

704 FORTRAN II
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SAP LISTINGS OF THE 4K AND 8K DRUM VERSIONS.

THESE LISTINGS CONSTITUTE THE ENTIRE FINAL VERSION OF 704 FORTRAN II. LISTINGS OF ASSOCIATED PROGRAMS, SUCH AS THE EDITOR, HAVE ALSO BEEN INCLUDED. THE LISTINGS HAVE BEEN ARRANGED SO THAT THERE IS A CLOSE CORRESPONDENCE WITH THE RECORDS ON THE FINAL FORTRAN II MASTER TAPE. WHEREVER, ON THE MASTER TAPE, A SINGLE FORTRAN RECORD MUST APPEAR AS SEPARATE 4K AND 8K VERSIONS, THE MAIN LISTINGS SEQUENCE INCLUDES THE 4K VERSION. THE 8K RECORDS, THEREFORE, APPEAR AT THE END. FURTHER INFORMATION PERTINENT TO THESE LISTINGS AND THE FORTRAN II MASTER TAPE CAN BE FOUND IN THE OPERATIONS MANUAL, PARTICULARLY ON PAGES 5 THROUGH 15.

THE FOLLOWING FORTRAN II RECORDS ARE DIAGNOSTIC CALL-IN RECORDS AND ARE BASICALLY THE SAME. FOR THIS REASON THEY HAVE BEEN OMITTED FROM THE MAIN LISTINGS. AN EXAMPLE OF A DIAGNOSTIC CALL-IN RECORD CAN BE FOUND ON PAGE 969 OF THESE LISTINGS.

2	035	054	074	093
4	038	057	077	095
6	040	059	079	097
8	042	061	081	099
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SCH	PERMANENT LIBRARY		913
SPH	PERMANENT LIBRARY		916
STH	PERMANENT LIBRARY		920
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REM 704 FORTRAN SELF LOADING RECORD 1 TO CS.

704 FORTRAN SELF LOADING RECORD 1 TO CS.

00000	0	53400	1	00000	LXA	0,1
00001	0	70000	1	00002	CPY	2,1
00002	1	00001	1	00001	TXI	1,1,1
00003	0	70000	1	00031	CPY	25,1
00004	0	00000	0	00003	HTR	3
00005	0	10000	0	00000	TZE	0
00006	0	76000	0	00006	COM	
00007	0	36100	0	00002	ACL	2
00010	0	76000	0	00006	COM	
00011	0	02000	0	00027	TRA	23
00012	-0	76000	0	00012	RTT	
00013	0	76600	0	00333	IOD	
00014	0	00000	0	00000	HTR	0
00015	1	77777	1	00015	TXI	13,1,-1
00016	-0	70000	1	00000	CAD	0,1
00017	-0	50000	0	00017	CAL	15
00020	0	62100	0	00026	STA	22
00021	0	77100	0	00022	ARS	18
00022	0	62100	0	00015	STA	13
00023	-0	50000	0	00017	CAL	15
00024	0	70000	0	00017	CPY	15
00025	0	70000	0	00002	CPY	2
00026	0	76200	0	00221	RTB	1
00027	-0	53400	1	00027	LXD	23,1
00030	0	70000	0	00003	CPY	3
00031	-0	76000	0	00007	LTM	
00032	0	76400	0	00221	BST	145
			00000		END	

A

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	30	0	0	0	0
LIB	0	0	0	0	0
COL	30	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 38

NUMBER OF SYMBOLS,	DEF	1,DEFOP	0,UNDEF	0
REM FORTRAN II CARD-TO-TAPE				

FORTRAN II CARD-TO-TAPE

						00110	ORG	72		
	00110	0	76200	0	00321	BEGIN	RCD	1		
	00111	-0	53400	1	00125		LXD	ADD01,1		
	00112	-0	53400	2	00127		LXD	ADD02,2		
	00113	0	70000	0	00340	ADD23	CPY	L9ROW		COPY 92
TD	00114	-3	00000	0	00116		TXL	ADD03,		
	00115	0	02000	4	00002		TRA	2,4		EOF TR
	00116	-0	60000	0	00332	ADD03	STQ	DATA1		STORE 9L
	00117	-0	63400	1	00125		SXD	ADD01,1		
	00120	-0	63400	2	00127		SXD	ADD02,2		
	00121	-0	53400	1	00135		LXD	ADD04,1		
	00122	0	70000	0	00341		CPY	R9ROW		COPY 9R
	00123	-0	60000	0	00333		STQ	DATA2		STORE 9R
	00124	0	07400	2	00265		TSX	SUB1,2		EXIT ENTRY1 SUB1
TD	00125	-3	00000	0	00130	ADD01	TXL	ADD05		RETURN1
	00126	0	76700	0	00001		ALS	1		RETURN2
TD	00127	-3	00000	0	00317	ADD02	TXL	ADD06		EXIT TO ENTRY2 SUB1
	00130	0	70000	0	00334	ADD05	CPY	DATA3		
	00131	-0	60000	0	00332		STQ	DATA1		
	00132	0	70000	0	00335		CPY	DATA4		COPY RIGHT
	00133	-0	60000	0	00333		STQ	DATA2		
	00134	0	07400	2	00265		TSX	SUB1,2		
	00135	-3	00010	0	00140	ADD04	TXL	ADD07,0,8		RETURN1
	00136	0	76700	0	00003		ALS	3		RETURN2
TD	00137	-3	00000	0	00316		TXL	ADD08		
	00140	-0	50000	0	00340	ADD07	CAL	L9ROW		
	00141	0	60200	0	00332		SLW	DATA1		
	00142	-0	50000	0	00341		CAL	R9ROW		
	00143	0	60200	0	00333		SLW	DATA2		
	00144	-3	00001	1	00170	ADD14	TXL	ADD09,1,1		
	00145	0	70000	0	00340	ADD15	CPY	L9ROW		
TD	00146	-3	00000	0	00151		TXL	ADD10		
	00147	0	00000	0	00110	ADD12	HTR	BEGIN		EOF
TD	00150	-3	00000	0	00210		TXL	ADD11		EOR
	00151	-0	50000	0	00340	ADD10	CAL	L9ROW		
	00152	-0	32000	0	00332		ANA	DATA1		
	00153	-0	10000	0	00147		TNZ	ADD12		
	00154	-0	50000	0	00340		CAL	L9ROW		
	00155	-0	60200	0	00332		ORS	DATA1		
	00156	0	70000	0	00341		CPY	R9ROW		
	00157	-0	50000	0	00341		CAL	R9ROW		
	00160	-0	32000	0	00333		ANA	DATA2		
	00161	-0	10000	0	00147		TNZ	ADD12		
	00162	-0	50000	0	00341		CAL	R9ROW		
	00163	-0	60200	0	00333		ORS	DATA2		
	00164	-2	00001	1	00204		TNX	ADD13,1,1		
	00165	0	07400	2	00265		TSX	SUB1,2		
TD	00166	-3	00000	0	00144		TXL	ADD14		RETURN1
TD	00167	-3	00000	0	00316		TXL	ADD08		RETURN2
	00170	-0	50000	0	00334	ADD09	CAL	DATA3		
	00171	-0	50100	0	00332		ORA	DATA1		
	00172	0	60200	0	00334		SLW	DATA3		
	00173	0	70000	0	00336		CPY	DATA5		

	00174	-0	32000	0	00336	ANA	DATA5		
	00175	0	60200	0	00332	SLW	DATA1		
	00176	-0	50000	0	00335	CAL	DATA4		
	00177	-0	50100	0	00333	ORA	DATA2		
	00200	0	60200	0	00335	SLW	DATA4		
	00201	0	70000	0	00337	CPY	DATA6		
	00202	-0	32000	0	00337	ANA	DATA6		
	00203	0	60200	0	00333	SLW	DATA2		
TD	00204	0	07400	2	00265	ADD13	TSX	SUB1,2	
	00205	-3	00000	0	00145	TXL	ADD15		RETURN1
TD	00206	0	76700	0	00004	ALS	4		RETURN2
	00207	-3	00000	0	00316	TXL	ADD08		
	00210	-0	50000	0	00332	ADD11	CAL	DATA1	
	00211	0	60200	0	00340	SLW	L9ROW		
	00212	-0	50000	0	00334	CAL	DATA3		
	00213	0	76000	0	00006	COM			
	00214	-0	32000	0	00336	ANA	DATA5		
	00215	0	32000	0	00332	ANS	DATA1		
	00216	-0	50000	0	00333	CAL	DATA2		
	00217	0	60200	0	00341	SLW	R9ROW		
	00220	-0	50000	0	00335	CAL	DATA4		
	00221	0	76000	0	00006	COM			
	00222	-0	32000	0	00337	ANA	DATA6		
	00223	0	32000	0	00333	ANS	DATA2		
TD	00224	0	07400	2	00265	TSX	SUB1,2		
	00225	-3	00000	0	00233	TXL	ADD16		RETURN1
	00226	0	60200	0	00331	SLW	DATA0		RETURN2
	00227	0	76700	0	00002	ALS	2		
	00230	0	36100	0	00331	ACL	DATA0		
TD	00231	0	76700	0	00001	ALS	1		
	00232	-3	00000	0	00316	TXL	ADD08		
	00233	-0	50000	0	00334	ADD16	CAL	DATA3	
	00234	0	76000	0	00166	SWT	6		
TD	00235	0	02000	0	00241	TRA	ADD34		
	00236	-3	00000	0	00407	ADD32	TXL	ADD31	
	00237	0	76600	0	00205	ADD33	WTD	5	
	00240	0	02000	0	00242	TRA	ADD29		
	00241	0	76600	0	00202	ADD34	WTD	2	
	00242	-0	50100	0	00336	ADD29	ORA	DATA5	
	00243	-0	50100	0	00340	ORA	L9ROW		
	00244	0	76000	0	00006	COM			
	00245	0	60200	0	00332	SLW	DATA1		
	00246	-0	50000	0	00335	CAL	DATA4		
	00247	-0	50100	0	00337	ORA	DATA6		
	00250	-0	50100	0	00341	ORA	R9ROW		
	00251	0	76000	0	00006	COM			
	00252	0	60200	0	00333	SLW	DATA2		
TD	00253	0	07400	2	00265	TSX	SUB1,2		
	00254	-3	00000	0	00262	TXL	ADD17		RETURN1
	00255	0	60200	0	00331	SLW	DATA0		RETURN2
	00256	0	76700	0	00001	ALS	1		
	00257	0	36100	0	00331	ACL	DATA0		
TD	00260	0	76700	0	00004	ALS	4		
	00261	-3	00000	0	00316	TXL	ADD08		

	00262	-0	53400	1	00125	ADD17	LXD	ADD01,1	
	00263	-0	53400	2	00127		LXD	ADD02,2	
	00264	0	02000	4	00003		TRA	3,4	
	00265	-0	63400	1	00327	SUB1	SXD	ADD18,1	
	00266	0	76000	0	00141		SLN	1	
	00267	-0	50000	4	00001		CAL	1,4	
	00270	0	40000	0	00330		ADD	CONS1	
	00271	0	56000	0	00332		LDQ	DATA1	
	00272	0	62100	0	00317	ADD22	STA	ADD06	
	00273	0	62100	0	00316		STA	ADD08	
	00274	3	00001	1	00300		TXH	ADD19,1,1	
	00275	-0	60000	0	00331		STQ	DATA0	INDEX=1
	00276	-0	50000	0	00331		CAL	DATA0	
	00277	0	10000	0	00322		TZE	ADD20	
	00300	0	53400	1	00330	ADD19	LXA	CONS1,1	
T	00301	-0	75400	0	00014	ADD21	PXD	12	CLEAN ACC
	00302	-0	76300	0	00001		LGL	1	1ST IN ACC
	00303	0	76700	0	00005		ALS	5	100000
	00304	-0	76300	0	00001		LGL	1	1000001
	00305	0	76700	0	00005		ALS	5	100000100000
	00306	-0	76300	0	00001		LGL	1	1000001000001
	00307	0	76700	0	00005		ALS	5	
	00310	-0	76300	0	00001		LGL	1	
	00311	0	76700	0	00005		ALS	5	
	00312	-0	76300	0	00001		LGL	1	
	00313	0	76700	0	00005		ALS	5	
	00314	-0	76300	0	00001		LGL	1	
	00315	0	02000	2	00002		TRA	2,2	1000001000001000001000001000001
	00316	0	36100	1	00000	ADD08	ACL	0,1	ADDRESS COMPUTED AT ADD22 IN ADDRESS
	00317	0	60200	1	00000	ADD06	SLW	0,1	ENTRY2 ADDRESS PREV. COMPUTED AT ADD22
	00320	2	00001	1	00301		TIX	ADD21,1,1	
	00321	-0	53400	1	00327		LXD	ADD18,1	
	00322	-0	76000	0	00141	ADD20	SLT	1	
	00323	0	02000	2	00001		TRA	1,2	OFF
	00324	0	56000	0	00333		LDQ	DATA2	SENSE LIGHT ON
	00325	-0	50000	4	00001		CAL	1,4	
	00326	0	40100	0	00301		ADM	ADD21	
	00327	-3	00000	0	00272	ADD18	TXL	ADD22,0,**	IR1 STORED IN DECREMENT
	00330	0	00000	0	00006	CONS1	HTR	6	
A	00331	0	00000	0	00000	DATA0	HTR		
A	00332	0	00000	0	00000	DATA1	HTR		9L ROW
A	00333	0	00000	0	00000	DATA2	HTR		9R ROW
A	00334	0	00000	0	00000	DATA3	HTR		
A	00335	0	00000	0	00000	DATA4	HTR		
A	00336	0	00000	0	00000	DATA5	HTR		
A	00337	0	00000	0	00000	DATA6	HTR		
A	00340	0	00000	0	00000	L9ROW	HTR		
A	00341	0	00000	0	00000	R9ROW	HTR		
	00342	0	77200	0	00202	START	REW	2	
	00343	0	76000	0	00140		SLN	0	
	00344	0	76200	0	00321	ADD27	RCD	1	
	00345	0	07400	4	00113		TSX	ADD23,4	
	00346	0	00000	0	00373		HTR	RECOR	
TD	00347	-3	00000	0	00355		TXL	ADD24	RETURN3


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00350  0 76000 0 00142          SLN 2                      RETURN4
00351 -0 53400 4 00354          LXD ADD25,4
00352  0 70000 4 00407  ADD26  CPY BLOCK,4
00353  2 00001 4 00352          TIX ADD26,4,1
00354 -3 00014 0 00344  ADD25  TXL ADD27,0,12
00355 -0 76000 0 00142  ADD24  SLT 2
00356  0 02000 0 00363          TRA ADD28                      OFF
00357  0 76000 0 00166          SWT 6
00360  0 02000 0 00414          TRA ADD30
00361  0 77000 0 00205          WEF 5
00362  0 77200 0 00205          REW 5
00363  0 76200 0 00221  ADD28  RTB 1
00364  0 70000 0 00373          CPY RECOR
00365  0 02000 0 00363          TRA ADD28
00366  0 02000 0 00004          TRA 4                          EOF
00367  0 77200 0 00201          REW 1
00370  0 76200 0 00221          RTB 1
00371  0 76200 0 00221          RTB 1
00372  0 07400 4 00004          TSX 4,4
A 00373  0 00000 0 00000  RECOR  HTR
                                00407  BLOCK  BES 11
00407  0 77200 0 00205  ADD31  REW 5
00410  0 50200 0 00236          CLS ADD32
00411  0 60100 0 00236          STO ADD32
00412 -0 50000 0 00334          CAL DATA3
00413  0 02000 0 00237          TRA ADD33
00414  0 77000 0 00202  ADD30  WEF 2
00415  0 77200 0 00202          REW 2
00416  0 02000 0 00363          TRA ADD28
A                                00000  END

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SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	192	0	0	0	0
LIB	0	0	0	0	0
COL	192	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 201

NUMBER OF SYMBOLS, DEF 49,DEFOP 0,UNDEF 0
 REM AST

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AST
***** FORTRAN II SECTION SIX *****F6R00010
FORTRAN 2 RECORD 0003 - CIT TO SAP CONVERSION. F6R00011
                                                    F6R00012
                                                    F6R00020
                                                    F6R00030
                                                    F6R00040
                                                    F6R00050
                                                    F6R00060
CIT TO SAP CONVERSION
00161 ZERO EQU 113
00162 ONE EQU 114
00177 SW1 EQU 127
00200 SW2 EQU 128
00201 SW3 EQU 129
00202 SW4 EQU 130
00210 ORG 136
00210 0 50000 0 00162 START CLA ONE
00211 0 34000 0 00200 CAS SW2
00212 0 02000 0 00700 TRA ADD01 SW2 EQUAL ZERO, ASSUME SWITCH TWO UP,
00213 0 02000 0 00216 TRA LIB1 SW2 EQUAL ONE, ASSUME SWITCH TWO DOWN,
00214 0 76000 0 00162 SWT 2 EQUAL TWO. TEST SWITCH TWO
00215 0 02000 0 00700 TRA ADD01
00216 0 77200 0 00204 LIB1 REW 4 SW TWO DOWN.
00217 0 77000 0 00202 WEF 2
00220 -0 53400 2 00221 LXD ADD02,2 SET READ ERROR COUNTER.
00221 1 00005 0 00223 ADD02 TXI ADD03,0,5
00222 0 76400 0 00204 ADD05 BST 4
00223 0 76200 0 00224 ADD03 RTB 4 READ TAPE 4
00224 0 53400 1 00726 LXA DATA1,1
00225 0 70000 1 01162 ADD04 CPY RECO3,1 CPY INTO REC-1, REC-2,---
00226 1 00001 1 00225 TXI ADD04,1,1
00227 0 02000 0 00700 TRA ADD01 END OF FILE ON TAPE 4.
00230 0 77100 0 00377 ARS 255
00231 0 77100 0 00377 ARS 0255
00232 -0 76000 0 00012 RTT
00233 2 00001 2 00222 TIX ADD05,2,1 IF ERROR.
00234 -0 63400 1 00440 SXD ADD06,1 SAVE COUNT OF NO. OF WORDS READ IN.
00235 0 53400 1 00677 LXA ADD07,1 SET XR1=0
00236 -0 63400 1 00442 IN207 SXD ADD08,1 SAVE XR1.
00237 -0 50000 1 01163 CAL RECOR,1 STORE SL IN DATA2
00240 0 60200 0 00775 SLW DATA2 STORE OP IN DATA3
00241 -0 50000 1 01162 CAL RECO3,1
00242 0 60200 0 00776 SLW DATA3
00243 -0 50000 1 01161 CAL RECO2,1 STORE SA IN DATA4
00244 0 60200 0 00777 SLW DATA4
00245 -0 50000 1 01160 CAL REC01,1 STORE RA IN DATA5
00246 0 60200 0 01000 SLW DATA5
00247 0 56000 0 00710 LDQ DATA6
00250 -0 60000 0 01007 STQ E1005 STORE BLANKS IN E1006,1007,1010,1005
00251 -0 60000 0 01010 STQ E1006
00252 -0 60000 0 01011 STQ E1007
00253 -0 60000 0 01012 STQ E1010
00254 -0 50000 0 00775 CAL DATA2 TEST SYMBOLIC LOCATION.
00255 0 10000 0 00305 TZE ADD09 IF ZERO, GO TO ADD09.
00256 0 76500 0 00036 LRS 30 NOT ZERO. SEE IF SL(1) EQUAL ZERO.
00257 0 10000 0 00303 TZE ADD10 SL(1) EQUAL ZERO, GO TO ADD10.
00260 0 40200 0 00722 SUB DATA7 SL(1) NOT EQUAL ZERO. SEE IF EQUAL 15.
00261 -0 10000 0 00264 TNZ ADD11 SL(1) NOT EQUAL 15, GO TO ADD11

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00262	-0	50000	0	00710	CAL DATA6	SL(1) EQUAL 15. PUT BLANKS IN AC AND	F6R00460
00263	0	02000	0	00306	TRA ADD12	GO TO ADD12	F6R00470
00264	0	40000	0	00722	ADD11 ADD DATA7	RESOTRE SL(1) IN AC.	F6R00480
00265	0	40200	0	00614	SUB LIB3		F6R00490
00266	0	10000	0	00612	TZE LIB2	IF SL(1)=\$, GO TO LIB2	F6R00500
00267	0	40000	0	00614	ADD LIB3		F6R00510
00270	0	40200	0	00616	SUB LIB5		F6R00520
00271	0	10000	0	00617	TZE LIB6	IF SL(1)=(, GO TO LIB6	F6R00530
00272	0	40000	0	00616	ADD LIB5		F6R00540
00273	0	40200	0	00722	SUB DATA7		F6R00550
00274	0	12000	0	00301	TPL ME1	GO TO ME1 IF SL(1) GREATER THEN 15 (I.E.,ALPHA-	F6R00560
00275	0	40000	0	00722	ADD DATA7		F6R00570
00276	-0	77300	0	00001	RQL 1	SL(1) LESS THEN 15, NOT ZERO, ASSEMBLE SYMBOL.	F6R00580
00277	0	07400	1	00603	TSX SUB1,1	AND GO TO SUB1 (TIV TYPE ENTRY).	F6R00590
00300	0	02000	0	00306	TRA ADD12		F6R00600
00301	-0	50000	0	00775	ME1 CAL DATA2		F6R00610
00302	0	02000	0	00306	TRA ADD12		F6R00620
00303	-0	76300	0	00015	ADD10 LGL 13	IFN. ASSEMBLE SYMBOL AND GO TO SUB2.	F6R00630
00304	0	07400	1	00654	TSX SUB2,1		F6R00640
00305	-0	76300	0	00044	ADD09 LGL 36	SYMBOLIC LOC EQUAL ZERO. PUT BLANKS IN ACC.	F6R00650
00306	0	60200	0	01005	ADD12 SLW E1003	STORE ACC. IN E1003.	F6R00660
00307	0	56000	0	00776	IN245 LDQ DATA3	SELECT OP IN MQ.	F6R00670
00310	0	50200	0	00717	CLS DATA8		F6R00680
00311	-0	76300	0	00022	LGL 18		F6R00690
00312	-0	60000	0	01001	STQ E0777	STORE DECREMENT IN E0777.	F6R00700
00313	0	56000	0	00710	LDQ DATA6	LOAD MQ WITH BLANKS	F6R00710
00314	-0	76300	0	00006	LGL 6		F6R00720
00315	0	76700	0	00006	ALS 6		F6R00730
00316	0	60100	0	01006	STO E1004	STORE IN E1004.	F6R00740
00317	0	34000	0	00707	CAS DATA9	IS OP EQUAL OCT.	F6R00750
00320	0	02000	0	00325	TRA ADD13	OP LESS THEN OCT	F6R00760
00321	0	02000	0	00566	TRA ADD14	OP EQUAL OCT. GO TO ADD14.	F6R00770
00322	0	34000	0	00706	CAS DAT10	OP GREATER THEN OCT. SEE IF OP=BCD.	F6R00780
00323	0	02000	0	00325	TRA ADD13		F6R00790
00324	0	02000	0	00525	TRA ADD15	OP EQUAL BCD. GO TO ADD15.	F6R00800
00325	0	56000	0	00777	ADD13 LDQ DATA4	OP NOT BCD OR OCT.	F6R00810
00326	-0	75400	0	00000	PXD	SELECT SA IN MQ.	F6R00820
00327	-0	76300	0	00006	LGL 6		F6R00830
00330	-0	10000	0	00343	TNZ IN301	SA(1) NOT EQUAL ZERO. GO TO IN301.	F6R00840
00331	-0	76300	0	00014	LGL 12	SA(1) EQUAL ZERO. TEST FOR INTERNAL	F6R00850
00332	-0	10000	0	00352	TNZ IN310	FORMULA NUMBER TYPE. IF YES, GO TO IN310.	F6R00860
00333	0	56000	0	00710	LDQ DATA6	SA(1),SA(2),SA(3) EQUAL ZERO. LOAD MQ WITH	F6R00870
00334	0	50000	0	01000	CLA DATA5	TEST FOR NOW-ZERO TAG OR RELATIVE ADDRESS.	F6R00880
00335	-0	10000	0	00510	TNZ IN446	NOT EQUAL ZERO. GO TO IN446	F6R00890
00336	0	50000	0	01001	CLA E0777	RA EQUAL ZERO. TEST FOR NON-ZERO DECREMENT.	F6R00900
00337	-0	10000	0	00362	TNZ IN320	NOT ZERO, GO TO IN320	F6R00910
00340	-0	50000	0	00715	CAL DT713	ZERO, OR A BLANK TO RT-HAND END OF E1004.	F6R00920
00341	-0	60200	0	01006	ORS E1004		F6R00930
00342	0	02000	0	00431	TRA IN367		F6R00940
00343	0	34000	0	00717	IN301 CAS DATA8	TEST IF SA(1)=16.	F6R00950
00344	0	02000	0	00355	TRA IN313	GREATER THEN 16(TRUE SYMBOL). GO TO IN313.	F6R00960
00345	0	07400	4	00004	TSX 4,4	EQUAL IS ERROR.	F6R00970
00346	0	07400	1	00603	TSX SUB1,1	LESS THEN 16 (TIV ENTRY TYPE). GO TO SUB1.	F6R00980
00347	0	76500	0	00036	LRS 30	RETURN FROM SUB1.	F6R00990

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00350	-0	77300	0	00001	RQL	1		F6R01000
00351	0	02000	0	00355	TRA	IN313		F6R01010
00352	0	07400	1	00654	IN310	TSX	SUB2,1	F6R01020
00353	-0	75400	0	00000	PXD			F6R01030
00354	-0	76300	0	00006	LGL	6		F6R01040
00355	-0	60200	0	01006	IN313	ORS	E1004	F6R01050
00356	-0	60000	0	01002	STQ	E1000		F6R01060
00357	-0	50000	0	00715	CAL	DT713		F6R01070
00360	-0	60200	0	01002	ORS	E1000		F6R01080
00361	0	56000	0	01002	LDQ	E1000		F6R01090
00362	-0	50000	0	00355	IN320	CAL	IN313	F6R01100
00363	0	07400	1	00445	TSX	IN403,1		F6R01110
00364	0	50000	0	01000	CLA	DATA5		F6R01120
00365	0	77100	0	00022	ARS	18	SELECT RELATIVE ADDRESS.	F6R01130
00366	0	10000	0	00377	TZE	IN335	RA EQUAL ZERO, GO TO IN335	F6R01140
00367	0	56000	0	00710	LDQ	DATA6	RA NOT EQUAL ZERO, LOAD MQ WITH BLANKS AND	F6R01150
00370	0	07400	1	00464	TSX	IN422,1	GO TO IN422	F6R01160
00371	0	50000	0	01000	CLA	DATA5	SET ACC. EQUAL RA.	F6R01170
00372	0	12000	0	00375	TPL	IN333	IF RA POSITIVE, GO TO IN333.	F6R01180
00373	-0	50000	0	00716	CAL	DT714	IF RA NEGATIVE, SELECT OCTAL 40 (MINUS)	F6R01190
00374	0	02000	0	00376	TRA	IN334	AND GO TO IN334.	F6R01200
00375	-0	50000	0	00717	IN333	CAL	DATA8	F6R01210
00376	0	07400	1	00460	IN334	TSX	IN416,1	F6R01220
00377	0	50000	0	01000	IN335	CLA	DATA5	F6R01230
00400	-0	32000	0	00726	ANA	DATA1	SET ACC. EQUAL RA. ANA OCTAL 77777	F6R01240
00401	-0	10000	0	00406	TNZ	IN344	IF NOT ZERO, GO TO IN344.	F6R01250
00402	0	50000	0	01001	CLA	E0777	ZERO. TEST IF E0777 EQUAL ZERO.	F6R01260
00403	0	10000	0	00425	TZE	IN363	IF ZERO, GO TO IN363.	F6R01270
00404	0	56000	0	00713	LDQ	DT711	NOT ZERO, LOAD MQ WITH 0 IN 1ST CHARAC, REST	F6R01280
00405	0	02000	0	00414	TRA	IN352	AND GO TO IN 352	F6R01290
00406	0	56000	0	00712	IN344	LDQ	DT710	F6R01300
00407	0	34000	0	00724	CAS	DT722		F6R01310
00410	0	02000	0	00413	TRA	IN351		F6R01320
00411	0	02000	0	00413	TRA	IN351		F6R01330
00412	0	56000	0	00710	LDQ	DATA6		F6R01340
00413	0	07400	1	00464	IN351	TSX	IN422,1	F6R01350
00414	0	50000	0	00714	IN352	CLA	DT712	F6R01360
00415	0	07400	1	00460	TSX	IN416,1		F6R01370
00416	0	50000	0	01001	CLA	E0777		F6R01380
00417	0	10000	0	00425	TZE	IN363		F6R01390
00420	0	77100	0	00022	ARS	18		F6R01400
00421	0	56000	0	00710	LDQ	DATA6		F6R01410
00422	0	07400	1	00464	TSX	IN422,1		F6R01420
00423	0	50000	0	00714	CLA	DT712		F6R01430
00424	0	07400	1	00460	TSX	IN416,1		F6R01440
00425	-0	75400	0	00006	IN363	PXD	6	F6R01450
00426	0	56000	0	00710	LDQ	DATA6		F6R01460
00427	-0	76300	2	00044	LGL	36,2		F6R01470
00430	-0	60200	0	00430	IN366	ORS	*	F6R01480
00431	0	76600	0	00202	IN367	WTD	2	F6R01490
00432	0	53400	1	00425	LXA	IN363,1		F6R01500
00433	0	70000	1	01013	IN371	CPY	E1011,1	F6R01510
00434	2	00001	1	00433	TIK	IN371,1,1		F6R01520
00435	0	76600	0	00333	IOD			F6R01530

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	00436	-0	53400	1	00442	LXD	ADD08,1		F6R01540
	00437	1	00004	1	00440	TXI	ADD06,1,4		F6R01550
	00440	-3	00440	1	00236	ADD06	TXL IN207,1,*		F6R01560
	00441	-0	53400	2	00221	LXD	ADD02,2		F6R01570
	00442	1	00442	0	00223	ADD08	TXI ADD03,0,*		F6R01580
	00443	-3	00036	2	00454	IN401	TXL IN412,2,30	IF SHIFT LESS THEN OR EQUAL 30, GO TO SELECT	F6R01590
	00444	-0	50000	0	00461	CAL	IN417	SHIFT GREATER THEN 30. PREPARE TO MODIFY ADDRES	F6R01600
	00445	0	40000	0	00725	IN403	ADD DT723	COMPUTE ADDRESS FOR STORING WORD.	F6R01610
	00446	0	62100	0	00461	STA	IN417		F6R01620
	00447	0	62100	0	00430	STA	IN366		F6R01630
	00450	0	62100	0	00452	STA	IN410		F6R01640
T	00451	-0	75400	0	00000	PXD		CLEAR ACC.	F6R01650
	00452	0	60200	0	00452	IN410	SLW *	STORE ZERO IN WORD.	F6R01660
	00453	-0	73400	2	00000	PDX	0,2	SET XR2 EQUAL TO ZERO	F6R01670
	00454	-0	76300	0	00006	IN412	LGL 6	SELECT CHARACTER	F6R01680
	00455	0	34000	0	00715	CAS	DT713	IS CHARACTER BLANK.	F6R01690
	00456	0	02000	0	00460	TRA	IN416	NO.	F6R01700
	00457	0	02000	1	00001	TRA	1,1	YES, RETURN TO PROGRAM	F6R01710
	00460	0	76700	2	00036	IN416	ALS 30,2	NO, SHIFT CHARACTER	F6R01720
	00461	-0	60200	0	00461	IN417	ORS *		F6R01730
T	00462	-0	75400	0	00000	PXD			F6R01740
	00463	1	00006	2	00443	TXI	IN401,2,6	ADJUST XR2 SHIFT AND GO TO IN401.	F6R01750
	00464	-0	60000	0	01004	IN422	STQ E1002		F6R01760
	00465	-0	63400	1	00774	SXD	DT772,1		F6R01770
	00466	0	76500	0	00043	IN424	LRS 35		F6R01780
	00467	-0	73400	1	00000	PDX	0,1		F6R01790
	00470	0	60200	0	01003	SLW	E1001		F6R01800
	00471	0	22100	0	00723	IN427	DVP DT721		F6R01810
	00472	0	76700	1	00000	ALS	0,1		F6R01820
	00473	-0	60200	0	01003	ORS	E1001		F6R01830
	00474	-0	60000	0	01002	STQ	E1000		F6R01840
	00475	0	50000	0	01002	CLA	E1000		F6R01850
	00476	0	10000	0	00501	TZE	IN437		F6R01860
	00477	0	76000	0	00000	CLM	0		F6R01870
	00500	1	77772	1	00471	TXI	IN427,1,-6		F6R01880
	00501	-0	50000	0	01003	IN437	CAL E1001		F6R01890
	00502	0	56000	0	01004	LDQ	E1002		F6R01900
	00503	-0	76300	0	00001	LGL	1		F6R01910
	00504	0	56000	0	01004	IN442	LDQ E1002		F6R01920
	00505	0	76500	1	00006	LRS	6,1		F6R01930
	00506	-0	53400	1	00774	LXD	DT772,1		F6R01940
	00507	0	02000	1	00001	TRA	1,1		F6R01950
	00510	0	77100	0	00022	IN446	ARS 18		F6R01960
	00511	0	10000	0	00362	TZE	IN320		F6R01970
	00512	0	07400	1	00464	TSX	IN422,1		F6R01980
	00513	0	50000	0	01000	CLA	DATA5		F6R01990
	00514	0	12000	0	00517	TPL	IN455		F6R02000
	00515	-0	50000	0	00716	CAL	DT714		F6R02010
	00516	0	02000	0	00521	TRA	IN457		F6R02020
T	00517	-0	75400	0	00000	IN455	PXD		F6R02030
	00520	-0	76300	0	00006	LGL	6		F6R02040
	00521	-0	60200	0	01006	IN457	ORS E1004		F6R02050
	00522	-0	50000	0	00355	CAL	IN313		F6R02060
	00523	0	07400	1	00445	TSX	IN403,1		F6R02070

00524	0	02000	0	00377	TRA	IN335		F6R02080
00525	0	56000	0	00777	ADD15	LDQ	DATA4	F6R02090
00526	-0	50000	0	00717		CAL	DATA8	F6R02100
00527	0	16200	0	00532		TQP	IN470	F6R02110
00530	0	40000	0	00717		ADD	DATA8	F6R02120
00531	0	76500	0	00000		LRS	0	F6R02130
00532	-0	60200	0	01006	IN470	ORS	E1004	F6R02140
00533	0	76700	0	00003		ALS	3	F6R02150
00534	-0	76300	0	00003		LGL	3	F6R02160
00535	0	76700	0	00003		ALS	3	F6R02170
00536	-0	76300	0	00003		LGL	3	F6R02180
00537	0	76700	0	00003		ALS	3	F6R02190
00540	-0	76300	0	00003		LGL	3	F6R02200
00541	0	76700	0	00003		ALS	3	F6R02210
00542	-0	76300	0	00003		LGL	3	F6R02220
00543	0	76700	0	00003		ALS	3	F6R02230
00544	-0	76300	0	00003		LGL	3	F6R02240
00545	0	76700	0	00003		ALS	3	F6R02250
00546	-0	76300	0	00003		LGL	3	F6R02260
00547	0	60200	0	01007		SLW	E1005	F6R02270
00550	0	76700	0	00003		ALS	3	F6R02280
00551	-0	76300	0	00003		LGL	3	F6R02290
00552	0	76700	0	00003		ALS	3	F6R02300
00553	-0	76300	0	00003		LGL	3	F6R02310
00554	0	76700	0	00003		ALS	3	F6R02320
00555	-0	76300	0	00003		LGL	3	F6R02330
00556	0	76700	0	00003		ALS	3	F6R02340
00557	-0	76300	0	00003		LGL	3	F6R02350
00560	0	76700	0	00003		ALS	3	F6R02360
00561	-0	76300	0	00003		LGL	3	F6R02370
00562	0	76700	0	00003		ALS	3	F6R02380
00563	-0	76300	0	00003		LGL	3	F6R02390
00564	0	60200	0	01010		SLW	E1006	F6R02400
00565	0	02000	0	00431		TRA	IN367	F6R02410
00566	0	50000	0	00777	ADD14	CLA	DATA4	F6R02420
00567	0	40200	0	00721		SUB	DT717	F6R02430
00570	-0	10000	0	00574		TNZ	IN532	F6R02440
00571	-0	50000	0	00706		CAL	DAT10	F6R02450
00572	0	60200	0	01006		SLW	E1004	F6R02460
00573	0	02000	0	00525		TRA	ADD15	F6R02470
00574	-0	50000	0	00725	IN532	CAL	DT723	F6R02480
00575	-0	60200	0	01006		ORS	E1004	F6R02490
00576	-0	50000	0	00777		CAL	DATA4	F6R02500
00577	0	60200	0	01007		SLW	E1005	F6R02510
00600	-0	50000	0	00710		CAL	DATA6	F6R02520
00601	0	60200	0	01010		SLW	E1006	F6R02530
00602	0	02000	0	00431		TRA	IN367	F6R02540
00603	-0	63400	1	00705	SUB1	SXD	DT703,1	F6R02550
00604	0	73400	4	00000		PAX	0,4	F6R02560
00605	0	40200	0	00722		SUB	DATA7	F6R02570
00606	-0	10000	0	00621		TNZ	IN550	F6R02580
00607	-0	50000	0	00720		CAL	DT716	F6R02590
00610	0	56000	0	00710		LDQ	DATA6	F6R02600
00611	0	02000	0	00355		TRA	IN313	F6R02610

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SAVE XR1 FOR RETURN
STORE CHARACTER IN XR4
IS CHARACTER *.
NO, GO TO IN 550.
YES, SELECT *.
LOAD MQ WITH BLANKS.
GO TO IN 313.

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	00612	0	02000	0	01164	LIB2	TRA	RPCH1		F6R02620
	00613	0	02000	0	00306		TRA	ADD12		F6R02630
	00614	0000000000053				LIB3	BCD	100000\$		F6R02640
	00615	536060606060				LIB4	BCD	1\$		F6R02650
	00616	0000000000074				LIB5	BCD	100000(		F6R02660
	00617	-0	50000	0	00775	LIB6	CAL	DATA2		F6R02670
	00620	0	02000	0	00306		TRA	ADD12		F6R02680
	00621	-0	50000	4	00772	IN550	CAL	DT770,4	SELECT APPROPRIATE NUMERIC OR ALPHABETIC	F6R02690
	00622	0	76700	0	00006		ALS	6	CHARACTER.	F6R02700
	00623	-0	50100	0	00773		ORA	DT771	FOLLOWED BY LEFT PARENTHESIS	F6R02710
	00624	0	76700	0	00030		ALS	24	AND SHIFT INTO PROPER POSITION.	F6R02720
	00625	0	60200	0	01002		SLW	E1000		F6R02730
	00626	0	53400	3	00636		LXA	IN565,3		F6R02740
	00627	-0	77300	0	00014		RQL	12		F6R02750
T	00630	-0	75400	0	00000		PXD	0		F6R02760
	00631	-0	76300	0	00003		LGL	3	TAG BITS INTO ACC. ADDRESS	F6R02770
	00632	-0	10000	0	00636		TNZ	IN565	TAG BITS EQUAL ZERO. NO, GO TO IN565	F6R02780
	00633	-2	00001	1	00646	IN562	TNX	IN575,1,1	YES. IF FINISHED WITH WORD, GO TO IN 575	F6R02790
	00634	-0	76300	0	00005		LGL	5	NOT FINISHED WITH WORD. TEST ADDRESS BITS	F6R02800
	00635	0	10000	0	00633		TZE	IN562	ADDRESS BITS ZERO.	F6R02810
	00636	0	73400	4	00004	IN565	PAX	4,4	ADDRESS BITS NOT ZERO.	F6R02820
	00637	-0	50000	4	00772		CAL	DT770,4	SELECT CHARACTER.	F6R02830
	00640	-2	00001	1	00647		TNX	IN576,1,1		F6R02840
	00641	0	76700	2	00026		ALS	22,2	SHIFT INTO PROPER POSITION.	F6R02850
	00642	-0	60200	0	01002		ORS	E1000		F6R02860
T	00643	-0	75400	0	00000		PXD			F6R02870
	00644	-0	76300	0	00005		LGL	5		F6R02880
	00645	1	00006	2	00636		TXI	IN565,2,6	ADJUST SHIFT.	F6R02890
	00646	-0	50000	0	00715	IN575	CAL	DT713		F6R02900
	00647	0	56000	0	00710	IN576	LDQ	DATA6		F6R02910
	00650	-0	76300	2	00026		LGL	22,2		F6R02920
	00651	-0	50100	0	01002		ORA	E1000		F6R02930
	00652	-0	53400	1	00705		LXD	DT703,1		F6R02940
	00653	0	02000	1	00001		TRA	1,1		F6R02950
	00654	0	60100	0	01002	SUB2	STO	E1000		F6R02960
	00655	-0	76300	0	00010		LGL	8		F6R02970
T	00656	-0	75400	0	00000		PXD	0		F6R02980
	00657	0	76500	0	00035		LRS	29		F6R02990
	00660	0	22100	0	00723		DVP	DT721		F6R03000
	00661	-0	10000	0	00663		TNZ	IN612		F6R03010
	00662	-0	50000	0	00715		CAL	DT713	IF SUBSIDIARY NO. IS ZERO, SELECT A BLANK	F6R03020
	00663	0	60200	0	01004	IN612	SLW	E1002		F6R03030
	00664	-0	76300	0	00044		LGL	36		F6R03040
	00665	-0	63400	1	00774		SXD	DT772,1		F6R03050
	00666	0	73400	1	00000		PAX	0,1		F6R03060
	00667	-0	50000	1	00760		CAL	IN756,1	SELECT ALPHABETIC CHARACTER.	F6R03070
	00670	0	76700	0	00006		ALS	6		F6R03080
	00671	-0	50100	0	01004		ORA	E1002		F6R03090
	00672	0	56000	0	00710		LDQ	DATA6		F6R03100
	00673	-0	76300	0	00030		LGL	24		F6R03110
	00674	0	60200	0	01004		SLW	E1002		F6R03120
	00675	0	50000	0	01002		CLA	E1000		F6R03130
	00676	0	02000	0	00466		TRA	IN424		F6R03140
	00677	0	00000	0	00000	ADD07	HTR	0		F6R03150

00700	0 77000 0 00202	ADD01	WEF	2	F6R03160
00701	0 77200 0 00204		REW	4	F6R03170
00702	0 77200 0 00202		REW	2	F6R03180
00703	0 76200 0 00221		RTB	1	F6R03190
00704	0 02000 0 00004		TRA	4	F6R03200
00705	0 00000 0 00000	DT703	HTR	0	F6R03210
00706	-204623636000	DAT10	OCT	604623636000	F6R03220
00707	-202223246000	DATA9	OCT	602223246000	F6R03230
00710	-206060606060	DATA6	OCT	606060606060	F6R03240
00711	+336060606060	DT707	OCT	336060606060	F6R03250
00712	-236060606060	DT710	OCT	636060606060	F6R03260
00713	+006060606060	DT711	OCT	006060606060	F6R03270
00714	+000000000073	DT712	OCT	73	F6R03280
00715	+000000000060	DT713	OCT	60	F6R03290
00716	+000000000040	DT714	OCT	40	F6R03300
00717	+000000000020	DATA8	OCT	20	F6R03310
00720	+000000000054	DT716	OCT	54	F6R03320
00721	-377777777777	DT717	OCT	777777777777	F6R03330
00722	+000000000017	DATA7	OCT	17	F6R03340
00723	+000000000012	DT721	OCT	12	F6R03350
00724	+000000000005	DT722	OCT	5	F6R03360
00725	+000000000001	DT723	OCT	1	F6R03370
00726	+000000077777	DATA1	OCT	77777	F6R03380
00727	+000000000071	DT725	OCT	71	F6R03390
00730	+000000000070		OCT	70	F6R03400
00731	+000000000067		OCT	67	F6R03410
00732	+000000000066		OCT	66	F6R03420
00733	+000000000065		OCT	65	F6R03430
00734	+000000000064		OCT	64	F6R03440
00735	+000000000063		OCT	63	F6R03450
00736	+000000000062		OCT	62	F6R03460
00737	+000000000051	DT735	OCT	51	F6R03470
00740	+000000000050		OCT	50	F6R03480
00741	+000000000047		OCT	47	F6R03490
00742	+000000000046		OCT	46	F6R03500
00743	+000000000045		OCT	45	F6R03510
00744	+000000000044		OCT	44	F6R03520
00745	+000000000043		OCT	43	F6R03530
00746	+000000000042		OCT	42	F6R03540
00747	+000000000041		OCT	41	F6R03550
00750	+000000000031		OCT	31	F6R03560
00751	+000000000030		OCT	30	F6R03570
00752	+000000000027		OCT	27	F6R03580
00753	+000000000026		OCT	26	F6R03590
00754	+000000000025		OCT	25	F6R03600
00755	+000000000024		OCT	24	F6R03610
00756	+000000000023		OCT	23	F6R03620
00757	+000000000022		OCT	22	F6R03630
00760	+000000000021	IN756	OCT	21	F6R03640
00761	+000000000011		OCT	11	F6R03650
00762	+000000000010		OCT	10	F6R03660
00763	+000000000007		OCT	7	F6R03670
00764	+000000000006		OCT	6	F6R03680
00765	+000000000005		OCT	5	F6R03690

00766	+0000000000004	OCT 4	F6R03700
00767	+0000000000003	OCT 3	F6R03710
00770	+0000000000002	OCT 2	F6R03720
00771	+0000000000001	OCT 1	F6R03730
00772	+0000000000000	DT770 OCT 0	F6R03740
00773	+0000000000034	DT771 OCT 34	F6R03750
00774	0 00000 0 00000	DT772 HTR 0	F6R03760
00775	0 00000 0 00000	DATA2 HTR 0	F6R03770
00776	0 00000 0 00000	DATA3 HTR 0	F6R03780
00777	0 00000 0 00000	DATA4 HTR 0	F6R03790
01000	0 00000 0 00000	DATA5 HTR 0	F6R03800
01001	0 00000 0 00000	E0777 HTR 0	F6R03810
01002	0 00000 0 00000	E1000 HTR 0	F6R03820
01003	0 00000 0 00000	E1001 HTR 0	F6R03830
01004	0 00000 0 00000	E1002 HTR 0	F6R03840
01005	0 00000 0 00000	E1003 HTR 0	F6R03850
01006	0 00000 0 00000	E1004 HTR 0	F6R03860
01007	0 00000 0 00000	E1005 HTR 0	F6R03870
01010	0 00000 0 00000	E1006 HTR 0	F6R03880
01011	0 00000 0 00000	E1007 HTR 0	F6R03890
01012	0 00000 0 00000	E1010 HTR 0	F6R03900
01013	0 00000 0 00000	E1011 HTR 0	F6R03910
01014	0 00000 0 00000	HTR 0	F6R03920
01015	0 00000 0 00000	HTR 0	F6R03930
01016	0 00000 0 00000	HTR 0	F6R03940
01017	0 00000 0 00000	E1015 HTR 0	F6R03950
	01164	REC BES 100	F6R03960
01164	0 76300 0 00006	RPCH1 LLS 6	F6R03961
01165	0 40200 0 00614	SUB LIB3	F6R03962
01166	0 10000 0 01171	TZE LIB2A	F6R03963
01167	-0 50000 0 00615	CAL LIB4	F6R03964
01170	0 02000 0 00306	TRA ADD12	F6R03965
01171	-0 50000 0 01173	LIB2A CAL DOL2	F6R03966
01172	0 02000 0 00306	TRA ADD12	F6R03967
01173	535360606060	DOL2 BCD 1\$\$	F6R03968
	01160	REC01 SYN REC-4	F6R03979
	01161	RECO2 SYN REC-3	F6R03980
	01162	RECO3 SYN REC-2	F6R03990
	01163	RECOR SYN REC-1	F6R04000
A	00000	END	F6R04001

SINGLE DOLLAR SIGN
DOUBLE DOLLAR SIGN.

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	419	0	0	0	0
LIB	0	0	0	0	0
COL	419	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 427

NUMBER OF SYMBOLS, DEF 117,DEFOP 0,UNDEF 0
REM

	00267	0	50000	4	00001	I143	CLA 1,4	SUBSTITUTE CODING.	F6S00520
	00270	0	62200	0	00432		STD I302		F6S00530
	00271	0	77100	0	00022		ARS 18		F6S00540
	00272	0	40000	0	00432		ADD I302		F6S00550
	00273	0	62100	0	00305		STA I161		F6S00560
	00274	0	62100	0	00341		STA I211		F6S00570
	00275	0	40200	4	00001		SUB 1,4		F6S00580
	00276	-0	63400	4	00432		SXD I302,4		F6S00590
	00277	0	73400	4	00000		PAX 0,4		F6S00600
	00300	-0	63400	4	00301		SXD I155,4		F6S00610
	00301	3	00301	0	00000	I155	TXH 0,0,*		F6S00620
	00302	0	76600	0	00361		WPR	SELECT PRINTER	F6S00630
	00303	0	50000	0	00431		CLA I301	FIND LAST NON-BLANK GROUP.	F6S00640
	00304	-0	53400	4	00354		LXD I224,4		F6S00650
	00305	0	34000	4	00305	I161	CAS *,4		F6S00660
	00306	1	77777	4	00311		TXI I165,4,-1		F6S00670
	00307	1	00001	4	00305	I163	TXI I161,4,1		F6S00680
	00310	1	77777	4	00311		TXI I165,4,-1		F6S00690
	00311	-0	63400	4	00360	I165	SXD I230,4	STORE END TEST.	F6S00700
	00312	-0	63400	4	00372		SXD I242,4		F6S00710
	00313	-0	63400	4	00316		SXD I172,4		F6S00720
	00314	-0	63400	4	00421		SXD I271,4		F6S00730
	00315	-0	53400	4	00301		LXD I155,4		F6S00740
D	00316	-2	00000	4	00322	I172	TNX I176,4		F6S00750
	00317	-3	00014	4	00321		TXL I175,4,12		F6S00760
	00320	0	76000	0	00370		SPR 8	FIRST CYCLE.	F6S00770
	00321	-0	53400	4	00301	I175	LXD I155,4	INITIALIZE GROUP COUNT.	F6S00780
	00322	0	53400	2	00333	I176	LXA I203,2	INITIALIZE LEFT SETUP.	F6S00790
	00323	-0	53400	1	00375		LXD I245,1		F6S00800
	00324	0	50000	0	00162		CLA ONE		F6S00810
	00325	0	34000	0	00202		CAS SW4		F6S00820
	00326	0	02000	0	00331		TRA I201		F6S00830
M	00327	0	02000	0	00332		TRA LIB5		F6S00840
	00330	0	76000	0	00164		SWT 4		F6S00850
	00331	-3	00331	0	00333	I201	TXL I203,0,*		F6S00860
M	00332	0	76100	0	00000	LIB5	NOP		F6S00870
T	00333	-0	75400	0	00000	I203	PXD		F6S00880
	00334	0	60200	1	00524	I204	SLW D41,1	CLEAR CARD IMAGE.	F6S00890
	00335	0	60200	1	00504		SLW D21,1		F6S00900
	00336	2	00001	1	00334		TIX I204,1,1		F6S00910
	00337	-0	50000	0	00433	I207	CAL I303	INITIALIZE COLUMN INDICATOR.	F6S00920
	00340	0	60200	0	00000	I210	SLW 0		F6S00930
	00341	0	56000	4	00341	I211	LDQ *,4	OBTAIN GROUP.	F6S00940
	00342	-0	63400	4	00331		SXD I201,4	STORE GROUP COUNT.	F6S00950
	00343	0	53400	4	00345		LXA I215,4	SET CHARACTER COUNT.	F6S00960
T	00344	-0	75400	0	00000	I214	PXD		F6S00970
	00345	-0	76300	0	00006	I215	LGL 6		F6S00980
	00346	0	73400	1	00000		PAX 0,1		F6S00990
	00347	-0	50000	0	00000		CAL 0	POSITION COLUMN INDICATOR.	F6S01000
	00350	0	77100	4	00006		ARS 6,4		F6S01010
	00351	2	00020	1	00375		TIX I245,1,16	TEST FOR DIGIT.	F6S01020
	00352	3	00017	1	00400		TXH I250,1,15	TEST FOR Y-Z ONE	F6S01030
	00353	-0	60200	3	00521		ORS D36,3	STORE DIGIT.	F6S01040
	00354	2	00001	4	00344	I224	TIX I214,4,1	COUNT CHARACTERS.	F6S01050

	00355	0	77100	0	00001	I225	ARS 1	SHIFT AND TEST COLUMN.	F6S01060
	00356	-0	53400	4	00331		LXD I201,4	RESTORE GROUP COUNT.	F6S01070
	00357	1	77777	4	00360		TXI I230,4,-1	COUNT GROUPS.	F6S01080
D	00360	-3	00000	4	00362	I230	TXL I232,4	TEST FOR LAST NON-BLANK GROUP.	F6S01090
	00361	-0	10000	0	00340		TNZ I210	TEST FOR END OF ROW.	F6S01100
	00362	-0	50000	2	00506	I232	CAL D23,2	FORM TRUE 8,4	F6S01110
	00363	-0	60200	2	00511		ORS D26,2	AND 3 ROWS AND	F6S01120
	00364	-0	60200	2	00516		ORS D33,2	MOVE 8,4 AND 8,3	F6S01130
	00365	0	60200	2	00507		SLW D24,2	ROWS.	F6S01140
	00366	-0	50000	2	00505		CAL D22,2		F6S01150
	00367	-0	60200	2	00511		ORS D26,2		F6S01160
	00370	-0	60200	2	00515		ORS D32,2		F6S01170
	00371	0	60200	2	00506		SLW D23,2		F6S01180
D	00372	-3	00000	4	00415	I242	TXL I265,4	TEST FOR END.	F6S01190
	00373	3	00017	2	00415		TXH I265,2,15	TEST FOR RIGHT HALF.	F6S01200
	00374	1	00020	2	00337		TXI I207,2,16	INITIALIZE RIGHT HALF.	F6S01210
	00375	2	00020	1	00403	I245	TIX I253,1,16	TEST FOR 16/CH/32	F6S01220
	00376	3	00017	1	00406		TXH I256,1,15	TEST FOR X-ZONE	F6S01230
	00377	-0	60200	3	00521		ORS D36,3	STORE DIGIT.	F6S01240
	00400	-0	60200	2	00523	I250	ORS D40,2	STORE Y-ZONE.	F6S01250
	00401	2	00001	4	00344		TIX I214,4,1	COUNT CHARACTERS.	F6S01260
TD	00402	-3	00000	0	00355	I252	TXL I225	OBTAIN NEXT GROUP.	F6S01270
	00403	2	00020	1	00411	I253	TIX I261,1,16	TEST FOR 32/CH/48.	F6S01280
	00404	3	00017	1	00354		TXH I224,1,15	TEST FOR BLANK.	F6S01290
	00405	-0	60200	3	00521		ORS D36,3	STORE DIGIT.	F6S01300
	00406	-0	60200	2	00522	I256	ORS D37,2	STORE X-ZONE.	F6S01310
	00407	2	00001	4	00344		TIX I214,4,1	COUNT CHARACTERS.	F6S01320
TD	00410	-3	00000	0	00355	I260	TXL I225	OBTAIN NEXT GROUP.	F6S01330
	00411	-0	60200	2	00521	I261	ORS D36,2	STORE 0-ZONE.	F6S01340
	00412	-0	60200	3	00521		ORS D36,3	STORE DIGIT.	F6S01350
	00413	2	00001	4	00344		TIX I214,4,1	COUNT CHARACTERS.	F6S01360
TD	00414	-3	00000	0	00355		TXL I225		F6S01370
	00415	-0	53400	1	00430	I265	LXD I300,1	COPY LOOP.	F6S01380
	00416	0	70000	1	00524	I266	CPY D41,1	CARD IMAGE COPIES.	F6S01390
	00417	0	70000	1	00504		CPY D21,1		F6S01400
	00420	2	00001	1	00416		TIX I266,1,1	COUNT COPIES.	F6S01410
D	00421	3	00000	4	00426	I271	TXH I276,4	TEST FOR SECOND CYCLE.	F6S01420
	00422	-0	53400	1	00402		LXD I252,1	NO, RELOAD INDEX REGISTERS	F6S01430
	00423	-0	53400	2	00410		LXD I260,2	AND RETURN.	F6S01440
	00424	-0	53400	4	00432		LXD I302,4		F6S01450
	00425	0	02000	4	00002		TRA 2,4		F6S01460
	00426	0	76600	0	00361	I276	WPR	SELECT PRINTER AGAIN.	F6S01470
	00427	0	76000	0	00371		SPR 9	SECOND CYCLE.	F6S01480
	00430	-3	00014	0	00322	I300	TXL I176,0,12	CONVERT REST OF LINE	F6S01490
	00431	60606060606060				I301	BCD 1		F6S01500
	00432	0	00000	0	00001	I302	HTR 1		F6S01510
	00433	-0	00000	0	00000	I303	MZE		F6S01520
					00504		BES 40		F6S01530
	00504	0	00000	0	00000	D21	HTR 0		F6S01540
	00505	0	00000	0	00000	D22	HTR 0		F6S01550
	00506	0	00000	0	00000	D23	HTR 0		F6S01560
	00507	0	00000	0	00000	D24	HTR 0		F6S01570
	00510	0	00000	0	00000	D25	HTR 0		F6S01580
	00511	0	00000	0	00000	D26	HTR 0		F6S01590

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00512 0 00000 0 00000 D27 HTR 0 F6S01600
00513 0 00000 0 00000 D30 HTR 0 F6S01610
00514 0 00000 0 00000 D31 HTR 0 F6S01620
00515 0 00000 0 00000 D32 HTR 0 F6S01630
00516 0 00000 0 00000 D33 HTR 0 F6S01640
00517 0 00000 0 00000 D34 HTR 0 F6S01650
00520 0 00000 0 00000 D35 HTR 0 F6S01660
00521 0 00000 0 00000 D36 HTR 0 F6S01670
00522 0 00000 0 00000 D37 HTR 0 F6S01680
00523 0 00000 0 00000 D40 HTR 0 F6S01690
00524 0 00000 0 00000 D41 HTR 0 F6S01700
          00551 D65 BES 20 F6S01710
A          00000 END F6S01720
          0 LIB1 00216,00217
          0 LIB2 00612,00226
          0 LIB5 00616,00332

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SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	176	0	0	0	0
LIB	0	0	0	0	0
COL	176	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 187

NUMBER OF SYMBOLS, DEF 193,DEFOP 0,UNDEF 0

REM ***** FORTRAN II SECTION SIX *****F6T00010

			00161	ZERO	EQU	113			
			00162	ONE	EQU	114			
			00177	SW1	EQU	127			
			00200	SW2	EQU	128			
			00201	SW3	EQU	129			
			00202	SW4	EQU	130			
							DUMP TAPE2 ONTO TAPE6 AND TAPE3 ONTO		F6T00020
							TAPE7 IF BATCH COMPILING		F6T00030
			00210		ORG	136			F6T00030
00210	0	77200	0	00202	REW	2	REWIND TAPES TWO AND THREE.		F6T00040
00211	0	77200	0	00203	REW	3			F6T00050
00212	-0	53400	1	00161	LXD	ZERO,1			F6T00060
00213	0	76000	0	00166	SWT	6	TEST SENSE SWITCH 6 TO SEE IF BATCH COMPILING.		F6T00070
00214	0	02000	0	00317	TRA	FINI	UP. DO NOT DUMP TAPES BUT GO TO FINI.		F6T00080
00215	-0	76000	0	00012	A11	RTT			F6T00090
00216	0	76100	0	00000		NOP			F6T00100
00217	-0	53400	4	00242	A6	LXD SEVEN,4	SET READ ERROR COUNTER.		F6T00110
00220	-0	53400	2	00161	A2	LXD ZERO,2			F6T00120
00221	0	76200	0	00202		RTD 2	READ A RECORD OF TAPE TWO.		F6T00130
00222	0	70000	2	01371	A1	CPY REC-1,2			F6T00140
00223	1	00001	2	00222		TXI A1,2,1			F6T00150
00224	0	02000	0	00247		TRA EOF	EOF		F6T00160
00225	0	77100	0	00377		ARS 255			F6T00170
00226	0	77100	0	00377		ARS 255			F6T00180
00227	-0	76000	0	00012		RTT			F6T00190
00230	0	02000	0	00243		TRA ERROR	ERROR		F6T00200
00231	1	77777	2	00232		TXI NEXT2,2,-1			F6T00210
00232	-0	63400	2	00237	NEXT2	SXD A4,2	SAVE WORD COUNT OF RECORD TO USE WHEN WRITING.		F6T00220
00233	-0	53400	2	00161		LXD ZERO,2	ONTO TAPE6		F6T00230
00234	0	76600	0	00206		WTD 6	WRITE RECORD JUST READ ONTO TAPE SIZE		F6T00240
00235	0	70000	2	01371	A3	CPY REC-1,2			F6T00250
00236	1	00001	2	00237		TXI A4,2,1			F6T00260
00237	-3	00237	2	00235	A4	TXL A3,2,*			F6T00270
00240	0	76600	0	00333		IOD			F6T00280
00241	0	02000	0	00215		TRA A11	GO READ NEXT RECORD FROM TAPE TWO.		F6T00290
00242	0	00005	0	00000	SEVEN	0,0,5			F6T00300
00243	0	76400	0	00202	ERROR	BST 2	READ ERROR PROCEDURE.		F6T00310
00244	2	00001	4	00220		TIX A2,4,1			F6T00320
00245	0	07400	4	00004		TSX 4,4			F6T00330
00246	0	00000	0	00246	ER	HTR ER			F6T00340
00247	0	77000	0	00206	EOF	WEF 6	AT END OF FILE ONE TAPE TWO. WRITE END OF FILE.		F6T00350
00250	1	00001	1	00251		TXI A5,1,1			F6T00360
							ON TAPE SIX.		F6T00370
00251	3	00001	1	00324	A5	TXH TEST2,1,1	TWO FILES DONE. YES, GO TEST SWITCH TWO.		F6T00380
00252	0	76200	0	00202		RTD 2	NO		F6T00390
00253	0	02000	0	00217		TRA A6			F6T00400
00254	0	50000	0	00162	TAPE7	CLA ONE	TEST SENSE SWITCH ONE.		F6T00410
00255	0	34000	0	00177		CAS SW1			F6T00420
00256	0	02000	0	00314		TRA EOF3+1			F6T00430
00257	0	02000	0	00262		TRA A7			F6T00440
00260	0	76000	0	00161		SWT 1			F6T00450

00261	0	02000	0	00314		TRA EOF3+1		F6T00460
00262	-0	53400	4	00242	A7	LXD SEVEN,4	DOWN. SET READ ERROR COUNTER.	F6T00470
00263	-0	53400	2	00161	A12	LXD ZERO,2	ONTO TAPE7	F6T00480
00264	0	76200	0	00223		RTB 3	READ A RECORD FROM TAPE THREE	F6T00490
00265	0	70000	2	01371	A8	CPY REC-1,2		F6T00500
00266	1	00001	2	00265		TXI A8,2,1		F6T00510
00267	0	02000	0	00313		TRA EOF3	EOF OF FILE.	F6T00520
00270	0	77100	0	00377		ARS 255		F6T00530
00271	0	77100	0	00377		ARS 255		F6T00540
00272	-0	76000	0	00012		RTT		F6T00550
00273	0	02000	0	00307		TRA ERR3	ERROR.	F6T00560
00274	1	77777	2	00275		TXI NEXT1,2,-1		F6T00570
00275	-0	63400	2	00302	NEXT1	SXD A10,2	SAVE WORD COUNT OF RECORD.	F6T00580
00276	-0	53400	2	00161		LXD ZERO,2		F6T00590
00277	0	76600	0	00227		WTB 7	WRITE THE RECORD ONTO TAPE SEVEN.	F6T00600
00300	0	70000	2	01371	A9	CPY REC-1,2		F6T00610
00301	1	00001	2	00302		TXI A10,2,1		F6T00620
00302	-3	00302	2	00300	A10	TXL A9,2,*	TEST END OF RECORD.	F6T00630
00303	0	76600	0	00333		IOD		F6T00640
00304	-0	76000	0	00012		RTT		F6T00650
00305	0	76100	0	00000		NOP		F6T00660
00306	0	02000	0	00262		TRA A7	GO READ NEXT RECORD.	F6T00670
00307	0	76400	0	00203	ERR3	BST 3		F6T00680
00310	2	00001	4	00263		TIX A12,4,1	READ ERROR PROCEDURE.	F6T00690
00311	0	07400	4	00004		TSX 4,4		F6T00700
00312	0	00000	0	00312	ERR4	HTR ERR4		F6T00710
00313	0	77000	0	00207	EOF3	WEF 7	AT EOF ON 3, WRITE EOF ON 7.	F6T00720
00314	0	76200	0	00221		RTB 1		F6T00730
00315	0	76200	0	00221		RTB 1		F6T00740
00316	0	76200	0	00221		RTB 1		F6T00750
00317	0	77200	0	00202	FINI	REW 2	REWINDS TAPES 2,3, AND 4 AND	F6T00760
00320	0	77200	0	00203		REW 3	RETURNS TO LOADER,	F6T00770
00321	0	77200	0	00204		REW 4		F6T00780
00322	0	76200	0	00221		RTB 1		F6T00790
00323	0	02000	0	00004		TRA 4		F6T00800
00324	0	50000	0	00162	TEST2	CLA ONE	AFTER 2ND FILE FROM 2 TO 6,	F6T00810
00325	0	34000	0	00200		CAS SW2	TEST SENSE SWITCH 2.	F6T00820
00326	0	02000	0	00254		TRA TAPE7		F6T00830
00327	0	02000	0	00332		TRA WT3		F6T00840
00330	0	76000	0	00162		SWT 2		F6T00850
00331	0	02000	0	00254		TRA TAPE7	UP. GO TEST SWITCH 1.	F6T00860
00332	-0	53400	1	00251	WT3	LXD A5,1	DOWN. RESET INDEX REGISTER 1 TO 1.	F6T00870
00333	0	50000	0	00331		CLA WT3-1	CHANGE A5 TRANSFER ADDRESS TO TAPE7.	F6T00880
00334	0	62100	0	00251		STA A5		F6T00890
00335	0	02000	0	00217		TRA A6		F6T00900
				00336		BSS 40		F6T00910
				01372	REC	BES 500		F6T00920
A				00000		END		F6T00930

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	102	0	0	0	0
LIB	0	0	0	0	0

COL 102 0 0 0 0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 111

NUMBER OF SYMBOLS, DEF 32,DEFOP 0,UNDEF 0
REM SUCCESSFUL COMPILATION RECORD

F1SC0010

SUCCESSFUL COMPILATION RECORD
CONTROL IS RETURNED TO THIS RECORD AT THE COMPLETION OF A
SINGLE PROBLEM COMPILATION, OR AT THE END OF BATCH
COMPILATION. TAPE 1 IS REWOUND AND A LOAD BUTTON
SEQUENCE IS EXECUTED AT THE CARD READER.
AN INSTALLATION MAY CHANGE THIS RECORD TO SUIT ITS OWN
OPERATING NEEDS.

F1SC0010
F1SC0020
F1SC0030
F1SC0040
F1SC0050
F1SC0060
F1SC0070
F1SC0080
F1SC0090
F1SC0100
F1SC0110
F1SC0120
F1SC0130
F1SC0140
F1SC0150
F1SC0160
F1SC0170
F1SC0180
F1SC0190

MASTER RECORD CARD = F0090000.

00030	-0	76000	0	00030	START	ORG	24	
00031	0	77200	0	00201		LTM		
00032	0	76200	0	00321		REW	1	
00033	0	70000	0	00000		RCD	209	CARD READER LOAD BUTTON SEQUENCE.
00034	0	02000	0	00036		CPY	0	
00035	0	00000	0	77777		TRA	SECCPY	
00036	0	70000	0	00001	SECCPY	HTR	32767	CARD READER EMPTY, HALT.
00037	0	02000	0	00000		CPY	1	
				00030		TRA	0	
						END	24	

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	19	0	0	0	0
LIB	0	0	0	0	0
COL	19	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 28

NUMBER OF SYMBOLS, DEF 2,DEFOP 0,UNDEF 0

REM SOURCE PROGRAM ERROR RECORD. THIS RECORD TESTS SL3 AND SL6 F1SPE010

SOURCE PROGRAM ERROR RECORD. THIS RECORD TESTS SL3 AND SL6
 TO DETERMINE IF A CARD READER LOAD BUTTON SEQUENCE IS TO BE
 EXECUTED, OR IF THE NEXT PROGRAM IS TO BE COMPILED. SL3-ON
 IF TAPE 5 CANNOT BE READ OR EOF ON TAPE 5 BEFORE END CARD
 IS FOUND. SS6-ON IF IN BATCH COMPILE MODE.

				00030	ORG 24		F1SPE010
				00030	LTM		F1SPE020
00031	-0	76000	0	00007	SLT 1	SL1-ON IF PROGRAM TO BE RE-TRIED.	F1SPE030
00032	0	02000	0	00034	TRA SS6TST		F1SPE040
00033	0	02000	0	00053	TRA SKIPPCM	SKIP TO COMMON RECORD	F1SPE050
00034	0	76000	0	00166	SS6TST SWT 6	SS6-ON IF IN BATCH MODE.	F1SPE060
00035	0	02000	0	00041	TRA READCD	SINGLE COMPILATION. READ CARD READER SEQ.	F1SPE070
00036	-0	76000	0	00143	SLT 3	ON IF END CARD ERROR FOUND BY BATCH MONITOR	F1SPE080
00037	0	02000	0	00055	TRA SKIPBM	SKIP TO BATCH MONITOR RECORD	F1SPE090
00040	0	77200	0	00206	REW 6		F1SPE100
00041	0	77200	0	00204	READCD REW 4		F1SPE110
00042	0	77200	0	00203	REW 3		F1SPE120
00043	0	77200	0	00202	REW 2		F1SPE130
00044	0	77200	0	00201	REW 1		F1SPE140
00045	0	76200	0	00321	RCD 209	CARD READER LOAD BUTTON SEQUENCE.	F1SPE150
00046	0	70000	0	00000	CPY 0		F1SPE160
00047	0	02000	0	00051	TRA SECCPY		F1SPE170
00050	0	00000	0	77777	HTR 32767	CARD READ EMPTY.	F1SPE180
00051	0	70000	0	00001	SECCPY CPY 1		F1SPE190
00052	0	02000	0	00000	TRA 0		F1SPE200
00053	0	76200	0	00221	SKIPPCM RTB 1	SKIP OVER FILE 1 MARK TO BATCH MONITOR.	F1SPE210
00054	0	76200	0	00221	RTB 1	SKIP OVER BATCH MONITOR RECORD	F1SPE220
00055	0	76200	0	00221	SKIPBM RTB 1	AND/OR SKIP MACHINE ERROR RECORD	F1SPE230
00056	0	02000	0	00004	TRA 4	TO 1-CS TO READ NEXT RECORD	F1SPE240
				00030	END 24		F1SPE250
							F1SPE260
							F1SPE270
							F1SPE280
							F1SPE290
							F1SPE300
							F1SPE310
							F1SPE320

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	32	0	0	0	0
LIB	0	0	0	0	0
COL	32	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 41

NUMBER OF SYMBOLS, DEF 5,DEFOP 0,UNDEF 0
 REM MONITOR PROGRAM FOR BATCH COMPILATION

F1BM0010

MONITOR PROGRAM FOR BATCH COMPILATION
 MASTER RECORD CARD F0120000

F1BM0010
 F1BM0020
 F1BM0030
 F1BM0040
 F1BM0050
 F1BM0060
 F1BM0070
 F1BM0080
 F1BM0090
 F1BM0100
 F1BM0110
 F1BM0120
 F1BM0130
 F1BM0140
 F1BM0150
 F1BM0160
 F1BM0170
 F1BM0180
 F1BM0190
 F1BM0200
 F1BM0210
 F1BM0220
 F1BM0230
 F1BM0240
 F1BM0250
 F1BM0260
 F1BM0270
 F1BM0280
 F1BM0290
 F1BM0300
 F1BM0310
 F1BM0320
 F1BM0330
 F1BM0330
 F1BM0330
 F1BM0330
 F1BM0330
 F1BM0350
 F1BM0360
 F1BM0370
 F1BM0380
 F1BM0390
 F1BM0400
 F1BM0410
 F1BM0420
 F1BM0430
 F1BM0440
 F1BM0450
 F1BM0460
 F1BM0470
 F1BM0480
 F1BM0490
 F1BM0500
 F1BM0510

00030 0 76000 0 00166 START ORG 24
 00031 0 02000 0 00146 TRA ADD93+1 TEST SW6, UP = SINGLE PROBLEM,
 00032 0 76000 0 00140 SLN 0 SKIP OVER MACHINE ERROR RECORD AND GO TO SEC1
 00033 0 53400 4 00237 ADD01 LXA L(5),4 TURN OFF LIGHTS
 00034 -0 50000 0 00245 CAL BLANKS COUNTER FOR 5 TRIES TO READ TAPE 5.
 00035 0 60200 0 00233 SLW BUFFER-1
 00036 0 60200 0 00232 SLW BUFFER-2
 00037 -0 76000 0 00012 RTT TURN OFF INDICATOR
 00040 0 76100 0 00000 NOP
 00041 0 76200 0 00205 ADD015 RTD 5
 00042 0 53400 3 00243 LXA L(14),3 ASSUME 14 WORDS PER RECORD
 00043 0 70000 1 00234 ADD02 CPY BUFFER,1
 00044 0 02000 0 00047 TRA ADD03
 00045 0 02000 0 00161 TRA ADD90 EOF
 00046 0 02000 0 00050 TRA ADD04 EOR
 00047 2 00001 1 00043 ADD03 TIX ADD02,1,1
 00050 0 77100 0 00377 ADD04 ARS 255
 00051 0 77100 0 00377 ARS 255
 00052 -0 76000 0 00012 RTT TEST TAPE INDICATOR
 00053 0 02000 0 00150 TRA ADD80 ON, PREPARE TO READ AGAIN
 00054 0 76600 0 00202 WTD 2 OFF, WRITE THIS RECORD ON TAPE 2
 00055 0 70000 2 00234 ADD05 CPY BUFFER,2
 00056 2 00001 2 00055 TIX ADD05,2,1
 00057 0 76600 0 00333 IOD
 00060 -0 76000 0 00012 RTT
 00061 0 76100 0 00000 NOP
 D 00062 3 00000 0 00074 ADD70 TXH ADD71,0 ROUTINE TO RESTORE PRINTER CARRIAGE AND PRINT
 00063 0 07400 4 00332 TSX PRINT,C FIRST STATEMENT OF CURRENT SOURCE PROGRAM
 00064 0 00234 0 00215 PZE RESTR,0,BUFFER
 00065 0 76600 0 00361 WPR
 00066 0 76600 0 00361 WPR
 00067 0 76600 0 00361 WPR
 00070 0 76600 0 00361 WPR
 00071 0 76600 0 00361 WPR
 00072 0 50200 0 00062 CLS ADD70 CHANGE TXH TO TXL
 00073 0 60100 0 00062 STO ADD70
 00074 0 76000 0 00141 ADD71 SLN 1 SL1-ON IF AT LEAST 1 SOURCE STATEMENT ON TP 2
 00075 -0 75400 0 00000 PXD 0,0 EXITS
 00076 0 56000 0 00216 LDQ BUFFER-14 TEST FOR COMMENT CARD
 00077 -0 76300 0 00006 LGL 6
 00100 0 40200 0 00244 SUB L(C)
 00101 0 10000 0 00033 TZE ADD01 YES, GO READ NEXT TAPE RECORD
 00102 -0 76300 0 00030 LGL 24 DISCARD FORMULA NUMBER
 00103 -0 75400 0 00000 PXD 0,0
 00104 -0 76300 0 00006 LGL 6
 00105 0 10000 0 00110 TZE ADD06 TEST FOR CONTINUATION CARD
 00106 0 40200 0 00246 SUB BLANK
 00107 -0 10000 0 00033 TNZ ADD01 YES, GO READ NEXT TAPE RECORD
 00110 0 53400 1 00242 ADD06 LXA L(12),1 THIS RECORD IS OF FIRST CARD OF
 00111 0 53400 2 00241 LXA L(7),2 FORTRAN STATEMENT. PREPARE TO TEST
 00112 0 50000 0 00234 CLA BUFFER FOR END(.....) CARD

00113	0	60100	0	00232	STO BUFFER-2	POSITION ENDMARK	F1BM0520
00114	0	56000	0	00217	LDQ BUFFER-13		F1BM0530
00115	0	07400	4	00200	TSX SUB1,4		F1BM0540
00116	0	40200	0	00247	SUB L(E)	TEST FIRST CHAR FOR E	F1BM0550
00117	-0	10000	0	00033	TNZ ADD01		F1BM0560
00120	0	07400	4	00200	TSX SUB1,4		F1BM0570
00121	0	40200	0	00250	SUB L(N)	TEST SECOND CHAR FOR N	F1BM0580
00122	-0	10000	0	00033	TNZ ADD01		F1BM0590
00123	0	07400	4	00200	TSX SUB1,4		F1BM0600
00124	0	40200	0	00251	SUB L(D)	TEST THIRD CHAR FOR D	F1BM0610
00125	-0	10000	0	00033	TNZ ADD01		F1BM0620
00126	0	07400	4	00200	TSX SUB1,4		F1BM0630
00127	0	40200	0	00252	SUB L(())	TEST FOURTH CHAR FOR (	F1BM0640
00130	-0	10000	0	00033	TNZ ADD01		F1BM0650
00131	0	07400	4	00200	TSX SUB1,4		F1BM0660
00132	0	07400	4	00200	TSX SUB1,4		F1BM0670
00133	0	40200	0	00253	SUB COMMA	TEST SIXTH CHAR FOR ,	F1BM0680
00134	-0	10000	0	00033	TNZ ADD01		F1BM0690
00135	0	07400	4	00200	TSX SUB1,4		F1BM0700
00136	0	07400	4	00200	TSX SUB1,4		F1BM0710
00137	0	40200	0	00253	SUB COMMA	TEST EIGHTH CHAR FOR ,	F1BM0720
00140	-0	10000	0	00033	TNZ ADD01		F1BM0730
00141	0	07400	4	00200	TSX SUB1,4		F1BM0740
00142	0	07400	4	00200	TSX SUB1,4		F1BM0750
00143	0	40200	0	00253	SUB COMMA	TEST TENTH CHAR FOR ,	F1BM0760
00144	-0	10000	0	00033	TNZ ADD01		F1BM0770
00145	0	77000	0	00202	ADD93 WEF 2	THIS IS END CARD, TERMINATE FILE	F1BM0780
00146	0	76200	0	00221	RTB 1	SKIP OVER MACHINE ERROR RECORD.	F1BM0790
00147	0	02000	0	00004	TRA 4	GO TO 1-CS FOR SECTION ONE	F1BM0800
00150	0	76400	0	00205	ADD80 BST 5	TAPE ERROR	F1BM0810
00151	2	00001	4	00041	TIX ADD015,4,1		F1BM0820
00152	0	07400	4	00332	TSX PRINT,4		F1BM0830
00153	0	00301	0	00254	TP5ERR,0,TP5END		F1BM0840
00154	0	76000	0	00143	SPROER SLN 3	SL3-ON IF TAPE CANNOT BE READ OR END CARD	F1BM0850
00155	0	76400	0	00201	BSTRTN BST 1	TROUBLE.	F1BM0860
00156	0	76400	0	00201	BST 1	BACKSPACE SYSTEM TAPE TO SOURCE PROGRAM ERROR	F1BM0870
00157	0	76400	0	00201	BST 1	RECORD.	F1BM0880
00160	0	02000	0	00004	TRA 4	CALL IN 1 - CS.	F1BM0890
00161	-0	76000	0	00141	ADD90 SLT 1	IS THERE A PROBLEM TO BE COMPILED	F1BM0900
00162	0	02000	0	00167	TRA ADD91	FINISHED, REWIND ALL TYPES	F1BM0910
00163	0	07400	4	00332	TSX PRINT,4		F1BM0920
00164	0	00315	0	00301	ENDCD,0,CDTEND		F1BM0930
00165	0	77200	0	00205	REW 5		F1BM0940
00166	0	02000	0	00154	TRA SPROER		F1BM0950
00167	0	76400	0	00201	ADD91 BST 1		F1BM0970
00170	0	77200	0	00206	REW 6		F1BM0974
00171	0	77200	0	00205	REW 5		F1BM0976
00172	0	07400	4	00332	TSX PRINT,C		F1BM0980
00173	0	00332	0	00315	REMA,0,ENDA		F1BM0990
00174	0	07400	4	00332	TSX PRINT,C		F1BM1000
00175	0	00216	0	00215	HTR RESTR,0,RESTR+1		F1BM1010
00176	0	16100	0	00177	TQO *+1		F1BM1020
00177	0	02000	0	00155	TRA BSTRTN		F1BM1030
00200	-0	75400	0	00000	SUB1 PXD 0,0	SUBROUTINE TO BRING NEXT NON BLANK	F1BM1040

00201	2 00001 2 00205	TIX	ADD50,2,1	CHAR OF BUFFER REGION TO AC.	F1BM1050
00202	0 53400 2 00240	LXA	L(6),2		F1BM1060
00203	0 56000 1 00234	LDQ	BUFFER,1		F1BM1070
00204	1 77777 1 00205	TXI	ADD50,1,-1		F1BM1080
00205	-0 76300 0 00006	ADD50	LGL 6		F1BM1090
00206	0 34000 0 00246	CAS	BLANK		F1BM1100
00207	0 02000 0 00211	TRA	ADD51		F1BM1110
00210	0 02000 0 00200	TRA	SUB1		F1BM1120
00211	0 34000 0 00235	ADD51	CAS ENDMK		F1BM1130
00212	0 02000 4 00001	TRA	1,4		F1BM1140
00213	0 02000 0 00033	TRA	ADD01		F1BM1150
00214	0 02000 4 00001	TRA	1,4		F1BM1160
00215	016060606060	RESTR	BCD 11		F1BM1165
	00234	BUFFER	BES 14		F1BM1170
00234	-377777777777	OCT	777777777777		F1BM1180
00235	+000000000077	ENDMK	OCT 77		F1BM1190
00236	0 00000 0 00003	L(3)	3		F1BM1200
00237	0 00000 0 00005	L(5)	5		F1BM1210
00240	0 00000 0 00006	L(6)	6		F1BM1220
00241	0 00000 0 00007	L(7)	7		F1BM1230
00242	0 00000 0 00014	L(12)	12		F1BM1240
00243	0 00000 0 00016	L(14)	14		F1BM1250
00244	000000000023	L(C)	BCD 100000C		F1BM1260
00245	606060606060	BLANKS	BCD 1		F1BM1270
00246	000000000060	BLANK	BCD 100000		F1BM1280
00247	000000000025	L(E)	BCD 100000E		F1BM1290
00250	000000000045	L(N)	BCD 100000N		F1BM1300
00251	000000000024	L(D)	BCD 100000D		F1BM1310
00252	000000000074	L()	BCD 100000(		F1BM1320
00253	000000000073	COMMA	BCD 100000,		F1BM1330
00254	006060606060	TP5ERR	BCD 90	TAPE 5 CONTAINING SOURCE SUBPROGRAM READ 5 TIMES	F1BM1340
00255	632147256005				
00256	602346456321				
00257	314531452760				
00260	624664512325				
00261	606264224751				
00262	462751214460				
00263	512521246005				
00264	606331442562				
00265	606445626423				
00266	232562622664			BCD 9 UNSUCCESSFULLY. TAPE 5 NOW POSITIONED AT RECORD WHICH	F1BM1350
00267	434370336063				
00270	214725600560				
00271	454666604746				
00272	623163314645				
00273	252460216360				
00274	512523465124				
00275	606630312330				
00276	602321454546			BCD 3 CANNOT BE READ.	F1BM1360
00277	636022256060				
00300	512521243360				
	00301	TP5END	BSS 0		F1BM1370
00301	006060606060	ENDCD	BCD 90	END CARD MISSING OR MISPUNCHED FOR LAST SUBPROGR	F1BM1380
00302	254524602321				

00303	512460443162					
00304	623145276046					
00305	516044316247					
00306	644523302524					
00307	602646516043					
00310	216263606264					
00311	224751462751					
00312	214460222531			BCD 3AM BEING COMPILED.		F1BM1390
00313	452760234644					
00314	473143252433					
		00315	CDTEND	BSS 0		F1BM1400
00315	016060606060		REMA	BCD 71		F1BM1410
00316	606060606060					
00317	606060606060					
00320	606060606060					
00321	606060606060					
00322	606060606060					
00323	606060606060					
00324	606330256043			BCD 6 THE LAST PROBLEM HAS BEEN PROCESSED.		F1BM1420
00325	216263604751					
00326	462243254460					
00327	302162602225					
00330	254560475146					
00331	232562622524					
		00332	ENDA	BSS 0		F1BM1430
						F1BM1450
				PRINT CONTROL SUBROUTINE.		F1BM1460
		00001	A	EQU 1		F1BM1470
		00002	B	EQU 2		F1BM1480
		00004	C	EQU 4		F1BM1490
		00332	PRINT	BSS 0		F1BM1500
00332	0 50000 4	00001	RAN	CLA 1,4		F1BM1510
00333	0 62100 0	00374		STA RNA		F1BM1520
00334	0 77100 0	00022		ARS 18		F1BM1530
00335	0 60100 0	00375		STO RNB		F1BM1540
00336	-0 63400 4	00376		SXD RNC,4		F1BM1550
00337	0 50000 0	00374	RN40	CLA RNA		F1BM1560
00340	0 40000 0	00377		ADD RND		F1BM1570
00341	0 34000 0	00375		CAS RNB		F1BM1580
00342	0 76100 0	00000		NOP		F1BM1590
00343	0 02000 0	00364		TRA RN50		F1BM1600
00344	0 76700 0	00022		ALS 18		F1BM1610
00345	0 40000 0	00374		ADD RNA		F1BM1620
00346	0 60100 0	00350		STO RAN10		F1BM1630
00347	0 07400 4	00401		TSX WOT,C		F1BM1640
A	00350	0 00000 0	00000	RAN10	HTR	F1BM1650
	00351	0 50000 0	00350		CLA RAN10	F1BM1660
	00352	0 77100 0	00022		ARS 18	F1BM1670
	00353	0 40200 0	00400		SUB RNE	F1BM1680
	00354	0 62100 0	00361		STA RN20	F1BM1690
	00355	0 40200 0	00400		SUB RNE	F1BM1700
	00356	0 62100 0	00362		STA RN30	F1BM1710
	00357	0 62100 0	00374		STA RNA	F1BM1720
	00360	0 50000 0	00613		CLA BLNKS	F1BM1730

A	00361	0	60100	0	00000	RN20	STO		F1BM1740
A	00362	0	60100	0	00000	RN30	STO		F1BM1750
	00363	0	02000	0	00337		TRA RN40		F1BM1760
	00364	0	50000	0	00375	RN50	CLA RNB		F1BM1770
	00365	0	76700	0	00022		ALS 18		F1BM1780
	00366	0	40000	0	00374		ADD RNA		F1BM1790
	00367	0	60100	0	00371		STO RN60		F1BM1800
	00370	0	07400	4	00401		TSX WOT,C		F1BM1810
A	00371	0	00000	0	00000	RN60	HTR		F1BM1820
	00372	-0	53400	4	00376		LXD RNC,C		F1BM1830
	00373	0	02000	4	00002		TRA 2,C		F1BM1840
A	00374	0	00000	0	00000	RNA	HTR		F1BM1850
A	00375	0	00000	0	00000	RNB	HTR		F1BM1860
A	00376	0	00000	0	00000	RNC	HTR		F1BM1870
	00377	0	00000	0	00024	RND	HTR 20		F1BM1880
	00400	0	00000	0	00001	RNE	HTR 1		F1BM1890
									F1BM1900
									F1BM1910
									F1BM1920
									F1BM1930
									F1BM1940
									F1BM1950
									F1BM1960
									F1BM1970
									F1BM1980
									F1BM1990
									F1BM2000
									F1BM2010
									F1BM2020
									F1BM2030
									F1BM2040
									F1BM2050
									F1BM2060
									F1BM2070
									F1BM2080
									F1BM2090
									F1BM2100
									F1BM2110
									F1BM2120
									F1BM2130
									F1BM2140
									F1BM2150
									F1BM2160
									F1BM2170
									F1BM2180
									F1BM2190
									F1BM2200
									F1BM2210
									F1BM2220
									F1BM2230
									F1BM2240
									F1BM2250
									F1BM2260
									F1BM2270

PRINT SUBROUTINE.

00401 -0 63400 1 00551 WOT SXD X1,1

00402 -0 63400 2 00557 WOT SXD X2,2

00403 0 50000 4 00001 CLA 1,4 PRINT ROUTINE

00404 0 62100 0 00432 STA T5 X

00405 0 62200 0 00614 STD X4 X

00406 0 77100 0 00022 ARS 18 X

00407 0 40000 0 00614 ADD X4 X

00410 0 62100 0 00463 STA PR2 X

00411 0 62100 0 00510 STA CI9 X

00412 0 40200 4 00001 SUB 1,4 B-A+1 IN AC

00413 0 10000 4 00002 TZE 2,4

00414 -0 12000 4 00002 TMI 2,4

00415 -0 63400 4 00614 SXD X4,4

00416 0 73400 4 00013 L11 PAX 11,4

00417 -0 63400 4 00422 SXD PR6,4

00420 -0 50000 0 00564 CAL WP INITIALIZE SWITCH

00421 0 60100 0 00564 STO WP X

TD 00422 3 00000 0 00423 PR6 TXH T4

00423 0 76600 0 00361 T4 WPR

TD 00424 -3 00000 0 00430 Z2 TXL S3

ATD 00425 -3 00000 0 00000 OZ2 TXL

00426 0 76000 0 00364 SP4 SPR 4

TD 00427 -3 00000 0 00461 TXL RPR+2

00430 0 50200 0 00564 S3 CLS WP SET SWITCH FOR MASKING

00431 0 60100 0 00564 STO WP CHARACTER FROM TYPE WHEEL 1

00432 -0 50000 0 00432 T5 CAL * OBTAIN FIRST CHARACTER

00433 0 77100 0 00036 ARS 30 X

00434 0 10000 0 00426 TZE SP4 DOUBLE SPACE IF ZERO

00435 0 34000 0 00615 CAS YZONE TEST FOR SPACE SUPPRESS

TD 00436 -3 00000 0 00440 TXL BK NO

TD 00437 -3 00000 0 00460 TXL RPR+1 SUPPRESS SPACE

00440 0 34000 0 00616 BK CAS BNK TEST FOR BLANK

TD 00441 -3 00000 0 00443 TXL DIGF NO

TD 00442 -3 00000 0 00461 TXL RPR+2 BLANK

00443 0 76000 0 00372 DIGF SPR 10 SET CHANNEL SKIP

00444 -0 32000 0 00445 ANA MK MASK OUT ZONE

	00445	0	73400	1	00017	MK	PAX 15,1	OBTAIN SPR COMBINATION	F1BM2280
	00446	1	00001	1	00447		TXI N2,1,1	X	F1BM2290
	00447	-2	00010	1	00451	N2	TNX N3,1,8	X	F1BM2300
	00450	0	76000	0	00370		SPR 8	X	F1BM2310
	00451	-2	00004	1	00453	N3	TNX N4,1,4	X	F1BM2320
	00452	0	76000	0	00364		SPR 4	X	F1BM2330
	00453	-2	00002	1	00455	N4	TNX N5,1,2	X	F1BM2340
	00454	0	76000	0	00362		SPR 2	X	F1BM2350
	00455	-2	00001	1	00457	N5	TNX RPR,1,1	X	F1BM2360
	00456	0	76000	0	00361		SPR 1	X	F1BM2370
	00457	0	76600	0	00361	RPR	WPR		F1BM2380
	00460	0	76000	0	00365		SPR 5	SUPPRESS SPACE	F1BM2390
	00461	0	50000	0	00613		CLA BLNKS	FIND LAST NON-BLANK GROUP	F1BM2400
	00462	-0	53400	4	00523		LXD CI4,4	X	F1BM2410
	00463	0	34000	4	00000	PR2	CAS 0,4	X	F1BM2420
	00464	1	77777	4	00467		TXI PR1,4,-1	X	F1BM2430
	00465	1	00001	4	00463		TXI PR2,4,1	X	F1BM2440
	00466	1	77777	4	00467		TXI PR1,4,-1	X	F1BM2450
	00467	-0	63400	4	00527	PR1	SXD CI6,4	STORE END TEST	F1BM2460
	00470	-0	63400	4	00541		SXD CI8,4	X	F1BM2470
	00471	-0	63400	4	00474		SXD PR8,4	X	F1BM2480
	00472	-0	63400	4	00601		SXD WP4,4	X	F1BM2490
	00473	-0	53400	4	00422		LXD PR6,4	X	F1BM2500
D	00474	-2	00000	4	00500	PR8	TNX PR5,4		F1BM2510
	00475	-3	00014	4	00477		TXL PR3,4,12		F1BM2520
	00476	0	76000	0	00370		SPR 8	FIRST CYCLE	F1BM2530
	00477	-0	53400	4	00422	PR3	LXD PR6,4	INITIALIZE GROUP COUNT	F1BM2540
	00500	0	53400	2	00502	PR5	LXA PR7,2	INITIALIZE LEFT SETUP	F1BM2550
	00501	-0	53400	1	00544		LXD YZ1,1	CLEAR CARD IMAGE	F1BM2560
T	00502	-0	75400	0	00000	PR7	PXD	X	F1BM2570
	00503	0	60200	1	00662	PR4	SLW LT,1	X	F1BM2580
	00504	0	60200	1	00642		SLW RT,1	X	F1BM2590
	00505	2	00001	1	00503		TIX PR4,1,1	X	F1BM2600
	00506	-0	50000	0	00620	CIR	CAL COL1	INITIALIZE COLUMN INDICATOR	F1BM2610
	00507	0	60200	0	00621	CI2	SLW COL	X	F1BM2620
	00510	0	56000	4	00000	CI9	LDQ 0,4	OBTAIN GROUP	F1BM2630
	00511	-0	63400	4	00425		SXD OZ2,4	STORE GROUP COUNT	F1BM2640
	00512	0	53400	4	00514		LXA Q6,4	SET CHARACTER COUNT	F1BM2650
T	00513	-0	75400	0	00000	CI1	PXD		F1BM2660
	00514	-0	76300	0	00006	Q6	LGL 6		F1BM2670
	00515	0	73400	1	00000		PAX 0,1		F1BM2680
	00516	-0	50000	0	00621		CAL COL	POSITION COLUMN INDICATOR	F1BM2690
	00517	0	77100	4	00006		ARS 6,4	X	F1BM2700
	00520	2	00020	1	00544		TIX YZ1,1,16	TEST FOR DIGIT	F1BM2710
	00521	3	00017	1	00547		TXH YZ2,1,15	TEST FOR Y-ZONE	F1BM2720
	00522	-0	60200	3	00657	CI5	ORS D,3	STORE DIGIT	F1BM2730
	00523	2	00001	4	00513	CI4	TIX CI1,4,1	COUNT CHARACTERS	F1BM2740
	00524	0	77100	0	00001	CI3	ARS 1	SHIFT AND TEST COLUMN	F1BM2750
	00525	-0	53400	4	00425		LXD OZ2,4	RESTORE GROUP COUNT	F1BM2760
	00526	1	77777	4	00527		TXI CI6,4,-1	COUNT GROUPS	F1BM2770
D	00527	-3	00000	4	00531	CI6	TXL CI7,4	TEST FOR LAST NON-BLANK GROUP	F1BM2780
	00530	-0	10000	0	00507		TNZ CI2	TEST FOR END OF ROW	F1BM2790
	00531	-0	50000	2	00644	CI7	CAL 8.3,2	FORM TRUE 8.4	F1BM2800
	00532	-0	60200	2	00647		ORS D-8,2	AND 3 ROWS AND	F1BM2810

	00533	-0	60200	2	00654		ORS D-3,2	MOVE 8.4 AND 8.3	F1BM2820
	00534	0	60200	2	00645		SLW 8.2,2	ROWS	F1BM2830
	00535	-0	50000	2	00643		CAL 8.4,2	FORM TRUE 8.4	F1BM2840
	00536	-0	60200	2	00647		ORS D-8,2	X	F1BM2850
	00537	-0	60200	2	00653		ORS D-4,2	X	F1BM2860
	00540	0	60200	2	00644		SLW 8.3,2	X	F1BM2870
D	00541	-3	00000	4	00564	CI8	TXL WP,4	TEST FOR END	F1BM2880
	00542	3	00017	2	00564		TXH WP,2,15	TEST FOR RIGHT HALF	F1BM2890
	00543	1	00020	2	00506		TXI CIR,2,16	INITIALIZE RIGHT HALF	F1BM2900
	00544	2	00020	1	00552	YZ1	TIX XZ1,1,16	TEST FOR 16/CH/32	F1BM2910
	00545	3	00017	1	00555		TXH XZ2,1,15	TEST FOR X-ZONE	F1BM2920
	00546	-0	60200	3	00657		ORS D,3	STORE DIGIT	F1BM2930
	00547	-0	60200	2	00661	YZ2	ORS Y,2	STORE Y-ZONE	F1BM2940
	00550	2	00001	4	00513		TIX CI1,4,1	COUNT CHARACTERS	F1BM2950
TD	00551	-3	00000	0	00524	X1	TXL CI3	OBTAIN NEXT GROUP	F1BM2960
	00552	2	00020	1	00560	XZ1	TIX OZ1,1,16	TEST FOR 32/CH/48	F1BM2970
	00553	3	00017	1	00523		TXH CI4,1,15	TEST FOR BLANK	F1BM2980
	00554	-0	60200	3	00657		ORS D,3	STORE DIGIT	F1BM2990
	00555	-0	60200	2	00660	XZ2	ORS X,2	STORE X-ZONE	F1BM3000
	00556	2	00001	4	00513		TIX CI1,4,1	COUNT CHARACTERS	F1BM3010
TD	00557	-3	00000	0	00524	X2	TXL CI3	OBTAIN NEXT GROUP	F1BM3020
	00560	-0	60200	2	00657	OZ1	ORS Z,2	STORE 0-ZONE	F1BM3030
	00561	-0	60200	3	00657		ORS D,3	STORE DIGIT	F1BM3040
	00562	2	00001	4	00513		TIX CI1,4,1	COUNT CHARACTERS	F1BM3050
TD	00563	-3	00000	0	00524		TXL CI3		F1BM3060
TD	00564	3	00000	0	00566	WP	TXH WP9	INVERTED TO TXL IF PROGRAM CARRIAGE CONTROL	F1BM3070
TD	00565	-3	00000	0	00572		TXL WP7	NO PROGRAM	F1BM3080
	00566	-0	53400	1	00612	WP9	LXD WP2,1	MASK OUT FIRST COL. OF CARD IMAGE	F1BM3090
	00567	-0	50000	0	00617		CAL MK2	X	F1BM3100
	00570	0	32000	1	00662	ANS	ANS LT,1	X	F1BM3110
	00571	2	00001	1	00570		TIX ANS,1,1	X	F1BM3120
	00572	-0	53400	1	00424	WP7	LXD Z2,1	COPY LOOP	F1BM3130
	00573	0	70000	1	00646	CRAN	CPY LT-12,1		F1BM3140
	00574	0	70000	1	00626		CPY RT-12,1	X	F1BM3150
	00575	1	77777	1	00576		TXI T2,1,-1		F1BM3160
	00576	3	77764	1	00573	T2	TXH CRAN,1,-12		F1BM3170
	00577	-0	50000	0	00564		CAL WP	RESET SWITCH FOR SECOND CYCLE	F1BM3180
	00600	0	60100	0	00564		STO WP	X	F1BM3190
D	00601	3	00000	4	00610	WP4	TXH WP5,4		F1BM3200
	00602	-0	53400	1	00551		LXD X1,1	NO, RELOAD INDEX REGISTERS AND RETURN	F1BM3210
	00603	-0	53400	2	00557		LXD X2,2	X	F1BM3220
	00604	-0	53400	4	00614	WT2	LXD X4,4	X	F1BM3230
	00605	0	02000	4	00002	L2	TRA 2,4	X	F1BM3240
	00606	0	76600	0	00361	RPR2	WPR		F1BM3250
TD	00607	-3	00000	0	00461		TXL PR2-2		F1BM3260
	00610	0	76600	0	00361	WP5	WPR		F1BM3270
	00611	0	76000	0	00371		SPR 9	SECOND CYCLE	F1BM3280
	00612	-3	00014	0	00500	WP2	TXL PR5,0,12	CONVERT REST OF LINE	F1BM3290
	00613	606060606060				BLNKS	BCD 1		F1BM3300
A	00614	0	00000	0	00000	X4	HTR		F1BM3310
	00615	+0000000000020				YZONE	OCT 20		F1BM3320
	00616	+0000000000060				BNK	OCT 60		F1BM3330
	00617	+3777777777777				MK2	OCT 377777777777		F1BM3340
	00620	-0	00000	0	00000	COL1	MZE		F1BM3350

00621	COL	BSS	1	F1BM3360
00642	RT	BES	16	F1BM3370
00642	8.5	BSS	1	F1BM3380
00643	8.4	BSS	1	F1BM3390
00644	8.3	BSS	1	F1BM3400
00645	8.2	BSS	1	F1BM3410
00657	D	BES	9	F1BM3420
00657	Z	BSS	1	F1BM3430
00660	X	BSS	1	F1BM3440
00661	Y	BSS	1	F1BM3450
00662	LT	SYN	Y+1	F1BM3460
00644	8.4L	SYN	LT-14	F1BM3470
00624	8.4R	SYN	RT-14	F1BM3480
00662		BSS	27	F1BM3490
00030		END	24	F1BM3500

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	354	0	0	0	0
LIB	0	0	0	0	0
COL	354	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 402

NUMBER OF SYMBOLS, DEF 131,DEFOP 0,UNDEF 0
 REM MACHINE ERROR RECORD. THIS RECORD HALTS TO PERMIT OPERATOR F1ME0010

MACHINE ERROR RECORD. THIS RECORD HALTS TO PERMIT OPERATOR INTERVENTION. IF THE SAME SOURCE PROGRAM IS TO BE RE-TRIED, OPERATOR SHOULD PRESS START. IF NEXT SOURCE PROGRAM IS TO BE COMPILED, THE OPERATOR MUST MANUALLY TURN SL1-ON, AND PRESS START.

F1ME0010
F1ME0020
F1ME0030
F1ME0040
F1ME0050
F1ME0060
F1ME0070
F1ME0080
F1ME0090
F1ME0100
F1ME0110
F1ME0120
F1ME0130
F1ME0160
F1ME0170

MASTER RECORD CARD = F0130000.

00030 0 00000 0 00031
00031 -0 76000 0 00141 NEXTIN
00032 0 02000 0 00004
00033 0 76400 0 00201
00034 0 76400 0 00201
00035 0 02000 0 00004
00030

ORG 24
HTR NEXTIN
SLT 1
TRA 4
BST 1
BST 1
TRA 4
END 24

GO TO 1 - CS TO REPEAT PROBLEM.
BACKSPACE OVER MACHINE ERROR RECORD.
BACKSPACE OVER BATCH MONITOR
TO 1-CS TO READ NEXT RECORD.

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	15	0	0	0	0
LIB	0	0	0	0	0
COL	15	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 24

NUMBER OF SYMBOLS, DEF 1, DEFOP 0, UNDEF 0
REM PST

SECTION 1= READS IN AND CLASSIFIES STATEMENTS. FOR ARITHMETIC4F10000
 FORMULAS, COMPILES THE OBJECT (OUTPUT) INSTRUCTIONS. FOR 4F10001
 NONARITHMETIC STATEMENTS INCLUDING INPUT-OUTPUT, DOES A 4F10002
 PARTIAL COMPILATION, AND RECORDS THE REMAINING INFORMATION 4F10003
 IN TABLES. 4F10004

THE FIVE MAJOR DIVISIONS OF SECTION 1 ARE= 4F10005
 COMMON, STATES A, B, C, AND D. COMMON REMAINS IN LOWER MEMORY4F10006
 THROUGHTOUT SECTION1. STATE A READS IN AND CLASSIFIES ALL 4F10007
 STATEMENTS, AND TREATS NONARITHMETIC STATEMENTS. STATES B, 4F10008
 C, AND D TREAT ARITHMETIC FORMULAS. 4F10009

SECTION 1 / COMMON = 4F10010
 704 FORTRAN MASTER RECORD CARD / COMMON = F0140000. 4F10011

		00000	ORG 0	4F10012		
00000	0	00004	0	00030	PZE ORGCOM,,1TOCS	4F100122
00001	0	00000	0	03437	PZE ORGA-1	4F100123

PART 1 / WORKING STORAGE, BUFFERS, AND TABLE PARAMETERS= 4F10014
 EIFNO AND SENSE SWITCH SIMULATORS. 4F10015
 TAPE TABLE BUFFERS. 4F10016
 TAPE TABLE PARAMETERS - INTET. 4F10017
 DRUM TABLE PARAMETERS. 4F10018
 FORSUB COUNT AND BUFFER. 4F10019
 CIB BUFFER AND PARAMETERS. 4F10020
 REMAINING WORKING STORAGE. 4F10021

PART 2 / CONSTANTS USED BY SECTION ONE. 4F10022

PART 3 / SUBROUTINES USED BY SECTION ONE= 4F10023

NAME	FUNCTION	
C0150,2	SCAN, AND CONVERT NUMERICS.	4F10024
C0160,2	SCAN CHARACTERS.	4F10025
C0180,2	CONVERT NUMERICS.	4F10026
C0190X,4	INITIALIZE C0190 TO 1ST WORD OF F.	4F10027
C0390,4	INSERT CHARACTER.	4F10028
C0190,4	OBTAIN NEXT NON-BLANK CHAR IN AC.	4F10029
CIT00,4	COMPILED INSTRUCTION TABLE ENTRIES.	4F10030
DIM.SR,4	DIMENSION TABLE SEARCH.	4F10031
DRTABS(,4)	DRUM TABLE ENTRIES.	4F10032
GETIFN,4	GET INTERNAL FORMULA NUMBER.	4F10033
JIF(GIF),4	JUMPS (GETS) IFN IN SL AND TL.	4F10034
MTR000	MONITOR STATES FROM DRUM.	4F10035
RA000,4	COMPUTER RELATIVE ADDRESS.	4F10036
RDRX,4	READ DRUM INTO BUFR.	4F10037
SR6DC1,1	CONVERT 6 BCD DIGITS TO 1 BINARY.	4F10038
SS000,4	SCAN AND PROCESS SUBSCRIPTS.	4F10039
SUBX00,4	ADD BLANKS TO SUBROUTINE NAMES.	4F10040
TESTFX,1	TEST FOR FIXED OR FLOATING POINT.	4F10041
TEST.,4	TEST CHARACTER IN AC.	4F10042
TET00,1	TAPE TABLE ENTRIES.	4F10043

DIAG DIAGNOSTIC CALLERS. 4F10044
 4F10045
 4F10046

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THE FOLLOWING CONVENTIONS ARE USED IN THIS LISTING=
** IN THE ADDRESS, TAG, OR DECREMENT OF AN INSTRUCTION
INDICATES THAT THIS FIELD WILL BE MODIFIED BY THE PROGRAM.
* IN COL/36 INDICATES THE INSTRUCTION IS A TRANSFER OUT OF
THIS LOGICAL BLOCK OR SUBROUTINE.
C IN COL/34 INDICATES THE INSTRUCTION WAS CORRECTED.
P IN COL/32 INDICATES THE INSTRUCTION WAS INSERTED (PATCH).
* * * * *
COMMON/1-WORKING STORAGE, BUFFERS, AND TABLE PARAMETERS=
00030 ORGCOM ORG 24
* * * * *
EIFNO AND SENSE SWITCH SIMULATORS.
00030 0 00000 0 00000 EIFNO PZE **, ** EXTERNAL, ,INTERNAL FORMULA NUMBER.
00031 0 00000 0 00002 ENDI1 PZE 2 SIMULATOR FOR SENSE SWITCH 1.
00032 0 00000 0 00002 ENDI2 PZE 2 SIMULATOR FOR SENSE SWITCH 2.
00033 0 00000 0 00002 ENDI3 PZE 2 SIMULATOR FOR SENSE SWITCH 3.
00034 0 00000 0 00002 ENDI4 PZE 2 SIMULATOR FOR SENSE SWITCH 4.
00035 0 00000 0 00002 ENDI5 PZE 2 SIMULATOR FOR SENSE SWITCH 5.
* * * * *
BUFFERS USED BY TET00 FOR THE TAPE TABLES.
00036 TEIFNO BSS 10 EXTERNAL, ,INTERNAL FORMULA NUMBERS.
00050 TDO BSS 10 DO STATEMENTS.
00062 TIFGO BSS 10 IF AND GO TO STATEMENTS.
00074 TRAD BSS 10 IF AND GO TO TRANSFER ADDRESSES.
00106 FORTAG BSS 10 INDEXES TO TAU AND SIGMA TABLES.
00120 FORVAR BSS 10 RIGHT - NON-SUB. FX. PT. VARIABLES.
00132 FORVAL BSS 10 LEFT - NON-SUB. FX. PT. VARIABLES.
00144 FRET BSS 10 FREQUENCY STATEMENTS.
00156 EQUIT BSS 10 EQUIVALENCE STATEMENTS.
00170 CLOSUB BSS 10 NAMES OF SUBROUTINES.
00202 FORMAT BSS 10 FORMAT STATEMENTS.
00214 SUBDEF BSS 10 SUBROUTINE DEFINITION STATEMENTS.
00226 COMMON BSS 10 UPPER MEMORY STORAGE STATEMENTS.
00240 HOLARG BSS 10 HOLLERITH ARGUMENTS FOR SUBROUTINE.
00252 NONEXC BSS 10 NON-EXECUTED STATEMENTS.
00264 TSTOPS BSS 10 STOP STATEMENTS.
00276 CALLFN BSS 10 1ST / LAST IFN FOR CALL STATEMENTS.
00310 FMTEFN BSS 10 TABLE OF FORMAT EXTERNAL FORMNOS.
* * * * *
END OF THE TAPE TABLE BUFFERS.
* * * * *
INTET/ TABLE PARAMETERS USED BY TET00, WHERE
O = ORIGIN OF TABLE BUFFER,
B = BUFFER CAPACITY,
A = ADDRESS OF TABLE ENTRY,
E = ENTRY LENGTH IN WORDS,
C = COUNT OF BLOCKS PUT ON TAPE,
P = PORTION OF BUFFER THAT IS FULL,

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00322	0	00012	0	00036	INTET	PZE	TEIFNO,,10	00)	0,,B.	4F10101
00323	0	00001	0	00030		PZE	EIFNO,,1		A,,E.	4F10102
00324	0	00000	0	00000		PZE	**,,**		C,,P.	4F10103
00325	0	00012	0	00050		PZE	TDO,,10	01)	0,,B.	4F10104
00326	0	00005	0	01105		PZE	1C,,5		A,,E.	4F10105
00327	0	00000	0	00000		PZE	**,,**		C,,P.	4F10106
00330	0	00012	0	00062		PZE	TIFGO,,10	02)	0,,B.	4F10107
00331	0	00002	0	01105		PZE	1C,,2		A,,E.	4F10108
00332	0	00000	0	00000		PZE	**,,**		C,,P.	4F10109
00333	0	00012	0	00074		PZE	TRAD,,10	03)	0,,B.	4F10110
00334	0	00001	0	01112		PZE	1G,,1		A,,E.	4F10111
00335	0	00000	0	00000		PZE	**,,**		C,,P.	4F10112
00336	0	00012	0	00106		PZE	FORTAG,,10	04)	0,,B.	4F10113
00337	0	00001	0	01347		PZE	G,,1		A,,E.	4F10114
00340	0	00000	0	00000		PZE	**,,**		C,,P.	4F10115
00341	0	00012	0	00120		PZE	FORVAR,,10	05)	0,,B.	4F10116
00342	0	00002	0	01347		PZE	G,,2		A,,E.	4F10117
00343	0	00000	0	00000		PZE	**,,**		C,,P.	4F10118
00344	0	00012	0	00132		PZE	FORVAL,,10	06)	0,,B.	4F10119
00345	0	00002	0	01347		PZE	G,,2		A,,E.	4F10120
00346	0	00000	0	00000		PZE	**,,**		C,,P.	4F10121
00347	0	00012	0	00144		PZE	FRET,,10	07)	0,,B.	4F10122
00350	0	00001	0	01112		PZE	1G,,1		A,,E.	4F10123
00351	0	00000	0	00000		PZE	**,,**		C,,P.	4F10124
00352	0	00012	0	00156		PZE	EQUIT,,10	08)	0,,B.	4F10125
00353	0	00002	0	01105		PZE	1C,,2		A,,E.	4F10126
00354	0	00000	0	00000		PZE	**,,**		C,,P.	4F10127
00355	0	00012	0	00170		PZE	CLOSUB,,10	09)	0,,B.	4F10128
00356	0	00001	0	01347		PZE	G,,1		A,,E.	4F10129
00357	0	00000	0	00000		PZE	**,,**		C,,P.	4F10130
00360	0	00012	0	00202		PZE	FORMAT,,10	10)	0,,B.	4F10131
00361	0	00002	0	01347		PZE	G,,2		A,,E.	4F10132
00362	0	00000	0	00000		PZE	**,,**		C,,P.	4F10133
00363	0	00012	0	00214		PZE	SUBDEF,,10	11)	0,,B.	4F10134
00364	0	00001	0	01112		PZE	1G,,1		A,,E.	4F10135
00365	0	00000	0	00000	SBDFCN	PZE	**,,**		C,,P.	4F10136
00366	0	00012	0	00226		PZE	COMMON,,10	12)	0,,B.	4F10137
00367	0	00001	0	01112		PZE	1G,,1		A,,E.	4F10138
00370	0	00000	0	00000		PZE	**,,**		C,,P.	4F10139
00371	0	00012	0	00240		PZE	HOLARG,,10	13)	0,,B.	4F10140


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00432 0 00004 0 01135      PZE E+3+4,,4      TAU2  ) ARG1+L,,L      4F10209
00433 0 00000 0 00454      PZE TAU2,,**      TDA,,N      4F10210
00434 -3 00060 0 00454      TXL TAU2,,12*4    *** FDA,,K*L   4F10211
00435 0 00132 0 00074      PZE 12*5,,90     DBL,,J      4F10212
00436 1 00001 0 02073 TAU2IX TXI ALT,,5-4     TXI ALT,,I   4F10213
                                         4F10214
00437 0 00006 0 01137      PZE E+3+6,,6     TAU3  ) ARG1+L,,L      4F10215
00440 0 00000 0 01356      PZE TAU3,,**     TDA,,N      4F10216
00441 -3 00060 0 01356      TXL TAU3,,8*6    *** FDA,,K*L   4F10217
00442 0 00113 0 00070      PZE 8*7,,75     DBL,,J      4F10218
00443 1 00001 0 02073 TAU3IX TXI ALT,,5-4     TXI ALT,,I   4F10219
                                         4F10220
00444 0 00001 0 01142      PZE E+11+1,,1    SIGMA1) ARG1+L,,L    4F10221
00445 0 00001 0 01230      PZE SIGMA1+2,,1  TDA,,N      4F10222
00446 -3 00036 0 01226      TXL SIGMA1,,30,* *** FDA,,K*L   4F10223
00447 0 00036 0 00074      PZE 30*2,,30    DBL,,J      4F10224
00450 1 00003 0 02073 SIG1IX TXI ALT,,5-2     TXI ALT,,I   4F10225
                                         4F10226
00451 0 00002 0 01107      PZE 1C+2,,2     DIM1  ) ARG1+L,,L    4F10227
00452 0 00000 0 00310      PZE DIM1,,**     TDA,,N      4F10228
00453 -3 00000 0 00310 ORGDM1 TXL DIM1,,0     *** FDA,,K*L   4F10229
00454 0 00144 0 00000      PZE 0,,100      DBL,,J      4F10230
00455 1 00002 0 02071 DIM1IX TXI DIMALT,,5-3 TXI ALT,,I   4F10231
                                         4F10232
00456 0 00002 0 01107      PZE 1C+2,,2     DIM2  ) ARG1+L,,L    4F10233
00457 0 00000 0 00764      PZE DIM2,,**     TDA,,N      4F10234
00460 -3 00000 0 00764 ORGDM2 TXL DIM2,,0     *** FDA,,K*L   4F10235
00461 0 00144 0 00000      PZE 0,,100      DBL,,J      4F10236
00462 1 00002 0 02071 DIM2IX TXI DIMALT,,5-3 TXI ALT,,I   4F10237
                                         4F10238
00463 0 00003 0 01110      PZE 1C+3,,3     DIM3  ) ARG1+L,,L    4F10239
00464 0 00000 0 01440      PZE DIM3,,**     TDA,,N      4F10240
00465 -3 00000 0 01440 ORGDM3 TXL DIM3,,0     *** FDA,,K*L   4F10241
00466 0 00132 0 00000      PZE 0,,90       DBL,,J      4F10242
00467 1 00002 0 02071 DIM3IX TXI DIMALT,,5-3 TXI ALT,,I   4F10243
                                         4F10244
                                         4F10245
                                         END OF DRUM TABLE PARAMETERS.
                                         * * * * * 4F10246
                                         4F10247
                                         COUNT AND BUFFER FOR TABLE OF FUNCTION NAMES AND DEGREES.
00470 BK      BSS 1 FORSUB COUNTER. 4F10248
00471 FORSUB BSS 100 NAMES AND DEGREES OF FUNCTIONS. 4F10249
                                         4F10250
                                         END OF FUNCTION COUNT AND BUFFER.
                                         * * * * * 4F10251
                                         4F10252
                                         4F10253
                                         PARAMETERS AND BUFFER FOR COMPILED INSTRUCTION TABLE.
00635 0 00144 0 00000 BS      PZE ,,100 CIB CAPACITY (4 * 25). 4F10254
00636 0 00000 0 00000 EC      PZE ,,** ENTRY COUNT = NO. WORDS IN CIB. 4F10255
00637 0 00000 0 00000 BBOX     PZE ,,** 2S COMPLEMENT OF THE ENTRY COUNT. 4F10256
00640 CIB     BSS 100 COMPILED INSTRUCTION BUFFER. 4F10257
                                         4F10258
                                         END OF CIT PARAMETERS AND BUFFER.
                                         * * * * * 4F10259
                                         4F10260
                                         4F10261
                                         ALL OF THE ABOVE BUFFERS AND PARAMETERS ARE USED BY 1 PRIME. 4F10262

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	01100		ORG	576			4F102625
	01100	ERASE	BSS	5		COMMON WORKING STORAGE.	4F10263
	01105	1C	BSS	5		COMMON WORKING STORAGE.	4F10264
	01112	1G	BSS	1		COMMON WORKING STORAGE.	4F10265
	01113	2G	BSS	1		COMMON WORKING STORAGE FOR STATE A.	4F10266
	01114	3G	BSS	1			4F10267
	01115	1H	BSS	1			4F10268
	01116	2H	BSS	1			4F10269
	01117	3LBAR	BSS	1		STORAGE USED BY ARITHMETIC.	4F10270
	01120	ARERAS	BSS	1		STORAGE USED BY ARITHMETIC.	4F10271
01121	-0	00001	0	00004	ARGCNT	MZE 4,,1	4F10272
				01122	ARGCTR	BSS 1	4F10273
01123	0	00000	0	00000	CALLNM	PZE **,,**	4F10274
				01124	CHSAVE	BSS 1	4F10275
				01125	DIMSAV	BSS 1	4F10276
				01126	E	BSS 14	4F10277
				01144	EPSM3	BSS 3	4F10278
				01147	EPS	BSS 1	4F10279
				01150	E1C	BSS 1	4F10280
				01151	EFN	BSS 1	4F10281
				01152	F	BSS 111	4F10282
				01331	FIRSTC	BSS 1	4F10283
				01332	FSNAME	BSS 1	4F10284
				01333	FT	BSS 12	4F10285
				01347	G	BSS 2	4F10286
				01351	GTAG	BSS 1	4F10287
01352	307400000000				HOLCNT	BCD 1H(0000	4F10288
				01353	I	BSS 1	4F10289
				01354	LEFT	BSS 3	4F10290
01357	0	00000	0	00000	LENGTH	PZE **,,**	4F10291
				01360	NBAR	BSS 1	4F10292
				01361	N2	BSS 1	4F10293
				01362	OPNWRD	BSS 1	4F10294
01363	0	00000	0	00000	PHI(I)	PZE **,,**	4F10295
01364	0	00000	0	00010	RAT	PZE 8,,**	4F10296
				01365	RESIDU	BSS 1	4F10297
01366	1	00000	0	00000	SET	PON **	4F10298
				01367	SL	BSS 1	4F10299
				01370	SYMBOL	BSS 1	4F10300
01371	0	00000	0	00370	TL	PZE 31*8,,**	4F10301
01372	0	00000	0	00000	TLINE	PZE **	4F10302
						END OF COMMON WORKING STORAGE, BUFFERS, AND PARAMETERS.	4F10303
						* * * * *	4F10304
							4F10305
						COMMON/2-CONSTANTS USED BY SECTION ONE=	4F10306
							4F10307
01373	+0000000000012	TEN	OCT	12		(1010) - CTEST-11	4F10308
01374	+0000000000077	ENDMK	OCT	77		111111 - CTEST-10	4F10309
01375	+0000000000074	OPEN	OCT	74		(- CTEST-9	4F10310
01376	+0000000000073	COMMA	OCT	73		, - CTEST-8	4F10311
01377	+0000000000034	CLOS	OCT	34		) - CTEST-7	4F10312
01400	+0000000000013	EQUAL	OCT	13		= - CTEST-6	4F10313
01401	+0000000000040	11Z	OCT	40		- - CTEST-5	4F10314
01402	+0000000000061	SLASH	OCT	61		/ - CTEST-4	4F10315

01403	+0000000000033	POINT	OCT 33	.	- CTEST-3	4F10316
01404	+0000000000020	12Z	OCT 20	+	- CTEST-2	4F10317
01405	+0000000000054	STAR	OCT 54	*	- CTEST-1	4F10318
	01406	CTEST	BSS 0		ADDRESS USED FOR INDEXING ABOVE.	4F10319
						4F10320
01406	0000000000000	L(0)	BCD 1000000	0		4F10321
01407	0000000000001	L(1)	BCD 1000001	1		4F10322
01410	0000000000002	L(2)	BCD 1000002	2		4F10323
01411	0000000000003	L(3)	BCD 1000003	3		4F10324
01412	0000000000004	L(4)	BCD 1000004	4		4F10325
01413	0000000000005	L(5)	BCD 1000005	5		4F10326
01414	0000000000006	L(6)	BCD 1000006	6		4F10327
01415	0000000000007	L(7)	BCD 1000007	7		4F10328
01416	0000000000010	L(8)	BCD 1000008	8		4F10329
01417	0000000000011	L(9)	BCD 1000009	9		4F10330
01420	+0000000000014	MINUS	OCT 14	-		4F10331
01421	0000000000023	L(C)	BCD 100000C	C		4F10332
01422	0000000000026	L(F)	BCD 100000F	F		4F10333
01423	0000000000030	L(H)	BCD 100000H	H		4F10334
01424	+0000000000032	CHAR2	OCT 32		CONSTANT USED BY CD000.	4F10335
01425	0000000000046	L(O)	BCD 100000O	O	(ALPHABETIC)	4F10336
01426	+0000000000052	CHAR3	OCT 52		CONSTANT USED BY CD000.	4F10337
01427	+0000000000053	SPECOP	OCT 53		00000\$	4F10338
01430	+0000000000060	BLANK	OCT 60		00000000000060	4F10339
01431	0000000000062	L(S)	BCD 100000S	S		4F10340
01432	0000000000063	L(T)	BCD 100000T	T		4F10341
01433	0000000000067	L(X)	BCD 100000X	X		4F10342
01434	0000000000071	L(Z)	BCD 100000Z	Z		4F10343
01435	+0000000000072	PM	OCT 72		RECORD MARK (ILLEGAL) -CD000	4F10344
01436	+0000000000100	BIT29	OCT 100			4F10345
01437	+0000000000121	A81	DEC 81		CONSTANT USED BY IOT.	4F10346
01440	+0000000000140	L(96)	OCT 140		USED BY C0500.	4F10347
01441	+0000000000160	L(112)	OCT 160		USED BY C0400.	4F10348
01442	+0000000000777	MASK3	OCT 777			4F10349
01443	+000000001000	1E9	OCT 1000		ADDRESS=8	4F10350
01444	000000002174	L(A())	BCD 10000A()		INTERNAL FLO-PT VARIABLE PREFIX.	4F10351
01445	000000003074	L(H())	BCD 10000H()			4F10352
01446	000000003174	L(I())	BCD 10000I()		INTERNAL FXD-PT VARIABLE PREFIX.	4F10353
01447	+000000006212	SAPSYM	OCT 6212			4F10354
01450	+000000006712	IFSVM	OCT 6712			4F10355
01451	+000000007112	CALLER	OCT 7112			4F10356
01452	+0000000077777	MASK2	OCT 77777		2**15-1	4F10357
01453	+000000400000	2E17	OCT 400000		TAG=4	4F10358
01454	+000001000000	2E18	OCT 1000000		DECREMENT=1	4F10359
01455	0 00001 0 00001	DECR1	PZE 1,,1		CONSTANT USED BY DRTABS.	4F10360
01456	+000001000002	ABTAG2	OCT 1000002		CONSTANT USED BY C3200.	4F10361
01457	0 00002 0 00000	D2	PZE ,,2		CONSTANT USED BY IOT.	4F10362
01460	+000002000004	ABTAG3	OCT 2000004		CONSTANT USED BY C3200.	4F10363
01461	0 00003 0 00000	D3CN	PZE ,,3		CONSTANT USED BY IOT.	4F10364
01462	+000003077775	BETAD2	OCT 3077775		3*2**18+(-3)	4F10365
01463	0 00006 0 00000	D6	PZE ,,6		-ARITHMETIC.	4F10366
01464	0 00020 0 00000	FSIND	PZE ,,16		CONSTANT USED BY IOT.	4F10367
01465	0 00021 0 00000	DEC17	PZE ,,17			4F10368
01466	0 00022 0 00000	DEC18	PZE ,,18			4F10369

01467	+000032000000	PZ	OCT	32000000	PLUS ZERO -CD000.	4F10370	
01470	+000037777600	MASK5	OCT	37777600	-ARITHMETIC.	4F10371	
01471	0 00040 0 00000	FNIND	PZE	,,32		4F10372	
01472	0 00043 0 00000	DEC35	PZE	,,35		4F10373	
01473	+000052000000	MZ	OCT	52000000	MINUS ZERO -CD000.	4F10374	
01474	+000200000000	NGTBIT	OCT	000200000000		4F10375	
01475	0 00220 0 00000	BTA	PZE	,,144	CONSTANT USED BY IOT.	4F10376	
01476	0 00300 0 00000	BDA	PZE	0,0,192	CONSTANT USED BY IOT.	4F10377	
01477	006060606060	5BLANS	BCD	10	006060606060	4F10378	
01500	010000000000	E(	BCD	1100000	-ARITHMETIC.	4F10379
01501	020000000000	I(	BCD	1200000	-ARITHMETIC.	4F10380
01502	030000000000	A(	BCD	1300000	-ARITHMETIC.	4F10381
01503	040000000000	P(	BCD	1400000	-ARITHMETIC.	4F10382
01504	060000000000	O(	BCD	1600000	-ARITHMETIC.	4F10383
01505	070000000000	X(	BCD	1700000	-ARITHMETIC.	4F10384
01506	+077775077775	BETAD1	OCT	77775077775	(-3(*2**18+(-3)	-ARITHMETIC.	4F10385
01507	+077777000000	1BAR	OCT	777770000000	(2**15-1)*2**18	DECREMENT MASK.	4F10386
01510	+170000000000	15P	DEC	15B5	CONSTANT USED BY IOT.	4F10387	
01511	+176060606060	PROCTR	OCT	176060606060		4F10388	
01512	+200000000000	ADPLUS	OCT	200000000000	ADDITION SIGN -ARITHMETIC.	4F10389	
01513	217400000000	FLOVAR	BCD	1A(0000	A(INTERNAL FLOATING PT.	4F10390	
01514	256747740160	FXFX	BCD	1EXP(1		4F10391	
01515	256747740260	FLFX	BCD	1EXP(2		4F10392	
01516	256747740360	FLFL	BCD	1EXP(3		4F10393	
01517	317400000000	FIXVAR	BCD	1I(0000	I(INTERNAL FIXED PT. VARIABLE.	4F10394	
01520	-0 00000 0 00000	MINUS0	MZE	0		4F10395	
01521	-0 00002 0 00000	DECM12	MZE	,,2		4F10396	
01522	-130000000000	ADSPOP	OCT	530000000000	\$00000	4F10397	
01523	-136000000000	DOLSGN	OCT	536000000000	CONSTANT USED BY C32000	4F10398	
01524	-140000000000	ADSTAR	OCT	-140000000000	MULTIPLUCATION SIGN -ARITHMETIC.	4F10399	
01525	-145400000000	STRSTR	OCT	-145400000000	EXPONENTIATION SIGN -ARITHMETIC.	4F10400	
01526	606060606060	BLANKS	BCD	1	606060606060	4F10401	
01527	-377777700000	MASK1	OCT	-377777700000	-(2**20-U.**15	-ARITHMETIC.	4F10402
01530	-377777777737	MASK4	OCT	-377777777737	-ARITHMETIC	4F10403	
01531	-377777777777	ALL1	OCT	-377777777777	END OF STATEMENT WORD.	4F10404	
						4F10405	
01532	212424000000	L(ADD)	BCD	1ADD000	SYMBOLIC OPERATION CODE.	4F10406	
01533	214362000000	L(ALS)	BCD	1ALS000	SYMBOLIC OPERATION CODE.	4F10407	
01534	214521000000	L(ANA)	BCD	1ANA000	SYMBOLIC OPERATION CODE.	4F10408	
01535	215162000000	L(ARS)	BCD	1ARS000	SYMBOLIC OPERATION CODE.	4F10409	
01536	226262000000	L(BSS)	BCD	1BSS000	SYMBOLIC OPERATION CODE.	4F10410	
01537	232143000000	L(CAL)	BCD	1CAL000		4F10411	
01540	233062000000	L(CHS)	BCD	1CHS000	SYMBOLIC OPERATION CODE.	4F10412	
01541	234321000000	L(CLA)	BCD	1CLA000	SYMBOLIC OPERATION CODE.	4F10413	
01542	234344000000	L(CLM)	BCD	1CLM000	SYMBOLIC OPERATION CODE.	4F10414	
01543	234362000000	L(CLS)	BCD	1CLS000	SYMBOLIC OPERATION CODE.	4F10415	
01544	234770000000	L(CPY)	BCD	1CPY000		4F10416	
01545	242363000000	L(DCT)	BCD	1DCT000	SYMBOLIC OPERATION CODE.	4F10417	
01546	242524000000	L(DED)	BCD	1DED000		4F10418	
01547	246547000000	L(DVP)	BCD	1DVP000	SYMBOLIC OPERATION CODE.	4F10419	
01550	262124000000	L(FAD)	BCD	1FAD000	SYMBOLIC OPERATION CODE.	4F10420	
01551	262447000000	L(FDP)	BCD	1FDP000	SYMBOLIC OPERATION CODE.	4F10421	
01552	264447000000	L(FMP)	BCD	1FMP000	SYMBOLIC OPERATION CODE.	4F10422	
01553	266222000000	L(FSB)	BCD	1FSB000	SYMBOLIC OPERATION CODE.	4F10423	

01554	304751000000	L(HPR)	BCD	1HPR000	SYMBOLIC OPERATION CODE.	4F10424
01555	432421000000	L(LDA)	BCD	1LDA000		4F10425
01556	432450000000	L(LDQ)	BCD	1LDQ000	SYMBOLIC OPERATION CODE.	4F10426
01557	434362000000	L(LLS)	BCD	1LLS000	SYMBOLIC OPERATION CODE.	4F10427
01560	435162000000	L(LRS)	BCD	1LRS000	SYMBOLIC OPERATION CODE.	4F10428
01561	436724000000	L(LXD)	BCD	1LXD000	SYMBOLIC OPERATION CODE.	4F10429
01562	444770000000	L(MPY)	BCD	1MPY000	SYMBOLIC OPERATION CODE.	4F10430
01563	446225000000	L(MSE)	BCD	1MSE000	SYMBOLIC OPERATION CODE.	4F10431
01564	465121000000	L(ORA)	BCD	1ORA000	SYMBOLIC OPERATION CODE.	4F10432
01565	476225000000	L(PSE)	BCD	1PSE000	SYMBOLIC OPERATION CODE.	4F10433
01566	476724000000	L(PXD)	BCD	1PXD000	SYMBOLIC OPERATION CODE.	4F10434
01567	504751000000	L(QPR)	BCD	1QPR000	CONSTANT USED BY C3200.	4F10435
01570	506724000000	L(QXD)	BCD	1QXD000	CONSTANT USED BY C3200.	4F10436
01571	626321000000	L(STA)	BCD	1STA000	SYMBOLIC OPERATION CODE.	4F10437
01572	626346000000	L(STO)	BCD	1STO000	SYMBOLIC OPERATION CODE.	4F10438
01573	626350000000	L(STQ)	BCD	1STQ000	SYMBOLIC OPERATION CODE.	4F10439
01574	626422000000	L(SUB)	BCD	1SUB000	SYMBOLIC OPERATION CODE.	4F10440
01575	626724000000	L(SXD)	BCD	1SXD000	SYMBOLIC OPERATION CODE.	4F10441
01576	633167000001	L(TIX)	BCD	1TIX001		4F10442
01577	634665000000	L(TOV)	BCD	1TOV000	SYMBOLIC OPERATION CODE.	4F10443
01600	635046000000	L(TQO)	BCD	1TQO000	SYMBOLIC OPERATION CODE.	4F10444
01601	635121000000	L(TRA)	BCD	1TRA000	SYMBOLIC OPERATION CODE.	4F10445
01602	636267000000	L(TSX)	BCD	1TSX000	SYMBOLIC OPERATION CODE.	4F10446
01603	642621000000	L(UFA)	BCD	1UFA000	SYMBOLIC OPERATION CODE.	4F10447
				END OF COMMON CONSTANTS USED BY SECTION ONE.		4F10448
				* * * * *		4F10449
				COMMON/3-SUBROUTINES USED BY SECTION ONE=		4F10450
						4F10451
				* * * * *		4F10452
						4F10453
						4F10454
				C0150,2/ CALLS=C0190,DIAG,C0180,C0160. CALLER=C0100.		4F10455
				C0150 INSPECTS 1ST NB CHAR STARTING IN MQ. IF NUMERIC, SETS I		4F10456
				= 0, AND CONVERTS SUCCESSIVE NUMERICS TO BINARY. IF NON-		4F10457
				NUMERIC, SETS I = -0, AND PACKS INTO 1G SUCCESSIVE CHARACTERS		4F10458
				UNTIL A ,()= OR ENDMK IS MET, AND LEFT IN THE AC.		4F10459
01604	-0 63400 2 01607	C0150	SXD	C015X,2	SAVE THE C(XR2).	4F10460
01605	0 07400 4 01707		TSX	C0190,4	* TEST 1ST NON-BLANK CHARACTER	4F10461
01606	0 34000 0 01417		CAS	L(9)	FOR NUMERIC OR NON-NUMERIC.	4F10462
01607	1 00000 0 01615	C015X	TXI	C0151,0,**	IF NON-NUMERIC, TRANSFER.	4F10463
01610	0 76100 0 00000		NOP		IF NUMERIC, THEN	4F10464
01611	0 07400 2 01655		TSX	C0180,2	* GO CONVERT TO BINARY.	4F10465
01612	0 60100 0 01113		STO	2G	SAVE NEXT NON-NUMERIC CHARACTER.	4F10466
01613	0 50000 0 01406		CLA	L(0)	PREPARE TO SET I TO +0.	4F10467
01614	1 00000 0 01620	FWA	TXI	C0152,0,**	GO SET I FOR NUMERIC.	4F10468
01615	0 07400 2 01624	C0151	TSX	C0160,2	* ASSEMBLE NON-NUMERICS IN 1G.	4F10469
01616	0 60100 0 01113		STO	2G	SAVE PUNCTUATION MARK, AND	4F10470
01617	0 50200 0 01406		CLS	L(0)	PREPARE TO SET I TO -0.	4F10471
01620	0 60100 0 01353	C0152	STO	I	SET I = +0, OR -0.	4F10472
01621	0 50000 0 01113		CLA	2G	PICKUP NEXT CHARACTER,	4F10473
01622	-0 53400 2 01607		LXD	C015X,2	RESTORE THE C(XR2), AND	4F10474
01623	0 02000 2 00001		TRA	1,2	* RETURN TO CALLER.	4F10475
				END OF PROGRAM C0150.		4F10476
				* * * * *		4F10477

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                                4F10478
                                C0160,2/ CALLS=C0190,DIAG. CALLERS=C0100,C0200,C1000,C1200, 4F10479
                                C1500,C3000,C3100,C0150. 4F10480
                                C0160 ASSEMBLES LEFT-ADJUSTED IN 1G, THE CHAR IN THE AC AND 4F10481
                                SUCCESSIVE NB CHARS STARTING IN THE MQ, UNTIL A ,( )= OR ENDMK4F10482
                                IS MET AND LEFT IN THE AC. ALSO MARKS END OF WORD WITH A 4F10483
                                BLANK, IF LESS THEN 6 CHARACTERS. 4F10484
01624 -0 63400 2 01631 C0160 SXD C016X,2 SAVE THE C(XR2), AND 4F10485
01625 0 53400 2 01406 LXAL(0),2 SET XR2 TO CONTROL SHIFTING. 4F10486
01626 0 60000 0 01112 STZ 1G CLEAR WORKING STORAGE. 4F10487
01627 0 53400 4 02652 C0161 LXAL CTESTX,4 TEST 4F10488
01630 0 34000 4 01406 C0162 CAS CTEST,4 CHARACTER 4F10489
01631 1 00000 0 01633 C016X TXI C0163,0,** IN THE AC 4F10490
D 01632 1 00000 0 01642 TXI C0165,0 AGAINST 4F10491
01633 2 00001 4 01630 C0163 TIX C0162,4,1 ALL PUNCTUATIONS. 4F10492
01634 -3 00036 2 01636 TXL C0164,2,30 IF SYMBOL EXCEEDS 6 CHARACTERS, 4F10493
01635 0 07400 4 03400 TSX DIAG,4 * GO TO THE DIAGNOSTIC. 4F10494
01636 0 76700 2 00036 C0164 ALS 30,2 BUILD LEFT-ADJUSTED 4F10495
01637 -0 60200 0 01112 ORS 1G SYMBOL IN WORKING STORAGE. 4F10496
01640 0 07400 4 01707 TSX C0190,4 * GET NEXT NB CHARACTER IN THE AC. 4F10497
01641 1 00006 2 01627 TXI C0161,2,6 UPDATE SHIFT COUNT, AND CONTINUE. 4F10498
01642 3 00000 2 01644 C0165 TXH C0167,2,0 IF PUNCTUATION IS 1ST CHARACTER. 4F10499
01643 0 07400 4 03400 C0166 TSX DIAG,4 * OR ILLEGAL, GO TO THE DIAGNOSTIC. 4F10500
01644 -3 00005 4 01643 C0167 TXL C0166,4,5 IF LEGAL PUNCTUATION, THEN 4F10501
01645 0 60100 0 01115 STO 1H SAVE, AND 4F10502
01646 0 50000 0 01430 CLA BLANK ADD A BLANK 4F10503
01647 0 76700 2 00036 ALS 30,2 TO SYMBOLS THAT ARE LESS 4F10504
01650 -0 60200 0 01112 ORS 1G THEN 6 CHARACTERS IN LENGTH. 4F10505
01651 0 50000 0 01115 CLA 1H PICKUP PUNCTUATION MARK, 4F10506
01652 -0 53400 2 01631 LXD C016X,2 RESTORE THE C(XR2), AND 4F10507
01653 0 02000 2 00001 TRA 1,2 * RETURN TO CALLER. 4F10508
                                END OF PROGRAM C0160. 4F10509
                                * * * * * 4F10510
                                C0180,2/ CALLS=C0190,DIAG. CALLERS=C0100,C0200,C0300,C0400, 4F10511
                                C1000,C1100,C1200,C1400,C1500,C0150. 4F10512
                                C0180 CONVERTS SUCCESSIVE NUMERIC STARTING IN THE MQ TO 4F10513
                                BINARY, PLACES RESULT IN 1G, AND LEAVES 1ST NON-NUMERIC IN 4F10514
                                THE AC. 1ST NUMERIC IS ASSUMED TO BE ALREADY IN THE AC. 4F10515
01654 0 07400 4 01707 C0180X TSX C0190,4 * OBTAIN 1ST NUMERIC IN THE AC. 4F10516
01655 0 60100 0 01112 C0180 STO 1G PLACE 1ST NUMERIC IN 1G. 4F10517
01656 0 07400 4 01707 TSX C0190,4 * EXAMINE NEXT NON-BLANK CHARACTER, 4F10518
01657 0 34000 0 01417 CAS L(9) AND IF NON-NUMERIC, THEN 4F10519
01660 0 02000 2 00001 TRA 1,2 * RETURN TO CALLER. 4F10520
01661 0 76100 0 00000 NOP IF NUMERIC, THEN 4F10521
01662 0 60100 0 01113 STO 2G SAVE DIGIT IN 2G. 4F10522
01663 0 50000 0 01112 CLA 1G MULTIPLY 4F10523
01664 0 76700 0 00002 ALS 2 C(1G) 4F10524
01665 0 40000 0 01112 ADD 1G BY 4F10525
01666 0 76700 0 00001 ALS 1 10, 4F10526
01667 0 40000 0 01113 ADD 2G AND ADD CURRENT DIGIT. 4F10527
01670 1 76626 0 01655 DCF TXI C0180,0,-F REPEAT PROCESS FOR NEXT CHARACTER. 4F10528
                                END OF PROGRAM C0180. 4F10529
                                * * * * * 4F10530

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                                4F10531
                                C0190X,4/ CALLERS=CD000,CB000,CC000,C0300,C3300. 4F10532
                                C0190X INITIALIZES C0190 TO OBTAIN 1ST WORD OF FORMUAL IN F. 4F10533
01671  0 50000 0 01670 C0190X CLA DCF SET FORMULA WORD 4F10534
01672  0 62200 0 01614 STD FWA ADDRESS = -(F-REGION ADDRESS), 4F10535
01673 -0 63400 0 01724 SXD CHCTR,0 SET CHARACTER COUNT = 0, 4F10536
01674  0 02000 4 00001 TRA 1,4 * RETURN TO MAIN ROUTINE. 4F10537
                                END OF PROGRAM C0190X. 4F10538
                                * * * * * 4F10539
                                4F10540
                                C0390,4/ CALLERS=C0300,C3300. 4F10541
                                C0390 INSERTS THE CHARACTER IN THE AC INTO THE 1ST POSITION 4F10542
                                TO THE LEFT OF THAT DEFINED BY FWA AND XR1 4F10543
01675  0 50000 0 01374 C0390 CLA ENDMK PREPARE TO CHANGE 4F10544
01676 -0 53400 2 01614 LXD FWA,2 THE PROPER CHARACTER 4F10545
01677 -0 53400 1 01724 LXD CHCTR,1 IN THE F-REGION. 4F10546
01700 -2 00001 1 01703 TNX C0393,1,1 ADJUST MASK 4F10547
01701 -0 76300 0 00006 C0392 LGL 6 TO POSITION 4F10548
01702  2 00001 1 01701 TIX C0392,1,1 CHARACTER 4F10549
01703  0 76000 0 00006 C0393 COM INVERT MASK, AND 4F10550
01704  0 32000 2 77777 ANS -1,2 ERASE PROPER CHARACTER. 4F10551
01705 -0 76300 0 00044 LGL 36 ADJUST CHARACTER, AND 4F10552
01706 -0 60200 2 77777 ORS -1,2 INSERT IN ERASED POSITION. 4F10553
                                C0390 CONTINUES BY USING C0190. 4F10554
                                4F10555
                                C0190,4/ CALLERS=CD000,CB000,CC000,C0100,C200,C00300,C0400, 4F10556
                                C0900,C1000,C1100,C1200,C1400,C1500,C1600,C3000,C3100,C3200, 4F10557
                                C3300,C3400,C0150,C0160,C0190,SS000,ROYCNV,RSC,LPR. 4F10558
                                C0190 OBTAINS IN AC THE NEXT NON-BLANK CHARACTER OF FORMULA. 4F10559
01707 -0 63400 1 01723 C0190 SXD C0194,1 SAVE THE C(XR1), AND 4F10560
01710 -0 53400 1 01724 LXD CHCTR,1 SET XR1 = CHARACTER COUNT. 4F10561
01711  0 56000 0 01365 LDQ RESIDU PICK UP ANY REMAINING CHARACTERS. 4F10562
01712  2 00001 1 01720 C0191 TIX C0193,1,1 IF NONE, 4F10563
01713 -0 53400 1 01614 LXD FWA,1 PICK UP NEXT FORMULA 4F10564
01714  0 56000 1 00000 LDQ 0,1 WORD FROM F-REGION, 4F10565
01715  1 77777 1 01716 TXI C0192,1,-1 AND INCREASE 4F10566
01716 -0 63400 1 01614 C0192 SXD FWA,1 FORMULA WORD ADDRESS BY 1. 4F10567
01717  0 53400 1 01414 LXA L(6),1 RESET XR1 FOR 6 NEW CHARACTERS. 4F10568
01720 -0 75400 0 00000 C0193 PXD ,0 EXAMINE 4F10569
01721 -0 76300 0 00006 LGL 6 NEXT CHARACTER 4F10570
01722  0 34000 0 01430 CAS BLANK AND COMPARE WITH A BLANK. 4F10571
01723  1 00000 0 01725 C0194 TXI C0195,0,** IF BLANK, 4F10572
01724  1 00000 0 01712 CHCTR TXI C0191,0,** GO EXAMINE NEXT CHARACTER. 4F10573
01725 -0 63400 1 01724 C0195 SXD CHCTR,1 IF NOT BLANK, RESET CHAR COUNT, 4F10574
01726 -0 60000 0 01365 STQ RESIDU SAVE ANY REMAINING CHARACTERS, 4F10575
01727 -0 53400 1 01723 LXD C0194,1 RESTORE THE C(XR1), AND 4F10576
01730  0 02000 4 00001 TRA 1,4 * RETURN TO MAIN ROUTINE. 4F10577
                                END OF PROGRAM C0190. 4F10578
                                * * * * * 4F10579
                                4F10580
                                CIT00,4/ CALLERS=C0200,C0400,C0900,C1000,C1100,C1300,C1600, 4F10581
                                C3200,RDC,WBT,RBT,WRD,BRW,EFT,LPR,CMA,EMK,INPUT(OUTPUT), 4F10582
                                ETMSW(LTMSW),LIB,VRA(VRD). 4F10583
                                CIT00 MAKE ENTRIES IN THE COMPILED INSTRUCTION TABLE. WHEN 4F10584

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THE BUFFER IS FULL IT IS WRITTEN AS A RECORD ONTO TAPE 3. 4F10585
01731 -0 63400 2 01102 CIT00 SXD CITXR2,2 SAVE THE C(XR2). 4F10586
01732 -0 63400 1 01101 SXD CITXR1,1 SAVE THE C(XR1). 4F10587
01733 -0 60000 0 01150 STQ CITMQR SAVE THE C(MQR). 4F10588
01734 -0 53400 2 00637 LXD BBOX,2 SET XR2 = 2S COMPL OF NO-WRDS-ENTD. 4F10589
01735 0 50000 0 00635 CLA BS COMPARE BLOCK SIZE 4F10590
01736 0 40200 0 00636 SUB EC WITH ENTRY COUNT. 4F10591
01737 -0 10000 0 01747 TNZ CIT04 IF BLOCK IS NOT FULL,GO MAKE ENTRY. 4F10592
01740 0 76600 0 00223 WRS CITTAP PREPARE TO WRITE BLOCK ON CIT TAPE. 4F10593
01741 0 73400 1 00000 PAX ,1 SET XR1 = 0, AND 4F10594
01742 0 70000 1 00640 CIT01 CPY CIB,1 COPY SUCCESSIVE 4F10595
01743 1 77777 1 01744 TXI CIT02,1,-1 WORDS OF BLOCK 4F10596
01744 1 00001 2 01745 CIT02 TXI CIT03,2,1 AND CONTINUE 4F10597
01745 3 00001 2 01742 CIT03 TXH CIT01,2,1 UNTIL XR2 = 0. 4F10598
01746 0 76600 0 00333 IOD WHEN DONE, 4F10599
01747 0 53400 1 01412 CIT04 LXA L(4),1 SET XR1 = ENTRY SIZE. 4F10600
01750 1 77777 4 01751 CIT05 TXI CIT05+1,4,-1 SET XR4 = -(ADDR OF NEXT ENTRY WRD) 4F10601
01751 0 50000 4 00000 CLA 0,4 AND PICK UP ADDRESS OF NEXT ENTRY 4F10602
01752 0 62100 0 01753 STA CIT06 TO SET NEXT ADDRESS. 4F10603
01753 0 50000 0 00000 CIT06 CLA ** MOVE ENTRY 4F10604
01754 0 60100 2 00640 STO CIB,2 INTO CIB BUFFER, 4F10605
01755 1 77777 2 01756 TXI CIT07,2,-1 AND COUNT 1 FOR EACH WORD ENTERED. 4F10606
01756 2 00001 1 01750 CIT07 TIX CIT05,1,1 WHEN DOEN, 4F10607
01757 -0 63400 2 00637 SXD BBOX,2 SAVE THE C(XR2), AND 4F10608
01760 -0 75400 2 02032 DMSR99 PXD DMSR05+1,2 COMPUTE THE 4F10609
01761 0 76000 0 00006 COM REAL NUMBER 4F10610
01762 0 40000 0 01454 ADD 2E18 OF WORDS ENTERED 4F10611
01763 -0 73400 2 02031 DMSR98 PDX DMSR05,2 IN CIB BUFFER, AND 4F10612
01764 -0 63400 2 00636 SXD EC,2 SAVE IN EC. 4F10613
01765 0 56000 0 01150 LDQ CITMQR RESTORE THE C(MQR), 4F10614
01766 -0 53400 1 01101 LXD CITXR1,1 RESTORE THE C(XR1), 4F10615
01767 -0 53400 2 01102 LXD CITXR2,2 RESTORE THE C(XR2), AND 4F10616
01770 0 02000 4 00001 TRA 1,4 * EXIT TO MAIN ROUTINE (5TH WRD CS). 4F10617
END OF PROGRAM CIT00. 4F10618
* * * * * 4F10619
DIM.SR,4/ CALLS=DIAG. CALLERS=C1200,SS000,CMA. 4F10621
DIM.SR SEARCHS THE DIMENSION TABLES. ENTRANCE IS TO DIM1SR, 4F10622
DIM2SR, OR DIM3SR ACCORDING TO THE DIMENSION. 4F10623
DIM1SR= ENTRY POINT FOR 1 DIMENSION TABLE. 4F10624
01771 -0 63400 4 01774 DIM1SR SXD DMSR00,4 SAVE THE C(XR4) FOR RETURN, 4F10625
01772 -0 53400 4 00452 LXD DIM1IX-3,4 SET XR4 = NUMBER OF ENTRIES IN DIM1 4F10626
01773 0 50000 0 00453 CLA ORGDM1 AND PICK UP 1ST ADDRESS OF DIM1 TO 4F10627
01774 1 00000 0 02000 DMSR00 TXI DMSR01,0,** GO SET DRUM ADDRESS. 4F10628
DIM2SR = ENTRY POINT FOR 2 DIMENSION TABLE. 4F10629
01775 -0 63400 4 01774 DIM2SR SXD DMSR00,4 SAVE THE C(XR) FRO RETURN. 4F10630
01776 -0 53400 4 00457 LXD DIM2IX-3,4 SET XR4 = NUMBER OF ENTRIES IN DIM2 4F10631
01777 0 50000 0 00460 CLA ORGDM2 AND PICK UP 1ST ADDRESS OF DIM2 TO 4F10632
02000 0 62100 0 01104 DMSR01 STA DRMADR SET DRUM ADDRESS. 4F10633
02001 0 50000 0 01760 CLA DMSR99 SET LOOP ADDRESS TO 4F10634
02002 0 62100 0 02041 STA DMSR15 DMSR05+1 FOR DIM1 AND DIM2. 4F10635
02003 -0 50000 0 02065 CAL DMCN12 (STZ D3) 4F10636
02004 1 00000 0 02014 DMSR11 TXI DMSR02,0,** GO SET OP FRO DIM1 AND DIM2. 4F10637
DIM3SR= ENTRY POINT FOR 3 DIMENSION TABLE. 4F10638

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02005	-0	63400	4	01774	DIM3SR	SXD	DMSR00,4	SAVE THE C(XR4) FRO RETURN,	4F10639
02006	-0	53400	4	00464		LXD	DIM3IX-3,4	SET XR4 = NUMBER OF ENTRIES IN DIM3	4F10640
02007	0	50000	0	00465		CLA	ORGDM3	AND PICK UP 1ST ADDRESS OF DIM3 TO	4F10641
02010	0	62100	0	01104		STA	DRMADR	SET DRUM ADDRESS.	4F10642
02011	0	50000	0	01763		CLA	DMSR98	SET LOOP ADDRESS TO	4F10643
02012	0	62100	0	02041		STA	DMSR15	DMSR05 FOR DIM3.	4F10644
02013	-0	50000	0	02066		CAL	DMCN3	(CPY D3)	4F10645
02014	0	60200	0	02031	DMSR02	SLW	DMSR05	SET OP CODES ACCORDING	4F10646
02015	0	60200	0	02044		SLW	DMSR07	TO DIMENSION.	4F10647
02016	-3	00000	4	02047		TXL	DMSR08,4,0	IF TABLE IS EMPTY, GO OUT.	4F10648
02017	-0	63400	4	02004		SXD	DMSR11,4	SAVE ENTRY COUNT IN CASE OF ERROR.	4F10649
02020	0	53400	4	01413	DMSR14	LXA	L(5),4	SET ERROR COUNTER FOR 5 ATTEMPTS.	4F10650
02021	-0	63400	4	02035	DMSR13	SXD	DMSR12,4	SAVE ERROR COUNTER, AND	4F10651
02022	-0	53400	4	02004		LXD	DMSR11,4	RESET ENTRY COUNT.	4F10652
02023	0	76200	0	00303		RDR	3	SELECT DRUM.	4F10653
02024	0	50000	0	01130		CLA	E+2	GET NAME OF VARIABLE.	4F10654
02025	0	46000	0	01104		LDA	DRMADR	LOAD CURRENT DRUM ADDRESS, AND	4F10655
02026	0	70000	0	01100	DMSR04	CPY	DRSYM	COPY DRUM SYMBOL.	4F10656
02027	0	04000	0	02043		TLQ	DMSR06	COMPARE WITH NAME OF VARIABLE, AND	4F10657
02030	0	70000	0	01101		CPY	D12	IF NOT LESS, COPY N1 AND N2.	4F10658
02031	0	00000	0	01102	DMSR05	PZE	D3	(DIM1 AND DIM2 = STZ , DIM3 = CPY).	4F10659
02032	0	70000	0	01103		CPY	DRCKSM	COPY CHECKSUM.	4F10660
02033	0	34000	0	01100		CAS	DRSYM	COMPARE DRUM SYMBOL WITH ANEM OF V.	4F10661
02034	0	07400	4	03400		TSX	DIAG,4	* GO TO DIGNOSTIC - MACHINE ERROR.	4F10662
02035	1	00000	0	02051	DMSR12	TXI	DMSR09,0,**	IF NOT EQUAL, THEN	4F10663
02036	0	70000	0	01100		CPY	DRSYM	CONTINUE	4F10664
02037	0	04000	0	02043		TLQ	DMSR06	PROCESS	4F10665
02040	0	70000	0	01101		CPY	D12	UNTIL	4F10666
02041	2	00001	4	00000	DMSR15	TIX	** ,4,1	TABLE	4F10667
02042	1	00000	0	02047		TXI	DMSR08,0	IS EXHAUSTED.	4F10668
02043	0	70000	0	01101	DMSR06	CPY	D12	PASS OVER ENTRY	4F10669
02044	0	00000	0	01102	DMSR07	PZE	D3	(DIM1 AND DIM2 = STZ, DIM3 = CPY)	4F10670
02045	0	70000	0	01103		CPY	DRCKSM	AND CHECKSUM, AND	4F10671
02046	2	00001	4	02026		TIX	DMSR04,4,1	REPEAT LOOP.	4F10672
02047	-0	53400	4	01774	DMSR08	LXD	DMSR00,4	RESTORE THE C(XR4), AND	4F10673
02050	0	02000	4	00001		TRA	1,4	* TAKE NOT FOUND EXIT.	4F10674
02051	-0	50000	0	01100	DMSR09	CAL	DRSYM	COMPUTE A	4F10675
02052	0	36100	0	01101		ACL	D12	NEW	4F10676
02053	0	36100	0	01102		ACL	D3	LOGICAL CHECKSUM	4F10677
02054	0	76000	0	00006		COM		FOR ENTRY. AND	4F10678
02055	0	36100	0	01103		ACL	DRCKSM	COMPARE WITH	4F10679
02056	0	76000	0	00006		COM		DRUM CHECKSUM.	4F10680
02057	0	10000	0	02063		TZE	DMSR10	IF NOT EQUAL, THEN	4F10681
02060	-0	53400	4	02035		LXD	DMSR12,4	REPEAT ATTEMPT,	4F10682
02061	2	00001	4	02021		TIX	DMSR13,4,1	UNLESS PROCESS	4F10683
02062	0	07400	4	03400		TSX	DIAG,4	* FAILED 5 TIMES IN READING DRUM.	4F10684
02063	-0	53400	4	01774	DMSR10	LXD	DMSR00,4	RESTORE THE C(XR4), AND	4F10685
02064	0	02000	4	00002		TRA	2,4	* TAKE FOUND EXIT TO MAIN ROTUINE.	4F10686
									4F10687
02065	0	60000	0	01102	DMCN12	STZ	D3	CONSTANT USED BY DIM.SR.	4F10688
02066	0	70000	0	01102	DMCN3	CPY	D3	CONSTANT USED BY DIM.SR.	4F10689
02067	456351000000				ENT	BCD	1NTR000	VARIABLE USED BY IO AND FL.	4F10690
02070	477125000000				NZE	BCD	1PZE000	VARIABLE USED BY FL.	4F10691
							END OF PROGRAM DIM.SR.		4F10692

		*****					4F10693	
							4F10694	
		DRTABS(,4)/ CALLS RDRX,DIAG. CALLERS=C1200,SS000,ROYCNV,CMA,					4F10695	
		VRA(VRD).					4F10696	
		DRTABS IS CALLED BY TSX ....IX,4 -WHERE IS THE NAME OF					4F10697	
		THE DRUM TABLE REFERRED TO. DRTABS MAKES ENTRIES IN THE DRUM					4F10698	
		TABLES, AND ALSO SEARCHES THE DRUM TABLES FOR INFOMATION.					4F10699	
		DIMALT= ENTRY POINT FOR DIMENSION TABLES.					4F10700	
D	02071	-0	50000	0	00415	DIMALT CAL	TXLOP PICK UP SWITCH CONTROL,	4F10701
	02072	1	00000	0	02074	TXI DRTABS,0	AND GO SET SWITCH FOR DIM TABLES.	4F10702
						ALT=	ENTRY POINT FOR ALL OTHER DRUM TABLES.	4F10703
	02073	0	50000	0	00422	ALT CLA	TXHOP PICK UP SWITCH CONTROL,	4F10704
	02074	0	63000	0	02135	DRTABS STP	DIMSW SET SWITCH.	4F10705
	02075	0	50000	4	00000	CLA	0,4 GET CALLER (TSX ....IX,4) IN AC.	4F10706
	02076	-0	63400	1	02535	SXD	XR1,1 SAVE THE C(XR1),	4F10707
	02077	-0	63400	2	02173	SXD	XR2,2 SAVE THE C(XR2),	4F10708
	02100	-0	63400	4	02215	SXD	XR4,4 SAVE THE C(XR4), AND	4F10709
	02101	-0	60000	0	02357	STQ	MQ SAVE THE C(MQR).	4F10710
	02102	0	40000	0	01407	ADD	L(1) PREPARE TO MOVE PARAMETERRS	4F10711
	02103	0	62100	0	02107	STA	MOVE INTO WORKING STORAGE.	4F10712
	02104	0	40200	0	01412	SUB	L(4) PREPARE TO UPDATE	4F10713
	02105	0	62100	0	02213	STA	UPDATE PERMANENT PARAMETER.	4F10714
	02106	0	53400	1	01413	LXA	L(5),1 MOVE 5 WORDS	4F10715
	02107	-0	50000	1	00000	MOVE CAL	** ,1 (...IX+1)	4F10716
	02110	0	60200	1	02365	SLW	TEMP,1 OF PARAMETERS	4F10717
	02111	2	00001	1	02107	TIX	MOVE,1,1 INTO WORKING STORAGE.	4F10718
	02112	0	50200	0	02360	CLS	NAR INITIALIZE	4F10719
	02113	0	62100	0	02221	STA	TRY ALL	4F10720
	02114	0	40000	0	01407	ADD	L(1) GENERAL	4F10721
	02115	0	62100	0	02200	STA	ESUM1 INSTRUCTIONS=	4F10722
	02116	0	62100	0	02202	STA	ESUM2 X	4F10723
	02117	0	77100	0	00021	ARS	17 X	4F10724
	02120	0	40100	0	02526	ADM	BIAS X	4F10725
	02121	0	62100	0	02530	STA	JUMP1 X	4F10726
	02122	0	62100	0	02555	STA	JUMP2 X	4F10727
	02123	-0	50000	0	02362	CAL	FDA X	4F10728
	02124	0	62200	0	02235	STD	COMPR X	4F10729
	02125	0	63000	0	02530	STP	JUMP1 X	4F10730
	02126	0	63000	0	02152	STP	SW X	4F10731
	02127	0	63000	0	02210	STP	RX4 X	4F10732
	02130	0	50000	0	02533	CLA	LBUF X	4F10733
	02131	0	62100	0	02222	STA	BUFL X	4F10734
	02132	0	50000	0	02361	CLA	TDA X	4F10735
	02133	-0	53400	2	02361	LXD	TDA,2 X	4F10736
D	02134	-0	63400	2	02146	SXD	BUFF+1,2 X	4F10737
	02135	-3	00000	0	02145	DIMSW TXL	BUFF,0 IF DIM TABLE, SKIP SEARCH.	4F10738
	02136	-3	00000	2	02150	TXL	XERR01+1,2,0 SKIP IF TABLE IS EMPTY.	4F10739
	02137	-0	53400	1	02360	LXD	NAR,1	4F10740
	02140	-0	63400	2	02223	SXD	NC,2	4F10741
	02141	-0	63400	2	02143	SXD	ADD01,2	4F10742
	02142	-2	00001	1	02235	ADD02	TNX COMPR,1,1 COMPUTES (N*L).	4F10743
	02143	1	00000	2	02142	ADD01	TXI ADD02,2,** (N)	4F10744
	02144	-0	53400	2	02362	BUFFM1	LXD FDA,2	4F10745
	02145	-0	53400	1	02363	BUFF	LXD DBL,1 L(J)	4F10746

	02146	2	00000	1	02150		TIX	BUFF+3,1,**	(N) TEST FOR TABLE OVERFLOW.	4F10747
D	02147	1	00000	0	02256	XERR01	TXI	WHICH,0	GO FIND OUT WHICH TABLE OVERFLOWED.	4F10748
	02150	-0	53400	1	02364		LXD	DI,1		4F10749
	02151	0	76600	1	00305		WDR	5,1		4F10750
D	02152	-3	00000	0	02174	SW	TXL	EBLK,0	ENTER SUM=TXL, BLOCK SUM=TXH.	4F10751
	02153	-3	00000	2	02156		TXL	ADD04,2,0	SKIP IF TABLE IS EMPTY.	4F10752
	02154	1	00001	2	02155		TXI	ADD03,2,1		4F10753
	02155	-2	00062	2	02163	ADD03	TNX	ADD05,2,50	SKIP IF BLOCK IS NOT YET FULL.	4F10754
	02156	0	60000	0	02365	ADD04	STZ	DUMP	START NEW BLOCK CHECKSUM.	4F10755
	02157	0	50000	0	02361		CLA	TDA	CHANGE CHECKSUM ADDRESS.	4F10756
	02160	0	62100	0	02362		STA	FDA		4F10757
	02161	0	40000	0	01407		ADD	L(1)	SET ENTRY ADDR = CHECKSUM ADD +1.	4F10758
	02162	0	62100	0	02361		STA	TDA		4F10759
	02163	-0	50000	0	02365	ADD05	CAL	DUMP		4F10760
	02164	0	36100	0	01347		ACL	G	ADD NEW FLOCON TO	4F10761
	02165	0	60200	0	02365		SLW	DUMP	CHECKSUM FOR THIS BLOCK.	4F10762
	02166	0	46000	0	02362		LDA	FDA		4F10763
	02167	0	70000	0	02365		CPY	DUMP	WRITE BLOCK CHECKSUM ON DRUM.	4F10764
	02170	0	76600	1	00305		WDR	5,1		4F10765
	02171	0	46000	0	02361		LDA	TDA		4F10766
	02172	0	70000	0	01347		CPY	G	WRITE NEW FLOCON ON DRUM.	4F10767
	02173	1	00000	0	02205	XR2	TXI	NOWIN,0,**	GO UPDATE FLOCON PARAMETER.	4F10768
	02174	-0	75400	0	00000	EBLK	PXD	,0	FOR ALL TABLES EXCEPT FLOCON=	4F10769
	02175	-0	53400	2	02360		LXD	NAR,2	(L)	4F10770
	02176	0	46000	0	02361		LDA	TDA	NEXT DRUM ENTRY ADDRESS.	4F10771
	02177	-2	00001	2	02202		TNX	ESUM2,2,1	IF L = 1,	4F10772
	02200	-0	70000	2	00000	ESUM1	CAD	** ,2	(ARG1+L-1) WRITE NEW	4F10773
	02201	2	00001	2	02200		TIX	ESUM1,2,1	ENTRY ON DRUM.	4F10774
	02202	-0	70000	0	00000	ESUM2	CAD	**	(ARG1+L-1)	4F10775
	02203	0	60200	0	02365		SLW	DUMP	COMPUTE AND	4F10776
	02204	0	70000	0	02365		CPY	DUMP	WRITE CHECKSUM FOR NEW ENTRY.	4F10777
	02205	-0	50000	0	02360	NOWIN	CAL	NAR	UPDATE PERMANENT	4F10778
	02206	0	77100	0	00022		ARS	18	PARAMETERS FOR ENTRY	4F10779
	02207	0	40000	0	01455		ADD	DECR1	JUST ADD TO TABLE.	4F10780
	02210	-3	00000	0	02212	RX4	TXL	RX4+2,0,**	IF TABLE WAS FLOCON,	4F10781
	02211	0	40200	0	01407		SUB	L(1)	READJUST.	4F10782
	02212	0	40100	0	02361		ADM	TDA	N=N+1,TDA=TDA+(L+1) OR (L).	4F10783
	02213	0	60100	0	00000	UPDATE	STO	**	(...IX-3)	4F10784
	02214	-0	53400	2	02361		LXD	TDA,2	L(N)	4F10785
	02215	1	00000	0	02247	XR4	TXI	OUT,0,**	GET TAG AND EXIT.	4F10786
	02216	-0	53400	4	02223	NXBLK	LXD	NC,4		4F10787
	02217	-0	53400	2	02362		LXD	FDA,2	L(K*L),K=K.	4F10788
	02220	-0	53400	1	02360	NEW	LXD	NAR,1	L(L)	4F10789
	02221	0	50000	1	00000	TRY	CLA	** ,1	(ARG1+L)	4F10790
	02222	0	34000	2	00000	BUFL	CAS	** ,2	(BUFR OR CTABL)	4F10791
	02223	1	00000	0	02225	NC	TXI	NC+2,0,**	NOT FOUND.	4F10792
	02224	1	77777	2	02242		TXI	YEA,2,-1	K*L = K*L-1.	4F10793
	02225	-2	00001	4	02144		TNX	BUFFM1,4,1	N = N-1 OR ITEM NOT IN TABLE.	4F10794
	02226	-0	63400	1	02227		SXD	NC+4,1		4F10795
	02227	2	00000	2	02220		TIX	NEW,2,**	K = K-1.	4F10796
	02230	-0	63400	4	02223		SXD	NC,4	SAVE CURRENT VALUE OF N,	4F10797
	02231	-0	50000	0	02363		CAL	DBL	AND GET NEW BLOCK.	4F10798
	02232	0	40100	0	02362		ADM	FDA		4F10799
	02233	0	62100	0	02362		STA	FDA		4F10800

02234	-0	53400	2	02241	LXD	NTL,2			4F10801
02235	2	00000	2	02237	COMPR	TIX	COMPR+2,2,**	(K*L)	4F10802
02236	-0	63400	2	02362	SXD	FDA,2		K*L = (N*L)MOD K*L IF N*L IS	4F10803
02237	-0	63400	2	02241	SXD	NTL,2		LESS THAN K*L, OTHERWISE K*L = K*L,	4F10804
02240	0	07400	4	02520	TSX	RDRX,4		* GO READ NEXT BLOCK INTO BUFFER.	4F10805
02241	1	00000	0	02216	NTL	TXI	NXBLK,0,**	(N*L,N*L-K*L,N*L-2*K*L,...(N*L)MOD	4F10806
02242	2	00001	1	02221	YEA	TIX	TRY,1,1	K*L). TEST NEXT WORD OF ARG. L=L-1.	4F10807
02243	-0	53400	2	02361	LXD	TDA,2		(N)	4F10808
02244	-0	63400	4	02245	SXD	YEA+3,4			4F10809
02245	2	00000	2	02247	TIX	OUT,2,**		COMPUTE TAG.	4F10810
02246	0	53400	2	01406	LXA	L(0),2			4F10811
02247	-0	75400	2	00000	OUT	PXD	,2	EXIT WITH TAG IN THE AC.	4F10812
02250	0	77100	0	00022	ARS	18		(TAG = NUMBER OF ENTRIES	4F10813
02251	-0	53400	2	02173	LXD	XR2,2		WHICH PRECEED THE ENTRY	4F10814
02252	-0	53400	4	02215	LXD	XR4,4		WHICH EQUALS THE ARGUMENT.	4F10815
02253	-0	53400	1	02535	LXD	XR1,1		RESTORE THE C(XR1,XR2,XR4),	4F10816
02254	0	56000	0	02357	LDQ	MQ		RESTORE THE C(MQR), AND	4F10817
02255	0	02000	4	00001	TRA	1,4		* RETURN TO MAIN ROUTINE.	4F10818
02256	-0	53400	4	02215	WHICH	LXD	XR4,4	GET ALPHA BAR, AND	4F10819
02257	0	50000	4	00000	CLA	0,4		AND PICK UP ALPHA (TSX ...NIX,4).	4F10820
02260	-0	32000	0	01452	ANA	MASK2		BLANK ALL BUT ...NIX.	4F10821
02261	0	40200	0	02274	SUB	CONX		(...NIX) - (ADDR OF FIXCNIX-5).	4F10822
02262	0	53400	4	01417	LXA	L(9),4		SET XR4 FOR 9 TABLES.	4F10823
02263	0	40200	0	01413	COMPUT	SUB	L(5)	COMPUTE WHICH	4F10824
02264	0	10000	0	02267	TZE	WHICHX		TABLE OVERFLOWED.	4F10825
02265	2	00001	4	02263	TIX	COMPUT,4,1		IF TABLE IS NOT FOUND.	4F10826
02266	0	07400	4	03400	TSX	DIAG,4		* GOT TO DIAGNOSTIC.	4F10827
02267	-0	75400	4	00000	WHICHX	PXD	,4	OTHERWISE,	4F10828
02270	0	76000	0	00006	COM			CONVERT 2S COMPLEMENT	4F10829
02271	0	40000	0	01454	ADD	2E18		OF NUMBER,	4F10830
02272	-0	73400	4	00000	PDX	,4		PLACE IN XR4, AND	4F10831
02273	1	00000	0	03400	TXI	DIAG,0		* GO TO DIAGNOSTIC.	4F10832
									4F10833
02274	0	00000	0	00412	CONX	PZE	FXCNIX-5	CONSTANT USED BY DRTABS.	4F10834
				02357	BUFR	BES	50	DRUM TABLE BUFFER.	4F10835
				02357	MQ	BSS	1	WORKING STORAGE USED BY DRTABS.	4F10836
				02360	NAR	BSS	1	WORKING STORAGE USED BY DRTABS.	4F10837
				02361	TDA	BSS	1	WORKING STORAGE USED BY DRTABS.	4F10838
				02362	FDA	BSS	1	WORKING STORAGE USED BY DRTABS.	4F10839
				02363	DBL	BSS	1	WORKING STORAGE USED BY DRTABS.	4F10840
				02364	DI	BSS	1	WORKING STORAGE USED BY DRTABS.	4F10841
				02365	TEMP	BSS	0	INDEXING ADDRES FOR ABOVE -DRTABS.	4F10842
				02365	DUMP	BSS	1	WORKING STORAGE USED BY DRTABS.	4F10843
								END OF PROGRAM DRTABS.	4F10844
								* * * * *	4F10845
									4F10846
								GETIFN,4/ CALLERS=C0100,C0200,C1000,C1100,C1600,C3200.	4F10847
								GETIFN PLACES THE INTERNAL FORMULA NUMBER IN AC AND IN 1C.	4F10848
02366	-0	53400	1	00030	GETIFN	LXD	EIFNO,1	PLACE THE INTERNAL FORMULA	4F10849
02367	-0	75400	1	00000	PXD	,1		NUMBER IN XR1, IN THE DECREMENT	4F10850
02370	0	60100	0	01105	STO	1C		OF THE AC, AND IN 1C. THEN	4F10851
02371	0	02000	4	00001	TRA	1,4		* RETURN TO CALLER.	4F10852
								END OF PROGRAM GETIFN.	4F10853
								* * * * *	4F10854

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                                JIF(GIF),4/ CALLERS=RDC,EFT,LPR,SPC,CMA,EMK,INPUT(OUTPUT), 4F10855
                                VRA(VRD),C3200. 4F10856
                                JIF = ENTRY POINT USED BY RDC,LPR,SPC,CMA,EMK,VRA(VRD),C3200. 4F10857
02372 -0 50000 0 00030 JIF CAL EIFNO INCREASE THE 4F10858
02373 0 40000 0 01454 ADD D1 INTERNAL FORMULA NUMBER 4F10859
02374 0 62200 0 00030 STD EIFNO BY 1. 4F10860
                                GIF = ENTRY POINT USED BY EFT,INPUT(OUTPUT). 4F10861
02375 -0 50000 0 00030 GIF CAL EIFNO PICKUP IFN, 4F10862
02376 -0 32000 0 01507 ANA 1BAR CLEAR SL, AND 4F10863
02377 0 60200 0 01367 L(SL) SLW SL PLACE IFN IN THE DECREMENTS 4F10864
02400 0 62200 0 01371 L(TL) STD TL OF SL AND TL. 4F10865
02401 0 02000 4 00001 TRA 1,4 * EXIT TO CALLER. 4F10866
                                END OF PROGRAM JIF(GIF). 4F10867
                                * * * * * 4F10868
                                * * * * * 4F10869
                                * * * * * 4F10870
                                MTR000/ MONITOR ROUTINE FOR CALLING STATES FROM DRUM. 4F10871
                                STATEA= ENTRY POINT FOR STATE A. 4F10872
D 02402 0 53400 4 01412 STATEA LXA L(4),4 SET C(XR4) = 4, THEN 4F10873
D 02403 1 00000 0 02411 TXI MTR1,0 GO GET PARAMETERS. 4F10874
                                STATEB= ENTRY POINT FOR STATE B. 4F10875
D 02404 0 53400 4 01410 STATEB LXA L(2),4 SET C(XR4) = 2, THEN 4F10876
D 02405 1 00000 0 02411 TXI MTR1,0 GO GET PARAMETERS. 4F10877
                                STATEC= ENTRY POINT FOR STATE C. 4F10878
02406 0 53400 4 01407 STATEC LXA L(1),4 SET C(XR4) = 1, THEN 4F10879
02407 1 00000 0 02411 MTRCSL TXI MTR1,0,** GO GET PARAMETERS. 4F10880
                                STATED= ENTRY POINT FOR STATE D. 4F10881
02410 0 53400 4 01411 STATED LXA L(3),4 SET C(XR4) = 3, THEN 4F10882
02411 0 50000 4 02437 MTR1 CLA ZETA+4,4 OBTAIN THE NUMBER OF WORDS IN THE 4F10883
02412 0 62200 0 02407 STD MTRCSL CURRENT STATE, AND SAVE. 4F10884
02413 0 77100 0 00022 ARS 18 ADD THE NUMBER OF WORDS IN THE 4F10885
02414 0 40000 0 02430 ADD MTR3 CURRENT STATE TO THE MEMORY ORIGIN 4F10886
02415 0 62100 0 02425 STA MTR2 TO SET ADDRESS OF COPY LOOP. 4F10887
02416 0 53400 1 01413 LXA DRMERC,1 SET FOR FIVE ATTEMPTS. 4F10888
02417 0 76200 4 00305 MTR15 RDR 5,4 READ SELECT CURRENT LOGICAL DRUM. 4F10889
02420 -0 53400 2 02407 LXD MTRCSL,2 LENGTH OF CURRENT STATE TO XR2. 4F10890
02421 0 46000 4 02437 LDA ZETA+4,4 THEN COPY 4F10891
02422 -0 75400 0 00000 PXD ,0 CURRENT STATE 4F10892
02423 -0 70000 0 01103 CAD DRCKSM FROM DRUM 4F10893
02424 0 76000 0 00006 COM INTO MEMORY 4F10894
02425 -0 70000 2 00000 MTR2 CAD **,2 WHILE COMPUTING 4F10895
02426 2 00001 2 02425 TIX MTR2,2,1 LOGICAL CHECKSUM. 4F10896
02427 0 76000 0 00006 COM IF THIS EQUALS DRUM CHECKSUM, 4F10897
02430 0 10000 0 03440 MTR3 TZE MEMORG * THEN ENTER CURRENT STATE. 4F10898
02431 2 00001 1 02417 TIX MTR15,1,1 CHECKSUM FAILED, TRY UP TO 5 TIMES. 4F10899
02432 1 75346 4 03400 MTRERR TXI DIAG,4,-MTRERR * GO TO DIAGNOSTIC AFTER 5 FAILURES. 4F10900
                                4F10901
02433 0 02663 0 00000 ZETA PZE DEL(A),,ENDADR-ORGA 4F10902
02434 0 01607 0 01322 PZE DEL(D),,ENDDDR-ORGD 4F10903
02435 0 01302 0 02210 PZE DEL(B),,ENDBDR-ORGB 4F10904
02436 0 01330 0 02373 PZE DEL(C),,ENDCDR-ORGC 4F10905
                                END OF PROGRAM MTR000. 4F10906
                                * * * * * 4F10907
                                * * * * * 4F10908

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						RDRX,4 CALLS=DIAG. CALLER=DRTABS.	4F10963
						RDRX READS A BLOCK OF DRUM ENTRIES INTO 50 WORD BUFR.	4F10964
	02520	0	53400	1	01413	RDRX LXA DRMERC,1 SET FOR 5 ATTEMPTS TO READ DRUM.	4F10965
	02521	-0	53400	2	02364	REP LXDI,2 SET XR2 * (5-DRUM NUMBER).	4F10966
	02522	3	00000	2	02524	TXH BIAS-2,2,0 IF NOT GREATER THEN ZERO.	4F10967
	02523	0	07400	4	03400	TSX DIAG,4 * GO TO DIAGNOSTIC.	4F10968
	02524	0	76200	2	00305	RDR 5,2 SELECT CURRENT DRUM.	4F10969
	02525	-0	53400	2	02362	LXD FDA,2 SET XR2 = NO. OF WORDS TO COPY.	4F10970
	02526	-0	75400	0	02554	BIAS PXD ETSUM,0 CLEAR THE AC.	4F10971
	02527	0	46000	0	02362	LDA FDA DRUM ORIGIN OF CURRENT BLOCK.	4F10972
TD	02530	-3	00000	0	00000	JUMP1 TXL ** (ETSUM-2*L) TXL=ENTRY, TXH=BLOCK.	4F10973
	02531	-0	70000	0	02365	CAD DUMP READ	4F10974
	02532	0	76000	0	00006	COM FLOCON BLOCK	4F10975
	02533	-0	70000	2	02357	LBUF CAD BUFR,2 AND COMPUTE	4F10976
	02534	2	00001	2	02533	TIX LBUF,2,1 LOGICAL CHECKSUM.	4F10977
	02535	1	00000	0	02562	XR1 TXI PROVE,0,** GO TEST CHECKSUM.	4F10978
	02536	0	70000	2	02357	CPY BUFR,2 COPY LOOP	4F10979
	02537	-2	00001	2	02564	TNX ERR,2,1 FOR ALL	4F10980
	02540	0	70000	2	02357	CPY BUFR,2 COPY LOOP	4F10981
	02541	-2	00001	2	02564	TNX ERR,2,1 TABLES	4F10982
	02542	0	70000	2	02357	CPY BUFR,2 EXCEPT	4F10983
	02543	-2	00001	2	02564	TNX ERR,2,1 FLOCON*	4F10984
	02544	0	70000	2	02357	CPY BUFR,2 X	4F10985
	02545	-2	00001	2	02564	TNX ERR,2,1 X	4F10986
	02546	0	70000	2	02357	CPY BUFR,2 X	4F10987
	02547	-2	00001	2	02564	TNX ERR,2,1 X	4F10988
	02550	0	70000	2	02357	CPY BUFR,2 X	4F10989
	02551	-2	00001	2	02564	TNX ERR,2,1 X	4F10990
	02552	0	70000	2	02357	CPY BUFR,2 X	4F10991
	02553	0	76100	0	00000	NOP X	4F10992
	02554	-0	70000	0	02365	ETSUM CAD DUMP SUM CHECKSUMS.	4F10993
	02555	2	00001	2	00000	JUMP2 TIX **,2,1 (ETSUM-2*L) TEST END OF BLOCK.	4F10994
	02556	-0	53400	2	02362	RDRXCR LXDI FDA,2 COMPUTE	4F10995
	02557	0	76000	0	00006	COM NEW	4F10996
	02560	0	36100	2	02357	ACL BUFR,2 LOGICAL	4F10997
	02561	2	00001	2	02560	TIX RDRXCR+2,2,1 CHECKSUM, AND	4F10998
	02562	0	76000	0	00006	PROVE COM IF CHECKSUMS COMPARE	4F10999
	02563	0	10000	4	00001	TZE 1,4 * RETURN TO MAIN ROUTINE.	4F11000
	02564	2	00001	1	02521	ERR TIX REP,1,1 OTHERWISE, REPEAT UP TO 5 TIMES.	4F11001
	02565	0	07400	4	03400	TSX DIAG,4 * FAILED 5 TIMES IN READING DRUM.	4F11002
						END OF PROGRAM RDRX.	4F11003
						*****	*4F11004
							4F11005
						SR6DC1,1/ CALLS=DIAG. CALLERS=CA000,SS000.	4F11006
						SR6DC1 CONVERTS UP TO 6 BCD DIGITS TO THEIR BINARY EQUIV.	4F11007
	02566	-0	63400	2	02574	SR6DC1 SXDI SR6XR2,2 SAVE THE C(XR2), AND	4F11008
	02567	0	53400	2	01414	LXA L(6),2 SET TO COUNT 6 CHARACTERS.	4F11009
	02570	0	60000	0	01101	STZ SR6WRK INITIALIZE OUTPUT CELL TO 0.	4F11010
	02571	-0	75400	0	00000	SR6DC2 PXDI,0 OBTAIN NEXT CHARACTER	4F11011
	02572	-0	76300	0	00006	LGL 6 IN AC AND	4F11012
	02573	0	34000	0	01430	CAS ABLANK TEST FOR BLANK.	4F11013
	02574	1	00000	0	02576	SR6XR2 TXDI SR6DC3,0,** IF NOT BLANK,	4F11014
	02575	1	77777	0	02610	ENDWRD TXDI SR6DC4,0,-1 (DECR= END OF PROBLEM INDICATOR)	4F11015
	02576	0	34000	0	01417	SR6DC3 CAS L(9) TEST FOR NUMERIC.	4F11016

02577	0	07400	4	03400		TSX	DIAG,4		* IF NON-NUMERIC - GO TO DIAGNOSTIC.	4F11017
02600	0	76100	0	00000	NOP	NOP			IF NUMERIC,	4F11018
02601	0	60100	0	01102		STO	SR6WRK+1		SAVE DIGIT, AND	4F11019
02602	0	50000	0	01101		CLA	SR6WRK		MULTIPLY PREVIOUS PARTIAL	4F11020
02603	0	76700	0	00002		ALS	2		RESULT BY 10,	4F11021
02604	0	40000	0	01101		ADD	SR6WRK		AND ADD IN	4F11022
02605	0	76700	0	00001		ALS	1		CURRENT DIGIT, SAVING	4F11023
02606	0	40000	0	01102		ADD	SR6WRK+1		NEW PARTIAL RESULT.	4F11024
02607	0	60100	0	01101		STO	SR6WRK		THEN ADJUST COUNT, AND	4F11025
02610	2	00001	2	02571	SR6DC4	TIX	SR6DC2,2,1		WHEN 6 CHARS HAVE BEEN TREATED,	4F11026
02611	0	50000	0	01101		CLA	SR6WRK		LEAVE OUTPUT IN AC,	4F11027
02612	-0	53400	2	02574		LXD	SR6XR2,2		RESTORE THE C(XR2), AND	4F11028
02613	0	02000	1	00001	TRA	TRA	1,1		* EXIT TO MAIN ROUTINE.	4F11029
							END OF PROGRAM SR6DC1.			4F11030
							*****			4F11031
							SS000,4/ CALLS=C0190,DIAG,SR6DC1,DIM,SR,DRTABS,TET00,TESTFX.			4F11032
							CALLERS=ARITH,LPR,C0200.			4F11033
							SS000 SCANS SUBSCRIPT COMBINATIONS AND MAKES TABLE ENTRIES.			4F11034
02614	-0	63400	2	02731	SS000	SXD	SXR2,2		SAVE C(XR2),	4F11035
02615	-0	63400	1	02730		SXD	SXR1,1		SAVE C(XR1),	4F11036
02616	-0	63400	4	02732		SXD	SXR4,4		SAVE C(XR4), AND	4F11037
02617	0	60000	0	01100		STZ	DIMCTR		SET DIMCTR = 0.	4F11038
02620	0	53400	4	01414		LXA	L(6),4		INITIALIZE	4F11039
02621	-0	63400	4	02726		SXD	SBS2,4		FOR EACH SUBSCRIPT MEMBER.	4F11040
02622	-0	50000	0	00422		CAL	TXHOP		PICK UP TXH OP, AND	4F11041
02623	0	63000	0	02776		STP	SBC6		SET OP	4F11042
02624	0	63000	0	02777		STP	SBC8		SWITCHES.	4F11043
02625	-0	50000	0	00415		CAL	TXLOP		PICK UP TXL OP, AND	4F11044
02626	0	63000	0	03014		STP	SBC4		SET OP SWITCH.	4F11045
02627	0	53400	3	01414	SS001	LXA	L(6),3		SET FOR 6 CHARACTERS OF MULTIPLIER.	4F11046
02630	0	60000	0	01370		STZ	SYMBOL		CLEAR WORKING STORAGE.	4F11047
02631	0	07400	4	01707		TSX	C0190,4		* GET FIRST NON BLANK CHAR IN THE AC.	4F11048
02632	0	34000	0	01417		CAS	L(9)		COMPARE IT WITH 9.	4F11049
02633	1	00000	0	02704		TXI	SS0045,0		RETURN TO EXPLICIT CODING.	4F11050
02634	0	76100	0	00000		NOP			IF NUMERIC,	4F11051
02635	0	60100	0	01331		STO	FIRSTC		SAVE RIGHT-ADJUSTED DIGIT, AND	4F11052
02636	0	76700	2	00044	SS0012	ALS	36,2		LEFT-ADJUST DIGIT TO	4F11053
02637	-0	60200	0	01370		ORS	SYMBOL		BUILD SYMBOL.	4F11054
02640	1	00006	2	02641		TXI	SS0013,2,6		UPDATE SHIFT DECREMENT, AND	4F11055
02641	1	77777	1	02642	SS0013	TXI	SS0014,1,-1		UPDATE COUNT OF CHARS COLLECTED.	4F11056
02642	0	07400	4	01707	SS0014	TSX	C0190,4		* GET NEXT NB CHARACTER IN THE AC.	4F11057
02643	0	53400	4	02652		LXA	CTESTX,4		SET XR4 = NO. OF PUNCTUATION MARKS.	4F11058
02644	0	34000	4	01406	SS0015	CAS	CTEST,4		TEST THIS CHARACTER AGAINST	4F11059
02645	1	00000	0	02647		TXI	SS0016,0		ALL PUNCTUATION.	4F11060
02646	0	02000	4	02733		TRA	SUBTR,4		IF EQUALITY IS FOUND, TRANSFER.	4F11061
02647	2	00001	4	02644	SS0016	TIX	SS0015,4,1		IF NOT FOUND TO BE PUNCTUATION,	4F11062
02650	0	34000	0	01417		CAS	L(9)		TEST FOR NUMERIC	4F11063
02651	1	00000	0	02655		TXI	SS0017,0		AND IF	4F11064
02652	0	76100	0	00012	CTESTX	NOP	CTEST-ENDMK		FOUND TO BE NUMERIC	4F11065
02653	3	00000	1	02636		TXH	SS0012,1,0		CONTINUE BUILDING SYMBOL. BUT IF	4F11066
02654	1	00000	0	02720		TXI	STOP49,0		SEVENTH CHAR, GO TO DIAGNOSTIC.	4F11067
02655	0	07400	1	03242	SS0017	TSX	TESTFX+1,1		* GO TEST FOR FIXED POINT VARIABLE.	4F11068
02656	0	07400	4	03400		TSX	DIAG,4		* NOT FIXED POINT --GO TO DIAGNOSTIC.	4F11069

	02657	-0	76300	0	00036	LGL	30	RESTORE FIXED POINT VARIABLE	4F11071
	02660	0	60200	0	01365	SLW	RESIDU	TO RESUDU, AND	4F11072
	02661	-0	53400	4	01724	LXD	CHCTR,4	RESET CHARACTER COUNTER	4F11073
	02662	1	00001	4	02663	TXI	SS0018,4,1	TO BEGIN PROCESSING	4F11074
	02663	-0	63400	4	01724	SS0018	SXD CHCTR,4	SUBSCRIPT MULTIPLIER.	4F11075
	02664	0	50200	0	02776	SBX	CLS SBC6	TEST FOR	4F11076
	02665	-0	12000	0	02667	TMI	SBX1	PREVIOUS MULTIPLIER.	4F11077
	02666	0	07400	4	03400	TSX	DIAG,4	* DOUBLE MULTIPLIER FOR SUBSCRIPT.	4F11078
	02667	0	60100	0	02776	SBX1	STO SBC6	RESET MULTIPLIER SWITCH.	4F11079
	02670	0	50000	0	01331	CLA	FIRSTC	TEST	4F11080
	02671	0	40200	0	01373	SUB	L(10)	MULTIPLIER	4F11081
	02672	-0	12000	0	02674	TMI	SBX2	FOR CONSTANT.	4F11082
	02673	0	07400	4	03400	TSX	DIAG,4	* SUBS-MULTIPLIER NOT A CONSTANT.	4F11083
	02674	-0	50000	0	01370	SBX2	CAL SYMBOL	ADJUST MULTIPLIER	4F11084
	02675	0	77100	2	00052	ARS	42,2	TO LOW ORDER POSITION.	4F11085
	02676	-0	53400	4	02726	LXD	SBS2,4	GET STORING TAG,	4F11086
	02677	0	60200	4	01137	SLW	E+9,4	AND STORE MULTIPLIER.	4F11087
	02700	0	60000	4	01145	STZ	E+15,4	SET ADDEND = 0.	4F11088
	02701	0	53400	3	01414	SS003	LXA L(6),3	SET FOR 6 CHARS OF VARIABLE/ADDEND.	4F11089
	02702	0	60000	0	01370	STZ	SYMBOL	CLEAR WORKING STORAGE.	4F11090
	02703	0	07400	4	01707	SS004	TSX C0190,4	* GO GET NEXT NB CHARACTER IN THE AC.	4F11091
	02704	0	53400	4	02652	SS0045	LXA CTESTX,4	COMPARE CHARACTER	4F11092
	02705	0	34000	4	01406	SS005	CAS CTEST,4	TO ALL	4F11093
D	02706	1	00000	0	02710	TXI	SS006,0	PUNCTUATION.	4F11094
	02707	0	02000	4	02733	TRA	SUBTR,4	IF EQUALITY IS FOUND, TRANSFER.	4F11095
	02710	2	00001	4	02705	SS006	TIX SS005,4,1	IF NOT FOUND TO BE PUNCTUATION,	4F11096
	02711	-3	00005	1	02713	TXL	SS008,1,5	IF 1ST CHARACTER OF VARIABLE OR	4F11097
	02712	0	60100	0	01331	STO	FIRSTC	ADDEND, SAVE FOR LATER TEST.	4F11098
	02713	0	76700	2	00044	SS008	ALS 36,2	POSITION EACH CHARACTER. BUT	4F11099
	02714	-3	00000	1	02720	SS009	TXL STOP49,1,0	* ON 7TH CHARACTER, GO TO STOP.	4F11100
	02715	-0	60200	0	01370	ORS	SYMBOL	BUILD SYMBOL.	4F11101
	02716	1	00006	2	02717	TXI	SS007,2,6	UPDATE EFFECTIVE ADDRESS OF SHIFT.	4F11102
	02717	1	77777	1	02703	SS007	TXI SS004,1,-1	UPDAT FOR ANOTHER CHAR COLLECTED.	4F11103
	02720	0	07400	4	03400	STOP49	TSX DIAG,4	* GO TO DIAGNOSTIC ON 7TH CHARACTER.	4F11104
							SUBSTR/ CONTROL TRANSFERS	GO FOR SUBSCRIPT SCAN=	4F11105
D	02721	1	00000	0	02722	TXI	ISC,0	ENK (ILLEGAL IN LIST SUBSCRIPT).	4F11106
	02722	0	07400	4	03400	ISC	TSX DIAG,4	* ((ILLEGAL IN LIST SUBSCRIPT).	4F11107
D	02723	1	00000	0	02772	TXI	SBC,0	,	4F11108
D	02724	1	00000	0	02770	TXI	SBR,0	)	4F11109
D	02725	1	00000	0	02722	TXI	ISC,0	= (ILLEGAL IN LIST SUBSCRIPT).	4F11110
	02726	1	00000	0	02733	SBS2	TXI SBM,0,**	- ,,SUBSCRIPT ELEMENT COUNTER,	4F11111
D	02727	1	00000	0	02722	TXI	ISC,0	/ (ILLEGAL IN LIST SUBSCRIPT).	4F11112
	02730	1	00000	0	02722	SXR1	TXI ISC,0,**	. (ILLEGAL IN LIST SUBSCRIPT).	4F11113
	02731	1	00000	0	02734	SXR2	TXI SBP,0,**	+	4F11114
	02732	1	00000	0	02664	SXR4	TXI SBX,0,**	*	4F11115
					02733	SUBTR	BSS 0	INDEXING ADDRESS FOR ABOVE LIST.	4F11116
	02733	-0	76000	0	00003	SBM	SSM	MINUS ADDEND.	4F11117
	02734	0	76000	0	00000	SBP	CLM	PLUS ADDEND.	4F11118
	02735	-0	53400	4	02726	LXD	SBS2,4	GET STORING TAG, AND	4F11119
	02736	0	60100	4	01145	STO	E+15,4	STORE SIGN OF ADDEND.	4F11120
	02737	0	50200	0	02777	CLS	SBC8	TEST SWITCH	4F11121
	02740	-0	12000	0	02742	TMI	SBP1	FOR PREVIOUS ADDEND.	4F11122
	02741	0	07400	4	03400	TSX	DIAG,4	* DOUBLE ADDEND FOR SUBSCRIPT,	4F11123
	02742	0	60100	0	02777	SBP1	STO SBC8	RESET ADDEND SWITCH.	4F11124

	02743	0	07400	1	03241		TSX TESTFX,1		* GO TO TEST FOR FIXED POINT.	4F11125
	02744	0	07400	4	03400		TSX DIAG,4		* NOT FIXED POINT --GO TO DIAGNOSTIC.	4F11126
	02745	-0	53400	4	02726		LXD SBS2,4		GET STORING TAG, AND	4F11127
	02746	0	50200	0	02776		CLS SBC6		TEST SWITCH	4F11128
	02747	0	12000	0	02754		TPL SBP2		FOR PREVIOUS MULTIPLIER.	4F11129
	02750	0	50000	0	01407		CLA L(1)		IF NONE,	4F11130
	02751	0	60100	4	01137		STO E+9,4		SET MULTIPLIER	4F11131
D	02752	1	00000	0	02755		TXI SBP4,0		TO 1, AND CONTINUE.	4F11132
	02753	0	50200	0	02776	SBC1	CLS SBC6		RESET MULTIPLIER	4F11133
	02754	0	60100	0	02776	SBP2	STO SBC6		OP SWITCH.	4F11134
	02755	-0	50000	0	01370	SBP4	CAL SYMBOL		IF VARIABLE SUBSCRIPT.	4F11135
	02756	3	00044	2	02762		TXH SBP41,2,36		ADD A BLANK	4F11136
	02757	-0	50000	0	01430		CAL BLANK		IF LESS	4F11137
	02760	0	76700	2	00044		ALS 36,2		THAN 6	4F11138
	02761	-0	50100	0	01370		ORA SYMBOL		CHARACTERS, AND	4F11139
	02762	0	60200	4	01140	SBP41	SLW E+10,4		PLACE IN E-REGION.	4F11140
	02763	0	07400	1	03241		TSX TESTFX,1		* GO TO TEST FOR FIXED POINT.	4F11141
	02764	0	07400	4	03400		TSX DIAG,4		* NOT FIXED POINT --GO TO DIAGNOSTIC.	4F11142
	02765	0	50000	0	02777		CLA SBC8		IF THERE IS AN ADDEND,	4F11143
	02766	-0	12000	0	02701		TMI SS003		GO COLLECT, OTHERWISE	4F11144
D	02767	1	00000	0	03012		TXI SBC7,0		GO UPDATE STORING TAG.	4F11145
	02770	0	50200	0	03014	SBR	CLS SBC4		SET SWITCH	4F11146
	02771	0	60100	0	03014		STO SBC4		FOR CLOSING PARENTHESIS.	4F11147
	02772	-0	50000	0	01100	SBC	CAL DIMCTR		UPDATE	4F11148
	02773	0	40000	0	01407		ADD L(1)		DIMENSION COUNTER	4F11149
	02774	0	62100	0	01100		STA DIMCTR		BY 1.	4F11150
	02775	-0	53400	4	02726		LXD SBS2,4		GET STORING TAG.	4F11151
D	02776	3	00000	0	02753	SBC6	TXH SBC1,0		SWITCH-IF NO MULTIPLIER, AND	4F11152
D	02777	3	00000	0	03016	SBC8	TXH SBC2,0		SWITCH-IF NO ADDEND, THEN	4F11153
	03000	0	50000	0	01407		CLA L(1)		SET	4F11154
	03001	0	60100	4	01137		STO E+9,4		MULTIPLIER = 1.	4F11155
	03002	0	60000	4	01145		STZ E+15,4		SET ADDEND = 0.	4F11156
	03003	0	50000	0	01331		CLA FIRSTC		TEST FOR	4F11157
	03004	0	40200	0	01373		SUB L(10)		CONSTANT OR VARIABLE.	4F11158
	03005	0	12000	0	02755		TPL SBP4		IF CONSTANT, THEN	4F11159
	03006	0	60000	4	01140		STZ E+10,4		SET VARIABLE = 0.	4F11160
	03007	-0	50000	0	01370	SBC9	CAL SYMBOL		ADJUST	4F11161
	03010	0	77100	2	00052		ARS 42,2		CONSTANT	4F11162
	03011	-0	60200	4	01145		ORS E+15,4		TO LOW ORDER POSITION.	4F11163
	03012	-2	00002	4	03024	SBC7	TNX SBC3,4,2		UPDATE STORING TAG	4F11164
	03013	-0	63400	4	02726		SXD SBS2,4		BY -2, AND SAVE.	4F11165
D	03014	-3	00000	0	02627	SBC4	TXL SS001,0		SWITCH-REPEAT FOR NEXT SUB-COMB.	4F11166
D	03015	1	00000	0	03030		TXI SA000,0		GO MAKE TABLE ENTRIES AND GET TAG.	4F11167
	03016	0	50200	0	02777	SBC2	CLS SBC8		RESET ADDEND	4F11168
	03017	0	60100	0	02777		STO SBC8		OP SWITCH.	4F11169
	03020	0	50200	0	01373		CLS L(10)		TEST	4F11170
	03021	0	40000	0	01331		ADD FIRSTC		ADDEND	4F11171
	03022	-0	12000	0	03007		TMI SBC9		FOR CONSTANT.	4F11172
	03023	0	07400	4	03400		TSX DIAG,4		* SUBSCRIPT ADDEND NOT A CONSTANT.	4F11173
	03024	0	50200	0	03014	SBC3	CLS SBC4		AFTER SCANNING 3 SUBSCRIPTS.	4F11174
	03025	-0	12000	0	03030		TMI SA000		GO MAKE TABLE ENTRIES AND GET TAG.	4F11175
	03026	0	07400	4	03400		TSX DIAG,4		* GO TO DIAG - NO) AFTER 3RD SUBS.	4F11176
							CSA000= ENTRY POINT USED	BY C0200 (GO TO ROUTINE).		4F11177
	03027	-0	63400	4	02732	CSA000	SXD SXR4,4		SAVE C(XR4) FOR RETURN TO C0200.	4F11178

03030	0	50000	0	01100	SA000	CLA DIMCTR	SAVE	4F11179
03031	0	60100	0	01125		STO DIMSAV	THE CONTENTS OF DIMCTR	4F11180
03032	0	76700	0	00041		ALS 33	POSITION AND	4F11181
03033	0	60100	0	01126		STO E	STORE I TAG.	4F11182
03034	0	50000	0	01141		CLA E+11	MOVE SUBSCRIPT ADDENDS	4F11183
03035	0	60100	0	01142		STO E+12	INTO POSITION	4F11184
03036	0	50000	0	01137		CLA E+9	FOR FOLLOWING	4F11185
03037	0	60100	0	01141		STO E+11	PROGRAM.	4F11186
03040	0	50000	0	01410		CLA L(2)	EXAMINE DIMCTR	4F11187
03041	0	34000	0	01100		CAS DIMCTR	TO DETERMINE	4F11188
03042	1	00000	0	03174		TXI 1D0000,0	WHETHER DIMESNION OF	4F11189
03043	1	00000	0	03131		TXI 2D0000,0	VARIABLE IS 1, 2, OR 3.	4F11190
03044	0	53400	4	01414	3D0000	LXA L(6),4	PREPARE TO PICK UP 3 COEFFICIENTS.	4F11191
03045	0	56000	4	01137	3D0001	LDQ E+9,4	CONVERT THEM FROM BCD TO BINARY	4F11192
03046	0	07400	1	02566		TSX SR6DC1,1	* IN E+3,5,7, AND	4F11193
03047	0	60100	4	01137		STO E+9,4	STORE BACK IN E+3,5,7,	4F11194
03050	2	00002	4	03045		TIX 3D0001,4,2	WHEN DONE, PREPARE	4F11195
03051	0	53400	4	01411		LXA L(3),4	TO PICK UP 3 ADDENDS.	4F11196
03052	0	50000	4	01144	3D0002	CLA E+14,4	CONVERT ADDENDS (BCD TO BINARY)=	4F11197
03053	0	60200	0	01347		SLW G	STRIP OFF	4F11198
03054	0	56000	0	01347		LDQ G	SIGN.	4F11199
03055	0	07400	1	02566		TSX SR6DC1,1	* CONVERT ADDENDS IN E+11,12,13,	4F11200
03056	0	56000	4	01144		LDQ E+14,4	PUT SIGN IN S-BIT OF MQ, AND	4F11201
03057	0	16200	0	03061		TQP 3D0040	IF PLUS--SKIP NEXT,	4F11202
03060	-0	50100	0	01453		ORA 2E17	IF MINUS--OR SIGN INTO BIT 18,	4F11203
03061	0	60100	4	01144	3D0040	STO E+14,4	AND STORE BACK INTO E+11,12,13,	4F11204
03062	2	00001	4	03052		TIX 3D0002,4,1	WHEN DONE,	4F11205
03063	0	07400	4	02005		TSX DIM3SR,4	* GO SEARCH DIM3 TABLE,	4F11206
03064	0	07400	4	03400		TSX DIAG,4	* --ERROR..NOT ON DRUM,	4F11207
03065	0	50000	0	01131	3D0060	CLA E+3	REFORMATIZE E-STRING =	4F11208
03066	0	76700	0	00022		ALS 18	PACK TOGETHER COEFFICIENTS 1 AND 2	4F11209
03067	0	40000	0	01133		ADD E+5	AND STORE THEM	4F11210
03070	0	60100	0	01131		STO E+3	IN E+3.	4F11211
03071	0	50000	0	01132		CLA E+4	MOVE SUBSCRIPT 1	4F11212
03072	0	60100	0	01133		STO E+5	TO E+5.	4F11213
03073	0	50000	0	01135		CLA E+7	AND MOVE	4F11214
03074	0	76700	0	00022		ALS 18	COEFFICIENT 3	4F11215
03075	0	60100	0	01132		STO E+4	INTO E+4.	4F11216
03076	0	50000	0	01136		CLA E+8	MOVE SUBSCRIPT 3 INTO E+7,	4F11217
03077	0	60100	0	01135		STO E+7	NEXT SUBSCRIPT 2 IN E+6.	4F11218
03100	0	50000	0	01101		CLA D12	MOVE DIMENSIONS 1 AND 2	4F11219
03101	0	60100	0	01136		STO E+8	INTO E+8.	4F11220
03102	-0	50000	0	01141		CAL E+11	PACK TOGETHER	4F11221
03103	0	76700	0	00022		ALS 18	ADDENDS 1 AND 2	4F11222
03104	-0	50100	0	01142		ORA E+12	AND	4F11223
03105	0	60200	0	01141		SLW E+11	STORE THEM IN E+11.	4F11224
03106	-0	50000	0	01143		CAL E+13	MOVE	4F11225
03107	0	76700	0	00022		ALS 18	ADDEND 3	4F11226
03110	0	60200	0	01142		SLW E+12	INTO E+12.	4F11227
03111	0	07400	4	00443		TSX TAU3IX,4	* GO SEARCH TAU3 TABLE.	4F11228
03112	0	76700	0	00030		ALS 24	POSITION TAU3 TAG, AND	4F11229
03113	-0	60200	0	01126		ORS E	PLACE TAU3 TAG IN TAG WORD.	4F11230
03114	-0	50000	0	01135		CAL E+7	COMBINE	4F11231
03115	-0	50100	0	01134		ORA E+6	SUBSCRIPTS 3,2, AND 1,	4F11232

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	03116	-0	50100	0	01133	3D0340	ORA	E+5	AND IF THEY ARE ALL ZERO,	4F11233
	03117	0	10000	0	03216	3D0350	TZE	NOTAG	--DON,T ENTER FORTAG.	4F11234
	03120	-0	50000	0	00030	FTG000	CAL	EIFNO	ENTER FORTAG=	4F11235
	03121	-0	32000	0	01527		ANA	MASK1	BRING UP ALPHA (INTFORMNO)	4F11236
	03122	0	60200	0	01347		SLW	G	AND STORE IN G.	4F11237
	03123	-0	50000	0	01126		CAL	E	BRING UP TAUTAG FOR I,	4F11238
	03124	0	77100	0	00030		ARS	24	ADJUST, AND	4F11239
	03125	-0	60200	0	01347		ORS	G	PLACE IN G WITH ALPHA. THEN	4F11240
	03126	0	07400	1	03321		TSX	TET00,1	* ENTER INTO FORTAG TABLE	4F11241
	03127	0	00000	0	00004		PZE	4	(TET TABLE 4).	4F11242
D	03130	1	00000	0	03220		TXI	SAEXIT,0	GO TO EXIT.	4F11243
	03131	0	53400	4	01412	2D0000	LXA	L(4),4	THEN PICKUP AND	4F11244
	03132	0	56000	4	01135	2D0001	LDQ	E+7,4	CONVERT COEFFICIENTS	4F11245
	03133	0	07400	1	02566		TSX	SR6DC1,1	* (BCD TO BINARY),	4F11246
	03134	0	60100	4	01135		STO	E+7,4	AND STORE BACK IN E+3 AND E+5,	4F11247
	03135	2	00002	4	03132		TIX	2D0001,4,2	WHEN DONE,	4F11248
	03136	0	53400	4	01410		LXA	L(2),4	PREPARE TO	4F11249
	03137	0	50000	4	01143	2D0002	CLA	E+13,4	PICKUP THE TWO ADDENDS.	4F11250
	03140	0	60200	0	01347		SLW	G	STRIP OFF	4F11251
	03141	0	56000	0	01347		LDQ	G	THEIR SIGNS,	4F11252
	03142	0	07400	1	02566		TSX	SR6DC1,1	* CONVERT THEM FROM BCD TO BINARY,	4F11253
	03143	0	56000	4	01143		LDQ	E+13,4	PUT SIGN IN S-BIT OF MQ, AND	4F11254
	03144	0	16200	0	03146		TQP	2D0040	IF PLUS--SKIP NEXT,	4F11255
	03145	-0	50100	0	01453		ORA	2E17	IF MINUS--OR SIGN INTO BIT 18,	4F11256
	03146	0	60100	4	01143	2D0040	STO	E+13,4	AND STORE BACK IN E+11 AND E+12.	4F11257
	03147	2	00001	4	03137		TIX	2D0002,4,1	WHEN DONE,	4F11258
	03150	0	07400	4	01775		TSX	DIM2SR,4	* GO SEARCH DIM2 TABLE.	4F11259
	03151	0	07400	4	03400		TSX	DIAG,4	* --ERROR..NOT ON DRUM.	4F11260
	03152	0	50000	0	01131	2D0060	CLA	E+3	REFORMATIZE E-STRING =	4F11261
	03153	0	76700	0	00022		ALS	18	PACK TOGETHER	4F11262
	03154	0	40000	0	01133		ADD	E+5	COEFFICIENTS 1 AND 2,	4F11263
	03155	0	60100	0	01131		STO	E+3	AND STORE THEM IN E+3,	4F11264
	03156	0	50000	0	01134		CLA	E+6	MOVE SUBSCRIPT 2 INTO E+5	4F11265
	03157	0	60100	0	01133		STO	E+5	(NEXT TO SUBSCRIPT 1 IN E+4),	4F11266
	03160	0	50000	0	01101		CLA	D12	OBTAIN	4F11267
	03161	-0	32000	0	01527		ANA	MASK1	DIMENSION 1, AND MOVE IT	4F11268
	03162	0	60100	0	01134		STO	E+6	INTO E+6.	4F11269
	03163	-0	50000	0	01141		CAL	E+11	PACK TOGETHER	4F11270
	03164	0	76700	0	00022		ALS	18	ADDENDS 1 AND 2,	4F11271
	03165	-0	50100	0	01142		ORA	E+12	AND STORE THEM	4F11272
	03166	0	60200	0	01141		SLW	E+11	IN E+11.	4F11273
	03167	0	07400	4	00436		TSX	TAU2IX,4	* GO SEATCH TAU2 TABLE.	4F11274
	03170	0	76700	0	00030		ALS	24	POSITION TAU2 TAG, AND	4F11275
	03171	-0	60200	0	01126		ORS	E	PLACE TAU2 TAG IN TAG WORD.	4F11276
	03172	-0	50000	0	01132		CAL	E+4	COMBINE SUBSCRIPTS 1 AND 2, AND	4F11277
D	03173	1	00000	0	03116		TXI	3D0340,0	GO TO FORTAG SECTION.	4F11278
	03174	0	56000	0	01131	1D0000	LDQ	E+3	PICKUP AND CONVERT COEFFICIENTS	4F11279
	03175	0	07400	1	02566		TSX	SR6DC1,1	* (BCD TO BINARY), AND	4F11280
	03176	0	76700	0	00022		ALS	18	THEN ADJUST THEM,	4F11281
	03177	0	60100	0	01131		STO	E+3	AND STORE THEM BACK IN E+3.	4F11282
	03200	0	50000	0	01141		CLA	E+11	PICKUP ADDEND,	4F11283
	03201	0	60200	0	01347		SLW	G	STRIP OFF SIGN,	4F11284
	03202	0	56000	0	01347		LDQ	G	CONVERT ADDEND	4F11285
	03203	0	07400	1	02566		TSX	SR6DC1,1	* (BCD TO BINARY), AND THEN	4F11286

03204	0	56000	0	01141		LDQ	E+11	PUT SIGN IN S-BIT OF MQ,	4F11287
03205	0	16200	0	03207		TQP	1D0001	IF PLUS--SKIP NEXT,	4F11288
03206	-0	50100	0	01453		ORA	2E17	IF MINUS--OR SIGN INTO BIT 18.	4F11289
03207	0	76700	0	00022	1D0001	ALS	18	THEN ADJUST AND STORE	4F11290
03210	0	60200	0	01141		SLW	E+11	BACK INTO E+11.	4F11291
03211	0	07400	4	00431		TSX	TAULIX,4	* GO SEARCH TAU1 TABLE.	4F11292
03212	0	76700	0	00030		ALS	24	POSITION TAU1 TAG, AND	4F11293
03213	-0	60200	0	01126		ORS	E	PLACE TAU1 TAG IN TAG WORD.	4F11294
03214	-0	50000	0	01132		CAL	E+4	TAKE SUBSCRIPT, AND	4F11295
03215	1	00000	0	03117		TXI	3D0350,0	GO TO FORTAG SECTION.	4F11296
03216	-0	50000	0	01471	NOTAG	CAL	FNIND	POSITION SIGMA1 TAG, AND	4F11297
03217	-0	60200	0	01126		ORS	E	PLACE SIGMA1 TAG IN TAGE WORD.	4F11298
03220	-0	53400	1	02730	SAEXIT	LXD	SXR1,1	RESTORE THE C(XR1)	4F11299
03221	-0	53400	2	02731		LXD	SXR2,2	RESTORE THE C(XR2)	4F11200
03222	-0	53400	4	02732		LXD	SXR4,4	RESTORE THE C(XR4)	4F11301
03223	0	02000	4	00001		TRA	1,4	* EXIT TO MAIN ROUTINE.	4F11302
							END OF PROGRAM SS000.		4F11303
							*****		*4F11304
							SUBX00,4/ CALLERS=C3000,C3300.		4F11305
							SUBX00 ADDS BLANKS TO THE NAMES OF SUBROUTINES.		4F11306
03224	0	53400	3	01414	SUBX00	LXA	L(6),3	PREPARE TO COUNT CHARS AND SHIFTS.	4F11307
03225	0	56000	0	01112		LDQ	1G	PICKUP SUBROUTINE NAME.	4F11308
03226	-0	75400	0	00000	SUBX01	PXD	,0	CLEAR THE AC, AND	4F11309
03227	-0	76300	0	00006		LGL	6	SEARCH FOR A BLANK	4F11310
03230	0	40200	0	01430		SUB	BLANK	CHARACTER IN THIS NAME.	4F11311
03231	0	10000	0	03235		TZE	SUBX03	IF NOT BLANK, THEN	4F11312
03232	1	00006	1	03233		TXI	SUBX02,1,6	UPDATE SHIFT COUNT, AND	4F11313
03233	2	00001	2	03226	SUBX02	TXI	SUBX01,2,1	CONTINUE UNTIL 6 CHARS ARE COUNTED.	4F11314
03234	0	02000	4	00001		TRA	1,4	* RETURN TO CALLER AFTER 6TH CHAR.	4F11315
03235	0	56000	0	01526	SUBX03	LDQ	BLANKS	IF LESS THEN 6 CHARACTERRS IN NAME,	4F11316
03236	-0	76300	1	00044		LGL	36,1	SHIFT ENOUGH BLANKS INTO THE AC,	4F11317
03237	-0	60200	0	01112		ORS	1G	AND FILL OUT NAME WITH BLANKS.	4F11318
03240	0	02000	4	00001		TRA	1,4	* RETURN TO CALLER.	4F11319
							END OF PROGRAM SUBX00.		4F11320
							*****		*4F11321
							TESTFX,1/ CALLERS=SS000,C3000,IFFIX.		4F11322
							TESTFX TEST FOR FIXED OR FLOATING POINT VARIABLES.		4F11323
03241	-0	50000	0	01331	TESTFX	CAL	FIRSTC	COMPARE FIRST CHARACTER	4F11324
03242	0	34000	0	01423		CAS	L(H)	WITH H.	4F11325
03243	0	34000	0	01425		CAS	L(O)	IF GREATER THEN H, COMPARE WITH O.	4F11326
03244	0	02000	1	00001		TRA	1,1	* IF NOT GREATER THEN H, LESS THEN O,	4F11327
03245	0	02000	1	00001		TRA	1,1	* THEN TAKE FLOATING POINT EXIT.	4F11328
03246	0	02000	1	00002		TRA	2,1	* OTHERWISE, TAKE FIXED POINT EXIT.	4F11329
							END OF PROGRAM TESTFX.		4F11330
							*****		*4F11331
							TEST..,4/ CALLS=DIAG. CALLERS=C0100,C0200,C0300,C0400,C1000,		4F11332
							C1100,C1200,C1400,C1500,C1600,C3000,C3100,C3200,C3400,LPR.		4F11333
							TEST.. TESTS THE CHARACTER IN THE AC(30-35).		4F11334
							TEST CHARACTER IN THE AC FOR COMMA OR ENDMARK.		4F11335
03247	0	34000	0	01376	TESTA0	CAS	COMMA		4F11336
03250	0	02000	0	03252		TRA	TESTA1		4F11337

03251	0	02000	4	00001	TRA	1,4		* RETURN TO CALLER.	4F11341
03252	0	40200	0	01374	TESTA1	SUB	ENDMK		4F11342
03253	0	10000	4	00001	TZE	1,4		* RETURN TO CALLER.	4F11343
03254	0	07400	4	03400	TSX	DIAG,4		* ERROR -- GO TO DIAGNOSTIC.	4F11344
							TEST CHARACTER IN THE AC FOR COMMA OR CLOSED PARENTHESIS.		4F11345
03255	0	34000	0	01376	TESTB0	CAS	COMMA		4F11346
03256	0	02000	0	03260	TRA	TESTB1			4F11347
03257	0	02000	4	00001	TRA	1,4		* RETURN TO CALLER.	4F11348
03260	0	40200	0	01377	TESTB1	SUB	CLOS		4F11349
03261	0	10000	4	00001	TZE	1,4		* RETURN TO CALLER.	4F11350
03262	0	07400	4	03400	TSX	DIAG,4		* ERROR -- GO TO DIAGNOSTIC.	4F11351
							TEST CHARACTER IN THE AC FOR OPEN PARENTHESIS OR ENDMARK.		4F11352
03263	0	34000	0	01375	TESTC0	CAS	OPEN		4F11353
03264	0	02000	0	03266	TRA	TESTC1			4F11354
03265	0	02000	4	00001	TRA	1,4		* RETURN TO CALLER.	4F11355
03266	0	40200	0	01374	TESTC1	SUB	ENDMK		4F11356
03267	0	10000	4	00001	TZE	1,4		* RETURN TO CALLER.	4F11357
03270	0	07400	4	03400	TSX	DIAG,4		* ERROR -- GO TO DIAGNOSTIC.	4F11358
							TEST CHARACTER IN THE AC FOR ENDMARK.		4F11359
03271	0	34000	0	01374	TESTD0	CAS	ENDMK		4F11360
03272	0	07400	4	03400	ERR77P	TSX	DIAG,4	* MACHINE ERROR, GO TO DIAGNOSTIC.	4F11361
03273	0	02000	4	00001	TRA	1,4		* RETURN TO CALLER.	4F11362
03274	0	07400	4	03400	TSX	DIAG,4		* ERROR -- GO TO DIAGNOSTIC.	4F11363
							TEST CHARACTER IN THE AC FOR OPEN PARENTHESIS.		4F11364
03275	0	34000	0	01375	TESTE0	CAS	OPEN		4F11365
03276	0	02000	0	03300	TRA	TESTE1			4F11366
03277	0	02000	4	00001	TRA	1,4		* RETURN TO CALLER.	4F11367
03300	0	07400	4	03400	TESTE1	TSX	DIAG,4	* ERROR -- GO TO DIAGNOSTIC.	4F11368
							TEST CHARACTER IN THE AC FOR CLOSED PARENTHESIS.		4F11369
03301	0	34000	0	01377	TESTF0	CAS	CLOS		4F11370
03302	0	02000	0	03304	TRA	TESTF1			4F11371
03303	0	02000	4	00001	TRA	1,4		* RETURN TO CALLER.	4F11372
03304	0	07400	4	03400	TESTF1	TSX	DIAG,4	* ERROR -- GO TO DIAGNOSTIC.	4F11373
							TEST CHARACTER IN THE AC FOR COMMA.		4F11374
03305	0	34000	0	01376	TESTG0	CAS	COMMA		4F11375
03306	0	02000	0	03310	TRA	TESTG1			4F11376
03307	0	02000	4	00001	TRA	1,4		* RETURN TO CALLER.	4F11377
03310	0	07400	4	03400	TESTG1	TSX	DIAG,4	* ERROR -- GO TO DIAGNOSTIC.	4F11378
							TEST CHARACTER IN THE AC FOR NON-NUMERIC.		4F11379
03311	0	34000	0	01417	TESTH0	CAS	L(9)		4F11380
03312	0	02000	4	00001	TRA	1,4		* RETURN TO CALLER.	4F11381
03313	0	76100	0	00000	NOF				4F11382
03314	0	07400	4	03400	TSX	DIAG,4		* ERROR -- GO TO DIAGNOSTIC.	4F11383
							TEST CHARACTER IN THE AC FOR NUMERIC.		4F11384
03315	0	34000	0	01417	TESTI0	CAS	L(9)		4F11385
03316	0	07400	4	03400	TSX	DIAG,4		* ERROR -- GO TO DIAGNOSTIC.	4F11386
03317	0	02000	4	00001	TRA	1,4		* RETURN TO CALLER.	4F11387
03320	0	02000	4	00001	TRA	1,4		* RETURN TO CALLER.	4F11388
							END OF PROGRAM TEST...		4F11389
							* * * * *		*4F11390
									4F11391
							TET00,1/ CALLERS=CA000,CC000,C0100,C0200,C0300,C1300,C1400,		4F11392
							C1500,C3000,C3100,SS000,FOR,SPC,CMA,EMK,LIB,VRA(VRD).		4F11393
							TET00 MAKES ENTRIES IN THE TAPE TABLES. WHEN A BUFFER IS		4F11394

					FULL IT IS WRITTEN AS A RECORD ONTO TAPE 4.	4F11395		
03321	-0	63400	2	01100	TET00	SXD TETXR2,2	SAVE THE C(XR2),	4F11396
03322	-0	63400	4	01101		SXD TETXR4,4	SAVE THE C(XR4), AND	4F11397
03323	-0	60000	0	01103		STQ TETMQR	SAVE THE C(MQR).	4F11398
03324	0	50000	1	00001		CLA 1,1	COMPUTE TABLE NUMBER	4F11399
03325	0	76700	0	00001		ALS 1	TIMES 3	4F11400
03326	0	40000	1	00001		ADD 1,1	AND	4F11401
03327	0	76000	0	00006		COM	PLACE THE 2S COMPLEMENT	4F11402
03330	0	40000	0	01407		ADD L(1)	OF THIS	4F11403
03331	0	73400	2	00000		PAX ,2	IN XR2	4F11404
03332	0	50000	2	00322		CLA INTET,2	OBTAIN THE CURRENT	4F11405
03333	0	77100	0	00022		ARS 18	B (BUFFER CAPACITY),	4F11406
03334	0	60100	0	01102		STO TETWRK	AND SAVE IT. THEN	4F11407
03335	0	50000	2	00324		CLA INTET+2,2	GET P (PORTION OF BUFFER FULL),	4F11408
03336	0	77100	0	00022		ARS 18	AND	4F11409
03337	0	40200	0	01102		SUB TETWRK	COMPARE TO B.	4F11410
03340	-0	10000	0	03356		TNZ TET03	IF BUFFER IS FULL,	4F11411
03341	0	62200	2	00324		STD INTET+2,2	SET P = 0, AND	4F11412
03342	0	76600	0	00224	TET01	WRS TABTAP	PREPARE TO WRITE BLOCK ON TABTAP.	4F11413
03343	0	53400	4	01102		LXA TETWRK,4	SET XR4 = BLOCK SIZE (B).	4F11414
03344	0	50000	0	01102		CLA TETWRK	ADD BLOCK SIZE TO	4F11415
03345	0	40000	2	00322		ADD INTET,2	ORIGIN OF CURRENT BLOCK (O).	4F11416
03346	0	62100	0	03350		STA TET02	AND SET ADDRESS OF COPY LOOP (O+B).	4F11417
03347	0	70000	1	00001		CPY 1,1	COPY TABLE NUM FOR IDENTIFICATION.	4F11418
03350	0	70000	4	00000	TET02	CPY **,4	WRITE BLOCK ONTO	4F11419
03351	2	00001	4	03350		TIX TET02,4,1	TABLE TAPE, AND	4F11420
03352	0	76600	0	00333		IOD	WHEN DONE,	4F11421
03353	0	50000	2	00324		CLA INTET+2,2	INCREASE C (BLOCK COUNT)	4F11422
03354	0	40000	0	01407		ADD L(1)	BY 1 FOR	4F11423
03355	0	62100	2	00324		STA INTET+2,2	BLOCK JUST WRITTEN ON TABLE TAPE.	4F11424
03356	0	50000	2	00324	TET03	CLA INTET+2,2	ADD P (PORTION OF BUFFER FULL)	4F11425
03357	0	77100	0	00022		ARS 18	TO O (ORIGIN OF CURRENT TABLE	4F11426
03360	0	40000	2	00322		ADD INTET,2	BUFFER) TO SET	4F11427
03361	0	62100	0	03371		STA TET05	ADDRESS OF ENTRY LOOP (P+O).	4F11428
03362	0	50000	2	00323		CLA INTET+1,2	OBTAIN CURRENT A (ENTRY ADDRESS),	4F11429
03363	0	62100	0	03370		STA TET04	AND SET ADDRESS OF ENTRY LOOP.	4F11430
03364	-0	73400	4	00000		PDX ,4	SET XR4 = E (ENTRY LENGTH IN WRDS).	4F11431
03365	0	40000	2	00324		ADD INTET+2,2	INCREASE P BY E TO ACCOUNT	4F11432
03366	0	62200	2	00324		STD INTET+2,2	FOR FOLLOWING ENTRY.	4F11433
03367	-0	53400	2	01406		LXD L(0),2	SET XR2 = 0. THEN	4F11434
03370	0	50000	2	00000	TET04	CLA **,2	MOVE THE CURRENT ENTRY	4F11435
03371	0	60100	2	00000	TET05	STO **,2	INTO THE CURRENT TABLE BUFFER, AND	4F11436
03372	1	77777	2	03373		TXI TET06,2,-1	WHEN	4F11437
03373	2	00001	4	03370	TET06	TIX TET04,4,1	DONE,	4F11438
03374	0	56000	0	01103		LDQ TETMQR	RESTORE ORIGINAL C(MQR),	4F11439
03375	-0	53400	2	01100		LXD TETXR2,2	RESTORE ORIGINAL C(XR2),	4F11440
03376	-0	53400	4	01101		LXD TETXR4,4	RESTORE ORIGINAL C(XR4), AND	4F11441
03377	0	02000	1	00002		TRA 2,1	* EXIT TO MAIN ROUTINE.	4F11442

END OF PROGRAM TET00. 4F11443
 * * * * * 4F11444
 4F11445

DIAGNOSTIC CALLERS=CD000,CB000,CC000,CA100,C0200,C0300,C090, 4F11446
 C1000,C1200,C3000,C3100,C3200,C3400,C0150,C0160,C0180,TEST..,4F11447
 SR6DC1,DRTABS,RDRX,DIM.SR,SS000,ROYCNV,RDC,RSC,LPR,EQS,RPR, 4F11448

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CMA,EMK,BEG(TYP),VRA(VRD).
(CA000 ALSO CALLS THE DIAGNOSTIC AFTER ALL STATEMENTS HAVE
BEEN PROCESSES. IF THERE HAVE BEEN NO PREVIOUS CALLS TO
THE DIAGNOSTIC DURING SECTION ONE, THEN 1PRIME IS CALLED.)
D 03400 1 00000 0 00004 DIAG TXI 4,0 * GO GET THE DIAGNOSTIC.
END OF PROGRAM DIAG.
* * * * *
ROUTINE TO COMPILE FLOW TRACING INSTRUCTIONS.
03401 -0 63400 4 03437 FLTR00 SXD FLTR05,4 SAVE CALLING TAG.
03402 0 50000 0 00030 CLA EIFNO GET LAST INTERNAL AND EXTERNAL FORMULA NOS.
03403 0 62100 0 02067 STA ENT PLACE LAST EFN IN DEC OF NTR INSTRUCTION.
03404 0 77100 0 00022 ARS 18
03405 0 62100 0 02070 STA NZE PLACE LAST IFN IN DEC OF PZE
03406 -0 53400 4 01122 LXD ARGCTR,4
03407 -3 00000 4 03413 TXL FLTR01,4,0 IS THIS AN FN FUNCTION, NO SKIP.
03410 0 60000 0 01107 STZ 1C+2
03411 0 50200 0 01454 CLS 2E18 SET ADDRESS TO -1
03412 0 02000 0 03423 TRA FLTR03
03413 0 50000 0 00365 FLTR01 CLA SBDFCN IS THIS A MAIN PROGRAM OR SUBPROGRAM.
03414 -0 10000 0 03420 TNZ FLTR02 SKIP ON SUBPROGRAM
03415 0 60000 0 01107 STZ 1C+2 SET ADDRESS TO 0
03416 0 60000 0 01110 STZ 1C+3
03417 0 02000 0 03424 TRA FLTR04
03420 0 50000 0 01523 FLTR02 CLA DOLSGN SET ADDRESS TO $+2
03421 0 60100 0 01107 STO 1C+2
03422 0 50000 0 01457 CLA D2
03423 0 60100 0 01110 FLTR03 STO 1C+3 SET RELATIVE ADDRESS WORD OF CIT.
03424 0 07400 4 01731 FLTR04 TSX CIT00,4
03425 0 00000 0 01406 PZE L(0) COMPILE NTR *+2,0,EFN
03426 0 00000 0 02067 PZE ENT
03427 0 00000 0 01510 PZE 15P
03430 0 00000 0 01457 PZE D2
03431 0 07400 4 01731 TSX CIT00,4
03432 0 00000 0 01406 PZE L(0) COMPILE PZE ALPHA,0,IFN
03433 0 00000 0 02070 PZE NZE WHERE ALPHA IS 0 FOR MAIN PROGRAM, $+2 FOR
03434 0 00000 0 01107 PZE 1C+2 SUBPROGRAM, OR -1 FOR FN FUNCTION IN EITHER
03435 0 00000 0 01110 PZE 1C+3 MAIN OR SUBPROGRAM.
03436 -0 53400 4 03437 LXD FLTR05,4
03437 1 00000 0 01731 FLTR05 TXI CIT00,0,** GO COMPILE LXD M(,4 OR 7(TYPE=,4
END OF THE COMMON PART OF SECTION ONE.
* * * * *
SECTION 1 / INITIALIZATION =
704 FORTRAN MASTER RECORD CARD / INITIALIZATION = F0150000.
00000 0 00004 0 00471 ORG 0
00001 0 00000 0 00600 PZE FORSUB,,1TOCS
00001 0 00000 0 00600 PZE DMWR98
00001 0 00000 0 00471 ORG FORSUB
INITIALIZATION OCCUPIES FORSUB BUFFER AND IS WRITTEN OVER
BY FORSUB ENTRIES IF THERE ARE ANY FORTRAN FUNCTIONS IN THE

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PROGRAM.
* * * * * 4F11468
* * * * * 4F11469
* * * * * 4F11470
PART I / CLEAR DRUMS 1,2,3,4, AND REWIND TAPES 2,3,4 = 4F11471
00471 0 53400 1 00575 CLDR00 LXA CLDR07,1 CLEAR DRUMS 1,2,3,4 TO +0. 4F11472
00472 0 76600 1 00305 CLDR01 WRS 197,1 X 4F11473
00473 -0 53400 2 00575 LXD CLDR07,2 X 4F11474
00474 0 70000 0 00576 CLDR03 CPY CLDR08 X 4F11475
00475 2 00001 2 00474 TIX CLDR03,2,1 X 4F11476
00476 2 00001 1 00472 TIX CLDR01,1,1 X 4F11477
00477 0 77200 0 00222 REW 146 REWIND WORKING TAPES 2,3,4. 4F11478
00500 0 77200 0 00223 REW 147 X 4F11479
00501 0 77200 0 00224 REW 148 X 4F11480
END OF INITIALIZATION / PART 1. 4F11481
* * * * * 4F11482
* * * * * 4F11483
PART 2 / WRITE STATES A,B,C,D ON DRUMS1,3,4,2= 4F11484
00502 0 53400 4 01411 DMWR01 LXA L(3),4 PREPARE TO WRITE STATE D ON DRUM 2. 4F11485
00503 0 02000 0 00513 TRA DMWR11 X 4F11486
00504 0 53400 4 01407 DMWR03 LXA L(1),4 PREPARE TO WRITE STATE C ON DRUM 4. 4F11487
00505 0 02000 0 00513 TRA DMWR11 X 4F11488
00506 0 53400 4 01410 DMWR06 LXA L(2),4 PREPARE TO WRITE STATE B ON DRUM 3. 4F11489
00507 0 02000 0 00513 TRA DMWR11 X 4F11490
00510 0 53400 4 01412 DMWR09 LXA L(4),4 PREPARE TO WRITE STATE A ON DRUM 1. 4F11491
00511 0 50000 0 00600 CLA DMWR98 THIS IS FINAL STATE TO BE WRITTEN, 4F11492
00512 0 62100 0 00546 STA DMWR40 CHANGE ADDRESS TO GET OUT OF LOOP. 4F11493
00513 0 50000 4 02437 DMWR11 CLA ZETA+4,4 GET LENGTH OF CURRENT STATE. 4F11494
00514 -0 73400 2 00000 PDX ,2 LENGTH OF CURRENT STATE. 4F11495
00515 -0 63400 2 00574 SXD CHECK,2 SAVE LENGTH. 4F11496
00516 0 77100 0 00022 ARS 18 LENGTH + ORIGIN TO PREPARE FOR CK 4F11497
00517 0 40000 0 02430 ADD MTR3 SUM AND COPY LOOPS. 4F11498
00520 0 62100 0 00523 STA DMWR20 X 4F11499
00521 0 62100 0 00533 STA DMWR26 X 4F11500
00522 -0 75400 0 00000 PXD ,0 CLEAR AC AND COMPUTE CK SUM. 4F11501
00523 0 36100 2 00000 DMWR20 ACL **,2 X 4F11502
00524 2 00001 2 00523 TIX DMWR20,2,1 X 4F11503
00525 0 60200 0 01103 SLW DRCKSM X 4F11504
00526 0 53400 1 01413 LXA DRMERC,1 SET FOR FIVE ATTEMPTS. 4F11505
00527 0 76600 4 00305 DMWR23 WDR 5,4 PREPARE TO WRITE DRUM. 4F11506
00530 -0 53400 2 00574 LXD CHECK,2 X 4F11507
00531 0 46000 4 02437 LDA ZETA+4,4 X 4F11508
00532 0 70000 0 01103 CPY DRCKSM WRITE CK SUM ON DRUM. 4F11509
00533 0 70000 2 00000 DMWR26 CPY **,2 WRITE STATE ON DRUM. 4F11510
00534 2 00001 2 00533 TIX DMWR26,2,1 X 4F11511
00535 0 76200 4 00305 RDR 5,4 PREPARE TO READ STATE BACK. 4F11512
00536 -0 53400 2 00574 LXD CHECK,2 X 4F11513
00537 0 46000 4 02437 LDA ZETA+4,4 X 4F11514
00540 -0 75400 0 00000 PXD ,0 CLEAR AC AND READ BACK CK SUM AND 4F11515
00541 -0 70000 0 00573 CAD GARBGE STATE. 4F11516
00542 0 76000 0 00006 COM X 4F11517
00543 -0 70000 0 00573 DMWR32 CAD GARBGE RECOMPUTE CK SUM. 4F11518
00544 2 00001 2 00543 TIX DMWR32,2,1 X 4F11519
00545 0 76000 0 00006 COM X 4F11520
00546 0 10000 0 00004 DMWR40 TZE 1TOCS * CK SUM AGREE, GO GET NEXT STATE. 4F11521

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00547	2	00001	1	00527	TIX	DMWR23,1,1	CK SUM FAILED, TRY UP TO 5 TIMES.	4F11522
00550	0	50000	0	00577	CLA	DMWR89	SET MONITOR TO RETURN TO THIS	4F11523
00551	0	60100	0	02402	STO	STATEA	PROGRAM INSTEAD OF TO STATE A.	4F11524
00552	-3	00003	4	00554	TXL	DMWR80,4,3	TEST FOR STATE A IN PROGRESS.	4F11525
00553	0	07400	4	03400	TSX	DIAG,4	* STATE A CANNOT BE WRITTEN ON DRUM1.	4F11526
00554	-3	00002	4	00561	DMWR80	TXL DMWR82,4,2	TEST FOR STATE D IN PROGRESS.	4F11527
00555	0	76200	0	00221	RTB	1	SPACE OVER STATE C RECORD.	4F11528
00556	0	76200	0	00221	RTB	1	SPACE OVER STATE B RECORD.	4F11529
00557	0	76200	0	00221	RTB	1	SPACE OVER STATE A RECORD.	4F11530
00560	0	07400	4	03400	TSX	DIAG,4	* STATE D CANNOT BE WRITTEN ON DRUM2.	4F11531
00561	-3	00001	4	00564	DMWR82	TXL DMWR84,4,1	TEST FOR SET B IN PROGRESS.	4F11532
00562	0	76200	0	00221	RTB	1	SPACE OVER STATE A RECORD.	4F11533
00563	0	07400	4	03400	TSX	DIAG,4	* STATE B CANNOT BE WRITTEN ON DRUM3.	4F11534
00564	0	76200	0	00221	DMWR84	RTB 1	SPACE OVER STATE B RECORD.	4F11535
00565	0	76200	0	00221	RTB	1	SPACE OVER STATE A RECORD.	4F11536
00566	0	07400	4	03400	TSX	DIAG,4	* STATE C CANNOT BE WRITTEN ON DRUM4.	4F11537
00567	0	53400	4	01406	DMWR88	LXA L(0),4	SET IR4 TO 0 TO CAUSE DIAGNOSTIC TO4F11538	4F11538
00570	0	02000	0	03400	TRA	DIAG	* PRINT END LINE AND STOP	4F11539
00571	0	07400	4	05702	DMWR99	TSX CA100,4	* GO TO SUBROUTINE TO LOAD FT REGION.	4F11540
00572	0	02000	0	03440	TRA	CA010	* GO BEGIN STATE A OF SECTION ONE.	4F11541
						END OF INITIALIZATION / PART 2.		4F11542
						* * * * *		4F11543
								4F11544
						PART3 / VARIABLES AND CONSTANTS USED BY INITIALIZATION=		4F11545
				00573	GARBGE	BSS 1	ERASEABLE STORAGE.	4F11546
00574	0	00000	0	00000	CHECK	PZE ,,**	SAVING CELL FOR LENGTH OF STATE.	4F11547
00575	0	04000	0	00004	CLDR07	PZE 4,,2048	CONSTANT FOR CLEARING DRUMS.	4F11548
00576	0	00000	0	00000	CLDR08	PZE 0	CONSTANT FOR CLEARING DRUMS.	4F11549
00577	0	02000	0	00567	DMWR89	TRA DMWR88	CONSTANT FOR ERROR ROUTINE.	4F11550
00600	0	00000	0	00571	DMWR98	PZE DMWR99	CONSTANT FOR ADDRESS MODIFICATION.	4F11551
						END OF INITIALIZATION / PART 3.		4F11552
						* * * * *		4F11553
								4F11554
								4F11555
						SECTION 1 / STATEA =		4F11556
						704 FORTRAN MASTER RECORD CARD / STATE A = F0190000.		4F11557
				00000	ORG	0		4F115571
00000	0	00510	0	03440	PZE	ORGA,,DMWR09		4F115572
00001	0	00000	0	07306	PZE	ENDA-1		4F115573
								4F11558
						NAME	FUNCTION	4F11559
						PART 1 / ASSEMBLE AND CLASSIFY ALL STATEMENTS=		4F11560
						CA000	ASSEMBLE STATEMENT.	4F11561
						CD000	SCAN FOR HOLLERITH AND ILLEGAL CHS.	4F11562
						CB000	CLASSIFY=ARITHMETIC/NON-ARITHMETIC.	4F11563
						CC000	CLASSIFY=WHICH NON-ARITHMETIC.	4F11564
						PART 2 / PROCESS CONTROL AND SPECIFICATION STATEMENTS.		4F11565
						C0100	DO.	4F11566
						C0200	GO TO.	4F11567
						C0300	IF.	4F11568
						C0400	IF (SENSE SWITCH.	4F11569
						C0500	IF (SENSE LIGHT.	4F11570
						C0600	IF DIVIDE CHECK.	4F11571
						C0700	IF AC OVERFLOW.	4F11572

C0800	IF MQ OVERFLOW.	4F11573
C0900	PAUSE.	4F11574
C1000	ASSIGN.	4F11575
C1100	SENSE LIGHT.	4F11576
C1200	DIMENSION.	4F11577
C1300	STOP.	4F11578
C1400	FREQUENCY.	4F11579
C1500	EQUIVALENCE.	4F11580
C1600	CONTINUE.	4F11581
C3000(C3500)	SUBROUTINE / FUNCTION.	4F11582
C3100	COMMON.	4F11583
C3200	RETURN.	4F11584
C3300	CALL.	4F11585
C3400	END.	4F11586
PART 3 / PROCESS INPUT-OUTPUT STATEMENTS=		4F11587
RDC	READ CARD	4F11588
RIT	READ INPUT TAPE.	4F11589
RDP	PRINT.	4F11590
WOT	WRITE OUTPUT TAPE.	4F11591
PDC	PUNCH.	4F11592
WBT	WRITE TAPE.	4F11593
RBT	READ TAPE.	4F11594
WRD	WRITE DRUM.	4F11595
RDD	READ DRUM.	4F11596
EFT	END FILE.	4F11597
RWN	REWIND.	4F11598
BSP	BACKSPACE.	4F11599
FOR	FORMAT.	4F11600
RSC	RESET AND SCAN.	4F11601
LISTR	CONTROL FOR LIST SCAN.	4F11602
LPR	LEFT PARENTHESES IN LIST SCAN.	4F11603
EOS	EQUAL SIGN IN LIST SCAN.	4F11604
SPCTR	CONTROL FOR SPECIFICATION SCAN.	4F11605
SPC	SUBSCRIPT SPECIFICATIONS.	4F11606
RPR	RIGHT PARENTHESIS IN LIST SCAN.	4F11607
CMA	COMMA IN LIST SCAN.	4F11608
EMK	ENDMARK IN LIST SCAN.	4F11609
PART 4 / SUBROUTINES USED BY STATE A=		4F11610
BEG(TYP),4	BEGIN SCAN AND TYPE TEST.	4F11611
BEGTR	CONTROL FOR BEGINNING SCAN.	4F11612
BRW,4	BINARY READ OR WRITE COMPILER.	4F11613
BSS,2	COMPILES= IFN BSS 0.	4F11614
CA100,4	READ SOURCE PROGRAM TAPE.	4F11615
CC500,4	SCAN DICTIONARY.	4F11616
ETM(LTM)SW,4	IF SW=NOP, COMPILES ETM(LTM). SL=0.	4F11617
IFFIX,1	SETS UP FORVAR OR FORVAL ENTRY.	4F11618
IN(OUT)PUT,2	COMPILES CAL *, AND XIT (LEV).	4F11619
LIB,1	MAKES CLOSUB ENTRY, COMPILES CIT.	4F11620
VRA(VRD),4	MAKES FORVAR, FIXCON, CIT ENTRIES.	4F11621
PART 5 / CONSTANTS AND VARIABLES USED BY STATE A.		4F11622
DIC	DICTIONARY.	4F11623
T	TRANSFER TABLE.	4F11624
		4F11625
THE FOLLOWING CONVENTIONS ARE USED IN THIS LISTING=		4F11626


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CD000/ CALLS=C0190X,C0190,DIAG. 4F11681
CD000 SCANS FOR HOLLERITH AND ILLEGAL CHARACTERS. 4F11682
03503 0 07400 4 01671 CD000 TSX C0190X,4 * SET SCAN TO PICK UP 1ST CHARACTER. 4F11683
03504 0 07400 1 03534 CD001 TSX CD900,1 * IF NOT ENDMARK OR ILLEGAL CHARACTER 4F11684
03505 0 34000 0 01376 CAS COMMA SCAN 4F11685
D 03506 1 00000 0 03510 TXI CD002,0 FOR 4F11686
D 03507 1 00000 0 03512 TXI CD003,0 HOLLERITH 4F11687
03510 0 40200 0 01375 CD002 SUB OPEN SPECIFICATION 4F11688
03511 -0 10000 0 03504 TNZ CD001 WHICH 4F11689
03512 0 07400 1 03534 CD003 TSX CD900,1 * CAN BE= 4F11690
03513 0 40200 0 01373 SUB L(10) , N H 4F11691
03514 0 12000 0 03504 TPL CD001 OR = ( N H. 4F11692
03515 0 07400 1 03534 CD004 TSX CD900,1 * IF NOT ENDMARK OR ILLEGAL CHARACTER 4F11693
03516 0 34000 0 01417 CAS L(9) CONTINUE SCAN. 4F11694
D 03517 1 00000 0 03522 TXI CD005,0 N 4F11695
D 03520 1 00000 0 03515 TXI CD004,0 IS 4F11696
D 03521 1 00000 0 03515 TXI CD004,0 A 4F11697
03522 0 34000 0 01423 CD005 CAS L(H) FIXED 4F11698
D 03523 1 00000 0 03505 TXI CD001+1,0 POINT 4F11699
D 03524 1 00000 0 03526 TXI CD700,0 INTEGER. 4F11700
D 03525 1 00000 0 03505 TXI CD001+1,0 X 4F11701
03526 0 07400 4 01707 CD700 TSX C0190,4 * GO GET NEXT NONBLANK CHARACTER, 4F11702
03527 0 34000 0 01374 CAS ENDMK AND IF ENDMARK, 4F11703
D 03530 1 00000 0 03532 TXI CD701,0 THEN SKIP 4F11704
D 03531 1 00000 0 03616 TXI CC000,0 * TO NON-ARITHMETIC CLASSIFICATION. 4F11705
03532 0 07400 1 03543 CD701 TSX CD600,1 * SINCE HOLLERITH HAS BEEN FOUND, 4F11706
D 03533 1 00000 0 03526 TXI CD700,0 THEN $ IS LEGAL IN FORMAT TEST. 4F11707
03534 0 07400 4 01707 CD900 TSX C0190,4 * OBTAIN NEXT NONBLANK CHARACTER, 4F11708
03535 0 34000 0 01374 CAS ENDMK AND IF NOT 4F11709
D 03536 1 00000 0 03540 TXI CD800,0 ENDMARK, THEN SKIP 4F11710
D 03537 1 00000 0 03562 TXI CB000,0 * EXIT TO ARITH/NON-ARITH SCAN. 4F11711
03540 0 34000 0 01427 CD800 CAS SPECOP CHECK FOR $ 4F11712
D 03541 1 00000 0 03546 TXI CD601,0 WHICH, UNLESS HOLLERITH, IS AN 4F11713
03542 0 07400 4 03400 TSX DIAG,4 * ERROR -- GO TO DIAGNOSTIC. 4F11714
03543 0 34000 0 01435 CD600 CAS PM CHECK FOR RECORD MARK 4F11715
03544 0 02000 1 00001 TRA 1,1 WHICH IS AN 4F11716
03545 0 07400 4 03400 TSX DIAG,4 * ERROR -- GO TO DIAGNOSTIC. 4F11717
03546 0 34000 0 01426 CD601 CAS CHAR3 CHECK FOR MINUS ZERO 4F11718
03547 0 02000 1 00001 TRA 1,1 WHICH IS AN 4F11719
03550 0 07400 4 03400 TSX DIAG,4 * ERROR -- GO TO DIAGNOSTIC. 4F11720
03551 0 34000 0 01424 CAS CHAR2 CHECK FOR PLUS ZERO 4F11721
03552 0 02000 1 00001 TRA 1,1 WHICH IS AN 4F11722
03553 0 07400 4 03400 TSX DIAG,4 * ERROR -- GO TO DIAGNOSTIC. 4F11723
03554 0 34000 0 01420 CAS MINUS CHECK FOR MINUS SIGN 4F11724
03555 0 02000 1 00001 TRA 1,1 WHICH IS AN 4F11725
03556 0 07400 4 03400 TSX DIAG,4 * ERROR -- GO TO DIAGNOSTIC. 4F11726
03557 0 40200 0 01373 SUB TEN CHECK FOR TEN 4F11727
03560 -0 10000 1 00001 TNZ 1,1 WHICH IS AN 4F11728
03561 0 07400 4 03400 TSX DIAG,4 * ERROR -- GO TO DIAGNOSTIC. 4F11729
END OF PROGRAM CD000. 4F11730
* * * * * 4F11731
CB000/ CALLS=C0190X,C0190,DIAG. 4F11732
CB000 CLASSIFIES STATEMENT AS ARITHMETIC OR NON-ARITHMETIC. 4F11733

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	03562	0	53400	1	01407	CB000	LXA L(1),1	SET XR TO COUNT PARENTHESES.	4F11735
	03563	0	07400	4	01671		TSX C0190X,4	* RESET CHCTR AND FWA TO BEGIN SCAN.	4F11736
	03564	0	07400	4	01707	CB001	TSX C0190,4	* EXAMINE NEXT NON-BLANK CHARACTER.	4F11737
	03565	0	34000	0	01400		CAS AEQUAL	IF AN EQUAL SIGN,	4F11738
D	03566	1	00000	0	03570		TXI CB005,0	THEN	4F11739
D	03567	1	00000	0	03601		TXI CB200,0	GO TEST PAREN-COUNT.	4F11740
	03570	0	34000	0	01375	CB005	CAS ALPAR	IF A LEFT PARENTHESIS,	4F11741
D	03571	1	00000	0	03573		TXI CB006,0	THEN	4F11742
	03572	1	00001	1	03564		TXI CB001,1,1	UPDATE PAREN-COUNT BY 1.	4F11743
	03573	0	34000	0	01377	CB006	CAS ARPAP	IF A RIGHT PARENTHESIS,	4F11744
D	03574	1	00000	0	03576		TXI CB007,0	THEN	4F11745
D	03575	1	00000	0	03614		TXI CB500,0	GO TEST PAREN-COUNT.	4F11746
	03576	0	40200	0	01374	CB007	SUB ENDMK	IF NOT ENDMARK, THEN	4F11747
	03577	-0	10000	0	03564		TNZ CB001	GO EXAMINE NEXT CHARACTER.	4F11748
D	03600	1	00000	0	03616		TXI CC000,0	* OTHERWISE, GO TO DIC LOOK-UP.	4F11749
	03601	2	00001	1	03616	CB200	TIX CC000,1,1	* IF EQUAL WAS NOT WITHIN PARENS,	4F11750
	03602	0	07400	4	01707	CB201	TSX C0190,4	* THEN EXAMINE NEXT CHARACTER.	4F11751
	03603	0	34000	0	01375		CAS ALPAR	IF LEFT PARENTHESIS,	4F11752
D	03604	1	00000	0	03606		TXI CB205,0	THEN	4F11753
D	03605	1	00000	0	02404		TXI ARITH,0	* THIS IS AN ARITHMETIC FORMULA.	4F11754
	03606	0	34000	0	01376	CB205	CAS ACOMMA	IF A COMMA,	4F11755
D	03607	1	00000	0	03611		TXI CB206,0	THEN	4F11756
D	03610	1	00000	0	03616		TXI CC000,0	* GO TO NON-ARITHMETIC DIC LOOK-UP.	4F11757
	03611	0	40200	0	01374	CB206	SUB ENDMK	IF NOT ENDMARK, THEN	4F11758
	03612	-0	10000	0	03602		TNZ CB201	GO EXAMINE NEXT CHARACTER.	4F11759
D	03613	1	00000	0	02404		TXI ARITH,0	* THIS IS AN ARITHMETIC FORMULA.	4F11760
	03614	2	00001	1	03564	CB500	TIX CB001,1,1	IF PAREN-COUNT DOES NOT BALANCE,	4F11761
	03615	0	07400	4	03400		TSX DIAG,4	* ERROR-GO TO DIAGNOSTIC ROUTINE.	4F11762
							END OF PROGRAM CB000.		4F11763
							* * * * *		*4F11764
							CC000/ CALLS=CC500,C0190X,DIAG,C0190,TET00.		4F11766
							CC000 CLASSIFIES STATEMENT AS TO WHICH NON-ARITHMETIC.		4F11767
	03616	0	60000	0	01113	CC000	STZ 2G	SET DICTIONARY WORD TAG, AND	4F11768
	03617	0	53400	3	01406		LXA L(0),3	CHARACTER COUNT AND ENTRY COUNT.	4F11769
	03620	0	07400	4	01671	CC001	TSX C0190X,4	* RESET CHCTR AND FWA TO BEGIN SCAN.	4F11770
	03621	0	07400	4	05743		TSX CC500,4	* EXAMINE NEXT DICTIONARY CHARACTER.	4F11771
	03622	0	34000	0	01374		CAS ENDMK	TEST FOR CONSECUTIVE ENDMARKS.	4F11772
	03623	0	02000	0	03272		TRA ERR77P	* MACHINE ERROR, GO TO DIAGNOSTIC.	4F11773
	03624	0	07400	4	03400		TSX DIAG,4	* ERROR = NOT FOUND IN DICTIONARY.	4F11774
D	03625	1	00000	4	03632		TXI CC004,4	GO BEGIN COMARISION.	4F11775
	03626	0	07400	4	05743	CC002	TSX CC500,4	* EXAMINE NEXT DICTIONARY CHARACTER.	4F11776
	03627	0	34000	0	01374		CAS ENDMK	TEST FOR END OF DIC ENTRY.	4F11777
D	03630	1	00000	0	03272		TXI ERR77P,0	* MACHINE ERROR, GO TO DIAGNOSTIC.	4F11778
D	03631	1	00000	0	03644		TXI CC007,0	IF END OF ENTRY, LOOK NO FURTHER.	4F11779
	03632	0	60100	0	01105	CC004	STO 1C	OTHERWISE, SAVE CHARACTER	4F11780
	03633	-0	60000	0	01106		STQ 1C+1	AND REMAINDER OF DICTIOANRY WORD.	4F11781
	03634	0	07400	4	01707		TSX C0190,4	* GO GET NEXT FORMULA CHARACTER,	4F11782
	03635	0	56000	0	01106		LDQ 1C+1	AND RESTORE DICTIONARY WORD.	4F11783
	03636	0	40200	0	01105		SUB 1C	IF CHARCATERS ARE EQUAL,	4F11784
	03637	0	10000	0	03626		TZE CC002	THEN GO COMPARE NEXT CHARACTER.	4F11785
	03640	0	07400	4	05743	CC005	TSX CC500,4	* OTHERWISE, EXAMINE NEXT DIC CHAR.	4F11786
	03641	0	40200	0	01374		SUB ENDMK	CONTINUE UNTIL AN ENDMARK IS	4F11787
	03642	-0	10000	0	03640		TNZ CC005	FOUND, THEN	4F11788

03643	1	77777	1	03620		TXI	CC001,1,-1		COUNT ENTRY, AND BEGIN AGAIN.	4F11789
03644	0	50000	1	06246	CC007	CLA	T,1		IF THE CURRENT STATEMENT IS	4F11790
03645	0	12000	1	06246		TPL	T,1		OF THE NON-EXCUTABLE TYPE,	4F11791
03646	-0	63400	1	01107		SXD	1C+2,1		THEN	4F11792
03647	0	07400	1	03321		TSX	TET00,1		* GO ENTER EIFNO IN THE	4F11793
03650	0	00000	0	00016		PZE	14		NONEXC TABLE.	4F11794
03651	-0	53400	1	01107		LXD	1C+2,1		AND THEN	4F11795
03652	0	02000	1	06246	CC008	TRA	T,1		* TAKE INDICATED TRANSFER.	4F11796
							END OF PROGRAM CC000.			4F11797
							* * * * *			*4F11798
							STATEA/2-PROCESS CONTROL AND SPECIFICATION STATEMENTS=			4F11799
										4F11800
							* * * * *			*4F11801
										4F11802
							C0100/ CALLS=GETIFN,C0190,TEST.,C0180,C0160,C0150,TET00.			4F11803
							C0100 PROCESSES DO STATEMENTS.			4F11804
03653	0	07400	4	02366	C0100	TSX	GETIFN,4		* GET INTERNAL FORMULA NUMBER IN 1C.	4F11805
03654	0	07400	4	01707		TSX	C0190,4		* OBTAIN 1ST NON-BLANK CHARACTER	4F11806
03655	0	07400	4	03315		TSX	TESTI0,4		* WHICH SHOULD BE NUMERIC.	4F11807
03656	0	07400	2	01655		TSX	C0180,2		* OBTAIN IN 1G THE BIN EQUIV OF BETA.	4F11808
03657	0	60100	0	01113		STO	2G		SAVE THE 1ST CHAR OF SUBSCRIPT.	4F11809
03660	0	50000	0	01112		CLA	1G		TAKE CONVERTED RESULT FOR BETA	4F11810
03661	0	62100	0	01105		STA	1C		AND STORE IN ADDR OF 1C.	4F11811
03662	0	50000	0	01113		CLA	2G		1C IS NOW COMPETE EXCEPT FOR TAG.	4F11812
03663	0	07400	2	01624		TSX	C0160,2		* OBTAIN IN 1G THE SUBSCRIPT.	4F11813
03664	0	50000	0	01112		CLA	1G		STORE SUBSCRIPT	4F11814
03665	0	60100	0	01106		STO	1C+1		IN 1C+1.	4F11815
03666	0	07400	2	01604		TSX	C0150,2		* OBTIAN IN 1G THE PROPER N1.	4F11816
03667	0	50000	0	01112		CLA	1G		STORE N1	4F11817
03670	0	60100	0	01107		STO	1C+2		IN 1C+2.	4F11818
03671	-0	50000	0	01353		CAL	I		OBTAIN I IN LOGICAL ACC AND	4F11819
03672	0	77100	0	00022		ARS	18		STORE IN POS 18 OF 1C	4F11820
03673	-0	60200	0	01105		ORS	1C		0 IF NUMERIC, OR 1 IF NON-NUMERIC.	4F11821
03674	0	07400	2	01604		TSX	C0150,2		* OBTAIN IN 1G THE PROPER N2.	4F11822
03675	0	07400	4	03247		TSX	TESTA0,4		* TEST THE AC FOR COMMA OR ENDMARK.	4F11823
03676	-0	10000	0	03701		TNZ	C0113		IF ENDMARK, THEN	4F11824
03677	-0	77300	0	00037		RQL	31		CREATE ONE IN MQ FOR N3	4F11825
03700	-0	60000	0	01365		STQ	RESIDU		AND PLACE IN RESIDU.	4F11826
03701	0	50000	0	01112	C0113	CLA	1G		STORE N2	4F11827
03702	0	60100	0	01110		STO	1C+3		IN 1C+3.	4F11828
03703	-0	50000	0	01353		CAL	I		OBTAIN I IN LOG ACC AND	4F11829
03704	0	77100	0	00023		ARS	19		STORE IN POS 19 OF 1C	4F11830
03705	-0	60200	0	01105		ORS	1C		0 IF NUMERIC, OR 1 IF NON-NUMERIC.	4F11831
03706	0	07400	2	01604		TSX	C0150,2		* OBTAIN IN 1G THE PROPER N3.	4F11832
03707	0	07400	4	03271		TSX	TESTD0,4		* THE AC SHOULD CONTIAN AN ENDMARK.	4F11833
03710	0	50000	0	01112		CLA	1G		STORE N3	4F11834
03711	0	60100	0	01111		STO	1C+4		IN 1C+4.	4F11835
03712	-0	50000	0	01353		CAL	I		OBTAIN I IN LOG ACC AND	4F11836
03713	0	77100	0	00024		ARS	20		STORE IN POS 20 OF 1C	4F11837
03714	-0	60200	0	01105		ORS	1C		0 IF NUMERIC, OR 1 IF NON-NUMERIC.	4F11838
03715	0	07400	1	03321		TSX	TET00,1		* GO TO TET PROGRAM TO ENTER	4F11839
03716	0	00000	0	00001		PZE	1		1C,1C+1,..1C+4 IN TDO TABLE 1.	4F11840
D 03717	1	00000	0	03440		TXI	CA010,0		* EXTI TO PROCESS NEXT STATEMENT.	4F11841

END OF PROGRAM C0100.

* * * * * 4F11843

* * * * * 4F11844

* * * * * 4F11845

C0200/ CALLS=GETIFN,DIAG,TEST.,C0190,C0180,TET00,C0160, 4F11846

CIT00,SS000(CSA000). 4F11847

C0200 PROCESSES GO TO STATEMENTS. 4F11848

03720 0 07400 4 02366 C0200 TSX GETIFN,4 * GET INTERNAL FORMULA NUMBER IN 1C 4F11849

03721 0 60100 0 01107 STO 1C+2 AND IN 1C+2. 4F11850

03722 0 07400 4 01707 TSX C0190,4 * OBTAIN IN ACC NEXT NB CHARACTER 4F11851

03723 0 34000 0 01417 CAS L(9) AND COMPARE IT WITH 9. 4F11852

D 03724 1 00000 0 03733 TXI C0205,0 IF NON-NUMERIC, GO COMPARE WITH (4F11853

03725 0 76100 0 00000 NOP IF NUMERIC, THEN 4F11854

03726 0 07400 2 01655 TSX C0180,2 * OBTAIN IN 1G THE BINARY EQUV BETA. 4F11855

03727 0 07400 4 03271 TSX TESTD0,4 * THE AC SHOULD CONTAIN AN ENDMARK. 4F11856

03730 0 50000 0 01112 CLA 1G STORE BETA IN 1C+1 TO CONSTRUCT 4F11857

03731 0 60100 0 01106 STO 1C+1 THE 2ND WORD OF TIFGO TABLE ENTRY. 4F11858

D 03732 1 00000 0 04030 TXI C0202,0 GO TO ENTER 1C,1C+1 INTO TIFGO. 4F11859

03733 0 34000 0 01375 C0205 CAS ALPAR TEST CHARACTER FOR ALPHABETIC. 4F11860

D 03734 1 00000 0 03736 TXI C0210,0 IF NOT ALPHABETIC, THEN 4F11861

D 03735 1 00000 0 03746 TXI C0212,0 THIS IS TYPE= GO TO (), I. 4F11862

03736 0 07400 2 01624 C0210 TSX C0160,2 * TYPE= GO TO N,(),SO OBTAIN IN 1G N 4F11863

03737 0 07400 4 03305 TSX TESTG0,4 * WHICH SHOULD BE FOLLOWED BY COMMA. 4F11864

03740 0 50000 0 01112 CLA 1G SAVE THE SYMBOL N IN 1C+3 4F11865

03741 0 60100 0 01110 STO 1C+3 FOR COMPILED INSTRUCTION. 4F11866

03742 0 07400 4 01707 TSX C0190,4 * OBTAIN IN ACC NEXT NB CHARACTER, 4F11867

03743 0 07400 4 03275 TSX TESTE0,4 * WHICH SHOULD BE A LPARAN. 4F11868

03744 0 50000 0 01407 CLA L(1) PREPARE TO SET ADDRESS PART OF 1C 4F11869

03745 0 02000 0 03747 TRA C0213 TO 1 TO INDICATE CLASS OF TRANSFER. 4F11870

03746 0 50000 0 01410 C0212 CLA L(2) PREPARE TO SET ADDR OF 1C TO 2. 4F11871

03747 0 62100 0 01105 C0213 STA 1C STORE 1 OR 2 IN ADDR OF 1C. 4F11872

03750 -0 53400 2 04032 LXI CTRAD,2 OBTAIN 250-(NO. TRAD ENTRIES), AND 4F11873

03751 -0 75400 2 00000 PXD ,2 PLACE IN THE DECREMENT OF THE AC 4F11874

03752 0 60100 0 01106 STO 1C+1 AND STORE IN 1C+1. 4F11875

03753 0 07400 4 01707 C0215 TSX C0190,4 * OBTAIN IN ACC NEXT NB CHAR. 4F11876

03754 0 07400 2 01655 TSX C0180,2 * OBTAIN IN 1G THE BIN EQU OF BETA. 4F11877

03755 0 60100 0 01113 STO 2G SAVE CHAR IN ACC. 4F11878

03756 0 07400 1 03321 TSX TET00,1 * GO TO ENTER 1G 4F11879

03757 0 00000 0 00003 PZE 3 INTO TRAD TABLE (TABLE 3). 4F11880

03760 -0 53400 2 04032 LXI CTRAD,2 REDUCE COUNTER 4F11881

03761 2 00001 2 03762 TIX C0216,2,1 CTRAD 4F11882

03762 -0 63400 2 04032 C0216 SXI CTRAD,2 BY 1. 4F11883

03763 0 50000 0 01113 CLA 2G RESTORE CHAR TO ACC. 4F11884

03764 0 07400 4 03255 TSX TESTB0,4 * TEST FOR COMMA OR RPAREN. 4F11885

03765 -0 10000 0 03753 TNZ C0215 IF RIGHT PARENTHESIS, THEN 4F11886

03766 0 50000 0 04032 CLA CTRAD OBTAIN IN ADDR OF ACC 250-NO. OF 4F11887

03767 0 77100 0 00022 ARS 18 ENTRIES IN TRAD TABLE,AND STORE 4F11888

03770 0 62100 0 01106 STA 1C+1 IN ADDR OF 1C+1. 4F11889

03771 0 50000 0 01105 CLA 1C OBTAIN 1C IN ACC 4F11890

03772 0 76000 0 00001 LBT AND TEST LOW ORDER BIT. 4F11891

03773 0 02000 0 04004 TRA C0220 THIS IS A TYPE GO TO (),I FORMULA. 4F11892

03774 0 07400 4 01707 TSX C0190,4 * OBTAIN NEXT NB CHAR AND 4F11893

03775 0 07400 4 03271 TSX TESTD0,4 * TEST FOR ENDMK. 4F11894

03776 0 07400 4 01731 TSX CIT00,4 * GO MAKE THE FOLLOWING CIT ENTRY= 4F11895

03777 0 00000 0 01107 PZE 1C+2 WORD 1--DECR= INTFORMN (LOCATION) 4F11896

04000	0	00000	0	01601	PZE L(TRA)	WORD 2--TRA00P (OP AND DECR)	4F11897
04001	0	00000	0	01110	PZE 1C+3	WORD 3--VARIABLE N (ADDRESS)	4F11898
04002	0	00000	0	01406	PZE L(0)	WORD 4--00000 (REL ADDR AND TAG).	4F11899
04003	0	02000	0	04030	TRA C0202	GO TO ENTER 1C,1C+1 INTO TIFGO.	4F11900
04004	0	07400	4	01707	C0220 TSX C0190,4	* EXAMINE NEXT NB CHARACTER,	4F11901
04005	0	07400	4	03305	TSX TESTG0,4	* WHICH SHOULD BE A COMMA.	4F11902
04006	0	07400	4	01707	TSX C0190,4	* OBTAIN IN ACC NEXT NB CHAR, AND	4F11903
04007	0	07400	2	01624	TSX C0160,2	* OBTAIN IN 1G THE FXF-PT. VARIABLE.	4F11904
04010	0	07400	4	03271	TSX TESTD0,4	* WHICH SHOULD BE FOLLOWED BY ENDMK.	4F11905
04011	0	50000	0	01407	CLA L(1)	PREPARE PROPER FORM OF SUBSCRIPT	4F11906
04012	0	60100	0	01131	STO E+3	COMBINATION AS	4F11907
04013	0	60100	0	01100	STO DIMCTR	INPUT TO SUBSCRIPT ANALYSIS=	4F11908
04014	0	50000	0	01112	CLA 1G	E+3 = 1ST COEFFICIENT.	4F11909
04015	0	60100	0	01132	STO E+4	E+4 = 1ST SUBSCRIPT VARIABLE,	4F11910
04016	0	60000	0	01137	STZ E+9	E+9 = ADDEND OF SUBSCRIPT,	4F11911
04017	0	07400	4	03027	TSX CSA000,4	* DIMCTR = DIMENSION OF VARIABLE.	4F11912
04020	0	50000	0	01126	CLA E	OUTPUT FROM CSA IS FOUND IN	4F11913
04021	0	77100	0	00030	ARS 24	E = I--TAUTAG (GENERAL TAG) 1-11.	4F11914
04022	0	60100	0	01113	STO 2G	ADJUST AND SAVE FOR COMP. INSTR.	4F11915
04023	0	07400	4	01731	TSX CIT00,4	* GO MAKE THE FOLLOWING CIT ENTRY=	4F11916
04024	0	00000	0	01107	PZE 1C+2	WORD 1--DECR-INTFORMNO(LOCATION)	4F11917
04025	0	00000	0	01601	PZE L(TRA)	WORD 2--TRA000(OP AND DECR)	4F11918
04026	0	00000	0	01406	PZE L(0)	WORD 3--000000(ADDRESS)	4F11919
04027	0	00000	0	01113	PZE 2G	WORD 4--ADDR = TAUTAG FOR I	4F11920
					C0200= ENTRY POINT USED BY C0400,C1000.		4F11921
04030	0	07400	1	03321	C0202 TSX TET00,1	* GO TO TET TO ENTER 1C AND 1C+1	4F11922
04031	0	00000	0	00002	PZE 2	INTO TIFGO TABLE (TABLE 2).	4F11923
04032	1	00372	0	03440	CTRAD TXI CA010,0,250	* EXIT TO PROCESS NEXT STATEMENT.	4F11924
					END OF PROGRAM C0200.		4F11925
					* * * * *		4F11926
					C0300/ CALLS=-C0190X,C0190,C0390,TEST.,DIAG,C0180,TET00,		4F11928
					STATEB.		4F11929
					C0300 PROCESSES IF STATEMENTS.		4F11930
04033	-0	53400	4	00030	C0300 LXD EIFNO,4	PLACE THE CURRENT INTERNAL FORMULA	4F11931
04034	-0	75400	4	00000	PXD ,4	NUMBER IN THE DECREMENT OF 1C	4F11932
04035	-0	76000	0	00003	SSM	WITH SIGN SET TO MINUS	4F11933
04036	0	60100	0	01105	STO 1C	FOR FUTURE TIFGO ENTRY.	4F11934
04037	0	07400	4	01671	TSX C0190X,4	* SET CHCTR AND FWA TO BEGIN SCAN.	4F11935
04040	0	07400	4	01707	TSX C0190,4	* OBTAIN IN AC THE 1ST NB CHAR (I).	4F11936
04041	0	56000	0	01433	LDQ L(X)	REPLACW THE CHARACTER I	4F11937
04042	0	07400	4	01675	TSX C0390,4	* WITH THE CHARACTER X.	4F11938
04043	0	56000	0	01373	LDQ L(10)	REPALCE THE CHARACTER F	4F11939
04044	0	07400	4	01675	TSX C0390,4	* WITH THE CHARACTER 001010.	4F11940
04045	0	07400	4	03275	TSX TESTE0,4	* IF NOT LPAREN -- THEN ERROR.	4F11941
04046	0	56000	0	01400	LDQ AEQUAL	REPLACE THE CHARACTER LPARAN	4F11942
04047	0	07400	4	01675	TSX C0390,4	* WITH THE CHARACTER EQUAL.	4F11943
04050	0	53400	2	01407	LXA L(1),2	SET XR2 FOR COUNTING PARENTHESES.	4F11944
04051	0	02000	0	04053	TRA *+2		4F11945
04052	0	07400	4	01707	C0302 TSX C0190,4	* MAKE SURE THAT NEXT NB CHARACTER	4F11946
04053	0	34000	0	01374	CAS ENDMK	IS NOT AN ENDMARK.	4F11947
04054	0	02000	0	03272	TRA ERR77P	* MACHINE ERROR, GO TO DIAGNOSTIC.	4F11948
04055	0	07400	4	03400	TSX DIAG,4	* PROGRAM ERROR, GO TO DIAGNOSTIC.	4F11949
04056	0	34000	0	01375	CAS ALPAR	IF IT IS A LPAREN,	4F11950

					C0901= ENTRY POINT USED BY C1300.		4F12059
04171	0	60000	0	01112	C0901 STZ 1G	CLEAR 1G.	4F12060
04172	0	07400	4	01707	C0902 TSX C0190,4	* TEST NEXT NON-BLANK CHARACTER	4F12061
04173	0	34000	0	01374	CAS ENDMK	FOR END OF STATEMENT MARK.	4F12062
04174	0	02000	0	03272	TRA ERR77P	* MACHINE ERROR, GO TO DIAGNOSTIC.	4F12063
04175	1	74341	0	04202	C090X TXI C0903,0,-CA010+1	IF NOT END OF STATEMENT, THEN	4F12064
04176	0	40000	0	01112	ADD 1G	ADD 1G TO DIGIT,	4F12065
04177	0	76700	0	00003	ALS 3	MULTIPLY BY 8.	4F12066
04200	0	60100	0	01112	STO 1G	AND STORE BACK IN 1G.	4F12067
04201	1	00000	0	04172	TXI C0902,0	CONTINUE UNTIL END OF STATEMENT.	4F12068
04202	0	50000	0	01112	C0903 CLA 1G	THEN PLACE OCTAL ALPHA	4F12069
04203	0	76700	0	00017	ALS 15	IN THE DECREMENT	4F12070
04204	0	60100	0	01105	STO 1C	OF 1C FOR FUTURE CIT ENTRY.	4F12071
04205	-0	53400	4	00030	LXD EIFNO,4	PLACE THE CURRENT INTERNAL FORMULA	4F12072
04206	-0	75400	4	00000	PXD ,4	NUMBER IN THE DECREMENT	4F12073
04207	0	60100	0	01106	STO 1C+1	OF 1C+1, WITH ZEROS ELSEWHERE.	4F12074
04210	0	07400	4	01731	TSX CIT00,4	* GO MAKE THE FOLLOWING CIT ENTRY=	4F12075
04211	0	00000	0	01106	PZE 1C+1	WORD1--DECR = INTFORMNO (LOCATION)	4F12076
04212	0	00000	0	01554	PZE L(HPR)	WORD2--HPR000 (OP AND DECR)	4F12077
04213	0	00000	0	01406	PZE L(0)	WORD3--000000 (ADDRESS)	4F12078
04214	0	00000	0	01105	PZE 1C	WORD4--DECR = ALPHA, REST ZEROS.	4F12079
04215	0	02000	2	00001	TRA 1,2	* EXIT TO CA000, OR TO C1300.	4F12080
					END OF PROGRAM C0900.		4F12081
					*****		*4F12082
					C1000/ USES=C0200. CALLS=GETIFN,C0190,C0180,DIAG,C0190,TEST..		4F12084
					CIT00.		4F12085
					C1000 PROCESSES ASSIGN STATEMENTS.		4F12086
04216	0	07400	4	02366	C1000 TSX GETIFN,4	* GET INTERNAL FORMULA NUMBER IN 1C	4F12087
04217	0	60100	0	01107	STO 1C+2	AND 1C+2, WITH ZEROS ELSEWHERE.	4F12088
04220	0	50000	0	01414	CLA L(6)	STORE 6 IN	4F12089
04221	0	62100	0	01105	STA 1C	ADDRESS OF 1C.	4F12090
04222	0	07400	2	01654	TSX C0180X,2	* GO FORM BINARY EQUIV OF ALPHA.	4F12091
04223	0	40200	0	01432	SUB L(T)	IF NEXT CHARACTER IS NOT T, THEN	4F12093
04224	0	10000	0	04226	TZE *+2	THIS IS AN	4F12094
04225	0	07400	4	03400	TSX DIAG,4	* ERROR - GO TO THE DIAGNOSTIC.	4F12095
04226	0	07400	4	01707	TSX C0190,4	* EXAMINE NEXT NON-BLANK CHARACTER	4F12096
04227	0	40200	0	01425	SUB L(0)	AND IF IT IS NOT 0, THEN	4F12097
04230	-0	10000	0	04225	TNZ *-3	ERROR, GO TO DIAGNOSTIC.	4F12098
04231	0	50000	0	01112	CLA 1G	PUT BIN EQUIV OF ALPHA	4F12099
04232	0	60100	0	01106	STO 1C+1	IN ADDRESS OF 1C+1.	4F12100
04233	0	07400	4	01707	TSX C0190,4	* PROCEED TO ASSEMBLE IN 1G	4F12101
04234	0	07400	2	01624	TSX C0160,2	* THE SYMBOL N.	4F12102
04235	0	07400	4	03271	TSX TESTD0,4	* THE NEXT NB CHAR SHOULD BE ENDMK.	4F12103
04236	0	07400	4	01731	TSX CIT00,4	* GO MAKE THE FOLLOWING CIT ENTRY=	4F12104
04237	0	00000	0	01107	PZE 1C+2	WORD1--DECR = INTFORMNO (LOCATION)	4F12105
04240	0	00000	0	01541	PZE L(CLA)	WORD2--CLA000 (OP AND DECR)	4F12106
04241	0	00000	0	01406	PZE L(0)	WORD3--000000 (ADDRESS)	4F12107
04242	0	00000	0	01406	PZE L(0)	WORD4--000000 (RELADDR AND TAG).	4F12108
04243	0	07400	4	01731	TSX CIT00,4	* STORE SECOND COMPILED INSTRUCTION=	4F12109
04244	0	00000	0	01406	PZE L(0)	WORD1--000000 (ALL ZEROS)	4F12110
04245	0	00000	0	01572	PZE L(STO)	WORD2--STO000 (OP AND DECR)	4F12111
04246	0	00000	0	01112	PZE 1G	WORD3--SYMBOL N (ADDRESS)	4F12112
04247	0	00000	0	01406	PZE L(0)	WORD4--000000 (REL ADDR AND TAG).	4F12113

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04250	0	02000	0	04030	TRA	C0202	* CONTINUE BY USING PROGRAM C02.	4F12114
						END OF PROGRAM C1000.		4F12115
						* * * * *		*4F12116
						C1100/ CALLS=C0190,C0180,TEST.,GETIFN,CIT00.		4F12117
						C1100 PROCESSES SENSE LIGHT STATEMENTS.		4F12118
04251	0	07400	2	01654	C1100	TSX C0180X,2	* GO FORM BINARY EQUIV OF SL NUMBER.	4F12120
04252	0	07400	4	03271		TSX TESTD0,4	* THE NEXT NB CHARACTER SHD BE ENDMK.	4F12122
04253	0	50000	0	01112		CLA 1G	STORE SENSE LIGHT NUMBER	4F12123
04254	0	40000	0	01440		ADD L(96)	PLUS 96	4F12124
04255	0	76700	0	00022		ALS 18	IN DECR	4F12125
04256	0	60100	0	01112		STO 1G	OF 1G.	4F12126
04257	0	07400	4	02366		TSX GETIFN,4	* GET INTERNAL FORMULA NUMBER IN 1C.	4F12127
04260	0	07400	4	01731		TSX CIT00,4	* GO MAKE THE FOLLOWING CIT ENTRY.	4F12128
04261	0	00000	0	01105		PZE 1C	WORD1--DECR = INTFORMNO (LOCATION)	4F12129
04262	0	00000	0	01565		PZE L(PSE)	WORD2--PSE000 (OP AND DECREMENT)	4F12130
04263	0	00000	0	01406		PZE L(0)	WORD3--000000 (ADDRESS PART)	4F12131
04264	0	00000	0	01112		PZE 1G	WORD4--DECR = 96+ALPHA,REST ZEROS.	4F12132
D 04265	1	00000	0	03440		TXI CA010,0	* EXIT TO PROCESS NEXT STATEMENT.	4F12133
						END OF PROGRAM C1100.		4F12134
						* * * * *		*4F12135
						C1200/ CALLS=C0190,C0160,TEST.,DIM.SR,DIAG,C0180,DRTABS.		4F12136
						C1200 PROCESSES DIMENSION STATEMENTS.		4F12137
04266	0	07400	4	01707	C1200	TSX C0190,4	* PROCEED TO ASSEMBLE IN 1G	4F12139
04267	0	07400	2	01624		TSX C0160,2	* THE VARIABLE SYMBOL.	4F12140
04270	0	07400	4	03275		TSX TESTE0,4	* NEXT NB CHARACTER SHOULD BE LPAREN.	4F12141
04271	0	50000	0	01112		CLA 1G	PUT VARIABLE SYMBOL	4F12142
04272	0	60100	0	01105		STO 1C	IN 1C.	4F12143
04273	0	60100	0	01130		STO E+2	ALSO IN E+2. THEN	4F12144
04274	0	07400	4	01771		TSX DIM1SR,4	* GO SEARCH DIM1 TABLE.	4F12145
04275	0	02000	0	04277		TRA C1280	THEN IF NOT	4F12146
04276	0	02000	0	04304		TRA C1299	FOUND,	4F12147
04277	0	07400	4	01775	C1280	TSX DIM2SR,4	* GO SEARCH DIM2 TABLE.	4F12148
04300	0	02000	0	04302		TRA C1281	THEN IF NOT	4F12149
04301	0	02000	0	04304		TRA C1299	FOUND,	4F12150
04302	0	07400	4	02005	C1281	TSX DIM3SR,4	* GO SEARCH DIM3 TABLE.	4F12151
04303	0	02000	0	04305		TRA C1282	DO NOT CONTUINUE IF	4F12152
04304	0	07400	4	03400	C1299	TSX DIAG,4	* VARIABLE PREVIOUSLY APPEARED.	4F12153
04305	0	07400	2	01654	C1282	TSX C0180X,2	* GO FORM BINARY EQUIV OF D1.	4F12154
04306	0	40200	0	01377		SUB CLOS	IF NOT 1 DIMENSION,	4F12155
04307	0	10000	0	04330		TZE C1210	THEN	4F12156
04310	0	50000	0	01112		CLA 1G	PUT D1	4F12157
04311	0	76700	0	00022		ALS 18	IN DECR	4F12158
04312	0	60100	0	01106		STO 1C+1	OF 1C+1.	4F12159
04313	0	07400	2	01654		TSX C0180X,2	* GO FORM BINARY EQUIV OF D2.	4F12160
04314	0	40200	0	01377		SUB CLOS	IF NOT 2 DIMENSION,	4F12163
04315	0	10000	0	04334		TZE C1220	THEN	4F12164
04316	0	50000	0	01112		CLA 1G	PUT D2	4F12165
04317	0	62100	0	01106		STA 1C+1	IN ADDRESS OF 1C+1.	4F12166
04320	0	07400	2	01654		TSX C0180X,2	* GO FORM BINARY EQUIV OF D3.	4F12168
04321	0	40200	0	01377		SUB CLOS	IF MORE THAN 3 DIMENSIONS,	4F12169
04322	0	10000	0	04324		TZE *+2	THIS IS AN	4F12170
04323	0	07400	4	03400		TSX DIAG,4	* ERROR - GO TO THE DIAGNOSTIC.	4F12171


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C1500/ CALLS=C0190,TEST.,C0160,C0180,TET00. 4F12228
C1500 PROCESSES EQUIVALENCE STATEMENTS. 4F12229
04375 0 07400 4 01707 C1500 TSX C0190,4 * OBTAIN NEXT NBCHAR IN ACC. 4F12230
04376 0 07400 4 03275 TSX TESTE0,4 * CHARACTER SHOULD BE A LPARAN. 4F12231
04377 0 50000 0 01407 C1501 CLA L(1) INITIALIZE 1C 4F12232
04400 0 60100 0 01106 STO 1C+1 TO 1. 4F12233
04401 0 07400 4 01707 TSX C0190,4 * OBTAIN NEXT NBCHAR IN ACC AND 4F12234
04402 0 07400 2 01624 TSX C0160,2 * OBTAIN IN 1G THE SYMBOL V. 4F12235
04403 0 56000 0 01112 LDQ 1G MOVE V 4F12236
04404 -0 60000 0 01105 STQ 1C INTO 1C. 4F12237
04405 0 34000 0 01375 CAS ALPAR EXAMINE CHARACTER LEFT IN THE AC, 4F12238
D 04406 1 00000 0 04416 TXI C1503,0 AND IF 4F12239
D 04407 1 00000 0 04411 TXI C1502,0 CHARACTER IS A LEFT PARENTHESIS, 4F12240
D 04410 2 00000 0 04416 TIX C1503,0 THEN 4F12241
04411 0 07400 2 01654 C1502 TSX C0180X,2 * GO FORM BINARY EQUIV OF N. 4F12242
04412 0 07400 4 03301 TSX TESTF0,4 * 1ST NON-NUMERIC SHOULD BE A RPAREN. 4F12244
04413 0 50000 0 01112 CLA 1G PUT BIN EQUIV OF N 4F12245
04414 0 60100 0 01106 STO 1C+1 IN 1C+1. 4F12246
04415 0 07400 4 01707 TSX C0190,4 * OBTAIN NEXT NBCHAR IN AC, AND 4F12247
04416 0 07400 4 03255 C1503 TSX TESTB0,4 * TEST FOR COMMA OR RPAREN. 4F12248
04417 0 10000 0 04423 TZE C1504 IF COMMA, THEN 4F12249
04420 0 07400 1 03321 TSX TET00,1 * GO TO PROGRAM TET TO ENTER SYMBOL 4F12250
04421 0 00000 0 00010 PZE 8 AND N IN EQUIT (TABLE 8), AND 4F12251
D 04422 1 00000 0 04377 TXI C1501,0 RETURN TO CONTINUE PROCESSING X. 4F12252
04423 0 50200 0 01106 C1504 CLS 1C+1 MAKE SIGN OF N MINUS SINCE 4F12253
04424 0 60100 0 01106 STO 1C+1 THIS IS LAST ITEM. 4F12254
04425 0 07400 1 03321 TSX TET00,1 * GO TO PROGRAM TET TO ENTER SYMBOL 4F12255
04426 0 00000 0 00010 PZE 8 AND N IN EQUIT (TABLE 8), AND 4F12256
04427 0 07400 4 01707 TSX C0190,4 * OBTAIN NEXT NBCHAR IN ACC, AND 4F12257
04430 0 07400 4 03247 TSX TESTA0,4 * TEST FOR COMMA OR ENDMARK. 4F12258
04431 -0 10000 0 04375 TNZ C1500 IF ENDMARK, THEN 4F12259
D 04432 1 00000 0 03440 TXI CA010,0 * EXIT TO PROCESS NEXT STATEMENT. 4F12260
END OF PROGRAM C1500. 4F12261
* * * * * 4F12262
C1600/ CALLS=C0190,TEST.,GIF,BSS. 4F12263
C1600 PROCESSES CONTINUE STATEMENTS. 4F12264
04433 0 07400 4 01707 C1600 TSX C0190,4 * OBTAIN NEXT NBCHAR IN ACC. 4F12266
04434 0 07400 4 03271 TSX TESTD0,4 * CHARACTER SHOULD BE AN ENDMARK. 4F12267
04435 0 07400 4 02375 TSX GIF,4 * GET INTERNAL FORMULA NUMBER, AND 4F12268
04436 0 07400 2 05674 TSX BSS,2 * GO COMPILE= IFN BSS 0. 4F12269
D 04437 1 00000 0 03440 TXI CA010,0 * EXIT TO PROCESS NEXT STATEMENT. 4F12270
END OF PROGRAM C1500. 4F12271
* * * * * 4F12272
C3000/ CALLS=DIAG,C0190,C0160,TEST.,SUBX00,TET00,TESTFX. 4F12273
C3000 PROCESSES SUBROUTINE AND FUNCTION STATEMENTS. 4F12274
04440 -0 50000 0 00422 C3500 CAL TXHOP 4F12276
04441 0 63000 0 04454 STP C3003 4F12277
04442 -0 53400 4 00030 C3000 LXD EIFNO,4 EXAMINE INTERNAL FORMULA NO., AND 4F12278
04443 -3 00001 4 04445 TXL *+2,4,1 IF NOT THE 1ST STATEMENT, THEN 4F12279
04444 0 07400 4 03400 TSX DIAG,4 * ERROR - GO TO DIAGNOSTIC. 4F12280
04445 0 50000 0 01121 CLA ARGCNT SET ARGCNT TO INDICATE TO LATER 4F12281
04446 0 76000 0 00003 SSP RETURN THAT THERE WAS A PRECEEDING 4F12282

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	04447	0	60100	0	01121		STO	ARGCNT		SUBROUTINE OR FUNCTION STATEMENT.	4F12283
	04450	0	07400	4	01707		TSX	C0190,4		* IF 1ST CHARACTER OF NAME IS	4F12284
	04451	0	07400	4	03311		TSX	TESTH0,4		* NUMERIC, THEN GO TO THE DIAGNOSTIC.	4F12285
	04452	0	07400	2	01624		TSX	C0160,2		* ASSEMBLE NAME IN 1G.	4F12286
	04453	0	07400	4	03263		TSX	TESTC0,4		* NEXT CHAR SHD BE LPAREN OR ENDMARK.	4F12287
D	04454	-3	00000	0	04457	C3003	TXL	*+3,0			4F12288
	04455	0	50000	0	01112		CLA	1G			4F12289
	04456	0	60100	0	01332		STO	FSNAME			4F12290
	04457	0	07400	4	03224		TSX	SUBX00,4		* FILL OUT NAME WITH BLANKS.	4F12291
	04460	0	07400	1	03321		TSX	TET00,1		* GO ENTER NAME	4F12292
	04461	0	00000	0	00013		PZE	11		IN SUBDEF TABLE.	4F12293
	04462	-0	53400	4	00030		LXD	EIFNO,4		PLACE	4F12294
	04463	-0	75400	4	00000		PXD	,4		INTERNAL FORMULA NUMBER	4F12295
	04464	0	60100	0	01347		STO	G		IN G.	4F12296
D	04465	1	00000	0	04506		TXI	C3002,0		GO TEST FOR END OF STATEMENT.	4F12297
	04466	0	40000	0	01374	C3001	ADD	ENDMK		IF NOT ENDMARK, RESTOERE CHARACTER	4F12298
	04467	0	07400	4	03311		TSX	TESTH0,4		* WHICH SHOULD BE NON-NUMERIC	4F12299
	04470	0	60100	0	01331		STO	FIRSTC		1ST CHARACTER OF ARGUMENT.	4F12300
	04471	0	07400	2	01624		TSX	C0160,2		* ASSEMBLE ARGUMENT IN 1G.	4F12301
	04472	0	07400	4	03255		TSX	TESTB0,4		* NEXT CHAR SHD BE COMMA OR RPARAN.	4F12302
	04473	0	50000	0	01112		CLA	1G		MOVE ARGUMENT	4F12303
	04474	0	60100	0	01350		STO	G+1		INTO G+1.	4F12304
	04475	0	07400	1	03241		TSX	TESTFX,1		* GO TEST FOR FIXED OR FLOATING PT.	4F12305
D	04476	1	00000	0	04501		TXI	C3004,0		IF FLOATING PT., SKIP FORVAL ENTRY.	4F12306
	04477	0	07400	1	03321		TSX	TET00,1		* IF FIXED POINT, GO MAKE ENTRY	4F12307
	04500	0	00000	0	00006		PZE	6		IN FORVAL TABLE.	4F12308
	04501	0	07400	1	03321	C3004	TSX	TET00,1		* IN BOTH CASES, MAKE ENTRIES IN	4F12309
	04502	0	00000	0	00013		PZE	11		SUBDEF TABLE.	4F12310
	04503	0	50000	0	01121		CLA	ARGCNT		UPDATE	4F12311
	04504	0	40000	0	01454		ADD	D1		ARGUMENT COUNT	4F12312
	04505	0	60100	0	01121		STO	ARGCNT		BY 1. AND	4F12313
	04506	0	07400	4	01707	C3002	TSX	C0190,4		* EXAMINE NEXT NON-BLANK CHARACTER.	4F12314
	04507	0	40200	0	01374		SUB	ENDMK		IF NOT ENDMARK, THEN	4F12315
	04510	-0	10000	0	04466		TNZ	C3001		GO PROCESS NEXT ARGUMENT.	4F12316
D	04511	1	00000	0	03440		TXI	CA010,0		* OTHERWISE, EXIT TO CA000.	4F12317
								END OF PROGRAM C3000.			4F12318
								* * * * *			4F12319
											4F12320
								C3100/ CALLS=C0190,DIAG,TEST.,C0160,TET00.			4F12321
								C3100 PROCESSES COMMON STATEMENTS.			4F12322
	04512	0	07400	4	01707	C3100	TSX	C0190,4		* GET FIRST NON-BLANK CHAR OF SYMBOL	4F12323
	04513	0	07400	4	03311		TSX	TESTH0,4		* WHICH SHOULD BE NON-NUMERIC.	4F12324
	04514	0	07400	2	01624		TSX	C0160,2		* ASSEMBLE SYMBOL IN 1G, AND TEST	4F12325
	04515	0	07400	4	03247		TSX	TESTA0,4		* NEXT CHARACTER FOR COMMA OR ENDMK.	4F12326
	04516	0	73400	4	00000		PAX	,4		SAVE RESULT OF TEST IN XR4, AND	4F12327
	04517	0	07400	1	03321		TSX	TET00,1		* GO ENTER THIS SYMBOL	4F12328
	04520	0	00000	0	00014		PZE	12		IN COMMON TABLE.	4F12329
	04521	0	50000	0	00365		CLA	SBDFCN		ANY ENTRIES IN SUBDEF	4F123291
	04522	0	10000	0	04534		TZE	C3101		INDICATE THIS IS NOT A	4F123292
	04523	0	50000	0	01454		CLA	2E18		MAIN PROGRAM. SINCE THIS	4F123293
	04524	0	60100	0	01347		STO	G		IS A COMMON	4F123294
	04525	-0	50000	0	01112		CAL	1G		STATEMENT WHICH	4F123296
	04526	0	60200	0	01350		SLW	G+1		APPEARS IN A SUBPROGRAM	4F123297
	04527	0	77100	0	00036		ARS	30		ENTER ANY	4F123298


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C3300/ CALLS=C0390,C0190X,C0190,TEST...,ARITH,SUBX00. 4F12380
C3300 PROCESSES CALL STATEMENTS. 4F12381
04607 0 07400 4 01707 C3300 TSX C0190,4 * IF 1ST CHARACTER OF NAME IS 4F12383
04610 0 07400 4 03311 TSX TESTH0,4 * NUMERIC, THEN GO TO THE DIAGNOSTIC. 4F12384
04611 0 07400 2 01624 TSX C0160,2 * COLLECT THE REST OF THE NAME, WHICH 4F12385
04612 0 07400 4 03263 TSX TESTC0,4 * SHD BE FOLLOWED BY LPAREN OR ENDMK. 4F12386
04613 0 10000 0 04632 TZE C3301 IF LPAREN, THEN CHANGE CALL TO A 4F12387
04614 0 07400 4 01671 TSX C0190X,4 * PSEUDO-ARITHMETIC FORMULA (Z10=). 4F12388
04615 0 07400 4 01707 TSX C0190,4 * PICKUP THE CHARACTER C, 4F12389
04616 0 56000 0 01434 LDQ L(Z) AND 4F12390
04617 0 07400 4 01675 TSX C0390,4 * REPLACE C WITH Z. 4F12391
04620 0 56000 0 01373 LDQ L(10) AND 4F12392
04621 0 07400 4 01675 TSX C0390,4 * REPLACE A WITH TEN. 4F12393
04622 0 56000 0 01400 LDQ EQUAL AND 4F12394
04623 0 07400 4 01675 TSX C0390,4 * REPLACE FIRST L WITH =. 4F12395
04624 0 56000 0 01430 LDQ BLANK AND 4F12396
04625 0 07400 4 01675 TSX C0390,4 * REPLACE SECOND L WITH BLANK. 4F12397
04626 0 50000 0 00030 CLA EIFNO PUT 1ST IFN OF THIS CAL IN CALLNM 4F12398
04627 0 77100 0 00022 ARS 18 FOR LATER TABLE ENTRY FO 4F12399
04630 0 62100 0 01123 STA CALLNM FIRST / LAST NUMBERS OF CALLS. 4F12400
D 04631 1 00000 0 02404 TXI ARITH,0 * THEN EXIT TO ARITH TO PROCESS. 4F12401
04632 0 07400 4 03224 C3301 TSX SUBX00,4 * IF THERE ARE NO ARGUMENTS, THEN 4F12402
04633 0 50000 0 01112 CLA 1G AFTER COMPLETING NAME WITH BLANKS, 4F12403
04634 0 60100 0 01347 STO G MOVE IT INTO G, AND 4F12404
04635 0 07400 1 03321 TSX TET00,1 * GO ENTER NAME 4F12405
04636 0 00000 0 00011 PZE 9 INTO CLOSUB TABLE. 4F12406
04637 0 07400 4 02366 TSX GETIFN,4 * PUT INTERNAL FORMULA NUMBER IN 1C. 4F12407
04640 0 07400 4 01731 TSX CIT00,4 * GO MAKE THE FOLLOWING CIT ENTRY= 4F12408
04641 0 00000 0 01105 PZE 1C WORD1--0(IFN)000 4F12409
04642 0 00000 0 01575 PZE L(SXD) WORD2--SXD000 4F12410
04643 0 00000 0 01505 PZE X( WORD3--700000 4F12411
04644 0 00000 0 01412 PZE L(4) WORD4--000004 4F12412
04645 0 07400 4 01731 TSX CIT00,4 * GO MAKE THE FOLLOWING CIT ENTRY= 4F12413
04646 0 00000 0 01406 PZE L(0) WORD1--000000 4F12414
04647 0 00000 0 01602 PZE L(TSX) WORD2--TSX000 4F12415
04650 0 00000 0 01112 PZE 1G WORD3--(NAME) 4F12416
04651 0 00000 0 01412 PZE L(4) WORD4--000004 4F12417
04652 0 07400 4 03401 TSX FLTR00,4 * GO MAKE FLOW TRACING INSTRUCTIONS. 4F12418
04653 0 00000 0 01406 PZE L(0) WORD1--000000 4F12419
04654 0 00000 0 01561 PZE L(LXD) WORD2--LXD000 4F12420
04655 0 00000 0 01505 PZE X( WORD3--700000 4F12421
04656 0 00000 0 01412 PZE L(4) WORD4--000004 4F12422
D 04657 1 00000 0 03440 TXI CA010,0 * EXIT TO PROCESS NEXT STATEMENT. 4F12423
END OF PROGRAM C3300. 4F12424
* * * * * 4F12425
C3400/ CALLS=C0190,DIAG,TEST... 4F12426
C3400 PROCESSES END STATEMENTS. 4F12427
04660 0 53400 2 01413 C3400 LXA L(5),2 PREPARE TO SET 5 SS SIMULATORS. 4F12429
04661 0 07400 4 01707 C3405 TSX C0190,4 * PICKUP CONSTANT, 4F12430
04662 0 34000 0 01410 CAS L(2) WHICH SHOULD BE 0,1, OR 2. 4F12431
04663 0 07400 4 03400 TSX DIAG,4 * OTHERWISE, GO TO THE DIAGNOSTIC. 4F12432
D 04664 1 00000 0 04666 TXI C3410,0 SIMULATOR IS PRESET TO 2. 4F12433

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	04665	0	60100	2	00036		STO	ENDI1+5,2		IF 0 OR 1, SET PROPER SIMULATOR.	4F12434
	04666	0	07400	4	01707	C3410	TSX	C0190,4	*	SKIP NEXT NON-BLANK CHARACTER, AND	4F12435
	04667	2	00001	2	04661		TIX	C3405,2,1		REPEAT PROCESS FOR 5 CONSTANTS.	4F12436
	04670	0	07400	4	01707		TSX	C0190,4	*	EXAMINE NEXT NON-BLANK CHARACTER,	4F12437
	04671	0	07400	4	03271		TSX	TESTD0,4	*	WHICH SHOULD BE AN ENDMK.	4F12438
D	04672	1	00000	0	03440		TXI	CA010,0	*	EXIT TO PROCESS NEXT STATEMENT.	4F12439
								END OF PROGRAM C3400.			4F12440
								*****			4F12441
								STATEA/3-PROCESS INPUT-OUTPUT STATEMENTS=			4F12442
											4F12443
								*****			4F12444
								RDC/ CALLS=INPUT,BEG,DIAG,ETMSW,LIB,CIT,JIF.			4F12446
								RDC PROCESSES READ STATEMENTS.			4F12447
	04673	0	50000	0	01437	RDC	CLA	A81		SET THE ADDRESS FIELD OF	4F12449
	04674	0	62100	0	02067		STA	ENT		ENT (NTR000) TO 81.	4F12450
	04675	0	07400	2	06002		TSX	INPUT,2	*	GO COMPILE CAL *, AND XIT (LEV).	4F12451
	04676	0	50000	0	06127		CLA	CSH		PICKUP (CSH) TO	4F12452
								TSC= ENTRY POINT USED BY RIT.			4F12453
	04677	0	60100	0	06143	TSC	STO	TSA		SET TSA.	4F12454
	04700	-0	50000	0	06133		CAL	RTN		MOVE (RTN)	4F12455
	04701	0	60200	0	06141		SLW	END		INTO END.	4F12456
	04702	0	50000	0	06130		CLA	DBC		PICKUP (DBC) TO	4F12457
								TTC= ENTRY POINT USED BY RDP.			4F12458
	04703	0	60100	0	06144	TTC	STO	TTA		SET TTA.	4F12459
	04704	0	07400	4	05603		TSX	BEG,4	*	CONVERT CONSTANT FORMULA NUMBER.	4F12460
	04705	0	07400	4	03400		TSX	DIAG,4	*	ATTEMPT TO USE VARIABLE FORMAT NO.	4F12461
	04706	-0	10000	4	00004		TNZ	4,4		GO TO THE DIAGNOSTIC, IF THERE WAS	4F12462
	04707	0	07400	4	03400		TSX	DIAG,4	*	NO FORMAT NUMBER GIVEN.	4F12463
	04710	0	62100	0	01366		STA	SET		MOVE BINARY FORMAT NUMBER INTO SET.	4F12464
	04711	-0	50000	0	06114		CAL	NTR		MOVE NTR000	4F12465
	04712	0	60200	0	07401		SLW	OP		INTO OP.	4F12466
	04713	-0	50000	0	00415		CAL	TXLOP		SET OP-SWITCHES.	4F12467
	04714	0	63000	0	05754		STP	ETMSW		ETMSW AND LTMSW,	4F12468
	04715	0	63000	0	05757		STP	LTMSW		TO NO TRANSFER CASE.	4F12469
	04716	0	07400	4	05754		TSX	ETMSW,4	*	GO COMPILE ETM.	4F12470
	04717	0	07400	4	06023		TSX	LIB,4	*	MAKE CLOSUB ENTRY, AND COMPILE=	4F12471
	04720	0	00000	0	01406		PZE	L(0)		WORD1--000000	4F12472
	04721	0	00000	0	01537		PZE	CAL		WORD2--CAL000	4F12473
	04722	0	00000	0	06144		PZE	TTA		WORD3--(DBC) OR (BDC)	4F12474
	04723	0	00000	0	01406		PZE	L(0)		WORD4--000000	4F12475
	04724	0	07400	4	01731		TSX	CIT,4	*	GO MAKE THE FOLLOWING CIT ENTRY=	4F12476
	04725	0	00000	0	01406		PZE	L(0)		WORD1--000000	4F12477
	04726	0	00000	0	06120		PZE	SLW		WORD2--SLW000	4F12478
	04727	0	00000	0	01406		PZE	L(0)		WORD3--000000	4F12479
	04730	0	00000	0	01454		PZE	D1		WORD4--001000	4F12480
	04731	0	07400	4	06023		TSX	LIB,4	*	MAKE CLOSUB ENTRY, AND COMPILE=	4F12481
	04732	0	00000	0	01406		PZE	L(0)		WORD1--000000	4F12482
	04733	0	00000	0	01537		PZE	CAL		WORD2--CAL000	4F12483
	04734	0	00000	0	06143		PZE	TSA		WORD3--(CSH) OR (TSH)	4F12484
	04735	0	00000	0	01406		PZE	L(0)		WORD4--000000	4F12485
	04736	0	07400	4	01731		TSX	CIT,4	*	GO MAKE THE FOLLOWING CIT ENTRY=	4F12486
	04737	0	00000	0	01371		PZE	TL		WORD1--0(IFN)0(248)	4F12487

	04740	0	00000	0	02067		PZE ENT	WORD2--NTR0(81, OR UNIT, OR 00)	4F12488
	04741	0	00000	0	01366		PZE SET	WORD3--800(FORMAT NUMBER)	4F12489
	04742	0	00000	0	01406		PZE L(0)	WORD4--000000	4F12490
	04743	0	07400	4	02372		TSX JIF,4	* GO JUMP IFN, AND SET SL AND TL.	4F12491
							BXT = EXIT SWITCH TO RSC OR LAST, USED BY WBT,RBT,WRD.		4F12492
D	04744	1	00000	0	05141	BXT	TXI RSC,0	* EXIT TO SCAN LIST, IF THERE IS ONE.	4F12493
							END OF PROGRAM RDC.		4F12494
							* * * * *		4F12495
									4F12496
							RIT/ CALLS=INPUT,BEG,VRD. USES=RDC.		4F12497
							RIT PROCESSES READ INPUT TAPE STATEMENTS.		4F12498
	04745	0	07400	2	06002	RIT	TSX INPUT,2	* GO COMPILE CAL *, AND XIT (LEV).	4F12499
	04746	0	07400	4	05603		TSX BEG,4	* SCAN AND TEST TYPE OF UNIT SYMBOL.	4F12500
	04747	0	07400	4	06036		TSX VRD,4	* IF VARIABLE, ENTER FORVAR AND CITS.	4F12501
	04750	0	62100	0	02067		STA ENT	IF CONSTANT, SET ENT= NTR0(UNIT).	4F12502
	04751	0	50000	0	06137		CLA TSH	PICKUP (TSH) TO SET TSA, AND	4F12503
D	04752	1	00000	0	04677		TXI TSC,0	* CONTINUE BY USING PROGRAM RDC.	4F12504
							END OF PROGRAM RIT.		4F12505
							* * * * *		4F12506
									4F12507
							RDP/ CALLS=OUTPUT. USES=RDC.		4F12508
							RDP PROCESSES PRINT STATEMENTS.		4F12509
	04753	-0	75400	0	00000	RDP	PXD ,0	RESET ENT	4F12510
	04754	0	62100	0	02067		STA ENT	TO NTR000.	4F12511
	04755	0	07400	2	06004		TSX OUTPUT,2	* GO COMPILE CAL *, AND XIT (LEV).	4F12512
	04756	0	50000	0	06135		CLA SPH	PICKUP (SPH), AND	4F12513
							TSD = ENTRY POINT USED BY	WOT, PDC.	4F12514
	04757	0	60100	0	06143	TSD	STO TSA	SET TSA.	4F12515
	04760	-0	50000	0	06131		CAL FIL	MOVE (FIL)	4F12516
	04761	0	60200	0	06141		SLW END	INTO END.	4F12517
	04762	0	50000	0	06126		CLA BDC	PICKUP (BDC) TO SET TTA, AND	4F12518
D	04763	1	00000	0	04703		TXI TTC,0	* CONTINUE BY USING PROGRAM RDC.	4F12519
							END OF PROGRAM RDP,		4F12520
							* * * * *		4F12521
									4F12522
							WOT/ CALLS=OUTPUT,BEG,VRD. USES=RDP.		4F12523
							PROCESSES WRITE OUTPUT TAPE STATEMENTS.		4F12524
	04764	0	07400	2	06004	WOT	TSX OUTPUT,2	* GO COMPILE CAL *, AND XIT (LEV).	4F12525
	04765	0	07400	4	05603		TSX BEG,4	* SCAN AND TEST TYPE OF UNIT SYMBOL.	4F12526
	04766	0	07400	4	06036		TSX VRD,4	* IF VARIABLE, ENTER FORVAR AND CITS.	4F12527
	04767	0	62100	0	02067		STA ENT	IF CONSTANT, SET ENT= NTR0(UNIT).	4F12528
	04770	0	50000	0	06136		CLA STH	PICKUP (STH) TO SET TSA, AND	4F12529
D	04771	1	00000	0	04757		TXI TSD,0	* CONTINUE BY USING PROGRAM RDP.	4F12530
							END OF PROGRAM WOT.		4F12531
							* * * * *		4F12532
									4F12533
							PDC/ CALLS=OUTPUT. USES=RDP.		4F12534
							PROCESSES PUNCH STATEMENTS.		4F12535
	04772	-0	75400	0	00000	PDC	PXD ,0	RESET ENT	4F12536
	04773	0	62100	0	02067		STA ENT	TO NTR000.	4F12537
	04774	0	07400	2	06004		TSX OUTPUT,2	* GO COMPILE CAL *, AND XIT (LEV).	4F12538
	04775	0	50000	0	06134		CLA SCH	PICKUP (SCH) TO SET TSA. AND	4F12539
D	04776	1	00000	0	04757		TXI TSD,0	* CONTINUE BY USING PROGRAM RDP.	4F12540
							END OF PROGRAM PDC.		4F12541

										*4F12542
										4F12543
						WBT/	CALLS=OUTPUT, BRW, CIT,			4F12544
						WBT	PROCESSES WRITE TAPE STATEMENTS,			4F12545
	04777	-0	50000	0	06124	CAL	WTB	MOVE	WTB000	4F12546
	05000	0	60200	0	07401	SLW	OP	INTO	OP.	4F12547
	05001	0	07400	2	06004	TSX	OUTPUT, 2	* GO	COMPILE CAL *, AND XIT (LEV),	4F12548
	05002	-0	50000	0	01475	CAL	BTA	PICKUP	BINARY TAPE ADDRESS, AND	4F12549
	05003	0	07400	4	05646	TSX	BRW, 4	* COMPILE	INSTRS TO SET UNIT DESIG.	4F12550
	05004	0	07400	4	01731	TSX	CIT, 4	* GO	MAKE THE FOLLOWING CIT ENTRY=	4F12551
	05005	0	00000	0	01406	PZE	L(0)	WORD1-	000000	4F12552
	05006	0	00000	0	01544	PZE	CPY	WORD2-	CPY000	4F12553
	05007	0	00000	0	01504	PZE	ZER	WORD3-	600000	4F12554
	05010	0	00000	0	01457	PZE	D2	WORD4-	002000	4F12555
D	05011	1	00000	0	04744	TXI	BXT, 0	* EXIT	TO SCAN LIST, IF THERE IS ONE,	4F12556
							END OF PROGRAM WBT,			4F12557
							*****			*4F12558
										4F12559
						RBT/	CALLS=INPUT, BRW, CIT,			4F12560
						RBT	PROCESSES READ TAPE STATEMENTS.			4F12561
	05012	-0	50000	0	06117	CAL	RTB	MOVE	RTB000	4F12562
	05013	0	60200	0	07401	SLW	OP	INT	OP.	4F12563
	05014	0	07400	2	06002	TSX	INPUT, 2	* GO	COMPILE CAL *, AND XIT (LEV),	4F12564
	05015	-0	50000	0	01475	CAL	BTA	PICKUP	BINARY TAPE ADDRESS, AND	4F12565
	05016	0	07400	4	05646	TSX	BRW, 4	* COMPILE	INSTRS TO SET UNIT DESIG.	4F12566
	05017	0	07400	4	01731	TSX	CIT, 4	* GO	MAKE THE FOLLOWING CIT ENTRY=	4F12567
	05020	0	00000	0	01406	PZE	L(0)	WORD1-	000000	4F12568
	05021	0	00000	0	01544	PZE	CPY	WORD2-	CPY000	4F12569
	05022	0	00000	0	01500	PZE	DMP	WORD3-	100000	4F12570
	05023	0	00000	0	01406	PZE	L(0)	WORD4-	000000	4F12571
	05024	0	07400	4	01731	TSX	CIT, 4	* GO	MAKE THE FOLLOWING CIT ENTRY=	4F12572
	05025	0	00000	0	01406	PZE	L(0)	WORD1-	000000	4F12573
	05026	0	00000	0	06125	PZE	XIT	WORD2-	XIT000	4F12574
	05027	0	00000	0	01510	PZE	15P	WORD3-	*00000	4F12575
	05030	0	00000	0	01461	PZE	D3CN	WORD4-	003000	4F12576
	05031	0	07400	4	01731	TSX	CIT, 4	* GO	MAKE THE FOLLOWING CIT ENTRY=	4F12577
	05032	0	00000	0	01406	PZE	L(0)	WORD1-	000000	4F12578
	05033	0	00000	0	01554	PZE	HPR	WORD2-	HPR000	4F12579
	05034	0	00000	0	01406	PZE	L(0)	WORD3-	000000	4F12580
	05035	0	00000	0	01406	PZE	L(0)	WORD4-	000000	4F12581
	05036	0	07400	4	01731	TSX	CIT, 4	* GO	MAKE THE FOLLOWING CIT ENTRY=	4F12582
	05037	0	00000	0	01406	PZE	L(0)	WORD1-	000000	4F12583
	05040	0	00000	0	06125	PZE	XIT	WORD2-	XIT000	4F12584
	05041	0	00000	0	01371	PZE	TL	WORD3-	0(IFN)0(248)	4F12585
	05042	0	00000	0	01406	PZE	L(0)	WORD4-	000000	4F12586
D	05043	1	00000	0	04744	TXI	BXT, 0	* EXIT	TO SCAN LIST, IF THERE IS ON	4F12587
							END OF PROGRAM RBT.			4F12588
							*****			*4F12589
										4F12590
						WRD/	CALLS=OUTPUT, BRW, CIT,			4F12591
						WRD	PROCESSES WRITE DRUM STATEMENTS.			4F12592
	05044	0	07400	2	06004	TSX	OUTPUT, 2	* GO	COMPILE CAL *, AND XIT (LEV),	4F12593
	05045	-0	50000	0	06122	CAL	WDR	PICKUP	WDR000, AND	4F12594
							XDR=	ENTRY POINT USED BY RDD.		4F12595

					BSP/ USES=EFT,		4F12650	
					BSP PROCESSES BACKSPACE TAPE STATEMENTS.		4F12651	
D	05111	-0	50000	0	06111	BSP CAL BST	PICKUP BST000 TO SET OP, AND	4F12652
	05112	1	00000	0	05067	TXI TPO,0	* CONTINUE BY USING PROGRAM EFT,	4F12653
						END OF PROGRAM BSP.		4F12654
						* * * * *		4F12655
						FOR/ CALLS=TET00,		4F12657
						FOR PROCESSES FORMAT STATEMENTS.		4F12658
	05113	-0	50000	0	00030	FOR CAL EIFNO	MOVE EXTERNAL FORMULA NUMBER	4F12659
	05114	0	62100	0	01366	STA SET	INTO THE ADDRESS OF SET,	4F12660
	05115	-0	50000	0	01366	CAL SET	AND MOVE SET (8000(EFN))	4F12661
	05116	0	60200	0	01347	SLW G	INTO G.	4F12662
	05117	-0	53400	1	01724	LXD CHCTR,1	SET XR1 = CHARACTER COUNT.	4F12663
	05120	-0	53400	2	01614	LXD FWA,2	SET XR2 = -(CURRENT F-WORD ADDR),	4F12664
	05121	-3	00001	1	05137	TXL NFFW,1,1	UNLESS POSITIONED AT THE	4F12665
	05122	1	77777	1	05123	TXI *+1,1,-1	BEGINNING OF A FORMAT WORD,	4F12666
	05123	0	56000	0	01365	LDQ RESIDU	THEN PICKUP AND	4F12667
	05124	-0	50000	0	01526	CAL BLANKS	PRECEED WITH BLANKS ANY	4F12668
	05125	-0	76300	0	00006	NFC LGL 6	CHARACTERS	4F12669
	05126	2	00001	1	05125	TIX NFC,1,1	REMAINING IN THE MO, AND	4F12670
	05127	0	60200	0	01350	NFW SLW G+1	MOVE FORMAT WORDS INTO G+1.	4F12671
	05130	0	07400	1	03321	TSX TET00,1	* GO ENTER THEN IN	4F12672
	05131	0	00000	0	00012	PZE 10	THE FORMAT TABLE.	4F12673
	05132	-0	50000	0	01350	CAL G+1	WHEN THE	4F12674
	05133	-0	32000	0	01374	ANA ENDMK	END OF STATEMENT MARK	4F12675
	05134	0	40200	0	01374	SUB ENDMK	HAS BEEN ENTERED.	4F12676
	05135	0	10000	0	03440	TZE CA010	* EXIT TO PROCESS NEXT STATEMENT.	4F12677
	05136	0	60000	0	01347	STZ G	PRECEED ALL BUT 1ST ENTRY WITH 0.	4F12678
	05137	-0	50000	2	00000	NFFW CAL 0,2	PICKUP NEXT FORMAT WORD,	4F12679
	05140	1	77777	2	05127	TXI NFW,2,-1	UPDATE SCAN INDEX, AND CONTINUE.	4F12680
						END OF PROGRAM FOR.		4F12681
						* * * * *		4F12682
						RSC/ CALLS=C0190,DIAG,		4F12683
						RSC SCANS EACH CHARACTER IN A STATEMENT UNTIL EQUALITY IS		4F12684
						FOUND ON ONE OF THE PUNCTUATION MARKS IN THE CTEST BLOCK IN		4F12685
						COMMON. THEN A TAGGED EXIT IS MADE THROUGH THE BLOCK OF		4F12686
						CONTROL TRANSFERS INDICATED BY THE ADDRESS STORED IN CEXIT.		4F12687
						RSC = ENTRY POINT FROM THE BXT SWITCH IN RDC, AND FROM SPC.		4F12688
	05141	-0	50000	0	05361	RSC CAL FLINE	RESET TEMPORARY	4F12689
	05142	0	62100	0	01372	STA TLINE	TABLE LINE COUNTER.	4F12690
	05143	0	60000	0	07400	STZ DOLEV	CLEAR DO LEVEL COUNTER.	4F12691
	05144	0	60000	0	01351	STZ GTAG	CLEAR GENERALIZED TAG.	4F12692
						LSC = ENTRY POINT FROM SPC.		4F12693
	05145	-0	50000	0	05204	LSC CAL LISTR	SET CONTROL TRANSFER	4F12694
						CXS = ENTRY POINT FROM EOS, BEG.		4F12695
	05146	0	62100	0	05156	CXS STA CEXIT	FOR LIST SCAN.	4F12696
						NXS = ENTRY POINT FROM LPR, SPC, CMA.		4F12697
	05147	0	53400	2	01414	NXS LXA L(6),2	RESET SYMBOL CHARACTER COUNT	4F12698
	05150	-0	63400	2	05637	SXD CSJ,2	AND SHIFT COUNT.	4F12699
	05151	0	60000	0	07404	STZ SYM	CLEAR SYMBOL WORKING STORAGE.	4F12700
						NXC = ENTRY POINT FROM CMA.		4F12701
	05152	0	07400	4	01707	NXC TSX C0190,4	* OBTAIN NEXT NB CHARACTER IN THE AC.	4F12702
	05153	0	53400	4	02652	CLOAD LXA CTESTX,4	SET XR4 TO PICK CONTROL CHARACTERS.	4F12703

D	05154	0	34000	4	01406	CCOMP	CAS	CTEST,4		COMPARE CHARACTER WITH CONSTANTS.	4F12705
	05155	-3	00000	0	05160		TXL	BUILD,0		IF EQUALITY IS FOUND ON SOME	4F12706
	05156	0	02000	4	00000	CEXIT	TRA	** ,4	*	CONTROL CHAR, EXIT TO TRA LIST.	4F12707
	05157	2	00001	4	05154		TIX	CCOMP,4,1		CONTINUE THROUGH PUNCTUATION.	4F12708
	05160	-0	53400	4	05637	BUILD	LXD	CSJ,4		BUILD A	4F12709
	05161	0	60100	4	07316		STO	CHR,4		SYMBOL	4F12710
	05162	-2	00001	4	05167		TNX	LCT,4,1		COMPOSED OF	4F12711
	05163	0	76700	2	00044		ALS	36,2		SIX OR LESS CHARACTERS.	4F12712
	05164	-0	63400	4	05637	CSZ	SXD	CSJ,4		SAVE SYMBOL CHARACTER COUNT,	4F12713
	05165	-0	60200	0	07404		ORS	SYM		ALSO, SAVE EACH	4F12714
	05166	1	00006	2	05152		TXI	NXC,2,6		CHARACTER SEPARATELY.	4F12715
	05167	-3	00044	2	05171	LCT	TXL	LCS,2,36		GO TO DIAGNOSTIC IF	4F12716
	05170	0	07400	4	03400		TSX	DIAG,4	*	MORE THAN 6 CHARACTERS IN SYMBOL,	4F12717
	05171	1	77777	4	05164	LCS	TXI	CSZ,4,-1		ADJUST COUNT, AND CONTINUE SCAN.	4F12718
										END OF PROGRAM RSC.	4F12719
										* * * * *	4F12720
										LISTR/ CONTROL TRANSFERS FOR LIST SCAN=	4F12721
D	05172	1	00000	0	05547		TXI	EMK,0	*	ENDMARK	4F12722
D	05173	1	00000	0	05205		TXI	LPR,0	*	(	4F12723
D	05174	1	00000	0	05413		TXI	CMA,0	*	,	4F12724
D	05175	1	00000	0	05377		TXI	RPR,0	*	)	4F12725
D	05176	1	00000	0	05261		TXI	EQS,0	*	*	4F12726
D	05177	1	00000	0	05200		TXI	ILC,0		- (ILLEGAL CHARACTER IN I/O LIST).	4F12727
	05200	0	07400	4	03400	IILC	TSX	DIAG,4	*	/ (ILLEGAL CHARACTER IN I/O LIST).	4F12728
D	05201	1	00000	0	05200		TXI	ILC,0		. (ILLEGAL CHARACTER IN I/O LIST).	4F12729
D	05202	1	00000	0	05200		TXI	ILC,0		+ (ILLEGAL CHARACTER IN I/O LIST).	4F12730
D	05203	1	00000	0	05200		TXI	ILC,0	*	(ILLEGAL CHARACTER IN I/O LIST).	4F12731
	05204	0	00000	0	05204	LISTR	PZE	LISTR		INDEXING ADDRESS FOR ABOVE LIST.	4F12732
										* * * * *	4F12733
										LPR/ CALLS=TYP,SS000,RA000,C0190,TEST,.,LTMSW,CIT,JIF,DIAG,	4F12734
										BSS. USES=CMA,RSC,	4F12735
										LPR * ENTRY POINT TAKEN WHEN LPAREN IS MET IN LIST SCAN.	4F12736
	05205	-0	50000	0	07404	LPR	CAL	SYM		TEST FOR SUBSCRIPT OR DO NEST.	4F12737
	05206	0	10000	0	05230		TZE	LPRD		IF SUBSCRIPT, THEN	4F12738
	05207	0	07400	4	05624		TSX	TYP,4	*	IF VARIABLE SYMBOL CONTAINS LESS	4F12739
	05210	0	02000	4	00003		TRA	3,4		THAN 6 CHARACTERS, ADD A BLANK,	4F12740
D	05211	1	00000	0	05416		TXI	ERRC,0	*	ON CONSTANT RETURN, GO TO DIAG,	4F12741
	05212	-0	50000	0	07404		CAL	SYM		MOVE SYMBOL	4F12742
	05213	0	60200	0	01130		SLW	E+2		INTO E+2, AND	4F12743
	05214	0	60200	0	07403		SLW	SA		COMPILE SYMBOLIC ADDRESS,	4F12744
	05215	0	07400	4	02614		TSX	SS000,4	*	GO SCAN AND PROCESS SUBSCRIPT.	4F12745
	05216	0	07400	4	02437		TSX	RA000,4	*	THEN GO COMPUTE RELATIVE ADDRESS.	4F12746
	05217	0	07400	4	01707		TSX	C0190,4	*	EXAMINE NEXT NON-BLANK CHARACTER	4F12747
	05220	0	34000	0	01377		CAS	CLOS			4F12748
	05221	0	02000	0	05226		TRA	*+5			4F12749
	05222	0	02000	0	05224		TRA	*+2			4F12750
	05223	0	02000	0	05226		TRA	*+3			4F12751
	05224	0	60000	0	07400		STZ	DOLEV			4F12752
	05225	0	07400	4	01707		TSX	C0190,4			4F12753
	05226	0	07400	4	03247		TSX	TESTA0,4	*	FOR EITHER COMMA OR ENDMARK.	4F12754
D	05227	1	00000	0	05421		TXI	CMA7,0	*	AND CONTINUE BY USING PROGRAM CMA.	4F12755
	05230	-0	50000	0	07400	LPRD	CAL	DOLEV		IF THE BEGINNING OF A DO NEST,	4F12756

D

05231	0	10000	0	05242	TZE	LPR3	AND DOLEV IS NOT ZERO, THEN	4F12759	
05232	0	53400	4	07400	LXA	DOLEV,4	TEST FOR NULL FORMULA.	4F12760	
05233	-3	00000	4	05236	TXL	LPRE,4,0	IF NULL, GO ESTABLISH POSITION.	4F12761	
05234	0	07400	4	05757	TSX	LTMSW,4	* OTHERWISE, COMPILE LTM, AND	4F12762	
05235	1	00000	0	05241	TXI	LPR4,0	AND GO JUMP IFN.	4F12763	
05236	-0	50000	0	01367	CAL	SL	IF C(SL) DO NOT = 0,	4F12764	
05237	0	10000	0	05241	TZE	*+2	THEN	4F12765	
05240	0	07400	2	05674	TSX	BSS,2	* GO COMPILE= IFN BSS 0,	4F12766	
05241	0	07400	4	02372	LPR4	TSX	JIF,4	* GO JUMP IFN, AND SET SL AND TL.	4F12767
05242	-0	53400	4	07400	LPR3	LXD	DOLEV,4	INCREASE THE C(DOLEV D)	4F12768
05243	1	00001	4	05244	TXI	LPR1,4,1	BY 1, AND	4F12769	
05244	-0	75400	4	00000	LPR1	PXD	,4	SET THE C(DOLEV A)	4F12770
05245	0	60200	0	07400	SLW	DOLEV	TO ZERO,	4F12771	
05246	-0	50000	0	01372	CAL	TLINE	NOTE AT	4F12772	
05247	0	62100	0	05254	STA	LPR2	THIS LEVEL	4F12773	
05250	0	60100	4	07400	STO	DOLEV,4	THE LOCATION IN TLDO	4F12774	
05251	0	40000	0	01413	ADD	L(5)	OF THIS DO FORMULA	4F12775	
05252	0	62100	0	01372	STA	TLINE	AND INCREASE LINE IN TLINE.	4F12776	
05253	0	50200	0	01371	CLS	TL	MOVE -(0(IFN)0(248)) INTO THE	4F12777	
05254	0	60100	0	00000	LPR2	STO	**	LOCATION WORD OF CURRENT TEMP DO.	4F12778
05255	0	07400	4	02372	TSX	JIF,4	* GO JUMP IFN, AND SET SL AND TL.	4F12779	
05256	-0	53400	4	07400	LXD	DOLEV,4	IF 3 OR FEWER LEVELS IN LIST DO,	4F12780	
05257	-3	00003	4	05147	TXL	NXS,4,3	* RETURN TO LIST SCAN.	4F12781	
05260	0	07400	4	03400	TSX	DIAG,4	* OTHERWISE, GO TO DIAGNOSTIC	4F12782	
							END OF PROGRAM LPR.	4F12783	
							* * * * *	*4F12784	
								4F12785	
							EQS/ CALLS=DIAG, USES=RSC	4F12786	
							EQS = ENTRY POINT WHEN EQUAL SIGN IS MET IN LIST CAN,	4F12787	
05261	-0	53400	4	07400	EQS	LXD	DOLEV,4	TEST THE LEGALITY OF EQUAL SIGN,	4F12788
05262	3	00000	4	05264	TXH	EQS2,4,0	AND GO TO DIAG ON THE ATTEMPT TO	4F12789	
05263	0	07400	4	03400	TSX	DIAG,4	* SPECIFY SUBSCRIPT RANGE WITHOUT (.	4F12790	
05264	-0	50000	4	07400	EQS2	CAL	DOLEV,4	INITIALIZE SPECIFICATION	4F12791
05265	0	62100	0	05331	STA	SPC2	OF GENERATED DO FORMULA	4F12792	
05266	0	62100	0	05345	STA	SPC5	AT CURRENT LEVEL.	4F12793	
05267	0	40000	0	01407	ADD	L(1)	PREPARE TO ENTER FORMULA NUMBERS	4F12794	
05270	0	62100	0	05302	STA	EQS1	IN LOCATION WORD*SUBSCRIPT IN	4F12795	
05271	0	40000	0	01412	ADD	L(4)	SYMBOL WORD, AND SUBSCRIPT SPECS	4F12796	
05272	0	62100	0	05333	STA	SPC3	IN TEMPDO ENTRY.	4F12797	
05273	0	53400	4	01411	LXA	L(3),4	PREPARE TO COUNT THE	4F12798	
05274	-0	63400	4	05304	SXD	NSJ,4	NUMBER OF SPECIFICATIONS.	4F12799	
05275	-0	50000	0	07404	CAL	SYM	OBTAIN SUBSCRIPT	4F12800	
05276	3	00044	2	05302	TXH	EQS1,2,36	FOR THIS DO, AND	4F12801	
05277	-0	50000	0	01430	CAL	BLANK	STORE IN PROPER	4F12802	
05300	0	76700	2	00044	ALS	36,2	LINE OF TEMPORARY	4F12803	
05301	-0	50100	0	07404	ORA	SYM	LIST DO TABLE.	4F12804	
05302	0	60200	0	00000	EQS1	SLW	**	(SUBSCRIPT SYMBOL WORD)	4F12805
05303	-0	50000	0	05317	CAL	SPCTR	SET CONTROL LOOP FOR	4F12806	
05304	1	00000	0	05146	NSJ	TXI	CXS,0,**	* EXIT TO SPECIFICATION	4F12807
							END OF PROGRAM EQS.	4F12608	
							* * * * *	*4F12809	
								4F12810	
							SPCTR/ CONTROL TRANSFERS FOR SPECIFICATION SCAN=	4F12811	
05305	0	07400	4	03400	TSX	DIAG,4	* E (ILLEGAL IN CONTROL FOR LIST DO).	4F12812	

	05366	-2	00001	2	05370		TNX	SPC8,2,1		AND THEN		4F12867
	05367	2	00001	4	05364		TIX	SPC7,4,1		WHEN DONE,		4F12868
	05370	0	53400	4	01105	SPC8	LXA	1C,4		TEST TO SKIP		4F12869
	05371	-3	00000	4	05374		TXL	SPCT,4,0		NULL DO,		4F12870
	05372	0	07400	1	03321		TSX	TET00,1	*	GO MAKE AN ENTRY		4F12871
	05373	0	00000	0	00001		PZE	1		IN TDO TABLE.)AND WHEN THE WHOLE		4F12872
	05374	3	00001	2	05363	SPCT	TXH	SPC9,2,1		DO NEST HAS BEEN ENTERED,		4F12873
	05375	0	07400	4	02372		TSX	JIF,4	*	GO JUMP IFN, AND SET SL AND TL.		4F12874
D	05376	1	00000	0	05141	RESET	TXI	RSC,0	*	THEN EXIT TO CONTINUE LIST SCAN.		4F12875
								END OF PROGRAM SPC,				4F12876
								* * * * *				4F12877
								RPR/ CALLS=DIAG,USES=CMA,SPC				4F12878
								RPR = ENTRY POINT WHEN RPAREN IS MET IN LIST SCAN.				4F12879
	05377	-0	53400	4	07400	RPR	LXD	DOLEV,4		TEST LEGALITY OF),		4F12881
	05400	3	00000	4	05402		TXH	RPS,4,0		IF THERE ARE TOO MANY I IN LIST,		4F12882
	05401	0	07400	4	03400		TSX	DIAG,4	*	GO TO THE DIAGNOSTIC		4F12883
	05402	-0	50000	4	07400	RPS	CAL	DOLEV,4		NULLIFY DO AT CURRENT LEVEL.		4F12884
	05403	0	62100	0	05345		STA	SPC5		SET SPC5 ADDRESS,		4F12885
	05404	0	50000	0	05411		CLA	RPA		SET CMA3 SWITCH TO RETURN TO		4F12886
	05405	0	62100	0	05546		STA	CMA3		RPT, AND IF ANY CHARACTERS		4F12887
	05406	3	00006	2	05414		TXH	CMA1,2,6	*	WERE COLLECTED, EXIT TO CMA.		4F12888
								RPT = REENTRY POINT USED		BY CMA.		4F12889
	05407	0	50000	0	05336	RPT	CLA	SPC1		RESET CMA3 SWITCH		4F12890
	05410	0	62100	0	05546		STA	CMA3		TO NXS,		4F12891
	05411	-0	75400	0	05407	RPA	PXD	RPT,0		CLEAR THE AC AND		4F12892
D	05412	1	00000	0	05345		TXI	SPC5,0	*	CONTINUE BY USING PROGRAM SPC.		4F12893
								END OF PROGRAM RPR.				4F12894
								* * * * *				4F12895
								CMA/ CALLS=TYP,DIAG,ETMSW,DIM.SR,IFFIX,TET00,DRTABS,JIF,CIT,				4F12896
								LTMSW. USES=RSC				4F12897
								CMA = ENTRY POINT WHEN COMMA IS MET IN LIST SCAN.				4F12898
	05413	-3	00006	2	05152	CMA	TXL	NXC,2,6	*	IF NOTHING COLLECTED, RETURN -SCAN.		4F12899
								CMA1 = ENTRY POINT USED		BY EMK.		4F12900
	05414	0	07400	4	05624	CMA1	TSX	TYP,4	*	TYPE TEST FOR NON-SUBSCR. VAR.		4F12901
	05415	0	02000	4	00003		TRA	3,4		ILLEGAL USE OF CONSTANT IN LIST,		4F12902
	05416	0	07400	4	03400	ERRC	TSX	DIAG,4	*	GO TO THE DIAGNOSTIC		4F12903
	05417	-0	50000	0	07404		CAL	SYM		MOVE VARIABLE SYMBOL		4F12904
	05420	0	60200	0	07403	CMA4	SLW	SA		INTO SA. AND		4F12905
								CMA7 = ENTRY POINT USED		BY LPR.		4F12906
	05421	0	53400	4	07400	CMA7	LXA	DOLEV,4		IF DOLEV ADDRESS = 0, AND IF		4F12907
	05422	3	00000	4	05424		TXH	CMA6,4,0		ETMSW IS SET TO TXH (NOP CASE),		4F12908
	05423	0	07400	4	05754		TSX	ETMSW,4	*	GO COMPILE ETM, AND CLEAR SL.		4F12909
	05424	-0	50000	0	07400	CMA6	CAL	DOLEV		IN ANY CASE,		4F12910
	05425	0	40000	0	01407		ADD	L(1)		UPDATE DOLEV ADDRESS		4F12911
	05426	0	60100	0	07400		STO	DOLEV		BY 1, AND THEN		4F12912
	05427	0	50000	0	01351		CLA	GTAG		SET GENERALIZED TAG*		4F12913
	05430	0	60100	0	07402		STO	RA		(RELATIVE ADDRESS)		4F12914
	05431	0	10000	0	05436		TZE	DIMSR		IF THIS VARIABLE HAS A SUBSCRIPT,		4F12915
	05432	0	50000	0	01147		CLA	EPS		AND IF SUBSCRIPT		4F12916
	05433	-0	10000	0	05537		TNZ	CMA5		IS A CONSTANT,		4F12917
	05434	0	62100	0	07402		STA	RA		THEN CLEAR THE ADDRESS OF RA.		4F12918
D	05435	1	00000	0	05537		TXI	CMA5,0		THEN GO MAKE CIT ENTRY.		4F12919

	05436	-0	50000	0	07403	DIMSR	CAL SA		IF THIS VARIABLE	4F12921
	05437	0	60200	0	01130		SLW E+2		DOES NOT HAVE A SUBSCRIPT, THEN	4F12922
	05440	0	07400	4	01771	RD1	TSX DIM1SR,4	*	GO SEARCH DIM1 TABLE,	4F12923
D	05441	1	00000	0	05444		TXI RD2,0		IF FOUND, THEN	4F12924
	05442	0	50000	0	01101	CS1	CLA D12		PICKUP DIMENSION 1	4F12925
D	05443	1	00000	0	05467		TXI DVS,0		AND GO TEST SIZE. OTHERWISE,	4F12926
	05444	0	07400	4	01775	RD2	TSX DIM2SR,4	*	GO SEARCH DIM2 TABLE.	4F12927
D	05445	1	00000	0	05455		TXI RD3,0		AND IF FOUND,	4F12928
	05446	0	56000	0	01101	CS2	LDQ D12		PICKUP	4F12929
	05447	0	60000	0	01361		STZ N2		DIMENSION 1 AND	4F12930
	05450	-0	62000	0	01361		SLQ N2		DIMENSION 2	4F12931
	05451	-0	76300	0	00022		LGL 18		AND MULTIPLY	4F12932
	05452	0	20000	0	01361		MPY N2		THEM TOGETHER.	4F12933
	05453	0	77100	0	00001		ARS 1		THEN	4F12934
D	05454	1	00000	0	05467		TXI DVS,0		GO TEST THE PRODUCT. OTHERWISE,	4F12935
	05455	0	07400	4	02005	RD3	TSX DIM3SR,4	*	GO SEARCH DIM3 TABLE.	4F12936
D	05456	1	00000	0	05533		TXI NODIM,0		AND IF FOUND,	4F12937
	05457	0	56000	0	01101	CS3	LDQ D12		PICKUP	4F12938
	05460	0	60000	0	01361		STZ N2		DIMENSION 1,	4F12939
	05461	-0	62000	0	01361		SLQ N2		DIMENSION 2,	4F12940
	05462	-0	76300	0	00022		LGL 18		AND DIMENSION 3.	4F12941
	05463	0	20000	0	01361		MPY N2		MULTIPLY	4F12942
	05464	0	76500	0	00022		LRS 18		THEM TOGETHER,	4F12943
	05465	0	20000	0	01102		MPY D3		AND IF	4F12944
	05466	0	76300	0	00021		LLS 17		THEIR	4F12945
	05467	0	40200	0	01407	DVS	SUB L(1)		PRODUCT IS	4F12946
	05470	0	10000	0	05533		TZE NODIM		GREATER THAN 1, THEN	4F12947
	05471	0	76700	0	00022		ALS 18		PLACE DIMENSION-1 IN THE	4F12948
	05472	0	60100	0	01347		STO G		DECREMENT OF G, AND	4F12949
	05473	0	07400	4	00417		TSX FXCNIX,4	*	GO ENTER IN FIXCON, AND GET TAG.	4F12950
	05474	0	76700	0	00022		ALS 18		ADJUST, AND STORE TAG IN THE	4F12951
	05475	0	62200	0	01364		STD RAT		DECREMENT OF RAT. THEN	4F12952
	05476	0	07400	4	02372		TSX JIF,4	*	GO JUMP IFN, AND SET SL AND TL.	4F12953
	05477	0	07400	4	01731		TSX CIT,4	*	GO MAKE THE FOLLOWING CIT ENTRY=	4F12954
	05500	0	00000	0	01367		PZE SL		WORD1--0(IFN)000	4F12955
	05501	0	00000	0	01561		PZE LXD		WORD2--LXD000	4F12956
	05502	0	00000	0	01501		PZE 2P		WORD3--200000	4F12957
	05503	0	00000	0	01364		PZE RAT		WORD4--0(FIXCON TAG)008	4F12958
	05504	0	07400	4	02372		TSX JIF,4	*	GO JUMP IFN, AND SET SL AND TL.	4F12959
	05505	0	07400	4	05754		TSX ETMSW,4	*	IF LTMSW = NOP, COMPILE LTM. SL=0.	4F12960
	05506	0	07400	4	01731		TSX CIT,4	*	GO MAKE THE FOLLOWING CIT ENTRY=	4F12961
	05507	0	00000	0	01367		PZE SL		WORD1--0(IFN)000 OR 000000	4F12962
	05510	0	00000	0	07401		PZE OP		WORD2--(OPERATION CODE)	4F12963
	05511	0	00000	0	07403		PZE SA		WORD3--(SYMBOLIC ADDRESS)	4F12964
	05512	0	00000	0	01416		PZE ST		WORD4--000008	4F12965
	05513	0	60000	0	01367		STZ SL		CLEAR SL, AND	4F12966
	05514	0	07400	4	05757		TSX LTMSW,4	*	IF LTMSW = NOP, COMPILE LTM. SL=0.	4F12967
	05515	0	07400	4	02375		TSX GIF,4	*	GET IFN IN SL AND TL.	4F12968
	05516	0	07400	4	01731		TSX CIT,4	*	GO MAKE THE FOLLOWING CIT ENTRY=	4F12969
	05517	0	00000	0	01406		PZE L(0)		WORD1--000000	4F12970
	05520	0	00000	0	01576		PZE TIX		WORD2--TIX001	4F12971
	05521	0	00000	0	01367		PZE SL		WORD3--0(IFN)000	4F12972
	05522	0	00000	0	01416		PZE ST		WORD4--000008	4F12973
	05523	0	60000	0	01367		STZ SL		CLEAR SL, AND	4F12974

	05524	0	07400	4	05754		TSX	ETMSW,4		* IF ETMSW = NOP, COMPILE ETM, SL=0.	4F12975
	05525	0	07400	4	01731		TSX	CIT,4		* GO MAKE THE FOLLOWING CIT ENTRY=	4F12976
	05526	0	00000	0	01406		PZE	L(0)		WORD1--000000	4F12977
	05527	0	00000	0	01546		PZE	DED		WORD2--DED000	4F12978
	05530	0	00000	0	01406		PZE	L(0)		WORD3--000000	4F12979
	05531	0	00000	0	01416		PZE	ST		WORD4--000008	4F12980
D	05532	1	00000	0	05537		TXI	CMA5,0		IF THE PRODUCT OF DIMENSIONS IS	4F12981
	05533	0	07400	1	05773	NODIM	TSX	IFFIX,1		* LESS THAN 2, TEST TYPE OF VARIABLE,	4F12982
D	05534	1	00000	0	05537		TXI	CMA5,0		AND IF FIXED POINT,	4F12983
	05535	0	07400	1	03321		TSX	TET00,1		* GO ENTER VARIABLE IN	4F12984
	05536	0	00000	0	00000		PZE	**		EITHER FORVAL OR FORVAR TABLE.	4F12985
	05537	0	07400	4	01731	CMA5	TSX	CIT,4		* GO MAKE THE FOLLOWING CIT ENTRY=	4F12986
	05540	0	00000	0	01367		PZE	SL		WORD1--0(IFN)000 OR 000000	4F12987
	05541	0	00000	0	07401		PZE	OP		WORD2--NTR000 OR CPY000	4F12988
	05542	0	00000	0	07403		PZE	SA		WORD3--(SYMBOL)	4F12989
	05543	0	00000	0	07402		PZE	RA		WORD4--(RELATIVE ADDRESS)	4F12990
	05544	0	60000	0	01367		STZ	SL		CLEAR SL, AND	4F12991
	05545	0	60000	0	01351		STZ	GTAG		CLEAR GTAG. THEN TAKE EXIT	4F12992
D	05546	1	00000	0	05147	CMA3	TXI	NXS,0		* SWITCH TO RPT OR NXS,	4F12993
								END OF PROGRAM CMA.			4F12994
								*****			4F12995
								EMK/ CALLS=DIAG,LTMSW,JIF,CIT,LIB,TET00, USES=CMA,			4F12996
								EMK = ENTRY POINT WHEN AN ENDMARK IS MET IN LIST SCAN.			4F12997
	05547	3	00006	2	05414	EMK	TXH	CMA1,2,6		* IF NO CHARACTERS REMAIN, THEN	4F12999
	05550	-0	53400	4	07400		LXD	DOLEV,4		CHECK THE NUMBER OF PARENTHESES.	4F13000
	05551	-3	00000	4	05553		TXL	FIN,4,0		IF THERE ARE TOO MANY LPARENS,	4F13001
	05552	0	07400	4	03400		TSX	DIAG,4		* GO TO THE DIAGNOSTIC OTHERWISE,	4F13002
	05553	0	07400	4	05757	FIN	TSX	LTMSW,4		* IF LTMSW = NOP, COMPILE LTM. SL=0.	4F13003
	05554	0	07400	4	02372		TSX	JIF,4		* GO JUMP IFN, AND SET SL AND TL.	4F13004
								LAST = ENTRY POINT SET BY BXT SWITCH.			4F13005
	05555	0	07400	4	01731	LAST	TSX	CIT,4		* GO MAKE THE FOLLOWING CIT ENTRY=	4F13006
	05556	0	00000	0	01367		PZE	SL		WORD1--0(IFN)000	4F13007
	05557	0	00000	0	01537		PZE	CAL		WORD2--CAL000	4F13008
	05560	0	00000	0	01510		PZE	15P		WORD3--*00000	4F13009
	05561	0	00000	0	01406		PZE	L(0)		WORD4--000000	4F13010
	05562	0	07400	4	06023		TSX	LIB,4		* MAKE CLOSUB ENTRY, AND COMPILE=	4F13011
	05563	0	00000	0	01406		PZE	L(0)		WORD1--000000	4F13012
	05564	0	00000	0	06125		PZE	XIT		WORD2--XIT000	4F13013
	05565	0	00000	0	06141		PZE	END		WORD3--(RTN) OR (FIL)	4F13014
	05566	0	00000	0	01406		PZE	L(0)		WORD4--000000	4F13015
								FINI = ENTRY POINT USED BY EFT.			4F13016
	05567	0	50000	0	05376	FINI	CLA	RESET		RESET BXT SWITCH	4F13017
	05570	0	62100	0	04744		STA	BXT		TO RSC.	4F13018
	05571	0	50000	0	01151		CLA	F-1		TEST FOR AN EXTERNAL	4F13019
	05572	0	40200	0	01477		SUB	5BLANS		STATEMENT NUMBER, AND IF NONE,	4F13020
	05573	0	10000	0	03440		TZE	CA010		* EXIT TO PROCESS NEXT STATEMENT.	4F13021
	05574	-0	50000	0	01520		CAL	MINUS0		OTHERWISE, SET THE SIGN	4F13022
	05575	-0	60200	0	00030		ORS	EIFNO		OF EIFNO TO MINUS, AND	4F13023
	05576	0	07400	1	03321		TSX	TET00,1		* GO ENTER -(EIFNO)	4F13024
	05577	0	00000	0	00000		PZE	0		IN THE TEIFNO TABLE.	4F13025
	05600	-0	50000	0	00030		CAL	EIFNO		THEN RESTORE	4F13026
	05601	0	60100	0	00030		STO	EIFNO		EIFNO, AND	4F13027
D	05602	1	00000	0	03440		TXI	CA010,0		* EXIT TO PROCESS NEXT STATEMENT.	4F13028

END OF PROGRAM EMK. 4F13029

* * * * * 4F13030

STATEA/ 4-SUBROUTINES USED BY STATE A= 4F13031

4F13032

* * * * *

BEG(TYP),4/ CALLS=DIAG. USES RSC. 4F13033

BEG = ENTRY POINT USED BY RDC,RIT,WOT,EFT, 4F13034

SAVE C(XR4) FOR RETURN, 4F13035

05603 -0 63400 4 05605 BEG SXD BEX,4 4F13036

05604 -0 50000 0 05620 CAL BEGTR SET CONTROL TRANSFER 4F13037

05605 1 00000 0 05146 BEX TXI CXS,0,** * AND GO EXECUTE BEGINNING SCAN. 4F13038

* * * * * 4F13039

BEGTR/ CONTROL TRANSFERS FOR BEGINNING SCAN= 4F13040

05606 1 00000 0 05621 TXI NLS,0 * ENDMARK (NO LIST SCAN) 4F13041

05607 0 07400 4 03400 IBC TSX DIAG,4 * ((ILLEGAL CHARACTER IN I/O SETUP). 4F13042

05610 1 00000 0 05623 TXI CMB,0 * , 4F13044

05611 1 00000 0 05607 TXI IBC,0) (ILLEGAL CHARACTER IN I/O SETUP). 4F13045

05612 1 00000 0 05607 TXI IBC,0 = (ILLEGAL CHARACTER IN I/O SETUP). 4F13046

05613 1 00000 0 05607 TXI IBC,0 - (ILLEGAL CHARACTER IN I/O SETUP). 4F13047

05614 1 00000 0 05607 TXI IBC,0 / (ILLEGAL CHARACTER IN I/O SETUP). 4F13048

05615 1 00000 0 05607 TXI IBC,0 . (ILLEGAL CHARACTER IN I/O SETUP). 4F13049

05616 1 00000 0 05607 TXI IBC,0 + (ILLEGAL CHARACTER IN I/O SETUP). 4F13050

05617 1 00000 0 05607 TXI IBC,0 * (ILLEGAL CHARACTER IN I/O SETUP). 4F13051

05620 0 00000 0 05620 BEGTR PZE BEGTR INDEXING ADDRESS FOR ABOVE LIST. 4F13052

* * * * * 4F13053

NLS = ENTRY POINT WHEN AN ENDMARK IS MET IN BEGINNING SCAN. 4F13054

05621 0 50000 0 06105 NLS CLA NLA IF ENDMARK IS MET, 4F13055

05622 0 62100 0 04744 STA BXT SET BXT SWITCH TO LAST. 4F13056

CMB = ENTRY POINT WHEN A COMMA IS MET IN BEGINNING SCAN. 4F13057

05623 -0 53400 4 05605 CMB LXI BEX,4 RESTORE THE C(XR4), AND 4F13058

TYP = ENTRY POINT USED BY LPR,SPC,CMA, 4F13059

05624 0 50000 0 07310 TYP CLA CHR-6 TEST FIRST CHARACTER 4F13060

05625 0 40200 0 01404 SUB PLUS FOR VARIABLE 4F13061

05626 -0 12000 0 05634 TMI ABS OR CONSTANT. 4F13062

05627 3 00044 2 05633 TXH SMB,2,36 IF VARIABLE. 4F13063

05630 -0 50000 0 01430 CAL BLANK ADD A BLANK 4F13064

05631 0 76700 2 00044 ALS 36,2 IF SYMBOL CONTAINS 4F13065

05632 -0 60200 0 07404 ORS SYM LESS THAN 6 CHARACTERS, AND 4F13066

05633 0 02000 4 00001 SMB TRA 1,4 * TAKE VARIABLE EXIT TO CALLER. 4F13067

05634 0 53400 2 01413 ABS LXA L(5),2 IF CONSTANT* 4F13068

05635 0 50000 2 07315 CLA CHR-1,2 THEN 4F13069

05636 0 60100 0 07307 STO BIN CONVERT 4F13070

05637 -3 00000 2 05645 CSJ TXL INT,2,** BCD 4F13071

05640 0 76700 0 00002 ALS 2 DIGITS 4F13072

05641 0 40000 0 07307 ADD BIN TO THEIR 4F13073

05642 0 76700 0 00001 ALS 1 BINARY 4F13074

05643 0 40000 2 07316 ADD CHR,2 EQUIVALENT, 4F13075

05644 1 77777 2 05636 TXI CSJ-1,2,-1 AND WHEN DONE, 4F13076

05645 0 02000 4 00002 INT TRA 2,4 * TAKE CONSTANT EXIT TO CALLER. 4F13077

END OF PROGRAM BEG(TYP), 4F13078

* * * * * 4F13079

* * * * * 4F13080

					BRW,4/ CALLS=JIF,BEG,VRA,CIT, CALLERS=WBT,RBT,WRD,	4F13081	
					SAVE THE C(XR4), AND	4F13082	
05646	-0	63400	4	06054	BRW	SXD XRW,4	4F13083
05647	0	60200	0	06140		SLW CON	4F13084
05650	0	07400	4	02372		TSX JIF,4	4F13085
05651	0	07400	4	05603		TSX BEG,4	4F13086
05652	0	07400	4	06032		TSX VRA,4	4F13087
05653	0	76700	0	00022		ALS 18	4F13088
05654	0	60100	0	07402		STO RA	4F13089
05655	0	07400	4	01731		TSX CIT,4	4F13090
05656	0	00000	0	01371		PZE TL	4F13091
05657	0	00000	0	07401		PZE OP	4F13092
05660	0	00000	0	01406		PZE L(0)	4F13093
05661	0	00000	0	07402		PZE RA	4F13094
05662	-0	50000	0	01544		CAL CPY	4F13095
05663	0	60200	0	07401		SLW OP	4F13096
05664	-0	50000	0	00415		CAL TXLOP	4F13097
05665	0	63000	0	05754		STP ETMSW	4F13098
05666	0	63000	0	05757		STP LTMSW	4F13099
05667	-0	50000	0	06133		CAL RTN	4F13100
05670	0	60200	0	06141		SLW END	4F13101
05671	0	60000	0	01367		STZ SL	4F13102
05672	-0	53400	4	06054		LXD XRW,4	4F13103
05673	0	02000	4	00001		TRA 1,4	4F13104
						END OF PROGRAM BRW.	4F13105
						* * * * *	4F13106
						BSS,2/ CALLS=CIT00, CALLERS=LPR,C1600,	4F13107
						BSS COMPILES= IFN BSS 0.	4F13108
05674	0	07400	4	01731	BSS	TSX CIT00,4	4F13109
05675	0	00000	0	01367		PZE SL	4F13110
05676	0	00000	0	01536		PZE L(BSS)	4F13111
05677	0	00000	0	01406		PZE L(0)	4F13112
05700	0	00000	0	01406		PZE L(0)	4F13113
05701	0	02000	2	00001		TRA 1,2	4F13114
						END OF PROGRAM BSS,	4F13115
						* * * * *	4F13116
						CA100,4 / CALLS=DIAG, CALLER=CA000,	4F13117
						CA100 READS NEXT SOURCE PROGRAM CARD (1 TAPE RECORD),	4F13118
05702	0	53400	2	01413	CA100	LXA TERC,2	4F13119
05703	-0	63400	2	01112		SXD 1G,2	4F13120
05704	-0	76000	0	00012		RTT	4F13121
05705	0	76100	0	00000		NOP	4F13122
05706	0	76200	0	00202	CA101	RDS 130	4F13123
05707	0	53400	2	01420		LXA L(12),2	4F13124
						INITIALIZE INDEX B FOR 12 CYCLES OF	4F13125
						COPY LOOP.	4F13126
05710	0	70000	2	01347	CA102	CPY FT+12,2	4F13127
05711	0	02000	0	05721		TRA CA103	4F13128
05712	0	02000	0	05740		TRA CA120	4F13129
05713	-0	53400	2	01112	CA130	LXD 1G,2	4F13130
05714	2	00001	2	05716		TIX CA131,2,1	4F13131
05715	0	07400	4	03400		TSX DIAG,4	4F13132
05716	-0	63400	2	01112	CA131	SXD 1G,2	4F13133
						SAVE REDUCED VALUE IN COUNTER,	4F13134

	05717	0	76400	0	00202		BST	130		BACKSPACE FORMULA TAPE,	4F13135
	05720	0	02000	0	05706		TRA	CA101		AND GO BACK TO READ AGAIN.	4F13136
	05721	2	00001	2	05710	CA103	TIX	CA102,2,1		TEST EXIT FROM LOOP.	4F13137
	05722	0	76600	0	00333		IOD			DELAY UNTIL TAPE DISCONNECTS.	4F13138
	05723	-0	76000	0	00012		RTT			CHECK READING OF TAPE.	4F13139
D	05724	1	00000	0	05713		TXI	CA130,0		IF INCORRECT, GO CHECK ERROR COUNT,	4F13140
	05725	0	53400	2	01420		LXA	L(12),2		PREPARE TO SCAN 12 WORDS OF CARD.	4F13141
	05726	0	50000	0	01526	CA112	CLA	BLANKS		TEST	4F13142
	05727	0	40200	2	01347		SUB	FT+12,2		FOR	4F13143
	05730	-0	10000	0	05733		TNZ	CA113		BLANK	4F13144
	05731	2	00001	2	05726		TIX	CA112,2,1		CARD.	4F13145
	05732	0	02000	0	05702		TRA	CA100		IF BLANK, GO TO READ NEXT CARD.	4F13146
	05733	-0	50000	0	01333	CA113	CAL	FT		IF NOT BLANK,	4F13147
	05734	0	77100	0	00036		ARS	30		EXAMINE FIRST	4F13148
	05735	0	40200	0	01421		SUB	L(C)		CHARACTER TO	4F13149
	05736	0	10000	0	05702		TZE	CA100		TEST FOR COMMENT CARD.	4F13150
	05737	0	02000	4	00001		TRA	1,4	*	EXIT IF NEITHER BLANK NOR COMMENT,	4F13151
	05740	0	60000	0	01333	CA120	STZ	FT		INDICATE THAT FINAL	4F13152
	05741	-0	63400	0	02575		SXD	ENDWRD,0		STATEMENT HAS BEEN READ IN.	4F13153
	05742	0	02000	4	00001		TRA	1,4	*	EXIT TO MAIN ROUTINE TO FINISH.	4F13154
										END OF PROGRAM CA100.	4F13155
										* * * * *	4F13156
										CC500,4/ CALLER=CC000,	4F13157
										CC500 BRINGS NEXT CHARACTER OF DICTIONARY INTO AC(30-35),	4F13158
	05743	-0	75400	0	00000	CC500	PXD	,0		CLEAR THE AC	4F13159
	05744	2	00001	2	05752		TIX	CC502,2,1		IF NO DICTIONARY CHARACTERS	4F13160
	05745	-0	53400	2	01113		LXD	2G,2		REMAIN IN THE MO, THEN	4F13161
	05746	0	56000	2	06145		LDQ	DIC,2		REFILL WITH NEXT DICTIONARY WORD,	4F13162
	05747	1	77777	2	05750		TXI	CC501,2,-1		RESET THE	4F13163
	05750	-0	63400	2	01113	CC501	SXD	2G,2		DICTIONARY WORD TAG, AND	4F13164
	05751	0	53400	2	01414		LXA	L(6),2		SET THE CHARACTER COUNT = 6.	4F13165
	05752	-0	76300	0	00006	CC502	LGL	6		SHIFT CHAR INTO AC(30-35),	4F13166
	05753	0	02000	4	00001		TRA	1,4	*	AND RETURN TO CALLER.	4F13167
										END OF PROGRAM CC500.	4F13168
										* * * * *	4F13169
										ETMSW(LTMSW)*4/ CALLS=CIT, CALLERS=RDC,LPR,SPC,CMA,EMK,	4F13170
										ETMSW = ENTRY POINT USED BY RDC,CMA.	4F13171
D	05754	-3	00000	0	05772	ETMSW	TXL	NOTTM,0		SWITCH (TXL=TRA, TXH=NOP),	4F13172
	05755	-0	50000	0	06112		CAL	ETM		PICKUP ETM00, AND	4F13173
	05756	1	00000	0	05761	XR4X	TXI	SETOP,0,**		GO SET OP.	4F13174
										LTMSW = ENTRY POINT USED BY LPR,SPC,CMA,EMK,	4F13175
D	05757	-3	00000	0	05772	LTMSW	TXL	NOTTM,0		SWITCH (TXL=TRA, TXH=NOP),	4F13176
	05760	-0	50000	0	06113		CAL	LTM		PICKUP LTM000, AND	4F13177
	05761	0	60200	0	06142	SETOP	SLW	TOP		SET TOP.	4F13178
	05762	-0	63400	4	05756		SXD	XR4X,4		SAVE THE C(XR4), AND	4F13179
	05763	0	07400	4	01731		TSX	CIT,4	*	GO MAKE THE FOLLOWING CIT ENTRY=	4F13180
	05764	0	00000	0	01367		PZE	SL		WORD1--0(IFN)000	4F13181
	05765	0	00000	0	06142		PZE	TOP		WORD2--ETM000 OR LTM000	4F13182
	05766	0	00000	0	01406		PZE	L(0)		WORD3--000000	4F13183
	05767	0	00000	0	01406		PZE	L(0)		WORD4--000000	4F13184
	05770	0	60000	0	01367		STZ	SL		CLEAR SL,	4F13185
	05771	-0	53400	4	05756		LXD	XR4X,4		RESTORE THE C(XR4), AND	4F13186

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05772 0 02000 4 00001 NOTTM TRA 1,4 * EXIT TO CALLER. 4F13189
END OF PROGRAM ETMSW(LTMSW). 4F13190
* * * * * 4F13191
4F13192
IFFIX,1/ USES=TESTFX, CALLERS=CMA,VRA(VRD), 4F13193
05773 -0 50000 0 00030 IFFIX CAL EIFNO SET 4F13194
05774 0 60000 0 01347 STZ G G TO 4F13195
05775 0 62200 0 01347 STD G (0(IFN)000), 4F13196
05776 -0 50000 0 07404 CAL SYM MOVE SYMBOL 4F13197
05777 0 60200 0 01350 SLW G+1 INTO G+1. 4F13198
06000 -0 50000 0 07310 CAL CHR-6 PICKUP 1ST CHARACTER OF SYMBOL, AND 4F13199
D 06001 1 00000 0 03242 TXI TESTFX+1,0 * GO TEST FOR FIXED OR FLOATING PT. 4F13200
END OF PROGRAM IFFIX. 4F13201
* * * * * 4F13202
4F13203
INPUT(OUTPUT),2/ CALLS=GIF,CIT,LIB, 4F13204
CALLERS =RDC,RIT,RDP,WOT,PDC,WBT,WRD,RDD. 4F13205
INPUT = ENTRY POINT USED BY RDC,RIT,RBT,RDD, 4F13206
06002 0 50000 0 01414 INPUT CLA L(6) PICKUP 6 TO 4F13207
TD 06003 1 00000 0 06005 TXI OUTPUT+1 GO SET INOUT FOR FORVAL ENTRY. 4F13208
OUTPUT = ENTRY POINT USED BY RDP,WOT,PDC,WBT,WRD. 4F13209
06004 0 50000 0 01413 OUTPUT CLA L(5) PICKUP 5 TO 4F13210
06005 0 60100 0 05536 STO INOUT SET INOUT FOR FORVAR ENTRY. 4F13211
06006 0 07400 4 02375 TSX GIF,4 * SET SL = IFN,000. 4F13212
06007 0 07400 4 01731 TSX CIT,4 * GO MAKE THE FOLLOWING CIT ENTRY= 4F13213
06010 0 00000 0 01367 PZE SL WORD1--0(IFN)000 4F13214
06011 0 00000 0 01537 PZE CAL WORD2--CAL000 4F13215
06012 0 00000 0 01510 PZE 15P WORD3--*00000 4F13216
06013 0 00000 0 01406 PZE L(0) WORD4--000000 4F13217
06014 0 07400 4 06023 TSX LIB,4 * MAKE CLOSUB ENTRY, AND COMPILER= 4F13218
06015 0 00000 0 01406 PZE L(0) WORD1--000000 4F13219
06016 0 00000 0 06125 PZE XIT WORD2--XIT000 4F13220
06017 0 00000 0 06132 PZE LEV WORD3--(LEV) 4F13221
06020 0 00000 0 01406 PZE L(0) WORD4--000000 4F13222
06021 0 60000 0 01367 STZ SL CLEAR SL, AND 4F13223
06022 0 02000 2 00001 TRA 1,2 * EXIT TO CALLER. 4F13224
END OF PROGRAM INPUT(OUTPUT), 4F13225
* * * * * 4F13226
4F13227
LIB,1/ CALLS=TET00,CIT, CALLERS=RDC,EMK,INPUT(OUTPUT), 4F13228
06023 -0 50000 4 00003 LIB CAL 3,4 MOVE NAME OF SUBROUTINE, 4F13229
06024 0 62100 0 06025 STA LIC ADDRESS OF WHICH 4F13230
06025 -0 50000 0 00000 LIC CAL ** IS IN WORD3 OF CALLING SEQ, 4F13231
06026 0 60200 0 01347 SLW G INTO G, AND 4F13232
06027 0 07400 1 03321 TSX TET00,1 * GO ENTER IN THE 4F13233
06030 0 00000 0 00011 PZE 9 CLOSUB TABLE. 4F13234
D 06031 1 00000 0 01731 TXI CIT,0 * MAKE CIT ENTRY, AND EXIT TO CALLER. 4F13235
END OF PROGRAM LIB. 4F13236
* * * * * 4F13237
4F13238
VRA(VRD),4/ CALLS=IFFIX,DIAG,TET00,CIT,DRTABS,JIF, 4F13239
CALLERS =RIT,WOT,EFT, 4F13240
VRA = ENTRY POINT USED BY EFT. 4F13241
06032 0 50000 0 02400 VRA CLA L(TL) RESET TPOA ADDRESS 4F13242

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06033	0	62100	0	05102	STA	TPOA		TO TL.	4F13243
06034	-0	50000	0	00415	CAL	TXLOP		PREPARE TO SET OP-SWITCH TO TRA.	4F13244
06035	1	77777	4	06037	TXI	VRD1,4,-1		SET RETURN TO TSX+2, AND GO SET OP.	4F13245
						VRD = ENTRY POINT USED BY		RIT,WOT,	4F13246
06036	0	50000	0	00415	VRD	CLA	TXLOP	PREPARE TO SET OP-SWITCH TO NOP.	4F13247
06037	0	63000	0	06052	VRD1	STP	VRX	SET VRX OP-SWITCH.	4F13248
06040	-0	63400	4	06052		SXD	VRX,4	SAVE THE C(XR4) FOR RETURN.	4F13249
06041	0	07400	1	05773		TSX	IFFIX,1	* SET UP IFN AND SYMBOL FOR FORVAR.	4F13250
06042	0	07400	4	03400		TSX	DIAG,4	* ILLEGAL USE OF FLOATING VARIABLE.	4F13251
06043	0	07400	1	03321		TSX	TET00,1	* IF SYMBOL IS FXD-PT, GO MAKE	4F13252
06044	0	00000	0	00005		PZE	5	ENTRY IN FORVAR TABLE.	4F13253
06045	0	07400	4	01731		TSX	CIT,4	* GO MAKE THE FOLLOWING CIT ENTRY=	4F13254
06046	0	00000	0	01367		PZE	SL	WORD1-0(IFN)000	4F13255
06047	0	00000	0	01537		PZE	CAL	WORD2-CAL000	4F13256
06050	0	00000	0	07404		PZE	SYM	WORD3-(FXD-PT SYMBOL)	4F13257
06051	0	00000	0	01406		PZE	L(0)	WORD4-000000	4F13258
06052	3	00000	0	06055	VRX	TXH	VDA,0,**	SWITCH ITXL=TRA, TXH=NOP),	4F13259
06053	-0	50000	0	06121		CAL	STD	PICKUP STD000, AND	4F13260
06054	1	00000	0	06076	XRW	TXI	RVX,0,**	GO SET TOP.	4F13261
06055	0	50000	0	06140	VDA	CLA	CON	IF CON	4F13262
06056	0	10000	0	06070		TZE	SDA	IS NOT ZERO,	4F13263
06057	0	60100	0	01347		STO	G	THEN	4F13264
06060	0	07400	4	00417		TSX	FXCNIX,4	* ENTER CON IN FIXCON,AND GET TAG,	4F13265
06061	0	76700	0	00022		ALS	18	ADJUST TAG, AND	4F13266
06062	0	60100	0	07402		STO	RA	SET RA.	4F13267
06063	0	07400	4	01731		TSX	CIT,4	* GO MAKE THE FOLLOWING CIT ENTRY.	4F13268
06064	0	00000	0	01406		PZE	L(0)	WORD1-000000	4F13269
06065	0	00000	0	01532		PZE	ADD	WORD2-ADD000	4F13270
06066	0	00000	0	01501		PZE	2P	WORD3-200000	4F13271
06067	0	00000	0	07402		PZE	RA	WORD4-(FIXCON TAG)	4F13272
06070	0	07400	4	01731	SDA	TSX	CIT,4	* GO MAKE THE FOLLOWING CIT ENTRY=	4F13273
06071	0	00000	0	01406		PZE	L(0)	WORD1-000000	4F13274
06072	0	00000	0	01535		PZE	ARS	WORD2-ARSO00	4F13275
06073	0	00000	0	01406		PZE	L(0)	WORD3-000000	4F13276
06074	0	00000	0	01466		PZE	D18	WORD4-0(18)000	4F13277
06075	-0	50000	0	01571		CAL	STA	PICKUP STAO00, AND	4F13278
06076	0	60200	0	06142	RVX	SLW	TOP	SET TOP TO STA OR STD.	4F13279
06077	0	07400	4	02372		TSX	JIF,4	* GO JUMP IFN, AND SET SL AND TL,	4F13280
06100	0	07400	4	01731		TSX	CIT,4	* GO MAKE THE FOLLOWING CIT ENTRY=	4F13281
06101	0	00000	0	01406		PZE	L(0)	WORD1- 00600	4F13282
06102	0	00000	0	06142		PZE	TOP	WORD2-STA000 OR STD000	4F13283
06103	0	00000	0	01371		PZE	TL	WORD3-0(IFN)000	4F13264
06104	0	00000	0	01406		PZE	L(0)	WORD4-000000	4F13285
06105	-0	75400	0	05555	NLA	PXD	LAST,0	CLEAR THE AC	4F13286
06106	-0	53400	4	06052		LXD	VRX,4	RESTORE THE C(XR4), AND	4F13287
06107	0	02000	4	00001		TRA	1,4	* EXIT TO CALLER.	4F13288
						END OF PROGRAM VRA(VRD),			4F13289
						*****			4F13290
						STATEA/5--CONSTANTS AND VARIABLES USED BY STATE A=			4F13292
									4F13293
06110	222324000000		BCD	BCD	1BCD000			CONSTANT USED BY IOT.	4F13294
06111	226263000000		BST	BCD	1BST000			CONSTANT USED BY IOT.	4F13295
06112	256344000000		ETM	BCD	1ETM000			CONSTANT USED BY IOT,	4F13296

06113	4363440000000	LTM	BCD	1LTM000	CONSTANT	USED	BY	IOT.	4F13297
06114	4563510000000	NTR	BCD	1NTR000	CONSTANT	USED	BY	IOT.	4F13298
06115	5124510000000	RDR	BCD	1RDR000	CONSTANT	USED	BY	IOT.	4F13299
06116	5125660000000	REW	BCD	1REW000	CONSTANT	USED	BY	IOT.	4F13300
06117	5163220000000	RTB	BCD	1RTB000	CONSTANT	USED	BY	IOT.	4F13301
06120	6243660000000	SLW	BCD	1SLW000	CONSTANT	USED	BY	IOT.	4F13302
06121	6263240000000	STD	BCD	1STD000	CONSTANT	USED	BY	IOT.	4F13303
06122	6624510000000	WDR	BCD	1WDR000	CONSTANT	USED	BY	IOT.	4F13304
06123	6625260000000	WEF	BCD	1WEF000	CONSTANT	USED	BY	IOT.	4F13305
06124	6663220000000	WTB	BCD	1WTB000	CONSTANT	USED	BY	IOT.	4F13306
06125	6731630000000	XIT	BCD	1XIT000	CONSTANT	USED	BY	IOT.	4F13307
06126	742224233460	BDC	BCD	1(BDC)	CONSTANT	USED	BY	IOT.	4F13308
06127	742362303460	CSH	BCD	1(CSH)	CONSTANT	USED	BY	IOT.	4F13309
06130	742422233460	DBC	BCD	1(DBC)	CONSTANT	USED	BY	IOT.	4F13310
06131	742631433460	FIL	BCD	1(FIL)	CONSTANT	USED	BY	IOT.	4F13311
06132	744325653460	LEV	BCD	1(LEV)	CONSTANT	USED	BY	IOT.	4F13312
06133	745163453460	RTN	BCD	1(RTN)	CONSTANT	USED	BY	IOT.	4F13313
06134	746223303460	SCH	BCD	1(SCH)	CONSTANT	USED	BY	IOT.	4F13314
06135	746247303460	SPH	BCD	1(SPH)	CONSTANT	USED	BY	IOT.	4F13315
06136	746263303460	STH	BCD	1(STH)	CONSTANT	USED	BY	IOT.	4F13316
06137	746362303460	TSH	BCD	1(TSH)	CONSTANT	USED	BY	IOT.	4F13317
									4F13318
		06140	CON	BSS	1	VARIABLE	USED	BY	IOT.
06141	0 00000 0 00000	END	PZE	**	VARIABLE	USED	BY	IOT.	4F13319
		06142	TOP	BSS	1	VARIABLE	USED	BY	IOT.
06143	0 00000 0 00000	TSA	PZE	**	VARIABLE	USED	BY	IOT.	4F13320
06144	0 00000 0 00000	TTA	PZE	**	VARIABLE	USED	BY	IOT.	4F13321
									4F13322
									4F13323
									4F13324
									4F13325
									4F13326
									4F13327
									4F13328
									4F13329
									4F13330
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									4F13345
									4F13346
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									4F13348
									4F13349
									4F13350
									4F13351
06145	+244677274663	DIC	OCT	244677274663	DO-GOT				4F13327
06146	-067731267462		OCT	-67731267462	O-IF(S				4F13328
06147	+254562256266		OCT	254562256266	ENSESW				4F13329
06150	+316323307731		OCT	316323307731	ITCH-I				4F13330
06151	+267462254562		OCT	267462254562	F(SENS				4F13331
06152	+254331273063		OCT	254331273063	ELIGHT				4F13332
06153	-373126243165		OCT	-373126243165	-IFDIV				4F13333
06154	+312425233025		OCT	312425233025	IDECHE				4F13334
06155	+234277312621		OCT	234277312621	CK-IFA				4F13335
06156	+232364446443		OCT	232364446443	CCUMUL				4F13336
06157	+216346514665		OCT	216346514665	ATOROV				4F13337
06160	+255126434666		OCT	255126434666	ERFLOW				4F13338
06161	-373126506446		OCT	-373126506446	-IFQUO				4F13339
06162	-233125456346		OCT	-233125456346	TIENTO				4F13340
06163	-252551264346		OCT	-252551264346	VERFLO				4F13341
06164	-267731267721		OCT	-267731267721	W-IF-A				4F13342
06165	-226231274577		OCT	-226231274577	SSIGN-				4F13343
06166	-226346477747		OCT	-226346477747	STOP-P				4F13344
06167	+216462257762		OCT	216462257762	AUSE-S				4F13345
06170	+254562254331		OCT	254562254331	ENSELI				4F13346
06171	+273063772431		OCT	273063772431	GHT-DI				4F13347
06172	-042545623146		OCT	-42545623146	MENSIO				4F13348
06173	-057725506431		OCT	-57725506431	N-EQUI				4F13349
06174	-252143254523		OCT	-252143254523	VALENC				4F13350
06175	+257726512550		OCT	257726512550	E-FREQ				4F13351

06176	-242545237077	OCT	-242545237077	UENCY-	4F13352
06177	+234645633145	OCT	234645633145	CONTIN	4F13353
06200	-242577512521	OCT	-242577512521	UE-REA	4F13354
06201	+246321472577	OCT	246321472577	DTAPE-	4F13355
06202	-112521243145	OCT	-112521243145	READIN	4F13356
06203	-076463632147	OCT	-76463632147	PUTTAP	4F13357
06204	+257751252124	OCT	257751252124	E-READ	4F13358
06205	+245164447751	OCT	245164447751	DRUM-R	4F13359
06206	+252124776651	OCT	252124776651	EAD-WR	4F13360
06207	+316325632147	OCT	316325632147	ITETAP	4F13361
06210	+257766513163	OCT	257766513163	E-WRIT	4F13362
06211	+254664634764	OCT	254664634764	EOUTPU	4F13363
06212	-236321472577	OCT	-236321472577	TTAPE-	4F13364
06213	-265131632524	OCT	-265131632524	WRITED	4F13365
06214	-116444774751	OCT	-116444774751	RUM-PR	4F13366
06215	+314563774764	OCT	314563774764	INT-PU	4F13367
06216	-052330775125	OCT	-52330775125	NCH-RE	4F13368
06217	-263145247722	OCT	-263145247722	WIND-B	4F13369
06220	+212342624721	OCT	212342624721	ACKSPA	4F13370
06221	+232577254524	OCT	232577254524	CE-END	4F13371
06222	+263143257726	OCT	263143257726	FILE-F	4F13372
06223	-065144216377	OCT	-65144216377	ORMAT-	4F13373
06224	-226422514664	OCT	-226422514664	SUBROU	4F13374
06225	-233145257723	OCT	-233145257723	TINE-C	4F13375
06226	-064444464577	OCT	-064444464577	OMMON-	4F13376
06227	-112563645145	OCT	-112563645145	RETURN	4F13377
06230	-372321434377	OCT	-372321434377	-CALL-	4F13378
06231	+254524747726	OCT	254524747726	END(-F	4F13379
06232	-244523633146	OCT	-244523633146	UNCTIO	4F13360
06233	-057777777777	OCT	-057777777777	N-----	4F13361
	06234	BSS	10		4F133815
			END OF DICTIONARY.		4F13382
			* * * * *		*4F13383

T/ TRANSFER TABLE IUSED BY CC000),

D	06246	1	00000	0	03653	T	TXI	C0100,0	DO,	4F13385
D	06247	1	00000	0	03720		TXI	C0200,0	GO TO.	4F13386
D	06250	1	00000	0	04106		TXI	C0400,0	IF ISENSE SWITCH.	4F13387
D	06251	1	00000	0	04150		TXI	C0500,0	IF (SENSE LIGHT.	4F13388
D	06252	1	00000	0	04154		TXI	C0600,0	IF DIVIDE CHECK.	4F13389
D	06253	1	00000	0	04162		TXI	C0700,0	IF AC OVERFLOW,	4F13390
D	06254	1	00000	0	04166		TXI	C0800,0	IF MO OVERFLOW.	4F13391
D	06255	1	00000	0	04033		TXI	C0300,0	IF.	4F13392
D	06256	1	00000	0	04216		TXI	C1000,0	A5SIGN.	4F13393
D	06257	1	00000	0	04343		TXI	C1300,0	STOP.	4F13394
D	06260	1	00000	0	04170		TXI	C0900,0	PAUSE.	4F13395
D	06261	1	00000	0	04251		TXI	C1100,0	SENSE LIGHT,	4F13396
D	06262	-3	00000	0	04266		TXL	C1200,0	DIMENSION*	4F13397
D	06263	-3	00000	0	04375		TXL	C1500,0	EOUIVALENCE.	4F13398
D	06264	-3	00000	0	04354		TXL	C1400,0	FREOUENCY,	4F13399
D	06265	1	00000	0	04433		TXI	C1600,0	CONTINUE.	4F13400
D	06266	1	00000	0	05012		TXI	RBT,0	READ TAPE.	4F13401
D	06267	1	00000	0	04745		TXI	RIT,0	READ INPUT TAPE.	4F13402
D	06270	1	00000	0	05063		TXI	RDD,0	READ DRUM.	4F13403

D	06271	1	00000	0	04673	TXI	RDC,0	READ CARD.	4F13405
D	06272	1	00000	0	04777	TXI	WBT,0	WRITE TAPE.	4F13406
D	06273	1	00000	0	04764	TXI	WOT,0	WRITE OUTPUT TAPE.	4F13407
D	06274	1	00000	0	05044	TXI	WRD,0	WRITE DRUM,	4F13408
D	06275	1	00000	0	04753	TXI	RDP,0	PRINT.	4F13409
D	06276	1	00000	0	04772	TXI	PDC,0	PUNCH.	4F13410
D	06277	1	00000	0	05107	TXI	RWN,0	REWIND.	4F13411
D	06300	1	00000	0	05111	TXI	BSP,0	BACKSPACE.	4F13412
D	06301	1	00000	0	05066	TXI	EFT,0	END FILE.	4F13413
D	06302	-3	00000	0	05113	TXL	FOR,0	FORMAT.	4F13414
D	06303	-3	00000	0	04442	TXL	C3000,0	SUBROUTINE.	4F13415
D	06304	-3	00000	0	04512	TXL	C3100,0	COMMON.	4F13416
D	06305	1	00000	0	04536	TXI	C3200,0	RETURN.	4F13417
D	06306	1	00000	0	04607	TXI	C3300,0	CALL.	4F13418
D	06307	-3	00000	0	04660	TXL	C3400,0	END.	4F13419
D	06310	-3	00000	0	04440	TXL	C3500,0	FUNCTION.	4F13420
					06311	BSS	10		4F134205
								END OF TRANSFER TABLE.	4F13421
	06323	ENDADR	BSS	0					4F134215
								* * * * *	4F13422
									4F13423
	07307	ENDA	ORG	3783					4F13424
	07307	BIN	BSS	1				VARIABLE USED BY IOT.	4F13425
	07316	CHR	BES	6				VARIABLE USED BY IOT.	4F13426
	07316		BSS	50				PARAMETERS FOR TLDOS TABLE -IOT.	4F13427
	07400	DOLEV	BSS	1				PARAMETERS FOR TLDOS TABLE -IOT.	4F13428
	07401	OP	BSS	1				VARIABLE USED BY IOT.	4F13429
	07402	RA	BSS	1				VARIABLE USED BY IOT.	4F13430
	07403	SA	BSS	1				VARIABLE USED BY IOT.	4F13431
	07404	SYM	BSS	1				VARIABLE USED BY IOT.	4F13432
	07405	TLDOS	BSS	250				DO TABLE USED BY IOT.	4F13433
								END OF WORKING STORAGE USED BY STATEA.	4F13434
								* * * * *	4F13435
									4F13436
								END OF THE NON-ARITHMETIC PART OF SECTION ONE.	4F13437
									4F13438
								* * * * *	4F13439
									4F13440
								ARITHMETIC / STATE B=	4F13441
								704 FORTRAN MASTER RECORD CARD / STATE B = F0180000.	4F13442
	00000		ORG	0					4F134421
00000	0	00506	0	03440	PZE	ORGB, ,DMWR06			4F134422
00001	0	00000	0	05214	PZE	ENDB-1			4F134423
									4F13443
	03440	ORGB	ORG	1824					4F13444
									4F13445
								THIS IS A RECODED VERSION OF STATE B OF SECTION ONE, 704	4F13446
								FORTRAN II. THE SCAN HAS BEEN COMPLETELY RECODED AND LEVEL	4F13447
								ANALYSIS HAS BEEN FOLDED OVER.	4F13448
									4F13449
								STATE B CONSISTS OF TWO PARTS...SCAN AND LEVEL ANALYSIS.	4F13450
								THE SCAN IS LEFT TO RIGHT OVER THE SOURCE STATEMENT WHICH IS	4F13451
								IN THE F REGION OF COMMON AND IS IN BCD.	4F13452
								EACH FIXED POINT CONSTANT, FLOATING POINT CONSTANT, AND BCD	4F13453

(HOLLERITH) ARGUMENT IN CALL NAME STATEMENTS ARE ENTERED IN 4F13454
 TABLES AND GIVEN AN INTERNAL VARIABLE NAME. 4F13455
 LEVEL ANALYSIS IS PREFORMED FOR EACH ELEMENT OF THE STATEMENT 4F13456
 WHERE AN ELEMENT IS DEFINED AS A VARIABLE, FUNCTION NAME OR (4F13457
 AND THE OPERATOR WHICH PRECEDES IT. 4F13458

03440	0	76000	0	00140	SLF			4F13459
03441	0	50000	0	04741	CLA SIG1ST			4F13460
03442	0	60100	0	00445	STO SIG1IX-3			4F13461
03443	0	60000	0	01122	STZ ARGCTR	CLEAR		4F13462
03444	0	60000	0	01124	STZ CHSAVE	X		4F13463
03445	0	60000	0	01117	STZ 3LBAR	X		4F13464
03446	0	60000	0	01360	STZ NBAR	X		4F13465
03447	0	60000	0	05277	STZ CBAR	X		4F13466
03450	0	60000	0	05300	STZ ABAR	X		4F13467
03451	0	60000	0	05301	STZ FSTYPE	X		4F13468
03452	-0	53400	4	01507	LXD 1BAR,4	SET NBAR=-1		4F13469
03453	-0	63400	4	01360	SXD NBAR,4	X		4F13470
03454	-0	50000	0	01500	CAL E(	SET ARERAS - E(		4F13471
03455	0	60200	0	01120	SLW ARERAS	X		4F13472
03456	0	07400	4	01671	TSX C0190X,4	SET FWA --F AND CHCTR - 0		4F13473
03457	-0	50000	0	00422	CAL TXHOP	SET SWITCHES FOR LEFT SCAN.		4F13474
03460	0	63000	0	03563	STP MS093	X		4F13475
03461	0	63000	0	03767	STP MS310	X		4F13476
03462	0	63000	0	03750	STP MS321	X		4F13477
03463	-0	50000	0	01512	MS010 CAL ADPLUS	SET OP TO ADDITION		4F13478
03464	0	60200	0	01127	MS030 SLW E+1	X		4F13479
03465	0	60000	0	05303	STZ FNBITS	CLEAR FUNCTION NAME INDICATOR		4F13480
03466	0	60000	0	05304	STZ FNCTR	CLEAR FUNCTION ARG COUNTER.		4F13481
03467	0	60000	0	01347	STZ G	CLEAR RECEIVING CELL.		4F13482
03470	0	50200	0	01406	CLS L(0)	SET E = -0		4F13483
03471	0	60100	0	01126	STO E	X		4F13484
03472	0	53400	2	01414	LXA L(6),2	SET IR2 FOR SIX CHARS.		4F13485
03473	-0	50000	0	01124	MS040 CAL CHSAVE	CHAR IN CHSAVE, IF ANY, TO AC.		4F13486
03474	-0	10000	0	03476	TNZ MS041	X		4F13467
03475	0	07400	4	01707	TSX C0190,4	CHSAVE EMPTY, GET NEXT CHAR.		4F13488
03476	0	34000	0	01417	MS041 CAS L(9)	IS CHAR. NUMERIC		4F13489
03477	0	02000	0	03504	TRA MS050	N/, TAKE TRA		4F13490
D 03500	3	00000	0	04417	MS4007 TXH CM4100,0			4F13491
03501	0	07400	4	04463	TSX ROYCNV,4	X		4F13492
03502	0	02000	0	04030	TRA HOLL	RETURN 1, THIS WAS HOLLERITH.		4F13493
03503	0	02000	0	04076	TRA LATXH	THIS WAS FIXED OR FLOATING CONSTANT.		4F13494
03504	0	53400	4	01373	MS050 LXA L(10),4	PREPARE TO TEST FOR PUNCTUATION.		4F13495
03505	0	34000	4	01406	MS051 CAS CTEST,4			4F13496
03506	0	02000	0	03510	TRA MS052	X		4F13497
03507	0	02000	0	03543	TRA MS090	CHAR IS SOME PUNCTUATION.		4F13498
03510	2	00001	4	03505	MS052 TIX MS051,4,1	X		4F13499
03511	0	76700	2	00044	MS060 ALS 36,2	POSITION CHAR FOR BUILDING SYMBOL.		4F13500
03512	-0	60200	0	01347	ORS G	ADD CHAR TO THOSE IN G.		4F13501
03513	1	00006	2	03514	TXI MS061,2,6	UPDATE POSITIONING TAG.		4F13502
03514	0	07400	4	01707	MS061 TSX C0190,4	GET NEXT CHAR.		4F13503
03515	0	53400	4	01373	MS070 LXA L(10),4	PREPARE TO TEST FOR PUNCTUATION.		4F13504
03516	0	34000	4	01406	MS071 CAS CTEST,4	X		4F13505
03517	0	02000	0	03521	TRA MS072	X		4F13506
03520	0	02000	0	03545	TRA MS091	CHAR IS SOME PUNCTUATION.		4F13507

03521	2	00001	4	03516	MS072	TIX MS071,4,1	X	4F13508
03522	-3	00022	2	03511		TXL MS060,2,18	IF THIS IS CHAR I, 2 /R 3 GO BUILD G.	4F13509
03523	0	34000	0	01422		CAS L(F)	IS THIS AN F ENDING FUNCTION NAME.	4F13510
03524	0	02000	0	03526		TRA MS073	X	4F13511
03525	0	02000	0	03530		TRA MS080	MAYBE, GO LOOK AT NEXT CHAR.	4F13512
03526	-3	00044	2	03511	MS073	TXL MS060,2,36	TEST FOR UNDER 7 CHARS.	4F13513
03527	0	07400	4	03400	MS074	TSX DIAG,4	BUILD G, 7TH CHAR IS ERROR.	4F13514
03530	0	07400	4	01707	MS080	TSX C0190,4	GET NEXT CHAR.	4F13515
03531	0	34000	0	01375		CAS OPEN	TEST FOR (.	4F13516
03532	0	02000	0	03534		TRA MS081	X	4F13517
03533	0	02000	0	03555		TRA MS092	YES, THIS IS A FUNCTION NAME.	4F13518
03534	0	60100	0	01331	MS081	STO FIRSTC	NO, SAVE CURRENT CHAR.	4F13519
03535	-0	50000	0	01422		CAL L(F)	ADD F TO CONTENTS OF G,	4F13520
03536	0	76700	2	00044		ALS 36,2	X	4F13521
03537	-0	60200	0	01347		ORS G	X	4F13522
03540	3	00044	2	03527		TXH MS074,2,36	TEST FOR 7TH CHAR, YES IS ERROR,	4F13523
03541	0	50000	0	01331		CLA FIRSTC	RESTORE CURRENT CHAR.	4F13524
03542	1	00006	2	03515		TXI MS070,2,6	UPDATE POSITIONING TAG,	4F13525
03543	0	60000	0	01124	MS090	STZ CHSAVE	CLEAR	4F13526
03544	0	02000	4	03677		TRA TRBLKA,4		4F13527
03545	0	60200	0	01124	MS091	SLW CHSAVE	OP IS IN NEXT ELEMENT, SAVE,	4F13528
03546	-0	50000	0	01430		CAL BLANK	ADD BLANK TO CHARS IN G.	4F13529
03547	0	76700	2	00044		ALS 36,2	X	4F13530
03550	-0	60200	0	01347		ORS G	X	4F13531
03551	0	56000	0	01347		LDQ G	MOVE G TO E+2 AND TO G+1,	4F13532
03552	-0	60000	0	01130		STQ E+2	X	4F13533
03553	-0	60000	0	01350		STQ G+1	X	4F13534
03554	0	02000	4	03727		TRA TRBLKB,4	NOW BRANCH TO INDIVIDUAL ROUTINE	4F13535
03555	-0	75400	0	00000	MS092	PXD ,0	CLEAR	4F13536
03556	0	56000	0	01526		LDQ BLANKS	ADD BLANKS TO SUBROUTINE NAME IN G.	4F13537
03557	-0	76300	2	00052		LGL 42,2	X	4F13538
03560	-0	50100	0	01347		ORA G	X	4F13539
03561	0	60200	0	01347		SLW G	X	4F13540
03562	0	60200	0	01130		SLW E+2	MOVE FUNCTION NAME TO E+2.	4F13541
03563	0	00000	0	04026	MS093	*** MS335,0	TXH FOR LEFT SIDE, TXL FOR RIGHT SIDE.	4F13542
03564	-0	53400	4	00470		LXD BK,4	THIS IS ARITH FUNCTION STATEMENT.	4F13543
03565	0	60200	4	00471		SLW FORSUB,4	ENTER FUNCTION NAME IN FORSUB TABLE.	4F13544
03566	-0	50000	0	00030		CAL EIFNO	ENTER INTERNAL FORMULA NO IN FORSUB.	4F13545
03567	-0	32000	0	01527		ANA MASK1	X	4F13546
03570	0	60100	4	00472		STO FORSUB+1,4	X	4F13547
03571	1	77776	4	03572		TXI FS010,4,-2	UPDATE COUNT OF ENTRIES IN FORSUB.	4F13548
03572	-0	63400	4	00470	FS010	SXD BK,4	X	4F13549
03573	0	07400	4	01707	FS020	TSX C0190,4	GET FIRST CHAR OF ARGUMENT.	4F13550
03574	0	34000	0	01400		CAS EQUAL	TEST FOR EQUAL,	4F13551
03575	0	02000	0	03577		TRA FS030	X	4F13552
03576	0	02000	0	03755		TRA MS322	GO MOVE FROM E, E+1, E+2 TO LEFT, LEFT+1,+2	4F13553
03577	0	34000	0	01417	FS030	CAS L(9)	TEST FOR ILLEGAL ARGUMENT,	4F13554
03600	0	02000	0	03603		TRA FS040	LEGAL, CONTINUE	4F13555
03601	3	00000	0	04427	MS9002	TXH CM4200,0		4F13556
03602	0	07400	4	03400		TSX DIAG,4	BEGINS NUMERIC, ERROR,	4F13557
03603	0	07400	2	01624	FS040	TSX C0160,2	COLLECT ARGUMENT NAME IN 1G,	4F13558
03604	0	07400	4	03255		TSX TESTB0,4	TEST CHAR FOLLOWING ARG FOR , OR)	4F13559
03605	-0	53400	2	01122		LXD ARGCTR,2	GET COUNT OF ARGUMENTS	4F13560
03606	0	56000	0	01112		LDQ 1G	ENTER ARGUMENT NAME IN ARGREG TABLE.	4F13561

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03675	0	02000	0	03707	TRA MS250	+		4F13616
03676	0	76700	0	00036	MS240 ALS 30	*	SAVE *	4F13617
				03677	TRBLKA BSS 0			4F13618
03677	0	60200	0	01127	SLW E+1	X		4F13619
03700	0	07400	4	01707	TSX C0190,4	GET	NEXT CHAR.	4F13620
03701	0	34000	0	01405	CAS STAR	IS	IT *	4F13621
03702	0	02000	0	03476	TRA MS041	X		4F13622
03703	0	02000	0	03705	TRA MS241	YES,	THIS WAS **	4F13623
03704	0	02000	0	03476	TRA MS041	NO,	GO COMPARE TO OTHER PUNCTUATION.	4F13624
03705	-0	50000	0	01525	MS241 CAL STRSTR	REPLACE	* WITH **	4F13625
03706	0	02000	0	03710	TRA MS251	X		4F13626
03707	0	76700	0	00036	MS250 ALS 30	POSITION	CHAR WHICH IS + OR - OR /	4F13627
03710	0	60200	0	01127	MS251 SLW E+1	PUT	CURRENT OP IN E+1.	4F13628
03711	0	02000	0	03473	TRA MS040	NOW	GO COLLECT SYMBOL,	4F13629
03712	0	76700	0	00036	MS260 ALS 30	(	TO SYMBOL WORD	4F13630
03713	0	60200	0	01130	SLW E+2	X		4F13631
03714	0	02000	0	04074	TRA LATXL	GO	PERFORM LEVEL ANALYSIS FOR (	4F13632
03715	0	02000	0	03726	TRA MS300	ENDMK		4F13633
03716	0	02000	0	03747	TRA MS320	(		4F13634
03717	0	02000	0	03726	TRA MS300	,		4F13635
03720	0	02000	0	03726	TRA MS300	)		4F13636
03721	0	02000	0	03767	TRA MS310	=		4F13637
03722	0	02000	0	03726	TRA MS300	-		4F13638
03723	0	02000	0	03726	TRA MS300	/		4F13639
03724	0	07400	4	03400	TSX DIAG,4	.		4F13640
03725	0	02000	0	03726	TRA MS300	+		4F13641
03726	-0	75400	0	00000	MS300 PXD ,0	*	CLEAR	4F13642
				03727	TRBLKB BSS 0	BASE	ADDRESS FOR TAGGED TRANSFER.	4F13643
03727	-0	76300	0	00006	LGL 6	GET	FIRST CHAR OF SYMBOL.	4F13644
03730	0	07400	1	03242	TSX TESTFX+1,1	TEST	FOR FIXED OR FLOATING POINT.	4F13645
03731	0	02000	0	04074	TRA LATXL	FLOATING,	GO PERFORM LEVEL ANALYSIS.	4F13646
03732	-0	50000	0	00030	CAL EIFNO	FIXED,	PREPARE FORVAR ENTRY.	4F13647
03733	-0	32000	0	01527	ANA MASK1	X		4F13648
03734	0	60200	0	01347	SLW G	X		4F13649
03735	0	07400	1	03321	TSX TET00,1	MAKE	FORVAR ENTRY.	4F13650
03736	0	00000	0	00005	5	X		4F13651
03737	-0	75400	0	00000	PXD ,0			4F13652
03740	0	56000	0	01356	LDQ LEFT+2			4F13653
03741	-0	76300	0	00014	LGL 12			4F13654
03742	0	40200	0	01451	SUB CALLER			4F13655
03743	-0	10000	0	04074	TNZ LATXL			4F13656
03744	0	07400	1	03321	TSX TET00,1			4F13657
03745	0	00000	0	00006	6			4F13658
03746	0	02000	0	04074	TRA LATXL	GO	PERFORM LEVEL ANALYSIS.	4F13659
03747	0	60000	0	01124	MS320 STZ CHSAVE	CLEAR	CELL FOR 0P.	4F13660
03750	0	00000	0	04003	MS321 *** MS330,0	TXH	ON LEFT, TXL ON RIGHT OF = SIGN.	4F13661
03751	0	07400	4	04450	TSX SS00X,4	GO	PROCESS SUBSCRIPT COMBINATION	4F13662
03752	0	07400	4	01707	TSX C0190,4	GET	NEXT CHAR.	4F13663
03753	0	40200	0	01400	SUB EQUAL	TEST	FOR EQUAL SIGN.	4F13664
03754	-0	10000	0	03671	TNZ MSERR=	NO,	ERROR.	4F13665
03755	0	53400	4	01411	MS322 LXA L(3),4	MOVE	CONTENTS OF E WORDS TO LEFT WORDS.	4F13666
03756	0	56000	4	01131	MS323 LDQ E+3,4	X		4F13667
03757	-0	60000	4	01357	STQ LEFT+3,4	X		4F13668
03760	2	00001	4	03756	TIX MS323,4,1	X		4F13669

03761	-0	50000	0	00415	MS311	CAL TXLOP	SET SWITCHES FOR RIGHT SIDE SCAN.	4F13670
03762	0	63000	0	03563		STP MS093	X	4F13671
03763	0	63000	0	03767		STP MS310	X	4F13672
03764	0	63000	0	03750		STP MS321	X	4F13673
03765	0	76000	0	00141		SLN 1	TURN = OR) LITE ON.	4F13674
03766	0	02000	0	03463		TRA MS010	GO SCAN NEXT ELEMENT.	4F13675
03767	0	00000	0	03671	MS310	*** MSERR=,0	TXH FOR LEFT, TXL FOR RIGHT OF EQUAL SIGN.	4F13676
03770	0	60000	0	01124		STZ CHSAVE	CLEAR	4F13677
03771	-0	75400	0	00000		PXD ,0	CLEAR AC	4F136775
03772	-0	76300	0	00006		LGL 6	GET FIRST CHAR OF SYMBOL.	4F13678
03773	0	07400	1	03242		TSX TESTFX+1,1	TEST FOR FIXED OR FLOATING POINT	4F13679
03774	0	02000	0	03755		TRA MS322	FLOATING,	4F13680
03775	-0	50000	0	00030		CAL EIFNO	FIXED, PREPARE FORVAL ENTRY.	4F13681
03776	-0	32000	0	01527		ANA MASK1	X	4F13682
03777	0	60200	0	01347		SLW G	X	4F13683
04000	0	07400	1	03321		TSX TET00,1	MAKE FORVAL ENTRY.	4F13684
04001	0	00000	0	00006		6	X	4F13685
04002	0	02000	0	03755		TRA MS322		4F13686
04003	0	07400	4	01771	MS330	TSX DIM1SR,4	SEARCH FOR THIS NAME IN THE DIM1, DIM2,	4F13687
04004	0	02000	0	04006		TRA MS331	AND DIM3 TABLES. IF IT IS FOUND IN ONE OF	4F13688
04005	0	02000	0	04013		TRA MS333	THESE TABLES IT IS A SUBSCRIPTED VARIABLE	4F13689
04006	0	07400	4	01775	MS331	TSX DIM2SR,4	OF THAT NUMBER OF DIMENSIONS, IF IT IS NOT	4F13690
04007	0	02000	0	04011		TRA MS332	FOUND IN ANY DIMENSION TABLE THEN IT IS	4F13691
04010	0	02000	0	04013		TRA MS333	ASSUMED TO BE THE NAME OF A FORTRAN II	4F13692
04011	0	07400	4	02005	MS332	TSX DIM3SR,4	SUBROUTINE OR FUNCTION COMPILED SEPARATELY.	4F13693
04012	0	02000	0	04015		TRA MS334	X	4F13694
04013	0	07400	4	04450	MS333	TSX SS000X,4	GO PROCESS SUBSCRIPT COMBINATIONS	4F13695
04014	0	02000	0	04076		TRA LATXH	GO PERFORM LEVEL ANALYSIS.	4F13696
04015	-0	50000	0	01471	MS334	CAL FNIND	NOT FOUND, TREAT AS FUNCTION NAME.	4F13697
04016	0	60200	0	05303		SLW FNBITS	X	4F13698
04017	-0	75400	0	00000		PXD ,0	X	4F13699
04020	0	56000	0	01526		LDQ BLANKS	COMPLETE NAME WITH BLANKS.	4F13700
04021	-0	76300	2	00052		LGL 42,2	X	4F13701
04022	-0	60200	0	01347		ORS G	X	4F13702
04023	-0	60200	0	01130		ORS E+2	X	4F13703
04024	0	07400	1	03321		TSX TET00,1	ENTER NAME IN CLOSUB TABLE.	4F13704
04025	0	00000	0	00011		9	X	4F13705
04026	0	76000	0	00142	MS335	SLN 2	TURN FUNCTION LITE ON.	4F13706
04027	0	02000	0	04074		TRA LATXL	GO PERFORM LEVEL ANALYSIS.	4F13707
04030	0	60000	0	01124	HOLL	STZ CHSAVE	CLEAR CHSAVE	4F13708
04031	-0	50000	0	01352		CAL HOLLCNT	GET CURRENT H(+I WORD	4F13709
04032	0	60200	0	01130		SLW E+2		4F13710
04033	0	53400	2	01103		LXA N,2	GET NUMBER OF CHARACTERS IN THIS ARG	4F13711
04034	-0	53400	4	01724		LXD CHCTR,4	GET CURRENT RESIDUE CHAR COUNT	4F13712
04035	0	56000	0	01365		LDQ RESIDU	GET CURRENT RESIDU WORD	4F13713
04036	0	53400	1	01414	C3351	LXA L(6),1	SET TO COLLECT SIX CHARS	4F13714
04037	-0	75400	0	00000		PXD 0,0	CLEAR AC	4F13715
04040	-2	00001	4	04053	C3352	TSX C3354,4,1	TEST FOR NO MORE CHARS IN RESIDU	4F13716
04041	-0	76300	0	00006	C33525	LGL 6	GET NEXT CHAR	4F13717
04042	0	60200	0	01112		SLW 1G	STORE WORD	4F13718
04043	-0	32000	0	01374		ANA ENDMK	BLANK ALL EXCEPT CURRENT CHAR	4F13719
04044	0	40200	0	01374		SUB ENDMK	TEST FOR INTERNAL ENDMK	4F13720
04045	-0	10000	0	04047		TNZ C3353		4F13721
04046	0	07400	4	03400		TSX DIAG,4	YES, ERROR, GO TO DIAGNOSTIC.	4F13722

04047	-0	50000	0	01112	C3353	CAL 1G	RETRIEVE WORD	4F13723
04050	-2	00001	2	04063		TNX C3358,2,1	TEST FOR ALL CHARS COLLECTED	4F13724
04051	-2	00001	1	04061		TNX C3356,1,1	TEST FOR SIX CHARS COLLECTED	4F13725
04052	0	02000	0	04040		TRA C3352	NOT SIX CHARS YET, CONTINUE COLLECTING	4F13726
04053	-0	53400	4	01614	C3354	LXD FWA,4	LOAD MQ WITH NEXT F REGION WORD	4F13727
04054	0	56000	4	00000		LDQ 0,4		4F13728
04055	1	77777	4	04056		TXI C3355,4,-1	UPDATE FWA	4F13729
04056	-0	63400	4	01614	C3355	SXD FWA,4		4F13730
04057	0	53400	4	01414		LXA L(6),4	RESET MQ CHAR COUNT TO SIX	4F13731
04060	0	02000	0	04041		TRA C33525	CONTINUE COLLECTING	4F13732
04061	0	07400	1	04437	C3356	TSX C3390,1	GO TO ENTER WORD IN HOLARG TABLE	4F13733
04062	1	00000	0	04036	C3357	TXI C3351,0,**	RETURN TO CONTINUE COLLECTING	4F13734
04063	-0	60000	0	01365	C3358	STQ RESIDU	UPDATE RESIDU	4F13735
04064	-0	63400	4	01724		SXD CHCTR,4	UPDATE CHCTR	4F13736
04065	-2	00001	1	04071		TNX C3360,1,1	TEST FOR SIX CHARS IN AC DEC IR1	4F13737
04066	0	56000	0	01526		LDQ BLANKS	NOT SIX CHARS, PREPARE TO ADD BLANKS	4F13738
04067	-0	76300	0	00006	C3359	LGL 6	ADD BLANKS	4F13739
04070	2	00001	1	04067		TIX C3359,1,1		4F13740
04071	0	07400	1	04437	C3360	TSX C3390,1	GO TO ENTER WORD IN HOLARG TABLE	4F13741
04072	-0	50000	0	01531		CAL ALL1	GET WORD OF ONES	4F13742
04073	0	07400	1	04437		TSX C3390,1	GO TO ENTER WORD IN HOLARG TABLE	4F13743
						LEVEL ANALYSIS		4F13744
04074	-0	50000	0	00415	LATXL	CAL TXLOP		4F13745
04075	0	02000	0	04077		TRA LATXL+3		4F13746
04076	-0	50000	0	00422	LATXH	CAL TXHOP		4F13747
04077	0	63000	0	04424		STP CM4105		4F13748
04100	0	53400	1	01406	LA0000	LXA L(0),A		4F13749
04101	0	50000	0	01130		CLA E+2		4F13750
04102	-0	76000	0	00142		SLT 2	IS THIS A FUNCTION NAME	4F13751
04103	0	02000	0	04144		TRA LA0000+36	NO	4F13752
04104	0	76000	0	00142		SLN 2	YES - TURN F LITE BACK ON	4F13753
04105	-0	53400	4	00470		LXD BK,C	IS FORSUB EMPTY	4F13754
04106	-3	00000	4	04115		TXL LA0000+13,C,0	YES. GO SET FS BITS TO 0	4F13755
04107	-0	63400	4	04114		SXD LA0000+12,C		4F13756
04110	0	34000	1	00471		CAS FORSUB,A	SEARCH FN NAME IN FORSUB	4F13757
04111	1	77776	1	04114		TXI LA0000+12,A,-2		4F13758
04112	0	02000	0	04117		TRA LA0000+15		4F13759
04113	1	77776	1	04114		TXI LA0000+12,A,-2		4F13760
04114	3	00000	1	04110		TXH LA0000+8,A,0		4F13761
04115	0	60000	0	05302		STZ FSBITS	SET FSBITS TO 0	4F13762
04116	0	02000	0	04131		TRA LA0000+25		4F13763
04117	-0	50000	1	00472		CAL FORSUB+1,A	FN NAME IN FORSUB	4F13764
04120	-0	32000	0	01452		ANA MASK2	EXTRACT TYPE NUMBER	4F13765
04121	-0	53400	4	01122		LXD ARGCTR,C	IS THIS A FUNCTION STATEMENT	4F13766
04122	-3	00000	4	04126		TXL LA0000+22,C,0	NO	4F13767
04123	0	34000	0	05301		CAS FSTYPE	YES - UPDATE FS TYPE	4F13768
04124	0	62100	0	05301		STA FSTYPE		4F13769
04125	3	00000	0	00000		TXH 0,0		4F13770
04126	0	76700	0	00007		ALS 7		4F13771
04127	-0	50100	0	01464		ORA FSIND		4F13772
04130	0	60200	0	05302		SLW FSBITS		4F13773
04131	-0	53400	1	01117		LXD 3LBAR,A	LOAD LA COUNTERS	4F13774
04132	-0	53400	2	01360		LXD NBAR,B		4F13775
04133	-0	53400	4	05300		LXD ABAR,C		4F13776

04134	-3	00000	1	04160	TXL	LA0003,A,0		4F13777
04135	3	75520	1	04137	TXH	LA0001,A,-1200		4F13778
04136	0	07400	4	03400	TSX	DIAG,4	ERROR..LAMBDA TABLE EXCEEDED.	4F13779
04137	3	77323	2	04141	TXH	LA0002,B,-301		4F13780
04140	0	07400	4	03400	TSX	DIAG,4	ERROR.,BETA TABLE EXCEEDED	4F13781
04141	-3	00000	4	04160	TXL	LA0003,C,0		4F13782
04142	3	77565	4	04160	TXH	LA0003,C,-139		4F13783
04143	0	07400	4	03400	TSX	DIAG,4	ERROR..ALPHA TABLE EXCEEDED	4F13784
04144	-0	53400	4	01122	LXD	ARGCTR,C	VARIABLE OR (	4F13785
04145	-3	00000	4	04115	TXL	LA0000+13,C,0	NOT AN FS - GO SET FS BITS TO 0	4F13786
04146	-0	63400	4	04153	SXD	LA0000+43,C	FUNCTION STATEMENT	4F13787
04147	0	34000	1	05215	CAS	ARGREG,A	SEARCH FREE VARIABLE TABLE	4F13788
04150	1	77777	1	04153	TXI	LA0000+43,A,-1		4F13789
04151	0	02000	0	04155	TRA	MS1018		4F13790
04152	1	77777	1	04153	TXI	LA0000+43,A,-1		4F13791
04153	3	00000	1	04147	TXH	LA0000+39,A,0		4F13792
04154	0	02000	0	04115	TRA	LA0000+13	NOT PRESENT - GO SET FSBITS TO 0	4F13793
04155	-0	75400	1	00000	PXD	0,A	PRESENT - STORE TYPE IN FSBITS	4F13794
04156	0	77100	0	00013	ARS	11		4F13795
04157	0	02000	0	04127	TRA	LA0000+23		4F13796
04160	0	50000	0	03601	CLA	MS9002		4F13797
04161	0	62100	0	04366	STA	LA4320		4F13798
04162	-0	75400	0	00000	PXD	0,0		4F13799
04163	0	56000	0	01130	LDQ	E+2		4F13800
04164	-0	60000	1	05533	STQ	LAMBDA+11,A		4F13601
04165	-0	60000	1	05530	STQ	LAMBDA+8,A		4F13802
04166	-0	60000	1	05525	STQ	LAMBDA+5,A		4F13803
04167	-0	76300	0	00006	LGL	6		4F13804
04170	0	60100	0	01331	STO	FIRSTC		4F13805
04171	0	40200	0	01375	SUB	OPEN		4F13606
04172	0	10000	0	04201	TZE	LA003		4F13807
04173	0	50000	0	03500	CLA	MS4007		4F13808
04174	-0	76000	0	00142	SLT	2		4F13809
04175	0	02000	0	04200	TRA	LA002		4F13810
04176	0	76000	0	00142	SLN	2		4F13811
04177	0	50000	0	04227	CLA	FINI03		4F13812
04200	0	62100	0	04366	STA	LA4320		4F13813
04201	0	50000	0	01126	CLA	E		4F13814
04202	0	60100	1	05531	STO	LAMBDA+9,A		4F13815
04203	0	60100	1	05526	STO	LAMBDA+6,A		4F13816
04204	0	60100	1	05523	STO	LAMBDA+3,A		4F13817
04205	-0	50000	0	01522	CAL	ADSPOP		4F13818
04206	0	60200	1	05535	SLW	LAMBDA+13,A		4F13819
04207	0	60200	1	05532	SLW	LAMBDA+10,A		4F13820
04210	0	60200	1	05527	SLW	LAMBDA+7,A		4F13821
04211	-0	75400	0	00000	PXD	,0		4F13822
04212	0	56000	0	01127	LDQ	E+1		4F13823
04213	-0	60000	1	05521	STQ	LAMBDA+1,A		4F13824
04214	-0	76300	0	00006	LGL	6		4F13825
04215	0	34000	0	01405	CAS	STAR		4F13826
04216	0	02000	0	04262	TRA	LA0015	/ SIGN	4F13827
04217	0	02000	0	04252	TRA	LA0010	, OR ,, SIGN	4F13828
04220	-0	76000	0	00142	SLT	2	+ OR - SIGN	4F13829
04221	0	02000	0	04236	TRA	LA0044		4F13830

04222	1	77775	2	04223		TXI MS1033,B,-3		-N TO -(N+3)		4F13831
04223	-0	75400	2	00000	MS1033	PXD ,B				4F13832
04224	0	77100	0	00022		ARS 18				4F13833
04225	0	60100	1	05536		STO LAMBDA+14,A		STO (N+3) IN LAMBDA+3 (L+4)+2		4F13834
04226	1	00001	2	04227		TXI FINI03,B,1		-(N+3) TO - (N+2)		4F13835
04227	-0	75400	2	04432	FINI03	PXD CM4300,B				4F13836
04230	0	77100	0	00022		ARS 18				4F13837
04231	-0	76000	0	00003		SSM				4F13838
04232	0	60100	1	05534		STO LAMBDA+12,A		STO -(N+2) IN LAMBDA+3 (L+4)		4F13839
04233	-0	76000	0	00141	LA0041	SLT 1				4F13840
04234	1	00001	2	04330		TXI L43130,B,1		UNARY... -(N+2) TO -(N+1)		4F13841
04235	1	00001	2	04272		TXI L13130,B,1		BINARY... -(N+2) TO -(N+1)		4F13842
04236	0	50000	0	01331	LA0044	CLA FIRSTC				4F13843
04237	0	34000	0	01375		CAS OPEN		EXAMINE SYMBOL		4F13844
04240	0	02000	0	04242		TRA LA0050				4F13845
04241	1	77775	2	04245		TXI LA0058,B,-3		-N TO -(N+3)		4F13846
04242	-0	76000	0	00141	LA0050	SLT 1				4F13847
04243	1	77777	2	04334		TXI LA4000,B,-1		UNARY... -NTO -(N+1)		4F13848
04244	1	77777	2	04276		TXI LA1000,B,-1		BINARY... -N TO -(N+1)		4F13849
04245	-0	75400	2	00000	LA0058	PXD ,B				4F13850
04246	0	77100	0	00022		ARS 18				4F13851
04247	0	60100	1	05533		STO LAMBDA+11,A		STO S(N+3) IN LAMBDA +3(L+3)+2		4F13852
04250	0	40000	0	01407		ADD L(1)		FORM -(N+2) IN ADD (ACC)		4F13853
04251	1	00001	2	04233		TXI LA0041,2,1				4F13854
04252	0	16200	0	04262	LA0010	TQP LA0015		GO TO * ROUTINE		4F13855
04253	-0	76000	0	00142		SLT 2		**		4F13856
04254	0	02000	0	04256		TRA LA0072				4F13857
04255	1	77777	2	04311		TXI L23000,B,-1		-N TO -(N+1)		4F13858
04256	0	50000	0	01331	LA0072	CLA FIRSTC				4F13859
04257	0	40200	0	01375		SUB OPEN				4F13860
04260	-0	10000	0	04324		TNZ LA2000				4F13861
04261	1	77777	2	04304		TXI L22000,B,-1		-N TO -(N+1)		4F13862
04262	-0	76000	0	00142	LA0015	SLT 2		* OR /		4F13863
04263	0	02000	0	04265		TRA LA0021				4F13864
04264	1	77776	2	04374		TXI L33000,B,-2		-N TO -(N+2)		4F13865
04265	0	50000	0	01331	LA0021	CLA FIRSTC				4F13866
04266	0	34000	0	01375		CAS OPEN				4F13867
04267	1	77777	2	04407		TXI LA3000,B,-1				4F13868
04270	1	77776	2	04367		TXI L32000,B,-2		-N TO -N(+2)		4F13869
04271	1	77777	2	04407		TXI LA3000,B,-1				4F13870
04272	0	60200	4	05310	L13130	SLW ALPHA+3,C		STO -(N+2) IN ALPHA+A+3		4F13871
04273	0	50200	0	01406		CLS L(0)				4F13872
04274	0	60100	1	05531		STO LAMBDA+9,A		STO -0 IN LAMBDA +3(L+3)		4F13873
04275	0	76000	0	00141		SLN 1				4F13874
04276	0	50200	0	05277	LA1000	CLS CBAR				4F13875
04277	0	77100	0	00022		ARS 18				4F13876
04300	0	60200	4	05305		SLW ALPHA,C		STO -C IN ALPHA+A		4F13877
04301	1	77775	4	04302		TXI LA1040,C,-3		-A TO -(A+3)		4F13878
04302	-0	63400	4	05300	LA1040	SXD ABAR,C				4F13879
04303	0	02000	0	04335		TRA LA4010				4F13880
04304	-0	75400	2	00000	L22000	PXD ,B				4F13881
04305	0	77100	0	00022		ARS 18				4F13882
04306	0	60100	1	05525		STO LAMBDA+5,A		STO S(N+1) IN LAMBDA+3(L+1)+2		4F13883
04307	0	40000	0	01407		ADD L(1)				4F13884

04310	1	00001	2	04320		TXI	L23130,B,1		-(N+1) TO -N		4F13885
04311	-0	75400	2	00000	L23000	PXD	,B				4F13886
04312	0	77100	0	00022		ARS	18				4F13887
04313	0	60100	1	05530		STO	LAMBDA+8,A		STO S(N+1) IN LAMBDA+3(L+2)+2		4F13888
04314	0	40000	0	01407		ADD	L(1)				4F13889
04315	-0	76000	0	00003		SSM					4F13890
04316	1	00001	2	04317		TXI	L23090,B,1		-(N+1) TO -N		4F13891
04317	0	60100	1	05526	L23090	STO	LAMBDA+6,A		STO -N IN LAMBDA+3(L+2)		4F13892
04320	0	60200	4	05305	L23130	SLW	ALPHA,C		STO -N IN ALPHA +A		4F13893
04321	0	50200	0	01406		CLS	L(0)				4F13894
04322	0	60100	1	05523		STO	LAMBDA+3,A		STO -0 IN LAMBDA+3(L+11)		4F13895
04323	0	76000	0	00141		SLN	1				4F13896
04324	0	50200	4	05304	LA2000	CLS	ALPHA-1,C				4F13897
04325	0	60100	1	05520		STO	LAMBDA,A		STO C(ALPHA+A-1) IN LAMBDA+3L		4F13898
04326	0	50000	0	01360		CLA	NBAR				4F13899
04327	1	00006	1	04355		TXI	LA4180,A,6				4F13900
04330	0	60200	4	05305	L43130	SLW	ALPHA,C		STO -(N+2) IN ALPHA+A		4F13901
04331	0	50200	0	01406		CLS	L(0)				4F13902
04332	0	60100	1	05531		STO	LAMBDA+9,A		STO -0 IN LAMBDA+3(L+3)		4F13903
04333	0	76000	0	00141		SLN	1				4F13904
04334	0	50200	4	05302	LA4000	CLS	ALPHA-3,C				4F13905
04335	0	60100	1	05520	LA4010	STO	LAMBDA,A		STO C(ALPHA+A-3) IN LAMBDA+3L		4F13906
04336	0	50200	0	01360		CLS	NBAR				4F13907
04337	0	77100	0	00022		ARS	18				4F13908
04340	0	60200	4	05303		SLW	ALPHA-2,C		STO-N IN ALPHA+A-2		4F13909
04341	0	60200	1	05522		SLW	LAMBDA+2,A		STO S(N) IN LAMBDA+3L+2		4F13910
04342	0	60100	1	05523		STO	LAMBDA+3,A		STO -N IN LAMBOA+3(L+1)		4F13911
04343	-0	75400	2	00000		PXD	,B				4F13912
04344	0	77100	0	00022		ARS	18				4F13913
04345	0	60100	1	05525		STO	LAMBDA+5,A		STO S(N+1) IN LAMBDA+3(L+1)+2		4F13914
04346	0	60100	4	05304		STO	ALPHA-1,C		STO-(N+1) IN ALPHA+A-1		4F13915
04347	-0	76000	0	00003		SSM					4F13916
04350	0	60100	1	05526		STO	LAMBDA+6,A		STO -(N+1) IN LAMBDA+3(L+2)		4F13917
04351	1	77777	2	04352		TXI	LA4150,B,-1		-(N+1) TO -(N+2)		4F13918
04352	-0	50000	0	01524	LA4150	CAL	ADSTAR				4F13919
04353	0	60200	1	05524		SLW	LAMBDA+4,A		STO * IN LAMBDA+3(L+1)+1		4F13920
04354	-0	75400	2	00000	LA4170	PXD	,B				4F13921
04355	0	77100	0	00022	LA4180	ARS	18				4F13922
04356	0	60100	1	05530		STO	LAMBDA+8,A		STOS(N+2) IN LAMBDA+3(L+2)+2		4F13923
04357	-0	60200	1	05531		ORS	LAMBDA+9,A		STO -(N+2) IN LAMBDA+3(L+3)		4F13924
04360	-0	50000	0	01525		CAL	STRSTR				4F13925
04361	0	60200	1	05527		SLW	LAMBDA+7,A		STO SPOP IN LAMBDA+3(L+2)+1		4F13926
04362	-0	50000	0	01522		CAL	ADSPOP				4F13927
04363	-0	50100	0	05302		ORA	FSBITS				4F13928
04364	-0	50100	0	05303		ORA	FNBITS				4F13929
04365	0	60200	1	05532		SLW	LAMBDA+10,A		STO SPOP IN LAMBDA+3(L+3)+1		4F13930
04366	1	77767	1	00000	LA4320	TXI	** ,A, -9				4F13931
04367	-0	75400	2	00000	L32000	PXD	,B				4F13932
04370	0	77100	0	00022		ARS	18				4F13933
04371	0	60100	1	05530		STO	LAMBDA+8,A		STO 5(N+2) IN LAMBDA+3(L+2)+2		4F13934
04372	0	40000	0	01407		ADD	L(1)				4F13935
04373	1	00001	2	04403		TXI	L33130,B,1		-(N+2) TO -(N+1)		4F13936
04374	-0	75400	2	00000	L33000	PXD	,B				4F13937
04375	0	77100	0	00022		ARS	18				4F13938

04376	0	60100	1	05533		STO LAMBDA+11,A	STO S(N+2) IN LAMBDA+3(L+3)+2	4F13939
04377	0	40000	0	01407		ADD L(1)		4F13940
04400	-0	76000	0	00003		SSM		4F13941
04401	1	00001	2	04402		TXI L33090,B,1	-(N+2) TO -(N+1)	4F13942
04402	0	60100	1	05531	L33090	STO LAMBDA+9,A	STO -(N+1) IN LAMBDA+3(L+3)	4F13943
04403	0	60200	4	05305	L33130	SLW ALPHA,C	STO -(N+1) IN ALPHA+A	4F13944
04404	0	50200	0	01406		CLS L(0)		4F13945
04405	0	60100	1	05526		STO LAMBDA+6,A		4F13946
04406	0	76000	0	00141		SLN 1		4F13947
04407	0	50200	4	05303	LA3000	CLS ALPHA-2,C		4F13948
04410	0	60100	1	05520		STO LAMBDA,A	STO C(ALPHA+A-2) IN LAMBDA+3L	4F13949
04411	0	50200	0	01360		CLS NBAR		4F13950
04412	0	77100	0	00022		ARS 18		4F13951
04413	0	60200	4	05304		SLW ALPHA-1,C	STO -N IN ALPHA+A-1	4F13952
04414	0	60200	1	05522		SLW LAMBDA+2,A	STO S(N) IN LAMBDA+3L+2	4F13953
04415	0	60100	1	05523		STO LAMBDA+3,A	STO -N IN LAMBDA+3(L+1)	4F13954
04416	1	00003	1	04354		TXI LA4170,A,3		4F13955
04417	1	77775	1	04420	CM4100	TXI CM4101,A,-3	LA COUNTER MODIFICATION ROUTINES	4F13956
04420	-0	63400	1	01117	CM4101	SXD 3LBAR,A		4F13957
04421	-0	63400	2	05277	CM4102	SXD CBAR,B		4F13958
04422	1	77777	2	04423		TXI CM4104,B,-1		4F13959
04423	-0	63400	2	01360	CM4104	SXD NBAR,B		4F13960
04424		00000	0	03463	CM4105	*** MS010,0		4F13961
04425	-0	50000	0	01524	MS020	CAL ADSTAR		4F13962
04426	0	02000	0	03464		TRA MS030		4F13963
04427	1	77775	1	04430	CM4200	TXI CM4201,A,-3		4F13964
04430	-0	63400	1	01117	CM4201	SXD 3LBAR,A		4F13965
04431	1	77777	4	04435		TXI CM4303,C,-1		4F13966
04432	1	77772	1	04433	CM4300	TXI CM4301,A,-6		4F13967
04433	-0	63400	1	01117	CM4301	SXD 3LBAR,A		4F13968
04434	1	77777	4	04435		TXI CM4303,C,-1		4F13969
04435	-0	63400	4	05300	CM4303	SXD ABAR,C		4F13970
04436	1	77777	2	04421		TXI CM4102,B,-1		4F13971
						* * * * *		*4F13972
								4F13973
						CLOSED SUBROUTINE TO MAKE ENTRIES IN HOLARG TABLE		4F13974
04437	-0	63400	1	04062	C3390	SXD C3357,1	SAVE CALLING IR	4F13975
04440	0	60200	0	01112		SLW 1G	MOVE WORD TO BE ENTERED TO 1G	4F13976
04441	0	07400	1	03321		TSX TET00,1	GO TO ENTER WORD IN HOLARG TABLE	4F13977
04442	0	00000	0	00015		13		4F13978
04443	0	50000	0	01352		CLA HOLCNT		4F13979
04444	0	40000	0	01407		ADD L(1)	UPDATE HOLCNT	4F13980
04445	0	60100	0	01352		STO HOLCNT		4F13981
04446	-0	53400	1	04062		LXD C3357,1	RELOAD CALLING IR	4F13982
04447	0	02000	1	00001		TRA 1,1	RETURN TO CALLER+1	4F13983
						* * * * *		*4F13984
								4F13985
						PROGRAM TO SIMPLIFY THE TREATMENT OF RELATIVE ADDRESSES IN		4F13986
						SECTION ONE THRU THE USE OF THE RA000 SUBROUTINE BY STATE B.		4F13987
04450	-0	63400	4	04503	SS000X	SXD SSIR4,4	SAVE CALLING TAG.	4F13988
04451	0	07400	4	02614		TSX SS000,4	GO TO SUBSCRIPT SCAN AND ANALYSIS ROUTINE.	4F13989
04452	0	07400	4	02437		TSX RA000,4	GO TO RELATIVE ADDRESS COMPUTATION ROUTINE.	4F13990
04453	-0	50000	0	01351		CAL GTAG		4F13991
04454	-0	32000	0	01527		ANA MASK1		4F13992

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04455	0	60200	0	01141	SLW	E+11			4F13993
04456	0	07400	4	00450	TSX	SIG1IX,4	GO ENTER THIS RELATIVE ADDRESS IN SIGMA1.		4F13994
04457	0	76700	0	00017	ALS	15	POSITION SIGMA TAG.		4F13995
04460	-0	60200	0	01126	ORS	E	ADD SIGMA TAG TO I-TAU TAGS IN E.		4F13996
04461	-0	53400	4	04503	LXD	SSIR4,4	RELOAD CALLING TAG.		4F13997
04462	0	02000	4	00001	TRA	1,4	RETURN TO CALLER +1.		4F13998
									4F13999
									*4F14000
									4F14001
							ROYCNV,4/ CALLS=C0190,FXCNIX,FLCNIX,DIAG.		4F14002
							ROYCNV DOES FIXED AND FLOATING POINT CONVERSION FOR SECTION		4F14003
							ARITHMETIC.		4F14004
							ROYCNV=ENTRY POINT FOR FIXED OR FLOATING POINT INTEGERS,		4F14005
04463	0	60100	0	01103	ROYCNV	STO N	SAVE DECIMAL DIGIT IN N.		4F14006
04464	-0	63400	4	04467	SXD	EXIT,4	SAVE C(XR4) FOR RETURN.		4F14007
04465	0	60000	0	01100	STZ	DOE	CLEAR DOE (IMPLICIT EXPONENT).		4F14008
04466	0	50000	0	04505	CLA	CM1	PICK UP SWITCH CONTROL.		4F14009
04467	1	00000	0	04474	EXIT	TXI IN2,0,**	AND GO SET SWITCH.		4F14010
							DECPNT=ENTRY POINT FOR FLOATING POINT FRACTIONS.		4F14011
04470	0	60000	0	01103	DECPNT	STZ N	CLEAR N (NO INTEGER).		4F14012
04471	-0	63400	4	04467	SXD	EXIT,4	SAVE C(XR4) FOR RETURN.		4F14013
04472	0	60000	0	01100	STZ	DOE	CLEAR DOE (IMPLICIT EXPONENT).		4F14014
04473	-0	50000	0	04505	NC7	CAL CM1	PICK UP SWITCH CONTROL.		4F14015
04474	0	63000	0	04515	IN2	STP CM2	SET SWITCHES CM2, AND		4F14016
04475	0	63000	0	04527	STP	CM3	CM3.		4F14017
04476	0	14000	0	04477	TOV	NC5	TURN OFF OV TRIGGER.		4F14018
04477	0	07400	4	01707	NC5	TSX C0190,4	* GO GET NEXT NB CHARACTER IN THE AC.		4F14019
04500	0	60200	0	01124	SLW	CHSAVE	SAVE IT FOR STATE B, AND THEN		4F14020
04501	0	34000	0	01423	CAS	L(H)	COMPARE IT WITH H.		4F14021
D	04502	1	00000	0	04504	TXI	NC1,0	IF H, GO TO HEXIT,	4F14022
D	04503	1	00000	0	04650	SSIR4	TXI HEXIT,0	IF NOT H, CONTINUE	4F14023
	04504	0	34000	0	01373	NC1	CAS TEN	AND COMPARE WITH TEN.	4F14024
D	04505	-3	00000	0	04521	CM1	TXL NC2,0	CHAR EXCEEDS IO, SO IS NON-NUMERIC.	4F14025
	04506	-0	75400	0	00000	PXD	,0	CLEAR THE AC (MACHINE ERROR).	4F14026
	04507	0	60100	0	01102	STO	H	CHARACTER IS NUMERIC SO HOLD IT.	4F14027
	04510	0	50000	0	01103	CLA	N	MULTIPLY THE PREVIOUS	4F14028
	04511	0	76700	0	00002	ALS	2	PARTIAL RESULT (OR ZERO)	4F14029
	04512	0	40000	0	01103	ADD	N	BY 10,	4F14030
	04513	0	76700	0	00001	ALS	1	AND ADD IN	4F14031
	04514	0	40000	0	01102	ADD	H	THE CURRENT DIGIT.	4F14032
D	04515	3	00000	0	04536	CM2	TXH NC3,0	SWITCH (NO TRANSFER IF INTEGER).	4F14033
	04516	0	14000	0	04544	TOV	NC4	TEST OVERFLOW, AND	4F14034
	04517	0	60100	0	01103	STO	N	IF NONE, SAVE NEW PARTIAL RESULT.	4F14035
D	04520	1	00000	0	04477	TXI	NC5,0	THEN GO PICK UP NEXT CHARACTER.	4F14036
	04521	0	34000	0	01403	NC2	CAS POINT	COMPARE NON-NUMERIC WITH A POINT.	4F14037
D	04522	1	00000	0	04527	TXI	CM3,0	IF GREATER THAN 27, GO OUT.	4F14038
D	04523	1	00000	0	04473	TXI	NC7,0	IF POINT, GO BACK AND SET SWITCH.	4F14039
	04524	0	34000	0	04657	CAS	L(E)	IF LESS THAN 27, COMPARE WITH E.	4F14040
D	04525	1	00000	0	04527	TXI	CM3,0	IF GREATER THAN 21, GO OUT.	4F14041
D	04526	1	00000	0	04546	TXI	EC1,0	IF E, GO TO EXPONENT ROUTINE.	4F14042
D	04527	3	00000	0	04605	CM3	TXH FN4,0	SWITCH (NO TRANSFER IF INTEGER).	4F14043
	04530	0	50000	0	01103	CLA	N	PICK UP CONVERTED CONSTANT, AND	4F14044
	04531	0	76700	0	00022	MS9506	ALS 18	STORE IN THE	4F14045
	04532	0	60100	0	01347	STO	G	DECREMENT OF G, AND	4F14046

	04533	0	07400	4	00417		TSX	FXCNIX,4		* GO MAKE FIXCON ENTRY.	4F14047
	04534	-0	50100	0	01517		ORA	FIXVAR		CREATE INTERNAL FXD-PT VARIABLE,AND	4F14048
D	04535	1	00000	0	04636		TXI	EXITR,0		GO TAKE EXITR.	4F14049
	04536	0	14000	0	04543	NC3	TOV	NC8		IF THERE WAS NO OVERFLOW,	4F14050
	04537	0	60100	0	01103		STO	N		SAVE PARTIAL RESULT, AND	4F14051
	04540	0	50200	0	01407		CLS	L(1)		SUBTRACT 1 FROM DOE	4F14052
	04541	0	40000	0	01100	NC9	ADD	DOE		TO ADJUST EXPONENT	4F14053
	04542	0	60100	0	01100		STO	DOE		IN FINAL RESULT.	4F14054
D	04543	1	00000	0	04477	NC8	TXI	NC5,0		THEN GO PICK UP NEXT CHARACTER.	4F14055
	04544	0	50000	0	01407	NC4	CLA	L(1)		ADD 1 TO DOE ,	4F14056
D	04545	1	00000	0	04541		TXI	NC9,0		IF THERE WAS INTEGER OVERFLOW.	4F14057
	04546	0	07400	4	01707	EC1	TSX	C0190,4		* GO GET NEXT NB CHARACTER IN THE AC.	4F14058
	04547	0	60200	0	01124		SLW	CHSAVE		SAVE IT FOR STATE B, AND	4F14059
	04550	0	60000	0	01101		STZ	EKE		CLEAR EKE (EXPLICIT EXPONENT).	4F14060
	04551	0	34000	0	01401		CAS	11Z		COMPARE CHARACTER WITH A DASH.	4F14061
D	04552	1	00000	0	04602		TXI	FN5,0		IF GREATER THAN 32, GO OUT.	4F14062
D	04553	1	00000	0	04561		TXI	EC3,0		IF A DASH, SET EKE MINUS.	4F14063
	04554	0	34000	0	01404		CAS	12Z		IF LESS THAN 32, COMPARE WITH PLUS.	4F14064
D	04555	1	00000	0	04602		TXI	FN5,0		IF GREATER THAN 16, GO OUT.	4F14065
D	04556	1	00000	0	04566		TXI	EC6,0		IF PLUS, GO EXAMINE NEXT CHAR.	4F14066
	04557	0	34000	0	01420		CAS	MINUS		IF LESS THAN 16,COMPARE WITH MINUS.	4F14067
D	04560	1	00000	0	04602		TXI	FN5,0		IF GREATER THAN 12, GO OUT.	4F14068
	04561	0	50200	0	01101	EC3	CLS	EKE		IF MINUS, SET EKE TO -0.	4F14069
	04562	0	34000	0	01373		CAS	TEN		COMPARE WITH TEN.	4F14070
D	04563	1	00000	0	04602		TXI	FN5,0		IF NON-NUMERIC, GO EXAMINE NEXT CH.	4F14071
	04564	-0	75400	0	00000	EC4	PXD	,0		CLEAR ACC,	4F14072
	04565	0	60100	0	01101	EC5	STO	EKE		SAVE PARTIAL RESULT(OR 0)IN EKE.	4F14073
	04566	0	07400	4	01707	EC6	TSX	C0190,4		* GO GET NEXT NB CHARACTER IN THE AC.	4F14074
	04567	0	60200	0	01124		SLW	CHSAVE		SAVE IT FOR STATE B,	4F14075
	04570	0	34000	0	01373		CAS	TEN		AND COMPARE WITH TEN.	4F14076
D	04571	1	00000	0	04602		TXI	FN5,0		CHAR EXCEEDS 10, SO IS NON-NUMERIC.	4F14077
	04572	-0	75400	0	00000		PXD	,0		CLEAR THE AC (MACHINE ERROR).	4F14078
	04573	0	60100	0	01102		STO	H		CHARACTER IS NUMERIC, SO HOLD IT.	4F14079
	04574	0	50000	0	01101		CLA	EKE		MULTIPLY THE PREVIOUS	4F14080
	04575	0	76700	0	00002		ALS	2		PARTIAL RESULT (OR ZERO)	4F14081
	04576	0	40000	0	01101		ADD	EKE		BY 10,	4F14082
	04577	0	76700	0	00001		ALS	1		AND ADD IN	4F14083
	04600	0	36100	0	01102		ACL	H		THE CURRENT DIGIT.	4F14084
D	04601	1	00000	0	04565		TXI	EC5,0		CONTINUE UNTIL NON-NUMERIC IS MET.	4F14085
	04602	0	50000	0	01101	FN5	CLA	EKE		COMBINE EXPLICIT EXPONENT	4F14086
	04603	0	40000	0	01100		ADD	DOE		WITH IMPLICIT EXPONENT,	4F14087
	04604	0	60100	0	01100		STO	DOE		AND SAVE IN DOE.	4F14088
	04605	0	50000	0	01103	FN4	CLA	N		IF N CONTAINS ZERO, TAKE	4F14089
	04606	0	10000	0	04633		TZE	MS9500		FLO PT CONSTANT RETURN.	4F14090
	04607	0	62100	0	04652		STA	K1		PUT INTEGER INTO FLO PT WORD,	4F14091
	04610	0	77100	0	00017		ARS	15		ADJUST, AND	4F14092
	04611	0	10000	0	04613		TZE	FN1		IF MORE THAN 15 BITS IN LENGTH	4F14093
	04612	-0	50100	0	04653		ORA	K2		AFFIX CORRECT EXPONENT.	4F14094
	04613	0	30000	0	04652	FN1	FAD	K1		THEN FLOATING ADD THE RESULT	4F14095
	04614	-0	77300	0	00010		RQL	8		OF INTEGER CONVERSION, AND	4F14096
	04615	0	76000	0	00010		RND			ROUND --TO OBTAIN	4F14097
	04616	-0	50100	0	04654		ORA	K3		NORMALIZED RESULT.	4F14098
	04617	0	53400	1	01100		LXA	DOE,1		EXAMINE THE C(DOE), AND	4F14099
	04620	-3	00000	1	04633		TXL	MS9500,1,0		IF ZERO, TAKE FLO PT RETURN.	4F14100

D	04621	-3	00062	1	04623		TXL	FN2,1,50		IF GREATER THAN 50, THEN	4F14101
	04622	1	00000	0	04647		TXI	CER,0		ERROR. -GO TO DIAGNOSTIC	4F14102
	04623	0	56000	0	01100	FN2	LDQ	DOE		DETERMINE WHETHER INTEGER WAS	4F14103
	04624	0	16200	0	04641		TQP	FN3		TO THE RIGHT OR TO THE LEFT OF DP,	4F14104
	04625	0	24100	1	04740		FDP	TAB,1		IF TO THE RIGHT, DIVIDE BY A	4F14105
	04626	-0	60000	0	01103		STQ	N		SUITABLE CONSTANT	4F14106
	04627	0	50000	0	01103		CLA	N		TO ADJUST RESULT	4F14107
	04630	0	36100	0	04655		ACL	K4		AND TEST FOR OUT OF RANGE.	4F14108
	04631	-0	76000	0	00001		PBT			IF P=I, SKIP TO ARITH RETURN.	4F14109
D	04632	1	00000	0	04647		TXI	CER,0		ERROR. --GO TO DIAGNOSTIC	4F14110
	04633	0	60100	0	01347	MS9500	STO	G		STORE IN G, AND	4F14111
	04634	0	07400	4	00424		TSX	FLCNIX,4	*	GO MAKE FLOCON ENTRY.	4F14112
	04635	-0	50100	0	01513		ORA	FLOVAR		CREATE INTERNAL FLO-PT VARIABLE,	4F14113
	04636	0	60200	0	01130	EXITR	SLW	E+2		SAVE VARIABLE IN E+2,	4F14114
	04637	-0	53400	4	04467		LXD	EXIT,4		RESTORE THE C(XR4), AND	4F14115
	04640	0	02000	4	00002		TRA	2,4	*	RETURN TO MAIN ROUTINE.	4F14116
	04641	0	60100	0	01103	FN3	STO	N		IF INTEGER WAS SITUATED	4F14117
	04642	0	56000	0	01103		LDQ	N		TO THE LEFT OF THE DECIMAL POINT,	4F14118
	04643	0	26000	1	04740		FMP	TAB,1		MULTIPLY BY A SUITABLE	4F14119
	04644	0	36100	0	04656		ACL	K5		CONSTANT TO ADJUST AND TEST RANGE.	4F14120
	04645	-0	76000	0	00001		PBT			IF P=I, SKIP TO ERROR,	4F14121
D	04646	1	00000	0	04633		TXI	MS9500,0		RETURN TO ARITHMETIC ROUTINE,	4F14122
	04647	0	07400	4	03400	CER	TSX	DIAG,4	*	CONVERSION ERROR, GO TO DIAGNOSTIC.	4F14123
	04650	-0	53400	4	04467	HEXIT	LXD	EXIT,4		RESTORE THE C(XR4), AND	4F14124
	04651	0	02000	4	00001		TRA	1,4	*	RETURN TO MAIN ROUTINE.	4F14125
											4F14126
	04652	+2330000000000				K1	OCT	2330000000000		CONSTANT USED BY ROYCNV.	4F14127
	04653	+2520000000000				K2	OCT	2520000000000		CONSTANT USED BY ROYCNV.	4F14128
	04654	+0004000000000				K3	OCT	400000000		CONSTANT USED BY ROYCNV.	4F14129
	04655	+3350000000000				K4	OCT	3350000000000		CONSTANT USED BY ROYCNV.	4F14130
	04656	+0430000000000				K5	OCT	43000000000		CONSTANT USED BY ROYCNV.	4F14131
	04657	0000000000025				L(E)	BCD	100000E		CONSTANT USED BY ROYCNV.	4F14132
											4F14133
	04660	+375536246150					OCT	375536246150		48-TABLE USED BY ROYCNV.	4F14134
	04661	+372430204754					OCT	372430204754		47-TABLE USED BY ROYCNV.	4F14135
	04662	+366700324573					OCT	366700324573		46-TABLE USED BY ROYCNV.	4F14136
	04663	+363546566774					OCT	363546566774		45-TABLE USED BY ROYCNV.	4F14137
	04664	+360436770626					OCT	360436770626		44-TABLE USED BY ROYCNV.	4F14138
	04665	+354713132675					OCT	354713132675		43-TABLE USED BY ROYCNV.	4F14139
	04666	+351557257061					OCT	351557257061		42-TABLE USED BY ROYCNV.	4F14140
	04667	+346445677215					OCT	346445677215		41-TABLE USED BY ROYCNV.	4F14141
	04670	+342726145174					OCT	342726145174		40-TABLE USED BY ROYCNV.	4F14142
	04671	+337570120775					OCT	337570120775		39-TABLE USED BY ROYCNV.	4F14143
	04672	+334454732312					OCT	334454732312		38-TABLE USED BY ROYCNV.	4F14144
	04673	+330741367020					OCT	330741367020		37-TABLE USED BY ROYCNV,	4F14145
	04674	+325601137163					OCT	325601137163		36-TABLE USED BY ROYCNV.	4F14146
	04675	+322464114134					OCT	322464114134		35-TABLE USED BY ROYCNV.	4F14147
	04676	+316755023372					OCT	316755023372		34-TABLE USED BY ROYCNV.	4F14148
	04677	+313612334310					OCT	313612334310		33-TABLE USED BY ROYCNV.	4F14149
	04700	+310473426555					OCT	310473426555		32-TABLE USED BY ROYCNV.	4F14150
	04701	+304770675742					OCT	304770675742		31-TABLE USED BY ROYCNV.	4F14151
	04702	+301623713116					OCT	301623713116		30-TABLE USED BY ROYCNV.	4F14152
	04703	+276503074076					OCT	276503074076		29-TABLE USED BY ROYCNV.	4F14153
	04704	+273402374713					OCT	273402374713		28-TABLE USED BY ROYCNV.	4F14154

04705	+267635456171	OCT	267635456171	27-TABLE USED BY ROYCNV.	4F14155
04706	+264512676456	OCT	264512676456	26-TABLE USED BY ROYCNV.	4F14156
04707	+261410545213	OCT	261410545213	25-TABLE USED BY ROYCNV.	4F14157
04710	+255647410337	OCT	255647410337	24-TABLE USED BY ROYCNV.	4F14158
04711	+252522640262	OCT	252522640262	23-TABLE USED BY ROYCNV.	4F14159
04712	+247417031702	OCT	247417031702	22-TABLE USED BY ROYCNV.	4F14160
04713	+243661534466	OCT	243661534466	21-TABLE USED BY ROYCNV.	4F14161
04714	+240532743536	OCT	240532743536	20-TABLE USED BY ROYCNV.	4F14162
04715	+235425434430	OCT	235425434430	19-TABLE USED BY ROYCNV.	4F14163
04716	+231674055530	OCT	231674055530	18-TABLE USED BY ROYCNV.	4F14164
04717	+226543212741	OCT	226543212741	17-TABLE USED BY ROYCNV.	4F14165
04720	+223434157116	OCT	223434157116	16-TABLE USED BY ROYCNV.	4F14166
04721	+217706576512	OCT	217706576512	15-TABLE USED BY ROYCNV.	4F14167
04722	+214553630410	OCT	214553630410	14-TABLE USED BY ROYCNV.	4F14168
04723	+211443023471	OCT	211443023471	13-TABLE USED BY ROYCNV.	4F14169
04724	+205721522451	OCT	205721522451	12-TABLE USED BY ROYCNV.	4F14170
04725	+202564416672	OCT	202564416672	11-TABLE USED BY ROYCNV.	4F14171
04726	+177452013710	OCT	177452013710	10-TABLE USED BY ROYCNV.	4F14172
04727	+173734654500	OCT	173734654500	09-TABLE USED BY ROYCNV.	4F14173
04730	+170575360400	OCT	170575360400	08-TABLE USED BY ROYCNV.	4F14174
04731	+165461132000	OCT	165461132000	07-TABLE USED BY ROYCNV.	4F14175
04732	+161750220000	OCT	161750220000	06-TABLE USED BY ROYCNV.	4F14176
04733	+156606500000	OCT	156606500000	05-TABLE USED BY ROYCNV.	4F14177
04734	+153470400000	OCT	153470400000	04-TABLE USED BY ROYCNV.	4F14178
04735	+147764000000	OCT	147764000000	03-TABLE USED BY ROYCNV.	4F14179
04736	+144620000000	OCT	144620000000	02-TABLE USED BY ROYCNV.	4F14180
04737	+141500000000	OCT	141500000000	01-TABLE USED BY ROYCNV.	4F14181
04740	+136400000000	TAB	OCT 136400000000	00-TABLE USED BY ROYCNV.	4F14182
			END OF PROGRAM ROYCNV.		4F14183
			*****		*4F14184
					4F14185
04741	0 00001 0 01230	SIG1ST	PZE SIGMA1+2,,1		4F14186
	04742	ENDBDR	BSS 0		4F141865
					4F14187
	05215	ENDB	ORG 2701		4F14188
	05215	ARGREG	BSS 50		4F14189
	05277	CBAR	BSS 1		4F14190
	05300	ABAR	BSS 1		4F14191
	05301	FSTYPE	BSS 1		4F14192
	05302	FSBITS	BSS 1		4F14193
	05303	FNBITS	BSS 1		4F14194
	05304	FNCTR	BSS 1		4F14195
	05305	ALPHA	BSS 139		4F14196
	05520	LAMBDA	BSS 1200		4F14197
			END OF ARITHMETIC / STATE B.		4F14198
			*****		*4F14199
					4F14200
			ARITHMETIC / STATE C=		4F14201
			704 FORTRAN MASTER RECORD CARD / STATE C = F0170000.		4F14202
	00000	00000	ORG 0		4F142021
00000	0 00504 0 03440	PZE	ORGC,,DMWR03		4F142022
00001	0 00000 0 05043	PZE	ENDC-1		4F142023
					4F14203
			STATE C. PERFORMS OPTIMIZATION ON LAMBDA TABLE,		4F14204

03524	0	40000	0	01347		ADD	G			4F14259
03525	0	62200	0	01347		STD	G			4F14260
03526	1	77777	2	03527	R05100	TXI	R05200,B,-1			4F14261
03527	3	00000	2	03520	R05200	TXH	R04500,B,0	DEC(K)=DEC(ACC)=-3P AT END		4F14262
03530	-0	50000	1	05520	R05300	CAL	LAMBDA,A	STRING BEADS... COMPRESS LAMBDA TABLE		4F14263
03531	0	10000	0	03540		TZE	R06100			4F14264
03532	0	60200	4	05520		SLW	LAMBDA,C			4F14265
03533	0	50000	1	05521		CLA	LAMBDA+1,A			4F14266
03534	0	60100	4	05521		STO	LAMBDA+1,C			4F14267
03535	0	50000	1	05522		CLA	LAMBDA+2,A			4F14268
03536	0	60100	4	05522		STO	LAMBDA+2,C			4F14269
03537	1	77775	4	03540		TXI	R06100,C,-3			4F14270
03540	1	77775	1	03541	R06100	TXI	R06200,A,-3			4F14271
03541	3	00000	1	03530	R06200	TXH	R05300,A,0			4F14272
03542	-0	63400	4	03563		SXD	R07800,C	-3P IN XC AT END		4F14273
03543	-0	63400	4	03707		SXD	CS0760,C			4F14274
03544	0	53400	1	01406		LXA	L(0),A			4F14275
03545	0	50000	1	05520	R06400	CLA	LAMBDA,A	STORE ORDERED, REDUCED LAMBDA TABLE		4F14276
03546	0	73400	2	00000		PAX	0,B	IN SCRIPL TABLE		4F14277
03547	0	50000	2	05044		CLA	BETA,B			4F14278
03550	-0	73400	4	00000		PDX	0,C			4F14279
03551	0	50000	1	05520		CLA	LAMBDA,A			4F14260
03552	0	60100	4	06650		STO	SCRIPL,C			4F14281
03553	0	50000	1	05521		CLA	LAMBDA+1,A			4F14282
03554	0	60100	4	06651		STO	SCRIPL+1,C			4F14283
03555	0	50000	1	05522		CLA	LAMBDA+2,A			4F14284
03556	0	60100	4	06652		STO	SCRIPL+2,C			4F14265
03557	1	77775	4	03560		TXI	R07500,C,-3			4F14286
03560	-0	75400	4	00000	R07500	PXD	0,C			4F14287
03561	0	62200	2	05044		STD	BETA,B			4F14288
03562	1	77775	1	03563		TXI	R07800,A,-3			4F14289
03563	3	00000	1	03545	R07800	TXH	R06400,A,0	-3P IN XA AT END		4F14290
03564	0	56000	0	01406	CS0000	LDQ	L(0)	ELIMINATE COMMON SEGMENTS		4F14291
03565	-0	50000	1	06645	CS0010	CAL	SCRIPL-3,A			4F14292
03566	0	10000	0	03575		TZE	CS0080	ERASED SEGMENT - CONTINUE BACK-SCAN		4F14293
03567	0	73400	2	00000	CS0030	PAX	0,B			4F14294
03570	-3	00000	2	03675		TXL	CS0660,B,0	EXIT FROM CS ROUTINE		4F14295
03571	0	62100	0	03567		STA	CS0030			4F14296
03572	0	50000	2	05044		CLA	BETA,B			4F14297
03573	0	73400	4	00000	CS0060	PAX	0,C			4F14298
03574	-3	77772	4	03576		TXL	CS0090,C,-6	AT LEAST TWO ELEMENTS		4F14299
03575	1	00003	1	03565	CS0080	TXI	CS0010,A,3	ONE ELEMENT OR ERASED SEGMENT		4F14300
03576	-0	63400	1	03651	CS0090	SXD	CS0470,A	SAVE XA		4F14301
03577	-0	63400	4	01357		SXD	LENGTH,C	SAVE XC, CONTAINING LENGTH OF SEGMENT		4F14302
03600	-3	00000	4	03603	CS0100	TXL	CS0130,C,0	SEARCH UP FOR MATCHING SEGMENT		4F14303
03601	1	00003	1	03602		TXI	CS0120,A,3			4F14304
03602	1	00003	4	03600	CS0120	TXI	CS0100,C,3			4F14305
03603	-0	50000	1	06645	CS0130	CAL	SCRIPL-3,A			4F14306
03604	-0	10000	0	03606		TNZ	CS0151			4F14307
03605	1	00003	1	03603		TXI	CS0130,A,3	ERASED SEGMENT		4F14308
03606	0	73400	2	00000	CS0151	PAX	0,B			4F14309
03607	-3	00000	2	03670		TXL	CS0610,B,0	GO ON TO NEXT SEGMENT		4F14310
03610	0	62100	0	03573		STA	CS0060			4F14311
03611	0	50000	2	05044		CLA	BETA,B			4F14312

03612	0	73400	4	00000		PAX 0,C		4F14313
03613	-0	75400	4	00000		PXD 0,C		4F14314
03614	0	40200	0	01357		SUB LENGTH		4F14315
03615	-0	10000	0	03600		TNZ CS0100	NOT SAME LENGTH SEGMENT-CONTINUE SEARCH	4F14316
03616	-0	53400	2	03651		LXD CS0470,B	SAME LENGTH SEGMENT	4F14317
03617	-0	63400	1	03667		SXD CS0600,A		4F14318
03620	-3	00000	4	03645	CS0250	TXL CS0430,C,0	MATCHING SEGMENTS	4F14319
03621	0	50000	2	06647		CLA SCRIPL-1,B		4F14320
03622	0	40200	1	06647		SUB SCRIPL-1,A		4F14321
03623	-0	10000	0	03600		TNZ CS0100		4F14322
03624	-0	50000	2	06645		CAL SCRIPL-3,B	SYMBOLS MATCH	4F14323
03625	-0	32000	0	01527		ANA MASK1		4F14324
03626	0	60200	0	01347		SLW G		4F14325
03627	-0	50000	1	06645		CAL SCRIPL-3,A		4F14326
03630	-0	32000	0	01527		ANA MASK1		4F14327
03631	0	76000	0	00006		COM		4F14328
03632	0	36100	0	01347		ACL G		4F14329
03633	0	76000	0	00006		COM		4F14330
03634	-0	10000	0	03600		TNZ CS0100		4F14331
03635	0	50000	2	06646		CLA SCRIPL-2,B	TAGS MATCH	4F14332
03636	0	77100	0	00006		ARS 6		4F14333
03637	0	76700	0	00006		ALS 6		4F14334
03640	0	40200	1	06646		SUB SCRIPL-2,A		4F14335
03641	-0	10000	0	03600		TNZ CS0100		4F14336
03642	1	00003	1	03643		TXI CS0360,A,3	OPS MATCH	4F14337
03643	1	00003	2	03644	CS0360	TXI CS0370,B,3		4F14338
03644	1	00003	4	03620	CS0370	TXI CS0250,C,3		4F14339
03645	-0	50000	1	06650	CS0430	CAL SCRIPL,A	MATCHING SEGMENTS	4F14340
03646	-0	32000	0	01452		ANA MASK2	SEARCH FOR REFERENCES	4F14341
03647	0	34000	1	06647	CS0450	CAS SCRIPL-1,A		4F14342
03650	1	00003	1	03647		TXI CS0450,A,3		4F14343
03651	1	00000	0	03653	CS0470	TXI CS0490,0,0		4F14344
03652	1	00003	1	03647		TXI CS0450,A,3		4F14345
03653	0	50000	0	03567	CS0490	CLA CS0030	CHANGE REFERENCE	4F14346
03654	0	62100	1	06647		STA SCRIPL-1,A		4F14347
03655	-0	53400	4	01357		LXD LENGTH,C		4F14348
03656	-0	53400	1	03667		LXD CS0600,A		4F14349
03657	-3	00000	4	03663	CS0530	TXL CS0570,C,0	ERASE DUPLICATE SEGMENT	4F14350
03660	-0	60000	1	06645		STQ SCRIPL-3,A		4F14351
03661	1	00003	1	03662		TXI CS0560,A,3		4F14352
03662	1	00003	4	03657	CS0560	TXI CS0530,C,3		4F14353
03663	0	53400	4	03573	CS0570	LXA CS0060,C		4F14354
03664	-0	60000	4	05044		STQ BETA,C		4F14355
03665	-0	50000	0	01401		CAL 11Z	STORE CS BIT	4F14356
03666	-0	60200	2	06651		ORS SCRIPL+1,B		4F14357
03667	1	00000	0	03603	CS0600	TXI CS0130,0,0		4F14358
03670	-0	53400	1	03651	CS0610	LXD CS0470,A		4F14359
03671	-0	53400	4	01357		LXD LENGTH,C		4F14360
03672	-3	00000	4	03565	CS0630	TXL CS0010,C,0		4F14361
03673	1	00003	1	03674		TXI CS0650,A,3		4F14362
03674	1	00003	4	03672	CS0650	TXI CS0630,C,3		4F14363
03675	0	53400	5	01406	CS0660	LXA L(0),5	STRING BEADS... COMPRESS SCRIPL TABLE	4F14364
03676	-0	50000	1	06650	CS0670	CAL SCRIPL,A		4F14365
03677	0	10000	0	03706		TZE CS0750		4F14366

03700	0	60200	4	06650	SLW	SCRIPL,C			4F14367
03701	0	50000	1	06651	CLA	SCRIPL+1,A			4F14368
03702	0	60100	4	06651	STO	SCRIPL+1,C			4F14369
03703	0	50000	1	06652	CLA	SCRIPL+2,A			4F14370
03704	0	60100	4	06652	STO	SCRIPL+2,C			4F14371
03705	1	77775	4	03706	TXI	CS0750,C,-3			4F14372
03706	1	77775	1	03707	CS0750	TXI	CS0760,A,-3		4F14373
03707	3	00000	1	03676	CS0760	TXH	CS0670,A,0		4F14374
03710	-0	63400	4	03724	SXD	PM0080,C	-3Q IN XC AT END		4F14375
03711	-0	63400	4	04113	SXD	AS1800,C			4F14376
03712	-0	63400	4	04136	SXD	AS3600,C			4F14377
03713	0	76000	0	00140	PM0000	SLF	TURN OFF ALL SENSE LITES		4F14378
03714	0	53400	1	01406	LXA	L(0),A	PERMUTE * AND /		4F14379
03715	0	50000	1	06650	PM0010	CLA	SCRIPL,A		4F14380
03716	0	73400	2	00000	PAX	0,B			4F14381
03717	0	50000	2	05044	CLA	BETA,B			4F14382
03720	0	73400	4	00000	PAX	0,C	LDXC WITH SEGMENT LENGTH		4F14383
03721	-0	63400	4	03723	SXD	PM0070,C			4F14384
03722	-3	77767	4	03726	TXL	PM0100,C,-9			4F14385
03723	1	00000	1	03724	PM0070	TXI	PM0080,A,0	LENGTH LESS THAN 3 OR OD NOT = TO *	4F14386
03724	-3	00000	1	04071	PM0080	TXL	AS0000,A,0	EXIT FROM PERMUTATION ROUTINE	4F14387
03725	0	02000	0	03715	TRA	PM0010			4F14388
03726	0	56000	1	06651	PM0100	LDQ	SCRIPL+1,A	SEGMENT LENGTH AT LEAST = TO 3	4F14389
03727	-0	75400	0	00000	PXD	0,0			4F14390
03730	-0	76300	0	00006	LGL	6			4F14391
03731	0	40200	0	01405	SUB	STAR			4F14392
03732	-0	10000	0	03723	TNZ	PM0070			4F14393
03733	0	16200	0	03735	TQP	PM0170			4F14394
03734	0	02000	0	03723	TRA	PM0070			4F14395
03735	-0	63400	4	03744	PM0170	SXD	PM0260,C		4F14396
03736	-0	63400	4	03762	SXD	PM0400,C			4F14397
03737	-0	63400	4	04013	SXD	PM0680,C			4F14398
03740	0	53400	4	01406	LXA	L(0),C	LDXC WITH 0		4F14399
03741	1	77775	1	03742	TXI	PM0240,A,-3			4F14400
03742	0	76000	0	00143	PM0240	SLN	3	TURN * LITE ON	4F14401
03743	1	77775	4	03744	PM0250	TXI	PM0260,C,-3		4F14402
03744	-3	00000	4	04025	PM0260	TXL	PM0790,C,0	EXIT	4F14403
03745	-0	63400	4	03755	SXD	PM0340,C			4F14404
03746	-0	53400	2	03747	LXD	PM0290,B			4F14405
03747	1	00000	3	03750	PM0290	TXI	PM0300,3,0	XA TO XA AND XB	4F14406
03750	-0	75400	0	00000	PM0300	PXD	0,0		4F14407
03751	0	56000	1	06651	LDQ	SCRIPL+1,A			4F14408
03752	-0	76300	0	00006	LGL	6			4F14409
03753	0	34000	0	01402	CAS	SLASH			4F14410
03754	0	00007	0	00000	FEXUB	HTR	0,0,7		4F14411
03755	-3	00000	0	04007	PM0340	TXL	PM0640,0,0	/ SIGN	4F14412
03756	-0	76000	0	00143	SLT	3	* SIGN... IS * LITE ON		4F14413
03757	1	77775	1	03742	TXI	PM0240,A,-3	NO		4F14414
03760	1	77775	2	03761	TXI	PM0390,B,-3	YES - SEARCH FOR / SIGN		4F14415
03761	1	77775	4	03762	PM0390	TXI	PM0400,C,-3		4F14416
03762	-3	00000	4	04023	PM0400	TXL	PM0770,C,0	EXIT	4F14417
03763	-0	75400	0	00000	PXD	0,0			4F14418
03764	0	56000	2	06651	LDQ	SCRIPL+1,B			4F14419
03765	-0	76300	0	00006	LGL	6			4F14420

03766	0	40200	0	01402		SUB SLASH			4F14421
03767	0	10000	0	03771		TZE PM0480			4F14422
03770	1	77775	2	03761		TXI PM0390,B,-3			4F14423
03771	0	50000	1	06650	PM0480	CLA SCRIPL,A	PERMUTE TAG WORDS		4F14424
03772	0	56000	2	06650		LDQ SCRIPL,B			4F14425
03773	-0	60000	1	06650		STQ SCRIPL,A			4F14426
03774	0	60100	2	06650		STO SCRIPL,B			4F14427
03775	0	50000	1	06651		CLA SCRIPL+1,A	PERMUTE OP WORDS		4F14428
03776	0	56000	2	06651		LDQ SCRIPL+1,B			4F14429
03777	-0	60000	1	06651		STQ SCRIPL+1,A			4F14430
04000	0	60100	2	06651		STO SCRIPL+1,B			4F14431
04001	0	50000	1	06652		CLA SCRIPL+2,A	PERMUTE SYMBOL WORDS		4F14432
04002	0	56000	2	06652		LDQ SCRIPL+2,B			4F14433
04003	-0	60000	1	06652		STQ SCRIPL+2,A			4F14434
04004	0	60100	2	06652		STO SCRIPL+2,B			4F14435
04005	-0	53400	4	03755		LXD PM0340,C			4F14436
04006	1	77775	1	03743		TXI PM0250,A,-3	RESUME SEGMENT SCAN		4F14437
04007	-0	76000	0	00143	PM0640	SLT 3	/ SIGN... IS * LITE ON		4F14438
04010	1	77775	2	04012	PM0650	TXI PM0670,B,-3	NO		4F14439
04011	1	77775	1	03743		TXI PM0250,A,-3			4F14440
04012	1	77775	4	04013	PM0670	TXI PM0680,C,-3			4F14441
04013	-3	00000	4	04023	PM0680	TXL PM0770,C,0			4F14442
04014	-0	75400	0	00000		PXD 0,0			4F14443
04015	0	56000	2	06651		LDQ SCRIPL+1,B			4F14444
04016	-0	76300	0	00006		LGL 6			4F14445
04017	0	40200	0	01402		SUB SLASH			4F14446
04020	0	10000	0	04010		TZE PM0650			4F14447
04021	0	76000	0	00143		SLN 3	TURN * LITE ON		4F14448
04022	0	02000	0	03771		TRA PM0480			4F14449
04023	-0	53400	1	04024	PM0770	LXD PM0780,A			4F14450
04024	1	00000	3	04025	PM0780	TXI PM0790,3,0	XB TO XA,XB		4F14451
04025	-0	75400	0	00000	PM0790	PXD 0,0			4F14452
04026	0	56000	1	06646		LDQ SCRIPL-2,A			4F14453
04027	-0	76300	0	00006		LGL 6			4F14454
04030	0	40200	0	01402		SUB SLASH			4F14455
04031	0	10000	0	03724		TZE PM0080	... / - EXIT FROM SEGMENT SCAN		4F14456
04032	-0	75400	0	00000		PXD 0,0			4F14457
04033	0	56000	1	06643		LDQ SCRIPL-5,A			4F14458
04034	-0	76300	0	00006		LGL 6			4F14459
04035	0	40200	0	01402		SUB SLASH			4F14460
04036	0	10000	0	03724		TZE PM0080	... / * - EXIT FROM SEGMENT SCAN		4F14461
04037	0	50000	1	06645		CLA SCRIPL-3,A	... **		4F14462
04040	0	60100	0	01126		STO E			4F14463
04041	0	50000	1	06646		CLA SCRIPL-2,A			4F14464
04042	0	60100	0	01127		STO E+1			4F14465
04043	0	50000	1	06647		CLA SCRIPL-1,A			4F14466
04044	0	60100	0	01130		STO E+2			4F14467
04045	1	00003	1	04046		TXI PM0980,A,3			4F14468
04046	1	00003	4	04047	PM0980	TXI PM0990,C,3			4F14469
04047	-3	00000	4	04057	PM0990	TXL PM1070,C,0	FINIS		4F14470
04050	0	50000	1	06645		CLA SCRIPL-3,A			4F14471
04051	0	60100	1	06650		STO SCRIPL,A			4F14472
04052	0	50000	1	06646		CLA SCRIPL-2,A			4F14473
04053	0	60100	1	06651		STO SCRIPL+1,A			4F14474

04054	0	50000	1	06647		CLA	SCRIPL-1,A		4F14475
04055	0	60100	1	06652		STO	SCRIPL+2,A		4F14476
04056	1	00003	1	04046		TXI	PM0980,A,3		4F14477
04057	0	50000	0	01126	PM1070	CLA	E		4F14478
04060	0	60100	1	06650		STO	SCRIPL,A		4F14479
04061	0	50000	0	01127		CLA	E+1		4F14480
04062	0	60100	1	06651		STO	SCRIPL+1,A		4F14481
04063	0	50000	0	01130		CLA	E+2		4F14482
04064	0	60100	1	06652		STO	SCRIPL+2,A		4F14483
04065	-0	50000	1	06654		CAL	SCRIPL+4,A	PRESERVE CS BIT	4F14484
04066	-0	32000	0	01401		ANA	11Z		4F14485
04067	-0	60200	1	06651		ORS	SCRIPL+1,A		4F14486
04070	0	02000	0	03723		TRA	PM0070		4F14487
04071	0	53400	7	01406	AS0000	LXA	L(0),7	RENUMBER SEGMENT OF SCRIPL	4F14488
04072	0	50000	2	05044	AS0100	CLA	BETA,B		4F14489
04073	0	10000	0	04100		TZE	AS0700		4F14490
04074	-0	75400	4	00000		PXD	0,C		4F14491
04075	0	77100	0	00022		ARS	18		4F14492
04076	0	62100	2	05044		STA	BETA,B		4F14493
04077	1	77777	4	04100		TXI	AS0700,C,-1		4F14494
04100	1	77777	2	04101	AS0700	TXI	AS0800,B,-1		4F14495
04101	3	00000	2	04072	AS0800	TXH	AS0100,B,0		4F14496
04102	0	50000	1	06650	AS0900	CLA	SCRIPL,A		4F14497
04103	0	73400	2	00000		PAX	0,B		4F14498
04104	0	50000	2	05044		CLA	BETA,B		4F14499
04105	0	62100	1	06650		STA	SCRIPL,A		4F14500
04106	0	56000	1	06652		LDQ	SCRIPL+2,A		4F14501
04107	-0	76300	0	00001		LGL	1		4F14502
04110	0	76000	0	00001		LBT			4F14503
04111	0	16200	0	04115		TQP	AS2000		4F14504
04112	1	77775	1	04113		TXI	AS1800,A,-3		4F14505
04113	3	00000	1	04102	AS1800	TXH	AS0900,A,0		4F14506
04114	0	02000	0	04122		TRA	AS2500		4F14507
04115	-0	76300	0	00043	AS2000	LGL	35		4F14508
04116	0	73400	2	00000		PAX	0,B		4F14509
04117	0	50000	2	05044		CLA	BETA,B		4F14510
04120	0	62100	1	06652		STA	SCRIPL+2,A		4F14511
04121	1	77775	1	04113		TXI	AS1800,A,-3		4F14512
04122	0	53400	3	01406	AS2500	LXA	L(0),3	LDXA,XB WITH 0	4F14513
04123	0	56000	0	01406		LDQ	L(0)	CLEAR MQ	4F14514
04124	0	60100	2	05044	AS2700	STO	BETA,B	RECLEAR BETA TABLE	4F14515
04125	1	77777	2	04126		TXI	AS2900,B,-1		4F14516
04126	3	00000	2	04124	AS2900	TXH	AS2700,B,0		4F14517
04127	0	50000	1	06650	AS3000	CLA	SCRIPL,A	ADD INTO GAMMA COUNTERS	4F14518
04130	0	73400	2	00000		PAX	0,B		4F14519
04131	0	50000	2	05044		CLA	BETA,B		4F14520
04132	0	40000	0	01462		ADD	BETAD2	3*2**18+(-3)	4F14521
04133	0	62200	2	05044		STD	BETA,B		4F14522
04134	0	62100	2	05044		STA	BETA,B		4F14523
04135	1	77775	1	04136		TXI	AS3600,A,-3		4F14524
04136	3	00000	1	04127	AS3600	TXH	AS3000,A,0	-30 IN XA AT END	4F14525
04137	-0	63400	1	01117		SXD	3QBAR,A	-30 TO 3QBAR = 3LBAR	4F14526
04140	-0	50000	1	06645	CCS000	CAL	SCRIPL-3,A	ELIMINATE COMMON SUBEXPRESSIONS	4F14527
04141	0	73400	2	00000		PAX	0,B	LOAD XB WITH S(1)	4F14528

04142	-3	00000	2	04167		TXL	CCS240,B,0	EXIT AT S(O)	4F14529
04143	-0	50000	2	05044		CAL	BETA,B	OBTAIN LENGTH OF S(I)	4F14530
04144	0	62200	0	04145		STD	CCS060	AND BACK UP TO	4F14531
04145	1	00000	1	04146	CCS060	TXI	CCS070,A,0	BEGINNING OF CURRENT SEGMENT	4F14532
04146	-0	50000	1	06651	CCS070	CAL	SCRIPL+1,A	OBTAIN OP1 (S(I))	4F14533
04147	-0	32000	0	01401		ANA	11Z	EXTRACT CS-BIT	4F14534
04150	0	10000	0	04140		TZE	CCS000	CONTINUE TO S(I-1)	4F14535
04151	-0	75400	2	00000		PXD	0,B		4F14536
04152	0	77100	0	00022		ARS	18		4F14537
04153	0	53400	4	01406		LXA	L(0),C	TO S(I)	4F14538
04154	-0	53400	2	04155		LXD	CCS140,B	AND KEEP COUNT OF SAME	4F14539
04155	1	00000	3	04156	CCS140	TXI	CCS150,3,0	XA TO XA,XB	4F14540
04156	-3	00000	2	04163	CCS150	TXL	CCS200,B,0	SEARCH-UP FINISHED, EXAMINE COUNT	4F14541
04157	0	34000	2	06647		CAS	SCRIPL-1,B		4F14542
04160	1	00003	2	04156		TXI	CCS150,B,3	CONTINUE SEARCH	4F14543
04161	1	00001	4	04162		TXI	CCS190,C,1	RAISE REF COUNTER AND	4F14544
04162	1	00003	2	04156	CCS190	TXI	CCS150,B,3	CONTINUE SEARCH	4F14545
04163	3	00001	4	04140	CCS200	TXH	CCS000,C,1	MULTIPLE REFERENCE	4F14546
04164	-0	50000	0	01530		CAL	MASK4	SINGLE REFERENCE - SO SET	4F14547
04165	0	32000	1	06651		ANS	SCRIPL+1,A	OP1(S(I))30 TO O, AND	4F14548
04166	0	02000	0	04140		TRA	CCS000	CONTINUE FOR S(I-1)	4F14549
04167	-0	53400	1	04136	CCS240	LXD	AS3600,A	-3Q TO XA	4F14550
04170	-3	00000	1	04423	PL0000	TXL	LK0000,A,0	GO TO LINKAGE	4F14551
04171	0	50000	1	06645		CLA	SCRIPL-3,A		4F14552
04172	0	73400	2	00000		PAX	0,B		4F14553
04173	-0	50000	2	05044		CAL	BETA,B		4F14554
04174	0	73400	4	00000		PAX	0,C		4F14555
04175	0	62200	0	04176		STD	PL0060		4F14556
04176	1	00000	1	04177	PL0060	TXI	PL0070,A,0	SET XA TO BEGINNING OF S(I)	4F14557
04177	-0	75400	0	00000	PL0070	PXD	0,0		4F14558
04200	0	56000	1	06651		LDQ	SCRIPL+1,A	OBTAIN	4F14559
04201	-0	76300	0	00006		LGL	6	AND	4F14560
04202	0	34000	0	01427		CAS	SPECOP	EXAMINE OP1 (S(I))	4F14561
04203	0	02000	0	04300		TRA	PL0680		4F14562
04204	0	02000	0	04242		TRA	PL0460		4F14563
04205	-0	75400	0	00000	PL0130	PXD	0,0	OP1 (S(I)) IS +, - OR *	4F14564
04206	0	56000	1	06652		LDQ	SCRIPL+2,A	OBTAIN	4F14565
04207	-0	76300	0	00001		LGL	1	AND	4F14566
04210	0	76000	0	00001		LBT		EXAMINE SYM1 (S(I))	4F14567
04211	0	16200	0	04223		TQP	PL0300		4F14568
04212	-0	76300	0	00005		LGL	5	EX (IN)TERNAL VARIABLE	4F14569
04213	0	34000	0	01423	PL0135	CAS	L(H)	IS SYM1 (S(I)) FIX OR FLO PT	4F14570
04214	0	34000	0	01425		CAS	L(O)		4F14571
04215	0	02000	0	04220		TRA	PL0240	FLO PT... SET OP1 (S(I)) 32 = 1	4F14572
04216	0	02000	0	04220		TRA	PL0240	FLO PT... DITTO	4F14573
04217	0	02000	0	04170		TRA	PL0000	FIX PT... OP1 (S(I)) 32 = 0	4F14574
04220	-0	50000	0	01416	PL0240	CAL	L(8)	SET OP1 (S(I)) 32 = 1	4F14575
04221	-0	60200	1	06651	PL0250	ORS	SCRIPL+1,A		4F14576
04222	1	00000	0	04170	PL0260	TXI	PL0000,0,0	CONTINUE SCAN	4F14577
04223	-0	53400	2	04224	PL0300	LXD	PL0310,B	SYM1 (S(I)) = SOME S(J)	4F14578
04224	1	00000	3	04225	PL0310	TXI	PL0320,3,0	XA TO XA,XB	4F14579
04225	-0	63400	4	04226	PL0320	SXD	PL0330,C		4F14580
04226	1	00000	2	04227	PL0330	TXI	PL0340,B,0		4F14581
04227	-0	50000	2	06650	PL0340	CAL	SCRIPL,B		4F14582

04230	0	73400	4	00000	PAX	0,C			4F14583
04231	-0	32000	0	01452	ANA	MASK2			4F14584
04232	0	40200	1	06652	SUB	SCRIPL+2,A			4F14585
04233	0	10000	0	04237	TZE	PL0420			4F14586
04234	0	50000	4	05044	CLA	BETA,C			4F14587
04235	0	73400	4	00000	PAX	0,C			4F14588
04236	0	02000	0	04225	TRA	PL0320			4F14589
04237	-0	50000	2	06651	PL0420	CAL	SCRIPL+1,B	SYM1(S(I)) = S(J)	4F14590
04240	-0	32000	0	01416	ANA	L(8)		EXTRACT OP1 (S(J)) 32 AND GO	4F14591
04241	0	02000	0	04221	TRA	PL0250		SET OP1 (S(I)) 32 = OP1 (S(J)) 32	4F14592
04242	-0	76300	0	00007	PL0460	LGL	7	OP1 (S(I)) IS SPOF	4F14593
04243	0	16200	0	04252	TQP	PL0465			4F14594
04244	0	56000	1	06652	PL0461	LDQ	SCRIPL+2,A	FS NAME -	4F14595
04245	-0	75400	0	00000	PXD	0,0		EXAMINE SUM1 (S(I)) S,1-5	4F14596
04246	-0	76300	0	00006	LGL	6			4F14597
04247	0	40200	0	01433	SUB	L(X)			4F14598
04250	-0	10000	0	04220	TNZ	PL0240		FLO PT... GO SET OP1 (S(I)) 32 = 1	4F14599
04251	0	02000	0	04170	TRA	PL0000		FIX PT ... OP1 (S(I)) 32 = 0	4F14600
04252	0	76000	0	00001	PL0465	LBT			4F14601
04253	0	02000	0	04260	TRA	PL0470			4F14602
04254	0	56000	1	06652	LDQ	SCRIPL+2,A			4F14603
04255	-0	75400	0	00000	PXD	,0			4F14604
04256	-0	76300	0	00006	LGL	6			4F14605
04257	0	02000	0	04213	TRA	PL0135			4F14606
04260	0	50000	1	06652	PL0470	CLA	SCRIPL+2,A	NOT AN FS NAME	4F14607
04261	0	53400	2	01406	LXA	L(0),B			4F14608
04262	0	34000	2	04732	PL0480	CAS	OPSUB,B		4F14609
04263	1	77777	2	04266	TXI	PL0520,B,-1			4F14610
04264	0	02000	0	04275	TRA	PL0650			4F14611
04265	1	77777	2	04266	TXI	PL0520,B,-1			4F14612
04266	3	77754	2	04262	PL0520	TXH	PL0480,B,-20		4F14613
04267	0	60100	0	01347	STO	G			4F14614
04270	-0	63400	1	04222	SXD	PL0260,A			4F14615
04271	0	07400	1	03321	TSX	TET00,A			4F14616
04272	0	00000	0	00011	HTR	9			4F14617
04273	-0	53400	1	04222	LXD	PL0260,A			4F14618
04274	0	02000	0	04244	TRA	PL0461			4F14619
04275	-0	50000	0	01412	PL0650	CAL	L(4)	SET OP1 (S(I)) 33 =I	4F14620
04276	-0	60200	1	06651	ORS	SCRIPL+1,A			4F14621
04277	0	02000	0	04244	TRA	PL0461			4F14622
04300	0	16200	0	04205	PL0680	TQP	PL0130		4F14623
04301	-0	75400	0	00000	PXD	0,0		OP1 (S(I) IS **	4F14624
04302	0	56000	1	06652	LDQ	SCRIPL+2,A		OBTAIN AND	4F14625
04303	-0	76300	0	00001	LGL	1		EXAMINE	4F14626
04304	0	76000	0	00001	LBT			SYM1 (S(I))	4F14627
04305	0	16200	0	04363	TQP	PL1000			4F14628
04306	-0	76300	0	00005	LGL	5		EX (IN)TERNAL VARIABLE	4F14629
04307	0	34000	0	01423	CAS	L(H)		IS OT FIX OR FLO PT	4F14630
04310	0	34000	0	01425	CAS	L(O)			4F14631
04311	0	02000	0	04314	TRA	PL0800			4F14632
04312	0	02000	0	04314	TRA	PL0800			4F14633
04313	0	02000	0	04316	TRA	PL0830		FIX PT	4F14634
04314	-0	50000	0	01416	PL0800	CAL	L(8)	FLO PT... SET OP1 (S(I)) 32 = 1	4F14635
04315	-0	60200	1	06651	PL0820	ORS	SCRIPL+1,A		4F14636

04316	-0	75400	0	00000	PL0830	PXD 0,0		4F14637
04317	0	56000	1	06655		LDQ SCRIPL+5,A	OBTAIN	4F14638
04320	-0	76300	0	00001		LGL 1	AND	4F14639
04321	0	76000	0	00001		LBT	EXAMINE	4F14640
04322	0	16200	0	04402		TQP PL1200	SYM2 (S(I))	4F14641
04323	-0	76300	0	00005		LGL 5		4F14642
04324	0	34000	0	01423		CAS L(H)		4F14643
04325	0	34000	0	01425		CAS L(O)		4F14644
04326	0	02000	0	04360		TRA PL0940	SYM2 (S(I)) IS FLO PT, SO GO	4F14645
04327	0	02000	0	04360		TRA PL0940	SET OP2 (S(I)) 32 = 1	4F14646
04330	-0	75400	0	00000	PL0850	PXD 0,0	SYM2(S(I)) IS FIX PT	4F14647
04331	-0	76300	0	00006		LGL 6		4F14648
04332	0	40200	0	01375		SUB OPEN		4F14649
04333	-0	10000	0	04170		TNZ PL0000	SYM2 (S(I)) IS EXTERNAL	4F14650
04334	-0	76300	0	00031		LGL 25	SYM2 (S(I)) IS INTERNAL (AND FIX PT)	4F14651
04335	0	40000	0	04352		ADD PL0880		4F14652
04336	0	62100	0	04330		STA PL0850		4F14653
04337	0	76200	0	00302		RDR FXCODR		4F14654
04340	0	46000	0	04330		LDA PL0850		4F14655
04341	0	70000	0	01347		CPY G		4F14656
04342	0	70000	0	01350		CPY G+1		4F14657
04343	0	50000	0	01347		CLA G		4F14658
04344	0	34000	0	01350		CAS G+1		4F14659
04345	0	02000	0	04347		TRA *+2	GO TO THE DIAGNOSTIC	4F14660
04346	0	02000	0	04350		TRA PL1570		4F14661
04347	0	07400	4	03400		TSX DIAG,4	* GO TO THE DIAGNOSTIC	4F14662
04350	0	10000	0	04170	PL1570	TZE PL0000	EXP IS 0, SO OP1 (S(I)) 33 = 0	4F14663
04351	0	34000	0	03754		CAS FEXUB		4F14664
04352	3	00000	0	00002	PL0880	TXH FIXCON,0,0	EXP NOT LESS THAN 7, SO	4F14665
04353	0	02000	0	04170		TRA PL0000	OP1 (S(I)) 33 = 0	4F14666
04354	0	60100	1	06655		STO SCRIPL+5,A	EXP LESS THAN 7, SO STORE EXP	4F14667
04355	-0	50000	0	01412		CAL L(4)	AS SYM2 (S(I)) AND SET	4F14668
04356	-0	60200	1	06651		ORS SCRIPL+1,A	OP1 (S(I)) 33 = 1	4F14669
04357	0	02000	0	04170		TRA PL0000		4F14670
04360	-0	50000	0	01416	PL0940	CAL L(8)	SYM2 (S(I)) IS FLO PT	4F14671
04361	-0	60200	1	06654		ORS SCRIPL+4,A	SET OP2 (S(I)) 32 = 1	4F14672
04362	0	02000	0	04170		TRA PL0000		4F14673
04363	-0	53400	2	04364	PL1000	LXD PL1010,B	SYM1 (S(I)) IS SOME S(J)	4F14674
04364	1	00000	3	04365	PL1010	TXI PL1020,3,0	XA TO XA,XB	4F14675
04365	-0	63400	4	04366	PL1020	SXD PL1030,C		4F14676
04366	1	00000	2	04367	PL1030	TXI PL1040,B,0		4F14677
04367	-0	50000	2	06650	PL1040	CAL SCRIPL,B		4F14678
04370	0	73400	4	00000		PAX 0,C		4F14679
04371	-0	32000	0	01452		ANA MASK2		4F14680
04372	0	40200	1	06652		SUB SCRIPL+2,A		4F14681
04373	0	10000	0	04377		TZE PL1130		4F14682
04374	0	50000	4	05044		CLA BETA,C		4F14683
04375	0	73400	4	00000		PAX 0,C		4F14684
04376	0	02000	0	04365		TRA PL1020		4F14685
04377	-0	50000	2	06651	PL1130	CAL SCRIPL+1,B		4F14686
04400	-0	32000	0	01416		ANA L(8)		4F14687
04401	0	02000	0	04315		TRA PL0820		4F14688
04402	-0	53400	2	04403	PL1200	LXD PL1210,B	SYM2 (S(I)) = SOME S(K)	4F14689
04403	1	00000	3	04404	PL1210	TXI PL1220,3,0	XA TO XA,XB	4F14690

04404	-0	53400	4	04416	PL1220	LXD	PL1330,C	LKXC WITH -6	4F14691
04405	-0	63400	4	04406	PL1230	SXD	PL1240,C		4F14692
04406	1	00000	2	04407	PL1240	TXI	PL1250,B,0		4F14693
04407	-0	50000	2	06650	PL1250	CAL	SCRIPL,B		4F14694
04410	0	73400	4	00000		PAX	0,C		4F14695
04411	-0	32000	0	01452		ANA	MASK2		4F14696
04412	0	40200	1	06655		SUB	SCRIPL+5,A		4F14697
04413	0	10000	0	04417		TZE	PL1340	SYM2(S(I)) = S(K)	4F14698
04414	0	50000	4	05044		CLA	BETA,C		4F14699
04415	0	73400	4	00000		PAX	0,C		4F14700
04416	1	77772	0	04405	PL1330	TXI	PL1230,0,-6		4F14701
04417	-0	50000	2	06651	PL1340	CAL	SCRIPL+1,B	SET OP2(S(I)) 32 = OP1 (S(K)) 32	4F14702
04420	-0	32000	0	01416		ANA	L(8)		4F14703
04421	-0	60200	1	06654		ORS	SCRIPL+4,A		4F14704
04422	0	02000	0	04170		TRA	PL0000	RESUME SCAN	4F14705
04423	-0	53400	1	04136	LK0000	LXD	AS3600,A	-3Q TO XA	4F14706
04424	-0	50000	1	06645	LK0030	CAL	SCRIPL-3,A		4F14707
04425	0	73400	2	00000		PAX	0,B	S(I) TO XB	4F14708
04426	-3	00000	0	04633		TXL	LK1610,8,0	EXIT UPON ENCOUNTERING S(0)	4F14709
04427	0	56000	1	06646		LDQ	SCRIPL-2,A	PLACE LAST OP OP S(I) IN MQ	4F14710
04430	0	50000	2	05044		CLA	BETA,B		4F14711
04431	0	62200	0	04432		STD	LK0110		4F14712
04432	1	00000	1	04433	LK0110	TXI	LK0120,A,0	MOVE XA TO BEGINNING OF S(I)	4F14713
04433	-0	53400	4	04434	LK0120	LXD	LK0130,C		4F14714
04434	1	00000	5	04435	LK0130	TXI	LK0140,5,0	XA TO XA,XC	4F14715
04435	-0	63400	1	04136	LK0140	SXD	AS3600,A		4F14716
04436	0	50000	2	05043		CLA	BETA-1,B		4F14717
04437	-0	73400	2	00000		PDX	0,B	LENGTH OF S(I-1) TO XB	4F14718
04440	-0	63400	2	04441		SXD	LK0180,B		4F14719
04441	1	00000	4	04442	LK0180	TXI	LK0190,C,0	MOVE XC TO BEGINNING OF S(I-1)	4F14720
04442	0	16200	0	04566	LK0190	TQP	LK1200	S(I) TYPE AC	4F14721
04443	-0	77300	0	00001		RQL	1		4F14722
04444	0	16200	0	04566		TQP	LK1200	S(I) TYPE AC	4F14723
04445	-0	50000	0	01404		CAL	12Z	S(I) RESULTS IN MQ (TYPE MQ)	4F14724
04446	-0	60200	1	06651		ORS	SCRIPL+1,A	SET OP1 (S(I)) 31 = 1	4F14725
04447	-0	75400	0	00000		PXD	0,0		4F14726
04450	0	56000	4	06651		LDQ	SCRIPL+1,C	PLACE OP1 (S(I-1)) IN MQ	4F14727
04451	-0	76300	0	00006		LGL	6		4F14728
04452	0	34000	0	01427		CAS	SPECOP		4F14729
04453	0	02000	0	04456		TRA	LK0320		4F14730
04454	0	02000	0	04543		TRA	LK0950		4F14731
04455	0	02000	0	04424		TRA	LK0030	S(I)TYPTMQ, S(I-1)TYPEAC . OP1(S(I))29=0	4F14732
04456	0	16200	0	04477	LK0320	TQP	LK0570		4F14733
04457	-0	76300	0	00033		LGL	27	S(I)TYPE MQ, OP1(S(I-1)) = **	4F14734
04460	-0	50000	1	06650		CAL	SCRIPL,A		4F14735
04461	-0	32000	0	01452		ANA	MASK2	EXTRACT S(I) IN ACC	4F14736
04462	0	16200	0	04472		TQP	LK0480	OP1 (S(I-1)) 33 = 0	4F14737
04463	0	40200	4	06652		SUB	SCRIPL+2,C	OP1 (S(I-1)) 33 = 1, OPEN ** SUBROUTINE.	4F14738
04464	-0	10000	0	04424		TNZ	LK0030	SET OP1 (S(I)) 29 = OP1 (S(I-1)) 35 = 0	4F14739
04465	-0	50000	0	01411		CAL	L(3)	S(I) = SYM1 (S(I-1)), SO	4F14740
04466	-0	60200	4	06651	LK0430	ORS	SCRIPL+1,C		4F14741
04467	-0	50000	0	01436	LK0440	CAL	BIT29		4F14742
04470	-0	60200	1	06651		ORS	SCRIPL+1,A		4F14743
04471	0	02000	0	04424		TRA	LK0030	OP1 (S(I-1)) = 0, CLOSED ** SUBROUTINES	4F14744

04472	0	40200	4	06655	LK0480	SUB	SCRIPL+5,C			4F14745
04473	-0	10000	0	04424		TNZ	LK0030	SET	OPKS(I))29=OPKS(I-1))35=0	4F14746
04474	-0	50000	0	01407		CAL	L(1)	S(I) =	SYM2 (S(I-1)), SO	4F14747
04475	-0	60200	4	06654		ORS	SCRIPL+4,C	SET	OP2 (S(I-1)) 35 = 1	4F14748
04476	0	02000	0	04467		TRA	LK0440			4F14749
04477	-0	75400	0	00000	LK0570	PXD	0,0	S(I) TYPE	MO, OP1 (S(I-1)) = *	4F14750
04500	0	56000	4	06654		LDQ	SCRIPL+4,C	PLACE	PO2 (S(I-1)) IN MQ	4F14751
04501	-0	76300	0	00006		LGL	6	IS	OP2 (S(I-1)) = *	4F14752
04502	0	40200	0	01405		SUB	STAR			4F14753
04503	-0	10000	0	04424		TNZ	LK0030	NO -	SET OP1 (S(I)) 29 = OP1 (S(I-1)) 35 =0	4F14754
04504	-0	50000	0	01410		CAL	L(2)	YES		4F14755
04505	-0	60200	4	06651		ORS	SCRIPL+1,C	SET	OP1(S(I-1))34=1	4F14756
04506	-0	50000	1	06650	LK0630	CAL	SCRIPL,A			4F14757
04507	-0	32000	0	01452		ANA	MASK2	SEARCH	FOR S(I) IN S(I-1)	4F14758
04510	-3	00000	2	04423	LK0650	TXL	LK0000,B,0	NOT	FOUND AT ALL	4F14759
04511	0	34000	1	06647		CAS	SCRIPL-1,A			4F14760
04512	1	00003	1	04515		TXI	LK0700,A,3			4F14761
04513	0	02000	0	04516		TRA	LK0710			4F14762
04514	1	00003	1	04515		TXI	LK0700,A,3	NOT	FOUND - CONTINUE SEARCH	4F14763
04515	1	77775	2	04510	LK0700	TXI	LK0650,B,-3			4F14764
04516	0	56000	1	06646	LK0710	LDQ	SCRIPL-2,A	S(I) IS	SYMJ (S(I-1))	4F14765
04517	-0	77300	0	00001		RQL	1	IS	OPJ (S(I-1)) = *	4F14766
04520	0	16200	0	04522		TXI	LK0750			4F14767
04521	1	00003	1	04515		TXI	LK0700,A,3	NO...	CONTINUE SEARCH	4F14768
04522	0	50000	4	06650	LK0750	CLA	SCRIPL,C	YES...	PERMUTE EL1(S(I-1)) WITH ELJ(S(I-1))	4F14769
04523	0	56000	1	06645		LDQ	SCRIPL-3,A	EXCHANGE		4F14770
04524	0	60100	1	06645		STO	SCRIPL-3,A	TAG		4F14771
04525	-0	60000	4	06650		STQ	SCRIPL,C	WORDS		4F14772
04526	-0	50000	4	06651		CAL	SCRIPL+1,C	PLACE	OP1 (S(I-1)) IN ACC	4F14773
04527	0	56000	1	06646		LDQ	SCRIPL-2,A	PLACE	OPJ (S(I-1)) IN MQ	4F14774
04530	0	60200	1	06646		SLW	SCRIPL-2,A	EXCHANGE		4F14775
04531	-0	60000	4	06651		STQ	SCRIPL+1,C	OP		4F14776
04532	-0	32000	0	01452		ANA	MASK2	WORDS	AND	4F14777
04533	-0	60200	4	06651		ORS	SCRIPL+1,C	SET	OP1(S(I-1))30-33= OPJ(S(I-1))30-33	4F14778
04534	0	50000	4	06652		CLA	SCRIPL+2,C	THEN		4F14779
04535	0	56000	1	06647		LDQ	SCRIPL-1,A	EXCHANGE		4F14780
04536	0	60100	1	06647		STO	SCRIPL-1,A	SYMBOL		4F14781
04537	-0	60000	4	06652		STQ	SCRIPL+2,C	WORDS		4F14782
04540	-0	53400	1	04136		LXD	AS3600,A	RESTORE	XA	4F14783
04541	-0	50000	0	01407	LK0900	CAL	L(1)	AND		4F14784
04542	0	02000	0	04466		TRA	LK0430			4F14785
04543	-0	77300	0	00033	LK0950	RQL	27	S(I) TYPE	MQ, OP1 (S(I-1)) = SPOP	4F14786
04544	-0	50000	1	06650		CAL	SCRIPL,A			4F14787
04545	-0	32000	0	01452		ANA	MASK2	EXTRACT	S(I) IN ACC	4F14788
04546	0	16200	0	04555		TQP	LK1050	OP1 (S(I-1))	33 = 0 (CLOSED 5UBROUTINE)	4F14789
04547	3	00006	2	04424		TXH	LK0030,B,6	OPEN	MULTIV... SET OP1 (S(I)) 29 = 0	4F14790
04550	0	40200	4	06655		SUB	SCRIPL+5,C	OPEN	UNIV... IS S(I) = SUM2 (S(I-1))	4F14791
04551	-0	10000	0	04424		TNZ	LK0030	NO...	SET OP1 (S(I))29 = OP2 (S(I-1))35 =0	4F14792
04552	-0	50000	0	01411		CAL	L(3)	AND		4F14793
04553	-0	60200	4	06654		ORS	SCRIPL+4,C	SET	OP2 (S(I-1))34 = OP2 (S(I-1))35 = 1	4F14794
04554	0	02000	0	04467		TRA	LK0440			4F14795
04555	-0	77300	0	00017	LK1050	RQL	15			4F14796
04556	0	16200	0	04560		TQP	LK1100	TEST	OP1(S(I-1))12	4F14797
04557	0	02000	0	04424		TRA	LK0030	FN-NAME		4F14798

04560	-3	00006	2	04424	LK1100	TXL LK0030,B,6	CLOSED UNIV. SBRTN	4F14799
04561	0	40200	4	06660		SUB SCRIPL+8,C	CLOSED MULTIV. SBRTN	4F14800
04562	-0	10000	0	04424		TNZ LK0030	S(I) NOT = SYM3 (S (I-1))	4F14801
04563	-0	50000	0	01407		CAL L(1)	S(I) = SYM3 (S(I-1)), SO	4F14802
04564	-0	60200	4	06657		ORS SCRIPL+7,C	SET OP3 (S(1-1))135 = 1	4F14803
04565	0	02000	0	04467		TRA LK0440		4F14804
04566	-0	75400	0	00000	LK1200	PXD 0,0	S(I) TYPE AC	4F14805
04567	0	56000	4	06651		LDQ SCRIPL+1,C	PLACE OP1 (S(I-1)) IN MO	4F14806
04570	-0	76300	0	00006		LGL 6		4F14807
04571	0	34000	0	01427		CAS SPECOP		4F14808
04572	0	02000	0	04604		TRA LK1340		4F14809
04573	0	02000	0	04622		TRA LK1470		4F14810
04574	-0	50000	1	06650		CAL SCRIPL,A	S(I) TYPE AC OP1 (S(I-1)) = + OR -	4F14811
04575	-0	32000	0	01452		ANA MASK2	SEARCH FOR S(I) IN S(I-1)	4F14812
04576	-3	00000	2	04423	LK1280	TXL LK0000,B,0	NOT FOUND AT ALL	4F14813
04577	0	34000	1	06647		CAS SCRIPL-1,A		4F14814
04600	1	00003	1	04603		TXI LK1330,A,3		4F14815
04601	0	02000	0	04522		TRA LK0750	S(I) = SOME SYMJ (S(I-1))... GO PERMUTE	4F14816
04602	1	00003	1	04603		TXI LK1330,A,3	NOT FOUND... CONTINUE SEARCH	4F14817
04603	1	77775	2	04576	LK1330	TXI LK1280,B,-3		4F14818
04604	0	16200	0	04612	LK1340	TQP LK1410		4F14819
04605	-0	50000	1	06650		CAL SCRIPL,A	S(I) TYPE AC OP1 (S(I-1)) = **	4F14820
04606	-0	32000	0	01452		ANA MASK2		4F14821
04607	0	40200	4	06652		SUB SCRIPL+2,C	IS S(I) = SYM1 (S(I-1))	4F14822
04610	-0	10000	0	04424		TNZ LK0030	NO	4F14823
04611	0	02000	0	04541		TRA LK0900	YES	4F14824
04612	-0	75400	0	00000	LK1410	PXD 0,0	S(I) TYPE AC OP1 (S(I-1)) = *	4F14825
04613	0	56000	4	06654		LDQ SCRIPL+4,C		4F14826
04614	-0	76300	0	00006		LGL 6	IS OP2 (S(I-1)) = 1	4F14827
04615	0	40200	0	01402		SUB SLASH		4F14828
04616	0	10000	0	04506		TZE LK0630	YES	4F14829
04617	-0	50000	0	01410		CAL L(2)	NO	4F14830
04620	-0	60200	4	06651		ORS SCRIPL+1,C	SET OP1 (S(I-1)) 34 = 1	4F14831
04621	0	02000	0	04423		TRA LK0000		4F14832
04622	-0	77300	0	00033	LK1470	RQL 27	S(I) TYPE AC OP1 (S(I-1)) = SPOP	4F14833
04623	-0	50000	1	06650		CAL SCRIPL,A		4F14834
04624	-0	32000	0	01452		ANA MASK2	EXTRACT S(I) IN ACC	4F14835
04625	0	16200	0	04630		TQP LK1530		4F14836
04626	3	00006	2	04424		TXH LK0030,B,6	OPEN MULTIV.	4F14837
04627	0	02000	0	04472	LK1520	TRA LK0480		4F14838
04630	-0	77300	0	00017	LK1530	RQL 15		4F14839
04631	0	16200	0	04472		TQP LK0480		4F14840
04632	0	02000	0	04424		TRA LK0030	FN-NAME	4F14841
04633	-0	53400	2	05044	LK1610	LXD BETA,B	IS S(0) A SINGLE ELEMENT	4F14842
04634	-0	75400	0	00000		PXD 0,0		4F14843
04635	0	56000	1	06646		LDQ SCRIPL-2,A		4F14844
04636	3	00003	2	04655		TXH LK1780,B,3	NO	4F14645
04637	-0	76300	0	00006		LGL 6	YES	4F14846
04640	0	40200	0	01401		SUB 11Z	IS OP (S(0)) = + OR -	4F14847
04641	0	10000	0	04662		TZE LKK000	OP (S(0)) = -	4F14648
04642	-0	50000	0	06652		CAL SCRIPL+2	OP (S(0)) = +	4F14849
04643	-0	32000	0	01527		ANA MASK1	DOES SYM (S(0)) = S(1)	4F14850
04644	-0	10000	0	04662		TNZ LKK000	NO	4F14851
04645	-0	50000	0	06654		CAL SCRIPL+4	YES - PLACE OP1 (S(I)) IN ACC	4F14852

				DICTIONARY OF OPEN SUBROUTINES FOLLOWS		
04732	-272122626060	OPSUB	OCT	672122626060	XABS	4F14907
04733	+212262606060		OCT	212262606060	ABS	4F14908
04734	-273145636060		OCT	673145636060	XINT	4F14909
04735	+314563606060		OCT	314563606060	INT	4F14910
04736	-274446246060		OCT	674446246060	XMOD	4F14911
04737	-044624606060		OCT	444624606060	MOD	4F14912
04740	-274421670060		OCT	674421670060	XMAXO	4F14913
04741	-042167016060		OCT	442167016060	MAX1	4F14914
04742	-274421670160		OCT	674421670160	XMAX1	4F14915
04743	-042167006060		OCT	442167006060	MAXO	4F14916
04744	-274431450060		OCT	674431450060	XMINO	4F14917
04745	-043145016060		OCT	443145016060	MIN1	4F14918
04746	-274431450160		OCT	674431450160	XMIN1	4F14919
04747	-043145006060		OCT	443145006060	MIN0	4F14920
04750	+264346216360		OCT	264346216360	FLOAT	4F14921
04751	-272631676060		OCT	672631676060	XFIX	4F14922
04752	-223127456060		OCT	623127456060	SIGN	4F14923
04753	-276231274560		OCT	676231274560	XSIGN	4F14924
04754	-272431446060		OCT	672431446060	XDIM	4F14925
04755	+243144606060		OCT	243144606060	DIM	4F14926
	04756		BSS	10		4F14927
				*	*	4F14928
				*	*	4F14929
				*	*	4F149295
	04770	ENDCDR	BSS	0		4F14930
						4F14931
	05044	ENDC	ORG	2596		4F14932
	05044	BETA	BSS	300		4F14933
				END OF ARITHMETIC / STATE C*		4F14934
				*	*	4F14935
				*	*	4F14936
				ARITHMETIC / STATE D=		4F14937
				704 FORTRAN MASTER RECORD CARD / STATE D = F0160000.		4F149371
	00000		ORG	0		4F149372
00000	0 00471 0 03440		PZE	ORGD,,CLDR00		4F149373
00001	0 00000 0 06157		PZE	ENDD-1		4F14938
						4F14939
	03440	ORGD	ORG	1824		4F14940
03440	-0 53400 1 01117	MC0000	LXD	3QBAR,A	MODE CHECKING ROUTINE	4F14941
03441	-0 63400 1 03512		SXD	MC0420,A		4F14942
03442	0 53400 1 01406		LXA	L(0),A		4F14943
03443	-0 63400 1 03461	MC0030	SXD	XASAVE,A		4F14944
03444	-0 50000 1 06650		CAL	SCRIPL,A		4F14945
03445	0 73400 2 00000	MC0050	PAX	,2	S(1) TO XB	4F14946
03446	0 50000 2 06174		CLA	CPBETA,B		4F14947
03447	0 73400 2 00454	MC0070	PAX	TAU2,B		4F14948
03450	-0 63400 2 03511		SXD	MC0410,B		4F14949
03451	-0 63400 2 03516		SXD	MC0460,B		4F14950
03452	3 77772 2 03511		TXH	MC0410,B,-6	SINGLE ELEMENT - GO ONTO S(I+1)	4F14951
03453	0 76000 0 00140		SLF		TURN OFF ALL SENSE LITES	4F14952
03454	-0 75400 0 00000		PXD	0,0	CLEAR ACC	4F14953
03455	0 56000 1 06651		LDQ	SCRIPL+1,A	PLACE OP1 (S(I)) IN MQ	4F14954
03456	-0 76300 0 00006		LGL	6		4F14955
03457	0 34000 0 01427		CAS	SPECOP		4F14956
03460	0 16200 0 03462		TQP	MC0180		4F14956

03461	1	00000	0	03511	XASAVE	TXI	MC0410,0,0			4F14957
03462	-0	76300	0	00032	MC0180	LGL	26	OP1 (S(I)) = +, - OR *		4F14958
03463	0	16200	0	03465		TQP	MC0210	FIX PT		4F14959
03464	0	76000	0	00141		SLN	1	FLO PT		4F14960
03465	-0	75400	0	00000	MC0210	PXD	0,0			4F14961
03466	0	56000	1	06652		LDQ	SCRIPL+2,A	PLACE SYMJ (S(I)) IN MQ - J = I,...		4F14962
03467	-0	76300	0	00001		LGL	1			4F14963
03470	0	76000	0	00001		LBT				4F14964
03471	0	16200	0	03514		TQP	MC0440			4F14965
03472	-0	76300	0	00005		LGL	5	SYMJ (S(I)) IS A VARIABLE		4F14966
03473	0	34000	0	01423		CAS	L(H)			4F14967
03474	0	34000	0	01425		CAS	L(O)			4F14968
03475	1	00000	0	03502	XBSAVE	TXI	MC0340,0,0	FLO PT		4F14969
03476	0	02000	0	03502		TRA	MC0340	FLO PT		4F14970
03477	-0	76000	0	00141	MC0310	SLT	1	SYMJ (S(I)) IS A FIX PT VARIABLE		4F14971
03500	1	00003	2	03506		TXI	MC0380,B,3	OK		4F14972
03501	0	07400	4	03400		TSX	DIAG,4	ERROR.. FLO PT LITE ON		4F14973
03502	-0	76000	0	00141	MC0340	SLT	1	SYMJ(S(I)) IS A FLO PT VARIABLE		4F14974
03503	0	07400	4	03400		TSX	DIAG,4	ERROR.. FLO PT LITE OFF		4F14975
03504	0	76000	0	00141		SLN	1	RESTORE FLO PT LITE		4F14976
03505	1	00003	2	03506		TXI	MC0380,B,3			4F14977
03506	-3	00000	2	03510	MC0380	TXL	MC0400,B,0	FINISHED WITH S(I)		4F14978
03507	1	77775	1	03465		TXI	MC0210,A,-3	CONTINUE SCANNING S(I). J TO J+1		4F14979
03510	-0	53400	1	03461	MC0400	LXD	XASAVE,A	GO TO S(I+1)		4F14980
03511	1	00000	1	03512	MC0410	TXI	MC0420,A,0			4F14981
03512	3	00000	1	03443	MC0420	TXH	MC0030,A,0			4F14982
03513	0	02000	0	03537		TRA	CP0000	EXIT TO COMPILER		4F14983
03514	-0	63400	2	03475	MC0440	SXD	XBSAVE,B	SYMJ (S(ITT = SAME S(K))		4F14984
03515	-0	53400	4	03461		LXD	XASAVE,C			4F14985
03516	1	00000	4	03517	MC0460	TXI	MC0470,C,0	MOVE XC TO 1ST ELEMENT OF S(I+1)		4F14986
03517	-0	50000	4	06650	MC0470	CAL	SCRIPL,C			4F14987
03520	-0	32000	0	01452		ANA	MASK2	EXTRACT S(K) IN ACC		4F14988
03521	0	34000	1	06652		CAS	SCRIPL+2,A	AND COMPARE WITH SYMJ (S(I))		4F14989
03522	0	02000	0	03524		TRA	MC0520			4F14990
03523	0	02000	0	03531		TRA	MC0570			4F14991
03524	0	73400	2	01226	MC0520	PAX	SIGMA1,B	S(K) TO XB		4F14992
03525	0	50000	2	06174		CLA	CPBETA,B			4F14993
03526	0	73400	2	00000	MC0540	PAX	TAU1,B			4F14994
03527	-0	63400	2	03530		SXD	MC0560,B			4F14995
03530	1	00000	4	03517	MC0560	TXI	MC0470,C,0			4F14996
03531	-0	53400	2	03475	MC0570	LXD	XBSAVE,B	SYMJ (S(I)) = S(K) FOR SOME K		4F14997
03532	-0	50000	4	06651		CAL	SCRIPL+1,C	PLACE OP1 (S(K)) IN ACC		4F14998
03533	0	77100	0	00003		ARS	3			4F14999
03534	0	76000	0	00001		LBT				4F15000
03535	0	02000	0	03477		TRA	MC0310	S(K) IS FIX PT		4F15001
03536	0	02000	0	03502		TRA	MC0340	S(K) IS FLO PT		4F15002
03537	0	76000	0	00140	CP0000	SLF		TURN OFF ALL SENSE LITES		4F15003
03540	0	60000	0	06160		STZ	FNSW			4F15004
03541	-0	53400	4	01122		LXD	ARGCTR,C	IS THIS AN FS STATEMENT		4F15005
03542	-3	00000	4	03550		TXL	CP0090,C,0	NO		4F15006
03543	0	07400	4	01731		TSX	CIT00,C	YES - COMPILE FOUR 36 - BIT		4F15007
03544	0	00000	0	01531		HTR	ALL1	STRINGS IN 1 AS A PRELUDE TO		4F15008
03545	0	00000	0	01531		HTR	ALL1	FS STATEMENT COMPILATION		4F15009

03546	0	00000	0	01531	HTR ALL1		4F15011
03547	0	00000	0	01531	HTR ALL1		4F15012
03550	-0	50000	0	00030	CP0090 CAL EIFNO		4F15013
03551	-0	32000	0	01527	ANA MASK1		4F15014
03552	0	60200	0	06164	SLW CW	STO INT. FORM. NO. IN DEC FIELD OF CW.	4F15015
03553	-0	53400	1	01117	LXD 3QBAR,A	-30 TO XA	4F15016
03554	0	50000	1	06645	CP0130 CLA SCRIPL-3,A	EXTRACT CURRENT S(I)	4F15017
03555	0	73400	2	00000	CP0140 PAX ,2		4F15018
03556	0	50000	2	06174	CLA CPBETA,B		4F15019
03557	0	62200	0	01363	STD PHI(I)	STO ERAS. REL. ADD. IN PHI (I)	4F15020
03560	-0	32000	0	01452	ANA MASK2		4F15021
03561	0	73400	2	01356	CP0180 PAX TAU3,B		4F15022
03562	-0	63400	2	03607	SXD CP0400,B		4F15023
03563	0	76000	0	00006	COM		4F15024
03564	0	40000	0	01407	ADD L(1)		4F15025
03565	0	76700	0	00022	ALS 18		4F15026
03566	0	62200	0	03567	STD CP0240		4F15027
03567	1	00000	1	03570	CP0240 TXI CP0250,A,0	MOVE XA TO 1ST ELEMENT OF CURRENT S(I)	4F15028
03570	-0	63400	1	01117	CP0250 SXD 3QBAR,A		4F15029
03571	0	56000	1	06651	LDQ SCRIPL+1,A	EXAMINE OP1 (S(I)) 29,30,31,32	4F15030
03572	-0	76300	0	00036	LGL 30		4F15031
03573	0	76000	0	00001	LBT		4F15032
03574	0	02000	0	03576	TRA CP0310	OP1 (S(I)) 29 = 0	4F15033
03575	0	16200	0	03604	TQP CP0370	OP1 (S(I)) 30 = 0	4F15034
03576	0	76000	0	00141	CP0310 SLN 1	OP1 (S(I)) 29 = 0 OR OP1 (S(I)) 30 = 1, SO	4F15035
03577	-0	77300	0	00001	RQL 1	SET STORE LITE	4F15036
03600	0	16200	0	03602	TQP CP0350	OP1 (S(I)) 31 = 0, SO SET STO LITE	4F15037
03601	0	76000	0	00142	SLN 2	OP1 (S(I)) 31 = 1, SO SET STQ LITE	4F15038
03602	-0	77300	0	00001	CP0350 RQL 1		4F15039
03603	0	02000	0	03605	TRA CP0380		4F15040
03604	-0	77300	0	00002	CP0370 RQL 2		4F15041
03605	0	16200	0	03611	CP0380 TQP CP0420	TEST OP1 (S(I)) 32	4F15042
03606	-0	76000	0	00144	SLT 4	OP1 (S(I)) 32 = 1, SO SET FLPTSW	4F15043
03607	3	00000	0	00000	CP0400 TXH 0,0,0		4F15044
03610	0	02000	0	03612	TRA CP0430		4F15045
03611	0	76000	0	00144	CP0420 SLN 4	OP1 (S(I)) 32 = 0, SO SET FXPTSW	4F15046
03612	-0	75400	0	00000	CP0430 PXD 0,0		4F15047
03613	0	56000	1	06651	LDQ SCRIPL+1,A	PLACE OP1 (S(I)) IN MQ	4F15048
03614	-0	76300	0	00006	LGL 6		4F15049
03615	0	34000	0	01427	CAS SPECOP		4F15050
03616	1	00000	0	03672	TXI CP0960,0,0		4F15051
03617	1	77775	1	04026	TXI CP2040,A,-3		4F15052
03620	0	40200	0	01401	SUB 11Z		4F15053
03621	0	10000	0	03650	TZE CP0760		4F15054
03622	-0	76300	0	00035	LGL 29	OP1 (S(I)) = +	4F15055
03623	0	16200	0	03710	TQP CP1130	OP1 (S(I)) 35 = 0	4F15056
03624	-0	53400	2	03607	CP0540 LXD CP0400,B	OP1 (S(I)) 35 = 1	4F15057
03625	1	00003	2	03626	TXI CP0560,B,3		4F15058
03626	-3	00000	2	04622	CP0560 TXL ES0000,B,0	GO TO END-OF-SEGMENT SBRTN	4F15059
03627	-0	63400	2	03607	SXD CP0400,B		4F15060
03630	1	77775	1	03631	TXI CP0590,A,-3		4F15061
03631	-0	75400	0	00000	CP0590 PXD 0,0		4F15062
03632	0	56000	1	06651	LDQ SCRIPL+1,A	PLACE OPJ (S(I)) IN MQ	4F15063
03633	-0	76300	0	00006	LGL 6		4F15064

03634	0	34000	0	01405	CAS STAR			4F15065
03635	0	02000	0	03716	TRA CP1200	OPJ (S(I)) = /		4F15066
03636	0	02000	0	03771	TRA CP1720	OPJ (S(I)) = *		4F15067
03637	0	40200	0	01401	SUB 11Z			4F15068
03640	0	10000	0	03663	TZE CP0880	OPJ (S(I)) = -		4F15069
03641	-0	50000	0	01550	CAL L(FAD)	OPJ (S(I)) = +		4F15070
03642	-0	76000	0	00144	SLT 4			4F15071
03643	0	02000	0	03646	TRA CP0740			4F15072
03644	0	76000	0	00144	SLN 4	FIX PT. RESTORE FXPTSW		4F15073
03645	-0	50000	0	01532	CAL L(ADD)			4F15074
03646	0	60200	0	06165	CP0740 SLW CW+1			4F15075
03647	0	02000	0	03766	TRA CP1690			4F15076
03650	-0	76300	0	00035	CP0760 LGL 29	OP1 (S(I)) = -		4F15077
03651	0	16200	0	03660	TQP CP0850			4F15078
03652	-0	50000	0	01540	CAL L(CHS)	OP1 (S(I)) 35 = 1, SO		4F15079
03653	0	60200	0	06165	SLW CW+1	COMPILE CHS FOR 1ST ELEMENT		4F15080
03654	0	60000	0	06166	STZ CW+2			4F15081
03655	0	60000	0	06167	STZ CW+3			4F15082
03656	0	07400	2	05104	TSX COMP,B			4F15083
03657	0	02000	0	03624	TRA CP0540			4F15084
03660	-0	50000	0	01543	CP0850 CAL L(CLS)	OP1 (S(I)) 35 = 0, SO		4F15085
03661	0	60200	0	06165	SLW CW+1	COMPILE CLS SYM1 (S(I)) FOR 1ST ELEMENT		4F15086
03662	0	02000	0	03712	TRA CP1150			4F15087
03663	-0	50000	0	01553	CP0880 CAL L(FSB)	OPJ (S(I)) = -		4F15088
03664	-0	76000	0	00144	SLT 4			4F15089
03665	0	02000	0	03670	TRA CP0940			4F15090
03666	0	76000	0	00144	SLN 4	FIX PT. RESTORE FXPTSW		4F15091
03667	-0	50000	0	01574	CAL L(SUB)			4F15092
03670	0	60200	0	06165	CP0940 SLW CW+1			4F15093
03671	0	02000	0	03766	TRA CP1690			4F15094
03672	0	16200	0	03674	CP0960 TQP CP0980			4F15095
03673	0	02000	0	04363	TRA CP4140			4F15096
03674	-0	76300	0	00035	CP0980 LGL 29	OP1 (S(I)) = *		4F15097
03675	0	76000	0	00143	SLN 3	TURN LITE 3 ON		4F15098
03676	0	76000	0	00001	LBT	TEST OP1 (S(I)) 34		4F15099
03677	0	02000	0	03702	TRA CP1050	OP1 (S(I)) 34 = 0, SO LEAVE LITE 3 ON		4F15100
03700	-0	76000	0	00143	SLT 3	OP1 (S(I)) 34 = 1, SO TURN LITE 3 OFF		4F15101
03701	3	00000	0	00000	TXH 0,0,0			4F15102
03702	0	16200	0	03704	CP1050 TQP CP1070			4F15103
03703	0	02000	0	03624	TRA CP0540	OP1 (S(I)) 35 = 1, SO GO MODIFY J		4F15104
03704	-0	50000	0	01556	CP1070 CAL L(LDQ)	OP1 (S(I)) 35 = 0		4F15105
03705	-0	76000	0	00143	SLT 3			4F15106
03706	0	02000	0	03711	TRA CP1140	ELI (S(II)) TO MQ		4F15107
03707	0	76000	0	00143	SLN 3	ELI (S(II)) TO ACC		4F15108
03710	-0	50000	0	01541	CP1130 CAL L(CLA)			4F15109
03711	0	60200	0	06165	CP1140 SLW CW+1			4F15110
03712	0	07400	4	05112	CP1150 TSX AC0000,C	ADDRESS COMPILE SYM1 (S(I))		4F15111
03713	0	07400	2	05104	TSX COMP,B			4F15112
03714	0	60000	0	06164	STZ CW	RESET CW		4F15113
03715	0	02000	0	03624	TRA CP0540	GO MODIFY J		4F15114
03716	-0	76000	0	00143	CP1200 SLT 3	OPJ (S(I)) = /		4F15115
03717	0	02000	0	03731	TRA CP1330			4F15116
03720	-0	76000	0	00144	SLT 4	PREDECESSOR IN ACC		4F15117
03721	0	02000	0	03764	TRA CP1670	FLO PT.		4F15118

03722	0	76000	0	00144	SLN 4	FIX PT. RESTORE FXPTSW	4F15119
03723	0	07400	4	01731	TSX CIT00,C	COMPILE LRS 35	4F15120
03724	0	00000	0	01406	HTR L(0)		4F15121
03725	0	00000	0	01560	HTR L(LRS)		4F15122
03726	0	00000	0	01406	HTR L(0)		4F15123
03727	0	00000	0	01472	HTR DEC35		4F15124
03730	0	02000	0	03734	TRA CP1450		4F15125
03731	-0	76000	0	00144	CP1330 SLT 4	PREDECESSOR IN MQ	4F15126
03732	0	02000	0	03753	TRA CP1570	AND SEGMENT IS	4F15127
03733	0	76000	0	00144	SLN 4	FIX PT. RESTORE FXPTSW	4F15128
03734	0	50000	0	01547	CP1450 CLA L(DVP)		4F15129
03735	0	60100	0	06165	STO CW+1		4F15130
03736	0	07400	4	05112	TSX AC0000,C	ADDRESS COMPILE SYMJ (S(I))	4F15131
03737	0	07400	2	05104	TSX COMP,B	COMPILE DVP SYMJ (S(I))	4F15132
03740	0	07400	4	01731	TSX CIT00,C	COMPILE CLM	4F15133
03741	0	00000	0	01406	HTR L(0)		4F15134
03742	0	00000	0	01542	HTR L(CLM)		4F15135
03743	0	00000	0	01406	HTR L(0)		4F15136
03744	0	00000	0	01406	HTR L(0)		4F15137
03745	0	07400	4	01731	TSX CIT00,C	COMPILE LLS 18	4F15138
03746	0	00000	0	01406	HTR L(0)		4F15139
03747	0	00000	0	01557	HTR L(LLS)		4F15140
03750	0	00000	0	01406	HTR L(0)		4F15141
03751	0	00000	0	01466	HTR DEC18		4F15142
03752	0	02000	0	03624	TRA CP0540	GO MODIFY J	4F15143
03753	0	50000	0	01573	CP1570 CLA L(STQ)	PREDECESSOR IN MQ	4F15144
03754	0	60100	0	06165	STO CW+1	AND SEGMENT IS FLO PT	4F15145
03755	0	50000	0	01505	CLA X(		4F15146
03756	0	60100	0	06166	STO CW+2		4F15147
03757	0	60000	0	06167	STZ CW+3		4F15148
03760	0	07400	2	05104	TSX COMP,B	COMPILE STO 700000	4F15149
03761	0	50000	0	01541	CLA L(CLA)		4F15150
03762	0	60100	0	06165	STO CW+1		4F15151
03763	0	07400	2	05104	TSX COMP,B	COMPILE CLA 700000	4F15152
03764	0	50000	0	01551	CP1670 CLA L(FDP)		4F15153
03765	0	60100	0	06165	STO CW+1	COMPILE FOP SYMJ (S(I))	4F15154
03766	0	07400	4	05112	CP1690 TSX AC0000,C	ADDRESS COMPILE SYMJ (S(I))	4F15155
03767	0	07400	2	05104	TSX COMP,B		4F15156
03770	0	02000	0	03624	TRA CP0540	GO MODIFY J	4F15157
03771	-0	76000	0	00143	CP1720 SLT 3	OPJ(S(I))=*	4F15158
03772	0	02000	0	04004	TRA CP1840		4F15159
03773	0	50000	0	01572	CLA L(STO)	PREDECESSOR IN ACC	4F15160
03774	0	60100	0	06165	STO CW+1		4F15161
03775	0	50000	0	01505	CLA X(		4F15162
03776	0	60100	0	06166	STO CW+2		4F15163
03777	0	60000	0	06167	STZ CW+3		4F15164
04000	0	07400	2	05104	TSX COMP,B	COMPILE STO 700000	4F15165
04001	0	50000	0	01556	CLA L(LDQ)		4F15166
04002	0	60100	0	06165	STO CW+1		4F15167
04003	0	07400	2	05104	TSX COMP,B	COMPILE LDQ 700000	4F15168
04004	0	76000	0	00143	CP1840 SLN 3	TURN LATE 3 ON	4F15169
04005	0	07400	4	05112	TSX AC0000,C	ADDRESS COMPILE SYMJ(S(I))	4F15170
04006	-0	76000	0	00144	SLT 4		4F15171
04007	0	02000	0	04022	TRA CP2000		4F15172

04010	0	76000	0	00144	SLN 4	FIX PT. RESTORE FXPTSW	4F15173
04011	0	50000	0	01562	CLA L(MPY)		4F15174
04012	0	60100	0	06165	STO CW+1		4F15175
04013	0	07400	2	05104	TSX COMP,B	COMPILE MPY SYMJ(S(I))	4F15176
04014	0	07400	4	01731	TSX CIT00,C	COMPILE ALS 17	4F15177
04015	0	00000	0	01406	HTR L(0)		4F15178
04016	0	00000	0	01533	HTR L(ALS)		4F15179
04017	0	00000	0	01406	HTR L(0)		4F15180
04020	0	00000	0	01465	HTR DEC17		4F15181
04021	0	02000	0	03624	TRA CP0540	GO MODIFY J	4F15182
04022	0	50000	0	01552	CP2000 CLA L(FMP)	FLO PT.	4F15183
04023	0	60100	0	06165	STO CW+1		4F15184
04024	0	07400	2	05104	TSX COMP,B	COMPILE FMP SYMJ(S(I))	4F15185
04025	0	02000	0	03624	TRA CP0540	GO MODIFY J.	4F15186
04026	-0	76300	0	00007	CP2040 LGL 7	OPI(S(I))=SPOP	4F15187
04027	0	76000	0	00001	LBT	TEST OP1(S(I))12	4F15188
04030	0	16200	0	04150	TQP CP2650	LIB OR OPEN FUNCTION	4F15189
04031	0	16200	0	04473	TQP CP5000	FN-FUNCTION	4F15190
04032	-0	75400	0	00000	PXD 0,0	FS-FUNCTION	4F15191
04033	0	76300	0	00017	LLS 15	PUT TYPE NO IN ADD(ACC)	4F15192
04034	-0	50100	0	01503	ORA P(	FORM 4...TYPE NO.	4F15193
04035	0	60200	0	06162	SLW ARGORG	AND STO IN ARGORG	4F15194
04036	-0	32000	0	01452	ANA MASK2		4F15195
04037	-0	50100	0	01505	ORA X(	FORM 7...TYPE NO.	4F15196
04040	0	60200	0	06163	SLW XRSAVE	AND STO IN XRSAVE	4F15197
04041	0	50000	1	06651	CLA SCRIPL+1,A		4F15198
04042	0	76000	0	00001	LBT	EXAMINE OP2(S(I))35	4F15199
04043	0	02000	0	04052	TRA CP2150	1ST ARG STORED	4F15200
04044	0	07400	4	01731	CP2100 TSX CIT00,C	1ST ARG IN ACC	4F15201
04045	0	00000	0	01406	HTR L(0)	COMPILE STO 4...TYPE NO. + 0	4F15202
04046	0	00000	0	01572	HTR L(STO)		4F15203
04047	0	00000	0	06162	HTR ARGORG		4F15204
04050	0	00000	0	01406	HTR L(0)		4F15205
04051	1	77775	1	04057	TXI CP2200,A,-3	GO ON TO OP3(S(I))	4F15206
04052	-0	50000	0	01541	CP2150 CAL L(CLA)		4F15207
04053	0	60200	0	06165	SLW CW+1		4F15208
04054	0	07400	4	05112	TSX AC0000,C	ADDRESS COMPILE SYM2(S(I))	4F15209
04055	0	07400	2	05104	TSX COMP,B	COMPILE CLA SYM2(S(I))	4F15210
04056	0	02000	0	04044	TRA CP2100		4F15211
04057	0	60000	0	06164	CP2200 STZ CW	RESET CW	4F15212
04060	-0	53400	2	03607	LXD CP0400,B		4F15213
04061	1	00003	2	04062	TXI CP2230,B,3		4F15214
04062	3	77772	2	04125	CP2230 TXH CP2500,B,-6	FINISHED WITH S(I)	4F15215
04063	-0	63400	2	03607	SXD CP0400,B		4F15216
04064	0	50000	1	06651	CLA SCRIPL+1,A		4F15217
04065	0	76000	0	00001	LBT	EXAMINE OP3(S(I))35	4F15218
04066	0	02000	0	04075	TRA CP2300	2ND ARG STORED	4F15219
04067	0	07400	4	01731	CP2250 TSX CIT00,C	2ND ARG IN MQ	4F15220
04070	0	00000	0	01406	HTR L(0)	COMPILE STO 4...TYPE NO, + 1	4F15221
04071	0	00000	0	01573	HTR L(STQ)		4F15222
04072	0	00000	0	06162	HTR ARGORG		4F15223
04073	0	00000	0	01454	HTR 2E18		4F15224
04074	1	77775	1	04102	TXI CP2350,A,-3	GO ON TO SYM4(S(I))	4F15225
04075	-0	50000	0	01556	CP2300 CAL L(LDQ)		4F15226

04076	0	60200	0	06165	SLW	CW+1		4F15227	
04077	0	07400	4	05112	TSX	AC0000,C	ADDRESS COMPILE SYM3(S(I))	4F15228	
04100	0	07400	2	05104	TSX	COMP,B	COMPILE LDQ SYM3(S(I))	4F15229	
04101	0	02000	0	04067	TRA	CP2250		4F15230	
04102	0	50000	0	01521	CP2350	CLA	DECM12	INITIALIZE DEC(P(CNTR)) TO 2	4F15231
04103	0	60200	0	06161	SLW	P(CNTR)		4F15232	
04104	-0	53400	2	03607	CP2370	LXD	CP0400,B	4F15233	
04105	1	00003	2	04106	TXI	CP2390,B,3		4F15234	
04106	3	77772	2	04125	CP2390	TXH	CP2500,B,-6	FINISHED WITH S(I)	4F15235
04107	-0	63400	2	03607	SXD	CP0400,B		4F15236	
04110	-0	50000	0	01541	CAL	L(CLA)		4F15237	
04111	0	60200	0	06165	SLW	CW+1		4F15236	
04112	0	07400	4	05112	TSX	AC0000,C	ADDRESS COMPILE SYMJ(S(I)), J=4,...	4F15239	
04113	0	07400	2	05104	TSX	COMP,B	COMPILE CLA SYMJ(S(I)), J=4,...	4F15240	
04114	0	07400	4	01731	TSX	CIT00,C	COMPILE STO 4...TYPE NO, + J-2, J=4,...	4F15241	
04115	0	00000	0	01406	HTR	L(0)		4F15242	
04116	0	00000	0	01572	HTR	L(STO)		4F15243	
04117	0	00000	0	06162	HTR	ARGORG		4F15244	
04120	0	00000	0	06161	HTR	P(CNTR)		4F15245	
04121	0	50000	0	06161	CLA	P(CNTR)	UPDATE P(CNTR)	4F15246	
04122	0	40000	0	01454	ADD	2E18		4F15247	
04123	0	60100	0	06161	STO	P(CNTR)		4F15248	
04124	1	77775	1	04104	TXI	CP2370,A,-3		4F15249	
04125	-0	53400	1	01117	CP2500	LXD	3QBAR,A	FINISHED WITH S(I)	4F15250
04126	-0	50000	0	01575	CAL	L(SXD)		4F15251	
04127	0	60200	0	06165	SLW	CW+1		4F15252	
04130	-0	50000	0	06163	CAL	XRSAVE		4F15253	
04131	0	60200	0	06166	SLW	CW+2		4F15254	
04132	-0	50000	0	01412	CAL	L(4)		4F15255	
04133	0	60200	0	06167	SLW	CW+3		4F15256	
04134	0	07400	2	05104	TSX	COMP,B	COMPILE SXD 7...TYPE NO. , 4	4F15257	
04135	-0	50000	0	01602	CAL	L(TSX)		4F15258	
04136	0	60200	0	06165	SLW	CW+1		4F15259	
04137	-0	50000	1	06652	CAL	SCRIPL+2,A		4F15260	
04140	0	60200	0	06166	SLW	CW+2		4F15261	
04141	0	07400	2	05104	TSX	COMP,B	COMPILE TSX SYMI(S(I)),4	4F15262	
04142	-0	50000	0	01561	CAL	L(LXD)		4F15263	
04143	0	60200	0	06165	SLW	CW+1		4F15264	
04144	-0	50000	0	06163	CAL	XRSAVE		4F15265	
04145	0	60200	0	06166	SLW	CW+2		4F15266	
04146	0	02000	0	05241	TRA	CP6000		4F15267	
04147	1	00000	0	04622	CP5830	TXI	ES0000,0,0	4F15268	
								4F15269	
04150	-0	76300	0	00024	CP2650	LGL	20	TEST OPI(S(I))33	4F15270
04151	0	16200	0	04217	TQP	CP3060	0... LIB. SBRTN	4F15271	
04152	0	50200	0	06164	CLS	CW	1... OPEN SBRTN	4F15272	
04153	0	60100	0	06164	STO	CW	CW TO -CW	4F15273	
04154	0	50000	1	06647	CLA	SCRIPL-1,A		4F15274	
04155	0	60100	0	06166	STO	CW+2		4F15275	
04156	0	07400	2	05104	TSX	COMP,B	COMPILE FUNCTION NAME	4F15276	
04157	0	60000	0	06164	STZ	CW	RESET CW	4F15277	
04160	-0	53400	2	03607	LXD	CP0400,B		4F15278	
04161	-3	77767	2	04203	TXL	CP2930,B,-9		4F15279	
04162	-0	50000	0	01531	CAL	ALL1	OPEN UNIVARIATE FUNCTION	4F15280	

04163	0	60200	0	06164	SLW	CW		4F15281
04164	0	50000	1	06651	CLA	SCRIPL+1,A		4F15282
04165	0	76000	0	00001	LBT		EXAMINE OP2(S(I))35	4F15283
04166	0	02000	0	04201	TRA	CP2900	0... ARG STORED	4F15284
04167	0	77100	0	00001	ARS	1	1... ARG NOT STORED	4F15285
04170	0	56000	0	01512	LDQ	ADPLUS		4F15286
04171	0	76000	0	00001	LBT			4F15287
04172	0	02000	0	04174	TRA	CP2860		4F15286
04173	0	56000	0	01524	LDQ	ADSTAR		4F15289
04174	-0	60000	0	06166	CP2860	STQ	CW+2	4F15290
04175	0	60000	0	06167		STZ	CW+3	4F15291
04176	0	07400	2	05104	CP2880	TSX	COMP,B	4F15292
04177	0	60000	0	06164		STZ	CW	4F15293
04200	0	02000	0	04622	TRA	ES0000	RESET CW	4F15294
04201	0	07400	4	05112	CP2900	TSX	AC0000,C	4F15295
04202	0	02000	0	04176	TRA	CP2880	ADDRESS COMPILE SYM2(S(II))	4F15296
04203	0	07400	4	05112	CP2930	TSX	AC0000,C	4F15297
04204	-0	53400	2	03607		LXD	CP0400,B	4F15298
04205	1	00003	2	04206		TXI	CP2960,B,3	4F15299
04206	3	77772	2	04212	CP2960	TXH	CP3000,B,-6	4F15300
04207	-0	63400	2	03607		SXD	CP0400,B	4F15301
04210	0	07400	2	05104		TSX	COMP,B	4F15302
04211	1	77775	1	04203		TXI	CP2930,A,-3	4F15303
04212	-0	50000	0	01531	CP3000	CAL	ALL1	4F15304
04213	0	60200	0	06164		SLW	CW	4F15305
04214	0	07400	2	05104		TSX	COMP,B	4F15306
04215	0	60000	0	06164		STZ	CW	4F15307
04216	0	02000	0	04622		TRA	ES0000	4F15308
04217	-3	77767	2	04246	CP3060	TXL	CP3350,B,-9	4F15309
04220	0	50000	1	06651		CLA	SCRIPL+1,A	4F15310
04221	0	76000	0	00001		LBT		4F15311
04222	0	02000	0	04240		TRA	CP3280	4F15312
04223	0	50000	0	01575	CP3100	CLA	L(SXD)	4F15313
04224	0	60100	0	06165		STO	CW+1	4F15314
04225	0	50000	0	01505		CLA	X(	4F15315
04226	0	60100	0	06166		STO	CW+2	4F15316
04227	0	50000	0	01412		CLA	L(4)	4F15317
04230	0	60100	0	06167		STO	CW+3	4F15318
04231	0	07400	2	05104		TSX	COMP,B	4F15319
04232	0	50000	0	01602		CLA	L(TSX)	4F15320
04233	0	60100	0	06165		STO	CW+1	4F15321
04234	0	50000	1	06647		CLA	SCRIPL-1,A	4F15322
04235	0	60100	0	06166		STO	CW+2	4F15323
04236	0	07400	2	05104		TSX	COMP,B	4F15324
04237	0	02000	0	04615		TRA	CP5780	4F15325
04240	0	50000	0	01541	CP3280	CLA	L(CLA)	4F15331
04241	0	60100	0	06165		STO	CW+1	4F15332
04242	0	07400	4	05112		TSX	AC0000,C	4F15333
04243	0	07400	2	05104		TSX	COMP,B	4F15334
04244	0	60000	0	06164		STZ	CW	4F15335
04245	0	02000	0	04223		TRA	CP3100	4F15336
04246	-3	77764	2	04272	CP3350	TXL	CP3560,B,-12	4F15337
04247	0	50000	1	06651		CLA	SCRIPL+1,A	4F15338
04250	0	76000	0	00001		LBT		4F15339
							EXAMINE OP2(S(I))35	
							COMPILE ACC OR MQ INDICATOR	
							RESET CW	
							GO COMPILE SYM2(S(II))	
							OPEN MULTIVARIATE FUNCTION	
							COMPILE SYMJ(S(I))	
							COMPILE LAST ARGUMENT NAME	
							RESET CW	
							GO TO END-OF-SEGMENT SBRTN	
							CLOSED UNIVARIATE FUNCTION	
							EXAMINE OP2(S(I))35	
							0... ARG STORED	
							1... ARG IN ACC	
							COMPILE SXD7...0,4	
							COMPILE TSX SYMI(S(I)),4	
							COMPILE FLOW TRACE INFO AND LXD 7(,4	
							ADDRESS COMPILE SYM2(S(I))	
							COMPILE CLA SYM2(S(I))	
							RESET CW	
							GO COMPILE SXD,TSX,LXD SEQUENCE	
							CLOSED BIVARIATE FUNCTION	
							EXAMINE OP2(S(I))35	

04251	0	02000	0	04260	TRA	CP3450	0... ARG1 STORED	4F15340
04252	0	50000	0	01556	CP3390	CLA L(LDQ)	1... ARG1 IN ACC	4F15341
04253	0	60100	0	06165		STO CW+1		4F15342
04254	1	77775	1	04255		TXI CP3420,A,-3		4F15343
04255	0	07400	4	05112	CP3420	TSX AC0000,C	ADDRESS COMPILE SYM3(S(I))	4F15344
04256	0	07400	2	05104		TSX COMP,B	COMPILE LDQ SYM3(S(I))	4F15345
04257	1	00003	1	04223		TXI CP3100,A,3	GO COMPILE SXD,TSX,LXD SEQUENCE	4F15346
04260	0	50000	1	06654	CP3450	CLA SCRIPL+4,A		4F15347
04261	0	76000	0	00001		LBT	EXAMINE OP3(S(I))35	4F15348
04262	0	02000	0	04264		TRA CP3490	0... ARG2 STORED	4F15349
04263	0	02000	0	04240		TRA CP3280	1... ARG2 IN MO	4F15350
04264	0	50000	0	01541	CP3490	CLA L(CLA)		4F15351
04265	0	60100	0	06165		STO CW+1		4F15352
04266	0	07400	4	05112		TSX AC0000,C	ADDRESS COMPILE SYM2(S(I))	4F15353
04267	0	07400	2	05104		TSX COMP,B	COMPILE CLA SYM2(S(I))	4F15354
04270	0	60000	0	06164		STZ CW	REST CW	4F15355
04271	0	02000	0	04252		TRA CP3390	GO COMPILE LDQ,SXD,TSX,LXD SEQUENCE	4F15356
04272	0	50000	1	06651	CP3560	CLA SCRIPL+1,A	CLOSED MULTIVARIATE FUNCTION	4F15357
04273	0	76000	0	00001		LBT	EXAMINE OP2(S(II))35	4F15358
04274	1	77772	1	04324		TXI CP3820,A,-6	0... ARG1 STORED	4F15359
04275	1	77772	1	04276		TXI CP3600,A,-6	1... ARG1 IN ACC	4F15360
04276	0	50000	0	01521	CP3600	CLA DECM12		4F15361
04277	0	60100	0	06161		STO P(CNTR)	INITIALIZE P(CNTR TO -2	4F15362
04300	0	50000	0	01556	CP3620	CLA L(LDQ)		4F15363
04301	0	60100	0	06165		STO CW+1		4F15364
04302	0	07400	4	05112		TSX AC0000,C	ADDRESS COMPILE SYMJ(S(I)) FOR J=4,5,...	4F15365
04303	0	07400	2	05104		TSX COMP,B	COMPILE LDQ SYMJ(S(I))	4F15366
04304	0	50000	0	01573		CLA L(STQ)		4F15367
04305	0	60100	0	06165		STO CW+1		4F15368
04306	0	50000	0	01503		CLA P(		4F15369
04307	0	60100	0	06166		STO CW+2		4F15370
04310	0	50000	0	06161		CLA P(CNTR)		4F15371
04311	0	60100	0	06167		STO CW+3		4F15372
04312	0	40200	0	01454		SUB 2E18		4F15373
04313	0	60100	0	06161		STO P(CNTR)		4F15374
04314	0	07400	2	05104		TSX COMP,B	COMPILE STQ 4...0-(J-2)	4F15375
04315	-0	53400	2	03607		LXD CP0400,B		4F15376
04316	1	00003	2	04317		TXI CP3770,B,3		4F15377
04317	-3	77764	2	04322	CP3770	TXL CP3800,B,-12		4F15378
04320	-0	53400	1	01117		LXD 3QBAR,A	FINISHED WITH ARG VECTOR	4F15379
04321	1	77775	1	04252		TXI CP3390,A,-3		4F15380
04322	-0	63400	2	03607	CP3800	SXD CP0400,B		4F15381
04323	1	77775	1	04300		TXI CP3620,A,-3	GO PICK UP NEXT ARG.	4F15382
04324	0	50000	1	06646	CP3820	CLA SCRIPL-2,A		4F15383
04325	0	76000	0	00001		LBT	EXAMINE OP3(S(I))35	4F15384
04326	1	00006	1	04355		TXI CP4070,A,6	0... ARG2 STORED	4F15385
04327	0	50000	0	01521		CLA DECM12	1... ARG2 IN MQ	4F15386
04330	0	60100	0	06161		STO P(CNTR)		4F15387
04331	0	50000	0	01541	CP3870	CLA L(CLA)		4F15388
04332	0	60100	0	06165		STO CW+1		4F15389
04333	0	07400	4	05112		TSX AC0000,C	ADDRESS COMPILE SYMJ(S(I)) FOR J=4,5,...	4F15390
04334	0	07400	2	05104		TSX COMP,B	COMPILE CLA SYMJ(S(I))	4F15391
04335	0	50000	0	01572		CLA L(STO)		4F15392
04336	0	60100	0	06165		STO CW+1		4F15393

04337	0	50000	0	01503	CLA P(		4F15394
04340	0	60100	0	06166	STO CW+2		4F15395
04341	0	50000	0	06161	CLA P(CNTR		4F15396
04342	0	60100	0	06167	STO CW+3		4F15397
04343	0	40200	0	01454	SUB 2E18		4F15398
04344	0	60100	0	06161	STO P(CNTR		4F15399
04345	0	07400	2	05104	TSX COMP,B	COMPILE STO 4...0-(J-2)	4F15400
04346	-0	53400	2	03607	LXD CP0400,B		4F15401
04347	1	00003	2	04350	TXI CP4020,B,3		4F15402
04350	-3	77764	2	04353	CP4020 TXL CP4050,B,-12		4F15403
04351	-0	53400	1	01117	LXD 3QBAR,A	FINISHED WITH ARG VECTOR	4F15404
04352	1	77775	1	04240	TXI CP3280,A,-3		4F15405
04353	-0	63400	2	03607	CP4050 SXD CP0400,B		4F15406
04354	1	77775	1	04331	TXI CP3870,A,-3	GO PICK UP NEXT ARG	4F15407
04355	0	50000	0	01541	CP4070 CLA L(CLA)		4F15408
04356	0	60100	0	06165	STO CW+1		4F15409
04357	0	07400	4	05112	TSX AC0000,C	ADDRESS COMPILE SYM2(S(II))	4F15410
04360	0	07400	2	05104	TSX COMP,B	COMPILE CLASYM2(S(I))	4F15411
04361	0	60000	0	06164	STZ CW	RESET CW	4F15412
04362	1	77772	1	04276	TXI CP3600,A,-6		4F15413
04363	-0	76300	0	00033	CP4140 LGL 27	OP1(S(I))=**	4F15414
04364	0	16200	0	04415	TQP CP4410	CLOSED SBRTN SINCE OP1(S(I))33=0	4F15415
04365	0	76000	0	00001	LBT	OPEN SBRTN SINCE OP1(S(I))33=1	4F15416
04366	0	02000	0	04371	TRA CP4200	BASE FIX PT SINCE OP1(S(1))32=0	4F15417
04367	0	50000	0	01525	CLA STRSTR	BASE FLO PT SINCE OP1(S(1))32=1	4F15418
04370	0	02000	0	04372	TRA CP4210		4F15419
04371	0	50000	0	01524	CP4200 CLA ADSTAR		4F15420
04372	0	60100	0	06165	CP4210 STO CW+1		4F15421
04373	-0	76300	0	00002	LGL 2	EXAMINE OP1(S(I))35	4F15422
04374	0	16200	0	04403	TQP CP4310	0... BASE STORED	4F15423
04375	0	56000	0	01524	LDQ ADSTAR	1... BASE NOT STORED	4F15424
04376	0	76000	0	00001	LBT	EXAMINE OP1(S(I))34	4F15425
04377	0	56000	0	01512	LDQ ADPLUS	0... BASE IN ACC	4F15426
04400	-0	60000	0	06166	STQ CW+2	1...BASE IN MQ	4F15427
04401	0	60000	0	06167	STZ CW+3		4F15428
04402	0	02000	0	04404	TRA CP4320		4F15429
04403	0	07400	4	05112	CP4310 TSX AC0000,C	ADDRESS COMPILE SYMI(S(I))	4F15430
04404	0	50200	0	06164	CP4320 CLS CW		4F15431
04405	0	60100	0	06164	STO CW	CW TO -CW	4F15432
04406	0	07400	2	05104	TSX COMP,B	COMPILE BASE	4F15433
04407	0	60000	0	06164	STZ CW	RESET CW	4F15434
04410	0	50000	1	06655	CLA SCRIPL+5,A		4F15435
04411	0	60100	0	06166	STO CW+2		4F15436
04412	0	07400	2	05104	TSX COMP,B	COMPILE FIX PT CONSTANT EXPONENT	4F15437
04413	0	60000	0	06165	STZ CW+1	RESET CW+1	4F15438
04414	0	02000	0	04622	TRA ES0000		4F15439
04415	-0	76300	0	00003	CP4410 LGL 3	CLOSED EXP. SBRTN	4F15440
04416	0	76000	0	00001	LBT	EXAMINE OP1(S(I))35	4F15441
04417	0	02000	0	04462	TRA CP4860	0... BASE STORED	4F15442
04420	0	50000	0	01556	CP4440 CLA L(LDQ)	1... BASE IN ACC.	4F15443
04421	0	60100	0	06165	STO CW+1		4F15444
04422	1	77775	1	04423	TXI CP4470,A,-3		4F15445
04423	0	07400	4	05112	CP4470 TSX AC0000,C	ADDRESS COMPILE SYM2(S(I))	4F15446
04424	0	07400	2	05104	TSX COMP,B	COMPILE LDQ SYM2 (S(I))	4F15447

04425	0	50000	0	01575	CP4490	CLA L(SXD)		4F15448
04426	0	60100	0	06165		STO CW+1		4F15449
04427	0	50000	0	01505		CLA X(		4F15450
04430	0	60100	0	06166		STO CW+2		4F15451
04431	0	50000	0	01412		CLA L(4)		4F15452
04432	0	60100	0	06167		STO CW+3		4F15453
04433	0	07400	2	05104		TSX COMP,B	COMPILE SXD 7...0.4	4F15454
04434	0	50000	0	01602		CLA L(TSX)		4F15455
04435	0	60100	0	06165		STO CW+1		4F15456
04436	0	50000	1	06651		CLA SCRIPL+1,A		4F15457
04437	0	77100	0	00003		ARS 3		4F15458
04440	0	76000	0	00001		LBT	EXAMINE OP2(S(I))32	4F15459
04441	1	00003	1	04447		TXI CP4660,A,3	O...	4F15460
04442	0	50000	0	01516		CLA FLFL	1... FLO**FLO	4F15461
04443	0	56000	1	06646		LDQ SCRIPL-2,A	EXAMINE OPI(S(I))I32 TO CHECK	4F15462
04444	-0	77300	0	00040		RQL 32	FOR MIXED EXPONENTIAL EXPRESSION	4F15463
04445	0	16200	0	03501		TQP MC0310+2	ERROR FIX PT BASE, FLOAT EXP.	4F15464
04446	0	02000	0	04454		TRA CP4730		4F15465
04447	0	56000	1	06651	CP4660	LDQ SCRIPL+1,A		4F15466
04450	-0	77300	0	00040		RQL 32	EXAMINE OP1(S(I))32	4F15467
04451	0	50000	0	01514		CLA FXFX		4F15468
04452	0	16200	0	04454		TQP CP4730	0...FX**FX	4F15469
04453	0	50000	0	01515		CLA FLFX	1... FL**FX	4F15470
04454	0	60100	0	06166	CP4730	STO CW+2		4F15471
04455	0	60100	0	01347		STO G		4F15472
04456	0	07400	2	05104		TSX COMP,B	COMPILE TSX FXFX/FLEX/FLFL,4	4F15473
04457	0	07400	1	03321		TSX TET00,A		4F15474
04460	0	00000	0	00011		HTR 9		4F15475
04461	0	02000	0	04615		TRA CP5780	COMPILE FLOW TRACE INFO AND LXD 7(,4	4F15476
04462	0	50000	0	01541	CP4860	CLA L(CLA)		4F15462
04463	0	60100	0	06165		STO CW+1		4F15483
04464	0	07400	4	05112		TSX AC0000,C	ADDRESS COMPILE SYM1(S(I))	4F15484
04465	0	07400	2	05104		TSX COMP,B	COMPILE CLA SYMI(S(I))	4F15485
04466	0	60000	0	06164		STZ CW		4F15486
04467	0	50000	1	06654		CLA SCRIPL+4,A		4F15487
04470	0	76000	0	00001		LBT	EXAMINE OP2*S(I))35	4F15488
04471	1	00000	0	04420		TXI CP4440,0,0	0...EXP STORED	4F15489
04472	1	77775	1	04425		TXI CP4490,A,-3	1... EXP IN MQ	4F15490
								4F15491
04473	0	50000	0	00030	CP5000	CLA EIFNO	FN FUNCTION	4F15492
04474	0	40000	0	01454		ADD 2E18	UPDATE EIFNO	4F15493
04475	0	60100	0	00030		STO EIFNO	AND	4F15494
04476	0	60100	0	06160		STO FNSW	SET FN SWITCH	4F15495
04477	0	62200	0	01105		STD 1C	KEEP 1C UPDATED FOR PENDING TIFGO ENTRY,	4F15496
04500	0	53400	4	01407		LXA L(1),C	INITIALIZE 5TAIX TO 1	4F15497
04501	0	50000	1	06650	CP5050	CLA SCRIPL,A	EXAMIN TAGJ(S(I)), J=2,...	4F15498
04502	-0	12000	0	04516		TMI CP5180	NONSUBSCRIPTED	4F15499
04503	-0	63400	2	04147		SXD CP5830,B	SUBSCRIPTED-IS THERE A GENERAL TAG	4F15500
04504	-0	63400	4	04577		SXD STACTR,C		4F15501
04505	0	07400	4	05112		TSX AC0000,C		4F15502
04506	-0	50000	0	06173		CAL TAGPRT		4F15503
04507	-0	10000	0	04522		TNZ CP5220	GENERAL TAG PRESENT	4F15504
04510	-0	50000	0	06167		CAL CW+3	NO GENERAL TAG PRESENT,SO PLACE	4F15505
04511	0	77100	0	00013		ARS 11	RELATIVE ADDRESS IN OPJ(S(I))14-28 AND	4F15506

04512	-0	50100	0	01474	ORA	NGTBIT	SET OPJ(S(I))10=I FROM NGTBIT	4F15507
04513	-0	60200	1	06651	ORS	SCRIPL+1,A		4F15508
04514	-0	53400	4	04577	CP5160	LXD	STACTR,C	4F15509
04515	-0	53400	2	04147		LXD	CP5830,B	4F15510
04516	1	00003	2	04517	CP5180	TXI	CP5190,B,3	4F15511
04517	3	77772	2	04552	CP5190	TXH	CP5460,B,-6	4F15512
04520	1	00001	4	04521		TXI	CP5210,C,1	4F15513
04521	1	77775	1	04501	CP5210	TXI	CP5050,A,-3	4F15514
04522	-0	50000	0	01566	CP5220	CAL	L(PXD)	4F15515
04523	0	60200	0	06165		SLW	CW+1	4F15516
04524	0	07400	2	05104		TSX	COMP,B	4F15517
04525	0	60000	0	06164		STZ	CW	4F15518
04526	0	07400	4	01731		TSX	CIT00,C	4F15519
04527	0	00000	0	01406		HTR	L(0)	4F15520
04530	0	00000	0	01535		HTR	L(ARS)	4F15521
04531	0	00000	0	01406		HTR	L(0)	4F15522
04532	0	00000	0	01466		HTR	DEC18	4F15523
04533	0	07400	4	01731		TSX	CIT00,C	4F15524
04534	0	00000	0	01406		HTR	L(0)	4F15525
04535	0	00000	0	01532		HTR	L(ADD)	4F15526
04536	0	00000	0	01511		HTR	PROCTR	4F15527
04537	0	00000	0	01521		HTR	DECM12	4F15528
04540	-0	50000	0	01571		CAL	L(STA)	4F15529
04541	0	60200	0	06165		SLW	CW+1	4F15530
04542	-0	50000	0	00030		CAL	EIFNO	4F15531
04543	-0	32000	0	01527		ANA	MASK1	4F15532
04544	0	60200	0	06166		SLW	CW+2	4F15533
04545	-0	53400	4	04577		LXD	STACTR,C	4F15534
04546	-0	75400	4	00000		PXD	0,C	4F15535
04547	0	60200	0	06167		SLW	CW+3	4F15536
04550	0	07400	2	05104		TSX	COMP,B	4F15537
04551	1	00000	0	04514		TXI	CP5160,0,0	4F15538
04552	-0	53400	1	01117	CP5460	LXD	3QBAR,A	4F15539
04553	-0	50000	0	01575		CAL	L(SXD)	4F15540
04554	0	60200	0	06165		SLW	CW+1	4F15541
04555	-0	50000	0	01505		CAL	X(	4F15542
04556	0	60200	0	06166		SLW	CW+2	4F15543
04557	-0	50000	0	01412		CAL	L(4)	4F15544
04560	0	60200	0	06167		SLW	CW+3	4F15545
04561	0	07400	2	05104		TSX	COMP,B	4F15546
04562	-0	50000	0	00030		CAL	EIFNO	4F15547
04563	-0	32000	0	01527		ANA	MASK1	4F15548
04564	0	60200	0	06164		SLW	CW	4F15549
04565	-0	50000	0	01602		CAL	L(TSX)	4F15550
04566	0	60200	0	06165		SLW	CW+1	4F15551
04567	-0	50000	1	06652		CAL	SCRIPL+2,A	4F15552
04570	0	60200	0	06166		SLW	CW+2	4F15553
04571	0	07400	2	05104		TSX	COMP,B	4F15554
04572	0	60000	0	06164		STZ	CW	4F15555
04573	1	77775	1	04574		TXI	CP5680,A,-3	4F15556
04574	0	50000	1	06650	CP5680	CLA	SCRIPL,A	4F15557
04575	0	12000	0	04600		TPL	CP5700	4F15558
04576	0	07400	4	05112		TSX	AC0000,C	4F15559
04577	1	00000	0	04607	STACTR	TXI	CP5720,0,0	4F15560

04600	0	56000	1	06651	CP5700	LDQ	SCRIPL+1,A	SUBSCRIPTED	4F15561
04601	-0	76300	0	00013		LGL	11		4F15562
04602	0	76000	0	00001		LBT			4F15563
04603	0	56000	0	01406		LDQ	L(0)	GENERAL TAG PRESENT	4F15564
04604	-0	60000	0	06167		STQ	CW+3	NO GENERAL TAG PRESENT	4F15565
04605	-0	50000	1	06652		CAL	SCRIPL+2,A		4F15566
04606	0	60200	0	06166		SLW	CW+2		4F15567
04607	0	07400	2	05104	CP5720	TSX	COMP,B	COMPILE TSX SYMJ(S(I)) , J=2,,, ,	4F15568
04610	-0	53400	2	03607		LXD	CP0400,B		4F15569
04611	1	00003	2	04612		TXI	CP5750,B,3		4F15570
04612	3	77772	2	04615	CP5750	TXH	CP5780,B,-6	FINISHED SCANNING	4F15571
04613	-0	63400	2	03607		SXD	CP0400,B		4F15572
04614	1	77775	1	04574		TXI	CP5680,A,-3		4F15573
04615	0	07400	4	03401	CP5780	TSX	FLTR00,4	COMPILE FLOW TRACE INFO AND LXD 7(,4	4F15574
04616	0	00000	0	01406		HTR	L(0)		4F15575
04617	0	00000	0	01561		HTR	L(LXD)		4F15576
04620	0	00000	0	01505		HTR	X(		4F15577
04621	0	00000	0	01412		HTR	L(4)		4F15578
04622	-0	53400	1	01117	ES0000	LXD	3QBAR,A	-3Q TO XA	4F15579
04623	-0	76000	0	00141		SLT	1		4F15580
04624	0	02000	0	03554		TRA	CP0130	GO TO NEXT SEGMENT	4F15581
04625	-0	50000	1	06650		CAL	SCRIPL,A		4F15582
04626	-0	32000	0	01452		ANA	MASK2		4F15583
04627	0	10000	0	04642		TZE	ES0160		4F15584
04630	0	50000	0	01120		CLA	ARERAS	S(I) NOT = S(O)	4F15585
04631	0	60100	0	06166		STO	CW+2		4F15586
04632	0	50000	0	01363		CLA	PHI(I)		4F15587
04633	0	60100	0	06167		STO	CW+3		4F15588
04634	0	50000	0	01573		CLA	L(STQ)		4F15589
04635	-0	76000	0	00142		SLT	2		4F15590
04636	0	50000	0	01572		CLA	L(STO)		4F15591
04637	0	60100	0	06165		STO	CW+1		4F15592
04640	0	07400	2	05104		TSX	COMP,B	COMPILE STO/STQ 1... TYPE NO + PHI(I)	4F15593
04641	0	02000	0	03554		TRA	CP0130	GO TO NEXT SEGMENT	4F15594
04642	0	56000	0	01356	ES0160	LDQ	LEFT+2	S(I)=S(O)	4F15595
04643	-0	76300	0	00014		LGL	12		4F15596
04644	0	34000	0	01450		CAS	IFSVM	IS THIS AN IF STATEMENT	4F15597
04645	0	02000	0	04647		TRA	ES0200		4F15598
04646	0	02000	0	05041		TRA	ES1500		4F15599
04647	0	34000	0	01451	ES0200	CAS	CALLER	IS THIS A CALL STATEMENT	4F15600
04650	0	02000	0	04652		TRA	ES0210		4F15601
04651	0	02000	0	05044		TRA	ES1520		4F15602
04652	0	34000	0	01447	ES0210	CAS	SAPSYM		4F15603
04653	0	02000	0	04655		TRA	ES0220		4F15604
04654	0	02000	0	05100		TRA	ES1710		4F15605
04655	0	77100	0	00006	ES0220	ARS	6		4F15606
04656	-0	53400	4	01122		LXD	ARGCTR,C	IS THIS A FUNCTION STATEMENT	4F15607
04657	3	00000	4	05016		TXH	ES1300,C,0	YES	4F15608
04660	0	34000	0	01423		CAS	L(H)	NOT A FUNCTION STATEMENT	4F15609
04661	0	34000	0	01425		CAS	L(O)		4F15610
04662	0	02000	0	04750		TRA	ES0300		4F15611
04663	0	02000	0	04750		TRA	ES0300		4F15612
04664	-0	76000	0	00144		SLT	4		4F15613
04665	0	02000	0	04703		TRA	ES0870		4F15614

04666	0	50000	0	01573	ES0710	CLA L(STQ)		FX(FLO) PT ON LEFT, FX(FLO) PT ON RIGHT	4F15615
04667	-0	76000	0	00142		SLT 2			4F15616
04670	0	50000	0	01572	ES0730	CLA L(STO)			4F15617
04671	0	60100	0	06165		STO CW+1			4F15618
04672	0	50000	0	01354		CLA LEFT			4F15619
04673	0	60100	0	06170		STO TAGWRD			4F15620
04674	0	50000	0	01355		CLA LEFT+1			4F15621
04675	0	60100	0	06171		STO OPWORD			4F15622
04676	0	50000	0	01356		CLA LEFT+2			4F15623
04677	0	60100	0	06172		STO SYMWRD			4F15624
04700	0	07400	4	05120		TSX AC0060,C		ADDRESS COMPILE VARIABLE ON LEFT	4F15625
04701	0	07400	2	05104		TSX COMP,B		COMPILE STO/STQ LEFT+2	4F15626
04702	0	02000	0	05064		TRA ES1590		EXIT TO FETCH STATE A	4F15627
04703	-0	76000	0	00142	ES0870	SLT 2		FX PT ON LEFT, FLO PT ON RIGHT	4F15628
04704	0	02000	0	04716		TRA ES0990			4F15629
04705	0	50000	0	01573		CLA L(STQ)		RESULT ON RIGHT APPEARS IN MQ	4F15630
04706	0	60100	0	06165		STO CW+1			4F15631
04707	0	50000	0	01505		CLA X(			4F15632
04710	0	60100	0	06166		STO CW+2			4F15633
04711	0	60000	0	06167		STZ CW+3			4F15634
04712	0	07400	2	05104		TSX COMP,B		COMPILE STQ 700000	4F15635
04713	0	50000	0	01541		CLA L(CLA)			4F15636
04714	0	60100	0	06165		STO CW+1			4F15637
04715	0	07400	2	05104		TSX COMP,B		COMPILE CLA 700000	4F15638
04716	0	07400	4	01731	ES0990	TSX CIT00,C		COMPILE FIXING INSTRUCTIONS, WHEN	4F15639
04717	0	00000	0	01406		HTR L(0)		RESULT ON RIGHT IS IN ACC.	4F15640
04720	0	00000	0	01603		HTR L(UFA)			4F15641
04721	0	00000	0	01504		HTR O(			4F15642
04722	0	00000	0	01406		HTR L(0)			4F15643
04723	0	07400	4	01731		TSX CIT00,C			4F15644
04724	0	00000	0	01406		HTR L(0)			4F15645
04725	0	00000	0	01560		HTR L(LRS)			4F15646
04726	0	00000	0	01406		HTR L(0)			4F15647
04727	0	00000	0	01406		HTR L(0)			4F15648
04730	0	07400	4	01731		TSX CIT00,C			4F15649
04731	0	00000	0	01406		HTR L(0)			4F15650
04732	0	00000	0	01534		HTR L(ANA)			4F15651
04733	0	00000	0	01504		HTR O(			4F15652
04734	0	00000	0	01454		HTR 2E18			4F15653
04735	0	07400	4	01731		TSX CIT00,C			4F15654
04736	0	00000	0	01406		HTR L(0)			4F15655
04737	0	00000	0	01557		HTR L(LLS)			4F15656
04740	0	00000	0	01406		HTR L(0)			4F15657
04741	0	00000	0	01406		HTR L(0)			4F15658
04742	0	07400	4	01731		TSX CIT00,C			4F15659
04743	0	00000	0	01406		HTR L(0)			4F15660
04744	0	00000	0	01533		HTR L(ALS)			4F15661
04745	0	00000	0	01406		HTR L(0)			4F15662
04746	0	00000	0	01466		HTR DEC18			4F15663
04747	0	02000	0	05004		TRA ES0610			4F15664
04750	-0	76000	0	00144	ES0300	SLT 4			4F15665
04751	0	02000	0	04666		TRA ES0710			4F15666
04752	-0	76000	0	00142	ES0320	SLT 2		FLO PT ON LEFT, FX PT ON RIGHT	4F15667
04753	0	02000	0	04765		TRA ES0440			4F15668

04754	0	50000	0	01573	CLA L(STQ)	RESULT ON RIGHT APPEARS IN MO	4F15669
04755	0	60100	0	06165	STO CW+1		4F15670
04756	0	50000	0	01505	CLA X(		4F15671
04757	0	60100	0	06166	STO CW+2		4F15672
04760	0	60000	0	06167	STZ CW+3		4F15673
04761	0	07400	2	05104	TSX COMP,B	COMPILE STQ 700000	4F15674
04762	0	50000	0	01541	CLA L(CLA)		4F15675
04763	0	60100	0	06165	STO CW+1		4F15676
04764	0	07400	2	05104	TSX COMP,B	COMPILE CLA 700000	4F15677
04765	0	07400	4	01731	ES0440 TSX CIT00,C	COMPILE FLOATING INSTRUCTIONS, WHEN	4F15678
04766	0	00000	0	01406	HTR L(0)	RESULT ON RIGHT IS IN ACC	4F15679
04767	0	00000	0	01560	HTR L(LRS)		4F15680
04770	0	00000	0	01406	HTR L(0)		4F15681
04771	0	00000	0	01466	HTR DEC18		4F15682
04772	0	07400	4	01731	TSX CIT00,C		4F15683
04773	0	00000	0	01406	HTR L(0)		4F15684
04774	0	00000	0	01564	HTR L(ORA)		4F15685
04775	0	00000	0	01504	HTR O(		4F15686
04776	0	00000	0	01406	HTR L(0)		4F15687
04777	0	07400	4	01731	TSX CIT00,C		4F15688
05000	0	00000	0	01406	HTR L(0)		4F15689
05001	0	00000	0	01550	HTR L(FAD)		4F15690
05002	0	00000	0	01504	HTR O(		4F15691
05003	0	00000	0	01406	HTR L(0)		4F15692
05004	-0	53400	4	01122	ES0610 LXD ARGCTR,C	IS THIS A FUNCTION STATEMENT	4F15693
05005	-3	00000	4	04670	TXL ES0730,C,0	NO	4F15694
05006	0	50000	0	01601	ES0630 CLA L(TRA)	YES	4F15695
05007	0	60100	0	06165	STO CW+1		4F15696
05010	0	60000	0	06166	STZ CW+2		4F15697
05011	-0	50000	0	01454	CAL 2E18		4F15698
05012	-0	50100	0	01412	ORA L(4)		4F15699
05013	0	60200	0	06167	SLW CW+3		4F15700
05014	0	07400	2	05104	TSX COMP,B	COMPILE TRA 1,4	4F15701
05015	0	02000	0	05064	TRA ES1590	EXIT TO FETCH STATE A	4F15702
05016	0	40200	0	01433	ES1300 SUB L(X)		4F15703
05017	0	10000	0	05023	TZE ES1360		4F15704
05020	-0	76000	0	00144	SLT 4		4F15705
05021	0	02000	0	05025	TRA ES1380		4F15706
05022	0	02000	0	04752	TRA ES0320		4F15707
05023	-0	76000	0	00144	ES1360 SLT 4		4F15708
05024	0	02000	0	04703	TRA ES0870		4F15709
05025	-0	76000	0	00142	ES1380 SLT 2		4F15710
05026	0	02000	0	05006	TRA ES0630		4F15711
05027	0	50000	0	01573	CLA L(STQ)		4F15712
05030	0	60100	0	06165	STO CW+1		4F15713
05031	0	50000	0	01505	CLA X(		4F15714
05032	0	60100	0	06166	STO CW+2		4F15715
05033	0	60000	0	06167	STZ CW+3		4F15716
05034	0	07400	2	05104	TSX COMP,B	COMPILE STQ 700000	4F15717
05035	0	50000	0	01541	CLA L(CLA)		4F15718
05036	0	60100	0	06165	STO CW+1		4F15719
05037	0	07400	2	05104	TSX COMP,B	COMPILE CLA 700000	4F15720
05040	0	02000	0	05006	TRA ES0630		4F15721
05041	0	07400	1	03321	ES1500 TSX TET00,1	* GO TO PROGRAM TET TO ENTER 1C,1C+1	4F15722

05042	0	00000	0	00002		PZE 2		INTO TIFGO TABLE (TABLE 2),	4F15723
05043	0	02000	0	05050		TRA ES1530			4F15724
05044	-0	53400	4	00030	ES1520	LXD EIFNO,4			4F15725
05045	-0	63400	4	01123		SXD CALLNM,4		PREPARE ENTRY FOR TABLE OF CALL FIRST AND	4F15726
05046	0	07400	1	03321		TSX TET00,1		LAST IFN NUMBERS,	4F15727
05047	0	00000	0	00020		16			4F15728
05050	-0	76000	0	00142	ES1530	SLT 2			4F15729
05051	0	02000	0	05064		TRA ES1590		EXIT TO FETCH STATE A	4F15730
05052	0	07400	4	01731		TSX CIT00,C		COMPILE LLS 37	4F15731
05053	0	00000	0	01406		L(0)			4F15732
05054	0	00000	0	01573		L(STQ)			4F15733
05055	0	00000	0	01505		X(			4F15734
05056	0	00000	0	01406		L(0)			4F15735
05057	0	07400	4	01731	TSX	CIT00,4			4F15736
05060	0	00000	0	01406		L(0)			4F15737
05061	0	00000	0	01541		L(CLA)			4F15738
05062	0	00000	0	01505		X(			4F15739
05063	0	00000	0	01406		L(0)			4F15740
05064	0	50000	0	06160	ES1590	CLA FNSW			4F15741
05065	0	10000	0	02402		TZE MTR000			4F15742
05066	0	50000	0	01151		CLA F-1			4F15743
05067	0	40200	0	01477		SUB 5BLANS			4F15744
05070	0	10000	0	02402		TZE MTR000			4F15745
05071	0	50200	0	00030		CLS EIFNO			4F15746
05072	0	60100	0	00030		STO EIFNO			4F15747
05073	0	07400	1	03321		TSX TET00,A			4F15748
05074	0	00000	0	00000		HTR 0			4F15749
05075	0	50200	0	00030		CLS EIFNO			4F15750
05076	0	60100	0	00030		STO EIFNO			4F15751
05077	0	02000	0	02402		TRA MTR000			4F15752
05100	-0	53400	2	00637	ES1710	LXD BBOX,B			4F15753
05101	0	50000	0	01362		CLA OPNWRD			4F15754
05102	0	60100	2	00635		STO CIB-3,B			4F15755
05103	0	02000	0	02402		TRA MTR000			4F15756
05104	0	07400	4	01731	COMP	TSX CIT00,C			4F15757
05105	0	00000	0	06164		HTR CW			4F15758
05106	0	00000	0	06165		HTR CW+1			4F15759
05107	0	00000	0	06166		HTR CW+2			4F15760
05110	0	00000	0	06167		HTR CW+3			4F15761
05111	0	02000	2	00001		TRA 1,B			4F15762
05112	0	50000	1	06650	AC0000	CLA SCRIPL,A			4F15763
05113	0	60100	0	06170		STO TAGWRD			4F15764
05114	0	50000	1	06651		CLA SCRIPL+1,A			4F15765
05115	0	60100	0	06171		STO OPWORD			4F15766
05116	0	50000	1	06652		CLA SCRIPL+2,A			4F15767
05117	0	60100	0	06172		STO SYMWRD			4F15768
05120	-0	50000	0	06170	AC0060	CAL TAGWRD			4F15769
05121	-0	32000	0	01527		ANA MASK1		EXTRACT TAGS IN ACC.	4F15770
05122	-0	76000	0	00001		PBT			4F15771
05123	0	02000	0	05204		TRA AC0540			4F15772
05124	-0	75400	0	00000		PXD 0,0		NON-SUBSCRIPTED SYMBOL	4F15773
05125	0	56000	0	06172		LDQ SYMWRD			4F15774

05126	-0	76300	0	00001	LGL 1		4F15777
05127	0	76000	0	00001	LBT		4F15778
05130	0	16200	0	05175	TQP AC0460	SYMBOL IS SOME S(K)	4F15779
05131	-0	76300	0	00013	LGL 11	NON-SUBSCRIPTED EX/INTERNAL VARIABLE	4F15760
05132	0	40200	0	01444	SUB L(A())	IS THIS A FLO PT CONSTANT	4F15781
05133	0	10000	0	05170	TZE AC0410	YES	4F15782
05134	0	40000	0	01444	ADD L(A())	NO	4F15783
05135	0	40200	0	01446	SUB L(I())	IS THIS A FIX PT CONSTANT	4F15784
05136	0	10000	0	05166	TZE AC0390	YES	4F15785
05137	0	40000	0	01446	ADD L(I())	NO	4F15786
05140	0	40200	0	01445	SUB L(H())	IS THIS A HOLLERITH FIELD	4F15787
05141	0	10000	0	05164	TZE AC0350	YES	4F15788
05142	0	56000	0	06171	LDQ OPWORD	NON-SUBSCRIPTED EXTERNAL VARIABLE	4F15789
05143	-0	76300	0	00015	LGL 13	IS THIS A FREE VARIABLE	4F15790
05144	0	16200	0	05161	TQP AC0340	NO	4F15791
05145	0	76300	0	00017	LLS 15	YES	4F15792
05146	0	76000	0	00006	COM		4F15793
05147	0	40200	0	01407	SUB L(1)		4F15794
05150	0	73400	2	00000	PAX 0,B		4F15795
05151	-0	75400	0	00000	PXD 0,8		4F15796
05152	0	60200	0	06167	SLW CW+3	STORE ARGUMENT BUFFER RELATIVE ADDRESS	4F15797
05153	-0	53400	2	00470	LXD BK,B		4F15798
05154	-0	50000	2	00470	CAL FORSUB-1,B		4F15799
05155	-0	32000	0	01452	ANA MASK2	EXTRACT FUNCTION STATEMENT TYPE	4F15600
05156	-0	50100	0	01503	ORA P()		4F15801
05157	0	60200	0	06166	AC0320 SLW CW+2		4F15802
05160	0	02000	4	00001	TRA 1,C	RETURN	4F15803
05161	0	60000	0	06167	AC0340 STZ CW+3	NON-SUBSCRIPTED, REAL VARIABLE	4F15804
05162	-0	50000	0	06172	CAL SYMWRD		4F15805
05163	0	02000	0	05157	TRA AC0320		4F15806
05164	-0	50000	0	01522	AC0350 CAL H()		4F15807
05165	0	02000	0	05171	TRA AC0420		4F15808
05166	0	50000	0	01501	AC0390 CLA I()	FIX PT INTERNAL VARIABLE	4F15809
05167	0	02000	0	05171	TRA AC0420		4F15810
05170	0	50000	0	01502	AC0410 CLA A()	FLO PT INTERNAL VARIABLE	4F15811
05171	0	60100	0	06166	AC0420 STO CW+2		4F15812
05172	-0	77300	0	00006	RQL 6		4F15813
05173	-0	60000	0	06167	STQ CW+3		4F15814
05174	0	02000	4	00001	TRA 1,C	RETURN	4F15815
05175	-0	76300	0	00043	AC0460 LGL 35	SYMBOL IS SOME S(K)	4F15616
05176	0	73400	2	00000	TDRADD PAX 0,B		4F15817
05177	-0	50000	6	06174	CAL CPBETA,6		4F15618
05200	-0	32000	0	01527	ANA MASK1	EXTRACT PHI(K)	4F15819
05201	0	60200	0	06167	SLW CW+3		4F15820
05202	-0	50000	0	01120	CAL ARERAS		4F15621
05203	0	02000	0	05157	TRA AC0320		4F15822
05204	0	60200	0	06170	AC0540 SLW TAGWRD	SUBSCRIPTED VARIABLE	4F15823
05205	0	56000	0	06170	LDQ TAGWRD		4F15824
05206	-0	75400	0	00000	PXD ,0	CLEAR AC.	4F15825
05207	-0	76300	0	00014	LGL 12	I-TAU TAGS TO AC	4F15826
05210	0	60200	0	06167	SLW CW+3	STORE FOR NEXT CIT ENTRY.	4F15827
05211	0	16200	0	05214	TQP *+3		4F15828
05212	0	60000	0	06167	STZ CW+3		4F15829
05213	-0	50000	0	01454	CAL 2E18	REPLACE NULL TAG,	4F15830

01103	4E	SYN	ERASE+3	COMMON WORKING STORAGE.	4F15877
00001	A	EQU	1		4F15878
01430	ABLANK	SYN	BLANK		4F15879
01376	ACOMMA	SYN	COMMA		4F15880
01532	ADD	SYN	L(ADD)		4F15881
01400	AEQUAL	SYN	EQUAL		4F15882
01375	ALPAR	SYN	OPEN		4F15883
02404	ARITH	SYN	STATEB		4F15884
01377	ARPAR	SYN	CLOS		4F15885
01535	ARS	SYN	L(ARS)		4F15886
00002	B	EQU	2		4F15887
00004	C	EQU	4		4F15888
01537	CAL	SYN	L(CAL)		4F15889
01731	CIT	SYN	CIT00		4F15890
01150	CITMQR	SYN	E1C	ERASABLE STORAGE.	4F15891
00223	CITTAP	SYN	147	COMPILED INSTRUCTION TAPE,	4F15892
01101	CITXR1	SYN	ERASE+1	ERASABLE STORAGE.	4F15893
01102	CITXR2	SYN	ERASE+2	ERASABLE STORAGE.	4F15894
01544	CPY	SYN	L(CPY)		4F15895
01454	D1	SYN	2E18		4F15896
01101	D12	SYN	ERASE+1	COMMON WORKING STORAGE.	4F15897
01466	D18	SYN	DEC18		4F15898
01102	D3	SYN	ERASE+2	COMMON WORKING STORAGE.	4F15899
01546	DED	SYN	L(DED)		4F15900
00000	DEL(A)	SYN	0	DRUM ORIGIN FOR STATE A,	4F15901
02210	DEL(B)	SYN	1160	DRUM ORIGIN FOR STATE B.	4F15902
02373	DEL(C)	SYN	1275	DRUM ORIGIN FOR STATE C.	4F15903
01322	DEL(D)	SYN	722	DRUM ORIGIN FOR STATE D.	4F15904
00310	DIM1	SYN	0200	DRUM TABLE ORIGIN -DRTABS,DIM.SR,	4F15905
00764	DIM2	SYN	0500	DRUM TABLE ORIGIN -DRTABS,DIM,SR.	4F15906
01440	DIM3	SYN	0800	DRUM TABLE ORIGIN -DRTABS,DIM,SR.	4F15907
01100	DIMCTR	SYN	ERASE	COMMON WORKING STORAGE.	4F15908
01500	DMP	SYN	E(		4F15909
01100	DOE	SYN	ERASE	COMMON WORKING STORAGE.	4F15910
01103	DRCKSM	SYN	ERASE+3	COMMON WORKING STORAGE.	4F15911
01104	DRMADR	SYN	ERASE+4	ERASABLE STORAGE.	4F15912
01413	DRMERC	SYN	L(5)	NUMBER OF DRUM READING ATTEMPTS.	4F15913
01100	DRSYM	SYN	ERASE	COMMON WORKING STORAGE.	4F15914
01100	E1TDR	SYN	ERASE	COMMON WORKING STORAGE.	4F15915
01101	E2C	SYN	ERASE+1	COMMON WORKING STORAGE.	4F15916
01101	E2TDR	SYN	ERASE+1	COMMON WORKING STORAGE.	4F15917
01102	E3C	SYN	ERASE+2	COMMON WORKING STORAGE.	4F15918
01102	E3TDR	SYN	ERASE+2	COMMON WORKING STORAGE.	4F15919
01101	EKE	SYN	ERASE+1	COMMON WORKING STORAGE.	4F15920
01103	ENOND	SYN	ERASE+3	COMMON WORKING STORAGE.	4F15921
01104	FEOD	SYN	ERASE+4	COMMON WORKING STORAGE.	4F15922
00002	FIXCON	SYN	0002	DRUM TABLE ORIGIN -DRTABS,	4F15923
00312	FLOCON	SYN	202	DRUM TABLE ORIGIN -DRTABS.	4F15924
00002	FXCODR	SYN	2		4F15925
01102	H	SYN	ERASE+2	COMMON WORKING STORAGE.	4F15926
01522	H(	SYN	ADSPOP		4F15927
01554	HPR	SYN	L(HPR)		4F15928
01555	LDA	SYN	L(LDA)		4F15929
01561	LXD	SYN	L(LXD)		4F15930

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01373 L(10) SYN TEN 4F15931
01400 L(11) SYN EQUAL 4F15932
01420 L(12) SYN MINUS 4F15933
01454 L(1D) SYN 2E18 4F15934
01374 L(63) SYN ENDMK 4F15935
03440 MEMORG SYN 1824 MEMORY ORIGIN FOR ALL STATES. 4F15936
01452 MSK SYN MASK2 4F15937
02402 MTR000 SYN STATEA 4F15938
02430 MTR300 SYN MTR3 4F15942
01103 N SYN ERASE+3 COMMON WORKING STORAGE. 4F15943
01404 PLUS SYN 12Z 4F15945
01566 PXD SYN L(PXD) 4F15946
01100 RAXR4 SYN ERASE COMMON WORKING STORAGE. 4F15947
01226 SIGMA1 SYN 0662 DRUM TABLE ORIGIN -DRTABS. 4F15948
01101 SR6WRK SYN ERASE+1 ERASABLE STORAGE. 4F15949
01416 ST SYN L(8) 4F15950
01571 STA SYN L(STA) 4F15951
01104 STCKSM SYN ERASE+4 COMMON WORKING STORAGE, 4F15952
00224 TABTAP SYN 148 TABLE TAPE. 4F15953
01453 TAG4 SYN 2E17 4F15954
00000 TAU1 SYN 0000 DRUM TABLE ORIGIN -DRTABS. 4F15955
00454 TAU2 SYN 0300 DRUM TABLE ORIGIN -DRTABS. 4F15956
01356 TAU3 SYN 0750 DRUM TABLE ORIGIN -DRTA8S. 4F15957
01413 TERC SYN L(5) TAPE ERROR COUNTER. 4F15958
01103 TETMQR SYN ERASE+3 ERASABLE STORAGE, 4F15959
01102 TETWRK SYN ERASE+2 ERASABLE STORAGE. 4F15960
01100 TETXR2 SYN ERASE ERASABLE STORAGE. 4F15961
01101 TETXR4 SYN ERASE+1 ERASABLE STORAGE. 4F15962
01576 TIX SYN L(TIX) 4F15963
01504 ZER SYN O( 4F15964
00000 .. EQU 0 4F15965
END OF SYNONYMS USED BY SECTION ONE. 4F15966
* * * * * 4F15967
END OF SECTION ONE. 4F15968
A 00000 END 4F15969
4F15970

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SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	6030	0	0	0	0
LIB	0	0	0	0	0
COL	6030	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 6039

NUMBER OF SYMBOLS, DEF 1394,DEFOP 0,UNDEF 0

REM 704 FORTRAN MASTER RECORD CARD / DIAGNOSTIC = F0200000. 4F1D0010

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704 FORTRAN MASTER RECORD CARD / DIAGNOSTIC = F0200000.      4F1D0010
-----FILE: 147.PNG-----INCLUDE PREV LINE
00000 0 13440 0 13440      00000      ORG 0      4F1D0020
00001 0 00000 0 17777      PZE DIAG,,DIAG      4F1D0030
                                PZE 8191      4F1D0040
                                704 FORTRAN TWO, SECTION ONE DIAGNOSTIC RECORD F020.      4F1D0050
                                THIS RECORD IS CALLED IN FROM TAPE ONCE FOR EACH ERROR IN      4F1D0060
                                SECTION ONE AND ONCE AT THE END OF SECTION ONE,      4F1D0070
                                4F1D0080
                                4F1D0090
                                13440 DIAG ORG 1824+4096      MOD 4K OR 8K MACHINE SIZE      4F1D0100
                                00001 A EQU 1      4F1D0110
                                00002 B EQU 2      4F1D0120
                                00004 C EQU 4      4F1D0130
                                77777 EXITX EQU 32767      4F1D0140
13440 3 00000 4 13543 EDIT TXH ERENT,C,0      IF IR4 IS ZERO THIS IS THE END OF SEC ONE.      4F1D0150
13441 0 50000 0 00020      CLA 16      IF NON ZERO IT IS AN ERROR CALL,      4F1D0160
13442 -0 32000 0 14033      ANA L(4)D      IF IT IS THE END OF SEC ONE WERE THERE ANY      4F1D0170
13443 0 10000 0 00004      TZE 4      ERRORS DURING SECTION ONE ( INDICATED BY      4F1D0180
13444 0 07400 4 14121      TSX PRINT,C      4F1D0190
13445 0 14104 0 14067      HTR STOP,0,XCOM      4F1D0200
13446 0 07400 4 14121      TSX PRINT,C      BIT IN WORD 20 OCTAL), IF THERE WERE NO      4F1D0210
13447 0 14045 0 14044      PZE RESTR,0,RESTR+1      ERRORS GO TO SEC ONE PRIME. IF THERE WERE      4F1D0220
13450 0 53400 4 02367      LXA DCELL1,4      GET INDICATOR OF SOURCE PROGRAM ERRORS.      4F1D0230
13451 3 00000 4 13456      TXH SOURCE,4,0      TEST IF ANY OF ERROR WERE SOURCE.      4F1D0240
13452 0 53400 4 14013      LXA L(8),4      NONE WERE, SO BACKSPACE TAPE 1 TO MACHINE      4F1D0250
13453 0 76400 0 00201      BST 1      ERROR RECORD.      4F1D0260
13454 2 00001 4 13453      TIX *-1,4,1      4F1D0270
13455 0 02000 0 00004      TRA 4      NOW GO TO 1 TO CS FOR MACHINE ERROR RECORD.      4F1D0280
13456 0 53400 4 14015 SOURCE LXA L(12),4      SOME SOURCE PROGRAM ERRORS, RECOMPILATION      4F1D0290
13457 0 76400 0 00201      BST 1      MEANINGLESS. BACKSPACE TAPE 1 TO SOURCE      4F1D0300
13460 2 00001 4 13457      TIX *-1,4,1      PROGRAM ERROR RECORD.      4F1D0310
13461 0 02000 0 00004      TRA 4      NOW GO TO 1 TO CS FOR THIS RECORD.      4F1D0320
                                13462      BSS 10      EXPANSION AREA. FOR PESSIMISM...      4F1D0330
                                NUMBERS      4F1D0340
                                OF MACHINE ERROR CALL FROM SECTION ONE,      4F1D0350
13474 000002000304      MACERR BCD 1002034      4F1D0360
13475 000002000602      BCD 1002062      4F1D0370
13476 000002020606      BCD 1002266      4F1D0380
13477 000002040303      BCD 1002433      4F1D0390
13500 000002040304      BCD 1002434      4F1D0400
13501 000002040305      BCD 1002435      4F1D0410
13502 000002040306      BCD 1002436      4F1D0420
13503 000002050203      BCD 1002523      4F1D0430
13504 000002050605      BCD 1002565      4F1D0440
13505 000003020702      BCD 1003272      4F1D0450
13506 000003050601      BCD 1003561      4F1D0460
13507 000005070105      BCD 1005715      4F1D0470
13510 000004030407      BCD 1004347      4F1D0480
13511 000005020303      BCD 1005233      4F1D0490
13512 000000050503      BCD 1000553      4F1D0500
13513 000000050600      BCD 1000560      4F1D0510
13514 000000050603      BCD 1000563      4F1D0520
13515 000000050606      BCD 1000566
13516 000100050304      BCD 1010534

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13517	000102070500			BCD	1012750			
				BSS	18		MORE PESSIMISM...	
13542	0 00000 0 00024	COUNT			20			4F1D0540
								4F1D0550
								4F1D0560
								4F1D0570
13543	-0 75400 4 00000	ERENT		PXD	0,C			4F1D0580
13544	0 76000 0 00006			COM			CONSTRUCT OCTAL STOP	4F1D0590
13545	0 40000 0 14032			ADD	L(1)D			4F1D0600
13546	-0 73400 2 00000			PDX	0,B			4F1D0610
13547	-0 75400 2 00000			PXD	0,B			4F1D0620
13550	0 76500 0 00043			LRS	35			4F1D0630
13551	-0 53400 2 14034			LXD	L(6)D,B			4F1D0640
13552	0 76700 0 00003	ALS		ALS	3			4F1D0650
13553	-0 76300 0 00003			LGL	3			4F1D0660
13554	2 00001 2 13552			TIX	ALS,B,1			4F1D0670
13555	0 60100 0 14047			STO	NUMB			4F1D0680
13556	0 53400 1 14035			LXA	L(0),1		SET TO SEARCH TABLE OF NUMBERS OF MACHINE	4F1D0690
13557	0 53400 2 13542			LXA	COUNT,2		ERRORS,	4F1D0700
13560	0 34000 1 13474			CAS	MACERR,1		COMPARE EACH ENTRY IN TABLE TO OCTAL	4F1D0710
13561	1 00001 1 13564			TXI	*+3,1,1		NUMBER IN AC	4F1D0720
13562	0 02000 0 13566			TRA	*+4		EXIT IF FOUND.	4F1D0730
13563	1 00001 1 13564			TXI	*+1,1,1			4F1D0740
13564	2 00001 2 13560			TIX	*-4,2,1		CONTINUE.	4F1D0750
13565	0 62100 0 02367			STA	DCELL1		SET INDICATOR TO NON-ZERO FOR SOURCE ERROR	4F1D0760
13566	0 53400 3 14035			LXA	L(0),3			4F1D0770
13567	0 50000 0 14037			CLA	XXX		CONSTRUCT CALLING SEQUENCE WORD FOR	4F1D0780
13570	0 34000 1 14504	ONE		CAS	TABLE,A		PRINTING COMMENT	4F1D0790
13571	0 02000 0 13573			TRA	TWO			4F1D0800
13572	0 02000 0 13601			TRA	FOUR			4F1D0810
13573	1 77777 1 13574	TWO		TXI	THREE,A,-1			4F1D0820
13574	3 00000 1 13570	THREE		TXH	ONE,A,0			4F1D0830
13575	0 50000 0 14047			CLA	NUMB			4F1D0840
13576	0 60100 0 14104			STO	XCOM			4F1D0850
13577	-0 50000 0 14046			CAL	XKEY			4F1D0860
13600	0 02000 0 13632			TRA	EIGHT			4F1D0870
13601	3 00000 2 13612	FOUR		TXH	FIVE,B,0			4F1D0880
13602	0 40200 1 14505			SUB	TABLE+1,A			4F1D0890
13603	0 10000 0 13627			TZE	SEVEN			4F1D0900
13604	0 50000 0 14047			CLA	NUMB			4F1D0910
13605	0 40200 1 14505			SUB	TABLE+1,A			4F1D0920
13606	0 10000 0 13611			TZE	NINE			4F1D0930
13607	0 50000 0 14037			CLA	XXX			4F1D0940
13610	0 02000 0 13573			TRA	TWO			4F1D0950
13611	1 77777 1 13612	NINE		TXI	FIVE,A,-1			4F1D0960
13612	-0 75400 1 00000	FIVE		PXD	0,A			4F1D0970
13613	0 76000 0 00006			COM				4F1D0980
13614	0 40000 0 14032			ADD	L(1)D			4F1D0990
13615	-0 73400 4 00000			PDX	0,C			4F1D1000
13616	-0 75400 4 00000			PXD	0,C			4F1D1010
13617	0 40000 0 14042			ADD	TABAD			4F1D1020
13620	3 00000 2 13625			TXH	SIX,B,0			4F1D1030
13621	0 77100 0 00022			ARS	18			4F1D1040
13622	0 60100 0 14050			STO	KEY			4F1D1050
13623	0 50000 0 14037			CLA	XXX			

13624	1	00001	2	13574		TXI THREE , B, 1		4F1D1060
13625	-0	50100	0	14050	SIX	ORA KEY		4F1D1070
13626	0	02000	0	13632		TRA EIGHT		4F1D1080
13627	0	50000	0	14047	SEVEN	CLA NUMB		4F1D1090
13630	0	60100	0	14104		STO XCOM		4F1D1100
13631	0	50000	0	14046		CLA XKEY		4F1D1110
13632	0	60100	0	14025	EIGHT	STO COMM		4F1D1120
13633	0	50000	0	01151		CLA F-1		4F1D1130
13634	0	60100	0	01150		STO F-2		4F1D1140
13635	0	50000	0	14045		CLA BLANK		4F1D1150
13636	0	60100	0	01151		STO F-1		4F1D1160
13637	-0	53400	1	14041		LXD L(X)D , A	CONSTRUCT CALLING SEQUENCE WORD	4F1D1170
13640	0	50000	0	14036		CLA ONES		4F1D1180
13641	0	34000	1	01331	STA05	CAS F+111 , A		4F1D1190
13642	0	02000	0	13644		TRA STA10		4F1D1200
13643	0	02000	0	13646		TRA STA20		4F1D1210
13644	2	00001	1	13641	STA10	TIX STA05 , A, 1		4F1D1220
13645	-0	53400	1	14035		LXD L(0) , A		4F1D1230
13646	-0	75400	1	00000	STA20	PXD 0 , A		4F1D1240
13647	0	60100	0	14051		STO SES		4F1D1250
13650	0	50000	0	14041		CLA L(X)D		4F1D1260
13651	0	40200	0	14051		SUB SES		4F1D1270
13652	0	40000	0	14043		ADD FORG		4F1D1280
13653	0	60100	0	14051		STO SES		4F1D1290
13654	0	50000	0	14043		CLA FORG		4F1D1300
13655	0	77100	0	00022		ARS 18		4F1D1310
13656	-0	50100	0	14051		ORA SES		4F1D1320
13657	0	60100	0	14023		STO STATE		4F1D1330
13660	0	50000	0	00020		CLA 16	WAS THERE A PREVIOUS ERROR CALL	4F1D1340
13661	-0	32000	0	14033		ANA L(4)D		4F1D1350
13662	-0	10000	0	13673		TNZ PROG		4F1D1360
13663	0	50000	0	14033		CLA L(4)D	NO, MAKE ERROR CALL INDICATION	4F1D1370
13664	-0	60200	0	00020		ORS 16		4F1D1380
13665	0	07400	4	14121		TSX PRINT , C	AND PRINT HEADING	4F1D1390
13666	0	14067	0	14052		HTR START , 0 , STOP		4F1D1400
13667	0	76600	0	00361		WPR		4F1D1410
13670	0	76600	0	00361		WPR		4F1D1420
13671	0	76600	0	00361		WPR		4F1D1430
13672	0	76600	0	00361		WPR		4F1D1440
13673	0	07400	4	13742	PROG	TSX SETNBC , 4		4F1D1450
13674	0	07400	4	13746		TSX NNBC , 4		4F1D1460
13675	0	07400	4	13746		TSX NNBC , 4		4F1D1470
13676	0	40200	0	14014		SUB L(10)		4F1D1480
13677	-0	10000	0	14022		TNZ EXIT		4F1D1490
13700	0	07400	4	13742		TSX SETNBC , 4		4F1D1500
13701	0	07400	4	13746		TSX NNBC , 4		4F1D1510
13702	0	40200	0	14007		SUB L(X)		4F1D1520
13703	-0	10000	0	13725		TNZ CALLBK		4F1D1530
13704	0	50000	0	14001		CLA L(I)		4F1D1540
13705	0	07400	4	13760		TSX REP , 4		4F1D1550
13706	0	07400	4	13746		TSX NNBC , 4		4F1D1560
13707	0	50000	0	14002		CLA L(F)		4F1D1570
13710	0	07400	4	13760		TSX REP , 4		4F1D1580
13711	0	07400	4	13746		TSX NNBC , 4		4F1D1590

13712	0	40200	0	14003	SUB	L(=)		4F1D1600
13713	-0	10000	0	14022	TNZ	EXIT		4F1D1610
13714	0	50000	0	14004	CLA	L(LP)		4F1D1620
13715	0	07400	4	13760	TSX	REP,4		4F1D1630
13716	-3	77622	1	14022	TXE	TXL EXIT,1,-110		4F1D1640
13717	0	07400	4	13746	TSX	NNBC,4		4F1D1650
13720	0	40200	0	14016	SUB	ENDM		4F1D1660
13721	-0	10000	0	13716	TNZ	TXE		4F1D1670
13722	0	50000	0	14005	CLA	L(RP)		4F1D1680
13723	0	07400	4	13760	TSX	REP,4		4F1D1690
13724	0	02000	0	14022	TRA	EXIT		4F1D1700
13725	0	50000	0	14010	CALLBK	CLA L(C)	CHANGE Z BACK TO C	4F1D1710
13726	0	07400	4	13760	TSX	REP,4		4F1D1720
13727	0	07400	4	13746	TSX	NNBC,4		4F1D1730
13730	0	50000	0	14011	CLA	L(A)	CHANGE TEN BACK TO A	4F1D1740
13731	0	07400	4	13760	TSX	REP,4		4F1D1750
13732	0	07400	4	13746	TSX	NNBC,4		4F1D1760
13733	0	50000	0	14012	CLA	L(L)	CHANGE EQUAL BACK TO FIRST L	4F1D1770
13734	0	07400	4	13760	TSX	REP,4		4F1D1780
13735	2	00001	2	13737	TIX	SECL,2,1		4F1D1790
13736	1	77777	1	13737	TXI	SECL,1,-1	ADJUST COUNTS FOR NEXT CHAR	4F1D1800
13737	0	50000	0	14012	SECL	CLA L(L)	CHANGE BLANK BACK TO SECOND L	4F1D1810
13740	0	07400	4	13760	TSX	REP,4		4F1D1620
13741	0	02000	0	14022	TRA	EXIT		4F1D1830
13742	-0	53400	1	13752	SETNBC	LXD TXI,1		4F1D1840
13743	0	53400	2	13747	LXA	LGL,2		4F1D1850
13744	0	56000	0	01152	LDQ	F		4F1D1860
13745	0	02000	4	00001	TRA	1,4		4F1D1870
13746	-0	75400	0	00000	NNBC	PXD		4F1D1880
13747	-0	76300	0	00006	LGL	LGL 6		4F1D1890
13750	2	00001	2	13754	TIX	CAS,2,1		4F1D1900
13751	0	56000	1	01152	LDQ	F,1		4F1D1910
13752	1	77777	1	13753	TXI	TXI TXI+1,1,-1		4F1D1920
13753	0	53400	2	13747	LXA	LGL,2		4F1D1930
13754	0	34000	0	14006	CAS	CAS BLANKX		4F1D1940
13755	0	02000	4	00001	TRA	1,4		4F1D1950
13756	0	02000	0	13746	TRA	NNBC		4F1D1960
13757	0	02000	4	00001	TRA	1,4		4F1D1970
13760	-0	60000	0	14017	REP	STQ ES1		4F1D1980
13761	-0	63400	2	14020	SXD	ES2,2		4F1D1990
13762	-0	63400	1	14021	SXD	ES3,1		4F1D2000
13763	0	76500	0	00043	LRS	35		4F1D2010
13764	-0	50000	0	14016	CAL	ENDM		4F1D2020
13765	-3	00005	2	13767	TXL	TXL TXL+2,2,5		4F1D2030
13766	1	00001	1	13771	TXI	TXL+4,1,1		4F1D2040
13767	-0	76300	0	00006	LGL	6		4F1D2050
13770	2	00001	2	13767	TIX	TIX TIX-1,2,1		4F1D2060
13771	0	76000	0	00006	COM			4F1D2070
13772	0	32000	1	01151	ANS	F-1,1		4F1D2080
13773	-0	76300	0	00044	LGL	36		4F1D2090
13774	-0	60200	1	01151	ORS	F-1,1		4F1D2100
13775	-0	53400	1	14021	LXD	ES3,1		4F1D2110
13776	-0	53400	2	14020	LXD	ES2,2		4F1D2120
13777	0	56000	0	14017	LDQ	ES1		4F1D2130

T

	14000	0 02000 4 00001	TRA	1,4		4F1D2140
	14001	0000000000031	L(I)	BCD	100000I	4F1D2150
	14002	0000000000026	L(F)	BCD	100000F	4F1D2160
	14003	0000000000013	L(=)	BCD	100000=	4F1D2170
	14004	0000000000074	L(LP)	BCD	100000(	4F1D2180
	14005	0000000000034	L(RP)	BCD	100000)	4F1D2190
	14006	0000000000060	BLANKX	BCD	100000	4F1D2200
	14007	0000000000067	L(X)	BCD	100000X	4F1D2210
	14010	0000000000023	L(C)	BCD	100000C	4F1D2220
	14011	0000000000021	L(A)	BCD	100000A	4F1D2230
	14012	0000000000043	L(L)	BCD	100000L	4F1D2240
	14013	0 00000 0 00010	L(8)		8	4F1D2250
	14014	+0000000000012	L(10)	OCT	12	4F1D2260
	14015	0 00000 0 00014	L(12)		12	4F1D2270
	14016	+0000000000077	ENDM	OCT	77	4F1D2280
A	14017	0 00000 0 00000	ES1	HTR		4F1D2290
A	14020	0 00000 0 00000	ES2	HTR		4F1D2300
A	14021	0 00000 0 00000	ES3	HTR		4F1D2310
	14022	0 07400 4 14121	SECND	TSX	PRINT,C	4F1D2320
A	14023	0 00000 0 00000	STATE	HTR		4F1D2330
	14024	0 07400 4 14121		TSX	PRINT,C	4F1D2340
A	14025	0 00000 0 00000	COMM	HTR		4F1D2350
	14026	0 76600 0 00361		WPR		4F1D2360
	14027	0 76600 0 00361		WPR		4F1D2370
	14030	0 76400 0 00201	BST	BST	1	4F1D2380
	14031	0 02000 0 02402	TRA	MON		4F1D2390
	14032	+000001000000	L(1)D	OCT	1000000	4F1D2400
	14033	+000004000000	L(4)D	OCT	4000000	4F1D2410
	14034	+000006000000	L(6)D	OCT	6000000	4F1D2420
A	14035	0 00000 0 00000	L(0)	HTR		4F1D2430
	14036	-377777777777	ONES	OCT	777777777777	4F1D2440
	14037	676767676767	XXX	BCD	1XXXXXX	4F1D2450
	14040	+000000077777	HALT	OCT	77777	4F1D2460
	14041	+000161000000	L(X)D	OCT	161000000	4F1D2470
	14042	0 14504 0 00000	TABAD	HTR	0,0,TABLE	4F1D2480
	14043	0 01150 0 00000	FORG	HTR	0,0,F-2	4F1D2490
	14044	016060606060	RESTR	BCD	11	4F1D2500
	14045	606060606060	BLANK	BCD	1	4F1D2510
	14046	0 14121 0 14104	XKEY	HTR	XCOM,0,XXCOM	4F1D2520
A	14047	0 00000 0 00000	NUMB	HTR		4F1D2530
A	14050	0 00000 0 00000	KEY	HTR		4F1D2540
A	14051	0 00000 0 00000	SES	HTR		4F1D2550
	14052	016060606060	START	BCD	71	4F1D2560
	14053	606060606060				
	14054	606060606060				
	14055	606060606060				
	14056	606060606060				
	14057	606060606060				
	14060	606060606060				
	14061	264651635121		BCD	6FORTRAN DIAGNOSTIC PROGRAM RESULTS	4F1D2570
	14062	456024312127				
	14063	454662633123				
	14064	604751462751				
	14065	214460512562				

14066	644363626060					
14067	006060606060	STOP	BCD	70		4F1D2580
14070	606060606060					
14071	606060606060					
14072	606060606060					
14073	606060606060					
14074	606060606060					
14075	606060606060					
14076	254524604626		BCD	6	END OF DIAGNOSTIC PROGRAM RESULTS	4F1D2590
14077	602431212745					
14100	466263312360					
14101	475146275121					
14102	446051256264					
14103	436362606060					
A	14104	0 00000 0 00000	XCOM	HTR		4F1D2600
	14105	606060606063	BCD		THIS ERROR IS NOT LISTED IN THE DIAGNOSTIC PROGRAM ERR	4F1D2610
	14106	303162602551				
	14107	514651603162				
	14110	604546636043				
	14111	316263252460				
	14112	314560633025				
	14113	602431212745				
	14114	466263312360				
	14115	475146275121				
	14116	446025515160				
	14117	465160433162		BCD	20R LIST.	4F1D2620
	14120	633360606060				
		14121	XXCOM	BSS	0	4F1D2630
		14121	PRINT	BSS	0	4F1D2640
	14121	0 50000 4 00001	RAN	CLA	1,4	4F1D2650
	14122	0 62100 0 14163		STA	RNA	4F1D2660
	14123	0 77100 0 00022		ARS	18	4F1D2670
	14124	0 60100 0 14164		STO	RNB	4F1D2680
	14125	-0 63400 4 14165		SXD	RNC,4	4F1D2690
	14126	0 50000 0 14163	RN40	CLA	RNA	4F1D2700
	14127	0 40000 0 14166		ADD	RND	4F1D2710
	14130	0 34000 0 14164		CAS	RNB	4F1D2720
	14131	0 76100 0 00000		NOP		4F1D2730
	14132	0 02000 0 14153		TRA	RN50	4F1D2740
	14133	0 76700 0 00022		ALS	18	4F1D2750
	14134	0 40000 0 14163		ADD	RNA	4F1D2760
	14135	0 60100 0 14137		STO	RAN10	4F1D2770
	14136	0 07400 4 14170		TSX	WOT,C	4F1D2780
A	14137	0 00000 0 00000	RAN10	HTR		4F1D2790
	14140	0 50000 0 14137		CLA	RAN10	4F1D2800
	14141	0 77100 0 00022		ARS	18	4F1D2610
	14142	0 40200 0 14167		SUB	RNE	4F1D2820
	14143	0 62100 0 14150		STA	RN20	4F1D2830
	14144	0 40200 0 14167		SUB	RNE	4F1D2840
	14145	0 62100 0 14151		STA	RN30	4F1D2850
	14146	0 62100 0 14163		STA	RNA	4F1D2860
	14147	0 50000 0 14402		CLA	BLNKS	4F1D2870
A	14150	0 60100 0 00000	RN20	STO		4F1D2880
A	14151	0 60100 0 00000	RN30	STO		4F1D2890

	14152	0	02000	0	14126		TRA RN40		4F1D2900
	14153	0	50000	0	14164	RN50	CLA RNB		4F1D2910
	14154	0	76700	0	00022		ALS 18		4F1D2920
	14155	0	40000	0	14163		ADD RNA		4F1D2930
	14156	0	60100	0	14160		STO RN60		4F1D2940
	14157	0	07400	4	14170		TSX WOT,C		4F1D2950
A	14160	0	00000	0	00000	RN60	HTR		4F1D2960
	14161	-0	53400	4	14165		LXD RNC,C		4F1D2970
	14162	0	02000	4	00002		TRA 2,C		4F1D2980
A	14163	0	00000	0	00000	RNA	HTR		4F1D2990
A	14164	0	00000	0	00000	RNB	HTR		4F1D3000
A	14165	0	00000	0	00000	RNC	HTR		4F1D3010
	14166	0	00000	0	00024	RND	HTR 20		4F1D3020
	14167	0	00000	0	00001	RNE	HTR 1		4F1D3030
	14170	-0	63400	1	14340	WOT	SXD X1,1		4F1D3040
	14171	-0	63400	2	14346		SXD X2,2		4F1D3050
	14172	0	50000	4	00001		CLA 1,4	PRINT ROUTINE	4F1D3060
	14173	0	62100	0	14221		STA T5	X	4F1D3070
	14174	0	62200	0	14403		STD X4	X	4F1D3080
	14175	0	77100	0	00022		ARS 18	X	4F1D3090
	14176	0	40000	0	14403		ADD X4	X	4F1D3100
	14177	0	62100	0	14252		STA PR2	X	4F1D3110
	14200	0	62100	0	14277		STA CI9	X	4F1D3120
	14201	0	40200	4	00001		SUB 1,4	B-A+1 IN AC	4F1D3130
	14202	0	10000	4	00002		TZE 2,4		4F1D3140
	14203	-0	12000	4	00002		TMI 2,4		4F1D3150
	14204	-0	63400	4	14403		SXD X4,4		4F1D3160
	14205	0	73400	4	00013	L11	PAX 11,4		4F1D3170
	14206	-0	63400	4	14211		SXD PR6,4		4F1D3180
	14207	-0	50000	0	14353		CAL WP	INITIALIZE SWITCH	4F1D3190
	14210	0	60100	0	14353		STO WP	X	4F1D3200
TD	14211	3	00000	0	14212	PR6	TXH T4		4F1D3210
	14212	0	76600	0	00361	T4	WPR		4F1D3220
TD	14213	-3	00000	0	14217	Z2	TXL S3		4F1D3230
ATD	14214	-3	00000	0	00000	OZ2	TXL		4F1D3240
	14215	0	76000	0	00364	SP4	SPR 4		4F1D3250
TD	14216	-3	00000	0	14250		TXL RPR+2		4F1D3260
	14217	0	50200	0	14353	S3	CLS WP	SET SWITCH FOR MASKING	4F1D3270
	14220	0	60100	0	14353		STO WP	CHARACTER FROM TYPE WHEEL 1	4F1D3280
	14221	-0	50000	0	14221	T5	CAL *	OBTAIN FIRST CHARACTER	4F1D3290
	14222	0	77100	0	00036		ARS 30	X	4F1D3300
	14223	0	10000	0	14215		TZE SP4	DOUBLE SPACE IF ZERO	4F1D3310
	14224	0	34000	0	14404		CAS YZONE	TEST FOR SPACE SUPPRESS	4F1D3320
TD	14225	-3	00000	0	14227		TXL BK	NO	4F1D3330
TD	14226	-3	00000	0	14247		TXL RPR+1	SUPPRESS SPACE	4F1D3340
	14227	0	34000	0	14405	BK	CAS BNK	TEST FOR BLANK	4F1D3350
TD	14230	-3	00000	0	14232		TXL DIGF	NO	4F1D3360
TD	14231	-3	00000	0	14250		TXL RPR+2	BLANK	4F1D3370
	14232	0	76000	0	00372	DIGF	SPR 10	SET CHANNEL SKIP	4F1D3380
	14233	-0	32000	0	14234		ANA MK	MASK OUT ZONE	4F1D3390
	14234	0	73400	1	00017	MK	PAX 15,1	OBTAIN SPR COMBINATION	4F1D3400
	14235	1	00001	1	14236		TXI N2,1,1	X	4F1D3410
	14236	-2	00010	1	14240	N2	TNX N3,1,8	X	4F1D3420
	14237	0	76000	0	00370		SPR 8	X	4F1D3430

	14240	-2	00004	1	14242	N3	TNX N4,1,4	X	4F1D3440
	14241	0	76000	0	00364		SPR 4	X	4F1D3450
	14242	-2	00002	1	14244	N4	TNX N5,1,2	X	4F1D3460
	14243	0	76000	0	00362		SPR 2	X	4F1D3470
	14244	-2	00001	1	14246	N5	TNX RPR,1,1	X	4F1D3480
	14245	0	76000	0	00361		SPR 1	X	4F1D3490
	14246	0	76600	0	00361	RPR	WPR		4F1D3500
	14247	0	76000	0	00365		SPR 5	SUPPRESS SPACE	4F1D3510
	14250	0	50000	0	14402		CLA BLNKS	FIND LAST NON-BLANK GROUP	4F1D3520
	14251	-0	53400	4	14312		LXD CI4,4	X	4F1D3530
	14252	0	34000	4	00000	PR2	CAS 0,4	X	4F1D3540
	14253	1	77777	4	14256		TXI PR1,4,-1	X	4F1D3550
	14254	1	00001	4	14252		TXI PR2,4,1	X	4F1D3560
	14255	1	77777	4	14256		TXI PR1,4,-1	X	4F1D3570
	14256	-0	63400	4	14316	PR1	SXD CI6,4	STORE END TEST	4F1D3560
	14257	-0	63400	4	14330		SXD CI8,4	X	4F1D3590
	14260	-0	63400	4	14263		SXD PR8,4	X	4F1D3600
	14261	-0	63400	4	14370		SXD WP4,4	X	4F1D3610
	14262	-0	53400	4	14211		LXD PR6,4	X	4F1D3620
D	14263	-2	00000	4	14267	PR8	TNX PR5,4		4F1D3630
	14264	-3	00014	4	14266		TXL PR3,4,12		4F1D3640
	14265	0	76000	0	00370		SPR 8	FIRST CYCLE	4F1D3650
	14266	-0	53400	4	14211	PR3	LXD PR6,4	INITIALIZE GROUP COUNT	4F1D3660
	14267	0	53400	2	14271	PR5	LXA PR7,2	INITIALIZE LEFT SETUP	4F1D3670
	14270	-0	53400	1	14333		LXD YZ1,1	CLEAR CARD IMAGE	4F1D3680
T	14271	-0	75400	0	00000	PR7	PXD	X	4F1D3690
	14272	0	60200	1	14451	PR4	SLW LT,1	X	4F1D3700
	14273	0	60200	1	14431		SLW RT,1	X	4F1D3710
	14274	2	00001	1	14272		TIX PR4,1,1	X	4F1D3720
	14275	-0	50000	0	14407	CIR	CAL COL1	INITIALIZE COLUMN INDICATOR	4F1D3730
	14276	0	60200	0	14410	CI2	SLW COL	X	4F1D3740
	14277	0	56000	4	00000	CI9	LDQ 0,4	OBTAIN GROUP	4F1D3750
	14300	-0	63400	4	14214		SXD OZ2,4	STORE GROUP COUNT	4F1D3760
	14301	0	53400	4	14303		LXA Q6,4	SET CHARACTER COUNT	4F1D3770
T	14302	-0	75400	0	00000	CI1	PXD		4F1D3780
	14303	-0	76300	0	00006	Q6	LGL 6		4F1D3790
	14304	0	73400	1	00000		PAX 0,1		4F1D3800
	14305	-0	50000	0	14410		CAL COL	POSITION COLUMN INDICATOR	4F1D3810
	14306	0	77100	4	00006		ARS 6,4	X	4F1D3820
	14307	2	00020	1	14333		TIX YZ1,1,16	TEST FOR DIGIT	4F1D3830
	14310	3	00017	1	14336		TXH YZ2,1,15	TEST FOR Y-ZONE	4F1D3840
	14311	-0	60200	3	14446	CI5	ORS D,3	STORE DIGIT	4F1D3850
	14312	2	00001	4	14302	CI4	TIX CI1,4,1	COUNT CHARACTERS	4F1D3860
	14313	0	77100	0	00001	CI3	ARS 1	SHIFT AND TEST COLUMN	4F1D3870
	14314	-0	53400	4	14214		LXD OZ2,4	RESTORE GROUP COUNT	4F1D3880
	14315	1	77777	4	14316		TXI CI6,4,-1	COUNT GROUPS	4F1D3890
D	14316	-3	00000	4	14320	CI6	TXL CI7,4	TEST FOR LAST NON-BLANK GROUP	4F1D3900
	14317	-0	10000	0	14276		TNZ CI2	TEST FOR END OF ROW	4F1D3910
	14320	-0	50000	2	14433	CI7	CAL 8.3,2	FORM TRUE 8,4	4F1D3920
	14321	-0	60200	2	14436		ORS D-8,2	AND 3 ROWS AND	4F1D3930
	14322	-0	60200	2	14443		ORS D-3,2	MOVE 8,4 AND 8.3	4F1D3940
	14323	0	60200	2	14434		SLW 8.2,2	ROWS	4F1D3950
	14324	-0	50000	2	14432		CAL 8.4,2	FORM TRUE 8,4	4F1D3960
	14325	-0	60200	2	14436		ORS D-8,2	X	4F1D3970

	14326	-0	60200	2	14442		ORS D-4,2	X	4F1D3980
	14327	0	60200	2	14433		SLW 8.3,2	X	4F1D3990
D	14330	-3	00000	4	14353	CI8	TXL WP,4	TEST FOR END	4F1D4000
	14331	3	00017	2	14353		TXH WP,2,15	TEST FOR RIGHT HALF	4F1D4010
	14332	1	00020	2	14275		TXI CIR,2,16	INITIALIZE RIGHT HALF	4F1D4020
	14333	2	00020	1	14341	YZ1	TIX XZ1,1,16	TEST FOR 16/CH/32	4F1D4030
	14334	3	00017	1	14344		TXH XZ2,1,15	TEST FOR X-ZONE	4F1D4040
	14335	-0	60200	3	14446		ORS D,3	STORE DIGIT	4F1D4050
	14336	-0	60200	2	14450	YZ2	ORS Y,2	STORE Y-ZONE	4F1D4060
	14337	2	00001	4	14302		TIX CI1,4,1	COUNT CHARACTERS	4F1D4070
TD	14340	-3	00000	0	14313	X1	TXL CI3	OBTAIN NEXT GROUP	4F1D4080
	14341	2	00020	1	14347	XZ1	TIX OZ1,1,16	TEST FOR 32/CH/48	4F1D4090
	14342	3	00017	1	14312		TXH CI4,1,15	TEST FOR BLANK	4F1D4100
	14343	-0	60200	3	14446		ORS D,3	STORE DIGIT	4F1D4110
	14344	-0	60200	2	14447	XZ2	ORS X,2	STORE X-ZONE	4F1D4120
	14345	2	00001	4	14302		TIX CI1,4,1	COUNT CHARACTERS	4F1D4130
TD	14346	-3	00000	0	14313	X2	TXL CI3	OBTAIN NEXT GROUP	4F1D4140
	14347	-0	60200	2	14446	OZ1	ORS Z,2	STORE 0-ZONE	4F1D4150
	14350	-0	60200	3	14446		ORS D,3	STORE DIGIT	4F1D4160
	14351	2	00001	4	14302		TIX CI1,4,1	COUNT CHARACTERS	4F1D4170
TD	14352	-3	00000	0	14313		TXL CI3		4F1D4180
TD	14353	3	00000	0	14355	WP	TXH WP9	INVERTED TO TXL IF PROGRAM CARRIAGE CONTROL	4F1D4190
TD	14354	-3	00000	0	14361		TXL WP7	NO PROGRAM	4F1D4200
	14355	-0	53400	1	14401	WP9	LXD WP2,1	MASK OUT FIRST COL, OF CARD IMAGE	4F1D4210
	14356	-0	50000	0	14406		CAL MK2	X	4F1D4220
	14357	0	32000	1	14451	ANS	ANS LT,1	X	4F1D4230
	14360	2	00001	1	14357		TIX ANS,1,1	X	4F1D4240
	14361	-0	53400	1	14213	WP7	LXD Z2,1	COPY LOOP	4F1D4250
	14362	0	70000	1	14435	CRAN	CPY LT-12,1		4F1D4260
	14363	0	70000	1	14415		CPY RT-12,1	X	4F1D4270
	14364	1	77777	1	14365		TXI T2,1,-1		4F1D4280
	14365	3	77764	1	14362	T2	TXH CRAN,1,-12		4F1D4290
	14366	-0	50000	0	14353		CAL WP	RESET SWITCH FOR SECOND CYCLE	4F1D4300
	14367	0	60100	0	14353		STO WP	X	4F1D4310
D	14370	3	00000	4	14377	WP4	TXH WP5,4		4F1D4320
	14371	-0	53400	1	14340		LXD X1,1	NO, RELOAD INDEX REGISTERS AND RETURN	4F1D4330
	14372	-0	53400	2	14346		LXD X2,2	X	4F1D4340
	14373	-0	53400	4	14403	WT2	LXD X4,4	X	4F1D4350
	14374	0	02000	4	00002	L2	TRA 2,4	X	4F1D4360
	14375	0	76600	0	00361	RPR2	WPR		4F1D4370
TD	14376	-3	00000	0	14250		TXL PR2-2		4F1D4380
	14377	0	76600	0	00361	WP5	WPR		4F1D4390
	14400	0	76000	0	00371		SPR 9	SECOND CYCLE	4F1D4400
	14401	-3	00014	0	14267	WP2	TXL PR5,0,12	CONVERT REST OF LINE	4F1D4410
	14402	606060606060				BLNKS	BCD 1		4F1D4420
A	14403	0	00000	0	00000	X4	HTR		4F1D4430
	14404	+0000000000020				YZONE	OCT 20		4F1D4440
	14405	+0000000000060				BNK	OCT 60		4F1D4450
	14406	+3777777777777				MK2	OCT 377777777777		4F1D4460
	14407	-0	00000	0	00000	COL1	MZE		4F1D4470
					14410	COL	BSS 1		4F1D4460
					14431	RT	BES 16		4F1D4490
					14431	8.5	BSS 1		4F1D4500
					14432	8.4	BSS 1		4F1D4510

14433	8.3	BSS	1		4F1D4520
14434	8.2	BSS	1		4F1D4530
14446	D	BES	9		4F1D4540
14446	Z	BSS	1		4F1D4550
14447	X	BSS	1		4F1D4560
14450	Y	BSS	1		4F1D4570
14451	LT	SYN	Y+1		4F1D4580
14433	8.4L	SYN	LT-14		4F1D4590
14413	8.4R	SYN	RT-14		4F1D4600
14451		BSS	27		4F1D4610
14022	EXIT	SYN	SECND		4F1D4620
				ADDRESS REQUIRED FROM SECTION ONE.....	4F1D4630
01152	F	SYN	618	ADDRESS OF 1ST WORD OF F REGION	4F1D4640
02402	MON	SYN	1282	ADDRESS OF ENTRY TO MONITOR FOR A	4F1D4650
02367	DCELL1	SYN	1271		4F1D4660

TABLE OF DIAGNOSTIC COMMENTS, SECTION ONE OF 704 FORTRAN II. 4F1D4690

COMMON 4F1D4700

14504 TABLE BSS 0 4F1D4720

14504 676767676767 BCD XXXXXX000001 DIM3 TABLE EXCEEDED, THE NUMBER OF 3-DIMEN4F1D4750

14505 0000000000001

14506 60606060606060

14507 243144036063

14510 212243256025

14511 672325252425

14512 247360633025

14513 604564442225

14514 516046266003

14515 402431442545

14516 623146452143

BCD SIONAL VARIABLES WHICH APPEAR IN DIMENSION STATEMENTS EXCEED4F1D4760

14517 606521513121

14520 224325626066

14521 303123306021

14522 474725215160

14523 314560243144

14524 254562314645

14525 606263216325

14526 442545636260

14527 256723252524

14530 626011463360

BCD 1S 90. 4F1D4770

14531 676767676767

BCD XXXXXX000002 DIM2 TABLE EXCEEDED, THE NUMBER OF 2-DIMEN4F1D4790

14532 0000000000002

14533 60606060606060

14534 243144026063

14535 212243256025

14536 672325252425

14537 247360633025

14540 604564442225

14541 516046266002

14542	402431442545		
14543	623146452143	BCD	SIONAL VARIABLES WHICH APPEAR IN DIMENSION STATEMENTS EXCEED4F1D4800
14544	606521513121		
14545	224325626066		
14546	303123306021		
14547	474725215160		
14550	314560243144		
14551	254562314645		
14552	606263216325		
14553	442545636260		
14554	256723252524		
14555	626001000033	BCD 1S 100.	4F1D4810
			4F1D4820
14556	676767676767	BCD	XXXXXX000003 DIM1 TABLE EXCEEDED. THE NUMBER OF 1--DIMEN4F1D4830
14557	0000000000003		
14560	606060606060		
14561	243144016063		
14562	212243256025		
14563	672325252425		
14564	243360633025		
14565	604564442225		
14566	516046266001		
14567	402431442545		
14570	623146452143	BCD	SIONAL VARIABLES WHICH APPEAR IN DIMENSION STATEMENTS EXCEED4F1D4840
14571	606521513121		
14572	224325626066		
14573	303123306021		
14574	474725215160		
14575	314560243144		
14576	254562314645		
14577	606263216325		
14600	442545636260		
14601	256723252524		
14602	626001000073	BCD 1S 100,	4F1D4850
			4F1D4860
14603	676767676767	BCD	XXXXXX000004 SIGMA TABLE EXCEEDED. MORE THAN 30 DIFFERE4F1D4870
14604	0000000000004		
14605	606060606060		
14606	623127442160		
14607	632122432560		
14610	256723252524		
14611	252433604446		
14612	512560633021		
14613	456003006024		
14614	312626255125		
14615	456360512543	BCD	NT RELATIVE ADDRESSES RESULTING FROM THE ADDENDS IN SUBSCRIP4F1D4880
14616	216331652560		
14617	212424512562		
14620	622562605125		
14621	626443633145		
14622	276026514644		
14623	606330256021		
14624	242425452462		
14625	603145606264		

14626	226223513147		
14627	636260462660	BCD	TS OF THIS STATEMENT. (SIGN CONSIDERED, ONE RELATIVE ADDRESS4F1D4890
14630	633031626062		
14631	632163254425		
14632	456333607462		
14633	312745602346		
14634	456231242551		
14635	252473604645		
14636	256051254321		
14637	633165256021		
14640	242451256262		
14641	462660006021	BCD	30F 0 ASSUMMED) 4F1D4900
14642	626264444425		
14643	243460606060		
			4F1D4910
14644	676767676767	BCD	XXXXXX000005 TAU3 TABLE EXCEEDED. THE TOTALITY OF DIFFE4F1D4920
14645	000000000005		
14646	606060606060		
14647	632164036063		
14650	212243256025		
14651	672325252425		
14652	243360633025		
14653	606346632143		
14654	316370604626		
14655	602431262625		
14656	512545636003	BCD	RENT 3-DIMENSIONAL SUBSCRIPT COMBINATIONS EXCEEDS 75 FOR THI4F1D4930
14657	402431442545		
14660	623146452143		
14661	606264226223		
14662	513147636023		
14663	464422314521		
14664	633146456260		
14665	256723252524		
14666	626007056026		
14667	465160633031		
14670	626047514627	BCD	2S PROGRAM. 4F1D4940
14671	512144336060		
			4F1D4950
14672	676767676767	BCD	XXXXXX000006 TAU2 TABLE EXCEEDED. THE TOTALITY OF DIFFE4F1D4960
14673	000000000006		
14674	606060606060		
14675	632164026063		
14676	212243256025		
14677	672325252425		
14700	243360633025		
14701	606346632143		
14702	316370604626		
14703	602431262625		
14704	512545636002	BCD	RENT 2-DIMENSIONAL SUBSCRIPT COMBINATIONS EXCEEDS 90 FOR THI4F1D4970
14705	402431442545		
14706	623146452143		
14707	606264226223		
14710	513147636023		
14711	464422314521		

14712	633146456260		
14713	256723252524		
14714	626011006026		
14715	465160633031		
14716	626047514627	BCD 2S PROGRAM.	4F1D4980
14717	512144336060		
			4F1D4990
14720	676767676767	BCD XXXXXX000007	TAU1 TABLE EXCEEDED. THE TOTALITY OF DIFFE4F1D5000
14721	000000460007		
14722	606060606060		
14723	632164016063		
14724	212243256025		
14725	672325252425		
14726	243360633025		
14727	606346632143		
14730	316370604626		
14731	602431262625		
14732	512545636001	BCD RENT 1-DIMENSIONAL SUBSCRIPT COMBINATIONS EXCEEDS 100 FOR TH4F1D5010	
14733	402431442545		
14734	623100452143		
14735	606264226223		
14736	513147636023		
14737	464422314521		
14740	633146456260		
14741	256723252524		
14742	626001000060		
14743	264651606330		
14744	316260475146	BCD 2IS PROGRAM.	4F1D5020
14745	275121443360		
			4F1D5030
14746	676767676767	BCD XXXXXX000010	FLOCON TABLE EXCEEDED. MORE THAT 450 DIFFE4F1D5040
14747	000000000100		
14750	606060606060		
14751	264346234645		
14752	606321224325		
14753	602567232525		
14754	242524336044		
14755	465125606330		
14756	216360040500		
14757	602431262625		
14760	254563602643	BCD RENT FLOATING POINT CONSTANTS IN THIS PROBLEM. (SIGN NOT CONS4F1D5050	
14761	462163314527		
14762	604746314563		
14763	602346456263		
14764	214563626031		
14765	456063303162		
14766	604751462243		
14767	254433607462		
14770	312745604546		
14771	636023464562		
14772	312425512524	BCD 2IDERED)	4F1D5060
14773	346060606060		
			4F1D5070
14774	676767676767	BCD XXXXXX000011	FIXCON TABLE EXCEEDED. MORE THAN 100 DIFFE4F1D5080

14775	000000000101			
14776	606060606060			
14777	263167234645			
15000	606321224325			
15001	602567232525			
15002	242524336044			
15003	465125606330			
15004	214560010000			
15005	602431262625			
15006	512545636026	BCD	RENT FIXED POINT CONSTANTS IN THIS PROGRAM. (SIGN NOT CONSID	4F1D5090
15007	316725246047			
15010	463145636023			
15011	464562632145			
15012	636260314560			
15013	633031626047			
15014	514627512144			
15015	336074623127			
15016	456045466360			
15017	234645623124			
15020	255125243460	BCD	1ERED)	4F1D5100
				4F1D5110
15021	676767676767	BCD	XXXXXX001635	MORE THAN SIX CHARACTERS IN SOME SYMBOL.
15022	000001060305			4F1D5120
15023	606060606060			
15024	444651256063			
15025	302145606231			
15026	676060233021			
15027	512123632551			
15030	626031456060			
15031	624644256062			
15032	704422464333			
				4F1D5130
15033	676767676767	BCD	XXXXXX001643	ILLEGAL PUNCTUATION IN THIS STATEMENT.
15034	000001060403			4F1D5140
15035	606060606060			
15036	314343252721			
15037	436060476445			
15040	236364216331			
15041	464560603145			
15042	606063303162			
15043	606062632163			
15044	254425456333			
				4F1D5150
15045	676767676767	BCD	XXXXXX002034	MACHINE ERROR. CAS CONTRADICTS PREVIOUS TL
15046	000002000304			4F1D5160
15047	606060606060			
15050	442123303145			
15051	256025515146			
15052	513360232162			
15053	602346456351			
15054	212431236362			
15055	604751256531			
15056	466462606343			
15057	503360606060	BCD	1Q.	4F1D5170

15060	676767676767	BCD	XXXXXX002062	REPEATED CHECK SUM ERROR IN READING DRUM	4F1D5180 34F1D5190
15061	000002000602				
15062	606060606060				
15063	512547252163				
15064	252460233025				
15065	234260626444				
15066	602551514651				
15067	603145605125				
15070	212431452760				
15071	245164446003				
15072	336060606060	BCD	1.		4F1D5200 4F1D5210 4F1D5220
15073	676767676767	BCD	XXXXXX002266	MACHINE ERROR. INDEX FAILURE.	
15074	000002020606				
15075	606060606060				
15076	442123303145				
15077	256025515146				
15100	513360314524				
15101	256760262131				
15102	436451253360				
15103	606060606060				
15104	606060606060				
15105	676767676767	BCD	XXXXXX002433	REPEATED FAILURE IN READING STATE C FROM	4F1D5230 D4F1D5240
15106	000002040303				
15107	606060606060				
15110	512547252163				
15111	252460262131				
15112	436451256031				
15113	456051252124				
15114	314527606263				
15115	216325602360				
15116	265146446024				
15117	516444606004	BCD	2RUM 4.		4F1D5250
15120	336060606060				
15121	676767676767	BCD	XXXXXX002434	REPEATED FAILURE IN READING STATE B FROM	4F1D5260 D4F1D5270
15122	000002040304				
15123	606060606060				
15124	512547252163				
15125	252460262131				
15126	436451256031				
15127	456051252124				
15130	314527606263				
15131	216325602260				
15132	265146446024				
15133	516444606003	BCD	2RUM 3.		4F1D5280
15134	336060606060				
15135	676767676767	BCD	XXXXXX002435	REPEATED FAILURE IN READING STATE D FROM	4F1D5290 D4F1D5300
15136	000002040305				
15137	606060606060				
15140	512547252163				

15141	252460262131			
15142	436451256031			
15143	456051252124			
15144	314527606263			
15145	216325602460			
15146	265146446024			
15147	516444606002	BCD 2RUM 2.		4F1D5310
15150	336060606060			
				4F1D5320
15151	676767676767	BCD XXXXXX002436	REPEATED FAILURE IN READING STATE A FROM D4	4F1D5330
15152	000002040306			
15153	606060606060			
15154	512547252163			
15155	252460262131			
15156	436451256031			
15157	456051252124			
15160	314527606263			
15161	216325602160			
15162	265146446024			
15163	516444606001	BCD 2RUM 1.		4F1D5340
15164	336060606060			
				4F1D5350
15165	676767676767	BCD XXXXXX002523	MACHINE ERROR. INDEX FAILURE.	4F1D5360
15166	000002050203			
15167	606060606060			
15170	442123303145			
15171	256060255151			
15172	465133606031			
15173	452425676026			
15174	213143645125			
15175	336060606060			
15176	606060606060			
				4F1D5370
15177	676767676767	BCD XXXXXX002565	REPEATED CHECK SUM ERROR IN READING TABLES4	4F1D5380
15200	000002050605			
15201	606060606060			
15202	512547252163			
15203	252460233025			
15204	234260626444			
15205	602551514651			
15206	603145605125			
15207	212431452760			
15210	632122432562			
15211	265146446024	BCD 4FROM DRUM 2, 3 OR 4,		4F1D5390
15212	516444600273			
15213	600360465160			
15214	047360606060			
				4F1D5400
15215	676767676767	BCD XXXXXX002577	NON-NUMERIC CHARACTER IN NUMERIC FIELD OR 4	4F1D5410
15216	000002050707			
15217	606060606060			
15220	454645404564			
15221	442551312360			
15222	233021512123			

15223	632551603145			
15224	604564442551			
15225	312360263125			
15226	432460465160			
15227	474662623122	BCD 8	POSSIBLE MISSING PUNCTUATION BETWEEN FIELDS.	4F1D5420
15230	432560443162			
15231	623145276047			
15232	644523636421			
15233	633146456022			
15234	256366252545			
15235	602631254324			
15236	623360606060			
				4F1D5430
15237	676767676767	BCD	XXXXXX002656	A SUBSCRIPT IS NOT A FIXED POINT VARIABLE. 4F1D5440
15240	000002060506			
15241	606060606060			
15242	216062642262			
15243	235131476360			
15244	316260454663			
15245	602160263167			
15246	252460474631			
15247	456360652151			
15250	312122432533			
				4F1D5450
15251	676767676767	BCD	XXXXXX002666	A SUBSCRIPT HAS A DOUBLE MULTIPLIER. 4F1D5460
15252	000002060606			
15253	606060606060			
15254	216062642262			
15255	235131476360			
15256	302162602160			
15257	244664224325			
15260	604464436331			
15261	474331255133			
15262	606060606060			
				4F1D5470
15263	676767676767	BCD	XXXXXX002673	A SUBSCRIPT MULTIPLIER IS NOT A CONSTANT. 4F1D5480
15264	000002060703			
15265	606060606060			
15266	216062642262			
15267	235131476360			
15270	446443633147			
15271	433125516031			
15272	626045466360			
15273	216023464562			
15274	632145633360			
				4F1D5490
15275	676767676767	BCD	XXXXXX002720	MORE THAN SIX CHARACTERS IN A SYMBOL WITHIN A SYMBOL. 4F1D5500
15276	000002070200			
15277	606060606060			
15300	444651256063			
15301	302145606231			
15302	676023302151			
15303	212363255162			
15304	603145602160			

15305	627044224643			
15306	606631633031			
15307	456021606264	BCD 8N A SUBSCRIPT OR POSSIBLE MISSING PUNCTUATION.		4F1D5510
15310	226223513147			
15311	636046516047			
15312	466262312243			
15313	256044316262			
15314	314527604764			
15315	452363642163			
15316	314645336060			
				4F1D5520
15317	676767676700	BCD XXXXX002722	THERE IS AN ILLEGAL CHARACTER IN SOME SUBS	4F1D5530
15320	000207020260			
15321	606060606060			
15322	633025512560			
15323	316260214560			
15324	314343252721			
15325	436023302151			
15326	212363255160			
15327	314560624644			
15330	256062642262			
15331	622351314763	BCD 2SCRIPT.		4F1D5540
15332	336060606060			
				4F1D5550
15333	676767676767	BCD XXXXXX002741	A SUBSCRIPT HAS A DOUBLE ADDEND.	4F1D5560
15334	000002070401			
15335	606060606060			
15336	216062642262			
15337	235131476360			
15340	302162602160			
15341	602446642243			
15342	256021242425			
15343	452433606060			
15344	606060606060			
				4F1D5570
15345	676767676767	BCD XXXXXX002744	A SUBSCRIPT IS NOT A FIXED POINT VARIABLE.	4F1D5580
15346	000002070404			
15347	606060606060			
15350	216062642262			
15351	235131476360			
15352	316260454663			
15353	602160263167			
15354	252460474631			
15355	456360652151			
15356	312122432533			
				4F1D5590
15357	676767676767	BCD XXXXXX002764	A SUBSCRIPT IS NOT A FIXED POINT VARIABLE.	4F1D5600
15360	000002070604			
15361	606060606060			
15362	216062642262			
15363	235131476360			
15364	316260454663			
15365	602160263167			
15366	252460474631			

15367 456360652151
15370 312122432533

15371 676767676767 BCD XXXXXX003023 A SUBSCRIPT ADDEND IS NOT A CONSTANT. 4F1D5610
15372 000003000203 4F1D5620
15373 606060606060
15374 216062642262
15375 235131476360
15376 212424254524
15377 603162604546
15400 636021602346
15401 456263214563
15402 336060606060

15403 676767676767 BCD XXXXXX003026 THERE IS A PARENTHESIS MISSING IN SOME SUB 4F1D5630
15404 000003000206 4F1D5640
15405 606060606060
15406 633025512560
15407 316260216047
15410 215125456330
15411 256231626044
15412 316262314527
15413 603145606246
15414 442560626422
15415 622351314763 BCD 4SCRIPT COMBINATION. 4F1D5650
15416 602346442231
15417 452163314645
15420 336060606060

15421 676767676767 BCD XXXXXX003064 A 3 DIMENSIONAL SUBSCRIPTED VARIABLE DOES 4F1D5660
15422 000003000604 4F1D5670
15423 606060606060
15424 216003602431
15425 442545623146
15426 452143606264
15427 226223513147
15430 632524606521
15431 513121224325
15432 602446256260
15433 454663603021 BCD 7NOT HAVE A DIMENSION STATEMENT ENTRY. 4F1D5680
15434 652560216024
15435 314425456231
15436 464560626321
15437 632544254563
15440 602545635170
15441 336060606060

15442 676767676767 BCD XXXXXX003151 A 2 DIMENSIONAL SUBSCRIPTED VARIABLE DOES 4F1D5690
15443 000003010501 4F1D5700
15444 606060606060
15445 216002602431
15446 442545623146
15447 452143606264
15450 226223513147

15451	632524606521		
15452	513121224325		
15453	602446256260		
15454	454663603021	BCD 7NOT HAVE A DIMENSION STATEMENT ENTRY.	4F1D5710
15455	652560216024		
15456	314425456231		
15457	464560626321		
15460	632544254563		
15461	602545635170		
15462	336060606060		
			4F1D5720
15463	676767676767	BCD XXXXXX003254	PROGRAM EXPECTS COMMA OR END OF STATEMENT.4F1D5730
15464	000003020504		
15465	606060606060		
15466	475146275121		
15467	446025674725		
15470	236362602346		
15471	444421604651		
15472	602545246046		
15473	266062632163		
15474	254425456333		
			4F1D5740
15475	676767676767	BCD XXXXXX003262	PROGRAM EXPECTS COMMA OR RIGHT PARENTHESIS4F1D5750
15476	000003020602		
15477	606060606060		
15500	475146275121		
15501	446025674725		
15502	236362602346		
15503	444421604651		
15504	605131273063		
15505	604721512545		
15506	633025623162		
15507	336060606060	BCD 1.	4F1D5760
			4F1D5770
15510	676767676767	BCD XXXXXX003270	PROGRAM EXPECTS LEFT PARENTHESIS OR END OF4F1D5780
15511	000003020700		
15512	606060606060		
15513	475146275121		
15514	446025674725		
15515	236362604325		
15516	266360472151		
15517	254563302562		
15520	316260465160		
15521	254524604626		
15522	606263216325	BCD 2 STATEMENT.	4F1D5790
15523	442545633360		
			4F1D5800
15524	676767676767	BCD XXXXXX003272	MACHINE ERROR. AC GREATER THAN OCTAL 77. 4F1D5810
15525	000003020702		
15526	606060606060		
15527	442123303145		
15530	256025515146		
15531	513360212360		
15532	275125216325		

15533	516063302145			
15534	604623632143			
15535	600707336060			
15536	676767676767	BCD 9XXXXXX003274	PROGRAM EXPECTS END OF STATEMENTS	4F1D5820
15537	000003020704			4F1D5830
15540	606060606060			
15541	475146275121			
15542	446025674725			
15543	236362602545			
15544	246046266062			
15545	632163254425			
15546	456362606060			
15547	676767676767	BCD 9XXXXXX003300	PROGRAM EXPECTS LEFT PARENTHESIS.	4F1D5840
15550	000003030000			4F1D5850
15551	606060606060			
15552	475146275121			
15553	446025674725			
15554	236362604325			
15555	266360472151			
15556	254563302562			
15557	316233606060			
15560	676767676767	BCD 9XXXXXX003304	PROGRAM EXPECTS RIGHT PARENTHESIS.	4F1D5860
15561	000003030004			4F1D5870
15562	606060606060			
15563	475146275121			
15564	446025674725			
15565	236362605131			
15566	273063604721			
15567	512545633025			
15570	623162336060			
15571	676767676767	BCD 7XXXXXX003310	PROGRAM EXPECTS COMMA.	4F1D5880
15572	000003030100			4F1D5690
15573	606060606060			
15574	475146275121			
15575	446025674725			
15576	236362602346			
15577	444421336060			
15600	676767676767	BCD XXXXXX003314	SYMBOL BEGINS NUMERIC WHICH IS ILLEGAL IN	4F1D5900
15601	000003030104			4F1D5910
15602	606060606060			
15603	627044224643			
15604	602225273145			
15605	626045644425			
15606	513123606630			
15607	312330603162			
15610	603143432527			
15611	214360314560			
15612	633031626023	BCD 3THIS CONTEXT.		4F1D5920
15613	464563256763			

15614	336060606060			
15615	676767676767	BCD	XXXXXX003316	SYMBOL BEGINS NON-NUMERIC WHICH IS ILLEGAL4F1D5940
15616	000003030106			
15617	606060606060			
15620	627044224643			
15621	602225273145			
15622	626045464540			
15623	456444255131			
15624	236066303123			
15625	306031626031			
15626	434325272143			
15627	603145606330	BCD	3 IN THIS CONTEXT.	4F1D5950
15630	316260234645			
15631	632567633360			
				4F1D5960
			STATE A	4F1D5970
				4F1D5980
15632	676767676767	BCD	XXXXXX003542	THE CHARACTER \$ OCCURS IN THIS STATEMENT 4F1D5990
15633	000003050402			
15634	606060606060			
15635	633025602330			
15636	215121236325			
15637	516053604623			
15640	236451626031			
15641	456063303162			
15642	606263216325			
15643	442545636060			
15644	606246442566	BCD	8 SOMEWHERE OTHER THAN IN HOLLERITH TEXT.	4F1D6000
15645	302551256046			
15646	633025516063			
15647	302145603145			
15650	603046434325			
15651	513163306063			
15652	256763336060			
15653	606060606060			
				4F1D6010
15654	676767676767	BCD	XXXXXX003545	THE ILLEGAL CHARACTER (0-8-2 PUNCH) OCC4F1D6020
15655	000003050405			
15656	606060606060			
15657	633025603143			
15660	432527214360			
15661	233021512123			
15662	632551606060			
15663	607400401040			
15664	026047644523			
15665	303460462323			
15666	645162603145	BCD	4URS INTHIS STATEMENT.	4F1D6030
15667	633031626062			
15670	632163254425			
15671	456333606060			
				4F1D6040
15672	676767676767	BCD	XXXXXX003550	THE ILLEGAL CHARACTER -0 (11-8-2 PUNCH) O 4F1D6050
15673	000003050500			
15674	606060606060			

15675	633025603143		
15676	432527214360		
15677	233021512123		
15700	632551604000		
15701	607401014010		
15702	400260476445		
15703	233034604660		
15704	232364516260	BCD 4CCURS IN THIS STATEMENTS.	4F1D6060
15705	314560633031		
15706	626062632163		
15707	254425456362		
			4F1D6070
15710	676767676767	BCD XXXXXX003553	THE ILLEGAL CHARACTER +0 112-6-2 PUNCH) 0
15711	000003050503		4F1D6080
15712	606060606060		
15713	633025603143		
15714	432527214360		
15715	233021512123		
15716	632551602000		
15717	600101024006		
15720	400260476445		
15721	233034600060		
15722	232364516260	BCD 4CCURS IN THIS STATEMENT.	4F1D6090
15723	314560633031		
15724	626062632163		
15725	254425456333		
			4F1D6100
15726	676767676767	BCD XXXXXX003556	THE ILLEGAL CHARACTER - (8-4 PUNCH) OCCUR
15727	000003050506		4F1D6110
15730	606060606060		
15731	633025603143		
15732	432527214360		
15733	233021512123		
15734	632551604060		
15735	741040046047		
15736	644523303460		
15737	462323645160		
15740	626031456063	BCD 4S IN THIS STATEMENT.	4F1D6120
15741	303162606263		
15742	216325442545		
15743	633360606060		
			4F1D6130
15744	676767676767	BCD XXXXXX003561	THE NON BCD CHARACTER 001010 HAS BEEN RE
15745	000003050601		4F1D6140
15746	606060606060		
15747	633025604546		
15750	456022232460		
15751	233021512123		
15752	632551600000		
15753	010001006030		
15754	216260222525		
15755	456051256060		
15756	212460265146	BCD 8AD FROM TAPE WHILE PROCESSING THIS STATEMENT.	4F1D6150
15757	446063214725		

15760 606630314325
15761 604751462325
15762 626231452760
15763 633031626062
15764 632163254425
15765 456333606060

15766 676767676767
15767 000003060105
15770 606060606060
15771 634646604421
15772 457060513127
15773 306360472151
15774 254563302562
15775 316233606060

BCD 8XXXXXX003615 TOO MANY RIGHT PARENTHESIS.

4F1D6160
4F1D6170

15776 676767676767
15777 000003060204
16000 606060606060
16001 454645402151
16002 316330442563
16003 312360626321
16004 632544254563
16005 604626602160
16006 637047256066
16007 303123306031
16010 626045466360
16011 314560243123
16012 633146452151
16013 703360606060

BCD XXXXXX003624 NON-ARITHMETIC STATEMENT OF A TYPE WHICH I

4F1D6180
4F1D6190

BCD 4S NOT IN DICTIONARY.

4F1D6200

16014 676767676767
16015 000004000505
16016 606060606060
16017 634646602625
16020 666051312730
16021 636047215125
16022 456330256225
16023 623360606060
16024 606060606060
16025 606060606060

BCD XXXXXX004055 TOO FEW RIGHT PARENTHESES.

4F1D6210
4F1D6220

16026 676767676767
16027 000004020205
16030 606060606060
16031 475146275121
16032 446025674725
16033 236362606346
16034 603360606060

BCD 7XXXXXX004225 PROGRAM EXPECTS TO .

4F104230
4F1D6240

16035 676767676767
16036 000004030004
16037 606060606060
16040 216065215131

BCD XXXXXX004304 A VARIABLE IN THIS LIST APPEARED PREVIOUSL

4F106250
4F1D6260

16041	212243256031		
16042	456063303162		
16043	604331626360		
16044	214747252151		
16045	252460475125		
16046	653146646243		
16047	706031456021	BCD 5Y IN ADIMENSION STATEMENT.	4F1D6270
16050	243144254562		
16051	314645606263		
16052	216325442545		
16053	633360606060		
			4F1D6280
16054	676767676767	BCD XXXXXX004323	MORE THAN 3 DIMENSIONS OR MISSING RIGHT PA4F1D6290
16055	000004030203		
16056	606060606060		
16057	444651256063		
16060	302145600360		
16061	243144254562		
16062	314645626046		
16063	516044316262		
16064	314527605131		
16065	273063604721		
16066	512545633025	BCD 2RENTHESES.	4F1D6300
16067	623162336060		
			4F1D6310
16070	676767676767	BCD XXXXXX004444	A SUBROUTINE OR FUNCTION STATEMENT APPEARS4F1D6320
16071	000004040404		
16072	606060606060		
16073	216062642251		
16074	466463314525		
16075	604651602664		
16076	452363314645		
16077	606263216325		
16100	442545636021		
16101	474725215162		
16102	432163255160	BCD LATER THAN THE FIRST STATEMENT OF THE PROGRAM. PROBABLY ATTE4F1D6330	
16103	633021456063		
16104	302560263151		
16105	626360626321		
16106	632544254563		
16107	604626606330		
16110	256047514627		
16111	512144336047		
16112	514622212243		
16113	706021636325		
16114	444763606346	BCD MPT TOBATCH COMPILE WITHOUT SENSE SWITCH 6 DOWN.	4F1D6340
16115	222163233060		
16116	234644473143		
16117	256066316330		
16120	466463606225		
16121	456225606266		
16122	316323306006		
16123	602446664533		
16124	606060606060		

16125	606060606060			4F1D6350
16126	676767676767	BCD	XXXXXX004544	A RETURN STATEMENT HAS OCCURRED IN A PROGR4F1D6360
16127	000004050404			
16130	606060606060			
16131	216051256364			
16132	514560626321			
16133	632544254563			
16134	603021626046			
16135	232364515125			
16136	246031456021			
16137	604751462751			
16140	214460454663	BCD	AM NOTDEFINED TO BE A SUBROUTINE OR FUNCTION SUBPROGRAM.	4F1D6370
16141	242526314525			
16142	246063466022			
16143	256021606264			
16144	225146646331			
16145	452560465160			
16146	266445236331			
16147	464560626422			
16150	475146275121			
16151	443360606060			
16152	676767676767	BCD	XXXXXX004663	SENSE SWITCH SETTING OTHER THAN 0,1 OR 2 4F1D6380
16153	000004060603			4F1D6390
16154	606060606060			
16155	622545622560			
16156	626631632330			
16157	606225636331			
16160	452760466330			
16161	255160633021			
16162	456000730160			
16163	465160026060			
16164	465160444651	BCD	7OR MORE THAN 5 SETTINGS OR WRONG FORMAT.	4F1D6400
16165	256063302145			
16166	600560622563			
16167	633145276260			
16170	465160665146			
16171	452760264651			
16172	442163336060			
16173	676767676767	BCD	8XXXXXX004705	VARIABLE FORMAT NUMBER. 4F1D6410
16174	000004070005			4F1D6420
16175	606060606060			
16176	652151312122			
16177	432560264651			
16200	442163604564			
16201	442225513360			
16202	606060606060			
16203	676767676767	BCD	6XXXXXX004707	NO FORMAT NUMBER. 4F1D6430
16204	000004070007			4F1D6440
16205	606060606060			
16206	454660264651			

16207	442163604564			
16210	442225513360			
16211	676767676767	BCD	XXXXXX005170	MORE THAN SIX CHARACTERS IN SOME SYMBOL.
16212	000005010700			
16213	606060606060			
16214	444651256063			
16215	302145606231			
16216	676023302151			
16217	212363255162			
16220	603145606246			
16221	442560627044			
16222	224643336060			
16223	676767676767	BCD	XXXXXX005200	ILLEGAL CHARACTER IN THIS LIST.
16224	000005020000			
16225	606060606060			
16226	314343252721			
16227	436023302151			
16230	212363255160			
16231	314560633031			
16232	626043316263			
16233	336060606060			
16234	606060606060			
16235	676767676767	BCD	XXXXXX005260	MORE THAN THREE LEVELS IN THIS LIST (NESTE
16236	000005020600			
16237	606060606060			
16240	444651256063			
16241	302145606330			
16242	512525604325			
16243	652543626031			
16244	456063303162			
16245	604331626360			
16246	744525626325			
16247	006047215125	BCD	30 PARENTHESIS).	
16250	456330256231			
16251	623433606060			
16252	676767676767	BCD	XXXXXX005263	ATTEMPT TO SPECIFY SUBSCRIPT RANGE WITHO
16253	000005020603			
16254	606060606060			
16255	216363254447			
16256	636063466062			
16257	472523312670			
16260	606264226223			
16261	513147636051			
16262	214527256066			
16263	316330466060			
16264	646360646225	BCD	4UT USEOF PARENTHESIS.	
16265	462660472151			
16266	254563302562			
16267	316233606060			

4F1D6450

4F1D6460

4F1D6470

4F1D6480

4F1D6490

4F1D6500

4F1D6510

4F1D6520

4F1D6530

4F1D6540

4F1D6550

16270	676767676767	BCD	XXXXXX005305	INCOMPLETE STATEMENT OR INCOMPLETE CLOSURE	4F1D6560
16271	000005030005				
16272	606060606060				
16273	314523464447				
16274	432563256062				
16275	632163254425				
16276	456360465160				
16277	314523464447				
16300	432563256023				
16301	434662645125				
16302	462660472151	BCD	3OF PARENTHESIS.		4F1D6570
16303	254563302562				
16304	316233606060				
					4F1D6580
16305	676767676767	BCD	XXXXXX005306	ILLEGAL CHARACTER IN D0 SPECIFICATION IN L	4F1D6590
16306	000005030006				
16307	606060606060				
16310	314343252721				
16311	436023302151				
16312	212363255160				
16313	314560240060				
16314	624725233126				
16315	312321633146				
16316	456031456043				
16317	316263736060	BCD	LIST,		4F1D6600
					4F1D6610
16320	676767676767	BCD	8XXXXXX005401	TOO MANY RIGHT PARENTHESIS.	4F1D6620
16321	000005040001				
16322	606060606060				
16323	634646604421				
16324	457060513127				
16325	306360472151				
16326	254563302562				
16327	316233606060				
					4F1D6630
16330	676767676767	BCD	6XXXXXX005416	CONSTANT IN LIST.	4F1D6640
16331	000005040106				
16332	606060606060				
16333	234645626321				
16334	456360314560				
16335	433162633360				
					4F1D6650
16336	676767676767	BCD	8XXXXXX005552	TOO MANY LEFT PARENTHESIS.	4F1D6660
16337	000005050502				
16340	606060606060				
16341	634646604421				
16342	457060432526				
16343	636047215125				
16344	456330256231				
16345	623360606060				
					4F1D6670
16346	676767676767	BCD	XXXXXX005607	ILLEGAL CHARACTER IN THIS STATEMENT.	4F1D6680
16347	000005060007				
16350	606060606060				

16351 314343252721
16352 436023302151
16353 212363255160
16354 314560633031
16355 626062632163
16356 254425456333
16357 606060606060

4F1D6690

16360 676767676767
16361 000005070105
16362 606060606060
16363 216063214725
16364 602330252342
16365 603021626046
16366 232364515125
16367 246063305125
16370 256063314425
16371 626031456021
16372 636325444763
16373 314527606346
16374 605125212460
16375 216051252346
16376 512460462660
16377 633025606246
16400 645123256047
16401 514627512144
16402 602651464460
16403 632147256002
16404 336021636325
16405 444763606346
16406 605125212460
16407 212221452446
16410 452524336063
16411 302560626321
16412 632544254563
16413 603145654643
16414 652524603162
16415 604546636047
16416 514623256262
16417 252433603126
16420 606330256051
16421 252346512460
16422 662162604546
16423 636063302560
16424 432162636051
16425 252346512460
16426 462660216062
16427 632163254425
16430 456360633025
16431 264643434666
16432 314527602431
16433 212745466263
16434 312360234644
16435 442545636031

BCD XXXXXX005715 A TAPE CHECK HAS OCCURRED THREE TIMES IN A4F1D6700

BCD TTEMPTING TO READ A RECORD OF THE SOURCE PROGRAM FROM TAPE 24F1D6710

BCD . ATTEMPT TO READ ABANDONED. THE STATEMENT INVOLVED IS NOT P4F1D6720

BCD ROCESSED. IF THE RECORD WAS NOT THE LAST RECORD OF A STATEME4F1D6730

BCD NT THEFOLLOWING DIAGNOSTIC COMMENT IS MEANINGLESS AND WAS C 4F1D6740

16436	626044252145			
16437	314527432562			
16440	626021452460			
16441	662162602360			
16442	646225246022	BCD AUSED BY AN ATTEMPT TO PROCESS A PARTIAL STATEMENT.		4F1D6750
16443	706021456021			
16444	636325444763			
16445	606346604751			
16446	462325626260			
16447	216047215163			
16450	312143606263			
16451	216325442545			
16452	633360606060			
16453	606060606060			
16454	676767676767	BCD XXXXXX006042	ILLEGAL USE OF FLOATING POINT VARIABLE.	4F1D6760
16455	000006000402			4F1D6770
16456	606060606060			
16457	314343252721			
16460	436064622560			
16461	462660264346			
16462	216331452760			
16463	474631456360			
16464	652151312122			
16465	432533606060			
		STATE B		4F1D6780
				4F1D6790
				4F1D6800
16466	676767676767	BCD 8XXXXXX003527	TOO MANY CHARACTERS IN SYMBOL,	4F1D6810
16467	000003050207			
16470	606060606060			
16471	634646604421			
16472	457060233021			
16473	512123632551			
16474	626031456062			
16475	704422464373			
16476	676767676767	BCD 8XXXXXX003602	ILLEGAL USE OF . CHARACTER.	4F1D6820
16477	000003060002			4F1D6830
16500	606060606060			
16501	314343252721			
16502	436064622560			
16503	462660603360			
16504	602330215121			
16505	236325513360			
16506	676767676767	BCD 7XXXXXX003613	ARGREG SIZE EXCEEDED.	4F1D6840
16507	000003060103			4F1D6850
16510	606060606060			
16511	215127512527			
16512	606231712560			
16513	256723252524			
16514	252433606060			
				4F1D6860

16515	676767676767	BCD	XXXXXX003615	ILLEGAL USE OF HOLLERITH SPECIFICATION.	4F1D6870
16516	000003060105				
16517	606060606060				
16520	314343252721				
16521	436064622560				
16522	462660304643				
16523	432551316330				
16524	606247252331				
16525	263123216331				
16526	464533606060				
16527	676767676767	BCD	8XXXXXX003654	NON-ZERO LEVEL REDUCTION.	4F1D6880
16530	000003060504				4F1D6890
16531	606060606060				
16532	454645407125				
16533	514660432565				
16534	254360512524				
16535	642363314645				
16536	336060606060				
16537	676767676767	BCD	8XXXXXX003671	ILLEGAL USE OF = SIGN.	4F1D6900
16540	000003060701				4F1D6910
16541	606060606060				
16542	314343252721				
16543	436064622560				
16544	462660601360				
16545	606231274533				
16546	606060606060				
16547	676767676767	BCD	8XXXXXX003724	ILLEGAL USE OF . SIGN,	4F1D6920
16550	000003070204				4F1D6930
16551	606060606060				
16552	314343252721				
16553	436064622560				
16554	462660603360				
16555	606231274573				
16556	606060606060				
16557	676767676767	BCD	XXXXXX004046	THE NUMERIC CONTROL OF A HOLLERITH TEXT IS	4F1D6940
16560	000004000406				4F1D6950
16561	606060606060				
16562	633025604564				
16563	442551312360				
16564	234645635146				
16565	436046266021				
16566	603046434325				
16567	513163306063				
16570	256763603162				
16571	432151272551	BCD	9LARGER THAN THE NUMBER OF CHARACTERS FOLLOWING THE H.		4F1D6960
16572	606330214560				
16573	633025604564				
16574	442225516046				
16575	266023302151				
16576	212363255162				

16577	602646434346			
16600	663145276063			
16601	302560303360			
16602	676767676767	BCD 8XXXXXX004136	LAMBDA TABLE SIZE EXCEEDED,	4F1D6970
16603	000004010306			4F1D6980
16604	606060606060			
16605	432144222421			
16606	606321224325			
16607	606231712560			
16610	256723252524			
16611	252473606060			
16612	676767676767	BCD 6XXXXXX004140	BETA TABLE SIZE EXCEEDED.	4F1D6990
16613	000004010400			4F1D7000
16614	606060606060			
16615	222563216063			
16616	212243256062			
16617	317125602567			
16620	676767676767	BCD 8XXXXXXG04143	ALPHA TABLE SIZE EXCEEDED,	4F1D7010
16621	270004010403			4F1D7020
16622	606060606060			
16623	214347302160			
16624	632122432560			
16625	623171256025			
16626	672325252425			
16627	247360606060			
16630	676767676767	BCD XXXXXX0C4647	FLOATING POINT CONSTANT OUTSIDE RANGE OF M4F1D7040	4F1D7030
16631	002304060407			
16632	606060606060			
16633	264346216331			
16634	452760474631			
16635	456360234645			
16636	626321456360			
16637	466463623124			
16640	256051214527			
16641	256046266044			
16642	212330314525	BCD 2ACHINE.		4F1D7050
16643	336060606060			
				4F1D7060
		STATE C		4F1D7070
				4F1D7080
16644	676767676767	BCD XXXXXX004347	CHECK SUM ERROR IN READING FIXED POINT CON	4F1D7090
16645	000004030407			
16646	606060606060			
16647	233025234260			
16650	626444602551			
16651	514651603145			
16652	605125212431			
16653	452760263167			
16654	252460474631			
16655	456360234645			

16656	626321456360	BCD 3STANT FROM DRUM 2.	4F1D7100
16657	265146446024		
16660	516444600233		
		STATE D	4F1D7110
			4F1D7120
			4F1D7130
16661	676767676767	BCD 6XXXXXX003501	MIXED EXPRESSION.
16662	000003050001		4F1D7140
16663	606060606060		
16664	443167252460		
16665	602567475125		
16666	626231464533		
			4F1D7150
16667	676767676767	BCD 6XXXXXX003503	MIXED EXPRESSION
16670	000003050003		4F1D7160
16671	606060606060		
16672	443167252460		
16673	602567475125		
16674	626231464560		
			4F1D7170
16675	676767676767	BCD XXXXXX005233	CHECK SUM ERROR IN READING SIGMA TABLE ENT
16676	464605020303		
16677	606060606060		
16700	233025234260		
16701	626444602551		
16702	514651603145		
16703	605125212431		
16704	452760623127		
16705	442160632122		
16706	432560254563		
16707	517060265146	BCD 3RY FROM DRUM 2.	
16710	446024516444		
16711	600233606060		
		LOCATIONS OF STAE B,C,D CALLS IN 8K SECTION ONE.	
16712	676767676767	BCD 8XXXXXX006412	TOO MANY CHARACTERS IN SYMBOL.
16713	000006040102		
16714	606060606060		
16715	634646604421		
16716	457060233021		
16717	512123632551		
16720	626031456062		
16721	704422464333		
16722	676767676767	BCD 8XXXXXX006465	ILLEGAL USE OF . CHARACTER,
16723	464606040605		
16724	606060606060		
16725	314343252721		
16726	436064622560		
16727	462660606033		
16730	606060233021		
16731	512123632551		

16732	676767676767	BCD 7XXXXXX006476	ARGREG SIZE EXCEEDED.
16733	000006040706		
16734	606060606060		
16735	215127512527		
16736	606231712560		
16737	256723252524		
16740	252433606060		
16741	676767676767	BCD XXXXXX006500	ILLEGAL USE OF HOLLERITH SPECIFICATION.
16742	000006050000		
16743	606060606060		
16744	314343252721		
16745	436064622560		
16746	462660304643		
16747	432551316330		
16750	606247252331		
16751	263123216331		
16752	464533606060		
16753	676767676767	BCD 8XXXXXX006537	NON-ZERO LEVEL REDUCTION.
16754	000006050307		
16755	606060606060		
16756	454645407125		
16757	514660432565		
16760	254360512524		
16761	642363314645		
16762	336060606060		
16763	676767676767	BCD 8XXXXXX006554	ILLEGAL USE OF = SIGN.
16764	000006050504		
16765	606060606060		
16766	314343252721		
16767	436064622560		
16770	462660601360		
16771	606231274533		
16772	606060606060		
16773	676767676767	BCD 8XXXXXX006554	ILLEGAL USE OF . SIGN,
16774	000006050504		
16775	606060606060		
16776	314343252721		
16777	436064622560		
17000	462660603360		
17001	606231274573		
17002	606060606060		
17003	676767676767	BCD XXXXXX006731	THE NUMERIC CONTROL OF A HOLLERITH TEXT IS
17004	000006070301		
17005	606060606060		
17006	633025604564		
17007	442551312360		
17010	234645635146		
17011	436046266021		
17012	603046434325		

17013 513163306063
17014 256763606031

17015 432151272551
17016 606330214560
17017 633025604564
17020 442225516046
17021 266023302151
17022 212363255162
17023 602646434346
17024 663145276063
17025 302560303360

BCD 9LARGER THAN THE NUMBER OF CHARACTERS FOLLOWING THE H.

17026 676767676767
17027 000007000201
17030 606060606060
17031 432144222421
17032 606321224325
17033 606231712560
17034 256723252524
17035 252433606060

BCD 8XXXXXX007021 LAMBDA TABLE SIZE EXCEEDED.

17036 676767676767
17037 000007000203
17040 606060606060
17041 222563216063
17042 212243256062
17043 317125602567

BCD 6XXXXXX007023 BETA TABLE SIZE EXCEEDED.

17044 676767676767
17045 000007000206
17046 606060606060
17047 214347302160
17050 632122432560
17051 623171256025
17052 672325252425
17053 243360606060

BCD 8XXXXXX007026 ALPHA TABLE SIZE EXCEEDED.

17054 676767676767
17055 000007050302
17056 606060606060
17057 264346216331
17060 452760474631
17061 456360234645
17062 626321456360
17063 466463623124
17064 256051214527
17065 256046266044

BCD XXXXXX007532 FLOATING POINT CONSTANT OUTSIDE RANGE OF M

17066 212330314525
17067 336060606060

BCD 2ACHINE.

17070 676767676767
17071 000100050304

BCD XXXXXX010534 CHECK SUM ERROR TN READING FIXED POINT CON

17072 606060606060
17073 233025234260
17074 626444602551
17075 514651606345
17076 605125212431
17077 452760263167
17100 252460474631
17101 456360234645
17102 626321456360
17103 265146446024
17104 516444600233

BCD 3STANT FROM DRUM 2.

17105 676767676767
17106 000101020106
17107 606060606060
17110 443167252460
17111 256747512562
17112 623146453360

BCD 6XXXXXX011216 MIXED EXPRESSION.

17113 676767676767
17114 000101020200
17115 606060606060
17116 443167252460
17117 256747512562
17120 623146456060

BCD 6XXXXXX011220 MIXED EXPRESSION

17121 676767676767
17122 000102070500
17123 606060606060
17124 233025234260
17125 626444602551
17126 514651603145
17127 605125212431
17130 452760623127
17131 442160632122
17132 432560254563
17133 517060265146
17134 446024516444
17135 600233606060

BCD XXXXXX012750 CHECK SUM ERROR IN READING SIGMA TABLE ENT

BCD 3RY FROM DRUM 2.

1NITALIZATION RECORD F015.

4F1D7200
4F1D7210
4F1D7220
4F1D7230

17136 676767676767
17137 000000050503
17140 606060606060
17141 263165256023
17142 464562252364
17143 633165256026
17144 213143645125
17145 626031456021
17146 636325444763
17147 314527606300

BCD XXXXXX000553 FIVE CONSECUTIVE FAILURES IN ATTEMPTING T04F1D7240

17150	606651316325	BCD 7 WRITESTATE A OF SECTION ONE ON DRUM 1.	4F1D7250
17151	626321632560		
17152	216046266062		
17153	252363314645		
17154	604645256046		
17155	456024516444		
17156	600133606060		
			4F1D7260
17157	676767676767	BCD XXXXXX000560 FIVE CONSECUTIVE FAILURES IN ATTEMPTING TO	4F1D7270
17160	000000050600		
17161	606060606060		
17162	263165256023		
17163	464562252364		
17164	633165256026		
17165	213143645125		
17166	626031456021		
17167	636325444763		
17170	314527606346		
17171	606651316325	BCD 7 WRITESTATE D OF SECTION ONE ON DRUM 2.	4F1D7280
17172	626321632560		
17173	246046266062		
17174	252363314645		
17175	604645256046		
17176	456024516444		
17177	600233606060		
			4F1D7290
17200	676767676767	BCD XXXXXX000563 FIVE CONSECUTIVE FAILURES IN ATTEMPTING TO	4F1D7300
17201	000000050603		
17202	606060606060		
17203	263165256023		
17204	464562252364		
17205	633165256026		
17206	213143645125		
17207	626031456021		
17210	636325444763		
17211	314527606346		
17212	606651316325	BCD 7 WRITESTATE B OF SECTION ONE ON DRUM 3,	4F1D7310
17213	626321632560		
17214	226046266062		
17215	252363314645		
17216	604645256046		
17217	456024516444		
17220	600373606060		
			4F1D7320
17221	676767676767	BCD XXXXXX000566 FIVE CONSECUTIVE FAILURES IN ATTEMPTING TO	4F1D7330
17222	000000050606		
17223	606060606060		
17224	263165256023		
17225	464562252364		
17226	633165256026		
17227	213143645125		
17230	626031456021		
17231	636325444763		
17232	314527606346		


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17233 606651316325          BCD 7 WRITESTATE C OF SECTION ONE ON DRUM 4,          4F1D7340
17234 626321632560
17235 236046266062
17236 252363314645
17237 604645256046
17240 456024516444
17241 600473606060

17242 676767676767          BCD 2XXXXXXXXXXXXX          4F1D7350
17243 676767676767          4F1D7360
A          00000          END          4F1D7370

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SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	780	0	0	0	0
LIB	0	0	0	0	0
COL	780	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 2018

NUMBER OF SYMBOLS, DEF 167,DEFOP 0,UNDEF 0

REM 704 FORTRAN MASTER RECORD CARD / 1 PRIME PART A = F0220000, F1P00010

00000	0	01146	0	01146	ORG 0		F1P00020
00001	0	00000	0	03161	PZE ORG1PA,,ORG1PA		F1P00030
					PZE END1PA-1		F1P00040
							F1P00050
					THIS IS PART A OF 2 PARTS OF SECTION ONE PRIME		F1P00060
							F1P00070
							F1P00080
01146	0	76100	0	00000	ORG 614		F1P00090
01147	0	77000	0	00204	NOP	TO PERMIT STOP FOR TESTING RUNS,	F1P00100
					PARTA WEF 4		F1P00110
					TABLE SAVING PROGRAM		F1P00120
					WRITE FIXCON WORD COUNT ON DRUM		F1P00130
01150	0	76600	0	00302	WRS 194		F1P00140
01151	0	50000	0	00414	CLA FXCNIX-3		F1P00150
01152	0	77100	0	00021	ARS 17		F1P00160
01153	0	60100	0	02107	STO WORKCL		F1P00170
01154	0	70000	0	02107	CPY WORKCL		F1P00180
01155	0	70000	0	02107	CPY WORKCL		F1P00190
					PROGRAM FOR SAVING COMPAIL TABLE		F1P00200
01156	-0	53400	2	00637	LXD BBOX,2		F1P00210
01157	3	00000	2	01161	TXH A1PTS,2,0		F1P00220
01160	0	07400	4	00004	TSX DIAG,4	STOP FOR NO INSTRUCTIONS COMPILED	F1P00230
01161	0	76600	0	00223	A1PTS WRS 147		F1P00240
01162	0	53400	1	07730	LXA L(0),1	SAVE	F1P00250
01163	0	70000	1	00640	AA3PTS CPY CIB,1	CIT	F1P00260
01164	1	77777	1	01165	TXI AA1PTS,1,-1	BUFFER	F1P00270
01165	1	00001	2	01166	AA1PTS TXI AA2PTS,2,1		F1P00280
01166	3	00000	2	01163	AA2PTS TXH AA3PTS,2,0		F1P00290
01167	0	77000	0	00223	WEF 147		F1P00300
01170	0	77200	0	00223	REW 147		F1P00310
01171	-0	76000	0	00012	A5PTS RTT	TURN OFF TAPE CHECK	F1P00320
01172	0	76100	0	00000	NOP	INDICATOR AND LIGHTS	F1P00330
01173	0	53400	1	07734	LXA L(4),1		F1P00340
01174	0	53400	4	07730	LXA L(0),4		F1P00350
01175	0	76200	0	00223	A14PTS RDS 147		F1P00360
01176	0	70000	4	03163	A6PTS CPY COMP,4	COPY A RECORD OF COMPILED	F1P00370
01177	1	77777	4	01176	TXI A6PTS,4,-1	INSTRUCTIONS INTO STORAGE	F1P00380
01200	0	02000	0	01222	TRA A10PTS	EOF	F1P00390
01201	0	76600	0	00333	WRS 219	EOR	F1P00400
01202	-0	76000	0	00012	RTT		F1P00410
01203	0	02000	0	01217	TRA A11PTS	TAPE CHECK ON	F1P00420
01204	0	76600	0	00222	WRS 146		F1P00430
01205	0	50000	0	02245	CLA CMPREC	COUNT EACH	F1P00440
01206	0	40000	0	07731	ADD L(1)	COMPAIL	F1P00450
01207	0	60100	0	02245	STO CMPREC	RECORD	F1P00460
01210	0	53400	1	07732	LXA L(2),1		F1P00470
01211	0	53400	2	07730	LXA L(0),2	TRANSFER RECORD	F1P00480
01212	0	70000	2	03163	A9PTS CPY COMP,2	FROM STORAGE	F1P00490
01213	1	77777	2	01214	TXI A7PTS,2,-1	TO TAPE 2	F1P00500
01214	1	00001	4	01215	A7PTS TXI A8PTS,4,1		F1P00510
01215	3	00000	4	01212	A8PTS TXH A9PTS,4,0		F1P00520
01216	0	02000	0	01175	TRA A14PTS		F1P00530
01217	0	76401	0	00223	A11PTS BST 147,0,1	PREPARE TO READ RECORD AGAIN	

01220	2	00001	1	01174	TIX	A14PTS-1,1,1	TEST FOR 2 TAPE CHECKS,	F1P00540
01221	0	07400	4	00004	TSX	DIAG,4	STOP FOR 5TH READ CHECK	F1P00550
01222	0	77000	0	00222	A10PTS WEF	146	END OF COMPAIL ON TAPE 2	F1P00560
01223	0	76600	0	00222	WRS	146		F1P00570
01224	0	70000	0	02245	CPY	CMPREC		F1P00580
						PROGRAM TO SAVE FORSUB TABLE		F1P00590
01225	-0	53400	1	00470	LXD	BK,1		F1P00600
01226	-3	00000	1	01234	TXL	WEF,1,0	TEST FOR EMPTY TABLE	F1P00610
01227	0	53400	2	07730	LXA	L(0),2		F1P00620
01230	0	70000	2	00471	CPY	FORSUB,2		F1P00630
01231	1	77777	2	01232	TXI	A15PTS,2,-1		F1P00640
01232	1	00001	1	01233	A15PTS TXI	A15PTS+1,1,1		F1P00650
01233	3	00000	1	01230	TXH	A15PTS-2,1,0		F1P00660
01234	0	77000	0	00222	WEF	WEF 146		F1P00670
						PROGRAM FOR SAVING FLOCON TABLE		F1P00680
01235	-0	53400	4	00421	FL00 LXD	FLCNIX-3,4 (N)		F1P00690
01236	-0	75400	4	00000	PXD	0,4		F1P00700
01237	0	77100	0	00022	ARS	18		F1P00710
01240	0	60100	0	02244	STO	FLSIZE LOAD FLSIZE WITH N		F1P00720
01241	-3	00000	4	01276	TXL	FL09,4,0 IS TABLE EMPTY		F1P00730
01242	-0	50000	0	07742	CAL	MSK		F1P00740
01243	0	32000	0	00422	ANS	FLCNIX-2		F1P00750
01244	0	32000	0	00421	ANS	FLCNIX-3		F1P00760
01245	0	50000	0	00421	CLA	FLCNIX-3 GET NUMBER OF WORDS IN FLOCON INCLUDING CK SUMS		F1P00770
01246	0	40200	0	00422	SUB	FLCNIX-2		F1P00780
01247	0	62100	0	01256	STA	FL04 SAVE L		F1P00790
01250	0	53400	2	07735	FL01 LXA	L(5),2 SET TO TRY FIVE TIMES IF CK SUM FAILS		F1P00800
01251	0	53400	4	01256	FL02 LXA	FL04,4 (L)		F1P00810
01252	0	76200	0	00302	RDR	2		F1P00820
01253	0	46000	0	00422	LDA	FLCNIX-2		F1P00830
01254	0	70000	4	05453	FL03 CPY	OTA+450,4 COPY FLOCON FROM DRUM		F1P00840
01255	2	00001	4	01254	TIX	FL03,4,1		F1P00850
01256	-0	75400	0	00000	FL04 PXD	** ,0		F1P00860
01257	0	53400	4	01256	LXA	FL04,4 COMPUTE CK SUM OF ENTRIES VERSUS CK SUM OF CK		F1P00870
01260	0	53400	1	07737	LXA	L(50),1 SUMS. TABLE IS OF FORM A CK SUM FOR FIFTY WORDS		F1P00880
01261	0	36100	4	05453	FL05 ACL	OTA+450,4 FOLLOWED BY THE FIFTY WORDS		F1P00890
01262	0	76000	0	00006	COM			F1P00900
01263	-2	00001	4	01307	TXN	ERROR,4,1		F1P00910
01264	0	36100	4	05453	FL06 ACL	OTA+450,4		F1P00920
01265	-2	00001	4	01271	TXN	FL07,4,1 FINAL ENRTY , GET OUT OF CK SUM LOOP		F1P00930
01266	2	00001	1	01264	TIX	FL06,1,1		F1P00940
01267	0	76000	0	00006	COM			F1P00950
01270	1	00061	1	01261	TXI	FL05,1,49		F1P00960
01271	0	76000	0	00006	FL07 COM			F1P00970
01272	0	10000	0	01275	TZE	FL08 TEST CK SUM		F1P00980
01273	2	00001	2	01251	TIX	FL02,2,1 CK SUM FAILED, TRY AGAIN		F1P00990
01274	0	07400	4	00004	TSX	DIAG,4 CK SUM FAILED FIVE TIMES		F1P01000
01275	0	53400	4	01256	FL08 LXA	FL04,4 (L)		F1P01010
01276	0	76600	0	00222	FL09 WTB	2		F1P01020
01277	0	70000	0	02244	CPY	FLSIZE		F1P01030
01300	-3	00000	4	01310	TXL	PROFOR,4,0 IS FLOCON EMPTY		F1P01040
01301	0	53400	1	07737	LXA	L(50),1		F1P01050
01302	-2	00001	4	01307	FL10 TXN	ERROR,4,1		F1P01060
01303	0	70000	4	05453	FL11 CPY	OTA+450,4		F1P01070

01304	-2	00001	4	01310		TSX	PROFOR,4,1	FINISHED, GET OUT OF LOOP		F1P01080
01305	2	00001	1	01303		TIX	FL11,1,1			F1P01090
01306	1	00061	1	01302		TXI	FL10,1,49			F1P01100
01307	0	07400	4	00004	ERROR	TSX	DIAG,4	INDEX RAN OUT AT CK SUM		F1P01110
								ROUTINE TO PROCESS FORMAT TABLE		F1P01120
01310	0	07400	1	07505	PROFOR	TSX	TAP00,1			F1P01130
01311	0	00000	0	00012		HTR	10			F1P01140
01312	0	00000	0	04551			OTA			F1P01150
01313	0	07400	1	07656		TSX	WAT00,1			F1P01160
01314	0	00000	0	00012		HTR	10			F1P01170
01315	0	00000	0	04551			OTA			F1P01180
								ROUTINE TO CONVERT DIM TABLES TO SIZ TABLE.		F1P01190
01316	-0	53400	4	00452	ADD00	LXD	DIM1IX-3,4	ENTRY COUNT		F1P01200
01317	-3	00000	4	01346		TXL	ADD07,4,0	TABLE EMPTY		F1P01210
01320	0	53400	2	07735	ADD01	LXA	L(5),2			F1P01220
01321	0	76200	0	00303	ADD02	RDR	3			F1P01230
01322	0	53400	1	07730		LXA	L(0),1			F1P01240
01323	0	46000	0	00453		LDA	ORGDM1			F1P01250
01324	-0	75400	0	00000		PXD	0,0			F1P01260
01325	0	70000	1	04551	ADD03	CPY	OTA,1	COPY NAME		F1P01270
01326	0	70000	1	04552		CPY	OTA+1,1	COPY N1		F1P01280
01327	1	77776	1	01330		TXI	ADD04,1,-2			F1P01290
01330	-0	70000	0	02106	ADD04	CAD	GARBGE	COPY AND SUM CK SUMS		F1P01300
01331	2	00001	4	01325		TIX	ADD03,4,1			F1P01310
01332	0	76000	0	00006		COM				F1P01320
01333	-0	53400	4	00452		LXD	DIM1IX-3,4			F1P01330
01334	0	53400	1	07730		LXA	L(0),1			F1P01340
01335	0	36100	1	04551	ADD05	ACL	OTA,1	SUM ENTRIES		F1P01350
01336	0	36100	1	04552		ACL	OTA+1,1			F1P01360
01337	1	77776	1	01340		TXI	ADD06,1,-2			F1P01370
01340	2	00001	4	01335	ADD06	TIX	ADD05,4,1			F1P01380
01341	0	76000	0	00006		COM				F1P01390
01342	0	10000	0	01347		TZE	ADD08			F1P01400
01343	-0	53400	4	00452		LXD	DIM1IX-3,4	CHECK SUM ERROR, TRY AGAIN		F1P01410
01344	2	00001	2	01321		TIX	ADD02,2,1			F1P01420
01345	0	07400	4	00004		TSX	DIAG,4	REPEATED CK SUM ERRORS IN READING DRUM		F1P01430
01346	0	53400	1	07730	ADD07	LXA	L(0),1			F1P01440
01347	-0	63400	1	02110	ADD08	SXD	NEWBAS,1			F1P01450
								NOW READ DIM2 TABLE		F1P01460
01350	-0	53400	4	00457		LXD	DIM2IX-3,4			F1P01470
01351	-3	00000	4	01413		TXL	ADD18,4,0	TABLE EMPTY		F1P01480
01352	0	53400	2	07735	ADD09	LXA	L(5),2			F1P01490
01353	0	76200	0	00303	ADD10	RDR	3			F1P01500
01354	-0	53400	1	02110		LXD	NEWBAS,1			F1P01510
01355	0	46000	0	00460		LDA	ORGDM2			F1P01520
01356	-0	75400	0	00000		PXD	0,0			F1P01530
01357	0	70000	1	04551	ADD11	CPY	OTA,1	COPY NAME		F1P01540
01360	0	70000	1	04552		CPY	OTA+1,1	COPY N1 N2		F1P01550
01361	1	77776	1	01362		TXI	ADD12,1,-2			F1P01560
01362	-0	70000	0	02106	ADD12	CAD	GARBGE	COPY AND SUM CK SUMS		F1P01570
01363	2	00001	4	01357		TIX	ADD11,4,1			F1P01580
01364	0	76000	0	00006		COM				F1P01590
01365	-0	53400	4	00457		LXD	DIM2IX-3,4			F1P01600
01366	-0	53400	1	02110		LXD	NEWBAS,1			F1P01610

01367	0	36100	1	04551	ADD13	ACL	OTA,1		F1P01620
01370	0	36100	1	04552		ACL	OTA+1,1		F1P01630
01371	1	77776	1	01372		TXI	ADD14,1,-2		F1P01640
01372	2	00001	4	01367	ADD14	TIX	ADD13,4,1		F1P01650
01373	0	76000	0	00006		COM			F1P01660
01374	0	10000	0	01400		TZE	ADD15		F1P01670
01375	-0	53400	4	00457		LXD	DIM2IX-3,4	CK SUM ERROR TRY AGAIN	F1P01680
01376	2	00001	2	01353		TIX	ADD10,2,1		F1P01690
01377	0	07400	4	00004		TSX	DIAG,4	REPEATED CK SUM ERRORS IN READING DRUM	F1P01700
01400	-0	53400	4	00457	ADD15	LXD	DIM2IX-3,4		F1P01710
01401	-0	53400	1	02110		LXD	NEWBAS,1		F1P01720
01402	0	60000	0	02107		STZ	WORKCL		F1P01730
01403	0	50000	1	04552	ADD16	CLA	OTA+1,1		F1P01740
01404	0	62100	0	02107		STA	WORKCL		F1P01750
01405	0	76500	0	00065		LRS	53		F1P01760
01406	0	20000	0	02107		MPY	WORKCL	N1*N2	F1P01770
01407	-0	60000	1	04552		STQ	OTA+1,1		F1P01780
01410	1	77776	1	01411		TXI	ADD17,1,-2		F1P01790
01411	2	00001	4	01403	ADD17	TIX	ADD16,4,1		F1P01600
01412	-0	63400	1	02110		SXD	NEWBAS,1	UPDATE NEWBAS FOR DIM3 ROUTINE	F1P01810
								NOW READ DIM3 TABLE.	F1P01820
01413	-0	53400	4	00464	ADD18	LXD	DIM3IX-3,4		F1P01830
01414	-3	00000	4	01462		TXL	ADD28,4,0	DIM3 TABLE EMPTY	F1P01840
01415	0	53400	2	07735	ADD19	LXA	L(5),2		F1P01850
01416	0	76200	0	00303	ADD20	RDR	3		F1P01860
01417	-0	53400	1	02110		LXD	NEWBAS,1		F1P01870
01420	0	46000	0	00465		LDA	ORGDM3		F1P01680
01421	-0	75400	0	00000		PXD	0,0		F1P01890
01422	0	70000	1	04551	ADD21	CPY	OTA,1		F1P01900
01423	0	70000	1	04552		CPY	OTA+1,1		F1P01910
01424	0	70000	4	02243		CPY	BUFFER,4		F1P01920
01425	1	77776	1	01426		TXI	ADD22,1,-2		F1P01930
01426	-0	70000	0	02106	ADD22	CAD	GARBGE		F1P01940
01427	2	00001	4	01422		TIX	ADD21,4,1		F1P01950
01430	0	76000	0	00006		COM			F1P01960
01431	-0	53400	4	00464		LXD	DIM3IX-3,4		F1P01970
01432	-0	53400	1	02110		LXD	NEWBAS,1		F1P01980
01433	0	36100	1	04551	ADD23	ACL	OTA,1		F1P01990
01434	0	36100	1	04552		ACL	OTA+1,1		F1P02000
01435	0	36100	4	02243		ACL	BUFFER,4		F1P02010
01436	1	77776	1	01437		TXI	ADD24,1,-2		F1P02020
01437	2	00001	4	01433	ADD24	TIX	ADD23,4,1		F1P02030
01440	0	76000	0	00006		COM			F1P02040
01441	0	10000	0	01445		TZE	ADD25		F1P02050
01442	-0	53400	4	00464		LXD	DIM3IX-3,4		F1P02060
01443	2	00001	2	01416		TIX	ADD20,2,1	CK SUM FAILED TRY AGAIN	F1P02070
01444	0	07400	4	00004		TSX	DIAG,4	REPEATED CK SUM ERRORS IN READING DRUM	F1P02080
01445	-0	53400	4	00464	ADD25	LXD	DIM3IX-3,4		F1P02090
01446	-0	53400	1	02110		LXD	NEWBAS,1		F1P02100
01447	0	50000	1	04552	ADD26	CLA	OTA+1,1		F1P02110
01450	0	60000	0	02107		STZ	WORKCL		F1P02120
01451	0	62100	0	02107		STA	WORKCL		F1P02130
01452	0	76500	0	00065		LRS	53		F1P02140
01453	0	20000	0	02107		MPY	WORKCL	N1*N2	F1P02150

01454	0	20000	4	02243		MPY	BUFFER,4		N3*(N1*N2)		F1P02160
01455	-0	60000	1	04552		STQ	OTA+1,1				F1P02170
01456	1	77776	1	01457		TXI	ADD27,1,-2				F1P02160
01457	2	00001	4	01447	ADD27	TIX	ADD26,4,1				F1P02190
01460	0	76100	0	00000		NOP			NOT USED.		F1P02200
01461	0	76100	0	00000		NOP			NOT USED.		F1P02210
									NOW WRITE SIZ TABLE ON TAPE 2.		F1P02220
01462	-0	75400	1	00000	ADD28	PXD	0,1				F1P02230
01463	0	76000	0	00006		COM					F1P02240
01464	0	40000	0	07740		ADD	DECR1				F1P02250
01465	-0	73400	4	00000		PDX	0,4				F1P02260
01466	-0	75400	4	00000		PXD	0,4				F1P02270
01467	0	77100	0	00022		ARS	18				F1P02280
01470	0	60100	0	02107		STO	WORKCL				F1P02290
01471	0	40000	0	07731		ADD	L(1)				F1P02300
01472	0	73400	1	00000		PAX	0,1				F1P02310
01473	0	53400	2	07730		LXA	L(0),2				F1P02320
01474	-0	75400	0	00000		PXD	0,0				F1P02330
01475	0	36100	2	04551	ADD33	ACL	OTA,2		COMPUTE CK SUM FOR SIZ TABLE		F1P02340
01476	1	77777	2	01477		TXI	ADD32,2,-1				F1P02350
01477	2	00001	4	01475	ADD32	TIX	ADD33,4,1				F1P02360
01500	0	60200	2	04551		SLW	OTA,2				F1P02370
01501	0	50000	0	02101		CLA	DMASK				F1P02380
01502	0	32000	0	00030		ANS	EIFNO				F1P02390
01503	0	76600	0	00222		WTB	2				F1P02400
01504	0	70000	0	00030		CPY	EIFNO				F1P02410
01505	0	70000	0	02107		CPY	WORKCL				F1P02420
01506	-3	00001	1	01513		TXL	ADD31,1,1				F1P02430
01507	0	53400	2	07730		LXA	L(0),2				F1P02440
01510	0	70000	2	04551	ADD29	CPY	OTA,2				F1P02450
01511	1	77777	2	01512		TXI	ADD30,2,-1				F1P02460
01512	2	00001	1	01510	ADD30	TIX	ADD29,1,1				F1P02470
01513	0	77000	0	00202	ADD31	WEF	2				F1P02480
01514	0	76600	0	00222		WTB	2		WRITE SENSE SWITCH SETTINGS AS RE-		F1P02490
01515	0	53400	1	07735		LXA	L(5),1		CORD ONE, FILE FIVE, TAPE TWO		F1P02500
01516	0	70000	1	00036	X0010	CPY	ENDI1+5,1				F1P02510
01517	2	00001	1	01516		TIX	X0010,1,1				F1P02520
01520	0	07400	1	07505		TSX	TAP00,1		ASSEMBLE AND WRITE SUBDEF TABLE		F1P02530
01521	0	00000	0	00013			11				F1P02540
01522	0	00000	0	04551			OTA				F1P02550
01523	0	07400	1	07656		TSX	WAT00,1				F1P02560
01524	0	00000	0	00013			11				F1P02570
01525	0	00000	0	04551			OTA				F1P02580
01526	0	07400	1	07505		TSX	TAP00,1		ASSEMBLE AND WRITE COMMON TABLE		F1P02590
01527	0	00000	0	00014			12				F1P02600
01530	0	00000	0	04551			OTA				F1P02610
01531	0	07400	1	07656		TSX	WAT00,1				F1P02620
01532	0	00000	0	00014			12				F1P02630
01533	0	00000	0	04551			OTA				F1P02640
01534	0	07400	1	07505		TSX	TAP00,1		ASSEMBLE AND WRITE TABLE OF HOLLERITH ARGS		F1P02650
01535	0	00000	0	00015			13				F1P02660
01536	0	00000	0	04551			OTA				F1P02670
01537	0	07400	1	07656		TSX	WAT00,1				F1P02680
01540	0	00000	0	00015			13				F1P02690

01541	0	00000	0	04551		OTA		F1P02700
01542	0	07400	1	07505	TSX	TAP00,1	ASSEMBLE TEIFNO FROM TAPE 4	F1P02710
01543	0	00000	0	00000	HTR	0		F1P02720
01544	0	00000	0	04551	HTR	OTA		F1P02730
01545	0	60000	0	02105	STZ	PAT15	INSURE DECREMENT IS CLEAR	F1P02740
01546	-0	53400	4	04550	LXD	OTA-1,4	LENGTH OF TEIFNO INTO I.R.4	F1P02750
01547	-3	00001	4	01606	TXL	WRITE,4,1	IS TEIFNO EMPTY OR IS THERE A SINGLE ENTRY	F1P02760
01550	-0	53400	1	02103	LXD	PAT13,1	INITIALIZE I.R. TO STEP THROUGH TABLE	F1P02770
01551	-0	63400	4	02104	SXD	PAT14,4	SAVE WORD COUNT	F1P02780
01552	-0	53400	4	02104	ISPLUS	LXD PAT14,4	REINTIALIZE FOR FURTHER SEARCHING	F1P02790
01553	0	50000	1	04551	NEXT	CLA OTA,1	PICK UP NEXT ENTRY IN TEIFNO	F1P02800
01554	0	12000	0	01561	TPL	MASK	HAS THIS BEEN PROCESSED	F1P02810
01555	0	60200	1	04551	SLW	OTA,1		F1P02820
01556	1	77777	1	01557	TXI	ISTHRU,1,-1	NO, SET I.R. TO LOOK AT NEXT ENTRY	F1P02830
01557	2	00001	4	01553	ISTHRU	TIX NEXT,4,1	HAVE ALL ENTRIES BEEN EXAMINED	F1P02840
01560	0	02000	0	01606	TRA	WRITE	YES, FINISHED	F1P02850
01561	0	62100	0	02105	MASK	STA PAT15	STORE COMPERAND	F1P02860
01562	1	77777	1	01563	TXI	RECOMP,1,-1	SET I.R.S TO START COMPARISON	F1P02870
01563	-0	75400	1	00000	RECOMP	PXD 0,1		F1P02880
01564	-0	73400	2	00000		PDX 0,2		F1P02890
01565	-2	00001	4	01606	TNX	WRITE,4,1	HAVE ALL ENTRIES BEEN EXAMINED	F1P02900
01566	-0	63400	4	02104	SXD	PAT14,4	SAVE NUMBER OF ENTRIES YET TO BE TREATED	F1P02910
01567	0	50000	2	04551	PAT16	CLA OTA,2	PICK UP ENTRY TO BE COMPARED	F1P02920
01570	-0	12000	0	01575	TMI	NODUP	NO SEARCH NECESSARY IF NEGATIVE	F1P02930
01571	-0	32000	0	02102	ANA	PAT11	ISOLATE EXTERNAL FORMULA NUMBER	F1P02940
01572	0	34000	0	02105	CAS	PAT15	COMPARE TO REMAINING ENTRIES	F1P02950
01573	0	02000	0	01575	TRA	NODUP	NO DUPLICATE	F1P02960
01574	0	02000	0	01600	TRA	PAT9	DUPLICATE	F1P02970
01575	1	77777	2	01576	NODUP	TXI PAT8,2,-1	NO DUPLICATE, SET I.R. TO OBTAIN NEXT ENTRY	F1P02980
						FOR COMPARISON		F1P02990
01576	2	00001	4	01567	PAT8	TIX PAT16,4,1	HAVE ALL ENTRIES BEEN COMPARED	F1P03000
01577	0	02000	0	01552	TRA	ISPLUS	YES	F1P03010
01600	0	50000	2	04551	PAT9	CLA OTA,2	FLAG DUPLICATE ENTRY NEGATIVE	F1P03020
01601	-0	76000	0	00003	SSM			F1P03030
01602	0	60100	2	04551	STO	OTA,2		F1P03040
01603	0	50200	1	04550	CLS	OTA-1,1		F1P03050
01604	0	60100	1	04550	STO	OTA-1,1		F1P03060
01605	0	02000	0	01552	TRA	ISPLUS		F1P03070
01606	0	07400	1	07656	WRITE	TSX WAT00,1	WRITE TEIFNO ON TAPE	F1P03080
01607	0	00000	0	00000	HTR	0		F1P03090
01610	0	00000	0	04551		OTA		F1P03100
01611	0	07400	1	07505	TSX	TAP00,1	ASSEMBLE TIFGO	F1P03110
01612	0	00000	0	00002	HTR	2		F1P03120
01613	0	00000	0	03163	L(2TA)	HTR 2TA		F1P03130
						START	PROGRAM FOR MODIFICATION OF TIFGO WITH TEIFNO	F1P03140
01614	0	50000	0	03162	MFGTP	CLA 2TA-1	GET NUMBER OF WORDS IN 2TA.	F1P03150
01615	0	10000	0	01751	TZE	WFG00	EXIT FOR NO ENTRIES IN TABLE,	F1P03160
01616	-0	73400	2	00000	PDX	0,2	SET INDEX B TO NUMBER OF WORDS,	F1P03170
01617	0	77100	0	00022	ARS	18	COMPUTE	F1P03180
01620	0	40000	0	01613	ADD	L(2TA)	2TA	F1P03190
01621	0	62100	0	01646	STA	MFG00	PLUS	F1P03200
01622	0	62100	0	01663	STA	MFG03	NUMBER	F1P03210
01623	0	62100	0	01665	STA	MFG05	OF	F1P03220
01624	0	62100	0	01701	STA	MFG08	WORDS	F1P03230

01625	0	62100	0	01702	STA MFG09	IN	F1P03240
01626	0	62100	0	01716	STA MFG12	2TA	F1P03250
01627	0	62100	0	01740	STA MFG18	AND	F1P03260
01630	0	62100	0	01747	STA MFG20	INITIALIZE ADDRESSES	F1P03270
01631	0	50000	0	04550	CLA OTA-1	GET NUM WORDS IN OTA	F1P03280
01632	-0	10000	0	01634	TNZ MFGOK	TABLE EXISTS	F1P03290
01633	0	02000	0	07751	TRA TEIFER	STOP FOR NO TABLE IN OTA	F1P03300
01634	0	77100	0	00022	MFGOK ARS 18	NUMBER WORDS PUT IN AC ADDRESS	F1P03310
01635	0	40000	0	07750	ADD L(OTA)	ADD OTA ORIGIN	F1P03320
01636	0	62100	0	01652	STA MFG01	INITIALIZE ADDRESSES WITH	F1P03330
01637	0	62100	0	01661	STA MFG02	OTA + NUM WORDS	F1P03340
01640	0	62100	0	01670	STA MFG06		F1P03350
01641	0	62100	0	01677	STA MFG07		F1P03360
01642	0	62100	0	01706	STA MFG10		F1P03370
01643	0	62100	0	01715	STA MFG11		F1P03380
01644	0	62100	0	01736	STA MFG17		F1P03390
01645	0	62100	0	01745	STA MFG19		F1P03400
01646	0	50000	2	00000	MFG00 CLA 0,2	ADDR IS 2TA + NUM WORDS IN 2TA. (1)	F1P03410
01647	0	12000	0	01722	TPL MFG14	SIGN IS PLUS.	F1P03420
01650	0	62100	0	07746	STA E3	SAVE A1.	F1P03430
01651	-0	53400	4	04550	LXD OTA-1,4	SET INDEX C TO NUM WORDS IN OTA.(2)	F1P03440
01652	0	50000	4	00000	MFG01 CLA 0,4	AL PRIME AND AL GO TO AC.	F1P03450
01653	-0	32000	0	07742	ANA MSK	ERASE AL PRIME IN AC.	F1P03460
01654	0	40200	0	07746	SUB E3	COMPARE TEIFNO ARGUMENT WITH A1.	F1P03470
01655	0	10000	0	01661	TZE MFG02	AL EQUALS ARGUMENT.	F1P03480
01656	2	00001	4	01652	TIX MFG01,4,1	COMP AL VS NEXT TEIFNO ENTRY. (3A1)	F1P03490
01657	0	50000	0	02103	CLA PAT13		F1P03500
01660	0	02000	0	01663	TRA MFG03		F1P03510
01661	0	50000	4	00000	MFG02 CLA 0,4	A1 PRIME AND A1L GO TO AC.	F1P03520
01662	0	77100	0	00022	ARS 18	A1 PRIME GOES TO ADDRESS OF AC	F1P03530
01663	0	62100	2	00000	MFG03 STA 0,2	(I) A1 PRIME REPLACES A1	F1P03540
01664	1	77777	2	01665	MFG04 TXI MFG05,2,-1	TAKE WORD 2 OF TIFGO ENTRY	F1P03550
01665	0	50000	2	00000	MFG05 CLA 0,2	(1). AC DECK IS A2, ADDR IS A3	F1P03560
01666	0	62100	0	07746	STA E3	SAVE A3	F1P03570
01667	-0	53400	4	04550	LXD OTA-1,4	(2)	F1P03580
01670	0	50000	4	00000	MFG06 CLA 0,4	A3 PRIME AND A3 GO TO AC	F1P03590
01671	-0	32000	0	07742	ANA MSK	ERASE A3 PRIME IN AC	F1P03600
01672	0	40200	0	07746	SUB E3	COMPARE TEIFNO ARGUMENT WITH A3	F1P03610
01673	0	10000	0	01677	TZE MFG07	A3 EQUALS ARGUMENT	F1P03620
01674	2	00001	4	01670	TIX MFG06,4,1	(3A3)	F1P03630
01675	0	50000	0	02103	CLA PAT13		F1P03640
01676	0	02000	0	01701	TRA MFG08		F1P03650
01677	0	50000	4	00000	MFG07 CLA 0,4	A3 PRIME AND A3 GO TO AC	F1P03660
01700	0	77100	0	00022	ARS 18	A3 PRIME GOES TO ADDR OF AC	F1P03670
01701	0	62100	2	00000	MFG08 STA 0,2	(1). A3 PRIME REPLACES A3	F1P03680
01702	0	50000	2	00000	MFG09 CLA 0,2	(1). A2 AND A3 PRIME GO TO AC	F1P03690
01703	0	77100	0	00022	ARS 18	A2 GOES TO ADDR OF AC	F1P03700
01704	0	62100	0	07746	STA E3	SAVE A2	F1P03710
01705	-0	53400	4	04550	LXD OTA-1,4	(2)	F1P03720
01706	0	50000	4	00000	MFG10 CLA 0,4	A2 PRIME AND A2 GO TO AC	F1P03730
01707	-0	32000	0	07742	ANA MSK	ERASE A2 PRIME IN AC	F1P03740
01710	0	40200	0	07746	SUB E3	COMPARE TEIFNO ARGUMENT WITH A2	F1P03750
01711	0	10000	0	01715	TZE MFG11	A2 EQUALS ARGUMENT	F1P03760
01712	2	00001	4	01706	TIX MFG10,4,1	(3A2)	F1P03770

01713	0	50000	0	02103	CLA	PAT13			F1P03780
01714	0	02000	0	01716	TRA	MFG12			F1P03790
01715	0	50000	4	00000	MFG11	CLA	0,4	A2 PRIME AND A2 GO TO AC	F1P03800
01716	0	62200	2	00000	MFG12	STD	0,2	(1) A2 PRIME REPLACES A2	F1P03810
01717	2	00001	2	01646	TIX	MFG00,2,1		TAKE FIRST WORD OF NEXT 2TA ENTRY	F1P03820
01720	2	00001	2	01717	MFG13	TIX	MFG13-1,2,1	TAKE SECOND WORD OF 2TA ENTRY	F1P03830
01721	0	02000	0	01751	TRA	WFG00		EXIT TO TAPE WRITING PROGRAM	F1P03840
01722	0	73400	4	00000	MFG14	PAX	0,4	INTEGER N GOES TO INDEX C	F1P03850
01723	0	02000	4	01733	TRA	MFG14+9,4			F1P03860
01724	0	02000	0	01720	TRA	MFG13		N EQUALS 7 NO MODIFICATION	F1P03670
01725	0	02000	0	01734	TRA	MFG15		N EQUALS 6	F1P03880
01726	0	02000	0	01664	TRA	MFG04		N EQUALS 5	F1P03890
01727	0	02000	0	01664	TRA	MFG04		N EQUALS 4	F1P03900
01730	0	02000	0	01664	TRA	MFG04		N EQUALS 3	F1P03910
01731	0	02000	0	01720	TRA	MFG13		N EQUALS 2 NO MODIFICATION	F1P03920
01732	0	02000	0	01720	TRA	MFG13		N EQUALS 1 NO MODIFICATION	F1P03930
01733	0	02000	0	01734	TRA	MFG15		N EQUALS 0	F1P03940
01734	1	77777	2	01735	MFG15	TXI	MFG16,2,-1	TAKE WORD 2 OF 2TA ENTRY	F1P03950
01735	-0	53400	4	04550	MFG16	LXD	OTA-1,4	(2)	F1P03960
01736	0	50000	4	00000	MFG17	CLA	0,4	K PRIME AND K GO TO AC	F1P03970
01737	-0	32000	0	07742	ANA	MSK		ERASE K PRIME	F1P03980
01740	0	40200	2	00000	MFG18	SUB	0,2	(1). COMPARE K WITH TEIFNO ARGUMENT	F1P03990
01741	0	10000	0	01745	TZE	MFG19		K EQUALS ARGUMENT	F1P04000
01742	2	00001	4	01736	TIX	MFG17,4,1		(3K)	F1P04010
01743	0	50000	0	02103	CLA	PAT13			F1P04020
01744	0	02000	0	01747	TRA	MFG20			F1P04030
01745	0	50000	4	00000	MFG19	CLA	0,4	K PRIME AND K GO TO AC	F1P04040
01746	0	77100	0	00022	ARS	18		K PRIME GOES TO ADDRESS OF AC	F1P04050
01747	0	62100	2	00000	MFG20	STA	0,2	(1). K PRIME REPLACES K	F1P04060
01750	2	00001	2	01646	TIX	MFG00,2,1		TAKE FIRST WORD OF NEXT 2TA ENTRY	F1P04070
01751	0	07400	1	07656	WFG00	TSX	WAT00,1	WRITE 2TA ON TAPE	F1P04080
01752	0	00000	0	00002			2		F1P04090
01753	0	00000	0	03163	HTR	2TA			F1P04100
01754	0	07400	1	07505	TSX	TAP00,1		ASSEMBLE TRAD	F1P04110
01755	0	00000	0	00003	HTR	3			F1P04120
01756	0	00000	0	03163	L(3TA)	HTR	3TA		F1P04130
								PROGRAM FOR MODIFICATION OF TRAD WITH TEIFNO	F1P04140
01757	0	50000	0	03162	MTRTP	CLA	3TA-1	GET NUM OF WORDS IN 3TA	F1P04150
01760	0	10000	0	02011	TZE	WTR00		NO ENTRIES IN TABLE	F1P04160
01761	-0	73400	2	00000	PDX	0,2		NUMBER OF WORDS PUT IN INDEX B	F1P04170
01762	0	77100	0	00022	ARS	18		RESET ADDRESSES	F1P04180
01763	0	40000	0	01756	ADD	L(3TA)			F1P04190
01764	0	62100	0	02000	STA	MTR02			F1P04200
01765	0	62100	0	02007	STA	MTR04			F1P04210
01766	0	50000	0	04550	CLA	OTA-1		GET NUMBER WORDS IN OTA.	F1P04220
01767	-0	10000	0	01771	TNZ	MTROK		TABLE EXISTS	F1P04230
01770	0	02000	0	07751	TRA	TEIFER		STOP FOR NO TABLE IN OTA	F1P04240
01771	0	77100	0	00022	MTR0K	ARS	18	PUT NUMBER WORDS IN AC ADDRESS	F1P04250
01772	0	40000	0	07750	ADD	L(OTA)		ADD OTA ORIGIN	F1P04260
01773	0	62100	0	01775	STA	MTR01		INITIALIZE ADDRESS	F1P04270
01774	-0	53400	4	04550	MTR00	LXD	OTA-1,4	SET INDEX C TO NUM WORDS IN OTA	F1P04280
01775	0	50000	4	00000	MTR01	CLA	0,4	A SUB I PRIME AND A SUB I GO TO AC	F1P04290
01776	0	62200	0	07746	STD	E3		SAVE A SUB I PRIME	F1P04300
01777	-0	32000	0	07742	ANA	MSK		ERASE SUB I PRIME	F1P04310

02000	0	40200	2	00000	MTR02	SUB 0,2	ADDR IS 3TA + NUM WORDS IN 3TA (1)	F1P04320
02001	0	10000	0	02005		TZE MTR03	A SUB I EQUALS ARGUMENT	F1P04330
02002	2	00001	4	01775		TIX MTR01,4,1	A SUB I NOT EQUAL TO ARGUMENT	F1P04340
02003	0	50000	0	02103		CLA PAT13		F1P04350
02004	0	02000	0	02007		TRA MTR04		F1P04360
02005	0	50000	0	07746	MTR03	CLA E3	A SUB I PRIME GOES TO AC DECR.	F1P04370
02006	0	77100	0	00022		ARS 18	A SUB I PRIME GOES TO AC ADDR.	F1P04380
02007	0	62100	2	00000	MTR04	STA 0,2	(1). A SUB I PRIME REPLACES A SUB	F1P04390
02010	2	00001	2	01774		TIX MTR00,2,1	TAKE NEXT WORD OF 3TA	F1P04400
02011	0	07400	1	07656	WTR00	TSX WAT00,1	ALL WORDS OF 3TA EXAMINED SO	F1P04410
02012	0	00000	0	00003		3	WRITE 3TA ON TAPE	F1P04420
02013	0	00000	0	03163		3TA		F1P04430
02014	0	07400	1	07505	AD000	TSX TAP00,1	ASSEMBLE TDO	F1P04440
02015	0	00000	0	00001		1		F1P04450
02016	0	00000	0	03163	OATDO	1TA	ORIGIN OF ASSEMBLED TDO	F1P04460
							PROGRAM FOR MODIFICATION OF TDO WITH TEIFNO	F1P04470
02017	0	50000	0	03162	MDOTP	CLA 1TA-1	GET NUMBER OF WORDS IN ITA	F1P04480
02020	0	10000	0	02074		TZE WDO00	EXIT FOR NO WORDS IN TABLE	F1P04490
02021	-0	73400	2	00000		PDX 0,2	NUMBER OF WORDS IN ITA PUT IN IRB	F1P04500
02022	0	77100	0	00022		ARS 18	NUM WORDS PUT IN AC ADDR	F1P04510
02023	0	40000	0	02016		ADD OATDO	ADD ORIGIN OF ASSEMBLED TDO	F1P04520
02024	0	62100	0	02036		STA MDO00	INITIALIZE ADDRESSES	F1P84530
02025	0	62100	0	02072		STA MDO06		F1P04540
02026	0	62100	0	02041		STA MDO30		F1P04550
02027	0	50000	0	04550		CLA OTA-1	GET NUMBER WORDS IN OTA	F1P04560
02030	0	77100	0	00022	MDOOK	ARS 18	PUT NUMBER WORDS IN AC ADDRESS	F1P04570
02031	0	40000	0	07750		ADD L(OTA)	ADD OTA ORIGIN AND	F1P04580
02032	0	62100	0	02050		STA MDO02	INITIALIZE ADDRESSES	F1P04590
02033	0	62100	0	02057		STA MDO03		F1P04600
02034	0	62100	0	02062		STA MDO04		F1P04610
02035	0	62100	0	02070		STA MDO041		F1P04620
02036	0	50000	2	00000	MDO00	CLA 0,2	ADDR IS ITA + NUMBER WORDS (1)	F1P04630
02037	0	12000	0	02043		TPL MDO01	SIGN OF WORD IS PLUS	F1P04640
02040	0	76000	0	00003		SSP	CHANGE SIGN OF WORD IN TABLE	F1P04650
02041	0	60100	2	00000	MDO30	STO 0,2		F1P04660
02042	0	02000	0	02073		TRA MDO07		F1P04670
02043	-0	32000	0	07742	MDO01	ANA MSK	ERASE DECR IN AC	F1P04680
02044	0	62100	0	07747		STA E1	SAVE BETA	F1P04690
02045	-0	53400	4	04550		LXD OTA-1,4	SET INDEX C TO NUM WORDS IN OTA	F1P04700
02046	3	00000	4	02050		TXH MDO02,4,0	TEST FOR TEIFNO	F1P04710
02047	0	02000	0	07751		TRA TEIFER	STOP FOR NO TEIFNO	F1P04720
02050	0	50000	4	00000	MDO02	CLA 0,4	BETA PRIME AND BETA GO TO AC	F1P04730
02051	-0	32000	0	07742		ANA MSK	ERASE BETA PRIME	F1P04740
02052	0	40200	0	07747		SUB E1	BETA COMPARED WITH TABLE ARGUMENT	F1P04750
02053	0	10000	0	02057		TZE MDO03	BETA EQUALS ARGUMENT	F1P04760
02054	2	00001	4	02050		TIX MDO02,4,1	BETA NOT EQUAL TO ARGUMENT	F1P04770
02055	0	50000	0	02103		CLA PAT13		F1P04780
02056	0	02000	0	02072		TRA MDO06		F1P04790
02057	0	50000	4	00000	MDO03	CLA 0,4	BETA PRIME AND BETA GO TO AC	F1P04800
02060	0	62200	0	07746		STD E2	SAVE DECR OF FIRST POSSIBILITY	F1P04810
02061	-2	00001	4	02066		TNX MDO08,4,1	SEE IF THERE ARE 2 ENTRIES FOR	F1P04820
02062	0	50000	4	00000	MDO04	CLA 0,4	ONE ARGUMENT	F1P04830
02063	-0	32000	0	07742		ANA MSK	ERASE DECR IN AC	F1P04840
02064	0	40200	0	07747		SUB E1		F1P04650

02065	0	10000	0	02070	TZE	MDO041		THERE ARE 2 ENTRIES	F1P04860
02066	0	50000	0	07746	MDO08	CLA	E2	THERE IS ONLY ONE ENTRY	F1P04870
02067	0	02000	0	02071	TRA	MDO05		FOR THIS ARGUMENT	F1P04860
02070	0	50000	4	00000	MDO041	CLA	0,4		F1P04890
02071	0	77100	0	00022	MDO05	ARS	18		F1P04900
02072	0	62100	2	00000	MDO06	STA	0,2	(I)* BETA PRIME REPLACES BETA	F1P04910
02073	2	00005	2	02036	MDO07	TIX	MDO00,2,5	TAKE NEXT ENTRY IN ITA	F1P04920
02074	0	07400	1	07656	WDO00	TSX	WAT00,1	WRITE TDO ON TAPE	F1P04930
02075	0	00000	0	00001		HTR	1		F1P04940
02076	0	00000	0	03163	TOT1	HTR	1TA		F1P04950
02077	0	76200	0	00221		RTB	1		F1P04960
02100	0	02000	0	00004		TRA	4	GO TO 1-CS FOR PART B OF ONE PRIME	F1P04970
02101	0	77777	0	00000	DMASK		0,0,32767		F1P04980
02102	+	0000000077777			PAT11	OCT	77777		F1P04990
02103	0	00000	0	00000	PAT13	HTR	0		F1P05000
02104	0	00000	0	00000	PAT14	HTR	0		F1P05010
02105	0	00000	0	00000	PAT15	HTR	0		F1P05020
				02106	GARBGE	BSS	1		F1P05030
				02107	WORKCL	BSS	1		F1P05040
				02110	NEWBAS	BSS	1		F1P05050
				02243	BUFFER	BES	90		F1P05060
				02243	E1PTS	BSS	1		F1P05070
				02244	FLSIZE	BSS	1		F1P05080
				02245	CMPREC	BSS	1		F1P05090
				03162	END1PA	ORG	1650		F1P05100
				03162	1TAM1	BSS	1	NO OF WORDS IN BLOCK	F1P05110
				03163	1TA	BSS	750	BLOCK FOR TABLE ASSEMBLING	F1P05120
									F1P05130
									F1P05140
								704 FORTRAN MASTER RECORD CARD / 1 PRIME PART B = F0240000.	F1P05150
				00000	ORG	0			F1P05160
00000	0	00507	0	00507	PZE	ORG1PB,,ORG1PB			F1P05170
00001	0	00000	0	01613	PZE	END1PB			F1P05180
									F1P05190
								THIS IS PART B OF 2 PARTS OF SECTION ONE PRIME	F1P05200
									F1P05210
				00507	ORG1PB	ORG	327		F1P05220
00507	0	76100	0	00000	NOP			TO PERMIT A STOP FOR TESTING USE.	F1P05230
00510	0	07400	1	07505	TSX	TAP00,1		ASSEMBLE FORVAL	F1P05240
00511	0	00000	0	00006	TNT6	HTR	6		F1P05250
00512	0	00000	0	01614	TOT6	HTR	6TA		F1P05260
00513	-0	53400	4	01613	LXD	6TA-1,4		TEST FOR ENTRIES IN FORVAL, IF NONE WRITE	F1P05270
00514	-3	00000	4	00546	TXL	CLMD09,4,0		IDENTIFICATION WORD AND ZERO WORD.	F1P05280
									F1P05290
00515	0	07400	1	07505	TSX	TAP00,1		ASSEMBLE TABLE OF FIRST, LAST FORMULA	F1P05300
00516	0	00000	0	00020		16		NUMBERS OF CALL STATEMENTS.	F1P05310
00517	0	00000	0	03564	L16TA	16TA			F1P05320
									F1P05330
00520	-0	53400	2	03563	LXD	16TA-1,2		TEST FOR ANY ENTRIES IN CALL NUMBER TABLE,	F1P05340
00521	-3	00000	2	00546	TXL	CLMD09,2,0		IF NONE WRITE OUT FORVAL TABLE.	F1P05350
									F1P05360
								THERE ARE ENTRIES IN BOTH FORVAL AND CALL NUMBER TABLES.	F1P05370
								THEREFORE THERE MAY BE SOME NUMBER IN FORVAL WHICH MUST BE	F1P05380
								REPLACED WITH THE LAST NUMBER RELATED TO A CALL STATEMENT.	F1P05390

THE PROGRAM TO SEARCH AND REPLACE IS BASED UPON THE TWO
 TABLES BEING ORDERED BY MAGNITUDE OF INTERNAL FORMULA
 NUMBERS. THIS PERMITS A SINGLE PASS OVER BOTH,

F1P05400
 F1P05410
 F1P05420
 F1P05430
 F1P05440
 F1P05450
 F1P05460
 F1P05470
 F1P05480
 F1P05490
 F1P05500
 F1P05510
 F1P05520
 F1P05530
 F1P05540
 F1P05550
 F1P05560
 F1P05570
 F1P05580
 F1P05590
 F1P05600
 F1P05610
 F1P05620
 F1P05630
 F1P05640
 F1P05650
 F1P05660
 F1P05670
 F1P05680
 F1P05690
 F1P05700
 F1P05710
 F1P05720
 F1P05730
 F1P05740
 F1P05750
 F1P05760
 F1P05770
 F1P05780
 F1P05790
 F1P05800
 F1P05810
 F1P05820
 F1P05830
 F1P05840
 F1P05850
 F1P05860
 F1P05870
 F1P05880
 F1P05890
 F1P05900
 F1P05910
 F1P05920
 F1P05930

00522	0	60000	0	02107	STZ	WORKCL		
00523	0	53400	1	07730	LXA	L(0),1	PREPARE FOR FORWARD SEARCH.	
00524	-0	53400	4	01613	LXD	6TA-1,4	NO OF ENTRIES IN FORVAL.	
00525	-0	75400	2	00000	PXD	,2		
00526	0	77100	0	00022	ARS	18		
00527	0	40000	0	00517	ADD	L16TA		
00530	0	62100	0	00531	STA	*+1		
U	00531	0	50000	2	CLMD01	CLA	...,2	GET NEXT ENTRY IN CALL TABLE.
	00532	0	62200	0	02107	STD	WORKCL	DIVIDE ENTRY INTO FIRST IN AC, LAST IN CS.
	00533	-0	32000	0	07742	ANA	MSK	
	00534	0	76700	0	00022	ALS	18	
	00535	0	34000	1	01614	CLMD02	CAS 6TA,1	COMPARE CALL FIRST IN AC TO NEXT FORVAL.
	00536	1	77777	1	00545	TXI	CLMD04,1,-1	CALL GREATER THAN FORVAL
	00537	0	02000	0	00542	TRA	CLMD03	CALL EQUAL FORVAL.
	00540	2	00001	2	00531	TIX	CLMD01,2,1	GO FOR NEXT CALL ENTRY IF ANY. OTHERWISE
	00541	0	02000	0	00546	TRA	CLMD09	GO WRITE FORVAL TABLE.
	00542	0	50000	0	02107	CLMD03	CLA WORKCL	REPLACE FORMULA NUMBER IN FORVAL WHICH IS
	00543	0	62200	1	01614	STD	6TA,1	FIRST RELATED TO CALL WITH LAST.
	00544	1	77777	1	00545	TXI	*+1,1,-1	
	00545	2	00001	4	00535	CLMD04	TIX CLMD02,4,1	GO ON WITH SEARCH IF THERE ARE MORE FORVALS
								IF NOT GO WRITE FORVAL TABLE.
	00546	0	07400	1	07656	CLMD09	TSX WAT00,1	
	00547	0	00000	0	00006	HTR	6	FORVAL
	00550	0	00000	0	01614	HTR	6TA	ON TAPE
	00551	0	50000	0	01613	CLA	6TA-1	GET NUMBER OF WORDS IN FORVAL
	00552	-0	10000	0	00554	TNZ	WFD00	TABLE EXISTS
	00553	0	02000	0	00610	TRA	A4VAR	EXIT 10 ASSEMBLE NEXT TABLE
	00554	0	76600	0	00302	WFD00	WRS 194	PREPARE TO WRITE FORVAL ON DRUM
	00555	-0	73400	1	00000	WFD01	PDX 0,1	SET INDEX A TO NUM OF WORDS
	00556	0	53400	2	00555	LXA	WFD01,2	SET INDEX B TO ZERO
	00557	0	77100	0	00022	ARS	18	PUT NUM OF WORDS IN AC
	00560	0	40000	0	00512	ADD	TOT6	
	00561	0	62100	0	00571	STA	WFD04	INITIALIZE
	00562	0	62100	0	00602	STA	WFD07	
	00563	0	40200	0	07731	SUB	L(1)	ADDRESSES
	00564	0	62100	0	00570	STA	WFD03	
	00565	0	62100	0	00601	STA	WFD06	
	00566	1	77777	1	00567	TXI	WFD02,1,-1	SUBTRACT ONE FROM INDEX A
	00567	0	76000	0	00000	WFD02	CLM	COMPUTE CHECK SUM
	00570	0	36100	1	00000	WFD03	ACL 0,1	FOR EACH FORVAL
	00571	0	36100	1	00000	WFD04	ACL 0,1	ENTRY AND SAVE IN
	00572	0	60200	2	03564	SLW	FRCHS,2	SEPARATE TABLE
	00573	1	77777	2	00574	TXI	WFD05,2,-1	
	00574	2	00002	1	00567	WFD05	TIX WFD02,1,2	TEST END OF FORVAL ENTRIES
	00575	0	53400	2	00555	LXA	WFD01,2	SET INDEX B TO ZERO
	00576	-0	53400	1	01613	LXD	6TA-1,1	
	00577	0	46000	0	07744	LDA	DRL02	

00600	1	77777	1	00601		TXI	WFD06,1,-1		F1P05940
00601	0	70000	1	00000	WFD06	CPY	0,1	WRITE FORVAL	F1P05950
00602	0	70000	1	00000	WFD07	CPY	0,1	ENTRY	F1P05960
00603	-2	00002	1	00606		TNX	WFD08,1,2	TEST END OF FORVAL ENTRIES	F1P05970
00604	0	70000	2	03564		CPY	FRCHS,2	WRITE CHECK SUM	F1P05980
00605	1	77777	2	00601		TXI	WFD06,2,-1	FOR ABOVE ENTRY	F1P05990
00606	0	70000	2	03564	WFD08	CPY	FRCHS,2	WRITE CHECK SUM FOR LAST ENTRY	F1P06000
00607	0	70000	0	07743		CPY	FRCON	WRITE END OF TABLE SIGNAL	F1P06010
00610	0	07400	1	07505	A4VAR	TSX	TAP00,1	ASSEMBLE FORVAR.	F1P06020
00611	0	00000	0	00005	TNT5	HTR	5		F1P06030
00612	0	00000	0	01614		HTR	5TA		F1P06040
00613	0	07400	1	07656		TSX	WAT00,1	WRITE FORVAR ON TAPE	F1P06050
00614	0	00000	0	00005		HTR	5		F1P06060
00615	0	00000	0	01614		HTR	5TA		F1P06070
00616	0	07400	1	07505		TSX	TAP00,1	ASSEMBLE FORTAG	F1P06080
00617	0	00000	0	00004		HTR	4		F1P06090
00620	0	00000	0	01614		HTR	4TA		F1P06100
00621	0	07400	1	07656		TSX	WAT00,1	WRITE FORTAG ON TAPE	F1P06110
00622	0	00000	0	00004		HTR	4		F1P06120
00623	0	00000	0	01614		HTR	4TA		F1P06130
								PROGRAM FOR PROCESSING FREQUENCY TABLE. FRET	F1P06140
00624	0	07400	1	07505		TSX	TAP00,1	ASSEMBLE FRET.	F1P06150
00625	0	00000	0	00007		HTR	7		F1P06160
00626	0	00000	0	01614	TOT7	HTR	7TA	ORIGIN OF ASSEMBLED FRET,	F1P06170
00627	0	50000	0	01613	MFRTP	CLA	7TA-1	GET NUM OF WORDS IN TABLE	F1P06180
00630	0	10000	0	01114		TZE	WFR00	EXIT FOR EMPTY TABLE	F1P06190
00631	-0	73400	2	00000		PDX	0,2	SET INDEX B TO NUM WORDS IN TABLE	F1P06200
00632	0	77100	0	00022		ARS	18	PUT NUMBER IN AC ADDRESS AND	F1P06210
00633	0	40000	0	00626		ADD	TOT7	INITIALIZE ADDRESSES	F1P06220
00634	0	62100	0	00645		STA	MFR00		F1P06230
00635	0	62100	0	00662		STA	MFR03		F1P06240
00636	0	50000	0	04550		CLA	OTA-1	GET NUMBER OF WORDS IN OTA	F1P06250
00637	-0	10000	0	00641		TNZ	MFROK	TABLE EXISTS	F1P06260
00640	0	02000	0	07751		TRA	TEIFER	STOP FOR NO TABLE IN OTA	F1P06270
00641	0	77100	0	00022	MFROK	ARS	18	PUT NUMBER WORDS IN AC ADDRESS	F1P06280
00642	0	40000	0	07750		ADD	L(OTA)	ADD OTA ORIGIN AND	F1P06290
00643	0	62100	0	00651		STA	MFR01	INITIALIZE ADDRESSES	F1P06300
00644	0	62100	0	00660		STA	MFR02		F1P06344
00645	0	50000	2	00000	MFRO0	CLA	0,2	ADDR IS 7TA + NUMBER OF WORDS	F1P06320
00646	0	12000	0	00663		TPL	MFR04	DO NOT MODIFY THIS WORD	F1P06330
00647	0	62100	0	01604		STA	E10	SAVE ABSOLUTE PART OF WORD	F1P06340
00650	-0	53400	1	04550		LXD	OTA-1,1	SET INDEX TO NUM WORDS IN OTA	F1P06350
00651	0	50000	1	00000	MFRO1	CLA	0,1	TEIFNO ARGUMENT IS IN AC.	F1P06360
00652	-0	32000	0	07742		ANA	MSK	COMPARE WITH 7TA WORD	F1P06370
00653	0	40200	0	01604		SUB	E10		F1P06380
00654	0	10000	0	00660		TZE	MFR02	MODIFY 7TA WORD	F1P06390
00655	2	00001	1	00651		TIX	MFR01,1,1	GO TO NEXT TEIFNO WORD	F1P06400
00656	0	50000	0	07730		CLA	L(0)	NO ENTRY FOUND IN TEIFNO. IGNORE.	F1P06410
00657	0	02000	0	00662		TRA	MFR03		F1P06420
00660	0	50000	1	04551	MFRO2	CLA	OTA,1	TEIFNO WORD GOES TO AC	F1P06430
00661	0	77100	0	00022		ARS	18	INTERNAL FORMULA NUM IN AC ADDR,	F1P06440
00662	0	62100	2	00000	MFRO3	STA	0,2	INTERNAL FORMULA NUM GOES TO 7TA	F1P06450
00663	2	00001	2	00645	MFRO4	TIX	MFR00,2,1	EXAMINE NEXT WORD OF 7TA	F1P06460
								PROGRAM FOR SORTING FRET	F1P06470

00664	0	50000	0	01613	SFRTP	CLA	7TA-1	GET NUMBER OF WORDS IN FRET	F1P06480
00665	0	77100	0	00022		ARS	18	NUMBER WORDS IN TABLE GO TO AC ADDR	F1P06490
00666	0	40000	0	00626		ADD	TOT7	COMPUTE NUMBER OF WORDS IN TABLE	F1P06500
00667	0	62100	0	00701		STA	SFR01	PLUS ORIGIN OF TABLE AND INITIALIZE	F1P06510
00670	0	62100	0	00707		STA	SFR03	ADDRESSES	F1P06520
00671	0	62100	0	00721		STA	SFR06		F1P06530
00672	0	62100	0	00724		STA	SFR07		F1P06540
00673	0	62100	0	00733		STA	SFR11		F1P06550
00674	0	62100	0	00743		STA	SFR13		F1P06560
00675	0	62100	0	00753		STA	SFR17		F1P06570
00676	0	76000	0	00000	SFR00	CLM		SET E12 TO ZERO TO INDICATE	F1P06580
00677	0	60100	0	07746		STO	E12	TABLE IS IN ORDER.	F1P06590
00700	-0	53400	1	01613		LXD	7TA-1,1	SET INDEX A TO NUM OF WORDS IN 7TA	F1P06600
00701	0	50000	1	00000	SFR01	CLA	0,1	A WORD OF 7TA GOES TO AC.	F1P06610
00702	-0	12000	0	00704		TMI	SFR02	COMPARE THIS WORD. IT IS ALPHA ONE	F1P06620
00703	1	77777	1	00701		TXI	SFR01,1,-1	EXAMINE NEXT WORD OF 7TA	F1P06630
00704	0	62100	0	01605	SFR02	STA	E11	SAVE ALPHA ONE FOR COMPARISON	F1P06640
00705	-0	63400	1	01606		SXD	ALBOX,1	SAVE INDEX FOR RETURN TO ALPHA ONE	F1P06650
00706	-2	00001	1	00762		TNX	SFR21,1,1	EXAMINE NEXT WORD OF 7TA	F1P06660
00707	0	50000	1	00000	SFR03	CLA	0,1	PUT NEXT WORD OF 7TA IN AC.	F1P06670
00710	-0	12000	0	00713		TMI	SFR05	COMPARE THIS WORD. IT IS ALPHA TWO	F1P06680
00711	-3	00001	1	00762		TXL	SFR21,1,1	EXIT FOR END OF TABLE	F1P06690
00712	1	77777	1	00707		TXI	SFR03,1,-1	EXAMINE NEXT 7TA WORD	F1P06700
00713	0	76000	0	00003	SFR05	SSP		COMPUTE ALPHA TWO	F1P06710
00714	0	40200	0	01605		SUB	E11	MINUS ALPHA ONE	F1P06720
00715	0	12000	0	00701		TPL	SFR01	ALPHA ONE IS SMALLER	F1P06730
00716	0	50000	0	07731		CLA	L(1)	C(E12) NOT ZERO INDICATES TABLE WAS	F1P06740
00717	0	60100	0	07746		STO	E12	NOT IN ORDER ON THIS PASS.	F1P06750
00720	0	53400	4	07730		LXA	L(0),4	SET INDEX C TO ZERO TO INDEX OTA	F1P06760
00721	0	50000	1	00000	SFR06	CLA	0,1	ALPHA TWO GOES TO AC	F1P06770
00722	0	60100	4	04551		STO	OTA,4	SAVE ALPHA TWO	F1P06780
00723	1	77777	1	00724		TXI	SFR07,1,-1	GET NEXT WORD OF ALPHA TWO ENTRY	F1P06790
00724	0	50000	1	00000	SFR07	CLA	0,1	PUT THIS WORD IN AC	F1P06800
00725	-0	12000	0	00732		TMI	SFR10	ALL WORDS OF ALPHA TWO ENTRY SAVED	F1P06810
00726	1	77777	4	00727		TXI	SFR09,4,-1	GO TO NEXT WORD OF OTA	F1P06820
00727	0	60100	4	04551	SFR09	STO	OTA,4	SAVE WORDS OF ALPHA TWO ENTRY	F1P06830
00730	-3	00001	1	00732		TXL	SFR10,1,1	ALPHA TWO ENTRY IS END OF TABLE	F1P06840
00731	1	77777	1	00724		TXI	SFR07,1,-1	EXAMINE NEXT WORD OF 7TA	F1P06850
00732	-0	53400	1	01606	SFR10	LXD	ALBOX,1	SET INDEX A TO GET ADDR OF ALPHA 1	F1P06860
00733	0	50000	1	00000	SFR11	CLA	0,1	ALPHA ONE GOES TO AC	F1P06870
00734	1	77777	4	00735		TXI	SFR12,4,-1	GO TO NEXT WORD OF OTA	F1P06880
00735	0	60100	4	04551	SFR12	STO	OTA,4	SAVE ALPHA ONE	F1P06890
00736	-0	63400	4	01607		SXD	A2BOX,4	COMPUTE INDEX FOR	F1P06900
00737	0	50000	0	01606		CLA	ALBOX	RETURNING TO ALPHA ONE	F1P06910
00740	0	40000	0	01607		ADD	A2BOX	AFTER TRANSPOSING	F1P06920
00741	0	62200	0	01607		STD	A2BOX	ALPHA ONE AND ALPHA TWO ENTRIES	F1P06930
00742	1	77777	1	00743		TXI	SFR13,1,-1	EXAMINE NEXT WORD OF 7TA	F1P06940
00743	0	50000	1	00000	SFR13	CLA	0,1	PUT NEXT WORD IN AC	F1P06950
00744	-0	12000	0	00750		TMI	SFR15	FINISHED SAVING ALPHA ONE ENTRY	F1P06960
00745	1	77777	4	00746		TXI	SFR14,4,-1	GO TO NEXT WORD OF OTA	F1P06970
00746	0	60100	4	04551	SFR14	STO	OTA,4	SAVE WORDS OF ALPHA ONE ENTRY	F1P06980
00747	1	77777	1	00743		TXI	SFR13,1,-1	EXAMINE NEXT WORD OF 7TA	F1P06990
00750	-0	53400	1	01606	SFR15	LXD	ALBOX,1	SET INDEX A TO GET ADDR OF ALPHA 1	F1P07000
00751	0	53400	2	07730		LXA	L(0),2	SET INDEX B TO INDEX OTA	F1P07010

00752	0	50000	2	04551	SFR16	CLA	OTA,2		ALPHA ONE ENTRY AND ALPHA TWO ENTRY	F1P07020
00753	0	60100	1	00000	SFR17	STO	0,1		ARE INTERCHANGED	F1P07030
00754	1	77777	2	00755		TXI	SFR18,2,-1		GO TO NEXT WORD OF OTA	F1P07040
00755	-2	00001	1	00676	SFR18	TXN	SFR00,1,1		END OF TABLE EXIT	F1P07050
00756	-3	00001	4	00760		TXL	SFR20,4,1		TEST IF OTA IS EMPTIED	F1P07060
00757	1	00001	4	00752		TXI	SFR16,4,1		COUNT WORDS TAKEN FROM OTA	F1P07070
00760	-0	53400	1	01607	SFR20	LXD	A2BOX,1		GET OLD ALPHA ONE AS NEW ALPHA ONE	F1P07080
00761	0	02000	0	00701		TRA	SFR01		START OVER WITH NEW ALPHA ONE	F1P07090
00762	0	50000	0	07746	SFR21	CLA	E12		TEST IF TABLE IS IN ORDER	F1P07100
00763	-0	10000	0	00676		TNZ	SFR00		EXAMINE TABLE AGAIN	F1P07110
									PROGRAM TO REVERSE FREQUENCIES FOR GO TO VECTOR ENTRIES IN	F1P07120
									TIFGD	F1P07130
00764	0	76400	0	00222	RFT00	BST	146		MOVE TAPE	F1P07140
00765	0	76400	0	00222		BST	146		THRU TABLES	F1P07150
00766	0	76400	0	00222		BST	146		ALREADY WRITTEN	F1P07160
00767	0	76400	0	00222		BST	146		TO OBTAIN	F1P07170
00770	0	76400	0	00222		BST	146		TIFGO	F1P07180
00771	0	76400	0	00222		BST	146			F1P07190
00772	0	76200	0	00222		RDS	146		SELECT TAPE FOR READING	F1P07200
00773	0	50000	0	07734		CLA	L(4)	PREPARE	TO COUNT	F1P07210
00774	0	60100	0	01610		STO	IT1		TWO TAPE TESTS	F1P07220
00775	0	70000	0	07747		CPY	E1RF		GET TABLE NUMBER	F1P07230
00776	0	50000	0	07747		CLA	E1RF		AND COMPARE WITH	F1P07240
00777	0	40200	0	07745		SUB	TNT2		TABLE CALLED FOR	F1P07250
01000	0	10000	0	01002		TZE	RFT01		TABLE NUMBERS AGREE	F1P07260
01001	0	07400	4	00004		TSX	DIAG,4		STOP FOR TABLE NOT IN RIGHT RECORD	F1P07270
01002	0	70000	0	04550	RFT01	CPY	OTA-1		GET NUMBER OF WORDS	F1P07280
01003	0	50000	0	04550		CLA	OTA-1		IN TAPE RECORD	F1P07290
01004	0	10000	0	01107		TZE	WFR01		EXIT FOR EMPTY TABLE ON TAPE	F1P07300
01005	0	62200	0	01022		STD	RFT05			F1P07310
01006	-0	76000	0	00012		RTT			TURN OFF TAPE	F1P07320
01007	0	76100	0	00000		NOP			CHECK INDICATOR AND LIGHTS	F1P07330
01010	0	53400	2	07730	RFT02	LXA	L(0),2		SET INDEX B TO ZERO	F1P07340
01011	0	70000	2	04551	RFT03	CPY	OTA,2			F1P07350
01012	1	77777	2	01011		TXI	RFT03,2,-1		COPY LOOP	F1P07360
01013	0	76100	0	00000		NOP			END OF FILE JUMP	F1P07370
01014	0	76600	0	00333		WRS	219		END OF RECORD. DELAY FOR TAPE TEST	F1P07380
01015	-0	76000	0	00012		RTT			TAPE TEST	F1P07390
01016	0	02000	0	01020		TRA	RFT04		TAPE TEST ON	F1P07400
01017	0	02000	0	01032		TRA	RFT07		TAPE TEST OFF	F1P07410
01020	0	76400	0	00224	RFT04	BST	148		REPEAT RECORD	F1P07420
01021	0	76200	0	00224		RDS	148		PREPARE TO READ RECORD	F1P07430
01022	1	00000	2	01023	RFT05	TXI	RFT06,2,**		COMPENSATE FOR REREADING RECORD	F1P07440
01023	0	50000	0	01610	RFT06	CLA	IT1		COUNT	F1P07450
01024	0	40200	0	07731		SUB	L(1)		TWO	F1P07460
01025	0	60100	0	01610		STO	IT1		TAPE TESTS	F1P07470
01026	0	70000	0	07747		CPY	E1RF		GET TABLE NUMBER	F1P07480
01027	0	70000	0	07747		CPY	E1RF		GET NUMBER OF WORDS IN TABLE	F1P07490
01030	0	12000	0	01010		TPL	RFT02		GO TO READ TAPE	F1P07500
01031	0	07400	4	00004		TSX	DIAG,4		STOP FOR SECOND TAPE TEST	F1P07510
01032	0	50000	0	01613	RFT07	CLA	7TA-1		COMPUTE TABLE	F1P07520
01033	0	77100	0	00022		ARS	18		ORIGIN PLUS	F1P07530
01034	0	40000	0	00626		ADD	TOT7		NUMBER OF	F1P07540
01035	0	62100	0	01057		STA	RFT09		WORDS IN	F1P07540

01036	0	62100	0	01072	STA RFT13	FRET AND	F1P07560
01037	0	62100	0	01103	STA RFT18	INITIALIZE ADDRESSES	F1P07570
01040	0	50000	0	04550	CLA OTA-1	GET NUMBER OF WORDS IN TI FGO	F1P07580
01041	0	77100	0	00022	ARS 18	PUT IN AC AND	F1P07590
01042	0	40200	0	07731	SUB L(1)	SUBTRACT ONE	F1P07600
01043	0	73400	4	00000	PAX 0,4	SET INDEX C TO THIS NUMBER	F1P07610
01044	0	40000	0	07750	ADD TOTO	ADD ORIGIN OF TIFGO ADD	F1P07620
01045	0	62100	0	01050	STA RFT08	INITIALIZE ADDRESS	F1P07630
01046	0	76000	0	00000	CLM		F1P07640
01047	0	60200	0	01611	SLW E1RFT		F1P07650
01050	0	50000	4	00000	RFT08 CLA 0,4	GET FIRST WORD OF TIFGO ENTRY	F1P07660
01051	0	62200	0	01611	STD E1RFT	SAVE FORMULA NUMBER	F1P07670
01052	-0	12000	0	01056	TMI RFT09-1	ENTRY IS AN IF(E)	F1P07680
01053	-0	32000	0	07742	ANA MSK	ERASE DECREMENT OF AC	F1P07690
01054	0	40200	0	07732	SUB L(2)	TEST FOR GO TO VECTOR ENTRY	F1P07700
01055	-0	10000	0	01106	TNZ RFT20	EXIT FOR ENTRY NOT A GO TO VECTOR	F1P07710
01056	-0	53400	1	01613	LXD 7TA-1,1	SET INDEX A TO NUM OF WORDS IN FRET	F1P07720
01057	0	50000	1	00000	RFT09 CLA 0,1	GET WORD OF FRET ENTRY	F1P07730
01060	0	12000	0	01065	TPL RFT10	TEST FOR FIRST WORD OF ENTRY	F1P07740
01061	0	76000	0	00003	SSP	PUT FORMULA NUMBER	F1P07750
01062	0	76700	0	00022	ALS 18	IN DECREMENT OF AC	F1P07760
01063	0	40200	0	01611	SUB E1RFT	COMPARE FORMULA NUMBERS	F1P07770
01064	0	10000	0	01067	TZE RFT11	FORMULA NUMBERS MATCH	F1P07780
01065	2	00001	1	01057	RFT10 TIX RFT09,1,1	TEST END OF FRET	F1P07790
01066	0	02000	0	01106	TRA RFT20	EXIT FOR END OF FRET	F1P07800
01067	-2	00001	1	01106	RFT11 TNX RFT20,1,1	PREPARE FOR SECOND WORD OF ENTRY	F1P07810
01070	-0	63400	1	01612	RFT12 SXD E2RFT,1	AND SAVE INDEX A FOR RETURN	F1P07820
01071	0	53400	2	07730	LXA L(0),2	SET INDEX B TO ZERO	F1P07830
01072	0	50000	1	00000	RFT13 CLA 0,1	GET FREQUENCY PART OF ENTRY	F1P07840
01073	-0	12000	0	01077	TMI RFT15	TEST END OF ENTRY	F1P07850
01074	0	60100	2	03172	STO FRTS,2	SAVE FREQUENCY	F1P07860
01075	1	77777	2	01076	TXI RFT14,2,-1	TAKE NEXT FRTS WORD	F1P07870
01076	2	00001	1	01072	RFT14 TIX RFT13,1,1	TAKE NEXT FRET WORD	F1P07880
01077	-3	00000	2	01106	RFT15 TXL RFT20,2,0	EXIT FOR NO FREQUENCY IN ENTRY	F1P07890
01100	-0	53400	1	01612	LXD E2RFT,1	SET INDEX A TO GET 2ND ENTRY WORD	F1P07900
01101	1	00001	2	01102	RFT16 TXI RFT17,2,1	GET FREQUENCIES	F1P07910
01102	0	50000	2	03172	RFT17 CLA FRTS,2	IN REVERSE ORDER	F1P07920
01103	0	60100	1	00000	RFT18 STO 0,1	AND REPLACE IN FRET ENTRY	F1P07930
01104	1	77777	1	01105	TXI RFT19,1,-1	TAKE NEXT WORD OF FRET ENTRY	F1P07940
01105	3	00000	2	01101	RFT19 TXH RFT16,2,0	TEST END OF ENTRY	F1P07950
01106	2	00002	4	01050	RFT20 TIX RFT08,4,2	TEST END OF TIFGO	F1P07960
01107	0	76200	0	00222	WFR01 RDS 146	POSITION	F1P07970
01110	0	76200	0	00222	RDS 146	TAPE	F1P07980
01111	0	76200	0	00222	RDS 146	FOR	F1P07990
01112	0	76200	0	00222	RDS 146	WRITING	F1P08000
01113	0	76200	0	00222	RDS 146	FRET	F1P08010
01114	0	07400	1	07656	WFR00 TSX WAT00,1	WRITE	F1P08020
01115	0	00000	0	00007	HTR 7	FRET	F1P08030
01116	0	00000	0	01614	HTR 7TA	ON TAPE	F1P08040
01117	0	07400	1	07505	TSX TAP00,1	ASSEMBLE EQUIP.	F1P08050
01120	0	00000	0	00010	8		F1P08060
01121	0	00000	0	04551	EQ		F1P08070
					PROGRAM FOR CLASSES OF EQUIVALENCE		F1P08080
					INITIALIZATION OF ADDRESSES AND STORAGE		F1P08090

01122	0	50000	0	04550	CLEQ	CLA EQM1	COMPUTE EO ORIGIN PLUS	F1P08100
01123	0	77100	0	00022		ARS 18	NUMBER OF WORDS IN TABLE	F1P08110
01124	0	40000	0	01574		ADD L(EQ)		F1P08120
01125	0	62100	0	01165		STA B7CLQ		F1P08130
01126	0	62100	0	01171		STA B8CLQ		F1P08140
01127	0	62100	0	01200		STA B9CLQ		F1P08150
01130	0	62100	0	01174		STA B2CLQ		F1P08160
01131	0	62100	0	01213		STA B11CLQ		F1P08170
01132	0	62100	0	01225		STA C2CLQ		F1P08180
01133	0	62100	0	01230		STA C3CLQ		F1P08190
01134	0	62100	0	01271		STA A10CLQ		F1P08200
01135	0	62100	0	01302		STA A11CLQ		F1P08210
01136	0	62100	0	01315		STA A12CLQ		F1P08220
01137	0	62100	0	01326		STA A13CLQ		F1P08230
01140	0	62100	0	01306		STA A17CLQ		F1P08240
01141	0	62100	0	01237		STA C10CLQ		F1P08250
01142	0	76000	0	00000	OADDR	CLM		F1P08260
01143	0	60200	0	01613		SLW MEEQM1		F1P08270
01144	0	60200	0	01575		SLW BOX1		F1P08280
01145	0	60200	0	01577		SLW E1CLEQ		F1P08290
01146	0	60200	0	01600		SLW E2CLEQ		F1P08300
01147	0	60200	0	01601		SLW E3CLEQ		F1P08310
01150	0	60200	0	01602		SLW E4CLEQ		F1P08320
01151	0	60200	0	01603		SLW E5CLEQ		F1P08330
01152	0	53400	2	01142		LXA OADDR, 2		F1P08340
01153	-0	53400	4	04550		LXD EQM1, 4		F1P08350
01154	0	60200	2	01614	G2CLQ	SLW MEEQ, 2		F1P08360
01155	1	77777	2	01156		TXI G1CLQ, 2, -1		F1P08370
01156	2	00001	4	01154	G1CLQ	TIX G2CLQ, 4, 1		F1P08380
01157	0	50000	0	07740		CLA DECR1		F1P08390
01160	0	60100	0	01576		STO BOX2		F1P08400
						INITIALIZATION OF AN EQUIVALENCE CLASS		F1P08410
01161	-0	53400	1	04550	BOCLQ	LXD EQM1, 1	SET INDEX A TO MUM OF WORDS IN EQ	F1P08420
01162	-3	00000	1	01454		TXL OUT, 1, 0	EXIT FOR EMPTY EQ TABLE	F1P08430
01163	-0	53400	2	01576		LXD BOX2, 2	PREPARE TO ENTER	F1P06440
01164	1	77777	2	01165		TXI B7CLQ, 2, -1	A WORD IN MEEQ	F1P08450
01165	0	50000	1	00000	B7CLQ	CLA 0, 1	OBTAIN EQ WORD	F1P06460
01166	0	10000	0	01212		TZE B5CLQ	EXIT FOR DELETED EQ SET	F1P08470
01167	0	60100	2	01614		STO MEEQ, 2	SAVE EQ SET IN TABLE MEEQ	F1P08480
01170	0	76000	0	00000		CLM	INDICATE	F1P08490
01171	0	60200	1	00000	B8CLQ	SLW 0, 1	DELETED	F1P08500
01172	1	77777	2	01173		TXI B1CLQ, 2, -1	EQ SET	F1P08510
01173	-2	00001	1	00000	B1CLQ	TNX 0, 1, 1	EXIT FOR END OF EQ TABLE	F1P08520
01174	0	50000	1	00000	B2CLQ	CLA 0, 1	OBTAIN EQ SUBSCRIPT	F1P08530
01175	-0	12000	0	01206		TMI B4CLQ	EXIT FOR END OF EQ SET	F1P08540
01176	0	60100	2	01614		STO MEEQ, 2	SAVE REST OF EQ SET	F1P08550
01177	1	77777	1	01200		TXI B9CLQ, 1, -1		F1P08560
01200	0	50000	1	00000	B9CLQ	CLA 0, 1	OBTAIN EQ SYMBOL	F1P08570
01201	1	77777	2	01202		TXI B10CLQ, 2, -1		F1P08580
01202	0	60100	2	01614	B10CLQ	STO MEEQ, 2		F1P08590
01203	1	77777	2	01204		TXI B3CLQ, 2, -1	IN TABLE MEEQ	F1P08600
01204	2	00001	1	01174	B3CLQ	TIX B2CLQ, 1, 1		F1P08610
01205	0	02000	0	00000		TRA **	EXIT FOR END OF EQ TABLE	F1P08620
01206	0	76000	0	00003	B4CLQ	SSP	SAVE LAST	F1P08630

01207	0	60100	2	01614	STO	MEEQ,2	SUBSCRIPT OF EQ SET	F1P08640	
01210	-0	63400	2	01576	SXD	BOX2,2	AND ITS MEEQ INDEX	F1P08650	
01211	0	02000	0	01220	TRA	C0CLQ	GO TO COMPARISON ROUTINE	F1P08660	
01212	1	77777	1	01213	B5CLQ	TXI	B11CLQ,1,-1	F1P08670	
01213	0	50000	1	00000	B11CLQ	CLA	0,1	F1P08680	
01214	0	12000	0	01216	TPL	B6CLQ	LOOP TO	F1P08690	
01215	2	00001	1	01165	TIX	B7CLQ,1,1	GO THROUGH	F1P08700	
01216	2	00002	1	01213	B6CLQ	TIX	B11CLQ,1,2	DELETED SET	F1P08710
01217	0	02000	0	01360	TRA	END	EXIT FOR COMPLETELY DELETED EO TABLE	F1P08720	
							COMPARISON OF MEEQ SYMBOLS WITH EQ SYMBOLS	F1P08730	
01220	-0	53400	2	01576	C0CLQ	LXD	BOX2,2	INITIALIZE TEST	F1P06740
01221	-0	63400	2	01253	SXD	C5CLQ,2	FOR END OF MEEQ TABLE	F1P08750	
01222	-0	53400	2	01575	LXD	BOX1,2	SET INDEX B TO GET 1ST SYMB OF MEEQ	F1P08760	
01223	-0	53400	1	04550	C6CLQ	LXD	EQ-1,1	PREPARE TO SCAN EQ TABLE	F1P08770
01224	-0	63400	1	01577	C7CLQ	SXD	E1CLEQ,1	SAVE INDEX OF 1ST WORD OF EQ SET	F1P08760
01225	0	50000	1	00000	C2CLQ	CLA	0,1	OBTAIN EQ WORD	F1P08790
01226	-0	10000	0	01235	TNZ	C4CLQ	SET NOT DELETED	F1P08800	
01227	1	77777	1	01230	TXI	C3CLQ,1,-1		F1P08810	
01230	0	50000	1	00000	C3CLQ	CLA	0,1	LOOP TO GO THRU	F1P08820
01231	-0	12000	0	01233	TMI	C1CLQ	DELETED SET	F1P08830	
01232	2	00002	1	01230	TIX	C3CLQ,1,2		F1P08840	
01233	2	00001	1	01224	C1CLQ	TIX	C7CLQ,1,1	EXAMINE NEXT EQ SET	F1P08850
01234	0	02000	0	01252	TRA	C9CLQ	EXIT FOR END OF EO TABLE	F1P08860	
01235	0	60100	0	01603	C4CLQ	STO	E5CLEQ	SAVE EQ SYMBOL	F1P08870
01236	1	77777	1	01237	TXI	C10CLQ,1,-1		F1P08880	
01237	0	50000	1	00000	C10CLQ	CLA	0,1	GET EQ SUBSCRIPT	F1P08890
01240	0	12000	0	01246	TPL	C8CLQ	NOT END OF EQ SET	F1P08900	
01241	0	50000	0	01603	CLA	E5CLEQ	GET LAST SYMBOL OF EQ SET	F1P08910	
01242	0	40200	2	01614	SUB	MEEQ,2	COMPARE WITH MEEQ SYMBOL	F1P08920	
01243	0	10000	0	01263	TZE	A0CLQ	MATCH	F1P08930	
01244	2	00001	1	01224	TIX	C7CLQ,1,1	NO MATCH	F1P08940	
01245	0	02000	0	01252	TRA	C9CLQ		F1P08950	
01246	0	50000	0	01603	C8CLQ	CLA	E5CLEQ	F1P08960	
01247	0	40200	2	01614	SUB	MEEQ,2		F1P08970	
01250	0	10000	0	01263	TZE	A0CLQ		F1P08980	
01251	2	00001	1	01225	TIX	C2CLQ,1,1		F1P08990	
01252	1	77776	2	01253	C9CLQ	TXI	C5CLQ,2,-2	GET NEXT MEEQ SYMBOL	F1P09000
01253	3	00000	2	01223	C5CLQ	TXH	C6CLQ,2,**	TEST END OF TABLE MEEQ	F1P09010
							END OF TABLE MEEQ, NO MATCH IN TABLE EQ	F1P09020	
01254	-0	53400	2	01576	F2CLQ	LXD	BOX2,2	INDICATE	F1P09030
01255	0	50000	2	01614	CLA	MEEQ,2	END OF SET	F1P09040	
01256	-0	76000	0	00003	SSM		IN TABLE	F1P09050	
01257	0	60100	2	01614	STO	MEEQ,2	MEEQ	F1P09060	
01260	1	77777	2	01261	TXI	F1CLQ,2,-1	INITIALIZE INDEX OF	F1P09070	
01261	-0	63400	2	01575	F1CLQ	SXD	BOX1,2	NEXT SET IN TABLE MEEQ AND	F1P09080
01262	0	02000	0	01161	TRA	BOCLQ	INITIALIZE THE SET	F1P09090	
							MEEQ SYMBOL MATCHES EQ SYMBOL	F1P09100	
01263	1	00001	1	01264	A0CLQ	TXI	A14CLQ,1,1	F1P09110	
01264	-0	63400	1	01314	A14CLQ	SXD	A6CLQ,1	SAVE EO INDEX OF MATCHED SYMBOL	F1P09120
01265	2	00001	1	01266	TIX	A1CLQ,1,1		F1P09130	
01266	1	77777	2	01267	A1CLQ	TXI	A2CLQ,2,-1	F1P09140	
01267	0	50000	2	01614	A2CLQ	CLA	MEEQ,2	F1P09150	
01270	0	62100	0	01600	STA	E2CLEQ	SAVE SUBSCRIPT OF MEEQ SYMBOL	F1P09160	
01271	0	50000	1	00000	A10CLQ	CLA	0,1	F1P09170	

01272	0	62100	0	01601	STA E3CLEQ	SAVE SUBSCRIPT OF EQ SYMBOL	F1P09160
01273	-0	53400	2	01576	LXD BOX2,2		F1P09190
01274	1	77777	2	01275	TXI A16CLQ,2,-1		F1P09200
01275	-0	63400	2	01356	A16CLQ SXD E1CLQ,2		F1P09210
01276	1	00001	2	01277	TXI A15CLQ,2,1		F1P09220
01277	-0	12000	0	01313	A15CLQ TMI A9CLQ	MATCHED SYMBOL IS END OF EQ SET	F1P09230
01300	1	77777	2	01301	A4CLQ TXI A3CLQ,2,-1	LOOP TO TRANSFER	F1P09240
01301	-2	00001	1	00000	A3CLQ TNX 0,1,1	TO MEEQ SYMBOLS OF	F1P09250
01302	0	50000	1	00000	A11CLQ CLA 0,1	EQ BELOW MATCHED SYMBOL	F1P09260
01303	0	60100	2	01614	STO MEEQ,2		F1P09270
01304	-2	00001	1	00000	TNX 0,1,1		F1P09280
01305	1	77777	2	01306	TXI A17CLQ,2,-1		F1P09290
01306	0	50000	1	00000	A17CLQ CLA 0,1		F1P09300
01307	-0	12000	0	01312	TMI A5CLQ		F1P09310
01310	0	60100	2	01614	STO MEEQ,2		F1P09320
01311	0	02000	0	01300	TRA A4CLQ		F1P09330
01312	0	62100	2	01614	A5CLQ STA MEEQ,2	SAVE SBSCR OF LAST SYMBOL OF EQ SET	F1P09340
01313	-0	53400	1	01577	A9CLQ LXD E1CLEQ,1		F1P09350
01314	-3	00000	1	01321	A6CLQ TXL A8CLQ,1,**	EXIT FOR MATCHED SYMBOL REACHED	F1P09360
01315	0	50000	1	00000	A12CLQ CLA 0,1	LOOP TO TRANSFER	F1P09370
01316	1	77777	2	01317	TXI A7CLQ,2,-1	TO MEEQ SYMBOLS OF	F1P09380
01317	0	60100	2	01614	A7CLQ STO MEEQ,2	EQ ABOVE MATCHED	F1P09390
01320	1	77777	1	01314	TXI A6CLQ,1,-1	SYMBOL	F1P09400
01321	-0	63400	2	01576	A8CLQ SXD BOX2,2		F1P09410
01322	-0	63400	2	01343	SXD D2CLQ,2		F1P09420
01323	-0	63400	2	01336	SXD D4CLQ,2		F1P09430
01324	-0	53400	1	01577	LXD E1CLEQ,1	INDICATE	F1P09440
01325	0	76000	0	00000	CLM	DELETED	F1P09450
01326	0	60200	1	00000	A13CLQ SLW 0,1	EQ SET	F1P09460
						NORMALIZATION OF MEEQ SUBSCRIPTS	F1P09470
01327	0	50000	0	01601	CLA E3CLEQ	GET EQ SUBSCRIPT	F1P09480
01330	0	40200	0	01600	SUB E2CLEQ	COMPARE WITH MEEQ SUBSCRIPT	F1P09490
01331	0	10000	0	01220	TZE C0CLQ	SUBSCRIPTS MATCH	F1P09500
01332	0	62100	0	01602	STA E4CLEQ		F1P09510
01333	0	12000	0	01350	TPL E0CLQ		F1P09520
						EQ SUBSCRIPT LESS THAN MEEQ SUBSCRIPT	F1P09530
01334	-0	53400	2	01356	LXD E1CLQ,2		F1P09540
01335	1	77777	2	01336	TXI D4CLQ,2,-1		F1P09550
01336	-3	00000	2	01344	D4CLQ TXL D3CLQ,2,**		F1P09560
01337	0	50000	2	01614	D1CLQ CLA MEEQ,2	NORMALIZE SUBSCRIPTS	F1P09570
01340	0	40000	0	01602	ADD E4CLEQ	OF NEW SYMBOLS	F1P09580
01341	0	62100	2	01614	STA MEEQ,2	IN MEEQ SET	F1P09590
01342	1	77776	2	01343	TXI D2CLQ,2,-2		F1P09600
01343	3	00000	2	01337	D2CLQ TXH D1CLQ,2,**		F1P09610
01344	0	50000	2	01614	D3CLQ CLA MEEQ,2	NORMALIZE SUBSCRIPT	F1P09620
01345	0	40000	0	01602	ADD E4CLEQ	OF LAST NEW SYMBOL	F1P09630
01346	0	62100	2	01614	STA MEEQ,2	ENTERED IN MEEQ SET	F1P09640
01347	0	02000	0	01220	TRA C0CLQ	GO TO COMPARISON ROUTINE	F1P09650
						EQ SUBSCRIPT GREATER THAN MEEQ SUBSCRIPT	F1P09660
01350	-0	53400	2	01575	E0CLQ LXD BOX1,2		F1P09670
01351	1	77777	2	01352	TXI E2CLQ,2,-1		F1P09680
01352	0	50000	2	01614	E2CLQ CLA MEEQ,2	NORMALIZE SUBSCRIPTS	F1P09690
01353	0	40000	0	01602	ADD E4CLEQ	OF OLD SYMBOLS	F1P09700
01354	0	62100	2	01614	STA MEEQ,2	IN MEEQ SET	F1P09710

01355	1	77776	2	01356		TXI E1CLQ,2,-2		F1P09720
01356	3	00000	2	01352	E1CLQ	TXH E2CLQ,2,**		F1P09730
01357	0	02000	0	01220		TRA C0CLQ	GO TO COMPARISON ROUTINE	F1P09740
01360	0	50000	0	01576	END	CLA BOX2	COMPUTE	F1P09750
01361	0	76000	0	00006		COM	NUMBER	F1P09760
01362	0	40000	0	07741		ADD DECR2	OF WORDS	F1P09770
01363	-0	73400	2	00000		PDX 0,2	IN TABLE	F1P09780
01364	-0	75400	2	00000		PXD 0,2	MEEQ AND	F1P09790
01365	0	62200	0	01613		STD MEEQM1	SAVE WITH TABLE	F1P09800
						REDUNDANCY AND INCONSISTENCY TEST OF EQUIVALENCE SENTENCES		F1P09810
01366	-0	53400	2	01576		LXD BOX2,2	INITIALIZATION	F1P09820
01367	-0	63400	2	01417		SXD M11CLQ,2	OF	F1P09830
01370	0	53400	2	01142		LXA OADDR,2	INDEXING	F1P09840
01371	-0	63400	2	01575		SXD BOX1,2		F1P09850
01372	-0	53400	2	01575	M6CLQ	LXD BOX1,2	OBTAIN	F1P09860
01373	0	50000	2	01614		CLA MEEQ,2	FIXED	F1P09870
01374	0	60100	0	01577		STO SMBL	SYMBOL	F1P09880
01375	1	77777	2	01376		TXI M10CLQ,2,-1	AND	F1P09890
01376	0	50000	2	01614	M10CLQ	CLA MEEQ,2	ITS	F1P09900
01377	0	60100	0	01600		STO SBSCR	SUBSCRIPT	F1P09910
01400	1	77777	2	01401		TXI M1CLQ,2,-1		F1P09920
01401	0	50000	2	01614	M1CLQ	CLA MEEQ,2	GET CHANGING SYMBOL AND	F1P09930
01402	0	34000	0	01577		CAS SMBL	COMPARE WITH FIXED SYMBOL	F1P09940
01403	0	02000	0	01405		TRA M2CLQ	NO MATCH	F1P09950
01404	0	02000	0	01423		TRA K1CLQ	MATCH	F1P09960
01405	1	77777	2	01406	M2CLQ	TXI M3CLQ,2,-1	HAS END OF CHANGING SYMBOLS	F1P09970
01406	0	50000	2	01614	M3CLQ	CLA MEEQ,2	BEEN REACHED, NO MATCH CASE	F1P09980
01407	-0	12000	0	01411		TMI M4CLQ	YES	F1P09990
01410	1	77777	2	01401		TXI M1CLQ,2,-1	NO	F1P10000
01411	-0	63400	2	01416	M4CLQ	SXD M7CLQ,2		F1P10010
01412	-0	53400	2	01575	M9CLQ	LXD BOX1,2	PREPARE TO GET	F1P10020
01413	1	77776	2	01414		TXI M5CLQ,2,-2	NEXT FIXED	F1P10030
01414	-0	63400	2	01575	M5CLQ	SXD BOX1,2	SYMBOL	F1P10040
01415	1	77777	2	01416		TXI M7CLQ,2,-1		F1P10050
01416	3	00000	2	01372	M7CLQ	TXH M6CLQ,2,**	TEST END OF MEEQ SET	F1P10060
01417	-3	00000	2	01450	M11CLQ	TXL CLQOUT,2,0		F1P10070
01420	1	77777	2	01421		TXI M8CLQ,2,-1		F1P10080
01421	-0	63400	2	01575	M8CLQ	SXD BOX1,2		F1P10090
01422	0	02000	0	01372		TRA M6CLQ		F1P10100
01423	1	77777	2	01424	K1CLQ	TXI K2CLQ,2,-1	GET SUBSCRIPT	F1P10110
01424	0	50000	2	01614	K2CLQ	CLA MEEQ,2	OF CHANGING SYMBOL	F1P10120
01425	-0	12000	0	01443		TMI K4CLQ	END OF SET REACHED	F1P10130
01426	0	34000	0	01600		CAS SBSCR	COMPARE SUBSCRIPTS OF MATCHED SYMBOL	F1P10140
01427	0	02000	0	01431		TRA K3CLQ	NO MATCH, INCONSISTENT CASE	F1P10150
01430	1	77777	2	01401		TXI M1CLQ,2,-1	MATCH, REDUNDANT CASE	F1P10160
01431	-0	53400	4	01442	K3CLQ	LXD NEWTBL,4		F1P10170
01432	3	00000	4	01435		TXH ERSTOR,4,0		F1P10180
01433	0	50000	0	07743		CLA FRCON		F1P10190
01434	0	60100	0	01614		STO MEEQ		F1P10200
01435	0	50000	0	01577	ERSTOR	CLA SMBL		F1P10210
01436	0	60100	4	01615		STO MEEQ+1,4		F1P10220
01437	1	77777	4	01440		TXI SAVIR4,4,-1		F1P10230
01440	-0	63400	4	01442	SAVIR4	SXD NEWTBL,4		F1P10240
01441	0	02000	0	01412		TRA M9CLQ	GET NEXT SYMBOL	F1P10250

01442	0	00000	0	00000	NEWTBL	HTR	0		F1P10260
01443	0	76000	0	00003	K4CLQ	SSP			F1P10270
01444	0	34000	0	01600		CAS	SBSCR		F1P10280
01445	0	02000	0	01431		TRA	K3CLQ		F1P10290
01446	0	02000	0	01412		TRA	M9CLQ		F1P10300
01447	0	02000	0	01431		TRA	K3CLQ		F1P10310
01450	-0	53400	4	01442	CLQOUT	LXD	NEWTBL,4		F1P10320
01451	-3	00000	4	01454		TXL	OUT,4,0		F1P10330
01452	0	50000	0	07743		CLA	FRCON		F1P10340
01453	0	60100	4	01615		STO	MEEQ+1,4		F1P10350
01454	0	07400	1	07656	OUT	TSX	WAT00,1	WRITE EQUIT ON TAPE.	F1P10360
01455	0	00000	0	00010			8		F1P10370
01456	0	00000	0	01614			MEEQ		F1P10380
01457	0	07400	1	07505		TSX	TAP00,1	ASSEMBLE TABLE CLOSUB	F1P10390
01460	0	00000	0	00011			9		F1P10400
01461	0	00000	0	01614	TOT9		9TA	ORIGIN OF TABLE 9	F1P10410
							PROGRAM FOR REMOVING DUPLICATE ENTRIES FROM TABLE CLOSUB		F1P10420
01462	0	50000	0	01613	RDCTP	CLA	9TA-1	GET NUMBER OF WORDS IN 9TA	F1P10430
01463	0	10000	0	01514		TZE	REC07	EXIT FOR EMPTY TABLE	F1P10440
01464	-0	73400	4	00000		PDX	0,4	SET INDEX C TO NUM OF WORDS IN 9TA	F1P10450
01465	0	77100	0	00022		ARS	18	COMPUTE TABLE ORIGIN PLUS	F1P10460
01466	0	40000	0	01461		ADD	TOT9	NUMBER OF WORDS IN TABLE	F1P10470
01467	0	62100	0	01473		STA	REC01	AND INITIALIZE ADDRESS	F1P10480
01470	-0	53400	2	01477		LXD	REC03,2	SET INDEX B TO COMP 1 AND	F1P10490
01471	-0	63400	2	01500		SXD	REC04,2	SAVE COMP 1 IN DECR OF REC04	F1P10500
01472	0	53400	2	07730	REC00	LXA	L(0),2	SET INDEX B TO ZERO	F1P10510
01473	0	50000	4	00000	REC01	CLA	0,4	GET 9TA WORD AND	F1P10520
01474	0	34000	2	01614	REC02	CAS	9TA,2	COMPARE WITH 9TA WORD	F1P10530
01475	0	02000	0	01477		TRA	REC03	9TA WORDS NOT EQUAL	F1P10540
01476	0	02000	0	01505		TRA	REC06	9TA WORDS ARE EQUAL	F1P10550
01477	1	77777	2	01500	REC03	TXI	REC04,2,-1	TAKE NEXT 9TA WORD	F1P10560
01500	3	00000	2	01474	REC04	TXH	REC02,2,**	TEST FOR END OF NEW 9TA TABLE	F1P10570
01501	-0	53400	1	01500		LXD	REC04,1	ADD COMP 1 TO DECR OF	F1P10580
01502	1	77777	1	01503		TXI	REC05,1,-1	REC04 TO ACCOUNT FOR	F1P10590
01503	-0	63400	1	01500	REC05	SXD	REC04,1	FOLLOWING ENTRY	F1P10600
01504	0	60100	2	01614		STO	9TA,2	ENTER UNEQUAL 9TA WORD IN TABLE	F1P10610
01505	2	00001	4	01472	REC06	TIX	REC00,4,1	TEST END OF OLD 9TA TABLE	F1P10620
01506	-0	53400	4	01500		LXD	REC04,4	GET TWOS COMP OF NUMBER	F1P10630
01507	-0	75400	4	00000		PXD	0,4	OF WORDS ENTERED IN 9TA	F1P10640
01510	0	76000	0	00006		COM		COMPUTE TRUE FIGURE AND	F1P10650
01511	0	40000	0	07731		ADD	L(1)	STORE IN 9TA-1	F1P10660
01512	-0	73400	4	00000		PDX	0,4		F1P10670
01513	-0	63400	4	01613		SXD	9TA-1,4		F1P10680
01514	0	07400	1	07656	REC07	TSX	WAT00,1	WRITE MODIFIED	F1P10690
01515	0	00000	0	00011		HTR	9	TABLE CLOSUB	F1P10700
01516	0	00000	0	01614		HTR	9TA	ON TAPE	F1P10710
01517	0	77000	0	00222		WEF	146	END OF TAPE TABLES FILE	F1P10720
01520	0	77200	0	00203		REW	3		F1P10730
01521	0	50000	0	01573		CLA	WAT99	CHANGE WAT SUB ROUTINE TO WRITE ON TAPE 3	F1P10740
01522	0	62100	0	07661		STA	WAT09		F1P10750
01523	0	62100	0	07701		STA	WAT05+2		F1P10760
01524	0	62100	0	07704		STA	WAT07-1		F1P10770
01525	0	62100	0	07721		STA	WAT08		F1P10780
01526	0	50000	0	07703		CLA	WAT05+4	NOP	F1P10790

01527	0	60100	0	07673	STO	WAT04-1	OVER COPY IDENTIFICATION	F1P10800
01530	0	60100	0	07674	STO	WAT04	OVER COPY WORD COUNT	F1P10810
01531	0	60100	0	07665	STO	WAT03-1	OVER STA FOR WORD COUNT	F1P10820
01532	0	50000	0	07752	CLA	TP3TRA		F1P10830
01533	0	60100	0	07676	STO	WAT04+2		F1P10840
01534	0	07400	1	07505	TSX	TAP00,1	ASSEMBLE NONEXC TABLE	F1P10850
01535	0	00000	0	00016		14		F1P10860
01536	0	00000	0	01614		XTA		F1P10870
01537	0	07400	1	07656	TSX	WAT00,1	WRITE NONEXC TABLE ON TAPE 3	F1P10880
01540	0	00000	0	00016		14		F1P10890
01541	0	00000	0	01614		XTA		F1P10900
01542	0	07400	1	07505	TSX	TAP00,1	ASSEMBLE TSTOPS TABLE	F1P10910
01543	0	00000	0	00017		15		F1P10920
01544	0	00000	0	01614		XTA		F1P10930
01545	0	07400	1	07656	TSX	WAT00,1	WRITE TSTOPS TABLE AS SECOND RECORD TAPE 3	F1P10940
01546	0	00000	0	00017		15		F1P10950
01547	0	00000	0	01614		XTA		F1P10960
01550	0	50000	0	00030	CLA	EIFNO		F1P10970
01551	0	40000	0	07740	ADD	DECR1	SET EIFNO TO LAST ADD IN PROBLEM PLUS 1	F1P10980
01552	0	60100	0	00030	STO	EIFNO		F1P10990
01553	-0	50000	0	07741	CAL	DECR2		F1P11000
01554	0	76000	0	00006	COM			F1P11010
01555	0	32000	0	00020	ANS	16		F1P11020
01556	0	50000	0	00034	CLA	ENDI4		F1P11030
01557	0	34000	0	07731	CAS	L(1)		F1P11040
01560	0	02000	0	01564	TRA	*+4		F1P11050
01561	0	50000	0	07741	CLA	DECR2		F1P11060
01562	-0	60200	0	00020	ORS	16		F1P11070
01563	0	02000	0	01571	TRA	SPACE		F1P11080
01564	-0	75400	0	00000	PXD	,0		F1P11090
01565	0	76000	0	00164	SWT	4		F1P11100
01566	0	02000	0	01571	TRA	SPACE		F1P11110
01567	0	50000	0	07741	CLA	DECR2		F1P11120
01570	-0	60200	0	00020	ORS	16		F1P11130
01571	0	76200	0	00221	SPACE	RTB 1		F1P11140
01572	0	02000	0	00004	TRA	4		F1P11150
01573	0	00000	0	00223	WAT99	147	ADD OF TAPE 3 IN BINARY MODE	F1P11160
							WORKING STORAGE FOR PROGRAM CLEQ	F1P11170
01574	0	00000	0	04551	L(EQ)	EQ		F1P11180
01575	0	00000	0	00000	BOX1			F1P11190
01576	0	00000	0	00000	BOX2			F1P11200
01577	0	00000	0	00000	E1CLEQ			F1P11210
01600	0	00000	0	00000	E2CLEQ			F1P11220
01601	0	00000	0	00000	E3CLEQ			F1P11230
01602	0	00000	0	00000	E4CLEQ			F1P11240
01603	0	00000	0	00000	E5CLEQ			F1P11250
							WORKING STORAGE FOR PROGRAM AMW	F1P11260
01604	0	00000	0	00000	E10			F1P11270
01605	0	00000	0	00000	E11		AMW2105	F1P11280
01606	0	00000	0	00000	A1BOX		AMW 2106	F1P11290
01607	0	00000	0	00000	A2BOX		AMW 2305	F1P11300
01610	0	00000	0	00000	IT1		AMW 2510	F1P11310
01611	0	00000	0	00000	E1RFT			F1P11320
01612	0	00000	0	00000	E2RFT			F1P11330

07553	0	70000	0	07753	CPY E1A	COPY IDENTIFICATION	F1P11880
07554	0	02000	0	07556	TRA TAP025		F1P11890
07555	0	07400	4	00004	TSX DIAG,4	EOF MACHINE ERROR	F1P11900
07556	0	50000	0	07753	CLA E1A		F1P11910
07557	0	40200	1	00001	SUB 1,1	TEST FOR RECORD OF TABLE BEING ASSEMBLED	F1P11920
07560	-0	10000	0	07552	TNZ READ4		F1P11930
07561	0	70000	2	00000	TAP03 CPY **,2		F1P11940
07562	1	77777	2	07617	TXI OVTEST,2,-1		F1P11950
07563	0	07400	4	00004	TSX DIAG,4	EOF MACHINE ERROR	F1P11960
07564	2	00001	4	07545	TIX TAP02,4,1		F1P11970
07565	0	76600	0	00333	TAP04 IOD		F1P11980
07566	-0	76000	0	00012	RTT		F1P11990
07567	0	02000	0	07621	TRA TAP14		F1P12000
07570	0	50000	0	00000	TAP05 CLA **		F1P12010
07571	0	77100	0	00022	ARS 18		F1P12020
07572	0	10000	0	07603	TZE TAP11		F1P12030
07573	0	73400	4	00000	PAX ,4		F1P12040
07574	0	40000	0	00000	TAP06 ADD **		F1P12050
07575	0	62100	0	07576	STA TAP07		F1P12060
07576	0	50000	4	00000	TAP07 CLA **,4		F1P12070
07577	0	60100	2	00000	TAP08 STO **,2		F1P12080
07600	1	77777	2	07601	TXI TAP081,2,-1		F1P12090
07601	-3	00000	2	07620	TAP081 TXL OVFLOW,2,**		F1P12100
07602	2	00001	4	07576	TAP09 TIX TAP07,4,1		F1P12110
07603	0	60000	0	00000	TAP11 STZ **		F1P12120
07604	-0	75400	2	00000	PXD ,2		F1P12130
07605	0	10000	0	07613	TZE TAP13		F1P12140
07606	0	77100	0	00022	ARS 18		F1P12150
07607	0	76000	0	00006	COM		F1P12160
07610	0	40000	0	07731	ADD L(1)		F1P12170
07611	0	73400	2	00000	PAX ,2		F1P12180
07612	-0	63400	2	00000	TAP12 SXD **,2		F1P12190
07613	0	56000	0	07754	TAP13 LDQ E2A		F1P12200
07614	-0	53400	2	07755	LXD E3A,2		F1P12210
07615	-0	53400	4	07756	LXD E4A,4		F1P12220
07616	0	02000	1	00003	TRA 3,1	RETURN TO CALLER	F1P12230
07617	3	00000	2	07561	OVTEST TXH TAP03,2,**		F1P12240
07620	0	07400	4	00004	OVFLOW TSX DIAG,4	BUFFER AREA EXCEEDED	F1P12250
07621	0	76400	0	00204	TAP14 BST 4		F1P12260
07622	1	00000	2	07623	TXI TAP14+2,2,**		F1P12270
07623	0	50000	0	07757	CLA E5A		F1P12280
07624	0	40200	0	07731	SUB L(1)		F1P12290
07625	0	60100	0	07757	STO E5A		F1P12300
07626	-0	10000	0	07552	TNZ READ4		F1P12310
07627	0	07400	4	00004	TSX DIAG,4	THREE FAILURES IN READING A RECORD FROM T4	F1P12320
07630	0	00000	0	00322	OAD INTET		F1P12330
				07631	BSS 3		F1P12340
					MAXIMUM NUMBER OF WORDS ALLOWED IN VARIOUS TABLES		F1P12350
07634	0	00000	0	77634	-100 FMTEFN, TABLE 17		F1P12360
07635	0	00000	0	77634	-100 CALLFN, TABLE 16		F1P12370
07636	0	00000	0	77324	-300 TSTOPS, TABLE 15		F1P12380
07637	0	00000	0	76422	-750 NONEXC, TABLE 14		F1P12390
07640	0	00000	0	76174	-900 HOLARG, TABLE 13		F1P12400
07641	0	00000	0	76650	-600 COMMON, TABLE 12		F1P12410

07642	0	00000	0	76174		-900	SUBDEF,	TABLE 11	F1P12420
07643	0	00000	0	75152	MWN	-1430	FORMAT,	TABLE 10	F1P12430
07644	0	00000	0	75044		-1500	CLOSUB,	TABLE 9	F1P12440
07645	0	00000	0	75044		-1500	EQUIT,	TABLE 8	F1P12450
07646	0	00000	0	76422		-750	FRET,	TABLE 7	F1P12460
07647	0	00000	0	76030		-1000	FORVAL,	TABLE 6	F1P12470
07650	0	00000	0	75044		-1500	FORVAR,	TABLE 5	F1P12480
07651	0	00000	0	75044		-1500	FORTAG,	TABLE 4	F1P12490
07652	0	00000	0	77406		-250	TRAD,	TABLE 3	F1P12500
07653	0	00000	0	76650		-600	TIFGO	TABLE 2	F1P12510
07654	0	00000	0	76422		-750	TDO,	TABLE 1	F1P12520
07655	0	00000	0	76422		-750	TEIFNO,	TABLE 0	F1P12530

PROGRAM FOR WRITING AN ASSEMBLED TABLE ON TAPE									
07656	-0	63400	2	07726	WAT00	SXD E1W,2		START PROGRAM WAT	F1P12540
07657	0	50000	0	07734		CLA L(4)	PREPARE TO COUNT		F1P12550
07660	0	60100	0	07727		STO E2W	TWO TAPE TESTS		F1P12560
07661	0	76600	0	00222	WAT09	WRS 146	PREPARE TO WRITE ON TAPE 2		F1P12570
07662	0	50000	1	00002		CLA 2,1	COMPUTE LOCATION OF NUMBER OF WORDS	F1P12580	
07663	0	40200	0	07731		SUB L(1)	IN TABLE AND INITIALIZE ADDRESSES	F1P12600	
07664	0	62100	0	07666		STA WAT03		F1P12610	
07665	0	62100	0	07674		STA WAT04		F1P12620	
07666	0	50000	0	00000	WAT03	CLA **	ADDRESS IS NTA-1	F1P12630	
07667	0	77100	0	00022		ARS 18	NUMBER OF WORDS IN TABLE PUT IN	F1P12640	
07670	0	73400	2	00000		PAX 0,2	INDEX B	F1P12650	
07671	0	40000	1	00002		ADD 2,1	RESET ADDRESS	F1P12660	
07672	0	62100	0	07677		STA WAT05		F1P12670	
07673	0	70000	1	00001		CPY 1,1	IDENTIFY TABLE ON TAPE	F1P12680	
07674	0	70000	0	00000	WAT04	CPY **	NUM OF WORDS IN TABLE PUT ON TAPE	F1P12690	
07675	0	40200	1	00002		SUB 2,1		F1P12700	
07676	0	10000	0	07724		TZE WAT06	NO ENTRIES IN TABLE	F1P12710	
07677	0	70000	2	00000	WAT05	CPY 0,2	ADDR IS NTA + NUM WORDS IN NTA	F1P12720	
07700	2	00001	2	07677		TIX WAT05,2,1	COPY LOOP	F1P12730	
07701	0	76400	0	00222		BST 146		F1P12740	
07702	-0	76000	0	00012		RTT		F1P12750	
07703	0	76100	0	00000		NOP		F1P12760	
07704	0	76200	0	00222		RDS 146		F1P12770	
07705	0	70000	0	07754	WAT07	CPY E2A		F1P12780	
07706	0	02000	0	07705		TRA WAT07		F1P12790	
07707	0	76100	0	00000		NOP	E O R	F1P12800	
07710	0	76600	0	00333		WRS 219	E O F	F1P12810	
07711	-0	76000	0	00012		RTT		F1P12820	
07712	0	02000	0	07714		TRA WAT10	TAPE CHECK ON	F1P12830	
07713	0	02000	0	07724		TRA WAT06	TAPE CHECK OFF	F1P12840	
07714	0	50000	0	07727	WAT10	CLA E2W		F1P12850	
07715	0	40200	0	07731		SUB L(1)		F1P12860	
07716	0	60100	0	07727		STO E2W		F1P12870	
07717	0	12000	0	07721		TPL WAT08		F1P12880	
07720	0	07400	4	00004		TSX DIAG,4	STOP FOR THIRD TAPE CHECK	F1P12890	
07721	0	76400	0	00222	WAT08	BST 146		F1P12900	
07722	0	02000	0	07661		TRA WAT09		F1P12910	
07723	0	70000	0	07730		CPY L(0)		F1P12920	
07724	-0	53400	2	07726	WAT06	LXD E1W,2	RESTORE INDEX B	F1P12930	
07725	0	02000	1	00003		TRA 3,1	RETURN TO MAIN PROGRAM	F1P12940	

THE FOLLOWING SYN CARDS ARE FOR PARAMETERS IN THE CARRY OVER
FROM SECTION ONE TO SECTION ONE PRIME.

00030 EIFNO SYN 24
 00031 ENDI1 SYN 25
 00034 ENDI4 SYN 28
 00322 INTET SYN 210
 00417 FXCNIX SYN 271
 00424 FLCNIX SYN 276
 00453 ORGDM1 SYN 299
 00455 DIM1IX SYN 301
 00460 ORGDM2 SYN 304
 00462 DIM2IX SYN 306
 00465 ORGDM3 SYN 309
 00467 DIM3IX SYN 311
 00470 BK SYN 312
 00471 FORSUB SYN 313
 00637 BBOX SYN 415
 00640 CIB SYN 416
 07760 END1PC BSS 0
 00000 END
 00001 0 ..

F1P13500
 F1P13510
 F1P13520
 F1P13530
 F1P13540
 F1P13550
 F1P13560
 F1P13570
 F1P13580
 F1P13590
 F1P13600
 F1P13610
 F1P13620
 F1P13630
 F1P13640
 F1P13650
 F1P13660
 F1P13670
 F1P13680
 F1P13690
 F1P13700

A

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	1371	0	0	0	0
LIB	0	0	0	0	0
COL	1371	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 1381

NUMBER OF SYMBOLS, DEF 421,DEFOP 0,UNDEF 1
 ORG 25

			00031		ORG	25		
			77777	ERLIST	SYN	32767		
			77633	TABLE	SYN	ERLIST-100		
			75435	TRADT	SYN	ERLIST-1250		
			75434	BETA	SYN	ERLIST-1251		
			75433	TIFGOT	SYN	ERLIST-1252		
			75433	ALPHA	SYN	ERLIST-1252		
			74303	NONEXT	SYN	ERLIST-1852		
00031	0	77200	0	00202	REW	2		
00032	0	77200	0	00203	REW	3		
00033	0	53400	4	01151	LXA	IR2,4		
00034	0	76200	0	00202	RDFILE	RTD	2	WILL READ ANY KIND OF END FILE MARK
00035	0	70000	0	00000	CPY	0		
00036	0	02000	0	00034	TRA	RDFILE		
00037	2	00001	4	00034	TIX	RDFILE,4,1		SPACE OVER 2 FILES AND OVER 1ST RECORD OF 3RD FILE
00040	0	76200	0	00222	RTB	2		
00041	0	76100	0	00000	NOP			
00042	0	53400	1	01152	LXA	IR4,1		
00043	0	70000	1	77634	CP	CPY	TABLE+1,1	
00044	1	00001	1	00043	TXI	CP,1,1		
00045	0	02000	0	00037	TRA	831		START AGAIN, CANNOT GET END FILE
00046	2	00001	1	00124	TIX	FORSUB,1,1		DROP COUNT OF 2ND FILE
00047	0	76200	0	00222	OVER	RTB	2	SPACE OVER END FILE AFTER FORSUB
00050	0	76200	0	00222	RTB	2		SPACE OVER FLOCON
00051	0	76200	0	00222	RTB	2		SPACE OVER FORMAT
00052	0	53400	1	01152	RDREC	LXA	IR4,1	
00053	0	76200	0	00222	RTB	2		
00054	0	70000	0	01174	CPY	IDENT		
00055	0	70000	0	01175	CPY	WDCONT		
00056	0	70000	1	77633	COPY	CPY	TABLE,1	ALTERNATE FOR READING TRAD CPY TRAD,2
00057	1	00001	1	00056	CPTXI	TXI	COPY,1,1	TIX COPYAA,1,1
00060	1	77777	4	00056	COPYAA	TXI	COPY,4,-1	
00061	-0	75400	1	00000	PXD	0,1		
00062	0	02000	0	01254	RDA	TRA	PTCH	NOP GOES HERE AFTER SIZ TABLES ARE READ
00063	0	40200	0	01175	SUBWDS	SUB	WDCONT	
00064	0	10000	0	00135	RDAAB	TZE	SIZ	TZE IDNTFY REPLACES THIS AFTER SIZ TABLES READ
00065	-0	53400	4	01201	LXD	BST,4		
00066	-3	00016	4	00072	TXL	TRY,4,14		
00067	0	56000	0	01174	LDQ	IDENT		
00070	0	07400	4	01033	BADWC	TSX	ERROR,4	
00071	0	02000	0	00777	TRA	DIAGND		
00072	1	00001	4	00073	TRY	TXI	RDSXD,4,1	
00073	-0	63400	4	01201	RDSXD	SXD	BST,4	
00074	0	76400	0	00202	BST	2		
00075	0	02000	0	00052	TRA	RDREC		
00076	0	60000	0	01201	IDNTFY	STZ	BST	FORMAT SIZE AND ALL TAPE TABLES HAVE IDENTIFICATION WORD AS FIRST WORD OF TAPE RECORD, NOT INCLUDED IN WORD COUNT
00077	0	53400	2	01253	LXA	TAPTAB,2		
00100	0	50000	0	01174	CLA	IDENT		
00101	0	34000	2	01253	CAS	CAS	TAPTAB,2	
00102	0	02000	0	00104	TRA	NEXT		
00103	0	02000	0	00116	TRA	HAVE		
00104	2	00002	2	00101	NEXT	TIX	CAS,2,2	
00105	-0	53400	4	01202	LXD	BSTA,4		BACK SPACE RECORD AND TRY AGAIN 15 TIMES IF NECESSARY
00106	-3	00016	4	00112	TXL	TRYA,4,14		

00107	0	56000	0	01174	LDQ	IDENT	
00110	0	07400	4	01033	NOIDEN	TSX	ERROR,4
00111	0	02000	0	00777		TRA	DIAGND
00112	1	00001	4	00113	TRYA	TXI	IDNSXD,4,1
00113	-0	63400	4	01202	IDNSXD	SXD	BSTA,4
00114	0	76400	0	00202		BST	2
00115	0	02000	0	00052		TRA	RDREC
00116	0	60000	0	01202	HAVE	STZ	BSTA
00117	0	50000	2	01254		CLA	TAPTAB+1,2
00120	0	62100	0	00121		STA	TRA
00121	0	02000	0	00000	TRA		TRA 0
00122	0	76200	0	00222	NOTIFG	RTB	2
00123	0	02000	0	00052		TRA	RDREC
00124	2	00002	1	00126	FORSUB	TIX	SAVEA,1,2
00125	0	53400	1	01152		LXA	IR4,1
00126	-0	63400	1	00133	SAVEA	SXD	TXLA,1
00127	0	53400	1	01152		LXA	IR4,1
00130	0	56000	1	77633	LDQA	LDQ	TABLE,1
00131	0	07400	4	01066	TSXA	TSX	CHECKA,4
00132	1	00002	1	00133		TXI	TXLA,1,2
00133	-3	00000	1	00130	TXLA	TXL	LDQA,1,0
00134	0	02000	0	00047		TRA	OVER
00135	-3	00000	1	00146	SIZ	TXL	SETRD,1,0
00136	2	00002	1	00140		TIX	SAVEB,1,2
00137	0	53400	1	01152		LXA	IR4,1
00140	-0	63400	1	00145	SAVEB	SXD	TXLB,1
00141	0	53400	1	01152		LXA	IR4,1
00142	0	56000	1	77633	LDQB	LDQ	TABLE,1
00143	0	07400	4	01066	TSXB	TSX	CHECKA,4
00144	1	00002	1	00145		TXI	TXLB,1,2
00145	-3	00000	1	00142	TXLB	TXL	LDQB,1,0
00146	0	76200	0	00222	SETRD	RTB	2
00147	0	76200	0	00222		RTB	2
00150	0	50000	0	01232		CLA	AFTRSZ
00151	0	62100	0	00064		STA	RDAAB
00152	0	50000	0	01205		CLA	NOP
00153	0	60100	0	00062		STO	RDA
00154	0	02000	0	00052		TRA	RDREC
00155	-3	00000	1	00052	SUBARG	TXL	RDREC,1,0
00156	2	00001	1	00160		TIX	SAVEC,1,1
00157	0	53400	1	01152		LXA	IR4,1
00160	-0	63400	1	00165	SAVEC	SXD	TXLC,1
00161	0	53400	1	01152		LXA	IR4,1
00162	0	56000	1	77633	LDQC	LDQ	TABLE,1
00163	0	07400	4	01066	TSXC	TSX	CHECKA,4
00164	1	00001	1	00165		TXI	TXLC,1,1
00165	-3	00000	1	00162	TXLC	TXL	LDQC,1,0
00166	0	02000	0	00052		TRA	RDREC
00167	-3	00000	1	00200	UPPER	TXL	UPPRTB,1,0
00170	2	00001	1	00172		TIX	SAVED,1,1
00171	0	53400	1	01152		LXA	IR4,1
00172	-0	63400	1	00177	SAVED	SXD	TXLD,1
00173	0	53400	1	01152		LXA	IR4,1
00174	0	56000	1	77633	LDQD	LDQ	TABLE,1

IF NO TIFGO ENTRY, IGNORE TRAD ENTRY

IF NO ENTRIES, GET NEXT TAPE RECORDS
REDUCE WORD COUNT FOR END OF ENTRIES TEST
IF TOO SMALL, SET TO ZERO

START AT FIRST ENTRY, THAT IS IR IS ZERO

GET NEXT 2 WORD ENTRY

SPACE OVER GAP AT END OF 4TH FILE
SPACE OVER 5 WORD END RECORD

RESET TEST AT END OF READ LOOP

INITIALIZATION OF END ENTRIES TEST

1 WORD ENTRIES

INITIALIZE END OF ENTRIES TEST

00175	0	07400	4	01066	TSXD	TSX	CHECKA,4	
00176	1	00001	1	00177		TXI	TXLD,1,1	1 WORD ENTRIES
00177	-3	00000	1	00174	TXLD	TXL	LDQD,1,0	
00200	0	76200	0	00222	UPPRTB	RTB	2	NO SCAN OF HOLARG RECORD
00201	0	02000	0	00052		TRA	RDREC	
00202	-3	00000	1	00052	TEIFNO	TXL	RDREC,1,0	INITIALIZE END OF ENTRIES TEST
00203	2	00001	1	00205		TIX	SAVEE,1,1	
00204	0	53400	1	01152		LXA	IR4,1	
00205	-0	63400	1	00214	SAVEE	SXD	TXLE,1	
00206	0	53400	1	01152		LXA	IR4,1	
00207	0	50000	1	77633	CLAE	CLA	TABLE,1	MINUS ENTRY MEANS BETA IS DUPLICATED IN SOURCE PROGRAM
00210	0	12000	0	00213		TPL	TSTE	
00211	0	56000	1	77633		LDQ	TABLE,1	
00212	0	07400	4	01033	TSXE	TSX	ERROR,4	
00213	1	00001	1	00214	TSTE	TXI	TXLE,1,1	
00214	-3	00000	1	00207	TXLE	TXL	CLAE,1,0	
00215	0	50000	0	01164		CLA	ADTIFG	
00216	0	62100	0	00056		STA	COPY	
00217	0	02000	0	00052		TRA	RDREC	
00220	-3	00000	1	01260	TIFGO	TXL	PATIF,1,0	IF NO ENTRIES, IGNORE TRAD IDENTIFICATION
00221	2	00002	1	00223		TIX	SAVEF,1,2	
00222	0	53400	1	01152		LXA	IR4,1	
00223	-0	63400	1	00310	SAVEF	SXD	TXLF,1	
00224	0	50000	0	01165		CLA	ADTRAD	SET READ LOOP TO READ TRAD UPWARDS IN MEMORY. BUT KEEP TRACK OF WORD COUNT AS USUAL
00225	0	60100	0	00056		STO	COPY	
00226	0	50000	0	01166		CLA	CPTRAD	
00227	0	62100	0	00057		STA	CPTXI	
00230	0	53400	4	01152		LXA	IR4,4	
00231	0	02000	0	00052		TRA	RDREC	
00232	0	50000	0	01163	TRAD	CLA	ADTABL	RESTORE COPY LOOP
00233	0	60100	0	00056		STO	COPY	
00234	0	50000	0	00060		CLA	COPYAA	
00235	0	62100	0	00057		STA	CPTXI	
00236	1	77777	4	00237		TXI	SXDG,4,-1	
00237	-0	63400	4	00572	SXDG	SXD	BETANB,4	SAVE NUMBER OF ENTRIES IN BETA TABLE ADD ONE TO LAST TEIFNO GET LAST TEIFNO
00240	0	50000	0	00030		CLA	24	
00241	0	76100	0	00000		NOP		
00242	0	77100	0	00022		ARS	18	
00243	0	60000	0	75434		STZ	BETA	
00244	0	62100	0	75434		STA	BETA	
00245	0	76200	0	00223		RTB	3	
00246	0	53400	2	01152		LXA	IR4,2	READ IN TABLE OF NON EXECUTABLE STATEMENTS AND SAVE DECREMENT OF TABLE IN ADDRESS OF MEMORY
00247	0	70000	0	00000	CPNON	CPY	0	
00250	-0	53400	4	00000		LXD	0,4	
00251	0	02000	0	00253		TRA	PXDH	
00252	0	02000	0	00257		TRA	SAVXNB	
00253	-0	75400	4	00000	PXDH	PXD	0,4	
00254	0	77100	0	00022		ARS	18	
00255	0	60100	2	74303		STO	NONEXT,2	
00256	1	00001	2	00247		TXI	CPNON,2,1	
00257	2	00001	2	00261	SAVXNB	TIX	SAVEH,2,1	SET END OF ENTRIES TEST
00260	0	53400	2	01152		LXA	IR4,2	
00261	-0	63400	2	01055	SAVEH	SXD	TXLH,2	SET END OF ENTRIES TEST
00262	0	53400	1	01152		LXA	IR4,1	

00263	0	50000	1	75433	CLAF	CLA	TIFGOT,1	SAVE ALPHA IN CASE OF ERROR, AND
00264	0	77100	0	00022		ARS	18	ALSO TO PUT IN ALPHA TABLE AT
00265	0	62100	0	01170		STA	ALFA	END OF PROCESSING EACH KIND OF TIFGO
00266	0	50000	1	75433		CLA	TIFGOT,1	DETERMINE KIND OF ENTRY
00267	-0	12000	0	00312		TMI	TIFMI	
00270	0	73400	2	00000		PAX	0,2	
00271	-3	00000	2	00345		TXL	TIFZRO,2,0	
00272	-3	00001	2	00363		TXL	TIFGO1,2,1	
00273	-3	00002	2	00410		TXL	TIFGO2,2,2	
00274	-3	00003	2	00435		TXL	TIFGO3,2,3	
00275	-3	00004	2	00461		TXL	TIFGO4,2,4	
00276	-3	00005	2	00505		TXL	TIFGO5,2,5	
00277	-3	00006	2	00531		TXL	TIFGO6,2,6	
00300	0	56000	1	75433		LDQ	TIFGOT,1	NOT IDENTIFYABLE, SAVE IN ERROR
00301	0	07400	4	01033	WHATIF	TSX	ERROR,4	TABLE, BUT PUT ALPHA IN TABLE ANYWAY
00302	-0	53400	4	00635	NXTIFG	LXD	ALFANB,4	STORE ALPHA IN TABLE
00303	0	50000	0	01170		CLA	ALFA	
00304	0	60100	4	75433		STO	ALPHA,4	
00305	1	00001	4	00306		TXI	FSAVE,4,1	
00306	-0	63400	4	00635	FSAVE	SXD	ALFANB,4	
00307	1	00002	1	00310	RETIF6	TXI	TXLF,1,2	TYPE 6 TIFGO ENTRIES DO NOT GO IN
00310	-3	00000	1	00263	TXLF	TXL	CLAF,1,0	ALPHA TABLE
00311	0	02000	0	00536		TRA	STOPS	WHEN TIFGO FINISHED, READ IN STOPS
00312	-0	32000	0	01157	TIFMI	ANA	ADDMSK	
00313	-0	10000	0	00316		TNZ	SAVEB1	IF BETA IS ZERO, THERE WAS NO ENTRY
00314	0	07400	4	01022	MINB1	TSX	NOBETA,4	CORRESPONDING TO IT IN COL 1 TO 5 OF
00315	0	02000	0	00321		TRA	NOWB2	SOURCE PROGRAM, SKIP REST OF PROCESSING
00316	0	07400	4	01047	SAVEB1	TSX	ISNONX,4	IF BETA IS NOT EXECUTABLE, DO NOT PUT IN
00317	-0	12000	0	00321		TMI	NOWB2	BETA TABLE
00320	0	07400	4	01131		TSX	MORBTS,4	
00321	0	50000	1	75432	NOWB2	CLA	TIFGOT-1,1	
00322	0	77100	0	00022		ARS	18	
00323	-0	32000	0	01157		ANA	ADDMSK	
00324	-0	10000	0	00327		TNZ	SAVEB2	
00325	0	07400	4	01022	MINB2	TSX	NOBETA,4	
00326	0	02000	0	00332		TRA	NOWB3	
00327	0	07400	4	01047	SAVEB2	TSX	ISNONX,4	
00330	-0	12000	0	00332		TMI	NOWB3	
00331	0	07400	4	01131		TSX	MORBTS,4	
00332	0	50000	1	75432	NOWB3	CLA	TIFGOT-1,1	
00333	-0	32000	0	01157		ANA	ADDMSK	
00334	-0	10000	0	00337		TNZ	SAVEB3	
00335	0	07400	4	01022	MINB3	TSX	NOBETA,4	
00336	0	02000	0	00342		TRA	ALFAD1	
00337	0	07400	4	01047	SAVEB3	TSX	ISNONX,4	
00340	-0	12000	0	00342		TMI	ALFAD1	
00341	0	07400	4	01131		TSX	MORBTS,4	
00342	0	50000	0	01156	ALFAD1	CLA	DECTRE	
00343	0	62200	0	01170		STD	ALFA	
00344	0	02000	0	00302		TRA	NXTIFG	
00345	0	50000	1	75432	TIFZRO	CLA	TIFGOT-1,1	
00346	-0	32000	0	01157		ANA	ADDMSK	
00347	-0	10000	0	00352		TNZ	TIFOB	
00350	0	07400	4	01022	TSXTFO	TSX	NOBETA,4	

00351	0	02000	0	00355	TRA	NEXTI	KEEP TRACK OF NUMBER OF BETAS
00352	0	07400	4	01047	TIFOB	TSX ISNONX,4	
00353	-0	12000	0	00355	TMI	NEXTI	
00354	0	07400	4	01131	TSX	MORBTS,4	
00355	0	50000	1	75432	NEXTI	CLA TIFGOT-1,1	DO NOT PUT IN ALPHA TABLE IF
00356	-0	73400	4	00000	PDX	0,4	ENTRY BY IRV FOR SAP INSTRUCTIONS
00357	3	00000	4	00307	TXH	RETIF6,4,0	
00360	0	50000	0	01154	CLA	DECONE	
00361	0	62200	0	01170	STD	ALFA	
00362	0	02000	0	00302	TRA	NXTIFG	
00363	0	60000	0	01172	TIFGO1	STZ TRADNB	
00364	0	50000	1	75432	CLAJ	CLA TIFGOT-1,1	PREPARE TO READ RELATED TRAD ENTRIES
00365	-0	73400	2	00000	PDX	0,2	
00366	0	76700	0	00022	ALS	18	
00367	0	62200	0	00404	STD	TXHJ	
00370	0	50000	2	76027	MORTR	CLA TRADT+250,2	
00371	-0	10000	0	00374	TNZ	TRADX1	
00372	0	07400	4	01022	BTIFG1	TSX NOBETA,4	
00373	0	02000	0	00400	TRA	ADDJ	
00374	0	07400	4	01047	TRADX1	TSX ISNONX,4	IF TRAD IS NON EXECUTABLE, MAKE ENTRY
00375	0	12000	0	00400	TPL	ADDJ	FAIL ANY ALPHA PLUS 1 SEARCH LATER ON
00376	0	50000	0	01154	CLA	DECONE	BY PUTING NUMBER IN DECFIELD
00377	0	62200	2	76027	STD	TRADT+250,2	BUT KEEP TRACK OF NUMBER OF BRANCHES GIVEN
00400	0	50000	0	01172	ADDJ	CLA TRADNB	
00401	0	40000	0	01154	ADD	DECONE	
00402	0	60100	0	01172	STO	TRADNB	
00403	1	77777	2	00404	TXI	TXHJ,2,-1	
00404	3	00000	2	00370	TXHJ	TXH MORTR,2,0	
00405	0	50000	0	01172	CLA	TRADNB	
00406	0	62200	0	01170	STD	ALFA	
00407	0	02000	0	00302	TRA	NXTIFG	
00410	0	60000	0	01172	TIFGO2	STZ TRADNB	
00411	0	50000	1	75432	CLAK	CLA TIFGOT-1,1	
00412	-0	73400	2	00000	PDX	0,2	
00413	0	76700	0	00022	ALS	18	
00414	0	62200	0	00431	STD	TXHK	
00415	0	50000	2	76027	MORTRD	CLA TRADT+250,2	
00416	-0	10000	0	00421	TNZ	TRADX2	
00417	0	07400	4	01022	BTIFG2	TSX NOBETA,4	
00420	0	02000	0	00425	TRA	ADDK	
00421	0	07400	4	01047	TRADX2	TSX ISNONX,4	
00422	0	12000	0	00425	TPL	ADDK	
00423	0	50000	0	01154	CLA	DECONE	
00424	0	62200	2	76027	STD	TRADT+250,2	
00425	0	50000	0	01172	ADDK	CLA TRADNB	
00426	0	40000	0	01154	ADD	DECONE	
00427	0	60100	0	01172	STO	TRADNB	
00430	1	77777	2	00431	TXI	TXHK,2,-1	
00431	3	00000	2	00415	TXHK	TXH MORTRD,2,0	
00432	0	50000	0	01172	CLA	TRADNB	
00433	0	62200	0	01170	STD	ALFA	
00434	0	02000	0	00302	TRA	NXTIFG	
00435	0	50000	1	75432	TIFGO3	CLA TIFGOT-1,1	
00436	0	77100	0	00022	ARS	18	

00437	-0	32000	0	01157		ANA	ADDMSK
00440	-0	10000	0	00443		TNZ	TIF3B1
00441	0	07400	4	01022	B1TIF3	TSX	NOBETA,4
00442	0	02000	0	00446		TRA	NEXTL
00443	0	07400	4	01047	TIF3B1	TSX	ISNONX,4
00444	-0	12000	0	00446		TMI	NEXTL
00445	0	07400	4	01131		TSX	MORBTS,4
00446	0	50000	1	75433	NEXTL	CLA	TIFGOT-1*,1
00447	-0	32000	0	01157		ANA	ADDMSK
00450	-0	10000	0	00453		TNZ	TIF3B2
00451	0	07400	4	01022	B2TIF3	TSX	NOBETA,4
00452	0	02000	0	00456		TRA	ADDL
00453	0	07400	4	01047	TIF3B2	TSX	ISNONX,4
00454	-0	12000	0	00456		TMI	ADDL
00455	0	07400	4	01131		TSX	MORBTS,4
00456	0	50000	0	01155	ADDL	CLA	DECTWO
00457	0	62200	0	01170		STD	ALFA
00460	0	02000	0	00302		TRA	NXTIFG
00461	0	50000	1	75432	TIFGO4	CLA	TIFGOT-1,1
00462	0	77100	0	00022		ARS	18
00463	-0	32000	0	01157		ANA	ADDMSK
00464	-0	10000	0	00467		TNZ	TIF4B1
00465	0	07400	4	01022	B1TIF4	TSX	NOBETA,4
00466	0	02000	0	00472		TRA	NEXTM
00467	0	07400	4	01047	TIF4B1	TSX	ISNONX,4
00470	-0	12000	0	00472		TMI	NEXTM
00471	0	07400	4	01131		TSX	MORBTS,4
00472	0	50000	1	75432	NEXTM	CLA	TIFGOT-1,1
00473	-0	32000	0	01157		ANA	ADDMSK
00474	-0	10000	0	00477		TNZ	TIF4B2
00475	0	07400	4	01022	B2TIF4	TSX	NOBETA,4
00476	0	02000	0	00502		TRA	ADDM
00477	0	07400	4	01047	TIF4B2	TSX	ISNONX,4
00500	-0	12000	0	00502		TMI	ADDM
00501	0	07400	4	01131		TSX	MORBTS,4
00502	0	50000	0	01155	ADDM	CLA	DECTWO
00503	0	62200	0	01170		STD	ALFA
00504	0	02000	0	00302		TRA	NXTIFG
00505	0	50000	1	75432	TIFGO5	CLA	TIFGOT-1,1
00506	0	77100	0	00022		ARS	18
00507	-0	32000	0	01157		ANA	ADDMSK
00510	-0	10000	0	00513		TNZ	TIF5B1
00511	0	07400	4	01022	B1TIF5	TSX	NOBETA,4
00512	0	02000	0	00516		TRA	NEXTN
00513	0	07400	4	01047	TIF5B1	TSX	ISNONX,4
00514	-0	12000	0	00516		TMI	NEXTN
00515	0	07400	4	01131		TSX	MORBTS,4
00516	0	50000	1	75432	NEXTN	CLA	TIFGOT-1,1
00517	-0	32000	0	01157		ANA	ADDMSK
00520	-0	10000	0	00523		TNZ	TIF5B2
00521	0	07400	4	01022	B2TIF5	TSX	NOBETA,4
00522	0	02000	0	00526		TRA	ADDN
00523	0	07400	4	01047	TIF5B2	TSX	ISNONX,4
00524	-0	12000	0	00526		TMI	ADDN

00525	0	07400	4	01131		TSX MORBTS,4	
00526	0	50000	0	01155	ADDN	CLA DECTWO	
00527	0	62200	0	01170		STD ALFA	
00530	0	02000	0	00302		TRA NXTIFG	
00531	0	50000	1	75432	TIFGO6	CLA TIFGOT-1,1	
00532	-0	32000	0	01157		ANA ADDMSK	
00533	-0	10000	0	00307		TNZ RETIF6	
00534	0	07400	4	01022	TIF6B	TSX NOBETA,4	
00535	0	02000	0	00307		TRA RETIF6	
00536	0	76200	0	00223	STOPS	RTB 3	
00537	-0	53400	1	00635		LXD ALFANB,1	LOAD NUMBER ALREADY IN ALPHA TABLE
00540	0	70000	0	00000	CPSTOP	CPY 0	READ TABLE OF STOPS INTO REST OF
00541	-0	53400	4	00000		LXD 0,4	ALPHA TABLE, PUT DECREMENT OF
00542	0	02000	0	00544		TRA PDXP	TAPE TABLE INTO ADDRESS OF MEMORY
00543	0	02000	0	00550		TRA TIXP	
00544	-0	75400	4	00000	PDXP	PXD 0,4	
00545	0	77100	0	00022		ARS 18	
00546	0	60100	1	75433		STO ALPHA,1	
00547	1	00001	1	00540		TXI CPSTOP,1,1	
00550	2	00001	1	00552	TIXP	TIX NEXTP,1,1	
00551	0	53400	1	01152		LXA IR4,1	
00552	-0	63400	1	00600	NEXTP	SXD ENDALF,1	
00553	-0	63400	1	00635		SXD ALFANB,1	
00554	-0	63400	1	00754		SXD FRETST,1	
00555	0	50000	0	01167		CLA CHNONX	RESET ISNONX ROUTINE SO IT IS
00556	0	62100	0	01053		STA YESNOX	MERELY INFORMATIVE AND DOES NOT
00557	0	53400	1	01152		LXA IR4,1	MAKE ENTRIES IN ERROR TABLE
00560	0	50000	1	75433	CLAQ	CLA ALPHA,1	
00561	0	02000	0	01271	QADD	TRA PAQADD	
00562	0	60000	0	01170	ADDQ	STZ ALFA	
00563	0	62100	0	01170		STA ALFA	
00564	0	53400	2	01152		LXA IR4,2	
00565	0	50000	2	75434	NXTBTA	CLA BETA,2	
00566	0	34000	0	01170		CAS ALFA	
00567	0	02000	0	00571		TRA NEXTQ	
00570	0	02000	0	00577		TRA NXTALF	
00571	1	77777	2	00572	NEXTQ	TXI BETANB,2,-1	
00572	3	00000	2	00565	BETANB	TXH NXTBTA,2,0	
00573	0	50000	0	01170		CLA ALFA	
00574	0	07400	4	01047		TSX ISNONX,4	IF ALPHA PLUS 1 IN NONX, THEN LOOK IN BETA
00575	-0	12000	0	00602		TMI ALAND1	TABLE FOR ALPHA +2 ETC
00576	0	07400	4	01022	NOTRA	TSX NOBETA,4	NOT EITHER TABLE, PART OF PROG NOT ENTERED
00577	1	00001	1	00600	NXTALF	TXI ENDALF,1,1	
00600	-3	00000	1	00560	ENDALF	TXL CLAQ,1,0	
00601	0	02000	0	00052		TRA RDREC	
00602	0	50000	0	01170	ALAND1	CLA ALFA	
00603	0	02000	0	00561		TRA QADD	
00604	-3	00000	1	00723	TDO	TXL SPACES,1,0	
00605	2	00005	1	00607		TIX SAVES,1,5	INITIALIZE END OF ENTRIES TEST
00606	0	53400	1	01152		LXA IR4,1	
00607	-0	63400	1	00722	SAVES	SXD TXLS,1	
00610	0	53400	1	01152		LXA IR4,1	
00611	0	50000	1	77633	CLADO	CLA TABLE,1	
00612	-0	32000	0	01160		ANA TAGMSK	SAVE TAG FIELD FOR PROCESSING N1,N2,N3

00613	0	76700	0	00022	ALS	18	
00614	0	63000	0	01203	STP	DOTAG	
00615	0	50000	1	77633	CLA	TABLE,1	SAVE ALPHA IN CASE OF ERROR
00616	0	77100	0	00022	ARS	18	
00617	0	62100	0	01170	STA	ALFA	
00620	0	50000	1	77633	CLA	TABLE,1	
00621	-0	32000	0	01157	ANA	ADDMSK	
00622	-0	10000	0	00625	TNZ	BINTIF	
00623	0	07400	4	01022	DONOB	TSX NOBETA,4	
00624	0	02000	0	00643	TRA	DOALF	
00625	0	53400	2	01152	BINTIF	LXA IR4,2	IS BETA IN DO TABLE A CONDITIONAL
00626	0	60100	0	01204	STO	DOBETA	TRANSFER, THAT IS, IS IT IN ALPHA TABLE
00627	0	50000	2	75433	SCLA	CLA ALPHA,2	
00630	-0	32000	0	01157	ANA	ADDMSK	MASK OUT NUMBER OF BRANCHES
00631	0	34000	0	01204	CAS	DOBETA	
00632	0	02000	0	00634	TRA	TIXS	
00633	0	02000	0	00727	TRA	CONBET	THIS IS AN ERROR
00634	1	00001	2	00635	TIXS	TXI ALFANB,2,1	
00635	-3	00000	2	00627	ALFANB	TXL SCLA,2,0	
00636	0	50000	0	01204	CLA	DOBETA	
00637	0	07400	4	01047	TSX	ISNONX,4	
00640	0	12000	0	00643	TPL	DOALF	IF BETA IN TO IS NON EXECUTABLE THIS
00641	0	07400	4	01022	DOBTNX	TSX NOBETA,4	
00642	0	07400	4	01141	TSX	ADOB,4	
00643	0	50000	0	01170	DOALF	CLA ALFA	
00644	-0	32000	0	01157	ANA	ADDMSK	CLEAR ANY HASH LEFT FROM ERROR RECODING
00645	0	40000	0	01153	ADD	ADDONE	
00646	0	07400	4	01047	TSX	ISNONX,4	IF ALPHA PLUS 1 IS NON EXECUTABLE
00647	0	12000	0	00652	TPL	DOSYMB	THIS IS ERROR
00650	0	07400	4	01022	DOALNX	TSX NOBETA,4	
00651	0	07400	4	01141	TSX	ADOB,4	
00652	0	56000	1	77632	DOSYMB	LDQ TABLE-1,1	DOES SYMBOL CONTAIN ANY ILLEGAL
00653	0	07400	4	01066	PUNSYM	TSX CHECKA,4	PUNCTUATION
00654	0	12000	0	00656	TPL	IJKSYM	
00655	0	07400	4	01141	TSX	ADOB,4	
00656	0	07400	4	01113	IJKSYM	TSX CHECKB,4	DOES SYMBOL BEGIN WITH IJKLM OR N
00657	0	12000	0	00661	TPL	NL	
00660	0	07400	4	01141	TSX	ADOB,4	
00661	-0	50000	0	01203	NL	CAL DOTAG	
00662	-0	76000	0	00001	PBT		
00663	0	02000	0	00674	TRA	N2+1	NO
00664	0	56000	1	77631	LDQ	TABLE-2,1	YES
00665	0	07400	4	01066	PUNN1	TSX CHECKA,4	
00666	0	12000	0	00670	TPL	IJKN1	
00667	0	07400	4	01141	TSX	ADOB,4	
00670	0	07400	4	01113	IJKN1	TSX CHECKB,4	
00671	0	12000	0	00673	TPL	N2	
00672	0	07400	4	01141	TSX	ADOB,4	
00673	-0	50000	0	01203	N2	CAL DOTAG	
00674	0	76700	0	00001	ALS	1	
00675	-0	76000	0	00001	PBT		
00676	0	02000	0	00706	TRA	N3	
00677	0	56000	1	77630	LDQ	TABLE-3,1	
00700	0	07400	4	01066	PUNN2	TSX CHECKA,4	

00701	0	12000	0	00703	TPL	IJKN2		
00702	0	07400	4	01141	TSX	ADOB,4		
00703	0	07400	4	01113	IJKN2	TSX	CHECKB,4	
00704	0	12000	0	00706	TPL	N3		
00705	0	07400	4	01141	TSX	ADOB,4		
00706	-0	50000	0	01203	N3	CAL	DOTAG	
00707	0	76700	0	00002	ALS	2		
00710	-0	76000	0	00001	PBT			
00711	0	02000	0	00721	TRA	NXTDO		
00712	0	56000	1	77627	LDQ	TABLE-4,1		
00713	0	07400	4	01066	PUNN3	TSX	CHECKA,4	
00714	0	12000	0	00716	TPL	IJKN3		
00715	0	07400	4	01141	TSX	ADOB,4		
00716	0	07400	4	01113	IJKN3	TSX	CHECKB,4	
00717	0	12000	0	00721	TPL	NXTDO		
00720	0	07400	4	01141	TSX	ADOB,4		
00721	1	00005	1	00722	NXTDO	TXI	TXLS,1,5	
00722	-3	00000	1	00611	TXLS	TXL	CLADO,1,0	
00723	0	76200	0	00222	SPACES	RTB	2	SPACE OVER FORVAL
00724	0	76200	0	00222		RTB	2	SPACE OVER FORVAR
00725	0	76200	0	00222		RTB	2	SPACE OVER FORTAG
00726	0	02000	0	00052	TRA	RDREC		
00727	0	07400	4	01022	CONBET	TSX	NOBETA,4	
00730	0	07400	4	01141	TSX	ADOB,4		
00731	0	02000	0	00643	TRA	DOALF		AND TEST ALPHA
00732	-3	00002	1	00052	FRET	TXL	RDREC,1,2	GO THRO THIS TABLE FROM LAST TO FIRST
00733	0	53400	2	01152	NEXTT	LXA	IR4,2	
00734	0	50000	1	77634	CLAT	CLA	TABLE+1,1	
00735	-0	12000	0	00740	TMI	NEWFRT		
00736	1	00001	2	00737	TXI	TNEXT,2,1		
00737	2	00001	1	00734	TNEXT	TIX	CLAT,1,1	WILL NOT FAIL BEFORE THE TMI
00740	-0	63400	2	01206	NEWFRT	SXD	FRETNB,2	SAVE NUMBER OF FREQUENCIES
00741	-0	32000	0	01157	ANA	ADDMSK		
00742	0	60100	0	01170	STO	ALFA		FREQUENCY OF BETA IS IGNORED BY
00743	-0	10000	0	00745	TRN	BRANCH		FORTRAN IF NO CORRESPONDING BETA IN
00744	0	02000	0	00763	TRA	NXTFRT		COLUMN 1 TO 5 OF SOURCE PROGRAM
00745	0	53400	4	01152	BRANCH	LXA	IR4,4	
00746	0	50000	4	75433	TCLAT	CLA	ALPHA,4	
00747	-0	32000	0	01157	ANA	ADDMSK		
00750	0	34000	0	01170	CAS	ALFA		
00751	0	02000	0	00753	TRA	TIXT		
00752	0	02000	0	00756	TRA	HAVALF		
00753	1	00001	4	00754	TIXT	TXI	FRETST,4,1	
00754	-3	00000	4	00746	FRETST	TXL	TCLAT,4,0	SET AT END OF READING IN STOP TABLE
00755	0	02000	0	00763	TRA	NXTFRT		
00756	0	50000	4	75433	HAVALF	CLA	ALPHA,4	THE ONLY TIME A FREQUENCY STATEMENT CAN
00757	-0	32000	0	01161	ANA	DECMSK		LOUSE UP THE OBJECT PROGRAM IS WHEN
00760	0	40200	0	01206	SUB	FRETNB		THERE ARE MORE FREQUENCIES GIVEN THAN
00761	0	12000	0	00763	TPL	NXTFRT		BRANCHES.
00762	0	07400	4	01022	FRETIF	TSX	NOBETA,4	
00763	2	00001	1	00733	NXTFRT	TIX	NEXTT,1,1	
00764	0	02000	0	00052	TRA	RDREC		
00765	0	50000	0	77633	EQUIV	CLA	TABLE	FIRST WORD IN TABLE WILL BE 35 ONES
00766	0	40200	0	01162	SUB	MSK35		IF THERE HAVE BEEN INCONSISTANT

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00767 -0 10000 0 00777          TNZ DIAGND
00770  0 53400 1 01152          LXA IR4,1
00771  0 50000 1 77632 NXTEQV  CLA TABLE-1,1
00772  0 40200 0 01162          SUB MSK35          LAST INCONSISTANCY IS FOLLOWED BY
00773  0 10000 0 00777          TZE DIAGND        ANOTHER WORD OF ONES
00774  0 56000 1 77632          LDQ TABLE-1,1
00775  0 07400 4 01033 NOTEQV  TSX ERROR,4
00776  1 00001 1 00771          TXI NXTEQV,1,1
00777  0 50000 0 01173 DIAGND  CLA ERNBR
01000  0 10000 0 01263          TZE SPACE2       IF NO ERROR, READ IN SECTION II
01001  0 60100 0 00030          STO 24          SAVE FOR BIG D
01002  0 50000 0 01171          CLA TW13        PUT RECORD NUMBER IN 2 FOR PRINT OUT
01003  0 60100 0 00002          STO 2
01004  0 53400 2 01152          LXA IR4,2
01005  0 76200 0 00201 DIAGRD  RTD 1          SPACE OVER REST OF SYSTEM IN FORTRAN
01006  0 70000 0 00000          CPY 0
01007  0 02000 0 01005          TRA DIAGRD
01010  1 00001 2 01011          TXI TST2FL,2,1
01011 -3 00001 2 01005 TST2FL  TXL DIAGRD,2,1
01012  0 76200 0 00221          RTB 1          END FILE SKIP, START TO READ BIG D
01013  0 53400 1 01152          LXA IR4,1
01014  0 70000 1 00031 DCPY    CPY 25,1
01015  1 77777 1 01014          TXI DCPY,1,-1
01016  0 76100 0 00000          NOP
01017  0 07400 4 00032 BIGD    TSX 26,4
01020  0 76100 0 00000 REW    NOP          REPLACED BY SPACE2 AT 1263. WAS REWIND
01021  0 76100 0 00000          NOP
                                ENTER WITH AC ZERO. EXIT WITH TSX FROM TABLE
                                WHICH HAS MISSING BETA, IN DEC OF AC AND
                                ALPHA IN ADDRESS OF AC.
01022 -0 63400 4 01170 NOBETA  SXD ALFA,4
01023  0 07400 4 01026          TSX SAVALF,4
01024 -0 53400 4 01170          LXD ALFA,4
01025  0 02000 4 00001          TRA 1,4
                                ENTER WITH HASH IN AC. EXIT WITH CONTENTS OF ALPHA IN AC
01026 -0 63400 4 01177 SAVALF  SXD ERAS,4
01027 -0 53400 4 01173          LXD ERNBR,4
01030  0 50000 0 01170          CLA ALFA
01031  0 60100 4 77777          STO ERLIST,4
01032  1 00001 4 01044          TXI NEXTA,4,1   SAME RETURN AS ERROR ROUTINE.
                                ENTER WITH MQ=BCD SYMBOL OR HASH,0, ALPHA
                                MAKES 2 WORD ENTRY IN ERROR LIST
                                1...KIND OF ERROR,0, TABLE IN WHICH ERROR FOUND
                                2...CONTENTS OF MQ
                                EXIT AC HASH, MQ NOT CHANGED
01033 -0 75400 4 00000 ERROR   PXD 0,4       PUT TSX FROM SECTION SCANNING
01034 -0 53400 4 01173          LXD ERNBR,4     FOR ERROR, IN DEC OF 1ST WORD
01035  0 62200 0 01177          STD ERAS
01036  0 62200 4 77777          STD ERLIST,4
01037  0 50000 0 01152          CLA IR4        PUT TSX FROM DABLE IN WHI+H
01040  0 77100 0 00022          ARS 18        ERROR WAS FOUND, IN ADDR. OF 1ST WORD
01041  0 62100 4 77777          STA ERLIST,4
01042 -0 60000 4 77776          STQ ERLIST-1,4 PUT MQ IN 2ND WORD
01043  1 00002 4 01044          TXI NEXTA,4,2

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01044 -0 63400 4 01173 NEXTA SXD ERNBR,4
01045 -0 53400 4 01177 LXD ERAS,4
01046 0 02000 4 00001 TRA 1,4
ENTER WITH AC ALL ZERO, EXCEPT ADDRESS WHICH HAS BETA
FROM TIFGO OR TDO, OR ALPHA+1 FROM SAME. EXIT SAME, EXCEPT
WHERE MATCH IS FOUND, THEN AC HAS HASH
01047 -0 63400 4 01152 ISNONX SXD IR4,4 ERROR WILL RECORD WHICH TABLE WAS SCANNED
01050 0 02000 0 01274 TRA PATS2
01051 0 34000 2 74303 CASH CAS NONEXT,2
01052 0 02000 0 01054 TRA NEXTH
01053 0 02000 0 01057 YESNOX TRA NONEXB THIS WILL BE CHANGED TO BYPASS ERROR WHEN
01054 1 00001 2 01055 NEXTH TXI TXLH,2,1 SCANNING BETA TABLE
01055 -3 00000 2 01051 TXLH TXL CASH,2,0
01056 0 02000 0 01277 TRA PATRE2
01057 0 76700 0 00022 NONEXB ALS 18 ERROR, SAVE BETA AND ALPHA IN LIST
01060 0 62200 0 01170 STD ALFA
01061 0 56000 0 01170 LDQ ALFA
01062 0 07400 4 01033 TSXH TSX ERROR,4
01063 -0 53400 4 01152 INFORM LXD IR4,4
01064 -0 76000 0 00003 SSM SET RETURN TO SHOW ERROR
01065 0 02000 0 01277 TRA PATRE2
ENTER WITH HASH IN AC MQ HAS BCD SYMBOL. EXIT WITH HASH IN
AC AMD MQ, SYMBOL IS STORED IN NAME. DC IS MINUS ONLY WHEN
ILLEGAL CHARACTER PRESENT
01066 -0 60000 0 01176 CHECKA STQ NAME
01067 -0 63400 4 01152 SXD IR4,4
01070 -0 63400 2 01151 SXD IR2,2
01071 -0 63400 1 01150 SXD IR1,1
01072 -0 53400 1 01231 LXD SYMBL,1 6 INTO IR1
01073 0 53400 2 01231 NXTNAM LXA SYMBL,2 10 INTO IR2
01074 -0 75400 0 00000 PXD 0,0 CLEAR AC AND COMPARE NEXT BCD
01075 -0 76300 0 00006 LGL 6 CHARACTER WITH TABLE OF ILLEGAL SYMBOLS
01076 0 34000 2 01231 ACAS CAS SYMBL,2
01077 0 02000 0 01101 TRA ATIX
01100 0 02000 0 01107 TRA WRONG
01101 2 00001 2 01076 ATIX TIX ACAS,2,1 GET NEXT ILLEGAL SYMBOL FOR COMPARISON
01102 2 00001 1 01073 TIX NXTNAM,1,1 GET NEXT BCD CHARACTER FOR COMPARISON
01103 -0 53400 4 01152 RETNA LXD IR4,4
01104 -0 53400 2 01151 LXD IR2,2
01105 -0 53400 1 01150 LXD IR1,1
01106 0 02000 4 00001 TRA 1,4
01107 0 56000 0 01176 WRONG LDQ NAME
01110 0 07400 4 01033 CHATSX TSX ERROR,4
01111 -0 76000 0 00003 SSM SIGNAL THAT ERROR HAS BEEN PICKED UP
01112 0 02000 0 01103 TRA RETNA
ENTER WITH HASH IN AC + MQ, EXIT SAME EXCEPT WHERE NO MATCH
THEN MINUS
01113 0 56000 0 01176 CHECKB LDQ NAME
01114 -0 63400 4 01152 SXD IR4,4
01115 0 53400 4 01215 LXA IJK,4
01116 -0 75400 0 00000 PXD 0,0
01117 -0 76300 0 00006 LGL 6
01120 0 34000 4 01215 BCAS CAS IJK,4
01121 0 02000 0 01123 TRA BTIX

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01122	0	02000	0	01127	TRA	RETNB	
01123	2	00001	4	01120	BTIX	TIX	BCAS,4,1
01124	0	56000	0	01176	LDQ	NAME	
01125	0	07400	4	01033	CHBTSX	TSX	ERROR,4
01126	-0	76000	0	00003	SSM		
01127	-0	53400	4	01152	RETNB	LXD	IR4,4
01130	0	02000	4	00001	TRA	1,4	
							ENTER WITH BETA FROM TIFGO ENTRIES WHICH ARE MINUS OR HAVE 0, 3,4,5 OR 6 IN ADDRESS OF 1ST WORD. TIFGO 1 AND 2 ARE ALREADY IN BETA TABLE. EXIT WITH SAME.
01131	-0	63400	4	01177	MORBTS	SXD	ERAS,4
01132	-0	53400	4	00572	LXD	BETANB,4	
01133	0	60100	4	75434	STOBET	STO	BETA,4
01134	1	77777	4	01135	TXI	STBET,4,-1	
01135	-0	63400	4	00572	STBET	SXD	BETANB,4
01136	-0	63400	4	00572		SXD	BETANB,4
01137	-0	53400	4	01177	LXD	ERAS,4	
01140	0	02000	4	00001	TRA	1,4	
01141	-0	63400	4	01177	ADOB	SXD	ERAS,4
01142	-0	53400	4	01173	LXD	ERNBR,4	
01143	0	50000	1	77633	CLA	TABLE,1	
01144	0	60100	4	77777	STO	ERLIST,4	
01145	0	50000	1	77632	CLA	TABLE-1,1	
01146	0	60100	4	77776	STO	ERLIST-1,4	
01147	1	00002	4	01044	TXI	NEXTA,4,2	
A 01150	0	00000	0	00000	IR1	HTR	
01151	0	00000	0	00002	IR2	HTR	2
01152	0	00000	0	00000	IR4	HTR	0
01153	0	00000	0	00001	ADDONE	HTR	1
01154	0	00001	0	00000	DECONE	HTR	0,0,1
01155	0	00002	0	00000	DECTWO	HTR	0,0,2
01156	0	00003	0	00000	DECTRE	HTR	0,0,3
01157	+0000000077777				ADDMSK	OCT	000000077777
01160	+000000700000				TAGMSK	OCT	000000700000
01161	+0777777000000				DECMSK	OCT	0777777000000
01162	+3777777777777				MSK35	OCT	3777777777777
01163	0	70000	1	77633	ADTABL	CPY	TABLE,1
01164	0	00000	0	75433	ADTIFG	HTR	TIFGOT
01165	0	70000	4	75435	ADTRAD	CPY	TRADT,4
01166	0	00000	0	00060	CPTRAD	HTR	COPYAA
01167	0	00000	0	01063	CHNONX	HTR	INFORM
01170	0	00000	0	00000	ALFA		
01171	0	00000	0	00325	TW13	HTR	213
01172	0	00000	0	00000	TRADNB		
01173	0	00000	0	00000	ERNBR		
01174	0	00000	0	00000	IDENT		
01175	0	00000	0	00000	WDCONT		
01176	0	00000	0	00000	NAME		
01177	0	00000	0	00000	ERAS		
01200	0	00000	0	00000	XERAS		
01201	0	00000	0	00000	BST		STORE NUMBER OF TIMES WORD COUNT WRONG
01202	0	00000	0	00000	BSTA		DITTO IDENTIFICATION
01203	0	00000	0	00000	DOTAG		
01204	0	00000	0	00000	DOBETA		

01205	0	76100	0	00000	NOP	NOP	
01206	0	00000	0	00000	FRETNB		
01207	00000000000031					BCD 100000I	
01210	00000000000042					BCD 100000K	
01211	00000000000041					BCD 100000J	
01212	00000000000043					BCD 100000L	
01213	00000000000044					BCD 100000M	
01214	00000000000045					BCD 100000N	
01215	0	00000	0	00006	IJK	HTR 6,0,0	
01216	00000000000020					BCD 100000+	
01217	+00000000000014					OCT 000000000014	OTHER MINUS SIGN
01220	00000000000060					BCD 100000	
01221	00000000000061					BCD 100000/	
01222	00000000000053					BCD 100000\$	
01223	00000000000074					BCD 100000(
01224	00000000000034					BCD 100000)	
01225	00000000000013					BCD 100000=	
01226	00000000000073					BCD 100000,	
01227	00000000000033					BCD 100000.	
01230	00000000000054					BCD 100000*	
01231	0	00006	0	00013	SYMBL	HTR 11,0,6	
01232	0	00000	0	00076	AFTRSZ	HTR IDNTFY	
01233	+00000000000013					OCT 000000000013	
01234	0	00000	0	00155		HTR SUBARG	
01235	+00000000000014					OCT 000000000014	
01236	0	00000	0	00167		HTR UPPER	
01237	+00000000000000					OCT 000000000000	
01240	0	00000	0	00202		HTR TEIFNO	
01241	+00000000000002					OCT 000000000002	
01242	0	00000	0	00220		HTR TIFGO	
01243	+00000000000003					OCT 000000000003	
01244	0	00000	0	00232		HTR TRAD	
01245	+00000000000001					OCT 000000000001	
01246	0	00000	0	00604		HTR TDO	
01247	+00000000000007					OCT 000000000007	
01250	0	00000	0	00732		HTR FRET	
01251	+00000000000010					OCT 000000000010	
01252	0	00000	0	00765		HTR EQUIV	
01253	0	00000	0	00020	TAPTAB	HTR 16	
01254	2	00001	1	01255	PTCH	TIX SZW,1,1	SIZ TABLE HAS CHECK SUM ENTRY NOT
01255	-0	75400	1	00000	SZW	PXD 0,1	NOT INCLUDED IN WORD COUNT
01256	0	77100	0	00022		ARS 18	
01257	0	02000	0	00063		TRA SUBWDS	
01260	0	50000	0	01163	PATIF	CLA ADTABL	
01261	0	60100	0	00056		STO COPY	
01262	0	02000	0	00122		TRA NOTIFG	
01263	0	76200	0	00222	SPACE2	RTB 2	
01264	0	76200	0	00222		RTB 2	
01265	0	76600	0	00333		IOD	
01266	-0	76000	0	00012		RTT	
01267	0	76100	0	00000		NOP	
01270	0	02000	0	00004		TRA 4	
01271	0	10000	0	00577	PAQADD	TZE NXTALF	
01272	0	40000	0	01153		ADD ADDONE	


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01273  0 02000 0 00562      TRA ADDQ
01274 -0 63400 2 01301 PATS2  SXD PATERA,2
01275  0 53400 2 01152      LXA IR4,2
01276  0 02000 0 01051      TRA CASH
01277 -0 53400 2 01301 PATRE2 LXD PATERA,2
01300  0 02000 4 00001      TRA 1,4
01301  0 00000 0 00000 PATERA
A          00000      END

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SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	710	0	0	0	0
LIB	0	0	0	0	0
COL	710	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 719

NUMBER OF SYMBOLS, DEF 256,DEFOP 0,UNDEF 0
 REM BLOCK ONE OF SECTION TWO.

BLOCK ONE OF SECTION TWO.

BLOCK ONE OF SECTION TWO.

MASTER RECORD CARD = FN027

BLOCK ONE OF SECTION TWO PERFORMS THE
 PRELIMINARY DO NEST STRUCTURE ANALYSIS
 REQUIRED FOR THE SUCCEEDING BLOCKS. IT AXSIGNS
 LEVEL NUMBERS AND THE POSSIBILITY OF CARRY.
 TRANSFERS OUT OF THE RANGE OF DOS ARE NOTED AND ENTERED
 INTO TABLE TRALEV. IF THERE IS A VARIABLE
 PARAMETER OF A DO ITS HIGHEST LEVEL OF DEFINITION
 IS ASSIGNED.
 FINALLY, A SEARCH IS MADE TO DETERMINE
 WHETHER A DO INDEX COUNTER IS
 NECESSARY TO KEEP CURRENT THE VALUES
 OF THE DO INDEX.

F2100000
 F2100001
 F2100002
 F2100003
 F2100004
 F2100005
 F2100006
 F2100007
 F2100008
 F2100009
 F2100010
 F2100011
 F2100012
 F2100015
 F2100017
 F2100020
 F2100030
 F2100040
 F2100050
 F2100060
 F2100070
 F2100080
 F2100090
 F2100100
 F2100110
 F2100120
 F2100130
 F2100140
 F2100150
 F2100160
 F2100170
 F2100180
 F2100190
 F2100200
 F2100210
 F2100211
 F2100230
 F2100240
 F2100250
 F2100260
 F2100270
 F2100280
 F2100290
 F2100300
 F2100310
 F2100320
 F2100330
 F2100340
 F2100350
 F2100360
 F2100370
 F2100380

00031 ORG 25
 00031 DOTAG BSS 1
 00032 BSS 1349
 02537 DOTAGZ BSS 1
 02540 TIFGO BSS 1
 02541 BSS 599
 03670 TIFZ BSS 1
 03671 TRAD BSS 1
 03672 BSS 249
 04263 TRADZ BSS 1
 04264 TRALEV BSS 1
 04265 BSS 599
 05414 TLTZ BSS 1
 02540 ORG 1376
 02540 FORVAL BSS 1
 02541 BSS 999
 04510 4VALZ BSS 1
 02540 ORG 1376
 02540 FORVAR BSS 1
 02541 BSS 1499
 05474 4VARZ BSS 1
 00734 ORG 476
 00734 FORTAG BSS 1
 00735 BSS 1499
 03670 FORTZ BSS 1

PROGRAM C ONSTANTS

05474 ORG 2876
 05474 0 00000 0 00000 L(0) 0,0,0
 05475 0 00001 0 00000 L(1) 0,0,1
 05476 0 00002 0 00000 L(2) 0,0,2
 05477 0 00003 0 00000 L(3) 0,0,3
 05500 0 00004 0 00000 L(4) 0,0,4
 05501 0 00005 0 00000 L(5) 0,0,5
 05502 0 00006 0 00000 L(6) 0,0,6
 05503 0 00011 0 00000 L(9) 0,0,9
 05504 0 01130 0 00000 L(600) 0,0,600
 05505 0 01750 0 00000 L(1000) 0,0,1000
 05506 0 02506 0 00000 L(1350) 0,0,1350
 05507 0 02734 0 00000 L(1500) 0,0,1500

05510	-0	00000	0	00000	L(MZ)	MZE		F2100390	
05511	+2000000000000				BITONE	OCT	2000000000000	F2100400	
05512	+1000000000000				BITTWO	OCT	1000000000000	F2100410	
05513	+077777077777				DECADD	OCT	77777077777	F2100420	
05514	+0777770000000				DECMSK	OCT	7777700000000	F2100430	
05515	+0000000700000				TAGMSK	OCT	700000	F2100440	
05516	+0000000077777				ADDMSK	OCT	77777	F2100450	
05517	-377777477777				NCMSK	OCT	-377777477777	F2100460	
05520	+0000000100000				CR1	OCT	100000	F2100470	
05521	+0000000200000				CR2	OCT	200000	F2100480	
							BEGIN BLO CK ONE.	F2100490	
05522	0	77200	0	00224	TAP00	REW	148	F2100500	
05523	0	77200	0	00223		REW	147	F2100510	
05524	-0	76000	0	00012		RTT		F2100520	
05525	0	76100	0	00000		NOP		F2100530	
05526	0	76400	0	00222		BST	TTAPE	F2100540	
05527	-0	53400	1	05503		LXD	L(9),1	F2100550	
05530	0	76400	0	00222	TAP10	BST	TTAPE	F2100560	
05531	2	00001	1	05530		TIX	TAP10,1,1	F2100570	
05532	0	76000	0	00140		PSE	96	F2100580	
05533	0	76000	0	00142		PSE	98	F2100590	
05534	-0	53400	2	05476		LXD	L(2),2	F2100600	
05535	0	50000	0	07153		CLA	TIFAD	F2100610	
05536	0	07400	4	07060		TSX	RTAPE,4	F2100620	
05537	-0	63400	1	02537		SXD	TIFGO-1,1	F2100630	
05540	-0	53400	2	05477		LXD	L(3),2	F2100640	
05541	0	50000	0	07154		CLA	TRADAD	F2100650	
05542	0	07400	4	07060		TSX	RTAPE,4	F2100660	
05543	-0	63400	1	03670		SXD	TRAD-1,1	F2100670	
05544	-0	53400	2	05475		LXD	L(1),2	F2100680	
05545	0	50000	0	07151		CLA	DOAD	F2100690	
05546	0	07400	4	07060		TSX	RTAPE,4	F2100700	
05547	-0	63400	1	00030		SXD	DOTAG-1,1	F2100710	
05550	-3	02505	1	05553		TXL	MR00,1,1349	F2100720	
05551	0	76000	0	00143		PSE	99	F2100730	
05552	0	02000	0	06567		TRA	TS4VAL	F2100740	
							MR00 COMPUTES LEVEL, X, CARRY BITS.	F2100750	
05553	-0	53400	1	00030	MR00	LXD	DOTAG-1,1	F2100760	
05554	-0	63400	1	05630		SXD	MR70,1	F2100770	
05555	-0	53400	1	05506		LXD	L(1350,1	F2100780	
05556	0	50000	0	05475	MR05	CLA	L(1)	F2100790	
05557	-0	73400	2	00000	MR10	PDX	0,2	F2100800	
05560	0	60100	1	02544		STO	DOTAGZ+5,1	F2100810	
05561	0	50000	1	02537		CLA	DOTAGZ,1	F2100820	
05562	-0	63400	4	05567		SXD	MR14,4	F2100830	
05563	0	73400	4	00000		PAX	0,4	F2100840	
05564	0	62200	0	05565		STD	MR12	F2100850	
D	05565	3	00000	4	05570	MR12	TXH	MR15,4	F2100860
	05566	0	02000	0	07303		TRA	ERBETA	F2100871
A	05567	0	00000	0	00000	MR14	HTR		F2100880
	05570	-0	53400	4	05567	MR15	LXD	MR14,4	F2100890
	05571	-0	32000	0	05515		ANA	TAGMSK	F2100900
	05572	0	10000	0	05576		TZE	MR20	F2100910
	05573	0	50000	0	05512		CLA	BITTWO	F2100920

BETA LESS THAN OR EQUAL TO ALPHA

IF ZERO(TRA TO MR20)

IF NOT ZERO(PUT BIT

IN L WORD FOR X NOT

05574	-0	60200	1	02544	ORS	DOTAGZ+5,1	COMPUTABLE AND GO TO	F2100930
05575	0	02000	0	05625	TRA	MR60	END.	F2100940
05576	0	50000	1	02542	MR20	CLA	DOTAGZ+3,1	F2100950
05577	0	40200	1	02541	SUB	DOTAGZ+2,1	COMPUTE X AND STORE IN	F2100960
05600	0	40000	1	02543	ADD	DOTAGZ+4,1	L WORD	F2100970
05601	0	76500	0	00043	LRS	35		F2100980
05602	0	22000	1	02543	DVH	DOTAGZ+4,1		F2100990
05603	0	20000	1	02543	MPY	DOTAGZ+4,1		F2101000
05604	0	76300	0	00043	LLS	35		F2101010
05605	0	62100	1	02544	STA	DOTAGZ+5,1		F2101020
05606	-3	00001	2	05625	TXL	MR60,2,1	IF L IS ONE(SKIP CARRY TEST)	F2101030
05607	0	50000	4	02537	CLA	DOTAGZ,4	OBTAIN NEXT BACK.SUBNEST	F2101040
05610	0	77100	0	00017	ARS	15	DO(FIRST WORD. IN-SPECT TAG	F2101050
05611	0	76000	0	00001	LBT		FOR VARIABLE N3) IF NOT.	F2101060
05612	0	02000	0	05614	TRA	MR30	0) VARIABLE(CONTINUE-WITH MR30,	F2101070
05613	0	02000	0	05625	TRA	MR60	1) OTHERWISE GO TO END.	F2101080
05614	0	50000	4	02537	MR30	CLA	DOTAGZ,4	F2101090
05615	-0	32000	0	05513	ANA	DECADD	OBTAIN FIRST WORD OF NEXT	F2101100
05616	0	40000	0	05475	ADD	L(1)	BACK SUBNEST DO, REMOVE	F2101110
05617	0	40200	1	02537	SUB	DOTAGZ,1	TAG, AND ADD ONE TO ALPHA.	F2101120
05620	-0	10000	0	05623	TNZ	MR40	SUB FIRST WORD CURRENT DO.	F2101130
05621	0	50000	0	05520	CLA	CR1	(TAG IS ZERO). IF RESULT IS	F2101140
05622	0	02000	0	05624	TRA	MR50	ZERO, CARRY IS TYPE ONE,	F2101150
05623	0	50000	0	05521	MR40	CLA	CR2	F2101160
05624	-0	60200	1	02544	MR50	ORS	DOTAGZ+5,1	F2101170
05625	-0	75400	1	00000	MR60	PXD	0,1	F2101180
05626	-0	73400	4	00000	PDX	0,4	MAKE CURRENT.DO NEXT BACK	F2101190
05627	1	77767	1	05630	TXI	MR70,1,-9	SUBNEST DO.	F2101200
05630	-3	00000	1	07316	MR70	TXL	ERTST,1,0	F2101210
05631	0	50000	1	02537	CLA	DOTAGZ,1	NO MORE DOS, EXIT TO TEST IF ERRORS	F2101220
05632	-0	32000	0	05516	ANA	ADDMSK	OBTAIN FIRST WORD NEW DO.	F2101230
05633	0	60100	0	05660	STO	MRES	OBTAIN BETA	F2101240
05634	0	50000	4	02537	MR75	CLA	DOTAGZ,4	F2101250
05635	-0	32000	0	05516	ANA	ADDMSK	AND SAVE	F2101260
05636	0	60100	0	05661	STO	MRES1	AND SUBTRCT NEW BETA..	F2101270
05637	0	40200	0	05660	SUB	MRES	IF NOT NEGATIVE, XRC DD	F2101280
05640	-0	12000	0	05645	TMI	MR80	CONTAINS NEW DO. OTHERWISE, TRA	F2101290
05641	0	50000	4	02544	CLA	DOTAGZ+5,4	XRC DO CONTAINS NEW DO,	F2101300
05642	-0	32000	0	05514	ANA	DECMSK	OBTAIN LEVEL OF XRC DO,	F2101310
05643	0	40000	0	05475	ADD	L(1)	ADD ONE, STORE IN L.	F2101320
05644	0	02000	0	05557	TRA	MR10	GO TO MR10	F2101330
05645	0	50000	1	02537	MR80	CLA	DOTAGZ,1	F2101340
05646	-0	32000	0	05514	ANA	DECMSK		F2101350
05647	0	77100	0	00022	ARS	18		F2101360
05650	0	34000	0	05661	CAS	MRES1		F2101370
05651	0	02000	0	05654	TRA	MR85	ALPHA(XRA) GREATER THAN BETA(XRC)	F2101380
05652	0	02000	0	07263	TRA	ERLIST	EQUALITY	F2101391
05653	0	02000	0	07263	TRA	ERLIST	LESS THAN	F2101401
05654	0	50000	4	02544	MR85	CLA	DOTAGZ+5,4	F2101410
05655	-0	73400	2	00000	PDX	0,2	NEWDO. IF XRL DO IS OF	F2101420
05656	-3	00001	2	05556	TXL	MR05,2,1	LEVEL ONE, START NEW NEST	F2101430
05657	1	00011	4	05634	TXI	MR75,4,9	BY TRA TO MR05. ELSE TRA MR75,	F2101440
A	05660	0	00000	0	00000	MRES	HTR	F2101450
A	05661	0	00000	0	00000	MRES1	HTR	F2101460

					FLOW, TRANSFER ANALYSIS,		
	05662	-0	53400	4	02537	FLOW	F2101470
						LXD TIFGO-1,4	F2101480
	05663	3	01127	4	06307	TXH SV00,4,599	F2101490
	05664	-0	53400	1	00030	LXD DOTAG-1,1	F2101500
	05665	-0	63400	1	05703	SXD FLO30,1	F2101510
	05666	-0	63400	4	05723	SXD FLO60,4	F2101520
	05667	-0	63400	1	06240	SXD ADL60,1	F2101530
	05670	-0	63400	1	06113	SXD INC40,1	F2101540
	05671	-0	63400	1	06166	SXD RNC70,1	F2101550
	05672	0	53400	1	06274	LXA TLT50,1	F2101560
	05673	-0	63400	1	06274	SXD TLT50,1	F2101570
	05674	-0	53400	4	05504	FLO10 LXD L(600),4	F2101580
	05675	-0	63400	4	06306	SXD TIFX,4	F2101590
	05676	-0	53400	1	05506	LXD L(1350,1	F2101600
	05677	0	50000	1	02544	FLO15 CLA DOTAGZ+5,1	F2101610
	05700	-0	73400	2	00000	PDX 0,2	F2101620
	05701	-3	00001	2	05705	TXL FLO40,2,1	F2101630
	05702	1	77767	1	05703	FLO20 TXI FLO30,1,-9	F2101640
D	05703	3	00000	1	05677	FLO30 TXH FLO15,1	F2101650
	05704	0	02000	0	05775	TRA FLOEND	F2101660
	05705	-0	63400	1	06275	FLO40 SXD BNX,1	F2101670
	05706	0	50000	1	02537	CLA DOTAGZ,1	F2101680
	05707	0	73400	2	00000	PAX 0,2	F2101690
	05710	-0	32000	0	05514	ANA DECMSK	F2101700
	05711	0	60100	0	06276	STO BNA	F2101710
	05712	-0	75400	2	00000	PXD 0,2	F2101720
	05713	0	60100	0	06277	STO ENA	F2101730
	05714	-0	53400	4	06306	LXD TIFX,4	F2101740
	05715	0	50000	4	03670	FLO50 CLA TIFZ,4	F2101750
	05716	-0	32000	0	05514	ANA DECMSK	F2101760
	05717	0	34000	0	06276	CAS BNA	F2101770
	05720	0	02000	0	05727	TRA FLO70	F2101780
	05721	0	07400	4	00004	TSX DIAG,4 BNA, MAY BE IN NEST.	F2101795
	05722	1	77776	4	05723	FLO55 TXI FLO60,4,-2	F2101800
D	05723	3	00000	4	05715	FLO60 TXH FLO50,4	F2101810
	05724	0	02000	0	05775	TRA FLOEND	F2101820
	05725	-0	53400	1	06275	FLO65 LXD BNX,1	F2101830
	05726	0	02000	0	05702	TRA FLO20	F2101840
	05727	-0	63400	4	06306	FLO70 SXD TIFX,4	F2101850
	05730	0	34000	0	06277	CAS ENA	F2101860
	05731	0	02000	0	05725	TRA FLO65	F2101870
	05732	0	76100	0	00000	NOP	F2101880
	05733	0	60100	0	06300	STO G	F2101890
	05734	0	50000	4	03670	CLA TIFZ,4	F2101900
	05735	-0	12000	0	05743	TMI FLO75	F2101910
	05736	0	73400	2	00000	PAX 0,2	F2101920
	05737	-3	00005	2	05743	TXL FLO75,2,5	F2101930
	05740	-3	00006	2	05722	TXL FLO55,2,6	F2101940
	05741	-3	00007	2	05743	TXL FLO75,2,7	F2101950
	05742	0	07400	4	00004	TSX DIAG,4 SEVEN.	F2101965
	05743	0	50000	0	06300	FLO75 CLA G	F2101970
	05744	-0	53400	1	06275	LXD BNX,1	F2101980
	05745	0	07400	4	06216	TSX ADLOC,4	F2101990
	05746	0	50000	0	05511	CLA BITONE	F2102000

05747	-0	60200	1	02545	ORS DOTAGZ+6,1	IN IMMEDIATE RANGE.	F2102010
05750	-0	75400	1	00000	PXD 0,1	SAVE	F2102020
05751	0	60100	0	06301	STO XDG	XDG	F2102030
05752	-0	75400	2	00000	PXD 0,2	AND	F2102040
05753	0	60100	0	06302	STO LDG	LDG	F2102050
05754	0	50200	0	06300	CLS G	LIST MINUS G	F2102060
05755	0	07400	4	06253	TSX TLT00,4	IN TRALEV BUFFER.	F2102070
05756	-0	53400	4	06306	LXD TIFX,4	OBTAIN FIRST WORD OF	F2102080
05757	0	50000	4	03670	CLA TIFZ,4	TIFGO ENTRY	F2102090
05760	-0	12000	0	06001	TMI 3ADIF	TRA IF 3ADIF	F2102100
05761	0	73400	2	00000	PAX 0,2	PUT ADDRESS IN XRB	F2102110
05762	0	02000	2	05772	FLO80 TRA FLO80+8,2	INDEXED TRA,	F2102120
05763	0	07400	4	00004	TSX DIAG,4	7, ROYS TRA.	F2102135
05764	0	07400	4	00004	TSX DIAG,4	6, ASSIGN FORMULA	F2102145
05765	0	02000	0	06005	TRA 2ADIF	5, 2 ADDRESS TYPE	F2102150
05766	0	02000	0	06005	TRA 2ADIF	4, 2 ADIF	F2102160
05767	0	02000	0	06005	TRA 2ADIF	3, 2ADIF	F2102170
05770	0	02000	0	06016	TRA GOTOVN	2 VECTOR TYPE TRA	F2102180
05771	0	02000	0	06016	TRA GOTOVN	1 GO TO N (ASSIGN)	F2102190
05772	0	02000	0	06011	TRA GOTOK	0 GO TO CONSTANT	F2102200
05773	-0	53400	4	06306	FLO90 LXD TIFX,4	GO BACK FOR NEXT	F2102210
05774	1	77776	4	05723	TXI FLO60,4,-2	TIFGO ENTRY,	F2102220
05775	-0	53400	1	06274	FLOEND LXD TLT50,1	TEST IF ANY TRALEV ENTRIES	F2102230
05776	3	01127	1	06307	TXH SV00,1,599		F2102240
05777	0	07400	4	06261	TSX TLT20,4	IF SO, GO TO WRITE ROUTINE	F2102250
06000	0	02000	0	06307	TRA SV00		F2102260
					CONTROL ROUTINES		F2102270
06001	-0	32000	0	05516	3ADIF ANA ADDMSK	THE FOLLOWING ROUTINES	F2102280
06002	0	76700	0	00022	ALS 18	ARRANGE TO PROCESS ALL OF	F2102290
06003	0	07400	4	06033	TSX FA000,4	THE ADDRESSES ASSOCIATED	F2102300
06004	-0	53400	4	06306	LXD TIFX,4	WITH THE TIFGO ENTRY,	F2102310
06005	0	50000	4	03671	2ADIF CLA TIFZ+1,4	ONE AT A TIME.	F2102320
06006	-0	32000	0	05514	ANA DECMSK	WHEN ALL ADDRESSES	F2102330
06007	0	07400	4	06033	TSX FA000,4	ARE PROCESSED,	F2102340
06010	-0	53400	4	06306	LXD TIFX,4	CONTROL IS RETURED TO	F2102350
06011	0	50000	4	03671	GOTOK CLA TIFZ+1,4	FLO90 FOR NEXT	F2102360
06012	-0	32000	0	05516	ANA ADDMSK	TIFGO ENTRY.	F2102370
06013	0	76700	0	00022	ALS 18		F2102380
06014	0	07400	4	06033	TSX FA000,4		F2102390
06015	0	02000	0	05773	TRA FLO90		F2102400
06016	0	50000	4	03671	GOTOVN CLA TIFZ+1,4	FOR GOTOV TRANSFERS,	F2102410
06017	0	73400	4	00000	PAX 0,4	USE WORD TWO	F2102420
06020	-0	63400	4	06031	SXD GTV20,4	FOR INDEXING	F2102430
06021	-0	73400	4	00000	PDX 0,4	VALUES NECESSARY	F2102440
06022	0	02000	0	06031	TRA GTV20		F2102450
06023	0	50000	4	04263	GTV10 CLA TRADZ,4	TO GET ADDRESSES	F2102460
06024	0	76700	0	00022	ALS 18	FROM TABLE TRAD.	F2102470
06025	-0	63400	4	06032	SXD GTV30,4	FOR GOTON (ASSIGN) TYPE	F2102480
06026	0	07400	4	06033	TSX FA000,4	TRANSFERS, ALL ADDRESSES	F2102490
06027	-0	53400	4	06032	LXD GTV30,4	MUST BE PROCESSED EVEN	F2102500
06030	1	77777	4	06031	TXI GTV20,4,-1	THOUGH THEY ARE ON SAME	F2102510
D 06031	3	00000	4	06023	GTV20 TXH GTV10,4	LEVEL BECAUSE OF	F2102520
D 06032	-3	00000	0	05773	GTV30 TXL FLO90,0	CARRY RESTRICTIONS.	F2102530
					ANALYSIS OF ADDRESS		F2102540

	06033	-0	63400	4	06076	FA000	SXD RS60,4	SAVE TSX SET	F2102550
	06034	0	60100	0	06303		STO A	SAVE ADDRESS	F2102560
	06035	-0	53400	1	06275		LXD BNX,1	OBTAIN	F2102570
	06036	0	07400	4	06216		TSX ADLOC,4	INDEX OF DO CONTAINING	F2102580
	06037	-0	75400	1	00000		PXD 0,1	ADDRESS AND LEVEL OF	F2102590
	06040	0	60100	0	06304		STO XDA	THAT DO.	F2102600
	06041	-0	75400	2	00000		PXD 0,2	SAVE IN	F2102610
	06042	0	60100	0	06305		STO LDA	XDA AND LDA.	F2102620
	06043	-3	00024	2	06045		TXL FA010,2,20	TEST LEVEL	F2102630
	06044	0	07400	4	00004		TSX DIAG,4	LEV. ADD OF TRA EXCEEDS 20. ERROR. GO TO DIAGNOSTIC.	F2102645
	06045	0	77100	0	00022	FA010	ARS 18		F2102650
	06046	0	62100	0	06051		STA FA020	TRANSFER	F2102660
	06047	-0	50000	0	05510		CAL L(MZ)	LEVEL IN	F2102670
	06050	-0	53400	1	06301		LXD XDG,1	XDG DO.	F2102680
A	06051	0	77100	0	00000	FA020	ARS		F2102690
	06052	-0	60200	1	02546		ORS DOTAGZ+7,1		F2102700
	06053	0	50000	0	06305		CLA LDA	LIST	F2102710
	06054	0	77100	0	00022		ARS 18	ADDRESS AND LEVEL	F2102720
	06055	0	40000	0	06303		ADD A	IN	F2102730
	06056	0	07400	4	06253		TSX TLT00,4	TLT. CONTINUE WITH RS00	F2102740
							TRANSFER BIT INSERTION IN	DO FORMULA	F2102750
	06057	-0	53400	1	06301	RS00	LXD XDG,1	XRA CONTAINS XDG	F2102760
	06060	-0	53400	2	06302		LXD LDG,2	XRB CONTAINS LDG	F2102770
	06061	-0	75400	2	00000	RS10	PXD 0,2	IF G AND A IN SAME DO,	F2102780
	06062	0	40200	0	06305		SUB LDA	EXIT. THIS ROUTINE INSERTS	F2102790
	06063	0	10000	0	06077		TZE INC00	BIT MEANING THERE IS A JUMP	F2102800
	06064	0	12000	0	06066		TPL RS20	OUT OF THE RANGE OF THIS DO.	F2102810
	06065	0	07400	4	00004		TSX DIAG,4	JUMP INTO HIGHER LEVEL. ERROR. GO TO DIAGNOSTIC.	F2102825
	06066	-0	50000	0	05510	RS20	CAL L(MZ)		F2102830
	06067	-0	60200	1	02544		ORS DOTAGZ+5,1		F2102840
	06070	-3	00001	2	06077		TXL INC00,2,1	FIND NEXT BACK SUBNEST	F2102850
	06071	1	00011	1	06072	RS30	TXI RS40,1,9	DO FORMULA	F2102860
	06072	0	50000	1	02544	RS40	CLA DOTAGZ+5,1	AND RETURN	F2102870
	06073	0	62200	0	06074		STD RS50	TO TEST	F2102880
D	06074	-3	00000	2	06071	RS50	TXL RS30,2	LEVEL	F2102890
	06075	-0	73400	2	00000		PDX 0,2	AT	F2102900
D	06076	-3	00000	0	06061	RS60	TXL RS10,0	RS10	F2102910
							INDEXING NO CARRY CONDITION		F2102920
	06077	0	50000	0	06305	INC00	CLA LDA	EXIT IF	F2102930
	06100	0	10000	0	06142		TZE RNC00	LDA IS ZERO.	F2102940
	06101	0	50000	0	06300		CLA G	PLACE G ANDA	F2102950
	06102	0	56000	0	06303		LDQ A	IN	F2102960
	06103	0	04000	0	06107		TLQ INC20	INCX AND INCY SO THAT	F2102970
	06104	0	60100	0	06140		STO INCX	INCX IS LESS THAN INCY.	F2102980
	06105	-0	60000	0	06141		STQ INCY		F2102990
	06106	0	02000	0	06111		TRA INC30		F2103000
	06107	-0	60000	0	06140	INC20	STQ INCX		F2103010
	06110	0	60100	0	06141		STO INCY		F2103020
	06111	-0	53400	1	06304	INC30	LXD XDA,1	INITIALIZE XRA	F2103030
	06112	1	77767	1	06113	INC35	TXI INC40,1,-9	FIND DO OF LEVEL LDA	F2103040
D	06113	-3	00000	1	06142	INC40	TXL RNC00,1	PLUS ONE.	F2103050
	06114	0	50000	1	02544		CLA DOTAGZ+5,1		F2103060
	06115	-0	32000	0	05514		ANA DECMSK		F2103070
	06116	0	40200	0	06305		SUB LDA		F2103080

	06117	0	40200	0	05475		SUB L(1)		F2103090
	06120	0	10000	0	06123		TZE INC50	DO OF LEVEL LDA PLUS ONE FOUND.	F2103100
	06121	0	12000	0	06112		TPL INC35	LEVEL TO HIGH, GO BACK.	F2103110
	06122	0	02000	0	06142		TRA RNC00	LEVEL TO LOW, DA EXHAUSTED.	F2103120
	06123	0	50000	1	02537	INC50	CLA DOTAGZ,1	OBTAIN BETA OF	F2103130
	06124	0	73400	2	00000		PAX 0,2	THIS DO IN DECREMENT.	F2103140
	06125	-0	75400	2	00000		PXD 0,2		F2103150
	06126	0	34000	0	06141		CAS INCY	COMPARE WITH INCY.	F2103160
	06127	0	02000	0	06142		TRA RNC00	GREATER THAN OR EQUAL TO	F2103170
	06130	0	02000	0	06142		TRA RNC00	GREATEST OF G, A, EXIT.	F2103180
	06131	0	34000	0	06140		CAS INCX	LESS THAN INCY, COMPARE	F2103190
	06132	0	02000	0	06135		TRA INC60	WITH INCX. GREATER THAN	F2103200
	06133	0	02000	0	06135		TRA INC60	OR EQUAL TO INCX, GO TO INC60.	F2103210
	06134	0	02000	0	06112		TRA INC35	LESS THAN INCX, GET NEXT DO.	F2103220
	06135	-0	50000	0	05517	INC60	CAL NCMSK	AND OUT CARRY BITS.	F2103230
	06136	0	32000	1	02544		ANS DOTAGZ+5,1		F2103240
	06137	0	02000	0	06112		TRA INC35	GO BACK FOR NEXT DO.	F2103250
A	06140	0	00000	0	00000	INCX	HTR	ES.	F2103260
A	06141	0	00000	0	00000	INCY	HTR	ES.	F2103270
							RESET NO CARRY CONDITION.	NO CARRY TRANSFER LEVEL	F2103280
	06142	0	50000	0	06305	RNC00	CLA LDA	EXIT IF LDA IS ZERO	F2103290
	06143	0	10000	0	06214		TZE RNC95		F2103300
	06144	0	50000	0	06302		CLA LDG	EXIT IF	F2103310
	06145	0	40200	0	06305		SUB LDA	LDA EQUALS	F2103320
	06146	0	10000	0	06214		TZE RNC95	LDG	F2103330
	06147	-0	73400	4	00000		PDX 0,4	INITIALIZE COUNTER XR6	F2103340
	06150	-0	53400	1	06301		LXD XDG,1	INITIALIZE XRA	F2103350
	06151	0	50000	0	06302		CLA LDG	AND	F2103360
	06152	-0	73400	2	00000		PDX 0,2	XR6. C(ACC) LDG.	F2103370
	06153	1	00001	2	06161		TXI RNC50,2,1	C(XRB) LDG PLUS ONE.	F2103380
	06154	1	00011	1	06155	RNC20	TXI RNC30,1,9	FIND NEXT BACKS	F2103390
	06155	3	02506	1	06214	RNC30	TXH RNC95,1,1350	SUBNESTDO.	F2103400
	06156	0	50000	1	02544		CLA DOTAGZ+5,1		F2103410
	06157	0	62200	0	06160		STD RNC40		F2103420
D	06160	-3	00000	2	06154	RNC40	TXL RNC20,2		F2103430
	06161	-0	63400	1	06206	RNC50	SXD RNC75,1	SAVE XRA	F2103440
	06162	0	62200	0	06212		STD RNC85	SAVE LEVEL OF THIS DO	F2103450
	06163	-0	75400	2	00000		PXD 0,2	SAVE LEVEL OF NEXT INNER	F2103460
	06164	0	60100	0	06213		STO RNC90	SUBNEST DO.	F2103470
	06165	1	77767	1	06166	RNC60	TXI RNC70,1,-9	TAKE NEXT DOWN DO IF ANY.	F2103480
D	06166	-3	00000	1	06207	RNC70	TXL RNC80,1		F2103490
	06167	0	50000	1	02537		CLA DOTAGZ,1	IF BETA	F2103500
	06170	-0	32000	0	05516		ANA ADDMSK	OF THIS DO	F2103510
	06171	0	76700	0	00022		ALS 18	IS LESS	F2103520
	06172	0	40200	0	06300		SUB G	THAN G,	F2103530
	06173	0	12000	0	06207		TPL RNC80	TEST LEVEL	F2103540
	06174	0	50000	1	02544		CLA DOTAGZ+5,1	TO SEE IF	F2103550
	06175	-0	32000	0	05514		ANA DECMSK	THIS DO IS OF SAME	F2103560
	06176	0	40200	0	06213		SUB RNC90	LEVEL AS NEXT INNERMOST	F2103570
	06177	-0	10000	0	06165		TNZ RNC60	SUBNEST DO. IF NOT, GET NEXT DO.	F2103580
	06200	0	50000	1	02545		CLA DOTAGZ+6,1	IF SO, MAKE NO CARRY	F2103590
	06201	-0	32000	0	05514		ANA DECMSK	TRANSFER LEVEL OF THIS	F2103600
	06202	0	40200	0	06305		SUB LDA	DO EQUAL TO GREATER	F2103610
	06203	0	12000	0	06165		TPL RNC60	OF PREVIOUS VALUE	F2103620

	06204	0	50000	0	06305		CLA LDA		AND CURRENT LDA.	F2103630
	06205	0	62200	1	02545		STD DOTAGZ+6,1			F2103640
D	06206	-3	00000	0	06165	RNC75	TXL RNC60,0		GO BACK FOR NEXT TEST DO	F2103650
	06207	-0	53400	1	06206	RNC80	LXD RNC75,1		GO BACK FOR NEXT SUBNEST DO,	F2103660
	06210	-0	53400	2	06212		LXD RNC85,2		IF COUNTER PERMITS.	F2103670
	06211	2	00001	4	06154		TIX RNC20,4,1		OTHERWISE, EXIT.	F2103680
D	06212	-3	00000	0	06214	RNC85	TXL RNC95,0			F2103690
A	06213	0	00000	0	00000	RNC90	HTR		ES	F2103700
	06214	-0	53400	4	06076	RNC95	LXD RS60,4		GO BACK TO CONTROL ROUTINE	F2103710
	06215	0	02000	4	00001		TRA 1,4		FOR NEXT ADDRESS.	F2103720
									INDEX AND LEVEL OF ADDRESS	F2103730
	06216	-0	63400	4	06226	ADLOC	SXD ADL20,4		SAVE TSX SET	F2103740
	06217	-0	53400	4	05474		LXD L(0),4		INITIALIZE XRC,	F2103750
	06220	-0	63400	4	06227		SXD ADL30,4		AND DEC OF ADL30, PUT ADDRESS	F2103760
	06221	0	60100	0	06252		STO ADL90		IN ADL90. XRA CONTAINS BNX	F2103770
	06222	0	50000	1	02537	ADL10	CLA DOTAGZ,1		OBTAIN FIRST WORD.	F2103780
	06223	0	73400	2	00000		PAX 0,2		SAVE BETA	F2103790
	06224	-0	32000	0	05514		ANA DECMASK		GET ALPHA ALONE.	F2103800
	06225	0	34000	0	06252		CAS ADL90		COMPARE WITH ADDRESS. IF	F2103810
D	06226	-3	00000	0	06244	ADL20	TXL ADL70,0		ALPHA NOT LESS THAN ADD, THEN	F2103820
D	06227	-3	00000	0	06244	ADL30	TXL ADL70,0		ADD IN LAST CHOOSEN DO.	F2103830
	06230	-0	75400	2	00000		PXD 0,2		IF ALPHA LESS THAN ADD,	F2103840
	06231	0	34000	0	06252		CAS ADL90		COMPARE WITH BETA.	F2103850
	06232	0	76100	0	00000		NOP		IF BETA IS NOT LESS THAN	F2103860
	06233	0	02000	0	06236		TRA ADL40		ADDRESS, THIS DO CONTAINS	F2103870
	06234	3	00000	4	06237		TXH ADL50,4,0		ADDRESS. EXIT IF OUT OF NEST	F2103880
	06235	0	02000	0	06244		TRA ADL70		TO ADL 70. OTHERWISE, GO TO 30	F2103890
	06236	-0	63400	1	06227	ADL40	SXD ADL30,1		IF DO IN THIS NEST, SXD.	F2103900
	06237	1	77767	1	06240	ADL50	TXI ADL60,1,-9		IN ANY CASE, TAKE NEXT DOWN	F2103910
D	06240	-3	00000	1	06244	ADL60	TXL ADL70,1		DO, IF ANY,	F2103920
	06241	0	50000	1	02544		CLA DOTAGZ+5,1		PUT LEVEL IN XRC.	F2103930
	06242	-0	73400	4	00000		PDX 0,4		AND GO BACK FOR TEST	F2103940
	06243	3	00001	4	06222		TXH ADL10,4,1		UNLESS NGW DO HAS LEVEL ONE.	F2103950
	06244	-0	53400	3	06227	ADL70	LXD ADL30,3		OBTAIN XDA IN XRA, XRB.	F2103960
	06245	-3	00000	1	06250		TXL ADL80,1,0		EXIT IF ZERO.	F2103970
	06246	0	50000	1	02544		CLA DOTAGZ+5,1		IF NOT ZERO, GET LDA IN	F2103980
	06247	-0	73400	2	00000		PDX 0,2		XRB, PUT	F2103990
	06250	-0	53400	4	06226	ADL80	LXD ADL20,4		TSX SET IN XRC	F2104000
	06251	0	02000	4	00001		TRA 1,4		AND RETURN.	F2104010
A	06252	0	00000	0	00000	ADL90	HTR			F2104020
									TRALEV LISTING	F2104030
	06253	-0	53400	1	06274	TLT00	LXD TLT50,1		OBTAIN CURRENT TRALEV	F2104040
	06254	0	60100	1	05414		STO TLTZ,1		INDEX. STORE ENTRY.	F2104030
	06255	1	77777	1	06256		TXI TLT10,1,-1		IF TABLE NOW FULL, GO TO	F2104060
	06256	-0	63400	1	06274	TLT10	SXD TLT50,1		TAPE WRITING ROUTINE.	F2104070
	06257	-3	00000	1	06261		TXL TLT20,1,0		OTHERWISE, SAVE NEW INDEX	F2104080
	06260	0	02000	4	00001		TRA 1,4		AND RETURN.	F2104090
	06261	0	76600	0	00224	TLT20	WRS TLTAPE		SELECT TAPE TO WRITE AWAY	F2104100
	06262	-0	53400	1	06274		LXD TLT50,1		BUFFER. INITIALIZE XRA	F2104110
	06263	-0	63400	1	06272		SXD TLT40,1		AND TEST INSTR.	F2104120
	06264	-0	76000	0	00142		MSE 98		TURN OFF TRALEV TAPE EMPTY	F2104130
	06265	0	76100	0	00000		NOP		LIGHT	F2104140
	06266	0	53400	1	06274		LXA TLT50,1		RE-INITIALIZE INDEX QUANTITIES	F2104150
	06267	-0	63400	1	06274		SXD TLT50,1			F2104160

	06270	0	70000	1	05414	TLT30	CPY	TLTZ,1		COPY BUFFER.	F2104170
	06271	1	77777	1	06272		TXI	TLT40,1,-1			F2104180
D	06272	3	00000	1	06270	TLT40	TXH	TLT30,1			F2104190
	06273	0	02000	4	00001		TRA	1,4		RETURN.	F2104200
	06274	0	00000	0	01130	TLT50	HTR	600		BUFFER SIZE	F2104210
								ES FORFLOW			F2104220
					06275	BNX	BSS	1		BEGINNING OF NEST INDEX	F2104230
					06276	BNA	BSS	1		BEGINNING OF NEST ADDRESS	F2104240
					06277	ENA	BSS	1		END OF NEST ADDRESS	F2104250
					06300	G	BSS	1		GAMMA OF SOME TIFGO ENTRY	F2104260
					06301	XDG	BSS	1		INDEX OF DO WITH G IN IMMED.	F2104270
					06302	LDG	BSS	1		RANGE. LEVEL OF XDG.	F2104280
					06303	A	BSS	1		AN ADDRESS TO WHICH G TRANSFERS.	F2104290
					06304	XDA	BSS	1		INDEX OF DO WITH A IN IMMED.	F2104300
					06305	LDA	BSS	1		RANGE. LEVEL OF XDA.	F2104310
					06306	TIFX	BSS	1		CURRENT TIFGO INDEX.	F2104320
										DO SYMBOL DEFINITION OF VARIABLE RANGES AND INCREMENTS	F2104330
	06307	-0	53400	1	00030	SV00	LXD	DOTAG-1,1			F2104340
	06310	-0	63400	1	06333		SXD	SV80,1			F2104350
	06311	-0	63400	1	06340		SXD	SV95,1			F2104360
	06312	-0	63400	1	06510		SXD	TRA40,1			F2104370
	06313	-0	53400	1	05506		LXD	L(1350,1		INITIALIZE XRA	F2104380
	06314	-0	63400	1	06325		SXD	SV44,1		SAVE CURRENT DO INDEX	F2104390
	06315	-0	63400	1	06345	SV10	SXD	SV98,1		SAVE NEST INDEX	F2104400
	06316	0	50000	1	02537	SV20	CLA	DOTAGZ,1		OBTAIN FIRST WORD CURRENT	F2104410
	06317	-0	32000	0	05515		ANA	TAGMSK		DO AND INSPECT TAG	F2104420
	06320	0	10000	0	06337		TZE	SV90		IF ZERO, GO TO INDEXING	F2104430
	06321	-0	53400	4	06345		LXD	SV98,4		OTHERWISE, NEST INDEX IN XRC	F2104440
	06322	0	50000	4	02540	SV30	CLA	DOTAGZ+1,4		OBTAIN SYM OF XRC,	F2104450
	06323	-0	53400	2	05477		LXD	L(3),2		INITIALIZE XRB COUNTER	F2104460
	06324	0	34000	1	02543	SV40	CAS	DOTAGZ+4,1		AND TEST FOR SYM EQUALS VAR.N.	F2104470
D	06325	-3	00000	0	06327	SV44	TXL	SV50,0		CURRENT DO INDEX STORAGE.	F2104480
D	06326	-3	00000	0	06346	SV48	TXL	SF00,0		INDEX STO OF N IN CUR. DO	F2104490
	06327	1	00001	1	06330	SV50	TXI	SV60,1,1		TAKE NEXT.N, COUNT	F2104500
	06330	2	00001	2	06324	SV60	TIX	SV40,2,1		IN XRB AND GO BACK.	F2104510
	06331	-0	53400	1	06325	SV65	LXD	SV44,1		SYM NOT VAR.N., PUT CURRENT	F2104520
	06332	1	77767	4	06333	SV70	TXI	SV80,4,-9		DO INDEX IN XRA AND INDEX	F2104530
D	06333	-3	00000	4	06337	SV80	TXL	SV90,4		XRC. IF TABLE ENDS, GO70 SU90.	F2104540
	06334	0	50000	4	02544		CLA	DOTAGZ+5,4		OTHERWISE TEST FOR,NEW NEST,	F2104550
	06335	-0	73400	2	00000		PDX	0,2		IF NOT NEW NEST, GO BACK TO.	F2104560
	06336	3	00001	2	06322		TXH	SV30,2,1		TEST SYM. OTHERWISE.	F2104570
	06337	1	77767	1	06340	SV90	TXI	SV95,1,-9		TAKE NEXT DOWN DO	F2104580
D	06340	-3	00000	1	06567	SV95	TXL	TS4VAL,1		POSSIBLE. OTHERWISE, EXIT	F2104590
	06341	-0	63400	1	06325		SXD	SV44,1		SAVE CURRENT DO INDEX.	F2104600
	06342	0	50000	1	02544		CLA	DOTAGZ+5,1			F2104610
	06343	-0	73400	2	00000		PDX	0,2		INSPECT LEVEL.	F2104620
	06344	3	00001	2	06316		TXH	SV20,2,1		IF NOT NEW NEST, TRA SV20	F2104630
D	06345	-3	00000	0	06315	SV98	TXL	SV10,0		IF NEW NEST, SV10 (NEST.INDEX STO.)	F2104640
	06346	-0	63400	1	06326	SF00	SXD	SV48,1		SAVE INDEX OF N. N CURRENT DO	F2104650
	06347	-0	63400	2	06356		SXD	SF10,2		SAVE N COUNTER.	F2104660
	06350	-0	63400	4	06361		SXD	SF15,4			F2104670
	06351	-0	75400	4	00000		PXD	0,4		SAVE INDEX OF SYMBOL DO	F2104680
	06352	0	60100	0	06467		STO	SFES1		IN FULL WORD.	F2104690
	06353	-0	53400	1	06325		LXD	SV44,1		OBTAIN INDEX OF CURRENT DO	F2104700

	06354	-0	75400	1	00000		PXD 0,1	IN ACC. AND COMPARE	F2104710
	06355	0	34000	0	06467		CAS SFES1	WITH INDEX OF SYMBOL DO.	F2104720
D	06356	-3	00000	0	06362	SF10	TXL SF20,0	CURRENT INDEX GREATER.	F2104730
	06357	0	02000	0	06424		TRA SF79	EQUALITY	F2104740
	06360	0	76000	0	00141		PSE 97	SYMBOL INDEX GREATER,	F2104750
D	06361	-3	00000	0	06366	SF15	TXL SF30,0	TURN ON LIGHT 97.	F2104760
	06362	-0	53400	4	06325	SF20	LXD SV44,4	CUR. IND. GREATER, PUT IN XRC	F2104770
	06363	-0	53400	1	06467		LXD SFES1,1	SYM. IND. IN XRA.	F2104780
	06364	-0	76000	0	00141		MSE 97	LIGHT 97 OFF.	F2104790
	06365	0	76100	0	00000		NOP	AT SF30, XRA CONTAIN LEAST	F2104800
	06366	-0	75400	4	00000	SF30	PXD 0,4	OF CUR. IND, SYM. IND. XRC	F2104810
	06367	0	60100	0	06467		STO SFES1	CONTAINS GREATER. PUT IN ES.	F2104820
	06370	0	50000	1	02544	SF35	CLA DOTAGZ+5,1	PUT LEVEL OF D(XRA) IN	F2104830
	06371	-0	73400	2	00000		PDX 0,2	XRB. HALT IF	F2104840
	06372	3	00001	2	06374		TXH SF40,2,1	LEVEL	F2104850
	06373	0	07400	4	00004		TSX DIAG,4 IS ONE	ERROR. GO TO DIAGNOSTIC	F2104865
	06374	1	00011	1	06375	SF40	TXI SF50,1,9	BACK UP IN XRA-	F2104870
	06375	-3	02506	1	06377	SF50	TXL SF60,1,1350	HALT IF TOP OD DOTAG	F2104880
	06376	0	07400	4	00004		TSX DIAG,4 PASSED.	ERROR. GO TO DIAGNOSTIC	F2104893
	06377	0	50000	1	02544	SF60	CLA DOTAGZ+5,1	THIS ROUTINE, BY RAISING	F2104900
	06400	0	62200	0	06401		STD SF70	XRA, EXITS TO SF80 OR	F2104910
D	06401	-3	00000	2	06374	SF70	TXL SF40,2	SF90 UPON FINDING A DO	F2104920
	06402	-0	75400	1	00000		PXD 0,1	IN THE SUBNEST OF XRA	F2104930
	06403	0	34000	0	06467		CAS SFES1	WHICH IS THE DO OF XRC OR	F2104940
	06404	0	02000	0	06407		TRA SF73	CONTAINS THE DO OF XRC	F2104950
	06405	0	02000	0	06431		TRA SF80	AND CURRENT DO.	F2104960
	06406	0	02000	0	06370		TRA SF35	GO BACK FOR NEXT DO	F2104970
	06407	-0	63400	1	06422	SF73	SXD SF76,1	THIS ROUTINE (THROUGH SF76)	F2104980
	06410	-0	53400	1	06361	SF74	LXD SF15,1		F2104990
	06411	0	07400	4	06470		TSX TRA00,4	USES TRA00	F2105000
	06412	0	10000	0	06465		TZE SFEND		F2105010
	06413	0	60100	0	06423		STO SF78	TO DETERMINE THE	F2105020
	06414	-0	53400	1	06422		LXD SF76,1	GREATEST EXIT LEVEL OF	F2105030
	06415	0	50000	1	02544		CLA DOTAGZ+5,1	DEFINITION FROM A	F2105040
	06416	-0	32000	0	05514		ANA DECMSK	DO SYM NOT IN THE	F2105050
	06417	0	34000	0	06423		CAS SF78	SUBNEST OF A DO WITH	F2105060
	06420	0	50000	0	06423		CLA SF78	VARIABLE NS, BUT IN A	F2105070
	06421	0	76100	0	00000		NOP	SUBNEST WHICH HAS A	F2105080
D	06422	-3	00000	0	06437	SF76	TXL SF90,0	NON EMPTY INTERSECTION	F2105090
A	06423	0	00000	0	00000	SF78	HTR	WITH THAT SUB NEST.	F2105100
	06424	0	50000	1	02544	SF79	CLA DOTAGZ+5,1		F2105110
	06425	-0	32000	0	05514		ANA DECMSK		F21111120
	06426	0	40200	0	05475		SUB L(1)		F2105130
	06427	-0	10000	0	06437		TNZ SF90		F2105140
	06430	0	02000	0	06465		TRA SFEND		F2105150
	06431	-0	76000	0	00141	SF80	MSE 97	EQUALITY, IF SYM DO IS	F2105160
	06432	0	07400	4	00004		TSX DIAG,4 CURRENT DO,	ERROR. GO TO DIAGNOSTIC.	F2105173
	06433	0	50000	0	05511		CLA BITONE		F2105180
	06434	-0	60200	1	02544		ORS DOTAGZ+5,1		F2105190
	06435	0	50000	1	02544		CLA DOTAGZ+5,1	OBTAIN LEVEL OF DEFINITION	F2105200
	06436	-0	32000	0	05514		ANA DECMSK	AND STORE	F2105210
	06437	0	77100	0	00022	SF90	ARS 18	IN ADDRESS PART	F2105220
	06440	0	60100	0	06467		STO SFES1	OF SFESI.	F2105230
	06441	-0	53400	1	06326		LXD SV48,1	INDEX OF VAR.N. IN CUR. DO.	F2105240

	06442	0	50000	1	02547		CLA DOTAGZ+8,1		OBTAIN PREVIOUS LEV. DEF.	F2105250
	06443	-0	32000	0	05516		ANA ADDMSK		AND COMPARE	F2105260
	06444	0	34000	0	06467		CAS SFES1		WITH NEW,	F2105270
	06445	0	02000	0	06465		TRA SFEND		EXIT UNLESS	F2105280
	06446	0	02000	0	06465		TRA SFEND		NEW LEV.	F2105290
	06447	0	50000	0	06467		CLA SFES1		IS LARGGER, IN WHICH CASE	F2105300
	06450	0	62100	1	02547		STA DOTAGZ+8,1		REPLACE OLD WITH NEW	F2105310
	06451	-0	53400	2	06356		LXD SF10,2		OBTAIN N COUNTER IN XRB	F2105320
	06452	0	50000	1	02543	SF92	CLA DOTAGZ+4,1		OBTAIN VAR. N IN ACC.	F2105330
	06453	0	02000	0	06457		TRA SF96		GO TO INDEXING.	F2105340
	06454	0	34000	1	02543	SF94	CAS DOTAGZ+4,1		COMPARE, TO FIND DUPLICATE	F2105350
	06455	0	02000	0	06457		TRA SF96		N S.	F2105360
	06456	0	02000	0	06462		TRA SF99		DUPE FOUND.	F2105370
	06457	1	00001	1	06460	SF96	TXI SF98,1,1		INDEX IN DO FORMULA	F2105380
	06460	2	00001	2	06454	SF98	TIX SF94,2,1		AND IN COUNTER	F2105390
	06461	0	02000	0	06465		TRA SFEND			F2105400
	06462	0	50000	0	06467	SF99	CLA SFES1		REPLACE	F2105410
	06463	0	62100	1	02547		STA DOTAGZ+8,1		OLD LEVEL	F2105420
	06464	0	02000	0	06452		TRA SF92		OF DEFINITION.	F2105430
	06465	-0	53400	4	06361	SFEND	LXD SF15,4		GO BACK FOR NEXT	F2105440
	06466	0	02000	0	06331		TRA SV65		SYMBOL DO	F2105450
A	06467	0	00000	0	00000	SFES1	HTR		ES,	F2105460
	06470	0	50000	1	02544	TRA00	CLA DOTAGZ+5,1	GREATEST TRANSFER LEVEL	OUT OF DO FORMULA	F2105470
	06471	-0	73400	2	00000		PDX 0,2		OBTAIL LEVEL OF DO	F2105480
	06472	-3	00024	2	06474	TRA10	TXL TRA20,2,20		USE MAX LEV TWENTY	F2105490
	06473	-0	53400	2	06472		LXD TRA10,2			F2105500
	06474	-0	63400	2	06513	TRA20	SXD TRA50,2		INITIALIZE TEST INSTR.	F2105520
	06475	-0	75400	2	00000		PXD 0,2		COMPUTE LEVEL MINUS ONE	F2105530
	06476	0	77100	0	00022		ARS 18		AND INITIALIZE SHIFT INSTR.	F2105540
	06477	0	40200	0	06537		SUB TRAN1		COMPUTE 35 MINUS (L MINUS	F2105530
	06500	0	62100	0	06515		STA TRA70		ONE) AND	F2105560
	06501	0	40200	0	06540		SUB TRAN2		INITIALIZE	F2105570
	06502	0	62100	0	06516		STA TRA80		SHIFT INSTR.	F2105580
	06503	-0	75400	0	00000		PXD 0,0		INITIALIZE	F2105590
	06504	0	60100	0	06542		STO TRAN5		ES LOCATION TO ZERO	F2105600
	06505	-0	50000	1	02546	TRA30	CAL DOTAGZ+7,1		OR INTO TRAN5 ALL THE	F2105610
	06506	-0	60200	0	06542		ORS TRAN5		T2 WORDS OF THIS DO	F2105620
	06507	1	77767	1	06510		TXI TRA40,1,-9		AND ALL DOS CONTAINED	F2105630
D	06510	-3	00000	1	06514	TRA40	TXL TRA60,1		BY THIS DO.	F2105640
	06511	0	50000	1	02544		CLA DOTAGZ+5,1			F2105650
	06512	-0	73400	2	00000		PDX 0,2			F2105660
D	06513	3	00000	2	06505	TRA50	TXH TRA30,2			F2105670
	06514	0	56000	0	06541	TRA60	LDQ TRAN4		PUT MASK IN QUOTIENT	F2105680
A	06515	0	76300	0	00000	TRA70	LLS		REGISTER, SHIFT COMPUTED	F2105690
A	06516	0	76700	0	00000	TRA80	ALS		AMOUNTS TO CONSTRUCT	F2105700
	06517	-0	32000	0	06542		ANA TRAN5		MASK IN ACC. AND IN	F2105710
	06520	0	10000	0	06536		TZE TRA95		UNION OF T2 WORDS. EXIT IF ZERO.	F2105720
	06521	0	60100	0	06542		STO TRAN5		OBTAIN LOW ORDER BIT	F2105730
	06522	0	40200	0	06537		SUB TRAN1		IN ACC.	F2105740
	06523	0	60100	0	06543		STO TRAN6			F2105750
	06524	-0	50100	0	06542		ORA TRAN5			F2105760
	06525	0	40200	0	06543		SUB TRAN6			F2105770
	06526	-0	53400	1	05475		LXD L(1),1			F2105780

06527	0	34000	1	06567	TRA85	CAS	TRATAB+19,1	SEARCH TABLE	F2105790
06530	0	02000	0	06532		TRA	TRA86	TO OBTAIN	F2105800
06531	0	02000	0	06535		TRA	TRA90	LEVEL INTEGER	F2105810
06532	1	00001	1	06533	TRA86	TXI	TRA87,1,1		F2105820
06533	-3	00023	1	06527	TRA87	TXL	TRA85,1,19		F2105830
06534	0	07400	4	00004		TSX	DIAG,4	ERROR GO TO DIAGNOSTIC.	F2103845
06535	-0	75400	1	00000	TRA90	PXD	0,1	PUT LEVEL IN ACC DECREMENT	F2105850
06536	0	02000	4	00001	TRA95	TRA	1,4	EXIT.	F2105860
06537	0	00000	0	00001	TRAN1	HTR	1		F2105870
06540	0	00000	0	00043	TRAN2	HTR	35		F2105880
06541	+37777777777777				TRAN4	OCT	377777777777		F2105890
A	06542	0	00000	0	00000	TRAN5	HTR		F2105900
A	06543	0	00000	0	00000	TRAN6	HTR		F2105910
	06544	+000000200000			TRATAB	OCT	200000		F2105920
	06545	+000000400000				OCT	400000		F2105930
	06546	+000001000000				OCT	1000000		F2105940
	06547	+000002000000				OCT	2000000		F2105950
	06550	+000004000000				OCT	4000000		F2105960
	06551	+000010000000				OCT	10000000		F2105970
	06552	+000020000000				OCT	20000000		F2105980
	06553	+000040000000				OCT	40000000		F2105990
	06554	+000100000000				OCT	100000000		F2106000
	06555	+000200000000				OCT	200000000		F2106010
	06556	+000400000000				OCT	400000000		F2106020
	06557	+001000000000				OCT	1000000000		F2106030
	06560	+002000000000				OCT	2000000000		F2106040
	06561	+004000000000				OCT	4000000000		F2106050
	06562	+010000000000				OCT	10000000000		F2106060
	06563	+020000000000				OCT	20000000000		F2106070
	06564	+040000000000				OCT	40000000000		F2106080
	06565	+100000000000				OCT	100000000000		F2106090
	06566	+200000000000				OCT	200000000000		F2106100
								FORVAL TABLE SEARCH FOR VARIABLE RANGES AND INCREMENTS	F2106110
06567	0	50000	0	07152	TS4VAL	CLA	4VALAD	READ IN	F2106120
06570	-0	53400	2	05502		LXD	L(6),2	FORVAL	F2106130
06571	0	07400	4	07060		TSX	RTAPE,4		F2106140
06572	-3	01747	1	06575		TXL	TSV10,1,999		F2106150
06573	0	76000	0	00144		PSE	100	IF FORVAL EMPTY, SET	F2106160
06574	0	02000	0	06753		TRA	T190	SENSE LIGHT AND EXTT	F2106170
06575	-0	63400	1	06652	TSV10	SXD	TS40,1	INITIALIZE TEST INSTRS.	F2106180
06576	-0	63400	1	06673		SXD	TS75,1		F2106190
06577	-0	76000	0	00143		MSE	99	TEST FOR EMPTY DOTAG	F2106200
06600	0	02000	0	06603		TRA	TSV20	OFF, NOT EMPTY	F2106210
06601	0	76000	0	00143		PSE	99	ON, DOTAG EMPTY	F2106220
06602	0	02000	0	06753		TRA	T190	EXIT	F2106230
06603	-0	53400	1	00030	TSV20	LXD	DOTAG-1,1	DOTAG TEST INITIALIZING	F2106240
06604	-0	63400	1	06650		SXD	TS35,1		F2106230
06605	-0	53400	1	05506		LXD	L(1350,1	INITIALIZE XRA	F2106260
06606	-0	53400	4	05505		LXD	L(1000,4	AND	F2106270
06607	-0	63400	4	06755		SXD	XFOR,4	XFOR. CONTINUE WITH TS00	F2106280
06610	-0	76000	0	00141	TS00	MSE	97	SENSE LIGHT-97 OFF	F2106290
06611	0	76100	0	00000		NOP			F2106300
06612	0	50000	1	02544	TS10	CLA	DOTAGZ+5,1	OBTAIN LEVEL OF CURRENT	F2106310
06613	-0	73400	2	00000		PDX	0,2	DO IN XRB. IF L IS ONE,	F2106320

06614	-3	00001	2	06621		TXL TS15,2,1	GO TO NEST PROCEDURE. IF	F2106330
06615	-0	76000	0	00141		MSE 97	L IS NOT ONE AND LIGHT IS	F2106340
06616	0	02000	0	06644		TRA TS30,0	OFF, GO TO INNER DO PRECEDURE,	F2106350
06617	0	76000	0	00141		PSE 97	IF LIGHT IS ON, CONTINUE	F2106360
06620	1	77767	1	06650		TXI TS35,1,-9	INDEXING FOR NEXT NEST.	F2106370
06621	-0	76000	0	00141	TS15	MSE 97		F2106380
06622	0	76100	0	00000		NOP		F2106390
06623	0	50000	1	02537		CLA DOTAGZ,1	L IS ONE, DO NEST PROCEDURE.	F2106400
06624	0	73400	2	00000		PAX 0,2	ESTABLISH BEGINNING OF	F2106410
06625	-0	32000	0	05514		ANA DECMSK	NEST ADDRESS BNA, AND	F2106420
06626	0	60100	0	06756		STO TBNA	END OF NEST ADDRESS ENA.	F2106430
06627	-0	75400	2	00000		PXD 0,2	SEARCH IN FORTAG UNTIL	F2106440
06630	0	60100	0	06757		STO TENA	FOR NRS. FOUND GREATER	F2106450
06631	-0	53400	4	06755		LXD XFOR,4	THAN ENA. IF NONE, EXIT	F2106460
06632	0	50000	0	06756		CLA TBNA	FROM ENTIRE ROUTINE.	F2106470
06633	0	34000	4	04510	TS20	CAS 4VALZ,4	TEST WHETHER FIRST SUCH	F2106480
06634	1	77776	4	06652		TXI TS40,4,-2	NR. IS IN NEST IF NOT,	F2106490
06635	0	07400	4	00004		TSX DIAG,4	FIND NEXT NEST. IF SO, (ERROR. GO TO DIAGNOSTIC.)	F2106503
06636	-0	63400	4	06755		SXD XFOR,4	GO TO INDEXING INSTRS.	F2106510
06637	0	50000	0	06757		CLA TENA	FOR NEXT DO.	F2106520
06640	0	40200	4	04510		SUB 4VALZ,4		F2106530
06641	0	12000	0	06643		TPL TS25		F2106540
06642	0	76000	0	00141		PSE 97	RECORD NO FORVAL FALLS IN THIS NEST.	F2106550
06643	1	77767	1	06650	TS25	TXI TS35,1,-9		F2106560
06644	0	50000	1	02537	TS30	CLA DOTAGZ,1	INNER DO PROCEDURE.	F2106570
06645	-0	32000	0	05515		ANA TAGMSK	TEST FOR NON ZERO TAG,	F2106580
06646	-0	10000	0	06654		TNZ TS50	IN WHICH CASE TRA FOR	F2106590
06647	1	77767	1	06650	TS33	TXI TS35,1,-9	TABLE SEARCH. OTHERWISE,	F2106600
06650	3	00000	1	06612	TS35	TXH TS10,1	INDEX FOR NEXT DO, IF POSSIBLE.	F2106610
06651	-3	00000	0	06753	TS38	TXL T190,0	EXIT, STORAGE FOR INDEX CUR. DO.	F2106620
06652	3	00000	4	06633	TS40	TXH TS20,4	INDEX TEST FOR FORVAL	F2106630
06653	0	02000	0	06753		TRA T190	EXIT	F2106640
06654	-0	63400	1	06651	TS50	SXD TS38,1	SAVE INDEX OF CURRENT DO	F2106650
06655	-0	63400	2	06722		SXD T110,2	SAVE LEVEL OF CURRENT DO	F2106660
06656	-0	53400	4	06755		LXD XFOR,4	OBTAIN FORVAL INDEX IN XRC	F2106670
06657	-0	53400	2	05477	TS55	LXD L(3),2	PUT THREE IN XRC	F2106680
06660	-0	53400	1	06651		LXD TS38,1	CURRENT DO IN XRA	F2106690
06661	0	50000	0	06757		CLA TENA	TEST FOR END OF NEST	F2106700
06662	0	40200	4	04510		SUB 4VALZ,4		F2106710
06663	-0	12000	0	06647		TMI TS33	NOT IN NEST TRA FOR NEXT DO.	F2106720
06664	0	50000	4	04511		CLA 4VALZ+1,4	IN NEST OBTAIN FORTAG	F2106730
06665	0	34000	1	02543	TS60	CAS DOTAGZ+4,1	SYMBOL, COMPARE WITH VAR	F2106740
06666	0	02000	0	06670		TRA TS65	N SYMBOLS.	F2106750
06667	0	02000	0	06676		TRA TS80	EQUALITY	F2106760
06670	1	00001	1	06671	TS65	TXI TS70,1,1	INDEX IN XRA,	F2106770
06671	2	00001	2	06665	TS70	TIX TS60,2,1	COUNT IN XRB	F2106780
06672	1	77776	4	06673		TXI TS75,4,-2	TAKE NEXT FORTAG ENTRY,	F2106790
06673	3	00000	4	06657	TS75	TXH TS55,4	IF ANY	F2106800
06674	-0	53400	1	06651		LXD TS38,1	RESTORE CURRENT DO INDEX	F2106810
06675	1	77767	1	06650		TXI TS35,1,-9	AND TRA FOR NEXT DO.	F2106820
06676	-0	63400	2	06743	TS80	SXD T148,2	SAVE VAR. N. COUNTER.	F2106830
06677	-0	63400	1	06742		SXD T144,1	SAVE COUNTER OF SYM IN DO	F2106840
06700	-0	53400	1	06651		LXD TS38,1	CURRENT DO INDEX IN XRA	F2106850
06701	-0	53400	2	06722		LXD T110,2	CURRENT DO LEVEL IN XRB	F2106860

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	06702	1	00001	2	06703		TXI TS85,2,1	ADJUST XRB FOR CURRENT DO TEST.	F2106870
	06703	0	50000	1	02544	TS85	CLA DOTAGZ+5,1	OBTAIN NEXT BACK DO IN	F2106880
	06704	0	62200	0	06705		STD TS90	SUBNEST. ON FIRST TIME	F2106890
D	06705	3	00000	2	06711	TS90	TXH T100,2	THROUGH, CURRENT DO IS	F2106900
	06706	1	00011	1	06703	TS92	TXI TS85,1,9	PRODUCED.	F2106910
	06707	2	00001	2	06706	TS94	TIX TS92,2,1	ADJUST LEVEL.	F2106920
	06710	0	07400	4	00004		TSX DIAG,4 IF NOT IN NEST,	ERROR. GO TO DIAGNOSTIC.	F2106933
	06711	0	50000	1	02537	T100	CLA DOTAGZ,1	NEXT BACK DO FOUND.	F2106940
	06712	-0	32000	0	05514		ANA DECMSK	TEST TO SEE IF FORTAG	F2106950
	06713	0	40200	4	04510		SUB 4VALZ,4	FORMULA NR. IS IN THIS	F2106960
	06714	0	12000	0	06707		TPL TS94	DO. IF NOT, GO TO TS94	F2106970
	06715	0	50000	1	02537		CLA DOTAGZ,1	TO ADJUST LEVEL FOR	F2106980
	06716	-0	32000	0	05516		ANA ADDMSK	OBTAINING NEW SUBNEST DO.	F2106990
	06717	0	76700	0	00022		ALS 18		F2107000
	06720	0	40200	4	04510		SUB 4VALZ,4		F2107010
	06721	-0	12000	0	06707		TMI TS94		F2107020
D	06722	-3	00000	2	06724	T110	TXL T120,2	DEC CONTAINS CURRENT LEVEL.	F2107030
	06723	0	02000	0	06746		TRA T170	APPARENT DEFINITION OF A VARIABLE N WITHIN	F2107044
								RANGE OF THE DO WITH VARIABLE N. IGNORE AND	F2107046
								GET NEXT FORVAL.	F2107047
	06724	-0	53400	1	06742	T120	LXD T144,1	PUT CUR. VAR. DO INDEX IN	F2107050
	06725	0	50000	1	02547		CLA DOTAGZ+8,1	XRA, AND OBTAIN LEV. DEF,	F2107060
	06726	0	73400	2	00000		PAX 0,2	OF VAR. N.	F2107070
	06727	-0	63400	2	06731		SXD T130,2	STORE IN DEC OF T130.	F2107080
	06730	-0	53400	2	06705		LXD TS90,2	OBTAIN LEVEL OF DO CONTAINING	F2107000
D	06731	-3	00000	2	06746	T130	TXL T170,2	FURTAG FOR. NR.	F2107100
	06732	-0	75400	2	00000		PXD 0,2	CHOOSE LARGER AND PUT IN	F2107110
	06733	0	77100	0	00022		ARS 18	LEV. DEF. FIELD OF CURRENT DO.	F2107120
	06734	0	62100	1	02547		STA DOTAGZ+8,1	IF CHANGE MADE, SAVE	F2107130
	06735	0	60100	0	06754		STO T195	LEVEL,	F2107140
	06736	-0	53400	2	06743		LXD T148,2	AND TEST TO SEE IF THIS	F2107150
	06737	0	50000	1	02543		CLA DOTAGZ+4,1	SYMBOL	F2107160
	06740	1	00001	1	06745		TXI T160,1,1	DUPLICATED	F2107170
	06741	0	34000	1	02543	T140	CAS DOTAGZ+4,1	IN DO VAR.N S.	F2107180
D	06742	-3	00000	0	06744	T144	TXL T150,0	IF SO, REPLACE ITS LEVEL(DEC HAS IX FOR VAR N)	F2107100
D	06743	-3	00000	0	06747	T148	TXL T180,0	OF DEF BY THIS (DEC HAS 3,2,1 IF FORVAL	F2107200
								MATCHES VARIABLE N3,N2,N1)	F2107201
	06744	1	00001	1	06745	T150	TXI T160,1,1	NEW LEVEL.	F2107210
	06745	2	00001	2	06741	T160	TIX T140,2,1		F2107220
	06746	1	77776	4	06673	T170	TXI TS75,4,-2		F2107230
	06747	0	50000	0	06754	T180	CLA T195		F2107240
	06750	0	62100	1	02547		STA DOTAGZ+8,1		F2107230
	06751	0	50000	1	02543		CLA DOTAGZ+4,1		F2107260
	06752	1	00001	1	06745		TXI T160,1,1		F2107270
	06753	0	02000	0	06760	T190	TRA RH00	EXIT	F2107280
A	06754	0	00000	0	00000	T195	HTR	ES	F2107290
A	06755	0	00000	0	00000	XFOR	HTR	FORTAG INDEX	F2107300
A	06756	0	00000	0	00000	TBNA	HTR	ES	F2107310
A	06757	0	00000	0	00000	TENA	HTR	ES	F2107320
								USE OF SYMBOL WITHIN RANGE AS FXD POINT VAR. FORVAR SEARCH.	F2107330
	06760	-0	53400	2	05501	RH00	LXD L(5),2	READ IN	F2107340
	06761	0	50000	0	07155		CLA 4VARAD	FORVAR	F2107350
	06762	0	07400	4	07060		TSX RTAPE,4		F2107360
	06763	3	02733	1	07053		TXH RH95,1,1499	EXIT IF FORVAR EMPTY	F2107370

06764	-0	76000	0	00143	MSE	99	TEST FOR EMPTY DOTAG.	F2107380
06765	0	02000	0	06770	TRA	RH05	NOT EMPTY	F2107390
06766	0	76000	0	00143	PSE	99	EMPTY, RESTORE SENSE LIGHT	F2107400
06767	0	02000	0	07053	TRA	RH95	AND EXIT.	F2107410
06770	-0	63400	1	07032	SXD	RH60,1	FORVAR.TEST	F2107420
06771	-0	63400	1	07043	SXD	RH75,1	INITIALIZING	F2107430
06772	-0	53400	1	00030	LXD	DOTAG-1,1	DOTAG TEST	F2107440
06773	-0	63400	1	07052	SXD	RH90,1	INITIALIZING	F2107450
06774	-0	53400	1	05507	LXD	L(1500,1	MAX WORDS IN FORVAL	F2107460
06775	-0	63400	1	07054	SXD	RHNNX,1	IN NEXT NEST INDEX.	F2107470
06776	-0	76000	0	00141	MSE	97	TURN LIGHT 97 OFF.	F2107480
06777	0	76100	0	00000	NOP			F2107490
07000	-0	53400	1	05506	LXD	L(1350,1	PUT MAX WDS IN DOTAG IN XRA.	F2107500
07001	0	50000	1	02537	CLA	DOTAGZ,1	OBTAIN FIRST DOTAG WORD.	F2107510
07002	0	73400	2	00000	PAX	0,2	SEPARATE ALPHA AND BETA,	F2107520
07003	-0	32000	0	05514	ANA	DECMASK	STORE IN RFIRST AND RLAST	F2107530
07004	0	60100	0	07056	STO	RFIRST		F2107540
07005	-0	75400	2	00000	PXD	0,2		F2107550
07006	0	60100	0	07057	STO	RLAST		F2107560
07007	0	50000	1	02544	CLA	DOTAGZ+5,1	OBTAIN LEVEL IN XRB.	F2107570
07010	-0	73400	2	00000	PDX	0,2		F2107580
07011	3	00001	2	07017	TXH	RH30,2,1	TRA IF LEVEL GREATER THAN ONE.	F2107590
07012	-0	76000	0	00141	MSE	97	LEVEL IS ONE, TEST WHETHER,	F2107600
07013	0	02000	0	07015	TRA	RH20	ON LAST LEVEL ONE, FORVAR	F2107610
07014	0	02000	0	07053	TRA	RH95	EXHAUSTED, IF SO, EXIT,	F2107620
07015	-0	53400	4	07054	LXD	RHNNX,4	OTHERWISE, ADJUST FORVAR	F2107630
07016	-0	63400	4	07055	SXD	RHCNX,4	INDEX TO SKIP LAST NEST AREA	F2107640
07017	-0	53400	4	07055	LXD	RHCNX,4	PUT FORVAR INDEX IN XRC	F2107650
07020	0	50000	0	07056	CLA	RFIRST	BEGIN SEARCH FOR FIRRTL.	F2107660
07021	0	34000	4	05474	CAS	4VARZ,4	FORVAR ENTRY IN RANGE.	F2107670
07022	1	77776	4	07032	TXI	RH60,4,-2		F2107680
07023	0	07400	4	00004	TSX	DIAG,4	ERROR GO TO DIAGNOSTIC	F2107695
07024	-0	63400	4	07055	SXD	RHCNX,4	SAVE INDEX AT THIS POINT,	F2107700
07025	0	50000	0	07057	CLA	RLAST	FOR NEXT DO, AND COMPARE	F2107710
07026	0	34000	4	05474	CAS	4VARZ,4	FORVAR ENTRY WITH RLAST	F2107720
07027	0	76100	0	00000	NOP			F2107730
07030	0	02000	0	07034	TRA	RH70	TRA, IN RANGE.	F2107740
07031	0	02000	0	07047	TRA	RH80	TRA, NOT IN RANGE	F2107750
D 07032	3	00000	4	07021	TXH	RH40,4	IF NO ENTRIES GREATER	F2107760
07033	0	02000	0	07053	TRA	RH95	THAN RFIRST, EXIT.	F2107770
07034	0	50000	1	02540	CLA	DOTAGZ+1,1	IN RANGE, COMPARE SYMBOLS	F2107780
07035	0	40200	4	05475	SUB	4VARZ+1,4	IF EQUAL, PUT BIT IN	F2107790
07036	-0	10000	0	07042	TNZ	RH72	DOTAG-ENTRY.	F2107800
07037	0	50000	0	05511	CLA	BITONE		F2107810
07040	-0	60200	1	02544	ORS	DOTAGZ+5,1		F2107820
07041	3	00001	2	07051	TXH	RH85,2,1		F2107830
07042	1	77776	4	07043	TXI	RH75,4,-2	INDEX FORVAR AND GO BACK,	F2107840
D 07043	3	00000	4	07025	TXH	RH50,4	IF POSSIBLE. OTHERWISE,	F2107850
07044	3	00001	2	07051	TXH	RH85,2,1	TEST LEVEL. IF LEVEL IS	F2107860
07045	0	76000	0	00141	PSE	97	ONE, ARRANGE TO EXIT WHEN	F2107870
07046	0	02000	0	07051	TRA	RH85	NEXT LEVEL ONE ENCOUNTERED	F2107880
07047	3	00001	2	07051	TXH	RH85,2,1	NOT IN RANGE, TEST LEVEL	F2107890
07050	-0	63400	4	07054	SXD	RHNNX,4	SET NEXT NEST INDEX IF L IS ONE.	F2107900
07051	1	77767	1	07052	TXI	RH90,1,-9	INDEX IN DOTAG AND GO	F2107910

D	07052	3	00000	1	07001	RH90	TXH	RH10,1	BACK, IF POSSIBLE.	F2107920
	07053	0	02000	0	07157	RH95	TRA	LB00	EXIT	F2107930
A	07054	0	00000	0	00000	RHNNX	HTR		NEXT NGST INDEX	F2107940
A	07055	0	00000	0	00000	RHCNX	HTR		CURRENT NEST INDEX	F2107950
A	07056	0	00000	0	00000	RFIRST	HTR		ALPHA ADDRESS	F2107960
A	07057	0	00000	0	00000	RLAST	HTR		BETA ADDRESS	F2107970
									TAPE READING ROUTINE	F2107980
	07060	0	62100	0	07101	RTAPE	STA	RT40	INITIALIZE TABLE ADDRESS	F2107990
	07061	0	60100	0	07126		STO	RT92		F2108000
	07062	-0	63400	4	07124		SXD	RT80,4	SAVEXRC, TSX SET	F2108010
	07063	-0	75400	2	00000		PXD	0,2	SAVE XRB,	F2108020
	07064	0	77100	0	00022		ARS	18	TABLE NR, IN ADDRESS.	F2108030
	07065	0	60100	0	07125		STO	RT90		F2108040
	07066	-0	53400	4	07136		LXD	RTD18,4	INITIALIZE ERROR COUNTER.	F2108050
	07067	-0	63400	4	07121		SXD	RT73,4		F2108060
	07070	0	76200	0	00222	RT10	RDS	TTAPE	SELECT TAPE	F2108070
	07071	-0	53400	1	07126		LXD	RT92,1	PUT MAX NR WORDS IN XRA	F2108080
	07072	-0	53400	4	05476		LXD	L(2),4	PUT TWO IN XRC	F2108090
	07073	0	70000	4	07131	RT20	CPY	RT95+2,4	COPY FIRST TWO WORDS.	F2108100
	07074	0	02000	0	07077		TRA	RT30	INTO E.S.	F2108110
	07075	0	07400	4	00004		TSX	DIAG,4 EOF.	ERROR. GO TO DIAGNOSTIC	F2108125
	07076	0	07400	4	00004		TSX	DIAG,4 EOR	ERROR. GO TO DIAGNOSTIC.	F2108135
	07077	2	00001	4	07073	RT30	TIX	RT20,4,1		F2108140
	07100	-3	00001	2	07131		TXL	RTD00,2,1		F2108150
	07101	0	70000	1	00000	RT40	CPY	0,1	COPY TABLE	F2108160
	07102	1	77777	1	07101		TXI	RT40,1,-1	COUNT NR. OF WORDS.	F2108170
	07103	0	07400	4	00004		TSX	DIAG,4 EOF	ERROR. GO TO DIAGNOSTIC.	F2108183
	07104	0	76600	0	00333	RT45	WRS	219	ERROR. GO TO DIAGNOSTIC.	F2108183
	07105	-0	76000	0	00012		RTT		ERROR TEST	F2108190
	07106	0	02000	0	07115		TRA	RT70	ERROR, TRA	F2108200
	07107	0	50000	0	07125		CLA	RT90	NO ERROR,	F2108220
	07110	0	40200	0	07127		SUB	RT95	TEST TABLE NR.	F2108230
	07111	0	10000	0	07113		TZE	RT60	NO ERROR	F2108240
	07112	0	07400	4	00004		TSX	DIAG,4 WRONG TABLE IDENT	NR. ERROR. GO TO DIAGNOSTIC.	F2108255
	07113	-0	53400	4	07124	RT60	LXD	RT80,4	TABLE CORRECT,	F2108260
	07114	0	02000	4	00001		TRA	1,4	RETURN.	F2108270
	07115	-0	53400	4	07121	RT70	LXD	RT73,4		F2108280
	07116	0	76400	0	00222		BST	TTAPE	ERROR, BACKSPACE TAPE	F2108290
	07117	-2	00001	4	07122		TNX	RT75,4,1		F2108300
	07120	-0	63400	4	07121		SXD	RT73,4	COUNT DOWN ERROR COUNTER	F2108310
D	07121	-3	00000	0	07070	RT73	TXL	RT10,0		F2108320
	07122	0	56000	0	07125	RT75	LDQ	RT90	IF FIVE FAILURES, PUT	F2108332
	07123	0	07400	4	00004		TSX	DIAG,4 TABLE NR. IN MQ.	ERROR. GO TO DIAGNOSTIC.	F2108344
A	07124	0	00000	0	00000	RT80	HTR		TSX INDEX STORAGE	F2108350
A	07125	0	00000	0	00000	RT90	HTR		TABLE NR STORAGE, C.S.	F2108360
A	07126	0	00000	0	00000	RT92	HTR		ADDRESS WORD STORAGE	F2108370
A	07127	0	00000	0	00000	RT95	HTR		TABLE NR, WD ONE OF TABLE.	F2108380
A	07130	0	00000	0	00000	RT96	HTR		NR. OF WDS IN DEC.	F2108390
	07131	-0	75400	0	00000	RTD00	PXD	0,0	THIS ROUTINE	F2108400
	07132	-0	53400	4	07136	RTD10	LXD	RTD18,4	READS IN ONE	F2108410
	07133	0	70000	1	02537	RTD15	CPY	DOTAGZ,1	ENTRY FROM	F2108420
	07134	1	77777	1	07137		TXI	RTD20,1,-1	TDO, AFTER WHICH	F2108430
	07135	0	07400	4	00004		TSX	DIAG,4 FOUR ZERO WORDS	=ERROR. GO TO DIAGNOSTIC.	F2108445
	07136	-3	00005	0	07104	RTD18	TXL	RT45,0,5	ARE STORED,BEFORE	F2108450

07137	2	00001	4	07133	RTD20	TIX	RTD15,4,1	READING IN	F2108460
07140	1	00003	4	07141	RTD23	TXI	RTD25,4,3	THE NEXT ENTRY.	F2108470
07141	0	60100	1	02537	RTD25	STO	DOTAGZ,1	STORE ZERO	F2108480
07142	1	77777	1	07143		TXI	RTD30,1,-1	INDEX	F2108490
07143	0	60100	1	02537	RTD30	STO	DOTAGZ,1	AND REPEAT.	F2108500
07144	1	77777	1	07145		TXI	RTD35,1,-1	WHEN DOTAG	F2108510
07145	0	60100	1	02537	RTD35	STO	DOTAGZ,1	ENTRY IS	F2108520
07146	1	77777	1	07147		TXI	RTD40,1,-1	COMPLETE,	F2108530
07147	0	60100	1	02537	RTD40	STO	DOTAGZ,1	TRA	F2108540
07150	1	77777	1	07132		TXI	RTD10,1,-1	TO RTD10	F2108550
07151	0	02506	0	02537	DOAD	HTR	DOTAGZ,0,1350	ADDRESS PART CONTAINS	F2108560
07152	0	01750	0	04510	4VALAD	HTR	4VALZ,0,1000	ADDRESS OF LAST WORD IN	F2108570
07153	0	01130	0	03670	TIFAD	HTR	TIFZ,0,600	TABLE PLUS ONE.	F2108580
07154	0	00372	0	04263	TRADAD	HTR	TRADZ,0,250	DEC CONTAINS MAX NR OF	F2108590
07155	0	02734	0	05474	4VARAD	HTR	4VARZ,0,1500	WRDS.	F2108600
07156	0	02734	0	03670	4TAGAD	HTR	FORTZ,0,1500		F2108610
								TRANSFER IN EXTENDED RANGE BIT.	F2108620
07157	-0	76000	0	00143	LB00	MSE	99	TEST FOR EMPTY DOTAG	F2108630
07160	0	02000	0	07163		TRA	LB02	OFF, NOT EMPTY	F2108640
07161	0	76000	0	00143		PSE	99	ON, EMPTY, RESET LIGHT	F2108650
07162	0	02000	0	07211		TRA	EB00	AND EXIT	F2108660
07163	-0	53400	1	00030	LB02	LXD	DOTAG-1,1	OBTAIN NEXT UNUSED INDEX	F2108670
07164	-3	00000	0	07207	LB05	TXL	LB60,0	TRA TO ADJUST FOR LAST DO.	F2108680
07165	0	50000	1	02545	LB10	CLA	DOTAGZ+6,1	OBTAIN T1 WORD.	F2108690
07166	-0	12000	0	07207		TMI	LB60	TEST SIGN, TRA IF NEG.	F2108700
07167	-0	32000	0	05511		ANA	BITONE	TEST FOR TRA IN IMMED. RANGE.	F2108710
07170	0	10000	0	07207		TZE	LB60	IF NONE,TRA.	F2108720
07171	-0	63400	1	07164		SXD	LB05,1	SAVE XRA	F2108730
07172	0	50000	1	02544		CLA	DOTAGZ+5,1	PUT LEVEL	F2108740
07173	-0	73400	2	00000		PDX	0,2	IN XRB	F2108750
07174	-0	50000	0	05510	LB20	CAL	LMSK	OR IN	F2108760
07175	-0	60200	1	02545		ORS	DOTAGZ+6,1	MSK	F2108770
07176	-3	00001	2	07206		TXL	LB50,2,1	EXIT IF LEVEL ONE.	F2108780
07177	1	00011	1	07200	LB25	TXI	LB30,1,9	FIND NEXT BACK	F2108790
07200	0	50000	1	02544	LB30	CLA	DOTAGZ+5,1	SUBNEST DO,	F2108800
07201	0	62200	0	07202		STD	LB40		F2108810
07202	-3	00000	2	07177	LB40	TXL	LB25,2		F2108820
07203	-0	73400	2	00000		PDX	0,2	SAVE NEW LEVEL IN XRB.	F2108830
07204	0	50000	1	02545		CLA	DOTAGZ+6,1	TEST SIGN OF WORD T1.	F2108840
07205	0	12000	0	07174		TPL	LB20	IF PLUS GO TO PUT IN MSK.	F2108850
07206	-0	53400	1	07164	LB50	LXD	LB05,1	IF NOT, FIND NEXT DO	F2108860
07207	1	00011	1	07210	LB60	TXI	LB70,1,9	IN MAIN PASS.	F2108870
07210	-3	02506	1	07165	LB70	TXL	LB10,1,1350	EB00 FOLLOWS	F2108880
								END OF BLOCK ROUTINE	F2108890
07211	0	77200	0	00223	EB00	REW	147	REWIND DOTAG TAPE	F2108900
07212	-0	76000	0	00143		MSE	99	TEST FOR EMPTY DQTAG	F2108910
07213	0	02000	0	07216		TRA	EB10	OFF, NOT EMPTY	F2108920
07214	0	76000	0	00143		PSE	99	ON, EMPTY, RESTORE AND TRA.	F2108930
07215	0	02000	0	07233		TRA	EB50		F2108940
07216	-0	53400	1	00030	EB10	LXD	DOTAG-1,1	INITIALIZE TEST INSTR.	F2108950
07217	-0	63400	1	07230		SXD	EB40,1	AND	F2108960
07220	-0	53400	1	05506		LXD	L(1350,1	XRA	F2108970
07221	-0	53400	4	05503	EB20	LXD	L(9),4	WRITE	F2108980
07222	0	50000	1	02544		CLA	DOTAGZ+5,1	DOTAG	F2108990

	07223	-0	73400	2	00000		PDX 0,2		ON	F2109000
	07224	3	00001	2	07226		TXH EB30,2,1		TAPE	F2109010
	07225	0	76600	0	00223		WRS 147		ONE	F2109020
	07226	0	70000	1	02537	EB30	CPY DOTAGZ,1		NEST	F2109030
	07227	1	77777	1	07230		TXI EB40,1,-1		PER	F2109040
D	07230	-3	00000	1	07233	EB40	TXL EB50,1		RECORD	F2109050
	07231	2	00001	4	07226		TIX EB30,4,1			F2109060
	07232	0	02000	0	07221		TRA EB20			F2109070
	07233	0	77000	0	00223	EB50	WEF 147		WRITE END OF FILE	F2109080
	07234	-0	53400	2	05500	EB60	LXD L(4),2		READ	F2109090
	07235	0	50000	0	07156		CLA 4TAGAD		IN	F2109100
	07236	0	07400	4	07060		TSX RTAPE,4		FORTAG.	F2109110
	07237	-0	63400	1	00733		SXD FORTAG-1,1		SET SENSE LIGHT 97	F2109120
	07240	-0	76000	0	00141		MSE 97		ON IF FORTAG	F2109130
	07241	0	76100	0	00000		NOP		EMPTY, OFF IF	F2109140
	07242	-3	02733	1	07244		TXL EB70,1,1499		FORTAG	F2109150
	07243	0	76000	0	00141		PSE 97		NOT EMPTY.	F2109160
	07244	0	76200	0	00222	EB70	RDS TTAPE		MOVE TTAPE PAST	F2109170
	07245	0	70000	0	07251		CPY EB80		END OF FILE MARK.	F2109180
	07246	0	02000	0	07244		TRA EB70			F2109190
	07247	0	02000	0	07252		TRA EB90		EOF	F2109200
	07250	0	07400	4	00004		TSX DIAG,4	SHOULD NOT BE EOR HERE.	ERROR. GO TO DIAGNOSTIC.	F2109210
A	07251	0	00000	0	00000	EB80	HTR		ES	F2109220
	07252	-0	76000	0	00142	EB90	MSE 98	IS TRALEV TALBE EMPTY		F2109230
	07253	0	02000	0	07260		TRA EB95			F2109240
	07254	0	76600	0	00224		WRS TLTAPE		ON, EMPTY.	F2109250
	07255	0	70000	0	05474		CPY L(0)			F2109260
	07256	0	70000	0	05474		CPY L(0)			F2109270
	07257	0	76000	0	00142		PSE 98			F2109280
	07260	0	77000	0	00224	EB95	WEF TLTAPE	TRALEV TAPE		F2109290
	07261	0	76200	0	00221		RDS 145	SKIP OVER DIAGNOSTIC RECORD ON SYSTEM TAPE		F2109295
	07262	0	02000	0	00004		TRA ONETCS	GO TO ONE TO CS (MONITOR).		F2109296
	07263	-0	63400	2	07301	ERLIST	SXD ERIR2,2	SAVE X R B		F2109311
	07264	-0	53400	2	07302		LXD ERNBR,2	GET ERROR NUMBER		F2109321
	07265	0	50000	4	02537		CLA DOTAGZ,4	SAVE ALPHA DO BETA		F2109331
	07266	0	60100	2	77777		STO LIST,2	IN LIST		F2109141
	07267	0	50000	4	02540		CLA DOTAGZ+1,4	AND SYMBOL		F2109351
	07270	0	60100	2	77776		STO LIST-1,2			F2109361
	07271	0	50000	1	02537		CLA DOTAGZ,1	SAVE OTHER ALPHA DO BETA		F2109371
	07272	0	60100	2	77775		STO LIST-2,2			F2109181
	07273	0	50000	1	02540		CLA DOTAGZ+1,1	AND SYMBOL		F2109391
	07274	0	60100	2	77774		STO LIST-3,2			F2102401
	07275	1	00004	2	07276		TXI ERNXT,2,4			F2109411
	07276	-0	63400	2	07302	ERNXT	SXD ERNBR,2			F2109421
	07277	-0	53400	2	07301		LXD ERIR2,2			F2109431
	07300	0	02000	0	05625		TRA MR60			F2109441
	07301	0	00000	0	00000	ERIR2				F2109451
	07302	0	00000	0	00000	ERNBR				F2109461
	07303	-0	63400	2	07301	ERBETA	SXD ERIR2,2	SAVE ALPHA DO BETA		F2109471
	07304	-0	53400	2	07302		LXD ERNBR,2	WHERE ALPHA		F2109481
	07305	0	60000	2	77777		STZ LIST,2	IS GREATER THAN		F2109491
	07306	0	50000	1	02537		CLA DOTAGZ,1	ITS BETA		F2109501
	07307	0	60100	2	77776		STO LIST-1,2			F2109511
	07310	0	50000	1	02540		CLA DOTAGZ+1,1			F2109521

07311	0	60100	2	77775	STO LIST-2,2	F2109531
07312	1	00003	2	07313	TXI ERNX,2,3	F2109541
07313	-0	63400	2	07302	ERNX SXD ERNBR,2	F2109551
07314	-0	53400	2	07301	LXD ERIR2,2	F2109561
07315	0	02000	0	05570	TRA MR15	F2109571
07316	-0	53400	2	07302	ERTST LXD ERNBR,2	F2109581
07317	-3	00000	2	05662	TXL FLOW,2,0	F2109591
07320	0	07400	4	00004	TSX 4,4	F2109601
				77777	LIST SYN 32767	F2109611
				00004	ONETCS EQU 4	F2109710
				00004	DIAG EQU 4	F2109711
				05510	LMSK SYN L(MZ)	F2109712
				00222	TTAPE EQU 146	F2109722
				00224	TLTAPE EQU 148	F2109732
A				00000	END	F2109742

END OF BLOCK 1

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	987	0	0	0	0
LIB	0	0	0	0	0
COL	987	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 996

NUMBER OF SYMBOLS, DEF 318,DEFOP 0,UNDEF 0
 REM BLOCK TWO OF SECTION TWO.

BLOCK TWO OF SECTION TWO.

		MASTER RECORD CARD = FN034	F2200004
		BLOCK 2 OF SECTION 2 PERFORMS SUBSCRIPT ANALYSIS FOR THOSE	F2200006
		SUBSCRIPT COMBINATIONS WHICH HAVE SUBSCRIPTS	F2200010
		SOME OR ALL OF WHICH ARE UNDER CONTROL OF THEIR RESPECTIVE	F2200020
		DOS. THERE ARE TWO MACHINE STATES, ONE	F2200030
		OF WHICH IS RESERVED EXCLUSIVELY	F2200040
		FOR THOSE SUBSCRIPT COMBINATIONS	F2200050
		SOME SUBSCRIPT ELEMENT/S OF WHICH ARE	F2200060
		NOT UNDER CONTROL OF A DO (RELATIVE	F2200070
		CONSTANT).	F2200080
00031	ORG	25	F2200090
00031	DOTAG	BSS 1	F2200100
00032	BSS	449	F2200110
00733	DOTAGZ	BSS 1	F2200120
00734	FORTAG	BSS 1	F2200140
00735	BSS	1499	F2200150
03670	FORTZ	BSS 1	F2200160
03670	ORG	1976	F2200170
03670	DOREC	BSS 1	F2200180
		(INIT ZERO)	
03671	BSS	1	F2200190
03672	ATSW	BSS 1	F2200200
		ADDED TAG SWITCH. EQ 1 IF PROC ADDED TAGS (INIT OF	
03673	NEWTAG	BSS 1	F2200210
		(INIT 4000MODS, FIRSTTAG)	
03674	XC	BSS 1	F2200220
		IX CURRENT DO.	
03675	LC	BSS 1	F2200230
		LEV CURRENT DO	
03676	ALPHA	BSS 1	F2200240
		ALPHA CURRENT DO	
03677	BETA	BSS 1	F2200250
		BETA CURRENT DO	
03700	TAG	BSS 1	F2200260
		TAG CURRENT TAG IN ROUTINE TAG	
03701	TS	BSS 1	F2200270
		TAG, EITHER FORTAG OR NEW TAG NAME OF CURRENT	
03702	TAG1	BSS 1	F2200280
		4TH WD OF TAGTAG	
03703	GROUP	BSS 1	F2200290
		GROUP NR. IN DEC	
03704	C1	BSS 1	F2200300
		COEFF 1ST SYMB (HERE TO D2 BELOW, INIT 0, SUBCOMF	
03705	S1	BSS 1	F2200310
		SUBSCR 1ST SYMB	
03706	C2	BSS 1	F2200320
		COEFF 2ND SYMB	
03707	S2	BSS 1	F2200330
		SUBSC 2ND	
03710	C3	BSS 1	F2200340
		COEFF 3RD	
03711	S3	BSS 1	F2200350
		SUBSC 3RD	
03712	D1	BSS 1	F2200360
		DIMENSION 1ST	
03713	D2	BSS 1	F2200370
		DIM 2ND	
03714	X1	BSS 1	F2200380
		IX DO MATHCING 1ST SYMB.) (HERE TO CARWRD	
03715	L1	BSS 1	F2200390
		LEV DO MATCHING 1ST SYMB BELOW, INIT 0, IDENTF	
03716	X2	BSS 1	F2200400
		IX DO MATHCING 2ND SYMB	
03717	L2	BSS 1	F2200410
		LEV DO MATCHING 2ND	
03720	X3	BSS 1	F2200420
		IX DO MATCHING 3RD	
03721	L3	BSS 1	F2200430
		LEV DO MATCHING 3RD	
03722	XL	BSS 1	F2200440
		IX LOWEST LEVEL DOSUB	
03723	LL	BSS 1	F2200450
		LEV LOWEST LEVEL DOSUB	
03724	NRSUBS	BSS 1	F2200460
		NR. SUBSCRIPTS IN SUBSCR COMBINATION	
03725	NRRC	BSS 1	F2200470
		NR. RELCONS IN SUBSCR COMBINATION	
03726	NRDS	BSS 1	F2200480
		NR DOSUBS IN S.C.	
03727	DORC	BSS 1	F2200490
		BIT POS 15,16,17 EQ 1 IF CORRES X1,X2,X3 DORC	
03730	RCSUBS	BSS 1	F2200500
		BIT POS 15,16,17 EQ 1 IF CORRES X1,X2,X3 RELCONF	
03731	DOSUBS	BSS 1	F2200510
		BIT POS 15,16,17 EQ 1 IF CORRES X1,X2,X3 DOSUB	
03732	DELTA	BSS 1	F2200520

03733	RCDUP	BSS	1		BIT POS 15,16,17,EQ1 FOR CORRES DUPE RELCONS	F2200530
03734	DUPES	BSS	1		BIT POS 15,16,17 EQ 1 FOR CORRES DUPE DOSUBS	F2200540
03735	RSYM1	BSS	1		--	F2200550
03736	RSYM2	BSS	1			F2200560
03737	CARWRD	BSS	1		BIT 11 IF LEFT TYPE 1 CARRY, 12 LEFT TYPE 2, 13 CENTER TYPE 1, 14 CENTER TYPE 2. S SET NEG IF COUNTER AND TEST FOUND	F2200570 F2200571 F2200572
03740	TL1	BSS	1			F2200580
03741	TL2	BSS	1			F2200590
03742	A	BSS	1			F2200600
03743	B	BSS	1			F2200610
03744	NEXTA	BSS	1			F2200620
03745	LASTB	BSS	1			F2200630
03746	REBITS	BSS	1			F2200640
03747	TRABIT	BSS	1			F2200650
03750	LOWPOS	BSS	1		5,3,1 1F LL SUBSCR IS X1,X2,X3 RESPECT. (ID)	F2200660
03751	0 00000 0 00000	L(0)		0,0,0		F2200670
03752	0 00001 0 00000	L(1)		0,0,1		F2200680
03753	0 00002 0 00000	L(2)		0,0,2		F2200690
03754	0 00003 0 00000	L(3)		0,0,3		F2200711
03755	0 00004 0 00000	L(4)		0,0,4		F2200710
03756	0 00005 0 00000	L(5)		0,0,5		F2200720
03757	0 00006 0 00000	L(6)		0,0,6		F2200730
03760	0 00024 0 00000	L(20)		0,0,20		F2200740
03761	0 00044 0 00000	L(36)		0,0,36		F2200750
03762	0 00074 0 00000	L(60)		0,0,60		F2200760
03763	0 00702 0 00000	L(450)		0,0,450		F2200770
03764	0 02734 0 00000	L(1500)		0,0,1500		F2200780
03765	0 00000 0 00001	L(1)A		1		F2200790
03766	0 00000 0 00002	L(2)A		2		F2200800
03767	0 00000 0 00004	L(4)A		4		F2200810
03770	-0 00000 0 00000	L(MZ)	MZE			F2200820
03771	+3777777777777	35ONES	OCT	3777777777777		F2200830
03772	+0777777000000	DECMASK	OCT	77777000000		F2200840
03773	+000000077777	ADDMSK	OCT	77777		F2200850
03774	+0001000000000	CR1	OCT	100000000	BIT 11	F2200860
03775	+0000400000000	CR2	OCT	40000000	BIT 12	F2200870
03776	+0000003000000	CARMSK	OCT	300000	BITS 19,20 (CARRY BITS OF DOTAG, WD 6)	F2200880
03777	+000000004000	FRSTAG	OCT	4000		F2200890
04000	+2000000000000	BITONE	OCT	2000000000000		F220090D
04001	+1000000000000	BITTWO	OCT	1000000000000		F2200910
04002	-2000000000000	2BITS	OCT	-2000000000000	S AND 1 BIT	F2200920
04003	+000000400000	BIT18	OCT	400000		F2200930
04004	+000000200000	BIT19	OCT	200000		F2200940
04005	+000000100000	BIT20	OCT	100000		F2200950
04006	0 00000 0 00144	ADTXX		100	DEC CONTAINS (FROM)HERE TO NAMXX BELOW,	F2200960
04007	0 00000 0 00454	RESXX		300	IX VALUE FOR NEXT (DEC INIT SET TO-ADD)	F2200970
04010	0 00000 0 00120	TAGXX		80	TABLE ENTRY.	F2200980
04011	0 00000 0 00144	NAMXX		100		F2200990
04012	0 77200 0 00223	BEGIN	REW DOTAPE		REWIND DOTAG TAPE	F2201000
04013	-0 53400 1 03756	LXD	L(5),1		INITIALIZE	F2201010
04014	0 50000 1 05106	BEG10	CLA LADDIN+5,1		DRUM PROGRAM	F2201020
04015	-0 32000 0 03773	ANA	ADDMSK		ADDRESSES	F2201030
04016	0 60100 1 05101	STO	LADDS+5,1			

04017	2	00001	1	04014	TIX	BEG10,1,1		F2201040
04020	0	50000	0	03751	CLA	L(0) , ,		F2201050
04021	0	60100	0	03670	STO	DOREC		F2201060
04022	-0	76000	0	00012	RTT		TURN	F2201070
04023	0	76100	0	00000	NOP		LIGHT OFF	F2201080
04024	-0	53400	6	03751	LXD	L(0) ,6	TEST FOR EMPTY	F2201090
04025	-0	76000	0	00144	MSE	100	FORVAL	F2201110
04026	-0	53400	4	03752	LXD	L(1) ,4	OFF, NOT EMPTY	F2201120
04027	-0	63400	4	04112	SXD	END80 ,4	ON, EMPTY	F2201130
04030	-0	76000	0	00143	MSE	99	TEST FOR	F2201140
04031	-0	53400	2	03752	LXD	L(1) ,2	EMPTY DOTAG	F2201150
04032	-0	63400	2	04113	SXD	END85 ,2	SAVE TABLE INFO 1N END PROG.	F2201160
04033	-3	00000	2	04043	TXL	END ,2 ,0	IF DOTAG EMPTY, GO TO END.	F2201170
04034	-0	53400	1	00733	LXD	FORTAG-1 ,1	INITIALIZE	F2201170
04035	-0	63400	1	05426	SXD	TINF30 ,1	FORTAG	F2201180
04036	-0	63400	1	04407	SXD	TAG20 ,1	TEST	F2201190
04037	-0	63400	1	04516	SXD	TAG90 ,1	INSTRUCTIONS.	F2201200
04040	0	50000	0	03777	PAT01	CLA FRSTAG	INITIALIZE NEW TAG NAME BASE	F2201220
04041	0	60100	0	03673	STO	NEWTAG		F2201230
04042	0	02000	0	04116	TRA	NEST		F2201240
04043	0	77000	0	00224	END	WEF ATAPE	WEF ON TAGTAG TAPE	F2201250
04044	0	76600	0	00303	WRS	195	MAKE END OF DRUMTAG TABLE ENTRY.	F2201260
04045	0	46000	0	05100	LDA	LADDS+4		F2201270
04046	0	70000	0	03771	CPY	35ONES		F2201280
04047	0	70000	0	03771	CPY	35ONES		F2201290
04050	-0	53400	1	03756	LXD	L(5) ,1		F2201300
04051	0	76600	0	00333	END10	WRS 219	DELAY.	F2201310
04052	0	76600	0	00303	WRS	ADRUM	WRITE.	F2201320
04053	0	50000	1	05106	CLA	LADDIN+5 ,1	ALL	F2201330
04054	0	40200	0	03766	SUB	L(2)A	DRUM	F2201340
04055	0	62100	0	04114	STA	END90	TABLE	F2201350
04056	0	50000	1	05106	CLA	LADDIN+5 ,1	WORD	F2201360
04057	-0	32000	0	03773	ANA	ADDMSK	COUNTS	F2201370
04060	0	40200	1	05101	SUB	LADDS+5 ,1	IN	F2201380
04061	0	76000	0	00003	SSP		FIRST	F2201390
04062	0	60100	0	04115	STO	END95	TWO	F2201400
04063	0	46000	0	04114	LDA	END90	WORDS	F2201410
04064	0	70000	0	04115	CPY	END95	PRECEDING	F2201420
04065	0	70000	0	04115	CPY	END95	EACH TABLE . (TSXCOM, TRASTO, NAMKEY,	F2201430
04066	2	00001	1	04051	TIX	END10,1,1	CHATAG, DRMTAG)	F2201440
04067	0	76000	0	00140	PSE	96	RESTORE SENSE LIGHTS	F2201450
04070	-0	53400	1	04112	LXD	END80 ,1	SL 100 ON, FORVAL EMPTY	F2201450
04071	3	00000	1	04073	TXH	END20 ,1 ,0	SL 99 ON, DOTAG EMPTY,	F2201470
04072	0	76000	0	00144	PSE	100		F2201480
04073	-0	53400	1	04113	END20	LXD END85 ,1		F2201490
04074	3	00000	1	04076	TXH	END30 ,1 ,0		F2201500
04075	0	76000	0	00143	PSE	99		F2201510
04076	0	77000	0	00222	END30	WEF TAPE2	WRITE EOF AFTER DONEST RECORDS	F2201520
04077	0	76600	0	00222	WRS	TAPE2		F2201530
04100	0	70000	0	03670	CPY	DOREC	MAKE AN EXTRA FILE WITH	F2201540
04101	0	70000	0	03670	CPY	DOREC	DONEST RECORD COUNT.	F2201550
04102	0	77000	0	00222	WEF	TAPE2		F2201560
04103	0	50000	0	05075	CLA	LADDS+1	TRASTO CARRYOVER TO BLOCK 3	F2201570
04104	0	60100	0	07775	STO	4093		F2201580

	04105	0	50000	0	05074	CLA	LADDS	TSXCOM CARRYOVER TO BLOCK 3.	F2201590
	04106	0	60100	0	07776	STO	4094		F2201600
	04107	0	50000	0	05076	CLA	LADDS+2	NAMKEY (OR NAME) CARRYOVER TO BLOCK 3,	F2201610
	04110	0	60100	0	07777	STO	4095		F2201620
	04111	0	02000	0	06647	TRA	NORMRT		F2201635
A	04112	0	00000	0	00000	END80	HTR	ES. (DEC HAS 1 IF FORVAL NOT EMPTY)	F2201640
A	04113	0	00000	0	00000	END85	HTR	FOR (DEC HAS 1 IF DOTAG NOT EMPTY)	F2201650
A	04114	0	00000	0	00000	END90	HTR	END	F2201670
A	04115	0	00000	0	00000	END95	HTR	PROGRAM.	F2201680
	04116	-0	53400	1	03751	NEST	LXD L(0),1	READ	F2201690
	04117	0	76200	0	00223	NEST10	RDS DOTAPE	ONE	F2201700
	04120	-0	53400	2	03763		LXD L(450),2	NEST OF DO FORMULAS	F2201710
	04121	0	70000	2	00733	NEST20	CPY DOTAGZ,2	FROM	F2201720
	04122	1	77777	2	04156		TXI NEST60,2,-1	DOTAPE.	F2201730
	04123	0	02000	0	04043		TRA END	IF EOF, GO TO ROUTINE END.	F2201740
	04124	0	50000	0	03751	NEST30	CLA L(0)	INITIALIZING INSTRUCTIONS.	F2201750
	04125	0	60100	0	03672		STO ATSW		F2201760
	04126	-0	63400	2	03674		SXD XC,2	PUT C(XRB) IN XC	F2201780
	04127	-0	63400	2	00030		SXD DOTAG-1,2	INITIALIZE	F2201790
	04130	-0	63400	2	04260		SXD NEST95,2	DECS	F2201800
	04131	-0	63400	2	05451		SXD TRAW20,2	THAT	F2201810
	04132	-0	63400	2	05464		SXD TRAW50,2	TEST	F2201820
	04133	-0	63400	2	05316		SXD SPC040,2	END OF	F2201830
	04134	-0	63400	2	05353		SXD SPC090,2	DONEST.	F2201840
	04135	0	53400	4	04006		LXA ADTXX,4	INIT	F2201850
	04136	-0	63400	4	04006		SXD ADTXX,4	DECS	F2201860
	04137	0	53400	4	04007		LXA RESXX,4	FROM	F2201870
	04140	-0	63400	4	04007		SXD RESXX,4	ADDRESSES.	F2201880
	04141	0	53400	4	04010		LXA TAGXX,4		F2201890
	04142	-0	63400	4	04010		SXD TAGXX,4		F2201900
	04143	0	53400	4	04011		LXA NAMXX,4		F2201910
	04144	-0	63400	4	04011		SXD NAMXX,4		F2201920
	04145	0	76600	0	00333		WRS 219	MAKE	F2201930
	04146	-0	76000	0	00012		RTT	RTT	F2201940
	04147	0	02000	0	04151		TRA NEST35	TEST	F2201950
	04150	0	02000	0	04262		TRA DOFOR	IF NO ERROR, GO TO DOFOR.	F2201960
	04151	1	00001	1	04152	NEST35	TXI NEST40,1,1	IF ERROR,	F2201970
	04152	3	00004	1	04155	NEST40	TXH NEST50,1,4	TRY 4 TIMES MORE FOR	F2201985
	04153	0	76400	0	00223		BST DOTAPE	CORRECT READ.	F2201990
	04154	0	02000	0	04117		TRA NEST10	AFTER FIFTH INCORRECT READ,	F2202002
	04155	0	07400	4	00004	NEST50	TSX DIAG,4	ERROR. GO TO DIAGNOSTIC	F2202015
	04156	3	00000	2	04121	NEST60	TXH NEST20,2,0	INDEX COPY. IF DOTAG	F2202020
	04157	0	70000	0	04163		CPY NEST70	STORAGE FULL, AND MORE	F2202030
	04160	0	07400	4	00004		TSX DIAG,4	NEST ENTRIES REMAIN. ERROR. GO TO DIAGNOSTIC.	F2202045
	04161	0	07400	4	00004		TSX DIAG,4	INCORRECT EOF. ERROR. GO TO DIAGNOSTIC.	F2202055
	04162	0	02000	0	04124		TRA NEST30	NO ENTRIES LEFT, GO TO NEST30).	F2202060
	04163	0	00000	0	00000	NEST70	HTR	E.S.	F2202070
	04164	-0	53400	2	03755	NESTEN	LXD L(4),2	PUT END OF NEST INDICATION	F2202080
	04165	0	50000	0	03771		CLA 35ONES	IN TAGTAG, CONSISTING OF	F2202090
	04166	0	60100	2	05067	NEST80	STO E1+4,2	FOUR WORDS OF 35 ONES.	F2202100
	04167	2	00001	2	04166		TIX NEST80,2,1		F2202120
	04170	0	07400	4	05510		TSX TAGENT,4	ENTER IN TAGTAG AND	F2202130
	04171	0	07400	2	05522		TSX TETAPE,2	WRITE BUFFER ON TAPE.	F2202140
	04172	0	50000	0	03752		CLA L(1)		

	04173	0	60100	0	03672		STO	ATSW		SET ADDED TAG SWITCH	F2202150
	04174	0	07400	4	05206		TSX	DRMENT,4		AND GO TO DRMENT TO	F2202160
	04175	-0	53400	1	04011		LXD	NAMXX,1		PROCESS ADDED TAGS	F2202170
								SXD NEST84,1		TO DRUM TABLE NAME	F2202190
	04176	-0	63400	1	04212		SXD	NEST84,1		TO DRUM TABLE NAME	F2202190
	04177	0	53400	1	04011		LXA	NAMXX,1		ALL ENTRIES	F2202200
D	04200	-3	00000	0	04212	NEST81	TXL	NEST84,0		IN CORE TABLE NAME	F2202210
	04201	0	50000	1	07301	NEST82	CLA	NAMZ,1			F2202210
	04202	0	60100	0	05063		STO	E1			F2202220
	04203	0	50000	1	07302		CLA	NAMZ+1,1			F2202230
	04204	0	60100	0	05064		STO	E2			F2202240
	04205	0	50000	0	05071		CLA	NAMKEY			F2202250
	04206	-0	63400	1	04200		SXD	NEST81,1			F2202260
	04207	0	07400	4	05025		TSX	LIST,4			F2202270
	04210	-0	53400	1	04200		LXD	NEST81,1			F2202280
	04211	1	77776	1	04212		TXI	NEST84,1,-2			F2202290
D	04212	3	00000	1	04201	NEST84	TXH	NEST82,1			F2202300
	04213	-0	53400	1	04006		LXD	ADTXX,1		TRANSFER	F2202310
	04214	-0	63400	1	04234		SXD	NEST88,1		TO DRUM TABLE NAME	F2202320
	04215	0	53400	1	04006		LXA	ADTXX,1		ALL ENTRIESP	F2202340
D	04216	-3	00000	0	04234	NEST85	TXL	NEST88,0		IN CORE TABLE ADTAG	F2202340
	04217	0	50000	1	07136	NEST86	CLA	ADTAGZ+1,1		EXCEPT	F2202360
	04220	-0	12000	0	04233		TMI	NEST87		RESET	F2202370
	04221	0	60100	0	05064		STO	E2		ENTRIES	F2202380
	04222	0	50000	1	07135		CLA	ADTAGZ,1			F2202380
	04223	0	60100	0	05063		STO	E1			F2202390
	04224	-0	73400	2	00000		PDX	0,2			F2202400
	04225	0	50000	2	00733		CLA	DOTAGZ,2			F2202410
	04226	0	62200	0	05063		STD	E1			F2202420
	04227	-0	63400	1	04216		SXD	NEST85,1			F2202430
	04230	0	50000	0	05071		CLA	NAMKEY			F2202440
	04231	0	07400	4	05025		TSX	LIST,4			F2202450
	04232	-0	53400	1	04216		LXD	NEST85,1			F2202460
	04233	1	77776	1	04234	NEST87	TXI	NEST88,1,-2			F2202470
	04234	3	00000	1	04217	NEST88	TXH	NEST86,1			F2202480
	04235	-0	53400	1	00030	NST100	LXD	DOTAG-1,1			F2202490
	04236	0	02000	0	04247		TRA	NST120			F2202500
	04237	0	50000	1	00743	NST110	CLA	DOTAGZ+8,1		DOES BIT 20 WD 9 OF THIS DOTAG	F2202510
	04240	-0	32000	0	04005		ANA	BBIT		EQ 1.	F2202530
	04241	0	10000	0	04247		TZE	NST120		AND	F2202530
	04242	0	50000	1	00732		CLA	DOTAGZ-1,1		DOES BIT 18 WD 9 OF PRIOR DOTAG	F2202550
	04243	-0	32000	0	04003		ANA	ABIT		EQ 1.	F2202550
	04244	-0	10000	0	04247		TNZ	NST120			F2202560
	04245	0	50000	0	03773		CLA	ADDMSK		YES. ERASE DEC WD 9	F2202570
	04246	0	32000	1	00743		ANS	DOTAGZ+8,1		OF PRIOR DOTAG.	F2202580
	04247	1	00011	1	04250	NST120	TXI	NST130,1,9			F2202590
	04250	-3	00671	1	04237	NST130	TXL	NST110,1,441			F2202610
	04251	0	50000	0	03670		CLA	DOREC		WRITE	F2202620
	04252	0	40000	0	03752		ADD	L(1)		DOTAG	F2202630
	04253	0	60100	0	03670		STO	DOREC		ON	F2202640
	04254	0	76600	0	00222		WRS	TAPE2		TAPE TWO.	F2202660
	04255	-0	53400	1	03763		LXD	L(450),1		COUNT NR.	F2202670
	04256	0	70000	1	00733	NEST90	CPY	DOTAGZ,1		OF NESTS.	F2202680
	04257	1	77777	1	04260		TXI	NEST95,1,-1		IN DOREC.	F2202700

D	04260	3	00000	1	04256	NEST95	TXH	NEST90,1	(DEC HAS DOTAG IX)	F2202710
	04261	0	02000	0	04116		TRA	NEST	RETURN FOR NEXT NEST,	F2202720
	04262	-0	53400	1	03674	DOFOR	LXD	XC,1	OBTAIN	F2202730
	04263	1	00011	1	04264		TXI	DOF10,1,9	NEXT BACK DO,	F2202740
	04264	3	00702	1	04164	DOF10	TXH	NESTEN,1,450	IF ANY.	F2202750
	04265	0	07400	4	04363		TSX	DOINFO,4	USE DOINFO	F2202760
	04266	0	02000	0	04377		TRA	TAG00	AND GO TO TAG00 ROUTINE.	F2202770
	04267	-0	53400	1	03674	DOFEND	LXD	XC,1	IS A COUNTER	F2202780
	04270	0	50000	1	00743		CLA	DOTAGZ+8,1		F2202790
	04271	-0	32000	0	04004		ANA	BIT19		F2202800
	04272	0	10000	0	04326		TZE	MAKESC		F2202810
	04273	-0	50000	1	00740		CAL	DOTAGZ+5,1	NECESSARY BECAUSE OF	F2202820
	04274	-0	32000	0	04002		ANA	2BITS	TRANSFERS OR COMPUTATION WITH	F2202830
	04275	-0	10000	0	04301		TNZ	DOF15	SYMBOL.	F2202840
	04276	0	50000	0	04005		CLA	BIT20	TEST FOR	F2202850
	04277	-0	32000	1	00741		ANA	DOTAGZ+6,1	DELTA TWO	F2202860
	04300	0	10000	0	04305		TZE	DOF20	INSERT	F2202870
	04301	0	50000	1	00741	DOF15	CLA	DOTAGZ+6,1	HAS A COUNTER BEEN	F2202880
	04302	-0	32000	0	04001		ANA	BITTWO	FOUND.	F2202890
	04303	-0	10000	0	04322		TNZ	DOF40	IF NOT,	F2202900
	04304	0	02000	0	04326		TRA	MAKESC	MAKE ONE. (RETURN IS TO DOF40)	F2202910
	04305	0	50000	1	00740	DOF20	CLA	DOTAGZ+5,1	IF NO COUNTER NECESSARY,	F2202920
	04306	-0	32000	0	04003		ANA	SUBBIT	HAS SYM OCCURRED WITH	F2202930
	04307	0	10000	0	04314		TZE	DOF30	RECON NOT AS TYPE ONE	F2202940
	04310	0	50000	1	00743		CLA	DOTAGZ+8,1	CARRY. IF SO, HAS A	F2202950
	04311	-0	73400	2	00000		PDX	0,2	TEST BEEN FOUND.	F2202960
	04312	3	00000	2	04322		TXH	DOF40,2,0	IF NOT,	F2202970
	04313	0	02000	0	04326		TRA	MAKESC	MAKE A COUNTER (RETURN IS TO DOF40)	F2202980
	04314	0	50000	1	00743	DOF30	CLA	DOTAGZ+8,1	IF SYM HAS NOT OCCURRED WITH	F2202990
	04315	0	77100	0	00014		ARS	12	RELCON OR IN SUCH OCCURRENCES	F2203000
	04316	-0	73400	2	00000		PDX	0,2	WAS ALWAYS A TYPE ONE	F2203010
	04317	-3	00013	2	04322		TXL	DOF40,2,11	CARRY, IS CURRECT TEST	F2203020
	04320	0	50000	0	04005		CLA	BBIT		F2203030
	04321	-0	60200	1	00743		ORS	DOTAGZ+8,1		F2203040
	04322	0	50000	0	04325	DOF40	CLA	DOF50	MADE. TAKE SIGN AND	F2203030
	04323	0	32000	1	00743		ANS	DOTAGZ+8,1	TEST TABLE INTEGER OUT	F2203060
	04324	0	02000	0	04262		TRA	DOFOR	OF TEST WORD AND EXIT.	F2203070
	04325	+007777777777				DOF50	OCT	7777777777		F2203080
	04326	0	50000	0	03755	MAKESC	CLA	L(4)	INITIALIZE	F2203090
	04327	0	60100	0	03731		STO	DOSUBS	DOSUBS AND OTHER LOCATIONS	F2203100
	04330	0	50000	0	03751		CLA	L(0)	USED IN INS00.	F2203110
	04331	0	60100	0	03730		STO	RCSUBS		F2203120
	04332	0	60100	0	03727		STO	DORC		F2203130
	04333	0	60100	0	03704		STO	C1		F2203140
	04334	0	60100	0	03737		STO	CARWRD		F2203150
	04335	0	50000	0	03673		CLA	NEWTAG	GET A NAME	F2203160
	04336	0	60100	0	03701		TS		FOR THIS	F2203170
	04337	0	40000	0	03765		ADD	L(1)A	SUBSCRIPT AND	F2203180
	04340	0	60100	0	03673		STO	NEWTAG	UP DATE NEWTAG.	F2203190
	04341	0	07400	4	06075		TSX	INS00,4	USE INS00 FOR TEST INFO,LIST.	F2203200
	04342	0	50000	0	03757		CLA	L(6)	SET UP TAG TAG	F2203210
	04343	-0	50100	0	03767		ORA	L(4)A	ENTRY	F2203220
	04344	-0	50100	0	03737		ORA	CARWRD		F2203230
	04345	0	60200	0	05066		SLW	E4		F2203240

04346	0	50000	0	03701	CLA TS		F2203250
04347	0	60100	0	05065	STO E3		F2203270
04350	0	50000	0	03751	CLA L(0)		F2203280
04351	0	60100	0	05064	STO E2		F2203290
04352	0	50000	0	03674	CLA XC		F2203300
04353	0	77100	0	00022	ARS 18		F2203310
04354	-0	50100	0	03676	ORA ALPHA		F2203320
04355	0	60100	0	05063	STO E1		F2203340
04356	0	07400	4	05510	TSX TAGENT,4	ENTER INTO TAGTAG.	F2203350
04357	-0	53400	1	03674	LXD XC,1		F2203360
04360	0	50000	0	04003	CLA ABIT		F2203370
04361	-0	60200	1	00743	ORS DOTAGZ+8,1		F2203380
04362	0	02000	0	04322	TRA DOF40	RETURN	F2203390
04363	0	50000	1	00733	DOINFO CLA DOTAGZ,1	FOR THE DO FORMULA WHOSE	F2203400
04364	0	73400	2	00000	PAX 0,2	INDEX IS IN XRA,	F2203410
04365	-0	32000	0	03772	ANA DECMSK	ESTABLISH	F2203420
04366	0	60100	0	03676	STO ALPHA	ALPHA,BETA,XC,XL	F2203430
04367	-0	75400	2	00000	PXD 0,2		F2203440
04370	0	60100	0	03677	STO BETA		F2203450
04371	-0	75400	1	00000	PXD 0,1		F2203460
04372	0	60100	0	03674	STO XC		F2203470
04373	0	50000	1	00740	CLA DOTAGZ+5,1		F2203480
04374	-0	32000	0	03772	ANA DECMSK		F2203490
04375	0	60100	0	03675	STO LC		F2203500
04376	0	02000	4	00001	TRA 1,4		F2203510
04377	-0	53400	1	03764	TAG00 LXD L(1500,1	THIS ROUTINE	F2203520
04400	0	02000	0	04407	TRA TAG20	SELECTS EVERY TAG	F2203530
04401	0	50000	1	03670	TAG05 CLA FORTZ,1	IN THE RANGE OF THE	F2203540
04402	-0	32000	0	03772	ANA DECMSK	CURRENT DO WHICH	F2203550
04403	0	34000	0	03676	CAS ALPHA	CONTAINS THE SUBSCRIPT	F2203560
04404	0	02000	0	04413	TRA TAG30	SYMBOL OF THE CURRENT	F2203570
04405	0	07400	4	00004	TSX DIAG,4	DO, AND WHICH HAS NOT (ERROR. GO TO DIAGNOSTIC.)	F2203585
04406	1	77777	1	04407	TAG10 TXI TAG20,1,-1	PREVIOUSLY BEEN	F2203590
04407	3	00000	1	04401	TAG20 TXH TAG05,1	PROCESSED, AND (DEC HAS FORTAG IX)	F2203600
04410	0	02000	0	04267	TRA DOFEND	COMPLETELY PROCESSES	F2203610
04411	-0	53400	1	04414	TAG25 LXD TAG40,1	THE TAG. THE RETURN	F2203620
04412	0	02000	0	04406	TRA TAG10	IS TO DOFEND	F2203630
04413	0	34000	0	03677	TAG30 CAS BETA	COMPARE WITH BETA.	F2203640
04414	-3	00000	0	04267	TAG40 TXL DOFEND,0	RANGE FINISHED. (DEC HAS CURR FORTAG IX)	F2203650
04415	0	76100	0	00000	NOP	IF ENTRY IS NEGATIVE,	F2203660
04416	0	50000	1	03670	CLA FORTZ,1	THEN IT HAS ALREADY	F2203670
04417	-0	12000	0	04406	TMI TAG10	BEN PROCESSED.	F2203680
04420	-0	32000	0	03773	ANA ADDMSK	STORE	F2203690
04421	0	60100	0	03700	STO TAG	IN TAG,	F2203710
04422	-0	63400	1	04414	SXD TAG40,1	AND SAVE INDEX.	F2203720
04423	0	07400	4	04520	TSX SUBCOM,4	OBTAIN SUB. COM.	F2203730
04424	0	76100	0	00000	NOP		F2203745
04425	0	07400	4	05566	TSX IDENT,4	USE IDENT.	F2203750
04426	0	02000	0	04411	TRA TAG25	SC. NOT WANTED.	F2203760
04427	0	07400	4	06030	TSX NAME,4	SC. TO BE PROCESSED. USE NAME.	F2203770
04430	0	07400	4	05106	TSX BRANCH,4		F2203780
04431	0	07400	4	04614	TSX SCEND,4		F2203800
04432	0	07400	4	05510	TSX TAGENT,4		F2203810
04433	-0	53400	2	03756	TAG50 LXD L(5),2		F2203820

04434	0	50000	2	03721	TAG52	CLA X1+5,2	ENTER BIT 18 WD 9	F2203830
04435	0	10000	0	04447		TZE TAG58	OF MATCHING DOTAG	F2203840
04436	-0	73400	1	00000		PDX 0,1	IF 1ST SUBSCR OR	F2203850
04437	3	00004	2	04445		TXH TAG56,2,4	IF THERE IS NO	F2203860
04440	0	50000	0	03774		CLA CR1	TYPE 1 CARRY INTO	F2203870
04441	3	00002	2	04443		TXH TAG54,2,2	THE 2ND AND 3RD	F2203880
04442	0	77100	0	00002		ARS 2	SUBSCR RESPECTIVELY,	F2203890
04443	-0	32000	0	03737	TAG54	ANA CARWRD		F2203910
04444	-0	10000	0	04447		TNZ TAG58		F2203910
04445	0	50000	0	04003	TAG56	CLA ABIT	ENTER BIT 18 WD 9.	F2203920
04446	-0	60200	1	00743		ORS DOTAGZ+8,1		F2203940
04447	2	00002	2	04434	TAG58	TIX TAG52,2,2		F2203950
04450	-0	53400	4	03756		LXD L(5),4	TAG 60 SEQUENCE CONCERNS	F2203960
04451	0	50000	4	03721	TAG60	CLA X1+5,4	TESTS AND ADDED TAGS.	F2203970
04452	0	10000	0	04500		TZE TAG68	FOR EACH INDEXED SUBSCRIPT,	F2203980
04453	-0	73400	1	00000		PDX 0,1	DETERMINE F IRST WHETHER	F2203990
04454	0	50000	0	03730		CLA RCSUBS	OR NOT IT	F2204000
04455	-0	50100	0	03727		ORA DORC	OCCURS WITH	F2204010
04456	0	10000	0	04470		TZE TAG66	A RELCON	F2204020
04457	-3	00001	4	04465		TXL TAG64,4,1	IF SO, PUT IN	F2204030
04460	0	50000	0	03774		CLA CR1	SUBBIT MEANING A TEST	F2204040
04461	3	00003	4	04463		TXH TAG62,4,3	IS NEEDED UNLESS	F2204050
04462	0	77100	0	00002		ARS 2	THE 1ST AND 2ND.	F2204070
04463	-0	32000	0	03737	TAG62	ANA CARWRD	SUBSCR PROMOTE A	F2204070
04464	-0	10000	0	04500		TNZ TAG68	TYPE ONE CARRY (LEFT	F2204080
04465	0	50000	0	04003	TAG64	CLA SUBBIT	OR CENTER RESPECTIVELY)	F2204090
04466	-0	60200	1	00740		ORS DOTAGZ+5,1	IS	F2204100
D 04467	-3	00000	0	04500	TAG65	TXL TAG68,0	NEEDED.	F2204110
04470	0	50000	0	04004	TAG66	CLA BIT19		F2204120
04471	-0	60200	1	00743		ORS DOTAGZ+8,1		F2204130
04472	0	50000	1	00740		CLA DOTAGZ+5,1	IF THE SUBSCRIPT DOES NOT OCCUR	F2204140
04473	-0	32000	0	04002		ANA 2BITS	WITH A RELCON, DETERMINE WHETHER OR	F2204160
04474	-0	10000	0	04500		TNZ TAG68	NOT A COUNTER HAS ALREADY BEEN REQUESTED.	F2204170
04475	-0	63400	4	04467		SXD TAG65,4	IF SO TAKE NEXT INDEXED SUBSCR. REQUESTED.	F2204180
04476	0	07400	2	04665		TSX TEST,2	IF NOT, USE ROUTINE TEST.	F2204190
04477	-0	53400	4	04467		LXD TAG65,4	THEN TAKE NEXT INDEXED SUBSCRIPT.	F2204200
04500	2	00002	4	04451	TAG68	TIX TAG60,4,2		F2204220
04501	-0	53400	1	04414	TAG70	LXD TAG40,1	SET ALL OCCURRANCES	F2204230
04502	0	50000	1	03670	TAG72	CLA FORTZ,1	OF THIS TAG, IN FORTAG,	F2204240
04503	-0	32000	0	03772		ANA DECMSK	IN THE RANGE OF THIS	F2204240
04504	0	34000	0	03677		CAS BETA	DO, NEGATIVE.	F2204250
D 04505	-3	00000	0	04411	TAG75	TXL TAG25,0		F2204260
04506	0	76100	0	00000		NOP		F2204270
04507	0	50000	1	03670		CLA FORTZ,1		F2204280
04510	-0	32000	0	03773		ANA ADDMSK		F2204290
04511	0	40200	0	03700		SUB TAG		F2204300
04512	-0	10000	0	04515		TNZ TAG80		F2204310
04513	-0	50000	0	03770		CAL L(MZ)		F2204320
04514	-0	60200	1	03670		ORS FORTZ,1		F2204330
04515	1	77777	1	04516	TAG80	TXI TAG90,1,-1		F2204340
D 04516	3	00000	1	04502	TAG90	TXH TAG72,1	(DEC HAS FORTAG IX)	F2204380
04517	0	02000	0	04411		TRA TAG25	RETURN FOR NEXT TAG.	F2204370
							THIS ROUTINE, GIVEN A TAU TAG, OBTAINS THE	F2204380
							CORRESPONDING SUBSCRIPT COMINATION FROM THE TAU	F2204390

					DRUM AND POSITIONS IT IN PROPER FORMAT IN STORAGE.	F2204400
04520	-0	63400	4	04601	SUBCOM SXD SUB085,4	F2204410
04521	-0	53400	1	04607	LXD SUBORG,1	F2204420
04522	0	76200	0	00304	SUB010 RDS TAUDRM	F2204430
04523	-0	53400	4	04611	LXD SUBORG+2,4	F2204440
04524	-0	75400	0	00000	PXD 0,0	F2204450
04525	0	60100	4	03714	SUB020 STO C1+8,4	F2204460
04526	2	00001	4	04525	TIX SUB020,4,1	F2204470
04527	0	50000	0	03700	CLA TAG	F2204480
04530	0	76500	0	00011	LRS 9	F2204490
04531	0	73400	6	00000	PAX 0,6	F2204500
04532	-0	75400	0	00000	PXD 0,0	F2204510
04533	0	76300	0	00011	LLS 9	F2204520
04534	0	60100	0	04612	STO SUBES1	F2204530
04535	0	76700	0	00001	ALS 1	F2204540
04536	0	60100	0	04613	STO SUBES2	F2204550
04537	0	50000	4	04612	CLA SUBORG+3,4	F2204560
04540	0	40000	0	04612	ADD SUBES1	F2204570
04541	0	40000	0	04613	SUB030 ADD SUBES2	F2204580
04542	2	00001	4	04541	TIX SUB030,4,1	F2204590
04543	0	62100	0	04612	STA SUBES1	F2204600
04544	0	46000	0	04612	LDA SUBES1	F2204610
04545	0	70000	0	03704	CPY C1	F2204620
04546	-3	00002	2	04550	TXL SUB040,2,2	F2204630
04547	0	70000	0	03710	CPY C3	F2204640
04550	0	70000	0	03705	SUB040 CPY S1	F2204650
04551	-3	00001	2	04556	TXL SUB060,2,1	F2204660
04552	0	70000	0	03707	CPY S2	F2204670
04553	-3	00002	2	04555	TXL SUB050,2,2	F2204680
04554	0	70000	0	03711	CPY S3	F2204690
04555	0	70000	0	03712	SUB050 CPY D1	F2204700
04556	0	70000	0	04612	SUB060 CPY SUBES1	F2204710
04557	-0	53400	4	04607	LXD SUBORG,4	F2204720
04560	-0	50000	0	03704	CAL C1	F2204730
04561	0	36100	4	03713	SUB070 ACL C1+7,4	F2204740
04562	2	00001	4	04561	TIX SUB070,4,1	F2204750
04563	0	60200	0	04613	SLW SUBES2	F2204760
04564	0	50000	0	04613	CLA SUBES2	F2204770
04565	0	40200	0	04612	SUB SUBES1	F2204780
04566	0	10000	0	04571	TZE SUB075	F2204790
04567	2	00001	1	04522	TIX SUB010,1,1	F2204805
04570	0	07400	4	00004	PAT03 TSX DIAG,4 IN CHECK SUMS DISAGREE	F2204815
04571	-0	53400	4	04610	SUB075 LXD SUBORG+1,4	F2204820
04572	0	50000	4	03713	SUB080 CLA C1+7,4	F2204830
04573	0	73400	2	00000	PAX 0,2	F2204840
04574	-0	32000	0	03772	ANA DECMSK	F2204850
04575	0	60100	4	03713	STO C1+7,4	F2204860
04576	-0	75400	2	00000	PXD 0,2	F2204870
04577	-2	00006	4	04602	TNX SUB090,4,6	F2204880
04600	0	60100	0	03706	STO C2	F2204890
04601	-3	00000	0	04572	SUB085 TXL SUB080,0	F2204900
04602	0	60100	0	03713	SUB090 STO D2	F2204910
04603	-0	53400	4	04601	LXD SUB085,4	F2204920
04604	0	76100	0	00000	NOP	F2204935

	04605	0	02000	4	00002	TRA	2,4	A NORMAL RETURN.	F2204940
	04606	0	76100	0	00000	SUB100	NOF		F2204955
	04607	+000006001356				SUBORG	OCT 6001356	DEC. IS 6, ADD. IS ORG. TAU 3	F2204960
	04610	+000007000454					OCT 7000454	DEC. IS 7, ADD. IS ORG. TAU 2	F2204970
	04611	+000010000000					OCT 10000000	DEC. IS 8, ADD. IS ORG. TAU 1	F2204980
A	04612	0	00000	0	00000	SUBES1	HTR	E.S.	F2204990
A	04613	0	00000	0	00000	SUBES2	HTR	E.S.	F2205000
							SCEND COLLECTS TAGTAG ENTRY AND MAKES TABLE ENTRY		F2205010
	04614	0	50000	0	03703	SCEND	CLA GROUP	ALL OF SCEND IS CONCERNED	F2205020
	04615	0	60100	0	03702		STO TAG1	WITH GENERATING THE	F2205030
	04616	0	50000	0	03731		CLA DOSUBS	TAGTAG ENTRY FROM ITS	F2205040
	04617	-0	50100	0	03734		ORA DUPES		F2205050
	04620	0	77100	0	00022		ARS 18	VARIOUS COMPONENTS.	F2205060
	04621	-0	60200	0	03702		ORS TAG1		F2205070
	04622	0	50000	0	03730		CLA RCSUBS		F2205079
	04623	-0	50100	0	03727		ORA DORC		F2205080
	04624	0	77100	0	00017		ARS 15		F22D5100
	04625	-0	60200	0	03702		ORS TAG1		F2205110
	04626	0	50000	0	03734		CLA DUPES		F2205120
	04627	0	77100	0	00011		ARS 9		F2205130
	04630	-0	60200	0	03702		ORS TAG1		F2205140
	04631	-0	50000	0	03737		CAL CARWRD		F2205150
	04632	-0	60200	0	03702		ORS TAG1		F2205160
	04633	-0	53400	1	03756		LXD L(5),1		F2205170
	04634	0	50000	0	03752	SCE010	CLA L(1)		F2205180
	04635	0	34000	1	03711		CAS C1+5,1	GENERATES THE THREE BIT	F2205190
	04636	0	02000	0	04645		TRA SCE020	TAG SHOWING WHICH	F2205200
	04637	0	02000	0	04645		TRA SCE020	COEFFICIENTS ARE GREATER	F2205210
	04640	-0	75400	1	00000		PXD 0,1	THAN ONE.	F2205220
	04641	-3	00001	1	04643		TXL SCE015,1,1		F2205230
	04642	0	40200	0	03752		SUB L(1)		F2205240
	04643	0	77100	0	00006	SCE015	ARS 6		F2205250
	04644	-0	60200	0	03702		ORS TAG1		F2205260
	04645	2	00002	1	04634	SCE020	TIX SCE010,1,2		F2205270
	04646	0	50000	0	03702		CLA TAG1	TAG1 IS NOW COMPLETE.	F2205280
	04647	0	60100	0	05066		STO E4	CONSTRUCT THE TAGTAG	F2205290
	04650	0	50000	0	03700		CLA TAG	ENTRY	F2205300
	04651	0	76700	0	00022		ALS 18		F2205310
	04652	0	40000	0	03701		ADD TS		F2205320
	04653	0	60100	0	05065		STO E3		F2205330
	04654	0	50000	0	03720		CLA X3		F2205340
	04655	0	77100	0	00022		ARS 18		F2205350
	04656	0	40000	0	03716		ADD X2		F2205360
	04657	0	60100	0	05064		STO E2		F2205370
	04660	0	50000	0	03714		CLA X1		F2205380
	04661	0	77100	0	00022		ARS 18		F2205390
	04662	0	40000	0	03676		ADD ALPHA		F2205400
	04663	0	60100	0	05063		STO E1		F2205410
	04664	0	02000	4	00001		TRA 1,4		F2205420
	04665	0	50000	1	00743	TEST	CLA DOTAGZ+8,1	IF A SUFFICIENTLY GOOD	F2205430
	04666	-0	12000	2	00001		TMI 1,2	TEST PREVIOUSLY FOUND, EXIT.	F2205440
	04667	2	00001	4	04670		TIX TEST10,4,1	XRC CONTAINS 5,3,1,	F2205450
	04670	-0	75400	4	00000	TEST10	PXD 0,4	DEPENDING ON POSITION NR	F2205460
	04671	0	76700	0	00003		ALS 3	1,2,3. CONSTRUCT A	F2205470

04672	-0	50100	0	03703	ORA	GROUP	TABLE SEARCH MASK IN	F2205480
04673	-3	00001	4	04701	TXL	TEST20,4,1	WHICH THE FORTH OCTAL	F2205490
04674	0	60100	0	04732	STO	TEST85	DIGIT IS THE CARRY BIT	F2205500
04675	0	50000	0	03737	CLA	CARWRD	INFO. FOR THE POSITION	F2205510
04676	0	76700	4	00005	ALS	5,4	BEING CONSIDERED THE	F2205520
04677	-0	32000	0	04733	ANA	TEST90	FIFTH OCTAL DIGIT IS THE	F2205530
04700	-0	50100	0	04732	ORA	TEST85	POSITION BIT, AND THE	F2205540
04701	-0	53400	4	04704	TEST20	LXD TEST35,4	SIXTH OCTAL DIGIT	F2205550
04702	0	34000	4	04754	TEST30	CAS TESTAB+15,4	IS THE GROUP NUMBER.	F2205560
04703	1	77777	4	04706	TXI	TEST40,4,-1	SEARCH TESTAB FOR	F2205570
04704	-3	00017	0	04707	TEST35	TXL TEST50,0,15	ENTRY AND CONSIDER	F2205580
04705	1	77777	4	04706	TXI	TEST40,4,-1	C(XRC) AFTER SEARCH, IF	F2205590
04706	3	00000	4	04702	TEST40	TXH TEST30,4,0	ENTRY NOT FOUND C(XRC)=0.	F2205600
04707	-0	63400	4	04715	TEST50	SXD TEST60,4	COMPARE THIS INTEGER	F2205610
04710	0	50000	1	00743	CLA	DOTAGZ+8,1	WITH PREVIOUS.INTEGER,	F2205620
04711	-0	73400	4	00000	PDX	0,4	IF ANY, IF NEW NR. IS LESS	F2205630
04712	-3	00000	4	04720	TXL	TEST75,4,0	THAN OLD, USE NEW TAG	F2205640
04713	0	77100	0	00014	ARS	12	FOR TEST. OTHERWISE	F2205650
04714	-0	73400	4	00000	PDX	0,4	USE OLD TAG.	F2205660
04715	-3	00000	4	04731	TEST60	TXL TEST80,4	(DEC HAS TEST TAB NR. FOR THIS S C.)	F2205670
04716	0	50000	0	04734	TEST70	CLA TEST95	IF THE NEW TAG IS	F2205680
04717	0	32000	1	00743	ANS	DOTAGZ+8,1	USED, AND C(XRC)	F2115690
04720	-0	53400	4	04715	TEST75	LXD TEST60,4	AFTER SEARCH WAS ZERO,	F2205700
04721	-0	75400	4	00000	PXD	0,4	SET DOTAGZ+8 WORD	F2205710
04722	0	77100	0	00006	ARS	6	NEGATIVE.	F2205720
04723	-0	50100	0	03701	ORA	TS		F2205730
04724	0	76700	0	00022	ALS	18		F2205740
04725	-0	60200	1	00743	ORS	DOTAGZ+8,1		F2205750
04726	3	00000	4	04731	TXH	TEST80,4,0		F2205760
04727	-0	50000	0	03770	CAL	L(MZ)		F2205770
04730	-0	60200	1	00743	ORS	DOTAGZ+8,1		F2205780
04731	0	02000	2	00001	TEST80	TRA 1,2		F2205790
04732	0	00000	0	00000	TEST85	HTR	STORAGE FOR COMPOSED TST WORD.	F2205800
04733	+000300000000				TEST90	OCT 300000000	BITS 10, 11)-. - .	F2205810
04734	+000000777777				TEST95	OCT 777777		F2205820
04735	+000241000000				TESTAB	OCT 241000000	FIRST SIGNIF DIGIT CONTAINS	F2205830
04736	+000221000000					OCT 221000000	A TWO IF TYPE ONE CARRY ,	F2205840
04737	+000244000000					OCT 244000000	ONE IF TYPE TWO FROM LEFT OR	F2205850
04740	+000222000000					OCT 222000000	CENTER. (4TH OCT DIG). NEXT	F2205860
04741	+000141000000					OCT 141000000	HAS 4 IF POSIT OF SUBSC IS	F2205870
04742	+000121000000					OCT 121000000	LEFT, 2 IF CENTER, 0 IF RIGHT	F2205880
04743	+000144000000					OCT 144000000	(5TH OCT DIGIT). FINAL DIG HAS	F2205890
04744	+000122000000					OCT 122000000	GROUP NR. (6TH OCT DIG).	F2205900
04745	+000045000000					OCT 45000000		F2205910
04746	+000041000000					OCT 41000000		F2205920
04747	+000021000000					OCT 21000000		F2205930
04750	+000044000000					OCT 44000000		F2205940
04751	+000022000000					OCT 22000000		F2205950
04752	+000043000000					OCT 43000000		F2205960
04753	+000023000000					OCT 23000000		F2205970
04754	-0	63400	4	04770	CARRY	SXD CAR05,4	SAVE LINKAGE	F2205980
04755	0	50000	2	03720	CLA	X1+4,2	PUT LEFT INDEX	F2205990
04756	-0	73400	1	00000	PDX	0,1	IN XRA	F2206000
04757	0	50000	2	03722	CLA	X1+6,2	PUT RIGHT INDEX	F2206010

	04760	-0	73400	4	00000		PDX 0,4		IN XRC	F2206020
	04761	0	50000	1	00740		CLA DOTAGZ+5,1		TEST LEFS SUB. DO	F2206030
	04762	-0	32000	0	03776		ANA CARMSK		CARRY BITS.	F2206040
	04763	0	10000	0	05022		TZE CAR30		EXIT IF NO CARRY.	F2206050
	04764	0	50000	1	00741		CLA DOTAGZ+6,1		COMPARE	F2206060
	04765	-0	32000	0	03772		ANA DECMSK		NO CARRY TRA LEVEL	F2206070
	04766	0	34000	0	03723		CAS LL		AND LOW LEVEL.	F2206080
	04767	0	02000	0	05022		TRA CAR30		EXIT	F2206090
D	04770	-3	00000	0	05022	CAR05	TXL CAR30,0			F2206100
	04771	0	50000	1	00740		CLA DOTAGZ+5,1		COMPUTE FOR LEFT	F2206110
	04772	-0	32000	0	03773		ANA ADDMSK		SUBSCRIPT THE QUANTITY	F2206120
	04773	0	60100	0	05024		STO CAR40		C*X (COEF. TIMES ADDED	F2206130
	04774	0	56000	0	05024		LDQ CAR40		VALUE).	F2206140
	04775	0	20000	2	03710		MPY C1+4,2		COMPUTE FOR RIGHT	F2206150
	04776	-0	60000	0	05024		STQ CAR40		SUBSCRIPT THE QUANTITY	F2206160
	04777	0	56000	0	03712		LDQ D1		C*N3*D(L) (O0EF.TIMES	F2206170
	05000	3	00002	2	05002		TXH CAR10,2,2		INCREMENT TIMES DIM. OF	F2206180
	05001	0	56000	0	03713		LDQ D2		LEFT SUBSCRIPT.	F2206190
	05002	0	20000	4	00737	CAR10	MPY DOTAGZ+4,4		IF THESE QUANTITIES	F2206200
	05003	0	20000	2	03712		MPY C1+6,2		ARE UNEQUAL,	F2206210
	05004	0	76700	0	00021		ALS 17		EXIT	F2206220
	05005	0	40200	0	05024		SUB CAR40			F2206230
	05006	-0	10000	0	05022		TNZ CAR30		OBTAIN LEFT	F2206240
	05007	0	50000	1	00740		CLA DOTAGZ+5,1		SUB. DOTAG	F2206250
	05010	-0	32000	0	03776		ANA CARMSK		CARRY BITS AGAIN.	F2206260
	05011	0	77100	0	00017		ARS 15		TEST FOR	F2206270
	05012	0	76000	0	00001		LBT		CARRY TYPE ONE	F2206280
	05013	0	02000	0	05016		TRA CAR15		OR CARRY TYPE	F2206290
	05014	0	50000	0	03774		CLA CR1		TWO.	F2206300
	05015	0	02000	0	05017		TRA CAR20		OBTAIN PROPER	F2206310
	05016	0	50000	0	03775	CAR15	CLA CR2		TAGTAG CARRY BIT,	F2206320
	05017	3	00002	2	05021	CAR20	TXH CAR25,2,2		SHIFT IF NECESSARY FOR	F2206330
	05020	0	77100	0	00002		ARS 2		CENTER SUB. AND	F2206340
	05021	-0	60200	0	03737	CAR25	ORS CARWRD		PLACE IN CARWRD.	F2206350
	05022	-0	53400	4	04770	CAR30	LXD CAR05,4		EXIT	F2206160
	05023	0	02000	4	00001		TRA 1,4			F2206370
A	05024	0	00000	0	00000	CAR40	HTR		E.S.	F2206380
	05025	-0	63400	4	05060	LIST	SXD LIST40,4	SAVE LINKAGE		F2206400
	05026	-0	73400	1	00000		PDX 0,1		PUT INDEX QUANTITY IN XRA	F2206410
	05027	0	73400	6	00000		PAX 0,6		PUT NR. OF WDS IN XRB,XRC.	F2206420
	05030	0	40000	0	05061		ADD LIST50		COMPUTE NR, OF WRDS	F2206430
	05031	0	62100	0	05046		STA LIST30		PLUS ORIGIN EI AND	F2206440
	05032	0	62100	0	05041		STA LIST20		INITIALIZE ADDRESSES.	F2206450
	05033	0	50000	1	05106		CLA LADDIN+5,1		TEST	F2206460
	05034	0	77100	0	00022		ARS 18		FOR	F2206470
	05035	0	40200	1	05101		SUB LADDS+5,1		FULL	F2206480
	05036	-0	10000	0	05040		TNZ LIST10		TABLE.	F2206490
	05037	0	07400	4	07774		TSX BURNCE,4	DRUM OVERFLOW, GO SAVE IRA BEFORE DIAG.		F2206505
	05040	-0	75400	0	00000	LIST10	PXD 0,0		ZERO IN ACC.	F2206510
	05041	0	36100	2	00000	LIST20	ACL 0,2		COMPUTE	F2206520
	05042	2	00001	2	05041		TIX LIST20,2,1		ENTRY	F2206530
	05043	0	76600	0	00303		WRS ADRUM	SELECT DRUMF		F2206535
	05044	0	60200	0	05062		SLW LIST60		CHECK SUM.	F2206540
	05045	0	46000	1	05101		LDA LADDS+5,1		COPY	F2206550

	05046	0	70000	4	00000	LIST30	CPY	0,4	ENTRY	F2206560
	05047	2	00001	4	05046		TIX	LIST30,4,1	AND	F2206570
	05050	0	70000	0	05062		CPY	LIST60	CHECK SUM.	F2206580
	05051	0	50000	1	05101		CLA	LADDS+5,1	COMPUTE	F2206590
	05052	0	40000	1	05074		ADD	TSXCOM+5,1	NEXT	F2206600
	05053	0	40000	0	03765		ADD	L(1)A	ENTRY	F2206610
	05054	-0	32000	0	03773		ANA	ADDMSK	ADDRESS.	F2206620
	05055	0	60100	1	05101		STO	LADDS+5,1		F2206630
	05056	-0	53400	4	05060		LXD	LIST40,4	EXIT	F2206640
	05057	0	02000	4	00001		TRA	1,4		F2206650
A	05060	0	00000	0	00000	LIST40	HTR		E.S.	F2206660
	05061	0	00000	0	05063	LIST50	HTR	E1	L(E1)	F2206670
A	05062	0	00000	0	00000	LIST60	HTR		E.S.	F2206680
								FOUR WORD ENTRY BLOCK		F2206690
A	05063	0	00000	0	00000	E1	HTR			F2206700
A	05064	0	00000	0	00000	E2	HTR			F2206710
A	05065	0	00000	0	00000	E3	HTR			F2206720
A	05066	0	00000	0	00000	E4	HTR			F2206730
								FIVE KEY WORDS, C(DEC)=INDEX QUANTITIES, C(ADD)=NR. OF WORDS.		F2206740
	05067	0	00005	0	00002	TSXCOM	HTR	2,0,5	ACC KEY WORD WHEN TSX TO LIST.	F2206750
	05070	0	00004	0	00003	TRASTO	HTR	3,0,4	(ADD DOES NOT INCL CHECK SUM)	F2206760
	05071	0	00003	0	00002	NAMKEY	HTR	2,0,3		F2206770
	05072	0	00002	0	00002	CHATAG	HTR	2,0,2		F2206780
	05073	0	00001	0	00004	DRMTAG	HTR	4,0,1	(ADTAG)	F2206790
								FIVE WORDS CONTAINING CURRENT TABLE ADDRESSES IN ADD. PART.		F2206800
A	05074	0	00000	0	00000	LADDS	HTR		TSXCOM - ADD OF LADDIN - LAST PLUS 1	F2206810
A	05075	0	00000	0	00000		HTR		TRASTO	F2206820
A	05076	0	00000	0	00000		HTR		NAMKEY	F2206830
A	05077	0	00000	0	00000		HTR		CHATAG	F2206840
A	05100	0	00000	0	00000		HTR		DRMTAG	F2206850
								FIVE WORDS, C(ADD)=ORIGIN, C(DEC)=LAST TABLE LOC. PLUS ONE		F2206860
	05101	0	01756	0	01302	LADDIN	HTR	706,0,1006	TSXCOM	F2206870
	05102	0	01300	0	00460		HTR	304,0,704	TRASTO	F2206880
	05103	0	02662	0	01760		HTR	1008,0,1458	NAMKEY	F2206890
	05104	0	00456	0	00002		HTR	2,0,302	CHATAG	F2206900
	05105	0	03650	0	02664		HTR	1460,0,1960	DRMTAG	F2206910
	05106	-0	63400	4	05122	BRANCH	SXD	BRA45,4	IF THERE ARE RELCONS	F2206920
	05107	0	50000	0	03725		CLA	NRRC	(NOT DORC) IN THE SC,	F2206930
	05110	0	10000	0	05112		TZE	BRA10	USE	F2206940
	05111	0	07400	4	05534		TSX	RELCON,4	RELCON.	F2206950
	05112	-0	53400	1	03726	BRA10	LXD	NRDS,1	THIS ROUTINE	F2206960
	05113	3	00001	1	05116		TXH	BRA30,1,1	CONDENSES	F2206970
	05114	0	07400	4	06075	BRA20	TSX	1NS00,4	DUPLICATE	F2206980
	05115	0	02000	0	05136		TRA	BRA90	SUBSCRIPTS	F2206990
	05116	3	00002	1	05123	BRA30	TXH	BRA50,1,2	AND	F2207000
	05117	0	50000	0	03734		CLA	DUPES	TRANSFERS	F2207010
	05120	-0	10000	0	05114		TNZ	BRA20	TO	F2207020
	05121	0	07400	4	06147	BRA40	TSX	2NS00,4	ROUTINES	F2207030
D	05122	-3	00000	0	05136	BRA45	TXL	BRA90,0	1NS00, 2NS00, 3NS00	F2207040
	05123	-0	53400	4	03734	BRA50	LXD	DUPES,4	AFTER	F2207050
	05124	3	00006	4	05114		TXH	BRA20,4,6	PROCESSING,	F2207060
	05125	-3	00000	4	05135		TXL	BRA80,4,0	RETURN	F2207070
	05126	3	00005	4	05132		TXH	BRA60,4,5	IS TO	F2207080
	05127	-3	00003	4	05132		TXL	BRA60,4,3	DRMENT OR	F2207090

05130	0	50000	0	03754		CLA L(3)		TAG00	F2207100
05131	0	02000	0	05133		TRA BRA70			F2207110
05132	0	50000	0	03756	BRA60	CLA L(5)			F2207120
05133	0	60100	0	03731	BRA70	STO DOSUBS			F2207130
05134	0	02000	0	05121		TRA BRA40			F2207140
05135	0	07400	4	06246	BRA80	TSX 3NS00,4			F2207150
05136	-0	53400	4	05122	BRA90	LXD BRA45,4			F2207160
05137	0	02000	4	00001		TRA 1,4			F2207170
05140	-0	63400	4	05204	RSR	SXD RSR20,4		SAVE LINKAGE	F2207180
05141	-0	63400	1	05205		SXD RSR30,1		SAVE INDEX	F2207190
05142	0	50000	1	00741		CLA DOTAGZ+6,1		HAS COUNTER ADJUSTMENT	F2207200
05143	-0	32000	0	04003		ANA BIT18		INSTRUCTION BEEN ENTERED.	F2207210
05144	-0	10000	0	05164		TNZ RSR10		IF SO, GO TO RSR10	F2207220
05145	0	50000	0	04003		CLA BIT18		IF NOT, ENTER IN	F2207230
05146	-0	60200	1	00741		ORS DOTAGZ+6,1		TRASTO AN ENTRY TO CAUSE	F2207240
05147	0	50000	1	00733		CLA DOTAGZ,1		THE COUNTER TO BE	F2207250
05150	-0	76000	0	00003		SSM			F2207260
05151	0	60100	0	05063		STO E1		DECREASED BY N1, WHICH	F2207270
05152	0	50000	1	00740		CLA DOTAGZ+5,1		WILL MAKE IT USEFUL AS	F2207280
05153	-0	32000	0	03772		ANA DECMSK		AS A RESET SUB. COMB.	F2207290
05154	0	77100	0	00022		ARS 18			F2207300
05155	0	60100	0	05064		STO E2			F2207310
05156	0	50000	1	00743		CLA DOTAGZ+8,1			F2207320
05157	-0	32000	0	03772		ANA DECMSK			F2207330
05160	-0	50100	1	00735		ORA DOTAGZ+2,1			F2207340
05161	0	60100	0	05065		STO E3			F2207350
05162	0	50000	0	05070		CLA TRASTO			F2207360
05163	0	07400	4	05025		TSX LIST,4			F2207370
05164	-0	53400	1	05205	RSR10	LXD RSR30,1		ENTER IN TRASTO	F2207380
05165	0	50000	1	00743		CLA DOTAGZ+8,1		AN ENTRY TO CAUSE	F2207390
05166	-0	32000	0	03772		ANA DECMSK		THE TAG UNDER	F2207400
05167	-0	50100	0	03701		ORA TS		CONSIDERATION	F2207410
05170	-0	76000	0	00003		SSM			F2207420
05171	0	60100	0	05065		STO E3		TO BE RESET	F2207430
05172	0	50000	0	03741		CLA TL2		BY THE ADJUSTED	F2207440
05173	0	77100	0	00022		ARS 18		COUNTER AT THE	F2207450
05174	-0	50100	0	03740		ORA TL1		PROPER TIMES.	F2207460
05175	0	60100	0	05064		STO E2			F2207470
05176	0	50000	1	00733		CLA DOTAGZ,1			F2207480
05177	0	60100	0	05063		STO E1			F2207490
05200	0	50000	0	05070		CLA TRASTO			F2207500
05201	0	07400	4	05025		TSX LIST,4			F2207510
05202	-0	53400	4	05204		LXD RSR20,4			F2207520
05203	0	02000	4	00001		TRA 1,4			F2207530
A	05204	0	00000	0	00000	RSR20	HTR		F2207540
A	05205	0	00000	0	00000	RSR30	HTR		F2207550
	05206	-0	63400	4	05212	DRMENT	SXD DRM05,4	THIS ROUTINE	F2207560
	05207	-0	53400	2	04006		LXD ADTXX,2	PROCESSES THE	F2207570
	05210	-0	63400	2	05241		SXD DRM20,2	ADDED TAG TABLE	F2207580
	05211	0	53400	2	04006		LXA ADTXX,2		F2207590
D	05212	-3	00000	0	05241	DRM05	TXL DRM20,0		F2207600
	05213	0	50000	2	07135	DRM10	CLA ADTAGZ,2	OBTAIN FIRST ENTRY WORD.	F2207610
	05214	-0	73400	1	00000		PDX 0,1	PUT INDEX IN XRA.	F2207620
	05215	-0	32000	0	03773		ANA ADDMSK	STORE TAG	F2207630

05216	0	60100	0	03700		STO TAG		IN TAG	F2207640
05217	0	60100	0	03701		STO TS		AND TS	F2207650
05220	-0	75400	1	00000		PXD 0,1		PUT INDEX	F2207660
05221	0	60100	0	03674		STO XC		IN XC	F2207670
05222	-0	63400	2	05244		SXD DRM30,2		SAVE INDEX B.	F2207680
05223	0	50000	2	07136		CLA ADTAGZ+1,2		OBTAIN WORD TWO.	F2207690
05224	-0	12000	0	05245		TMI DRM40		TRA IF RESET ENTRY.	F2207700
05225	0	60100	0	03701		STO TS		SAVE NAME IN TS.	F2207710
05226	0	07400	4	04363		TSX DOINFO,4		USE DOINFO	F2207720
05227	0	07400	4	04520		TSX SUBCOM,4		AND	F2207730
05230	0	76100	0	00000		NOP	OTHER		F2207745
05231	0	07400	4	05566		TSX IDENT,4		ROUTINES	F2207750
05232	0	07400	4	00004		TSX DIAG,4	IN ORDER TO	(ERROR. GO TO DIAGNOSTIC.)	F2207765
05233	0	07400	4	05106		TSX BRANCH,4		PROCESS	F2207770
05234	0	07400	4	04614		TSX SCEND,4		ENTRY.	F2207780
05235	0	50000	0	05073		CLA DRMTAG			F2207790
05236	0	07400	4	05025		TSX LIST,4		ENTER RESULT IN DRMTAG.	F2207800
05237	-0	53400	2	05244	DRM15	LXD DRM30,2			F2207810
05240	1	77776	2	05241		TXI DRM20,2,-2			F2207820
05241	3	00000	2	05213	DRM20	TXH DRM10,2			F2207830
05242	-0	53400	4	05212		LXD DRM05,4			F2207840
05243	0	02000	4	00001		TRA 1,4			F2207850
05244	0	00000	0	00000	DRM30	HTR			F2207860
05245	0	73400	4	00000	DRM40	PAX 0,4		FOR RESET ENTRY,	F2207870
05246	-0	32000	0	03772		ANA DECMASK		INITIALIZE CELLS	F2207880
05247	0	60100	0	03740		STO TL1		USED IN RSR ROUTINE.	F2207890
05250	-0	75400	4	00000		PXD 0,4			F2207900
05251	0	60100	0	03741		STO TL2			F2207910
05252	0	07400	4	05140		TSX RSR,4			F2207920
05253	0	02000	0	05237		TRA DRM15		TRA FOR NEXT ENTRY.	F2207930
						SUBROUTINE TAGADD			F2207940
05254	3	00000	2	05256	TAGADD	TXH TAGAD1,2,0	C(IRB) EQ 1	IF NORMAL ADTAG	F2207950
05255	-0	75400	1	00000		PXD 0,1			F2207960
05256	-0	53400	1	04006	TAGAD1	LXD ADTXX,1			F2207970
05257	-3	00000	1	05273		TXL TAGAD6,1,0			F2207980
05260	3	00000	2	05274		TXH TAGAD8,2,0		XRB=1,NORMAL ADDED TAG	F2207990
05261	0	40000	0	03700		ADD TAG			F2208000
05262	0	60100	1	07135		STO ADTAGZ,1			F2208010
05263	0	50000	0	03673		CLA NEWTAG			F2208020
05264	0	56000	0	03673		LDQ NEWTAG			F2208030
05265	0	60100	1	07136		STO ADTAGZ+1,1			F2208040
05266	0	40000	0	03765		ADD L(1)A			F2208050
05267	0	60100	0	03673		STO NEWTAG			F2208060
05270	1	77776	1	05271		TXI TAGAD2,1,-2			F2208070
05271	-0	63400	1	04006	TAGAD2	SXD ADTXX,1			F2208080
05272	0	02000	4	00001	TAGAD3	TRA 1,4			F2208088
05273	0	07400	4	00004	TAGAD6	TSX DIAG,4	TABLE WILL NOT HOLD ENTRY.	ERROR. GO TO DIAGNOSTIC.	F2208093
05274	0	60100	1	07135	TAGAD8	STO ADTAGZ,1			F2208110
05275	-0	60000	1	07136		STQ ADTAGZ+1,1			F2208120
05276	1	77776	1	05271		TXI TAGAD2,1,-2			F2208130
						SUBROUTINE SPC000			F2208140
05277	-0	63400	1	05371	SPC000	SXD SPC115,1		SAVE INDEX OF DO TO BE SEARCHED.	F2208150
05300	-0	63400	2	05344		SXD SPC060,2		SAVE TINFO,LIST INDICATOR	F2208160
05301	-0	63400	4	05361		SXD SPC105,4		SAVE TSX INDEX.	F2208170

	05302	0	60100	0	05410	STO	SPCKEY	SAVE LIST KEY WORD	F2208180	
	05303	0	50000	1	00740	CLA	DOTAGZ+5,1	OBTAIN L WORD	F2208190	
	05304	0	62200	0	05321	STD	SPC050	INITIALIZE TEST INSTR.	F2208200	
	05305	0	50000	1	00733	CLA	DOTAGZ,1	OBTAIN ALPHABETA WRD,	F2208210	
	05306	0	73400	2	00000	PAX	0,2	SAVE BETA,	F2208220	
	05307	-0	32000	0	03772	ANA	DECMSK	OBTAIN ALPHA ALONE	F2208230	
	05310	0	60100	0	03744	STO	NEXTA	STO IN NEXTA	F2208240	
	05311	0	60100	0	03742	STO	A	AND STORE IN A.	F2208250	
	05312	-0	75400	2	00000	PXD	0,2	PUT BETA IN LASTB AND	F2208260	
	05313	0	60100	0	03745	STO	LASTB	BETING SEARCH FOR R2	F2208270	
	05314	-0	53400	1	05371	LXD	SPC115,1	OBTAIN CURRENT INDEX AND	F2208280	
	05315	1	77767	1	05316	SPC020	TXI	SPC040,1,-9	GO DOWN ONE DO,IF POSSIBLE,ELSE	F2208290
D	05316	-3	00000	1	05362	SPC040	TXL	SPC110,1	GO TO SET UP LAST INTERVAL.	F2208300
	05317	0	50000	1	00740	CLA	DOTAGZ+5,1	TEST WHETHER OR NOT THIS DO	F2208310	
	05320	-0	73400	2	00000	PDX	0,2	IS IN RANGE OF R1(DXL)	F2208320	
D	05321	-3	00000	2	05362	SPC050	TXL	SPC110,2	IF NOT,EXIT FOR LAST INTERVAL,	F2208330
	05322	0	50000	1	00734	CLA	DOTAGZ+1,1	IF IN R1,IS THIS DO TO BE	F2208340	
	05323	0	40200	0	03735	SUB	RSYM1	SKIPPED. IF NOT,GO BACK TO	F2208350	
	05324	0	10000	0	05330	TZE	SPC053	GET NEXT DO.	F2208360	
	05325	0	50000	1	00734	CLA	DOTAGZ+1,1		F2208370	
	05326	0	40200	0	03736	SUB	RSYM2		F2208380	
	05327	-0	10000	0	05315	TNZ	SPC020		F2208390	
	05330	0	50000	1	00733	SPC053	CLA	DOTAGZ,1	R2 FOUND,ARRANGE TO SKIP THIS	F2208400
	05331	0	73400	2	00000	PAX	0,2	INTERVAL. USE ALPHA OF R2	F2208410	
	05332	-0	32000	0	03772	ANA	DECMSK	AS B,PUT BETA OF R2 IN	F2208420	
	05333	0	60100	0	03743	STO	B	NEXTA.	F2208430	
	05334	-0	75400	2	00000	PXD	0,2	DO FORMULAS WITHIN R2 ARE	F2208440	
	05335	0	60100	0	03744	STO	NEXTA	ACCOUNTED FOR AFTER SEARCH.	F2208450	
	05336	-0	63400	1	05371	SXD	SPC115,1	SAVE INDEX OF R2.	F2208460	
	05337	-0	53400	2	05344	SPC055	LXD	SPC060,2	PUT TINFOR, LIST IND. IN XRB	F2208470
	05340	0	50000	0	03742	SPC058	CLA	A	FOR	F2208480
	05341	0	40200	0	03743	SUB	B	NON EMPTY	F2208490	
	05342	0	10000	0	05345	TZE	SPC065	INTERVALS,	F2208500	
	05343	-3	00001	2	05376	TXL	SPCTIN,2,1	GO TO ARRANGE TINFOR SEARCH, OR	F2208510	
D	05344	-3	00000	0	05401	SPC060	TXL	SPCSTO,0	TRA TO USE LIST.	F2208520
	05345	-0	53400	2	05344	SPC065	LXD	SPC060,2	RETURN HERE,TEST TINFOR	F2208530
	05346	-3	00000	2	05372	TXL	SPC120,2,0	LIST IND. IF ZERO, EXIT.	F2208540	
	05347	-0	53400	1	05371	SPC070	LXD	SPC115,1	TO SET UP NEXT INTERVAL,	F2208550
	05350	0	50000	1	00740	CLA	DOTAGZ+5,1	OBTAIN INDEX OF LAST R2 AND	F2208560	
	05351	0	62200	0	05356	STD	SPC100	STEP DOWN IN DOTAG BY USUAL	F2208570	
	05352	1	77767	1	05353	SPC080	TXI	SPC090,1,-9	PROCEDURE UNTIL SOME DO IS	F2208580
D	05353	-3	00000	1	05362	SPC090	TXL	SPC110,1	FOUND NOT IN R2,OR UNTIL	F2208590
	05354	0	50000	1	00740	CLA	DOTAGZ+5,1	DOTAG EXHAUSTED. IF DO FOUND	F2208600	
	05355	-0	73400	2	00000	PDX	0,2	NOT IN R2,SET A AND GO TO TEST	F2208610	
D	05356	3	00000	2	05352	SPC100	TXH	SPC080,2	IF THIS DO IS IN R1.	F2208620
	05357	0	50000	0	03744	CLA	NEXTA	IF IT IS,NEW2 WILL BE FOUND	F2208630	
	05360	0	60100	0	03742	STO	A	OR EXIT MADE TO SPC110.	F2208640	
D	05361	-3	00000	0	05321	SPC105	TXL	SPC050,0	F2208650	
	05362	0	50000	0	03744	SPC110	CLA	NEXTA	THIS IS SETUP FOR LAST	F2208660
	05363	0	60100	0	03742	STO	A	INTERVAL. FOR A,USE	F2208670	
	05364	0	50000	0	03745	CLA	LASTB	CONTENTS OF NEXTA. FOR B,	F2208680	
	05365	0	60100	0	03743	STO	B	USE BETA OF R1,FOUND IN	F2208690	
	05366	-0	53400	2	05344	LXD	SPC060,2	LASTB. OBTAIN TINFOR,STOTAG	F2208700	
	05367	0	50000	0	03751	CLA	L(0)	IND,AND SET LOCATION OF	F2208710	

	05370	0	62200	0	05344		STD	SPC060		INDICATOR TO ZERO. GO TO	F2208720
D	05371	-3	00000	0	05340	SPC115	TXL	SPC058,0		TINFOR OR TRASTO.	F2208730
	05372	-0	53400	4	05361	SPC120	LXD	SPC105,4		EXIT,ALL STORES DONE,OR,	F2208740
	05373	0	02000	4	00001		TRA	1,4		SEARCH MADE,T NOT FOUND.	F2208750
	05374	-0	53400	4	05361	SPC130	LXD	SPC105,4		EXIT,T FOUND	F2208760
	05375	0	02000	4	00002		TRA	2,4		IN SOME INTERVAL	F2208770
	05376	0	07400	4	05417	SPCTIN	TSX	TINFXX,4		GO TO SEARCH FORTAG	F2208780
	05377	0	02000	0	05374		TRA	SPC130		T FOUND	F2208790
	05400	0	02000	0	05345		TRA	SPC065		T NOT FOUND	F2208800
	05401	0	50000	0	03743	SPCSTO	CLA	B		FOR TRASTO,E2 AND E3 ARE	F2208810
	05402	0	77100	0	00022		ARS	18		ALREADY SET UP. COLLECT	F2208820
	05403	0	40000	0	03742		ADD	A		A AND B INTO E1 WORD,	F2208830
	05404	0	60100	0	05063		STO	E1		PUT TRASTO INDICATOR IN	F2208840
	05405	0	50000	0	05410		CLA	SPCKEY		ACC. AND	F2208850
	05406	0	07400	4	05025		TSX	LIST,4		TSX TO LISTING ROUTINE.	F2208860
	05407	0	02000	0	05345		TRA	SPC065		ON RETURN,GO TO TEST FINISH.	F2208870
A	05410	0	00000	0	00000	SPCKEY	HTR			STORAGE FOR TABLEKEY	F2208880
										SUBROUTINES TINFOR AND TINFXX	F2208890
	05411	0	50000	1	00733	TINFOR	CLA	DOTAGZ,1		C(XRA)=INDEX OF DR TO BE	F2208900
	05412	0	73400	1	00000		PAX	0,1		SEARCHED, SEPARATE ALPHA	F2208910
	05413	-0	32000	0	03772		ANA	DECMSK		AND BETA	F22D8920
	05414	0	60100	0	03742		STO	A		AND STORE IN A	F2208930
	05415	-0	75400	1	00000		PXD	0,1			F2208940
	05416	0	60100	0	03743		STO	B		B	F2208950
	05417	-0	53400	1	03764	TINFXX	LXD	L(1500,1		PUT MAX FORTAG INDEX IN XRA	F2208960
	05420	0	50000	1	03670	TINF10	CLA	FORTZ,1		OBTAIN FORTAG ENTRY	F2208970
	05421	-0	32000	0	03772		ANA	DECMSK		RETAIN FORMULA NUMBER ONLY	F2208980
	05422	0	34000	0	03742		CAS	A		COMPARE ALPHA AND FORMULA NR.	F2208990
	05423	0	02000	0	05430		TRA	TINF40		FOR. NR. GREATER THAN ALPHA. TRA.	F2209000
	05424	0	76100	0	00000		NOP			C(A) MAY BE SOME BETA FROM SPC	F2209010
	05425	1	77777	1	05426	TINF20	TXI	TINF30,1,-1		FOR.NR. LESS THAN ALPHA. GO	F2209020
										BACK FOR NEXT FORTAG ENTRY	F2209030
D	05426	3	00000	1	05420	TINF30	TXH	TINF10,1		IF POSSIBLE. OTHERWISE,	F2209040
	05427	0	02000	4	00002		TRA	2,4		RETURN TO CALLING INSTR PLUS TWO.	F2209050
	05430	0	34000	0	03743	TINF40	CAS	B		COMPARE FOR. NR. WITH BETA	F2209060
	05431	0	02000	4	00002		TRA	2,4		FOR. NR. GREATER THAN BETA,EXIT,	F2209070
	05432	0	76100	0	00000		NOP			FOR. NR. EQUAL TO OR	F2209080
	05433	0	50000	1	03670		CLA	FORTZ,1		LESS THAN BETA,OBTAIN FORTAG	F2209090
	05434	0	12000	0	05425		TPL	TINF20		TAG AND COMPARE WITH SEARCH TAG.	F2209100
	05435	-0	32000	0	03773		ANA	ADDMSK		I.F. NOT EQUAL,GO BACK FOR NEXT TAG	F2209110
	05436	0	40200	0	03700		SUB	TAG			F2209120
	05437	-0	10000	0	05425		TNZ	TINF20		IF EQUAL,RETURN TO CALLING	F2209130
	05440	0	02000	4	00001		TRA	1,4			F2209140
										INSTR PLUS ONE. XRA CONTAINS INDEX IN FORTAG OF FIRST TAG	F2209150
										FOUND	F2209160
										SUBROUTINE TRAWRD	F2209170
	05441	-0	63400	4	05470	TRAWRD	SXD	TRAW65,4			F2209180
	05442	0	50000	0	03751		CLA	L(0)			F2209190
	05443	0	60100	0	03747		STO	TRABIT			F2209200
	05444	0	50000	1	00740		CLA	DOTAGZ+5,1			F2209210
	05445	0	62200	0	05454		STD	TRAW30			F2209220
	05446	0	50000	1	00742	TRAW10	CLA	DOTAGZ+7,1		OBTAIN T2 WORD	F2209230
	05447	-0	60200	0	03747		ORS	TRABIT		OR INTO TRABIT	F2209240
	05450	1	77767	1	05451		TXI	TRAW20,1,-9		TAKE NEXT DO	F2209250

D	05451	-3	00000	1	05471	TRAW20	TXL	TRAW70,1	IF NONE, EXIT. (DEC HAS DOTAG IX)	F2209260
	05452	0	50000	1	00740		CLA	DOTAGZ+5,1	OBTAIN L WORD	F2209270
	05453	-0	73400	4	00000		PDX	0,4	PUT L IN XRC.	F2209280
D	05454	-3	00000	4	05471	TRAW30	TXL	TRAW70,4	EXIT IF DO IS NOT IN RANGE R1	F2209290
	05455	-3	00001	2	05446		TXL	TRAW10,2,1	IF COMPLETE TEST,GO BACK	F2209300
	05456	0	50000	1	00734	TRAW35	CLA	DOTAGZ+1,1	IF INCOMPLETE TEST,IS THIS A	F2209310
	05457	0	40200	0	03736		SUB	RSYM2	DO TO BE SKIPPED	F2209320
	05460	-0	10000	0	05446		TNZ	TRAW10	IF NOT, GO 8ACK	F2209330
	05461	0	50000	1	00740		CLA	DOTAGZ+5,1	THIS DO IS TO BE SKIPPED	F2209340
	05462	0	62200	0	05467		STD	TRAW60	PUT LEVEL OF THIS DO IN TEST INSTR.	F2209350
	05463	1	77767	1	05464	TRAW40	TXI	TRAW50,1,-9	TAKE NEXT DO IF ANY	F2209360
D	05464	-3	00000	1	05471	TRAW50	TXL	TRAW70,1	IF NOT, EXIT. OTHERWISE, (DEC.HAS DOTAG IX)	F2209370
	05465	0	50000	1	00740		CLA	DOTAGZ+5,1	OBTAIN L WORD	F2209380
	05466	-0	73400	4	00000		PDX	0,4	PUT L IN XRC	F2209390
D	05467	3	00000	4	05463	TRAW60	TXH	TRAW40,4	IF DO IS IN RANGE OF R2,GO BACK	F2209400
D	05470	-3	00000	0	05454	TRAW65	TXL	TRAW30,0	OTHERWISE,GO TO TRAW30	F2209410
	05471	-0	53400	4	05470	TRAW70	LXD	TRAW65,4		F2209420
	05472	0	50000	0	03761		CLA	L(36)	OBTAIN 36 IN DECREMENT	F2209430
	05473	0	40200	0	03741		SUB	TL2	36-TL2	F2209440
	05474	0	77100	0	00022		ARS	18	IN ADDRESS	F2209450
	05475	0	62100	0	05505		STA	TRAW90	INITIALIZE SHIFT	F2209460
	05476	0	50000	0	03741		CLA	TL2	OBTAIN TL2	F2209470
	05477	0	40200	0	03740		SUB	TL1	TL2-TL1	F2209480
	05500	0	77100	0	00022		ARS	18	IN ADDRESS	F2209490
	05501	0	62100	0	05504		STA	TRAW80	INITIALIZE SHIFT	F2209500
	05502	0	50000	0	03751		CLA	L(0)	ACC CONTAINS ZERO	F2209510
	05503	0	56000	0	03771		LDQ	35ONES	MQ CONTAINS ALL ONES	F2209520
A	05504	0	76300	0	00000	TRAW80	LLS		PUT TL2-TL1 ONES-IN-ACC	F2209530
A	05505	0	76700	0	00000	TRAW90	ALS		POSITION ONES IN ACC	F2209540
	05506	-0	32000	0	03747		ANA	TRABIT	AND IN TRANSFER BITS	F2209550
	05507	0	02000	4	00001		TRA	1,4	GO BACK TO CALLING INSTR PLUS ONE.	F2209560
									SUBROUTINES TAGENT AND TETAPE	F2209570
	05510	-0	53400	1	04010	TAGENT	LXD	TAGXX,1	THIS ROUTINE ENTERS	F2209580
	05511	3	00000	1	05513		TXH	TE10,1,0	ONE ENTRY IN TAGZ,	F2209590
	05512	0	07400	2	05522		TSX	TETAPE,2	IF POSSIBLE. IF NOT,	F2209600
	05513	-0	53400	2	03755	TE10	LXD	L(4),2	TRA TO TETAPE.	F2209610
	05514	0	50000	2	05067	TE20	CLA	E1+4,2		F2209620
	05515	0	60100	1	06771		STO	TAGZ,1		F2209630
	05516	1	77777	1	05517		TXI	TE30,1,-1		F2209640
	05517	2	00001	2	05514	TE30	TIX	TE20,2,1		F2209650
	05520	-0	63400	1	04010		SXD	TAGXX,1		F2209660
	05521	0	02000	4	00001		TRA	1,4		F2209670
	05522	0	76600	0	00224	TETAPE	WRS	ATAPE	THIS ROUTINE	F2209680
	05523	-0	53400	1	04010		LXD	TAGXX,1	ENTERS ALL THE VALID	F2209690
	05524	-0	63400	1	05530		SXD	TE50,1	ENTRIES IN TAGZ ON	F2209700
	05525	0	53400	1	04010		LXA	TAGXX,1	THE TAPE	F2209710
	05526	0	70000	1	06771	TE40	CPY	TAGZ,1	THE LAST ENTRY ON TAPE	F2209720
	05527	1	77777	1	05530		TXI	TE50,1,-1	AFTER EACH NEST IS	F2209730
D	05530	3	00000	1	05526	TE50	TXH	TE40,1	AN ENTRY OF 4 WDS OF 35 ONES	F2209740
	05531	0	53400	1	04010		LXA	TAGXX,1		F2209750
	05532	-0	63400	1	04010		SXD	TAGXX,1		F2209760
	05533	0	02000	2	00001		TRA	1,2		F2209770
									ROUTINE RELCON PINGPONGS INSTRUCTIONS	F2209780
	05534	-0	53400	2	03753	RELCON	LXD	L(2),2	INITIALIZE SWITCH	F2209790

	05535	-0	53400	4	03756	REL10	LXD L(5),4	INITIALIZE	ERROR COUNTER.	F2209805
	05536	-0	53400	1	05565	REL20	LXD RELWDS,1		PUT NR OF DRM WDS IN XRA	F2209810
	05537	0	76200	0	00301		RDS PPDRM		LOCATE DRUM ADDRESS	F2209820
	05540	0	46000	2	05566		LDA RELDRA+2,2		LOCATE PROPER DRM ADDRESS	F2209830
	05541	0	70000	1	06566	REL30	CPY CORESZ,1		READ STATE B, OR A, INTO	F2209840
	05542	2	00001	1	05541		TIX REL30,1,1		STORAGE	F2209850
	05543	-0	53400	1	05565		LXD RELWDS,1		LOAD XRA WITH NR OF DRM WDS	F2209860
	05544	-0	75400	0	00000		PXD 0,0	COMPUTE		F2209870
	05545	0	36100	1	06566	REL40	ACL CORESZ,1		CHECK	F2209880
	05546	2	00001	1	05545		TIX REL40,1,1		SUM	F2209890
	05547	0	60200	0	05561		SLW REL80		AND	F2209900
	05550	0	50000	0	05561		CLA REL80		COMPARE.	F2209910
	05551	0	40200	2	05564		SUB RELCS+2,2		IF NOT ZERO,	F2209920
	05552	-0	10000	0	05557		TNZ REL70		GO TO ERROR ROUTINE.	F2209930
	05553	-3	00001	2	05112	REL50	TXL BRA10,2,1		IF STATE A, RETURN-TO BRANCH.	F2209940
D	05554	-3	00000	0	05566	REL60	TXL CORES,0		AND TRA TO REL ROUTINE	F2209950
	05555	-0	53400	2	03752	RELEND	LXD L(1),2			F2209960
	05556	0	02000	0	05535		TRA REL10		GO TO READ IN STATE A.	F2209970
	05557	2	00001	4	05536	REL70	TIX REL20,4,1		COUNT IN ERROR COUNTER AND RETURN	F2209980
	05560	0	07400	4	00004		TSX DIAG,4 DRUM READ		ERROR. GO TO DIAGNOSTIC.	F2209995
A	05561	0	00000	0	00000	REL80	HTR		E.S.	F2210000
	05562	+103075525444				RELCS	OCT 103075525444	CHECK SUM, STATE B, RELCON		F2210014
	05563	-246744643200				OCT	-246744643200	CHECK SUM STATE A, NORMAL		F2210024
	05564	+000000001000				RELDRA	OCT 1000	DRUM ADDRESS, STATE B.		F2210030
	05565	+001000000000				OCT	1000000000	NR. WDS, DRUM ADDRESS.STATE A.		F2210040
					05566	ORG	2934			F2210050
							MASTER RECORD CARD = FN032			F2210055
	05566	-0	63400	4	05622	IDENT	SXD ID075,4		SAVE INDEX	F2210060
	05567	-0	53400	1	03760		LXD L(20),1		INITIALIZE IDENT STORAGE.	F2210070
	05570	0	50000	0	03751		CLA L(0)		TO ZERO	F2210080
	05571	0	60100	0	06027		STO IDES			F2210090
	05572	0	60100	1	03740	ID010	STO X1+20,1			F2210100
	05573	2	00001	1	05572		TIX ID010,1,1			F2210110
	05574	0	50000	0	03771		CLA 35ONES	INITIALIZE		F2210120
	05575	0	60100	0	03723		STO LL	LOW LEVEL		F2210130
	05576	-0	53400	2	03751		LXD L(0),2	COUNT THE SUBSCRIPT		F2210140
	05577	-0	53400	4	03756		LXD L(5),4	SYMBOLS.		F2210150
	05600	0	50000	4	03712	ID020	CLA S1+5,4	STORE COUNT IN		F2210160
	05601	0	10000	0	05603		TZE ID030	NRSUBS, AND ALSO IN		F2210170
	05602	1	00001	2	05603		TXI ID030,2,1	NRRC, WHICH IS THE.		F2210180
	05603	2	00002	4	05600	ID030	TIX ID020,4,2	COUNT OF REL. CON.		F2210190
	05604	-0	75400	2	00000		PXD 0,2	SUBSCRIPTS. DO SUBS ARE		F2210200
	05605	0	60100	0	03725		STO NRRC	SUBTRACTED OUT LATER.		F2210210
	05606	0	60100	0	03724		STO NRSUBS			F2210220
	05607	-0	53400	1	03674		LXD XC,1	COMPARE EACH SYMBOL		F2210230
	05610	-0	53400	2	03675		LXD LC,2	IN THE SUB. COMB. WITH		F2210240
	05611	0	76000	0	00141		PSE TL	THE SYMBOL OF EACH		F2210250
	05612	0	50000	1	00734	ID050	CLA DOTAGZ+1,1	DO IN THE SUB NEST.		F2210260
	05613	-0	53400	4	03756		LXD L(5),4	WHEN EQUALITY IS		F2210270
	05614	0	34000	4	03712	ID060	CAS S1+5,4	FOUND, GO TO ID120.		F2210280
	05615	0	02000	0	05617		TRA ID070	IF THE CURRENT DO		F2210290
	05616	0	02000	0	05632		TRA ID120	SYMBOL IS NOT FOUND,		F2210300
	05617	2	00002	4	05614	ID070	TIX ID060,4,2	MAKE EXIT FROM ID410		F2210310
	05620	-0	76000	0	00141		MSE TL			F2210320

	05621	0	02000	0	05623		TRA	ID080		F2210330
D	05622	-3	00000	0	06025	ID075	TXL	ID410,0		F2210340
	05623	-3	00001	2	05646	ID080	TXL	ID150,2,1	THESE INSTRUCTIONS	F2210350
	05624	1	00011	1	05625	ID090	TXI	ID100,1,9	FIND THE NEXT BACK	F2210360
	05625	0	50000	1	00740	ID100	CLA	DOTAGZ+5,1	SUB NEST DO FORMULA,	F2210370
	05626	0	62200	0	05627		STD	ID110	AND RETURN CONTROL	F2210380
D	05627	-3	00000	2	05624	ID110	TXL	ID090,2	TO ID050.	F2210390
	05630	-0	73400	2	00000		PDX	0,2		F2210400
	05631	0	02000	0	05612		TRA	ID050		F2210410
	05632	-0	76000	0	00141	ID120	MSE	TL	TURN OFF TEST LIGHT	F2210420
	05633	0	76100	0	00000		NOP		AND	F2210430
	05634	-0	75400	1	00000		PXD	0,1	ESTABLISH	F2210440
	05635	0	60100	4	03721		STO	X1+5,4	INDEX	F2210450
	05636	-0	75400	2	00000		PXD	0,2	AND	F2210460
	05637	0	60100	4	03722		STO	L1+5,4	LEVEL FOR THIS SUBSCRIPT.	F2210470
	05640	0	50000	0	03725		CLA	NRRC	SUBTRACT ONE FROM	F2210480
	05641	0	40200	0	03752		SUB	L(1)	NRRC. THIS WORD	F2210490
	05642	0	60100	0	03725		STO	NRRC	CONTAINS INITIALLY	F2210500
	05643	0	10000	0	05646		TZE	ID150	THE NUMBER OF	F2210510
	05644	0	50000	1	00734		CLA	DOTAGZ+1,1	SUBSCRIPTS IN THE	F2210520
	05645	0	02000	0	05617		TRA	ID070	COMBINATION.	F2210530
	05646	0	76600	0	00333	ID150	IOD		THIS - EDRECNO FN 265001 P463	F2210540
	05647	0	50000	0	03714		CLA	X1	ROUTINE FN265002	F2210550
	05650	0	56000	0	03716		LDQ	X2	LOOKS FOR THE	F2210560
	05651	0	04000	0	05653		TLQ	PT041	OUTERMOST	F2210570
	05652	0	50000	0	03716		CLA	X2	DOTAG	F2210580
	05653	0	56000	0	03720	PT041	LDQ	X3	OF A	F2210590
	05654	0	04000	0	05656		TLQ	PT042	SUBSCRIPT	F2210600
	05655	0	50000	0	03720		CLA	X3	COMBINATION.	F2210610
	05656	0	60100	0	05662	PT042	STO	PT043		F2210620
	05657	-0	53400	4	03757		LXD	L(6),4		F2210630
	05660	-0	53400	3	03754		LXD	L(3),3		F2210640
	05661	0	02000	0	05663		TRA	ID160	RETURN	F2210650
A	05662	0	00000	0	00000	PT043	HTR			F2210660
	05663	0	50000	1	03710	ID160	CLA	S1+3,1	WHICH CAN BE ASSIGNED	F2210670
	05664	0	10000	0	05671		TZE	ID170	HAVE BEEN ASSIGNED.	F2210680
	05665	0	40200	2	03712		SUB	S1+5,2	THIS	F2210690
	05666	-0	10000	0	05671		TNZ	ID170	ROUTINE	F2210700
	05667	-0	75400	4	00000		PXD	0,4	MAKES UP THE	F2210710
	05670	-0	60200	0	03734		ORS	DUPES	DUPLICATE	F2210720
	05671	2	00001	4	05672	ID170	TIX	ID180,4,1	SUBSCRIPT	F2210730
	05672	2	00002	2	05663	ID180	TIX	ID160,2,2	WORD.	F2210740
	05673	2	00001	4	05674		TIX	ID190,4,1		F2210750
	05674	2	00002	1	05663	ID190	TIX	ID160,1,2		F2210760
	05675	-0	53400	2	03725		LXD	NRRC,2	IF THERE IS MORE	F2210770
	05676	-3	00000	2	05723		TXL	ID300,2,0	THAN ONE RELCON,	F2210780
	05677	-3	00001	2	05704		TXL	ID195,2,1	AND IF THERE ARE	F2210790
	05700	0	50000	0	03734		CLA	DUPES	DUPLICATES, THEN THE	F2210800
	05701	0	60100	0	03733		STO	RCDUP	RELCONS ARE DUPLICATES.	F2210810
	05702	0	50000	0	03751		CLA	L(0)	OTHERWISE, THE DOSUBS	F2210820
	05703	0	60100	0	03734		STO	DUPES	ARE DUPLICATES.	F2210830
	05704	-0	53400	4	03756	ID195	LXD	L(5),4	IF THERE ARE RELCONS,	F2210840
	05705	0	50000	4	03722	ID200	CLA	L1+5,4	THERE ARE NOT MORE	F2210850
	05706	-0	10000	0	05720		TNZ	ID210	THAN TWO.	F2210860

05707	0	50000	4	03712	CLA S1+5,4	PUT THEIR SYMBOLS	F2210870
05710	0	10000	0	05720	TZE ID210	IN PSYM1 AND RSYM2,	F2210880
05711	-0	75400	4	00000	PXD 0,4	AND PUT BITS IN THE	F2210890
05712	-3	00001	4	05714	TXL ID205,4,1	PROPER POSITIONS OF	F2210900
05713	0	40200	0	03752	SUB L(1)	RCSUBS.	F2210910
05714	-0	60200	0	03730	ID205 ORS RCSUBS		F2210920
05715	0	50000	4	03712	CLA S1+5,4		F2210930
05716	-2	00001	2	05722	TNX ID220,2,1		F2210940
05717	0	60100	0	03736	STO RSYM2		F2210950
05720	2	00002	4	05705	ID210 TIX ID200,4,2		F2210960
05721	0	02000	0	05723	TRA ID300		F2210970
05722	0	60100	0	03735	ID220 STO RSYM1		F2210980
05723	-0	53400	4	03756	ID300 LXD L(5),4	FOR ALL DO SUBS,	F2210990
05724	0	50000	4	03721	ID310 CLA X1+5,4	SELECT THE	F2211000
05725	0	10000	0	05740	TZE ID340	MAXIMUM OF ALL	F2211010
05726	-0	73400	1	00000	PDX 0,1	VARIABLE N LEVEL	F2211020
05727	-0	53400	2	03754	LXD L(3),2	OF DEFINITION	F2211030
05730	0	50000	1	00741	ID320 CLA DOTAGZ+6,1	QUANTITIES.	F2211040
05731	-0	32000	0	03773	ANA ADDMSK		F2211050
05732	0	76700	0	00022	ALS 18		F2211060
05733	0	34000	0	06027	CAS IDES		F2211070
05734	0	60100	0	06027	STO IDES		F2211080
05735	0	76100	0	00000	NOP		F2211090
05736	2	00001	1	05737	TIX ID330,1,1		F2211100
05737	2	00001	2	05730	ID330 TIX ID320,2,1		F2211110
05740	2	00002	4	05724	ID340 TIX ID310,4,2		F2211120
05741	-0	53400	4	03756	LXD L(5),4	COMPARE THIS MAXIMUM	F2211130
05742	-0	53400	2	03751	LXD L(0),2		F2211140
05743	0	50000	4	03722	ID350 CLA L1+5,4	WITH EACH SUBSCRIPT	F2211150
05744	0	10000	0	06000	TZE ID380	LEVEL, THOSE SUBSCRIPT	F2211160
05745	0	34000	0	06027	CAS IDES	LEVELS LESS THAN OR	F2211170
05746	0	02000	0	05764	TRA ID370	EQUAL TO THE MAXIMUM	F2211180
05747	0	76100	0	00000	NOP	LEVEL OF DEFINITION	F2211190
05750	-0	75400	4	00000	PXD 0,4	QUANTITY WILL BE TREATED	F2211200
05751	-3	00001	4	05753	TXL ID360,4,1	AS REL. CONS.	F2211210
05752	0	40200	0	03752	SUB L(1)	INDICATE THIS CONDITION	F2211220
05753	-0	60200	0	03727	ID360 ORS DORC	IN THE DORC WORD.	F2211230
05754	0	50000	4	03721	CLA X1+5,4		F2211240
05755	-0	73400	1	00000	PDX 0,1		F2211250
05756	0	50000	0	04000	CLA BITONE	MAKE INDICATION FOR STORED COUNTER	F2211260
05757	-0	60200	1	00740	ORS DOTAGZ+5,1	FOR THIS DORC.	F2211270
05760	-0	75400	0	00000	PXD 0,0	CLEAR X(N) AND L(N)	F2211280
05761	0	60100	4	03722	STO L1+5,4	SINCE THEY ARE NO LONGER DOSUBS.	F2211290
05762	0	60100	4	03721	STO X1+5,4		F2211300
05763	0	02000	0	06000	TRA ID380		F2211310
05764	0	34000	0	03723	ID370 CAS LL	FOR TRUE DO SUBS.	F2211320
05765	0	02000	0	05773	TRA ID372	ESTABLISH LOW LEVEL	F2211330
05766	0	02000	0	05773	TRA ID372	AND LOW INDEX. LOW	F2211340
05767	0	60100	0	03723	STO LL	LEVEL WORD WAS	F2211350
05770	0	50000	4	03721	CLA X1+5,4	INITIALIZED TO	F2211360
05771	0	60100	0	03722	STO XL	35ONES.	F2211370
05772	-0	63400	4	03750	SXD LOWPOS,4		F2211380
05773	-0	75400	4	00000	ID372 PXD 0,4	PUT BITS IN	F2211390
05774	-3	00001	4	05776	TXL ID375,4,1	PROPER POSITIONS	F2211400

	05775	0	40200	0	03752		SUB L(1)		OF DOSUBS		F2211410
	05776	-0	60200	0	03731	ID375	ORS DOSUBS		WORD		F2211420
	05777	1	00001	2	06000		TXI ID380,2,1				F2211430
	06000	2	00002	4	05743	ID380	TIX ID350,4,2				F2211440
	06001	-0	75400	2	00000		PXD 0,2				F2211450
	06002	0	60100	0	03726		STO NRDS		CHECK TO SEE THAT		F2211460
	06003	-0	10000	0	06005		TNZ ID385		AT LEAST ONE SUBSCR IS A DOSUB		F2211472
	06004	0	07400	4	00004		TSX DIAG,4	NO DOSUB WAS PRECLUDED.	ERROR. GO TO DIAGNOSTIC		F2211485
	06005	-0	53400	2	03725	ID385	LXD NRRC,2		THESE INSTRUCTIONS		F2211490
	06006	-3	00000	2	06023		TXL ID400,2,0		COMPUTE DELTA.		F2211500
	06007	-0	53400	4	03752		LXD L(1),4		IF ONE DISTINCT DOSUB,		F2211510
	06010	0	50000	0	03733		CLA RCDUP		ONE DISTINCT RELCON,		F2211520
	06011	-0	10000	0	06021		TNZ ID395		DELTA IS ONE.		F2211530
	06012	0	50000	0	03734		CLA DUPES		IF TWO DISTINCT DOSUBS,		F2211540
	06013	-0	10000	0	06021		TNZ ID395		ONE RELCON, DELTA IS TWO.		F2211550
	06014	-3	00001	2	06016		TXL ID390,2,1		IF ONE DOSUB, TWO		F2211560
	06015	1	00002	4	06021		TXI ID395,4,2		DISTINCT RELCONS,		F2211570
	06016	-0	53400	2	03726	ID390	LXD NRDS,2		DELTA IS THREE.		F2211580
	06017	-3	00001	2	06021		TXL ID395,2,1		FOR ALL OTHER CASES,		F2211590
	06020	1	00001	4	06021		TXI ID395,4,1		DELTA IS ZERO.		F2211600
	06021	-0	75400	4	00000	ID395	PXD 0,4				F2211610
	06022	0	60100	0	03732		STO DELTA				F2211620
	06023	-0	53400	4	05622	ID400	LXD ID075,4		EXIT,		F2211630
	06024	0	02000	4	00002		TRA 2,4		SUBCOM USED.		F2211640
	06025	-0	53400	4	05622	ID410	LXD ID075,4		EXIT,		F2211650
	06026	0	02000	4	00001		TRA 1,4		SUBCOMB NOT USED.		F2211660
A	06027	0	00000	0	00000	IDES	HTR				F2211670
	06030	-0	63400	4	06036	NAME	SXD NAM10,4	-	SAVE LINKAGE		F2211680
	06031	0	50000	0	03700		CLA TAG		PUT TAU IN TS,		F2211690
	06032	0	60100	0	03701	PAT05	STO TS			P463	F2211700
	06033	-0	53400	1	05662		LXD PT043,1				F2211710
	06034	0	07400	4	05411	RET01	TSX TINFOR,4		SEARCH RANGE OF XL		F2211720
	06035	0	02000	0	06037		TRA NAM20		(FOUND) FOR NEGATICE TAG.		F2211730
TD	06036	-3	00000	0	06073	NAM10	TXL NAM50		NOT FOUND		F2211740
	06037	0	50000	0	03673	NAM20	CLA NEWTAG		OBTAIN		F2211750
	06040	0	60100	0	03701		STO TS		NEW		F2211760
	06041	0	40000	0	03765		ADD L(1)A		NAME		F2211770
	06042	0	60100	0	03673		STO NEWTAG				F2211780
	06043	-0	53400	1	03674		LXD XC,1		ARRANGE		F2211790
	06044	0	50000	1	00733		CLA DOTAGZ,1		ENTRY BLOCK		F2211800
	06045	0	60100	0	05063		STO E1		FOR CHATAG		F2211810
	06046	0	50000	0	03700		CLA TAG		ENTRY.		F2211820
	06047	0	76700	0	00022		ALS 18				F2211830
	06050	0	40000	0	03701		ADD TS				F2211840
	06051	0	60100	0	05064		STO E2				F2211850
	06052	0	50000	0	05072		CLA CHATAG				F2211860
	06053	-0	53400	4	03725		LXD NRRC,4		USE LIST OR SPC000,		F2211870
	06054	3	00000	4	06057		TXH NAM30,4,0		DEPENDING UPON		F2211880
	06055	0	07400	4	05025		TSX LIST,4		WHETHER OR NOT		F2211890
	06056	0	02000	0	06061		TRA NAM40		WORD NRRC IS ZERO. I.E., ARE THERE RELCONS.		F2211900
	06057	-0	53400	2	03753	NAM30	LXD L(2),2		NO TINFOR SEARCH REQUIRED.		F2211910
	06060	0	07400	4	05277		TSX SPC000,4				F2211920
	06061	-0	53400	1	04011	NAM40	LXD NAMXX,1		ENTER		F2211930
	06062	3	00000	1	06064		TXH NAM44,1,0		ALPHA,		F2211940

06063	0	07400	4	00004		TSX DIAG,4 TAG,	(NAME TABLE FULL. ERROR. GO TO DIAGNOSTIC.)	F2211955
06064	0	50000	0	03676	NAM44	CLA ALPHA	AND	F2211960
06065	-0	50100	0	03700		ORA TAG	NAME	F2211970
06066	0	60100	1	07301		STO NAMZ,1	IN	F2211980
06067	0	50000	0	03701		CLA TS	NAME	F2211990
06070	0	60100	1	07302		STO NAMZ+1,1	TABLE	F2212000
06071	1	77776	1	06072		TXI NAM48,1,-2		F2212010
06072	-0	63400	1	04011	NAM48	SXD NAMXX,1		F2212020
06073	-0	53400	4	06036	NAM50	LXD NAM10,4	EXIT	F2212030
06074	0	02000	4	00001		TRA 1,4		F2212040
						1NS00 PROCESSES SC CONTAINING ONE DISTINCT INDEXED SUBSCRIPT.		F2212050
06075	-0	63400	4	06146	1NS00	SXD 1NS20,4	SAVE LINKAGE	F2212060
06076	-0	53400	1	03674		LXD XC,1		F2212070
06077	0	50000	0	04001		CLA BITTWO	IF A COUNTER HAS	F2212080
06100	-0	32000	1	00741		ANA DOTAGZ+6,1	BEEN FOUND,	F2212090
06101	-0	10000	0	06142		TNZ 1NS10	GO TO 1NS10	F2212100
06102	-0	53400	4	03731		LXD DOSUBS,4	SKIP TO 1NS10	F2212110
06103	-3	00003	4	06142		TXL 1NS10,4,3	IF NOT FIRST POSITION.	F2212120
06104	3	00004	4	06142		TXH 1NS10,4,4		F2212130
06105	0	50000	0	03730		CLA RCSUBS	IF ANY RELCONS,	F2212140
06106	-0	50100	0	03727		ORA DORC	GO TO 1NS10	F2212150
06107	-0	10000	0	06142		TNZ 1NS10		F2212160
06110	-0	53400	4	03704		LXD C1,4	IF C1 IS NOT ONE,	F2212170
06111	3	00001	4	06142		TXH 1NS10,4,1	GO TO 1NS10	F2212180
06112	0	50000	0	03773		CLA ADDMSK	THIS SUB. COMB. WILL SERVE	F2212190
06113	0	32000	1	00743		ANS DOTAGZ+8,1	AS COUNTER AND TEST, ENTER IN	F2212200
06114	0	50000	0	03701		CLA TS	DOTAGZ+8.	F2212210
06115	0	76700	0	00022		ALS 18	INDICATE	F2212220
06116	-0	50100	0	03770		ORA L(MZ)	BEST TEST	F2212230
06117	-0	60200	1	00743		ORS DOTAGZ+8,1	FOUND.	F2212240
06120	0	50000	0	04001		CLA BITTWO	INDICATE COUNTER FOUND.	F2212250
06121	-0	60200	1	00741		ORS DOTAGZ+6,1		F2212260
06122	-0	50000	0	03770		CAL L(MZ)	SET CARWRD NEGATIVE.	F2212270
06123	-0	60200	0	03737		ORS CARWRD	TEST BITONE OF L WORD.	F2212280
06124	0	50000	0	04000		CLA BITONE	IF ONE, SKIP TRASTO	F2212290
06125	-0	32000	1	00740		ANA DOTAGZ+5,1	TEST.	F2212300
06126	-0	10000	0	06142		TNZ 1NS10		F2212310
06127	0	50000	1	00740	1NS05	CLA DOTAGZ+5,1	TEST TO SEE IF TRANSFER	F2212320
06130	0	12000	0	06142		TPL 1NS10	STORE NECESSARY.	F2212330
06131	0	50000	1	00733		CLA DOTAGZ,1	MAKE TRASTO ENTRY	F2212340
06132	0	60100	0	05063		STO E1	TO STORE COUNTER	F2212350
06133	0	50000	1	00734		CLA DOTAGZ+1,1	IN LOCATION OF SYMBOL.	F2212360
06134	0	60100	0	05064		STO E2		F2212370
06135	0	50000	0	03675		CLA LC		F2212380
06136	-0	50100	0	03701		ORA TS		F2212390
06137	0	60100	0	05065		STO E3		F2212400
06140	0	50000	0	05070		CLA TRASTO		F2212410
06141	0	07400	4	05025		TSX LIST,4		F2212420
06142	0	50000	0	03757	1NS10	CLA L(6)	ENTER	F2212430
06143	0	60100	0	03703		STO GROUP	GROUP NR.	F2212440
06144	-0	53400	4	06146		LXD 1NS20,4	AND EXIT.	F2212450
06145	0	02000	4	00001		TRA 1,4		F2212460
06146	0	00000	0	00000	1NS20	HTR		F2212470
						2NS00 ROUTINE PROCESSES SC WITH TWO DISTINCT INDEXED		F2212480

06234	0	60100	0	03746		STO	REBITS		F2213030
06235	-0	63400	1	06173	2NS91	SXD	2NS65,1		F2213040
06236	-0	53400	2	03752		LXD	L(1),2		F2213050
06237	0	07400	4	05441		TSX	TRAWRD,4	TEST FOR TANSFER BITS.	F2213060
06240	0	10000	0	06244		LZE	2NSEND	RESETTING NOT NECESSARY IF	F2213070
06241	-0	53400	2	03746		LXD	REBITS,2	TRAWRD RESULT ZERO. IF	F2213080
06242	-0	53400	1	06173		LXD	2NS65,1	RESETTING NECESSARY, EXECUTE	F2213090
06243	0	07400	4	06370		TSX	RESET,4	RESET ROUTINE AND	F2213100
06244	-0	53400	4	06157	2NSEND	LXD	2NS25,4	EXIT	F2213110
06245	0	02000	4	00001		TRA	1,4		F2213120
							3NS00 ROUTINE PROCESSES SC WITH THREE DISTINCT INDEXED		F2213130
							SUBSCRIPTS.		F2213140
06246	-0	63400	4	06255	3NS00	SXD	3GRP15,4	SAVE LINKAGE	F2213150
							THIS ROUTINE DETERMINES GROUP NUMBER FOR 3NS NO DUPE SC		F2213160
06247	-0	53400	2	03751		LXD	L(0),2	PUT ZERO IN XRB	F2213170
06250	0	50000	0	03721		CLA	L3	OBTAIN L3	F2213180
06251	0	34000	0	03717		CAS	L2	COMPARE WITH L2	F2213190
06252	1	00004	2	06254		TXI	3GRP10,2,4	L3 GREATER THAN L2	F2213200
06253	0	07400	4	00004		TSX	DIAG,4 NO DUPES.	ERROR. GO TO DIAGNOSTIC.	F2213215
06254	0	34000	0	03715	3GRP10	CAS	L1	L3 LESS THAN L2,COMPARE L3,L1	F2213220
06255	-3	00000	0	06260	3GRP15	TXL	3GRP20,0	L3 GREATER THAN L1	F2213230
06256	0	07400	4	00004		TSX	DIAG,4 NO DUPES.	ERROR. GO TO DIAGNOSTIC.	F2213243
06257	1	00001	2	06260		TXI	3GRP20,2,1	L3 LESS THAN L1	F2213250
06260	0	50000	0	03717	3GRP20	CLA	L2	OBTAIN L2	F2213260
06261	0	40200	0	03715		SUB	L1	SUBTRACT L1	F2213270
06262	-0	12000	0	06264		TMI	3GRP30	TRA IF L2 LESS THAN L1	F2213280
06263	1	00002	2	06264		TXI	3GRP30,2,2	L2 GREATER THAN L1	F2213290
06264	-0	75400	2	00000	3GRP30	PXD	0,2	PUT GROUP NUMBER IN ACC DEC.	F2213300
06265	0	60100	0	03703		STO	GROUP	OR INTO TAG 1	F2213310
06266	0	50000	0	03715		CLA	L1	OBTAIN L1	F2213320
06267	0	40200	0	03752		SUB	L(1)	L1 LESS 1	F2213330
06270	0	40200	0	03717		SUB	L2	L1 LESS 1 LESS L2	F2213340
06271	-0	10000	0	06274		TNZ	3GRP40	NOT ZERO,NO CARRY,TRA	F2213350
06272	-0	53400	2	03755		LXD	L(4),2	SET XRB	F2213360
06273	0	07400	4	04754		TSX	CARRY,4	AND TSX TO CARRY	F2213370
06274	0	50000	0	03717	3GRP40	CLA	L2	RE-ENTRY,OBTAIN L2	F2213380
06275	0	40200	0	03752		SUB	L(1)	L2 LESS 1	F2213390
06276	0	40200	0	03721		SUB	L3	L2 LESS 1 LESS L3	F2213400
06277	-0	10000	0	06302		TNZ	3GRP50	NOT ZERO,NO CARRY,TRA	F2213410
06300	-0	53400	2	03753		LXD	L(2),2	SET XRB	F2213420
06301	0	07400	4	04754		TSX	CARRY,4	AND TSX TO CARRY	F2213430
06302	-0	53400	6	03751	3GRP50	LXD	L(0),6	THE FOLLOWING ROUTINE,	F2213440
06303	-0	53400	1	03703		LXD	GROUP,1	THROUGH 3GRP72, COMPUTES	F2213450
06304	0	02000	1	06313	3GRP55	TRA	3GRP55+7,1	QUANTITIES FOR XRB, XRC.	F2213460
06305	1	00002	2	06314		TXI	3GRP65,2,2	GROUP IS SIX	F2213470
06306	1	00004	4	06314		TXI	3GRP65,4,4	FIVE	F2213480
06307	1	00004	2	06314		TXI	3GRP65,2,4	FOUR	F2213490
06310	1	00002	6	06313		TXI	3GRP60,6,2	THREE	F2213500
06311	1	00002	4	06314		TXI	3GRP65,4,2	TWO	F2213510
06312	1	00004	4	06313		TXI	3GRP60,4,4	ONE	F2213520
06313	1	00002	2	06314	3GRP60	TXI	3GRP65,2,2		F2213530
06314	0	50000	4	03720	3GRP65	CLA	X1+4,4		F2213540
06315	0	60100	0	06362		STO	INX		F2213550
06316	0	50000	4	03721		CLA	X1+5,4		F2213560

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06317	0	60100	0	06363	STO INL		F2213570	
06320	0	50000	2	03720	CLA X1+4,2		F2213580	
06321	0	60100	0	06364	STO MIDX		F2213590	
06322	0	50000	2	03721	CLA X1+5,2		F2213600	
06323	0	60100	0	06365	STO MIDL		F2213610	
06324	3	00000	4	06326	TXH 3GRP70,4,0	THE QUANTITIES IN XRB.	F2213620	
06325	1	00001	4	06326	TXI 3GRP70,4,1	XRC, ARE ZERO, TWO, OR	F2213630	
06326	-0	63400	4	06357	3GRP70 SXD INP,4	FOUR, ADJUSTED TO ONE,	F2213640	
06327	3	00000	2	06331	TXH 3GRP72,2,0	TWO, FOUR, TO INDICATE THE	F2213630	
06330	1	00001	2	06331	TXI 3GRP72,2,1	POSITION OF THE SUBCRIPT	F2213660	
06331	-0	63400	2	06361	3GRP72 SXD MIDP,2	BEING RESET, STORE IN INP, MIDP.	F2213670	
06332	-0	53400	4	03755	LXD L(4),4	THIS LOOP IS EXECUTED TWICE.	F2213680	
06333	0	50000	4	06366	3GRP75 CLA INX+4,4	OBTAIN INNER INDEX OF PAIR	F2213690	
06334	-0	73400	1	00000	PDX 0,1	IN XRA	F2213700	
06335	0	50000	4	06367	CLA INL+4,4	OBTAIN INNER LEVEL OF PAIR	F2213710	
06336	0	60100	0	03741	STO TL2	TL2	F2213718	
06337	0	50000	0	03723	CLA LL	OBTAIN LOWER LEVEL IN	F2213720	
06340	0	60100	0	03740	STO TL1	TL1	F2213740	
06341	-0	53400	2	03752	LXD L(1),2	PUT ONE IN XRB,	F2213750	
06342	-0	63400	4	06360	SXD 3GRP80,4	SAVE XRC,	F2213760	
06343	0	07400	4	05441	TSX TRAWRD,4	AND USE TRAWRD.	F2213770	
06344	-0	53400	4	06360	LXD 3GRP80,4	RESTORE XRC,	F2213780	
06345	0	10000	0	06355	TZE 3GRP77	GO TO INDEXING IF ZERO.	F2213790	
06346	0	50000	4	06363	CLA INP+4,4	TRAWRD RESULT NOT ZERO.	F2213800	
06347	-0	73400	2	00000	PDX 0,2	PREPARE TO	F2213810	
06350	0	50000	4	06366	CLA INX+4,4	USE RESET	F2213820	
06351	-0	73400	1	00000	PDX 0,1		F2213830	
06352	-0	63400	4	06360	SXD 3GRP80,4	SAVE XRC,	F2213840	
06353	0	07400	4	06370	TSX RESET,4	GO TO RESET,	F2213850	
06354	-0	53400	4	06360	LXD 3GRP80,4	RESTR0E XRC,	F2213860	
06355	2	00002	4	06333	3GRP77 TIX 3GRP75,4,2	INDEX AND GO BACK,	F2213870	
06356	0	02000	0	06366	TRA 3NSEND	OR EXIT	F2213880	
A	06357	0	00000	0	00000	INP HTR	POSITION OF INNER SUB.	F2213890
A	06360	0	00000	0	00000	3GRP80 HTR		F2213900
A	06361	0	00000	0	00000	MIDP HTR	POSITION OF MIDDLE SUB.	F2213910
A	06362	0	00000	0	00000	INX HTR	INDEX INNER LEVEL SUBSCRIPT	F2213920
A	06363	0	00000	0	00000	INL HTR	LEVEL INNER LEVEL SUBSCRIPT	F2213930
A	06364	0	00000	0	00000	MIDX HTR	INDEX MIDDLE LEVEL SUBSCRIPT	F2213940
A	06365	0	00000	0	00000	MIDL HTR	LEVEL MIDDLE LEVEL SUBSCRIPT	F2213950
06366	-0	53400	4	06255	3NSEND LXD 3GRP15,4		F2213960	
06367	0	02000	4	00001	TRA 1,4		F2213970	
06370	-0	63400	4	06421	RESET SXD RES45,4	SAVE LINKAGE	F2213980	
06371	-0	75400	2	00000	PXD 0,2	SAVE	F2213990	
06372	0	60100	0	06613	STO RES300	PREFIX (REBITS)	F2214000	
06373	-0	75400	1	00000	PXD 0,1	SAVE INDEX	F2214010	
06374	0	60100	0	06614	STO RES310	OF RESET	F2214020	
06375	0	50000	0	03710	CLA C3	OBTAIN C3 IN	F2214030	
06376	0	77100	0	00022	ARS 18	ADDRESS PART.	F2214040	
06377	0	02000	2	06406	RES05 TRA RES05+7,2	INDEXED T RANSFER, C(XRB)=C(REBITS)	F2214050	
06400	0	02000	0	06422	TRA RES50	C(XRB)=110	F2214060	
06401	0	02000	0	06414	TRA RES30	C(XRB)=101	F2214070	
06402	0	02000	0	06416	TRA RES40	C(XRB)=100	F2214080	
06403	0	02000	0	06412	TRA RES20	C(XRB)=011	F2214090	
06404	0	02000	0	06422	TRA RES50	C(XRB)= 010	F2214100	

	06405	0	60100	0	05064	RES10	STO E2		C(XRB)=001	F2214110
	06406	0	50000	0	03713		CLA D2		THESE INSTRUCTIONS, THROUGH	F2214120
	06407	0	77100	0	00022		ARS 18		RES60, COMPUTE THE	F2214130
	06410	0	40000	0	03712		ADD D1		CHARACTERISTIC WORDS OF THE	F2214140
	06411	0	02000	0	06430		TRA RES60		SUBSCRIPT COMBINATION.	F2214150
	06412	0	40000	0	03706	RES20	ADD C2			F2214160
	06413	0	02000	0	06405		TRA RES10			F2214170
	06414	0	40000	0	03704	RES30	ADD C1			F2214180
	06415	0	02000	0	06405		TRA RES10			F2214190
	06416	0	50000	0	03704	RES40	CLA C1			F2214200
	06417	0	60100	0	05064		STO E2			F2214210
	06420	0	50000	0	03751		CLA L(0)			F2214220
D	06421	-3	00000	0	06430	RES45	TXL RES60,0			F2214230
	06422	0	50000	0	03706	RES50	CLA C2			F2214240
	06423	0	77100	0	00022		ARS 18			F2214250
	06424	-3	00002	2	06426		TXL RES55,2,2			F2214260
	06425	0	40000	0	03704		ADD C1			F2214270
	06426	0	60100	0	05064	RES55	STO E2			F2214280
	06427	0	50000	0	03712		CLA D1			F2214290
	06430	0	60100	0	05065	RES60	STO E3			F2214300
	06431	3	00004	2	06433		TXH RES65,2,4		IF PREFIX IS 1,0,0,	F2214310
	06432	3	00003	2	06620		TXH RES400,2,3		T RA TO RES400	F2214320
	06433	-0	53400	1	04007	RES65	LXD RESXX,1		SEARCH	F2214330
	06434	-0	63400	1	06445		SXD RES75,1		RETAB	F2214340
	06435	0	53400	1	04007		LXA RESXX,1		FOR	F2214350
	06436	0	02000	0	06445		TRA RES75		SAME	F2214360
	06437	0	50000	1	07755	RES70	CLA RETABZ,1		INDEX.	F2214370
	06440	-0	32000	0	03772		ANA DECMSK			F2214380
	06441	0	34000	0	06614		CAS RES310			F2214390
	06442	1	77775	1	06445		TXI RES75,1,-3			F2214400
	06443	0	02000	0	06447		TRA RES80		INDEX FOUND, GO TO RES80	F2214410
	06444	1	77775	1	06445	RES73	TXI RES75,1,-3			F2214420
D	06445	3	00000	1	06437	RES75	TXH RES70,1			F2214430
	06446	0	02000	0	06466		TRA RES85		NOT FOUND, GO TO RES85	F2214440
	06447	0	50000	1	07755	RES80	CLA RETABZ,1		COMPARE PREFIX OF	F2214450
	06450	-0	32000	0	06615		ANA RES320		RETAB ENTRY	F2214460
	06451	0	76700	0	00006		ALS 6		WITH CURRENT	F2214470
	06452	0	40200	0	06613		SUB RES300		PREFIX. IF NOT EQUAL,	F2214480
	06453	-0	10000	0	06444		TNZ RES73		CONTINUE RETAB SEARCH.	F2214490
	06454	0	50000	1	07756		CLA RETABZ+1,1		IF EQUAL, COMPARE	F2214500
	06455	0	40200	0	05064		SUB E2		C HARACTERISTIC WORDS.	F2214510
	06456	-0	10000	0	06444		TNZ RES73		IF	F2214520
	06457	0	50000	1	07757		CLA RETABZ+2,1		NOT	F2214530
	06460	0	40200	0	05065		SUB E3			F2214540
	06461	-0	10000	0	06444		TNZ RES73		EQUAL, CONTINUE SEARCH.	F2214550
	06462	0	50000	1	07755		CLA RETABZ,1		IF EQUAL,	F2214560
	06463	-0	32000	0	03773		ANA ADDMSK		USE RESET TAG ALREADY	F2214570
	06464	0	60100	0	06616		STO RES330		ENTERED. SAVE NAME.	F2214580
	06465	0	02000	0	06573		TRA RES200		TRA TO RES200	F2214590
	06466	0	50000	0	06613	RES85	CLA RES300		NO USABLE ENTRY FOUND.	F2214600
	06467	0	77100	0	00006		ARS 6		MAKE	F2214610
	06470	-0	50100	0	03700		ORA TAG		NEW	F2214620
	06471	0	60100	0	06616		STO RES330			F2214630
	06472	-0	50100	0	06614		ORA RES310		ENTRY	F2214640

06473	-0	53400	1	04007	LXD RESXX,1	IN	F2214650
06474	3	00000	1	06476	TXH RES87,1,0	RETAB.	F2214660
06475	0	07400	4	00004	TSX DIAG,4	RETAB TABLE FULL.	F2214675
06476	0	60100	1	07755	RES87 STO RETABZ,1	ERROR. GO TO DIAGNOSTIC.	F2214680
06477	0	50000	0	05064	CLA E2		F2214690
06500	0	60100	1	07756	STO RETABZ+1,1		F2214700
06501	0	50000	0	05065	CLA E3		F2214710
06502	0	60100	1	07757	STO RETABZ+2,1		F2214720
06503	1	77775	1	06504	TXI RES88,1,-3	ADJUST IN DEX.	F2214730
06504	-0	63400	1	04007	RES88 SXD RESXX,1		F2214740
06505	0	50000	0	06614	CLA RES310	MAKE E2 WORD	F2214750
06506	3	00005	2	06522	TXH RES96,2,5	FOR DRUMTAG OR	F2214760
06507	3	00004	2	06521	TXH RES94,2,4	TAGTAG ENTRY	F2214770
06510	3	00003	2	06520	TXH RES92,2,3		F2214780
06511	3	00002	2	06515	TXH RES90,2,2		F2214790
06512	3	00001	2	06522	TXH RES96,2,1		F2214800
06513	0	77100	0	00022	ARS 18		F2214810
06514	0	02000	0	06522	TRA RES96		F2214820
06515	0	77100	0	00022	RES90 ARS 18		F2214830
06516	0	40000	0	06614	ADD RES310		F2214840
06517	0	02000	0	06522	TRA RES96		F2214850
06520	0	50000	0	03751	RES92 CLA L(0)		F2214860
06521	0	77100	0	00022	RES94 ARS 18		F2214870
06522	0	60100	0	05064	RES96 STO E2		F2214880
06523	0	50000	0	06614	CLA RES310	MAKE	F2214890
06524	0	77100	0	00022	ARS 18	E1 WORD	F2214900
06525	3	00003	2	06527	TXH RES98,2,3		F2214910
06526	0	50000	0	03751	CLA L(0)		F2214920
06527	0	60100	0	05063	RES98 STO E1		F2214930
06530	-0	53400	1	06614	LXD RES310,1		F2214940
06531	0	50000	1	00733	CLA DOTAGZ,1		F2214950
06532	-0	32000	0	03772	ANA DECMSK		F2214960
06533	-0	60200	0	05063	ORS E1		F2214970
06534	0	50000	0	06616	CLA RES330	MAKE	F2214980
06535	0	60100	0	05065	STO E3	E3 WORD	F2214990
06536	0	50000	0	03757	CLA L(6)	MAKE	F2215000
06537	0	60100	0	05066	STO E4	E4	F2215010
06540	0	50000	0	06613	CLA RES300	WORD	F2215020
06541	0	77100	0	00022	ARS 18		F2215030
06542	-0	60200	0	05066	ORS E4		F2215040
06543	-3	00002	2	06550	TXL RES110,2,2		F2215050
06544	-3	00003	2	06546	TXL RES100,2,3		F2215060
06545	-3	00004	2	06550	TXL RES110,2,4		F2215070
06546	0	76700	0	00011	RES100 ALS 9		F2215080
06547	-0	60200	0	05066	ORS E4		F2215090
06550	0	50000	0	03751	RES110 CLA L(0)	THESE INSTRUCTIONS,	F2215100
06551	0	60100	0	06617	STO RES340	TO RES170, DETERMINE	F2215110
06552	-0	53400	4	03756	LXD L(5),4	WHICH COEFFICIENTS	F2215120
06553	0	50000	4	03711	RES120 CLA C1+5,4	ARE GREATER THAN	F2215130
06554	0	40200	0	03752	SUB L(1)	ONE AND PLACE	F2215140
06555	0	10000	0	06562	TZE RES140	THIS INFO IN	F2215150
06556	2	00001	4	06557	TIX RES130,4,1	E4(TAG1).	F2215160
06557	-0	75400	4	00000	RES130 PXD 0,4		F2215170
06560	-0	60200	0	06617	ORS RES340		F2215180

	06561	1	00001	4	06562		TXI	RES140,4,1		F2215190
	06562	2	00002	4	06553	RES140	TIX	RES120,4,2		F2215200
	06563	0	50000	0	06617		CLA	RES340		F2215210
	06564	-0	32000	0	06613		ANA	RES300		F2215220
	06565	0	77100	0	00006		ARS	6		F2215230
	06566	-0	60200	0	05066		ORS	E4		F2215240
	06567	0	50000	0	05073		CLA	DRMTAG	DRUM TAG ENTRY	F2215250
	06570	0	07400	4	05025		TSX	LIST,4	OR	F2215260
	06571	0	02000	0	06573		TRA	RES200	TAGTAG	F2215270
	06572	0	07400	4	05510	RES180	TSX	TAGENT,4	ENTRY.	F2215280
	06573	-0	53400	1	06614	RES200	LXD	RES310,1	MAKE	F2215290
	06574	0	50000	1	00733		CLA	DOTAGZ,1	PROPER	F2215300
	06575	0	60100	0	05063		STO	E1	TRASTO	F2215310
	06576	0	50000	0	03741		CLA	TL2	ENTRY	F2215320
	06577	0	77100	0	00022		ARS	18		F2215330
	06600	0	40000	0	03740		ADD	TL1		F2215340
	06601	0	60100	0	05064		STO	E2		F2215350
	06602	0	50000	0	06616		CLA	RES330		F2215360
	06603	0	76700	0	00022		ALS	18		F2215370
	06604	0	40000	0	03701		ADD	TS		F2215380
	06605	-0	76000	0	00003		SSM			F2215390
	06606	0	60100	0	05065		STO	E3		F2215400
	06607	0	50000	0	05070		CLA	TRASTO		F2215410
	06610	0	07400	4	05025		TSX	LIST,4		F2215420
	06611	-0	53400	4	06421	RES210	LXD	RES45,4	EXIT.	F2215430
	06612	0	02000	4	00001		TRA	1,4		F2215440
A	06613	0	00000	0	00000	RES300	HTR		PREFIX STORAGE	F2215450
A	06614	0	00000	0	00000	RES310	HTR		INDEX STORAGE	F2215460
	06615	+00000000	70000			RES320	OCT	70000	PREFIX MASK	F2215470
A	06616	0	00000	0	00000	RES330	HTR		RESET NAME STORAGE	F2215480
A	06617	0	00000	0	00000	RES340	HTR		E.S.	F2215490
	06620	0	50000	0	05064	RES400	CLA	E2	TEST FOR COEFFICIENT	F2215500
	06621	0	40200	0	03752		SUB	L(1)	EQUAL TO ONE.	F2215510
	06622	-0	10000	0	06433		TNZ	RES65	IF NOT, PROCESS NORMALLY	F2215520
	06623	0	50000	1	00733		CLA	DOTAGZ,1	THROUGH RESET.	F2215530
	06624	0	77100	0	00021		ARS	17	TEST FOR CONSTANT N1.	F2215540
	06625	0	76000	0	00001		LBT		IF VARIABLE, NORMAL PROCESSING.	F2215550
	06626	0	02000	0	06630		TRA	RES410	0	F2215560
	06627	0	02000	0	06433		TRA	RES65	1	F2215570
	06630	0	50000	1	00741	RES410	CLA	DOTAGZ+6,1	HAS COUNTER BEEN FOUND.	F2215580
	06631	-0	32000	0	04001		ANA	BITTWO		F2215590
	06632	-0	10000	0	06645		TNZ	RES420	IF SO, GO TO RES420	F2215600
	06633	0	50000	0	03741		CLA	TL2	IF NOT, MAKE ENTRY	F2215610
	06634	0	77100	0	00022		ARS	18	IN ADDED TAG TABLE	F2215620
	06635	-0	50100	0	03740		ORA	TL1	FOR PROCESSING INTO	F2215630
	06636	-0	76000	0	00003		SSM		DRUM TAG AFTER NEST	F2215640
	06637	0	76500	0	00043		LRS	35	ANALYSIS.	F2215650
	06640	-0	75400	1	00000		PXD	0,1		F2215660
	06641	-0	50100	0	03701		ORA	TS		F2215670
	06642	-0	53400	2	03752		LXD	L(1),2		F2215680
	06643	0	07400	4	05254		TSX	TAGADD,4		F2215690
	06644	0	02000	0	06611		TRA	RES210	TRA TO EXIT	F2215700
	06645	0	07400	4	05140	RES420	TSX	RSR,4	COUNTER FOUND, USE RSR.	F2215710
	06646	0	02000	0	06611		TRA	RES210	TRA TO EXIT	F2215720

						THE 2 WD SUBRT NORMRT SPACES TAPE 1 PAST DIAGNOSTIC RECORD.	F2215725
06647	0	76200	0	00221	NORMRT	RDS 145 SKIP OVER DIAGNOSTIC RECORD ON SYSTEM TAPE.	F2215726
06650	0	02000	0	00004	TRA	ONETCS GO TO ONE TO CS (MONITOR)	F2215727
				06651	BSS	80	F2215730
				06771	TAGZ	BSS 1	F2215740
				06772	BSS	99	F2215750
				07135	ADTAGZ	BSS 1	F2215760
				07136	BSS	99	F2215770
				07301	NAMZ	BSS 1	F2215780
				07302	BSS	299	F2215790
				07755	RETABZ	BSS 1	F2215800
						MASTER RECORD CARD = FN030	F2215805
						TMIS ROUTINE PROCESSES SINGLE RELATIVE CONSTANTS	F2215810
						AND, FOR SC WITH TWO RC SUBS, DOES ALL PROCESSING	F2215820
						EXCEPT WHERE THERE IS A POSSIBLE MULTIPLE DEFINITION,	F2215830
						AT WHICH POINT IT CALLS ON 2R0000.	F2215840
				05566	ORG	IDENT STATE B	F2215850
05566	-0	53400	1	00030	CORES	LXD DOTAG-1,1	F2215860
05567	-0	63400	1	05602	SXD	DSDR20,1	F2215870
05570	-0	63400	1	05745	SXD	DSD118,1	F2215880
05571	-0	63400	1	05762	SXD	DSD145,1	F2215890
05572	-0	63400	1	06026	SXD	2R0020,1	F2215900
05573	-0	76000	0	00144	DSDR00	MSE 100	F2215910
05574	0	76100	0	00000		NOP	F2215920
05575	-0	53400	1	03674	LXD	XC,1 PUT INDEX OF DC IN XRA	F2215930
05576	-0	53400	4	03732	LXD	DELTA,4 PUT DELTA IN XRC	F2215940
05577	0	50000	0	03675	CLA	LC INITIALIZE END OF	F2215950
05600	0	62200	0	05605	STD	DSDR30 DC TEST INSTR	F2215960
05601	1	77767	1	05602	DSDR10	TXI DSDR20,1,-9 TAKE NEXT DOWN DO,IF POSSIBLE	F2215970
D 05602	-3	00000	1	05734	DSDR20	TXL DSD100,1 EXIT IF DOTAG EXHAUSTED.	F2215980
05603	0	50000	1	00740	CLA	DOTAGZ+5,1 OBTAIN LEVEL OF THIS DO IN	F2215990
05604	-0	73400	2	00000	PDX	0,2 XRB,COMPARE WITH LEVEL OF	F2216000
D 05605	-3	00000	2	05734	DSDR30	TXL DSD100,2 D6 AND EXIT IF NOT IN DC.	F2216010
05606	0	50000	1	00734	CLA	DOTAGZ+1,1 OBTAIN SYMBOL OF THIS DO	F2216020
05607	0	40200	0	03735	SUB	RSYM1 COMPARE WITH (FIRST) R SYM.	F2216030
05610	0	10000	0	05621	TZE	DSDR50 IF THIS DO IS DR1,TRA.	F2216040
05611	-3	00002	4	05601	TXL	DSDR10,4,2 IF NOT DR1,GO BACK,UNLESS DELTA3	F2216050
05612	0	50000	1	00734	CLA	DOTAGZ+1,1 OBTAIN SYMBOL AGAIN	F2216060
05613	0	40200	0	03736	SUB	RSYM2 AND COMPARE WITH RSYM2	F2216070
05614	-0	10000	0	05601	TNZ	DSDR10 IF NOT RSYM1 OR RSYM2,GO BACK	F2216080
05615	0	50000	0	03736	CLA	RSYM2 IF DO SYM IS RSYM2,	F2216090
05616	0	56000	0	03735	LDQ	RSYM1 SWITCH RSYM1 AND RSYM2	F2216100
05617	0	60100	0	03735	STO	RSYM1 TO MAKE BUCKET LABELS	F2216110
05620	-0	60000	0	03736	STQ	RSYM2 AGREE WITH ORDER OF DO FORMULAS	F2216120
05621	-0	63400	1	06365	DSDR50	SXD XR1,1 SAVE	F2216130
05622	-0	75400	2	00000	PXD	0,2 INDEX OF R1	F2216140
05623	0	60100	0	06366	STO	LR1 AND LEVEL OF R1	F2216150
05624	0	60100	0	03741	STO	TL2 INITIALIZE TRAWRD TL2	F2216160
05625	0	50000	0	03723	CLA	LL INITIALIZE TRAWRD TL1	F2216170
05626	0	60100	0	03740	STO	TL1 PREPARE	F2216180
05627	-0	53400	2	03752	LXD	L(1),2 TRAWRD C(XRB)	F2216190
05630	-3	00002	4	05632	TXL	DSDR55,4,2	F2216200
05631	-0	53400	2	03753	LXD	L(2),2	F2216210
05632	0	07400	4	05441	DSDR55	TSX TRAWRD,4 GO TO TRAWRD AND	F2216220

05633	0	60100	0	06371	STO D2D1	SAVE IF NOT ZERO	F2216230
05634	-0	53400	4	03732	LXD DELTA,4	RETURN HERE	F2216240
05635	3	00002	4	05703	TXH DSDR85,4,2	TRANSFER IF DELTA IS THREE	F2216250
05636	0	10000	0	05602	TZE DSDR20	RETURN IF RESULT ZERO	F2216260
05637	-0	63400	1	05733	SXD DSDR95,1		F2216270
05640	-3	00001	4	05655	TXL DSDR65,4,1	TR IF DELTA=1	F2216280
05641	0	50000	0	03761	CLA L(36)	FOR DELTA=2,SEPARATE	F2216290
05642	0	40200	0	03675	SUB LC	TRAWRD RESULTS.	F2216300
05643	0	77100	0	00022	ARS 18		F2216310
05644	0	62100	0	05647	STA DSDR60		F2216320
05645	0	56000	0	03751	LDQ L(0)		F2216330
05646	0	50000	0	06371	CLA D2D1		F2216340
A 05647	0	76500	0	00000	DSDR60 LRS		F2216350
05650	0	10000	0	05652	TZE DSDR62	IF TRANSFERS EXIST DC TO DL,	F2216360
05651	0	76000	0	00144	PSE 100	SET SENSE SWITCH	F2216370
05652	-0	60000	0	06371	DSDR62 STQ D2D1		F2216380
05653	0	50000	0	06371	CLA D2D1		F2216390
05654	0	10000	0	05700	TZE DSDR80	IF NO TRANSFERS DR TO DC,EXIT	F2216400
05655	0	50000	0	03672	DSDR65 CLA ATSW	TEST ADDED TAG SWITCH	F2216410
05656	-0	10000	0	05700	TNZ DSDR80	IF ADDED DELTA TWO, SKIP INSERT	F2216420
05657	-0	53400	1	06365	LXD XR1,1	IS TAG IN DR1	F2216430
05660	0	07400	4	05411	TSX TINFO,4	GO TO TINFO AND RETURN	F2216440
05661	0	02000	0	05667	TRA DSDR70	FOUND	F2216450
05662	-0	53400	2	03751	LXD L(0),2	NOT FOUND	F2216460
05663	-0	53400	1	06365	LXD XR1,1		F2216470
05664	0	07400	4	05254	TSX TAGADD,4	INSERT TAG IN R1,RETURN	F2216480
05665	-0	60000	0	06374	STQ TR1	HERE AND STORE NAME IN TR1	F2216490
05666	0	02000	0	05675	TRA DSDR75		F2216500
05667	-0	53400	1	06365	DSDR70 LXD XR1,1	FIND NAME OF TAG IN R1	F2216510
05670	0	50000	1	00733	CLA DOTAGZ,1		F2216520
05671	-0	32000	0	03772	ANA DECMSK		F2216530
05672	0	40000	0	03700	ADD TAG		F2216540
05673	0	07400	4	06376	TSX GETNAM,4		F2216550
05674	0	60100	0	06374	STO TR1		F2216560
05675	-0	53400	1	06365	DSDR75 LXD XR1,1	LIST STORES	F2216570
05676	-0	53400	2	03751	LXD L(0),2		F2216580
05677	0	07400	4	06431	TSX STORES,4		F2216590
05700	-0	53400	1	05733	DSDR80 LXD DSDR95,1		F2216600
05701	-0	53400	4	03732	LXD DELTA,4		F2216610
05702	0	02000	0	05602	TRA DSDR20		F2216620
05703	0	10000	0	06022	DSDR85 TZE 2R0000	GO TO R2 SEARCH IF NO TRA R1 TO D6	F2216630
05704	-0	53400	1	06365	LXD XR1,1	IF TRA R1 TO DC,	F2216640
05705	-0	53400	2	03752	LXD L(1),2	USE SPC000 TO LOOK FOR	F2216630
05706	0	07400	4	05277	TSX SPC000,4	TAG IN R1	F2216660
05707	0	02000	0	05717	TRA DSDR87	NOT FOUND,GO TO DSDR87	F2216670
05710	-0	53400	1	06365	LXD XR1,1	FOUND,USE SUBROUTINE	F2216680
05711	0	50000	1	00733	CLA DOTAGZ,1	GETNAM TO DETERMINE LABEL	F2216690
05712	-0	32000	0	03772	ANA DECMSK	OF TAG IN R1	F2216700
05713	0	40000	0	03700	ADD TAG		F2216710
05714	0	07400	4	06376	TSX GETNAM,4		F2216720
05715	0	60100	0	06374	STO TR1	PUT NAME IN TR1	F2216730
05716	0	02000	0	05726	TRA DSDR89		F2216740
05717	-0	53400	1	06365	DSDR87 LXD XR1,1	USE TAGADD TO INSERT	F2216750
05720	-0	53400	2	03751	LXD L(0),2	TAG IN R1	F2216760

	05721	0	07400	4	05254	TSX TAGADD,4		F2216770
	05722	-0	60000	0	06374	STQ TR1	PUT NAME IN TR1	F2216780
	05723	-0	53400	1	03722	LXD XL,1		F2216790
	05724	0	50000	0	04005	CLA BIT20		F2216800
	05725	-0	60200	1	00741	ORS DOTAGZ+6,1		F2216810
	05726	-0	53400	1	06365	DSDR89 LXD XR1,1	LIST STORES	F2216820
	05727	-0	53400	2	03752	LXD L(1),2		F2216830
	05730	0	07400	4	06431	TSX STORES,4		F2216840
	05731	0	02000	0	06022	DSDR90 TRA 2R0000	GO TO R2 ROUTINE AND	F2216850
	05732	-0	53400	4	03732	DSDR92 LXD DELTA,4	RETURN HERE	F2216860
D	05733	-3	00000	0	05602	DSDR95 TXL DSDR20,0	NEXT R1. DEC CONTAINS XNEXTR1	F2216870
	05734	-3	00001	4	06021	DSD100 TXL DSD200,4,1	TRA IF DELTA IS 1	F2216880
	05735	3	00002	4	06021	TXH DSD200,4,2	TRA IF DELTA IS 3	F2216890
	05736	-0	76000	0	00144	MSE 100	DELTA IS 2,TEST D3D1 SWITCH	F2216900
	05737	0	02000	0	05741	TRA DSD110	LIGHT OFF	F2216910
	05740	0	02000	0	05776	TRA DSD170	LIGHT ON	F2216920
	05741	-0	53400	1	03722	DSD110 LXD XL,1	OBTAIN INDEX OF DL IN XRA	F2216930
	05742	0	50000	1	00740	CLA DOTAGZ+5,1	OBTAIN LEVEL OF DL	F2216940
	05743	0	62200	0	05750	STD DSD120	AND STORE IN TEST INSTR.	F2216950
D	05744	1	77767	1	05745	DSD115 TXI DSD118,1,-9	TAKE NEXT DOWN DO IF POSSIBLE	F2216960
	05745	-3	00000	1	06021	DSD118 TXL DSD200,1	OTHERWISE,EXIT,	F2216970
	05746	0	50000	1	00740	CLA DOTAGZ+5,1	OBTAIN LEVEL OF THIS DO	F2216980
D	05747	-0	73400	2	00000	PDX 0,2	AND TEST WHETHER THIS DO IS	F2216990
D	05750	-3	00000	2	06021	DSD120 TXL DSD200,2	IN DL. IF NOT,EXIT.	F2217000
	05751	-0	75400	1	00000	PXD 0,1	IF IN DL,	F2217010
	05752	0	40200	0	03674	SUB XC	IF THIS DO D6.	F2217020
	05753	0	10000	0	05760	TZE DSD130	IF SO,TRA.	F2217030
	05754	0	50000	1	00734	CLA DOTAGZ+1,1	IF NOT,IS THIS DO A DR.	F2217040
	05755	0	40200	0	03735	SUB RSYM1		F2217050
	05756	0	10000	0	05767	TZE DSD160	IF SO,TRA,	F2217060
	05757	0	02000	0	05744	TRA DSD115	IF NOT,GO BACK TO GET NEXT DO	F2217070
	05760	-0	63400	2	05765	DSD130 SXD DSD150,2	IF DO IS DC,	F2217080
D	05761	1	77767	1	05762	DSD140 TXI DSD145,1,-9		F2217090
D	05762	-3	00000	1	06021	DSD145 TXL DSD200,1		F2217100
	05763	0	50000	1	00740	CLA DOTAGZ+5,1	IS NEW IN DL.	F2217110
	05764	-0	73400	2	00000	PDX 0,2	IF SO,GO BACK TO STEP DOWN	F2217120
D	05765	-3	00000	2	05750	DSD150 TXL DSD120,2	AGAIN IN DC. IF NOT IN	F2217130
	05766	0	02000	0	05761	TRA DSD140	DC, GO TO TEST IF IN DL	F2217140
	05767	-0	75400	2	00000	DSD160 PXD 0,2	INITIALIZE	F2217150
	05770	0	60100	0	03741	STO TL2	TL2 TO LEVEL OF DR	F2217160
	05771	0	50000	0	03723	CLA LL	PUT LEVEL OF DL	F2217170
	05772	0	60100	0	03740	STO TL1	IN TL1	F2217180
	05773	-0	53400	2	03752	LXD L(1),2	PUT 1 IN XRB	F2217190
	05774	0	07400	4	05441	TSX TRAWRD,4	AND GO TO TRAWRD.	F2217200
	05775	0	10000	0	05745	TZE DSD118	IF RESULT ZERO,GO BACK	F2217210
	05776	-0	53400	2	03722	DSD170 LXD XL,2		F2217220
	05777	0	50000	0	04000	CLA BITONE		F2217230
	06000	-0	60200	2	00740	ORS DOTAGZ+5,2		F2217240
	06001	-0	53400	2	03750	LXD LOWPOS,2		F2217250
	06002	0	50000	0	03751	CLA L(0)		F2217260
	06003	0	60100	2	03721	STO X1+5,2		F2217270
	06004	0	60100	2	03722	STO X1+6,2		F2217280
	06005	2	00001	2	06006	TIX DSD175,2,1		F2217290
	06006	-0	75400	2	00000	DSD175 PXD 0,2		F2217300

06007	-0	60200	0	03727	ORS	DORC			F2217310
06010	0	76000	0	00006	COM				F2217320
06011	0	32000	0	03731	ANS	DOSUBS			F2217330
06012	0	50000	0	03674	CLA	XC			F2217340
06013	0	60100	0	03722	STO	XL			F2217350
06014	0	50000	0	03675	CLA	LC			F2217360
06015	0	60100	0	03723	STO	LL			F2217370
06016	0	50000	0	03752	CLA	L(1)			F2217380
06017	0	60100	0	03726	STO	NRDS			F2217390
06020	0	60100	0	03732	STO	DELTA			F2217400
06021	0	02000	0	06123	DSD200	TRA	DS4VAL		F2217410
						RELCON	DELTA THREE SECOND	LEVEL DEFINITION.	F2217420
06022	-0	53400	1	06365	2R0000	LXD	XR1,1	PUT INDEX OF R1 IN XRA	F2217430
06023	0	50000	0	06366		CLA	LR1	OBTAIN LEVEL OF R1	F2217440
06024	0	62200	0	06031		STD	2R0030	INITIALIZE TEST INSTR.	F2217450
06025	1	77767	1	06026	2R0010	TXI	2R0020,1,-9	TAKE NEXT DOWN DO IF POSSIBLE	F2217460
D 06026	-3	00000	1	05732	2R0020	TXL	DSDR92,1	EXIT IF PARTLY FULL DOTAG EXHAUSTED	F2217470
06027	0	50000	1	00740		CLA	DOTAGZ+5,1	OBTAIN LEVEL OF DO	F2217480
06030	-0	73400	2	00000		PDX	0,2	PUT IN XRB AND COMPARE WITH	F2217490
D 06031	-3	00000	2	05732	2R0030	TXL	DSDR92,2	LR1,EXIT IF NEW DO NOT IN XR1.	F2217500
06032	0	50000	1	00734		CLA	DOTAGZ+1,1	OBTAIN SYMBOL OF NEW DO,	F2217510
06033	0	40200	0	03736		SUB	RSYM2	COMPARE WITH RSYM2.	F2217520
06034	-0	10000	0	06025		TNZ	2R0010	IF NOT RSYM2,GO BACK.	F2217530
06035	-0	63400	1	06367		SXD	XR2,1	SAVE INDEX	F2217540
06036	-0	75400	2	00000		PXD	0,2	AND LEVEL	F2217550
06037	0	60100	0	06370		STO	LR2	OF R2.	F2217560
06040	0	60100	0	03741		STO	TL2	PREPARE FOR TSX TO TRAWRD.	F2217570
06041	0	50000	0	03675		CLA	LC	TO TEST FOR TRANSFERS	F2217580
06042	0	60100	0	03740		STO	TL1	FROM R2 TO DS.	F2217590
06043	-0	53400	2	03752		LXD	L(1),2		F2217600
06044	0	07400	4	05441		TSX	TRAWRD,4	IF NO TRANSFERS,GO BACK	F2217610
06045	0	10000	0	06026		TZE	2R0020	FOR NEXT DO.	F2217620
06046	-0	63400	1	06072		SXD	2R0065,1		F2217630
06047	0	60100	0	06373		STO	D3D2	TEMPORARY STORAGE	F2217640
06050	0	50000	0	03761		CLA	L(36)	PUT 36 IN ACC	F2217650
06051	0	40200	0	06366		SUB	LR1	SUB LEVEL OF R1,	F2217660
06052	0	77100	0	00022		ARS	18	SHIFT RESULT AND	F2217670
06053	0	62100	0	06056		STA	2R0050		F2217680
06054	0	56000	0	03751		LDQ	L(0)	PUT ZERO IN MQ,	F2217690
06055	0	50000	0	06373		CLA	D3D2	OBTAIN TRAWRD RESULT,	F2217700
A 06056	0	76500	0	00000	2R0050	LRS		PERFORM SEPARATION	F2217710
06057	0	60100	0	06372		STO	D3D1	AND SAVE	F2217720
06060	-0	60000	0	06373		STQ	D3D2	RESULTS.	F2217730
06061	0	50000	0	06372		CLA	D3D1	IF D3D1 IS ZERO,THEN D3D2	F2217740
06062	-0	10000	0	06065		TNZ	2R0060	IS NOT ZERO	F2217750
06063	0	50000	0	06371		CLA	D2D1	IF D2D1 IS ZERO,	F2217760
06064	0	10000	0	06121		TZE	2R0200	TR TO GET NEX DO	F2217770
06065	-0	53400	1	06367	2R0060	LXD	XR2,1	SEARCH FOR TAG	F2217780
06066	0	07400	4	05411		TSX	TINFOR,4	IN R2	F2217790
06067	0	02000	0	06100		TRA	2R0080	FOUN0,TR TO OBTAIN NAME	F2217800
06070	-0	53400	1	06367		LXD	XR2,1	NOT FOUND, LOOK FOR DELTA TWO	F2217810
06071	0	07400	4	06413		TSX	ADDSER,4	INSERT IN ADDED TAG TABLE.	F2217820
D 06072	-3	00000	0	06105	2R0065	TXL	2R0090,0	FOUND,NAME IN ACC.	F2217830
06073	-0	53400	1	06367		LXD	XR2,1	NOT FOUND	F2217840

06074	-0	53400	2	03751	LXD	L(0),2	ADD TAG	F2217850
06075	0	07400	4	05254	TSX	TAGADD,4	IN TABLE OF ADDED TAGES	F2217860
06076	-0	60000	0	06375	STQ	TR2	PUT NAME IN TR2	F2217870
06077	0	02000	0	06106	TRA	2R0100		F2217880
06100	-0	53400	1	06367	LXD	XR2,1	SEARCH	F2217890
06101	0	50000	1	00733	CLA	DOTAGZ,1	FOR	F2217900
06102	-0	32000	0	03772	ANA	DECMSK	NAME	F2217910
06103	0	40000	0	03700	ADD	TAG		F2217920
06104	0	07400	4	06376	TSX	GETNAM,4		F2217930
06105	0	60100	0	06375	2R0090	STO	TR2	F2217940
06106	0	50000	0	06372	2R0100	CLA	D3D1	F2217950
06107	0	10000	0	06113	TZE	2R0150	LIST STORES IF ANY TR,	F2217960
06110	-0	53400	1	06367	LXD	XR2,1	FOR TRANSFERS,	F2217970
06111	-0	53400	2	03753	LXD	L(2),2	D3D1	F2217980
06112	0	07400	4	06431	TSX	STORES,4		F2217990
06113	0	50000	0	06373	2R0150	CLA	D3D2	F2218000
06114	0	10000	0	06121	TZE	2R0200	TEST TR	F2218010
06115	0	50000	0	06371	CLA	D2D1	TEST TR	F2218020
06116	0	10000	0	06121	TZE	2R0200	D2D1	F2218030
06117	-0	53400	1	06367	LXD	XR2,1	LIST STORES	F2218040
06120	0	07400	4	06447	TSX	STORXX,4		F2218050
06121	-0	53400	1	06072	2R0200	LXD	2R0065,1	F2218060
06122	0	02000	0	06026	TRA	2R0020	RETURN FOR	F2218070
							NEXT R2	F2218080
							DRUM SEARCH OF FORVAL	F2218090
06123	-0	53400	1	04112	DS4VAL	LXD	END80,1	F2218100
06124	-3	00000	1	06207	TXL	DS4V20,1,0	OBTAIN FORVAL EMPTY INDICATOR,	F2218110
06125	0	50000	0	03700	CLA	TAG	EXIT IF FORVAL EMPTY	F2218120
06126	0	76700	0	00022	ALS	18	PRESET WORD E2 FOR LIST	F2218130
06127	0	40000	0	03701	ADD	TS	ROUTINE,TAU TAG AND NAME	F2218140
06130	0	60100	0	05064	STO	E2		F2218150
06131	-0	76000	0	00144	MSE	100	LIGHT 100 OFF	F2218160
06132	0	76100	0	00000	NOP			F2218170
06133	0	50000	0	03676	CLA	ALPHA	THESE INSTRUCTIONS SET UP	F2218180
06134	0	60100	0	03742	STO	A	FOR DRUM SEARCH.	F2218190
06135	0	50000	0	03677	CLA	BETA		F2218200
06136	0	40000	0	03765	ADD	L(1)A		F2218210
06137	0	60100	0	03743	STO	B		F2218220
06140	0	50000	0	06363	CLA	4VALAD	OBTAIN LOCATION FO FIRST	F2218230
06141	0	60100	0	06362	STO	FORAD	FORVAL DRUM ENTRY,STORE IN	F2218240
06142	-0	53400	1	03751	LXD	L(0),1	LDA ADDRESS. PUT ZERO	F2218250
06143	0	07400	4	06210	TSX	FSXX,4	IN XRA AND GO TO	F2218260
06144	-0	53400	4	03732	LXD	DELTA,4	SEARCH ROUTINE. UPON RETURN,	F2218270
06145	3	00002	4	06207	TXH	DS4V20,4,2	ECIT UNLESS DELTA IS 2,	F2218280
06146	-3	00001	4	06207	TXL	DS4V20,4,1	IN WHICH CASE,CONTINUE,	F2218290
06147	0	76000	0	00144	PSE	100	TURN INDICATOR LIGHT ON	F2218300
06150	0	50000	0	03743	CLA	B	THE FOLLOWING INSTR,	F2218310
06151	0	60100	0	03744	STO	NEXTA	SET UP TWO ADDITIONAL	F2218320
06152	0	50000	0	03742	CLA	A	RANGES FOR SEARCHING,	F2218330
06153	0	60100	0	03743	STO	B	THOSE FORMULAS OUTSIDE	F2218340
06154	-0	53400	2	03722	LXD	XL,2	OF DC BUT WITHIN DL.	F2218350
06155	0	50000	2	00733	CLA	DOTAGZ,2	IN THESE SPECIAL RANGES	F2218360
06156	0	73400	2	00000	PAX	0,2	AS SOON AS ONE ENTRY IS	F2218370
06157	-0	32000	0	03772	ANA	DECMSK	FOUND IN EITHER RANGE,	F2218380
06160	0	60100	0	03742	STO	A	TO BE DONE.	

06161	-0	75400	2	00000	PXD	0,2		F2218390
06162	0	40000	0	03765	ADD	L(1)A		F2218400
06163	0	60100	0	03745	STO	LASTB		F2218410
06164	0	50000	0	03742	CLA	A		F2218420
06165	0	40000	0	03752	ADD	L(1)		F2218430
06166	0	40200	0	03743	SUB	B		F2218440
06167	0	10000	0	06174	TZE	DS4V10	IF THIS RANGE IS EMPTY,	F2218450
06170	0	50000	0	06363	CLA	4VALAD	SKIP SEARCH.	F2218460
06171	0	60100	0	06362	STO	FORAD		F2218470
06172	-0	53400	1	03751	LXD	L(0),1		F2218480
06173	0	07400	4	06210	TSX	FSXX,4	GO TO SEARCH ROUTINE	F2218490
06174	0	50000	0	03744	CLA	NEXTA	A AND B FOR SECOND	F2218500
06175	0	60100	0	03742	STO	A	SPECIAL RANGE.	F2218510
06176	0	50000	0	03745	CLA	LASTB		F2218520
06177	0	60100	0	03743	STO	B		F2218530
06200	0	40200	0	03742	SUB	A		F2218540
06201	0	10000	0	06207	TZE	DS4V20		F2218550
06202	0	76000	0	00144	PSE	100		F2218560
06203	0	50000	0	06363	CLA	4VALAD		F2218570
06204	0	60100	0	06362	STO	FORAD		F2218580
06205	-0	53400	1	03751	LXD	L(0),1		F2218590
06206	0	07400	4	06210	TSX	FSXX,4		F2218600
06207	0	02000	0	05555	TRA	RELEND	EXIT	F2218610
06210	-0	63400	4	06231	FSXX	FS28,4	SAVE TSX INDEX	F2218620
06211	0	50000	0	03756	FS00	CLA	L(5)	F2218632
06212	0	62200	0	06361	STD	4VLHL8	INITIALIZE	F2218640
06213	0	76200	0	00302	FS05	RDS	194	F2218650
06214	-0	53400	2	06300	LXD	BS71,2		F2218660
06215	0	46000	0	06362	LDA	FORAD	FIND FIRST OR NEXT ADDRESS	F2218670
06216	0	50000	0	03742	CLA	A	IN FORVAL,PUT A IN ACC.	F2218680
06217	0	70000	0	06472	FS10	CPY	BLOCK	F2218690
06220	0	04000	0	06232	TLQ	FS30	COPY FORMULA NR.	F2218700
06221	0	70000	0	06473	CPY	BLOCK+1	A GREATER THAN FOR.NR.,TRA.	F2218710
06222	0	50000	0	03743	CLA	B	A LESS,COPY BALANCE OF	F2218720
06223	0	70000	0	06474	CPY	BLOCK+2	ENTRY,PUT B IN ACC,	F2218730
06224	1	00003	1	06225	TXI	FS20,1,3	ADJUST XRA FOR THIS	F2218740
06225	0	70000	2	06566	FS20	CPY	BLOCK+60,2	F2218750
06226	0	04000	0	06235	TLQ	FS40	ENTRY.	F2218760
06227	0	40200	0	06472	FS25	SUB	BLOCK	F2218770
06230	0	12000	0	06242	TPL	FS50	B GREAT THAN F,TRA	F2218780
06231	-3	00000	0	06353	FS28	TXL	BS99,0	F2218790
06232	0	70000	0	06473	FS30	CPY	BLOCK+1	F2218800
06233	0	70000	0	06474	CPY	BLOCK+2	COPY BALANCE OF ENTRY,GO	F2218810
06234	1	00003	1	06217	TXI	FS10,1,3	BACK IF POSSIBLE TO CONTINUE	F2218820
06235	0	70000	2	06567	FS40	CPY	BLOCK+61,2	F2218830
06236	0	70000	2	06570	CPY	BLOCK+62,2	SEARCH FOR BEGINNING OF RANGE,	F2218840
06237	2	00003	2	06225	TIX	FS20,2,3	THIS ENTRY IS IN RANGE,	F2218850
06240	-0	53400	2	03751	LXD	L(0),2	CONTINUE READING IN ENTRIES	F2218860
06241	0	02000	0	06227	TRA	FS25	UNTIL BLOCK FULL OR RANGE	F2218870
06242	-0	63400	2	06255	FS50	SXD	CS20,2	EXCEEDED.
06243	-0	63400	2	06265	SXD	BS40,2		F2218880
06244	-0	63400	1	06262	SXD	BS25,1		F2218890
06245	-0	53400	2	03762	CS00	LXD	L(60),2	F2218900
06246	-0	50000	2	06566	CS10	CAL	BLOCK+60,2	F2218910
							THIS ROUTINE COMPUTES	F2218920
							THE CHECK SUMS OF THE	

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	06247	0	36100	2	06567		ACL	BLOCK+61,2		ENTRIES AND COMPARES	F2218930
	06250	0	60200	0	06364		SLW	4VALES			F2218940
	06251	0	50000	0	06364		CLA	4VALES		THEM WITH THE GIVEN CHECK	F2218950
	06252	0	40200	2	06570		SUB	BLOCK+62,2		SUMS.	F2218960
	06253	-0	10000	0	06355		TNZ	4VLHLT		TRA TO EXIT IF BAD ENTRY.	F2218970
	06254	1	77775	2	06255		TXI	CS20,2,-3			F2218980
D	06255	3	00000	2	06246	CS20	TXH	CS10,2		CONTINUE WITH BS00	F2218990
	06256	0	50000	0	03735	BS00	CLA	RSYM1		THIS ROUTINE SEARCHES	F2219000
	06257	-0	53400	4	03732		LXD	DELTA,4		THE STORAGE BLOCK FOR	F2219010
	06260	-0	53400	2	03762	BS10	LXD	L(60),2		RSYM1,AND RSYM2 IF DELTA	F2219020
	06261	0	34000	2	06567	BS20	CAS	BLOCK+61,2		IS THREE.	F2219030
D	06262	-3	00000	0	06264	BS25	TXL	BS30,0			F2219040
	06263	0	02000	0	06272		TRA	BS60		EQUALITY F UND,TRA.	F2219050
	06264	1	77775	2	06265	BS30	TXI	BS40,2,-3		RE-ENTRY	F2219060
D	06265	3	00000	2	06261	BS40	TXH	BS20,2			F2219070
	06266	-3	00002	4	06275	BS50	TXL	BS70,4,2			F2219080
	06267	-0	53400	4	03751		LXD	L(0),4			F2219090
	06270	0	50000	0	03736		CLA	RSYM2			F2219100
	06271	0	02000	0	06260		TRA	BS10			F2219110
	06272	-0	76000	0	00144	BS60	MSE	100		TEST TO SEE IF	F2219120
	06273	0	02000	0	06307		TRA	BS80		NORMAL SEARCH,OR IF	F2219130
	06274	0	02000	0	06327		TRA	BS90		SPECIAL CASE OF DELTA TWO.	F2219140
	06275	-0	53400	2	06265	BS70	LXD	BS40,2		BLOCK SEARCH DONE. IF BLOCK	F2219150
	06276	3	00000	2	06353		TXH	BS99,2,0		WAS NOT FULL,EXIT.	F2219160
	06277	-0	53400	1	06262		LXD	BS25,1		OTHERWISE,PREPARE TO CONTINUE	F2219170
	06300	1	00071	1	06301	BS71	TXI	BS72,1,57		SEARCH,IF MORE ENTRIES IN FORVAL.	F2219180
	06301	3	02733	1	06353	BS72	TXH	BS99,1,1499			F2219190
	06302	-0	75400	1	00000		PXD	0,1		AND COMPUTE	F2219200
	06303	0	77100	0	00022		ARS	18		NEW FORVAL	F2219210
	06304	0	40000	0	06363		ADD	4VALAD		ADDRESS	F2219220
	06305	0	60100	0	06362		STO	FORAD			F2219230
D	06306	-3	00000	0	06211	BS78	TXL	FS00,0		GO BACK TO CONTINUE SEARCH	F2219240
	06307	0	60100	0	06364	BS80	STO	4VALES		RSYM FOUND,ARRANGE TO	F2219250
	06310	-0	53400	1	03722		LXD	XL,1		SAVE INDEXED SUBSCRIPTS.	F2219260
	06311	0	50000	0	04000		CLA	BITONE			F2219270
	06312	-0	60200	1	00740		ORS	DOTAGZ+5,1			F2219280
	06313	-0	53400	1	03674		LXD	XC,1			F2219290
	06314	-0	60200	1	00740		ORS	DOTAGZ+5,1		RSYM FOUND,E2 PREVIOUSLY	F2219300
	06315	0	50000	2	06566		CLA	BLOCK+60,2		PREPARED,NOW PREPARE	F2219310
	06316	0	60100	0	05063		STO	E1		E1,SAVE ACC,XR8,XRC,	F2219320
	06317	0	50000	0	05067		CLA	TSXCOM		AND LIST.	F2219330
	06320	-0	63400	2	06326		SXD	BS85,2		AFTER LISTING,	F2219340
	06321	-0	63400	4	06306		SXD	BS78,4		RESTORE ACC,XR8,XRC	F2219330
	06322	0	07400	4	05025		TSX	LIST,4		AND RETURN TO CONTINUE	F2219360
	06323	-0	53400	2	06326		LXD	BS85,2		SEARCH.	F2219370
	06324	-0	53400	4	06306		LXD	BS78,4			F2219380
	06325	0	50000	0	06364		CLA	4VALES			F2219390
TD	06326	-3	00000	0	06264	BS85	TXL	BS30			F2219400
	06327	-0	53400	2	03722	BS90	LXD	XL,2		SPECIAL CASE,DELTA TWO,	F2219410
	06330	0	50000	0	04000		CLA	BITONE		PUT IN BIT TO SAVE SL	F2219420
	06331	-0	60200	2	00740		ORS	DOTAGZ+5,2			F2219430
	06332	-0	53400	2	03750		LXD	LOWPOS,2		OBTAIN INDEX QUANTITY 1, 3, 5.	F2219440
	06333	0	50000	0	03751		CLA	L(0)		FOR XL,	F2219450
	06334	0	60100	2	03721		STO	X1+5,2		SET PROPER X AND L TO ZERO,	F2219460

06335	0	60100	2	03722		STO	X1+6,2		F2219470
06336	2	00001	2	06337		TIX	BS91,2,1	ADJUST 1,3,5 TO 1,2,4,	F2219480
06337	-0	75400	2	00000	BS91	PXD	0,2	PUT IN ACC	F2219490
06340	-0	60200	0	03727	BS92	ORS	DORC	AND PUT BIT IN DORC	F2219500
06341	0	76000	0	00006		COM		REMOVE BIT	F2219510
06342	0	32000	0	03731		ANS	DOSUBS	FROM DOSUBS	F2219520
06343	0	50000	0	03674		CLA	XC		F2219530
06344	0	60100	0	03722		STO	XL		F2219540
06345	0	50000	0	03675		CLA	LC		F2219550
06346	0	60100	0	03723		STO	LL		F2219560
06347	0	50000	0	03752		CLA	L(1)		F2219570
06350	0	60100	0	03726		STO	NRDS		F2219580
06351	0	60100	0	03732		STO	DELTA		F2219590
06352	0	02000	0	06207		TRA	DS4V20	EXIT	F2219600
06353	-0	53400	4	06231	BS99	LXD	FS28,4	EXIT FROM FSXX ENTRY	F2219610
06354	0	02000	4	00001		TRA	1,4		F2219620
06355	-0	53400	2	06361	4VLHLL	LXD	4VLHLL8,2	IF THERE IS AN ERROR IN THE	F2219630
06356	2	00001	2	06360		TIX	4VLHLL4,2,1	CHECK SUM ROUTINE,THE BLOCK	F2219640
06357	0	07400	4	00004	4VLHLL2	TSX	DIAG,4	WILL BE REREAD 5 TIMES. (ERROR. GO TO DIAGNOSTIC.)	F2219655
06360	-0	63400	2	06361	4VLHLL4	SXD	4VLHLL8,2	BEFORE THE MACHINE STOPS.	F2219660
06361	-3	00000	0	06213	4VLHLL8	TXL	FS05,0		F2219670
06362	0	00000	0	00000	FORAD	HTR		DRUM ADDRESS FOR LDA INSTR.	F2219680
06363	0	00000	0	00312	4VALAD	HTR	202		F2219690
06364	0	00000	0	00000	4VALES	HTR		E.S.	F2219700
06365	0	00000	0	00000	XR1				F2219710
06366	0	00000	0	00000	LR1				F2219720
06367	0	00000	0	00000	XR2				F2219730
06370	0	00000	0	00000	LR2				F2219740
06371	0	00000	0	00000	D2D1				F2219750
06372	0	00000	0	00000	D3D1				F2219760
06373	0	00000	0	00000	D3D2				F2219770
06374	0	00000	0	00000	TR1				F2219780
06375	0	00000	0	00000	TR2				F2219790
							SUBROUTINE GETNAM		F2219800
06376	-0	53400	1	04011	GETNAM	LXD	NAMXX,1	THIS ROUTINE SEARCHES	F2219810
06377	-0	63400	1	06406		SXD	GETN20,1	TABLE NAMZ FOR THE NAME	F2219820
06400	0	53400	1	04011		LXA	NAMXX,1	OF TAU TAG IN A PARTICULAR	F2219830
06401	0	02000	0	06406		TRA	GETN20		F2219840
06402	0	34000	1	07301	GETN05	CAS	NAMZ,1	DO FORMULA.	F2219850
06403	0	02000	0	06405		TRA	GETN10		F2219860
06404	0	02000	0	06411		TRA	GETN30		F2219870
06405	1	77776	1	06406	GETN10	TXI	GETN20,1,-2		F2219880
06406	3	00000	1	06402	GETN20	TXH	GETN05,1		F2219890
06407	-0	32000	0	03773		ANA	ADDMSK		F2219900
06410	0	02000	4	00001		TRA	1,4		F2219910
06411	0	50000	1	07302	GETN30	CLA	NAMZ+1,1		F2219920
06412	0	02000	4	00001		TRA	1,4		F2219930
							SUBROUTINE ADDSER		F2219940
06413	-0	75400	1	00000	ADDSER	PXD	0,1		F2219950
06414	0	40000	0	03700		ADD	TAG		F2219960
06415	-0	53400	1	04006		LXD	ADTXX,1	PREPARE XRA AND DEC 0	F2219970
06416	-0	63400	1	06425		SXD	ADS030,1	ADS030 FOR TABLE SEARCH.	F2219980
06417	0	53400	1	04006		LXA	ADTXX,1		F2219990
06420	0	02000	0	06425		TRA	ADS030	TRA FOR EMPTY TABLE TEST	F2220000

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06421	0	34000	1	07135	ADS010	CAS	ADTAGZ,1		F2220010
06422	0	02000	0	06424		TRA	ADS020,		F2220020
06423	0	02000	0	06427		TRA	ADS040	FIRST WORD FOUND	F2220030
06424	1	77776	1	06425	ADS020	TXI	ADS030,1,-2		F2220040
06425	3	00000	1	06421	ADS030	TXH	ADS010,1		F2220050
06426	0	02000	4	00002		TRA	2,4	NOT FOUND	F2220060
06427	0	50000	1	07136	ADS040	CLA	ADTAGZ+1,1		F2220070
06430	0	02000	4	00001	ADS050	TRA	1,4		F2220080
							SUBROUTINES STORES AND STORXX		F2220090
06431	-0	63400	4	06464	STORES	SXD	STO40,4	THIS ROUTINE PREPARES	F2220100
06432	0	50000	0	06366		CLA	LR1	AN ENTRY FOR TABLE TRASTO	F2220110
06433	0	77100	0	00022		ARS	18	AND USES LIST TO ENTERS	F2220120
06434	0	40000	0	03675		ADD	LC	THE ENTRY ON THE PROPER	F2220130
06435	0	60100	0	05064		STO	E2	DRUM TABLE. IF SPC000	F2220140
06436	0	50000	0	06374		CLA	TR1	IS USED BY THE ROUTINE,	F2220150
06437	-3	00001	2	06441		TXL	STO20,2,1	MANY ENTRIES MAY BE MADE	F2220160
06440	0	50000	0	06375		CLA	TR2	IN TRA STO.	F2220170
06441	0	76700	0	00022	STO20	ALS	18	IF DELTA EQUALS ONE OR TWO,	F2220180
06442	0	40000	0	03701		ADD	TS	THIS ROUTINE IS ENTERED	F2220190
06443	0	60100	0	05065		STO	E3	THROUGH STORES WITH C(XRB)	F2220200
06444	-3	00000	2	06460		TXL	STO35,2,0	ZERO. IF DELTA IS THREE	F2220210
06445	-3	00001	2	06465		TXL	STO50,2,1	AND WE ARE WORKING ON	F2220220
06446	0	02000	0	06460		TRA	STO35	TRANSFERS DR2 TO DS THEN	F2220230
06447	-0	63400	4	06464	STORXX	SXD	STO40,4	STORES ENTRY IS USED WITH	F2220240
06450	0	50000	0	06370		CLA	LR2	C(XRB)=2	F2220250
06451	0	77100	0	00022		ARS	18	IF DELTA=3,TRA DR1 TO DS,	F2220260
06452	0	40000	0	06366		ADD	LR1	STORES ENTRY IS USED WITH	F2220270
06453	0	60100	0	05064		STO	E2	C(XRB)=1	F2220280
06454	0	50000	0	06375		CLA	TR2	IF DELTA=3,TRA DR2 TO DR1,	F2220290
06455	0	76700	0	00022		ALS	18	ENTRY STORXX IS USED.	F2220300
06456	0	40000	0	06374		ADD	TR1	C(XRB) NOT USED.	F2220310
06457	0	60100	0	05065		STO	E3	LIST ROUTINE IS USED IN	F2220320
								EVERY CASE, MAKING ONE	F2220330
								TRASTO ENTRY, EXCEPT FOR	F2220340
								CASE DELTA=3, TRA DR1 TO DS,	F2220350
								C(XRB)=1, WHEN SPC000 IS USED.	F2220360
06460	0	50000	1	00733	STO35	CLA	DOTAGZ,1	LIST ROUTINE USED	F2220370
06461	0	60100	0	05063		STO	E1		F2220380
06462	0	50000	0	05070		CLA	TRASTO		F2220390
06463	0	07400	4	05025		TSX	LIST,4		F2220400
06464	-3	00000	0	06470	STO40	TXL	ST100,0		F2220410
06465	-0	53400	2	03753	STO50	LXD	L(2),2	SPC000 USED.	F2220420
06466	0	50000	0	05070		CLA	TRASTO		F2220430
06467	0	07400	4	05277		TSX	SPC000,4		F2220440
06470	-0	53400	4	06464	ST100	LXD	STO40,4	EXIT	F2220450
06471	0	02000	4	00001		TRA	1,4		F2220760
				06472	BLOCK	BSS	60		F2220470
				07730		ORG	4056		F2220480
							MASTER RECORD CARD = FN029		F2220485
07730	-0	53400	2	07770	PPONG	LXD	PG80,2	ROUTINE PPONG SETS UP DRUM ONE FOR	F2220490
07731	0	02000	0	07733		TRA	PG10	PING-PONGING.	F2220300
07732	-0	53400	2	07767		LXD	PG70,2		F2220510
07733	-0	53400	4	07771	PG10	LXD	PG90,4		F2220520
07734	0	76600	0	00301	PG15	WRS	193		F2220530

07735	-0	53400	1	07772	LXD	PG95,1		F2220540
07736	0	46000	2	07767	LDA	PG60+2,2		F2220550
07737	0	70000	1	06566	PG20	CPY	CORES,1	F2220560
07740	2	00001	1	07737	TIX	PG20,1,1		F2220570
07741	0	76600	0	00333	WRS	219		F2220580
07742	0	76200	0	00301	RDS	193		F2220590
07743	-0	53400	1	07772	LXD	PG95,1		F2220600
07744	0	46000	2	07767	LDA	PG60+2,2		F2220610
07745	0	70000	1	05566	PG30	CPY	CORES,1	F2220620
07746	2	00001	1	07745	TIX	PG30,1,1		F2220630
07747	-0	53400	1	07772	LXD	PG95,1		F2220640
07750	-0	75400	0	00000	PXD	0,0	PG40-1	F2220630
07751	0	36100	1	05566	PG40	ACL	CORES,1	F2220660
07752	2	00001	1	07751	TIX	PG40,1,1		F2220670
07753	0	60200	0	07773	SLW	PG99		F2220680
07754	0	50000	0	07773	CLA	PG99		F2220690
07755	0	40200	2	07765	SUB	PG50+2,2		F2220700
07756	0	10000	0	07761	TZE	NORMRP		F2220715
07757	2	00001	4	07734	TIX	PG15,4,1		F2220720
07760	0	07400	4	00004	TSX	DIAG,4	DRUM READ	F2220735
07761	0	76200	0	00221	NORMRP	RDS	145	F2220736
07762	0	02000	0	00004	TRA	ONETCS		F2220737
07763	+103075525444			PG50	OCT	103075525444	CHECK SUM, STATE B, RELCON	F2220744
07764	-246744643200				OCT	-246744643200	CHECK SUM STATE A, NORMAL	F2220754
07765	+000000001000			PG60	OCT	1000		F2220760
07766	+000000000000				OCT			F2220770
07767	+000001000000			PG70	OCT	1000000		F2220780
07770	+000002000000			PG80	OCT	2000000		F2220790
07771	+000005000000			PG90	OCT	5000000		F2220805
07772	+001000000000			PG95	OCT	1000000000		F2220810
A 07773	0	00000	0	00000	PG99	HTR		F2220820
07774	-0	63400	1	77777	BURNCE	SXD	TOP,1	F2220825
07775	0	02000	0	00004	TRA	DIAG		F2220826
				77777	TOP	EQU	32767	F2220827
				00222	TAPE2	EQU	146	F2220830
				00223	DOTAPE	EQU	147	F2220840
				00224	ATAPE	EQU	148	F2220850
				00301	PPDRM	EQU	193	F2220860
				00303	ADRUM	EQU	195	F2220870
				00304	TAUDRM	EQU	196	F2220880
				00141	TL	EQU	97	F2220890
				05565	RELWDS	SYN	RELDRA+1	F2220900
				04003	ABIT	SYN	BIT18	F2220910
				04005	BBIT	SYN	BIT20	F2220920
				04003	SUBBIT	SYN	BIT18	F2220930
				06566	CORES	SYN	CORES+512	F2220940
				00004	ONETCS	EQU	4	F2220945
				00004	DIAG	EQU	4	F2220946
A				00000		END		F2220950

ERROR. GO TO DIAGNOSTIC.

SKIP OVER DIAGNOSTIC RECORD ON SYSTEM TAPE.

GO TO ONE TO CS (MONITOR)=

DRUM OVERFLOW

ERROR PROCEDURE.

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	2101	0	0	0	0

LIB	0	0	0	0	0
COL	2101	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 2110

NUMBER OF SYMBOLS, DEF 586,DEFOP 0,UNDEF 0
REM BLOCK THREE OF SECTION TWO.

BLOCK THREE OF SECTION TWO.

		MASTER RECORD CARD = FN036	F2300004
		BLOCK 3 DOES SUBSCRIPT ANALYSIS FOR	F2300006
		THOSE SUBSCRIPT COMBINATIONS NO SUBSCRIPT	F2300010
		ELEMENT OF WHICH IS UNDER CONTROL OF	F2300020
		A DO (PURE RELATIVE CONSTANTS). TWO	F2300030
		TYPES OF TSXCOM TABLE ENTRIES ARE MADE IN ROUTINE FOUND	F2300040
		WHICH WILL INDICATE TO SUCCEEDING BLOCKS THE NECESSITY TO	F2300050
		COMPILE EITHER DIRECT LXDS OF INDEX REG VALUES OR TSXS TO	F2300060
		SUBROUTINES TO COMPUTE THOSE INDEX REG VALUES. FOUR-TYPES OF	F2300070
		TRASTO TABLE ENTRIES ARE MADE WHICH WILL INDICATE THAT	F2300080
		CERTAIN INDEXING INSTRUCTIONS SHOULD BE COMPILED ACCOMPANYING	F2300000
		THE TRANSFERS OUT OF THE RANGE OF DOS WHICH DEFINE VALUES	F2300100
		OF THE SUBSCRIPTS IN QUESTION. FINALLY, TSXCOM ENTRIES AND	F2300110
		TABLE IRV ENTRIES ARE SORTED AND WRITTEN ON-DRUM. ROUTINES	F2300120
		ENCOUNTERED IN BLOCK 2 WILL BE RECOGNIZED IN THIS BLOCK 3 -	F2300130
		SUBCOM, TRAWORD, SPC, TINFOR, LIST.	F2300140
00031	ORG	25	F2300150
00031	NAME	BSS 1	F2300160
		TABLE STORAGE	
00032	BSS	449	F2300170
00733	NAMZ	BSS 1	F2300180
00734	FORTAG	BSS 1	F2300190
00735	BSS	1499	F2300200
03670	FORTZ	BSS 1	F2300210
03671	FORVAL	BSS 1	F2300220
03672	BSS	1499	F2300230
06625	4VALZ	BSS 1	F2300240
00031	ORG	25	F2300250
00031	TCOM	BSS 1	F2300260
00032	BSS	749	F2300270
01407	TCOMZ	BSS 1	F2311280
03671	ORG	1977	F2300290
03671	DOTAG	BSS 1	F2300300
03672	BSS	1349	F2300310
06377	DOTAGZ	BSS 1	F2300320
06400	BSS	149	F2300330
06625	IRVZ	BSS 1	F2300340
06626	TAG	BSS 1	F2300350
		ADDRESS HAS FORTAG IX CURRENT	
06627	TS	BSS 1	F2300360
		NEW NAME	
06630	TAGIND	BSS 1	F2300370
		ONE IF SOLITARY SUB COEFF ONE, OTHERWISE ZERO	
06631	DELTA	BSS 1	F2300380
		COUNT OF NO OF SYMBOLS IN SUB COMB	
06632	RSYM1	BSS 1	F2300390
		WORKING SYMBOL ONE	
06633	RSYM2	BSS 1	F2300400
		WORKING SYMBOL TWO	
06634	RSYM3	BSS 1	F2300410
		WORKING SYMBOL THREE	
06635	C1	BSS 1	F2300420
		COEFF FIRST SYMBOL	
06636	S1	BSS 1	F2300430
		FIRST SYMBOL	
06637	C2	BSS 1	F2300440
		COEFF 2ND SYMBOL	
06640	S2	BSS 1	F2300450
		2ND SYMBOL	
06641	C3	BSS 1	F2300460
		COEFF 3RD SYMBOL	
06642	S3	BSS 1	F2300470
		3RD SYMBOL	
06643	D1	BSS 1	F2300480
		DIM 1ST SYM, IF TWO-DIMENSIONAL	
06644	D2	BSS 1	F2300490
		DIM 2ND SYM, IF THREE-DIMENSIONAL	
06645	TL2	BSS 1	F2300500
		LEVEL DOTAG MATCHING SUBXCRIPY SYMBOL	
06646	XR1	BSS 1	F2300510
		IX DOTAG MATCHING FIRST SUB SYMBOL (RSYM1)	

	06647	LR1	BSS	1	LEV DOTAG MATCHING 1ST SUB SYMB (RSYM1)	F2300520		
	06650	NEXTR1	BSS	1	IX LAST DOTAG OF NEST SEARCHED IN TRAWRD 1ST LVF	F2300530		
	06651	XR2	BSS	1	IX DOTAG MATCHING 2ND SUB SYMB (RSYM2)	F2300540		
	06652	LR2	BSS	1	LEV DOTAG MATCHING 2ND SUB SYMB (RSYM2)	F2300550		
	06653	NEXTR2	BSS	1	IX LAST DO OF NEST SRCHD IN TRAWRD ON 2ND LEV	F2300560		
	06654	XR3	BSS	1	IX DOTAG MATCHING THIRD SUB SYMB (RSYM3)	F2300570		
	06655	NEXTR3	BSS	1	IX LAST DO OF NEST SRCHD IN TRWRD ON 3RD LEVEL	F2300580		
	06656	SKIP	BSS	1	SKIP, ZERO OR 1	F2300590		
	06657	TRABIT	BSS	1	TRAWRD TEMP STORAGE	F2300600		
	06660	NEXTA	BSS	1	INTERMEDIATE UPPER LIMIT OF RANGE	F2300610		
	06661	LASTB	BSS	1	INTERMEDIATE LOWER LIMIT OF RANGE	F2300620		
	06662	A	BSS	1	UPPER LIMIT OF RANGE	F2300630		
	06663	B	BSS	1	LOWER LIMIT OF RANGE	F2300640		
	06664	IRVXX	BSS	1	CURRENT TABLE IRV I.R. VALUE	F2300650		
06665	0	00000	0	00000	L(0)	0,0,0	F2300660	
06666	0	00001	0	00000	L(1)	0,0,1	F2300670	
06667	0	00002	0	00000	L(2)	0,0,2	F2300680	
06670	0	00003	0	00000	L(3)	0,0,3	F2300690	
06671	0	00006	0	00000	L(6)	0,0,6	F2300700	
06672	0	00044	0	00000	L(36)	0,0,36	F2300710	
06673	0	02506	0	00000	L(1350)	0,0,1350	F2300720	
06674	0	02734	0	00000	L(1500)	0,0,1500	F2300730	
06675	+00000000000001		L(1)A	OCT	1		F2300740	
06676	-0	00000	0	00000	L(MZ)	MZE	F2300750	
06677	+2000000000000		BITONE	OCT	2000000000000		F2300760	
06700	+000000400000		BIT18	OCT	400000		F2300770	
06701	+1777777777777		34ONES	OCT	1777777777777		F2300780	
06702	+3777777777777		35ONES	OCT	3777777777777		F2300790	
06703	+000000077777		ADDMSK	OCT	77777		F2300800	
06704	+0777770000000		DECMSK	OCT	777770000000		F2300810	
06705	-2000000000000		PREMSK	OCT	-2000000000000		F2300820	
06706	0	00000	0	00312	DRMADD	202	DRUM ORIGIN OF FORVAL TABLE	F2300830
06707	0	00000	0	01760	NAMORG	1008	DRUM ORIGIN OF NAME TABLE	F2300840
06710	0	00000	0	00031	NAMAD	NAME	CORE ORIGIN OF NAME TABLE	F2300850
06711	0	00702	0	00000	NAMAX	0,0,450	MAXIMUM WORDS IN NAME TABLE	F2300860
06712	0	00000	0	02430	IRVORG	1304	DRUM ORIGIN OF WD COUNT TABLE IRV	F2300870
06713	0	00000	0	06377	IRVAD	IRV	CORE ORIGIN OF IRV TABLE	F2300880
06714	0	00226	0	00000	IRVMAX	0,0,150	MAXIMUM WORDS IN IRV TABLE	F2300890
06715	0	00000	0	01300	TCOMOR	704	DRUM ORIGIN OF WD COUNT, TABLE TCOM	F2300900
06716	0	00000	0	01302	TSXORG	706	DRUM ORIGIN OF TSXCOM TABLE	F2300910
06717	0	00000	0	00031	TCOMAD	TCOM	CORE ORIGIN OF TCOM TABLE	F2300920
06720	0	01356	0	00000	TCOMAX	0,0,750		F2300930
06721	0	50000	0	07776	BLOCK3	CLA 4094	TSXCOM CARRYOVER FROM BLOCK TWO	F2300940
06722	0	60100	0	07667		STO LADDS	EQUAL TO LAST TABLE ENTRY PLUS ONE.	F2300950
06723	0	50000	0	07775		CLA 4093	TRASTO CARRYOVER FROM BLOCK TWO	F2300960
06724	0	60100	0	07670		STO LADDS+1	EQUAL TO LAST TABLE ENTRY PLUS ONE.	F2300970
06725	0	50000	0	06714		CLA IRVMAX	INITIALIZE IRVXX.	F2300980
06726	0	60100	0	06664		STO IRVXX	EQUAL TO ETC.	F2300990
06727	-0	53400	1	00733		LXD FORTAG-1,1	IF FORTAG EMPTY,	F2301000
06730	3	02733	1	07616		TXH NORMRT,1,1499	NORM RET MONITOR. GO TO SPACE TAPE 1.	F2301015
06731	-0	53400	2	06671	NAMRD	LXD L(6),2	INITIALIZE EERROR COUNTER.	F2301022
06732	0	50000	0	07777	NAM10	CLA 4095	OBTAIN NAME ADDRESS CARRYOVER FROM BLOCK 2	F2301030
06733	0	40200	0	06707		SUB NAMORG	FROM BLOCK TWO,	F2301040
06734	0	73400	1	00000		PAX 0,1		F2301050

06735	-3	00000	1	06766		TXL NAM95,1,0	IF NO TABLE NAME, GO TO READ IN FORVAL.	F2301060
06736	0	76200	0	00303		RDS ADRUM	READ IN TABLE NAME.	F2301070
06737	0	40000	0	06710		ADD NAMAD	ADD CORE ORG TABLE NAME TO COMP TERMINUS AND	F2301080
06740	0	62100	0	06746		STA NAM60	STORE IN COPY ADDRESS.	F2301090
06741	-0	75400	1	00000		PXD 0,1		F2301100
06742	-0	76000	0	00003		SSM		F2301110
06743	0	40000	0	06711		ADD NAMAX	DIFF BETWEEN MAX NO ENTRIES AND ACTUAL NL.	F2301120
06744	0	60100	0	00030		STO NAME-1		F2301130
06745	0	46000	0	06707		LDA NAMORG	DRUM LRG	F2301140
06746	0	70000	1	00000	NAM60	CPY 0,1		F2301150
06747	2	00001	1	06746		TIX NAM60,1,1		F2301160
06750	-0	53400	1	00030		LXD NAME-1,1		F2301170
06751	-0	63400	1	06762		SXD NAM80,1		F2301180
06752	-0	53400	1	06711		LXD NAMAX,1		F2301190
06753	-0	50000	1	00733	NAM70	CAL NAMZ,1	COMPUTE CHECK SUM	F2301200
06754	0	36100	1	00734		ACL NAMZ+1,1	FOR	F2301210
06755	0	60200	0	06771		SLW NAMES1	EACH	F2301220
06756	0	50000	0	06771		CLA NAMES1	TABLE ENTRY,	F2301230
06757	0	40200	1	00735		SUB NAMZ+2,1	AND COMPARE	F2301240
06760	-0	10000	0	06764		TNZ NAM90	SAME.	F2301250
06761	1	77775	1	06762		TXI NAM80,1,-3		F2301260
06762	3	00000	1	06753	NAM80	TXH NAM70,1		F2301270
06763	0	02000	0	06772		TRA BEGIN	TABLE NAME ALL IN.	F2301280
06764	2	00001	2	06732	NAM90	TIX NAM10,2,1		F2301290
06765	0	07400	4	00004		TSX DIAG,4	DRUM READ NAME TABLE. ERROR. GO TO DIAGNOSTIC.	F2301305
06766	0	50000	0	06711	NAM95	CLA NAMAX	TABLE NAME EMPTY.	F2301310
06767	0	60100	0	00030		STO NAME-1		F2301320
06770	0	02000	0	06772		TRA BEGIN		F2301330
06771	0	00000	0	00000	NAMES1	HTR	TEMP STORAGE	F2301340
06772	-0	76000	0	00144	BEGIN	MSE LIGHT	TEST FOR EHPTY FORVAL	F2301350
06773	0	02000	0	06776		TRA CPYLP		F2301360
06774	0	76000	0	00144		PSE LIGHT	IF EMPTY,	F2301370
06775	0	02000	0	07616		TRA NORMRT	NORM RET MONITOR. GO TO SPACE TAPE 1	F2301385
06776	-0	53400	2	06671	CPYLP	LXD L(6),2	READ IN FORVAL	F2301392
06777	0	76200	0	00302	RDSDRM	RDS BDRUM		F2301400
07000	0	50000	0	06701		CLA 34ONES	PUT DRUM MARK IN ACC.	F2301410
07001	0	46000	0	06706		LDA DRMADD		F2301420
07002	-0	53400	1	06674		LXD L(1500,1		F2301430
07003	0	70000	1	06625	CPYONE	CPY 4VALZ,1	PULL IN FIRST WORD OF FORVAL.	F2301440
07004	0	04000	0	07006		TLQ CPYTWO	TEST FOR DRUM MARK.	F2301430
07005	0	02000	0	07012		TRA CHKSUM		F2301460
07006	0	70000	1	06626	CPYTWO	CPY 4VALZ+1,1	PULL IN 2ND WORD OF FORVAL,	F2301470
07007	0	70000	1	06627		CPY 4VALZ+2,1	AND CHECK SUM.	F2301480
07010	2	00003	1	07003		TIX CPYONE,1,3		F2301490
07011	-0	53400	1	06665		LXD L(0),1		F2301500
07012	-0	63400	1	03670	CHKSUM	SXD FORVAL-1,1	COMPUTE AND	F2301510
07013	-0	63400	1	07024		SXD NEXT,1	COMPARE	F2301520
07014	-0	53400	1	06674		LXD L(1500,1	CHECK	F2301530
07015	-0	50000	1	06625	CSLOOP	CAL 4VALZ,1	SUMS.	F2301540
07016	0	36100	1	06626		ACL 4VALZ+1,1		F2301550
07017	0	60200	0	07030		SLW COMCS		F2301560
07020	0	50000	0	07030		CLA COMCS		F2301570
07021	0	40200	1	06627		SUB 4VALZ+2,1		F2301580
07022	-0	10000	0	07026		TNZ ERROR		F2301590

D

A

	07023	1	77775	1	07024		TXI	NEXT,1,-3			F2301600
D	07024	3	00000	1	07015	NEXT	TXH	CSLOOP,1			F2301610
	07025	0	02000	0	07031		TRA	2WDDO	FORVAL ALL IN.		F2301620
	07026	2	00001	2	06777	ERROR	TIX	RDSDRM,2,1			F2301630
	07027	0	07400	4	00004		TSX	DIAG,4	DRUM REAAD FORVAL TABLE.	ERROR. GO TO DIAGNOSTIC.	F2301645
A	07030	0	00000	0	00000	COMCS	HTR				F2301650
	07031	-0	53400	4	06671	2WDDO	LXD	L(6),4	ERROR COUNTER.		F2301662
	07032	0	77200	0	00223	2WDO5	REW	TAPE3	PREPARE TO READ IN DOTAG.		F2301670
	07033	-0	53400	1	07071		LXD	L(300),1			F2301680
	07034	-0	76000	0	00143		MSE	99	TEST FOR EMPTY DOTAG.		F2301690
	07035	0	02000	0	07040		TRA	2WD10			F2301700
	07036	0	76000	0	00143		PSE	99			F2301710
	07037	0	02000	0	07062		TRA	2WD70			F2301720
	07040	-0	76000	0	00012	2WD10	RTT				F2301730
	07041	0	76100	0	00000		NOP				F2301740
	07042	0	76200	0	00223	2WD20	RDS	TAPE3	PULL		F2301750
	07043	-0	53400	2	07072	2WD30	LXD	L(7),2	IN		F2301760
	07044	0	70000	1	07570		CPY	DOZ,1	DOTAG		F2301770
	07045	0	02000	0	07050		TRA	2WD40	BUT		F2301780
	07046	0	02000	0	07062		TRA	2WD70	ONLY		F2301790
	07047	0	02000	0	07042		TRA	2WD20	THE		F2301800
	07050	0	70000	1	07571	2WD40	CPY	DOZ+1,1	FIRST		F2301810
	07051	0	02000	0	07054		TRA	2WD50	TWO		F2301820
	07052	0	07400	4	00004		TSX	DIAG,4	WORDS	ERROR. GO TO DIAGNOSTIC.	F2301835
	07053	0	07400	4	00004		TSX	DIAG,4	OF	ERROR. GO TO DIAGNOSTIC.	F2301845
	07054	0	70000	0	07073	2WD50	CPY	ESXX	EACH		F2301850
	07055	0	02000	0	07060		TRA	2WD60	TABLE		F2301860
	07056	0	07400	4	00004		TSX	DIAG,4	ENTRY.	ERROR. GO TO DIAGNOSTIC.	F2301875
	07057	0	07400	4	00004		TSX	DIAG,4		ERROR. GO TO DIAGNOSTIC.	F2301885
	07060	2	00001	2	07054	2WD60	TIX	2WD50,2,1			F2301890
	07061	1	77776	1	07043		TXI	2WD30,1,-2			F2301900
	07062	-0	63400	1	07570	2WD70	SXD	DOZ,1			F2301910
	07063	0	76600	0	00333		WRS	219			F2301920
	07064	-0	76000	0	00012		RTT				F2301930
	07065	0	02000	0	07067		TRA	2WD80	READ ERROR.		F2301940
	07066	0	02000	0	07616		TRA	NORMRT	NORM RET MONITOR. GO TO SPACE TAPE 1		F2301955
	07067	2	00001	4	07032	2WD80	TIX	2WDO5,4,1			F2301960
	07070	0	07400	4	00004		TSX	DIAG,4	TAPE 3 READING DOTAG,	ERROR. GO TO DIAGNOSTIC.	F2301975
	07071	0	00454	0	00000	L(300)		0,0,300			F2301980
	07072	0	00007	0	00000	L(7)		0,0,7			F2301990
A	07073	0	00000	0	00000	ESXX	HTR		TEMP STORAGE.		F2302000
									MASTER RECORD CARD = FN037		F2302005
					07614		ORG	3980			F2302010
	07614	-0	63400	1	77777	BURNCE	SXD	T0P,1	DRUM OVERFLOW		F2302011
	07615	0	02000	0	00004		TRA	DIAG	ERROR PROCEDURE		F2302012
									THE 2 WD SUBRT NORMRT SPACES TAPE 1 PAST THE DIAGNOSTIC REC.		F2302016
	07616	0	76200	0	00221	NORMRT	RDS	145	SKIP OVER DIAGNOSTIC RECORD 00 SYSTEM TAPE.		F2302017
	07617	0	02000	0	00004		TRA	ONETCS	GO TO ONE TO CS (MONITOR)		F2302018
	07620	-0	63400	4	07653	LIST	SXD	LIST40,4	SAVE LINKAGE		F2302030
	07621	-0	73400	1	00000		PDX	0,1	PUT INDEX QUANTITY IN XRA		F2302040
	07622	0	73400	6	00000		PAX	0,6	PUT NR. OF WDS IN XRB,XRC.		F2302050
	07623	0	40000	0	07654		ADD	LIST50	COMPUTE NR. OF WRDS		F2302060
	07624	0	62100	0	07641		STA	LIST30	PLUS ORIGIN E1 AND		F2302070
	07625	0	62100	0	07634		STA	LIST20	INITIALIZE ADDRESSES,		F2302080

	07626	0	50000	1	07701	CLA	LADDIN+5,1	TEST	F2302090
	07627	0	77100	0	00022	ARS	18	FOR	F2302100
	07630	0	40200	1	07674	SUB	LADDS+5,1	FULL	F2302110
	07631	-0	10000	0	07633	TNZ	LIST10	TABLE.	F2302120
	07632	0	07400	4	07614	TSX	BURNCE,4	DRUM OVERFLOW, GO SAVE IRA BEFORE DIAG.	F2302135
	07633	-0	75400	0	00000	LIST10	PXD 0,0	ZERO IN ACC.	F2302140
	07634	0	36100	2	00000	LIST20	ACL 0,2	COMPUTE	F2302150
	07635	2	00001	2	07634	TIX	LIST20,2,1	ENTRY	F2302160
	07636	0	76600	0	00303	WRS	ADRUM	SELECT DRUM.	F2302165
	07637	0	60200	0	07655	SLW	LIST60	CHECK SUM.	F2302170
	07640	0	46000	1	07674	LDA	LADDS+5,1	COPY	F2302180
	07641	0	70000	4	00000	LIST30	CPY 0,4	ENTRY	F2302190
	07642	2	00001	4	07641	TIX	LIST30,4,1	AND	F2302200
	07643	0	70000	0	07655	CPY	LIST60	CHECK SUM.	F2302210
	07644	0	50000	1	07674	CLA	LADDS+5,1	COMPUTE	F2302220
	07645	0	40000	1	07667	ADD	TSXCOM+5,1	NEXT	F2302230
	07646	0	40000	0	06675	ADD	L(1)A	ENTRY	F2302240
	07647	-0	32000	0	06703	ANA	ADDMSK	ADDRESS.	F2302250
	07650	0	60100	1	07674	STO	LADDS+5,1		F2302260
	07651	-0	53400	4	07653	LXD	LIST40,4	EXIT	F2302270
	07652	0	02000	4	00001	TRA	1,4		F2302280
A	07653	0	00000	0	00000	LIST40	HTR	E.S.	F2302290
	07654	0	00000	0	07656	LIST50	HTR	L(E1)	F2302300
A	07655	0	00000	0	00000	LIST60	HTR	E.S.	F2302310
								FOUR WORD ENTRY BLOCK	F2302320
A	07656	0	00000	0	00000	E1	HTR		F2302330
A	07657	0	00000	0	00000	E2	HTR		F2302340
A	07660	0	00000	0	00000	E3	HTR		F2302350
A	07661	0	00000	0	00000	E4	HTR		F2302360
								FIVE KEY WORDS, C(DEC)=INDEX QUANTITIES, C(ADD)=NR. OF WORDS.	F2302370
	07662	0	00005	0	00002	TSXCOM	HTR	2,0,5	F2302380
	07663	0	00004	0	00003	TRASTO	HTR	3,0,4	F2302390
	07664	0	00003	0	00002	NAMKEY	HTR	2,0,3	F2302400
	07665	0	00002	0	00002	CHATAG	HTR	2,0,2	F2122410
	07666	0	00001	0	00004	DRMTAG	HTR	4,0,1	F2302420
								FIVE WORDS CONTAINING CURRENT TABLE ADDRESSES IN ADD. PART.	F2302430
A	07667	0	00000	0	00000	LADDS	HTR	TSXCOM	F2302440
A	07670	0	00000	0	00000		HTR	TRASTO	F2302450
A	07671	0	00000	0	00000		HTR	NAMKEY	F2302460
A	07672	0	00000	0	00000		HTR	CHATAG	F2302470
A	07673	0	00000	0	00000		HTR	DRMTAG	F2302480
								FIVE WORDS, C(ADD)=ORIGIN,C(DEC)=LAST TABLE L.C. PLUS ONE	F2302490
	07674	0	02660	0	01302	LADDIN	HTR	706,0,1456	F2302500
	07675	0	01300	0	00460		HTR	304,0,704	F2302510
	07676	0	02662	0	01760		HTR	1008,0,1458	F2302520
	07677	0	00456	0	00002		HTR	2,0,302	F2302530
	07700	0	03650	0	02664		HTR	1460,0,1960	F2302540
								THIS ROUTINE, GIVEN A TAU TAG, OBTAINS THE	F2302550
								CORRESPONDING SUBSCRIPT COMBINATION FROM THE TAU	F2302560
								DRUM AND POSITIONS IT IN PROPER FORMAT IN STORAGE.	F2302570
	07701	-0	63400	4	07762	SUBCOM	SXD	SUB085,4	F2302580
	07702	-0	53400	1	07770	LXD	SUBORG,1	INITIALIZE ERROR COUTNER.	F2302590
	07703	0	76200	0	00304	SUB010	RDS	TAUDRM	F2302600
	07704	-0	53400	4	07772	LXD	SUBORG+2,4	INITIALIZE	F2302610

07705	-0	75400	0	00000		PXD 0,0	SUBSCRIPT COMBINATION	F2302620
07706	0	60100	4	06645	SUB020	STO C1+8,4	SPACE	F2302630
07707	2	00001	4	07706		TIX SUB020,4,1	TO ZERO.	F2302640
07710	0	50000	0	06626		CLA TAG	COMPUTE	F2302650
07711	0	76500	0	00011		LRS 9	DRUM	F2302660
07712	0	73400	6	00000		PAX 0,6	ADDRESS.	F2302670
07713	-0	75400	0	00000		PXD 0,0	TAU ONE ADD. IS ORG+3TAU.	F2302680
07714	0	76300	0	00011		LLS 9	TAU TWO ADD. IS ORG+5TAU.	F2302690
07715	0	60100	0	07773		STO SUBES1	TAU THREE ADD. IS ORG+7TAU.	F2302700
07716	0	76700	0	00001		ALS 1	STORE	F2302710
07717	0	60100	0	07774		STO SUBES2	ADDRESS	F2302720
07720	0	50000	4	07773		CLA SUBORG+3,4	IN SUBES1	F2302730
07721	0	40000	0	07773		ADD SUBES1	FOR LDA	F2302740
07722	0	40000	0	07774	SUB030	ADD SUBES2	INSTRUCTION.	F2302750
07723	2	00001	4	07722		TIX SUB030,4,1		F2302760
07724	0	62100	0	07773		STA SUBES1		F2302770
07725	0	46000	0	07773		LDA SUBES1	COPY SUB. COMB.	F2302780
07726	0	70000	0	06635		CPY C1	TAU ONE, TWO, THREE	F2302790
07727	-3	00002	2	07731		TXL SUB040,2,2		F2302800
07730	0	70000	0	06641		CPY C3	TAU 3	F2302810
07731	0	70000	0	06636	SUB040	CPY S1	TAU 1,2,3	F2302820
07732	-3	00001	2	07737		TXL SUB060,2,1		F2302830
07733	0	70000	0	06640		CPY S2	TAU2,3	F2302840
07734	-3	00002	2	07736		TXL SUB050,2,2		F2302850
07735	0	70000	0	06642		CPY S3	TAU 3	F2302860
07736	0	70000	0	06643	SUB050	CPY D1	TAU 2,3	F2302870
07737	0	70000	0	07773	SUB060	CPY SUBES1	TAU 1,2,3	F2302880
07740	-0	53400	4	07770		LXD SUBORG,4	COMPUT CHECK SUM	F2302890
07741	-0	50000	0	06635		CAL C1	AND COMPARE WITH	F2302900
07742	0	36100	4	06644	SUB070	ACL C1+7,4	ENTRY CHECK CUM.	F2302910
07743	2	00001	4	07742		TIX SUB070,4,1	THREE ATTEMPTS ARE MADE	F2302920
07744	0	60200	0	07774		SLW SUBES2	TO READ SC CORRECTLY.	F2302930
07745	0	50000	0	07774		CLA SUBES2	IF ERROR STILL PRESENT,	F2302940
07746	0	40200	0	07773		SUB SUBES1	COMPLETE ROUTINE, MAKE ERROR RET.	F2302950
07747	0	10000	0	07752		TZE SUB075	CHECK SUMS AGREE, TRA.	F2302960
07750	2	00001	1	07703		TIX SUB010,1,1	CHECK SUMS DISAGREE,	F2302972
07751	0	07400	4	00004		TSX DIAG,4	IN READING TAU FROM DRUM, ERROR. GO TO DIAGNOSTIC.	F2302983
07752	-0	53400	4	07771	SUB075	LXD SUBORG+1,4	REARRANGE C1, C2, D1, D2,	F2302990
07753	0	50000	4	06644	SUB080	CLA C1+7,4	TO COMPLY WITH CORE	F2303000
07754	0	73400	2	00000		PAX 0,2	STORAGE FORMAT.	F2303010
07755	-0	32000	0	06704		ANA DECMSK		F2303020
07756	0	60100	4	06644		STO C1+7,4		F2303030
07757	-0	75400	2	00000		PXD 0,2		F2303040
07760	-2	00006	4	07763		TNX SUB090,4,6		F2303050
07761	0	60100	0	06637		STO C2		F2303060
07762	-3	00000	0	07753	SUB085	TXL SUB080,0		F2303070
07763	0	60100	0	06644	SUB090	STO D2		F2303080
07764	-0	53400	4	07762		LXD SUB085,4	RESTORE LINKAGE INDEX,	F2303090
07765	0	76100	0	00000		NOP		F2303102
07766	0	02000	4	00001		TRA 1,4		F2303110
07767	0	76100	0	00000	SUB100	NOP		F2303122
07770	+000006001356				SUBORG	OCT 000006001356		F2303130
07771	+000007000454					OCT 7000454	DEC. IS 7, ADD. IS ORG. TAU 2	F2303140
07772	+000010000000					OCT 10000000	DEC. IS 8, ADD. IS ORG. TAU 1	F2303150

D

A	07773	0	00000	0	00000	SUBES1	HTR	E.S.	F2303160
A	07774	0	00000	0	00000	SUBES2	HTR	E.S.	F2303170
					06721	ORG	3537		F2303180
							MASTER RECORD CARD = FN039		F2303185
	06721	-0	53400	1	00733	BL3A	LXD FORTAG-1,1	IF FORTAG	F2303190
	06722	3	02733	1	07616	TXH	NORMRT,1,1499	IS EMPTY, NORM RET MONITOR. GO SPACE TP 1.	F2303205
	06723	-0	76000	0	00144	MSE	LIGHT	IF FORVAL IS EMPTY,	F2303210
	06724	0	02000	0	06726	TRA	INIT		F2303220
	06725	0	02000	0	07616	TRA	NORMRT	NORM RET MONITOR. GO TO SPACE TAPE 1	F2303235
	06726	-0	53400	1	03670	INIT	LXD FORVAL-1,1	INITIALIZE	F2303240
	06727	-0	63400	1	07034	SXD	TAB60,1	.	F2303250
	06730	-0	53400	1	00733	LXD	FORTAG-1,1	.	F2303260
	06731	-0	63400	1	07015	SXD	VAL80,1	.	F2303270
	06732	-0	63400	1	07020	SXD	VAL95,1	.	F2303280
	06733	-0	53400	1	07570	LXD	DOZ,1	.	F2303290
	06734	-0	63400	1	07101	SXD	IND20,1	.	F2303300
	06735	-0	53400	1	06674	VALTAG	LXD L(1500,1	THIS PROGRAM	F2303310
	06736	0	50000	1	03670	VAL10	CLA FORTZ,1	MAKES A	F2303320
	06737	-0	12000	0	07017	TMI	VAL90	PASS OVER	F2303330
	06740	-0	32000	0	06677	ANA	BITONE	FORTAG, AND	F2303340
	06741	-0	10000	0	07017	TNZ	VAL90	FOR EACH NON-NEGATIVE (NOT TRREATED IN BL 2)	F2303350
	06742	0	50000	1	03670	CLA	FORTZ,1	TAG WITH BITONE EQUAL	F2303360
	06743	-0	32000	0	06703	ANA	ADDMSK	TO ZERO, (NOT YET TREATED HERE)	F2303370
	06744	0	60100	0	06626	STO	TAG	OBTAINS THE CORRESPONDING SUBSCRIPT	F2303380
	06745	-0	63400	1	07000	SXD	SAVEA,1	COMPINATION FROM THE	F2303390
	06746	0	07400	4	07701	TSX	SUBCOM,4	TAU TABLE DRUM.	F2303400
	06747	-0	53400	4	06670	LXD	L(3),4		F2303410
	06750	-0	75400	0	00000	PXD	0,0		F2303420
	06751	0	60100	4	06635	VAL20	STO RSYM1+3,4	INITIALIZE WITH ZEROES.	F2303430
	06752	2	00001	4	06751	TIX	VAL20,4,1		F2303440
	06753	-0	53400	1	06671	LXD	L(6),1	THIS ROUTINE STORES	F2303450
	06754	-0	53400	2	06670	LXD	L(3),2	THE SYMBOLS AS FOLLOWS	F2303460
	06755	0	50000	1	06644	VAL30	CLA S1+6,1	LEFTMOST IN RSYM1,	F2303470
	06756	0	10000	0	06761	TZE	VAL40	NEXT SYMBOL IN RSYM2,	F2303480
	06757	0	60100	2	06635	STO	RSYM1+3,2	RIGHTMOST IN RSYM3.	F2303490
	06760	1	77777	2	06761	TXI	VAL40,2,-1	IF THERE ARE NOT THREE	F2303500
	06761	2	00002	1	06755	VAL40	TIX VAL30,1,2	SYMBOLS IN THE SC, THEN	F2303510
	06762	-0	75400	2	00000	PXD	0,2	THE RSYM LOCATIONS ARE	F2303520
	06763	-0	76000	0	00003	SSM		SET TO ZERO.	F2303530
	06764	0	40000	0	06670	ADD	L(3)	DELTA IS THE SYMBOL COUNT.	F2303540
	06765	0	10000	0	07001	TZE	VAL60	SUBSCRIPT IS CONSTANT, NO SYMBOLS.	F2303550
	06766	0	60100	0	06631	STO	DELTA		F2303560
	06767	-0	53400	4	06665	LXD	L(0),4	LOCATION TAGIND IS SET	F2303570
	06770	0	40200	0	06666	SUB	L(1)	TO ZERO, UNLESS THE SC	F2303580
	06771	-0	10000	0	06777	TNZ	VAL50	HAS THE FOLLOWING	F2303590
	06772	0	50000	0	06636	CLA	S1	CHARACTERISTICS	F2303600
	06773	0	10000	0	06777	TZE	VAL50	ONE SYMBOL	F2303610
	06774	-0	53400	1	06635	LXD	C1,1	IN LEFTMOST POSITION	F2303620
	06775	3	00001	1	06777	TXH	VAL50,1,1	WITH COEFFICIENT EQUAL	F2303630
	06776	-0	53400	4	06666	LXD	L(1),4	TO ONE	F2303640
	06777	-0	63400	4	06630	VAL50	SXD TAGIND,4		F2303650
D	07000	-3	00000	0	07022	SAVEA	TXL TABSER,0	GO TO PROCESSING ROUTINE. (DEC HAS FORTAG IX)	F2303660
	07001	-0	53400	1	07000	VAL60	LXD SAVEA,1	RETURN FROM PROCESSING	F2303670
	07002	0	50000	1	03670	CLA	FORTZ,1	ROUTINE. FOR THIS TAG,	F2303680

	07003	-0	12000	0	07014	TMI VAL70	AND ALL TAGS EQUAL TO	F2303690
	07004	-0	32000	0	06677	ANA BITONE	THIS TAG, SET FORTAG	F2303700
	07005	-0	10000	0	07014	TNZ VAL70	ENTRY BIT ONE EQUAL	F2303710
	07006	0	50000	1	03670	CLA FORTZ,1	TO ONE.	F2303720
	07007	-0	32000	0	06703	ANA ADDMSK		F2303730
	07010	0	40200	0	06626	SUB TAG		F2303740
	07011	-0	10000	0	07014	TNZ VAL70		F2303750
	07012	0	50000	0	06677	CLA BITONE		F2303760
	07013	-0	60200	1	03670	ORS FORTZ,1		F2303770
	07014	1	77777	1	07015	VAL70 TXI VAL80,1,-1		F2303780
D	07015	3	00000	1	07002	VAL80 TXH VAL60+1,1	IF FORTAG DONE, (DEC HAS FORTAGIX)	F2303790
	07016	-0	53400	1	07000	LXD SAVEA,1	GO BACK	F2303800
	07017	1	77777	1	07020	VAL90 TXI VAL95,1,-1	FOR NEXT TAG	F2303810
D	07020	3	00000	1	06736	VAL95 TXH VAL10,1	IF ANY (DEC HAS FORTAGIX)	F2303820
	07021	0	02000	0	07616	TRA NORMRT	NORM RET MONITOR. GO TO SPACE TAPE 1	F2303835
	07022	-0	53400	1	06674	TABSER LXD L(1500,1	SEARCH	F2303840
	07023	-0	63400	2	07032	SXD TAB40,2	(6 - 2X NO SUB SYMBOLS - VAL40)	F2303850
	07024	-0	53400	2	06670	TAB10 LXD L(3),2	FORVAL	F2303860
	07025	0	50000	1	06626	CLA 4VALZ+1,1	FOR AN	F2303870
	07026	0	34000	2	06635	TAB20 CAS RSYM1+3,2	OCCURRANCE	F2303880
	07027	0	02000	0	07031	TRA TAB30	OF ANY SYMBOL	F2303890
	07030	0	02000	0	07036	TRA FOUND	IN THIS SC.	F2303900
	07031	1	77777	2	07032	TAB30 TXI TAB40,2,-1		F2303910
D	07032	3	00000	2	07026	TAB40 TXH TAB20,2	(DEC LOADED FROM TABSER + 1)	F2303920
	07033	1	77775	1	07034	TAB50 TXI TAB60,1,-3		F2303930
D	07034	3	00000	1	07024	TAB60 TXH TAB10,1	(DEC HAS FORVALIX)	F2303940
	07035	0	02000	0	07001	TRA VAL60		F2303950
	07036	-0	63400	1	07053	FOUND SXD FND10,1	IF SYMBOL FOUND,	F2303960
	07037	-0	53400	4	06630	LXD TAGIND,4	MAKE NORMAL OR SPECIAL	F2303970
	07040	0	50000	1	06625	CLA 4VALZ,1	ENTRY IN TSXCOM, DEPENDING	F2303980
	07041	3	00000	4	07054	TXH FND20,4,0	ON TAGIND. (UNLESS SEE SUBRT INDO)	F2303990
	07042	0	60100	0	07112	STO FORNR		F2304000
	07043	0	07400	4	07064	TSX INDO,4		F2304010
	07044	0	02000	0	07062	TRA FND40	INDO RETURN IF FRVL ALPH IN RANGE MTCHNG DOTAG	F2304020
	07045	-0	53400	1	07053	LXD FND10,1	RETURN FROM INDO WHEN NOT SO.	F2304030
	07046	0	50000	1	06625	CLA 4VALZ,1		F2304040
	07047	0	60100	0	07656	STO E1	SPECIAL ENTRY IF TAGIND	F2304050
	07050	0	50000	0	06626	CLA TAG	NOT ZERO	F2304060
	07051	0	76700	0	00022	ALS 18		F2304070
	07052	-0	50100	0	06626	ORA TAG		F2304080
D	07053	-3	00000	0	07057	FND10 TXL FND30,0	(DEC HAS FORTAG IX)	F2304090
	07054	-0	50100	0	06626	FND20 ORA TAG	SET UP E BLOCK WHEN TAGIND EQUAL 1	F2304100
	07055	0	60100	0	07656	STO E1		F2304110
	07056	0	50000	0	06632	CLA RSYM1	TAG SYMBOL	F2304120
	07057	0	60100	0	07657	FND30 STO E2		F2304130
	07060	0	50000	0	07662	CLA TSXCOM	TSXCOM KEY	F2304140
	07061	0	07400	4	07620	TSX LIST,4		F2304150
	07062	-0	53400	1	07053	FND40 LXD FND10,1		F2304160
	07063	0	02000	0	07033	TRA TAB50	CONTINUE SEARCH	F2304170
						SUBRT INDO.... THIS ROUTINE DETERMINES WHETHER THE FORVAL		F2304180
						WHICH HAS BEEN FOUND TO HATCH A SUBSCRIPT FALLS WITHIN RANGE		F2304190
						OF A DO WHICH IN TURN MATCHES THE FORAVAL. IF SO A RETURN IS		F2304200
						MADE AND TSXCOM ENTRY FOR THIS FORVAL ALPHA IS OMMITTED.		F2304210
	07064	-0	53400	1	07113	INDO LXD IND60,1		F1004220

	07065	0	02000	0	07101	TRA	IND20	.			F1004230
	07066	0	50000	1	07570	IND10	CLA	DOZ,1	OBTAIN	FIRST WORD DOTAG.	F2304240
	07067	0	73400	2	00000	PAX	0,2			DOTAGS BETA.	F2304250
	07070	-0	32000	0	06704	ANA	DECMASK			DOTAGS ALPHA	F2304260
	07071	0	34000	0	07112	CAS	FORN			AGAINST FORVAL ALPHA.	F2304270
	07072	0	02000	4	00002	TRA	2,4			OUTSIDE RANGE . RETURN.	F2304280
	07073	0	07400	4	00004	TSX	DIAG,4	FORVAL ALPHA EQ DO ALPHA.	ERROR.	GO TO DIAGNOSTIC.	F2304295
	07074	-0	75400	2	00000	PXD	0,2				F2304300
	07075	0	34000	0	07112	CAS	FORN			DOTAGS BETA AGAINST FORVAL ALPHA.	F2304310
	07076	0	02000	0	07103	TRA	IND30			FORVAL WITHIN RANGE	F2304320
	07077	0	02000	0	07103	TRA	IND30			OF DOTAG.	F2304330
	07100	1	77776	1	07101	TXI	IND20,1,-2				F2304340
D	07101	3	00000	1	07066	IND20	TXH	IND10,1			F2304350
	07102	0	02000	4	00002	TRA	2,4			DOTAG EXHAUSTED, RETURN.	F2304360
	07103	-0	53400	2	06670	IND30	LXD	L(3),2			F2304370
	07104	0	50000	1	07571	CLA	DOZ+1,1			FN EDIT CORR CD NR.	F2304384
	07105	0	34000	2	06635	IND40	CAS	RSYM1+3,2		DOES DOTAG SYMBOL EQUAL	F2304390
	07106	0	02000	0	07110	TRA	IND50			FORVAL SYMBOL (WHICH HAS BEEN FOUND	F2304400
	07107	0	02000	4	00001	TRA	1,4			TO EQUAL SUBSCRIPT). IF SO, RETURN.	F2304410
	07110	2	00001	2	07105	IND50	TIX	IND40,2,1			F2304420
	07111	1	77776	1	07101	TXI	IND20,1,-2				F2304430
A	07112	0	00000	0	00000	FORN	HTR			STORAGE FOR FIRST WD FORVAL (ALPHA)	F2304440
	07113	0	00454	0	00000	IND60		0,0,300			F2304450
					07114	DO	BSS	1			F2304460
					07115		BSS	299			F2304470
					07570	DOZ	BSS	1			F2304480
					06721	ORG		3537			F2304490
										MASTER RECORD CARD = FN041	F2304495
	06721	-0	53400	1	00733	BL3B	LXD	FORTAG-1,1	FORTAG	EMPTY	F2304500
	06722	3	02733	1	07616	TXH	NORMRT,1,1499		NORM	RET MONITOR. GO TO SPACE TAPE 1.	F2304515
	06723	-0	76000	0	00143	MSE	99			TEST FOR EMPTY DOTAG	F2304520
	06724	0	02000	0	06727	TRA	RDOTAG			OFF	F2304530
	06725	0	76000	0	00143	PSE	99			ON, EMPTY	F2304540
	06726	0	02000	0	07616	TRA	NORMRT			NORM RET MONITOR. GO TO SPACE TAPE 1	F2304555
	06727	-0	53400	6	06671	RDOTAG	LXD	L(6),6		INITIALIZE ERROR COUNTERS.	F2304562
	06730	0	76400	0	00222	RDP0S	BST	TAPE2		POSITION TAPE 2 FOR DOTAG	F2304570
	06731	0	76400	0	00222	BST	TAPE2				F2304580
	06732	0	76200	0	00222	RDS	TAPE2				F2304590
	06733	0	70000	0	06770	CPY	RDES1				F2304600
	06734	0	70000	0	06771	CPY	RDES2				F2304610
	06735	0	70000	0	00000	CPY					F2304620
	06736	0	07400	4	00004	TSX	DIAG,4			ERROR. GO TO DIAGNOSTIC.	F2304635
	06737	0	07400	4	00004	TSX	DIAG,4			ERROR. GO TO DIAGNOSTIC.	F2304645
	06740	0	50000	0	06770	RDREC	CLA	RDES1			F2304650
	06741	0	40200	0	06771	SUB	RDES2				F2304660
	06742	0	10000	0	06745	TZE	RDBACK				F2304670
	06743	2	00001	4	06731	TIX	RDP0S+1,4,1		ERROR	- REREAD	F2304680
	06744	0	07400	4	00004	TSX	DIAG,4			ERROR. GO TO DIAGNOSTIC.	F2304695
	06745	-0	53400	1	06770	RDBACK	LXD	RDES1,1		NO RECORDS	F2304700
	06746	1	00002	1	06747	TXI	RDBST,1,2				F2304710
	06747	0	76400	0	00222	RDBST	BST	TAPE2		8ACKSPACE DESIGNATED NO RECORDS	F2304720
	06750	2	00001	1	06747	TIX	RDBST,1,1				F2304730
	06751	-0	53400	1	06673	LXD	L(1350,1			MAX SIZE DOTAG	F2304740
	06752	0	76200	0	00222	RDRDS	RDS	TAPE2			F2304750

06753	0	70000	1	06377	RDCPY	CPY	DOTAGZ,1	READ IN DOTAG	F2304760
06754	1	77777	1	06753		TXI	RDCPY,1,-1		F2304770
06755	0	02000	0	06757		TRA	RDEOF		F2304780
06756	0	02000	0	06752		TRA	RDRDS		F2304790
06757	-0	63400	1	03670	RDEOF	SXD	DOTAG-1,1	DOTAG INDEX(1350-NO DOTAG ENTRIES)	F2304800
06760	0	76200	0	00222		RDS	TAPE2	SPACE TAPE.	F2304810
06761	0	76200	0	00222		RDS	TAPE2		F2304820
06762	0	76600	0	00333		WRS	219		F2304830
06763	-0	76000	0	00012		RTT			F2304840
06764	0	02000	0	06766		TRA	RDER	ON	F2304850
06765	0	02000	0	06772		TRA	DOPASS		F2304860
06766	2	00001	2	06730	RDER	TIX	RDP0S,2,1	TRY TWICE MORE.	F2304870
06767	0	07400	4	00004		TSX	DIAG,4	TAPE 2, READING DOTAG. ERROR. GO TO DIAGNOSTIC.	F2304885
06770	0	00000	0	00000	RDES1	HTR		RECORD COUNT	F2304890
06771	0	00000	0	00000	RDES2	HTR		RECORD COUNT	F2304900
06772	-0	53400	1	03670	DOPASS	LXD	DOTAG-1,1	DOTAG INDEX.	F2304910
06773	-0	63400	1	07110		SXD	SYM40,1	INITIALIZE.	F2304920
06774	-0	63400	1	07160		SXD	SYM130,1	.	F2304930
06775	-0	63400	1	07222		SXD	SYM220,1	.	F2304940
06776	-0	63400	1	07523		SXD	TRAW20,1	.	F2304950
06777	-0	63400	1	07541		SXD	TRAW50,1	.	F2304960
07000	-0	63400	1	07420		SXD	SPC040,1	.	F2304970
07001	-0	63400	1	07455		SXD	SPC090,1	.	F2304980
07002	-0	53400	1	00030		LXD	NAME-1,1	.	F2304990
07003	-0	63400	1	07261		SXD	GETN20,1	.	F2305000
								THIS ROUTINEMAKES A PASS OVER FORTAG AND FOR EACH NON-	F2305010
								NEGATIVE TAG, OBTAINS THE CORRESPONDING SUBSCRIPT COMPINATION	F2305020
								FROM THE TAU DRUM. THE SYMBOLS ARE PUT INTO THE LOCATIONS	F2305030
								RSYM1, RSYM2, RSYM3, AND LOCATION TAGIND IS INITIALIZED.	F2305040
								CONTROL THEN GOES TO ROUTINE SYMONE. UPON RETURN, THIS ENTRY	F2305050
								IN FORTAG AND ALL OTHER NON- NEGATIVE ENTRIES CONTAINING	F2305060
								THIS TAG ARE SET NEGATIVE.	F2305070
07004	-0	53400	1	00733	TAGPAS	LXD	FORTAG-1,1		F2305080
07005	-0	63400	1	07601		SXD	TINF30,1		F2305090
07006	-0	63400	1	07073		SXD	TAGP80,1		F2305100
07007	-0	63400	1	07076		SXD	TAGP98,1		F2305110
07010	-0	53400	1	06674		LXD	L(1500,1		F2305120
07011	0	50000	1	03670	TAGP10	CLA	FORTZ,1		F2305130
07012	-0	12000	0	07075		TMI	TAGP94	IF NEG, GET NEXT FORTAG	F2305140
07013	-0	32000	0	06703		ANA	ADDMSK	TAG	F2305150
07014	0	60100	0	06626		STO	TAG		F2305160
07015	-0	63400	1	07077		SXD	TAGX,1	SAVE CURRENT FORTAG IX	F2305170
07016	0	07400	4	07701		TSX	SUBCOM,4	OBTAIN AND DISPERSE THE TAU TABLES.	F2305180
07017	-0	53400	4	06670		LXD	L(3),4		F2305190
07020	-0	75400	0	00000		PXD	0,0		F2305200
07021	0	60100	4	06635	TAGP20	STO	RSYM1+3,4	INITIALIZE RSYM LOCATIONS WITH ZERO.	F2305210
07022	2	00001	4	07021		TIX	TAGP20,4,1		F2305220
07023	-0	53400	1	06671		LXD	L(6),1		F2305230
07024	-0	53400	2	06670		LXD	L(3),2		F2305240
07025	-0	53400	4	06665		LXD	L(0),4		F2305250
07026	0	50000	1	06644	TAGP30	CLA	S1+6,1	GET SYMBOL	F2305260
07027	0	10000	0	07041		TZE	TAGP40	IF ZERO, GET NEXT SYMBOL	F2305270
07030	3	00002	2	07037		TXH	TAGP34,2,2	AT RSYM2 AND RSYM3 PASS,	F2305280
07031	0	34000	0	06632		CAS	RSYM1	CHECK FOR DUPLICATE SYMBOLS.	F2305290

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07032	0	02000	0	07034	TRA	TAGP32			F2305300	
07033	1	00001	4	07041	TXI	TAGP40,4,1	SYMBOL DUPLICATES RSYM1.		F2305310	
07034	0	34000	0	06633	TAGP32	CAS	RSYM2		F2305320	
07035	0	02000	0	07037	TRA	TAGP34			F2305330	
07036	1	00001	4	07041	TXI	TAGP40,4,1	SYMBOL DUPLICATES RSYM2.		F2305340	
07037	0	60100	2	06635	TAGP34	STO	RSYM1+3,2		F2305350	
07040	1	77777	2	07041	TXI	TAGP40,2,-1	BUMP DELTA COUNTER.		F2305360	
07041	2	00002	1	07026	TAGP40	TIX	TAGP30,1,2		F2305370	
07042	-0	75400	2	00000	PXD	0,2	COMPUTE		F2305380	
07043	-0	76000	0	00003	SSM		DELTA AS NO		F2305390	
07044	0	40000	0	06670	ADD	L(3)	OF DISTINCT SYMBOLS.		F2305400	
07045	0	10000	0	07062	TZE	TAGP50	CONSTANT SUBSCRIPT.		F2305410	
07046	0	60100	0	06631	STO	DELTA			F2305420	
07047	-0	53400	2	06665	LXD	L(0),2			F2305430	
07050	3	00000	4	07060	TXH	TAGP45,4,0	IF DUPES, SET TAGIND TO ZERO		F2305440	
07051	0	40200	0	06666	SUB	L(1)			F2305450	
07052	-0	10000	0	07060	TNZ	TAGP45	IF DELTA OTHER THAN ONE, SET TAGIND TO ZERO		F2305460	
07053	0	50000	0	06636	CLA	S1			F2305470	
07054	0	10000	0	07060	TZE	TAGP45	IF SUBSCRIPT CONSTANT, SET TAGIND TO ZERO		F2305480	
07055	-0	53400	1	06635	LXD	C1,1	IF COEFF OTHER THAN 1 SET TAGIND TO ZERO		F2305490	
07056	3	00001	1	07060	TXH	TAGP45,1,1			F2305500	
07057	-0	53400	2	06666	LXD	L(1),2	OTHERWISE SET TAGIND TO ONE.		F2305510	
07060	-0	63400	2	06630	TAGP45	SXD	TAGIND,2		F2305520	
07061	0	02000	0	07100	TRA	SYMONE	GO TO ANALYZE DONESTI		F2305530	
07062	-0	53400	1	07077	TAGP50	LXD	TAGX,1	IF ANY	F2305540	
07063	0	50000	1	03670	TAGP60	CLA	FORTZ,1	OF THE AS YET UNTREATED	F2305550	
07064	-0	12000	0	07072	TMI	TAGP70	FORTAGS		F2305560	
07065	-0	32000	0	06703	ANA	ADDMSK	ARE		F2305570	
07066	0	40200	0	06626	SUB	TAG	THE SAME AS THAT TAG		F2305580	
07067	-0	10000	0	07072	TNZ	TAGP70	JUST TREATED,		F2305590	
07070	-0	50000	0	06676	CAL	L(MZ)	SET THEM		F2305600	
07071	-0	60200	1	03670	ORS	FORTZ,1	MINUS.		F2305610	
07072	1	77777	1	07073	TAGP70	TXI	TAGP80,1,-1		F2305620	
D	07073	3	00000	1	07063	TAGP80	TXH	TAGP60,1	(DEC HAS FORTAG IX)	F2305630
	07074	-0	53400	1	07077	TAGP90	LXD	TAGX,1		F2305640
	07075	1	77777	1	07076	TAGP94	TXI	TAGP98,1,-1	IF ALL OF FORTAG	F2305650
D	07076	3	00000	1	07011	TAGP98	TXH	TAGP10,1	HAS BEEN COMPLETED, (DEC HAS FORTAG IX)	F2305660
D	07077	-3	00000	0	07616	TAGX	TXL	NORMRT,0	NORMAL RET MONITOR. (DEC HAS CURR FORTAG IX)	F2305675
							ROUTINE SYMONE FINDS DOFORMULAS DEFINING SOME SYMBOL IN THIS		F2305680	
							SC. IT USES TRAWRD TO DETERMINE WHETHER OR NOT ROUTINE		F2305690	
							PROCESS SHOULD BE USED.		F2305700	
							IF MORE THAN ONE SYMBOL, IT THEN USES ROUTINE SYM2.		F2305710	
	07100	-0	53400	1	06673	SYMONE	LXD	L(1350,1		F2305720
	07101	-0	53400	2	06670	SYM10	LXD	L(3),2		F2305730
	07102	0	50000	1	06400	CLA	DOTAGZ+1,1	GET NEXT DOTAG SYMBOL.		F2305740
	07103	0	34000	2	06635	SYM20	CAS	RSYM1+3,2	IS IT SAME AS SUBSCRIPT SYMBOL.	F2305750
	07104	0	02000	0	07106	TRA	SYM30			F2305760
	07105	0	02000	0	07112	TRA	SYM50	YES		F2305770
	07106	2	00001	2	07103	SYM30	TIX	SYM20,2,1		F2305780
	07107	1	77767	1	07110	TXI	SYM40,1,-9			F2305790
D	07110	3	00000	1	07101	SYM40	TXH	SYM10,1	END OF DOTAG, RETURN.	F2305800
	07111	0	02000	0	07062	TRA	TAGP50			F2305810
	07112	0	50000	0	06632	SYM50	CLA	RSYM1	INTERCHANGE THE	F2305820
	07113	0	56000	2	06635	LDQ	RSYM1+3,2	MATCHING SUBSCRIPT		F2305830

07114	0	60100	2	06635		STO RSYM1+3,2	SYMBOL WITH	F2305840
07115	-0	60000	0	06632		STQ RSYM1	RSYM1.	F2305850
07116	0	50000	1	06404		CLA DOTAGZ+5,1		F2305860
07117	-0	32000	0	06704		ANA DECMSK	STORE LEVEL	F2305870
07120	0	60100	0	06647		STO LR1	OF	F2305880
07121	0	60100	0	06645		STO TL2	DOTAG	F2305890
07122	-0	63400	1	06646		SXD XR1,1	THIS DOTAG IS R1.	F2305900
07123	-0	53400	4	06631		LXD DELTA,4	IF DELTA IS	F2305910
07124	-0	53400	2	06666		LXD L(1),2	ONE, THEN	F2305920
07125	-3	00001	4	07127		TXL SYM60,4,1	NO TRAWORD SKIP.	F2305930
07126	-0	53400	2	06667		LXD L(2),2	OTHERWISE, TRAWORD SKIP,	F2305940
07127	0	07400	4	07513	SYM60	TSX TRAWRD,4		F2305950
07130	-0	63400	1	06650		SXD NEXTR1,1	SAVE INDEX LAST DOTAG HANDLED.	F2305960
07131	0	10000	0	07135		TZE SYM70	ARE THERE TRANSFERS OUT(TRABITS).	F2305970
07132	-0	53400	1	06646		LXD XR1,1	YES. LOAD I.R. FOR MATCHING DOTAG.	F2305980
07133	-0	53400	2	06666		LXD L(1),2	A ONE TELLS PROCESS THAT	F2305990
07134	0	07400	4	07236		TSX PROCES,4	CALLER WAS SYMONE. (B).	F2306000
07135	-0	53400	4	06631	SYM70	LXD DELTA,4	NO TRANSFERS OUT (TRABITS)	F2306010
07136	-3	00001	4	07142		TXL SYM80,4,1	IF DELTA IS GREATER THAN ONE, THEN	F2306020
07137	-0	53400	1	06646		LXD XR1,1	LOAD INDEX REG FOR MATCHING DOTAG,	F2306030
07140	-0	53400	2	06647		LXD LR1,2	AND LEVEL AND	F2306040
07141	0	02000	0	07144		TRA SYM2	GO TO SECOND LEVEL SEARCH.	F2306050
07142	-0	53400	1	06650	SYM80	LXD NEXTR1,1	DELTA IS ONE,	F2306060
07143	0	02000	0	07110		TRA SYM40	CONTINUE FIRST LEVEL SEARCH.	F2306070
							ROUTINE SYMTWO MAKES A SECOND LEVEL SEARCH AMONG THOSE DOS	F2306080
							NESTED WITHIN THE DO MATCHING RSYM1. USES PROCESS ROUTINE	F2306090
							IF NECESSARY, AND ROUTINE SYM3 IF NECESSARY.	F2306100
07144	-0	63400	2	07150	SYM2	SXD SYM100,2	INITIALIZE LEVEL TEST	F2306110
07145	0	02000	0	07157		TRA SYM120		F2306120
07146	0	50000	1	06404	SYM90	CLA DOTAGZ+5,1	GET LEVEL OF	F2306130
07147	-0	73400	2	00000		PDX 0,2	NEW DOTAG AND	F2306140
D 07150	-3	00000	2	07110	SYM100	TXL SYM40,2	TEST AGAINST LEVEL OF R1 AND	F2306150
07151	0	50000	1	06400		CLA DOTAGZ+1,1	IF WITHIN RANGE OF R1,	F2306160
07152	0	34000	0	06633		CAS RSYM2	TEST MATCH DOTAG SYMBOL AGAINST RSYM2.	F2306170
07153	0	02000	0	07155		TRA SYM110		F2306180
07154	0	02000	0	07166		TRA SYM150	MATCHES . GO TO TREAT R2.	F2306190
07155	0	40200	0	06634	SYM110	SUB RSYM3	DOESNT MATCH RSYM2, TRY RSYM3.	F2306200
07156	0	10000	0	07162		TZE SYM140		F2306210
D 07157	1	77767	1	07160	SYM120	TXI SYM130,1,-9	GET NEXT DOTAG	F2306220
07160	3	00000	1	07146	SYM130	TXH SYM90,1	(DEC CONTAINS DOTAG IX)	F2306230
07161	0	02000	0	07110		TRA SYM40	IF END OF DOTAG, EXIT.	F2306240
07162	0	50000	0	06633	SYM140	CLA RSYM2	DOTAG SYMBOL MATCHES RSYM3 -	F2306250
07163	0	56000	0	06634		LDQ RSYM3	INTERCHANGE	F2306260
07164	0	60100	0	06634		STO RSYM3	RSYM2 AND	F2306270
07165	-0	60000	0	06633		STQ RSYM2	RSYM3.	F2306280
07166	-0	63400	1	06651	SYM150	SXD XR2,1	THIS DOTAG IS R2	F2306290
07167	-0	63400	2	06652		SXD LR2,2	SAVE ITS LEVEL .	F2306300
07170	-0	53400	2	06666		LXD L(1),2	IF DELTA IS	F2306310
07171	-0	53400	4	06631		LXD DELTA,4	TWO OR ONE, THEN	F2306320
07172	-3	00002	4	07174		TXL SYM160,4,2	NO TRAWORD SKIP.	F2306330
07173	-0	53400	2	06667		LXD L(2),2	OTHERWISE TRAWORD SKIP.	F2306340
07174	0	07400	4	07513	SYM160	TSX TRAWRD,4		F2306350
07175	-0	63400	1	06653		SXD NEXTR2,1	SAVE INDEX LAST DOTAG HANDLED.	F2306360
07176	0	10000	0	07202		TZE SYM170	ARE THERE TRANSFERS OUT (TRABITS)	F2306370

	07177	-0	53400	1	06651		LXD	XR2,1	YES. LOAD IX REG FOR MATCHING DOTAG.	F2306380
	07200	-0	53400	2	06667		LXD	L(2),2	A TWO TELLS PROCESS THAT	F2306390
	07201	0	07400	4	07236		TSX	PROCES,4	CALLER WAS SYM2. (2).	F2306400
	07202	-0	53400	4	06631	SYM170	LXD	DELTA,4	00 TRANSFERS OUT (TRABITS)	F2306410
	07203	-3	00002	4	07207		TXL	SYM180,4,2	IF DELTA IS 3 , THEN	F2306420
	07204	-0	53400	1	06651		LXD	XR2,1	LOAD INDEX REG FOR MATCHING DOTAG.	F2306430
	07205	-0	53400	2	06652		LXD	LR2,2	AND LEVEL AND	F2306440
	07206	0	02000	0	07211		TRA	SYM3	GO TO THRID LEVEL SEARCH	F2306450
	07207	-0	53400	1	06653	SYM180	LXD	NEXTR2,1	DELTA IS LESS THAN-THREE,	F2306460
	07210	0	02000	0	07160		TRA	SYM130	CONTINUE SECOND LEVEL SEARCH.	F2306470
									ROUTINE SYM3 MAKES A THIRD LEVEL SEARCH OF DOTAG AMONG THOSE	F2306480
									DOS NESTED WITHIN THE DO MATCHING RSYM2, USES PROCESS IF	F2306490
									NECESSARY, AND THEN RETURNS TO SYM2.	F2306500
	07211	-0	63400	2	07215	SYM3	SXD	SYM200,2	INITIALIZE WITH LEVEL.OF R2.	F2306510
	07212	0	02000	0	07221		TRA	SYM210		F2306520
	07213	0	50000	1	06404	SYM190	CLA	DOTAGZ+5,1	OBTAIN LEVEL	F2306530
	07214	-0	73400	2	00000		PDX	0,2	OF CURRENT DOTAG AND IF IT IS	F2306540
D	07215	-3	00000	2	07160	SYM200	TXL	SYM130,2	OUTSIDE RANGE OF R2, EXIT. (DEC HAS LEVEL R2)	F2306550
	07216	0	50000	1	06400		CLA	DOTAGZ+1,1	OTHERWISE CHECK FOR IDENTIRY	F2306560
	07217	0	40200	0	06634		SUB	RSYM3	WITH THIRD FORTAG SYMBOL.	F2306570
	07220	0	10000	0	07224		TZE	SYM230	IF IDENTITY, GO TO ANALYZE . OTHERWISE,	F2306580
D	07221	1	77767	1	07222	SYM210	TXI	SYM220,1,-9	GET NEXT DOTAG.	F2306590
	07222	3	00000	1	07213	SYM220	TXH	SYM190,1	IF END OF DOTAG, (DEC HAS DOTAG IX)	F2306600
	07223	0	02000	0	07160		TRA	SYM130	EXIT FROM THIRD LEVEL SEARCH	F2306610
	07224	-0	63400	1	06654	SYM230	SXD	XR3,1	SAVE IX OF MATCHING DO	F2306620
	07225	-0	53400	2	06666		LXD	L(1),2	NO TRAWORD SKIP.	F2306630
	07226	0	07400	4	07513		TSX	TRAWRD,4	GO TO HUNT TRANSFERS-OUT.	F2306640
	07227	0	10000	0	07222		TZE	SYM220	IF NO TRNSFRS OUT-(TRABITS) RETURN TO SRCH	F2306650
	07230	-0	63400	1	06655		SXD	NEXTR3,1	TRNSFRS OUT. SAVE IX LAST DO HANDLED IN TRAWORD	F2306660
	07231	-0	53400	1	06654		LXD	XR3,1		F2306670
	07232	-0	53400	2	06670		LXD	L(3),2	THREE TELLS PROCESS THAT CALLER WAS SYM3	F2306680
	07233	0	07400	4	07236		TSX	PROCES,4		F2306690
	07234	-0	53400	1	06655		LXD	NEXTR3,1	GET IX NEXT DOTAG AND	F2306700
	07235	0	02000	0	07222		TRA	SYM220	CONTINUE THIRD LEVEL SEARCH.	F2306710
									ROUTINE PROCESS DETERHINES WHETHER OR NOT THERE EXISTS A	F2306720
									TAG IDENTICAL TO THE CURRENT RELCON TAG AND WHETHER ITS	F2306730
									TAG NAME HAS BEEN CHANGED. THE SEARCH FOR THIS IDENTICAL TAG	F2306740
									IS MADE THRU APPROPRIATE RANGES OF THAT DO WHOSE SYMBOL HAS	F2306750
									BEEN FOUND TO MATCH ONE OF THE RELCON SYMBOLS. TRASTO ENTRIES	F2306760
									ARE ENTERED DEPENDING UPON WHICH OF THOSE CONDITIONS HOLDS.	F2306770
	07236	-0	63400	1	07262	PROCES	SXD	DOX,1	SAVE DOTAG IX	F2306780
	07237	-0	63400	4	07265		SXD	SYMLNK,4	AND CALLER	F2306790
	07240	-0	63400	2	07243		SXD	PR10,2	AND INITIALIZE WITH B.	F2306800
	07241	-0	53400	2	06631		LXD	DELTA,2		F2306810
	07242	-0	53400	4	06665		LXD	L(0),4		F2306820
D	07243	3	00000	2	07245	PR10	TXH	PR20,2	DOES DELTA EXCEED B. (DEC HAS B)	F2306830
	07244	-0	53400	4	06666		LXD	L(1),4	IF NOT, THEN NO SKIP. OTHERWISE,	F2306840
	07245	-0	63400	4	06656	PR20	SXD	SKIP,4	SXIP IF C(SKIP)=0.	F2306850
	07246	-0	53400	4	06630		LXD	TAGIND,4	TRA IF SPECIAL CASE, I.E., MOST SIMPLE	F2306860
	07247	3	00000	4	07317		TXH	PRSPEC,4,0	(TAGIND NOT ZERO)	F2306870
	07250	0	50000	1	06377		CLA	DOTAGZ,1	SEARCH TABLE NAME	F2306880
	07251	-0	32000	0	06704		ANA	DECMSK	GET RSYM1 DOTAG ALPHA IN DEC	F2306890
	07252	0	40000	0	06626		ADD	TAG	AND FORTAG IN ADDRESS.	F2306900
	07253	-0	53400	1	06711	GETNAM	LXD	NAMAX,1	LOAD MAX NO NAME TABLE WORDS	F2306910

	07254	0	02000	0	07261	TRA	GETN20			F2306920
	07255	0	34000	1	00733	GETN05	CAS	NAMZ,1	DOES THE DOTAG ALPHA AND FORTAG INDEX OF THE	F2306930
	07256	0	02000	0	07260	TRA	GETN10		FIRST WORD OF NAME TABLE MATCH THOSE ABOVE.	F2306940
	07257	0	02000	0	07263	TRA	GETN30		YES.	F2306950
	07260	1	77775	1	07261	GETN10	TXI	GETN20,1,-3	NO, GET NEXT NAME TABLE.	F2306960
D	07261	3	00000	1	07255	GETN20	TXH	GETN05,1	IS NAME TABLE EXHAUSTED (DEC HAS NAME IX)	F2306970
D	07262	-3	00000	0	07266	DOX	TXL	PR25,0	YES, NOT NOT FOUND. (DEC HAS IX MATCHING DOTAG	F2306980
	07263	0	50000	1	00734	GETN30	CLA	NAMZ+1,1	FOUND. OBTAIN NEW TAG NAME	F2306990
	07264	0	60100	0	06627	STO	TS		AND SAVE IT.	F2307000
D	07265	-3	00000	0	07313	SYMLNK	TXL	PR80,0		F2307010
	07266	-0	53400	4	06656	PR25	LXD	SKIP,4	NOT FOUND IN NAME TABLE,	F2307020
	07267	-0	53400	1	07262		LXD	DOX,1	SEARCH FORTAG	F2307030
	07270	3	00000	4	07275		TXH	PR30,4,0	IN PROPER RANGE.	F2307040
	07271	-0	53400	2	06666		LXD	L(1),2	INDICATE TINFOR SEARCH REQUIRED	F2307050
	07272	0	07400	4	07401	TSX	SPC000,4			F2307060
	07273	0	02000	0	07277	TRA	PR40		NOT FOUND	F2307070
	07274	0	02000	0	07315	TRA	PR90		T FOUND	F2307080
	07275	0	07400	4	07564	PR30	TSX	TINFOR,4		F2307090
	07276	0	02000	0	07315	TRA	PR90		FOUND, GO TO EXIT.	F2307100
	07277	-0	53400	2	06665	PR40	LXD	L(0),2	T NOT FOUND, MAKE TYPE 6	F2307110
	07300	0	07400	4	07336	TSX	TRAENT,4		TRASTO ENTRY	F2307120
									MAKE ENTRY IN TABLE IRV	F2307130
	07301	-0	53400	1	06664	PR60	LXD	IRVXX,1	GET IX FOR ENTRY IN TABLE IRV.	F2307140
	07302	3	00000	1	07304	TXH	PR70,1,0			F2307150
	07303	0	07400	4	00004	TSX	DIAG,4	TABLE IRV FULL.	ERROR. GO TO DIAGNOSTIC.	F2307165
	07304	0	50000	0	06626	PR70	CLA	TAG	PLACE TAG IN	F2307170
	07305	0	76700	0	00022	ALS	18		DECREMENT AND	F2307180
	07306	0	40000	0	06626		ADD	TAG	ADDRESS AND	F2307190
	07307	0	60100	1	06625	STO	IRVZ,1		STORE ENTRY IN TABLE IRV	F2307200
	07310	1	77777	1	07311	TXI	PR75,1,-1		BUMP IRV TABLE INDEX AND	F2307210
	07311	-0	63400	1	06664	PR75	SXD	IRVXX,1	SAVE IT FOR NEXT ENTRY.	F2307220
	07312	0	02000	0	07315	TRA	PR90			F2307230
	07313	-0	53400	2	06666	PR80	LXD	L(1),2	MAKE TYPE ONE TRASTO ENTRY	F2307240
	07314	0	07400	4	07336	TSX	TRAENT,4			F2307250
	07315	-0	53400	4	07265	PR90	LXD	SYMLNK,4	RESTORE INDEX REG	F2307260
	07316	0	02000	4	00001	TRA	1,4		AND RETURN TO CALLER	F2307270
									ROUTINE PERSPEC IS FOR THE SPECIAL CASE OF A SINGLE SUBSCRIPT	F2307280
									RELCON WITH NO COEFFICIENT (TAGIND EQUALS ONE)	F2307290
	07317	0	50000	1	06407	PRSPEC	CLA	DOTAGZ+8,1	IF DOTAGS	F2307300
	07320	0	77100	0	00022	ARS	18		TEST NAME	F2307310
	07321	0	40200	0	06626	SUB	TAG		IS SAME AS	F2307320
	07322	-0	10000	0	07331	TNZ	PR100		CURRENT FORTAG	F2307330
	07323	0	50000	0	06700	CLA	BIT18		AND IF	F2307340
	07324	-0	32000	1	06405	ANA	DOTAGZ+6,1		THERE IS A	F2307350
	07325	0	10000	0	07315	TZE	PR90			F2307360
	07326	-0	53400	2	06670	LXD	L(3),2		MAKE A TYPE 5 TRASTO ENTRY	F2307370
	07327	0	07400	4	07336	TSX	TRAENT,4			F2307380
	07330	0	02000	0	07315	TRA	PR90			F2307390
	07331	0	07400	4	07564	PR100	TSX	TINFOR,4	LOOK FOR ALREADY PROCESSED IDENT FORTAG.	F2307400
	07332	0	02000	0	07315	TRA	PR90		FOUND.	F2307410
	07333	-0	53400	2	06667	LXD	L(2),2		NOT FOUND, MAKE A TYPE 1 TRASTO	F2307420
	07334	0	07400	4	07336	TSX	TRAENT,4		ENTRY	F2307430
	07335	0	02000	0	07315	TRA	PR90			F2307440
									MAKE A TRASTO ENTRY. TRASTO TYPE ONE ENTRY IS MADE WHEN	F2307450

B IS ONE OR TWO, TYPE FIVE ENTRY WHEN B IS THREE, AND TYPE SIX TRASTO ENTRY WHEN B IS ZERO.

07336	-0	63400	4	07375	TRAENT	SXD	TE70,4		F2307460
07337	-0	53400	1	07262		LXD	DOX,1		F2307470
07340	0	50000	1	06377		CLA	DOTAGZ,1	GET DOTAGS ALPHA AND BETA	F2307480
07341	-3	00002	2	07343		TXL	TE10,2,2	WHERE B IS 3 (TYPE5)	F2307490
07342	-0	76000	0	00003		SSM		SET E1 NEG.	F2307510
07343	0	60100	0	07656	TE10	STO	E1	AND STORE IN E1.	F2307520
07344	0	50000	0	06645		CLA	TL2	GET LEVEL OF DOTAG	F2307530
07345	0	77100	0	00022		ARS	18	INTO ADDRESS AND	F2307540
07346	3	00000	2	07350		TXH	TE20,2,0	WHERE B ZERO (TYPE 6),	F2307550
07347	-0	76000	0	00003		SSM		SET NEG AND	F2307560
07350	0	60100	0	07657	TE20	STO	E2	PUT IT INTO E2.	F2307570
07351	-3	00001	2	07361		TXL	TE40,2,1	WHERE B 2OR3 (TYPE 1 OR 5),	F2307580
07352	0	50000	1	06407		CLA	DOTAGZ+8,1	PREPARE DOTAGS	F2307590
07353	-0	32000	0	06704		ANA	DECMASK	TEST NAME .	F2307600
07354	3	00002	2	07357		TXH	TE30,2,2	IF B 2 (TYPE 1)	F2307610
07355	-0	50100	0	06626		ORA	TAG	PREPARE FORTAG INDEX AND	F2307620
07356	0	02000	0	07367		TRA	TE60	GO TO STORE IN E3.	F2307630
07357	-0	50100	1	06401	TE30	ORA	DOTAGZ+2,1	WHERE B IS 3, (TYPE 3) PREPARE DOTAGS	F2307640
07360	0	02000	0	07366		TRA	TE50	PARAMETER N1.	F2307650
07361	0	50000	0	06626	TE40	CLA	TAG	WHERE B ZERO OR 1 (TYPE 1), GET FORTAG	F2307660
07362	-3	00000	2	07366		TXL	TE50,2,0	AND WHEN ONE,	F2307670
07363	0	76700	0	00022		ALS	18	PUT IN DEC WITH	F2307680
07364	0	40000	0	06627		ADD	TS	NEW TAG NAME IN ADDRESS.	F2307690
07365	0	02000	0	07367		TRA	TE60		F2307700
07366	-0	76000	0	00003	TE50	SSM		SET MINUS FOR B ZERO OR 3 (TYPE 6OR5)	F2307710
07367	0	60100	0	07660	TE60	STO	E3	AND STORE IN E3, FINALLY.	F2307720
07370	-0	50000	0	07663		CAL	TRASTO	GET TRASTO KEY WORD.	F2307730
07371	-0	53400	2	06667		LXD	L(2),2	INDICATE TINFOR SEARCH NOT REQUIRED	F2307740
07372	-0	53400	4	06656		LXD	SKIP,4		F2307750
07373	3	00000	4	07376		TXH	TE80,4,0	IF SKIP IS 1 (DELTA GREATER THEN B),	F2307760
07374	0	07400	4	07401		TSX	SPC000,4	GO TO SPC.	F2307770
07375	-3	00000	0	07377	TE70	TXL	TE90,0	(DEC SAVES TSXLINK)	F2307780
07376	0	07400	4	07620	TE80	TSX	LIST,4	GO TO LIST KF SKIP IS ZERO.	F2307790
07377	-0	53400	4	07375	TE90	LXD	TE70,4	RETURN FROM LIST.	F2307800
07400	0	02000	4	00001		TRA	1,4	RETURN TO CALLER.	F2307810
							SUBROUTINE SPC000		F2307820
07401	-0	63400	1	07473	SPC000	SXD	SPC115,1	SAVE INDEX OF DO TO BE SEARCHED.	F2307830
07402	-0	63400	2	07446		SXD	SPC060,2	SAVE TINFOR, LIST INDICATOR	F2307840
07403	-0	63400	4	07463		SXD	SPC105,4	SAVE TSX INDEX.	F2307850
07404	0	60100	0	07512		STO	SPCKEY	SAVE LIST KEY WORD	F2307860
07405	0	50000	1	06404		CLA	DOTAGZ+5,1	OBTAIN L WORD	F2307870
07406	0	62200	0	07423		STD	SPC050	INITIALIZE TEST INSTR.	F2307880
07407	0	50000	1	06377		CLA	DOTAGZ,1	OBTAIN ALPHABETA WRD,	F2307890
07410	0	73400	2	00000		PAX	0,2	SAVE BETA,	F2307900
07411	-0	32000	0	06704		ANA	DECMASK	OBTAIN ALPHA ALONE	F2307910
07412	0	60100	0	06660		STO	NEXTA	STO IN NEXTA	F2307920
07413	0	60100	0	06662		STO	A	AND STORE IN A.	F2307930
07414	-0	75400	2	00000		PXD	0,2	PUT BETA IN LASTB AND	F2307940
07415	0	60100	0	06661		STO	LASTB	BEGIN SEARCH FOR R2	F2307950
07416	-0	53400	1	07473	SPC010	LXD	SPC115,1	OBTAIN CURRENT INDEX AND	F2307960
07417	1	77767	1	07420	SPC020	TXI	SPC040,1,-9	GO DOWN ONE DO, IF POSSIBLE, ELSE	F2307970
07420	-3	00000	1	07464	SPC040	TXL	SPC110,1	GO TO SET UP LAST INTERVAL. (DEC HAS DOTAG IX)	F2307980
									F2307990

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	07421	0	50000	1	06404		CLA DOTAGZ+5,1	TEST WHETHER OR NOT THIS DO	F2308000
	07422	-0	73400	2	00000		PDX 0,2	IS IN RANGE OF R1(DXL)	F2308010
D	07423	-3	00000	2	07464	SPC050	TXL SPC110,2	IF NOT, EXIT FOR LAST INTRVL. (DEC LEV DO)	F2308020
	07424	0	50000	1	06400		CLA DOTAGZ+1,1	IF IN R1, IS THIS DO TO BE	F2308030
	07425	0	40200	0	06634		SUB RSYM3	SKIPPED. IF NOT, GO BACK TO	F2308040
	07426	0	10000	0	07432		TZE SPC053	GET NEXT DO.	F2308050
	07427	0	50000	1	06400		CLA DOTAGZ+1,1		F2308060
	07430	0	40200	0	06633		SUB RSYM2		F2308070
	07431	-0	10000	0	07417		TNZ SPC020		F2308080
	07432	0	50000	1	06377	SPC053	CLA DOTAGZ,1	R2 FOUND, ARRANGE TO SKIP THIS	F2308090
	07433	0	73400	2	00000		PAX 0,2	INTERVAL. USE ALPHA OF R2	F2308100
	07434	-0	32000	0	06704		ANA DECMASK	AS B, PUT BETA OF R2 IN	F2308110
	07435	0	60100	0	06663		STO B	NEXTA.	F2308120
	07436	-0	75400	2	00000		PXD 0,2	DO FORMULAS WITHIN R2 ARE	F2308130
	07437	0	60100	0	06660		STO NEXTA	ACCOUNTED FOR AFTER SEARCH.	F2308140
	07440	-0	63400	1	07473		SXD SPC115,1	SAVE INDEX OF R2.	F2308150
	07441	-0	53400	2	07446	SPC055	LXD SPC060,2	PUT TINFOR, LIST IND. IN XRB	F2308160
	07442	0	50000	0	06662	SPC058	CLA A	FOR	F2308170
	07443	0	40200	0	06663		SUB B	NON EMPTY	F2308180
	07444	0	10000	0	07447		TZE SPC065	INTERVALS,	F2308190
	07445	-3	00001	2	07500		TXL SPCTIN,2,1	GO TO ARRANGE TINFOR SEARCH, OR	F2308200
D	07446	-3	00000	0	07503	SPC060	TXL SPCST0,0	TRA TO USE LIST. (DEC HAS TINFOR SEARCH INDIC)	F2308210
	07447	-0	53400	2	07446	SPC065	LXD SPC060,2	RETURN HERE, TEST TINFOR	F2308220
	07450	-3	00000	2	07474		TXL SPC120,2,0	LIST IND. IF ZERO, EXIT.	F2308230
	07451	-0	53400	1	07473	SPC070	LXD SPC115,1	TO SET UP NEXT INTERVAL,	F2308240
	07452	0	50000	1	06404		CLA DOTAGZ+5,1	OBTAIN INDEX OF LAST R2 AND	F2308250
	07453	0	62200	0	07460		STD SPC100	STEP DOWN IN DOTAG BY USUAL	F2308260
	07454	1	77767	1	07455	SPC080	TXI SPC090,1,-9	PROCEDURE UNTIL SOME DO IS	F2308270
D	07455	-3	00000	1	07464	SPC090	TXL SPC110,1	FOUND NOT IN R2, OR UNTIL (DEC HAS DOTAG TX)	F2308280
	07456	0	50000	1	06404		CLA DOTAGZ+5,1	DOTAG EXHAUSTED. IF DO FOUND	F2308290
	07457	-0	73400	2	00000		PDX 0,2	NOT IN R2, SET A AND GO TO TEST	F2308300
D	07460	3	00000	2	07454	SPC100	TXH SPC080,2	IF THIS DO IS IN R1. (DEC HAS LEV LAST R2 DO)	F2308310
	07461	0	50000	0	06660		CLA NEXTA	IF IT IS, NEWR2 WILL BE FOUND	F2308320
	07462	0	60100	0	06662		STO A	OR EXIT MADE TO SPC110.	F2308330
D	07463	-3	00000	0	07423	SPC105	TXL SPC050,0		F2308340
	07464	0	50000	0	06660	SPC110	CLA NEXTA	THIS IS SETUP FOR LAST	F2308350
	07465	0	60100	0	06662		STO A	INTERVAL. FOR A, USE	F2308360
	07466	0	50000	0	06661		CLA LASTB	CONTENTS OF NEXTA. FOR B,	F2308370
	07467	0	60100	0	06663		STO B	USE BETA OF R1, FOUND IN	F2308380
	07470	-0	53400	2	07446		LXD SPC060,2	LASTB. OBTAIN TINFOR, STOTAG	F2308390
	07471	0	50000	0	06665		CLA L(0)	IND, AND SET LOCATION OF	F2308400
	07472	0	62200	0	07446		STD SPC060	INDICATOR TO ZERO. GO TO	F2308410
D	07473	-3	00000	0	07442	SPC115	TXL SPC058,0	TINFOR OR TRASTO. (DEC HAS DOTAG IX)	F2308420
	07474	-0	53400	4	07463	SPC120	LXD SPC105,4	EXIT, ALL STORES DONE, OR,	F2308430
	07475	0	02000	4	00001		TRA 1,4	SEARCH MADE, T NOT FOUND.	F2308440
	07476	-0	53400	4	07463	SPC130	LXD SPC105,4	EXIT,T FOUND	F2308450
	07477	0	02000	4	00002		TRA 2,4	IN SOME INTERVAL	F2308460
	07500	0	07400	4	07572	SPCTIN	TSX TINFXX,4	GO TO SEARCH FORTAG	F2308470
	07501	0	02000	0	07476		TRA SPC130	T FOUND	F2308480
	07502	0	02000	0	07447		TRA SPC065	T NOT FOUND	F2308490
	07503	0	50000	0	06663	SPCST0	CLA B	FOR TRASTO, E2 AND E3 ARE	F2308500
	07504	0	77100	0	00022		ARS 18	ALREADY SET UP, COLLECT	F2308510
	07505	0	40000	0	06662		ADD A	A AND B INTO E1 WORD,	F2308520
	07506	0	60100	0	07656		STO E1	PUT TRASTO INDICATOR IN	F2308530

	07507	0	50000	0	07512	CLA	SPCKEY	ACC.	AND	F2308540	
	07510	0	07400	4	07620	TSX	LIST,4	TSX	TO LISTING ROUTINE.	F2308550	
	07511	0	02000	0	07447	TRA	SPC065	ON	RETURN, GO TO TEST FINISH.	F2308560	
A	07512	0	00000	0	00000	SPCKEY	HTR	STORAGE	FOR TABLEKEY	F2308570	
								SUBROUTINE TRAWRD		F2308580	
	07513	-0	63400	4	07545	TRAWRD	SXD	TRAW65,4		F2308590	
	07514	0	50000	0	06665	CLA	L(0)			F2308600	
	07515	0	60100	0	06657	STO	TRABIT	INITIALIZE.		F2308610	
	07516	0	50000	1	06404	CLA	DOTAGZ+5,1	LEVEL	OF DOTAG	F2308620	
	07517	0	62200	0	07526	STD	TRAW30			F2308630	
	07520	-0	50000	1	06406	TRAW10	CAL	DOTAGZ+7,1	OBTAIN	T2 WORD.	F2308640
	07521	-0	60200	0	06657	ORS	TRABIT	OR	INTO TRABIT	F2308650	
	07522	1	77767	1	07523	TXI	TRAW20,1,-9	TAKE	NEXT DO	F2308660	
D	07523	-3	00000	1	07546	TRAW20	TXL	TRAW70,1	IF	NONE, EXIT (DEC HAS DOTAG IX)	F2308670
	07524	0	50000	1	06404	CLA	DOTAGZ+5,1	OBTAIN	L WORD	F2308680	
D	07525	-0	73400	4	00000	PDX	0,4	PUT	L IN XRC.	F2308690	
D	07526	-3	00000	4	07546	TRAW30	TXL	TRAW70,4	EXIT	IF DO IS NOT INRANGE R1 (DEC HAS LEV DO)	F2308700
	07527	-3	00001	2	07520	TXL	TRAW10,2,1	IF	COMPLETE TEST, GO BACK (NO TRAWORD SKIP)	F2308710	
	07530	0	50000	1	06400	TRAW35	CLA	DOTAGZ+1,1	IF	INCOMPLETE TEST, IS THIS A	F2308720
	07531	0	40200	0	06633	SUB	RSYM2	DO	TO BE SKIPPED	F2308730	
	07532	0	10000	0	07536	TZE	TRAW38	IF	SO, GO TO TRAW38	F2308740	
	07533	0	50000	1	06400	CLA	DOTAGZ+1,1	TEST	RSYM3	F2308750	
	07534	0	40200	0	06634	SUB	RSYM3	IF	NO SKIP	F2308760	
	07535	-0	10000	0	07520	TNZ	TRAW10	GO	BACK.	F2308770	
	07536	0	50000	1	06404	TRAW38	CLA	DOTAGZ+5,1	THIS	DO IS TO BE SKIPPED.	F2308780
	07537	0	62200	0	07544	STD	TRAW60	PUT	LEVEL OF THIS DO IN TEST INSTR,	F2308790	
	07540	1	77767	1	07541	TRAW40	TXI	TRAW50,1,-9	TAKE	NEXT DO IF ANY	F2308800
D	07541	-3	00000	1	07546	TRAW50	TXL	TRAW70,1	IF	NOT, EXIT. OTHERWISE, (DEC HAS DO IX)	F2308810
	07542	0	50000	1	06404	CLA	DOTAGZ+5,1	OBTAIN	L WORD	F2308820	
	07543	-0	73400	4	00000	PDX	0,4	PUT	L IN XRC	F2308830	
D	07544	3	00000	4	07540	TRAW60	TXH	TRAW40,4	IF	DO IS IN RANGE OF R2, GO BACK.	F2308840
D	07545	-3	00000	0	07526	TRAW65	TXL	TRAW30,0	OTHERWISE,	GO TO TRAW30	F2308850
	07546	-0	53400	4	07545	TRAW70	LXD	TRAW65,4		F2308860	
	07547	0	50000	0	06672	CLA	L(36)	OBTAIN	36 IN DECREMENT	F2308870	
	07550	0	40200	0	06645	SUB	TL2	36--TL2	(LEVEL OF DOTAG)	F2308880	
	07551	0	77100	0	00022	ARS	18	IN	ADDRESS	F23A1190	
	07552	0	62100	0	07561	STA	TRAW90	INITIALIZE	SHIFT	F2308900	
	07553	0	50000	0	06645	CLA	TL2	OBTAIN	TL2	F2308910	
	07554	0	77100	0	00022	ARS	18	IN	ADDRESS	F2308920	
	07555	0	62100	0	07560	STA	TRAW80	INITIALIZE	SHIFT	F2308930	
	07556	0	50000	0	06665	CLA	L(0)	ACC	CONTAINS ZERO	F2308940	
	07557	0	56000	0	06702	LDQ	35ONES	MQ	CONTAINS ALL ONES	F2308950	
A	07560	0	76300	0	00000	TRAW80	LLS	PUT	TL2 ONES IN ACC (LEV. DOTAG)	F2308960	
A	07561	0	76700	0	00000	TRAW90	ALS	POSITION	ONES IN ACC	F2308970	
	07562	-0	32000	0	06657	ANA	TRABIT	AND	IN TRANSFER BITS	F2308980	
	07563	0	02000	4	00001	TRA	1,4	GO	BACK TO CALLING INSTR PLUS ONE.	F2308990	
								SUBROUTINES TINFOR AND TINFXX		F2309000	
	07564	0	50000	1	06377	TINFOR	CLA	DOTAGZ,1	C(XRA)=INDEX	OF DO TO BE	F2309010
	07565	0	73400	1	00000	PAX	0,1	SEARCHED.	SEPARATE ALPHA	F2309020	
	07566	-0	32000	0	06704	ANA	DECMSK	AND	BETA	F2309030	
	07567	0	60100	0	06662	STO	A	AND	STORE IN A	F2309040	
	07570	-0	75400	1	00000	PXD	0,1			F2309050	
	07571	0	60100	0	06663	STO	B	B		F2309060	
	07572	-0	53400	1	06674	TINFXX	LXD	L(1500,1	PUT	MAX FORTAG INDEX IN XRA	F2309070

	07573	0	50000	1	03670	TINF10	CLA	FORTZ,1	OBTAIN FORTAG ENTRY	F2309080
	07574	-0	32000	0	06704		ANA	DECMASK	RETAIN FORMULA NUMBER ONLY	F2309090
	07575	0	34000	0	06662		CAS	A	COMPARE ALPHA AND FORMULA NR.	F2309100
	07576	0	02000	0	07603		TRA	TINF40	FOR, NR. GREATER THAN ALPHA. TRA.	F2309110
	07577	0	76100	0	00000		NOP		C(A) MAY BE SOME BETA FROM SPC, HENCE, NO HALT.	F2309120
	07600	1	77777	1	07601	TINF20	TXI	TINF30,1,-1	FOR. NR. LESS THAN ALPHA. GO	F2309130
									BACK FOR NEXT FORTAG ENTRY	F2309140
D	07601	3	00000	1	07573	TINF30	TXH	TINF10,1	IF POSSIBLE. OTHERWISE, (DEC HAS FORTAG IX)	F2309150
	07602	0	02000	4	00002		TRA	2,4	RETURN TO CALLING INSTR PLUS TWO.	F2309160
	07603	0	34000	0	06663	TINF40	CAS	B	COMPARE FOR, NR. WITH BETA	F2309170
	07604	0	02000	4	00002		TRA	2,4	FOR. NR. GREATER THAN BETA, EXIT.	F2309180
	07605	0	76100	0	00000		NOP		FOR. NR. EQUAL TO OR	F2309190
	07606	0	50000	1	03670		CLA	FORTZ,1	LESS THAN BETA, OBTAIN FORTAG	F2309200
	07607	0	12000	0	07600		TPL	TINF20	TAG AND COMPARE WITH SEARCH TAG.	F2309210
	07610	-0	32000	0	06703		ANA	ADDMSK	I.F. NOT EQUAL, GO BACK FOR NEXT TAG	F2309220
	07611	0	40200	0	06626		SUB	TAG		F2309230
	07612	-0	10000	0	07600		TNZ	TINF20	IF EQUAL, RETURN TO CALLING	F2309240
	07613	0	02000	4	00001		TRA	1,4	INSTR PLUS ONE. XRA CONTAINS IX IN FORTAG OF	F2309250
									FIRST TAG FOUND	F2309260
					06721	ORG	3537			F2309270
									MASTER RECORD CARD = FN043	F2309275
	06721	-0	53400	1	00733	BL3C	LXD	FORTAG-1,1	IF FORTAG IS EMPTY,	F2309280
	06722	3	02733	1	07164		TXH	WRTIRV,1,1499	GO TO WRITE IRV	F2309290
									READ IN TSXCOM	F2309300
	06723	-0	53400	4	06671	RDTSX	LXD	L(6),4	INITIALIZE ERROR COUNTER	F2309312
	06724	0	50000	0	07667	RTSX10	CLA	LADDS	COMPUTE NUMBER	F2309320
	06725	0	40200	0	06716		SUB	TSXORG	OF TSXCOM ENTRIES	F2309330
	06726	0	73400	1	00000		PAX	0,1	AND	F2309340
	06727	-0	63400	1	00030		SXD	TCOM-1,1	SAVE.	F2309350
	06730	0	10000	0	06763		TZE	RTSX60	IF EMPTY, GO TO EXIT.	F2309360
	06731	0	40000	0	06717		ADD	TCOMAD	OTHERWISE, COMPUTE TERMINAL CORE ADDRESS	F2309370
	06732	0	62100	0	06735		STA	RTSX20	AND INITIALIZE CPY ADDRESS THEREWITH.	F2309380
	06733	0	76200	0	00303		RDS	195	DRUM 3	F2309390
	06734	0	46000	0	06716		LDA	TSXORG	ORIG OF TSXCOM TABLES ON DRUM	F2309400
	06735	0	70000	1	00000	RTSX20	CPY	0,1	READ TSXCOM (ADD HAS TERM CORE ADD TSXCOMP	F2309410
	06736	2	00001	1	06735		TIX	RTSX20,1,1	TABLES .	F2309420
	06737	-0	53400	1	00030		LXD	TCOM-1,1	COMPUTE	F2309430
	06740	-0	75400	1	00000		PXD	0,1	NUMBER OF	F2309440
	06741	-0	76000	0	00003		SSM		UNFILLED TSXCOM TABLE	F2309450
	06742	0	40000	0	06720		ADD	TCOMAX	SPACES,	F2309460
	06743	0	60100	0	00030		STO	TCOM-1	SAVE,	F2309470
	06744	0	62200	0	06756		STD	RTSX30	AND INITIALIZE.	F2309480
	06745	-0	53400	1	06720		LXD	TCOMAX,1	COMPUTE	F2309490
	06746	-0	50000	1	01407	RTSX25	CAL	TCOMZ,1	CHECK	F2309500
	06747	0	36100	1	01410		ACL	TCOMZ+1,1	SUM FOR EACH TABLE ENTRY	F2309510
	06750	0	60200	0	06760		SLW	RTSX40	AND COMPARE	F2309520
	06751	0	50000	0	06760		CLA	RTSX40	AGAINST	F2309530
	06752	0	40200	1	01411		SUB	TCOMZ+2,1	GIVEN SUM.	F2309540
	06753	0	76100	0	00000		NOP			F2309550
	06754	-0	10000	0	06761		TNZ	RTSX50	ERROR.	F2309560
	06755	1	77775	1	06756		TXI	RTSX30,1,-3		F2309570
D	06756	3	00000	1	06746	RTSX30	TXH	RTSX25,1	IF COMPLETE, (DEC HAS UNUSED TSXCOM BUFFER)	F2309580
	06757	0	02000	0	06766		TRA	SORT	GO TO SORT.	F2309590
A	06760	0	00000	0	00000	RTSX40	HTR			F2309600

06761	2	00001	4	06724	RTSX50	TIX	RTSX10,4,1	GO BACK TO REREAD	F2309610
06762	0	07400	4	00004		TSX	DIAG,4	READING TSXCOM FROM DRUM3. ERROR. GO TO DIAGNOSTIC.	F2309625
06763	0	50000	0	06720	RTSX60	CLA	TCOMAX	IF TSXCOM EMPTY PUT MAX NO	F2309630
06764	0	60100	0	00030		STO	TCOM-1	TSXCOM ENTRIES IN KEY WORD AND	F2309640
06765	0	02000	0	07053		TRA	IRVSRT	EXIT.	F2309650
								SORT TSXCOM	F2309660
06766	-0	76000	0	00144	SORT	MSE	LIGHT	TURN OFF LIGHT	F2309670
06767	0	76100	0	00000		NOP			F2309680
06770	-0	53400	1	00030		LXD	TCOM-1,1	INITIALIZE	F2309690
06771	1	00003	1	06772		TXI	SORT10,1,3		F2309700
06772	3	01353	1	07034	SORT10	TXH	MAKIRV,1,747	IS THERE ONLY ONE ENTRY IN TSXCOM.	F2309710
06773	-0	63400	1	07025		SXD	SORT80,1	INITIALIZE	F2309720
06774	-0	53400	1	06720	SORT20	LXD	TCOMAX,1		F2309730
06775	0	50000	1	01407	SORT30	CLA	TCOMZ,1	OBTAIN FIRST WORD, FIRST ENTRY TSXCOM (ALPHA)	F2309740
06776	0	34000	1	01412		CAS	TCOMZ+3,1	COMPARE IT AGAINST SECOND ENTRY	F2309750
06777	0	02000	0	07007		TRA	SORT50	OUT OF ORDER, REARRANGE TOTAL TSXCOM ENTRY.	F2309760
07000	0	02000	0	07002		TRA	SORT40	IN ORDER BY FIRST WORDS. GO CHECK 2ND WORDS.	F2309770
07001	0	02000	0	07024		TRA	SORT70	ENTRIES IN ORDER, IGNORE.	F2309780
07002	0	50000	1	01410	SORT40	CLA	TCOMZ+1,1	ALRIGHT- FIRST WORDS IN ORDER BUT	F2309790
07003	0	34000	1	01413		CAS	TCOMZ+4,1	HOW DO THEIR 2ND WORDS COMPARE.	F2309800
07004	0	02000	0	07013		TRA	SORT60	IF OUT OF ORDER, GO TO REARRANGE.	F2309810
07005	0	02000	0	07024		TRA	SORT70	IF EQUAL OR	F2309820
07006	0	02000	0	07024		TRA	SORT70	IF IN ORDER, IGNORE.	F2309830
07007	0	50000	1	01407	SORT50	CLA	TCOMZ,1	FIRST ENTRY GREATER, OUT OF ORDER 1ST WORDS.	F2309840
07010	0	56000	1	01412		LDQ	TCOMZ+3,1	INTERCHANGE THE FIRST WORDS	F2309850
07011	0	60100	1	01412		STO	TCOMZ+3,1	OF THE	F2309860
07012	-0	60000	1	01407		STQ	TCOMZ,1	TWO ENTRIES.	F2309870
07013	0	50000	1	01410	SORT60	CLA	TCOMZ+1,1	INTERCHANGE	F2309880
07014	0	56000	1	01413		LDQ	TCOMZ+4,1	THE	F2309890
07015	0	60100	1	01413		STO	TCOMZ+4,1	SECOND	F2309900
07016	-0	60000	1	01410		STQ	TCOMZ+1,1	AND	F2309910
07017	0	50000	1	01411		CLA	TCOMZ+2,1	THIRD	F2309920
07020	0	56000	1	01414		LDQ	TCOMZ+5,1	WORDS	F2309930
07021	0	60100	1	01414		STO	TCOMZ+5,1	OF THE	F2309940
07022	-0	60000	1	01411		STQ	TCOMZ+2,1	TWO ENTRIES.	F2309930
07023	0	76000	0	00144		PSE	LIGHT	INDICATE OUT OF ORDER ENTRY HAS BEEN FOUND.	F2309960
07024	1	77775	1	07025	SORT70	TXI	SORT80,1,-3	BUMP FOR NEXT COMPARISON.	F2309970
07025	3	00000	1	06775	SORT80	TXH	SORT30,1	IS PASS COMPLETE. (DEC HAS UNUSED TSXCOM BUFF+3)	F2309980
07026	-0	76000	0	00144		MSE	LIGHT	YES. WAS OUT OF ORDER ENTRY APPREHENDED .	F2309990
07027	0	02000	0	07034		TRA	REMOVE	NO. GO TO MAKIRV.	F2310000
07030	-0	53400	1	07025		LXD	SORT80,1	YES. NUMBER OF COMPARISONS	F2310010
07031	1	00003	1	07032		TXI	SORT90,1,3	MADE IS DECREASED BY ONE	F2310020
07032	-0	63400	1	07025	SORT90	SXD	SORT80,1	ON EACH PASS.	F2310030
07033	0	02000	0	06774		TRA	SORT20		F2310040
								BUILD UP TABLE IRV FROM TSXCOM	F2310050
07034	-0	53400	2	06664	MAKIRV	LXD	IRVXX,2	(IX VALUE FOR NEXT IRV ENTRY)	F2310060
07035	-0	53400	1	00030		LXD	TCOM-1,1		F2310070
07036	-0	63400	1	07051		SXD	MAK50,1		F2310080
07037	-0	53400	1	06720		LXD	TCOMAX,1		F2310090
07040	-0	50000	1	01410	MAK10	CAL	TCOMZ+1,1	GET SECOND WORD OF TSXCOMP	F2310100
07041	-0	32000	0	06705		ANA	PREMSK	PULL OUT PREFIX.	F2310110
07042	-0	10000	0	07050		TNZ	MAK40	IS ANYTHING THERE.	F2310120
07043	0	50000	1	01410		CLA	TCOMZ+1,1		F2310130
07044	3	00000	2	07046		TXH	MAK20,2,0		F2310140

D

	07045	0	07400	4	00004		TSX	DIAG,4	TABLE	IRV	BUFFER FULL,	ERROR. GO TO DIAGNOSTIC.	F2310155
	07046	0	60100	2	06625	MAK20	STO	IRVZ,2			STORE IRV.		F2310160
	07047	1	77777	2	07050		TXI	MAK40,2,-1					F2310170
	07050	1	77775	1	07051	MAK40	TXI	MAK50,1,-3					F2310180
D	07051	3	00000	1	07040	MAK50	TXH	MAK10,1			IS TSXCOM TABLE EXHAUST (DEC HAS UNUSED TSXCOM)		F2310190
	07052	-0	63400	2	06664	MAK60	SXD	IRVXX,2			YES. SAVE INDICATION OF SIZE OF IRV.		F2310200
											SORT TABLE IRV.		F2310210
	07053	-0	53400	1	06664	IRVSRT	LXD	IRVXX,1					F2310220
	07054	1	00001	1	07055		TXI	IRVS10,1,1					F2310230
	07055	3	00225	1	07120	IRVS10	TXH	WRTTSX,1,149			IS THERE BUT ONE ENTRY IN IRV.		F2310240
	07056	-0	63400	1	07067		SXD	IRVS50,1					F2310250
	07057	-0	76000	0	00144		MSE	LIGHT			TURN OFF LITE.		F2310260
	07060	0	76100	0	00000		NOP						F2310270
	07061	-0	53400	1	06714	IRVS20	LXD	IRVMAX,1			INITIALIZE		F2310280
	07062	0	50000	1	06625	IRVS30	CLA	IRVZ,1			GET FIRST IRV ENTRY AND		F2310290
	07063	0	34000	1	06626		CAS	IRVZ+1,1			COMPARE AGAINST ITS NEIGHBOR.		F2310300
	07064	0	02000	0	07073		TRA	IRVS60			OUT OF ORDER. GO TO REARRANGE.		F2310310
	07065	0	76100	0	00000		NOP						F2310320
	07066	1	77777	1	07067	IRVS40	TXI	IRVS50,1,-1			BUMP FOR NEXT COMPARISON		F2310330
D	07067	3	00000	1	07062	IRVS50	TXH	IRVS30,1			IS PASS COMPLETE (DEC HAS IRV INDEX)		F2310340
	07070	-0	76000	0	00144		MSE	LIGHT			YES. WAS OUT OF ORDER NABBED.		F2310350
	07071	0	02000	0	07100		TRA	DELETE			NO. SORT COMPLETE.		F2310360
	07072	0	02000	0	07061		TRA	IRVS20			YES. MAKE ANOTHER PASS.		F2310370
	07073	0	56000	1	06626	IRVS60	LDQ	IRVZ+1,1			REARRANGE		F2310380
	07074	0	60100	1	06626		STO	IRVZ+1,1			THE OUT OF ORDER		F2310390
	07075	-0	60000	1	06625		STQ	IRVZ,1			IRV ENTRIES AND		F2310400
	07076	0	76000	0	00144		PSE	LIGHT			INDICATE SAME.		F2310410
	07077	0	02000	0	07066		TRA	IRVS40					F2310420
											DELETE DUPE ENTRIES FROM TABLE IRV		F2310430
	07100	-0	53400	1	06664	DELETE	LXD	IRVXX,1					F2310440
	07101	-0	63400	1	07112		SXD	DEL30,1			INITIALIZE		F2310450
	07102	-0	53400	3	06714		LXD	IRVMAX,3			INITIALIZE CANDIDATE IR AND STANDARD IR		F2310460
	07103	2	00001	2	07104		TIX	DEL10,2,1			BUMP CANDIDATE IR.		F2310470
	07104	0	50000	2	06625	DEL10	CLA	IRVZ,2			GET CANDIDATE.		F2310480
	07105	0	34000	1	06625		CAS	IRVZ,1			COMPARE AGAINST STANDARD.		F2310490
	07106	0	02000	0	07116		TRA	DEL40			CANDIDATE DOES NOT MATCH STANDARD.		F2310500
	07107	0	02000	0	07111		TRA	DEL20			CAND MATCHES STAND. IGNORE ITS REINSTATEMENT.		F2310510
	07110	0	07400	4	00004		TSX	DIAG,4	IRV	UNORDERED DESPITE SORT.	ERROR. GO TO DIAGNOSTIC.		F2310523
	07111	1	77777	2	07112	DEL20	TXI	DEL30,2,-1			BUMP FOR NEXT CANDIDATE.		F2310530
D	07112	3	00000	2	07104	DEL30	TXH	DEL10,2			IS IT END OF PASS. (DEC HAS IRV INDEX)		F2310540
	07113	1	77777	1	07114		TXI	DEL35,1,-1			YES. BUMP STANDARD IR.		F2310550
	07114	-0	63400	1	06664	DEL35	SXD	IRVXX,1			SAVE NEW EDITED-IRV TABLE-SIZE INDICATION.		F2310560
	07115	0	02000	0	07120		TRA	WRTTSX					F2310570
	07116	0	60100	1	06626	DEL40	STO	IRVZ+1,1			NOT DUPE, PUT CANDIDATE BACK.		F2310580
	07117	1	77777	1	07111		TXI	DEL20,1,-1			AND INSTALL IT AS STANDARD.		F2310590
											WRITE EDITED TSXCOM TABLE ON DRUM		F2310600
	07120	0	76600	0	00303	WRTTSX	WRS	ADRUM					F2310610
	07121	-0	53400	1	00030		LXD	TCOM-1,1			INITIALIZE		F2310620
	07122	-0	63400	1	07133		SXD	WTSX30,1					F2310630
	07123	-0	53400	1	06720		LXD	TCOMAX,1					F2310640
	07124	-0	75400	0	00000		PXD	0,0					F2310650
	07125	-0	53400	2	06665		LXD	L(0),2					F2310660
	07126	0	02000	0	07133		TRA	WTSX30					F2310670
	07127	0	36100	1	01407	WTSX10	ACL	TCOMZ,1			COMPUTE		F2310680

	07130	0	36100	1	01410	ACL	TCOMZ+1,1	CHECK SUM OF ALL ENTRIES	F2310690
	07131	1	77775	1	07132	TXI	WTSX20,1,-3		F2310700
	07132	1	00002	2	07133	WTSX20 TXI	WTSX30,2,2		F2310710
D	07133	3	00000	1	07127	WTSX30 TXH	WTSX10,1	IS THAT ALL OF TSXCOM. (DEC HAS TSXCOM LIMIT)	F2310720
	07134	0	60200	0	07163	SLW	WTSX60	STORE CHECK SUM.	F2310730
	07135	-0	53400	1	00030	LXD	TCOM-1,1	COMPUTE	F2310740
	07136	-0	75400	1	00000	PXD	0,1	NUMBER	F2310750
	07137	-0	76000	0	00003	SSM		OF	F2310760
	07140	0	40000	0	06720	ADD	TCOMAX	TSXCOM	F2310770
	07141	-0	73400	1	00000	PDX	0,1	ENTRIES.	F2310780
	07142	0	77100	0	00022	ARS	18	COMPUTE CORE	F2310790
	07143	0	40000	0	06717	ADD	TCOMAD	TERMINUS	F2310800
	07144	0	62100	0	07155	STA	WTSX40	AND INITIALIZE CPY ADDRESS FOR FIRST WORD,	F2310810
	07145	0	40000	0	06675	ADD	L(1)A	FOR SECOND	F2310820
	07146	0	62100	0	07156	STA	WTSX50	WORD.	F2310830
	07147	-0	75400	2	00000	PXD	0,2		F2310840
	07150	0	60100	0	00030	STO	TCOM-1	NOW CONTAINS NO OF TSXCOM ENTRIES MINUS C.S.	F2310850
	07151	0	46000	0	06715	LDA	TCOMOR		F2310860
	07152	0	70000	0	00030	CPY	TCOM-1	CPY WORD COUNT	F2310870
	07153	0	70000	0	00030	CPY	TCOM-1	ONTO DRUM	F2310880
	07154	-3	00000	2	07164	TXL	WRTIRV,2,0	IF EMPTY, EXIT.	F2310890
	07155	0	70000	1	00000	WTSX40 CPY	0,1	WRITE TSXCOM ENTRIES	F2310900
	07156	0	70000	1	00000	WTSX50 CPY	0,1	ONTO DRUM	F2310910
	07157	2	00003	1	07155	TIX	WTSX40,1,3		F2310920
	07160	0	70000	0	07163	CPY	WTSX60	CHECKSUM	F2310930
	07161	0	70000	0	07163	CPY	WTSX60		F2310940
	07162	0	02000	0	07164	TRA	WRTIRV		F2310950
A	07163	0	00000	0	00000	WTSX60 HTR		C.S. STORAGE	F2310960
	07164	0	76600	0	00303	WRTIRV WRS	ADRUM	WRITE EDITED TABLE IRV ON DRUM	F2310970
	07165	-0	53400	1	06664	LXD	IRVXX,1		F2310980
	07166	-0	63400	1	07173	SXD	WIRV20,1	INITIALIZE TEST INSTR.	F2311000
	07167	-0	75400	0	00000	PXD	0,0		F2311010
	07170	-0	53400	1	06714	LXD	IRVMAX,1		F2311020
	07171	0	36100	1	06625	WIRV10 ACL	IRVZ,1	COMPUTE CHECK SUM.	F2311030
	07172	1	77777	1	07173	TXI	WIRV20,1,-1		F2311040
D	07173	3	00000	1	07171	WIRV20 TXH	WIRV10,1	IS IRV DONE FOR. (DEC HAS IRV IX)	F2311050
	07174	0	60200	0	07217	SLW	WIRV40	YES. SAVE C.S.	F2311060
	07175	-0	53400	1	06664	LXD	IRVXX,1	COMPUTE	F2311070
	07176	-0	75400	1	00000	PXD	0,1	NUMBER	F2311080
	07177	-0	76000	0	00003	SSM		OF	F2311090
	07200	0	40000	0	06714	ADD	IRVMAX	IRV ENTRIES	F2311100
	07201	0	60100	0	06664	STO	IRVXX	AND SAVE.	F2311110
	07202	-0	73400	1	00000	PDX	0,1	COMPUTE	F2311120
	07203	0	77100	0	00022	ARS	18	CORE TERMINUS	F2311130
	07204	0	40000	0	06713	ADD	IRVAD	OF IRV.	F2311140
	07205	0	62100	0	07212	STA	WIRV30	INITIALIZE CPY.	F2311150
	07206	0	46000	0	06712	LDA	IRVORG		F2311160
	07207	0	70000	0	06664	CPY	IRVXX	WRITE WORD	F2311170
	07210	0	70000	0	06664	CPY	IRVXX	COUNT.	F2311180
	07211	-3	00000	1	07220	TXL	END,1,0	EXIT IF IRV EMPTY.	F2311190
	07212	0	70000	1	00000	WIRV30 CPY	0,1	WRITE IRV.	F2311200
	07213	2	00001	1	07212	TIX	WIRV30,1,1		F2311210
	07214	0	70000	0	07217	CPY	WIRV40	WRITE	F2311220

	07215	0	70000	0	07217	CPY WIRV40	CHECK SUM.	F2311230
	07216	0	02000	0	07220	TRA END		F2311240
A	07217	0	00000	0	00000	WIRV40 HTR	C.S. STORAGE	F2311250
	07220	0	76600	0	00303	END WRS 195	WRITE NR OF WDS IN TRASTO ON DRUM.	F2311260
	07221	0	50000	0	07670	CLA LADDS+1	ORIGIN PLUS NR OF WDS IN TRASTO	F2311270
	07222	0	40200	0	07232	SUB L(304A	LESS ORIGIN OF TRASTO	F2311280
	07223	0	60100	0	07230	STO ENDES		F2311290
	07224	0	46000	0	07231	LDA L(302A		F2311300
	07225	0	70000	0	07230	CPY ENDES		F2311310
	07226	0	70000	0	07230	CPY ENDES		F2311320
	07227	0	02000	0	07616	TRA NORMRT	NORM RET MONITOR. GO TO SPACE TAPE 1	F2311335
A	07230	0	00000	0	00000	ENDES HTR		F2311340
	07231	0	00000	0	00456	L(302A HTR 302		F2311350
	07232	0	00000	0	00460	L(304A HTR 304		F2311360
					77777	TOP EQU 32767		F2311365
					00304	TAUDRM EQU 196		F2311370
					00303	ADRUM EQU 195		F2311380
					00302	BDRUM EQU 194		F2311390
					00222	TAPE2 EQU 146		F2311400
					00223	TAPE3 EQU 147		F2311410
					00144	LIGHT EQU 100	IF FORVAL EMPTY, LIGHT ON.	F2311420
					07034	REMOVE SYN MAKIRV		F2311430
					06377	IRV SYN DOTAGZ		F2311440
					00004	ONETCS EQU 4		F2311445
					00004	DIAG EQU 4		F2311446
A					00000	END		F2311450

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	1160	0	0	0	0
LIB	0	0	0	0	0
COL	1160	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 1169

NUMBER OF SYMBOLS, DEF 365,DEFOP 0,UNDEF 0
 REM BLOCK FOUR OF SECTION TWO.

BLOCK FOUR OF SECTION TWO.

MASTER RECORD CARD = FN045

BLOCK 4

THIS PART COMPILES THE SUBROUTINES WHICH COMPUTE INDEX LOAD VALUES FOR PURE RELCONS.

THE LOAD VALUE FOR SUBSCRIPTS (C1I,C2J,C3K) IS (C1I-1)+(C2D1J-D1)+(C3D1D2K-D1D2)+1

TABLE IRV, PRODUCED BY BLOCK 3, GIVES A LIST OF THE SUBROUTINES REQUIRED.

F2400000
 F2400005
 F2400010
 F2400020
 F2400030
 F2400040
 F2400050
 F2400060
 F2400070
 F2400080
 F2400090
 F2400100
 F2400110
 F2400120
 F2400130
 F2400140
 F2400150
 F2400160
 F2400170
 F2400180
 F2400190
 F2400200
 F2400210
 F2400220
 F2400230
 F2400240
 F2400250
 F2400260
 F2400270
 F2400280
 F2400290
 F2400300
 F2400310
 F2400320
 F2400330
 F2400340
 F2400350
 F2400360
 F2400370
 F2400380
 F2400390
 F2400400
 F2400410
 F2400420
 F2400430
 F2400440
 F2400450
 F2400460
 F2400470
 F2400480
 F2400490
 F2400500
 F2400510

		00030	ORG	24		
		00030	CIB	BSS	100	
		00174	WRKSC	BSS	8	
		00204	BOB	BSS	152	
		00434	OR000	BSS	28	
		00450		ORG	296	
M	00450	+0100000000001	OR012	OCT	0100000000001	
M	00451	+0600000000003	OR013	OCT	0600000000003	
		00456		ORG	302	
M	00456	+0100000000002	OR018	OCT	0100000000002	
		00466		ORG	310	
M	00466	+0100000000003	OR026	OCT	0100000000003	
	00467	0 00000 0 00000	HTR		0	
	00470	0 50000 0 01430	START1	CLA	L(1)	SAVE STATUS OF SENSE-LIGHT3
	00471	-0 76000 0 00143		MSE	99	SO THAT IT CAN BE USED
	00472	0 02000 0 00474		TRA	START	IN THIS BLOCK.
	00473	0 60100 0 01415		STO	SENSE1	
	00474	0 07400 4 00752	START	TSX	RDRM,4	READ TABLE IRV (BOB ALSO)
	00475	0 02000 0 00542		TRA	FINISH+9	RETURN HERE IF NO ENTRIES.
	00476	-0 53400 1 01007		LXD	1CNT,1	LOAD IRA WITH NO. OF IRV ENTRIES
	00477	0 07400 4 00710		TSX	INITFX,4	FORM END TEST FOR FIXC00 SEARCH
	00500	-0 53400 2 01427		LXD	L(0),2	BEGIN WITH FIRST TABLE BOB ENTRY.
	00501	0 50000 2 00204	REPETE	CLA	BOB,2	SELECT TABLE IRV ENTRY.
	00502	0 62100 0 01375		STA	NAME1	PUT SUBCOM NAME IN NAME 1.
	00503	0 77100 0 00022		ARS	18	PUT TAU REFERENCE
	00504	0 62100 0 01376		STA	TAG1	IN TAG1.
	00505	-0 63400 2 01414	ENTRY	SXD	BX,2	
	00506	-0 63400 1 01413		SXD	AX,1	
	00507	0 07400 4 01143		TSX	SUBCOM,4	READ TAU ENTRY FROM DRUM.
	00510	0 07400 4 00562		TSX	COMPIL,4	COMPILE SUBROUTINE FRO COMPUTING
	00511	-0 53400 2 01414		LXD	BX,2	LOAD VALUE.
	00512	-0 53400 1 01413		LXD	AX,1	
	00513	1 77777 2 00514		TXI	TEST,2,-1	STEP DOWN COUNT THROUGH TABLE IRV.
	00514	-2 00001 1 00531	TEST	TNX	FINISH,1,1	END OF TABLE IRV.
	00515	0 50000 2 00204		CLA	BOB,2	REDUNDANT.
	00516	0 07400 4 00735		TSX	LINKTR,4	COMPILE SUBROUTINE RETURN.
	00517	0 02000 0 00501		TRA	REPETE	
	00520	0 62100 0 01377		STA	TAG2	THE INSTRUCTIONS FROM HERE
	00521	0 40200 0 01376		SUB	TAG1	THROUGH
	00522	0 10000 0 00527		TZE	EQUAL	TRA ENTRY
	00523	0 07400 4 00735		TSX	LINKTR,4	ARE
	00524	0 50000 0 01377		CLA	TAG2	REDUNDANT.
	00525	0 60100 0 01376		STO	TAG1	
	00526	0 02000 0 00505		TRA	ENTRY	
	00527	0 07400 4 00674	EQUAL	TSX	STOTP,4	

00530	0	02000	0	00513	TRA	TEST-1		F2400520
00531	0	07400	4	00735	FINISH	TSX LINKTR,4	FORM LAST SUBROUTINE RETURN,	F2400530
00532	0	50000	0	01071		CLA FC08+1	FIXCON WORD COUNT	F2400540
00533	0	76600	0	00302		WRS 194		F2400550
00534	-0	32000	0	01424		ANA DECMSK	ADJUST FLXCON WRDCT	F2400560
00535	0	40000	0	01421		ADD L1DEC		F2400570
00536	0	77100	0	00021		ARS 17	WRITE FIXCON WORDCT AND	F2400580
00537	0	60100	0	01401		STO AD1	ITS CHECKSUM ON DRUM, IN	F2400590
00540	0	70000	0	01401		CPY AD1	ITS ORIGINAL POSITION, AT THE	F2400600
00541	0	70000	0	01401		CPY AD1	BEGINNING.	F2400610
00542	0	07400	4	01021		TSX CITSP,4	WRITE CIT BUFFER ON TAPE	F2400620
00543	0	77000	0	00222		WEF 146	WRITE E.O.F. ONCIT TAPE	F2400630
00544	0	76600	0	00222		WRS 146		F2400640
00545	0	70000	0	01400		CPY RECCNT	WRITE CIT RECORDCOUNT AND	F2400650
00546	0	70000	0	01400		CPY RECCNT	CHECKSUM ON CIT TAPE	F2400660
00547	0	77000	0	00222		WEF 146	WRITE E.O.F. ON CIT TAPE.	F2400670
00550	0	53400	1	01400		LXA RECCNT,1	BACKSPACE CIT TAPE	F2400680
00551	1	00003	1	00552		TXI BST,1,3	UNTIL 1ST CIT RECORD	F2400690
00552	0	76400	0	00222	BST	BST 146	THAT THIS BLOCK COMPILED.	F2400700
00553	2	00001	1	00552		TIX BST,1,1		F2400710
00554	0	76000	0	00140		PSE 96	TURN OFF ALL SENSE LIGHTS.	F2400720
00555	0	50000	0	01415		CLA SENSE1	RESET LIGHT 3 TOOTHE STATUS	F2400730
00556	0	10000	0	00560		TZE END	IT HELD BEFORE THE	F2400740
00557	0	76000	0	00143		PSE 99	COMMENCEMENT OF THIS BLOCK.	F2400750
00560	0	76200	0	00221	END	RDS 145	SKIP OVER DIAGNOSTIC RECORD ON SYSTEM TAPE	
00561	0	02000	0	00004		TRA 4		
00562	-0	63400	1	01402	COMPIL	SXD 1XB0X,1		F2400770
00563	-0	63400	2	01403		SXD 2XB0X,2		F2400780
00564	-0	63400	4	01012		SXD LINK1,4	SAVE LINKAGE	F2400790
00565	0	76000	0	00140		PSE 96	TURN ALL SENSE LIGHTS OFF	F2400800
00566	0	07400	4	01240		TSX COSE,4	OBTAIN NAME OF IOEFF. IN FIXCON.	F2400810
00567	0	50000	0	01426		CLA L(CLA)		F2400820
00570	0	60100	0	01051		STO CIL01	THIS ROUTINE COMPILES	F2400830
00571	0	50000	0	00451		CLA OR000+13	THE INSTRUCTION	F2400840
00572	-0	32000	0	01422		ANA 6ONES		F2400850
00573	0	60100	0	01052		STO CIL02	CLA 6)+3,	F2400860
00574	0	50000	0	01432		CLA L(3)	WITH ZERO TAG,	F2400870
00575	0	76700	0	00022		ALS 18		F2400880
00576	0	60100	0	01053		STO CIL03	TOGETHER WITH A SYMBOLIC	F2400890
00577	0	50000	0	01375		CLA NAME1	LOCATION OF	F2400900
00600	-0	50100	0	01420		ORA BCD10		F2400910
00601	0	60100	0	01050	STOLOC	STO CIL00	10)+NAME1	F240A920
00602	0	07400	4	01015		TSX CIT,4	ENTER INSTR. IN CIT	F2400930
00603	0	50000	0	01425		CLA L(STO)		F2400940
00604	0	60100	0	01051		STO CIL01	THIS ROUTINE COMPILES THE	F2400950
00605	0	50000	0	00466		CLA OR000+26	INSTRUCTION.	F2400960
00606	0	73400	1	00000		PAX 0,1		F2400970
00607	-0	32000	0	01422		ANA 6ONES	STO 1)+3	F2400980
00610	-0	63400	1	01053		SXD CIL03,1	THESE COMPILED INSTR. PLACE	F2400990
00611	0	60100	0	01052		STO CIL02	1 IN ERASABLE STORAGE	F2401000
00612	-0	75400	0	00000		PXD 0		F2401010
00613	0	60100	0	01050		STO CIL00		F2401020
00614	0	07400	4	01015		TSX CIT,4	ENTER INSTR. IN CIT	F2401030
00615	0	50000	0	00175		CLA WRKSC+1	TEST 1ST SUBSCRIPT SYMBOL	F2401040

00616	0	10000	0	00630	TZE S2	NO SYMBOL PRESENT	F2401050
00617	0	60100	0	00435	STO OR000+1	SAVE S1 FOR LXC ROUTINE	F2401060
00620	0	53400	1	01433	LXA L(4),1	INDEX FOR NO. OF COMPILED INSTR.	F2401070
00621	-0	76000	0	00141	MSE 97	DOES 1ST COEFF EXCEED 1	F2401080
00622	0	02000	0	00624	TRA COMP20	NO	F2401090
00623	1	00002	1	00626	TXI COMP30,1,2	YES. 6 INSTR. TO BE COMPILED	F2401100
00624	0	50000	0	01436	COMP20 CLA KLX02	NO. COMPILE INSTR TO COMPUTE	F2401110
00625	0	02000	0	00627	TRA COMP30+1	S1-1+(1 ALREADY IN ERASABLE)	F2401120
00626	0	50000	0	01437	COMP30 CLA KLX021	YES. COMPILE C1A1-1	F2401130
00627	0	07400	4	01257	TSX LXC,4	+(1 AREADY IN ERASABLE)	F2401140
00630	0	50000	0	00177	S2 CLA WRKSC+3		F2401150
00631	0	10000	0	00645	TZE S3	TRA IF NO 2ND SUBSC, SYMBOL	F2401160
00632	0	60100	0	00440	STO OR000+4	SAVE S2 FOR LXC ROUTINE.	F2401170
00633	0	50000	0	00202	CLA WRKSC+6	OBTAIN SYMBOLIC ADDRESS	F2401180
00634	0	07400	4	01054	TSX FIXCON,4	OF D1 IN FIXCON TABLE	F2401190
00635	0	60100	0	00443	STO OR000+7	AND STORE FOR LXC ROUTINE.	F2401200
00636	0	53400	1	01435	LXA L(6),1	6 INSTR. TO BE COMPILED	F2401210
00637	-0	76000	0	00142	MSE 98	IS COEFF. C2 GREATER THAN 1,	F2401220
00640	0	02000	0	00643	TRA COMP40	NO. COMPILE D1*S2-D1+	F2401230
00641	0	50000	0	01440	CLA KLX03	YES. 8 INSTR. COMPILED TO	F2401240
00642	1	00002	1	00644	TXI COMP40+1,1,2	COMPUTE D1*S2*C3-D1+	F2401250
00643	0	50000	0	01441	COMP40 CLA KLX031		F2401260
00644	0	07400	4	01257	TSX LXC,4	+ THAT ALREADY COMPUTED.	F2401270
00645	0	50000	0	00201	S3 CLA WRKSC+5	TEST FOR 3RD SUBSCRIPT	F2401280
00646	0	10000	0	00664	TZE COMP55	SYMBOL.	F2401290
00647	0	60100	0	00461	STO OR000+21	STORE FOR LXC ROUTINE.	F2401300
00650	0	56000	0	00202	LDQ WRKSC+6	COMPUTE D1*D2,	F2401310
00651	0	20000	0	00203	MPY WRKSC+7	AND OBTAIN	F2401320
00652	0	76700	0	00021	ALS 17	NAME FOR THIS CONSTANT FROM	F2401330
00653	0	07400	4	01054	TSX FIXCON,4	FIXCON, AND STORE FOR	F2401340
00654	0	60100	0	00464	STO OR000+24	LXC ROUTINE.	F2401350
00655	0	53400	1	01435	LXA L(6),1	6 INSTR. TO BE COMPILED	F2401360
00656	-0	76000	0	00143	MSE 99	IS 3RD COEFF GREATER THAN 1.	F2401370
00657	0	02000	0	00662	TRA COMP50	NO. COMPILE D1D2*S3-D1D2+	F2401380
00660	0	50000	0	01442	CLA KLX05	YES, COMPILE D1D2*C3S3-D1D2+	F2401390
00661	1	00002	1	00663	TXI COMP50+1,1,2		F2401400
00662	0	50000	0	01443	COMP50 CLA KLX051		F2401410
00663	0	07400	4	01257	TSX LXC,4	+ THAT ALREADY COMPUTED.	F2401420
00664	-0	53400	4	01045	COMP55 LXD BBOX,4		F2401430
00665	1	00004	4	00666	TXI COMP55+2,4,4	STEP UP CIT BUFFER COUNT	F2401440
00666	-0	63400	4	01045	SXD BBOX,4		F2401450
00667	0	07400	4	00674	TSX STOTP,4	COMPILE INSTRUCTION TO STORE	F2401460
00670	-0	53400	1	01402	LXD 1XB0X,1	LOADING VALUE FOR SUBSCRIPT COMB.	F2401470
00671	-0	53400	2	01402	LXD 1XB0X,2		F2401480
00672	-0	53400	4	01012	LXD LINK1,4		F2401490
00673	0	02000	4	00001	TRA 1,4	RETURN	F2401500
00674	-0	63400	4	01404	STOTP SXD LINK2,4	ROUTINE COMPILES THE INSTR.	F2401510
00675	0	50000	0	01427	CLA L(0)	TO STORE THE RESULTS OF	F2401520
00676	0	60100	0	01050	STO CIL00	THE SUBROUTINE COMPILATION IN	F2401530
00677	0	60100	0	01053	STO CIL03	THE TAG NAME.	F2401540
00700	0	50000	0	01425	CLA L(STO)	THIS INSTRUCTION IS	F2401550
00701	0	60100	0	01051	STO CIL01		F2401560
00702	0	50000	0	01375	CLA NAME1	STO 12)+ NAME1	F2401570
00703	-0	50100	0	01417	ORA BCD14		F2401580

00704	0	60100	0	01052		STO	CIL02			F2401590
00705	0	07400	4	01015		TSX	CIT,4	ENTER	IN CIT TABLE	F2401600
00706	-0	53400	4	01404		LXD	LINK2,4			F2401610
00707	0	02000	4	00001		TRA	1,4	RETURN		F2401620
								ROUTINE FORMS END	TEST FOR FIXCON SEARCH ROUTINE	F2401630
00710	0	53400	2	01434	INITFX	LXA	L(5),2	LOAD	READING ERROR COUNTER.	F2401640
00711	0	76200	0	00302	C1	RDS	194			F2401650
00712	0	70000	0	01007		CPY	1CNT	READ	FIXCON WD.CT	F2401660
00713	0	70000	0	01010		CPY	2CNT	AND	ITS CHECKSUM	F2401670
00714	0	50000	0	01007		CLA	1CNT			F2401680
00715	0	40200	0	01010		SUB	2CNT	TEST	FOR READING ERROR.	F2401690
00716	-0	10000	0	00733		TNZ	C6	ERROR.		F2401700
00717	0	50000	0	01007		CLA	1CNT	IS	FIXCON EMPTY.	F2401710
00720	0	10000	0	00725		TZE	C4	YES		F2401720
00721	0	40200	0	01431		SUB	L(2)			F2401730
00722	0	76700	0	00021		ALS	17	STORE	END TEST IN	F2401740
00723	0	62200	0	01071	C2	STD	FC08+1	FIXCON	SEARCH ROUTINE	F2401750
00724	0	02000	4	00001		TRA	1,4	RETURN	TO MAIN ROUTINE.	F2401760
00725	0	76200	0	00302	C4	RDS	194	FIXCON	IS EMPTY.	F2401770
00726	0	70000	0	01427		CPY	L(0)	SET	FIRST FOUR LOCATIONS	F2401780
00727	0	70000	0	01427		CPY	L(0)	TO		F2401790
00730	0	70000	0	01427		CPY	L(0)	ZERO.		F2401800
00731	0	70000	0	01427		CPY	L(0)			F2401810
00732	0	02000	0	00723		TRA	C2	STORE	ZERO AS END TEST	F2401820
00733	2	00001	2	00711	C6	TIX	C1,2,1	ERROR.	TRY TO READ 3 TIMES.	F2401830
00734	0	07400	4	00004		TSX	DIAG,4	DRUM	2 READING ERROR FIVE TIMES.	F2401840
00735	0	50000	0	01427	LINKTR	CLA	L(0)			F2401850
00736	0	60100	0	01050		STO	CIL00	THIS	ROUTINE COMPILES	F2401860
00737	0	60100	0	01052		STO	CIL02	INSTRUCTION	FOR RETURN	F2401870
00740	0	50000	0	00750		CLA	L(TRA)	TO	THE FORTRAN MASTER	F2401880
00741	0	60100	0	01051		STO	CIL01	ROUTINE.		F2401890
00742	0	50000	0	00751		CLA	RELTG	TRA1,4		F2401900
00743	0	60100	0	01053		STO	CIL03			F2401910
00744	-0	63400	4	01012		SXD	LINK1,4			F2401920
00745	0	07400	4	01015		TSX	CIT,4	FENTER	IN CIT TABLE.	F2401930
00746	-0	53400	4	01012		LXD	LINK1,4			F2401940
00747	0	02000	4	00001		TRA	1,4	RETURN		F2401950
00750	635121000000				L(TRA)	BCD	1TRA000			F2401960
00751	+000001000004				RELTG	OCT	000001000004	ROUTINE	READS AND CHECKS TABLE IRV (ALSO CALLED BOB)	F2401970
								LOAD	ERROR COUNTER.	F2401980
00752	0	53400	1	01434	RDRM	LXA	L(5),1	LOAD	ERROR COUNTER.	F2401990
00753	-0	63400	4	01012		SXD	LINK1,4	SAVE	ENTRY PT.	F2402000
00754	0	76200	0	00303	RDS	RDS	195			F2402010
00755	0	53400	0	01013		LXA	L(152), 2			F2402020
00756	0	46000	0	01014		LDA	L1304	DRUM	ADDRESS OF TABLE IS 1304	F2402030
00757	0	70000	0	01007		CPY	1CNT	READ	WD. CT. OF TABLE.	F2402040
00760	0	70000	0	01010		CPY	2CNT	READ	WD. CT. CHECKSUM.	F2402050
00761	0	70000	2	00434	CPY	CPY	BOB+152,2	READ	150 TABLE ENTRIES.	F2402060
00762	2	00001	2	00761		TIX	CPY,2,1			F2402070
00763	0	50000	0	01007		CLA	1CNT	DOES	WD. CT AGREE	F2402080
00764	0	40200	0	01010		SUB	2CNT	WITH	ITS CHECKSUM.	F2402090
00765	-0	10000	0	01005		TNZ	EROR	NO.	ERROR.	F2402100
00766	-0	53400	2	01007		LXD	1CNT,2	YES.		F2402110
00767	3	00000	2	00772		TXH	PROCED,2,0	IS	TABLE EMPTY.	F2402120

	00770	-0	53400	4	01012		LXD	LINK1,4		YES. RETURN TO	F2402130
	00771	0	02000	4	00001		TRA	1,4		MAIN ROUTINE.	F2402140
T	00772	-0	75400	0	00000	PROCED	PXD	0		TABLE IRV IS NOT EMPTY,	F2402150
	00773	-0	73400	4	00000		PDX	0,4		INITIALISE IRC TO ZERO.	F2402160
	00774	0	36100	4	00204	ACCSUH	ACL	BOB,4		FORM LOGICAL CHECKSUM OF	F2402170
	00775	1	77777	4	00776		TXI	TIX,4,-1		ENTRIES	F2402180
	00776	2	00001	2	00774	TIX	TIX	ACCSUH,2,1			F2402190
	00777	0	60200	0	01011		SLW	LOGWD			F2402200
	01000	0	50000	0	01011		CLA	LOGWD		COMPUTED CHECKSUM.	F2402210
	01001	0	40200	4	00204		SUB	BOB,4		DRUM CHECKSUM FOLLOWS LAST ENTRY.	F2402220
	01002	-0	10000	0	01005		TNZ	EROR		NOT EQUAL	F2402230
	01003	-0	53400	4	01012		LXD	LINK1,4		DRUM READ CORRECTLY.	F2402240
	01004	0	02000	4	00002		TRA	2,4		RETURN	F2402250
	01005	2	00001	1	00754	EROR	TIX	RDS,1,1		TRY TO READ THREE MORE TIMES.	F2402260
	01006	0	07400	4	00004		TSX	DIAG,4		DRUM 3 READING ERROR FIVE TIMES.	F2402270
A	01007	0	00000	0	00000		1CNT	HTR			F2402280
A	01010	0	00000	0	00000		2CNT	HTR			F2402290
A	01011	0	00000	0	00000		LOGWD	HTR			F2402300
A	01012	0	00000	0	00000		LINK1	HTR			F2402310
	01013	0	00000	0	00230	L(152)	HTR	152		LENGTH OF TABLE IRV, WD. CT., CHECKSUMS	F2402320
	01014	0	00000	0	02430	L1304	HTR	1304		ORG OF WD. CT OF TABLE IRV	F2402330
										ROUTINE WRITES CIT BUFFER ON TAPE ,IF FULL, THEN ENTERS	F2402340
										NEW CIT INTO BUFFER.	F2402350
	01015	-0	63400	1	01046	CIT	SXD	E2C,1			F2402360
	01016	-0	63400	2	01047		SXD	E3C,2			F2402370
	01017	-0	53400	2	01045		LXD	BBOX,2		COMPLEMENT OF CURRENT BUFFER CT.	F2402380
	01020	3	77634	2	01034		TXH	CIT04,2,-100		BUFFER NEITHER FULL NOR ZERO	F2402390
	01021	-0	53400	2	01045	CITSP	LXD	BBOX,2			F2402400
	01022	-3	00000	2	01034		TXL	CIT04,2,0		TRA IF BUFFER CT ZERO	F2402410
	01023	0	50000	0	01400		CLA	RECCNT		BUFFER IS ALREADY FULL.	F2402420
	01024	0	40000	0	01430		ADD	L(1)		UPDATE CIT RECORD COUNT.	F2402430
	01025	0	60100	0	01400		STO	RECCNT			F2402440
	01026	0	76600	0	00222		WRS	146			F2402450
	01027	0	53400	1	01427		LXA	L(0),1		WRITE CIT BUFFER ON TAPE.	F2402460
	01030	0	70000	1	00030	CIT01	CPY	CIB,1			F2402470
	01031	1	77777	1	01032		TXI	CIT02,1,-1			F2402480
	01032	1	00001	2	01033	CIT02	TXI	CIT03,2,1		STEP BUFFER COUNT BACK TO ZERO	F2402490
	01033	3	00001	2	01030	CIT03	TXH	CIT01,2,1		TEST FOR BUFFER END	F2402500
	01034	0	53400	1	01433	CIT04	LXA	L(4),1			F2402510
	01035	0	50000	1	01054	CIT05	CLA	CIL00+4,1		STORE 4WD CIT IN 8UFFER.	F2402520
	01036	0	60100	2	00030		STO	CIB,2			F2402530
	01037	1	77777	2	01040		TXI	CIT07,2,-1		UPDATE CIT BUFFER COUNT	F2402540
	01040	2	00001	1	01035	CIT07	TIX	CIT05,1,1			F2402550
	01041	-0	63400	2	01045		SXD	BBOX,2		SAVE CIT BUFFER COUNT	F2402560
	01042	-0	53400	1	01046		LXD	E2C,1			F2402570
	01043	-0	53400	2	01047		LXD	E3C,2		RELOAD INDEX REGS,	F2402580
	01044	0	02000	4	00001		TRA	1,4		RETURN	F2402590
	01045	0	00000	0	00000	BBOX	HTR	0		CIT BUFFER CT. INITIALLY ZERO	F2402600
A	01046	0	00000	0	00000		E2C	HTR			F2402610
A	01047	0	00000	0	00000		E3C	HTR			F2402620
					01050	CIL00	BSS	1		SYMBOLIC LOCN OF CIT	F2402630
					01051	CIL01	BSS	1		OP.DAND DEC. OF CIT.	F2402640
					01052	CIL02	BSS	1		SYMBOLIC ADDRESS OF CIT	F2402650
					01053	CIL03	BSS	1		REL. ADDRESS AND TAG.	F2402660

					REQUIRED FIXCON IS IN ACC. WHEN THIS-ROUTINE IS	F2402670				
					BEGUN. THE FIXCON TABLE IS SEARCHED AND IF FIXCON IS	F2402680				
					NOT ALREADY THERE, IT IS ENTERED IN THE TABLE.	F2402690				
					(SEARCH IS MADE IN TWO PASSES, ONE FOR EVEN ENTRIES, ONE	F2402700				
					FOR ODD, FOR TIMING PURPOSES.)EXIT WITH NAME OF ENTRY IN ACC	F2402710				
	01054	-0	63400	1	01107	FIXCON	SXD	FC29,1		F2402720
	01055	-0	63400	2	01077		SXD	FC18,2		F2402730
	01056	-0	63400	4	01111		SXD	FC34,4		F2402740
	01057	0	60100	0	01406		STO	ERDRM1	SAVE FIXCON.	F2402750
	01060	0	53400	4	01434		LXA	L(5),4	INITIALIZE DRUM ERROR COUNTER.	F2402760
	01061	0	50000	0	01142	FC02	CLA	ORIGIN	INITIALISE AD1 TO SELECT 1ST ENTRY	F2402770
	01062	0	60100	0	01401		STO	AD1	AND ODD NUMBERED ENTRIES.	F2402780
	01063	0	53400	1	01427		LXA	L(0),1	INITIALISE COUNT THROUGH TABLE	F2402790
	01064	0	53400	2	01431		LXA	L(2),2	INITIALISES FOR TWO FIXCON PASSES	F2402800
	01065	0	50000	0	01406	FC04	CLA	ERDRM1	REQD. FIXCON	F2402810
	01066	0	76200	0	00302		RDS	194	READ NEXT FIXCON ENTRY	F2402820
	01067	0	46000	0	01401		LDA	AD1		F2402830
	01070	0	70000	0	01407	FC08	CPY	CPYWD1		F2402840
D	01071	3	00000	1	01102		TXH	FC24+1,1	DECR IS WD.CT OF FIXCON TABLE (INITFX)	F2402850
	01072	0	70000	0	01410		CPY	CPYWD2	READ CHECKSUM OF ENTRY	F2402860
	01073	0	04000	0	01110		TLQ	FC30	TRA IF ENTRY DOES NOT MATCH FIXCON	F2402870
	01074	0	70000	0	01405		CPY	ERDRM	FALSE COPY.	F2402880
	01075	0	34000	0	01410		CAS	CPYWD2	COMPARE WITH CHECKSUM.	F2402890
D	01076	0	07400	4	00004		TSX	DIAG,4	OBVIATED BY TLQ.	F2402900
	01077	-3	00000	0	01135	FC18	TXL	FC60,0	SAVED IRB IN DECR. MATCH FOUND.	F2402910
	01100	0	70000	0	01405	FC20	CPY	ERDRM	FALSE COPY, NO MATCH	F2402920
	01101	1	00002	1	01070	FC24	TXI	FC08,1,2	INCREASE COUNT OF WORDS TESTED.	F2402930
	01102	-2	00001	2	01112		TNX	FC40,2,1	BOTH PASSES ARE COMPLETED.	F2402940
	01103	0	50000	0	01401		CLA	AD1	ADJUST DRUM ADDRESS	F2402950
	01104	0	40000	0	01431		ADD	L(2)	TO TEST EVEN NUMBERED ENTRIES	F2402960
	01105	0	60100	0	01401		STO	AD1		F2402970
	01106	0	53400	1	01430	FC28	LXA	L(1),1	INITIALISE COUNT THROUGH TABLE	F2402980
D	01107	-3	00000	0	01065	FC29	TXL	FC04,0	TRA TO MAKE 2ND PASS. SAVED IRA IN DEC	F2402990
	01110	0	70000	0	01405	FC30	CPY	ERDRM	FALSE COPY.	F2403000
D	01111	-3	00000	0	01100	FC34	TXL	FC20,0	DECR, CONTAINS ROUTINE LINKAGE.	F2403010
	01112	0	60100	0	01407	FC40	STO	CPYWD1	SEARCH COMPLETED. NO MATCH.	F2403020
	01113	-0	53400	1	01071		LXD	FC08+1,1		F2403030
	01114	1	00001	1	01115		TXI	FC42,1,1	INCREASE FIXCON WD. COUNT AND	F2403040
	01115	-0	63400	1	01071	FC42	SXD	FC08+1,1	STORE AS NEW TEST.	F2403050
	01116	-0	75400	1	00000		PXD	0,1	FORM NEW ADDRESS	F2403060
	01117	0	77100	0	00021		ARS	17	FOR	F2403070
	01120	0	40000	0	01142		ADD	ORIGIN	DRUM WRITING.	F2403080
	01121	0	60100	0	01401		STO	AD1		F2403090
	01122	0	76600	0	00302		WRS	194		F2403100
	01123	0	46000	0	01401		LDA	AD1	WRITE NEW FIXCON AND	F2403110
	01124	0	70000	0	01407		CPY	CPYWD1	ITS CHECKSUM ON DRUM.	F2403120
	01125	0	70000	0	01407		CPY	CPYWD1		F2403130
	01126	-0	75400	1	00000	FC50	PXD	0,1	FORM NAME OF CONSTANT	F2403140
	01127	0	77100	0	00022		ARS	18	IN ACC. NAME CONSISTS OF	F2403150
	01130	-0	50100	0	01416		ORA	BCD2	2 IN DEC.=2) FOR FIXCON TABLE,	F2403160
	01131	-0	53400	1	01107		LXD	FC29,1	AND ENTRY NO WITHIN TABLE,	F2403170
	01132	-0	53400	2	01077		LXD	FC18,2	IN ADDRESS.	F2403180
	01133	-0	53400	4	01111		LXD	FC34,4	RESTORE INDEX.	F2403190
	01134	0	02000	4	00001		TRA	1,4	RETURN.	F2403200

	01135	0	50000	0	01407	FC60	CLA	CPYWD1		MATCH FOUND. TEST DRUM READ.	F2403210
	01136	0	40200	0	01410		SUB	CPYWD2			F2403220
	01137	0	10000	0	01126		TZE	FC50		DRUM READ CORRECTLY.	F2403230
	01140	2	00001	4	01061		TIX	FC02,4,1		ERROR. TRY 3 TIMES.	F2403240
	01141	0	07400	4	00004	STOPFC	TSX	DIAG,4		DRUM 2 READING ERROR FIVE TIMES.	F2403250
	01142	0	00000	0	00002	ORIGIN	HTR	2		DRUM ORIGIN OF FIXCON TABLE.	F2403260
										THIS ROUTINE, GIVEN A TAU TAG, OBTAINS THE CORR.	F2403270
										SUBSCR. COMBINATION FROM THE APPROPRIATE TAU TABLE	F2403280
										AND STORES IN POSITION C1,S1,C2,S2,S3,S3,D1,D2.	F2403290
	01143	-0	63400	4	01224	SUBCOM	SXD	SUB085,4		SAVE S.R. LINKAGE	F2403300
	01144	0	53400	1	01434		LXA	L(5),1		INITIALIZE DRUM ERROR COUNTER.	F2403310
	01145	0	60100	0	01237		STO	SUBTAG		STORE TAU TAG NAME.	F2403320
	01146	0	76200	0	00304	SUB010	RDS	196		SELECT TAU DRUM	F2403330
	01147	-0	53400	4	01234		LXD	SUBORG+2,4		INITIALIZE SUBSCRIPT COMBINATION	F2403340
T	01150	-0	75400	0	00000		PXD	0		WORKING SPACE	F2403350
	01151	0	60100	4	00204	SUB020	STO	WRKSC+8,4		TO ZERO.	F2403360
	01152	2	00001	4	01151		TIX	SUB020,4,1			F2403370
	01153	0	50000	0	01237		CLA	SUBTAG		THESE INSTRUCTIONS PLACE	F2403380
	01154	0	76500	0	00011		LRS	9		TAU TABLE REQUIRED	F2403390
	01155	0	73400	6	00000		PAX	0,6		(1,2 OR 3) IN IRB AND IRC.	F2403400
T	01156	-0	75400	0	00000		PXD	0			F2403410
	01157	0	76300	0	00011		LLS	9		STORE ENTRY NUMBER	F2403420
	01160	0	60100	0	01235		STO	SUBES1		WITHIN APPROPRIATE TAU TABLE.	F2403430
	01161	0	76700	0	00001		ALS	1			F2403440
	01162	0	60100	0	01236		STO	SUBES2		STORE TWICE TAU ENTRY NO.	F2403450
	01163	0	50000	4	01235		CLA	SUBORG+3,4		SELECT APPROPRIATE TAU ORIGIN.	F2403460
	01164	0	40000	0	01235		ADD	SUBES1		FORM DRUM ADDRESS, WHICH EQUALS	F2403470
	01165	0	40000	0	01236	SUB030	ADD	SUBES2		TAU ORIGIN + ENTRY N/*	F2403480
	01166	2	00001	4	01165		TIX	SUB030,4,1		NUMBER OF WORDS PER ENTRY	F2403490
	01167	0	62100	0	01235		STA	SUBES1		(3 FOR TAU1,5 FOR TAU2,7 FORTAU3)	F2403500
	01170	0	46000	0	01235		LDA	SUBES1		SELECT TAU ENTRY.	F2403510
	01171	0	70000	0	00174		CPY	WRKSC		DECR. C1, ADDR, C2	F2403520
	01172	-3	00002	2	01174		TXL	SUB040,2,2			F2403530
	01173	0	70000	0	00200		CPY	WRKSC+4		FOR TAU 3, ADDR. C3.	F2403540
	01174	0	70000	0	00175	SUB040	CPY	WRKSC+1		S1	F2403550
	01175	-3	00001	2	01202		TXL	SUB060,2,1			F2403560
	01176	0	70000	0	00177		CPY	WRKSC+3		FOR TAU2 AND3, S2.	F2403570
	01177	-3	00002	2	01201		TXL	SUB050,2,2			F2403580
	01200	0	70000	0	00201		CPY	WRKSC+5		FOR TAU3, S0, ALSO	F2403590
	01201	0	70000	0	00202	SUB050	CPY	WRKSC+6		ADDRESS D2,0ECR.D1	F2403600
	01202	0	70000	0	01235	SUB060	CPY	SUBES1		CHECKSUM.	F2403610
	01203	-0	53400	4	01232		LXD	SUBORG,4			F2403620
	01204	-0	50000	0	00174		CAL	WRKSC		COMPUTE	F2403630
	01205	0	36100	4	00203	SUB070	ACL	WRKSC+7,4		CHECKSUM.	F2403640
	01206	2	00001	4	01205		TIX	SUB070,4,1			F2403650
	01207	0	60200	0	01236		SLW	SUBES2			F2403660
	01210	0	50000	0	01236		CLA	SUBES2		TEST FOR	F2403670
	01211	0	40200	0	01235		SUB	SUBES1		READING ERROR.	F2403680
	01212	0	10000	0	01214		TZE	SUB075		TRA. IF CORRECT	F2403690
	01213	2	00001	1	01146		TIX	SUB010,1,1		IF ERROR, TRY FOUR MORE TIMES.	F2403700
	01214	-0	53400	4	01233	SUB075	LXD	SUBORG+1,4		-	F2403720
	01215	0	50000	4	00203	SUB080	CLA	WRKSC+7,4		REARRANGE WORDS WRKSC	F2403730
	01216	0	73400	2	00000		PAX	0,2		AND WRKSC+6, IN TURN, WHICH	F2403740
	01217	-0	32000	0	01424		ANA	DECMASK		CONTAIN C1 AND C2,D1AND D2.	F2403750

	01220	0	60100	4	00203	STO	WRKSC+7,4	NONBCD CHARACTERS	F2403760
	01221	-0	75400	2	00000	PXD	0,2	ARE STORED IN DECREMENT	F2403770
	01222	-2	00006	4	01225	TNX	SUB090,4,6	AND ORDER OF ITEMS IS NOW	F2403780
	01223	0	60100	0	00176	STO	WRKSC+2	C1,S1,C2,S2,C3,S3,D1,D2.	F2403790
D	01224	-3	00000	0	01215	SUB085	TXL	SUB080,0	F2403800
	01225	0	60100	0	00203	SUB090	STO	WRKSC+7	F2403810
	01226	-0	53400	4	01224	LXD	SUB085,4	RESTORE LINKAGE INDEX	F2403820
	01227	-3	00001	1	01231	TXL	SUB100+1,1,1	TRA IF READING ERROR.	F2403830
	01230	0	02000	4	00001	SUB100	TRA	1,4	F2403840
	01231	0	07400	4	00004	TSX	DIAG,4	DRUM 4 READING ERROR 5 TIMES.	F2403850
	01232	+000006001356				SUBORG	OCT	000006001356	F2403860
	01233	+000007000454					OCT	000007000454	F2403870
	01234	+000010000000					OCT	000010000000	F2403880
A	01235	0	00000	0	00000	SUBES1	HTR	ERASABLE ST, FOR DRUM ADDR.	F2403890
A	01236	0	00000	0	00000	SUBES2	HTR	ERASABLE ST, FO DRUM CHECK1	F2403900
A	01237	0	00000	0	00000	SUBTAG	HTR		F2403910
								COSE ROUTINE FORMS NAME OF EACH NONTRIVIAL COEFF. IN FIXCON	F2403920
								TABLE, AND SETS SENSE LIGHTS ACCORDINGLY.	F2403930
	01240	0	53400	1	01435	COSE	LXA	L(6),1	F2403940
	01241	0	53400	2	01432	LXA	L(3),2	INDEX TO SELECT SUBSCRIPTS IN TURN	F2403950
	01242	-0	63400	4	01411	SXD	LINKC,4	INITIALISE SENSE LT. SELECTION.	F2403960
	01243	0	50000	1	00202	COSE5	CLA	WRKSC+6,1	F2403970
	01244	0	10000	0	01253	TZE	COSE08	SELECT A S.C. COEFF.	F2403980
	01245	0	40200	0	01421	SUB	L1DEC	TRA IF NO SUBSC. IN THIS DIMENSION	F2403990
	01246	0	10000	0	01253	TZE	COSE08	TRA IF COEFF. IS ONE.	F2404000
	01247	0	76000	2	00144	PSE	100,2	SET CORRESPONDING SENSE LIGHT.	F2404010
	01250	0	50000	1	00202	CLA	WRKSC+6,1	ENTER COEFF IN FIXCON IF	F2404020
	01251	0	07400	4	01054	TSX	FIXCON,4	NOT ALREADY THERE.	F2404030
	01252	0	60100	2	00450	STO	OR00+12,2	STORE NAME OF FIXCON ENTRY.	F2404040
	01253	2	00002	1	01254	COSE08	TIX	COSE10,1,2	F2404050
	01254	2	00001	2	01243	COSE10	TIX	COSE5,2,1	F2404060
	01255	-0	53400	4	01411	LXD	LINKC,4	REPEAT FOR ALL SUBSCRIPTS.	F2404070
	01256	0	02000	4	00001	TRA	1,4	RETURN	F2404080
								ROUTINE COMPILES SETS OF INSTRUCTIONS, GIVEN STARTING LOCN.	F2404090
								OF APPROPRIATE SKELETON IN ACC., AND NO. OF INSTR. IN IRA	F2404100
	01257	-0	63400	4	01313	LXC	SXD	LXC19,4	F2404110
	01260	0	60100	0	01412	STO	ERLXC	SAVE LOCATION OF INSTR. SKELETON.	F2404120
	01261	-0	75400	1	00000	PXD	0,1	NO. OF INST TO BE COMPILED.	F2404130
	01262	0	77100	0	00022	ARS	18		F2404140
	01263	0	40000	0	01412	ADD	ERLXC	FORM ADDRESS WHICH GIVES	F2404150
	01264	0	62100	0	01267	STA	LXC10	APPROPRIATE SKELETAL WORDS.	F2404160
	01265	0	50000	0	01427	LXC08	CLA	L(0)	F2404170
	01266	0	60100	0	01050	STO	CIL00	SET CIT SYMBOLIC LOCN. TO ZERO	F2404180
	01267	0	56000	1	00000	LXC10	LDQ	0,1	F2404190
	01270	0	76300	0	00000	LLS	0	SELECT NEXT SKELETAL WORD.	F2404200
	01271	-0	76300	0	00022	LGL	18	FOR COMPILATION. SET SIGN IN AC.	F2404210
	01272	-0	60000	0	01051	STQ	CIL01	BCD. OPERATION IS IN DECREMENT.	F2404220
	01273	-0	12000	0	01314	TMI	LXC20	STORE OPERATION	F2404230
	01274	0	62100	0	01275	STA	LXC15	CIT IS SHIFT TYPE INSTRUCTION.	F2404240
A	01275	0	50000	0	00000	LXC15	CLA	CIT IS SYMBOLIC ADDRESS TYPE.	F2404250
	01276	0	60100	0	01052	STO	CIL02	ADDR. IS LOCATION OF SYMBOLIC ADDRESS	F2404260
	01277	0	50000	0	01427	CLA	L(0)	OF CIT.	F2404270
	01300	0	60100	0	01053	STO	CIL03	SET CIT TAG TO ZERO.	F2404280
	01301	-0	50000	0	01052	CAL	CIL02	TEST FOR A COT	F2404290

01302	-0	32000	0	01422	ANA	6ONES	SYMBOLIC ADDRESS OF THE TYPE	F2404300
01303	0	10000	0	01321	TZE	LXC30	1)+3 OR6)+2 ERASABLE	F2404310
01304	-0	32000	0	01423	ANA	BIT01	STORAGE	F2404320
01305	-0	10000	0	01321	TNZ	LXC30	NO	F2404330
01306	-0	50000	0	01052	CAL	CIL02	YES. SEPARATE ADDRESS LEAVING THE	F2404340
01307	0	76700	0	00022	ALS	18	CLASS OF SYMBOLS IN SYMBOLIC	F2404350
01310	0	62200	0	01053	STD	CIL03	ADDRESS POSN. ALONE, AND	F2404360
01311	-0	50000	0	01422	CAL	6ONES	PLACING ADDEND IN REL. ADDRESS	F2404370
01312	0	32000	0	01052	ANS	CIL02	POSITION.	F2404380
01313	-3	00000	0	01321	LXC19	TXL LXC30,0	UNCOND. TRANSFER LINKAGE INDECR.	F2404390
01314	0	76700	0	00022	LXC20	ALS 18	CIT IS SHIFT TYPE INSTRUCTION	F2404400
01315	-0	32000	0	01424	ANA	DECMASK	I.E. ABSOLUTE ADDRESS ONLY,	F2404410
01316	0	60100	0	01053	STO	CIL03	STORE ADDRESS IN CIT REL. ADDRESS.	F2404420
01317	0	50000	0	01427	CLA	L(0)	STORE ZERO AS	F2404430
01320	0	60100	0	01052	STO	CIL02	SYMBOLIC ADDRESS.	F2404440
01321	0	07400	4	01015	LXC30	TSX CIT,4	MAKE CIT ENTRY.	F2404450
01322	2	00001	1	01265	TIX	LXC08,1,1	RETURN FOR NEXT SKELETON INST.	F2404460
01323	-0	53400	4	01313	LXD	LXC19,4	SKELETON COMPLETED.	F2404470
01324	0	02000	4	00001	TRA	1,4	RETURN.	F2404480
01325	0	00451	2	34321	LX100	HTR 14545,2,OR000+13	CLA. THESE WORDS	F2404490
01326	0	00466	6	26346	HTR	11494,6,OR000+26	STO. CONSTITUTE THE	F2404500
01327	0	00435	2	34321	LX102	HTR 14545,2,OR000+1	CLA. CODING	F2404510
01330	0	00451	6	26422	HTR	11538,6,OR000+13	SUB. SKELETONS,	F2404520
01331	0	00466	2	12424	HTR	5396,2,OR000+26	ADD. AND ARE	F2404530
01332	0	00466	6	26346	HTR	11494,6,OR000+26	SOO. CALLED UPON	F2404540
01333	0	00435	4	32450	LX105	HTR 13608,4,OR000+1	LDQ. BY THE LXC	F2404550
01334	0	00445	4	44770	HTR	18936,4,OR000+9	MPY. ACCORDING	F2404560
01335	-2	00021	2	14362	TNX	6386,2,17	ALS. TO THE	F2404570
01336	0	00451	6	26422	HTR	11538,6,OR000+13	SUB. DIFFERENT	F2404580
01337	0	00466	2	12424	HTR	5396,2,OR000+26	ADD. COMPUTATIONS	F2404590
01340	0	00466	6	26346	HTR	11494,6,OR000+26	STO. REQUIRED.	F2404600
01341	0	00440	4	32450	LX110	HTR 13608,4,OR000+4	LDQ.	F2404610
01342	0	00443	4	44770	HTR	18936,4,OR000+7	MPY. THE TAG AND	F2404620
01343	-2	00021	2	14362	TNX	6386,2,17	ALS. ADDRESS ARE	F2404630
01344	0	00443	6	26422	HTR	11538,6,OR000+7	SUB. THE BCD	F2404640
01345	0	00466	2	12424	HTR	5396,2,OR000+26	ADD. EQUIVALENTS OF	F2404630
01346	0	00466	6	26346	HTR	11494,6,OR000+26	STO. THE CIT	F2404660
01347	0	00440	4	32450	LX116	HTR 13608,4,OR000+4	LDQ. INSTRUCTIONS.	F2404670
01350	0	00446	4	44770	HTR	18936,4,OR000+10	MPY. THE SYMBOLIC	F2404680
01351	-2	00022	4	35162	TNX	14962,4,18	LRS. DECREMENTS ARE	F2404690
01352	0	00443	4	44770	HTR	18936,4,OR000+7	MPY. THE LOCATIONS	F2404700
01353	-2	00021	2	14362	TNX	6386,2,17	ALS. OF THE	F2404710
01354	0	00443	6	26422	HTR	11538,6,OR000+7	SUB. ADDRESSES IN	F2404720
01355	0	00466	2	12424	HTR	5396,2,OR000+26	ADD. THE CIT	F2404730
01356	0	00466	6	26346	HTR	11494,6,OR000+26	STO.	F2404740
01357	0	00461	4	32450	LX124	HTR 13608,4,OR000+21	LDQ. THE NEGATIVE	F2404750
01360	0	00464	4	44770	HTR	18936,4,OR000+24	MPY. PREFIX INDICATES	F2404760
01361	-2	00021	2	14362	TNX	6386,2,17	ALS. A PURELY	F2404770
01362	0	00464	6	26422	HTR	11538,6,OR000+24	SUB. ABSOLUTE ADDRESS	F2404780
01363	0	00466	2	12424	HTR	5396,2,OR000+26	ADD.	F2404790
01364	0	00466	6	26346	HTR	11494,6,OR000+26	STO.	F2404800
01365	0	00461	4	32450	LX130	HTR 13608,4,OR000+21	LDQ.	F2404810
01366	0	00447	4	44770	HTR	18936,4,OR000+11	MPY.	F2404820
01367	-2	00022	4	35162	TNX	14962,4,18	LRS.	F2404830

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	01370	0	00464	4	44770	HTR	18936,4,OR000+24	MPY.	F2404840
	01371	-2	00021	2	14362	TNX	6386,2,17	ALS.	F2404850
	01372	0	00464	6	26422	HTR	11538,6,OR000+24	SUB.	F2404860
	01373	0	00466	2	12424	HTR	5396,2,OR000+26	ADD.	F2404870
	01374	0	00466	6	26346	HTR	11494,6,OR000+26	STO.	F2404880
A	01375	0	00000	0	00000	NAME1	HTR		F2404890
A	01376	0	00000	0	00000	TAG1	HTR		F2404900
A	01377	0	00000	0	00000	TAG2	HTR		F2404910
A	01400	0	00000	0	00000	RECCNT	HTR		F2404920
A	01401	0	00000	0	00000	AD1	HTR		F2404930
A	01402	0	00000	0	00000	1XB0X	HTR		F2404940
A	01403	0	00000	0	00000	2XB0X	HTR		F2404950
A	01404	0	00000	0	00000	LINK2	HTR		F2404960
A	01405	0	00000	0	00000	ERDRM	HTR		F2404970
A	01406	0	00000	0	00000	ERDRM1	HTR		F2404980
A	01407	0	00000	0	00000	CPYWD1	HTR		F2404990
A	01410	0	00000	0	00000	CPYWD2	HTR		F2405000
A	01411	0	00000	0	00000	LINKC	HTR		F2405010
A	01412	0	00000	0	00000	ERLXC	HTR		F2405020
A	01413	0	00000	0	00000	AX	HTR		F2405030
A	01414	0	00000	0	00000	BX	HTR		F2405040
A	01415	0	00000	0	00000	SENSE1	HTR		F2405050
	01416		+0200000000000			BCD2	OCT	0200000000000	F2405060
	01417		+1400000000000			BCD14	OCT	1400000000000	F2405070
	01420		+1200000000000			BCD10	OCT	1200000000000	F2405080
	01421		+0000010000000			L1DEC	OCT	0000010000000	F2405090
	01422		-3700000000000			6ONES	OCT	7700000000000	F2405100
	01423		-2000000000000			BIT01	OCT	6000000000000	F2405110
	01424		+0777777000000			DECMSK	OCT	0777777000000	F2405120
	01425		6263460000000			L(STO)	BCD	1STO000	F2405130
	01426		2343210000000			L(CLA)	BCD	1CLA000	F2405140
	01427	0	00000	0	00000	L(0)	HTR	0	F2405150
	01430	0	00000	0	00001	L(1)	HTR	1	F2405160
	01431	0	00000	0	00002	L(2)	HTR	2	F2405170
	01432	0	00000	0	00003	L(3)	HTR	3	F2405180
	01433	0	00000	0	00004	L(4)	HTR	4	F2405190
	01434	0	00000	0	00005	L(5)	HTR	5	F2405193
	01435	0	00000	0	00006	L(6)	HTR	6	F2405200
	01436	0	00000	0	01327	KLX02	HTR	LX102	F2405210
	01437	0	00000	0	01333	KLX021	HTR	LX105	F2405220
	01440	0	00000	0	01347	KLX03	HTR	LX116	F2405230
	01441	0	00000	0	01341	KLX031	HTR	LX110	F2405240
	01442	0	00000	0	01365	KLX05	HTR	LX130	F2405250
	01443	0	00000	0	01357	KLX051	HTR	LX124	F2405260
M			00450		OR012	SYN	OR000+12		F2405270
M			00451		OR013	SYN	OR000+13		F2405280
M			00456		OR018	SYN	OR000+18		F2405290
M			00466		OR026	SYN	OR000+26		F2405300
			00004		DIAG	EQU	4		F2405305
A			00000			END			F2405310
					00R012		00450,00450		
					00R013		00451,00451		
					00R018		00456,00456		
					00R026		00466,00466		

SKELETON KEYS
FOR LXC ROUTINE.

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	536	0	0	0	0
LIB	0	0	0	0	0
COL	536	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 549

NUMBER OF SYMBOLS, DEF 159,DEFOP 0,UNDEF 0
REM FORTRAN 2*****BLOCK 5 OF SECTION 2*****F2500000

FORTRAN 2*****BLOCK 5 OF SECTION 2*****F2500000
 BLOCK 5 OF SECTION 2 USES INFORMATION GENERATED BY BLOCKS F2500030
 1,2, AND 3 TO COMPILE ALL DO LOOP INDEXING INSTRUCTIONS. F2500040
 DECREMENTS ARE COMPUTED, AND WHEN NECESSARY OPEN SUBROUTINES F2500050
 ARE COMPILED TO COMPUTE THESE DECREMENTS AT OBJECT PROGRAM F2500060
 TIME. AT THE END OF BLOCK 5 THESE INSTRUCTIONS ARE ON TAPE F2500070
 3 IN SEMI-INVERTED ORDER. BLOCK 6 INVERTS THE DOFILE INTO ITF2S00080
 PROPER ORDER ONTO TAPE 4 F2500090

MASTER RECORD CARD = FN047 F2500100
 BEGIN INITIALIZATION F2500110
 THE INITIALIZATION RECORD IS THE FIRST RECORD 0B BLOCK 5 READ F2500120
 IN BY MONITOR. IT POSITIONS THE INPUT TAPES 2 AND 4 AND F2500130
 REWINDS THE OUTPUT TAPE 3.IT READS THE NEXT RECORD (THE ALPHAF2300160
 STATE) INTO CORES THEN WRITES IT ON DRUM 2. THEN IT READS F2500170
 IN THE NEXT RECORD(COMMON + THE BETA STATE), AND WRITES THE BF2500180
 BETA STATE ON DRUM 1. IT READS THE ADTAG TABLE FROM DRUM 2 IF2500190
 FIXCON IS CHECKED8 AND INITIALIZED IF NECESSARY. IF THERE ARE F2500200
 ANY DOS CONTROL IS PASSED TO MAN. IF THERE ARE NO DOS THE NEF2500210
 NEXT RECORD, WHICH IS BLOCK 6, IS READ IN. F2500220

			00030		ORG 24			F2500230
00030	0	53400	1	00131	AINIT	LXA L5,1	INITIALIZE ERROR COUNTER,	F2500240
00031	0	76400	0	00222		BST 146	POSITION TAPE 2	F2500250
00032	0	76400	0	00222		BST 146	TO READ DOTAG	F2500260
00033	0	76200	0	00222	A1	RDS 146		F2500270
00034	0	70000	0	00124		CPY CPYWD3	DO TAG REC COUNT	F2500280
00035	0	70000	0	00124		CPY CPYWD3	DO TAG REC COUNT	F2500290
00036	0	76600	0	00333		WRS 219		F2500300
00037	-0	76000	0	00012		RTT		F2500310
00040	0	02000	0	00056		TRA A3I	ERROR	F2500320
00041	-0	53400	1	00124		LXD CPYWD3,1		F2500330
00042	-3	00000	1	00044		TXL A2,1,0		F2500340
00043	1	00002	1	00044		TXI A2,1,2		F2500350
00044	0	76400	0	00222	A2	BST 146	BACKSPACE TO BEGINNING	F2500360
00045	2	00001	1	00044		TIX A2,1,1	OF DOTAG RECORDS	F2500370
00046	0	77200	0	00223		REW 147	REWIND OUTPUT TAPE	F2500380
00047	0	77200	0	00224		REW 148	REWIND TAGTAG TAPE	F2500390
00050	0	76200	0	00224	A3	RDS 148		F2500400
00051	0	70000	0	00124		CPY CPYWD3	TAGTAG RECORD COUNT	F2500410
00052	0	02000	0	00050		TRA A3		F2500420
00053	0	76200	0	00221		RDS 145	SKIP OVER DIAGNOSTIC RECORD ON SYSTEM TAPE	F2500430
00054	0	02000	0	00004		TRA 4	E.D.F. READ IN NEXT BLOCK OF INST.	F2500440
							THE ALPHA STATE IS NOW IN CORES. CONTROL PASSES TO C.	F2500450
00055	0	02000	0	00050		TRA A3	E.O.R.	F2500460
00056	-2	00001	1	00061	A3I	TNX A4,1,1	READING	F2500470
00057	0	76400	0	00222		BST 146	ERROR	F2500480
00060	0	02000	0	00033		TRA A1	ROUTINE	F2500490
00061	0	07400	4	00004	A4	TSX DIAG,4	TAPE 2 HAS GOTTEN AN ERROR CHECK 5 TIMES.	F2500500
00062	0	53400	2	00146	C	LXA L0,2		F2500510
00063	0	07400	4	00132		TSX BINIT,4	WRITE BLOCK A ON DRUM	F2500520
00064	0	76200	0	00221		RDS 145	SKIP OVER DIAGNOSTIC RECORD ON SYSTEM TAPE	F2300530
00065	0	02000	0	00004		TRA 4	READ NEXT RECORD	F2500540
							COMMON AND BETA STATE ARE NOW IN CORES, CONTROL IS PASSED TO	F2500550

THE FOLLOWING INSTRUCTION.

	00066	0	53400	2	00126	LXA	L1,2		F2500560	
	00067	0	07400	4	00132	TSX	BINIT,4	PLACE BLOCK B ON DRUM	F2500570	
	00070	0	07400	4	00150	TSX	ADTGDM,4	READ ADTAG ENTRIES	F2500580	
	00071	0	53400	1	00131	LXA	L5,1	INITIALIZE ERROR COUNTER.	F2500590	
	00072	0	76200	0	00302	C1	RDS	194	SELECT FIXCON DRUM.	F2500600
	00073	0	70000	0	00124	CPY	CPYWD3	WORD COUNT OF FIXCON	F2500610	
	00074	0	70000	0	00125	CPY	CPYWD4		F2500620	
	00075	0	50000	0	00124	CLA	CPYWD3		F2500630	
	00076	0	40200	0	00125	SUB	CPYWD4		F2500640	
	00077	-0	10000	0	00122	TNZ	C6	ERROR IN DRUM READING	F2500650	
	00100	0	50000	0	00124	CLA	CPYWD3		F2500660	
	00101	0	10000	0	00114	TZE	C4	NO ENTRIES IN FIXCON	F2500670	
	00102	0	40200	0	00127	SUB	L2		F2500680	
	00103	0	76700	0	00021	ALS	17		F2500690	
	00104	0	62200	0	04616	C2	STD	FC08+1	STORE WORD COUNT IN	F2500700
	00105	0	50000	0	05126	CLA	L(1)	DECREMENT OF FC08-1	F2500710	
	00106	0	60100	0	05205	STO	SWICH2	SET SWITCH 2 TO 1	F2500720	
	00107	-0	76000	0	00143	MSE	99		F2500730	
	00110	0	02000	0	03654	TRA	MAN	IF NO DOTAGS,	F2500740	
	00111	0	76000	0	00143	PSE	99	TRA MONITOR	F2500750	
	00112	0	76200	0	00221	RDS	145	SKIP OVER DIAGNOSTIC RECORD ON SYSTEM TAPE	F2500760	
	00113	0	02000	0	00004	TRA	4	OTHERWISE TRA MAN.	F2500770	
	00114	0	76600	0	00302	C4	WRS	194	F2500780	
	00115	0	70000	0	00146	CPY	L0	NO ENTRIES, WRITE	F2500790	
	00116	0	70000	0	00146	CPY	L0	ZEROS IN FIRST FOUR	F2500800	
	00117	0	70000	0	00146	CPY	L0	LOCATIONS OF DRUM 3	F2500810	
	00120	0	70000	0	00146	CPY	L0		F2500820	
	00121	0	02000	0	00104	TRA	C2		F2500830	
	00122	2	00001	1	00072	C6	TIX	C1,1,1	DRUM 2 READING ERROR ROUTINE.	F2500840
	00123	0	07400	4	00004	TSX	DIAG,4	DRUM 2 READING ERROR 5 TIMES.	F2500850	
A	00124	0	00000	0	00000	CPYWD3	HTR		F2500860	
A	00125	0	00000	0	00000	CPYWD4	HTR		F2500870	
	00126	0	00000	0	00001	L1	HTR	1	F2500880	
	00127	0	00000	0	00002	L2	HTR	2	F2500890	
	00130	0	00000	0	00003	L3	HTR	3	F2500900	
	00131	0	00000	0	00005	L5	HTR	5	F2500910	
								*****	F2500920	
								BINIT WRITES A SELECTED STATE, ALPHA OR BETA, ON DRUM2 OR 1	F2300930	
								RESPECTIVELY,	F2500940	
	00132	0	50000	0	00146	BINIT	CLA	L0	F2500930	
	00133	0	53400	1	00147	LXA	L1000,1	FORM CHECK SUM FOR	F2500960	
M	00134	0	36100	1	07226	B1	ACL	RTXAC+1000,1	PROGRAM ON DRUM.	F2500970
	00135	2	00001	1	00134	TIX	B1,1,1		F2500980	
	00136	0	60200	0	00124	SLW	CPYWD3		F2500990	
	00137	0	53400	1	00147	LXA	L1000,1		F2501000	
	00140	0	76600	2	00302	WRS	194,2	WRITE 1000 WORDS OF	F2501010	
	00141	0	46000	0	00147	LDA	L1000	PROGRAM ONTO DRUM	F2501020	
	00142	0	70000	0	00124	CPY	CPYWD3		F2501030	
M	00143	0	70000	1	07226	B2	CPY	RTXAC+1000,1	F2501040	
	00144	2	00001	1	00143	TIX	B2,1,1		F2501050	
	00145	0	02000	4	00001	TRA	1,4		F2501060	
A	00146	0	00000	0	00000	L0	HTR	14	F2501070	
	00147	0	00000	0	01750	L1000	HTR	1000	F2501080	

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ADTGDM READS THE ADTAG TABLE FROM DRUM 3 INTO CORES.
00150 0 50000 0 05133 ADTGDM CLA L(0) INITIALIZE ERROR INDICATOR
00151 0 60100 0 05223 STO ERORBX
00152 0 53400 2 05124 ADTG05 LXA LZKMX,2 CHECK SUM AREA
00153 0 53400 1 05125 LXA LADMX,1 ADTAG AREA
00154 0 76200 0 00303 RDS 195
00155 0 46000 0 00217 LDA DRADSI READ ADTEG TABLE
00156 0 70000 1 03466 ADTG10 CPY ADTGMX,1 ADDRESS IS ORIGIN - MAX WORDS
00157 0 50000 0 05123 CLA ALLONE FENCE FOR TABLE END
00160 0 70000 1 03467 CPY ADTGMX+1,1
00161 0 40200 1 03466 SUB ADTGMX,1
00162 0 70000 1 03470 CPY ADTGMX+2,1
00163 0 10000 0 00170 TZE ADTG30 END OF TABLE.
00164 0 70000 1 03471 CPY ADTGMX+3,1
00165 1 77774 1 00166 TXI ADTG20,1,-4
00166 0 70000 2 01242 ADTG20 CPY ZEKSUM,2 CHECK SUM FOR DRMTAG.
00167 1 77777 2 00156 TXI ADTG10,2,-1
00170 -0 63400 1 00207 ADTG30 SXD ADTG38,1 MAX CURRENT TABLE SIZE.
00171 -0 63400 1 04521 SXD ADTGS1,1
00172 3 00617 1 00210 TXH ADTG38+1,1,399 RETURN IF TABLE DEPLETED.
00173 0 53400 1 05125 LXA LADMX,1 START TO CHECK
00174 0 53400 2 05124 LXA LZKMX,2 ALL CHECK SUMS.
00175 -0 50000 1 03466 ADTG32 CAL ADTGMX,1
00176 0 36100 1 03467 ACL ADTGMX+1,1
00177 0 36100 1 03470 ACL ADTGMX+2,1
00200 0 36100 1 03471 ACL ADTGMX+3,1
00201 0 60200 0 00124 SLW CPYWD3
00202 0 50000 0 00124 CLA CPYWD3
00203 0 40200 2 01242 SUB ZEKSUM,2
00204 -0 10000 0 00211 TNZ EROR
00205 1 77774 1 00206 TXI ADTG34,1,-4
00206 1 77777 2 00207 ADTG34 TXI ADTG38,2,-1
00207 3 00000 1 00175 ADTG38 TXH ADTG32,1 TEST FOR END OF TABLE.
00210 0 02000 4 00001 TRA 1,4 END OF TABLE, READ CORRECTLY.
00211 0 50000 0 05223 EROR CLA ERORBX IF ERROR IN A CHECK THE
00212 0 40000 0 05126 ADD L(1) ENTIRE TABLE IS RE-READ.
00213 0 60100 0 05223 STO ERORBX THIS IS DONE FOUR TIMES AFTER
00214 0 40200 0 00131 SUB L5 THE FIRST READING OF THE TABLE.
00215 -0 10000 0 00152 TNZ ADTG05
00216 0 07400 4 00004 STOP TSX DIAG,4 DRUM 3 READING ERROR 5 TIMES.
00217 +000000002664 DRADSI OCT 2664 DRMTG ORIGIN.
*****
*****
MASTER RECORD CARD = FN051
BEGIN COMMON AND BETA STATES
*****
00030 ORG 24 BEGIN BLOCK 5 COMMON
00030 CIB BSS 100
00174 DOTAG BSS 450

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F2501090
F2506930
F2506940
F2506950
F2506960
F2506970
F2501100
F2501110
F2501120
F2501130
F2501140
F2501150
F2501160
F2501170
F2501180
F2501190
F2501200
F2501210
F2501220
F2501230
F2501240
F2501250
F2501260
F2501270
F2501280
F2501290
F2501300
F2501310
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F2501370
F2501380
F2501390
F2501400
F2501410
F2501420
F2501430
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F2501450
F2501460
F2301470
F2301480
F2301490
F2301500
F2501505
F2501510
F2301520
F2501530
F2501540
F2501550
F2501560

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				01076	TGTG	BSS	672		F2501570	
				02336	OMXTGA	BSS	200		F2501580	
				02646	ADTG	BSS	404		F2501590	
				03472	OADTGA	BSS	100		F2501600	
				03636	WRKSC	BSS	8		F2501610	
	03646	0	00000	0	00000	TAG1			F2501620	
	03647	0	00000	0	00000	TAG2			F2501630	
M	03650	0	00000	0	00000	TAG21			F2501640	
M	03651	0	00000	0	00000	TAG22			F2501650	
				03652	TAG3	BSS	1		F2501660	
				03653	TAG4	BSS	1		F2501670	
								MAN CONSTITUTES THE MAIN LINEAR FLOW THROUGH BLOCK 5. A	F2501680	
								SUBROUTINE PICKS A DO BETA OR ALPHA, AND THEN CONTROL IS PASSF	F2501690	
								ED TO THE PROPER STATE, (BETA OR ALPHA), TO COMPILE ALL THE	F2501700	
								INDEXING INSTRUCTIONS FOR THAT PART OF THAT DO. CONTROL IS	F2501710	
								RETURNED TO MAN. THIS PROCESS IS REPEATED UNTIL ALL ALPHAS	F2501720	
								AND BETAS IN A NEST HAVE BEEN TREATED. THE WHOLE PROCEDURE IF	F2501730	
								IS REPEATED FOR EACH NEST AND THEN CONTROL IS PASSED TO BLOCKF	F2501740	
								SIX.	F2501750	
								*****	F2501760	
	03654	0	07400	4	04012	MAN	TSX	TDOTG,4	READ ONE NEST OF DOTAG	F2501770
	03655	0	02000	0	03740		TRA	MAN70	END OF PROBLEM	F2501780
	03656	-0	63400	2	04142		SXD	DOGS60,2	INIT. DECREMENT OF TEST.	F2501790
	03657	-0	63400	2	03664		SXD	MAN05,2		F2501800
	03660	0	53400	2	05057		LXA	LMXDTG,2		F2501810
	03661	-0	50000	0	05103		CAL	T1MSK	MASK FOR T1 WORD OF DOTAG	F2501820
	03662	0	32000	2	01104	MAN03	ANS	DOTAGZ+6,2	T1 WORD MUST HAVE	F2501830
	03663	1	77767	2	03664		TXI	MAN05,2,-9	SOME BITS REMOVED FOR	F2501840
	03664	3	00000	2	03662	MAN05	TXH	MAN03,2	SXD LOCATION	F2501830
	03665	0	07400	4	04027		TSX	TTG,4	READ NEST OF TAGTAGS	F2501860
	03666	-0	63400	2	04165		SXD	FIND10,2	SAVE COUNT OF TAGTAGS IN NEST	F2501870
	03667	0	50000	0	05133		CLA	L(0)	ZERO.	F2501880
	03670	0	53400	2	05122		LXA	LHXTGA,2	INITIALIZE APPENDED TGTG	F2501890
	03671	0	60100	2	02646	MAN06	STO	MXTGA,2	TO.	F2501900
	03672	2	00001	2	03671		TIX	MAN06,2,1	ZERO.	F2501910
	03673	0	53400	2	05124		LXA	LZEKMX,2	INITIALIZE APPENDED ADTAG	F2501920
	03674	0	60100	2	03636	STO	STO	ADTGA,2	TO	F2501930
	03675	2	00001	2	03674		TIX	STO,2,1	ZERO	F2501940
	03676	0	50000	0	05133	MAN10	CLA	L(0)	INITIALIZE	F2501950
	03677	0	60100	0	05173		STO	BB0X	INDICATORS	F2501960
	03700	0	60100	0	05230		STO	DOIND		F2501970
	03701	0	60100	0	05231		STO	DOIND1		F2501980
	03702	0	60100	0	05233		STO	SWICH1		F2501990
	03703	0	50000	0	05123		CLA	ALLONE	INITIALIZE	F2502000
	03704	0	60100	0	05244		STO	VCTR	INSTRUCTION COUNTER	F2502010
	03705	0	50000	0	05126	MAN20	CLA	L(1)		F2502020
	03706	0	60100	0	05222		STO	LOCIND		F2502030
	03707	0	07400	4	04055		TSX	DOGS,4	SELECT BOR A	F2502040
	03710	0	02000	0	03731		TRA	MAN50	NEST COMPLETELY ANALYZED	F2502050
	03711	0	50000	0	05233		CLA	SWICH1	IS APPROPRIATE	F2502060
	03712	0	34000	0	05205		CAS	SWICH2	CODING IN CORES	F2502070
	03713	0	02000	0	03715		TRA	MAN35	NO	F2502080
	03714	0	02000	0	03720		TRA	MAN40	YES	F2502090
	03715	0	07400	4	03763	MAN35	TSX	ABDRM,4	NO. READ STATE FROM DRUM	F2502100

	03716	0	50000	0	05233		CLA SWICH1		F2502110
	03717	0	60100	0	05205		STO SWICH2		F2502120
	03720	-0	53400	2	05230	MAN40	LXD DOIND, 2		F2502130
	03721	0	50000	2	01076		CLA DOTAGZ, 2		F2502140
	03722	0	62200	0	05224		STD A	SAVE A	F2502150
	03723	0	73400	1	00000		PAX 0,1		F2502160
	03724	-0	63400	1	05225		SXD B,1	CURRENT DO	F2502170
	03725	-0	73400	1	00000	MAN45	PDX 0,1		F2502180
	03726	-0	75400	1	00000		PXD 0,1	ACCUMULATOR, LEAVING BETA	F2502190
M	03727	0	07400	4	05256		TSX RTXAC, 4		F2502200
	03730	0	02000	0	03705		TRA MAN20	BACK TO DOGS	F2502210
	03731	0	07400	4	04352	MAN50	TSX CITSP, 4	WRITE CIT BUFFER ON TAPE	F2502220
	03732	0	76600	0	00223		WRS 147		F2502230
	03733	0	70000	0	05133		CPY L(0)	END OF RECORD INDIC	F2502240
	03734	0	70000	0	05133		CPY L(0)		F2502250
	03735	0	70000	0	05133		CPY L(0)		F2502260
	03736	0	70000	0	05133		CPY L(0)		F2502270
	03737	0	02000	0	03654		TRA MAN		F2502280
	03740	0	77000	0	00223	MAN70	WEF 147	END OF FILE FOR DO FILE	F2502290
	03741	0	76600	0	00301		WRS 193		F2502300
	03742	0	46000	0	05065		LDA AD202		F2502310
	03743	0	70000	0	05063		CPY DRADS2		F2502320
	03744	0	70000	0	05063		CPY DRADS2		F2502330
	03745	0	76600	0	00301		WRS 193		F2502340
	03746	0	70000	0	05064		CPY DRADS3		F2502350
	03747	0	70000	0	05064		CPY DRADS3		F2502360
	03750	0	76600	0	00302		WRS 194		F2502370
	03751	0	50000	0	04616		CLA FC08+1		F2502380
	03752	-0	32000	0	05142		ANA DECMSK		F2502390
	03753	0	40000	0	05061		ADD L1DEC		F2502400
	03754	0	77100	0	00021		ARS 17		F2502410
	03755	0	60100	0	05214		STO AD1		F2502420
	03756	0	70000	0	05214		CPY AD1		F2502430
	03757	0	70000	0	05214		CPY AD1		F2502440
	03760	0	76000	0	00140		PSE 96		F2502450
	03761	0	76200	0	00221		RDS 145	SKIP OVER DIAGNOSTIC RECORD ON SYSTEM TAPE	F2502460
	03762	0	02000	0	00004		TRA 4	EXIT BLOCK 5.	F2502470
							*****		F2502412
							ABDRM IS CALLED BY MAN TO WRITE THE PROPEER DRUM STATE8 ALPHAF		F2502400
							OR BETA, INTO CORES WHEN NECESSARY.		F2502500
	03763	-0	63400	4	05223	ABDRM	SXD ERORBX, 4	STORE LINKAGE	F2502510
	03764	0	53400	4	05233		LXA SWICH1, 4		F2502520
	03765	0	53400	2	05132		LXA L(5), 2	INITIALIZE DRUM READING ERROR COUNTER.	F2502530
	03766	0	76200	4	00302	PGPG4	RDS 194, 4		F2502540
	03767	0	53400	1	05073		LXA BLKSZE, 1	= OF INST PLUS CHECK SUM	F2502550
	03770	0	46000	4	05073		LDA ABDMA+1, 4		F2502560
	03771	0	70000	0	05203		CPY CHEKSM		F2502570
M	03772	0	70000	1	07226	PGPG8	CPY RTXAC+1000, 1		F2502580
	03773	2	00001	1	03772		TIX PGPG8, 1, 1		F2502590
	03774	0	50000	0	05133		CLA L(0)		F2502600
	03775	0	53400	1	05073		LXA BLKSZE, 1		F2502610
M	03776	0	36100	1	07226	PGPG10	ACL RTXAC+1000, 1		F2502620
	03777	2	00001	1	03776		TIX PGPG10, 1, 1		F2502630
	04000	0	60200	0	05202		SLW ERAB		F2502640

04001	0	50000	0	05203	CLA	CHEKSM			F2502650	
04002	0	40200	0	05202	SUB	ERAB			F2502660	
04003	0	10000	0	04010	TZE	PGPG14			F2502670	
04004	2	00001	2	03766	TIX	PGPG4,2,1	READING ERROR	TRY AGAIN 4 TIMES,	F2502680	
04005	-3	00000	4	04007	TXL	PGPG12,4,0	WHICH DRUM.		F2502690	
04006	0	07400	4	00004	TSX	DIAG,4	DRUM 1 READ INCORRECTLY	5 TIMES.	F2502700	
04007	0	07400	4	00004	PGPG12	TSX	DIAG,4	DRUM 2 READ INCORRECTLY	5 TIMES.	F2502710
04010	-0	53400	4	05223	PGPG14	LXD	ERORBX,4		F2502720	
04011	0	02000	4	00001	TRA	1,4			F2502730	
							*****		F2502740	
04012	0	53400	1	05132	TDOTG	LXA	L(5),1	S CALLED BY MAN TO READ	IN A NEST OF DOTAG ENTRIES.	F2502750
04013	0	53400	2	05057	TDOTG1	LXA	LMXDTG,2			F2502770
04014	0	76200	0	00222	RDS	146	LOC. OF DOTAGZ			F2502780
04015	0	70000	2	01076	TDOTG4	CPY	DOTAGZ,2			F2502790
04016	1	77777	2	04015	TXI	TDOTG4,2,-1				F2502800
04017	0	02000	4	00001	TRA	1,4	EF END OF PROBLEM			F2502810
04020	0	76600	0	00333	WRS	219				F2502820
04021	-0	76000	0	00012	RTT					F2502830
04022	0	02000	0	04024	TRA	TDOTG5	ERROR			F2502840
04023	0	02000	4	00002	TRA	2,4	RECORD CORRECTLY READ			F2502850
04024	0	76400	0	00222	TDOTG5	BST	146	BACKSPACE AND REPEAT		F2502860
04025	2	00001	1	04013	TIX	TDOTG1,1,1	IF NOT YET READ	3 TIMES		F2502870
04026	0	07400	4	00004	TSX	DIAG,4	TAPE 4 READ INCORRECTLY	5 TIMES.		F2502880
							*****		F2502890	
							TTG IS CALLED BY MAN TO READ	IN A NEST OF TAGTAG ENTRIES		F2502900
04027	0	53400	2	05121	TTG	LXA	LMXTG,2	LOCATION OF MAX TAP TABLE	SIZE	F2502910
04030	0	53400	1	05132	TTG01	LXA	L(5),1	INITIALIZE TAPE ERROR	COUNTER.	F2502920
04031	0	76200	0	00224	TTG02	RDS	148			F2502930
04032	-0	63400	2	04043	SXD	TTG10,2	FOR ERROR BACKUP	IN READING		F2502940
04033	0	70000	2	02336	TTG05	CPY	MXTGTG,2			F2502950
04034	0	02000	0	04037	TRA	TTG06				F2502960
04035	0	07400	4	00004	TSX	DIAG,4	FALXE END OF FILE	ON TAPE 4.		F2502970
04036	0	02000	0	04041	TRA	TTG07	END OF RECORD,	CORRECT-EXIT.		F2502980
04037	2	00001	2	04033	TTG06	TIX	TTG05,2,1			F2502990
04040	0	07400	4	00004	TSX	DIAG,4	BUFFFR EXCEEDED.			F2503000
04041	0	76600	0	00333	TTG07	WRS	219			F2503010
04042	-0	76000	0	00012	RTT					F2503020
04043	-3	00000	0	04051	TTG10	TXL	TTG16	ERROR IN READING		F2503030
04044	1	00004	2	04045	TXI	TTG11,2,4	FIRST WORD LAST	ENTRY		F2503040
04045	0	50000	2	02336	TTG11	CLA	MXTGTG,2	FOR NEST END TEST		F2503050
04046	0	40200	0	05123	SUB	ALLONE	END OF NEST	INDICATOR		F2503060
04047	0	10000	4	00001	TTG13	TZE	1,4	END OF NEST		F2503070
04050	2	00004	2	04030	TIX	TTG01,2,4				F2503080
04051	-0	53400	2	04043	TTG16	LXD	TTG10,2	TAPE ERROR ROUTINE,	LOAD	F2503090
04052	0	76400	0	00224	BST	148	TAG TABLE INDEX	AND RETRY		F2503100
04053	2	00001	1	04031	TIX	TTG02,1,1	UP TO 5 TIMES.			F2503110
04054	0	07400	4	00004	TSX	DIAG,4	TAPE 4 READ INCORRECTLY	5 TIMES		F2503120
							*****		F2503130	
							DOGS IS CALLED BY MAN TD	SELECT AN ALPHA OR BETA	TO BE PRO	F2503140
							CESSED BY THE APPROPRIATE	STATE (ALPHA OR BETA).		F2503150
04055	0	50000	0	05133	DOGS	CLA	L(0)	INITIALIZING TO ZERO		F2503160
04056	0	60100	0	05224	STO	A	ALL CALLS REQUIRED	FOR		F2503170
04057	0	60100	0	05225	STO	B	COMPARISON FOR	EACH DO		F2503180
04060	0	60100	0	05226	STO	SWICH				F2503190

TD

	04061	0	60100	0	05227	STO	TEBBOX		F2503200
	04062	-0	53400	1	05231	LXD	DOIND1,1	IF LEVEL OF LAST	F2503210
D	04063	-3	00000	1	04072	TXL	DOGS20,1		F2503220
	04064	0	50000	0	05233	CLA	SWICH1		F2503230
	04065	-0	10000	0	04072	TNZ	DOGS20		F2503240
	04066	0	50000	1	01103	CLA	DOTAGZ+5,1	ANALYZED DOTAG ENTRY	F2503250
	04067	-0	73400	1	00000	PDX	0,1	IS ONE THEN THE NEST	F2503260
	04070	3	00001	1	04072	TXH	DOGS20,1,1	HAS BEEN COMPLETELY	F2503270
	04071	0	02000	4	00001	TRA	1,4	ANALYZED. IF NOT	F2503280
	04072	0	53400	1	05057	DOGS20	LXA LMXDTG,1	START SCAN AT FIRST ENTRY	F2503290
	04073	0	50000	0	05226	DOGS22	CLA SWICH		F2503300
	04074	-0	10000	0	04104	TNZ	DOGS25	B PORTION UNDER CONSIDERATION	F2503310
	04075	0	50000	1	01076	CLA	DOTAGZ,1	A PORTION UNDER CONSIDERATION	F2503320
	04076	-0	32000	0	05136	ANA	BIT1		F2503330
	04077	-0	10000	0	04134	TNZ	DOGS50	CONTINUE, ALREADY ANALYZED	F2503340
	04100	0	50000	1	01076	CLA	DOTAGZ,1	SETS UP A PORTION OF	F2503350
	04101	-0	73400	2	00000	PDX	0,2	DO FOR COMPARISON	F2503360
	04102	-0	63400	2	05225	SXD	B,2	PUT A OF DO IN INDICATOR B	F2503370
	04103	0	02000	0	04114	TRA	DOGS30	PROCEED T/ COMPARISON	F2503380
	04104	0	50000	1	01076	DOGS25	CLA DOTAGZ,1	B PORTION UNDER CONSIDERATION	F2503390
	04105	-0	32000	0	05137	ANA	BIT2	MASK T0 INDICATE LOOKED AT	F2503400
	04106	-0	10000	0	04134	TNZ	DOGS50	ALREADY ANALYZED, CONTINUE	F2503410
	04107	0	50000	1	01076	CLA	DOTAGZ,1	SET UP A IN	F2503420
	04110	-0	73400	2	00000	PDX	0,2	B WORD FOR COMPARISON	F2503430
	04111	-0	63400	2	05224	SXD	A,2		F2503440
	04112	0	73400	2	00000	PAX	0,2		F2503450
	04113	-0	63400	2	05225	SXD	B,2		F2503460
	04114	0	50000	0	05225	DOGS30	CLA B		F2503470
	04115	0	34000	0	05227	CAS	TEBBOX		F2503480
	04116	0	02000	0	04125	TRA	DOGS45	T-B1 STORE B IN TEB8OX	F2503490
	04117	0	02000	0	04121	TRA	DOGS40	T=B1 COMPARE AS	F2503500
	04120	0	02000	0	04134	TRA	DOGS50	T-B1 CONTINUE	F2503510
	04121	0	50000	0	05232	DOGS40	CLA TEABOX	COMPARE AS	F2503520
	04122	0	34000	0	05224	CAS	A		F2503530
	04123	0	02000	0	04134	TRA	DOGS50	T-A CONTINUE	F2503540
	04124	0	07400	4	00004	TSX	DIAG,4	T=A, ERROR.	F2503550
	04125	0	50000	0	05224	DOGS45	CLA A	T-A STORE B IN TRBBOX	F2503560
	04126	0	60100	0	05232	STO	TEABOX		F2503570
	04127	0	50000	0	05225	CLA	B		F2503580
	04130	0	60100	0	05227	STO	TEBBOX		F2503590
	04131	-0	63400	1	05231	SXD	DOIND1,1	RECORD THE DO POSITION	F2503600
	04132	0	50000	0	05226	CLA	SWICH	RECORD SWITCH	F2503610
	04133	0	60100	0	05233	STO	SWICH1		F2503620
	04134	0	50000	0	05226	DOGS50	CLA SWICH	REVERSE SWITCH FOR	F2503630
	04135	0	40200	0	05126	SUB	L(1)	EITHER B OF SAME DO OR	F2503640
	04136	0	76000	0	00003	SSP		A OF NEXT DO	F2503650
	04137	0	60100	0	05226	STO	SWICH		F2503660
	04140	-0	10000	0	04142	TNZ	DOGS60	TESTS A,B STATUS IF A	F2503670
	04141	1	77767	1	04142	TXI	DOGS60,1,-9	LOWERS INDEX FOR NEXT DO	F2503680
D	04142	3	00000	1	04073	DOGS60	TXH DOGS22,1		F2503690
	04143	-0	53400	1	05231	LXD	DOIND1,1	END OF SCAN	F2503700
	04144	-0	63400	1	05230	SXD	DOIND,1	DO INDICATOR SET	F2503710
	04145	0	53400	2	05233	LXA	SWICH1,2		F2503720
	04146	0	50000	0	05136	CLA	BIT1	ORDER TO PLACE BIT IN	F2503730

04147	-3	00000	2	04151		TXL	DOGS70,2,0	A OR B USED	F2503740
04150	0	77100	0	00001		ARS	1	INDICATOR POSITION	F2503750
04151	-0	60200	1	01076	DOGS70	ORS	DOTAGZ,1		F2503760
04152	0	02000	4	00002		TRA	2,4	EXIT AFTER FINDING DO	F2503770
								*****	F2503780
								SCAN SCANS TAGTAG FOR THE FIRST ENTRY THAT IS MODIFIED BY A	DF2503790
								DO WHOSE ALLPHA IS LESS THAT THE CURRENT DOTAG BETA.	F2503800
								THIS TAG IS CALLED RTXTGX.	F2503810
04153	0	53400	1	05121	SCAN	LXA	LMXTG,1	COMPARE B WITH DOFOR	F2503820
04154	0	50000	0	05225	SCAN05	CLA	B	DOTAG A OF EACH TAGTAG	F2503830
04155	0	34000	1	02336		CAS	MXTGTG,1	ENTRY IN NEST	F2503840
04156	1	00004	1	04161		TXI	SCAN10,1,4	SEARCH COMPLETED.	F2503850
04157	0	07400	4	00004		TSX	DIAG,4	EQUALITY IMPOSSIBLE.	F2503860
04160	1	77774	1	04154		TXI	SCAN05,1,-4	G LESS THAN A.	F2503870
04161	0	02000	4	00001	SCAN10	TRA	1,4		F2503880
								*****	F2503890
								FIND, BEGINNING WITH RTXTGX, SEARCHES FOR A TAGTAG ENTRY MODIF	F2503900
								FLED BY THE CURRENT DO.	F2503910
04162	-0	63400	4	04176	FIND	SXD	FIND22,4		F2503920
04163	-0	53400	1	05237		LXD	XTG,1		F2503930
04164	1	77774	1	04165	FIND04	TXI	FIND10,1,-4	BUMP TO NEXT TGTG ENTRY.	F2503940
04165	3	00000	1	04170	FIND10	TXH	FIND20,1	DECREMENT CONTAINS TGTG COUNT.	F2503950
04166	-0	53400	4	04176		LXD	FIND22,4		F2503960
04167	0	02000	4	00001		TRA	1,4	END OF TGTG TABLE AND DO.	F2503970
04170	0	50000	0	05224	FIND20	CLA	A	COMPARE DOTAGA WITH	F2503980
04171	0	34000	1	02336		CAS	MXTGTG,1	TGTG DOFOR DOTAG A.	F2503990
04172	0	02000	0	04166		TRA	FIND10+1	END OF DO.	F2504000
04173	0	76100	0	00000		NOP			F2504010
04174	0	07400	4	04213		TSX	TGFM,4		F2504020
04175	0	07400	4	04204		TSX	ISC,4		F2504030
04176	-3	00000	0	04164	FIND22	TXL	FIND04,0	POSIND=3 IF LEFTMMST SYMBML.	F2504040
04177	-0	75400	2	00000		PXD	0,2	2IF CENTER.	F2504050
04200	0	77100	0	00022		ARS	18	1 IF RIGHTMOST.	F2504060
04201	0	60100	0	05240		STO	POSIND		F2504070
04202	-0	53400	4	04176		LXD	FIND22,4		F3504080
04203	0	02000	4	00002		TRA	2,4	SUCCESSFUL SEARCH.	F2504090
								*****	F2504100
								ISC IS CALLED BY FIND TO TEST FOR MODIFICATION.	F2504110
04204	0	53400	2	05126	ISC	LXA	L(1),2	COMPARE SUBSCRIPT	F2504120
04205	0	50000	0	05230		CLA	DOIND	WITH THE INDEX	F2504130
04206	0	40200	2	03652		SUB	TAG2+3,2	OF THE CURRENT DO.	F2504140
04207	0	10000	4	00002		TZE	2,4	CURRENT DO MODIFIES THIS TAG.	F2504150
04210	1	00001	2	04211		TXI	ISC+5,2,1	TRY NEXT LEFT	F2504160
04211	-3	00003	2	04205		TXL	ISC+1,2,3	SUBSCRIPT.	F2504170
04212	0	02000	4	00001		TRA	1,4	NO MODIFICATION, ERROR RETURN.	F2504180
								*****	F2504190
								TGFM TAKES A TAG ENTRY AND STORES ITS INFORMATION INTO	F2504200
								WORKING TGTG.	F2504210
04213	0	50000	1	02336	TGFM	CLA	MXTGTG,1		F2504220
04214	0	62200	0	03646		STD	TAG1	IN WORKING TGTG.	F2504230
04215	0	73400	2	00000		PAX	0,2	A, X1, X2, X3, TG, TG1.	F2504240
04216	-0	63400	2	03647		SXD	TAG2,2		F2504250
04217	0	50000	1	02337		CLA	MXTGTG+1,1		F2504260
04220	0	62200	0	03650		STD	TAG2+1		F2504270

04221	0	73400	2	00000		PAX	0,2		F2504280
04222	-0	63400	2	03651		SXD	TAG2+2,2		F2504290
04223	0	50000	1	02340		CLA	MXTGTG+2,1		F2504300
04224	0	60100	0	03652		STO	TAG3		F2504310
04225	0	50000	1	02341		CLA	MXTGTG+3,1		F2504320
04226	0	60100	0	03653		STO	TAG4		F2504330
04227	0	02000	4	00001		TRA	1,4		F2504340
							*****		F2504350
							ENTR SIMJLATES A TAU ENTRY AND SPREADS IS INTO WORKING TAG--		F2504360
04230	-0	53400	2	05230	ENTR	LXD	DOIND,2	SYMBOL OF DO IS	F2504370
04231	0	50000	2	01077		CLA	DOTAGZ+1,2	PLACED IN WRKSC	F2504380
04232	0	60100	0	03637		STO	WRKSC+1	AND COEF. IS SET	F2504390
04233	0	50000	0	05061		CLA	L1DEC	=1. THIS SIMULATES	F2504400
04234	0	60100	0	03636		STO	WRKSC	A TAU TABLE ENTRY.	F2504410
04235	0	02000	4	00001		TRA	1,4		F2504420
							*****		F2504430
							SUBCOM SPREADS A TAU ENTRY INTO WORKING TAG		F2504440
04236	-0	63400	4	04320	SUBCOM	SXD	SUB085,4	SAVE LINKAGE.	F2504450
04237	0	53400	1	05132		LXA	L(5),1		F2504460
04240	0	60100	0	04331		STO	SUBTAG		F2504470
04241	0	76200	0	00304	SUB010	RDS	196	SELECT TAU DRUM.	F2504480
04242	-0	53400	4	04326		LXD	SUBORG+2,4	INITIALIZE	F2504490
04243	-0	75400	0	00000		PXD	0,0	SUBSCRIPT COMBINATION	F2504500
04244	0	60100	4	03646	SUB020	STO	WRKSC+8,4	TO ZERO.	F2504510
04245	2	00001	4	04244		TIX	SUB020,4,1		F2504520
04246	0	50000	0	04331		CLA	SUBTAG		F2504530
04247	0	76500	0	00011		LRS	9		F2504540
04250	0	73400	6	00000		PAX	0,6	TAU 1,2, OR 3	F2504550
04251	-0	75400	0	00000		PXD	0,0	TAU 1 ADD. IS ORG+3TAU.	F2504560
04252	0	76300	0	00011		LLS	9	TAU2 ADD. IS ORG+5TAU.	F2504570
04253	0	60100	0	04327		STO	SUBES1	TAU THREE ADD. IS ORG+7TAU.	F2504580
04254	0	76700	0	00001		ALS	1	STORE	F2504590
04255	0	60100	0	04330		STO	SUBES2	ADDRESS	F2504600
04256	0	50000	4	04327		CLA	SUBORG+3,4		F2504610
04257	0	40000	0	04327		ADD	SUBES1	FOR LDA	F2504620
04260	0	40000	0	04330	SUB030	ADD	SUBES2	INSTRUCTION	F2504630
04261	2	00001	4	04260		TIX	SUB030,4,1		F2504640
04262	0	62100	0	04327		STA	SUBES1	ACTUAL DRUM ADDRESS.	F2504650
04263	0	46000	0	04327		LDA	SUBES1	COPY SUB. COMBINATION	F2504660
04264	0	70000	0	03636		CPY	WRKSC	WD1 IS C1 AND C2.	F2504670
04265	-3	00002	2	04267		TXL	SUB040,2,2	1 AND 2 DIM SKIP WD5.	F2504680
04266	0	70000	0	03642		CPY	WRKSC+4	WD5 IS C3.	F2504690
04267	0	70000	0	03637	SUB040	CPY	WRKSC+1	WD2 IS S1,	F2504700
04270	-3	00001	2	04275		TXL	SUB060,2,1	1 DIM., SKIP WDS 4,6,7.	F2504710
04271	0	70000	0	03641		CPY	WRKSC+3	WD4 IS S2.	F2504720
04272	-3	00002	2	04274		TXL	SUB050,2,2	1 AND 2 DIM SKIP WD 6	F2504730
04273	0	70000	0	03643		CPY	WRKSC+5	WD6 IS S3.	F2504740
04274	0	70000	0	03644	SUB050	CPY	WRKSC+6	WD7 IS DIMENSION	F2504750
04275	0	70000	0	04327	SUB060	CPY	SUBES1	CHECK-SUM INTO-SUBES1.	F2504760
04276	-0	53400	4	04324		LXD	SUBORG,4	COMPUTE CHECK-SUM.	F2504770
04277	-0	50000	0	03636		CAL	WRKSC		F2504780
04300	0	36100	4	03645	SUB070	ACL	WRKSC+7,4		F2504790
04301	2	00001	4	04300		TIX	SUB070,4,1	3 ATTEMPTS ARE MADE	F2504800
04302	0	60200	0	04330		SLW	SUBES2	TO READ SC CORRECTLY,	F2504810

04303	0	50000	0	04330	CLA	SUBES2	IF ERROR STILL PRESENT,	F2504820
04304	0	40200	0	04327	SUB	SUBES1	COMPLETE ROUTINE, RETURN.	F2504830
04305	0	10000	0	04310	TZE	SUB075	CHECK SUMS AGREE, TRA.	F2504840
04306	2	00001	1	04241	TIX	SUB010,1,1	ERROR, TRY UP TO 5 TIMES.	F2504850
04307	0	07400	4	00004	TSX	DIAG,4	DRUM 4 READING ERROR 5 TIMES.	F2504860
04310	-0	53400	4	04325	LXD	SUBORG+1,4	REARRANGE C1,C2,D1, AND D2.	F2504870
04311	0	50000	4	03645	SUB080	CLA	WRKSC+7,4	F2504880
04312	0	73400	2	00000	PAX	0,2	C2 INTO XB.	F2504890
04313	-0	32000	0	05142	ANA	DECMSK		F2504900
04314	0	60100	4	03645	STO	WRKSC+7,4	WD1 DECREMENT IS C1)	F2504910
04315	-0	75400	2	00000	PXD	0,2	WD7 DECREMENT IS D1.	F2504920
04316	-2	00006	4	04321	TNX	SUB090,4,6		F2504930
04317	0	60100	0	03640	STO	WRKSC+2		F2504940
D 04320	-3	00000	0	04311	SUB085	TXL	SUB080,0	F2504950
04321	0	60100	0	03645	SUB090	STO	WRKSC+7	F2504960
04322	-0	53400	4	04320	LXD	SUB085,4	WD8 DECREMENT IS D2.	F2504970
04323	0	02000	4	00001	SUB100	TRA	1,4	RESTORE LINKAGE INDEX.
04324	+000006001356			SUBORG	OCT	000006001356	DECREMENT IS 6, ADD. IS ORG. TAU3.	F2504980
04325	+000007000454				OCT	000007000454	DECREMENT IS 7, ADD. IS ORG. TAU2	F2504990
04326	+000010000000				OCT	000010000000	DECREMENT IS 8, ADD. IS ORG. TAU1	F2505000
A 04327	0	00000	0	00000	SUBES1	HTR		F2505010
A 04330	0	00000	0	00000	SUBES2	HTR		F2505020
04331	0	00000	0	00000	SUBTAG			F2505030
								F2505040
								F2505050
								F2505060
								F2505070
								F2505080
								F2505090
								F2505100
								F2505110
								F2505120
								F2505130
								F2505140
								F2505150
								F2505160
								F2505170
								F2505180
								F2505190
								F2505200
								F2505210
								F2505220
								F2505230
								F2505240
								F2505250
								F2505260
								F2505270
								F2505280
								F2505290
								F2505300
								F2505310
								F2505320
								F2505330
								F2505340
								F2505350
04332	0	50000	0	05222	LOC0	CLA	LOCIND	
04333	0	10000	2	00001	TZE	1,2	LOCATION ALREADY ASSIGNED.	
04334	0	50000	0	05133	CLA	L(0)	IF LOCIND GREATER	
04335	0	60100	0	05222	STO	LOCIND		
04336	0	50000	0	05176	CLA	CIL00	TO ZERO.	
04337	-0	10000	2	00001	TNZ	1,2	IF CIL00 HAS NOT BEEN	
04340	0	50000	0	05244	CLA	VCTR		
04341	0	60100	0	05176	STO	CIL00	UPDATE VCTR.	
04342	0	40000	0	05110	ADD	L(8)		
04343	0	60100	0	05244	STO	VCTR	-	
04344	0	02000	2	00001	TRA	1,2	START COMPARING BUFFER	
								F2505190
								F2505200
								F2505210
								F2505220
								F2505230
								F2505240
								F2505250
								F2505260
								F2505270
								F2505280
								F2505290
								F2505300
								F2505310
								F2505320
								F2505330
								F2505340
								F2505350
04345	-0	63400	1	05174	CIT	SXD	E2C,1	SIZE TO CURRENT WORD COUNT.
04346	-0	63400	2	05175	SXD	E3C,2		
04347	0	07400	2	04332	TSX	LOC0,2		
04350	-0	53400	2	05173	LXD	BB0X,2	COMP OF CURRENT WORD COUNT.	
04351	3	77634	2	04362	TXH	CIT04,2,-100	IF BUFFER INITIALLY	
04352	-0	53400	2	05173	CITSP	LXD	BB0X,2	
04353	-3	00000	2	04362	TXL	CIT04,2,0	WRITE	
04354	0	76600	0	00223	WRS	147	BUFFER	
04355	0	53400	1	05133	LXA	L(0),1	ON TAPE 3.	
04356	0	70000	1	00030	CIT01	CPY	CIB,1	COPY LOOP.
04357	1	77777	1	04360	TXI	CIT02,1,-1		
04360	1	00001	2	04361	CIT02	TXI	CIT03,2,1	DROP WORD COUNT.
04361	3	00001	2	04356	CIT03	TXH	CIT01,2,1	TEST FOR BUFFER DNE.

04362	0	53400	1	05130	CIT04	LXA	L(4),1		PROCEED TO NEW	F2505360
04363	0	50000	1	05202	CIT05	CLA	CIL00+4,1		INST INTO BUFFER.	F2505370
04364	0	60100	2	00030		STO	CIB,2			F2505380
04365	1	77777	2	04366		TXI	CIT07,2,-1		KEEP WORD COUNT UPDATED.	F2505390
04366	2	00001	1	04363	CIT07	TIX	CIT05,1,1			F2505400
04367	-0	63400	2	05173		SXD	BB0X,2		SAVE CURRENT WD CT,	F2505410
04370	-0	53400	1	05174		LXD	E2C,1			F2505420
04371	-0	53400	2	05175		LXD	E3C,2			F2505430
04372	0	02000	4	00001		TRA	1,4			F2505440
									*****	F2505430
									SCLMN1 ISOLATES THE INNERMOST DOTAG CONTROLLING A GIVEN TAG	F2505460
04373	-0	53400	1	03647	SCLMN1	LXD	TAG2,1		S1 INDEX QUANTITY.	F2505470
04374	-0	53400	2	03650		LXD	TAG2+1,2		S2 INDEX QUANTITY.	F2505480
04375	-0	63400	2	04376		SXD	SCLMN2,2		THIS ROUTINE	F2505490
D 04376	3	00000	1	04400	SCLMN2	TXH	SCLMN3,1		COMPARES SIZES	F2505500
04377	-0	53400	1	04376		LXD	SCLMN2,1		OF THE INDEX	F2505510
04400	-0	53400	2	03651	SCLMN3	LXD	TAG2+2,2		QUANTITIES OF	F2505520
04401	-0	63400	2	04402		SXD	SCLMN4,2		EACH SUBSCRIPT IN A TAG.	F2505530
D 04402	3	00000	1	04404	SCLMN4	TXH	SCLMN5,1		LARGEST 2.X. QUANTITY	F2505540
04403	-0	53400	1	04402		LXD	SCLMN4,1		IS FOUND AND LEFT IN	F2505550
04404	-0	75400	1	00000	SCLMN5	PXD	0,1		ACC FOR COMPARISON WITH DOIND.	F2505560
04405	0	02000	4	00001		TRA	1,4			F2505570
									*****	F2505580
									TELC MONITORS THE COMPUTING OF THE LOAD PORTION OF THE TEST	F2505590
									DECREMENT.	F2505600
04406	0	53400	1	05131	TELC	LXA	L(3),1			F2505610
04407	0	50000	0	05133		CLA	L(0)			F2505620
04410	0	60100	0	05245		STO	ERTX01			F2505630
04411	-0	63400	4	05236		SXD	LINKC,4			F2505640
04412	0	50000	1	03652	TELC05	CLA	TAG2+3,1		SEQUENCE. PUT S IN XB TO PREPARE	F2505650
04413	-0	73400	2	00000		PDX	0,2		FOR CN1IJ ROUTINE.	F2505660
04414	-3	00000	2	04416		TXL	TELC10-2,2,0		NO S, GO TO NEXT S.	F2505670
04415	0	07400	4	04423		TSX	CN1IJ,4		COMPUTE (CN1-1)IJ-ETC.	F2505680
04416	0	40000	0	05245		ADD	ERTX01			F2505690
04417	0	60100	0	05245		STO	ERTX01		(C1N1)+(C2N1-1)D1+(C3N1-1)D1D2.	F2505700
04420	2	00001	1	04412	TELC10	TIX	TELC05,1,1		GO TO NEXT S FOR CN1IJ ROUTINE.	F2505710
04421	-0	53400	4	05236		LXD	LINKC,4			F2505720
04422	0	02000	4	00001		TRA	1,4			F2505730
									*****	F2505740
									CN1IJ COMPUTES THE LOAD VALUE FOR A GIVEN SUBSCRIPT IN A	F2505750
									SUBSCRIPT COMBINATION. (C1N1-1), OR (C2N1-1)D1	F2505760
04423	0	56000	2	01100	CN1IJ	LDQ	DOTAGZ+2,2		N2 INTO MQ.	F2505770
04424	0	76300	0	00022		LLS	18			F2505790
04425	-3	00002	1	04431		TXL	CN1IJ2,1,2		S2 OR S3, TRANSFER.	F2505800
04426	0	20000	0	03636		MPY	WRKSC		S1,	F2505810
04427	0	40200	0	05127		SUB	L(2)			F2505820
04430	0	02000	0	04445		TRA	CN1IJ8			F2505830
04431	-3	00001	1	04437	CN1IJ2	TXL	CN1IJ4,1,1		DIVIDE BY 2 AND RETURN.	F2505840
04432	0	20000	0	03640		MPY	WRKSC+2		S2	F2505850
04433	0	40200	0	05127		SUB	L(2)		COMPUTE	F2505860
04434	0	76500	0	00022		LRS	18		(2C2N1-2)D1D2 THEN	F2505870
04435	0	20000	0	03644		MPY	WRKSC+6		GO TO CN1IJ8 TO DIVIDE	F2505880
04436	0	02000	0	04445		TRA	CN1IJ8		BY 2 AND RETURN.	F2505890
04437	0	20000	0	03642	CN1IJ4	MPY	WRKSC+4		S3,	F2505900

04440	0	40200	0	05127		SUB L(2)	COMPUTE	F2505910
04441	0	76500	0	00022		LRS 18	(2C3N1-2)D1D2 THEN	F2505920
04442	0	20000	0	03644		MPY WRKSC+6	GO TO CN1IJ8 TO DIVIDE	F2505930
04443	0	76500	0	00022		LRS 18	DIVIDE BY 2 AND	F2505940
04444	0	20000	0	03645		MPY WRKSC+7	RETURN.	F2503950
04445	0	77100	0	00001	CN1IJ8	ARS 1	DIVIDE BY 2, RESULT IS (C1N1-1)	F2505960
04446	0	02000	4	00001		TRA 1,4	OR (C2N1-1)D1 OR (C3N1-1)D1D2	F2505970
							*****F2505980	
							CXIJ COMPUTES GN3X. WHEN THE ROUTINE CXIJ+2 IS CALLED,	F2505990
							GQ IS COMPUTED, Q BEING WHATEVER PARAMETER IS LEFT IN THE ACCF2506000	
							BY THE CALLER.	F2506010
04447	0	50000	2	01103	CXIJ	CLA DOTAGZ+5,2		F2506020
04450	-0	32000	0	05141		ANA ADMSK	ISOLATE X QUANTITY.	F2506030
04451	0	60100	0	05247		STO ERTX03		F2506040
04452	3	00001	1	04455		TXH CXIJ+6,1,1	S2 OR S1.	F2506050
04453	0	56000	0	03642		LDQ WRKSC+4	S3, LOAD C3.	F2506060
04454	0	02000	0	04461		TRA CXIJ2		F2506070
04455	-3	00002	1	04460		TXL CXIJ1,1,2	S2.	F2506080
04456	0	56000	0	03636		LDQ WRKSC	S1, LOAD C1.	F2506090
04457	0	02000	0	04461		TRA CXIJ2		F2506100
04460	0	56000	0	03640	CXIJ1	LDQ WRKSC+2	S2, LOAD C2.	F2506110
04461	0	20000	0	05247	CXIJ2	MPY ERTX03		F2506120
04462	3	00002	1	04470		TXH CXIJ4,1,2	IF S1, FINISHED.	F2506130
04463	0	76500	0	00022		LRS 18		F2506140
04464	0	20000	0	03644		MPY WRKSC+6	CX TIMES D1.	F2506150
04465	3	00001	1	04470		TXH CXIJ4,1,1	IF S2, FINISHED.	F2506160
04466	0	76500	0	00022		LRS 18		F2506170
04467	0	20000	0	03645		MPY WRKSC+7	CXD1 TIMES D2.	F2506180
04470	0	76300	0	00021	CXIJ4	LLS 17		F2506190
04471	0	02000	4	00001		TRA 1,4	IN ACC. AND RETURN.	F2506200
							*****F2506210	
							CSXD COMPILES AN SXD INSTRUCTION WHERE THE ADDRESS IS NOT YET	F2306220
							KNOWN, BUT IS KNOWN TO BE THE TEST FOR A GIVEN DO. THE	F2506230
							ADDRESS WORD IS FILLED IN WITH THAT DOTAG ALPHA-BETA AND THE	F2306240
							LOCATION OF THE SXD IS STORED IN THAT DQTAG SO THAT A TABLE	F2506250
							(SXD TX) MAY BE MADE FOR REFERENCE BY SECTION 3 TO FILL IN THE	F2506260
							PROPER ADDRESS DURING MERGE.	F2506270
04472	-0	63400	4	05245	CSXD	SXD ERTX01,4	ROUTINE FOR	F2506280
04473	0	07400	4	06224		TSX CILV,4	COMPILING AN	F2506290
04474	0	50000	0	05133		CLA L(0)	SXD INSTRUCTION	F2506300
04475	0	60100	0	05201		STO CIL03	WHERE THE	F2506310
04476	0	60100	0	05200		STO CIL02		F2506320
04477	-0	53400	4	05250		LXD BLKNUM,4		F2506330
04500	-3	00002	4	04503		TXL CSXD4,4,2	BLOCKS B,C.	F2506340
04501	-0	53400	4	03650		LXD TAG21,4	BLOCKS D,E, LOAD S2 INDEX.	F2506350
04502	0	02000	0	04504		TRA CSXD4+1		F2506360
04503	-0	53400	4	03647	CSXD4	LXD TAG2,4	BLOCKS B,C, LOAD S1 INDEX.	F2506370
04504	0	50000	4	01076		CLA DOTAGZ,4	FOR BLOCKS B,C, FILL IN	F2506380
04505	-0	32000	0	05071		ANA NOPRET	SYMBOLIC ADDRESS OF SXD	F2506390
04506	0	60100	0	05200		STO CIL02	FROM WD1 OF S1 DOTAG.	F2506400
04507	0	50000	0	03652		CLA TAG3	NOT KNOWN.	F2506410
04510	0	62100	0	05201		STA CIL03		F2506420
04511	0	50000	0	05045		CLA L(SXD)		F2506430
04512	0	60100	0	05177		STO CIL01		F2506440

04513	0	07400	4	04345		TSX	CIT,4		F2506450
04514	-0	53400	4	05245		LXD	ERTX01,4		F2506460
04515	0	02000	4	00001		TRA	1,4		F2506470
							*****		F2506480
							ADTGSE FINDS A VALID DRMTG (ADTAG) ENTRY FOR CONSIDERATION		F2506490
							AND SPREADS IT INTO WORKING TAG (WRKSC).		F2506500
04516	-0	53400	1	05237	ADTGSE	LXD	XTG,1		F2506510
04517	1	77774	1	04520	ADTGS	TXI	ADTGS+1,1,-4		F2506520
04520	-0	63400	1	05237		SXD	XTG,1		F2506530
04521	3	00000	1	04523	ADTGS1	TXH	ADTGS5,1		F2506540
04522	0	02000	4	00001		TRA	1,4	END OF TABLE.	F2506550
04523	0	50000	1	03466	ADTGS5	CLA	ADTGMX,1	COMPARE ADTG DDA WITH	F2506560
04524	-0	32000	0	05142		ANA	DECMSK	DOTAG A AND B UNTIL	F2506570
04525	0	34000	0	05224		CAS	A	WE FIND AN ADTAG	F2506580
04526	0	02000	0	04531		TRA	ADTGS4	MODIFIED BY A DO THAT	F2506590
04527	0	02000	0	04531		TRA	ADTGS4	IS WITHIN THE RANGE	F2506600
04530	0	02000	0	04517		TRA	ADTGS	OF THE CURRENT DO	F2506610
04531	0	34000	0	05225	ADTGS4	CAS	B		F2506620
04532	0	02000	0	04517		TRA	ADTGS	NOT IN RANGE, SELECT NEXT	F2506630
04533	0	07400	4	00004		TSX	DIAG,4	EQUALITY IMPOSSIBLE.	F2506640
04534	0	50000	1	03466		CLA	ADTGMX,1	IN RANGE, FILL	F2506650
04535	-0	73400	2	00000		PDX	0,2	OUT WORKING TAG.	F2506660
04536	-0	63400	2	03646		SXD	TAG1,2	DDA IN TAG1 DECREMENT.	F2506670
04537	0	73400	2	00000		PAX	0,2		F2506680
04540	-0	63400	2	03647		SXD	TAG2,2	S1 INDEX IN TAG2.	F2506690
04541	0	50000	1	03467		CLA	ADTGMX+1,1		F2506700
04542	-0	73400	2	00000		PDX	0,2		F2506710
04543	-0	63400	2	03650		SXD	TAG2+1,2	S2 INDEX IN TAG2+1.	F2506720
04544	0	73400	2	00000		PAX	0,2		F2506730
04545	-0	63400	2	03651		SXD	TAG2+2,2	S3 INDEX IN TAG2+2.	F2506740
04546	0	50000	1	03470		CLA	ADTGMX+2,1		F2506750
04547	0	60100	0	03652		STO	TAG3	TAG NAME IN TAG3.	F2506760
04550	0	50000	1	03471		CLA	ADTGMX+3,1		F2506770
04551	0	60100	0	03653		STO	TAG4	ADTG WD4 IN TAG4.	F2506780
04552	0	53400	2	05126	ADTGS8	LXA	L(1),2	INIT FOR POSING.	F2506790
04553	0	50000	2	03652		CLA	TAG2+3,2		F2506800
04554	0	40200	0	05230		SUB	DOIND	TEST FOR MODIFICATION,	F2506810
04555	0	10000	4	00002		TZE	2,4	PROPER ENTRY FOUND.	F2506820
04556	3	00002	2	04517		TXH	ADTGS,2,2	NOT MOD BY DO, TAKE NEXT SUBSCRIPT	F2506830
04557	1	00001	2	04553		TXI	ADTGS8+1,2,1	ADTG NOT MOD BY DO, TAKE NEXT ADTG.	F2506840
							*****		F2506830
							N1STET ISOLATES VARIABLE N1 BITS FOR A TAG AND ORS THEM TO	LF	F2506860
							LAST 3 BITS OF THE WORD N1SBX.		F2506870
04560	0	50000	0	03653	N1STET	CLA	TAG4		F2506880
04561	0	77100	0	00003		ARS	3	ONE BIT	F2506890
04562	-0	32000	0	05076		ANA	L(7)	IS STORED IN N1SBX.	F2506900
04563	0	76700	0	00003		ALS	3		F2506910
04564	0	60100	0	05254		STO	N1SBX		F2506920
04565	0	53400	1	05131		LXA	L(3),1		F2506980
04566	0	50000	1	03652	N1S02	CLA	TAG2+3,1	A CONATAINS POSIND.	F2506990
04567	-0	73400	2	00000		PDX	0,2		F2507000
04570	-3	00000	2	04576		TXL	N1S05,2	NO TAG FOR THIS POS.	F2507010
04571	0	50000	2	01076		CLA	DOTAGZ,2	ISOLATE	F2507020
04572	0	77100	0	00017		ARS	15	VARIABLE	F2507030

04573	-0	32000	0	05130		ANA L(4)		N1		F2507040
04574	0	77100	1	00003		ARS 3,1		BIT.		F2507050
04575	-0	60200	0	05254		ORS N1SBX		OR N1BIT TO N1SBX.		F2507060
04576	2	00001	1	04566	N1S05	TIX N1S02,1,1		REPEAT FOR NEXT RIGHT S.		F2507070
04577	0	50000	0	05254		CLA N1SBX				F2507080
04600	0	02000	4	00001		TRA 1,4				F2507090
								*****		F2507100
								FIXCON SCANS THE FIXCON DRUM TABLE FOR A DESIRED SYMBOL FOR		AF2507110
								FIXED POINT CONSTANT. IF THE DESIRED FIXCON IS NOT THERE A		SF2507120
								SYMBOL IS CREATED FOR IT AND AN ENTRY IS MADE.		F2507130
04601	-0	63400	1	04634	FIXCON	SXD FC29,1		SAVE		F2507140
04602	-0	63400	2	04624		SXD FC18,2		INDEX		F2507150
04603	-0	63400	4	04636		SXD FC34,4		REGISTERS.		F2507160
M	04604	0	60100	0	05243	STO ERDRM1				F2507170
	04605	0	53400	4	05132	LXA L(5),4				F2507180
	04606	0	50000	0	04667	FC02	CLA ORIGIN	FIXCON TABLE ORIGIN.		F2507190
	04607	0	60100	0	05214	STO AD1				F2507200
	04610	0	53400	1	05133	LXA L(0),1		INITIALIZE WORD COUNT TEST INDICATOR.		F2507210
	04611	0	53400	2	05127	LXA L(2),2		INITIALIZE INDICATOR FOR TWO PASSES.		F2507220
M	04612	0	50000	0	05243	FC04	CLA ERDRM1	COMPARISON WORD IN ACCUMULATOR.		F2507230
	04613	0	76200	0	00302	RDS 194		FIXCON TABLE		F2507240
	04614	0	46000	0	05214	LDA AD1		ON DRUM 3.		F2507250
	04615	0	70000	0	05241	FC08	CPY CPYWD1	ENTRY FROM TABLE.		F2507260
D	04616	3	00000	1	04627	TXH FC24+1,1		DECREMENT CONTAINS WORD COUNT.		F2507270
	04617	0	70000	0	05242	CPY CPYWD2		CHECK SUM.		F2507280
	04620	0	04000	0	04635	TLQ FC30		ENTRY LESS THAN COMPARISON WORD.		F2507290
	04621	0	70000	0	05246	CPY ERDRM		SKIP EVEN ENTRIES FOR 2ND PASS.		F2507300
	04622	0	34000	0	05242	CAS CPYWD2		COMPARE ENTRY WITH COMPARISON WORD.		F2507310
	04623	0	07400	4	00004	TSX DIAG,4		TLQOBVIATES THIS PATH.		F2507320
D	04624	-3	00000	0	04662	FC18	TXL FC60,0	EQUALITY SEARCH ENDED.		F2507330
	04625	0	70000	0	05246	FC20	CPY ERDRM	SKIP EVEN ENTRIES FOR 2ND PASS.		F2507340
	04626	1	00002	1	04615	FC24	TXI FC08,1,2	BUMP WORD COUNT TEST INDICATOR		F2507330
	04627	-2	00001	2	04637	TXN FC40,2,1		TEST FOR PASS CONDITION.		F2507360
	04630	0	50000	0	05214	CLA AD1		INITIALIZE ORIGIN DRUM		F2507370
	04631	0	40000	0	05127	ADD L(2)		ADDRESS FOR 2ND PASS		F2507380
	04632	0	60100	0	05214	STO AD1		(EVEN ENTRIES)		F2507390
	04633	0	53400	1	05126	FC28	LXA L(1),1	SET ENTRY NUMBER FOR SECOND PASS.		F2507400
D	04634	-3	00000	0	04612	FC29	TXL FC04,0	RETURN TO FC04 FOR SECOND PASS.		F2507410
	04635	0	70000	0	05246	FC30	CPY ERDRM			F2507420
D	04636	-3	00000	0	04625	FC34	TXL FC20,0			F2507430
	04637	0	60100	0	05241	FC40	STO CPYWD1	SEARCH ENDED, ENTRY NOT FOUND.		F2507440
	04640	-0	53400	1	04616	LXD FC08+1,1				F2507450
	04641	1	00001	1	04642	TXI FC42,1,1		WORD COUNT,		F2507460
	04642	-0	63400	1	04616	FC42	SXD FC08+1,1	NEW TEST VALUE (WORD COUNT).		F2507470
	04643	-0	75400	1	00000	PXD 0,1		WORD COUNT		F2507480
	04644	0	77100	0	00021	ARS 17		PLUS		F2507490
	04645	0	40000	0	04667	ADD ORIGIN		ORIGIN EQUALS		F2507500
	04646	0	60100	0	05214	STO AD1		NEW ADDRESS FOR DRUM WRITING.		F2507510
	04647	0	76600	0	00302	WRS 194		SELECT		F2507520
	04650	0	46000	0	05214	LDA AD1		DRUM AND		F2507530
	04651	0	70000	0	05241	CPY CPYWD1		WRITE NEW CONSTANT		F2507540
	04652	0	70000	0	05241	CPY CPYWD1		AND CHECK SUM ON DRUM.		F2507550
	04653	-0	75400	1	00000	FC50	PXD 0,1	PLACE NAME OF CONSTANT		F2507560
	04654	0	77100	0	00022	ARS 18		IN ACCUMULATOR, RESTORE X REGISTERS,		F2507570

04655	-0	50100	0	05101	ORA	BCD2	AND RETURN	F2507580	
04656	-0	53400	1	04634	LXD	FC29,1	TO	F2507590	
04657	-0	53400	2	04624	LXD	FC18,2	MAIN	F2507600	
04660	-0	53400	4	04636	LXD	FC34,4		F2507610	
04661	0	02000	4	00001	TRA	1,4	ROUTINE.	F2507620	
04662	0	50000	0	05241	FC60	CLA	CPYWD1	TEST DRUM READING	F2507630
04663	0	40200	0	05242	SUB	CPYWD2		F2507640	
04664	0	10000	0	04653	TZE	FC50	DRUM READ CORRECTLY.	F2507650	
04665	2	00001	4	04606	TIX	FC02,4,1	RETURN FOR 1ST-PASS.	F2507660	
04666	0	07400	4	00004	STOPFC	TSX	DIAG,4	DRUM 4 READING ERROR 5 TIMES.	F2507670
04667	0	00000	0	00002	ORIGIN	HTR	2	F2507680	
							*****	F2507690	
							OP2 IS CALLED BY THE ALPHA STATE TO TEST FOR OPTIMIZATION IN	F2507700	
							THE COMILATION OF LOAD VALUE COMPUTATION. IT OPTIMIZES WHEN	F2507710	
							(CN1-1)=0 OR IS COMPUTABLE AT EXECUTIVE TIME.	F2507720	
04670	0	50000	4	77776	OP2	CLA	32766,4	F2507730	
04671	0	62100	0	04740	STA	RETURN	LINKAGE.	F2507740	
04672	0	50000	1	03652	CLA	TAG2+3,1	IF S IS NOT	F2507750	
04673	-0	73400	2	00000	PDX	0,2	DEFINED BY A DO,	F2507760	
04674	3	00000	2	04676	TXH	0P2P,2,0		F2507770	
04675	0	02000	4	00001	TRA	1,4		F2507780	
04676	0	50000	2	01100	OP2P	CLA	DOTAGZ+2,2	IF NOT DEFINED BY	F2507790
04677	-0	32000	0	05104	ANA	6ONES		F2507800	
04700	-0	10000	4	00001	TNZ	1,4	RETURN TO MAIN ROUTINE.	F2507810	
04701	0	50000	2	01100	CLA	DOTAGZ+2,2	IF CONSTANT, COMPUTE	F2507820	
04702	0	07400	4	04423	TSX	CN1IJ,4		F2507830	
04703	0	10000	0	04740	TZE	RETURN	RETURN AND CONSIDER S2.	F2507840	
04704	0	76700	0	00022	ALS	18	OTHERWISE COMPUTE	F2507850	
04705	-3	00002	1	04707	TXL	0P2P1,1,2		F2507860	
04706	0	40000	0	05061	ADD	L1DEC	TO (CN1-1).	F2507870	
04707	0	07400	4	04601	OP2P1	TSX	FIXCON,4	F2507880	
04710	-3	00002	1	04713	TXL	0P2P2,1,2		F2507890	
04711	0	60100	0	07567	STO	OR000+1		F2507900	
04712	2	00001	1	05517	TIX	AC050,1,1		F2507910	
04713	0	73400	1	00000	OP2P2	PAX	0,1	F2507920	
04714	-0	32000	0	05104	ANA	6ONES	ASSIGN FIXCON SYMBOL	F2507930	
04715	0	60100	0	05200	STO	CIL02	CHECK SUBSCRIPT. IF	F2507940	
04716	-0	75400	1	00000	PXD	0,1	S1, TRA RETURN (3RD) OTHERWISE	F2507930	
04717	0	60100	0	05201	STO	CIL03	COMPILE ADD L(SYMBOL).	F2507960	
04720	0	50000	0	05054	CLA	L(ADD)	STO 1)+3.	F2507970	
04721	0	60100	0	05177	STO	CIL01		F2507980	
04722	0	50000	0	05133	CLA	L(0)		F2507990	
04723	0	60100	0	05176	STO	CIL00		F2508000	
04724	-0	53400	1	05173	LXD	BB0X,1		F2508010	
04725	1	00004	1	04726	TXI	0P24,1,4		F2508020	
04726	-0	63400	1	05173	OP24	SXD	BB0X,1	F2508030	
04727	0	07400	4	04345	TSX	CIT,4		F2508040	
04730	0	50000	0	05044	CLA	L(STO)		F2508050	
04731	0	60100	0	05177	STO	CIL01		F2508060	
04732	0	50000	0	05075	CLA	L3DEC		F2508070	
04733	0	60100	0	05201	STO	CIL03		F2508080	
04734	0	50000	0	07620	CLA	OR000+26		F2508090	
04735	-0	32000	0	05104	ANA	6ONES		F2508100	
04736	0	60100	0	05200	STO	CIL02		F2508110	

04737	0	07400	4	04345	TSX	CIT,4		F2508120
04740	0	02000	0	00000	RETURN	TRA 0	ADDRESS MODIFIED,	F2508130
							*****	F2508140
							OP3 TESTS FOR VARIABLE NS AND IF CONSTANT COMPILES A	F2508150
							CLA L(N2-N1), OR IF VARIABLE CLA L(N2)...SUBL(N1),	F2508160
04741	-0	63400	4	05040	OP3	SXD	EROP3,4	F2508170
04742	0	50000	2	01076		CLA	DOTAGZ,2 ARE ALL	F2508180
04743	0	77100	0	00017		ARS	15 N PARAMETERS	F2508190
04744	-0	32000	0	05076		ANA	L(7) CONSTANT.	F2508200
04745	-0	10000	0	04766		TNZ	OP31 NO, OP31.	F2508210
04746	0	50000	2	01101		CLA	DOTAGZ+3,2 YES,	F2508220
04747	0	40200	2	01100		SUB	DOTAGZ+2,2 FORM	F2508230
04750	0	76700	0	00022		ALS	18 N2-N1,	F2508240
04751	0	07400	4	04601	TSX	FIXCON,4	OBTAIN FIXCON SYMBOL	F2508250
04752	0	73400	4	00000		PAX	0,4 COMPILE	F2508260
04753	-0	32000	0	05104		ANA	6ONES CLA	F2508270
04754	0	60100	0	05200		STO	CIL02 L(N2-N1)	F2508280
04755	-0	75400	4	00000		PXD	0,4 AND	F2508290
04756	0	60100	0	05201		STO	CIL03 RETURN	F2508300
04757	0	50000	0	05053		CLA	L(CLA) TO	F2508310
04760	0	60100	0	05177		STO	CIL01 THE	F2508320
04761	0	50000	0	05133		CLA	L(0) CALLER.	F2508330
04762	0	60100	0	05176		STO	CIL00 ZERO LOCATION.	F2508340
04763	0	07400	4	04345	TSX	CIT,4		F2508350
04764	-0	53400	4	05040		LXD	EROP3,4	F2508360
04765	0	02000	4	00001		TRA	1,4	F2508370
04766	0	77100	0	00001	OP31	ARS	1	F2508380
04767	0	76000	0	00001		LBT		F2508390
04770	0	02000	0	04776		TRA	OP32	F2508400
04771	0	50000	2	01101		CLA	DOTAGZ+3,2 N2 VARIABLE,	F2508410
04772	0	60100	0	05200		STO	CIL02 COMPILE	F2506420
04773	0	50000	0	05133		CLA	L(0) CLA L(N2).	F2508430
04774	0	60100	0	05201		STO	CIL03	F2508440
04775	0	02000	0	05006		TRA	OP33	F2506450
04776	0	50000	2	01101	OP32	CLA	DOTAGZ+3,2	F2508460
04777	0	76700	0	00022		ALS	18	F2508470
05000	0	07400	4	04601		TSX	FIXCON,4	F2508480
05001	0	73400	4	00000		PAX	0,4	F2508490
05002	-0	32000	0	05104		ANA	6ONES	F2508500
05003	0	60100	0	05200		STO	CIL02	F2508510
05004	-0	75400	4	00000		PXD	0,4	F2508520
05005	0	60100	0	05201		STO	CIL03	F2508530
05006	0	50000	0	05133	OP33	CLA	L(0)	F2508540
05007	0	60100	0	05176		STO	CIL00	F2508550
05010	0	50000	0	05053		CLA	L(CLA)	F2508560
05011	0	60100	0	05177		STO	CIL01	F2508570
05012	0	07400	4	04345		TSX	CIT,4	F2508580
05013	0	50000	2	01076		CLA	DOTAGZ,2	F2508590
05014	0	77100	0	00021		ARS	17	F2508600
05015	0	76000	0	00001		LBT		F2508610
05016	0	02000	0	05024		TRA	OP34	F2508620
05017	0	50000	2	01100		CLA	DOTAGZ+2,2 N1IS VARIABLE,	F2508630
05020	0	60100	0	05200		STO	CIL02 PREPARE TO	F2508640
05021	0	50000	0	05133		CLA	L(0) COMPILE	F2508650

05022	0	60100	0	05201	STO	CIL03	SUBL(N1).	F2508660
05023	0	02000	0	05033	TRA	OP35		F2508670
05024	0	50000	2	01100	OP34	CLA	DOTAGZ+2,2	F2508680
05025	0	76700	0	00022		ALS	18	F2508690
05026	0	07400	4	04601		TSX	FIXCON,4	F2508700
05027	0	73400	4	00000		PAX	0,4	F2508710
05030	-0	32000	0	05104		ANA	6ONES	F2508720
05031	0	60100	0	05200		STO	CIL02	F2508730
05032	-0	63400	4	05201		SXD	CIL03,4	F2508740
05033	0	50000	0	05055	OP35	CLA	L(SUB)	F2508750
05034	0	60100	0	05177		STO	CIL01	F2508760
05035	0	07400	4	04345		TSX	CIT,4	F2508770
05036	-0	53400	4	05040		LXD	EROP3,4	F2508780
05037	0	02000	4	00001		TRA	1,4	F2508790
05040	0	00000	0	00000	EROP3			F2508800
05041	+000000000100				EROP	OCT	100	F2508810
							*****	F2508820
05042	636731000000				L(TXI)	BCD	1TXI000	F2508830
05043	476724000000				L(PXD)	BCD	1PXD000	F2508840
05044	626346000000				L(STO)	BCD	1STO000	F2508850
05045	626724000000				L(SXD)	BCD	1SXD000	F2508860
05046	633167000000				L(TIX)	BCD	1TIX000	F2508870
05047	636743000000				L(TXL)	BCD	1TXL000	F2508880
05050	242524000000				L(DED)	BCD	1DED000	F2508890
05051	436724000000				L(LXD)	BCD	1LXD000	F2508900
05052	626324000000				L(STD)	BCD	1STD000	F2508910
05053	234321000000				L(CLA)	BCD	1CLA000	F2508920
05054	212424000000				L(ADD)	BCD	1ADD000	F2508930
05055	626422000000				L(SUB)	BCD	1SUB000	F2508940
05056	226262000000				L(BSS)	BCD	1BSS000	F2508950
05057	0	00000	0	00702	LMXDTG		450	F2508960
05060	+000000000400				MAXLOC	OCT	400	F2508970
05061	+000001000000				L1DEC	OCT	1000000	F2508980
05062	+000000002664				DRADS1	OCT	2664	F2508990
05063	0	00000	0	00314	DRADS2		204	F2509000
05064	0	00000	0	00002	DRADS3		2	F2509010
05065	0	00000	0	00312	AD202		202	F2509020
05066	0	00000	0	00021	L(17)		17	F2509030
05067	0	00000	0	07566	L(OR0)		OR000	F2509040
05070	0	00000	0	00000	ESTORE	HTR	0	F2509050
05071	+077777077777				NOPRET	OCT	077777077777	F2509050
05072	+000000001750				ABDRMA	DEC	1000	F2509070
05073	+000000001750				BLKSZE	DEC	1000	F2509080
05074	+000000077776				MINUS1	OCT	77776	F2509090
05075	+000003000000				L3DEC	OCT	000003000000	F2509100
05076	0	00000	0	00007	L(7)		7	F2509110
05077	+170000000000				BCD15	OCT	170000000000	F2509120
05100	+060000000002				BCD0	OCT	060000000002	F2509130
05101	+020000000000				BCD2	OCT	020000000000	F2509140
05102	-200000000000				BIT01	OCT	600000000000	F2509150
05103	-300000077777				T1MSK	OCT	700000077777	F2509160
05104	-370000000000				6ONES	OCT	770000000000	F2509170
05105	+007777000000				TETMSK	OCT	007777000000	F2509180
05106	0	00000	0	00006	L(6)		6	F2509190

05107	0	00000	0	00030	L(24)	24	F2509200
05110	0	00000	0	00010	L(8)	8	F2509210
05111	+0000000000010				L(K1)	OCT 10	F2509220
05112	+0000040000000				L4DEC	OCT 0000040000000	F2509230
05113	0	00000	0	03636	INST20	ADTGA	F2509240
05114	0	00000	0	02646	INST22	MXTGA	F2509250
05115	0	00000	0	05673	INST24	RTX160	F2509260
05116	0	00000	0	05716	INST26	RTX184	F2509270
05117	0	00000	0	06204	INST30	RTX264	F2509280
05120	0	00000	0	06065	INST32	RTX226	F2509290
05121	0	00000	0	01240	LMXTG	672	F2509300
05122	0	00000	0	00310	LHXTGA	200	F2509310
05123	+3777777777777				ALLONE	OCT 3777777777777	F2509320
05124	0	00000	0	00144	LZEKMX	100	F2509330
05125	0	00000	0	00620	LADMX	400	F2509340
05126	0	00000	0	00001	L(1)	1	F2509350
05127	0	00000	0	00002	L(2)	2	F2509360
05130	0	00000	0	00004	L(4)	4	F2509370
05131	0	00000	0	00003	L(3)	3	F2509380
05132	0	00000	0	00005	L(5)	5	F250939D
05133	0	00000	0	00000	L(0)	0	F2509411
05134	0	00000	0	00012	L(10)	10	F2509410
05135	0	00000	0	00020	L(16)	16	F2509420
05136	2	00000	0	00000	BIT1	PTW 0	F2509430
05137	1	00000	0	00000	BIT2	PON 0	F2509440
05140	+0020000000000				BIT8	OCT 0020000000000	F2509450
05141	+0000000077777				ADMSK	OCT 77777	F2509460
05142	+0777770000000				DECMSK	OCT 0777770000000	F2509470
05143	0	00000	0	00000	SMSK		F2509480
05144	+0000000000760				SMSK1	OCT 760	F2509490
05145	+0000000000774				SMSK2	OCT 774	F2509500
05146	+0000000000763				SMSK3	OCT 763	F2509510
05147	+0000000000773				SMSK4	OCT 773	F2509520
05150	+0000000000020				BITMSK	OCT 20	F2509530
05151	+0000000000010					OCT 10	F2509540
05152	+0000000074030				0PMSK	OCT 74030	F2509550
05153	+0000000003777				11BITS	OCT 3777	F2509560
05154	+0000000100000				BIT20	OCT 100000	F2509570
05155	-3777777777777				36ONES	OCT 7777777777777	F2509580
05156	0	53400	1	05130	INST2	LXA L(4),1	F2509590
05157	0	53400	1	05127	INST3	LXA L(2),1	F2509600
05160	0	02000	0	06115	INST4	TRA AC224	F2509610
05161	0	02000	0	06116	INST5	TRA AC228	F2509620
05162	0	00000	0	06250	INST8	AC244	F2509630
05163	0	00000	0	03636	INST10	ADTGA	F2509640
05164	0	00000	0	05315	INST11	AC010	F2509650
05165	0	00000	0	02646	INST12	MXTGA	F2509660
05166	0	02000	0	05725	INST13	TRA AC155	F2509670
05167	0	07400	4	07131	INST14	TSX CIL03I,4	F2509680
05170	+0000000000077				6ONESR	OCT 77	F2509690
05171	+0077770000000				6T017	OCT 0077770000000	F2509700
05172	+0000000007777				24T035	OCT 7777	F2509710
05173	0	00000	0	00000	BB0X	HTR	F2509720
05174	0	00000	0	00000	E2C	HTR	F2509730

A
A

A	05175	0	00000	0	00000	E3C	HTR		F2509740
					05176	CIL00	BSS	1	F2509750
					05177	CIL01	BSS	1	F2509760
					05200	CIL02	BSS	1	F2509770
					05201	CIL03	BSS	1	F2509780
					05202	ERTGA	BSS	1	F2509790
					05203	CHEKSM	BSS	1	F2509800
					05204	TETTG	BSS	1	F2509810
					05205	SWICH2	BSS	1	F2509820
					05206	ERLXC	BSS	1	F2509830
					05207	AX	BSS	1	F2509840
					05210	RELC0	BSS	1	F2509850
					05211	WRKTGA	BSS	1	F2509860
					05212	N3X	BSS	1	F2509870
					05213	XX	BSS	1	F2509880
					05214	AD1	BSS	1	F2509890
					05215	AD2	BSS	1	F2509900
					05216	ADTGX	BSS	1	F2509910
					05217	WRKRXT	BSS	1	F2509920
					05220	TETTGX	BSS	1	F2509930
					05221	RTXTGX	BSS	1	F2509940
					05222	LOCIND	BSS	1	F2509950
					05223	ERORBX	BSS	1	F2509960
					05224	A	BSS	1	F2509970
					05225	B	BSS	1	F2509980
					05226	SWICH	BSS	1	F2509990
					05227	TEBBOX	BSS	1	F2510000
					05230	DOIND	BSS	1	F2510010
					05231	DOIND1	BSS	1	F2510020
					05232	TEABOX	BSS	1	F2510030
					05233	SWICH1	BSS	1	F2510040
					05234	N3IND	BSS	1	F2510050
					05235	N1N2N3	BSS	1	F2510060
					05236	LINKC	BSS	1	F2510070
					05237	XTG	BSS	1	F2510080
					05240	POSIND	BSS	1	F2510090
					05241	ER40	BSS	1	F2510100
					05242	ER41	BSS	1	F2510110
					05243	ARG	BSS	1	F2510120
					05244	VCTR	BSS	1	F2510130
					05245	ERTX01	BSS	1	F2510140
					05246	ERTX02	BSS	1	F2510150
					05247	ERTX03	BSS	1	F2510160
					05250	BLKNUM	BSS	1	F2510170
					05251	SXDTXZ	BSS	1	F2510180
					05252	ORED0	BSS	1	F2510190
					05253	DEFDO	BSS	1	F2510200
					05254	N1SBX	BSS	1	F2510210
					05255	TETLOC	BSS	1	F2510220
									F2510230
						BEGIN BETA STAGE			F2510240
						THE BETA STATE IS CALLED BY MAN TO COMPUTE AND COMPILE			F2510250
						INCREMENTING, TESTING, AND RESETTING INSTRUCTIONS FOR A GIVE			F2510260
						DO.			F2510270

	05256	-0	63400	4	05325	RTX	SXD	RTX024,4		F2510280
	05257	-0	53400	1	05244		LXD	VCTR,1	VARIABLE CTR. LAST BETA.	F2510290
	05260	-0	53400	2	05230		LXD	DOIND,2	NEW DO	F2510300
	05261	0	50000	2	01076		CLA	DOTAGZ,2	ALPHA BETA WORD OF DO.	F2510310
	05262	0	73400	2	00000		PAX	0,2	PLACE B IN X.	F2510320
	05263	-0	63400	2	05264		SXD	RTX04,2		F2510330
D	05264	-3	00000	1	05276	RTX04	TXL	RTX05,1	IS THIS THE FIRST BETA,	F2510340
	05265	-0	75400	2	00000		PXD	0,2		F2510350
	05266	0	40000	0	05111		ADD	L(K1)	FIRST B. SET	F2510360
	05267	0	60100	0	05244		STO	VCTR	VCTR AND	F2510370
	05270	0	50000	0	05123		CLA	ALLONE	INITIALIZE	F2510380
	05271	0	60100	0	05176		STO	CIL00	CIL BUFFER	F2510390
	05272	0	60100	0	05177		STO	CIL01	TO ALL ONES.	F2510400
	05273	0	60100	0	05200		STO	CIL02		F2510410
	05274	0	60100	0	05201		STO	CIL03		F2510420
	05275	0	07400	4	04352		TSX	CITSP,4	USE SPECIAL CIT ENTRY.	F2510430
	05276	0	50000	0	05133	RTX05	CLA	L(0)	INITIALIZE THE TEST TAG	F2510440
	05277	0	60100	0	05220		STO	TETTGX	INDEX FOR THIS DO TO ZERO.	F2510450
	05300	0	60100	0	05237		STO	XTG		F2510460
	05301	0	60100	0	05221		STO	RTXTGX		F2510470
	05302	0	60100	0	05216		STO	ADTGX		F2510480
	05303	0	07400	4	06235		TSX	N3BIT,4	ISOLATE N3 BIT OF DOTAG	F2510490
	05304	0	07400	4	04153		TSX	SCAN,4		F2510500
	05305	-0	63400	1	05221	RTXIN1	SXD	RTXTGX,1	STORE FIRST TTG FOR TX CYCLE.	F2510510
	05306	-0	63400	1	05237		SXD	XTG,1	ENTRY THAT LIES BETWEEN A AND B	F2510520
	05307	0	07400	4	04162	RTX06	TSX	FIND,4		F2510530
	05310	0	02000	0	05707		TRA	RTX180	END OF DO, START DMTG CYCLE.	F2510540
	05311	-0	63400	1	05237		SXD	XTG,1	SC MODIFIED BY DO, STORE.	F2510550
	05312	0	07400	4	06243		TSX	TETG,4	PLACE TEST BITS IN TAG WORD.	F2510560
	05313	0	07400	4	06277		TSX	PRES,4		F2510570
								AT THE END OF THIS ROUTINE THE BLOOK INDICATION IS IN XB.		F2510580
	05314	3	00004	2	05673		TXH	RTX160,2,4	BLOCK F, NO INSTRUCTIONS, GET NEW TAG.	F2510590
	05315	3	00000	2	05435		TXH	RTX70,2,0	BLOCK DIFFERENT FROM A OR F,	F2510600
	05316	0	50000	0	05234		CLA	N3IND	BLOCK EQUALSA.	F2510610
	05317	-0	10000	0	05403		TNZ	RTX68	DECREMENT OF RXA IS VARIABLE	F2510620
	05320	-0	53400	1	03652	RTX020	LXD	TAG3,1	DECREMENT IS CONSTANT.	F2510630
	05321	3	00000	1	05334		TXH	RTX50,1,0	TEST FOR INSERTED COUNTER.	F2510640
	05322	0	50000	0	03652		CLA	TAG3	OR RESET TAG.	F2510650
	05323	0	76500	0	00013		LRS	11		F2510660
	05324	0	76000	0	00001		LBT			F2510670
D	05325	-3	00000	0	05327	RTX024	TXL	RTX30,0	RESET	F2510680
	05326	0	02000	0	05332		TRA	RTX34	COUNTER.	F2510690
	05327	0	50000	0	03652	RTX30	CLA	TAG3	IF RESET TAG, PUT TAG	F2510700
	05330	-0	32000	0	05153		ANA	11BITS	NAME IN ACCUMULATOR AND	F2510710
	05331	0	02000	0	05336		TRA	RTX51	GO TO SUBCOM.	F2510720
	05332	0	07400	4	04230	RTX34	TSX	ENTR,4	IF COUNTER, MAKE	F2510730
	05333	0	02000	0	05337		TRA	RTX52	ARTIFICIAL ENTRY IN WRKSC.	F2510740
	05334	-0	75400	1	00000	RTX50	PXD	0,1	CURRENT TAG.	F2510750
	05335	0	77100	0	00022		ARS	18	GET TAG NAME	F2510760
	05336	0	07400	4	04236	RTX51	TSX	SUBCOM,4	LAY OUT TAU ENTRY.	F2510770
	05337	0	50000	0	05042	RTX52	CLA	L(TXI)	COMPILE	F2510780
	05340	0	60100	0	05177		STO	CIL01	TXI	F2510790
	05341	0	53400	1	05240		LXA	POSIND,1	PREPARE FOR	F2510800
	05342	-0	53400	2	05230		LXD	DOIND,2	EXIT-ROUTINE.	F2510810

05343	0	07400	4	06447	TSX	CN3IJ,4	ROUTINE COMPUTES DECREMENT N3G	F2510820
05344	0	60100	0	05245	STO	ERTX01	AND STORES IN ERTX01.	F2510830
05345	0	53400	1	05240	LXA	POSIND,1		F2510830
05346	0	50000	0	03653	CLA	TAG4	TEST FOR DUPLICATE	F2510840
05347	0	76500	0	00014	LRS	12	SUBSCRIPTS AND COMPUTE	F2510850
05350	0	76300	1	00004	LLS	4,1	DECREMENT FOR THEM.	F2510870
05351	0	76000	0	00001	LBT		TEST ON S1,S2, OR S3 FOR DUPES.	F2510880
05352	0	02000	0	05376	TRA	RTX66	NO DUPLICATES FOR THIS SUBSCRIPT.	F2510890
05353	0	77100	0	00001	ARS	1		F2510900
05354	0	76000	0	00001	LBT		TEST FOR S1 OR S2 DUPES	F2510910
05355	1	00002	1	05367	TXI	RTX62+3,1,2	DUPES ARE 1,3 ON TRANSFER	F2510920
05356	1	00001	1	05357	TXI	RTX61,1,1		F2510930
05357	0	60100	0	05246	STO	ERTX02	STORE STATUS OF ACCUMULATOR. DUPES ARE	F2510940
05360	0	07400	4	06447	TSX	CN3IJ,4	1,2 OR 2,3 OR 1,2,3.	F2510950
05361	0	53400	1	05240	LXA	POSIND,1	COMPUTE DECREMENT ADJUSTMENT	F2510960
05362	0	40000	0	05245	ADD	ERTX01	FOR NEXT LEFT SUBSCRIPT.	F2510970
05363	0	60100	0	05245	STO	ERTX01	REPLACE ADJUSTED DECREMENT IN ERTX01.	F2510980
05364	1	00002	1	05365	TXI	RTX62+1,1,2		F2510990
05365	3	00003	1	05376	TXH	RTX66,1,3	NOT 3RD SUBSCRIPT CASE,	F2511000
05366	0	50000	0	05246	CLA	ERTX02	LOW ORDER BIT IS SUBSCRIPT LEFT OF DOSUB.	F2511010
05367	0	77100	0	00001	ARS	1		F2511020
05370	0	76000	0	00001	LBT		TEST FOR S1 DUPE.	F2511030
05371	0	02000	0	05376	TRA	RTX66		F2511040
05372	-0	53400	2	05230	LXD	DOIND,2		F2511050
05373	0	07400	4	06447	TSX	CN3IJ,4	COMPUTE DECREMENT ADJUSTMENT FOR S1	F2511060
05374	0	40000	0	05245	ADD	ERTX01	IN 1,2,3 AND 1,3 CASES.	F2511070
05375	0	60100	0	05245	STO	ERTX01	FINAL DECREMENT ADJUSTMENT.	F2511080
05376	0	50000	0	05245	CLA	ERTX01		F2511090
05377	0	62100	0	05177	STA	CIL01	AFTER DECREMENT IS COMPUTED, FILL	F2511100
05400	0	07400	4	06465	TSX	CIL023,4	OUT-4 WORDS OF	F2511110
05401	0	07400	4	04345	TSX	CIT,4	COMPILED INSTRUCTION.P	F2511120
05402	0	02000	0	05413	TRA	RTX69	AND CONTINUE.	F2511130
05403	0	07400	4	06224	TSX	CILV,4	DECREMENT IS VARIABLE. ASSIGN LOCATION.	F2511140
05404	0	50000	0	05176	CLA	CIL00	PREPARE VCTR LOCATION	F2511150
05405	-0	32000	0	05141	ANA	ADMSK	FOR TGA ROUTINE.	F2511160
05406	0	07400	4	06476	TSX	TGA,4	PLACE LOCATION IN APPENDED TAGTAG WORD	F2511170
05407	0	07400	4	06625	TSX	CIL23,4	AND THEN FILL OUT	F2511180
05410	0	50000	0	05042	CLA	L(TXI)	REMAINING WORDS OF	F2511190
05411	0	60100	0	05177	STO	CIL01	COMPILED INSTRUCTION	F2511200
05412	0	07400	4	04345	TSX	CIT,4	COMPILER ROUTINE.	F2511210
05413	0	50000	0	03653	CLA	TAG4	TEST FOR SYM80L	F2511220
05414	0	12000	0	05673	TPL	RTX160	INDICATION	F2511230
05415	-0	53400	2	05230	LXD	DOIND,2	FORVAR	F2511240
05416	0	50000	2	01103	CLA	DOTAGZ+5,2	OCCURRANCE.	F2511250
05417	-0	32000	0	05136	ANA	BIT1		F2511260
05420	0	10000	0	05673	TZE	RTX160	NO FORVAR, CONTINUE.	F2511270
05421	0	50000	0	05133	CLA	L(0)	FORVAR EXISTS.	F2511280
05422	0	60100	0	05176	STO	CIL00		F2511290
05423	0	50000	0	03652	CLA	TAG3	COMPILE	F2511300
05424	-0	32000	0	05141	ANA	ADMSK	STORE	F2511310
05425	0	60100	0	05201	STO	CIL03	INSTRUCTION	F2511320
05426	0	50000	0	05045	CLA	L(SXD)	FOR	F2511330
05427	0	60100	0	05177	STO	CIL01	FORVAR OCCURRANCE.	F2511340
05430	-0	53400	2	05230	LXD	DOIND,2		F2511350

05431	0	50000	2	01077	CLA DOTAGZ+1,2	PUT FORVAR SUBSCRIPT	F2511360
05432	0	60100	0	05200	STO CIL02	IN RELATIVE ADDRESS	F2511370
05433	0	07400	4	04345	TSX CIT,4	WORD FOR SXD INSTRUCTION.	F2511380
05434	0	02000	0	05673	TRA RTX160		F2511390
05435	3	00001	2	05466	RTX70 TXH RTX90,2,1	BLOCK IS B,C,D QR E.	F2511400
05436	-0	63400	2	05250	SXD BLKNUM,2		F2511410
05437	-0	53400	2	03647	LXD TAG2,2	BLOCK B FIRST DETERMINE	F2511420
05440	0	07400	4	06620	TSX NBITS,4	IF DECREMENT IS VARIABLE	F2511430
05441	0	40000	0	05234	ADD N3IND		F2511440
05442	-0	10000	0	05464	TNZ RTX80	DECREMENT IS VARIABLE.	F2511450
05443	0	50000	0	03652	CLA TAG3	DECREMENT IS CONSTANT.	F2511460
05444	0	77100	0	00022	ARS 18		F2511470
05445	0	07400	4	04236	TSX SUBCOM,4	LAY OUT TAU INTO WRKSC.	F2511480
05446	-0	53400	2	05230	LXD DOIND,2	PREPARE FOR	F2511490
05447	0	53400	1	05240	LXA POSIND,1	EXIT ROUTINE.	F2511500
05450	0	07400	4	06447	TSX CN3IJ,4	COMPUTE N3G AND	F2511510
05451	0	60100	0	05245	STO ERTX01	STORE IN ERTX01.	F2511520
05452	-0	53400	2	03647	LXD TAG2,2		F2511530
05453	0	53400	1	05240	LXA POSIND,1	MOVE POSIND TO LEFT SUB	F2511540
05454	1	00001	1	05455	TXI RTX72,1,1	AND COMPUTE XN3G	F2511550
05455	0	07400	4	04447	RTX72 TSX CXIJ,4	FOR LEFT SUB WHICH IS TEST.	F2511560
05456	0	40200	0	05126	SUB L(1)		F2511570
05457	0	60100	0	05246	STO ERTX02		F2511580
05460	0	40000	0	05245	ADD ERTX01	ADDN3G FOR THIS SUBSCRIPT	F2511590
05461	0	60100	0	05245	STO ERTX01	RESULT IS TXI DECREMENT.	F2511600
05462	0	07400	4	06513	TSX EDCB,4	COMPILE TXI SXD TIX.	F2511610
05463	0	02000	0	05673	TRA RTX160	CHECK BEST TEST.	F2511620
05464	0	07400	4	06546	RTX80 TSX BCDE,4	BLOCK B IS VARIABLE.	F2511630
05465	0	02000	0	05673	TRA RTX160		F2511640
05466	3	00002	2	05525	RTX90 TXH RTX110,2,2	BLOCK IS C,D, OR E.	F2511650
05467	-0	63400	2	05250	SXD BLKNUM,2	BLOCK IS C, PUT IN XB.	F2511660
05470	-0	53400	2	03647	LXD TAG2,2	ISOLATE	F2511670
05471	0	07400	4	06620	TSX NBITS,4	NBITS INTO N1N2N3.	F2511680
05472	0	40000	0	05234	ADD N3IND		F2511690
05473	-0	10000	0	05523	TNZ RTX100	DECREMENT IS VARIABLE, TSX BCDE.	F2511700
05474	0	50000	0	03652	CLA TAG3	DECREMENT IS CONSTANT.	F2511710
05475	0	77100	0	00022	ARS 18	LAY OUT TAU	F2511720
05476	0	07400	4	04236	TSX SUBCOM,4	ENTRY INTO WRKSC.	F2511730
05477	-0	53400	2	03647	LXD TAG2,2	COMPUTE	F2511740
05500	0	53400	1	05131	LXA L(3),1	XN3G-1	F2511750
05501	0	07400	4	04447	RTX91 TSX CXIJ,4	FOR	F2511760
05502	0	40200	0	05126	SUB L(1)	LEFT	F2511770
05503	0	60100	0	05246	STO ERTX02	SUBSCRIPT.	F2511780
05504	0	53400	1	05240	LXA POSIND,1	THEN COMPUTE N3G	F2511790
05505	0	07400	4	06447	TSX CN3IJ,4	FOR RIGHT	F2511800
05506	0	40000	0	05246	ADD ERTX02	SUBSCRIPT.	F2511810
05507	0	60100	0	05245	STO ERTX01	RESULT IS ERTX01.	F2511820
05510	0	50000	0	03653	CLA TAG4		F2511830
05511	0	77100	0	00011	ARS 9	TEST FOR DUPES.	F2511840
05512	0	76000	0	00001	LBT		F2511850
05513	0	02000	0	05521	TRA RTX95	NO DOSUB DUPE.	F2511860
05514	0	53400	1	05240	LXA POSIND,1	DOSUB IS DUPE.	F2511870
05515	1	00001	1	05516	TXI RTX93,1,1	COMPUTE ADJUSTMENT	F2511880
05516	0	07400	4	06447	RTX93 TSX CN3IJ,4	FOR DECREMENT AND	F2511890

05517	0	40000	0	05245		ADD ERTX01	STORE IN ERTX01.	F2511900
05520	0	60100	0	05245		STO ERTX01	XN3G(L) + N3G(R) + N3G(C) - 1)	F2511910
05521	0	07400	4	06513	RTX95	TSX EDCB,4	COMPILE TXI SXD TIX.	F2511920
05522	0	02000	0	05673		TRA RTX160		F2511930
05523	0	07400	4	06546	RTX100	TSX BCDE,4	BLOCK DECREMENT IS VARIABLE.	F2511940
05524	0	02000	0	05673		TRA RTX160		F2511950
05525	3	00003	2	05601	RTX110	TXH RTX140,2,3	D OR E.	F2511960
05526	-0	63400	2	05250		SXD BLKNUM,2	STORE BLOCK NUMBER D.	F2511970
05527	-0	53400	2	03650		LXD TAG2+1,2	BLOCK D CONSIDERED.	F2511980
05530	0	07400	4	06620		TSX NBITS,4	ISOLATE NBITS	F2511990
05531	0	40000	0	05234		ADD N3IND	CHECK FOR VARIABLE DECREMENT.	F2512000
05532	-0	10000	0	05577		TNZ RTX130	DECREMENT IS VARIABLE.	F2512010
05533	0	50000	0	03652		CLA TAG3	DECREMENT IS CONSTANT.	F2512020
05534	0	77100	0	00022		ARS 18	SET UP TAG	F2512030
05535	-0	32000	0	05153		ANA 11BITS	NAME AND	F2512040
05536	0	07400	4	04236		TSX SUBCOM,4	LAY OUT TAU ENTRY.P	F2512050
05537	-0	53400	2	03650		LXD TAG2+1,2	CONSIDER CENTER SUBSCRIPT	F2512060
05540	0	53400	1	05127		LXA L(2),1	FOR EXIT ROUTINE.	F2512070
05541	0	07400	4	04447		TSX CXIJ,4	COMPUTE XN3G FOR	F2512080
05542	0	60100	0	05246		STO ERTX02	CENTER SUBSCRIPT.	F2512090
05543	0	53400	1	05240		LXA POSIND,1	PREPARE DOSUB SUBSCRIPT	F2512100
05544	-0	53400	2	05230		LXD DOIND,2	FOR CN3IJROUTINE.	F2512110
05545	0	07400	4	06447		TSX CN3IJ,4	COMPUTE N3G FOR	F2512120
05546	0	60100	0	05245		STO ERTX01	DOSUB SUBSCRIPT.	F2512130
05547	0	50000	0	03653		CLA TAG4	TEST	F2512140
05550	0	77100	0	00011		ARS 9	FOR	F2512150
05551	-0	32000	0	05076		ANA L(7)	DUPEs,	F2512160
05552	0	10000	0	05570		TZE RTX126	NORMAL BLOCK D, NO DUPEs.	F2512170
05553	0	76000	0	00001		LBT		F2512180
05554	0	02000	0	05563		TRA RTX118	XX0 BLOCK D, OR 0XX.	F2512190
05555	0	53400	1	05240		LXA POSIND,1	X0X BLOCK D.	F2512200
05556	1	00002	1	05557		TXI RTX114,1,2	SWITCH RIGHT OR LEFT POSIND.	F2512210
05557	0	07400	4	06447	RTX114	TSX CN3IJ,4	COMPUTE N3G	F2512220
05560	0	40000	0	05245		ADD ERTX01	DECREMENT ADJUSTMENT	F2512230
05561	0	60100	0	05245		STO ERTX01	FOR X0X	F2512240
05562	0	02000	0	05570		TRA RTX126	DUPEs.	F2512250
05563	-0	53400	2	03650	RTX118	LXD TAG2+1,2	COMPUTE XN3G	F2512260
05564	0	53400	1	05131		LXA L(3),1	DECREMENT	F2512270
05565	0	07400	4	04447	RTX122	TSX CXIJ,4	ADJUSTMENT	F2512280
05566	0	40000	0	05246		ADD ERTX02	FOR CENTER	F2512290
05567	0	60100	0	05246		STO ERTX02	SUBSCRIPT.	F2512300
05570	0	50000	0	05246	RTX126	CLA ERTX02	SUB1 AND	F2512310
05571	0	40200	0	05126		SUB L(1)	ADD ERTX01	F2512320
05572	0	60100	0	05246		STO ERTX02	AND ERTX02	F2512330
05573	0	40000	0	05245		ADD ERTX01	YIELDING TXI	F2512340
05574	0	60100	0	05245		STO ERTX01	DECREMENT.	F2512350
05575	0	07400	4	06513		TSX EDCB,4	COMPILE TXI SXD TIX.	F2512360
05576	0	02000	0	05673		TRA RTX160	END CHECK FOR TEST TAG.	F2512370
05577	0	07400	4	06546	RTX130	TSX BCDE,4	BLOCK D IS VARIABLE.	F2512380
05600	0	02000	0	05673		TRA RTX160		F2512390
05601	-0	63400	2	05250	RTX140	SXD BLKNUM,2	BLOCK E	F2512400
05602	-0	53400	2	03647		LXD TAG2,2	PUT N BITS FOR S1	F2512410
05603	0	07400	4	06620		TSX NBITS,4	PLACE N BITS PLUS	F2512420
05604	0	40000	0	05234		ADD N3IND	N3IND FOR S1	F2512430

05605	0	60100	0	05245	STO	ERTX01	AND S2 INTO ERTX01	F2512440
05606	-0	53400	2	03650	LXD	TAG2+1,2	FOR VARIABLE DECREMENT	F2512450
05607	0	07400	4	06620	TSX	NBITS,4	TEST. 1F SUM IS NOT ZERO,	F2512460
05610	0	40000	0	05245	ADD	ERTX01	THEN THE DECREMENT IS VARIABLE.	F2512470
05611	-0	10000	0	05644	TNZ	RTX154	DECREMENT IS VARIABLE.	F2512480
05612	0	50000	0	03652	CLA	TAG3	CONSTANT CASE, LAY	F2512490
05613	0	77100	0	00022	ARS	18	OUT TAU ENTRY INTO	F2512500
05614	0	07400	4	04236	TSX	SUBCOM,4	WRKSC.	F2512510
05615	-0	53400	2	03650	LXD	TAG2+1,2	SET UP CENTER SUBSCRIPT	F2512520
05616	0	53400	1	05127	LXA	L(2),1	FOR EXIT ROUTINE,	F2512530
05617	0	07400	4	04447	TSX	CXIJ,4	COMPUTE XN3G FOR CENTER.	F2512540
05620	0	40200	0	05126	SUB	L(1)	STORE SN3G-1	F2512550
05621	0	60100	0	05246	STO	ERTX02	IN ERTX02.	F2512560
05622	0	53400	1	05240	LXA	POSIND,1	COMPUTE N3G	F2512570
05623	-0	53400	2	05230	LXD	DOIND,2	FOR RIGHT	F2512580
05624	0	07400	4	06447	TSX	CN3IJ,4	SUBSCRIPT (DOSUB).	F2512590
05625	0	40000	0	05246	ADD	ERTX02	PUT FIRST TXI DECREMENT	F2512600
05626	0	60100	0	05245	STO	ERTX01	IN ERTX01.	F2512610
05627	0	07400	4	06513	TSX	EDCB,4	COMPILES FIRST	F2512620
05630	-0	53400	2	03647	LXD	TAG2,2	THREE OF BLOCK E.	F2512630
05631	0	53400	1	05240	LXA	POSIND,1	COMPUTE XN3G FOR	F2512640
05632	1	00002	1	05633	TXI	RTX150,1,2	LEFT SUBSCRIPT.	F2512650
05633	0	07400	4	04447	RTX150	TSX CXIJ,4	IN ORDER TO CMPILE 2ND	F2512660
05634	0	40200	0	05126	SUB	L(1)	TXI SXD TIX IN	F2512670
05635	0	60100	0	05245	STO	ERTX01	BLOCK E, THE BLOCK	F2512680
05636	0	60100	0	05246	STO	ERTX02	NUMBER IS SET TO	F2512690
05637	-0	53400	4	05250	LXD	BLKNUM,4	APPEAR LIKE BLOCK C SO	F2512700
05640	2	00002	4	05641	TIX	RTX152,4,2	THATTHE SXD LOCATION IS STORED	F2512710
05641	-0	63400	4	05250	RTX152	SXD BLKNUM,4	PROPERLY INTO DOTAG.	F2512720
05642	0	07400	4	06513	TSX	EDCB,4	COMPILE 2ND TXI SXD TIX.	F2512730
05643	0	02000	0	05673	TRA	RTX160		F2512740
05644	0	07400	4	06546	RTX154	TSX BCDE,4	E IS VARIABLE. THIS TAKES	F2512750
05645	0	07400	4	06224	TSX	CILV,4	CARE OF FIRST 3 INSTRUCTIONS.P	F2512760
05646	0	07400	4	06625	TSX	CIL23,4	THE REMAINING THREE ARE	F2512770
05647	0	50000	0	05042	CLA	L(TXI)		F2512780
05650	0	60100	0	05177	STO	CIL01	NOW COMPILED.	F2512790
05651	0	07400	4	04345	TSX	CIT,4		F2512800
05652	-0	53400	4	05250	LXD	BLKNUM,4	CHANGE BLKNUM	F2512810
05653	2	00002	4	05653	RTX157	TIX RTX157,4,2	FROM E	F2512820
05654	-0	63400	4	05250	SXD	BLKNUM,4	TO C AND	F2512830
05655	0	07400	4	04472	TSX	CSXD,4	TSX CSXD.	F2512840
05656	-0	53400	4	05250	LXD	BLKNUM,4		F2512850
05657	1	00002	4	05660	TXI	RTX157+5,4,2		F2512860
05660	-0	63400	4	05250	SXD	BLKNUM,4		F2512870
05661	-0	53400	2	03647	LXD	TAG2,2	PLACE LOCATION OF SXD	F2512880
05662	0	50000	0	05176	CLA	CIL00	INSTRUCTION IN PROPER DOTAG ENTRY	F2512890
05663	-0	32000	0	05141	ANA	ADMSK	AND POSITION. (LEFT SUB DO).	F2512900
05664	0	76700	0	00014	ALS	12		F2512910
05665	-0	60200	2	01104	ORS	DOTAGZ+6,2		F2512920
05666	0	07400	4	06224	TSX	CILV,4	GENERATE AND	F2512930
05667	0	07400	4	06625	TSX	CIL23,4		F2512940
05670	0	50000	0	05046	CLA	L(TIX)	COMPILE REMAINING INSTRC.	F2512950
05671	0	60100	0	05177	STO	CIL01		F2512960
05672	0	07400	4	04345	TSX	CIT,4	PUT INTO BUFFER.	F2512970

05673	-0	53400	2	05230	RTX160	LXD DOIND,2	FINDING S.C, WHICH	F2512980
05674	0	50000	2	01106		CLA DOTAGZ+8,2	HAS AN S THAT IS THE TEST.	F2512990
05675	-0	32000	0	05105		ANA TETMSK		F2513000
05676	0	60100	0	05245		STO ERTX01	TEST NAME.	F2513010
05677	0	50000	0	03652		CLA TAG3	COMPARE TAG NAME	F2513020
05700	0	76700	0	00022		ALS 18	WITH BEST TEST	F2513030
05701	-0	32000	0	05142		ANA DECMSK	OF CURRENT DO.	F2513040
05702	0	40200	0	05245		SUB ERTX01	IF THIS TAG IS	F2513050
05703	-0	10000	0	05706		TNZ RTX164	BEST TEST,	F2513060
05704	0	50000	0	05237		CLA XTG	STORE ITS INDEX	F2513070
05705	0	60100	0	05220		STO TETTGX	IN TETTGX,	F2513080
05706	0	02000	0	05307	RTX164	TRA RTX06	GO TO FIND FOR NEXT TAG.	F2513090
05707	0	50000	0	05116	RTX180	CLA INST26	RTX184 LOCATION.	F2513100
05710	0	62100	0	05414		STA RTX69+1	RESET AT END OF ROUTINE.	F2513110
05711	0	53400	4	05125		LXA LADMX,4	PREPARE FOR ADTAG TXI.	F2513120
05712	1	00004	4	05713		TXI RTX180+4,4,4		F2513130
05713	-0	63400	4	05237		SXD XTG,4		F2513140
05714	0	50000	0	05113		CLA INST20	ADTGA LOCATION,	F2513150
05715	0	62100	0	06507		STA TGA8		F2513160
05716	0	07400	4	04516	RTX184	TSX ADTGSE,4	SEARCH FOR ADTAG.	F2513170
05717	0	02000	0	05745		TRA RTX192	END OF TABLE, START TX PHASE.	F2513180
05720	-0	75400	2	00000		PXD 0,2	ENTRY FOUND, CONTINUE ADTG CYCLE.	F2513190
05721	0	77100	0	00022		ARS 18	POSIND IN ADDRESS.	F2513200
05722	0	60100	0	05240		STO POSIND		F2513210
05723	0	50000	0	03653		CLA TAG4	LOOK AT	F2513220
05724	0	77100	0	00025		ARS 21	CARRY BITS.	F2513230
05725	3	00002	2	05732		TXH RTX190,2,2	S1, BLOCK A.	F2513240
05726	-3	00001	2	05730		TXL RTX188,2,1	S3	F2513250
05727	0	77100	0	00002		ARS 2	S2	F2513260
05730	-0	32000	0	05131	RTX188	ANA L(3)		F2513270
05731	-0	10000	0	05716		TNZ RTX184	CARRY T1 OR T2 BLOCK F.	F2513280
05732	0	50000	0	05234	RTX190	CLA N3IND		F2513290
05733	0	10000	0	05320		TZE RTX020	DECREMENT IS CONSTANT.	F2513300
05734	0	07400	4	06224		TSX CILV,4	DECREMENT IS VARIABLE.	F2513310
05735	0	50000	0	05176		CLA CIL00	INSTRUCTION IS COMPILED	F2513320
05736	-0	32000	0	05141		ANA ADMASK	AND ENTRY IS MADE	F2513330
05737	0	07400	4	06476		TSX TGA,4	IN APPENDED DRM TG WORD,	F2513340
05740	0	07400	4	06625		TSX CIL23,4		F2513350
05741	0	50000	0	05042		CLA L(TXI)	COMPILE	F2513360
05742	0	60100	0	05177		STO CIL01	TXI AND PUT	F2513370
05743	0	07400	4	04345		TSX CIT,4	IN CIB,	F2513380
05744	0	02000	0	05716		TRA RTX184	GET NEW ADTAG.	F2513390
05745	0	50000	0	05115	RTX192	CLA INST24	RESET MODIFIED	F2513400
05746	0	62100	0	05414		STA RTX69+1	ADDRESSES FOR	F2513410
05747	0	50000	0	05114		CLA INST22	TXI CYCLE.	F2513420
05750	0	62100	0	06507		STA TGA8		F2513430
05751	-0	53400	1	05220	RTX195	LXD TETTGX,1	DETERMINE IF THIS DO HAS A TEST.	F2513440
05752	3	00000	1	05770		TXH RTX197,1,0	THIS DO HAS A TEST.	F2513450
05753	-0	53400	2	05230	RTX196	LXD DOIND,2	THIS DO HAS NO TEST. THIS INFORMATION	F2513460
05754	0	50000	2	01076		CLA DOTAGZ,2	IS ENTERED IN A DRUM TABLE.	F2513470
05755	0	76700	0	00004		ALS 4	ELIMINATE BITS	F2513480
05756	0	77100	0	00004		ARS 4	INSERTED BY DOGS.	F2513490
05757	0	60100	0	05251		STO SXDTXZ	ENTER	F2513500
05760	0	76600	0	00301		WRS 193	DOTAG	F2513510

05761	0	46000	0	05064	LDA DRADS3	WORD	F2513520
05762	0	70000	0	05251	CPY SXDTXZ	ONE	F2513530
05763	0	70000	0	05251	CPY SXDTXZ	INTO	F2513540
05764	0	50000	0	05064	CLA DRADS3	DOCAR	F2513550
05765	0	40000	0	05127	ADD L(2)	DRUM.	F2513560
05766	0	60100	0	05064	STO DRADS3	TABLE.	F2513570
05767	0	02000	0	06222	TRA RTX280		F2513580
05770	0	76000	0	00140	RTX197 PSE 096	CLEAR SENSE LIGHTS.	F2513590
05771	0	07400	4	04213	TSX TGFM,4	FILL OUT TAG WORDS.	F2513600
05772	0	07400	4	04204	TSX ISC,4	FIND DOSUB.	F2513610
05773	0	07400	4	00004	TSX DIAG,4	SC NOT MODIFIED BY CURRENT DO.	F2313620
05774	-0	75400	2	00000	PXD 0,2	FORM	F2513630
05775	0	77100	0	00022	ARS 18	POSITION	F2513640
05776	0	60100	0	05240	STO POSIND	INDICATOR.	F2513650
05777	0	07400	4	06224	TSX CILV,4	OBTAIN LOCATION FOR TEST,	F2513660
06000	-0	53400	2	05230	LXD DOIND,2	ISOLATE	F2513670
06001	0	07400	4	06620	TSX NBITS,4	NBITS.	F2513680
06002	0	60100	0	05235	STO N1N2N3		F2513690
06003	0	50000	2	01101	CLA DOTAGZ+3,2		F2513700
06004	-0	32000	0	05104	ANA 6ONES		F2513710
06005	-0	10000	0	06045	TNZ RTX210	N2 IS VARIABLE	F2513720
06006	0	53400	1	05240	LXA POSIND,1		F2513730
06007	-2	00001	1	06015	RTX198 TNX RTX200,1,1	IS POSITION S3.	F2513740
06010	0	50000	0	03653	CLA TAG4	CHECK FOR DORC.	F2513750
06011	-0	32000	1	05152	ANA BITMSK+2,1		F2513760
06012	0	60100	0	05254	STO N1SBX	N1 BIT.	F2513770
06013	0	07400	4	04566	TSX N1S02,4		F2513780
06014	-0	10000	0	06045	TNZ RTX210	TXL VARIABLE DECREMENT,	F2513790
06015	-0	53400	1	03652	RTX200 LXD TAG3,1		F2513800
06016	3	00000	1	06021	TXH RTX201,1,0		F2513810
06017	0	07400	4	04230	TSX ENTR,4	NOT NORMAL TAG, LAY OUT SIMULATED	F2513820
06020	0	02000	0	06024	TRA RTX202	TAU ENTRY INTO WRKSC.	F2513830
06021	0	50000	0	03652	RTX201 CLA TAG3	PREPARE FOR	F2513840
06022	0	77100	0	00022	ARS 18	SUBCOM ROUTINE.	F2513850
06023	0	07400	4	04236	TSX SUBCOM,4	LAY OUT TAU ENTRY.	F2513860
06024	-0	53400	2	05230	RTX202 LXD DOIND,2	PREPARE FOR AND CALL CXIJ	F2513870
06025	0	53400	1	05240	LXA POSIND,1	ROUTINE TO COMPUTE XGN3.	F2513880
06026	0	50000	2	01101	CLA DOTAGZ+3,2	PTCH06 CALLS TELC ROUTINE	F2513890
06027	0	07400	4	04451	TSX CXIJ+2,4		F2513900
06030	-2	00001	1	06033	TNX RTX204,1,1		F2513910
06031	0	07400	4	04410	TSX TELC+2,4	COMPUTES LOAD VALUE FOR	F2513920
06032	0	50000	0	05245	CLA ERTX01	DEC, STORES IN ERTX01.	F2513930
06033	0	60100	0	05177	RTX204 STO CIL01	FINAL TXL DECREHENT.	F2513940
06034	-0	50000	0	05047	CAL L(TXL)		F2513950
06035	-0	60200	0	05177	ORS CIL01		F2513960
06036	0	07400	4	06634	TSX CILNAM,4	ENTER TAG NAME IN CIL03.	F2513970
06037	0	50000	0	05224	CLA A	ALPHA PLUS ONE IS	F2513980
06040	0	40000	0	05061	ADD L1DEC	ENTERED AS THE SYMBOLIC	F2513990
06041	0	60100	0	05200	STO CIL02	ADDRESS.	F2514000
06042	0	07400	4	04345	TSX CIT,4	ENTER TXL IN BUFFER,	F2514010
06043	0	50000	0	05133	CLA L(0)	ELIMINATE VARIABLE INDICATOR BIT.	F2514020
06044	0	02000	0	06055	TRA RTX214		F2514030
06045	0	50000	0	05047	RTX210 CLA L(TXL)	COMPILE INSTRUCTION FOR VARIABLE DECREMENT.	F2514040
06046	0	60100	0	05177	STO CIL01		F2514050

06047	0	07400	4	06634		TSX CILNAM,4	ENTER TAG NAME.	F2514060
06050	0	50000	0	05224		CLA A	ALPHA PLUS ONE IS	F2514070
06051	0	40000	0	05061		ADD L1DEC	ENTERED AS THE	F2514080
06052	0	60100	0	05200		STO CIL02	SYMBOLIC ADDRESS,	F2514090
06053	0	07400	4	04345		TSX CIT,4	ENTER COMPILED TXL IN BUFFER.	F2514100
06054	0	50000	0	05154		CLA BIT20	TEST VARIABLE INDICATOR.	F2514110
06055	-0	53400	2	05230	RTX214	LXD DOIND,2	ENTERONE IN BIT 20 IF	F2514120
06056	-0	60200	2	01106		ORS DOTAGZ+8,2	VARIABLE DECREMENT.	F2514130
06057	0	50000	0	05176		CLA CIL00	STORE LOCATION	F2514140
06060	0	76700	0	00030		ALS 24	OF	F2514150
06061	-0	60200	2	01104		ORS DOTAGZ+6,2	TEST.	F2514160
06062	0	76000	0	00141		PSE 097	SET SENSE INDICATOR SO	F2514170
06063	-0	53400	1	05221	RTX222	LXD RTXTGX,1	START SCAN FOR TIXING,	F2514180
06064	-0	63400	1	05237		SXD XTG,1		F2514190
06065	0	07400	4	04162	RTX226	TSX FIND,4	FIND VALID TAG. FILL TAG WORDS.	F2514200
06066	0	02000	0	06201		TRA RTX260	END OF DO.	F2514210
06067	-0	63400	1	05237		SXD XTG,1	PRESERVE X OF TAG UNDER CONDSIDERATION.	F2514220
06070	0	07400	4	04373	RTX228	TSX SCLMN1,4	COMPARE LARGEST S INDES	F2514230
06071	0	40200	0	05230		SUB DOIND	WITH INDEX OF THE DO.	F2514240
06072	0	10000	0	06144		TZE RTX234	DO IS OUTER, OBTAIN TAG.	F2514250
06073	-0	53400	2	03652		LXD TAG3,2		F2514260
06074	3	00000	2	06103		TXH RTX229,2,0	CURRENT TAG VALID, FILL OUT WRKSC.	F2514270
06075	0	50000	0	03652		CLA TAG3	NEW TAG, DETERMINE	F2514280
06076	0	77100	0	00013		ARS 11	IF TAU ENTRY	F2514290
06077	0	76000	0	00001		LBT	EXISTS.	F2514300
06100	0	02000	0	06110		TRA RTX229+5	NO,TSX ENTR.	F2514310
06101	0	50000	0	03652		CLA TAG3	YES, TSX	F2514320
06102	0	02000	0	06105		TRA RTX229+2	SUBCOM.	F2514330
06103	0	50000	0	03652	RTX229	CLA TAG3	CURRENT TAG	F2514340
06104	0	77100	0	00022		ARS 18	VALID.	F2514350
06105	-0	32000	0	05153		ANA 11BITS	FILL OUT	F2514360
06106	0	07400	4	04236		TSX SUBCOM,4	WRKSC AND	F2514370
06107	0	02000	0	06111		TRA RTX230	CONTINUE.	F2514380
06110	0	07400	4	04230		TSX ENTR,4	ARTIFICIAL WRKSC ENTRY,	F2514390
06111	0	53400	4	05240	RTX230	LXA POSIND,4		F2514400
06112	2	00001	4	06114		TIX CLA,4,1	MOVE RIGHT ONE POSITION.	F2514410
06113	0	02000	0	06130		TRA RTX232	POSITION IS RIGHT, IGNORE CARRY,	F2514420
06114	0	50000	0	03653	CLA	CLA TAG4	POSITION IS LEFT OR CENTER,	F2514430
06115	0	77100	0	00001		ARS 1	OR TYPE 1 AND 2	F2514440
06116	-0	50100	0	03653		ORA TAG4	CARRY BITS FOR LEFT	F2514450
06117	-3	00001	4	06122		TXL ARS,4,1	AND CENTER POSITIONS.	F2514460
06120	0	77100	0	00027		ARS 23	S2 CARRY BIT IN POSITION 35,	F2514470
06121	0	02000	0	06123		TRA LBT		F2514480
06122	0	77100	0	00025	ARS	ARS 21	S3 CARRY BIT IN POSITION 35	F2514490
06123	0	76000	0	00001	LBT	LBT	TEST FOR DOSUB CARRY BIT.	F2514500
06124	0	02000	0	06130		TRA RTX232	NO CARRY, CONTINUE.	F2514510
06125	0	50000	0	05220		CLA TETTGX	CARRY, SEE IF THIS	F2514520
06126	0	40200	0	05237		SUB XTG	TAG IS BEST TEST.	F2514530
06127	-0	10000	0	06200		TNZ RTX254	NO, GET NEXT TAG.	F2514540
06130	0	50000	0	05046	RTX232	CLA L(TIX)	COMPILE TIX INSTRUCTION.	F2514550
06131	0	60100	0	05177		STO CIL01		F2514560
06132	0	50000	0	05235		CLA N1N2N3	TEST FOR VARIABLE DECREMENT,	F2514570
06133	0	10000	0	06147		TZE RTX238	DECREMENT IS CONSTANT.	F2514580
06134	-0	76000	0	00141		MSE 097	DECREMENT IS VARIABLE8 TURN OFF.	F2514590

06135	0	76100	0	00000		NOP	LIGHT INDICATION FIRST	F2514600
06136	0	07400	4	06224		TSX CILV,4	TIX AFTER TXL AND ASSIGN	F2514610
06137	0	07400	4	06625		TSX CIL23,4	LOCATION.	F2514620
06140	0	50000	0	05176		CLA CIL00	WHEN DECREMENT IS VARIABLE, LOCATION	F2514630
06141	-0	32000	0	05141		ANA ADMSK	MUST BE STORED IN TGA WORD	F2514640
06142	0	07400	4	06477		TSX TGAT,4	FOR SXD ADDRESS IS OBJECT TIME.	F2514650
06143	0	02000	0	06177		TRA RTX250	NOW PERFORM COMPILING.	F2514660
06144	0	50000	0	05050	RTX234	CLA L(DED)	COMPILE OP WHICH INDICATES	F2514670
06145	0	60100	0	05177		STO CIL01	SC IS DEAD.	F2514680
06146	0	02000	0	06171		TRA RTX242	ASSIGN LOCATION IF NECESSARY.	F2514690
06147	0	53400	1	05240	RTX238	LXA POSIND,1	DECREMENT IS CONSTANT.	F2514700
06150	-0	53400	2	05230		LXD DOIND,2	TEST FOR DUPLICATES	F2514710
06151	0	07400	4	04447		TSX CXIJ,4	AND COMPUTE ACCORDINGLY	F2514720
06152	0	60100	0	05245		STO ERTX01	XN3G IN ERTX01.	F2514730
06153	0	56000	0	03653		LDQ TAG4	TEST	F2514740
06154	0	76300	1	00033		LLS 27,1	FOR.	F2514750
06155	0	76000	0	00001		LBT	DUPES.	F2514760
06156	0	02000	0	06167		TRA RTX240	NO DUPES	F2514770
06157	1	00001	1	06160	RTX239	TXI RTX239+1,1,1	DUPES EXIST	F2514780
06160	0	56000	0	03653		LDQ TAG4	TEST DUPE	F2514790
06161	0	76300	1	00033		LLS 27,1	BITS OF POSITIONS	F2514800
06162	0	76000	0	00001		LBT	TO THE LEFT OF DOSUB	F2514810
06163	0	02000	0	06157		TRA RTX239	UNTIL THAT POSITION IS	F2514820
06164	0	07400	4	04447		TSX CXIJ,4	IN XA, THEN CALLCXIJ	F2514830
06165	0	40000	0	05245		ADD ERTX01	AND COMPUTE AND ADD	F2514840
06166	0	60100	0	05245		STO ERTX01	DECREMENT ADJUSTMENT	F2514850
06167	0	50000	0	05245	RTX240	CLA ERTX01	PUT COMPUTED DE EREMTN	F2514860
06170	0	62100	0	05177		STA CIL01	IN CIL01 WORD.	F2514870
06171	-0	76000	0	00141	RTX242	MSE 097	A LOC MUST BE ASSIGNED IF	F2514880
06172	0	02000	0	06176		TRA RTX246		F2514890
06173	0	07400	4	06224		TSX CILV,4	THIS IS FIRST TIX AFTER	F2514900
06174	0	07400	4	06625		TSX CIL23,4	TEST.	F2514910
06175	0	02000	0	06177		TRA RTX250		F2514920
06176	0	07400	4	06465	RTX246	TSX CIL023,4		F2514930
06177	0	07400	4	04345	RTX250	TSX CIT,4	COMPILE INST.	F2514940
06200	0	02000	0	06065	RTX254	TRA RTX226	RETURN FOR NEXT TG	F2514950
06201	0	53400	4	05125	RTX260	LXA LADMX,4	START DRMTG SEARCH AND	F2514960
06202	1	00004	4	06203		TXI RTX260+2,4,4		F2514970
06203	-0	63400	4	05237		SXD XTG,4	COMPILING	F2514980
06204	0	07400	4	04516	RTX264	TSX ADTGSE,4	FIND VALID TAG, FILL OUT TAG WDS.	F2514990
06205	0	02000	0	06216		TRA RTX270	END OF TABLE	F2515000
06206	-0	75400	2	00000		PXD 0,2	STORE POSITION	F2515010
06207	0	77100	0	00022		ARS 18	OF DOSUB	F2515020
06210	0	60100	0	05240		STO POSIND	IN POSIND.	F2515030
06211	0	50000	0	05117		CLA INST30	MODIFY TGTG	F2515040
06212	0	62100	0	06200		STA RTX254	TIX COMPILING	F2515050
06213	0	50000	0	05113		CLA INST20	ROUTINE TO	F2515060
06214	0	62100	0	06507		STA TGA8		F2515070
06215	0	02000	0	06070		TRA RTX228	AND EXECUTE.	F2515080
06216	0	50000	0	05120	RTX270	CLA INST32	ADTG PORTION FINISHED.	F2515090
06217	0	62100	0	06200		STA RTX254	REMODIFY TIX COMPILING	F2513100
06220	0	50000	0	05114		CLA INST22	ROUTINE FOR TGTGS.	F2515110
06221	0	62100	0	06507		STA TGA8	END OF BETA CYCLE8 RETURN TO 1 PLUS	F2513120
06222	-0	53400	4	05325	RTX280	LXD RTX024,4	LOCATION OF THE INSTRUCTION	F2515130

06223	0	02000	4	00001	TRA	1,4	CALLING RTX.	F2513140	
							*****F2515130		
							CILV IS CALLED WHEN AN INSTRUCTION NUMBER IS NEEDED FOR A COMF	F2515160	
							PILED BETA STATE INSTRUCTION.	F2515170	
06224	0	50000	0	05244	CILV	CLA	VCTR	THIS ROUTINE UPDATES	F2515180
06225	0	60100	0	05176		STO	CIL00	VCTR AND	F2515190
06226	0	40000	0	05110		ADD	L(8)	STORE IT INTO CIL00	F2515200
06227	0	60100	0	05244		STO	VCTR	IT IS CALLED WHEN	F2515210
06230	-0	32000	0	05141		ANA	ADMSK	WE NEED A LOCATION	F2515220
06231	0	40200	0	05060		SUB	MAXLOC	FOR A COMPILED	F2515230
06232	0	10000	0	06234		TZE	CILV1	INSTRUCTION.	F2515240
06233	0	02000	4	00001		TRA	1,4		F2515250
06234	0	07400	4	00004	CILV1	TSX	DIAG,4	TOO MANY INSTRUCTION NUMBERS.	F2515260
								*****F2515270	
								N3BIT PLACES THE VARIABLE N3 BIT OF A DO IN THE WORK N3IND.	F2513280
06235	-0	53400	2	05230	N3BIT	LXD	DOIND,2	THIS ROUTINE ISOLATES	F2515290
06236	0	50000	2	01076		CLA	DOTAGZ,2	THE N3 BIT SO THAT	F2515300
06237	0	77100	0	00017		ARS	15	IT CAN BE EASILY TESTED.	F2515310
06240	-0	32000	0	05126		ANA	L(1)		F2515320
06241	0	60100	0	05234		STO	N3IND		F2515330
06242	0	02000	4	00001		TRA	1,4	RETURN	F2515340
								TETG DETERMINES FOR WHICH DOS A GIVEN TAG IS A TEST. THIS	F2515330
								INFORMATION IS RECORDED IN TAG4.	F2515360
06243	0	50000	0	03652	TETG	CLA	TAG3	ISOLATE	F2515370
06244	-0	32000	0	05141		ANA	ADMSK	TAG NAME.	F2515380
06245	0	60100	0	05241		STO	ER40		F2515390
06246	0	50000	0	03653		CLA	TAG4	ISOLATE DUPES INDICATORS	F2515400
06247	0	77100	0	00011		ARS	9		F2515410
06250	-0	32000	0	05076		ANA	L(7)	IF THERE ARE DUPES	F2515420
06251	0	60100	0	05242		STO	ER41	THIS INSURES THAT TEST BITS	F2515430
06252	0	40200	0	05126		SUB	L(1)	ARE ENTERED ONLY FOR	F2515440
06253	0	32000	0	05242		ANS	ER41	RIGHTMOST DUPE.	F2515450
06254	0	53400	1	05131		LXA	L(3),1		F2515460
06255	0	50000	1	03652		CLA	TAG2+3,1	SELECT DOTAG WHICH	F2515470
06256	0	10000	0	06275		TZE	TETG5	CONTR0LS THIS	F2515480
06257	-0	73400	2	00000		PDX	0,2	SUBSCRIPT.	F2515400
06260	0	50000	2	01106		CLA	DOTAGZ+8,2		F2515S00
06261	-0	32000	0	05105		ANA	TETMSK	ISOLATE TEST NAME	F2515510
06262	0	77100	0	00022		ARS	18	OF THIS SUBSCRIPT.	F2515520
06263	0	40200	0	05241		SUB	ER40	DOES TEST NAME EQUAL TAG NAME,	F2515530
06264	-0	10000	0	06275		TNZ	TETG5	NO, GO TO NEXT SUBSCRIPT.	F2515540
06265	0	56000	0	05242		LDQ	ER41	TEST NAME EQUALS TAG NAHE,	F2515550
06266	0	76300	1	00044		LLS	36,1	SEE IF THIS SUBSCRIPT	F2515560
06267	0	76000	0	00001		LBT		IS A LEFT DUPE.	F2515570
06270	0	02000	0	06272		TRA	TETG3	NOT A LEFT DUPE, ENTER TEST BIT.	F251S580
06271	0	02000	0	06275		TRA	TETG5	LEFT DUPE, IGNORE.	F2515590
06272	0	50000	0	05136	TETG3	CLA	BIT1	ENTER TEST BIT	F2515600
06273	0	77100	1	00012		ARS	10,1	FOR THIS	F2515610
06274	-0	60200	0	03653		ORS	TAG4	SUBSCRIPT.	F2515620
06275	2	00001	1	06255	TETG5	TIX	TETG+10,1,1	DEAL WITH NEXT SUBSCRIPT,	F2515630
06276	0	02000	4	00001		TRA	1,4		F2515640
								*****F2515650	
								PRES DETERMINES THE TXI BLOCK NUMBER FOR A GIVEN TAG AND PUTSF	F2515660
								IT IN INDEX REGISTER B.	F2515670

06277	0	50000	0	03653	PRES	CLA	TAG4	FIRST THE TEST	F2515680
06300	0	76500	0	00032		LRS	26	BITS ARE ISOLATED	F2515690
06301	0	76700	0	00041		ALS	33	AND STORED.	F2515700
06302	0	60100	0	05241		STO	ER40	TEST BITS 1,2.	F2515710
06303	0	76300	0	00005		LLS	5	THEN THE GROUP NO.	F2515720
06304	0	76700	0	00024		ALS	20	IS LEFT	F2515730
06305	-0	50100	0	03653		ORA	TAG4	IN THE MQ WHILE THE	F2515740
06306	0	77100	0	00025		ARS	21	CARRY BITS ARE ORED	F2515750
06307	-0	32000	0	05132		ANA	L(5)	AND STORED.	F2515760
06310	0	60100	0	05242		STO	ER41	CARRY BITS 101.	F2515770
06311	0	76300	0	00005		LLS	5	THE GROUP NO. IS THEN	F2515780
06312	-0	50100	0	05240		ORA	POSIND	SHIFTED TO BE COMBINED	F2515790
06313	0	56000	0	05241		LDQ	ER40	WITH THE POS. THE TEST	F2515800
06314	0	76300	0	00001		LLS	1	BITS ARE SEPARATED SO THAT	F2515810
06315	0	76700	0	00001		ALS	1	THEY CAN OR PROPERLY WITH	F2515820
06316	0	76300	0	00002		LLS	2	CARRY BITS LT, LC, CT, CC.	F2515830
06317	-0	50100	0	05242		ORA	ER41	THIS RESULTS IN THE MASK	F2515840
06320	0	60100	0	05243		STO	ARG	USED FOR TABLE SEARCH.	F2515850
06321	-0	63400	4	05241		SXD	ER40,4		F2515860
06322	0	53400	1	05126		LXA	L(1),1	THIS BLOCK REPRESENTS	F2515870
06323	1	00042	1	06324		TXI	PRES10,1,34	SETS OF CALLING SEQUENCES TO	F2515880
06324	-0	63400	1	06364	PRES10	SXD	S3,1	SEARCH ROUTINE. MASK IS	F2515890
06325	1	00012	1	06326		TXI	PRES20,1,10	STORED AND BLOCK TEST	F2515900
06326	0	50000	0	05144	PRES20	CLA	SMSK1	INDEX DECREMENT IS STORED.	F2515910
06327	0	60100	0	05143		STO	SMSK	FIRST 11 ENTRIES ARE	F2515920
06330	0	07400	4	06354		TSX	SEARCH,4	SFARCHED. THEN 12,12,4.	F2515930
06331	0	50000	0	05145		CLA	SMSK2	RETURN TO ROUTINE	F2515940
06332	0	60100	0	05143		STO	SMSK	AFTER SEARCHING LAST	F2515950
06333	2	00014	1	06334		TIX	PRES30,1,12	BLOCK INDICATES AN ERROR.	F2515960
06334	-0	63400	1	06364	PRES30	SXD	S3,1		F2515970
06335	1	00014	1	06336		TXI	PRES40,1,12		F2515980
06336	0	07400	4	06354	PRES40	TSX	SEARCH,4		F2515990
06337	0	50000	0	05147		CLA	SMSK4		F2516000
06340	0	60100	0	05143		STO	SMSK		F2516010
06341	2	00020	1	06342		TIX	PRES50,1,16		F2516020
06342	-0	63400	1	06364	PRES50	SXD	S3,1		F2516030
06343	1	00020	1	06344		TXI	PRES60,1,16		F2516040
06344	0	07400	4	06354	PRES60	TSX	SEARCH,4		F2516050
06345	0	50000	0	05146		CLA	SMSK3		F2516060
06346	0	60100	0	05143		STO	SMSK		F2516070
06347	2	00006	1	06350		TIX	PRES70,1,6		F2516080
06350	-0	63400	1	06364	PRES70	SXD	S3,1		F2516090
06351	1	00006	1	06352		TXI	PRES80,1,6		F2516100
06352	0	07400	4	06354	PRES80	TSX	SEARCH,4		F2516110
06353	0	07400	4	00004	ERROR	TSX	DIAG,4	ALL SEARCHES FAILED.	F2516120
								*****F2516130	
								SEARCH IS CALLED BY PRES TO COMPARE CONSTANTS IN THE RX TABLE	F2516140
								AGAINST VARIOUS PERMUTATIONS OF AN ARGUMENT WORD. A MATCHING	F2516150
								COMPARISON MEANS THE CONSTANT WILL YIELD THE CORRECT BLOCK	F2516160
								NUMBER.	F2516170
06354	0	50000	1	06450	SEARCH	CLA	RXTA+45,1		F2516180
06355	0	77100	0	00003		ARS	3	THIS ROUTINE TAKES	F2516190
06356	0	60100	0	05217		STO	WRKRXT	THE ARGUMENT MASK, EDITS	F2516200
06357	0	50000	0	05243		CLA	ARG	IT AND THEN SEARCHES	F2516210

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06360	-0	32000	0	05143	ANA	SMSK	PRESCRIBED BLOCKS OF	F2516220
06361	0	40200	0	05217	SUB	WRKRXT	THE RX TABLE.	-F2516230
06362	0	10000	0	06366	TZE	S8	SUCCESSFUL SEARCH.	F2516240
06363	2	00001	1	06364	TIX	S3,1,1	INDEX FOR NEXT ENTRY,	F2516250
06364	3	00000	1	06354	TXH	SEARCH,1	TEST FOR END OF BLOCK,	F2516260
06365	0	02000	4	00001	TRA	1,4		F2516270
06366	0	50000	1	06450	CLA	RXTA+45,1	TABLE ENTRY CONTAINS	F2516280
06367	-0	32000	0	05076	ANA	L(7)	BLOCK NOS. 0-5 WHICH	F2516290
06370	0	73400	2	00000	PAX	0,2	CORRESPOND TO BLOCKS	F2516300
06371	-0	53400	4	05241	LXD	ER40,4	A-F.	F2516310
06372	0	02000	4	00001	TRA	1,4		F2516320
06373	+000000000	06600			RXTA	OCT 6600	6L, 760 MASK	F2516330
06374	+000000000	06400				OCT 6400	6C	F2516340
06375	+000000000	06200				OCT 6200	6R	F2516350
06376	+000000000	05600				OCT 5600	5L	F2516360
06377	+000000000	04600				OCT 4600	4L	F2516370
06400	+000000000	04200				OCT 4200	4R	F2516380
06401	+000000000	03600				OCT 3600	3L	F2516390
06402	+000000000	03400				OCT 3400	3C	F2516400
06403	+000000000	02400				OCT 2400	2C	F2516410
06404	+000000000	01600				OCT 1600	1L	F2516420
06405	+000000000	05501				OCT 5501	5C, 774 MASK	F2516430
06406	+000000000	05400				OCT 5400	5C	F2516440
06407	+000000000	05302				OCT 5302	5R	F2516450
06410	+000000000	05200				OCT 5200	5R	F2516460
06411	+000000000	04541				OCT 4541	4C	F2516470
06412	+000000000	04501				OCT 4501	4C	F2516480
06413	+000000000	04445				OCT 4445	4C	F2516490
06414	+000000000	04400				OCT 4400	4C	F2516500
06415	+000000000	01541				OCT 1541	1C	F2516510
06416	+000000000	01501				OCT 1501	1C	F2516520
06417	+000000000	01445				OCT 1445	1C	F2516530
06420	+000000000	01400				OCT 1400	1C	F2516540
06421	+000000000	01215				OCT 1215	1R, 773 MASK	F2516550
06422	+000000000	01200				OCT 1200	1R	F2516560
06423	+000000000	02723				OCT 2723	2L	F2516570
06424	+000000000	02733				OCT 2733	2L	F2516580
06425	+000000000	02623				OCT 2623	2L	F2516590
06426	+000000000	02633				OCT 2633	2L	F25166D0
06427	+000000000	03324				OCT 3324	3R	F2516610
06430	+000000000	03302				OCT 3302	3R	F2516620
06431	+000000000	03223				OCT 3223	3R	F2516630
06432	+000000000	03200				OCT 3200	3R	F2516640
06433	+000000000	01334				OCT 1334	1R	F2516650
06434	+000000000	01324				OCT 1324	1R	F2516660
06435	+000000000	01315				OCT 1315	1R	F2516670
06436	+000000000	01302				OCT 1302	1R	F2516680
06437	+000000000	01233				OCT 1233	1R	F2516690
06440	+000000000	01223				OCT 1223	1R	F2516700
06441	+000000000	02600				OCT 2600	2L, 763 MASK	F2516710
06442	+000000000	02610				OCT 2610	2L	F2516720
06443	+000000000	02233				OCT 2233	2R	F2516730
06444	+000000000	02223				OCT 2223	2R	F2516740
06445	+000000000	02215				OCT 2215	2R	F2516750

06446	+000000002200		OCT	2200	2R		F2516760
						*****	F2516770
						CN3IJ COMPUTES THE INDEX INCREMENTING VALUE FOR EACH PASS THRF	F2516780
						THROUGH A DO LOOP. THIS IS THE NORHAL TXI DECREMENT.	F2516790
06447	0 56000 2 01102	CN3IJ	LDQ	DOTAGZ+4,2		COMPUTES DECREMENT AND	F2516800
06450	0 76300 0 00022		LLS	18		LEAVES IT IN ACCUMULATOR.	F2516810
06451	3 00002 1 06457		TXH	CN3IJ5,1,2		IF POSIND=3, S1 POS.	F2516820
06452	0 20000 0 03644		MPY	WRKSC+6		D1N3 FOR S2 OR S3.	F2516830
06453	0 76500 0 00022		LRS	18			F2516840
06454	3 00001 1 06457		TXH	CN3IJ5,1,1		POSIND=2 S2 POS.	F2516850
06455	0 20000 0 03645		MPY	WRKSC+7		D2D1N3 FOR S3.	F2516860
06456	0 76500 0 00022		LRS	18			F2516870
06457	-0 75400 1 00000	CN3IJ5	PXD	0,1		PLACE TWICE	F2516880
06460	0 76700 0 00001		ALS	1		POSIND IN	F2516890
06461	-0 73400 1 00000		PDX	0,1		INDEX REGISTER.	F2516900
06462	0 20000 1 03644		MPY	WRKSC+6,1		CN3D1D2 OR CN3D1 OR CN3.	F2516910
06463	0 77100 0 00001		ARS	1			F2516920
06464	0 02000 4 00001		TRA	1,4		RESULT IS N3G.	F2516930
						*****	F2516940
						CIL023 FILLS OUT THE LOCATION, ADDRESS, AND TAG NAME WORDS FOF	F2516950
						FOR NON-LOCATION COMPILED INSTRUCTIONS ADDRESSING THE FOLLOWIF	F2516960
						ING INSTRUCTIONS	F2516970
06465	0 50000 0 05133	CIL023	CLA	L(0)		ROUTINE PLACES SPECIAL	F2516980
06466	0 60100 0 05176		STO	CIL00			F2516990
06467	0 50000 0 05061		CLA	L1DEC		SYMBOL FOR ADDRESS	F2517000
06470	0 60100 0 05201		STO	CIL03			F2517010
06471	0 50000 0 05077		CLA	BCD15		AND INITIALIZES LOC. WORD	F2517020
06472	0 60100 0 05200		STO	CIL02		AND PLACES TAG IN	F2517030
06473	0 50000 0 03652		CLA	TAG3		TAG WD. THIS IS DOEN	F2517040
06474	0 62100 0 05201		STA	CIL03		FOR INST. OF K DECREMENT.	F2517050
06475	0 02000 4 00001		TRA	1,4		).	F2517060
						*****	F2517070
						TGA MAKES AN ENTRY IN APPENDED TAGTAG SHOWING THE LOCATION OFF	F2317080
						A GIVEN VARIABLE DECREMENT TXI OR TIX. FOR REFERENCE BY THE	F2517090
						ALPHA STATE WHEN COMPILING CECREMENT INITIALIZATION	F2517100
						INSTRUCTIONS.	F2517110
06476	0 76700 0 00022	TGA	ALS	18		FOR RX LOC.	F2517120
06477	0 77100 0 00003	TGAT	ARS	3		FOR TX LOC, DIV VCTOR BY 8.	F2517130
06500	0 60100 0 05202		STO	ERTGA			F2517140
06501	0 53400 1 05240		LXA	POSIND,1			F2517150
06502	0 50000 0 05237		CLA	XTG		CALCULATES X LOC OF TTGA.	F2517160
06503	0 77100 0 00002		ARS	2		INDEX QUANTITY FOR TTGA IS	F2517170
06504	-0 73400 2 00000		PDX	0,2		ONE FOURTH THAT FOR TTG.	F2517180
06505	0 50000 0 05202		CLA	ERTGA			F2517190
06506	2 00001 1 06511	TGA5	TIX	TGA10,1,1		SHIFT LEFT FOR S1 OR S2	F2517200
06507	-0 60200 2 02646	TGA8	ORS	MXTGA,2		ADDRESS IS ORIGIN PLUS MAX	F2517210
06510	0 02000 4 00001		TRA	1,4		ADD TG WD. LINKAGE TRANSFER.	F2517220
06511	0 76700 0 00006	TGA10	ALS	6			F2517230
06512	0 02000 0 06506		TRA	TGA5			F2517240
						*****	F23172S0
						EDCB COMPILES TXI-SXD-TIX INSTRUCTIONS AND STORES THE SXD LOCF	F2517260
						ATION FOR BLOCKS B,C,D, OR E WHEN THE DECREMENTS ARE CONSTANT	F2517270
						AND KNOWN.	F2517280
06513	-0 63400 4 06533	EDCB	SXD	EDCB5,4		COMPILES TXI SXD TIX	F2517290

06514	0	50000	0	05042	CLA	L(TXI)	INSTRUCTIONS WHEN	F2517300
06515	0	60100	0	05177	STO	CIL01	DECREMENTS ARE KNOWN,	F2517310
06516	0	50000	0	05245	CLA	ERTX01	ASSUMES DECREMENTS TO	F2517320
06517	0	62100	0	05177	STA	CIL01	BE IN ERTX01 AND	F2517330
06520	0	07400	4	06465	TSX	CIL023,4	ERTX02,	F2517340
06521	0	07400	4	04345	TSX	CIT,4	COMPILE TXI INSTRUCITON.	F2517350
06522	0	07400	4	04472	TSX	CSXD,4	COMPILE SXD SKELETON.	F2517360
06523	0	50000	0	05176	CLA	CIL00		F2517370
06524	-0	32000	0	05141	ANA	ADMSK		F2517380
06525	0	76700	0	00014	ALS	12	BELOW, PLACE SXD LOC. INTO	F2517390
06526	-0	53400	4	05250	LXD	BLKNUM,4	DOTAG WORD 7. APPROPRIATE	F2517400
06527	3	00002	4	06534	TXH	EDCB10,4,2	BITS DEPEND ON BLOCK NOS.	F2517410
06530	-0	53400	2	03647	LXD	TAG2,2	BLOCKS D, E SHIFT LEFT 12.	F2517420
06531	3	00001	4	06533	TXH	EDCB5,4,1	BLOCKS C, B USE S1 DOTAG.	F2517430
06532	0	76700	0	00006	ALS	6	BLOCK C, SHIFT LEFT 12.	F2517440
06533	-3	00000	0	06535	EDCB5	TXL EDCB20,0	BLOCK B, SHIGT LEFT 18.	F2517450
06534	-0	53400	2	03650	EDCB10	LXD TAG2+1,2	BLOCK D,E USE S2 DOTAG.	F2517460
06535	-0	60200	2	01104	EDCB20	ORS DOTAGZ+6,2	PLACE LOC. INTO WD 7.	F2517470
06536	0	50000	0	05046	CLA	L(TIX)	COMPILE	F2517480
06537	0	60100	0	05177	STO	CIL01	TIX.	F2517490
06540	0	50000	0	05246	CLA	ERTX02	COMPILE	F2517500
06541	0	62100	0	05177	STA	CIL01	TIX DECREMENT,	F2517510
06542	0	07400	4	06465	TSX	CIL023,4		F2517520
06543	0	07400	4	04345	TSX	CIT,4		F2517530
06544	-0	53400	4	06533	LXD	EDCB5,4		F2517540
06545	0	02000	4	00001	TRA	1,4		F2517550
						*****		F2517560
						BCDE COMPILES TXI-SXD-TIX INSTRUCTIONS AND MAKES PROPER TABLE		F2517570
						ENTRIES IN DOTAG AND TGA WHEN BLOCK B,C,D, OR E IS VARIABLE.		F2517580
06546	-0	63400	4	06567	BCDE	SXD BCDE2,4		F2517590
06547	0	07400	4	06224	TSX	CILV,4	OBTAIN LOC. FOR FIRST INST.	F2517600
06550	0	50000	0	05176	CLA	CIL00	MAKE LOCATION ENTRY INTO	F2517610
06551	-0	32000	0	05141	ANA	ADMSK	APPENDED TAG WORD.	F2517620
06552	0	07400	4	06476	TSX	TGA,4		F2517630
06553	0	50000	0	05042	CLA	L(TXI)	PLACE OPERATION IN	F2517640
06554	0	60100	0	05177	STO	CIL01	COMPILED INSTRUCTIN,	F2517650
06555	0	07400	4	06625	TSX	CIL23,4	FILL OUT REMAINING WORDS.	F2517660
06556	0	07400	4	04345	TSX	CIT,4		F2517670
06557	0	07400	4	04472	TSX	CSXD,4		F2517680
06560	-0	53400	2	05250	LXD	BLKNUM,2		F2517690
06561	-3	00002	2	06570	TXL	BCDE5,2,2	TEST FOR BLOCKS B OR C.	F2517700
06562	0	50000	0	05176	CLA	CIL00	BLOCK D OR E.	F2517710
06563	-0	53400	1	03650	LXD	TAG2+1,1	PLACE LOC. OF SXD INST.	F2517720
06564	-0	32000	0	05141	ANA	ADMSK	INTO DOTAG ENTRY FOR	F2517730
06565	0	76700	0	00014	ALS	12	CENTER SUBSCRIPT.	F2517740
06566	-0	60200	1	01104	ORS	DOTAGZ+6,1		F2517750
06567	-3	00000	0	06577	BCDE2	TXL BCDE9,0	BLOCKS D,E CONTINUE.	F2517760
06570	0	50000	0	05176	BCDE5	CLA CIL00	BLOCK B OR C .	F2517770
06571	-0	53400	1	03647	LXD	TAG2,1	PLACE LOC. FOR SXD OF	F2517780
06572	-0	32000	0	05141	ANA	ADMSK	REMAINING TWO BLOCKS.	F2517790
06573	0	76700	0	00014	ALS	12	DISTINGUISH BETWEEN BLOCK B, C.	F2517800
06574	3	00001	2	06576	TXH	BCDE8,2,1		F2517810
06575	0	76700	0	00006	ALS	6		F2517820
06576	-0	60200	1	01104	BCDE8	ORS DOTAGZ+6,1		F2517830

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06577	-0	75400	2	00000	BCDE9	PXD	0,2	BLOCK NUMBER MUST BE	F2517840
06600	0	76700	0	00016		ALS	14	STORED IN PROPER POS.	F2517850
06601	0	53400	1	05240		LXA	POSIND,1	OF TAG 4 WORD.	F2517860
06602	-3	00001	1	06606		TXL	BCDE10-1,1,1		F2517870
06603	-3	00002	1	06607		TXL	BCDE10,1,2	IF POSITION IS LEFT,	F2517880
06604	-0	50000	0	05140		CAL	BIT8	PLACE A ONE IN BIT 7 OF TAG4	F2517890
06605	0	02000	0	06607		TRA	BCDE10	TO INDICATE BLOCK D SPECIAL.	F2517900
06606	0	77100	0	00003		ARS	3		F2517910
06607	-0	53400	2	05237	BCDE10	LXD	XTG,2		F2517920
06610	-0	60200	2	02341		ORS	MXTGTG+3,2		F2517930
06611	0	07400	4	06224		TSX	CILV,4	OBTAIN LOC. FOR THIRD	F2517940
06612	0	50000	0	05046		CLA	L(TIX)	INST. AND OPERATION PART	F2517950
06613	0	60100	0	05177		STO	CIL01	FOR 2ND WORD.	F2517960
06614	0	07400	4	06625		TSX	CIL23,4	FILL OUT REMAINING WORDS.	F2517970
06615	0	07400	4	04345		TSX	CIT,4		F2517980
06616	-0	53400	4	06567		LXD	BCDE2,4		F2517990
06617	0	02000	4	00001		TRA	1,4		F2518000
								*****F2518010	
								NBITS ISOLATES THE VARIABLE PARAMETER BITS FOR A GIVEN DOTAG.	F2518020
06620	0	50000	2	01076	NBITS	CLA	DOTAGZ,2	ROUTINE FOR ISOLATING	F2518030
06621	0	77100	0	00017		ARS	15	THE N BITS OF A DO.	F2518040
06622	-0	32000	0	05076		ANA	L(7)		F2518050
06623	0	60100	0	05235		STO	N1N2N3		F2518060
06624	0	02000	4	00001		TRA	1,4		F2518070
								*****F2518080	
								CIL23 FILLS OUT THE ADDRESS AND TAG NAME WORDS FOR A COMPILED	F2518090
								INSTRUCTION WHEN THE ADDRESS IS TO BE THE NEXT SEQUENTIAL	F2518100
								TRUCTION AND THE LOCATION WORD IS FILLED ELSEWHERE.	F2518110
06625	0	50000	0	05176	CIL23	CLA	CIL00	THIS ROUTINE PLACES TAG IN	F2518120
06626	0	60100	0	05200		STO	CIL02	TAG WD. OF CIL03 AN0 1	F2518130
06627	0	50000	0	03652		CLA	TAG3	IN DECREMENT FOR THE	F2518140
06630	-0	32000	0	05141		ANA	ADMSK	RELATIVE PART,	F2518150
06631	-0	50100	0	05061		ORA	L1DEC	PLACES THE LOCATION IN	F2518160
06632	0	60100	0	05201		STO	CIL03	THE ADDRESS WORD CIL02 .	F2518170
06633	0	02000	4	00001		TRA	1,4		F2518180
								*****F2518190	
								CILNAM ENTERS ONLY THE TAG NAME.	F2518200
06634	0	50000	0	03652	CILNAM	CLA	TAG3	THIS ROUTINE	F2518210
06635	-0	32000	0	05141		ANA	ADMSK	ENTERS THE	F2518220
06636	0	60100	0	05201		STO	CIL03	TAG NAME	F2518230
06637	0	02000	4	00001		TRA	1,4	IN CIL.	F2518240
								*****F2518250	
									F2518260
									F2518270
								MASTER RECORD CARD = FN049	F2518275
								BEGIN ALPHA STATE	F2518280
								THE ALPHA STATE, AC, IS CALLED BY MAN TO COMPILE ALL INITIAL	F2518290
								ZATION AND LOAD INSTRUCTIONS WHEN AN ALPH OF A DO IS UNDER	CF2518300
								CONSIDERATION.	F2518310
				05256		ORG	RTX		F2518320
05256	-0	63400	4	06252	AC	SXD	AC248,4	STORE LINKAGE	F2518330
05257	0	60100	0	05244		STO	VCTR	DOTAG ALPHA IS LOCATION.	F2518340
05260	0	50000	2	01104		CLA	DOTAGZ+6,2	PLACE	F2518350
05261	0	77100	0	00033		ARS	27	SXD LOCATION	F2518360

05262	-0	32000	0	05170	ANA 6ONESR	IN	F2518370
05263	0	76700	0	00003	ALS 3	CIL00 AND	F2518380
05264	0	40000	0	05225	ADD B	TXL LOCATION	F2518390
05265	0	60100	0	05176	STO CIL00	IN	F2518400
05266	0	50000	2	01076	CLA DOTAGZ,2	ERTX01 FOR	F2518410
05267	-0	32000	0	05071	ANA N0PRET		F2518420
05270	0	60100	0	05251	STO SXDTXZ		F2518430
05271	0	76600	0	00301	WRS 193	OF SXDTX TABLE	F2518440
05272	-0	50000	0	05251	CAL SXDTXZ	MAKE	F2518450
05273	0	36100	0	05176	ACL CIL00	SXDTX	F2518460
05274	0	60200	0	05245	SLW ERTX01	TABLE	F2518470
05275	0	46000	0	05063	LDA DRADS2	ENTRY	F2518480
05276	0	70000	0	05251	CPY SXDTXZ	ON	F2518490
05277	0	70000	0	05176	CPY CIL00	DRUM 1.	F2518500
05300	0	70000	0	05245	CPY ERTX01		F2518510
05301	0	50000	0	05063	CLA DRADS2	RESET DRUM	F2518520
05302	0	40000	0	05131	ADD L(3)	ADDRESS FOR	F2518530
05303	0	60100	0	05063	STO DRADS2	NEXT ENTRY.	F2518540
05304	0	50000	0	05123	AC05 CLA ALLONE	INITIALIZE CIL WORDS	F2518550
05305	0	60100	0	05176	STO CIL00	TO ALL ONES AND	F2518560
05306	0	60100	0	05177	STO CIL01	PUT	F2518570
05307	0	60100	0	05200	STO CIL02	INTO CIT	F2518580
05310	0	60100	0	05201	STO CIL03	AS FIRST ALPHA STAGE	F2518590
05311	0	07400	4	04352	TSX CITSP,4	ENTRY.	F2518600
05312	0	07400	4	04153	TSX SCAN,4	SCAN AND FIND PICK	F2518610
05313	-0	63400	1	05221	SXD RTXTGX,1		F2518620
05314	-0	63400	1	05237	SXD XTG,1	BY A DO WITHIN ALPHA	F2518630
05315	0	07400	4	04162	AC010 TSX FIND,4	AND BETA.	F2518640
05316	0	02000	0	06240	TRA AC240+1	END OF DO FOR DOTAG.	F2518650
05317	-0	63400	1	05237	SXD XTG,1	STORE TGTG INDEX IN XTG.	F2518660
05320	0	07400	4	04373	AC014 TSX SCLMN1,4	OBTAIN X FOR MINLEV OF S.C	F2518670
05321	-0	53400	1	05237	LXD XTG,1	SET UP FOR FIND ROUTINE.	F2518680
05322	0	40200	0	05230	SUB DOIND	TEST TO SEE IF THIS IS	F2518690
05323	-0	10000	0	05315	AC016 TNZ AC010	THE OUTERMOST DO.	F2518700
05324	-0	53400	1	03652	LXD TAG3,1	IF IT IS PROCEED TO	F2518710
05325	3	00000	1	05340	TXH AC018,1,0	COMPILE PROPER INST.	F2518720
05326	0	50000	0	03652	CLA TAG3 -	NO CURRENT TG, USE NEW TG.	F2518730
05327	0	77100	0	00013	ARS 11	CHECK RESET TAG BIT	F2518740
05330	0	76000	0	00001	LBT	OR INSERTED COUNTER.	F2518750
05331	0	02000	0	05334	TRA AC016I	RESET TYPE ENTRY, USE NEW TAG	F2518760
05332	0	07400	4	04230	TSX ENTR,4	CTR. TYPE ENTRY, SIMULATE	F2518770
05333	0	02000	0	05343	TRA AC020	WRKSC AND CONTINUE	F2518780
05334	0	50000	0	03652	AC016I CLA TAG3	RESET TYPE ENTRY	F2518790
05335	-0	32000	0	05153	ANA 11BITS	LAY OUT TAU ENTRIES	F2518800
05336	0	07400	4	04236	TSX SUBCOM,4		F2518810
05337	0	02000	0	05355	TRA AC021	DECREMENT AND CONTINUE	F2518820
05340	0	50000	0	03652	AC018 CLA TAG3	CURRENT TAG VALID, LAY	F2518830
05341	0	77100	0	00022	ARS 18	OUT TAU DNTRIES INTO	F2518840
05342	0	07400	4	04236	AC019 TSX SUBCOM,4	WRKSC AND CONTINUE	F2518850
05343	0	07400	4	04560	AC020 TSX N1STET,4		F2518860
05344	0	50000	0	05254	CLA N1SBX	VALUE IS CONSTANT	F2518870
05345	-0	10000	0	05400	TNZ AC030	VARIABLE, TRA AC030.	F2518880
05346	0	07400	4	04406	TSX TELC,4	COMPUTE LOAD	F2518890
05347	0	50000	0	05245	CLA ERTX01	VALUE	F2518900

05350	0	76700	0	00022	ALS 18	AND PLACE	F2518910
05351	0	40000	0	05061	ADD L1DEC	IN	F2518920
05352	0	07400	4	04601	TSX FIXCON,4	FIXCON.	F2518930
05353	0	60100	0	05200	STO CIL02	FIXCON LOCATION SYMBOL.	F2518940
05354	0	02000	0	05357	TRA AC022	CONTINUE.	F2518950
05355	0	50000	0	05100	AC021 CLA BCD0		F2518960
05356	0	60100	0	05200	STO CIL02	LXD ADDRESS T0 BCD ZERO.	F2518970
05357	0	50000	0	05051	AC022 CLA L(LXD)		F2518980
05360	0	60100	0	05177	STO CIL01	LXD	F2518990
05361	0	07400	4	07131	TSX CIL03I,4	FILL OUT LOCATION AND TG WORDS.	F2519000
05362	0	50000	0	05200	CLA CIL02	PLACE LXD ADDRESS	F2519010
05363	0	60100	0	07621	STO OR000+27	IN OR0 TABLE.	F2519020
05364	0	73400	4	00000	PAX 0,4	RELATIVE PART OF FIXCON NAME	F2519030
05365	-0	32000	0	05104	ANA 6ONES		F2519040
05366	0	60100	0	05200	STO CIL02	ADDRESS.	F2519050
05367	-0	63400	4	05201	SXD CIL03,4	RELATIVE ADDRESS.	F2519060
05370	0	50000	0	05222	CLA LOCIND	TEST LOCATION INDICATOR.	F2519070
05371	0	10000	0	05376	TZE AC024		F2519080
05372	0	40200	0	05126	SUB L(1)		F2519090
05373	0	60100	0	05222	STO LOCIND	A LOCATION MUST BE	F2519100
05374	0	50000	0	05224	CLA A	ASSIGNED FOR 1ST LXD	F2519110
05375	0	60100	0	05176	STO CIL00	COMPILED FOR AN ALPHA.	F2519120
05376	0	07400	4	04345	AC024 TSX CIT,4	PUT IN DOFILE.	F2519130
05377	0	76100	0	00000	NOP		F2519140
05400	0	50000	0	03653	AC030 CLA TAG4	VARIABLE CASE, THE BITS FOR	F2519150
05401	0	77100	0	00003	ARS 3	DEFINING A SUB BY A DO OR	F2519160
05402	-0	32000	0	05076	ANA L(7)	A RELCON OR BOTH ARE	F2519170
05403	0	60100	0	05210	STO RELC0	ISOLATED IN 3 SEPARATE	F2519180
05404	0	50000	0	03653	CLA TAG4	WORDS, DEFDO, RELCO, AND	F2519190
05405	-0	32000	0	05076	ANA L(7)	ORDED0.	F2519200
05406	0	60100	0	05253	STO DEFDO		F2519210
05407	-0	50100	0	05210	ORA RELC0		F2519220
05410	0	60100	0	05252	STO OREDO		F2519230
05411	0	50000	0	05254	CLA N1SBX	IF CONSTANT LOAD,	F2519240
05412	0	10000	0	05567	TZE AC100+2	TRA AC100+2.	F2519250
05413	0	50000	0	05127	CLA L(2)	1F VARIABLE LOAD, FILL	F2519260
05414	0	07400	4	07137	TSX BITP,4	OR0 TABLE.	F2519270
05415	0	02000	0	05417	TRA AC040	S1 NOT DEFINED.	F2519280
05416	0	60100	0	07567	STO OR000+1	S1 DEFINED. STO SYMBOL IN OR0+1.	F2519290
05417	0	50000	0	05126	AC040 CLA L(1)	REPEAT FOR	F2519300
05420	0	07400	4	07137	TSX BITP,4	S2.	F2519310
05421	0	02000	0	05426	TRA AC046	S2 NOT DEFINED.	F2519320
05422	0	60100	0	07572	STO OR000+4	S2 DEFINED. PUT SUBSCRIPT	F2519330
05423	0	50000	0	03644	CLA WRKSC+6	SYMBOL IN OR0+4 AND	F2519340
05424	0	07400	4	04601	TSX FIXCON,4	D1 SYMBOL	F2519350
05425	0	60100	0	07575	STO OR000+7	IN OR0+7.	F2519360
05426	0	50000	0	05133	AC046 CLA L(0)	REPEAT FOR	F2519370
05427	0	07400	4	07137	TSX BITP,4		F2519380
05430	0	02000	0	05443	TRA AC048	S3 NOT DEFINED.	F2519390
05431	0	60100	0	07613	STO OR000+21	S3 DEFINED. PUT SUBSCRIPT	F2519400
05432	0	56000	0	03644	LDQ WRKSC+6	SYMBOL IN OR0+21	F2519410
05433	0	20000	0	03645	MPY WRKSC+7	AND	F2519420
05434	0	76700	0	00021	ALS 17	PUT	F2519430
05435	0	07400	4	04601	TSX FIXCON,4	D1D2 IN	F2519440

	05436	0	60100	0	07616		STO	OR000+24	OR0+24.	F2519450
	05437	0	50000	0	03644		CLA	WRKSC+6		F2519460
	05440	0	07400	4	04601		TSX	FIXCON,4	OBTAIN SYMBOL FOR D1	F2519470
	05441	0	60100	0	07575		STO	OR000+7	AND STORE IN OR0+7,	F2519480
	05442	0	76000	0	00140		PSE	96	TURN OFF SENSE LIGHTS.	F2519490
	05443	0	07400	4	07172	AC048	TSX	COSE,4	TEST COEFFS GREATER THAN 1.	F2519500
	05444	0	50000	0	05152		CLA	0PMSK		F2519510
	05445	-0	32000	0	03653		ANA	TAG4	COEFS, 011 RELCONS, 100 CUPE.	F2519520
	05446	-0	10000	0	05472		TNZ	AC049	SOME OF ABOVE EXIST.	F2519530
M	05447	-0	53400	1	03650		LXD	TAG21,1	NONE OF ABOVE EXIST,	F2519540
	05450	-3	00000	1	05452		TXL	AC048+7,1,0	IF S2 DEF BY DO,	F2519550
	05451	-0	50000	1	01100		CAL	DOTAGZ+2,1	ISOLATE N1.	F2519560
M	05452	-0	53400	1	03651		LXD	TAG22,1	IF S3 DEF BY DO,	F2519570
	05453	-3	00000	1	05455		TXL	AC048+10,1,0	OR N1S OF S2 AND S3.	F2519580
	05454	-0	50100	1	01100		ORA	DOTAGZ+2,1	IF EITHER N1 IS GREATER	F2519590
	05455	0	40200	0	05126		SUB	L(1)	THAN 1, RETURN.	F2519600
	05456	0	10000	0	05460		TZE	AC048I	IS S1 IS	F2519610
	05457	0	12000	0	05472		TPL	AC049	DEFINED BY A DO,	F2519620
	05460	-0	53400	1	03647	AC048I	LXD	TAG2,1	IS/LATE N1.	F2519630
	05461	-3	00000	1	05464		TXL	AC048I+4,1,0	IF NOT ISOLATE	F2519640
	05462	0	50000	1	01100		CLA	DOTAGZ+2,1	S1 (BCD).	F2519650
	05463	0	02000	0	05465		TRA	AC048I+5		F2519660
	05464	0	50000	0	03637		CLA	WRKSC+1		F2519670
	05465	0	60100	0	05200		STO	CIL02	STO S1 OR N1 SYMBOL.	F2519680
	05466	0	07400	4	07131		TSX	CIL03I,4	FILL OUT	F2519690
	05467	0	50000	0	05051		CLA	L(LXD)	COMPILED INSTRUCTION	F2519700
	05470	0	60100	0	05177		STO	CIL01	WORDS AND CONTINUE	F2519710
	05471	0	02000	0	05564		TRA	AC100-1	TO INIT PORTION,	F2519720
	05472	0	53400	1	05127	AC049	LXA	L(2),1		F2519730
	05473	0	50000	0	05252		CLA	OREDO	IS LEFT SUB A RELCON,	F2519740
	05474	-0	32000	0	05130		ANA	L(4)	DORC, OR DOSUB.	F2519750
	05475	0	10000	0	05503		TZE	AC049A	NO, COMPILE CLA, SUB.	F2519760
	05476	-0	53400	2	03647		LXD	TAG2,2	YES, IS IT A DOSUB.	F2519770
	05477	-3	00000	2	05505		TXL	AC049B,2,0	NO.	F2519780
	05500	0	50000	2	01100		CLA	DOTAGZ+2,2	YES, IS N1(S1)=1.	F2519790
	05501	0	40200	0	05126		SUB	L(1)		F2519800
	05502	-0	10000	0	05505		TNZ	AC049B	NO.	F2519810
	05503	0	50000	0	07350	AC049A	CLA	KLX01		F2519820
	05504	0	07400	4	07271		TSX	LXC,4	COMPILE CLA, SUB.	F2519830
	05505	0	50000	0	05252	AC049B	CLA	OREDO		F2519840
	05506	0	77100	0	00002		ARS	2	DEFINITION.	F2519850
	05507	0	76000	0	00001		LBT		OF S1.	F2519860
	05510	0	02000	0	05523		TRA	AC064	S1 IS NOT DEF., TAKE S2.	F2519870
	05511	0	53400	1	05131		LXA	L(3),1	S1 DEFINED, GO TO	F2519880
	05512	0	07400	4	04670		TSX	0P2,4	OPTIMIZING ROUTINE.	F2519890
	05513	0	53400	1	05127		LXA	L(2),1	AT LEAST 4 COMP INST.	F2519900
	05514	-0	76000	0	00141		MSE	97	TEST ON COEF	F2519910
	05515	0	02000	0	05517		TRA	AC050	GREATER THAN 1,	F2519920
	05516	1	00002	1	05521		TXI	AC050I,1,2		F2519930
	05517	0	50000	0	07353	AC050	CLA	KLX02	L(LXI02)	F2519940
	05520	0	02000	0	05522		TRA	AC050I+1		F2519950
	05521	0	50000	0	07352	AC050I	CLA	KLX02I	L(LXI03)	F2519960
	05522	0	07400	4	07271		TSX	LXC,4	COMPILER.	F2519970
	05523	0	50000	0	05252	AC064	CLA	OREDO		F2519980

05524	0	77100	0	00001	ARS 1	S2	F2519990
05525	0	76000	0	00001	LBT	DEFINED.	F2520000
05526	0	02000	0	05540	TRA AC080	S2 NOT DEFINED. S3.	F2520010
05527	0	53400	1	05127	LXA L(2),1	CALL OP2 ROUTINE	F2520020
05530	0	07400	4	04670	TSX OP2,4	TO OPTIMIZE.	F2520030
05531	0	53400	1	05106	LXA L(6),1	COUNTER FOR COMPILING	F2520040
05532	-0	76000	0	00142	MSE 98	IS COEF GREATER THAN 1,	F2520050
05533	0	02000	0	05536	TRA AC068	NO	F2520060
05534	0	50000	0	07354	CLA KLX03	YES.	F2520070
05535	1	00002	1	05537	TXI AC068+1,1,2	INCREMENT COMPILING COUNTER.	F2520080
05536	0	50000	0	07356	AC068 CLA KLX03I		F2520090
05537	0	07400	4	07271	TSX LXC,4	COMPILE S2 LOAD VALUE.	F2520100
05540	0	50000	0	05252	AC080 CLA OREDO		F2520110
05541	0	76000	0	00001	LBT		F2520120
05542	0	02000	0	05554	TRA AC096	S3 NOT DEFINED, EXIT.	F2520130
05543	0	53400	1	05126	LXA L(1),1	CALL OP2 ROUTINE	F2520140
05544	0	07400	4	04670	TSX OP2,4	FOR OPTIMIZATION	F2520150
05545	0	53400	1	05106	LXA L(6),1	COMPILING COUNTER.	F2520160
05546	-0	76000	0	00143	MSE 99	TEST FOR COEF GREATER THAN 1.	F2520170
05547	0	02000	0	05552	TRA AC084	NONE.	F2520180
05550	0	50000	0	07355	CLA KLX05	C3 GREATER THAN 1, COMPILE	F2520190
05551	1	00002	1	05553	TXI AC084+1,1,2	KLX05 BLOCK.	F2520200
05552	0	50000	0	07357	AC084 CLA KLX05I	C3=1, COMPILE KLX05I	F2520210
05553	0	07400	4	07271	TSX LXC,4	BLOCK.	F2520220
05554	0	07400	4	07131	AC096 TSX CIL03I,4	COMPILE	F2520230
05555	0	50000	0	05051	CLA L(LXD)	LXD.	F2520240
05556	0	60100	0	05177	STO CIL01		F2520250
05557	0	50000	0	07620	CLA OR000+26	ERASABLE OBJECT TIME SYMBOL.	F2520260
05560	0	73400	1	00000	PAX 0,1		F2520270
05561	-0	32000	0	05104	ANA 6ONES		F2520280
05562	-0	63400	1	05201	SXD CIL03,1		F2520290
05563	0	60100	0	05200	STO CIL02		F2520300
05564	0	07400	4	04345	TSX CIT,4	PUT IN BUFFER.	F2520310
05565	0	50000	0	07620	AC100 CLA OR000+26		F2520320
05566	0	60100	0	07621	STO OR000+27		F2520330
05567	0	53400	1	05131	LXA L(3),1	PREPARE TO	F2520340
05570	-0	63400	1	05207	AC109 SXD AX,1	CHECK FOR	F2520350
05571	0	50000	1	03652	CLA TAG2+3,1	DUPES.	F2520360
05572	-0	73400	2	00000	PDX 0,2	SAVE INDEX OF S.	F2520370
05573	-3	00000	2	05743	TXL AC160,2,0	POS. NOT MOD. BY DO.	F2520380
05574	-2	00001	1	05601	AC110 TNX AC116,1,1		F2520390
05575	0	34000	1	03652	CAS TAG2+3,1	SKIP DUPES	F2520400
05576	0	02000	0	05574	TRA AC110	EXCEPT	F2520410
05577	0	02000	0	05743	TRA AC160	RIGHTMOST.	F2520420
05600	0	02000	0	05574	TRA AC110		F2520430
05601	0	50000	2	01106	AC116 CLA DOTAGZ+8,2	ISOLATE	F2520440
05602	-0	32000	0	05171	ANA 6T017	NAME OF TEST	F2520450
05603	0	60100	0	05204	STO TETTG	FOR THIS DO	F2520460
05604	0	50000	0	03652	CLA TAG3	AND	F2520470
05605	-0	32000	0	05172	ANA 24T035	COMPARE	F2520480
05606	0	76700	0	00022	ALS 18	WITH	F2520490
05607	0	34000	0	05204	CAS TETTG	CURRENT TAG.	F2520500
05610	0	02000	0	05743	TRA AC160	NOT A TEST TAG.	F2520510
05611	0	02000	0	05613	TRA AC120	THIS IS A TEST TAG.	F2520520

05612	0	02000	0	05743	TRA AC160	NOT A TEST TAG.	F2520530
05613	0	50000	2	01101	AC120 CLA DOTAGZ+3,2	THIS IS TEST TAG,	F2520540
05614	-0	32000	0	05104	ANA 6ONES	18 N2 CONSTANT.	F2520550
05615	-0	10000	0	05622	TNZ AC128		F2520560
05616	0	50000	2	01106	CLA DOTAGZ+8,2	IF RIGHT TEST HAS VARIABLE DECREMENT	F2520570
05617	-0	32000	0	05154	ANA BIT20	GO TO AC138 +4	F2520580
05620	0	10000	0	05627	TZE AC138	INSTEAD OF	F2520590
05621	0	02000	0	05633	TRA AC138+4		F2520600
05622	0	50000	2	01101	AC128 CLA DOTAGZ+3,2		F2520610
05623	0	60100	0	05200	STO CIL02	PUT N2 WORD AS	F2520620
05624	0	50000	0	05133	CLA L(0)	SYMBOLIC ADDRESS AND	F2520630
05625	0	60100	0	05201	STO CIL03	ZERO AS THE	F2520640
05626	0	02000	0	05660	TRA AC140	RELATIVE ADDRESS.	F2520650
05627	0	56000	2	01104	AC138 LDQ DOTAGZ+6,2	CONSTANT N2 CASE.	F2520660
05630	-0	77300	0	00011	RQL 9	IS TEST	F2520670
05631	-0	76300	0	00014	LGL 12	MODIFIED.	F2520680
05632	0	10000	0	05743	TZE AC160	NO, TAKE NEXT SUB.	F2520690
05633	0	50000	2	01101	CLA DOTAGZ+3,2	YES, ISOLATE N2.	F2520700
05634	-0	53400	1	05207	LXD AX,1		F2520710
05635	0	07400	4	04451	TSX CXIJ+2,4	IF POSITION IS	F2520720
05636	-2	00001	1	05647	TNX AC139,1,1		F2520730
05637	0	60100	0	05070	STO ESTORE		F2520740
05640	0	50000	2	01106	CLA DOTAGZ+8,2	DOES TEST	F2520750
05641	-0	32000	0	05154	ANA BIT20	HAVE VARIABLE DECREMENT.	F2520760
05642	-0	10000	0	05646	TNZ AC139-1		F2520770
05643	0	50000	0	05070	CLA ESTORE		F2520780
05644	0	07400	4	04410	TSX TELC+2,4		F2520790
05645	0	02000	0	05647	TRA AC139		F2520800
05646	0	50000	0	05070	CLA ESTORE		F2520810
05647	0	76700	0	00022	AC139 ALS 18		F2520820
05650	0	07400	4	04601	TSX FIXCON,4	ASSIGN SYMBOL FOR	F2520830
05651	0	73400	1	00000	PAX 0,1	LOAD PORTION	F2520840
05652	-0	32000	0	05104	ANA 6ONES	AND COMPILE	F2520850
05653	0	60100	0	05200	STO CIL02	CLAL(GN2 + LOAD PORT.)	F2520860
05654	0	50000	0	05133	CLA L(0)		F2520870
05655	0	60100	0	05201	STO CIL03		F2520880
05656	-0	63400	1	05201	SXD CIL03,1		F2520890
05657	0	02000	0	05665	TRA AC144		F2520900
05660	0	50000	0	05126	AC140 CLA L(1)		F2520910
05661	-0	53400	1	05207	LXD AX,1	COMPUTE G AND DETERMINE	F2520920
05662	0	07400	4	04451	TSX CXIJ+2,4	IF GREATER THAN ONE,	F2520930
05663	0	40200	0	05126	SUB L(1)		F2520940
05664	-0	10000	0	05673	TNZ AC146		F2520950
05665	0	50000	0	05053	AC144 CLA L(CLA)	G = 1,	F2520960
05666	0	60100	0	05177	STO CIL01	COMPILE	F2520970
05667	0	50000	0	05133	CLA L(0)	CLA N2, FOLLOWED	F2520980
05670	0	60100	0	05176	STO CIL00	LATER BY STD.	F2520990
05671	0	07400	4	04345	TSX CIT,4		F2521000
05672	0	02000	0	05704	TRA AC150		F2521010
05673	0	40000	0	05126	AC146 ADD L(1)	G GREATER THAN 1,	F2521020
05674	0	76700	0	00022	ALS 18	COMPILE	F2521030
05675	0	07400	4	04601	TSX FIXCON,4	LDQ, MPY, ALS.	F2521040
05676	0	60100	0	07577	STO OR000+9		F2521050
05677	0	50000	0	05200	CLA CIL02		F2521060

05700	0	60100	0	07567	STO	OR000+1		F2521070
05701	0	50000	0	07352	CLA	KLX02I		F2521080
05702	0	53400	1	05131	LXA	L(3),1		F2521090
05703	0	07400	4	07271	TSX	LXC,4		F2521100
05704	-0	53400	1	05207	LXD	AX,1	AC150	F2521110
05705	0	50000	1	03652	CLA	TAG3,1		F2521120
05706	-0	73400	2	00000	PDX	0,2		F2521130
05707	0	50000	2	01106	CLA	DOTAGZ+8,2		F2521140
05710	-0	32000	0	05154	ANA	BIT20		F2521150
05711	-0	53400	2	05207	LXD	AX,2		F2521160
05712	0	10000	0	05733	TZE	AC157		F2521170
05713	-2	00001	2	05733	TNX	AC157,2,1		F2521180
05714	0	53400	1	05126	LXA	L(1),1		F2521190
05715	0	50000	0	07351	CLA	KLX01I		F2521200
05716	0	07400	4	07271	TSX	LXC,4		F2521210
05717	0	50000	0	05166	CLA	INST13		F2521220
05720	0	60100	0	05554	STO	AC096		F2521230
05721	0	07400	4	07172	TSX	COSE,4		F2521240
05722	-0	53400	2	05207	LXD	AX,2		F2521250
05723	-3	00002	2	05540	TXL	AC080,2,2		F2521260
05724	0	02000	0	05523	TRA	AC064		F2521270
05725	0	50000	0	05167	CLA	INST14	AC155	F2521280
05726	0	60100	0	05554	STO	AC096		F2521290
05727	-0	53400	2	05207	LXD	AX,2		F2521300
05730	-0	53400	4	05173	LXD	BB0X,4		F2521310
05731	1	00004	4	05732	TXI	AC155+5,4,4		F2521320
05732	-0	63400	4	05173	SXD	BB0X,4		F2521330
05733	0	07400	4	07211	TSX	TESTL0,4	AC157	F2521340
05734	0	50000	0	05255	CLA	TETLOC		F2521350
05735	0	60100	0	05200	STO	CIL02	IN TETL0.	F2521360
05736	0	50000	0	05052	CLA	L(STD)	COMPILE	F2521370
05737	0	60100	0	05177	STO	CIL01	STD TETL0	F2521380
05740	-0	63400	0	05176	SXD	CIL00	AND RETURN TO	F2521390
05741	-0	63400	0	05201	SXD	CIL03	AC160 TO	F2521400
05742	0	07400	4	04345	TSX	CIT,4	CONSIDER NEXT	F2521410
05743	-0	53400	1	05207	LXD	AX,1	SUB OF TAG.	F2521420
05744	2	00001	1	05570	TIX	AC109,1,1	REDUCE POS. CTR.	F2521430
05745	0	50000	0	03653	CLA	TAG4	CHECK SUSBIT	F2521440
05746	0	12000	0	05770	TPL	AC165	FOR FORVAR.	F2521450
05747	-0	53400	2	05230	LXD	DOIND,2	FORVAR, IS IT	F2521460
05750	0	50000	2	01103	CLA	DOTAGZ+5,2	WITHIN THE CURRENT DO.	F2521470
05751	-0	32000	0	05136	ANA	BIT1		F2521480
05752	0	10000	0	05770	TZE	AC165	NO, AC165.	F2521490
05753	0	50000	0	05133	CLA	L(0)	YES,	F2521500
05754	0	60100	0	05200	STO	CIL02	COMPILE	F2521510
05755	0	07400	4	07131	TSX	CIL03I,4	INSTRUCTIONS	F2521520
05756	0	50000	0	05043	CLA	L(PXD)	TO	F2521530
05757	0	60100	0	05177	STO	CIL01	STORE	F2521540
05760	0	07400	4	04345	TSX	CIT,4	THE	F2521550
05761	0	50000	2	01077	CLA	DOTAGZ+1,2	VALUE	F2521560
05762	0	60100	0	05200	STO	CIL02	OF	F2521570
05763	0	50000	0	05044	CLA	L(STO)	THE	F2521580
05764	0	60100	0	05177	STO	CIL01	SUBSCRIPT	F2521590
05765	-0	75400	0	00000	PXD	0,0	INTO	F2521600

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05766	0	60100	0	05201	STO	CIL03	ITS	F2521610
05767	0	07400	4	04345	TSX	CIT,4	SYMBOL.	F2521620
05770	0	50000	0	05237	AC165	CLA	XTG	F2521630
05771	0	77100	0	00002	ARS	2	TGA FOR LOCATIONS	F2521640
05772	-0	73400	1	00000	PDX	0,1	INDICATING VARIABLE	F2521650
05773	-0	50000	1	02646	CAL	MXTGA,1	DECREMENTS OF TXI	F2521660
05774	0	60200	0	05211	SLW	WRKTGA	AND TIX INSTRUCTIONS-	F2521670
05775	0	10000	0	06237	TZE	AC240	NONE, AC240.	F2521680
05776	0	53400	1	05131	LXA	L(3),1	YES, ISOLATE	F2521690
05777	-0	63400	1	05207	AC166	SXD	AX,1	F2521700
06000	-0	50000	0	05211	CAL	WRKTGA	CHECK FOR	F2521710
06001	0	77100	0	00022	ARS	18	LOCATIONS	F2521720
06002	-2	00001	1	06005	AC168	TNX	AC170,1,1	F2521730
06003	0	77100	0	00006	ARS	6	INSTRUCTIONS	F2521740
06004	0	02000	0	06002	TRA	AC168	WITH VARIABLE	F2521750
06005	-0	32000	0	05170	AC170	ANA	6ONESR	F2521760
06006	0	10000	0	06060	TZE	AC190	DECREMENTS.	F2521770
06007	0	76700	0	00003	ALS	3	NONE, AC190.	F2521780
06010	0	60100	0	05255	STO	TETLOC	STORE	F2521790
06011	0	53400	4	05133	LXA	L(0),4	LOC. OF TXI.	F2521800
06012	-0	53400	1	05207	LXD	AX,1	IS	F2521810
06013	0	50000	0	03653	CLA	TAG4	POSITION	F2521820
06014	-3	00002	1	06035	TXL	AC173,1,2		F2521830
06015	-0	32000	0	05140	ANA	BIT8	POSITION IS S1, IS	F2521840
06016	-0	10000	0	06021	AC171	TNZ	AC172	F2521850
06017	0	50000	0	03653	CLA	TAG4	THIS BLOCK D SPECIAL.	F2521860
06020	0	02000	0	06042	TRA	AC176	NO, BLOCK A.	F2521870
06021	0	56000	0	03640	AC172	LDQ	WRKSC+2	F2521880
06022	0	20000	0	03644	MPY	WRKSC+6	TES, SET UP	F2521890
06023	0	76700	0	00021	ALS	17	CID1 AS G	F2521900
06024	0	60100	0	07612	STO	OR000+20	FOR XX POSITION.	F2521910
06025	0	50000	0	03636	CLA	WRKSC	C1 IS G FOR	F2521920
06026	0	60100	0	07611	STO	OR000+19	N3X POSITION.	F2521930
06027	0	53400	1	05131	LXA	L(3),1	PREPARE TO	F2521940
06030	-0	63400	1	05212	SXD	N3X,1	CALL PC ROUTINE	F2521950
06031	0	53400	1	05127	LXA	L(2),1	TO COMPILE	F2521960
06032	-0	63400	1	05213	SXD	XX,1	INITIALIZATION	F2521970
06033	0	07400	4	06701	TSX	PC,4	INSTRUCTIONS	F2521980
06034	0	02000	0	06060	TRA	AC190	FOR BLOCK D SPECIAL.	F2521990
06035	-3	00001	1	06037	AC173	TXL	AC174,1,1	F2522000
06036	0	77100	0	00003	ARS	3	IS POSITION S3)	F2522010
06037	0	77100	0	00035	AC174	ARS	29	F2522020
06040	-0	32000	0	05076	ANA	L(7)	ISOLATE BLKNUM	F2522030
06041	0	73400	4	00000	PAX	0,4	FROM TAG4 AND	F2522040
06042	3	00000	4	06045	AC176	TXH	AC176+3,4,0	F2522050
06043	0	07400	4	06324	TSX	AOR0,4	CALLPROPER ROUTINE	F2522060
06044	0	02000	0	06060	TRA	AC190	TO COMPILE INITIALIZATION	F2522070
06045	3	00001	4	06050	TXH	AC178,4,1	INSTRUCTIONS FOR THAT BLOCK.	F2522080
06046	0	07400	4	06435	TSX	BOR0,4	BLOCK A	F2522090
06047	0	02000	0	06060	TRA	AC190	BLOCK B	F2522100
06050	3	00002	4	06053	AC178	TXH	AC182,4,2	F2522110
06051	0	07400	4	06453	TSX	COR0,4	BLOCK C	F2522120
06052	0	02000	0	06060	TRA	AC190		F2522130
06053	3	00003	4	06056	AC182	TXH	AC186,4,3	F2522140

06054	0	07400	4	06502	TSX DORO,4	BLOCK D.	F2522150
06055	0	02000	0	06060	TRA AC190		F2522160
06056	0	07400	4	06541	AC186 TSX EOR0,4	BLOCK E.	F2522170
06057	0	02000	0	06060	TRA AC190		F2522180
06060	-0	53400	1	05207	AC190 LXD AX,1	IF ALL SUBS HAVE NOT BEEN	F2522190
06061	2	00001	1	05777	TIX AC166,1,1	CONSIDERED FOR TXIS, TAKE NEXT RT.	F2522200
06062	0	53400	1	05131	LXA L(3),1	THIS REPRESENTS END OF	F2522210
06063	-0	63400	1	05207	AC200 SXD AX,1	TXI PHASE, START TIX.	F2522220
06064	0	50000	0	05211	CLA WRKTGA	ISOLATE APP. TGTG ENTRY.	F2522230
06065	-2	00001	1	06070	AC210 TNX AC214+1,1,1		F2522240
06066	0	77100	0	00006	ARS 6		F2522250
06067	0	02000	0	06065	AC214 TRA AC210		F2522260
06070	-0	32000	0	05170	ANA 6ONESR		F2522270
06071	0	10000	0	06235	TZE AC236	IS THERE A TIX VAR. DEC. LOC.	F2522280
06072	0	76700	0	00003	ALS 3	YES, STORE TIX REL, LOC.	F2522290
06073	0	60100	0	05255	STO TETLOC	IN TETLOC WORD.	F2522300
06074	-0	53400	1	05207	LXD AX,1		F2522310
06075	0	50000	1	03652	CLA TAG2+3,1	ISOLATE	F2522320
06076	-0	73400	2	00000	PDX 0,2	N3 FOR	F2522330
06077	0	50000	2	01102	ACI21 CLA DOTAGZ+4,2	THIS DO.	F2522340
06100	0	40200	0	05126	SUB L(1)	DOES N3 = 1.	F2522350
06101	0	10000	0	06107	TZE AC220+2		F2522360
06102	0	07400	4	07237	TSX XOR0,4	NO, PLACE N SYMBOLS	F2522370
06103	0	53400	1	05106	LXA L(6),1	IN APPROP. OR0 LOCS	F2522380
06104	-0	53400	2	05207	LXD AX,2	AND COMPUTE	F2522390
06105	0	50000	2	07367	AC220 CLA KTX00+3,2	X QUANTITY	F2522400
06106	0	07400	4	07271	TSX LXC,4	ON O.C. LEVEL.	F2522410
06107	-0	53400	1	05207	LXD AX,1		F2522420
06110	0	50000	0	05160	CLA INST4	TRA AC224. MODIFY ADR0	F2522430
06111	0	60100	0	06424	STO AOR030	ROUTINE T0 COMPUTE G.	F2522440
06112	0	50000	0	05161	CLA INST5	TRAAC228.	F2522450
06113	0	60100	0	06430	STO AOR040		F2522460
06114	0	07400	4	06324	TSX AOR0,4	COMPUTE G, PUT IN OR0+19.	F2522470
06115	0	02000	0	06172	AC224 TRA AC230	G1 = 1.	F2522480
06116	-0	53400	1	05207	AC228 LXD AX,1	G1 NOT = 1,	F2522490
06117	0	50000	1	03652	CLA TAG2+3,1	COMPILE INSTRUCTIONS	F2522500
06120	-0	73400	2	00000	PDX 0,2	TO COMPUTE AND INITIALIZE	F2522510
06121	0	50000	2	01102	CLA DOTAGZ+4,2	TIX DECREMENT.	F2522520
06122	0	40200	0	05126	SUB L(1)		F2522530
06123	-0	10000	0	06166	TNZ AC228I	N3 NOT = 1.	F2522540
06124	0	50000	2	01100	CLA DOTAGZ+2,2	N3 = 1, DOES	F2522550
06125	0	40200	0	05126	SUB L(1)	N1 = 1.	F2522560
06126	-0	10000	0	06135	TNZ ACI22	N1 NOT = 1.	F2522570
06127	0	50000	2	01101	CLA DOTAGZ+3,2	N3, N1=1.	F2522580
06130	0	60100	0	07566	STO OR000	G GREATER THAN 1,	F2522590
06131	0	50000	0	07360	CLA K1AOR0		F2522600
06132	0	53400	1	05130	LXA L(4),1		F2522610
06133	0	07400	4	07271	TSX LXC,4		F2522620
06134	0	02000	0	06231	TRA AC234	EXIT TIX INITIALIZATION.	F2522630
06135	0	07400	4	04741	ACI22 TSX OP3,4	N3= 1, N1 NOT = 1,	F2522640
06136	0	50000	0	05054	CLA L(ADD)	COMPILE	F2522650
06137	0	60100	0	05177	STO CIL01	TIX	F2522660
06140	0	50000	0	07603	CLA OR000+13	INITIALIZATION	F2522670
06141	0	73400	1	00000	PAX 0,1	GROUP	F2522680

06142	-0	32000	0	05104	ANA 6ONES	FOR	F2522690
06143	0	60100	0	05200	STO CIL02	THIS	F2522700
06144	-0	63400	1	05201	SXD CIL03,1	CASE.	F2522710
06145	0	07400	4	04345	TSX CIT,4		F2522720
06146	0	50000	0	05044	CLA L(STO)		F2522730
06147	0	60100	0	05177	STO CIL01		F2522740
06150	0	50000	0	05133	CLA L(0)		F2522750
06151	0	60100	0	05201	STO CIL03		F2522760
06152	0	50000	0	07620	CLA OR000+26	ERASEABLE STORAGE	F2522770
06153	0	73400	4	00000	PAX 0,4	SYMBOL FOR ADDRESS.	F2522780
06154	-0	32000	0	05104	ANA 6ONES		F2522790
06155	0	60100	0	05200	STO CIL02		F2522800
06156	-0	63400	4	05201	SXD CIL03,4		F2522810
06157	0	07400	4	04345	TSX CIT,4		F2522820
06160	0	50000	0	07620	CLA OR000+26	PLACE ERASEABLE SYMBOL	F2522830
06161	0	60100	0	07566	STO OR000	IN OR000 FOR LXC BLOCK.	F2522840
06162	0	53400	1	05130	LXA L(4),1		F2522850
06163	0	50000	0	07360	CLA K1AOR0		F2522860
06164	0	07400	4	07271	TSX LXC,4		F2522870
06165	0	02000	0	06231	TRA AC234	EXIT TIX INITIALIZATION,	F2522880
06166	0	53400	1	05130	AC228I LXA L(4),1		F2522890
06167	0	50000	0	07371	CLA LTX040	COMPILE TIX INITIALIZATION	F2522900
06170	0	07400	4	07271	TSX LXC,4	GROUP FOR THIS CASE.	F2522910
06171	0	02000	0	06231	TRA AC234	EXIT TIX INITIALIZATION.	F2522920
06172	-0	53400	1	05207	AC230 LXD AX,1	G=1,	F2522930
06173	0	50000	1	03652	CLA TAG2+3,1	DOES	F2522940
06174	-0	73400	2	00000	PDX 0,2	N3 = 1.	F2522950
06175	0	50000	2	01102	CLA DOTAGZ+4,2		F2522960
06176	0	40200	0	05126	SUB L(1)		F2522970
06177	-0	10000	0	06226	TNZ AC230I	NO.	F2522980
06200	0	50000	2	01100	CLA DOTAGZ+2,2	YES, DOES N1= 1.	F2522990
06201	0	40200	0	05126	SUB L(1)		F252300D
06202	-0	10000	0	06211	TNZ ACI23	NO.	F2523010
06203	0	50000	2	01101	CLA DOTAGZ+3,2	G,N3,N1 = 1,	F2523020
06204	0	60100	0	07566	STO OR000	COMPILE TIX	F2523030
06205	0	50000	0	07362	CLA K2AOR0	INITIALIZATION	F2523040
06206	0	53400	1	05127	LXA L(2),1	FOR THIS	F2523050
06207	0	07400	4	07271	TSX LXC,4	CASE.	F2523060
06210	0	02000	0	06231	TRA AC234	EXIT TIX INITIALIZATION.	F2523070
06211	0	07400	4	04741	ACI23 TSX OP3,4	N3=1, N1 NOT = 1.	F2523080
06212	0	50000	0	05054	CLA L(ADD)	COMPILE	F2523090
06213	0	60100	0	05177	STO CIL01	TIX	F2523100
06214	0	50000	0	07603	CLA OR000+13	INITIALIZATION	F2523110
06215	0	73400	1	00000	PAX 0,1	FOR	F2523120
06216	-0	32000	0	05104	ANA 6ONES	THIS	F2523130
06217	0	60100	0	05200	STO CIL02	CASE.	F2523140
06220	-0	63400	1	05201	SXD CIL03,1		F2523150
06221	0	07400	4	04345	TSX CIT,4		F2523160
06222	0	50000	0	07363	CLA K3AOR0		F2523170
06223	0	53400	1	05126	LXA L(1),1		F2523180
06224	0	07400	4	07271	TSX LXC,4		F2523190
06225	0	02000	0	06231	TRA AC234	EXIT TIX INITIALIZATION.	F2523200
06226	0	53400	1	05127	AC230I LXA L(2),1	G =1, N3 NOT = 1.	F2523210
06227	0	50000	0	07372	CLA LTX042		F2523220

	06230	0	07400	4	07271		TSX LXC,4		THIS CASE.		F2523230
	06231	0	50000	0	05157	AC234	CLA INST3		RESET MODIFIED AOR0.		F2523240
	06232	0	60100	0	06424		STO AOR030		LXC L(4),1.		F2523250
	06233	0	50000	0	05156		CLA INST2				F2523260
	06234	0	60100	0	06430		STO AOR040		LXD L(2),1.		F2523270
	06235	-0	53400	1	05207	AC236	LXD AX,1				F2523280
	06236	2	00001	1	06063		TIX AC200,1,1				F2523290
	06237	0	02000	0	05315	AC240	TRA AC010				F2523300
	06240	0	53400	2	05125		LXA LADMX,2		START ADTG COMPILING.		F2523310
	06241	1	00004	2	06242		TXI AC240+3,2,4				F2523320
	06242	-0	63400	2	05237		SXD XTG,2				F2523330
	06243	0	50000	0	05162		CLA INST8		L(TRA AC244).		F2523340
	06244	0	62100	0	06237		STA AC240		MODIFY RETURN FOR ADTG ENTRY.		F2523350
	06245	0	62100	0	05323		STA AC016				F2523360
	06246	0	50000	0	05163		CLA INST10				F2523370
	06247	0	62100	0	05773		STA AC165+3				F2523380
	06250	0	07400	4	04516	AC244	TSX ADTGSE,4		FIND VALID ADTG ENTRY.		F2523390
	06251	0	02000	0	06253		TRA AC250		END OF TABLE , GET NEXT DO.		F2523400
D	06252	-3	00000	0	05320	AC248	TXL AC014,0		VALID ENTRY, CONTINUE AC CYCLE.		F2523410
	06253	0	50000	0	05164	AC250	CLA INST11		REINITIALIZE		F2523420
	06254	0	62100	0	06237		STA AC240		INSTRUCTIONS		F2523430
	06255	0	62100	0	05323		STA AC016		MODIFIED		F2523440
	06256	0	50000	0	05165		CLA INST12		FOR DMTAG		F2523450
	06257	0	62100	0	05773		STA AC165+3		CYCLE,		F2523460
	06260	0	50000	0	05222		CLA LOCIND		COMPILE AT LEAST		F2523470
	06261	0	10000	0	06272		TZE AC260		A BSS INST SO		F2523480
	06262	0	50000	0	05224		CLA A		THAT TRA INST		F2523490
	06263	0	60100	0	05176		STO CIL00		WILL FUNCTION		F2523500
	06264	0	50000	0	05133		CLA L(0)		PROPERLY.		F2523510
	06265	0	60100	0	05200		STO CIL02				F2523520
	06266	0	60100	0	05201		STO CIL03				F2523530
	06267	0	50000	0	05056		CLA L(BSS)				F2523540
	06270	0	60100	0	05177		STO CIL01				F2523550
	06271	0	07400	4	04345		TSX CIT,4				F2523560
	06272	-0	53400	4	06252	AC260	LXD AC248,4		END OF		F2523570
	06273	0	02000	4	00001		TRA 1,4		ALPHA CYCLE.		F2523580
							*****				F2523590
							CDOR0 TAKES COEF. AND DIM. AND FILLS OUT OR0.				F2523600
	06274	-0	63400	4	06277	CDOR0	SXD CDOR01,4				F2523610
	06275	-0	53400	2	05207		LXD AX,2				F2523620
	06276	-0	76000	0	00144		MSE 100				F2523630
D	06277	3	00000	0	06300	CDOR01	TXH CDOR01+1,0		WHICH SUB IS IT.		F2523640
	06300	-3	00002	2	06307		TXL CDOR03,2,2		S2 OR S3, TRA.		F2523650
	06301	0	50000	0	03636		CLA WRKSC		S1,		F2523660
	06302	0	40200	0	05061		SUB L1DEC		IS C1 GREATER THAN1.		F2523670
	06303	0	10000	4	00001		TZE 1,4		C1=1, RETURN.		F2523680
	06304	0	76000	0	00144		PSE 100		C1 NOT = 1, TURN ON		F2523690
	06305	0	50000	0	03636		CLA WRKSC		SENSE LIGHT , ISOLATE C1.		F2523700
	06306	0	02000	0	06317		TRA CDOR07+1				F2523710
	06307	0	56000	0	03644	CDOR03	LDQ WRKSC+6		ISOLATE D1.		F2523720
	06310	-3	00001	2	06313		TXL CDOR05,2,1		WHICH SUBLISKIT.		F2523730
	06311	0	20000	0	03640		MPY WRKSC+2		S2, FORM C2D1.		F2523740
	06312	0	02000	0	06316		TRA CDOR07				F2523750
	06313	0	20000	0	03642	CDOR05	MPY WRKSC+4		S3, FORM		F2523760

06314	0	76500	0	00022		LRS 18	C3D1D2.	F2523770
06315	0	20000	0	03645		MPY WRKSC+7		F2523780
06316	0	76700	0	00021	CDOR07	ALS 17	ASSIGN SYMBOL	F2523790
06317	0	07400	4	04601		TSX FIXCON,4	FOR G AND PUT	F2523800
06320	0	60100	0	07611		STO OR000+19	IN OR0 + 19.	F2523810
06321	-0	53400	4	06277		LXD CDOR01,4	RESTORE LINKAGE,	F2523820
06322	-0	53400	2	05207		LXD AX,2	PUT AX POSITION IN	F2523830
06323	0	02000	4	00001		TRA 1,4	I.R. B AND RETURN.	F2523840
						*****	*****	F2523850
						AOR0, BOR0, COR0, DOR0, AND EOR0 ARE CALLED TO MAKE APPROPRIATE		F2523860
						COMPILING TABLE (OR0) ENTRIES AND TO CALL ROUTINES TO MAKE		F2523870
						COMPUTATIONS AND COMPILE INSTRUCTIONS TO INITIALIZE VARIABLE		DF2523880
						DECREMENTS FOR BLOCKS A, B, C, D, AND E RESPECTIVELY.		F2523890
06324	-0	63400	4	06346	AOR0	SXD AOR05,4		F2523900
06325	0	50000	1	03652		CLA TAG2+3,1	LOCATION IS	F2523910
06326	-0	73400	2	00000		PDX 0,2	SPECIFIED IN OR0 +14	F2523920
06327	0	50000	2	01076		CLA DOTAGZ,2	BY COMBINING TETLOC	F2523930
06330	-0	32000	0	05141		ANA ADMSK	WITH PROPER BETA.	F2523940
06331	0	76700	0	00022		ALS 18		F2523950
06332	-0	50100	0	05255		ORA TETLOC		F2523960
06333	0	60100	0	07604		STO OR000+14		F2523970
06334	0	50000	2	01102		CLA DOTAGZ+4,2		F2523980
06335	0	60100	0	07566		STO OR000		F2523990
06336	-0	53400	1	05207		LXD AX,1		F2524000
06337	-3	00002	1	06347		TXL AOR010,1,2	S2 OR S3.	F2524010
06340	0	50000	0	03636		CLA WRKSC	S1 , IS	F2524020
06341	0	40200	0	05061		SUB L1DEC	C1=1.	F2524030
06342	0	10000	0	06424		TZE AOR030	YES	F2524040
06343	0	40000	0	05061		ADD L1DEC	NO, ASSIGN	F2524050
06344	0	07400	4	04601		TSX FIXCON,4	SYMBOL FOR C1.	F2524060
06345	0	60100	0	07611		STO OR000+19		F2524070
D 06346	-3	00000	0	06430	AOR05	TXL AOR040,0		F2524080
06347	-3	00001	1	06367	AOR010	TXL AOR020,1,1	IS SUB S2.	F2524090
06350	0	56000	0	03640		LDQ WRKSC+2	YES, FOR C2D1.	F2524100
06351	0	20000	0	03644		MPY WRKSC+6	IF S2 IS A	F2524110
06352	0	76700	0	00021		ALS 17	DUPE, ADD C1.	F2524120
06353	0	60100	0	05245		STO ERAOR0		F2524130
06354	0	56000	0	03653		LDQ TAG4		F2524140
06355	0	76300	0	00031		LLS 25		F2524150
06356	0	76000	0	00001		LBT		F1124160
06357	0	02000	0	06363		TRA AOR014	NO DUPES.	F2524170
06360	0	50000	0	03636		CLA WRKSC		F2524180
06361	0	40000	0	05245		ADD ERAOR0		F2524190
06362	0	60100	0	05245		STO ERAOR0		F2524200
06363	0	50000	0	05245	AOR014	CLA ERAOR0	CONTAINS C2D1, ETC.	F2524210
06364	0	07400	4	04601		TSX FIXCON,4	ASSIGN SYMBOL FOR	F2524220
06365	0	60100	0	07611		STO OR000+19	G AND PUT IN OR0+19	F2524230
06366	0	02000	0	06430		TRA AOR040		F2524240
06367	0	56000	0	03642	AOR020	LDQ WRKSC+4	S3, FORM	F2524250
06370	0	20000	0	03644		MPY WRKSC+6	C3D1D2.	F2524260
06371	0	76500	0	00022		LRS 18		F2524270
06372	0	20000	0	03645		MPY WRKSC+7		F2524280
06373	0	76700	0	00021		ALS 17		F2524290
06374	0	60100	0	05245		STO ERAOR0		F2524300

06375	0	56000	0	03653	LDQ TAG4	CHECK DUPES	F2524310
06376	0	76300	0	00032	LLS 26	AND MAKE G	F2524320
06377	0	76000	0	00001	LBT	ADJUSTMENTS	F2524330
06400	0	02000	0	06420	TRA AOR024	ACCORDINGLY.	F2524340
06401	0	77100	0	00001	ARS 1		F2524350
06402	0	76000	0	00001	LBT		F2524360
06403	0	02000	0	06411	TRA AOR022		F2524370
06404	0	56000	0	03640	LDQ WRKSC+2		F2524380
06405	0	20000	0	03644	MPY WRKSC+6		F2524390
06406	0	76700	0	00021	ALS 17		F2524400
06407	0	40000	0	05245	ADD ERAOR0		F2524410
06410	0	60100	0	05245	STO ERAOR0		F2524420
06411	0	50000	0	03653	AOR022 CLA TAG4		F2524430
06412	0	77100	0	00013	ARS 11		F2524440
06413	0	76000	0	00001	LBT		F2524450
06414	0	02000	0	06420	TRA AOR024		F2524460
06415	0	50000	0	03636	CLA WRKSC		F2524470
06416	0	40000	0	05245	ADD ERAOR0		F2524480
06417	0	60100	0	05245	STO ERAOR0		F2524490
06420	0	50000	0	05245	AOR024 CLA ERAOR0		F2524500
06421	0	07400	4	04601	TSX FIXCON,4	ASSIGN SYMBOL FOR	F2524510
06422	0	60100	0	07611	STO OR000+19	G FOR S3.	F2524520
06423	0	02000	0	06430	TRA AOR040		F2524530
06424	0	53400	1	05127	AOR030 LXA L(2),1	SUB IS S1, C1=1,	F2524540
06425	0	50000	0	07362	CLA K2AOR0	COMPILE CLA, STD.	F2524550
06426	0	07400	4	07271	TSX LXC,4		F2524560
06427	0	02000	0	06433	TRA AOR050		F2524570
06430	0	53400	1	05130	AOR040 LXA L(4),1	COMPILE LDQ,MPY, STD.	F2524580
06431	0	50000	0	07360	CLA K1AOR0		F2524590
06432	0	07400	4	07271	TSX LXC,4		F2524600
06433	-0	53400	4	06346	AOR050 LXD AOR05,4	RESTORE LINKAGE.	F2524610
06434	0	02000	4	00001	TRA 1,4		F2524620
					*****		F2324630
06435	-0	63400	4	05236	BOR0 SXD LINKC,4	FOR B BLOCK	F2524640
06436	0	56000	0	03640	LDQ WRKSC+2	COMPUTE G AS	F2524650
06437	0	20000	0	03644	MPY WRKSC+6	C2D1. PLACE	F2524660
06440	0	76700	0	00021	ALS 17	THIS AND C1	F2524670
06441	0	60100	0	07611	STO OR000+19	IN OR0.	F2524680
06442	0	50000	0	03636	CLA WRKSC		F2524690
06443	0	60100	0	07612	STO OR000+20		F2524700
06444	0	53400	1	05127	LXA L(2),1	INITIALIZE N3X	F2524710
06445	-0	63400	1	05212	SXD N3X,1	POS. TO S2.	F2524720
06446	0	53400	1	05131	LXA L(3),1	INITIALIZE XX	F2524730
06447	-0	63400	1	05213	SXD XX,1	POS. TO S1.	F2524740
06450	0	07400	4	06701	TSX PC,4		F2524750
06451	-0	53400	4	05236	LXD LINKC,4		F2524760
06452	0	02000	4	00001	TRA 1,4		F2524770
					*****		F2524780
06453	-0	63400	4	06465	COR0 SXD COR005,4		F2524790
06454	0	56000	0	03644	LDQ WRKSC+6	FORM C3D1D2 AND	F2524800
06455	0	20000	0	03645	MPY WRKSC+7	STORE-IN	F2524810
06456	0	76500	0	00022	LRS 18	OR0+19	F2524820
06457	0	20000	0	03642	MPY WRKSC+4	FOR USE BY	F2524830
06460	0	76700	0	00021	ALS 17	PC IN COMPUTING	F2524840

	06461	0	60100	0	07611		STO	OR000+19	BLOCK C DECREMENTS.	F2524850
	06462	0	50000	0	03653		CLA	TAG4	TEST	F2524860
	06463	0	77100	0	00011		ARS	9	FOR	F2524870
	06464	0	76000	0	00001		LBT		DUPEs.	F2524880
D	06465	-3	00000	0	06473	COR005	TXL	COR010,0	NO DUPEs.	F2524890
	06466	0	56000	0	03644		LDQ	WRKSC+6	IF DUPEs, FORM	F2524900
	06467	0	20000	0	03640		MPY	WRKSC+2	C2D1, ADD TO	F2524910
	06470	0	76700	0	00021		ALS	17	OR0+19, AND STORE	F2524920
	06471	0	40000	0	07611		ADD	OR000+19	IN OR0+19 FOR	F2524930
	06472	0	60100	0	07611		STO	OR000+19	USE BY PC.	F2524940
	06473	0	53400	1	05126	COR010	LXA	L(1),1	SET N3X POSITION	F2524950
	06474	-0	63400	1	05212		SXD	N3X,1	TO S3,	F2524960
	06475	0	53400	1	05131		LXA	L(3),1	XX POSITION TO S1	F2524970
	06476	-0	63400	1	05213		SXD	XX,1	AND CALL PC TO COMPUTE	F2524980
	06477	0	07400	4	06701		TSX	PC,4	AND COMPILE BLKC INIT.	F2524990
	06500	-0	53400	4	06465		LXD	COR005,4	RESTORE LINKAGE AND	F2525000
	06501	0	02000	4	00001		TRA	1,4	RETURN TO MAIN ROUTINE.	F2525010
									*****	F2525020
	06502	-0	63400	4	06522	DORO	SXD	DOR05,4	BLOCK D NORMAL.	F2525030
	06503	0	56000	0	03642		LDQ	WRKSC+4	COMPUTES C3D1D2, G1	F2525040
	06504	0	20000	0	03644		MPY	WRKSC+6	AND C2D1, G2 IF DUP.	F2525050
	06505	0	76500	0	00022		LRS	18	EXIST IN THE CASE	F2525060
	06506	0	20000	0	03645		MPY	WRKSC+7	110 C1 ADDED TO G2.	F2525070
	06507	0	76700	0	00021		ALS	17	IN THE CASE 101	F2525080
	06510	0	60100	0	07611		STO	OR000+19	C1 ADDED TO G1.	F2525090
	06511	0	56000	0	03640		LDQ	WRKSC+2		F2525100
	06512	0	20000	0	03644		MPY	WRKSC+6		F2525110
	06513	0	76700	0	00021		ALS	17		F2525120
	06514	0	60100	0	07612		STO	OR000+20		F2525130
	06515	0	50000	0	03653		CLA	TAG4		F2525140
	06516	0	77100	0	00011		ARS	9		F2525150
	06517	-0	32000	0	05076		ANA	L(7)		F2525160
	06520	0	10000	0	06532		TZE	DOR020		F2525170
	06521	0	76000	0	00001		LBT			F2525180
D	06522	-3	00000	0	06527	DOR05	TXL	DOR010,0		F2525190
	06523	0	50000	0	03636		CLA	WRKSC		F2525200
	06524	0	40000	0	07611		ADD	OR000+19		F2525210
	06525	0	60100	0	07611		STO	OR000+19		F2525220
	06526	0	02000	0	06532		TRA	DOR020		FC52523D
	06527	0	50000	0	03636	DOR010	CLA	WRKSC		F2525240
	06530	0	40000	0	07612		ADD	OR000+20		F2525250
	06531	0	60100	0	07612		STO	OR000+20		F2525260
	06532	0	53400	1	05126	DOR020	LXA	L(1),1	SET N3X POS. TO S3,	F2525270
	06533	-0	63400	1	05212		SXD	N3X,1		F2525280
	06534	0	53400	1	05127		LXA	L(2),1	XX POS. TO S2.	F2525290
	06535	-0	63400	1	05213		SXD	XX,1		F2525300
	06536	0	07400	4	06701		TSX	PC,4	MAKE COMPUTATIONS AND COMPILE	F2525310
	06537	-0	53400	4	06522		LXD	DOR05,4	INSTRUCTIONS TO INIT. VAR.	F2525320
	06540	0	02000	4	00001		TRA	1,4	BLOCK D DECREMENTS,	F2525330
									*****	F2525340
	06541	-0	63400	4	06645	EOR0	SXD	EOR006,4		F2525350
	06542	0	07400	4	06502		TSX	DORO,4	COMP. INSTR. FOR 1ST TXI-SXD-TIX.	F2525360
	06543	0	50000	0	07605		CLA	OR000+15	UPDATE	F2525370
	06544	0	40000	0	05110		ADD	L(8)	TXI RELATIVE	F2525380

06545	0	60100	0	07604	STO OR000+14	INSTRUCTION NUM8ER.	F2525390
06546	0	40000	0	05135	ADD L(16)	UPDATE TIX RELATIVE	F2525400
06547	0	60100	0	07605	STO OR000+15	INSTRUCTION NUMBER.	F2525410
06550	0	53400	1	05131	LXA L(3),1	SEE IF	F2525420
06551	0	50000	1	03652	CLA TAG2+3,1	X FOR	F2525430
06552	-0	73400	2	00000	PDX 0,2	XX POSITION	F2525440
06553	0	50000	2	01103	CLA DOTAGZ+5,2	IS	F2525450
06554	-0	32000	0	05137	ANA BIT2	COMPUTABLE.	F2525460
06555	0	10000	0	06644	TZE EOR006-1	X COMPUTABLE.	F2525470
06556	0	50000	2	01102	CLA DOTAGZ+4,2	X NOT COMPUTABLE,	F2525480
06557	0	40200	0	05126	SUB L(1)	IS N3=1.	F2525490
06560	-0	10000	0	06644	TNZ EOR006-1	N3 NOT =1.	F2525500
06561	0	50000	2	01100	CLA DOTAGZ+2,2	N3=1, IS	F2525510
06562	0	40200	0	05126	SUB L(1)	N1 = 1.	F2525520
06563	-0	10000	0	06610	TNZ EOR02	N1 NOT = 1.	F2525530
06564	0	50000	0	03636	CLA WRKSC	N3,NU = 1,	F2525540
06565	0	40200	0	05061	SUB L1DEC	DOES C1=1.	F2525550
06566	-0	10000	0	06571	TNZ EOR01	NO.	F2525560
06567	0	50000	2	01101	CLA DOTAGZ+3,2	N3, N1, C1 = 1 .	F2525570
06570	0	02000	0	06674	TRA EOR022	ISOLATE N2 SYMBOL.	F2525580
06571	0	50000	2	01101	EOR01 CLA DOTAGZ+3,2	ISOLATE	F2525590
06572	0	60100	0	07566	STO OR000	N2 SYMBOL.	F2525600
06573	0	50000	0	03636	CLA WRKSC	ASSIGN SYMBOL	F2525610
06574	0	07400	4	04601	TSX FIXCON,4	FOR C1, AND	F2525620
06575	0	60100	0	07611	STO OR000+19	COMPILE LDQ L(N2),	F2525630
06576	0	50000	0	07360	CLA K1AOR0	MPY L(C1), ARS 17.	F2525640
06577	0	53400	1	05131	LXA L(3),1		F2525650
06600	0	07400	4	07271	TSX LXC,4		F2525660
06601	0	53400	1	05126	EOR03 LXA L(1),1	COMPILE	F2525670
06602	0	50000	0	07376	CLA LXCIE1	SUB L(1),	F2525680
06603	0	07400	4	07271	TSX LXC,4		F2525690
06604	1	00001	1	06605	TXI EOR03+4,1,1	COMPILE	F2525700
06605	0	50000	0	07400	CLA LXCEIP	STD L(TIX), STD L(TXI).	F2525710
06606	0	07400	4	07271	TSX LXC,4		F2525720
06607	0	02000	0	06664	TRA EOR018+3		F2525730
06610	0	07400	4	04741	EOR02 TSX OP3,4	COMPILE CLA (N2 - N1)	F2525740
06611	0	50000	0	03636	CLA WRKSC	OR CLA N2, SUB N1.	F2525750
06612	0	40200	0	05061	SUB L1DEC	DOES C1=1.	F2525760
06613	0	10000	0	06601	TZE EOR03	UES, EOR03.	F2525770
06614	0	50000	0	05054	CLA L(ADD)	NO, COMPILE	F2525780
06615	0	60100	0	05177	STO CIL01	ADD L(1),	F2525790
06616	0	50000	0	07603	CLA OR000+13	STO 1)+3,	F2525800
06617	0	73400	4	00000	PAX 0,4		F2525810
06620	-0	32000	0	05104	ANA 6ONES	MPY L(C1.,	F2525820
06621	0	60100	0	05200	STO CIL02	ALS 17,	F2525830
06622	-0	63400	4	05201	SXD CIL03,4	STO 1)+3,	F2525840
06623	0	07400	4	04345	TSX CIT,4	AND GO TO	F2525850
06624	0	50000	0	05044	CLA L(STO)	EOR03.	F2525860
06625	0	60100	0	05177	STO CIL01		F2525870
06626	0	50000	0	07620	CLA OR000+26		F2525880
06627	0	60100	0	07567	STO OR000+1		F2525890
06630	0	73400	4	00000	PAX 0,4		F2525900
06631	-0	32000	0	05104	ANA 6ONES		F2525910
06632	0	60100	0	05200	STO CIL02		F2525920

06633	-0	63400	4	05201	SXD	CIL03,4		F2525930
06634	0	07400	4	04345	TSX	CIT,4	FIXCON SYMBOL	F2525940
06635	0	50000	0	03636	CLA	WRKSC	FOR C1.	F2525950
06636	0	07400	4	04601	TSX	FIXCON,4		F2525960
06637	0	60100	0	07577	STO	OR000+9		F2525970
06640	0	50000	0	07352	CLA	KLX02I		F2525980
06641	0	53400	1	05130	LXA	L(4),1		F2525990
06642	0	07400	4	07271	TSX	LXC,4		F2526000
06643	0	02000	0	06601	TRA	EOR03		F2526010
06644	0	07400	4	07226	TSX	PXOR0,4	C1 GREATER THAN 1.	F2526020
06645	-3	00000	0	06647	EOR006	TXL EOR008,0		F2526030
06646	0	02000	0	06666	TRA	EOR020	X CONSTANT, EOR020.	F2526040
06647	0	53400	1	05106	EOR008	LXA L(6),1	X NOT CONST.,	F2526050
06650	0	50000	0	03636	CLA	WRKSC	COMPILE	F2526060
06651	0	40200	0	05061	SUB	L1DEC	INSTRUCTIONS	F2526070
06652	0	10000	0	06657	TZE	EOR015	TO COMPUTE	F2526080
06653	1	00002	1	06654	TXI	EOR010,1,2	XGN3.	F2526090
06654	0	50000	0	03636	EOR010	CLA WRKSC		F2526100
06655	0	07400	4	04601	TSX	FIXCON,4		F2526110
06656	0	60100	0	07577	STO	OR000+9		F2526120
06657	0	50000	0	07373	EOR015	CLA LXCI		F2526130
06660	0	07400	4	07271	TSX	LXC,4		F2526140
06661	0	53400	1	05130	EOR018	LXA L(4),1	COMPILE LLS, SUB,	F2526150
06662	0	50000	0	07375	CLA	LXCIE	STD,STD.	F2526160
06663	0	07400	4	07271	TSX	LXC,4		F2526170
06664	-0	53400	4	06645	LXD	EOR006,4		F2526180
06665	0	02000	4	00001	TRA	1,4		F2526190
06666	0	76500	0	00043	EOR020	LRS 35		F2526200
06667	0	76100	0	00000	NOP			F2526210
06670	0	20000	0	03636	MPY	WRKSC		F2526220
06671	0	76700	0	00021	ALS	17		F2526230
06672	0	76100	0	00000	NOP			F2526240
06673	0	07400	4	04601	TSX	FIXCON,4		F2526250
06674	0	60100	0	07612	EOR022	STO OR000+20	PUT SYMBOL IN	F2526260
06675	0	53400	1	05126	LXA	L(1),1	OR0+20 AND COMPILE	F2526270
06676	0	50000	0	07377	CLA	LXCIEP	CLA (SYMBOL),	F2526280
06677	0	07400	4	07271	TSX	LXC,4		F2526290
06700	0	02000	0	06601	TRA	EOR03		F2526300
						*****		F2526310
						PC IS A SUBROUTINE CALLED BY AOR0, BOR0, ETC. TO HAKE COMPUTAF		F2526320
						TIONS AND TO CALL COMPILING ROUTINES FOR TXI DECREMENT INTIAF		F2526330
						LIZATION.		F2526340
06701	-0	63400	4	06717	PC	SXD PC04,4		F2526350
06702	-0	53400	1	05212	LXD	N3X,1		F2526360
06703	0	50000	1	03652	CLA	TAG2+3,1		F2526370
06704	-0	73400	2	00000	PDX	0,2		F2526380
06705	0	50000	2	01076	CLA	DOTAGZ,2		F2526390
06706	-0	32000	0	05141	ANA	ADMSK	FORM LOCATION	F2526400
06707	0	76700	0	00022	ALS	18	WORDS AND PUT	F2526410
06710	-0	50100	0	05255	ORA	TETLOC	IN OR0+14	F2526420
06711	0	60100	0	07604	STO	OR000+14	AND OR0+15.	F2526430
06712	0	40000	0	05135	ADD	L(16)		F2526440
06713	0	60100	0	07605	STO	OR000+15		F2526450
06714	0	50000	2	01076	CLA	DOTAGZ,2	IS N3 FOR THIS DO	F2526460

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06715	0	77100	0	00017	ARS	15	VARIABLE.	F2526470
06716	0	76000	0	00001	LBT			F2526480
06717	-3	00000	0	06731	PC04	TXL PC10,0	NO, PC10.	F2526490
06720	0	50000	2	01102		CLA DOTAGZ+4,2	YES,	F2526500
06721	0	60100	0	07566		STO OR000	COMPILE	F2526510
06722	0	50000	0	07611		CLA OR000+19	LDQ L(G), (N3X POS.),	F2526520
06723	0	07400	4	04601		TSX FIXCON,4	MPY N3, (N3X POS.),	F2526530
06724	0	60100	0	07611		STO OR000+19	ALS 17,	F2526540
06725	0	53400	1	05130		LXA L(4),1	STO C(OR0+12)	F2526550
06726	0	50000	0	07402		CLA K1BOR0		F2526560
06727	0	07400	4	07271		TSX LXC,4		F2526570
06730	0	02000	0	06736		TRA PC20		F2526580
06731	0	56000	2	01102	PC10	LDQ DOTAGZ+4,2	N3 CONSTANT, PUT	F2526590
06732	0	20000	0	07611		MPY OR000+19	N3G SYMBOL IN	F2526600
06733	0	76300	0	00043		LLS 35	OR0+19	F2526610
06734	0	07400	4	04601		TSX FIXCON,4		F2526620
06735	0	60100	0	07611		STO OR000+19		F2526630
06736	-0	53400	1	05213	PC20	LXD XX,1	ISOLATE N3 FOR	F2526640
06737	0	50000	1	03652	PCI	CLA TAG2+3,1	XX POSITION	F2526650
06740	-0	73400	2	00000		PDX 0,2		F2526660
06741	0	50000	2	01102		CLA DOTAGZ+4,2	DOES N3 = 1.	F2526670
06742	0	40200	0	05126		SUB L(1)		F2526680
06743	-0	10000	0	07050		TNZ PC21	NO, PC22.	F2526690
06744	0	50000	2	01103		CLA DOTAGZ+5,2	YES, IS X CONST.	F2526700
06745	-0	32000	0	05137		ANA BIT2		F2526710
06746	0	10000	0	07050		TZE PC21	YES, PC21.	F2526720
06747	-3	00002	1	07027		TXL PCI31,1,2	NO, IS POS. S2.	F2526730
06750	0	50000	2	01100		CLA DOTAGZ+2,2	NO, IS N1 = 1.	F2526740
06751	0	40200	0	05126		SUB L(1)		F2526750
06752	-0	10000	0	06773		TNZ PCI22	NO, PCI22.	F2526760
06753	0	50000	2	01101		CLA DOTAGZ+3,2	YES, DOES C1 = 1,	F2526770
06754	0	60100	0	07567		STO OR000+1		F2526780
06755	0	50000	0	03636		CLA WRKSC		F2526790
06756	0	40200	0	05061		SUB L1DEC		F2526800
06757	-0	10000	0	06764		TNZ PCI21	NO, PCI21.	F2526810
06760	0	53400	1	05126		LXA L(1),1	YES, COMPILE	F2526820
06761	0	50000	0	07353		CLA KLX02	CLA N1,	F2526830
06762	0	07400	4	07271		TSX LXC,4	SUBL(1), AND	F2526840
06763	0	02000	0	07044		TRA PCI33		F2526850
06764	0	50000	0	03636	PCI21	CLA WRKSC		F2526860
06765	0	07400	4	04601		TSX FIXCON,4	COMPILE	F2526870
06766	0	60100	0	07577		STO OR000+9	LDQ L(N2)	F2526880
06767	0	50000	0	07352		CLA KLX02I	MPY LC1)	F2526890
06770	0	53400	1	05130		LXA L(4),1	ALS 17	F2526900
06771	0	07400	4	07271		TSX LXC,4	STO 1) +3.	F2526910
06772	0	02000	0	07113		TRA PC60		F2526920
06773	0	07400	4	04741	PCI22	TSX OP3,4	COMPILE CLA L(N2-N1)	F2526930
06774	0	50000	0	03636		CLA WRKSC		F2526940
06775	0	40200	0	05061		SUB L1DEC	IS C1 = 1.	F2526950
06776	0	10000	0	07113		TZE PC60	YES, PC 60.	F2526960
06777	0	50000	0	03636		CLA WRKSC	NO, OBTAIN	F2526970
07000	0	07400	4	04601		TSX FIXCON,4	SYMBOL FOR	F2526980
07001	0	60100	0	07577		STO OR000+9	C1 AND	F2526990
07002	0	50000	0	05054	PCI22R	CLA L(ADD)	COMPILE	F2527000

07003	0	60100	0	05177	STO CIL01	ADD L(1)	F2527010
07004	0	50000	0	07603	CLA OR000+13	STO 1) +3	F2527020
07005	0	73400	1	00000	PAX 0,1	LDQ 1) +3	F2527030
07006	-0	63400	1	05201	SXD CIL03,1	MPY L(G)	F2527040
07007	-0	32000	0	05104	ANA 6ONES	ALS17	F2527050
07010	0	60100	0	05200	STO CIL02	STD 1) +3	F2527060
07011	0	07400	4	04345	TSX CIT,4	SUB L(1),	F2527070
07012	0	50000	0	05044	CLA L(STO)	THEN GO	F2527080
07013	0	60100	0	05177	STO CIL01	TO PC60.	F2527090
07014	0	50000	0	07620	CLA OR000+26		F2527100
07015	0	60100	0	07567	STO OR000+1		F2527110
07016	0	73400	4	00000	PAX 0,4		F2527120
07017	-0	32000	0	05104	ANA 6ONES		F2527130
07020	0	60100	0	05200	STO CIL02		F2527140
07021	-0	63400	4	05201	SXD CIL03,4		F2527150
07022	0	07400	4	04345	TSX CIT,4		F2527160
07023	0	53400	1	05130	LXA L(4),1		F2527170
07024	0	50000	0	07352	CLA KLX02I		F2527180
07025	0	07400	4	07271	TSX LXC,4		F2527190
07026	0	02000	0	07044	TRA PCI33		F2527200
07027	0	50000	0	07612	PCI31 CLA OR000+20	XX POS 2 , X VAR., N3 = 1,	F2527210
07030	0	07400	4	04601	TSX FIXCON,4	ASSIGN SYMBOL FOR G	F2527220
07031	0	60100	0	07577	STO OR000+9	AND PUT IN OR0+9	F2527230
07032	0	50000	2	01100	CLA DOTAGZ+2,2	IS N1 = 1	F2527240
07033	0	40200	0	05126	SUB L(1)		F2527250
07034	0	10000	0	07037	TZE PCI32	YES, PCI32.	F2527260
07035	0	07400	4	04741	TSX OP3,4	NO, COMPILE CLA (N2-N1)	F2527270
07036	0	02000	0	07002	TRA PCI22R	OR CLA N2, SUB N1.	F2527280
07037	0	50000	2	01101	PCI32 CLA DOTAGZ+3,2	COMPILE	F2527290
07040	0	60100	0	07567	STO OR000+1	LDQ N2,	F2527300
07041	0	53400	1	05130	LXA L(4),1	MPY G,	F2527310
07042	0	50000	0	07352	CLA KLX02I	ALS 17,	F2527320
07043	0	07400	4	07271	TSX LXC,4	STO1)+3,	F2527330
07044	0	53400	1	05126	PCI33 LXA L(1),1		F2527340
07045	0	50000	0	07404	CLA LXCI61		F2527350
07046	0	07400	4	07271	TSX LXC,4		F2527360
07047	0	02000	0	07113	TRA PC60		F2527370
07050	0	07400	4	07226	PC21 TSX PXOR0,4	IS X CONSTANT.	F2527380
07051	0	02000	0	07053	TRA PC22	NO, PC22.	F2527390
07052	0	02000	0	07102	TRA PC50	YES. PC50,	F2527400
07053	-0	53400	1	05213	PC22 LXD XX,1	X NOT CONSTANT,	F2527410
07054	-3	00002	1	07073	TXL PC40,1,2	IS POSITION S1.	F2527420
07055	0	53400	1	05106	LXA L(6),1	TES, COMPILE	F2527430
07056	0	50000	0	03636	CLA WRKSC	INSTRUCTIONS	F2527440
07057	0	40200	0	05061	SUB L1DEC	TO COMPUTE	F2527450
07060	0	10000	0	07065	TZE PC30	N3X-1, AND	F2527460
07061	1	00002	1	07062	TXI PC25,1,2	TO TO PC60,	F2527470
07062	0	40000	0	05061	PC25 ADD L1DEC		F2527480
07063	0	07400	4	04601	TSX FIXCON,4		F2527490
07064	0	60100	0	07577	STO OR000+9		F2527500
07065	0	50000	0	07373	PC30 CLA LXCI		F2527510
07066	0	07400	4	07271	TSX LXC,4		F2527520
07067	0	53400	1	05127	LXA L(2),1		F2527530
07070	0	50000	0	07374	CLA LXCI6		F2527540

07071	0	07400	4	07271	TSX LXC,4		F2527550
07072	0	02000	0	07113	TRA PC60		F2527560
07073	0	50000	0	07612	PC40 CLA OR000+20	POS, IS S2,	F2527570
07074	0	07400	4	04601	TSX FIXCON,4	COMPILE INSTRUCTIONS	F2527580
07075	0	60100	0	07612	STO OR000+20	TO COMPUT N3X-1 AND	F2527590
07076	0	53400	1	05134	LXA L(10),1	GO TO PC60.	F2527600
07077	0	50000	0	07403	CLA LX2CI		F2527610
07100	0	07400	4	07271	TSX LXC,4		F2527620
07101	0	02000	0	07113	TRA PC60		F2527630
07102	0	76500	0	00043	PC50 LRS 35	X IS CONSTANT,	F2527640
07103	0	20000	0	07612	MPY OR000+20	FORM GN3X-1 FOR	F2527650
07104	0	76700	0	00021	ALS 17	XX POS. AND COMPILE	F2527660
07105	0	40200	0	05061	SUB L1DEC		F2527670
07106	0	07400	4	04601	TSX FIXCON,4		F2527680
07107	0	60100	0	07612	STO OR000+20		F2527690
07110	0	53400	1	05126	LXA L(1),1		F2527700
07111	0	50000	0	07401	CLA XK		F2527710
07112	0	07400	4	07271	TSX LXC,4		F2527720
07113	-0	53400	1	05212	PC60 LXD N3X,1		F2527730
07114	0	50000	1	03652	CLA TAG2+3,1	IS	F2527740
07115	-0	73400	2	00000	PDX 0,2	N3	F2527750
07116	0	53400	1	05131	LXA L(3),1	OF	F2527760
07117	0	50000	2	01076	CLA DOTAGZ,2	CURRENT	F2527770
07120	0	77100	0	00017	ARS 15	DO	F2527780
07121	0	76000	0	00001	LBT	VARIABLE.	F2527790
07122	0	02000	0	07127	TRA PC61	CONSTANT, PC61.	F2527800
07123	0	50000	0	07405	CLA LXCI8	VARIABLE, COMPILE	F2527810
07124	0	07400	4	07271	PC62 TSX LXC,4	STD, ADD N3G, STD.	F2527820
07125	-0	53400	4	06717	LXD PC04,4		F2527830
07126	0	02000	4	00001	TRA 1,4		F2527840
07127	0	50000	0	07562	PC61 CLA LXCI8P	CONSTANT. COMPILE	F2527850
07130	0	02000	0	07124	TRA PC62	STO, ADD C(OR0+12), STD.	F2527860
					*****		F2527870
					CIL03I FILLS OUT LOCATION AND TAG NAME WORDS FOR COMPILED INSTRUCTIONS WITHOUT LOCATIONS.		F2527880
							F2527890
07131	0	50000	0	05133	CIL03I CLA L(0)	PLACE 0 IN LOCATION	F2527900
07132	0	60100	0	05176	STO CIL00	WORD AND TAG IN	F2527910
07133	0	50000	0	03652	CLA TAG3	TAG WORD OF COMPILED	F2527920
07134	-0	32000	0	05141	ANA ADMSK	INSTRUCGIN.	F2527930
07135	0	60100	0	05201	STO CIL03		F2527940
07136	0	02000	4	00001	TRA 1,4		F2527950
					*****		F2527960
					BITP CHECKS SUBSCRIPTS FOR DEFINITION. IF DEFINED BY RELCON OR DOSUB IT OBTAINS OBJECT PROGRAM SYMBOLS FOR N1 OR S1 RESPECTIVELY.		F2327970
							F2327980
							F2527990
07137	0	62100	0	07162	BITP STA BITP14		F2528000
07140	0	62100	0	07147	STA BITP02	INITIALIZE SHIFTS,	F2528010
07141	0	62100	0	07153	STA BITP04	STORE LINKAGE	F2528020
07142	0	73400	2	00000	PAX 0,2	AND PLACE 0,1,2 IN	F2528030
07143	0	76700	0	00001	ALS 1	XB FOR S3, S2, AND	F2528040
07144	0	73400	1	00000	PAX 0,1	S1 RESPECTIVELY,	F2528050
07145	-0	63400	4	07166	SXD BITP25,4		F2528060
07146	0	50000	0	05252	CLA OREDO	CHECK TO SEE IT	F2528070
A 07147	0	77100	0	00000	BITP02 ARS	DEFINED BY DO, RELCON,	F2528080

	07150	0	76000	0	00001		LBT		OR DORC. RETURN AS NOT	F2528090
	07151	0	02000	4	00001		TRA 1,4		DEFINED IF NOT DEFINED.	F2528100
	07152	0	50000	0	05253		CLA DEFDO		DEFINED. CHECK TO SEE	F2528110
A	07153	0	77100	0	00000	BITP04	ARS		IF DEFINED BY DO,	F2528120
	07154	0	76000	0	00001		LBT			F2528130
	07155	0	02000	0	07167		TRA BITP30		DEFINED AS RELCON.	F2528140
	07156	0	50000	2	03651		CLA TAG2+2,2		DEFINED BY DO, CHECK	F2528150
	07157	-0	73400	2	00000		PDX 0,2		TO SEE IF N1 IS	F2528160
	07160	0	50000	0	05254	BITP10	CLA N1SBX		VARIABLE. IF SO, RETURN	F2528170
	07161	3	00007	0	00100		TXH 64,0,7		AS UNDEFINED.	F2528180
A	07162	0	77100	0	00000	BITP14	ARS		IF NOT,	F2528190
	07163	0	76000	0	00001		LBT		CONTINUE.	F2528200
	07164	0	02000	0	07151		TRA BITP02+2		SYMBOL HAS VARIABLE N1.	F2528210
	07165	0	50000	2	01100	BITP20	CLA DOTAGZ+2,2		DOSUB, N2.	F2528220
D	07166	-3	00000	0	07170	BITP25	TXL BITP40,0		SUBMLEFT IN ACC.	F2528230
	07167	0	50000	1	03643	BITP30	CLA WRKSC+5,1		RELCON S SYMBOL FROM WRKSC.	F2528240
	07170	-0	53400	4	07166	BITP40	LXD BITP25,4		RESTORE LINKAGE	F2528250
	07171	0	02000	4	00002		TRA 2,4		SYMBOL IN ACC.	F2528260
									*****F2528270	
									COSE TESTS COEFFICIENTS AND OBTAINS OBJECT PROGRAM SYMBOLS FRF2528280	
									THOSE GREATER THAN 1	F2528290
	07172	0	53400	1	05106	COSE	LXA L(6),1		COEFFICIENT INDEX.	F2528300
	07173	0	53400	2	05131		LXA L(3),2		SENSE LIGHT INDEX.	F2528310
	07174	-0	63400	4	05236		SXD LINKC,4		STORE LINKAGE.	F2528320
	07175	0	50000	1	03644	COSE5	CLA WRKSC+6,1		ISOLATE COEFFICIENT,	F2528330
	07176	0	10000	0	07205		TZE COSE08		NO SUB FOR THIS DIM.	F2528340
	07177	0	40200	0	05061		SUB L1DEC			F2528350
	07200	0	10000	0	07205		TZE COSE08		C=1, CHECK NEXT C.	F2528360
	07201	0	76000	2	00144		PSE 100,2		C NOT = 1, SENSE LIGHT.	F2528370
	07202	0	50000	1	03644		CLA WRKSC+6,1		ASSIGN FIXCON SYMBOL	F2528380
	07203	0	07400	4	04601		TSX FIXCON,4		FOR C NOT = 1. STORE IN	F2528390
	07204	0	60100	2	07602		STO OR000+12,2		OR0+910, OR 11.	F2528400
	07205	2	00002	1	07206	COSE08	TIX COSE10,1,2		BUMP COEF. INDEX.	F2528410
	07206	2	00001	2	07175	COSE10	TIX COSE5,2,1		BUMP S.6. TEST AND LOOP,	F2528420
	07207	-0	53400	4	05236		LXD LINKC,4		RESTORE LINKAGE	F2528430
	07210	0	02000	4	00001		TRA 1,4		AND RETURN.	F2528440
									*****F2528450	
									TESTLO OBTAINS THE TEST LOCATION TO BE THE SYMBOLIC ADDRESS OF2528460	
									OF THE STD INITIALIZING INSTRUCTION,	F2528470
	07211	0	50000	2	03652	TESTLO	CLA TAG2+3,2		INITIALIZE INDEX	F2528480
	07212	-0	73400	2	00000		PDX 0,2		FOR TEST DOTAG.	F2528490
	07213	0	50000	0	05133		CLA L(0)		ISOLATE	F2528500
	07214	0	56000	2	01104		LDQ DOTAGZ+6,2		SXD	F2528510
	07215	-0	77300	0	00003		RQL 3		LOCATION	F2528520
	07216	-0	76300	0	00006		LGL 6		AND PUT	F2528530
	07217	0	76700	0	00003		ALS 3		IN TETLOC	F2528540
	07220	0	60100	0	05255		STO TETLOC		ADDRESS	F2528550
	07221	0	50000	2	01076		CLA DOTAGZ,2		PUT TXL	F2528560
	07222	-0	32000	0	05141		ANA ADMSK		LOCATION	F2528570
	07223	0	76700	0	00022		ALS 18		IN TETLOC	F2528580
	07224	-0	60200	0	05255		ORS TETLOC		DECREMENT.	F2528590
	07225	0	02000	4	00001		TRA 1,4			F2528600
									*****F2528610	
									PREFACE TO OR0 EXAMINES VARIABILITY OF X QUANTITY.	F2528620

07226	0	50000	1	03652	PXOR0	CLA TAG2+3,1	IF X IS	F2528630
07227	-0	73400	2	00000		PDX 0,2	CONSTANT IT IS	F2528640
07230	0	50000	2	01103		CLA DOTAGZ+5,2	LEFT IN THE	F2528650
07231	-0	32000	0	05137		ANA BIT2	DECREMENT OF	F2528660
07232	-0	10000	0	07237		TNZ XOR0	ACC.	F2528670
07233	0	50000	2	01103		CLA DOTAGZ+5,2		F2528680
07234	-0	32000	0	05141		ANA ADMSK		F2528690
07235	0	76700	0	00022		ALS 18		F2528700
07236	0	02000	4	00002		TRA 2,4		F2528710
						*****		F2528720
						XOR0 FILLS OUT OR0 FOR N1, N2, N3, GIVEN DO IN B AND POS IN		AF2528730
07237	-0	63400	4	07260	XOR0	SXD XOR032,4		F2528740
07240	0	50000	2	01076		CLA DOTAGZ,2		F2528750
07241	0	77100	0	00017		ARS 15		F2528760
07242	-0	32000	0	05076		ANA L(7)		F2528770
07243	0	60100	0	05235		STO N1N2N3		F2528780
07244	0	50000	0	05067		CLA L(OR0)	ORIGIN OF OR0 TABLE.	F2528790
07245	0	40000	0	05130		ADD L(4)	CALCULATES ADDRESS	F2528800
07246	3	00002	1	07250		TXH XOR010,1,2	FOR STORING INTO	F2528810
07247	0	40000	0	05131		ADD L(3)	OR0 TABLE.	F2528820
07250	3	00001	1	07252	XOR010	TXH XOR020,1,1		F2528830
07251	0	40000	0	05066		ADD L(17)		F2528840
07252	0	62100	0	07263	XOR020	STA XOR036	STORE ADRS FOR NS.	F2528850
07253	0	53400	1	05131		LXA L(3),1		F2528860
07254	0	56000	0	05235	XOR030	LDQ N1N2N3		F2528870
07255	-0	77300	1	00044		RQL 36,1		F2528880
07256	0	50000	2	01100		CLA DOTAGZ+2,2		F2528890
07257	0	16200	0	07261		TQP XOR034	N IS CONSTANT.	F2528900
07260	-3	00000	0	07263	XOR032	TXL XOR036,0	N IS VARIABLE	F2528910
07261	0	76700	0	00022	XOR034	ALS 18		F2528920
07262	0	07400	4	04601		TSX FIXCON,4		F2528930
07263	0	60100	1	00000	XOR036	STO 0,1		F2528940
07264	2	00001	2	07265		TIX XOR040,2,1		F2528950
07265	2	00001	1	07254	XOR040	TIX XOR030,1,1		F2528960
07266	0	60100	0	07566		STO OR000		F2528970
07267	-0	53400	4	07260		LXD XOR032,4		F2528980
07270	0	02000	4	00001		TRA 1,4		F2528990
						*****		F2529000
						THIS ROUTINE EXAMINES A BLOCK OF CONSTANTS AND COMPILES ONE		IF2529010
						INSTRUCTION FOR EACH. THE CALLER INDICATES THE FIRST CONSTAN		IF2529020
						BY A REFERENCE IN THE ACCUMULATOR, AND INDICATES THE NUMBER OF		IF2529030
						OF INSTRUCTIONS IN INDEX REGISTER A.		F2529040
07271	-0	63400	4	07336	LXC	SXD LXC19,4		F2529050
07272	0	60100	0	05206		STO ERLXC		F2529060
07273	-0	75400	1	00000		PXD 0,1		F2529070
07274	0	77100	0	00022		ARS 18		F2529080
07275	0	40000	0	05206		ADD ERLXC		F2529090
07276	0	62100	0	07312		STA LXC10		F2529100
07277	0	50000	0	05222		CLA LOCIND	TEST TO SEE IF	F2529110
07300	0	10000	0	07310		TZE LXC08	THIS IS THE FIRST	F2529120
07301	0	40200	0	05126		SUB L(1)	LXD COMPILED. IF SO,	F2529130
07302	0	60100	0	05222		STO LOCIND	PLACE A IN	F2529140
07303	-0	53400	2	05230		LXD DOIND,2	DECREMENT	F2529150
07304	0	50000	2	01076		CLA DOTAGZ,2	OF LOCATION WORD	F2529160

	07305	-0	32000	0	05142		ANA DECMSK		FOR FIRST COMPILED	F2529170
	07306	0	60100	0	05176		STO CIL00		INSTRUCTION.	F2529180
	07307	0	02000	0	07312		TRA LXC10			F2529190
	07310	0	50000	0	05133	LXC08	CLA L(0)			F2529200
	07311	0	60100	0	05176		STO CIL00			F2529210
	07312	0	56000	1	00000	LXC10	LDQ 0,1		SKELETAL INSTRUCTION.	F2529220
	07313	0	76300	0	00000		LLS 0			F2529230
	07314	-0	76300	0	00022		LGL 18			F2529240
	07315	-0	60000	0	05177		STQ CIL01		COMPILE OP. WORD.	F2529250
	07316	-0	12000	0	07337		TMI LXC20			F2529260
	07317	0	62100	0	07320		STA LXC15		SYMBOL.ADDR, TYPE INSTRUCTION,	F2529270
A	07320	0	50000	0	00000	LXC15	CLA			F2529280
	07321	0	60100	0	05200		STO CIL02		SYMBOLIC ADDRESS.	F2529290
	07322	0	50000	0	05133		CLA L(0)		RELATIVE	F2529300
	07323	0	60100	0	05201		STO CIL03		ADDRESS.	F2529310
	07324	-0	50000	0	05200		CAL CIL02		TEST CIL02	F2529320
	07325	-0	32000	0	05104		ANA 6ONES		WORD.	F2529330
	07326	0	10000	0	07344		TZE LXC30		FIRST CHARACTER IS ZERO.	F2529340
	07327	-0	32000	0	05102		ANA BIT01			F2529350
	07330	-0	10000	0	07344		TNZ LXC30		FIRST CHARACTER ALPHABETIC.	F2529360
	07331	-0	50000	0	05200		CAL CIL02		FIRST CHARACTER NUMERIC,	F2529370
	07332	0	76700	0	00022		ALS 18		PLACE REIGHT HALF OF CIL02	F2529380
	07333	0	62200	0	05201		STD CIL03		IN CIL03, LEFT HALF	F2529390
	07334	-0	50000	0	05104		CAL 6ONES		IN CIL02.	F2529400
	07335	0	32000	0	05200		ANS CIL02			F2529410
D	07336	-3	00000	0	07344	LXC19	TXL LXC30,0		SHIF TYPE INSTRUCTION,	F2529420
	07337	0	76700	0	00022	LXC20	ALS 18			F2529430
	07340	-0	32000	0	05142		ANA DECMSK			F2529440
	07341	0	60100	0	05201		STO CIL03			F2529450
	07342	0	50000	0	05133		CLA L(0)			F2529460
	07343	0	60100	0	05200		STO CIL02			F2529470
	07344	0	07400	4	04345	LXC30	TSX CIT,4			F2529480
	07345	2	00001	1	07310		TIX LXC08,1,1		COUNT COMPILED INSTR. IN BLK.	F2529490
	07346	-0	53400	4	07336		LXD LXC19,4			F2529500
	07347	0	02000	4	00001		TRA 1,4			F2529510
							*****			F2529520
	07350	0	00000	0	07406	KLX01	LXI00			F2529530
	07351	0	00000	0	07407	KLX01I	LXI00+1			F2529540
	07352	0	00000	0	07412	KLX02I	LXI05			F2529550
	07353	0	00000	0	07410	KLX02	LXI02			F2529560
	07354	0	00000	0	07424	KLX03	LXI16			F2529570
	07355	0	00000	0	07442	KLX05	LXI30			F2529580
	07356	0	00000	0	07416	KLX03I	LXI10			F2529590
	07357	0	00000	0	07434	KLX05I	LXI24			F2529600
	07360	0	00000	0	07473	K1AOR0	A1C00			F2529610
	07361	0	00000	0	07474	K1AOR0	A1C01			F2529620
	07362	0	00000	0	07477	K2AOR0	A1000			F2529630
	07363	0	00000	0	07500	K3AOR0	A1001			F2529640
	07364	0	00000	0	07501	KTX00	TXC00			F2529650
	07365	0	00000	0	07507		TXC08			F2529660
	07366	0	00000	0	07515		TXC18			F2529670
	07367	0	00000	0	07531	KTX04	TXC30			F2529680
	07370	0	00000	0	07532	KTX03	TXC31			F2529690
	07371	0	00000	0	07534	LTX040	TX040			F2529700

07372	0	00000	0	07536	LTX042	TX042		F2529710
07373	0	00000	0	07456	LXCI	XCI		F2529720
07374	0	00000	0	07466	LXCI6	XCI6		F2529730
07375	0	00000	0	07553	LXCIE	XCIE		F2529740
07376	0	00000	0	07554	LXCIE1	XCIE+1		F2529750
07377	0	00000	0	07563	LXCIEP	XCIEP		F2529760
07400	0	00000	0	07564	LXCEIP	XCEIP		F2529770
07401	0	00000	0	07552	XK	XKI		F2529780
07402	0	00000	0	07452	K1BOR0	L(BIC)		F2529790
07403	0	00000	0	07540	LX2CI	X2CI		F2529800
07404	0	00000	0	07467	LXCI61	XCI6+1		F2529810
07405	0	00000	0	07470	LXCI8	XCI8		F2529820
07406	0	07603	2	34321	LXI00	14545,2,OR000+13	CLA	F2529830
07407	0	07620	6	26346		11494,6,OR000+26	STO	F2529840
07410	0	07567	2	34321	LXI02	14545,2,OR000+1	CLA	F2529850
07411	0	07620	6	26346		11494,6,OR000+26	STO	F2529860
07412	0	07567	4	32450	LXI05	13608,4,OR000+1	LDQ	F2529870
07413	0	07577	4	44770		18936,4,OR000+9	MPY	F2529880
07414	-2	00021	2	14362	TNX	6386,2,17	ALS 17	F2529890
07415	0	07620	6	26346		11494,6,OR000+26	STO	F2529900
07416	0	07572	4	32450	LXI10	13608,4,OR000+4	LDQ	F2529910
07417	0	07575	4	44770		18936,4,OR000+7	MPY	F2529920
07420	-2	00021	2	14362	TNX	6386,2,17	ALS 17	F2529930
07421	0	07575	6	26422		11538,6,OR000+7	SUB	F2529940
07422	0	07620	2	12424		5396,2,OR000+26	ADD	F2529950
07423	0	07620	6	26346		11494,6,OR000+26	STO	F2529960
07424	0	07572	4	32450	LXI16	13608,4,OR000+4	LDQ	F2529970
07425	0	07600	4	44770		18936,4,OR000+10	MPY	F2529980
07426	-2	00022	4	35162	TNX	14962,4,18	LRS	F2529990
07427	0	07575	4	44770		18936,4,OR000+7	MPY	F2530000
07430	-2	00021	2	14362	TNX	6386,2,17	ALS	F2530010
07431	0	07575	6	26422		11538,6,OR000+7	SUB	F2530020
07432	0	07620	2	12424		5396,2,OR000+26	ADD	F2530030
07433	0	07620	6	26346		11494,6,OR000+26	STO	F2530040
07434	0	07613	4	32450	LXI24	13608,4,OR000+21	LDQ	F2530050
07435	0	07616	4	44770		18936,4,OR000+24	MPY	F2530060
07436	-2	00021	2	14362	TNX	6386,2,17	ALS	F2530070
07437	0	07616	6	26422		11538,6,OR000+24	SUB	F2530080
07440	0	07620	2	12424		5396,2,OR000+26	ADD	F2530090
07441	0	07620	6	26346		11494,6,OR000+26	STO	F2530100
07442	0	07613	4	32450	LXI30	13608,4,OR000+21	LDQ	F2530110
07443	0	07601	4	44770		18936,4,OR000+11	MPY	F2530120
07444	-2	00022	4	35162	TNX	14962,4,18	LRS	F2530130
07445	0	07616	4	44770		18936,4,OR000+24	MPY	F2530140
07446	-2	00021	2	14362	TNX	6386,2,17	ALS	F2530150
07447	0	07616	6	26422		11538,6,OR000+24	SUB	F2530160
07450	0	07620	2	12424		5396,2,OR000+26	ADD	F2530170
07451	0	07620	6	26346		11494,6,OR000+26	STO	F2530180
07452	0	07611	4	32450	L(BIC)	13608,4,OR000+19	LDQ	F2530190
07453	0	07566	4	44770		18936,4,OR000	MPY	F2530200
07454	-2	00021	2	14362	TNX	6386,2,17	ALS	F2530210
07455	0	07602	6	26346		11494,6,OR000+12	STO	F2530220
07456	0	07570	2	34321	XCI	14545,2,OR000+2	CLA	F2530230
07457	0	07567	6	26422		11538,6,OR000+1	SUB	F2530240

07460	0	07571	2	12424		5396,2,OR000+3	ADD	F2530250		
07461	-2	00043	4	35162	TNX	14962,4,35	LRS	F2530260		
07462	0	07571	2	46547		19815,2,OR000+3	DVP	F2530270		
07463	0	07571	4	44770		18936,4,OR000+3	MPY	F2530280		
07464	-2	00022	4	35162	TNX	14962,4,18	LRS	F2530290		
07465	0	07577	4	44770		18936,4,OR000+9	MPY	F2530300		
07466	-2	00043	4	34362	XCI6	TNX	14578,4,35	LLS	F2530310	
07467	0	07603	6	26422		11538,6,OR000+13	SUB	F2530320		
07470	0	07605	6	26324	XCI8		11476,6,OR000+15	STD	F2530330	
07471	0	07602	2	12424		5396,2,OR000+12	ADD	F2530340		
07472	0	07604	6	26324		11476,6,OR000+14	STD	F2530350		
07473	0	07566	4	32450	A1C00		13608,4,OR000	LDQ	F2530360	
07474	0	07611	4	44770	A1C01		18936,4,OR000+19	MPY	F2530370	
07475	-2	00021	2	14362		TNX	6386,2,17	ALS	F2530380	
07476	0	07604	6	26324			11476,6,OR000+14	STD	F2530390	
07477	0	07566	2	34321	A1000		14545,2,OR000	CLA	F2530400	
07500	0	07604	6	26324	A1001		11476,6,OR000+14	STD	F2530410	
07501	0	07570	2	34321	TXC00		14545,2,OR000+2	CLA	F2530420	
07502	0	07567	6	26422			11538,6,OR000+1	SUB	F2530430	
07503	0	07571	2	12424			5396,2,OR000+3	ADD	F2530470	
07504	-2	00043	4	35162		TNX	14962,4,35	LRS	F2530450	
07505	0	07571	2	46547			19815,2,OR000+3	DVP	F2530460	
07506	0	07571	4	44770			18936,4,OR000+3	MPY	F2530470	
07507	0	07573	2	34321	TXC08		14545,2,OR000+5	CLA	F2530480	
07510	0	07572	6	26422			11538,6,OR000+4	SUB	F2530490	
07511	0	07574	2	12424			5396,2,OR000+6	ADD	F2530500	
07512	-2	00043	4	35162		TNX	14962,4,35	LRS	F2530510	
07513	0	07574	2	46547			19815,2,OR000+6	DVP	F2530520	
07514	0	07574	4	44770			18936,4,OR000+6	MPY	F2530530	
07515	0	07614	2	34321	TXC18		14545,2,OR000+22	CLA	F2530540	
07516	0	07613	6	26422			11538,6,OR000+21	SUB	F2530550	
07517	0	07615	2	12424			5396,2,OR000+23	ADD	F2530560	
07520	-2	00043	4	35162		TNX	14962,4,35	LRS	F2530570	
07521	0	07615	2	46547			19815,2,OR000+23	DVP	F2530580	
07522	0	07615	4	44770			18936,4,OR000+23	MPY	F2530590	
07523	-2	00022	4	35162		TNX	14962,4,18	LRS	F2530600	
07524	0	07575	4	44770			18936,4,OR000+7	MPY	F2530610	
07525	-2	00022	4	35162		TNX	14962,4,18	LRS	F2530620	
07526	0	07576	4	44770			18936,4,OR000+8	MPY	F2530630	
07527	-2	00022	4	35162		TNX	14962,4,18	LRS	F2530640	
07530	0	07601	4	44770			18936,4,OR000+11	MPY	F2530650	
07531	-2	00043	4	34362	TXC30		TNX	14578,4,35	LLS	F2530660
07532	0	07621	2	12424	TXC31			5396,2,OR000+27	ADD	F2530670
07533	0	07603	6	26422			11538,6,OR000+13	SUB	F2530680	
07534	-2	00022	4	35162	TX040		TNX	14962,4,18	LRS	F2530690
07535	0	07611	4	44770			18936,4,OR000+19	MPY	F2530700	
07536	-2	00043	4	34362	TX042		TNX	14578,4,35	LLS	F2530710
07537	0	07604	6	26324			11476,6,OR000+14	STD	F2530720	
07540	0	07573	2	34321	X2CI			14545,2,OR000+5	CLA	F2530730
07541	0	07572	6	26422			11538,6,OR000+4	SUB	F2530740	
07542	0	07574	2	12424			5396,2,OR000+6	ADD	F2530750	
07543	-2	00043	4	35162		TNX	14962,4,35	LRS	F2530760	
07544	0	07574	2	46547			19815,2,OR000+6	DVP	F2530770	
07545	0	07574	4	44770			18936,4,OR000+6	MPY	F2530780	

07546	-2	00022	4	35162		TNX	14962,4,18	LRS	F2530790
07547	0	07612	4	44770			18936,4,OR000+20	MPY	F2530800
07550	-2	00043	4	34362		TNX	14578,4,35	LLS	F2530810
07551	0	07603	6	26422			11538,6,OR000+13	SUB	F2530820
07552	0	07612	2	34321	XKI		14545,2,OR000+20	CLA	F2530830
07553	-2	00043	4	34362	XCIE	TNX	14578,4,35	LLS	F2530840
07554	0	07603	6	26422			11538,6,OR000+13	SUB	F2530850
07555	0	07605	6	26324			11476,6,OR000+15	STD	F2530860
07556	0	07604	6	26324			11476,6,OR000+14	STD	F2530870
07557	0	07605	6	26324	XCI8P		11476,6,OR000+15	STD	F2530880
07560	0	07611	2	12424			5396,2,OR000+19	ADD	F2530890
07561	0	07604	6	26324			11476,6,OR000+14	STD	F2530900
07562	0	00000	0	07557	LXCI8P		XCI8P		F2530910
07563	0	07612	2	34321	XCIEP		14545,2,OR000+20	CLA	F2530920
07564	0	07605	6	26324	XCEIP		11476,6,OR000+15	STD	F2530930
07565	0	07604	6	26324			11476,6,OR000+14	STD	F2530940
							*****		F2530950
		07566	OR000	BSS	12				F2530960
M	07602	+0100000000001	OR012	OCT	0100000000001				F2530970
	07603	+0600000000003		OCT	0600000000003				F2530980
		07604	OR014	BSS	12				F2530990
M	07620	+0100000000003	OR026	OCT	0100000000003	1)+3	SYMBOL.		F2531000
							*****		F2531010
									F2531020
							*****		F2531030
							SYNONYMS		F2531040
		01242	ZEKSUM	SYN	TGTG+100				F2531050
M		03650	TAG21	SYN	TAG2+1				F2531060
M		03651	TAG22	SYN	TAG2+2				F2531070
M		05256	RTXAC	SYN	RTX				F2531080
M		05256	RTXAC	SYN	AC				F2531090
		05245	ERAOR0	SYN	ERTX01				F2531100
		05241	CPYWD1	SYN	ER40				F2531110
		05242	CPYWD2	SYN	ER41				F2531120
M		05243	ERDRM1	SYN	ARG				F2531130
M		05243	ERDRM1	SYN	ARG				F2531140
		05246	ERDRM	SYN	ERTX02				F2531150
		05202	ERAB	SYN	ERTGA				F2531160
		03636	ADTGA	SYN	OADTGA+100				F2531170
		03466	ADTGMX	SYN	ADTG+400				F2531180
		01076	DOTAGZ	SYN	DOTAG+450				F2531190
M		07602	OR012	SYN	OR000+12				F2531200
		07603	OR013	SYN	OR000+13				F2531210
		07610	OR018	SYN	OR000+18				F2531220
M		07620	OR026	SYN	OR000+26				F2531230
		02336	MXTGTG	SYN	TGTG+672				F2531240
		02646	MXTGA	SYN	OMXTGA+200				F2531250
		00004	DIAG	EQU	4				F2531260
A		00000		END					F2531270
			0OR012		07602,07602				
			0OR026		07620,07620				
			0RTXAC		05256,05256				
			0TAG21		03650,03650				
			0TAG22		03651,03651				

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	3127	0	0	0	0
LIB	0	0	0	0	0
COL	3127	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 3142

NUMBER OF SYMBOLS, DEF 679,DEFOP 0,UNDEF 0
REM BLOCK SIX OF SECTION TWO.

00112	-0	76000	0	00012	RTT	TEST TAPE CHECK	F2600540
00113	0	02000	0	00115	TRA DFI21	ERROR	F2600550
00114	0	02000	0	00051	TRA DFI10	IF NO ERROR RETRN TO READ NEXT RECORD	F2600560
00115	2	00001	2	00117	DFI21 TIX DFI22,2,1	REDUCE ERROR COUNTER BY 1	F2600570
00116	0	07400	4	00004	TSX DIAG,4	TAPE CHECK. TRIED 5 TIMES.	F2600580
00117	0	76400	0	00223	DFI22 BST 147	RESTORE TAPE POSITION	F2600590
00120	-0	53400	1	00163	LXD ERAS,1	AND INDEX 1	F2600600
00121	0	02000	0	00053	TRA DFI11	FOR ANOTHER TRY	F2600610
00122	0	70000	0	00163	DFI30 CPY ERAS	CHECK THAT END OF RECORD	F2600620
00123	0	07400	4	00004	TSX DIAG,4	HAS BEEN REACHED---END OF NEST.	F2600630
00124	0	07400	4	00004	TSX DIAG,4	RECORD IS ONLY FOUR WORDS.	F2600640
00125	0	76600	0	00333	WRS 219	DELAY UNTIL TAPE DISCONNECTSP	F2600650
00126	-0	76000	0	00012	RTT	TEST TAPE CHECK	F2600660
00127	0	02000	0	00131	TRA DFI40	ERROR	F2600670
00130	0	02000	0	00133	TRA DFI50	PROCEED TO PROCESS THIS NEST	F2600680
00131	2	00001	2	00117	DFI40 TIX DFI22,2,1	REDUCE ERROR COUNT BY 1 AND RETRY	F2600690
00132	0	07400	4	00004	TSX DIAG,4	TAPE CHECK. TRIED 5 TIMES.	F2600700
00133	-0	63400	1	00146	DFI50 SXD DFI55,1	STORE INDEX FOR END OF BLOCK TEST	F2600710
00134	1	00004	1	00135	DFI51 TXI DFI52,1,4		F2600720
00135	0	50000	1	00200	DFI52 CLA NOR,1	SCAN UP EVERY FOURTH WORD	F2600730
00136	0	12000	0	00134	TPL DFI51	TO TEST FOR,MINUS	F2600740
00137	-0	63400	1	00163	SXD ERAS,1	SAVE FOR NEXT END OF BLOCK TEST	F2600750
00140	0	50200	1	00200	CLS NOR,1	RESTORE PLUS SIGN TO	F2600760
00141	0	60100	1	00200	STO NOR,1	FIRST WORD OF BLOCK	F2600770
00142	0	76600	0	00224	DFI53 WRS 148	SELECT OUTPUT TAPE	F2600780
00143	0	53400	2	00162	LXA L(100),2	PREPARE FOR NEXT 100 WORDS	F2600790
00144	0	70000	1	00200	DFI54 CPY NOR,1	WRITE BLOCK IN	F2600800
00145	1	77777	1	00146	TXI DFI55,1,-1	FORWARD DIRECTION	F2600810
00146	-3	00000	1	00151	DFI55 TXL DFI60,1	UNTIL END OF BLOCK	F2600820
00147	2	00001	2	00144	TIX DFI54,2,1	IF WORDS IN RECORD	F2600830
00150	0	02000	0	00142	TRA DFI53	START ANOTHER RECORDEACHED 0	F2600840
00151	-0	53400	1	00163	DFI60 LXD ERAS,1	IF INDEX 1 HAS NOT REACHED 0	F2600850
00152	3	00000	1	00133	TXH DFI50,1,0	PROCESS NEXT BLOCK	F2600860
00153	0	02000	0	00044	TRA DFI05	RETURN TO PROCESS NEXT NEST	F2600870
00154	0	76200	0	00221	EXIT RDS 145	SKIP OVER DIAGNOSTIC RECORD ON SYSTEM TAPE.	F2600880
00155	0	02000	0	00004	TRA 4		
					CONSTANTS AND ERAS STORAGE FOR DFI		F2600900
00156	0	00000	0	00000	L(0) 0		F2600910
00157	0	00000	0	00005	L(5) 5		F2600920
00160	+377777777777			ALLONE	OCT 377777777777		F2600930
00161	-0	00000	0	00000	L(M0) MZE 0 -		F2600940
00162	0	00000	0	00144	L(100) 100		F2600950
				00163	ERAS BSS 1		F2600960
				00200	ORG 128	ORIGIN FOR NOR	F2600970
				00200	NOR BSS 3904		F2600980
				00004	DIAG EQU 4		F2600990
				00000	END		F2601000

D

A

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	101	0	0	0	0
LIB	0	0	0	0	0
COL	101	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS	0
NUMBER OF OFF-LINE PRINT RECORDS	110
NUMBER OF SYMBOLS, DEF 36,DEFOP 0,UNDEF 0	
ORG 3641	

07071

ORG 3641

MASTER RECORD CARD = FN055

ROUTINE TO HANDLE ADDITIONAL SU8ROUTINES IF DESIRED

	07071	2	00001	4	01306		TIX M13505,4,1	COMPARE M1D FOR-PRESENT SUBROUTINES	F3B12180
	07072	-0	53400	4	02170		LXD L(0),4	COMPARE ADD IT, OPEN SUBS, IN M1D2S	F3B12190
	07073	0	34000	4	07122	0P1	CAS M1D2,4	WITH CURRENT NAME.	F3B12200
	07074	1	77777	4	07077		TXI 0P2,4,-1	NOT FOUND, GET NEXT M1D2 ENTRY	F3B12210
	07075	0	02000	0	07101		TRA 0P3	FOUND	F3B12220
	07076	1	77777	4	07077		TXI 0P2,4,-1	NOT FOUND, GET NEXT M1D2 ENTRY	F3B12230
	07077	3	77776	4	07073	0P2	TXH 0P1,4,M1D2L	TEST FOR END OF M1D2.	F3B12240
	07100	0	07400	4	00004		TSX 4,4	CURRENT SUB NOT IN M1D2	F3B12250
	07101	-0	63400	4	02312	0P3	SXD CCELL,4	SAVE 1RC FOR LATER BRANCH OF SAME INST.	F3B12260
	07102	1	77776	1	07103		TXI 0P3+2,1,-2	INDEX TO GET NEXT 4 WORD INSTR.	F3B12270
	07103	0	07400	4	07136		TSX TEST,4	TEST FOR END OF CUR. COMPAIL REC.	F3B12280
	07104	-0	53400	4	02312		LXD CCELL,4	GO TO THE COMPILER FOR PART, SUBROUTINE	F3B12290
	07105	0	02000	4	07106	0P4	TRA 0P4+1,4	COMPAIL INSTRUCTION	F3B12300
	07106	0	02000	0	07170		TRA XDIM	OPEN SUB IS XDIM	F3B12310
	07107	0	02000	0	07171		TRA DIM	OPEN SUB IS DIM	F3B12320
A	07110	0	00000	0	00000		HTR	SPACE FOR BRANCHING TO 10 ADDITIONAL	F3B12330
A	07111	0	00000	0	00000		HTR	OPEN SU8ROUTINES THE LIST OF TRANSFERS	F3B12340
A	07112	0	00000	0	00000		HTR	TO ADDITIONAL OPEN SUBS MUST BE ORDER-	F3B12350
A	07113	0	00000	0	00000		HTR	ED IN THE SAME WAY AS THE ADDITIONAL OPEN	F3B12360
A	07114	0	00000	0	00000		HTR	SUB NAMES ARE ORDERED IN THE-DICTION-	F3B12370
A	07115	0	00000	0	00000		HTR	ARY M1D2.	F3B12380
A	07116	0	00000	0	00000		HTR		F3B12390
A	07117	0	00000	0	00000		HTR		F3B12400
A	07120	0	00000	0	00000		HTR		F3B12410
A	07121	0	00000	0	00000		HTR		F3B12420
									F3B12430
								THE DICTIONARY FOR ADDITIONAL OPEN SUBROUTINES, AND	F3B12440
								CONSTANTS USED IN THE DISCRIMINATION PROCEDURE.	F3B12450
	07122	672431446060				M1D2	BCD 1XDIM	OPEN SUB XDIM	F3B12460
	07123	243144606060					BCD 1DIM	OPEN SUB DIM	F3B12470
A	07124	0	00000	0	00000		HTR	SPACE FOR ADDING 10 ADDITIONAL OPEN SUBS.	F3B12480
A	07125	0	00000	0	00000		HTR		F3B12490
A	07126	0	00000	0	00000		HTR		F3B12500
A	07127	0	00000	0	00000		HTR		F3B12510
A	07130	0	00000	0	00000		HTR		F3B12520
A	07131	0	00000	0	00000		HTR		F3B12530
A	07132	0	00000	0	00000		HTR		F3B12540
A	07133	0	00000	0	00000		HTR		F3B12550
A	07134	0	00000	0	00000		HTR		F3B12560
A	07135	0	00000	0	00000		HTR		F3B12570
								FOUR SUBROUTINES USED IN COMPILING OPEN SUBROUTINES	F3B12580
								1.TEST	F3B12590
	07136	-0	63400	4	07230	TEST	SXD C,4	SAVE LINKAGE	F3B12600
	07137	-0	75400	1	00000		PXD 0,1	COMPARE CURRENT VALUE OF IR1 WITH	F3B12610
	07140	0	34000	0	02305		CAS M1ALWN	2S COMPL. OF WORD COUNT.	F3B12620
	07141	0	02000	4	00001		TRA 1,4	..	F3B12630
	07142	0	07400	4	00341		TSX M10210,4	CURRENT RECORD EXHAUSTED	F3B12640
	07143	0	07400	4	00004		TSX 4,4	STOP. NO OF WDS. IN CUR REC EXCEEDS WD.	F3B12650
								COUNT	F3B12660
	07144	-0	53400	4	07230		LXD C,4	RESTORE LINKAGE	F3B12670
	07145	0	02000	4	00001		TRA 1,4	RETURN	F3B12680
								2 TEARG1. ROUTINE TO DET. IF TOO FEW ARGS SPECIFIED	F3B12690

07146	0	50000	1	02327	TEARG1	CLA	AIL,1	TEST FOR ALL ONES IN 1ST WD OF CUR. INSTR	F3B12700
07147	0	40200	0	02211		SUB	ALLONE		F3B12710
07150	0	10000	0	02155		TZE	ERROR1	ALL ONES. GO TO PROPER STOP	F3B12720
07151	0	02000	4	00001		TRA	1,4	NOT ALL ONES. RETURN	F3B12730
							3 TEARG2. ROUTINE	TO DET. IF TOO MANY ARGS. SPECIFIED	F3B12740
07152	0	50000	1	02327	TEARG2	CLA	AIL,1	TEST FOR ALL ONES IN TST WORD OF	F3B12750
07153	0	02000	0	07235		TRA	SUBPAT		F3B12760
07154	0	50000	1	02331	ARGTAG	CLA	AIL+2,1	PLACE SUMB ADDRESS OF CURRENT ARG	F3B12770
07155	0	60100	0	02324		STO	M1CW+2	IN M1CW+2	F3B12780
07156	0	50000	1	02332		CLA	AIL+3,1	PLACE RELATIVE ADD. AND TAG OF CUR	F3B12790
07157	0	60100	0	02325		STO	M1CW+3	RENT ARG. IN M1CW+3	F3B12800
07160	-0	32000	0	02207		ANA	TGMSK	TEST FOR TAG	F3B12810
07161	0	10000	4	00001		TZE	1,4	NO TAG. RETURN	F3B12820
07162	-0	63400	4	07230		SXD	C,4	ARG TAGGED. SAVE LINKAGE	F3B12830
07163	-0	76000	0	00143		MSE	99	TEST FOR END OF CHTAG TABLE	F3B12840
07164	0	07400	4	01016		TSX	M12500,4	CHTAG TABLE NOT EXHAUSTED.	F3B12850
07165	0	76000	0	00143		PSE	99	END OF CHTAG TABLE. RESTORE IN	F3B12860
07166	-0	53400	4	07230		LXD	C,4	DICATOR AND LINKAGE	F3B12870
07167	0	02000	4	00001		TRA	1,4	RETURN	F3B12880
							THE ROUTINE FOR COMPILING THE OPEN SUBROUTINES DIMAND XDIM		F3B12890
07170	0	76000	0	00144	XDIM	PSE	100	TURN ON SENSE LIGHT 100 FOR XDIM	F3B12900
07171	0	07400	4	07146	DIM	TSX	TEARG1,4	TEST NO. OF ARGS SPECIFIED	F3B12910
07172	0	07400	4	07154		TSX	ARGTAG,4	TEST WHETHER FIRST ARG. IS TAGGED	F3B12920
07173	1	77774	1	07174		TXI	01,1,-4	INDEX COMPAIL RECORD TO BEG. OF NEXT REC.	F3B12930
07174	0	07400	4	07136	01	TSX	TEST,4	TEST FOR END OF CURRENT AIL RECORD	F3B12940
07175	0	07400	4	07152		TSX	TEARG2,4	TEST NO. OF ARGS. SPECIFIED	F3B12950
07176	0	07400	4	00707		TSX	CIT00,4	COMPILE FIRST INST. FOR DIM AND XDIM	F3B12960
07177	0	00000	0	02322		HTR	M1CW	LOCATION (1ST WD)	F3B12970
07200	0	00000	0	02215		HTR	L(CLA)	CLA(2ND WD.)	F3B12980
07201	0	00000	0	02324		HTR	M1CW+2	FIRST ARG (3RD WD)	F3B12990
07202	0	00000	0	02325		HTR	M1CW+3	REL. ADD END TAG OF 1ST ARG (4TH WD)	F3B13000
07203	0	07400	4	07154		TSX	ARGTAG,4	TEST WHETHER 2ND. ARG TAGGED ETC.	F3B13010
07204	-0	50000	0	07231		CAL	L(SUB)	PREPARE OP. WD (2ND WD) OF 2ND AIL	F3B13020
07205	-0	76000	0	00144		MSE	100	ENTRY. OP. IS SUB. FOR XDIM	F3B13030
07206	-0	50000	0	07232		CAL	L(FSB)	FSB FOR DIM	F3B13040
07207	0	60200	0	02323		SLW	M1CW+1		F3B13050
07210	0	07400	4	00707		TSX	CIT00,4	COMPILE 2ND INST FOR DIM OR XDIH	F3B13060
07211	0	00000	0	02170		HTR	L(0)	0 (1ST WD)	F3B13070
07212	0	00000	0	02323		HTR	M1CW+1	SUB(XDIH), FSB(DIM) (2ND. WD)	F3B13080
07213	0	00000	0	02324		HTR	M1CW+2	2ND. ARG (3RD WD)	F3B13090
07214	0	00000	0	02325		HTR	M1CW+3	REL. ADD AND TAG OF 2ND ARG (4TH WD)	F3B13100
07215	0	07400	4	00707		TSX	CIT00,4	COMPILE 3RD INST FOR DIM AND XDIM	F3B13110
07216	0	00000	0	02170		HTR	L(0)	0(1ST WD)	F3B13120
07217	0	00000	0	07233		HTR	L(TPL)	TPL(2ND WD)	F3B13130
07220	0	00000	0	02245		HTR	L(017)	OCT. 17 IN BITS S-5	F3B13140
07221	0	00000	0	02177		HTR	L(2D)	REL. ADD 2, TAG 0 (4TH WD)	F3B13150
07222	0	07400	4	00707		TSX	CIT00,4	COMPILE LAST INST FOR DIH AND XD)M	F3B13160
07223	0	00000	0	02170		HTR	L(0)	0 (1STWD)	F3B13170
07224	0	00000	0	07234		HTR	L(PXD)	PXD (2ND WD)	F3B13180
07225	0	00000	0	02170		HTR	L(0)	0 (3RD WD)	F3B13190
07226	0	00000	0	02170		HTR	L(0)	0 (4TH WD)	F3B13200
07227	1	77774	1	00774		TXI	RESUME,1,-4	INDEX CUR AIL RECORD TO BEGINNING	F3B13210
								OF NEXT 4WD INST AND RETURN TO MAIN PROG	F3B13220
								CONSTANTS AND ERASIBLE STORAGE FOR FOUR	F3B13230

SUBROUTINES USED IN COMPILING OPEN SUBROUTINES										F3B13240	
A	07230	0	00000	0	00000	C	HTR				F3B13250
					77776	M1D2L	EQU	-2			F3B13260
									THE 2S COMPL OF THE LENGTH OF		F3B13270
									M1D2. THIS CARD MUST BE CHANGED WHEN		F3B13280
									ADDITIONS TO M1D2 ARE MADE		F3B13290
					02170	L(0)	SYN	1144			F3B13291
					01306	M13505	SYN	710			F3B13292
					02312	CCELL	SYN	1226			F3B13293
					02305	M1ALWN	SYN	1221			F3B13294
					00341	M10210	SYN	225			F3B13295
					02327	AIL	SYN	1239			F3B13300
					02211	ALLONE	SYN	1161			F3B13301
					02155	ERROR1	SYN	1133			F3B13302
					02163	ERROR2	SYN	1139			F3B13303
					02322	M1CW	SYN	1234			F3B13304
					02207	TGMSK	SYN	1159			F3B13305
					01016	M12500	SYN	526			F3B13310
									CONSTANS USED IN COMPILING THE OPEN SUBRTNS. XDIM AND DIM		F3B13320
					00707	CIT00	SYN	455			F3B13330
					02215	L(CLA)	SYN	1165			F3B13340
	07231	626422000000				L(SUB)	BCD	1SUB000			F3B13350
	07232	266222000000				L(FSB)	BCD	1FSB000			F3B13360
	07233	634743000000				L(TPL)	BCD	1TPL000			F3B13370
	07234	476724000000				L(PXD)	BCD	1PXD000			F3B13380
					02245	L(017)	SYN	1189			F3B13390
					02177	L(2D)	SYN	1151			F3B13400
					00774	RESUME	SYN	508			F3B13401
	07235	0	40200	0	02211	SUBPAT	SUB	ALLONE			F3B13402
	07236	0	10000	4	00001		TZE	1,4			F3B13403
	07237	0	02000	0	02163		TRA	ERROR2			F3B13414
A	07240	0	00000	0	00000	R00M	HTR	SPACE FROM ROOM MAY BE USED FOR ADD. OPEN SUB. COMPILATION			
					07071		END	3641			

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	140	0	0	0	0
LIB	0	0	0	0	0
COL	140	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 149

NUMBER OF SYMBOLS, DEF 37,DEFOP 0,UNDEF 0
 REM MASTER RECORD CARD = FN056

MASTER RECORD CARD = FN056

					THE FOLLOWING PROGRAM CONSTITUTES THE FIRST SECTION OF THE	F3B00010
					MERGE. IT PERFORMS THE INITIAL MERGE OF THE AIL FILE AND THE	F3B00020
					DO FILE OF COMPILED INSTRUCTIONS. IN ADDITION TO MERGING	F3B00030
					THESE TWO FILES, IT INSERTS THE ARITHMETIC OPEN SUBROUTINES	F3B00040
					IN THEIR CORRECT POSITION IN THE FILE OF COMPILED INSTRUCT-	F3B00050
					IONS AND EFFECTS APPROPRIATE GENERALIZED TAG CHANGES IN AIL	F3B00060
					FILE INSTRUCTIONS	F3B00070
	00030			ORG 24		F3B00080
					TAPE POSITIONING TO READ FORTAG INTO CORE STORAGE	F3B00090
00030	0	53400	1	02164	LXA MLECTR,1 LOAD 5 INTO IRA TP RD ERROR CTR.	F3B00100
00031	0	76200	0	00222	M10000 RDS 146 READ BINARY TAPE 2 WITH FORTAG TBL	F3B00110
00032	0	70000	0	05737	CPY ERAS THE 7TH RECORD OF 5TH FILE WHICH IS	F3B00120
00033	0	07400	2	00064	TSX M10043,2 THE TAPE TABLES HAVING 11 RECORDS.	F3B00130
00034	0	76100	0	00031	NOP M10000 TAPE 2 STANDS AT DOTAGB RECORD	F3B00140
00035	-0	53400	1	05737	LXD ERAS,1 COUNT FILE. TAPE 2 BACKSPACED NO.	F3B00150
00036	1	00007	1	00037	TXI M10010,1,7 RECORDS IN DOTAGB PLUS 7 TO START FORTAG,	F3B00160
00037	0	76400	0	00222	M10010 BST 146	F3B00170
00040	2	00001	1	00037	TIX M10010,1,1	F3B00180
					READ FORTAG INTO CORE STORAGE	F3B00190
00041	-0	76000	0	00012	RTT TURN-OFF TAPE INDICATOR,	F3B00200
00042	0	76100	0	00000	NOP IF 00.	F3B00210
00043	0	53400	1	02164	LXA MLECTR,1 LOAD 5 INTO IRA TP RD ERROR CTR.	F3B00220
00044	0	76200	0	00222	M10020 RDS 146 READ TAPE 2 POSITIONED AT FORTAG TBL	F3B00230
00045	0	70000	0	02326	CPY FORTAG-1 AND TEST FIRST WORD TO GUARANTEE	F3B00240
00046	0	50000	0	02326	CLA FORTAG-1 BEGINNING OF FORTAG TABLE.	F3B00250
00047	0	40200	0	02174	SUB M1CON+4 FORTAG IS TABLE NO. 4.	F3B00260
00050	0	10000	0	00052	TZE M10030 TABLE NO. IS FIRST WORD OF TAPE TABLES.	F3B00270
00051	0	07400	4	00004	TSX 4,4 WRONG TABLE. IS NOT FORTAG.	F3B00280
00052	0	70000	0	02326	M10030 CPY FORTAG-1 READ 2ND FORTAG TABLE WORD AND TEST	F3B00290
00053	0	50000	0	02326	CLA FORTAG-1 THERE ARE FORTAG ENTRIES.	F3B00300
00054	0	10000	0	00061	TZE M10040 FORTAG TABLE ENTRIES ARE 1 WORD.	F3B00310
00055	0	53400	2	02170	LXA M1CON,2 LOAD 0 INTO INDEX REG. B.	F3B00320
00056	0	70000	2	02327	M10035 CPY FORTAG,2 READ 3RD AND SUCCEEDING WORDS	F3B00330
00057	1	77777	2	00056	TXI M10035,2,-1 OF FORTAG INTO CONSEC. LOCATIONS.	F3B00340
00060	0	07400	4	00004	TSX 4,4 EOF SKIP. FORTAG NOT LAST REC. OF FILE.	F3B00350
00061	0	07400	2	00064	M10040 TSX M10043,2 TEST IF TAPE READ CORRECTLY.	F3B00360
00062	0	76100	0	00044	NOP M10020 RE-READ TAPE LOCATION.	F3B00370
00063	0	02000	0	00075	TRA M10050 CONTINUE IN MAIN PROGRAM.	F3B00380
00064	0	76600	0	00333	M10043 WRS 219 DELAY 704 FOR RTT TEST.	F3B00390
00065	-0	76000	0	00012	RTT	F3B00400
00066	0	02000	0	00070	TRA M10045 TO TAPE READ ERROR ROUTINE.	F3B00410
00067	0	02000	2	00002	TRA 2,2 TAPE 2 READ CORRECTLY. RETURN MAIN RTN,	F3B00420
00070	0	50000	2	00001	M10045 CLA 1,2 TAPE READ ERROR RTN. INITIALIZE	F3B00430
00071	0	62100	0	00073	STA M10048 TIX ADDRESS TO RETURN TO PROPER	F3B00440
00072	0	76400	0	00222	BST 146 RE-READ TAPE LOCATION.	F3B00450
00073	2	00001	1	00000	M10048 TIX 0,1,1	F3B00460
00074	0	07400	4	00004	TSX 4,4 BINARY READ 5 TIMES UNSUCCESSFULLY	F3B00470
					POSITIONING OF TAPE 2, TAPE 3, TAPE 4, TO READ COMPAIL	F3B00480
					WRITE MERGE 1, AND READ DO FILE, RESP.	F3B00490
00075	0	77200	0	00223	M10050 REW 147 REWIND TAPE 3 TO WRITE MERGE 1.	F3B00500
00076	0	77200	0	00224	REW 148 REWIND TAPE 4 FOR COMPDO FILE.	F3B00510
00077	0	76200	0	00224	RDS 148 SPACE OVER TRALEV THE 1ST FILE ON	F3B00520
00100	0	70000	0	05737	M10055 CPY ERAS TAPE 4 TO GET TO FIRST RECORD	F3800530

00101	0	02000	0	00100	TRA M10055	OF COMPDO FILE.	F3B00540
00102	0	02000	0	00104	TRA M10060	END OF TRALEV FILE.	F3800550
00103	0	02000	0	00077	TRA M10055-1	SPACE OVER NEXT TRALEV RECORD.	F3B00560
00104	0	53400	2	02170	M10060 LXI M1CON,2	LOAD 0 INTO IRB.	F3B00570
00105	1	00021	2	00106	TXI M10060+2,2,17		F3B00580
00106	0	76400	0	00222	BST 146	BACKSPACE BINARY TAPE 2 BY	F3B00590
00107	2	00001	2	00106	TIX M10060+2,2,1	13 RECORDS TO POSITIDN TAPE 2	F3B00600
00110	0	53400	1	02164	LXA M1ECTR,1	TO READ COMPAIL RECORD COUNT FILE.	F3B00610
00111	0	76200	0	00222	M10063 RDS 146		F3B00620
00112	0	70000	0	05737	CPY ERAS		F3B00630
00113	0	07400	2	00064	TSX M10043,2		F3B00640
00114	0	76100	0	00111	NOP M10063	BACKSPACE TAPE 2 OVER COMPAIL	F3B00650
00115	0	53400	2	05737	LXA ERAS,2	RECORD COUNT, A EOF MARK, AND	F3B00660
00116	1	00002	2	00117	TXI M10070,2,2	OVER COMPAIL RECORDS	F3B00670
00117	0	76400	0	00222	M10070 BST 146	TO POSITION TAPE 2 TO FIRST	F3B00680
00120	2	00001	2	00117	TIX M10070,2,1	RECORD OF COMPAIL FILE.	F3B00690
00121	-0	76000	0	00141	MSE 97	TURN-OFF SENSE LIGHTS 1,3, AND 4.	F3B00700
00122	0	76100	0	00000	NOP	SENSE LIGHT 2 USED BY SEC. 2	F3B00710
00123	-0	76000	0	00143	MSE 99	TO INDICATE TO SEC. 3 THERE	F3B00720
00124	0	76100	0	00000	NOP	ARE NO COMPDO INSTR IF	F3B00730
00125	-0	76000	0	00144	MSE 100	LIGHT 2 IS ON.	F3B00740
00126	0	76100	0	00000	NOP		F3B00750
					CHANGE TAG TABLE EDIT		F3B00760
00127	0	53400	4	02164	PEC00 LXI M1ECTR,4	LOAD 5 INTO IRC DR RD ERROR CTR.	F3B00770
00130	0	76200	0	00303	PEC01 RDS 195	UNEDITED CHTG TABLE ON LOG OR 3.	F3B00780
00131	0	46000	0	02170	LDA M1CON	0=DR ORG UCHTG - 2	F3B00790
00132	0	70000	0	05737	CPY ERAS	TABLE LENGTH TO ERAS	F3B00800
00133	0	70000	0	05740	CPY ERAS+1	CHECK SUM INTO ERAS+1.	F3B00810
00134	-0	50000	0	05737	CAL ERAS	CHECK DRUM READ	F3B00820
00135	0	40200	0	05740	SUB ERAS+1	TEST IF TABLE LENGTH READ	F3B00830
00136	0	10000	0	00141	TZE PEC02	CORRECTLY FROM DRUM 3.	F3B00840
00137	2	00001	4	00130	TIX PEC01,4,1	READ DRUM 5 TIMES IF LENGTH WRONG.	F3B00850
00140	0	07400	4	00004	TSX 4,4	DRUM READ 5 TIMES UNSUCCESSFULLY.	F3B00860
00141	0	53400	4	02164	PEC02 LXI M1ECTR,4	LOAD 5 INTO IRC DR RD ERROR CTR.	F3B00870
00142	0	50000	0	05737	PEC03 CLA ERAS	TEST IF THERE ARE ANY ENTRIES	F3B00880
00143	0	10000	0	00235	TZE PEC20	IN CHG TAG TABLE.	F3B00890
00144	0	73400	3	00000	PAX 0,3	UNEDITED TABLE LENGTH TO IRA, IRB	F3B00900
00145	0	40200	0	00154	SUB PEC05	COMPUTE CORE ADDRESS INTO WHICH	F3B00910
00146	0	62100	0	00151	STA PEC04	CHG TAG TABLE ENTRIES TO BE	F3B00920
00147	0	76200	0	00303	RDS 195	READ PLUS TABLE LENGTH FOR TIX OPER.	F3B00930
00150	0	46000	0	02172	LDA M1CON+2	DRUM READ ADDRESS OF 2.	F3B00940
00151	0	70000	1	00000	PEC04 CPY 0,1	READ CHG TAG TABLE INTO UCHTG BLOCK	F3B00950
00152	2	00001	1	00151	TIX PEC04,1,1		F3B00960
00153	0	53400	1	02170	LXA M1CON,1	LOAD 0 INTO IRA.	F3B00970
00154	-0	50000	1	05263	PEC05 CAL UCHTG,1	UNEDITED CHG TAG TABLE ENTRIES CONSIST	F3B00980
00155	0	36100	1	05264	ACL UCHTG+1,1	OF 3 WORDS. TEST LOG SUM OF	F3B00990
00156	0	40200	1	05265	SUB UCHTG+2,1	2 WORDS EQUALS DRUM CHECK	F3B01000
00157	0	10000	0	00162	TZE PEC06	SUM FOR THE ENTRY.	F3B01010
00160	2	00001	4	00142	TIX PEC03,4,1	DRUM READ ERROR. TRY 5 TIMES.	F3B01020
00161	0	07400	4	00004	TSX 4,4	DRUM READ 5 TIMES UNSUCCESSFULLT.	F3B01030
00162	1	77775	1	00163	PEC06 TXI PEC07,1,-3	MODIFY TABLE ADDR FOR NEXT 3 WORDS.	F3B01040
00163	2	00003	2	00154	PEC07 TIX PEC05,2,3	TEST FOR END CHG TAG BLOCK	F3B01050
					BEGIN EDIT OF UCHTG		F3B01060
00164	0	53400	3	02170	PEC10 LXI M1CON,3	LOAD 0 INTO IRA, IRB	F3B01070

	00165	0	50000	0	05740		CLA ERAS+1	PUT UCHTG TABLE LENGTH IN ADDRESS AND	F3B01080
	00166	-0	50100	0	02326		ORA FORTAG-1	FORTAG TABLE LENGTH IN DECREMENT	F3B01090
	00167	0	76000	0	00006		COM 0	PORTIONS OF ACCUM.	F3B01100
	00170	0	40000	0	02212		ADD M1CON+18	OBTAIN 25 COMP OF FORTAG	F3B01110
	00171	0	62200	0	00213		STD PEC16	LENGTH AND UCHTG LENGTH AND	F3B01120
	00172	0	76700	0	00022		ALS 18	STORE IN DEC OF TEST INST.	F3B01130
	00173	0	62200	0	00211		STD PEC14		F3B01140
	00174	0	50000	1	02327	PEC11	CLA FORTAG,1	SUCCESSIVE DUPLICATES IN	F3B01150
	00175	0	34000	1	02330		CAS FORTAG+1,1	FORTAG TABLE NOT COMPARED TO	F3B01160
	00176	0	02000	0	00200		TRA PEC12	UCHTG TABLE ENTRIES.	F3801170
	00177	1	77777	1	00174		TXI PEC11,1,-1	IRA KEEPS TRACK OF FORTAG ENTRIES.	F3B01180
	00200	0	76700	0	00022	PEC12	ALS 18	IRC KEEPS TRACK OF UCHTG ENTRIES.	F3B01190
	00201	0	60100	0	05737		STO ERAS	MOVE TAG OF CURRENT FORTAG ENTRY	F3B01200
	00202	0	53400	4	02170		LXA M1CON,4	INTO DECREMENT AND COMPARE WITH	F3B01210
	00203	0	50000	4	05264	PEC13	CLA UCHTG+1,4	TAG1 IN DECREMENT OF UCHTG	F3B01220
	00204	-0	32000	0	02205		ANA M1CON+13	ENTRIES. IF TAGS ARE EQUAL,	F3B01230
	00205	0	34000	0	05737		CAS ERAS	TEST FORTAG INTERNAL	F3B01240
	00206	1	77775	4	00211		TXI PEC14,4,-3	FORMULA LIES WITHIN RANGE	F3B01250
	00207	0	02000	0	00243		TRA PEC30	GIVEN IN FIRST WORD	F3B01260
	00210	1	77775	4	00211		TXI PEC14,4,-3	OF UCHTG ENTRY.	F3B01270
D	00211	3	00000	4	00203	PEC14	TXH PEC13,4	2S COMP OF UCHTG LENGTH IN DECREMENT.	F3B01280
	00212	1	77777	1	00213	PEC15	TXI PEC16,1,-1	END OF UCHTG TABLE.	F3B01290
D	00213	3	00000	1	00174	PEC16	TXH PEC11,1	2S COMP OF FORTAG LENGTH IN DECREMENT.	F3B01300
							END OF EDIT, COMPUTE CHTGE2		F3B01310
	00214	-0	75400	2	00000	PEC17	PXD 0,2	END OF FORTAG TABLE.	F3B01320
	00215	0	60100	0	02274		STO CHTGL	SAVE VALUE OF IRB FROM	F3B01330
	00216	0	50000	0	02170		CLA M1CON	EDIT CHG TAG TABLE ROUTINE	F3B01340
	00217	0	60100	0	02275		STO CHTGE1	AS TABLE LENGTH CONTROL	F3B01350
	00220	0	53400	4	02170		LXA M1CON,4	WORD FOR CHANGE TAG TABLE	F3B01360
	00221	0	50000	4	05741		CLA CHTG,4	SEARCH ROUTINE AT M12500.	F3B01370
	00222	0	60100	0	02277		STO CHTGFN	CALCULATE NUMBER OF ENTRIES	F3B01380
	00223	1	77776	4	00224	PEC18	TXI PEC18+1,4,-2	IN EDITED CHG TAG TABLE WITH	F3B01390
	00224	-0	75400	4	00000		PXD 0,4	SAME INTERNAL FORMULA	F3B01400
	00225	0	40200	0	02274		SUB CHTGL	NUMBER AND RECORD IN	F3B01410
	00226	0	10000	0	00232		TZE PEC19	CONTROL WORDS CHTGE1 AND CHTGE2	F3B01420
	00227	0	50000	4	05741		CLA CHTG,4	TO PREVENT SEARCHING ENTIRE	F3B01430
	00230	0	40200	0	02277		SUB CHTGFN	EDITED CHG TAG TABLE IN	F3B01440
	00231	0	10000	0	00223		TZE PEC18	SEARCH AT M12500.	F3B01450
	00232	-0	75400	4	00000	PEC19	PXD 0,4		F3B01460
	00233	0	60100	0	02276		STO CHTGE2		F3B01470
	00234	0	02000	0	00271		TRA RSTO00		F3B01480
							ROUTINE FOR EMPTY UCHTG TABLE		F3B01490
	00235	0	50000	0	02170	PEC20	CLA M1CON	PLACE ZEROS INTO 3 CONTROL	F3B01500
	00236	0	60100	0	02274		STO CHTGL	WORDS FOR CHANGE TAG TABLE SEARCH	F3B01510
	00237	0	60100	0	02275		STO CHTGE1	ROUTINE TO INDICATE NO ENTRIES	F3801520
	00240	0	60100	0	02276		STO CHTGE2	IN EDITED CHG TAG TABLE.	F3801530
	00241	0	76000	0	00143		PSE 99	SENSE LIGHT 3 TURNED ON TO INDICATE	F3B01540
	00242	0	02000	0	00271		TRA RSTO00	NO ENTRIES IN EDITED CHG TAG TABLE	F3B01550
							SEARCH FOR INT FMLA NO OF CUR. FORTAG ENTRY IN UCHTG		F3B01560
	00243	0	50000	1	02327	PEC30	CLA FORTAG,1	TAG OF FORTAG ENTRY EQUAL	F3B01570
	00244	-0	32000	0	02205		ANA M1CON+13	TO TAG1 OF UCHTG ENTRY.	F3B01580
	00245	0	60100	0	02273		STO COMBOX	TEST FORTAG INTERNAL FORMULA	F3B01590
	00246	0	50000	4	05263		CLA UCHTG,4	NUMBER LIES WITHIN RANGE	F3B01600
	00247	-0	32000	0	02205		ANA M1CON+13	GIVEN IN FIRST WORD OF UCHTG	F3B01610

00250	0	34000	0	02273	CAS COMBOX	ENTRY. IF RANGE CONDITION IS	F3B01620
00251	1	77775	4	00211	TXI PEC14,4,-3	SATISFIED, PRODUCE ENTRY	F3B01630
00252	1	77775	4	00211	TXI PEC14,4,-3	FOR EDITED CHG TAG TABLE.	F3B01640
00253	0	50000	4	05263	CLA UCHTG,4	EDITED CHG TAG ENTRY CONSISTS	F3B01650
00254	0	76700	0	00026	ALS 22	OF 2 WORDS. FIRST WORD HAS	F3B01660
00255	0	77100	0	00004	ARS 4	INTERNAL FORMULA NUMBER	F3B01670
00256	0	34000	0	02273	CAS COMBOX	IN DECREMENT AND ZEROS IN	F3B01680
00257	0	02000	0	00262	TRA PEC31	ADDRESS. SECOND WORD HAS	F3B01690
00260	0	02000	0	00262	TRA PEC31	TAG1 IN DECREMENT AND TAG2	F3B01700
00261	1	77775	4	00211	TXI PEC14,4,-3	IN ADDRESS TAKEN FROM 2ND	F3801710
00262	0	50000	0	02273	PEC31 CLA COMBOX	WORD OF UCHTG ENTRY. CONTINUE	F3B01720
00263	0	60100	2	05741	STO CHTG,2	WITH FORTAG AND UCHTG TAG	F3B01730
00264	0	50000	4	05264	CLA UCHTG+1,4	COMPARISON LOOP UNTIL FORTAG	F3B01740
00265	0	60100	2	05742	STO CHTG+1,2	TABLE EXHAUSTED.	F3B01750
00266	1	77776	2	00267	TXI PEC32,2,-2		F3B01760
00267	3	76646	2	00212	PEC32 TXH PEC15,2,-602	CHTG BLOCK EXCEEDS ALLOCATED 600 WORDS	F3B01770
00270	0	07400	4	00004	TSX 4,4	CHTG BLOCK EXCEEDS ALLOCATED 600 WORDS.	F3B01780
					SXTX TABLE READ	ROUTINE	F3B01790
00271	-0	76000	0	00142	RSTO00 MSE 98	TEST IF DO FILE EMPTY.	F3B01800
00272	0	02000	0	00274	TRA RSTO05-1	SENSE LIGHT 2 ON INDICATES	F3801810
00273	0	02000	0	00340	TRA M10200	NO SXTX ENTRIES.	F3B01820
00274	0	53400	4	02164	LXA MLECTR,4	LOAD 5 INTO IRC DR RD ERROR CTR.	F3B01830
00275	0	76200	0	00301	RSTO05 RDS 193	SXDTX TABLE ON LOGICAL DRUM 1,	F3B01840
00276	0	46000	0	02213	LDA M1CON+19	STARTING AT LOCATION 202	F3B01850
00277	0	70000	0	05737	CPY ERAS	1ST WORD IS ORIGIN + 2+ TAB LENGTH.	F3801860
00300	0	70000	0	05740	CPY ERAS+1	2ND DR WD IS CK SUM FOR 1ST WD.	F3801870
00301	-0	50000	0	05737	CAL ERAS	SXDTX TABLE ENTRY HAS 3 WORDS.	F3801880
00302	0	40200	0	05740	SUB ERAS+1	THIRD WORD IS CHECK SUM.	F3B01890
00303	0	10000	0	00306	TZE RSTO20	TEST THAT FIRST 2 WORDS OFF	F3801900
00304	2	00001	4	00275	TIX RSTO05,4,1	DRUM READ CORRECTLY.	F3801910
00305	0	07400	4	00004	TSX 4,4	DRUM READ 5 TIMES UNSUCCESSFULLY.	F3B01920
00306	0	53400	4	02164	RSTO20 LXA MLECTR,4	LOAD 5 INTO IRC DR RD ERROR CTR	F3801930
00307	0	50000	0	05737	RSTO21 CLA ERAS	SUBTRACT ORIGIN+2 FROM FIRST	F3B01040
00310	0	40200	0	02214	SUB M1CON+20	WORD TO GET SXDTX TABLE LENGTH.	F3801950
00311	-0	10000	0	00314	TNZ RSTO30		F3801960
00312	0	60100	0	02300	STO SXTXL	STORE 0 AS SXDTX LENGTH IF NO	F3801970
00313	0	02000	0	00340	TRA M10200	ENTRIES AND GO TO READ AIL RTN.	F3801980
00314	0	60100	0	02300	RSTO30 STO SXTXL	STORE SXDTX LENGTH AND LOAD	F3B01990
00315	0	73400	3	00000	PAX 0,3	SXDTX LENGTH INTO IRA, IRB.	F3802000
00316	0	40200	0	00327	SUB RSTO40+3	CALC. ADDRESS TO READ IN SXTX TABLE.	F3802010
00317	0	62100	0	00324	STA RSTO40	INITIAL WORD OF TABLE IS	F3B02020
00320	0	62100	0	00466	STA M10305	FORTAG + 300. INITIALIZE	F3802030
00321	0	62100	0	00474	STA M10310+1	ADDRESSES FOR SXTX TABLE SEARCH.	F3802040
00322	0	76200	0	00301	RDS 193	READ SXTX ENTRIES FROM	F3802050
00323	0	46000	0	02214	LDA M1CON+20	DRUM 1, LOC. 204.	F3B02060
00324	0	70000	2	00000	RSTO40 CPY 0,2	CPY LOOP	F3B02070
00325	2	00001	2	00324	TIX RSTO40,2,1	SXTX TABLE LENGTH IN IRB.	F3802080
00326	0	53400	2	02170	LXA M1CON,2		F3B02090
00327	-0	50000	2	03003	CAL SXTX,2	TEST LOGICAL SUM OF 1ST TWO	F3802100
00330	0	36100	2	03004	ACL SXTX+1,2	WORDS EQUAL CHECK SUM IN 3RD	F3802110
00331	0	40200	2	03005	SUB SXTX+2,2	WORD FOR EACH SXTX ENTRY.	F3802120
00332	0	10000	0	00335	TZE RSTO60	PROGRAM AUTOMATICALLY TRIES	F3B02130
00333	2	00001	4	00307	TIX RSTO21,4,1	RE-READING DRUM 3 TIMES IF ERROR.	F3802140
00334	0	07400	4	00004	TSX 4,4	DRUM READ 5 TIMES UNSUCCESSFULLY.	F3B02150

00335	1	77775	2	00336	RSTO60	TXI	RSTO60+1,2,-3		F3B02160
00336	2	00003	1	00327		TIX	RSTO40+3,1,3	SXTX TABLE LENGTH IN 1RA,	F3B02170
00337	0	02000	0	00340		TRA	M10200	SXTX TABLE IN CORES SUCCESSFULLY.	F3B02180
								READ AIL, READ DO ROUTINES	F3B02190
00340	0	53400	4	02170	M10200	LXA	M1CON,4	0 IN IRC WHEN SKIPPING CLOSED SRTNS.	F3B02200
00341	0	50000	0	02171	M10210	CLA	M1CON+1	STORE 1 IN M1TRC, TP 2.	F3B02210
00342	0	60100	0	02306		STO	M1TRC	READ ERROR COUNTER.	F3B02220
00343	0	76200	0	00222	M10220	RDS	146	READ 1 RECORD OF AIL, THE 2ND	F3B02230
00344	0	53400	1	02170		LXA	M1CON,1	FILE ON TP 2 ALREADY POSITIONED.	F3B02240
00345	0	70000	1	02327	M10230	CPY	AIL,1	AIL REC. READ OVER FORTAG FILE.	F3B02250
00346	1	77777	1	00345		TXI	M10230,1,-1	IRA GIVES POSITION IN AIL RECORD.	F3B02260
00347	0	02000	0	00521		TRA	M10800	END OF AIL FILE.	F3B02270
00350	0	76600	0	00333		WRS	219	END OF AIL RECORD.	F3B02280
00351	-0	76000	0	00012		RTT			F3B02290
00352	0	02000	0	00501		TRA	M10700	REDUNDANCY WHEN READING TP 2.	F3B02300
00353	-0	63400	1	02305	M10240	SXD	M1ALWN,1	STORE 2S COMPL AIL WORD COUNT	F3B02310
00354	0	53400	1	02170		LXA	M1CON,1	IN CURRENT AIL REC, USUALLY 100	F3B02320
00355	-0	75400	4	00000		PXD	0,4	RD RTN ENTRY VIA TSX	F3B02330
00356	0	10000	0	00360		TZE	PAT1	ROUTINE TO SKIP OVER FORTRAN FUNCTIONS	F3B02340
00357	0	02000	4	00002	RET1	TRA	2,4	IRC VALUE SET BY TSX RETURN F FCN TEST	F3B02350
00360	-0	50000	1	02327	PAT1	CAL	AIL,1	A FORTRAN FCN, A CLOSED SUBRTN,	F3B02360
00361	-0	32000	1	02330		ANA	AIL+1,1	IS IDENTIFIED BY 4 WORDS	F3B02370
00362	-0	32000	1	02331		ANA	AIL+2,1	FILLED WITH 1 BITS.	F3B02380
00363	-0	32000	1	02332		ANA	AIL+3,1	TEST IF AIL ENTRY IS ALL 1 BITS,	F3B02390
00364	0	60200	0	05737		SLW	ERAS	INDICATES SUCCEEDING ENTRIES	F3B02400
00365	0	50000	0	05737		CLA	ERAS	BELONG TO A FORTRAN FCN AND	F3B02410
00366	0	40200	0	02211		SUB	M1CON+17	ARE SKIPPED OVER HERE.	F3B02420
00367	-0	10000	0	00410		TNZ	PAT5	AIL ENTRY NOT A FORTRAN FCN.	F3B02430
00370	0	50000	0	02176		CLA	M1CON+6	AIL ENTRY IS A FORTRAN FCN.	F3B02770
00371	0	62200	0	00411		STD	PAT5+1	STORE 1 IN DECRE. F FCN EXISTS.	F3B02450
00372	1	77774	1	00420		TXI	OUT34,1,-4	TO TEST IF LAST AIL INSTR OF BUFFER.	F3B02460
00373	-0	75400	1	00000	PAT2	PXD	0,1	COMPARE NO. CURRENT WORD OF	F3B02470
00374	0	34000	0	02305		CAS	M1ALWN	AIL REC WITH AIL REC COUNT	F3B02480
00375	0	02000	0	00400		TRA	PAT3	TO TEST IF LAST INSTR IN REC.	F3B02490
00376	0	07400	4	00341		TSX	M10210,4	READ NEXT AIL RECORD.	F3B02500
00377	0	07400	4	00004		TSX	4,4	WD COUNT-NOT EQUAL TO REC COUNT	F3B02510
00400	0	50000	1	02327	PAT3	CLA	AIL,1	TEST IF OPEN SUBRTN END,	F3B02520
00401	-0	10000	0	00403		TNZ	PAT4	BY 1S IN FIRST WORD OF ENTRY.	F3B02530
00402	1	77774	1	00373		TXI	PAT2,1,-4	0S IN 1ST WORD INDICATES F FCN ENTRY	F3B02540
00403	0	40200	0	02211	PAT4	SUB	M1CON+17	-377777777777.	F3B02550
00404	-0	10000	0	00410		TNZ	PAT5	1ST DESIRED AIL ENTRY FOUND	F3B02560
00405	-0	50000	1	02327		CAL	AIL,1	TEST IF CURRENT ENTRY	F3B02570
00406	-0	32000	1	02330		ANA	AIL+1,1	AN OPEN SUBRTN END OR	F3B02580
00407	0	02000	0	00412		TRA	OUT24	ANOTHER FORTRAN FCN.	F3B02590
00410	0	53400	4	02170	PAT5	LXA	M1CON,4		F3B02600
00411	-3	00000	0	00426		TXL	M10250	UNCON. TR TO READ IN DO RECORD.	F3B02610
00412	-0	32000	1	02331	OUT24	ANA	AIL+2,1	CONTINUATION OF TEST IF	F3B02620
00413	-0	32000	1	02332		ANA	AIL+3,1	CURRENT ENTRY F FCN OR	F3B02630
00414	0	76000	0	00006		COM		OPEN SUBRTN ENTRY.	F3B02640
00415	-0	32000	0	02211		ANA	M1CON+17	-377777777777.	F3B02650
00416	0	10000	0	00372		TZE	PAT2-1	ENTRY INDICATES F FCN.	F3B02660
00417	1	77774	1	00373		TXI	PAT2,1,-4	OPEN SUBRTN END.	F3B02670
00420	-0	75400	1	00000	OUT34	PXD	0,1	COMPARE NO. CURRENT WORD OF	F3B02680
00421	0	34000	0	02305		CAS	M1ALWN	AIL REC WITH AIL REC COUNT	F3B02690

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00422	0	02000	0	00425	TRA	OUT43	TO TEST IF LAST INSTR IN RECORD.	F3B02700
00423	0	07400	4	00341	OUT41	TSX M10210,4	READ NEXT AIL RECORD.	F3B02710
00424	0	07400	4	00004	TSX	4,4	WORD COUNT EXCEEDS TOTAL COUNT IN REC.	F3B02720
00425	1	77774	1	00373	OUT43	TXI PAT2,1,-4	ADD 4 IRA, AT LEAST 1 INSTR IN ROUTINE	F3B02730
00426	0	50000	0	02171	M10250	CLA M1CON+1	STORE 1 IN M1TRC, TP 2	F3B02740
00427	0	60100	0	02306	STO	M1TRC	READ ERROR COUNTER.	F3B02750
00430	0	76200	0	00224	M10260	RDS 148	READ 1 RECORD OF DO, THE 1ST	F3B02760
00431	0	53400	2	02170	LXA	M1CON,2	FILE ON TP 2 ALREADY POSITIONED.	F3B02770
00432	0	70000	2	02473	M10270	CPY DO,2	DO REC. READ 100 WDS BEYOND AIL.	F3B02780
00433	1	77777	2	00432	TXI	M10270,2,-1	IRB GIVES POSITION IN DO RECORD.	F3B02790
00434	0	02000	0	00531	TRA	M10850	TO END OF DO FILE RTN.	F3B02800
00435	0	76600	0	00333	WRS	219	TO END OF DO RECORD RTN.	F3B02810
00436	-0	76000	0	00012	RTT		IF DO FILE EMPTY, NO SXTX TABLE MADE.	F3B02820
00437	0	02000	0	00511	TRA	M10750	REDUNDANCY WHEN READING TP 2.	F3B02830
00440	-0	63400	2	02304	SXD	M1DOWN,2	STORE 2S COMPL DO WORD COUNT.	F3B02840
00441	0	50000	0	02300	CLA	SXTXL	TEST IF SXDTX TABLE EMPTY	F3B02850
00442	-0	10000	0	00445	TNZ	M10285-2	FROM STORED TABLE LENGTH.	F3B02860
00443	0	53400	2	02170	LXA	M1CON,2	NO SXTX ENTRIES, GO TO AIL AND DO	F3B02870
00444	0	02000	0	00454	TRA	M10290	COMPILATION ROUTINES.	F3B02880
00445	-0	63400	4	02302	SXD	CBOX,4	SAVE IRC FOR TSX TEST	F3B02890
00446	1	00004	2	00447	TXI	M10285,2,4	ADD 4 IRB GET 1ST WD LAST DO INSTR.	F3B02900
00447	0	50000	2	02474	M10285	CLA DO+1,2	TEST CURRENT DO INST AN SXD	F3B02910
00450	0	40200	0	02246	SUB	M1ABC+25	BY EXAMINING 2ND WORD OF INSTR.	F3B02920
00451	0	10000	0	00463	TZE	M10300	CURRENT INSTR IS SXD.	F3B02930
00452	3	00000	2	00446	TXH	M10285-1,2,0	IRB ZERO HEANS ALL DO ENTRIES	F3B02940
00453	-0	53400	4	02302	LXD	CBOX,4	IN BLOCK EXAMINED FOR SXD.	F3B02950
00454	-0	75400	4	00000	M10290	PXD 0,4	IRC NOT ZERO AFTER 1ST DO REC	F3B02960
00455	0	10000	0	00457	TZE	M10295	IN CORES. IRC PERMITS RE-ENTRY	F3B02970
00456	0	02000	4	00002	TRA	2,4	VIA TSX TO DO + AIL CMP RTN	F3B02980
00457	-0	76000	0	00141	M10295	MSE 97	TEST IF END AIL FILE.	F3B02990
00460	0	02000	0	00626	TRA	M11010	TO COMPARE AIL + DO FMLA NOS.	F3B03000
00461	0	76000	0	00141	PSE	97	SENSE LIGHT 1 ON IF AIL EOF.	F3B03010
00462	0	02000	0	00636	TRA	M11030	TO COMPILE DO INSTR.	F3B03020
00463	0	50000	2	02475	M10300	CLA DO+2,2	SEARCH SXTX TABLE FOR ENTRY	F3B03030
00464	0	60100	0	02301	STO	SXLOC	EQUAL TO ADDR PORTION GIVEN IN	F3B03040
00465	0	53400	4	02300	LXA	SXTXL,4	3RD WD CURRENT SXD DO INSTR.	F3B03050
00466	0	50000	4	00000	M10305	CLA 0,4	ADDR SXTX ORGIN PLUS LENGTH	F3B03060
00467	0	40200	0	02301	SUB	SXLOC		F3B03070
00470	0	10000	0	00473	TZE	M10310	SXTX ENTRY CORR TO SXD FOUND.	F3B03080
00471	2	00003	4	00466	TIX	M10305,4,3		F3B03090
00472	0	02000	0	00452	TRA	M10285+3	NO SXTX ENTRY CORR TO SXD FOUND.	F3B03100
00473	2	00001	4	00474	M10310	TIX M10310+1,4,1	ROUTINE PUT 2ND WORD SXTX	F3B03110
00474	0	50000	4	00000	CLA	0,4	TABLE ENTRY INTO ADDRESS WD	F3B03120
00475	0	60100	2	02475	STO	DO+2,2	CURRENT SXD DO INSTR.	F3B03130
00476	0	50000	0	02170	CLA	M1CON	CHANGE SXD FMLA NO. TO	F3B03140
00477	0	60100	2	02473	STO	DO,2	ZEROS IN DO RECORD BUFFER.	F3B03150
00500	0	02000	0	00452	TRA	M10285+3	TO CONTINUE SXD SEARCH OF DO REC.	F3B03160
						ERROR ROUTINES,	END OF FILE ROUTINES	F3B03170
00501	0	50000	0	02306	M10700	CLA M1TRC	REDUNDANCY CHECK READING	F3B03180
00502	0	40200	0	02164	SUB	M1ECTR	AIL RECORD. TEST IF	F3B03190
00503	0	10000	0	00510	TZE	M1EATC	TAPE 2 READ ALREADY 5	F3B03200
00504	0	40000	0	02165	ADD	M1ECTR+1	TIMES. IF NOT, INCREASE	F3B03210
00505	0	60100	0	02306	STO	M1TRC	COUNT BY 1 IN TAPE READ	F3B03220
00506	0	76400	0	00222	M10705	BST 146	COUNTER AND READ AIL	F3B03230

00507	0	02000	0	00343	TRA	M10220	RECORD AGAIN.	F3B03240
00510	0	07400	4	00004	M1EATC	TSX 4,4	AIL REC. READ 5 TIMES UNSUCCESSFULLY.	F3B03250
00511	0	50000	0	02306	M10750	CLA M1TRC	REDUNDANCY CHECK READING	F3B03260
00512	0	40200	0	02164		SUB M1ECTR	DO RECORD. TEST IF	F3B03270
00513	0	10000	0	00520		TZE M1EDTC	TAPE 2 READ ALREADY 5	F3B03280
00514	0	40000	0	02165		ADD M1ECTR+1	TIMES. IF NOT, INCREASE	F3B03290
00515	0	60100	0	02306		STO M1TRC	COUNT BY 1 IN TAPE READ	F3B03300
00516	0	76400	0	00224	M10755	BST 148	COUNTER AND READ DO	F3B03310
00517	0	02000	0	00430		TRA M10260	RECORD AGAIN	F3B03320
00520	0	07400	4	00004	M1EDTC	TSX 4,4	DO REC. READ 5 TIMES UNSUCCESSFULLY,	F3B03330
00521	0	76000	0	00141	M10800	PSE 97	END OF FILE FOR AIL ROUTINE.	F3B03340
00522	-0	76000	0	00142		MSE 98	TURN SENSE LIGHT 1 ON FOR AIL	F3B03350
00523	0	02000	0	00526		TRA M10810	EOF AND TEST IF ENTRIES IN SXTX TBL	F3B03360
00524	0	76000	0	00142		PSE 98	BY LIGHT 2 ON.	F3B03370
00525	0	02000	0	00536		TRA M10900	TO WR ON TP 3 INSTR IN BUFFER.	F3B03380
00526	-0	75400	4	00000	M10810	PXD 0,4	IRC ZERO IF DO FILE NOT READ YET.	F3B03390
00527	0	10000	0	00426		TZE M10250	TO READ DO FILE RECORD.	F3B03400
00530	0	02000	0	00636		TRA M11030	TO COMPILE DO INSTRUCTIONS.	F3B03410
00531	0	76000	0	00142	M10850	PSE 98	END OF FILE FOR DO ROUTINE.	F3B03420
00532	-0	76000	0	00141		MSE 97	TURN SENSE LIGHT 2 ON FOR DO	F3B03430
00533	0	02000	0	00751		TRA M12000	EOF AND TEST IF AIL AT EOF.	F3B03440
00534	0	76000	0	00141		PSE 97		F3B03450
00535	0	02000	0	00536		TRA M10900		F3B03460
						M1 TERMINAL ROUTINE		F3B03470
00536	0	76600	0	00223	M10900	WRS 147	ROUTINE WR ON TP 3 INSTR REMAINING	F3B03480
00537	-0	53400	2	02317		LXD BBOX,2	IN CIB BUFFER FROM CIT.	F3B03490
00540	0	76000	0	00140		PSE 96	TURN-OFF ALL SENSE LIGHTS.	F3B03500
00541	0	70000	1	02637	M10910	CPY CIB,1		F3B03510
00542	1	77777	1	00543		TXI M10920,1,-1		F3B03520
00543	1	00001	2	00544	M10920	TXI M10920+1,2,1	IRB 2S COMP NO WORDS CIB BUFFER.	F3B03530
00544	3	00001	2	00541		TXH M10910,2,1		F3B03540
00545	0	77000	0	00223	M10930	WEF 147	WR FORTRAN FCNS 2ND FILE TP 3.	F3B03550
00546	-0	53400	2	00411	PAT10	LXD PAT5+1,2	WRITE FORTRAN FCNS AS 2ND FILE ON TAPE 3.	F3B03560
00547	3	00000	2	00553		TXH PAT12,2,0	1 IN DECREMENT IF F FCNS IN AIL FILE.	F3B03570
00550	0	77000	0	00223	PAT11	WEF 147	WR 2ND TAPE MARK ON TP 3 FOR MERGE 1 END.	F3B03580
00551	0	76200	0	00221		RTB 1	SPACE OVER DIAGNOSTIC RECORD.	F3B03590
00552	0	02000	0	00004		TRA 4	TO READ IN MERGE 2.	F3B03600
00553	-0	63400	1	02166	PAT12	SXD M1ECTR+2,1		F3B03610
00554	-0	63400	2	02167		SXD M1ECTR+3,2		F3B03620
00555	0	53400	1	02164		LXA M1ECTR,1	LOAD 5 INTO IRC TP RD ERROR CTR.	F3B03630
00556	0	76200	0	00222		RDS 146	READ AIL RECORD COUNT, THE	F3B03640
00557	0	70000	0	05737		CPY ERAS	NEXT FILE AFTER AIL EOF	F3B03650
00560	0	07400	2	00064		TSX M10043,2	TO BACKSPACE TP 2 TO	F3B03660
00561	0	76100	0	00556		NOP PAT12+3	START OF AIL FILE TO GET	F3B03670
00562	-0	53400	1	02166		LXD M1ECTR+2,1	F FCNS AT BEGINNING OF COMPAIL FILE.	F3B03680
00563	-0	53400	2	02167		LXD M1ECTR+3,2		F3B03690
00564	0	53400	2	05737		LXA ERAS,2		F3B03700
00565	1	00002	2	00566		TXI PAT13,2,2		F3B03710
00566	0	76400	0	00222	PAT13	BST 146		F3B03720
00567	2	00001	2	00566		TIX PAT13,2,1		F3B03730
00570	0	76000	0	00142		PSE 98	PUT LIGHT 2 ON FOR DO EOF.	F3B03740
00571	0	76000	0	00143		PSE 99	PUT LIGHT 3 ON FOR NO CHTG TBL.	F3B03750
00572	0	50000	0	02170		CLA M1CON	INITIALIZE BBOX WITH 0. BBOX	F3B03760
00573	0	60100	0	02317		STO BBOX	KEEPS COUNT OF RECORDS IN CIB BUFFER.	F3B03770

00574	0	07400	4	00341		TSX M10210,4	TO READ AIL FILE FOR FORTRAN FCNS.	F3B03780
00575	0	76100	0	00000		NOP	NOP NEEDED FOR ROUTINE AT RET1.	F3B03790
00576	-0	50000	1	02327	PAT14	CAL AIL,1	TEST FOR FORTRAN FCN. AIL	F3B03800
00577	-0	32000	1	02330		ANA AIL+1,1	WORD ALL ONES IF A FORTRAN FCN.	F3B03810
00600	-0	32000	1	02331		ANA AIL+2,1		F3B03820
00601	-0	32000	1	02332		ANA AIL+3,1		F3B03830
00602	0	60200	0	05737		SLW ERAS		F3B03840
00603	0	50000	0	05737		CLA ERAS		F3B03850
00604	0	40200	0	02211		SUB M1CON+17		F3B03860
00605	-0	10000	0	00615		TNZ OUT	ENTRY IS NOT A FORTRAN FCN.	F3B03870
00606	1	77774	1	00607	PAT15	TXI PAT15+1,1,-4		F3B03880
00607	-0	75400	1	00000		PXD 0,1	TEST IF LAST WORD OF	F3B03890
00610	0	34000	0	02305		CAS M1ALWN	AIL BUFFER.	F3B03900
00611	0	02000	0	00751		TRA M12000	TO AIL COMPILATION ROUTINE.	F3B03910
00612	0	07400	4	00341	PAT16	TSX M10210,4	TO READ NEXT AIL ENTRY.	F3B03920
00613	0	07400	4	00004		TSX 4,4	NO. OF WORDS OF AIL REC NOT A MULTIPLE OF 4	F3B03930
00614	0	02000	0	00751		TRA M12000	TO AIL COMPILATION ROUTINE.	F3B03940
00615	1	77777	2	00616	OUT	TXI OUT1,2,-1	MAKE IRB VALUE ZERO.	F3B03950
00616	-0	63400	2	00411	OUT1	SXD PAT5+1,2	DECREMENT ZERO MEANS NO FORTRAN FCNS.	F3B03960
00617	0	76200	0	00222	OUT13	RDS 146	SPACE OVER REMAINING	F3B03970
00620	0	70000	0	05737	OUT14	CPY ERAS	AIL ENTRIES WHICH ARE	F3B03980
00621	0	02000	0	00620		TRA OUT14	NOT FORTRAN FCNS TO POSITION	F3B03990
00622	0	02000	0	00624		TRA OUT22	TAPE 2 AT END OF AIL FILE.	F3B04000
00623	0	02000	0	00617		TRA OUT13		F3B04010
00624	0	53400	1	02170	OUT22	LXA M1CON,1		F3B04020
00625	0	02000	0	00536		TRA M10900	TO WR ANY F FCN ENTRIES IN CIB BUFFER.	F3B04030
						COMPAIL INSTR USUALLY MERGED AHEAD OF COMPDO INSTR IF BOTH		F3B04040
						HAVE SAME FMLA NO, EXCEPT FOR READ AND WRITE,WHEN DO PRECEDES		F3804030
						THE AIL FOR TIMING REASONS. FMLA NO. DECREMENT PART HERE.		F3B04060
						COMPARISON OF AIL AND DO FMLA NOS AND		F3B04070
						COMPILE OF DO INSTRUCTIONS		F3B04080
00626	0	50000	2	02473	M11010	CLA DO,2	COMPARE AIL AND DO INTERNAL	F3B04090
00627	0	62200	0	02307		STD M1DOFN	FORMULA NOS.	F3B04100
00630	0	07400	4	00744	M11015	TSX ERR2,4	TEST FOR FORTRAN FCNS.	F3B04110
00631	-0	32000	0	02205		ANA M1CON+13	+077777000000.	F3B04120
00632	0	34000	0	02307		CAS M1DOFN	COMPARE AIL AND	F3B04130
00633	0	02000	0	00636		TRA M11030	AIL FMLA NO GREATER DO NO.	F3B04140
00634	0	02000	0	00667		TRA M11070	AIL FMLA NO. EQUALS DO NO.	F3B04150
00635	0	02000	0	00751		TRA M12000	AIL FMLA NO. LESS DO NO.	F3B04160
00636	0	53400	4	02174	M11030	LXA M1CON+4,4	COMPILE DO INSTR BY	F3B04170
00637	0	50000	2	02473	M11031	CLA DO,2	GATHERING 4 WORDS FROM	F3B04180
00640	0	60100	4	02326		STO M1CW+4,4	DO REC BUFFER AND PLACING	F3B04190
00641	1	77777	2	00642		TXI M11035,2,-1	THEM IN CALLING SEQ LOCATIONS.	F3B04200
00642	2	00001	4	00637	M11035	TIX M11031,4,1		F3B04210
00643	0	07400	4	00707		TSX CIT00,4	TO CIT COMPILING ROUTINE.	F3B04220
00644	0	00000	0	02322		HTR M1CW	CALLING SEQ FOR LOCATIONS	F3B04230
00645	0	00000	0	02323		HTR M1CW+1	OF 4 COMPILED WORDS.	F3B04240
00646	0	00000	0	02324		HTR M1CW+2		F3B04250
00647	0	00000	0	02325		HTR M1CW+3		F3B04260
00650	-0	75400	2	00000		PXD 0,2	TEST IF END OF CUR DO REC	F3B04270
00651	0	34000	0	02304		CAS M1DOWN	BY COMPARING CURRENT DO WD	F3B04280
00652	0	02000	0	00655		TRA M11055	POSITION WITH TOTAL DO	F3B04290
00653	0	07400	4	00426		TSX M10250,4	REC WORD COUNT.	F3B04300
00654	0	07400	4	00004		TSX 4,4	NO OF WORDS NOT A MULTIPLE OF 4	F3B04310

00655	-0	76000	0	00141	M11055	MSE 97	END OF AIL FILE IF LIGHT 1 ON,	F3B04320
00656	0	02000	0	00661		TRA M11060		F3B04330
00657	0	76000	0	00141		PSE 97	AIL AT EOF. CONTINUE	F3B04340
00660	0	02000	0	00636		TRA M11030	COMPILING DO INSTR.	F3B04350
00661	0	50000	2	02473	M11060	CLA DO,2	GET NEXT DO INST SAME BLOCK	F3B04360
00662	-0	32000	0	02205		ANA M1CON+13	AS PREVIOUS ONE.	F3B04370
00663	0	34000	0	02307		CAS M1DOFN	AIL AND DO FMLA NOS IN DECREMENTS.	F3B04380
00664	0	02000	0	00626		TRA M11010	DO FMLA NO. GREATER AIL NO.	F3B04390
00665	0	76100	0	00000		NOP	DO FMLA NO. EQUALS AIL NO.	F3B04400
00666	0	02000	0	00636		TRA M11030	DO FMLA NO. LESS AIL NO.	F3B04410
00667	1	77777	1	00670	M11070	TXI M11070+1,1,-1		F3B04420
00670	0	50000	1	02327		CLA AIL,1	TEST IF CURRENT AIL OPER RDS	F3B04430
00671	0	40200	0	02236		SUB M1ABC+17		F3B04440
00672	0	10000	0	00677		TZE M11080		F3B04450
00673	0	50000	1	02327		CLA AIL,1	TEST IF CURRENT AIL OPER WRS	F3B04460
00674	0	40200	0	02247		SUB M1ABC+26		F3B04470
00675	0	10000	0	00677		TZE M11080		F3B04480
00676	1	00001	1	00751		TXI M12000,1,1	RESTORE IRA CURRENT AIL VALUE.	F3B04490
00677	1	00001	1	00700	M11080	TXI ERR3,1,1	T0 TEST IF SPACING TAPE.	F3B04500
00700	0	50000	2	02473	ERR3	CLA DO,2	TEST IF BOTH AIL AND DO HAVE SAME FORMULA NO.	F3B04510
00701	-0	32000	0	02206		ANA M1CON+14	DETERMINE IF DO OR AIL INSTR COMPILED FIRST.	F3B04520
00702	0	10000	0	00704		TZE RET2	LXD BEFORE RDS HAS ZERO LOCATION.	F3B04530
00703	0	02000	0	00751		TRA M12000	T0 COMPILE AIL INSTRUCTION.	F3B04540
00704	0	50000	0	02210	RET2	CLA M1CON+16	INCREASE AIL 1ST WD ADDRESS	F3B04550
00705	-0	60200	1	02327		ORS AIL,1	FOR SEC. 4 PURPOSES.	F3B04560
00706	0	02000	0	00636		TRA M11030	T0 COMPILE DO INSTR.	F3B04570
						COMPILING ROUTINE,CIT00		F3B04580
00707	-0	60000	0	02314	CIT00	STQ E1C	E1C CELL FOR SAVING MQ.	F3B04590
00710	-0	63400	1	02315		SXD E2C,1	E2C CELL FOR SAVING IRA.	F3B04600
00711	-0	63400	2	02316		SXD E3C,2	E3C CELL FOR SAVING IRB.	F3B04610
00712	-0	53400	2	02317		LXD BBOX,2	2S COMP NO. ALREADY IN BLOCK.	F3B04620
00713	3	77634	2	00723		TXH CIT04,2,-100	TR NO. WDS IN BLOCK LESS 100.	F3B04630
00714	-3	00000	2	00723		TXL CIT04,2,0	TR NO. WDS IN BLOCK EQUALS 0.	F3B04640
00715	0	76600	0	00223		WRS 147	WRITE-OUT BLOCK OF 100	F3B04650
00716	0	53400	1	02170		LXA M1CON,1	WORDS WHICH MAKE UP	F3B04660
00717	0	70000	1	02637	CIT01	CPY CIB,1	25 COMPILED INSTR. ON TP 3.	F3B04670
00720	1	77777	1	00721		TXI CIT02,1,-1		F3B04680
00721	1	00001	2	00722	CIT02	TXI CIT03,2,1	WRITING OF CIB BUFFER	F3B04690
00722	3	00001	2	00717	CIT03	TXH CIT01,2,1	FINISHED WHEN IRB IS 0.	F3B04700
00723	0	53400	1	02174	CIT04	LXA M1CON+4,1	ROUTINE TO PLACE 4 WORDS	F3B04710
00724	0	50000	0	02171		CLA M1CON+1	OF COMPILED INSTR IN CIB	F3B04720
00725	0	62100	0	00726		STA CIT05	BUFFER OF 100 WORDS,	F3B04730
00726	0	50000	4	00000	CIT05	CLA 0,4	IRC CONTAINS 2S COMP LOC OF	F3B04740
00727	0	62100	0	00730		STA CIT06	CALLING SEQ LESS 1,	F3B04750
00730	0	50000	0	00000	CIT06	CLA	INSTR ADDRESS SEQUENTIALLY	F3B04760
00731	0	60100	2	02637		STO CIB,2	M1CW, M1CW+1, M1CW+2	F3B04770
00732	0	50000	0	00726		CLA CIT05	AND M1CW+3.	F3B04780
00733	0	40000	0	02171		ADD M1CON+1		F3B04790
00734	0	62100	0	00726		STA CIT05		F3804800
00735	1	77777	2	00736		TXI CIT07,2,-1		F3B04810
00736	2	00001	1	00726	CIT07	TIX CIT05,1,1	IRA LOADED WITH 4.	F3B04820
00737	-0	63400	2	02317		SXD BBOX,2	2S COMPL NO. WORDS ALREADY IN BLOCK.	F3B04830
00740	0	56000	0	02314		LDQ E1C	RESTORE MQ, IRA, IRB.	F3B04840
00741	-0	53400	1	02315		LXD E2C,1	IRA GIVES AIL REC POSITION.	F3804850

00742	-0	53400	2	02316		LXD E3C,2	IRB GIVES DO REC POSITION.	F3B04860
00743	0	02000	4	00005		TRA 5,4	RETURN TO TSX ADDR PLUS 5.	F3B04870
00744	0	50000	1	02327	ERR2	CLA AIL,1	TEST IF FORTRAN FCN DEFINED IN MIDDLE OF	F3B04880
00745	0	34000	0	02211		CAS M1CON+17	PROGRAM, BY FIRST INSTR WORD ALL ONES.	F3B04890
00746	0	02000	4	00001		TRA 1,4	RETURN TO NEXT INSTR. OF MAIN PROGRAM.	F3804900
00747	0	07400	4	00004		TSX 4,4	FORTRAN FUNCTION IN MIDDLE OF PROGRAM	F3804910
00750	0	07400	4	00004	ERROR3	TSX 4,4	WORD ALL 1S COMPARED HIGH TO AC WITH ALL 1S	F3804920
						COMPILATION OF AIL INSTRUCTIONS		F3804930
00751	0	07400	4	00744	M12000	TSX ERR2,4	TEST 1ST AIL WORD ALL ONES.	F3B04940
00752	0	62200	0	02310		STD M1ALFN	SAVE FMLA NO. 1ST INSTR ARITH BLOCK,	F3B04950
00753	-0	12000	0	01070	M12005	TMI M13000	MINUS MEANS OPEN SU8ROUTINE.	F3804960
00754	0	53400	4	02174		LXA M1CON+4,4	COMPILE AIL INST BY	F3B04970
00755	0	50000	1	02327	M12010	CLA AIL,1	MOVING 4 WORDS OF INSTR	F3B04980
00756	0	60100	4	02326		STO M1CW+4,4	INTO COMPILED WORD 8UFFER.	F3804990
00757	1	77777	1	00760		TXI M12020,1,-1		F3B05000
00760	2	00001	4	00755	M12020	TIX M12010,4,1		F3805010
00761	0	50000	0	02325	M12021	CLA M1CW+3	TEST IF TAGGED INSTR, BITS 24-26.	F3B05020
00762	-0	32000	0	02207	M12022	ANA M1CON+15	1,2 OR 3 GIVEN IN TAG. ONE	F3B05030
00763	0	10000	0	00767		TZE M12030	DIM TAGS NOT CHANGED.	F3805040
00764	-0	76000	0	00143		MSE 99	SENSE LIGHT 3 ON IF NO	F3805050
00765	0	07400	4	01016		TSX M12500,4	ENTRIES IN EDITED CHANGE	F3805060
00766	0	76000	0	00143		PSE 99	TAG TABLE.	F3B05070
00767	0	07400	4	00707	M12030	TSX CIT00,4	TO CIT COMPILING IF TAG UNCHANGED.	F3805080
00770	0	00000	0	02322		HTR M1CW	CALLING SEQ FOR LOCATIONS	F3B05090
00771	0	00000	0	02323		HTR M1CW+1	OF 4 COMPILED WORDS.	F3B05100
00772	0	00000	0	02324		HTR M1CW+2		F3B05110
00773	0	00000	0	02325		HTR M1CW+3		F3B05120
00774	-0	75400	1	00000	M12035	PXD 0,1	TEST IF END OF CUR AIL REC	F3B05130
00775	0	34000	0	02305		CAS M1ALWN	BY COMPARING CURRENT AIL WD	F3B05140
00776	0	02000	0	01001		TRA M12040	POSITION WITH TOTAL AIL	F3805150
00777	0	07400	4	00341		TSX M10210,4	REC WORD COUNT.	F3B05160
01000	0	07400	4	00004		TSX 4,4	NO OF WORDS OF AIL REC NOT A MULTIPLE OF 4	F380S170
01001	0	50000	1	02327	M12040	CLA AIL,1	NEXT AIL INST SAME BLOCK AS	F3B05180
01002	-0	32000	0	02205		ANA M1CON+13	PREVIOUS ONE. +077777000000.	F3B05190
01003	0	34000	0	02310		CAS M1ALFN		F3B05200
01004	0	02000	0	01010		TRA M12050	NEXT AIL FMLA NO. GR THAN PREV.	F3B09210
01005	0	76100	0	00000		NOP		F3B03220
01006	0	50000	1	02327		CLA AIL,1	TEST IF OPEN SRTN. IF NOT,	F3805230
01007	0	02000	0	00753		TRA M12005	COMPILE AIL INSTR	F3B05240
01010	-0	76000	0	00142	M12050	MSE 98	END OF DO FILE IF LIGHT 2 ON,	F3B03250
01011	0	02000	0	00630		TRA M11015	TO CMP AIL AND DO FMLA NOS.	F3805260
01012	0	76000	0	00142		PSE 98		F3B05270
01013	3	00001	2	00751		TXH M12000,2,1	IN THE MAIN MERGE IF IRB	F3B03280
01014	-3	00000	2	00751		TXL M12000,2,0	ANY VALUE EXCEPT 1.	F3805290
01015	0	02000	0	00576		TRA PAT14	TO TEST FOR FORTRAN FCN.	F3B05300
						CHANGE TAG TABLE SEARCH		F3805310
01016	0	50000	0	02325	M12500	CLA M1CW+3	SYMBOLIC TAG IN BINARY BITS	F3805320
01017	0	62100	0	02303		STA TAGBOX	24-35 4TH WD COMPILED INSTR.	F3805330
01020	-0	63400	4	02302		SXD CBOX,4	IRC HAS TSX RTN ADDR TO M12030.	F3B05340
01021	-0	53400	4	02275	M12503	LXD CHTGE1,4		F3B05350
01022	0	50000	4	05741		CLA CHTG,4	CMP INT FMLA NO CUR AIL INSTR	F3B05360
01023	0	34000	0	02310		CAS M1ALFN	WITH CUR CHTG TABLE BLOCK.	F3805370
01024	0	02000	0	01027		TRA M12510	CHTG FMLA NO GREATER AIL NO.	F3805380
01025	0	02000	0	01031		TRA M12515	CHTG FMLA NO EQUALS AIL NO,	F3B05390

01026	0	02000	0	01046		TRA	M12540		CHTG FMLA NO LESS AIL NO.	F3B05400
01027	-0	53400	4	02302	M12510	LXD	CBOX,4		IRC HAS TSX RTN ADDR TO	F3B05410
01030	0	02000	4	00002		TRA	2,4		AIL COMP AT M12030.	F3B05420
01031	0	50000	0	02276	M12515	CLA	CHTGE2		SEARCH CUR CHTG BLOCK FOR	F3B05430
01032	0	62200	0	01044		STD	M12530+1		CUR AIL INST TAG	F3B05440
01033	1	77777	4	01034	M12520	TXI	M12520+1,4,-1			F3B05450
01034	0	50000	4	05741		CLA	CHTG,4		GET TAG1 FROM 2ND WORD OF	F3B05460
01035	0	76500	0	00022		LRS	18		CHTG TABLE.	F3B05470
01036	0	40200	0	02303		SUB	TAGBOX		TAG BOX HAS AIL TAG IN ADDR.	F3B05480
01037	-0	10000	0	01043		TNZ	M12530		CHTG TAG AND AIL TAG DIFFERENT.	F3B05490
01040	0	76300	0	00022		LLS	18		CHTG AND AIL TAGS SAME, SO	F3B05500
01041	0	62100	0	02325		STA	M1CW+3		REPLACE CUR AIL TAG WITH CHTG T2.	F3B05510
01042	0	02000	0	01027		TRA	M12510		RTN VIA TSX TO AIL COMP AT M12030.	F3B05520
01043	1	77777	4	01044	M12530	TXI	M12530+1,4,-1		IRC ENDS CHTG BLOCK SAME FMLA NO.	F3B05530
01044	3	00000	4	01033		TXH	M12520,4		DECREMENT IS CHTGE2 VALUE.	F3B05540
01045	0	02000	0	01027		TRA	M12510			F3B05550
01046	0	50000	0	02276	M12540	CLA	CHTGE2		UPDATE CHTGE1. CHTGE1 HAS IRC	F3B05560
01047	0	60100	0	02275		STO	CHTGE1		VALUE TO GET 1ST ENTRY OF	F3805570
01050	0	40200	0	02274		SUB	CHTGL		CHTG BLOCK ALL SAME FMLA NO.	F3B05580
01051	-0	10000	0	01054		TNZ	M12550		CHTGL HAS 2S COMP NO WDS CHTG TABLE.	F3B05590
01052	0	76000	0	00143		PSE	99		SENSE LIGHT 3 ON MEANS CHTG	F3B05600
01053	0	02000	0	01027		TRA	M12510		EMPTY OR EXHAUSTED.	F3B05610
01054	-0	53400	4	02275	M12550	LXD	CHTGE1,4		COMPUTE NEW CHTGE2. CHTGE2 IS	F3B05620
01055	0	50000	4	05741		CLA	CHTG,4		DECREMENT VALUE IN M12530 TO	F3B05630
01056	0	60100	0	02277		STO	CHTGFN		INDICATE LAST ENTRY IN CHTG	F3B05640
01057	1	77776	4	01060	M12555	TXI	M12555+1,4,-2		BLOCK ALL WITH SAME FMLA NO.	F3B05650
01060	-0	75400	4	00000		PXD	0,4		THIS OBVIATES SEARCHING ENTIRE	F3B05660
01061	0	40200	0	02274		SUB	CHTGL		CHTG TABLE WHEN TESTING AIL	F3B05670
01062	0	10000	0	01066		TZE	M12570		INSTR FOR CHANGING ITS TAG.	F3B05680
01063	0	50000	4	05741		CLA	CHTG,4		ROUTINE ENTERED WHEN AIL	F3B05690
01064	0	40200	0	02277		SUB	CHTGFN		FMLA NO. GREATER THAN CHTG	F3B05700
01065	0	10000	0	01057		TZE	M12555		FMLA, SO MUST UPDATE CHTGE1	F3B05710
01066	-0	63400	4	02276	M12570	SXD	CHTGE2,4		AND CHTGE2 TO GET NEXT ENTRY,	F3B05720
01067	0	02000	0	01021		TRA	M12503		TO CMP AIL AND CHTG FMLA NOS.	F3B05730
									EXPONENTIAL OPEN SUBROUTINES	F3B05740
01070	0	76000	0	00002	M13000	CHS			CHANGE MINUS SIGN OF	F3B05750
01071	0	60100	0	02322		STO	M1CW		INT FMLA NO, IF ANY, TO H1CW	F3B05760
01072	1	77777	1	01073		TXI	M13005,1,-1		DECREASE COUNT IN IR1	F3B05770
01073	0	50000	1	02327	M13005	CLA	AIL,1		SECOND WORD	F3B05780
01074	0	40200	0	02237		SUB	M1ABC+18		FIXED EXP, FLOATING EXP OR SPECIAL OP	F3B05790
01075	0	10000	0	01101		TZE	M13020		FIXED EXPONENT	F3B05800
01076	0	40000	0	02240		ADD	M1ABC+19		TEST FOR FLOATING POINT	F3B05810
01077	0	10000	0	01102		TZE	M13020+1		IF NEITHER, THEN NOT EXPONENTIAL	F3B05820
01100	1	77777	1	01304		TXI	M13500,1,-1		DETERMINATION OF SPECIAL OP.	F3B05830
01101	0	76000	0	00144	M13020	PSE	100		FIXED EXP. LITE 100 ON	F3B05840
01102	1	77777	1	01103		TXI	M13020+2,1,-1		3RD WORD	F3B05850
01103	0	50000	1	02327		CLA	AIL,1		INFO ON LOC OF ARG	F3B05860
01104	0	60100	0	02324		STO	M1CW+2		TO M1CW+2	F3B05870
01105	1	77777	1	01106	M13025	TXI	M13025+1,1,-1			F3B05880
01106	0	50000	1	02327		CLA	AIL,1		REL ADD AND TAG, IF ANY.	F3B05890
01107	0	60100	0	02325		STO	M1CW+3		TO M1CW+3	F3B05900
01110	1	77777	1	01111	M13030	TXI	M13030+1,1,-1		DECREASE BY 1	F3B05910
01111	-0	75400	1	00000		PXD	0,1		TEST FOR END OF CUR AIL REC	F3B05920
01112	0	34000	0	02305		CAS	M1ALWN		2S COMPLIMENT OF NUMBER OF WORDS	F3B05930

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01113	0	02000	0	01116	TRA M13040	OF CURRENT AIL RECORD	F3B05940
01114	0	07400	4	00341	TSX M10210,4	BACK TO READ NEXT AIL RECORD	F3B05950
01115	0	07400	4	00004	TSX 4,4	NO OF WORDS OF AIL REC NOT A MULTIPLE OF 4	F3B05960
01116	1	77776	1	01117	M13040 TXI M13040+1,1,-2	DECREASE BY 2	F3B05970
01117	0	50000	0	02324	CLA M1CW+2	LOCATION OF ARGUMENT	F3B05980
01120	0	40200	0	02241	SUB M1ABC+20	SUBTRACT A PLUS SIGN	F3B05990
01121	0	10000	0	01212	TZE M13200	ARG IN AC	F3B06000
01122	0	50000	0	02324	CLA M1CW+2	LOCATION AGAIN	F3B06010
01123	0	40200	0	02237	SUB M1ABC+18	SUBTRACT ASTERISK	F3B06020
01124	0	10000	0	01230	TZE M13250	ARG IN MQ	F3B06030
						ARGUMENT STORED, FIXED OR FLOATING	F3B06040
01125	0	50000	1	02327	CLA AIL,1	VALUE OF EXPONENT, 3RD WORD	F3B06050
01126	0	40200	0	02176	SUB M1CON+6	OF SECOND AIL ENTRY	F3B06060
01127	-0	10000	0	01135	TNZ M13060	EXP GREATER THAN 1	F3B06070
01130	0	50000	0	02215	CLA M1ABC	EXP EQUALS 1, COMPILE A CLA INSTR	F3B06080
01131	0	60100	0	02323	STO M1CW+1	AND PLACE IT IN OP CODE	F3B06090
01132	-0	76000	0	00144	MSE 100	TURN OFF SENSE LIGHT, ADJUST	F3B06100
01133	0	76100	0	00000	NOF	COUNT FOR NEXT AIL ENTRY, AND	F3B06110
01134	1	77776	1	00761	TXI M12021,1,-2	TRANSFER BACK FOR CHTG SEARCH	F3B06120
01135	0	50000	0	02325	M13060 CLA M1CW+3	EXPONENT GREATER THAN 1	F3B06130
01136	-0	32000	0	02207	ANA M1CON+15	TEST IF TAG NEEDS CHANGING	F3B06140
01137	0	10000	0	01143	TZE M13070	ARG TAGGED	F3B06150
01140	-0	76000	0	00143	MSE 99	END OF CHTG TABLE	F3B06160
01141	0	07400	4	01016	TSX M12500,4	TRANSFER BACK TO CHTG TABLE	F3B06170
01142	0	76000	0	00143	PSE 99	SEARCH	F3B06180
01143	0	07400	4	00707	M13070 TSX CIT00,4	COMPILE FIRST INST	F3B06190
01144	0	00000	0	02322	HTR M1CW	LOCATION OF INTERNAL FORMULA NO	F3B06200
01145	0	00000	0	02216	HTR M1ABC+1	LOCATION OF LDQ INSTRUCTION	F3B06210
01146	0	00000	0	02324	HTR M1CW+2	LOCATION OF ARGUMENT	F3B06220
01147	0	00000	0	02325	HTR M1CW+3	TAG	F3B06230
01150	0	50000	1	02327	M13080 CLA AIL,1	VALUE OF EXPONENT	F3B06240
01151	0	40200	0	02177	SUB M1CON+7	SUBTRACT 2	F3B06250
01152	0	10000	0	01175	TZE M13115	EXPONENT EQUAL TO 2	F3B06260
01153	0	62200	0	02311	STD CCOUNT	EXP-2 TO COUNT	F3B06270
01154	-0	76000	0	00144	MSE 100	ARG FIXED OR FLOATING	F3B06280
01155	0	02000	0	01260	TRA M13300	FLOATING ARGUMENT	F3B06290
01156	0	76000	0	00144	PSE 100		F3B06300
						FIXED ARGUMENT, STORED, IN AC, INMQ, EXP GREATER THAN 2	F3B06310
01157	0	07400	4	00707	M13090 TSX CIT00,4	COMPILE INSTRUCTIONS FOR FIXED ARG.	F3B06320
01160	0	00000	0	02170	HTR M1CON	FOR THE EXPON.	F3B06330
01161	0	00000	0	02217	HTR M1ABC+2	ENTIAL ROUTINE. THE LOCATION	F3B06340
01162	0	00000	0	02324	HTR M1CW+2	OF THE ARGUMENT HAS ALREADY	F3B06350
01163	0	00000	0	02325	HTR M1CW+3	BEEN CONSIDERED, AND TH LOOP	F3B06360
01164	0	07400	4	00707	TSX CIT00,4	WILL COMPILE N-2 PAIRS OF	F3B06370
01165	0	00000	0	02170	HTR M1CON	MPY AND LRS INSTRUCTIONS	F3B06380
01166	0	00000	0	02220	HTR M1ABC+3		F3B06390
01167	0	00000	0	02170	HTR M1CON		F3B06400
01170	0	00000	0	02203	HTR M1CON+11		F3B06410
01171	-0	53400	4	02311	LXD CCOUNT,4	LOAD EXPONENT -2 IN IR 4 AND	F3B06420
01172	1	77777	4	01173	M13110 TXI M13110+1,4,-1	COMPILE N-2 PAIRS OF INSTRUCTIONS	F3B06430
01173	-0	63400	4	02311	SXD CCOUNT,4	RESTORE CCOUNT DURING LOOP	F3B06440
01174	3	00000	4	01157	TXH M13090,4		F3B06450
01175	-0	76000	0	00144	M13115 MSE 100	ARG FIXED OR FLOATING	F3B06460
01176	0	02000	0	01276	TRA M13330	FLOATING ARGUMENT	F3B06470

01177	0	07400	4	00707		TSX	CIT00,4	COMPILE LAST 2 INST FOR	F3B06480
01200	0	00000	0	02170		HTR	M1CON	EXP GREATER OR EQUAL 2, IN WHICH	F3B06490
01201	0	00000	0	02217		HTR	M1ABC+2	CASE WE MUST COMPILE ONLY ONE	F3B06500
01202	0	00000	0	02324		HTR	M1CW+2	PAIR OF INSTRUCTIONS	F3B06510
01203	0	00000	0	02325		HTR	M1CW+3		F3B06520
01204	0	07400	4	00707		TSX	CIT00,4		F3B06530
01205	0	00000	0	02170		HTR	M1CON		F3B06540
01206	0	00000	0	02221		HTR	M1ABC+4		F3B06550
01207	0	00000	0	02170		HTR	M1CON		F3B06560
01210	0	00000	0	02202		HTR	M1CON+10		F3B06570
01211	1	77776	1	00774		TXI	M12035,1,-2	BACK TO CONTINUE AIL ROUTINES	F3B06580
								ARG IN AC, FIXED OR FLOATING	F3B06590
01212	0	50000	1	02327	M13200	CLA	AIL,1	TEST TO SEE IF EXPONENT	F3B06600
01213	0	40200	0	02176		SUB	M1CON+6	EQUALS 1, IF YES, TRANSFER	F3B06610
01214	-0	10000	0	01220		TNZ	M13210	BACK TO PICK UP NEXT RECORD	F3B06620
01215	-0	76000	0	00144		MSE	100	IF NO, CONTINUE TO	F3B06630
01216	0	76100	0	00000		NOP		COMPILE PROPER INSTRUCTIONS	F3B06640
01217	1	77776	1	00774		TXI	M12035,1,-2		F3B06650
01220	0	50000	0	02242	M13210	CLA	M1ABC+21	EXP GREATER THAN 1,0	F3B06660
01221	0	60100	0	02324		STO	M1CW+2	STORE VALUE OF EXPONENT IN INSTR. AREA	F3B06670
01222	0	07400	4	00707		TSX	CIT00,4	COMPILE FIRST INST	F3B06680
01223	0	00000	0	02322		HTR	M1CW	CALLING SEQUENCE FOR ARG-	F3B06690
01224	0	00000	0	02222		HTR	M1ABC+5	UMENT IN ACC, COMPILE	F3B06700
01225	0	00000	0	02324		HTR	M1CW+2	A STO INSTRUCTION, AND CONTINUE	F3B06710
01226	0	00000	0	02325		HTR	M1CW+3	AS IF IT WERE STORED INITIALLY	F3B06720
01227	0	02000	0	01143		TRA	M13070		F3B06730
								ARG IN MQ, FIXED OR FLOATING	F3B06740
01230	0	50000	1	02327	M13250	CLA	AIL,1	VALUE OF EXPONENT AND TEST TO	F3806750
01231	0	40200	0	02176		SUB	M1CON+6	SEE IF EXPONENT = 1, IF IT IS	F3B06760
01232	-0	10000	0	01250		TNZ	M13265	EQUAL TO ONE, WE KNOW THAT	F3B06770
01233	0	07400	4	00707		TSX	CIT00,4	THE VALUE OF THE	F3B06780
01234	0	00000	0	02322		HTR	M1CW	ARGUMENT IS RETAINED AS THE	F3B06790
01235	0	00000	0	02232		HTR	M1ABC+13	ANSWER.	F3B06800
01236	0	00000	0	02170		HTR	M1CON		F3B06810
01237	0	00000	0	02170		HTR	M1CON		F3B06820
01240	0	07400	4	00707		TSX	CIT00,4		F3B06830
01241	0	00000	0	02170		HTR	M1CON		F3B06840
01242	0	00000	0	02223		HTR	M1ABC+6		F3B06850
01243	0	00000	0	02170		HTR	M1CON		F3B06860
01244	0	00000	0	02204		HTR	M1CON+12		F3B06870
01245	-0	76000	0	00144		MSE	100	TURN OF SENSE LIGHT	F3B06880
01246	0	76100	0	00000		NOP			F3B06890
01247	1	77776	1	00774		TXI	M12035,1,-2	BACK TO AIL ROUTINE	F3B06900
01250	0	50000	0	02242	M13265	CLA	M1ABC+21	EXP GREATER 1,	F3B06910
01251	0	60100	0	02324		STO	M1CW+2	PLACE 010000000000IN LOCATION POS.	F3B06920
01252	0	07400	4	00707		TSX	CIT00,4	COMPILE FIRST INST	F3B06930
01253	0	00000	0	02322		HTR	M1CW	ZERO	F3B06940
01254	0	00000	0	02224		HTR	M1ABC+7	COMPILE A STQ INSTRUCTION	F3B06950
01255	0	00000	0	02324		HTR	M1CW+2	AND THEN TRANSFER TO DETER-	F3B06960
01256	0	00000	0	02325		HTR	M1CW+3	MINE THE VALUE OF THE	F3B06970
01257	0	02000	0	01150		TRA	M13080	EXPONENT,	F3B06980
								FLOATING ARG, STORE0, IN AC, IN MQ, EXP GREATER 2	F3B06990
01260	0	07400	4	00707	M13300	TSX	CIT00,4		F3B07000
01261	0	00000	0	02170		HTR	M1CON	INST COMPILING LOOP FOR FLOATING	F3B07010

01262	0	00000	0	02225	HTR	M1ABC+8	ARGUMENT, COMPILE A FMP	F3B07020
01263	0	00000	0	02324	HTR	M1CW+2	INSTRUCTION, AND A LRS INSTR-	F3B07030
01264	0	00000	0	02325	HTR	M1CW+3	UCTION.	F3B07040
01265	0	07400	4	00707	TSX	CIT00,4		F3B07050
01266	0	00000	0	02170	HTR	M1CON	ZERO, FOR INTERNAL FMLA. NO.	F3B07060
01267	0	00000	0	02220	HTR	M1ABC+3		F3B07070
01270	0	00000	0	02170	HTR	M1CON	PLACE 43 INDECREMENT OF	F3B07080
01271	0	00000	0	02204	HTR	M1CON+12	RELATIVE ADDRESS.	F3B07090
01272	-0	53400	4	02311	LXD	CCOUNT,4	LOAD N-2 IN IR 4	F3B07100
01273	1	77777	4	01274	M13320	TXI M13320+1,4,-1	DECREASE COUNT BY 1	F3B07110
01274	-0	63400	4	02311	SXD	CCOUNT,4	REPLACE CCOUNT	F3B07120
01275	3	00000	4	01260	TXH	M13300,4	BACK TO COMILE N-2 PRS. OF INST.	F3B07130
01276	0	07400	4	00707	M13330	TSX CIT00,4	COMPILE LAST INST FOR	F3B07140
01277	0	00000	0	02170	HTR	M1CON	EXP GREATER OR EQUAL 2	F3B07150
01300	0	00000	0	02225	HTR	M1ABC+8		F3B07160
01301	0	00000	0	02324	HTR	M1CW+2		F3B07170
01302	0	00000	0	02325	HTR	M1CW+3		F3B07180
01303	1	77776	1	00774	TXI	M12035,1,-2	BACK TO STANDARD AIL ROUTINE	F3B07190
01304	-0	53400	4	02203	M13500	LXD M1CON+11,4	SPECIAL OPS. LOAD COUNT OF 22 IN IR 4	F3B07200
01305	0	50000	1	02327	CLA	AIL,1	COMPARE SPECIAL OP. FUNCTION NAME	F3B07210
01306	0	34000	4	02273	M13503	CAS M1D+18,4	IS THIRD WORD OF 1ST AIL ENTRY	F3807220
01307	0	02000	0	07071	TRA	0P1-2	NEW ROUTINE HANDLING ADD. SUBROUTINES	F3B07230
01310	0	02000	0	01312	TRA	M13510	INCONSTANT AREA	F3807240
01311	0	02000	0	07071	TRA	0P1-2	NEW ROUTINE HANDLING ADD. SUBROUTINES	F3B07250
01312	-0	63400	4	02312	M13510	SXD CCELL,4	IRC TO CCELL	F3B07260
01313	1	77776	1	01314	TXI	M13510+2,1,-2	DECREASE CONTENTS OF IR 1 BY 2	F3B07270
01314	-0	75400	1	00000	PXD	0,1	END OF AIL REC	F3B07280
01315	0	34000	0	02305	CAS	M1ALWN	2 IS COMP, OF NO. OF WORDS OF CUR-	F3B07290
01316	0	02000	0	01321	TRA	M13520	RENT AIL RECORD	F3B07300
01317	0	07400	4	00341	TSX	M10210,4	TO GET NEXT AIL RECORD	F3B07310
01320	0	07400	4	00004	TSX	4,4	NO OF WORDS OF AIL REC NOT A MULTIPLE OF 4	F3B07320
01321	-0	53400	4	02312	M13520	LXD CCELL,4		F3B07330
01322	0	02000	4	01345	M13525	TRA M13525+19,4	CHOOSE APPROPRIATE SPECIAL OP BRANCH	F3B07340
01323	1	77776	1	01345	TXI	M13550,1,-2	(XABS)	F3807350
01324	1	77776	1	01345	TXI	M13550,1,-2	(ABS)	F3B07360
01325	1	77776	1	01412	TXI	M13600,1,-2	(XINT)	F3B07370
01326	1	77776	1	01411	TXI	M13595,1,-2	(INT)	F3B07380
01327	1	77776	1	01412	TXI	M13600,1,-2	(XFIX)	F3B07390
01330	1	77776	1	02063	TXI	M13900,1,-2	(FLDAT)	F3B07400
01331	1	77776	1	01513	TXI	M13680,1,-2	(XMOD)	F3B07410
01332	1	77776	1	01514	TXI	M13681,1,-2	(MOD)	F3B07420
01333	1	77776	1	01514	TXI	M13681,1,-2	(XSIGN)	F3B07430
01334	1	77776	1	01514	TXI	M13681,1,-2	(SIGN)	F3807440
01335	1	77776	1	01514	TXI	M13681,1,-2	(XMAX0)	F3B07450
01336	1	77776	1	01514	TXI	M13681,1,-2	(MAX1 0)	F3B07460
01337	1	77776	1	01513	TXI	M13680,1,-2	(XMAX1B)	F3B07470
01340	1	77776	1	01513	TXI	M13680,1,-2	(MAX0B)	F3B07480
01341	1	77776	1	01514	TXI	M13681,1,-2	(XMIN0B)	F3807490
01342	1	77776	1	01514	TXI	M13681,1,-2	(MIN1B0)	F3807500
01343	1	77776	1	01513	TXI	M13680,1,-2	(XMIN1B)	F3B07510
01344	1	77776	1	01513	TXI	M13680,1,-2	(MIN0B)	F3B07520
							XABS, ABS BRANCH	F3B07530
01345	0	07400	4	02156	M13550	TSX ERROR1+1,4	INFO ON LOC OF ARG, CHECK FOR ALL 1S	F3B07540
01346	0	60100	0	02324	STO	M1CW+2	TO M1CW+2	F3B07550

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01347	1	77777	1	01350		TXI	M13555,1,-1	INCREMENT IR 1.	F3B07560
01350	0	50000	1	02327	M13555	CLA	AIL,1	REL ADD AND TAG, IF ANY,	F3B07570
01351	0	60100	0	02325		STO	M1CW+3	TO M1CW+3	F3B07580
01352	0	50000	0	02324		CLA	M1CW+2	LOCATION OF ARGUMENT	F3B07590
01353	0	40200	0	02241		SUB	M1ABC+20	SUBTRACT PLUS SIGN	F3B07600
01354	0	10000	0	01373		TZE	M13575	ARG IN AC	F3B07610
01355	0	50000	0	02324		CLA	M1CW+2	LOCATION OF ARGUMENT	F3B07620
01356	0	40200	0	02237		SUB	M1ABC+18	ONE ASTERISK	F3B07630
01357	0	10000	0	01401		TZE	M13580	ARG IN MQ	F3B07640
							ARG STORED		F3B07650
01360	0	50000	0	02325		CLA	M1CW+3	RELATIVE ADDRESS AND TAG (IF ANY)	F3B07660
01361	-0	32000	0	02207		ANA	M1CON+15	ARG TAGGED,	F3B07670
01362	0	10000	0	01366		TZE	M13570	ARG NOT TAGGED	F3B07680
01363	-0	76000	0	00143		MSE	99	END OF CHTG TABLE	F3B07690
01364	0	07400	4	01016		TSX	M12500,4	CHANGE TAG TABLE SEARCH	F3B07700
01365	0	76000	0	00143		PSE	99		F3B07710
01366	0	07400	4	00707	M13570	TSX	CIT00,4	COMPILE FIRST INST	F3B07720
01367	0	00000	0	02322		HTR	M1CW	INTERNAL FMLA NO.	F3B07730
01370	0	00000	0	02215		HTR	M1ABC	COMPILE ACLA INSTRUCTION	F3B07740
01371	0	00000	0	02324		HTR	M1CW+2		F3B07750
01372	0	00000	0	02325		HTR	M1CW+3		F3B07760
							ARG IN AC, (STORED)		F3B07770
01373	0	07400	4	00707	M13575	TSX	CIT00,4	COMPILE FIRST (SECOND) INST	F3B07780
01374	0	00000	0	02170		HTR	M1CON	ZERO	F3B07790
01375	0	00000	0	02226		HTR	M1ABC+9	SSP	F3B07800
01376	0	00000	0	02170		HTR	M1CON	ZERO	F3B07810
01377	0	00000	0	02170		HTR	M1CON	ZERO	F3B07820
01400	1	77777	1	00774		TXI	M12035,1,-1	AIL ROUTINE	F3B07830
							ARG IN MQ		F3B07840
01401	0	50000	0	02242	M13580	CLA	M1ABC+21	0100000000000	F3B07850
01402	0	60100	0	02324		STO	M1CW+2	LOCATION OF ARG	F3B07860
01403	0	07400	4	00707		TSX	CIT00,4	COMPILE FIRST INST	F3B07870
01404	0	00000	0	02322		HTR	M1CW	INT. FMLA NO.	F3B07880
01405	0	00000	0	02224		HTR	M1ABC+7	STQ	F3B07890
01406	0	00000	0	02324		HTR	M1CW+2		F3B07900
01407	0	00000	0	02325		HTR	M1CW+3		F3B07910
01410	0	02000	0	01366		TRA	M13570	COMPILE INSTRUCTION AS IF STORED	F3B07920
							XFIX, XINT, INT	BRANCH	F3B07930
01411	0	76000	0	00144	M13595	PSE	100	FLOATING PT	F3B07940
01412	0	07400	4	02156	M13600	TSX	ERROR1+1,4	INFO ON LOC OF ARG	F3B07950
01413	0	60100	0	02324		STO	M1CW+2	TO M1CW+2	F3B07960
01414	1	77777	1	01415		TXI	M13605,1,-1		F3B07970
01415	0	50000	1	02327	M13605	CLA	AIL,1	REL ADD AND TAG, IF ANY,	F3B07980
01416	0	60100	0	02325		STO	M1CW+3	TO M1CW+3	F3807990
01417	0	50000	0	02324		CLA	M1CW+2	LOCATION OF ARG.	F3B08000
01420	0	40200	0	02241		SUB	M1ABC+20	PLUS SIGN	F3B08010
01421	0	10000	0	01440		TZE	M13630	ARG IN AC	F3B08020
01422	0	50000	0	02324		CLA	M1CW+2	LOCATION OF ARG.	F3B08030
01423	0	40200	0	02237		SUB	M1ABC+18	ASTERISK	F3B08040
01424	0	10000	0	01503		TZE	M13670	ARG IN MQ	F3B08050
							ARG STORED		F3B08060
01425	0	50000	0	02325		CLA	M1CW+3	4TH WORD	F3B08070
01426	-0	32000	0	02207		ANA	M1CON+15	ARG TAGGED	F3B08080
01427	0	10000	0	01433		TZE	M13620	NOT TAGGED	F3808090

01430	-0	76000	0	00143	MSE	99	END OF CHTG TABLE	F3808100
01431	0	07400	4	01016	TSX	M12500,4	CHTG TABLE SEARCH	F3808110
01432	0	76000	0	00143	PSE	99		F3B08120
01433	0	07400	4	00707	M13620	TSX	CIT00,4	F3B08130
01434	0	00000	0	02322	HTR	M1CW	INT. FMLA NO. IF ANY.	F3B08140
01435	0	00000	0	02215	HTR	M1ABC	CLA INSTRUCTION	F3808150
01436	0	00000	0	02324	HTR	M1CW+2		F3808160
01437	0	00000	0	02325	HTR	M1CW+3		F3B08170
							ARG IN AC(STORED)	F3B08180
01440	0	07400	4	00707	M13630	TSX	CIT00,4	F3808190
01441	0	00000	0	02170	HTR	M1CON	COMPILE FIRST (SECOND) INST	F3808200
01442	0	00000	0	02227	HTR	M1ABC+10	ZERO	F3808210
01443	0	00000	0	02243	HTR	M1ABC+22	UFA OP CODE	F3B08220
01444	0	00000	0	02170	HTR	M1CON	060000000000	F3808230
01445	-0	76000	0	00144	MSE	100	ZERO	F3808240
01446	0	02000	0	01450	TRA	M13640	TEST FOR FLOATING PT.	F3808250
01447	0	02000	0	01475	TRA	M13660	XINT	F3808260
							INT	F3808270
							XFIX, XINT, ARG STORED, IN AC, IN MQ	F3808280
01450	0	07400	4	00707	M13640	TSX	CIT00,4	F3808290
01451	0	00000	0	02170	HTR	M1CON	COMPILE 4 INST	F3B08300
01452	0	00000	0	02220	HTR	M1ABC+3	ZERO	F3808310
01453	0	00000	0	02170	HTR	M1CON	LRS INSTRUCTION	F3B08320
01454	0	00000	0	02170	HTR	M1CON	ZERO	F3808330
01455	0	07400	4	00707	TSX	CIT00,4	ZERO	F3B08340
01456	0	00000	0	02170	HTR	M1CON		F3B08350
01457	0	00000	0	02230	HTR	M1ABC+11	ANA	F3808360
01460	0	00000	0	02243	HTR	M1ABC+22	060000000000	F3808370
01461	0	00000	0	02176	HTR	M1CON+6		F3B08380
01462	0	07400	4	00707	TSX	CIT00,4	+000001000000	F3B08390
01463	0	00000	0	02170	HTR	M1CON		F3B08400
01464	0	00000	0	02223	HTR	M1ABC+6	LLS	F3B08410
01465	0	00000	0	02170	HTR	M1CON		F3808420
01466	0	00000	0	02170	HTR	M1CON		F3B08430
01467	0	07400	4	00707	TSX	CIT00,4		F3B08440
01470	0	00000	0	02170	HTR	M1CON		F3B08450
01471	0	00000	0	02221	HTR	M1ABC+4	ALS	F3808470
01472	0	00000	0	02170	HTR	M1CON		F3808480
01473	0	00000	0	02203	HTR	M1CON+11	+000022000000	F3808490
01474	1	77777	1	00774	TXI	M12035,1,-1	CONTINUE WITH ROUTINE	F3B08500
							INT, ARG STORED, IN AC, IN MQ	F3B08510
01475	0	07400	4	00707	M13660	TSX	CIT00,4	F3B08520
01476	0	00000	0	02170	HTR	M1CON	COMPILE 1 INST	F3B08530
01477	0	00000	0	02231	HTR	M1ABC+12	FAD	F3B08540
01500	0	00000	0	02243	HTR	M1ABC+22	060000000000	F3B08550
01501	0	00000	0	02170	HTR	M1CON	ZERO	F3B08560
01502	1	77777	1	00774	TXI	M12035,1,-1	CONTINUE WITH AIL ROUTINE	F3B08570
							XFIX, XINT, INT, ARG IN MQ	F3B08580
01503	0	50000	0	02242	M13670	CLA	M1ABC+21	F3B08590
01504	0	60100	0	02324	STO	M1CW+2	COMPILE FIRST INST	F3B08600
01505	0	07400	4	00707	TSX	CIT00,4	010000000000	F3B08610
01506	0	00000	0	02322	HTR	M1CW	INT, FMLA NO.	F3B08620
01507	0	00000	0	02224	HTR	M1ABC+7	STQ	F3B08630
01510	0	00000	0	02324	HTR	M1CW+2		
01511	0	00000	0	02325	HTR	M1CW+3		

01512	0	02000	0	01433	TRA M13620	TRANSFER TO CONTINUE AS STORED	F3B08640
					ALL MUTIVARIATE FUNCTIONS		F3B08650
01513	0	76000	0	00144	M13680 PSE 100	PLACE SENSE SW. ON FOR FIXPT,	F3B08660
01514	0	50000	1	02325	M13681 CLA AIL-2,1	TEST INTERNAL FORMULA NO,	F3B08670
01515	0	40200	0	02211	SUB M1CON+17	-377777777777, SHOULD BE AT	F3B08680
01516	0	10000	0	02155	TZE ERROR1	LEAST TWO ARGUMENTS FOR MULTIVARIATE FCNS.	F3B08690
01517	0	50000	1	02327	CLA AIL,1	LOCATION OF ARGUMENT	F3B08700
01520	0	60100	0	02324	RET3 STO M1CW+2	LOCATION OF ARGUMENT	F3B08710
01521	1	77777	1	01522	TXI M13685,1,-1	ADJUST COUNT IN IR 1,	F3B08720
01522	0	50000	1	02327	M13685 CLA AIL,1	REL ADD + TAG OF	F3B08730
01523	0	60100	0	02325	STO M1CW+3	FIRST ARG TO M1CW+3	F3B08740
01524	1	77777	1	01525	TXI M13690,1,-1		F3B08750
01525	-0	75400	1	00000	M13690 PXD 0,1	END OF AIL REC	F3B08760
01526	0	34000	0	02305	CAS M1ALWN	2S COMPLIMENT OF NO. OF WORDS	F3B08770
01527	0	02000	0	01532	TRA M13700	IN AIL RECORD	F3B08780
01530	0	07400	4	00341	TSX M10210,4	BRING IN NEXT AIL REC.	F3B08790
01531	0	07400	4	00004	TSX 4,4	NO OF WORDS OF AIL REC NOT A MULTIPLE OF 4	F3B08800
01532	0	50000	0	02325	M13700 CLA M1CW+3	REL. ADDRESS + TAG, IF ANY	F3B08810
01533	-0	32000	0	02207	ANA M1CON+15	+000000002000	F3B08820
01534	0	10000	0	01540	TZE M13710	FIRST ARG TAGGED	F3B08830
01535	-0	76000	0	00143	MSE 99	END OF CHTG TABLE	F3B08840
01536	0	07400	4	01016	TSX M12500,4	CHTG TABLE SEARCH	F3B08850
01537	0	76000	0	00143	PSE 99		F3B08860
01540	0	50000	0	02201	M13710 CLA M1CON+9	SIGN, MODULO OR MAX, MIN	F3B08870
01541	0	34000	0	02312	CAS CCELL	COMPARE TO 10	F3B08880
01542	0	76100	0	00000	NOP		F3B08890
01543	0	02000	0	01706	TRA M13770	MAX OR MIN BRANCH	F3B08900
01544	0	50000	0	02175	CLA M1CON+5	SIGN OR MODULO, +000012000000	F3B08910
01545	0	34000	0	02312	CAS CCELL		F3B08920
01546	0	76100	0	00000	NOP		F3B08930
01547	0	02000	0	02122	TRA M13950	SIGN BRANCH	F3B08940
01550	-0	76000	0	00144	MSE 100	XMOD OR MOD	F3B08950
01551	0	02000	0	01604	TRA M13735	FL0ATING PT., MOD BRANCH	F3B08960
					XMOD BRANCH		F3B08970
01552	0	07400	4	00707	TSX CIT00,4	COMPILE 3 INST, FOR MULTIVARIATE	F3B08980
01553	0	00000	0	02322	HTR M1CW	XMOD.	F3B08990
01554	0	00000	0	02232	HTR M1ABC+13	CLM	F3B09000
01555	0	00000	0	02170	HTR M1CON		F3B09010
01556	0	00000	0	02170	HTR M1CON		F3B09020
01557	0	07400	4	00707	TSX CIT00,4		F3B09030
01560	0	00000	0	02170	HTR M1CON		F3B09040
01561	0	00000	0	02216	HTR M1ABC+1	LDQ	F3B09050
01562	0	00000	0	02324	HTR M1CW+2	A	F3B09060
01563	0	00000	0	02325	HTR M1CW+3		F3B09070
01564	0	07400	4	00707	TSX CIT00,4		F3B09080
01565	0	00000	0	02170	HTR M1CON		F3B09090
01566	0	00000	0	02223	HTR M1ABC+6	LLS	F3B09100
01567	0	00000	0	02170	HTR M1CON		F3B09110
01570	0	00000	0	02170	HTR M1CON		F3B09120
01571	0	50000	0	02170	CLA M1CON	ZERO, TO REPLACE 1,S.	F3B09130
01572	0	60100	0	02322	STO M1CW	INTERNAL FMLA NO.	F3B09140
01573	0	50000	0	02233	CLA M1ABC+14	DVP OP CODE	F3B09150
01574	0	60100	0	02323	STO M1CW+1		F3B09160
01575	1	77776	1	01576	TXI M13725,1,-2	DECREASE IR 1 BY 2	F3B09170

01576	0	07400	4	02156	M13725	TSX	ERROR1+1,4	CHECK FOR END OF CALLING SEQUENCE	F3B09180
01577	0	60100	0	02324		STO	M1CW+2	SYMBOLIC ADDRESS OF 2ND ARGUM.	F3B09190
01600	1	77777	1	01601		TXI	M13730,1,-1		F3B09200
01601	0	50000	1	02327	M13730	CLA	AIL,1	REL ADD AND TAG 0,	F3B09210
01602	0	60100	0	02325		STO	M1CW+3	SECOND ARG TO M1CW+3	F3B09220
01603	1	77777	1	00762		TXI	M12022,1,-1	BACK TO END OF AIL ROUTINE	F3B09230
							MOD BRANCH		F3B09240
01604	0	07400	4	00707	M13735	TSX	CIT00,4	COMPILE FIRST INST	F3B09250
01605	0	00000	0	02322		HTR	M1CW		F3B09260
01606	0	00000	0	02250		HTR	M1ABC+27	CLS A	F3B09270
01607	0	00000	0	02324		HTR	M1CW+2		F3B09280
01610	0	00000	0	02325		HTR	M1CW+3		F3B09290
01611	0	50000	0	02324		CLA	M1CW+2	SAVE FIRST ARG IN 3RD WORD	F3B09300
01612	0	60100	0	02320		STO	3WD		F3B09310
01613	0	50000	0	02325		CLA	M1CW+3	SAVE REL ADD AND TAG IN 4WD	F3B09320
01614	0	60100	0	02321		STO	4WD		F3B09330
01615	1	77776	1	01616		TXI	M13741,1,-2		F3B09340
01616	0	07400	4	02156	M13741	TSX	ERROR1+1,4	CHECK THAT NEXT WORD IS LAST ARG.	F3B09350
01617	0	60100	0	02324		STO	M1CW+2	SYMBOLIC AD OF 2ND ARG.	F3B09360
01620	1	77777	1	01621		TXI	M13745,1,-1		F3B09370
01621	0	50000	1	02327	M13745	CLA	AIL,1	REL ADD AND TAG OF	F3B09380
01622	0	60100	0	02325		STO	M1CW+3	SECOND ARG TO M1CW+3	F3B09390
01623	-0	32000	0	02207		ANA	M1CON+15	TEST IF TAGGED	F3B09400
01624	0	10000	0	01630		TZE	M13755	SECOND ARG TAGGED	F3B09410
01625	-0	76000	0	00143		MSE	99	END OF CHTG TABLE	F3B09420
01626	0	07400	4	01016		TSX	M12500,4	BACK TO AIL ROUTINE	F3B09430
01627	0	76000	0	00143		PSE	99		F3B09440
01630	0	07400	4	00707	M13755	TSX	CIT00,4	COMPILE LAST 9 INSTS	F3B09450
01631	0	00000	0	02170		HTR	M1CON		F3B09460
01632	0	00000	0	02234		HTR	M1ABC+15	FDP B	F3B09470
01633	0	00000	0	02324		HTR	M1CW+2		F3B09480
01634	0	00000	0	02325		HTR	M1CW+3		F3B09490
01635	0	07400	4	00707		TSX	CIT00,4		F3B09500
01636	0	00000	0	02170		HTR	M1CON		F3B09510
01637	0	00000	0	02224		HTR	M1ABC+7	STQ	F3B09520
01640	0	00000	0	02242		HTR	M1ABC+21	010000000000	F3B09530
01641	0	00000	0	02170		HTR	M1CON		F3B09540
01642	0	07400	4	00707		TSX	CIT00,4		F3B09550
01643	0	00000	0	02170		HTR	M1CON		F3B07560
01644	0	00000	0	02215		HTR	M1ABC	CLA	F3B09570
01645	0	00000	0	02242		HTR	M1ABC+21	010000000000	F3B09580
01646	0	00000	0	02170		HTR	M1CON		F3B09590
01647	0	07400	4	00707		TSX	CIT00,4		F3B09600
01650	0	00000	0	02170		HTR	M1CON		F3B09610
01651	0	00000	0	02227		HTR	M1ABC+10	UFA	F3B09620
01652	0	00000	0	02243		HTR	M1ABC+22	060000000000	F3B09630
01653	0	00000	0	02170		HTR	M1CON		F3B09640
01654	0	07400	4	00707		TSX	CIT00,4		F3B09650
01655	0	00000	0	02170		HTR	M1CON		F3B09660
01656	0	00000	0	02231		HTR	M1ABC+12	FAD	F3B09670
01657	0	00000	0	02243		HTR	M1ABC+22	060000000000	F3B09680
01660	0	00000	0	02170		HTR	M1CON		F3B09690
01661	0	07400	4	00707		TSX	CIT00,4		F3B09700
01662	0	00000	0	02170		HTR	M1CON		F3B09710

01663	0	00000	0	02222	HTR	M1ABC+5	STO	F3B09720	
01664	0	00000	0	02242	HTR	M1ABC+21	060000000000	F3B09730	
01665	0	00000	0	02170	HTR	M1CON		F3B09740	
01666	0	07400	4	00707	TSX	CIT00,4		F3B09750	
01667	0	00000	0	02170	HTR	M1CON		F3B09760	
01670	0	00000	0	02216	HTR	M1ABC+1	LDQ	F3B09770	
01671	0	00000	0	02242	HTR	M1ABC+21	060000000000	F3B09780	
01672	0	00000	0	02170	HTR	M1CON		F3B09790	
01673	0	07400	4	00707	TSX	CIT00,4		F3B09800	
01674	0	00000	0	02170	HTR	M1CON		F3B09810	
01675	0	00000	0	02225	HTR	M1ABC+8	FMP	F3B09820	
01676	0	00000	0	02324	HTR	M1CW+2	B	F3B09830	
01677	0	00000	0	02325	HTR	M1CW+3		F3B09840	
01700	0	07400	4	00707	TSX	CIT00,4		F3B09850	
01701	0	00000	0	02170	HTR	M1CON		F3B09860	
01702	0	00000	0	02231	HTR	M1ABC+12	FAD	F3B09870	
01703	0	00000	0	02320	HTR	3WD	A	F3B09880	
01704	0	00000	0	02321	HTR	4WD		F3B09890	
01705	1	77777	1	00774	TXI	M12035,1,-1	AIL ROUTINE	F3B09900	
						MAX, MIN BRANCH		F3B09910	
01706	0	50000	0	02200	M13770	CLA	M1CON+8	+000004000000	F3B09920
01707	0	34000	0	02312	CAS	CCELL	FOR MIN BRANCH		F3B09930
01710	0	76100	0	00000	NOF				F3B09940
01711	0	02000	0	02017	TRA	M13855	MIN BRANCH		F3B09950
						ALL MAX ROUTINES			F3B09960
01712	0	07400	4	00707	TSX	CIT00,4	COMPILE FIRST INST		F3B09970
01713	0	00000	0	02322	HTR	M1CW			F3B09980
01714	0	00000	0	02215	HTR	M1ABC	CLA A1		F3B09990
01715	0	00000	0	02324	HTR	M1CW+2	SYMBOLIC ADDRESS OF FIRST ARGUMENT		F3B10000
01716	0	00000	0	02325	HTR	M1CW+3	RELATIVE ADDRESS + TAG, IF ANY		F3B10010
01717	0	50000	1	02327	M13780	CLA	AIL,1	END MARK, IF ANY, TO ENDT, THIS WILL	F3B10020
01720	0	60100	0	02313	STO	ENDT	BE ALL 1S IF END.		F3B10030
01721	1	77776	1	01722	TXI	M13785,1,-2			F3B10040
01722	0	50000	1	02327	M13785	CLA	AIL,1	SYMBOLIC ADDRESS OF ITH ARG, I EQUAL 2,...,N	F3B10050
01723	0	60100	0	02324	STO	M1CW+2	TO M1CW+2		F3B10060
01724	1	77777	1	01725	TXI	M13790,1,-1			F3B10070
01725	0	50000	1	02327	M13790	CLA	AIL,1	REL ADD AND TAG OF	F3B10080
01726	0	60100	0	02325	STO	M1CW+3	ITH ARG TO M1CW+3		F3B10090
01727	-0	32000	0	02207	ANA	M1CON+15	TEST IF ITHARGUMENT TAGGED		F3B10100
01730	0	10000	0	01734	TZE	M13800	ITH ARG NOT TAGGED		F3B10110
01731	-0	76000	0	00143	MSE	99	END OF CHTG TABLE		F3B10120
01732	0	07400	4	01016	TSX	M12500,4	CHTG TABLE SEARCH		F3B10130
01733	0	76000	0	00143	PSE	99			F3B10140
01734	0	50000	0	02200	M13800	CLA	M1CON+8	000004000000	F3B10150
01735	0	34000	0	02312	CAS	CCELL	COMPARE FOR MINIMUM BR.		F3B10160
01736	0	76100	0	00000	NOF				F3B10170
01737	0	02000	0	02025	TRA	M13860	MIN BRANCH		F3B10180
01740	0	07400	4	00707	TSX	CIT00,4	COMPILE 3 INSTRUCTIONS FOR		F3B10190
01741	0	00000	0	02170	HTR	M1CON	ITH ARG		F3810200
01742	0	00000	0	02216	HTR	M1ABC+1	LDQ		F3B10210
01743	0	00000	0	02324	HTR	M1CW+2	ITH ARGUMENT I=2....,N		F3B10220
01744	0	00000	0	02325	HTR	M1CW+3			F3B10230
01745	0	07400	4	00707	TSX	CIT00,4			F3B10240
01746	0	00000	0	02170	HTR	M1CON			F3B10250

01747	0	00000	0	02235	HTR	M1ABC+16	TLQ	F3810260
01750	0	00000	0	02245	HTR	M1ABC+24	+1700000000000	F3B10270
01751	0	00000	0	02177	HTR	M1CON+7	+000002000000	F3810280
01752	0	07400	4	00707	TSX	CIT00,4		F3B10290
01753	0	00000	0	02170	HTR	M1CON		F3B10300
01754	0	00000	0	02215	HTR	M1ABC	CLA AI	F3B10310
01755	0	00000	0	02324	HTR	M1CW+2		F3B10320
01756	0	00000	0	02325	HTR	M1CW+3		F3B10330
01757	0	50000	0	02313	CLA	ENDT	I=N	F3B10340
01760	0	40200	0	02211	SUB	M1CON+17	-377777777777	F3B10350
01761	0	10000	0	01771	TZE	M13830	LAST ARGUMENT	F3B10360
01762	1	77777	1	01763	TXI	M13820,1,-1		F3B10370
01763	-0	75400	1	00000	M13820	PXD 0,1	END OF AIL REC	F3B10380
01764	0	34000	0	02305	CAS	M1ALWN	2S COMPL. OF NO. OF WORS OF AIL REC	F3810390
01765	0	02000	0	01717	TRA	M13780	TO COMPILE INSTR. FOR ALL ARGUMENTS	F3810400
01766	0	07400	4	00341	TSX	M10210,4	PACK TO READ NEXT AIL RECORD	F3810410
01767	0	07400	4	00004	TSX	4,4	NO OF WORDS OF AIL REC NOT A MULTIPLE OF 4	F3810420
01770	0	02000	0	01717	TRA	M13780		F3810430
01771	-0	76000	0	00144	M13830	MSE 100	TEST FOR FIXED PT AND TURN OFF SW.	F3B10440
01772	1	77777	1	00774	TXI	M12035,1,-1	OUT FOR XMAX0, MAX1, XMIN0, MIN1	F3810450
01773	0	50000	0	02312	CLA	CCELL	NO. OF FUNCTION FIXED MAX.	F3810460
01774	0	77100	0	00022	ARS	18		F3B10470
01775	0	76000	0	00001	LBT		TEST FOR FLOATING MAX OR MIN	F3B10480
01776	0	02000	0	01440	TRA	M13630	XMAX1, XMIN1, FIXED MIX OR MIN	F3810490
01777	0	07400	4	00707	TSX	CIT00,4	COMPILE LAST 3 INSTRUCTIONS	F3B10500
02000	0	00000	0	02170	HTR	M1CON	FOR MAX0, MIN0	F3810510
02001	0	00000	0	02220	HTR	M1ABC+3	LRS	F3B10520
02002	0	00000	0	02170	HTR	M1CON		F3810530
02003	0	00000	0	02203	HTR	M1CON+11	18	F3B10540
02004	0	07400	4	00707	TSX	CIT00,4		F3B10550
02005	0	00000	0	02170	HTR	M1CON		F3B10560
02006	0	00000	0	02244	HTR	M1ABC+23	ORA	F3B10570
02007	0	00000	0	02243	HTR	M1ABC+22	06000D000000	F3B10580
02010	0	00000	0	02170	HTR	M1CON		F3810590
02011	0	07400	4	00707	TSX	CIT00,4		F3B10600
02012	0	00000	0	02170	HTR	M1CON		F3810610
02013	0	00000	0	02231	HTR	M1ABC+12	FAD	F3B10620
02014	0	00000	0	02243	HTR	M1ABC+22	060000000000	F3B10630
02015	0	00000	0	02170	HTR	M1CON		F3810640
02016	1	77777	1	00774	TXI	M12035,1,-1	BACK TO END OF AIL ROUTINE	F3B10650
						ALL MIN ROUTINE	COMPILE FIRST INST	F3B10660
02017	0	07400	4	00707	M13855	TSX CIT00,4	COMPILE FIRST INST	F3B10670
02020	0	00000	0	02322	HTR	M1CW		F3810680
02021	0	00000	0	02216	HTR	M1ABC+1	LDQ A1	F3B10690
02022	0	00000	0	02324	HTR	M1CW+2		F3810700
02023	0	00000	0	02325	HTR	M1CW+3		F3B10710
02024	0	02000	0	01717	TRA	M13780	TO STORE NEEDED INFORMATION	F3810720
02025	0	07400	4	00707	M13860	TSX CIT00,4	COMPILE 3 INST FOR	F3B10730
02026	0	00000	0	02170	HTR	M1CON	ITH ARG	F3B10740
02027	0	00000	0	02215	HTR	M1ABC	CLA A2...N	F3B10750
02030	0	00000	0	02324	HTR	M1CW+2		F3810760
02031	0	00000	0	02325	HTR	M1CW+3		F3810770
02032	0	07400	4	00707	TSX	CIT00,4		F3810780
02033	0	00000	0	02170	HTR	M1CON		F3B10790

02034	0	00000	0	02235	HTR	M1ABC+16	TLQ	F3B10800
02035	0	00000	0	02245	HTR	M1ABC+24	+000002000000	F3B10810
02036	0	00000	0	02177	HTR	M1CON+7	+1700000000000	F3B10820
02037	0	07400	4	00707	TSX	CIT00,4		F3B10830
02040	0	00000	0	02170	HTR	M1CON		F3810840
02041	0	00000	0	02216	HTR	M1ABC+1	LDQ A2...N	F3B10850
02042	0	00000	0	02324	HTR	M1CW+2		F3B10860
02043	0	00000	0	02325	HTR	M1CW+3		F3B10870
02044	0	50000	0	02313	CLA	ENDT	I=N	F3B10880
02045	0	40200	0	02211	SUB	M1CON+17	-377777777777	F3B10890
02046	0	10000	0	02050	TZE	M13880	LAST ARGUMENT	F3B10900
02047	1	77777	1	01763	TXI	M13820,1,-1	TO TEST IF END OF AIL RECORD	F3B10910
02050	0	07400	4	00707	M13880 TSX	CIT00,4	COMPILE TWO INST.	F3B10920
02051	0	00000	0	02170	HTR	M1CON		F3B10930
02052	0	00000	0	02224	HTR	M1ABC+7	STQ	F3B10940
02053	0	00000	0	02242	HTR	M1ABC+21	010000000000	F3B10950
02054	0	00000	0	02170	HTR	M1CON		F3B10960
02055	0	07400	4	00707	TSX	CIT00,4		F3B10970
02056	0	00000	0	02170	HTR	M1CON		F3B10980
02057	0	00000	0	02215	HTR	M1ABC	CLA	F3B10990
02060	0	00000	0	02242	HTR	M1ABC+21	010000000000	F3B11000
02061	0	00000	0	02170	HTR	M1CON		F3B11010
02062	0	02000	0	01771	TRA	M13830	TEST SW, 4 AND GO TO VARIOUS ROUTES	F3B11020
						FLOAT BRANCH		F3B11030
02063	0	07400	4	02156	M13900 TSX	ERROR1+1,4	TO TEST IF ONLY ONE ARGUMENT	F3B11040
02064	0	60100	0	02324	STO	M1CW+2	SYMBOLIC LOCATION OF ARGUMENT	F3B11050
02065	1	77777	1	02066	TXI	M13905,1,-1		F3B11060
02066	0	50000	1	02327	M13905 CLA	AIL,1	REL ADD AND TAG, IF ANY,	F3B11070
02067	0	60100	0	02325	STO	M1CW+3	TO M1CW+3	F3B11080
02070	0	50000	0	02324	CLA	M1CW+2		F3B11090
02071	0	40200	0	02241	SUB	M1ABC+20	PLUS SIGN	F3B11100
02072	0	10000	0	02111	TZE	M13915	ARG IN AC	F3B11110
02073	0	50000	0	02324	CLA	M1CW+2		F3B11120
02074	0	40200	0	02237	SUB	M1ABC+18	ASTERISK	F3B11130
02075	0	10000	0	02112	TZE	M13920	ARG IN MQ	F3B11140
02076	0	50000	0	02325	CLA	M1CW+3	RELATIVE ADDRESS AND TAG, IF ANY	F3B11150
02077	-0	32000	0	02207	ANA	M1CON+15		F3B11160
02100	0	10000	0	02104	TZE	M13910	ARG NOT TAGGED	F3811170
02101	-0	76000	0	00143	MSE	99		F3B11190
02102	0	07400	4	01016	TSX	M12500,4	CHTG TABLE SEARCH	F3B11190
02103	0	76000	0	00143	PSE	99		F3B11200
02104	0	07400	4	00707	M13910 TSX	CIT00,4		F3B11210
02105	0	00000	0	02322	HTR	M1CW		F3B11220
02106	0	00000	0	02215	HTR	M1ABC	CLA A	F3B11230
02107	0	00000	0	02324	HTR	M1CW+2		F3811240
02110	0	00000	0	02325	HTR	M1CW+3		F3811250
						ARG IN AC (STORED)		F3B11260
02111	0	02000	0	01777	M13915 TRA	M13830+6	TO COMILE 3 INSTR. AS MAX OR MIN	F3B11270
						ARG IN MQ		F3B11280
02112	0	50000	0	02242	M13920 CLA	M1ABC+21	010000000000	F3B11290
02113	0	60100	0	02324	STO	M1CW+2	SYMBOLIC LOCATION	F3B11300
02114	0	07400	4	00707	TSX	CIT00,4		F3B11320
02115	0	00000	0	02322	HTR	M1CW		F3B11330
02116	0	00000	0	02224	HTR	M1ABC+7	STQ	F3B11340

02272	443145006060							
02273	0 00000 0 00000	COMBOX	TAG OR INT FMLA NO OF FORTAG ENTRY DURING CHTG EDIT					F3B11850
02274	0 00000 0 00000	CHTGL	2S COMP OF NO OF WORDS IN CHTG TABLE					F3B11860
02275	0 00000 0 00000	CHTGE1	2S COMP OF CUR. ENTRY POINT IN CHTG TABLE					F3B11870
02276	0 00000 0 00000	CHTGE2	2S COMP OF NEXT ENTRY POINT IN CHTG TABLE					F3B11880
02277	0 00000 0 00000	CHTGFN	INT FMLA NO APPEARING IN CURRENT CHTG TABLE BLOCK					F3B11890
02300	0 00000 0 00000	SXTXL	LENGTH OF SXTX TABLE					F3B11900
02301	0 00000 0 00000	SXLOC	LOCATION WORD OF CURRENT DO INST					F3B11910
02302	0 00000 0 00000	CBOX	IRC DURING CHTG TABLE SEARCH, SXTX TABLE SEARCH					F3B11920
02303	0 00000 0 00000	TAGBOX	TAG OF CUR AIL INST DURING CHTG TABLE SEARCH					F3B11930
02304	0 00000 0 00000	M1DOWN	2S COMP OF NO OF WORDS IN CUR DO REC					F3B11940
02305	0 00000 0 00000	M1ALWN	2S COMP OF NO OF WORDS IN CUR AIL REC					F3B11950
02306	0 00000 0 00000	M1TRC	NO OF REC READS					F3B11960
02307	0 00000 0 00000	M1DOFN	INT FMLA NO OF CUR BLOCK OF DO INST					F3B11970
02310	0 00000 0 00000	M1ALFN	INT FMLA NO OF CUR BLOCK OF AIL INST					F3B11980
02311	0 00000 0 00000	CCOUNT	COUNT NO OF PAIRS OF MPY,LRS INST FOR EXP ROUTINE					F3B11990
02312	0 00000 0 00000	CCELL	IND SPECIAL OP ROUTINE					F3B12000
02313	0 00000 0 00000	ENDT	IND APPEARANCE OF END MARK IN MAX,MIN ROUTINES					F3B12010
02314	0 00000 0 00000	E1C	CELL FOR SAVING MQ					F3B12020
02315	0 00000 0 00000	E2C	CELL FOR SAVING IRA					F3B12030
02316	0 00000 0 00000	E3C	CELL FOR SAVING IRB					F3B12040
02317	0 00000 0 00000	BB0X	2S COMP OF NO OF WORDS ALREADY ENTERED IN BLOCK					F3B12050
02320	0 00000 0 00000	3WD	TEHP STORAGE FOR THID WD OF COMPILED INST					F3B12060
02321	0 00000 0 00000	4WD	TEHP STORAGE FORFOURTH WD OF COMPILED INST					F3B12070
		02322 M1CW	BSS 4 FOUR WORD INST SPACE FOR COMPILING					F3B12080
02326	0 00000 0 00000	PZE	LENGTH OF FORTAG TABLE					F3B12090
		02327 FORTAG	BSS 1500 AIL,DO,CIB LATER SHARE THIS BLOCK					F3B12100
		05263 UCHTG	BSS 300					F3B12110
		05737 ERAS	BSS 2 ORIGEN + SXTX LENGTH, SXTX, CHTG LENGTH					F3B12120
		05741 CHTG	BSS 600					F3B12130
		02327 AIL	SYN FORTAG					F3B12140
		02473 DO	SYN FORTAG+100					F3B12150
		02637 CIB	SYN FORTAG+200					F3B12160
		03003 SXTX	SYN FORTAG+300					F3B12170
		07073 0P1	SYN 3643					
		00030	END 24					F3B13420

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	1219	0	0	0	0
LIB	0	0	0	0	0
COL	1219	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 1287

NUMBER OF SYMBOLS, DEF 242,DEFOP 0,UNDEF 0
 REM MASTER RECORD CARD = FN058

00103	0	50000	0	02347	CLA	CHS1	COMPUTED CHECK SUM.	F3B00540
00104	0	40200	0	02350	SUB	CHS2	DO CHECK SUMS MATCH	F3B00550
00105	0	10000	0	00110	TZE	STRS	YES	F3B00560
00106	2	00001	4	00057	TIX	RDRA3,4,1	IF THE SUMS DONT AGREE, TRY 4 MORE TIMES	F3B00570
00107	0	07400	4	00004	COR3	TSX 4,4	CHECK SUMS INCORRECT AFTER 5 TRIES	F3B00580
						PROGRAM TO SORT	TRASTO ENTRIES BY TYPE	F3B00590
00110	0	50000	0	02345	STRS	CLA TRSWC	INITIALIZATION OF ALL MODIFIED ADDRESSES	F3B00600
00111	0	40000	0	02333	ADD	TRSORG		F3B00610
00112	0	62100	0	00135	STA	A4		F3B00620
00113	0	62100	0	00140	STA	A1		F3B00630
00114	0	62100	0	00144	STA	A3		F3B00640
00115	0	62100	0	00154	STA	B1		F3B00650
00116	0	62100	0	00162	STA	B5		F3B00660
00117	0	62100	0	00174	STA	C3		F3B00670
00120	0	62100	0	00204	STA	D2		F3B00680
00121	0	62100	0	00210	STA	D3		F3B00690
00122	0	62100	0	00220	STA	E2		F3B00700
00123	0	62100	0	00226	STA	E4		F3B00710
00124	0	62100	0	00240	STA	F3		F3B00720
00125	-0	63400	0	02337	SXD	1BOX,0	CLEAR DECREMENT OF WORK AREA	F3B00730
00126	-0	63400	0	02340	SXD	2BOX,0		F3B00740
00127	-0	63400	0	02341	SXD	3BOX,0		F3B00750
00130	-0	63400	0	02342	SXD	4BOX,0		F3B00760
00131	-0	63400	0	02343	SXD	5BOX,0		F3B00770
00132	-0	63400	0	02344	SXD	6BOX,0		F3B00780
00133	0	53400	1	02345	LXA	TRSWC,1	WORD COUNT IN IR 1	F3B00790
00134	1	77776	1	00135	TXI	A4,1,-2		F3B00800
00135	0	50000	1	00000	A4	CLA 0,1	OBTAIN WORD 3, AND SEPARATE TYPES	F3B00810
00136	-0	12000	0	00203	TMI	D1	ENTRY IS TYPE 4,5 OR 6, 3RD WD, MINUS	F3B00820
						ENTRY IS TYPE 1, 2, OR 3		F3B00830
00137	1	00002	1	00140	TXI	A1,1,2	RESTORE LOOP COUNT	F3B00840
00140	0	50000	1	00000	A1	CLA 0,1	OBTAIN WORD 1	F3B00850
00141	0	12000	0	00153	TPL	B2	ENTRY IS TYPE 1 OR 2	P3B0D890
						ENTRY IS TYPE 3		F3B00870
00142	0	53400	4	02277	LXA	L(4),4	MINUS IN FIRST AND THIRD WDS.	F3B00880
00143	-0	53400	2	02341	LXD	3BOX,2	PLACE A COUNT OF 4 IN IR 4,	F3B00890
00144	-0	50000	1	00000	A3	CAL 0,1	CLEAR IR 2, AND GET 1ST WD. IN ACC	F3B00900
00145	0	60200	2	04030	SLW	TYPE3,2	PLACE IN PROPER MEMORY LOC.	F3B00910
00146	1	77777	2	00147	TXI	A2,2,-1	SUB. 1 FROM IR 2, LOOP BACK	F3B00920
00147	-0	63400	2	02341	A2	SXD 3BOX,2	TO GET 4 WORDS IN PROPER LOC.	F3B00930
00150	-2	00001	1	00247	TNX	PACK,1,1	EXIT FOR END OF TRASTO	F3B00940
00151	2	00001	4	00144	TIX	A3,4,1		F3B00950
00152	1	77776	1	00135	TXI	A4,1,-2	PICK UP NEXT TRASTO ENTRY	F3B00960
						ENTRY IS TYPE 1 OR 2		F3B00970
00153	1	77777	1	00154	B2	TXI B1,1,-1		F3B00980
00154	-0	50000	1	00000	B1	CAL 0,1	OBTAIN WORD 2	F3B00990
00155	-0	32000	0	02335	ANA	MASK	EXAMINE PREFIX, IF TYPE 2 HAS MINUS SIGN	F3B01000
00156	0	10000	0	00171	TZE	C1	ENTRY IS TYPE 1	F3B01010
						ENTRY IS TYPE 2		F3B01020
00157	1	00001	1	00160	TXI	B3,1,1	RESTORE COUNT TO GET WORD 1	F3B01030
00160	0	53400	4	02277	B3	LXA L(4),4	COUNT 4 IN IR 4	F3B01040
00161	-0	53400	2	02340	LXD	2BOX,2	CLEAR IR 2	F3B01050
00162	-0	50000	1	00000	B5	CAL 0,1	1ST WORD	F3B01060
00163	0	60200	2	03210	SLW	TYPE2,2	PROPER OUTPUT AREA	F3B01070

00164	1	77777	2	00165		TXI	B4,2,-1	DECREASE COUNT IN IR 2 BY -1	F3B01080
00165	-0	63400	2	02340	B4	SXD	2BOX,2	PLACE COUNT IN PROPER PLACE	F3B01090
00166	-2	00001	1	00247		TNX	PACK,1,1	EXIT	F3B01100
00167	2	00001	4	00162		TIX	B5,4,1		F3B01110
00170	1	77776	1	00135		TXI	A4,1,-2	TRANSFER BACK TO SORT NEXT ENTRY	F3B01120
								ENTRY IS TYPE 1	F3B01130
00171	1	00001	1	00172	C1	TXI	C2,1,1	RESTORE COUNT TO GET WD 1.	F3B01140
00172	0	53400	4	02277	C2	LXA	L(4),4		F3B01150
00173	-0	53400	2	02337		LXD	1BOX,2		F3B01160
00174	-0	50000	1	00000	C3	CAL	0,1		F3B01170
00175	0	60200	2	02370		SLW	TYPE1,2	STORE IN PROPER MEMORY POSITION	F3B01180
00176	1	77777	2	00177		TXI	C4,2,-1		F3B01190
00177	-0	63400	2	02337	C4	SXD	1BOX,2	SAVE COUNT OF TYPE 1 ENTRY	F3B01200
00200	-2	00001	1	00247		TNX	PACK,1,1	EXIT	F3B01210
00201	2	00001	4	00174		TIX	C3,4,1		F3B01220
00202	1	77776	1	00135		TXI	A4,1,-2	BACK FOR NEXT ENTRY	F3B01230
								ENTRY IS TYPE 4, 5 OR 6	F3B01240
00203	1	00002	1	00204	D1	TXI	D2,1,2		F3B01250
00204	0	50000	1	00000	D2	CLA	0,1	OBTAIN WORD 1	F3B01260
00205	0	12000	0	00217		TPL	E1	ENTRY IS TYPE 4 OR 6	F3B01270
								ENTRY IS TYPE 5	F3B01280
00206	0	53400	4	02277		LXA	L(4),4		F3B01290
00207	-0	53400	2	02343		LXD	5BOX,2	COUNT OF ENTRIES FOR TYPE 5	F3B01300
00210	-0	50000	1	00000	D3	CAL	0,1		F3B01310
00211	0	60200	2	05470		SLW	TYPE5,2	STORE IN PROPER MEMORY POS.	F3B01320
00212	1	77777	2	00213		TXI	D4,2,-1		F3B01330
00213	-0	63400	2	02343	D4	SXD	5BOX,2	SAVE COUNT FOR TYPE 1 ENTRY	F3B01340
00214	-2	00001	1	00247		TNX	PACK,1,1	EXIT	F3B01350
00215	2	00001	4	00210		TIX	D3,4,1		F3B01360
00216	1	77776	1	00135		TXI	A4,1,-2	OBTAIN NEXT TRASTO ENTRY	F3B01370
								ENTRY IS TYPE 4 OR 6	F3B01380
00217	1	77777	1	00220	E1	TXI	E2,1,-1		F3B01390
00220	-0	50000	1	00000	E2	CAL	0,1	OBTAIN WORD 2	F3B01400
00221	-0	32000	0	02335		ANA	MASK	TEST IF MINUS	F3B01410
00222	0	10000	0	00235		TZE	F1	ENTRY IS TYPE 4	F3B01420
								ENTRY IS TYPE 6	F3B01430
00223	1	00001	1	00224		TXI	E3,1,1	RESTORE COUNT TO GET WORD 1	F3B01440
00224	0	53400	4	02277	E3	LXA	L(4),4		F3B01450
00225	-0	53400	2	02344		LXD	6BOX,2		F2B01460
00226	-0	50000	1	00000	E4	CAL	0,1		F3B01470
00227	0	60200	2	06310		SLW	TYPE6,2	STORE IN PROPER MEMORY POS	F3B01480
00230	1	77777	2	00231		TXI	E5,2,-1		F3B01490
00231	-0	63400	2	02344	E5	SXD	6BOX,2	SAVE COUNT FOR TYPE 6 ENTRY	F3B01500
00232	-2	00001	1	00247		TNX	PACK,1,1	EXIT	F3B01510
00233	2	00001	4	00226		TIX	E4,4,1		F3B01520
00234	1	77776	1	00135		TXI	A4,1,-2	OBTAIN NEXT TRASTO ENTRY	F3B01530
								ENTRY IS TYPE 4	F3B01540
00235	1	00001	1	00236	F1	TXI	F2,1,1		F3B01550
00236	0	53400	4	02277	F2	LXA	L(4),4		F3B01560
00237	-0	53400	2	02342		LXD	4BOX,2		F3B01570
00240	-0	50000	1	00000	F3	CAL	0,1		F3B01580
00241	0	60200	2	04650		SLW	TYPE4,2	STORE IN PROPER MEMORY POS	F3B01590
00242	1	77777	2	00243		TXI	F4,2,-1		F3B01600
00243	-0	63400	2	02342	F4	SXD	4BOX,2	SAVE COUNT FOR TYPE 4 ENTRY	F3B01610

00244	-2	00001	1	00247		TNX	PACK,1,1	EXIT		F3B01620
00245	2	00001	4	00240		TIX	F3,4,1			F3B01630
00246	1	77776	1	00135		TXI	A4,1,-2	OBTAIN NEXT TRASTO ENTRIES		F3B01640
							TYPE 2 TO TRASTO			F3B01650
00247	-0	53400	1	02337	PACK	LXD	1BOX,1	PACK TRASTO ENTRIES TO GETHER		F3B01660
00250	-0	53400	4	02340		LXD	2BOX,4	IN MEMORY IN ORDER OF TYPES 1 THRU		F3B01670
00251	-3	00000	4	00261		TXL	H5,4,0	6.		F3B01680
00252	-0	53400	2	02274		LXD	L(0),2			F3B01690
00253	-0	50000	2	03210	G4	CAL	TYPE2,2			F3B01700
00254	0	60200	1	02370		SLW	TYPE1,1			F3801710
00255	1	77777	1	00256		TXI	G1,1,-1			F3B01720
00256	1	77777	2	00257	G1	TXI	G2,2,-1			F3801730
00257	1	00001	4	00260	G2	TXI	G3,4,1			F3B01740
00260	3	00000	4	00253	G3	TXH	G4,4,0	INDEX C REDUCES TO ZERO		F3B01750
							TYPE 3 TO TRASTO			F3B01760
00261	-0	53400	2	02341	H5	LXD	3BOX,2			F3B01770
00262	-3	00000	2	00271		TXL	I5,2,0			F3B01780
00263	-0	50000	4	04030	H4	CAL	TYPE3,4			F3B01790
00264	0	60200	1	02370		SLW	TYPE1,1			F3B01800
00265	1	77777	1	00266		TXI	H1,1,-1			F3B01810
00266	1	77777	4	00267	H1	TXI	H2,4,-1			F3B01820
00267	1	00001	2	00270	H2	TXI	H3,2,1			F3B01830
00270	3	00000	2	00263	H3	TXH	H4,2,0			F3B01840
							TYPE 4 TO TRASTO			F3B01850
00271	-0	53400	4	02342	I5	LXD	4BOX,4			F3801860
00272	-3	00000	4	00301		TXL	J5,4,0			F3B01870
00273	-0	50000	2	04650	I4	CAL	TYPE4,2			F3B01880
00274	0	60200	1	02370		SLW	TYPE1,1			F3B01890
00275	1	77777	1	00276		TXI	I1,1,-1			F3B01900
00276	1	77777	2	00277	I1	TXI	I2,2,-1			F3B01910
00277	1	00001	4	00300	I2	TXI	I3,4,1			F3B01920
00300	3	00000	4	00273	I3	TXH	I4,4,0			F3B01930
							TYPE 5 TO TRASTO			F3B01940
00301	-0	53400	2	02343	J5	LXD	5BOX,2			F3D01950
00302	-3	00000	2	00311		TXL	K5,2,0			F3B01960
00303	-0	50000	4	05470	J4	CAL	TYPE5,4			F3B01970
00304	0	60200	1	02370		SLW	TYPE1,1			F3B01980
00305	1	77777	1	00306		TXI	J1,1,-1			F3B01990
00306	1	77777	4	00307	J1	TXI	J2,4,-1			F3B02000
00307	1	00001	2	00310	J2	TXI	J3,2,1			F3B02010
00310	3	00000	2	00303	J3	TXH	J4,2,0			F3B02020
							TYPE 6 TO TRASTO			F3B02030
00311	-0	53400	4	02344	K5	LXD	6BOX,4			F3B02040
00312	-3	00000	4	00321		TXL	CALL,4,0			F3B02050
00313	-0	50000	2	06310	K4	CAL	TYPE6,2			F3B02060
00314	0	60200	1	02370		SLW	TYPE1,1			F3B02070
00315	1	77777	1	00316		TXI	K1,1,-1			F3B02080
00316	1	77777	2	00317	K1	TXI	K2,2,-1			F3B02090
00317	1	00001	4	00320	K2	TXI	K3,4,1			F3B02100
00320	3	00000	4	00313	K3	TXH	K4,4,0			F3B02110
							PROGRAM TO READ TIFGO TABLE			F3B02120
00321	-0	76000	0	00012	RTT00	RTT		TURN OFF TAPE CHECK INDICATOR AND LITES		F3B02130
				00321	CALL	SYN	RTT00			F3B02140
00322	0	76100	0	00000		NOF				F3B02150

00323	0	53400	2	02330	LXA	M2ECTR,2	LOAD COUNT OF 5 FOR ERROR ROUTINE	F3B02160
00324	0	76200	0	00222	RTTD3	RTB 2	SELECT TAPE 2 TO READ TIFGO	F3B02170
00325	0	70000	0	05471		CPY TIFGO-1		F3B02180
00326	0	50000	0	05471		CLA TIFGO-1	IDENTIFICATION FOR TIFGO TABLE	F3B02190
00327	0	40200	0	02276		SUB L(2)	IS TABLE CALLED FOR	F3B02200
00330	0	10000	0	00332		TZE RTTD1	YES	F3B02210
00331	0	07400	4	00004		TSX 4,4	NOT TIFGO FILE	F3B02220
00332	0	70000	0	05471	RTTD1	CPY TIFGO-1	GET WORD COUNT	F3B02230
00333	0	53400	1	02274		LXA L(0),1		F3B02240
00334	0	50000	0	05471		CLA TIFGO-1	TEST WD. COUNT	F3B02250
00335	0	10000	0	00342		TZE RTTD5	NO TIFGO ENTRIES	F3B02260
00336	0	70000	1	05472	RTTD2	CPY TIFGO,1	COPY	F3B02270
00337	1	77777	1	00336		TXI RTTD2,1,-1	LOOP	F3B02280
00340	0	07400	4	00004		TSX 4,4	EOF INCORRECT	F3B02290
00341	0	76600	0	00333		IOD	EOR	F3B02300
00342	-0	76000	0	00012	RTTD5	RTT	IS TAPE CHECK ON	F3B02310
00343	0	02000	0	00346		TRA RTTD4	YES	F3B02320
00344	-0	63400	1	05471		SXD TIFGO-1,1	NO	F3B02330
00345	0	02000	0	00351		TRA RTTE1	TO READ TRAD TABLE	F3B02340
00346	0	76400	0	00202	RTTD4	BST 2		F3B02350
00347	2	00001	2	00324		TIX RTTD3,2,1		F3B02360
00350	0	07400	4	00004	COR4	TSX 4,4	ERROR READING TIFGO TABLE AFTER 5 TRIES	F3B02370
						PROGRAM TO READ	TRAD TABLE	F3B02380
00351	0	53400	2	02330	RTTE1	LXA M2ECTR,2	LOAD COUNT OF 5 FOR ERROR ROUTINE	F3B02390
00352	0	76200	0	00222	RTTE5	RTB 2	READ TRAD TABLE FROM TAPE 2	F3B02400
00353	0	70000	0	06766		CPY TRAD-1	IDENTIFICATION NUMBER	F3B02410
00354	0	50000	0	06766		CLA TRAD-1		F3B02420
00355	0	40200	0	02331		SUB L(3)	IS TABLE CALLED FOR	F3B02430
00356	0	10000	0	00360		TZE RTTE2	YES	F3B02440
00357	0	07400	4	00004		TSX 4,4	TRAD TABLE NOT CALLED FOR	F3B02450
00360	0	70000	0	06766	RTTE2	CPY TRAD-1	GET WORD COUNT	F3B02460
00361	0	50000	0	06766		CLA TRAD-1	TEST WORD COUNT FOR NUMBER OF ENTRIES	F3B02470
00362	0	10000	0	00370		TZE RTTE6		F3B02480
00363	0	53400	1	02274		LXA L(0),1		F3B02490
00364	0	70000	1	06767	RTTE3	CPY TRAD,1	COPY TRAD ENTRIES AND GET 2S COMP.	F3B02500
00365	1	77777	1	00364		TXI RTTE3,1,-1	OF NUMBER OF ENTRIES.	F3B02510
00366	0	07400	4	00004		TSX 4,4	EOF INCORRECT	F3B02520
00367	0	76600	0	00333		IOD	EOR	F3B02530
00370	-0	76000	0	00012	RTTE6	RTT	IS TAPE CHECK ON	F3B02540
00371	0	02000	0	00373		TRA RTTE4	YES	F3B02550
00372	0	02000	0	00376		TRA RTTC0	NO	F3B02560
00373	0	76400	0	00202	RTTE4	BST 2	ERROR ROUTINE FOR READING TRAD	F3B02570
00374	2	00001	2	00352		TIX RTTE5,2,1	ENTRIES	F3B02580
00375	0	07400	4	00004	COR5	TSX 4,4	AFTER 5 TRIES	F3B02590
						PROGRAM TO READ	TRALEV	F3B02600
00376	0	76000	0	00000	RTTC0	CLM	CLEAR ACCUMULATOR	F3B02610
00377	0	60200	0	03210		SLW TRALEV-1	SET WORD PRECEDING ENTRIES TO ZERO	F3B02620
00400	0	53400	2	02330	RTTC4	LXA M2ECTR,2	LOAD COUNT OF 5 FOR ERROR ROUTINE	F3B02630
00401	0	76200	0	00224	RTTC2	RTB 4	READ TRALEV ENTRIES FROM TP. 4	F3B02640
00402	0	70000	0	03211		CPY TRALEV	IDENTIFICATION	F3B02650
00403	-0	76000	0	00012		RTT	IS TAPE CHECK ON	F3B02660
00404	0	02000	0	00406		TRA RTTC1	YES	F3B02670
00405	0	02000	0	00411		TRA RTTC3	NO	F3B02680
00406	0	76400	0	00204	RTTC1	BST 4	ERROR ROUTINE FOR READING TRALEV	F3B02690

00407	2	00001	2	00401	TIX	RTTC2,2,1		F3B02700
00410	0	07400	4	00004	COR6	TSX 4,4	AFTER 5 TRIES	F3B02710
00411	0	50000	0	03211	RTTC3	CLA TRALEV	IS TRALEV EMPTY	F3B02720
00412	0	10000	0	00450		TZE OUT	YES	F3B02730
00413	0	53400	2	02330		LXA M2ECTR,2	LOAD COUNT OF 5 FOR ERROR ROUTINE	F3B02740
00414	-0	53400	1	02305	RTTA3	LXD M2CON+9,1	RESET IR 1 TO ALL ONES	F3B02750
00415	0	70000	1	03211	RTTA1	CPY TRALEV,1	COPY LOOP. ADD COUNT TO READ ADDRESS	F3B02760
00416	1	77777	1	00415		TXI RTTA1,1,-1		F3B02770
00417	0	07400	4	00004		TSX 4,4	EOF INCORRECT	F3B02780
00420	0	76600	0	00333		IOD	EOR	F3B02790
00421	-0	76000	0	00012		RTT	IS TAPE CHECK ON	F3B02800
00422	0	02000	0	00424		TRA RTTA2	YES	F3B02810
00423	0	02000	0	00431		TRA RTTB1	NO	F3B02820
00424	0	76400	0	00204	RTTA2	BST 4	BACKSPACE TAPE 4	F3B02830
00425	0	76200	0	00224		RTB 4	READ AGAIN	F3B02840
00426	0	70000	0	03211		CPY TRALEV	GET WORD COUNT	F3B02850
00427	2	00001	2	00414		TIX RTTA3,2,1	TRY AGAIN TO READ IN ENTRIES	F3B02860
00430	0	07400	4	00004	COR7	TSX 4,4	ERROR READING TAPE 4	F3B02870
00431	-0	63400	1	00442	RTTB1	SXD RTTB4,1	SAVE WORD COUNT OF FIRST RECORD, 2S COMP,	F3B02880
00432	0	53400	2	02330		LXA M2ECTR,2	LOAD COUNT OF 5 FOR ERROR ROUTINE	F3B02890
00433	0	76200	0	00224	RTTB5	RTB 4		F3B02900
00434	-0	53400	1	00442		LXD RTTB4,1	REPLACE COUNT IN IR 1 OF FIRST RECORD	F3B02910
00435	0	70000	1	03211	RTTB2	CPY TRALEV,1	COPY SECOND RECORD ETC, IN PROPER PLACE	F3B02920
00436	1	77777	1	00435		TXI RTTB2,1,-1	SUBTRACT 1 FROM COUNT	F3B02930
00437	0	02000	0	00447		TRA RTTB6	EOF	F3B02940
00440	0	76600	0	00333		IOD	EOR	F3B02950
00441	-0	76000	0	00012		RTT	IS TAPE CHECK ON	F3B02960
00442	-3	00000	1	00444	RTTB4	TXL RTTB3,1	YES, COMPARE TO WORD COUNT OF FIRST	F3B02970
00443	0	02000	0	00447		TRA RTTB6	RECORD, NO.	F3B02980
00444	0	76400	0	00204	RTTB3	BST 4		F3B02990
00445	2	00001	2	00433		TIX RTTB5,2,1		F3B03000
00446	0	07400	4	00004	COR8	TSX 4,4	ERROR TRYING TO READ TRALEV FROM TAPE 4	F3B03010
00447	-0	63400	1	03210	RTTB6	SXD TRALEV-1,1	SAVE TRALEV WORD COUNT	F3B03020
00450	0	50000	0	02345	OUT	CLA TRSWC	TIFGO WORD COUNT.	F3BD3030
00451	0	76000	0	00006		COM		F3B03040
00452	0	40000	0	02275		ADD M2CON+1	2S COMPLIMENT OF WORD COUNT	F3B03050
00453	0	73400	1	00000		PAX 0,1	IN IR 1	F3B03060
00454	-0	63400	1	02367		SXD CTRSWC,1	SAVE WORD COUNT	F3B03070
00455	-0	53400	1	02314		LXD M2CON+16,1	PLACE 5 IN IR 1	F3B03080
00456	0	76200	0	00222	RDS	RDS 146	MOVE UP TAPE 2, 3 FILES TO TIFGO	F3B03090
00457	0	70000	0	02366	CPY	CPY M2CW+4	FILE	F3B03100
00460	0	02000	0	00457		TRA CPY		F3B03110
00461	0	02000	0	00463		TRA TIX	END OF RECORD	F3B03120
00462	0	02000	0	00456		TRA RDS		F3B03130
00463	2	00001	1	00456	TIX	TIX RDS,1,1		F3B03140
00464	0	77200	0	00224	REW	REW 148	TAPE.4 REWOUND	F3B03150
00465	0	76000	0	00000		CLM	SET ACC. TO ZERO	F3B03160
00466	0	60200	0	02345		SLW TIFFN	REPLACE INDEX COUNTERS	F3B03170
00467	0	60200	0	02346		SLW CTRAST	CELLS TO ZEROS	F3B03180
00470	0	60200	0	02347		SLW ETRAL		F3B03190
00471	0	60200	0	02350		SLW LEVNO		F3B03200
00472	0	60200	0	02331		SLW CBOX		F3B03210
00473	0	60200	0	02355		SLW BBOX		F3B03220
00474	0	60200	0	02332		SLW L0X		F3B03230

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00475	0	60200	0	07324	SLW	ASN0		F3B03240	
00476	0	60200	0	07323	SLW	EASC0		F3B03250	
00477	0	60200	0	02356	SLW	ETRAST		F3B03260	
00500	0	60200	0	02357	SLW	NETRAL		F3B03270	
00501	0	60200	0	07322	SLW	TFRC0		F3B03280	
00502	0	53400	1	02274	LXA	M2CON,1	INITIALIZE IR 1 TO ZERO	F3B03290	
						M2 MAIN PROGRAM-	TIFGO FMLA NO NOT IN	F3B03300	
						TRALEV		F3B03310	
00503	-0	75400	1	00000	M21000	PXD 0,1	TEST TO SEE IF AT END OF TIFGO	F3B03320	
00504	0	40200	0	05471	SUB	TIFGO-1	NO. OF TIFGO ENTRIES	F3B03330	
00505	0	10000	0	00751	TZE	M21900	END OF TIFGO	F3B03340	
00506	0	50000	1	05472	CLA	TIFGO,1	FIRST WD. OF TIFGO ENTRY,	F3B03350	
00507	0	62200	0	02345	STD	TIFFN	SAVE INTERNAL FMLA. NO.	F3B03360	
00510	-0	12000	0	00514	TMI	M21010	SIGNIFIES AN IF	F3B03370	
00511	-0	32000	0	02306	ANA	M2CON+10	TEST DIFFERENT TYPES	F3B03380	
00512	0	40200	0	02300	SUB	M2CON+4		F3B03390	
00513	0	10000	0	00730	TZE	M21600	TIFGO ENTRY AN ASSIGN	F3B03400	
00514	0	50000	0	02347	M21010	CLA	ETRAL	DETERMINE CURRENT TIFGO ENTRY	
00515	0	40200	0	03210	SUB	TRALEV-1	FOR CORRESPONDING TRALEV ENTRY	F3B03420	
00516	0	10000	0	00523	TZE	M21020	END OF TRALEV	F3B03430	
00517	-0	53400	2	02347	LXD	ETRAL,2	IR 2, CURRENT TRALEV ENTRY	F3B03440	
00520	0	50000	2	03211	CLA	TRALEV,2	TRALEV, FMLA WD.	F3B03450	
00521	0	40000	0	02345	ADD	TIFFN	TIFGO FMLA NO.	F3B03460	
00522	0	10000	0	00776	TZE	M22000	TIFGO ENTRY IN TRALEV	F3B03470	
00523	0	50000	1	05472	M21020	CLA	TIFGO,1	F3B03480	
00524	-0	12000	0	00672	TMI	M21800	TIFGO ENTRY AN IF(E)	F3B03490	
00525	-0	32000	0	02306	ANA	M2CON+10		F3B03500	
00526	0	10000	0	00536	TZE	M21030	TIFGO ENTRY A GO TO A	F3B03510	
00527	0	34000	0	02277	CAS	M2CON+3		F3B03520	
00530	1	77777	1	00650	TXI	M21500,1,-1	TIFGO ENTRY AN IF OVERFLOW	F3B03530	
00531	1	77777	1	00625	TXI	M21400,1,-1	TIFGO ENTRY AN IF DIVCK	F3B03540	
00532	0	34000	0	02276	CAS	M2CON+2		F3B03550	
00533	1	77777	1	00602	TXI	M21300,1,-1	TIFGO ENTRY AN IF SENSE	F3B03560	
00534	1	77777	1	00550	TXI	M21100,1,-1	TIFGO ENTRY A GO TO (A),1	F3B03570	
00535	1	77776	1	00503	TXI	M21000,1,-2	TIFGO ENTRY A GO TO N(A)	F3B03580	
							TIFGO ENTRY A GO TO A	F3B03590	
00536	1	77777	1	00537	M21030	TXI	M21030+1,1,-1	F3B03600	
00537	0	50000	1	05472	CLA	TIFGO,1	2ND WORD BETA IN ADDRESS	F3B03610	
00540	0	76700	0	00022	ALS	18	SHIFT TO DECREMENT	F3B03620	
00541	0	60100	0	02364	STO	M2CW+2	3RD WD OF INSTRUCTION AREA	F3B03630	
00542	0	07400	4	02177	TSX	CIT200,4	COMPILE INSTRUCTION	F3B03640	
00543	0	00000	0	02345	HTR	TIFFN	ALPHA	F3B03650	
00544	0	00000	0	02315	HTR	M2ABC	TRA	F3B03660	
00545	0	00000	0	02364	HTR	M2CW+2	BETA	F3B03670	
00546	0	00000	0	02274	HTR	M2CON	0	F3B03680	
00547	1	77777	1	00503	TXI	M21000,1,-1		F3B03690	
							TIFGO ENTRY A GO TO (A),I	F3B03700	
00550	0	50000	1	05472	M21100	CLA	TIFGO,1	2ND WORD OF TIFGO ENTRY	F3B03710
00551	0	73400	2	00000	PAX	0,2	CTRAD U IN IR 2	F3B03720	
00552	-0	63400	2	02332	SXD	L0X,2	SAVE CTRAD U IN INDEX CELL DECR.	F3B03730	
00553	-0	32000	0	02305	ANA	M2CON+9	SAVE CTRAD 1 IN ACCUMULATOR	F3B03740	
00554	0	40000	0	02303	ADD	M2CON+7	ADD ONE, CTRAD 1+I	F3B03750	
00555	0	40200	0	02332	SUB	L0X	CTRAD U	F3B03760	
00556	0	60100	0	02365	STO	M2CW+3	4TH WD OF INSTRUCTION	F3B03770	

00557	0	07400	4	02177	M21110	TSX	CIT200,4	COMPILE	F3B03780
00560	0	00000	0	02345		HTR	TIFFN	ALPHA	F3B03790
00561	0	00000	0	02274		HTR	M2CON	ZERO	F3B03800
00562	0	00000	0	02345		HTR	TIFFN	ALPHA	F3B03810
00563	0	00000	0	02365		HTR	M2CW+3	NO. OF TRAD ENTRUES CTRAD 1+1-CTRAD 2	F3B03820
00564	1	00001	2	00565		TXI	M21120,2,1	STEP UP COUNT TO NEXT TRAD ENTRY	F3B03830
00565	0	50000	1	05472	M21120	CLA	TIFGO,1	2ND WORD OF TIFGO ENTRY	F3B03840
00566	0	62200	0	00600		STD	M21140	STORE IN TXL INSTRUCTION	F3B03850
00567	0	50000	2	07361	M21125	CLA	TRAD+250,2	BRING IN NEXT TRAD ENTRY	F3B03860
00570	0	76700	0	00022		ALS	18	PUT BETA1 IN DECREMENT	F3B03870
00571	0	60100	0	02364		STO	M2CW+2	3RD WD. OF CIT	F3B03880
00572	0	07400	4	02177		TSX	CIT200,4	COMPILE	F3B03890
00573	0	00000	0	02274		HTR	M2CON	ZERO	F3B03900
00574	0	00000	0	02315		HTR	M2ABC	TRA	F3B03910
00575	0	00000	0	02364		HTR	M2CW+2	TRAD BI	F3B03920
00576	0	00000	0	02274		HTR	M2CON	ZERO	F3B03930
00577	1	00001	2	00600		TXI	M21140,2,1	STEP UP TRAD ENTRY	F3B03940
00600	-3	00000	2	00567	M21140	TXL	M21125,2	TEST IF LAST TRAD ENTRY, NO	F3B03950
00601	1	77777	1	00503		TXI	M21000,1,-1	BACK TO NEXT TIFGO.	F3B03960
								TIFGO ENTRY AN IF SENSE	F3B03970
00602	0	07400	4	02177	M21300	TSX	CIT200,4	COMPILE	F3B03980
00603	0	00000	0	02345		HTR	TIFFN	ALPHA	F3B03990
00604	0	00000	0	02274		HTR	M2CON	ZERO	F3B04000
00605	0	00000	0	02274		HTR	M2CON	ZERO	F3B04010
00606	0	00000	0	02274		HTR	M2CON	ZERO	F3B04020
00607	0	50000	1	05472		CLA	TIFGO,1	2ND. WORD OF TIFGO ENTRY	F3B04030
00610	-0	32000	0	02306		ANA	M2CON+10	SAVE ADDRESS, BETA 2	F3B04040
00611	0	76700	0	00022		ALS	18	SHIFT TO DECREMENT	F3B04050
00612	0	53400	2	02276		LXA	M2CON+2,2	LOAD 2 IN IR 2, 2 SETS OF INSTRUCTION	F3B04060
00613	0	60100	0	02364	M21310	STO	M2CW+2	STORE BETA 2 IN 3RD WD.	F3B04070
00614	0	07400	4	02177		TSX	CIT200,4	COMPILE	F3B04080
00615	0	00000	0	02274		HTR	M2CON	ZERO	F3B04090
00616	0	00000	0	02315		HTR	M2ABC	TRA	F3B04100
00617	0	00000	0	02364		HTR	M2CW+2	BETA 2, BETA 1	F38D411D
00620	0	00000	0	02274		HTR	M2CON	ZERO	F3B04120
00621	0	50000	1	05472		CLA	TIFGO,1	2ND WORD	F3B04130
00622	-0	32000	0	02305		ANA	M2CON+9	SAVE DECREMENT	F3B04140
00623	2	00001	2	00613		TIX	M21310,2,1	COMPILE SECOND TRA	F3B04150
00624	1	77777	1	00503		TXI	M21000,1,-1	BACK TO OBTAIN NEXT TIFGO	F3B04160
								TIFGO ENTRY AN IF DIV CK	F3B04170
00625	0	07400	4	02177	M21400	TSX	CIT200,4	COMPILE	F3B04180
00626	0	00000	0	02345		HTR	TIFFN	ALPHA	F3B04190
00627	0	00000	0	02274		HTR	M2CON	ZERO	F3B04200
00630	0	00000	0	02274		HTR	M2CON	ZERO	F3B04210
00631	0	00000	0	02274		HTR	M2CON	ZERO	F3B04220
00632	0	50000	1	05472		CLA	TIFGO,1	2ND WORD OF TIFGO ENTRY	F3B04230
00633	-0	32000	0	02305		ANA	M2CON+9	SAVE DECREMENT	F3B04240
00634	0	53400	2	02276		LXA	M2CON+2,2	COUNT OF 2 IN IR 2	F3B04250
00635	0	60100	0	02364	M21410	STO	M2CW+2	COMPILE	F3B04260
00636	0	07400	4	02177		TSX	CIT200,4	COMPILE	F3B04270
00637	0	00000	0	02274		HTR	M2CON	ZERO	F3B04280
00640	0	00000	0	02315		HTR	M2ABC	TRA	F3B04290
00641	0	00000	0	02364		HTR	M2CW+2	BETA1,	F3B04300
00642	0	00000	0	02274		HTR	M2CON	ZERO	F3B04310

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00643	0	50000	1	05472	CLA	TIFGO,1	2ND WORD	F3B04320
00644	-0	32000	0	02306	ANA	M2CON+10	SAVE BETA 2	F3B04330
00645	0	76700	0	00022	ALS	18	PLACE IN DECREMENT	F3B04340
00646	2	00001	2	00635	TIX	M21410,2,1	COMPILE 2ND TRA INSTR,	F3B04350
00647	1	77777	1	00503	TXI	M21000,1,-1	BACK TO GET NEXT TIFGO	F3B04360
						TIFGO ENTRY AN	IF OVERFLOW	F3B04370
00650	0	50000	1	05472	M21500	CLA	TIFGO,1	F3B04380
00651	-0	32000	0	02305	ANA	M2CON+9	SAVE DECREMENT	F3B04390
00652	0	60100	0	02364	STO	M2CW+2	3RD WORD, BETA 1	F3B04400
00653	0	07400	4	02177	TSX	CIT200,4	COMPILE	F3B04410
00654	0	00000	0	02345	HTR	TIFFN	ALPHA	F3B04420
00655	0	00000	0	02274	HTR	M2CON	ZERO	F3B04430
00656	0	00000	0	02364	HTR	M2CW+2	BETA 1	F3B04440
00657	0	00000	0	02274	HTR	M2CON	ZERO	F3B04450
00660	0	50000	1	05472	CLA	TIFGO,1	2ND WORD OF TIFGO ENTRY	F3B04460
00661	-0	32000	0	02306	ANA	M2CON+10	SAVE BETA 2	F3B04470
00662	0	76700	0	00022	ALS	18	SHIFT TO DECREMENT	F3B04480
00663	0	60100	0	02364	STO	M2CW+2	3RD WORD OF COMPILED INSTRUCTIONS	F3B04490
00664	0	07400	4	02177	M21515	TSX	CIT200,4	F3B04500
00665	0	00000	0	02274	HTR	M2CON	ZERO	F3B04510
00666	0	00000	0	02315	HTR	M2ABC	TRA	F3B04520
00667	0	00000	0	02364	HTR	M2CW+2	BETA 2	F3B04530
00670	0	00000	0	02274	HTR	M2CON	ZERO	F3B04540
00671	1	77777	1	00503	TXI	M21000,1,-1	BACK TO NEXT TIFGO ENTRY	F3B04550
						TIFGO ENTRY AN	IF (E)	F3B04560
00672	-0	32000	0	02306	M21800	ANA	M2CON+10	F3B04570
00673	0	76700	0	00022	ALS	18	PLACE IN DECREMENT	F3B04580
00674	0	60100	0	02364	STO	M2CW+2	3RD WORD OF CIT	F3B04590
00675	0	07400	4	02177	TSX	CIT200,4	COMPILE	F3B04600
00676	0	00000	0	02345	HTR	TIFFN	ALPHA	F3B04610
00677	0	00000	0	02274	HTR	M2CON	ZERO	F3B04620
00700	0	00000	0	02274	HTR	M2CON	ZERO	F3B04630
00701	0	00000	0	02274	HTR	M2CON	ZERO	F3B04640
00702	1	77777	1	00703	TXI	M21810,1,-1	STEP COUNT FOR 2ND TIFGO WORD	F3B04650
00703	0	50000	1	05472	M21810	CLA	TIFGO,1	F3B04660
00704	-0	32000	0	02305	ANA	M2CON+9	SAVE DECREMENT BETA 2	F3B04670
00705	0	60100	0	02366	STO	M2CW+4	5TH WD.	F3B04680
00706	0	50000	0	02345	CLA	TIFFN	ALPHA	F3B04690
00707	-0	50100	0	02301	ORA	M2CON+5	10(8) INSTR. NO. WITHIN INTERNAL FMLANO.	F3B04700
00710	0	60100	0	02362	STO	M2CW	INTERNAL FMLA NO.	F3B04710
00711	0	07400	4	02177	TSX	CIT200,4	COMPILE	F3B04720
00712	0	00000	0	02362	HTR	M2CW		F3B04730
00713	0	00000	0	02316	HTR	M2ABC+1	TZE	F3B04740
00714	0	00000	0	02366	HTR	M2CW+4	BETA 2 C(M2CW+4)	F3B04750
00715	0	00000	0	02274	HTR	M2CON	ZERO	F3B04760
00716	0	50000	1	05472	CLA	TIFGO,1	2ND WORD OF TIFGO ENTRY	F3B04770
00717	-0	32000	0	02306	ANA	M2CON+10	SAVE ADDRESS, BETA 3	F3B04780
00720	0	76700	0	00022	ALS	18	SHIFT TO DECREMENT	F3B04790
00721	0	60100	0	02366	STO	M2CW+4	STORE BETA 3	F3B04800
00722	0	07400	4	02177	TSX	CIT200,4	COMPILE	F3B04810
00723	0	00000	0	02274	HTR	M2CON	ZERO	F3B04820
00724	0	00000	0	02317	HTR	M2ABC+2	TPL	F3B04830
00725	0	00000	0	02366	HTR	M2CW+4	BETA 3 C(M2CW+4)	F3B04840
00726	0	00000	0	02274	HTR	M2CON	ZERO	F3B04850

00727	0	02000	0	00664	TRA M21515	TR. TO COMPILE TRA TO BETA 1	F3B04860
					TIFGO ENTRY AN ASSIGN		F3B04870
00730	0	50000	0	07324	M21600 CLA ASN0	CURRENT ASSIGN NO.	F3B04880
00731	0	60100	0	02365	STO M2CW+3	4TH WORD OF CIT	F3B04890
00732	0	40000	0	02303	ADD M2CON+7	+000001000000	F3B04900
00733	0	60100	0	07324	STO ASN0	REPLACE ASSIGN NO.	F3B04910
00734	0	07400	4	02177	TSX CIT200,4	COMPILE	F3B04920
00735	0	00000	0	02345	HTR TIFFN	ALPHA	F3B04930
00736	0	00000	0	02274	HTR M2CON	ZERO	F3B04940
00737	0	00000	0	02307	HTR M2CON+11	+030000000000	F3B04950
00740	0	00000	0	02365	HTR M2CW+3	CURRENT ASSIGN NO.	F3B04960
00741	1	77777	1	00742	M21610 TXI M21610+1,1,-1		F3B04970
00742	0	50000	1	05472	CLA TIFGO,1	2ND WD. OF TIFGO ENTRY	F3B04980
00743	0	76700	0	00022	ALS 18	PLACE BETA IN DECREMENT	F3B04990
00744	-0	53400	2	07323	LXD EASC0,2	CURRENT ASC0 ENTRY PT. IN IR 2	F3B05000
00745	0	60100	2	07325	STO ASC0,2	STORE BETA IN PROPER ASC0 LOC	F3B05010
00746	1	77777	2	00747	TXI M21620,2,-1	STEP COUNT FOR NEXT ASC0 ENTRY	F3B05020
00747	-0	63400	2	07323	M21620 SXD EASC0,2	PT. AND STORE	F3B03030
00750	1	77777	1	00503	TXI M21000,1,-1	BACK FOR NEXT TIFGO	F3B05040
					M2 TERMINAL ROUTINE		F3B05050
00751	-0	53400	2	02355	M21900 LXD BBOX,2	2S COMPL. OF NO OF WDS IN BLOCK	F3B05060
00752	-0	53400	4	07322	LXD TFRC0,4		F3B05070
00753	1	00003	4	00754	TXI M21900+3,4,3	STEP UP BLOCK COUNT BY 3	F3B05080
00754	-3	00000	2	00764	TXL M21920,2,0	TEST IF AT END OF BLOCK	F3B05090
00755	0	76600	0	00222	WRS 146	SELECT TAPE 2	F3B05100
00756	1	00001	4	00757	TXI M21910-1,4,1	STEPUP IR 4 BY 1	F3B05110
00757	-0	53400	1	02274	LXD M2CON,1	ZEROS IN IR 1	F3B05120
00760	0	70000	1	06622	M21910 CPY CIB2,1	WRITE REMAINING CITS	F3B05130
00761	1	77777	1	00762	TXI M21910+2,1,-1	DECREASE COUNT IN IR 1	F3B05140
00762	1	00001	2	00763	TXI M21910+3,2,1	INCREASE COUNT IN IR 2	F3B05150
00763	3	00001	2	00760	TXH M21910,2,1	TEST 1F AT END	F3B05160
00764	0	77000	0	00222	M21920 WEF 146	WRITE END OF FILE	F3B05170
00765	0	76400	0	00222	BST 146		F3B05180
00766	2	00001	4	00765	TIX M21920+1,4,1		F3B05190
00767	0	76200	0	00222	M21925 RDS 146	POSITION TAPE 2 AT BEGINNING	F3B05200
00770	0	70000	0	02366	CPY M2CW+4	OF TIFGO FILE	F3B05210
00771	0	02000	0	00770	TRA M21925+1	BACK TO READ LOOP	F3B05220
00772	0	02000	0	00774	TRA M22000-2		F3B05230
00773	0	02000	0	00767	TRA M21925		F3B05240
00774	0	76200	0	00221	RTB 1		F3B05250
00775	0	02000	0	00004	TRA 4		F3B05260
					M2-MAIN PROGRAM-TIFGO FMLA NO IN		F3B05270
					TRALEV		F3B05280
00776	1	77777	2	00777	M22000 TXI M22000+1,2,-1	UPDATE TRALEV ENTRY	F3B05290
00777	-0	63400	2	02347	SXD ETRAL,2	POINT, SAVE IN PROPER CELL	F3B05300
01000	-0	53400	2	02274	LXD M2CON,2	RESET IR 2 WITH ZERO	F3B05310
01001	0	07400	4	01456	TSX M22700,4	TRASTO FMLA NO SEARCH, M2 SUBROUTINE	F3B05320
01002	0	02000	0	01004	TRA M22006	CUR TIFGO FMLA NO NOT IN TRASTO	F3B05330
01003	0	02000	0	01015	TRA M22015	CUR TIFGO FMLA NO IN TRASTO	F3B05340
01004	-0	53400	2	02347	M22006 LXD ETRAL,2	2S COMPL. OF TRALEV ENTRY PT. COUNT	F3B05350
01005	0	50000	2	03211	CLA TRALEV,2	TRALEV ENTRY	F3B05360
01006	-0	12000	0	01013	TMI M22013	IS IT START OF NEXT ENTRY 2	F3B05370
01007	-0	75400	2	00000	PXD 0,2	TRALEV ENTRY PT CT. IN ACC	F3B05380
01010	0	40200	0	03210	SUB TRALEV-1	TRALEV WORD COUNT	F3B05390

01011	0	10000	0	01013	TZE	M22013	IS IT END OF TRALEV TABLE, YES	F3B05400
01012	1	77777	2	01005	TXI	M22006+1,2,-1	NO, UPDATE TRALEV TABLE	F3B05410
01013	-0	63400	2	02347	M22013	SXD	ETRAL,2	F3B05420
01014	0	02000	0	00523	TRA	M21020	START OF NEXT ENTRY, SAVE COUNT	F3B05430
01015	-0	63400	2	02356	M22015	SXD	ETRAST,2	F3B05440
01016	0	50000	0	02274	CLA	M2CON	OF TRALEV, BACK TO COMPILE INSTR.	F3B05450
01017	0	60100	0	02333	STO	ADDCCO	SAVE TRASTO ENTRY PT.	F3B05460
01020	0	50000	1	05472	CLA	TIFGO,1	INITIALIZE ADDCCO	F3B05470
01021	-0	12000	0	01360	TMI	M22600	OBTAIN TIFGO TYPE, TRANSFER TO ROUTINES	F3B05480
01022	-0	32000	0	02306	ANA	M2CON+10	IF(E)	F3B05490
01023	0	10000	0	01033	TZE	M22020	GO TO A	F3B05500
01024	0	34000	0	02277	CAS	M2CON+3		F3B05510
01025	1	77777	1	01344	TXI	M22500,1,-1	IF OVERFLOW	F3B05520
01026	1	77777	1	01252	TXI	M22400,1,-1	IF DIV CK	F3B05530
01027	0	34000	0	02276	CAS	M2CON+2		F3B05540
01030	1	77777	1	01236	TXI	M22300,1,-1	IF SENSE	F3B05550
01031	1	77777	1	01123	TXI	M22200,1,-1	GO TO (A),1	F3B05560
01032	1	77777	1	01072	TXI	M22100,1,-1	GO TO N (A)	F3B05570
							GO TO A	F3B05580
01033	0	50000	0	02345	M22020	CLA	TIFFN	F3B05590
01034	0	60100	0	02362	PAT1	STO	M2CW	F3B05600
01035	0	50000	0	02301	PAT2	CLA	M2CON+5	F3B05610
01036	0	60100	0	02360	PAT3	STO	CLOC	F3B05620
01037	0	07400	4	01477	M22022	TSX	M22750,4	F3B05630
01040	0	07400	4	01560	TSX	M22800,4	+10,INCREMENT	F3B05640
01041	-0	53400	2	02346	LXD	CTRAST,2	FOR LOC WD OF 1ST INSTR OF TRASTO BLOCK	F3B05650
01042	1	77774	2	01043	M22025	TXI	M22025+1,2,-4	F3B05660
01043	0	07400	4	01456	TSX	M22700,4	TRASTO LEV.NO.SEARCH	F3B05670
01044	0	02000	0	01052	TRA	M22035	CUR.TIFGO LEV.NO.IN TRASTO	F3B05680
01045	0	50000	0	02333	CLA	ADDCCO	CUR.TIFGO NO.NOT IN TRASTO	F3B05690
01046	0	10000	0	01037	TZE	M22022	UP0ATE TRASTO ENTRY POINT	F3B05700
01047	0	50000	0	02274	CLA	M2CON	TRASTO FMLA NO SEARCH	F3B05710
01050	0	60100	0	02362	STO	M2CW	TIFGO FMLA NO.AGAIN FOUND	F3B05720
01051	0	02000	0	01037	TRA	M22022	TIFGO FMLA NO AGAIN FOUND	F3B05730
01052	0	50000	0	02333	M22035	CLA	ADDCCO	F3B05740
01053	0	10000	0	01056	TZE	M22040	TIFGO ENTRY NOT YET FOUND IN TRASTO	F3B05750
01054	0	50000	0	02311	CLA	M2CON+13	TIFGO ENTRY ALREADY FOUND IN TRASTO	F3B05760
01055	0	60100	0	02362	STO	M2CW	ADJUST LOCATION WORD TO ZERO	F3B05770
01056	0	50000	1	05473	M22040	CLA	TIFGO+1,1	F3B05780
01057	0	76700	0	00022	ALS	18	TIFGO BETA	F3B05790
01060	0	60100	0	02364	STO	M2CW+2	PUT INTO DECREMENT	F3B05800
01061	0	07400	4	02177	TSX	CIT200,4	3RD WORD	F3B05810
01062	0	00000	0	02362	HTR	M2CW	COMPILE FINAL INSTRUCTION	F3B05820
01063	0	00000	0	02315	HTR	M2ABC	17(8)	F3B05830
01064	0	00000	0	02364	HTR	M2CW+2	TRA	F3B05840
01065	0	00000	0	02274	HTR	M2CON	BETA	F3B05850
01066	-0	53400	2	02347	LXD	ETRAL,2	ZERO	F3B05860
01067	1	77777	2	01070	M22050	TXI	M22050+1,2,-1	F3B05870
01070	-0	63400	2	02347	SXD	ETRAL,2	UPDATE TRALEV TO NEXT ENTRY	F3B05880
01071	1	77776	1	00503	TXI	M21000,1,-2	BACK TO TEST AGAIN.	F3B05890
							GO TO N (A)	F3B05900
01072	0	50000	0	02345	M22100	CLA	TIFFN	F3B05910
01073	0	76000	0	00002	CHS		CURRENT TIFGO ALPHA	F3B05920
01074	0	60100	0	02362	PAT5	STO	M2CW	F3B05930
							MAKE LOCATION WORD POSITIVE	

01075	0	50000	0	02301	PAT6	CLA	M2CON+5	+10	F3B05940
01076	0	60100	0	02360	PAT7	STO	CLOC	SAVE INCREMENT	F3B05930
01077	0	07400	4	01477	M22105	TSX	M22750,4	TRASTO LEV NO SEARCH	F3B05960
01100	0	07400	4	01560		TSX	M22800,4	CUR TIFGO LEV NO.IN TRASTO	F3B05970
01101	-0	53400	2	02346		LXD	CTRAST,2	CUR TIFGQ LEV NO NOT IN TRASTO	F3B05980
01102	1	77774	2	01103	M22110	TXI	M22110+1,2,-4	UPDATE TRASTO ENTRY POINT	F3B05990
01103	0	07400	4	01456		TSX	M22700,4	TRASTO FMLA NO SEARCH	F3B06000
01104	0	02000	0	01112		TRA	M22120	TIFGO FMLA NO.NOT AGAIN FOUND	F3B06010
01105	0	50000	0	02333		CLA	ADDCO	TIFGO FMLA NO.AGAIN FOUND	F3B06020
01106	0	10000	0	01077		TZE	M22105	TIFGO ENTRY NOT YET FOUND IN TRASTO	F3B06030
01107	0	50000	0	02274		CLA	M2CON	TIFGO ENTRY ALREADY FOUND IN TRASTO	F3B06040
01110	0	60100	0	02362		STO	M2CW	ADJUST LOCATION WROD TO ZERO	F3B06030
01111	0	02000	0	01077		TRA	M22105	BACK TO LEVEL NO. SEARCH	F3806060
01112	-0	53400	2	02347	M22120	LXD	ETRAL,2	UPDATE TRALEV ENTRY POINT	F3B06070
01113	0	50000	2	03211		CLA	TRALEV,2	BEGINNING OF TRALEV BLOCK	F3B06080
01114	-0	12000	0	01121		TMI	M22130		F3B06090
01115	-0	75400	2	00000		PXD	0,2	TEST IF END OF TRALEV	F3B06100
01116	0	40200	0	03210		SUB	TRALEV-1		F3B06110
01117	0	10000	0	01121		TZE	M22130		F3B06120
01120	1	77777	2	01113		TXI	M22120+1,2,-1	SPACE OVER TO NEXT ENTRY	F3806130
01121	-0	63400	2	02347	M22130	SXD	ETRAL,2		F3B06140
01122	1	77777	1	00503		TXI	M21000,1,-1		F3B06150
								TIFGO ENTRY A GO TO (A),1	F3B06160
01123	0	50000	1	05472	M22200	CLA	TIFGO,1	COMPUTE N+1 (CTRAD1- CTRAD2+1)	F3806170
01124	0	73400	2	00000		PAX	0,2	STORE IN M2CW+3	F3B06180
01125	-0	63400	2	02332		SXD	L0X,2	STORE COMPILING FIRST	F3B06100
01126	-0	32000	0	02305		ANA	M2CON+9	INSTRUCTION	F3806200
01127	0	40000	0	02303		ADD	M2CON+7		F3B06210
01130	0	40200	0	02332		SUB	L0X		F3806220
01131	0	60100	0	02365		STO	M2CW+3		F3806230
01132	0	76000	0	00006		COM		COMPUTE 2S COMP OF	F3B06240
01133	0	40000	0	02304		ADD	M2CON+8	N-1 IN ORDER TO	F3806230
01134	0	62200	0	01140		STD	M22220	OBTAIN TRALEV ENTRY	F3B06260
01135	-0	53400	2	02347		LXD	ETRAL,2	POINT FOR LAST ADDRESS	F3B06270
01136	-0	63400	2	01165		SXD	M22240+1,2		F3B06280
01137	-0	63400	2	01231		SXD	M22275+1,2		F3806290
01140	1	00000	2	01141	M22220	TXI	M22220+1,2		F3806300
01141	-0	63400	2	02357		SXD	NETRAL,2	TRALEV. ENTRY PT. FOR LAST ADDRESS	F3B06310
01142	-0	63400	2	02347		SXD	ETRAL,2	CURRENT TRALEV ENTRY PT.	F3806320
01143	0	07400	4	02177		TSX	CIT200,4	COMPILE FIRST INSTRUCTION	F3B06330
01144	0	00000	0	02345		HTR	TIFFN	ALPHA	F3806340
01145	0	00000	0	02274		HTR	M2CON	ZERO	F3B06350
01146	0	00000	0	02345		HTR	TIFFN	ALPHA	F3B06360
01147	0	00000	0	02365		HTR	M2CW+3	NO. OF ADDRESS IN TRAD	F3B06370
01150	0	07400	4	01477	M22225	TSX	M22750,4	TRASTO LEVEL NO SEARCH	F3B06380
01151	0	07400	4	02013		TSX	M23000,4	COR TIFGO LEV NO IN TRASTO	F3B06390
01152	-0	53400	2	02346		LXD	CTRAST,2	CUR TIFGO LEV NO NOT IN TRASTO	F3806400
01153	1	77774	2	01154	M22230	TXI	M22230+1,2,-4	UPDATE TRASTD ENTRY POINT	F3B06410
01154	0	07400	4	01456		TSX	M22700,4	TRASTO FMLA NO.SEARCH	F3B06420
01155	0	07400	4	02077		TSX	M23050,4	TIFGO FMLA NO.NOT AGAIN FOUND	F3B06430
01156	0	02000	0	01150		TRA	M22225	TIFGO FMLA NO AGAIN FOUND	F3B06440
01157	0	50000	0	02356	M22233	CLA	ETRAST	RESET CTRAST CELL FOR	F3B06430
01160	0	60100	0	02346		STO	CTRAST	TRASTO LEV NO SEARCH	F3B06460
01161	-0	53400	2	02347		LXD	ETRAL,2	UPDATE TRALEV ENTRY POINT	F3B06470

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	01162	1	00001	2	01163		TXI M22240-1,2,1		F3B06480
	01163	-0	63400	2	02347		SXD ETRAL,2		F3B06490
	01164	-3	00000	2	01166	M22240	TXL M22240+2,2,0		F3B06500
D	01165	-3	00000	2	01150		TXL M22225,2		F3B06510
	01166	0	50000	0	02333		CLA ADDCO		F3B06520
	01167	0	10000	0	01232		TZE M22275+2	TIFGO ENTRY NEVER FOUND IN TRASTO	F3B06530
	01170	-0	53400	2	02357		LXD NETRAL,2	RESET ETRAL FOR SECOND	F3B06540
	01171	-0	63400	2	02347		SXD ETRAL,2	PASS THROUGH TRASTO	F3B06550
	01172	0	50000	0	02301		CLA M2CON+5	INITIALIZE LOCATION	F3B06560
	01173	0	60100	0	02360		STO CLOC	COUNTER	F3B06570
	01174	0	60100	0	02362		STO M2CW	SET LOCATION WORD FOR FIRST	F3B06580
	01175	0	50000	0	02345	M22245	CLA TIFFN	TRASTO INSERT	F3B06590
	01176	-0	60200	0	02362		ORS M2CW		F3B06600
	01177	0	50000	0	02274		CLA M2CON	INITIALIZE ADDCO FOR	F3B06610
	01200	0	60100	0	02333		STO ADDCO	TRASTO LEV.NO.SEARCH AND TRANSFER TO PERFORM	F3B06620
	01201	0	07400	4	01477	M22250	TSX M22750,4	TRASTO LEV.NO.SEARCH	F3B06630
	01202	0	07400	4	01560		TSX M22800,4	CUR TIFGO LEV NO FOUND	F3B06640
	01203	-0	53400	2	02346		LXD CTRAST,2	CUR TIFGO NO.NOT FOUND	F3B06650
	01204	1	77774	2	01205	M22255	TXI M22255+1,2,-4	UPDATE TRASTO ENTRY POINT	F3B06660
	01205	0	07400	4	01456		TSX M22700,4	TRASTO FMLA NO.SEARCH	F3B06670
	01206	0	02000	0	01214		TRA M22263	TIFGO FMLA NO.NOT AGAIN FOUND	F3B06680
	01207	0	50000	0	02333		CLA ADDCO	TIFGO FMLA NO.AGAIN FOUND	F3B06690
	01210	0	10000	0	01201		TZE M22250	CUR TIFGO ADD NOT YET FOUND IN TRASTO	F3B06700
	01211	0	50000	0	02274		CLA M2CON	CURTIFGO ADD ALREADY FOUND IN TRASTO	F3B06710
	01212	0	60100	0	02362		STO M2CW	ADJUST LOCATION WORD	F3B06720
	01213	0	02000	0	01201		TRA M22250		F3B06730
	01214	0	50000	0	02333	M22263	CLA ADDCO		F3B06740
	01215	0	10000	0	01223		TZE M22270	CUR. TIFGO NEVER FOUND IN TRASTO	F3B06750
	01216	0	07400	4	02163		TSX M23075,4	CUR. TIFGO ADD. FOUND IN.TRASTO	F3B06760
	01217	0	50000	0	02360		CLA CLOC	UPDATE LOCATION WORD FOR NEXT ENTRY	F3B06770
	01220	0	40000	0	02301		ADD M2CON+5	BLOCK OF TRASTO UNSERTS	F3B06780
	01221	0	60100	0	02360		STO CLOC		F3B06790
	01222	0	60100	0	02362		STO M2CW		F3B06800
	01223	0	50000	0	02356	M22270	CLA ETRAST	RESET CTRAST FOR TRASTO	F3B06810
	01224	0	60100	0	02346		STO CTRAST	LEV. NI. SEARCH	F3B06820
	01225	-0	53400	2	02347		LXD ETRAL,2	UPDATE TRALEV ENTRT PIINT	F3B06830
	01226	1	00001	2	01227		TXI M22275-1,2,1		F3B06840
	01227	-0	63400	2	02347		SXD ETRAL,2		F3B06850
	01230	-3	00000	2	01232	M22275	TXL M22275+2,2,0		F3B06860
	01231	-3	00000	2	01175		TXL M22245,2		F3B06870
	01232	-0	53400	2	02357		LXD NETRAL,2	UPDATE TRALEV ENTRY POINT	F3806880
	01233	1	77777	2	01234		TXI M22280,2,-1	FOR NEXT TIFGO ENTRY	F3B06890
	01234	-0	63400	2	02347	M22280	SXD ETRAL,2		F3B06900
	01235	1	77777	1	00503		TXI M21000,1,-1	BACK TO NEXT TIFGO	F3B06910
							TIFGO ENTRY AN IF SENSE		F3B06920
	01236	-0	53400	2	02347	M22300	LXD ETRAL,2	UPDATE TRALEV	F3B06930
	01237	-0	63400	2	01165		SXD M22240+1,2		F3B06940
	01240	-0	63400	2	01231		SXD M22275+1,2		F3B06950
	01241	1	77777	2	01242	M22303	TXI M22303+1,2,-1		F3B06960
	01242	-0	63400	2	02357		SXD NETRAL,2		F3B06970
	01243	-0	63400	2	02347		SXD ETRAL,2		F3B06980
	01244	0	07400	4	02177		TSX CIT200,4	COMPILE INFO. INSTRUCTION	F3B06990
	01245	0	00000	0	02345		HTR TIFFN	ALPHA	F3B07000
	01246	0	00000	0	02274		HTR M2CON	ZERO	F3B07010

01247	0	00000	0	02274		HTR	M2CON	ZERO	F3B07020
01250	0	00000	0	02274		HTR	M2CON	ZERO	F3B07030
01251	0	02000	0	01150		TRA	M22225	TRASTO LEVEL NO. SEARCH	F3B07040
								TIFGO ENTRY AN IF DIV CK	F3B07050
01252	-0	53400	2	02347	M22400	LXD	ETRAL,2	UPDATE TRALEV	F3B07060
01253	1	77776	2	01254		TXI	M22400+2,2,-2		F3B07070
01254	-0	63400	2	01277		SXD	M22425+1,2		F3B07080
01255	-0	63400	2	01342		SXD	M22465+1,2		F3B07090
01256	0	07400	4	02177		TSX	CIT200,4	COMPILE INFO. INSTRUCTION	F3B07100
01257	0	00000	0	02345		HTR	TIFFN	ALPHA	F3B07110
01260	0	00000	0	02274		HTR	M2CON	ZERO	F3B07120
01261	0	00000	0	02274		HTR	M2CON	ZERO	F3B07130
01262	0	00000	0	02274		HTR	M2CON	ZERO	F3B07140
01263	0	07400	4	01477	M22410	TSX	M22750,4	TRASTO LEVEL NO SEARCH	F3B07150
01264	0	07400	4	02013		TSX	M23000,4	CUR. TIFGO LEVEL NO. IN TRASTO	F3B07160
01265	-0	53400	2	02346		LXD	CTRAST,2	CUR. TIFGO LEVEL NO. NOT IN TRASTO	F3B07170
01266	1	77774	2	01267	M22415	TXI	M22415+1,2,-4	UPDATE TRASTO ENTRY POINT	F3B07180
01267	0	07400	4	01456		TSX	M22700,4	TRASTO FMLA. NO. SEARCH	F3B07190
01270	0	07400	4	02077		TSX	M23050,4	TIFGO FMLA. NO NOT AGAIN FOUND	F3B07200
01271	0	02000	0	01263		TRA	M22410	TIFGO FMLA. NO. AGAIN FOUND	F3B07210
01272	0	50000	0	02356	M22420	CLA	ETRAST	RESET CTRAST CELL FOR	F3B07220
01273	0	60100	0	02346		STO	CTRAST	TRASTO LEVEL NO. SEARCH	F3B07230
01274	-0	53400	2	02347		LXD	ETRAL,2	UPDATE TRALEV ENTRY POINT	F3B07240
01275	1	77777	2	01276		TXI	M22425,2,-1		F3B07250
01276	-0	63400	2	02347	M22425	SXD	ETRAL,2		F3B07260
01277	3	00000	2	01263		TXH	M22410,2		F3B07270
01300	0	50000	0	02333		CLA	ADDCO		F3B07280
01301	0	10000	0	01343		TZE	M22465+2	TIFGO ENTRY NEVER FOUND IN TRASTO	F3B07290
01302	1	00002	2	01303		TXI	M22430,2,2	RESET ETRAL FOR SECOND	F3B07300
01303	-0	63400	2	02347	M22430	SXD	ETRAL,2	PASS THROUGH TREASTO	F3B07310
01304	0	50000	0	02301		CLA	M2CON+5	INITIALIZE LOCATION	F3B07320
01305	0	60100	0	02360		STO	CLOC	COUNTER	F3B07330
01306	0	60100	0	02362		STO	M2CW	SET LOCATION WORD FOR	F3B07340
01307	0	50000	0	02345	M22435	CLA	TIFFN	FIRST TRASTO INSERT	F3B07330
01310	-0	60200	0	02362		ORS	M2CW		F3B07360
01311	0	50000	0	02274		CLA	M2CON	INITIALIZE ADDCO FOR	F3B07370
01312	0	60100	0	02333		STO	ADDCO	TRASTO LEV NO SEARCH	F3B07380
01313	0	07400	4	01477	M22440	TSX	M22750,4	TRASTO LEV NO SEARCH	F3B07390
01314	0	07400	4	01560		TSX	M22800,4	CUR TIFGO LEV NO FOUND IN TRASTO	F3B07400
01315	-0	53400	2	02346		LXD	CTRAST,2	CUR TIFGO LEV NO NOT FOUND IN TRASTO	F3B07410
01316	1	77774	2	01317	M22445	TXI	M22445+1,2,-4	UPDATE TRASTO ENTRY POINT	F3807420
01317	0	07400	4	01456		TSX	M22700,4	TRASTO FMLA NO SEARCH	F3B07430
01320	0	02000	0	01326		TRA	M22455	TIFGO FMLA NO NOT AGAIN FOUND	F3B07440
01321	0	50000	0	02333		CLA	ADDCO	TIFGO FMLA NO AGAIN FOUND	F3B07450
01322	0	10000	0	01313		TZE	M22440	CUR TIFGO ADD NOT YET FOUND IN TRASTO	F3807460
01323	0	50000	0	02274		CLA	M2CON	CUR TIFGO ENTRY ALREADY FOUND IN TRASTO	F3B07470
01324	0	60100	0	02362		STO	M2CW	ADJUST LOCATION WORD	F3B07480
01325	0	02000	0	01313		TRA	M22440	TRASTO LEV. NO, SEARCH	F3B07490
01326	0	50000	0	02333	M22455	CLA	ADDCO		F3B07500
01327	0	10000	0	01335		TZE	M22460	CUR TIFGO ADD NEVER FOUND IN TRASTO	F3807510
01330	0	07400	4	02163		TSX	M23075,4	CUR TIFGO ADD FOUND IN TRASTO	F3B07520
01331	0	50000	0	02360		CLA	CLOC	UPDATE LOCATION WORD FOR	F3B07530
01332	0	40000	0	02301		ADD	M2CON+5	NEXT BLOCK OF TRASTO INSERTS	F3B07540
01333	0	60100	0	02360		STO	CLOC		F3B07550

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01334	0	60100	0	02362		STO	M2CW			F3B07560
01335	0	50000	0	02356	M22460	CLA	ETRAST	RESET	CTRAST FOR TRASTO LEV	F3B07570
01336	0	60100	0	02346		STO	CTRAST	NO	SEARCH	F3B07580
01337	-0	53400	2	02347		LXD	ETRAL,2	UPDATE	TRALEV ENTRY	F3B07590
01340	1	77777	2	01341		TXI	M22465,2,-1	POINT		F3B07600
01341	-0	63400	2	02347	M22465	SXD	ETRAL,2			F3B07610
01342	3	00000	2	01307		TXH	M22435,2	TEST	END OF TRALEV ENTRIES .	F3B07620
01343	1	77777	1	00503		TXI	M21000,1,-1	NEXT	TIFGO.	F3B07630
								TIFGO	ENTRY AN IF OVERFLOW	F3B07640
01344	-0	53400	2	02347	M22500	LXD	ETRAL,2	INITIALIZE	AND RECORD END OF	F3B07650
01345	1	77776	2	01346		TXI	M22500+2,2,-2	TRALEV	ENTRY	F3B07660
01346	-0	63400	2	01277		SXD	M22425+1,2			F3B07670
01347	-0	63400	2	01342		SXD	M22465+1,2			F3B07680
01350	0	07400	4	01477	M22505	TSX	M22750,4	TRASTO	LEV NO SEARCH	F3B07690
01351	0	07400	4	02027	COR12	TSX	M23025,4			F3B07700
01352	-0	53400	2	02346		LXD	CTRAST,2	CUR	TIFGO LEV NO NOT IN TRASTO	F3B07710
01353	1	77774	2	01354	M22510	TXI	M22510+1,2,-4	UPDATE	TRASTO ENTRY POINT	F3B07720
01354	0	07400	4	01456		TSX	M22700,4	TRASTO	FMLA NO SEARCH	F3B07730
01355	0	07400	4	02113		TSX	M23060,4	TRASTO	FMLA NO NOT AGAIN FOUND	F3B07740
01356	0	02000	0	01350		TRA	M22505	TRASTO	FMLA NO AGAIN FOUND	F3B07750
01357	0	02000	0	01272		TRA	M22420	CONTINUE	AS IN DVCH.	F3B07760
								TIFGO	ENTRY AN IF (E)	F3B07770
01360	-0	53400	2	02347	M22600	LXD	ETRAL,2	PERMUTE	WDS. OF THIS TRALEV ENTRY	F3B07780
01361	0	50000	2	03211		CLA	TRALEV,2	SO	THAT	F3B07790
01362	0	60100	0	02361		STO	SAVE	A1, A2, A3,	BECOMES A2, A3, A1	F3B07800
01363	0	50000	2	03212		CLA	TRALEV+1,2	A2	FIRST	F3B07810
01364	0	60100	2	03211		STO	TRALEV,2			F3B07820
01365	0	50000	2	03213		CLA	TRALEV+2,2	A3	SECOND	F3B07830
01366	0	60100	2	03212		STO	TRALEV+1,2			F3B07840
01367	0	50000	0	02361		CLA	SAVE	A1	THIRD	F3B07850
01370	0	60100	2	03213		STO	TRALEV+2,2			F3B07860
01371	1	77775	2	01372	M22610	TXI	M22610+1,2,-3			F3B07870
01372	-0	63400	2	01342		SXD	M22465+1,2			F3B07880
01373	0	07400	4	02177		TSX	CIT200,4	COMPILE	INFO INSTRUCTION	F3B07890
01374	0	00000	0	02345		HTR	TIFFN	ALPHA		F3B07900
01375	0	00000	0	02274		HTR	M2CON	ZERO		F3B07910
01376	0	00000	0	02274		HTR	M2CON	ZERO		F3B07920
01377	0	00000	0	02274		HTR	M2CON	ZERO		F3B07930
01400	0	07400	4	01477	M22620	TSX	M22750,4	TRASTQ	LEV NO SEARCH	F3B07940
01401	0	07400	4	02043		TSX	M23035,4	CUR	TIFGO LEV NO FOUND IN TRASTO	F3B07930
01402	-0	53400	2	02346		LXD	CTRAST,2	CUR	TIFGO LEV NO NOT FOUND IN TRASTO	F3B07960
01403	1	77774	2	01404	M22625	TXI	M22625+1,2,-4	UPDATE	TRASTO ENTRY POINT	F3B07970
01404	0	07400	4	01456		TSX	M22700,4	TRASTO	FMLA NO SEARCH	F3B07980
01405	0	07400	4	02127		TSX	M23065,4	TRASTO	FMLA NO NOT AGAIN FOUND	F3B07990
01406	0	02000	0	01400		TRA	M22620	TRASTO	FMLA NO AGAIN FOUND	F3B08000
01407	0	50000	0	02356	M22630	CLA	ETRAST	RESET	CTRAST CELL FOR	F3B08010
01410	0	60100	0	02346		STO	CTRAST	TRASTO	LEV NO SEARCH	F3B08020
01411	-0	53400	2	02347		LXD	ETRAL,2	UPDATE	TRALEV	F3B08030
01412	1	77777	2	01413		TXI	M22635,2,-1	ENTRY	POINT	F3B08040
01413	-0	63400	2	02347	M22635	SXD	ETRAL,2			F3B08050
01414	0	07400	4	01477	M22640	TSX	M22750,4	TRASTO	LEVEL NO SEARCH	F3B08060
01415	0	07400	4	02062		TSX	M23040,4	CUR	TIFGO LEV NO FOUND IN TRASTO	F3B08070
01416	-0	53400	4	02346		LXD	CTRAST,4	CUR	TIFGO LEV NO NOT FOUND IN TRASTO	F3B08080
01417	1	77774	2	01420		TXI	M22645,2,-4	UPDATE	TRASTO ENTRY POINT	F3B08090

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01420	0	07400	4	01456	M22645	TSX	M22700,4	TRASTO FMLA NO SEARCH	F3B08100
01421	0	07400	4	02147		TSX	M23070,4	TIFGO FMLA NO NOT AGAIN FOUND	F3B08110
01422	0	02000	0	01414		TRA	M22640	TIFGO FMLA NO AGAIN FOUND	F3B08120
01423	0	50000	0	02356	M22650	CLA	ETRAST	RESET CTRAST CELL FOR	F3B08130
01424	0	60100	0	02346		STO	CTRAST	TRASTO LEV NO SEARCH	F3B08140
01425	-0	53400	2	02347		LXD	ETRAL,2		F3B08150
01426	1	77777	2	01427		TXI	M22655,2,-1	UPDATE TRALEV	F3B08160
01427	-0	63400	2	02347	M22655	SXD	ETRAL,2	ENTRY POINT	F3B08170
01430	0	50000	0	02333		CLA	ADDCO	SET ADDCO FOR	F3B08180
01431	0	40000	0	02301		ADD	M2CON+5	TRA ADDRESS	F3B08190
01432	0	60100	0	02333		STO	ADDCO		F3B08200
01433	0	07400	4	01477	M22660	TSX	M22750,4	TRASTQ LEV NO SEARCH	F3B08210
01434	0	07400	4	02013		TSX	M23000,4	CUR TIFGO LEV NO FOUND IN TRASTO	F3B08220
01435	-0	53400	2	02346		LXD	CTRAST,2	CUR TIFGO LEV NO NOT FOUND IN TRASTO	F3808230
01436	1	77774	2	01437		TXI	M22663,2,-4	UPDATE TRASTO ENTRY POINT	F3B08240
01437	0	07400	4	01456	M22663	TSX	M22700,4	TRASTO FMLA NO SEARCH	F3B08250
01440	0	07400	4	02077		TSX	M23050,4	TIFGO FMLA NO NOT AGAIN FOUND	F3B08260
01441	0	02000	0	01433		TRA	M22660	TIFO FMLA NO AGAIN FOUND	F3B08270
01442	-0	53400	2	02347		LXD	ETRAL,2		F3B08280
01443	1	77777	2	01444		TXI	M22670,2,-1	UPDATE TRALEV ENTRY POINT	F3B08290
01444	-0	63400	2	02347	M22670	SXD	ETRAL,2	FOR NEXT TIFGO ENTRY	F3B08300
01445	0	50000	0	02333		CLA	ADDCO		F3B08310
01446	0	40200	0	02301		SUB	M2CON+5		F3B08320
01447	0	10000	0	00535	COR13	TZE	M21030-1		F3B08330
01450	1	00003	2	01451		TXI	M22675,2,3	RESET ETRAL FOR	F3B08340
01451	-0	63400	2	02347	M22675	SXD	ETRAL,2	SECOND PASS THROUGH TRASTO	F3B08350
01452	0	50000	0	02356		CLA	ETRAST	RESET CTRAST FOR SECOND	F3B08360
01453	0	60100	0	02346		STO	CTRAST	PASS THROUGH TRASTO	F3B08370
01454	0	50000	0	02302		CLA	M2CON+6	INITIALIZE LOCATION	F3B08380
01455	1	77777	1	01305		TXI	M22435-2,1,-1		F3B08390
							M2 CLOSED SUBROUTINES		F3B08400
							TRASTO FMLA NO SEARCH		F3B08410
01456	-0	75400	2	00000	M22700	PXD	0,2	PLACE COUNT OF TRALEV ENTRY IN AC.	F3B08420
01457	0	40200	0	02367		SUB	TRASTO-1	TRASTO WORD COUNT	F3B08430
01460	0	10000	4	00001		TZE	1,4	EQUAL. TR BACK	F3B08440
01461	0	50000	2	02370		CLA	TRASTO,2	TRASTO ENTRY	F3B08450
01462	-0	32000	0	02306		ANA	M2CON+10	SAVE DECREMENT	F3B08460
01463	0	76700	0	00022		ALS	18	SHIFT B TO DECREMENT PORTION	F3B08470
01464	0	34000	0	02345		CAS	TIFFN	CURRENT TIFGO FMLA. NO.	F3B08480
01465	0	02000	0	01470		TRA	M22710	TRASTO GREATER THAN TIFGO	F3B08490
01466	0	02000	0	01475		TRA	M22715	TRASTO EQUAL TO TIFGO FMLA NO	F3B08500
01467	1	77774	2	01456		TXI	M22700,2,-4	TRAS TO LESS THAN TIFGO, BACK TO BRING NEXT	F3B08510
01470	0	50000	2	02370	M22710	CLA	TRASTO,2	TRASTO ENTRY	F3B08520
01471	-0	32000	0	02305		ANA	M2CON+9	MASK OUT ADDRESS	F3B08530
01472	0	34000	0	02345		CAS	TIFFN	INTERNAL FORMULA NO. ALPHA	F3B08540
01473	1	77774	2	01456		TXI	M22700,2,-4	TRASTO	F3B08550
01474	1	77774	2	01456		TXI	M22700,2,-4		F3B08560
01475	-0	63400	2	02346	M22715	SXD	CTRAST,2		F3B08570
01476	0	02000	4	00002		TRA	2,4	TRASTO NOT FOUND	F3B08580
							TRASTO LEVEL NO SEARCH		F3B08590
01477	-0	63400	4	02331	M22750	SXD	CBOX,4	TR COUNT STORED FOR LINKAGE	F3B08600
01500	-0	53400	2	02347		LXD	ETRAL,2	CURRENT TRALEV ENTRY PT. IN IR 2	F3B08610
01501	0	50000	2	03211		CLA	TRALEV,2	LOAD TRALEV WORD	F3B08620
01502	0	62100	0	02350		STA	LEVNO	CURRENT LEVEL NO.	F3B08630

01503	-0	53400	2	02346	LXD	CTRAST,2	CURRENT TRASTO ENTRY PT.	F3B08640	
01504	0	50000	0	02340	CLA	TWOL	TWOS COMPLIMENT OF NO OF WDS. IN DEC. FIELD	F3808630	
01505	0	10000	0	01527	TZE	M22770	TYPE 2	F3B08660	
01506	0	50000	0	02346	CLA	CTRAST	CURRENT TRASTO ENTRY PT.	F3B08670	
01507	-0	10000	0	01513	TNZ	M22760		F3B08680	
01510	0	50000	0	02337	CLA	ONEL	TYPE 1	F3B08690	
01511	0	10000	0	01550	TZE	M22787		F3B08700	
01512	0	02000	0	01527	TRA	M22770		F3B08710	
01513	0	50000	0	02337	M22760	CLA	ONEL	TEST TYPE 1	F3B08720
01514	-0	10000	0	01524	TNZ	M22767		F3808730	
01515	0	40000	0	02340	M22762	ADD	TWOL	NO. OF TYPE 2	F3B08740
01516	-0	73400	4	00000	PDX	0,4		F3B08750	
01517	-0	75400	4	00000	PXD	0,4		F3B08760	
01520	0	34000	0	02346	CAS	CTRAST	COMPARE	F3B08770	
01521	0	02000	0	01527	TRA	M22770		F3B08780	
01522	0	02000	0	01527	TRA	M22770		F3B08790	
01523	0	02000	0	01550	TRA	M22787		F3B08800	
01524	0	34000	0	02346	M22767	CAS	CTRAST	F3B08810	
01525	0	02000	0	01515	TRA	M22762		F3B08820	
01526	0	02000	0	01515	TRA	M22762		F3B08830	
01527	0	50000	2	02371	M22770	CLA	TRASTO+1,2	LEVEL NOS.	F3B08840
01530	-0	32000	0	02306	ANA	M2CON+10	SAVE ADDRESS, TEST UPPER LEVEL	F3B08850	
01531	0	34000	0	02350	CAS	LEVNO	COMPARE TO CURRENT TIFGO LEVEL NO,	F3808860	
01532	0	02000	0	01535	TRA	M22777	LESS THAN	F3B08870	
01533	0	02000	0	01556	TRA	M22795		F3B08880	
01534	0	02000	0	01556	TRA	M22795		F3B08890	
01535	0	50000	2	02371	M22777	CLA	TRASTO+1,2	LEVEL NOS.	F3B08900
01536	-0	32000	0	02305	ANA	M2CON+9	SAVE DECREMENT	F3B08910	
01537	0	77100	0	00022	ARS	18	PLACE IN ADDRESS	F3B08920	
01540	0	34000	0	02350	CAS	LEVNO	CURRENT TIFGO LEVEL NO.	F3B08930	
01541	0	02000	0	01556	TRA	M22795	EXIT, NOT FOUND	F3B08940	
01542	0	02000	0	01543	TRA	M22783	EQUAL TO OR GREATER THAN	F3B08930	
01543	0	50000	0	02333	M22783	CLA	ADDCO	NO. OF TIMES TIFGO APPEARS	F3808960
01544	0	40000	0	02301	ADD	M2CON+5	ADD 10(8) INCREMENT	F3B08970	
01545	0	60100	0	02333	STO	ADDCO	RESTORE	F3B08980	
01546	-0	53400	4	02331	LXD	CBOX,4	RESTORE LINKAGE, LEVEL NO.	F3B08990	
01547	0	02000	4	00001	TRA	1,4	FOUND.	F3B09000	
01550	0	50000	2	02372	M22787	CLA	TRASTO+2,2	TAGS, WORD 3, TYPE 2 LEVEL NO.	F3B09010
01551	-0	32000	0	02305	ANA	M2CON+9	SAVE DECREMENT	F3B09020	
01552	0	77100	0	00022	ARS	18	SHIFT TO ADDRESS	F3B09030	
01553	0	34000	0	02350	CAS	LEVNO	COMPARE LEVEL NO.	F3B09040	
01554	0	02000	0	01543	TRA	M22783		F3B09050	
01555	0	02000	0	01556	TRA	M22795		F3809060	
01556	-0	53400	4	02331	M22795	LXD	CBOX,4	F3B09070	
01557	0	02000	4	00002	TRA	2,4	NOT FOUND, BACK TO MAIN ROUTINE	F3B09080	
							INDEXING INSTRUCTION COMPILER	F3B09090	
01560	-0	63400	4	02331	M22800	SXD	CBOX,4	SAVE COUNT IN 4 FOR LINKAGE	F3B09100
01561	-0	53400	2	02274	LXD	M2CON,2	PLACE ZERO IN IR 2	F3B09110	
01562	0	50000	0	02346	CLA	CTRAST	CURRENT TRASTO ENTRY POINT	F3B09120	
01563	-0	10000	0	01567	TNZ	M22810		F3B09130	
01564	0	50000	2	02337	M22805	CLA	ONEL,2	LENGTH OF TYPE 1 ENTRY ETC.	F3B09140
01565	-0	10000	2	01600	TNZ	M22819,2	ENTRIES EXIST	F3B09150	
01566	1	77777	2	01564	TXI	M22805,2,-1	GET NEXT TYPE ENTRY	F3B09160	
01567	0	50000	0	02274	M22810	CLA	M2CON	ZERO IN ACC.	F3B09170

01570	0	40000	2	02337	ADD ONEL,2	LENGTH OF TYPE 1 ENTRY ETC	F3B09180
01571	-0	73400	4	00000	PDX 0,4	PLACE THIS RESULT INIR 4	F3B09190
01572	-0	75400	4	00000	PXD 0,4	PUT BACK IN ACC., CLEARING ADDRESS	F3B09200
01573	0	10000	0	01577	TZE M22813		F3B09210
01574	0	40200	0	02346	SUB CTRAST	CURRENT TRASTO ENTRY POINT	F3B09220
01575	-0	12000	2	01600	TMI M22819,2	PROPER TYPE	F3B09230
01576	0	40000	0	02346	ADD CTRAST		F3B09240
01577	1	77777	2	01570	M22813 TXI M22810+1,2,-1	SORT ACCORDING TO TYPE	F3B09250
01600	0	02000	0	01606	M22819 TRA M22825	TYPE I INSERTS	F3B09260
01601	0	02000	0	01633	TRA M22850	TYPE II INSERTS	F3B09270
01602	0	02000	0	01654	TRA M22875	TYPE III INSERTS	F3B09280
01603	0	02000	0	01677	TRA M22900	TYPE IV INSERTS	F3B09290
01604	0	02000	0	01732	TRA M22925	TYPE V INSERTS	F3B09300
01605	0	02000	0	01752	TRA M22950	TYPE VI INSERTS	F3B09310
01606	-0	53400	2	02346	M22825 LXD CTRAST,2	TYPE I INSERTS	F3B09320
01607	0	50000	2	02372	CLA TRASTO+2,2	3RD WRD OF TRASTO ENTRY	F3B09330
01610	0	76500	0	00022	LRS 18	ADDRESS PORTION IN MQ	F3B09340
01611	0	60100	0	02365	STO M2CW+3	DECREMENT, T1, IN 4TH WORD	F3B09350
01612	-0	50000	0	02310	CAL M2CON+12	+140000000000	F3B09360
01613	0	60200	0	02364	SLW M2CW+2	SYMBOLIC ADDRESS	F3B09370
01614	0	76300	0	00022	LLS 18	PUT BACK T2 IN ACC	F3B09380
01615	-0	60200	0	02364	ORS M2CW+2	PUT 1N ADDRESS PART OF 3RD WD	F3B09390
01616	0	07400	4	02177	TSX CIT200,4	COMPILE INSTRUCTIONS	F3B09400
01617	0	00000	0	02362	HTR M2CW	INT. FMLA NO. IF ANY	F3B09410
01620	0	00000	0	02320	HTR M2ABC+3	SXD	F3B09420
01621	0	00000	0	02364	HTR M2CW+2	+140000000000, T2	F3B09430
01622	0	00000	0	02365	HTR M2CW+3	T1	F3B09440
01623	0	60100	0	02365	STO M2CW+3	PUT T2 IN 4TH WRD.	F3B09450
01624	0	07400	4	02177	TSX CIT200,4	COMPILE	F3B09460
01625	0	00000	0	02274	HTR M2CON	ZERO	F3B09470
01626	0	00000	0	02321	HTR M2ABC+4	LXD	F3B09480
01627	0	00000	0	02364	HTR M2CW+2	14(8),T2	F3B09490
01630	0	00000	0	02365	HTR M2CW+3	T2	F3B09500
01631	-0	53400	4	02331	M22848 LXD CBOX,4	RESTORE LINKAGE	F3B09510
01632	0	02000	4	00001	TRA 1,4	BACK TO MAIN ROUTINE	F3B09520
01633	-0	53400	2	02346	M22850 LXD CTRAST,2	TYPE II INSERTS	F3B09530
01634	-0	50000	2	02371	CAL TRASTO+1,2	2ND WORD OF TRASTO ENTRY	F3B09540
01635	0	60200	0	02364	SLW M2CW+2	SAVE IN 3RD WORD FOR COMPILER	F3B09550
01636	-0	50000	2	02372	CAL TRASTO+2,2	3RD WD OF ENTRY	F3B09560
01637	-0	32000	0	02306	ANA M2CON+10	SAVE ADDRESS	F3B09570
01640	0	60200	0	02365	SLW M2CW+3	STORE IN 4TH WD	F3B09580
01641	0	07400	4	02177	TSX CIT200,4	COMPILER	F3B09590
01642	0	00000	0	02362	HTR M2CW	INTERNAL FMLA NO., IF ANY	F3B09600
01643	0	00000	0	02322	HTR M2ABC+5	PXD	F3B09610
01644	0	00000	0	02274	HTR M2CON	ZERO	F3B09620
01645	0	00000	0	02365	HTR M2CW+3	ZERO,T1	F3B09630
01646	0	07400	4	02177	TSX CIT200,4	COMPILER	F3B09640
01647	0	00000	0	02274	HTR M2CON	ZERO	F3B09650
01650	0	00000	0	02323	HTR M2ABC+6	STO	F3B09660
01651	0	00000	0	02364	HTR M2CW+2	S(BCD)	F3B09670
01652	0	00000	0	02274	HTR M2CON	ZERO	F3B09680
01653	0	02000	0	01631	TRA M22848	TO RESTORE LINKAGE	F3B09690
01654	-0	53400	2	02346	M22875 LXD CTRAST,2	TYPE III INSERTS	F3B09700
01655	0	50000	2	02372	CLA TRASTO+2,2	3RD WRD OF TRASTO ENTRY	F3B09710

01656	0	76500	0	00022	LRS 18	SHIFT N TO MG	F3B09720
01657	0	40000	0	02303	ADD M2CON+7	1 TO ADDRESS FOR SIGN	F3B09730
01660	0	60100	0	02365	STO M2CW+3	4TH WORD	F3B09740
01661	0	76000	0	00000	CLM	CLEAR ACC	F3B09750
01662	0	76300	0	00022	LLS 18	PUT N BACK IN ACC.	F3B09760
01663	0	76000	0	00006	COM	COMPLIMENT	F3B09770
01664	0	40000	0	02275	ADD M2CON+1	ADD ONE, 2 S COMPLIMENT	F3B09780
01665	-0	32000	0	02306	ANA M2CON+10	SAVE ADDRESS	F3B09790
01666	0	60100	0	02363	STO M2CW+1	2ND WORD OF COMPILER	F3B09800
01667	-0	50000	0	02324	CAL M2ABC+7	TXI	F3B09810
01670	-0	60200	0	02363	ORS M2CW+1	IN DECREMENT	F3B09820
01671	0	07400	4	02177	TSX CIT200,4	COMPILER	F3B09830
01672	0	00000	0	02362	HTR M2CW		F3B09840
01673	0	00000	0	02363	HTR M2CW+1	TXI, N(COMP)	F3B09850
01674	0	00000	0	02311	HTR M2CON+13	+1700000000000	F3B09860
01675	0	00000	0	02365	HTR M2CW+3	1,	F3B09870
01676	0	02000	0	01631	TRA M22848	RESTORE LINKAGE	F3B09880
01677	-0	53400	2	02346	M22900 LXD CTRAST,2	TYPE IV INSERT	F3B09890
01700	0	50000	2	02372	CLA TRASTO+2,2	3RD WRD OF TRASTO ENTRY	F3B09900
01701	0	76000	0	00002	CHS	CHANGE SIGN TO PLUS	F3B09910
01702	0	76500	0	00022	LRS 18	T1, T0 ADDRESS. T2 TO M2	F3B09920
01703	0	76100	0	00000	COR14 NOP		F3B09930
01704	0	60100	0	02365	PAT9 STO M2CW+3		F3B09940
01705	0	50000	0	02360	PAT10 CLA CLOC	INCREMENT FOR LOC WD OF 1ST ENTRY	F3B09950
01706	0	40000	0	02301	PAT11 ADD M2CON+5	ADD 10	F3B09960
01707	0	60100	0	02360	PAT12 STO CLOC	RESTORE WITH NEW INCREMENT	F3B09970
01710	0	60100	0	02364	PAT13 STO M2CW+2	ALS 0 PLACE IN 3RD WD OF COMPILER	F3B09980
01711	0	50000	0	02345	PAT14 CLA TRSWC	WORD COUNT	F3B09990
01712	-0	60200	0	02364	PAT15 ORS M2CW+2	SAVE IN DECREMENT OF 3RD WD	F3B10000
01713	0	07400	4	02177	RET3 TSX CIT200,4	COMPILER	F3B10010
01714	0	00000	0	02362	HTR M2CW		F3B10020
01715	0	00000	0	02320	HTR M2ABC+3	SXD	F3B10030
01716	0	00000	0	02364	COR16 HTR M2CW+2	WORD COUNT, INCREMENTED LOC WD	F3B10040
01717	0	00000	0	02365	HTR M2CW+3	T1	F3B10050
01720	0	50000	2	02372	CLA TRASTO+2,2	3RD WORD OF TRASTO ENTRY	F3B10060
01721	-0	32000	0	02306	ANA M2CON+10	SAVE ADDRESS	F3B10070
01722	0	40000	0	02303	ADD M2CON+7	1 TO ADDRESS FOR C	F3B10080
01723	0	60100	0	02365	STO M2CW+3	4TH WORD	F3B10090
01724	0	07400	4	02177	TSX CIT200,4	COMPILER	F3B10100
01725	0	00000	0	02364	COR17 HTR M2CW+2	LOC WORD	F3B10110
01726	0	00000	0	02325	HTR M2ABC+8	TIX	F3B10120
01727	0	00000	0	02311	HTR M2CON+13	17(8)	F3B10130
01730	0	00000	0	02365	HTR M2CW+3	1T2	F3B10140
01731	0	02000	0	01631	TRA M22848	BACK TO RESTORE LINKAGE	F3B10150
01732	-0	53400	2	02346	M22925 LXD CTRAST,2	TYPE V INSERTS	F3B10160
01733	0	50000	2	02372	CLA TRASTO+2,2	3RD WORD	F3B10170
01734	0	76000	0	00002	CHS	CHANGE SIGN TO PLUS	F3B10180
01735	0	76500	0	00022	LRS 18	SHIFT T TO ADDRESS, N TO MQ	F3B10190
01736	0	40000	0	02303	ADD M2CON+7	1 FOR SIGN	F3B10200
01737	0	60100	0	02365	STO M2CW+3	4TH WRD. FOR COMPILER	F3B10210
01740	-0	50000	0	02324	CAL M2ABC+7	TXI	F3B10220
01741	0	77100	0	00022	ARS 18	SHIFT TO ADDRESS PORTION	F3B10230
01742	0	76300	0	00022	LLS 18	CONTENTS OF MQ	F3B10240
01743	0	60200	0	02363	SLW M2CW+1	1 TXI, N	F3B10250

01744	0	07400	4	02177	TSX	CIT200,4	COMPILER	F3B10260
01745	0	00000	0	02362	HTR	M2CW		F3B10270
01746	0	00000	0	02363	HTR	M2CW+1	TXI, N	F3B10280
01747	0	00000	0	02311	HTR	M2CON+13	17(8)	F3B10290
01750	0	00000	0	02365	HTR	M2CW+3	1,T	F3B10300
01751	0	02000	0	01631	TRA	M22848	RESTORE LINKAGE	F3B10310
01752	-0	53400	2	02346	M22950	LXD	CTRAST,2	TYPE VI INSERTS
01753	0	50000	2	02372	CLA	TRASTO+2,2	3RD WORD OF TRASTO ENTRY	F3B10330
01754	0	76000	0	00002	CHS			F3B10340
01755	-0	50100	0	02312	ORA	M2CON+14	+1200000000000	F3B10350
01756	0	60100	0	02364	STO	M2CW+2	3RD WD OF COMPILER	F3B10360
01757	0	50000	0	02277	CLA	M2CON+3	+0000000000004	F3B10370
01760	-0	50100	0	02334	COR18	ORA	COR28	+000004
01761	0	60100	0	02366	STO	M2CW+4	5TH WORD	F3B10390
01762	0	07400	4	02177	TSX	CIT200,4	COMPILER	F3B10400
01763	0	00000	0	02362	HTR	M2CW		F3B10410
01764	0	00000	0	02320	HTR	M2ABC+3	SXD	F3B10420
01765	0	00000	0	02313	HTR	M2CON+15	6000000000000	F3B10430
01766	0	00000	0	02366	HTR	M2CW+4	4,4	F3B10440
01767	0	07400	4	02177	TSX	CIT200,4	COMPILER	F3B10450
01770	0	00000	0	02274	HTR	M2CON	ZERO	F3B10460
01771	0	00000	0	02326	HTR	M2ABC+9	TSX	F3B10470
01772	0	00000	0	02364	HTR	M2CW+2	12(8),T	F3B10480
01773	0	00000	0	02277	HTR	M2CON+3	ZERO,4	F3B10490
01774	0	50200	2	02372	CLS	TRASTO+2,2	3RD WORD	F3B10500
01775	0	60100	0	02365	STO	M2CW+3	4TH WD OF COMPILER	F3B10510
01776	-0	50100	0	02310	ORA	M2CON+12	14 IN DECREMENT	F3B10520
01777	0	60100	0	02364	STO	M2CW+2	3RD WD, SAVE T	F3B10530
02000	0	07400	4	02177	TSX	CIT200,4	COMPILER	F3B10540
02001	0	00000	0	02274	HTR	M2CON	ZERO	F3B10550
02002	0	00000	0	02321	HTR	M2ABC+4	LXP	F3B10560
02003	0	00000	0	02364	HTR	M2CW+2	14(8),T	F3B10570
02004	0	00000	0	02365	HTR	M2CW+3	ZERO,T	F3B10580
02005	0	07400	4	02177	TSX	CIT200,4	COMPILER	F3B10590
02006	0	00000	0	02274	HTR	M2CON	ZERO	F3B10600
02007	0	00000	0	02327	HTR	M2ABC+10	LXD	F3B10610
02010	0	00000	0	02313	HTR	M2CON+15	6(8)	F3B10620
02011	0	00000	0	02366	HTR	M2CW+4	5 4	F3B10630
02012	0	02000	0	01631	TRA	M22848	BACK TO RESTORE LINKAGE	F3B10640
							INITIAL TRANSFER COMPILERS FOR TIFGO ENTRIES	F3B10650
							WHEN A TRASTO ENTRY IS ASSOCIATED WITH	F3B10660
							THE TRANSFER ADDRESS	F3B10670
							TRANSFER WITH LOCATION 0	F3B10680
02013	-0	63400	4	02270	M23000	SXD	ADD6+3,4	SAVE CONTENTS OF IR4 FOR LINKAGE
02014	0	50000	0	02345	CLA	TIFFN	CURRENT TIF60 FMLA. NO. IN DECR.	F3B10700
02015	0	60100	0	02364	STO	M2CW+2	3RD WORD	F3B10710
02016	0	50000	0	02333	CLA	ADDCO	8 TIMES N0, OF TIMES ADDRESS)S IN TRASTO	F3B10720
02017	-0	60200	0	02364	ORS	M2CW+2	PLACE IN ADDRESS	F3B10730
02020	0	07400	4	02177	TSX	CIT200,4	COMPILER	F3B10740
02021	0	00000	0	02274	HTR	M2CON	ZERO	F3B10750
02022	0	00000	0	02315	HTR	M2ABC	TRA	F3B10760
02023	0	00000	0	02364	HTR	M2CW+2	TIFEN, ADDCO	F3B10770
02024	0	00000	0	02274	HTR	M2CON	ZERO	F3B10780
02025	0	02000	0	02271	COR20	TRA	PAT17	F3B10790

02026	0	02000	4	00006	TRA	6,4	BACK TO MAIN ROUTINE	F3B10800
							INFO INSTRUCTION FOR IF OVERFLOW	F3B10810
02027	-0	63400	4	02270	M23025	SXD	ADD6+3,4	F3B10820
02030	0	50000	0	02345	CLA	TIFFN	SAVE LINKAGE	F3B10830
02031	0	60100	0	02364	STO	M2CW+2	TIFGO FMLA NO.	F3B10840
02032	0	50000	0	02333	CLA	ADDCO	3RD WD.	F3B10850
02033	-0	60200	0	02364	ORS	M2CW+2	COUNT	F3B10860
02034	0	07400	4	02177	TSX	CIT200,4	ADDRESS	F3B10870
02035	0	00000	0	02345	HTR	TIFFN	COMPILER	F3B10880
02036	0	00000	0	02274	HTR	M2CON	TIFGO FMLA NO.	F3B10890
02037	0	00000	0	02364	HTR	M2CW+2	ZERO	F3B10900
02040	0	00000	0	02274	HTR	M2CON	TIFFN, ADDCO	F3B10910
02041	0	02000	0	02271	COR22	TRA	PAT17	F3B10920
02042	0	02000	4	00006	TRA	6,4		F3B10930
							TRANSFER ON ZERO WITH LOCATION FMLA NO + 8	F3B10940
02043	-0	63400	4	02270	M23035	SXD	ADD6+3,4	F3B10950
02044	0	50000	0	02345	CLA	TIFFN	SAVE LINKAGE	F3B10960
02045	0	60100	0	02362	STO	M2CW	INT.FMLA NO	F3B10970
02046	0	60100	0	02364	STO	M2CW+2	3RD WD	F3B10980
02047	0	50000	0	02333	CLA	ADDCO	COUNT	F3B10990
02050	-0	60200	0	02362	ORS	M2CW	ADDRESS OF FIRST WD.	F3B1100D
02051	0	40000	0	02301	ADD	M2CON+5	ADD 10	F3B11010
02052	-0	60200	0	02364	ORS	M2CW+2	ADD 10 TO COUNT	F3B11020
02053	0	07400	4	02177	TSX	CIT200,4	COMPILER	F3B11030
02054	0	00000	0	02362	HTR	M2CW	INT FMLAN0, ADDCO	F3B11040
02055	0	00000	0	02316	HTR	M2ABC+1	TZE	F3B11050
02056	0	00000	0	02364	HTR	M2CW+2	INT. FMLA NO., ADDCO+10	F3B11060
02057	0	00000	0	02274	HTR	M2CON	ZERO	F3B11070
02060	0	02000	0	02271	COR24	TRA	PAT17	F3B11080
02061	0	02000	4	00006	TRA	6,4		F3B11090
							TRANSFER ON PLUS WITH LOCATION 0	F3B11100
02062	-0	63400	4	02270	M23040	SXD	ADD6+3,4	F3B11110
02063	0	50000	0	02345	CLA	TIFFN	SAVE LINKAGE	F3B11120
02064	0	60100	0	02364	STO	M2CW+2	TIFGO INT. FMLA NO.	F3B11130
02065	0	50000	0	02333	CLA	ADDCO	3RD WD	F3B11140
02066	0	40000	0	02301	ADD	M2CON+5	10 TO ADDCO	F3B11150
02067	-0	60200	0	02364	ORS	M2CW+2	IN ADDRESS OF 3RD WD	F3B11160
02070	0	07400	4	02177	TSX	CIT200,4	COMPILER	F3B11170
02071	0	00000	0	02274	HTR	M2CON	ZERO	F3B11180
02072	0	00000	0	02317	HTR	M2ABC+2	TPL	F3B11190
02073	0	00000	0	02364	HTR	M2CW+2	TIFFN, ADDCO+10	F3B11200
02074	0	00000	0	02274	HTR	M2CON	ZERO	F3B11210
02075	0	02000	0	02271	COR26	TRA	PAT17	F3B11220
02076	0	02000	4	00006	TRA	6,4		F3B11230
							INITIAL TRANSFER COMPILERS FOR TIFGO	F3B11240
							ENTRIES WHEN THERE IS NO TRASTO ENTRY	F3B11250
							FOR THE TRANSFER ADDRESS	F3B11260
							TRANSFER WITH LOCATION 0	F3B11270
02077	-0	63400	4	02331	M23050	SXD	CBOX,4	F3B11280
02100	-0	53400	2	02347	LXD	ETRAL,2	SAVE LINKAGE	F3B11290
02101	0	50000	2	03211	CLA	TRALEV,2	IN IRZ CURRENT TRALEV ENTRY PT,	F3B11300
02102	-0	32000	0	02305	ANA	M2CON+9	CURRENT TRALEV ENTRY	F3B11310
02103	0	60100	0	02364	STO	M2CW+2	SAVE DECREMENT, OF TRAVEV ENTRY	F3B11320
02104	0	07400	4	02177	TSX	CIT200,4	SRD WORD	F3B11330
							COMPILER	F3B11330

02105	0	00000	0	02274	HTR	M2CON	ZERO	F3B11340	
02106	0	00000	0	02315	HTR	M2ABC	TRA	F3B11350	
02107	0	00000	0	02364	HTR	M2CW+2	AI	F3B11360	
02110	0	00000	0	02274	HTR	M2CON	ZERO	F3B11370	
02111	-0	53400	4	02331	LXD	CBOX,4	RESTORE LINKAGE	F3B11380	
02112	0	02000	4	00002	TRA	2,4		F3B11390	
							INFO INSTRUCTION FOR IF OVERFLOW	F3B11400	
02113	-0	63400	4	02331	M23060	SXD	CBOX,4	SAVE LINKAGE	F3B11410
02114	-0	53400	2	02347	LXD	ETRAL,2	CURRENT TRALEV ENTRY DT.	F3B11420	
02115	0	50000	2	03211	CLA	TRALEV,2	TRALEV ENTRY	F3B11430	
02116	-0	32000	0	02305	ANA	M2CON+9	SAVE DECREMENT	F3B11440	
02117	0	60100	0	02364	STO	M2CW+2	3RD WD	F3B114S0	
02120	0	07400	4	02177	TSX	CIT200,4	COMPILER	F3B11460	
02121	0	00000	0	02345	HTR	TIFFN	TIFGO INT. FMLA NO	F3B11470	
02122	0	00000	0	02274	HTR	M2CON	ZERO	F3B11480	
02123	0	00000	0	02364	HTR	M2CW+2	AI	F3B11490	
02124	0	00000	0	02274	HTR	M2CON	ZERO	F3B11500	
02125	-0	53400	4	02331	LXD	CBOX,4	RESTORE LINKAGE	F3B11510	
02126	0	02000	4	00002	TRA	2,4		F3B11520	
							TRANSFER ON ZERO WITH LOCATION FMLA NO + 8	F3B11530	
02127	-0	63400	4	02331	M23065	SXD	CBOX,4	SAVE LINKAGE	F3B11540
02130	-0	53400	2	02347	LXD	ETRAL,2	CURRENT TRALEV ENTRY PT	F3B11550	
02131	0	50000	2	03211	CLA	TRALEV,2	SAVE DECREMENT OF TRALEV	F3B11560	
02132	-0	32000	0	02305	ANA	M2CON+9	ENTRY	F3B11570	
02133	0	60100	0	02364	STO	M2CW+2		F3B11580	
02134	0	50000	0	02345	CLA	TIFFN	TIFGO FMLA NO.	F3B11590	
02135	0	60100	0	02362	STO	M2CW		F3B11600	
02136	0	50000	0	02301	CLA	M2CON+5	10 (8)	F3B11610	
02137	-0	60200	0	02362	ORS	M2CW	ADD TO ADDRESS	F3B11620	
02140	0	07400	4	02177	TSX	CIT200,4		F3B11630	
02141	0	00000	0	02362	HTR	M2CW	T1FFN+10(8)	F3B11640	
02142	0	00000	0	02316	HTR	M2ABC+1	TZE	F3B11650	
02143	0	00000	0	02364	HTR	M2CW+2	AI	F3B11660	
02144	0	00000	0	02274	HTR	M2CON	ZERO	F3B11670	
02145	-0	53400	4	02331	LXD	CBOX,4		F3B11680	
02146	0	02000	4	00002	TRA	2,4		F3B11690	
							TRANSFER ON PLUS WITH LOCATION 0	F3B11700	
02147	-0	63400	4	02331	M23070	SXD	CBOX,4	SAVE LINKAGE	F3B11710
02150	-0	53400	2	02347	LXD	ETRAL,2		F3B11720	
02151	0	50000	2	03211	CLA	TRALEV,2		F3B11730	
02152	-0	32000	0	02305	ANA	M2CON+9	DECREMENT OF TRALEV ENTRY	F3B11740	
02153	0	60100	0	02364	STO	M2CW+2		F3B11750	
02154	0	07400	4	02177	TSX	CIT200,4		F3B11760	
02155	0	00000	0	02274	HTR	M2CON	ZERO	F3B11770	
02156	0	00000	0	02317	HTR	M2ABC+2	TPL	F3B11780	
02157	0	00000	0	02364	HTR	M2CW+2	AI	F3B11790	
02160	0	00000	0	02274	HTR	M2CON	ZERO	F3B11800	
02161	-0	53400	4	02331	LXD	CBOX,4		F3B11810	
02162	0	02000	4	00002	TRA	2,4		F3B11820	
							FINAL TRANSFER COMPILER FOR TIFGO	F3B11830	
							ENTRIES WHEN A TRASTO ENTRY IS ASSOCIATED	F3B11840	
							WITH THE TRANSFER ADDRESS	F3B11850	
02163	-0	63400	4	02331	M23075	SXD	CBOX,4	SAVE LINKAGE	F3B11860
02164	-0	53400	2	02347	LXD	ETRAL,2		F3B11870	

02165	0	50000	2	03211	CLA	TRALEV,2		F3B11880	
02166	-0	32000	0	02305	ANA	M2CON+9	SAVE DECREMENT OF TRALEV	F3B11890	
02167	0	60100	0	02364	STO	M2CW+2	ENTRY	F3B11900	
02170	0	07400	4	02177	TSX	CIT200,4		F3B11910	
02171	0	00000	0	02311	HTR	M2CON+13	+170000000000	F3B11920	
02172	0	00000	0	02315	HTR	M2ABC	TRA	F3B11930	
02173	0	00000	0	02364	HTR	M2CW+2	AI	F3B11940	
02174	0	00000	0	02274	HTR	M2CON	ZERO	F3B11950	
02175	-0	53400	4	02331	LXD	CBOX,4		F3B11960	
02176	0	02000	4	00001	TRA	1,4		F3B11970	
						M2 COMPILER CIT200		F3B11980	
02177	0	60100	0	02351	CIT200	STO	E1C2	SAVE AC	F3B11990
02200	-0	60000	0	02352	STQ	E2C2	SAVE MQ	F3B12000	
02201	-0	63400	1	02353	SXD	E3C2,1	SAVE IR 1	F3B12010	
02202	-0	63400	2	02354	SXD	E4C2,2	SAVE IR 2	F3B12020	
02203	-0	53400	2	02355	LXD	BBOX,2	2 S COMP. OF NO. OF WDS. IN BLOCK	F3B12030	
02204	3	77634	2	02217	TXH	CIT204,2,-100	COMPARE TO 100.	F3B12040	
02205	-3	00000	2	02217	TXL	CIT204,2,0	LAST ENTRY	F3B12050	
02206	0	76600	0	00222	WRS	146	SELECT TAPE 2	F3B12060	
02207	0	50000	0	07322	CLA	TFRC0	TIFGO FILE REC. COUNT	F3B12070	
02210	0	40000	0	02303	ADD	M2CON+7	ADD 1 TO DECREMENT	F3B12080	
02211	0	60100	0	07322	STO	TFRC0	TIFGO FILE REC. COUNT	F3B12090	
02212	0	53400	1	02274	LXA	M2CON,1	ZERO IN IR 1	F3B12100	
02213	0	70000	1	06622	CIT201	CPY	CIB2,1	OUTPUT AREA	F3B12110
02214	1	77777	1	02215	TXI	CIT202,1,-1	SET COUNT FOR NEXT WORD	F3B12120	
02215	1	00001	2	02216	CIT202	TXI	CIT203,2,1	SET UP COUNT OF BLOCK	F3B12130
02216	3	00001	2	02213	CIT203	TXH	CIT201,2,1	BACK TO CONTINUE WRITING	F3B12140
02217	0	53400	1	02277	CIT204	LXA	M2CON+3,1	COUNT OF 4 IN IR 1	F3B12150
02220	0	50000	0	02275	CLA	M2CON+1	1 IN ACC	F3B12160	
02221	0	62100	0	02222	STA	CIT205	TO GET NEXT ENTRY	F3B12170	
02222	0	50000	4	00000	CIT205	CLA	0,4	ADDRESS OF NEXT ENTRY	F3B12180
02223	0	62100	0	02224	STA	CIT206		F3B12190	
A 02224	0	50000	0	00000	CIT206	CLA	NEXT ENTRY	F3B12200	
02225	0	60100	2	06622	STO	CIB2,2	OUTPUT AREA	F3B12210	
02226	0	50000	0	02222	CLA	CIT205	ADDRESS	F3B12220	
02227	0	40000	0	02275	ADD	M2CON+1	ONE	F3B12230	
02230	0	62100	0	02222	STA	CIT205	RESTORE ADDRESS	F3B12240	
02231	1	77777	2	02232	TXI	CIT207,2,-1	DECREASE BLOCK COUNT	F3B12250	
02232	2	00001	1	02222	CIT207	TIX	CIT205,1,1	GET NEXT ENTRY	F3B12260
02233	-0	63400	2	02355	SXD	BBOX,2	SAVE COUNT	F3B12270	
02234	0	50000	0	02351	CLA	E1C2	RESTORE AC	F3B12280	
02235	0	56000	0	02352	LDQ	E2C2	RESTORE MQ	F3B12290	
02236	-0	53400	1	02353	LXD	E3C2,1	RESTORE IR 1	F3B12300	
02237	-0	53400	2	02354	LXD	E4C2,2	RESTORE IR 2	F3B12310	
02240	0	02000	4	00005	TRA	5,4	BACK TO MAIN ROUTINE	F3B12320	
02241	-0	63400	4	02260	ADD1	SXD	ADD4,4	SAVE LINKAGE	F3B12330
02242	-0	53400	2	02346	ADD2	LXD	CTRAS,2	CURRENT TRASTO ENTRY POINT	F3B12340
02243	0	50000	2	02372	CLA	TRASTO+2,2	3RD WD OF TRASTO ENTRY	F3B12330	
02244	0	12000	0	02254	TPL	ADD3	SORT OUT TYPES 1,2,3	F3B12360	
02245	0	50000	2	02371	CLA	TRASTO+1,2	TYPES 4,5,6. TEST 2ND WD	F3B12370	
02246	-0	12000	0	02254	TMI	ADD3	TYPE 2	F3B12380	
02247	0	50000	2	02370	CLA	TRASTO,2	1ST WORD	F3B12390	
02250	-0	12000	0	02254	TMI	ADD3	TYPE 3	F3B12400	
02251	0	50000	0	02333	CLA	ADDCO	COUNT TIMES 8	F3B12410	

02252	0	40000	0	02301	ADD M2CON+5	ADD ONE	F3B12420
02253	0	60100	0	02333	STO ADDCO	RESTORE NEW COUNT	F3B12430
02254	1	77774	2	02255	ADD3 TXI ADD3+1,2,-4	SKIP TO NEXT ENTRY	F3B12440
02255	0	07400	4	01456	TSX M22700,4	TRASTO FMLA NO SEARCH	F3B12450
02256	0	02000	0	02263	TRA ADD5		F3B12460
02257	0	07400	4	01477	TSX M22750,4	TRASTO LEVEL NO SEA RCH	F3B12470
02260	-3	00000	0	02265	ADD4 TXL ADD6,0		F3B12480
02261	-0	53400	2	02346	LXD CTRAST,2	END	F3B12490
02262	1	77774	2	02255	TXI ADD3+1,2,-4	BACK FOR NEXT ENTRY	F3B12500
02263	-0	53400	4	02260	ADD5 LXD ADD4,4		F3B12510
02264	0	02000	4	00001	TRA 1,4	BACK TO MAIN ROUTINE, VIA PAT 18	F3B12520
02265	0	50000	0	02333	ADD6 CLA ADDCO		F3B12530
02266	0	40200	0	02301	SUB M2CON+5		F3B12540
02267	0	60100	0	02333	STO ADDCO		F3B12550
02270	-3	00000	0	02242	TXL ADD2,0		F3B12560
02271	0	07400	4	02241	PAT17 TSX ADD1,4		F3B12570
02272	-0	53400	4	02270	PAT18 LXD ADD6+3,4		F3B12580
02273	0	02000	4	00006	PAT19 TRA 6,4		F3B12590
02274	+0000000000000			M2CON	DEC 0,1,2,4,6,8,16,1B17,3B17		F3B12600
02275	+00000000000001						
02276	+00000000000002						
02277	+00000000000004						
02300	+00000000000006						
02301	+00000000000010						
02302	+00000000000020						
02303	+00000100000000						
02304	+00000300000000						
02305	+07777700000000			OCT	77777000000,77777,50000000000,140000000000		F3B12610
02306	+000000077777						
02307	+05000000000000						
02310	+14000000000000						
02311	+17000000000000			COR27	OCT 170000000000,120000000000,60000000000,3000000		F3B12620
02312	+12000000000000						
02313	+06000000000000						
02314	+00000300000000						
02315	63512100000000			M2ABC	BCD 6TRA000TZE000TPL000SXD000LXP000PXD000		F3B12630
02316	63712500000000						
02317	63474300000000						
02320	62672400000000						
02321	43674700000000						
02322	47672400000000						
02323	62634600000000			BCD	5STO000TXI000TIX000TSX000LXD000		F3B12640
02324	63673100000000						
02325	63316700000000						
02326	63626700000000						
02327	43672400000000						
02330	+00000000000005			M2ECTR	DEC 5		F3B12650
	02274	L(0)		SYN	M2CON		F3B12660
	02276	L(2)		SYN	M2CON+2		F3B12670
	02277	L(4)		SYN	M2CON+3		F3B12680
02331	+00000000000003			L(3)	DEC 3		F3B12690
	02331	CBOX		SYN	L(3) IRC STORED IN DECR FIELD FOR ALL CLSD SUBROUTINE LINKAGE		F3B12700
02332	+0000000000456			OCT	456		F3B12710
	02332	L0X		SYN	O456 LOWER INDEX FOR TRAD IN DECR FIELD		F3B12720

02333	0	00000	0	02370	TRSORG		TRASTO		F3B12730
				02333	ORTRST	SYN	TRSORG		F3B12740
				02333	ADDCO	SYN	TRSORG	8 TIMES THE NUM OF TIMES THE CURRENT ADDRESS OF THE	F3B127S0
								CURRENT TIFGO ENTRY APPEARS IN TRASTO, IN ADDR FIELD	F3B12760
02334	+0000004000000			COR28	OCT		4000000		F3B12770
02335	-2000000000000			MASK	OCT		-2000000000000		F3B12780
02336	+0000000000460			O460	OCT		460		F3B12790
02337	0	00000	0	00000	1BOX				F3B12800
02340	0	00000	0	00000	2BOX				F3B12810
02341	0	00000	0	00000	3BOX				F3B12820
02342	0	00000	0	00000	4BOX				F3B12830
02343	0	00000	0	00000	5BOX				F3B12840
02344	0	00000	0	00000	6BOX				F3B12850
				02337	ONEL	SYN	1BOX	TWOS COMPS	F3B12860
				02340	TWOL	SYN	ONEL+1	OF THE LENGTHS	F3B12870
				02341	THREEL	SYN	ONEL+2	OF VARIOUS TYPES	F3B12880
				02342	FOURL	SYN	ONEL+3	OF ENTRY BLOCKS	F3B12890
				02343	FIVEL	SYN	ONEL+4	IN TRASTO	F3B12900
				02344	SIXL	SYN	ONEL+5	IN DECREMENT FIELD	F3B12910
02345	0	00000	0	00000	TRSWC			WORD COUNT	F3B12920
				02345	TIFFN	SYN	TRSWC	CURRENT TIFGO FMLA NUM IN DEC FIELD	F3B12930
02346	0	00000	0	00000	WCCHS				F3B12940
				02346	CTRAST	SYN	WCCHS	CURRENT TRASTO ENTRY POINT IN DEC FIELD (TWOS COMP)	F3B12950
02347	0	00000	0	00000	CHS1				F3B12960
				02347	ETRAL	SYN	CHS1	CURRENT TRALEV ENTRY POINT IN DEC FIELD (TWOS COMP)	F3B12970
02350	0	00000	0	00000	CHS2				F3B12980
				02350	LEVNO	SYN	CHS2	LEVEL NUM OF CURRENT ADDR OF CURR TIFGO ENTRY IN ADDRESS	F3B12990
02351	0	00000	0	00000	E1C2			CELL FOR SAVING AC	F3B13000
02352	0	00000	0	00000	E2C2			CELL FOR SAVING MQ	F3B13010
02353	0	00000	0	00000	E3C2			CELL FOR SAVING IRA IN DEC FIELD	F3B13020
02354	0	00000	0	00000	E4C2			CELL FOR SAVING IRB IN DEC FIELD	F3B13030
02355	0	00000	0	00000	BBOX			TWOS COMP OF NO OF WDS ALREADY ENTERED IN BLOCK	F3B13040
02356	0	00000	0	00000	ETRAST			TRASTO ENTRY POINT FOR INITIAL TIFGO FMLA NO MATCH IN DEC	F3B13050
02357	0	00000	0	00000	NETRAL			TRALEV ENTRY POINT FOR LAST ADD IN DEC FIELD(TWOS COMP)	F3B13060
02360	0	00000	0	00000	CLOC			INCREMENT FOR LOC WD OF FIRST INST IN CUR BLOCK	F3B13070
								OF TRASTO INSERTIONS (IN ADDR FIELD)	F3B13080
02361	0	00000	0	00000	SAVE			TEHP STORAGE FOR FIRST TRALEV ENTRY FOR IF (E)	F3B13090
				02362	M2CW	BSS	5	FOUR WORD INSTRUCTION STORAGE	F3B13100
02367	0	00000	0	00000	CTRSWC				F3B13110
				02370	TRASTO	BSS	400		F3B13120
				02370	TYPE1	SYN	TRASTO		F3B13130
				03210	TYPE2	BSS	400		F3B13140
				04030	TYPE3	BSS	400		F3B13150
				04650	TYPE4	BSS	400		F3B13160
				05470	TYPE5	BSS	400		F3B13170
				06310	TYPE6	BSS	400		F3B13180
				03211	TRALEV	SYN	TYPE2+1		F3B13190
				05472	TIFGO	SYN	TYPE2+1202		F3B13200
				06622	CIB2	SYN	TYPE2+1802		F3B13210
				06767	TRAD	SYN	CIB2+101		F3B13220
				07322		ORG	3794		F3B13230
				07322	TFRC0	BSS	1		F3B13240
				07323	EASC0	BSS	1	CURRENT ASC0 ENTRY POINT IN DECR FIELD (TWOS COMP)	F3B13250
				07324	ASN0	BSS	1	ONE LESS THAN CUR ASSIGN NUM IN DEC FIELD	F3B13260

07325 ASC0 BSS 300
00030 END 24

F3B13270
F3B13280

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	1329	0	0	0	0
LIB	0	0	0	0	0
COL	1329	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 1361

NUMBER OF SYMBOLS, DEF 320,DEFOP 0,UNDEF 0
REM MASTER RECORD CARD = FN060

MASTER RECORD CARD = FN060

THE FOLLOWING PROGRAM CONSTITUTES THE FINAL SECTION OF THE MERGE. IT MERGES THE FILE OF INSTRUCTIONS PREPARED BY THE FIRST SECTION WITH THE FILE PREPARED BY THE SECOND SECTION. IN ADDITION TO MERGING THESE TWO FILES, IT INSERTS IN THEIR PROPER POSITION THE INDEXING INSTRUCTIONS NECESSITATED BY THE APPEARANCE OF RELATIVE CONSTANTS.

			00030	ORG 24						F3B00010
					READ TSXCOM INTO HIGH SPEED STORAGE					F3B00020
	00030	0	53400	4	01202	M30000	LXA	M3ECTR,4	ERORR COUNT IN IR 4	F3B00030
	00031	0	76200	0	00303		RDS	195	SELECT DRUM 3	F3B00040
	00032	0	46000	0	01147		LDA	L(704)	DRUM ADDRESS	F3B00050
	00033	0	70000	0	01226		CPY	TSXCOM-2	WORD COUNT OF TSXCOM TABLE	F3B00060
	00034	0	70000	0	01227		CPY	TSXCOM-1	CHECK SUM OF WORD COUNT	F3B00070
	00035	0	50000	0	01226		CLA	TSXCOM-2	WD. COUNT	F3B00080
	00036	0	40200	0	01227		SUB	TSXCOM-1	CHECK SUM	F3B00090
	00037	0	10000	0	00042		TZE	M30010	EQUAL	F3B00100
	00040	2	00000	4	00031		TIX	M30000+1,4	NOT EQUAL, TRY 4 MORE TIMES	F3B00110
	00041	0	07400	4	00004		TSX	4,4	WORD COUNT NOT EQUAL TO CHECK SUM	F3B00120
	00042	0	53400	4	01202	M30010	LXA	M3ECTR,4	ERROR COUNT IN IR4	F3B00130
	00043	0	50000	0	01226		CLA	TSXCOM-2	WORD COUNT	F3B00140
	00044	0	77100	0	00022		ARS	18	PLACE IN ADDRESS	F3B00150
	00045	0	10000	0	00073		TZE	M30050	NO TSX INSTRUCTION	F3B00160
	00046	0	73400	3	00000		PAX	0,3	PLACE WORD COUNT IN IR 1 AND 2	F3B00170
	00047	0	40000	0	01142		ADD	L(1)	ADD ONE TO WORD COUNT	F3B00180
	00050	0	40000	0	00061		ADD	M30025	INITIAL ADDRESS	F3B00190
	00051	0	62100	0	00055		STA	M30020		F3B00200
	00052	0	76200	0	00303		RDS	195	SELECT DRUM 3	F3B00210
	00053	0	46000	0	01150		LDA	L(706)	DRUM ADDRESS	F3B00220
	00054	1	00001	1	00055		TXI	M30020,1,1	INCCREMENT 8B 1	F3B00230
	00055	0	70000	1	00000	M30020	CPY	0,1	TSXCOM TABLE INTO STOORAGE	F3B00240
	00056	2	00001	1	00055		TIX	M30020,1,1	COPY LOOP	F3B00250
	00057	0	53400	1	01141		LXA	L(0),1		F3B00260
	00060	-0	50000	0	01141		CAL	L(0)	ZEROS IN ACC.	F3B00270
	00061	0	36100	1	01230	M30025	ACL	TSXCOM,1	COMPUTE NEW CHECK SUMS AND COMPARE	F3B00280
	00062	1	77777	1	00063		TXI	M30025+2,1,-1	TO GIVEN CHECK SUM	F3B00290
	00063	2	00001	2	00061		TIX	M30025,2,1		F3B00300
	00064	-0	63400	1	01227		SXD	TSXCOM-1,1		F3B00310
	00065	0	60200	0	01226		SLW	TSXCOM-2		F3B00320
	00066	0	50000	0	01226		CLA	TSXCOM-2		F3B00330
	00067	0	40200	1	01230		SUB	TSXCOM,1		F3B00340
	00070	0	10000	0	00073		TZE	M30050	END. CHECK SUMS AGREE	F3B00350
	00071	2	00001	4	00043		TIX	M30010+1,4,1	NOT EQUAL) BACK TO TRY 4 MORE T IMES	F3B00360
	00072	0	07400	4	00004		TSX	4,4	READ DRUM 3 MORE TIMES	F3B00370
	00073	0	02000	0	02673	M30050	TRA	TSXPT1		F3B00380
									PROGRAM FOR PART 3 OF MERGE	F3B00390
	00074	0	07400	4	00654		TSX	READTF,C	INITIALIZE TIFGO FILE BUFFER	F3B00400
	00075	0	07400	4	00700		TSX	READFF,C	FIRST FILE BUFFERS	F3B00410
	00076	-0	76000	0	00142		MSE	98	IS TIFGO FILE USED UP	F3B00420
	00077	0	02000	0	00101		TRA	C4	NO	F3B00430
	00100	0	02000	0	00150		TRA	G1	YES, GO TO END OF TIFGO ROUTINE	F3B00440
	00101	0	50000	0	07322	C4	CLA	3794	TIFGO RECORD COUNT	F3B00450
	00102	0	40000	0	01151		ADD	L(1D)	ADD ONE TO DECREMENT	F3B00460
	00103	0	60100	0	07322		STO	3794	NEW TIFGO RECORD COUNT	F3B00470

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00104	0	50000	1	02362	C6	CLA FFLBUF,A	OBTAIN ALPHA FOR NEXT CIT IN IST FILE BUFFER	F3B00340
00105	0	62200	0	01221		STD FFLCFN		F3B00550
00106	0	50000	2	02216		CLA TFGBUF,B	OBTAIN FOR NEXT CIT AND SAVE IN	F3B00560
00107	-0	32000	0	01162		ANA MASK	TIFGO BUFFER	F3B00570
00110	0	62200	0	01213		STD TFGCFN		F3B00580
00111	0	34000	0	01221		CAS FFLCFN	COMPARE FIRST FILE TO TIFGO FILE	F3B00590
00112	0	02000	0	00234		TRA E1	ALPHA LESS THAN BETA	F3B00600
00113	0	02000	0	00337		TRA J1	ALPHA EQUALS BETA	F3B00610
							ALPHA GREATER THAN BETA	F3B00620
00114	0	53400	4	01145	C5	LXA L(4),C	COMPILE THIS TIFGO FILE INSTRUCTION	F3B00630
00115	0	50000	2	02216	C2	CLA TFGBUF,B	SET UP FOR WORDS	F3B00640
00116	0	60100	4	01220		STO TFGCOM+4,C		F3B00650
00117	1	77777	2	00120		TXI C1,B,-1		F3B00660
00120	2	00001	4	00115	C1	TIX C2,C,1		F3B00670
00121	0	07400	4	01022		TSX CIT00,C	COMPILER	F3B00680
00122	0	00000	0	01214		HTR TFGCOM		F3B00690
00123	0	00000	0	01215		HTR TFGCOM+1		F3B00700
00124	0	00000	0	01216		HTR TFGCOM+2		F3B00710
00125	0	00000	0	01217		HTR TFGCOM+3		F3B00720
00126	-0	75400	2	00000		PXD 0,B	COMPARE WORD COUNT	F3B00730
00127	0	34000	0	01212		CAS TFGWC	WITH BUFFER SIZE	F3B00740
00130	0	02000	0	00137		TRA C7	WORD COUNT LESS THAN BUFFER SSIZE	F3B00750
00131	0	02000	0	00133		TRA C3	WC EQUALS BS	F3B00760
00132	0	07400	4	00004		TSX 4,4	WORD COUNT INCORRECT	F3B00770
00133	0	07400	4	00654	C3	TSX READTF,C	READ TIFGO FILE INTO BUFFER	F3B00780
00134	-0	76000	0	00142		MSE 98	IS TIFGO FILE USED UP	F3B00790
00135	0	02000	0	00137		TRA C7	NO TEST LOCATION WD OF NEXT ENTRY	F3B00800
00136	0	02000	0	00150		TRA G1	YES GO TO END OF TIFGO FILE ROUTINE	F3B00810
00137	0	50000	2	02216	C7	CLA TFGBUF,B	WORD COUNT LESS THAN BUFFER SIZE	F3B00820
00140	-0	32000	0	01164		ANA 2BIT	IS LOCATION WORD SPECIAL	F3B00830
00141	-0	10000	0	00114		TNZ C5	YES BACK TO COMPILE NEXT ENTRY	F3B00840
00142	0	50000	2	02216		CLA TFGBUF,B	NO	F3B00850
00143	-0	32000	0	01162		ANA MASK	DOES NEXT INSTRUCTION IN TIFGO FILE	F3B00860
00144	0	34000	0	01213		CAS TFGCFN	BELONG TO CURRENT COMPILED BLOCK	F3B00870
00145	0	02000	0	00104		TRA C6	NO	F3B00880
00146	0	76100	0	00000		NOP	YES	F3B00890
00147	0	02000	0	00114		TRA C5	YES	F3B00900
							END OF TIFGO FILE RDUTINE	F3B00910
00150	-0	76000	0	00141	G1	MSE 97	IS FIRST FILE USED UP. TEST SWITCH	F3B00920
00151	0	02000	0	00153		TRA G2	NO	F3B00930
00152	0	02000	0	00443		TRA OUT	YES GO TO TERMINAL ROUT INE	F3B00940
00153	0	50000	1	02362	G2	CLA FFLBUF,A	ENTRY IN FIRST FILE BUFFER	F3B00950
00154	0	62200	0	01221		STD FFLCFN	STORE INTERNAL FORMULA NO. FOR ENTRY	F3B00960
00155	0	53400	4	01145	G5	LXA L(4),C	COMPILE	F3B00970
00156	0	50000	1	02362	G4	CLA FFLBUF,A	FIRST	F3B00980
00157	0	60100	4	01226		STO FFLCOM+4,C	FILE	F3B00990
00160	1	77777	1	00161		TXI G3,A,-1	INSTRUCTION	F3B01000
00161	2	00001	4	00156	G3	TIX G4,C,1		F3B01010
00162	0	07400	4	01022		TSX CIT00,C	COMPILER	F3B01020
00163	0	00000	0	01222		HTR FFLCOM		F3B01030
00164	0	00000	0	01223		HTR FFLCOM+1		F3B01040
00165	0	00000	0	01224		HTR FFLCOM+2		F3B01050
00166	0	00000	0	01225		HTR FFLCOM+3		F3B01060
00167	-0	75400	1	00000		PXD 0,A	COMPARE WORD COUNT WITH BUFFER SIZE	F3B01070

00170	0	34000	0	01220		CAS FFLWC	TO TEST IF FIRST FILE IS NOW EMPPTY	F3B01080
00171	0	02000	0	00201		TRA G8	WORD COUNT LES THAN BUFFER SIZE	F3B01090
00172	0	02000	0	00174		TRA G7	WC EQUALS BS	F3B01100
00173	0	07400	4	00004		TSX 4,4	WORD COUNT INCORRECT	F3B01110
00174	0	07400	4	00700	G7	TSX READFF,C		F3B01120
00175	-0	76000	0	00141		MSE 97	TEST IF FIRST FILE IS USED UP	F3B01130
00176	0	02000	0	00201		TRA G8	NO	F3B01140
00177	0	07400	4	00724		TSX M31000,C	YES, GO TO TSX COM TABLE SEARCH	F3B01150
00200	0	02000	0	00443		TRA OUT	TERMINAL ROUTINE	F3B01160
00201	0	50000	1	02362	G8	CLA FFLBUF,A	TEST IF NEXT FIRST FILE ENTRY	F3B01170
00202	0	10000	0	00155		TZE G5	BELONGS TOSAME BLOCK OF INSTRUCTIONS	F3B01180
00203	0	07400	4	00724		TSX M31000,C	NO	F3B01190
00204	0	50000	1	02362	G9	CLA FFLBUF,A	TEST IF NEXT FIRST FILE ALPHA	F3B01200
00205	-0	32000	0	01162		ANA MASK	IS GREATER THAN PREVIOUS ONE	F3B01210
00206	0	34000	0	01221		CAS FFLCFN	INTERNAL FORMULA NUMBER	F3B01220
00207	0	02000	0	00153		TRA G2	YES, BACK TO COMPILE NEXT INSTRUCTION	F3B01230
00210	0	76100	0	00000		NOF		F3B01240
00211	0	53400	4	01145		LXA L(4),C	NO, COMPILE THIS INSTRUCTION	F3B01230
00212	0	50000	1	02362	G10	CLA FFLBUF,A	ENTRY IN FIRST FILE BUFFER, SET	F3B01260
00213	0	60100	4	01226		STO FFLCOM+4,C	UP FOUR WORDS OF ENTRY	F3B01270
00214	1	77777	1	00215		TXI G11,A,-1	STEP UP IR COUNTS	F3B01280
00215	2	00001	4	00212	G11	TIX G10,C,1		F3B01290
00216	0	07400	4	01022		TSX CIT00,C	COMPILER	F3B01300
00217	0	00000	0	01222		HTR FFLCOM		F3B01310
00220	0	00000	0	01223		HTR FFLCOM+1		F3B01320
00221	0	00000	0	01224		HTR FFLCOM+2		F3B01330
00222	0	00000	0	01225		HTR FFLCOM+3		F3B01340
00223	-0	75400	1	00000		PXD 0,A	TEST IF FIRS T FILE BUFFER	F3B01350
00224	0	34000	0	01220		CAS FFLWC	IS EMPTY	F3B01360
00225	0	02000	0	00204		TRA G9	NO	F3B01370
00226	0	02000	0	00230		TRA G12	YES	F3B01380
00227	0	07400	4	00004		TSX 4,4	WORD COUNT INCORRECT	F3B01390
00230	0	07400	4	00700	G12	TSX READFF,C	READ IN TO REFILL BUFFER	F3B01400
00231	-0	76000	0	00141		MSE 97	TEST IF AT END OF FIRST FILE	F3B01410
00232	0	02000	0	00204		TRA G9		F3B01420
00233	0	02000	0	00443		TRA OUT	TERMINAL ROUTINE	F3B01430
							ALPHA LESS THAN BETA	F3B01440
00234	0	53400	4	01145	E1	LXA L(4),C	COMPILE	F3B01450
00235	0	50000	1	02362	E3	CLA FFLBUF,A	FIRST	F3B01460
00236	0	60100	4	01226		STO FFLCOM+4,C	FILE	F3B01470
00237	1	77777	1	00240		TXI E2,A,-1	INSTRUCTION SET UP FOUR WORDS	F3B01480
00240	2	00001	4	00235	E2	TIX E3,C,1		F3B01490
00241	0	07400	4	01022		TSX CIT00,C	COMPILER	F3B01500
00242	0	00000	0	01222		HTR FFLCOM		F3B01510
00243	0	00000	0	01223		HTR FFLCOM+1		F3B01520
00244	0	00000	0	01224		HTR FFLCOM+2		F3B01530
00245	0	00000	0	01225		HTR FFLCOM+3		F3B01540
00246	-0	75400	1	00000		PXD 0,A	COMPARE WORD COUNT	F3B01550
00247	0	34000	0	01220		CAS FFLWC	WITH BUFFER SIZE	F3B01560
00250	0	02000	0	00257		TRA F1	WC LESS THAN BS	F3B01570
00251	0	02000	0	00253		TRA E4	WC EQUALS BS	F3B01580
00252	0	07400	4	00004		TSX 4,4	WORD COUNT INCORRECT	F3B01590
00253	0	07400	4	00700	E4	TSX READFF,C	READ FIRST FILE	F3B01600
00254	-0	76000	0	00141		MSE 97	IS FIRST FILE USED UP	F3B01610

00255	0	02000	0	00257	TRA F1	NO	F3B01620
00256	0	02000	0	00312	TRA H1	YES	F3B01630
00257	0	50000	1	02362	F1 CLA FFLBUF,A	DOES NEXT INSTRUCTION IN	F3B01640
00260	0	10000	0	00234	TZE E1	FIRST FILE HAVE ZERO LOC WORD	F3B01650
00261	0	07400	4	00724	TSX M31000,C	TSX COM TABLE SEARCH	F3B01660
00262	0	50000	1	02362	F2 CLA FFLBUF,A	TEST KF PRESENT ALPHA IS	F3B01670
00263	-0	32000	0	01162	ANA MASK	GREATER THAN ALPHA OF	F3B01680
00264	0	34000	0	01221	CAS FFLCFN	PREVIOUS CIT	F3B01690
00265	0	02000	0	00104	TRA C6	NEXT INTERNAL FORMULA NO.	F3B01700
00266	0	76100	0	00000	NOP		F3B01710
00267	0	53400	4	01145	LXA L(4),C		F3B01720
00270	0	50000	1	02362	F3 CLA FFLBUF,A	PREPARE TO COMPILE THIS INSTRUCTION	F3B01730
00271	0	60100	4	01226	STO FFLCOM+4,C	SET UP FOUR WORDS	F3B01740
00272	1	77777	1	00273	TXI F4,A,-1		F3B01750
00273	2	00001	4	00270	F4 TIX F3,C,1		F3B01760
00274	0	07400	4	01022	TSX CIT00,C	COMPILER	F3B01770
00275	0	00000	0	01222	HTR FFLCOM		F3B01780
00276	0	00000	0	01223	HTR FFLCOM+1		F3B01790
00277	0	00000	0	01224	HTR FFLCOM+2		F3B01800
00300	0	00000	0	01225	HTR FFLCOM+3		F3B01810
00301	-0	75400	1	00000	PXD 0,A	COUNT OF POSITION OM FIRST FILE	F3B01820
00302	0	34000	0	01220	CAS FFLWC	TEST IF FIRST FILE BUFFER	F3B01830
00303	0	02000	0	00262	TRA F2	IS EMPTY	F3B01840
00304	0	02000	0	00306	TRA F5	NO, GET NEXT CIT ENTRY	F3B01850
00305	0	07400	4	00004	TSX 4,4	WORD COUNT INCORRECT	F3B01860
00306	0	07400	4	00700	F5 TSX READFF,C	READ FIRST FILE	F3B01870
00307	-0	76000	0	00141	MSE 97	TEST IF AT END OF FIRST FILE	F3B01880
00310	0	02000	0	00262	TRA F2	BACK TO GET NEXT FIRST FILE ENTRY	F3B01890
00311	0	02000	0	00313	TRA H0		F3B01900
						END OF FIRST FILE ROUTINE	F3B01910
00312	0	07400	4	00724	H1 TSX M31000,C	READ TIFGO FILE	F3B01920
00313	-0	76000	0	00142	H0 MSE 98	END OF TIFGO FILE	F3B01930
00314	0	02000	0	00316	TRA H2	NO	F3B01940
00315	0	02000	0	00443	TRA OUT	YES, TO TERMINAL ROUTINE	F3B01950
00316	0	53400	4	01145	H2 LXA L(4),C	COMPILE	F3B01960
00317	0	50000	2	02216	H4 CLA TFGBUF,B	TIFGO	F3B01970
00320	0	60100	4	01220	STO TFGCOM+4,C	FILE	F3B01980
00321	1	77777	2	00322	TXI H3,B,-1	INSTRUCTION	F3B01990
00322	2	00001	4	00317	H3 TIX H4,C,1		F3B02000
00323	0	07400	4	01022	TSX CIT00,C	COMPILER	F3B02010
00324	0	00000	0	01214	HTR TFGCOM		F3B02020
00325	0	00000	0	01215	HTR TFGCOM+1		F3B02030
00326	0	00000	0	01216	HTR TFGCOM+2		F3B02040
00327	0	00000	0	01217	HTR TFGCOM+3		F3B02050
00330	-0	75400	2	00000	PXD 0,B	COMPARE WORD COUNT	F3B02060
00331	0	34000	0	01212	CAS TFGWC	WITH BUFFER SIZE	F3B02070
00332	0	02000	0	00316	TRA H2	WC LESS THAN BS	F3B02080
00333	0	02000	0	00335	TRA H5	WC EQUALS BS	F3B02090
00334	0	07400	4	00004	TSX 4,4	WORD COUNT INCORRECT	F3B02100
00335	0	07400	4	00654	H5 TSX READTF,C	BUFFER NOW EMPTY, READ NEXT BLOCK	F3B02110
00336	0	02000	0	00313	TRA H0		F3B02120
						ALPHA EQUALS BETA	F3B02130
00337	0	50000	2	02216	J1 CLA TFGBUF,B	TEST IF LOC. WORD OF TIFGO FILE IS	F3B02140
00340	0	12000	0	00376	TPL L1	MINUS NO	F3B02150

00425	-0	76000	0	00141		MSE	97		IS FIRST FILE USED UP	F3B02700
00426	0	02000	0	00430		TRA	M3		NO	F3B02710
00427	0	02000	0	00330	COR1	TRA	H3+6			F3B02720
00430	0	50000	1	02362	M3	CLA	FFLBUF,A		DOES NEXT INSTRUCTION IN	F3B02730
00431	-0	32000	0	01162		CAS	FFLBUF,A		FIRST FILE BELONG TO CURRENT	F3B02740
00432	0	34000	0	01221		CAS	FFLBUF,A		COMPILED BLOCK	F3B02750
00433	0	02000	0	00436		TRA	M4		NO	F3B02760
00434	0	76100	0	00000		NOP			YES	F3B02770
00435	0	02000	0	00405		TRA	L5		YES	F3B02780
00436	-0	75400	2	00000	M4	PXD	0,2		TEST IF TIFGO FILE BUFFER IS EMPTY	F3B02790
00437	0	34000	0	01212		CAS	TFGWC			F3B02800
00440	0	02000	0	00137		TRA	C7			F3B02810
00441	0	02000	0	00133		TRA	C3			F3B02820
00442	0	07400	4	00004		TSX	4,4		WORD COUNT INCORRECT	F3B02830
									M3 TERMINAL ROUTINE	F3B02840
00443	-0	53400	1	01207	OUT	LXD	BBOX,1		2S C OMLIMENT OF NO. OF WORDS	F3B02850
00444	0	50000	1	02523	PAT1	CLA	CIB-3,1		ENTERED IN BLICK	F3B02860
00445	0	40200	0	01172	PAT2	SUB	L(TRA)		TEST IF TRA INSTRUCTION	F3B02870
00446	0	10000	0	01137	PAT3	TZE	RTN		YES	F3B02880
00447	0	02000	0	01066	COR2	TRA	PAT4		NO	F3B02890
00450	-0	63400	1	00454	RET1	SXD	N2,1		SAVE INDEX REG. NO. IN COMPARE INSTR.	F3B02900
00451	0	53400	1	01141		LXA	L(0),1		INITIALIZE IR 1 TO 1	F3B02910
00452	0	70000	1	02526	N1	CPY	CIB,1		REMAINDER OF	F3B02920
00453	1	77777	1	00454		TXI	N2,1,-1		INSTRUCTIONS IN BUFFER	F3B02930
00454	3	00000	1	00452	N2	TXH	N1,1		TEST IF AT END OF BUFFER	F3B02940
00455	0	77000	0	00204		WEF	4		YES, WRITE END OF FILE	F3B02950
00456	-0	53400	4	07322	M32000	LXD	3794,4	WRITE DO FILE C + FORTRAN FUNCTION FILE AS 2ND FILE		F3B02960
00457	1	00003	4	00460		TXI	M32005,4,3	POSITION TAPE 2 TO READ DO FILE C		F3B02970
00460	0	76400	0	00222	M32005	BST	146			F3B02980
00461	2	00001	4	00460		TIX	M32005,4,1			F3B02990
00462	0	76200	0	00222		RDS	146	READ DO FILE C INTO STORAGE		F3B03000
00463	0	70000	0	07323		CPY	3795			F3B03010
00464	0	53400	4	07323		LXA	3795,4	WORD COUNT		F3B03020
00465	1	00004	4	00466		TXI	BST,4,4			F3B03030
00466	0	76400	0	00222	BST	BST	146	BACK TO FIRST WD.		F3B03040
00467	2	00001	4	00466		TIX	BST,4,1			F3B03050
00470	0	76200	0	00222		RDS	146	PAST IDENTIFICATION COUNT		F3B03060
00471	0	76200	0	00222		RDS	146	WORD COUNT		F3B03070
00472	0	76600	0	00224		WRS	148	ZERO ON TAPE 4		F3B03080
00473	0	70000	0	01141		CPY	L(0)			F3B03090
00474	0	50000	0	01141		CLA	L(0)	RESTORE BBOX TO ZERO		F3B03100
00475	0	60100	0	01207		STO	BBOX			F3B03110
00476	0	76000	0	00140		PSE	96	TURN OFF ALL SENSE SWITCHES		F3B03120
00477	0	07400	4	00654	READ	TSX	READTF,4	TREAD TIFGO FILE		F3B03130
00500	-0	76000	0	00142		MSE	98	TEST IF AT END OF TIFGO FILE		F3B03140
00501	0	02000	0	00503		TRA	COMP	NO		F3B03150
00502	0	02000	0	00522		TRA	FREAD	YES		F3B03160
00503	0	53400	4	01145	COMP	LXA	L(4),4	4 IN IR 4		F3B03170
00504	0	50000	2	02216		CLA	TFGBUF,2	SET UP FOUR WORDS FOR COMPILATION		F3B03180
00505	0	60100	4	01220		STO	TFGCOM+4,4			F3B03190
00506	1	77777	2	00507		TXI	COMP1,2,-1			F3B03200
00507	2	00001	4	00504	COMP1	TIX	COMP+1,4,1			F3B03210
00510	0	07400	4	01022		TSX	CIT00,4	COMPILER		F3B03220
00511	0	00000	0	01214		HTR	TFGCOM			F3B03230

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00512	0	00000	0	01215	HTR	TFGCOM+1		F3B03240
00513	0	00000	0	01216	HTR	TFGCOM+2		F3B03250
00514	0	00000	0	01217	HTR	TFGCOM+3		F3B03260
00515	-0	75400	2	00000	PXD	0,2	COUNT OF TIFGO	F3B03270
00516	0	34000	0	01212	CAS	TFGWC	COMPARE TO CURRENT FMLA. NO.	F3B03280
00517	0	02000	0	00503	TRA	COMP	LESS THAN, COMPILER ENTRIESP	F3B03290
00520	0	02000	0	00477	TRA	READ	EQUAL TO. READ NEXT ENTRY	F3B03300
00521	0	07400	4	00004	TSX	4,4	WORD COUNT INCORRECT	F3B03310
00522	0	07400	4	00700	FREAD	TSX READFF,4	READ FIRST FILE	F3B03320
00523	-0	76000	0	00141	MSE	97	TEST IF AT END OF FIRST FILE	F3B03330
00524	0	02000	0	00526	TRA	FCOMP	NO	F3B03340
00525	0	02000	0	00545	TRA	WRITE	YES	F3B03350
00526	0	53400	4	01145	FCOMP	LXA L(4),4	SET UP COUNT AND FOUR WORDS OF ENTRY	F3B03360
00527	0	50000	1	02362	CLA	FFLBUF,1		F3B03370
00530	0	60100	4	01226	STO	FFLCOM+4,4		F3B03380
00531	1	77777	1	00532	TXI	FCOMP1,1,-1		F3B03390
00532	2	00001	4	00527	FCOMP1	TIX FCOMP+1,4,1		F3B03400
00533	0	07400	4	01022	TSX	CIT00,4	COMPILER	F3B03410
00534	0	00000	0	01222	HTR	FFLCOM		F3B03420
00535	0	00000	0	01223	HTR	FFLCOM+1		F3B03430
00536	0	00000	0	01224	HTR	FFLCOM+2		F3B03440
00537	0	00000	0	01225	HTR	FFLCOM+3		F3B03450
00540	-0	75400	1	00000	PXD	0,1	CHECK WORD COUNT	F3B03460
00541	0	34000	0	01220	CAS	FFLWC	AND COMPARE TO FIRST FILE WORD COUNT	F3B03470
00542	0	02000	0	00526	TRA	FCOMP		F3B03480
00543	0	02000	0	00522	TRA	FREAD		F3B03490
00544	0	07400	4	00004	TSX	4,4	WORD COUNT INCORRECT	F3B03500
00545	-0	53400	1	01207	WRITE	LXD BBOX,1	TWOS COMPLIMENT OF NO. OF ENTRIES	F3B03510
00546	-3	00000	1	00555	TXL	WRITE2+1,1,0		F3B03520
00547	0	76600	0	00224	WRS	148	SELECT TAPE 4	F3B03530
00550	-0	63400	1	00554	SXD	WRITE2,1		F3B03540
00551	0	53400	1	01141	LXA	L(0),1		F3B03550
00552	0	70000	1	02526	WRITE1	CPY CIB,1	REMAINDER OF BUFFER ONTO TAPE 4	F3B03560
00553	1	77777	1	00554	TXI	WRITE2,1,-1		F3B03570
00554	3	00000	1	00552	WRITE2	TXH WRITE1,1		F3B03580
00555	0	77000	0	00224	WEF	148		F3B03590
00556	0	53400	4	07323	LXA	3795,4		F3B03600
00557	1	00003	4	00560	TXI	P0S,4,3		F3B03610
00560	0	76400	0	00222	P0S	BST 146	BACKSPACE OVER DO FILE C	F3B03620
00561	2	00001	4	00560	TIX	P0S,4,1		F3B03630
00562	0	76200	0	00222	M32010	RDS 146	WRITE ASC0 OVER DO FILE C ON TAPE 2	F3B03640
00563	0	76200	0	00222	RDS	146		F3B03650
00564	0	76600	0	00222	WRS	146	SELECT TAPE 2	F3B03660
00565	0	70000	0	07324	CPY	3796	COPY ASC0 OVER DOFILE C	F3B03670
00566	0	50000	0	07324	CLA	3796		F3B03680
00567	0	10000	0	00576	TZE	M32030-1	NO ASC0 ENTRIES	F3B03690
00570	-0	73400	1	00000	PDX	0,1	NUMBER OF ASC0 ENTRIES IN IR 1	F3803700
00571	0	77100	0	00022	ARS	18	SHIFT WORD COUNT	F3B03710
00572	0	40000	0	00574	ADD	M32020	INITIAL ADDRESS	F3B03720
00573	0	62100	0	00574	STA	M32020	INITIALIZE COPY ADDRESS	F3803730
00574	0	70000	1	07325	M32020	CPY 3797,1	ASC0 TABLR	F3B03740
00575	2	00001	1	00574	TIX	M32020,1,1		F3B03750
00576	0	77000	0	00222	WEF	146	END OF FILE AFTER ASC0 TABLE	F3B03760
00577	0	53400	4	01202	M32030	LXA M3ECTR,4	ERROR COUNT	F3B03770

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00600	0	76200	0	00302	RDS 194	READ FIXCON INTO STORAGE	F3B03780
00601	0	70000	0	01226	CPY FIXCON-2	DRUM CHECK SUM CHCHECKING	F3B03790
00602	0	70000	0	01227	CPY FIXCON-1		F3B03800
00603	0	50000	0	01226	CLA FIXCON-2	WORD COUNT	F3B03810
00604	0	40200	0	01227	SUB FIXCON-1	CHECK SUM	F3B03820
00605	0	10000	0	00610	TZE M32040	CORRECTP	F3B03830
00606	2	00001	4	00600	TIX M32030+1,4,1	TRY 4 MORE TIMES	F3B03840
00607	0	07400	4	00004	TSX 4,4	WORD COUNT INCORRECT	F3B03850
00610	0	53400	4	01202	M32040 LXA M3ECTR,4	ERROR COUNT	F3B03860
00611	0	50000	0	01226	CLA FIXCON-2	WORD COUNT	F3B03870
00612	0	10000	0	00634	TZE M32065	NO FIXCON ENTRIES	F3B03880
00613	0	73400	3	00000	PAX 0,3	INITIALIZE WORD COUNT	F3B03890
00614	0	40000	0	00623	ADD M32055	INITIAL ADDRESS	F3B03900
00615	0	62100	0	00620	STA M32050		F3B03910
00616	0	76200	0	00302	RDS 194		F3B03920
00617	0	46000	0	01143	LDA L(2)	READ DRUM 2 FOR FIXCON TABLE	F3B03930
00620	0	70000	1	00000	M32050 CPY 0,1		F3B03940
00621	2	00001	1	00620	TIX M32050,1,1		F3B03950
00622	0	53400	1	01141	LXA L(0),1	SET IR 1 TO ZERO	F3B03960
00623	0	50000	1	01230	M32055 CLA FIXCON,1	FIRST ENTRY	F3B03970
00624	0	40200	1	01231	SUB FIXCON+1,1	CHECK SUM	F3B03980
00625	0	10000	0	00630	TZE M32060	CORRECT	F3B03990
00626	2	00001	4	00611	TIX M32040+1,4,1	TRY 4 MORE TIMES	F3B04000
00627	0	07400	4	00004	TSX 4,4	WORD COUNT INCORRECT	F3B04010
00630	1	77776	1	00631	M32060 TXI M32060+1,1,-2	SKIP OVER CHECK SUM	F3B04020
00631	2	00002	2	00623	TIX M32055,2,2	NEXT ENTRY	F3B04030
00632	-0	63400	1	00644	SXD M32070+2,1	END OF TABLE COUNT	F3B04040
00633	0	53400	2	01141	LXA L(0),2	RESET IR 2 TO ZERO	F3B04050
00634	0	76600	0	00222	M32065 WRS 146	WRITE FIXCON ON TAPE 2	F3B04060
00635	0	50000	0	01226	CLA FIXCON-2		F3B04070
00636	0	77100	0	00001	ARS 1	SET UP FIX CON ENTRIES WHITHOUT	F3B04080
00637	0	60100	0	01226	STO FIXCON-2	CHECK SUMS FOR WRITING OUT ON TAPE 2	F3B04090
00640	0	70000	0	01226	CPY FIXCON-2		F3B04100
00641	0	10000	0	00645	TZE M32075	NO FIXCON ENTRY	F3B04110
00642	0	70000	2	01230	M32070 CPY FIXCON,2		F3B04120
00643	1	77776	2	00644	TXI M32070+2,2,-2		F3B04130
00644	3	00000	2	00642	TXH M32070,2		F3B04140
00645	0	77000	0	00222	M32075 WEF 146	WRITE END OF FILE AFTER FIXCON	F3B04150
00646	0	53400	4	01145	LXA L(4),4		F3B04160
00647	0	76400	0	00222	BST 146	BACKSPACE TAPE 2 FOR SECTION 4	F3B04170
00650	2	00001	4	00647	TIX M32075+2,4,1		F3B04180
00651	0	76000	0	00140	PSE 96	TURN OFF ALL SENSE SWITCHES	F3B04190
00652	0	76200	0	00221	RTB 1		F3B04200
00653	0	02000	0	00004	TRA 4		F3B04210
					M3 CLOSED SU8ROUTINES		F3B04220
					SUBROUTINE FOR READING A RECORD OF TIFGO FILE		F3804230
00654	-0	63400	1	01211	READTF SXD E3M3,A	SAVE LINKAGE IN IR 1	F3B04240
00655	0	53400	1	01202	LXA M3ECTR,1	ERROR COUNT	F3B04250
00656	0	76200	0	00222	M3B3 RDS 146	TAPE 2 TO READ TIFGO FILE	F3B04260
00657	0	53400	2	01141	LXA L(0),B	RESET IR2 TO ZERO	F3B04270
00660	0	70000	2	02216	M3B1 CPY TFGBUF,B	COPY TIFGO FILE FROM TAPE INTO BUFFER	F3B04280
00661	1	77777	2	00660	TXI M3B1,B,-1	SET UP COUNT	F3B04290
00662	0	02000	0	00675	TRA M3B4	EOF	F3B04300
00663	0	76600	0	00333	WRS 219	EOR) ON TAPE 3	F3B04310

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00664	-0	76000	0	00012		RTT	IS TAPE CHECK INDICATOR ON	F3B04320
00665	0	02000	0	00672		TRA M3B2	YES	F3B04330
00666	-0	63400	2	01212		SXD TFGWC,B	NO	F3B04340
00667	0	53400	2	01141		LXA L(0),B	RESET INDEX OF TIFGO BUFFER	F3B04350
00670	-0	53400	1	01211		LXD E3M3,A	RESTORE INDEX OF FIRST FILE BUFFER	F3B04360
00671	0	02000	4	00001		TRA 1,C	EXIR. BACK TO MAIN ROUTINE	F3B04370
00672	0	76400	0	00222	M3B2	BST 146		F3B04380
00673	2	00001	1	00656		TIX M3B3,A,1	ERROR ROUTINE	F3B04390
00674	0	07400	4	00004		TSX 4,4	ERROR READING TAPE 2. TIFGO FILE	F3B04400
00675	0	76000	0	00142	M3B4	PSE 98	INDICATE END OF TIFGO FILE	F3B04410
00676	-0	53400	1	01211		LXD E3M3,A	RESTORE INDEX OF FIRST FILE BUFFER	F3B04420
00677	0	02000	4	00001		TRA 1,C	TRANSFER TO MAIN ROUTINE	F3B04430
						SU8ROUTINE FOR	READING A RECORD OF FIRST FILE	F3B04440
00700	-0	63400	2	01210	READFF	SXD E2M3,B	SAVE COUNT IN IR 2 FOR LINKAGE	F3B04450
00701	0	53400	2	01202		LXA M3ECTR,B	ERROR COUNT	F3B04460
00702	0	76200	0	00223	M3A3	RDS 147	READ FIRST FILE FROM TAPE 3	F3B04470
00703	0	53400	1	01141		LXA L(0),A	INITIALIZE IR1 TO ZERO	F3B04480
00704	0	70000	1	02362	M3A1	CPY FFLBUF,A	COPY FIRST FILE INTO BUFFER	F3B04490
00705	1	77777	1	00704		TXI M3A1,A,-1		F3B04500
00706	0	02000	0	00721		TRA M3A4	EOF	F3B04510
00707	0	76600	0	00333		WRS 219	EOR DELAY 704 TO MAKE TAPE TEST	F3B04520
00710	-0	76000	0	00012		RTT		F3B04530
00711	0	02000	0	00716		TRA M3A2	ERROR ROUTINE	F3B04540
00712	-0	63400	1	01220		SXD FFLWC,A	SAVE LOCATON WORD OF FIRST FILE	F3B04550
00713	0	53400	1	01141		LXA L(0),A	RESET INDEX OF FIRST FILE BUFFER	F3B04560
00714	-0	53400	2	01210		LXD E2M3,B	RESTORE INDEX OF TIFGO FILE BUFFER	F3B04570
00715	0	02000	4	00001		TRA 1,C		F3B04580
00716	0	76400	0	00223	M3A2	BST 147	BACKSPACE TAPE 3 TO TRY AGAIN	F3B04590
00717	2	00001	2	00702		TIX M3A3,B,1		F3B04600
00720	0	07400	4	00004		TSX 4,4	ERROR READING FIRST FILE FROM TAPE 3	F3B04610
00721	0	76000	0	00141	M3A4	PSE 97	INDICATE END DF FIRST FILE	F3B04620
00722	-0	53400	2	01210		LXD E2M3,B	RESTORE INDEX OF TIFGO FILE BUFFER	F3B04630
00723	0	02000	4	00001		TRA 1,C		F3B04640
						TSXCOM TABLE SEARCH		F3B04650
00724	-0	63400	1	01211	M31000	SXD E3M3,1	SAVE LINKAGE OF FIRST FILE BUFFER	F3B04660
00725	-0	63400	4	01210		SXD E2M3,4	SAVE LINKAGE FROMT TSX INSTR.	F3B04670
00726	0	60000	0	01065		STZ DUP	REINITIALIZE HTE INSTR.	F3B04680
00727	0	50000	0	01226	M31005	CLA TSXCOM-2	TEST WORD COUNT OF CHECK SUM	F3B04690
00730	0	40200	0	01227		SUB TSXCOM-1		F3B04700
00731	0	10000	0	01017		TZE M31080	CHECK SUM EQUALS WORD COUNT	F3B04710
00732	-0	53400	1	01226		LXD TSXCOM-2,1	WORD COUNT IN IR1	F3B04720
00733	0	50000	1	01230		CLA TSXCOM,1	FIRST ENTRY	F3B04730
00734	-0	32000	0	01162		ANA MASK	SAVE DECREMENT, INTERNAL FMLA. NO.	F3B04740
00735	0	40200	0	01221		SUB FFLCFN	FIRST FILE LOCATION NO.	F3B04750
00736	-0	10000	0	01017		TNZ M31080	NOT EQUAL. NO TSXCOM ENTRY	F3B04760
						CUR FIRST FILE	FMLA NO APPEARS IN TSXCOM	F3B04770
00737	-0	50000	1	01231	M31015	CAL TSXCOM+1,1		F3B04780
00740	-0	32000	0	01165		ANA PMASK	SAVE SIGN OF SECOND WD. OF ENTRY	F3B04700
00741	0	10000	0	01057	CQR3	TZE CIT07+6	TYPE 1 ENTRY NEGATIVE	F3B04800
00742	0	50000	1	01230		CLA TSXCOM,1	TYPE 2 ENTRY	F3B04810
00743	-0	32000	0	01163		ANA AMASK	SAVE ADDRESS AND STORE IN	F3B04820
00744	0	60100	0	01225		STO FFLCOM+3	4TH WORD OF FIRST FILE COMPILER	F3B04830
00745	0	50000	1	01231		CLA TSXCOM+1,1	SECOND WORD OF ENTRY	F3B04840
00746	0	60100	0	01224		STO FFLCOM+2	3RD. WORD OF COMPILER	F3B04850

00747	0	07400	4	01022		TSX	CIT00,4	COMPILE INSTRUCTION-4	F3B04860
00750	0	00000	0	01141		HTR	L(0)	ZERO	F3B04870
00751	0	00000	0	01156		HTR	L(LXD)	LXD INSTRUCTION	F3B04880
00752	0	00000	0	01224		HTR	FFLCOM+2		F3B04890
00753	0	00000	0	01225		HTR	FFLCOM+3		F3B04900
00754	1	77776	1	00755		TXI	M31030,1,-2	STEP UP COUNT FOR NEXT TSXCOM ENTRY	F3B04910
00755	-0	63400	1	01226	M31030	SXD	TSXCOM-2,1	SAVE NEW WORD COUNT	F3B04920
00756	0	02000	0	00727		TRA	M31005	BACK TO SEARCH REMAING ENTRIES	F3B04930
00757	0	07400	4	01022	M31035	TSX	CIT00,4	TYPE I ENTRY	F3B04940
00760	0	00000	0	01141		HTR	L(0)	ZERO	F3B04950
00761	0	00000	0	01157		HTR	L(SXD)	SXD	F3B04960
00762	0	00000	0	01152		HTR	L(6H)	+060000000000	F3B04970
00763	0	00000	0	01155		HTR	L(5.4)	000004000004	F3B04980
00764	0	50000	1	01231		CLA	TSXCOM+1,1	SECOND WORD OF ENTRY	F3B04990
00765	-0	32000	0	01163		ANA	AMASK	SAVE ADDRESS	F3805000
00766	-0	50100	0	01153		ORA	L(10H)	ADD 120000000000	F3B05010
00767	0	60100	0	01224		STO	FFLCOM+2	IN 3RD. WORD OF COMPILER	F3B05020
00770	0	07400	4	01022		TSX	CIT00,4	FOR NEXT INSTRUCTION	F3B05030
00771	0	00000	0	01141		HTR	L(0)	ZERO	F3B05040
00772	0	00000	0	01160		HTR	L(TSX)	TSX	F3B05050
00773	0	00000	0	01224		HTR	FFLCOM+2	12(8) PLUS ADDRESS	F3805060
00774	0	00000	0	01145		HTR	L(4)	+000000000004	F3B05070
00775	0	50000	1	01231	M31050	CLA	TSXCOM+1,1	SECOND WORD	F3B05080
00776	-0	32000	0	01163		ANA	AMASK	SAVE ADDRESS	F3B05000
00777	0	60100	0	01225		STO	FFLCOM+3	STORE IN 4TH. WORD OF COMPILED INSTR.	F3805100
01000	-0	50100	0	01154		ORA	L(12H)	ADD 12(8) AND DTORE IN 3RD.	F3B05110
01001	0	60100	0	01224		STO	FFLCOM+2	WORD OF INSTRUCTION IN COMPILER	F3805120
01002	0	07400	4	01022		TSX	CIT00,4		F3B05130
01003	0	00000	0	01141		HTR	L(0)	ZERO	F3B05140
01004	0	00000	0	01161		HTR	L(LXP)	LXP	F3B05150
01005	0	00000	0	01224		HTR	FFLCOM+2	12(8) PLUS ADDRESS	F3B05160
01006	0	00000	0	01225		HTR	FFLCOM+3	ADDRESS	F3B05170
01007	1	77776	1	01010		TXI	M31063-1,1,-2	RESET IR1 FOR NEXT ENTRY	F3B05180
01010	-0	63400	1	01226		SXD	TSXCOM-2,1	SAVE WORD COUNT	F3B05190
01011	0	07400	4	01022	M31063	TSX	CIT00,4	COMPILE INSTRUCTION	F3B05200
01012	0	00000	0	01141		HTR	L(0)	ZERO0000000000	F3B05210
01013	0	00000	0	01156		HTR	L(LXD)	LXD	F3B05220
01014	0	00000	0	01152		HTR	L(6H)	+060000000000	F3B05230
01015	0	00000	0	01155		HTR	L(5.4)	000004000004	F3B05240
01016	0	02000	0	00727		TRA	M31005	CONT1 UE TABLE SEARCH	F3B05230
01017	-0	53400	1	01211	M31080	LXD	E3M3,1	END OF TSXCOM TABLE SEARCH	F3B05260
01020	-0	53400	4	01210		LXD	E2M3,4	RESTORE IR COUNTS FROM LINKAGE	F3805270
01021	0	02000	4	00001		TRA	1,4	AND GO BACK TO MAIN ROUTINE	F3805280
								COMPILING ROUTINE,CIT00	F3B05290
01022	-0	60000	0	01204	CIT00	STQ	E1C	SAVE CONTENTS OF MQ	F3B05300
01023	-0	63400	1	01205		SXD	E2C,1	SAVE CONTENTS OF IR1	F3B03310
01024	-0	63400	2	01206		SXD	E3C,2	SAVE CONTENTS OF IR12	F3B05320
01025	-0	53400	2	01207		LXD	BBOX,2	2S COMPLIMENT OF NO. OF WORDS OF ENTRY	F3B05330
01026	3	77634	2	01036		TXH	CIT04,2,-100	TEST IF LESS THAN 100 AND GREATER	F3B05340
01027	-3	00000	2	01036		TXL	CIT04,2,0	THAN ZERO . IF SO. COMPILE INSTRUCTION	F3B033S0
01030	0	76600	0	00224		WRS	148		F3B05360
01031	0	53400	1	01141		LXA	M1CON,1	SET COUNT IN IR 1 TO ZERO	F3B05370
01032	0	70000	1	02526	CIT01	CPY	CIB,1	REFILL BUFFER	F3B05380
01033	1	77777	1	01034		TXI	CIT02,1,-1	RESET COUNTS FOR FIRST ENTRY IN BUFFER	F3B05390

01034	1	00001	2	01035	CIT02	TXI	CIT03,2,1		F3B05400
01035	3	00001	2	01032	CIT03	TXH	CIT01,2,1		F3B05410
01036	0	53400	1	01145	CIT04	LXA	M1CON+4,1	COUNT OF 4 IN IR1	F3B05420
01037	0	50000	0	01142		CLA	M1CON+1		F3B05430
01040	0	62100	0	01041		STA	CIT05		F3B05440
01041	0	50000	4	00000	CIT05	CLA	0,4	LINKAGE FROM MAIN ROUTINE PLUS 1	F3B05430
01042	0	62100	0	01043		STA	CIT06		F3B05460
01043	0	50000	0	00000	CIT06	CLA		FIRST PARAMETER. 2ND.) 3RD.) AND4TH.	F3B03470
01044	0	60100	2	02526		STO	CIB,2	AND STORE IN PROPER OUTPUT AREA	F3B05480
01045	0	50000	0	01041		CLA	CIT05		F3B05490
01046	0	40000	0	01142		ADD	M1CON+1		F3B05500
01047	0	62100	0	01041		STA	CIT05	TO GET NEXT WORD	F3B05310
01050	1	77777	2	01051		TXI	CIT07,2,-1	DECREASE COUNT IN IR1 AND 2 BY ONE	F3B05520
01051	2	00001	1	01041	CIT07	TIX	CIT05,1,1		F3B05530
01052	-0	63400	2	01207		SXD	BBOX,2	SAVE COUNT OF CIB BUFFER	F3B05540
01053	0	56000	0	01204		LDQ	E1C	RESTORE MQ	F3B05550
01054	-0	53400	1	01205		LXD	E2C,1	RESTORE IR 1	F3B05560
01055	-0	53400	2	01206		LXD	E3C,2	RESTORE IR2	F3B05570
01056	0	02000	4	00003		TRA	3,4	BACK TO MAIN ROUTINE	F3B05580
01057	0	50000	1	01231		CLA	TSXCOM+1,1		F3B05590
01060	0	34000	0	01065		CAS	DUP		F3B05600
01061	0	02000	0	01063		TRA	DIF		F3B05610
01062	1	77776	1	00755		TXI	M31030,1,-2		F3B05620
01063	0	60100	0	01065	DIF	STO	DUP		F3B05630
01064	0	02000	0	00757		TRA	M31035		F3B05640
01065	0	00000	0	00000	DUP	HTR			F3B05650
01066	0	07400	4	01022	PAT4	TSX	CIT00,4	COMPILER FOR LOAD BUTTON SEQUENCE	F3B05660
01067	0	00000	0	01175	PAT5	HTR	ZERO		F3B05670
01070	0	00000	0	01166	PAT6	HTR	L(RCD)	RCD	F3B05680
01071	0	00000	0	01175	PAT7	HTR	ZERO		F3B05690
01072	0	00000	0	01175	PAT8	HTR	ZERO		F3B05700
01073	0	07400	4	01022	PAT9	TSX	CIT00,4	COMPILE INSTRUCTION	F3B05710
01074	0	00000	0	01175	PAT10	HTR	ZERO		F3B05720
01075	0	00000	0	01167	PAT11	HTR	L(CPY)	CPY	F3B05730
01076	0	00000	0	01175	PAT12	HTR	ZERO		F3B05740
01077	0	00000	0	01175	PAT13	HTR	ZERO		F3B05750
01100	0	07400	4	01022	PAT14	TSX	CIT00,4		F3B05760
01101	0	00000	0	01175	PAT15	HTR	ZERO		F3B05770
01102	0	00000	0	01170	PAT16	HTR	L(XIT)	XIT	F3B05780
01103	0	00000	0	01173	PAT17	HTR	L(15H)	+1700000000000	F3B05790
01104	0	00000	0	01177	PAT18	HTR	L(2D)	000002000000	F3B05800
01105	0	07400	4	01022	PAT19	TSX	CIT00,4		F3B05810
01106	0	00000	0	01175	PAT20	HTR	ZERO		F3B05820
01107	0	00000	0	01171	PAT21	HTR	L(HPR)	HPR	F3B05830
01110	0	00000	0	01175	PAT22	HTR	ZERO		F3B05840
01111	0	00000	0	01200	PAT23	HTR	L(7M)	7 PLUS LOC. NO. OF RCD INSTR.	F3B05850
01112	0	07400	4	01022	PAT24	TSX	CIT00,4		F3B05860
01113	0	00000	0	01175	PAT25	HTR	ZERO		F3B05870
01114	0	00000	0	01167	PAT26	HTR	L(CPY)	CPY	F3B05880
01115	0	00000	0	01175	PAT27	HTR	ZERO		F3B05890
01116	0	00000	0	01176	PAT28	HTR	ONED	0000000000001	F3B03900
01117	0	07400	4	01022	PAT29	TSX	CIT00,4		F3B05910
01120	0	00000	0	01175	PAT30	HTR	ZERO		F3B05920
01121	0	00000	0	01170	PAT31	HTR	L(XIT)	XIT	F3B05930

01122	0	00000	0	01175	PAT32	HTR	ZERO		F3B05940
01123	0	00000	0	01175	PAT33	HTR	ZERO		F3B05950
01124	0	07400	4	01022	PAT34	TSX	CIT00,4		F3B05960
01125	0	00000	0	01174	PAT35	HTR	L(LOC)	+003777000370	F3B05970
01126	0	00000	0	01171	PAT36	HTR	L(HPR)	HPR	F3B05980
01127	0	00000	0	01175	PAT37	HTR	ZERO		F3B05990
01130	0	00000	0	01201	PAT38	HTR	L(1.7)	000001000007	F3B06000
01131	0	07400	4	01022	PAT39	TSX	CIT00,4		F3B06010
01132	0	00000	0	01175	PAT40	HTR	ZERO		F3B06020
01133	0	00000	0	01172	PAT41	HTR	L(TRA)	TRA TO FINAL HALT	F3B06030
01134	0	00000	0	01174	PAT42	HTR	L(LOC)		F3B06040
01135	0	00000	0	01175	PAT43	HTR	ZERO		F3B06050
01136	-0	53400	1	01207	PAT44	LXD	BBOX,1	RESTORE COUNT IN IRL	F3B06060
01137	0	76600	0	00224	RTN	WRS	148		F3B06070
01140	0	02000	0	00450	PAT46	TRA	RET1	BACK TO COMPLETE TERMINAL ROUTINE	F3B06080
								WORKING STORAGE AND CONSTANTS	F3B06090
			00001	A	EQU	1			F3B06100
			00002	B	EQU	2			F3B06110
			00004	C	EQU	4			F3B06120
01141	+0000000000000			L(0)	DEC	0			F3B06130
			01141	M1CON	SYN	L(0)			F3B06140
01142	+0000000000001			L(1)	DEC	1			F3B06150
01143	+0000000000002			L(2)	DEC	2			F3B06160
01144	+0000000000003			L(3)	DEC	3			F3B06170
01145	+0000000000004			L(4)	DEC	4			F3B06180
01146	+0000000000010			L(8)	DEC	8			F3B06190
01147	+0000000001300			L(704)	DEC	704			F3B06200
01150	+000000001302			L(706)	DEC	706			F3B06210
01151	+000001000000			L(1D)	DEC	1B17			F3B06220
01152	+0600000000000			L(6H)	OCT	60000000000			F3B06230
01153	+1200000000000			L(10H)	OCT	1200000000000			F3B06240
01154	+1400000000000			L(12H)	OCT	1400000000000			F3B06250
01155	+0000040000004			L(5.4)	OCT	4000004			F3B06260
01156	436724000000			L(LXD)	BCD	1LXD000			F3B06270
01157	626724000000			L(SXD)	BCD	1SXD000			F3B06280
01160	636267000000			L(TSX)	BCD	1TSX000			F3B06290
01161	436747000000			L(LXP)	BCD	1LXP000			F3B06300
01162	+077777000000			MASK	OCT	77777000000			F3B06310
01163	+000000077777			AMASK	OCT	77777			F3B06320
01164	+100000000000			2BIT	OCT	100000000000			F3B06330
01165	-300000000000			PMASK	OCT	700000000000			F3806340
01166	512324000000			L(RCD)	BCD	1RCD000			F3B06330
01167	234770000000			L(CPY)	BCD	1CPY000			F3B06360
01170	673163000000			L(XIT)	BCD	1XIT000			F3806370
01171	304751000000			L(HPR)	BCD	1HPR000			F3B06380
01172	635121000000			L(TRA)	BCD	1TRA000			F3B06300
01173	+170000000000			L(15H)	OCT	1700000000000			F3B06400
01174	+003777000370			L(LOC)	OCT	3777000370			F3B06410
01175	0 00000 0 00000			ZERO	PZE				F3B06420
01176	+000001000000			ONED	DEC	1B17			F3B06430
01177	+000002000000			L(2D)	DEC	2B17			F3B06440
01200	+000000000007			L(7M)	DEC	7			F3B06450
01201	+000001000007			L(1.7)	OCT	1000007			F3B06460
01202	+000000000005			M3ECTR	DEC	5			F3B06470

01203	+000000000370	L(370)	OCT	370		F3B06475
01204	0 00000 0 00000	E1C		CELL FOR SAVING MQ		F3B06480
01205	0 00000 0 00000	E2C		CELL FOR SAVING IRA		F3B06490
01206	0 00000 0 00000	E3C		CELL FOR SAVING IRB		F3B06500
01207	0 00000 0 00000	BBOX		2S COMP OF NO OF WORDS	ALREADY ENTERED IN BLOCK	F3B06510
01210	0 00000 0 00000	E2M3				F3B06520
01211	0 00000 0 00000	E3M3				F3B06530
				SENSE LITE 98 ON FOR	END OF TIFGO FILE	F3B06540
01212	0 00000 0 00000	TFGWC		TIFGO WORD COUNT		F3B06530
01213	0 00000 0 00000	TFGCFN		CURRENT FORMULA NUM	FOR TIFGO INSTRUCTION	F3806560
	01214	TFGCOM	BSS	4	TIFGO COMPILER	F3806570
				SENSE LITE 97 ON FOR	END OF FIRST FILE	F3B06580
01220	0 00000 0 00000	FFLWC		FIRST FILE WORD COUNT		F3B06590
01221	0 00000 0 00000	FFLCFN		CURRENT FORMULA NUM	FOR FIRST FILE INSTR	F3B06600
	01222	FFLCOM	BSS	4	FIRST FILE COMPILER	F3B06610
01226	0 00000 0 00000	PZE				F3B06620
01227	0 00000 0 00000	PZE				F3B06630
	01230	TSXCOM	BSS	502		F3B06640
	01230	FIXCON	SYN	TSXCOM		F3B06650
	02216	TFGBUF	BSS	100	TIFGO BUFFER	F3B06660
	02362	FFLBUF	BSS	100	FIRST FILE BUFFER	F3B06670
	02526	CIB	BSS	100		F3B06680
	02673	ORG		1467		F3B06681
02673	0 60200 0 01226	TSXPT1	SLW	TSXCOM-2		F3B06682
02674	0 07400 4 00654		TSX	READTF,4		F3B06683
02675	0 07400 4 00700		TSX	READFF,4		F3B06684
02676	-0 76000 0 00141		MSE	97		F3B06685
02677	0 02000 0 02702		TRA	TSXPT2		F3B06686
02700	0 76000 0 00141		PSE	97		F3B06687
02701	0 02000 0 00076		TRA	M30050+3		F3B06688
02702	0 50000 0 01230	TSXPT2	CLA	TSXCOM		F3B06689
02703	0 34000 0 02362		CAS	FFLBUF		F3B06690
02704	0 02000 0 00076		TRA	M30050+3		F3B06691
02705	0 02000 0 00076		TRA	M30050+3		F3B06692
02706	0 50000 0 01230		CLA	TSXCOM		F3B06693
02707	0 62200 0 01221		STD	FFLCFN		F3B06694
02710	0 07400 4 00724		TSX	M31000,4		F3B06695
02711	0 02000 0 00076		TRA	M30050+3		F3B06696
	00030		END	24		F3B06700

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	687	0	0	0	0
LIB	0	0	0	0	0
COL	687	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 696

NUMBER OF SYMBOLS, DEF 216,DEFOP 0,UNDEF 0

REM 704 FORTRAN II, 4-1-6-2 SYSTEM

F4400010

704 FORTRAN II, 4-1-6-2 SYSTEM
SECTION 4 - FLOW ANALYSIS
ROBERT C. BRILL - NOVEMBER 13, 1958

F4400010
F4400020
F4400030
F4400040
F4400050
F4400060
F4400070
F4400080
F4400090
F4400100
F4400110
F4400120
F4400130
F4400140

NOTE - THIS LISTING CORRESPONDS TO THE FORTRAN II 4-1-6-2
SYSTEM TAPE. TO MAKE IT CORRESPOND TO THE 8-1-6-2 SYSTEM
TAPE MAKE THE FOLLOWING CHANGES IN THIS LISTING.

IN RECORD F0730000, LOCATION 77, CHANGE
000674000000 TO 003140000000
IN RECORD F0730000, LOCATION 632, CHANGE
000000000215 TO 000000001037

F4400150
F4400160
F4400170
F4400180
F4400190
F4400200
F4400210
F4400220
F4400230
F4400240
F4400230
F4400260
F4400270
F4400280
F4400290
F4400300
F4400310
F4400320
F4400330
F4400340
F4400350
F4400360
F4400370
F4400380
F4400390
F4400400
F4400410
F4400420
F4400430
F4400440
F4400450
F4400460
F4400470
F4400480
F4400490
F4400500
F4400510
F4400520
F4400530
F4400540

DEFINITION STATEMENTS

00215 BBBB.J SYN 141
00674 BBSIZE SYN 444

04230 NOINS SYN 2200

00454 ZINSTM SYN 300
00144 ZINSTR SYN 100
01274 ZBB SYN 700
00310 ZTIFRD SYN 200
01750 XFRET= SYN 1000
00372 ZFRET= SYN 250
00620 XSET SYN 400
00310 ZSET SYN 200
00031 ZNLIST SYN 25
05360 XTRA SYN 2800
01274 ZTRA SYN 700
00017 ZTAG SYN 15
00000 XXXXXX SYN 0

00004 RDFORT SYN 4

07774 BBOX.= SYN 4092
07775 DOBOX= SYN 4093
07776 SSBOX= SYN 4094
07777 TTBOX= SYN 4095
07775 SUCCBX SYN 4093
07776 PREDBX SYN 4094
07777 BBTBOX SYN 4095
00221 SYSTAP SYN 145
00222 TBLTAP SYN 146

THESE FIRST TWO DEFINITIONS MAKE
THE PROGRAM COMPATIBLE WITH
SECTION 5 (TAG ANALYSIS). THEIR
VALUES ARE THOSE OF PREDL (BLOCK
LENGTH OF PRED TABLE) AND 6*BBBLF
(BLOCK LENGTH OF BB TABLE) RES-
PECTIVELY, AS GIVEN IN THE
SECTION 5 LISTING.
BLOCK LENGTH OF COMPILED
INSTRUCTION TABLE (CIT)-PART 1
SAME AS PREVIOUS - PART 2
SAME AS PREVIOUS - PART 6
LENGTH OF BB LIST
BLOCK LENGTH OF TIFRD
TABLE LENGTH AND DRUM ADD FOR FRET
BLOCK LENGTH OF FRET
LENGTH OF SET TABLE
BLOCK LENGTH OF SET TABLE
LENGTH OF NLIST
LENGTH OF TRA TABLE
BLOCK LENGTH OF TRA TABLE
BLOCK LENGTH OF TAGLIST H
THE APPEARANCE OF THIS SYMBOL IN
THE LISTING INDICATES THAT ITS
VALUE IS SET BY THE PROGRAM.
A TSX RDFORT,4 CALLS IN THE DIAG-
NOSTIC ROUTINE. A RDS SYSTAP
FOLLOWED BY A TRA RDFORT CALLS
IN THE NEXT RECORD OF THE
FORTRAN PROGRAM.
THE FOLLOWING ARE THE ADDRESSES
OF SPECIAL COUNTERS

FORTRAN SYSTEM TAPE (LOGICAL 1)
TIFGO, TRAD, FRET, AND DOTAG
TAPE (LOGICAL 2)

00223	TAGTAP	SYN	147	TAGLIST TAPE (LOGICAL 3)	F4400550
00223	BLT	SYN	147	BBLIST TAPE (LOGICAL 3)	F4400560
00224	INSTTP	SYN	148	CIT TAPE (LOGICAL 4)	F4400370
00301	TIFDRM	SYN	193	TIFRD DRUM (LOGICAL 1)	F4400380
00301	DOCRDR	SYN	193	DOCARE DRUM (LOGICAL 1)	F4400300
00301	DODRUM	SYN	193	DOLIST DRUM (LOGICAL 1)	F4400600
00301	TRADRM	SYN	193	INITIAL TRA TABLE DRUM (LOGICAL 1)	F4400610
00302	FRTDRM	SYN	194	FRET DRUM (LOGICAL 2)	F4400620
00303	BBLDRM	SYN	195	BBLIST DRUM (LOGICAL 3)	F4400630
00303	SETDRM	SYN	195	SET DRUM (LOGICAL 3)	F4400640
01750	TIFADD	SYN	1000	DRUM ADDRESS FOR TIFRD	F4400630
03270	DOADDR	SYN	1720	DRUM ADDRESS FOR DO LIST	F4400660
02260	BBLADD	SYN	1200	DRUM ADDRESS FOR BB LIST	F4400670
01750	FRTADD	SYN	1000	DRUM ADDRESS FOR FRET	F4400680
01275	SETADD	SYN	701	DRUM ADDRESS FOR SET TABLE	F4400690
07773	BBLIST	SYN	4091	THE FOLLOWING ARE THE BASE	F4400700
06500	DOLIST	SYN	BBLIST-ZBB+1	ADDRESSES OF ALL TABLES	F4400710
06024	INST.A	SYN	DOLIST-300		F4400720
06024	TIFRD	SYN	DOLIST-300		F4400730
03710	TRAD.=	SYN	TIFRD-1100		F4400740
06023	FRET.=	SYN	DOLIST-301		F4400750
06023	DVFQ.=	SYN	FRET.=		F4400760
04216	DOTAG	SYN	DVFQ.--301-600		F4400770
04216	DOCARE	SYN	DOTAG		F4400780
06024	TRA..M	SYN	DOLIST-300		F4400790
04524	SET..M	SYN	TRA..M-ZTRA-4		F4400800
04214	TIFRDM	SYN	SET..M-200		F4400810
03703	INST.M	SYN	TIFRDM-201		F4400820
07774	SETLOC	SYN	BBLIST+1		F4400830
07773	TRATBL	SYN	BBLIST		F4400840
02413	BBTABL	SYN	TRATBL-2800		F4400850
02414	FIXDOS	SYN	BBTABL+1		F4400860
01114	NLIST	SYN	BBTABL-ZBB-3		F4400870
01062	FRET	SYN	NLIST-26		F4400880
01062	SETTAB	SYN	NLIST-25-1		F4400890
01260	SNSLT	SYN	NLIST+100		F4400900
01120	DOBLOK	SYN	BBTABL-ZBB+1		F4400910
00443	LCNTR	SYN	DOBLOK-300-1		F4400920
06500	TAG	SYN	BBLIST-ZBB+1		F4400930
06460	INST.R	SYN	TAG-15-1		F4400940
06314	BBTAGS	SYN	INST.R-100		F4400950
06024	INSTA	SYN	INST.A		F4400960
03703	INSTM	SYN	INST.M		F4400970
06460	INSTR	SYN	INST.R		F4400980
07773	PRED	SYN	TRATBL		F4400990
04524	SETM	SYN	SET..M		F4401000
06024	TRAM	SYN	TRA..M		F4401010
01574	BGINS	SYN	INSTA-NOINS	END OF INST. BLOCK (PART 1)	F4401020
04053	FRETN=	SYN	FRET.--1000	BEGINNING OF FRET (PART 1)	F4401030
04530	NDTRA	SYN	TRAM-700	END OF TRA TABLE BLOCK (PART 2)	F4401040
03227	NDINS	SYN	INSTM-300	END OF INST. BLOCK (PART 2)	F4401030
03704	NTIFR	SYN	TIFRDM-200	END OF TIFRD 8LOCK (PART 2)	F4401060
07464	NDSET	SYN	SETLOC-ZSET	END OF SET BLOCK (PART 3)	F4401070
					F4401080

SECTION 4 - PART 1 OF 6

FORTRAN EDITOR INFORMATION

MASTER RECORD CARD = F0620000

ENTRY POINT = 112

FIRST LOCATION = 30

LAST LOCATION = 1327

00030	ORG 24	CONSTANTS AND VARIABLES (THE 1ST THREE REMAIN IN CORES THROUGHOUT SECTION 4.)	
00030	+000000000000	ERRBX DEC 0	COUNTER FOR READING ERRORS
00031	+0000000000001	LAL DEC 1	
00032	-0000000000004	MINUS4 DEC -4	
00033	+0000000000000	L0...= DEC 0	
00034	+0000000000005	L5...= DEC 5	
00035	+0000000000002	TIFLAB DEC 2	
00036	+0000000000003	TRALAB DEC 3	
00037	+0000000000007	FRELAB DEC 7	
00040	0 00001 0 00000	LD1..= HTR 0,0,1	
00041	0 00000 0 00310	LZTIF= ZTIFRD	
00042	0 00000 0 00312	LZTF2= ZTIFRD+2	
00043	0 00000 0 00372	LAZFT= ZFRET=	
00044	0 00000 0 00374	LAFT2= ZFRET+=2	
00045	0 00000 0 01300	LZTR4= ZTRA+4	
00046	0 00000 0 01750	FRETY= FRTADD	DRUM ADDRESS FOR FRET
00047	0 00000 0 01750	Y TIFADD	DRUM ADDRESS FOR TIFRD
00050	0 01750 0 00000	LXFRT= 0,0,XFRET=	
00051	+1700000000000	OCTAL OCT 1700000000000	
00052	+3777777777777	ENDMK= OCT 3777777777777	
00053	+0000007000000	TAGMRK OCT 7000000	
00054	+0777777000000	OPMSK= OCT 777770000000	
00055	+0000600000000	PSEMK= OCT 60000000	
00056	+0000700000000	PSTMK= OCT 70000000	
00057	+0000007777777	TGMSK= OCT 777777	
00060	-3000000000000	NMASK= OCT -3000000000000	
00061	-3700000000000	1STLT= OCT -3700000000000	
00062	-2300000000000	1STT.= OCT -2300000000000	
00063	0 76100 0 00000	LNOP.= NOP	PROGRAM CONSTANT
00064	+0351210000000	LTRA.= OCT 351210000000	TRA
00065	+0011460000000	OCT 1146000000	TSX-TRA
00066	+0004540000000	OCT 454000000	TXL-TSX
00067	+0001620000000	LTROP= OCT 162000000	TZE-TXL
00070	+0423630000000	OCT 42363000000	DCT
00071	-0240000000000	OCT -24000000000	RTT-DCT
00072	+0276420000000	OCT 27642000000	MSE-RTT
00073	+0300000000000	LPCOP= OCT 30000000000	PSE-MSE
00074	+0347430000000	LTPL.= OCT 34743000000	
00075	0 02000 0 00135	LTRAA TRA AA+1	
00076	0 02000 0 00435	LOUT TRA STTIF=	
00077	0 02000 0 00125	LBEG TRA BEGCLA	
00100	0 02000 0 00135	LXRDN TRA AA+1	

F4401090
F4410010
F4410020
F4410030
F4410040
F4410050
F4410060
F4410070
F4410080
F4410090
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F4410300
F4410310
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F4410460
F4410470
F4410480
F4410490
F4410500
F4410510
F4410520
F4410530

00101	0	02000	0	01262	LMPY	TRA	MPY		F4410540
00102	0	02000	0	01235	LSTQ	TRA	STQDTG		F4410550
00103	+0020000000000				CONSTA	OCT	2000000000		F4410560
00104	2	00000	1	00406	CNST2A	TIX	CLAB,1,0		F4410570
00105	0	00000	0	00000	ERAS1=				F4410580
00106	0	00000	0	00000	ERAS2=				F4410590
00107	0	00000	0	00000	ERAS3=				F4410600
				00107	FRTBX=	SYN	ERAS3=		F4410610
00110	0	00000	0	00000	OPCD				F4410620
00111	0	00001	0	00000	DVFQB=	HTR	0,0,1		F4410630
									F4410640
									F4410650
									F4410660
									F4410670
									F4410680
									F4410690
									F4410700
									F4410710
									F4410720
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									F4410980
									F4410990
									F4411000
									F4411010
									F4411020
									F4411030
									F4411040
									F4411050
									F4411060
									F4411070

THIS SCANS THE COMPILED INSTRUCTIONS AND COMPILES A LIST
KNOWN AS BBLIST OF THE COMPILED INSTRUCTION NUMBER OF THE
FIRST INSTRUCTION OF EACH BASIC BLOCK OF THE OBJECT PROGRAM.

00112	0	77200	0	00224	PASS1	REW	INSTTP		F4410680
00113	0	50000	0	00052	CLA	ENDMK=			F4410690
00114	0	60100	0	07773	STO	BBLIST		STORE MARK FOR END OF B B LIST	F4410700
00115	-0	75400	0	00000	PXD				F4410710
00116	0	60100	0	07774	STO	BBOX.=			F4410720
00117	0	60100	0	07775	STO	DOBOX=			F4410730
00120	0	60100	0	07776	STO	SSBOX=			F4410740
00121	0	60100	0	07777	STO	TTBOX=			F4410750
00122	0	50000	0	00077	CLA	LBEG			F4410760
00123	0	62100	0	00342	STA	XRDIN		SET EXIT ADDRESS	F4410770
00124	0	02000	0	00310	TRA	RDINSA		TRANSFER TO ROUTINE TO READ IN 1ST BLOCK OF COMPILED INSTRUCTIONS	F4410780
								RESTORE USUAL EXIT ADDRESS	F4410790
00125	0	50000	0	00100	BEGCLA	CLA	LXRDN		F4410800
00126	0	62100	0	00342	STA	XRDIN			F4410810
00127	0	53400	2	00031	LXA	LA1,2		INITIALIZE INDEX REGISTERS	F4410820
00130	0	53400	1	00031	LXA	LA1,1			F4410830
00131	1	00014	1	00132	LD12.=	TXI	LD12.=+1,1,12		F4410840
00132	0	50000	1	06024	CLA	INST.A,1		PUT INSTRUCTION NUMBER OF FIRST INSTRUCTION IN BBLIST	F4410850
00133	0	07400	4	00356	TSX	STB,4			F4410860
00134	2	04230	1	00310	AA	TIX	RDINSA,1,NOINS	TEST FOR END OF INSTRUCTION BLOCK IF THERE IS NO LOCATION SYMBOL, THIS INST. NEED NOT BE CONSIDERED	F4410870
00135	0	50000	1	06024	CLA	INST.A,1			F4410880
00136	0	10000	0	00153	TZE	OTHER			F4410890
00137	-0	50000	1	06023	CAL	INST.A-1,1			F4410900
00140	0	62200	0	00110	STD	OPCD			F4410910
00141	-0	32000	0	00061	ANA	1STLT=		IF FIRST LETTER IS A T,GO TO TRCS	F4410920
00142	0	60200	0	00105	SLW	ERAS1=			F4410930
00143	0	50000	0	00105	CLA	ERAS1=			F4410940
00144	0	40200	0	00062	SUB	1STT.=			F4410950
00145	0	10000	0	00160	TZE	TRCS			F4410960
00146	0	50000	0	00110	CLA	OPCD			F4410970
00147	-0	53400	4	00220	LXD	LD4..=,4		FOUR INTO INDEX REGISTER C	F4410980
00150	0	40200	4	00074	PSUB	SUB	LPCOP=+1,4	LOOK FOR A TEST INSTRUCTION THIS IS A TEST	F4410990
00151	0	10000	4	00160	TZE	PTRA+1,4			F4411000
00152	2	00001	4	00150	TIX	PSUB,4,1			F4411010
00153	1	00004	1	00134	OTHER	TXI	AA,1,4	NO TRANSFER EXISTS	F4411020
00154	0	02000	0	00266	TRA	TSTCS		DCT	F4411030
00155	0	02000	0	00266	TRA	TSTCS		RTT	F4411040
00156	0	02000	0	00266	TRA	TSTCS		MSE	F4411050
00157	0	02000	0	00262	PTRA	TRA	PSECS	PSE	F4411060
00160	0	50000	0	00110	TRCS	CLA	OPCD	FIND WHAT KIND OF TRANSFER THIS IS	F4411070

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00161	-0	53400	4	00220		LXD LD4. =, 4	FOUR INTO INDEX REGISTER C	F4411080
00162	0	40200	4	00070	P2SUB	SUB LTROP=+1, 4		F4411090
00163	0	10000	4	00204		TZE P2TRA+1, 4	HAVE FOUND TYPE OF TRANSFER	F4411100
00164	2	00001	4	00162		TIX P2SUB, 4, 1	NOT FOUND YET	F4411110
00165	0	50000	1	06022		CLA INST.A-2, 1	IS THIS A TRANSFER WITH A SYMBOLIC	F4411120
00166	0	40200	0	00051		SUB OCTAL	ADDRESS = SPECIAL MARK	F4411130
00167	0	10000	0	00153		TZE OTHER	YES, IGNORE AS NOT REAL TRANSFER	F4411140
00170	0	50000	1	06024		CLA INST.A, 1		F4411150
00171	0	40200	1	06022		SUB INST.A-2, 1		F4411160
00172	0	10000	0	00153		TZE OTHER		F4411170
00173	0	50000	1	06022	2WYTR	CLA INSTA-2, 1	IS A CONDITONAL TRANSFER, PUT ITS	F4411180
00174	0	07400	4	00356		TSX STB, 4	ADDRESS AND THE ADDRESS OF THE	F4411190
00175	0	50000	1	06016		CLA INST.A-6, 1	NEXT INSTRUCTION IN THE BASIC	F4411200
00176	0	07400	4	00356		TSX STB, 4	BLOCK LIST	F4411210
00177	1	00010	1	00134		TXI AA, 1, 8	LOOK AT NEXT INSTRUCTION	F4411220
00200	0	02000	0	00204		TRA TRACSA	TRA IS THE OPERATION CODE	F4411230
00201	0	02000	0	00153		TRA OTHER	TSX	F4411240
00202	0	02000	0	00230		TRA DOCSA	TXL	F4411250
00203	0	02000	0	00243	P2TRA	TRA IF3CSA	TZE	F4411260
00204	0	50000	1	06021	TRACSA	CLA INSTA-3, 1	IS INSTRUCTION TAGGED	F4411270
00205	-0	32000	0	00057		ANA TGMSK=		F4411280
00206	-0	10000	0	00215		TNZ GOTOVA	YES, IS A GO TO VECTOR	F4411290
00207	-0	50000	1	06022		CAL INST.A-2, 1	TEST FOR A GO TO N	F4411300
00210	-0	32000	0	00060		ANA NMASK=	IS ADDRESS IN N-BLOCK	F4411310
00211	-0	10000	0	00153		TNZ OTHER	YES, THIS IS A GO TO N, IGNORE NOW	F4411320
00212	0	50000	1	06022		CLA INST.A-2, 1	NOT TAGGED, IS A STRAIGHT TRANSFER	F4411330
00213	0	07400	4	00356		TSX STB, 4	STORE ADDRESS IN BASIC BLOCK LIST	F4411340
00214	1	00004	1	00134		TXI AA, 1, 4	LOOK AT NEXT INSTRUCTION	F4411350
00215	0	50000	1	06021	GOTOVA	CLA INST.A-3, 1	THIS IS A GO TO VECTOR	F4411360
00216	-0	73400	4	00000		PDX 0, 4		F4411370
00217	2	00001	4	00220	SELF1	TIX SELF1+1, 4, 1	PUT NUMBER OF BRANCHES INTO IR C	F4411380
00220	1	00004	1	00221	LD4. =	TXI 4TIX, 1, 4	SET FOR NEXT INSTRUCTION	F4411390
00221	2	04230	1	00306	4TIX	TIX RDIN, 1, NOINS	READ IN MORE INSTRUCTIONS IF NEEDED	F4411400
00222	0	50000	1	06022		CLA INST.A-2, 1	GET ADDRESS OF THIS INSTRUCTION	F4411410
00223	-0	63400	4	00106		SXD ERAS2=, 4	SAVE IN0EX REGISTER C	F4411420
00224	0	07400	4	00356		TSX STB, 4	PUT ADDRESS IN BASIC BLOCK LIST	F4411430
00225	-0	53400	4	00106		LXD ERAS2=, 4	RESTORE INDEX REGISTER C	F4411440
00226	2	00001	4	00220		TIX LD4. =, 4, 1	HAVE ALL BRANCHES BEEN DONE	F4411450
00227	1	00004	1	00134		TXI AA, 1, 4	YES, LOOK AT NEXT INSTRUCTION	F4411460
00230	-0	53400	4	07775	DOCSA	LXD DOBOX=, 4	THIS IS THE END OF A DO	F4411470
00231	1	00002	4	00232	SELF2	TXI SELF2+1, 4, 2	SET DOLIST ADDRESS FOR NEXT ENTRY	F4411480
00232	0	50000	1	06024		CLA INST.A, 1	PUT LOCA, ION OF TRANSFER AND	F4411490
00233	0	60100	4	06501		STO DOLIST+1, 4	ADDRESS OF TRANSFER INTO 00 LIST	F4411500
00234	0	50000	1	06022		CLA INST.A-2, 1		F4411510
00235	0	60100	4	06500		STO DOLIST, 4		F4411520
00236	-0	63400	4	07775		SXD DOBOX=, 4	STORE DO LIST ADDRESS	F4411530
00237	0	07400	4	00356		TSX STB, 4	PUT ADDRESS OF TRA BACK IN TRA TABLE	F4411540
00240	0	50000	1	06020		CLA INST.A-4, 1		F4411550
00241	0	07400	4	00356		TSX STB, 4	PUT LOC OF NEXT INST. IN TRA	F4411560
00242	1	00004	1	00134		TXI AA, 1, 4	LOOK AT NEXT INST.	F4411570
00243	0	50000	1	06017	IF3CSA	CLA INST.A-5, 1	THIS INSTRUCTION IS A TZE	F4411580
00244	-0	32000	0	00054		ANA OPMSK=		F4411590
00245	0	40200	0	00074		SUB LTPL. =	IS IT FOLLOWED BY BOTH A TPL AND	F4411600
00246	-0	10000	0	00173		TNZ 2WYTR	A TRA, IF NOT, TREAT IT AS A	F4411610

00247	0	50000	1	06013	CLA	INST.A-9,1	TWO-WAY TRANSFER	F4411620	
00250	-0	32000	0	00054	ANA	OPMSK=		F4411630	
00251	0	40200	0	00064	SUB	LTRA.=		F4411640	
00252	-0	10000	0	00173	TNZ	2WYTR		F4411650	
00253	0	50000	1	06022	CLA	INST.A-2,1	PUT ADDRESSES OF THE THREE BRANCHES	F4411660	
00254	0	07400	4	00356	TSX	STB,4	INTO THE BASIC BLOCK LIST	F4411670	
00255	0	50000	1	06016	CLA	INST.A-6,1		F4411680	
00256	0	07400	4	00356	TSX	STB,4		F4411690	
00257	0	50000	1	06012	CLA	INST.A-10,1		F4411700	
00260	0	07400	4	00356	TSX	STB,4		F4411710	
00261	1	00014	1	00134	TXI	AA,1,12	LOOK AT INSTRUCTION AFTER THESE 3.	F4411720	
00262	0	50000	1	06021	PSECS	CLA	INSTA-3,1	INSTRUCTION IS A PSE	F4411730
00263	-0	32000	0	00056	ANA	PSTMK=		F4411740	
00264	0	40200	0	00055	SUB	PSEMK=		F4411750	
00265	-0	10000	0	00153	TNZ	OTHER	NOT A SKIP, LOOK AT NEXT INST.	F4411760	
00266	0	50000	1	06017	TSTCS	CLA	INSTA-5,1	THIS IS A TEST INSTRUCTION	F4411770
00267	-0	32000	0	00054	ANA	OPMSK=	IS IT FOLLOWED BY A TRA	F4411780	
00270	0	40200	0	00064	SUB	LTRA.=		F4411790	
00271	-0	10000	0	00153	TNZ	OTHER	NO,GO TO NEXT INSTRUCTION	F4411800	
00272	0	50000	1	06016	CLA	INST.A-6,1	YES, IS USED FOR SKIPPING	F4411810	
00273	0	07400	4	00356	TSX	STB,4		F4411820	
00274	0	50000	1	06013	CLA	INST.A-9,1	IS TEST INSTRUCTION FOLLOWED BY	F4411830	
00275	-0	32000	0	00054	ANA	OPMSK=	TWO TRAS	F4411840	
00276	0	40200	0	00064	SUB	LTRA.=		F4411850	
00277	-0	10000	0	00303	TNZ	SLOC	NO, STORE LOCATION OF 2ND INST.	F4411860	
00300	0	50000	1	06012	CLA	INST.A-10,1	YES,STORE ADDRESS OF 2ND TRA	F4411870	
00301	0	07400	4	00356	TSX	STB,4		F4411880	
00302	1	00014	1	00134	TXI	AA,1,12	DO INSTRUCTION AFTER 2ND TRA NEXT	F4411890	
00303	0	50000	1	06014	SLOC	CLA	INSTA-8,1	STORE LOCATION OF 2ND INSTRUCTION	F4411900
00304	0	07400	4	00356	TSX	STB,4	AFTER TEST	F4411910	
00305	1	00010	1	00134	TXI	AA,1,8	LOOK AT 2ND INSTRUCTION AFTER TEST	F4411920	
								F4411930	
							THIS ROUTINE READS A BLOCK OF COMPILED INSTRUCTIONS INTO	F4411940	
							STORAGE FROM TAPE 4, FILE 1.	F4411950	
00306	0	50000	0	00063	RDIN	CLA	LNOP.=	STORE EXIT ADDRESS FROM RDINS	F4411960
00307	0	60100	0	00342	STO	XRDIN			F4411970
00310	0	50000	0	00032	RDINSA	CLA	MINUS4	INITIALIZE ERROR BOX	F4411980
00311	0	60100	0	00030	STO	ERRBX			F4411990
00312	0	76200	0	00224	RDSEL	RDS	INSTTP	SELECT INSTRUCTION TAPE	F4412000
00313	-0	63400	1	00105	SXD	ERAS1=,1			F4412010
00314	-0	53400	1	00131	LXD	LD12.=,1			F4412020
00315	0	50000	1	01574	RCLA	CLA	BGINS,1	MOVE EXTRA INSTRUCTIONS	F4412030
00316	0	60100	1	06024	STO	INST.A,1			F4412040
00317	2	00001	1	00315	TIX	RCLA,1,1			F4412050
00320	-0	63400	1	00106	SXD	ERAS2=,1	SAVE INDEX IN CASE OF ERROR		F4412060
00321	0	70000	1	06010	RCPY	CPY	INSTA-12,1	READ IN BLOCK OF INSTRUCTIONS	F4412070
00322	1	00001	1	00321	TXI	RCPY,1,1			F4412080
00323	1	77777	1	00334	TXI	RDEND,1,-1	END OF FILE		F4412090
00324	0	76600	0	00333	TPTST	WRS	219	TEST FOR TAPE ERROR	F4412100
00325	-0	76000	0	00012	RTT				F4412110
00326	0	02000	0	00346	TRA	RDERR	ERROR		F4412120
00327	0	50000	0	00032	CLA	MINUS4	INITIALIZE ERROR BOX		F4412130
00330	0	60100	0	00030	STO	ERRBX			F4412140
00331	3	04230	1	00341	LNOINS	TXH	XRDIN-1,1,NOINS	END OF RECORD--SEE IF IT IS END OF	F4412150

00332	0	76200	0	00224	RDS	INSTTP	BLOCK GOING INTO STORAGE	F4412160	
00333	0	02000	0	00320	TRA	RCPY-1	READ NEXT BLOCK	F4412170	
00334	-0	75400	1	00000	PXD	0,1	STORE NUMBER OF REMAINING INSTRUC-	F4412180	
00335	0	40000	0	00131	ADD	LD12.=	TIONS FOR TEST	F4412190	
00336	0	62200	0	00134	STD	AA		F4412200	
00337	0	50000	0	00076	CLA	LOUT	STORE FINAL EXIT ADDRESS.	F4412210	
00340	0	62100	0	00134	STA	AA		F4412220	
00341	-0	53400	1	00105	LXD	ERAS1=,1	NO ERROR,RESTORE INDEX REGISTER	F4412230	
00342	0	02000	0	00135	XRDIN	TRA	AA+1	RETURN TO MAIN ROUTINE	F4412240
00343	0	50000	0	00075	RDIN2	CLA	LTRAA	RESTORE USUAL EXIT ADDRESS IN RDINSF	F4412250
00344	0	60100	0	00342	STO	XRDIN		F4412260	
00345	0	02000	0	00222	TRA	4TIX+1	RETURN TO MAIN ROUTINE	F4412270	
00346	0	50000	0	00030	RDERR	CLA	ERRBX	F4412280	
00347	-0	12000	0	00351	SKIP1	TMI	SKIP1+2	HAVE 5 TRIES AT READING BEEN MADE	F4412290
00350	0	07400	4	00004	TSX	RDFORT,4	YES, GO TO DIAGNOSTIC ROUTINE	F4412300	
00351	0	40000	0	00031	ADD	LA1	NO, TRY READING AGAIN	F4412310	
00352	0	60100	0	00030	STO	ERRBX		F4412320	
00353	0	76400	0	00224	BST	INSTTP		F4412330	
00354	-0	53400	1	00106	LXD	ERAS2=,1	RESET INDEX REGISTER	F4412340	
00355	0	02000	0	00332	TRA	LNOINS+1	AND TRY TO READ AGAIN	F4412350	
								F4412360	
								F4412370	
								F4412380	
								F4412390	
								F4412400	
								F4412410	
								F4412420	
								F4412430	
								F4412440	
								F4412450	
								F4412460	
								F4412470	
								F4412480	
								F4412490	
								F4412500	
								F4412510	
A								F4412520	
								F4412530	
								F4412540	
								F4412550	
								F4412560	
								F4412570	
								F4412580	
								F4412590	
								F4412600	
D								F4412610	
								F4412620	
D								F4412630	
								F4412640	
								F4412650	
								F4412660	
								F4412670	
								F4412680	
								F4412690	

THIS ROUTINE STORES, IN OR0ER AND ELIMINATING DUPLICATIONS,
THE COMPILED INSTRUCTION NUMBER OF THE BEGINNING OF EACH
BASIC BLOCK

00414	0	02000	0	00417	TRA	BLDQ+1		F4412700
00415	1	00001	1	00416	TXI2	TXI	BLDQ,1,1	F4412710
00416	0	56000	1	07774	BLDQ	LDQ	BBLIST+1,1	X SHOULD BE ENTERED HERE, SAVE NEXT
00417	0	60100	1	07774		STO	BBLIST+1,1	ENTRY AND STORE X
00420	1	00001	1	00421		TXI	BTXH,1,1	IS THIS LAST ENTRY IN TABLE.
D 00421	3	00000	1	00430	BTXH	TXH	BSTQ,1	YES, TRANSFER
00422	0	50000	1	07774		CLA	BBLIST+1,1	NO, SHIFT NEXT ENTRY
00423	-0	60000	1	07774		STQ	BBLIST+1,1	F4412770
00424	1	00001	1	00425		TXI	BTXL,1,1	F4412780
D 00425	-3	00000	1	00416	BTXL	TXL	BLDQ,1	IS THIS LAST ENTRY IN TABLE
00426	0	60100	1	07774		STO	BBLIST+1,1	YES, STORE LAST ENTRY
00427	1	00001	2	00432		TXI	BOUT,2,1	F4412810
00430	-0	60000	1	07774	BSTQ	STQ	BBLIST+1,1	STORE LAST ENTRY
00431	1	00001	2	00432		TXI	BOUT,2,1	F4412830
00432	-0	53400	1	00105	BOUT	LXD	ERAS1=,1	RESTORE INDEX REGISTER
00433	0	02000	4	00001		TRA	1,4	TRANSFER BACK.
00434	0	07400	4	00004	BTSX	TSX	RDFORT,4	BBLIST IS FULL WITHOUT THIS ENTRY
								F4412860
								F4412670
								F4412880
								F4412890
								F4412900
								F4412910
								F4412920
								F4412930
								F4412940
								F4412950
								F4412960
								F4412970
								F4412980
								F4412990
								F4413000
								F4413010
								F4413020
								F4413030
								F4413040
								F4413050
								F4413060
								F4413070
								F4413080
								F4413090
								F4413100
								F4413110
								F4413120
								F4413130
								F4413140
								F4413150
								F4413160
								F4413170
								F4413180
								F4413190
								F4413200
								F4413210
								F4413220
								F4413230
00435	0	50000	0	00032	STTIF=	CLA	MINUS4	INITIALIZE ERROR BOX
00436	0	60100	0	00030		STO	ERRBX	
00437	0	76400	0	00222		BST	TBLTAP	POSITION TAPE4TO READ TIFGO
00440	0	76400	0	00222		BST	TBLTAP	
00441	0	76200	0	00222		RDS	TBLTAP	
00442	0	70000	0	00105		CPY	ERAS1=	GET NO. OF RECORDS IN DOTAG
00443	-0	53400	1	00105		LXD	ERAS1=,1	BACKSPACE OVER COUNT, END FILE,
00444	1	00014	1	00445	TXITF	TXI	TXITF+1,1,12	IXTAG, END FILE, 9 TABLES
00445	0	76400	0	00222	BSTA	BST	TBLTAP	
00446	2	00001	1	00445	SELF3	TIX	SELF3-1,1,1	
00447	0	76200	0	00222		RDS	TBLTAP	
00450	0	70000	0	00106		CPY	ERAS2=	COPY TABLE NUMBER
00451	0	70000	0	00105		CPY	ERAS1=	COPY NO OF WORDS IN TABLE
00452	0	70000	1	06024	CPYTF	CPY	TIFRD,1	COPY WORD OF TIFGO
00453	0	02000	0	00456		TRA	CLATFA	REGULAR EXIT FROM COPY
00454	0	07400	4	00004		TSX	RDFORT,4	END OF FILE SHOULD NOT OCCUR
00455	1	77777	1	00476		TXI	CHECK,1,-1	END OF RECORD - GIVE RTT, SET INDEX
00456	0	50000	1	06024	CLATFA	CLA	TIFRD,1	LOOK AT THIS WORD OF TIFGO
00457	-0	12000	0	00451		TMI	CPYTF-1	-,MEANS AN IF, GIVE 2ND COPY,IGNORE
00460	-0	32000	0	00057		ANA	TGMSK=	IS THIS A GO TO N ENTRY
00461	0	40200	0	00031		SUB	LA1	
00462	0	70000	1	06023		CPY	TIFRD-1,1	COPY SECOND WORD OF ENTRY
00463	0	10000	0	00467		TZE	GOTONA	THIS IS A GO TO N ENTRY
00464	0	40200	0	00034		SUB	L5...=	NOT A GO TO N--IS IT AN ASSIGN
00465	-0	10000	0	00452		TNZ	CPYTF	NO, LOOK AT NEXT ENTRY, DONT SAVE
00466	1	00002	1	00452	ASSN	TXI	CPYTF,1,2	AN ASSIGN,KEEP ENTRY IN TIFRD
00467	0	50000	1	06023	GOTONA	CLA	TIFRD-1,1	A GO TO N, SAVE ENTRY AND ALSO
00470	0	62200	0	00105		STD	ERAS1=	LEAVE ENOUGH SPACE FOR CORRES-
00471	0	73400	4	00000		PAX	0,4	PONDING ENTRIES IN TRAD
00472	-0	75400	4	00000		PXD	0,4	
00473	0	40200	0	00105		SUB	ERAS1=	
00474	0	62200	0	00475	SELF4	STD	SELF4+1	
00475	1	00000	1	00466		TXI	ASSN,1,XXXXXX	LOOK AT NEXT ENTRY IN TIFRD
00476	0	76600	0	00333	CHECK	IOD		TEST FOR TAPE ERROR

00477	-0	76000	0	00012		RTT		F4413240
00500	0	02000	0	00515		TRA ERRORA	ERROR	F4413250
00501	0	50000	0	00106		CLA ERAS2=	CHECK FOR POSITIONING OF TAPE	F4413260
00502	0	40200	0	00035		SUB TIFLAB		F4413270
00503	-0	10000	0	00524		TNZ BADPOS		F4413280
00504	-0	75400	1	00000		PXD 0,1	SAVE LENGTH OF TABLE FOR TESTS	F4413290
00505	0	62200	0	00570		STD ABOX		F4413300
00506	0	77100	0	00022		ARS 18		F4413310
00507	0	60100	0	00106		STO ERAS2=		F4413320
00510	-0	10000	0	00525		TNZ RDTRAD-2	TIFGO IS NOT EMPTY	F4413330
00511	0	76200	0	00222	RDS6	RDS TBLTAP		F4413340
00512	1	77777	2	00513		TXI RDS6+2,2,-1	NO ENTRIES IN TIFGO-SKIP PROCESSING	F4413850
00513	-0	63400	2	07774		SXD BBOX.=,2		F4413360
00514	0	02000	0	00637		TRA LXA6		F4413370
00515	0	50000	0	00030	ERRORA	CLA ERBXX		F4413380
00516	-0	12000	0	00520	SKIP2	TMI SKIP2+2	HAVE 5 TRIES AT READING BEEN MADE	F4413390
00517	0	07400	4	00004		TSX RDFORT,4	YES, GO TO DIAGNOSTIC ROUTINE	F4413400
00520	0	40000	0	00031		ADD LA1	NO, TRY READING AGAIN	F4413410
00521	0	60100	0	00030		STO ERBXX		F4413420
00522	-0	53400	1	00040		LXD LD1. .,1	RESET INDEX REGISTER	F4413430
00523	0	02000	0	00445		TRA BSTA		F4413440
00524	0	07400	4	00004	BADPOS	TSX RDFORT,4	TAPE POSITIONED INCORRECTLY	F4413450
								F4413460
						THIS ROUTINE READS TRAD FROM TAPE 2, FILE 5, RECORD 7, AND		F4413470
						ENTERS ALL WORDS OF TRAD INTO THE BASIC BLOCK LIST.		F4413480
00525	0	50000	0	00032		CLA MINUS4	INITIALIZE ERROR BOX	F4413490
00526	0	60100	0	00030		STO ERBXX		F4413500
00527	0	53400	1	00031	RDTRAD	LXA LA1,1	SET INDEX	F4413510
00530	0	76200	0	00222		RDS TBLTAP		F4413520
00531	0	70000	0	00105		CPY ERAS1=	COPY TABLE NUMBER	F4413530
00532	0	70000	1	03711		CPY TRAD.=+1,1	COPY NUMBER OF WORDS AND TABLE	F4413540
00533	1	77777	1	00532	SELF5	TXI SELF5-1,1,-1	COPY NEXT WORD	F4413550
00534	0	07400	4	00004		TSX RDFORT,4	END OF FILE SHOULD NOT OCCUR	F4413560
00535	0	76600	0	00333		IOD	END OF RECORD--TEST FOR ERROR	F4413570
00536	-0	76000	0	00012		RTT		F4413580
00537	0	02000	0	00551		TRA ERR2TD	ERROR	F4413590
00540	0	50000	0	00105		CLA ERAS1=	CHECK FOR POSITIONING OF TAPE	F4413600
00541	0	40200	0	00036		SUB TRALAB		F4413610
00542	-0	10000	0	00524		TNZ BADPOS		F4413620
00543	-3	00000	1	00560	TXLTRD	TXL TXITRD,1,0	ALL OF TRAD NOW IN BASIC BLOCK LIST	F4413630
00544	0	50000	1	03710		CLA TRAD.=,1	NO ERROR--ENTER IN BASIC BLOCK LIST	F4413640
00545	0	76700	0	00022		ALS 18	SHIFT WORD OF TRAO	F4413650
00546	0	60100	1	03710		STO TRAD.=,1		F4413660
00547	0	07400	4	00356		TSX STB,4		F4413670
00550	1	00001	1	00543		TXI TXLTRD,1,1	SET FOR NEXT WORD IN TRAD	F4413680
00551	0	50000	0	00030	ERR2TD	CLA ERBXX		F4413690
00552	-0	12000	0	00554	SKIP3	TMI SKIP3+2	HAVE 5 TRIES AT READING BEEN MADE	F4413700
00553	0	07400	4	00004		TSX RDFORT,4	YES, GO TO DIAGNOSTIC ROUTINE	F4413710
00554	0	40000	0	00031		ADD LA1	NO, TRY READING AGAIN	F4413720
00555	0	60100	0	00030		STO ERBXX		F4413730
00556	0	76400	0	00222		BST TBLTAP		F4413740
00557	0	02000	0	00527		TRA RDTRAD		F4413750
00560	1	77777	2	00561	TXITRD	TXI TXITRD+1,2,-1		F4413760
00561	-0	63400	2	07774		SXD BBOX.=,2	SAVE LENGTH OF BB TABLE	F4413770

		THIS ROUTINE READS FRET FROM TAPE 2, FILE 5, RECORD 12, AND		F4414320	
		CHANGES FREQUENCIES TO PROBABILITIES.		F4414330	
00643	0 50000 0 00032	RFRET	CLA MINUS4	INITIALIZE ERROR BOX	F4414340
00644	0 60100 0 00030		STO ERBFX		F4414350
00645	0 53400 4 00034		LXA L5...=,4	SPACE TO FRET	F4414360
00646	0 76200 0 00222	RDSFTP	RDS TBLTAP		F4414370
00647	2 00001 4 00646		TIX RDSFTP,4,1		F4414380
00650	0 70000 0 00106		CPY ERAS2=	COPY TABLE NUMBER	F4414390
00651	0 70000 0 00105	RDINF	CPY ERAS1=	COPY NUMBER OF WORDS IN TABLE	F4414400
00652	-0 53400 2 00105		LXD ERAS1=,2	PUT NUMBER OF WORDS INTO INDEX B	F4414410
00653	-3 00000 2 01012		TXL EMPTY,2,0		F4414420
00654	0 53400 1 00031		LXA LA1,1	INITIALIZE INDEX REGISTERS A AND C	F4414430
00655	-0 53400 4 00050		LXD LXFRT=,4		F4414440
00656	0 70000 4 06023	CPYF	CPY FRET.=,4	COPY WORDS INTO STORAGE	F4414450
00657	0 50000 4 06023		CLA FRET.=,4	IS THIS WORD THE FORMULA NUMBER OF	F4414460
00660	-0 12000 0 00665		TMI TNX	A NEW ENTRY--YES, TRANSFER	F4414470
00661	0 40000 4 06022	ADD	ADD FRET.=-1,4	NO, ADD THIS FREQUENCY TO PREVIOUS	F4414480
00662	0 60100 4 06023		STO FRET.=,4	SUM TO GET CUMULATIVE FREQUENCY	F4414490
00663	-2 00001 2 00724		TNX ALDNE,2,1	IS TABLE ALL COPIED	F4414500
00664	1 77777 4 00656		TXI CPYF,4,-1	NO,COPY NEXT WORD	F4414510
00665	-2 00001 2 00711	TNX	TNX ERRFN,2,1	THIS IS FORM. NO,--SHOULONT END TAB	F4414520
00666	1 77777 4 00667	SELF10	TXI SELF10+1,4,-1	INDEX PLACE IN STORAGE	F4414530
00667	0 70000 4 06023	CPY3FT	CPY FRET.=,4	COPY FIRST FREQUENCY IN ENTRY	F4414540
00670	-2 00001 2 00706		TNX DOEND,2,1	TEST FOR END OF TABLE ON TAPE	F4414550
00671	1 77777 4 00672	SELF11	TXI SELF11+1,4,-1	INDEX PLACE IN STORAGE	F4414560
00672	0 70000 4 06023		CPY FRET.=,4	COPY NEXT WORD-- IS IT NEXT FREQ OR	F4414570
00673	0 50000 4 06023		CLA FRET.=,4	IS IT NEW FORMULA NUMBER	F4414580
00674	0 12000 0 00661		TPL ADD	NEXT FREQUENCY,GO TO ADD	F4414590
00675	0 50000 4 06021	DOCSFT	CLA FRET.=-2,4	NEW FORMULA NUMBER,ENTRY JUST	F4414600
00676	0 60100 1 06023		STO DVFQ.=,1	COPIED WAS FOR A DO, MOVE TO	F4414610
00677	0 50000 4 06022		CLA FRET.=-1,4	DVFQ	F4414620
00700	0 60100 1 06022		STO DVFQ.=-1,1		F4414630
00701	1 00002 1 00702		TXI CLAFT,1,2	INDEX POSITION IN DVFQ TABLE	F4414640
00702	0 50000 4 06023	CLAFT	CLA FRET.=,4	PUT NEW FORMULA INTO FRET IN PLACE	F4414650
00703	0 60100 4 06021		STO FRET.=-2,4	OF ENTRY JUST MOVED	F4414660
00704	-2 00001 2 00711		TNX ERRFN,2,1	THIS SHOULD BE END ONLY IF WAS DOCSF	F4414670
00705	1 00001 4 00667		TXI CPY3FT,4,1	COPY NEXT WORD	F4414680
00706	0 50000 0 00663	DOEND	CLA ADD+2	THIS DO ENTRY IS END OF TABLE	F4414690
00707	0 62100 0 00704		STA CLAFT+2	RESTORE ADDRESS	F4414700
00710	0 02000 0 00675		TRA DOCSFT	ERROR EXIT	F4414710
00711	0 07400 4 00004	ERRFN	TSX RDFORT,4	THE TAPE RECORD ENDS WITH A FORMULAF	F4414720
00712	0 50000 0 00665		CLA TNX	NUMBER WITH NO FREQUENCIES	F4414730
00713	0 62100 0 00704		STA CLAFT+2	RESTORE ADDRESS	F4414740
00714	0 50000 0 00030	ERRORF	CLA ERBFX		F4414750
00715	-0 12000 0 00717	SKIP4	TMI SKIP4+2	HAVE 5 TRIES AT READING BEEN MADE	F4414760
00716	0 07400 4 00004		TSX RDFORT,4	YES, GO TO DIAGNOSTIC ROUTINE	F4414770
00717	0 40000 0 00031		ADD LA1	NO, TRY READING AGAIN	F4414780
00720	0 60100 0 00030		STO ERBFX		F4414790
00721	0 76400 0 00222		BST TBLTAP		F4414800
00722	0 76200 0 00222		RDS TBLTAP	SET TO READ FRET AGAIN.	F4414810
00723	0 02000 0 00650		TRA RDSFTP+2	TRY AGAIN	F4414820
00724	0 76600 0 00333	ALDNE	IOD		F4414830
00725	-0 76000 0 00012		RTT	TEST FOR TAPE ERROR	F4414840
00726	0 02000 0 00714		TRA ERRORF	ERROR	F4414850

00727	0	50000	0	00106	CLA	ERAS2=	CHECK FOR POSITIONING OF TAPE	F4414860
00730	0	40200	0	00037	SUB	FRELAB		F4414870
00731	-0	10000	0	00524	TNZ	BADPOS		F4414880
00732	1	77777	4	00733	TXI	CONTN,4,-1		F4414890
00733	-0	63400	1	01274	CONTN	SXD DVFTST,1	SAVE LENGTH OF DVFQ TABLE	F4414900
00734	-0	63400	4	00107	SXD	FRTBX=,4	SAVE LENGTH OF FRET TABLE IN STOR.	F4414910
00735	1	00001	4	00736	TXI	CLA1,4,1		F4414920
00736	0	50000	4	06023	CLA1	CLA FRET.=,4	TAKE TOTAL FREQ OF ENTRY (LAST WD)	F4414930
00737	0	60100	0	00105	STO	ERAS1=	STORE AS DIVISOR	F4414940
00740	0	50000	0	00052	CLA	ENDMK=	STORE HIGHEST NO AS TOTAL PROB.	F4414950
00741	0	60100	4	06023	STO	FRET.=,4		F4414960
00742	1	00001	4	00743	TXI	CLAD,4,1	INDEX PLACE IN FRET	F4414970
00743	0	50000	4	06023	CLAD	CLA FRET.=,4	LOOK AT NEXT WORD	F4414980
00744	-0	12000	0	00753	TMI	NEWFM	FORMULA NUMBER--END OF THIS ENTRY	F4414990
00745	0	56000	0	00033	LDQ	L0...=	ANOTHER CUMULATIVE FREQUENCY	F4415000
00746	0	22100	0	00105	DVP	ERAS1=	DIVIDE BY TOTAL FREQUENCY TO GET	F4415010
00747	0	76000	0	00012	DCT		CUMULATIVE PROBABILITY	F4415020
00750	0	56000	0	00052	LDQ	ENDMK=		F4415030
00751	-0	60000	4	06023	STQ	FRET.=,4		F4415040
00752	1	00001	4	00743	TXI	CLAD,4,1	LOOK AT NEXT WORD	F4415050
00753	1	00001	4	00754	NEWFM	TXI NEWFM+1,4,1	IS THIS END OF TABLE	F4415060
00754	-2	01750	4	00736	TNX	CLA1,4,XFRET=	NO--LOOK AT NEXT ENTRY	F4415070
								F4415080
						THIS ROUTINE WRITES FRET ON DRUM 2 IN BLOCKS OF 250 WORDS		F4415090
00755	0	50200	0	00107	DONE	CLS FRTBX=		F4415100
00756	0	40000	0	00050	ADD	LXFRT=		F4415110
00757	-0	73400	4	00000	PDX	0,4	PUT NO. OF WORDS IN FRET INTO INDEX	F4415120
00760	-2	00372	4	01006	LZFRFT=	TNX LSTBLK,4,ZFRET=	IS THERE ONLY A PARTIAL BLOCK LEFT	F4415130
00761	-0	53400	3	00760	LXD	LZFRFT=,3	NO, FULL BLOCK--SET INDEX REGS.	F4415140
00762	0	50000	0	00043	CLA	LAZFT=	GET LENGTH OF BLOCK	F4415150
00763	0	40100	0	00771	ADM	ADM ACLA	SET ADDRESSES FOR BLOCK	F4415160
00764	0	62100	0	00771	STA	ACLA		F4415170
00765	0	62100	0	00776	STA	CPYFT		F4415180
00766	0	76600	0	00302	WRS	FRTDRM	SELECT DRUM	F4415190
00767	-0	75400	2	00000	PXD	0,2		F4415200
00770	0	60100	0	00106	STO	ERAS2=	STORE LENGTH OF BLOCK	F4415210
00771	0	36100	2	04053	ACLA	ACL FRETN=,2	FIND CHECKSUM	F4415220
00772	2	00001	2	00771	TIX	ACLA,2,1		F4415230
00773	0	60200	0	00105	SLW	ERAS1=	STORE CHECKSUM	F4415240
00774	0	46000	0	00046	LDA	FRETY=		F4415250
00775	0	70000	0	00106	CPY	ERAS2=	COPY NO OF WORDS IN BLOCK	F4415260
00776	0	70000	1	04053	CPYFT	CPY FRETN=,1	COPY BLOCK	F4415270
00777	2	00001	1	00776	TIX	CPYFT,1,1		F4415280
01000	0	70000	0	00105	CPY	ERAS1=	COPY CHECK SUM	F4415290
01001	3	01750	4	01014	TXH	OUTA,4,XFRET=	IS THIS END OF TABLE	F4415300
01002	0	50000	0	00046	CLA	FRETY=	NO,SET DRUM ADDRESS FOR NEXT BLOCK	F4415310
01003	0	40000	0	00044	ADD	LAFT2=		F4415320
01004	0	62100	0	00046	STA	FRETY=		F4415330
01005	0	02000	0	00760	TRA	LZFRFT=	DO NEXT BLOCK	F4415340
01006	-0	75400	4	00000	LSTBLK	PXD 0,4	ONLY A PARTIAL BLOCK LEFT	F4415350
01007	-0	73400	3	00000	PDX	0,3	LENGTH OF BLOCK INTO INDICES	F4415360
01010	0	77100	0	00022	ARS	18		F4415370
01011	1	01750	4	00763	TXI	ADM,4,XFRET=		F4415380
01012	0	76600	0	00302	EMPTY	WRS FRTDRM		F4415390

01013	0	46000	0	00046	LDA	FRETY=		F4415400
01014	0	70000	0	00033	OUTA	CPY	L0...=	F4415410
01015	0	77200	0	00224	REW	INSTTP	REWIND COMPILED INSTRUCTION TAPE	F4415420
								F4415430
							THIS ROUTINE SORTS THE LIST OF TXL INSTRUCTIONS BY ADDRESS	F4415440
01016	-0	53400	1	07775	SRTDO	LXD	DOBOX=,1	PUT TOTAL LNGTH OF DOLIST IN ERAS2=F4415450
01017	-3	00000	1	01305	TXL	CLTRA=-3,1,0	IF NO DOS, OMIT ROUTINES WITH DOS	F4415460
01020	-0	63400	1	00106	SXD	ERAS2=,1		F4415470
01021	0	50000	1	06500	CLADO	CLA	DOLIST,1	TAKE LAST ENTRY NOT ALREADY SORTED
01022	0	56000	1	06501	LDQ	DOLIST+1,1	PUT ADDRESS IN AC, LOC IN MQ	F4415490
01023	-3	00002	1	01046	TXLDO	TXL	STOREA,1,2	IS THERE ANOTHER ENTRY TO BE
							COMPARED	F4415510
01024	0	34000	1	06502	CAS	DOLIST+2,1	YES, COMPARE ADDRESSES	F4415520
01025	1	77776	1	01023	TXI	TXLDO,1,-2	STORED ADDRESS SMALLER, LOOK AT	F4415530
							NEXT WORD	F4415540
01026	0	02000	0	01040	TRA	COMPR	ADDRESSES ARE EQUAL, COMPARE LOCATNF	F4415550
01027	0	60100	0	00105	STO	ERAS1=	STORED ADDRESS LARGER, EXCHANGE	F4415560
01030	0	50000	1	06503	CLA	DOLIST+3,1	ENTRIES	F4415570
01031	-0	60000	1	06503	STQDO	STQ	DOLIST+3,1	F4415580
01032	0	56000	0	00105	LDQ	ERAS1=		F4415590
01033	0	60100	0	00105	STO	ERAS1=		F4415600
01034	0	50000	1	06502	CLA	DOLIST+2,1		F4415610
01035	-0	60000	1	06502	STQ	DOLIST+2,1		F4415620
01036	0	56000	0	00105	LDQ	ERAS1=		F4415630
01037	1	77776	1	01023	TXI	TXLDO,1,-2		F4415640
01040	0	60100	0	00105	COMPR	STO	ERAS1=	ADDRESSES EQUAL,COMPARE LOCATIONS
01041	0	50000	1	06503	CLA	DOLIST+3,1		F4415660
01042	0	04000	0	01044	TLQ	CLA2	STORED LARGER,DO NOT EXCHANGE	F4415670
01043	0	02000	0	01031	TRA	STQDO	STORED LOC SMALLER, EXCHANGE	F4415680
01044	0	50000	0	00105	CLA2	CLA	ERAS1=	RESTORE ACCUMULATOR
01045	1	77776	1	01023	TXI	TXLDO,1,-2		F4415700
01046	-0	53400	1	00106	STOREA	LXD	ERAS2=,1	NOW HAVE HIGHEST OF ENTRIES NOT
01047	0	60100	1	06500	STO	DOLIST,1	PREVIOUSLY SORTED, STORE JUST	F4415720
01050	-0	60000	1	06501	STQ	DOLIST+1,1	BEFORE THOSE ALREADY SORTED AND	F4415730
01051	1	77776	1	01052	SELF13	TXI	SELF13+1,1,-2	SET INDEX TO AVOID THIS ENTRY ASF
01052	-0	63400	1	00106	SXD	ERAS2=,1	ALREADY SORTED, LOOK FOR HIGHEST	F4415750
01053	3	00002	1	01021	TXH	CLADO,1,2	ENTRY OF THOSE NOT YET SORTED.	F4415760
							TABLE IS ENTIRELY SORTED NOW.	F4415770
								F4415780
							THIS ROUTINE REPLACES THE INSTRUCTION NUMBERS IN THE DO LIST	F4415790
							BY BASIC BLOCK NUMBERS	F4415800
01054	0	53400	2	00033	LXA	L0...=,2	INITIALIZE INDEX REGISTERS	F4415810
01055	0	50000	0	07775	CLA	DOBOX=	PUT NUMBER OF WORDS IN LIST INTO	F4415820
01056	0	62200	0	01060	STD	TIXDO	DECREMENT OF TIX FOR COMPARISON	F4415830
01057	0	53400	1	00031	LXA	LAL,1		F4415840
01060	2	00000	1	01102	TIXDO	TIX	RDDOT,1	HAVE ALL ENTRIES BEEN DONE
01061	0	50000	1	06477	CLA	DOLIST-1,1	ADD INST NO TO BE CHANGED (ADDR)	F4415860
01062	0	34000	2	07773	LDQ	CAS	BBLIST,2	COMPARE TO INST NO OF BEG OF BB
01063	1	00001	2	01062	TXI	LDQ,2,1	BEG BB LESS, TRY NEXT	F4415880
01064	0	02000	0	01066	TRA	LDQ+4	BEG. B.B. EQUAL,FOUND	F4415890
01065	1	77777	2	01066	TXI	LDQ+4,2,-1	BEG B B GREATER, PREVIOUS BB IS IT	F4415900
01066	-0	75400	2	00000	LOQP4	PXD	0,2	PUT B B NO IN DECREMENT
01067	0	60100	1	06477	STO	DOLIST-1,1	REPLACE INSTR NO IN DO LIST	F4415920
01070	0	50000	1	06500	CLA	DOLIST,1	ADD INSTR NO OF LOC OF TXL	F4415930

01071	0	34000	2	07773		CAS	BBLIST,2	COMPARE TO BB OF ADDR FIRST	F4415940
01072	1	00001	2	01071	SELF14	TXI	SELF14-1,2,1	TOO SMALL--TRY NEXT	F4415950
01073	0	02000	0	01075	SELF15	TRA	SELF15+2	EQUAL--FOUND	F4415960
01074	1	77777	2	01075	SELF16	TXI	SELF16+1,2,-1	TOO LARGE, WAS ONE PREVIOUS	F4415970
01075	-0	75400	2	00000	CASP4	PXD	0,2	PUT BB NO INTO DOLIST IN PLACE OF	F4415980
01076	0	60100	1	06500		STO	DOLIST,1	INSTRUCTION NUMBER	F4415990
01077	0	50000	1	06477		CLA	DOLIST-1,1	PUT BB NO OF ADDRESS OF THIS DO	F4416000
01100	-0	73400	2	00000		PDX	0,2	INTO IR B TO START COMPARISON	F4416010
01101	1	00002	1	01060		TXI	TIXDO,1,2	DO NEXT ENTRY	F4416020
									F4416030
									F4416040
									F4416050
01102	0	50000	0	00032	RDDOT	CLA	MINUS4	THIS ROUTINE READS DOCARE FROM DRUM 1	F4416060
01103	0	60100	0	00030		STO	ERRBX	INITIALIZE ERROR BOX	F4416070
01104	0	76200	0	00301	RDSDOT	RDS	DOCRDR	SELECT DOCARE DRUM	F4416080
01105	0	53400	1	00033		LXA	L0...=,1	ZERO INTO I.R.A	F4416090
01106	0	70000	0	00105		CPY	ERAS1=		F4416100
01107	0	53400	4	00105		LXA	ERAS1=,4		F4416110
01110	0	70000	0	00106		CPY	ERAS2=		F4416120
01111	-2	00002	4	01141		TNX	CLAE,4,2	TEST FOR EMPTY TABLE	F4416130
01112	0	70000	1	04216	CPYDOT	CPY	DOCARE,1	COPY TABLE	F4416140
01113	1	00001	1	01114	SELF17	TXI	SELF17+1,1,1		F4416150
01114	0	70000	1	04363		CPY	DOCARE+101,1	COPY CHECKSUMS	F4416160
01115	2	00002	4	01112		TIX	CPYDOT,4,2	TEST FOR END	F4416170
01116	-0	63400	1	00107		SXD	ERAS3=,1	SAVE INDEX	F4416180
01117	-0	53400	2	00107		LXD	ERAS3=,2		F4416190
01120	-0	50000	0	00105		CAL	ERAS1=		F4416200
01121	0	36100	1	04217		ACL	DOCARE+1,1		F4416210
01122	2	00001	1	01121	SELF18	TIX	SELF18-1,1,1	SUM ENTRIES	F4416220
01123	0	60200	0	00105		SLW	ERAS1=		F4416230
01124	-0	50000	0	00106		CAL	ERAS2=		F4416240
01125	0	36100	2	04363	ACLB	ACL	DOCARE+101,2	SUM CHECKS	F4416250
01126	2	00001	2	01125		TIX	ACLB,2,1		F4416260
01127	0	60200	0	00106		SLW	ERAS2=		F4416270
01130	0	50000	0	00106	CHSMCR	CLA	ERAS2=		F4416280
01131	0	40200	0	00105		SUB	ERAS1=		F4416290
01132	0	10000	0	01143		TZE	RDDTG	NO ERROR-DO NEXT PART OF PROGRAM	F4416300
01133	0	50000	0	00030		CLA	ERRBX		F4416310
01134	-0	12000	0	01136	SKIP5	TMI	SKIP5+2	HAVE 5 TRIES AT READING BEEN MADE	F4416320
01135	0	07400	4	00004		TSX	RDFORT,4	YES, GO TO DIAGNOSTIC ROUTINE	F4416330
01136	0	40000	0	00031		ADD	LA1	NO, TRY READING AGAIN	F4416340
01137	0	60100	0	00030		STO	ERRBX		F4416350
01140	0	02000	0	01104		TRA	RDSDOT		F4416360
01141	0	60000	0	00107	CLAE	STZ	ERAS3=	SET SIGNAL FOR EMPTY DOCARE	F4416370
01142	0	02000	0	01130		TRA	CHSMCR		F4416380
									F4416390
									F4416400
									F4416410
									F4416420
									F4416430
									F4416440
									F4416450
									F4416460
									F4416470
01143	0	76200	0	00222	RDDTG	RDS	TBLTAP	THIS ROUTINE READS DOTAG FROM TAPE 2, FILE 6, AND CONDENSES	F4416480
01144	0	76200	0	00222		RDS	TBLTAP	IT	F4416490
01145	0	76200	0	00222		RDS	TBLTAP		F4416500
01146	0	50000	0	00032		CLA	MINUS4	INITIALIZE ERROR BOX	F4416510
01147	0	60100	0	00030		STO	ERRBX		F4416520
01150	-0	53400	1	00054		LXD	OPMSK=,1	COMPLEMENT OF ONE INTO IR A	F4416530
01151	0	76200	0	00222	RSDTGT	RDS	TBLTAP		F4416540

01152	0	70000	1	04216	CPY1D	CPY DOTAG,1	COPY RECORD SAVING ONLY THOSE	F4416480
01153	0	02000	0	01156		TRA CPY2D	PARTS TO BE USED	F4416490
01154	0	02000	0	01203		TRA NTRDO=	END OF FILE--ALL COPIED	F4416500
01155	0	02000	0	01167		TRA TESTDT	END OF RECORD--TEST FOR ERROR	F4416510
01156	0	70000	0	00105	CPY2D	CPY ERAS1=		F4416520
01157	0	70000	0	00105		CPY ERAS1=		F4416530
01160	0	70000	0	00105		CPY ERAS1=		F4416540
01161	0	70000	1	04217		CPY DOTAG+1,1		F4416550
01162	0	70000	1	04220		CPY DOTAG+2,1		F4416560
01163	0	70000	1	04221		CPY DOTAG+3,1		F4416570
01164	0	70000	0	00105		CPY ERAS1=		F4416580
01165	0	70000	0	00105		CPY ERAS1=		F4416590
01166	1	77774	1	01152		TXI CPY1D,1,-4	SET FOR NEXT ENTRY	F4416600
01167	-0	76000	0	00012	TESTDT	RTT 4	TEST REDUNDANCY	F4416610
01170	0	02000	0	01173		TRA ERR2DT		F4416620
01171	-0	63400	1	01216		SXD DTGBX,1	SAVE LENGTH OF TABLE SO FAR	F4416630
01172	0	02000	0	01151		TRA RDSDTG	COPY NEXT RECORD	F4416640
01173	0	50000	0	00030	ERR2DT	CLA ERBXX		F4416650
01174	-0	12000	0	01176	SKIP6	TMI SKIP6+2	HAVE 5 TRIES AT READING BEEN MADE	F4416660
01175	0	07400	4	00004		TSX RDFORT,4	YES, GO TO DIAGNOSTIC ROUTINE	F4416670
01176	0	40000	0	00031		ADD LA1	NO, TRY READING AGAIN	F4416680
01177	0	60100	0	00030		STO ERBXX		F4416690
01200	0	76400	0	00222		BST TBLTAP		F4416700
01201	-0	53400	1	01216		LXD DTGBX,1	SET INDEX TO READ LAST RECORD AGAIN	F4416710
01202	0	02000	0	01151		TRA RDSDTG		F4416720
								F4416730
						THIS ROUTINE PUTS INFORMATION FROM DOTAG AND DVFQ INTO DOLIST		F4416740
01203	-0	53400	1	00054	NTRDO=	LXD OPMSK=,1	COMPLEMENT OF ONE INTO I R A	F4416750
01204	0	53400	2	00031		LXA LA1,2	ONE INTO IR B	F4416760
01205	0	53400	4	00033		LXA L0...=,4	ZERO INTO INDEX C	F4416770
01206	0	50000	0	01216		CLA DTGBX		F4416780
01207	0	62200	0	01247		STD DTGBX2	PUT LENGTH OF DOTAG IN FOR TEST	F4416790
01210	-0	75400	0	00000		PXD		F4416800
01211	0	60100	0	00105		STO ERAS1=		F4416810
01212	0	60100	0	00106		STO ERAS2=	CLEAR ERAS1= AND ERAS2=	F4416820
01213	0	02000	0	01216		TRA NXTDO+2		F4416830
01214	1	00002	2	01215	NXTDO	TXI NXTDO+1,2,2		F4416840
01215	1	77774	1	01216		TXI DTGBX,1,-4	SET FOR NEXT ENTRY	F4416850
01216	-3	77777	1	01310	DTGBX	TXL CLTRA=,1,-1	IS DOTAG FINISHED--IF SO EXIT	F4416860
01217	0	50000	1	04221	CLADT	CLA DOTAG+3,1	LOOK FOR INDICATION OF AN IF	F4416870
01220	0	12000	0	01223		TPL STF+2	TRANSFER IF DO HAS NO IF	F4416880
01221	0	50000	0	00053	STF	CLA TAGMRK	STORE IF INDICATION IN DOLIST	F4416890
01222	-0	60200	2	06477		ORS DOLIST-1,2		F4416900
01223	0	50000	1	04216		CLA DOTAG,1		F4416910
01224	-0	32000	0	00053		ANA TAGMRK	LOOK FOR INDICATION OF VARIABLE	F4416920
							NO OF TIMES IN LOOP	F4416930
01225	-0	10000	0	01266		TNZ VRBLN	VARIABLE,GET FROM DVFQ	F4416940
01226	0	50000	1	04220		CLA DOTAG+2,1	GET (N2-N1+N3) AND PUT IN MQ	F4416950
01227	0	62100	0	00105		STA ERAS1=		F4416960
01230	-0	75400	0	00000		PXD	CLEAR ACCUMULATOR	F4416970
01231	0	56000	0	00105		LDQ ERAS1=	DIVIDE (N2-N1+N3) BY N3 TO GET	F4416980
01232	0	22100	1	04217		DVP DOTAG+1,1	NUMBER OF TIMES IN DO LOOP	F4416990
01233	0	76000	0	00012		DCT		F4417000
01234	0	07400	4	00004		TSX RDFORT,4	BAD DIVIDE	F4417010

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	01235	-0	60000	0	00105	STQDTG	STQ	ERAS1=		F4417020
	01236	0	50000	0	00105		CLA	ERAS1=	SHIFT TO AC	F4417030
	01237	0	62100	2	06500		STA	DOLIST,2	TEST FOR END	F4417040
	01240	-0	53400	4	00107	NDDOT	LXD	ERAS3=,4		F4417050
	01241	0	50000	1	04222		CLA	DOTAG+4,1	DOES NEXT ENTRY IN DOTAG CORRESPOND	F4417060
	01242	0	34000	4	04217	DDCAS	CAS	DOCARE+1,4	TO A TXL	F4417070
	01243	0	02000	0	01245		TRA	DDTIX		F4417080
	01244	1	77774	1	01247		TXI	DTGBX2,1,-4	NO-SET FOR NEXT ENTRY AND SAME TXL	F4417090
	01245	2	00001	4	01242	DDTIX	TIX	DDCAS,4,1		F4417100
	01246	0	02000	0	01214		TRA	NXTDO	YES-LOOK AT NEXT TXL AND NEXT ENTRY	F4417110
D	01247	-3	00000	1	01310	DTGBX2	TXL	CLTRA=,1	TEST FOR END	F4417120
	01250	0	50000	1	04216		CLA	DOTAG,1	DOES THIS ENTRY HAVE A VARIABLE NO.	F4417130
	01251	-0	32000	0	00053		ANA	TAGMRK	OF TIMES IN LOOP	F4417140
	01252	-0	10000	0	01264		TNZ	VBLN2	YES,GET NO. FROM DVFQ	F4417150
	01253	0	50000	1	04220		CLA	DOTAG+2,1	NO,GET N2-N1+N3	F4417160
	01254	0	62100	0	00106		STA	ERAS2=	AND PUT IN MQ	F4417170
	01255	-0	75400	0	00000		PXD	0,0	CLEAR AC	F4417180
	01256	0	56000	0	00106		LDQ	ERAS2=	DIV N2-N1+N3 BY N3 TO GET NO. OF	F4417190
	01257	0	22100	1	04217		DVP	DOTAG+1,1	TIMES IN THIS DO	F4417200
	01260	0	76000	0	00012		DCT			F4417210
	01261	0	07400	4	00004		TSX	RDFORT,4	BAD DIVIDE	F4417220
	01262	0	20000	0	00105	MPY	MPY	ERAS1=		F4417230
	01263	0	02000	0	01235		TRA	STQDTG		F4417240
	01264	0	50000	0	00101	VBLN2	CLA	LMPY	SET EXIT ADDRESS	F4417250
	01265	0	02000	0	01267		TRA	VRBLN+1		F4417260
	01266	0	50000	0	00102	VRBLN	CLA	LSTQ	SET EXIT ADDRESS	F4417270
	01267	0	62100	0	01304		STA	EXIT		F4417280
	01270	0	50000	1	04216		CLA	DOTAG,1	GET FORMULA NUMBER OF DO	F4417290
	01271	0	77100	0	00022		ARS	18		F4417300
	01272	-0	76000	0	00003		SSM			F4417310
	01273	-0	53400	4	00111		LXD	DVFQB=,4		F4417320
D	01274	3	00000	4	01300	DVFTST	TXH	LDQ5,4	TEST FOR END OF DVFQ	F4417330
	01275	0	34000	4	06023		CAS	DVFQ.=,4	COMPARE TO FORMULA NO. IN DVFQ	F4417340
	01276	1	00002	4	01274		TXI	DVFTST,4,2	DVFQ TOO SMALL, TRY NEXT	F4417350
	01277	1	00002	4	01302		TXI	ENTER,4,2	EQUAL--SET INDEX FOR NEXT SEARCH	F4417360
	01300	0	56000	0	00034	LDQ5	LDQ	L5...=	FREQ NOT IN DVFQ, TAKE 5 AS FREQ	F4417370
	01301	0	02000	0	01303		TRA	ENTER+1		F4417380
	01302	0	56000	4	06024	ENTER	LDQ	DVFQ.=+1,4		F4417390
	01303	-0	63400	4	00111		SXD	DVFQB=,4		F4417400
A	01304	0	02000	0	00000	EXIT	TRA		RETURN TO MAIN PART OF THIS ROUTINE	F4417410
	01305	-0	53400	4	00220		LXD	LD4...=,4	READ DOTAG	F4417420
	01306	0	76200	0	00222	RDSP	RDS	TBLTAP	FIND BEGINNING OF DOTAG	F4417430
	01307	2	00001	4	01306		TIX	RDSP,4,1		F4417440
										F4417450
									THIS ROUTINE CLEARS THE TRANSFER TABLE AND PRESETS ALL	F4417460
									COUNTERS TO ZERO	F4417470
	01310	0	56000	0	00031	CLTRA=	LDQ	LA1		F4417480
	01311	-0	75400	0	00000		PXD	0,0		F4417490
	01312	0	60100	0	01113		STO	NLIST-1	STORE ENDMARK FOR N-LIST	F4417500
	01313	0	53400	1	00045		LXA	LZTR4=,1		F4417510
	01314	0	60100	1	06025		STO	TRAM+1,1		F4417520
	01315	-0	60000	1	06024		STQ	TRAM,1		F4417530
	01316	2	00002	1	01314	SELF26	TIX	SELF26-2,1,2		F4417540
	01317	-0	53400	1	07775		LXD	DOBOX=,1		F4417550

01320	0	50000	0	00054	CLA	OPMSK=		F4417560
01321	0	60100	1	06477	STO	DOLIST-1,1	STORE ENDMARK FOR DOLIST	F4417570
01322	0	76200	0	00221	RDS	SYSTAP		F4417580
01323	0	60000	0	01114	STZ	NLIST	CLEAR DUMMY SENSE LIGHTS.	F4417590
01324	0	60000	0	01115	STZ	NLIST+1		F4417600
01325	0	60000	0	01116	STZ	NLIST+2		F4417610
01326	0	60000	0	01117	STZ	NLIST+3		F4417620
01327	0	02000	0	00004	TRA	RDFORT		F4417630

SECTION 4 - PART 2 OF 6 (1ST RECORD OF 2)

FORTRAN EDITOR INFORMATION

MASTER RECORD CARD = F0640000
 ENTRY POINT = 4 (CONTROL GOES BACK TO FORTRAN LOADER -
 1 TO CS - IN ORDER TO READ IN NEXT RECORD)
 FIRST LOCATION = 33
 LAST LOCATION = 1104

00033 ORG 27

CONSTANTS AND VARIABLES

00033	0	00000	0	00000	L0M	HTR	0	F4420100
00034	0	00000	0	00006	L6M	HTR	6	F4420110
00035	0	00001	0	00000	LD1M	HTR	0,0,1	F4420120
00036	0	00003	0	00000	LD3	HTR	0,0,3	F4420130
00037	0	00007	0	00000	LD7M	HTR	0,0,7	F4420140
00040	0	00000	0	01275	SETYM	SETADD	DRUM ADDRESS FOR SET TABLE	F4420150
00041	0	00000	0	01750	TIFY	TIFADD	DRUM ADDRESS FOR TIFRD	F4420160
00042	0	00000	0	00311	LZSET1	ZSET+1		F4420170
00043	0	00000	0	00312	LZTIF2	ZTIFRD+2		F4420180
00044	0	05360	0	00000	LXTRA	0,0,XTRA		F4420190
00045	0	01274	0	00000	LZTRA	0,0,ZTRA		F4420200
00046	0	00620	0	00000	LXSET	0,0,XSET		F4420210
00047	0	00310	0	00000	LZSET	0,0,ZSET		F4420220
00050	0	76664	0	00000	LNLST	0,0,-NLIST	ADDRESS OF N	F4420230
00051	0	76660	0	00000	LDSAN	0,0,-NLIST-4	ADDRESS OF SENSE LIGHT	F4420240
00052	0	00000	0	03063	LFXDN	RDTIF-1	LAST LOCATION IN FIXDO LIST	F4420250
00053	0	02000	0	00613	LCOUT	TRA OUTB	TRANSFER TO EXIT ROUTINE	F4420260
00054	0	02000	0	03131	TRNOM	TRA NOMOR		F4420270
00055	2	00000	4	00705	CNST2M	TIX C3CLA,4,0	TO TEXT FOR END OF LOOKUP	F4420280
00056		+0020000000000			CONSTM	OCT 2000000000		F4420290
00057		+0000000077777			ADRMK	OCT 77777		F4420300
00060		+0777770000000			DECMKM	OCT 77777000000		F4420310
00061		-3000000000000			PFXMKM	OCT -3000000000000		F4420320
00062		+0000000700000			IFMSK	OCT 700000		F4420330
00063		+0007700000000			XXPSX	OCT 770000000		F4420340
00064		+0001400000000			XX14X	OCT 140000000		F4420350
00065		+0001600000000			XX16X	OCT 160000000		F4420360
00066		+0003600000000			XX360	OCT 360000000		F4420370
00067		-3700000000000			FSTLT	OCT -3700000000000		F4420380
00070		-2300000000000			FSTT	OCT -2300000000000		F4420390
00071		+1700000000000			OCTALM	OCT 1700000000000		F4420400
00072		+3777777777777			ENDMKM	OCT 3777777777777		F4420410
00073		-1000000000000			GTNCD	OCT -1000000000000		F4420420

00074	+3000000000000	CRTCD	OCT	3000000000000			F4420450
00075	+0762250000000	LPSE	OCT	7622500000000			F4420460
00076	+0347430000000	LTPL	OCT	3474300000000			F4420470
00077	+0351210000000	LTRA	OCT	3512100000000		TRA	F4420480
00100	+0016220000000		OCT	1622000000000		TXL-TRA	F4420490
00101	-0003720000000	LTROP	OCT	-3720000000000		TTR-TXL	F4420500
00102	+0351210000000		OCT	3512100000000		TRA	F4420510
00103	+0411040000000		OCT	4110400000000		PSE-TRA	F4420520
00104	-0336420000000		OCT	-3364200000000		DCT-PSE	F4420530
00105	-0240000000000		OCT	-2400000000000		RTT-DCT	F4420540
00106	+0276420000000		OCT	2764200000000		MSE-RTT	F4420550
00107	-0071000000000		OCT	-7100000000000		TZE-MSE	F4420560
00110	-0321540000000		OCT	-3215400000000		HPR-TZE	F4420570
00111	+0313160000000	LNTOP	OCT	3131600000000		TSX-HPR	F4420580
00112	+0000001000000	SBOX	OCT	1000000			F4420590
00113	-0000001000000	SPBOX	OCT	-1000000			F4420600
00114	+0000001000000	TBOX	OCT	1000000			F4420610
00115	-0000001000000	TPBOX	OCT	-1000000			F4420620
00116	0 00312 0 00000	PBOX		0,0,ZTIFRD+2			F4420630
00117	0 00000 0 00000	BBOX					F4420640
00120	0 00000 0 00000	MBOX		0			F4420650
00121	0 00000 0 00000	ACBOX		0			F4420660
00122	0 00000 0 00000	OUTBX		0			F4420670
00123	0 00000 0 00000	ENTBX		0			F4420680
00124	0 00000 0 00000	XBOX			SAVE POWER OF 2		F4420690
00125	0 00000 0 00000	ERAS1M		0			F4420700
00126	0 00000 0 00000	ERAS2M		0			F4420710
00127	0 00000 0 00000	ERAS3M					F4420720
							F4420730
							F4420740
							F4420750
							F4420760
							F4420770
00130	1 00001 2 00131	BEGBB	TXI	BEGBB+1,2,1		SET FOR NEXT BASIC BLOCK	F4420780
00131	0 50000 0 00112		CLA	SBOX			F4420790
00132	0 40000 0 00113		ADD	SPBOX			F4420800
00133	0 77100 0 00022		ARS	18		PUT SET TABLE ADDRESS INTO BB TABLE	F4420810
00134	0 40000 0 00114		ADD	TBOX			F4420820
00135	0 40000 0 00115		ADD	TPBOX			F4420830
00136	0 60100 2 02413		STO	BBTABL,2		PUT TRA TABLE ADDRESS INTO BB TABLE	F4420840
00137	-0 53400 4 00114		LXD	TBOX,4			F4420850
00140	-2 01274 4 00143		TNX	FNDAS,4,ZTRA		IS BLOCK OF TRA TABLE FULL	F4420860
00141	-0 63400 4 00114		SXD	TBOX,4		SAVE NEW INDEX FOR TRA	F4420870
00142	0 07400 4 03147		TSX	WRTRA,4		WRITE TRA BLOCK ON DRUM	F4420880
00143	-2 00454 1 00145	FNDAS	TNX	2FNDAS,1,ZINSTM		IS BLOCK OF INSTRUCTIONS ALL USED	F4420890
00144	0 07400 4 00763		TSX	RDINSM,4		YES, READ IN NEXT BLOCK	F4420900
00145	0 50000 1 03703	2FNDAS	CLA	INSTM,1		IF THERE IS NO LOCATION SYMBOL,	F4420910
00146	0 10000 0 00225		TZE	TR3S+1		THIS CANT BE A SET OR AN ENDING	F4420920
						OTHER THAN A CERTAINTY CASE	F4420930
00147	-0 53400 4 00116		LXD	PBOX,4		CHANGE, LOOK AT ASSIGN ENTRY	F4420940
00150	-2 00310 4 00155	2TNX	TNX	BADD,4,ZTIFRD		IS BLOCK OF TIFRD ALL USED	F4420950
00151	-0 63400 4 00116		SXD	PBOX,4		YES, READ IN MORE	F4420960
00152	0 07400 4 03064		TSX	RDTIF,4			F4420970
00153	-0 53400 4 00116		LXD	PBOX,4			F4420980

00154	0	50000	1	03703	CLA	INST.M,1	COMPARE FORMULA NO. TO ASSIGN	F4420990
00155	0	40000	0	00034	BADD	ADD L6M	LIST.	F4421000
00156	0	40200	4	04214	SUB	TIFRDM,4		F4421010
00157	0	10000	0	00231	TZE	ASNCS		F4421020
00160	0	50000	1	03702	2CLA	CLA INSTM-1,1	NOT AN ASSIGN	F4421030
00161	-0	32000	0	00060	ANA	DECMKM	TEST FOR A SET SENSE LIGHT	F4421040
00162	0	40200	0	00075	SUB	LPSE		F4421050
00163	-0	10000	0	00257	TNZ	TSTTR	NOT A PSE, LOOK FOR A TRANSFER	F4421060
00164	0	50000	1	03700	CLA	INST.M-3,1	LOOK AT ADDRESS OF PSE FOR SET	F4421070
00165	-0	32000	0	00063	ANA	XXPSX		F4421080
00166	0	40200	0	00064	SUB	XX14X		F4421090
00167	0	10000	0	00174	TZE	STSLT	IT IS A SET SENSE LIGHT	F4421100
00170	0	50000	1	03677	CLA	INSTM-4,1	NOT A SET SENSE LIGHT, SEE IF NEXT	F4421110
00171	0	40200	2	07772	SUB	BBLIST-1,2	INSTRUCTION STARTS A BB	F4421120
00172	0	10000	0	00320	TZE	CRTCS	YES, IS A CERTAINTY CASE	F4421130
00173	0	02000	0	00504	TRA	IF2PS	NO, IS A PSE CASE.	F4421140
00174	-0	53400	4	00112	STSLT	LXD SBOX,4	LOAD INDEX FOR SET TABLE	F4421150
00175	-2	00310	4	00201	TNX	3CLA,4,ZSET	IF SET BLOCK IS FULL, PUT ON DRUM	F4421160
00176	-0	63400	4	00112	SXD	SBOX,4	SAVE INDEX	F4421170
00177	0	07400	4	01032	TSX	WRSET,4	GO TO DRUM ROUTINE	F4421180
00200	-0	53400	4	00112	LXD	SBOX,4	RESTORE INDEX	F4421190
00201	0	50000	1	03700	3CLA	CLA INSTM-3,1	LOOK AT RELATIVE ADDRESS OF PSE	F4421200
00202	-0	32000	0	00037	ANA	LD7M	FIND NO OF SENSE LIGHT	F4421210
00203	0	10000	0	00210	TZE	SLSOF	IF ZERO TURN ALL LIGHTS OFF	F4421220
00204	0	40000	0	00051	ADD	LDSAN	NOT ZERO, ADD ADDRESS OF FIRST	F4421230
00205	0	40000	0	00031	ADD	LA1	ADD ONE FOR SENSE LIGHT ON	F4421240
00206	0	60100	4	04524	STO	SET.M,4	STORE SET ENTRY	F4421250
00207	1	00001	4	00224	TXI	TR3S,4,1	INDEX FOR NEXT SET ENTRY	F4421260
00210	-0	63400	2	00117	SLSOF	SXD BBOX,2	SAVE INDEX B	F4421270
00211	-0	53400	2	00276	LXD	LD4,2		F4421280
00212	0	50000	0	00051	CLA	LDSAN	PUT ENTRIES IN SET TABLE TO TURN	F4421290
00213	0	40000	0	00035	3ADD	ADD LD1M	OFF ALL SENSE LIGHTS	F4421300
00214	-2	00310	4	00220	TNX	4STO,4,ZSET	IS BLOCK OF SETS FULL	F4421310
00215	-0	63400	4	00112	SXD	SBOX,4	YES, SAVE INDEX C	F4421320
00216	0	07400	4	01032	TSX	WRSET,4	WRITE BLOCK ON DRUM	F4421330
00217	-0	53400	4	00112	LXD	SBOX,4	RESTORE INDEX C	F4421340
00220	0	60100	4	04524	4STO	STO SETM,4		F4421350
00221	1	00001	4	00222	TXI	3TIX,4,1	SET FOR NEXT ENTRY IN TABLE	F4421360
00222	2	00001	2	00213	3TIX	TIX 3ADD,2,1	ARE ALL SETS DONE	F4421370
00223	-0	53400	2	00117	LXD	BBOX,2	YES, RESTORE INDEX B	F4421380
00224	-0	63400	4	00112	TR3S	SXD SBOX,4	STORE SET TABLE INDEX	F4421390
00225	0	50000	1	03677	CLA	INST.M-4,1	TEST THIS FOR END OF A BASIC BLOCK	F4421400
00226	0	40200	2	07772	SUB	BBLIST-1,2	(CANT BE A TRANSFER, SKIP, ETC.)	F4421410
00227	0	10000	0	00320	TZE	CRTCS	END OF BB MUST BE A CERTAINTY CASE	F4421420
00230	1	00004	1	00143	TXFAS	TXI FNDAS,1,4	NOT END OF BB, LOOK AT NEXT INSTR.	F4421430
00231	-0	63400	4	00116	ASNCS	SXD PBOX,4	SAVE INDEX FOR TIFRD	F4421440
00232	0	50000	1	03675	CLA	INST.M-6,1	PUT ADDRESS (=N) OF STA INTO AC	F4421450
00233	0	07400	4	00632	TSX	SRCHN,4	SEARCH N-LIST FOR N	F4421460
00234	0	40000	0	00050	ADD	LNLST	PUT INDEX FOR N IN SET TABLE	F4421470
00235	-0	53400	4	00112	LXD	SBOX,4	PUT SET TABLE ADDRESS INTO INDEX	F4421480
00236	-2	00310	4	00242	TNX	4STD,4,ZSET	IS SET BLOCK FULL	F4421490
00237	-0	63400	4	00112	SXD	SBOX,4	YES,SAVE INDEX	F4421500
00240	0	07400	4	01032	TSX	WRSET,4	PUT BLOCK ON DRUM	F4421510
00241	-0	53400	4	00112	LXD	SBOX,4	RESTORE INDEX	F4421520

00242	0	60100	4	04524	4STD	STO	SETM,4	STORE ADDRESS OF N BEING SET	F4421530
00243	-0	63400	4	00112		SXD	SBOX,4	SAVE INDEX	F4421540
00244	-0	53400	4	00116		LXD	PBOX,4	SET FOR TIFRD	F4421550
00245	0	50000	4	04213		CLA	TIFRDM-1,4	GET VALUE TO ASSIGN TO N FROM TIFRDF	F4421560
00246	0	76700	0	00022		ALS	18		F4421570
00247	1	00002	4	00250	LD2	TXI	LD2+1,4,2	SET INDEX FOR NEXT ENTRY IN TIFRD	F4421580
00250	-0	63400	4	00116		SXD	PBOX,4	SAVE TIFRD INDEX	F4421590
00251	0	07400	4	00667		TSX	FNDBB,4	CHANGE VALUE FOR N TO BASIC BLOCK	F4421600
00252	-0	53400	4	00112		LXD	SBOX,4	NUMBER, PUT SET ADDRESS IN INDEX	F4421610
00253	0	77100	0	00022		ARS	18	AND PUT VALUE N IS TO BE GIVEN	F4421620
00254	0	62100	4	04524		STA	SET.M,4	INTO TABLE ENTRY	F4421630
00255	1	00001	4	00256		TXI	4TXII,4,1	SET INDEX FOR NEXT ENTRY IN TABLE	F4421640
00256	1	00004	1	00224	4TXII	TXI	TR3S,1,4	SINCE THIS INSTRUCTION IS A CLA AND	F4421650
								IS FOLLOWED BY A STA, IT CANNOT	F4421660
								BE THE END OF A BASIC BLOCK.	F4421670
								ALSO THE STA CANNOT BE AN	F4421680
								ASSIGN, PSE, TRANSFER, OR SKIP.	F4421690
								IT CAN ONLY BE A CERTAINTY CASE	F4421700
								OR INNOCUOUS.	F4421710
								IS THIS LAST INSTRUCTION IN A BB	F4421720
									F4421730
00257	0	50000	1	03677	TSTTR	CLA	INSTM-4,1	YES,LOOK FOR TYPE OF ENDING	F4421740
00260	0	40200	2	07772		SUB	BBLIST-1,2	NO, CHECK FOR ENDING OF GROUP OF	F4421750
00261	0	10000	0	00312		TZE	ENDBB	INSTRUCTIONS	F4421760
00262	-0	53400	4	00612		LXD	LD8,4	LOOK AT OP CODE	F4421770
00263	-0	50000	1	03702		CAL	INST.M-1,1	COMPARE TO OP CODES OF POSSIBLE	F4421780
00264	-0	32000	0	00060		ANA	DECMKM	ENDINGS--TRANSFER WHEN FOUND	F4421790
00265	0	40200	4	00112	SUBP	SUB	LNTOP+1,4	TRY NEXT POSSIBILITY	F4421800
00266	0	10000	4	00307		TZE	TRTIN+1,4	NOT FOUND--LOOK FOR A CONDITIONAL	F4421810
00267	2	00001	4	00265		TIX	SUBP,4,1	TRANSFER	F4421820
00270	-0	50000	1	03702		CAL	INST.M-1,1		F4421830
00271	-0	32000	0	00067	6ANA	ANA	FSTLT		F4421840
00272	0	60200	0	00125		SLW	ERAS1M		F4421850
00273	0	50000	0	00125		CLA	ERAS1M		F4421860
00274	0	40200	0	00070		SUB	FSTT		F4421870
00275	0	10000	0	00426		TZE	CNDTR	IS A CONDITIONAL TRANSFER	F4421880
00276	1	00004	1	00143	LD4	TXI	FNDAS,1,4	NOT AN END OF BB, LOOK AT NEXT INST	F4421890
00277	0	02000	0	00451		TRA	GOTOVM	TRA IS THE OPERATION CODE	F4421900
00300	0	02000	0	00504		TRA	IF2PS	PSE	F4421910
00301	0	02000	0	00536		TRA	IF2CS	DCT	F4421920
00302	0	02000	0	00536		TRA	IF2CS	RTT	F4421930
00303	0	02000	0	00530		TRA	MSECSM	MSE	F4421940
00304	0	02000	0	00552		TRA	IF3CSM	TZE	F4421950
00305	0	02000	0	00601		TRA	HPRCS	HPR	F4421960
00306	1	00004	1	00143	TRTIN	TXI	FNDAS,1,4	TSX IS OP CODE	F4421970
00307	0	02000	0	00324		TRA	TRACSM	TRA IS THE OPERATION CODE	F4421980
00310	0	02000	0	00377		TRA	DOCSM	TXL	F4421990
00311	0	02000	0	00327	TRTTR	TRA	TRACSM+3	TTR	F4422000
00312	-0	53400	4	00036	ENDBB	LXD	LD3,4	SET INDEX	F4422010
00313	0	50000	1	03702		CLA	INST.M-1,1	THIS INST ENDS A BASIC BLOCK--LOOK	F4422020
00314	-0	32000	0	00060		ANA	DECMKM	AT OP CODE FOR TYPE OF ENDING	F4422030
00315	0	40200	4	00102	6SUB	SUB	LTROP+1,4	COMPARE TO POSSIBLE OP CODE	F4422040
00316	0	10000	4	00312		TZE	TRTTR+1,4	TRANSFER IF FOUND	F4422050
00317	2	00001	4	00315		TIX	6SUB,4,1	TRY NEXT POSSIBILITY	F4422060
00320	0	07400	4	00663	CRTCS	TSX	ENTB2,4	NOT A CONDITIONAL TRANSFER--IT IS	F4422070
								A CERTAINTY CASE DUE TO AN ENTRY	F4422080

00321	-0	50000	0	00074	6CLA	CAL CRTCD	PUT CERTAINTY CODE IN BB TABLE	F4422070
00322	0	63000	2	02413		STP BBTABL,2		F4422080
00323	1	00004	1	00130		TXI BEGBB,1,4	LOOK AT NEXT INSTR--BEG OF A BB.	F4422090
00324	-0	50000	1	03701	TRACSM	CAL INSTM-2,1	OP CODE IS TRA--SEE IF ADDRESS IS	F4422100
00325	-0	32000	0	00061		ANA PFXMKM	IN PROGRAM(UNCONDITIONAL TRA) ORF	F4422110
00326	-0	10000	0	00334		TNZ GOTONM	IN N LIST (GO TO N)	F4422120
00327	0	50000	1	03701		CLA INST.M-2,1	GET INSTR OF ADDRESS	F4422130
00330	0	07400	4	00653		TSX ENTRB,4	ENTER IN TRA TABLE	F4422140
00331	-0	50000	0	00074		CAL CRTCD	STORE CERTAINTY CODE IN BB TABLE	F4422150
00332	0	63000	2	02413		STP BBTABL,2		F4422160
00333	1	00004	1	00130		TXI BEGBB,1,4	LOOK AT NEXT INST.--NEW B.B.	F4422170
00334	-0	50000	0	00073	GOTONM	CAL GTNCD	IS A GO TO N	F4422180
00335	0	63000	2	02413		STP BBTABL,2	STORE GO TO N CODE IN BB TABLE	F4422190
00336	0	50000	1	03701		CLA INST.M-2,1	PUT N INTO AC	F4422200
00337	0	07400	4	00632		TSX SRCHN,4	FIND LOCATION OF N IN N-LIST	F4422210
00340	-0	53400	4	00114		LXD TBOX,4		F4422220
00341	0	62200	4	06024		STD TRA..M,4	PUT N-LIST ADDRESS IN TRA TABLE	F4422230
00342	-0	53400	4	00116		LXD PBOX,4	PUT TIFRD ADDRESS INTO INDEX	F4422240
00343	-2	00310	4	00347	7TNX	TNX BCLA,4,ZTIFRD	IS TIFRD BLOCK USED	F4422250
00344	-0	63400	4	00116		SXD PBOX,4	YES, SAVE INDEX	F4422260
00345	0	07400	4	03064		TSX RDTIF,4	READ IN NEXT BLOCK OF TIFRD	F4422270
00346	-0	53400	4	00116		LXD PBOX,4	RESTORE INDEX	F4422280
00347	0	50000	1	03703	BCLA	CLA INSTM,1	COMPARE FORMULA NUMBER OF INSTR. TOF	F4422290
00350	-0	32000	0	00060		ANA DECMKM	THAT OF NEXT ENTRY IN TIFRD	F4422300
00351	0	40000	0	00031		ADD LAL		F4422310
00352	0	40200	4	04214		SUB TIFRDM,4		F4422320
00353	0	10000	0	00355	8ATZE	TZE 8TXI	ENTRY FOUND	F4422330
00354	0	07400	4	00004		TSX RDFORT,4	NO ENTRY FOUND IN TIFRD FOR GO TO	NF4422340
00355	1	00002	4	00356	8TXI	TXI 8TXI+1,4,2	SET FOR N-WORDS IN TIFRD	F4422350
00356	-2	00310	4	00362	8TNX	TNX 8CLA,4,ZTIFRD	SEE IF TIFRD BLOCK IS ALL USED	F4422360
00357	-0	63400	4	00116		SXD PBOX,4	YES SAVE INDEX	F4422370
00360	0	07400	4	03064		TSX RDTIF,4	READ IN NEXT BLOCK	F4422380
00361	-0	53400	4	00116		LXD PBOX,4	RESTORE INDEX	F4422390
00362	0	50000	4	04214	8CLA	CLA TIFRDM,4	GET NEXT VALUE ON N FROM TIFRD	F4422400
00363	0	12000	0	00375		TPL 8ATRB	PLUS INDICATES NO MORE VALUES FOR	NF4422410
00364	0	76000	0	00003		SSP	ELIMINATE MINUS SIGN	F4422420
00365	-0	63400	4	00116		SXD PBOX,4	SAVE TIFRD INDEX	F4422430
00366	-0	53400	4	00114		LXD TBOX,4	GET TRA TABLE INDEX	F4422440
00367	-2	01274	4	00372		TNX 8ATSX,4,ZTRA	IS BLOCK OF TRA TABLE FULL	F4422450
00370	-0	63400	4	00114		SXD TBOX,4	YES SAVE INDEX	F4422460
00371	0	07400	4	03147		TSX WRTRA,4	WRITE BLOCK ON DRUM	F4422470
00372	0	07400	4	00653	8ATSX	TSX ENTRB,4	ENTER TRANSFER IN TRA TABLE	F4422480
00373	-0	53400	4	00116		LXD PBOX,4	RESTORE INDEX FOR TIFRD	F4422490
00374	1	00001	4	00356		TXI 8TXI+1,4,1	SET FOR NEXT WORD	F4422500
00375	-0	63400	4	00116	8ATRB	SXD PBOX,4	SAVE TIFRD INDEX	F4422510
00376	1	00004	1	00130		TXI BEGBB,1,4	SET FOR NEXT INSTR AND NEXT BB.	F4422520
00377	0	50000	1	03701	DOCSM	CLA INSTM-2,1	THIS IS A DO CASE	F4422530
00400	0	07400	4	00653		TSX ENTRB,4	ENTER ADDRESS OF TRA BACK	F4422540
00401	0	07400	4	00663		TSX ENTB2,4	ENTER TRA TO NEXT INSTR	F4422550
00402	-0	63400	2	00117		SXD BBOX,2	SAVE INDEX	F4422560
00403	-0	53400	2	00035		LXD LD1M,2	LOOK AT DOLIST ENTRY FOR	F4422570
00404	-0	53400	4	00114		LXD TBOX,4	THIS DO	F4422580
00405	0	50000	2	06500	9CLAT	CLA DOLIST,2	COMPARE LOCATION IN DO LIST TO	F4422590
00406	-0	32000	0	00060		ANA DECMKM	THIS BASIC BLOCK	F4422600

00407	0	40200	0	00117		SUB	BBOX		F4422610
00410	0	10000	0	00412		TZE	CLAR		F4422620
00411	1	00002	2	00405		TXI	9CLAT,2,2	NOT FOUND--TRY NEXT	F4422630
00412	0	50000	2	06477	CLAR	CLA	DOLIST-1,2	LOOK AT ADDRESS WORD IN DO LIST	F4422640
00413	-0	32000	0	00062		ANA	IFMSK	SEE IF DO HAS AN IF	F4422650
00414	0	10000	0	00424		TZE	DONOIF	NO IF--TRANSFER	F4422660
00415	0	50000	2	06500		CLA	DOLIST,2	DO WITH IF-PUT LOOP COUNT IN	F4422670
00416	0	76700	0	00022		ALS	18	TRANSFER TABLE	F4422680
00417	0	62200	4	06030	DWFCD	STD	TRAM+4,4		F4422690
00420	-0	50000	0	00417		CAL	DWFCD	GET CODE FOR DO WITH IF	F4422700
00421	-0	53400	2	00117	DOLXD	LXD	BBOX,2	RESTORE INDEX FOR BB TABLE	F4422710
00422	0	63000	2	02413		STP	BBTABL,2	STORE CODE FOR ENDING IN BB TABLE	F4422720
00423	1	00004	1	00130		TXI	BEGBB,1,4	DO NEXT INSTR.--NEXT BASIC BLOCK	F4422730
00424	-0	50000	0	00424	DONOIF	CAL	DONOIF	GET CODE FOR DO WITHOUT IF	F4422740
00425	0	02000	0	00421		TRA	DOLXD	STORE CODE IN B B TABLE	F4422750
00426	0	50000	1	03701	CNDTR	CLA	INSTM-2,1	THE OP CODE IS A CONDITIONAL TRA	F4422760
00427	0	40200	0	00071		SUB	OCTALM	SEE IF THIS IS A REAL TRANSFER	F4422770
00430	0	10000	0	00230		TZE	TXFAS	NO-- IT IS NOT ANYTHING	F4422780
00431	0	50000	1	03703		CLA	INST.M,1		F4422790
00432	0	40200	1	03701		SUB	INST.M-2,1		F4422800
00433	0	10000	0	00230		TZE	TXFAS		F4422810
00434	0	50000	1	03701		CLA	INST.M-2,1	PUT ADDRESS OF TRA IN TRA TABLE	F4422820
00435	0	07400	4	00653		TSX	ENTRB,4		F4422830
00436	0	50000	1	03675		CLA	INST.M-6,1	PUT NEXT TRA ADDRESS IN TRA TABLE	F4422840
00437	0	07400	4	00653		TSX	ENTRB,4		F4422850
00440	0	50000	1	03703		CLA	INST.M,1		F4422860
00441	-0	53400	4	00114	11LXD	LXD	TBOX,4		F4422870
00442	0	62200	4	06030		STD	TRA..M+4,4		F4422880
00443	-0	50000	0	00474	11CAL	CAL	PBYCDM	PUT PROBABILITY CODE IN BB TABLE	F4422690
00444	0	63000	2	02413		STP	BBTABL,2		F4422900
00445	0	50000	0	00247		CLA	LD2	PUT NO. OF CASES (=2) IN TRA TABLE	F4422910
00446	0	62200	4	06026		STD	TRA..M+2,4		F4422920
00447	-0	63400	4	00114		SXD	TBOX,4	SAVE TRA INDEX	F4422930
00450	1	00010	1	00130		TXI	BEGBB,1,8	DO NEXT INSTRUCTION	F4422940
00451	0	50000	1	03700	GOTOVM	CLA	INSTM-3,1	THIS IS A GO TO VECTOR	F4422950
00452	-0	73400	4	00000		PDX	0,4		F4422960
00453	2	00001	4	00455		TIX	OK,4,1	CHECK NO. OF BRANCHES	F4422970
00454	0	07400	4	00004		TSX	RDFORT,4	NONE, PART OF PROGRAM NOT TRANSFERED TO	F4422980
00455	3	00001	4	00457	OK	TXH	ONEVCT+1,4,1	TEST FOR ONLY ONE BRANCH	F4423000
00456	1	00004	1	00327	ONEVCT	TXI	TRACSM+3,1,4	ONLY ONE BRANCH--A CERTAINTY CASE	F4423010
00457	-0	75400	4	00000		PXD	0,4	MORE THAN ONE--STANDARD CASE	F4423020
00460	-0	53400	4	00114		LXD	TBOX,4	SET INDEX FOR TRA TABLE ADDRESS	F4423030
00461	0	62200	4	06022		STD	TRA..M-2,4	PUT NO. INTO TRA TABLE	F4423040
00462	0	62200	0	00120		STD	MBOX	SAVE NO. TO TEST IF VECTOR IS DONE	F4423050
00463	-0	50000	0	00474		CAL	PBYCDM		F4423060
00464	0	63000	2	02413		STP	BBTABL,2	PUT PROBABILITY CODE IN BB TABLE	F4423070
00465	0	50000	1	03703		CLA	INST.M,1		F4423080
00466	0	62200	4	06024		STD	TRA..M,4	PUT FORMULA NUMBER INTO TRA TABLE	F4423090
00467	-2	00454	1	00471	13TIX	TNX	13CLA,1,ZINSTM	IS BLOCK OF INSTRUCTIONS ALL USED	F4423100
00470	0	07400	4	00763		TSX	RDINSM,4	READ IN NEXT BLOCK	F4423110
00471	0	50000	1	03675	13CLA	CLA	INSTM-6,1	ENTER ADDRESS OF ONE TRANSFER	F4423120
00472	0	07400	4	00653		TSX	ENTRB,4	INTO TRA TABLE.	F4423130
00473	-0	53400	4	00120		LXD	MBOX,4	HAVE ALL BRANCHES OF VECTOR BEEN	F4423140

00474	2	00001	4	00476	PBYCDM	TIX	13SXD,4,1	ENTERED	F4423150
00475	1	00010	1	00130	13ON	TXI	BEGBB,1,8	YES, GO TO NEXT BB--NEXT INST.	F4423160
00476	-0	63400	4	00120	13SXD	SXD	MBOX,4	NO,SAVE COUNT AND ENTER NEXT	F4423170
00477	-0	53400	4	00114		LXD	TBOX,4	PUT TRA TABLE ADDRESS IN INDEX	F4423180
00500	-2	01274	4	00503	STPCD	TNX	13TXIM,4,ZTRA	HAS THIS BLOCK OF TRA BEEN FILLED	F4423190
00501	-0	63400	4	00114		SXD	TBOX,4	YES,SAVE TRA INDEX	F4423200
00502	0	07400	4	03147		TSX	WRTRA,4	WRITE BLOCK OF TRA ON DRUM	F4423210
00503	1	00004	1	00467	13TXIM	TXI	13TIX,1,4	SET INST. INDEX AND DO NEXT BRANCH	F4423220
00504	0	50000	1	03700	IF2PS	CLA	INSTM-3,1	THIS IS A PSE, LOOK AT ADDRESS TO	F4423230
00505	-0	32000	0	00063		ANA	XXPSX	SEE IF IT IS 164-166	F4423240
00506	0	40200	0	00065		SUB	XX16X		F4423250
00507	0	10000	0	00514		TZE	PSTCS	YES, IT IS A TEST	F4423260
00510	0	50000	1	03700		CLA	INST.M-3,1		F4423270
00511	-0	32000	0	00060		ANA	DECMKM	NO, SEE IF ADDR IS 360	F4423280
00512	0	40200	0	00066		SUB	XX360		F4423290
00513	-0	10000	0	00230		TNZ	TXFAS	NO,THIS IS NOT A BB END	F4423300
00514	-0	50000	0	00474	PSTCS	CAL	PBYCDM	THIS IS A PSE TEST INSTRUCTION	F4423310
00515	0	63000	2	02413		STP	BBTABL,2	PUT PROBABILITY CODE IN BB TABLE	F4423320
00516	-0	53400	4	00114		LXD	TBOX,4	SET INDEX FOR TRA TABLE ADDRESS	F4423330
00517	0	50000	1	03703		CLA	INST.M,1	PUT FORMULA NUMBER IN TRA TABLE	F4423340
00520	0	62200	4	06024		STD	TRA..M,4		F4423350
00521	0	50000	0	00247		CLA	LD2	PUT NO. OF CASES(=2) IN TRA TABLE	F4423360
00522	0	62200	4	06022		STD	TRA..M-2,4		F4423370
00523	0	50000	1	03671	SNSCS	CLA	INSTM-10,1	PUT ADDRESS FOR ON INTO TRA TABLE	F4423380
00524	0	07400	4	00653		TSX	ENTRB,4		F4423390
00525	0	50000	1	03675		CLA	INST.M-6,1	PUT OFF ADDRESS INTO TRA TABLE	F4423400
00526	0	07400	4	00653		TSX	ENTRB,4		F4423410
00527	1	00014	1	00130	MSECD	TXI	BEGBB,1,12	DO NEXT BB.	F4423420
00530	-0	50000	0	00527	MSECSM	CAL	MSECD	THIS IS A MSE TEST	F4423430
00531	0	63000	2	02413		STP	BBTABL,2	STORE MSE CODE IN BBTABL	F4423440
00532	0	50000	1	03700		CLA	INST.M-3,1	LOOK AT ADDRESS OF MSE	F4423450
00533	-0	53400	4	00114		LXD	TBOX,4	SET INDEX FOR TRA TABLE	F4423460
00534	0	62200	4	06024		STD	TRA..M,4	PUT NO. OF SENSE LIGHT IN TRA TABLE	F4423470
00535	0	02000	0	00523		TRA	SNSCS	PUT ADDRESSES IN TRA TABLE	F4423480
00536	-0	50000	0	00474	IF2CS	CAL	PBYCDM	THIS IS A TWO-WAY TEST INSTRUCTION	F4423490
00537	0	63000	2	02413		STP	BBTABL,2	PUT PROBABILITY CODE IN BB TABLE	F4423500
00540	-0	53400	4	00114		LXD	TBOX,4	SET INDEX FOR TRA TABLE	F4423510
00541	0	50000	1	03703		CLA	INST.M,1	PUT FORMULA NUMBER IN TRA TABLE	F4423520
00542	0	62200	4	06024		STD	TRA..M,4		F4423530
00543	0	50000	0	00247		CLA	LD2	PUT NO OF CASES (=2) IN TRA TABLE	F4423540
00544	0	62200	4	06022		STD	TRA..M-2,4		F4423550
00545	0	50000	1	03675		CLA	INST.M-6,1	PUT ADDRESSES IN TRA TABLE	F4423560
00546	0	07400	4	00653		TSX	ENTRB,4	=ON- ADDRESS	F4423570
00547	0	50000	1	03671		CLA	INST.M-10,1	-OFF - ADDRESS	F4423580
00550	0	07400	4	00653		TSX	ENTRB,4		F4423590
00551	1	00014	1	00130	LD12M	TXI	BEGBB,1,12	DO NEXT BB	F4423600
00552	0	50000	1	03676	IF3CSM	CLA	INST.M-5,1	THIS IS A TZE, NOT END OF A BB.	F4423610
00553	-0	32000	0	00060		ANA	DECMKM	CHECK TO SEE IF IT IS FOLLOWED BY	F4423620
00554	0	40200	0	00076		SUB	LTPL	TPL AND A TRA, IF NOT THERE HAS	F4423630
00555	0	10000	0	00557		TZE	16CLA	BEEN AN ERROR	F4423640
00556	0	07400	4	00004	IFTSX	TSX	RDFORT,4	ERROR	F4423650
00557	0	50000	1	03672	16CLA	CLA	INSTM-9,1	CHECK FOR TRA	F4423660
00560	-0	32000	0	00060		ANA	DECMKM		F4423670
00561	0	40200	0	00077		SUB	LTRA		F4423680

00562	-0	10000	0	00556		TNZ	IFTSX		ERROR	F4423690
00563	-0	50000	0	00474	16CAL	CAL	PBYCDM		NO ERROR	F4423700
00564	0	63000	2	02413		STP	BBTABL,2		PUT PROBABILITY CODE IN BB TABLE	F4423710
00565	-0	53400	4	00114		LXD	TBOX,4		SET INDEX FOR TRA TABLE	F4423720
00566	0	50000	1	03703		CLA	INST.M,1		PUT FORMULA NO. IN TRA TABLE	F4423730
00567	0	62200	4	06024		STD	TRA..M,4			F4423740
00570	0	50000	0	00036		CLA	LD3		PUT N0. OF CASES (=3) IN TRA TABLE	F4423750
00571	0	62200	4	06022		STD	TRA..M-2,4			F4423760
00572	0	50000	1	03675		CLA	INST.M-6,1		PUT ADDRESSES OF BRANCHES INTO	F4423770
00573	0	07400	4	00653		TSX	ENTRB,4		TRA TABLE	F4423780
00574	0	50000	1	03701		CLA	INST.M-2,1			F4423790
00575	0	07400	4	00653		TSX	ENTRB,4			F4423800
00576	0	50000	1	03671		CLA	INST.M-10,1			F4423810
00577	0	07400	4	00653		TSX	ENTRB,4			F4423820
00600	1	00014	1	00130		TXI	BEGBB,1,12		DO NEXT BB.	F4423830
00601	-0	50000	1	03676	HPRCS	CAL	INSTM-5,1		TEST FOR PAUSE(INNOCUOUS) OR A STOP	F4423840
00602	-0	32000	0	00060		ANA	DECMKM			F4423850
00603	0	40200	0	00077		SUB	LTRA		IS HPR FOLLOWED BY TRA	F4423860
00604	-0	10000	0	00276		TNZ	LD4		NO-IGNORE-- IS A PAUSE	F4423870
00605	0	50000	1	03675		CLA	INST.M-6,1		DOES TRA GO BACK TO HPR	F4423880
00606	0	40200	1	03703		SUB	INST.M,1			F4423890
00607	-0	10000	0	00276		TNZ	LD4		NO-- HPR IS A PAUSE--IGNORE	F4423900
00610	-0	50000	0	00500		CAL	STPCD		THIS IS A STOP--PUT STOP CODE IN	F4423910
00611	0	63000	2	02413		STP	BBTABL,2		BB TABLE AND NO ENTRY IN TRATBL	F4423920
00612	1	00010	1	00130	LD8	TXI	BEGBB,1,8		DO NEXT BASIC BLOCK	F4423930
00613	-0	63400	2	00117	OUTB	SXD	BBOX,2		SAVE LENGTH OF BB TABLE	F4423940
00614	0	50200	0	00760		CLS	C5STD		GET ADDRESS IN FXDO LIST	F44.3950
00615	0	40200	0	00031		SUB	LA1			F4423960
00616	0	62100	0	00617		STA	STOREB			F4423970
00617	0	60100	0	00000	STOREB	STO	XXXXXX			F4423980
00620	0	50000	2	02413		CLA	BBTABL,2		LOOK AT LAST ENTRY IN BB TABLE	F4423990
00621	0	62200	0	07777		STD	TTBOX=		PUT LENGTH OF TRA TABLE IN TTBOX	F4424000
00622	0	76700	0	00022		ALS	18			F4424010
00623	0	62200	0	07776		STD	SSBOX=		PUT LENGTH OF SET TABLE IN SS BOX	F4424020
00624	-0	75400	0	00000		PXD	0,0			F4424030
00625	0	60100	2	02412		STO	BBTABL-1,2			F4424040
00626	0	07400	4	03147		TSX	WRTRA,4		WRITE LAST BLOCK OF TRAS ON DRUM	F4424050
00627	0	07400	4	01032		TSX	WRSET,4		WRITE LAST BLOCK OF SETS ON DRUM	F4424060
00630	0	76200	0	00221		RDS	SYSTAP			F4424070
00631	0	02000	0	00004		TRA	RDFORT		DO NEXT BLOCK OF PROGRAM	F4424080
										F4424090
									THIS ROUTINE SEARCHES THE N-LIST FOR THE N IN THE AC, ENTERS	F4424100
									IT IF IT IS NOT ALREADY ENTERED AND RETURNS TO THE LOCATION	F4424110
									FOLLOWING THE TSX WITH THE INDEX FOR N IN THE DECREMENT OF	F4424120
									THE ACCUMULATOR	F4424130
00632	-0	63400	4	00125	SRCHN	SXD	ERAS1M,4		SAVE INDEX TO RETURN	F4424140
00633	-0	53400	4	00035		LXD	LD1M,4		SET INDEX	F4424150
00634	0	60100	0	00121		STO	ACBOX		SAVE AC	F4424160
00635	0	50000	4	01114	CLANN	CLA	NLIST,4		LOOK AT ENTRY IN N-LIST	F4424170
00636	0	10000	0	00642		TZE	ENTRN		END OF LIST REACHED, N NOT FOUND	F4424180
00637	0	40200	0	00121		SUB	ACBOX		COMPARE TO N TO BE FOUND	F4424190
00640	0	10000	0	00650		TZE	NFOUN		N HAS BEEN FOUND	F4424200
00641	1	00001	4	00635		TXI	CLANN,4,1		NOT FOUND YET, TRY NEXT ENTRY	F4424210
00642	-2	00031	4	00644	ENTRN	TNX	C1CLA,4,ZNLIST		TEST FOR OVERFLOW OF N-LIST	F4424220

	00643	0	07400	4	00004		TSX	RDFORT,4		N-LIST HAS OVERFLOWED	F4424230
	00644	0	50000	0	00121	C1CLA	CLA	ACBOX		STORE N IN N-LIST	F4424240
	00645	0	60100	4	01114		STO	NLIST,4			F4424250
T	00646	-0	75400	0	00000		PXD			STORE ZERO IN LOCATION AFTER LAST	F4424260
	00647	0	60100	4	01113		STO	NLIST-1,4		ENTRY IN N-LIST	F4424270
	00650	-0	75400	4	00000	NFOUN	PXD	0,4		PUT INDEX FOR N INTO AC	F4424280
	00651	-0	53400	4	00125		LXD	ERAS1M,4		RESTORE INDEX FOR TRA BACK	F4424290
	00652	0	02000	4	00001		TRA	1,4		TRANSFER BACK	F4424300
											F4424310
										THIS ROUTINE TAKES THE COMPILED INSTRUCTION NUMBER IN THE	F4424320
										ACCUMULATOR, TRANSLATES IT TO A BASIC BLOCK NUMBER, ENTERS	F4424330
										THE BASIC BLOCK NUMBER IN THE TRANSFER TABLE, TESTS FOR A	F4424340
										TRANSFER TO THE BEGINNING OF A 00 WITH AN IF. IT RETURNS TO	F4424350
										THE LOCATION FOLLOWING THE TSX TO IT.	F4424360
	00653	-0	63400	4	00123	ENTRB	SXD	ENTBX,4		SAVE INDEX	F4424370
	00654	0	07400	4	00667		TSX	FNDBB,4		CHANGE INSTRUCTION NUMBER TO BB NO.	F4424380
	00655	-0	53400	4	00114		LXD	TBOX,4			F4424390
	00656	0	62200	4	06023		STD	TRA..M-1,4		ENTER IN TRA TABLE	F4424400
	00657	1	00002	4	00660		TXI	C2SXD,4,2		SET FOR NEXT ENTRY IN TRA TABLE	F4424410
	00660	-0	63400	4	00114	C2SXD	SXD	TBOX,4			F4424420
	00661	-0	53400	4	00123		LXD	ENTBX,4		GO TO TSTAD WITH ADDRESS SET TO GO	F4424430
	00662	0	02000	0	00713		TRA	TSTAD		BACK TO MAIN ROUTINE	F4424440
											F4424450
										THIS ROUTINE ENTERS IN THE TRANSFER TABLE AND TESTS A	F4424460
										TRANSFER TO THE INSTRUCTION (AND BASIC BLOCK) IMMEDIATELY	F4424470
										AFTER THE LOCATION OF THE TRANSFER	F4424480
	00663	-0	63400	4	00123	ENTB2	SXD	ENTBX,4		SAVE INDEX	F4424490
	00664	-0	75400	2	00000		PXD	0,2		PUT THIS BASIC BLOCK NO. INTO AC	F4424500
	00665	0	40000	0	00035		ADD	LD1M		ADD ONE	F4424510
	00666	0	02000	0	00655		TRA	ENTRB+2		ENTER AND TEST THIS ADDRESS	F4424520
											F4424530
										THIS ROUTINE CHANGES COMPILED INSTRUCTION NOS. (IN THE AC)	F4424540
										TO BASIC BLOCK NUMBERS IN DECREMENT OF THE ACCUMULATOR) BY	F4424550
										OPTIMAL TABLE LOOKUP	F4424560
	00667	0	60100	0	00121	FNDBB	STO	ACBOX		SAVE NUMBER BEING LOOKED FOR	F4424570
	00670	-0	63400	4	00122		SXD	OUTBX,4		SAVE EXIT INDEX	F4424580
	00671	0	56000	0	00055		LDQ	CNST2M		SET UP TEST FOR END	F4424590
	00672	-0	53400	4	00033		LXD	L0M,4		START LOOK UP	F4424600
	00673	0	50000	0	00124		CLA	XBOX			F4424610
	00674	0	77100	0	00001	C3ARS	ARS	1			F4424620
	00675	0	62200	0	00702		STD	C3TXI			F4424630
	00676	0	62200	0	00704		STD	C3TIX			F4424640
	00677	0	50000	0	00121		CLA	ACBOX			F4424650
D	00700	3	00000	4	00704	PLACEM	TXH	C3TIX,4			F4424660
	00701	0	34000	4	07773		CAS	BBLIST,4			F4424670
D	00702	1	00000	4	00705	C3TXI	TXI	C3CLA,4			F4424680
	00703	0	02000	0	00710		TRA	C3FND			F4424690
	00704	2	00000	4	00705	C3TIX	TIX	C3CLA,4,XXXXXX			F4424700
	00705	0	50000	0	00704	C3CLA	CLA	C3TIX			F4424710
	00706	0	04000	0	00674		TLQ	C3ARS			F4424720
	00707	0	07400	4	00004		TSX	RDFORT,4		FLOW ERROR	F4424730
	00710	-0	75400	4	00000	C3FND	PXD	0,4			F4424740
	00711	-0	53400	4	00122		LXD	OUTBX,4			F4424750
	00712	0	02000	4	00001		TRA	1,4		RETURN	F4424760

						THIS ROUTINE TESTS FOR A TRANSFER TO THE BEGINNING OF A DO AND MAKES A SET ENTRY FOR THE DO.	F4424770 F4424780 F4424790	
00713	-0	63400	1	00125	TSTAD	SXD ERAS1M,1	SAVE INDEX REGISTER FOR TRA BACK	F4424800
00714	-0	63400	4	00122		SXD OUTBX,4		F4424810
00715	-0	53400	1	00112		LXD SBOX,1		F4424820
00716	0	60100	0	00121		STO ACBOX	SAVE ADDRESS BEING TESTED	F4424830
00717	-0	53400	4	00035		LXD LD1M,4	COMPARE TO DO LIST	F4424840
00720	0	50000	0	00121	C4CLA	CLA ACBOX	PUT ADDRESS BEING TESTED INTO AC	F4424850
00721	-0	50100	0	00062		ORA IFMSK	WITH AN IF MARK	F4424860
00722	0	34000	4	06477	C4CAS	CAS DOLIST-1,4	COMPARE TO DO LIST	F4424870
00723	1	00002	4	00722		TXI C4CAS,4,2	ENTRY SMALLER,OR EQUAL BUT W. NO IFF	F4424880
00724	0	02000	0	00731		TRA FXDO	ENTRY EQUAL, HAS IF	F4424890
00725	-0	63400	1	00112		SXD SBOX,1	ENTRY LARGER, TEST FINISHED.	F4424900
00726	-0	53400	1	00125		LXD ERAS1M,1	SAVE SET INDEX AND RESTORE INDEX	F4424910
00727	-0	53400	4	00122		LXD OUTBX,4	REGISTERS.	F4424920
00730	0	02000	4	00001		TRA 1,4	RETURN TO MAIN ROUTINE	F4424930
00731	-0	75400	2	00000	FXDO	PXD 0,2	SEE IF TRA IS IN OR OUT OF RANGE	F4424940
00732	-0	50100	0	00062		ORA IFMSK	OF THIS DO	F4424950
00733	0	40200	4	06477		SUB DOLIST-1,4		F4424960
00734	-0	12000	0	00742		TMI C4ENT	TR BEFORE BEG OF DO,MAKE SET ENTRY	F4424970
00735	-0	75400	2	00000		PXD 0,2	TR AFTER BEG OF DO, SEE IF IN DO.	F4424980
00736	0	34000	4	06500		CAS DOLIST,4	COMPARE TO END OF DO.	F4424990
00737	0	02000	0	00742		TRA C4ENT	TR. AFTER DO, ENTER SET	F4425000
00740	1	00002	4	00720		TXI C4CLA,4,2	TR. AT END OF DO--NO SET	F4425010
00741	1	00002	4	00720		TXI C4CLA,4,2	TR. IN RANGE OF DO--NO SET	F4425020
00742	0	50000	4	06500	C4ENT	CLA DOLIST,4	ENTER SET FOR DO.	F4425030
00743	-2	00310	1	00745		TNX C4STD,1,ZSET	IS BLOCK OF SET TABLE FULL	F4425040
00744	0	07400	4	01032		TSX WRSET,4	YES, WRITE BLOCK ON DRUM	F4425050
00745	0	60100	1	04524	C4STD	STO SETM,1	STORE BB NO. IN SET TABLE	F4425060
00746	0	50000	0	00031		CLA LA1		F4425070
00747	0	62100	1	04524		STA SETM,1	STORE 1 INTO SET LIST	F4425080
00750	0	50000	0	00760		CLA C5STD	MODIFY ADDRESS IN FIX DO LIST FOR	F4425090
00751	0	40000	0	00031		ADD LA1	NEXT ENTRY	F4425100
00752	0	62100	0	00760		STA C5STD		F4425110
00753	-0	32000	0	00057		ANA ADRMK		F4425120
00754	0	40200	0	00052		SUB LFXDN	IS FIXDO LIST FULL	F4425130
00755	-0	12000	0	00757		TMI C5STD-1	NO CONTINUE TESTING	F4425140
00756	0	07400	4	00004		TSX RDFORT,4	FIXDOS FULL	F4425150
00757	-0	75400	1	00000		PXD 0,1		F4425160
00760	0	60100	0	02413	C5STD	STO FIXDOS-1	STORE SET ADDRESS IN FIX DO LIST	F4425170
00761	1	00001	1	00762	C5TXI	TXI C5TXI+1,1,1	SET FOR NEXT ENTRY IN SET LIST	F4425180
00762	1	00002	4	00720		TXI C4CLA,4,2	SET DO LIST INDEX, CONTINUE TEST	F4425190
								F4425200
						THIS ROUTINE READS ANOTHER BLOCK OF COMPILED INSTRUCTIONS INTO STORAGE AND SHIFTS THE EXTRA INSTRUCTIONS TO THE BEGINNING OF THE BLOCK		F4425210 F4425220 F4425230
00763	-0	63400	4	00122	RDINSM	SXD OUTBX,4	SAVE INDEX FOR RETURN	F4425240
00764	0	50000	0	00032		CLA MINUS4	INITIALIZE ERROR BOX	F4425250
00765	0	60100	0	00030		STO ERBXX		F4425260
00766	-0	63400	2	00117		SXD BBOX,2	SAVE INDEX	F4425270
00767	-0	53400	4	00551		LXD LD12M,4	SHIFT EXTRA INSTRUCTIONS FROM END	F4425280
00770	0	50000	4	03227	D1CLA	CLA NDINS,4	OF BLOCK FOR BEGINNING	F4425290
00771	0	60100	4	03703		STO INST.M,4		F4425300

00772	2	00001	4	00770	TIX	D1CLA,4,1	IS BLOCK SHIFTED	F4425310
00773	0	76200	0	00224	D1RDS	RDS INSTTP	SLLECT INSTRUCTION TAPE	F4425320
00774	-0	53400	2	00036		LXD LD3,2	YES, SET INDEX FOR NO. OF RECORDS	F4425330
00775	0	70000	4	03667	D1CPY	CPY INSTM-12,4	COPY BLOCK OF INSTRUCTIONS	F4425340
00776	1	00001	4	00775		TXI D1CPY,4,1	SET FOR NEXT WORD	F4425350
00777	0	02000	0	01007		TRA D2END	END OF FILE	F4425360
01000	-2	00001	2	01003		TNX D1BCK,2,1	END OF RECORD--IS IT END OF 3RD REC	F4425370
01001	0	76200	0	00224		RDS INSTTP	NO, READ NEXT RECORD.	F4425380
01002	0	02000	0	00775		TRA D1CPY		F4425390
01003	0	76600	0	00333	D1BCK	WRS 219	TEST EOR TAPE ERROR	E4425400
01004	-0	76000	0	00012		RTT		F4425410
01005	0	02000	0	01021		TRA INERR	ERROR	F4425420
01006	3	00453	4	01016		TXH D1XX,4,ZINSTM-1	IF 3RD RECORD FULL--NOT END OF FILE	F4425430
01007	-0	75400	4	00000	D2END	PXD 0,4	REACHED END OF INSTRUCTIONS,	F4425440
01010	0	40000	0	00612		ADD LD8	PUT TEST FOR LAST INSTRUCTION	F4425450
01011	0	62200	0	00143		STD FNDAS	INTO MAIN ROUTINE	F4425460
01012	0	50000	0	00053		CLA LCOU	PUT ADDRESS OF FINAL EXIT INTO MAIN	F4425470
01013	0	60100	0	00144		STO FNDAS+1	ROUTINE.	F4425480
01014	0	50000	0	00072		CLA ENDMKM		F4425490
01015	0	60100	4	03667		STO INST.M-12,4		F4425500
01016	-0	53400	4	00122	D1XX	LXD OUTBX,4	NO ERROR, RESTORE INDEX REGISTERS	F4425510
01017	-0	53400	2	00117		LXD BBOX,2		F4425520
01020	0	02000	4	00001		TRA 1,4	RETURN TO MAIN ROUTINE	F4425530
01021	0	50000	0	00030	INERR	CLA ERBXX		F4425540
01022	-0	12000	0	01024	SKIP7	TMI SKIP7+2	HAVE 5 TRIES AT READING BEEN MADE	F4425550
01023	0	07400	4	00004		TSX RDFORT,4	YES, GO TO DIAGNOSTIC ROUTINE	F4425560
01024	0	40000	0	00031		ADD LA1	NO, TRY READING AGAIN	F4425570
01025	0	60100	0	00030		STO ERBXX		F4425580
01026	0	76400	0	00224	D2BST	BST INSTTP	BACKSPACE OVER RECOROS JUST REAO	F4425590
01027	1	00001	2	01030		TXI D2TIX,2,1		F4425600
01030	-2	00003	2	01026	D2TIX	TNX D2BST,2,3		F4425610
01031	0	02000	0	00773		TRA D1RDS	TAPE BACKSPACED--TRY TO READ AGAIN	F4425620
								F4425630
						THIS ROUTIRE WRITES A BLOCK OF SETS ON DRUM 3.		F4425640
01032	-0	63400	4	00122	WRSET	SXD OUTBX,4	SAVE INDEX FOR RETURN	F4425650
01033	0	60100	0	00121		STO ACBOX	SAVE CONTENTS OF AC	F4425660
01034	0	50000	0	00113	D7CLA	CLA SPBOX	SET SP BOX FOR NEXT BLOCK	F4425670
01035	0	40000	0	00047		ADD LZSET		F4425680
01036	0	60100	0	00113		STO SPBOX		F4425690
01037	0	40200	0	00046		SUB LXSET		F4425700
01040	-0	12000	0	01042		TMI STWRS	NO OVERFLOW --CONTINLE	F4425710
01041	0	07400	4	00004		TSX RDFORT,4	SET TABLE HAS OVERFLOWED.	F4425720
01042	0	76600	0	00303	STWRS	WRS SETDRM	SELECT DRUM	F4425730
01043	-0	75400	0	00000		PXD 0,0	CLEAR AC	F4425740
01044	-0	53400	4	00047		LXD LZSET,4	SET INDEX FOR COMPUTING CHECKSUM	F4425750
01045	0	36100	4	04524	D6ACL	ACL SETM,4	COMPUTE CHECK SUM	F4425760
01046	2	00001	4	01045		TIX D6ACL,4,1		F4425770
01047	0	60200	0	00125		SLW ERAS1M	STORE CHECK SUM	F4425780
01050	0	46000	0	00040		LDA SETYM	LOCATE DRUM ADDRESS	F4425790
01051	-0	53400	4	00047		LXD LZSET,4	SET INOEX EOR COPY1NG	F4425800
01052	0	70000	4	04524	D6CPY	CPY SETM,4	COPY BLOCK	F4425810
01053	2	00001	4	01052		TIX D6CPY,4,1		F4425820
01054	0	70000	0	00125		CPY ERAS1M	COPY CHECK SUM	F4425830
01055	0	50000	0	00040		CLA SETYM	SET DRUM ADDRESS FOR NEXT BLOCK	F4425840

01056	0	40000	0	00042	ADD LZSET1		F4425850
01057	0	60100	0	00040	STO SETYM		F4425860
01060	-0	53400	4	00122	LXD OUTBX,4	RESTORE INDEX REGISTER	F4425870
01061	0	50000	0	00121	CLA ACBOX		F4425880
01062	0	02000	4	00001	TRA 1,4		F4425890
							F4425900
					THIS SETS UP FOR OPTIMAL LOOK UP IN BB LIST		F4425910
01063	-0	53400	1	00551	PASS2 LXD LD12M,1	INITIALIZE INDEX REGISTERS	F4425920
01064	1	00455	1	01065	1TXI TXI 1TXI+1,1,ZINSTM+1		F4425930
01065	0	50000	0	07774	CLA BBOX.=	GET LENGTH OF BBLIST	F4425940
01066	0	62200	0	00700	STD PLACEM	PUT LENGTH INTO TEST	F4425950
01067	0	77100	0	00001	ARS 1		F4425960
01070	0	30000	0	00033	FAD L0M	FIND LEAST POWER OF 2 NOT LESS THAN	F4425970
01071	0	77100	0	00033	ARS 27	LENGTH OF TABLE	F4425980
01072	0	40200	0	00035	SUB LD1M		F4425990
01073	0	62100	0	01075	STA ARSX		F4426000
01074	0	50000	0	00056	CLA CONSTM		F4426010
A 01075	0	77100	0	00000	ARSX ARS		F4426020
01076	0	60100	0	00124	STO XBOX		F4426030
01077	0	50000	0	07775	CLA DOBOX=	IF THERE ARE NO DOS, DO NOT TEST	F4426040
01100	-0	10000	0	01103	TNZ TRAQ-1	FOR A TRANSFER TO A DO	F4426050
01101	0	50000	0	00730	CLA FXDO-1		F4426060
01102	0	60100	0	00713	STO TSTAD		F4426070
01103	0	53400	2	00057	LXA ADRMK,2		F4426080
01104	0	02000	0	00130	TRAQ TRA BEGBB		F4426090
							F4426100
							F4426110
							F4426120
					SECTION 4 - PART 2 QF 6 I2ND RECORD OF 2)		F4426130
							F4426140
					FORTRAN EDITOR INFORMATION		F4426150
					MASTER RECORD CARD = F0650000		F4426160
					ENTRY POINT = 1063 (CONTROL GOES TO PREVIOUS RECORD)		F4426170
					FIRST LOCATION = 3064		F4426180
					LAST LOCATION = 3210		F4426190
							F4426200
							F4426210
					03064 ORG 1588		F4426220
					THIS ROUTINE READS A BLOCK OF TIFRD INTO CORE STORAGE FROM		F4426230
					DRUM 1.		F4426240
03064	-0	63400	4	00122	RDTIF SXD OUTBX,4	SAVE INDEX FOR RETURN	F4426250
03065	-0	63400	2	00125	SXD ERAS1M,2	SAVE INDEX	F4426260
03066	0	50000	0	00032	CLA MINUS4	INITIALIZE ERROR BOX	F4426270
03067	0	60100	0	00030	STO ERBXX		F4426280
03070	0	50000	0	03703	CLA NTIFR-1	MOVE EXTRA WORD FROM END OF BLOCK	F4426290
03071	0	60100	0	04213	STO TIFRDM-1	TO BEGINNING	F4426300
03072	0	76200	0	00301	TFRDS RDS TIFDRM	SELECT DRUM	F4426310
03073	0	46000	0	00041	LDA TIFY	LOCATE DRUM ADDRESS	F4426320
03074	0	70000	0	00126	CPY ERAS2M	COPY LENGTH OF BLOCK	F4426330
03075	-0	53400	6	00126	LXD ERAS2M,6	SET INDEX FOR COUNT	F4426340
03076	0	70000	4	04213	D2CPY CPY TIFRDM-1,4	READ IN BLOCK OF TIFRD	F4426350
03077	2	00001	4	03076	TIX D2CPY,4,1	TEST FOR END OF BLOCK	F4426360
03100	0	70000	0	00127	CPY ERAS3M	COPY CHECK SUM	F4426370
03101	-0	50000	0	00126	CAL ERAS2M		F4426380
03102	0	10000	0	03121	TZE LSTBLT	TIFGO IS EMPTY	

03103	0	36100	2	04213	D3ACL	ACL	TIFRDM-1,2	COMPUTE CHECKSUM	F4426390
03104	2	00001	2	03103		TIX	D3ACL,2,1		F4426400
03105	0	60200	0	00121		SLW	ACBOX		F4426410
03106	0	50000	0	00121		CLA	ACBOX		F4426420
03107	0	40200	0	00127		SUB	ERAS3M	COMPARE CHECK SUMS	F4426430
03110	-0	10000	0	03141		TNZ	TFERR	NOT EQUAL,ERROR	F4426440
03111	-0	53400	4	00126		LXD	ERAS2M,4	WAS THIS A FULL BLOCK	F4426450
03112	-2	00307	4	03121		TNX	LSTBLT,4,ZTIFRD-1	NO--WAS LAST BLOCK	F4426460
03113	0	50000	0	00041		CLA	TIFY	THIS WAS A FULL BLOCK, SET DRUM	F4426470
03114	0	40000	0	00043		ADD	LZTIF2	ADDRESS FOR NEXT BLOCK	F4426480
03115	0	62100	0	00041		STA	TIFY		F4426490
03116	-0	53400	2	00125	TFLXD	LXD	ERAS1M,2	RESTORE INDEX REGISTER	F4426500
03117	-0	53400	4	00122		LXD	OUTBX,4		F4426510
03120	0	02000	4	00001		TRA	1,4	RETURN TO MAIN ROUTINE	F4426520
03121	0	50000	0	00054	LSTBLT	CLA	TRNOM	END OF TIFGO--PREVENT FURTHER	F4426530
03122	0	60100	0	03065		STO	RDITIF+1	ATTEMPTS TO READ IN	F4426540
03123	0	50000	0	00126		CLA	ERAS2M	PUT NUMBER OF WORDS IN THIS BLOCK	F4426550
03124	0	40000	0	00035		ADD	LD1M	INTO COMPARISONS	F4426560
03125	0	62200	0	00150		STD	2TNX		F4426570
03126	0	62200	0	00343		STD	7TNX		F4426580
03127	0	62200	0	00356		STD	8TNX		F4426590
03130	0	02000	0	03116		TRA	TFLXD	RESTORE INDEX REGISTERS AND EXIT.	F4426600
03131	0	50000	0	03156	NOMOR	CLA	TRTSX	TIFRD IS ALL USED - STORE A TSX	F4426610
03132	0	60100	0	03064		STO	RDITIF		F4426620
03133	0	50000	0	03140		CLA	TR2CL		F4426630
03134	0	60100	0	00147		STO	2TNX-1		F4426640
03135	-0	53400	4	00116		LXD	PBOX,4		F4426650
03136	0	60000	4	04214		STZ	TIFRDM,4		F4426660
03137	0	02000	0	03117		TRA	TFLXD+1		F4426670
03140	0	02000	0	00160	TR2CL	TRA	2CLA		F4426680
03141	0	50000	0	00030	TFERR	CLA	ERRBX		F4426690
03142	-0	12000	0	03144	SKIP8	TMI	SKIP8+2	HAVE 5 TRIES AT READING BEEN MADE	F4426700
03143	0	07400	4	00004		TSX	RDFORT,4	YES, GO TO DIAGNOSTIC ROUTINE	F4426710
03144	0	40000	0	00031		ADD	LA1	NO, TRY READING AGAIN	F4426720
03145	0	60100	0	00030		STO	ERRBX		F4426730
03146	0	02000	0	03072		TRA	TFRDS		F4426740
									F4426750
								THIS ROUTINE WRITES A BLOCK OF THE TRA TABLE ON THE DRUM	F4426760
								WITH CHECK SUM	F4426770
03147	-0	63400	4	00122	WRTRA	SXD	OUTBX,4	SAVE INDFX FOR RETURN	F4426780
03150	0	60100	0	00121		STO	ACBOX	SAVE CONTENTS OF THE AC	F4426790
03151	0	50000	0	00115	TRCLA	CLA	TPBOX	SET TP BOX FOR NEXT BLOCK	F4426800
03152	0	40000	0	00045		ADD	LZTRA		F4426810
03153	0	60100	0	00115		STO	TPBOX		F4426820
03154	0	40200	0	00044		SUB	LXTRA		F4426830
03155	-0	12000	0	03157		TMI	TRWRS	NO OVERFLOW--CONTINUE	F4426840
03156	0	07400	4	00004	TRTSX	TSX	RDFORT,4	THE TRA TABLE HAS OVERFLOWED	F4426850
03157	0	76600	0	00301	TRWRS	WRS	TRADRM	SELECT DRUM	F4426860
03160	-0	53400	4	00045		LXD	LZTRA,4	SET INDEX	F4426870
03161	-0	75400	0	00000		PXD	0,0	CLEAR AC	F4426880
03162	0	36100	4	06024	D4ACL	ACL	TRAM,4	COMPUTE CHECKSUM	F4426890
03163	2	00001	4	03162		TIX	D4ACL,4,1		F4426900
03164	0	60200	0	00125		SLW	ERAS1M	STORE CHECK SUM	F4426910
03165	-0	53400	4	00045		LXD	LZTRA,4	SET INDEX FOR COPYING	F4426920

03166	0	70000	4	06024	D4CPY	CPY TRAM, 4		COPY BLOCK	F4426930
03167	2	00001	4	03166		TIX D4CPY, 4, 1			F4426940
03170	0	70000	0	00125		CPY ERAS1M		COPY CHECK SUM	F4426950
03171	-0	53400	4	00276		LXD LD4, 4			F4426960
03172	0	50000	4	04530	D5CLA	CLA NDTRA, 4		SHIFT EXTRA ENTRIES FROM THE	F4426970
03173	0	60100	4	06024		STO TRA..M, 4		TO THE BEGINNING OF BLOCK	F4426980
03174	2	00001	4	03172		TIX D5CLA, 4, 1			F4426990
03175	-0	53400	4	00045		LXD LZTRA, 4		SET INDEX	F4427000
03176	-0	75400	0	00000		PXD 0, 0			F4427010
03177	0	56000	0	00031		LDQ LA1			F4427020
03200	0	60100	4	06021	D5ST2	STO TRAM-3, 4		INITIALIZE TRA TABLE	F4427030
03201	-0	60000	4	06020		STQ TRA..M-4, 4			F4427040
03202	2	00002	4	03200		TIX D5ST2, 4, 2			F4427050
03203	0	50000	0	03157		CLA TRWRS		SET ADDRESS FOR NEXT BLOCK	F4427060
03204	0	40000	0	00031		ADD LA1			F4427070
03205	0	62100	0	03157		STA TRWRS			F4427080
03206	-0	53400	4	00122	TRLXD	LXD OUTBX, 4		RESTORE INDEX REGISTERS	F4427090
03207	0	50000	0	00121		CLA ACBOX		RESTORE CONTENTS OF AC	F4427100
03210	0	02000	4	00001		TRA 1, 4		RETURN TO MAIN ROUTINE	F4427110

SECTION 4 - PART 3 OF 6

FORTRAN EDITOR INFORMATION

MASTER RECORD CARD = F0670000

ENTRY POINT = 111

FIRST LOCATION = 33

LAST LOCATION = 437

				00033		ORG 27			F4430010
						CONSTANTS AND VARIABLES			F4430020
00033	0	00000	0	00000	ZERO	0			F4430030
00034	0	00001	0	00000	LD1N	0, 0, 1			F4430040
00035	0	70007	0	00000	LD7N	0, 0, -TRATBL+2			F4430050
00036	+2000000000000				PBYCDN	OCT 2000000000000			F4430060
00037	-3000000000000				PFXMKN	OCT -3000000000000			F4430070
00040	+3777777777777				ENDMKN	OCT 3777777777777			F4430080
00041	0	00000	0	00310	LAZST	ZSET			F4430090
00042	0	00000	0	00311	LZST1	ZSET+1			F4430100
00043	0	00000	0	00374	LZFR1	ZFRET+=2			F4430110
00044	0	00000	0	01274	LAZTR	ZTRA			F4430120
00045	0	00310	0	00000	LZSETN	0, 0, ZSET			F4430130
00046	0	01274	0	00000	LZTRAN	0, 0, ZTRA			F4430140
00047	0	00000	0	01275	WSETY	SETADD		DRUM ADDRESS FOR SET TABLE	F4430150
00050	0	00000	0	01750	FRETY	FRTADD		DRUM ADDRESS FOR FRET	F4430160
00051	0	00000	0	02260	BBLYN	BBLADD		DRUM ADDRESS FOR BB LIST	F4430170
00052	0	00000	0	03270	DOYN	DOADDR		DRUM ADDRESS FOR DO LIST	F4430180
00053	0	02000	0	00366	TRBCK	TRA CLAFN			F4430190
00054	0	00000	0	00201	LFXST	FXSET			F4430200
00055	0	00000	0	00000	ERAS1N				F4430210
00056	0	00000	0	00000	ERAS2N				F4430220
00057	0	00000	0	00000	ERAS3N				F4430230
00060	0	00000	0	00000	ERAS4N				F4430240

00061	0	00000	0	00000	ERAS5N			F4430340
								F4430350
						THIS ROUTINE READS THE SET TABLE FROM DRUM 3.		F4430360
00062	0	50000	0	00032	RDSET	CLA MINUS4	INITIALIZE ERROR BOX	F4430370
00063	0	60100	0	00030		STO ERBXX		F4430380
00064	0	76200	0	00303	16WRS	RDS SETDRM		F4430390
00065	0	46000	0	00047		LDA WSETY	LOCATE DRUM ADDRESS	F4430400
00066	-0	53400	3	07776		LXD SSBOX=,3	SET INDEX REGISTERS	F4430410
00067	0	70000	1	01063	16CPY	CPY SETTAB+1,1	COPY TABLE	F4430420
00070	2	00001	1	00067		TIX 16CPY,1,1		F4430430
00071	0	70000	0	00055		CPY ERAS1N	COPY CHECK SUM	F4430440
00072	-0	75400	0	00000		PXD 0,0	CLEAR AC	F4430450
00073	0	36100	2	01063	16ACL	ACL SETTAB+1,2	COMPUTE CHECK SUM	F4430460
00074	2	00001	2	00073		TIX 16ACL,2,1		F4430470
00075	0	60200	0	00056		SLW ERAS2N	STORE CHECK SUM	F4430480
00076	0	50000	0	00056		CLA ERAS2N	COMPARE CHECK SUMS	F4430490
00077	0	40200	0	00055		SUB ERAS1N		F4430500
00100	0	10000	0	00107		TZE READ4	IF NO ERROR-READ IN NEXT PROGRAM	F4430510
00101	0	50000	0	00030	17ERR	CLA ERBXX		F4430520
00102	-0	12000	0	00104	SKIP9	TMI SKIP9+2	HAVE 5 TRIES AT READING BEEN MAOE	F4430530
00103	0	07400	4	00004		TSX RDFORT,4	YES, GO TO DIAGNOSTIC ROUTINE	F4430540
00104	0	40000	0	00031		ADD LA1	NO, TRY READING AGAIN	F4430550
00105	0	60100	0	00030		STO ERBXX		F4430560
00106	0	02000	0	00064		TRA 16WRS	TRY AGAIN	F4430570
00107	0	76200	0	00221	READ4	RDS SYSTAP		F4430580
00110	0	02000	0	00004		TRA RDFORT		F4430590
								F4430600
						THIS ROUTINE WRITES THE BBLIST ON DRUM 3		F4430610
00111	-0	53400	3	07774	LXD	LXD BBOX.=,3	PUT BASIC BLOCK LIST ON DRUM	F4430620
00112	-0	75400	0	00000		PXD 0,0		F4430630
00113	0	76600	0	00303		WRS BBLDRM		F4430640
00114	0	36100	1	07773		ACL BBLIST,1	COMPUTE CHECK SUM	F4430650
00115	2	00001	1	00114	SELF30	TIX SELF30-1,1,1		F4430660
00116	0	36100	0	07773		ACL BBLIST		F4430670
00117	0	60200	0	00055		SLW ERAS1N	STORE CHECK SUM	F4430680
00120	0	46000	0	00051		LDA BBLYN		F4430690
00121	0	70000	2	07773		CPY BBLIST,2	COPY LIST	F4430700
00122	2	00001	2	00121	SELF31	TIX SELF31-1,2,1		F4430710
00123	0	70000	0	07773		CPY BBLIST	COPY LAST WORD IN LIST	F4430720
00124	0	70000	0	00055		CPY ERAS1N	COPY CHECK SUM	F4430730
								F4430740
						THIS ROUTINE WRITES DOLIST ON DRUM 1.		F4430750
00125	-0	53400	3	07775		LXD DOBOX=,3	COPY DO LIST ONTO DRUM	F4430760
00126	-0	75400	0	00000		PXD 0,0		F4430770
00127	0	76600	0	00301		WRS DODRUM	SELECT DRUM	F4430780
00130	0	36100	1	06500	2ACL	ACL DOLIST,1	COMPUTE CHECK SUM	F4430790
00131	2	00001	1	00130		TIX 2ACL,1,1		F4430800
00132	0	60200	0	00055		SLW ERAS1N	STORE CHECK SUM	F4430810
00133	0	46000	0	00052		LDA DOYN		F4430820
00134	0	70000	2	06500	2CPY	CPY DOLIST,2	COPY TABLE	F4430830
00135	2	00001	2	00134		TIX 2CPY,2,1		F4430840
00136	0	70000	0	00055		CPY ERAS1N	COPY CHECK SUM	F4430850
								F4430860
						THIS READS THE TWO BLOCKS OF THE SET TABLE FROM THE DRUM		F4430870

00137	0	50000	0	00032	4PXD	CLA MINUS4	INITIALIZE ERROR BOX	F4430880
00140	0	60100	0	00030		STO ER RBX		F4430890
00141	0	76200	0	00303	4WRS	RDS SETDRM		F4430900
00142	0	46000	0	00047		LDA WSETY		F4430910
00143	-0	53400	3	00045		LXD LZSETN,3		F4430920
00144	0	70000	1	07774	4CPY	CPY SETLOC,1	COPY BLOCK	F4430930
00145	2	00001	1	00144		TIX 4CPY,1,1		F4430940
00146	0	70000	0	00055		CPY ERAS1N	COPY CHECK SUM	F4430950
00147	-0	75400	0	00000		PXD 0,0	CLEAR AC	F4430960
00150	0	36100	2	07774	4ACL	ACL SETLOC,2	COMPUTE CHECKSUM	F4430970
00151	2	00001	2	00150		TIX 4ACL,2,1		F4430980
00152	0	60200	0	00056		SLW ERAS2N		F4430990
00153	0	50000	0	00056		CLA ERAS2N		F4431000
00154	0	40200	0	00055		SUB ERAS1N	COMPARE CHECK SUMS	F4431010
00155	0	10000	0	00164	4TZE	TZE TESTST		F4431020
00156	0	50000	0	00030	STERR	CLA ER RBX		F4431030
00157	-0	12000	0	00161	SKIP10	TMI SKIP10+2	HAVE 5 TRIES AT READING BEEN MADE	F4431040
00160	0	07400	4	00004		TSX RDFORT,4	YES, GO TO DIAGNOSTIC ROUTINE	F4431050
00161	0	40000	0	00031		ADD LA1	NO, TRY READING AGAIN	F4431060
00162	0	60100	0	00030		STO ER RBX		F4431070
00163	0	02000	0	00141		TRA 4WRS	TRY AGAIN TO READ IN	F4431080
00164	0	50000	0	07776	TESTST	CLA SSBOX=	IS THERE ANOTHER BLOCK ON DRUM	F4431090
00165	0	40200	0	00045		SUB LZSETN		F4431100
00166	-0	12000	0	00201		TMI FXSET	NO OTHER-	F4431110
00167	0	50000	0	00047	6SET	CLA WSETY	ANOTHER BLOCK-SET DRUM ADDRESS	F4431120
00170	0	40000	0	00042		ADD LZST1		F4431130
00171	0	60100	0	00047		STO WSETY		F4431140
00172	0	50000	0	00144	5CLA	CLA 4CPY	SET ADDRESSES FOR NEXT BLOCK	F4431150
00173	0	40200	0	00041		SUB LAZST		F4431160
00174	0	62100	0	00144		STA 4CPY		F4431170
00175	0	62100	0	00150		STA 4ACL		F4431180
00176	0	50000	0	00054		CLA LFXST		F4431190
00177	0	62100	0	00155		STA 4TZE	STORE ADDRESS FOR NEXT ROUTINE	F4431200
00200	0	02000	0	00137		TRA 4PXD	READ IN NEXT BLOCK	F4431210
								F4431220
							THIS ROUTINE FIXES THE SETS FOR TRANSFERS TO DOS WITH IFS	F4431230
00201	0	53400	1	00033	FXSET	LXA ZERO,1	SET INDEX FOR FIX DO LIST	F4431240
00202	0	50000	1	02414	CCLA	CLA FIXDOS,1	GET ENTRY FROM FIXDO LIST	F4431250
00203	-0	12000	0	00213		TMI WRTST	ALL DONE IF MINUS	F4431260
00204	-0	73400	4	00000		PDX 0,4	SET FOR ADDRESS IN SET TABLE	F4431270
00205	0	50000	4	07774		CLA SETLOC,4	LOOK AT ENTRY IN SET TABLE	F4431280
00206	-0	73400	2	00000		PDX 0,2	SET FOR ADDRESS IN BASIC BLOCK TAB.	F4431290
00207	0	50000	2	02413		CLA BBTABL,2	GET ADDRESS IN TRA TABLE	F4431300
00210	0	40000	0	00035		ADD LD7N	SET FOR CORE ADDRESS OF COUNTER	F4431310
00211	0	62200	4	07774		STD SETLOC,4	PUT INTO SET TABLE	F4431320
00212	1	77777	1	00202		TXI CCLA,1,-1	LOOK AT NEXT ENTRY IN FIXDO LIST	F4431330
								F4431340
							THIS ROUTINE WRITES THE FINISHED SET TABLE ON THE DRUM	F4431350
00213	-0	53400	3	07776	WRTST	LXD SSBOX=,3	SET INDEX REGISTERS	F4431360
00214	0	76600	0	00303		WRS SETDRM	SELECT DRUM	F4431370
00215	-0	75400	0	00000		PXD 0,0		F4431380
00216	0	36100	1	07774	7AACL	ACL SETLOC,1	COMPUTE CHECK SUM	F4431390
00217	2	00001	1	00216		TIX 7AACL,1,1		F4431400
00220	0	60200	0	00055		SLW ERAS1N	STORE CHECK SUM	F4431410

00221	0	46000	0	00047	LDA	WSETY			F4431420
00222	0	70000	2	07774	7ACPY	CPY	SETLOC,2	COPY TABLE	F4431430
00223	2	00001	2	00222	TIX	7ACPY,2,1			F4431440
00224	0	70000	0	00055	CPY	ERAS1N		COPY CHECK SUM	F4431450
									F4431460
									F4431470
									F4431480
00225	0	50000	0	07777	RDTRA	CLA	TTBOX=		F4431490
00226	0	40200	0	00034	SUB	LD1N			F4431500
00227	0	60100	0	00057	STO	ERAS3N		INITIALIZE ERAS3N	F4431510
00230	0	50000	0	00032	8PXD	CLA	MINUS4	INITIALIZE ERROR BOX	F4431520
00231	0	02000	0	00265	TRA	SKIP11+3			F4431530
00232	0	76200	0	00301	8WRS	RDS	TRADRM		F4431540
00233	-0	53400	3	00046	LXD	LZTRAN,3		SET INDICES	F4431550
00234	0	70000	1	07774	8CPY	CPY	TRATBL+1,1	COPY BLOCK OF TABLE	F4431560
00235	2	00001	1	00234	TIX	8CPY,1,1			F4431570
00236	0	70000	0	00055	CPY	ERAS1N		COPY CHECK SUM	F4431580
00237	0	36100	2	07774	8ACL	ACL	TRATBL+1,2		F4431590
00240	2	00001	2	00237	TIX	8ACL,2,1			F4431600
00241	0	60200	0	00056	SLW	ERAS2N			F4431610
00242	0	50000	0	00056	CLA	ERAS2N			F4431620
00243	0	40200	0	00055	SUB	ERAS1N		COMPARE CHECK SUMS	F4431630
00244	-0	10000	0	00261	TNZ	TRERR		IF NOT ZERO, HAS BEEN AN ERROR	F4431640
00245	0	50000	0	00057	CLA	ERAS3N		PUT NO OF WORDS COPIED IN AC	F4431650
00246	0	40200	0	00046	SUB	LZTRAN		ADD BLOCK JUST COPIED	F4431660
00247	-0	12000	0	00270	TMI	CLRNS		MINUS MEANS ALL DONE, CLEAR N LIST	F4431670
00250	0	60100	0	00057	STO	ERAS3N		STORE NUMBER OF WORDS LEFT TO COPY	F4431680
00251	0	50000	0	00232	CLA	8WRS		NOT FINISHED--SET DRUM NUMBER FOR	F4431690
00252	0	40000	0	00031	ADD	LA1		NEXT BLOCK	F4431700
00253	0	62100	0	00232	STA	8WRS			F4431710
00254	0	50000	0	00234	CLA	8CPY		SET ADDRESSES FOR NEXT BLOCK	F4431720
00255	0	40200	0	00044	SUB	LAZTR			F4431730
00256	0	62100	0	00234	STA	8CPY			F4431740
00257	0	62100	0	00237	STA	8ACL			F4431750
00260	0	02000	0	00230	TRA	8PXD		COPY NEXT BLOCK	F4431760
00261	0	50000	0	00030	TRERR	CLA	ERRBX		F4431770
00262	-0	12000	0	00264	SKIP11	TMI	SKIP11+2	HAVE 5 TRIES AT READING BEEN MADE	F4431780
00263	0	07400	4	00004	TSX	RDFORT,4		YES, GO TO DIAGNOSTIC ROUTINE	F4431790
00264	0	40000	0	00031	ADD	LA1		NO, TRY READING AGAIN	F4431800
00265	0	60100	0	00030	STO	ERRBX			F4431810
00266	-0	75400	0	00000	PXD	0,0		CLEAR AC	F4431820
00267	0	02000	0	00232	TRA	8WRS		TRY AGAIN	F4431830
									F4431840
									F4431850
									F4431860
									F4431870
									F4431880
									F4431890
									F4431900
									F4431910
									F4431920
									F4431930
									F4431940
									F4431950
00270	0	56000	0	00033	CLRNS	LDQ	ZERO		F4431840
00271	0	53400	4	00031	LXA	LA1,4			F4431850
00272	0	50000	4	01114	CLANS	CLA	NLIST,4		F4431860
00273	0	10000	0	00300	TZE	11PXD		END OF LIST-DO NEXT ROUTINE	F4431870
00274	-0	60000	4	01114	STQ	NLIST,4		STORE ZERO IN N-LIST	F4431880
00275	1	00001	4	00272	TXI	CLANS,4,1		SET FOR NEXT WORD IN LIST	F4431890
									F4431900
									F4431910
									F4431920
									F4431930
									F4431940
									F4431950
00276	-0	63400	2	00060	RDFRT	SXD	ERAS4N,2	SAVE INDEX REGISTERS	F4431930
00277	-0	63400	1	00061	SXD	ERAS5N,1			F4431940
00300	0	50000	0	00032	11PXD	CLA	MINUS4	INITIALIZE ERROR BOX	F4431950

00301	0	02000	0	00343	TRA	SKIP12+3		F4431960
00302	0	76200	0	00302	11WRS	RDS	FRTDRM	F4431970
00303	0	46000	0	00050		LDA	FRETY	F4431980
00304	0	70000	0	00056		CPY	ERAS2N	F4431990
00305	-0	53400	7	00056		LXD	ERAS2N,7	F4432000
00306	0	70000	1	01062	11CPY	CPY	FRET,1	F4432010
00307	2	00001	1	00306		TIX	11CPY,1,1	F4432020
00310	0	70000	0	00055		CPY	ERAS1N	F4432030
00311	0	70000	0	00057		CPY	ERAS3N	F4432040
00312	0	36100	2	01062	11ACL	ACL	FRET,2	F4432050
00313	2	00001	2	00312		TIX	11ACL,2,1	F4432060
00314	0	36100	0	00056		ACL	ERAS2N	F4432070
00315	0	60200	0	00056		SLW	ERAS2N	F4432080
00316	3	00000	4	00322		TXH	11CLA,4,0	F4432090
00317	0	50000	0	00402		CLA	NOQFD	F4432100
00320	0	62100	0	00357		STA	13TXIN-1	F4432110
00321	0	02000	0	00346		TRA	FXTRA	F4432120
00322	0	50000	0	00056	11CLA	CLA	ERAS2N	F4432130
00323	0	40200	0	00055		SUB	ERAS1N	F4432140
00324	-0	10000	0	00337		TNZ	FQERR	F4432150
00325	0	50000	0	00050	12CLA	CLA	FRETY	F4432160
00326	0	40000	0	00043		ADD	LZFR1	F4432170
00327	0	60100	0	00050		STO	FRETY	F4432180
00330	0	50000	0	00057		CLA	ERAS3N	F4432190
00331	-0	10000	0	00334		TNZ	12TRA-2	F4432200
00332	0	50000	0	00341		CLA	SKIP12+1	F4432210
00333	0	60100	0	00301		STO	11PXD+1	F4432220
00334	-0	53400	1	00061		LXD	ERAS5N,1	F4432230
00335	-0	53400	2	00060		LXD	ERAS4N,2	F4432240
00336	0	02000	0	00346	12TRA	TRA	FXTRA	F4432250
00337	0	50000	0	00030	FQERR	CLA	ERRBX	F4432260
00340	-0	12000	0	00342	SKIP12	TMI	SKIP12+2	F4432270
00341	0	07400	4	00004		TSX	RDFORT,4	F4432280
00342	0	40000	0	00031		ADD	LA1	F4432290
00343	0	60100	0	00030		STO	ERRBX	F4432300
00344	-0	75400	0	00000		PXD	0,0	F4432310
00345	0	02000	0	00302		TRA	11WRS	F4432320
							TRY AGAIN	F4432330
							THIS ROUTINE PUTS THE CUMULATIVE PROBABILITIES INTO THE TRA	F4432340
							TABLE FROM THE FREQUENCY TABLE	F4432350
00346	-0	53400	2	00033	FXTRA	LXD	ZERO,2	F4432360
00347	0	50000	0	07774		CLA	BBOX.=	F4432370
00350	0	40200	0	00034		SUB	LD1N	F4432380
00351	0	62200	0	00352		STD	13TXH	F4432390
00352	3	00000	2	00062	13TXH	TXH	RDSET,2	F4432400
00353	-0	50000	2	02413		CAL	BBTABL,2	F4432410
00354	-0	73400	1	00000		PDX	0,1	F4432420
00355	-0	32000	0	00037		ANA	PFXMKN	F4432430
00356	0	40200	0	00036		SUB	PBYCDN	F4432440
00357	0	10000	0	00361		TZE	CLAT	F4432450
00360	1	00001	2	00352	13TXIN	TXI	13TXH,2,1	F4432460
00361	0	50000	4	01062	CLAT	CLA	FRET,4	F4432470
00362	0	76700	0	00022		ALS	18	F4432480
00363	0	40000	1	07773		ADD	TRATBL,1	F4432490

00364	-0	10000	0	00402		TNZ	NOQFD		NO, NO FREQUENCY FOUND	F4432500
00365	-2	00001	4	00372	14TIX	TNX	14LXD,4,1		SET FOR NEXT WORD	F4432510
00366	0	50000	4	01062	CLAFN	CLA	FRET,4		GET PROBABILITY FROM FRET	F4432520
00367	-0	12000	0	00360		TMI	13TXIN		MINUS INDICATES NEXT ENTRY IN FRET	F4432530
00370	0	60100	1	07773		STO	TRATBL,1		PUT PROBABILITY IN TRA TABLE	F4432540
00371	1	00002	1	00365		TXI	14TIX,1,2		SET FOR NEXT ENTRY IN TRA	F4432550
00372	0	50000	0	00057	14LXD	CLA	ERAS3N		TEST FOR END OF LAST BLOCK	F4432560
00373	-0	10000	0	00377		TNZ	14CLA			F4432570
00374	0	50000	0	00402		CLA	NOQFD		END OF TABLE-PREVENT FURTHER	F4432580
00375	0	62100	0	00357		STA	13TXIN-1		LOOKING AT FRET	F4432590
00376	1	00001	2	00352		TXI	13TXH,2,1		ALSO END OF ENTRY-LOOK AT NEXT BB.	F4432600
00377	0	50000	0	00053	14CLA	CLA	TRBCK		END OF BLOCK OF FRET--READ IN NEXT	F4432610
00400	0	62100	0	00336		STA	12TRA		BLOCK, SETTING ADDRESS FOR	F4432620
00401	0	02000	0	00276		TRA	RDFRT		RETURN	F4432630
00402	-0	12000	0	00416	NOQFD	TMI	NTENT		FORM. NO. IN FRET IS LARGER, NOT	F4432640
									IN FRET	F4432650
00403	2	00001	4	00404		TIX	CLAQ,4,1		FORM. NO. SMALLER, TRY NEXT ENTRY	F4432660
00404	0	50000	4	01062	CLAQ	CLA	FRET,4		LOOK AT NEXT WORD IN FRET	F4432670
00405	-0	12000	0	00362		TMI	CLAT+1		- MEANS NEW ENTRY, COMPARE TO TRA	F4432680
00406	2	00001	4	00404		TIX	CLAQ,4,1		KEEP LOOKING FOR BEG. OF NEXT ENTRY	F4432690
00407	0	50000	0	00057		CLA	ERAS3N		END OF BLOCK REACHED	F4432700
00410	0	10000	0	00414		TZE	NDTBL		TEST FOR END OF TABLE	F4432710
00411	0	50000	0	00403		CLA	CLAQ-1		END OF BLOCK ONLY--STORE RETURN	F4432720
00412	0	62100	0	00336		STA	12TRA		ADDRESS AND GO TO READ	F4432730
00413	0	02000	0	00276		TRA	RDFRT		IN NEXT BLOCK	F4432740
00414	0	50000	0	00402	NDTBL	CLA	NOQFD		END OF TABLE-PREVENT FURTHER	F4432750
00415	0	62100	0	00357		STA	13TXIN-1		LOOKING AT FRET.	F4432760
00416	0	50000	1	07771	NTENT	CLA	TRATBL-2,1		NO ENTRY IN FRET--MAKE UP FREQS	F4432770
00417	-0	63400	4	00055		SXD	ERAS1N,4		SAVE FRET ADDRESS	F4432780
00420	-0	73400	4	00000		PDX	0,4		PUT NO. OF BRANCHES IN INDEX	F4432790
00421	0	50000	0	00034		CLA	LD1N		PUT TOTAL PROBABILITY IN AC	F4432800
00422	0	56000	0	00033		LDQ	ZERO		CLEAR MQ	F4432810
00423	0	22100	1	07771		DVP	TRATBL-2,1		DIVIDE BY NO. OF BRANCHES	F4432820
00424	0	76000	0	00012		DCT				F4432830
00425	0	07400	4	00004		TSX	RDFORT,4		BAD DIVIDE	F4432840
00426	-0	60000	0	00056		STQ	ERAS2N		STORE PROBABILITY IN AC	F4432850
00427	-0	75400	0	00000		PXD	0,0		CLEAR AC	F4432860
00430	0	40000	0	00056	15ADD	ADD	ERAS2N		ADD PROB. OF BRANCH FOR CUMULATING	F4432870
00431	0	60100	1	07773		STO	TRATBL,1		PROBABILITY AND STORE	F4432880
00432	-2	00001	4	00434		TNX	15LXD,4,1		IS THIS BASIC BLOCK DONE	F4432890
00433	1	00002	1	00430		TXI	15ADD,1,2		NO, DO NEXT BRANCH	F4432900
00434	-0	53400	4	00055	15LXD	LXD	ERAS1N,4		RESTORE INDEX	F4432910
00435	0	50000	0	00040		CLA	ENDMKN			F4432920
00436	0	60100	1	07773		STO	TRATBL,1		STORE PROBABILITY IN LAST BRANCH	F4432930
00437	1	00001	2	00352		TXI	13TXH,2,1		DO NEXT BASIC BLOCK.	F4432940

SECTION 4 - PART 4 OF 6

FORTRAN EDITOR INFORMATION

MASTER RECORD CARD = F0690000

ENTRY POINT = 42

FIRST LOCATION = 33

LAST LOCATION = 161

F4440010
F4440020
F4440030
F4440040
F4440050
F4440060
F4440070

									F4440080
									F4440090
		00033		ORG	27				F4440100
						CONSTANTS AND VARIABLES			F4440110
00033	0	00001	0	00000	LD1P	0,0,1			F4440120
00034	0	77777	0	00000	DECMKP	0,0,-1			F4440130
00035	0	77777	0	77777	ADMK	-1,0,-1			F4440140
00036	+	1000000000000			BT2MK	OCT 1000000000000			F4440150
00037	0	00000	0	07640	VISITS	HTR 4000	COUNTER FOR NUMBER OF VISITS		F4440160
00040	+	321702174347			RAND1	OCT 321702174347			F4440170
00041	+	0000000000001			RAND2	OCT 1			F4440180
									F4440190
									F4440200
									F4440210
									F4440220
									F4440230
									F4440240
									F4440250
									F4440260
									F4440270
									F4440280
									F4440290
									F4440300
									F4440310
									F4440320
									F4440330
									F4440340
									F4440350
									F4440360
									F4440370
									F4440380
									F4440390
									F4440400
									F4440410
									F4440420
									F4440430
									F4440440
									F4440450
									F4440460
									F4440470
									F4440480
									F4440490
									F4440500
									F4440510
									F4440520
									F4440530
									F4440540
									F4440550
									F4440560
									F4440570
									F4440580
									F4440590
									F4440600
									F4440610

D

00111	0	50000	2	07772	CLANT	CLA	TRATBL-1,2	LOOK AT ENTRY IN TRAT	F4440620
00112	-0	32000	0	00034		ANA	DECMKP	AND OUT ALL BUT VALUE FOR N IN TRAT	F4440630
00113	0	40200	4	01114		SUB	NLIST,4	IS THIS ENTRY FOR CURRENT VALUE	F4440640
00114	0	10000	0	00147		TZE	ENTERP	YES, ENTER	F4440650
00115	1	50002	2	00116		TXI	TXLN,2,2	NO, LOOK AT NEXT ENTRY IN TRAT	F4440660
00116	-3	00000	2	00111	TXLN	TXL	CLANT,2	TEST FOR N NOT SET	F4440670
00117	-0	50000	1	02413		CAL	BBTABL,1		F4440680
00120	-0	73400	2	00000		PDX	0,2		F4440690
00121	0	02000	0	00147		TRA	ENTERP	ENTER TRA TO FIRST BRANCH GIVEN	F4440700
00122	0	50000	2	07773	MSECSE	CLA	TRATBL,2	THIS IS A MSE--GET ADDRESS OF SENSE	F4440710
00123	-0	73400	4	00000		PDX	0,4	LIGHT CELL AND PUT IN INDEX	F4440720
00124	1	50000	4	01260		CLA	SNSLT,4	IS LIGHT ON OR OFF	F4440730
00125	0	10000	0	00131		TZE	MSETXI	OFF--TAKE SECOND BRANCH	F4440740
00126	-0	75400	0	00000		PXD	0,0	ON--TURN OFF, TAKE FIRST BRANCH	F4440750
00127	0	60100	4	01260		STO	SNSLT,4		F4440760
00130	0	02000	0	00147		TRA	ENTERP	ENTER TRANSFER	F4440770
00131	1	00002	2	00147	MSETXI	TXI	ENTERP,2,2	ENTER TRANSFER	F4440780
00132	0	50000	2	07771	DOWIF	CLA	TRATBL-2,2	THIS IS A DO WITH AN IF	F4440790
00133	0	40000	0	00033		ADD	LD1P	ADD ONE TO LOOP COUNT	F4440800
00134	0	56000	2	07773		LDQ	TRATBL,2	COMPARE TO NO. OF TIMES IN LOOP	F4440810
00135	0	04000	0	00140		TLQ	TROUT	TRANSFER OUT--LOOP DONE	F4440820
00136	0	62200	2	07771		STD	TRATBL-2,2	LOOP NOT DONE--STORE NEW COUNT	F4440830
00137	0	02000	0	00147		TRA	ENTERP	TAKE TRANSFER BACK	F4440840
00140	1	00002	2	00147	TROUT	TXI	ENTERP,2,2	TAKE TRANSFER OUT	F4440850
00141	0	56000	0	00040	PRBYCS	LDQ	RAND1	THIS IS A PROBABILITY CASE	F4440860
00142	0	20000	0	00041		MPY	RAND2	GENERATE A RANDOM NUMBER BY	F4440870
00143	-0	60000	0	00041		STQ	RAND2	MULTIPLIC. AND SAVE THE RESULT	F4440880
00144	0	50000	2	07773	COMP	CLA	TRATBL,2	COMPARE TO CUMULATIVE PROB IN TRA	F4440890
00145	0	04000	0	00147		TLQ	ENTERP	FOUND, TAKE TRANSFER	F4440900
00146	1	00002	2	00144		TXI	COMP,2,2	NOT FOUND--LOOK AT NEXT BRANCH	F4440910
00147	0	50000	2	07772	ENTERP	CLA	TRATBL-1,2	THIS IS THE BRANCH TO BE TAKEN	F4440920
00150	-0	73400	1	00000		PDX	0,1	PUT NO. OF NEXT BASIC BLOCK IN IR	F4440930
00151	0	40000	0	00031		ADD	LAL	ADD 1 TO COUNTER FOR THIS TRANSFER	F4440940
00152	0	62100	2	07772		STA	TRATBL-1,2	STORE COUNT	F4440950
00153	0	40200	2	07772		SUB	TRATBL-1,2	TEST FOR OVERFLOW	F4440960
00154	0	10000	0	00046		TZE	INTOBB	NO OVERFLOW, DO NEXT BB	F4440970
00155	0	50000	0	00035	OVRFLO	CLA	ADMK		F4440980
00156	0	62100	2	07772		STA	TRATBL-1,2	STORE MAXIMUM COUNT	F4440990
00157	0	02000	0	00046		TRA	INTOBB		F4441000
00160	0	76200	0	00221	READ5	RDS	SYSTAP		F4441010
00161	0	02000	0	00004		TRA	RDFORT		F4441020

SECTION 4 - PART 5 OF 6

FORTRAN EDITOR INFORMATION

MASTER RECORD CARD = F0710000

ENTRY POINT = 42

FIRST LOCATION = 33

LAST LOCATION = 205

00033

ORG 27

CONSTANTS AND VARIABLES

F4441030
F4441040
F4450010
F4450020
F4450030
F4450040
F4450050
F4450060
F4450070
F4450080
F4450090
F4450100
F4450110

00033	+000000700000	TGMSK	OCT	700000		F4450120
00034	+000000777777	RTMSK	OCT	777777		F4450130
00035	-3000000000000	CODMK	OCT	-3000000000000		F4450140
00036	0 00000 0 03270	DOYY		DOADDR		F4450150
00037	0 00000 0 00000	MPYR1				F4450160
00040	0 00000 0 00000	MPYR2				F4450170
00041	0 00000 0 00000	BBBOX				F4450180
						F4450190
						F4450200
						F4450210
						F4450220
						F4450230
						F4450240
						F4450250
						F4450260
						F4450270
						F4450280
						F4450290
						F4450300
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						F4450350
						F4450360
						F4450370
						F4450380
						F4450390
						F4450400
						F4450410
						F4450420
						F4450430
						F4450440
						F4450450
						F4450460
						F4450470
						F4450480
						F4450490
						F4450500
						F4450510
						F4450520
						F4450530
						F4450540
						F4450550
						F4450560
						F4450570
						F4450580
						F4450590
						F4450600
						F4450610
						F4450620
						F4450630
						F4450640
						F4450650

						F4450200
						F4450210
						F4450220
						F4450230
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						F4450380
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						F4450420
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						F4450440
						F4450450
						F4450460
						F4450470
						F4450480
						F4450490
						F4450500
						F4450510
						F4450520
						F4450530
						F4450540
						F4450550
						F4450560
						F4450570
						F4450580
						F4450590
						F4450600
						F4450610
						F4450620
						F4450630
						F4450640
						F4450650

00114	0	40200	2	01121		SUB DOBLOK+1,2		F4450660
00115	-0	10000	0	00126		TNZ ENDBBQ	NO, LOOK AT END OF THIS B.B.	F4450670
00116	1	00001	4	00117	BEGDO	TXI CLANO-1,4,1	YES, INCREASE L BOX BY 1	F4450680
00117	1	00002	2	00120		TXI CLANO,2,2	SET FOR NEXT ENTRY IN TNX LIST	F4450690
00120	0	50000	2	01122	CLANO	CLA DOBLOK+2,2	GET NO. OF TIMES IN THIS DO	F4450700
00121	0	62100	4	00443		STA LCNTR,4 4		F4450710
00122	0	56000	4	00443		LDQ LCNTR,4	MULTIPLY NO OF TIMES IN THIS DO	F4450720
00123	0	20000	4	00444		MPY LCNTR+1,4	BY NO. OF TIMES IN OUTER DOS	F4450730
00124	-0	60000	4	00443		STQ LCNTR,4	STORE IN COUNTER FOR THIS DO	F4450740
00125	0	02000	0	00113		TRA NTHRDO	SEE IF THERE IS ANOTHER TNX TO THIS	F4450750
00126	-0	53400	1	00041	ENDBBQ	LXD BBOX,1	THIS IS END OF BB IN DO WITHOUT IF	F4450760
00127	0	50000	1	02413		CLA BBTABL,1	LOOK AT ENTRY ON BB TABLE	F4450770
00130	-0	73400	1	00000		PDX 0,1	GET ADDRESS IN TRA TABLE	F4450780
00131	-0	32000	0	00035		ANA CODMK	LOOK AT ENDING CODE	F4450790
00132	0	10000	0	00155		TZE ENDDO	ZERO INDICATES DO ENDING	F4450800
00133	0	50000	1	07772		CLA TRATBL-1,1	A CERTAINTY CASE--LOOK AT TRATBL	F4450810
00134	-0	32000	0	00034		ANA RTMSK	GET COUNTER FROM TRA TABLE	F4450820
00135	0	60100	0	00037		STO MPYR1		F4450830
00136	0	56000	0	00037		LDQ MPYR1	MULTIPLY COUNTER BY NUMBER OF TIMES	F4450840
00137	0	20000	4	00443		MPY LCNTR,4	THIS LOOP IS DONE	F4450850
00140	-0	60000	0	00037		STQ MPYR1		F4450860
00141	0	50000	0	00037		CLA MPYR1		F4450870
00142	0	34000	0	00034		CAS RTMSK	TEST FOR COUNTER OVERFLOW	F4450880
00143	0	50000	0	00034		CLA RTMSK	COUNTER HAS OVERFLOWED	F4450890
00144	0	76100	0	00000		NOP	NO OVERFLOW	F4450900
00145	0	62100	1	07772		STA TRATBL-1,1	PUT ALL ONES IN COUNTER	F4450910
00146	-0	53400	1	00041	6LXD	LXD BBOX,1		F4450920
00147	1	00001	1	00150		TXI NXTBB,1,1	SET FOR NEXT BB--DOES IT BEGIN A DO	F4450930
00150	-0	75400	1	00000	NXTBB	PXD 0,1	LOOK AT NEXT BB	F4450940
00151	0	62200	0	00041		STD BBOX	DOES THIS BB START A DO	F4450950
00152	0	40200	2	01117		SUB DOBLOK-1,2	COMPARE TO DO LIST	F4450960
00153	0	10000	0	00116		TZE BEGDO		F4450970
00154	0	02000	0	00126		TRA ENDBBQ		F4450980
00155	0	50000	1	07770	ENDDO	CLA TRATBL-3,1	THIS IS THE END OF A DO WITHOUT IF	F4450990
00156	-0	32000	0	00034		ANA RTMSK		F4451000
00157	0	60100	0	00037		STO MPYR1		F4451010
00160	0	56000	0	00037		LDQ MPYR1	MULTIPLY COUNTER BY TOTAL NO OF	F4451020
00161	0	20000	4	00443		MPY LCNTR,4	TIMES IN LOOP	F4451030
00162	-0	60000	0	00040		STQ MPYR2	STORE NO IN MPYR2	F4451040
00163	0	56000	0	00037		LDQ MPYR1	MULTIPLY COUNTER BY NO TIME DO IS	F4451050
00164	0	20000	4	00444		MPY LCNTR+1,4	STARTED TO GET COUNTER OUT	F4451060
00165	-0	60000	0	00037		STQ MPYR1		F4451070
00166	0	50000	0	00037		CLA MPYR1		F4451080
00167	0	34000	0	00034		CAS RTMSK	TEST FOR COUNTER OVERFLOW	F4451090
00170	0	50000	0	00034		CLA RTMSK	COUNTER HAS OVERFLOWED--USE MAX. NO.	F4451100
00171	0	76100	0	00000		NOP	NO OVERFLOW	F4451110
00172	0	62100	1	07770		STA TRATBL-3,1	STORE NO TIMES OUT IN COUNTER OUT	F4451120
00173	0	50200	0	00037		CLS MPYR1		F4451130
00174	0	40000	0	00040		ADD MPYR2		F4451140
00175	0	34000	0	00034		CAS RTMSK	TEST FOR COUNTER OVERFLOW	F4451150
00176	0	50000	0	00034		CLA RTMSK	COUNTER HAS OVERFLOWED--USE MAX. NO.	F4451160
00177	0	76100	0	00000		NOP	NO OVERFLOW	F4451170
00200	0	62100	1	07772		STA TRATBL-1,1	STORE NO TIMES BACK IN COUNT. BACK	F4451180
00201	1	77777	4	00202		TXI 9TXL,4,-1	DECREASE LEVEL COUNTER FOR DO DONE	F4451190

D 00202 3 00000 4 00146 9TXL TXH 6LXD,4,0 IS THIS THE END OF OUTER DO F4451200
00203 -3 00000 2 00100 9TSTND TXL LOOKDO,2 YES, IS IT END OF PROBLEM F4451210
00204 0 76200 0 00221 READ6 RDS SYSTAP F4451220
00205 0 02000 0 00004 TRA RDFORT YES, GO TO NEXT ROUTINE F4451230
F4451240
F4451250
F4460010
F4460020
F4460030
F4460040
F4460050
F4460060
F4460070
F4460080
F4460090
F4460100
F4460110
F4460120
F4460130
F4460140
F4460150
F4460160
F4460170
F4460180
F4460190
F4460200
F4460210
F4460220
F4460230
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F4460300
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F4460320
F4460330
F4460340
F4460350
F4460360
F4460370
F4460380
F4460390
F4460400
F4460410
F4460420
F4460430
F4460440
F4460450
F4460460
F4460470
F4460480

SECTION 4 - PART 6 OF 6

FORTRAN EDITOR INFORMATION
MASTER RECORD CARD = F0730000
ENTRY POINT = 100
FIRST LOCATION = 33
LAST LOCATION = 1021

00033 ORG 27

CONSTANTS AND VARIABLES

00033 0 00000 0 00000 LOR
00034 0 00000 0 77777 LC1 -1
00035 0 00000 0 00005 L5 5
00036 0 00000 0 00006 L6R 6
00037 0 00000 0 00010 L8 8
00040 0 00000 0 03773 L2043 2043
00041 0 00000 0 03777 L2047 2047
00042 0 00000 0 04000 L2048 2048
00043 0 00001 0 00000 LD1R 0,0,1
00044 +000000777770 STMSK OCT 777770
00045 +000000777777 TAGMK OCT 777777
00046 +000033000000 TMARK OCT 33000000
00047 +07777700000000 DECMKR OCT 777770000000
00050 +037777037777 MASK OCT 37777037777
00051 +3777700000000 14ONES OCT 3777700000000
00052 0 00017 0 00000 LZTAG 0,0,ZTAG

OPERATION CODES OF TYPES OF REFERENCES

00053 +036721000000 OCT 36721000000 LXA
00054 +036731000000 OCT 36731000000 TXI
00055 +033167000000 OCT 33167000000 TIX
00056 +036747000000 OCT 36747000000 LXP
00057 +042524000000 OCT 42524000000 DED
00060 +036724000000 OCT 36724000000 LXD
00061 +072167000000 OCT 72167000000 PAX
00062 +072467000000 LCOPS OCT 72467000000 PDX
00063 0 00000 0 02260 BBLYR BBLADD
00064 0 00000 0 00000 BBTY
00065 0 76600 0 00301 LA301 WDR 1
00066 0 02000 0 00575 LTRND TRA NDDR
00067 0 00000 0 00000 ERAS1R
00070 0 00000 0 00000 ERAS2R
00071 0 00000 0 00001 IINBX 1
00072 0 00000 0 00000 INSX
00073 -0 00001 0 00000 TGPBOX MZE 0,0,1
00074 0 00114 0 00000 BLKNO 0,0,76
00075 0 00000 0 00000 BLKSIZ
00076 0 00000 0 00000 LENGTH

LENGTH OF BLOCK TO BE STORED
TOTAL LENGTH OF TABLE LEFT TO STORE F4460480

00153	-3	00000	1	00177		TXL PRDBB,1,0	TEST FOR ONLY ONE ENTRY IN PRED	F4461030
00154	-0	75400	1	00000	LXABB	PXD 0,1		F4461040
00155	-0	73400	2	00000		PDX 0,2		F4461050
00156	0	50000	1	07772		CLA PRED-1,1	TAKE ENTRIES FOR COMPARISON	F4461060
00157	0	56000	1	07773		LDQ PRED,1	FIND LARGEST ELEMENT LEFT IN TABLE	F4461070
00160	0	34000	2	07774	2CAS	CAS PRED+1,2		F4461080
00161	0	02000	0	00173		TRA 2TIX		F4461090
00162	0	02000	0	00173		TRA 2TIX		F4461100
00163	-0	60000	0	00067		STQ ERAS1R		F4461110
00164	0	56000	2	07774		LDQ PRED+1,2	EXCHANGE ENTRIES-- STORAGE IS GREAT	F4461120
00165	0	60100	2	07774		STO PRED+1,2		F4461130
00166	0	50000	0	00067		CLA ERAS1R		F4461140
00167	-0	60000	0	00067		STQ ERAS1R		F4461150
00170	0	56000	2	07775		LDQ PRED+2,2		F4461160
00171	0	60100	2	07775		STO PRED+2,2		F4461170
00172	0	50000	0	00067		CLA ERAS1R		F4461180
00173	2	00002	2	00160	2TIX	TIX 2CAS,2,2	TEST FOR END OF TABLE	F4461190
00174	0	60100	1	07772		STO PRED-1,1	THIS IS LARGEST ENTRY NOT SORTED	F4461200
00175	-0	60000	1	07773		STQ PRED,1	YET, STORE AND CONTINUE SORT	F4461210
00176	2	00002	1	00154		TIX LXABB,1,2	HAS ENTIRE TABLE BEEN SORTED YET	F4461220
								F4461230
							THIS PUTS THE ADDRESSES OF ENTRIES IN THE PREDECESSOR TABLE	F4461240
							INTO THE BASIC BLOCK TABLE	F4461250
00177	-0	53400	2	07774	PRDBB	LXD BBOX.=,2	PUT LAST BB ADDRESS INTO IR B	F4461260
00200	-0	53400	5	07777		LXD TTBOX=,5	PUT LAST PRED ADDRESS INTO A AND C	F4461270
00201	-0	75400	4	00000	3PXD	PXD 0,4	NEW BB	F4461280
00202	0	77100	0	00022		ARS 18		F4461290
00203	0	62100	2	02413		STA BBTABL,2	PUT PRED ADDR IN BB TABLE	F4461300
00204	1	77776	4	00205	3TXI	TXI 3TXI+1,4,-2	SET FOR NEXT ENTRY IN BB TABLE	F4461310
00205	-2	00001	2	00214		TNX 3ENO,2,1	IS THIS THE END OF THE TABLE	F4461320
00206	-0	75400	2	00000		PXD 0,2	PUT NEW BB NO IN AC FOR COMPARISON	F4461330
00207	0	34000	4	07774	CAS	CAS PRED+1,4	COMPARE BB NO IN PRED TABLE TO BB	F4461340
00210	0	02000	0	00201		TRA 3PXD	NO IN AC	F4461350
00211	0	76100	0	00000		NOP	EQUALITY NOT POSSIBLE	F4461360
00212	2	00002	4	00207		TIX CAS,4,2		F4461370
00213	0	62100	0	02412		STA BBTABL-1	PUT ZERO AS PRED FOR BB1	F4461380
00214	-0	75400	0	00000	3ENO	PXD 0,0	PUT ZERO AS PRED ADDR INTO TABLE	F4461390
00215	0	62100	0	02413		STA BBTABL	FOR BB ZERO	F4461400
00216	0	07400	4	00633	TSX2	TSX DRUM.J,4	PUT PRED TABLE ON DRUM	F4461410
00217	0	00000	0	00000		HTR		F4461420
00220	0	00000	0	07773		HTR PRED	CORE MEMORY ADDRESS OF LAST WORD	F4461430
00221	0	00000	0	00000		HTR	--DRUM ADDRESS	F4461440
00222	0	50000	0	00221		CLA TSX2+3		F4461450
00223	0	60100	0	07776		STO PREDBX	SAVE DRUM ADDRESS	F4461460
								F4461470
							THIS ROUTINE ADJUSTS THE ADDRESSES IN THE BB TABLE TO	F4461480
							CORRESPOND TO ONE WORD ENTRIES IN THE PREDECESSOR AND	F4461490
							SUCCESSOR TABLES	F4461500
00224	-0	53400	2	07774	SHFTBB	LXD BBOX.=,2	SET INDEX	F4461510
00225	1	00001	2	00226		TXI CAL4,2,1		F4461520
00226	-0	50000	2	02414	CAL4	CAL BBTABL+1,2		F4461530
00227	-0	32000	0	00050		ANA MASK		F4461540
00230	0	77100	0	00001		ARS 1,		F4461550
00231	0	62200	2	02414		STD BBTABL+1,2		F4461560

00232	0	62100	2	02414	STA	BBTABL+1,2		F4461570
00233	2	00001	2	00226	TIX	CAL4,2,1		F4461580
							THIS ROUTINE READS THE BASIC BLOCK LIST FROM THE DRUM	F4461590
00234	0	50000	0	00032	RDBBL	CLA MINUS4	INITIALIZE ERROR BOX	F4461600
00235	0	02000	0	00260	TRA	SKIP14+3		F4461610
00236	0	76200	0	00303	BRDS	RDS BBLDRM		F4461620
00237	0	46000	0	00063	LDA	BBLYR		F4461630
00240	-0	53400	3	07774	LXD	BBOX.=,3		F4461640
00241	0	70000	1	07773	BCPY	CPY BBLIST,1		F4461650
00242	2	00001	1	00241	TIX	BCPY,1,1		F4461660
00243	0	70000	0	07773	CPY	BBLIST		F4461670
00244	0	70000	0	00067	CPY	ERAS1R		F4461680
00245	0	36100	2	07773	BACL	ACL BBLIST,2		F4461690
00246	2	00001	2	00245	TIX	BACL,2,1		F4461700
00247	0	36100	0	07773	ACL	BBLIST		F4461710
00250	0	60200	0	00070	SLW	ERAS2R		F4461720
00251	0	50000	0	00070	CLA	ERAS2R		F4461730
00252	0	40200	0	00067	SUB	ERAS1R		F4461740
00253	0	10000	0	00263	TZE	TAGPAS		F4461750
00254	0	50000	0	00030	CLA	ERRBX		F4461760
00255	-0	12000	0	00257	SKIP14	TMI SKIP14+2	HAVE 5 TRIES AT READING BEEN MADE	F4461770
00256	0	07400	4	00004	TSX	RDFORT,4	YES, GO TO DIAGNOSTIC ROUTINE	F4461780
00257	0	40000	0	00031	ADD	LAL	NO, TRY READING AGAIN	F4461790
00260	0	60100	0	00030	STO	ERRBX		F4461800
00261	-0	75400	0	00000	PXD			F4461810
00262	0	02000	0	00236	TRA	BRDS		F4461820
							THIS ROUTINE COMPILES THE LIST OF TAGGED INSTRUCTIONS	F4461830
00263	0	53400	2	00033	TAGPAS	LXA LOR,2	INITIALIZE INDEX REGISTERS	F4461840
00264	0	53400	4	00031	LXA	LAL,4		F4461850
00265	0	50000	0	00032	RDINSR	CLA MINUS4	INITIALIZE ERROR BOX	F4461860
00266	0	60100	0	00030	STO	ERRBX		F4461870
00267	0	53400	1	00045	LXA	TAGMK,1		F4461880
00270	0	76200	0	00224	RDSIN	RDS INSTTP		F4461890
00271	0	70000	1	06457	CPYN	CPY INSTR-1,1	COPY BLOCK	F4461900
00272	1	00001	1	00271	TXI	CPYN,1,1		F4461910
00273	0	02000	0	00375	TRA	OUTR	END OF FILE-EXIT	F4461920
00274	-0	76000	0	00012	ENDRC	RTT		F4461930
00275	0	02000	0	00301	TRA	ERRRR		F4461940
00276	-0	63400	1	00363	1ALXD	SXD LZINS,1	STORE LENGTH OF RECORD TO COMPARE	F4461950
00277	0	53400	1	00033	LXA	LOR,1	CONTINUE TAG PASS	F4461960
00300	0	02000	0	00364	TRA	LZINS+1		F4461970
00301	0	50000	0	00030	ERRRR	CLA ERRBX		F4461980
00302	-0	12000	0	00304	SKIP15	TMI SKIP15+2	HAVE 5 TRIES AT READING BEEN MADE	F4461990
00303	0	07400	4	00004	TSX	RDFORT,4	YES, GO TO DIAGNOSTIC ROUTINE	F4462000
00304	0	40000	0	00031	ADD	LAL	NO, TRY READING AGAIN	F4462010
00305	0	60100	0	00030	STO	ERRBX		F4462020
00306	0	76400	0	00224	BST	INSTTP		F4462030
00307	0	02000	0	00267	TRA	RDSIN-1	TRY AGAIN TO READ IN RECORD.	F4462040
00310	-0	75400	4	00000	INTBB	PXD 0,4	PUT TAG ADDR IN BB LIST	F4462050
00311	0	40000	0	00073	ADD	TGPBOX		F4462060
00312	0	77100	0	00022	ARS	18		F4462070
00313	-0	50100	0	00046	ORA	TMARK		F4462080
								F4462090
								F4462100

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00314	0	60100	2	06314	STO	BBTAGS,2		F4462110	
00315	1	00001	2	00316	BGTXI	TXI	BGTXI+1,2,1	F4462120	
00316	-0	50000	1	06455	CAL	INST.R-3,1	IS THIS THE INSTRUCTION TAGGED	F4462130	
00317	-0	32000	0	00044	ANA	STMSK		F4462140	
00320	0	10000	0	00362	TZE	TXINS	NO	F4462150	
00321	0	50000	1	06455	CLA	INST.R-3,1	YES,	F4462160	
00322	-0	32000	0	00045	ANA	TAGMK		F4462170	
00323	-0	76000	0	00003	SSM		AND A MINUS FOR 1ST INST IN A BASIC	F4462180	
00324	0	60100	4	06500	STO	TAG,4	BLOCK INTO TAG LIST	F4462190	
00325	-0	63400	2	00067	TSTOP	SXD	ERAS1R,2	SAVE INDEX	F4462200
00326	0	53400	2	00037	LXA	L8,2	SET FOR A COMPARISON	F4462210	
00327	0	50000	1	06457	CLA	INST.R-1,1	COMPARE OP CODE OF INSTRUCTION	F4462220	
00330	-0	32000	0	00047	ANA	DECMKR		F4462230	
00331	0	40200	2	00063	SUB	SUB	LCOPS+1,2	OP CODES OF TYPES OF TAGGED INSTRS	F4462240
00332	0	10000	2	00346	TZE	TROPS+1,2	TRANSFER WHEN FOUND	F4462250	
00333	0	40000	2	00063	ADD	LCOPS+1,2	RESTORE ORIGINAL CODE TO AC	F4462260	
00334	2	00001	2	00331	TIX	SUB,2,1	TRY NEXT COMPARISON	F4462270	
00335	1	00005	2	00346	LD5	TXI	STOCD,2,5	NOT FOUND-IS PASSIVE -WANT 6 IN IRBF	F4462280
							GET CODE FOR TYPE OF INSTRUCTION INTO INDEX	F4462290	
00336	1	77771	2	00346	TXI	STOCD,2,-7	LXA--INDEX HAS 8, WANT 1	F4462300	
00337	1	77776	2	00346	TXI	STOCD,2,-2	TXI--INDEX HAS 7, WANT 5	F4462310	
00340	1	77777	2	00346	TXI	STOCD,2,-1	TIX--INDEX HAS 6, WANT 5	F4462320	
00341	1	77775	2	00346	TXI	STOCD,2,-3	LXP--INDEX HAS 5, WANT 2	F4462330	
00342	1	77777	2	00346	TXI	STOCD,2,-1	DED--INDEX HAS 4, WANT 3	F4462340	
00343	1	77776	2	00346	TXI	STOCD,2,-2	LXD--INDEX HAS 3, WANT 1	F4462350	
00344	1	77777	2	00346	TXI	STOCD,2,-1	PAX--INDEX HAS 2, WANT 1	F4462360	
00345	0	02000	0	00346	TROPS	TRA	STOCD	PDX--INDEX HAS 1, WANT 1	F4462370
00346	-0	75400	2	00000	STOCD	PXD	0,2	STORE CODE FOR TYPE OF OPERATION	F4462380
00347	0	62200	4	06500	STD	TAG,4	TAG LIST	F4462390	
00350	-0	53400	2	00067	LXD	ERAS1R,2		F4462400	
00351	1	00001	4	00352	TXI	TSTTG,4,1	SET FOR NEXT WORD IN TAG LIST	F4462410	
00352	-2	00017	4	00362	TSTTG	TNX	TXINS,4,ZTAG	TEST FOR END OF BLOCK	F4462420
00353	0	76600	0	00223	WRTAG	WRS	TAGTAP	END OF BLOCK--WRITE ON TAPE	F4462430
00354	0	70000	4	06500	TGCPY	CPY	TAG,4	F4462440	
00355	1	00001	4	00356	TGTXI	TXI	TGTXI+1,4,1	F4462450	
00356	-2	00017	4	00354	TNX	TGCPY,4,ZTAG		F4462460	
00357	0	50000	0	00073	CLA	TGPBOX		F4462470	
00360	0	40000	0	00052	ADD	LZTAG		F4462480	
00361	0	60100	0	00073	TGSTO	STO	TGPBOX	F4462490	
00362	1	00004	1	00363	TXINS	TXI	TXINS+1,1,4	F4462500	
00363	2	00144	1	00265	LZINS	TIX	RDINSR,1,ZINSTR	F4462510	
00364	0	50000	1	06460	CLA	INSTR,1	IS THIS THE BEG OF A BASIC BLOCK	F4462520	
00365	0	40200	2	07773	SUB	BBLIST,2		F4462530	
00366	0	10000	0	00310	TZE	INTBB	YES	F4462540	
00367	0	50000	1	06455	CLA	INST.R-3,1	NO, IS IT TAGGED	F4462550	
00370	-0	32000	0	00044	ANA	STMSK		F4462560	
00371	0	10000	0	00362	TZE	TXINS	NO	F4462570	
00372	0	50000	1	06455	CLA	INST.R-3,1	YES	F4462580	
00373	-0	32000	0	00045	ANA	TAGMK		F4462590	
00374	0	02000	0	00324	TRA	TSTOP-1		F4462600	
00375	-0	75400	4	00000	OUTR	PXD	0,4	F4462610	
00376	0	40000	0	00073	ADD	TGPBOX		F4462620	
00377	0	77100	0	00022	ARS	18		F4462630	
00400	-0	50100	0	00046	ORA	TMARK		F4462640	

00401	0	60100	2	06314	STO	BBTAGS,2		F4462650
00402	3	00001	4	00405	TXH	WRTG2,4,1		F4462660
00403	0	50000	0	00073	CLA	TGPBOX		F4462670
00404	0	12000	0	00411	TPL	TPL FINAL		F4462680
00405	0	50000	0	00404	WRTG2	CLA TPL		F4462690
00406	0	60100	0	00361	STO	TGSTO		F4462700
00407	0	53400	4	00031	LXA	LA1,4		F4462710
00410	0	02000	0	00353	TRA	WRTAG		F4462720
00411	0	50000	0	07774	FINAL	CLA BBOX.=		F4462730
00412	0	40000	0	00043	ADD	LD1R		F4462740
00413	0	60100	0	07774	STO	BBOX.=		F4462750
00414	0	50000	0	07776	CLA	PREDBX		F4462760
00415	0	60100	0	07777	STO	BBTBOX		F4462770
00416	0	50000	0	00047	CLA	DECMKR	WANT TXL TO HAVE BLK-1	F4462780
00417	0	62200	0	00545	STD	TXLBTT	LATER	F4462790
00420	0	76600	0	00333	IOD			F4462800
00421	0	56000	0	00077	LDQ	BLKMAX	COMPUTE NO. OF BB IN BLOCK	F4462810
T 00422	-0	75400	0	00000	PXD			F4462820
00423	0	22100	0	00036	DVP	L6R		F4462830
00424	0	76000	0	00012	DCT			F4462840
00425	0	07400	4	00004	TSX	RDFORT,4	BAD DIVIDE	F4462850
00426	-0	60000	0	00074	STQ	BLKNO		F4462860
00427	0	56000	0	07774	LDQ	BBOX.=		F4462870
00430	0	20000	0	00036	MPY	L6R		F4462880
00431	-0	60000	0	00076	STQ	LENGTH	STORE TOTAL LNGTH OF TABLE FOR DRUM	F4462890
00432	-0	53400	1	00031	LXD	LA1,1		F4462900
00433	0	50000	0	07777	NXTBL	CLA BBTBOX	COMPUTE WRS ADDRESSES	F4462910
00434	-0	32000	0	00041	ANA	L2047		F4462920
00435	0	62100	0	00064	STA	BBTY	STORE DRUM ADDRESSES	F4462930
00436	0	50000	0	07777	CLA	BBTBOX		F4462940
00437	0	77100	0	00013	ARS	11		F4462950
00440	0	40000	0	00065	ADD	LA301		F4462960
00441	0	62100	0	00525	STA	WRS1		F4462970
00442	0	40000	0	00031	ADD	LA1		F4462980
00443	0	62100	0	00576	STA	NDWRS		F4462990
00444	0	50000	0	00076	CLA	LENGTH		F4463000
00445	0	10000	0	00606	TZE	OUT2		F4463010
00446	-0	12000	0	00606	TMI	OUT2	FORM NEW TABLE LENGTH	F4463020
00447	0	40200	0	00077	SUB	BLKMAX		F4463030
00450	0	60100	0	00076	STO	LENGTH	IS THIS A FULL BLOCK	F4463040
00451	-0	12000	0	00453	TMI	LSTBLR	NO, PUT IN ACTUAL LENGTH	F4463050
T 00452	-0	75400	0	00000	PXD		YES, PUT IN FULL BLOCK LENGTH	F4463060
00453	0	40000	0	00077	LSTBLR	ADD BLKMAX	FORM NEXT DRUM ADDRESS	F4463070
00454	0	77100	0	00022	ARS	18		F4463080
00455	0	40000	0	07777	ADD	BBTBOX		F4463090
00456	0	40000	0	00031	ADD	LA1		F4463100
00457	0	60100	0	07777	STO	BBTBOX		F4463110
00460	0	53400	4	00071	LXA	IINBX,4	RESTORE INSTRUCTION REPLACED FOR	F4463120
00461	0	50000	0	00072	CLA	INSX	END OF PREVIOUS BLOCK	F4463130
00462	0	60100	4	00555	STO	CPY1A,4		F4463140
00463	-0	50000	0	00545	CAL	TXLBTT	COMPUTE NEW TEST DECREMENTS FOR	F4463150
00464	0	40000	0	00074	ADD	BLKNO	TESTING END OF BLOCK--THE VALUE	F4463160
00465	0	62200	0	00545	STD	TXLBTT	IS THE NUMBER OF THE LAST BASIC	F4463170
00466	0	62200	0	00551	STD	TXL2	BLOCK WHICH WILL FIT IN THIS BLKF	F4463180

00467	0	62200	0	00570	STD	TXL3		F4463190
00470	-0	32000	0	00047	ANA	DECMKR		F4463200
00471	0	40000	0	00043	ADD	LD1R	IS THIS LARGER THAN THE NUMBER OF	F4463210
00472	0	40200	0	07774	SUB	BBOX.=	THE LAST BASIC BLOCK	F4463220
00473	-0	12000	0	00501	TMI	COMB	NO	F4463230
00474	0	50000	0	07774	CLA	BBOX.=	YES, TEST DECREMENT SHOULD BE	F4463240
00475	0	40200	0	00043	SUB	LD1R	NUMBER OF LAST BB INSTEAD	F4463250
00476	0	62200	0	00545	STD	TXLBBT		F4463260
00477	0	62200	0	00551	STD	TXL2		F4463270
00500	0	62200	0	00570	STD	TXL3		F4463280
00501	0	50000	0	00041	COMB	CLA	L2047	F4463290
00502	0	40200	0	00064	SUB	BBTY	SET B FOR TEST FOR END OF DRUM	F4463300
00503	0	73400	2	00000	PAX	0,2	NUMBER OF WORDS LEFT ON DRUM INTO	BF4463310
00504	0	40000	0	00031	ADD	LA1		F4463320
00505	0	76500	0	00043	LRS	35	ARRANGE CONNECTION TO 2ND LOOP	F4463330
00506	0	22100	0	00036	DVP	L6R	FIND OUT WHICH OF THE 6 WORDS IN	F4463340
							AN ENTRY WILL OCCUPY THE LAST	F4463350
							POSITION ON THE DRUM	F4463360
00507	0	76000	0	00012	DCT			F4463370
00510	0	07400	4	00004	TSX	RDFORT,4	BAD DIVIDE	F4463380
00511	0	40200	0	00031	SUB	LA1		F4463390
00512	-0	12000	0	00604	TMI	ZREM	BREAK IS BETWEEN ENTRIES (PUT 5	F4463400
							INTO AC)	F4463410
00513	-0	10000	0	00515	TNZ	FREM	MORE THAN ONE WORD FITS (LEAVE	F4463420
							NO-I IN AC)	F4463430
00514	0	50000	0	00034	CLA	LC1	EXACTLY 1 WORD FITS (PUT LC1 IN AC)	F4463440
00515	0	76700	0	00001	FREM	ALS	1	F4463450
00516	0	76000	0	00006	COM		GET ADDRESS OF INSTRUCTION TO BE	F4463460
00517	0	62100	0	00071	STA	IINBX	REPLACED BY TRA TO 2ND LOOP	F4463470
00520	0	53400	4	00071	LXA	IINBX,4	SAVE ADDRESS OF THIS ONE	F4463480
00521	0	56000	4	00555	LDQ	CPY1A,4	REPLACE PROPER INSTRUCTION WITH A	F4463490
							TRANSFER TO TAKE CARE OF END	F4463500
							OF DRUM SITUATION	F4463510
00522	0	50000	0	00066	CLA	LTRND		F4463520
00523	0	60100	4	00555	STO	CPY1A,4	STORE A TRA NDDR	F4463530
00524	-0	60000	0	00072	STQ	INSX		F4463540
A	00525	0	76600	0	00000	WRS1	WRS	F4463550
T	00526	-0	75400	0	00000	PXD	SELECT DRUM	F4463560
	00527	-3	00000	2	00600	TXL	LDA1,2,0	F4463570
							INDEX B HAS NO. OF WORDS LEFT ON	F4463580
							DRUM, ONLY 1 WORD FITS ON DRUM	F4463590
00530	-2	00006	2	00573	TNX	NOBK,2,6	LESS THAN 6 WORDS FIT	F4463600
00531	0	46000	0	00064	LDA	BBTY	MAIN LOOP FOR STORING BB TABLE	F4463610
00532	0	70000	1	02413	CPY1R	CPY	BBTABL,1	F4463620
00533	0	36100	1	02413	ACL	BBTABL,1	WRITE SIX WORDS OF ENTRY	F4463630
00534	0	70000	1	06314	CPY	BBTAGS,1		F4463640
00535	0	36100	1	06314	ACL	BBTAGS,1		F4463650
00536	0	70000	0	00033	CPY	LOR		F4463660
00537	0	60200	0	00067	SLW	ERAS1R		F4463670
00540	0	70000	0	00033	CPY	LOR		F4463680
00541	1	00001	1	00542	TXI	CPY5,1,1	INCREASE INDEX OF POSITION IN BBT	F4463690
00542	0	70000	0	00033	CPY5	CPY	LOR	F4463700
00543	-2	00006	2	00550	TNX	CPY6C,2,6	TEST FOR NEARING END OF DRUM	F4463710
00544	0	70000	0	00033	CPY6	CPY	LOR	F4463720
D	00545	-3	00000	1	00532	TXLBBT	TXL	CPY1R,1

	00546	0	70000	0	00067	CPY ERAS1R		WHOLE BLOCK FITS, COPY CHECKSUM	F4463730
	00547	0	02000	0	00433	TRA NXTBL			F4463740
	00550	0	70000	0	00033	CPY6C CPY LOR			F4463750
	00551	-3	00000	1	00555	TXL2 TXL CPY1A,1,XXXXXX			F4463760
	00552	0	70000	0	00067	CPY ERAS1R			F4463770
	00553	0	02000	0	00433	TRA NXTBL			F4463780
A	00554	0	00000	0	00000	DUMM HTR		USED IN SWITCHING AT END OF BLOCK	F4463790
								ONE OF THE FOLLOWING INSTRUCTIONS IS ALWAYS REPLACED BY	F4463800
								TRANSFER TO SECOND DRUM.	F4463810
	00555	0	70000	1	02413	CPY1A CPY BBTABL,1			F4463820
	00556	0	36100	1	02413	ACL BBTABL,1			F4463830
	00557	0	70000	1	06314	CPY2A CPY BBTAGS,1			F4463840
	00560	0	36100	1	06314	ACL BBTAGS,1			F4463850
	00561	0	70000	0	00033	CPY3A CPY LOR			F4463860
	00562	0	60200	0	00067	SLW ERAS1R			F4463870
	00563	0	70000	0	00033	CPY4A CPY LOR			F4463880
	00564	1	00001	1	00565	TXI CPY5A,1,1			F4463890
	00565	0	70000	0	00033	CPY5A CPY LOR			F4463900
	00566	0	76100	0	00000	NOP			F4463910
	00567	0	70000	0	00033	CPY6A CPY LOR			F4463920
	00570	-3	00000	1	00601	TXL3 TXL CPY1B,1,XXXXXX			F4463930
	00571	0	70000	0	00067	CPY7A CPY ERAS1R			F4463940
	00572	0	02000	0	00433	TRA NXTBL			F4463950
	00573	0	46000	0	00064	NOBK LDA BBTY			F4463960
	00574	0	02000	0	00555	TRA CPY1A			F4463970
	00575	0	53400	2	00042	NDDR LXA L2048,2		SELECT 2ND DRUM	F4463980
A	00576	0	76600	0	00000	NDWRS WRS			F4463990
	00577	0	02000	4	00532	TRA CPY1R,4			F4464000
	00600	0	46000	0	00064	LDA1 LDA BBTY			F4464010
	00601	0	70000	1	02413	CPY1B CPY BBTABL,1			F4464020
	00602	-0	53400	4	00603	LXD LMLE,4		PRESET RETURN TO MAIN LOOP	F4464030
	00603	1	77777	0	00575	LMLE TXI NDDR,0,-1			F4464040
	00604	0	50000	0	00035	ZREM CLA L5		IF DRUM ENDS WITH LAST WORD IN AN	F4464050
	00605	0	02000	0	00515	TRA FREM		ENTRY	F4464060
									F4464070
								THIS ROUTINE WRITES BBLIST ON TAPE 3.	F4464080
	00606	0	77000	0	00223	OUT2 WEF BLT			F4464090
	00607	-0	53400	1	07774	LXD BBOX.=,1			F4464100
	00610	0	50000	0	07774	CLA BBOX.=			F4464110
	00611	0	77100	0	00022	ARS 18			F4464120
	00612	0	60100	0	07774	STO BBOX.=			F4464130
	00613	-0	53400	2	00616	LXD WBL2,2			F4464140
	00614	0	76600	0	00223	WRS BLT			F4464150
	00615	0	70000	2	07774	WBL1 CPY BBOX.=,2		WRITE BB LIST	F4464160
	00616	1	00001	2	00617	WBL2 TXI WBL2+1,2,1			F4464170
	00617	2	00001	1	00615	TIX WBL1,1,1			F4464180
	00620	0	76400	0	00223	BST BLT			F4464190
	00621	0	76400	0	00223	BST BLT			F4464200
	00622	0	76400	0	00223	BST BLT			F4464210
	00623	0	76200	0	00223	RDS BLT			F4464220
	00624	0	53400	1	00032	LXA MINUS4,1		MOVES KEYS FOR SECTION 5 IN	F4464230
	00625	0	50000	1	10000	KEYS CLA 4096,1		8-1-4-1 SYSTEM, DOES NOTHING IN	F4464240
	00626	0	60100	1	20000	STO 8192,1		4-1-4-1 SYSTEM.	F4464250
	00627	2	00001	1	00625	TIX KEYS,1,1			F4464260

00630	0	76200	0	00221	RDS	SYSTAP		F4464270
00631	0	02000	0	00004	TRA	RDFORT		F4464280
								F4464290
							THIS DRUM SUBROUTINE TRANSFERS A TABLE TO THE DRUM, TABLE IS	F4464300
							BACKWARDS IN CM AND STORED EVERY OTHER WORD. GOES FORWARD ON	F4464310
							DRUM. CALLING SEQUENCE IS,	F4464320
							TSX DRUM, 4	F4464330
							HTR N N IS NUMBER OF ENTRIES IN THE TABLE	F4464340
							HTR A A IS CM ADDRESS OF LAST ENTRY IN	F4464350
							TABLE	F4464360
							HTR D D IS DRUM ADDRESS, 0-8191	F4464370
							UPON RETURN, NEXT AVAILABLE DRUM ADDRESS HAS REPLACED THE	F4464380
							HTR D	F4464390
							A CHECK SUM IS PUT AFTER EVERY B WORDS, SEE THE NEXT CARD.	F4464400
							A MUST BE GREATER THAN 1, N GETS REPLACED BY 0	F4464410
00632	0	00000	0	00215	GP1..J	HTR BBBB.J	ADDRESS HAS B.	F4464420
00633	0	50000	4	00002	DRUM.J	CLA 2, 4	SET ADDRESSES DEPENDENT ON INITIAL	F4464430
00634	0	62100	0	00664		STA G7..J	TABLE ADDRESS IN CORES	F4464440
00635	0	62100	0	00757		STA G22..J		F4464450
00636	0	62100	0	00762		STA G17..J		F4464460
00637	0	62100	0	00753		STA G33..J		F4464470
00640	0	40200	0	01012		SUB TWOA.J		F4464480
00641	0	62100	0	00760		STA G14..J		F4464490
00642	-0	53400	1	01013	G1...J	LXD GK6..J, 1	INITIALIZE INDEX OF POSITION IN	F4464500
00643	-0	63400	1	00666		SXD G8...J, 1	TABLE.	F4464510
00644	0	50000	4	00001	G2...J	CLA 1, 4	FORM N-B	F4464520
00645	0	40200	0	00632		SUB GP1..J		F4464530
00646	-0	12000	0	00733		TMI G3...J	IS N LARGER THAN B	F4464540
00647	0	60100	4	00001		STO 1, 4	YES STORE NEW N	F4464550
00650	0	50000	0	00632		CLA GP1..J	PREPARE TO TRANSFER B WORDS	F4464560
00651	0	10000	4	00004	G4...J	TZE 4, 4	IF NO WORDS LEFT, RETURN	F4464570
00652	0	60100	0	01015		STO GV2..J		F4464580
00653	-0	53400	1	00666		LXD G8...J, 1	CURRENT INDEX TO A	F4464590
00654	1	00002	1	00655	G5...J	TXI G5...J+1, 1, 2	UP IT, IT LAGS BEHIND	F4464600
00655	-0	63400	1	01016		SXD GV3..J, 1		F4464610
00656	0	76700	0	00023		ALS 19		F4464620
00657	0	40200	0	00666		SUB G8...J	THE TXL IS NEGATIVE	F4464630
00660	-0	73400	2	00000		PDX 0, 2		F4464640
00661	-0	63400	2	00666		SXD G8...J, 2	SET NEW END TEST	F4464650
00662	0	50000	0	01014		CLA ZERO.J		F4464660
00663	1	00002	1	00664	G6...J	TXI G6...J+1, 1, 2	CHECK	F4464670
00664	0	36100	1	00000	G7...J	ACL TABLEJ, 1		F4464680
00665	3	07775	2	00667		TXH G31..J, 2, 4093	SUM.	F4464690
00666	-3	00000	1	00663	G8...J	TXL G6...J, 1, SET..J		F4464700
00667	0	60200	0	01017	G31..J	SLW GV4..J	STORE CHECK SUM	F4464710
00670	0	50000	4	00003		CLA 3, 4	SPACE LEFT ON DRUM, NEGATIVE	F4464720
00671	-0	32000	0	01004		ANA GK1..J		F4464730
00672	0	40200	0	01005		SUB GK2..J		F4464740
00673	0	40000	0	01015		ADD GV2..J	WILL BLOCK FIT	F4464750
00674	-0	12000	0	00721		TMI G9...J		F4464760
00675	0	60100	0	01021	G20..J	STO GV6..J	NO, STO. AMOUNT LEFT OVER	F4464770
00676	0	40200	0	01015		SUB GV2..J		F4464780
00677	0	76000	0	00003		SSP	IN AC IS DRUM SPACE	F4464790
00700	0	60100	0	01015		STO GV2..J		F4464800

00701	0	76700	0	00023	ALS 19		F4464810
00702	0	40000	0	01016	ADD GV3..J	FORM INITIALIZING INDEX	F4464820
00703	-0	73400	2	00000	PDX 0,2	FOR 2ND HALF	F4464830
00704	-0	53400	1	01016	LXD GV3..J,1	LOAD BEFORE STORING BACK	F4464840
00705	-0	63400	2	01016	SXD GV3..J,2		F4464850
00706	1	77776	2	00707	G30..J TXI G30..J+1,2,-2	END TEST IS 2 LESS	F4464860
00707	-0	63400	2	00763	SXD G23..J,2		F4464870
00710	0	50000	0	01007	CLA GK4..J	DRUM SELECTION ROUTINE	F4464880
00711	0	07400	2	00770	TSX G11..J,2	ALSO STORES SWITCH	F4464890
00712	0	02000	0	00744	TRA G15..J		F4464900
00713	0	50000	4	00003	G24..J CLA 3,4		F4464910
00714	0	40200	0	01010	SUB ONEA.J		F4464920
00715	0	60100	4	00003	STO 3,4	SET BLOCK LENGTH TO NO. OF	F4464930
00716	0	50000	0	01021	CLA GV6..J	WORDS LEFT.	F4464940
00717	0	60100	0	01015	STO GV2..J		F4464950
00720	0	02000	0	00737	TRA G10..J		F4464960
00721	0	40000	0	01010	G9..J ADD ONEA.J	DOES SUM CHECK FIT TOO	F4464970
00722	-0	12000	0	00737	TMI G10..J		F4464980
00723	0	50000	0	01006	G19..J CLA GK3..J	NO	F4464990
00724	0	07400	2	00770	TSX G11..J,2		F4465000
00725	0	40000	0	01010	ADD ONEA.J	ARRANGE TO PUT CK SUM	F4465010
00726	0	62100	0	00730	STA G25..J	ON NEXT DRUM	F4465020
00727	0	02000	0	00741	TRA G12..J		F4465030
00730	0	76600	0	00000	G25..J WRS SET..J		F4465040
00731	0	70000	0	01017	G26..J CPY GV4..J	COPY CHECK SUM.	F4465050
00732	0	02000	0	00644	TRA G2..J		F4465060
00733	0	56000	0	01014	G3..J LDQ ZERO.J	RECORD THAT THERE ARE NO WORDS LEFT	F4465070
00734	0	50000	4	00001	CLA 1,4		F4465080
00735	-0	60000	4	00001	STQ 1,4		F4465090
00736	0	02000	0	00651	TRA G4..J		F4465100
00737	0	50000	0	00731	G10..J CLA G26..J	SUM CK. FITS TOO	F4465110
00740	0	07400	2	00770	TSX G11..J,2		F4465120
00741	0	50000	0	00666	G12..J CLA G8..J		F4465130
00742	0	62200	0	00763	STD G23..J	SET END TEST	F4465140
00743	-0	53400	1	01016	LXD GV3..J,1		F4465150
00744	0	50000	0	01015	G15..J CLA GV2..J		F4465160
00745	0	76000	0	00001	LBT	IS BLOCK LENGTH ODD	F4465170
00746	0	02000	0	00766	TRA G13..J	NO	F4465180
00747	0	56000	0	01010	LDQ ONEA.J		F4465190
00750	0	04000	0	00755	TLQ GV3..J	IS IT EQUAL TO ONE	F4465200
00751	0	46000	0	01020	LDA GV5..J	YES, TRANSFER THE SINGLE WORD	F4465210
00752	1	00002	1	00753	G34..J TXI G34..J+1,1,2		F4465220
00753	0	70000	1	00000	G33..J CPY TABLEJ,1		F4465230
00754	0	02000	0	00764	TRA G18..J		F4465240
00755	0	46000	0	01020	G32..J LDA GV5..J	COPY WORDS ONTO THE DRUM	F4465250
00756	1	00002	1	00757	G27..J TXI G27..J+1,1,2		F4465260
00757	0	70000	1	00000	G22..J CPY TABLEJ,1		F4465270
00760	0	70000	1	77776	G14..J CPY TABLEJ-2,1		F4465280
00761	1	00004	1	00762	G16..J TXI G16..J+1,1,4		F4465290
00762	0	70000	1	00000	G17..J CPY TABLEJ,1		F4465300
00763	-3	00000	1	00760	G23..J TXL G14..J,1		F4465310
00764	0	70000	0	01017	G18..J CPY GV4..J	OR TRA G25 OR TRA G24	F4465320
00765	0	02000	0	00644	TRA G2..J		F4465330
00766	0	46000	0	01020	G13..J LDA GV5..J		F4465340

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00767 0 02000 0 00760      TRA G14..J                               F4465350
                                                F4465360
                                DRUM SELECTION SUBROUTINE, COMPUTES NEW DRUM ADDRESS F4465370
00770 0 60100 0 00764 G11..J STO G18..J                               STORE SWITCH WORD. F4465380
00771 0 50000 4 00003      CLA 3,4                               PRESERVE DRUM ADDRESS F4465390
00772 0 60100 0 01020      STO GV5..J                               F4465400
00773 0 40000 0 01015      ADD GV2..J                               FORM THE NEW DRUM ADDRESS F4465410
00774 0 40000 0 01010      ADD ONEA..J                               F4465420
00775 0 60100 4 00003      STO 3,4                               F4465430
00776 0 50000 0 01020      CLA GV5..J                               SELECT THE DRUM F4465440
00777 0 77100 0 00013      ARS 11                               F4465450
01000 0 40000 0 01011      ADD GK5..J                               F4465460
01001 0 60100 0 01002      STO G21..J                               F4465470
A 01002 0 76600 0 00000 G21..J WRS                               F4465480
01003 0 02000 2 00001      TRA 1,2                               F4465490
                                                F4465500
                                FOLLOWING ARE THE CONSTANTS USED F4465510
01004 0 00000 0 03777 GK1..J 2047                               F4465520
01005 0 00000 0 04000 GK2..J 2048                               F4465530
01006 0 02000 0 00730 GK3..J TRA G25..J F4465540
01007 0 02000 0 00713 GK4..J TRA G24..J F4465550
01010 0 00000 0 00001 ONEA..J 1                               F4465560
01011 0 76600 0 00301 GK5..J WDR 1 F4465570
01012 0 00000 0 00002 TWOA..J 2                               F4465580
01013 0 77774 0 00000 GK6..J 0,0,-4 F4465590
01014 0 00000 0 00000 ZERO..J F4465600
                                VARIABLES OR TEMPORARY STORAGE F4465610
01015 0 00000 0 00000 GV2..J LENGTH OF BLOCK F4465620
01016 0 00000 0 00000 GV3..J INDEX OF LAST WORD IN BLOCK F4465630
01017 0 00000 0 00000 GV4..J SUM CHECK F4465640
01020 0 00000 0 00000 GV5..J OLD DRUM ADDRESS F4465650
01021 0 00000 0 00000 GV6..J REMAINING BLOCK LENGTH F4465660
                                00000 TABLEJ SYN 0 F4465670
                                00000 SET..J SYN 0 F4465680
                                                F4465690
                                                F4465700
A                                00000      END F4465710

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SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	2683	0	0	0	0
LIB	0	0	0	0	0
COL	2683	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 2692

NUMBER OF SYMBOLS, DEF 774, DEFOP 0, UNDEF 0

REM 704 FORTRAN II, SECTION V, TAG ANALYSIS, 4-1-6-2

F5G00010

704 FORTRAN II, SECTION V, TAG ANALYSIS, 4-1-6-2	F5G00010
DAVID STERNLIGHT I.B.M. WORLD HEADQUARTERS 5 NOV 58.	F5G00020
INTRODUCTION	F5G00030
THE GENERAL PHILOSOPHY OF SECTION 5 IS TO REDUCE A PROGRAM	F5G00040
USING AS MANY INDEX REGISTERS AS NEEDED TO ONE USING 3 INDEX	F5G00050
REGISTERS IN AS EFFICIENT A MEANS AS POSSIBLE, CALLING ON	F5G00060
INDEX CELLS WHICH ARE STORAGE LOCATIONS, TO RETAIN DISPLACED	F5G00070
INFORMATION WHEN THE CONTENTS OF AN INDEX REGISTER MUST BE	F5G00080
REPLACED. THUS THE INDEX CELLS CORRESPOND TO ORIGINAL INDEX	F5G00090
REGISTERS USED IN THE FORTRAN OBJECT PROGRAM BEFORE SECTION 5.	F5G00100
THE MAIN PROBLEMS SECTION 5 HANDLES ARE THOSE OF KEEPING	F5G00110
INDEX CELLS UP TO DATE, AND EFFICIENTLY SEEING TO IT THAT THE	F5G00120
3 INDEX REGISTERS CONTAIN THE PROPER INFORMATION AT ALL	F5G00130
TIMES FOR THE CORRECT EXECUTION OF TAGGED INSTRUCTIONS.	F5G00140
GENERALLY, SECTION 5 COMPILES SX,S WHENEVER AN INDEX CELL	F5G00150
MUST BE UPDATED SO THAT IF AN INDEX QUANTITY IS NEEDED AND	F5G00160
NOT PRESENT IN AN INDEX REGISTER, AN LX CAN BE USED WITHOUT	F5G00170
CONCERN ABOUT WHAT IS WIPED OUT. THE SKILLFUL PLACEMENT OF	F5G00180
THESE SX,S IS ONE OF THE MAJOR JOBS OF SECTION 5.	F5G00190
THE PROGRAM IS ANALYZED USING THE CONCEPT OF BASIC BLOCKS,	F5G00200
PROGRAM UNITS HAVING A SINGLE ENTRY AND EXIT POINT, AS DEFINED	F5G00210
BY SECTION 4. THE LINKS BETWEEN BASIC BLOCKS ARE LABELED	F5G00220
BY FREQUENCY IN SECTION 4, BY ACTUAL PROGRAM SIMULATION.	F5G00230
SECTION 5 ANALYSES THE OBJECT PROGRAM BY STARTING WITH THE	F5G00240
HIGHEST FREQUENCY LINK BETWEEN BB,S AND EXPANDING OUTWARD	F5G00250
ALONG PREDECESSOR AND SUCCESSOR BASIC BLOCKS. THE AREA FORMED	F5G00260
IN THIS MANNER IS A PORTION OF THE OBJECT PROGRAM AND IS	F5G00270
CALLED A LOOPLIST. THIS IS TREATED TO REDUCE THE NUMBER OF	F5G00280
INDEX REGISTERS TO 3, IS THEN CALLED A REGION, AND CAN ENTER	F5G00290
FUTURE LOOPLISTS. THE LOOPLIST PROCESS IS CONTINUED,	F5G00300
CONSTANTLY EXPANDING THE TREATED AREA OF THE OBJECT PROGRAM	F5G00310
BY THE INCLUSION OF ALREADY TREATED REGIONS IN THE CURRENT	F5G00320
LOOPLIST WHERE APPROPRIATE TO THE FLOW OF THE PROGRAM. THESE	F5G00330
REGIONS BECOME A PART OF THIS LATEST LOOPLIST,S REGION AT THE	F5G00340
END OF THE LOOPLIST TREATMENT, FORMING A NEW, SINGLE REGION.	F5G00350
FINALLY THE ENTIRE PROGRAM HAS BEEN TREATED. A FURTHER PRINCIPLE	F5G00360
USED BY SECTION 5 IS TO COMPILE THE UPDATING SX,S AS	F5G00370
LATE AS POSSIBLE TO TRADE OBJECT PROGRAM SPACE FOR TIME,	F5G00380
SINCE THE LATER THE SX IS COMPILED, THE LOWER THE FREQUENCY	F5G00390
OF TRANSFERS BETWEEN BLOCKS, HENCE THE FEWER THE EXECUTIONS	F5G00400
OF THE SX.	F5G00410
LPLST IS FORMED IN CORES BY SECTION 5 PART 1. IT SUMMARIZES	F5G00420
EACH NEW REGION TO BE TREATED. PREFIX CODES ARE 2=OPAQUE	F5G00430
REGION, 1=TRANSPARENT REGION (AT LEAST ONE INDEX REGISTER	F5G00440
FREE) AND PREFIX CODE 0=BASIC BLOCKS. THE BB NUMBER	F5G00450
IS CONTAINED IN THE DECREMENT OR ADDRESS. 7777 INDICATE.	F5G00460
LPLST ENTRY IS AT END OF REGION OR LPLST EXIT IS AT BEGINNING	F5G00470
OF REGION, SPECIFIED BY BB NUMBER. 00000 INDICATES NOTHING	F5G00480
INTERVENING BETWEEN THAT POINT AND THE NEXT DECREMENT OR	F5G00490
ADDRESS. A WORD OF FULL BB,ENS, CALLED SENTINEL, TERMINATES	F5G00500
LPLST. THUS A NEW REGION TO BE TREATED MIGHT HAVE A LPLST	F5G00510
BEFORE TREATMENT LIKE	F5G00520
277777 000014	F5G00530
000023 000000	F5G00540

100026 000033	F5G00550
200003 777777	F5G00560
777777 777777.	F5G00570
THIS MEANS ENTRY IN OPAQUE REGION ENDING IN BB 14, THEN COMES	F5G00580
BB23, THEN IMMEDIATELY FOLLOWS A TRANSPARENT REGION FROM	F5G00590
BB 26 TO BB 33, THEN AN OPAQUE REGION ENTERING AT BB 3,	F5G00600
TERMINATING THIS LPLST. WHEN TREATED, THIS ENTIRE LPLST	F5G00610
BECOMES A NEW, SINGLE REGION, ENCOMPASSING THE OLD REGIONS	F5G00620
AND BB,S IN IT, WHICH WILL DISAPPEAR.	F5G00630
REG TABLE, IN CORES, HAS 1 WORD PER EXISTING REGION. PREFIX	F5G00640
INDICATES EXISTENCE IN REGION OF LX,S TO THE IR,S ,	F5G00650
DECREMENT=FIRST BB NO. IN REGION, TAG BITS=EMPTINESS	F5G00660
THROUGHOUT REGION OF IR,S.	F5G00670
INPUT TABLES INCLUDE PRED, SUCC, BBB, ALL ON DRUM.	F5G00680
SUCC IS FIRST DRUM TABLE. IT IS PREPARED BY SECTION 4,	F5G00690
ORDERED ON BB NUMBER. IT IS PING PONGED BETWEEN DRUM AND	F5G00700
CORES BY THE SE6 ROUTINE.	F5G00710
THE WORD FORMAT IS SIGN BIT MADE NEGATIVE BY X89 WHEN A LINK	F5G00720
IS TREATED. BITS 1-14=FREQUENCY OF LINK, ADDRESS=NO. OF	F5G00730
SUCCESSOR BASIC BLOCK.	F5G00740
PRED IS THE SECOND DRUM TABLE. IT IS PREPARED BY SECTION 4.	F5G00750
PRED IS ORDERED ON BB NUMBER AND PING PONGED BETWEEN DRUM AND	F5G00760
CORES BY THE SE5 ROUTINE.	F5G00770
WORD FORMAT IS SIGN BIT NEGATIVE WHEN LINK TREATED.	F5G00780
BITS 1-14=FREQUENCY OF LINK. BITS 15-17 CALL FOR LX,S TO	F5G00790
THE 3 INDEX REGISTERS AND BITS 18-20 CALL FOR SX,S TO APPRO-	F5G00800
PRIATE INDEX CELLS. THESE SX,S WILL LATER BE COMPILED	F5G00810
BETWEEN BASIC BLOCKS BY PART 4 OF SECTION 5. THE ADDRESS	F5G00820
CONTAINS THE NUMBER OF THE PREDECESSOR BASIC BLOCK.	F5G00830
BBB IS THE THIRD DRUM TABLE, AND IS PREPARED BY SECTION 4.	F5G00840
THERE IS A 6 WORD ENTRY FOR EACH BB, AND A FINAL DUMMY ENTRY.	F5G00850
THE SE AND SE1 ROUTINES PING PONG BBB BETWEEN DRUM AND CORES.	F5G00860
WORD FORMAT FROM SECTION 4. FIRST WORD DECR=STARTING POINT	F5G00870
IN SUCC, ADDRESS=STARTING POINT IN PRED OF ENTRIES	F5G00880
REFERRING TO THIS BASIC BLOCK. FIRST WORD PREFIX CONTAINS	F5G00890
CODE DESCRIBING TYPE OF ENDING BB HAS. CODING IS....	F5G00900
000=DO WITH AN IF, 001=MSE, 010=PROBABILITY BRANCH	F5G00910
011=CERTAINTY BRANCH, 100=DO WITHOUT AN IF, 101=GO TO N,	F5G00920
110=STOP. SECOND WORD, BITS 12-17=PERMUTATION NUMBERS,	F5G00930
INITIALIZED TO 33 BY SECTION 4. ADDRESS=ORDINAL NUMBER OF	F5G00940
FIRST TAGLIST ENTRY BELONGING TO THIS BB. REMAINING WORDS	F5G00950
INITIALIZED TO ZEROES BY SECTION 4.	F5G00960
IN SECTION 5 PART 1, FURTHER ENTRIES ARE MADE. SECOND WORD	F5G00970
BITS S-2 INDICATE IR ACTIVITY IN THIS BB. PERMUTATION NOS.	F5G00980
MAY UNDERGO CHANGE. WORDS 3-5 RECORD ENTRY AND EXIT CONDS.	F5G00990
FOR THE 3 INDEX REGISTERS IN THE DECREMENT AND ADDRESS.	F5G01000
WORD 6 DECR=REGION NUMBER BB CURRENTLY BELONGS TO.	F5G01010
ADDRESS=NUMBER OF NEXT BB IN REGION.	F5G01020
STAG IS THE FOURTH DRUM TABLE. INITIALIZED TO ZEROES AT SEC.	F5G01030
5 PART 1 START. ONE 4 BIT ENTRY FOR EACH TAGLIST INSTRUCTION	F5G01040
IS MADE IN SECTION 5 PART 1 AND READ IN PART 4. BITS S-8	F5G01050
CALL FOR AN SX PRECEDING THE TAGLIST INSTRUCTION, BITS 9-17	F5G01060
FOR AN LX FOLLOWING. BITS 18-35 IN PAIRS SPECIFY THE INDEX	F5G01070
REGISTER TAGLIST INSTRUCTION IS TO USE. THUS PRED RECORDS	F5G01080

INTER BB LX,S AND SX,S AND STAG RECORDS INTRA-BB LX,S AND SX,S. STAG IS HANDLED BY THE SE4 ROUTINE. F5G01090
 CMTAG, THE CORE BUFFER FOR TAGLIST, HAS THE SAME WORD FORMAT, THAT IS, THE DECREMENT CONTAINS THE INSTRUCTION CLASS, CODED FROM 0 TO 6, AND THE ADDRESS CONTAINS THE SYMBOLIC ADDRESS, AS FOLLOWS, BITS 24-26 CONTAIN TAU 1,2, OR 3, AND BITS 27-35 CONTAIN THE NUMBER OF THE ENTRY IN THAT TAU TABLE. NOTE THAT IN THE OUTPUT, THE SYMBOLIC ADDRESS OF INDEX CELLS IS, TAU 1=G, TAU 2=10, TAU 3=1G, AND THIS SYMBOL IS FOLLOWED BY THE NUMBER OF THE ENTRY. THUS A TAGLIST ENTRY IN THE ADDRESS OF 003005 BECOMES 1G5, THAT IS, TAU 3, ENTRY 5. THE INSTRUCTION CLASSES AS FOLLOWS, IN DECF L=LXA,LXD,PAX,PDX. 2=LXP. 3=DED. 4 IS UNUSED BUT AVAIL. FOR TNX. 5=ACTIVE INSTR LIKE TIX AND TXI. 6=PASSIVE INSTR. A PASSIVE INSTR IS A TAGGED INSTR THAT DOES NOT CHANGE THE CONTENTS OF THE INDEX REGISTER. 7=UNUSED BUT AVAIL. FOR TIX. WHEN 7 IS USED FOR A TIX, IT REPRESENTS A TIX USED AS A TRANSFER, NOT AN ACTIVE TIX. ACTIVE INSTRUCTIONS MAY BE RECOGNIZED BY THEIR ADDRESSES, WHICH ARE OF THE FORM *+Q WHERE Q IS SOME CONSTANT. F5G01100
 F5G01110
 F5G01120
 F5G01130
 F5G01140
 F5G01150
 F5G01160
 F5G01170
 F5G01180
 F5G01190
 F5G01200
 F5G01210
 F5G01220
 F5G01230
 F5G01240
 F5G01250
 F5G01260
 F5G01270
 F5G01280
 F5G01290
 F5G01300
 F5G01310
 F5G01320
 F5G01330
 F5G01340
 F5G01350
 F5G01360
 F5G01370
 F5G01380
 F5G01390
 F5G01400
 F5G01410
 F5G01420
 F5G01430
 F5G01440
 F5G01450
 F5G01460
 F5G01470
 F5G01480
 F5G01490
 F5G01500
 F5G01510
 F5G01520
 F5G01530
 F5G01540
 F5G01550
 F5G01560
 F5G01570
 F5G01580
 F5G01590
 F5G01600
 F5G01610
 F5G01620

4-1-6-2 PARAMETER LIST

10000	MSIZE EQU 4096	4-1-6-2 MEMORY SIZE	F5G01590
00062	FP1 EQU 50	4-1-6-2 REG TABLE SIZE	F5G01600
00036	S3P1 EQU 30	4-1-6-2 LPLST TABLE SIZE	F5G01610
00062	STL EQU 50	4-1-6-2 STAG LENGTH	F5G01620

					FIXED PARAMETER LIST, INDEP. OF CORESIZE	F5G01670
07774		KEYS	SYN	Msize-4	CONSTANTS TO RELATE PROGRAM TO TABLES	F5G01680
					ORDER OF DRUM TABLES IS SUCC STARTING AT ZERO, FOLLOWED BY	F5G01690
					PRED, BBB, AND STAG, WHICH IS FILLED IN BY SECTION V.	F5G01700
					THE ORDER OF INFORMATION IN KEYS IS ... KEYS=NUMBER OF BBS,	F5G01710
					KEYS+1=START OF PRED, KEYS+2=START OF BBB, AND KEYS+3=STAG.	F5G01720
00004		INSTTP	EQU	4	COMPILED INST ON TAPE 4	F5G01730
00003		TAPE	EQU	3	OUTPUT TAPE IS 3	F5G01740
00003		OTAPE	EQU	3	OUTPUT TAPE IS 3	F5G01750
00003		BLT	EQU	3	BLOCK LIST ON TAPE 3	F5G01760
00002		ACTPE	EQU	2	ASSIGN CONSTANTS ON TAPE 2	F5G01770
00001		RECNO	EQU	1	NO OF CIT RECORDS IN AT ONE TIME	F5G01780
00144		ZINST	EQU	RECNO*100	LENGTH OF INST TABLE	F5G01790
00144		LCLST	EQU	100	LENGTH OF OUTPUT BLOCK, COMPILED INSTR	F5G01800
00200		NSXD	EQU	128	NO. OF SXD CASES IN SXD LIST	F5G01810
00024		PTL1	EQU	20	SPACE FOR PATCHES, PART 1	F5G01811
00051		PTL2	EQU	41	SPACE FOR PATCHES, PART 2.	F5G01812
00052		PTL3	EQU	42	SPACE FOR PATCHES, PART 3	F5G01813
00042		PTL4	EQU	34	SPACE FOR PATCHES, PART 4.	F5G01814
00000		SET	EQU	0	INITIAL DRUM ADDRESS	F5G01820
00000		K	EQU	0	INITIAL DRUM ADDRESS	F5G01830
					EDITOR RECORD NO. 75	F5G01840
					FOR CONTROL CARD INFORMATION, SEE END OF ASSEMBLY.	F5G01850
					NO DIAGNOSTIC CALLER FOLLOWS	F5G01870
					PART 1A	F5G01880
					OPTIMIZE INDEXING EXCEPT FOR PERMUTATION, GO TO N,	F5G01890
					INSTRUCTION COMPILATION.	F5G01900
00030		ORG		24	ROUTINE TO TRANSFER NEXT	F5G01910
					PROGRAM PART	F5G01930
00030	0	76200	0	00221	RTB 1 SKIP DIAGNOSTIC	F5G01940
00031	0	02000	0	00004	TRA 4 READ NEXT PROGRAM RECORD	F5G01950
					THE ROUTINES SE, SE1, SE4, SE5, SE6 MANIPULATE DRUM TABLES	F5G01960
					SUCC, PRED, BBB, AND STAG. THEY ARE ENTERED WITH THE WANTED	F5G01970
					ITEM IN THE AC. THEY LOAD IX1 FOR IMMEDIATE REFERENCE TO THE	F5G01980
					STATED ITEM. AFTER SAVING CORES ON THE DRUM WHERE NECESSARY,	F5G01990
					THEY BRING IN THE APPROPRIATE PART OF DRUM TABLES. IF THE	F5G02000
					ITEM IS ALREADY IN CORES, OF COURSE NO SAVING OR DRUM	F5G02010
					MANIPULATION IS NECESSARY.	F5G02020
00032	0	76700	0	00022	SE4 ALS 18	F5G02030
00033	-0	32000	0	00303	ANA SEK4	F5G02040
00034	0	07400	2	00101	TSX SE21,2	F5G02050
					PARAMETERS FOR STAG TABLE	F5G02060
00035	0	00000	0	00000	STAGP HTR 0 N(0)	F5G02070
00036	0	00000	0	00000	HTR 0 N(1)	F5G02080
00037	0	00062	0	00000	HTR 0,0,STAGL N(S)	F5G02090
00040	0	00000	0	00000	HTR 0,0,SET N(L)	F5G02100
00041	0	00000	0	00001	HTR 1 S	F5G02110
00042	0	00000	0	00000	HTR SET D(0)	F5G02120
00043	0	00000	0	05061	HTR STAG A	F5G02130
					PARAMETERS FOR SUCC. TABLE	F5G02140
00044	-0	32000	0	00303	SE6 ANA SEK4	F5G02150
00045	0	07400	2	00101	TSX SE21,2	F5G02160
00046	0	00000	0	00000	SUCCP HTR 0 N(0)	F5G02170

00047	-0000000000001		OCT	-1	N(1)		F5G02180
00050	0 00215 0 00000		HTR	0,0	SUCCL N(S)		F5G02190
00051	0 00000 0 00000		HTR	SET	N(L)		F5G02200
00052	0 00000 0 00001		HTR	1	S		F5G02210
00053	0 00000 0 00000		HTR	0	D(0)		F5G02220
00054	0 00000 0 07555		HTR	SUCC	A		F5G02230
					PARAMETERS FOR PRED. TABLE		F5G02240
00055	0 76700 0 00022	SE5	ALS	18			F5G02250
00056	-0 32000 0 00303		ANA	SEK4			F5G02260
00057	0 07400 2 00101		TSX	SE21,2			F5G02270
00060	0 00000 0 00000	PREDP	HTR	0	N(0)		F5G02280
00061	-0000000000001		OCT	-1	N(1)		F5G02290
00062	0 00215 0 00000		HTR	0,0	PREDL N(S)		F5G02300
00063	0 00000 0 00000		HTR	SET	NIL)		F5G02310
00064	0 00000 0 00001		HTR	1	S		F5G02320
00065	0 00000 0 00000		HTR	SET	D(0)		F5G02330
00066	0 00000 0 07337		HTR	PRED	A		F5G02340
					PARAMETERS FOR BBB TABLE		F5G02350
00067	0 76700 0 00022	SE1	ALS	18	BB NO. IN ADDR.		F5G02360
00070	-0 32000 0 00303	SE	ANA	SEK4	BB NO. IN DECR.		F5G02370
00071	0 07400 2 00101		TSX	SE21,2			F5G02380
00072	0 00000 0 00000	BBBP	HTR	0	N(0) IN DECR. 1ST BB IN CM		F5G02390
00073	-0000000000001		OCT	-1	N(1) IN DECR, LAST BB IN CM +1		F5G02400
00074	0 00112 0 00000		HTR	0,0	BBBL N(S) IN DECR, NO. + BBS POS. IN CM		F5G02410
00075	0 00000 0 00000		HTR	SET	N(L) IN DECR, NO. OF BBS		F5G02420
00076	0 00000 0 00006		HTR	6	S IN ADDR., NO. OF WDS PER BB		F5G02430
00077	0 00000 0 00000		HTR	SET	D(0) IN ADDR., INITIAL DRUM ADDR.		F5G02440
00100	0 00000 0 06442		HTR	BBB	A IN AOR., INITIAL CM ADDR		F5G02450
					2 ED PARAMETER IS + OR - ACCORDING		F5G02460
					AS CM BLOCK IS FULL OR EMPTY		F5G02470
					SR FOR SHUFFLING TABLES TO AND FROM DRUM		F5G02480
00101	0 60100 0 00306	SE21	STO	SEV2	STJ=S 1TEM NO.,X		F5G02490
00102	0 34000 2 00002		CAS	2,2	IS N .X CM		F5G02500
00103	3 00000 0 00000		TXH	-,-,-			F5G02510
00104	-3 00000 0 00106		TXL	SE42,0,-			F5G02520
00105	0 02000 0 00156		TRA	SE41	POSSIBLY		F5G02530
00106	-0 63400 4 00311	SE42	SXD	SEV5,4	NO,STORE RETURN INDEX		F5G02540
00107	0 50000 2 00002		CLA	2,2			F5G02550
00110	-0 12000 0 00120		TMI	SE35	IS CM BLOCK EMPTY		F5G02560
00111	0 07400 4 00262		TSX	SE22,4	NO,FORM CHECK SUM		F5G02570
00112	0 50000 0 00273		CLA	SE23			F5G02580
00113	0 62100 0 00115		STA	SE24	STORE		F5G02590
00114	0 50000 0 00307		CLA	SEV3	CHECK		F5G02600
00115	0 60100 0 00000	SE24	STO	SET	SUM		F5G02610
00116	0 50000 0 00277		CLA	SEK			F5G02620
00117	0 07400 4 00166		TSX	SE26,4			F5G02630
00120	0 50000 0 00314	SE35	CLA	ZERO			F5G02640
00121	0 56000 0 00306		LDQ	SEV2	N(0)=(INT. PT. (N/N(S)).N(S)		F5G02650
00122	0 22100 2 00003		DVP	3,2			F5G02660
00123	0 20000 2 00003		MPY	3,2			F5G02670
00124	-0 60000 2 00001		STQ	1,2	N(1)=MIN (N (0)+N(S),N(L))		F5G02680
00125	0 50000 2 00001		CLA	1,2			F5G02690
00126	0 40000 2 00003		ADD	3,2			F5G02700
00127	0 56000 2 00004		LDQ	4,2			F5G02710

00130	-0	60000	2	00002		STQ	2,2		F5G02720
00131	0	04000	0	00133		TLQ	SE36		F5G02730
00132	0	60100	2	00002		STO	2,2		F5G02740
00133	0	50000	0	00300	SE36	CLA	SEK1 TRANSFER IN A		F5G02750
00134	0	07400	4	00166		TSX	SE26,4 BLOCK OF THE TABLE		F5G02760
00135	0	07400	4	00262		TSX	SE22,4 CHECK SUM		F5G02770
00136	0	50000	0	00273		CLA	SE23 COMPARE		F5G02780
00137	0	62100	0	00140		STA	SE37 CHECK		F5G02790
00140	0	50000	0	00000	SE37	CLA	SET SUMS		F5G02800
00141	0	34000	0	00307		CAS	SEV3		F5G02810
00142	0	02000	0	00144	SE45	TRA	SE43		F5G02820
00143	0	02000	0	00152		TRA	SE40 AGREE		F5G02830
00144	-0	53400	4	00151	SE43	LXD	TPCT,4 REPEAT 5 TIMES		F5G02840
00145	1	00001	4	00146		TXI	SE44,4,1		F5G02850
00146	-0	63400	4	00151	SE44	SXD	TPCT,4		F5G02860
00147	-3	00004	4	00133		TXL	SE36,4,4 TRY AGAIN		F5G02870
00150	0	07400	4	00004		TSX	4,4 TRIEO 5 TIMES GO TO DIAGNOSTIC		F5G02880
							NOTE ON THIS 150 STOP. THIS DRUM CHECKSUM STOP MAY BE CAUSED		F5G02890
							BY MACHINE ERROR.		F5G02900
							IF IX 2 CONTAINS TABLE 1S AND CHECK		F5G02910
							77744 STAG 40		F5G02920
							77732 SUCC 51 ALL		F5G02930
							77721 PRED 63 OCTAL		F5G02940
							77707 BBB 75		F5G02950
							TO SEE IF THE CHECKED LOCATION CONTENTS ARE LESS		F5G02960
							THAN THE CONTENTS OF 306 OCTAL. IF SO, SOURCE PROGRAM, RATH-		F5G02970
							ER THAN MACHINE ERROR IS LIKELY. THE ERROR COULD BE		F5G02980
							A. TRANSFER TO A NON-EXECUTABLE INSTRUCTOR.		F5G02990
							B. UNREACHABLE EXECUTABLE INSTRUCTION IN PROGRAM.		F5G03000
							C. LAST STATEMENT OF A DO IS A TRANSFER.		F5G03010
							D. INCORRECT NUMBER OF ENTRIES IN A FREQUENCY STATEMENT.		F5G03020
00151	0	00000	0	00000	TPCT	HTR	-		F5G03030
00152	-0	63400	0	00151	SE40	SXD	TPCT,0 RESET TARECOUNT		F5G03040
00153	-0	53400	4	00311		LXD	SEV5,4 RESTORE RETURN INDEX		F5G03050
00154	0	50000	0	00306		CLA	SEV2 GET N AGANIN		F5G03060
00155	0	02000	0	00156		TRA	SE41		F5G03070
							THE ITEM MIGHT BE IN STORAGE		F5G03080
00156	0	40200	2	00001	SE41	SUB	1,2 N-N(0)		F5G03090
00157	-0	12000	0	00106		TMI	SE42 DOES IT LIE IN STORAGE		F5G03100
00160	0	76500	0	00043		LRS	35 YES,INDEX=		F5G03110
00161	0	20000	2	00005		MPY	5,2 COM((N-N(0).S)		F5G03120
00162	0	76300	0	00021		LLS	17		F5G03130
00163	0	40200	0	00304		SUB	SEK5		F5G03140
00164	0	73400	1	00000		PAX	0,1		F5G03150
00165	0	02000	4	00001		TRA	1,4		F5G03160
							DRUM TRANSFER SUBROUTINE PROPER		F5G03170
00166	-0	63400	4	00310	SE26	SXD	SEV4,4 STORE RETURN INDEX ANO ITEM NO. TO BE TRANSFERRED		F5G03180
00167	0	60100	0	00260		STO	SE25 STORE READ-WRITE INDICATOR		F5G03190
00170	0	56000	2	00003		LDQ	3,2 FORM		F5G03200
00171	0	20000	2	00005		MPY	5,2 N(S)*S+1		F5G03210
00172	0	76300	0	00021		LLS	17 ANO		F5G03220
00173	0	40000	0	00315		ADD	ONEA STORE		F5G03230
00174	0	60100	0	00305		STO	SEV1 IT		F5G03240
00175	0	50000	0	00314		CLA	ZERO FORM		F5G03250

00176	0	56000	2	00001	LDQ 1,2 ((N(0)/N(S))	F5G03260
00177	0	22100	2	00003	DVP 3,2 (N(S)(S+1))	F5G03270
00200	0	20000	0	00305	MPY SEV1	F5G03280
00201	-0	60000	0	00305	STQ SEV1 INITIAL DRUM ADDRESS	F5G03290
00202	0	50000	2	00006	CLA 6,2 =D(0)+(NON(S))\$(N(S).S=1)	F5G03300
00203	0	40000	0	00305	ADD SEV1	F5G03310
00204	0	60100	0	00313	STO SEV7 SET LDA INSTRUCTIONS	F5G03320
00205	0	76700	0	00007	ALS 7 COMPUTE THE	F5G03330
00206	0	76000	0	00006	COM DRUM SELECTION	F5G03340
00207	-0	73400	1	00000	PDX 0,1 INDEX	F5G03350
00210	0	07400	4	00260	TSX SE25,4 SELECT DRUM	F5G03360
00211	0	50000	2	00002	CLA 2,2	F5G03370
00212	0	40200	2	00001	SUB 1,2 (N(1)-N(0))S	F5G03380
00213	0	76500	0	00065	LRS 53 INTO MQ	F5G03390
00214	0	20000	2	00005	MPY 5,2	F5G03400
00215	0	50000	0	00313	CLA SEV7 FORM NO. OF	F5G03410
00216	-0	32000	0	00301	ANA SEK2 WORDS LEFT ON	F5G03420
00217	0	40200	0	00302	SUB SEK3 DRUM GROUP	F5G03430
00220	0	76000	0	00003	SSP	F5G03440
00221	0	04000	0	00247	TLQ SE31 MUST BLOCK BE SPLIT	F5G03450
00222	0	73400	4	00000	PAX 0,4 YES	F5G03460
00223	0	40000	2	00007	ADD 7,2 SET INDEX AND	F5G03470
00224	0	62100	0	00236	STA SE27 COMPUTE ADDRESS OF 1ST CPY	F5G03480
00225	0	40200	2	00007	SUB 7,2 COMPUTE NO.	F5G03490
00226	-0	60000	0	00305	STQ SEV1 OF WORDS IN	F5G03500
00227	0	40200	0	00305	SUB SEV1 2 ED TRANSFER	F5G03510
00230	0	40200	0	00315	SUB ONEA	F5G03520
00231	0	76000	0	00003	SSP	F5G03530
00232	0	60100	0	00305	STO SEV1	F5G03540
00233	0	40000	0	00236	ADD SE27	F5G03550
00234	0	62100	0	00243	STA SE29 SET 2 ED CPY	F5G03560
00235	0	46000	0	00313	SE28 LDA SEV7	F5G03570
00236	0	70000	4	00000	SE27 CPY SET,4 TRANSFER	F5G03580
00237	2	00001	4	00236	TIX SE27,4,1 1ST BLOCK OF WORDS	F5G03590
00240	2	00001	1	00241	TIX SE30,1,1 DECREASE C(1) BY 1	F5G03600
00241	0	07400	4	00260	SE30 TSX SE25,4 SELECT DRUM	F5G03610
00242	0	53400	4	00305	LXA SEV1,4	F5G03620
00243	0	70000	4	00000	SE29 CPY SET,4 TRANSFER	F5G03630
00244	2	00001	4	00243	TIX SE29,4,1 2 EDBLOCK	F5G03640
00245	-0	53400	4	00310	SE34 LXD SEV4,4	F5G03650
00246	0	02000	4	00001	TRA 1,4 RETURN	F5G03660
00247	0	76300	0	00043	SE31 LLS 35 (N(1)-N(0)).S+1	F5G03670
00250	0	40000	0	00315	ADD ONEA WORDS ARE TO	F5G03680
00251	0	73400	4	00000	PAX 0,4 BE TRANSFERED	F5G03690
00252	0	40000	2	00007	ADD 7,2	F5G03700
00253	0	62100	0	00255	STA SE32	F5G03710
00254	0	46000	0	00313	SE33 LDA SEV7	F5G03720
00255	0	70000	4	00000	SE32 CPY SET,4	F5G03730
00256	2	00001	4	00255	TIX SE32,4,1	F5G03740
00257	0	02000	0	00245	TRA SE34	F5G03750
00260	0	76200	1	00300	SE25 RDS 192,1 (OR WRS) DRUM	F5G03760
00261	0	02000	4	00001	TRA 1,4 SELECTION SUBROUTINE. CHECK SUM SUBROUTINL	F5G03770
00262	0	50000	2	00002	SE22 CLA 2,2	F5G03780
						F5G03790

00263	0	40200	2	00001		SUB 1,2 COMPUTE	F5G03800
00264	0	76500	0	00043		LRS 35 (N(1)-N(0)).S	F5G03810
00265	0	20000	2	00005		MPY 5,2 THE NUMBER OF WORDS	F5G03820
00266	0	76300	0	00021		LLS 17 TO BE SUM	F5G03830
00267	0	73400	1	00000		PAX 0,1 CHECKED	F5G03840
00270	0	40000	2	00007		ADD 7,2 COMPUTE AND STORE ADDRESS OF WORD	F5G03850 F5G03860
00271	0	62100	0	00273		STA SE23 FOLLOWING LAST TABLE WORD.	F5G03870
00272	0	50000	0	00314		CLA ZERO CLEAR SUM CHECK.	F5G03880
00273	0	36100	1	00000	SE23	ACL -,1 FORM THE	F5G03890
00274	2	00001	1	00273		TIX SE23,1,1 SUM CHECK.	F5G03900
00275	0	60200	0	00307		SLW SEV3	F5G03910
00276	0	02000	4	00001		TRA 1,4	F5G03920
00277	0	76600	1	00300	SEK	WRS 192,1 WRS,192,1	F5G03930
00300	0	76200	1	00300	SEK1	RDS 192,1 RDS,192,1	F5G03940
00301	0	00000	0	03777	SEK2	HTR 2047 MASK TO EXTRACT LAST 11 BIT	F5G03950
00302	0	00000	0	04000	SEK3	HTR 2048 2048 IN ADDR.	F5G03960
00303	0	77777	0	00000	SEK4	HTR 0,0,-1 IN DECR. PART	F5G03970
00304	0	00000	1	00000	SEK5	HTR 0,1 2 15	F5G03980
00305	0	00000	0	00000	SEV1	NS.S+1 TEMP STORAGE	F5G03990
00306	0	00000	0	00000	SEV2	STORAGE OF N (DECR.)	F5G04000
00307	0	00000	0	00000	SEV3	STORAGE OF CK SUM.	F5G04010
00310	0	00000	0	00000	SEV4	RETURN FROM SE 26	F5G04020
00311	0	00000	0	00000	SEV5	RETURN FROM SE	F5G04030
00312	0	00000	0	00000	SEV6	STORE N TO BE TRANSFERRED	F5G04040
00313	0	00000	0	00000	SEV7	INITIAL DRUM ADDR.	F5G04050
00314	+00000000000000				ZERO	OCT 0	F5G04060
00315	0	00000	0	00001	ONEA	HTR 1	F5G04070
00316	0	00001	0	00000	ONED	HTR 0,0,1 CONSTANTS USED IN S1	F5G04080 F5G04090
00317	0	00006	0	00000	S1K2	HTR 0,0,6 CONSTANT WHICH LOOKS LIKE PASS. REF.	F5G04100
00320	0	00000	0	00010	S1K3	HTR 8 NO. OF S3 VARIABLES SAVED.	F5G04110
				00317	C	SYN S1K2	F5G04120
00321	0	77777	0	00000	S2K1	HTR 0,0,-1 ONES IN DECR. PART.	F5G04130
00322	0	00001	0	00000	S2K2	HTR 0,0,1 CONST. USED TO TEST FOR LX.	F5G04140
00323	-37777777777777				S3K1	OCT -37777777777777 END LOOP LIST SENTENTIAL	F5G04150
00324	0	77777	7	77777	S3K2	HTR -1,-1,-1 USED FOR CF TO FIND OUT IF THIS IS BB	F5G04160
00325	0	00036	0	00000	S3K3	HTR 0,0,S3P1 INITIALIZING CONST. FOR LOOP LIST	F5G04170
00326	+0000007777777				S3K4	OCT 777777 MASK TO EXTRACT LAST 1/2 WORD.	F5G04180
00327	0	77777	0	00000	S3K5	HTR 0,0,-1 MASK TO EXTRACT INST. TYPE CONSTANTS OF S4	F5G04190 F5G04200
00330	0	00000	0	01224	S4K1	CMTL SIZE OF STORAGE FOR TAG TABLE.	F5G04210
00331	0	00000	0	00017	S4K2	HTR 15 NO OF TAGS PER RECORD.	F5G04220
00332	0	00000	0	05216	S4K3	HTR CMTAG THE L CONSTANTS MUST BE AHEAD OF THOSE FOR S5	F5G04230 F5G04240
00333	+0000007777776				LK1	OCT 777776 E,HASH SYMBOL	F5G04250
00334	-2000000000000				LK2	OCT -2000000000000 CONSTANTS FOR EXTRACTING	F5G04260
00335	-3000000000000				LK3	OCT -3000000000000 1ST 2,3 BITS OF WORD RESPT. CONSTANTS FOR MATCHING SUBROUTINE	F5G04270 F5G04280
00336	+0000007777777				S5K1	OCT 777777 PHI,EMPTINESS	F5G04290
00337	+0000007777775				S5K2	OCT 777775 CONSTANT USEO TO TEST FOR REAL TAGS	F5G04300
00340	-0000000000000				S5K3	OCT -0 -0	F5G04310
00341	0	00000	0	00002	S5K4	HTR 2 +2	F5G04320
00342	0	00000	0	00003	S5K5	HTR 3 +3	F5G04330

00343	0 00000 0 00010	S5K6	HTR 8 +8	F5G04340
00344	0 00000 0 00004	S9K1	HTR 4 +4	F5G04350
00345	0 00000 1 00000	S9K2	0,1 MASK FOR PHI DIGIT NO. 1	F5G04360
00346	0 00000 2 00000		0,2 MASK FOR PHI DIGIT NO. 2	F5G04370
00347	0 00000 4 00000		0,4 MASK FOR PHI DIGIT NO. 3	F5G04380
00350	0 00003 0 00000	S9K3	HTR 0,0,3 MASK TO EXTRACT 2 BITS IN DECR.	F5G04390
00351	0 00000 0 07776	SAK1	4094 CONST USED TO TEST NON EXISTENT BB CONSTANTS OF SB	F5G04400
00352	+0010000000000	SBK1	OCT +0010000000000 CONST. USED TO GENERATE SX BIT. AD.	F5G04410
00353	0 00000 0 77777	SBK2	HTR -1 USED TO EXTRACT ADOR.	F5G04420
00354	0 00004 0 00000	SBK3	HTR 0,0,4 CONST. TO GENERATE SX BIT FOR TRANSFER	F5G04430
00355	0 04741 0 00000	SCK1	HTR 0,0,LPLST	F5G04440
00356	+177777077777	FK1	OCT 177777077777 TRANSPARANT REGION CONST	F5G04450
00357	+277777077777	FK2	OCT 277777077777 OPAQUE REGION CONST	F5G04460
00360	0 00000 7 00000	FK3	HTR 0,7 MASK TO EXTRACT TAG.	F5G04470
00361	+177777777777	FK4	OCT 177777777777 CONST TO TEST FOR OPAQUE REG.	F5G04480
00362	0 00000 0 00062	FK5	HTR FP1 LENGTH OF REGION LIST	F5G04490
00363	-0000000000000	XK3	OCT -0 3 CONSTANTS USED TO	F5G04500
00364	+2000000000000		OCT 2000000000000 CHANGE REGION WDS.	F5G04510
00365	+1000000000000		OCT 1000000000000 TO INDICATE IRS LX E0.	F5G04520
00366	-3777760000000	XK4	OCT -3777760000000 E,HASH SYMBOL,1N LQT HALF	F5G04530
00367	-3000000000000	XK5	OCT -3000000000000 MASK FOR PREFIX	F5G04540
00370	+2000000000000	XK6	OCT 2000000000000	F5G04550
00371	0 00000 0 00011	XK9	HTR 9	F5G04560
	00363	XK10	SYN XK3 MASK TO EXTRACT 1ST 1N BB FIT.	F5G04570
00372	+0000010000000	XK11	OCT 1000000 CONST. TO GENERAGE LX BIT.	F5G04580
00373	0 00005 0 00000	XK12	HTR 0,0,5 4 CONSTS. USED TO TEST FOR ACTIVE	F5G04590
00374	0 00004 0 00000	XK13	HTR 0,0,4 TNX	F5G04600
00375	0 00007 0 00000	XK14	HTR 0,0,7 TIX	F5G04610
00376	0 00002 0 00000	XK15	HTR 0,0,2 LXP	F5G04620
00377	0 00000 4 00000	XK16	HTR 0,4 CONST. TO GENERATE LX BIT.	F5G04630
00400	1 00000 0 00000	XK17	PON CONST. TO SEPARATE TYPES	F5G04640
	00366	XK18	SYN XK4 E IN LEFT HALF WORD.	F5G04650
00401	-3777770000000	XK19	OCT -3777770000000 MASK LEFT HALF WORD.	F5G04660
00402	-3777007777777	XK20	OCT -3777007777777 CONST. TO DELETE PERM. NOS.	F5G04670
00403	0 00003 0 00000	XK21	HTR 0,0,3 CONST. TO TEST FOR DED INST.	F5G04680
00404	-3777770777777	XK22	OCT -3777770777777 CONST. TO DELETE PHIS.	F5G04690
00405	0 00000 1 00000	XK23	HTR 0,1	F5G04700
00406	0 00000 2 00000		HTR 0,2	F5G04710
00407	0 00000 4 00000		HTR 0,4	F5G04720
00410	0 00000 0 00000	SlV1	TEMP. STORAGE FOR	F5G04730
00411	0 00000 0 00000		HTR -	F5G04740
00412	0 00000 0 00000		HTR - 1ST 9 VARIABLES	F5G04750
00413	0 00000 0 00000		HTR - IN S3	F5G04760
00414	0 00000 0 00000		HTR -	F5G04770
00415	0 00000 0 00000		HTR -	F5G04780
00416	0 00000 0 00000		HTR -	F5G04790
00417	0 00000 0 00000		HTR -	F5G04800
00420	0 00000 0 00000	SlV3	THE CLA IN S3	F5G04810
00421	0 00000 0 00000	SlV4	RETURN INDEX	F5G04820
00422	0 00000 0 00000	SlV5	(+/-)=DECIDE ON (MOST/LEAST) REPL. I.R.	F5G04830
00423	0 00000 0 00000	SlV6	TEMP	F5G04840
00424	0 00000 0 00000	SlV7	STORAGE	F5G04850
			THE IR1,2,3 CELLS SIMULATE OBJECT MACHINE INDEX REGISTERS,	F5G04860
				F5G04870


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AND CONTAIN A REAL TAG, THE EMPTY SYMBOL 777777, OR THE HASH F5G04880
SYMBOL 777776. (HASH MEANS THE REGISTER IS NOT EMPTY BUT F5G04890
ITS CONTENTS HAVE NO VALUE, I.E. LXP COMPILED IN SECTION 3 ORF5G04900
DED COMPILED IN SECTION 2. (LXP IS A WARNING THAT ALTHOUGH IRF5G04910
IS VALUELESS, IT WILL BE LOADED VERY SOON WITH A NEW VALUE.))F5G04920
00425 0 00000 0 00000 IR1 THE 3 I.R.S IN F5G04930
00426 0 00000 0 00000 IR2 THE LAST 1/2 OF REGISTER F5G04940
00427 0 00000 0 00000 IR3 F5G04950
00430 0 00000 0 00000 IRR HOLDS 3,2,1 IF IR1,2,3 SELECTED F5G04960
00431 0 00000 0 00000 IND1 + OR - ACCORDING AS IR1 EOUND OR IR1 NOT FOUND F5G04970
00432 0 00000 0 00000 IND2 + OR - ACCORDING AS IR2 FOUND OR IR2 NOT FOUND F5G04980
00433 0 00000 0 00000 IND3 + OR - ACCORDING AS IR3 FOUND OR IR3 NOT FOUND F5G04990
00434 0 00000 0 00000 IN4 +F OR - IF IR HAS OR HASNT BEEN FOUND F5G05000
VARIABLES OF S3 SUBROUTINE F5G05010
00435 0 00000 0 00000 S3V1 LOCATION OF 1ST TAG IN BB F5G05020
00436 0 00000 0 00000 S3V2 TAG COUNTER,IN DECR. PART. F5G05030
00437 0 00000 0 00000 S3V3 + NO. OF TAGS LEFT IN BB AFTER T1X,OR- F5G05040
00440 0 00000 0 00000 S3V4 LOOP LIST INDEX. F5G05050
00441 0 00000 0 00000 1TAG THE TAN-TAG F5G05060
00442 0 00000 0 00000 TPE THE TYPE OF INSTR. F5G05070
00443 0 00000 0 00000 INTAG TAG + INSTR. TYPE (ENTRY IN TAG LIST) F5G05080
00444 0 00000 0 00000 S3V5 LOOP LIST QUANTITY F5G05090
00445 0 00000 0 00000 S3V8 RETURN INDEX F5G05100
00446 0 00000 0 00000 S3V6 (1ST TAG IN BB-1ST TAG IN C.M.) F5G05110
00447 0 00000 0 00000 S3V7 NO. OF WORDS LEFT IN C.M. F5G05120
00450 0 00000 0 00000 S3V9 (+/-)= (THIS IS NOT NEW BB/THIS IS NEW BB) F5G05130
VARIABLES OF S4 F5G05140
00451 0 00000 0 00000 S4V1 LOC OF 1ST TAG IN CMTAG F5G05150
00452 0 00000 0 00000 S4V2 LOC OF 1ST TAG IN NEX, RECORD (TAPE POS.) F5G05160
00453 0 00000 0 00000 S4V3 (LOC OF LAST TAG)+ 1 F5G05170
ABOVE MUST BE SET AT START. F5G05180
00454 0 00000 0 00000 S4V4 (LOC. OF 1ST TAG IN BB-POS OF TAPE) F5G05190
VARIABLES FOR MATCHING SUBROUTINE S5 F5G05200
00455 0 00000 0 00000 IR4 TEMP. STORAGE FOR C (IR1) F5G05210
00456 0 00000 0 00000 IR5 TEMP. STORAGE FOR C (IR2) F5G05220
00457 0 00000 0 00000 IR6 TEMP. STORAGE FOR C (IR3) F5G05230
00460 0 00000 0 00000 ENC COUNTER OF = F5G05240
00461 0 00000 0 00000 IRC COUNTER OF = F5G05250
THE IN 1,2,3, EN4,5,6 CELLS ARE LOAED BY THE S5 ROUTINE F5G05260
FOR PERMUTATION OF INDEX REGISTER ASSIGMENT THROUGHOUT AN F5G05270
ALREADY TREATED REGION UPON ENTRY TO THIS REGION IN LPLST. F5G05280
OPTIMIZED MATCH TO CURRENT CONTENTS OF IR1,2,3 IS SECURED BY F5G05290
PERMUTING THE ENTIRE REGION AS NECESSARY. THE IN1,2,3 F5G05300
AND EN4,5,6 CELLS LINK THE OUTMODED SYSTEM EN1,2,3, EX1,2,3 F5G05310
ACT1,2,3 FOR THIS REGION WITH THE ABSOLUTE SYSTEM IR1,2,3, F5G05320
AC1,2,3, LX1,2,3. FOR EXAMPLE EN4 IS 3,2,OR. DEPENDING ON F5G05330
WHETHER THE CORRESPONDENT OF EN1 IS IR 1,2,OR 3. INVERSELY, F5G05340
IN1 IS 3,2,OR1 FOR THE CORRESPON0ENT OF IR1 EQUAL TO EN1,2,3. F5G05350
00462 0 00000 0 00000 IN1 INDEX OF CORRES OF IR1 F5G05360
00463 0 00000 0 00000 IN2 INDEX OF CORRES OF IR2 F5G05370
00464 0 00000 0 00000 IN3 INDEX OF CORRES OF IR3 F5G05380
00465 0 00000 0 00000 EN4 INDEX OF CORRES OF EN1 F5G05390
00466 0 00000 0 00000 EN5 INOEX OF CORRE8 OF EN2 F5G05400
00467 0 00000 0 00000 EN6 INDEX OF CORRES OF EN3 F5G05410

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00470	0	00000	0	00000	EN1	THE ENTRANCE REQUIREM	F5G05420
00471	0	00000	0	00000	EN2	ENTS EN1,ENZ,EN3.	F5G05430
00472	0	00000	0	00000	EN3		F5G05440
00473	0	00000	0	00000	S5V1	TEMP. STORE FOR RETURN INDEX.	F5G05450
00474	0	00000	0	00000	S5V2	TEMP STORE FOR LOOP LIST QUANT.	F5G05460
00475	0	00000	0	00000	S9V1	TEMP. STORE FOR BB NO.	F5G05470
00476	0	00000	0	00000	S9V2	TEMP. STORE FOR RETURN INDEX	F5G05480
00477	0	00000	0	00000	S9V4	TEMP. STORE FOR REGION WORD.	F5G05490
						VARIABLES OF SA SUBROUTINE (WHICH GETS EXIT CONDITITIONS)	F5G05500
00500	0	00000	0	00000	SAV1	TEMP STORE FOR PERMUTATION NOS.	F5G05510
00501	0	00000	0	00000	SAV2	RETURN INDEX.	F5G05520
00502	0	00000	0	00000	SAV3	TEMP. STORE FOR REGION WORD.	F5G05530
						THE EX1,2,3 CELLS CONTAIN THE EXIT REQUIREMENTS FOR A BB THAT	F5G05540
						HAS ALREADY BEEN TREATED.	F5G05550
00503	0	00000	0	00000	EX1	3 EXIT CONDITIONS	F5G05560
00504	0	00000	0	00000	EX2		F5G05570
00505	0	00000	0	00000	EX3		F5G05580
						THE ACT 1,2,3 CELLS CONTAIN ACTIVITY OF AN ALREADY TREATED BB	F5G05590
00506	0	00000	0	00000	ACT1	3 ACTIVE	F5G05600
00507	0	00000	0	00000	HTR -	INDICATORS	F5G05610
00510	0	00000	0	00000	HTR -		F5G05620
						VARIABLES OF SB	F5G05630
00511	0	00000	0	00000	SBV1	RETURN INDEX	F5G05640
00512	0	00000	0	00000	SBV2	TEMP. STORAGE.	F5G05650
00513	0	00000	0	00000	SBV3	TEMP. STORAGE.	F5G05660
00514	0	00000	0	00000	SBV4	INDEX OF REGISTER WHICH IS ACTIVE.	F5G05670
00515	0	00000	0	00000	SBV5	STORAGE FOR PERMUTATION NOS.	F5G05680
00516	0	00000	0	00000	SCV1	RETURN INDEX	F5G05690
00517	0	00000	0	00000	SCV2	INDEX OF BB.	F5G05700
00520	0	00000	0	00000	SCV3	INDEX OF POSITION IN LOOP LIST	F5G05710
00521	0	00000	0	00000	ACIND	+ OR - MEANS 2ED OR ACTIVE PASS	F5G05720
00522	0	00000	0	00000	SDV1	STORE FOR RETURN INDEX.	F5G05730
00523	0	00000	0	00000	SDV2	INDEX OF ACTIVE I.R.	F5G05740
00524	0	00000	0	00000	SDV3	THE PERMUTATION NOS.	F5G05750
00525	0	00000	0	00000	SDV4	TEMP. STORE FOR INDEX OF BB	F5G05760
00526	0	00000	0	00000	SFV1	ACTIVE INOICATOR FORMED HERE.	F5G05770
00527	0	00000	0	00000	SFV2	RETURN INOEX.	F5G05780
00530	0	00000	0	00000	SGV1	RETURN INDEX	F5G05790
00531	0	00000	0	00000	SGV2	PERMUTED REGION WORD	F5G05800
00532	0	00000	0	00000	FV1	HIGHEST FREQ. IN REGION (I.C. PRED. TABLE ENTRY)	F5G05810
00533	0	00000	0	00000	FV2	BB NO. OF BB HAVING HIGHEST FREQ. (ADDR.)	F5G05820
00534	0	00000	0	00000	FV3	PRED. NO. (I.C. 0TH WORD FROM BB. (ADDR.)	F5G05830
00535	0	00000	0	00000	FV4	WORD HAVING REGION NO. (5TH BB WORD)	F5G05840
00536	0	00000	0	00000	FV5	CURRENT BB NO. BEING CONSIDERED. (ADDR.)	F5G05850
00537	0	00000	0	00000	FV6	RETURN INDEX OF F1,F80	F5G05860
00540	0	00000	0	00000	FV7	PRED. NO. BEING CONSIDERED IN B.B. (ADDR.)	F5G05870
00541	0	00000	0	00000	FV8	FIRST PRED. FROM NEXT B.B. (ADDR.)	F5G05880
00542	0	00000	0	00000	FV9	0,0,- TEMP STORE FORCURRENT SUCC IN DECR ONLY	F5G05890
00543	0	00000	0	00000	FV10	0,0,- TEMP STORE IN DECR ONLY, CURRENT SUCC	F5G05900
00544	0	00000	0	00000	FV101	HIGHEST FREQ. IN BB (PRED. TABLE ENTRY)	F5G05910
00545	0	00000	0	00000	FV102	BB NO. BEING CONSIDERED. (ADDR.)	F5G05920
00546	0	00000	0	00000	FV103	PRED. NO. (0TH WORD FROM BB) IADDR.)	F5G05930
00547	0	00000	0	00000	FV104	WORD HAVING REGION. NO.	F5G05940
00550	0	00000	0	00000	LPIND	+ OR - IF IT ISNT OF IS A LOOP	F5G05950

00551	0	00000	0	00000	LV1	THE CONDITIONS OF THE I.R.S	F5G05960
00552	0	00000	0	00000	LV2	AT END OF THE	F5G05970
00553	0	00000	0	00000	LV3	1ST LXING PASS.	F5G05980
00554	0	00000	0	00000	LV4	THE LOOP LIST QUANTITY	F5G05990
00555	0	00000	0	00000	LV5	WORD FROM BB WITH PRED. AND SUCC. LOCS	F5G06000
						VARIABLES OF 2ED LXING PASS.	F5G06010
						ACTIVITY. WHEN SIMULATING A NEW BB IN THE 2ND LXING PASS,	F5G06020
						IF AN LX, TXI, OR TIX IS ENCOUNTERED, THE APPROPRIATE INDEX	F5G06030
						REGISTER BECOMES ACTIVE. THIS IS PLUS ACTIVITY. IF THE SAME	F5G06040
						REGISTER MUST BE DISPLACED IN THE SAME LPLST, SB IS ENTERED	F5G06050
						TO RECORD AN SX NECESSARY. SINCE THE ACTIVITY IS PLUS, THE	F5G06060
						SX WILL BE COMPILED IN STAG IMMEDIATELY AFTER THE ACTIVE	F5G06070
						INSTRUCTION. THIS SX ENDS THE ACTIVITY, COMPLETELY TAKING	F5G06080
						CARE OF THE PROBLEM. AT THE END OF LPLST, IF THE INDEX	F5G06090
						REGISTER IS STILL ACTIVE, OR IF, DURING LPLST, AN ACTIVE	F5G06100
						REGISTER FALLS OBSOLETE BY A DED OR LXD, THEN ALL THE BLOCKS	F5G06110
						IN WHICH IT IS ACTIVE ARE MARKED BY SC, MAKING THIS ACTIVITY	F5G06120
						MINUS. THIS, UNLIKE PLUS ACTIVITY, CAN NEVER BE ENDED. THE	F5G06130
						APPEARANCE OF A MINUS BB IN A FUTURE LPLST CAUSES THE	F5G06140
						APPROPRIATE AC1,2,OR3 TO CONTAIN MINUS ACTIVITY AND WHENEVER	F5G06150
						THE CORRESPONDING INDEX REGISTER MUST BE DISPLACED, AN SB	F5G06160
						ENTRY WILL CAUSE AN SX TO BE COMPILED IN THE PRED LINK FROM	F5G06170
						THAT BB. THIS POSTPONEMENT OF SX COMPILATION AFTER AN ACTIVE	F5G06180
						INSTRUCTION FOR AS LONG AS POSSIBLE PRODUCES A LARGER NUMBER	F5G06190
						OF SX,S THAN STRICTLY NECESSARY, BUT PLACES THEM IN LOW	F5G06200
						FREQUENCY PATHS, TRADING OBJECT PROGRAM SPACE FOR OBJECT	F5G06210
						PROGRAM TIME.	F5G06220
						THE AC1,2,3 CELLS DESCRIBE THE ACTIVITY STATUS OF IR1,2,3.	F5G06230
						ZERO..NOT ACTIVE, PLUS ACTIVITY..ACTIVE INSTRUCTION IN A	F5G06240
						BB NOT TREATED UNTIL THIS LPLST. AC1,2,3 CONTAINS INFO.	F5G06250
						FOR SB TO MAKE A STAG ENTRY AT THE ACTIVE INSTRUCTION.	F5G06260
						MINUS ACTIVITY..ACTIVE INSTR. IN BB ALREADY IN A REGION.	F5G06270
						AC1,2,3 CONTAINS INFO. FOR SB TO MAKE A PRED ENTRY AT LINK	F5G06280
						OUT OF THE REGION.	F5G06290
00556	0	00000	0	00000	AC1	3 ACTIVE INDICATORS,+0 MEANS NOT ACTIVE	F5G06300
00557	0	00000	0	00000	AC2	IF + VE,THEN ACTIVE THING IS INSTR., DECR. IS	F5G06310
00560	0	00000	0	00000	AC3	LOC. OF BB IN LOOP LIST,ADDR. IS LOC. OF Y-TAG. IF-VE,	F5G06320
00561	0	00000	0	00000	HTR	0 ACTIVE THING IS TRANSFER, LOC. IN LP LST IN DECR.	F5G06330
						THE LX1,2,3 CELLS CONTAIN THE ENTRANCE REQUIREMENTS FOR A BB.	F5G06340
00562	0	00000	0	00000	LX1	3 ENTRANCE REQUIREMENTS OF A BB	F5G06350
00563	0	00000	0	00000	LX2	BUILT UP HERE. +0 MEANS	F5G06360
00564	0	00000	0	00000	LX3	NO ENTRANCE REQU. DETERMINED.	F5G06370
00565	0	00000	0	00000	XV1	IN DECR., INDEX OF CURRENT REGION	F5G06380
00566	0	00000	0	00000	XV2	THE NEW REGION WORD.	F5G06390
00567	0	00000	0	00000	XV3	THE WORD POSITION IN STAG	F5G06400
00570	0	00000	0	00000	XV4	THE DIGIT INDEX WITHIN THE WORD.	F5G06410
00571	0	00000	0	00000	XV5	THE LOCATION OF CURRENT TAG (INSTR.)	F5G06420
00572	0	00000	0	00000	XV6	NEAR X07,C.F. OF TNX BRANCH,NEAR X85, TAG	F5G06430
00573	0	00000	0	00000	XV7	X07 TO X09+,INDEX OF BB,NEAR X85,TAG	F5G06440
00574	0	00000	0	00000	XV8	INDEX OF BB NEAR X33	F5G06450
						PERMUTATION. WHEN INDEX REGISTER ASSIGNMENTS THROUGHOUT AN	F5G06460
						ALREADY TREATED REGION ARE PERMUTED, STAG, PRED AN0 BBB MUST	F5G06470
						BE UPDATED. INSTEAD, WORD 2 OF BBB CONTAINS PERMUTATION	F5G06480
						NUMBERS THROUGH WHICH THESE TABLES ARE READ, AND UPDATING	F5G06490

					REQUIRES ONLY THESE NUMBERS TO BE CHANGED. IN SECTION 5 PART	F5G06500
					2 WHFN THE FINAL CONFIGURATION HAS BEEN REACHED, THE TABLES	F5G06510
					THEMSELVES ARE ACTUALLY UPDATED.	F5G06520
00575	0	00000	0	00000	THE PERMUTATION NOS.	F5G06530
00576	0	00000	0	00000	INDEX OF I.R. IN BB CONSIDERED.	F5G06540
00577	0	00000	0	00000		F5G06550
00600	0	00000	0	00000		F5G06560
00601	0	00000	0	00000	INDEX OF PARTICULAR BB X40 ON	F5G06570
00602	0	00000	0	00000	TEMP. STORE FOR 2 INDEXES	F5G06580
00603	0	00000	0	00000	WHILE USING SUBROUTINE.	F5G06590
00604	0	00000	0	00000	TEMP. STORE FOR PRED.=,X91-2+X90,X92 X97 ON	F5G06600
00605	0	00000	0	00000	TEMP. STORE FOR OLD REGION WD.,X74	F5G06610
00606	0	00000	0	00000	IN ADDR.,X111,NO. OF SUCC. WE SEARCH FOR.	F5G06620
00607	0	00000	0	00000	TEMP STORE FOR PREVIOUS LPLST QUANTITY	F5G06630
00610	0	00000	0	00000	TEMP STORE IN DECR. ONLY	F5G06640
00611	0	00000	0	00000	TEMP STORE FOR TAG NEAR X43	F5G06650
00612	0	00000	0	00000	NUMBER OF LAST BB FOR WHICH REGION NO. WAS ADDED	F5G06660
00613	0	00000	0	00000	DECR ONLY , TEMP STORE FOR REGION INDEX	F5G06670
00614	0	00000	0	00000	0 OR NOT0 IF IS OR ISNT SAME AS 1ST REGION	F5G06680
00615	0	00000	0	00000	TEMP. STORE FOR PRED. TABLE ENTRY.	F5G06690
00616	0	00000	0	00000	TEMP. STORE FOR INDEX OF I.R.	F5G06700
00617	0	00000	0	00000	TEMP. STORE FOR PERM. NOS.	F5G06710
					THE S1 AND S111 ROUTINES SELECT THE MOST (S1) OR THE LEAST	F5G06720
					(S111) REPLACEABLE INDEX REGISTERS BY SCANNING AHEAD	F5G06730
					THROUGH LPLST. THE IR WHOSE CONTENTS ARE REQUIRED AGAIN	F5G06740
					SOONEST (LAST) IS THE LEAST (MOST) REPLACEABLE. THESE	F5G06750
					ROUTINES USE THE S2 SUBROUTINE, WHICH ACTUALLY TRIES TO	F5G06760
					SELECT AN IR.	F5G06770
00620	-0	76000	0	00003	SSM SET INDICATOR TO-MEANING	F5G06780
00621	0	02000	0	00623	TRA S109 SEARCH FOR LEAST REPLACEABLE I.R.	F5G06790
00622	0	76000	0	00003	S1 SSP SET INDICATOR TO + MEANING	F5G06800
00623	0	60100	0	00422	S109 STO S1V5 SEARCH FOR MOST REPLACEABLE I.R.	F5G06810
00624	-0	63400	4	00421	SXD S1V4,4 STORE RETURN INDEX.	F5G06820
00625	-0	76000	0	00003	SSM SET	F5G06830
00626	0	60100	0	00431	STO IND1 INDICATORS	F5G06840
00627	0	60100	0	00432	STO IND2 TO	F5G06850
00630	0	60100	0	00433	STO IND3 NOT	F5G06860
00631	0	60100	0	00434	STO IN4 FOUND.	F5G06870
00632	-0	53400	2	00641	LXD S123,2 SET TO LOOP FOR EMPTY I.R.	F5G06880
00633	0	53400	1	00342	S119 LXA S5K5,1 SET COUNT TO 3, N TO 1	F5G06890
00634	0	50000	1	00430	S120 CLA IR1+3,1 IS IRN EMPTY OR	F5G06900
00635	0	34000	2	00000	CAS 0,2 (FILLED WITH HASH)	F5G06910
00636	-3	77445	0	00640	S121 TXL S122,0,-LK1 NO, COM(LOC. OF HASH) IN DECR.	F5G06920
00637	0	02000	0	00644	TRA S124 YES,	F5G06930
00640	2	00001	1	00634	S122 TIX S120,1,1 NO,COUNT TO 3,N=N+1	F5G06940
00641	3	77442	2	00662	S123 TXH S127,2,-S5K1 HAVE WE LOOKEO FOR HASH	F5G06950
00642	-0	53400	2	00636	LXD S121,2 NO,SET TO LOOP FOR HASH.	F5G06960
00643	0	02000	0	00633	TRA S119	F5G06970
00644	0	50200	0	00422	S124 CLS S1V5 LOOK1NG FOR MOST REPLACEABLE	F5G06980
00645	-0	12000	0	00656	TMI S129 I.R.	F5G06990
00646	0	60100	1	00434	STO IND1+3,1 NO, RECORD IRN ELIMINATED	F5G07000
00647	0	56000	0	00434	LDQ IN4	F5G07010
00650	0	60100	0	00434	STO IN4 RECORD SOME IR ELIMINATED	F5G07020
00651	0	16200	0	00653	TQP S128 HAS AN IR BEEN ELIMINATED BEFORE	F5G07030

00652	0	02000	0	00640	TRA S122	NO,	F5G07040
00653	0	53400	1	00342	S128 LX A S5K5,1 SET COUNT TO 3,N=1		F5G07050
00654	0	50000	1	00434	S126 CLA IND1+3,1 HAS IRN		F5G07060
00655	0	12000	0	00660	TPL S125 BEEN ELIMINATED		F5G07070
00656	-0	63400	1	00430	S129 SXD IRR,1 NO,SELECT IRN		F5G07080
00657	0	02000	4	00001	TRA 1,4 AND RETURN.		F5G07090
00660	2	00001	1	00654	S125 TIX S126,1,1 COUNT TO 3,N=N+1		F5G07100
00661	0	07400	4	00004	S130 TSX 4,4 DIAGNOSTIC, THERE IS AN ERROR.		F5G07110
00662	0	50000	0	01122	S127 CLA S39		F5G07120
00663	0	60100	0	00420	STO S1V3 STORE ASIDE		F5G07130
00664	0	53400	4	00320	LXA S1K3,4 THE		F5G07140
00665	0	50000	4	00445	S112 CLA S3V1+8,4 STATE		F5G07150
00666	0	60100	4	00420	STO S1V1+8,4 OF THE		F5G07160
00667	2	00001	4	00665	TIX S112,4,1 S3 ROUTINE.		F5G07170
00670	0	07400	4	01023	S11 TSX S3,4 GET NEXT TAG		F5G07180
00671	0	02000	0	00706	TRA S103 COME HERE IF TAG NOT GOT.		F5G07190
00672	0	50000	0	00410	CLA S1V1		F5G07200
00673	0	34000	0	00435	CAS S3V1 IS THE LOOP COMPLETED		F5G07210
00674	0	02000	0	00676	TRA S104 NO		F5G07220
00675	0	02000	0	00701	TRA S135 PERHAPS		F5G07230
00676	0	07400	4	00766	S104 TSX S2,4 NO		F5G07240
00677	0	02000	0	00745	TRA S16 COME HERE IF IR DECIDED ON		F5G07250
00700	0	02000	0	00670	TRA S11 COME HERE IF NOT DECIDED ON		F5G07260
00701	0	50000	0	00411	S135 CLA S1V1+1 IS THE LOOP COMPLETED		F5G07270
00702	0	34000	0	00436	CAS S3V2		F5G07280
00703	0	02000	0	00676	TRA S104		F5G07290
00704	0	02000	0	00741	TRA S102 YES		F5G07300
00705	0	02000	0	00676	TRA S104		F5G07310
00706	0	34000	0	00323	S103 CAS S3K1 IS THIS AN END LOOP LIST		F5G07320
00707	0	02000	0	00711	TRA S105 NO		F5G07330
00710	0	02000	0	00763	TRA S101 YES		F5G07340
00711	0	50000	0	00444	S105 CLA S3V5 GET LOOP LIST QUANTITY AGAIN.		F5G07350
00712	0	34000	0	00324	CAS S3K2 IS IT A BB		F5G07360
00713	0	76100	0	00000	NOP NO,IT IS EITHER A TRANSPARENT		F5G07370
00714	0	02000	0	00716	TRA P001 OR OPAQUE REGION		F5G07380
00715	0	02000	0	00670	TRA S11 YES		F5G07390
00716	0	34000	0	00417	P001 CAS S1V1+7		F5G07400
00717	0	02000	0	00721	TRA S136		F5G07410
00720	0	02000	0	00741	TRA S102		F5G07420
00721	0	07400	4	00070	S136 TSX SE,4 GET BB WHICH CONTAINS ENTR. REQU.		F5G07430
00722	0	56000	0	00317	LDQ S1K2 MAKE THIS LOOK LIKE A		F5G07440
00723	-0	60000	0	00442	STQ TPE PASSIVE REFERENCE.		F5G07450
00724	0	53400	4	00342	LXA S5K5,4 SET COUNT TO 3.		F5G07460
00725	-0	50000	1	06444	S115 CAL BBB+2,1 PUT THIS TAU TAG		F5G07470
00726	0	77100	0	00022	ARS 18 IN LOCATION		F5G07480
00727	0	60200	0	00441	SLW 1TAG TAG		F5G07490
00730	-0	63400	1	00423	SXD S1V6,1 STORE THE		F5G07500
00731	-0	63400	4	00424	SXD S1V7,4 INDEXES.		F5G07510
00732	0	07400	4	00766	TSX S2,4 TRY TO SELECT AN I.R.		F5G07520
00733	0	02000	0	00745	TRA S16 COME HERE IF I.R. SELECTED.		F5G07530
00734	-0	53400	1	00423	LXD S1V6,1 AND HERE IF NOT. RESTORE		F5G07540
00735	-0	53400	4	00424	LXD S1V7,4 THE INDEXES.		F5G07550
00736	1	77777	1	00737	TXI S114,1,-1 DECREASE ENTR. INDEX		F5G07560
00737	2	00001	4	00725	S114 TIX S115,4,1 COUNT TO 3.		F5G07570

THE TAG FEED EXIT. IN THE LATTER IT FEEDS THE NEXT ITEM FROM F5G08120
 LPLST AND TAKES THE LPLST FEED EXIT. WHEN IT COMES TO A F5G08130
 LPLST ITEM WHICH IS A BB AND NOT IN A REGION, IT GOES TO F5G08140
 FEED TAG STATE AND STAYS THERE UNTIL THE LAST TAGLIST ITEM INF5G08150
 THAT BB HAS BEEN FED. THEN IT RETURNS TO LPLST FEED. WHEN F5G08160
 SENTINEL IS FED THE ROUTINE RE-INITIALIZES ITSELF TO THE F5G08170
 BEGINNING OF LPLST AND STAYS IN FEED LPLST STATE. IT USES F5G08180
 THE S4 SUBROUTINE FOR HANDLING TAPE 3 DURING TAGLIST FEEDING. F5G08190

01023	-0	53400	1	00436	S3	LXD S3V2,1 ARE THERE ANY	F5G08200
01024	2	00001	1	01122		TIX S39,1,1	F5G08210
01025	-0	63400	4	00445		SXD S3V8,4 NO,STORE RETURN INDEX	F5G08220
01026	0	50000	0	00437		CLA S3V3	F5G08230
01027	0	60100	0	00450		STO S3V9	F5G08240
01030	0	12000	0	01114		TPL S300 ARE THERE ANY MORE TAGS IN BB	F5G08250
01031	-0	53400	1	00440		LXD S3V4,1 NO	F5G08260
01032	0	50000	0	00444		CLA S3V5 WAS THE LAST THING	F5G08270
01033	0	12000	0	01035		TPL S306 AN END LPLST	F5G08280
01034	-0	53400	1	00325		LXD S3K3,1 YES, RESET LPLST INDEX	F5G08290
01035	0	50000	1	04777	S306	CLA LPLST+S3P1,1 GET LOOP LIST QUANTITY	F5G08300
01036	0	60100	0	00444		STO S3V5 QUANTITY.	F5G08310
01037	1	77777	1	01040		TXI S31,1,-1	F5G08320
01040	-0	63400	1	00440	S31	SXD S3V4,1 THE INDEX.	F5G08330
01041	0	34000	0	00323		CAS S3K1 IS THIS END OF LOOP LIST	F5G08340
01042	0	02000	0	01044		TRA S32 NO,	F5G08350
01043	0	02000	0	01052		TRA S35 YES,	F5G08360
01044	0	34000	0	00324	S32	CAS S3K2	F5G08370
01045	0	76100	0	00000		NOP NO	F5G08380
01046	0	02000	0	01050		TRA S305	F5G08390
01047	0	02000	0	01053		TRA S34 YES	F5G08400
01050	-0	53400	4	00445	S305	LXD S3V8,4	F5G08410
01051	0	50000	0	00444		CLA S3V5 RETURN WITH LOOP	F5G08420
01052	0	02000	4	00001	S35	TRA 1,4 LIST QUANTITY	F5G08430
01053	0	07400	4	00070	S34	TSX SE,4 GET INDEX OF BB	F5G08440
01054	0	50000	1	06443		CLA BBB+1,1	F5G08450
01055	-0	32000	0	00326		ANA S3K4 GET AND STORE THE	F5G08460
01056	0	60100	0	00435	S303	STO S3V1 TAG LOCATION.	F5G08470
01057	0	07400	4	01133		TSX S4,4 GO TO PUT TAG IN CM.	F5G08480
01060	0	60100	0	00446		STO S3V6 STORE (1ST BB TAG-1ST TAG IN C.M.)	F5G08490
01061	0	40200	0	00330		SUB S4K1 FORM NO. OF	F5G08500
01062	0	76000	0	00003		SSP WDS LEFT IN C.M.	F5G08510
01063	0	60100	0	00447		STO S3V7	F5G08520
01064	0	50000	0	00444		CLA S3V5 GET THE	F5G08530
01065	0	40000	0	00316		ADD ONED LOC. OF 1ST	F5G08540
01066	0	07400	4	00070		TSX SE,4 TAG IN	F5G08550
01067	0	50000	1	06443		CLA BBB+1,1 NEXT BB.	F5G08560
01070	-0	32000	0	00326		ANA S3K4	F5G08570
01071	0	40200	0	00435		SUB S3V1 IS NO. OF TAGS IN BB LESS	F5G08580
01072	0	34000	0	00447		CAS S3V7 THAN OR EQUAL TO SPACE IN C.M.	F5G08590
01073	0	02000	0	01076		TRA S304	F5G08600
01074	0	02000	0	01117		TRA S36 YES,	F5G08610
01075	0	02000	0	01117		TRA S36 YES,	F5G08620
01076	0	40200	0	00447	S304	SUB S3V7 STORE S EXCESS OF TAGS	F5G08630
01077	0	60100	0	00437		STO S3V3	F5G08640
01100	0	50000	0	00447		CLA S3V7	F5G08650

01101	0	73400	1	00000	S302	PAX 0,1 SET COUNT OF NO. OF TAGS.	F5G08660
01102	1	00001	1	01103	S37	TXI S38,1,1	F5G08670
01103	-0	63400	1	00436	S38	SXD S3V2,1	F5G08680
01104	0	40000	0	00332		ADD S4K3 SET ADDRESS OF	F5G08690
01105	0	40000	0	00446		ADD S3V6 CLA	F5G08700
01106	0	62100	0	01122		STA S39 INSTRUCTION.	F5G08710
01107	-0	53400	4	00445		LXD S3V8,4	F5G08720
01110	0	50000	0	00450		CLA S3V9 IS THIS A	F5G08730
01111	0	12000	0	01023		TPL S3 NEW BB	F5G08740
01112	0	50000	0	00444		CLA S3V5 YES,RETURN WITH	F5G08750
01113	0	02000	4	00001		TRA 1,4 LOOP LIST QUANTITY.	F5G08760
01114	0	50000	0	00451	S300	CLA S4V1 NEXT TAG NEEDED HAS	F5G08770
01115	0	40000	0	00330		ADD S4K1 LOC. (S+1ST TAG IN C.M.)	F5G08780
01116	0	02000	0	01056		TRA S303	F5G08790
01117	0	56000	0	00323	S36	LDQ S3K1	F5G08800
01120	-0	60000	0	00437		STQ S3V3	F5G08810
01121	0	02000	0	01101		TRA S302	F5G08820
01122	0	50000	1	00000	S39	CLA -,1 GET TAG WORD	F5G08830
01123	-0	63400	1	00436		SXD S3V2,1	F5G08840
01124	0	60100	0	00443		STO INTAG AND	F5G08850
01125	-0	32000	0	00326		ANA S3K4 SEPARATE TYPE	F5G08860
01126	0	60100	0	00441		STO 1TAG FROM	F5G08870
01127	-0	50000	0	00327		CAL S3K5 TAU-TAG.	F5G08880
01130	-0	32000	0	00443		ANA INTAG	F5G08890
01131	0	60100	0	00442		STO TPE	F5G08900
01132	0	02000	4	00002		TRA 2,4	F5G08910
01133	0	50000	0	00435	S4	CLA S3V1 FORM (LOC. OF 1ST TAG IN BB	F5G08920
01134	0	40200	0	00451		SUB S4V1 -LOC. OF 1ST TAG IN CM)	F5G08930
01135	-0	12000	0	01142		TMI S41 IS TAG IN C.M.	F5G08940
01136	0	34000	0	00330		CAS S4K1 POSSIBLY,IS IT FOR SURE	F5G08950
01137	0	76100	0	00000		NOP NO	F5G08960
01140	0	02000	0	01142		TRA S41 NO	F5G08970
01141	0	02000	4	00001		TRA 1,4 YES. RETURN.	F5G08980
01142	0	50000	0	00435	S41	CLA S3V1 NO,FORM (LOC. OF 1ST TAG IN BB	F5G08990
01143	0	40200	0	00452		SUB S4V2 -POSITION OF TAPE)	F5G09000
01144	-0	12000	0	01166		TMI S42 MUST WE RUN TAPE BACK WORDS	F5G09010
01145	0	60100	0	00454		STO S4V4 NO,	F5G09020
01146	0	50000	0	00453		CLA S4V3 CAN ALL THE FOLLOWING TAGS	F5G09030
01147	0	40200	0	00452		SUB S4V2 BE PUT IN C.M.	F5G09040
01150	0	34000	0	00330		CAS S4K1	F5G09050
01151	0	02000	0	01154		TRA S401 NO	F5G09060
01152	0	02000	0	01173		TRA S45 YES,GO TO SET COUNT	F5G09070
01153	0	02000	0	01173		TRA S45 YES,TO NO. OF TAGS IN BB.	F5G09080
01154	0	50000	0	00454	S401	CLA S4V4	F5G09090
01155	0	34000	0	00331		CAS S4K2 IS TAG IN NEXT RECORD	F5G09100
01156	0	76100	0	00000		NOP NO	F5G09110
01157	0	02000	0	01161		TRA S47	F5G09120
01160	0	02000	0	01172		TRA S44 YES	F5G09130
01161	0	76200	0	00223	S47	RTB TAPE NO, SPACE FWD 1 REC.	F5G09140
01162	0	50000	0	00452		CLA S4V2 ADJUST TAPE POSITION	F5G09150
01163	0	40000	0	00331		ADD S4K2	F5G09160
01164	0	60100	0	00452	S43	STO S4V2	F5G09170
01165	0	02000	0	01142		TRA S41	F5G09180
01166	0	76400	0	00203	S42	BST TAPE ADJUST TAPE POSITION	F5G09190

01167	0	50000	0	00452	CLA S4V2 AFTER BACKSPACING	F5G09200
01170	0	40200	0	00331	SUB S4K2 ONE RECORD.	F5G09210
01171	0	02000	0	01164	TRA S43	F5G09220
01172	0	50000	0	00330 S44	CLA S4K1 SET COUNT TO STORAGE SIZE.	F5G09230
01173	0	73400	2	00000 S45	PAX 0,2	F5G09240
01174	0	40000	0	00332	ADD S4K3 SET CPY	F5G09250
01175	0	62100	0	01207	STA S46 ADDRESS.	F5G09260
01176	0	50000	0	00452	CLA S4V2	F5G09270
01177	0	60100	0	00451	STO S4V1	F5G09280
01200	0	76200	0	00223 S49	RTB TAPE	F5G09290
01201	-0	63400	2	01210	SXD S407,2 STORE (2) IN CASE OF TAPE CHECK	F5G09300
01202	-0	76000	0	00012	RTT TURN OFF TAPE	F5G09310
01203	0	76100	0	00000	NOP CHECK.	F5G09320
01204	0	50000	0	00452	CLA S4V2 ADJUST	F5G09330
01205	0	40000	0	00331	ADD S4K2 TAPE	F5G09340
01206	0	60100	0	00452	STO S4V2 POSITION	F5G09350
01207	0	70000	2	00000 S46	CPY -,2	F5G09360
01210	1	00000	0	01216 S407	TXI S48,0,- VALUE OF (2) STORED HERE	F5G09370
01211	0	07400	4	00004	TSX 4,4 END OF FILE OCCURRED,DIAGNOSTIC	F5G09380
01212	-0	63400	4	01244	SXD S405,4	F5G09390
01213	0	07400	4	01226	TSX S406,4 CHECK REDUNDANCY BITS	F5G09400
01214	-0	53400	4	01244	LXD S405,4	F5G09410
01215	0	02000	0	01200	TRA S49	F5G09420
01216	2	00001	2	01207 S48	TIX S46,2,1 COUNT NO. OF WORDS CPYED.	F5G09430
01217	0	70000	0	00454 S409	CPY S4V4 COPY OUT TO	F5G09440
01220	0	02000	0	01217	TRA S409 END OF RECORD.	F5G09450
01221	0	07400	4	00004	TSX 4,4 ERRONEOUS END OF FILE,DIAGNOSTIC	F5G09460
01222	-0	63400	4	01244	SXD S405,4 CHECK REDUNDANCY BITS	F5G09470
01223	0	07400	4	01226	TSX S406,4	F5G09480
01224	-0	53400	4	01244	LXD S405,4	F5G09490
01225	0	02000	0	01133	TRA S4	F5G09500
01226	0	76600	0	00333 S406	IOD	F5G09510
01227	-0	76000	0	00012	RTT	F5G09520
01230	0	02000	0	01233	TRA S402 TRY AGAIN	F5G09530
01231	-0	63400	0	00151	SXD TPCT,0 RESETS REPEAT COUNT	F5G09540
01232	0	02000	4	00001 S404	TRA 1,4 RETURN	F5G09550
01233	0	76400	0	00203 S402	BST TAPE PREPARE TO READ AGAIN	F5G09560
01234	-0	53400	2	00151	LXD TPCT,2 FIVE TIMES	F5G09570
01235	1	00001	2	01236	TXI S402A,2,1	F5G09580
01236	-0	63400	2	00151 S402A	SXD TPCT,2	F5G09590
01237	-3	00004	2	01241	TXL S402B,2,4 GO ON	F5G09600
01240	0	07400	4	00004	TSX 4,4 NO GOOD,DIAGNOSTIC	F5G09610
01241	-0	53400	2	01210 S402B	LXD S407,2 RESET INDEX	F5G09620
01242	0	76200	0	00223	RTB TAPE	F5G09630
01243	-0	53400	4	01244	LXD S405,4	F5G09640
01244	1	00000	0	01207 S405	TXI S46,0,- RETURN ADDR. STORED HERE	F5G09650
					THE S5 SUBROUTINE LOADS EN1,2,3 FROM THE ENTRANCE CONDITIONS	F5G09660
					OF THE ENTRY BB IN A REGION WHEN THE REGION IS ENCOUNTERED	F5G09670
					IN LPLST. IN ADDITION, THE PERMUTATION OF INDEX REGISTERS	F5G09680
					THE REGION PROVIDING THE BEST MATCH BETWEEN IR1,2,3 AND	F5G09690
					EN1,2,3 IS LEFT IN CELLS IN1,2,3 AND EN4,5,6 BY S5. S5 USES	F5G09700
					S1,S111,S6,S7,S9, AS SUBROUTINES.	F5G09710
01245	-0	63400	4	00473 S5	SXD S5V1,4 STORE RETURN INDEX	F5G09720
01246	0	60100	0	00474	STO S5V2 STORE LOOP LIST QUANTITY	F5G09730

01247	0	07400	4	01466	TSX S9,4 GET THE ENTRANCE	F5G09740
					REQUIREMENTS	F5G09750
01250	0	50000	0	00340	CLA S5K3	F5G09760
01251	0	53400	2	00343	LXA S5K6,2 STORE -0S IN THE COUNTER OF THIS + OF REAL	F5G09770
01252	0	60100	2	00470	STO ENC+8,2 STORE -0S IN THE	F5G09780
01253	2	00001	2	01252	TIX S51,2,1 REGISTERS.	F5G09790
01254	0	53400	1	00342	LXA S5K5,1 SET INDEX FOR EN1,N=1	F5G09800
01255	0	53400	2	00342	LXA S5K5,2 SET INDEX FOR IR1, M EQUALS 1	F5G09810
01256	0	50000	1	00473	CLA EN1+3,1	F5G09820
01257	0	34000	0	00336	CAS S5K1 IS ENN EMPTY	F5G09830
01260	0	02000	0	01262	TRA S55 NO	F5G09840
01261	0	02000	0	01427	TRA S58 YES	F5G09850
01262	0	56000	2	00465	LDQ IN1+3,2 NO	F5G09860
01263	0	16200	0	01267	TQP S56 IS IRM ASSIGNED	F5G09870
01264	0	34000	2	00430	CAS IR1+3,2 NO,IS C(ENM)=C(IRM)	F5G09880
01265	0	02000	0	01267	TRA S56 NO.	F5G09890
01266	0	02000	0	01433	TRA S59 YES.	F5G09900
01267	2	00001	2	01262	TIX S55,2,1 NO. THRU WITH IRS	F5G09910
01270	2	00001	1	01255	TIX S54,1,1 YES. THRU WITH ENS	F5G09920
01271	0	53400	2	00342	LXA S5K5,2 YES,SET INDEX FOR IR1,M=1	F5G09930
01272	0	53400	1	00342	LXA S5K5,1 SET INDEX FOR EN1,N=1	F5G09940
01273	0	50000	2	00430	CLA IR1+3,2	F5G09950
01274	0	34000	0	00336	CAS S5K1 IS IRM EMPTY	F5G09960
01275	0	02000	0	01277	TRA S511 NO	F5G09970
01276	0	02000	0	01310	TRA S513 YES	F5G09980
01277	0	56000	2	00465	LDQ IN1+3,2 NO	F5G09990
01300	0	16200	0	01320	TQP S514 IS IRM ASSIGNED	F5G10000
01301	0	34000	0	00337	CAS S5K2 NO,IS C(IRM)REAL	F5G10010
01302	0	02000	0	01320	TRA S514 NO,	F5G10020
01303	0	02000	0	01320	TRA S514 NO,	F5G10030
01304	0	50000	0	00461	CLA IRC INCREASE REAL	F5G10040
01305	0	40000	0	00315	ADD ONEA UNASSIGNED TAG	F5G10050
01306	0	60100	0	00461	STO IRC COUNTER.	F5G10060
01307	0	02000	0	01320	TRA S514	F5G10070
01310	0	50000	1	00470	CLA EN4+3,1 HAS ENN	F5G10080
01311	0	12000	0	01317	TPL S537 BEEN ASSIGNED	F5G10090
01312	0	56000	0	00337	LDQ S5K2 NO,IS C(ENN)	F5G10100
01313	0	50000	1	00473	CLA EN1+3,1 REAL	F5G10110
01314	0	04000	0	01317	TLQ S537	F5G10120
01315	0	07400	4	01443	TSX S6,4 YES,MAKE IRM=ENN	F5G10130
01316	0	02000	0	01320	TRA S514	F5G10140
01317	2	00001	1	01310	TIX S513,1,1 ARE WE THRU WITH EN S	F5G10150
01320	2	00001	2	01272	TIX S510,2,1 YES, ARE WE THRU WITH IRS	F5G10160
01321	0	50000	0	00460	CLA ENC YES.	F5G10170
01322	-0	12000	0	01327	TMI S515 ARE THERE NO EMPTY ENS	F5G10180
01323	0	34000	0	00341	CAS S5K4 HOW MANY EMPTY ENS.	F5G10190
01324	0	02000	0	01327	TRA S515 3 OR 0	F5G10200
01325	0	02000	0	01343	TRA S520 2 EMPTY EN	F5G10210
01326	0	02000	0	01366	TRA S526 1 EMPTY EN	F5G10220
01327	0	53400	1	00342	LXA S5K5,1 3 OR 0 EMPTY EN,N=1	F5G10230
01330	0	53400	2	00342	LXA S5K5,2 M=1	F5G10240
01331	0	50000	1	00470	CLA EN4+3,1	P5G10250
01332	0	12000	0	01340	TPL S516 ENN ASSIGNED	F5G10260
01333	0	50000	2	00465	CLA IN1+3,2 NO,IRM	F5G10270

01334	0	12000	0	01337	TPL S517 ASSIGNED	F5G10280
01335	0	07400	4	01443	TSX S6,4 NO,MAKE IRM=IRN	F5G10290
01336	0	02000	0	01340	TRA S516	F5G10300
01337	2	00001	2	01333 S517	TIX S518,2,1	F5G10310
01340	2	00001	1	01330 S516	TIX S519,1,1	F5G10320
01341	-0	53400	4	00473	LXD S5V1,4	F5G10330
01342	0	02000	4	00001	TRA 1,4 RETURN	F5G10340
01343	0	50000	0	00461 S520	CLA IRC	F5G10350
01344	0	34000	0	00341	CAS S5K4 ARE THERE 3 REAL UNASSNED TAGS IN THE IRS	F5G10360
01345	0	02000	0	01350	TRA S536	F5G10370
01346	0	02000	0	01405	TRA S531 1,NO,GO MATCH EMPTY ENS	F5G10380
01347	0	02000	0	01405	TRA S531 2,NO. WITH ANY REAL UNASS. IRS	F5G10390
01350	0	07400	4	01450 S536	TSX S7,4 3, YES, TO COPY IRS, ETC.	F5G10400
01351	0	07400	4	00622	TSX S1,4 SELECT MOST REPLACEABLE I.R.	F5G10410
01352	0	53400	1	00342	LXA S5K5,1	F5G10420
01353	0	07400	4	01435	TSX S595,4	F5G10430
01354	0	50000	1	00473 S521	CLA EN1+3,1 IS EN	F5G10440
01355	0	34000	0	00336	CAS S5K1 EMPTY	F5G10450
01356	0	02000	0	01360	TRA S522 NO	F5G10460
01357	2	00001	1	01354	TIX S521,1,1 INDEX COUNTER OF IR S	F5G10470
01360	0	07400	4	01443 S522	TSX S6,4 MADE ENN = IRM	F5G10480
01361	0	53400	1	00342 S529	LXA S5K5,1	F5G10490
01362	0	50000	1	00460 S525	CLA IR4+3,1 REPLACE THE IRS	F5G10500
01363	0	60100	1	00430	STO IR1+3,1	F5G10510
01364	2	00001	1	01362	TIX S525,1,1	F5G10520
01365	0	02000	0	01327	TRA S515	F5G10530
01366	0	56000	0	00461 S526	LDQ IRC	FS010540
01367	0	50000	0	00341	CLA S5K4 ARE THERE 2 OR 3 REAL	F5G10550
01370	0	04000	0	01403	TLQ S530 UNASSNEO TAGS	F5G10560
01371	0	07400	4	01450	TSX S7,4 YES,COPY IRS	F5G10570
01372	0	07400	4	00620	TSX S111,4 LOOK FOR LEAST REPLACEABLE I.R.	F5G10580
01373	0	07400	4	01435	TSX S595,4	F5G10590
01374	0	53400	1	00342	LXA S5K5,1 ASSIGN THE EMPTY	F5G10600
01375	0	50000	1	00473 S527	CLA EN1+3,1 EN TO THE IR	F5G10610
01376	0	34000	0	00336	CAS S5K1 SELECTED	F5G10620
01377	0	02000	0	01401	TRA S528	F5G10630
01400	0	07400	4	01443	TSX S6,4 BY	F5G10640
01401	2	00001	1	01375 S528	TIX S527,1,1 S111.	F5G10650
01402	0	02000	0	01361	TRA S529	F5G10660
01403	0	16200	0	01405 S530	TQP S531 IS THERE ONE REAL TAG	F5G10670
01404	0	02000	0	01327	TRA S515 NO,GO MATCH ARBITRARILY.	F5G10680
01405	0	53400	1	00342 S531	LXA S5K5,1 SET COUNT TO 3,N=1	F5G10690
01406	0	53400	2	00342	LXA S5K5,2 SET COUNT TO 3,M=1	F5G10700
01407	0	50000	1	00473 S532	CLA EN1+3,1 IS ENN	F5G10710
01410	0	34000	0	00336	CAS S5K1 EMPTY	F5G10720
01411	0	02000	0	01413	TRA S533 NO,	F5G10730
01412	0	02000	0	01415	TRA S534 YES,	F5G10740
01413	2	00001	1	01407 S533	TIX S532,1,1 NO,THRU WITH ENS	F5G10750
01414	0	02000	0	01327	TRA S515 YES.	F5G10760
01415	0	50000	2	00465 S534	CLA IN1+3,2	F5G10770
01416	0	12000	0	01425	TPL S535	F5G10780
01417	0	50000	2	00430	CLA IR1+3,2 NO	F5G10790
01420	0	34000	0	00337	CAS S5K2 IS C (IRM) REAL	F5G10800
01421	0	76100	0	00000	NOP NO	F5G10810

01422	0	02000	0	01425	TRA S535	F5G10820
01423	0	07400	4	01443	TSX S6,4 YES	F5G10830
01424	0	02000	0	01327	TRA S515	F5G10840
01425	2	00001	2	01415	TIX S534,2,1 NO	F5G10850
01426	0	02000	0	01413	TRA S533	F5G10860
01427	0	50000	0	00460	S58 CLA ENC YESENM EMPTY	F5G10870
01430	0	40000	0	00315	ADD ONEA INCREASE COUNTER	F5G10880
01431	0	60100	0	00460	STO ENC OF NO. OF EMPTY ENS.	F5G10890
01432	0	02000	0	01270	TRA S57	F5G10900
01433	0	07400	4	01443	S59 TSX S6,4 MAKE IRM=ENN	F5G10910
01434	0	02000	0	01270	TRA S57	F5G10920
01435	-0	53400	2	00430	S595 LXD IRR,2	F5G10930
01436	0	50000	2	00430	CLA IR1+3,2	F5G10940
01437	0	34000	0	01465	CAS S7K1	F5G10950
01440	0	02000	4	00001	TRA 1,4	F5G10960
01441	0	02000	0	01361	TRA S529	F5G10970
01442	0	02000	4	00001	TRA 1,4	F5G10980
01443	-0	75400	1	00000	S6 PXD 0,1	F5G10990
01444	0	60100	2	00465	STO IN1+3,2	F5G11000
01445	-0	75400	2	00000	PXD 0,2	F5G11010
01446	0	60100	1	00470	STO EN4+3,1	F5G11020
01447	0	02000	4	00001	TRA 1,4	F5G11030
01450	0	53400	1	00342	S7 LXA S5K5,1 SET COUNT TO 3,M=1	F5G11040
01451	0	50000	1	00430	S71 CLA IR1+3,1 COPY ASIDE C(IRM)	F5G11050
01452	0	60100	1	00460	STO IR4+3,1	F5G11060
01453	0	56000	1	00465	LDQ IN1+3,1 IRM ASSIGNED	F5G11070
01454	0	16200	0	01461	TQP S72	F5G11080
01455	0	34000	0	00337	CAS S5K2 NO, IS C(IRM) REAL	F5G11090
01456	0	76100	0	00000	NOP	F5G11100
01457	0	02000	0	01461	TRA S72 NO	F5G11110
01460	0	02000	0	01463	TRA S73 YES.	F5G11120
01461	0	50000	0	01465	S72 CLA S7K1 NO,REPLACE CIIRM)	F5G11130
01462	0	60100	1	00430	STO IR1+3,1 BY IMPOSSIBLE TAG.	F5G11140
01463	2	00001	1	01451	S73 TIX S71,1,1 COUNT TO 3,M=M+1	F5G11150
01464	0	02000	4	00001	TRA 1,4 RETURN	F5G11160
01465	+000000777760			S7K1	OCT 777760 IMPOSSIBLE TAG VALUE. THE S9 SUBROUTINE LOADS EN1,2,3.	F5G11170
01466	-0	63400	4	00476	S9 SXD S9V2,4 STORE RETURN INDEX.	F5G11180
01467	0	07400	4	00070	TSX SE,4 MAKE SURE BB IS IN C+M+	F5G11190
01470	0	50000	1	06447	CLA BBB+5,1 GET AND	F5G11200
01471	-0	73400	2	00000	PDX 0,2 STORE THE	F5G11210
01472	0	50000	2	05061	CLA REG,2 REGION	F5G11220
01473	0	60100	0	00477	STO S9V4 WORD+	F5G11230
01474	0	53400	2	00342	LXA S5K5,2 SET COUNT TO 3,N=1	F5G11240
01475	0	50000	1	06443	CLA BBB+1,1 STORE THE WORD	F5G11250
01476	0	60100	0	00475	STO S9V1 CONTAINING THE PERMATATION NOS.	F5G11260
01477	0	50000	0	00475	S92 CLA S9V1 EXTRACT THE N TH	F5G11270
01500	0	77100	2	00003	ARS 3,2 PERMUTATION NO.	F5G11280
01501	0	77100	2	00003	ARS 3,2 AND PUT IT	F5G11290
01502	-0	32000	0	00350	ANA S9K3 IN	F5G11300
01503	-0	73400	4	00000	PDX 0,4 INDEX 4.	F5G11310
01504	-0	50000	0	00477	CAL S9V4 IS THIS	F5G11320
01505	-0	32000	4	00350	ANA S9K2+3,4 AN EMPTY	F5G11330
01506	0	10000	0	01515	TZE S93 I.R.	F5G11340
						F5G11350

01507	0	50000	0	00336		CLA S5K1 YES,STORE EMPTINESS SYMBOL	F5G11360
01510	0	60100	4	00473	S94	STO EN1+3,4	F5G11370
01511	1	77777	1	01512		TXI S91,1,-1 DOWN THE ENTR. INDEX	F5G11380
01512	2	00001	2	01477	S91	TIX S92,2,1 COUNT TO 3	F5G11390
01513	-0	53400	4	00476		LXD S9V2,4	F5G11400
01514	0	02000	4	00001		TRA 1,4 RETURN	F5G11410
01515	-0	50000	1	06444	S93	CAL BBB+2,1 SET THE	F5G11420
01516	0	77100	0	00022		ARS 18 ENTRANCE REQUIREMENT.	F5G11430
01517	0	34000	0	00336		CAS S5K1 IS IT AN EMPTINESS SYMBOL	F5G11440
01520	0	02000	0	01510		TRA S94 NO,	F5G11450
01521	0	50000	0	00333		CLA LK1 YES,STORE E,(HASH SYMBOL).	F5G11460
01522	0	02000	0	01510		TRA S94 NO,	F5G11470
						THE SA SUBROUTINE LOADS EX1,2,3 AND ACT1,2,3 FROM EXIT	F5G11480
						CONDITIONS AND ACTIVITY BITS IPREFIX, WORD 2, BBB) OF THE	F5G11490
						EXIT BB IN A REGION.	F5G11500
01523	-0	63400	4	00501	SA	SXD SAV2,4 STORE RETURN INDEX.	F5G11510
01524	-0	32000	0	00353		ANA SBK2 IF THIS IS AN IMPOSSIBLE BB,	F5G11520
01525	0	56000	0	00351		LDQ SAK1 RETURN AT ONCE, DOING NOTHING	F5G11530
01526	0	04000	4	00001		TLQ 1,4	F5G11540
01527	0	07400	4	00067		TSX SE1,4 MAKE SURE BB IS IN CM.	F5G11550
01530	0	50000	1	06447		CLA BBB+5,1 GET AND	F5G11560
01531	-0	73400	2	00000		PDX 0,2 STORE	F5G11570
01532	0	50000	2	05061		CLA REG,2 REGION	F5G11580
01533	0	60100	0	00502		STO SAV3 WORD.	F5G11590
01534	0	50000	1	06443		CLA BBB+1,1 GET AND STORE THE	F5G11600
01535	0	60100	0	00500		STO SAV1 WORD HAVING PERMUTATION NOS.	F5G11610
01536	0	53400	2	00342		LXA S5K5,2 SET COUNT TO 3,N=N+1	F5G11620
01537	-0	50000	0	00500	SA1	CAL SAV1 PUT PERMUTATION	F5G11630
01540	0	77100	2	00003		ARS 3,2 NUMBER	F5G11640
01541	0	77100	2	00003		ARS 3,2 IN	F5G11650
01542	-0	32000	0	00350		ANA S9K3 INDEX 4	F5G11660
01543	-0	73400	4	00000		PDX 0,4	F5G11670
01544	-0	50000	0	00502		CAL SAV3 IS THIS	F5G11680
01545	-0	32000	4	00350		ANA S9K2+3,4 AN EMPTY	F5G11690
01546	0	10000	0	01560		TZE SA2 EXIT	F5G11700
01547	0	50000	0	00336		CLA S5K1 YES,STORE EMPTINESS SYMBOL.	F5G11710
01550	0	60100	4	00506	SA4	STO EX1+3,4	F5G11720
01551	-0	50000	0	00500	SA5	CAL SAV1 STORE THE	F5G11730
01552	0	76700	2	00003		ALS 3,2 ACTIVE	F5G11740
01553	0	60200	4	00511		SLW ACT1+3,4 INDICATOR	F5G11750
01554	1	77777	1	01555		TXI SA3,1,-1	F5G11760
01555	2	00001	2	01537	SA3	TIX SA1,2,1 COUNT TO 3	F5G11770
01556	-0	53400	4	00501		LXD SAV2,4	F5G11780
01557	0	02000	4	00001		TRA 1,4 RETURN	F5G11790
01560	-0	50000	1	06444	SA2	CAL BBB+2,1	F5G11800
01561	-0	32000	0	00326		ANA S3K4 IS THIS	F5G11810
01562	0	34000	0	00336		CAS S5K1 AN EMPTY SYMBOL	F5G11820
01563	0	02000	0	01550		TRA SA4 NO	F5G11830
01564	0	50000	0	00333		CLA LK1 YES REPLACE BY E.	F5G11840
01565	0	02000	0	01550		TRA SA4 NO	F5G11850
						THE SB SUBROUTINE ENTERS A BIT IN PRED OR STAG TO REQUEST SX	F5G11860
						COMPILATION. THE APPROPRIATE ACTIVITY CELL AC1,2, OR 3 IS	F5G11870
						EXAMINED. IF IT IS NEGATIVE (ACTIVE INSTRUCTION IN A BB	F5G11880
						ALREADY IN A REGION), THE SX BIT IS PLACED IN PRED IN THE	F5G11890

					LINK OUT OF THE REGION. IF IT IS POSITIVE (ACTIVE INSTRUC.	F5G11900	
					IN A BB IN THIS LPLST), THE SX BIT IS PLACED IN THE STAG	F5G11910	
					TABLE, AT THE ACTIVE INSTRUCTION. THE APPROPRIATE AC1,2, OR 3	F5G11920	
					IS ALSO TURNED OFF BY SB.	F5G11930	
01566	-0	63400	1	00514	SB	SXD SBV4,1 STORE INDEX OF ACTIVE I.R+	F5G11940
01567	-0	63400	4	00511		SXD SBV1,4 STORE INDEX OF RETURN,	F5G11950
01570	0	50000	1	00561		CLA AC1+3,1 IS THE ACTIVE THING	F5G11960
01571	0	12000	0	01641		TPL SB1 AN INSTRUCTION	F5G11970
01572	-0	73400	1	00000		PDX 0,1 NO	F5G11980
01573	0	50000	1	04777		CLA LPLST+S3P1,1 GET + STORE	F5G11990
01574	0	34000	0	00324		CAS S3K2 PRED. BB	F5G12000
01575	0	76100	0	00000		NOP	F5G12010
01576	0	02000	0	01600		TRA SB01	F5G12020
01577	0	77100	0	00022		ARS 18 NO	F5G12030
01600	0	62100	0	00513	SB01	STA SBV3	F5G12040
01601	0	50000	1	05000		CLA LPLST+S3P1+1,1	F5G12050
01602	0	34000	0	00323		CAS S3K1 END LOOP LIST SENTINEL	F5G12060
01603	0	02000	0	01605		TRA SB7 NO,	F5G12070
01604	0	50000	0	04741		CLA LPLST YES,SUCCESSOR IS 1ST ENTRY.	F5G12080
01605	0	07400	4	00070	SB7	TSX SE,4 NO,GET ADDR. OF	F5G12090
01606	0	50000	1	06443		CLA BBB+1,1 PRED.	F5G12100
01607	0	60100	0	00515		STO SBV5 STORE PERMUTATION NOS.	F5G12110
01610	0	50000	1	06442		CLA BBB,1 GET ADDR OF 1ST PRED.	F5G12120
01611	0	60200	0	00512	SB4	SLW SBV2	F5G12130
01612	0	07400	4	00055		TSX SE5,4	F5G12140
01613	-0	50000	1	07337		CAL PRED,1	F5G12150
01614	-0	32000	0	00353		ANA SBK2	F5G12160
01615	0	34000	0	00513		CAS SBV3 IS THIS THE RIGHT TRANSFER	F5G12170
01616	0	02000	0	01620		TRA SB2 NO	F5G12180
01617	0	02000	0	01623		TRA SB5 YES	F5G12190
01620	0	50000	0	00512	SB2	CLA SBV2 NO TRY NEXT PRED.	F5G12200
01621	0	40000	0	00315		ADD ONEA	F5G12210
01622	0	02000	0	01611		TRA SB4	F5G12220
01623	0	53400	2	00342	SB5	LXA S5K5,2	F5G12230
01624	-0	50000	0	00515	SB00	CAL SBV5 SEARCH PERMUTATION	F5G12240
01625	0	77100	2	00003		ARS 3,2 NOS. FOR THE INDEX	F5G12250
01626	0	77100	2	00003		ARS 3,2 STORED IN SBV4	F5G12260
01627	-0	32000	0	00350		ANA S9K3	F5G12270
01630	0	34000	0	00514		CAS SBV4 IS THIS PERMUTATION NO.	F5G12280
01631	0	02000	0	01633		TRA SB8 NO EQUAL TO THE ACTIVE	F5G12290
01632	0	02000	0	01635		TRA SB9 YES IR	F5G12300
01633	2	00001	2	01624	SB8	TIX SB00,2,1 NO	F5G12310
01634	0	07400	4	00004		TSX 4,4 DIAGNOSTIC,ERROR	F5G12320
01635	0	50000	0	00354	SB9	CLA SBK3 GENERATE NO STORE	F5G12330
01636	0	77100	2	00003		ARS 3,2 THE	F5G12340
01637	-0	60200	1	07337		ORS PRED,1 SX FIT IN	F5G12350
01640	0	02000	0	01654		TRA SB6 PRED. TABLE.	F5G12360
01641	-0	32000	0	00326	SB1	ANA S3K4	F5G12370
01642	0	76500	0	00043		LRS 35 COMPUTE NO. OF WORD IN	F5G12380
01643	0	22100	0	00371		DVP XK9 STAG ANO POSITION OF SX	F5G12390
01644	0	73400	2	00000		PAX 0,2 FIT IN WORD.	F5G12400
01645	-0	50000	0	00352		CAL SBK1 GENERATE	F5G12410
01646	0	76700	2	00010		ALS 8,2 THE BIT	F5G12420
01647	0	60200	0	00512		SLW SBV2 TO	F5G12430

				STORE.		F5G12440
01650	0	76300	0	00043	LLS 35 GET NO. OF WORD OUT OF MQ.	F5G12450
01651	0	07400	4	00032	TSX SE4,4 MAKE SURE THE WD IS IN C.M.	F5G12460
01652	-0	50000	0	00512	CAL SBV2	F5G12470
01653	-0	60200	1	05061	ORS STAG,1	F5G12480
01654	0	50000	0	00314	CLA ZERO SET IR	F5G12490
01655	-0	53400	1	00514	LXD SBV4,1 TO	F5G12500
01656	0	60100	1	00561	STO AC1+3,1 NOT ACTIVE.	F5G12510
01657	-0	53400	4	00511	LXD SBV1,4 RE-	F5G12520
01660	0	02000	4	00001	TRA 1,4 TURN	F5G12530
					THE SC SUBROUTINE HANDLES THE PROBLEM OF AN ACTIVE INDEX	F5G12540
					REGISTER WITH NO SUBSEQUENT LX IN THE PRESENT REGION. THIS	F5G12550
					POSTPONES THE NECESSITY OF AN SX UNTIL A LATER LX IS FOUND.	F5G12560
					THE ACTIVITY IS TRANSFERRED FROM AC1,2,3 TO PREFIX, WORD 2,	F5G12570
					BBB TABLE FOR ALL BB,S DURING WHICH INDEX REGISTER IS ACTIVE.	F5G12580
					THIS PERPETUATION OF ACTIVITY WHEN NOT TURNED OFF DURING THE	F5G12590
					TREATMENT OF THE SAME LPLST IN WHICH IT AROSE IS CALLED MARK-	F5G12600
					ING A SECTION OF LPLST ACTIVE. ALL BB,S BETWEEN THE ORIGIN	F5G12610
					OF THE ACTIVITY AND THE PRESENT POINT OF LPLST WHEN SC IS	F5G12620
					ENTERED ARE MARKED ACTIVE, AND THE DESIGNATED AC1,2,3 IS	F5G12630
					TURNED OFF. SD IS USED AS A SUBROUTINE, DOING THE ACTUAL	F5G12640
					MARKING OF BB,S ACTIVE.	F5G12650
01661	0	50000	1	00561	CLA AC1+3,1 IS IR	F5G12660
01662	0	10000	4	00001	TZE 1,4 ACTIVE	F5G12670
01663	-0	63400	4	00516	SXD SCV1,4 YES,STORE RETURN	F5G12680
01664	-0	63400	1	01736	SXD SC9,1 AND INDEX OF ACTIVE I.R+	F5G12690
01665	0	62200	0	00520	STD SCV3 STORE INDEX OF LOOP LIST.	F5G12700
01666	0	50000	0	00520	CLA SCV3 IS THIS THE CURRENT	F5G12710
01667	0	40200	0	00316	SUB ONED	F5G12720
01670	-0	40000	0	00440	SBM S3V4 IS THIS THE CURRENT LPLST INDEX	F5G12730
01671	-0	10000	0	01674	TNZ SC40	F5G12740
01672	0	50000	0	00521	CLA ACIND YES	F5G12750
01673	0	12000	4	00001	TPL 1,4 IS THIS THE ACTIVE PASS	F5G12760
01674	-0	53400	2	00520	LXD SCV3,2 YES	F5G12770
01675	0	50000	2	04777	CLA LPLST+S3P1,2	F5G12780
01676	0	34000	0	00324	CAS S3K2 IS 1ST AACTIVE QUANTITY A BB	F5G12790
01677	0	02000	0	01721	TRA SC02	F5G12800
01700	0	02000	0	01721	TRA SC02 NO	F5G12810
01701	0	02000	0	01734	TRA SC8 YES	F5G12620
01702	0	40200	0	00316	SUB ONED IS THIS CURRENT	F5G12830
01703	0	34000	0	00440	CAS S3V4 LOOP LIST INDEX	F5G12840
01704	0	02000	0	01706	TRA SC2 NO,	F5G12850
01705	0	02000	0	01725	TRA SC5 YES,	F5G12860
01706	-0	53400	2	00520	LXD SCV3,2 NO,	F5G12870
01707	0	50000	2	04777	CLA LPLST+S3P1,2	F5G12880
01710	0	34000	0	00323	CAS S3K1 IS IT END LOOP LIST	F5G12890
01711	0	02000	0	01713	TRA SC3 NO,	F5G12900
01712	0	02000	0	01732	TRA SC6 YES,	F5G12910
01713	0	34000	0	00324	SC3 CAS S3K2 NO,IS IT A BB	F5G12920
01714	0	76100	0	00000	NOP NO,	F5G12930
01715	0	02000	0	01717	TRA SC04	F5G12940
01716	0	02000	0	01734	TRA SC8 YES,	F5G12950
01717	-0	53400	2	01736	SC04 LXD SC9,2 NO, PUT INDEX OF ACTIVE IR	F5G12960
01720	0	07400	4	01753	TSX SD,4 IN 2. GO TO RECORD REGION ACTIVE.	F5G12970

01721	0	50000	0	00520	SC02	CLA SCV3 PREPARE TO GET	F5G12980
01722	0	40200	0	00316		SUB ONED NEXT	F5G12990
01723	0	62200	0	00520	SC7	STD SCV3 LOOP LIST QUANTITY.	F5G13000
01724	0	02000	0	01702		TRA SC4	F5G13010
01725	-0	53400	1	01736	SC5	LXD SC9,1	F5G13020
01726	0	50000	0	00314		CLA ZERO RECORD I.R. NOT	F5G13030
01727	0	60100	1	00561		STO AC1+3,1 ACTIVE ANYMORE.	F5G13040
01730	-0	53400	4	00516		LXD SCV1,4	F5G13050
01731	0	02000	4	00001		TRA 1,4 RETURN.	F5G13060
01732	0	50000	0	00325	SC6	CLA S3K3 ARRANGE TO GET 1ST LPLST QUANTITY	F5G13070
01733	0	02000	0	01723		TRA SC7 QUANTITY NEXT.	F5G13080
01734	0	07400	4	00070	SC8	TSX SE,4	F5G13090
01735	-0	63400	1	00517		SXD SCV2,1 GET INDEX OF BB	F5G13100
01736	1	00000	1	01737	SC9	TXI SC01,1,0 INCREASE INDEX BY INDEX OF OCT. I.R.	F5G13110
01737	0	50000	1	06447	SC01	CLA BBB+5,1 GET THE	F5G13120
01740	-0	32000	0	00326		ANA S3K4 EXIT CONDITION.	F5G13130
01741	-0	53400	2	01736		LXD SC9,2 IS EXIT COND. SAME	F5G13140
01742	0	34000	2	00430		CAS IR1+3,2 AS TAG IN ACTIVE I.RH	F5G13150
01743	0	02000	0	01721		TRA SC02 NO,	F5G13160
01744	0	02000	0	01746		TRA SC03 YES,	F5G13170
01745	0	02000	0	01721		TRA SC02 NO,	F5G13180
01746	-0	50000	0	00340	SC03	CAL S5K3 RECORD THAT BB IS	F5G13190
01747	0	77100	2	00003		ARS 3,2 ACTIVE	F5G13200
01750	-0	53400	1	00517		LXD SCV2,1 WO THIS	F5G13210
01751	-0	60200	1	06443		ORS BBB+1,1 I+R.	F5G13220
01752	0	02000	0	01721		TRA SC02	F5G13230
01753	-0	63400	2	00523	SD	SXD SDV2,2	F5G13240
01754	-0	63400	4	00522		SXD SDV1,4 STORE RETURN.	F5G13250
01755	0	07400	4	00070		TSX SE,4 GET INO=X OF BB	F5G13260
01756	0	50000	1	06447		CLA BBB+5,1 GET	F5G13270
01757	-0	73400	1	00000		PDX 0,1 REGION	F5G13280
01760	0	50000	1	05061		CLA REG,1 WORD.	F5G13290
01761	0	07400	4	00070		TSX SE,4 GET BB INDEX.	F5G13300
01762	-0	63400	1	00525	SD7	SXD SDV4,1	F5G13310
01763	0	50000	1	06443		CLA BBB+1,1 STORE	F5G13320
01764	0	60100	0	00524		STO SDV3 AWAY THE PERMUTATION NOS.	F5G13330
01765	0	53400	2	00342		LXA S5K5,2 SET COUNT TO 3,N=1	F5G13340
01766	-0	50000	0	00524	SD3	CAL SDV3 IS	F5G13350
01767	0	77100	2	00003		ARS 3,2 PERMUTATION NO.	F5G13360
01770	0	77100	2	00003		ARS 3,2	F5G13370
01771	-0	32000	0	00350		ANA S9K3 N EQUAL	F5G13380
01772	0	34000	0	00523		CAS SDV2 TO I.R. INDEX	F5G13390
01773	0	02000	0	01775		TRA SD1 NO	F5G13400
01774	0	02000	0	02000		TRA SD4 YES	F5G13410
01775	1	77777	1	01776	SD1	TXI SD1+1,1,-1 NO	F5G13420
01776	2	00001	2	01766	S02	TIX SD3,2,1 COUNT TO 3	F5G13430
01777	0	07400	4	00004		TSX 4,4	F5G13440
02000	-0	50000	1	06444	SD4	CAL BBB+2,1	F5G13450
02001	-0	32000	0	00326		ANA S3K4 IS TAG IN	F5G13460
02002	-0	53400	4	00523		LXD SDV2,4 EXIT CONDITION	F5G13470
02003	-0	53400	1	00525		LXD SDV4,1 SAME AS IN ACTIVE I.R.	F5G13480
02004	0	34000	4	00430		CAS IR1+3,4	F5G13490
02005	0	02000	0	02007		TRA SD5 NO	F5G13500
02006	0	02000	0	02020		TRA SD9 YES,IS	F5G13510

02007	-0	50000	1	06447	SD5	CAL	BBB+5,1	NO THIS LAST		F5G13520
02010	-0	32000	0	00353		ANA	SBK2	BB		F5G13530
02011	0	34000	0	00353		CAS	SBK2	IN REGION		F5G13540
02012	0	02000	0	02014		TRA	SD6	NO		F5G13550
02013	0	02000	0	02016		TRA	SD8	YES		F5G13560
02014	0	07400	4	00067	SD6	TSX	SE1,4	NO		F5G13570
02015	0	02000	0	01762		TRA	SD7			F5G13580
02016	-0	53400	4	00522	SD8	LXD	SDV1,4	RETURN		F5G13590
02017	0	02000	4	00001		TRA	1,4			F5G13600
02020	-0	50000	0	00340	SD9	CAL	S5K3	RECORD THIS BB		F5G13610
02021	0	77100	2	00003		ARS	3,2	ACTIVE		F5G13620
02022	-0	60200	1	06443		ORS	BBB+1,1	WO THIS IR		F5G13630
02023	0	02000	0	02007		TRA	SD5			F5G13640
								THE SF SUBROUTINE FORMS APPROPRIATE AC1,2,3 ENTRY WHEN AN		F5G13650
								ACTIVE INSTRUCTION IS ENCOUNTERED.		F5G13660
02024	0	50000	0	00442	SF	CLA	TPE	IS THIS		F5G13670
02025	0	34000	0	00322		CAS	S2K2	AN LX		F5G13680
02026	0	02000	0	02030		TRA	SF1	NO,		F5G13690
02027	0	02000	0	02034		TRA	SF4	YES,		F5G13700
02030	0	34000	0	00373	SF1	CAS	XK12	NO,IS IT AN ACTIVE INSTR		F5G13710
02031	0	02000	4	00001		TRA	1,4	NO RETURN		F5G13720
02032	0	02000	0	02034		TRA	SF4	YES,		F5G13730
02033	0	02000	4	00001		TRA	1,4	NO		F5G13740
02034	0	50000	0	00571	SF4	CLA	XV5	FORM QUANTITY TO		F5G13750
02035	0	60100	0	00526		STO	SFV1	BE PUT		F5G13760
02036	-0	53400	2	00440		LXD	S3V4,2	INTO		F5G13770
02037	1	00001	2	02040		TXI	SF5,2,1	ACTIVE		F5G13780
02040	-0	63400	2	00526	SF5	SXD	SFV1,2	INDICATOR		F5G13790
02041	0	02000	4	00002		TRA	2,4			F5G13800
								PERMUTE THE PHI AND LX BITS SUBROUTINE		F5G13810
								THE SG SUBROUTINE PERMUTES AS INDICATED BY EN4,5,6 ON A REG		F5G13820
								ENTRY.		F5G13830
02042	-0	63400	4	00530	SG	SXD	SGV1,4	SAVE RETURN		F5G13840
02043	0	56000	0	00315		LDQ	ONEA	SET NEW LX AND PHI BITS TO ONEA		F5G13850
02044	-0	60000	0	00531		STQ	SGV2			F5G13860
02045	0	50000	0	00444		CLA	S3V5	GET INDEX OF REGION WORD		F5G13870
02046	0	07400	4	00070		TSX	SE,4			F5G13880
02047	0	50000	1	06447		CLA	BBB+5,1			F5G13890
02050	-0	73400	2	00000		PDX	0,2			F5G13900
02051	0	53400	4	00342		LXA	S5K5,4	SET COUNT TO 3		F5G13910
02052	0	50000	4	00470	SG1	CLA	EN4+3,4	FIND INDEX OF IR		F5G13920
02053	-0	73400	1	00000		PDX	0,1			F5G13930
02054	-0	50000	2	05061		CAL	REG,2	PERMUTE THE LX BIT		F5G13940
02055	0	76700	4	00003		ALS	3,4			F5G13950
02056	-0	32000	0	00340		ANA	S5K3			F5G13960
02057	0	77100	1	00003		ARS	3,1			F5G13970
02060	-0	60200	0	00531		ORS	SGV2			F5G13980
02061	-0	50000	2	05061		CAL	REG,2	PERMUTE THE PHI BIT		F5G13990
02062	0	77100	4	00003		ARS	3,4			F5G14000
02063	-0	32000	0	00405		ANA	XK23			F5G14010
02064	0	76700	1	00003		ALS	3,1			F5G14020
02065	-0	60200	0	00531		ORS	SGV2			F5G14030
02066	2	00001	4	02052		TIX	SG1,4,1	COUNT TO 3		F5G14040
02067	-0	50000	2	05061		CAL	REG,2			F5G14050

02070	-0	32000	0	00303	ANA	SEK4		F5G14060
02071	-0	50100	0	00531	ORA	SGV2		F5G14070
02072	0	60200	2	05061	SLW	REG,2		F5G14080
02073	-0	53400	4	00530	LXD	SGV1,4	RETURN	F5G14090
02074	0	02000	4	00001	TRA	1,4		F5G14100
							THE F1 SUBROUTINE FINDS THE HIGHEST FREQUENCY PRED ENTRY FOR	F5G14110
							A GIVEN BB AND STORES IT IN FV 101.	F5G14120
02075	-0	63400	4	00537	F1	SXD	FV6,4 STORE RETURN	F5G14130
02076	0	56000	0	00314	LDQ	ZERO	SET HIGHEST	F5G14140
02077	-0	60000	0	00544	STQ	FV101	FREQ. TO 0.	F5G14150
02100	0	60100	0	00545	STO	FV102	STORE BB NO+	F5G14160
02101	0	07400	4	00067	TSX	SE1,4	GET INDEX OF BB	F5G14170
02102	0	50000	1	06447	CLA	BBB+5,1	STORE REGION	F5G14180
02103	0	60100	0	00547	STO	FV104	NO. WORD.	F5G14190
02104	-0	50000	1	06442	CAL	BBB,1	GET PRED.	F5G14200
02105	0	62100	0	00540	STA	FV7	NO. AND STORE IT	F5G14210
02106	-0	50000	0	00545	CAL	FV102	GET AND STORE	F5G14220
02107	0	40000	0	00315	ADD	ONEA	FIRST PRED. IN	F5G14230
02110	0	07400	4	00067	TSX	SE1,4	NEXT B.B.	F5G14240
02111	0	50000	1	06442	CLA	BBB,1		F5G14250
02112	0	62100	0	00541	STA	FV8		F5G14260
02113	0	50000	0	00540	CLA	FV7	IS THIS PRED.	F5G14270
02114	0	34000	0	00541	F4	CAS	FV8 IN SAME BB	F5G14280
02115	0	02000	0	02117	TRA	F2		F5G14290
02116	0	02000	0	02134	TRA	F5	NO	F5G14300
02117	0	07400	4	00055	F2	TSX	SE5,4 GET INDEX OF PRED	F5G14310
02120	0	50000	1	07337	CLA	PRED,1		F5G14320
02121	0	34000	0	00544	CAS	FV101	IS THIS FREQ. GREATER	F5G14330
02122	0	02000	0	02125	TRA	F92		F5G14340
02123	0	76100	0	00000	NOP			F5G14350
02124	0	02000	0	02130	TRA	F3	NO	F5G14360
02125	0	60100	0	00544	F92	STO	FV101 STORE NEW MAX.	F5G14370
02126	0	50000	0	00540	CLA	FV7	STORE NEW	F5G14380
02127	0	60100	0	00546	STO	FV103	PRED. NO.	F5G14390
02130	0	50000	0	00540	F3	CLA	FV7 ARRANGE TO	F5G14400
02131	0	40000	0	00315	ADD	ONEA	CONSIDER NEXT PRED.	F5G14410
02132	0	62100	0	00540	STA	FV7		F5G14420
02133	0	02000	0	02114	TRA	F4		F5G14430
02134	-0	53400	4	00537	F5	LXD	FV6,4	F5G14440
02135	0	02000	4	00001	TRA	1,4	RETURN	F5G14450
							THE F30 SUBROUTINE FINDS THE HIGHEST FREQUENCY SUCC ENTRY FOR	F5G14460
							A GIVEN BB AND STORES IT IN FV 101.	F5G14470
02136	-0	63400	4	00537	F30	SXD	FV6,4	F5G14480
02137	0	56000	0	00314	LDQ	ZERO	SET HIGHEST FREQH	F5G14490
02140	-0	60000	0	00544	STQ	FV101	TO 0.	F5G14500
02141	0	60100	0	00545	STO	FV102	STORE BB NO.	F5G14510
02142	0	07400	4	00070	TSX	SE,4		F5G14520
02143	0	50000	1	06447	CLA	BBB+5,1		F5G14530
02144	0	60100	0	00547	STO	FV104		F5G14540
02145	-0	50000	1	06442	CAL	BBB,1	GET SUCC. NO.	F5G14550
02146	0	62200	0	00542	STD	FV9	AND STORE IT	F5G14560
02147	-0	50000	0	00545	CAL	FV102	GET AND STORE	F5G14570
02150	0	40000	0	00316	ADD	ONED	SUCC.	F5G14580
02151	0	07400	4	00070	TSX	SE,4	NO.	F5G14590

02152	0	50000	1	06442	CLA BBB,1 OF 1ST SUCC.	F5G14600
02153	0	62200	0	00543	STD FV10 IN NEXT BB	F5G14610
02154	0	50000	0	00542	CLA FV9	F5G14620
02155	0	34000	0	00543	F31 CAS FV10 IS SUCC IN SAME BB	F5G14630
02156	0	02000	0	02160	TRA F32	F5G14640
02157	0	02000	0	02175	TRA F34 NO.	F5G14650
02160	0	07400	4	00044	F32 TSX SE6,4 GET INDEX OF SUCC.	F5G14660
02161	0	50000	1	07555	CLA SUCC,1	F5G14670
02162	0	34000	0	00544	CAS FV101 IS THIS FREQ. GREATER	F5G14680
02163	0	02000	0	02166	TRA F93	F5G14690
02164	0	76100	0	00000	NOP	F5G14700
02165	0	02000	0	02171	TRA F33 NO	F5G14710
02166	0	60100	0	00544	F93 STO FV101 STORE NEW MAX.	F5G14720
02167	0	50000	0	00542	CLA FV9 STORE NEW	F5G14730
02170	0	60100	0	00546	STO FV103 SUCC. NO.	F5G14740
02171	0	50000	0	00542	F33 CLA FV9 ARRANGE TO CONSIDER	F5G14750
02172	0	40000	0	00316	ADD ONED NEXT SUCC.	F5G14760
02173	0	62200	0	00542	STD FV9	F5G14770
02174	0	02000	0	02155	TRA F31	F5G14780
02175	-0	53400	4	00537	F34 LXD FV6,4	F5G14790
02176	0	02000	4	00001	TRA 1,4 RETURN	F5G14800
02177	0	50000	0	00314	F CLA ZERO SET INDICATOR TO SAY	F5G14810
02200	0	60100	0	00550	STO LPIND THIS ISNT A LOOP.	F5G14820
02201	0	60100	0	00532	STO FV1 SET HIGHEST FREQ. TO 0.	F5G14830
02202	0	60100	0	00536	STO FV5 SET TO CONSIDER 0TH BB	F5G14840
02203	0	50000	0	00536	F7 CLA FV5	F5G14850
02204	0	07400	4	02075	TSX F1,4 FIND MOST FREQ. UNCONSIDERED TRANSFER	F5G14860
02205	0	50000	0	00544	CLA FV101 IS IT GREATER THAN	F5G14870
02206	0	34000	0	00532	CAS FV1 PREVIOUS MAXIMUM	F5G14880
02207	0	02000	0	02212	TRA F85	F5G14890
02210	0	76100	0	00000	NOP	F5G14900
02211	0	02000	0	02221	TRA F6 NO+	F5G14910
02212	0	60100	0	00532	F85 STO FV1 REPLACE PREV. MAX.	F5G14920
02213	0	50000	0	00545	CLA FV102 AND BB NO.	F5G14930
02214	0	60100	0	00533	STO FV2	F5G14940
02215	0	50000	0	00546	CLA FV103 AND PRED. NO.	F5G14950
02216	0	60100	0	00534	STO FV3	F5G14960
02217	0	50000	0	00547	CLA FV104 AND REGION NO. WORD.	F5G14970
02220	0	60100	0	00535	STO FV4	F5G14980
02221	0	50000	0	00536	F6 CLA FV5 ARRANGE TO CONSIDER NEXT	F5G14990
02222	0	40000	0	00315	ADD ONEA B.B.	F5G15000
02223	0	60100	0	00536	STO FV5	F5G15010
02224	0	40200	0	07774	SUB KEYS	F5G15020
02225	0	40000	0	00315	ADD ONEA	F5G15030
02226	-0	10000	0	02203	TNZ F7 WAS THIS THE LAST BB	F5G15040
02227	0	76000	0	00012	F86 DCT YES, IF ANY DIVIDE CHECKS GO	F5G15050
02230	0	07400	4	00004	TSX 4,4 TO DIAGNOSTIC.	F5G15060
02231	0	50000	0	00532	CLA FV1 NO DVD CHECKS, WERE THERE ANY	F5G15070
02232	-0	10000	0	02234	TNZ F86A UNCONSIDERED PREDs	F5G15080
02233	0	02000	0	00030	TRA R NO,CONTINUE PROGRAM, PART I DONE.	F5G15090
02234	0	50000	0	00535	F86A CLA FV4 YES	F5G15100
02235	0	10000	0	02245	TZE F9 IS THIS A REGION ALREADY	F5G15110
02236	-0	73400	1	00000	PDX 0,1 YES.	F5G15120
02237	0	50000	1	05061	CLA REG,1 GET REGION WORD.	F5G15130

02240	-0	32000	0	00360	ANA FK3	F5G15140
02241	0	10000	0	02244	TZE F8 IS IT AN OPAQUE REGION	F5G15150
02242	0	50000	0	00356	CLA FK1 NO,GET TRANSPARENT REGION MARKER.	F5G15160
02243	0	02000	0	02245	TRA F9	F5G15170
02244	0	50000	0	00357	F8 CLA FK2 GET OPAQUE REGION MARKER.	F5G15180
02245	0	60100	0	04775	F9 STO LPLST+S3P1-2	F5G15190
02246	0	50000	0	00533	CLA FV2 STORE THE REGION MARKER	F5G15200
02247	0	76700	0	00022	ALS 18 AT END OF LPLST.	F5G15210
02250	0	62200	0	04775	STD LPLST+S3P1-2	F5G15220
02251	0	50000	0	00350	CLA S9K3 INITIALIZE THE STORING	F5G15230
02252	0	62200	0	02270	STD F11 POSITION IN LPLST.	F5G15240
02253	0	50000	0	00532	F23 CLA FV1 GET INDEX	F5G15250
02254	0	07400	4	00067	TSX SE1,4 OF BB UP FOR ENTRY.	F5G15260
02255	0	50000	1	06447	CLA BBB+5,1 IS THIS BB IN	F5G15270
02256	0	10000	0	02611	TZE F57 A REGION	F5G15280
02257	-0	73400	2	00000	PDX 0,2 YES	F5G15290
02260	0	50000	2	05061	CLA REG,2 GET AND STORE	F5G15300
02261	0	60100	0	00535	STO FV4 REGION WORD	F5G15310
02262	-0	32000	0	00360	ANA FK3	F5G15320
02263	0	10000	0	02603	TZE F55 IS IT AN OPAQUE REGION	F5G15330
02264	0	53400	1	00341	LXA S5K4,1 NO, TRANSPARENT	F5G15340
02265	0	50000	1	04777	F12 CLA LPLST+S3P1,1	F5G15350
02266	1	00001	1	02267	TXI F25,1,1 STORE INDEX OF LPLST QUANTITY BEING COMPARED.	F5G15360
02267	-0	63400	1	02412	F25 SXD F18,1	F5G15370
02270	3	00000	1	02321	F11 TXH F19,1,K ARE WE THRU WITH COMPARISONS	F5G15380
02271	0	34000	0	00324	CAS S3K2 NO,IS THIS BB ENTRY	F5G15390
02272	0	76100	0	00000	NOP	F5G15400
02273	0	02000	0	02275	TRA F87	F5G15410
02274	0	02000	0	02265	TRA F12 YES.	F5G15420
02275	0	07400	4	00070	F87 TSX SE,4 GET INDEX OF BB	F5G15430
02276	0	50000	1	06447	CLA BBB+5,1 GET	F5G15440
02277	-0	73400	1	00000	PDX 0,1 REGION	F5G15450
02300	0	50000	1	05061	CLA REG,1 WORD.	F5G15460
02301	-0	53400	1	02412	LXD F18,1	F5G15470
02302	0	34000	0	00535	CAS FV4 IS THIS THE SAME REGION	F5G15480
02303	0	02000	0	02265	TRA F12 NO	F5G15490
02304	0	02000	0	02306	TRA F100	F5G15500
02305	0	02000	0	02265	TRA F12 NO	F5G15510
02306	0	50000	0	00532	F100 CLA FV1 PUT EXIT BB NO.	F5G15520
02307	0	62100	1	05000	STA LPLST+S3P1+1,1 IN TR. REG. QUANTITY	F5G15530
02310	2	00001	1	02311	F13 TIX F24,1,1 GENERATE INOEX OF LAST THING TO BE MOVED UP.	F5G15540
02311	-0	53400	2	02270	F24 LXD F11,2 GET INOEX TO GENERATE INDEX OF 1ST THING	F5G15550
02312	-0	63400	1	02412	F43 SXD F18,1 STORE INOEX OF LAST THING	F5G15560
02313	0	56000	0	00323	LDQ S3K1 RECORD	F5G15570
02314	-0	60000	0	00550	STQ LPIND LOOP.	F5G15580
02315	2	00001	2	02316	TIX F14,2,1 GENERATE INDEX OF 1ST THING	F5G15590
02316	0	07400	4	02407	F14 TSX F15,4 GO TO MOVE LPLST QUANTITIES UP+	F5G15600
02317	0	07400	4	02651	TSX F80,4	F5G15610
02320	0	02000	0	02717	TRA L TO 1ST LXING PASS.	F5G15620
02321	0	50000	0	00356	F19 CLA FK1	F5G15630
02322	-0	53400	1	02270	LXD F11,1 STORE TRANSPARENT	F5G15640
02323	0	60100	1	04777	STO LPLST+S3P1,1 REGION MARKER	F5G15650
02324	0	50000	0	00532	CLA FV1	F5G15660
02325	0	62100	1	04777	STA LPLST+S3P1,1	F5G15670

02326	0	07400	4	00067		TSX SE1,4 FIND BB INDEX.	F5G15680
02327	0	50000	0	00314		CLA ZERO SET INITIAL MAX	F5G15690
02330	0	60100	0	00532		STO FV1 FREQ. TO 0+	F5G15700
02331	0	50000	1	06447		CLA BBB+5,1 GET THE	F5G15710
02332	-0	73400	1	00000		PDX 0,1 REGION	F5G15720
02333	0	50000	1	05061		CLA REG,1 WORD	F5G15730
02334	0	77100	0	00022		ARS 18	F5G15740
02335	0	07400	4	02075	F21	TSX F1,4 DETERMINE MOST FREQ. PRED IN BB.	F5G15750
02336	0	50000	0	00544		CLA FV101 IS IT MORE FREQ. THAN	F5G15760
02337	0	34000	0	00532		CAS FV1 PREV. MAX.	F5G15770
02340	0	02000	0	02343		TRA F88	F5G15780
02341	0	76100	0	00000		NOP	F5G15790
02342	0	02000	0	02352		TRA F20 NO.	F5G15800
02343	0	60100	0	00532	F88	STO FV1 REPLACE PREV. MAX.	F5G15810
02344	0	50000	0	00545		CLA FV102 AND BB NO.	F5G15820
02345	0	60100	0	00533		STO FV2 AND	F5G15830
02346	0	50000	0	00546		CLA FV103 PRED. NO.	F5G15840
02347	0	60100	0	00534		STO FV3 AND	F5G15850
02350	0	50000	0	00547		CLA FV104 REGION NO. WORD.	F5G15860
02351	0	60100	0	00535		STO FV4	F5G15870
02352	0	50000	0	00547	F20	CLA FV104 ARRANGE TO CONSIDER THE	F5G15880
02353	-0	32000	0	00353		ANA SBK2 NEXT B.B. IN REGION.	F5G15890
02354	0	34000	0	00353		CAS SBK2 ARE WE THRU WITH REGION	F5G15900
02355	0	02000	0	02335		TRA F21	F5G15910
02356	0	02000	0	02360		TRA F22 YES	F5G15920
02357	0	02000	0	02335		TRA F21	F5G15930
02360	0	50000	0	00532	F22	CLA FV1 WAS THERE AN UNCONSIDERED	F5G15940
02361	0	10000	0	02372		TZE F28 PRED	F5G15950
02362	0	50000	0	00533		CLA FV2 YES,STORE THE	F5G15960
02363	-0	53400	1	02270		LXD F11,1 ENTRY B.B.	F5G15970
02364	0	76700	0	00022		ALS 18 NO.	F5G15980
02365	0	62200	1	04777		STD LPLST+S3P1,1	F5G15990
02366	1	00001	1	02367		TXI F70,1,1 UP THE STORING INDEX	F5G16000
02367	-0	63400	1	02270	F70	SXD F11,1	F5G16010
02370	3	00036	1	02404		TXH F73,1,S3P1 IS LPLST FULL	F5G16020
02371	0	02000	0	02253		TRA F23	F5G16030
02372	-0	53400	2	02270	F28	LXD F11,2	F5G16040
02373	0	53400	1	00341	F56	LXA S5K4,1	F5G16050
02374	-0	63400	1	02412		SXD F18,1	F5G16060
02375	0	07400	4	02407		TSX F15,4 NONE LPLST UP.	F5G16070
02376	0	50000	0	04740		CLA LPLST-1	F5G16080
02377	0	34000	0	00361		CAS FK4 IS THIS AN OPAQUE REGION	F5G16090
02400	0	76100	0	00000		NOP	F5G16100
02401	0	02000	0	02706		TRA F75 TO 2ED LXING PASS.	F5G16110
02402	3	00002	1	02421	P002	TXH F29,1,2	F5G16120
02403	0	02000	0	02706		TRA F75	F5G16130
02404	0	50000	0	00303	F73	CLA SEK4 STORE SPECIAL	F5G16140
02405	0	62200	0	04741		STD LPLST SYMBOL IN DECR. PART OF 1ST LPLST	F5G16150
02406	0	02000	0	02536		TRA F53 QUANTITY	F5G16160
02407	-0	53400	1	00325	F15	LXD S3K3,1 SET INDEX TO START OF LOOP LIST.	F5G16170
02410	0	50000	2	04777	F26	CLA LPLST+S3P1,2 MOVE THIS	F5G16180
02411	0	60100	1	04777		STO LPLST+S3P1,1 ENTRY UP.	F5G16190
02412	-3	00000	2	02415	F18	TXL F17,2,- IN DECR., THE INDEX OF LAST TO BE MOVED.	F5G16200
02413	2	00001	1	02414		TIX F16,1,1 NO.	F5G16210

02414	2	00001	2	02410	F16	TIX F26,2,1 ARE WE FINISHED COPYING	F5G16220
02415	0	60100	0	04740	F17	STO LPLST-1 CASE OF LOOP,STORE PRED. OF 1ST ELEMENT.	F5G16230
02416	0	50000	0	00323		CLA S3K1 STORE THE END	F5G16240
02417	0	60100	1	05000		STO LPLST+S3P1+1,1 LOOP LIST QUANTITY.	F5G16250
02420	0	02000	4	00001		TRA 1,4	F5G16260
02421	-0	63400	1	02527	F29	SXD F39,1 INITIALIZE STORING LOCATION.	F5G16270
02422	0	34000	0	00324	F64	CAS S3K2 ISNT OPAQUE REGIONH IS IT BB	F5G16280
02423	0	76100	0	00000		NOP NO.	F5G16290
02424	0	02000	0	02426		TRA F89	F5G16300
02425	0	02000	0	02543		TRA F44 YES.	F5G16310
02426	0	56000	0	00314	F89	LDQ ZERO NO, SET INITIAL	F5G16320
02427	-0	60000	0	00532		STQ FV1 FREQ+ TO 0.	F5G16330
02430	0	07400	4	00070		TSX SE,4 GET	F5G16340
02431	0	50000	1	06447		CLA BBB+5,1 REGION	F5G16350
02432	-0	73400	1	00000		PDX 0,1 NO.	F5G16360
02433	0	50000	1	05061		CLA REG,1 GET NO. OF 1ST BB IN REGION	F5G16370
02434	0	07400	4	02136	F35	TSX F30,4 DETERMINE MOST FREQ SUCC IN BB	F5G16380
02435	0	50000	0	00544		CLA FV101 IS IT MORE FREQ. THAN	F5G16390
02436	0	34000	0	00532		CAS FV1 PREV+ MAX	F5G16400
02437	0	02000	0	02442		TRA F90	F5G16410
02440	0	76100	0	00000		NOP YES,	F5G16420
02441	0	02000	0	02451		TRA F36 NO	F5G16430
02442	0	60100	0	00532	F90	STO FV1 YES, REPLACE PREV.MAX.	F5G16440
02443	0	50000	0	00545		CLA FV102 AND BB NO.	F5G16450
02444	0	60100	0	00533		STO FV2 AND	F5G16460
02445	0	50000	0	00546		CLA FV103 SUCC. NO+	F5G16470
02446	0	60100	0	00534		STO FV3 AND	F5G16480
02447	0	50000	0	00547		CLA FV104 REGION NO. WORD	F5G16490
02450	0	60100	0	00535		STO FV4	F5G16500
02451	0	50000	0	00547	F36	CLA FV104 ARRANGE TO CONSIDER THE	F5G16510
02452	-0	32000	0	00353		ANA SBK2 NEXT BB IN REGION	F5G16520
02453	0	34000	0	00353		CAS SBK2 IS II LAST BB IN REGION	F5G16530
02454	0	02000	0	02456		TRA F94	F5G16540
02455	0	02000	0	02460		TRA F37 YES	F5G16550
02456	0	76700	0	00022	F94	ALS 18	F5G16560
02457	0	02000	0	02434		TRA F35	F5G16570
02460	0	50000	0	00532	F37	CLA FV1 WAS THERE AN UNCONSIDERED	F5G16580
02461	-0	53400	1	02527		LXD F39,1 SUCC	F5G16590
02462	0	10000	0	02550		TZE F47	F5G16600
02463	0	50000	0	00533		CLA FV2 EXIT BB	F5G16610
02464	0	77100	0	00022		ARS 18 NO.	F5G16620
02465	0	62100	1	04777		STA LPLST+S3P1,1	F5G16630
02466	2	00001	1	02467	F45	TIX F62,1,1 DOWN THE STORING	F5G16640
02467	-0	63400	1	02527	F62	SXD F39,1 INDEX.	F5G16650
02470	0	50000	0	00532		CLA FV1 GET INDEX OF	F5G16660
02471	0	07400	4	00067		TSX SE1,4 BB UP FOR ENTRY.	F5G16670
02472	0	50000	1	06447		CLA BBB+5,1 IS THIS BB IN	F5G16680
02473	0	10000	0	02553		TZE F48 A REGION	F5G16690
02474	-0	73400	2	00000		PDX 0,2 YES.	F5G16700
02475	0	50000	2	05061		CLA REG,2 GET AND	F5G16710
02476	0	60100	0	00535		STO FV4 STORE REGION WORD.	F5G16720
02477	-0	32000	0	00360		ANA FK3 IS IT IN AN	F5G16730
02500	0	10000	0	02574		TZE F54 OPAGUE REGION	F5G16740
02501	-0	53400	1	02527		LXD F39,1 NO.	F5G16750

02502	0	50000	0	00356	CLA FK1 STORE TRANSPARENT REGION	F5G16760
02503	0	60100	1	04777	STO LPLST+S3P1,1 MARKER	F5G16770
02504	0	50000	0	00532	CLA FV1 WITH	F5G16780
02505	0	76700	0	00022	ALS 18 ENTRY	F5G16790
02506	0	62200	1	04777	STD LPLST+S3P1,1 BB NO. IN DECR.	F5G16800
02507	-0	53400	2	00325	LXD S3K3,2 SET INDEX TO 1ST ELEMENT IN LPLST.	F5G16810
02510	0	50000	2	04777	F38 CLA LPLST+S3P1,2	F5G16820
02511	0	34000	0	00324	CAS S3K2 IS THIS A BB ENTRY	F5G16830
02512	0	76100	0	00000	NOP	F5G16840
02513	0	02000	0	02515	TRA F91	F5G16850
02514	0	02000	0	02526	TRA F40 YES	F5G16860
02515	-0	63400	2	02412	F91 SXD F18,2 STOREINDEX OF QUANTITYBEING C.F. ED	F5G16870
02516	0	07400	4	00067	TSX SE1,4	F5G16880
02517	0	50000	1	06447	CLA BBB+5,1 GET	F5G16890
02520	-0	73400	2	00000	PDX 0,2 REGION WORD.	F5G16900
02521	0	50000	2	05061	CLA REG,2	F5G16910
02522	-0	53400	2	02412	LXD F18,2 GET INDEX OF QUANTITY BEING COMPARED.	F5G16920
02523	0	34000	0	00535	CAS FV4 IS THIS NAME REGION	F5G16930
02524	0	02000	0	02526	TRA F40	F5G16940
02525	0	02000	0	02531	TRA F41 YES	F5G16950
02526	2	00001	2	02527	F40 TIX F39,2,1	F5G16960
02527	-3	00000	2	02535	F39 TXL F42,2,- IS THIS INDEX OF QUANTITY BEING COMPARED	F5G16970
02530	0	02000	0	02510	TRA F38 NO	F5G16980
02531	0	50000	2	04777	F41 CLA LPLST+S3P1,2 PUT EXIT BB NO.	F5G16990
02532	-0	53400	1	02527	LXD F39,1 FROM PREVIOUS QUANTITY	F5G17000
02533	0	62100	1	04777	STA LPLST+S3P1,1 IN THIS LATEST ONE.	F5G17010
02534	0	02000	0	02312	TRA F43	F5G17020
02535	3	00002	2	02541	F42 TXH F63,2,2 IS LPLST FULL	F5G17030
02536	0	50000	0	00323	F53 CLA S3K1 STORE ENO	F5G17040
02537	0	60100	0	04776	STO LPLST+S3P1-1 LOOP LIST SENTINEL.	F5G17050
02540	0	02000	0	02706	TRA F75 GO TO DEAL WITH STRING.	F5G17060
02541	0	50000	2	04777	F63 CLA LPLST+S3P1,2	F5G17070
02542	0	02000	0	02422	TRA F64	F5G17080
02543	0	07400	4	02136	F44 TSX F30,4 DETERMINE MOST FREQ. SUCC. IN BB.	F5G17090
02544	0	50000	0	00544	CLA FV101 STORE THE	F5G17100
02545	0	60100	0	00532	STO FV1 MOST FREQ. SUCC. AWAY.	F5G17110
02546	-0	53400	1	02527	LXD F39,1	F5G17120
02547	-0	10000	0	02466	TNZ F45 WAS THERE AN UNCONSIDERED SUCC.	F5G17130
02550	0	50000	0	00323	F47 CLA S3K1 NO,RECORD AN	F5G17140
02551	0	60100	1	05000	STO LPLST+S3P1+1,1 END LOOP LIST SENTINEL.	F5G17150
02552	0	02000	0	02706	TRA F75	F5G17160
02553	-0	53400	1	02527	F48 LXD F39,1 ENTER BB	F5G17170
02554	0	50000	0	00532	CLA FV1 NO. AND MARKER	F5G17180
02555	-0	32000	0	00353	ANA SBK2 IN	F5G17190
02556	0	76700	0	00022	ALS 18 LPLST	F5G17200
02557	0	60100	0	00535	STO FV4	F5G17210
02560	0	60100	1	04777	STO LPLST+S3P1,1	F5G17220
02561	-0	63400	1	02570	SXD F50,1	F5G17230
02562	-0	53400	2	00325	LXD S3K3,2 S + TO	F5G17240
02563	0	50000	2	04777	F51 CLA LPLST+S3P1,2	F5G17250
02564	0	34000	0	00535	CAS FV4 IS THIS SAME BB AS NEW ENTRY	F5G17260
02565	0	02000	0	02567	TRA F49	F5G17270
02566	0	02000	0	02312	TRA F43 YES	F5G17280
02567	2	00001	2	02570	F49 TIX F50,2,1 DECREASE COMPARISON INDEX.	F5G17290

02570	-3	00000	2	02572	F50	TXL F52,2,- IS THIS INDEX OF NEW QUANTITY	F5G17300
02571	0	02000	0	02563		TRA F51 NO.	F5G17310
02572	3	00002	2	02541	F52	TXH F63,2,2 IS LPLST FULL	F5G17320
02573	0	02000	0	02536		TRA F53 YES.	F5G17330
02574	-0	53400	1	02527	F54	LXD F39,1 IS OPAQUE REGION	F5G17340
02575	0	50000	0	00357		CLA FK2 ENTER OPAQUE	F5G17350
02576	0	60100	1	04777		STO LPLST+S3P1,1 REGION MARKER	F5G17360
02577	0	50000	0	00532		CLA FV1 WITH CORRECT	F5G17370
02600	0	76700	0	00022		ALS 18 ENTRY BB	F5G17380
02601	0	62200	1	04777		STD LPLST+S3P1,1 NO.	F5G17390
02602	0	02000	0	02550		TRA F47	F5G17400
02603	-0	53400	2	02270	F55	LXD F11,2 STORE THE	F5G17410
02604	0	50000	0	00357		CLA FK2 OPAQUE	F5G17420
02605	0	60100	2	04777		STO LPLST+S3P1,2 REGION MARKR	F5G17430
02606	0	50000	0	00532		CLA FV1 WITH	F5G17440
02607	0	62100	2	04777		STA LPLST+S3P1,2 EXIT BB	F5G17450
02610	0	02000	0	02373		TRA F56 NO.	F5G17460
02611	0	50000	0	00532	F57	CLA FV1 PUT THE	F5G17470
02612	-0	32000	0	00353		ANA SBK2 B.B. NO.	F5G17480
02613	0	76700	0	00022		ALS 18 IN	F5G17490
02614	0	60100	0	00535		STO FV4 DECR. PART.	F5G17500
02615	0	50000	0	02270		CLA F11 SET THE END	F5G17510
02616	0	62200	0	02623		STD F59 TEST.	F5G17520
02617	0	53400	1	00341		LXA S5K4,1 SET INDEX OF 1ST LPLST TO BE COMPARED	F5G17530
02620	0	50000	1	04777	F61	CLA LPLST+S3P1,1	F5G17540
02621	1	00001	1	02622		TXI F58,1,1	F5G17550
02622	-0	63400	1	02412	F58	SXD F18,1	F5G17560
02623	3	00000	1	02630	F59	TXH F60,1,- WAS THAT THE LAST QUANTITY	F5G17570
02624	0	34000	0	00535		CAS FV4 IS THIS THE SAME BB.	F5G17580
02625	0	02000	0	02620		TRA F61	F5G17590
02626	0	02000	0	02310		TRA F13 YES	F5G17600
02627	0	02000	0	02620		TRA F61	F5G17610
02630	-0	53400	1	02270	F60	LXD F11,1	F5G17620
02631	0	50000	0	00532		CLA FV1 STORE THE	F5G17630
02632	-0	32000	0	00353		ANA SBK2 BB	F5G17640
02633	0	76700	0	00022		ALS 18 MARKER.	F5G17650
02634	0	60100	1	04777		STO LPLST+S3P1,1	F5G17660
02635	0	50000	0	00532		CLA FV1	F5G17670
02636	0	07400	4	02075		TSX F1,4 FIND MOST FREQ. PRED. OF BB.	F5G17680
02637	0	50000	0	00544		CLA FV101 DOES B.B. HAVE	F5G17690
02640	0	60100	0	00532		STO FV1 UNCONSIDERED PRED.	F5G17700
02641	-0	10000	0	02644		TNZ F71	F5G17710
02642	-0	53400	2	02270		LXD F11,2 NO,GO TO MOVE LPLST UP.	F5G17720
02643	0	02000	0	02373		TRA F56	F5G17730
02644	-0	53400	1	02270	F71	LXD F11,1	F5G17740
02645	1	00001	1	02646		TXI F72,1,1 UP THE STORING INDEX	F5G17750
02646	-0	63400	1	02270	F72	SXD F11,1	F5G17760
02647	3	00036	1	02536		TXH F53,1,S3P1 IS LPLST FULL	F5G17770
02650	0	02000	0	02253		TRA F23 NO.	F5G17780
02651	0	53400	1	00362	F80	LXA FK5,1 FIND	F5G17790
02652	0	50000	1	05061	F81	CLA REG,1 THE 1ST AVAILABLE REGION	F5G17800
02653	0	10000	0	02656		TZE F82 POSITION.	F5G17810
02654	2	00001	1	02652		TIX F81,1,1	F5G17820
02655	0	07400	4	00004		TSX 4,4 DIAGNOSTIC, ERROR	F5G17830

02656	-0	63400	1	00565	F82	SXD XV1,1	STORE THE INDEX	F5G17840
							OF THE NEW REGION WORD	F5G17850
02657	0	56000	0	00314	F83	LDQ ZERO	STORE INITIAL	F5G17860
02660	-0	60000	0	00566		STQ XV2	VALUE OF REGION	F5G17870
02661	0	02000	4	00001		TRA 1,4		F5G17880
02662	0	07400	4	01523	F78	TSX SA,4	GET EXIT CONDITIONS OF REGION.	F5G17890
02663	0	53400	1	00342		LXA S5K5,1	PUT EXIT	F5G17900
02664	0	56000	0	00314		LDQ ZERO		F5G17910
02665	0	50000	1	00506	F76	CLA EX1+3,1	CONDITONS	F5G17920
02666	0	60100	1	00430		STO IR1+3,1	INTO	F5G17930
02667	0	50000	1	00511		CLA ACT1+3,1	I+R.S	F5G17940
02670	-0	60000	1	00561		STQ AC1+3,1		F5G17950
02671	0	12000	0	02675		TPL F77	IS THIS EXIT ACTIVE	F5G17960
02672	0	50000	0	00325		CLA S3K3	YES,FORM AND	F5G17970
02673	-0	76000	0	00003		SSM	STORE ACTIVE	F5G17980
02674	0	60100	1	00561		STO AC1+3,1	INDICATOR	F5G17990
02675	2	00001	1	02665	F77	TIX F76,1,1	COUNT TO 3	F5G18000
02676	0	50000	0	00325		CLA S3K3	INITIALIZE	F5G18010
02677	0	40200	0	00316		SUB ONED	LOOP LIST	F5G18020
02700	0	60100	0	00440		STO S3V4	TO ITS	F5G18030
02701	0	60100	0	00444		STO S3V5		F5G18040
02702	0	50000	0	00340		CLA S5K3	2ED	F5G16050
02703	0	60100	0	00437		STO S3V3	ELEMENT	F5G18060
02704	-0	63400	0	00436		SXD S3V2,0		F5G18070
02705	0	02000	0	03072		TRA X32		F5G18080
02706	0	07400	4	02651	F75	TSX F80,4	DETERMINE NEW REGION INDEX	F5G18090
02707	0	50000	0	04741		CLA LPLST	IS 1ST	F5G18100
02710	0	56000	0	00324		LDQ S3K2	ELEMENT OF LPLST A TRANSPARENT	F5G18110
02711	0	04000	0	02662		TLQ F78	ON OPAQUE REGION	F5G18120
02712	0	53400	1	00342		LXA S5K5,1	NO,INITIALIZE	F5G18130
02713	0	50000	0	00336		CLA S5K1	THE	F5G18140
02714	0	60100	1	00430	F79	STO IR1+3,1	I.R.S	F5G18150
02715	2	00001	1	02714		TIX F79,1,1	TO EMPTINESS	F5G18160
02716	0	02000	0	03061		TRA X		F5G18170
							FIRST LXING PASS.	F5G18180
02717	-0	63400	0	02763	L	SXD ROT3,0		F5G18190
02720	-0	63400	0	02756		SXD ROT1,0		F5G18200
02721	0	53400	1	00342	INIZ	LXA S5K5,1	INITIALIZE	F5G18210
02722	0	50000	0	00336		CLA S5K1	THE	F5G18220
02723	0	60100	1	00430	L23	STO IR1+3,1	INDEX REGISTERS	F5G18230
02724	2	00001	1	02723		TIX L23,1,1	TO EMPTINESS.	F5G18240
02725	0	56000	0	00325		LDQ S3K3		F5G18250
02726	-0	60000	0	00440		STQ S3V4	INITIALIZE THE	F5G18260
02727	0	56000	0	00340		LDQ S5K3	LOOP LIST.	F5G18270
02730	-0	60000	0	00437		STQ S3V3	MAKE SURE THAT THE	F5G18280
02731	-0	63400	0	00436		SXD S3V2,0		F5G18290
02732	0	07400	4	01023	1L4	TSX S3,4	GET NEXT TAG.	F5G18300
02733	0	02000	0	03013		TRA L6	*RETURN HERE IF TAG WASNT GOTTEN.	F5G18310
02734	0	53400	1	00342		LXA S5K5,1	SET COUNT TO 3,N=1	F5G18320
02735	0	50000	0	00441		CLA 1TAG	IS CL (TAG) EQUAL	F5G18330
02736	0	34000	1	00430	L2	CAS IR1+3,1	TO C (IRN)	F5G18340
02737	0	02000	0	02741		TRA L1	NO.	F5G18350
02740	0	02000	0	03000		TRA 1L3	YES	F5G18360
02741	2	00001	1	02736	L1	TIX L2,1,1	NO. COUNT TO 3,N=N+1	F5G18370

02742	0	50000	0	00442	CLA TPE IS THIS	F5G18380
02743	0	34000	0	00376	CAS XK15 AN LXP INSTR.	F5G18390
02744	0	02000	0	02746	TRA L18 NO,	F5G18400
02745	0	02000	0	02752	TRA ROT0 YES	F5G18410
02746	0	34000	0	00403	L18 CAS XK21 NO,IS IT A DED INSTR.	F5G18420
02747	0	02000	0	02773	TRA L17 NO	F5G18430
02750	0	02000	0	02752	TRA ROT0 YES	F5G18440
02751	0	02000	0	02773	TRA L17	F5G18450
02752	-0	53400	2	00440	ROT0 LXD S3V4,2	F5G18460
02753	-3	00034	2	02732	TXL 1L4,2,S3P1-2	F5G18470
02754	-0	53400	2	02763	LXD ROT3,2	F5G18480
02755	1	77777	2	02756	TXI ROT1,2,-1	F5G18490
02756	-3	00000	2	02732	ROT1 TXL 1L4,2,-	F5G18500
02757	-0	63400	2	02763	SXD ROT3,2	F5G18510
02760	-0	53400	2	00314	LXD ZERO,2	F5G18520
02761	0	50000	2	04741	ROT2 CLA LPLST,2	F5G18530
02762	0	34000	0	00323	CAS S3K1	F5G18540
02763	-3	00000	0	02765	ROT3 TXL ROT4,0,-	F5G18550
02764	-3	00000	0	02767	TXL ROT5,0,-	F5G18560
02765	0	60100	2	04740	ROT4 STO LPLST-1,2	F5G18570
02766	1	77777	2	02761	TXI ROT2,2,-1	F5G18580
02767	-0	63400	2	02756	ROT5 SXD ROT1,2	F5G18590
02770	0	50000	0	04740	CLA LPLST-1	F5G18600
02771	0	60100	2	04740	STO LPLST-1,2	F5G18610
02772	0	02000	0	02721	TRA INIZ	F5G18620
02773	0	07400	4	00622	L17 TSX S1,4 SELECT MOST REPLACEABLE I.R.	F5G18630
02774	-0	53400	4	00430	LXD IRR,4 PLACE TAU-TAG	F5G18640
02775	0	50000	0	00441	CLA 1TAG IN APPROPRIATE	F5G18650
02776	0	60100	4	00430	STO IR1+3,4 I.R.	F5G18660
02777	0	02000	0	02732	TRA 1L4	F5G18670
03000	0	50000	0	00442	L13 CLA TPE IS THIS AN LXP	F5G16680
03001	0	34000	0	00376	CAS XK15	F5G18690
03002	0	02000	0	03004	TRA 1L19	F5G16700
03003	0	02000	0	03010	TRA L5 YES	F5G18710
03004	0	34000	0	00403	L119 CAS XK21 IS IT AN DED	F5G18720
03005	0	02000	0	02732	TRA 1L4	F5G18730
03006	0	02000	0	03010	TRA L5 YES.	F5G18740
03007	0	02000	0	02732	TRA 1L4	F5G18750
03010	0	50000	0	00333	L5 CLA LK1 PLACE AN E (HASH	F5G18760
03011	0	60100	1	00430	STO IR1+3,1 SYMBOL) IN	F5G18770
03012	0	02000	0	02732	TRA 1L4 RIGHT IR,	F5G18780
03013	0	60100	0	00554	L6 STO LV4 IS THIS AN END OF LOOP	F5G18790
03014	0	34000	0	00323	CAS S3K1 LIST SENTINEL	F5G18800
03015	0	02000	0	03017	TRA L14 NO,	F5G18810
03016	0	02000	0	03051	TRA L15 YES,	F5G18820
03017	-0	50000	0	00554	L14 CAL LV4 IS	F5G18830
03020	-0	32000	0	00335	ANA LK3 THIS A	F5G18840
03021	0	10000	0	02732	TZE 1L4 BB	F5G18850
03022	0	50000	0	00554	CLA LV4 NO,FORM CORRESPONENCE	F5G18860
03023	0	07400	4	01245	TSX S5,4 BETWEEN IRS AND ENS	F5G18870
03024	0	50000	0	00554	CLA LV4 GET + STORE EXIT CONDITIONS	F5G18880
03025	0	07400	4	01523	TSX SA,4 AND (USELESSLY+ OCTIVE 1NOICATORS.	F5G18890
03026	0	53400	1	00342	LXA S5K5,1 SET COUNT TO 3,N=1	F5G18900
03027	0	50000	1	00470	L11 CLA EN4+3,1 PUT CORRESPONDENCE INDEX	F5G18910

03030	-0	73400	2	00000		PDX 0,2 IN 2.	F5G18920
03031	0	50000	1	00506		CLA EX1+3,1 IS THIS EXIT CONDITION	F5G18930
03032	0	34000	0	00336		CAS S5K1 EMPTY	F5G18940
03033	0	02000	0	03035		TRA L13 NO,	F5G18950
03034	0	02000	0	03040		TRA P003	F5G18960
03035	0	60100	2	00430	L13	STO IR1+3,2 NO,REPLACE C (IR) BY EXIT CONDITION.	F5G18970
03036	2	00001	1	03027	L10	TIX L11,1,1 COUNT TO 3,N=N+1	F5G18980
03037	0	02000	0	02732		TRA 1L4	F5G18990
03040	0	50000	2	00430	P003	CLA IR1+3,2	F5G19000
03041	0	56000	0	00333		LDQ LK1	F5G19010
03042	0	04000	0	03036		TLQ L10	F5G19020
03043	0	53400	4	00342		LXA S5K5,4	F5G19030
03044	0	34000	4	00506	P003A	CAS EX1+3,4	F5G19040
03045	0	02000	0	03047		TRA P003B	F5G19050
03046	-0	60000	2	00430		STQ IR1+3,2	F5G19060
03047	2	00001	4	03044	P003B	TIX P003A,4,1	F5G19070
03050	0	02000	0	03036		TRA L10	F5G19080
03051	0	53400	1	00342	L15	LXA S5K5,1 COPY ASIDE THE FINAL	F5G19090
03052	0	50000	1	00430	L16	CLA IR1+3,1 CONTENTS	F5G19100
03053	0	34000	0	00333		CAS LK1 (IF REAL, OTHERWISE	F5G19110
03054	0	76100	0	00000		NOP	F5G19120
03055	0	50000	0	00336		CLA S5K1 SET TO	F5G19130
03056	0	60100	1	00430		STO IR1+3,1 EMPTY)	F5G19140
03057	0	60100	1	00554		STO LV1+3,1 OF THE	F5G19150
03060	2	00001	1	03052		TIX L16,1,1 IRS	F5G19160
						THE SECONO LXING PASS FOLLOWS.	F5G19170
						PRECEDED BY 1ST LXING PASS	F5G19180
03061	0	56000	0	00325	X	LDQ S3K3 INITIALIZE THE	F5G19190
03062	-0	60000	0	00440		STQ S3V4 LOOP LIST AND	F5G19200
03063	0	56000	0	00340		LDQ S5K3 MAKE SURE TAG	F5G19210
03064	-0	60000	0	00437		STQ S3V3 LOC. GETS SET.	F5G19220
03065	-0	63400	1	00436		SXD S3V2,1	F5G19230
03066	0	50000	0	00314	X21	CLA ZERO SET ACTIVE INDICATORS	F5G19240
03067	0	60100	0	00556		STO AC1 TO	F5G19250
03070	0	60100	0	00557		STO AC2	F5G19260
03071	0	60100	0	00560		STO AC3 NOT ACTIVE.	F5G19270
03072	0	50000	0	00314	X32	CLA ZERO SET LX INDICATORS	F5G19280
03073	0	60100	0	00562		STO LX1 TO	F5G19290
03074	0	60100	0	00563		STO LX2 NOT	F5G19300
03075	0	60100	0	00564		STO LX3 LX ED.	F5G19310
03076	0	60100	0	00521		STO ACIND SET IND. TO SAY THIS IS 2ED LXING PASS	F5G19320
03077	0	07400	4	01023	X3	TSX S3,4 TRY TO GET NEXT TAG.	F5G19330
03100	0	02000	0	03322		TRA X13 COME HERE IF TAG NOT GOT.	F5G19340
03101	0	50000	0	01122		CLA S39 COMPUTE LOCATIONS OF	F5G19350
03102	-0	32000	0	00353		ANA SBK2 THIS TAG=(ADDR. FOLLOWING	F5G19360
03103	0	40000	0	00451		ADD S4V1 TIX BLACK + L (CM)-	F5G19370
03104	0	40200	0	00332		SUB S4K3 CMTAG-INDEX OF TAG	F5G19380
03105	0	76700	0	00022		ALS 18	F5G19390
03106	-0	40000	0	00436		SBM S3V2	F5G19400
03107	0	76500	0	00065		LRS 53 THEN FORM LOC/9	F5G19410
03110	-0	60000	0	00571		STQ XV5 AND REMAINDER	F5G19420
03111	0	22100	0	00371		DVP XK9 STORE INTEG. PART	F5G19430
03112	-0	60000	0	00567		STQ XV3 AND REMAINDER.	F5G19440
03113	0	60100	0	00570		STO XV4	F5G19450

03114	0	53400	1	00342	LXA S5K5,1 SET COUNT TO 3,N=1	F5G19460
03115	0	50000	0	00441	CLA 1TAG	F5G19470
03116	0	34000	1	00430	X2 CAS IR1+3,1 IS CONTENTS OF IRN SAME AS OF TAG	F5G19480
03117	0	02000	0	03121	TRA X1 NO	F5G19490
03120	0	02000	0	03257	TRA X7 YES	F5G19500
03121	2	00001	1	03116	X1 TIX X2,1,1 NO COUNT OT 3,N=N+1	F5G19510
03122	0	50000	0	00442	CLA TPE IS THIS AN	F5G19520
03123	0	34000	0	00376	CAS XK15 LX PRIME	F5G19530
03124	0	02000	0	03126	TRA X103 NO	F5G19540
03125	0	02000	0	03131	TRA X8 YES. COMPILE LXD FOR LXP.	F5G19550
03126	0	34000	0	00403	X103 CAS XK21 IS IT A DED	F5G19560
03127	0	02000	0	03131	TRA X8	F5G19570
03130	0	02000	0	03077	TRA X3 YES	F5G19580
03131	0	07400	4	00622	X8 TSX S1,4 SELECT MOST REPLACEABLE I.R.	F5G19590
03132	-0	53400	1	00430	LXD IRR,1 PLACE TAU-TAG	F5G19600
03133	0	50000	0	00441	CLA 1TAG IN SELECTED	F5G19610
03134	0	60100	1	00430	STO IR1+3,1 I.R.	F5G19620
03135	0	50000	1	00561	CLA AC1+3,1 IS THIS	F5G19630
03136	0	10000	0	03140	TZE X4 IR ACTIVE	F5G19640
03137	0	07400	4	01566	TSX SB,4 YES,RECORD SXD NECESSARY.	F5G19650
03140	0	50000	0	00442	X4 CLA TPE IS THIS	F5G19660
03141	0	34000	0	00322	CAS S2K2 AN LX	F5G19670
03142	0	02000	0	03144	TRA X5 NO	F5G19680
03143	0	02000	0	03155	TRA X14 YES	F5G19690
03144	-0	50000	0	00443	X5 CAL INTAG IS THIS 1ST INSTR.	F5G19700
03145	-0	32000	0	00363	ANA XK10 IN A BB	F5G19710
03146	-0	10000	0	03204	TNZ X9	F5G19720
03147	0	50000	0	00567	CLA XV3 NO,	F5G19730
03150	0	07400	4	00032	TSX SE4,4 DETERMINE INDEX IN STAG	F5G19740
03151	0	53400	2	00570	LXA XV4,2	F5G19750
03152	-0	50000	0	00372	CAL XK11 GENERATE	F5G19760
03153	0	76700	2	00010	ALS 8,2 LX BIT	F5G19770
03154	-0	60200	1	05061	ORS STAG,1 STORE IN STAG.	F5G19780
03155	0	07400	4	02024	X14 TSX SF,4 CHECK IF AN ACTIVE INSTR.	F5G19790
03156	0	02000	0	03162	TRA X01 COME HERE IF NOT ACTIVE	F5G19800
03157	-0	53400	1	00430	LXD IRR,1 ACTIVE-STORE ACTIVE	F5G19810
03160	0	50000	0	00526	CLA SFV1 INDICATOR	F5G19820
03161	0	60100	1	00561	STO AC1+3,1	F5G19830
03162	-0	53400	2	00430	X01 LXD IRR,2	F5G19840
03163	0	50000	2	00565	CLA LX1+3,2 WAS AN ENTRANCE REQUIREMENT	F5G19850
03164	-0	10000	0	03167	TNZ X19 BEEN DETERMINED FOR THIS BB.	F5G19860
03165	0	50000	0	00333	CLA LK1 NO,RECORD HASH	F5G19870
03166	0	60100	2	00565	STO LX1+3,2 AS ENTRANCE REQUIREMENT	F5G19880
03167	-0	50000	0	00340	X19 CAL S5K3 RECORD THAT THERE IS AN	F5G19890
03170	0	77100	2	00003	ARS 3,2 LX FOR THIS IR IN	F5G19900
03171	-0	60200	0	00566	ORS XV2 REGION.	F5G19910
03172	0	50000	0	00567	X02 CLA XV3 RECORD THE	F5G19920
03173	0	07400	4	00032	TSX SE4,4 SPECIFIC	F5G19930
03174	-0	50000	0	00570	CAL XV4 TAG	F5G19940
03175	0	76000	0	00006	COM IN	F5G19950
03176	0	73400	2	00000	PAX 0,2 THE	F5G19960
03177	-0	50000	0	00430	CAL IRR STAG	F5G19970
03200	0	77100	2	00000	ARS 0,2 TABLE	F5G19980
03201	0	77100	2	00000	ARS 0,2	F5G19990

03202	-0	60200	1	05061	ORS STAG,1	F5G20000
03203	0	02000	0	03077	TRA X3	F5G20010
03204	-0	53400	1	00440	X9 LXD S3V4,1 GET	F5G20020
03205	-3	00034	1	03212	TXL XI1+1,1,S3P1-2	F5G20030
03206	0	50000	0	00550	CLA LPIND	F5G20040
03207	-0	12000	0	03212	TMI XI1+1	F5G20050
03210	-0	53400	2	00430	LXD IRR,2	F5G20060
03211	0	02000	0	03243	XI1 TRA X16-3	F5G20070
03212	0	50000	1	04775	CLA LPLST+S3P1-2,1 AND	F5G20080
03213	0	34000	0	00324	CAS S3K2 STORE	F5G20090
03214	0	76100	0	00000	NOP BB	F5G20100
03215	0	02000	0	03217	TRA X117	F5G20110
03216	0	77100	0	00022	ARS 18 PRED	F5G20120
03217	0	62100	0	00513	X117 STA SBV3 NO.	F5G20130
03220	0	50000	1	04776	CLA LPLST+S3P1-1,1	F5G20140
03221	0	07400	4	00070	TSX SE,4 GET ADDR. OF	F5G20150
03222	0	50000	1	06442	CLA BBB,1 1ST PRED.	F5G20160
03223	0	60200	0	00512	X03 SLW SBV2	F5G20170
03224	0	07400	4	00055	TSX SE5,4 GET PRED.	F5G20180
03225	-0	50000	1	07337	CAL PRED,1	F5G20190
03226	-0	32000	0	00353	ANA SBK2	F5G20200
03227	0	34000	0	00513	CAS SBV3 IS THIS RIGHT PRED.	F5G20210
03230	0	02000	0	03232	TRA X04 NO	F5G20220
03231	0	02000	0	03235	TRA X05 YES	F5G20230
03232	0	50000	0	00512	X04 CLA SBV2 NO ARRANGE TO	F5G20240
03233	0	40000	0	00315	ADD ONEA TRY NEXT	F5G20250
03234	0	02000	0	03223	TRA X03 PRED.	F5G20260
03235	-0	53400	2	00430	X05 LXD IRR,2 PUT LX	F5G20270
03236	-0	50000	0	00377	CAL XK16 BIT INTO	F5G20280
03237	0	77100	2	00003	ARS 3,2 PRED.	F5G20290
03240	-0	60200	1	07337	ORS PRED,1 TABLE.	F5G20300
03241	-0	53400	4	00440	LXD S3V4,4	F5G20310
03242	-0	60200	4	04776	ORS LPLST+S3P1-1,4	F5G20320
03243	0	50000	2	00430	CLA IR1+3,2 SET ENTR. REQU.	F5G20330
03244	0	60100	2	00565	STO LX1+3,2	F5G20340
03245	0	02000	0	03155	TRA X14	F5G20350
03246	0	07400	4	01661	X16 TSX SC,4 RECORD I.R. ACTIVE IN SECTION OF LPLST	F5G20360
03247	0	56000	0	00333	LDQ LK1	F5G20370
03250	0	50000	1	00565	CLA LX1+3,1 HAS THIS	F5G20380
03251	-0	10000	0	03253	TNZ X100 ENTR. REQU. BEEN DETERMINED	F5G20390
03252	-0	60000	1	00565	STQ LX1+3,1 NO,RECORD ENTR. REQU. IS AN E.	F5G20400
03253	-0	60000	1	00430	X100 STQ IR1+3,1 ERASE THIS I.R.	F5G20410
03254	0	50000	0	00314	CLA ZERO RECORD THAT THIS	F5G20420
03255	0	60100	1	00561	STO AC1+3,1 I.R. ISNT ACTIVE.	F5G20430
03256	0	02000	0	03172	TRA X02	F5G20440
03257	-0	63400	1	00430	X7 SXD IRR,1	F5G20450
03260	0	50000	0	00442	CLA TPE IS THIS	F5G20460
03261	0	34000	0	00376	CAS XK15 AN LXP	F5G20470
03262	0	02000	0	03264	TRA X104 NO	F5G20480
03263	0	02000	0	03246	TRA X16 YES.	F5G20490
03264	0	34000	0	00403	X104 CAS XK21 IS IT A DED	F5G20500
03265	0	02000	0	03267	TRA X15	F5G20510
03266	0	02000	0	03246	TRA X16 YES.	F5G20520
03267	0	07400	4	02024	X15 TSX SF,4 DETERMINE ACTIVITY.	F5G20530

03270	0	02000	0	03275	TRA X17 COME HERE IF NOT ACTIVE.	F5G20540
03271	-0	53400	1	00430	LXD IRR,1	F5G20550
03272	0	07400	4	01661	TSX SC,4 RECORD PART OF LOOP LIST ACTIVE.	F5G20560
03273	0	50000	0	00526	CLA SFV1 STORE ACTIVE	F5G20570
03274	0	60100	1	00561	STO AC1+3,1 INDICATOR.	F5G20580
03275	0	50000	0	00442	X17 CLA TPE	F5G20590
03276	0	34000	0	00322	CAS S2K2 IS THIS AN LX	F5G20600
03277	0	02000	0	03301	TRA X18	F5G20610
03300	0	02000	0	03162	TRA X01 YES.	F5G20620
03301	-0	53400	1	00430	X18 LXD IRR,1	F5G20630
03302	0	50000	1	00565	CLA LX1+3,1 WAS THIS	F5G20640
03303	-0	10000	0	03172	TNZ X02 I.R. LX ED	F5G20650
03304	0	50000	1	00430	CLA IR1+3,1 NO,STORE THE TAG	F5G20660
03305	0	60100	1	00565	STO LX1+3,1 IN TH LX INDICATOR.	F5G20670
03306	0	02000	0	03172	TRA X02	F5G20680
03307	0	07400	4	00070	X22 TSX SE,4 MAKE SURE BB IS IN C+M.	F5G20690
03310	0	53400	2	00342	LXA S5K5,2	F5G20700
03311	0	50000	2	00565	X25 CLA LX1+3,2	F5G20710
03312	-0	10000	0	03314	TNZ X23 HAS THIS ENTRANCE REQ. BEEN FOUND	F5G20720
03313	0	50000	2	00430	CLA IR1+3,2 NO,ENTRANCE = EXIT.	F5G20730
03314	0	76700	0	00022	X23 ALS 18 PUT ENTR. REQ. IN LEFT.	F5G20740
03315	0	40000	2	00430	ADD IR1+3,2 ADD THE EXIT REQUIREMENTS.	F5G20750
03316	0	60200	1	06444	SLW BBB+2,1	F5G20760
03317	1	77777	1	03320	TXI X24,1,-1 DOWN INDEX OF ENTR-EXIT REQU.	F5G20770
03320	2	00001	2	03311	X24 TIX X25,2,1 COUNT TO 3	F5G20780
03321	0	02000	0	03353	TRA X26	F5G20790
03322	-0	53400	1	00440	X13 LXD S3V4,1 GET LOOP LIST QUANTITY	F5G20800
03323	3	00034	1	03353	TXH X26,1,S3P1-2 TRANSFER IF THIS IS 1ST IN LPLST	F5G20810
03324	0	50000	1	04775	CLA LPLST+S3P1-2,1 OF PREVIOUS QUANTITY	F5G20820
03325	0	60100	0	00607	STO XV19	F5G20830
03326	0	56000	0	00324	LDQ S3K2 WAS IT	F5G20840
03327	0	04000	0	03331	TLQ X126 A BB	F5G20850
03330	0	77100	0	00022	ARS 18 YES	F5G20860
03331	-0	32000	0	00326	X126 ANA S3K4 IS THERE	F5G20870
03332	0	56000	0	00351	LDQ SAK1	F5G20880
03333	0	04000	0	03346	TLQ X129	F5G20890
03334	0	07400	4	00067	TSX SE1,4 YES, GET EXIT BB	F5G20900
03335	0	50000	1	06442	CLA BBB,1 WAS THAT BB	F5G20910
03336	0	77100	0	00041	ARS 33 TERMINATED BY	F5G20920
03337	0	40000	0	00315	ADD ONEA A	F5G20930
03340	-0	10000	0	03346	TNZ X129 GO TO N	F5G20940
03341	0	53400	1	00342	LXA S5K5,1 YES, SET COUNT TO 3	F5G20950
03342	0	50000	1	00561	X128 CLA AC1+3,1 IS THIS IR	F5G20960
03343	0	10000	0	03345	TZE X127 ACTIVE	F5G20970
03344	0	07400	4	01566	TSX SB,4 YES, RECORD SXD NECESSARY	F5G20980
03345	2	00001	1	03342	X127 TIX X128,1,1 COUNT TO 3	F5G20990
03346	0	50000	0	00607	X129 CLA XV19 GET	F5G21000
03347	0	34000	0	00324	CAS S3K2	F5G21010
03350	0	76100	0	00000	NOP NO	F5G21020
03351	0	02000	0	03353	TRA X26	F5G21030
03352	0	02000	0	03307	TRA X22 YES,	F5G21040
03353	0	50000	0	00444	X26 CLA S3V5 NO	F5G21050
03354	0	34000	0	00323	CAS S3K1 IS THIS AN END-LOOP-LIST	F5G21060
03355	0	02000	0	03357	TRA X31 NO	F5G21070

03356	0	02000	0	04370	TRA X88 YES		F5G21080
03357	-0	50000	0	00444	X31 CAL S3V5		F5G21090
03360	-0	32000	0	00335	ANA LK3		F5G21100
03361	0	34000	0	00400	CAS XK17 WHAT TYPE ENTRY IS THIS		F5G21110
03362	0	02000	0	03365	TRA X118		F5G21120
03363	0	02000	0	04043	TRA X33 TRANSPARENT REGION		F5G21130
03364	0	02000	0	03072	TRA X32 BB		F5G21140
03365	0	50000	0	00444	X118 CLA S3V5 OPAQUE REGION		F5G21150
03366	0	07400	4	00070	TSX SE,4 IS		F5G21160
03367	0	50000	1	06447	CLA BBB+5,1 THIS		F5G21170
03370	0	60100	0	00614	STO XV24		F5G21180
03371	0	62200	0	00613	STD XV23 THE		F5G21190
03372	0	50000	0	04741	CLA LPLST SAME		F5G21200
03373	0	56000	0	00361	LDQ FK4		F5G21210
03374	0	04000	0	03376	TLQ X221		F5G21220
03375	1	00000	0	03404	TXI X213,0,-		F5G21230
03376	0	07400	4	00067	X221 TSX SE1,4 REGION		F5G21240
03377	0	50000	1	06447	CLA BBB+5,1 AS		F5G21250
03400	-0	32000	0	00321	ANA S2K1 AT THE BEGINNING		F5G21260
03401	0	40200	0	00613	SUB XV23 OF THE		F5G21270
03402	0	60100	0	00614	STO XV24 STORE IND. OF SAMENESS OF 1ST REGION		F5G21280
03403	0	10000	0	03724	TZE X61 LPLST		F5G21290
03404	0	50000	0	00444	X213 CLA S3V5		F5G21300
03405	0	07400	4	01245	X57 TSX S5,4 NO,MATCH ENTR. REQU.		F5G21310
03406	-0	53400	1	00613	X63 LXD XV23,1 GET		F5G21320
03407	0	50000	1	05061	CLA REG,1 REGION WORD		F5G21330
03410	0	07400	4	00070	TSX SE,4 CST INDEX OF 1ST BB		F5G21340
03411	-0	50000	1	06443	X209 CAL BBB+1,1 GET THE		F5G21350
03412	0	60200	0	00575	SLW XV9 ORIGINAL PERM. NOS.		F5G21360
03413	-0	32000	0	00402	ANA XK20 STORE WORD TO		F5G21370
03414	0	60200	0	00574	SLW XV8 CONTAIN NEW PERM. NOS.		F5G21380
03415	0	53400	2	00342	LXA S5K5,2 SET COUNT TO 3		F5G21390
03416	-0	50000	0	00575	X210 CAL XV9 GET THE		F5G21400
03417	0	77100	2	00003	ARS 3,2		F5G21410
03420	0	77100	2	00003	ARS 3,2 PERM. NO. AND		F5G21420
03421	-0	32000	0	00350	ANA S9K3 PUT IT		F5G21430
03422	-0	73400	4	00000	PDX 0,4 IN 4.		F5G21440
03423	0	50000	4	00470	CLA EN4+3,4 GET THE		F5G21450
03424	0	76700	2	00003	ALS 3,2 CORRESPONDENCE		F5G21460
03425	0	76700	2	00003	ALS 3,2 OF THE ENTR. REQUIREMENTS		F5G21470
03426	-0	60200	0	00574	ORS XV8 FORM NEW PERM.		F5G21480
03427	2	00001	2	03416	TIX X210,2,1		F5G21490
03430	-0	50000	0	00574	CAL XV8 STORE NEW PERM.		F5G21500
03431	0	62200	1	06443	STD BBB+1,1 NOS.		F5G21510
03432	0	50000	1	06447	CLA BBB+5,1 IS THIS THE LAST		F5G21520
03433	-0	32000	0	00353	ANA SBK2 BB IN REGION		F5G21530
03434	0	34000	0	00353	CAS SBK2		F5G21540
03435	0	02000	0	03437	TRA X211 NO.		F5G21550
03436	0	02000	0	03441	TRA X212 YES, DONE		F5G21560
03437	0	07400	4	00067	X211 TSX SE1,4 ARRANGE TO DO NEXT		F5G21570
03440	0	02000	0	03411	TRA X209 BB.		F5G21580
03441	0	53400	1	00342	X212 LXA S5K5,1 SET COUNT TO 3		F5G21590
03442	0	50000	1	00465	X60 CLA IN1+3,1 GET INDEX		F5G21600
03443	-0	73400	2	00000	PDX 0,2 OF EN.		F5G21610

03444	0	50000	2	00473	CLA EN1+3,2 IS C(ENM)	F5G21620
03445	0	34000	1	00430	CAS IR1+3,1 =C(IRN)	F5G21630
03446	0	02000	0	03450	TRA X58	F5G21640
03447	0	02000	0	03734	TRA X64 YES,	F5G21650
03450	0	34000	0	00337	X58 CAS S5K2 IS C(ENM) REAL	F5G21660
03451	0	76100	0	00000	NOP NO,	F5G21670
03452	0	02000	0	03454	TRA X119	F5G21680
03453	0	02000	0	03771	TRA X67 YES,	F5G21690
03454	0	50000	1	00561	X119 CLA AC1+3,1 NO,IS	F5G21700
03455	0	10000	0	03457	X102 TZE X59 IRN ACTIVE	F5G21710
03456	0	07400	4	01566	X65 TSX SB,4 YES,RECORD SXD NECESSARY.	F5G21720
03457	2	00001	1	03442	X59 TIX X60,1,1	F5G21730
03460	0	07400	4	02042	TSX SG,4 PERMUTE REGION WORD	F5G21740
03461	0	50000	0	04741	X89 CLA LPLST	F5G21750
03462	0	34000	0	00324	CAS S3K2 IS IT A BB	F5G21760
03463	0	07400	4	00067	TSX SE1,4 NO	F5G21770
03464	0	02000	0	03466	TRA X206	F5G21780
03465	0	02000	0	03471	TRA X207	F5G21790
03466	0	50000	1	06447	X206 CLA BBB+5,1	F5G21800
03467	-0	73400	1	00000	PDX 0,1	F5G21810
03470	0	50000	1	05061	CLA REG,1 FORM NO OF 1ST BB IN REGION	F5G21820
03471	0	62200	0	00566	X207 STD XV2	F5G21830
03472	0	53400	1	00342	LXA S5K5,1	F5G21840
03473	0	50000	0	00336	X116 CLA S5K1	F5G21850
03474	0	34000	1	00430	CAS IR1+3,1 IS THIS IR EMPTY	F5G21860
03475	0	02000	0	03500	TRA X115	F5G21870
03476	-0	50000	1	00410	CAL XK23+3,1 YES, INITIALIZE IR	F5G21880
03477	-0	60200	0	00566	ORS XV2 TO EMRTYNESS	F5G21890
03500	2	00001	1	03473	X115 TIX X116,1,1 COUNT TO 3	F5G21900
03501	-0	53400	2	00325	LXD S3K3,2 PREPARE TO SCAN LOOP LIST	F5G21910
03502	-0	63400	2	00600	SXD XV12,2	F5G21920
03503	0	50000	2	04777	X79 CLA LPLST+S3P1,2	F5G21930
03504	0	34000	0	00323	CAS S3K1 IS THIS END LOOP LIST	F5G21940
03505	0	02000	0	03507	TRA X120	F5G21950
03506	0	02000	0	03717	TRA X81 YES.	F5G21960
03507	0	34000	0	00324	X120 CAS S3K2 IS IT A BB	F5G21970
03510	0	76100	0	00000	NOP	F5G21980
03511	0	02000	0	03513	TRA X121	F5G21990
03512	0	77100	0	00022	ARS 18 YES.	F5G22000
03513	0	62100	0	00513	X121 STA SBV3 STORE EXIT BB NO.	F5G22010
03514	0	50000	2	05000	CLA LPLST+S3P1+1,2	F5G22020
03515	0	34000	0	00323	CAS S3K1 IS NEXT QUANTITY AN END LPLST	F5G22030
03516	0	02000	0	03520	TRA X107	F5G22040
03517	0	02000	0	03603	TRA X114 YES.	F5G22050
03520	0	77100	0	00022	X107 ARS 18	F5G22060
03521	0	62100	0	00606	STA XV18 STORE ENTRY BB NO.	F5G22070
03522	0	40000	0	00315	ADD ONEA	F5G22080
03523	0	07400	4	00067	TSX SE1,4	F5G22090
03524	-0	50000	1	06442	CAL BBB,1	F5G22100
03525	-0	32000	0	00353	ANA SBK2	F5G22110
03526	0	60100	0	00515	STO SBV5	F5G22120
03527	0	50000	0	00606	CLA XV18	F5G22130
03530	0	07400	4	00067	TSX SE1,4	F5G22140
03531	0	50000	1	06442	CLA BBB,1	F5G22150

03532	-0	32000	0	00353	ANA SBK2		F5G22160
03533	0	60200	0	00512	SLW SBV2	X109	F5G22170
03534	0	07400	4	00055	TSX SE5,4		F5G22180
03535	-0	50000	1	07337	CAL PRED,1		F5G22190
03536	-0	32000	0	00353	ANA SBK2		F5G22200
03537	0	34000	0	00513	CAS SBV3	IS THIS THE RIGHT TRANSFER	F5G22210
03540	0	02000	0	03542	TRA X108		F5G22220
03541	0	02000	0	03550	TRA X110	YES	F5G22230
03542	0	50000	0	00512	CLA SBV2	ARRANGE TO TRY	F5G22240
03543	0	40000	0	00315	ADD ONEA	NEXT PRED.	F5G22250
03544	0	34000	0	00515	CAS SBV5	IS THIS PRED ENTRY IN SAME BB	F5G22260
03545	0	02000	0	03533	TRA X109		F5G22270
03546	0	02000	0	03554	TRA X222		F5G22280
03547	0	02000	0	03533	TRA X109		F5G22290
03550	0	50000	1	07337	CLA PRED,1	SET SIGN	F5G22300
03551	-0	76000	0	00003	SSM OF PRED.		F5G22310
03552	0	60100	1	07337	STO PRED,1	ENTRY NEGATIVE.	F5G22320
03553	0	02000	0	03542	TRA X108		F5G22330
03554	0	50000	0	00513	CLA SBV3	GET INDEX	F5G22340
03555	0	40000	0	00315	ADD ONEA		F5G22350
03556	0	07400	4	00067	TSX SE1,4	OF	F5G22360
03557	0	50000	1	06442	CLA BBB,1		F5G22370
03560	-0	32000	0	00321	ANA S2K1		F5G22380
03561	0	60100	0	00515	STO SBV5		F5G22390
03562	0	50000	0	00513	CLA SBV3		F5G22400
03563	0	07400	4	00067	TSX SE1,4		F5G22410
03564	0	50000	1	06442	CLA BBB,1		F5G22420
03565	-0	32000	0	00321	ANA S2K1		F5G22430
03566	0	60200	0	00512	SLW SBV2	X112	F5G22440
03567	0	07400	4	00044	TSX SE6,4		F5G22450
03570	-0	50000	1	07555	CAL SUCC,1		F5G22460
03571	-0	32000	0	00353	ANA SBK2		F5G22470
03572	0	34000	0	00606	CAS XV18	IS THIS RIGHT SUCC.	F5G22480
03573	0	02000	0	03575	TRA X111		F5G22490
03574	0	02000	0	03607	TRA X113		F5G22500
03575	0	50000	0	00512	CLA SBV2	ARRANGE TO TRY NEXT SUCC.	F5G22510
03576	0	40000	0	00316	ADD ONED		F5G22520
03577	0	34000	0	00515	CAS SBV5	IS THIS SUCC IN SAME BB	F5G22530
03600	0	02000	0	03566	TRA X112		F5G22540
03601	0	02000	0	03613	TRA X74		F5G22550
03602	0	02000	0	03566	TRA X112		F5G22560
03603	0	50000	0	00550	CLA LPIND	IS THIS	F5G22570
03604	0	12000	0	03613	TPL X74	A LOOP	F5G22580
03605	0	50000	0	04741	CLA LPLST	YES	F5G22590
03606	0	02000	0	03520	TRA X107		F5G22600
03607	0	50000	1	07555	CLA SUCC,1	SET SIGN	F5G22610
03610	-0	76000	0	00003	SSM OF SUCC+	ENTRY	F5G22620
03611	0	60100	1	07555	STO SUCC,1	NEGATIVE	F5G22630
03612	0	02000	0	03575	TRA X111		F5G22640
03613	-0	53400	2	00600	LXD XV12,2	X74	F5G22650
03614	0	50000	2	04777	CLA LPLST+S3P1,2		F5G22660
03615	0	34000	0	00324	CAS S3K2	IS IT A BB	F5G22670
03616	0	76100	0	00000	NOP		F5G22680
03617	0	02000	0	03621	TRA X122		F5G22690

03620	0	02000	0	03662	TRA X80 YES	F5G22700
03621	-0	73400	4	00000 X122	PDX 0,4	F5G22710
03622	3	77776	4	03624	TXH X205,4,-2 IS THE DECR. AN IMPOSSIBLE BB	F5G22720
03623	0	77100	0	00022	ARS 18	F5G22730
03624	0	07400	4	00067 X205	TSX SE1,4	F5G22740
03625	0	50000	1	06447	CLA BBB+5,1 THE	F5G22750
03626	-0	73400	1	00000	PDX 0,1 REGION	F5G22760
03627	-0	50000	1	05061	CAL REG,1 WORD	F5G22770
03630	0	60200	0	00605	SLW XV17	F5G22780
03631	0	10000	0	03655	TZE X105 HAS THIS REGION ALREADY BEEN RENUMBERED	F5G22790
03632	-0	32000	0	00335	ANA LK3 OR THE LX BITS FOR	F5G22800
03633	-0	60200	0	00566	ORS XV2 OLD REGION IN NEW REGION WORD.	F5G22810
03634	-0	50000	0	00404	CAL XK22 AND THE OLD PHI	F5G22820
03635	-0	50100	0	00605	ORA XV17 BITS	F5G22830
03636	0	32000	0	00566	ANS XV2 INTO NEW REGION WORD.	F5G22840
03637	0	50000	0	00314	CLA ZERO CLEAR OLD	F5G22850
03640	0	60100	1	05061	STO REG,1 REGION WORD.	F5G22860
03641	0	50000	0	00605	CLA XV17 GET INDEX OF	F5G22870
03642	0	77100	0	00022	ARS 18 FIRST BB IN REG	F5G22880
03643	0	62100	0	00612 X75	STA XV22 STOREBB NO.	F5G22890
03644	0	07400	4	00067	TSX SE1,4 GET INDEX OF BB	F5G22900
03645	0	50000	0	00565 X101	CLA XV1 STORE THE	F5G22910
03646	0	62200	1	06447	STD BBB+5,1 NEW REGION NO.	F5G22920
03647	0	50000	1	06447	CLA BBB+5,1 IS THIS THE	F5G22930
03650	-0	32000	0	00353	ANA SBK2 LAST BB	F5G22940
03651	0	34000	0	00353	CAS SBK2 OF THE REGION	F5G22950
03652	0	02000	0	03643	TRA X75	F5G22960
03653	0	02000	0	03665	TRA X76 YES.	F5G22970
03654	0	02000	0	03643	TRA X75	F5G22980
03655	0	50000	0	00612 X105	CLA XV22 RECORD THAT PREVIOUSLY	F5G22990
03656	0	07400	4	00067	TSX SE1,4 NUMBERED BB	F5G23000
03657	0	50000	0	00404	CLA XK22 WAS LAST	F5G23010
03660	0	62100	1	06447	STA BBB+5,1 ONE IN NEW REGION.	F5G23020
03661	0	02000	0	03717	TRA X81 FINISHED RENUMBERING.	F5G23030
03662	0	77100	0	00022 X80	ARS 18	F5G23040
03663	0	62100	0	00612	STA XV22	F5G23050
03664	0	07400	4	00067	TSX SE1,4	F5G23060
03665	-0	53400	2	00600 X76	LXD XV12,2	F5G23070
03666	1	77777	2	03667 X140	TXI X140+1,2,-1	F5G23080
03667	-0	63400	2	00600	SXD XV12,2	F5G23090
03670	0	50000	2	04777 X77	CLA LPLST+S3P1,2	F5G23100
03671	0	34000	0	00323	CAS S3K1 IS THIS END LOOP LIST	F5G23110
03672	1	00000	0	03700 X219	TXI X217,0,- SEE X217+2	F5G23120
03673	0	50000	0	00336	CLA S5K1 YES	F5G23130
03674	0	62100	1	06447 X216	STA BBB+5,1 RECORD THE NEXT BB NO.	F5G23140
03675	0	50000	0	00565	CLA XV1 RECORD THE	F5G23150
03676	0	62200	1	06447	STD BBB+5,1 NEW REGION	F5G23160
03677	0	02000	0	03503	TRA X79 NO.	F5G23170
03700	0	56000	0	00324 X217	LDQ S3K2	F5G23180
03701	0	04000	0	03704	TLQ X220	F5G23190
03702	0	77100	0	00022 X215	ARS 18 NO	F5G23200
03703	1	00000	0	03674 X218	TXI X216,0,-	F5G23210
03704	-0	63400	2	03672 X220	SXD X219,2	F5G23220
03705	0	07400	4	00070	TSX SE,4	F5G23230

03706	0	50000	1	06447	CLA BBB+5,1		F5G23240
03707	-0	73400	1	00000	PDX 0,1		F5G23250
03710	0	50000	1	05061	CLA REG,1	GET REGION WORD	F5G23260
03711	0	62200	0	03703	STD X218		F5G23270
03712	0	50000	0	00612	CLA XV22		F5G23280
03713	0	07400	4	00067	TSX SE1,4		F5G23290
03714	0	50000	0	03703	CLA X218		F5G23300
03715	-0	53400	2	03672	LXD X219,2		F5G23310
03716	1	00000	0	03702	TXI X215,-,-		F5G23320
03717	0	50000	0	00566	CLA XV2	X81	F5G23330
03720	-0	50100	0	00315	ORA ONEA		F5G23340
03721	-0	53400	1	00565	LXD XV1,1	NEW REGION	F5G23350
03722	0	60100	1	05061	STO REG,1	WORD.	F5G23360
03723	0	02000	0	02177	TRA F		F5G23370
03724	0	53400	1	00342	LXA S5K5,1	X61	F5G23380
03725	-0	75400	1	00000	PXD 0,1	PLACE APPROPRIATE NOS.	F5G23390
03726	0	62200	1	00465	STD IN1+3,1	IN CORRSEPENDENCE	F5G23400
03727	0	62200	1	00470	STD EN4+3,1	TABLES	F5G23410
03730	2	00001	1	03725	TIX X62,1,1		F5G23420
03731	0	50000	0	00444	CLA S3V5		F5G23430
03732	0	07400	4	01466	TSX S9,4	GET THE ENTRANCE REQUIREMENTS	F5G23440
03733	0	02000	0	03406	TRA X63		F5G23450
03734	0	50000	1	00561	CLA AC1+3,1	IS THIS I.R.	F5G23460
03735	0	10000	0	03457	TZE X59	ACTIVE	F5G23470
03736	-0	53400	4	00440	LXD S3V4,4	YES.	F5G23480
03737	0	50000	4	04776	CLA LPLST+S3P1-1,4	GET	F5G23490
03740	-0	63400	1	00577	SXD XV11,1	THE	F5G23500
03741	-0	63400	2	00600	SXD XV12,2	REGION	F5G23510
03742	0	07400	4	00070	TSX SE,4	WORD	F5G23520
03743	0	50000	1	06447	CLA BBB+5,1	IN	F5G23530
03744	-0	73400	4	00000	PDX 0,4	THE	F5G23540
03745	0	56000	4	05061	LDQ REG,4	MQ.	F5G23550
03746	-0	53400	1	00577	LXD XV11,1	HAS THERE	F5G23560
03747	-0	53400	2	00600	LXD XV12,2		F5G23570
03750	-0	77300	2	00003	RQL 3,2	BEEN AN LX	F5G23580
03751	0	16200	0	03753	TQP X66	FOR THIS I.R.	F5G23590
03752	0	02000	0	03456	TRA X65	YES	F5G23600
03753	0	50000	0	00614	CLA XV24	X66	F5G23610
03754	-0	10000	0	03762	TNZ X208	IS THIS SAME REG. AS BEGINS STRING	F5G23620
03755	0	50000	0	04741	CLA LPLST	YES	F5G23630
03756	0	07400	4	01523	TSX SA,4	GET ACTIVE INDS. AT START OF STRING	F5G23640
03757	-0	53400	1	00577	LXD XV11,1		F5G23650
03760	0	50000	1	00511	CLA ACT1+3,1	WAS THIS IR ACTIVE AT START	F5G23660
03761	0	12000	0	03456	TPL X65		F5G23670
03762	-0	53400	4	00440	LXD S3V4,4	YES, MARK ALL	F5G23680
03763	0	50000	4	04776	CLA LPLST+S3P1-1,4	BBS IN OPAQUE	F5G23690
03764	-0	53400	2	00577	LXD XV11,2	REGION ACTIVE	F5G23700
03765	0	07400	4	01753	TSX SD,4		F5G23710
03766	-0	53400	1	00577	LXD XV11,1		F5G23720
03767	0	07400	4	01661	TSX SC,4	MARK SECTION OF LLLST ACTIVE	F5G23730
03770	0	02000	0	03457	TRA X59		F5G23740
03771	-0	63400	1	00577	SXD XV11,1	X67	F5G23750
03772	-0	53400	1	00440	LXD S3V4,1	GET	F5G23760
03773	0	50000	1	04775	CLA LPLST+S3P1-2,1	PRED+ NO	F5G23770

03774	0	34000	0	00324	CAS S3K2 IS THIS A BB	F5G23780
03775	0	76100	0	00000	NOP NO	F5G23790
03776	0	02000	0	04000	TRA X123	F5G23800
03777	0	77100	0	00022	ARS 18 YES,SHIFT BB NO RIGHT.	F5G23810
04000	0	62100	0	00513	STA SBV3 AND STORE IT	F5G23820
04001	0	50000	1	04776	CLA LPLST+S3P1-1,1 GET INDEX OF	F5G23830
04002	0	07400	4	00070	TSX SE,4 THIS BB	F5G23840
04003	0	50000	1	06443	CLA BBB+1,1 GET TO STORE	F5G23850
04004	0	60100	0	00575	STO XV9 PREM. NO.	F5G23860
04005	0	50000	1	06442	CLA BBB,1 GET PRED. NO.	F5G23870
04006	0	60200	0	00512	SLW SBV2	F5G23880
04007	0	07400	4	00055	TSX SE5,4 GET INDEX OF PRED.	F5G23890
04010	-0	50000	1	07337	CAL PRED,1 IS THIS THE	F5G23900
04011	-0	32000	0	00353	ANA SBK2 RIGHT PRED	F5G23910
04012	0	34000	0	00513	CAS SBV3	F5G23920
04013	0	02000	0	04015	TRA X69	F5G23930
04014	0	02000	0	04020	TRA X70 YES.	F5G23940
04015	0	50000	0	00512	CLA SBV2	F5G23950
04016	0	40000	0	00315	ADD ONEA	F5G23960
04017	0	02000	0	04006	TRA X68	F5G23970
04020	0	53400	4	00342	LXA S5K5,4 SET COUNT TO 3	F5G23980
04021	-0	50000	0	00575	CAL XV9 FIND	F5G23990
04022	0	77100	4	00003	ARS 3,4 THE	F5G24000
04023	0	77100	4	00003	ARS 3,4 PERM+ NO.	F5G24010
04024	-0	32000	0	00350	ANA S9K3	F5G24020
04025	0	34000	0	00577	CAS XV11 IS THIS THE RIGHT I.R.	F5G24030
04026	0	02000	0	04030	TRA X71 NO,	F5G24040
04027	0	02000	0	04032	TRA X73 YES,	F5G24050
04030	2	00001	4	04021	TIX X72,4,1 NO,	F5G24060
04031	0	07400	4	00004	TSX 4,4 DIAGNOSTIC, ERROR.	F5G24070
04032	-0	50000	0	00377	CAL XK16 RECORD THAT AN	F5G24080
04033	0	77100	4	00003	ARS 3,4 LX IS	F5G24090
04034	-0	60200	1	07337	ORS PRED,1 NECESSARY.	F5G24100
04035	-0	53400	4	00577	LXD XV11,4 RECORD	F5G24110
04036	-0	50000	0	00340	CAL S5K3 LX	F5G24120
04037	0	77100	4	00003	ARS 3,4 FOR THIS I.R.	F5G24130
04040	-0	60200	0	00566	ORS XV2 IN THIS REGION.	F5G24140
04041	-0	53400	1	00577	LXD XV11,1	F5G24150
04042	0	02000	0	03454	TRA X119	F5G24160
04043	0	50000	0	00444	CLA S3V5	F5G24170
04044	0	07400	4	01245	TSX S5,4 MATCH ENTRANCE REQU.	F5G24180
04045	0	50000	0	00444	CLA S3V5	F5G24190
04046	0	07400	4	01523	TSX SA,4 GET EXIT COND.	F5G24200
04047	0	50000	0	00444	CLA S3V5	F5G24210
04050	0	07400	4	00070	TSX SE,4 GET INDEX OF	F5G24220
04051	0	50000	1	06447	CLA BBB+5,1 B.B.	F5G24230
04052	-0	73400	1	00000	PDX 0,1 GET	F5G24240
04053	0	50000	1	05061	CLA REG,1 REGION	F5G24250
04054	0	07400	4	00070	TSX SE,4 WORD.	F5G24260
04055	-0	63400	1	00601	SXD XV13,1 GET INDEX OF FIRST BB.	F5G24270
04056	-0	50000	1	06443	CAL BBB+1,1 CLEAR REGISTER TO	F5G24280
04057	0	60200	0	00575	SLW XV9 CONTAIN PERM. NOS.	F5G24290
04060	-0	32000	0	00402	ANA XK20 GET ORIGINAL PERM. NOS.	F5G24300
04061	0	60200	0	00574	SLW XV8	F5G24310

04062	0	53400	2	00342	LXA S5K5,2 SET COUNT TO 3.	F5G24320
04063	-0	50000	0	00575	X38 CAL XV9 GET THE	F5G24330
04064	0	77100	2	00003	ARS 3,2 PERM.	F5G24340
04065	0	77100	2	00003	ARS 3,2 NO. AND	F5G24350
04066	-0	32000	0	00350	ANA S9K3 PUT IT	F5G24360
04067	-0	73400	4	00000	PDX 0,4 IN 4.	F5G24370
04070	0	50000	4	00470	CLA EN4+3,4 GET THE CORRESPONDENCE	F5G24380
04071	0	76700	2	00003	ALS 3,2 OF THE ENTR,	F5G24390
04072	0	76700	2	00003	ALS 3,2 REQUIREMENTS.	F5G24400
04073	-0	60200	0	00574	ORS XV8 FORM NEW PERM. NOS.	F5G24410
04074	-0	63400	1	00576	SXD XV10,1	F5G24420
04075	0	50000	4	00470	CLA EN4+3,4	F5G24430
04076	-0	73400	1	00000	PDX 0,1 GET INDEX OF I.R.	F5G24440
04077	0	50000	4	00473	CLA EN1+3,4	F5G24450
04100	0	34000	0	00336	CAS S5K1 IS ENM EMPTY	F5G24460
04101	0	02000	0	04103	TRA X34 NO,	F5G24470
04102	0	02000	0	04150	TRA X41 YES,	F5G24480
04103	0	34000	0	00333	X34 CAS LK1 NO,IS C(ENM)=E	F5G24490
04104	0	02000	0	04106	TRA X35 NO,	F5G24500
04105	0	02000	0	04111	TRA X36 YES,	F5G24510
04106	0	34000	1	00430	X35 CAS IR1+3,1 C-(ENM)=C(IRN)	F5G24520
04107	0	02000	0	04111	TRA X36 NO	F5G24530
04110	0	02000	0	04132	TRA X43 YES	F5G24540
04111	-0	53400	1	00576	X36 LXD XV10,1 NO	F5G24550
04112	1	77777	1	04113	X42 TXI X42+1,1,-1	F5G24560
04113	2	00001	2	04063	X37 TIX X38,2,1 COUNT TO 3	F5G24570
04114	-0	50000	0	00574	CAL XV8 STORE NEW	F5G24580
04115	0	62200	1	06440	STD BBB-2,1 PERM. NOS.	F5G24590
04116	0	63000	1	06440	STP BBB-2,1 AND ACTIVE INDICATORS	F5G24600
04117	0	50000	1	06444	CLA BBB+2,1 IS THIS	F5G24610
04120	-0	32000	0	00353	ANA SBK2 LAST BB IN REGION	F5G24620
04121	0	34000	0	00353	CAS SBK2	F5G24630
04122	0	02000	0	04124	TRA X39	F5G24640
04123	0	02000	0	04217	TRA X45 YES,DONE.	F5G24650
04124	0	07400	4	00067	X39 TSX SE1,4 GET INDEX OF NEXT B.B.	F5G24660
04125	0	02000	0	04055	TRA X40	F5G24670
04126	0	50000	4	00506	X200 CLA EX1+3,4 IS CONTENTS OF IR	F5G24680
04127	0	56000	0	00337	LDQ S5K2 AT EXIT	F5G24690
04130	0	04000	0	04135	TLQ X130 REAL	F5G24700
04131	0	02000	0	04111	TRA X36 YES	F5G24710
04132	0	50000	4	00511	X43 CLA ACT1+3,4	F5G24720
04133	-0	63400	1	05164	PW0 SXD W2+1,1	F5G24730
04134	0	12000	0	04126	TPL X200 IS IT ACTIVE AT EXIT	F5G24740
04135	0	50000	1	00561	X130 CLA AC1+3,1 YES,IS THIS IR ACTIVE	F5G24750
04136	0	10000	0	04111	TZE X36	F5G24760
04137	0	50000	1	00430	CLA IR1+3,1 YES	F5G24770
04140	0	60100	0	00611	STO XV21	F5G24780
04141	-0	53400	1	00576	LXD XV10,1 DOES THIS BB CONTAIN THE	F5G24790
04142	0	50000	1	06444	CLA BBB+2,1 SAME TAG IN THIS POSITION	F5G24800
04143	-0	32000	0	00336	ANA S5K1	F5G24810
04144	0	34000	0	00611	CAS XV21	F5G24820
04145	0	02000	0	05144	TRA W0	F5G24830
04146	0	02000	0	04213	TRA X44 YES.	F5G24840
04147	0	02000	0	05144	TRA W0	F5G24850

					C(XV10)= INDEX OF PARTICULAR	F5G24860	
					ENTRANCE REQUIREMENT.	F5G24870	
04150	0	50000	1	00430	X41	CLA IR1+3,1	F5G24880
04151	0	60100	0	00572		STO XV6	F5G24890
04152	0	76700	0	00022		ALS 18 STORE AWAY THIS	F5G24900
04153	0	40000	1	00430		ADD IR1+3,1 TAG TEMPORARILY.	F5G24910
04154	0	60200	0	00573		SLW XV7	F5G24920
04155	0	50000	1	00430		CLA IR1+3,1 IS THIS	F5G24930
04156	0	56000	0	00337		LDQ S5K2 TAG	F5G24940
04157	0	04000	0	04176		TLQ X201	F5G24950
04160	-0	53400	1	00601		LXD XV13,1	F5G24960
04161	0	53400	4	00342		LXA S5K5,4 SET COUNT TO 3.	F5G24970
04162	-0	50000	1	06444	X85	CAL BBB+2,1	F5G24980
04163	0	76500	0	00022		LRS 18	F5G24990
04164	0	34000	0	00572		CAS XV6 IS ENTR. REQU. EQUAL TO TAG	F5G25000
04165	0	02000	0	04167		TRA X82 NO,	F5G25010
04166	0	02000	0	04202		TRA X86 YES,	F5G25020
04167	0	50000	0	00314	X82	CLA ZERO NO,	F5G25030
04170	0	76300	0	00022		LLS 18	F5G25040
04171	0	34000	0	00572		CAS XV6 IS TAG EQUAL TO EXIT COND.	F5G25050
04172	0	02000	0	04174		TRA X83	F5G25060
04173	0	02000	0	04206		TRA X87 YES	F5G25070
04174	1	77777	1	04175	X83	TXI X83+1,1,-1	F5G25080
04175	2	00001	4	04162	X84	TIX X85,4,1 COUNT TO 3.	F5G25090
04176	0	50000	0	00573	X201	CLA XV7 STORE THE	F5G25100
04177	-0	53400	1	00576		LXD XV10,1 NEW ENTRAKCE-	F5G25110
04200	0	60100	1	06444		STO BBB+2,1 EXIT REQUI.	F5G25120
04201	0	02000	0	04112		TRA X42	F5G25130
04202	-0	50000	0	00366	X86	CAL XK18 PUT AN E	F5G25140
04203	0	62200	0	00573		STD XV7 IN THE ENTR. REQU.	F5G25150
04204	0	63000	0	00573		STP XV7	F5G25160
04205	0	02000	0	04167		TRA X82	F5G25170
04206	-0	50000	0	00573	X87	CAL XV7 PLACE E	F5G25180
04207	-0	32000	0	00401		ANA XK19 IN	F5G25190
04210	0	40000	0	00333		ADD LK1 EXIT	F5G25200
04211	0	60200	0	00573		SLW XV7 REQUIREMENT.	F5G25210
04212	0	02000	0	04174		TRA X83	F5G25220
04213	-0	50000	0	00340	X44	CAL S5K3 RECORD THIS	F5G25230
04214	0	77100	2	00003		ARS 3,2 I.R.	F5G25240
04215	-0	60200	0	00574		ORS XV8 ACTIVE	F5G25250
04216	0	02000	0	04112		TRA X42	F5G25260
04217	0	53400	2	00342	X45	LXA S5K5,2	F5G25270
04220	-0	63400	2	00602	X56	SXD XV14,2	F5G25280
04221	0	50000	2	00470		CLA EN4+3,2	F5G25290
04222	-0	73400	4	00000		PDX 0,4 GET INDEX	F5G25300
04223	-0	63400	4	00514		SXD SBV4,4 OF I.R.	F5G25310
04224	0	50000	2	00473		CLA EN1+3,2	F5G25320
04225	0	34000	0	00336		CAS S5K1 IS ENM EMPTY	F5G25330
04226	0	02000	0	04230		TRA X46	F5G25340
04227	0	02000	0	04343		TRA X223	F5G25350
04230	0	34000	0	00333	X46	CAS LK1 IS THERE HASH IN ENM	F5G25360
04231	0	02000	0	04233		TRA X134	F5G25370
04232	0	02000	0	04307		TRA X55 YES	F5G25380
04233	0	34000	4	00430	X134	CAS IR1+3,4 DOES CONTENTS OF IR EQUAL CONTENTS OF EN	F5G25390

04234	0	02000	0	04236	TRA X47	NO	F5G25400
04235	0	02000	0	04357	TRA X131	YES	F5G25410
04236	-0	53400	1	00440	X47	LXD S3V4,1 GET AND	F5G25420
04237	0	50000	1	04775	CLA LPLST+S3P1-2,1 STORE PRED.	F5G25430	
04240	0	34000	0	00324	CAS S3K2 BB	F5G25440	
04241	0	76100	0	00000	NOP NO.	F5G25450	
04242	0	02000	0	04244	TRA X124	F5G25460	
04243	0	77100	0	00022	ARS 18	F5G25470	
04244	0	62100	0	00513	X124	STA SBV3	F5G25480
04245	0	50000	1	04776	CLA LPLST+S3P1-1,1 GET	F5G25490	
04246	0	07400	4	00070	TSX SE,4 BB NO.	F5G25500	
04247	0	50000	1	06443	CLA BBB+1,1 STORE THE	F5G25510	
04250	0	60100	0	00575	STO XV9 PERM. NOS.	F5G25520	
04251	0	50000	1	06447	CLA BBB+5,1	F5G25530	
04252	-0	73400	4	00000	PDX 0,4	F5G25540	
04253	-0	53400	2	00602	LXD XV14,2	F5G25550	
04254	-0	50000	0	00340	CAL S5K3	F5G25560	
04255	0	77100	2	00003	ARS 3,2	F5G25570	
04256	-0	60200	4	05061	ORS REG,4	F5G25580	
04257	0	50000	1	06442	CLA BBB,1 GET PRED. NO.	F5G25590	
04260	0	60200	0	00512	X48	SLW SBV2 STORE PRED. NO.	F5G25600
04261	0	07400	4	00055	TSX SE5,4 OBTAIN PRED. INDEX.	F5G25610	
04262	-0	50000	1	07337	CAL PRED,1 IS THIS	F5G25620	
04263	-0	32000	0	00353	ANA SBK2 THE CORRECT	F5G25630	
04264	0	34000	0	00513	CAS SBV3 PRED	F5G25640	
04265	0	02000	0	04267	TRA X49	F5G25650	
04266	0	02000	0	04272	TRA X50 YES.	F5G25660	
04267	0	50000	0	00512	X49	CLA SBV2 ARRANGE TO	F5G25670
04270	0	40000	0	00315	ADD ONEA TRY NEXT PREDECESSOR.	F5G25680	
04271	0	02000	0	04260	TRA X48	F5G25690	
04272	0	53400	4	00342	X50	LXA S5K5,4 1 HAS INDEX OF PRED.	F5G25700
04273	-0	50000	0	00575	X52	CAL XV9 EXTRACT	F5G25710
04274	0	77100	4	00003	ARS 3,4 THE	F5G25720	
04275	0	77100	4	00003	ARS 3,4 PERM.	F5G25730	
04276	-0	32000	0	00350	ANA S9K3 NO.	F5G25740	
04277	0	34000	0	00514	CAS SBV4 IS THIS THE PERM. NO.	F5G25750	
04300	0	02000	0	04302	TRA X51	F5G25760	
04301	0	02000	0	04304	TRA X53 YES.	F5G25770	
04302	2	00001	4	04273	X51	TIX X52,4,1	F5G25780
04303	0	07400	4	00004	TSX 4,4 DIAGNOSTIC, ERROR.	F5G25790	
04304	-0	50000	0	00377	X53	CAL XK16 GENERATE	F5G25800
04305	0	77100	4	00003	ARS 3,4 THE LX BIT.	F5G25810	
04306	-0	60200	1	07337	ORS PRED,1 INSERT LX BIT.	F5G25820	
04307	-0	53400	1	00514	X55	LXD SBV4,1 IS THE	F5G25830
04310	0	50000	1	00561	CLA AC1+3,1 I.R.	F5G25840	
04311	0	10000	0	04313	TZE X135 ACTIVE	F5G25850	
04312	0	07400	4	01566	TSX SB,4 YES,RECORD SXD NEEDED.	F5G25860	
04313	-0	53400	2	00602	X135	LXD XV14,2 REPLACE IR	F5G25870
04314	-0	53400	4	00514	LXD SBV4,4 BY EXIT CONDITIONS	F5G25880	
04315	0	50000	2	00506	CLA EX1+3,2 OF THE	F5G25890	
04316	0	60100	4	00430	STO IR1+3,4 REGION	F5G25900	
04317	0	50000	2	00511	X136	CLA ACT1+3,2 IS IR	F5G25910
04320	0	12000	0	04325	TPL X54 ACTIVE AT EXIT	F5G25920	
04321	0	50000	0	00440	CLA S3V4 SET	F5G25930	

04322	-0	76000	0	00003	SSM	ACTIVE	F5G25940
04323	0	40200	0	00316	SUB ONED	INDICATOR	F5G25950
04324	0	60100	4	00561	STO AC1+3,4		F5G25960
04325	-0	53400	2	00602	LXD XV14,2	COUNT TO	F5G25970
04326	2	00001	2	04220	TIX X56,2,1	3	F5G25980
04327	0	07400	4	02042	TSX SG,4	PERMUTE REGION WORD	F5G25990
04330	-0	50000	2	05061	CAL REG,2		F5G26000
04331	-0	32000	0	00404	ANA XK22		F5G26010
04332	0	60200	2	05061	SLW REG,2		F5G26020
04333	0	53400	4	00342	LXA S5K5,4		F5G26030
04334	0	50000	4	00430	XY1 CLA IR1+3,4		F5G26040
04335	0	40200	0	00336	SUB S5K1		F5G26050
04336	-0	10000	0	04341	TNZ XY2		F5G26060
04337	-0	50000	4	00410	CAL XK23+3,4		F5G26070
04340	-0	60200	2	05061	ORS REG,2		F5G26080
04341	2	00001	4	04334	XY2 TIX XY1,4,1		F5G26090
04342	0	02000	0	03077	TRA X3		F5G26100
04343	0	50000	4	00430	X223 CLA IR1+3,4	IS CONTENTS OF IR REAL	F5G26110
04344	0	56000	0	00337	LDQ S5K2		F5G26120
04345	0	04000	0	04325	TLQ X54		F5G26130
04346	0	53400	1	00342	LXA S5K5,1	YES, SET COUNT TO 3	F5G26140
04347	0	34000	1	00506	X225 CAS EX1+3,1	IS CONTENTS SAME AS EXIT CONDITIONS	F5G26150
04350	0	02000	0	04352	TRA X224		F5G26160
04351	0	02000	0	04354	TRA X226	YES	F5G26170
04352	2	00001	1	04347	X224 TIX X225,1,1	COUNT TO 3	F5G26180
04353	0	02000	0	04325	TRA X54		F5G26190
04354	0	50000	0	00333	X226 CLA LK1	REPLACE IR BY E	F5G26200
04355	0	60100	4	00430	STO IR1+3,4		F5G26210
04356	0	02000	0	04325	TRA X54		F5G26220
04357	0	56000	2	00506	X131 LDQ EX1+3,2	IS THE EXIT	F5G26230
04360	0	50000	0	00337	CLA S5K2	CONDITION REAL FOR THIS IR	F5G26240
04361	0	04000	0	04365	TLQ X132		F5G26250
04362	-0	53400	1	00514	X133 LXD SBV4,1	NO	F5G26260
04363	0	07400	4	01661	TSX SC,4	RECORD PART OF LPLST ACTIVE	F5G26270
04364	0	02000	0	04313	TRA X135		F5G26280
04365	0	50000	2	00511	X132 CLA ACT1+3,2	IS THIS IR ACTIVE	F5G26290
04366	0	12000	0	04313	TPL X135	AT EXIT OF REGION	F5G26300
04367	0	02000	0	04362	TRA X133	YES	F5G26310
04370	0	50000	0	00550	X88 CLA LPIND		F5G26320
04371	0	12000	0	04416	TPL XY3	IS THIS A LOOP	F5G26330
04372	0	50000	0	04740	CLA LPLST-1 YES		F5G26340
04373	0	34000	0	00324	CAS S3K2 IS LAST LPLST QUANTITY A BB		F5G26350
04374	0	76100	0	00000	NOP NO		F5G26360
04375	0	02000	0	04377	TRA X125		F5G26370
04376	0	77100	0	00022	ARS 18 YES		F5G26380
04377	0	62100	0	00513	X125 STA SBV3	STORE PRED. NO.	F5G26390
04400	0	50000	0	04741	CLA LPLST		F5G26400
04401	0	07400	4	00070	TSX SE,4 GET INDEX OF 1ST BB IN LOOP.		F5G26410
04402	-0	63400	1	00574	SXD XV8,1	STORE INDEX OF 1ST BB	F5G26420
04403	0	50000	1	06442	CLA BBB,1		F5G26430
04404	0	60200	0	00604	X91 SLW XV16	STORE PRED. NO.	F5G26440
04405	0	07400	4	00055	TSX SE5,4 GET INDEX OF PRED.		F5G26450
04406	0	50000	1	07337	CLA PRED,1 IS		F5G26460
04407	-0	32000	0	00353	ANA SBK2 THIS THE		F5G26470

04410	0	34000	0	00513	CAS SBV3 RIGHT PRED	F5G26480
04411	0	02000	0	04413	TRA X90	F5G26490
04412	0	02000	0	04445	TRA X92 YES	F5G26500
04413	0	50000	0	00604	CLA XV16	F5G26510
04414	0	40000	0	00315	ADD ONEA	F5G26520
04415	0	02000	0	04404	TRA X91	F5G26530
04416	0	53400	1	00342	LXA S5K5,1	F5G26540
04417	0	07400	4	01661	TSX SC,4	F5G26550
04420	2	00001	1	04417	TIX XY4,1,1	F5G26560
04421	0	02000	0	03461	TRA X89	F5G26570
04422	-0	63400	1	04444	SXD X137,1	F5G26580
04423	0	34000	1	00430	CAS IR1+3,1 IS CONTENTS OF IRN EQUAL TO CONTENTS OF ENM	F5G26590
04424	0	02000	0	04426	TRA X98	F5G26600
04425	0	02000	0	04473	TRA X93 YES	F5G26610
04426	-0	50000	0	00340	CAL S5K3 RECORD LX FOR	F5G26620
04427	0	77100	1	00003	ARS 3,1 THIS IR IN THIS	F5G26630
04430	-0	53400	1	00565	LXD XV1,1 REGION.	F5G26640
04431	-0	60200	1	05061	ORS REG,1	F5G26650
04432	-0	63400	4	00602	SXD XV14,4 GET	F5G26660
04433	-0	63400	2	00603	SXD XV15,2 INDEX	F5G26670
04434	0	50000	0	00604	CLA XV16 OF	F5G26680
04435	0	07400	4	00055	TSX SE5,4 PRED.	F5G26690
04436	-0	53400	4	00602	LXD XV14,4	F5G26700
04437	-0	53400	2	00603	LXD XV15,2	F5G26710
04440	-0	50000	0	00377	CAL XK16 RECORD	F5G26720
04441	0	77100	4	00003	ARS 3,4 LX	F5G26730
04442	-0	60200	1	07337	ORS PRED,1 NECESSARY.	F5G26740
04443	-0	53400	1	04444	LXD X137,1	F5G26750
04444	1	00000	0	04464	TXI X96,0,-	F5G26760
04445	-0	53400	2	00574	LXD XV8,2	F5G26770
04446	0	53400	4	00342	LXA S5K5,4 SET COUNT TO 3	F5G26780
04447	0	50000	2	06443	CLA BBB+1,2 GET THE WORD WITH	F5G26790
04450	0	60100	0	00575	STO XV9 PERM. NOS.	F5G26800
04451	-0	50000	0	00575	CAL XV9 GET	F5G26810
04452	0	77100	4	00003	ARS 3,4 INDEX	F5G26820
04453	0	77100	4	00003	ARS 3,4 OF	F5G26830
04454	-0	32000	0	00350	ANA S9K3 THE	F5G26840
04455	-0	73400	1	00000	PDX 0,1 I.R.	F5G26850
04456	-0	50000	2	06444	CAL BBB+2,2 GET ENTRANCE	F5G26860
04457	0	77100	0	00022	ARS 18 REQUIREMENT.	F5G26870
04460	0	34000	0	00337	CAS S5K2 IS ENM REAL	F5G26880
04461	0	76100	0	00000	NOP	F5G26890
04462	0	02000	0	04464	TRA X96 NO	F5G26900
04463	0	02000	0	04422	TRA X97 YES	F5G26910
04464	0	50000	1	00561	CLA AC1+3,1 IS IRN	F5G26920
04465	0	10000	0	04473	TZE X93 ACTIVE	F5G26930
04466	-0	63400	2	00602	SXD XV14,2 YES,	F5G26940
04467	-0	63400	4	00603	SXD XV15,4	F5G26950
04470	0	07400	4	01566	TSX SB,4 RECORD SXD NECESSARY.	F5G26960
04471	-0	53400	2	00602	LXD XV14,2	F5G26970
04472	-0	53400	4	00603	LXD XV15,4	F5G26980
04473	1	77777	2	04474	TXI X93+1,2,-1	F5G26990
04474	2	00001	4	04451	TIX X95,4,1 COUNT TO 3	F5G27000
					ACTIVE PASS.	F5G27010

				FOLLOWS 2 ED LXING PASS.	F5G27020	
04475	0	56000	0	00325	LDQ S3K3 INITIALIZE THE	F5G27030
04476	-0	60000	0	00440	STQ S3V4 LOOP LIST	F5G27040
04477	0	56000	0	00340	LDQ S5K3 AND	F5G27050
04500	-0	60000	0	00437	STQ S3V3 MAKE SURE TAG	F5G27060
04501	-0	60000	0	00521	STQ ACIND SET IND. TO SAY THIS IS ACTIVE PASS	F5G27070
04502	-0	63400	0	00436	SXD S3V2,0 LOCATION GETS SET	F5G27080
04503	0	50000	0	00314	A3 CLA ZERO ARE	F5G27090
04504	0	40100	0	00556	ADM AC1 THERE	F5G27100
04505	0	40100	0	00557	ADM AC2 ANY	F5G27110
04506	0	40100	0	00560	ADM AC3 ACTIVE I.R.S	F5G27120
04507	0	10000	0	03461	TZE X89 LEFT GO TO RENUMBER.	F5G27130
04510	0	07400	4	01023	TSX S3,4 YES. TRY TO GET NEXT TAG.	F5G27140
04511	0	02000	0	04644	TRA A12 COME HERE IF TAG NOT GOT	F5G27150
04512	0	50000	0	01122	CLA S39 COMPUTE LOCATION OF THIS	F5G27160
04513	-0	32000	0	00353	ANA SBK2 TAG=(ADDR. FOLLOWING	F5G27170
04514	0	40000	0	00451	ADD S4V1 TIX BLOCK + L(CM)-CM TAG	F5G27180
04515	0	40200	0	00332	SUB S4K3 - INDEX OF TAG.)	F5G27190
04516	0	76700	0	00022	ALS 18	F5G27200
04517	-0	40000	0	00436	SBM S3V2	F5G27210
04520	0	76500	0	00065	LRS 53	F5G27220
04521	-0	60000	0	00571	STQ XV5	F5G27230
04522	0	22100	0	00371	DVP XK9 FORM LOC/9 AND	F5G27240
04523	-0	60000	0	00567	STQ XV3 REMAINDER	F5G27250
04524	0	60100	0	00570	STO XV4	F5G27260
04525	0	50000	0	00442	CLA TPE IS THIS	F5G27270
04526	0	34000	0	00322	CAS S2K2 AN LX	F5G27280
04527	0	02000	0	04531	TRA A1	F5G27290
04530	0	02000	0	04570	TRA A5 YES	F5G27300
04531	0	34000	0	00376	A1 CAS XK15 IS IT AN LX PRIME	F5G27310
04532	0	02000	0	04534	TRA A20	F5G27320
04533	0	02000	0	04614	TRA A8 YES	F5G27330
04534	0	34000	0	00403	A20 CAS XK21 IS IT A DED	F5G27340
04535	0	02000	0	04537	TRA A21	F5G27350
04536	0	02000	0	04614	TRA A8 YES.	F5G27360
04537	0	34000	0	00373	A21 CAS XK12 IS IT AN ACTIVE INSTR.	F5G27370
04540	0	02000	0	04542	TRA A2	F5G27380
04541	0	02000	0	04570	TRA A5 YES.	F5G27390
04542	0	50000	0	00567	A2 CLA XV3 GET INDEX	F5G27400
04543	0	07400	4	00032	TSX SE4,4 OF STAG ENTRY.	F5G27410
04544	0	53400	2	00570	LXA XV4,2 IS THERE	F5G27420
04545	-0	50000	1	05061	CAL STAG,1 AN LX	F5G27430
04546	0	77100	2	00010	ARS 8,2 IN FRONT	F5G27440
04547	-0	32000	0	00372	ANA XK11 OF	F5G27450
04550	0	34000	0	00372	CAS XK11 THIS INSTR.	F5G27460
04551	0	02000	0	04503	TRA A3	F5G27470
04552	0	02000	0	04554	TRA A4 YES.	F5G27480
04553	0	02000	0	04503	TRA A3	F5G27490
04554	-0	50000	0	00570	A4 CAL XV4 GET	F5G27500
04555	0	76000	0	00006	COM THE	F5G27510
04556	0	73400	2	00000	PAX 0,2 S-TAG	F5G27520
04557	-0	50000	1	05061	CAL STAG,1 IN	F5G27530
04560	0	76700	2	00000	ALS 0,2 DECR.	F5G27540
04561	0	76700	2	00000	ALS 0,2 PART.	F5G27550

04562	-0	32000	0	00350	ANA S9K3		F5G27560
04563	-0	73400	1	00000	PDX 0,1		F5G27570
04564	0	50000	1	00561	CLA AC1+3,1 IS THE CORRESPONDING		F5G27580
04565	0	10000	0	04503	TZE A3 I.R. ACTIVE		F5G27590
04566	0	07400	4	01566	TSX SB,4 YES,RECORD SXD NECESSARY		F5G27600
04567	0	02000	0	04503	TRA A3		F5G27610
04570	0	50000	0	00567	CLA XV3	A5	F5G27620
04571	0	07400	4	00032	TSX SE4,4 GET STAG INDEX.		F5G27630
04572	-0	50000	0	00570	CAL XV4		F5G27640
04573	0	76000	0	00006	COM IS IT		F5G27650
04574	0	73400	2	00000	PAX 0,2 TO		F5G27660
04575	-0	50000	1	05061	CAL STAG,1 AN		F5G27670
04576	0	76700	2	00000	ALS 0,2		F5G27680
04577	0	76700	2	00000	ALS 0,2 ACTIVE		F5G27690
04600	-0	32000	0	00350	ANA S9K3		F5G27700
04601	-0	73400	1	00000	PDX 0,1 IR		F5G27710
04602	0	50000	1	00561	CLA AC1+3,1		F5G27720
04603	0	10000	0	04503	TZE A3		F5G27730
04604	0	50000	1	00430	CLA IR1+3,1 IS IT	A51	F5G27740
04605	0	34000	0	00441	CAS 1TAG	SAME TAU-TAG	F5G27750
04606	0	02000	0	04610	TRA A6		F5G27760
04607	0	02000	0	04612	TRA A7 YES		F5G27770
04610	0	07400	4	01566	TSX SB,4 RECORD SXD NEEDED.	A6	F5G27780
04611	0	02000	0	04503	TRA A3		F5G27790
04612	0	07400	4	01661	TSX SC,4 RECORD CERTAIN PART OF	A7	F5G27800
04613	0	02000	0	04503	TRA A3 LOOP LIST ACTIVE.		F5G27810
04614	0	50000	0	00567	CLA XV3 GET	A8	F5G27820
04615	0	07400	4	00032	TSX SE4,4 THE		F5G27830
04616	-0	50000	0	00570	CAL XV4		F5G27840
04617	0	76000	0	00006	COM S-TAG		F5G27850
04620	0	73400	2	00000	PAX 0,2 OF		F5G27860
04621	-0	50000	1	05061	CAL STAG,1		F5G27870
04622	0	60100	0	00423	STO S1V6		F5G27871
04623	0	76700	2	00000	ALS 0,2 THIS		F5G27880
04624	0	76700	2	00000	ALS 0,2 INSTR.		F5G27890
04625	-0	32000	0	00350	ANA S9K3		F5G27900
04626	-0	73400	1	00000	PDX 0,1		F5G27910
04627	0	10000	0	04503	TZE A3 DOES THIS INSTR HAVE AN S-TAG		F5G27920
04630	0	50000	1	00561	CLA AC1+3,1 YES.		F5G27930
04631	0	10000	0	04503	TZE A3	IS THIS IR ACTIVE	F5G27940
04632	0	50000	0	00314	CLA ZERO		F5G27941
04633	-0	75400	2	00000	PXD 0,2		F5G27942
04634	0	76000	0	00006	COM		F5G27943
04635	-0	73400	4	00000	PDX 0,4		F5G27944
04636	0	50000	0	00423	CLA S1V6		F5G27945
04637	0	77100	4	00010	ARS 8,4		F5G27946
04640	-0	32000	0	00316	ANA ONED		F5G27947
04641	-0	10000	0	04604	TNZ A51		F5G27948
04642	0	07400	4	01661	TSX SC,4 YES,RECORD SECTION OF LPLST ACTIVE		F5G27950
04643	0	02000	0	04503	TRA A3		F5G27960
04644	-0	53400	1	00440	LXD S3V4,1	GET INDEX OF LPLST QUANTITY	F5G27970
04645	0	50000	1	04775	CLA LPLST+S3P1-2,1	GET PREVIOUS LPLST QUANTITY	F5G27980
04646	0	60100	0	00607	STO XV19		F5G27990
04647	0	56000	0	00324	LDQ S3K2	WAS IT A	F5G28000

04650	0	04000	0	04663	TLQ	A28		F5G28010
04651	0	07400	4	00070	TSX	SE,4	YES, WAS THAT	F5G26020
04652	0	50000	1	06442	CLA	BBB,1	BB TERMINATED	F5G28030
04653	0	77100	0	00041	ARS	33	BY A	F5G28040
04654	0	40000	0	00315	ADD	ONEA	GO TO N	F5G28050
04655	-0	10000	0	04663	TNZ	A28		F5G28060
04656	0	53400	1	00342	LXA	S5K5,1	YES	F5G28070
04657	0	50000	1	00561	CLA	AC1+3,1	IS THIS	F5G28080
04660	0	10000	0	04662	TZE	A27	IR ACTIVE	F5G28090
04661	0	07400	4	01566	TSX	SB,4	YES, RECORD SXD NECESSARY	F5G28100
04662	2	00001	1	04657	TIX	A26,1,1		F5G28110
04663	0	50000	0	00444	CLA	S3V5		F5G28120
04664	0	56000	0	00324	LDQ	S3K2	IS THIS	F5G28130
04665	0	04000	0	04700	TLQ	A35	ATR. REGION	F5G28140
04666	-0	32000	0	00336	ANA	S5K1	NO, BB	F5G28150
04667	0	10000	0	04503	TZE	A3		F5G28160
04670	0	76700	0	00003	ALS	3		F5G28170
04671	-0	73400	1	00000	PDX	0,1		F5G28180
04672	-3	00002	1	04674	TXL	AP1,1,2		F5G28190
04673	1	77777	1	04674	TXI	AP1,1,-1		F5G28200
04674	0	50000	1	00561	CLA	AC1+3,1		F5G28210
04675	0	10000	0	04503	TZE	A3		F5G28220
04676	0	07400	4	01566	TSX	SB,4		F5G28230
04677	0	02000	0	04503	TRA	A3		F5G28240
04700	0	07400	4	00070	TSX	SE,4		F5G28250
04701	0	50000	1	06447	CLA	BBB+5,1		F5G28260
04702	-0	73400	2	00000	PDX	0,2	INDEX OF REGION TO 2	F5G28270
04703	0	50000	2	05061	CLA	REG,2	GET REGION	F5G28280
04704	0	60100	0	00607	STO	XV19		F5G28290
04705	0	53400	1	00342	LXA	S5K5,1		F5G28300
04706	-0	50000	0	00607	CAL	XV19		F5G28310
04707	0	76700	1	00003	ALS	3,1		F5G28320
04710	-0	76000	0	00001	PBT		IS THERE AN LX FOR THIS IR	F5G28330
04711	0	02000	0	04715	TRA	A30		F5G28340
04712	0	50000	1	00561	CLA	AC1+3,1	YES	F5G28350
04713	0	10000	0	04715	TZE	A30	IS THIS IR ACTIVE	F5G28360
04714	0	07400	4	01566	TSX	SB,4	YES, RECORD SXD NECESSARY	F5G28370
04715	2	00001	1	04706	TIX	A31,1,1		F5G28380
04716	0	50000	0	00444	CLA	S3V5		F5G28390
04717	0	07400	4	01523	TSX	SA,4	GET THE EXIT CONDITIONS	F5G28400
04720	0	53400	1	00342	LXA	S5K5,1		F5G28410
04721	0	50000	1	00561	CLA	AC1+3,1		F5G28420
04722	0	10000	0	04736	TZE	A32	IS THIS IR ACTIVE	F5G28430
04723	0	50000	1	00506	CLA	EX1+3,1	YES	F5G28440
04724	0	56000	0	00337	LDQ	S5K2		F5G28450
04725	0	04000	0	04730	TLQ	A33	IS THE EXIT CONDITION REAL	F5G28460
04726	0	50000	1	00511	CLA	ACT1+3,1	YES	F5G28470
04727	0	12000	0	04736	TPL	A32	IS THE IR ACTIVE AT EXIT	F5G28480
04730	-0	63400	1	00610	SXD	XV20,1	YES	F5G28490
04731	-0	53400	2	00610	LXD	XV20,2		F5G28500
04732	0	50000	0	00444	CLA	S3V5		F5G28510
04733	0	07400	4	01753	TSX	SD,4	RECORD TR. REG. ACTIVE	F5G28520
04734	-0	53400	1	00610	LXD	XV20,1		F5G28530
04735	0	07400	4	01661	TSX	SC,4	RECORD SECTION OF LPLST ACTIVE	F5G28540

04736	2	00001	1	04721	A32	TIX	A34,1,1	COUNT TO 3	F5G28550
04737	0	02000	0	04503		TRA	A3		F5G28560
04740	0	50000	0	00376	QP	CLA	XK15		F5G28580
04741	-0	32000	0	00020		ANA	16		F5G28590
04742	0	77100	0	00001		ARS	1		F5G28600
04743	0	62200	0	00103		STD	SE21+2		F5G28610
04744	0	10000	0	00030		TZE	R		F5G28620
04745	-0	53400	4	00063		LXD	PREDP+3,4		F5G28630
04746	0	50000	0	00075		CLA	BBBBP+3		F5G28640
04747	-3	00000	4	00030	QP0	TXL	R,4,0		F5G28650
04750	1	77777	4	04751		TXI	QP1,4,-1		F5G28660
04751	-0	63400	4	00104	QP1	SXD	SE21+3,4		F5G28670
04752	0	40200	0	00316		SUB	ONED		F5G28680
04753	0	07400	4	00070		TSX	SE,4		F5G28690
04754	-0	53400	4	00072		LXD	BBBBP,4		F5G28700
04755	1	00111	4	04756		TXI	QP2,4,BBBL-1		F5G28710
04756	-0	63400	4	04767	QP2	SXD	QP4,4		F5G28720
04757	-0	63400	4	04771		SXD	QP5,4		F5G28730
04760	0	53400	4	06442		LXA	BBB,4		F5G28740
04761	-0	63400	4	04775		SXD	QP8,4		F5G28750
04762	-0	53400	4	00104		LXD	SE21+3,4		F5G28760
04763	-0	75400	4	00000	QP3	PXD	0,4		F5G28770
04764	0	07400	4	00056		TSX	SE5+1,4		F5G28780
04765	0	50200	1	07337		CLS	PRED,1		F5G28790
04766	0	73400	4	00000		PAX	0,4		F5G28800
04767	3	00000	4	04772	QP4	TXH	QP6,4,-		F5G28810
04770	1	00112	4	04771		TXI	QP5,4,BBBL		F5G28820
04771	3	00000	4	04773	QP5	TXH	QP7,4,-		F5G28830
04772	0	60100	1	07337	QP6	STO	PRED,1		F5G28840
04773	-0	53400	4	00306	QP7	LXD	SEV2,4		F5G28850
04774	0	50000	0	00072		CLA	BBBBP		F5G28860
04775	-3	00000	4	04747	QP8	TXL	QP0,4,-		F5G28870
04776	1	77777	4	04763		TXI	QP3,4,-1		F5G28880
				04741		ORG	QP+1 LPLST MUST START AT SAME PLACE AS QP AND OTHERS.		F5G28890
							STORAGE ASSIGNMENT (TABLES)		F5G28900
				04741	LPLST	BSS	S3P1 SPACE FOR LOOP LIST TABLE		F5G28910
				05061	REG	BES	FP1 SPACE FOR REGION WORDS		F5G28920
				02712	SPACE	EQU	MSIZE-5-REG STORAGE SPACE LEFT		F5G28930
				00062	STAGL	SYN	STL		F5G28940
05061	0	00000	0	00000	STAG	HTR	-		F5G28950
05062	0	00000	0	00000		HTR	-		F5G28960
05063	0	00000	0	00000		HTR	-		F5G28960
05064	0	00000	0	00000		HTR	-		F5G28960
05065	0	00000	0	00000		HTR	-		F5G28960
05066	0	00000	0	00000		HTR	-		F5G28960
05067	0	00000	0	00000		HTR	-		F5G28960
05070	0	00000	0	00000		HTR	-		F5G28960
05071	0	00000	0	00000		HTR	-		F5G28960
05072	0	00000	0	00000		HTR	-		F5G28960
05073	0	00000	0	00000		HTR	-		F5G28960
05074	0	00000	0	00000		HTR	-		F5G28960
05075	0	00000	0	00000		HTR	-		F5G28960
05076	0	00000	0	00000		HTR	-		F5G28960
05077	0	00000	0	00000		HTR	-		F5G28960

05100	0	00000	0	00000		HTR	-	F5G28960
05101	0	00000	0	00000		HTR	-	F5G28960
05102	0	00000	0	00000		HTR	-	F5G28960
05103	0	00000	0	00000		HTR	-	F5G28960
05104	0	00000	0	00000		HTR	-	F5G28960
05105	0	00000	0	00000		HTR	-	F5G28960
05106	0	00000	0	00000		HTR	-	F5G28960
05107	0	00000	0	00000		HTR	-	F5G28960
05110	0	00000	0	00000		HTR	-	F5G28960
05111	0	00000	0	00000		HTR	-	F5G28960
05112	0	00000	0	00000		HTR	-	F5G28960
05113	0	00000	0	00000		HTR	-	F5G28960
05114	0	00000	0	00000		HTR	-	F5G28960
05115	0	00000	0	00000		HTR	-	F5G28960
05116	0	00000	0	00000		HTR	-	F5G28960
05117	0	00000	0	00000		HTR	-	F5G28960
05120	0	00000	0	00000		HTR	-	F5G28960
05121	0	00000	0	00000		HTR	-	F5G28960
05122	0	00000	0	00000		HTR	-	F5G28960
05123	0	00000	0	00000		HTR	-	F5G28960
05124	0	00000	0	00000		HTR	-	F5G28960
05125	0	00000	0	00000		HTR	-	F5G28960
05126	0	00000	0	00000		HTR	-	F5G28960
05127	0	00000	0	00000		HTR	-	F5G28960
05130	0	00000	0	00000		HTR	-	F5G28960
05131	0	00000	0	00000		HTR	-	F5G28960
05132	0	00000	0	00000		HTR	-	F5G28960
05133	0	00000	0	00000		HTR	-	F5G28960
05134	0	00000	0	00000		HTR	-	F5G28960
05135	0	00000	0	00000		HTR	-	F5G28960
05136	0	00000	0	00000		HTR	-	F5G28960
05137	0	00000	0	00000		HTR	-	F5G28960
05140	0	00000	0	00000		HTR	-	F5G28960
05141	0	00000	0	00000		HTR	-	F5G28960
05142	0	00000	0	00000		HTR	-	F5G28960
05143	0	00000	0	00000		HTR	-	F5G28960
05144	0	50000	1	06444	W0	CLA	BBB+2,1	F5G28980
05145	0	77100	0	00022		ARS	18	F5G28990
05146	0	40200	0	00611		SUB	XV21	F5G29000
05147	0	10000	0	04112		TZE	X42	F5G29010
05150	0	53400	1	00342		LXA	S5K5,1	F5G29020
05151	-0	53400	4	00601		LXD	XV13,4	F5G29030
05152	0	50000	4	06444	W1	CLA	BBB+2,4	F5G29040
05153	0	76500	0	00022		LRS	18	F5G29050
05154	0	40200	0	00611		SUB	XV21	F5G29060
05155	0	10000	0	05165		TZE	W3	F5G29070
05156	0	50000	0	00314		CLA	ZERO	F5G29080
05157	0	76300	0	00022		LLS	18	F5G29090
05160	0	40200	0	00611		SUB	XV21	F5G29100
05161	0	10000	0	05165		TZE	W3	F5G29110
05162	1	77777	4	05163		TXI	W2,4,-1	F5G29120
05163	2	00001	1	05152	W2	TIX	W1,1,1	F5G29130
05164	-3	00000	0	04111		TXL	X36,-,-	F5G29140
05165	-0	63400	2	05171	W3	SXD	W4,2	F5G29150

05166	-0	53400	1	05164	LXD	W2+1,1		F5G29160
05167	0	07400	4	01566	TSX	SB,4		F5G29170
05170	-0	53400	2	05171	LXD	W4,2		F5G29180
05171	-3	00000	0	04111	W4	TXL	X36,-,-	F5G29190
				05172	BSS	PTL1	SPACE FOR PATCHES	F5G29200
				01224	CMTL	SYN	9*SPACE/20/15*15	F5G29210
				05216	CMTAG	BSS	CMTL	F5G29220
				00112	BBBL	SYN	6*SPACE/20/6	F5G29230
				06442	BBB	BSS	BBBL*6+1	F5G29240
				07337	PRED	SYN	BBB+BBBL*6+1	F5G29250
				00435	SPAC1	EQU	MSIZE-4-PRED	F5G29260
				00215	PREDL	EQU	SPAC1/2-1	F5G29270
				07337	BSS	PREDL+1		F5G29280
				00215	SUCCL	SYN	PREDL	F5G29290
				07555	SUCC	BSS	SUCCL+1	F5G29300
							EDITOR RECORD NO. 76	F5G29310
							FOR CONTROL CARD INFORMATION, SEE END OF ASSEMBLY.	F5G29320
							DIAGNOSTIC CALLER FOLLOWS	F5G29340
							PART 1B	F5G29350
							INITIALIZATION AND PRED LIMIT FOR FAST COMPILING.	F5G29360
				07337	ORG	PRED		F5G29370
07337	0	53400	1	00362	I	LXA	FK5,1 CLEAR REG. TABLE	F5G29380
07340	0	76000	0	00012		DCT	CLEAR DIVIDE CHECK LIGHT	F5G29390
07341	0	76100	0	00000		NOP	IN CASE DIVIDE CHECK IS ON	F5G29400
07342	0	50000	0	00314		CLA	ZERO	F5G29410
07343	0	60100	1	05061	I11	STO	REG,1	F5G29420
07344	2	00001	1	07343		TIX	I11,1,1	F5G29430
07345	0	76000	0	00140		PSE	96 TURN OFF SENSE LIGHTS.	F5G29440
07346	0	50000	0	07777		CLA	KEYS+3 INITIALIZE	F5G29441
07347	0	60100	0	00042		STO	STAGP+5 DRUM ADDR. OF STAG	F5G29450
07350	0	50000	0	07775		CLA	KEYS+1	F5G29460
07351	0	60100	0	00065		STO	PREDP+5	F5G29470
07352	0	50000	0	07776		CLA	KEYS+2	F5G29480
07353	0	60100	0	00077		STO	BBBP+5 DRUM ADDR. OF BB.B.	F5G29490
07354	0	50000	0	07774		CLA	KEYS	F5G29500
07355	0	76700	0	00022		ALS	18	F5G29510
07356	0	60100	0	00075		STO	BBBP+3 N0. OF BASIC BLOCKS.	F5G29520
07357	0	40200	0	00316		SUB	ONED	F5G29530
07360	0	07400	4	00070		TSX	SE,4	F5G29540
07361	0	50000	1	06442		CLA	BBB,1	F5G29550
07362	0	62200	0	00051		STD	SUCCP+3 LOCATION OF LAST SUCC	F5G29560
07363	0	76700	0	00022		ALS	18	F5G29570
07364	0	62200	0	00063		STD	PREDP+3 LOCATION OF LAST PRED	F5G29580
07365	0	50000	1	06443		CLA	BBB+1,1	F5G29590
07366	-0	32000	0	00326		ANA	S3K4	F5G29600
07367	0	60100	0	00453		STO	S4V3	F5G29610
07370	0	76500	0	00043		LRS	35	F5G29620
07371	0	22100	0	00331		DVP	S4K2 COMPUTE	F5G29630
07372	-0	60000	0	07450		STQ	IV1 THE	F5G29640
07373	0	10000	0	07375		TZE	I1 LOCATION	F5G29650
07374	0	50000	0	00315		CLA	ONEA WHICH A TAG	F5G29660
07375	0	40000	0	07450	I1	ADD	IV1 WOULD HAVE	F5G29670
07376	0	76500	0	00043		LRS	35 IF IT	F5G29680
07377	0	20000	0	00331		MPY	S4K2 WERE FIRST IN	F5G29690

07400	0	76300	0	00043	LLS 35 THE NEXT RECORD.	F5G29700
07401	0	60100	0	00452	STO S4V2	F5G29710
07402	0	60100	0	00451	STO S4V1	F5G29720
07403	0	50000	1	06443	CLA BBB+1,1 DETERMINE NO.	F5G29730
07404	-0	32000	0	00326	ANA S3K4 OF ENTRIES IN	F5G29740
07405	0	76500	0	00043	LRS 35 STAG.	F5G29750
07406	0	22100	0	00371	DVP XK9	F5G29760
07407	-0	60000	0	07450	STQ IV1	F5G29770
07410	0	10000	0	07412	TZE I10	F5G29780
07411	0	50000	0	00315	CLA ONEA	F5G29790
07412	0	40000	0	07450	I10 ADD IV1 INITIALIZE	F5G29800
07413	0	76700	0	00022	ALS 18	F5G29810
07414	0	60100	0	00040	STO STAGP+3 OF ENTRIES IN STAG	F5G29820
07415	0	76500	0	00043	LRS 35 COMPUTE	F5G29830
07416	0	22100	0	00037	DVP STAGP+2 THE	F5G29840
07417	0	10000	0	07421	TZE I3 DRUM	F5G29850
07420	0	50000	0	00315	CLA ONEA ADDR.	F5G29860
07421	-0	60000	0	07451	I3 STQ IV2 FOLLOWING	F5G29870
07422	0	40000	0	07451	ADD IV2 THE	F5G29880
07423	0	76700	0	00022	ALS 18	F5G29890
07424	0	40000	0	00040	ADD STAGP+3 STAG	F5G29900
07425	0	77100	0	00022	ARS 18	F5G29910
07426	0	40000	0	00042	ADD STAGP+5 TABLE.	F5G29920
07427	0	56000	0	07453	LDQ IK1	F5G29930
07430	0	04000	0	07447	TLQ I7	F5G29940
07431	0	50000	0	00036	I6 CLA STAGP+1	F5G29950
07432	0	34000	0	00040	CAS STAGP+3 ARE WE THRU STORING 0 S	F5G29960
07433	0	02000	0	07435	TRA I4	F5G29970
07434	0	02000	0	07454	TRA I9	F5G29980
07435	0	60100	0	00035	I4 STO STAGP SET N(0) TO OLD N(1)	F5G29990
07436	0	40000	0	00037	ADD STAGP+2 SET N(1) TO MIN (OLD N(1)+N.,	F5G30000
07437	0	56000	0	00040	LDQ STAGP+3 N(L)	F5G30010
07440	-0	60000	0	00036	STQ STAGP+1	F5G30020
07441	0	04000	0	07443	TLQ I5	F5G30030
07442	0	60100	0	00036	STO STAGP+1	F5G30040
07443	0	50000	0	00277	I5 CLA SEK	F5G30050
07444	0	53400	2	07452	LXA IK2,2	F5G30060
07445	0	07400	4	00166	TSX SE26,4 STORE BLOCK OF 0S	F5G30070
07446	0	02000	0	07431	TRA I6	F5G30080
07447	0	07400	4	00004	I7 TSX 4,4 TO DIAGNOSTIC	F5G30090
07450	0	00000	0	00000	IV1	F5G30100
07451	0	00000	0	00000	IV2	F5G30110
07452	0	00000	0	77744	IK2 1-STAGP	F5G30120
07453	0	00000	0	17777	IK1 HTR 8191	F5G30130
07454	0	07400	4	01133	I9 TSX S4,4	F5G30140
07455	0	77200	0	00204	REW INSTTP REWIND THE COMPILED INST TAPE	F5G30150
07456	0	50000	0	07775	CLA KEYS+1	F5G30160
07457	-0	10000	0	04740	TNZ LPLST-1	F5G30170
07460	0	60100	0	00550	STO LPIND	F5G30180
07461	0	60100	0	04740	STO LPLST-1	F5G30190
07462	0	60100	0	04741	STO LPLST	F5G30200
07463	0	50000	0	00323	CLA S3K1	F5G30210
07464	0	60100	0	04742	STO LPLST+1	F5G30220
07465	-0	53400	4	00317	LXD S1K2,4 SKIP DIAGNOSTICS	F5G30230

07466	0	76200	0	00221	I9A	RTB 1	AND ANTIPINGPONG	F5G30240
07467	2	00001	4	07466		TIX I9A,4,1	SIX RECORDS	F5G30250
07470	0	02000	0	02706		TRA F75		F5G30260

EDITOR RECORD NO. 78
FOR CONTROL CARD INFORMATION, SEE END OF ASSEMBLY.
DIAGNOSTIC CALLER FOLLOWS
PART 1C
SUCC LIMIT FOR FAST COMPILING

				04740		ORG	LPLST-1	F5G30320
04740	-0	53400	1	00103	QS	LXD	SE21+2,1	F5G30330
04741	-3	00000	1	02177		TXL	F,1,0	F5G30340
04742	-0	53400	4	00051		LXD	SUCCP+3,4	F5G30350
04743	0	50000	0	00075		CLA	BBBP+3	F5G30360
04744	-3	00000	4	02177	QS0	TXL	F,4,0	F5G30370
04745	1	77777	4	04746		TXI	QS1,4,-1	F5G30380
04746	-0	63400	4	00104	QS1	SXD	SE21+3,4	F5G30390
04747	0	40200	0	00316		SUB	ONED	F5G30400
04750	0	07400	4	00070		TSX	SE,4	F5G30410
04751	-0	53400	4	00072		LXD	BBBP,4	F5G30420
04752	1	00111	4	04753		TXI	QS2,4,BBBL-1	F5G30430
04753	-0	63400	4	04764	QS2	SXD	QS4,4	F5G30440
04754	-0	63400	4	04766		SXD	QS5,4	F5G30450
04755	-0	53400	4	06442		LXD	BBB,4	F5G30460
04756	-0	63400	4	04772		SXD	QS8,4	F5G30470
04757	-0	53400	4	00104		LXD	SE21+3,4	F5G30480
04760	-0	75400	4	00000	QS3	PXD	0,4	F5G30490
04761	0	07400	4	00044		TSX	SE6,4	F5G30500
04762	0	50200	1	07555		CLS	SUCC,1	F5G30510
04763	0	73400	4	00000		PAX	0,4	F5G30520
04764	3	00000	4	04767	QS4	TXH	QS6,4,-	F5G30530
04765	1	00112	4	04766		TXI	QS5,4,BBBL	F5G30540
04766	3	00000	4	04770	QS5	TXH	QS7,4,-	F5G30550
04767	0	60100	1	07555	QS6	STO	SUCC,1	F5G30560
04770	-0	53400	4	00306	QS7	LXD	SEV2,4	F5G30570
04771	0	50000	0	00072		CLA	BBBP	F5G30580
04772	-3	00000	4	04744	QS8	TXL	QS0,4,-	F5G30590
04773	1	77777	4	04760		TXI	QS3,4,-1	F5G30600

EDITOR RECORD NO. 80
FOR CONTROL CARD INFORMATION, SEE END OF ASSEMBLY.
DIAGNOSTIC CALLER FOLLOWS
PART 1D
PRED UNDO FROM FAST COMPILING

				04740		ORG	LPLST-1	F5G30610
04740	-0	53400	1	00103	QPU	LXD	SE21+2,1	F5G30620
04741	-3	00000	1	00030		TXL	R,1,0	F5G30630
04742	-0	53400	4	00063		LXD	PREDP+3,4	F5G30640
04743	0	50000	0	00075		CLA	BBBP+3	F5G30650
04744	-3	00000	4	00030	QPU0	TXL	R,4,0	F5G30660
04745	1	77777	4	04746		TXI	QPU1,4,-1	F5G30670
04746	-0	63400	4	00104	QPU1	SXD	SE21+3,4	F5G30680
04747	0	40200	0	00316		SUB	ONED	F5G30690
04750	0	07400	4	00070		TSX	SE,4	F5G30700
04751	-0	53400	4	00072		LXD	BBBP,4	F5G30710
04752	1	00111	4	04753		TXI	QPU2,4,BBBL-1	F5G30720

04753	-0	63400	4	04764	QPU2	SXD	QPU4,4	F5G30800
04754	-0	63400	4	04766		SXD	QPU5,4	F5G30810
04755	0	53400	4	06442		LXA	BBB,4	F5G30820
04756	-0	63400	4	04772		SXD	QPU8,4	F5G30830
04757	-0	53400	4	00104		LXD	SE21+3,4	F5G30840
04760	-0	75400	4	00000	QPU3	PXD	0,4	F5G30850
04761	0	07400	4	00056		TSX	SE5+1,4	F5G30860
04762	0	50200	1	07337		CLS	PRED,1	F5G30870
04763	0	73400	4	00000		PAX	0,4	F5G30880
04764	3	00000	4	04767	QPU4	TXH	QPU6,4,-	F5G30890
04765	1	00112	4	04766		TXI	QPU5,4,BBBL	F5G30900
04766	3	00000	4	04770	QPU5	TXH	QPU7,4,-	F5G30910
04767	0	60100	1	07337	QPU6	STO	PRED,1	F5G30920
04770	-0	53400	4	00306	QPU7	LXD	SEV2,4	F5G30930
04771	0	50000	0	00072		CLA	BBBP	F5G30940
04772	-3	00000	4	04744	QPU8	TXL	QPU0,4,-	F5G30950
04773	1	77777	4	04760		TXI	QPU3,4,-1	F5G30960

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FOR CONTROL CARD INFORMATION, SEE END OF ASSEMBLY.
DIAGNOSTIC CALLER FOLLOWS
PART 1E
SUCC UNDO FROM FAST COMPILING

				04740	ORG	LPLST-1	F5G31020	
04740	-0	53400	1	00103	QSU	LXD	SE21+2,1	F5G31030
04741	-3	00000	1	02177		TXL	F,1,0	F5G31040
04742	-0	53400	4	00051		LXD	SUCCP+3,4	F5G31050
04743	0	50000	0	00075		CLA	BBBP+3	F5G31060
04744	-3	00000	4	02177	QSU0	TXL	F,4,0	F5G31070
04745	1	77777	4	04746		TXI	QSU1,4,-1	F5G31080
04746	-0	63400	4	00104	QSU1	SXD	SE21+3,4	F5G31090
04747	0	40200	0	00316		SUB	ONED	F5G31100
04750	0	07400	4	00070		TSX	SE,4	F5G31110
04751	-0	53400	4	00072		LXD	BBBP,4	F5G31120
04752	1	00111	4	04753		TXI	QSU2,4,BBBL-1	F5G31130
04753	-0	63400	4	04764	QSU2	SXD	QSU4,4	F5G31140
04754	-0	63400	4	04766		SXD	QSU5,4	F5G31150
04755	-0	53400	4	06442		LXD	BBB,4	F5G31160
04756	-0	63400	4	04772		SXD	QSU8,4	F5G31170
04757	-0	53400	4	00104		LXD	SE21+3,4	F5G31180
04760	-0	75400	4	00000	QSU3	PXD	0,4	F5G31190
04761	0	07400	4	00044		TSX	SE6,4	F5G31200
04762	0	50200	1	07555		CLS	SUCC,1	F5G31210
04763	0	73400	4	00000		PAX	0,4	F5G31220
04764	3	00000	4	04767	QSU4	TXH	QSU6,4,-	F5G31230
04765	1	00112	4	04766		TXI	QSU5,4,BBBL	F5G31240
04766	3	00000	4	04770	QSU5	TXH	QSU7,4,-	F5G31250
04767	0	60100	1	07555	QSU6	STO	SUCC,1	F5G31260
04770	-0	53400	4	00306	QSU7	LXD	SEV2,4	F5G31270
04771	0	50000	0	00072		CLA	BBBP	F5G31280
04772	-3	00000	4	04744	QSU8	TXL	QSU0,4,-	F5G31290
04773	1	77777	4	04760		TXI	QSU3,4,-1	F5G31300

EDITOR RECORD NO. 84
FOR CONTROL CARD INFORMATION, SEE END OF ASSEMBLY.
DIAGNOSTIC CALLER FOLLOWS

F5G31310
F5G31320
F5G31330
F5G31350

PART 2

				PERMUTE RESULTS AND COMBINE BB LIST WITH BB TABLE		
		00317		ORG	C	F5G31360
				HTR	-1	F5G31370
00317	0	00000	0	77777	BLV09	F5G31380
00320	0	76200	0	00223	BL12	F5G31390
00321	0	70000	0	00655	BL13	F5G31400
00322	0	02000	0	00320		F5G31410
00323	0	02000	0	00325		F5G31420
00324	0	02000	0	00320		F5G31430
00325	-0	53400	2	00332	BL6	F5G31440
00326	0	76200	0	00223	BL5	F5G31450
00327	0	53400	1	00332		F5G31460
00330	0	70000	1	00655	BL1	F5G31470
00331	1	77777	1	00330		F5G31480
00332	0	00005	0	00000	CON1	F5G31490
00333	0	76600	0	00333		F5G31500
00334	-0	76000	0	00012		F5G31510
00335	0	02000	0	00435		F5G31520
00336	0	50000	0	07774		F5G31530
00337	0	40200	0	00552		F5G31540
00340	0	60100	0	00566		F5G31550
00341	0	50000	0	00314		F5G31560
00342	0	07400	4	00032		F5G31570
00343	0	50000	1	05061		F5G31580
00344	0	60100	0	00602		F5G31590
00345	0	50000	0	00564		F5G31600
00346	0	56000	0	00566	BL3	F5G31610
00347	0	04000	0	00541		F5G31620
00350	0	40000	0	00315		F5G31630
00351	0	07400	4	00067		F5G31640
00352	0	50000	1	06443		F5G31650
00353	-0	32000	0	00554		F5G31660
00354	0	60100	0	00571		F5G31670
00355	0	50000	1	06442		F5G31680
00356	-0	32000	0	00553		F5G31690
00357	0	60100	0	00570		F5G31700
00360	0	50000	0	00564		F5G31710
00361	0	07400	4	00067		F5G31720
00362	-0	53400	2	00565		F5G31730
00363	0	50000	2	00655		F5G31740
00364	0	60100	1	06447		F5G31750
00365	1	77777	2	00366	BL2	F5G31760
00366	-0	63400	2	00565		F5G31770
00367	0	50000	1	06443		F5G31780
00370	0	60100	0	00572		F5G31790
00371	-0	63400	1	00567		F5G31800
00372	0	50000	1	06443		F5G31810
00373	-0	32000	0	00554		F5G31820
00374	0	40200	0	00571		F5G31830
00375	0	40200	0	00315		F5G31840
00376	0	73400	2	00000		F5G31850
00377	-0	63400	2	00600		F5G31860
00400	0	50000	1	06442		F5G31870
00401	-0	32000	0	00553		F5G31880
				ANA	2AMSK	F5G31890

00402	0	60100	0	00575	BL9	STO BLV01		F5G31900
00403	0	34000	0	00570		CAS BLV5	IS THIS PRED IN SAME BB	F5G31910
00404	0	02000	0	00406		TRA BL7	YES	F5G31920
00405	0	02000	0	00440		TRA BL01	NO	F5G31930
00406	0	07400	4	00055	BL7	TSX SE5,4	YES, GET INDEX OF PRED	F5G31940
00407	-0	50000	0	00555		CAL SALM		F5G31950
00410	0	60200	0	00574		SLW BLV9		F5G31960
00411	-0	50000	1	07337		CAL PRED,1		F5G31970
00412	0	60200	0	00573		SLW BLV8	STODRE OLD PRED WORD	F5G31980
00413	0	32000	0	00574		ANS BLV9	INT INITIALIZE NEW PRED WORD	F5G31990
00414	-0	53400	2	00550		LXD 2LD3,2	SET COUNT TO 3	F5G32000
00415	-0	50000	0	00572	BL8	CAL BLV7	PLACE THE	F5G32010
00416	0	77100	2	00003		ARS 3,2	PERMUTATION NO.	F5G32020
00417	0	77100	2	00003		ARS 3,2	IN REGISTER 4	F5G32030
00420	-0	32000	0	00550		ANA 2LD3		F5G32040
00421	-0	73400	4	00000		PDX 0,4		F5G32050
00422	-0	50000	0	00573		CAL BLV8	PERMUTE	F5G32060
00423	0	76700	2	00003		ALS 3,2	THE LXD	F5G32070
00424	-0	32000	0	00557		ANA BITMK	AND SXD	F5G32080
00425	0	77100	4	00003		ARS 3,4	BITS IN THE	F5G32090
00426	-0	60200	0	00574		ORS BLV9	PRED ENTRY	F5G32100
00427	2	00001	2	00415		TIX BL8,2,1	COUNT TO 3	F5G32110
00430	0	50000	0	00574		CLA BLV9		F5G32120
00431	0	60100	1	07337		STO PRED,1	STORE PRED ENTRY WITH PERMUTED BITS	F5G32130
00432	0	50000	0	00575		CLA BLV01	ARRANGE TO CONSIDER	F5G32140
00433	0	40000	0	00315		ADD ONEA	NEXT PRED ENTRY	F5G32150
00434	0	02000	0	00402		TRA BL9		F5G32160
00435	0	76400	0	00203	BL4	BST BLT	TAPE CHECK BACKSPACE TAPE	F5G32170
00436	2	00001	2	00326		TIX BL5,2,1	IRY 5 TIMES	F5G32180
00437	0	07400	4	00004		TSX 4,4 THEN	START DIAGNOSTIC.	F5G32190
00440	-0	53400	1	00600	BL01	LXD BLV05,1		F5G32200
00441	-2	00001	1	00504	BL03	TNX BL04,1,1	IS THERE ANOTHER TAG IN BB	F5G32210
00442	-0	53400	2	00577		LXD BLV04,2	YES	F5G32220
00443	-2	00001	2	00466		TIX BL02,2,1	HAVE WE EXHAUSTED STAG WORD	F5G32230
00444	-0	63400	1	00600		SXD BLV05,1	YES, STORE COUNT OF NO. OF TAGS	F5G32240
00445	-0	53400	2	00603		LXD BLV08,2	STORE	F5G32250
00446	0	50000	0	00602		CLA BLV07	OLD PERMUTED	F5G32260
00447	0	60100	2	05061		STO STAG,2	STAG WORD	F5G32270
00450	0	50000	0	00314		CLA ZERO		F5G32280
00451	0	60100	0	00602		STO BLV07		F5G32290
00452	0	50000	0	00576		CLA BLV03	GET	F5G32300
00453	0	07400	4	00032		TSX SE4,4	NEXT	F5G32310
00454	-0	63400	1	00603		SXD BLV08,1	STAG	F5G32320
00455	-0	50000	1	05061		CAL STAG,1	WORD	F5G32330
00456	0	60200	0	00601		SLW BLV06	STORL STAG WORD	F5G32340
00457	-0	32000	0	00560		ANA LMSK	AND	F5G32350
00460	0	60200	0	00602		SLW BLV07	INITIALIZE NEW STAG WORD	F5G32360
00461	0	50000	0	00576		CLA BLV03	INCREASE THE	F5G32370
00462	0	40000	0	00315		ADD ONEA	STAG WORD NO.	F5G32380
00463	0	60100	0	00576		STO BLV03		F5G32390
00464	-0	53400	2	00551		LXD 2LD9,2	RESET COUNT TO 9	F5G32400
00465	-0	53400	1	00600		LXD BLV05,1	RESTORE 1	F5G32410
00466	-0	63400	2	00577	BL02	SXD BLV04,2	STORE COUNTER	F5G32420
00467	-0	50000	0	00601		CAL BLV06		F5G32430

00470	0	76700	0	00002		ALS 2		F5G32440
00471	0	60200	0	00601		SLW BLV06		F5G32450
00472	-0	32000	0	00550		ANA 2LD3	EXTRACT TAG	F5G32460
00473	-0	73400	4	00000		PDX 0,4		F5G32470
00474	-0	50000	0	00572		CAL BLV7	PERMUTE	F5G32480
00475	0	77100	4	00003		ARS 3,4		F5G32490
00476	0	77100	4	00003		ARS 3,4	THE	F5G32500
00477	-0	32000	0	00550		ANA 2LD3	TAG	F5G32510
00500	0	77100	2	00012		ARS 10,2		F5G32520
00501	0	77100	2	00012		ARS 10,2		F5G32530
00502	-0	60200	0	00602		ORS BLV07	FORM NEW TAG WORD	F5G32540
00503	0	02000	0	00441		TRA BL03		F5G32550
00504	-0	53400	1	00567	BL04	LXD BLV4,1	GET INDEX OF BB	F5G32560
00505	0	50000	1	06442		CLA BBB,1	IS	F5G32570
00506	0	77100	0	00041		ARS 33	THIS	F5G32580
00507	0	40000	0	00315		ADD ONEA	A GO N	F5G32590
00510	-0	10000	0	00516		TNZ BL07	NO	F5G32600
00511	0	50000	0	00317		CLA BLV09	YES, STORE BB NO.	F5G32610
00512	0	76700	0	00022		ALS 18	OF LAST	F5G32620
00513	0	62200	1	06443		STD BBB+1,1	GO N ENCOUNTERED	F5G32630
00514	0	50000	0	00564		CLA BLV1	STORE PRESENT	F5G32640
00515	0	60100	0	00317		STO BLV09	BB NO.	F5G32650
00516	-0	53400	2	00550	BL07	LXD 2LD3,2	SET COUNT TO 3	F5G32660
00517	-0	50000	0	00572	BL09	CAL BLV7		F5G32670
00520	0	77100	2	00003		ARS 3,2		F5G32680
00521	0	77100	2	00003		ARS 3,2	GET PERMUTATION NO.	F5G32690
00522	-0	32000	0	00550		ANA 2LD3		F5G32700
00523	-0	73400	4	00000		PDX 0,4		F5G32710
00524	0	50000	1	06444		CLA BBB+2,1	PERMUTE	F5G32720
00525	0	60100	4	00564		STO EXCO,4	ENTRANCE-EXIT REQUIREMENTS	F5G32730
00526	1	77777	1	00527	BL08	TXI BL08+1,1,-1		F5G32740
00527	2	00001	2	00517		TIX BL09,2,1	COUNT TO 3	F5G32750
00530	-0	53400	2	00550		LXD 2LD3,2	PLACE PERMUTED	F5G32760
00531	0	50000	2	00564	BL10	CLA EXCO,2	ENTRANCE-EXIT COND.	F5G32770
00532	0	60100	1	06441		STO BBB-1,1	BACK IN BB	F5G32780
00533	1	77777	1	00534	BL11	TXI BL11+1,1,-1		F5G32790
00534	2	00001	2	00531		TIX BL10,2,1	COUNT TO 3	F5G32800
00535	0	50000	0	00564	BL05	CLA BLV1	PREPARE TO DEAL WITH	F5G32810
00536	0	40000	0	00315		ADD ONEA	WITH NEXT BB	F5G32820
00537	0	60100	0	00564		STO BLV1		F5G32830
00540	0	02000	0	00346		TRA BL3		F5G32840
00541	0	07400	4	00067	BL06	TSX SE1,4	PUT EDN MARK INTO THE DUMMEY BB	F5G32850
00542	0	50000	0	00556		CLA EN2MK		F5G32860
00543	0	60100	1	06447		STO BBB+5,1		F5G32870
00544	0	50000	0	00602		CLA BLV07	STORE	F5G32880
00545	-0	53400	2	00603		LXD BLV08,2	OLD	F5G32890
00546	0	60100	2	05061		STO STAG,2	STAG WORD	F5G32900
00547	0	02000	0	00030		TRA R	READ NEXT PART	F5G32910
00550	0	00003	0	00000	2LD3	0,0,3		F5G32920
00551	0	00011	0	00000	2LD9	0,0,9		F5G32930
00552	0	00000	0	00002	TWO	2		F5G32940
00553	0	00000	0	77777	2AMSK	-1	ADDRESS MASK	F5G32950
00554	0	00000	7	77777	RMSK	-1,-1	RIGHT HALF MASK	F5G32960
00555	-377770077777				SALM	OCT -377770077777	MS MASK OUT SXD AND LXD PRED RESULTS	F5G32970

00556	3	77777	7	77777	EN2MK	PTH	-1,-1,-1	PUT IN LOCATION OF DUMMEY BB	F5G32980
00557	0	00004	4	00000	BITMK		0,4,4	MASK TO EXTRACT ONE SXD AND LXD BIT	F5G32990
00560	-377777	7000000			LMSK	OCT	-377777000000		F5G33000
				00564	EXCO	BES	3	THE ENTRANCE-EXIT CONDITIONS PERMUTED	F5G33010
00564	0	00000	0	00000	BLV1			BBNO.	F5G33020
00565	0	00000	0	00000	BLV2			INDEX IN BB LIST	F5G33030
00566	0	00000	0	00000	BLV3			TEST CONSTANT	F5G33040
00567	0	00000	0	00000	BLV4			INDEX OF BB	F5G33050
00570	0	00000	0	00000	BLV5			1ST PRED NO. IN NEXT BB	F5G33060
00571	0	00000	0	00000	BLV6			UST TAG IN NEXT BB,	F5G33070
00572	0	00000	0	00000	BLV7			PERMUTTTION NOS.	F5G33080
00573	0	00000	0	00000	BLV8			OLD PRED ENTRY	F5G33090
00574	0	00000	0	00000	BLV9			NEW, PERMUTED, PRED ENTRY	F5G33100
00575	0	00000	0	00000	BLV01			CURRENT PRED. NO.	F5G33110
00576	0	00000	0	00000	BLV03			NO. OF STAG WORD, INITIALLY ZERO	F5G33120
00577	0	00000	0	00000	BLV04			COUNTER TO 9, INITIALLY ZERO	F5G33130
00600	0	00000	0	00000	BLV05			COUNT OF NO. OF TAGS IN BB	F5G33140
00601	0	00000	0	00000	BLV06			STAG WORD	F5G33150
00602	0	00000	0	00000	BLV07			NEW, PERMUTED, STAG WORD	F5G33160
00603	0	00000	0	00000	BLV08			INDEX OF OLD STAG WORD	F5G33170
				00604		BSS	PTL2	SPACE FOR PATCHES	F5G33180
00655	0	00000	0	00000	BLIST				F5G33190
								EDITOR RECORD NO. 86	F5G33200
								FOR CONTROL CARD INFORMATION, SEE END OF ASSEMBLY.	F5G33210
								DIAGNOSTIC CALLER FOLLOWS	F5G33230
								PART 3	F5G33240
								CHANGE LXD AND SXD RESULTS TO BE COMPATIBLE WITH GO TO	F5G33250
								N RESTRICTION. MODIFY ASSIGN CONSTANT TABLE.	F5G33260
								C CONTAINS THE BB NO. OF THE GO TO N	F5G33270
				00320	ORG	C+1			F5G33280
00320	0	76200	0	00222	START	RTB	ACTPE	LOCATE THE END OF FILE BEFORE ASSIGN CONSTANT	F5G33290
00321	0	70000	0	00573	CPY	ACV12			F5G33300
00322	0	02000	0	00320	TRA	START			F5G33310
00323	0	02000	0	00330	TRA	RDIN			F5G33320
00324	0	02000	0	00320	TRA	START			F5G33330
00325	0	76400	0	00202	ERR	BST	ACTPE	BACKSPACE TAPE TO TRY AGAIN	F5G33340
00326	2	00001	2	00331	TIX	AAC2,2,1		COUNT TO 5	F5G33350
00327	0	07400	4	00004	TSX	4,4		TO DIAGNOSTIC	F5G33360
00330	-0	53400	2	00555	RDIN	LXD	3LD3,2		F5G33370
00331	0	76200	0	00222	AAC2	RTB	ACTPE		F5G33380
00332	0	70000	0	00573	CPY	ACV12		COPY THE EXTRA WORD	F5G33390
00333	0	53400	1	00314	LXA	ZERO,1			F5G33400
00334	0	70000	1	00647	AAC1	CPY	ASCON,1		F5G33410
00335	1	77777	1	00334	TXI	AAC1,1,-1			F5G33420
00336	0	07400	4	00004	TSX	4,4			F5G33430
00337	0	76600	0	00333	IOD			CHECK REDUNDANCY BITS	F5G33440
00340	-0	76000	0	00012	RTT				F5G33450
00341	0	02000	0	00325	TRA	ERR		THERR IS AN ERROR	F5G33460
00342	0	76200	0	00222	RTB	ACTPE			F5G33470
00343	0	76200	0	00222	RTB	ACTPE			F5G33480
00344	0	76200	0	00222	RTB	ACTPE			F5G33490
00345	0	76600	0	00333	IOD				F5G33500
00346	-0	63400	1	00527	SXD	ACV1,1		O.K. STORE RECORD OF NO. OF ENTRIES	F5G33510
00347	-0	63400	1	00541	SXD	AC22,1			F5G33520

00350	0	50000	0	00317	CLA C		F5G33530
00351	0	56000	0	00560	LDQ ACK1	GET BB NO. OF 1ST GO TO N	F5G33540
00352	0	04000	0	00520	TLQ AC16	WAS THIS THE LAST GO TO N	F5G33550
00353	0	40000	0	00315	ADD ONEA	NO	F5G33560
00354	0	07400	4	00067	TSX SE1,4		F5G33570
00355	-0	50000	1	06442	CAL BBB,1	FIND NO. OF 1ST SUCC IN NEXT BB	F5G33580
00356	0	77100	0	00022	ARS 18		F5G33590
00357	0	62100	0	00562	STA ACV3		F5G33600
00360	0	50000	0	00317	CLA C		F5G33610
00361	0	07400	4	00067	TSX SE1,4		F5G33620
00362	0	50000	0	00314	CLA ZERO	CLEAR THE COMBINED SXDD CASE	F5G33630
00363	0	60100	0	00563	STO ACV4		F5G33640
00364	-0	50000	1	06442	CAL BBB,1	FIND THE NO. OF 1ST SUCC IN THIS BB	F5G33650
00365	0	77100	0	00022	ARS 18		F5G33660
00366	-0	32000	0	00552	ANA AMSK		F5G33670
00367	0	60100	0	00561	STO ACV2		F5G33680
00370	0	34000	0	00562	CAS ACV3	IS THIS SUCC IN SAME BB	F5G33690
00371	0	02000	0	00373	TRA AAC3	YES	F5G33700
00372	0	02000	0	00506	TRA AC14	NO	F5G33710
00373	0	76700	0	00022	ALS 18		F5G33720
00374	0	07400	4	00044	TSX SE6,4	YES GET BB NO. OF SUCESSOR	F5G33730
00375	-0	50000	1	07555	CAL SUCC,1		F5G33740
00376	0	62100	0	00567	STA ACV8		F5G33750
00377	0	40000	0	00315	ADD ONEA	FIN NO. OF 1ST PRED ENTRY NEXT BBB	F5G33760
00400	0	07400	4	00067	TSX SE1,4		F5G33770
00401	0	50000	1	06442	CLA BBB,1		F5G33780
00402	0	62100	0	00565	STA ACV6		F5G33790
00403	0	50000	0	00314	CLA ZERO		F5G33800
00404	0	60100	0	00571	STO ACV10	PRESET COMBINED LXD CASE TO 0	F5G33810
00405	0	50000	0	00567	CLA ACV8	FIND NO. OF 1ST PRED IN THIS BB	F5G33820
00406	0	07400	4	00067	TSX SE1,4		F5G33830
00407	-0	50000	1	06442	CAL BBB,1		F5G33840
00410	-0	32000	0	00552	ANA AMSK		F5G33850
00411	0	62100	0	00570	STA ACV9	RECORD 1ST PRED FOR FUTURE USE	F5G33860
00412	0	62100	0	00566	STA ACV7		F5G33870
00413	0	34000	0	00565	CAS ACV6	IS THIS PRED IN SAME BB	F5G33880
00414	0	02000	0	00416	TRA AC4		F5G33890
00415	0	02000	0	00444	TRA AC8	NO	F5G33900
00416	0	07400	4	00055	TSX SE5,4	IS THIS THE TRANSFER FROM CURRENTLY CONSIDERED	F5G33910
00417	-0	50000	1	07337	CAL PRED,1	ED GO TO NP	F5G33920
00420	-0	32000	0	00552	ANA AMSK		F5G33930
00421	0	40200	0	00317	SUB C		F5G33940
00422	-0	10000	0	00427	TNZ AC5	IF NOT SKIP THE ORING OF SXD CASE	F5G33950
00423	-0	50000	1	07337	CAL PRED,1	OR THE SXD CASE INTO COMBINED SXD CASE	F5G33960
00424	-0	60200	0	00563	ORS ACV4		F5G33970
00425	-0	50000	0	00554	CAL NTMSK		F5G33980
00426	0	32000	1	07337	ANS PRED,1		F5G33990
00427	-0	50000	1	07337	CAL PRED,1	IS THE BB WHICH IS PREDECESSOR	F5G34000
00430	-0	63400	1	00572	SXD ACV11,1	A GO TO N	F5G34010
00431	0	07400	4	00067	TSX SE1,4		F5G34020
00432	0	50000	1	06442	CLA BBB,1		F5G34030
00433	0	77100	0	00041	ARS 33		F5G34040
00434	0	40000	0	00315	ADD ONEA		F5G34050
00435	-0	10000	0	00441	TNZ AC6		F5G34060

00436	-0	53400	2	00572	LXD ACV11,2	YES, OR THE LXD XCASE INTO THE	F5G34070	
00437	-0	50000	2	07337	CAL PRED,2	COMBINED LXD CASE	F5G34080	
00440	-0	60200	0	00571	ORS ACV10		F5G34090	
00441	0	50000	0	00566	AC6	CLA ACV7	F5G34100	
00442	0	40000	0	00315	ADD ONEA		F5G34110	
00443	0	02000	0	00412	TRA AC7		F5G34120	
00444	-0	50000	0	00571	AC8	CAL ACV10	IS THE COMBINED LXD CASE ZERO	F5G34130
00445	-0	32000	0	00553	ANA TMSK		F5G34140	
00446	0	10000	0	00503	TZE AC12		F5G34150	
00447	0	50000	0	00567	CLA ACV8	NO, HAS THIS BB ALREADY BEEN	F5G34160	
00450	0	07400	4	00067	TSX SE1,4	CONSIDERED	F5G34170	
00451	0	56000	1	06442	LDQ BBB,1	AS A SUCCESSOR TO	F5G34180	
00452	-0	77300	0	00024	RQL 20	A GO TO N	F5G34190	
00453	0	16200	0	00455	TQP AC18		F5G34200	
00454	0	02000	0	00503	TRA AC12		F5G34210	
00455	0	50000	0	00557	AC18	CLA LT1	F5G34220	
00456	-0	60200	1	06442	ORS BBB,1	RECORD THAT THIS BB HAS BEEN CONSIDERED AS	F5G34230	
00457	0	50000	0	00570	CLA ACV9	ECT..PE PREPARE TO SCAN ALL PRED ENTRYS	F5G34240	
00460	0	62100	0	00566	AC11	STA ACV7	F5G34250	
00461	0	34000	0	00565	CAS ACV6	IS THIS PRED IN SAME BB	F5G34260	
00462	0	02000	0	00464	TRA AC9		F5G34270	
00463	0	02000	0	00531	TRA AC19	NO	F5G34280	
00464	0	07400	4	00055	AC9	TSX SE5,4	DETERMINE IF THE BB WHICH	F5G34290
00465	-0	63400	1	00572	SXD ACV11,1	IS THE PREDECESSOR OF THIS ONE	F5G34300	
00466	0	50000	1	07337	CLA PRED,1	IS A GO TO N	F5G34310	
00467	0	07400	4	00067	TSX SE1,4		F5G34320	
00470	0	50000	1	06442	CLA BBB,1		F5G34330	
00471	0	77100	0	00041	ARS 33		F5G34340	
00472	0	40000	0	00315	ADD ONEA		F5G34350	
00473	-0	10000	0	00500	TNZ AC10		F5G34360	
00474	-0	53400	2	00572	LXD ACV11,2	IT IS A GO TO N	F5G34370	
00475	0	50000	0	00571	CLA ACV10	REPLACE LXD CASE BY THE	F5G34380	
00476	-0	32000	0	00553	ANA TMSK	COMBINED LXD CASE	F5G34390	
00477	-0	60200	2	07337	ORS PRED,2		F5G34400	
00500	0	50000	0	00566	AC10	CLA ACV7	ARRANGE TO TREAT NEXT PRED ENTRY	F5G34410
00501	0	40000	0	00315	ADD ONEA		F5G34420	
00502	0	02000	0	00460	TRA AC11		F5G34430	
00503	0	50000	0	00561	AC12	CLA ACV2	F5G34440	
00504	0	40000	0	00315	ADD ONEA	ARRANGE TO TREAT NEXT SUCC ENTRY	F5G34450	
00505	0	02000	0	00367	TRA AC13		F5G34460	
00506	0	50000	0	00317	AC14	CLA C	STORE COMBINED	F5G34470
00507	0	07400	4	00067	TSX SE1,4	SXDCASE IN PREFIX	F5G34480	
00510	0	50000	0	00563	CLA ACV4	OF 2ED WORD OF BBB ENTRY	F5G34490	
00511	0	76700	0	00017	ALS 15		F5G34500	
00512	0	63000	1	06443	STP BBB+1,1		F5G34510	
00513	0	50000	1	06443	CLA BBB+1,1	GET NEXT GO TO N NUMBER	F5G34520	
00514	0	77100	0	00022	ARS 18		F5G34530	
00515	-0	32000	0	00552	ANA AMSK		F5G34540	
00516	0	60100	0	00317	STO C		F5G34550	
00517	0	02000	0	00351	TRA AC15		F5G34560	
00520	0	76600	0	00222	AC16	WTB ACTPE	WRITE ASSIGN CONSTANTS BACK ON TAPE	F5G34570
00521	0	53400	1	00314	LXA ZERO,1		F5G34580	
00522	-0	53400	2	00527	LXD ACV1,2		F5G34590	
00523	0	70000	0	00573	CPY ACV12		F5G34600	

00524	-3	00000	2	00030	TXL R,2,0	IF NO ASSIGN CONST., GO TO NEXT PART	F5G34610
00525	0	70000	1	00647	AC17	CPY ASCON,1	F5G34620
00526	1	77777	1	00527	TXI ACV1,1,-1		F5G34630
00527	-3	00000	1	00030	ACV1	TXL R,1,SET	F5G34640
00530	0	02000	0	00525	TRA AC17		F5G34650
00531	0	50000	0	00567	AC19	CLA ACV8	F5G34660
00532	0	07400	4	00067	TSX SE1,4		F5G34670
00533	0	53400	2	00314	LXA ZERO,2		F5G34680
00534	0	50000	1	06447	AC25	CLA BBB+5,1	F5G34690
00535	0	34000	2	00647	AC23	CAS ASCON,2	F5G34700
00536	0	02000	0	00540	TRA AC20	IS THIS ASSIGN CONST. EQUAL TO THE LOCATION OF 1ST INST IN BB	F5G34710
00537	0	02000	0	00543	TRA AC24	YES	F5G34720
00540	-3	00000	2	00542	AC20	TXL AC21,2,0	F5G34730
00541	-3	00000	2	00503	AC22	TXL AC12,2,SET	F5G34740
00542	1	77777	2	00535	AC21	TXI AC23,2,-1	F5G34750
00543	-0	50000	0	00571	AC24	CAL ACV10	F5G34760
00544	-0	32000	0	00553	ANA TMSK	REPLACE ASSIGN CONST. BY NEW LOCATION SYMBOL	F5G34770
00545	0	77100	0	00005	ARS 5		F5G34780
00546	0	40000	0	00567	ADD ACV8		F5G34790
00547	0	36100	0	00556	ACL LXDC		F5G34800
00550	0	60200	2	00647	SLW ASCON,2		F5G34810
00551	0	02000	0	00534	TRA AC25		F5G34820
00552	0	00000	0	77777	AMSK	HTR -1	F5G34830
00553	0	00000	7	00000	TMSK	HTR 0,-1	F5G34840
00554	-3	77770	7	77777	NTMSK	OCT 777770777777	F5G34850
00555	0	00005	0	00000	3LD3	0,0,5	F5G34860
00556	+15	00000	0	00000	LXDC	OCT 150000000000	F5G34870
00557	0	00000	1	00000	LT1	HTR 0,1	F5G34880
00560	+0	00000	7	77776	ACK1	OCT 77776	F5G34890
00561	0	00000	0	00000	ACV2	NO. OF CURRENT SUCC. OF THIS BB IN ADDR.	F5G34900
00562	0	00000	0	00000	ACV3	NO. OF 1ST SUCC IN NEXT BB IN ADDR	F5G34910
00563	0	00000	0	00000	ACV4	COMBINED SXD CASE LAST OCTAL DIGIT IN DECR	F5G34920
00564	0	00000	0	00000	ACV5	NO. OF CURRENT PRED IN ADDR	F5G34930
00565	0	00000	0	00000	ACV6	NO. OF 1ST PRED IN NEXT BB IN ADDR	F5G34940
00566	0	00000	0	00000	ACV7	MO. OF CURRENT PRED IN THIS BB IN ADDR	F5G34950
00567	0	00000	0	00000	ACV8	BB NO. OF SUCCESSOR IN ADDR	F5G34960
00570	0	00000	0	00000	ACV9	NO. OF 1ST PRED IN THE SUCCESSOR BB IN ADDR	F5G34970
00571	0	00000	0	00000	ACV10	THE COMBINED LXDC CASE	F5G34980
00572	0	00000	0	00000	ACV11	TEMP. STORE FOR PRED TABLE INDEX AT AC5	F5G34990
00573	0	00000	0	00000	ACV12	EXTRA WORD FROM ASSIGN CONSTANT RECORD	F5G35000
00574	0	00000	0	00000	ACV13	TEMP. STORE FOR LOCATION OF 1ST INST. IN BB	F5G35010
				00647	ASCON	BES PTL3	F5G35020
						SPACE FOR PATCHES	F5G35030
						EDITOR RECORD NO. 88	F5G35040
						FOR CONTROL CARD INFORMATION, SEE END OF ASSEMBLY.	F5G35060
						DIAGNOSTIC CALLER FOLLOWS	F5G35070
						PART 4	F5G35080
						COMPILE INSTRUCTIONS FROM PREVIOUS RESULTS	F5G35090
						CONSTANTS	F5G35100
				00317	ORG	C	F5G35110
00317	0	00000	0	00003	L3	3	F5G35120
00320	0	00000	0	00004	L4	4	F5G35130
00321	0	00000	0	00007	L7	7	F5G35140
00322	0	00000	0	00023	L19	19	F5G35150
				00316	LD1	SYN ONED	

00323	0 00002 0 00000	LD2	0,0,2		F5G35160
00324	0 00003 0 00000	LD3	0,0,3		F5G35170
00325	0 00004 0 00000	LD4	0,0,4		F5G35180
00326	0 00007 0 00000	LD7	0,0,7		F5G35190
00327	0 00010 0 00000	LD8	0,0,8		F5G35200
00330	0 00011 0 00000	LD9	0,0,9		F5G35210
00331	0 00014 0 00000	LD12	0,0,12		F5G35220
00332	0 00000 7 00000	LT7	0,7		F5G35230
00333	0 00000 0 77754	LM20	-20		F5G35240
00334	0 00000 0 77774	LM4	-4		F5G35250
00335	0 77777 0 00000	DECMK	0,0,-1	DECREMENT MASK	F5G35260
00336	3 77777 7 77777	ENDMK	PTH -1,-1,-1		F5G35270
00337	0 00000 0 77777	ADDMK	-1		F5G35280
00340	+0000000777770	STMSK	OCT 777770		F5G35290
00341	0 00007 7 00000	PRMK	0,7,7	MASK FOR PRED RESULTS	F5G35300
00342	0 00000 7 77777	TAGMK	-1,-1	MASK FOR TAU- TAGS	F5G35310
00343	-3 77777 0 00000	LFTMSK	MTH 0,0,-1		F5G35320
	00343	SMK3	SYN LFTMSK		F5G35330
00344	634743000000	LTPL	BCD 1TPL000		F5G35340
00345	436747000000	LLXP	BCD 1LXP000		F5G35350
00346	627045000000	LSYN	BCD 1SYN000		F5G35360
00347	242524000000	LDED	BCD 1DED000		F5G35370
00350	635121000000	LTRA	BCD 1TRA000		F5G35380
00351	636267000000	LTSX	BCD 1TSX000		F5G35390
00352	226262000000	LBSS	BCD 1BSS000	BSS IN BCD.	F5G35391
00353	+076225000000	LPSE	OCT 76225000000		F5G35400
00354	+060000000000	GSYM	OCT 60000000000	GARBAGE SYMBLE	F5G35410
00355	0 00004 0 00004	T4SYM	PZE 4,0,4	TAG 4 AND RELATIVE PART 4	F5G35420
00356	0 00000 0 00004		4	4 NUMBERS TO CONVERT S-TAG	F5G35430
00357	0 00000 0 00002		2		F5G35440
00360	0 00000 0 00001		1		F5G35450
00361	0 00000 0 00000	VSTAG	PZE 0		F5G35460
00362	0 00000 0 00001	RECSC	HTR RECNO	ADDR, NO. OF RECS. BROUGHT IN , C.I.T.	F5G35470
00363	0 02000 0 00000	LCOUT	TRA -	TRANSFER TO EXIT ROUTINE	F5G35480
00364	+035121000000		OCT 35121000000	TRA OP CODE	F5G35490
00365	+041104000000		OCT 41104000000	PSE-TRA	F5G35500
00366	-033642000000		OCT -33642000000	DCT-PSE	F5G35510
00367	-024000000000		OCT -24000000000	RTT-DCT	F5G35520
00370	+027642000000		OCT 27642000000	MSE-RTT	F5G35530
00371	-007100000000		OCT -71000000000	TZE-MSE	F5G35540
00372	-032154000000		OCT -32154000000	HPR-TZE	F5G35550
00373	+031316000000	LNTOP	OCT 31316000000	TSX-HPR	F5G35560
00374	+035121000000		OCT 35121000000		F5G35570
00375	+001622000000		OCT 16220000000	TXL-TRA	F5G35580
00376	-031772000000		OCT -31772000000	HPR-TXL	F5G35590
00377	+031400000000	LTROP	OCT 31400000000	TTR-HPR	F5G35600
00400	-370000000000	FSTLT	OCT -370000000000		F5G35610
00401	-230000000000	FSTT	OCT -230000000000		F5G35620
00402	+170000000000	PCC	OCT 170000000000	MEANS LOCATION OF THIS INST.	F5G35630
00403	-300000000000	PFXMK	OCT -300000000000		F5G35640
00404	+000770000000	XXPSX	OCT 7700000000	CONSTANTS TO TEST PSE ADDR.	F5G35650
00405	+000160000000	XX16X	OCT 1600000000		F5G35660
00406	+000360000000	XX360	OCT 3600000000		F5G35670
00407	+0000000777777	SHK1	OCT 777777	CONST. TO EXTRACT R. HALF WORD	F5G35680

00320	SHK2	SYN	L4		F5G35690	
00410	+1600000000000	SIK2	OCT	1600000000000	I.D. FOR LOCATION OF SXD	F5G35700
00411	6267240000000	SIK3	BCD	1SXD000	SXD IN BCD	F5G35710
	00411	LSXD	SYN	SIK3		F5G35720
	00410	IDSXD	SYN	SIK2		F5G35730
00412	0 00000 0	00144	SKK1	LCLST		F5G35740
	00350	SLK1	SYN	LTRA	TRA IN BCD	F5G35750
00413	+1500000000000	SMK1	OCT	1500000000000	I.D. FOR LOCATION OF LX0	F5G35760
00414	4367240000000	SMK2	BCD	1LXD000	LXD IN BCD	F5G35770
	00414	LLXD	SYN	SMK2		F5G35780
					FOR SMK3 SEE LFTMSK	F5G35790
00415	+1400000000000	SMK4	OCT	1400000000000	I.D. FOR TAU-TAG	F5G35800
	00413	SLK2	SYN	SMK1		F5G35810
	00413	IDLXD	SYN	SMK1		F5G35820
	00415	IDTAG	SYN	SMK4		F5G35830
00416	-0000000000000	Z1K3	OCT	-0		F5G35840
	00416	MZE	SYN	Z1K3		F5G35850
00417	0 77776 0 00000	Z2K1		0,0,-2	THE INDEXES NEEDED TO REFER	F5G35860
00420	0 77772 0 00000			0,0,-6	TO THE BOTTOM POSITIONS	F5G35870
00421	0 77766 0 00000			0,0,-10	IN LIST1, LIST2, LIST3, RESPT.	F5G35880
00422	0 00007 0 00003	Z2K2	HTR	3,0,7	NO. OF LISTS, NO. OF CASES	F5G35890
00423	0 00000 0 00001	CASE	HTR	1		F5G35900
00424	0 00000 0 00002			2		F5G35910
00425	0 00000 0 00004			4		F5G35920
00426	0 00000 0 00003			3		F5G35930
00427	0 00000 0 00005			5		F5G35940
00430	0 00000 0 00006			6		F5G35950
00431	0 00000 0 00007			7		F5G35960
00432	+000032212110	Z2K3	OCT	32212110	CONST. TO DETERMINE NO. 1 S IN 3 BITS	F5G35970
00433	+0000300000000	Z2K4	DEC	3B14		F5G35980
00434	0 00000 0 00007	Z2K5	HTR	7		F5G35990
00435	0 00000 0 77777	Z4K1		-1		F5G36000
00436	0 00000 0 00000	Z4K2		0	INDEX OF ST SXD CASE	F5G36010
00437	0 00000 0 01000	LNSX0	NSXD*4		NO. OF SXD IN SXD LIST	F5G36020
00440	0 77770 0 00000	Z7K1		0,0,-8	INDEXES OF ASSOCIATED SXD CASES	F5G36030
00441	0 77764 0 00000			0,0,-12		F5G36040
00442	0 77760 0 00000			0,0,-16		F5G36050
					THE DEFINITION OF TEMP. AND VARIABLE STORAGE LOCATIONS	F5G36060
00443	-0 00001 0 00000	BBNO	MZE	0,0,1	DECR., CURRENT BB NO. BEING SCANNED	F5G36070
00444	0 00000 0 00000	NXTLOC			LOCATUON OF 1ST INST OF THE BB	F5G36080
00445	0 00000 0 00000	OUTBX			TEMP. STORAGE OF RETURN INDEXES	F5G36090
00446	0 00000 0 00000	ERRBX			ERROR INDICATOR	F5G36100
00447	0 00000 0 00000	BBOX			TEMP. STORE FOR INDEXES, MAINLY 2	F5G36110
00450	0 00000 0 00000	BBOX1			ANOTHER OF SAME	F5G36120
00451	0 00000 0 00000	ABOX			TEMP. STORE , INDEX 1	F5G36130
00452	0 00000 0 00000	TAG			TAU-TAG FROM AN INST.	F5G36140
00453	0 00000 0 00000	STAGN1			WORD FROM STAG SHIFTED LEFT MULTIPLE OF I	F5G36150
00454	0 00000 0 00000	STAGN2			SAME WORD SHIFTED BY ONES	F5G36160
00455	0 00000 0 00000	9CNT			COUNT TO 9, 9 TAGS IN STAG WORD	F5G36180
00456	-0000000000001	STGWD	DEC	-1	NO. OF STAG ENTRY BEING CONSIDERED	F5G36180
00457	0 00000 0 00000	TMP10			TEMP. STORE , LASTS ONLY 10 INSTRS.	F5G36190
00460	0 00000 0 00000	CIND			+ OR - MEANS IR4 ISNT OR IS NECESSARY	F5G36200
00461	-0 00000 0 00000	CPIND	MZE		+ OR - MEANS COMPILE/DONT COMPILE	F5G36210
00462	0 00000 0 00000	ARG1			U 1ST ARGUMENT FOR SUBROUTINES	F5G36220

00463	0	00000	0	00000	MBOX		NO. OF TRANSFERS IN GO TO VECTOR	F5G36230
00464	0	00000	0	00000	SUCNO		NO. OF A SUCCESSOR, GOV ROUTINE	F5G36240
00465	0	00000	0	00000	SXD0		LXD CASE IN DECR., PRED NO. IN ADDR.	F5G36250
00466	0	00000	0	00000	SXD1		3 TAU TAGS WHICH MUST BE STORED	F5G36260
00467	0	00000	0	00000	SXD2		FROM IR1,2,3	F5G36270
00470	0	00000	0	00000	SXD3		RESPT.	F5G36280
00471	0	00000	0	00000	SADV1		RETURN INDEX	F5G36290
00472	0	00000	0	00000	SADV2		LOCATION OF 1ST INST IN SUCCESSOR BB	F5G36300
00473	0	00000	0	00000	SADV3		NO. OF CURRENT PRED	F5G36310
00474	0	00000	0	00000	SADV4		NO. OF 1ST PRED IN SUCCESSOR BB	F5G36320
00475	0	00000	0	00000	SADV5		THE SUCCESSOR BB NO.	F5G36330
00476	0	00000	0	00000	SHV1		RETURN INDEX	F5G36340
00477	0	00000	0	00000	SHV2		ENTRY FROM PRED.	F5G36350
00500	0	00000	0	00000	SIV1		INDEX OF SXD CASE RELATIVE TO SXST	F5G36360
00501	0	00000	0	00000	SIV2		RETURN INDEX	F5G36370
00502	0	00000	0	00000	SIV3		LOCATION OF 1ST INST. IN SXD GROUP	F5G36380
00503	0	00000	0	00000	SIV4		TEMP. STORE	F5G36390
00504	0	00000	0	00000	SIV5		STORE FOR INDEX OF TAU TAG IN SXD CASE	F5G36400
00505	0	00000	0	00000	SIV6		STOER FOR THE TAG	F5G36410
00506	0	00000	0	00000	SJV1		LXD CASE IN DECR.	F5G36420
00507	0	00000	0	00000	SJV2		RETURN INDEX	F5G36430
00510	0	00000	0	00000	SJV3			F5G36440
				00655	CLST	BES LCLST	THE NEW LIST OF COMPILED INST.	F5G36450
00655	0	00144	0	00000	SKV1	0,0,LCLST	INDEX FOR NEXT ENTRY IN CLST	F5G36460
						SKV1 COMES ALREADY INITIALIZED		F5G36470
00656	0	00000	0	00000	SLV1		RETURN INDEX	F5G36480
00657	0	00000	0	00000	SLV2		LOCATION TO BE ATTACHED TO TRA	F5G36490
00660	0	00000	0	00000	SLV3		+ OR - MEANS ISNT OR IS HANGING TRA0	F5G36500
00661	0	00000	0	00000	SMV1		RETURN INDEX	F5G36510
00662	0	00000	0	00000	SMV2		TAG TO BE COMPILED	F5G36520
00663	0	00000	0	00000	SMV3		STORE INDEX OF QUANTITY IN LIST	F5G36530
00664	0	00000	0	00000	SMV4		LOCATION , TEMP. STORE	F5G36540
00665	0	00000	0	00000	Z1V2		NO. OF 1ST PRED. IN NEXT BB	F5G36550
00666	0	00000	0	00000	Z1V3		NO. OF PRED BEING CONSIDERED	F5G36560
00667	0	00000	0	00000	Z1V5		THE CASES	F5G36570
00670	0	00000	0	00000	Z1V8		THE LOC. OF 1ST PRED IN BB, USED IN Z4	F5G36580
00671	0	00000	0	00000	Z2V1		IN DECREMENTS, THE INDEXES	F5G36590
00672	0	00000	0	00000			THE TOP ENTRIES	F5G36600
00673	0	00000	0	00000			IN THE 3 LXD LISTS	F5G36610
00674	0	00000	0	00000	Z2V2		IN ADDR., NO. OF 1S IN DIFFERENCE	F5G36620
00675	0	00000	0	00000	Z2V3		IN DECR., INDEX OF LIST GIVING MIN. DIFFERENC	F5G36630
				00676	LIST1	BSS 4		F5G36640
				00702	LIST2	BSS 4		F5G36650
				00706	LIST3	BSS 4		F5G36660
				00715	LLIND	BES 3	+ OR - MEANS LIST NOT TO BE OR TOBE COMPILED	F5G36670
00715	0	00000	0	00000	Z4V1		TEMP. STORE , LXD CASE IN ADDR.	F5G36680
00716	0	00000	0	00000	Z5V1		INDEX IN SYN TABLE	F5G36690
00717	0	00000	0	00000	Z7V1		INDEX OF LIST	F5G36700
00720	0	00000	0	00000	Z7V2		+ OR - MEANS 1ST OR 2ED TIME THRU	F5G36710
				00735	NDINS	BES 12	BLOCK FOR 3 EXTRA COMPILED INST.	F5G36720
				01101	INST	BES RECNO*100	THE BLOCK FOR 1HE COMPILED INSTR	F5G36730
01101	-0	00000	0	00000	SXST	MZE	- OR + MEANS NO SEQUENTIAL TRANSFER OR S. T.	F5G36740
				01102		BSS 3		F5G36750
							THE SXD INST. ASSOCIATED WITH SEQUENTIAL TRANSFER	F5G36760

	01105	SXAS0	BSS	4		ASSOCIATED WITH 0 LXD CASE	F5G36770	
	01111	SXAS1	BSS	4		WITH 1ST LXD LIST	F5G36780	
	01115	SXAS2	BSS	4		2ED LIST	F5G36790	
	01121	SXAS3	BSS	4		3RD	F5G36800	
	01125	SXAS	BSS	4*NSXD		THE LIST OF SXD INST.	F5G36810	
02125	-0	00000	0	00000	SYN	MZE	SYN CARD TABLE STORED BACKWARD	F5G36820
							WHEN ENTERED WITH PRESENT BB NO. IN ADDR OF ARG1 AND BBNO.	F5G36830
							OFA SUCCESSOR BB IN ADDR. OF AC, SAD FIGURES OUT WHAT THE ADF	F5G36840
							DRESS OF CORRESPONDING TRANSFER INST. SHOULD BE AND RETURNS	F5G36850
							WITH THE ADDR IN LOGICAL AC	F5G36860
02126	-0	63400	4	00471	SAD	SXD SADV1,4	STORE RETURN	F5G36870
02127	-0	32000	0	00337		ANA ADDMK	STORE THE SUCC. NO.	F5G36880
02130	0	60100	0	00475		STO SADV5		F5G36890
02131	0	07400	4	00067		TSX SE1,4		F5G36900
02132	0	50000	1	06447		CLA BBB+5,1		F5G36910
02133	0	60100	0	00472		STO SADV2		F5G36920
02134	0	50000	1	06442		CLA BBB,1		F5G36930
02135	-0	32000	0	00337		ANA ADDMK		F5G36940
02136	0	60200	0	00474		SLW SADV4		F5G36950
02137	0	60200	0	00473	SAD1	SLW SADV3		F5G36960
02140	0	07400	4	00055		TSX SE5,4		F5G36970
02141	0	50000	1	07337		CLA PRED,1		F5G36980
02142	-0	32000	0	00337		ANA ADDMK	IS THIS THE CORRECT	F5G36990
02143	0	40200	0	00462		SUB ARG1	PRED ENTRY	F5G37000
02144	0	10000	0	02150		TZE SAD2		F5G37010
02145	-0	50000	0	00473		CAL SADV3	NO, TRY NEXT RETURN	F5G37020
02146	0	40000	0	00315		ADD ONEA		F5G37030
02147	0	02000	0	02137		TRA SAD1		F5G37040
02150	-0	50000	1	07337	SAD2	CAL PRED,1	IS THE SXD CASE 0	F5G37050
02151	-0	32000	0	00326		ANA LD7		F5G37060
02152	0	10000	0	02160		TZE SAD3	YES	F5G37070
02153	0	50000	0	00473		CLA SADV3	NO, FORM THE SYMBOLIC ADDR.	F5G37080
02154	0	40200	0	00474		SUB SADV4	AS ID FOR SXD PLUS NO. OF PRED WITHIN	F5G37090
02155	0	76700	0	00012		ALS 10	THE BB * 1024 PLUS BB NO.	F5G37100
02156	0	40000	0	00410		ADD IDSXD		F5G37110
02157	0	02000	0	02165		TRA SAD6		F5G37120
02160	0	50000	1	07337	SAD3	CLA PRED,1	IS THE LXD CASE ZERO	F5G37130
02161	-0	32000	0	00332		ANA LT7		F5G37140
02162	0	10000	0	02170		TZE SAD4		F5G37150
02163	0	77100	0	00005		ARS 5	NO, FORM TH SYMBOLIC ADDR.	F5G37160
02164	0	40000	0	00413		ADD IDLXD	AS 1024* LXD CASE PLUS BB NO. PLUS	F5G37170
02165	0	40000	0	00475	SAD6	ADD SADV5	I. D. FOR AN LXD	F5G37180
02166	-0	53400	4	00471	SAD5	LXD SADV1,4		F5G37190
02167	0	02000	4	00001		TRA 1,4		F5G37200
02170	-0	50000	0	00472	SAD4	CAL SADV2		F5G37210
02171	0	02000	0	02166		TRA SAD5		F5G37220
							THIS ROUTINE COMPILES CURRENT INST) IF INDICATOR IN CPIND	F5G37230
							INDICATES IT SHOULD BE	F5G37240
02172	0	50000	0	00461	SCMI	CLA CPIND	SHOULD INST. BE COMPILED	F5G37250
02173	0	12000	0	02206		TPL SCMI1		F5G37260
02174	-0	63400	4	00457		SXD TMP10,4	YES, COMPILE THE INST	F5G37270
02175	0	50000	2	01101		CLA INST,2		F5G37280
02176	0	07400	4	02367		TSX SK,4		F5G37290
02177	0	50000	2	01100		CLA INST-1,2		F5G37300

02200	0	07400	4	02367	TSX	SK,4		F5G37310
02201	0	50000	2	01077	CLA	INST-2,2		F5G37320
02202	0	07400	4	02367	TSX	SK,4		F5G37330
02203	0	50000	2	01076	CLA	INST-3,2		F5G37340
02204	0	07400	4	02367	TSX	SK,4		F5G37350
02205	-0	53400	4	00457	LXD	TMP10,4		F5G37360
02206	-0	76000	0	00003	SSM		SCMI1	F5G37370
02207	0	60100	0	00461	STO	CPIND	RECORD INST SHOULD BE COMPILED	F5G37380
02210	0	02000	4	00001	TRA	1,4		F5G37390
						DETERMINE AN SXD CASE SUBROUTINE		F5G37400
02211	-0	63400	4	00476	SH	SXD SHV1,4	STORE RETURN	F5G37410
02212	0	53400	4	00320	LXA	SHK2,4	CLEAR	F5G37420
02213	0	56000	0	00314	LDQ	ZERO	THE	F5G37430
02214	-0	60000	4	00471	SH1	STQ SXD0+4,4	SXD	F5G37440
02215	2	00001	4	02214	TIX	SH1,4,1	POSITIONS 0-3	F5G37450
02216	0	62100	0	00465	STA	SXD0	STORE THE PRED NO.	F5G37460
02217	0	07400	4	00055	TSX	SE5,4	GET INDEX OF PRED	F5G37470
02220	0	50000	1	07337	CLA	PRED,1	GET AND	F5G37480
02221	0	60100	0	00477	STO	SHV2	STORE PRED ENTRY	F5G37490
02222	0	07400	4	00067	TSX	SE1,4	GET INDEX OF BBB TABLE ENTRY	F5G37500
02223	-0	53400	4	00324	LXD	LD3,4	NO, SET COUNT TO 3	F5G37510
02224	0	56000	0	00477	SH2	LDQ SHV2	IS	F5G37520
02225	-0	77300	4	00022	RQL	18,4	SXD REQUIRED	F5G37530
02226	0	16200	0	00232	TQP	SH3	FOR THIS I.R.	F5G37540
02227	0	50000	1	06444	CLA	BBB+2,1	YES, GET AND	F5G37550
02230	-0	32000	0	00342	ANA	TAGMK	EXTRACT THE	F5G37560
02231	0	60100	4	00471	STO	SXD1+3,4	EXIT CONDITIONS	F5G37570
02232	1	77777	1	02233	SH3	TXI SH3+1,1,-1	DOWN THE EXIT CONDITIONS	F5G37580
02233	2	00001	4	02224	TIX	SH2,4,1	COUNT TO 3	F5G37590
02234	-0	50000	0	00477	SH4	CAL SHV2	GET	F5G37600
02235	-0	32000	0	00332	ANA	LT7	AND STORE	F5G37610
02236	0	76700	0	00003	ALS	3	LXD CASE	F5G37620
02237	0	62200	0	00465	STD	SXD0		F5G37630
02240	-0	53400	4	00476	LXD	SHV1,4		F5G37640
02241	0	02000	4	00001	TRA	1,4	RETURN	F5G37650
						COMPILE AN SXD CASE SUBROUTINE		F5G37660
02242	-0	63400	4	00501	SI	SXD SIV2,4	STORE RETURN	F5G37670
02243	-0	63400	1	00500	SXD	SIV1,1	STORE INDEX OF SXD CASE	F5G37680
02244	0	07400	4	02426	TSX	SL1,4	RECORD ANY HANGING TRANSFER	F5G37690
02245	-0	50000	0	00443	CAL	BBNO		F5G37700
02246	0	77100	0	00022	ARS	18		F5G37710
02247	0	60100	0	00657	STO	SLV2	STORE BB NO.	F5G37720
02250	0	07400	4	00067	TSX	SE1,4	GET INDEX OF BB	F5G37730
02251	0	50000	1	06442	CLA	BBB,1		F5G37740
02252	-0	32000	0	00337	ANA	ADDMK		F5G37750
02253	0	60100	0	00503	STO	SIV4	STORE LOC. OF 1ST PRED IN BB	F5G37760
02254	-0	53400	1	00500	LXD	SIV1,1	FORM	F5G37770
02255	0	50000	1	01101	CLA	SXST,1	LOC. OF THIS PRED -	F5G37780
02256	-0	32000	0	00337	ANA	ADDMK	LOC. OF 1ST PRED IN BB	F5G37790
02257	0	40200	0	00503	SUB	SIV4		F5G37800
02260	0	76700	0	00012	ALS	10		F5G37810
02261	0	40000	0	00657	ADD	SLV2		F5G37820
02262	0	40000	0	00410	ADD	SIK2		F5G37830
02263	0	60100	0	00657	STO	SLV2	STORE THE LOC. OF 1ST SXD	F5G37840

02264	-0	53400	2	00324		LXD LD3,2		F5G37850
02265	0	50000	1	01102	SI2	CLA SXST+1,1		F5G37860
02266	0	10000	0	02305		TZE SI1	IS THIS TAG 0	F5G37870
02267	-0	63400	1	00504		SXD SIV5,1	NO, PRESERVE IN0EX 1	F5G37880
02270	0	60100	0	00505		STO SIV6	PRESERVE THE TAG	F5G37890
02271	0	50000	0	00657		CLA SLV2	PUT LOCATION WORD ON TAPE	F5G37900
02272	0	07400	4	02367		TSX SK,4		F5G37910
02273	0	50000	0	00314		CLA ZERO	AND RESET TO 0	F5G37920
02274	0	60100	0	00657		STO SLV2		F5G37930
02275	0	50000	0	00411		CLA SIK3	PUT SXD ON TAPE	F5G37940
02276	0	07400	4	02367		TSX SK,4		F5G37950
02277	0	50000	0	00505		CLA SIV6	14*2**-5+TAU-TAG IS	F5G37960
02300	0	40000	0	00415		ADD SMK4	SYMBOLIC ADDRESS	F5G37970
02301	0	07400	4	02367		TSX SK,4		F5G37980
02302	0	50000	2	00361		CLA VSTAG,2		F5G37990
02303	0	07400	4	02367		TSX SK,4	PUT S-TAG ON TAPE	F5G38000
02304	-0	53400	1	00504		LXD SIV5,1		F5G38010
02305	1	77777	1	02306	SI1	TXI SI1+1,1,-1		F5G38020
02306	2	00001	2	02265		TIX SI2,2,1	COUNT TO 3, FORM N+1	F5G38030
02307	-0	53400	1	00500		LXD SIV1,1		F5G38040
02310	0	50000	1	01101		CLA SXST,1		F5G38050
02311	-0	73400	2	00000		PDX 0,2		F5G38060
02312	-3	00000	2	02321		TXL SI3,2,0	IS THE LXD CASE 0	F5G38070
02313	-3	00000	1	02325		TXL SI4,1,0	NO, IS THIS THE ST POSITION	F5G38080
02314	3	77757	1	02334		TXH SI6,1,-16-1	IS THIS ASSOCIATED WITH A LIST	F5G38090
02315	0	77100	0	00022	SI5	ARS 18	NO	F5G38100
02316	0	07400	4	02403		TSX SL,4	COMPILE A TRA TO LXD CASE	F5G38110
02317	-0	53400	4	00501		LXD SIV2,4		F5G38120
02320	0	02000	4	00003		TRA 3,4	RETURN TO LOC. OF TSX + 3	F5G38130
02321	0	50200	0	00315	SI3	CLS ONEA	RECORD THAT THERE IS	F5G38140
02322	0	60100	0	00660		STO SLV3	A HANGING TRA TO 0 CASE	F5G38150
02323	-0	53400	4	00501		LXD SIV2,4		F5G38160
02324	0	02000	4	00001		TRA 1,4	RETURN TO LOC. OF TSX +1	F5G38170
02325	0	60100	0	00465	SI4	STO SXD0	STORE LXD CASE AS ARG FOR SJ	F5G38180
02326	0	07400	4	02336		TSX SJ,4	IS SXD CASE INST POS. ASSOC. WITH LIST	F5G38190
02327	0	00000	0	00000			SHOULDN'T BE WITH CASE 0	F5G38200
02330	0	02000	0	02334		TRA SI6	YES	F5G38210
02331	-0	53400	1	00500		LXD SIV1,1	NO	F5G38220
02332	0	50000	1	01101		CLA SXST,1		F5G38230
02333	0	02000	0	02315		TRA SI5	GO TO COMPILE TRA TO LXD CASE	F5G38240
02334	-0	53400	4	00501	SI6	LXD SIV2,4	RETURN TO 2 FOLLOWING TSX WITH	F5G38250
02335	0	02000	4	00002		TRA 2,4	INDEX OF TOP QUANTITY IN 1 AND LIST INDEX IN2	F5G38260
							DETERMINE IF THE SXO CASE IS ASSOCIATED WITH AN LXD LIST	F5G38270
02336	-0	63400	4	00507	SJ	SXD SJV2,4		F5G38280
02337	0	50000	0	00465		CLA SXD0		F5G38290
02340	-0	32000	0	00335		ANA DECMK		F5G38300
02341	0	60100	0	00506		STO SJV1		F5G38310
02342	0	10000	0	02363		TZE SJ3	IS THIS THE 0 LXD CASE	F5G38320
02343	-0	53400	4	00314		LXD ZERO,4	NO, SET COUNT TO 3, N TO 1	F5G38330
02344	-0	53400	2	00324		LXD LD3,2	2 HAS THE COUNTER	F5G38340
02345	0	50000	4	01111	SJ2	CLA SXAS1,4		F5G38350
02346	0	12000	0	02357		TPL SJ1	DOES THE LIST ALREADY HAVE SXD	F5G38360
02347	0	50000	2	00674		CLA Z2V1+3,2	NO	F5G38370
02350	-0	73400	1	00000		PDX 0,1	GET INDEX OF TOP QUANTITY	F5G38380

02351	0	50000	1	00676	CLA LIST1,1		F5G38390
02352	0	76700	0	00022	ALS 18		F5G38400
02353	0	40200	0	00506	SUB SJV1	IS THIS CASE SAME AS CASE HEADUNG LIST N	F5G38410
02354	-0	10000	0	02357	TNZ SJ1		F5G38420
02355	-0	53400	4	00507	LXD SJV2,4	YES	F5G38430
02356	0	02000	4	00002	TRA 2,4	RETURN, INDEX OF TOP OF LIST IN 1	F5G38440
02357	1	77777	4	02360	TXI SJ1+1,4,-1		F5G38450
02360	2	00001	2	02345	TIX SJ2,2,1	COUNT TO 3	F5G38460
02361	-0	53400	4	00507	LXD SJV2,4		F5G38470
02362	0	02000	4	00003	TRA 3,4		F5G38480
02363	-0	53400	4	00507	LXD SJV2,4		F5G38490
02364	0	50000	0	01105	CLA SXAS0		F5G38500
02365	0	12000	4	00003	TPL 3,4		F5G38510
02366	0	02000	4	00001	TRA 1,4		F5G38520
					PUT WORD OF COMPILED INST ON TAPE		F5G38530
02367	-0	53400	1	00655	LXD SKV1,1		F5G38540
02370	0	60100	1	00655	STO CLST,1	STORE THE WORD IN CLST	F5G38550
02371	2	00001	1	02401	TIX SK1,1,1	COUNT NO OF WORDS IS CLST FULL	F5G38560
02372	0	53400	1	00412	LXA SKK1,1	YES	F5G38570
02373	-0	63400	1	00655	SXD SKV1,1	RESET THE INDEX	F5G38580
02374	0	76600	0	00223	WTB OTAPE	WRITE THE BLOCK ON	F5G38590
02375	0	70000	1	00655	CPY CLST,1	THE OUTPUT TAPE	F5G38600
02376	2	00001	1	02375	TIX SK2,1,1		F5G38610
02377	0	76600	0	00333	IOD		F5G38620
02400	0	02000	4	00001	TRA 1,4		F5G38630
02401	-0	63400	1	00655	SXD SKV1,1	STORE INDEX OF NEXT WORD	F5G38640
02402	0	02000	4	00001	TRA 1,4		F5G38650
					SUBROUTINE FOR COMPILING TRA TO LXD CASE		F5G38660
02403	-0	32000	0	00434	ANA Z2K5	FORM	F5G38670
02404	0	76700	0	00012	ALS 10	THE	F5G38680
02405	0	40000	0	00413	ADD SLK2	ADDRESS	F5G38690
02406	0	60100	0	00657	STO SLV2	OF	F5G38700
02407	0	50000	0	00443	CLA BBNO	THE	F5G38710
02410	-0	32000	0	00335	ANA DECMK		F5G38720
02411	0	77100	0	00022	ARS 18	TRA IN	F5G38730
02412	-0	60200	0	00657	ORS SLV2	SLV2	F5G38740
02413	-0	63400	4	00656	SXD SLV1,4	STORE RETURJ	F5G38750
02414	0	50000	0	00314	CLA ZERO	PUT 0 LOCATION	F5G38760
02415	0	07400	4	02367	TSX SK,4	ON TAPE	F5G38770
02416	0	50000	0	00350	CLA LTRA		F5G38780
02417	0	07400	4	02367	TSX SK,4	PUT SYMB. ADDR. ON TAPE	F5G38790
02420	0	50000	0	00657	CLA SLV2		F5G38800
02421	0	07400	4	02367	TSX SK,4	PUT SYMB. ADDR ON TAPE	F5G38810
02422	0	50000	0	00314	CLA ZERO		F5G38820
02423	0	07400	4	02367	TSX SK,4	ANOTHER 0	F5G38830
02424	-0	53400	4	00656	LXD SLV1,4		F5G38840
02425	0	02000	4	00001	TRA 1,4		F5G38850
					SUBROUTINE FOR PUTTING HANGING TRA 0 ON TAPE		F5G38860
02426	0	50000	0	00660	CLA SLV3		F5G38870
02427	0	12000	4	00001	TPL 1,4	RETURN IF THERE IS NO HANGING TRA0	F5G38880
02430	-0	63400	4	00656	SXD SLV1,4	OTHERWISE , STORE RETURN AND	F5G38890
02431	0	50000	0	00443	CLA BBNO	GET	F5G38900
02432	0	07400	4	00070	TSX SE,4	THE	F5G38910
02433	0	50000	1	06447	CLA BBB+5,1	SYMBOLIC LOCATION	F5G38920

02434	0	60100	0	00657	STO	SLV2	OF 1ST INST IN BB AND	F5G38930
02435	0	50000	0	00314	CLA	ZERO	STORE IN SYNBOLIS ADDR WORD	F5G38940
02436	0	60100	0	00660	STO	SLV3	SET INDICATOR TO SAY NO HANGING TRA	F5G38950
02437	0	02000	0	02414	TRA	SL2		F5G38960
						COMPILE AN LXD LIST		F5G38970
02440	0	50000	2	00715	SM	CLA LLIND,2	IMMEDIATELY RETURN IF LIST IS	F5G38980
02441	0	12000	4	00001	TPL	1,4	ALREADY COMPOLED	F5G38990
02442	0	60200	2	00715	SLW	LLIND,2	RECORD LIST ALREADY COMPILED	F5G39000
02443	-0	63400	4	00661	SXD	SMV1,4	STORE RETURN	F5G39010
02444	0	50000	2	00422	CLA	Z2K1+3,2	COMPUTE THE	F5G39020
02445	0	40200	0	00316	SUB	ONED	INDEX OF SUB BOTTEM	F5G39030
02446	0	62200	0	02453	STD	SM1	POSITION OF LIDT	F5G39040
02447	0	62200	0	02513	STD	SM5	SET END TEST	F5G39050
02450	0	50000	1	00676	SM6	CLA LIST1,1		F5G39060
02451	-0	12000	0	02521	TMI	SM8	DOES THIS ELEMENT OF LIST REPRESENT AN LXD	F5G39070
02452	-3	00000	1	02454	TXL	SM1+1,1,0		F5G39080
02453	-3	00000	1	02455	SM1	TXL SM10,1,SET	YES, IS ELEMENT IN SUB BOTTOM POS.	F5G39090
02454	-0	40000	1	00677	SBM	LIST1+1,1	NO	F5G39100
02455	0	60100	0	00662	SM10	STO SMV2	STORE THE TAG AWAY	F5G39110
02456	0	50000	0	00443	CLA	BBNO	FORN	F5G39120
02457	-0	32000	0	00335	ANA	DECMK	THE	F5G39130
02460	0	76500	0	00034	LRS	28	LOCATION	F5G39140
02461	0	50000	1	00676	CLA	LIST1,1		F5G39150
02462	0	76300	0	00012	LLS	10		F5G39160
02463	0	40000	0	00413	ADD	SMK1		F5G39170
02464	-0	63400	1	00663	SXD	SMV3,1	STORE INDEX OF LIST QUANTITY	F5G39180
02465	0	60100	0	00664	STO	SMV4		F5G39190
02466	0	07400	4	02426	TSX	SL1,4	RECORD ANY HANGING TRA0	F5G39200
02467	0	50000	0	00664	CLA	SMV4		F5G39210
02470	0	07400	4	02367	TSX	SK,4	COMPILE THE LOCATION	F5G39220
02471	0	50000	0	00414	CLA	SMK2		F5G39230
02472	0	07400	4	02367	TSX	SK,4	COMPILE LXD	F5G39240
02473	0	50000	0	00443	CLA	BBNO		F5G39250
02474	0	07400	4	00070	TSX	SE,4	FIND INDEX OF BB	F5G39260
02475	0	50000	0	00662	CLA	SMV2		F5G39270
02476	0	34000	0	00320	SM3	CAS L4	IS THIS THE CORRECT ENT. REQUIREMENT	F5G39280
02477	0	02000	0	02501	TRA	SM2		F5G39290
02500	0	02000	0	02503	TRA	SM4	YES	F5G39300
02501	0	76700	0	00001	SM2	ALS 1	NO, SHIFT IT LEFT ONE	F5G39310
02502	1	77777	1	02476	TXI	SM3,1,-1	AND INDEX TO NEXT ENRR. REQUIREMENT	F5G39320
02503	-0	50000	1	06444	SM4	CAL BBB+2,1	FORM	F5G39330
02504	0	77100	0	00022	ARS	18	AND COMPILE	F5G39340
02505	0	40000	0	00415	ADD	SMK4	THE	F5G39350
02506	0	07400	4	02367	TSX	SK,4		F5G39360
02507	0	50000	0	00662	CLA	SMV2	COMPILE THE TAG	F5G39370
02510	0	07400	4	02367	TSX	SK,4		F5G39380
02511	-0	53400	1	00663	LXD	SMV3,1	IS THE ELEMENT IN SUB BOTTOM POSITION	F5G39390
02512	-3	00000	1	02514	TXL	SM5+1,1,0		F5G39400
02513	-3	00000	1	02515	SM5	TXL SM7,1,SET		F5G39410
02514	1	77777	1	02450	TXI	SM6,1,-1	NO, INDEX TO NEXT LIST POS.	F5G39420
02515	0	50200	0	00315	SM7	CLS ONEA		F5G39430
02516	0	60100	0	00660	STO	SLV3	RECORD THAT THERE IS HANGING TRA 0	F5G39440
02517	-0	53400	4	00661	SM9	LXD SMV1,4		F5G39450
02520	0	02000	4	00001	TRA	1,4	RETURN	F5G39460

02521	0	10000	0	02515	SM8	TZE SM7	GO TO RECORD HANGING TRA	F5G39470
02522	0	76000	0	00003		SSP		F5G39480
02523	0	07400	4	02403		TSX SL,4	RECORD A TRA TO LXD CASE	F5G39490
02524	0	02000	0	02517		TRA SM9		F5G39500
							THE METHODS OF BRINGNING IN BLOCKS OF COMPILED INST. AND	F5G39510
							CHECKING FOR ENDINGS IS THE SAME AS IN PASS 2 OF FLOW ANAL.	F5G39520
02525	-2	00144	2	02527	FNDAS	TNX 2FNDS,2,ZINST	IS BLOCK OF INST. ALL USED	F5G39530
02526	0	07400	4	03472		TSX RDINS,4	YES, READ IN NEXT BLOCK	F5G39540
02527	-0	50000	2	01076	2FNDS	CAL INST-3,2	IS THIS INST. TAGGED	F5G39550
02530	-0	32000	0	00340		ANA STMSK		F5G39560
02531	0	10000	0	03336		TZE CI7A		F5G39570
02532	-0	53400	4	00455	CI4	LXD 9CNT,4	YES	F5G39580
02533	2	00001	4	02547		TIX CI5,4,1	COUNT TO 9, IS STAG WORD EXHAUSTED	F5G39590
02534	-0	63400	2	00447		SXD BBOX,2	YES, GET ANOTHER	F5G39600
02535	0	50000	0	00456		CLA STGWD	INCREASE THE NO. OF CURRENT STAG WORD	F5G39610
02536	0	40000	0	00315		ADD ONEA		F5G39620
02537	0	60100	0	00456		STO STGWD		F5G39630
02540	0	07400	4	00032		TSX SE4,4	GET INDEX OF NEXT STAG WORD	F5G39640
02541	0	50000	1	05061		CLA STAG,1		F5G39650
02542	0	60100	0	00454		STO STAGN2	GET AND STORE	F5G39660
02543	0	76700	0	00002		ALS 2		F5G39670
02544	0	60100	0	00453		STO STAGN1	THE STAG WORD	F5G39680
02545	-0	53400	2	00447		LXD BBOX,2	RESTORE INDEX REGISER 2	F5G39690
02546	-0	53400	4	00330		LXD LD9,4	RESET COUNT TO 9	F5G39700
02547	-0	63400	4	00455	CI5	SXD 9CNT,4		F5G39710
02550	-0	50000	2	01076		CAL INST-3,2		F5G39720
02551	-0	32000	0	00342		ANA TAGMK	EXTRACT THE TAG	F5G39730
02552	0	60100	0	00452		STO TAG		F5G39740
02553	-0	50000	0	00453		CAL STAGN1		F5G39750
02554	-0	32000	0	00324		ANA LD3	EXTRACT THE S-TAG	F5G39760
02555	-0	73400	4	00000		PDX 0,4		F5G39770
02556	-0	50000	4	00361		CAL VSTAG,4	CONVERT S-TAG TO 1,2, OR 4	F5G39780
02557	0	62100	2	01076		STA INST-3,2	REPLACE TAU-TAG BY S-TAG	F5G39790
02560	0	40200	0	00320		SUB L4	IS THE TAG 4	F5G39800
02561	-0	10000	0	02564		TNZ CI5A		F5G39810
02562	-0	76000	0	00003		SSM		F5G39820
02563	0	60100	0	00460		STO CIND	YES, RECORD IR 4 NECESSARY	F5G39830
02564	-0	50000	0	00454	CI5A	CAL STAGN2		F5G39840
02565	0	76700	0	00011		ALS 9		F5G39850
02566	-0	76000	0	00001		PBT	IS AN LXD NECESSARY	F5G39860
02567	0	02000	0	02602		TRA SKLX	NO	F5G39870
02570	0	50000	0	00314		CLA ZERO	YES	F5G39880
02571	0	07400	4	02367		TSX SK,4	COMPILE LOCATION OF 0	F5G39890
02572	0	50000	0	00414		CLA SMK2	COMPILE LXD	F5G39900
02573	0	07400	4	02367		TSX SK,4		F5G39910
02574	0	50000	0	00452		CLA TAG	COMPILE THE SYMB. ADDR. OF THE CELL	F5G39920
02575	-0	50100	0	00415		ORA SMK4		F5G39930
02576	0	07400	4	02367		TSX SK,4		F5G39940
02577	0	50000	2	01076		CLA INST-3,2	COMPILE THE S-TAG	F5G39950
02600	-0	32000	0	00337		ANA ADDMK		F5G39960
02601	0	07400	4	02367		TSX SK,4		F5G39970
02602	-0	50000	2	01100	SKLX	CAL INST-1,2		F5G39980
02603	-0	32000	0	00343		ANA LFTMSK		F5G39990
02604	0	60200	0	00457		SLW TMP10		F5G40000

02605	0	50000	0	00457	CLA	TMP10			F5G40010
02606	0	34000	0	00345	CAS	LLXP	IS THIS AN LXP		F5G40020
02607	0	02000	0	02637	TRA	CI1			F5G40030
02610	0	02000	0	02612	TRA	SKLY	YES.		F5G40031
02611	0	02000	0	02637	TRA	CI1			F5G40032
02612	-0	50000	0	00454	SKLY	CAL	STAGN2		F5G40040
02613	0	76700	0	00011	ALS	9			F5G40041
02614	-0	76000	0	00001	PBT		IS LXD NECESSARY.		F5G40042
02615	0	02000	0	03462	TRA	CI3A	NO.		F5G40043
02616	0	50000	2	01076	CLA	INST-3,2	YES. IS S-TAG=4.		F5G40044
02617	0	60200	0	00461	SLW	CPIND	RECORD DONT COMPILE.		F5G40045
02620	-0	32000	0	00337	ANA	ADDMK			F5G40046
02621	0	40200	0	00320	SUB	L4			F5G40047
02622	-0	10000	0	02667	TNZ	CI6	NOT 4.		F5G40048
02623	-0	50000	2	01074	CAL	INST-5,2	IS NEXT INSTR		F5G40049
02624	-0	32000	0	00343	ANA	LFTMSK			F5G40050
02625	0	60200	0	00457	SLW	TMP10	AN LXD		F5G40051
02626	0	50000	0	00457	CLA	TMP10			F5G40052
02627	0	40200	0	00414	SUB	LLXD	WITH REAL		F5G40053
02630	-0	10000	0	02667	TNZ	CI6	IR4.		F5G40054
02631	0	50000	2	01072	CLA	INST-7,2			F5G40055
02632	-0	32000	0	00337	ANA	ADDMK	IF SO,		F5G40056
02633	0	40200	0	00320	SUB	L4			F5G40057
02634	-0	10000	0	02667	TNZ	CI6	TURN ON		F5G40058
02635	0	76000	0	00141	PSE	97			F5G40059
02636	0	02000	0	02667	TRA	CI6	SENSE LIGHT.		F5G40060
02637	0	34000	0	00347	CI1	CAS	LDED	IS IT A DED	F5G40061
02640	0	02000	0	02642	TRA	CI2			F5G40062
02641	0	02000	0	03462	TRA	CI3A	YES		F5G40070
02642	0	50000	0	00454	CI2	CLA	STAGN2		F5G40080
02643	0	12000	0	02667	TPL	CI6	IS SXD REQUIRED		F5G40090
02644	0	50000	2	01101	CLA	INST,2	NEITHER LXP NOR DED, COMPILE THE		F5G40100
02645	0	07400	4	02367	TSX	SK,4	INST.		F5G40110
02646	0	50000	2	01100	CLA	INST-1,2			F5G40120
02647	0	07400	4	02367	TSX	SK,4			F5G40130
02650	0	50000	2	01077	CLA	INST-2,2			F5G40140
02651	0	07400	4	02367	TSX	SK,4			F5G40150
02652	0	50000	2	01076	CLA	INST-3,2			F5G40160
02653	0	07400	4	02367	TSX	SK,4			F5G40170
02654	0	50000	0	00314	CLA	ZERO	YES, COMPILE AN SXD, ZERO LOCATION		F5G40180
02655	0	60100	0	00461	STO	CPIND	RECORD THAT THIS INST. SHOULDNT BE CONPILED		F5G40190
02656	0	07400	4	02367	TSX	SK,4			F5G40200
02657	0	50000	0	00411	CLA	SIK3	SXD IN BCD		F5G40210
02660	0	07400	4	02367	TSX	SK,4			F5G40220
02661	0	50000	0	00452	CLA	TAG	SYMB. ADDR. OF TAU-TAG CELL		F5G40230
02662	-0	50100	0	00415	ORA	SMK4			F5G40240
02663	0	07400	4	02367	TSX	SK,4			F5G40250
02664	0	50000	2	01076	CLA	INST-3,2	AND TAG WORD		F5G40260
02665	-0	32000	0	00337	ANA	ADDMK			F5G40270
02666	0	07400	4	02367	TSX	SK,4			F5G40280
02667	-0	50000	0	00453	CI6	CAL	STAGN1	NO SXD REQUIRED.	F5G40290
02670	0	76700	0	00002	ALS	2			F5G40300
02671	0	60200	0	00453	SLW	STAGN1			F5G40310
02672	-0	50000	0	00454	CAL	STAGN2			F5G40320

02673	0	76700	0	00001	ALS	1		F5G40330
02674	0	60200	0	00454	SLW	STAGN2		F5G40340
02675	0	02000	0	02700	TRA	CKLOC	GO TO CHECK FOR ENDINGS	F5G40350
02676	-0	76000	0	00003	SSM			F5G40360
02677	0	60100	0	00461	STO	CPIND	RECODD LATER COMPILING NECESSARY	F5G40370
						NOW THE END OF BB IS CHECKED FOR		F5G40380
02700	0	50000	2	01101	CKLOC	CLA INST,2	IF NO LOCATION SYMBOL , THIS CANT BE	F5G40390
02701	0	10000	0	02723	TZE	TR3S	ENSING OTHER THAN CERTAINTY	F5G40400
02702	0	50000	2	01075	CLA	INST-4,2	IS THIS LAST INST IN BB	F5G40410
02703	0	40200	0	00444	SUB	NXTLOC		F5G40420
02704	0	10000	0	02743	TZE	ENDBB	YES, LOOK FOR TYPE OF ENDING	F5G40430
02705	-0	53400	4	00327	LXD	LD8,4	NO, CHECK FOR ENDING OF GROUP OF INST	F5G40440
02706	-0	50000	2	01100	CAL	INST-1,2		F5G40450
02707	-0	32000	0	00335	ANA	DECMK	LOOK AT OP CODE	F5G40460
02710	0	40200	4	00374	SUBP	SUB LNTP+1,4	COMPARE TO OP CODES OF POSSIBLE	F5G40470
02711	0	10000	4	02737	TZE	TRTIN+1,4	ENDINGS TRANSFER WHEN FOUND	F5G40480
02712	2	00001	4	02710	TIX	SUBP,4,1	TRY NEXT POSSIBILITY	F5G40490
02713	-0	50000	2	01100	CAL	INST-1,2	NOT FOUND, LOOK FORCONDITIONAL TRANSFER	F5G40500
02714	-0	32000	0	00400	6ANA	ANA FSTLT		F5G40510
02715	0	60200	0	00457	SLW	TMP10		F5G40520
02716	0	50000	0	00457	CLA	TMP10		F5G40530
02717	0	40200	0	00401	SUB	FSTT		F5G40540
02720	0	10000	0	03162	TZE	TTYPE	IS A CONDITIONAL TRANSFER	F5G40550
02721	0	07400	4	02172	NOEND	TSX SCMI,4	NOT AN END OD BB COMPILE INST	F5G40560
02722	1	00004	2	02525	TXI	FNDAS,2,4	IF IT NEEDS TO BE	F5G40570
02723	0	50000	2	01075	TR3S	CLA INST-4,2	IS THIS LAST INST IN BB	F5G40580
02724	0	40200	0	00444	SUB	NXTLOC		F5G40590
02725	0	10000	0	03042	TZE	SEQTR	YES	F5G40600
02726	0	02000	0	02721	TRA	NOEND	NO	F5G40610
						TRANSFER VECTOR	SEE SUBP+1 ABOVE	F5G40620
02727	0	02000	0	03046	TRA	GOTOV	TRA IS OP CODE	F5G40630
02730	0	02000	0	03115	TRA	IF2PS	PSE	F5G40640
02731	0	02000	0	03171	TRA	IF2CS	DCT	F5G40650
02732	0	02000	0	03171	TRA	IF2CS	RTT	F5G40660
02733	0	02000	0	03125	TRA	MSECS	MSE	F5G40670
02734	0	02000	0	03226	TRA	IF3CS	TZE	F5G40680
02735	0	02000	0	03324	TRA	STPCSZ	HPR	F5G40690
02736	0	02000	0	02721	TRTIN	TRA NOEND	TSX	F5G40700
						THE FOLLOWING IS 4 WORD TRANSFER VECTOR, SEE ENDBB BELOW		F5G40710
02737	0	02000	0	02752	TRA	TRACS	TRAIS OP CODE	F5G40720
02740	0	02000	0	03037	TRA	DOCS	TXL	F5G40730
02741	0	02000	0	03042	TRA	PAUSE	HPR	F5G40740
02742	0	02000	0	02755	TRTTR	TRA TRAC3	TTR	F5G40750
02743	-0	53400	4	00325	ENDBB	LXD LD4,4	THIS INST ENDS A BASIC	F5G40760
02744	0	50000	2	01100	CLA	INST-1,2	BLOCK LOOKAT OP CODE	F5G40770
02745	-0	32000	0	00335	ANA	DECMK	FOR TYPE OF ENDING	F5G40780
02746	0	40200	4	00400	6SUB	SUB LTROP+1,4		F5G40790
02747	0	10000	4	02743	TZE	TRTTR+1,4	TRANSFER IF IOUND	F5G40800
02750	2	00001	4	02746	TIX	6SUB,4,1	TRY NEXT POSSIBILITY	F5G40810
02751	0	02000	0	03042	TRA	SEQTR		F5G40820
02752	-0	50000	2	01077	TRACS	CAL INST-2,2	OP CODE IS TRA SEE IF ADDRESS	F5G40830
02753	-0	32000	0	00403	ANA	PFXMK	IS IN PROGRAM UNCONDITONAL TRANSFER	F5G40840
02754	-0	10000	0	02772	TNZ	GOTON	IF TRANSFER IT IS A GO TO N	F5G40850
02755	-0	63400	2	00447	TRAC3	SXD BBOX,2	THIS IS GO TO ALPHA	F5G40860

02756	-0	50000	0	00443	CAL	BBNO			F5G40870
02757	0	77100	0	00022	ARS	18			F5G40880
02760	0	60100	0	00462	STO	ARG1	STORE	BBNO AS ARGUMENT OF SAD	F5G40890
02761	0	07400	4	00067	TSX	SE1,4			F5G40900
02762	-0	50000	1	06442	CAL	BBB,1			F5G40910
02763	0	07400	4	00044	TSX	SE6,4	GET	SUCC. TABLE ENTRY	F5G40920
02764	-0	50000	1	07555	CAL	SUCC,1			F5G40930
02765	0	07400	4	02126	TSX	SAD,4	GO	TO DETERMINE SYMBOLIC ADDRESS	F5G40940
02766	-0	53400	2	00447	LXD	BBOX,2			F5G40950
02767	0	60200	2	01077	SLW	INST-2,2	TEPL	ACE SYMBOLIC ADDR.	F5G40960
02770	0	07400	4	02172	TSX	SCMI,4	COM	PILE THE INSTR	F5G40970
02771	1	00004	2	03544	TXI	BEGBB,2,4	BEG	NING OF BB, INDEX TO NEXT INSTR	F5G40980
02772	-0	63400	2	00447	GOTON	SXD	BBOX,2		F5G40990
02773	0	50000	0	00443	CLA	BBNO			F5G41000
02774	0	07400	4	00070	TSX	SE,4			F5G41010
02775	0	50000	1	06442	CLA	BBB,1	CHE	CK TO MAKE SURE THIS IS GO TO N	F5G41020
02776	0	77100	0	00041	ARS	33			F5G41030
02777	0	40000	0	00315	ADD	ONEA			F5G41040
03000	0	10000	0	03002	TZE	GON1			F5G41050
03001	0	07400	4	00004	TSX	4,4	DI	AGNOSTIC THIS ISNT GO N	F5G41060
03002	-0	50000	1	06443	GON1	CAL	BBB+1,1		F5G41070
03003	0	77100	0	00041	ARS	33	PUT	SXD CASE IN TMP10	F5G41080
03004	0	60200	0	00457	SLW	TMP10			F5G41090
							NOW	ANY SXD BEFIR GO TO N ARE COMPILED	F5G41100
03005	-0	53400	2	00324	LXD	LD3,2			F5G41110
03006	0	50000	2	00361	GON3	CLA	VSTAG,2	DOES THIS THIS IR NEED SXD	F5G41120
03007	-0	32000	0	00457	ANA	TMP10			F5G41130
03010	0	10000	0	03032	TZE	GON2			F5G41140
03011	-0	63400	1	00451	SXD	ABOX,1	YES		F5G41150
03012	0	56000	0	00314	LDQ	ZERO	RE	PLACE LOCATION BY 0 AND	F5G41160
03013	-0	53400	4	00447	LXD	BBOX,4	PUT	LOCATION ON THE	F5G41170
03014	0	50000	4	01101	CLA	INST,4	SXD	INST.	F5G41180
03015	-0	60000	4	01101	STQ	INST,4	SXD	INST	F5G41190
03016	0	07400	4	02367	TSX	SK,4			F5G41200
03017	0	50000	0	00411	CLA	LSXD			F5G41210
03020	0	07400	4	02367	TSX	SK,4			F5G41220
03021	-0	53400	1	00451	LXD	ABOX,1			F5G41230
03022	-0	50000	1	06444	CAL	BBB+2,1			F5G41240
03023	-0	32000	0	00342	ANA	TAGMK			F5G41250
03024	-0	50100	0	00415	ORA	IDTAG			F5G41260
03025	0	07400	4	02367	TSX	SK,4			F5G41270
03026	-0	50000	0	00457	CAL	TMP10			F5G41280
03027	-0	32000	2	00361	ANA	VSTAG,2			F5G41290
03030	0	07400	4	02367	TSX	SK,4			F5G41300
03031	-0	53400	1	00451	LXD	ABOX,1			F5G41310
03032	1	77777	1	03033	GON2	TXI	GON2+1,1,-1		F5G41320
03033	2	00001	2	03006	TXI	GON3,2,1			F5G41330
03034	-0	53400	2	00447	LXD	BBOX,2			F5G41340
03035	0	07400	4	02172	TSX	SCMI,4	COM	PILE THE INST	F5G41350
03036	1	00004	2	03544	TXI	BEGBB,2,4			F5G41360
03037	-0	75400	0	00000	DOCS	PXD	0,0		F5G41370
03040	0	60100	0	01101	STO	SXST	T	RECORD THERE IS SEQUDNTIAL TRANSFER	F5G41380
03041	0	02000	0	02755	TRA	TRAC3	OT	HERWISE DO EXACTLY AS FOR TRA TRANSFER	F5G41390
03042	-0	75400	0	00000	PAUSE	PXD	0,0		F5G41400

			03042	SEQTR	SYN PAUSE		F5G41410
03043	0	60100	0	01101	STO SXST	RECORD SEQUENTIAL TRANSFER	F5G41420
03044	0	07400	4	02172	TSX SCMI,4		F5G41430
03045	1	00004	2	03544	TXI BEGBB,2,4		F5G41440
03046	0	07400	4	02172	GOTOV TSX SCMI,4	COMPILE INST IF NECESSARY	F5G41450
03047	0	50000	2	01076	CLA INST-3,2	FIND NO. OF BRANCHES IN VECTOR	F5G41460
03050	0	40200	0	00316	SUB LD1		F5G41470
03051	0	62200	0	00463	STD MBOX		F5G41480
03052	0	50000	0	00443	CLA BBNO		F5G41490
03053	0	77100	0	00022	ARS 18	STORE BBNO FOR SAD ROUTINE	F5G41500
03054	0	60100	0	00462	STO ARG1		F5G41510
03055	1	00004	2	03056	GOV4 TXI GOV4+1,2,4		F5G41520
03056	-0	63400	2	00450	SXD BBOX1,2		F5G41530
03057	0	07400	4	00067	TSX SE1,4		F5G41540
03060	0	50000	1	06442	CLA BBB,1		F5G41550
03061	0	60200	0	00464	SLW SUCNO	STORE NO OF 1ST SUCCESSOR	F5G41560
03062	-0	53400	2	00450	LXD BBOX1,2		F5G41570
03063	-2	00144	2	03065	13TNX TNX GOV1,2,ZINST	IS BLOCK OF INST ALL USED	F5G41580
03064	0	07400	4	03472	TSX RDINS,4	T READ NEXT BLOCK	F5G41590
03065	-0	63400	2	00450	GOV1 SXD BBOX1,2		F5G41600
03066	-0	50000	0	00464	CAL SUCNO		F5G41610
03067	0	07400	4	00044	TSX SE6,4		F5G41620
03070	0	50000	1	07555	CLA SUCC,1		F5G41630
03071	0	07400	4	02126	TSX SAD,4	FINF NEW SYMBOLIC ADDR FOR THIS TRANSFER	F5G41640
03072	-0	53400	2	00450	LXD BBOX1,2		F5G41650
03073	0	60200	0	00457	SLW TMP10	STORE SYMBOLIC ADDR.	F5G41660
03074	-0	53400	4	00463	LXD MBOX,4		F5G41670
03075	2	00001	4	03101	TIX GOV2,4,1	IS THIS THE LAST TRANSFER	F5G41680
03076	0	50000	2	01077	CLA INST-2,2		F5G41690
03077	0	40200	0	00444	SUB NXTLOC	1ST INST IN NEXT BB, IS IT	F5G41700
03100	0	10000	0	03104	TZE GOV3		F5G41710
03101	0	50000	0	00457	GOV2 CLA TMP10	NO	F5G41720
03102	0	60100	2	01077	STO INST-2,2		F5G41730
03103	0	07400	4	02172	TSX SCMI,4	COMPILE THE INXT	F5G41740
03104	1	00004	2	03105	GOV3 TXI GOV3+1,2,4		F5G41750
03105	-0	50000	0	00464	CAL SUCNO		F5G41760
03106	0	40000	0	00316	ADD ONED		F5G41770
03107	0	60200	0	00464	SLW SUCNO		F5G41780
03110	-0	53400	4	00463	LXD MBOX,4		F5G41790
03111	1	77777	4	03112	GOV5 TXI GOV5+1,4,-1		F5G41800
03112	-0	63400	4	00463	SXD MBOX,4		F5G41810
03113	3	00000	4	03063	TXH 13TNX,4,0	IS THIS LAST TRA OF VECTOR	F5G41820
03114	0	02000	0	03544	TRA BEGBB	YES	F5G41830
03115	0	50000	2	01076	IF2PS CLA INST-3,2	THIS IS PSE LOOK AT ADDRESS TO	F5G41840
03116	-0	32000	0	00404	ANA XXPSX	SEE IF IT IS 164-6	F5G41850
03117	0	40200	0	00405	SUB XX16X		F5G41860
03120	0	10000	0	03125	TZE PSTCS	YES, IT IS A TEST	F5G41870
03121	0	50000	2	01076	CLA INST-3,2		F5G41880
03122	-0	32000	0	00335	ANA DECMK	NO, SEE IF ADDR IS 360	F5G41890
03123	0	40200	0	00406	SUB XX360		F5G41900
03124	-0	10000	0	02721	TNZ NOEND	NO, THIS ISNT BB END	F5G41910
03125	0	07400	4	02172	PSTCS TSX SCMI,4	THIS IS A PSE TEST INST	F5G41920
				03125	MSECS SYN PSTCS	OR AN MSE INST	F5G41930
03126	1	00004	2	03127	PS1 TXI PS1+1,2,4	INEDX TO CONSIIEER 1ST TRANSFER	F5G41940

03127	-0	63400	2	00450	SXD	BBOX1,2		F5G41950
03130	-0	50000	0	00443	CAL	BBNO		F5G41960
03131	0	77100	0	00022	ARS	18		F5G41970
03132	0	60100	0	00462	STO	ARG1		F5G41980
03133	0	07400	4	00067	TSX	SE1,4	STORE BBNO AS ARGUMENT FOR SAD	F5G41990
03134	-0	50000	1	06442	CAL	BBB,1		F5G42000
03135	0	60100	0	00464	STO	SUCNO	GETNUMBER OF 1ST SUCCESSOR	F5G42010
03136	0	40000	0	00316	ADD	LD1		F5G42020
03137	0	07400	4	00044	TSX	SE6,4	GET THE SECOND SUCC ENTRY	F5G42030
03140	0	50000	1	07555	CLA	SUCC,1		F5G42040
03141	0	07400	4	02126	TSX	SAD,4		F5G42050
03142	-0	53400	2	00450	LXD	BBOX1,2		F5G42060
03143	0	60200	2	01077	SLW	INST-2,2	REPLACE SYMBOLIC ADDRESS	F5G42070
03144	0	07400	4	02172	TSX	SCMI,4		F5G42080
03145	1	00004	2	03146	TXI	PS2+1,2,4	INCREASE INSTR INDEX	F5G42090
03146	0	50000	2	01077	CLA	INST-2,2	IS THIS A SEQUENTIAL TRANSFER	F5G42100
03147	0	40200	0	00444	SUB	NXTLOC		F5G42110
03150	0	10000	0	03307	TZE	PS3	YES, SKIP COMPILING THE INST	F5G42120
03151	-0	63400	2	00450	SXD	BBOX1,2	NO	F5G42130
03152	0	50000	0	00464	CLA	SUCNO		F5G42140
03153	0	07400	4	00044	TSX	SE6,4		F5G42150
03154	0	50000	1	07555	CLA	SUCC,1		F5G42160
03155	0	07400	4	02126	TSX	SAD,4	DETERMINE THE SYMBOLIC ADDRESS	F5G42170
03156	-0	53400	2	00450	LXD	BBOX1,2		F5G42180
03157	0	60200	2	01077	SLW	INST-2,2	REPLACE SYMBOLIC ADDRESS	F5G42190
03160	0	07400	4	02172	TSX	SCMI,4	COMPILE THE INST.	F5G42200
03161	1	00004	2	03544	TXI	BEGBB,2,4		F5G42210
03162	0	50000	2	01077	TTYPE	CLA INST-2,2	IS THIS TRANSFER TO NEXT INST.	F5G42220
03163	0	34000	2	01101	CAS	INST,2		F5G42230
03164	0	02000	0	03166	TRA	TTYP1		F5G42240
03165	0	02000	0	02721	TRA	NOEND	YES	F5G42250
03166	0	40200	0	00402	TTYP1	SUB PCC		F5G42260
03167	0	10000	0	02721	TZE	NOEND	YES	F5G42270
03170	0	02000	0	03173	TRA	CNOTR	NO, IS CONDITIONAL TRANSFER	F5G42280
03171	0	07400	4	02172	IF2CS	TSX SCMI,4	THIS IS DCT OR RTT	F5G42290
03172	1	00004	2	03173	RT1	TXI RT1+1,2,4	INDEX TO CONSIDER 1ST TRANSFER	F5G42300
03173	-0	63400	2	00450	CNOTR	SXD BBOX1,2	STORE BBNO. AS ARGUMENT	F5G42310
03174	-0	50000	0	00443	CAL	BBNO	STORE BBNO AS ARGUMENT	F5G42320
03175	0	77100	0	00022	ARS	18	OF SAD	F5G42330
03176	0	60100	0	00462	STO	ARG1		F5G42340
03177	0	07400	4	00067	TSX	SE1,4		F5G42350
03200	-0	50000	1	06442	CAL	BBB,1		F5G42360
03201	0	60100	0	00464	STO	SUCNO		F5G42370
03202	0	07400	4	00044	TSX	SE6,4	GET THE 1ST SUCC ENTRY	F5G42380
03203	0	50000	1	07555	CLA	SUCC,1		F5G42390
03204	0	07400	4	02126	TSX	SAD,4		F5G42400
03205	-0	53400	2	00450	LXD	BBOX1,2		F5G42410
03206	0	60200	2	01077	SLW	INST-2,2	REPLACE SYMBOLIC ADDRESS	F5G42420
03207	0	07400	4	02172	TSX	SCMI,4	COMPILE THE INST	F5G42430
03210	1	00004	2	03211	RT2	TXI RT2+1,2,4		F5G42440
03211	0	50000	2	01077	CLA	INST-2,2	IS THIS A SEQUENTIAL TRANSFER	F5G42450
03212	0	40200	0	00444	SUB	NXTLOC		F5G42460
03213	0	10000	0	03307	TZE	PS3	YES, SKIP COMPILING THE INST	F5G42470
03214	-0	63400	2	00450	SXD	BBOX1,2		F5G42480

03215	0	50000	0	00464	CLA SUCNO		F5G42490
03216	0	40000	0	00316	ADD LD1		F5G42500
03217	0	07400	4	00044	TSX SE6,4		F5G42510
03220	0	50000	1	07555	CLA SUCC,1		F5G42520
03221	0	07400	4	02126	TSX SAD,4	DETERMINE THE SYMBOLIC ADDR	F5G42530
03222	-0	53400	2	00450	LXD BBOX1,2		F5G42540
03223	0	60200	2	01077	SLW INST-2,2		F5G42550
03224	0	07400	4	02172	TSX SCMI,4	COMPILE THE TRANSFER	F5G42560
03225	1	00004	2	03544	TXI BEGGB,2,4		F5G42570
03226	-0	63400	2	00450	SXD BBOX1,2	THIS IS A TZE INST I. E. AN IF	F5G42580
03227	-0	50000	0	00443	CAL BBNO		F5G42590
03230	0	77100	0	00022	ARS 18	STORE BB NO. FOR SUBROUTINE	F5G42600
03231	0	60100	0	00462	STO ARG1		F5G42610
03232	0	07400	4	00067	TSX SE1,4	ARGUMENT	F5G42620
03233	-0	50000	1	06442	CAL BBB,1		F5G42630
03234	0	60100	0	00464	STO SUCNO		F5G42640
03235	0	40000	0	00316	ADD LD1	GET THE SUCC ENTRY	F5G42650
03236	0	07400	4	00044	TSX SE6,4	FOR THE TZE	F5G42660
03237	0	50000	1	07555	CLA SUCC,1		F5G42670
03240	0	07400	4	02126	TSX SAD,4		F5G42680
03241	-0	53400	2	00450	LXD BBOX1,2		F5G42690
03242	0	60200	2	01077	SLW INST-2,2	REPLACE THE SYMBOLIC ADDREAS	F5G42700
03243	0	07400	4	02172	TSX SCMI,4	COMPILE THE TZE	F5G42710
03244	1	00004	2	03245	TXI IF1+1,2,4		F5G42720
03245	-0	50000	2	01100	CAL INST-1,2	CHECK NEXT INST TO SEE	F5G42730
03246	-0	32000	0	00343	ANA LFTMSK	IF IT IS TPL	F5G42740
03247	0	60200	0	00457	SLW TMP10		F5G42750
03250	0	50000	0	00457	CLA TMP10		F5G42760
03251	0	40200	0	00344	SUB LTPL		F5G42770
03252	0	10000	0	03254	TZE 16CLA		F5G42780
03253	0	07400	4	00004	IFHPR TSX 4,4	IF NOT, DIAGNOSTIC	F5G42790
03254	0	50000	2	01077	16CLA CLA INST-2,2	DOES THIS EXIT GO TO NEXT BB	F5G42800
03255	0	40200	0	00444	SUB NXTLOC		F5G42810
03256	-0	10000	0	03265	TNZ IF2		F5G42820
03257	0	50000	2	01073	CLA INST-6,2	YES, DOES NEXT ONE ALSO	F5G42830
03260	0	40200	0	00444	SUB NXTLOC		F5G42840
03261	-0	10000	0	03265	TNZ IF2		F5G42850
03262	-0	75400	0	00000	PXD 0,0	YES, RECORD SEQUENTIAL TRANSFER	F5G42860
03263	0	60100	0	01101	STO SXST		F5G42870
03264	1	00010	2	03544	TXI BEGGB,2,8		F5G42880
03265	-0	63400	2	00450	SXD BBOX1,2	COMPILE THE TPL	F5G42890
03266	0	50000	0	00464	CLA SUCNO		F5G42900
03267	0	07400	4	00044	TSX SE6,4		F5G42910
03270	0	50000	1	07555	CLA SUCC,1		F5G42920
03271	0	07400	4	02126	TSX SAD,4	FIND AND	F5G42930
03272	-0	53400	2	00450	LXD BBOX1,2	REPLACE	F5G42940
03273	0	60200	2	01077	SLW INST-2,2	SYMBOLIC ADDRESS	F5G42950
03274	0	07400	4	02172	TSX SCMI,4		F5G42960
03275	1	00004	2	03276	IF3 TXI IF3+1,2,4		F5G42970
03276	-0	50000	2	01100	CAL INST-1,2	IS THIS TRA	F5G42980
03277	-0	32000	0	00343	ANA LFTMSK		F5G42990
03300	0	60200	0	00457	SLW TMP10		F5G43000
03301	0	50000	0	00457	CLA TMP10		F5G43010
03302	0	40200	0	00350	SUB LTRA		F5G43020

03303	-0	10000	0	03253	TNZ	IFHPR		IF NOT , STOP	F5G43030
03304	0	50000	2	01077	CLA	INST-2,2		YES IT IS IS THIS A	F5G43040
03305	0	40200	0	00444	SUB	NXTLOC		SEQUENTIAL TRANSFER	F5G43050
03306	-0	10000	0	03312	TNZ	IF4			F5G43060
03307	-0	75400	0	00000	PS3	PXD	0,0	YES, RECORD THAT	F5G43070
03310	0	60100	0	01101	STO	SXST			F5G43080
03311	1	00004	2	03544	TXI	BEGBB,2,4			F5G43090
03312	-0	63400	2	00450	IF4	SXD	BBOX1,2	CONPILE THE TRA	F5G43100
03313	0	50000	0	00464	CLA	SUCNO			F5G43110
03314	0	40000	0	00323	ADD	LD2			F5G43120
03315	0	07400	4	00044	TSX	SE6,4			F5G43130
03316	0	50000	1	07555	CLA	SUCC,1		IF NECESSARY	F5G43140
03317	0	07400	4	02126	TSX	SAD,4		MODIFY THE	F5G43150
03320	-0	53400	2	00450	LXD	BBOX1,2		SYMBOLIC	F5G43160
03321	0	60200	2	01077	SLW	INST-2,2		ADDRESS	F5G43170
03322	0	07400	4	02172	TSX	SCMI,4			F5G43180
03323	1	00004	2	03544	TXI	BEGBB,2,4			F5G43190
03324	0	50000	2	01074	STPCSZ	CLA	INST-5,2		F5G43200
03325	0	40200	0	00350	SUB	LTRA			F5G43210
03326	-0	10000	0	02721	TNZ	NOEND			F5G43220
03327	0	50000	2	01101	CLA	INST,2			F5G43230
03330	0	40200	2	01073	SUB	INST-6,2			F5G43240
03331	-0	10000	0	02721	TNZ	NOEND			F5G43250
03332	0	07400	4	02172	STPCS	TSX	SCMI,4	COMPILE THE TWO INXT	F5G43260
03333	1	00004	2	03334	STP1	TXI	STP1+1,2,4	AND GO TO STAET BB	F5G43270
03334	0	07400	4	02172	TSX	SCMI,4			F5G43280
03335	1	00004	2	03544	TXI	BEGBB,2,4			F5G43290
								THIS ROUTINE ELIMINATES EXTRA SXD AND LXD INXT AROUND	F5G43300
								SUBROUTINE CALL SEQUENCES	F5G43310
03336	-0	50000	2	01100	CI7A	CAL	INST-1,2	IS THIS AN SXD INST	F5G43320
03337	-0	32000	0	00343	ANA	LFTMSK			F5G43330
03340	0	60200	0	00457	SLW	TMP10			F5G43340
03341	0	50000	0	00457	CLA	TMP10			F5G43350
03342	0	40200	0	00411	SUB	LSXD			F5G43360
03343	-0	10000	0	03412	TNZ	CI7C			F5G43370
03344	-0	50000	2	01076	CAL	INST-3,2		YES, DOES IT HAVE TAG 4	F5G43380
03345	-0	32000	0	00337	ANA	ADDMK			F5G43390
03346	0	40200	0	00320	SUB	L4			F5G43400
03347	-0	10000	0	03412	TNZ	CI7C			F5G43410
03350	0	50000	0	00460	CLA	CIND		YES, IS IR4 NECESSARY	F5G43420
03351	0	12000	0	03401	TPL	DLSXD			F5G43430
03352	-0	50000	2	01074	CAL	INST-5,2		YES, IS THE NEXT INST A TSX	F5G43440
03353	-0	32000	0	00343	ANA	LFTMSK			F5G43450
03354	0	60200	0	00457	SLW	TMP10			F5G43460
03355	0	50000	0	00457	CLA	TMP10			F5G43470
03356	0	40200	0	00351	SUB	LTSX			F5G43480
03357	-0	10000	0	03412	TNZ	CI7C			F5G43490
03360	0	50000	2	01101	CLA	INST,2			F5G43500
03361	0	07400	4	02367	TSX	SK,4		YES, COMPILE AN SXD INSTR , TAG 4, TO	F5G43510
03362	0	50000	0	00411	CLA	LSXD		SPECIAL TEMP. STORAGE LOC.	F5G43520
03363	0	07400	4	02367	TSX	SK,4			F5G43530
03364	0	50000	0	00354	CLA	GSYM			F5G43540
03365	0	07400	4	02367	TSX	SK,4			F5G43550
03366	0	50000	0	00355	CLA	T4SYM			F5G43560

03367	0	07400	4	02367	TSX SK,4			F5G43570
03370	0	50000	2	01075	CMTSX CLA INST-4,2	COMPILE THE TSX INST		F5G43580
03371	0	07400	4	02367	CMTS1 TSX SK,4			F5G43590
03372	0	50000	2	01074	CLA INST-5,2			F5G43600
03373	0	07400	4	02367	TSX SK,4			F5G43610
03374	0	50000	2	01073	CLA INST-6,2			F5G43620
03375	0	07400	4	02367	TSX SK,4			F5G43630
03376	0	50000	2	01072	CLA INST-7,2			F5G43640
03377	0	07400	4	02367	TSX SK,4			F5G43650
03400	1	00010	2	02525	CI7B TXI FNDAS,2,8	LOOK AT NEXT INST	LXF	F5G43660
03401	0	50000	2	01101	DLSXD CLA INST,2			F5G43670
03402	0	07400	4	02367	TSX SK,4	IR4 NOT NECESS.	COMPILE BSS 0.	F5G43680
03403	0	50000	0	00352	CLA LBSS			F5G43690
03404	0	07400	4	02367	TSX SK,4			F5G43700
03405	0	50000	0	00314	CLA ZERO			F5G43710
03406	0	07400	4	02367	TSX SK,4			F5G43720
03407	0	50000	0	00314	CLA ZERO			F5G43730
03410	0	07400	4	02367	TSX SK,4			F5G43740
03411	0	02000	0	03370	TRA CMTSX			F5G43750
03412	-0	50000	2	01100	CI7C CAL INST-1,2	IS THIS AN LXD		F5G43770
03413	-0	32000	0	00343	ANA LFTMSK			F5G43780
03414	0	60200	0	00457	SLW TMP10			F5G43790
03415	0	50000	0	00457	CLA TMP10			F5G43800
03416	0	40200	0	00414	SUB LLXD			F5G43810
03417	-0	10000	0	02676	TNZ CI7	NO, GO TO COMPILE THE INST		F5G43820
03420	-0	50000	2	01076	CAL INST-3,2	YES, IS THE TAG 4		F5G43830
03421	-0	32000	0	00337	ANA ADDMK			F5G43840
03422	0	40200	0	00320	SUB L4			F5G43850
03423	-0	10000	0	02676	TNZ CI7	NO, GO TO COMPILE THE INST.		F5G43860
03424	0	50000	0	00460	CLA CIND	YES. IS IR4 NECESSARY.		F5G43870
03425	0	12000	0	03460	TPL CI7E	NO, GO TO REPRESS LATER COMPILING OF INST		F5G43880
03426	-0	76000	0	00141	MSE 97	CHECK FOR LXP WHICH WAS LXD-D.		F5G43881
03427	0	02000	0	03432	TRA CI7C1	NO,SUCH.		F5G43882
03430	0	76000	0	00003	SSP	THERE WAS, SUPPRESS LATER COMPILING		F5G43883
03431	0	02000	0	03460	TRA CI7E	OF INST.		F5G43884
03432	-0	50000	2	01074	CI7C1 CAL INST-5,2	IS FOLLOWING INSTR AN SXD.		F5G43885
03433	-0	32000	0	00343	ANA LFTMSK			F5G43900
03434	0	60200	0	00457	SLW TMP10			F5G43910
03435	0	50000	0	00457	CLA TMP10			F5G43920
03436	0	40200	0	00411	SUB LSXD			F5G43930
03437	-0	10000	0	03450	TNZ CI7D			F5G43940
03440	-0	50000	2	01072	CAL INST-7,2	YES, IS THE TAG A 4		F5G43950
03441	-0	32000	0	00337	ANA ADDMK			F5G43960
03442	0	40200	0	00320	SUB L4			F5G43970
03443	-0	10000	0	03450	TNZ CI7D			F5G43980
03444	0	50000	2	01075	CLA INST-4,2	IS SXD FIRST INSTR		F5G43990
03445	0	40200	0	00444	SUB NXTLOC	OF NEXT BB.		F5G44000
03446	0	10000	0	03450	TZE CI7D	YES, COMPILE LX.		F5G44010
03447	1	00010	2	02525	CI7D TXI FNDAS,2,8	NO--DELETE LX, SX.		F5G44020
03450	0	50000	0	00314	CI7D CLA ZERO	CLMPLE THE LXO WITH GARBAGE		F5G44030
03451	0	07400	4	02367	TSX SK,4	SYMBOLADDEAA AND TAG 4		F5G44040
03452	0	50000	0	00414	CLA LLXD			F5G44050
03453	0	07400	4	02367	TSX SK,4			F5G44060
03454	0	50000	0	00354	CLA GSYM			F5G44070

03455	0	07400	4	02367		TSX SK,4		F5G44080
03456	0	50000	0	00355		CLA T4SYM		F5G44090
03457	0	07400	4	02367		TSX SK,4		F5G44100
03460	0	60100	0	00461	CI7E	STO CPIND	SURPRESS LATER COMPILING INST SET +	F5G44110
03461	0	02000	0	02700		TRA CKLOC		F5G44120
03462	0	50000	2	01076	CI3A	CLA INST-3,2	IS THE S-TAG EQUAL TO 4	F5G44130
03463	0	60200	0	00461		SLW CPIND	RECORD INST. NOT TO BE COMPILED	F5G44140
03464	-0	32000	0	00337		ANA ADDMK		F5G44150
03465	0	40200	0	00320		SUB L4		F5G44160
03466	-0	10000	0	02667		TNZ CI6		F5G44170
03467	-0	75400	0	00000		PXD 0,0	YES, RECORD IR4 NOT NECESSARY	F5G44180
03470	0	60100	0	00460		STO CIND		F5G44190
03471	0	02000	0	02667		TRA CI6	SINCE LXP OR DED, SKIP COMPILING INST.	F5G44200
							THIS ROUTINE READS ANOTHER BLOCK OF COMPILED INST INTO CS	F5G44210
							AND SHIFTS THE EXTRA INST TO THE BEGINNING OF BLOCK	F5G44220
03472	-0	63400	4	00445	RDINS	SXD OUTBX,4	SAVE RETURN INDEX	F5G44230
03473	0	50000	0	00320		CLA L4 SET ERBXX FOR 5 TRIES		F5G44240
03474	0	60100	0	00446		STO ERBXX		F5G44250
03475	-0	63400	1	00447		SXD BBOX,1	SAVE INDEX 1	F5G44260
03476	-0	53400	4	00331		LXD LD12,4	SHIFT EXTRA INST FROM END	F5G44270
03477	0	50000	4	00735	D1CLA	CLA NDINS,4	OF BLOCK TO BEGINNING	F5G44280
03500	0	60100	4	01101		STO INST,4		F5G44290
03501	2	00001	4	03477		TIX D1CLA,4,1	IS BLOCK SHIFTED	F5G44300
03502	0	76200	0	00224	D1RDS	RTB INSTTP	SELECT INST TAPE	F5G44310
03503	0	53400	1	00362		LXA RECSC,1	YES, SET INDEX FOR NO. OF RECORDS	F5G44320
03504	0	70000	4	01065	D1CPY	CPY INST-12,4	COPY BLOCK OF INST	F5G44330
03505	1	00001	4	03504		TXI D1CPY,4,1	SET FOR NEXT WORD	F5G44340
03506	0	02000	0	03516		TRA D2END	END OF FILE	F5G44350
03507	-2	00001	1	03512		TNX D1BCK,1,1	END OF RECORD IS IT END OF LAST RECORD	F5G44360
03510	0	76200	0	00224		RTB INSTTP	NO, READ NEXT RECORD	F5G44370
03511	0	02000	0	03504		TRA D1CPY		F5G44380
03512	0	76600	0	00333	D1BCK	IOD	TEST FOR TAPE ERROR	F5G44390
03513	-0	76000	0	00012		RTT		F5G44400
03514	0	02000	0	03530		TRA INERR	ERROR	F5G44410
03515	3	00143	4	03525		TXH D1XX,4,ZINST-1	IF 3RD FULL REC. NOT END OF FILE	F5G44420
03516	-0	75400	4	00000	D2END	PXD 0,4	REACHED END OF INSTR	F5G44430
03517	0	40000	0	00327		ADD LD8	PUT TEST FOR LAST INST	F5G44440
03520	0	62200	0	02525		STD FNDAS INTO MAIN	ROUTINE	F5G44450
03521	0	50000	0	00363		CLA LCOUT	PUT ADDR OF FINAL EXIT INTO MAIN	F5G44460
03522	0	60100	0	02526		STO FNDAS+1	ROUTINE	F5G44470
03523	0	50000	0	00336		CLA ENDMK		F5G44480
03524	0	60100	4	01065		STO INST-12,4		F5G44490
03525	-0	53400	4	00445	D1XX	LXD OUTBX,4	NO ERROR, RESTORE INDEX REGISTERS	F5G44500
03526	-0	53400	1	00447		LXD BBOX,1		F5G44510
03527	0	02000	4	00001		TRA 1,4	RETURN TO MAIN ROUTINE	F5G44520
03530	0	50000	0	00446	INERR	CLA ERBXX	ERROR IN READING IS THIS 1ST TRY	F5G44530
03531	0	10000	0	03540		TZE HTRD2	TO READ IN	F5G44540
03532	0	40200	0	00315		SUB ONEA	YES, STORE INDICATION AND TRY AGAIN	F5G44550
03533	0	60100	0	00446		STO ERBXX		F5G44560
03534	0	76400	0	00204	D2BST	BST INSTTP	BACKSPACE OVER RECORDS JUST READ	F5G44570
03535	1	00001	1	03536		TXI D2TIX,1,1		F5G44580
03536	-2	00001	1	03534	D2TIX	TNX D2BST,1,RECNO		F5G44590
03537	0	02000	0	03502		TRA D1RDS	TAPE BACKSPACED TRY AGAIN	F5G44600
03540	0	07400	4	00004	HTRD2	TSX 4,4	ERROR ON 5TH TRY DIAGNOSTIC	F5G44610

03541	-0	53400	2	00331	PASS2	LXD	LD12,2			F5G44620
03542	0	77200	0	00203		REW	OTAPE			F5G44630
03543	1	00145	2	03544	1TXI	TXI	1TXI+1,2,ZINST+1			F5G44640
							INITIALIZE FOR	START OF BB		F5G44650
03544	-0	63400	2	00450	BEGBB	SXD	BBOX1,2	STORE INDEX OF POSITION ON ONST TABOE		F5G44660
03545	0	50000	0	00316		CLA	ONED			F5G44670
03546	0	40000	0	00443		ADD	BBNO			F5G44680
03547	0	60100	0	00443		STO	BBNO			F5G44690
03550	0	77100	0	00022		ARS	18	WAS THIS THE LAST BB		F5G44700
03551	0	40200	0	07774		SUB	KEYS			F5G44710
03552	0	40000	0	00315		ADD	ONEA			F5G44720
03553	0	10000	0	04413		TZE	LSTBB	YES, GL GO WRITE PARTIAL BLOK		F5G44730
03554	0	50000	0	01101		CLA	SXST	NO		F5G44740
03555	-0	12000	0	03560		TMI	BEGBBY			F5G44750
03556	0	50000	0	00337		CLA	ADDMK			F5G44760
03557	0	60100	0	01101		STO	SXST			F5G44770
03560	0	50000	0	00443	BEGBBY	CLA	BBNO			F5G44780
03561	0	07400	4	00070		TSX	SE,4			F5G44790
03562	-0	50000	1	06444		CAL	BBB+2,1	GET ENTRANCE REQUIREMENT		F5G44800
03563	0	77100	0	00022		ARS	18	FOR IR4		F5G44810
03564	0	40200	0	00340		SUB	STMSK	STORE + OR - IF IR4		F5G44820
03565	0	60100	0	00460		STO	CIND	ISNT OR IS NECESSARY		F5G44830
03566	0	50000	0	00315		CLA	ONEA	RECORD THERE ISNT HANGING TRA 0		F5G44840
03567	0	60100	0	00660		STO	SLV3			F5G44850
03570	-0	50000	0	00443		CAL	BBNO	FIND THE 1ST INST IN NEXT		F5G44860
03571	0	40000	0	00316		ADD	ONED			F5G44870
03572	0	07400	4	00070		TSX	SE,4	BB		F5G44880
03573	0	50000	1	06447		CLA	BBB+5,1			F5G44890
03574	0	60100	0	00444		STO	NXTLOC			F5G44900
							DETERMINE WHICH LXD CASES EXIST , RESULT IN Z1V5			F5G44910
03575	0	56000	0	00314	Z1	LDQ	ZERO	INITIALIZE THE EXISTENCE		F5G44920
03576	-0	60000	0	00667		STQ	Z1V5	INDICATOR WORD		F5G44930
03577	0	50000	1	06442		CLA	BBB,1	GET AND STORE NO. OF 1ST PRED IN		F5G44940
03600	0	62100	0	00665		STA	Z1V2	NEXT BB		F5G44950
03601	-0	50000	0	00443		CAL	BBNO			F5G44960
03602	0	07400	4	00070		TSX	SE,4			F5G44970
03603	-0	50000	1	06442		CAL	BBB,1	STORE THE NO OF		F5G44980
03604	0	62100	0	00666		STA	Z1V3	1ST PRED IN		F5G44990
03605	0	62100	0	00670		STA	Z1V8	THIS BB		F5G45000
03606	0	50000	0	00666		CLA	Z1V3			F5G45010
03607	0	34000	0	00665	Z15	CAS	Z1V2	IS THIS PRED IN SAME BB		F5G45020
03610	0	02000	0	03612		TRA	Z12	YES		F5G45030
03611	0	02000	0	03626		TRA	Z2	NO		F5G45040
03612	0	07400	4	00055	Z12	TSX	SE5,4			F5G45050
03613	0	50000	1	07337		CLA	PRED,1	DETERMINE THE		F5G45060
03614	-0	32000	0	00332		ANA	LT7	LXD CASE		F5G45070
03615	0	76700	0	00003		ALS	3			F5G45080
03616	-0	73400	4	00000		PDX	0,4			F5G45090
03617	-0	50000	0	00416		CAL	Z1K3	STORE BIT AS INDICATOR		F5G45100
03620	0	77100	4	00007		ARS	7,4	FOR THIS		F5G45110
03621	-0	60200	0	00667		ORS	Z1V5	LXD CASE		F5G45120
03622	0	50000	0	00666		CLA	Z1V3			F5G45130
03623	0	40000	0	00315		ADD	ONEA	ARRANGE TO DEAL WITH NEXT		F5G45140
03624	0	62100	0	00666		STA	Z1V3	PRED		F5G45150

03625	0	02000	0	03607	TRA Z15		F5G45160
					THIS OPEN S. R. FORMS THE LXD LISTS FROM TNE INFO LEFT IN		F5G45170
					Z1V5 BY Z1		F5G45180
03626	0	56000	0	00314	Z2 LDQ ZERO		F5G45190
03627	0	53400	1	00422	LXA Z2K2,1		F5G45200
03630	-0	60000	1	00715	Z21 STQ LLIND,1	SET THE 3 INDEXDS TO THE SUB	F5G45210
03631	0	50000	1	00422	CLA Z2K1+3,1	BOTTOM POSITIONS	F5G45220
03632	0	40200	0	00316	SUB ONED	IN THE 3 LISTS AND ALL	F5G45230
03633	0	60100	1	00674	STO Z2V1+3,1	INDICATORS TO SAY COMPILED	F5G45240
03634	2	00001	1	03630	TIX Z21,1,1		F5G45250
03635	-0	53400	1	00331	LXD LD12,1		F5G45260
03636	0	50000	0	00416	CLA MZE	PLACE -0 S IN THE	F5G45270
03637	0	60100	1	00712	Z28 STO LIST1+12,1	LXD LISTS	F5G45280
03640	2	00001	1	03637	TIX Z28,1,1		F5G45290
03641	-0	53400	1	00422	LXD Z2K2,1	SET TO BEGINNING OF CASE LIST	F5G45300
03642	0	56000	0	00667	Z25 LDQ Z1V5	DID	F5G45310
03643	0	50000	1	00432	CLA CASE+7,1	THIS	F5G45320
03644	0	73400	2	00000	PAX 0,2	CASE	F5G45330
03645	-0	77300	2	00007	RQL 7,2	OCCURR	F5G45340
03646	0	16200	0	03711	TQP Z26		F5G45350
03647	0	50000	0	00434	CLA Z2K5	YES, SET NO OF ONES IN	F5G45360
03650	0	60100	0	00674	STO Z2V2	DIFFERENCE TO HIGH NUMBER	F5G45370
03651	0	53400	2	00422	LXA Z2K2,2	INITIALIZE TO 1ST LIST	F5G45380
03652	0	56000	0	00314	Z23 LDQ ZERO	IS P004	F5G45390
03653	0	50000	2	00674	CLA Z2V1+3,2		F5G45400
03654	-0	73400	4	00000	R004 PDX 0,4	QUANTITY IN THE LIST	F5G45410
03655	0	50000	4	00676	CLA LIST1,4	IS THE TOP	F5G45420
03656	-0	32000	1	00432	ANA CASE+7,1	YES, DETERMINE	F5G45430
03657	-0	40000	4	00676	SBM LIST1,4	CONTAINED IN THIS	F5G45440
03660	-0	10000	0	03676	TNZ Z27	CASE	F5G45450
03661	0	50000	1	00432	CLA CASE+7,1	YES, DETERMINE	F5G45460
03662	0	40200	4	00676	SUB LIST1,4	THE NO.	F5G45470
03663	0	76500	0	00025	LRS 21	OF ONES	F5G45480
03664	0	20000	0	00433	MPY Z2K4	IN THE	F5G45490
03665	0	62100	0	03667	STA Z22 LOGICAL		F5G45500
03666	0	50000	0	00432	CLA Z2K3	DIFFERENCE	F5G45510
03667	0	77100	0	00000	Z22 ARS SET		F5G45520
03670	-0	32000	0	00434	ANA Z2K5		F5G45530
03671	0	34000	0	00674	CAS Z2V2	IS THE NUMBER OF ONES IN THE	F5G45540
03672	0	02000	0	03676	TRA Z27	DIFFERENCE LESS THAN OR EQUAL TO	F5G45550
03673	0	02000	0	03676	TRA Z27	THE PREVIOUS MINIMUM. NO	F5G45560
03674	0	60100	0	00674	STO Z2V2	YES, STORE NEW MIN	F5G45570
03675	-0	63400	2	00675	SXD Z2V3,2	STORE INDEX OF LIST OF GIVING NEW MIN	F5G45580
03676	2	00001	2	03652	Z27 TIX Z23,2,1	COUNT TO 3 LISTS ARE WE THRU	F5G45590
03677	-0	53400	2	00675	LXD Z2V3,2	UES, GET INDEX OF LIST WITH MIN DIFF	F5G45600
03700	0	50000	2	00674	CLA Z2V1+3,2	STIRE	F5G45610
03701	-0	73400	4	00000	PDX 0,4	THIS	F5G45620
03702	0	50000	1	00432	CLA CASE+7,1	CASE AT TOP OF	F5G45630
03703	1	00001	4	03704	Z24 TXI Z24+1,4,1	THAT LIST	F5G45640
03704	0	60100	4	00676	STO LIST1,4		F5G45650
03705	-0	75400	4	00000	PXD 0,4	STORE INDEX OF TOP	F5G45660
03706	0	60100	2	00674	STO Z2V1+3,2	POSITION IN THAT LIST	F5G45670
03707	0	50000	0	00416	CLA MZE	STORE INDICATION THAT THE	F5G45680
03710	0	60100	2	00715	STO LLIND,2	LIST IS TO BE COMPILED	F5G45690

03711	2	00001	1	03642	Z26	TIX Z25,1,1	COUNT THE 7 CASES	F5G45700
						EXPAND TNE LXD	LISTS	F5G45710
03712	0	50000	0	00434	Z3	CLA Z2K5	IS THE	F5G45720
03713	-0	40000	0	00700		SBM LIST1+2	BOTTOM ENTRY OF	F5G45730
03714	0	10000	0	04003		TZE Z307	LIST1 A CASE 7	F5G45740
03715	0	50000	0	00700		CLA LIST1+2	NO, DO THE BOTTOMS	F5G45750
03716	-0	32000	0	00704		ANA LIST2+2	OF LISTS 1 AND 2 HAVE	F5G45760
03717	0	10000	0	03766		TZE Z35	A NON ZERO INTERSECTION	F5G45770
03720	0	34000	0	00700		CAS LIST1+2	YES, DOES INTERSECTION EQUAL 1	F5G45780
03721	0	02000	0	03723		TRA Z31		F5G45790
03722	0	02000	0	03760		TRA Z33	YES	F5G45800
03723	0	34000	0	00704	Z31	CAS LIST2+2	IS IT EQUAL TO BOTTOM OF 2	F5G45810
03724	0	02000	0	03726		TRA Z32		F5G45820
03725	0	02000	0	03763		TRA Z34	YES	F5G45830
03726	0	60100	0	00701	Z32	STO LIST1+3	STORE INTERSECTION IN SUB1	F5G45840
03727	-0	76000	0	00003		SSM	POSITITON AND -(INTER.) IN	F5G45850
03730	0	60100	0	00705		STO LIST2+3	SUB2 POS.	F5G45860
03731	0	02000	0	04015		TRA Z306		F5G45870
03732	-0	76000	0	00003	Z38	SSM	ENTER -INTER1 AND 3	F5G45880
03733	0	60100	0	00711		STO LIST3+3	IN SUB3 POS.	F5G45890
03734	0	02000	0	04015		TRA Z306		F5G45900
03735	-0	76000	0	00003	Z39	SSM	ENTER - INTER 1 AND 3	F5G45910
03736	0	60100	0	00701		STO LIST1+3	INSUV1 POS.	F5G45920
03737	0	02000	0	04015		TRA Z306		F5G45930
03740	0	50000	0	00704	Z300	CLA LIST2+2	DO BOTTOM ENTRIES	F5G45940
03741	-0	32000	0	00710		ANA LIST3+2	OF 2 AND 3 HAVE	F5G45950
03742	0	10000	0	04015		TZE Z306	NONZERO INTERSECTION	F5G45960
03743	0	34000	0	00704		CAS LIST2+2	YES, IS INTRE 2 AND 3	F5G45970
03744	0	02000	0	03746		TRA Z301		F5G45980
03745	0	02000	0	03755		TRA Z303	YES	F5G45990
03746	0	34000	0	00710	Z301	CAS LIST3+2	IS INTERSECTION EQUAL TO BOTTOM OF LIST 3	F5G46000
03747	0	02000	0	03751		TRA Z302		F5G46010
03750	0	02000	0	04013		TRA Z304	YES	F5G46020
03751	0	60100	0	00711	Z302	STO LIST3+3	STORE INTER 2 AND 3 IN SUB 3 POS.	F5G46030
03752	-0	76000	0	00003		SSM	AND -INTER IN	F5G46040
03753	0	60100	0	00705		STO LIST2+3	SUB 2 POS.	F5G46050
03754	0	02000	0	04015		TRA Z306		F5G46060
03755	-0	76000	0	00003	Z303	SSM	ENTER -(INTER 2 AND 3)	F5G46070
03756	0	60100	0	00711		STO LIST3+3	IN SUB 3 POS.	F5G46080
03757	0	02000	0	04015		TRA Z306		F5G46090
03760	-0	76000	0	00003	Z33	SSM	ENTER -(INTER 1 AND 2)	F5G46100
03761	0	60100	0	00705		STO LIST2+3	IN SUB 2 POS.	F5G46110
03762	0	02000	0	04015		TRA Z306		F5G46120
03763	-0	76000	0	00003	Z34	SSM	STORE -(INTER 1 AND 2)	F5G46130
03764	0	60100	0	00701		STO LIST1+3	IN SUB 1 POS.	F5G46140
03765	0	02000	0	04015		TRA Z306		F5G46150
03766	0	50000	0	00700	Z35	CLA LIST1+2	DO BOTTOM ENTRIES IN	F5G46160
03767	-0	32000	0	00710		ANA LIST3+2	1 AND 3 HAVE NONZERO	F5G46170
03770	0	10000	0	03740		TZE Z300	INTERSECTION	F5G46180
03771	0	34000	0	00700		CAS LIST1+2	YES, IS IT EQUAL TO BOT. 1	F5G46190
03772	0	02000	0	03774		TRA Z36		F5G46200
03773	0	02000	0	03732		TRA Z38	YES	F5G46210
03774	0	34000	0	00710	Z36	CAS LIST3+2	TO THE BOTTOM ENTRY IN 3	F5G46220
03775	0	02000	0	03777		TRA Z37		F5G46230

03776	0	02000	0	03735	TRA Z39	YES	F5G46240
03777	0	60100	0	00711	Z37 STO LIST3+3	ENTER INTLR 1 ANO 3 IN SUB	F5G46250
04000	-0	76000	0	00003	SSM	3 POS. AND -(INTER) IN	F5G46260
04001	0	60100	0	00701	STO LIST1+3	SUB1 POS.	F5G46270
04002	0	02000	0	04015	TRA Z306		F5G46280
04003	-0	63400	0	00671	Z307 SXD Z2V1,0	CREATE THE LIST	F5G46290
04004	0	50000	0	00321	CLA L7		F5G46300
04005	0	60100	0	00676	STO LIST1		F5G46310
04006	0	50000	0	00317	CLA L3		F5G46320
04007	0	60100	0	00677	STO LIST1+1		F5G46330
04010	0	50000	0	00315	CLA ONEA		F5G46340
04011	0	60100	0	00700	STO LIST1+2		F5G46350
04012	0	02000	0	04053	TRA Z4		F5G46360
04013	-0	76000	0	00003	Z304 SSM	ENTER - INTER 2 AND 3	F5G46370
04014	0	60100	0	00705	Z305 STO LIST2+3	INSUB2 POS.	F5G46380
04015	-0	53400	2	00324	Z306 LXD LD3,2	SET COUNT TO 3	F5G46390
04016	0	53400	1	00314	LXA ZERO,1	SET TO INSPECT 1ST L1ST	F5G46400
04017	0	50000	1	00700	Z309 CLA LIST1+2,1		F5G46410
04020	0	10000	0	04031	TZE Z308	IS THE BOTTOM ENTRY ZERO	F5G46420
04021	0	40200	0	00315	SUB ONEA	NO	F5G46430
04022	-0	32000	1	00700	ANA LIST1+2,1	DOES IT HAVE TWO ONES	F5G46440
04023	0	10000	0	04031	TZE Z308		F5G46450
04024	0	60100	0	00457	STO TMP10	YES	F5G46460
04025	0	50000	1	00701	CLA LIST1+3,1	IS THE SUB BOTTOM	F5G46470
04026	-0	10000	0	04031	TNZ Z308	ENTRY ZERO	F5G46480
04027	0	50000	0	00457	CLA TMP10	YES	F5G46490
04030	0	60100	1	00701	STO LIST1+3,1		F5G46500
04031	1	77774	1	04032	Z308 TXI Z308+1,1,-4	PRERARE FOR NLXT LIST	F5G46510
04032	2	00001	2	04017	TIX Z309,2,1	COUNT TO 3	F5G46520
04033	0	50000	0	00434	CLA Z2K5		F5G46530
04034	-0	40000	0	00677	SBM LIST1+1		F5G46540
04035	-0	10000	0	04053	TNZ Z4		F5G46550
04036	0	50000	0	00700	CLA LIST1+2		F5G46560
04037	0	40200	0	00315	SUB ONEA		F5G46570
04040	-0	32000	0	00700	ANA LIST1+2		F5G46580
04041	-0	10000	0	04053	TNZ Z4		F5G46590
04042	0	50000	0	00700	CLA LIST1+2		F5G46600
04043	0	60100	0	00701	STO LIST1+3		F5G46610
04044	0	50000	0	00434	CLA Z2K5		F5G46620
04045	0	40200	0	00700	SUB LIST1+2		F5G46630
04046	0	60100	0	00700	STO LIST1+2		F5G46640
04047	0	40200	0	00315	SUB ONEA		F5G46650
04050	0	32000	0	00700	ANS LIST1+2		F5G46660
04051	-0	50000	0	00701	CAL LIST1+3		F5G46670
04052	-0	60200	0	00700	ORS LIST1+2		F5G46680
					DETECT AND COMPILE ANY SEQUENTIAL TRANSFER		F5G46690
04053	0	56000	0	00416	Z4 LDQ MZE	PUT MINUS ZEROS IN	F5G46700
04054	-0	60000	0	01125	STQ SXAS	THE ASSOXIATED	F5G46710
04055	0	53400	4	00322	LXA L19,4	SXDPOSITIONS	F5G46720
04056	-0	60000	4	01125	Z411 STQ SXST+20,4		F5G46730
04057	2	00001	4	04056	TIX Z411,4,1		F5G46740
04060	0	50000	0	01101	CLA SXST		F5G46750
04061	-0	12000	0	04140	TMI Z5	IS THERE A SEQUENTIAL TRANSFER	F5G46760
04062	-0	50000	0	00443	CAL BBNO	YES	F5G46770

04063	0	77100	0	00022	ARS 18		F5G46780
04064	0	40200	0	00315	SUB ONEA		F5G46790
04065	0	60100	0	00457	STO TMP10	PUT NO OF PREV. BB IN TMP10	F5G46800
04066	0	50000	0	00670	CLA Z1V8	INITIALIZE 1ST PRED NO THIS BB	F5G46810
04067	0	60100	0	00666	Z49 STO Z1V3		F5G46820
04070	0	07400	4	00055	TSX SE5,4		F5G46830
04071	-0	50000	1	07337	CAL PRED,1		F5G46840
04072	-0	32000	0	00337	ANA ADDMK	IS THIS THE SEQUENTIAL	F5G46850
04073	0	40200	0	00457	SUB TMP10	TRANSFERS PREO ENTRY	F5G46860
04074	0	10000	0	04100	TZE Z410		F5G46870
04075	-0	50000	0	00666	CAL Z1V3	NO, TRY NEXT ONE	F5G46880
04076	0	40000	0	00315	ADD ONEA		F5G46890
04077	0	02000	0	04067	TRA Z49		F5G46900
04100	0	50000	0	00666	Z410 CLA Z1V3	GET THE PRED NO	F5G46910
04101	0	07400	4	02211	TSX SH,4	FORM THE SXD CASE	F5G46920
04102	0	50000	0	00466	CLA SXD1		F5G46930
04103	0	40000	0	00467	ADD SXD2		F5G46940
04104	0	40000	0	00470	ADD SXD3		F5G46950
04105	0	10000	0	04117	TZE Z44	IS THIS A 0 SXD CASE	F5G46960
04106	0	53400	4	00320	LXA L4,4	ISNT 0 SXD CASL	F5G46970
04107	0	50000	4	00471	Z41 CLA SXD1+3,4	RECORD SXD CASE	F5G46980
04110	0	60100	4	01105	STO SXST+4,4	IN POSITION ASSOCIATED	F5G46990
04111	2	00001	4	04107	TIX Z41,4,1	WITH SEQUENTIAL TRANSFER	F5G47000
04112	0	53400	1	00314	LXA ZERO,1	COMPILE THE SXD	F5G47010
04113	0	07400	4	02242	TSX SI,4	INST. WITH	F5G47020
04114	0	02000	0	04140	TRA Z47	(1) ASSOCIATED SXD WITH 0 LXD CASE	F5G47030
04115	0	07400	4	02440	Z42 TSX SM,4	(2)ASSOCIATED WITH AN LXD LIST	F5G47040
04116	0	02000	0	04140	TRA Z47	(3) NOT ASSOCIATED (TRA COMPILED)	F5G47050
04117	-0	53400	4	00465	Z44 LXD SXD0,4		F5G47060
04120	-3	00000	4	04136	TXL Z46,4,0	DOES IT HAVE A 0 LXD CASE	F5G47070
04121	-0	75400	4	00000	PXD 0,4	NO	F5G47080
04122	0	77100	0	00022	ARS 18	LXD CASE TO AC (ADDR)	F5G47090
04123	0	60100	0	00715	STO Z4V1		F5G47100
04124	-0	53400	2	00324	LXD LD3,2	SET COUNT TO 3 , N=1	F5G47110
04125	0	50000	2	00674	Z45 CLA Z2V1+3,2	GET INDEX	F5G47120
04126	-0	73400	1	00000	PDX 0,1	OF TOP QUANTITY IN LIST N	F5G47130
04127	0	50000	1	00676	CLA LIST1,1	IS THE LXD CASE OF THIS SXD	F5G47140
04130	0	40200	0	00715	SUB Z4V1	CASE THE SAME AS	F5G47150
04131	0	10000	0	04115	TZE Z42	THE TOP QUANTITY IN LIST N	F5G47160
04132	2	00001	2	04125	TIX Z45,2,1	NO, COUNT TO 3	F5G47170
04133	0	50000	0	00715	CLA Z4V1	COMPILE A	F5G47180
04134	0	07400	4	02403	TSX SL,4	TRA (LXD)	F5G47190
04135	0	02000	0	04140	TRA Z47		F5G47200
04136	0	50200	0	00315	Z46 CLS ONEA	RECORD THAT THERE	F5G47210
04137	0	60100	0	00660	Z48 STO SLV3	IS A HANGING TRA 0CASE	F5G47220
				04140	Z47 SYN Z48+1		F5G47230
						FORM THE SXD LIST AND THE SYN CARD LIST	F5G47240
04140	0	50000	0	00316	Z5 CLA ONED	SET INDEX IN SYN TABLE	F5G47250
04141	0	60100	0	00716	STO Z5V1		F5G47260
04142	0	50000	0	00670	CLA Z1V8	RESET 1 ST PRED IN BB	F5G47270
04143	0	60100	0	00666	Z53 STO Z1V3		F5G47280
04144	0	40200	0	00665	SUB Z1V2	IS THIS PRED IN SAME BB	F5G47290
04145	0	10000	0	04263	TZE Z6	NO, ADD FINISHED	F5G47300
04146	0	50000	0	01101	CLA SXST	YES	F5G47310

04147	-0	12000	0	04153	TMI Z51	WAS THERE A SEQUENTIAL TRANSFER	F5G47320
04150	-0	32000	0	00337	ANA ADDMK	YES, EXTRACT ADDRESS	F5G47330
04151	0	40200	0	00666	SUB Z1V3	HAS PRED ALREDY BEEN CONSIDERED	F5G47340
04152	0	10000	0	04213	TZE Z55	AS A SEQUENTIAL TRANSFER	F5G47350
04153	0	50000	0	00666	Z51 CLA Z1V3	NO	F5G47360
04154	0	07400	4	02211	TSX SH,4	GENERATE SXD CASE	F5G47370
04155	0	50000	0	00466	CLA SXD1	IS THE	F5G47380
04156	0	40000	0	00467	ADD SXD2	SXD CASE	F5G47390
04157	0	40000	0	00470	ADD SXD3	ZERO	F5G47400
04160	0	10000	0	04213	TZE Z55		F5G47410
04161	0	53400	1	00314	LXA ZERO,1	NO, PREPARE TO SCAN SXD LIST	F5G47420
04162	0	50000	1	01101	Z503 CLA SXST,1	IS SUBSXDO	F5G47430
04163	-0	32000	0	00335	ANA DECMK		F5G47440
04164	0	60100	0	00457	STO TMP10		F5G47450
04165	0	50000	0	00465	CLA SXD0		F5G47460
04166	-0	32000	0	00335	ANA DECMK		F5G47470
04167	0	40200	0	00457	SUB TMP10		F5G47480
04170	-0	10000	0	04216	TNZ Z54		F5G47490
04171	0	50000	1	01102	CLA SXST+1,1	THIS SXD CASE	F5G47500
04172	0	40200	0	00466	SUB SXD1		F5G47510
04173	-0	10000	0	04216	TNZ Z54		F5G47520
04174	0	50000	1	01103	CLA SXST+2,1	SAME AS	F5G47530
04175	0	40200	0	00467	SUB SXD2		F5G47540
04176	-0	10000	0	04216	TNZ Z54		F5G47550
04177	0	50000	1	01104	CLA SXST+3,1	THE ONE ALREADY	F5G47560
04200	0	40200	0	00470	SUB SXD3	STORED	F5G47570
04201	-0	10000	0	04216	TNZ Z54		F5G47580
04202	0	50000	1	01101	CLA SXST,1	YES, STORE INDICATION	F5G47590
04203	-0	53400	2	00716	LXD Z5V1,2		F5G47600
04204	-0	32000	0	00337	ANA ADDMK	SYN,2 CARD	F5G47610
04205	0	60100	2	02125	STO SYN,2	IN THE	F5G47620
04206	0	50000	0	00465	CLA SXD0	SYN	F5G47630
04207	0	76700	0	00022	ALS 18	LIST	F5G47640
04210	0	62200	2	02125	STD SYN,2		F5G47650
04211	1	00001	2	04212	Z52 TXI Z52+1,2,1		F5G47660
04212	-0	63400	2	00716	SXD Z5V1,2		F5G47670
04213	0	50000	0	00666	Z55 CLA Z1V3	PREPARE TO DEAL WITH NEXT PRED	F5G47680
04214	0	40000	0	00315	ADD ONEA		F5G47690
04215	0	02000	0	04143	TRA Z53		F5G47700
04216	0	50000	1	01101	Z54 CLA SXST,1		F5G47710
04217	0	12000	0	04232	TPL Z502	IS THIS SXD POS. EMPTY	F5G47720
04220	-0	53400	2	00324	LXD LD3,2	YES	F5G47730
04221	-3	00000	1	04232	TXL Z502,1,0	IS THIS ST CASE	F5G47740
04222	3	77773	1	04233	TXH Z504,1,-4-1	NO, IS THIS 0 LIST CASE	F5G47750
04223	3	77767	1	04242	TXH Z507,1,-8-1	NO 1ST	F5G47760
04224	3	77763	1	04241	TXH Z506,1,-12-1	2ED	F5G47770
04225	3	77757	1	04240	TXH Z505,1,-16-1	3RD	F5G47780
04226	0	07400	4	04252	TSX Z500,4	ENTER THE SXD CASE IN THE LIST	F5G47790
04227	0	50000	0	00416	CLA MZE		F5G47800
04230	0	60100	1	01105	STO SXST+4,1	STORE ENO MARK FOR SYN CAEDS	F5G47810
04231	0	02000	0	04213	TRA Z55		F5G47820
04232	1	77774	1	04162	Z502 TXI Z503,1,-4	EXAMINE NEXT SXD CASE	F5G47830
04233	-0	50000	0	00465	Z504 CAL SXD0	ZERO LIST CASE	F5G47840
04234	-0	32000	0	00335	ANA DECMK	IS THE LXD CASE 0	F5G47850

04235	-0	10000	0	04232	TNZ	Z502		F5G47860
04236	0	07400	4	04252	TSX	Z500,4	YES, ENTER SXD CASE IN	F5G47870
04237	0	02000	0	04213	TRA	Z55	ASSOCIATED POSITION	F5G47880
04240	2	00001	2	04241	Z505	TIX	Z505+1,2,1	F5G47890
04241	2	00001	2	04242	Z506	TIX	Z506+1,2,1	F5G47900
04242	-0	50000	2	00674	Z507	CAL	Z2V1+3,2	F5G47910
04243	-0	73400	4	00000	PDX	0,4	IS	F5G47920
04244	0	50000	0	00465	CLA	SXD0	THE	F5G47930
04245	0	77100	0	00022	ARS	18	LXD	F5G47940
04246	0	40200	4	00676	SUB	LIST1,4	CASE THE	F5G47950
04247	-0	10000	0	04232	TNZ	Z502	SAME	F5G47960
04250	0	07400	4	04252	TSX	Z500,4	YES	F5G47970
04251	0	02000	0	04213	TRA	Z55		F5G47980
							SUBROUTINE FOR ENTERING SXD CASE IN SXD LIST	F5G47990
04252	0	50000	0	00465	Z500	CLA	SXD0	F5G48000
04253	0	60100	1	01101	STO	SXST,1		F5G48010
04254	0	50000	0	00466	CLA	SXD1		F5G48020
04255	0	60100	1	01102	STO	SXST+1,1		F5G48030
04256	0	50000	0	00467	CLA	SXD2		F5G48040
04257	0	60100	1	01103	STO	SXST+2,1		F5G48050
04260	0	50000	0	00470	CLA	SXD3		F5G48060
04261	0	60100	1	01104	STO	SXST+3,1		F5G48070
04262	0	02000	4	00001	TRA	1,4		F5G48080
							COMPILE THE SXD LIST	F5G48090
04263	0	53400	1	00333	Z6	LXA	LM20,1	F5G48100
04264	0	50000	1	01101	Z61	CLA	SXST,1	F5G48110
04265	-0	12000	0	04274	TMI	Z7	IS THIS SXD POSITION EMPTY	F5G48120
04266	-0	63400	1	04271	SXD	Z6V1,1	NO	F5G48130
04267	0	07400	4	02242	TSX	SI,4	COMPILE THE SXD CASE WITH	F5G48140
04270	0	76100	0	00000	NOP		(1) 0 LXD CASE, OR	F5G48150
04271	3	00000	0	00000	Z6V1	TXH	0,0,SET	F5G48160
04272	-0	53400	1	04271	LXD	Z6V1,1	(2) THIS RETURN CANT OCCURR	F5G48170
04273	1	77774	1	04264	TXI	Z61,1,-4	(3) TRA ALREADY CONPILED	F5G48180
							COMPILE TNE LXD LISTS AND ASSOCIATED SXD S	F5G48190
04274	-0	53400	2	00324	Z7	LXD	LD3,2	F5G48200
04275	0	50000	2	00422	Z72	CLA	Z2K1+3,2	F5G48210
04276	-0	73400	1	00000	PDX	0,1	PUT INDEX OF BOTTOM POSITION IN 1	F5G48220
04277	0	50000	1	00676	CLA	LIST1,1		F5G48230
04300	-0	12000	0	04350	TMI	Z75	YES, IS IT A TRA(0) CASE	F5G48240
04301	0	10000	0	04320	TZE	Z73	IS THE LIST FILLED	F5G48250
04302	0	50000	1	00677	CLA	LIST1+1,1	PERHAPS, IS IT A FOR SURE	F5G48260
04303	0	10000	0	04350	TZE	Z75	IT IS IF EITHER THE SUB BOTTOM	F5G48270
04304	0	12000	0	04350	TPL	Z75	ENTRY IS -0 OR POSITIVE	F5G48280
04305	0	50000	0	00720	CLA	Z7V2		F5G48290
04306	-0	12000	0	04320	TMI	Z73	IS THIS 1ST TIME THRU	F5G48300
04307	0	50000	2	00443	Z76	CLA	Z7K1+3,2	F5G48310
04310	-0	73400	1	00000	PDX	0,1	YES	F5G48320
04311	0	50000	1	01101	CLA	SXST,1	IS THERE ASSOCIATED	F5G48330
04312	-0	63400	2	00717	SXD	Z7V1,2	SXDLIST	F5G48340
04313	-0	12000	0	04344	TMI	Z74		F5G48350
04314	0	07400	4	02242	TSX	SI,4	YES, COMPILE SXD CASE	F5G48360
04315	0	02000	0	04317	TRA	Z71		F5G48370
04316	0	02000	0	04333	TRA	Z77	COMPILE	F5G48380
04317	-0	53400	2	00717	Z71	LXD	Z7V1,2	F5G48390

04320	2	00001	2	04275	Z73	TIX Z72,2,1	COUNT TO 3	F5G48400
04321	0	50200	0	00720		CLS Z7V2	IS THIS 1ST TIME THRU	F5G48410
04322	0	60100	0	00720		STO Z7V2		F5G48420
04323	-0	12000	0	04274		TMI Z7	YES, GO BACK CLASXST	F5G48430
04324	0	50000	0	01105		CLA SXAS0	IS THERE A 0 ASSOCIATED SXD CASE	F5G48440
04325	-0	12000	0	04353		TMI Z8		F5G48450
04326	0	53400	1	00334		LXA LM4,1	YES	F5G48460
04327	0	07400	4	02242		TSX SI,4	COMPILE SXD CASE	F5G48470
04330	0	02000	0	04353		TRA Z8		F5G48480
04331	0	02000	0	04353		TRA Z8		F5G48490
04332	0	02000	0	04353		TRA Z8		F5G48500
04333	-0	53400	2	00717	Z77	LXD Z7V1,2		F5G48510
04334	0	50000	2	00715		CLA Z4V1,2		F5G48520
04335	-0	12000	0	04344		TMI Z74		F5G48530
04336	0	50000	2	00443		CLA Z7K1+3,2		F5G48540
04337	-0	73400	1	00000		PDX 0,1		F5G48550
04340	0	50000	1	01101		CLA SXST,1		F5G48560
04341	0	77100	0	00022		ARS 18		F5G48570
04342	0	07400	4	02403		TSX SL,4		F5G48580
04343	0	02000	0	04317		TRA Z71		F5G48590
04344	0	50000	2	00674	Z74	CLA Z2V1+3,2	COMPILE THE LXD LIST	F5G48600
04345	-0	73400	1	00000		PDX 0,1		F5G48610
04346	0	07400	4	02440		TSX SM,4		F5G48620
04347	0	02000	0	04317		TRA Z71		F5G48630
04350	0	50000	0	00720	Z75	CLA Z7V2	IS THIS 1ST TIME THRU	F5G48640
04351	-0	12000	0	04307		TMI Z76	NO, 2ED TIME	F5G48650
04352	0	02000	0	04320		TRA Z73	YES	F5G48660
						COMPILE ANY SYN CARDS		F5G48670
04353	-0	50000	0	00443	Z8	CAL BBNO	FORM	F5G48680
04354	0	77100	0	00022		ARS 18	AND	F5G48690
04355	0	60100	0	00457		STO TMP10	STORE	F5G48700
04356	0	07400	4	00067		TSX SE1,4		F5G48710
04357	-0	50000	1	06442		CAL BBB,1	-(IDSXD)-(BBNO)+(1ST PRED)*2**25	F5G48720
04360	-0	32000	0	00337		ANA ADDMK		F5G48730
04361	0	76700	0	00012		ALS 10		F5G48740
04362	0	40200	0	00457		SUB TMP10		F5G48750
04363	0	40200	0	00410		SUB IDSXD		F5G48760
04364	0	60100	0	00457		STO TMP10		F5G48770
04365	-0	53400	2	00716		LXD Z5V1,2	SET TO START OF SYN LIST	F5G48780
04366	-3	00001	2	04407	Z81	TXL Z83,2,1	ARE WE THRU	F5G48790
04367	2	00001	2	04370	Z82	TIX Z82+1,2,1	DECREASE INDEX	F5G48800
04370	-0	50000	2	02125		CAL SYN,2		F5G48810
04371	-0	32000	0	00335		ANA DECMK	COMPILE THE SYN CARD	F5G48820
04372	0	77100	0	00010		ARS 8		F5G48830
04373	0	40200	0	00457		SUB TMP10		F5G48840
04374	0	07400	4	02367		TSX SK,4		F5G48850
04375	0	50000	0	00346		CLA LSYN		F5G48860
04376	0	07400	4	02367		TSX SK,4		F5G48870
04377	-0	50000	2	02125		CAL SYN,2		F5G48880
04400	-0	32000	0	00337		ANA ADDMK		F5G48890
04401	0	76700	0	00012		ALS 10		F5G48900
04402	0	40200	0	00457		SUB TMP10		F5G48910
04403	0	07400	4	02367		TSX SK,4		F5G48920
04404	0	50000	0	00314		CLA ZERO		F5G48930

04405	0	07400	4	02367		TSX SK,4		F5G48940
04406	0	02000	0	04366		TRA Z81		F5G48950
04407	-0	53400	2	00450	Z83	LXD BBOX1,2	GET INDEX OF COMPILED INDT	F5G48960
04410	0	50000	0	00416		CLA MZE	RECORD NO SEQUENTIAL TRANSFER	F5G48970
04411	0	60100	0	01101		STO SXST		F5G48980
04412	0	02000	0	02525		TRA FNDAS		F5G48990
						WRITE TH E LAST BLOCK OF C.I. T. ON TAPE		F5G49000
						AFTER PUTTING RELATIVE CONSTANT ROUTINES AT END		F5G49010
04413	0	76200	0	00224	LSTBB	RTB INSTTP	AN END OF	F5G49020
04414	0	70000	0	00457		CPY TMP10	FILE SEPARATES RELATIVE CONST. ROUTINES	F5G49030
04415	0	02000	0	04420		TRA EF3	END FILE ALREADY READ	F5G49040
04416	0	02000	0	04413		TRA LSTBB	READ END FILE	F5G49050
04417	0	07400	4	00004		TSX 4,4	DIAGNOSTIC, ERROR	F5G49060
04420	-0	53400	4	00325	EF3	LXD LD4,4	TRY 4 TIMES	F5G49070
04421	0	53400	3	00337	EFRTB	LXA ADDMK,3	READ IN NEXT RECORD	F5G49080
04422	0	76200	0	00224		RTB INSTTP	OF RELATIVE CONSTANT SUBROUTINES	F5G49090
04423	0	70000	1	04516	EFCPY	CPY RELSR,1		F5G49100
04424	1	77777	1	04423		TXI EFCPY,1,-1		F5G49110
04425	0	02000	0	04436		TRA EFREW	END OF FILE , END OF INST.	F5G49120
04426	0	76600	0	00333		IOD		F5G49130
04427	-0	76000	0	00012		RTT		F5G49140
04430	0	02000	0	04451		TRA EFERR		F5G49150
04431	-0	63400	1	04432		SXD EFTXL,1	STORE END TEST	F5G49160
04432	-3	00000	2	04421	EFTXL	TXL EFRTB,2,SET	COMPILE THE INSTRUCTIONS	F5G49170
04433	0	50000	2	04516		CLA RELSR,2		F5G49180
04434	0	07400	4	02367		TSX SK,4		F5G49190
04435	1	77777	2	04432		TXI EFTXL,2,-1		F5G49200
04436	0	77200	0	00204	EFREW	REW INSTTP	REWIND THE TAPE	F5G49210
04437	0	53400	1	00412		LXA SKK1,1	SET 1 TO LENGTH OF CS BLOCK	F5G49220
04440	-0	53400	4	00655		LXD SKV1,4	INDEX OF NEXTCLST POSITION	F5G49230
04441	-0	63400	4	04444		SXD LSTXL,4		F5G49240
04442	3	00143	4	04447		TXH LSWEF,4,LCLST-1	IS BLOCK EMRTY	F5G49250
04443	0	76600	0	00223		WTB OTAPE	NO, WRITE	F5G49260
04444	-3	00000	1	04447	LSTXL	TXL LSWEF,1,-	IT ON TAPE	F5G49270
04445	0	70000	1	00655		CPY CLST,1		F5G49280
04446	1	77777	1	04444		TXI LSTXL,1,-1		F5G49290
04447	0	77000	0	00203	LSWEF	WEF OTAPE	WRITE AN END FILE	F5G49300
04450	0	02000	0	00030		TRA R		F5G49310
04451	0	76400	0	00204	EFERR	BST INSTTP		F5G49320
04452	2	00001	4	04421		TIX EFRTB,4,1		F5G49330
04453	0	07400	4	00004		TSX 4,4	4TH ERROR, TO DIAGNOSTIC	F5G49340
				04454		BSS PTL4	SPACE FOR PATCHES	F5G49350
04516	0	00000	0	00000	RELSR		START OF REL. CONST. ROUTINES	F5G49360
				00000		ORG 0		F5G49370
00000	0	00004	0	00030		HTR R,0,4	CONTROL CARD PART 1.	F5G49371
00001	0	00000	0	05215		HTR CMTAG-1		F5G49372
				00000		ORG 0		F5G49373
00000	0	07337	0	07337		HTR PRED,0,PRED	CONTROL CARD PART 1B.	F5G49374
00001	0	00000	0	07470		HTR I9A+2		F5G49375
				00000		ORG 0		F5G49376
00000	0	04740	0	04740		HTR QS,0,QS	CONTROL CARD, PART 1C.	F5G49377
00001	0	00000	0	04773		HTR QS8+1		F5G49378
				00000		ORG 0		F5G49379
00000	0	04740	0	04740		HTR QPU,0,QPU	CONTROL CARD, PART 1D.	F5G49380

00001	0	00000	0	04773	HTR QPU8+1		F5G49381
				00000	ORG 0		F5G49382
00000	0	04740	0	04740	HTR QSU,0,QSU	CONTROL CARD, PART 1E.	F5G49383
00001	0	00000	0	04773	HTR QSU8+1		F5G49384
				00000	ORG 0		F5G49385
00000	0	00320	0	00317	HTR BLV09,0,BL12	CONTROL CARD, PART 2.	F5G49386
00001	0	00000	0	00655	HTR BLIST		F5G49387
				00000	ORG 0		F5G49388
00000	0	00320	0	00320	HTR START,0,START	CONTROL CARD, PART 3.	F5G49389
00001	0	00000	0	00647	HTR ASCON		F5G49390
				00000	ORG 0		F5G49391
00000	0	03541	0	00317	HTR L3,0,PASS2	CONTROL CARD, PART 4.	F5G49392
00001	0	00000	0	04516	HTR RELSR		F5G49393
				03541	END PASS2		F5G49394

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	4988	0	0	0	0
LIB	0	0	0	0	0
COL	5086	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 5045

NUMBER OF SYMBOLS, DEF 1244,DEFOP 0,UNDEF 0
 REM APPLIED PROGRAMMING/ FORTRAN. 704 = EST.NO. 8081, JOB NO. 1.

THE FOLLOWING CONVENTIONS ARE USED IN THIS LISTING=

** IN THE ADDRESS, TAG, OR DECREMENT OF AN INSTRUCTION INDICATES THAT THIS FIELD WILL BE MODIFIED BY THE PROGRAM.
 * IN COL/36 INDICATES THE INSTRUCTION IS A TRANSFER OUT OF THIS LOGICAL BLOCK OR SUBROUTINE.
 C IN COL/34 INDICATES THE INSTRUCTION WAS CORRECTED.
 P IN COL/32 INDICATES THE INSTRUCTION WAS INSERTED (PATCH).

* * * * *

704 FORTRAN 2 / SECTION 5PRIME / A. S. NOBLE, JR. / 12 FEB 58

5PRIME COMPILES ASSIGN CONSTANTS, FIXED POINT CONSTANTS FLOATING POINT CONSTANTS, REGION SIX CONSTANTS AND FORMAT STATEMENTS. THE FOLLOWING TABLES ARE PUT ON DRUMS FOR USE IN THE ASSEMBLY PROGRAM ... SIZ, TEIFNO, EQUIT, CLOSUB, FORSUB.

00030 ORG 24

SETCIT/ CALLS=OIAG.

SET UP CIT BUFFER, COUNTER, ANO TARE FOR COMPILING.

00030	0	76400	0	00203	5PRIME	BST	CITTAP	BACKSPACE CIT TAPE OVER EOF MARK
00031	0	76400	0	00203		BST	CITTAP	AND LAST RECOR0.
00032	0	53400	2	00420		LXA	TERC,2	SET TAPE ERROR COUNTER FOR 5 TRYS.
00033	0	76200	0	00223		RTB	CITTAP	SELECT CIT TAPE FOR READING.
00034	0	53400	1	00413		LXA	L(0),1	COPY LAST
00035	0	70000	1	00445	CPYCIT	CPY	CIB,1	CIT RECORD
00036	1	77777	1	00035		TXI	CPYCIT,1,-1	INTO CIT BUFFER.
00037	0	07400	4	00004		TSX	DIAG,4	* EOF ERROR - GO TO DIAGNOSTIC.
00040	0	76400	0	00203		BST	CITTAP	REPOSITION CIT TAPE, AND
00041	-0	76000	0	00012		RTT		IF TAPE RECORD
00042	1	00000	0	00045		TXI	RTTON1,0	WAS READ CORRECTLY,
00043	-0	63400	1	00044		SXD	BBOX,1	SAVE CIT COUNTER,
00044	1	00000	0	00047	BBOX	TXI	5P1ASC,0,**	* AND GO READ ASSIGN CONSTANTS.
00045	2	00001	2	00033	RTTON1	TIX	CPYCIT-2,2,1	OTHERWISE, GO REREAD RECORD UNLESS
00046	0	07400	4	00004		TSX	DIAG,4	* 5 ATTEMPTS FAILE0 - GO TO DIAG.

END OF PROGRAM SETCIT.

* * * * *

5P1ASC/ CALLS=5PS1R,5PS2C.

READ IN AND COMPILE ASSIGN CONSTANTS.

00047	0	76400	0	00202	5P1ASC	BST	TABTAP	POSITION TABLE TAPE, AND
00050	0	07400	4	00304		TSX	5PS1R,4	* GO READ ASSIGN CONSTANTS.
00051	-3	00000	1	00053		TXL	SETOP,1,0	IF NO ENTRIES, GO SET OP TO OCT.
00052	0	07400	4	00331		TSX	5PS2C,4	* GO COMPILE ASSIGN CONSTANTS.
00053	0	50000	0	00431	SETOP	CLA	OCTLOP	SET WORD2 OF COMPILED INSTRUCTION
00054	0	60100	0	00442		STO	WORD2	TO (OCT000) BCD FOR FUTURE USE.

END OF PROGRAM 5P1ASC.

D

* * * * *

5P2FXC/ CALLS=5PS1R,5PS2C.

READ IN AND COMPILE FIXCON.

00055	0	53400	2	00416	5P2FXC	LXA	L(3),2	POSITION
00056	0	76400	0	00202		BST	TABTAP	TABLE TAPE
00057	2	00001	2	00056		TIX	5P2FXC+1,2,1	TO FIXCON.
00060	0	07400	4	00304		TSX	5PS1R,4	* GO READ FIXCON INTO BUFFER.
00061	-3	00000	1	00065		TXL	5P3F3D,1,0	* IF NO ENTRIES, GO READ IN FORSUB.
00062	0	50000	0	00426		CLA	FIXSYM	SET WORD1 OF COMPILED
00063	0	60100	0	00441		STO	WORD1	INSTRUCTION TO (200000) BCD.
00064	0	07400	4	00331		TSX	5PS2C,4	* GO COMPILE FIXCON ENTRIES.

END OF PROGRAM 5P2FXC.

* * * * *

5P3F3D/ CALLS=5PS1R,5PS3D.

TRANSFER FORSUB TABLE FROM TAPE 2 TO DRUM 3.

00065	0	53400	2	00420	5P3F3D	LXA	L(5),2	POSITION
00066	0	76400	0	00202		BST	TABTAP	TABLE TAPE
00067	2	00001	2	00066		TIX	5P3F3D+1,2,1	TO DO TAG B
00070	0	76200	0	00222		RTB	TABTAP	RECORD COUNT
00071	0	70000	0	00440		CPY	5PERAS	AND ADD 23
00072	-0	53400	1	00440		LXD	5PERAS,1	TO THIS TO
00073	1	00027	1	00074		TXI	BKSPC,1,23	POSITION
00074	0	76400	0	00202	BKSPC	BST	TABTAP	TABLE TAPE
00075	2	00001	1	00074		TIX	BKSPC,1,1	TO FORSUB.
00076	0	07400	4	00304		TSX	5PS1R,4	* GO READ FORSUB INTO BUFFER.
00077	0	60000	0	00613		STZ	WRDCNT	IF THERE WERE
00100	-3	00000	1	00107		TXL	EMPTY1,1,0	ENTRIES MADE IN
00101	-0	75400	1	00433	L(SIX)	PXD	SIX,1	FORSUB TABLE
00102	0	76000	0	00006		COM		COMPUTE THE
00103	0	40100	0	00425		ADM	DECR1	WORD COUNT
00104	0	62200	0	00613		STD	WRDCNT	AND THEN
00105	0	07400	4	00345		TSX	5PS3D1,4	* GO WRITE FORSUB ONTO DRUM3.
00106	1	00000	0	00110		TXI	5P4FLC,0	* WHEN DONE, GO READ IN FLOCON.
00107	0	07400	4	00351	EMPTY1	TSX	5PS3D3,4	* IF FORSUB IS EMPTY, RECORD WRD CNT.

END OF PROGRAM 5P3F3D.

* * * * *

5P4FLC/ CALLS=5PS1R,5PS2C.

READ IN AND COMPILE FLOCON.

00110	0	76200	0	00222	5P4FLC	RTB	TABTAP	FIND
00111	0	70000	0	00440		CPY	5PERAS	NEXT
00112	1	00000	0	00111		TXI	5P4FLC+1,0	END OF FILE
00113	1	00000	0	00115		TXI	EOFIL,0	ON TABLE TAPE
00114	1	77773	0	00110	MINUS5	TXI	5P4FLC,0,-5	TO LOCATE FLOCON.
00115	0	76600	0	00333	EOFIL	IOD		WHEN DONE,
00116	-0	76000	0	00012		RTT		MAKE SURE TAPE CHECK
00117	0	76100	0	00000		NOP		LIGHT IS TURNED OFF, AND
00120	0	07400	4	00304		TSX	5PS1R,4	* GO READ FLOCON INTO BUFFER.
00121	-3	00000	1	00125		TXL	5P5R6C,1,0	* IF NO ENTRIES, GO COMPILE REGION6.
00122	0	50000	0	00427		CLA	FLOSVM	SET WORD1 OF COMPILED
00123	0	60100	0	00441		STO	WORD1	INSTRUCTION TO (300000) BCD.
00124	0	07400	4	00331		TSX	5PS2C,4	* GO COMPILE FLOCON ENTRIES.

D
D

END OF PROGRAM 5P4FLC.

* * * * *

5P5R6C/ CALLS=5PS2C.
COMPILE REGION-SIX CONSTANTS.

00125	0	50000	0	00430	5P5R6C	CLA	SIXSYM		SET WORD1 OF COMPILED
00126	0	60100	0	00441		STO	WORD1		INSTRUCTION TO (600000) BCD.
00127	0	50000	0	00101		CLA	L(SIX)		SET COMPILING
00130	0	62100	0	00333		STA	COMP		SUBROUTINE (5PS2)
00131	-0	53400	1	00114		LXD	MINUS5,1		TO PICK UP THE FIVE CONSTANTS.
00132	0	07400	4	00331		TSX	5PS2C,4		* GO COMPILE REGION-SIX CONSTANTS.

END OF PROGRAM 5P5R6C.
* * * * *

5P6FTC/ CALLS=5PS1R,5PS4W.
READ IN AND COMPILE FORMAT TABLE.

00133	0	50000	0	00137	5P6FTC	CLA	TXLOP		SET OP SWITCH
00134	0	63000	0	00306		STP	OPSW1		IN READING ROUTINE (5PS1)
00135	0	50000	0	00424		CLA	L(10)		TO TEST FOR CORRECT TABLE NUMBER.
00136	0	07400	4	00304		TSX	5PS1R,4		* GO READ IN FORMAT TABLE.
00137	-3	00000	1	00154	TXLOP	TXL	5P7CBW,1,0		* IF NO ENTRIES, GO WRITE OUT CIT.
00140	0	50000	0	00432		CLA	4MATOP		SET WORD2 OF COMPILED
00141	0	60100	0	00442		STO	WORD2		INSTRUCTION TO (BCD000) BCD.
00142	0	53400	2	00413		LXA	L(0),2		MOVE
00143	0	50000	2	00614	COMPW1	CLA	BUFFER,2		FORMAT
00144	0	60100	0	00441		STO	WORD1		ENTRY
00145	1	77777	2	00146		TXI	COMPW3,2,-1		INTO
00146	0	50000	2	00614	COMPW3	CLA	BUFFER,2		WORD1 AND
00147	0	60100	0	00443		STO	WORD3		WORD3.
00150	0	07400	4	00370		TSX	5PS4W,4		* THEN GO COMPILE FORMAT TABLE.
00151	1	00002	1	00152		TXI	TESTF,1,2		IF NO ENTRIES REMAIN,
00152	-3	00000	1	00154	TESTF	TXL	5P7CBW,1,0		* THEN GO WRITE OUT CIT BUFFER.
00153	1	77777	2	00143		TXI	COMPW1,2,-1		OTHERWISE, CONTINUE COMPILING.

END OF PROGRAM 5P6FTC.
* * * * *

5P7CBW.
TERMINATE COMPILING.

00154	0	76600	0	00223	5P7CBW	WTB	CITTAP		WRITE
00155	-0	53400	2	00044		LXD	BBOX,2		THE CONTENTS
00156	-0	63400	2	00162		SXD	TESTC,2		OF THE
00157	0	53400	2	00413		LXA	L(0),2		CIT BUFFER
00160	0	70000	2	00445	WRCIB	CPY	CIB,2		ONTO
00161	1	77777	2	00162		TXI	TESTC,2,-1		TAPE3
00162	3	00000	2	00160	TESTC	TXH	WRCIB,2,**		FOLLOWED BY
00163	0	77000	0	00203		WEF	CITTAP		AN END OF FILE.

END OF PROGRAM 5P7CBW.
* * * * *

5P8S2D/ CALLS=5PS1R,5PS3D.
TRANSFER SIZ TABLE FROM TAPE 2 TO DRUM 2.

00164	-0	50000	0	00137	5P8S2D	CAL	TXLOP		SET OP SWITCH IN 5PS1R
00165	0	63000	0	00310		STP	OPSW2		TO COPY EIFNO, BUT SKIP TABNO TEST.
00166	0	07400	4	00304		TSX	5PS1R,4		* GO READ IN SIZ TABLE + EIFNO.


```

00167 0 50000 0 00612      CLA TABNUM      MOVE EIFNO
00170 0 60100 0 00611      STO EIFNO      INTO PROPER LOCATION.
00171 0 50000 0 00351      CLA SETDRM    SET DRUM ROUTINE (5PS3D)
00172 0 40200 0 00414      SUB L(1)      TO WRITE ONTO DRUM2.
00173 0 60100 0 00351      STO SETDRM    SET DRUM ADDRESS
00174 -0 75400 0 02000 DRMLOC PXD 1024,0  FOR REMAINING DRUM TABLES
00175 0 62100 0 00174      STA DRMLOC    TO ZERO.
00176 -3 00000 1 00202      TXL EMPTY2,1,0 IF THERE WERE ENTRIES MADE
00177 0 50000 0 00613      CLA WRDCNT    IN SIZ TABLE, PICKUP WRDCNT AND,
00200 0 07400 4 00346      TSX 5PS3D,4  * GO WRITE SIZ ONTO DRUM2.
00201 1 00000 0 00203      TXI 5P9T4D,0 * WHEN DONE, GO READ IN TEIFNO.
00202 0 07400 4 00351 EMPTY2 TSX 5PS3D3,4 * IF SIZ IS EMPTY, GO RECORD WRD CNT.
                                END OF PROGRAM 5P8S2D.
                                * * * * *

```

```

5P9T4D/ CALLS=5PS1R,5PS3D.
TRANSFER TEIFNO TABLE FROM TAPE 2 TO DRUM 4.

```

```

00203 0 53400 2 00420 5P9T4D LXI L(5),2  MOVE TABLE TAPE
00204 0 76200 0 00222      RTB TABTAP    OVER END OF FILE AND 1ST FOUR
00205 2 00001 2 00204      TIX 5P9T4D+1,2,1 TABLES TO POSITION FOR TEIFNO.
00206 0 50000 0 00137      CLA TXLOP     SET OP SWITCH IN 5PS1R
00207 0 63000 0 00310      STP OPSW2    TO MAKE TABLE NUMBER TEST.
00210 0 50000 0 00413      CLA L(0)     PICKUP TEIFNO TABLE NUMBER, AND
00211 0 07400 4 00304      TSX 5PS1R,4  * GO READ IN TEIFNO TABLE.
00212 0 50000 0 00137      CLA TXLOP     SET OP SWITCH IN 5PS3D
00213 0 63000 0 00354      STP DRMSW    TO WRITE EIFNO ON DRUM.
00214 0 50000 0 00351      CLA SETDRM    SET DRUM ROUTINE
00215 0 40000 0 00415      ADD L(2)     TO WRITE ONTO
00216 0 60100 0 00351      STO SETDRM    DRUM 4.
00217 -3 00000 1 00222      TXL EMPTY3,1,0 IF THERE WERE ENTRIES MAEEIN TEIFNO
00220 0 07400 4 00344      TSX 5PS3D,4  * GO WRITE EIFNO AND TEIFNO ON DRUM4.
00221 1 00000 0 00223      TXI 5P10ED,0 * WHEN DONE, GO READ IN EQUIT.
00222 0 07400 4 00351 EMPTY3 TSX 5PS3D3,4 * IF TEIFNO IS EMPTY, RECORD WRD CNT.
                                END OF PROGRAM 5P9T4D.
                                * * * * *

```

```

5P10ED/ CALLS=5PS1R,5PS3D.
TRANSFER EQUIT TABLE FROM TAPE 2 TO DRUM 1.

```

```

00223 0 53400 1 00421 5P10ED LXI L(7),1  MOVE TABLE TAPE
00224 0 76200 0 00222      RTB TABTAP    OVER 7 RECORDS
00225 2 00001 1 00224      TIX 5P10ED+1,1,1 TO POSITION FOR EQUIT.
00226 0 50000 0 00422      CLA L(8)     PICKUP EQUIT TABLE NUMBER, AND
00227 0 07400 4 00304      TSX 5PS1R,4  * GO READ IN EQUIT TABLE.
00230 -0 50000 0 00137      CAL TXLOP     SET OP SWITCH IN 5PS3D
00231 0 63000 0 00354      STP DRMSW    TO SKIP WRITING OF EIFNO.
00232 0 50000 0 00351      CLA SETDRM    SET DRUM ROUTINE
00233 0 40200 0 00416      SUB L(3)     TO WRITE ONTO
00234 0 60100 0 00351      STO SETDRM    DRUM1.
00235 -3 00000 1 00270      TXL EMPTY4,1,0 IF EQUIT IS EMPTY, RECORD WRDCNT.
00236 -0 53400 4 00613      LXI WRDCNT,4 OTHERWISE,
00237 0 53400 3 00413      LXI L(0),3  COMPUTE A
00240 0 76000 0 00000 EQCHS CLM      LOGICAL
00241 0 36100 1 00614 CLASS ACL BUFFER,1 CHECK
00242 0 56000 1 00614      LDQ BUFFER,1 SUM

```

```

00243 -0 60000 2 03550      STQ NEWEQ,2          FOR
00244  1 77777 1 00245      TXI NXT1,1,-1       EACH
00245  1 77777 2 00246 NXT1 TXI NXT2,2,-1       EQUIVALENCE
00246  0 36100 1 00614 NXT2 ACL BUFFER,1        CLASS
00247  0 56000 1 00614      LDQ BUFFER,1        AND
00250 -0 60000 2 03550      STQ NEWEQ,2          MOVE
00251  1 77777 1 00252      TXI NXT3,1,-1       EACH
00252  1 77777 2 00253 NXT3 TXI NXT4,2,-1       CLASS
00253  1 77776 4 00254 NXT4 TXI NXT5,4,-2       FOLLOWED
00254  0 16200 0 00241 NXT5 TQP CLASS          BY ITS
00255  0 60200 2 03550 L(NEQ) SLW NEWEQ,2        CHECK
00256  1 77777 2 00257      TXI NXT6,2,-1       SUM
00257  3 00001 4 00240 NXT6 TXH EQCHS,4,1      INTO NEWEQ.
00260 -0 75400 2 00000      PXD ,2             COMPUTE
00261  0 76000 0 00006      COM                THE
00262  0 40100 0 00425      ADM DECR1          NEW
00263  0 62200 0 00613      STD WRDCNT         WORDCOUNT
00264  0 77100 0 00022      ARS 18             AND
00265  0 73400 1 00000      PAX ,1            THE
00266  0 40000 0 00255      ADD L(NEQ)         NEW
00267  0 62100 0 00362      STA CADDRM        MEMORY ADDRESS, AND
00270  0 07400 4 00351 EMPTY4 TSX 5PS3D3,4    * GO WRITE EQUIT ON DRUM 1.

```

```

      END OF PROGRAM 5P10ED.
      * * * * *

```

```

      5P11CD/ CALLS=5PS1R,5PS3D.
      TRANSFER CLOSUB TABLE FROM TAPE 2 TO DRUM 3.

```

```

00271  0 50000 0 00423 5P11CD CLA L(9)          PICKUP CLOSUB TABLE NUMBER, AND
00272  0 07400 4 00304      TSX 5PS1R,4        * GO READ IN CLOSUB TABLE.
00273  0 50000 0 00351      CLA SETDRM          SET DRUM ROUTINE
00274  0 40000 0 00415      ADD L(2)          TO WRITE ONTO
00275  0 60100 0 00351      STO SETDRM          DRUM3.
00276 -3 00000 1 00301      TXL EMPTY5,1,0      IF THERE WERE ENTRIES MADEIN CLOSUB
00277  0 07400 4 00344      TSX 5PS3D,4        * GO WRITE CLOSUB ONTO DRUM3.
00300  1 00000 0 00302 5PXR1 TXI END5P,0,**     THEN GO CALL SECTION SIX.
00301  0 07400 4 00351 EMPTY5 TSX 5PS3D3,4    * IF CLOSUB IS EMPTY, RECORD WRDCNT.
00302  0 76200 0 00221 END5P RTB SYSTAP       SPACE OVER DIAGNOSTIC RECORD,
00303  1 00000 0 00004 5PXR2 TXI SECSIX,0,**   * THEN GO CALL SECTION SIX.

```

```

      END OF PROGRAM 5P11CD.
      * * * * *

```

```

      END OF PROGRAM 5PRIME.
      * * * * *

```

```

      5PS1R,4/ CALLERS=5P1ASC,5P2FXC,5P3F3D,5P4FLC,5P6FTC,5P8S2D,
      5P9T4D,5P10ED,5P11CD. CALLS=DIAG.
      READ A RECORD FROM TAPE 2.

```

```

00304  0 53400 2 00420 5PS1R LXA TERC,2        SET TAPE ERROR COUNTER FOR 5 TRYS.
00305  0 76200 0 00222 READ  RTB TABTAP        SELECT TABLE TAPE FOR READING.
D 00306 -3 00000 0 00315 OPSW1 TXL SKIP,0       IF OP SWITCH IS SET TO TXH,
00307  0 70000 0 00612      CPY TABNUM          THEN COPY 1ST WORD INTO TABNUM.
D 00310  3 00000 0 00315 OPSW2 TXH SKIP,0       IF OP SWITCH IS SET TO TXH,
00311  0 34000 0 00612      CAS TABNUM          THEN COMPARE C(AC) WITH TABNUM=
D 00312  1 00000 0 00314      TXI STOP,0          IF INCORRECT RECORD - GO TO STOP.

```

```

00313 1 00000 0 00315 5PXR4 TXI SKIP,0,** IF EQUAL - THEN CONTINUE.
00314 0 07400 4 00004 STOP TSX DIAG,4 * IF INCORRECT RECORD - GO TO DIAG.
00315 0 70000 0 00613 SKIP CPY WRDCNT READ WORD COUNT,
00316 0 53400 1 00413 LXI L(0),1 AND THEN READ
00317 0 70000 1 00614 COPY CPY BUFFER,1 COMPLETE TABLE
00320 1 77777 1 00317 TXI COPY,1,-1 INTO BUFFER.
00321 0 07400 4 00004 TSX DIAG,4 * IF END OF FILE -,GO TO DIAGNOSTIC.
00322 0 76600 0 00333 IOD WHEN DONE,
00323 -0 76000 0 00012 RTT IF TAPE RECORD
00324 1 00000 0 00326 TXI RTTON,0 WAS READ CORRECTLY,
00325 0 02000 4 00001 TRA 1,4 * RETURN TO MAIN ROUTINE.
00326 0 76400 0 00202 RTTON BST TABTAP OTHERWISE, BACKSPACE TAPE, AND
00327 2 00001 2 00305 TIX READ,2,1 GO REREAD RECORD UNLESS
00330 0 07400 4 00004 TSX DIAG,4 * 5 ATTEMPTS FAILED - GO TO DIAG.

```

END OF PROGRAM 5PS1R.

5PS2C,4/ CALLS=5PS4W. CALLERS=5P1ASC,5P2FXC,5P4FLC,5P5R6C.
 COMPILE 4-WORD INSTRUCTIONS FROM BUFFER ENTRIES.

```

00331 -0 63400 4 00313 5PS2C SXD 5PXR4,4 SAVE C(XR4) FOR EXIT.
00332 0 53400 2 00413 LXI L(0),2 MOVE
00333 0 50000 2 00614 COMP CLA BUFFER,2 ENTRY
00334 0 60100 0 00443 STO WORD3 INTO WORD3,
00335 0 07400 4 00370 TSX 5PS4W,4 * AND GO COMPILE INSTRUCTION.
00336 1 00001 1 00337 TXI TEST,1,1 IF NO ENTRIES REMAIN,
00337 -3 00000 1 00342 TEST TXL EXIT2,1,0 THEN TAKE EXIT2.
00340 0 60000 0 00441 STZ WORD1 SET WORD1 TO ZERO,
00341 1 77777 2 00333 TXI COMP,2,-1 AND COMPILE SUCCEEDING ENTRIES.
00342 -0 53400 4 00313 EXIT2 LXI 5PXR4,4 RESTORE C(XR4), AND
00343 0 02000 4 00001 TRA 1,4 * RETURN TO MAIN ROUTINE.

```

END OF PROGRAM 5PS2C.

5PS3D,4/ CALLERS=5P3F3D,5P8S2D,5P9T4D,5P10ED,5P11CD.
 WRITE TABLE ONTO DRUM FOLLOWED BY CHECKSUM.

```

00344 0 50000 0 00613 5PS3D CLA WRDCNT SET C(XR1)
00345 0 77100 0 00022 5PS3D1 ARS 18 EQUAL TO
00346 0 73400 1 00614 5PS3D2 PAX BUFFER,1 THE WORD COUNT
00347 0 40000 0 00346 ADD 5PS3D2 AND INITIALIZE
00350 0 62100 0 00362 STA CADDRM CAD ADDRESS.
00351 0 76600 0 00303 5PS3D3 WDR 3 WRITE ONTO
00352 0 76000 0 00000 CLM THE DRUM,
00353 0 46000 0 00174 LDA DRMLC ACCORDING TO SWITCH SETTING.
00354 -3 00000 0 00357 DRMSW TXL DRMSW+3,0 IF OP SWITCH IS TXH,
00355 0 70000 0 00611 CPY EIFNO WRITE EIFNO FOLLOWED
00356 0 70000 0 00611 CPY EIFNO BY ITS CHECKSUM.
00357 0 70000 0 00613 CPY WRDCNT WRITE WORD COUNT FOLLOWED
00360 0 70000 0 00613 CPY WRDCNT BY ITS CHECKSUM, AND THEN
00361 -3 00000 1 00367 TXL EXIT3,1,0 UNLESS THE BUFFER IS EMPTY,
00362 -0 70000 1 00000 CADDRM CAD **,1 WRITE THE
00363 2 00001 1 00362 TIX CADDRM,1,1 CONTENTS OF BUFFER
00364 0 70000 0 00413 CPY L(0) ONTO DRUM FOLLOWED
00365 0 60200 0 00440 SLW 5PERAS BY ZERO AND THEN
00366 0 70000 0 00440 CPY 5PERAS THE LOGICAL CHECKSUM.

```

```

00367 0 02000 4 00001 EXIT3 TRA 1,4 * RETURN TO MAIN ROUTINE.
      END OF PROGRAM 5PS3D.
      * * * * *
5PS4W,4/ CALLERS=5P6FTC,5PS2C.
MOVE 4-WORD INSTRUCTION INTO CIB, AND WRITE CIB ONTO TAPE3.
00370 -0 63400 1 00300 5PS4W SXD 5PXR1,1 SAVE C(XR1) AND
00371 -0 63400 2 00303 SXD 5PXR2,2 SAVE C(XR2).
00372 -0 53400 2 00044 LXD BBOX,2 IF THE NUMBER OF
00373 3 77634 2 00402 TXH MOVE-1,2,-100 WORDS ENTERED = 100,
00374 0 76600 0 00223 WTB CITTAP THEN
00375 0 53400 1 00413 LXA L(0),1 WRITE
00376 0 70000 1 00445 WRITE CPY CIB,1 THE CONTENTS
00377 1 00001 2 00400 TXI TESTB,2,1 OF THE CIT
00400 -3 00000 2 00402 TESTB TXL MOVE-1,2,0 BUFFER
00401 1 77777 1 00376 TXI WRITE,1,-1 ONTO TAPE3.
00402 0 53400 1 00417 LXA L(4),1 MOVE
00403 0 50000 1 00445 MOVE CLA WORD1+4,1 NEW
00404 0 60100 2 00445 STO CIB,2 4 WORD
00405 1 77777 2 00406 TXI TESTA,2,-1 INSTRUCTION
00406 2 00001 1 00403 TESTA TIX MOVE,1,1 INTO CIT BUFFER.
00407 -0 63400 2 00044 SXD BBOX,2 ADJUST BUFFER COUNT.
00410 -0 53400 1 00300 LXD 5PXR1,1 RESTORE C(XR1),
00411 -0 53400 2 00303 LXD 5PXR2,2 RESTORE C(XR2), AND
00412 0 02000 4 00001 TRA 1,4 * EXIT TO MAIN ROUTINE.
      END OF PROGRAM 5PS4W.
      * * * * *

```

```

CONSTANTS USED BY 5 PRIME.
00413 0 00000 0 00000 L(0) PZE 0
00414 0 00000 0 00001 L(1) PZE 1
00415 0 00000 0 00002 L(2) PZE 2
00416 0 00000 0 00003 L(3) PZE 3
00417 0 00000 0 00004 L(4) PZE 4
00420 0 00000 0 00005 L(5) PZE 5
00421 0 00000 0 00007 L(7) PZE 7
00422 0 00000 0 00010 L(8) PZE 8
00423 0 00000 0 00011 L(9) PZE 9
00424 0 00000 0 00012 L(10) PZE 10
00425 0 00001 0 00000 DECR1 PZE 0,0,1
00426 02000000000000000000 FIXSYM BCD 1200000
00427 03000000000000000000 FLOSYM BCD 1300000
00430 06000000000000000000 SIXSYM BCD 1600000
00431 46236300000000000000 OCTLOP BCD 1OCT000
00432 22232400000000000000 4MATOP BCD 1BCD000
00433 +23300000000000000000 SIX OCT 233000000000,77777,0,1000000,0
00434 +0000000077777
00435 +00000000000000000000
00436 +00000100000000000000
00437 +00000000000000000000

```

```

END OF 5 PRIME CONSTANTS.
* * * * *

```

WORKING STORAGE USED BY 5 PRIME.

```

00440 5PERAS BSS 1
00441 0500000000000 WORD1 BCD 1500000
00442 6351210000000 WORD2 BCD 1TRA000
00443 0000000000000 WORD3 BCD 1000000
00444 0000000000000 WORD4 BCD 1000000
00445 CIB BSS 100
00611 EIFNO BSS 1
00612 TABNUM BSS 1
00613 WRDCNT BSS 1
00614 BUFFER BSS 1500
03550 NEWEQ BSS 1500

```

END OF 5 PRIME WORKING STORAGE.

* * * * *

SYNONYMS USED BY 5 PRIME.

```

00351 SETDRM SYN 5PS3D3 LOCATION OF WDR INSTRUCTION.
00420 TERC SYN L(5) TAPE ERROR COUNTER.
00001 SYSTAP SYN 1 FORTRAN SYSTEM TAPE.
00002 TABTAP SYN 2 TABLE TAPE.
00003 CITTAP SYN 3 COMPILED INSTRUCTION TAPE.
00004 DIAG SYN 4 DIAGNOSTIC ROUTINE.
00004 SECSIX SYN 4 SECTION SIX = NEXT SECTION.

```

END OF 5 PRIME SYNONYMS.

* * * * *

00030 END 5PRIME

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	403	0	0	0	0
LIB	0	0	0	0	0
COL	403	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 416

NUMBER OF SYMBOLS, DEF 104,DEFOP 0,UNDEF 0

REM ***** FORTRAN II SECTION PRE-SIX *****F6A00010

00104	0	76000	0	00006		COM		F6A00510
00105	0	10000	0	00110		TZE SDF		F6A00520
00106	2	00001	2	00074		TIX RDRM1,2,1		F6A00530
00107	0	07400	4	00004		TSX 4,4		F6A00540
00110	0	50000	0	04574	SDF	CLA TV-2	WD CT. OF TRANSFER VECTOR.	F6A00550
00111	0	60100	0	00032		STO PC3	STORE LENGTH IN PROGRAM CARD.	F6A00560
00112	0	10000	0	00133		TZE NOVC		F6A00570
00113	0	40200	0	01342		SUB C18		F6A00580
00114	0	62200	0	00127		STD P8		F6A00590
00115	-0	53400	5	01307		LXD C1,5	INITIALIZE TAPE 4 (SETXR1 AND 4=0)	F6A00600
00116	-0	50000	4	04573	P9	CAL TV-3,4	STORAGE.	F6A00610
00117	0	60200	1	02461		SLW REC-1,1	SELECT NAME AND	F6A00620
00120	0	60200	1	02457		SLW REC-3,1	COMPILE CIT.	F6A00630
00121	0	60000	1	02456		STZ REC-4,1		F6A00640
00122	-0	50000	0	01311		CAL BCD		F6A00650
00123	0	60200	1	02460		SLW REC-2,1		F6A00660
00124	1	00004	1	00125		TXI P7,1,4		F6A00670
00125	3	00143	1	00131	P7	TXH WRIT4,1,99		F6A00680
00126	1	00001	4	00127	P11	TXI P8,4,1		F6A00690
00127	3	00127	4	00135	P8	TXH P10,4,*		F6A00700
00130	0	02000	0	00116		TRA P9		F6A00710
00131	0	07400	2	01254	WRIT4	TSX SUB1,2	WRITE RECORD ON	F6A00720
00132	0	02000	0	00126		TRA P11	TAPE 4.	F6A00730
00133	-0	53400	1	01307	NOVC	LXD C1,1	SETXR1=0	F6A00740
00134	0	02000	0	00135		TRA P10		F6A00750
						SUBDEF COMPILING		F6A00760
00135	0	53400	4	00142	P10	LXA P16,4	SET READ ERROR COUNTER.	F6A00770
00136	0	02000	0	00143		TRA P17		F6A00780
00137	0	76400	0	00202	P15	BST 2		F6A00790
00140	2	00001	4	00143		TIX P17,4,1		F6A00800
00141	0	07400	4	00004		TSX 4,4		F6A00810
00142	0	42000	0	00005	P16	HPR 5		F6A00820
00143	0	76200	0	00222	P17	RTB 2	READ SUBDEF TABLE INTO	F6A00830
00144	0	53400	2	01310		LXA C2,2	SUB-1,-2,...	F6A00840
00145	0	70000	2	04574	P18	CPY SUB-2,2		F6A00850
00146	1	00001	2	00145		TXI P18,2,1		F6A00860
00147	0	02000	0	01341		TRA EOF2		F6A00870
00150	0	77100	0	00377		ARS 255		F6A00880
00151	0	77100	0	00377		ARS 255		F6A00890
00152	-0	76000	0	00012		RTT		F6A00900
00153	0	02000	0	00137		TRA P15		F6A00910
00154	0	50000	0	00032		CLA PC3		F6A00920
00155	0	77100	0	00022		ARS 18		F6A00930
00156	0	60100	0	00035		STO PC6		F6A00940
00157	-0	50000	0	04574		CAL SUB-2	STORE SUBDEF WORD COUNT.	F6A00950
00160	0	60100	0	00036		STO SUBIN		F6A00960
00161	0	10000	0	01233		TZE NOSUB	TEST FOR SUBROUTINE.	F6A00970
00162	-0	50000	0	04573	P19	CAL SUB-3	STORE NAME OF SUBROUTINE FOR PROGRAM CARD.	F6A00980
00163	0	60200	0	00034		SLW PC5		F6A00990
00164	0	50000	0	00035		CLA PC6		F6A01000
00165	0	40000	0	01307		ADD C1		F6A01010
00166	0	60100	0	00035		STO PC6	SET RELATIVE	F6A01020
00167	0	60000	0	01356		STZ RCT	COUNT TO 0.	F6A01030
00170	-0	50000	0	01314		CAL C5	COMPILE CITS.	F6A01040

00171	0	60200	1	02461		SLW REC-1,1		F6A01050
00172	0	07400	2	01265		TSX SUB2,2	COMPLETES CIT ONE.	F6A01060
00173	0	02000	0	00175		TRA P20	CIT 1	F6A01070
00174	0	07400	2	01254		TSX SUB1,2	IF VEC, WRITE OFF TAPE FOUR.	F6A01080
00175	0	60000	1	02461	P20	STZ REC-1,1	COMPILE CIT, WD1=0,	F6A01090
00176	0	07400	2	01265		TSX SUB2,2	WD 2=HTR, WD 3=0, WD 4=0.	F6A01100
00177	0	02000	0	00201		TRA P22		F6A01110
00200	0	07400	2	01254		TSX SUB1,2	IF NEC, WRITE OFF TAPE FOUR.	F6A01120
00201	0	60000	1	02461	P22	STZ REC-1,1	CIT 3	F6A01130
00202	0	07400	2	01265		TSX SUB2,2		F6A01140
00203	0	02000	0	01415		TRA NAME		F6A01150
00204	0	07400	2	01254		TSX SUB1,2		F6A01160
00205	0	02000	0	01415	COMPX	TRA NAME		F6A01170
00206	0	07400	2	01275		TSX SUB3,2	TO STORE CIT 4 IN TAPE 4 BUFFER.	F6A01180
00207	0	02000	0	00211		TRA P26		F6A01190
00210	0	07400	2	01254		TSX SUB1,2		F6A01200
00211	-0	50000	0	01320	P26	CAL C9		F6A01210
00212	0	07400	2	01275		TSX SUB3,2	TO STORE IN T-4 BUFFER PROLOGUE CIT 5	F6A01220
00213	0	02000	0	00215		TRA P28		F6A01230
00214	0	07400	2	01254		TSX SUB1,2		F6A01240
00215	-0	50000	0	01321	P28	CAL C10	TO STORE IN T-4 BUFFER PROLOGUE CIT 6.	F6A01250
00216	0	07400	2	01275		TSX SUB3,2		F6A01260
00217	0	02000	0	00221		TRA P30		F6A01270
00220	0	07400	2	01254		TSX SUB1,2		F6A01280
00221	0	56000	0	01307	P30	LDQ C1	INIT DELETE	F6A01290
00222	-0	60000	0	01357		STQ DELIN	INDICATOR NOT ZERO.	F6A01300
00223	0	50000	0	04574		CLA SUB-2	COMPUTE TEST	F6A01310
00224	0	77100	0	00022		ARS 18	ADDRESS FOR END	F6A01320
00225	0	40200	0	01317		SUB C8	OF ARG LIST.	F6A01330
00226	0	60100	0	01360		STO ARGCT	ARGCT CONTAINS WD CT. OF SUBDEF-1.	F6A01340
00227	0	10000	0	01243		TZE F1	=0 IF NO ARGUMENTS	F6A01350
00230	0	40000	0	01322		ADD C11		F6A01360
00231	0	62100	0	01333		STA AGTST	AGTST CONTAINS NO. OF ARGS-SUB+4	F6A01370
						FORM ARG ARRAY INDICATOR TABLE		F6A01380
00232	-0	50000	0	01322	A1	CAL C11	INIT ARG LIST,	F6A01390
00233	0	62100	0	00306		STA A10	SET ADDRESS A10=SUB-4.	F6A01400
00234	0	53400	2	00142		LXA P16,2		F6A01410
00235	0	76200	0	00302	A4	RDR 2	READ SIZE TABLE WORD COUNT.	F6A01420
00236	0	46000	0	00237		LDA A2		F6A01430
00237	-0	75400	0	00000	A2	PXD 0		F6A01440
00240	-0	70000	0	01350		CAD EA1		F6A01450
00241	0	76000	0	00006		COM		F6A01460
00242	-0	70000	0	01351		CAD EA2		F6A01470
00243	0	76000	0	00006		COM		F6A01480
00244	0	10000	0	00247		TZE A3		F6A01490
00245	2	00001	2	00235		TIX A4,2,1		F6A01500
00246	0	07400	4	00004		TSX 4,4		F6A01510
00247	0	50000	0	01350	A3	CLA EA1		F6A01520
00250	0	77100	0	00001		ARS 1		F6A01530
00251	0	60100	0	01350		STO EA1	EA1 NOW CONTAINS NO. OF 2-WORD ENTRIES IN SIZE	F6A01540
						TABLE.		F6A01541
00252	-0	53400	2	01307	A18	LXD C1,2	SET ARRAY IND. TABLE	F6A01550
00253	0	60000	2	05310	A19	STZ ARIND,2	TO ZERO,	F6A01560
00254	1	00001	2	00255		TXI A20,2,1	TABLE	F6A01570

00255	3	00035	2	00257	A20	TXH CH4,2,29		F6A01580
00256	0	02000	0	00253		TRA A19		F6A01590
00257	0	53400	2	01350	CH4	LXA EA1,2		F6A01600
00260	-3	00000	2	00342		TXL B1,2,0	TEST FOR NO ARRAYS.	F6A01610
00261	-0	63400	1	01352		SXD IRIST,1	SAVE TAPE 4 INDEX.	F6A01620
00262	0	53400	1	00142		LXA P16,1		F6A01630
00263	0	76200	0	00302	A8	RDR 2		F6A01640
00264	0	46000	0	00265		LDA A5		F6A01650
00265	-0	75400	0	00002	A5	PXD 2		F6A01660
00266	-0	70000	2	06546	A6	CAD DIM,2	READ SIZ TABLE.	F6A01670
00267	-0	70000	0	01351		CAD EA2		F6A01680
00270	2	00001	2	00266		TIX A6,2,1		F6A01690
00271	0	70000	0	01351		CPY EA2		F6A01700
00272	0	76000	0	00006		COM		F6A01710
00273	-0	70000	0	01351		CAD EA2		F6A01720
00274	0	76000	0	00006		COM		F6A01730
00275	0	10000	0	00300		TZE A7		F6A01740
00276	2	00001	1	00263		TIX A8,1,1		F6A01750
00277	0	07400	4	00004		TSX 4,4		F6A01760
00300	0	50000	0	01324	A7	CLA C13	INIT ARIND TABLE.	F6A01770
00301	-0	53400	1	01352		LXD IRIST,1		F6A01780
00302	0	60100	0	01351		STO EA2		F6A01790
00303	0	50000	0	01323		CLA C12		F6A01800
00304	0	62100	0	00316		STA A14		F6A01810
00305	0	53400	2	01350	A9	LXA EA1,2		F6A01820
00306	0	50000	0	04572	A10	CLA SUB-4	SELECT ARG.	F6A01830
00307	0	34000	2	06546		CAS DIM,2	IS ARGUMENT AN ARRAY.	F6A01840
00310	0	02000	0	00312		TRA A11		F6A01850
00311	0	02000	0	00315		TRA A13	YES	F6A01860
00312	2	00001	2	00306	A11	TIX A10,2,1		F6A01870
00313	0	50000	0	01334	A12	CLA ZERO	ARG IS NOT ARRAY. SET BIT TO ZERO	F6A01880
00314	0	02000	0	00316		TRA A14		F6A01890
00315	0	50000	0	01325	A13	CLA C14	ARG IS ARRAY, SET BIT TO BE 1.	F6A01900
00316	-0	60200	0	05310	A14	ORS ARIND STORE	INSTORE INDICATOR	F6A01910
00317	0	50000	0	01325		CLA C14		F6A01920
00320	0	77100	0	00001	A17	ARS 1		F6A01930
00321	0	60100	0	01325		STO C14		F6A01940
00322	-0	50000	0	01351		CAL EA2	MODIFY ARIND COUNT.	F6A01950
00323	0	40200	0	01317		SUB C8		F6A01960
00324	0	60100	0	01351		STO EA2		F6A01970
00325	0	10000	0	00334		TZE A15	WORD FULL TEST.	F6A01980
00326	0	50000	0	00306	A16	CLA A10	MODIFY ARG	F6A01990
00327	0	40200	0	01317		SUB C8	LIST ADDRESS.	F6A02000
00330	0	62100	0	00306		STA A10		F6A02010
00331	0	40200	0	01333		SUB AGTST		F6A02020
00332	0	10000	0	00342		TZE B1	NO MORE ARGUMENTS.	F6A02030
00333	0	02000	0	00305		TRA A9		F6A02040
00334	0	50000	0	01324	A15	CLA C13		F6A02050
00335	0	60100	0	01351		STO EA2		F6A02060
00336	0	50000	0	00316		CLA A14		F6A02070
00337	0	40000	0	01317		ADD C8		F6A02080
00340	0	62100	0	00316		STA A14		F6A02090
00341	0	02000	0	01432		TRA APCH3+1		F6A02100
00342	-0	63400	1	01352	B1	SXD IRIST,1	SAVE TAPE 4 INDEX	F6A02110

T

FORM OP TABLES FROM SEARCHING CIT					
00343	0 60000 0 01361		STZ TP2CT	SET TAPE 2 RECORD COUNT TO ZERO,	F6A02120
00344	0 76200 0 00222	B3	RTB 2	READY TAPE 2.	F6A02130
00345	0 70000 0 01351	CH2	CPY EA2		F6A02140
00346	0 02000 0 00345		TRA CH2		F6A02150
00347	0 02000 0 00351		TRA B2	E0F	F6A02160
00350	0 02000 0 00344		TRA B3	EOR	F6A02170
00351	-0 53400 1 01307	B2	LXD C1,1	INIT OP BLOCK. SET XR1=0	F6A02180
00352	0 53400 4 00357	B8	LXA B5,4	READ TAPE 3	F6A02190
00353	0 02000 0 00360		TRA B6		F6A02200
00354	0 76400 0 00203	B4	BST 3		F6A02210
00355	2 00001 4 00360		TIX B6,4,1		F6A02220
00356	0 07400 4 00004		TSX 4,4		F6A02230
00357	0 42000 0 00005	B5	HPR 5		F6A02240
00360	0 76200 0 00223	B6	RTB 3	SELECT CIT TAPE.	F6A02250
00361	0 53400 2 01310		LXA C2,2	SETXR2=-1	F6A02260
00362	0 70000 2 02624	B7	CPY CIT-2,2	COPY A RECORD OF CIT TAPE INTO CIT-1,-2,	F6A02270
00363	1 00001 2 00362		TXI B7,2,1		F6A02280
00364	0 02000 0 00517		TRA B28	END OF FILE	F6A02290
00365	0 77100 0 00377		ARS 255	END OF RECORD	F6A02300
00366	0 77100 0 00377		ARS 255		F6A02310
00367	-0 76000 0 00012		RTT		F6A02320
00370	0 02000 0 00354		TRA B4		F6A02330
00371	-0 63400 2 00515		SXD B27,2	SAVE TAPE 3 RECORD LENGTH(-2)	F6A02340
00372	-0 53400 4 01307		LXD C1,4	INIT TAPE 3 BLOCK.	F6A02350
00373	0 50000 0 01356		CLA RCT		F6A02360
00374	-0 10000 0 00377		TNZ B9	TRANSFER IF RELATIVE COUNT NOT ZERO.	F6A02370
00375	-0 50000 0 02625		CAL CIT-1	STORE INITIAL	F6A02380
00376	0 60200 0 01353		SLW SLINT	SYM LOCATION.	F6A02390
00377	0 50000 0 01357	B9	CLA DELIN	IS DELINO ZERO.	F6A02400
00400	0 10000 0 00414		TZE B11	TRANSFER IF YES.	F6A02410
00401	-0 50000 4 02624		CAL CIT-2,4	SELECT CIT. IS OP QPR.	F6A02420
00402	0 77100 0 00022		ARS 18		F6A02430
00403	0 34000 0 01332		CAS QPR		F6A02440
00404	0 02000 0 00425		TRA B12		F6A02450
00405	0 02000 0 00407		TRA B10	EQUAL. OP IS QPR.	F6A02460
00406	0 02000 0 00425		TRA B12	NOT EQUAL	F6A02470
00407	0 60000 0 01357	B10	STZ DELIN	QPR OP. SET DELETE INDICATOR TO ZERO.	F6A02480
00410	0 50000 0 01356	B16	CLA RCT		F6A02490
00411	0 40000 0 01317		ADD C8	INCREMENT RCT BY 1,	F6A02500
00412	0 60100 0 01356		STO RCT	AND GO MODIFY TAPE THREE INDEX.	F6A02510
00413	0 02000 0 00514		TRA B26		F6A02520
00414	0 50000 0 01317	B11	CLA C8	SET DELETE INDIC. EQUAL ONE	F6A02530
00415	0 60100 0 01357		STO DELIN	AND GO MODIFY TAPE 3 IN0EX.	F6A02540
00416	0 02000 0 00514		TRA B26		F6A02550
00417	0 50000 4 02622	EXT21	CLA CIT-4,4		F6A02560
00420	0 77100 0 00022		ARS 18		F6A02570
00421	0 40000 0 01356		ADD RCT		F6A02580
00422	0 60100 0 01356		STO RCT		F6A02590
00423	0 02000 0 00514		TRA B26		F6A02600
00424	000000226262	BSS	BCD 1000BSS		F6A02610
00425	0 34000 0 00424	B12	CAS BSS	OP NOT QPR. TEST FOR BSS OP.	F6A02620
00426	0 02000 0 00430		TRA EXT20		F6A02630
00427	0 02000 0 00417		TRA EXT21	OP EQUAL BSS.	F6A02640
					F6A02650

00430	0	02000	0	01370	EXT20	TRA	APCH1	OP NOT QPR NOR BSS.	F6A02660
00431	0	62100	0	00432		STA	B13	INITIALIZE ARGUMENT LIST ADDRESS.	F6A02670
00432	0	50000	0	04572	B13	CLA	SUB-4	SEARCH ARG LIST	F6A02680
00433	0	34000	4	02623		CAS	CIT-3,4	FOR EQUAL SYMBOLIC	F6A02690
00434	0	02000	0	00436		TRA	B15	ADDRESS.	F6A02700
00435	0	02000	0	00444		TRA	B14	EQUAL, GO TO B14 TO COMPILE OP TABLE ENTRY.	F6A02710
00436	0	50000	0	00432	B15	CLA	B13	SYMBOLIC ADDRESS NOT AN ARGUMENT. UPDATE	F6A02720
00437	0	40200	0	01317		SUB	C8	ARGUMENT COUNTER.	F6A02730
00440	0	62100	0	00432		STA	B13		F6A02740
00441	0	40200	0	01333		SUB	AGTST	TEST FOR ALL ARGUMENTS TREATED.	F6A02750
00442	0	10000	0	00410		TZE	B16	NO MORE ARGUMENTS. TRANSFER.	F6A02760
00443	0	02000	0	00432		TRA	B13	GO CHECK AGAINST NEXT ARGUMENT.	F6A02770
00444	0	50200	0	01322	B14	CLS	C11	EQUAL, MUST COMPILE OP TABLE ENTRY.	F6A02780
00445	0	40200	0	00432		SUB	B13		F6A02790
00446	0	40000	0	01317		ADD	C8		F6A02800
00447	0	60100	0	01354		STO	ARGNO	COMPUTE ADDRESS	F6A02810
00450	0	40200	0	01317		SUB	C8	COMPUTE ADDRESS	F6A02820
00451	0	76500	0	00043		LRS	35	OF BIT IN ARIND	F6A02830
00452	0	22000	0	01324		DVH	C13	TABLE.	F6A02840
00453	-0	60000	0	01355		STQ	ERAS1		F6A02850
00454	0	62100	0	00461		STA	B18		F6A02860
00455	0	50000	0	01323		CLA	C12		F6A02870
00456	0	40200	0	01355		SUB	ERAS1		F6A02880
00457	0	62100	0	00460		STA	B17		F6A02890
00460	0	56000	0	00460	B17	LDQ	*	TEST FOR ARRAY.	F6A02900
00461	0	76300	0	00461	B18	LLS	*		F6A02910
00462	-0	75400	0	00000		PXD			F6A02920
00463	0	76300	0	00001		LLS	1		F6A02930
00464	0	10000	0	00470		TZE	B19	NOT ARRAY.	F6A02940
00465	0	50000	4	02622		CLA	CIT-4,4	ARG IS ARRAY, SO STORE RELATIVE ADDRESS OF	F6A02950
00466	0	60100	1	06544		STO	OP-2,1	CIT AS WORD 2 OF OP TABLE ENTRY.	F6A02960
00467	0	02000	0	00471		TRA	B20		F6A02970
00470	0	60000	1	06544	B19	STZ	OP-2,1	ARG IS NOT ARRAY. SET WORD 2 OF OP ENTRY=0.	F6A02980
00471	0	50000	0	01354	B20	CLA	ARGNO	ASSEMBLE WORD ONE OF OP TABLE ENTRY.	F6A02990
00472	0	76700	0	00022		ALS	18		F6A03000
00473	0	40000	0	01356		ADD	RCT		F6A03010
00474	0	60100	1	06545		STO	OP-1,1		F6A03020
00475	1	00002	1	00476		TXI	B21,1,2	MODIFY TAPE 2	F6A03030
00476	3	00441	1	00500	B21	TXH	B22,1,289	BLOCK.	F6A03040
00477	0	02000	0	00410		TRA	B16		F6A03050
00500	0	76600	0	00222	B22	WTB	2	WRITE OFF	F6A03060
00501	-0	53400	1	01307		LXD	C1,1	TAPE 2.	F6A03070
00502	0	70000	1	06545	B25	CPY	OP-1,1		F6A03080
00503	1	00001	1	00504		TXI	B23,1,1		F6A03090
00504	3	00441	1	00506	B23	TXH	B24,1,289		F6A03100
00505	0	02000	0	00502		TRA	B25		F6A03110
00506	-0	53400	1	01307	B24	LXD	C1,1	SET XR1 EQUAL ZERO	F6A03120
00507	0	50000	0	01361		CLA	TP2CT	UPDATE TAPE TWO RECORD COUNT.	F6A03130
00510	0	40000	0	01317		ADD	C8		F6A03140
00511	0	60100	0	01361		STO	TP2CT		F6A03150
00512	0	76600	0	00333		IOD			F6A03160
00513	0	02000	0	00410		TRA	B16		F6A03170
00514	1	00004	4	00515	B26	TXI	B27,4,4	MODIFY TAPE 3 BLOCK TO SELECT NEXT CIT (FROM TAPE 3).	F6A03180
									F6A03181

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00515	3	00515	4	00352	B27	TXH B8,4,*	TEST END OF TAPE 3 BLOCK.	F6A03190
00516	0	02000	0	00377		TRA B9		F6A03200
00517	0	77200	0	00203	B28	REW 3	EOF TAPE 3. REWIND TAPE 3.	F6A03210
00520	3	00000	1	00522		TXH B29,1,0	ANY OP ENTRIES TO BE WRITTEN ON T-2.	F6A03220
00521	0	02000	0	00531		TRA B34	NO.	F6A03230
00522	-0	63400	1	00527	B29	SXD B31,1	YES, SAVE COUNT OF WORDS TO BE WRITTEN.	F6A03240
00523	0	76600	0	00222		WTB 2		F6A03250
00524	-0	53400	1	01320		LXD C9,1	WRITE OFF ON	F6A03260
00525	0	70000	1	06546	B30	CPY OP,1	TAPE 2.	F6A03270
00526	1	00001	1	00527		TXI B31,1,1	NECESSARY	F6A03280
00527	3	00527	1	00534	B31	TXH B35,1,*		F6A03290
00530	0	02000	0	00525		TRA B30		F6A03300
00531	0	50000	0	01361	B34	CLA TP2CT	IS RECORD COUNT ZERO.	F6A03310
00532	-0	10000	0	00540		TNZ B36	NO. OKAY 50 TRANSFER TO READ TARE TWO.	F6A03320
00533	0	07400	4	00004		TSX 4,4	YES, ERROR.	F6A03330
00534	0	50000	0	01361	B35	CLA TP2CT		F6A03340
00535	0	76600	0	00333		IOD	UPDATE TAPE TWO RECORD COUNT.	F6A03350
00536	0	40000	0	01317		ADD C8		F6A03360
00537	0	60100	0	01361		STO TP2CT		F6A03370
00540	0	77000	0	00202	B36	WEF 2	WEF TAPE 2.	F6A03380
00541	0	76400	0	00202		BST 2		F6A03390
00542	0	53400	1	01361		LXA TP2CT,1	BACK SPACE TO	F6A03400
00543	0	76400	0	00202	B37	BST 2	BEGIN OF FILE.	F6A03410
00544	2	00001	1	00543		TIX B37,1,1		F6A03420
00545	0	77100	0	00377		ARS 255		F6A03430
00546	0	77100	0	00377		ARS 255		F6A03440
00547	-0	76000	0	00012		RTT		F6A03450
00550	0	76100	0	00000		NOP		F6A03460
00551	-0	53400	1	01352		LXD IRIST,1		F6A03470
00552	0	60000	0	01356		STZ RCT	SET RELATIVE COUNT TO ZERO.	F6A03480
00553	0	50000	0	01326		CLA C15		F6A03490
00554	0	60100	0	01357		STO DELIN	SET DELETE INDICATOR TO NOT-ZERO.	F6A03500
00555	-0	53400	2	01334	REA02	LXD ZERO,2		F6A03510
00556	0	53400	4	00563	D5	LXA D1,4	SET READ-ERROR COUNTER.	F6A03520
00557	0	02000	0	00564		TRA D2		F6A03530
00560	0	76400	0	00202	D3	BST 2	REA0 TAPE 2 FILE 6	F6A03540
00561	2	00001	4	00564		TIX D2,4,1	INTO STORAGE.	F6A03550
00562	0	07400	4	00004		TSX 4,4		F6A03560
00563	0	42000	0	00005	D1	HPR 5		F6A03570
00564	0	76200	0	00222	D2	RTB 2		F6A03580
00565	0	76100	0	00000		NOP		F6A03590
00566	0	70000	2	06545	D4	CPY OP-1,2		F6A03600
00567	1	00001	2	00566		TXI D4,2,1		F6A03610
00570	0	02000	0	00576		TRA D89	E.O.F.	F6A03620
00571	0	77100	0	00377		ARS 255		F6A03630
00572	0	77100	0	00377		ARS 255		F6A03640
00573	-0	76000	0	00012		RTT		F6A03650
00574	0	02000	0	00560		TRA D3		F6A03660
00575	0	02000	0	00556		TRA D5		F6A03670
00576	0	60000	0	01350	D89	STZ EA1		F6A03680
00577	-0	63400	2	01350		SXD EA1,2		F6A03690
00600	0	76100	0	00000		NOP		F6A03700
00601	0	50000	0	01350	D30	CLA EA1	TEST WD COUNT OF OP TABLE.	F6A03710
00602	0	40200	0	01345		SUB C21		F6A03720

00603	-0	12000	0	00605		TMI D6		F6A03730
00604	0	07400	4	00004		TSX 4,4	MORE THAN 2000 WORDS IS ERROR.	F6A03740
00605	0	77200	0	00202	D6	REW 2	REWIND TAPE 2.	F6A03750
00606	0	60000	0	01363		STZ CONCT	SET CONCT EQUAL ZERO	F6A03760
00607	0	50000	0	01317		CLA C8	INIT. ARG. NUMBER TO ONE.	F6A03770
00610	0	60100	0	01354		STO ARGNO		F6A03780
00611	0	50000	0	01350		CLA EAL		F6A03790
00612	0	40200	0	01342		SUB C18	SUBTRACT ONE (IN DECREMENT)	F6A03800
00613	0	62200	0	00636		STD D14	SET END OF 0P BLOCK TEST. (EAL-1)	F6A03810
00614	0	60000	1	02461	D7	STZ REC-1,1	COMPILE CLA N,4	F6A03820
00615	-0	50000	0	01327		CAL C16	WHERE N IS THE ARGUMENT NUMBER.	F6A03830
00616	0	60200	1	02460		SLW REC-2,1	SL=0	F6A03840
00617	0	50000	0	01354		CLA ARGNO	OP=CLA	F6A03850
00620	0	76700	0	00022		ALS 18	SA=0	F6A03860
00621	0	40000	0	01307		ADD C1	RA=N,4	F6A03870
00622	0	60100	1	02456		STO REC-4,1		F6A03880
00623	0	60000	1	02457		STZ REC-3,1		F6A03890
00624	1	00004	1	00625		TXI D8,1,4		F6A03900
00625	3	00143	1	00647	D8	TXH D9,1,99	TEST CIT BLOCK FULL. IF YES, GO WRITE OFF.	F6A03910
00626	0	60000	0	01362	D10	STZ DELTA	SET DELTA ZERO.	F6A03920
00627	-0	53400	2	01307		LXD C1,2	INIT. IR2 TO ZERO.	F6A03930
00630	0	50000	2	06545	D11	CLA OP-1,2	SELECT OP TABLE ENTRY.	F6A03940
00631	0	77100	0	00022		ARS 18		F6A03950
00632	0	34000	0	01354		CAS ARGNO	COMPARE IT WITH ARG NO.	F6A03960
00633	0	02000	0	00635		TRA D12		F6A03970
00634	0	02000	0	00651		TRA D13	EQUAL ARGUMENT, GO COMPILE STORE.	F6A03980
00635	1	00002	2	00636	D12	TXI D14,2,2	UPDATE OP TABLE COUNTER.	F6A03990
00636	3	00636	2	00640	D14	TXH D15,2,*	TEST FOR END OF OP TABLE.	F6A04000
00637	0	02000	0	00630		TRA D11		F6A04010
00640	0	50000	0	01354	D15	CLA ARGNO	MODIFY ARG NUMBER (INCREASE IT BY ONE).	F6A04020
00641	0	40000	0	01317		ADD C8		F6A04030
00642	0	60100	0	01354		STO ARGNO		F6A04040
00643	0	40200	0	01360		SUB ARGCT	TEST END OF ARG. NUMBERS.	F6A04050
00644	-0	12000	0	00614		TMI D7	NO.	F6A04060
00645	0	10000	0	00614		TZE D7	NO.	F6A04070
00646	0	02000	0	00761		TRA E1	FINISHED.	F6A04080
00647	0	07400	2	01254	D9	TSX SUB1,2	WRITE OFF ON	F6A04090
00650	0	02000	0	00626		TRA D10	TAPE 4.	F6A04100
00651	0	50000	2	06544	D13	CLA OP-2,2	COMPILE STORE.	F6A04110
00652	0	77100	0	00022		ARS 18		F6A04120
00653	0	60100	0	01364		STO DELDD	COMPUTE GAMMA WHICH IS THE AMOUNT NECESSARY TO	F6A04130
00654	0	40200	0	01362		SUB DELTA	ADD TO GET EFFECTIVE ADDRESS FOR STA.	F6A04140
00655	0	60100	0	01365		STO GAMMA		F6A04150
00656	0	56000	0	01364		LDQ DELDD		F6A04160
00657	-0	60000	0	01362		STQ DELTA		F6A04170
00660	0	50000	0	01365		CLA GAMMA	IS INCREMENT ZERO.	F6A04180
00661	0	10000	0	00722		TZE D25	YES	F6A04190
00662	0	50000	0	01363		CLA CONCT	NO. TEST FOR ANY INCREMENT TABLE.	F6A04200
00663	0	10000	0	00677		TZE CH6	NO INCREMENT TABLE.	F6A04210
00664	0	40000	0	01330		ADD C17	YES, THERE IS AN INCREMENT TABLE.	F6A04220
00665	0	40200	0	01317		SUB C8	SET ADDRESS OF D17=LOCATION OF	F6A04230
00666	0	62100	0	00667		STA D17	LAST GAMMA STORED.	F6A04240
00667	0	50000	0	06546	D17	CLA HTAB	IS LAST GAMMA	F6A04250
00670	0	40200	0	01365		SUB GAMMA	EQUAL CURRENT GAMMA.	F6A04260

00671	0	10000	0	00743	TZE EX1	YES, ADDEND ALREADY IN TABLE	F6A04270
00672	0	50000	0	00667	CLA D17	NO,	F6A04280
00673	0	40200	0	01317	SUB C8	MODIFY ADDRESS IN HTAB.	F6A04290
00674	0	62100	0	00667	STA D17		F6A04300
00675	0	40200	0	01330	SUB C17	ANY MORE ENTRIES IN HTAB.	F6A04310
00676	0	12000	0	00667	TPL D17	YES.	F6A04320
00677	0	50000	0	01330	CH6 CLA C17	NOT IN TABLE.	F6A04330
00700	0	40000	0	01363	ADD CONCT		F6A04340
00701	0	62100	0	00703	STA D18		F6A04350
00702	0	50000	0	01365	CLA GAMMA		F6A04360
00703	0	60100	0	00703	D18 STO *	SET BY CH6 TO HTAB+CONCT. STORE GAMMA.	F6A04370
00704	0	50000	0	01363	CLA CONCT	UP CONCOUNT BY ONE.	F6A04380
00705	0	40000	0	01317	ADD C8		F6A04390
00706	0	60100	0	01363	STO CONCT		F6A04400
00707	0	60000	1	02461	D19 STZ REC-1,1	COMPILE ADD.	F6A04410
00710	-0	50000	0	01331	CAL ADD	ADD	F6A04420
00711	0	60200	1	02460	SLW REC-2,1		F6A04430
00712	-0	50000	0	01335	CAL TABCT		F6A04440
00713	0	60200	1	02457	SLW REC-3,1	SA=9(	F6A04450
00714	0	50000	0	01363	CLA CONCT		F6A04460
00715	0	40200	0	01317	SUB C8		F6A04470
00716	0	76700	0	00022	ALS 18	RELATIVE LOCATION OF HTAB CONSTANT.	F6A04480
00717	0	60100	1	02456	STO REC-4,1		F6A04490
00720	1	00004	1	00721	TXI D16,1,4	MODIFY TAPE 4 BLOCK.	F6A04500
00721	3	00143	1	00737	D16 TXH D20,1,99	TEST TAPE 4 BLOCK FULL.	F6A04510
00722	0	60000	1	02461	D25 STZ REC-1,1	COMPILE STA, ONE SUCH CIT FOR EACH TIME ARG.	F6A04520
00723	-0	50000	0	01337	CAL STA	APPEARS IN OP TABLE.	F6A04530
00724	0	60200	1	02460	SLW REC-2,1		F6A04540
00725	-0	50000	0	01353	CAL SLINT	TEST INITIAL SYMBOLIC LOCATION.	F6A04550
00726	-0	10000	0	00730	TNZ D21	TRANSFER IF NOT ZERO.	F6A04560
00727	-0	50000	0	01313	CAL C4	ZERO. SET SA EQUAL TO \$\$000.	F6A04570
00730	0	60200	1	02457	D21 SLW REC-3,1		F6A04580
00731	0	56000	2	06545	LDQ OP-1,2		F6A04590
00732	0	76300	0	00022	LLS 18		F6A04600
00733	-0	60000	1	02456	STQ REC-4,1		F6A04610
00734	1	00004	1	00735	TXI D22,1,4		F6A04620
00735	3	00143	1	00755	D22 TXH D23,1,99	TEST TAPE 4 BLOCK FULL.	F6A04630
00736	0	02000	0	00635	D24 TRA D12	NO.	F6A04640
00737	-0	63400	2	01352	D20 SXD IRIST,2		F6A04650
00740	0	07400	2	01254	TSX SUB1,2	GO WRITE A CIT RECORD ON TAPE 4.	F6A04660
00741	-0	53400	2	01352	LXD IRIST,2		F6A04670
00742	0	02000	0	00722	TRA D25		F6A04680
00743	0	50000	0	00667	EX1 CLA D17	ADDEND ALREADY IN TABLE	F6A04690
00744	0	40200	0	01330	SUB C17		F6A04700
00745	0	76700	0	00022	ALS 18		F6A04710
00746	0	60100	1	02456	STO REC-4,1		F6A04720
00747	0	60000	1	02461	STZ REC-1,1		F6A04730
00750	-0	50000	0	01331	CAL ADD		F6A04740
00751	0	60200	1	02460	SLW REC-2,1		F6A04750
00752	-0	50000	0	01335	CAL TABCT		F6A04760
00753	0	60200	1	02457	SLW REC-3,1		F6A04770
00754	1	00004	1	00721	TXI D16,1,4		F6A04780
00755	-0	63400	2	01352	D23 SXD IRIST,2		F6A04790
00756	0	07400	2	01254	TSX SUB1,2		F6A04800

00757	-0	53400	2	01352		LXD IRIST,2		F6A04810
00760	0	02000	0	00635		TRA D12		F6A04820
00761	0	53400	2	00766	E1	LXA E3,2	READ TAPE 3	F6A04830
00762	0	02000	0	00767		TRA E4		F6A04840
00763	0	76400	0	00203	E2	BST 3		F6A04850
00764	2	00001	2	00767		TIX E4,2,1	SET READ ERROR COUNTER.	F6A04860
00765	0	07400	4	00004		TSX 4,4		F6A04870
00766	0	42000	0	00005	E3	HPR 5		F6A04880
00767	0	76200	0	00223	E4	RTB 3	READ A RECORD FROM TAPE 3.	F6A04890
00770	0	53400	4	01310		LXA C2,4	SET COUNTER TO -1, TO READ INTO	F6A04900
00771	0	70000	4	02624	E5	CPY CIT-2,4	CIT-1,-2,---	F6A04910
00772	1	00001	4	00771		TXI E5,4,1		F6A04920
00773	0	02000	0	01061		TRA E14	EOF.	F6A04930
00774	0	77100	0	00377		ARS 255		F6A04940
00775	0	77100	0	00377		ARS 255		F6A04950
00776	-0	76000	0	00012		RTT		F6A04960
00777	0	02000	0	00763		TRA E2		F6A04970
01000	-0	63400	4	01041		SXD E8,4		F6A04980
01001	-0	53400	4	01307		LXD C1,4		F6A04990
01002	0	50000	0	01360		CLA ARGCT	TEST ARGUMENT COUNT FOR ZERO.	F6A05000
01003	0	10000	0	01012		TZE E6	YES, TRANSFER.	F6A05010
01004	0	50000	0	01356		CLA RCT	NO, TEST RCT FOR ZERO.	F6A05020
01005	-0	10000	0	01012		TNZ E6	RCT NOT ZERO.	F6A05030
01006	-0	50000	0	01353		CAL SLINT	TEST FIRST SUMBOLIC LOC.	F6A05040
01007	-0	10000	0	01012		TNZ E6	TRANSFER IF NOT ZERO.	F6A05050
01010	-0	50000	0	01313		CAL C4	\$\$	F6A05060
01011	0	60200	0	02625		SLW CIT-1		F6A05070
01012	-0	50000	4	02624	E6	CAL CIT-2,4		F6A05080
01013	0	77100	0	00022		ARS 18	IS OP QPR.	F6A05090
01014	0	40200	0	01332		SUB QPR		F6A05100
01015	0	10000	0	01043		TZE E9	YES, TRANSFER.	F6A05110
01016	0	40000	0	01332		ADD QPR		F6A05120
01017	0	40200	0	01053		SUB QXD	IS OP QXD.	F6A05130
01020	0	10000	0	01050		TZE EX3	YES, TRANSFER.	F6A05140
01021	0	50000	0	01357		CLA DELIN	IS DELETE IND	F6A05150
01022	0	10000	0	01054		TZE E11	ZERO. TRANSFER IF YES.	F6A05160
01023	-0	50000	4	02624		CAL CIT-2,4	COPY CIT FROM TAPE 3 INTO	F6A05170
01024	0	60200	1	02460	E10	SLW REC-2,1	TAPE 4 BUFFER.	F6A05180
01025	-0	50000	4	02625		CAL CIT-1,4	BLOCK	F6A05190
01026	0	60200	1	02461		SLW REC-1,1		F6A05200
01027	-0	50000	4	02623		CAL CIT-3,4		F6A05210
01030	0	60200	1	02457		SLW REC-3,1		F6A05220
01031	-0	50000	4	02622		CAL CIT-4,4		F6A05230
01032	0	60200	1	02456		SLW REC-4,1		F6A05240
01033	0	50000	0	01356		CLA RCT	ADD TO RCT	F6A05250
01034	0	40000	0	01317		ADD C8	UPDATE RELATIVE COUNT BY ONE.	F6A05260
01035	0	60100	0	01356		STO RCT		F6A05270
01036	1	00004	1	01037		TXI E7,1,4	MODIFY TAPE 4 BUFFER COUNTER.	F6A05280
01037	3	00143	1	01057	E7	TXH E13,1,99	TEST END OF TAPE 4 BLOCK.	F6A05290
01040	1	00004	4	01041	E12	TXI E8,4,4	NO, MODIFY TAPE 3 BLOCK COUNTER.	F6A05300
01041	3	01041	4	00761	E8	TXH E1,4,*	TEST ENO OF TAPE 3 BLOCK.	F6A05310
01042	0	02000	0	01012		TRA E6	NO.	F6A05320
01043	0	60100	0	01357	E9	STO DELIN	QPR. SET DELIN=0.	F6A05330
01044	-0	50000	0	01340		CAL TRA	SELECT OP=TRA,	F6A05340

01045	0	60200	1	02460	EX2	SLW REC-2,1	AND RETURN TO GET REST	F6A05350
01046	0	60000	1	02461		STZ REC-1,1	OF CIT.	F6A05360
01047	0	02000	0	01027		TRA E10+3		F6A05370
01050	-0	50000	0	01052	EX3	CAL LXD	OP IS QXD.	F6A05380
01051	0	02000	0	01024		TRA E10		F6A05390
01052	436724000000				LXD	BCD 1LXD000		F6A05400
01053	000000506724				QXD	BCD 1000QXD		F6A05410
01054	0	50000	0	01317	E11	CLA C8	DELETE INSTRUCTION. SET DELETE INDICATOR	F6A05420
01055	0	60100	0	01357		STO DELIN	TO NOT ZERO, AND TRANSFER	F6A05430
01056	0	02000	0	01040		TRA E12	TO TEST TAPE 4 BLOCK FULL.	F6A05440
01057	0	07400	2	01254	E13	TSX SUB1,2	WRITE OFF ON	F6A05450
01060	0	02000	0	01040		TRA E12	TAPE 4.	F6A05460
01061	0	50000	0	01363	E14	CLA CONCT	ENO OF TAPE 3.	F6A05470
01062	0	10000	0	01113		TZE E20	TRANSFER SINCE 9) TABLE NOT NEC.	F6A05480
01063	0	50000	0	01330		CLA C17	IF NECESSARY	F6A05490
01064	0	62100	0	01072		STA E17	COMPILE 9) TABLE.	F6A05500
01065	0	60000	0	01350		STZ EA1	SET EA1=0.	F6A05510
01066	-0	50000	0	01335		CAL TABCT		F6A05520
01067	0	60200	1	02461		SLW REC-1,1	SL=9)	F6A05530
01070	-0	50000	0	01346	E18	CAL OCT	OP=OCT.	F6A05540
01071	0	60200	1	02460		SLW REC-2,1		F6A05550
01072	-0	50000	0	01072	E17	CAL *	SA=THE NECESSARY CONSTANT.	F6A05560
01073	0	60200	1	02457		SLW REC-3,1		F6A05570
01074	0	60000	1	02456		STZ REC-4,1	RA=0	F6A05580
01075	1	00004	1	01076		TXI E15,1,4	MODIFY TAPE 4 BLOCK COUNT.	F6A05590
01076	3	00143	1	01111	E15	TXH E16,1,99	TEST END OF TAPE 4 BLOCK.	F6A05600
01077	0	50000	0	01072	E19	CLA E17	TO GET NEXT CONSTANT IN 9) TABLE.	F6A05610
01100	0	40200	0	01317		SUB C8		F6A05620
01101	0	62100	0	01072		STA E17		F6A05630
01102	0	50000	0	01350		CLA EA1	INCREASE EA1 BY ONE.	F6A05640
01103	0	40000	0	01317		ADD C8		F6A05650
01104	0	60100	0	01350		STO EA1		F6A05660
01105	0	40200	0	01363		SUB CONCT		F6A05670
01106	0	10000	0	01113		TZE E20	TRANSFER IF ALL NEC 9) TABLE CITS COMPILED.	F6A05680
01107	0	60000	1	02461		STZ REC-1,1	SET SL=0	F6A05690
01110	0	02000	0	01070		TRA E18	AND GO COMPILE REST OF CIT.	F6A05700
01111	0	07400	2	01254	E16	TSX SUB1,2		F6A05710
01112	0	02000	0	01077		TRA E19		F6A05720
01113	0	07400	4	01406	E20	TSX APCH2,4	TO SKIP BCD FILE.	F6A05730
01114	0	76200	0	00222	E21	RTB 2	SKIPPING TO FILE 5.	F6A05740
01115	0	70000	0	01355	CH3	CPY ERAS1		F6A05750
01116	0	02000	0	01115		TRA CH3		F6A05760
01117	0	02000	0	01121		TRA E22	END OF FILE.	F6A05770
01120	0	02000	0	01114		TRA E21	END OF RECORD.	F6A05780
01121	2	00001	2	01114	E22	TIX E21,2,1		F6A05790
01122	0	76200	0	00222		RTB 2	SKIP FIRST 3 RECORDS IN FILE FIVE.	F6A05800
01123	0	76200	0	00222		RTB 2		F6A05810
01124	0	76200	0	00222		RTB 2		F6A05820
01125	0	77100	0	00377		ARS 255		F6A05830
01126	0	77100	0	00377		ARS 255		F6A05840
01127	-0	76000	0	00012		RTT		F6A05850
01130	0	76100	0	00000		NOP		F6A05860
01131	0	53400	2	01136		LXA E24,2	SET READ ERROR COUNTER.	F6A05870
01132	0	02000	0	01137		TRA E25		F6A05880

01133	0	76400	0	00202	E23	BST 2		F6A05890
01134	2	00001	2	01137		TIX E25,2,1		F6A05900
01135	0	07400	4	00004		TSX 4,4		F6A05910
01136	0	42000	0	00005	E24	HPR 5		F6A05920
01137	0	76200	0	00222	E25	RTB 2	READ HOLARG TABLE	F6A05930
01140	0	53400	4	01310		LXA C2,4	INTO SUB-1,-2,---	F6A05940
01141	0	70000	4	04574	E26	CPY SUB-2,4		F6A05950
01142	1	00001	4	01141		TXI E26,4,1		F6A05960
01143	0	02000	0	01347		TRA EOF3		F6A05970
01144	0	77100	0	00377		ARS 255		F6A05980
01145	0	77100	0	00377		ARS 255		F6A05990
01146	-0	76000	0	00012		RTT		F6A06000
01147	0	02000	0	01133		TRA E23		F6A06010
01150	0	50000	0	04574	E27	CLA SUB-2	TEST WORD COUNT OF HOLARG TABLE.	F6A06020
01151	0	10000	0	01214		TZE E33	EXIT, NO HOLARG.	F6A06030
01152	0	40200	0	01342		SUB C18		F6A06040
01153	0	60100	0	01350		STO EA1	STORE WD. COUNT-1 IN EA1	F6A06050
01154	0	50000	0	01150		CLA E27	INITIALIZE ADDRESS FOR SEARCHING HOLARG TABLE.	F6A06060
01155	0	40200	0	01317		SUB C8		F6A06070
01156	0	62100	0	01164		STA E29		F6A06080
01157	0	60000	0	01351		STZ EA2	SET EA2=0.	F6A06090
01160	-0	50000	0	01343		CAL C19	SET SL OF FIRST CIT FOR EACH HOLLERITH	F6A06100
01161	0	60200	1	02461		SLW REC-1,1	ARGUMENT=11.	F6A06110
01162	-0	50000	0	01311	E28	CAL BCD		F6A06120
01163	0	60200	1	02460		SLW REC-2,1	SET OP=BCD.	F6A06130
01164	0	50000	0	01164	E29	CLA *	(SUB-3 TO START)	F6A06140
01165	0	34000	0	01344		CAS C20	TEST FOR END OF ARGUMENT.	F6A06150
01166	0	02000	0	01170		TRA LIB10	NO.	F6A06160
01167	0	02000	0	01206		TRA LIB12	TRANSFER WHEN CITs FOR A GIVEN ARGUMENT DONE.	F6A06170
01170	0	60100	1	02457	LIB10	STO REC-3,1	SA=6 CHARACTERS OF THE ARGUMENT.	F6A06180
01171	0	60000	1	02456	LIB11	STZ REC-4,1	RA=0.	F6A06190
01172	1	00004	1	01173		TXI E30,1,4	MODIFY TAPE 4 BLOCK COUNT.	F6A06200
01173	3	00143	1	01212	E30	TXH E31,1,99	TEST TAPE 4 BLOCK FULL.	F6A06210
01174	0	50000	0	01164	E32	CLA E29	MODIFY ADDRESS IN HOLARG TABLE.	F6A06220
01175	0	40200	0	01317		SUB C8		F6A06230
01176	0	62100	0	01164		STA E29		F6A06240
01177	0	50000	0	01351		CLA EA2	INCREMENT COUNT OF WORDS FROM TABLE	F6A06250
01200	0	40000	0	01342		ADD C18	TREATED BY ONE.	F6A06260
01201	0	60100	0	01351		STO EA2		F6A06270
01202	0	40200	0	01350		SUB EA1	TEST FOR END OF HOLARG TABLE.	F6A06280
01203	0	10000	0	01244		TZE E40	END.	F6A06290
01204	0	60000	1	02461		STZ REC-1,1	NO.	F6A06300
01205	0	02000	0	01162		TRA E28		F6A06310
01206	0	60100	1	02457	LIB12	STO REC-3,1	END OF ARGUMENT, COMPILE ENDING CIT	F6A06320
01207	0	50000	0	01346		CLA OCT	(SA=STRING OF 1S)	F6A06330
01210	0	60100	1	02460		STO REC-2,1		F6A06340
01211	0	02000	0	01171		TRA LIB11		F6A06350
01212	0	07400	2	01254	E31	TSX SUB1,2	WRITE OFF ON TAPE 4.	F6A06360
01213	0	02000	0	01174		TRA E32		F6A06370
01214	-3	00001	1	01225	E33	TXL E35,1,1	MAY NEED TO WRITE OFF 4.	F6A06380
01215	2	00001	1	01216		TIX CH7,1,1		F6A06390
01216	-0	63400	1	01223	CH7	SXD E34,1	WRITE OFF ON	F6A06400
01217	0	76600	0	00224		WTB 4	TAPE 4.	F6A06410
01220	-0	53400	1	01307		LXD C1,1		F6A06420

01221	0	70000	1	02461	E36	CPY REC-1,1		F6A06430
01222	1	00001	1	01223		TXI E34,1,1		F6A06440
01223	3	01223	1	01225	E34	TXH E35,1,*		F6A06450
01224	0	02000	0	01221		TRA E36		F6A06460
01225	0	77000	0	00204	E35	WEF 4	WRITE END OF FILE ON TAPE 4.	F6A06470
01226	0	77200	0	00204		REW 4	REWIND TAPES 2,3,4	F6A06480
01227	0	77200	0	00203		REW 3	AND GO TO LOADER,	F6A06490
01230	0	77200	0	00202		REW 2		F6A06500
01231	0	76200	0	00221		RTB 1		F6A06510
01232	0	02000	0	00004		TRA 4	RETURN TO LOADER	F6A06520
01233	0	60000	0	00034	NOSUB	STZ PC5	NOT A SUBROUTINE. SET NAME=0 ON PROGRAM CARD.	F6A06530
01234	0	60000	0	01356		STZ RCT	SET RELATIVE COUNT=0.	F6A06540
01235	0	50000	0	01317		CLA C8		F6A06550
01236	0	60100	0	01357		STO DELIN	SET DELIN TO NOT ZERO.	F6A06560
01237	0	60000	0	01363		STZ CONCT	SET CONSTANT COUNT=ZERO.	F6A06570
01240	0	77200	0	00202		REW 2	REWIND TAPE TWO.	F6A06580
01241	0	60000	0	01360		STZ ARGCT	SET ARGUMENT COUNT=ZERO.	F6A06590
01242	0	02000	0	00761		TRA E1	GO DEAL WITH TAPE 3 CITS.	F6A06600
01243	0	02000	0	01234	F1	TRA NOSUB+1		F6A06610
01244	0	60000	1	02461	E40	STZ REC-1,1	COMPILE FINAL HOLARG CIT.	F6A06620
01245	-0	50000	0	01346		CAL OCT		F6A06630
01246	0	60200	1	02460		SLW REC-2,1		F6A06640
01247	-0	50000	0	01344		CAL C20		F6A06650
01250	0	60200	1	02457		SLW REC-3,1		F6A06660
01251	0	60000	1	02456		STZ REC-4,1		F6A06670
01252	1	00004	1	01253		TXI CH10,1,4	UPOATE T-4 BLOCK COUNTER.	F6A06680
01253	0	02000	0	01214	CH10	TRA E33	GO TEST BLOCK FULL.	F6A06690
01254	0	76600	0	00224	SUB1	WTB 4	WRITE TAPE 4,	F6A06700
01255	-0	53400	1	01307		LXD C1,1		F6A06710
01256	0	70000	1	02461	SUBA	CPY REC-1,1		F6A06720
01257	1	00001	1	01260		TXI SUBB,1,1		F6A06730
01260	3	00143	1	01262	SUBB	TXH SUBC,1,99		F6A06740
01261	0	02000	0	01256		TRA SUBA		F6A06750
01262	0	76600	0	00333	SUBC	IOD		F6A06760
01263	-0	53400	1	01307		LXD C1,1		F6A06770
01264	0	02000	2	00001		TRA 1,2		F6A06780
01265	-0	50000	0	01315	SUB2	CAL C6	COMPILE CITS	F6A06790
01266	0	60200	1	02460		SLW REC-2,1	OP=HTR	F6A06800
01267	0	60000	1	02457		STZ REC-3,1	SA=0	F6A06810
01270	0	60000	1	02456		STZ REC-4,1	RA=0	F6A06820
01271	1	00004	1	01272		TXI SUB2A,1,4		F6A06830
01272	3	00143	1	01274	SUB2A	TXH SUB2B,1,99	TLST TAPE 4 BLOCK FULL.	F6A06840
01273	0	02000	2	00001		TRA 1,2	NO.	F6A06850
01274	0	02000	2	00002	SUB2B	TRA 2,2	YES.	F6A06860
01275	0	60200	1	02456	SUB3	SLW REC-4,1	STORE CIT 4 5 6	F6A06870
01276	-0	50000	0	01316		CAL C7		F6A06880
01277	0	60200	1	02460		SLW REC-2,1	OP=SXD	F6A06890
01300	-0	50000	0	01314		CAL C5		F6A06900
01301	0	60200	1	02457		SLW REC-3,1	SA=\$0000	F6A06910
01302	0	60000	1	02461		STZ REC-1,1	SL=0	F6A06920
01303	1	00004	1	01304		TXI SUB3A,1,4		F6A06930
01304	3	00143	1	01306	SUB3A	TXH SUB3B,1,99	TEST TAPE 4 BLOCK FULL.	F6A06940
01305	0	02000	2	00001		TRA 1,2	NO.	F6A06950
01306	0	02000	2	00002	SUB3B	TRA 2,2	YES.	F6A06960

01307	0 00000 0 00004	C1	HTR 4		F6A06970
01310	0 00000 0 77777	C2	HTR -1		F6A06980
01311	222324000000	BCD	BCD 1BCD000		F6A06990
01312	0 00000 0 00003	C3	HTR 3		F6A07000
01313	5353600000000	C4	BCD 1\$\$ 000		F6A07010
01314	5360000000000	C5	BCD 1\$ 0000		F6A07020
01315	306351000000	C6	BCD 1HTR000		F6A07030
01316	626724000000	C7	BCD 1SXD000		F6A07040
01317	0 00000 0 00001	C8	HTR 1		F6A07050
01320	+000001000002	C9	OCT 000001000002		F6A07060
01321	+000002000004	C10	OCT 000002000004		F6A07070
01322	-0 50000 0 04572	C11	CAL SUB-4		F6A07080
01323	0 00000 0 05310	C12	HTR ARIND		F6A07090
01324	0 00000 0 00043	C13	HTR 35		F6A07100
01325	2 00000 0 00000	C14	TIX 0,0,0		F6A07110
01326	0 00000 0 00005	C15	HTR 5		F6A07120
01327	234321000000	C16	BCD 1CLA000		F6A07130
01330	0 50000 0 06546	C17	CLA HTAB		F6A07140
01331	212424000000	ADD	BCD 1ADD000	INITARG	F6A07150
01332	000000504751	QPR	BCD 1000QPR		F6A07160
01333	0 50000 0 00000	AGTST	CLA **		F6A07170
01334	0 00000 0 00000	ZERO	HTR 0		F6A07180
01335	1100000000000	TABCT	BCD 1900000		F6A07190
01336	0 07400 4 00004	EOF1	TSX 4,4		F6A07200
01337	626321000000	STA	BCD 1STA000		F6A07210
01340	635121000000	TRA	BCD 1TRA000		F6A07220
01341	0 07400 4 00004	EOF2	TSX 4,4		F6A07230
01342	+000001000000	C18	OCT 000001000000		F6A07240
01343	+1300000000000	C19	OCT 1300000000000		F6A07250
01344	-3777777777777	C20	OCT 7777777777777		F6A07260
01345	+003720000000	C21	OCT 0037200000000	(2000 IN DICREMENT)	F6A07270
01346	462363000000	OCT	BCD 1OCT000		F6A07280
01347	0 07400 4 00004	EOF3	TSX 4,4		F6A07290
01350	0 00000 0 00000	EA1	HTR 0		F6A07300
01351	0 00000 0 00000	EA2	HTR 0		F6A07310
01352	0 00000 0 00000	IRIST	HTR 0		F6A07320
01353	0 00000 0 00000	SLINT	HTR 0		F6A07330
01354	0 00000 0 00000	ARGNO	HTR 0		F6A07340
01355	0 00000 0 00000	ERAS1	HTR 0		F6A07350
01356	0 00000 0 00000	RCT	HTR 0		F6A07360
01357	0 00000 0 00000	DELIN	HTR 0		F6A07370
01360	0 00000 0 00000	ARGCT	HTR 0		F6A07380
01361	0 00000 0 00000	TP2CT	HTR 0		F6A07390
01362	0 00000 0 00000	DELTA	HTR 0		F6A07400
01363	0 00000 0 00000	CONCT	HTR 0		F6A07410
01364	0 00000 0 00000	DELDD	HTR 0		F6A07420
01365	0 00000 0 00000	GAMMA	HTR 0		F6A07430
01366	0 00000 0 00000	SUM	HTR 0		F6A07440
	01367	BSS	1		F6A07441
01370	0 34000 0 01403	APCH1	CAS SYNOP		F6A07442
01371	0 02000 0 01401		TRA GOON		F6A07443
01372	0 02000 0 00514		TRA B26	OP IS SYN.	F6A07444
01373	0 34000 0 01404		CAS OCTOP		F6A07445
01374	0 02000 0 01401		TRA GOON		F6A07446

01375	0	02000	0	00410	TRA	B16	OP IS OCT.	F6A07447
01376	0	34000	0	01405	CAS	BCDOP		F6A07448
01377	0	02000	0	01401	TRA	GOON		F6A07449
01400	0	02000	0	00410	TRA	B16	OP IS BCD.	F6A07450
01401	-0	50000	0	01322	GOON	CAL	C11	F6A07451
01402	0	02000	0	00431	TRA	EXT20+1		F6A07452
01403	+0000000627045				SYNOP	OCT	000000627045	F6A07453
01404	+0000000462363				OCTOP	OCT	000000462363	F6A07454
01405	+0000000222324				BCDOP	OCT	000000222324	F6A07455
01406	0	76200	0	00202	APCH2	RTD	2	F6A07456
01407	0	70000	0	01355		CPY	ERAS1	F6A07457
01410	0	02000	0	01407	TRA	*-1		F6A07458
01411	0	02000	0	01413	TRA	*+2	END OF FILE	F6A07459
01412	0	02000	0	01406	TRA	APCH2	END OF RECORD	F6A07460
01413	0	53400	2	01312	LXA	C3,2		F6A07461
01414	0	02000	4	00001	TRA	1,4	RETURN TO PROGRAM.	F6A07462
01415	-0	50000	0	01311	NAME	CAL	BCD	F6A07463
01416	0	60200	1	02460	SLW	REC-2,1	INSERT CIT 3 PRIME.	F6A07464
01417	-0	50000	0	00034	CAL	PC5	OP=BCD	F6A07465
01420	0	60200	1	02457	SLW	REC-3,1	SA=NAME OF ROUTINE.	F6A07466
01421	0	60000	1	02461	STZ	REC-1,1		F6A07467
01422	0	60000	1	02456	STZ	REC-4,1		F6A07468
01423	1	00004	1	01424	TXI	*+1,1,4		F6A07469
01424	3	00143	1	01426	TXH	*+2,1,99		F6A07470
01425	0	02000	0	01427	TRA	P24		F6A07471
01426	0	07400	2	01254	TSX	SUB1,2		F6A07472
01427	-0	50000	0	01317	P24	CAL	C8	F6A07473
01430	0	02000	0	00206	TRA	COMPX+1		F6A07474
01431	2	00000	0	00000	APCH3	TIX	0,0,0	F6A07475
01432	0	50000	0	01431	CLA	APCH3	REINITIALIZE C14	F6A07476
01433	0	60100	0	01325	STO	C14		F6A07477
01434	0	02000	0	00326	TRA	A16		F6A07478
				02316	ORG	1230		F6A07480
				02462	REC	BES	100	F6A07481
				02626	CIT	BES	100	F6A07482
				06546	OP	BES	2000	F6A07483
				02626	ORG	1430		F6A07490
				04576	TV	BES	1000	F6A07500
				04576	SUB	SYN	TV	F6A07510
				06546	ORG	3430		F6A07520
				06546	HTAB	BSS	300	F6A07530
				06546	DIM	SYN	OP	F6A07540
				05252	ORG	2730		F6A07550
				05310	ARIND	BES	30	F6A07560
A				00000	END			F6A07570

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	801	0	0	0	0
LIB	0	0	0	0	0
COL	801	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 810

NUMBER OF SYMBOLS, DEF 250,DEFOP 0,UNDEF 0
REM PST

PST
 ***** FORTRAN II SECTION SIX *****F6B00010
 FORTRAN 2 RECORD 94 - BINARY SEARCH. F6B00011

CONTROL ENTERS THIS RECORD AT LOCATION 210 (OCTAL) F6B00012

					00037	ORG	31			F6B00014
00037	1	00037	2	00037	SRCH	TXI	*,2,*	OR TXL TDEV,2,0 OR TXH TTIV,2,-2		F6B00020
00040	0	16200	0	00042		TQP	IFTXH	OR TXL TTEV DEPENDING ON TABLE AND		F6B00030
00041	1	77776	1	00102		TXI	LOWER,1,-2	ON DIRECTION OF TABLE.		F6B00040
00042	1	77776	1	00101	IFTXH	TXI	RAISE,1,-2			F6B00050
00043	1	20000	2	00037		TXI	SRCH,2,+8192	FOR A TABLE WITH N		F6B00060
00044	1	60000	2	00037		TXI	SRCH,2,-8192	ENTRIES, THE SEARCH IS		F6B00070
00045	1	10000	2	00037		TXI	SRCH,2,+4096	COMMENCED AT THE 2**XTH		F6B00080
00046	1	70000	2	00037		TXI	SRCH,2,-4096	ENTRY, THE LATTER BEING THE		F6B00090
00047	1	04000	2	00037		TXI	SRCH,2,+2048	LARGEST POWER OF 2		F6B00100
00050	1	74000	2	00037		TXI	SRCH,2,-2048	LESS THAN N.		F6B00110
00051	1	02000	2	00037		TXI	SRCH,2,+1024	THEN. DEPENDING ON THE RESULTS		F6B00120
00052	1	76000	2	00037		TXI	SRCH,2,-1024	OF THE COMPARISON, THE SEARCH		F6800130
00053	1	01000	2	00037		TXI	SRCH,2,+512	STEPS UP, OR DOWN, BY		F6B00140
00054	1	77000	2	00037		TXI	SRCH,2,-512	2**(X-1), AND MAKES		F6B00150
00055	1	00400	2	00037		TXI	SRCH,2,+256	A NEW COMPARISON WITH THAT		F6B00160
00056	1	77400	2	00037		TXI	SRCH,2,-256	ENTRY		F6B00170
00057	1	00200	2	00037		TXI	SRCH,2,+128	IF THIS STEP OVERREACHES THE		F6B00180
00060	1	77600	2	00037		TXI	SRCH,2,-128	END OF THE TABLE, IT IS TRAPPED		F6B00190
00061	1	00100	2	00037		TXI	SRCH,2,+64	BY THE TXL OR TXH INSTRUCTIONS		F6B00200
00062	1	77700	2	00037		TXI	SRCH,2,-64	IN SRCH		F6B00210
00063	1	00040	2	00037		TXI	SRCH,2,+32			F6B00220
00064	1	77740	2	00037		TXI	SRCH,2,-32			F6B00230
00065	1	00020	2	00037		TXI	SRCH,2,+16			F6B00240
00066	1	77760	2	00037		TXI	SRCH,2,-16	INDEX REGISTER 1, WHICH		F6B00250
00067	1	00010	2	00037		TXI	SRCH,2,+8	CONTAINS 2(X+3) SELECTS THE		F6B00260
00070	1	77770	2	00037		TXI	SRCH,2,-8	APPROPRIATE TXI IN THIS LIST,		F6B00270
00071	1	00004	2	00037		TXI	SRCH,2,+4	TO MAKE THE NEXT LEAP		F6B00280
00072	1	77774	2	00037		TXI	SRCH,2,-4	FORWARDS OR BACKWARDS IN		F6B00290
00073	1	00002	2	00037		TXI	SRCH,2,+2	THE TABLE.		F6B00300
00074	1	77776	2	00037		TXI	SRCH,2,-2			F6B00310
00075	1	00001	2	00037		TXI	SRCH,2,+1	INDEX REGISTER 2 SELECTS THE		F6B00320
00076	1	77777	2	00037		TXI	SRCH,2,-1	TABLE ENTRY FOR COMPARISON.		F6B00330
00077	0	02000	4	00001	NOTIN	TRA	1,4	END OF SEARCH.		F6B00340
00100	1	77777	2	00077		TXI	NOTIN,2,-1			F6B00350
00101	0	02000	1	00101	RAISE	TRA	RAISE,1			F6B00360
00102	0	02000	1	00102	LOWER	TRA	LOWER,1			F6B00370
00103	0	56000	0	00120	STEV	LDQ	TEVL	ENTER HERE TO SEARCH TEV.		F6B00380
00104	-0	60000	0	00037		STQ	SRCH	TABLE		F6B00390
00105	0	53400	1	00117		LXA	TEVS,1	CONTROLS HOPPING WITHIN TEV.		F6B00400
00106	-0	53400	2	00117		LXD	TEVS,2	SELECTS ITEM FOR COMPARISON.		F6B00410
00107	0	34000	2		TTEV	CAS	TEV,2			F6B00420
00110	1	77776	1	00101		TXI	RAISE,1,-2	NOT FOUND. CONTINUE SEARCH		F6B00430
00111	0	02000	0	00113		TRA	ATEV	FOUND.		F6B00440
00112	1	77776	1	00102		TXI	LOWER,1,-2	NOT FOUND. CONTINUE SEARCH		F6B00450
00113	-0	75400	2	00000	ATEV	PXD	0,2	CONTROLS ENTRY POINT OF SEARCH		F6B00460
00114	0	77100	0	00022		ARS	18	DEC. CONTAINS TABLE LENGTH.		F6B00470
00115	0	40000	0	00172		ADD	LTEV			F6B00480
										F6B00490

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00116	0	02000	4	00002	TRA	2,4		F6B00500
00117	0	00000	0	00004	TEVS	4,0,**+0		F6B00510
00120	-3	00000	2	00107	TEVL	TXL TTEV,2,**+0		F6B00520
00121	0	76700	0	00017	STIV	ALS 15	ENTER HERE TO SEARCH TIV.	F6B00530
00122	0	60200	0	00160		SLW ENTRY		F6B00540
00123	0	60200	0	00157		SLW ARG		F6B00550
00124	0	56000	0	00141		LDQ TIVL		F6B00560
00125	-0	60000	0	00037		STQ SRCH		F6B00570
00126	0	53400	1	00140		LXA TIVS,1		F6B00580
00127	-0	53400	2	00140		LXD TIVS,2		F6B00590
00130	0	50000	2	02114	TTIV	CLA TIV,2		F6B00600
00131	0	62100	0	00157		STA ARG		F6B00610
00132	0	34000	0	00157		CAS ARG		F6B00620
00133	1	77776	1	00102		TXI LOWER,1,-2		F6B00630
00134	0	02000	0	00136		TRA ATIV		F6B00640
00135	1	77776	1	00101		TXI RAISE,1,-2		F6B00650
00136	0	50000	2	02114	ATIV	CLA TIV,2	RETURN WITH COMPLETE OLD TIV ENTRY	F6B00660
00137	0	02000	4	00002		TRA 2,4		F6B00670
00140	0	77777	0	00004	TIVS	4,0,**-1		F6B00680
00141	3	77776	2	00130	TIVL	TXH TTIV,2,**-2		F6B00690
00142	0	56000	0	00155	SDEV	LDQ DEVL	ENTER HERE TO SEARCH DEV	F6B00700
00143	-0	60000	0	00037		STQ SRCH	TABLE	F6B00710
00144	0	53400	1	00154		LXA DEVS,1	CONTROLS HOPPING WITHIN DEV	F6B00720
00145	-0	53400	2	00154		LXD DEVS,2	SELECTS THE ITEM FOR COMPARISON.	F6B00730
00146	0	34000	2	77777	TDEV	CAS DEV,2		F6B00740
00147	1	77776	1	00101		TXI RAISE,1,-2	NOT FOUND CONTINUE SEARCH	F6B00750
00150	0	02000	0	00152		TRA ADEV	ENTRY FOUND	F6B00760
00151	1	77776	1	00102		TXI LOWER,1,-2	NOT FOUND. CONTINUE SEARCH.	F6B00770
00152	0	50000	2	74413	ADEV	CLA DEA,2		F6B00780
00153	0	02000	4	00003		TRA 3,4		F6B00790
00154	0	00000	0	00004	DEVS	4,0,**+0	CONTROLS ENTRY POINT OF SEARCH.	F6B00800
00155	-3	00000	2	00146	DEVL	TXL TDEV,2,**+0	CONTAINS TABLE LENGTH	F6B00810
00156	0	00001	0	00002	DEVA	2,0,**+1	USED BY EDEV FOR MODIFYING DEVS.	F6B00820
00157	0	00000	0	00000	ARG	HTR 0		F6B00830
00160	0	00000	0	00000	ENTRY	HTR 0		F6B00840
00161	+0000000000000				ZERO	DEC 0000000000		F6B00850
00162	+0000000000001				ONE	DEC 0000000001		F6B00860
00163	+0000000000002				TWO	DEC 0000000002		F6B00870
00164	0	00000	0	77777	ADDR	HTR -1		F6B00880
00165	0	00000	0	00000	EIFN	HTR 0		F6B00890
00166	0	00000	0	00000	L1	HTR 0		F6B00900
00167	0	00000	0	00000	L2	HTR 0		F6B00910
00170	0	00000	0	00000	LIFN	HTR 0		F6B00920
00171	0	00000	0	77462	LCTR	HTR -206		F6B00930
00172	0	00000	0	00000	LTEV	HTR 0		F6B00940
00173	0	00000	0	00000	D	HTR 0		F6B00950
00174	0	00000	0	00000	EA	HTR 0		F6B00960
00175	0	00000	0	00000	L3	HTR 0		F6B00970
00176	0	00000	0	00000	PGBK	HTR 0		F6B00980
00177	0	00000	0	00000	SW1	HTR 0		F6B00990
00200	0	00000	0	00000	SW2	HTR 0		F6B01000
00201	0	00000	0	00000	SW3	HTR 0		F6B01010
00202	0	00000	0	00000	SW4	HTR 0		F6B01020
00203	0	00000	0	00000	SW5	HTR 0		F6B01030

00204	+077777077777	DOLSI	OCT	077777077777		F6B01040
00205	0 00001 0 00001	ME2		1,0,1	ADDRESS CAN BE CHANGED TO ZERO BY ME1 IN REC.96	F6B01050
	00210		ORG	136		F6B01060
00210	0 53400 2 00255	START	LXA	ADD5,2	SET DRUM ERROR COUNTER TO 15	F6B01070
00211	0 76200 0 00304	ADD6	RDR	4	SELECT DRUM 4.	F6B01080
00212	-0 75400 0 00000	ADD1	PXD		NUMBER OF	F6B01090
00213	0 46000 0 00212		LDA	ADD1	ENTRIES IN	F6B01100
00214	0 70000 0 00165		CPY	EIFN	EXTERNAL INTERNAL	F6B01110
00215	0 76000 0 00006		COM		FORMULA NOS TABLE.	F6B01120
00216	0 70000 0 00223		CPY	ADD2		F6B01130
00217	0 76000 0 00006		COM			F6B01140
00220	0 10000 0 00224		TZE	ADD3		F6B01150
00221	2 00001 2 00211		TIX	ADD6,2,1		F6B01160
00222	0 07400 4 00004		TSX	4,4		F6B01170
00223	0 00000 0 00000	ADD2	HTR	0		F6B01180
00224	-0 53400 1 00165	ADD3	LXD	EIFN,1		F6B01190
00225	1 00001 1 00226		TXI	ADD4,1,1		F6B01200
00226	-0 63400 1 00165	ADD4	SXD	EIFN,1		F6B01210
00227	0 77200 0 00202		REW	2	TO	F6B01220
00230	0 02000 0 00260	B1	TRA	BPCH1	GO SKIP BCD FILE	F6B01230
00231	0 76200 0 00222	B2	RTB	2	POSITION TAPE TWO	F6B01240
00232	0 70000 0 00253	CH1	CPY	ERAS		F6B01250
00233	0 02000 0 00232		TRA	CH1	AT THE BEGINNING OF FILE FIVE.	F6B01260
00234	0 02000 0 00236		TRA	B3		F6B01270
00235	0 02000 0 00231		TRA	B2		F6B01280
00236	2 00001 1 00231	B3	TIX	B2,1,1		F6B01290
00237	0 76200 0 00222		RTB	2	SELECT TAPE TWO	F6B01300
00240	0 70000 0 00177		CPY	SW1	COPY SENSE SWITCH SETTINGS	F6B01310
00241	0 70000 0 00200		CPY	SW2	I.E. FIRST RECORD OF FILE 5.	F6B01320
00242	0 70000 0 00201		CPY	SW3		F6B01330
00243	0 70000 0 00202		CPY	SW4		F6B01340
00244	0 70000 0 00203		CPY	SW5		F6B01350
00245	0 77200 0 00203		REW	3		F6B01360
00246	0 77200 0 00204		REW	4		F6B01370
00247	-0 76000 0 00012		RTT			F6B01380
00250	0 76100 0 00000		NOP			F6B01390
00251	0 76200 0 00221		RTB	1		F6B01400
00252	0 02000 0 00004		TRA	4	TO RETURN CONTROL TO LOADER.	F6B01410
00253	0 00000 0 00000	ERAS	HTR	0		F6B01420
00254	0 00000 0 00004	FOUR	HTR	4		F6B01430
00255	0 00000 0 00017	ADD5	HTR	15		F6B01440
	00256		BSS	2		F6B01441
00260	0 76200 0 00202	BPCH1	RTD	2	SKIP A BCD FILE.	F6B01442
00261	0 70000 0 00253		CPY	ERAS		F6B01443
00262	0 02000 0 00261		TRA	*-1		F6B01444
00263	0 02000 0 00265		TRA	PREPR	END OF FILE	F6B01445
00264	0 02000 0 00260		TRA	BPCH1	END OF RECORD	F6B01445
00265	0 53400 1 00267	PREPR	LXA	LOCV3,1		F6B01447
00266	0 02000 0 00231		TRA	B2		F6B01448
00267	+0000000000003	LOCV3	DEC	3		F6B01449
	01400		ORG	768		F6B01450
	01400	SOPR	BSS	12		F6B01460
	01654	SYMOP	BES	160		F6B01470
	02114	ABSOP	BES	160		F6B01480

T

A	02114	TIV	BSS		F6B01490
	71003		ORG	-3581	F6B01500
	71457	ECS	BES	300	F6B01501
	72607	UPPER	BES	600	F6B01510
	74413	DEA	BES	900	F6B01520
	74413		ORG	-1781	F6B01530
	75055	STS	BES	290	F6B01540
	75531	I	BES	300	F6B01550
	76173	L	BES	290	F6B01560
	77777	DEV	BES	900	F6B01570
A	00000		END		F6B01580
	00001	0	TEV		

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	174	0	0	0	0
LIB	0	0	0	0	0
COL	174	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 183

NUMBER OF SYMBOLS, DEF 71,DEFOP 0,UNDEF 1
 REM AST

AST

***** FORTRAN II SECTION SIX *****F6C00010

FORTRAN 2 RECORD 96 - ASSIGN COMMON F6C00011

CONTROL ENTERS THIS RECORD AT LOCATION 400 (OCTAL) F6C00012

M

00205 ME2 SYN 133 F6C00013
00210 ORG 136 F6C00014

THIS ROUTINE IS ENTERED AFTER AN UNSUCCESSFUL BINARY SEARCH F6C00020
OF DEV. INDEX REGISTER 2 CONTAINS THE RELATIVE POSITION IN F6C00030
DEV THAT THE NEW, ENTRY SHOULD HAVE. F6C00031

00210 1 00001 2 00211 EDEV TXI EDEV0,2,1 SAVE POSITION FOR TEST. F6C00032

00211 -0 63400 2 00225 EDEV0 SXD EDEV1,2 F6C00033

00212 0 60100 0 00160 STO ENTRY SAVE ITEM TO BE ENTERED F6C00040

00213 -0 53400 2 00155 LXD DEVL,2 F6C00050

00214 1 00001 2 00215 TXI EDEV2,2,1 UPDATE LENGTH OF DEV TABLE. F6C00060

00215 -0 63400 2 00155 EDEV2 SXD DEVL,2 MUST STARTING PT OF NEXT SEARCH BE F6C00070

00216 -3 00000 2 00225 EDEV3 TXL EDEV1,2,**+0 UPDATED TO NEXT POWER OF 2. F6C00080

00217 -0 50000 0 00154 CAL DEVS YES. F6C00090

00220 0 40000 0 00156 ADD DEVA UPDATE DEVS F6C00100

00221 0 60200 0 00154 SLW DEVS F6C00110

00222 0 62200 0 00156 STD DEVA F6C00120

00223 0 40000 0 00156 ADD DEVA UPDATE THE EDEV3 TEST TO NEXT F6C00130

00224 0 62200 0 00216 STD EDEV3 HIGHER POWER OF 2. F6C00140

00225 3 00225 2 00233 EDEV1 TXH EDEV4,2,* DECREMENT CONTAINS NEW POSITION F6C00150

00226 -0 50000 0 00160 CAL ENTRY OF ENTRY. IF TEST SHOWS THAT ENTRY F6C00160

00227 0 60200 2 77777 SLW DEV,2 TO BE MADE ON END OF TABLE, F6C00170

00230 0 50000 0 00174 CLA EA DO SO. F6C00180

00231 0 60100 2 74413 STO DEA,2 ENTRY IS MADE INTO MIDDLE OF DEV. F6C00190

00232 0 02000 4 00001 TRA 1,4 MOVE SUCCEEDING ENTRIES DOWN F6C00200

00233 -0 50000 2 00000 EDEV4 CAL DEV+1,2 UNTIL SPACE IS MADE FOR NEW ENTRY. F6C00210

00234 0 60200 2 77777 SLW DEV,2 F6C00220

00235 -0 50000 2 74414 CAL DEA+1,2 F6C00230

00236 0 60200 2 74413 SLW DEA,2 F6C00240

00237 1 77777 2 00225 TXI EDEV1,2,-1 F6C00250

READ EQUIV SENTENCE FROM DRUM 1 F6C00260

00240 -0 63400 2 00264 NXT SXD LIB20,2 SAVE XR2 F6C00270

00241 0 53400 2 00265 LIB21 LXI LOC15,2 SET DRUM READ ERROR COUNTER F6C00280

00242 0 76200 0 00301 RDR 1 F6C00290

00243 0 53400 1 00161 LXI ZERO,1 SET XR1=0 F6C00300

00244 0 46000 0 00361 LDA ETL TO LOCATE FIRST VARIABLE NAME IN EQUIV. SENT. F6C00310

T

00245 -0 75400 0 00000 PXD F6C00320

00246 -0 70000 1 71456 ECC CAD ECS-1,1 COPY VARIABLE NAME INTO ECS-1 ETC F6C00330

00247 1 00001 1 00250 TXI ECI,1,1 F6C00340

00250 -0 70000 1 75531 ECI CAD I,1 COPY ELEMENT NUMBER INTO I-1 ETC F6C00350

00251 0 16200 0 00246 TQP ECC TRANS. TO ECC IF STILL MORE WORDS IN SENT. F6C00360

READ IN. F6C00370

00252 0 70000 0 00362 CPY CS CHECK SUM TEST. (EACH SENTENCE HAS ITS OWN F6C00380

00253 0 76000 0 00006 COM LOGICAL CHECK SUM. F6C00390

00254 0 36100 0 00362 ACL CS F6C00400

00255 0 76000 0 00006 COM F6C00410

00256 0 10000 0 00261 TZE GFI IF CHECK SUM OK, PROCEED TO GFI F6C00420

00257 2 00001 2 00242 TIX LIB21,2,1 IF INCORRECT CHECK SUM, TRY AGAIN UNLESS F6C00430

00260 0 07400 4 00004 TSX 4,4 ERROR COUNTER EQUALS ONE. F6C00440

F6C00450

	00261	-0	63400	1	00363	GFI	SXD	N,1	SAVE NO. OF VARIABLE NAMES READ IN SENT.	F6C00460
	00262	-0	53400	2	00264		LXD	LIB20,2	RESTORE XR2	F6C00470
	00263	0	02000	4	00001		TRA	1,4	RETURN	F6C00480
	00264	0	00000	0	00000	LIB20	HTR	0		F6C00490
	00265	0	00000	0	00017	LOC15	HTR	15		F6C00500
									EQUIV SENTENCE ASSIGNMENT	F6C00510
	00266	-0	53400	1	00363	UP02	LXD	N,1	N=NO. OF WORDS IN SENTENCE INTO XR1	F6C00520
	00267	-0	63400	4	00372		SXD	IR4,4	SAVE XR4	F6C00530
	00270	0	50200	1	75531		CLS	I,1	SELECT MAXIMUM I+/LAST I/INTO AC	F6C00540
	00271	-2	00001	1	00276		TNX	MAX,1,1	WHERE I IS NUMERIC PART OF EQUIV. COMPARE WITH	F6C00550
	00272	0	56000	1	75531	MIT	LDQ	I,1	NEXT I	F6C00560
	00273	0	04000	0	00275		TLQ	TIN	GREATER OF THE TWO IS INTO AC.	F6C00570
	00274	0	50000	1	75531		CLA	I,1		F6C00580
	00275	2	00001	1	00272	TIN	TIX	MIT,1,1	IF MORE IS TO BE COMPARED, DECREMENT XR1	F6C00590
									AND REPEAT WITH NEXT I.	F6C00591
	00276	0	60200	0	00364	MAX	SLW	MAXI	STORE MAXIMUM I OF SENTENCE.	F6C00600
T	00277	-0	75400	0	00000		PXD		LET D=L-I, WHERE L IS LENGTH OF ARRAY	F6C00610
	00300	0	60100	0	00365		STO	MAXD	SET MAXD=0 WHICH CORRESPONDS TO ONE	F6C00620
	00301	-0	53400	1	00363		LXD	N,1	WD CT. OF SENT. INTO XR1. OF THE WORDS IN THE	F6C00630
									SENTENCE.	F6C00631
	00302	0	50000	1	71457	LID	CLA	ECS,1	BRING A WORD OF SENTENCE INTO AC.	F6C00640
	00303	0	53400	2	00366		LXA	VSZ,2	NO. OF ENTRIES IN ARRAY NAME TABLE (FROM SIZE	F6C00650
									TABLE).	F6C00651
D	00304	-3	00000	2	00311		TXL	NSZ,2	IF NO ENTRIES IN SIZE TABLE, GO TO NSZ	F6C00660
	00305	0	34000	2	75055	SSZ	CAS	STS,2	OTHERWISE, COMPARE A WORD OF EQUIV SENT WITH	F6C00670
									AN ARRAY NAME.	F6C00671
	00306	0	02000	0	00310		TRA	TDV		F6C00680
	00307	0	02000	0	00313		TRA	SSF	IF EQUAL, GO TO SSF TO COMPUTE D.	F6C00690
	00310	2	00001	2	00305	TDV	TIX	SSZ,2,1	IF NOT EQUAL, DECREMENT ARRAY NAME INDEX AND GO	F6C00700
									AGAIN TO COMPARE.	F6C00701
	00311	0	50000	0	00162	NSZ	CLA	ONE	IF NO WORD IN SENTENCE IS AN ARRAY,	F6C00710
	00312	0	02000	0	00314		TRA	LIT	SET L=1 AND GO TO LIT TO COMPUTE D.	F6C00720
	00313	0	50000	2	76173	SSF	CLA	L,2	IF WORD IN SENT.=ARRAY NAME IN SIZE TABLE, CLA	F6C00730
									LENGTH OF THAT ARRAY.	F6C00731
	00314	-0	40000	1	75531	LIT	SBM	I,1	COMPUTE AND STORE D=L-I FOR I CORRESPONDING TO	F6C00740
									WORD	F6C00741
	00315	0	60100	0	00173		STO	D	IN EQUIVALENCE SENTENCE.	F6C00750
	00316	0	56000	0	00173		LDQ	D	COMPARE WITH MAXD AND STORE LARGER IN MAXD.	F6C00760
	00317	0	50000	0	00365		CLA	MAXD		F6C00770
	00320	0	04000	0	00322		TLQ	DEN		F6C00780
	00321	-0	60000	0	00365		STQ	MAXD	GO BACK AND COMPUTE D USING NEW I UNTIL ALL	F6C00790
	00322	2	00001	1	00302	DEN	TIX	LID,1,1	IS CORRESPONDING TO WDS IN EQUIV. SENT. ARE	F6C00800
	00323	0	50000	0	00171		CLA	LCTR	EXHAUSTED.	F6C00810
	00324	0	40200	0	00364		SUB	MAXI	REDUCE LOCATION COUNTER BY MAX1	F6C00820
	00325	0	60100	0	00171		STO	LCTR		F6C00830
	00326	-0	53400	1	00363		LXD	N,1	RESET COUNTER FOR WORDS IN EQUIV. SENTENCE.	F6C00840
	00327	-0	63400	1	00367	STJ	SXD	J,1	SAVE CURRENT STATUS OF COUNTER IN DECR. OF J.	F6C00850
	00330	0	50000	0	00171		CLA	LCTR	COMPUTE ABSOLUTE LOCATION OF WORD IN SENT.,	F6C00860
	00331	0	40100	1	75531		ADM	I,1	AND SAVE IT IN EA	F6C00870
	00332	0	60100	0	00174		STO	EA		F6C00880
	00333	0	50000	1	71457	DES	CLA	ECS,1	CURRENT WORD OF EQUIV SENTENCE.	F6C00890
	00334	0	07400	4	00142		TSX	SDEV,4	SEARCH DEV TABLE	F6C00900
	00335	0	07400	4	00210		TSX	EDEV,4	STORE IN DEV TABLE	F6C00910
	00336	0	02000	0	00342		TRA	MJC	RETURN FROM EDEV.	F6C00920

00337	0	40200	0	00174		SUB EA	RETURN FROM SDEV IF FOUND IN DEV TABLE. DEA	F6C00930
00340	0	10000	0	00342		TZE MJC	CORRESP. TO DEV ENTRY SHOULD EQUAL EA OR ERROR	F6C00940
00341	0	07400	4	00004		TSX 4,4		F6C00950
00342	-0	53400	1	00367	MJC	LXD J,1	CURRENT STATUS OF EQUIV. WORD COUNTER	F6C00960
00343	2	00001	1	00327		TIX STJ,1,1	IF MORE WDS IN SENTENCE, REPEAT WITH NEXT WORD	F6C00970
00344	0	50000	0	00171		CLA LCTR	AT END OF SENTENCE, REDUCE LCTR BY MAXD.	F6C00980
00345	0	40200	0	00365		SUB MAXD		F6C00990
00346	0	60100	0	00171		STO LCTR		F6C01000
00347	-0	53400	4	00372		LXD IR4,4		F6C01010
00350	0	50000	0	00363	UP03	CLA N	TO MODIFY DRUM ADDRESS ADD NO. OF WORDS READ	F6C01020
							EQUIVALENCE TABLE.	F6C01021
00351	0	77100	0	00021		ARS 17	PLUS ONE TO ALLOW FOR CHECK SUM	F6C01030
00352	0	40000	0	00162		ADD ONE	PLUS	F6C01040
00353	0	40000	0	00361		ADD ETL	LAST STARTING DRUM ADDRESS.	F6C01050
00354	0	60100	0	00361		STO ETL	STORE NEW STARTING DRUM ADDRESS IN ETL.	F6C01060
00355	0	53400	1	00361		LXA ETL,1	TEST FOR END OF EQUIVALENCE TABLE.	F6C01070
00356	-3	00000	1	00360	ECN	TXL UP31,1,**	WD COUNT OF EQUIV. TABLE IN DECR.	F6C01080
00357	0	02000	4	00002		TRA 2,4	IS END OF TABLE, GO TO 2,4	F6C01090
00360	0	02000	4	00001	UP31	TRA 1,4	IF NOT END OF EQUIV TABLE, GO TO EXIT+1	F6C01100
00361	0	00000	0	00000	ETL	HTR 0		F6C01110
00362	0	00000	0	00000	CS	HTR 0		F6C01120
00363	0	00000	0	00000	N	HTR 0		F6C01130
00364	0	00000	0	00000	MAXI	HTR 0		F6C01140
00365	0	00000	0	00000	MAXD	HTR 0		F6C01150
00366	0	00000	0	00000	VSZ	HTR 0	CONTAINS NO. OF 2-WORD ENTRIES IN SIZ TABLE.	F6C01160
00367	0	00000	0	00000	J	HTR 0		F6C01170
00370	0	00000	0	00000	ETN	HTR 0		F6C01180
00371	+000001000000				C1	OCT 000001000000		F6C01190
00372	0	00000	0	00000	IR4	HTR 0		F6C01200
							BUILD SYMBOL TABLE FROM COMMON	F6C01210
				00400		ORG 256		F6C01220
T	00400	-0	75400	0	00004	UP12	PXD 4	F6C01230
	00401	0	76000	0	00006		COM	F6C01240
	00402	0	60200	0	77777		SLW DEV	F6C01250
	00403	0	76200	0	00222		RTB 2	F6C01260
	00404	0	53400	1	00411		LXA STP,1	F6C01270
	00405	0	02000	0	00412		TRA UP15	F6C01280
	00406	0	76400	0	00202	ERRUP	BST 2	F6C01290
	00407	2	00001	1	00412		TIX UP15,1,1	F6C01300
	00410	0	07400	4	00004		TSX 4,4	F6C01310
	00411	0	42000	0	00005	STP	HPR 5	F6C01320
	00412	0	76200	0	00222	UP15	RTB 2	F6C01330
	00413	-0	53400	4	00164		LXD ADDR,4	F6C01340
	00414	0	70000	4	72606	UP16	CPY UPPER-1,4	F6C01350
	00415	1	00001	4	00414		TXI UP16,4,1	F6C01360
	00416	0	02000	0	00427		TRA EOF	F6C01370
	00417	0	77100	0	00377		ARS 255	F6C01380
	00420	0	77100	0	00377		ARS 255	F6C01390
	00421	-0	76000	0	00012		RTT	F6C01400
	00422	0	02000	0	00406		TRA ERRUP	F6C01410
	00423	0	50000	0	72605		CLA UPPER-2	F6C01420
	00424	0	40200	0	00371		SUB C1	F6C01430
	00425	0	62200	0	00522		STD UP18	F6C01440
	00426	0	02000	0	00430		TRA DSR	F6C01450
							ERROR	

	00427	0	07400	4	00004	EOF	TSX 4,4	END OF FILE ERROR	F6C01460
	00430	0	53400	2	00265	DSR	LXA LOC15,2	SET DRUM ERROR COUNTER	F6C01470
	00431	0	76200	0	00302	LIB22	RDR 2		F6C01480
	00432	0	46000	0	00433		LDA DSA	SIZE TABLE TEST	F6C01490
T	00433	-0	75400	0	00000	DSA	PXD 0		F6C01500
	00434	-0	70000	0	00366		CAD VSZ	READ SIZE TABLE WORD COUNT	F6C01510
	00435	0	76000	0	00006		COM		F6C01520
	00436	-0	70000	0	00362		CAD CS		F6C01530
	00437	0	76000	0	00006		COM		F6C01540
	00440	0	10000	0	00443		TZE DTR		F6C01550
	00441	2	00001	2	00431		TIX LIB22,2,1	IF DRUM READ ERROR	F6C01560
	00442	0	07400	4	00004		TSX 4,4		F6C01570
	00443	0	50000	0	00366	DTR	CLA VSZ		F6C01580
	00444	0	77100	0	00001		ARS 1	STORE NO. OF ARRAY NAMES IN SIZE	F6C01590
	00445	0	60100	0	00366		STO VSZ	TABLE INTO VSZ	F6C01600
D	00446	0	53400	1	00366	DTE	LXA VSZ,1	SIZE TABLE TEST	F6C01610
	00447	-3	00000	1	00466		TXL ETR,1	IF NO SIZE TABLE, GO ETR	F6C01620
	00450	0	53400	2	00265		LXA LOC15,2	IF SIZE TABLE ENTRIES, SET	F6C01630
	00451	0	76200	0	00302	LIB23	RDR 2	DRUM READ ERROR COUNT AND READ IN SIZE	F6C01640
	00452	0	46000	0	00453		LDA DTA	TABLE.	F6C01650
T	00453	-0	75400	0	00002	DTA	PXD 2		F6C01660
	00454	-0	70000	1	75055	DTC	CAD STS,1	COPY ARRAY NAME INTO STS,1	F6C01670
	00455	-0	70000	1	76173		CAD L,1	COPY ARRAY LENGTH INTO L,1	F6C01680
	00456	2	00001	1	00454		TIX DTC,1,1		F6C01690
	00457	0	70000	0	00362		CPY CS		F6C01700
	00460	0	76000	0	00006		COM		F6C01710
	00461	-0	70000	0	00362		CAD CS		F6C01720
	00462	0	76000	0	00006		COM		F6C01730
	00463	0	10000	0	00466		TZE ETR	TEST CHECK SUM IF OK, GO TO ETR.	F6C01740
	00464	2	00001	2	00451		TIX LIB23,2,1	CHECK SUM ERROR.	F6C01750
	00465	0	07400	4	00004		TSX 4,4		F6C01760
	00466	0	53400	2	00265	ETR	LXA LOC15,2		F6C01770
	00467	0	76200	0	00301	LIB24	RDR 1	SELECT DRUM 1. TO SEE IF ANY EQUIV. TABLE.	F6C01780
	00470	0	46000	0	00471		LDA ETA	EQUIV TABLE TEST	F6C01790
T	00471	-0	75400	0	00000	ETA	PXD 0		F6C01800
	00472	-0	70000	0	00370		CAD ETN	READ WORD COUNT OF EQUIV TABLE INTO ETN	F6C01810
	00473	0	76000	0	00006		COM		F6C01820
	00474	-0	70000	0	00362		CAD CS		F6C01830
	00475	0	76000	0	00006		COM		F6C01840
	00476	0	10000	0	00501		TZE ETT	IF NO ERROR, GO TO ETT.	F6C01850
	00477	2	00001	2	00467		TIX LIB24,2,1		F6C01860
	00500	0	07400	4	00004		TSX 4,4		F6C01870
	00501	-0	53400	1	00370	ETT	LXD ETN,1	SET XR1 EQUAL WD. CT. OF EQUIV TABLE	F6C01880
D	00502	-3	00000	1	00535		TXL UP01,1	IF WORD COUNTER ZERO, TRANSFER	F6C01890
	00503	-0	63400	1	00356		SXD ECN,1	IF THERE ARE ENTRIES IN EQUIV, SAVE WD. CT. IN ECN.	F6C01900
	00504	0	50000	0	00163		CLA TWO		F6C01910
	00505	0	60100	0	00361		STO ETL	SET ETL=2	F6C01920
	00506	0	50000	0	72605		CLA UPPER-2,	IF WORD COUNT OF COMMON TABLE	F6C01930
	00507	0	10000	0	00574		TZE UP25	EQUALS ZERO, GO TO UP 25. IF NOT 0,	F6C01940
	00510	0	07400	4	00240	UP32	TSX NXT,4	READ EQUIV. SENTENCE.	F6C01950
	00511	2	00001	1	00512		TIX CH2,1,1	XR1 CONTAINS NO. OF WOROS READ BY NXT	F6C01960
	00512	-0	63400	1	00525	CH2	SXD UP21,1	NO. OF WORDS IN SENTENCE INTO DECR. UP 21	F6C01970
	00513	-0	53400	1	00164		LXD ADDR,1	SET XR1,2=0	F6C01980

00514	-0	53400	2	00164	UP22	LXD ADDR,2		F6C01990
00515	0	50000	1	71456	UP20	CLA ECS-1,1	COMPARE VARIABLE NAME FROM EQUIV SENTENCE	F6C02000
00516	0	34000	2	72604		CAS UPPER-3,2	WITH WORD IN COMMON	F6C02010
00517	0	02000	0	00521		TRA UP17	NOT EQUAL	F6C02020
00520	0	02000	0	00532		TRA UP30	EQUAL. I.E, VARIABLE NAME IS IN COMMON.	F6C02030
00521	1	00001	2	00522	UP17	TXI UP18,2,1	NOT EQUAL. INCREMENT INDEX REG 2.	F6C02040
00522	3	00522	2	00524	UP18	TXH UP19,2,*	PROCEED TO UP 19 IF ALL WORDS IN COMMON COMPARE	F6C02050
00523	0	02000	0	00515		TRA UP20	OTHERWISE COMPARE AGAIN WITH NEXT COMMON WORD	F6C02060
00524	1	00001	1	00525	UP19	TXI UP21,1,1	END OF COMMON. INCREMENT VARIABLE NAME COUNTER	F6C02070
00525	3	00525	1	00527	UP21	TXH UP33,1,*	IF ALL VARIABLE NAMES IN SENTENCE COMPARED	F6C02080
00526	0	02000	0	00514		TRA UP22	IF MORE NAMES IN SENTENCE, COMPARE NEXT WORD	F6C02090
00527	0	07400	4	00350	UP33	TSX UP03,4	MODIFY DRUM ADDRESS AND TEST FOR END OF EQUIV.	F6C02100
							TAB.	F6C02101
00530	0	02000	0	00510		TRA UP32	RETURN HERE IF NOT END OF EQUIV TABLE TO READ	F6C02110
							NEXT SENTENCE	F6C02111
00531	0	02000	0	00535		TRA UP01	IF END OF EQUIV TABLE, RETURN HERE	F6C02120
00532	0	07400	4	00266	UP30	TSX UP02,4	TO ASSIGN EQUIV. SENT, WORD OF WHICH	F6C02130
							APPEARS IN COMMON, TO UPPER MEMORY	F6C02131
00533	0	02000	0	00510		TRA UP32	RETURN IF NOT END OF EQUIV. TABLE	F6C02140
00534	0	02000	0	00535		TRA UP01	IF END OF EQUIV TABLE, RETURN HERE	F6C02150
							ASSIGN UPPER MEMORY FOR WORDS IN COMMON BUT NOT IN EQUIV.	F6C02151
00535	-0	53400	1	00164	UP01	LXD ADDR,1	ASSIGN UPPER	F6C02160
00536	0	50000	0	72605		CLA UPPER-2	XR1 WILL CONATIN COUNT OF COMMON WDS PROCESSED.	F6C02170
00537	0	10000	0	00576		TZE ME1	TRANSFER OUT TO ME1 IF NO COMMON TABLE.	F6C02180
00540	0	40200	0	00371		SUB C1	IF THERE IS A COMMON TABLE, DECREASE WORD CT.	F6C02190
00541	0	62200	0	00572		STD UP23	BY 1 AND STORE IN DECR. OF UP 23	F6C02200
00542	0	50000	0	00171		CLA LCTR		F6C02210
00543	0	60100	0	00174		STO EA	STORE LOCATION COUNTER IN EA.	F6C02220
00544	0	50000	1	72604	UP24	CLA UPPER-3,1	A COMMON ENTRY INTO AC.	F6C02230
00545	-0	63400	1	00601		SXD LIB1,1	SAVE COUNT.	F6C02240
00546	0	07400	4	00142		TSX SDEV,4	SEE IF IN DEV TABLE	F6C02250
00547	0	07400	4	00210		TSX EDEV,4	TO ENTER COMMON SYMBOL IN DEV TABLE.	F6C02260
00550	0	02000	0	00553		TRA UP05	RETURN FROM EDEV. GO TO UP05 TO RESET LCTR	F6C02270
00551	-0	53400	1	00601		LXD LIB1,1	RETURN HERE IF LOCATED COMMON WORD IN DEV TABL	F6C02280
00552	0	02000	0	00571		TRA UP06	RESTORE XR AND GO TO UP06 TO INCREMENT WD COUNT	F6C02290
							TO DETERMINE WHETHER SYMBOL JUST ENTERED IN DEV IS AN ARRAY.	F6C02291
00553	0	53400	2	00366	UP05	LXA VSZ,2	IS UPPER SYM	F6C02300
00554	-0	53400	1	00601		LXD LIB1,1		F6C02310
00555	-3	00000	2	00563		TXL UP07,2	TRANSFER IF NO SIZE TABLE.	F6C02320
00556	0	50000	1	72604		CLA UPPER-3,1	COMPARE COMMON SYMBOL JUST ENTERED IN DEV TABLE	F6C02330
00557	0	34000	2	75055	UP08	CAS STS,2	WITH ARRAY NAME FROM SIZE TABLE	F6C02340
00560	0	02000	0	00562		TRA UP09		F6C02350
00561	0	02000	0	00565		TRA UP10	COMMON SYMBOL LOCATED FN SIZE TABLE	F6C02360
00562	2	00001	2	00557	UP09	TIX UP08,2,1	NOT LOCATED. REPEAT UNTIL COMPARED WITH ALL	F6C02370
							ARRAY NAMES	F6C02371
00563	0	50200	0	00162	UP07	CLS ONE	IF NOT IN SIZE TABLE, REDUCE LCTR BY ONE. I.E.	F6C02380
							NOT AN ARRAY.	F6C02381
00564	0	02000	0	00566		TRA UP11		F6C02390
00565	0	50200	2	76173	UP10	CLS L,2	REDUCE LCTR BY LENGTH OF ARRAY	F6C02400
00566	0	40000	0	00171	UP11	ADD LCTR	REDUCE LCTR	F6C02410
00567	0	60100	0	00171		STO LCTR		F6C02420
00570	0	60100	0	00174		STO EA	STORE CURRENT LCTR IN EA.	F6C02430
00571	1	00001	1	00572	UP06	TXI UP23,1,1	REPEAT FOR EACH COMMON ENTRY UNTIL	F6C02440
00572	3	00572	1	00574	UP23	TXH UP25,1,*	ALL ENTRIES IN COMMON TABLE ARE IN DEV	F6C02450

	00573	0	02000	0	00544		TRA UP24	TABLE WITH THEIR ABSOLUTE LOCATIONS IN DEA	TABLF6C02460
	00574	0	76200	0	00221	UP25	RTB 1	GO TO LOADER	F6C02470
	00575	0	02000	0	00004		TRA 4		F6C02480
M	00576	0	62100	0	00205	ME1	STA ME2	STORE ZERO IN ADDRESS OF ME2 AND GO TO	F6C02490
	00577	0	02000	0	00574		TRA UP25	LOADER.	F6C02500
	00600	0	00000	0	00000	IDENT	HTR 0		F6C02510
	00601	0	00000	0	00000	LIB1	HTR 0		F6C02520
A					00000		END		F6C02530
						0	ME2 00205,00205		

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	279	0	0	0	0
LIB	0	0	0	0	0
COL	279	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 288

NUMBER OF SYMBOLS, DEF 154,DEFOP 0,UNDEF 0
 REM AST

AST

***** FORTRAN II SECTION SIX *****F6D00010

FORTRAN 2 RECORD 98 - EOUIV-DIMENSION. F6D00011

CONTROL ENTERS THIS RECORD AT LOCATION 400 (OCTAL). F6D00012

ENTER TRANSFER VECTOR INTO DEV TABLE F6D00013

00210 EDEV SYN 136 F6D00014

00240 NXT SYN 160 F6D00015

00265 LOC15 SYN 181 F6000050

00266 UP02 SYN 182 F6D00060

00350 UP03 SYN 232 F6D00070

00361 ETL SYN 241 F6D00000

00363 N SYN 243 F6D00090

00366 VSZ SYN 246 F6D00100

00367 J SYN 247 F6D00110

00370 ETN SYN 248 F6D00120

00400 ORG 256 F6D00130

00400 0 50000 0 00171 CLA LCTR SAVE UPPER BREAK F6D00140

00401 0 60100 0 00175 STO L3 IN L3 F6D00150

00402 0 76200 0 00303 RDR 3 SELECT DRUM 3 F6D00160

T 00403 -0 75400 0 00000 A27 PXD 0 F6D00170

00404 0 46000 0 00403 LDA A27 LOCATE TRANSFER VECTOR TABLE (CLOSUB) F6D00180

00405 0 70000 0 72605 CPY UPPER-2 F6D00190

00406 0 70000 0 72605 CPY UPPER-2 LOAD INDEX REG 1 WITH WORD COUNT OF F6D00200

00407 -0 53400 1 72605 A23 LXD UPPER-2,1 TRANSFER VECTOR TABLE. F6D00210

D 00410 -3 00000 1 00452 TXL A28,1 IF NO TRANS VECTOR, GO TO ASSIGN EQUIV AND F6D00220

00411 0 53400 2 00265 LX A LOC15,2 DIMENSION STORAGE. F6D00230

00412 0 76200 0 00303 X1 RDR 3 IF THERE IS A TRANSFER VECTOR, F6D00240

T 00413 -0 75400 0 00002 A29 PXD 2 READ IT INTO UPPER -3 ETC. F6D00250

00414 0 46000 0 00413 LDA A29 F6D00260

00415 -0 70000 1 72605 A30 CAD UPPER-2,1 F6D00270

00416 2 00001 1 00415 TIX A30,1,1 F6D00280

00417 0 70000 0 00625 CPY SUM F6D00290

00420 0 76000 0 00006 COM F6D00300

00421 -0 70000 0 00625 CAD SUM TO TEST CHECK SUM F6D00310

00422 0 76000 0 00006 COM F6D00320

00423 0 10000 0 00426 TZE A25 CHECK SUM OKAY. GO TO ENTER TRANS. VECTOR INTO F6D00330

DEV TABLE, F6D00331

00424 2 00001 2 00412 TIX X1,2,1 IF CHECK SUM ERROR, TRY AGAIN F6D00340

00425 0 07400 4 00004 TSX 4,4 F6D00350

00426 0 50000 0 72605 A25 CLA UPPER-2 REDUCE WD COUNT OF TRANSFER VECTOR BY ONE F6D00360

00427 0 40200 0 00626 SUB C2 AND STORE RESULT IN DECR OF A24. F6D00370

00430 0 62200 0 00450 STD A24 F6D00380

00431 -0 53400 1 00164 LXD ADDR,1 SET COUNTER FOR WORDS PROCESSED TO ZERO. F6D00390

00432 0 50000 0 00166 CLA L1 F6D00400

00433 0 60100 0 00174 A42 STO EA STORE PROGRAM COUNTER IN EA. F6D00410

00434 0 50000 1 72604 CLA UPPER-3,1 SELECT A TRANSFER VECTOR NAME. F6D00420

00435 -0 63400 1 00627 SXD LIB1,1 F6D00430

00436 0 07400 4 00142 TSX SDEV,4 TO SEE IF NAME SELECTED IS IN DEV TABLE. YES, F6D00440

ERROR. F6D00441

00437 0 07400 4 00210 TSX EDEV,4 ENTER NAME IN DEV TABLE. F6D00450

00440 0 02000 0 00442 TRA A40 EXIT FROM EDEV. F6D00460

00441 0 07400 4 00004 A41 TSX 4,4 IF NAME LOCATED IN DEV TABLE, ERROR F6D00470

00442	0	50000	0	00166	A40	CLA L1	STORE PROGRAM COUNTER IN PROG BREAK.	F6D00480
00443	0	60100	0	00167		STO L2		F6D00490
00444	0	40000	0	00162		ADD ONE	INCREASE PROGRAM COUNTER BY 1.	F6D00500
00445	0	60100	0	00166		STO L1		F6D00510
00446	-0	53400	1	00627		LXD LIB1,1		F6D00520
00447	1	00001	1	00450		TXI A24,1,1		F6D00530
00450	3	00450	1	00452	A24	TXH A28,1,*	TRANSFER TO ASSIGN EQUIV. IF ALL TRANS VECTOR NAMES ENTERED	F6D00540
								F6D00541
00451	0	02000	0	00433		TRA A42		F6D00550
						ASSIGN EQUIV	AOTHERWISE, SELECT NEST TRANS. VEC. NAME AND ENTER IN DEV	F6D00560
								F6D00561
00452	0	76400	0	00202	A28	BST 2	TO POSITION TAPE 2 AT BEGINNING OF SUBDEF TABL	F6D00570
00453	0	76400	0	00202		BST 2		F6D00580
00454	0	53400	1	00461		LXA A1,1	SET READ ERROR COUNTER	F6D00590
00455	0	02000	0	00462		TRA A2		F6000600
00456	0	76400	0	00202	A3	BST 2	READ ERROR PROCEDURE	F6D00610
00457	2	00001	1	00462		TIX A2,1,1		F6D00620
00460	0	07400	4	00004		TSX 4,4		F6D00630
00461	0	42000	0	00005	A1	HPR 5	SELECT TAPE TWO	F6D00640
00462	0	76200	0	00222	A2	RTB 2	TO READ SUB DEF, TABLE.	F6D00650
00463	-0	53400	4	00164		LXD ADDR,4	SET COUNTER=0,	F6D00660
00464	0	70000	4	72606	A4	CPY UPPER-1,4	ANO READ SUBDEF TABLE.	F6D00670
00465	1	00001	4	00464		TXI A4,4,1	INTO UPPER-1, ETC,	F6D00680
00466	0	02000	0	00624		TRA EOF1	END-OF-FILE IS ERROR HERE,	F6D00690
00467	0	77100	0	00377		ARS 255		F6D00700
00470	0	77100	0	00377		ARS 255		F6D00710
00471	-0	76000	0	00012		RTT		F6D00720
00472	0	02000	0	00456		TRA A3	IF RTT ERROR.	F6D00730
00473	0	77200	0	00202		REW 2	WHEN RECORD HAS BEEN READ, REWIND TABLE-TAPE.	F6000740
00474	0	50000	0	00370		CLA ETN	ETN HAS WORD COUNT OF EQUIV. TABLE	F6D00750
00475	0	10000	0	00556		TZE DIM	IF NO EQUIV. ENTRIES, GO TO ASSIGN DIMENSION	F6D00760
00476	0	50000	0	00163		CLA TWO		F6D00770
00477	0	60100	0	00361		STO ETL	STORE WD CT OF EQUIV TABLE+2 IN ETL	F6000780
00500	0	07400	4	00240	A5	TSX NXT,4	TO READ AN EQUIV SENTENCE INTO ECS-1,--, I-1,--	F6000790
00501	0	50000	0	72605	A6	CLA UPPER-2	LEAVES WD CT. OF SENT. IN XR1.	F6D00800
00502	0	40200	0	00626		SUB C2	TEST WORD COUNT OF SUBDEF TABLE.	F6D00810
00503	0	10000	0	00530		TZE ME30	IF NO ARGUMENTS, GO TO SEARCH DEV TABLE	F6000820
00504	-0	12000	0	00530		TMI ME30		F6D00830
00505	2	00001	1	00506		TIX CH4,1,1		F6D00840
00506	-0	63400	1	00535	CH4	SXD A14,1	SAVE XR1 IN DECR. OF A14	F6D00850
00507	0	40200	0	00626		SUB C2		F6000860
00510	0	62200	0	00520		STD A12		F6D00870
00511	-0	53400	1	00164		LXD ADDR,1		F6D00880
00512	-0	53400	2	00164	A8	LXD ADDR,2	SET XRS 1+2=0	F6D00890
00513	0	50000	1	71456	A9	CLA ECS-1,1	COMPARE A WORD OF EQUIV SENTENCE	F6D00900
00514	0	34000	2	72603		CAS UPPER-4,2	WITH LIST OF ARGUMENTS IN SUBDEF TABLE.	F6D00910
00515	0	02000	0	00517		TRA A10		F6D00920
00516	0	02000	0	00542		TRA A11	IN SUB DEF TABLE, I.E. EQUIV. VARIABLE IS A SUBF	F6D00930
							ROUTINE ARGUMENT	F6D00931
00517	1	00001	2	00520	A10	TXI A12,2,1	INCREASE ARGUMENT COUNTER AND REPEAT COMPARISON	F6000940
00520	3	00000	2	00644	A12	TXH DPCH3,2,**		F6D00950
00521	0	02000	0	00513		TRA A9		F6D00960
00522	0	07400	4	00142	A13	TSX SDEV,4		F6D00970
00523	-0	53400	1	00646		LXD SVIT,1		F6D00980

00524	1	00001	1	00535		TXI A14,1,1		F6D00990
00525	0	07400	4	00350		TSX UP03,4	IF WORD FOUND IN DEV SEARCH, GO TO MODIFY DRUM ADDRESS	F6D01000 F6D01001
00526	0	02000	0	00500		TRA A5	OF EQUIV TABLE. READ IN NEXT EQUIV. SENTENCE	F6D01010
00527	0	02000	0	00556		TRA DIM	EXIT HERE FROM UP03 IF END OF EQUIV TABLE REACH	F6D01020
00530	0	50000	0	71456	ME30	CLA ECS-1	SEARCH DEV TABLE FOR AN EQUIV. NAME.	F6D01030
00531	0	07400	4	00142		TSX SDEV,4		F6D01040
00532	0	02000	0	00537		TRA A7	NOT IN DEV TABLE. GO TO ASSIGN EQUIV STORAGE	F6D01050
00533	0	76100	0	00000		NOP		F6D01060
00534	0	02000	0	00525		TRA A13+3	RETURNS HERE IF SEARCH SUCCESSFUL	F6D01070
00535	3	00535	1	00537	A14	TXH A7,1,*	(WD COUNT OF SENT. IN DECREMENT). TRANSF. TO A7	F6D01080
00536	0	02000	0	00512		TRA A8	IF END OF EQUIV SENTENCE.	F6D01090
00537	0	07400	4	00266	A7	TSX UP02,4	NOT SUB DEF SO NORMAL EQUIV ASSIGNMENT.	F6D01100
00540	0	02000	0	00500		TRA A5	IF NOT END OF EQUIV TABLE, GO TO READ IN NEXT SENTENCE	F6D01110 F6D01111
00541	0	02000	0	00556		TRA DIM	END OF EQUIV. GO TO ASSIGN DIMENSION STORAGE	F6D01120
00542	0	60000	0	00174	A11	STZ EA	EQUIV. VARIABLE IS A SUBROUTINE ARGUMENT	F6D01130
00543	-0	53400	1	00363		LXD N,1	SET COUNTER FOR NO. OF WORDS IN SENT.	F6D01140
00544	-0	63400	1	00367	A21	SXD J,1	SAVE NO. OF WORDS IN EQUIV SENT.	F6D01150
00545	0	50000	1	71457		CLA ECS,1	STORE EQUIV VARIABLE IN DEV AND	F6D01160
00546	0	07400	4	00142		TSX SDEV,4	STORE LOCATION AS ZERO.	F6D01170
00547	0	07400	4	00210		TSX EDEV,4	EQUIV ENTRIES	F6D01180
00550	0	02000	0	00551		TRA A22		F6D01190
00551	-0	53400	1	00367	A22	LXD J,1	RESTORE COUNTER FOR NO. OF WDS LEFT IN EQUIV SENTENCE.	F6D01200 F6D01201
00552	2	00001	1	00544		TIX A21,1,1	IF MORE WORDS IN SENT, GO TO STORE LOCATION AS ZERO,	F6D01210 F6D01211
00553	0	07400	4	00350		TSX UP03,4	SENTENCE FINISHED. GO COMPUTE NEW DRUM ADD. + TEST FOR END.	F6D01220 F6D01221
00554	0	02000	0	00500		TRA A5	IF NOT END OF EQUIV TABLE, REPEAT WITH NEXT SENTENCE.	F6D01230 F6D01231
00555	0	02000	0	00556		TRA DIM	END OF EQUIV TABLE.	F6D01240
00556	0	53400	1	00366	DIM	LXA VSZ,1	ADD SYMBOLS FROM DIMENSION SENTENCES	F6D01250
00557	-3	00000	1	00622		TXL ENDA,1	SET COUNTER WITH WD CT OF ARRAY NAME TABLE	F6D01260
00560	0	02000	0	00631	SZYES	TRA DPCH1	IF NO SIZE TABLE, GO TO READ LOADER	F6D01270
00561	0	62200	0	00604		STD A18		F6D01280
00562	0	50000	0	00171		CLA LCTR	STORE LCTR IN EA.	F6D01290 F6D01300
00563	0	60100	0	00174	SEA	STO EA		F6D01310
00564	0	50000	1	75055	DDS	CLA STS,1		F6D01320
00565	-0	63400	1	00363		SXD N,1	SAVE COUNTER FOR ARRAY NAME TABLE	F6D01330
00566	0	07400	4	00142		TSX SDEV,4	GO TO SEARCH DEV TABLE FOR ARRAY NAME	F6D01340
00567	0	02000	0	00574		TRA A15	IF NOT IN TABLE, GO SEE IF THAT ARRAY NAME IS SUBROUTINE ARGUMENT	F6001350 F6D01351
00570	0	76100	0	00000		NOP 0		F6D01360
00571	-0	53400	1	00363		LXD N,1	IF IN TABLE, GO TO NEXT ARRAY NAME SEARCH.	F6D01370
00572	2	00001	1	00564		TIX DDS,1,1		F6D01380
00573	0	02000	0	00622		TRA ENDA		F6D01390
00574	-0	63400	2	00630	A15	SXD IR2,2	SAVE XR2	F6D01400
00575	-0	53400	2	00164		LXD ADDR,2	SET COUNTER=0	F6D01410
00576	0	02000	0	00637		TRA DPCH2		F6D01420
00577	0	50000	1	75055	A20	CLA STS,1	TO SEE IF ARRAY NAME IS A SUBROUTINE ARG.	F6D01430
00600	0	34000	2	72603		CAS UPPER-4,2		F6D01440
00601	0	02000	0	00603		TRA A16	NOT A SUBROUTINE ARGUMENT	F6D01450

D

00602	0	02000	0	00616		TRA A17	IF IT IS A SUB ARG, GO TO A17	F6D01460
00603	1	00001	2	00604	A16	TXI A18,2,1		F6D01470
00604	3	00604	2	00606	A18	TXH A19,2,*	IF NO MORE ARGUMENT NAMES TO COMPARE GO TO A19.	F6D01480
00605	0	02000	0	00577		TRA A20		F6D01490
00606	-0	53400	2	00630	A19	LXD IR2,2	ARRAY NAME NOT A SUBROUTINE ARGUMENT	F6D01500
00607	0	07400	4	00210		TSX EDEV,4	ENTER ARRAY NAME IN DEV TABLE. STORE LOCATION	F6D01510
							IN DEA	F6D01511
00610	-0	53400	1	00363	SLC	LXD N,1	RESTORE ARRAY NAME COUNTER.	F6D01520
00611	0	50000	0	00171		CLA LCTR	SUBTRACT LENGTH OF ARRAY FROM LCTR AND STORE	F6D01530
							LCTR.	F6D01531
00612	0	40200	1	76173		SUB L,1		F6D01540
00613	0	60100	0	00171		STO LCTR		F6D01550
00614	2	00001	1	00563		TIX SEA,1,1	UPDATE ARRAY NAME TABLE COUNTER AND GO SEE IF	F6D01560
							IN DEV.	F6D01561
00615	0	02000	0	00622		TRA ENDA		F6D01570
00616	-0	53400	1	00363	A17	LXD N,1	RESTORE ARRAY NAME COUNTER	F6D01580
00617	0	50000	0	00171		CLA LCTR		F6D01590
00620	2	00001	1	00563		TIX SEA,1,1	DECREMENT ARRAY NAME COUNTER	F6D01600
00621	0	02000	0	00622		TRA ENDA	WHEN ALL ARRAY NAMES TREATED, GO TO LOADER.	F6D01610
A				00622	ENDA	BSS		F6D01620
00622	0	76200	0	00221		RTB 1		F6D01630
00623	0	02000	0	00004		TRA 4		F6D01640
00624	0	07400	4	00004	EOF1	TSX 4,4		F6D01650
00625	0	00000	0	00000		SUM HTR 0		F6D01660
00626	+0	000001000000				C2 OCT 000001000000		F6D01670
00627	0	00000	0	00000	LIB1	HTR 0		F6D01680
00630	0	00000	0	00000		IR2 HTR 0		F6D01690
00631	0	50000	0	72605	DPCH1	CLA UPPER-2		F6D01691
00632	0	40200	0	00626		SUB C2		F6D01692
00633	0	60100	0	00636		STO HERE		F6D01693
00634	0	40200	0	00626		SUB C2		F6D01694
00635	0	02000	0	00561		TRA SZYES+1		F6D01695
00636	0	00000	0	00000	HERE	HTR 0		F6D01696
00637	-0	53400	1	00363	DPCH2	LXD N,1		F6D01700
00640	0	50000	0	00636		CLA HERE		F6D01701
00641	0	12000	0	00577		TPL A20		F6D01702
00642	0	50000	1	75055		CLA STS,1		F6D01703
00643	0	02000	0	00606		TRA A19		F6D01704
00644	-0	63400	1	00646	DPCH3	SXD SVIT,1		F6D01705
00645	0	02000	0	00522		TRA A13		F6D01706
00646	0	00000	0	00000	SVIT	HTR 0		F6D01707
A				00000		END		F6D01708

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	205	0	0	0	0
LIB	0	0	0	0	0
COL	205	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 213

NUMBER OF SYMBOLS, DEF 132,DEFOP 0,UNDEF 0

REM ***** FORTRAN II SECTION SIX *****F6E00010

***** FORTRAN II SECTION SIX ***** F6E00010
 FORTRAN 2 RECORD 100 - COMMON MAPPING. F6E00011

CONTROL ENTERS THIS RECORD AT LOCATION 210 (OCTAL). F6E00012

LIST STORAGE FOR VARIABLES F6E00014
 APPEARING IN COMMON SENTENCES, F6E00020
 LOCATIONS IN BOTH DECIMAL AND OCTAL F6E00030
 F6E00040

M			00205	ME2	SYN	133		F6E00050
			00210		ORG	136		F6E00060
	00210	0	77200	0	REW	2	REWIND TAPE 2	F6E00070
	00211	0	76200	0	FIL	RTD	2	SPACE OVER SOURCE PROGRAM.
	00212	0	70000	0		CPY	LIN	F6E00090
	00213	0	02000	0		TRA	FIL	F6E00100
M	00214	0	53400	1	LXA	ME2,1	=1 IF COMMON TABLE, =0 IF NO COMMON TABLE.	F6E00110
D	00215	-3	00000	1	TXL	ENDS,1	IF NO COMMON TABLE, GO TO ENDS.	F6E00120
	00216	-0	53400	1	LDX	DEVL,1	TABLE LENGTH OF DEV.	F6E00130
D	00217	-3	00000	1	TXL	ENDS,1	IF NO DEV TABLE, GO TO ENDS	F6E00140
	00220	0	07400	4	TSX	SPACE,4	GO TO WRITE TITLE AND HEADINGS.	F6E00150
	00221	0	00024	0		TITLE,,20		F6E00160
	00222	0	07400	4	TSX	SPACE,4		F6E00170
	00223	0	00024	0		CHEAD,,20		F6E00180
	00224	-0	53400	2	CNL	LXD	LNC,2	SET TAPE 2 BLOCK LENGTH TO 20
	00225	0	50000	1	CNW	CLA	DEA,1	TEST FOR COMMON,
	00226	0	40200	0		SUB	L3	I.E. SEE IF LOCATION OF SYMBOL IS IN RANGE OF COMMON
	00227	0	10000	0		TZE	B4	NOT IN COMMON.
	00230	-0	12000	0		TMI	B4	NOT IN COMMON.
	00231	-0	50000	0		CAL	BLANKS	YES, IN COMMON.
	00232	0	60200	2		SLW	LIN+1,2	STORE BLANKS IN TWO WORDS OF TAPE 2 ENTRY.
	00233	0	60200	2		SLW	LIN+2,2	
	00234	0	56000	1		LDQ	DEV,1	SELECT SYMBOL AND
	00235	0	53400	4		LXA	SIX,4	CONVERT.
	00236	-0	76300	0	SIX	LGL	6	BRING ONE CHARACTER OF SYMBOL INTO AC.
	00237	0	60200	0		SLW	SYM	
	00240	-0	32000	0		ANA	6BITS	TEST IF CHARACTER IN AC IS A BLANK.
	00241	0	40200	0		SUB	BLANK	
	00242	0	10000	0		TZE	CNA	YES, THEN FINISHED. I.E. SYMBOLIC NAME IN 2ND WORD OF ENTRY.
	00243	-0	50000	0		CAL	SYM	
	00244	0	60200	2		SLW	LIN+2,2	
	00245	2	00001	4		TIX	SIX,4,1	
	00246	0	50000	1	CNA	CLA	DEA,1	TO GET BCD IMAGE OF DECIMAL LOCATION.
	00247	0	62100	0		STA	LOC	
	00250	0	53400	4		LXA	ONE,4	
	00251	0	56000	0		LDQ	LOC	
	00252	0	50000	0	CNV	CLA	TEN	
	00253	0	04000	0		TLQ	FIN	
T	00254	-0	75400	0		PXD		REMAINDERS STORED IN DIG-1,... THAT IS, IF 205 (OCTAL)
	00255	0	22100	0		DVP	TEN	WERE THE NUMBER IN LOC, WE GET A BINARY 3 IN DIG-1, ...
	00256	0	60200	4		SLW	DIG,4	3 IN DIG-2, IN DIG-3
	00257	1	00001	4		TXI	CNV,4,1	

00260	-0	60000	4	00513	FIN	STQ	DIG,4		F6E00470
00261	-0	50000	0	00404		CAL	BLANKS		F6E00480
00262	0	76700	0	00006	DEC	ALS	6		F6E00490
00263	-0	50100	4	00513		ORA	DIG,4	SET UP BCD IMAGE OF DEC. NO. AS 3 BLANKS,1,3,3.	F6E00500
00264	2	00001	4	00262		TIX	DEC,4,1		F6E00510
00265	0	60200	2	00507		SLW	LIN+3,2	STORE DECIMAL LOCATION IN 3RD WORD OF ENTRY.	F6E00520
00266	0	50000	0	00410		CLA	LOC		F6E00530
00267	0	76500	0	00017		LRS	15		F6E00540
00270	-0	50000	0	00405		CAL	BLANK		F6E00550
00271	-0	14000	0	00272		TNO	OCT		F6E00560
00272	0	76700	0	00003	OCT	ALS	3	TO SET UP BCD IMAGE OF OCTAL LOCATION	F6E00570
00273	0	76300	0	00003		LLS	3	THE TRANSFER IS ON NO OVERFLOW SINCE WHEN ALL	F6E00580
00274	-0	14000	0	00272		TNO	OCT	15 BITS OF LOC HAVE BEEN CONVERTED, A BIT FROM	F6E00590
								REMAINING BLANK WILL ENTER P POSITION OF ACC.	F6E00591
00275	0	60200	2	00510		SLW	LIN+4,2	STORE OCTAL LOCATION IN 4TH WORD OF ENTRY	F6E00600
00276	-2	00001	1	00320		TNX	NT2,1,1	GO TO NT2 IF NO MORE ENTRIES IN DEV TABLE	F6E00610
00277	2	00004	2	00225		TIX	CNW,2,4	IF ROOM FOR MORE 4-WORD ENTRIES IN 20-WD RECORD	F6E00620
								REPEAT	F6E00621
00300	0	07400	4	00307		TSX	WRITE,4		F6E00630
00301	0	00024	0	00505	LNC		LIN+1,,20		F6E00640
00302	0	02000	0	00224		TRA	CNL		F6E00650
00303	-2	00001	1	00317	B4	TNX	WLL,1,1	IF NO MORE WORDS IN DEV TABLE, GO TO WLL.	F6E00660
00304	0	02000	0	00225		TRA	CNW		F6E00670
00305	0	76600	0	00202	SPACE	WTD	2		F6E00680
00306	0	70000	0	00404		CPY	BLANKS	WRITE A BLANK RECORD TO PROVIDE A SPACE.	F6E00690
00307	0	76600	0	00202	WRITE	WTD	2		F6E00700
00310	0	50000	4	00001		CLA	1,4	TO SET INITIAL LOCATION AND NO. OF WORDS TO BE	F6E00710
								WRITTEN.	F6E00711
00311	0	62100	0	00313		STA	POOP		F6E00720
00312	-0	73400	2	00000		PDX	0,2		F6E00730
00313	0	70000	2	00313	POOP	CPY	*,2		F6E00740
00314	2	00001	2	00313		TIX	POOP,2,1		F6E00750
00315	0	76600	0	00333		IOD			F6E00760
00316	0	02000	4	00002		TRA	2,4	ALL WORDS IN RECORD WRITTEN. RETURN TO PROGRAM	F6E00770
00317	1	00004	2	00320	WLL	TXI	NT2,2,4		F6E00780
00320	-0	75400	2	00000	NT2	PXD	0,2	STORE IN LND ADDRESS	F6E00790
00321	0	60100	0	00330		STO	LND	AND DECREMENT 20-NO. OF WORDS IN FINAL RECORD	F6E00800
								OF TTAPE,2.	F6E00801
00322	0	77100	0	00022		ARS	18	SUBTRACT THIS FROM LNE	F6E00810
00323	0	62100	0	00330		STA	LND	TO GET ADDRESS AND	F6E00820
00324	0	50000	0	00333		CLA	LNE	DECREMENT FOR WRITING	F6E00830
00325	0	40200	0	00330		SUB	LND	FINAL RECORD	F6E00840
00326	0	60100	0	00330		STO	LND		F6E00850
00327	0	07400	4	00307		TSX	WRITE,4		F6E00860
00330	0	00000	0	00000	LND				F6E00870
				00331	ENDS	BSS			F6E00880
00331	0	60000	0	00174		STZ	EA	SET EA=0	F6E00890
00332	0	02000	0	00004		TRA	4	AND GO TO LOADER	F6E00900
00333	0	00030	0	00511	LNE		LIN+5,,24		F6E00910
				00334		BSS	40		F6E00920
00404	606060606060				BLANKS	BCD	1		F6E00930
00405	0000000000060				BLANK	BCD	100000		F6E00940
00406	+0000000000077				6BITS	OCT	77		F6E00950
00407	+0000000000012				TEN	DEC	10		F6E00960

A

00410	+000000000000	LOC	DEC	0						F6E00970	
00411	606060606060		BCD	4						F6E00980	
00412	606060606060										
00413	606060606060										
00414	606060606060										
00415	606263465121		BCD	6	STORAGE FOR VARIABLES APPEARING IN					F6E00990	
00416	272560264651										
00417	606521513121										
00420	224325626021										
00421	474725215131										
00422	452760314560										
00423	234644444645		BCD		COMMON SENTENCES					F6E01000	
00424	606225456325										
00425	452325626060										
00426	606060606060										
00427	606060606060										
00430	606060606060										
00431	606060606060										
00432	606060606060										
00433	606060606060										
00434	606060606060										
A		00435	TITLE	BSS						F6E01010	
	00435	606060606060		BCD		DEC	OCT		DEC	OCT	F6E01020
	00436	606060606060									
	00437	606024252360									
	00440	606046236360									
	00441	606060606060									
	00442	606060606060									
	00443	606024252360									
	00444	606046236360									
	00445	606060606060									
	00446	606060606060									
	00447	606024252360		BCD		DEC	OCT		DEC	OCT	F6E01030
	00450	606046236360									
	00451	606060606060									
	00452	606060606060									
	00453	606024252360									
	00454	606046236360									
	00455	606060606060									
	00456	606060606060									
	00457	606024252360									
	00460	606046236360									
A		00461	CHEAD	BSS							F6E01040
		00461		BSS	19						F6E01050
		00504	LIN	BSS	1						F6E01060
		00513	DIG	BES	6						F6E01070
		00513	SYM	BSS	1						F6E01080
		00210		END	START						F6E01090
		0	ME2	00205,00205							

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	122	0	0	0	0

LIB	0	0	0	0	0
COL	122	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 166

NUMBER OF SYMBOLS, DEF 101,DEFOP 0,UNDEF 0
REM AST

AST

***** FORTRAN II SECTION SIX *****F6F00010

F6F00011
FORTRAN 2 RECORD 101 - FORTRAN FUNCTION ASSN

F6F00012
CONTROL ENTERS THIS RECORD AT LOCATION 210.

F6F00013
F6F00014
F6F00020
ENTER FORTRAN FUNCTION NAMES IN TDEV

					00210		ORG	136			F6F00030
	00210	-0	53400	1	00154		LXD	DEVS,1			F6F00040
D	00211	-3	00000	1	00215	GO	TXL	IFMT,1			F6F00050
	00212	0	50000	0	00156		CLA	DEVA	IF PREVIOUS ENTRIES, UPDATE DECREMENT OF EDEV3		F6F00060
	00213	0	40000	0	00156		ADD	DEVA	WHICH WILL CONTAIN THE MAX. POWER OF 2 EX-		F6F00070
	00214	0	62200	0	00277		STD	EDEV3	PRESSIBLE IN THE NO. OF DEV TABLE ENTRIES		F6F00080
A					00215	IFMT	BSS				F6F00090
	00215	0	02000	0	00325		TRA	FPCH1			F6F00100
	00216	0	76200	0	00303	LIB24	RDR	3	SELECT DRUM 3.		F6F00110
T	00217	-0	75400	0	02000	NFA	PXD	1024	TABLE FROM		F6F00120
	00220	0	60100	0	00373		STO	LIBD	SET LIBD EQUAL TO ZERO.		F6F00130
	00221	0	46000	0	00217		LDA	NFA	LOCATE FORSUB (FORTRAN FUNCTION) TABLE.		F6F00140
	00222	-0	70000	0	00704		CAD	FORT	TO READ WORD COUNT OF FORSUB TABLE, SAVE IT IN		F6F00150
	00223	0	76000	0	00006		COM		FORT AND		F6F00160
	00224	-0	70000	0	00372		CAD	SUM	CHECK.		F6F00170
	00225	0	76000	0	00006		COM				F6F00180
	00226	0	10000	0	00231		TZE	RFS			F6F00190
	00227	2	00001	4	00216		TIX	LIB24,4,1	IF DRUM READ ERROR,		F6F00200
	00230	0	07400	4	00004		TSX	4,4			F6F00210
	00231	-0	53400	3	00704	RFS	LXD	FORT,3	TEST IF ANY FORTRAN FUNCTIONS.		F6F00220
D	00232	-3	00000	2	00267		TXL	RDRM,2	IF NOT, GO TO RETURN TO LOADER.		F6F00230
	00233	0	53400	4	00321		LXA	LOC15,4	IF YES, SET DRUM READ ERROR COUNTER		F6F00240
	00234	0	76200	0	00303	LIB25	RDR	3	AND READ FORSUB TABLE		F6F00250
T	00235	-0	75400	0	02002	TFA	PXD	1026	INTO FORT-WDCT THRU FORT-1.		F6F00260
	00236	0	46000	0	00235		LDA	TFA			F6F00270
	00237	-0	70000	2	00704	CFS	CAD	FORT,2			F6F00280
	00240	2	00001	2	00237		TIX	CFS,2,1			F6F00290
	00241	0	70000	0	00372		CPY	SUM			F6F00300
	00242	0	76000	0	00006		COM				F6F00310
	00243	-0	70000	0	00372		CAD	SUM			F6F00320
	00244	0	76000	0	00006		COM				F6F00330
	00245	0	10000	0	00250		TZE	FORS	CHECK SUM OKAY.		F6F00340
	00246	2	00001	4	00234		TIX	LIB25,4,1	IF CHECK SUM ERROR, REPEAT		F6F00350
	00247	0	07400	4	00004		TSX	4,4			F6F00360
	00250	-0	63400	1	00264	FORS	SXD	FORM,1	SAVE WD COUNTER IN DECREMENT OF FORM.		F6F00370
	00251	0	50000	1	00704		CLA	FORT,1	SELECT FUNCTION SYMBOL, ANO GO TO		F6F00380
	00252	0	07400	4	00142		TSX	SDEV,4	DEV TABLE		F6F00390
	00253	0	07400	4	00271		TSX	EDEV,4	IF NOT IN TABLE, GO TO ENTER IT WITH LOCATION		F6F00400
TD	00254	1	00000	0	00265		TXI	FORE	ZERO, AND TRANSFER TO FORE.		F6F00410
	00255	-0	53400	1	00264		LXD	FORM,1	RETURN HERE IF SYMBOL WAS FOUND IN DEV.		F6F00420
	00256	0	50000	1	00704		CLA	FORT,1	ENTER SYMBOL		F6F00430
	00257	-0	53400	2	00373		LXD	LIBD,2	IN LIBP TABLE.		F6F00440
	00260	1	00001	2	00261		TXI	FORD,2,1			F6F00450
	00261	0	60100	2	00540	FORD	STO	LIBP,2			F6F00460
	00262	-0	63400	2	00373		SXD	LIBD,2			F6F00470
	00263	2	00002	1	00250		TIX	FORS,1,2	END OF FORSUB TABLE. NO, GO TO SELECT NEXT		F6F00480
									FUNCTION SYMBOL		F6F00481

TD	00264	1	00000	0	00267	FORM	TXI	RDRM		YES, GO TO LOADER.	F6F00490
	00265	-0	53400	1	00264	FORE	LXD	FORM,1		RESTORE TABLE WORD-COUNTER. END OF FORSUB TABLE	F6F00500
	00266	2	00002	1	00250		TIX	FORS,1,2		NO, DECREMENT COUNTER AND GO TO READ NEXT FUNCTION SYMBOL	F6F00510 F6F00511
	00267	0	76200	0	00221	RDRM	RTB	1		YES, GO TO LOADER	F6F00520
	00270	0	02000	0	00004		TRA	4			F6F00530
	00271	1	00001	2	00272	EDEV	TXI	EDEV0,2,1		FOR COMMENTS, SEE RECORD 96.	F6F00540
	00272	-0	63400	2	00306	EDEV0	SXD	EDEV1,2			F6F00550
	00273	0	60100	0	00160		STO	ENTRY			F6F00560
	00274	-0	53400	2	00155		LXD	DEVL,2			F6F00570
	00275	1	00001	2	00276		TXI	EDEV2,2,1			F6F00580
	00276	-0	63400	2	00155	EDEV2	SXD	DEVL,2			F6F00590
	00277	-3	00000	2	00306	EDEV3	TXL	EDEV1,2,**+0			F6F00600
	00300	-0	50000	0	00154		CAL	DEVS			F6F00610
	00301	0	40000	0	00156		ADD	DEVA			F6F00620
	00302	0	60200	0	00154		SLW	DEVS			F6F00630
	00303	0	62200	0	00156		STD	DEVA			F6F00640
	00304	0	40000	0	00156		ADD	DEVA			F6F00650
	00305	0	62200	0	00277		STD	EDEV3			F6F00660
	00306	3	00000	2	00314	EDEV1	TXH	EDEV4,2,**			F6F00670
	00307	-0	50000	0	00160		CAL	ENTRY			F6F00680
	00310	0	60200	2	77777		SLW	DEV,2			F6F00690
	00311	0	50000	0	00174		CLA	EA			F6F00700
	00312	0	60200	2	74413		SLW	DEA,2			F6F00710
	00313	0	02000	4	00001		TRA	1,4			F6F00720
	00314	-0	50000	2	00000	EDEV4	CAL	DEV+1,2		MOVE TABLE	F6F00730
	00315	0	60200	2	77777		SLW	DEV,2		ENTRIES.	F6F00740
	00316	-0	50000	2	74414		CAL	DEA+1,2			F6F00750
	00317	0	60200	2	74413		SLW	DEA,2			F6F00760
	00320	1	77777	2	00306		TXI	EDEV1,2,-1			F6F00770
	00321	0	42000	0	00017	LOC15	HPR	15			F6F00780
	00322	0	00000	0	77777	MI1	PZE	-1			F6F00781
	00323	+0	000001000000			DCR1	OCT	1000000			F6F00782
	00324	0	00000	0	00000	SAV	HTR	0			F6F00783
	00325	0	50000	0	72605	FPCH1	CLA	UPPER-2		WORD COUNT OF SUBDEF TABLE.	F6F00784
	00326	0	40200	0	00323		SUB	DCR1			F6F00785
	00327	0	10000	0	00351		TZE	GOHD+1		NO ARGUMENTS.	F6F00786
	00330	-0	12000	0	00351		TMI	GOHD+1		NO ARGUMENTS.	F6F00787
	00331	0	62200	0	00346		STD	ETST		ARGUMENTS TO ENTER IN DEV.	F6F00788
	00332	-0	53400	1	00323		LXD	DCR1,1			F6F00789
	00333	0	50000	0	00322		CLA	MI1			F6F00790
	00334	0	60100	0	00174		STO	EA		SET EA TO ALL 7 S.	F6F00791
	00335	-0	63400	1	00324	GOFIX	SXD	SAV,1			F6F00792
	00336	0	50000	1	72604		CLA	UPPER-3,1		SELECT ARGUMENT.	F6F00793
	00337	0	07400	4	00142		TSX	SDEV,4		GO SEARCH DEV FOR IT.	F6F00794
	00340	0	07400	4	00271		TSX	EDEV,4		NOT IN SO ENTER IN DEV	F6F00795
	00341	0	02000	0	00344		TRA	*+3		AND TRANSFER.	F6F00796
	00342	0	50000	0	00174		CLA	EA		ALREADY IN DEV. ENTER	F6F00797
	00343	0	60100	2	74413		STO	DEA,2		LOCATION AS ALL 7S.	F6F00798
	00344	-0	53400	1	00324		LXD	SAV,1			F6F00799
	00345	1	00001	1	00346		TXI	*+1,1,1			F6F00800
	00346	3	00000	1	00350	ETST	TXH	GOHD,1,**		TEST FOR ANY MORE ARGS.	F6F00801
	00347	0	02000	0	00335		TRA	GOFIX			F6F00802
	00350	0	60000	0	00174	GOHD	STZ	EA		RESET EA TO ZERO.	F6F00803

00351	0	53400	4	00321	RNF	LXA	LOC15,4	SET DRUM READ ERROR COUNTER	F6F00804
00352	0	02000	0	00216		TRA	LIB24		F6F00805
				00353		BSS	15		F6F00806
00372	0	00000	0	00000	SUM				F6F00807
00373	0	00000	0	00000	LIBD				F6F00810
				00540	LIBP	BES	100		F6F00820
				00704	FORT	BES	100		F6F00830
				00210	END	START			F6F00840

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	117	0	0	0	0
LIB	0	0	0	0	0
COL	117	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 125

NUMBER OF SYMBOLS, DEF 103,DEFOP 0,UNDEF 0
 REM AST

AST

***** FORTRAN II SECTION SIX *****F6G00010

FORTRAN 2 RECORD 103 - FIRST PASS OF CIT TAPE. F6G00011

CONTROL ENTERS THIS RECORD AT LOCATION 210. F6G00012

INITIALIZE FIRST TAPE PASS F6G00013

ORG 136 F6G00014

00210 -0 53400 1 00155 MDEA LXN DEVL,1 COMPUTE NUMBER OF F6G00030

00211 -0 75400 1 74413 LDEA PXD DEA,1 ENTRIES IN DEV F6G00040

00212 0 77100 0 00022 ARS 18 TABLE. F6G00050

00213 0 60100 0 00173 STO D COMPUTE ADDRESS OF F6G00060

00214 -0 40000 0 00146 SBM TDEV DEA TABLE TO MOVE F6G00070

00215 0 62100 0 00152 STA ADEV IT TO END OF F6G00080

00216 0 62100 0 00170 STA LIFN DEV TABLE. F6G00090

00217 0 02000 0 00672 TRA GPCH1 F6G00100

00220 -3 00000 1 00225 RETN TXL PREP,1 TEST FOR NO ENTRIES IN DEV. F6G00110

00221 0 62100 0 00223 STA MDAS YES. F6G00120

00222 0 50000 1 74413 MDAL CLA DEA,1 MOVE LOCATIONS TO F6G00130

00223 0 60100 1 00223 MDAS STO *,1 END OF DEV TABLE. F6G00140

00224 2 00001 1 00222 TIX MDAL,1,1 F6G00150

00225 0 50000 0 00165 PREP CLA EIFN COMPUTE ADDRESS FOR F6G00160

00226 0 77100 0 00022 ARS 18 TEV TABLE F6G00170

00227 0 56000 0 00173 LDQ D WILL FOLLOW THE MOVED F6G00180

00230 0 04000 0 00233 TLQ MVIF DEA TABLE F6G00190

00231 0 50000 0 00173 CLA D ALLOWS FOR IFN F6G00200

00232 0 40000 0 00162 ADD ONE TABLE TO BE STORED F6G00210

00233 -0 40000 0 00152 MVIF SBM ADEV IN DECREMENT OF DEA F6G00220

00234 0 62100 0 00624 STA ETEV5 TABLE HENCE IF IFN IS F6G00230

00235 0 62100 0 00627 STA ETEV6 LONGER THAN DEA IFN F6G00240

00236 0 62100 0 00246 STA ETEV7 LENGTH IS USED IN F6G00250

00237 0 62100 0 00107 STA TTEV COMPUTING ADDRESS OF F6G00260

00240 -0 40000 0 00162 SBM ONE TEV TABLE F6G00270

00241 0 62100 0 00626 STA ETEV4 F6G00280

00242 -0 75400 0 00000 PXD STORE ONES IN F6G00290

00243 0 60000 0 00166 STZ L1 SET PROGRAM BREAK=0 F6G00300

00244 0 60000 0 00167 STZ L2 SET PROGRAM COUNTER=0 F6G00310

00245 0 76000 0 00006 COM SOTRE ONES IN TEV AND TIV F6G00320

00246 0 60200 0 ETEV7 SLW TEV TABLES INITIAL F6G00330

00247 0 60100 0 02114 STO TIV ENTRIES. F6G00340

00250 0 60200 0 02115 SLW TIV+1 F6G00350

00251 0 53400 2 00256 LXA RDC,2 SET READ ERROR COUNTER AND F6G00360

00252 0 02000 0 00257 TRA RD GO TO READ CITS FROM TAPE 4 F6G00370

00253 0 76400 0 00204 ERR BST 4 F6G00380

00254 2 00001 2 00257 TIX RD,2,1 F6G00390

00255 0 07400 4 00004 TSX 4,4 F6G00400

00256 0 42000 0 00005 RDC HPR 5 F6G00410

00257 0 76200 0 00224 RD RTB 4 READ CIT RECORD FROM TAPE 4. F6G00420

00260 0 53400 4 00164 LXA ADDR,4 COUNTER SET=-1 F6G00430

00261 0 70000 4 01104 RD1 CPY REC-2,4 COPY CIT RECORD INTO REC-1,-2, F6G00440

00262 1 00001 4 00261 TXI RD1,4,1 F6G00450

00263 0 02000 0 00525 TRA EOF IF END-OF-FILE REACHED ON TAPE 4. F6G00460

00264 0 77100 0 00377 ARS 255 F6G00470

00265 0 77100 0 00377 ARS 255 F6G00480

00265 0 77100 0 00377 ARS 255 F6G00490

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00266	-0	76000	0	00012	RTT		F6G00500
00267	0	02000	0	00253	TRA ERR		F6G00510
00270	-0	63400	4	00522	SXD RD2,4	STORE COUNT OF CIT IN RD2 DECR.	F6G00520
00271	-0	53400	4	00164	LXD ADDR,4	SET WORD COUNTER=0	F6G00530
00272	-0	63400	4	00524	SXD RD3,4	SAVE IT IN DECREMENT OF RD3	F6G00540
00273	0	50000	4	01105	CLA REC-1,4	SELECT FROM REC	F6G00550
00274	0	60100	0	00664	STO SL	SYMBOLIC LOCATION	F6G00560
00275	0	50000	4	01104	CLA REC-2,4		F6G00570
00276	0	60100	0	00665	STO OP	SYMBOLIC OP, BINARY DEC	F6G00580
00277	0	50000	4	01103	CLA REC-3,4		F6G00590
00300	0	60100	0	00666	STO SA	SYMBOLIC ADDRESS	F6G00600
00301	0	50000	4	01102	CLA REC-4,4	RELATIVE ADDRESS, TAG	F6G00610
00302	0	60100	0	00667	STO RA	SET EA TO ZERO.	F6G00620
00303	-0	75400	0	00000	PXD	SET EA TO ZERO	F6G00630
00304	0	60100	0	00174	STO EA		F6G00640
00305	-0	50000	0	00665	CAL OP	SELECT SYMBOLIC OP.	F6G00650
00306	0	76500	0	00022	LRS 18	IS OP=OCT.	F6G00660
00307	0	34000	0	00660	CAS OCT		F6G00670
00310	0	02000	0	00315	TRA SA1	GO TO SA1 SINCE OP IS NEITHER OCT NOR BCD.	F6G00680
00311	0	02000	0	00424	TRA ORDOP	YES, OP IS OCTAL. GO TO ORDOP	F6G00690
00312	0	34000	0	00662	CAS BCD	IS OP BCD.	F6G00700
00313	0	02000	0	00315	TRA SA1	OP IS NEITHER OCT NOR BCD.	F6G00710
00314	0	02000	0	00424	TRA ORDOP	YES, OP IS BCD. GO TO ORDOP	F6G00720
00315	-0	50000	0	00666	CAL SA	IF OP NOT BCD OR OCT SELECT SYMBOLIC ADDRESS	F6G00730
00316	0	10000	0	00413	TZE SA2	SA EQUAL ZERO. GO TO SA2 TO SET EA=0	F6G00740
00317	0	76500	0	00036	LRS 30	TEST SA(1), I.E., FIRST 6-BIT CHARACTER OF SA	F6G00750
00320	0	73400	4	00000	PAX 0,4	TO DETERMINE THE TYPE OF SYMBOL IT IS.	F6G00760
00321	3	00017	4	00364	TXH SA4,4,15	TRANSFER IF FIRST CHAR. IS GREATER THAN 15.	F6G00770
00322	0	02000	4	00342	TRA SAT,4		F6G00780
00323	0	02000	0	00412	TRA SA8	SA(1) EQUAL FIFTEEN	F6G00790
00324	0	02000	0	00357	TRA SA6	SA(1) EQUAL FOURTEEN	F6G00800
00325	0	02000	0	00357	TRA SA6	SA(1) EQUAL THIRTEEN	F6G00810
00326	0	02000	0	00343	TRA SA9	SA(1) EQUAL TWELVE	F6G00820
00327	0	02000	0	00414	TRA SA5	SA(1) EQUAL ELEVEN	F6G00830
00330	0	02000	0	00357	TRA SA6	SA(1) EQUAL TEN	F6G00840
00331	0	02000	0	00414	TRA SA5	SA(1) EQUAL NINE	F6G00850
00332	0	02000	0	00357	TRA SA6	SA(1) EQUAL EIGHT	F6G00860
00333	0	02000	0	00343	TRA SA9	SA(1) EQUAL SEVEN	F6G00870
00334	0	02000	0	00414	TRA SA5	SA(1) EQUAL SIX	F6G00880
00335	0	02000	0	00343	TRA SA9	SA(1) EQUAL FIVE	F6G00890
00336	0	02000	0	00343	TRA SA9	SA(1) EQUAL FOUR	F6G00900
00337	0	02000	0	00414	TRA SA5	SA(1) EQUAL THREE	F6G00910
00340	0	02000	0	00414	TRA SA5	SA(1) EQUAL TWO	F6G00920
00341	0	02000	0	00343	TRA SA9	SA(1) EQUAL ONE	F6G00930
00342	0	02000	0	00404	SAT TRA SA3	SA11) EQUAL ZERO	F6G00940
00343	-0	77300	0	00016	SA9 RQL 14	TAG CELL(12), ARITH ERASE(1),	F6G00950
00344	-0	76300	0	00021	LGL 17	FUNCT ERASE(7), LIB(4),	F6G00960
00345	0	07400	4	00121	TSX STIV,4	ASSIGN CONSTANTS(5). ASSEMBLE SYMBOL AND	F6G00970
00346	0	07400	4	00632	TSX ETIV,4	PUT IN TIV TABLE WHERE A TIV TABLE ENTRY	F6G00980
00347	0	62100	0	00663	STA TRV	HAS SYMBOL IN S-21 AND HAS LOCATION IN 22-35.	F6G00990
00350	0	56000	0	00663	LDQ TRV		F6G01000
00351	0	50000	0	00667	CLA RA		F6G01010
00352	-0	76000	0	00003	SSM	SELECT RA AS LENGTH	F6G01020
00353	0	77100	0	00022	ARS 18	TO STORE AS ADDRESS	F6G01030

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00354	0	04000	0	00414		TLQ SA5	OF TIV ENTRY IF RA	F6G01040
00355	0	62100	2	02114		STA TIV,2	IS LONGER	F6G01050
00356	0	02000	0	00414		TRA SA5		F6G01060
00357	-0	77300	0	00016	SA6	RQL 14	FORMAT(8)	F6G01070
00360	-0	76300	0	00021		LGL 17		F6G01080
00361	0	07400	4	00121	SA7	TSX STIV,4	PUT IN TIV TABLE	F6G01090
00362	0	07400	4	00632		TSX ETIV,4	IF NOT IN ALREADY.	F6G01100
00363	0	02000	0	00413		TRA SA2	TRANSFER WITH SA IN AC TO STORE ADDRESS OF SA	F6G01110
							IN EA.	F6G01111
00364	0	50000	0	00666	SA4	CLA SA	SA(1) GREATER THAN 15.	F6G01120
00365	0	40200	0	00670		SUB DOL1	TRANSFER IF ONE DOLLAR SIGN	F6G01130
00366	0	10000	0	00377		TZE LIB3		F6G01140
00367	0	40000	0	00670		ADD DOL1		F6G01150
00370	0	40200	0	00671		SUB DOL2	TRANSFER IF TWO DOLLAR SIGNS	F6G01160
00371	0	10000	0	00401		TZE LIB4		F6G01170
00372	0	50000	0	00666		CLA SA	ORDINARY SYMBOL.	F6G01180
00373	0	07400	4	00142		TSX SDEV,4	SEARCH DEV TABLE.	F6G01190
00374	0	07400	4	00103		TSX STEV,4	NOT IN. GO TO SEARCH TEV TABLE.	F6G01200
00375	0	07400	4	00605		TSX ETEV,4	NOT IN. ENTER IN TEV.	F6G01210
00376	0	02000	0	00413		TRA SA2	IF FOUND IN DEV OR TEV, LOCATION LEFT IN AC +	F6G01220
							GO TO STA	F6G01221
00377	0	50000	0	00204	LIB3	CLA DOLSI	SET LOCATION EQUAL TO ADDR. PART OF DOLSI	F6G01230
00400	0	02000	0	00413		TRA SA2		F6G01240
00401	0	50000	0	00204	LIB4	CLA DOLSI		F6G01250
00402	0	77100	0	00022		ARS 18		F6G01260
00403	0	02000	0	00413		TRA SA2		F6G01270
00404	0	53400	4	00666	SA3	LXA SA,4	NORMAL INST(0)	F6G01280
00405	-3	00000	4	00414		TXL SA5,4,0	TRANSFER IF IFN TYPE.	F6G01290
00406	-0	76300	0	00015		LGL 13	ADDRESS PART NOT EQUAL ZERO, PUT ADDRESS PART	F6G01300
00407	-0	77300	0	00012		RQL 10	OF SA IN SYMBOL AND STORE IN TIV.	F6G01310
00410	-0	76300	0	00006		LGL 6		F6G01320
00411	0	02000	0	00361		TRA SA7		F6G01330
00412	0	50000	0	00166	SA8	CLA L1	PROG COUNT(I15)	F6G01340
00413	0	62100	0	00174	SA2	STA EA	STORE IN EA ADDRESS LEFT IN AC FROM 1 OF ABOVE,	F6G01350
					SA5	BSS 00414	CONSTANTS2,3,6,9,11	F6G01360
00414	-0	50000	0	00665	OPCAS	CAL OP		F6G01370
00415	0	76500	0	00022		LRS 18	IS OP BSS OR SYN.	F6G01380
00416	0	34000	0	00657		CAS SYN	SYN OP	F6G01390
00417	0	02000	0	00424		TRA ORDOP	NEITHER	F6G01400
00420	0	02000	0	00440		TRA SYNOP	OP IS SYN. GO TO SYNOP	F6G01410
00421	0	34000	0	00661		CAS BSS		F6G01420
00422	0	02000	0	00424		TRA ORDOP	OP IS NEITHER BSS OR SYN	F6G01430
00423	0	02000	0	00431		TRA BSSOP	OP IS BSS. GO TO BSSOP.	F6G01440
00424	0	50000	0	00166	ORDOP	CLA L1	OP NOT SYN OR BSS.	F6G01450
00425	0	60100	0	00167		STO L2		F6G01460
00426	0	40000	0	00162		ADD ONE	UPDATE L1 BY 1.	F6G01470
00427	0	60100	0	00166		STO L1		F6G01480
00430	0	02000	0	00444		TRA SLS		F6G01490
00431	0	50000	0	00166	BSSOP	CLA L1	FOR BSS OP,	F6G01500
00432	0	60100	0	00167		STO L2		F6G01510
00433	0	50000	0	00667		CLA RA	UPDATE L1 BY	F6G01520
00434	0	77100	0	00022		ARS 18	RELATIVE ADDRESS.	F6G01530
00435	0	40000	0	00166		ADD L1		F6G01540
00436	0	60100	0	00166		STO L1		F6G01550

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00437	0	02000	0	00444	TRA	SLS			F6G01560
00440	0	50000	0	00174	SYN	CL	EA	FOR SYN OP,	F6G01570
00441	0	60100	0	00167		STO	L2	SET L2 EQUAL	F6G01580
00442	-0	10000	0	00444		TNZ	SLS	TO SYN ADDRESS.	F6G01590
00443	0	07400	4	00004		TSX	4,4		F6G01600
00444	-0	50000	0	00664	SLS	CAL	SL	FOR ALL OPS TEST SYMBOLIC LOCATION.	F6G01610
00445	0	10000	0	00520		TZE	SL6	SL ZERO.	F6G01620
00446	0	76500	0	00036		LRS	30		F6G01630
00447	0	10000	0	00466		TZE	SL1	SL(1) ZERO. TRANFER.	F6G01640
00450	0	73400	4	00000		PAX	0,4		F6G01650
00451	3	00017	4	00476		TXH	SL2,4,15	SL(1) OVER 15	F6G01660
00452	3	00016	4	00520		TXH	SL3,4,14	SL(1) EQUAL 15	F6G01670
00453	-0	77300	0	00016		RQL	14	SL(1) LESS 15	F6G01680
00454	-0	76300	0	00021		LGL	17		F6G01690
00455	0	07400	4	00121		TSX	STIV,4	IS SYMBOL IN TIV.	F6G01700
00456	0	02000	0	00462		TRA	SL5	NO.	F6G01710
00457	0	50000	0	00167	SL8	CL	L2	YES, PUT L2 AS LOCATION	F6G01720
00460	0	62100	2	02114		STA	TIV,2	IN TIV TABLE.	F6G01730
00461	0	02000	0	00520		TRA	SL6		F6G01740
00462	0	50000	0	00167	SL5	CL	L2	PUT L2 IN AS	F6G01750
00463	0	62100	0	00160		STA	ENTRY	LOCATION AND STORE	F6G01760
00464	0	07400	4	00632		TSX	ETIV,4	SYMBOL AND LOCATION	F6G01770
00465	0	02000	0	00520		TRA	SL6	IN TIV TABLE.	F6G01780
00466	0	53400	4	00664	SL1	LXA	SL,4	SL(1) EQUAL ZERO.	F6G01790
00467	-3	00000	4	00514		TXL	SL7,4	TRANSFER IF IFN TYPE.	F6G01800
00470	-0	76300	0	00015		LGL	13	OTHERWISE, ASSEMBLE SYMBOL.	F6G01810
00471	-0	77300	0	00012		RQL	10		F6G01820
00472	-0	76300	0	00006		LGL	6	IS SYM IN TIV TABLE.	F6G01830
00473	0	07400	4	00121		TSX	STIV,4	NO	F6G01840
00474	0	02000	0	00520		TRA	SL6	YES	F6G01850
00475	0	02000	0	00457		TRA	SL8	YES. GO TO STORE L2 AS LOCATION IN TIV TABLE	F6G01860
00476	0	50000	0	00664	SL2	CL	SL		F6G01870
00477	0	40200	0	00670		SUB	DOL1		F6G01880
00500	0	10000	0	00505		TZE	LIB1	EXIT TO LIB1 IF SL EQUAL DOL1 (\$ 0000)	F6G01890
00501	0	40000	0	00670		ADD	DOL1		F6G01900
00502	0	40200	0	00671		SUB	DOL2		F6G01910
00503	0	10000	0	00510		TZE	LIB2	EXIT TO LIB2 IF SL EQUAL DOL2 (\$\$ 000)	F6G01920
00504	0	02000	0	00520		TRA	SL6		F6G01930
00505	0	50000	0	00167	LIB1	CL	L2	STORE L2 IN ADDRESS OF DOLSI.	F6G01940
00506	0	62100	0	00204		STA	DOLSI		F6G01950
00507	0	02000	0	00520		TRA	SL6		F6G01960
00510	0	50000	0	00167	LIB2	CL	L2	STORE L2 IN DECREMENT OF DOLSI	F6G01970
00511	0	76700	0	00022		ALS	18		F6G01980
00512	0	62200	0	00204		STD	DOLSI		F6G01990
00513	0	02000	0	00520		TRA	SL6		F6G02000
00514	-0	53400	4	00664	SL7	LXD	SL,4	STORE LOCATION	F6G02010
00515	0	50000	0	00167		CL	L2	OF INTERNAL FORMULA	F6G02020
00516	0	76700	0	00022		ALS	18	NUMBER AS L2,	F6G02030
00517	0	62200	4		SL9	STD	IFN,4		F6G02040
			00520		SL3	BSS		SL(1) EQUAL 15	F6G02050
			00520		SL6	BSS			F6G02060
00520	-0	53400	4	00524		LXD	RD3,4		F6G02070
00521	1	00004	4	00522		TXI	RD2,4,4		F6G02080
00522	-3	00000	4	00272	RD2	TXL	RD4,4,**		F6G02090

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	00523	0	53400	2	00256		LXA RDC,2		F6G02100
	00524	1	00000	0	00257	RD3	TXI RD,0,**		F6G02110
	00525	-0	53400	1	00120	EOF	LXD TEVL,1	AT END OF CIT TAPE.	F6G02120
D	00526	-3	00000	1	00534		TXL DIVL,1	ANY ENTRIES IN TEV TABLE. IF NOT GO TO DIVL.	F6G02130
	00527	-0	75400	1	00000		PXD 0,1	YES.	F6G02140
	00530	0	77100	0	00022		ARS 18	REDUCE LCTR BY NUMBER	F6G02150
	00531	0	40200	0	00171		SUB LCTR	OF ENTRIES IN TEV AND	F6G02160
	00532	0	60200	0	00171		SLW LCTR	STORE IN LTEV.	F6G02170
	00533	0	60200	0	00172		SLW LTEV		F6G02180
	00534	-0	53400	2	00141	DIVL	LXD TIVL,2	ANY ENTRIES IN TIV TABLE.	F6G02190
	00535	1	00001	2	00536		TXI SIVL,2,1		F6G02200
D	00536	-3	00000	2	00577	SIVL	TXL DONE,2	NO ENTRIES IN TIV, GO TO DONE.	F6G02210
	00537	-0	50000	2	02114		CAL TIV,2	YES, OBTAIN LENGTH	F6G02220
	00540	0	62100	0	00173		STA D	FROM TIV TABLE.	F6G02230
	00541	0	77100	0	00016		ARS 14		F6G02240
	00542	-0	73400	1	00000		PDX 0,1		F6G02250
	00543	0	02000	1	00563		TRA TYPE,1		F6G02260
	00544	0	02000	0	00574		TRA SIVT	15	F6G02270
	00545	0	02000	0	00574		TRA SIVT	14	F6G02280
	00546	0	02000	0	00574		TRA SIVT	13	F6G02290
	00547	0	02000	0	00567		TRA CIVL	12	F6G02300
	00550	0	02000	0	00574		TRA SIVT	11	F6G02310
	00551	0	02000	0	00574		TRA SIVT	10	F6G02320
	00552	0	02000	0	00574		TRA SIVT	9	F6G02330
	00553	0	02000	0	00574		TRA SIVT	8	F6G02340
	00554	0	02000	0	00567		TRA CIVL	7	F6G02350
	00555	0	02000	0	00574		TRA SIVT	6	F6G02360
	00556	0	02000	0	00574		TRA SIVT	5	F6G02370
TD	00557	1	00000	0	00564	GIVL	TXI EIVL	4	F6G02380
	00560	0	02000	0	00574		TRA SIVT	3	F6G02390
	00561	0	02000	0	00574		TRA SIVT	2	F6G02400
	00562	0	02000	0	00567		TRA CIVL	1	F6G02410
	00563	0	02000	0	00574	TYPE	TRA SIVT	0	F6G02420
	00564	0	77100	0	00001	EIVL	ARS 1	TYPE4	F6G02430
	00565	0	76700	0	00025		ALS 21	IF DECR. EQUAL ZERO, GO TO SAVE INDEX.	F6G02440
	00566	0	10000	0	00575		TZE FIVL	TYPE1,7,12	F6G02450
	00567	0	50000	0	00171	CIVL	CLA LCTR	TYPE1,7,12	F6G02460
	00570	0	40200	0	00173		SUB D	REDUCE LCTR BY LENGTH	F6G02470
	00571	0	62100	2	02114		STA TIV,2	STORE AS LOCATION IN TIV.	F6G02480
	00572	0	40200	0	00162		SUB ONE	MODIFY LOCATION COUNTER.	F6G02490
	00573	0	60100	0	00171		STO LCTR		F6G02500
	00574	1	00001	2	00536	SIVT	TXI SIVL,2,1	MODIFY TO SELECT NEXT SYMBOL	F6G02510
	00575	-0	63400	2	00557	FIVL	SXD GIVL,2		F6G02520
	00576	1	00001	2	00536		TXI SIVL,2,1		F6G02530
	00577	-0	53400	2	00557	DONE	LXD GIVL,2	LOCATION OF 4)0	F6G02540
	00600	0	76000	0	00000		CLM	STORE ALL 7 S IN ADDRESS PART	F6G02550
	00601	0	76000	0	00006		COM	OF 4) TIV ENTRY AND	F6G02560
	00602	0	62100	2	02114		STA TIV,2	RETURN	F6G02570
	00603	0	76200	0	00221		RTB 1	TO	F6G02580
	00604	0	02000	0	00004		TRA 4	LOADER.	F6G02590
	00605	1	00001	2	00606	ETEV	TXI ETEV0,2,1		F6G02600
	00606	-0	63400	2	00622	ETEV0	SXD ETEV1,2		F6G02610
	00607	0	60100	0	00160		STO ENTRY		F6G02620
	00610	-0	53400	2	00120		LXD TEVL,2		F6G02630

	00611	1	00001	2	00612		TXI	ETEV2,2,1	F6G02640
	00612	-0	63400	2	00120	ETEV2	SXD	TEVL,2	F6G02650
	00613	-3	00000	2	00622	ETEV3	TXL	ETEV1,2,**+0	F6G02660
	00614	-0	50000	0	00117		CAL	TEVS	F6G02670
	00615	0	40000	0	00631		ADD	TEVA	F6G02680
	00616	0	60200	0	00117		SLW	TEVS	F6G02690
	00617	0	62200	0	00631		STD	TEVA	F6G02700
	00620	0	40000	0	00631		ADD	TEVA	F6G02710
	00621	0	62200	0	00613		STD	ETEV3	F6G02720
	00622	3	00622	2	00626	ETEV1	TXH	ETEV4,2,*	F6G02730
	00623	-0	50000	0	00160		CAL	ENTRY	F6G02740
U	00624	0	60200	2		ETEV5	SLW	TEV,2	F6G02750
	00625	0	02000	4	00001		TRA	1,4	F6G02760
U	00626	-0	50000	2		ETEV4	CAL	TEV+1,2	F6G02770
U	00627	0	60200	2		ETEV6	SLW	TEV,2	F6G02780
	00630	1	77777	2	00622		TXI	ETEV1,2,-1	F6G02790
	00631	0	00001	0	00002	TEVA		2,0,**+1	F6G02800
	00632	1	77777	2	00633	ETIV	TXI	ETIV5,2,-1	F6G02810
	00633	-0	63400	2	00647	ETIV5	SXD	ETIV1,2	F6G02820
	00634	-0	53400	2	00141		LXD	TIVL,2	F6G02830
	00635	1	77777	2	00636		TXI	ETIV2,2,-1	F6G02840
	00636	-0	63400	2	00141	ETIV2	SXD	TIVL,2	F6G02850
	00637	1	00001	2	00640		TXI	ETIV3,2,1	F6G02860
	00640	3	77776	2	00647	ETIV3	TXH	ETIV1,2,**-2	F6G02870
	00641	-0	50000	0	00140		CAL	TIVS	F6G02880
	00642	0	40000	0	00656		ADD	TIVA	F6G02890
	00643	0	60200	0	00140		SLW	TIVS	F6G02900
	00644	0	62200	0	00656		STD	TIVA	F6G02910
	00645	0	40000	0	00656		ADD	TIVA	F6G02920
	00646	0	62200	0	00640		STD	ETIV3	F6G02930
	00647	-3	00647	2	00653	ETIV1	TXL	ETIV4,2,*	F6G02940
	00650	-0	50000	0	00160		CAL	ENTRY	F6G02950
	00651	0	60200	2	02114		SLW	TIV,2	F6G02960
	00652	0	02000	4	00001		TRA	1,4	F6G02970
	00653	-0	50000	2	02113	ETIV4	CAL	TIV-1,2	F6G02980
	00654	0	60200	2	02114		SLW	TIV,2	F6G02990
	00655	1	00001	2	00647		TXI	ETIV1,2,1	F6G03000
	00656	0	77777	0	00002	TIVA		2,0,**-1	F6G03010
	00657	000000	627045			SYN	BCD	1000SYN	F6G03020
	00660	000000	462363			OCT	BCD	1000OCT	F6G03030
	00661	000000	226262			BSS	BCD	1000BSS	F6G03040
	00662	000000	222324			BCD	BCD	1000BCD	F6G03050
	00663	-0	00000	0	00000	TRV		MZE	F6G03060
	00664	0	00000	0	00000	SL	HTR	0	F6G03070
	00665	0	00000	0	00000	OP	HTR	0	F6G03080
	00666	0	00000	0	00000	SA	HTR	0	F6G03090
	00667	0	00000	0	00000	RA	HTR	0	F6G03100
	00670	536000	000000			DOL1	BCD	1\$ 0000	F6G03110
	00671	535360	000000			DOL2	BCD	1\$\$ 000	F6G03120
	00672	0	62100	0	00517	GPCH1	STA	SL9	F6G03121
	00673	0	62100	0	00675		STA	*+2	F6G03122
	00674	-0	53400	2	00165		LXD	EIFN,2	F6G03123
	00675	0	60000	2			STZ	IFN,2	F6G03124
U	00676	2	00001	2	00675		TIX	*-1,2,1	F6G03125

00677 0 02000 0 00220 TRA RETN
 00700 BSS 34
 01106 REC BES 100
 00210 END START
 00001 0 TEV
 00002 0 IFN

F6G03126
F6G03130
F6G03140
F6G03150

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	329	0	0	0	0
LIB	0	0	0	0	0
COL	329	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 339

NUMBER OF SYMBOLS, DEF 152,DEFOP 0,UNDEF 2
 REM AST

AST

***** FORTRAN II SECTION SIX *****F6H00010

FORTRAN 2 RECORD 105 - MAP FORTRAN FUNCTIONS. F6H00011

IN TDEV F6H00012

00206 ME8 SYN 134 F6H00020

00210 ME8 ORG 136 F6H00030

00210 0 53400 4 00402 RNF LX A LOC15,4 SET DRUM READ ERROR COUNTER. F6H00040

00211 0 76200 0 00303 LIB27 RDR 3 SELECT DRUM 3 AND F6H00050

00212 -0 75400 0 02000 NFA PXD 1024 LOCATE FORSUB (FORTRAN FUNCTION) TABLE F6H00060

00213 0 46000 0 00212 LDA NFA F6H00070

00214 -0 70000 0 00730 CAD FORT READ WORD COUNT OF TABLE. F6H00080

00215 0 76000 0 00006 COM F6H00090

00216 -0 70000 0 00563 CAD SUM F6H00100

00217 0 76000 0 00006 COM F6H00110

00220 0 10000 0 00223 TZE RFS TRANSFER IF NO READ ERROR. F6H00120

00221 2 00001 4 00211 TIX LIB27,4,1 READ-ERROR PROCEOURE F6H00130

00222 0 07400 4 00004 TSX 4,4 F6H00140

00223 -0 53400 3 00730 RFS LX D FORT,3 SET INDEX REGISTERS 1 AND 2 EQUAL F6H00150

FORSUB WORD COUNT F6H00160

00224 -3 00000 1 00375 TX L LIB36,1 TRANSFER IF NO FORTRAN FUNCTIONS. F6H00170

00225 0 50000 0 00152 CLA ADEV INITIALIZE ADDRESSES WITH INITIAL F6H00180

00226 0 62100 0 00260 STA AFOR LOCATION OF DEA TABLE (ALSO IFN TABLE) F6H00190

00227 0 50000 0 00170 CLA LIFN F6H00200

00230 0 62100 0 00256 STA GIFN F6H00210

00231 0 53400 4 00402 LX A LOC15,4 DRUM READ ERROR COUNTER. F6H00220

00232 0 76200 0 00303 LIB28 RDR 3 F6H00230

00233 -0 75400 0 02002 TFA PXD 1026 READ FORTRAN FUNCTION (FORSUB) F6H00240

00234 0 46000 0 00233 LDA TFA TABLE FROM DRUM (2-WORD ENTRIES) INTO F6H00250

00235 -0 70000 2 00730 CFS CAD FORT,2 FORT-WD. CT,..., FORT-1. F6H00260

00236 2 00001 2 00235 TIX CFS,2,1 F6H00270

00237 0 70000 0 00563 CPY SUM F6H00280

00240 0 76000 0 00006 COM F6H00290

00241 -0 70000 0 00563 CAD SUM F6H00300

00242 0 76000 0 00006 COM F6H00310

00243 0 10000 0 00246 TZE FORS TRANSFER IF CHECK SUM OKAY. F6H00320

00244 2 00001 4 00232 TIX LIB28,4,1 F6H00330

00245 0 07400 4 00004 TSX 4,4 F6H00340

00246 -0 63400 1 00400 FORS SX D FORM,1 SAVE COUNT OF FUNCT. F6H00350

00247 0 50000 1 00730 CLA FORT,1 IS FUNCTION IN F6H00360

00250 0 07400 4 00142 TSX SDEV,4 DEV TABLE. F6H00370

00251 -0 53400 1 00400 LX D FORM,1 NO, ERROR. F6H00380

00252 0 07400 4 00004 TSX 4,4 F6H00390

00253 -0 53400 1 00400 LX D FORM,1 YES. EXIT HERE FROM SDEV WITH APPROPRIATE F6H00400

COUNTER IN XR2. F6H00410

00254 0 50000 1 00731 CLA FORT+1,1 OBTAIN FORMULA F6H00420

00255 -0 73400 4 00000 PDX 0,4 NUMBER. F6H00430

00256 0 50000 4 GIFN CLA IFN,4 GET LOCATION FROM F6H00440

00257 0 77100 0 00022 ARS 18 IFN TABLE. F6H00450

00260 0 62100 2 AFOR STA FORF,2 STORE LOCATION IN DEA TABLE. F6H00460

00261 0 62100 1 00731 STA FORT+1,1 STORE LOCATION IN FORT (INTERNAL TABLE). F6H00470

00262 2 00002 1 00246 TIX FORS,1,2 F6H00480

LIST NAMES OF FORTRAN FUNCTIONS WITH CORRESPONDING F6H00490

INTERNAL FORMULA NUMBERS AND OCTAL LOCATIONS

F6H00490

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00263	-0	53400	1	00730	LXD	FORT,1		F6H00500
00264	0	07400	4	00345	TSX	SPACE,4		F6H00510
00265	0	00024	0	00434		TITLE,,20		F6H00520
00266	0	07400	4	00345	TSX	SPACE,4		F6H00530
00267	0	00024	0	00460		CHEAD,,20		F6H00540
00270	-0	53400	2	00343	CNL	LXD LNC,2	SET TAPE TWO BLOCK LENGTH TO 20.	F6H00550
00271	-0	50000	0	00403	CNW	CAL BLANKS		F6H00560
00272	0	60200	2	00554	SLW	LIN+1,2	STORE BLANKS IN FIRST WORD OF ENTRY.	F6H00570
00273	0	56000	1	00730	LDQ	FORT,1	SELECT SYMBOL	F6H00580
00274	0	53400	4	00275	LXA	SIX,4	AND CONVERT.	F6H00590
00275	-0	76300	0	00006	SIX	LGL 6	BRING ONE CHARACTER OF SYMBOL INTO ACC.	F6H00600
00276	0	60200	0	00562	SLW	SYM		F6H00610
00277	-0	32000	0	00405	ANA	6BITS	TEST IF CHARACTER IN ACC. IS A BLANK.	F6H00620
00300	0	40200	0	00404	SUB	BLANK		F6H00630
00301	0	10000	0	00305	TZE	CNA	BLANK, THEN FINISHED. SECOND WORD OF ENTRY HAS COMPLETE SYMBOL.	F6H00640
								F6H00641
00302	-0	50000	0	00562	CAL	SYM	NOT BLANK, STORE IN SECOND WORD AND	F6H00650
00303	0	60200	2	00555	SLW	LIN+2,2	GO TO TEST NEXT CHARACTER	F6H00660
00304	2	00001	4	00275	TIX	SIX,4,1	UNLESS SIX HAVE BEEN TREATED.	F6H00670
00305	0	50000	1	00731	CNA	CLA FORT+1,1	TO GET BCD IMAGE OF DECIMAL INTERNAL FORMULA NO	F6H00680
00306	0	77100	0	00022	ARS	18	(DECREMENT OF SECOND WORD OF TWO WORD ENTRIES	F6H00690
00307	0	62100	0	00407	STA	LOC	FORT TABLE CONTAINS INTERNAL FORMULA NUMBER.)	F6H00700
00310	0	53400	4	00162	LXA	ONE,4		F6H00710
00311	0	56000	0	00407	LDQ	LOC		F6H00720
00312	0	50000	0	00406	CNV	CLA TEN		F6H00730
00313	0	04000	0	00320	TLQ	FIN		F6H00740
00314	-0	75400	0	00000	PXD			F6H00750
00315	0	22100	0	00406	DVP	TEN		F6H00760
00316	0	60200	4	00562	SLW	LIG,4	(SAVING REMAINDERS).	F6H00770
00317	1	00001	4	00312	TXI	CNV,4,1		F6H00780
00320	-0	60000	4	00562	FIN	STQ DIG,4		F6H00790
00321	-0	50000	0	00403	CAL	BLANKS		F6H00800
00322	0	76700	0	00006	DEC	ALS 6		F6H00810
00323	-0	50100	4	00562	ORA	DIG,4		F6H00820
00324	2	00001	4	00322	TIX	DEC,4,1		F6H00830
00325	0	60200	2	00556	SLW	LIN+3,2	STORE BCD IMAGE OF DECIMAL INTERNAL FORMULA NO.	F6H00840
						4	IN THIRD WORD OF ENTRY.	F6H00841
00326	0	50000	1	00731	CLA	FORT+1,1	TO GET BCD IMAGE OF OCTAL LOCATION.	F6H00850
00327	0	62100	0	00407	STA	LOC		F6H00860
00330	0	50000	0	00407	CLA	LOC		F6H00870
00331	0	76500	0	00017	LRS	15		F6H00880
00332	-0	50000	0	00404	CAL	BLANK		F6H00890
00333	-0	14000	0	00334	TNO	OCT		F6H00900
00334	0	76700	0	00003	OCT	ALS 3		F6H00910
00335	0	76300	0	00003	LLS	3		F6H00920
00336	-0	14000	0	00334	TNO	OCT	OVERFLOW OCCURS WHEN ALL 15 BITS OF LOCATION	F6H00930
00337	0	60200	2	00557	SLW	LIN+4,2	HAVE BEEN TREATED. STORE BCD IMAGE OF OCTAL	F6H00940
							LOCATION IN 4TH WORD OF ENTRY.	F6H00941
00340	-2	00002	1	00357	TNX	WLL,1,2	TRANSFER IF ALL FUNCTIONS IN FORSUB TREATED.	F6H00950
00341	2	00004	2	00271	TIX	CNW,2,4	TRANSFER IF TARE BLOCK NOT FULL.	F6H00960
00342	0	07400	4	00347	TSX	WRITE,4	WRITE A RECORD ON TARE TWO	F6H00970
00343	0	00024	0	00554	LNC	LIN+1,,20	ANO GO TO CNL TO CORTINUE.	F6H00980
00344	0	02000	0	00270	TRA	CNL		F6H00990
00345	0	76600	0	00202	SPACE	WTD 2		F6H01000

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00346	0	70000	0	00403	CPY	BLANKS		F6H01010
00347	0	76600	0	00202	WRITE	WTD	2	F6H01020
00350	0	50000	4	00001	CLA	1,4		F6H01030
00351	0	62100	0	00353	STA	POOP		F6H01040
00352	-0	73400	2	00000	PDX	0,2		F6H01050
00353	0	70000	2	00000	POOP	CPY	** , 2	F6H01060
00354	2	00001	2	00353	TIX	POOP,2,1		F6H01070
00355	0	76600	0	00333	IOD			F6H01080
00356	0	02000	4	00002	TRA	2,4		F6H01090
00357	-0	75400	2	00000	WLL	PXD	0,2	F6H01100
00360	0	60100	0	00367	STO	LND	GET ADDRESS AND DECREMENT TO STORE IN LND FOR WRITING FINAL RECORD.	F6H01110
00361	0	77100	0	00022	ARS	18		F6H01120
00362	0	62100	0	00367	STA	LND		F6H01130
00363	0	50000	0	00401	CLA	LNE		F6H01140
00364	0	40200	0	00367	SUB	LND		F6H01150
00365	0	60100	0	00367	STO	LND		F6H01160
00366	0	07400	4	00347	TSX	WRITE,4	WRITE IT.	F6H01170
00367	0	00000	0	00000	LND			F6H01180
00370	0	50000	0	00407	CLA	LOC	SET ME8 EQUAL TO LOCATION OF LAST FORSUB ENTRY	F6H01190
00371	0	40000	0	00162	ADD	ONE	LISTED PLUS ONE.(TO BE USED BY RECORD 110).	F6H01200
00372	0	60100	0	00206	STO	ME8		F6H01210
00373	0	76200	0	00221	LIB26	RTB	1	F6H01220
00374	0	02000	0	00004	TRA	4		F6H01230
00375	0	60000	0	00206	LIB36	STZ	ME8	F6H01240
00376	0	02000	0	00373	TRA	LIB26	NO FORTRAN FUNCTIONS. SET ME8 EQUAL ZERO AND GO TO RETURN TO LOADER.	F6H01250
00377	-0	75400	0	00000	CFOR	PXD		F6H01260
00400	1	00000	0	00261	FORM	TXI	AFOR+1	F6H01270
00401	0	00030	0	00560	LNE	LIN+5,,24		F6H01280
00402	0	00000	0	00017	LOC15	HTR	15	F6H01290
00403	606060606060				BLANKS	BCD	1	F6H01300
00404	0000000000060				BLANK	BCD	100000	F6H01310
00405	+0000000000077				6BITS	OCT	77	F6H01320
00406	+0000000000012				TEN	DEC	10	F6H01330
00407	+0000000000000				LOC	DEC	0	F6H01340
00410	606060606060				BCD		NAMES OF FORTRAN FUNCTIONS WITH CORRESPONDING	F6H01350
00411	606060606060							
00412	606045214425							
00413	626046266026							
00414	465163512145							
00415	602664452363							
00416	314645626066							
00417	316330602346							
00420	515125624746							
00421	452431452760							
00422	314563255145				BCD	INTERNAL FORMULA NUMBERS AND OCTAL LOCATIONS		F6H01360
00423	214360264651							
00424	446443216045							
00425	644422255162							
00426	602145246046							
00427	236321436043							
00430	462321633146							
00431	456260606060							
00432	606060606060							
00433	606060606060							

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TD

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A          00434  TITLE BSS                                F6H01370
00434 606060606060 BCD                                IFN  LOC                                F6H01380
00435 606060606060
00436 606031264560
00437 606043462360
00440 606060606060
00441 606060606060
00442 606031264560
00443 606043462360
00444 606060606060
00445 606060606060
00446 606031264560 BCD  IFN  LOC                                IFN  LOC                                IFN  LOC F6H01390
00447 606043462360
00450 606060606060
00451 606060606060
00452 606031264560
00453 606043462360
00454 606060606060
00455 606060606060
00456 606031264560
00457 606043462360

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A          00460  CHEAD BSS                                F6H01400
00460                                BSS 40                                F6H01410
00530                                BSS 19                                F6H01420
00553  LIN  BSS 1                                F6H01430
00562  DIG  BES 6                                F6H01440
00562  SYM  BSS 1                                F6H01450
00563  SUM  BSS 1                                F6H01460
00730  FORT BES 100                                F6H01470
00210                                END START                                F6H01480
00001 0  IFN
00002 0  FORF

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SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	157	0	0	0	0
LIB	0	0	0	0	0
COL	157	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 203

NUMBER OF SYMBOLS, DEF 114,DEFOP 0,UNDEF 2

REM ***** FORTRAN II SECTION SIX *****F6I00010

	00265	0	62100	0	00426		STA LOC	LOC NOW CONTAINS LOCATION OF CURRENT INTERNAL	F6I00500
	00266	0	50000	0	00426		CLA LOC	FORMULA NUMBER.	F6I00510
	00267	0	76500	0	00017		LRS 15	TO CONVERT THE LOCATION	F6I00520
	00270	-0	50000	0	00423		CAL BLANK	TO THE BCD IMAGE OF ITS OCTAL	F6I00530
	00271	-0	14000	0	00272		TNO OCT	REPRESENTATION, AND	F6I00540
	00272	0	76700	0	00003	OCT	ALS 3	STORE IT IN THE	F6I00550
	00273	0	76300	0	00003		LLS 3	FOURTH WORD OF THE 4-WORD ENTRY.	F6I00560
	00274	-0	14000	0	00272		TNO OCT		F6I00570
	00275	0	60200	2	00527		SLW LIN+4,2		F6I00580
	00276	-2	00001	1	00336		TNX WLL,1,1	TRANSFER WHEN ALL EIFN ENTRIES HAVE BEEN TREATED.	F6I00590
	00277	2	00004	2	00251		TIX CNW,2,4	MORE ENTRIES + STILL ROOM IN 20-WORD BLOCK, GO TO CNW.	F6I00600
	00300	0	07400	4	00326		TSX WRITE,4	WRITE TAPE 2 BLOCK.	F6I00610
TD	00301	0	00024	0	00524	LNC	LIN+1,,20		F6I00620
	00302	1	00000	0	00250	DCX	TXI CNL		F6I00630
	00303	-0	63400	4	00302	DCR	TXD DCX,4		F6I00640
	00304	0	62100	0	00426		STA LOC	TO CONVERT ADDRESS	F6I00650
	00305	0	53400	4	00162		LXA ONE,4	IN LOC TO BCD	F6I00660
	00306	0	56000	0	00426		LDQ LOC	IMAGE OF DECIMAL	F6I00670
	00307	0	50000	0	00425	CNV	CLA TEN	LOCATION.	F6I00680
T	00310	0	04000	0	00315		TLQ FIN		F6I00690
	00311	-0	75400	0	00000		PXD		F6I00700
	00312	0	22100	0	00425		DVP TEN	DIVIDE BY TEN AND	F6I00710
	00313	0	60200	4	00532		SLW DIG,4	STORE REMAINDERS.	F6I00720
	00314	1	00001	4	00307		TXI CNV,4,1		F6I00730
	00315	-0	60000	4	00532	FIN	STQ DIG,4		F6I00740
	00316	-0	50000	0	00422		CAL BLANKS		F6I00750
	00317	0	76700	0	00006	DEC	ALS 6		F6I00760
	00320	-0	50100	4	00532		ORA DIG,4		F6I00770
	00321	2	00001	4	00317		TIX DEC,4,1		F6I00780
	00322	-0	53400	4	00302		LXD DCX,4		F6I00790
	00323	0	02000	4	00001		TRA 1,4	RETURN TO PROGRAM.	F6I00800
	00324	0	76600	0	00202	SPACE	WTD 2		F6I00810
	00325	0	70000	0	00422		CPY BLANKS		F6I00820
	00326	0	76600	0	00202	WRITE	WTD 2		F6I00830
	00327	0	50000	4	00001		CLA 1,4		F6I00840
	00330	0	62100	0	00332		STA POOP		F6I00850
	00331	-0	73400	2	00000		PDX 0,2		F6I00860
	00332	0	70000	2	00332	POOP	CPY *,2		F6I00870
	00333	2	00001	2	00332		TIX POOP,2,1		F6I00880
	00334	0	76600	0	00333		IOD		F6I00890
	00335	0	02000	4	00002		TRA 2,4		F6I00900
	00336	-0	75400	2	00000	WLL	PXD 0,2	TO GET WORD COUNTERS FOR WRITING	F6I00910
	00337	0	60100	0	00346		STO LND	FINAL RECORD.	F6I00920
	00340	0	77100	0	00022		ARS 18		F6I00930
	00341	0	62100	0	00346		STA LND		F6I00940
	00342	0	50000	0	00351		CLA LNE		F6I00950
	00343	0	40200	0	00346		SUB LND		F6I00960
	00344	0	60100	0	00346		STO LND		F6I00970
	00345	0	07400	4	00326		TSX WRITE,4	WRITE FINAL RECORD	F6I00980
	00346	0	00000	0	00000	LND		AND	F6I00990
	00347	0	76200	0	00221	ENDS	RTB 1	GO TO LOADER.	F6I01000
	00350	0	02000	0	00004		TRA 4		F6I01010

00533 SUM BSS 1
02112 TEIFN BES 750
00210 END START
00001 0 IFN

F6I01200
F6I01210
F6I01220

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	130	0	0	0	0
LIB	0	0	0	0	0
COL	130	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 175

NUMBER OF SYMBOLS, DEF 108,DEFOP 0,UNDEF 1

REM ***** FORTRAN II SECTION SIX *****F6J00010

***** FORTRAN II SECTION SIX ***** F6J00010
 FORTRAN 2 RECORD 109 - MAP PROGRAM. F6J00011

RELOCATE DATA DOWN TO LOWER STORAGE F6J00012
 COMPUTE DELTA EQUAL LCTR MINUS L1 PLUS 1 F6J00020
 SUBTRACT DELTA FROM ALL LOCATIONS BETWEEN L3 F6J00030
 AND L1 IN DEV, TEV, AND TIV TABLES F6J00040
 L1 IS PROGRAM BREAK, L3 IS COMMON BREAK F6J00050
 F6J00060

				00210	ORG	136		F6J00070
	00210	0	50000	0	00171	CLA	LCTR	F6J00080
	00211	0	40200	0	00166	SUB	L1	F6J00090
	00212	0	40000	0	00162	ADD	ONE	F6J00100
	00213	0	60100	0	00546	STO	DELTA	F6J00110
	00214	0	50000	0	00166	CLA	L1	F6J00120
	00215	0	40000	0	00175	ADD	L3	F6J00130
	00216	0	40200	0	00171	SUB	LCTR	F6J00140
	00217	0	60100	0	00176	STO	PGBK	F6J00150
	00220	-0	53400	1	00155	LXD	DEVL,1	F6J00160
D	00221	-3	00000	1	00243	TXL	A5,1	F6J00170
	00222	0	50000	0	00152	CLA	ADEV	F6J00180
	00223	0	62100	0	00225	STA	A1	F6J00190
	00224	0	62100	0	00241	STA	A4	F6J00200
	00225	0	50000	1	00225	A1	CLA *	F6J00210
	00226	0	62100	0	00301	STA	ERAS1	F6J00220
	00227	0	50000	0	00301	CLA	ERAS1	F6J00230
	00230	0	34000	0	00175	CAS	L3	F6J00240
	00231	0	02000	0	00236	TRA	A3	F6J00250
	00232	0	02000	0	00240	TRA	A2	F6J00260
							LOC GREATER THAN L3, DO NOT RELOCATE.	F6J00261
							LOC EQUAL L3. GO TO RELOCATE (HAS TO BE GREATER	F6J00270
							THAN L1)	F6J00280
	00233	0	34000	0	00166	CAS	L1	F6J00290
	00234	0	02000	0	00240	TRA	A2	F6J00300
	00235	0	02000	0	00240	TRA	A2	F6J00310
	00236	2	00001	1	00225	A3	TIX A1,1,1	F6J00320
	00237	0	02000	0	00243	TRA	A5	F6J00330
	00240	0	40200	0	00546	A2	SUB DELTA	F6J00340
	00241	0	62100	1	00241	A4	STA *,1	F6J00350
	00242	0	02000	0	00236	TRA	A3	F6J00360
	00243	0	50000	0	00172	A5	CLA LTEV	F6J00370
	00244	-0	53400	1	00120	LXD	TEVL,1	F6J00380
D	00245	-3	00000	1	00257	TXL	A6,1	F6J00390
	00246	0	34000	0	00175	CAS	L3	F6J00400
	00247	0	02000	0	00257	TRA	A6	F6J00410
	00250	0	02000	0	00255	TRA	A7	F6J00420
	00251	0	34000	0	00166	CAS	L1	F6J00430
							LOC GREATER THAN L3. OONT RELOCATE	F6J00440
							LOC EQUAL L3. RELOCATE	F6J00450
							LOC LESS THAN L3. IS IT GREATER THAN OR EQUAL	F6J00460
							L1.	F6J00470
	00252	0	02000	0	00255	TRA	A7	F6J00480
	00253	0	02000	0	00255	TRA	A7	F6J00490
	00254	0	02000	0	00257	TRA	A6	F6J00500
	00255	0	40200	0	00546	A7	SUB DELTA	
	00256	0	60100	0	00172	STO	LTEV	
	00257	-0	53400	1	00141	A6	LXD TIVL,1	
	00260	1	00001	1	00261	TXI	NT1,1,1	
D	00261	-3	00000	1	00302	NT1	TXL B4,1	
	00262	0	50000	1	02114	A10	CLA TIV,1	
							NO, GO TO WRITE OFF STORAGE NOT USED	
							YES. TEST TIV.	

	00263	0	62100	0	00301		STA ERAS1	SELECT LOCATION FROM ADDRESS BITS.	F6J00510
	00264	0	50000	0	00301		CLA ERAS1		F6J00520
	00265	0	34000	0	00175		CAS L3		F6J00530
	00266	0	02000	0	00273		TRA A8	NO RELOCATION.	F6J00540
	00267	0	02000	0	00276		TRA A9	RELOCATE.	F6J00550
	00270	0	34000	0	00166		CAS L1		F6J00560
	00271	0	02000	0	00276		TRA A9	RELOCATE.	F6J00570
	00272	0	02000	0	00276		TRA A9	RELOCATE.	F6J00580
D	00273	1	00001	1	00274	A8	TXI NT2,1,1	IF MORE ENTRIES IN TIV TO BE TESTED FOR RELOC-	F6J00590
	00274	-3	00000	1	00302	NT2	TXL B4,1	ATION, GO TO TEST TIV. IF DONE, GO WRITE STORAGE NOT USED.	F6J00600
	00275	0	02000	0	00262		TRA A10	RELOCATE BY SUBTRACTING DELTA	F6J00610
	00276	0	40200	0	00546	A9	SUB DELTA		F6J00620
	00277	0	62100	1	02114		STA TIV,1		F6J00630
	00300	0	02000	0	00273		TRA A8		F6J00640
A	00301	0	00000	0	00000	ERAS1	HTR		F6J00650
	00302	0	07400	4	00352	B4	TSX SPACE,4	TO WRITE STORAGE NOT USED BY PROGRAM	F6J00660
	00303	0	00024	0	00470		TITLE,,20	RECORD ON TAPE TWO.	F6J00670
	00304	0	07400	4	00352		TSX SPACE,4	GO TO WRITE TITLE AND HEADINGS.	F6J00680
	00305	0	00024	0	00514		CHEAD,,20		F6J00690
	00306	0	50000	0	00176		CLA PGBK		F6J00700
	00307	0	60100	0	00443		STO LOC	TO LIST PROGRAM BREAK.	F6J00710
	00310	0	07400	4	00364		TSX SUB,4	GO TO CONVERT PROGRAM BREAK TO BCD IMAGES	F6J00720
	00311	-0	50000	0	00437		CAL BLANKS	OF ITS DECIMAL AND ITS OCTAL	F6J00730
	00312	0	60200	0	00514		SLW LIN-19	REPRESENTATIONS.	F6J00740
	00313	0	60200	0	00515		SLW LIN-18	SET FIRST 2 WORDS OF RECORD TO BLANK.	F6J00750
	00314	0	50000	0	00547		CLA DECWD		F6J00760
	00315	0	60100	0	00516		STO LIN-17	SET 3RD WORD TO IMAGE OF DECIMAL REPR.	F6J00770
	00316	0	50000	0	00550		CLA OCTWD	SET 4TH WORD TO IMAGE OF OCTAL REPRESENTATION	F6J00780
	00317	0	60100	0	00517		STO LIN-16	OF PROGRAM BREAK.	F6J00790
	00320	0	50000	0	00175		CLA L3		F6J00800
	00321	0	60100	0	00443		STO LOC	TO LIST COMMON BREAK.	F6J00810
	00322	0	07400	4	00364		TSX SUB,4	GO TO CONVERT IT.	F6J00820
	00323	-0	50000	0	00437		CAL BLANKS		F6J00830
	00324	0	60200	0	00520		SLW LIN-15		F6J00840
	00325	0	60200	0	00521		SLW LIN-14	SET WORDS FIVE AND SIX TO BLANK.	F6J00850
	00326	0	50000	0	00547		CLA DECWD	SET WORD SEVEN TO BCD IMAGE OF DECIMAL	F6J00860
	00327	0	60100	0	00522		STO LIN-13	REPRESENTATION OF COMMON BREAK.	F6J00870
	00330	0	50000	0	00550		CLA OCTWD		F6J00880
	00331	0	60100	0	00523		STO LIN-12	SET WORD EIGHT TO IMAGE OF OCTAL REPR.	F6J00890
	00332	-0	50000	0	00437		CAL BLANKS		F6J00900
	00333	0	60200	0	00524		SLW LIN-11	SET REMAINDER OF RECORD TO BLANK.	F6J00910
	00334	0	60200	0	00525		SLW LIN-10		F6J00920
	00335	0	60200	0	00526		SLW LIN-9		F6J00930
	00336	0	60200	0	00527		SLW LIN-8		F6J00940
	00337	0	60200	0	00530		SLW LIN-7		F6J00950
	00340	0	60200	0	00531		SLW LIN-6		F6J00960
	00341	0	60200	0	00532		SLW LIN-5		F6J00970
	00342	0	60200	0	00533		SLW LIN-4		F6J00980
	00343	0	60200	0	00534		SLW LIN-3		F6J00990
	00344	0	60200	0	00535		SLW LIN-2		F6J01000
	00345	0	60200	0	00536		SLW LIN-1		F6J01010
	00346	0	60200	0	00537		SLW LIN		F6J01020
	00347	0	07400	4	00354		TSX WRITE,4	GO TO WRITE RECORD ON TAPE TWO.	F6J01030

00350	0	00024	0	00540	LNC		LIN+1,,20		F6J01040
00351	0	02000	0	00004	TRA	4		GO TO LOADER.	F6J01050
00352	0	76600	0	00202	SPACE	WTD	2		F6J01060
00353	0	70000	0	00437	CPY	BLANKS			F6J01070
00354	0	76600	0	00202	WRITE	WTD	2		F6J01080
00355	0	50000	4	00001	CLA	1,4			F6J01090
00356	0	62100	0	00360	STA	POOP			F6J01100
00357	-0	73400	2	00000	PDX	0,2			F6J01110
00360	0	70000	2	00360	POOP	CPY	*,2		F6J01120
00361	2	00001	2	00360	TIX	POOP,2,1			F6J01130
00362	0	76600	0	00333	IOD				F6J01140
00363	0	02000	4	00002	TRA	2,4			F6J01150
00364	0	53400	1	00162	SUB	LXA	ONE,1		F6J01160
00365	0	56000	0	00443	LDQ	LOC			F6J01170
00366	0	50000	0	00442	CNV	CLA	TEN	CONVERTING TO DECIMAL.	F6J01180
00367	0	04000	0	00374	TLQ	FIN			F6J01190
00370	-0	75400	0	00000	PXD				F6J01200
00371	0	22100	0	00442	DVP	TEN			F6J01210
00372	0	60200	1	00546	SLW	DIG,1			F6J01220
00373	1	00001	1	00366	TXI	CNV,1,1			F6J01230
00374	-0	60000	1	00546	FIN	STQ	DIG,1		F6J01240
00375	-0	50000	0	00437	CAL	BLANKS			F6J01250
00376	0	76700	0	00006	DEC	ALS	6	DECIMAL TO BCD IMAGE.	F6J01260
00377	-0	50100	1	00546	ORA	DIG,1			F6J01270
00400	2	00001	1	00376	TIX	DEC,1,1			F6J01280
00401	0	60200	0	00547	SLW	DECWD			F6J01290
00402	0	50000	0	00443	CLA	LOC			F6J01300
00403	0	76500	0	00017	LRS	15			F6J01310
00404	-0	50000	0	00440	CAL	BLANK			F6J01320
00405	-0	14000	0	00406	TNO	OCT			F6J01330
00406	0	76700	0	00003	OCT	ALS	3	OCTAL TO BCD IMAGE.	F6J01340
00407	0	76300	0	00003	LLS	3			F6J01350
00410	-0	14000	0	00406	TNO	OCT			F6J01360
00411	0	60200	0	00550	SLW	OCTWD			F6J01370
00412	0	02000	4	00001	TRA	1,4			F6J01380
			00413		BSS	20			F6J01390
00437	606060606060				BLANKS	BCD	1		F6J01400
00440	0000000000060				BLANK	BCD	100000		F6J01410
00441	+0000000000077				6BITS	OCT	77		F6J01420
00442	+0000000000012				TEN	DEC	10		F6J01430
00443	+0000000000000				LOC	DEC	0		F6J01440
00444	606060606060					BCD	7		F6J01450
00445	606060606060								
00446	606060606060								
00447	606060606060								
00450	606060606060								
00451	606060606060								
00452	606060606060								
00453	626346512127				BCD	5STORAGE	NOT USED BY PROGRAM		F6J01460
00454	256045466360								
00455	646225246022								
00456	706047514627								
00457	512144606060								
00460	606060606060				BCD	8			F6J01470

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00461 606060606060
00462 606060606060
00463 606060606060
00464 606060606060
00465 606060606060
00466 606060606060
00467 606060606060

A 00470 TITLE BSS F6J01480
00470 606060606060 BCD 2 F6J01490
00471 606060606060
00472 606024252360 BCD 4 DEC OCT F6J01500
00473 606046236360
00474 606060606060
00475 606060606060
00476 606024252360 BCD 4 DEC OCT F6J01510
00477 606046236360
00500 606060606060
00501 606060606060
00502 606060606060 BCD F6J01520
00503 606060606060
00504 606060606060
00505 606060606060
00506 606060606060
00507 606060606060
00510 606060606060
00511 606060606060
00512 606060606060
00513 606060606060

A 00514 CHEAD BSS F6J01530
00514 BSS 19 F6J01540
00537 LIN BSS 1 F6J01550
00546 DIG BES 6 F6J01560
00546 0 00000 0 00000 DELTA HTR 0 F6J01570
00547 0 00000 0 00000 DECWD HTR 0 F6J01580
00550 0 00000 0 00000 OCTWD HTR 0 F6J01590
A 00000 END F6J01600

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	166	0	0	0	0
LIB	0	0	0	0	0
COL	166	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 207

NUMBER OF SYMBOLS, DEF 106,DEFOP 0,UNDEF 0
REM ***** FORTRAN II SECTION SIX *****F6K00010

LIST DATA LOCATIONS NOT APPEARING IN COMMON

				00206	ME8	SYN	134			F6K00012
				00032	PC3	SYN	26			F6K00020
				00210		ORG	136			F6K00030
	00210	-0	53400	1		LXD	PC3,1	ANY TRANSFER VECTOR.		F6K00040
D	00211	-3	00000	1		TXL	J4,1	NO, TRANSFER.		F6K00050
	00212	0	07400	4		TSX	SPACE,4	YES, GO TO WRITE COLUMN HEADINGS AND		F6K00060
	00213	0	00024	0			TRAN,,20	LOCATIONS OF NAMES IN TRANSFER VECTOR.		F6K00070
	00214	0	07400	4		TSX	SPACE,4			F6K00080
	00215	0	00024	0			TRHAD,,20			F6K00090
	00216	0	50000	0		CLA	ADEV	PRINT TRANSFER VECTOR		F6K00100
	00217	0	62100	0		STA	TV1	INITIAL DEA LOCATION.		F6K00110
	00220	-0	75400	1		PXD	0,1			F6K00120
	00221	0	77100	0		ARS	18			F6K00130
	00222	0	60100	0		STO	LENG	NO. OF WORDS IN TRANSFER VECTOR.		F6K00140
	00223	-0	53400	1		LXD	DEVL,1	SET DEA TABLE COUNTER.		F6K00150
	00224	-0	53400	2		LXD	LNC,2	SET TAPE TWO RECORD LENGTH EQUAL TO TWENTY.		F6K00160
	00225	0	50000	1		CLA	** ,1	LOCATION FROM DEA TABLE.		F6K00170
	00226	0	62100	0		STA	LOC			F6K00180
	00227	0	50000	0		CLA	LOC	IF DEV ENTRY IS IN TRANS. VECTOR, ITS CORRES-		F6K00190
	00230	0	34000	0		CAS	LENG	PONDING DEA ENTRY(ADDR. PART)WILL BE LESS		F6K00200
								THAN TRANS. VECTOR WORD COUNT.		F6K00210
	00231	0	02000	0		TRA	TV3	DEV ENTRY NOT IN TRANSFER VECTOR.		F6K00220
	00232	0	02000	0		TRA	TV3			F6K00221
	00233	0	56000	1		LDQ	DEV,1	DEV ENTRY IS IN TRANSFER VECTOR SO LIST IT.		F6K00230
	00234	0	07400	4		TSX	D3,4	TO PREPARE FIRST TWO WORDS OF TAPE TWO ENTRY.		F6K00240
	00235	0	07400	4		TSX	D4,4	TO PREPARE 3RD AND 4TH WORDS OF ENTRY.		F6K00250
	00236	-2	00001	1		TNX	TV5,1,1	IF NO MORE WOROS IN DEV TABLE, GO TO WRITE LAST		F6K00260
								RECORD.		F6K00270
	00237	2	00004	2		TIX	TV1,2,4	IF TAPE TWO RECORD FULL, GO TO WRITE RECORD		F6K00280
	00240	0	07400	4		TSX	WRITE,4	AND THEN TO TV2 TO SET UP FOR NEXT RECORD.		F6K00281
	00241	0	00024	0			LIN+1,,20			F6K00290
	00242	0	02000	0		TRA	TV2			F6K00300
	00243	-2	00001	1		TNX	TV6,1,1	DO NOT LIST (NOT IN TRANSFER VECTOR). UPDATE		F6K00310
								INDEX.		F6K00320
	00244	0	02000	0		TRA	TV1	AND GO TO SELECT NEXT DEA. IF END OF DEV,		F6K00330
	00245	1	00004	2		TXI	TV5,2,4	ADJUST WRITE-COPY INDEX AND GO		F6K00331
	00246	0	07400	1		TSX	WLL,1	WRITE LAST RECORD.		F6K00340
	00247	-0	53400	1		J4	LXD	DEVL,1		F6K00350
								ANY DEV ENTRIES.		F6K00360
D	00250	-3	00000	1		TXL	J1,1	NO, TRANSFER		F6K00370
	00251	0	50000	0		CLA	LENG	YES, COMPARE WD. CT. OF TRANSFER VECTOR WITH		F6K00380
	00252	0	34000	0		CAS	ME8	LAST LOCATION OF FORTRAN FUNCTIONS+1 (ME8 SET		F6K00390
								BY RECORD 105.		F6K00400
	00253	0	02000	0		TRA	LIB38	LESS THAN TRANSFER VECTOR LENGTH.		F6K00401
	00254	0	02000	0		TRA	LIB37	EQUAL OR GREATER THAN TR. VECTOR LENGTH. SET		F6K00410
	00255	0	50000	0		CLA	ME8	LENG EQUAL TO ME8 TO AVOID DUPLICATE LISTING		F6K00420
	00256	0	60100	0		STO	LENG	OF FORTRAN FUNCTIONS (LISTED BY RECOR0 105).		F6K00430
	00257	0	50000	0		CLA	ADEV	STORE INITIAL LOCATION OF DEA TABLE IN AOORESS		F6K00440
	00260	0	62100	0		STA	BDV	OF BDV.		F6K00450
	00261	-0	53400	2		LXD	LNC,2	SET TAPE TWO RECORD LENGTH TO 20.		F6K00460
	00262	0	50000	1		BDV	CLA	** ,1		F6K00470
								SELECT LOCATION FROM ADDRESS PART OF DEA		F6K00480

	00263	0	62100	0	00455		STA LOC	ENTRY. COMPARE IT WITH MAX (TRANSFER VECTOR	F6K00490
	00264	0	50000	0	00455		CLA LOC	WORD COUNT, LAST LOCATION OF FORTRAN FUNCTIONS	F6K00500
	00265	0	34000	0	00456		CAS LENG	PLUS 1).	F6K00510
	00266	0	02000	0	00271		TRA J6	NOT PREVIOUSLY LISTED AS FORTRAN FUNCTION	F6K00520
	00267	0	02000	0	00271		TRA J6	OR IN TRANSFER VECTOR. GO SEE IF COMMON.	F6K00530
	00270	0	02000	0	00306		TRA B11	PREVIOUSLY LISTED. GO SEE IF ANY MORE DEV	F6K00540
								ENTRIES.	F6K00541
	00271	0	34000	0	00175	J6	CAS L3	IS DEV ENTRY IN COMMON.	F6K00550
	00272	0	02000	0	00306		TRA B11	YES, GO SEE IF ANY MORE DEV ENTRIES.	F6K00560
	00273	0	02000	0	00274		TRA B10	DEV ENTRY NOT A FORTRAN FUNCTION, NOT IN	F6K00570
	00274	0	50000	0	00310	B10	CLA ME5	TRANSFER VECTOR OR COMMON. ME5 IS TAPE TWO	F6K00580
	00275	0	10000	0	00311		TZE ME6	BUFFER COUNTER (0 TO START). GO WRITE HEADING,	F6K00590
	00276	0	56000	1	77777	ME7	LDQ DEV,1	TAPE 2 BUFFER INDEX NOT 0. LOAD APPROPRIATE	F6K00600
	00277	0	07400	4	00366		TSX D3,4	DEV ENTRY AND GO TO PREPARE THE 4-WORD ENTRY.	F6K00610
	00300	0	07400	4	00405		TSX D4,4		F6K00620
	00301	-2	00001	1	00323		TNX B25,1,1	GO WRITE FINAL RECORD IF DEV TABLE FINISHED.	F6K00630
	00302	2	00004	2	00262		TIX BDV,2,4	TRANSFER IF STILL ROOM IN TAPE TWO BUFFER.	F6K00640
	00303	0	07400	4	00440		TSX WRITE,4	BUFFER FULL. GO WRITE RECORD.	F6K00650
	00304	0	00024	0	00634		LIN+1,,20		F6K00660
	00305	0	02000	0	00261		TRA CNL	GO SET BUFFER LENGTH AND CONTINUE.	F6K00670
	00306	-2	00001	1	00320	B11	TNX D7,1,1	TRANSFER IF NO MORE ENTRIES IN DEV.	F6K00680
	00307	0	02000	0	00262		TRA BDV	GO SELECT NEXT DEV ENTRY.	F6K00690
	00310	0	00000	0	00000	ME5	HTR 0		F6K00700
	00311	0	07400	4	00436	ME6	TSX SPACE,4	TO WRITE STORAGE LOCATIONS FOR VARIABLES	F6K00710
	00312	0	00024	0	00553		TITLE,,20	APPEARING IN DIMENSION AND EQUIVALENCE	F6K00720
	00313	0	07400	4	00436		TSX SPACE,4	STATEMENTS AND HEADINGS	F6K00730
	00314	0	00024	0	00527		TRHAD,,20		F6K00740
	00315	-0	53400	2	00241		LXD LNC,2	RESET COUNTER FOR TAPE TWO BUFFER AND STORE	F6K00750
	00316	-0	63400	2	00310		SXD ME5,2	IT IN ME5	F6K00760
	00317	0	02000	0	00276		TRA ME7		F6K00770
	00320	0	50000	0	00310	D7	CLA ME5	IS ANYTHING IN TAPE TWO BUFFER	F6K00780
	00321	0	10000	0	00324		TZE J1	TRANSFER IF NOT.	F6K00790
	00322	1	00004	2	00323		TXI B25,2,4	ADJUST BUFFER INDEX	F6K00800
	00323	0	07400	1	00353	B25	TSX WLL,1	AND GO WRITE LAST RECORD.	F6K00810
	00324	-0	53400	1	00120	J1	LXD TEV,1	ANY TEV ENTRIES.	F6K00820
D	00325	-3	00000	1	00450		TXL J3,1	NO, GO TO LOADER	F6K00830
	00326	0	07400	4	00436		TSX SPACE,4	YES, WRITE LOCATIONS FOR VARIABLES NOT APPEAR-	F6K00840
	00327	0	00024	0	00577		OTHER,,20	ING IN DIMENSION, EQUIVALENCE, OR COMMON,	F6K00850
	00330	0	07400	4	00436		TSX SPACE,4	AND WRITE HEADINGS.	F6K00860
	00331	0	00024	0	00527		TRHAD,,20		F6K00870
	00332	0	50000	0	00107	D1	CLA TTEV	SET ADDRESS OF D5 EQUAL TO LOCATION OF	F6K00880
	00333	0	62100	0	00335		STA D5	BEGINNING OF TEV TABLE.	F6K00890
	00334	-0	53400	2	00241		LXD LNC,2	SET TAPE TWO RECORD LENGTH TO 20.	F6K00900
U	00335	0	56000	1		D5	LDQ TEV,1	SELECT TEV ENTRY, AND GO SET WORD 1 TO BLANK,	F6K00910
	00336	0	07400	4	00366		TSX D3,4	WORD2 TO VARIABLE NAME.	F6K00920
	00337	-0	75400	1	00000		PXD 0,1	COMPUTE LOCATION OF TEV ENTRY.	F6K00930
	00340	0	77100	0	00022		ARS 18		F6K00940
	00341	0	40000	0	00172		ADD LTEV		F6K00950
	00342	0	62100	0	00455		STA LOC	AND GO COMPUTE AND STORE BCD IMAGES OF DECIMAL	F6K00960
	00343	0	07400	4	00405		TSX D4,4	AND OCTAL REPRESENTATIONS IN WORDS 3 AND 4.	F6K00970
	00344	-2	00001	1	00351		TNX D6,1,1	IF END OF TEV ENTRIES, GO WRITE LAST RECORD.	F6K00980
	00345	2	00004	2	00335		TIX D5,2,4	TRANSFER IF STILL ROOM IN BUFFER.	F6K00990
	00346	0	07400	4	00440		TSX WRITE,4	BUFFER FULL. WRITE BUFFER CONTENTS AND GO SET	F6K01000
	00347	0	00024	0	00634		LIN+1,,20	BUFFER COUNTER.	F6K01010

00350	0	02000	0	00334	TRA D5-1		F6K01020
00351	0	07400	1	00353	D6 TSX WLL,1	WRITE FINAL RECORD AND GO TO LOADER.	F6K01030
00352	0	02000	0	00004	TRA 4		F6K01040
00353	-0	75400	2	00000	WLL PXD 0,2	COMPUTE COUNT TO WRITE FINAL RECORD.	F6K01050
00354	0	60100	0	00363	STO LND		F6K01060
00355	0	77100	0	00022	ARS 18		F6K01070
00356	0	62100	0	00363	STA LND		F6K01080
00357	0	50000	0	00365	CLA LNE		F6K01090
00360	0	40200	0	00363	SUB LND		F6K01100
00361	0	60100	0	00363	STO LND		F6K01110
00362	0	07400	4	00440	TSX WRITE,4	WRITE FINAL RECORD.	F6K01120
00363	0	00000	0	00000	LND		F6K01130
00364	0	02000	1	00001	TRA 1,1		F6K01140
00365	0	00030	0	00640	LNE LIN+5,,24		F6K01150
00366	-0	63400	4	00601	D3 SXD IR4,4		F6K01160
00367	-0	50000	0	00451	CNW CAL BLANKS		F6K01170
00370	0	60200	2	00634	SLW LIN+1,2	STORE BLANKS IN WORDS 1 AND 2 OF ENTRY.	F6K01180
00371	0	60200	2	00635	SLW LIN+2,2		F6K01190
00372	0	53400	4	00373	LXA SIX,4		F6K01200
00373	-0	76300	0	00006	SIX LGL 6		F6K01210
00374	0	60200	0	00634	SLW SYM		F6K01220
00375	-0	32000	0	00453	ANA 6BITS		F6K01230
00376	0	40200	0	00452	SUB BLANK	STORE VARIABLE NAME FILLED WITH BLANKS AT	F6K01240
00377	0	10000	0	00403	TZE CNA	LEFT IN WORD 2 OF ENTRY.	F6K01250
00400	-0	50000	0	00634	CAL SYM		F6K01260
00401	0	60200	2	00635	SLW LIN+2,2		F6K01270
00402	2	00001	4	00373	TIX SIX,4,1		F6K01280
00403	-0	53400	4	00601	CNA LXD IR4,4		F6K01290
00404	0	02000	4	00001	TRA 1,4	RETURN TO PROGRAM.	F6K01300
00405	-0	63400	4	00601	D4 SXD IR4,4		F6K01310
00406	0	53400	4	00162	LXA ONE,4	CONVERT LOCATION TO BCD IMAGE OF ITS	F6K01320
00407	0	56000	0	00455	LDQ LOC	DECIMAL REPRESENTATION, AND	F6K01330
00410	0	50000	0	00454	CNV CLA TEN	STORE IT IN WORD 3 OF ENTRY.	F6K01340
00411	0	04000	0	00416	TLQ FIN		F6K01350
00412	-0	75400	0	00000	PXD		F6K01360
00413	0	22100	0	00454	DVP TEN		F6K01370
00414	0	60200	4	00610	SLW DIG,4		F6K01380
00415	1	00001	4	00410	TXI CNV,4,1		F6K01390
00416	-0	60000	4	00610	FIN STQ DIG,4		F6K01400
00417	-0	50000	0	00451	CAL BLANKS		F6K01410
00420	0	76700	0	00006	DEC ALS 6		F6K01420
00421	-0	50100	4	00610	ORA DIG,4		F6K01430
00422	2	00001	4	00420	TIX DEC,4,1		F6K01440
00423	0	60200	2	00636	SLW LIN+3,2		F6K01450
00424	0	50000	0	00455	CLA LOC		F6K01460
00425	0	76500	0	00017	LRS 15		F6K01470
00426	0	50000	0	00452	CLA BLANK	CONVERT LOCATION TO BCD IMAGE OF ITS OCTAL	F6K01480
00427	-0	14000	0	00430	OCT TNO OCT	REPRESENTATION, AND STORE IT IN WORD 4 OF ENTRY	F6K01490
00430	0	76700	0	00003	OCT ALS 3		F6K01500
00431	0	76300	0	00003	LLS 3		F6K01510
00432	-0	14000	0	00430	TNO OCT		F6K01520
00433	0	60200	2	00637	SLW LIN+4,2		F6K01530
00434	-0	53400	4	00601	LXD IR4,4		F6K01540
00435	0	02000	4	00001	TRA 1,4		F6K01550

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00436	0 76600 0 00202	SPACE	WTD 2			F6K01560
00437	0 70000 0 00451		CPY BLANKS			F6K01570
00440	0 76600 0 00202	WRITE	WTD 2	TO WRITE TAPE-TWO BUFFER (20 WORDS) ONTO TAP,		F6K01580
00441	0 50000 4 00001		CLA 1,4			F6K01590
00442	0 62100 0 00444		STA POOP			F6K01600
00443	-0 73400 2 00000		PDX 0,2			F6K01610
00444	0 70000 2 00000	POOP	CPY **,2			F6K01620
00445	2 00001 2 00444		TIX POOP,2,1			F6K01630
00446	0 76600 0 00333		IOD			F6K01640
00447	0 02000 4 00002		TRA 2,4			F6K01650
00450	0 02000 0 00004	J3	TRA 4			F6K01660
00451	606060606060	BLANKS	BCD 1			F6K01670
00452	0000000000060	BLANK	BCD 100000			F6K01680
00453	+0000000000077	6BITS	OCT 77			F6K01690
00454	+0000000000012	TEN	DEC 10			F6K01700
00455	+0000000000000	LOC	DEC 0			F6K01710
00456	0 00000 0 00000	LENG	HTR 0			F6K01720
00457	606060606060		BCD 6			F6K01730
00460	606060606060					
00461	606060606060					
00462	606060606060					
00463	606060606060					
00464	606060606060					
00465	434623216331		BCD 6LOCATIONS OF NAMES IN TRANSFER VECTO			F6K01740
00466	464562604626					
00467	604521442562					
00470	603145606351					
00471	214562262551					
00472	606525236346					
00473	516060606060		BCD 8R			F6K01750
00474	606060606060					
00475	606060606060					
00476	606060606060					
00477	606060606060					
00500	606060606060					
00501	606060606060					
00502	606060606060					
A	00503	TRAN	BSS			F6K01760
00503	606060606060		BCD 2			F6K01770
00504	606060606060					
00505	606024252360		BCD 4 DEC OCT			F6K01780
00506	606046236360					
00507	606060606060					
00510	606060606060					
00511	606024252360		BCD 4 DEC OCT			F6K01790
00512	606046236360					
00513	606060606060					
00514	606060606060					
00515	606024252360		BCD 4 DEC OCT			F6K01800
00516	606046236360					
00517	606060606060					
00520	606060606060					
00521	606024252360		BCD 4 DEC OCT			F6K01810
00522	606046236360					

	00523	606060606060					
	00524	606060606060					
	00525	606024252360		BCD 2	DEC	OCT	F6K01820
	00526	606046236360					
A			00527	TRHAD	BSS		F6K01830
	00527	606060606060			BCD 3		F6K01840
	00530	606060606060					
	00531	606060606060					
	00532	626346512127		BCD 7	STORAGE LOCATIONS FOR VARIABLES APPEARING		F6K01850
	00533	256043462321					
	00534	633146456260					
	00535	264651606521					
	00536	513121224325					
	00537	626021474725					
	00540	215131452760					
	00541	314560243144		BCD 7	IN DIMENSION AND EQUIVALENCE SENTENCES		F6K01860
	00542	254562314645					
	00543	602145246025					
	00544	506431652143					
	00545	254523256062					
	00546	254563254523					
	00547	256260606060					
	00550	606060606060		BCD 3			F6K01870
	00551	606060606060					
	00552	606060606060					
A			00553	TITLE	BSS		F6K01880
	00553	606060606060			BCD 2		F6K01890
	00554	606060606060					
	00555	606060626346		BCD 7	STORAGE LOCATIONS FOR VARIABLES NOT APP		F6K01900
	00556	512127256043					
	00557	462321633146					
	00560	456260264651					
	00561	606521513121					
	00562	224325626045					
	00563	466360214747					
	00564	252151314527		BCD 6	EARING IN DIMENSION, EQUIVALENCE OR C		F6K01910
	00565	603145602431					
	00566	442545623146					
	00567	457325506431					
	00570	652143254523					
	00571	256046516023					
	00572	464444464560		BCD 5	COMMON SENTENCES		F6K01920
	00573	622545632545					
	00574	232562606060					
	00575	606060606060					
	00576	606060606060					
A			00577	OTHER	BSS		F6K01930
	00577	0 00000 0 00000		ERAS2			F6K01940
	00600	0 00000 0 00000		ERAS1			F6K01950
	00601	0 00000 0 00000		IR4			F6K01960
			00610	DIG	BES 6		F6K01970
			00610		BSS 19		F6K01980
			00633	LIN	BSS 1		F6K01990
			00634	SYM	BSS 1		F6K02000

A 00000 END
00001 0 TEV

F6K02010

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	209	0	0	0	0
LIB	0	0	0	0	0
COL	209	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 281

NUMBER OF SYMBOLS, DEF 129,DEFOP 0,UNDEF 1

REM ***** FORTRAN II SECTION SIX *****F6L00010

***** FORTRAN II SECTION SIX ***** F6L00010
 FORTRAN 2 RECORD 111 - WRITE PROGRAM CARD. F6L00011

WRITE PROGRAM CARD ON TAPE 3

			00030	PC1	SYN	24		F6L00012
			00031	PC2	SYN	25		F6L00020
			00032	PC3	SYN	26		F6L00030
			00033	PC4	SYN	27		F6L00040
			00034	PC5	SYN	28		F6L00050
			00035	PC6	SYN	29		F6L00060
			00210		ORG	136		F6L00070
			00210		REW	3	REWIND TAPE 3	F6L00080
			00211		CLS	FR4		F6L00090
			00212		STO	PC1	STORE PUNCH IN COL 1,4 IN DECREMENT OF PC1	F6L00100
			00213		CLA	PC3	DECREMENT CONTAINS LENGTH OF TRANSFER VECTOR.	F6L00110
			00214		ADD	PGBK	ADD LENGTH OF LOWER STORAGE IN ADDRESS.	F6L00120
			00215		STO	PC3		F6L00130
			00216		CLA	L3	TWOS COMPLEMENT OF LENGTH OF UPPER	F6L00140
			00217		STO	PC4	STORAGE IN ADDRESS.	F6L00150
T			00220		PXD			F6L00160
			00221		ACL	PC1	COMPUTE CHECK SUM,	F6L00170
			00222		ACL	PC3		F6L00180
			00223		ACL	PC4		F6L00190
			00224		ACL	PC5		F6L00200
			00225		ACL	PC6		F6L00210
			00226		SLW	PC2	AND STORE IT IN PC 2.	F6L00220
			00227		WTB	3	WRITE PROGRAM CARD ONTO TAPE 3.	F6L00230
			00230		CPY	PC1	PUNCH IN COL. ONE, WD. COUNT IN DECR. 9L.	F6L00240
			00231		CPY	PC2	CHECK SUM. 9R.	F6L00250
			00232		CPY	PC3	LENGTH OF TRANS. VECS LENGTH. OF LOWER STORAGE,	F6L00260
			00233		CPY	PC4	2S COMP. OF UPPER STORAGE. 8R.	F6L00270
			00234		CPY	PC5	NAME OF SUBROUTINE (ZEROS IF MAIN PROGRAM). 7L.	F6L00280
			00235		CPY	PC6	ENTRY POINT. 7R	F6L00290
			00236		LXA	L18,1	FILL REST OF CARD WITH ZEROS.	F6L00300
			00237		CPY	ZERO		F6L00310
			00240		TIX	B4,1,1		F6L00320
			00241		IOD			F6L00330
			00242		TRA	4	GO TO LOADER,	F6L00340
			00243		HTR	18		F6L00350
			00244		OCT	000004000000		F6L00360
A			00000		END			F6L00370
								F6L00380
								F6L00390

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	42	0	0	0	0
LIB	0	0	0	0	0
COL	42	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0
 NUMBER OF OFF-LINE PRINT RECORDS 50
 NUMBER OF SYMBOLS, DEF 80,DEFOP 0,UNDEF 0

REM AST

AST

***** FORTRAN II SECTION SIX *****F6M00010

FORTRAN 2 RECORD 112 - OP TABLES. F6M00011

CONTROL ENTERS THIS RECORD DURING SECOND PASS OF CIT TAPE. F6M00012

TABLE OF SHARE OPERATION CODES F6M00014

		00174	N	EQU	124			F6M00020
		01400		ORG	SOPR			F6M00030
01400	0	56000	0	LDQ	OPRL	STORE NEW INSTRUCTION IN SRCH.		F6M00040
01401	-0	60000	0	STQ	SRCH			F6M00050
01402	0	53400	1	LXA	OPRS,1	SET XR1 EQUAL 16.		F6M00060
01403	-0	53400	2	LXD	OPRS,2	SET XR2 EQUAL 64.		F6M00070
						DOES OP COMPARE.		F6M00080
01404	0	34000	2	OPRT	CAS SYMOP,2			F6M00081
01405	1	77776	1	TXI	LOWER,1,-2	NO, SELECT NEW OP FROM OP TABLE.		F6M00090
01406	0	02000	0	TRA	OPRF	YES, GO TO OPRF TO SELECT ABSOLUTE OP.		F6M00100
01407	1	77776	1	TXI	RAISE,1,-2			F6M00110
01410	-0	50000	2	OPRF	CAL ABSOP,2	SELECT ABSOLUTE OP AND RETURN		F6M00120
01411	0	02000	4	TRA	2,4			F6M00130
01412	-3	00174	2	OPRL	TXL OPRT,2,N	TO PROGRAM.		F6M00140
01413	0	00100	0	OPRS	16,0,64			F6M00150
		01460		ORG	SYMOP-N			F6M00160
01460	000000	212343		OPTBL	BCD 1000ACL			F6M00170
01461	000000	212424			BCD 1000ADD			F6M00180
01462	000000	212444			BCD 1000ADM			F6M00190
01463	000000	214362			BCD 1000ALS			F6M00200
01464	000000	214521			BCD 1000ANA			F6M00210
01465	000000	214562			BCD 1000ANS			F6M00220
01466	000000	215162			BCD 1000ARS			F6M00230
01467	000000	226263			BCD 1000BST			F6M00240
01470	000000	232124			BCD 1000CAD			F6M00250
01471	000000	232143			BCD 1000CAL			F6M00260
01472	000000	232162			BCD 1000CAS			F6M00270
01473	000000	232626			BCD 1000CFE			F6M00280
01474	000000	233062			BCD 1000CHS			F6M00290
01475	000000	234321			BCD 1000CLA			F6M00300
01476	000000	234344			BCD 1000CLM			F6M00310
01477	000000	234362			BCD 1000CLS			F6M00320
01500	000000	234644			BCD 1000COM			F6M00330
01501	000000	234770			BCD 1000CPY			F6M00340
01502	000000	242363			BCD 1000DCT			F6M00350
01503	000000	246530			BCD 1000DVH			F6M00360
01504	000000	246547			BCD 1000DVP			F6M00370
01505	000000	256344			BCD 1000ETM			F6M00380
01506	000000	262124			BCD 1000FAD			F6M00390
01507	000000	262430			BCD 1000FDH			F6M00400
01510	000000	262447			BCD 1000FDP			F6M00410
01511	000000	264447			BCD 1000FMP			F6M00420
01512	000000	264651			BCD 1000FOR			F6M00430
01513	000000	266222			BCD 1000FSB			F6M00440
01514	000000	266525			BCD 1000FVE			F6M00450
01515	000000	304751			BCD 1000HPR			F6M00460
01516	000000	306351			BCD 1000HTR			F6M00470

01517	000000314624	BCD 1000IOD	F6M00490
01520	000000432263	BCD 1000LBT	F6M00500
01521	000000432421	BCD 1000LDA	F6M00510
01522	000000432450	BCD 1000LDQ	F6M00520
01523	000000432743	BCD 1000LGL	F6M00530
01524	000000434362	BCD 1000LLS	F6M00540
01525	000000435162	BCD 1000LRS	F6M00550
01526	000000436344	BCD 1000LTM	F6M00560
01527	000000436721	BCD 1000LXA	F6M00570
01530	000000436724	BCD 1000LXD	F6M00580
01531	000000444645	BCD 1000MON	F6M00590
01532	000000444751	BCD 1000MPR	F6M00600
01533	000000444770	BCD 1000MPY	F6M00610
01534	000000446225	BCD 1000MSE	F6M00620
01535	000000446330	BCD 1000MTH	F6M00630
01536	000000446366	BCD 1000MTW	F6M00640
01537	000000447125	BCD 1000MZE	F6M00650
01540	000000454647	BCD 1000NOP	F6M00660
01541	000000456351	BCD 1000NTR	F6M00670
01542	000000465121	BCD 1000ORA	F6M00680
01543	000000465162	BCD 1000ORS	F6M00690
01544	000000472167	BCD 1000PAX	F6M00700
01545	000000472263	BCD 1000PBT	F6M00710
01546	000000472467	BCD 1000PDX	F6M00720
01547	000000474645	BCD 1000PON	F6M00730
01550	000000476225	BCD 1000PSE	F6M00740
01551	000000476330	BCD 1000PTH	F6M00750
01552	000000476366	BCD 1000PTW	F6M00760
01553	000000476724	BCD 1000PXD	F6M00770
01554	000000477125	BCD 1000PZE	F6M00780
01555	000000512324	BCD 1000RCD	F6M00790
01556	000000512451	BCD 1000RDR	F6M00800
01557	000000512462	BCD 1000RDS	F6M00810
01560	000000512566	BCD 1000REW	F6M00820
01561	000000514524	BCD 1000RND	F6M00830
01562	000000514751	BCD 1000RPR	F6M00840
01563	000000515043	BCD 1000RQL	F6M00850
01564	000000516322	BCD 1000RTB	F6M00860
01565	000000516324	BCD 1000RTD	F6M00870
01566	000000516363	BCD 1000RTT	F6M00880
01567	000000606060	BCD 1000	F6M00890
01570	000000622244	BCD 1000SBM	F6M00900
01571	000000623167	BCD 1000SIX	F6M00910
01572	000000624326	BCD 1000SLF	F6M00920
01573	000000624345	BCD 1000SLN	F6M00930
01574	000000624350	BCD 1000SLQ	F6M00940
01575	000000624363	BCD 1000SLT	F6M00950
01576	000000624366	BCD 1000SLW	F6M00960
01577	000000624751	BCD 1000SPR	F6M00970
01600	000000624763	BCD 1000SPT	F6M00980
01601	000000624764	BCD 1000SPU	F6M00990
01602	000000626244	BCD 1000SSM	F6M01000
01603	000000626247	BCD 1000SSP	F6M01010
01604	000000626321	BCD 1000STA	F6M01020

01605	000000626324	BCD	1000STD		F6M01030
01606	000000626346	BCD	1000STO		F6M01040
01607	000000626347	BCD	1000STP		F6M01050
01610	000000626350	BCD	1000STQ		F6M01060
01611	000000626371	BCD	1000STZ		F6M01070
01612	000000626422	BCD	1000SUB		F6M01080
01613	000000626545	BCD	1000SVN		F6M01090
01614	000000626663	BCD	1000SWT		F6M01100
01615	000000626724	BCD	1000SXD		F6M01110
01616	000000633167	BCD	1000TIX		F6M01120
01617	000000634350	BCD	1000TLQ		F6M01130
01620	000000634431	BCD	1000TMI		F6M01140
01621	000000634546	BCD	1000TNO		F6M01150
01622	000000634567	BCD	1000TNX		F6M01160
01623	000000634571	BCD	1000TNZ		F6M01170
01624	000000634665	BCD	1000TOV		F6M01180
01625	000000634743	BCD	1000TPL		F6M01190
01626	000000635046	BCD	1000TQO		F6M01200
01627	000000635047	BCD	1000TQP		F6M01210
01630	000000635121	BCD	1000TRA		F6M01220
01631	000000636267	BCD	1000TSX		F6M01230
01632	000000636351	BCD	1000TTR		F6M01240
01633	000000636730	BCD	1000TXH		F6M01250
01634	000000636731	BCD	1000TXI		F6M01260
01635	000000636743	BCD	1000TXL		F6M01270
01636	000000637125	BCD	1000TZE		F6M01280
01637	000000642621	BCD	1000UFA		F6M01290
01640	000000642644	BCD	1000UFM		F6M01300
01641	000000642662	BCD	1000UFS		F6M01310
01642	000000662451	BCD	1000WDR		F6M01320
01643	000000662526	BCD	1000WEF		F6M01330
01644	000000664751	BCD	1000WPR		F6M01340
01645	000000664764	BCD	1000WPU		F6M01350
01646	000000665162	BCD	1000WRS		F6M01360
01647	000000666322	BCD	1000WTB		F6M01370
01650	000000666324	BCD	1000WTD		F6M01380
01651	000000666362	BCD	1000WTS		F6M01390
01652	000000666365	BCD	1000WTV		F6M01400
01653	000000673163	BCD	1000XIT		F6M01410
	01720	ORG	ABSOP-N		F6M01420
01720	+036100000000	OCT	+036100000000	ACL	F6M01430
01721	+040000000000	OCT	+040000000000	ADD	F6M01440
01722	+040100000000	OCT	+040100000000	ADM	F6M01450
01723	+076700000000	OCT	+076700000000	ALS	F6M01460
01724	-032000000000	OCT	-032000000000	ANA	F6M01470
01725	+032000000000	OCT	+032000000000	ANS	F6M01480
01726	+077100000000	OCT	+077100000000	ARS	F6M01490
01727	+076400000200	OCT	+076400000200	BST	F6M01500
01730	-070000000000	OCT	-070000000000	CAD	F6M01510
01731	-050000000000	OCT	-050000000000	CAL	F6M01520
01732	+034000000000	OCT	+034000000000	CAS	F6M01530
01733	+076000000030	OCT	+076000000030	CFE	F6M01540
01734	+076000000002	OCT	+076000000002	CAS	F6M01550
01735	+050000000000	OCT	+050000000000	CLA	F6M01560

01736	+076000000000	OCT	+076000000000	CLM	F6M01570
01737	+050200000000	OCT	+050200000000	CLS	F6M01580
01740	+076000000006	OCT	+076000000006	COM	F6M01590
01741	+070000000000	OCT	+070000000000	CPY	F6M01600
01742	+076000000012	OCT	+076000000012	DCT	F6M01610
01743	+022000000000	OCT	+022000000000	DVH	F6M01620
01744	+022100000000	OCT	+022100000000	DVP	F6M01630
01745	+076000000007	OCT	+076000000007	ETM	F6M01640
01746	+030000000000	OCT	+030000000000	FAD	F6M01650
01747	+024000000000	OCT	+024000000000	FDH	F6M01660
01750	+024100000000	OCT	+024100000000	FDP	F6M01670
01751	+026000000000	OCT	+026000000000	FMP	F6M01680
01752	-000000000000	OCT	-000000000000	FOR	F6M01690
01753	+030200000000	OCT	+030200000000	FSB	F6M01700
01754	-100000000000	OCT	-100000000000	FVE	F6M01710
01755	+042000000000	OCT	+042000000000	HPR	F6M01720
01756	+000000000000	OCT	+000000000000	HTR	F6M01730
01757	+076600000333	OCT	+076600000333	IOD	F6M01740
01760	+076000000001	OCT	+076000000001	LBT	F6M01750
01761	+046000000000	OCT	+046000000000	LDA	F6M01760
01762	+056000000000	OCT	+056000000000	LDQ	F6M01770
01763	-076300000000	OCT	-076300000000	LGL	F6M01780
01764	+076300000000	OCT	+076300000000	LLS	F6M01790
01765	+076500000000	OCT	+076500000000	LRS	F6M01800
01766	-076000000007	OCT	-076000000007	LTM	F6M01810
01767	+053400000000	OCT	+053400000000	LXA	F6M01820
01770	-053400000000	OCT	-053400000000	LXD	F6M01830
01771	-100000000000	OCT	-100000000000	MON	F6M01840
01772	-020000000000	OCT	-020000000000	MPR	F6M01850
01773	+020000000000	OCT	+020000000000	MPY	F6M01860
01774	-076000000000	OCT	-076000000000	MSE	F6M01870
01775	-300000000000	OCT	-300000000000	MTH	F6M01880
01776	-200000000000	OCT	-200000000000	MTW	F6M01890
01777	-000000000000	OCT	-000000000000	MZE	F6M01900
02000	+076100000000	OCT	+076100000000	NOP	F6M01910
02001	+100000000000	OCT	+100000000000	NTR	F6M01920
02002	-050100000000	OCT	-050100000000	ORA	F6M01930
02003	-060200000000	OCT	-060200000000	ORS	F6M01940
02004	+073400000000	OCT	+073400000000	PAX	F6M01950
02005	-076000000001	OCT	-076000000001	PBT	F6M01960
02006	-073400000000	OCT	-073400000000	PDX	F6M01970
02007	+100000000000	OCT	+100000000000	PON	F6M01980
02010	+076000000000	OCT	+076000000000	PSE	F6M01990
02011	+300000000000	OCT	+300000000000	PTH	F6M02000
02012	+200000000000	OCT	+200000000000	PTW	F6M02010
02013	-075400000000	OCT	-075400000000	PXD	F6M02020
02014	+000000000000	OCT	+000000000000	PZE	F6M02030
02015	+076200000321	OCT	+076200000321	RCD	F6M02040
02016	+076200000300	OCT	+076200000300	RDR	F6M02050
02017	+076200000000	OCT	+076200000000	RDS	F6M02060
02020	+077200000200	OCT	+077200000200	REW	F6M02070
02021	+076000000010	OCT	+076000000010	RND	F6M02080
02022	+076200000361	OCT	+076200000361	RPR	F6M02090
02023	-077300000000	OCT	-077300000000	RQL	F6M02100

02024	+076200000220	OCT	+076200000220	RTB	F6M02110
02025	+076200000200	OCT	+076200000200	RTD	F6M02120
02026	-076000000012	OCT	-076000000012	RTT	F6M02130
02027	+000000000000	OCT	+000000000000		F6M02140
02030	-040000000000	OCT	-040000000000	SBM	F6M02150
02031	-200000000000	OCT	-200000000000	SIX	F6M02160
02032	+076000000140	OCT	+076000000140	SLF	F6M02170
02033	+076000000140	OCT	+076000000140	SLN	F6M02180
02034	-062000000000	OCT	-062000000000	SLQ	F6M02190
02035	-076000000140	OCT	-076000000140	SLT	F6M02200
02036	+062000000000	OCT	+062000000000	SLW	F6M02210
02037	+076000000360	OCT	+076000000360	SPR	F6M02220
02040	+076000000360	OCT	+076000000360	SPT	F6M02230
02041	+076000000340	OCT	+076000000340	SPU	F6M02240
02042	-076000000003	OCT	-076000000003	SSM	F6M02250
02043	+076000000003	OCT	+076000000003	SSP	F6M02260
02044	+062100000000	OCT	+062100000000	STA	F6M02270
02045	+062200000000	OCT	+062200000000	STD	F6M02280
02046	+060100000000	OCT	+060100000000	STO	F6M02290
02047	+063000000000	OCT	+063000000000	STP	F6M02300
02050	-060000000000	OCT	-060000000000	STQ	F6M02310
02051	+060000000000	OCT	+060000000000	STZ	F6M02320
02052	+040200000000	OCT	+040200000000	SUB	F6M02330
02053	-300000000000	OCT	-300000000000	SVN	F6M02340
02054	+076000000160	OCT	+076000000160	SWT	F6M02350
02055	-063400000000	OCT	-063400000000	SXD	F6M02360
02056	+200000000000	OCT	+200000000000	TIK	F6M02370
02057	+004000000000	OCT	+004000000000	TLQ	F6M02380
02060	-012000000000	OCT	-012000000000	TMI	F6M02390
02061	-014000000000	OCT	-014000000000	TNO	F6M02400
02062	-200000000000	OCT	-200000000000	TNX	F6M02410
02063	-010000000000	OCT	-010000000000	TNZ	F6M02420
02064	+014000000000	OCT	+014000000000	TOV	F6M02430
02065	+012000000000	OCT	+012000000000	TPL	F6M02440
02066	+016100000000	OCT	+016100000000	TQO	F6M02450
02067	+016200000000	OCT	+016200000000	TQP	F6M02460
02070	+002000000000	OCT	+002000000000	TRA	F6M02470
02071	+007400000000	OCT	+007400000000	TSX	F6M02480
02072	+002100000000	OCT	+002100000000	TTR	F6M02490
02073	+300000000000	OCT	+300000000000	TXH	F6M02500
02074	+100000000000	OCT	+100000000000	TXI	F6M02510
02075	-300000000000	OCT	-300000000000	TXL	F6M02520
02076	+010000000000	OCT	+010000000000	TZE	F6M02530
02077	-030000000000	OCT	-030000000000	UFA	F6M02540
02100	-026000000000	OCT	-026000000000	UFM	F6M02550
02101	-030200000000	OCT	-030200000000	UFS	F6M02560
02102	+076600000300	OCT	+076600000300	WDR	F6M02570
02103	+077000000200	OCT	+077000000200	WEF	F6M02580
02104	+076600000361	OCT	+076600000361	WPR	F6M02590
02105	+076600000341	OCT	+076600000341	WPU	F6M02600
02106	+076600000000	OCT	+076600000000	WRS	F6M02610
02107	+076600000220	OCT	+076600000220	WTB	F6M02620
02110	+076600000200	OCT	+076600000200	WTD	F6M02630
02111	+076600000320	OCT	+076600000320	WTS	F6M02640

02112 +076600000030
02113 +002100000000
01400

OCT +076600000030
OCT +002100000000
END SOPR

WTV
XIT

F6M02650
F6M02660
F6M02670

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	274	0	0	0	0
LIB	0	0	0	0	0
COL	274	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 282

NUMBER OF SYMBOLS, DEF 77,DEFOP 0,UNDEF 0
REM AST

AST

***** FORTRAN II SECTION SIX *****F6N00010

FORTRAN 2 RECORD 113 - SECOND PASS OF CIT TAPE. F6N00011

SECOND PASS OVER CIT TAPE F6N00012

			00210	ORG	136		F6N00030
	00210	0	77200	0	00204	REW 4	F6N00040
	00211	0	50000	0	00170	CLA LIFN	F6N00050
	00212	0	62100	0	00332	STA SA9	F6N00060
	00213	0	62100	0	00554	STA SL9	F6N00070
T	00214	-0	75400	0	00000	PXD	F6N00080
	00215	0	60100	0	00166	STO L1	F6N00090
	00216	0	60100	0	00167	STO L2	F6N00100
	00217	0	53400	2	00224	LXA RDC,2	F6N00110
	00220	0	02000	0	00225	TRA RD	F6N00120
	00221	0	76400	0	00204	ERR BST 4	F6N00130
	00222	2	00001	2	00225	TIX RD,2,1	F6N00140
	00223	0	07400	4	00004	TSX 4,4	F6N00150
	00224	0	42000	0	00005	RDC HPR 5	F6N00160
	00225	0	76200	0	00224	RD RTB 4	F6N00170
	00226	0	53400	4	00164	LXA ADDR,4	F6N00180
	00227	0	70000	4	01256	RD1 CPY REC-2,4	F6N00190
	00230	1	00001	4	00227	TXI RD1,4,1	F6N00200
	00231	0	02000	0	00571	TRA EOF	F6N00210
	00232	0	77100	0	00377	ARS 255	F6N00220
	00233	0	77100	0	00377	ARS 255	F6N00230
	00234	-0	76000	0	00012	RTT	F6N00240
	00235	0	02000	0	00221	TRA ERR	F6N00250
	00236	-0	63400	4	00565	SXD RD2,4	F6N00260
	00237	-0	53400	4	00164	LXD ADDR,4	F6N00270
	00240	-0	63400	4	00567	RD4 SXD RD3,4	F6N00280
	00241	0	50000	4	01257	CLA REC-1,4	F6N00290
	00242	0	60100	0	00727	STO SL	F6N00300
	00243	0	50000	4	01256	CLA REC-2,4	F6N00310
	00244	0	60100	0	00726	STO OP	F6N00320
	00245	0	50000	4	01255	CLA REC-3,4	F6N00330
	00246	0	60100	0	00730	STO SA	F6N00340
	00247	0	50000	4	01254	CLA REC-4,4	F6N00350
	00250	0	60100	0	00731	STO RA	F6N00360
T	00251	-0	75400	0	00000	PXD	F6N00370
	00252	0	60100	0	00174	STO EA	F6N00380
	00253	0	60100	0	00732	STO RBIT	F6N00390
	00254	0	60100	0	00733	STO CBIT	F6N00400
	00255	-0	50000	0	00726	CAL OP	F6N00410
	00256	0	76500	0	00022	LRS 18	F6N00420
	00257	0	34000	0	00721	CAS OCT	F6N00430
	00260	0	02000	0	00265	TRA SA1	F6N00440
	00261	0	02000	0	00513	TRA DATOP	F6N00450
	00262	0	34000	0	00723	CAS BCD	F6N00460
	00263	0	02000	0	00265	TRA SA1	F6N00470
	00264	0	02000	0	00513	TRA DATOP	F6N00480
	00265	-0	50000	0	00730	SA1 CAL SA	F6N00490
	00266	0	10000	0	00341	TZE OPCAS	F6N00500
	00267	0	76500	0	00036	LRS 30	F6N00510

00270	0	10000	0	00323	TZE SA3	TRANSFER IF SA(1) EQUAL ZERO.	F6N00520
00271	0	73400	4	00000	PAX 0,4		F6N00530
00272	3	00017	4	00301	TXH SA4,4,15	TRANSFER IF SA(1) GREATER THAN 15.	F6N00540
00273	3	00016	4	00335	TXH SAB,4,14	TRANSFER IF SA(1) EQUAL 15.	F6N00550
00274	-0	77300	0	00016	SA6 RQL 14	SA(1) LESS THAN 15. ASSEMBLE SYMBOL AND GO	F6N00560
00275	-0	76300	0	00021	LGL 17	OBTAIN LOC FROM	F6N00570
00276	0	07400	4	00121	SA7 TSX STIV,4	TIV.	F6N00580
00277	0	07400	4	00004	TSX 4,4	ERROR,IF NOT IN TIV.	F6N00590
00300	0	02000	0	00336	TRA SA2	SA(1) GREATER THAN 15.	F6N00600
00301	0	50000	0	00730	SA4 CLA SA	SA(1) GREATER THAN 15	F6N00610
00302	0	40200	0	00321	SUB DOL1		F6N00620
00303	0	10000	0	00314	TZE LIB10	TRANSFER IF SA EQUAL DOL1 OR DOL2.	F6N00630
00304	0	40000	0	00321	ADD DOL1		F6N00640
00305	0	40200	0	00322	SUB DOL2		F6N00650
00306	0	10000	0	00316	TZE LIB11		F6N00660
00307	0	50000	0	00730	CLA SA		F6N00670
00310	0	07400	4	00142	TSX SDEV,4	OBTAIN LOC FROM	F6N00680
00311	0	07400	4	00103	TSX STEV,4	TEV OR DEV.	F6N00690
00312	0	07400	4	00004	TSX 4,4	ERROR IF NOT IN DEV OR TEV.	F6N00700
00313	0	02000	0	00336	TRA SA2		F6N00710
00314	0	50000	0	00204	LIB10 CLA DOLSI	LOCATION FROM ADDRESS OF DOLSI.	F6N00720
00315	0	02000	0	00336	TRA SA2		F6N00730
00316	0	50000	0	00204	LIB11 CLA DOLSI		F6N00740
00317	0	77100	0	00022	ARS 18	LOCATION FROM DECREMENT OF DOLSI.	F6N00750
00320	0	02000	0	00336	TRA SA2		F6N00760
00321	5360000000000				DOL1 BCD 1\$ 0000		F6N00770
00322	5353600000000				DOL2 BCD 1\$\$ 000		F6N00780
00323	0	53400	4	00730	SA3 LXA SA,4	SA(1) EQUAL ZERO.	F6N00790
00324	-3	00000	4	00331	TXL SA5,4,0	IFN TEST. TRANSFER TO OBTAIN RELOCAT. LOC. FROM	F6N00800
						IFN.	F6N00801
00325	-0	76300	0	00015	LGL 13	IFN WITH RELATIVE LOCATION. ASSEMBLE SYMBOLIC	F6N00810
00326	-0	77300	0	00012	RQL 10	ADDRESS AND GO	F6N00820
00327	-0	76300	0	00006	LGL 6	OBTAIN LOC FROM TIV.	F6N00830
00330	0	02000	0	00276	TRA SA7		F6N00840
00331	-0	53400	4	00730	SA5 LXD SA,4	OBTAIN LOC FROM	F6N00850
00332	0	50000	4		SA9 CLA IFN,4	IFN TABLE.	F6N00860
00333	0	77100	0	00022	ARS 18		F6N00870
00334	0	02000	0	00336	TRA SA2		F6N00880
00335	0	50000	0	00166	SAB CLA L1	SA(1) EQUAL 15, SET LOCATION EQUAL L1.	F6N00890
00336	0	62100	0	00174	SA2 STA EA	STORE LOCATION IN ADDRESS OF EA.	F6N00900
00337	0	50000	0	00163	CLA TWO	SET RBIT AS RELOCATABLE.	F6N00910
00340	0	60100	0	00732	STO RBIT		F6N00920
00341	-0	50000	0	00726	OPCAS CAL OP	ALL OPS NOT OCT OR BCD.	F6N00930
00342	0	76500	0	00022	LRS 18		F6N00940
00343	0	34000	0	00720	CAS SYN	TEST FOR OP EQUAL SYN OR BSS.	F6N00950
00344	0	02000	0	00351	TRA ORDOP		F6N00960
00345	0	02000	0	00515	TRA SYNOP	TRANSFER TO SYNOP IF OP EQUAL SYN.	F6N00970
00346	0	34000	0	00722	CAS BSS		F6N00980
00347	0	02000	0	00351	TRA ORDOP		F6N00990
00350	0	02000	0	00503	TRA BSSOP	TRANSFER TO BSSOP IF OP EQUAL BSS.	F6N01000
00351	0	07400	4	01400	ORDOP TSX SOPR,4	SEARCH FOR OP.	F6N01010
00352	0	07400	4	00004	TSX 4,4	ERROR IF NOT FOUND.	F6N01020
00353	0	60200	0	00734	SLW WORD	STORE OCT OP.	F6N01030
00354	0	50000	0	00731	CLA RA	COMPUTE ADDRESS EQUAL	F6N01040

00355	0	77100	0	00022	ARS 18	TO LOC. PLUS RELATIVE ADDRESS.	F6N01050
00356	0	40000	0	00174	ADD EA		F6N01060
00357	0	60100	0	00735	STO TEST1	SAVE ADDRESS IN TEST 1	F6N01070
00360	0	50000	0	00174	CLA EA	LOCATION GREATER THAN PGBK	F6N01080
00361	0	40200	0	00176	SUB PGBK		F6N01090
00362	0	12000	0	00375	TPL COMM	YES, TRANSFER	F6N01100
00363	0	50000	0	00735	CLA TEST1	NO, SEE IF	F6N01110
00364	0	40200	0	00176	SUB PGBK	ADDRESS GREATER THAN PGBK.	F6N01120
00365	0	12000	0	00372	TPL LIB40	YES, GO TO STORE ONE IN CBIT	F6N01130
00366	0	02000	0	00367	TRA LIB50	NO, CBIT=0	F6N01140
00367	0	50000	0	00735	LIB50 CLA TEST1		F6N01150
00370	0	76500	0	00017	LRS 15		F6N01160
00371	0	02000	0	00404	TRA TG		F6N01170
00372	0	50000	0	00162	LIB40 CLA ONE		F6N01180
00373	0	60100	0	00733	STO CBIT	STORE 1 IN CBIT	F6N01190
00374	0	02000	0	00367	TRA LIB50		F6N01200
00375	0	50000	0	00735	COMM CLA TEST1		F6N01210
00376	0	12000	0	00400	TPL TA		F6N01220
00377	0	40000	0	00724	ADD TAG	IF NEG MAKE COMP	F6N01230
00400	0	76500	0	00017	TA LRS 15	TEST FOR COMP	F6N01240
00401	0	10000	0	00404	TZE TG	ADDRESS.	F6N01250
00402	0	50000	0	00162	CLA ONE		F6N01260
00403	0	60100	0	00733	STO CBIT	INDICATE COMP DATA.	F6N01270
00404	-0	50000	0	00731	TG CAL RA	COMBINE TAG, BINARY	F6N01280
00405	0	76500	0	00003	LRS 3	DECREMENT, ADDRESS, AND	F6N01290
00406	-0	50000	0	00726	CAL OP	OP.	F6N01300
00407	0	76300	0	00022	LLS 18		F6N01310
00410	-0	50100	0	00734	ORA WORD		F6N01320
00411	0	60200	0	00734	STORE SLW WORD	STORE INSTRUCTION.	F6N01330
00412	0	50000	0	00166	CLA L1	UPDATE PROG CTR	F6N01340
00413	0	60100	0	00167	STO L2	AND PROGRAM BREAK	F6N01350
00414	0	40000	0	00162	ADD ONE	FOR ALL OPS.	F6N01360
00415	0	60100	0	00166	STO L1		F6N01370
00416	-0	53400	4	00512	RLCPU LXD RLC1,4	MODIFY RLC4.	F6N01380
00417	2	00001	4	00431	TIX RLC2,4,1	TRANSFER IF RLC1 NOT ZERO.	F6N01390
00420	0	50000	0	00461	CLA RLC3	RLC1 IS ZERO SO	F6N01400
00421	0	62200	0	00512	STD RLC1	INITIALIZE IT TO 20.	F6N01410
00422	-0	53400	4	00502	LXD WCT,4	SET INDEX REGISTER 4, DECREMENT OF	F6N01420
00423	-0	75400	0	00000	PXD	RLCB AND RLC6 EQUAL ZERO.	F6N01430
00424	-0	63400	4	00501	SXD RLC8,4		F6N01440
00425	0	62200	0	00514	STD RLC6	SET ABL AND ABR EQUAL ZERO.	F6N01450
00426	0	60200	4	00736	SLW ABL,4		F6N01460
00427	0	60200	4	00737	SLW ABR,4		F6N01470
00430	1	77776	4	00433	TXI RLC4,4,-2	MODIFY WORD COUNT.	F6N01480
00431	-0	63400	4	00512	RLC2 SXD RLC1,4	SAVE LENGTH OF CARD COUNT.	F6N01490
00432	-0	53400	4	00502	LXD WCT,4		F6N01500
00433	0	50000	0	00734	RLC4 CLA WORD	STORE INSTRUCTION IN ABL BLOCK	F6N01510
00434	0	60100	4	00736	STO ABL,4		F6N01520
00435	1	77777	4	00436	TXI RLC5,4,-1	MODIFY WORD COUNT	F6N01530
00436	-0	63400	4	00502	RLC5 SXD WCT,4	SAVE NEW WORD COUNT.	F6N01540
00437	-0	53400	4	00514	LXD RLC6,4	MODIFY RELOCATION BITS	F6N01550
00440	1	00002	4	00441	TXI RLC7,4,2	COUNT.	F6N01560
00441	-0	63400	4	00514	RLC7 SXD RLC6,4	SAVE RELO. BITS COUNT.	F6N01570
00442	0	50000	0	00732	CLA RBIT	TEST RELOCATION BIT.	F6N01580

	00443	0	10000	0	00455	TZE	RLCC		TRANSFER IF ZERO.	F6N01590
	00444	-0	50100	0	00733	ORA	CBIT			F6N01600
	00445	1	00001	4	00446	TXI	RLCB,4,1		MODIFY RELOC. BITS COUNT	F6N01610
	00446	-0	63400	4	00514	SXD	RLC6,4	RLCB		F6N01620
	00447	0	76500	0	00043	LRS	35			F6N01630
	00450	-0	76300	4	00110	LGL	72,4		MAKE ABR AND ABL RELATIVE BY	F6N01640
	00451	-0	53400	4	00501	LXD	RLC8,4		STORING RELOCATION BITS.	F6N01650
	00452	-0	60200	4	00736	ORS	ABL,4		STORE RELO BITS	F6N01660
	00453	-0	76300	0	00044	LGL	36			F6N01670
	00454	-0	60200	4	00737	ORS	ABR,4			F6N01680
	00455	-0	53400	4	00514	LXD	RLC6,4	RLCC	TEST IF TOO MANY RELOCATABLE	F6N01690
	00456	3	00104	4	00462	TXH	ST8,4,68		BITS TO PUNCH COMPLETE CARD. YES, TRANSFER.	F6N01700
	00457	-0	53400	4	00502	LXD	WCT,4		NO, TEST END OF PUNCH BLOCK.	F6N01710
	00460	-3	77622	4	00464	ST2	TXL ST3,4,-110		IF BLOCK FULL, TRANSFER TO ST 3.	F6N01720
	00461	1	00024	0	00521	RLC3	TXI SLS,0,20		RETURN TO GET SL	F6N01730
	00462	-0	53400	4	00502	ST8	LXD WCT,4		TEST WCT FOR ZERO.	F6N01740
D	00463	-3	00000	4	00475		TXL ST4,4			F6N01750
	00464	-0	75400	4	00000	ST3	PXD 0,4		COMPUTE LAST ADDRESS	F6N01760
	00465	0	76000	0	00006	COM			IN BLOCK (UNCOMPLEMENT WORD COUNT),	F6N01770
	00466	-0	73400	4	00000	PDX	0,4			F6N01780
	00467	1	00736	4	00470	TXI	STD,4,ABL			F6N01790
	00470	-0	63400	4	00473	STD	SXD ST5,4		SAVE IT.	F6N01800
	00471	-0	63400	4	00473		SXD ST5,4			F6N01810
	00472	0	07400	4	00600		TSX ABPCH,4		EXIT TO PUNCH CARD	F6N01820
	00473	0	00000	0	00736	ST5	ABL			F6N01830
	00474	0	42000	0	00000	ST6	HPR			F6N01840
	00475	0	50000	0	00166	ST4	CLA L1		SET ADDRESS PART OF	F6N01850
	00476	0	62100	0	00474	STA	ST6		ST6 TO PROGRAM BREAK.	F6N01860
T	00477	-0	63400	0	00502		SXD WCT		SET WCT, RLC1 TO	F6N01870
T	00500	-0	63400	0	00512		SXD RLC1		ZERO.	F6N01880
TD	00501	1	00000	0	00521	RLC8	TXI SLS		RETURN TO GET SL.	F6N01890
	00502	0	00000	0	00000	WCT	HTR 0			F6N01900
	00503	0	50000	0	00166	BSSOP	CLA L1		OP IS BSS.	F6N01910
	00504	0	60100	0	00167	STO	L2		STORE PROGRAM COUNTER,	F6N01920
	00505	0	50000	0	00731	CLA	RA		UPDATE PROG BREAK,	F6N01930
	00506	0	10000	0	00521	TZE	SLS		AND GO TO PUNCH	F6N01940
	00507	0	77100	0	00022	ARS	18		ACARD IF NECESSARY,	F6N01950
	00510	0	40000	0	00166	ADD	L1		STORE NEW ADDRESS	F6N01960
	00511	0	60100	0	00166	STO	L1		FOR LOADING.	F6N01970
TD	00512	1	00000	0	00462	RLC1	TXI ST8			F6N01980
	00513	-0	50000	0	00730	DATOP	CAL SA		OCT OR BCD OP.	F6N01990
TD	00514	1	00000	0	00411	RLC6	TXI STORE			F6N02000
	00515	0	50000	0	00174	SYNOP	CLA EA		OP IS SYN.	F6N02010
	00516	0	60100	0	00167	STO	L2		SET PROG CTR EQUAL ADDRESS	F6N02020
	00517	-0	10000	0	00521	TNZ	SLS			F6N02030
	00520	0	07400	4	00004	TSX	4,4			F6N02040
	00521	-0	50000	0	00727	SLS	CAL SL		ALL OPS. TEST SL	F6N02050
	00522	0	10000	0	00563	TZE	SL6		TRANSFER IF SL IS ZERO.	F6N02060
	00523	0	76500	0	00036	LRS	30			F6N02070
	00524	0	10000	0	00535	TZE	SL1		TRANSFER IF SL(1) EQUAL ZERO.	F6N02080
	00525	0	73400	4	00000	PAX	0,4			F6N02090
	00526	3	00017	4	00552	TXH	SL2,4,15		SL(1) GREATER THAN 15.	F6N02100
	00527	3	00016	4	00563	TXH	SL3,4,14		SL(1) EQUAL 15.	F6N02110
	00530	-0	77300	0	00016	RQL	14		SL(1) LESS THAN 15. ASSEMBLE SYMBOL AND GO	F6N02120

	00531	-0	76300	0	00021		LGL	17	SEE IF ITS IN TIV.	F6N02130
	00532	0	07400	4	00121		TSX	STIV,4		F6N02140
	00533	0	02000	0	00563		TRA	SL6	NOT IN TABLE.	F6N02150
	00534	0	02000	0	00556		TRA	SL4	IN TABLE. GO STORE LOCATION IN EA.	F6N02160
	00535	0	53400	4	00727	SL1	LXA	SL,4	SL(1) EQUAL ZERO. TEST ADORESS PART OF SL.	F6N02170
D	00536	-3	00000	4	00553		TXL	SL7,4	ZERO. EXIT TO GET IFN LOCATION.	F6N02180
	00537	-0	76300	0	00015		LGL	13	NOT ZERO. ASSEMBLE SYMBOL	F6N02190
	00540	-0	77300	0	00012		RQL	10	AND GO SEARCH TIV TABLE.	F6N02200
	00541	-0	76300	0	00006		LGL	6		F6N02210
	00542	0	07400	4	00121		TSX	STIV,4		F6N02220
	00543	0	02000	0	00563		TRA	SL6	NOT IN TIV TABLE, SO TRANSFER.	F6N02230
	00544	0	62100	0	00174		STA	EA	IN TIV TABLE. RETURN WITH LOCATION	F6N02240
	00545	0	50000	0	00174		CLA	EA	IN ADDRESS. TEST ADDRESS.	F6N02250
	00546	-0	10000	0	00560		TNZ	SL5	TRANSFER IF NOT ZERO.	F6N02260
	00547	0	50000	0	00167	SL8	CLA	L2	ZERO. PUT L2 IN TIV TABLE AS LOCATION.	F6N02270
	00550	0	62100	2	02114		STA	TIV,2		F6N02280
	00551	0	02000	0	00563		TRA	SL6		F6N02290
	00552	0	02000	0	00563	SL2	TRA	SL6		F6N02300
	00553	-0	53400	4	00727	SL7	LXD	SL,4	IFN LOCATION.	F6N02310
U	00554	0	50000	4		SL9	CLA	IFN,4		F6N02320
	00555	0	77100	0	00022		ARS	18		F6N02330
	00556	0	62100	0	00174	SL4	STA	EA	CHECK STORED LOCATION (FROM TIV).	F6N02340
	00557	0	50000	0	00174		CLA	EA	EQUAL PROG CTR	F6N02350
	00560	0	40200	0	00167	SL5	SUB	L2	IF NOT EQUAL TO L2, GO TO ERROR HALT.	F6N02360
	00561	0	10000	0	00563		TZE	SL6		F6N02370
	00562	0	07400	4	00004		TSX	4,4		F6N02380
A					00563	SL3	BSS			F6N02390
A					00563	SL6	BSS			F6N02400
	00563	-0	53400	4	00567		LXD	RD3,4	MODIFY TO GET NEW CIT.	F6N02410
	00564	1	00004	4	00565		TXI	RD2,4,4		F6N02420
	00565	-3	00000	4	00240	RD2	TXL	RD4,4,**		F6N02430
	00566	0	53400	2	00224		LXA	RDC,2		F6N02440
	00567	1	00000	0	00225	RD3	TXI	RD,0,**		F6N02450
	00570	0	00000	0	00000	TEST6	HTR	0		F6N02460
	00571	0	50000	0	00574	EOF	CLA	LBT	SET RETURN OF ST4 TO EOT.	F6N02470
	00572	0	60100	0	00475		STO	ST4	IF NECESSARY ON END OF	F6N02480
	00573	0	02000	0	00462		TRA	ST8	FILE	F6N02490
TD	00574	1	00000	0	00575	LBT	TXI	EOT		F6N02500
	00575	0	77200	0	00204	EOT	REW	4	REWIND TAPE 4 AND RETURN TO LOADER.	F6N02510
	00576	0	76200	0	00221		RTB	1		F6N02520
	00577	0	02000	0	00004		TRA	4		F6N02530
	00600	-0	50000	4	00001	ABPCH	CAL	1,4	TO PUNCH CARD.	F6N02540
	00601	0	62200	0	00645		STD	PCH1	COMPUTE LAST ADDRESS PLUS ONE, AND	F6N02550
	00602	0	77100	0	00022		ARS	18	TOTAL WORD COUNT.	F6N02560
	00603	0	40000	0	00645		ADD	PCH1		F6N02570
	00604	0	62100	0	00617		STA	PCH2		F6N02580
	00605	0	62100	0	00635		STA	PCH3		F6N02590
	00606	-0	40000	4	00001		SBM	1,4		F6N02600
	00607	0	10000	4	00002		TZE	2,4	GO TO HALT IF WORD COUNT LESS	F6N02610
	00610	-0	12000	4	00002		TMI	2,4	THAN ONE.	F6N02620
	00611	0	73400	1	00000		PAX	0,1		F6N02630
	00612	0	50000	4	00002		CLA	2,4	OBTAIN FIRST ADDRESS.	F6N02640
	00613	0	76600	0	00223	PCH8	WTB	3	SELECT TAPE THREE.	F6N02650
	00614	0	62100	0	00646		STA	VR	SET LOADING ADDRESS.	F6N02660

	00615	0	76000	0	00000		CLM			F6N02670
	00616	0	53400	2	00645		LXA PCH1,2			F6N02680
	00617	0	36100	1	00000	PCH2	ACL 0,1	FORM CHECK SUM.		F6N02690
	00620	3	00025	2	00623		TXH PCH5,2,21			F6N02700
	00621	-2	00001	1	00623		TNX PCH5,1,1			F6N02710
	00622	1	00001	2	00617		TXI PCH2,2,1			F6N02720
	00623	-0	63400	2	00633	PCH5	SXD PCH6,2	STORE WORD COUNT.		F6N02730
	00624	1	77776	2	00625		TXI PCHR,2,-2			F6N02740
	00625	-0	63400	2	00646	PCHR	SXD VR,2			F6N02750
	00626	0	36100	0	00646		ACL VR			F6N02760
	00627	0	60200	0	00647		SLW SUM	STORE CHECK SUM.		F6N02770
	00630	0	70000	0	00646		CPY VR			F6N02780
	00631	0	70000	0	00647		CPY SUM			F6N02790
	00632	1	00002	2	00633		TXI PCH6,2,2			F6N02800
D	00633	1	00000	1	00634	PCH6	TXI PCH9,1			F6N02810
	00634	1	77777	1	00635	PCH9	TXI PCH3,1,-1			F6N02820
	00635	0	70000	1	00000	PCH3	CPY 0,1	COPY RECORD ONTO TAPE THREE.		F6N02830
	00636	2	00001	2	00634		TIX PCH9,2,1			F6N02840
	00637	0	50000	0	00646	PCH7	CLA VR	COMPUTE LOADING ADDRESS FOR NEXT CARD.		F6N02850
	00640	0	77100	0	00022		ARS 18			F6N02860
	00641	0	40000	0	00646		ADD VR			F6N02870
	00642	2	00001	1	00613		TIX PCH8,1,1			F6N02880
	00643	0	76600	0	00333		IOD			F6N02890
	00644	0	02000	4	00003		TRA 3,4	RETURN TO PROGRAM.		F6N02900
	00645	0	00000	0	00001	PCH1	HTR 1			F6N02910
ATD	00646	2	00000	0	00000	VR	TIX			F6N02920
	00647	0	00000	0	00000	SUM	HTR 0			F6N02930
					00613	WRS1	SYN PCH8			F6N02940
					00650		BSS 40			F6N02950
	00720	0000000627045				SYN	BCD 1000SYN			F6N02960
	00721	000000462363				OCT	BCD 1000OCT			F6N02970
	00722	000000226262				BSS	BCD 1000BSS			F6N02980
	00723	000000222324				BCD	BCD 1000BCD			F6N02990
TD	00724	0	00000	4	00000	TAG	HTR 0,4			F6N03000
	00725	2	00000	0	00000	TCD	TIX 0			F6N03010
	00726	0	00000	0	00000	OP	HTR 0			F6N03020
	00727	0	00000	0	00000	SL	HTR 0			F6N03030
	00730	0	00000	0	00000	SA	HTR 0			F6N03040
	00731	0	00000	0	00000	RA	HTR 0			F6N03050
	00732	0	00000	0	00000	RBIT	HTR 0			F6N03060
	00733	0	00000	0	00000	CBIT	HTR 0			F6N03070
	00734	0	00000	0	00000	WORD	HTR 0			F6N03080
	00735	0	00000	0	00000	TEST1	HTR 0			F6N03090
					00736	ABL	BSS 1			F6N03100
					00737	ABR	BSS 109			F6N03110
					01260	REC	BES 100			F6N03120
					01260	RLP	SYN REC			F6N03130
A					00000		END			F6N03140
					00001	0	IFN			

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	319	0	0	0	0

LIB	0	0	0	0	0
COL	319	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 328

NUMBER OF SYMBOLS, DEF 166,DEFOP 0,UNDEF 1
REM AST

LIBRARY SEARCH

00030 PC1 SYN 24
 00036 SUBIN SYN 30
 02114 ABSOP SYN 1100
 00162 ONE SYN 114
 00177 SW1 SYN 127
 02114 TRB SYN ABSOP
 00203 SW5 SYN 131
 00163 TWO SYN 115
 00161 ZERO SYN 113
 00210 ORG 136

00210 0 53400 1 00544 LXA RDC,1 SET DRUM READ ERROR COUNTER.
 00211 0 76200 0 00303 D5 RDR 3 SELECT DRUM 3 (TRANSFER VECTOR TABLE).
 00212 -0 75400 0 00000 A4 PXD 0 TRANSFER VECTOR
 00213 0 46000 0 00212 LDA A4
 00214 -0 70000 0 03133 CAD TVR-1 READ WORD COUNT OF TABLE INTO TVR-1.
 00215 0 76000 0 00006 COM
 00216 -0 70000 0 01001 CAD SUM
 00217 0 76000 0 00006 COM
 00220 0 10000 0 00223 TZE D4 NO READ ERROR.
 00221 2 00001 1 00211 TIX D5,1,1
 00222 0 07400 4 00774 TSX OUTER,4
 00223 -0 53400 1 03133 D4 LXD TVR-1,1 SET INDEX REG 1 WITH WORD CT. OF TRANS. VECTOR.
 00224 -3 00000 1 00475 TXL WEF,1 IFNO TRANSFER VECTOR, GO TO W.E.F.
 00225 0 53400 2 00544 LXA RDC,2
 00226 0 76200 0 00303 A5 RDR 3
 00227 -0 75400 0 00002 A6 PXD 2 READ TRANSFER
 00230 0 46000 0 00227 LDA A6 VECTOR INTO STORAGE, FIRST SUBROUTINE NAME INTO
 00231 -0 70000 1 03133 A7 CAD TVR-1,1 TVR-1-WD COUNT, LAST SUBR. NAME INTO TVR-2,
 00232 2 00001 1 00231 TIX A7,1,1
 00233 0 70000 0 01001 CPY SUM
 00234 0 76000 0 00006 COM
 00235 -0 70000 0 01001 CAD SUM
 00236 0 76000 0 00006 COM
 00237 0 10000 0 00242 TZE A8 TEST CHECK SUM.
 00240 2 00001 2 00226 TIX A5,2,1
 00241 0 07400 4 00774 TSX OUTER,4
 00242 0 50000 0 00203 A8 CLA SW5 CHECK SUM OKAY.
 00243 0 34000 0 00162 CAS ONE
 00244 0 02000 0 00247 TRA A1 GO TO TEST SENSE SWITCH FIVE.
 00245 0 02000 0 00252 TRA A3 1 IN SW5 MEANS ASSUME SENSE SWITCH 5 DOWN
 00246 0 02000 0 00463 TRA FINI 0 IN SW5 MEANS ASSUME SENSE SWITCH 5 IS UP.
 00247 0 76000 0 00165 A1 SWT 5 SENSE SWITCH 5 TEST.
 00250 0 02000 0 00463 TRA FINI UP.
 00251 0 02000 0 00252 TRA A3 DOWN.
 00252 0 76200 0 00221 A3 RTB 1 SPACE TAPE1 OVER EOF (THAT IS, OVER SYSTEM).
 00253 0 60000 0 01002 A10 STZ RCT
 00254 0 60000 0 01003 STZ LIBCT
 00255 0 50000 0 00162 CLA ONE
 00256 0 60100 0 01004 STO PASCT
 00257 0 60000 0 01005 LOOP1 STZ CTF

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00260	0	07400	4	00537	A11	TSX SUB1,4	READ TAPE1 RECORD.	F6P00540
00261	0	02000	0	00433		TRA EOF	RETURN HERE IF END OF FILE	F6P00550
00262	0	50000	0	01327		CLA BUFF-1	RETURN AT END OF RECORD TO EXAMINE FIRST WORD.	F6P00560
00263	-0	12000	0	00265		TMI A12	PROG. CARD TEST. FIRST WORD IS MINUS ON PROG. CARD.	F6P00570 F6P00580
00264	0	02000	0	00260		TRA A11	NOT A PROGRAM CARD. GO TO READ ANOTHER RECORD.	F6P00590
00265	0	62200	0	00335	A12	STD A18	PROGRAM CARD.	F6P00600
00266	0	62200	0	00303		STD A15	SAVE LENGTH OF RECORD (BITS 4-1B HAVE NO. OF	F6P00610
00267	-0	53400	1	01007		LXD FR4,1	WORDS IN RECORD EXCLUDING 9-ROW.	F6P00620
00270	0	50000	0	01325		CLA BUFF-3	SAVE LENGTH OF	F6P00630
00271	0	62200	0	01006		STD VLENG	TRANSFER VECTOR (ROW 8 DECREMENT).	F6P00640
00272	-0	53400	2	03133	A16	LXD TVR-1,2		F6P00650
00273	0	50000	1	01326		CLA BUFF-2,1	TEST FOR PRIMARY NAME ON PROG CARD.	F6P00660
00274	-0	12000	0	00302		TMI SEC	NOT PRIMARY NAME.	F6P00670
00275	0	50000	1	01327		CLA BUFF-1,1	YES, PRIMARY NAME. SELECT NAME AND	F6P00680
00276	0	34000	2	03133	A14	CAS TVR-1,2	COMPARE IT TO NAME IN TRANSFER VECTOR.	F6P00690
00277	0	02000	0	00301		TRA A13		F6P00700
00300	0	02000	0	00305		TRA EQ	FOUND ROUTINE, GO TO EQ.	F6P00710
00301	2	00001	2	00276	A13	TIX A14,2,1	NOT EQUAL, GO TO SELECT NEXT TR. VEC. NAME.	F6P00720
00302	1	00002	1	00303	SEC	TXI A15,1,2	NOT FOUND. GO TO TEST NEXT WORD ON CARD.	F6P00730
00303	-3	00303	1	00272	A15	TXL A16,1,*	ANY MORE WORDS ON PROG. CARO. IF YES, TRANSFER.	F6P00740
00304	0	02000	0	00260		TRA A11	NO MORE PRI. NAMES ON CARD. GO READ NEXT REC. OF LIBRARY TAPE.	F6P00750 F6P00760
00305	0	07400	4	00760	EQ	TSX ERASE,4	WHEN PRIM. NAME ON PROG. CARD EQUALS VARIABLE	F6P00770
00306	-0	63400	1	00322		SXD EQ2,1	NAME IN TRANS. VEC., GO ERASE NAME FROMTVR.	F6P00780
00307	0	53400	4	01003	EQ4	LXA LIBCT,4	SET XR4 EQUAL NO. OF LIB. ROUTINES FOUND.	F6P00790
00310	0	50000	1	01327		CLA BUFF-1,1	ENTER NAME OF FOUND SUBROUTINE IN LIBF TABLE.	F6P00800
00311	0	60100	4	03607		STO LIBF-1,4	AND ERASE NAME FROM	F6P00810
00312	0	50000	0	01003		CLA LIBCT	TVR TABLE	F6P00820
00313	0	40000	0	00162		ADD ONE	UPDATE LIBCT	F6P00830
00314	0	60100	0	01003		STO LIBCT		F6P00840
00315	0	50000	0	01005		CLA CTF	UPDATE CTP.	F6P00850
00316	0	40000	0	00162		ADD ONE		F6P00860
00317	0	60100	0	01005		STO CTF	OTHER NAMES ON CARD. NO, TRANSFER.	F6P00870
00320	-3	00004	1	00323		TXL EQ3,1,4		F6P00880
00321	1	77776	1	00307		TXI EQ4,1,-2	YES, GO ENTER IN LIBF.	F6P00890
00322	0	00000	0	00000	EQ2	HTR 0		F6P00900
00323	-0	53400	1	00322	EQ3	LXD EQ2,1		F6P00910
00324	0	02000	0	00334		TRA A18-1		F6P00920
00325	-0	53400	2	03133	A19	LXD TVR-1,2	OF THIS ROUTINE	F6P00930
00326	0	50000	1	01327		CLA BUFF-1,1	SELECT NAME ON PROGRAM CARD	F6P00940
00327	0	34000	2	03133	A17	CAS TVR-1,2	IS IT CALLED FOR BY TRANSFER VECTOR.	F6P00950
00330	0	02000	0	00332		TRA NO		F6P00960
00331	0	02000	0	00337		TRA YES	YES, TRANSFER.	F6P00970
00332	2	00001	2	00327	NO	TIX A17,2,1	NO, TEST FOR ANY MORE NAMES IN TR. VECTOR. YES, TRANSFER.	F6P00980 F6P00990
00333	0	07400	4	00506	A20	TSX LIBEN,4	NO, GO ENTER NAME IN LIBF IF NOT ALREADY THERE.	F6P01000
00334	1	00002	1	00335		TXI A18,1,2	INCREMENT PROG CARD COUNTER BY 2,	F6P01010
00335	-3	00335	1	00325	A18	TXL A19,1,*	THIS IS SET BY A12, CONTAINS NO. OF WORDS ON PROGRAM CARD.	F6P01020 F6P01030
00336	0	02000	0	00342		TRA A21	TRANS. WHEN ALL NAMES ON CARD HAVE BEEN CHECKED	F6P01040
00337	0	07400	4	00760	YES	TSX ERASE,4	ERASE NAME FROM TRANSFER VECTOR TABLE.	F6P01050
00340	0	50000	1	01327		CLA BUFF-1,1	SELECT SUBROUTINE NAME AND GO	F6P01060
00341	0	02000	0	00333		TRA A20	ENTER IT IN LIBF.	F6P01070

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00342	-0	53400	2	00303	A21	LXD A15,2		F6P01080
00343	3	00026	2	00400		TXH EXCAD,2,22	TRANSFER IF PROG. CARD HAS MORE THAN 22 WORDS.	F6P01090
00344	0	07400	4	00523		TSX WRITE,4	WRITE PROG CARD ON TAPE 3	F6P01100
00345	0	00002	0	00000		HTR 0,0,2		F6P01110
00346	0	07400	4	00537	B13	TSX SUB1,4	READ RECORD FROM LIB. TAPE	F6P01120
00347	0	02000	0	00433		TRA EOF	EOF.	F6P01130
00350	0	50000	0	01006	X3	CLA VLENG	WD. CT. OF TRANS. VEC. OF LIBRARY SUBROUTINE.	F6P01140
00351	0	10000	0	00356		TZE A22	IF NO TRANSFER VECTOR, GO TO WRITE.	F6P01150
00352	0	34000	0	01012		CAS L20D		F6P01160
00353	0	02000	0	00365		TRA X2	GO TO X2 IF TRANS VEC. OF LIB. SUBR. GREATER THAN 20.	F6P01170
00354	0	02000	0	00355		TRA X1	GO TO X1 IF TRANS VEC OF LIB. SUBR LESS THAN OR EQUAL 20.	F6P01180
00355	0	07400	4	00613	X1	TSX LOOP3,4	GO SEARCH LIBF FOR SUB-SUBROUTINE NAME, ETC.	F6P01190
00356	0	07400	4	00523	A22	TSX WRITE,4	GO WRITE TRANS. VECT. RECORD ON TAPE 3.	F6P01200
00357	0	00004	0	00000		HTR 0,0,4		F6P01210
00360	0	07400	4	00537	LOOP2	TSX SUB1,4	GO READ NEW RECORD FROM LIBRARY TAPE.	F6P01220
00361	0	02000	0	00433		TRA EOF	EOF ON LIBRARY TAPE.	F6P01230
00362	0	50000	0	01327		CLA BUFF-1	TEST FOR PROGRAM CARD.	F6P01240
00363	-0	12000	0	00265		TMI A12	YES, PROG CARD. TRANSFER.	F6P01250
00364	0	02000	0	00356		TRA A22	NO, GO TO WRITE CARD ON TAPE THREE.	F6P01260
00365	0	40200	0	01012	X2	SUB L20D	TO TREAT 20 AT A TIME.	F6P01270
00366	0	60100	0	01006		STO VLENG		F6P01280
00367	0	50000	0	01012		CLA L20D		F6P01290
00370	0	07400	4	00613		TSX LOOP3,4	SEARCH FOR SUB+SUBROUT IN LIBF. IF NOT THERE, ENTER IN TVR TABLE.	F6P01300
00371	0	07400	4	00523		TSX WRITE,4	WRITE RECORD ON TAPE 3.	F6P01310
00372	0	00004	0	00000		HTR 0,0,4		F6P01320
00373	0	07400	4	00537		TSX SUB1,4	READ NEXT RECORD FROM LIB TAPE	F6P01330
00374	0	02000	0	00433		TRA EOF	EOF	F6P01340
00375	0	50000	0	01327		CLA BUFF-1	IS IT A PROG. CARD.	F6P01350
00376	0	12000	0	00350		TPL X3	NO, GO PROCESS TRANS. VEC.	F6P01360
00377	0	07400	4	00774	ERROR	TSX OUTER,4	YES. ERROR.	F6P01370
00400	0	50200	0	01013	EXCAD	CLS L22D	TO WRITE FIRST CARD OG PROG. CARD.	F6P01380
00401	0	60100	0	01327	B9	STO BUFF-1		F6P01390
00402	0	07400	4	00647		TSX CHSUM,4	COMPUTE CHECK SUM.	F6P01400
00403	0	07400	4	00523		TSX WRITE,4	WRITE IT ON TAPE 3.	F6P01410
00404	0	00002	0	00000		HTR 0,0,2	BLANKS	F6P01420
00405	-0	75400	2	00000		PXD 0,2		F6P01430
00406	0	40200	0	01013		SUB L22D	MORE THAN 22 WORDS.	F6P01440
00407	-0	12000	0	00346		TMI B13	NO, GO TO B13.	F6P01450
00410	-0	73400	2	00000		PDX 0,2	YES, DECREMENT WD. CT. BY 22 AND STORE IT IN INDEX REGISTER 2.	F6P01460
00411	0	40200	0	01000		SUB ONEDE		F6P01470
00412	0	62200	0	00417		STD BOO1		F6P01480
00413	-0	53400	1	00162		LXD ONE,1		F6P01490
00414	0	50000	1	01277	BOO	CLA BUFF-25,1	MOVE INFO. READ FROM LIB. TAPE UP IN BUFFER,	F6P01500
00415	0	60100	1	01325		STO BUFF-3,1		F6P01510
00416	1	00001	1	00417		TXI BOO1,1,1		F6P01520
00417	-3	00417	1	00414	BOO1	TXL BOO,1,*		F6P01530
00420	-3	00025	2	00423		TXL B8,2,21		F6P01540
00421	0	50200	0	01013		CLS L22D		F6P01550
00422	0	02000	0	00401		TRA B9		F6P01560
								F6P01570
								F6P01580
								F6P01590
								F6P01600
								F6P01610

00573	0	76600	0	00202	SPACE	WTD 2	WRITE A WORD OF BLANKS ON TAPE TWO.	F6P02700
00574	0	70000	0	00703		CPY BLANKS		F6P02710
00575	0	02000	0	00562		TRA PRINT		F6P02720
00576	-0	63400	4	00702	WLL	SXD IR4,4	PREPARE TO WRITE FINAL RECORD ON TAPE TWO,	F6P02730
00577	1	00002	2	00600		TXI ME20,2,2		F6P02740
00600	-0	75400	2	00000	ME20	PXD 0,2		F6P02750
00601	0	60100	0	00610		STO LND		F6P02760
00602	0	77100	0	00022		ARS 18		F6P02770
00603	0	62100	0	00610		STA LND		F6P02780
00604	0	50000	0	01017		CLA LNE		F6P02790
00605	0	40200	0	00610		SUB LND		F6P02800
00606	0	60100	0	00610		STO LND		F6P02810
00607	0	07400	4	00562		TSX PRINT,4	AND GO WRITE IT.	F6P02820
00610	0	00000	0	00000	LND			F6P02830
00611	-0	53400	4	00702		LXD IR4,4		F6P02840
00612	0	02000	4	00001		TRA 1,4		F6P02850
00613	0	40000	0	01014	LOOP3	ADD THRDE		F6P02860
00614	0	62200	0	00626		STD A27		F6P02870
00615	-0	53400	1	01007		LXD FR4,1		F6P02880
00616	0	53400	2	01003	A28	LXA LIBCT,2	SUBROUTINE IN TVR	F6P02890
00617	0	50000	1	01327		CLA BUFF-1,1	SELECT NAME FROM SUBROUTINE TRANS. VEC.	F6P02900
00620	0	34000	2	03610	A24	CAS LIBF,2	SELECT NAME FROM LIBF TABLE.	F6P02910
00621	0	02000	0	00623		TRA A23	NOT EQUAL	F6P02920
00622	0	02000	0	00625		TRA A26	SUBROUTINE IS IN LIBF.	F6P02930
00623	2	00001	2	00620	A23	TIX A24,2,1	NOT EQUAL, ANY MORE NAMES IN LIBF. YES,TRANS.	F6P02940
00624	0	02000	0	00630		TRA A25	NO. NOT IN LIBF.	F6P02950
00625	1	00001	1	00626	A26	TXI A27,1,1	ANY MORE NAMES IN SUBROUT. TRANS. VECTOR.	F6P02960
00626	-3	00626	1	00616	A27	TXL A28,1,*	YES.	F6P02970
00627	0	02000	4	00001		TRA 1,4	NO, RETURN TO PROGRAM	F6P02980
00630	0	50000	0	03133	A25	CLA TVR-1	SET DECR. OF A31 EQUAL WD CT. OF TVR TABLE.	F6P02990
00631	0	62200	0	00641		STD A31	IF NOT ALREADY IN	F6P03000
00632	-0	53400	2	01000		LXD ONEDE,2		F6P03010
00633	0	10000	0	00645		TZE EXT2	TRANSFER IF NO ENTRIES IN TVR TABLE	F6P03020
00634	0	50000	1	01327		CLA BUFF-1,1	SELECT THE NAME FROM SUBROUT. TR. VECTOR.	F6P03030
00635	0	34000	2	03133	A32	CAS TVR-1,2	IS IT IN THE TVR TABLE.	F6P03040
00636	0	02000	0	00640		TRA A30		F6P03050
00637	0	02000	0	00625		TRA A26	YES, TRANSFER.	F6P03060
00640	1	00001	2	00641	A30	TXI A31,2,1		F6P03070
00641	-3	00641	2	00635	A31	TXL A32,2,*		F6P03080
00642	0	60100	2	03133		STO TVR-1,2	NO. PUT IT THERE, UP0ATE COUNT OF TVR TABLE.	F6P03090
00643	-0	63400	2	03133		SXD TVR-1,2		+ F6P03100
00644	0	02000	0	00625		TRA A26		F6P03110
00645	0	50000	1	01327	EXT2	CLA BUFF-1,1	SELECT NAME FROM SUBR. TRANS. VEC. AND	F6P03120
00646	0	02000	0	00642		TRA A31+1	GO STORE IT.	F6P03130
00647	0	53400	1	00163	CHSUM	LXA TWO,1	COMPUTE CHECK SUM AND STORE IT IN BUFF-2.	F6P03140
00650	-0	50000	0	01327		CAL BUFF-1		F6P03150
00651	0	36100	1	01327	B6	ACL BUFF-1,1		F6P03160
00652	1	00001	1	00653		TXI B5,1,1		F6P03170
00653	-3	00027	1	00651	B5	TXL B6,1,23		F6P03180
00654	0	60200	0	01326		SLW BUFF-2		F6P03190
00655	0	02000	4	00001		TRA 1,4		F6P03200
00656	-0	63400	4	00702	SUB2	SXD IR4,4		F6P03210
00657	-0	50000	0	00703		CAL BLANKS		F6P03220
00660	0	60200	2	03634		SLW LIN+1,2	STORE BLANKS IN BOTH WORDS OF ENTRY.	F6P03230

00661	0	60200	2	03635		SLW LIN+2,2		F6P03240
00662	0	56000	0	01015	CNS	LDQ NAME	ASSEMBLE BCD REPRESENTATION OF	F6P03250
00663	0	53400	4	00664		LXA SIX,4	SUBROUTINE NAME.	F6P03260
00664	-0	76300	0	00006	SIX	LGL 6		F6P03270
00665	0	60200	0	01016		SLW SYM		F6P03280
00666	-0	32000	0	00705		ANA 6BITS		F6P03290
00667	0	40200	0	00704		SUB BLANK		F6P03300
00670	0	10000	0	00674		TZE CNA		F6P03310
00671	-0	50000	0	01016		CAL SYM		F6P03320
00672	0	60200	2	03635		SLW LIN+2,2	STORE IT IN WORD TWO OF ENTRY.	F6P03330
00673	2	00001	4	00664		TIX SIX,4,1		F6P03340
00674	2	00002	2	00700	CNA	TIX EXIT,2,2	RECORD NOT FULL. DECR. XR2 AND EXIT TO PROGRAM.	F6P03350
00675	0	07400	4	00562		TSX PRINT,4	RECORD FULL. GO WRITE IT.	F6P03360
00676	0	00024	0	03634	LNC	LIN+1,,20		F6P03370
00677	-0	53400	2	00676		LXD LNC,2	RESET RECORD LENGTH COUNTER	F6P03380
00700	-0	53400	4	00702	EXIT	LXD IR4,4	AND RETURN TO PROGRAM	F6P03390
00701	0	02000	4	00001		TRA 1,4		F6P03400
00702	0	00000	0	00000	IR4	0,0,0		F6P03410
00703	606060606060				BLANKS	BCD 1		F6P03420
00704	0000000000060				BLANK	BCD 100000		F6P03430
00705	+0000000000077				6BITS	OCT 77		F6P03440
00706	+0000000000012				TEN	DEC 10		F6P03450
00707	+0000000000000				LOC	DEC 0		F6P03460
00710	606060606060					BCD 7		F6P03470
00711	606060606060							
00712	606060606060							
00713	606060606060							
00714	606060606060							
00715	606060606060							
00716	606060606060							
00717	606062642251				BCD 6	SUBROUTINES PUNCHED FROM LIBRARY		F6P03480
00720	466463314525							
00721	626047644523							
00722	302524602651							
00723	464460433122							
00724	512151706060							
00725	606060606060				BCD 7			F6P03490
00726	606060606060							
00727	606060606060							
00730	606060606060							
00731	606060606060							
00732	606060606060							
00733	606060606060							
A				00734	FOUND	BSS		F6P03500
00734	606060606060					BCD 7		F6P03510
00735	606060606060							
00736	606060606060							
00737	606060606060							
00740	606060606060							
00741	606060606060							
00742	606060606060							
00743	626422514664				BCD 6	SUBROUTINES NOT PUNCHED FROM LIBRARY		F6P03520
00744	633145256260							
00745	454663604764							

00746	452330252460															
00747	265146446043															
00750	312251215170															
00751	606060606060			BCD	7					F6P03530						
00752	606060606060															
00753	606060606060															
00754	606060606060															
00755	606060606060															
00756	606060606060															
00757	606060606060															
A																
				00760	LOST	BSS				F6P03540						
00760	0 50000 0 03133	ERASE	CLA	TVR-1		DECREASE	WD	CT	OF	TVR	BY	ONE.	F6P03550			
00761	0 40200 0 01000		SUB	ONEDE									F6P03560			
00762	0 62200 0 03133		STD	TVR-1									F6P03570			
00763	0 62200 0 00770		STD	NEXT									F6P03580			
00764	0 10000 0 00772		TZE	EXT1		TEST	FOR	ANY	WORDS	LEFT	IN	TVR	TABLE.	F6P03590		
00765	0 50000 2 03132	SKIP	CLA	TVR-2,2									F6P03600			
00766	0 60100 2 03133		STO	TVR-1,2		MOVE	UP	ENTRIES	IN	TVR	TABLE		F6P03610			
00767	1 00001 2 00770		TXI	NEXT,2,1									F6P03620			
00770	-3 00770 2 00765	NEXT	TXL	SKIP,2,*									F6P03630			
00771	0 02000 4 00001		TRA	1,4		EXIT	TO	PROGRAM					F6P03640			
00772	0 60000 0 03132	EXT1	STZ	TVR-2		WHEN	NO	WORDS	LEFT	IN	TVR	TABLE,	STORE	ZERO	IN	F6P03650
00773	0 02000 4 00001		TRA	1,4		TVR-2	AND	RETURN	TO	PROGRAM.				F6P03660		
00774	0 77200 0 00201	OUTER	REW	1									F6P03670			
00775	0 76200 0 00221		RTB	1									F6P03680			
00776	0 76200 0 00221		RTB	1									F6P03690			
00777	0 02000 0 00004		TRA	4									F6P03700			
01000	0 00001 0 00000	ONEDE		0,0,1									F6P03710			
01001	0 00000 0 00000	SUM											F6P03720			
U																
01002	0 00000 0	RCT		IN	ADDRESS								F6P03730			
01003	0 00000 0 00000	LIBCT		(	ADDRESS)								F6P03740		
01004	0 00000 0 00000	PASCT		(	ADDRESS)								F6P03750		
01005	0 00000 0 00000	CTF		(	ADDRESS)								F6P03760		
01006	0 00000 0 00000	VLENG		0,0,									F6P03770			
01007	0 00004 0 00000	FR4		0,0,4									F6P03780			
01010	0 00000 0 00024	L20		20,0,0									F6P03790			
01011	0 00002 0 00000	TWODE		0,0,2									F6P03800			
01012	0 00024 0 00000	L20D		0,0,20									F6P03810			
01013	0 00026 0 00000	L22D		0,0,22									F6P03820			
01014	0 00003 0 00000	THRDE		0,0,3									F6P03830			
01015	0 00000 0 00000	NAME	HTR	0									F6P03840			
01016	0 00000 0 00000	SYM	HTR	0									F6P03850			
01017	0 00026 0 03636	LNE		LIN+3,,22									F6P03860			
		01330	BUFF	BES	200								F6P03870			
		03134	TVR	BES	900								F6P03880			
		03610	LIBF	BES	300								F6P03890			
		03610	BSS	19									F6P03900			
		03633	LIN	BSS	1								F6P03910			
													F6P03920			
						PUNCH	BINARY	LOADER	IF	CARDS	ARE	OUTPUT	F6P03930			
						AND	IF	MAIN	ROUTINE,	PUNCH	PROGRAM		F6P03940			
M	03634	0 50000 0 00162	REQ	CLA	ONE								F6P03950			
M	03635	0 34000 0 00177	CAS	SW1		ARE	CARDS	OUTPUT					F6P03960			
	03636	0 02000 0 03643	TRA	WLP1		EQUALS	ZERO.	ASSUME	SWITCH	UP,	GO	PUNCH	CARDS.	F6P03970		

	03637	0	02000	0	03716		TRA	OUT	EQUALS ONE, ASSUME SWITCH DOWN. NO CARD OUPUT.	F6P03980
	03640	0	76000	0	00161		SWT	1	TEST SWITCH ONE.	F6P03990
	03641	0	02000	0	03643		TRA	WLP1	UP SO GO TO PUNCH ON LINE.	F6P04000
	03642	0	02000	0	03716		TRA	OUT	DOWN SO GO TO RETURN TO LOADER.	F6P04010
	03643	0	50000	0	00036	WLP1	CLA	SUBIN	TEST FOR SUB DEF.	F6P04020
	03644	-0	10000	0	03653		TNZ	RTF	IF SOURCE PROG IS A SUBROUTINE, GO READ TAPE 3	F6P04030
	03645	0	53400	1	03736		LXA	WPLV,1	MAIN ROUTINE. PUNCH LOADER.	F6P04040
	03646	-0	53400	2	03736	WPL2	LXD	WPLV,2	SET CARD LENGTH.	F6P04050
	03647	0	76600	0	00341		WPU		SELECT PUNCH.	F6P04060
	03650	-2	00001	2	03646	WPL3	TNX	WPL2,2,1	TRANSFER IF CARD FULL.	F6P04070
	03651	0	70000	1	04340		CPY	ZER+216,1	COPY LOADER WORD.	F6P04080
	03652	2	00001	1	03650		TIX	WPL3,1,1	TRANSFER IF NOT FINISHED PUNCHING LOADER.	F6P04090
M	03653	0	53400	1	00162	RTF	LXA	ONE,1	SET IR1 EQUAL ONE.	F6P04100
	03654	-0	63400	1	03712	RT9	SXD	RT1,1	SAVE WORD COUNT OF STORAGE BLOCK TO BE PUNCHED	F6P04110
	03655	-0	53400	2	03662		LXD	RT2,2	SET IR2 EOUAL FIVE FOR READ-ERROR COUNTER.	F6P04120
	03656	0	76200	0	00223	RTR	RTB	3	READ TAPE THREE.	F6P04130
	03657	-0	53400	4	03701		LXD	RT3,4	SET IR4 EQUAL 24.	F6P04140
M	03660	0	70000	1	02114	RT7	CPY	TRB,1	COPY BINARY INST. INTO STORAGE.	F6P04150
	03661	1	00001	1	03667		TXI	RT4,1,1	INCREASE WORD COUNT ONE.	F6P04160
	03662	1	00005	0	03723	RT2	TXI	TEF,,5	END OF FILE ON TAPE 3.	F6P04170
M	03663	0	60000	1	02114	RTZ	STZ	TRB,1,6*4096	EOR STORE ZERO.	F6P04180
	03664	1	00001	1	03665		TXI	RT6,1,1	INCREASE WORD COUNT BY ONE	F6P04190
	03665	2	00001	4	03663	RT6	TIX	RTZ,4,1	FILL OUT CARD (IN STORAGE) WITH ZEROS.	F6P04200
TD	03666	1	00000	0	03673		TXI	RT5		F6P04210
	03667	2	00001	4	03660	RT4	TIX	RT7,4,1	MOD. AND TEST END OF CARD. TRANSFER IF CARD NOT	F6P04220
									FILLED.	F6P04230
	03670	0	70000	0	03735		CPY	DUMP	NO INDEX IN XR4 IS AN ERROR HERE,	F6P04240
	03671	0	02000	0	03727		TRA	RTE	SINCE RECORD LENGTH ON TAPE 3 IS CARD LENGTH,	F6P04250
	03672	0	07400	4	00774		TSX	OUTER,4		F6P04260
	03673	0	76600	0	00333	RT5	IOD			F6P04270
	03674	0	77100	0	00377		ARS	255	CHECK FOR TAPE CHECK.	F6P04280
	03675	0	77100	0	00377		ARS	255		F6P04290
	03676	-0	76000	0	00012		RTT			F6P04300
	03677	0	02000	0	03727		TRA	RTE	GO TO READ ERROR PROCEDURE.	F6P04310
	03700	-0	53400	1	03712	RTA	LXD	RT1,1	TAPE READ OKAY. ADD 24 (FOR CARD JUST READ)	F6P04320
	03701	1	00030	1	03702	RT3	TXI	RT8,1,24	TO WORD COUNT.	F6P04330
	03702	-3	01130	1	03654	RT8	TXL	RT9,1,24*25	TEST END OF PUNCH BLOCK.	F6P04340
M	03703	0	53400	4	00161		LXA	ZERO,4	BLOCK FULL. SET XR4 EQUAL ZERO,	F6P04350
M	03704	0	53400	1	00162	PIC	LXA	ONE,1	AND PUNCH OUT PUNCH BLOCK.	F6P04360
	03705	0	76600	0	00341	PC3	WPU		PUNCH CARD.	F6P04370
	03706	-0	53400	2	03701		LXD	RT3,2	SET XR2 EQUAL 24	F6P04380
M	03707	0	70000	1	02114	PC2	CPY	TRB,1		F6P04390
	03710	1	00001	1	03711		TXI	*+1,1,1		F6P04400
	03711	2	00001	2	03707		TIX	PC2,2,1	TRANSFER IF NOT END OF CARD.	F6P04410
	03712	-3	00000	1	03705	RT1	TXL	PC3,1,**	END OF PUNCH BLOCK TEST. TRANS. IF NOT END.	F6P04420
D	03713	-3	00000	4	03653		TXL	RTF,4	GO READ MORE FROM TAPE THREE.	F6P04430
	03714	0	76600	0	00341	PTC	WPU		PUNCH TWO BLANK CARDS.	F6P04440
	03715	0	76600	0	00341		WPU			F6P04450
	03716	0	76200	0	00221	OUT	RTB	1	RETURN TO LOADER.	F6P04460
	03717	0	76200	0	00221		RTB	1		F6P04470
	03720	0	76200	0	00221		RTB	1		F6P04480
	03721	0	02000	0	00004		TRA	4		F6P04490
ATD	03722	2	00000	0	00000		TIX			F6P04500
	03723	-2	00030	1	03714	TEF	TNX	PTC,1,24	HAS LAST BLOCK BEEN PUNCHED. TRANSFER TO	F6P04510

						PUNCH ENDING BLANKS IF YES.	F6P04520
M	03724	-0	63400	1	03712	SXD RT1,1	F6P04530
	03725	0	53400	4	00162	LXA ONE,4	F6P04540
	03726	0	02000	0	03704	TRA PIC	F6P04550
	03727	2	00001	2	03732	RTE TIX BST,2,1	F6P04560
	03730	0	07400	4	00774	TSX OUTER,4	F6P04570
	03731	0	00000	0	03700	HTR RTA	F6P04580
	03732	0	76400	0	00203	BST BST 3	F6P04590
	03733	-0	53400	1	03712	LXD RT1,1	F6P04600
	03734	0	02000	0	03656	TRA RTR	F6P04610
					03735	DUMP BSS 1	F6P04620
					02114	TRB SYN ABSOP	F6P04630
M	03736	0	00031	0	00330	WPLV 216,0,25	F6P04640
	03737	0	00040	0	00000	WRCC 0,0,32	F6P04650
					03740	BSS 40	F6P04660
					04010	ZER BSS 216	F6P04670
					04010	ZRO SYN ZER	F6P04680
					04010	ORG ZRO	F6P04690
						BINARY LOADER AS OCTAL DATA	F6P04700
	04010	+053400100000				OCT 053400100000	F6P04710
	04011	+070000100002				OCT 070000100002	F6P04720
	04012	+177777100001				OCT 177777100001	F6P04730
	04013	+000000100000				OCT 000000100000	F6P04740
	04014	-076000000007				OCT 476000000007	F6P04750
	04015	+076200000321				OCT 076200000321	F6P04760
	04016	+070000177452				OCT 070000177452	F6P04770
	04017	+177777100006				OCT 177777100006	F6P04780
	04020	+000000000000				OCT 000000000000	F6P04790
	04021	+377470100005				OCT 377470100005	F6P04800
	04022	-053400177715				OCT 453400177715	F6P04810
	04023	-063400177715				OCT 463400177715	F6P04820
	04024	+060000077453				OCT 060000077453	F6P04830
	04025	+076200000321				OCT 076200000321	F6P04840
	04026	+070000000000				OCT 070000000000	F6P04850
	04027	+002000077500				OCT 002000077500	F6P04860
	04030	+000000000015				OCT 000000000015	F6P04870
	04031	+060000200000				OCT 060000200000	F6P04880
	04032	+200001200021				OCT 200001200021	F6P04890
	04033	+014000000024				OCT 014000000024	F6P04900
	04034	+002000000000				OCT 002000000000	F6P04910
	04035	+000000000000				OCT 000000000000	F6P04920
	04036	+000000000030				OCT 000000000030	F6P04930
	04037	+000000077777				OCT 000000077777	F6P04940
	04040	+050000000000				OCT 050000000000	F6P04950
	04041	+070000000001				OCT 070000000001	F6P04960
	04042	-012000077626				OCT 412000077626	F6P04970
	04043	+010000000015				OCT 010000000015	F6P04980
	04044	+060000077777				OCT 060000077777	F6P04990
	04045	-053400100000				OCT 453400100000	F6P05000
	04046	-300037177516				OCT 700037177516	F6P05010
	04047	+300040100000				OCT 300040100000	F6P05020
	04050	+062100000025				OCT 062100000025	F6P05030
	04051	+040000000026				OCT 040000000026	F6P05040
	04052	+062100000026				OCT 062100000026	F6P05050

04053	+0500000000001	OCT	0500000000001	F6P05060
04054	+062100077520	OCT	062100077520	F6P05070
04055	+0020000000015	OCT	0020000000015	F6P05080
04056	+0621000000010	OCT	0621000000010	F6P05090
04057	+0771000000017	OCT	0771000000017	F6P05100
04060	-0734004000000	OCT	4734004000000	F6P05110
04061	-300001477524	OCT	700001477524	F6P05120
04062	+007400277611	OCT	007400277611	F6P05130
04063	+0621000000010	OCT	0621000000010	F6P05140
04064	-0500000000000	OCT	-5000000000000	F6P05150
04065	+0771000000022	OCT	0771000000022	F6P05160
04066	+0400000000010	OCT	0400000000010	F6P05170
04067	+062100077531	OCT	062100077531	F6P05180
04070	-0534002000000	OCT	4534002000000	F6P05190
04071	-3000002000000	OCT	7000002000000	F6P05200
04072	+062100077577	OCT	062100077577	F6P05210
04073	+062100077601	OCT	062100077601	F6P05220
04074	+062100077572	OCT	062100077572	F6P05230
04075	+062100077566	OCT	062100077566	F6P05240
04076	+062100077543	OCT	062100077543	F6P05250
04077	-0500000000000	OCT	4500000000000	F6P05260
04100	-300001477543	OCT	700001477543	F6P05270
04101	-0700000000007	OCT	4700000000007	F6P05280
04102	-0700000000006	OCT	4700000000006	F6P05290
04103	-0700002000000	OCT	4700002000000	F6P05300
04104	+200001277543	OCT	200001277543	F6P05310
04105	-300000477551	OCT	700000477551	F6P05320
04106	-300001400015	OCT	700001400015	F6P05330
04107	-300002477551	OCT	700002477551	F6P05340
04110	-300003477561	OCT	700003477561	F6P05350
04111	+0602000000000	OCT	0602000000000	F6P05360
04112	+0500000000001	OCT	0500000000001	F6P05370
04113	+010000077557	OCT	010000077557	F6P05380
04114	+0402000000000	OCT	0402000000000	F6P05390
04115	+010000077557	OCT	010000077557	F6P05400
04116	+0420000000000	OCT	0420000000000	F6P05410
04117	-300001400015	OCT	700001400015	F6P05420
04120	+300003477642	OCT	300003477642	F6P05430
04121	+0560000000006	OCT	0560000000006	F6P05440
04122	+0500000000007	OCT	0500000000007	F6P05450
04123	-0763000000001	OCT	4763000000001	F6P05460
04124	+0602000000007	OCT	0602000000007	F6P05470
04125	+012000077573	OCT	012000077573	F6P05480
04126	+0500001000000	OCT	0500001000000	F6P05490
04127	+0771000000022	OCT	0771000000022	F6P05500
04130	+007400277604	OCT	007400277604	F6P05510
04131	+0767000000022	OCT	0767000000022	F6P05520
04132	+0622001000000	OCT	0622001000000	F6P05530
04133	+0500000000007	OCT	0500000000007	F6P05540
04134	-0763000000001	OCT	4763000000001	F6P05550
04135	+0602000000007	OCT	0602000000007	F6P05560
04136	+012000077602	OCT	012000077602	F6P05570
04137	+0500001000000	OCT	0500001000000	F6P05580
04140	+007400277604	OCT	007400277604	F6P05590

04141	+062100100000	OCT	062100100000	F6P05600
04142	+200001177562	OCT	200001177562	F6P05610
04143	+002000000015	OCT	002000000015	F6P05620
04144	+062100000010	OCT	062100000010	F6P05630
04145	+050000000007	OCT	050000000007	F6P05640
04146	-076300000001	OCT	476300000001	F6P05650
04147	+060200000007	OCT	060200000007	F6P05660
04150	-012000077612	OCT	412000077612	F6P05670
04151	+076000000141	OCT	076000000141	F6P05680
04152	+050200000010	OCT	050200000010	F6P05690
04153	+040000000025	OCT	040000000025	F6P05700
04154	+012000077622	OCT	012000077622	F6P05710
04155	-076000000141	OCT	476000000141	F6P05720
04156	+002000077624	OCT	002000077624	F6P05730
04157	+050000000010	OCT	050000000010	F6P05740
04160	+040100077520	OCT	040100077520	F6P05750
04161	+002000200001	OCT	002000200001	F6P05760
04162	-076000000141	OCT	476000000141	F6P05770
04163	+002000077617	OCT	002000077617	F6P05780
04164	+040200000026	OCT	040200000026	F6P05790
04165	+002000200001	OCT	002000200001	F6P05800
04166	-073400200000	OCT	473400200000	F6P05810
04167	-300000277770	OCT	700000277770	F6P05820
04170	+040000077771	OCT	040000077771	F6P05830
04171	+040000077640	OCT	040000077640	F6P05840
04172	+062200077713	OCT	062200077713	F6P05850
04173	+040200077715	OCT	040200077715	F6P05860
04174	+062200077667	OCT	062200077667	F6P05870
04175	+036100000000	OCT	036100000000	F6P05880
04176	+040200077640	OCT	040200077640	F6P05890
04177	+077100000022	OCT	077100000022	F6P05900
04200	+200002277641	OCT	200002277641	F6P05910
04201	+007400477536	OCT	007400477536	F6P05920
04202	-053400177771	OCT	453400177771	F6P05930
04203	+050000077777	OCT	050000077777	F6P05940
04204	+010000077652	OCT	010000077652	F6P05950
04205	+050000000007	OCT	050000000007	F6P05960
04206	+060100177451	OCT	060100177451	F6P05970
04207	+050000000006	OCT	050000000006	F6P05980
04210	+060100177452	OCT	060100177452	F6P05990
04211	+200002177704	OCT	200002177704	F6P06000
04212	+050000000026	OCT	050000000026	F6P06010
04213	+060000177451	OCT	060000177451	F6P06020
04214	+060100177452	OCT	060100177452	F6P06030
04215	-053400400007	OCT	453400400007	F6P06040
04216	+300000477661	OCT	300000477661	F6P06050
04217	+050000077776	OCT	050000077776	F6P06060
04220	+060100177451	OCT	060100177451	F6P06070
04221	+050000000007	OCT	050000000007	F6P06080
04222	+062200177451	OCT	062200177451	F6P06090
04223	+062100000025	OCT	062100000025	F6P06100
04224	+040000000026	OCT	040000000026	F6P06110
04225	+062100000026	OCT	062100000026	F6P06120
04226	+073400200000	OCT	073400200000	F6P06130

04227	+300000200003	OCT	300000200003	F6P06140
04230	+050000077520	OCT	050000077520	F6P06150
04231	+0402000000006	OCT	0402000000006	F6P06160
04232	+073400400000	OCT	073400400000	F6P06170
04233	-075400400000	OCT	475400400000	F6P06180
04234	+0771000000022	OCT	0771000000022	F6P06190
04235	+010000077677	OCT	010000077677	F6P06200
04236	+0340000000027	OCT	0340000000027	F6P06210
04237	+0500000000027	OCT	0500000000027	F6P06220
04240	+076100000000	OCT	076100000000	F6P06230
04241	+0601000000027	OCT	0601000000027	F6P06240
04242	+0402000000026	OCT	0402000000026	F6P06250
04243	-012000077453	OCT	412000077453	F6P06260
04244	-063400277777	OCT	463400277777	F6P06270
04245	+0600000000007	OCT	0600000000007	F6P06280
04246	+100002177707	OCT	100002177707	F6P06290
04247	+050000177452	OCT	050000177452	F6P06300
04250	+007400277604	OCT	007400277604	F6P06310
04251	+062100177452	OCT	062100177452	F6P06320
04252	+100002177713	OCT	100002177713	F6P06330
04253	-300000177707	OCT	700000177707	F6P06340
04254	-063400177771	OCT	463400177771	F6P06350
04255	-277452000015	OCT	677452000015	F6P06360
04256	-050000277453	OCT	450000277453	F6P06370
04257	-010000077723	OCT	410000077723	F6P06380
04260	+050000277454	OCT	050000277454	F6P06390
04261	+0621000000024	OCT	0621000000024	F6P06400
04262	+002000077770	OCT	002000077770	F6P06410
04263	-032000077776	OCT	432000077776	F6P06420
04264	-010000077770	OCT	410000077770	F6P06430
04265	+050000277453	OCT	050000277453	F6P06440
04266	-073400400000	OCT	473400400000	F6P06450
04267	+0771000000022	OCT	0771000000022	F6P06460
04270	+040000277454	OCT	040000277454	F6P06470
04271	+062100077736	OCT	062100077736	F6P06480
04272	+062100077764	OCT	062100077764	F6P06490
04273	+062100077766	OCT	062100077766	F6P06500
04274	+062100077741	OCT	062100077741	F6P06510
04275	-053400177771	OCT	453400177771	F6P06520
04276	-050000400000	OCT	450000400000	F6P06530
04277	-032000077776	OCT	432000077776	F6P06540
04300	+010000077767	OCT	010000077767	F6P06550
04301	+050000400000	OCT	050000400000	F6P06560
04302	+034000177453	OCT	034000177453	F6P06570
04303	+002100077745	OCT	002100077745	F6P06580
04304	+002000077763	OCT	002000077763	F6P06590
04305	+200002177742	OCT	200002177742	F6P06600
04306	+0601000000006	OCT	0601000000006	F6P06610
04307	-053400177753	OCT	453400177753	F6P06620
04310	+050000177477	OCT	050000177477	F6P06630
04311	+010000077757	OCT	010000077757	F6P06640
04312	+0340000000006	OCT	0340000000006	F6P06650
04313	-200024077755	OCT	600024077755	F6P06660
04314	+002000077767	OCT	002000077767	F6P06670

04315	+200001177750	OCT	200001177750	F6P06680
04316	+000000077770	OCT	000000077770	F6P06690
04317	+0500000000006	OCT	0500000000006	F6P06700
04320	+060100177477	OCT	060100177477	F6P06710
04321	+060000177500	OCT	060000177500	F6P06720
04322	+002000077767	OCT	002000077767	F6P06730
04323	+050000077743	OCT	050000077743	F6P06740
04324	+060100400000	OCT	060100400000	F6P06750
04325	+050000177454	OCT	050000177454	F6P06760
04326	+062100400000	OCT	062100400000	F6P06770
04327	+200001477735	OCT	200001477735	F6P06780
04330	+100002277771	OCT	100002277771	F6P06790
04331	-300000277716	OCT	700000277716	F6P06800
04332	+050000077453	OCT	050000077453	F6P06810
04333	-010000077775	OCT	410000077775	F6P06620
04334	+100324200021	OCT	100324200021	F6P06830
04335	+0000000000014	OCT	0000000000014	F6P06840
04336	-3000000000000	OCT	7000000000000	F6P06850
04337	+0000000000000	OCT	0000000000000	F6P06860
	00000	END		F6P06870

A

```

00001 0 IN
0 ONE 00162,00162
0 SW1 00177,00177
0 SW5 00203,00203
0 TRB 02114,02114
0 TWO 00163,00163
0 ZERO 00161,00161
0ABSOP 02114,02114

```

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	689	0	0	0	0
LIB	0	0	0	0	0
COL	689	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 739

NUMBER OF SYMBOLS, DEF 239,DEFOP 0,UNDEF 1
 REM PST

PST
 APPLIED PROGRAMMING, IBM , L. MAY AND A. S. NOBLE JR.
 T04 FORTRAN II / SECTION ONE. 29 OCT 58
 8K VERSION WITHOUT CODING ON DRUMS.

SECTION 1= READS IN AND CLASSIFIES STATEMENTS. FOR ARITHMETIC FORMULAS, COMPILES THE OBJECT (OUTPUT) INSTRUCTIONS. FOR NONARITHMETIC STATEMENTS INCLUDING INPUT-OUTPUT, DOES A PARTIAL COMPILATION, AND RECORDS THE REMAINING INFORMATION IN TABLES.

THE FIVE MAJOR DIVISIONS OF SECTION 1 ARE= COMMON, STATES A, B, C, AND D. COMMON REMAINS IN LOWER MEMORY THROUGHOUT SECTION 1. STATE A READS IN AND CLASSIFIES ALL STATEMENTS, AND TREATS NONARITHMETIC STATEMENTS. STATES B, C, AND D TREAT ARITHMETIC FORMULAS.

SECTION 1 / COMMON =
 704 FORTRAN MASTER RECORD CARD / COMMON = F0140000.

00000 0 00004 0 00030
 00001 0 00000 0 06322

ORG 0
 PZE ORGCOM, ,1TOCS
 PZE STATEB-1

PART I / WORKING STORAGE, BUFFERS, AND TABLE PARAMETERS= EIFNO AND SENSE SWITCH SIMULATORS. TAPE TABLE BUFFERS. TAPE TABLE PARAMETERS - INTET. DRUM TABLE PARAMETERS. FORSUB COUNT AND BUFFER. CIB BUFFER AND PARAMETERS. REMAINING WORKING STORAGE.

PART 2 / CONSTANTS USED BY SECTION ONE.

PART 3 / SUBROUTINES USED BY SECTION ONE=

NAME	FUNCTION	
C0I50,2	SCAN, AND CONVERT NUMERICS.	4F10025
C0I60,2	SCAN CHARACTERS.	4F10026
C0I80,Z	CONVERT NUMERICS.	4F10027
C0I90X,4	INITIALIZE C0I90 TO 1ST WORD OF F.	4F10028
C0390,4	INSERT CHARACTER.	4F10029
C0190,4	OBTAIN NEXT NON-BLANK CHAR IN AC.	4F10030
CIT00,4	COMPILED INSTRUCTION TABLE ENTRIES.	4F10031
DIM.SR,4	DIMENSION TABLE SEARCH.	4F10032
DRTABS(,4)	DRUM TABLE ENTRIES.	4F10033
0ETIFN,4	GET INTERNAL FORMULA NUMBER.	4F10034
JIF(GIF),4	JUMPS (GETS) IFN IN SL AND TL.	4F10035
MTR000	MONITOR STATES FROM DRUM.	4F10036
RA000,4	COMPUTE RELATIVE ADDRESS.	4F10037
RDRX,4	READ DRUM INTO BUFR.	4F10038
SR6DCI,1	CONVERT 6 BCD DIGITS TO 1 BINARY.	4F10039
SS000,4	SOAN AND PROCESS SUBSCRIPTS.	4F10040
SUBX00,4	ADD BLANKS TO SUBROUTINE NAMES.	4F10041
TESTFX,1	TEST FOR FIXED OR FLOATING POINT.	4F10042
TEST.,4	TEST CHARACTER IN THE AC.	4F10043
TET00,1	TAPE TABLE ENTRIES.	4F10044
		4F10045

	DIAG		DIAGNOSTIC CALLERS.	4F10046
				4F10047
			TNE FOLLOWING CONVENTIONS ARE USED IN TNIS LISTING=	4F10048
			** IN THE ADDRESS, TAG, OR DECREMENT OF AN INSTRUCTION	4F10049
			INDICATES THAT THIS FIELD WILL BE MODIFIED BY THE PROGRAM.	4F10050
			* IN COL/36 INDICATES THE INSTRUCTION IS A TRANSFER OUT OF	4F10051
			TNIS LOGICAL BLOCK OR SUBROUTINE.	4F10052
			C IN COL/34 INDICATES THE INSTRUCTION WAS CORRECTED.	4F10053
			P IN COL/32 INDICATES THE INSTRUCTION WAS INSERTED (PATCH).	4F10054
				4F10055
				4F10056
			* * * * *	4F10057
				4F10058
			COMMON/1-WORKING STORAGE, BUFFERS, AND TABLE PARAMETERS=	4F10059
00030	ORGLCOM	ORG	24	4F10060
			* * * * *	4F10061
				4F10062
			EIFNO AND SENSE SWITCH SIMULATORS.	4F10063
00030	0	00000	0 00000 EIFNO PZE **,,** EXTERNAL,,INTERNAL FORMULA NUMBER.	4F10064
00031	0	00000	0 00002 ENDI1 PZE 2 SIMULATOR FOR SENSE SWITCH 1.	4F10065
00032	0	00000	0 00002 ENDI2 PZE 2 SIMULATOR FOR SENSE SWITCH 2.	4F10066
00033	0	00000	0 00002 ENDI3 PZE 2 SIMULATOR FOR SENSE SWITCH 3.	4F10067
00034	0	00000	0 00002 ENDI4 PZE 2 SIMULATOR FOR SENSE SWITCH 4.	4F10068
00035	0	00000	0 00002 ENDI5 PZE 2 SIMULATOR FOR SENSE SWITCH 5.	4F10069
			* * * * *	4F10070
				4F10071
			BUFFERS USED BY TET00 FOR THE TAPE TABLES.	4F10072
00036	TEIFNO	BSS	10 EXTERNAL,,INTERNAL FORMULA NUMBERS.	4F10073
00050	TDO	BSS	10 DO STATEMENTS.	4F10074
00062	TIFGO	BSS	10 IF AND GO TO STATEMENTS.	4F10075
00074	TRAD	BSS	10 IF AND GO TO TRANSFER ADDRESSES.	4F10076
00106	FORTAG	BSS	10 INDEXES TO TAU AND SIGMA TABLES.	4F10077
00120	FORVAR	BSS	10 RIGHT - NON-SUB. FX. PT. VARIABLES.	4F10078
00132	FORVAL	BSS	10 LEFT - NON-SUB. FX. PT. VARIABLES.	4F10079
00144	FRET	BSS	10 FREQUENCY STATEMENTS.	4F10080
00156	EQUIT	BSS	10 EQUIVALENCE STATEMENTS.	4F10081
00170	CLOSUB	BSS	10 NAMES OF SUBROUTINES.	4F10082
00202	FORMAT	BSS	10 FORMAT STATEMENTS.	4F10083
00214	SUBDEF	BSS	10 SUBROUTINE DEFINITION STATEMENTS.	4F10084
00226	COMMON	BSS	10 UPPER MEMORY STORAGE STATEMENTS.	4F10085
00240	NOLARG	BSS	10 HOLLERITH ARGUMENTS FOR SUBROUTINE.	4F10086
00252	NONEXC	BSS	10 NON-EXECUTED STATEMENTS.	4F10087
00264	TSTOPS	BSS	10 STOP STATEMENTS.	4F10088
00276	CALLFN	BSS	10 1ST / LAST IFN FOR CALL STATEMENTS.	4F10089
00310	FMTEFN	BSS	10 TABLE OF FORMAT EXTERNAL FORMNOS.	4F10090
			FND OF THE TAPE TABLE BUFFERS.	4F10091
			* * * * *	4F10092
				4F10093
			INTET/ TABLE PARAMETERS USED BY TET00, WHERE	4F10094
			O = ORIGIN OF TABLE BUFFER,	4F10095
			B = BUFFER CAPACITY,	4F10096
			A = ADDRESS OF TABLE ENTRY,	4F10097
			E = ENTRY LENGTH IN WORDS,	4F10098
			C = COUNT OF BLOCKS PUT ON TAPE,	4F10099

00371	0	00012	0	00240	PZE	NOLARG,,10	I3)	0,,0.	4F10154
00372	0	00001	0	01112	PZE	1G,,1		A,,E.	4F10155
00373	0	00000	0	00000	PZE	**,,**		C,,P.	4F10156
									4F10157
00374	0	00012	0	00252	PZE	NONEXC,,10	14)	0,,0.	4F10158
00375	0	00001	0	00030	PZE	EIFNO,,1		A,,E.	4F10159
00376	0	00000	0	00000	PZE	**,,**		C,,P.	4F10160
									4F10161
00377	0	00012	0	00264	PZE	TSTOPS,,10	15)	0,,B.	4F10162
00400	0	00001	0	00030	PZE	EIFNO,,1		A,,E.	4F10163
00401	0	00000	0	00000	PZE	**,,**		C,,P.	4F10164
									4F10165
00402	0	00012	0	00276	PZE	CALLFN,,10	16)	0,,B.	4F10166
00403	0	00001	0	01123	PZE	CALLNM,,1		A,,E.	4F10167
00404	0	00000	0	00000	PZE	**,,**		C,,P.	4F10168
									4F10169
00405	0	00012	0	00310	PZE	FMTEFN,,10	17)	0,,B.	4F10170
00406	0	00001	0	01366	PZE	SET,,1		A,,E.	4F10171
00407	0	00000	0	00000	PZE	**,,**		C,,P.	4F10172
									4F10173
		00410			BSS	3		EXPANSION SPACE FOR INTET.	4F10174
								END OF TAPE TABLE PARAMETERS.	4F10175
					*	*	*	*	4F10176
					*	*	*	*	4F10177
					*	*	*	*	4F10178
					*	*	*	*	4F10179
					*	*	*	*	4F10180
					*	*	*	*	4F10181
					*	*	*	*	4F10182
					*	*	*	*	4F10183
					*	*	*	*	4F10184
					*	*	*	*	4F10185
					*	*	*	*	4F10186
					*	*	*	*	4F10187
					*	*	*	*	4F10188
					*	*	*	*	4F10189
					*	*	*	*	4F10190
					*	*	*	*	4F10191
					*	*	*	*	4F10192
					*	*	*	*	4F10193
					*	*	*	*	4F10194
					*	*	*	*	4F10195
					*	*	*	*	4F10196
					*	*	*	*	4F10197
					*	*	*	*	4F10198
					*	*	*	*	4F10199
					*	*	*	*	4F10200
					*	*	*	*	4F10201
					*	*	*	*	4F10202
					*	*	*	*	4F10203
					*	*	*	*	4F10204
					*	*	*	*	4F10205
					*	*	*	*	4F10206
					*	*	*	*	4F10207
00413	0	00001	0	01350	PZE	G+1,,1	FIXCON)	ARG1+L,,L	4F10192
00414	0	00000	0	00002	PZE	FIXCON,,**		TDA,,N	4F10193
00415	-3	00062	0	00002	TXLOP	TXL	FIXCON,,50*1	***	FDA,,K*L
00416	0	00144	0	00144	PZE	50*2,,100		DBL,,J	4F10194
00417	1	00003	0	02073	FXCNIX	TXI	ALT,,5-2	TXI	ALT,,I
									4F10195
									4F10196
									4F10197
00420	0	00001	0	01350	PZE	G+1,,1	FLOCON)	ARG1+L,,L	4F10198
00421	0	00000	0	00312	PZE	FLOCON,,**		TDA,,N	4F10199
00422	3	00062	0	00312	TXHOP	TXH	FLOCON,,50*1	***	FDA,,K*L
00423	0	00702	0	00063	PZE	50*1+1,,450		DBL,,J	4F10200
00424	1	00003	0	02073	FLCNIX	TXI	ALT,,5-2	TXI	ALT,,I
									4F10201
									4F10202
									4F10203
00425	0	00002	0	01133	PZE	E+3+2,,2	TAU1	)	ARG1+L,,L
00426	0	00000	0	00000	PZE	TAU1,,**		TDA,,N	4F10204
00427	-3	00062	0	00000	TXL	TAU1,,25*2	***	FDA,,K*L	4F10205
00430	0	00144	0	00113	PZE	25*3,,100		DBL,,J	4F10206

00431	1	00001	0	02073	TAU1IX	TXI	ALT,,5-4	TAI	ALT,,I	4F10208
00432	0	00004	0	01135		PZE	E+3+4,,4	TAU2)	ARG1+L,,L	4F10209
00433	0	00000	0	00454		PZE	TAU2,,**		TDA,,N	4F10210
00434	-3	00060	0	00454		TXL	TAU2,,12*4	***	FDA,,K*L	4F10211
00435	0	00132	0	00074		PZE	12*5,,90		DBL,,J	4F10212
00436	1	00001	0	02073	TAU2IX	TXI	ALT,,5-4	TXI	ALT,,I	4F10213
00437	0	00006	0	01137		PZE	E+3+6,,6	TAU3)	ARG1+L,,L	4F10214
00440	0	00000	0	01356		PZE	TAU3,,**		TDA,,N	4F10215
00441	-3	00060	0	01356		TXL	TAU3,,8*6	***	FDA,,K*L	4F10216
00442	0	00113	0	00070		PZE	8*7,,75		DBL,,J	4F10217
00443	1	00001	0	02073	TAU3IX	TXI	ALT,,5-4	TXI	ALT,,I	4F10218
00444	0	00001	0	01142		PZE	E+11+1,,1	SIGMA1)	ARG1+L,,L	4F10219
00445	0	00001	0	01230		PZE	SIGMA1+2,,1		TDA,,N	4F10220
00446	-3	00036	0	01226		TXL	SIGMA1,,30*1	***	FDA,,K*L	4F10221
00447	0	00036	0	00074		PZE	30*2,,30		DBL,,J	4F10222
00450	1	00003	0	02073	SIG1IX	TXI	ALT,,5-2	TXI	ALT,,I	4F10223
00451	0	00002	0	01107		PZE	1C+2,,2	DIM1)	ARG1+L,,L	4F10224
00452	0	00000	0	00310		PZE	DIM1,,**		TDA,,N	4F10225
00453	-3	00000	0	00310	ORGDM1	TXL	DIM1,,0	***	FDA,,K*L	4F10226
00454	0	00144	0	00000		PZE	0,,100		DBL,,J	4F10227
00455	1	00002	0	02071	DIM1IX	TXI	DIMALT,,5-3	TXI	ALT,,I	4F10228
00456	0	00002	0	01107		PZE	1C+2,,2	DIM2)	ARG1+L,,L	4F10229
00457	0	00000	0	00764		PZE	DIM2,,**		TDA,,N	4F10230
00460	-3	00000	0	00764	ORGDM2	TXL	DIM2,,0	***	FDA,,K*L	4F10231
00461	0	00144	0	00000		PZE	0,,100		DBL,,J	4F10232
00462	1	00002	0	02071	DIM2IX	TXI	DIMALT,,5-3	TXI	ALT,,I	4F10233
00463	0	00003	0	01110		PZE	1C+3,,3	DIM3)	ARG1+L,,L	4F10234
00464	0	00000	0	01440		PZE	DIM3,,**		TDA,,N	4F10235
00465	-3	00000	0	01440	ORGDM3	TXL	DIM3,,0	***	FDA,,K*L	4F10236
00466	0	00132	0	00000		PZE	0,,90		DBL,,J	4F10237
00467	1	00002	0	02071	DIM3IX	TXI	DIMALT,,5-3	TXI	ALT,,I	4F10238
							END OF DRUM TABLE PARAMETERS.			4F10239
							*****			4F10240
							COUNT AND,BUFFER FOR TABLE OF FUNCTION NAMES AND DEGREES.			4F10241
		00470	BK	BSS	1		FORSUB COUNTER.			4F10242
		00471	FORSUB	BSS	100		NAMES AND DEGREES OF FUNCTIONS.			4F10243
							END OF FUNCTION COUNT AND BUFFER.			4F10244
							*****			4F10245
							PARAMETERS AND BUFFER FOR COMPILED INSTRUCTION TABLE.			4F10246
00635	0	00144	0	00000	BS	PZE	,,100			4F10247
00636	0	00000	0	00000	EC	PZE	,,**			4F10248
00637	0	00000	0	00000	BBOX	PZE	,,**			4F10249
				00640	CIB	BSS	100			4F10250
							COMPILED INSTRUCTION BUFFER.			4F10251
							END OF CIT PARAMETERS AND BUFFER.			4F10252
							*****			4F10253
							CIB CAPACITY (4 * 25).			4F10254
							ENTRY COUNT = NO. WORDS IN CIB.			4F10255
							2S COMPLEMENT OF THE ENTRY COUNT.			4F10256
							COMPILED INSTRUCTION BUFFER.			4F10257
							END OF CIT PARAMETERS AND BUFFER.			4F10258
							*****			4F10259
							*****			4F10260
							*****			4F10261

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ALL OF THE ABOVE BUFFERS AND PARAMETERS ARE USED BY 1 PRIME. 4F10262
01100 ORG 576 4F102625
01100 ERASE BSS 5 COMMON WORKING STORAGE. 4F10263
01105 1C BSS 5 COMMON WORKING STORAGE. 4F10264
01112 1G BSS 1 COMMON WORKING STORAGE. 4F10265
01113 2G BSS 1 COMMON WORKING STORAGE FOR STATE A. 4F10266
01114 3G BSS 1 4F10267
01115 1H BSS 1 4F10268
01116 2H BSS 1 4F10269
01117 3LBAR BSS 1 STORAGE USED BY ARITHMETIC. 4F10270
01120 ARERAS BSS 1 STORAGE USED BY ARITHMETIC. 4F10271
01121 -0 00001 0 00004 ARGCNT MZE 4,,1 ARGUMENT COUNTER USED BY C30,C32. 4F10272
01122 ARGCTR BSS 1 STORAGE USED BY ARITHMETIC. 4F10273
01123 0 00000 0 00000 CALLNM PZE **,,** 4F10274
01124 CHSAVE BSS 1 WORKING STORAGE USED BY ROYCNV. 4F10275
01125 DIMSAV BSS 1 WORKING STORAGE USED BY SS000. 4F10276
01126 E BSS 14 WORKING STORAGE USED BY SS000. 4F10277
01144 EPSM3 BSS 3 4F10278
01147 EPS BSS 1 EPSILON - VARIABLE USED BY RA000. 4F10279
01150 E1C BSS 1 COMMON WORKING STORAGE. 4F10280
01151 EFN BSS 1 EXTERNAL FORMULA NUMBER (F-1). 4F10281
01152 F BSS 111 ASSEMBLED STATEMENT REGION. 4F10282
01331 FIRSCT BSS 1 USED BY SS000,TESTFX,C3000. 4F10283
01332 FSNAME BSS 1 NAME OF FUNCTION. 4F10284
01333 FT BSS 12 SOURCE PROGRAM INPUT BUFFER. 4F10285
01347 G BSS 2 4F10286
01351 GTAG BSS 1 VARIABLE USED BY IOT, RA. 4F10287
01352 3074000000000 HOLCNT BCD 1H(0000 WORKING STORAGE USED BY C3300. 4F10288
01353 I BSS 1 4F10289
01354 LEFT BSS 3 STORAGE USED BY ARITHMETIC. 4F10290
01357 0 00000 0 00000 LENGTH PZE **,,** 4F10291
01360 NBAR BSS 1 STORAGE USED BY ARITHMETIC. 4F10292
01361 N2 BSS 1 4F10293
01362 OPNWRD BSS 1 ERASABLE USED BY STATE D. 4F10294
01363 0 00000 0 00000 PHI(I) PZE **,,** 4F10295
01364 0 00000 0 00010 RAT PZE 8,,** VARIABLE USED BY IOT. 4F10296
01365 RESIDU BSS 1 REMAINDER OF F-REGION WORD.(C0190) 4F10297
01366 1 00000 0 00000 SET PON .. 4F10298
01367 SL BSS 1 4F10299
01370 SYMBOL BSS 1 WORKING STORAGE USED BY SS000. 4F10300
01371 0 00000 0 00370 TL PZE 31*8,,** 4F10301
01372 0 00000 0 00000 TLINE PZE ** VARIABLE USED BY IOT. 4F10302
END OF COMMON WORKING STORAGE, BUFFERS, AND PARAMETERS. 4F10303
* * * * * 4F10304
COMMON/2-CONSTANTS USED BY SECTION ONE= 4F10305
01373 +00000000000012 TEN OCT 12 (1010) - CTEST-1I 4F10308
01374 +00000000000077 ENDMK OCT 77 111111 - CTEST-I0 4F10309
01375 +00000000000074 OPEN OCT 74 ( - CTEST-9 4F10310
01376 +00000000000073 COMMA OCT 73 , - CTEST-8 4F10311
01377 +00000000000034 CLOS OCT 34 ) - CTEST-7 4F10312
01400 +00000000000013 EQUAL OCT 13 = - CTEST-6 4F10313
01401 +00000000000040 11Z OCT 40 - - CTEST-5 4F10314

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01402	+0000000000061	SLASH	OCT	61	/	- CTEST-4	4F10315
01403	+0000000000033	POINT	OCT	33	.	- CTEST-3	4F10316
01404	+0000000000020	12Z	OCT	20	+	- CTEST-2	4F10317
01405	+0000000000054	STAR	OCT	54	*	- CTEST-1	4F10318
	01406	CTEST	BSS	0		ADDRESS USED FOR INDEXING ABOVE.	4F10319
							4F10320
01406	0000000000000	L(0)	BCD	1000000	0		4F10321
01407	0000000000001	L(1)	BCD	1000001	1		4F10322
01410	0000000000002	L(2)	BCD	1000002	2		4F10323
01411	0000000000003	L(3)	BCD	1000003	3		4F10324
01412	0000000000004	L(4)	BCD	1000004	4		4F10325
01413	0000000000005	L(5)	BCD	1000005	5		4F10326
01414	0000000000006	L(6)	BCD	1000006	6		4F10327
01415	0000000000007	L(7)	BCD	1000007	7		4F10328
01416	0000000000010	L(8)	BCD	1000008	8		4F10329
01417	0000000000011	L(9)	BCD	1000009	9		4F10330
01420	+0000000000014	MINUS	OCT	14	-		4F10331
01421	0000000000023	L(C)	BCD	100000C	C		4F10332
01422	0000000000026	L(F)	BCD	100000F	F		4F10333
01423	0000000000030	L(H)	BCD	100000H	H		4F10334
01424	+0000000000032	CHAR2	OCT	32		CONSTANT USED BY CD000.	4F10335
01425	0000000000046	L(O)	BCD	100000O	O	(ALPHABETIC)	4F10336
01426	+0000000000052	CHAR3	OCT	52		CONSTANT USED BY CD000.	4F10337
01427	+0000000000053	SPECOP	OCT	53		00000\$	4F10338
01430	+0000000000060	BLANK	OCT	60		0000000000060	4F10339
01431	0000000000062	L(S)	BCD	100000S	S		4F10340
01432	0000000000063	L(T)	BCD	100000T	T		4F10341
01433	0000000000067	L(X)	BCD	100000X	X		4F10342
01434	0000000000071	L(Z)	BCD	100000Z	Z		4F10343
01435	+0000000000072	PM	OCT	72		RECORD MARK (ILLEGAL) -CD000	4F10344
01436	+0000000000100	BIT29	OCT	100			4F10345
01437	+0000000000121	A81	DEC	81		CONSTANT USED BY IOT.	4F10346
01440	+0000000000140	L(96)	OCT	140		USED BY C0500.	4F10347
01441	+0000000000160	L(112)	OCT	160		USED BY C0400.	4F10348
01442	+0000000000777	MASK3	OCT	777		, ARITHMETIC.	4F10349
01443	+000000001000	1E9	OCT	1000		AADDRESS=8	4F10350
01444	000000002174	L(A())	BCD	10000A()		INTERNAL FLO-PT VARIABLE PREFIX.	4F10351
01445	000000003074	L(H())	BCD	10000H()			4F10352
01446	000000003174	L(I())	BCD	10000I()		INTERNAL FXD-PT VARIABLE PREFIX.	4F10353
01447	+000000006212	SAPSYM	OCT	6212			4F10354
01450	+000000006712	IFSVM	OCT	6712			4F10355
01451	+000000007112	CALLER	OCT	7112			4F10356
01452	+000000077777	MASK2	OCT	77777		2**15-I -ARITHMETIC.	4F10357
01453	+000000400000	2E17	OCT	400000		TAG=4	4F10358
01454	+000001000000	2E18	OCT	1000000		DECREMENT=1	4F10359
01455	0 00001 0 00001	DECR1	PZE	1,,1		CONSTANT USED BY DRTABS.	4F10360
01456	+000001000002	ABTAG2	OCT	1000002		CONSTANT USED BY C3200.	4F10361
01457	0 00002 0 00000	D2	PZE	,,2		CONSTANT USED BY IOT.	4F10362
01460	+000002000004	ABTAG3	OCT	2000004		CONSTANT USED BY C3200.	4F10363
01461	0 00003 0 00000	D3CN	PZE	,,3		CONSTANT USED BY IOT.	4F10364
01462	+000003077775	BETAD2	OCT	3077775		3*2**18+(-3) -ARITHMETIC.	4F10365
01463	0 00006 0 00000	D6	PZE	,,6		CONSTANT USED BY IOT.	4F10366
01464	0 00020 0 00000	FSIND	PZE	,,16			4F10367
01465	0 00021 0 00000	DECI7	PZE	,,17			4F10368

01466	0 00022 0 00000	DEC18	PZE	,,18		4F10369
01467	+000032000000	PZ	OCT	32000000	PLUS ZERO -ED000.	4F10370
01470	+000037777600	MASK5	OCT	37777600	-ARITHMETIC.	4F10371
01471	0 00040 0 00000	FNIND	PZE	,,32		4F10372
01472	0 00043 0 00000	DEC35	PZE	,,35		4F10373
01473	+000052000000	MZ	OCT	52000000	MINUS ZERO -CD000.	4F10374
01474	+000200000000	NGTBIT	OCT	000200000000		4F10375
01475	0 00220 0 00000	BTA	PZE	,,144	CONSTANT USED BY IOT.	4F10376
01476	0 00300 0 00000	BDA	PZE	0,0,192	CONSTANT USED BY IOT.	4F10377
01477	006060606060	5BLANS	BCD	10	006060606060	4F10378
01500	010000000000	E(	BCD	1100000	-ARITHMETIC.	4F10379
01501	020000000000	I(	BCD	1200000	-ARITHMETIC.	4F10380
01502	030000000000	A(	BCD	1300000	-ARITHMETIC.	4F10381
01503	040000000000	P(	BCD	1400000	-ARITHMETIC.	4F10382
01504	060000000000	O(	BCD	1600000	-ARITHMETIC.	4F10383
01505	070000000000	X(	BCD	1700000	-ARITHMETIC.	4F10384
01506	+077775077775	BETAD1	OCT	77775077775	(-3(*2**18+(-3)	4F10365
01507	+077777000000	1BAR	OCT	777770000000	(2**15-1)*2**18DECREMENT MASK.	4F10386
01510	+170000000000	15P	DEC	15B5	CONSTANT USED BY IOT.	4F10387
01511	+176060606060	PROCTR	OCT	176060606060		4F10388
01512	+200000000000	ADPLUS	OCT	200000000000	ADDITION SIGN -ARITHMETIC.	4F10389
01513	217400000000	FLOVAR	BCD	1A(0000	A(INTERNAL FLOATING PT. VARIABLE.	4F10390
01514	256747740160	FXFX	BCD	1EXP(1		4F10391
01515	256747740260	FLFX	BCD	1EXP(2		4F10392
01516	256747740360	FLFL	BCD	1EXP(3		4F10393
01517	317400000000	FIXVAR	BCD	1I(0000	I(INTERNAL FIXED PT. VARIABLE.	4F10394
01520	-0 00000 0 00000	MINUS0	MZE	0		4F10395
01521	-0 00002 0 00000	DECM12	MZE	,,2		4F10396
01522	-130000000000	ADSP0P	OCT	530000000000	\$00000	4F10397
01523	-136000000000	DOLSGN	OCT	536000000000	CONSTANT USED BY C32000	4F10398
01524	-140000000000	ADSTAR	OCT	-140000000000	MULTIPLICATION SIGN -ARITHMETIC.	4F10399
01525	-145400000000	STRSTR	OCT	-145400000000	EXPONENTIATION SIGN -ARITHMETIC.	4F10400
01526	606060606060	BLANKS	BCD	1	606060606060	4F10401
01527	-377777700000	MASK1	OCT	-377777700000	-(2**20-U.*2**15 -ARITHMETIC.	4F10402
01530	-377777777737	MASK4	OCT	-377777777737	-ARITHMETIC.	4F10403
01531	-377777777777	ALL1	OCT	-377777777777	END OF STATEMENT WORD.	4F10404
						4F10405
01532	212424000000	L(ADD)	BCD	1ADD000	SYMBOLIC OPERATION CODE.	4F10406
01533	214362000000	L(ALS)	BCD	1ALS000	SYMBOLIC OPERATION CODE.	4F10407
01534	214521000000	L(ANA)	BCD	1ANA000	SYMBOLIC OPERATION CODE.	4F10408
01535	215162000000	L(ARS)	BCD	1ARS000	SYMBOLIC OPERATION CODE.	4F10409
01536	226262000000	L(BSS)	BCD	1BSS000	SYMBOLIC OPERATION CODE.	4F10410
01537	232143000000	L(CAL)	BCD	1CAL000		4F10411
01540	233062000000	L(CHS)	BCD	1CHS000	SYMBOLIC OPERATION CODE.	4F10412
01541	234321000000	L(CLA)	BCD	1CLA000	SYMBOLIC OPERATION CODE.	4F10413
01542	234344000000	L(CLM)	BCD	1CLM000	SYMBOLIC OPERATION CODE.	4F10414
01543	234362000000	L(CLS)	BCD	1CLS000	SYMBOLIC OPERATION CODE.	4F10415
01544	234770000000	L(CPY)	BCD	1CPY000		4F10416
01545	242363000000	L(DCT)	BCD	1DCT000	SYMBOLIC OPERATION CODE.	4F10417
01546	242524000000	L(DED)	BCD	1DED000		4F10418
01547	246547000000	L(DVP)	BCD	1DVP000	SYMBOLIC OPERATION CODE.	4F10419
01550	262124000000	L(FAD)	BCD	1FAD000	SYMBOLIC OPERATION CODE.	4F10420
01551	262447000000	L(FDP)	BCD	1FDP000	SYMBOLIC OPERATION CODE.	4F10421
01552	264447000000	L(FMP)	BCD	1FMP000	SYMBOLIC OPERATION CODE.	4F10422

01553	266222000000	L(FSB)	BCD	1FSB000	SYMBOLIC OPERATION CODE.	4F10423
01554	304751000000	L(HPR)	BCD	1HPR000	SYMBOLIC OPERATION CODE.	4F10424
01555	432421000000	L(LDA)	BCD	1LDA000		4F10425
01556	432450000000	L(LDQ)	BCD	1LDQ000	SYMBOLIO OPERATION CODE.	4F10426
01557	434362000000	L(LLS)	BCD	1LLS000	SYMBOLIC OPERATION CODE.	4F10427
01560	435162000000	L(LRS)	BCD	1LRS000	SYMBOLIC OPERATION CODE.	4F10428
01561	436724000000	L(LXD)	BCD	1LXD000	SYMBOLIC OPERATION CODE.	4F10429
01562	444770000000	L(MPY)	BCD	1MPY000	SYMBOLIC OPERATION CODE.	4F10430
01563	446225000000	L(MSE)	BCD	1MSE000	IDMBOLIC OPERATION CODE.	4F10431
01564	465121000000	L(ORA)	BCD	1ORA000	SYMBOLIC OPERATION CODE.	4F10432
01565	476225000000	L(PSE)	BCD	1PSE000	SYMBOLIC OPERATION CODE.	4F10433
01566	476724000000	L(PXD)	BCD	1PXD000	SYMBOLIC OPERATION CODE.	4F10434
01567	504751000000	L(QPR)	BCD	1QPR000	CONSTANT USED BY C3200.	4F10435
01570	506724000000	L(QXD)	BCD	1QXD000	CONSTANT USED BY C3200.	4F10436
01571	626321000000	L(STA)	BCD	1STA000	SYMBOLIC OPERATION CODE.	4F10437
01572	626346000000	L(STO)	BCD	1STO000	SYMBOLIC OPERATION CODE.	4F10438
01573	626350000000	L(STQ)	BCD	1STQ000	SYMBOLIC OPERATION CODE.	4F10439
01574	626422000000	L(SUB)	BCD	1SUB000	SYMBOLIC OPERATION CODE.	4F10440
01575	626724000000	L(SXD)	BCD	1SXD000	SYMBOLIC OPERATION CODE.	4F10441
01576	633167000001	L(TIX)	BCD	1TIX001		4F10442
01577	634665000000	L(TOV)	BCD	1TOV000	SYMBOLIC OPERATION CODE.	4F10443
01600	635046000000	L(TQO)	BCD	1TQO000	SYMBOLIC OPERATION CODE.	4F10444
01601	635121000000	L(TRA)	BCD	1TRA000	SYMBOLIC OPERATION CODE.	4F10445
01602	636267000000	L(TSX)	BCD	1TSX000	SYMBOLIC OPERATION CODE.	4F10446
01603	642621000000	L(UFA)	BCD	1UFA000	IYMBOLIC OPERATION CODE.	4F10447

END OF COMMON CONSTANTS USED BY SECTION ONE. 4F10448
 * * * * * 4F10449

COMMON/3--SUBROUTINES USED BY SECTION ONE=
 4F10450
 4F10451
 4F10452
 * * * * * 4F10453
 4F10454

C0150,2/ CALLS=C0190,DIAG,C0180,C0160. CALLER=C0100. 4F10455
 C0150 INSPECTS 1ST NB CHAR STARTING IN MQ. IF NUMERIC, SETS I 4F10456
 = 0, AND CONVERTS SUCCESSIVE NUMERICS TO BINARY. IF NON- 4F10457
 NUMERIC, SETS I = -0, AND PACKS INTO 1G SUCCESSIVE CHARACTERS 4F10458
 UNTIL A ,()= OR ENDMK IS MET, AND LEFT IN THE AC. 4F10459

01604	-0	63400	2	01607	C0150	SXD	C015X,2	SAVE THE C(XR2).	4F10460
01605	0	07400	4	01707		TSX	C0190,4	* TEST 1ST NON-BLANK CHARACTER	4F10461
01606	0	34000	0	01417		CAS	L(9)	FOR NUMERIC OR NON-NUMERIC.	4F10462
01607	1	00000	0	01615	C015X	TXI	C0151,0,**	IF NON-NUMERIC, TRANSFER.	4F10463
01610	0	76100	0	00000		NOF		IF NUMERIC, THEN	4F10464
01611	0	07400	2	01655		TSX	C0180,2	* GO CONVERT TO BINARY.	4F10465
01612	0	60100	0	01113		STO	2G	SAVE NEXT NON-NUMERIC CHARACTER.	4F10466
01613	0	50000	0	01406		CLA	L(0)	PREPARE TO SET I TO +0.	4F10467
01614	1	00000	0	01620	FWA	TXI	C0152,0,**	GO SET I FOR NUMERIC.	4F10468
01615	0	07400	2	01624	C0151	TSX	C0160,2	* ASSEMBLE NON-NUMERICS IN 1G.	4F10469
01616	0	60100	0	01113		STO	2G	SAVE PUNCTUATION MARK, AND	4F10470
01617	0	50200	0	01406		CLS	L(0)	PREPARE TO SET I TO -0.	4F10471
01620	0	60100	0	01353	C0152	STO	I	SET I = +0, OR -0.	4F10472
01621	0	50000	0	01113		CLA	2G	PICKUP NEXT CHARACTER,	4F10473
01622	-0	53400	2	01607		LXD	C015X,2	RESTORE THE C(XR2), AND	4F10474
01623	0	02000	2	00001		TRA	1,2	* RETURN TO CALLER.	4F10475

END OF PROGRAM C0150. 4F10476


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CIT00 MAKES ENTRIES IN THE COMPILED INSTRUCTION TABLE. WHEN 4F10584
THE BUFFER IS FULL IT IS WRITTEN AS A RECORD ONTO TAPE 3. 4F10585
01731 -0 63400 2 01102 CIT00 SXD CITXR2,2 SAVE THE C(XR2). 4F10586
01732 -0 63400 1 01101 SXD CITXR1,1 SAVE THE C(XR1). 4F10587
01733 -0 60000 0 01150 STQ CITMQR SAVE THE C(MQR). 4F10588
01734 -0 53400 2 00637 LXD BBOX,2 SET XR2 = 2S COMPL OF NO-WRDS-ENTD.4F10589
01735 0 50000 0 00635 CLA BS COMPARE BLOCK SIZE 4F10590
01736 0 40200 0 00636 SUB EC WITH ENTRY COUNT. 4F10591
01737 -0 10000 0 01747 TNZ CIT04 IF BLOCK IS NOT FULL,GO MAKE ENTRY.4F10592
01740 0 76600 0 00223 WRS CITTAP PREPARE TO WRITE BLOCK ON CIT TAPE.4F10593
01741 0 73400 1 00000 PAX ,1 SET XR1 = 0, AND 4F10594
01742 0 70000 1 00640 CIT01 CPY CIB,1 COPY SUCCESSIVE 4F10595
01743 1 77777 1 01744 TXI CIT02,1,-1 WORDS OF BLOCK 4F10596
01744 1 00001 2 01745 CIT02 TXI CIT03,2,1 AND CONTINUE 4F10597
01745 3 00001 2 01742 CIT03 TXH CIT01,2,1 UNTIL XR2 = 0. 4F10598
01746 0 76600 0 00333 IOD WHEN DONE, 4F10599
01747 0 53400 1 01412 CIT04 LXA L(4),1 SET XR1 = ENTRY SIZE. 4F10600
01750 1 77777 4 01751 CIT05 TXI CIT05+1,4,-1 SET XR4 = -(ADDR OF NEXT ENTRY WRD)4F10601
01751 0 50000 4 00000 CLA 0,4 AND PICK UP ADDRESS OF NEXT ENTRY 4F10602
01752 0 62100 0 01753 STA CIT06 TO SET NEXT ADDRESS. 4F10603
01753 0 50000 0 00000 CIT06 CLA ** MOVE ENTRY 4F10604
01754 0 60100 2 00640 STO CIB,2 INTO CIB BUFFER, 4F10605
01755 1 77777 2 01756 TXI CIT07,2,-1 AND COUNT -1 FOR EACH WORD ENTERED.4F10606
01756 2 00001 1 01750 CIT07 TIX CIT05,1,1 WHEN DONE, 4F10607
01757 -0 63400 2 00637 SXD BBOX,2 SAVE THE C(XR2), AND 4F10608
01760 -0 75400 2 02032 DMSR99 PXD DMSR05+1,2 COMPUTE THE 4F10609
01761 0 76000 0 00006 COM REAL NUMBER 4F10610
01762 0 40000 0 01454 ADD 2E18 OF WORDS ENTERED 4F10611
01763 -0 73400 2 02031 DMSR98 PDX DMSR05,2 IN CIB BUFFER, AND 4F10612
01764 -0 63400 2 00636 SXD EC,2 SAVE IN EC. 4F10613
01765 0 56000 0 01150 LDQ CITMQR RESTORE THE C(MQR), 4F10614
01766 -0 53400 1 01101 LXD CITXR1,1 RESTORE THE C(XR1), 4F10615
01767 -0 53400 2 01102 LXD CITXR2,2 RESTORE THE C(XR2I), AND 4F10616
01770 0 02000 4 00001 TRA 1,4 * EXIT TO MAIN ROUTINE (5TH WRD CS). 4F10617
END OF PROGRAM CIT00. 4F10618
* * * * * 4F10619
DIM.SR,4/ CALLS=DIAG. CALLERS=C1200,SS000,CMA. 4F10621
DIM.SR SEARCHS THE DIMENSION TABLES. ENTRANCE IS TO DIM1SR, 4F10622
DIM2SR, OR DIM3SR ACCORDING TO THE DIMENSION. 4F10623
DIM1SR= ENTRY POINT FOR 1 DIMENSION TABLE. 4F10624
01771 -0 63400 4 01774 DIM1SR SXD DMSR00,4 SAVE THE C(XR4) FOR RETURN, 4F10625
01772 -0 53400 4 00452 LXD DIM1IX-3,4 SET XR4 = NUMBER OF ENTRIES IN DIM14F10626
01773 0 50000 0 00453 CLA ORGDM1 AND PICK UP 1ST ADDRESS OF DIM1 TO 4F10627
01774 1 00000 0 02000 DMSR00 TXI DMSR01,0,** GO SET DRUM ADDRESS. 4F10628
DIM2SR= ENTRY POINT FOR 2 DIMENSION TABLE. 4F10629
01775 -0 63400 4 01774 DIM2SR SXD DMSR00,4 SAVE THE C(XR4) FOR RETURN, 4F10630
01776 -0 53400 4 00457 LXD DIM2IX-3,4 SET XR4 = NUMBER OF ENTRIES IN DIM24F10631
01777 0 50000 0 00460 CLA ORGDM2 AND PICK UP 1ST ADDRESS OF DIM2 TO 4F10632
02000 0 62100 0 01104 DMSR01 STA DRMADR SET DRUM ADDRESS. 4F10633
02001 0 50000 0 01760 CLA DMSR99 SET LOOP ADDRESS TO 4F10634
02002 0 62100 0 02041 STA DMSR15 DMSR05+1 FOR DIM1 AND DIM2. 4F10635
02003 -0 50000 0 02065 CAL DMCN12 (STZ D3) 4F10636
02004 1 00000 0 02014 DMSR11 TXI DMSR02,0,** GO SET OP FOR DIM1 AND DIM2. 4F10637

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					DIM3SR= ENTRY POINT FOR 3	DIMENSION TABLE.	4F10638	
02005	-0	63400	4	01774	DIM3SR	SXD DMSR00,4	SAVE THE C(XR4) FOR RETURN,	4F10639
02006	-0	53400	4	00464		LXD DIM3IX-3,4	SET XR4 = NUMBER OF ENTRIES IN DIM3	4F10640
02007	0	50000	0	00465		CLA ORGDM3	AND PICK UP 1ST ADDRESS OF DIM3 TO	4F10641
02010	0	62100	0	01104		STA DRMADR	SET DRUM ADDRESS.	4F10642
02011	0	50000	0	01763		CLA DMSR98	SET LOOP ADDRESS TO	4F10643
02012	0	62100	0	02041		STA DMSR15	DMSR05 FOR DIM3.	4F10644
02013	-0	50000	0	02066		CAL DMCN3	(CPY D3)	4F10645
02014	0	60200	0	02031	DMSR02	SLW DMSR05 4	SET OP CODES ACCORDING	4F10646
02015	0	60200	0	02044		SLW DMSR07	TO DIMENSION.	4F10647
02016	-3	00000	4	02047		TXL DMSR08,4,0	IF TABLE IS EMPTY, GO OUT.	4F10648
02017	-0	63400	4	02004		SXD DMSR11,4	SAVE ENTRY COUNT IN CASE OF ERROR.	4F10649
02020	0	53400	4	01413	DMSR14	LXA L(5),4	SET ERROR COUNTER FOR 5 ATTEMPTS.	4F10650
02021	-0	63400	4	02035	DMSR13	SXD DMSR12,4	SAVE ERROR COUNTER, AND	4F10651
02022	-0	53400	4	02004		LXD DMSR11,4	RESET ENTRY COUNT.	4F10652
02023	0	76200	0	00303		RDR 3	SELECT DRUM.	4F10653
02024	0	50000	0	01130		CLA E+2	GET NAME OF VARIABLE.	4F10654
02025	0	46000	0	01104		LDA DRMADR	LOAD CURRENT DRUM ADDRESS, AND	4F10655
02026	0	70000	0	01100	DMSR04	CPY DRSYM	COPY DRUM SYMBOL.	4F10656
02027	0	04000	0	02043		TLQ DMSR06	COMPARE WITH NAME OF VARIABLE, AND	4F10657
02030	0	70000	0	01101		CPY D12	IF NOT LESS, COPY N1 AND N2.	4F10658
02031	0	00000	0	01102	DMSR05	PZE D3	(DIM1 AND DIM2 = STZ , DIM3 = CPY).	4F10659
02032	0	70000	0	01103		CPY DRCKSM	COPY CHECKSUM.	4F10660
02033	0	34000	0	01100		CAS DRSYM	COMPARE DRUM SYMBOL WITH NAME OF V.	4F10661
02034	0	07400	4	03400		TSX DIAG,4	* GO TO DIAGNOSTIC - MACHINE ERROR.	4F10662
02035	1	00000	0	02051	DMSR12	TXI DMSR09,0,**	IF NOT EQUAL, THEN	4F10663
02036	0	70000	0	01100		CPY DRSYM	CONTINUE	4F10664
02037	0	04000	0	02043		TLQ DMSR06	PROCESS	4F10665
02040	0	70000	0	01101		CPY D12	UNTIL	4F10666
02041	2	00001	4	00000	DMSR15	TIX **,4,1	TABLE	4F10667
02042	1	00000	0	02047		TXI DMSR08,0	IS EXHAUSTED.	4F10668
02043	0	70000	0	01101	DMSR06	CPY D12	PASS OVER ENTRY	4F10669
02044	0	00000	0	01102	DMSR07	PZE D3	(DIM1 AND DIM2 = STZ , DIM3 = CPY).	4F10670
02045	0	70000	0	01103		CPY DRCKSM	AND CHECKSUM, AND	4F10671
02046	2	00001	4	02026		TIX DMSR04,4,1	REPEAT LOOP.	4F10672
02047	-0	53400	4	01774	DMSR08	LXD DMSR00,4	RESTORE THE C(XR4), AND	4F10673
02050	0	02000	4	00001		TRA 1,4	* TAKE NOT FOUND EXIT.	4F10674
02051	-0	50000	0	01100	DMSR09	CAL DRSYM	COMPUTE A	4F10675
02052	0	36100	0	01101		ACL D12	NEW	4F10676
02053	0	36100	0	01102		ACL D3	LOGICAL CHECKSUM	4F10677
02054	0	76000	0	00006		COM	FOR ENTRY, AND	4F10678
02055	0	36100	0	01103		ACL DRCKSM	COMPARE WITH	4F10679
02056	0	76000	0	00006		COM	DRUM CHECKSUM.	4F10680
02057	0	10000	0	02063		TZE DMSR10	IF NOT EQUAL, THEN	4F10681
02060	-0	53400	4	02035		LXD DMSR12,4	REPEAT ATTEMPT,	4F10682
02061	2	00001	4	02021		TIX DMSR13,4,1	UNLESS PROCESS	4F10683
02062	0	07400	4	03400		TSX DIAG,4	* FAILED 5 TIMES IN READING DRUM.	4F10684
02063	-0	53400	4	01774	DMSR10	LXD DMSR00,4	RESTORE THE C(XR4), AND	4F10685
02064	0	02000	4	00002		TRA 2,4	* TAKE FOUND EXIT TO MAIN ROUTINE.	4F10686
								4F10687
02065	0	60000	0	01102	DMCN12	STZ D3	CONSTANT USED BY DIM.SR.	4F10688
02066	0	70000	0	01102	DMCN3	CPY D3	CONSTANT USED BY DIM.SR.	4F10689
02067	456351000000				ENT	BCD 1NTR000	VARIABLE USED BY IO AND FL.	4F10690
02070	477125000000				NZE	BCD 1PZE000	VARIABLE USED BY FL.	4F10691

END OF PROGRAM DIM.SR. 4F10692
 * * * * * 4F10693

DRTABS(,4)/ CALLS=RDRX,DIAG. CALLERS=C1200,SS000,ROYCNV,CMA, 4F10695
 VRA(VRD). 4F10696

DRTABS IS CALLED BY TSXIX,4 -WHERE IS THE NAME OF 4F10697
 THE DRUM TABLE REFERRED TO. DRTABS MAKES ENTRIES IN THE DRUM 4F10698
 TABLES, AND ALSO SEARCHES THE DRUM TABLES FOR INFORMATION. 4F10699

DIMALT= ENTRY POINT FOR DIMENSION TABLES. 4F10700

D 02071 -0 50000 0 00415 DIMALT CAL TXLOP PICK UP SNITCH CONTROL, 4F10701
 02072 1 00000 0 02074 TXI DRTABS,0 AND GO SET SNITCH FOR DIM TABLES. 4F10702

ALT= ENTRY POINT FOR ALL OTHER DRUM TABLES. 4F10703

02073 0 50000 0 00422 ALT CLA TXHOP PICK UP SWITCH CONTROL, 4F10704

02074 0 63000 0 02135 DRTABS STP DIMSW SET SNITCH. 4F10705

02075 0 50000 4 00000 CLA 0,4 GET CALLER (TSXIX,4) IN AC. 4F10706

02076 -0 63400 1 02535 SXD XR1,1 SAVE THE C(XR1), 4F10707

02077 -0 63400 2 02173 SXD XR2,2 SAVE THE C(XR2), 4F10708

02100 -0 63400 4 02215 SXD XR4,4 SAVE THE C(XR4), AND 4F10709

02101 -0 60000 0 02357 STQ MQ SAVE THE C(MQR). 4F10710

02102 0 40000 0 01407 ADD L(1) PREPARE TO MOVE PARAMETERS 4F10711

02103 0 62100 0 02107 STA MOVE INTO WORKING STORAGE. 4F10712

02104 0 40200 0 01412 SUB L(4) PREPARE TO UPDATE 4F10713

02105 0 62100 0 02213 STA UPDATE PERMANENT PARAMETER. 4F10714

02106 0 53400 1 01413 LXA L(5),1 MOVE 5 WORDS 4F10715

02107 -0 50000 1 00000 MOVE CAL **,1 (...IX+1) 4F10716

02110 0 60200 1 02365 SLW TEMP,1 OF PARAMETERS 4F10717

02111 2 00001 1 02107 TIX MOVE,1,1 INTO WORKING STORAGE. 4F10718

02112 0 50200 0 02360 CLS NAR INITIALIZE 4F10719

02113 0 62100 0 02221 STA TRY ALL 4F10720

02114 0 40000 0 01407 ADD L(1) GENERAL 4F10721

02115 0 62100 0 02200 STA ESUM1 INSTRUCTIONS= 4F10722

02116 0 62100 0 02202 STA ESUM2 X 4F10723

02117 0 77100 0 00021 ARS 17 X 4F10724

02120 0 40100 0 02526 ADM BIAS X 4F10725

02121 0 62100 0 02530 STA JUMP1 X 4F10726

02122 0 62100 0 02555 STA JUMP2 X 4F10727

02123 -0 50000 0 02362 CAL FDA X 4F10728

02124 0 62200 0 02235 STD COMPR X 4F10729

02125 0 63000 0 02530 STP JUMP1 X 4F10730

02126 0 63000 0 02152 STP SW X 4F10731

02127 0 63000 0 02210 STP RX4 X 4F10732

02130 0 50000 0 02533 CLA LBUF X 4F10733

02131 0 62100 0 02222 STA BUFL X 4F10734

02132 0 50000 0 02361 CLA TDA X 4F10735

02133 -0 53400 2 02361 LXD TDA,2 X 4F10736

02134 -0 63400 2 02146 SXD BUFF+1,2 X 4F10737

D 02135 -3 00000 0 02145 DIMSW TXL BUFF,0 IF DIM TABLE, SKIP SEARCH. 4F10738

02136 -3 00000 2 02150 TXL XERR01+1,2,0 SKIP IF TABLE IS EMPTY. 4F10739

02137 -0 53400 1 02360 LXD NAR,1 4F10740

02140 -0 63400 2 02223 SXD NC,2 4F10741

02141 -0 63400 2 02143 SXD ADD01,2 4F10742

02142 -2 00001 1 02235 ADD02 TNX COMPR,1,1 COMPUTES (N*L). 4F10743

02143 1 00000 2 02142 ADD01 TXI ADD02,2,** (N) 4F10744

02144 -0 53400 2 02362 BUFFM1 LXD FDA,2 4F10745

	02145	-0	53400	1	02363	BUFF	LXD	DBL,1	L(J)	4F10746
	02146	2	00000	1	02150		TIX	BUFF+3,1,**	(N) TEST FOR TABLE OVERFLOW.	4F10747
D	02147	1	00000	0	02256	XERR01	TXI	WHICH,0	GO FIND OUT WHICH TABLE OVERFLOWED.	4F10748
	02150	-0	53400	1	02364		LXD	DI,1		4F10749
	02151	0	76600	1	00305		WDR	5,1		4F10750
D	02152	-3	00000	0	02174	SW	TXL	EBLK,0	ENTRY SUM=TXL, BLOCK SUM=TXH.	4F10751
	02153	-3	00000	2	02156		TXL	ADD04,2,0	SKIP IF TABLE IS EMPTY.	4F10752
	02154	1	00001	2	02155		TXI	ADD03,2,1		4F10753
	02155	-2	00062	2	02163	ADD03	TNX	ADD05,2,5,0	SKIP IF BLOCK IS NOT YET FULL.	4F10754
	02156	0	60000	0	02365	ADD04	STZ	DUMP	START NEW BLOCK CHECKSUM.	4F10755
	02157	0	50000	0	02361		CLA	TDA	CHANGE CHECKSUM ADDRESS.	4F10756
	02160	0	62100	0	02362		STA	FDA		4F10757
	02161	0	40000	0	01407		ADD	L(1)	SET ENTRY ADDR = CHECKSUM ADDR +1.	4F10758
	02162	0	62100	0	02361		STA	TDA		4F10759
	02163	-0	50000	0	02365	ADD05	CAL	DUMP		4F10760
	02164	0	36100	0	01347		ACL	G	ADD NEW FLOCON TO	4F10761
	02165	0	60200	0	02365		SLW	DUMP	CHECKSUM FOR THIS BLOCK.	4F10762
	02166	0	46000	0	02362		LDA	FDA		4F10763
	02167	0	70000	0	02365		CPY	DUMP	WRITE BLOCK CHECKSUM ON DRUM.	4F10764
	02170	0	76600	1	00305		WDR	5,1		4F10765
	02171	0	46000	0	02361		LDA	TDA		4F10766
	02172	0	70000	0	01347		CPY	G	WRITE NEW FLOCON ON DRUM.	4F10767
	02173	1	00000	0	02205	XR2	TXI	NOWIN,0,**	GO UPDATE FLOCON PARAMETER.	4F10768
	02174	-0	75400	0	00000	EBLK	PXD	,0	FOR ALL TABLES EXCEPT FLOCON=	4F10769
	02175	-0	53400	2	02360		LXD	NAR,2	(L)	4F10770
	02176	0	46000	0	02361		LDA	TDA	NEXT DRUM ENTRY ADDRESS.	4F10771
	02177	-2	00001	2	02202		TNX	ESUM2,2,1	IF L = 1,	4F10772
	02200	-0	70000	2	00000	ESUM1	CAD	** ,2	(ARG1+L-1) WRITE NEW	4F10773
	02201	2	00001	2	02200		TIX	ESUM1,2,1	ENTRY ON DRUM.	4F10774
	02202	-0	70000	0	00000	ESUM2	CAD	**	(ARG1+L-1)	4F10775
	02203	0	60200	0	02365		SLW	DUMP	COMPUTE AND	4F10776
	02204	0	70000	0	02365		CPY	DUMP	WRITE CHECKSUM FOR NEW ENTRY.	4F10777
	02205	-0	50000	0	02360	NOWIN	CAL	NAR	UPDATE PERMANENT	4F10778
	02206	0	77100	0	00022		ARS	18	PARAMETERS FOR ENTRY	4F10779
	02207	0	40000	0	01455		ADD	DECR1	JUST ADDED TO TABLE.	4F10780
	02210	-3	00000	0	02212	RX4	TXL	RX4+2,0,**	IF TABLE WAS FLOCON,	4F10781
	02211	0	40200	0	01407		SUB	L(1)	READJUST.	4F10782
	02212	0	40100	0	02361		ADM	TDA	N=N+1,TDA=TDA+(L+1) OR (L).	4F10783
	02213	0	60100	0	00000	UPDATE	STO	**	(...IX-3)	4F10784
	02214	-0	53400	2	02361		LXD	TDA,2	L(N)	4F10785
	02215	1	00000	0	02247	XR4	TXI	OUT,0,**	GET TAG AND EXIT.	4F10786
	02216	-0	53400	4	02223	NXBLK	LXD	NC,4		4F10787
	02217	-0	53400	2	02362		LXD	FDA,2	L(K*L),K=K.	4F10788
	02220	-0	53400	1	02360	NEW	LXD	NAR,1	L(L)	4F10789
	02221	0	50000	1	00000	TRY	CLA	** ,1	(ARG1+L)	4F10790
	02222	0	34000	2	00000	BUFL	CAS	** ,2	(BUFR OR CTABL)	4F10791
	02223	1	00000	0	02225	NC	TXI	NC+2,0,**	NOT FOUND.	4F10792
	02224	1	77777	2	02242		TXI	YEA,2,-1	K*L = K*L-1.	4F10793
	02225	-2	00001	4	02144		TNX	BUFFM1,4,1	N = N-1 OR ITEM NOT IN TABLE.	4F10794
	02226	-0	63400	1	02227		SXD	NC+4,1		4F10795
	02227	2	00000	2	02220		TIX	NEW,2,**	K = K-1.	4F10796
	02230	-0	63400	4	02223		SXD	NC,4	SAVE CURRENT VALUE OF N,	4F10797
	02231	-0	50000	0	02363		CAL	DBL	AND GET NEW BLOCK.	4F10798
	02232	0	40100	0	02362		ADM	FDA		4F10799

02233	0	62100	0	02362		STA	FDA			4F10800
02234	-0	53400	2	02241		LXD	NTL,2			4F10801
02235	2	00000	2	02237	COMPR	TIX	COMPR+2,2,**		(K*L)	4F10802
02236	-0	63400	2	02362		SXD	FDA,2		K*L = (N*L)MOD K*L IF N*L IS	4F10803
02237	-0	63400	2	02241		SXD	NTL,2		LESS TNAN K*L, OTHERWISE K*L = K*L.	4F10804
02240	0	07400	4	02520		TSX	RDRX,4	*	GO READ NEXT BLOCK INTO BUFFER.	4F10805
02241	1	00000	0	02216	NTL	TXI	NXBLK,0,**		(N*L,N*L-K*L,N*L-2*K*L,...(N*L)MOD	4F10806
02242	2	00001	1	02221	YEA	TIX	TRY,1,1		K*L). TEST NEXT WORD OF ARG. L=L-1.	4F10807
02243	-0	53400	2	02361		LXD	TDA,2		(N)	4F10808
02244	-0	63400	4	02245		SXD	YEA+3,4			4F10809
02245	2	00000	2	02247		TIX	OUT,2,**		COMPUTE TAG.	4F10810
02246	0	53400	2	01406		LXA	L(0),2			4F10811
02247	-0	75400	2	00000	OUT	PXD	,2		EXIT WITH TAG IN THE AC.	4F10812
02250	0	77100	0	00022		ARS	18		(TAG = NUMBER OF ENTRIES	4F10813
02251	-0	53400	2	02173		LXD	XR2,2		WHICH PRECEED THE ENTRY	4F10814
02252	-0	53400	4	02215		LXD	XR4,4		WHICH EQUALS THE ARGUMENT.	4F10815
02253	-0	53400	1	02535		LXD	XR1,1		RESTORE THE C(XR1,XR2,XR4),	4F10816
02254	0	56000	0	02357		LDQ	MQ		RESTORE THE C(MQR), AND	4F10817
02255	0	02000	4	00001		TRA	1,4	*	RETURN TO MAIN ROUTINE.	4F10818
02256	-0	53400	4	02215	WHICH	LXD	XR4,4		GET ALPHA BAR, AND	4F10819
02257	0	50000	4	00000		CLA	0,4		AND,PICK UP ALPHA (TSX ...NIX,4).	4F10820
02260	-0	32000	0	01452		ANA	MASK2		BLANK ALL BUT ...NIX.	4F10821
02261	0	40200	0	02274		SUB	CONX		(...NIX) - (ADDR OF FXCNIX-5).	4F10822
02262	0	53400	4	01417		LXA	L(9),4		SET XR4 FOR 9 TABLES.	4F10823
02263	0	40200	0	01413	COMPUT	SUB	L(5)		COMPUTE WHICH	4F10824
02264	0	10000	0	02267		TZE	WHICHX		TABLE OVERFLOWED.	4F10825
02265	2	00001	4	02263		TIX	COMPUT,4,1		IF TABLE IS NOT FOUND,	4F10826
02266	0	07400	4	03400		TSX	DIAG,4	*	GO TO DIAGNOSTIC.	4F10827
02267	-0	75400	4	00000	WHICHX	PXD	,4		OTHERWISE,	4F10826
02270	0	76000	0	00006		COM			CONVERT 2S COMPLEMENT	4F10829
02271	0	40000	0	01454		ADD	2E18		OF NUMBER,	4F10630
02272	-0	73400	4	00000		PDX	,4		PLACE IN XR4, AND	4F10831
D 02273	1	00000	0	03400		TXI	DIAG,0	*	GO TO DIAGNOSTIC.	4F11832
										4F10833
02274	0	00000	0	00412	CONX	PZE	FXCNIX-5		CONSTANT USED BY DRTABS.	4F10834
				02357	BUFR	BES	50		DRUM TABLE BUFFER.	4F10835
				02357	MQ	BSS	1		WORKING STORAGE USED BY DRTABS.	4F10836
				02360	NAR	BSS	1		WORKING STORAGE USED BY DRTABS.	4F10837
				02361	TDA	BSS	1		NORKING STORAGE USED BY DRTABS.	4F10838
				02362	FDA	BSS	1		WORKING STORAGE USED BY DRTABS.	4F10839
				02363	DBL	BSS	1		WORKING STORAGE USED BY DRTABS.	4F10840
				02364	DI	BSS	1		WORKING STORAGE USED BY DRTABS.	4F10841
				02365	TEMP	BSS	0		INDEXING ADDRESS FOR ABOVE -DRTABS.	4F10842
				02365	DUMP	BSS	1		WORKING STORAGE USED BY DRTABS.	4F10643
									END OF PROGRAM DRTABS.	4F10844
									* * * * *	4F10845
										4F10646
									GETIFN,4/ OALLERS=COI00,CO200,C1000,C1100,C1600,C3200.	4F10847
									GETIFN PLACES THE INTERNAL FORMULA NUMBER IN AC AND IN 1C.	4F10848
02366	-0	53400	1	00030	GETIFN	LXD	EIFNO,1		PLACE THE INTERNAL FORMULA	4F10849
02367	-0	75400	1	00000		PXD	,1		NUMBER IN XRI, IN THE DECREMENT	4F10850
02370	0	60100	0	01105		STO	1C		OF THE AC, AND IN IC. THEN	4F10851
02371	0	02000	4	00001		TRA	1,4		RETURN TO CALLER.	4F10852
									END OF PROGRAM GETIFN.	4F10853

02476	-0	76300	0	00022		LGL	18	ADJUST, AND MULTIPLY	4F10942
02477	0	20000	0	01351		MPY	GTAG	DIMENSION 2 TIMES GTAG.	4F10943
02500	0	76700	0	00021		ALS	17	THEN ADD	4F10944
02501	0	40000	0	01145		ADD	EPS-2	EPSILON SUB 2	4F10045
02502	0	56000	0	01136		LDQ	E+8	TO THE PRODUCT, AND	4F10946
02503	0	40200	0	01361	2D1	SUB	N2	SUBTRACT ADDEND 2.	4F10047
02504	0	60100	0	01351		STO	GTAG	MULTIPLY	4F10040
02505	0	20000	0	01351		MPY	GTAG	THE RESULT	4F10049
02506	0	76700	0	00021		ALS	17	TIMES	4F10950
02507	0	40000	4	01147		ADD	EPS, 4	DIMENSION 1, AND, ADD, IN EPSILON	4F10951
02510	0	40000	0	01147		ADD	EPS	SUB 1 AND EPSILON.	4F10952
02511	0	40200	0	01141	1D1	SUB	E+11	SUBTRACT ADDEND 1,	4F10953
02512	0	60100	0	01351		STO	GTAG	AND PLACE THE RESULT	4F10954
02513	-0	50000	0	01126		CAL	E	IN THE DECREMENT OF GTAG,	4F10955
02514	0	77100	0	00030		ARS	24	WITH I-TAUTAG	4F10956
02515	0	62100	0	01351		STA	GTAG	IN THE ADDRESS.	4F10957
02516	-0	53400	4	01100		LXD	RAXR4, 4	RESTORE THE C(XR4), AND	4F10958
02517	0	02000	4	00001		TRA	1, 4	* EXIT TO CALLER.	4F10959
								END OF PROGRAM RA000.	4F10960
								* * * * *	4F10961
									4F10962
								RDRX*4/ CALLS=DIAG. CALLER=DRTABS.	4F10963
								RDRX READS A BLOCK OF DRUM ENTRIES INTO 50 WORD BUFR.	4F10964
02520	0	53400	1	01413	RDRX	LXA	DRMERC, 1	SET FOR 5 ATTEMPTS TO READ, DRUM.	4F10965
02521	-0	53400	2	02364	REP	LXD	DI, 2	SET XRZ = (5-DRUM NUMBER).	4F10966
02522	3	00000	2	02524		TXH	BIAS-2, 2, 0	IF NOT GREATER THAN ZERO,	4F10967
02523	0	07400	4	03400		TSX	DIAG, 4	* GO TO DIAGNOSTIC.	4F10968
02524	0	76200	2	00305		RDR	5, 2	SELECT CURRENT DRUM.	4F10969
02525	-0	53400	2	02362		LXD	FDA, 2	SET XR2 = NO. OF WORDS TO COPY.	4F10970
02526	-0	75400	0	02554	BIAS	PXD	ETSUM, 0	CLEAR THE AC.	4F10971
02527	0	46000	0	02362		LDA	FDA	DRUM ORIGIN OF CURRENT BLOCK.	4F10972
02530	-3	00000	0	00000	JUMP1	TXL	**	(ETSUM-2*L) TXL=ENTRY, TXH=BLOCK.	4F10973
02531	-0	70000	0	02365		CAD	DUMP	READ	4F10974
02532	0	76000	0	00006		COM		FLOCON BLOCK	4F10975
02533	-0	70000	2	02357	LBUF	CAD	BUFR, 2	AND COMPUTE	4F10976
02534	2	00001	2	02533		TIX	LBUF, 2, 1	LOGICAL CHECKSUM.	4F10977
02535	1	00000	0	02562	XR1	TXI	PROVE, 0, **	GO TEST CHECKSUM.	4F10978
02536	0	70000	2	02357		CPY	BUFR, 2	COPY LOOP,	4F10979
02537	-2	00001	2	02564		TNX	ERR, 2, 1	FOR ALL	4F10980
02540	0	70000	2	02357		CPY	BUFR, 2	TABLES	4F10901
02541	-2	00001	2	02564		TNX	ERR, 2, 1	EXCEPT	4F10902
02542	0	70000	2	02357		CPY	BUFR, 2	FLOCON=	4F10903
02543	-2	00001	2	02564		TNX	ERR, 2, 1	X	4F10904
02544	0	70000	2	02357		CPY	BUFR, 2	X	4F10905
02545	-2	00001	2	02564		TNX	ERR, 2, 1	X	4F10906
02546	0	70000	2	02357		CPY	BUFR, 2	X	4F10907
02547	-2	00001	2	02564		TNX	ERR, 2, 1	X	4F10906
02550	0	70000	2	02357		CPY	BUFR, 2	X	4F10909
02551	-2	00001	2	02564		TNX	ERR, 2, 1	X	4F10990
02552	0	70000	2	02357		CPY	BUFR, 2	X	4F10901
02553	0	76100	0	00000		NOP		X	4F10992
02554	-0	70000	0	02365	ETSUM	CAD	DUMP	SUM CHECKSUMS.	4F10993
02555	2	00001	2	00000	JUMP2	TIX	** , 2, 1	(ETSUM-2*L) TEST END OF BLOCK.	4F10994
02556	-0	53400	2	02362	RDRXCR	LXD	FDA, 2	COMPUTE	4F10995

02557	0	76000	0	00006		COM		NEW	4F10996
02560	0	36100	2	02357		ACL	BUFR,2	LOGICAL	4F10997
02561	2	00001	2	02560		TIX	RDRXCR+2,2,1	CHECKSUM, AND	4F10998
02562	0	76000	0	00006	PROVE	COM		IF CHECKSUMS COMPARE	4F10999
02563	0	10000	4	00001		TZE	1,4	* RETURN TO MAIN ROUTINE.	4F11000
02564	2	00001	1	02521	ERR	TIX	REP,1,1	OTHERWISE, REPEAT UP TO 5 TIMES.	4F11001
02565	0	07400	4	03400		TSX	DIAG,4	* FAILED 5 TIMES IN READING DRUM.	4F11002
							END OF PROGRAM RDRX.		4F11003
							*****		*4F11004
							SR6DC1,1/ CALLS=DIAG. CALLERS=CA000,SS000.		4F11005
							SR6DC1 CONVERTS UP TO 6 BCD DIGITS TO THEIR BINARY EQUIV.		4F11006
02566	-0	63400	2	02574	SR6DC1	SXD	SR6XR2,2	SAVE THE C(XR2), AND	4F11008
02567	0	53400	2	01414		LXA	L(6),2	SET TO COUNT 6 CHARACTERS.	4F11009
02570	0	60000	0	01101		STZ	SR6WRK	INITIALIZE OUTPUT CELL TO 0.	4F11010
02571	-0	75400	0	00000	SR6DC2	PXD	,0	OBTAIN NEXT CHARACTER	4F11011
02572	-0	76300	0	00006		LGL	6	IN AC AND	4F11012
02573	0	34000	0	01430		CAS	ABLANK	TEST FOR BLANK.	4F11013
02574	1	00000	0	02576	SR6XR2	TXI	SR6DC3,0,**	IF NOT BLANK,	4F11014
02575	1	77777	0	02610	ENDWRD	TXI	SR6DC4,0,-1	(DECR= END OF PROBLEM INDICATOR)	4F11015
02576	0	34000	0	01417	SR6DC3	CAS	L(9)	TEST FOR NUMERIC.	4F11016
02577	0	07400	4	03400		TSX	DIAG,4	* IF NON-NUMERIC - GO TO DIAGNOSTIC.	4F11017
02600	0	76100	0	00000	NOP	NOP		IF NUMERIC,	4F11018
02601	0	60100	0	01102		STO	SR6WRK+1	SAVE DIGIT, AND	4F11019
02602	0	50000	0	01101		CLA	SR6WRK	MULTIPLY PREVIOUS PARTIAL	4F11020
02603	0	76700	0	00002		ALS	2	RESULT BY 10,	4F11021
02604	0	40000	0	01101		ADD	SR6WRK	AND ADD IN	4F11022
02605	0	76700	0	00001		ALS	1	CURRENT DIGIT, SAVING	4F11023
02606	0	40000	0	01102		ADD	SR6WRK+1	NEW PARTIAL RESULT.	4F11024
02607	0	60100	0	01101		STO	SR6WRK	THEN ADJUST COUNT, AND	4F11025
02610	2	00001	2	02571	SR6DC4	TIX	SR6DC2,2,1	WHEN 6 CHARS HAVE BEEN TREATED,	4F11026
02611	0	50000	0	01101		CLA	SR6WRK	LEAVE OUTPUT IN AC,	4F11027
02612	-0	53400	2	02574		LXD	SR6XR2,2	RESTORE THE C(XR2), AND	4F11028
02613	0	02000	1	00001	TRA	TRA	1,1	* EXIT TO MAIN ROUTINE.	4F11029
							END OF PROGRAM SR6DC1.		4F11030
							*****		*4F11031
							SS000,4/ CALLS=C0190,DIAG,SR6DC1,DIM.SR,DRTABS,TET00,TESTFX.		4F11033
							CALLERS=ARITH,LPR,C0200.		4F11034
							SS000 SCANS SUBSCRIPT COMBINATIONS AND MAKES TABLE ENTRIES.		4F11035
02614	-0	63400	2	02731	SS000	SXD	SXR2,2	SAVE C(XR2),	4F11036
02615	-0	63400	1	02730		SXD	SXR1,1	SAVE C(XR1),	4F11037
02616	-0	63400	4	02732		SXD	SXR4,4	SAVE C(XR4), AND	4F11038
02617	0	60000	0	01100		STZ	DIMCTR	SET DIMCTR = 0.	4F11039
02620	0	53400	4	01414		LXA	L(6),4	INITIALIZE	4F11040
02621	-0	63400	4	02726		SXD	SBS2,4	FOR EACH SUBSCRIPT MEMBER.	4F11041
02622	-0	50000	0	00422		CAL	TXHOP	PICK UP TXH OP, AND	4F11042
02623	0	63000	0	02776		STP	SBC6	SET OP	4F11043
02624	0	63000	0	02777		STP	SBC8	SWITCHES.	4F11044
02625	-0	50000	0	00415		CAL	TXLOP	PICK UP TXL OP, AND	4F11045
02626	0	63000	0	03014		STP	SBC4	SET OP SWITCH.	4F11046
02627	0	53400	3	01414	SS001	LXA	L(6),3	SET FOR 6 CHARACTERS OF MULTIPLIER.	4F11047
02630	0	60000	0	01370		STZ	SYMBOL	CLEAR WORKING STORAGE.	4F11048
02631	0	07400	4	01707		TSX	C0190,4	* GET FIRST PON BLANK CHAR IN THE AC.	4F11049

	02632	0	34000	0	01417		CAS L(9)		COMPARE IT WITH 9.	4F11050
D	02633	1	00000	0	02704		TXI SS0045,0		RETURN TO EXPLICIT CODING.	4F11051
	02634	0	76100	0	00000		NOF		IF NUMERIC,	4F11052
	02635	0	60100	0	01331		STO FIRSTC		SAVE RIGHT-ADJUSTED DIGIT, AND	4F11053
	02636	0	76700	2	00044	SS0012	ALS 36,2		LEFT-ADJUST DIGIT TO	4F11054
	02637	-0	60200	0	01370		ORS SYMBOL		BUILD SYMBOL.	4F11055
	02640	1	00006	2	02641		TXI SS0013,2,6		UPDATE SHIFT DECREMENT, AND	4F11056
	02641	1	77777	1	02642	SS0013	TXI SS0014,1,-1		UPDATE COUNT OF CHARS COLLECTED.	4F11057
	02642	0	07400	4	01707	SS0014	TSX C0190,4	*	GET NEXT NB CHARACTER IN THE AC.	4F11058
	02643	0	53400	4	02652		LXA CTESTX,4		SST XR4 = NO. OF PUNCTUATION MARKS.	4F11059
	02644	0	34000	4	01406	SS0015	CAS CTEST,4		TEST THIS CHARACTER AGAINST	4F11060
D	02645	1	00000	0	02647		TXI SS0016,0		ALL PUNCTUATION.	4F11061
	02646	0	02000	4	02733		TRA SUBTR,4		IF EQUALITY IS FOUND, TRANSFER.	4F11062
	02647	2	00001	4	02644	SS0016	TIX SS0015,4,1		IF NOT FOUND TO BE PUNCTUATION,	4F11063
	02650	0	34000	0	01417		CAS L(9)		TEST FOR NUMERIC.	4F11064
D	02651	1	00000	0	02655		TXI SS0017,0		AND IF	4F11065
	02652	0	76100	0	00012	CTESTX	NOF CTEST-ENDMK		FOUND TO BE NUMERIC,	4F11066
	02653	3	00000	1	02636		TXH SS0012,1,0		CONTINUE BUILDING SYMBOL. BUT IF	4F11067
D	02654	1	00000	0	02720		TXI STOP49,0		SEVENTH CHAR, GO TO DIAGNOSTIC.	4F11066
	02655	0	07400	1	03242	SS0017	TSX TESTFX+1,1	*	GO TEST FOR FIXED POINT VARIABLE.	4F11069
	02656	0	07400	4	03400		TSX DIAG,4	*	NOT FIXED POINT --GO TO DIAGNOSTIC.	4F11070
	02657	-0	76300	0	00036		LGL 30		RESTORE FIXED POINT VARIABLE	4F11071
	02660	0	60200	0	01365		SLW RESIDU		TO RESIDU, AND	4F11072
	02661	-0	53400	4	01724		LXD CHCTR,4		RESET CHARACTER COUNTER	4F11073
	02662	1	00001	4	02663		TXI SS0018,4,1		TO BEGIN PROCESSING	4F11074
	02663	-0	63400	4	01724	SS0018	SXD CHCTR,4		SUBSCRIPT MULTIPLIER.	4F11075
	02664	0	50200	0	02776	SBX	CLS SBC6		TEST FOR	4F11076
	02665	-0	12000	0	02667		TMI SBX1		PREVIOUS MULTIPLIER.	4F11077
	02666	0	07400	4	03400		TSX DIAG,4	*	DOUBLE MULTIPLIER FOR SUBSCRIPT.	4F11078
	02667	0	60100	0	02776	SBX1	STO SBC6		RESET MULTIPLIER SWITCH.	4F11079
	02670	0	50000	0	01331		CLA FIRSTC		TEST	4F11080
	02671	0	40200	0	01373		SUB L(10)		MULTIPLIER	4F11081
	02672	-0	12000	0	02674		TMI SBX2		FOR CONSTANT.	4F11082
	02673	0	07400	4	03400		TSX DIAG,4	*	SUBS-MULTIPLIER NOT A CONSTANT.	4F11083
	02674	-0	50000	0	01370	SBX2	CAL SYMBOL		ADJUST MULTIPLIER	4F11084
	02675	0	77100	2	00052		ARS 42,2		TO LOW ORDER POSITION.	4F11085
	02676	-0	53400	4	02726		LXD SBS2,4		GET STORING TAG,	4F11086
	02677	0	60200	4	01137		SLW E+9,4		AND STORE MULTIPLIER.	4F11087
	02700	0	60000	4	01145		STZ E+15,4		SET ADDEND = 0.	4F11088
	02701	0	53400	3	01414	SS003	LXA L(6),3		SET FOR 6 CHARS OF VARIABLE/ADDEND.	4F11089
	02702	0	60000	0	01370		STZ SYMBOL		CLEAR WORKING STORAGE.	4F11090
	02703	0	07400	4	01707	SS004	TSX C0190,4	*	GO GET NEXT NB CHARACTER IN THE AC.	4F11091
	02704	0	53400	4	02652	SS0045	LXA CTESTX,4		COMPARE CHARACTER	4F11092
	02705	0	34000	4	01406	SS005	CAS CTEST,4		TO ALL	4F11093
D	02706	1	00000	0	02710		TXI SS006,0		PUNCTUATION.	4F11094
	02707	0	02000	4	02733		TRA SUBTR,4		IF EQUALITY IS FOUND, TRANSFER.	4F11095
	02710	2	00001	4	02705	SS006	TIX SS005,4,1		IF NOT FOUND TO BE PUNCTUATION,	4F11096
	02711	-3	00005	1	02713		TXL SS008,1,5		IF 1ST CHARACTER OF VARIABLE OR	4F11097
	02712	0	60100	0	01331		STO FIRSTC		ADDEND, SAVE FOR LATER TESTS.	4F11098
	02713	0	76700	2	00044	SS008	ALS 36,2		POSITION EACH CHARACTER. BUT	4F11099
	02714	-3	00000	1	02720	SS009	TXL STOP49,1,0	*	ON 7TH CHARACTER, GO TO STOP.	4F11100
	02715	-0	60200	0	01370		ORS SYMBOL		BUILD SYMBOL.	4F11101
	02716	1	00006	2	02717		TXI SS007,2,6		UPDATE EFFECTIVE ADDRESS OF SHIFT.	4F11102
	02717	1	77777	1	02703	SS007	TXI SS004,1,-1		UPDATE FOR ANOTHER CHAR COLLECTED.	4F11103

	02720	0	07400	4	03400	STOP49	TSX	DIAG,4		* GO TO DIAGNOSTIC ON 7TH CHARACTER.	4F11104
								SUBTR/ CONTROL TRANSFERS		FOR SUBSCRIPT SCAN=	4F11105
D	02721	1	00000	0	02722		TXI	ISC,0		EMK (ILLEGAL IN LIST SUBSCRIPT).	4F11106
	02722	0	07400	4	03400	ISC	TSX	DIAG,4		* ((ILLEGAL IN LIST SUBSCRIPT).	4F11107
D	02723	1	00000	0	02772		TXI	SBC,0		,	4F11108
D	02724	1	00000	0	02770		TXI	SBR,0		)	4F11109
D	02725	1	00000	0	02722		TXI	ISC,0		= (ILLEGAL IN LIST SUBSCRIPT).	4F11110
	02726	1	00000	0	02733	SBS2	TXI	SBM,0,**		- ,,SUBSCRIPT ELEMENT COUNTER.	4F11111
D	02727	1	00000	0	02722		TXI	ISC,0		/ (ILLEGAL IN LIST SUBSCRIPT).	4F11112
	02730	1	00000	0	02722	SXR1	TXI	ISC,0,**		. (ILLEGAL IN LIST SUBSCRIPT).	4F11113
	02731	1	00000	0	02734	SXR2	TXI	SBP,0,**		+	4F11114
	02732	1	00000	0	02664	SXR4	TXI	SBX,0,**		*	4F11115
					02733	SUBTR	BSS	0		INDEXING ADDRESS FOR ABOVE LIST.	4F11116
	02733	-0	76000	0	00003	SBM	SSM			MINUS ADDEND.	4F11117
	02734	0	76000	0	00000	SBP	CLM			PLUS ADDEND.	4F11118
	02735	-0	53400	4	02726		LXD	SBS2,4		GET STORING TAG, AND	4F11119
	02736	0	60100	4	01145		STO	E+15,4		STORE SIGN OF ADDEND.	4F11120
	02737	0	50200	0	02777		CLS	SBC8		TEST SWITCH	4F11121
	02740	-0	12000	0	02742		TMI	SBP1		FOR PREVIOUS ADDEND.	4F11122
	02741	0	07400	4	03400		TSX	DIAG,4		* DOUBLE ADDEND FOR SUBSCRIPT.	4F11123
	02742	0	60100	0	02777	SBP1	STO	SBC8		RESET ADDEND SWITCH.	4F11124
	02743	0	07400	1	03241		TSX	TESTFX,1		* GO TO TEST FOR FIXED POINT.	4F11125
	02744	0	07400	4	03400		TSX	DIAG,4		* NOT FIXED POINT --GO TO DIAGNOSTIC.	4F11126
	02745	-0	53400	4	02726		LXD	SBS2,4		GET STORING TAG, AND	4F11127
	02746	0	50200	0	02776		CLS	SBC6		TEST SWITCH	4F11128
	02747	0	12000	0	02754		TPL	SBP2		FOR PREVIOUS MULTIPLIER.	4F11129
	02750	0	50000	0	01407		CLA	L(1)		IF NONE,	4F11130
	02751	0	60100	4	01137		STO	E+9,4		SET MULTIPLIER	4F11131
D	02752	1	00000	0	02755		TXI	SBP4,0		TO 1, AND CONTINUE.	4F11132
	02753	0	50200	0	02776	SBC1	CLS	SBC6		RESET MULTIPLIER	4F11133
	02754	0	60100	0	02776	SBP2	STO	SBC6		OP SWITCH.	4F11134
	02755	-0	50000	0	01370	SBP4	CAL	SYMBOL		IF VARIABLE SUBSCRIPT,	4F11135
	02756	3	00044	2	02762		TXH	SBP41,2,36		ADD A BLANK	4F11136
	02757	-0	50000	0	01430		CAL	BLANK		IF LESS	4F11137
	02760	0	76700	2	00044		ALS	36,2		THAN 6	4F11138
	02761	-0	50100	0	01370		ORA	SYMBOL		CHARACTERS, AND	4F11139
	02762	0	60200	4	01140	SBP41	SLW	E+10,4		PLACE IN E-REGION.	4F11140
	02763	0	07400	1	03241		TSX	TESTFX,1		* GO TO TEST FOR FIXED POINT.	4F11141
	02764	0	07400	4	03400		TSX	DIAG,4		* NOT FIXED POINT --GO TO DIAGNOSTIC.	4F11142
	02765	0	50000	0	02777		CLA	SBC8		IF THERE IS AN ADDEND,	4F11143
	02766	-0	12000	0	02701		TMI	SS003		GO COLLECT, OTHERWISE	4F11144
D	02767	1	00000	0	03012		TXI	SBC7,0		GO UPDATE STORING TAG.	4F11145
	02770	0	50200	0	03014	SBR	CLS	SBC4		SET SWITCH	4F11146
	02771	0	60100	0	03014		STO	SBC4		FOR CLOSING PARENTHESIS.	4F11147
	02772	-0	50000	0	01100	SBC	CAL	DIMCTR		UPDATE	4F11148
	02773	0	40000	0	01407		ADD	L(1)		DIMENSION COUNTER	4F11149
	02774	0	62100	0	01100		STA	DIMCTR		BY 1.	4F11150
	02775	-0	53400	4	02726		LXD	SBS2,4		GET STORING TAG.	4F11151
D	02776	3	00000	0	02753	SBC6	TXH	SBC1,0		SWITCH-IF NO MULTIPLIER, AND	4F11152
D	02777	3	00000	0	03016	SBC8	TXH	SBC2,0		SWITCH-IF NO ADDEND, THEN	4F11153
	03000	0	50000	0	01407		CLA	L(1)		SET	4F11154
	03001	0	60100	4	01137		STO	E+9,4		MULTIPLIER = 1.	4F11155
	03002	0	60000	4	01145		STZ	E+15,4		SET ADDEND = 0.	4F11156
	03003	0	50000	0	01331		CLA	FIRSTC		TEST FOR	4F11157

	03004	0	40200	0	01373		SUB L(10)	CONSTANT OR VARIABLE.	4F11158
	03005	0	12000	0	02755		TPL SBP4	IF CONSTANT, THEN	4F11159
	03006	0	60000	4	01140		STZ E+10,4	SET VARIABLE = 0.	4F11160
	03007	-0	50000	0	01370	SBC9	CAL SYMBOL	ADJUST	4F11161
	03010	0	77100	2	00052		ARS 42,2	CONSTANT	4F11162
	03011	-0	60200	4	01145		ORS E+15,4	TO LOW ORDER POSITION.	4F11163
	03012	-2	00002	4	03024	SBC7	TNX SBC3,4,2	UPDATE STORING TAG	4F11164
	03013	-0	63400	4	02726		SXD SBS2,4	BY -2, AND SAVE.	4F11165
D	03014	-3	00000	0	02627	SBC4	TXL SS001,0	SWITCH-REPEAT FOR NEXT SUB-COMB.	4F11166
D	03015	1	00000	0	03030		TXI SA000,0	GO MAKE TABLE ENTRIES AND GET TAG.	4F11167
	03016	0	50200	0	02777	SBC2	CLS SBC8	RESET ADDEND	4F11168
	03017	0	60100	0	02777		STO SBC8	OP SWITCH.	4F11169
	03020	0	50200	0	01373		CLS L(10)	TEST	4F11170
	03021	0	40000	0	01331		ADD FIRSCT	ADDEND	4F11171
	03022	-0	12000	0	03007		TMI SBC9	FOR CONSTANT.	4F11172
	03023	0	07400	4	03400		TSX DIAG,4	* SUBSCRIPT ADDEND NOT A CONSTANT.	4F11173
	03024	0	50200	0	03014	SBC3	CLS SBC4	AFTER SCANNING 3 SUBSCRIPTS,	4F11174
	03025	-0	12000	0	03030		TMI SA000	GO MAKE TABLE ENTRIES AND GET TAG.	4F11175
	03026	0	07400	4	03400		TSX DIAG,4	* GO TO DIAG - NO) AFTER 3RD SUBS.	4F11176
							CSA000= ENTRY POINT USED BY C0200 (GO TO ROUTINE).		4F11177
	03027	-0	63400	4	02732	CSA000	SXD SXR4,4	SAVE C(XR4) FOR RETURN TO C0200.	4F11178
	03030	0	50000	0	01100	SA000	CLA DIMCTR	SAVE	4F11179
	03031	0	60100	0	01125		STO DIMSAV	THE CONTENTS OF DIMCTR.	4F11180
	03032	0	76700	0	00041		ALS 33	POSITION AND	4F11181
	03033	0	60100	0	01126		STO E	STORE I TAG.	4F11182
	03034	0	50000	0	01141		CLA E+11	MOVE SUBSCRIPT ADDENDS	4F11183
	03035	0	60100	0	01142		STO E+12	INTO POSITION	4F11184
	03036	0	50000	0	01137		CLA E+9	FOR FOLLOWING	4F11185
	03037	0	60100	0	01141		STO E+11	PROGRAM.	4F11186
	03040	0	50000	0	01410		CLA L(2)	EXAMINE DIMCTR	4F11187
	03041	0	34000	0	01100		CAS DIMCTR	TO DETERMINE	4F11188
D	03042	1	00000	0	03174		TXI 1D0000,0	WHETHER DIMENSION OF	4F11189
D	03043	1	00000	0	03131		TXI 2D0000,0	VARIABLE IS 1, 2, OR 3.	4F11190
	03044	0	53400	4	01414	3D0000	LXA L(6),4	PREPARE TO PICK UP 3 COEFFICIENTS.	4F11191
	03045	0	56000	4	01137	3D0001	LDQ E+9,4	CONVERT THEM FROM BCD TO BINARY	4F11192
	03046	0	07400	1	02566		TSX SR6DC1,1	* IN E+3,5,7, AND	4F11193
	03047	0	60100	4	01137		STO E+9,4	STORE BACK IN E+3,5,7.	4F11194
	03050	2	00002	4	03045		TIX 3D0001,4,2	WHEN DONE, PREPARE	4F11195
	03051	0	53400	4	01411		LXA L(3),4	TO PICK UP 3 ADDENDS.	4F11196
	03052	0	50000	4	01144	3D0002	CLA E+14,4	CONVERT ADDENDS (BCD TO BINARY)=	4F11197
	03053	0	60200	0	01347		SLW G	STRIP OFF	4F11198
	03054	0	56000	0	01347		LDQ G	SIGN,	4F11199
	03055	0	07400	1	02566		TSX SR6DC1,1	* CONVERT ADDENDS IN E+11,12,13,	4F11200
	03056	0	56000	4	01144		LDQ E+14,4	PUT SIGN IN S-BIT OF MQ, AND	4F11201
	03057	0	16200	0	03061		TQP 3D0040	IF PLUS--SKIP NEXT,	4F11202
	03060	-0	50100	0	01453		ORA 2E17	IF MINUS--OR SIGN INTO BIT 18,	4F11203
	03061	0	60100	4	01144	3D0040	STO E+14,4	AND STORE BACK INTO E+11,12,13.	4F11204
	03062	2	00001	4	03052		TIX 3D0002,4,1	WHEN DONE,	4F11205
	03063	0	07400	4	02005		TSX DIM3SR,4	* GO SEARCH DIM3 TABLE.	4F11206
	03064	0	07400	4	03400		TSX DIAG,4	* --ERROR...NOT ON DRUM.	4F11207
	03065	0	50000	0	01131	3D0060	CLA E+3	REFORMATIZE E-STRING =	4F11208
	03066	0	76700	0	00022		ALS 18	PACK TOGETHER COEFFICIENTS 1 AND 2	4F11209
	03067	0	40000	0	01133		ADD E+5	AND STORE THEM	4F11210
	03070	0	60100	0	01131		STO E+3	IN E+3.	4F11211

03071	0	50000	0	01132	CLA	E+4	MOVE	SUBSCRIPT 1	4F11212	
03072	0	60100	0	01133	STO	E+5	TO	E+5.	4F11213	
03073	0	50000	0	01135	CLA	E+7	AND	MOVE	4F11214	
03074	0	76700	0	00022	ALS	18	COEFFICIENT	3	4F11215	
03075	0	60100	0	01132	STO	E+4	INTO	E+4.	4F11216	
03076	0	50000	0	01136	CLA	E+8	MOVE	SUBSCRIPT 3 INTO E+7,	4F11217	
03077	0	60100	0	01135	STO	E+7	NEXT	TO SUBSCRIPT 2 IN E+6.	4F11218	
03100	0	50000	0	01101	CLA	D12	MOVE	DIMENSIONS 1 AND 2	4F11219	
03101	0	60100	0	01136	STO	E+8	INTO	E+8.	4F11220	
03102	-0	50000	0	01141	CAL	E+11	PACK	TOGETHER	4F11221	
03103	0	76700	0	00022	ALS	18	ADDENDS	1 AND 2	4F11222	
03104	-0	50100	0	01142	ORA	E+12	AND		4F11223	
03105	0	60200	0	01141	SLW	E+11	STORE	THEM IN E+11.	4F11224	
03106	-0	50000	0	01143	CAL	E+13	MOVE		4F11225	
03107	0	76700	0	00022	ALS	18	ADDEND	3	4F11226	
03110	0	60200	0	01142	SLW	E+12	INTO	E+12.	4F11227	
03111	0	07400	4	00443	TSX	TAU3IX,4	* GO	SEARCH TAU3 TABLE.	4F11228	
03112	0	76700	0	00030	ALS	24	POSITION	TAU3 TAG, AND	4F11229	
03113	-0	60200	0	01126	ORS	E	PLACE	TAU3 TAG IN TAG WORD.	4F11230	
03114	-0	50000	0	01135	CAL	E+7	COMBINE		4F11231	
03115	-0	50100	0	01134	ORA	E+6	SUBSCRIPTS	3,2, AND 1,	4F11232	
03116	-0	50100	0	01133	3D0340	ORA	E+5	AND IF THEY ARE ALL ZERO,	4F11233	
03117	0	10000	0	03216	3D0350	TZE	NOTAG	--DON,T ENTER FORTAG.	4F11234	
03120	-0	50000	0	00030	FTG000	CAL	EIFNO	ENTER	FORTAG=	4F11235
03121	-0	32000	0	01527	ANA	MASK1	BRING	UP ALPHA (INTFORMNO)	4F11236	
03122	0	60200	0	01347	SLW	G	AND	STORE IN G.	4P11237	
03123	-0	50000	0	01126	CAL	E	BRING	UP TAUTAG FOR I,	4F11238	
03124	0	77100	0	00030	ARS	24	ADJUST,	AND	4F11239	
03125	-0	60200	0	01347	ORS	G	PLACE	IN G WITH ALPHA. THEN	4F11240	
03126	0	07400	1	03321	TSX	TET00,1	* ENTER	INTO FORTAG TABLE	4F11241	
03127	0	00000	0	00004	PZE	4	(TET	TABLE 4).	4F11242	
03130	1	00000	0	03220	TXI	SAEXIT,0	GO	TO EXIT.	4F11243	
03131	0	53400	4	01412	2D0000	LXA	L(4),4	THEN	PICKUP AND	4F11244
03132	0	56000	4	01135	2D0001	LDQ	E+7,4	CONVERT	COEFFICIENTS	4F11245
03133	0	07400	1	02566	TSX	SR6DC1,1	* (BCD	TO BINARY),	4F11246	
03134	0	60100	4	01135	STO	E+7,4	AND	STORE BACK IN E+3 AND E+5.	4F11247	
03135	2	00002	4	03132	TIX	2D0001,4,2	WHEN	DONE,	4F11248	
03136	0	53400	4	01410	LXA	L(2),4	PREPARE	TO	4F11249	
03137	0	50000	4	01143	2D0002	CLA	E+13,4	PICKUP	THE TWO ADDENDS.	4F11250
03140	0	60200	0	01347	SLW	G	STRIP	OFF	4F11251	
03141	0	56000	0	01347	LDQ	G	THEIR	SIGNS,	4F11252	
03142	0	07400	1	02566	TSX	SR6DC1,1	* CONVERT	THEM FROM BCD TO BINARY,	4F11253	
03143	0	56000	4	01143	LDQ	E+13,4	PUT	SIGN IN S-BIT OF MQ, AND	4F11254	
03144	0	16200	0	03146	TQP	2D0040	IF	PLUS--SKIP NEXT,	4F11255	
03145	-0	50100	0	01453	ORA	2E17	IF	MINUS--OR SIGN INTO BIT 18,	4F11256	
03146	0	60100	4	01143	2D0040	STO	E+13,4	AND	STORE BACK IN E+11 AND E+12.	4F11257
03147	2	00001	4	03137	TIX	2D0002,4,1	WHEN	DONE,	4F11258	
03150	0	07400	4	01775	TSX	DIM2SR,4	* GO	SEARCH DIM2 TABLE.	4F11259	
03151	0	07400	4	03400	TSX	DIAG,4	* --	ERROR..NOT ON DRUM.	4F11260	
03152	0	50000	0	01131	2D0060	CLA	E+3	REFORMATIZE	E-STRING =	4F11261
03153	0	76700	0	00022	ALS	18	PACK	TOGETHER	4F11262	
03154	0	40000	0	01133	ADD	E+5	COEFFICIENTS	1 AND 2,	4F11263	
03155	0	60100	0	01131	STO	E+3	AND	STORE THEM IN E+3.	4F11264	
03156	0	50000	0	01134	CLA	E+6	MOVE	SUBSCRIPT 2 INTO E+5	4F11265	

D

	03157	0	60100	0	01133		STO	E+5	(NEXT TO SUBSCRIPT 1 IN E+4).	4F11266
	03160	0	50000	0	01101		CLA	D12	OBTAIN	4F11267
	03161	-0	32000	0	01527		ANA	MASK1	DIMENSION 1, AND MOVE IT	4F11268
	03162	0	60100	0	01134		STO	E+6	INTO E+6.	4F11269
	03163	-0	50000	0	01141		CAL	E+11	PACK TOGETHER	4F11270
	03164	0	76700	0	00022		ALS	18	ADDENDS 1 AND 2,	4F11271
	03165	-0	50100	0	01142		ORA	E+12	AND STORE THEM	4F11272
	03166	0	60200	0	01141		SLW	E+11	IN E+11.	4F11273
	03167	0	07400	4	00436		TSX	TAU2IX,4	* GO SEARCH TAU2 TABLE.	4F11274
	03170	0	76700	0	00030		ALS	24	POSITION TAU2 TAG, AND	4F11275
	03171	-0	60200	0	01126		ORS	E	PLACE TAU2 TAG IN TAG WORD.	4F11276
	03172	-0	50000	0	01132		CAL	E+4	COMBINE SUBSCRIPTS 1 AND 2, AND	4F11277
D	03173	1	00000	0	03116		TXI	3D0340,0	GO TO FORTAG SECTION.	4F11278
	03174	0	56000	0	01131	1D0000	LDQ	E+3	PICKUP AND CONVERT COEFFICIENTS	4F11279
	03175	0	07400	1	02566		TSX	SR6DC1,1	* (BCD TO BINARY), AND	4F11280
	03176	0	76700	0	00022		ALS	18	THEN ADJUST THEM,	4F11281
	03177	0	60100	0	01131		STO	E+3	AND STORE THEM BACK IN E+3.	4F11282
	03200	0	50000	0	01141		CLA	E+11	PICKUP ADDEND,	4F11283
	03201	0	60200	0	01347		SLW	G	STRIP OFF SIGN,	4F11284
	03202	0	56000	0	01347		LDQ	G	CONVERT ADDEND	4F11285
	03203	0	07400	1	02566		TSX	SR6DC1,1	* (BCD TO BINARY), AND THEN	4F11286
	03204	0	56000	0	01141		LDQ	E+11	PUT SIGN IN S-BIT OF MQ, AND	4F11287
	03205	0	16200	0	03207		TQP	1D0001	IF PLUS--SKIP NEXT,	4F11288
	03206	-0	50100	0	01453		ORA	2E17	IF MINUS--OR SIGN INTO BIT 18.	4F11289
	03207	0	76700	0	00022	1D0001	ALS	18	THEN ADJUST AND STORE	4F11290
	03210	0	60200	0	01141		SLW	E+11	BACK INTO E+11.	4F11291
	03211	0	07400	4	00431		TSX	TAU1IX,4	* GO SEARCH TAU1 TABLE.	4F11292
	03212	0	76700	0	00030		ALS	24	POSITION TAU1 TAG, AND	4F11293
	03213	-0	60200	0	01126		ORS	E	PLACE TAU1 TAG IN TAG WORD.	4F11294
	03214	-0	50000	0	01132		CAL	E+4	TAKE SUBSCRIPT, AND	4F11295
D	03215	1	00000	0	03117		TXI	3D0350,0	GO TO FORTAG SECTION.	4F11296
	03216	-0	50000	0	01471	NOTAG	CAL	FNIND	POSITION SIGMA1 TAG, AND	4F11297
	03217	-0	60200	0	01126		ORS	E	PLACE SIGMA1 TAG IN TAG WORD.	4F11298
	03220	-0	53400	1	02730	SAEXIT	LXD	SXR1,1	RESTORE THE C(XR1),	4F11299
	03221	-0	53400	2	02731		LXD	SXR2,2	RESTORE THE C(XR2),	4F11300
	03222	-0	53400	4	02732		LXD	SXR4,4	RESTORE THE C(XR4), AND	4F11301
	03223	0	02000	4	00001		TRA	1,4	* EXIT TO MAIN ROUTINE.	4F11302
								END OF PROGRAM SS000.		4F11303
								* * * * *		4F11304
								SUBX00,4/ CALLERS=C3000,C3300.		4F11305
								SUBX00 ADDS BLANKS TO THE NAMES OF SUBROUTINES.		4F11306
	03224	0	53400	3	01414	SUBX00	LXA	L(6),3	PREPARE TO COUNT CHARS AND SHIFTS.	4F11307
	03225	0	56000	0	01112		LDQ	1G	PICKUP SUBROUTINE NAME.	4F11308
	03226	-0	75400	0	00000	SUBX01	PXD	,0	CLEAR THE AC, AND	4F11309
	03227	-0	76300	0	00006		LGL	6	SEARCH FOR A BLANK	4F11310
	03230	0	40200	0	01430		SUB	BLANK	CHARACTER IN THIS NAME.	4F11311
	03231	0	10000	0	03235		TZE	SUBX03	IF NOT BLANK, THEN	4F11312
	03232	1	00006	1	03233		TXI	SUBX02,1,6	UPDATE SHIFT COUNT, AND	4F11313
	03233	2	00001	2	03226	SUBX02	TIX	SUBX01,2,1	CONTINUE UNTIL 6 CHARS ARE COUNTED.	4F11314
	03234	0	02000	4	00001		TRA	1,4	* RETURN TO CALLER AFTER 6TH CHAR.	4F11315
	03235	0	56000	0	01526	SUBX03	LDQ	BLANKS	IF LESS THAN 6 CHARACTERS IN NAME,	4F11316
	03236	-0	76300	1	00044		LGL	36,1	SHIFT ENOUGH BLANKS INTO THE AC,	4F11317
	03237	-0	60200	0	01112		ORS	1G	AND FILL OUT NAME WITH BLANKS.	4F11318

03240	0	02000	4	00001	TRA	1,4		* RETURN TO CALLER.	4F11320
								END OF PROGRAM SUBX00.	4F11321
								* * * * *	*4F11322
								TESTFX,1/ CALLERS=SS000,C3000,IFFIX.	4F11323
								TESTFX TESTS FOR FIXED OR FLOATING POINT VARIABLES.	4F11324
03241	-0	50000	0	01331	TESTFX	CAL	FIRSTC	COMPARE FIRST CHARACTER	4F11325
03242	0	34000	0	01423	CAS	L(H)		WITH H.	4F11326
03243	0	34000	0	01425	CAS	L(O)		IF GREATER THAN H, COMPARE WITH O.	4F11327
03244	0	02000	1	00001	TRA	1,1		* IF NOT GREATER THAN H, LESS THAN O,	4F11328
03245	0	02000	1	00001	TRA	1,1		* THEN TAKE FLOATING POINT EXIT.	4F11329
03246	0	02000	1	00002	TRA	2,1		* OTHERWISE, TAKE FIXED POINT EXIT.	4F11330
								END OF PROGRAM TESTFX.	4F11331
								* * * * *	*4F11332
								TEST..,4/ CALLS=DIAG. CALLERS=C0100,C0200,C0300,C0400,C1000,	4F11333
								C1100,C1200,C1400,C1500,C1600,C3000,C3100,C3200,C3400,LPR.	4F11334
								TEST.. TESTS THE CHARACTER IN THE AC(30-35).	4F11335
								TEST CHARACTER IN THE AC FOR COMMA OR ENDMARK.	4F11336
03247	0	34000	0	01376	TESTA0	CAS	COMMA		4F11337
03250	0	02000	0	03252	TRA	TESTA1			4F11338
03251	0	02000	4	00001	TRA	1,4		* RETURN TO CALLER.	4F11339
03252	0	40200	0	01374	TESTA1	SUB	ENDMK		4F11340
03253	0	10000	4	00001	TZE	1,4		* RETURN TO CALLER.	4F11341
03254	0	07400	4	03400	TSX	DIAG,4		* ERROR -- GO TO DIAGNOSTIC.	4F11342
								TEST CHARACTER IN THE AC FOR COMMA OR CLOSED PARENTHESIS.	4F11343
03255	0	34000	0	01376	TESTB0	CAS	COMMA		4F11344
03256	0	02000	0	03260	TRA	TESTB1			4F11345
03257	0	02000	4	00001	TRA	1,4		* RETURN TO CALLER.	4F11346
03260	0	40200	0	01377	TESTB1	SUB	CLOS		4F11347
03261	0	10000	4	00001	TZE	1,4		* RETURN TO CALLER.	4F11348
03262	0	07400	4	03400	TSX	DIAG,4		* ERROR -- GO TO DIAGNOSTIC.	4F11349
								TEST CHARACTER IN THE AC FOR OPEN PARENTHESIS OR ENDMARK.	4F11350
03263	0	34000	0	01375	TESTC0	CAS	OPEN		4F11351
03264	0	02000	0	03266	TRA	TESTC1			4F11352
03265	0	02000	4	00001	TRA	1,4		* RETURN TO CALLER.	4F11353
03266	0	40200	0	01374	TESTC1	SUB	ENDMK		4F11354
03267	0	10000	4	00001	TZE	1,4		* RETURN TO CALLER.	4F11355
03270	0	07400	4	03400	TSX	DIAG,4		* ERROR -- GO TO DIAGNOSTIC.	4F11356
								TEST CHARACTER IN THE AC FOR OPEN PARENTHESIS OR ENDMARK.	4F11357
03271	0	34000	0	01374	TESTD0	CAS	ENDMK		4F11358
03272	0	07400	4	03400	ERR77P	TSX	DIAG,4		4F11359
03273	0	02000	4	00001	TRA	1,4		* MACHINE ERROR, GO TO DIAGNOSTIC.	4F11360
03274	0	07400	4	03400	TSX	DIAG,4		* RETURN TO CALLER.	4F11361
								* ERROR -- GO TO DIAGNOSTIC.	4F11362
								TEST CHARACTER IN THE AC FOR OPEN PARENTHESIS.	4F11363
03275	0	34000	0	01375	TESTE0	CAS	OPEN		4F11364
03276	0	02000	0	03300	TRA	TESTE1			4F11365
03277	0	02000	4	00001	TRA	1,4		* RETURN TO CALLER.	4F11366
03300	0	07400	4	03400	TESTE1	TSX	DIAG,4		4F11367
								* ERROR -- GO TO DIAGNOSTIC.	4F11368
								TEST CHARACTER IN THE AC FOR CLOSED PARENTHESIS.	4F11369
03301	0	34000	0	01377	TESTF0	CAS	CLOS		4F11370
03302	0	02000	0	03304	TRA	TESTF1			4F11371
03303	0	02000	4	00001	TRA	1,4		* RETURN TO CALLER.	4F11372
03304	0	07400	4	03400	TESTF1	TSX	DIAG,4		4F11373
								* ERROR -- GO TO DIAGNOSTIC.	

					TEST CHARACTER IN THE AC FOR COMMA.		4F11374
03305	0	34000	0	01376	TESTG0 CAS	COMMA	4F11375
03306	0	02000	0	03310	TRA	TESTG1	4F11376
03307	0	02000	4	00001	TRA	1,4	4F11377
03310	0	07400	4	03400	TESTG1 TSX	DIAG,4	4F11378
						TEST CHARACTER IN THE AC FOR NON-NUMERIC.	4F11379
03311	0	34000	0	01417	TESTH0 CAS	L(9)	4F11380
03312	0	02000	4	00001	TRA	1,4	4F11381
03313	0	76100	0	00000	NOF		4F11382
03314	0	07400	4	03400	TSX	DIAG,4	4F11383
						TEST CHARACTER IN THE AC FOR NUMERIC.	4F11384
03315	0	34000	0	01417	TESTI0 CAS	L(9)	4F11385
03316	0	07400	4	03400	TSX	DIAG,4	4F11386
03317	0	02000	4	00001	TRA	1,4	4F11387
03320	0	02000	4	00001	TRA	1,4	4F11388
						END OF PROGRAM TEST...	4F11389
						* * * * *	4F11390
						TET00,1/ CALLERS=CA000,CC000,C0100,C0200,C0300,C1300,C1400,	4F11392
						C1500,C3000,C3100,SS000,FOR,SPC,CMA,EMK,LIB,VRA(VRD).	4F11393
						TET00 MAKES ENTRIES IN THE TAPE TABLES. WHEN A BUFFER IS	4F11394
						FULL IT IS WRITTEN AS A RECORD ONTO TAPE 4.	4F11395
03321	-0	63400	2	01100	TET00 SXD	TETXR2,2	4F11396
03322	-0	63400	4	01101	SXD	TETXR4,4	4F11397
03323	-0	60000	0	01103	STQ	TETMQR	4F11398
03324	0	50000	1	00001	CLA	1,1	4F11399
03325	0	76700	0	00001	ALS	1	4F11400
03326	0	40000	1	00001	ADD	1,1	4F11401
03327	0	76000	0	00006	COM		4F11402
03330	0	40000	0	01407	ADD	L(1)	4F11403
03331	0	73400	2	00000	PAX	,2	4F11404
03332	0	50000	2	00322	CLA	INTET,2	4F11405
03333	0	77100	0	00022	ARS	18	4F11406
03334	0	60100	0	01102	STO	TETWRK	4F11407
03335	0	50000	2	00324	CLA	INTET+2,2	4F11408
03336	0	77100	0	00022	ARS	18	4F11409
03337	0	40200	0	01102	SUB	TETWRK	4F11410
03340	-0	10000	0	03356	TNZ	TET03	4F11411
03341	0	62200	2	00324	STD	INTET+2,2	4F11412
03342	0	76600	0	00224	TET01 WRS	TABTAP	4F11413
03343	0	53400	4	01102	LXA	TETWRK,4	4F11414
03344	0	50000	0	01102	CLA	TETWRK	4F11415
03345	0	40000	2	00322	ADD	INTET,2	4F11416
03346	0	62100	0	03350	STA	TET02	4F11417
03347	0	70000	1	00001	CPY	1,1	4F11418
03350	0	70000	4	00000	TET02 CPY	** ,4	4F11419
03351	2	00001	4	03350	TIX	TET02,4,1	4F11420
03352	0	76600	0	00333	IOD		4F11421
03353	0	50000	2	00324	CLA	INTET+2,2	4F11422
03354	0	40000	0	01407	ADD	L(1)	4F11423
03355	0	62100	2	00324	STA	INTET+2,2	4F11424
03356	0	50000	2	00324	TET03 CLA	INTET+2,2	4F11425
03357	0	77100	0	00022	ARS	18	4F11426
03360	0	40000	2	00322	ADD	INTET,2	4F11427

03361	0	62100	0	03371		STA TET05	ADDRESS OF ENTRY LOOP (P+O).	4F11428
03362	0	50000	2	00323		CLA INTET+1,2	OBTAIN CURRENT A (ENTRY ADDRESS),	4F11429
03363	0	62100	0	03370		STA TET04	AND SET ADDRESS OF ENTRY LOOP.	4F11430
03364	-0	73400	4	00000		PDX ,4	SET XR4 = E (ENTRY LENGTH IN WRDS).	4F11431
03365	0	40000	2	00324		ADD INTET+2,2	INCREASE P BY E TO ACCOUNT	4F11432
03366	0	62200	2	00324		STD INTET+2,2	FOR FOLLOWING ENTRY.	4F11433
03367	-0	53400	2	01406		LXD L(0),2	SET XR2 = 0. THEN	4F11434
03370	0	50000	2	00000	TET04	CLA **,2	MOVE THE CURRENT ENTRY	4F11435
03371	0	60100	2	00000	TET05	STO **,2	INTO THE CURRENT TABLE BUFFER, AND	4F11436
03372	1	77777	2	03373		TXI TET06,2,-1	WHEN	4F11437
03373	2	00001	4	03370	TET06	TIX TET04,4,1	DONE,	4F11438
03374	0	56000	0	01103		LDQ TETMQR	RESTORE ORIGINAL C(MQR),	4F11439
03375	-0	53400	2	01100		LXD TETXR2,2	RESTORE ORIGINAL C(XR2),	4F11440
03376	-0	53400	4	01101		LXD TETXR4,4	RESTORE ORIGINAL C(XR4), AND	4F11441
03377	0	02000	1	00002		TRA 2,1	* EXIT TO MAIN ROUTINE.	4F11442
						END OF PROGRAM TET00.		4F11443
						*****		4F11444
						DIAGNOSTIC CALLERS=CD000,CB000,CC000,CA100,C0200,C0300,C090,		4F11445
						C1000,C1200,C3000,C3100,C3200,C3400,C0150,C0160,C0180,TEST.,		4F11446
						SR6DC1,DRTABS,RDRX,DIM.SR,SS000,ROYCNV,RDC,RSC,LPR,EQS,RPR,		4F11447
						CMA,EMK,BEG(TYP),VRA(VRD).		4F11448
						(CA000 ALSO CALLS THE DIAGNOSTIC AFTER ALL STATEMENTS HAVE		4F11449
						BEEN PROCESSES. IF THERE HAVE BEEN NO PREVIOUS CALLS TO		4F11450
						THE DIAGNOSTIC DURING SECTION ONE, THEN 1PRIME IS CALLED.)		4F11451
D	03400	1	00000	0	00004	DIAG TXI 4,0	* GO GET THE DIAGNOSTIC.	4F11452
						END OF PROGRAM DIAG.		4F11453
						*****		4F11454
						ROUTINE TO COMPILE FLOW TRACING INSTRUCTIONS.		4F11455
								4F11456
03401	-0	63400	4	03437	FLTR00	SXD FLTR05,4	SAVE CALLING TAG.	4F114571
03402	0	50000	0	00030		CLA EIFNO	GET LAST INTERNAL AND EXTERNAL FORMULA NOS.	4F114572
03403	0	62100	0	02067		STA ENT	PLACE LAST EFN IN DEC OF NTR INSTRUCTION.	4F114573
03404	0	77100	0	00022		ARS 18		4F114574
03405	0	62100	0	02070		STA NZE	PLACE LAST IFN IN DEC OF PZE	4F114575
03406	-0	53400	4	01122		LXD ARGCTR,4		4F114576
03407	-3	00000	4	03413		TXL FLTR01,4,0	IS THIS AN FN FUNCTION, NO SKIP.	4F114577
03410	0	60000	0	01107		STZ 1C+2		4F114578
03411	0	50200	0	01454		CLS 2E18	SET ADDRESS TO -1	4F114579
03412	0	02000	0	03423		TRA FLTR03		4F11457A
03413	0	50000	0	00365	FLTR01	CLA SBDFCN	IS THIS A MAIN PROGRAM OR SUBPROGRAM.	4F11457B
03414	-0	10000	0	03420		TNZ FLTR02	SKIP ON SUBPROGRAM	4F11457C
03415	0	60000	0	01107		STZ 1C+2	SET ADDRESS TO 0	4F11457D
03416	0	60000	0	01110		STZ 1C+3		4F11457E
03417	0	02000	0	03424		TRA FLTR04		4F11457F
03420	0	50000	0	01523	FLTR02	CLA DOLSGN	SET ADDRESS TO \$+2	4F11457G
03421	0	60100	0	01107		STO 1C+2		4F11457H
03422	0	50000	0	01457		CLA D2		4F11457I
03423	0	60100	0	01110	FLTR03	STO 1C+3	SET RELATIVE ADDRESS WORD OF CIT.	4F11457J
03424	0	07400	4	01731	FLTR04	TSX CIT00,4		4F11457K
03425	0	00000	0	01406		PZE L(0)	COMPILE NTR *+2,0,EFN	4F11457L
03426	0	00000	0	02067		PZE ENT		4F11457M
03427	0	00000	0	01510		PZE 15P		4F11457N
03430	0	00000	0	01457		PZE D2		4F11457O
03431	0	07400	4	01731		TSX CIT00,4		4F11457P

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03432 0 00000 0 01406 PZE L(0) COMPILER PZE ALPHA,0,IFN 4F11457Q
03433 0 00000 0 02070 PZE NZE WHERE ALPHA IS 0 FOR MAIN PROGRAM, $+2 FOR 4F11457R
03434 0 00000 0 01107 PZE 1C+2 SUBPROGRAM, OR -1 FOR FN FUNCTION IN EITHER 4F11457S
03435 0 00000 0 01110 PZE 1C+3 MAIN OR SUBPROGRAM. 4F11457T
03436 -0 53400 4 03437 LXI FLTR05,4 4F11457U
D 03437 1 00000 4 01731 FLTR05 TXI CIT00,4 GO COMPILER LXI M(,4 OR 7(TYPE=,4 4F11457V
4F11457W
4F11458
END OF THE COMMON PART OF SECTION ONE. 4F11459
4F11460
* * * * * 4F11461
SECTION 1 / INITIALIZATION = 4F11463
00471 ORG FORSUB 4F11465
INITIALIZATION OCCUPIES FORSUB BUFFER AND IS WRITTEN OVER 4F11466
BY FORSUB ENTRIES IF THERE ARE ANY FORTRAN FUNCTIONS IN THE 4F11467
PROGRAM. 4F11468
* * * * * 4F11469
PART I / CLEAR DRUMS 1,2,3,4, AND REWIND TAPES 2,3,4 = 4F11471
00471 0 53400 1 00504 CLDR00 LXA CLDR07,1 CLEAR DRUMS 1,2,3,4 TO +0. 4F11472
00472 0 76600 1 00305 CLDR01 WRS 197,1 X 4F11473
00473 -0 53400 2 00504 LXI CLDR07,2 X 4F11474
00474 0 70000 0 00505 CLDR03 CPY CLDR08 X 4F11475
00475 2 00001 2 00474 TIX CLDR03,2,1 X 4F11476
00476 2 00001 1 00472 TIX CLDR01,1,1 X 4F11477
00477 0 77200 0 00222 REW 146 REWIND WORKING TAPES 2,3,4. 4F11478
00500 0 77200 0 00223 REW 147 X 4F11479
00501 0 77200 0 00224 REW 148 X 4F11480
00502 0 07400 4 05702 DMWR99 TSX CA100,4 * GO TO SUBROUTINE TO LOAD FT REGION. 4F11540
00503 0 02000 0 03440 TRA CA010 * GO BEGIN STATE A OF SECTION ONE. 4F11541
END OF INITIALIZATION / PART 2. 4F11542
* * * * * 4F11543
PART3 / VARIABLES AND CONSTANTS USED BY INITIALIZATION= 4F11544
00504 0 04000 0 00004 CLDR07 PZE 4,,2048 CONSTANT FOR CLEARING DRUMS. 4F11548
00505 0 00000 0 00000 CLDR08 PZE 0 CONSTANT FOR CLEARING DRUMS. 4F11549
END OF INITIALIZATION / PART 3. 4F11552
* * * * * 4F11553
SECTION 1 / STATEA = 4F11556
NAME FUNCTION 4F11559
PART 1 / ASSEMBLE AND CLASSIFY ALL STATEMENTS= 4F11560
CA000 ASSEMBLE STATEMENT. 4F11561
CD000 SCAN FOR HOLLERITH AND ILLEGAL CHS. 4F11562
CB000 CLASSIFY=ARITHMETIC/NON-ARITHMETIC. 4F11563
CC000 CLASSIFY=WHICH NON-ARITHMETIC. 4F11564
PART 2 / PROCESS CONTROL AND SPECIFICATION STATEMENTS. 4F11565
C0100 DO. 4F11566
C0200 GO TO. 4F11567
C0300 IF. 4F11568
C0400 IF (SENSE SWITCH. 4F11569

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C0500	IF (SENSE LIGHT.	4F11570
C0600	IF DIVIDE CHECK.	4F11571
C0700	IF AC OVERFLOW.	4F11572
C0800	IF MQ OVERFLOW.	4F11573
C0900	PAUSE.	4F11574
C1000	ASSIGN.	4F11575
C1100	SENSE LIGHT.	4F11576
C1200	DIMENSION.	4F11577
C1300	STOP.	4F11578
C1400	FREQUENCY.	4F11579
C1500	EQUIVALENCE.	4F11580
C1600	CONTINUE.	4F11581
C3000(C3500)	SUBROUTINE / FUNCTION.	4F11582
C3100	COMMON.	4F11583
C3200	RETURN.	4F11584
C3300	CALL.	4F11585
C3400	END.	4F11586
PART 3 / PROCESS INPUT-OUTPUT STATEMENTS=		4F11587
RDC	READ CARD	4F11588
RIT	READ INPUT TAPE.	4F11589
RDP	PRINT.	4F11590
WOT	WRITE OUTPUT TAPE.	4F11591
PDC	PUNCH.	4F11592
WBT	WRITE TAPE.	4F11593
RBT	READ TAPE.	4F11594
WRD	WRITE DRUM.	4F11595
RDD	READ DRUM.	4F11596
EFT	END FILE.	4F11597
RWN	REWIND.	4F11598
BSP	BACKSPACE.	4F11599
FOR	FORMAT.	4F11600
RSC	RESET AND SCAN.	4F11601
LISTR	CONTROL FOR LIST SCAN.	4F11602
LPR	LEFT PARENTHESES IN LIST SCAN.	4F11603
EOS	EQUAL SIGN IN LIST SCAN.	4F11604
SPCTR	CONTROL FOR SPECIFICATION SCAN.	4F11605
SPC	SUBSCRIPT SPECIFICATIONS.	4F11606
RPR	RIGHT PARENTHESIS IN LIST SCAN.	4F11607
CMA	COMMA IN LIST SCAN.	4F11608
EMK	ENDMARK IN LIST SCAN.	4F11609
PART 4 / SUBROUTINES USED BY STATE A=		4F11610
BEG(TYP),4	BEGIN SCAN AND TYPE TEST.	4F11611
BEGTR	CONTROL FOR BEGINNING SCAN.	4F11612
BRW,4	BINARY READ OR WRITE COMPILER.	4F11613
BSS,2	COMPILES= IFN BSS 0.	4F11614
CA100,4	READ SOURCE PROGRAM TAPE.	4F11615
CC500,4	SCAN DICTIONARY.	4F11616
ETM(LTM)SW,4	IF SW=NOP, COMPILES ETM(LTM). SL=0.	4F11617
IFFIX,1	SETS UP FORVAR OR FORVAL ENTRY.	4F11618
IN(OUT)PUT,2	COMPILES CAL *, AND XIT (LEV).	4F11619
LIB,1	MAKES CLOSUB ENTRY, COMPILES CIT.	4F11620
VRA(VRD),4	MAKES FORVAR, FIXCON, CIT ENTRIES.	4F11621
PART 5 / CONSTANTS AND VARIABLES USED BY STATE A.		4F11622
DIC	DICTIONARY.	4F11623

T TRANSFER TABLE. 4F11624

4F11625

THE FOLLOWING CONVENTIONS ARE USED IN THIS LISTING= 4F11626

4F11627

** IN THE ADDRESS, TAG, OR DECREMENT OF AN INSTRUCTION 4F11628

INDICATES THAT THIS FIELD WILL BE MODIFIED BY THE PROGRAM. 4F11629

* IN COL/36 INDICATES THE INSTRUCTION IS A TRANSFER OUT OF 4F11630

THIS LOGICAL BLOCK OR SUBROUTINE. 4F11631

C IN COL/34 INDICATES THE INSTRUCTION WAS CORRECTED. 4F11632

P IN COL/32 INDICATES THE INSTRUCTION WAS INSERTED (PATCH). 4F11633

4F11634

* * * * * 4F11635

4F11636

STATEA/1-ASSEMBLE AND CLASSIFY ALL STATEMENTS= 4F11637

03440 ORGA ORG 1824 4F11638

* * * * * 4F11639

03440 STATEA BSS 0 4F11640

CA000/ CALLS=CA100,SR6DC1,TET00,DIAG. 4F11641

CA000 ASSEMBLES STATEMENT IN THE F-REGION AND ASSIGNS AN IFN. 4F11642

03440 -0 53400 4 02575 CA010 LXN ENDWRD,4 IF THE FINAL STATEMENT HAS BEEN 4F11643

03441 -3 00000 4 03400 TXN DIAG,4,0 * PROCESSED, THEN GO CALL DIAGNOSTIC. 4F11644

03442 -0 53400 1 00030 LXN EIFNO,1 KEEP INTERNAL FORMULA NUMBER 4F11645

03443 1 00001 1 03444 TXN CA013,1,1 (DECR PART OF EIFNO) 4F11646

03444 -0 63400 1 00030 CA013 SXN EIFNO,1 UP TO DATE BY ADDING 1. 4F11647

03445 -0 50000 0 01333 CAL FT OBTAIN HOLLERITH CODED 5-DIGIT 4F11648

03446 0 77100 0 00006 ARS 6 EXTERNAL FORMULA NO IN ACC, 4F11649

03447 0 60200 0 01151 SLW F-1 AND RETAIN IN F-01. 4F11650

03450 -0 53400 1 01670 LXN DCF,1 INITIALIZE INDEX A TO COMPL OF F. 4F11651

03451 0 53400 2 01400 CA018 LXN L(11),2 SET UP LOOP FOR 11 CYCLES. 4F11652

03452 0 56000 2 01347 CA019 LDQ FT+12,2 MOVE WORD FROM REGION FT 4F11653

03453 -0 60000 1 00000 STQ 0,1 TO REGION F. 4F11654

03454 2 00001 1 03455 TIX CA020,1,1 KEEP F-REGION ADDRESS UP-TO-DATE. 4F11655

03455 2 00001 2 03452 CA020 TIX CA019,2,1 TEST END OF LOOP. 4F11656

03456 0 07400 4 05702 TSX CA100,4 * GO READ NEXT NON-BLANK CARD. 4F11657

03457 -0 50000 0 01333 CAL FT TEST RIGHTMOST CHARACTER OF 4F11658

03460 -0 32000 0 01374 ANA L(63) FIRST WORD FOR CONTINUATION MARK, 4F11659

03461 0 10000 0 03464 TZE CA021 IF ZERO OR BLANK, 4F11660

03462 0 40200 0 01430 SUB ABLANK DISCONTINUE READING, 4F11661

03463 -0 10000 0 03451 TNZ CA018 OTHERWISE CONTINUE. 4F11662

03464 0 50000 0 01526 CA021 CLA BLANKS BEGIN SCANNING REGION F BACKWARDS 4F11663

03465 0 34000 1 77777 CA022 CAS -1,1 TO FIND FIRST NON BLANK WORD. 4F11664

03466 0 02000 0 03470 TRA CA023 NOT BLANK. 4F11665

03467 1 00001 1 03465 TXN CA022,1,1 BLANK, SO CONTINUE SCAM. 4F11666

03470 0 56000 0 01531 CA023 LDQ 36ONES PLACE BINARY ONES IN FIRST WORD 4F11667

03471 -0 60000 1 00000 STQ 0,1 FOLLOWING RIGHTMOST NONBLANK WORD. 4F11668

03472 -0 50000 0 01151 CAL F-1 PICK UP EXTERNAL FORMULA NUMBER AND 4F11669

03473 0 34000 0 01477 CAS 5BLANS COMPARE WITH /0 /. 4F11670

03474 0 02000 0 03476 TRA CA015 NOT COMPARE. 4F11671

03475 0 02000 0 03503 TRA CD000 * TAKE EXTFORMNO, IF ANY, AND 4F11672

03476 0 76500 0 00043 CA015 LRS 35 GO TO CONVERSION SUBROUTINE AND 4F11673

03477 0 07400 1 02566 TSX SR6DC1,1 * RETURN HERE WITH RESULT IN ACC. 4F11674

03500 0 62100 0 00030 STA EIFNO STORE RESULT IN ADDRESS OF EIFNO. 4F11675

03501 0 07400 1 03321 TSX TET00,1 * GO TO PROGRAM TET TO ENTER EIFNO 4F11676

03502 0 00000 0 00000 PZE 0 INTO TABLE TEIFNO (TABLE O). 4F11677

						CB000/ CALLS=C0190X,C0190,DIAG.		4F11732
						CB000 CLASSIFIES STATEMENT AS ARITHMETIC OR NON-ARITHMETIC.		4F11733
	03562	0	53400	1	01407	CB000 LXA L(1),1	SET XRI TO COUNT PARENTHESES.	4F11734
	03563	0	07400	4	01671	TSX C0190X,4	* RESET CHCTR AND FWA TO BEGIN SCAN.	4F11735
	03564	0	07400	4	01707	CB001 TSX C0190,4	* EXAMINE NEXT NON-BLANK CHARACTER.	4F11736
	03565	0	34000	0	01400	CAS AEQUAL	IF AN EQUAL SIGN,	4F11737
D	03566	1	00000	0	03570	TXI CB005,0	THEN	4F11738
D	03567	1	00000	0	03601	TXI CB200,0	GO TEST PAREN-COUNT.	4F11739
	03570	0	34000	0	01375	CB005 CAS ALPAR	IF A LEFT PARENTHESIS,	4F11740
D	03571	1	00000	0	03573	TXI CB006,0	THEN	4F11741
	03572	1	00001	1	03564	TXI CB001,1,1	UPDATE PAREN-COUNT BY 1.	4F11742
	03573	0	34000	0	01377	CB006 CAS ARPAP	IF A RIGHT PARENTHESIS,	4F11743
D	03574	1	00000	0	03576	TXI CB007,0	THEN	4F11744
D	03575	1	00000	0	03614	TXI CB500,0	GO TEST PAREN-COUNT.	4F11745
	03576	0	40200	0	01374	CB007 SUB ENDMK	IF NOT ENDMARK, THEN	4F11746
	03577	-0	10000	0	03564	TNZ CB001	GO EXAMINE NEXT CHARACTER.	4F11747
D	03600	1	00000	0	03616	TXI CC000,0	* OTHERWISE, GO TO DIC LOOK-UP.	4F11748
	03601	2	00001	1	03616	CB200 TIX CC000,1,1	* IF EQUAL WAS,NOT WITHIN PARENS,	4F11749
	03602	0	07400	4	01707	CB201 TSX C0190,4	* THEN EXAMINE NEXT CHARACTER.	4F11750
	03603	0	34000	0	01375	CAS ALPAR	IF LEFT PAR6NTHESIS,	4F11751
D	03604	1	00000	0	03606	TXI CB205,0	THEN	4F11752
D	03605	1	00000	0	06323	TXI ARITH,0	* THIS IS AN ARITHMETIC FORMULA.	4F11753
	03606	0	34000	0	01376	CB205 CAS ACOMMA	IF A COMMA,	4F11754
D	03607	1	00000	0	03611	TXI CB206,0	THEN	4F11755
D	03610	1	00000	0	03616	TXI CC000,0	* GO TO NO,-ARITHMETIC DIC LOOK-UP.	4F11756
	03611	0	40200	0	01374	CB206 SUB ENDMK	IF NOT ENDMARK, THEN	4F11757
	03612	-0	10000	0	03602	TNZ CB201	GO EXAMINE NEXT CHARACTER.	4F11758
D	03613	1	00000	0	06323	TXI ARITH,0	* THIS IS AN ARITHMETIC FORMULA.	4F11759
	03614	2	00001	1	03564	CB500 TIX CB001,1,1	IF PAREN-COUNT DOES NOT BALANCE,	4F11760
	03615	0	07400	4	03400	TSX DIAG,4	* ERROR-GO TO DIAGNOSTIC ROUTINE.	4F11761
						END OF PROGRAM CB000.		4F11762
						* * * * *		4F11763
						* * * * *		4F11764
						* * * * *		4F11765
						* * * * *		4F11766
						CC000/ CALLS=CC500,C0190X,DIAG,C0190,TET00.		4F11767
						CC000 CLASSIFIES STATEMENT AS TO WHICH NON-ARITH.ETIC.		4F11768
	03616	0	60000	0	01113	CC000 STZ 2G	SET DICTIONARY WORD TAG, AND	4F11769
	03617	0	53400	3	01406	LXA L(0),3	CHARACTER COUNT AND ENTRY COUNT.	4F11770
	03620	0	07400	4	01671	CC001 TSX C0190X,4	* RESET CHCTR AND FWA TO BEGIN SCAN.	4F11771
	03621	0	07400	4	05743	TSX CC500,4	* EXAMINE NEXT DICTIONARY CHARACTER.	4F11772
	03622	0	34000	0	01374	CAS ENDMK	TEST FOR CONSECUTIVE ENDMARKS.	4F11773
	03623	0	02000	0	03272	TRA ERR77P	* MACHINE ERROR, GO TO DIAGNOSTIC.	4F11774
	03624	0	07400	4	03400	TSX DIAG,4	* ERROR = NOT FOUND IN DICTIONARY.	4F11775
D	03625	1	00000	0	03632	TXI CC004,0	GO BEGIN COMPARISON.	4F11776
	03626	0	07400	4	05743	CC002 TSX CC500,4	* EXAMINE NEXT DICTIONARY CHARACTER.	4F11777
	03627	0	34000	0	01374	CAS ENDMK	TEST FOR END OF DIC ENTRY.	4F11778
D	03630	1	00000	0	03272	TXI ERR77P,0	* MACHINE ERROR, GO TO DIAGNOSTIC.	4F11779
D	03631	1	00000	0	03644	TXI CC007,0	IF END OF ENTRY, LOOK NO FURTHER.	4F11780
	03632	0	60100	0	01105	CC004 STO 1C	OTHERWISE, SAVE CHARACTER	4F11781
	03633	-0	60000	0	01106	STQ 1C+1	AND REMAINDER OF DICTIONARY WORD.	4F11782
	03634	0	07400	4	01707	TSX C0190,4	* GO GET NEXT FORMULA CHARACTER,	4F11783
	03635	0	56000	0	01106	LDQ 1C+1	AND RESTORE DICTIONARY WORD.	4F11784
	03636	0	40200	0	01105	SUB 1C	IF CHARACTERS ARE EQUAL,	4F11785
	03637	0	10000	0	03626	TZE CC002	THEN GO COMPARE NEXT CHARACTERS.	4F11786

03640	0	07400	4	05743	CC005	TSX	CC500,4		* OTHERWISE, EXAMINE NEXT DIC CHAR.	4F11786
03641	0	40200	0	01374		SUB	ENDMK		CONTINUE JNTIL AN ENDMARK IS	4F11787
03642	-0	10000	0	03640		TNZ	CC005		FOUND, THEN	4F11788
03643	1	77777	1	03620		TXI	CC001,1,-1		COUNT ENTRY, AND BEGIN AGAIN.	4=11789
03644	0	50000	1	06246	CC007	CLA	T,1		IF THE CURRENT STATEMENT IS	4F11790
03645	0	12000	1	06246		TPL	T,1		OF THE NON-EXECUTABLE TYPE,	4F11791
03646	-0	63400	1	01107		SXD	1C+2,1		THEN	4F11792
03647	0	07400	1	03321		TSX	TET00,1		* GO ENTER EIFNO IN THE	4F11793
03650	0	00000	0	00016		PZE	14		NONEXC TABLE.	4F11794
03651	-0	53400	1	01107		LXD	1C+2,1		AND THEN	4F11795
03652	0	02000	1	06246	CC008	TRA	T,1		* TAKE INDICATED TRANSFER.	4F11796
									END OF PROGRAM CC000.	4F11797
									* * * * *	*4F11798
										4F11799
									STATEA/2-PROCESS CONTROL AND SPECIFICATION STATEMENTS=	4F11800
										4F11801
									* * * * *	*4F11802
										4F11803
									C0100/ CALLS=GETIFN,C0190,TEST.,C0180,C0160,C0150,TET00.	4F11804
									C0100 PROCESSES DO STATEMENTS.	4F11805
03653	0	07400	4	02366	C0100	TSX	GETIFN,4		* GET INTERNAL FORMULA NUMBER IN 1C.	4F11806
03654	0	07400	4	01707		TSX	C0190,4		* OBTAIN 1ST NON-BLANK CHARACTER	4F11807
03655	0	07400	4	03315		TSX	TESTI0,4		* WHICH SHOULD BE NUMERIC.	4F11808
03656	0	07400	2	01655		TSX	C0180,2		* OBTAIN IN 1G THE BIN EQUIV OF BETA.	4F11809
03657	0	60100	0	01113		STO	2G		SAVE THE 1ST CHAR OF SUBSCRIPT.	4F11810
03660	0	50000	0	01112		CLA	1G		TAKE CONVERTED RESULT FOR BETA	4F11811
03661	0	62100	0	01105		STA	1C		AND STORE IN ADDR OF 1C.	4F11812
03662	0	50000	0	01113		CLA	2G		1C IS NOW COMPLETE EXCEPT FOR TAG.	4F11813
03663	0	07400	2	01624		TSX	C0160,2		* OBTAIN IN 1G THE SUBSCRIPT.	4F11814
03664	0	50000	0	01112		CLA	1G		STORE SUBSCRIPT	4F11815
03665	0	60100	0	01106		STO	1C+1		IN 1C+1.	4F11816
03666	0	07400	2	01604		TSX	C0150,2		* OBTAIN IN 1G THE PROPER N1.	4F11817
03667	0	50000	0	01112		CLA	1G		STORE N1	4F11818
03670	0	60100	0	01107		STO	1C+2		IN 1C+2.	4F1.819
03671	-0	50000	0	01353		CAL	I		OBTAIN I IN LOGICAL ACC AND	4F11820
03672	0	77100	0	00022		ARS	18		STORE IN POS 18 OF 1C	4F11821
03673	-0	60200	0	01105		ORS	1C		0 IF NUMERIC, OR 1 IF NO,-NUMERIC.	4F11822
03674	0	07400	2	01604		TSX	C0150,2		* OBTAIN IN 1G THE PROPER N2.	4F11823
03675	0	07400	4	03247		TSX	TESTA0,4		* TEST THE AC FOR COMMA OR ENDMARK.	4F11824
03676	-0	10000	0	03701		TNZ	C0113		IF ENDMARK, THEN	4F11825
03677	-0	77300	0	00037		RQL	31		CREATE ONE IN MQ FOR N3	4F11826
03700	-0	60000	0	01365		STQ	RESIDU		AND PLACE IN RESIDU.	4F11827
03701	0	50000	0	01112	C0113	CLA	1G		STORE N2	4F11820
03702	0	60100	0	01110		STO	1C+3		IN 1C+3.	4F11829
03703	-0	50000	0	01353		CAL	I		OBTAIN I IN LOG ACC AND	4F11830
03704	0	77100	0	00023		ARS	19		STORE IN POS 19 OF 1C	4F11831
03705	-0	60200	0	01105		ORS	1C		0 IF NUMERIC, OR 1 IF NON-NUMERIC.	4F11832
03706	0	07400	2	01604		TSX	C0150,2		* OBTAIN IN 1G THE PROPER N3.	4F11833
03707	0	07400	4	03271		TSX	TESTD0,4		* THE AC SHOULD CONTAIN AN ENDMARK.	4F11834
03710	0	50000	0	01112		CLA	1G		STORE N3	4F11835
03711	0	60100	0	01111		STO	1C+4		IN 1C+4.	4F11836
03712	-0	50000	0	01353		CAL	I		OBTAIN I IN LOG ACC AND	4F11837
03713	0	77100	0	00024		ARS	20		STORE IN POS 20 OF 1C	4F11838
03714	-0	60200	0	01105		ORS	1C		0 IF NUMERIC, OR 1 IF NON-NUMERIC.	4F11839

	03715	0	07400	1	03321		TSX TET00,1		* GO TO TET PROGRAM TO ENTER	4F11840
	03716	0	00000	0	00001		PZE 1		1C,1C+1,..1C+4 IN TDO TABLE 1.	4F11841
D	03717	1	00000	0	03440		TXI CA010,0		* EXIT TO PROCESS NEXT STATEMENT.	4F11842
							END OF PROGRAM C0100.			4F11843
							*****			4F11844
							C0200/ CALLS=GETIFN,DIAG,TEST.,C0190,C0180,TET00,C0160,			4F11846
							CIT00,SS000(CSA000).			4F11847
							C0200 PROCESSES GO TO STATEMENTS.			4F11848
	03720	0	07400	4	02366	C0200	TSX GETIFN,4		* GET INTERNAL FORMULA NUMBER IN 1C	4F11849
	03721	0	60100	0	01107		STO 1C+2		AND IN 1C+2.	4F11850
	03722	0	07400	4	01707		TSX C0190,4		* OBTAIN IN ACC NEXT NB CHARACTER	4F11851
	03723	0	34000	0	01417		CAS L(9)		AND COMPARE IT WITH 9.	4F11852
D	03724	1	00000	0	03733		TXI C0205,0		IF NON-NUMERIC, GO COMPARE WITH (.	4F11853
	03725	0	76100	0	00000		NOP		IF NUMERIC, THEN	4F11854
	03726	0	07400	2	01655		TSX C0180,2		* OBTAIN IN 1G THE BINARY EQUV BETA.	4F11855
	03727	0	07400	4	03271		TSX TESTD0,4		* THE AC SHOULD CONTAIN AN ENDMARK.	4F11856
	03730	0	50000	0	01112		CLA 1G		STORE BETA IN 1C+1 TO CONSTRUCT	4F11857
	03731	0	60100	0	01106		STO 1C+1		THE 2ND WORD OF TIFGO TABLE ENTRY.	4F11858
D	03732	1	00000	0	04030		TXI C0202,0		GO TO ENTER 1C,1C+1 INTO TIFGO.	4F11859
	03733	0	34000	0	01375	C0205	CAS ALPAR		TEST CHARACTER FOR ALPHABETIC.	4F11860
D	03734	1	00000	0	03736		TXI C0210,0		IF NOT ALPHABETIC, THEN	4F11861
D	03735	1	00000	0	03746		TXI C0212,0		THIS IS TYPE= GO TO (), I.	4F11862
	03736	0	07400	2	01624	C0210	TSX C0160,2		* TYPE= GO TO N,(),SO OBTAIN IN 1G N	4F11863
	03737	0	07400	4	03305		TSX TESTG0,4		* WHICH SHOULD BE FOLLOWED BY COMMA.	4F11864
	03740	0	50000	0	01112		CLA 1G		SAVE THE SYMBOL N IN 1C+3	4F11865
	03741	0	60100	0	01110		STO 1C+3		FOR COMPILED INSTRUCTION.	4F11866
	03742	0	07400	4	01707		TSX C0190,4		* OBTAIN IN ACC NEXT NB CHARACTER,	4F11867
	03743	0	07400	4	03275		TSX TESTE0,4		* WHICH SHOULD BE A LPAREN.	4F11868
	03744	0	50000	0	01407		CLA L(1)		PREPARE TO SET ADDRESS PART OF 1C	4F11869
	03745	0	02000	0	03747		TRA C0213		TO 1 TO INDICATE CLASS OF TRANSFER.	4F11870
	03746	0	50000	0	01410	C0212	CLA L(2)		PREPARE TO SET ADDR OF 1C TO 2.	4F11871
	03747	0	62100	0	01105	C0213	STA 1C		STORE 1 OR 2 IN ADDR OF 1C.	4F11872
	03750	-0	53400	2	04032		LXD CTRAD,2		OBTAIN 250-(NO. TRAD ENTRIES), AND	4F11873
	03751	-0	75400	2	00000		PXD ,2		PLACE IN THE DECREMENT OF THE AC	4F11874
	03752	0	60100	0	01106		STO 1C+1		AND STORE IN 1C+1.	4F11875
	03753	0	07400	4	01707	C0215	TSX C0190,4		* OBTAIN IN ACC NEXT NB CHAR.	4F11876
	03754	0	07400	2	01655		TSX C0180,2		* OBTAIN IN 1G THE BIN EQU OF BETA.	4F11877
	03755	0	60100	0	01113		STO 2G		SAVE CHAR IN ACC.	4F11878
	03756	0	07400	1	03321		TSX TET00,1		* GO TO ENTER 1G	4F11879
	03757	0	00000	0	00003		PZE 3		INTO TRAD TABLE (TABLE 3).	4F11880
	03760	-0	53400	2	04032		LXD CTRAD,2		REDUCE COUNTER	4F11881
	03761	2	00001	2	03762		TIX C0216,2,1		CTRAD	4F11882
	03762	-0	63400	2	04032	C0216	SXD CTRAD,2		BY 1.	4F11883
	03763	0	50000	0	01113		CLA 2G		RESTORE CHAR TO ACC.	4F11884
	03764	0	07400	4	03255		TSX TESTB0,4		* TEST FOR COMMA OR RPAREN.	4F11885
	03765	-0	10000	0	03753		TNZ C0215		IF RIGHT PARENTHESIS, THEN	4F11886
	03766	0	50000	0	04032		CLA CTRAD		OBTAIN IN ADDR OF ACC 250-NO. OF	4F11887
	03767	0	77100	0	00022		ARS 18		ENTRIES IN TRAD TABLE,AND STORE	4F11888
	03770	0	62100	0	01106		STA 1C+1		IN ADDR OF 1C+1.	4F11889
	03771	0	50000	0	01105		CLA 1C		OBTAIN 1C IN ACC	4F11890
	03772	0	76000	0	00001		LBT		AND TEST LOW ORDER BIT.	4F11891
	03773	0	02000	0	04004		TRA C0220		THIS IS A TYPE GO TO (),I FORMULA.	4F11892
	03774	0	07400	4	01707		TSX C0190,4		* OBTAIN NEXT NB CHAR AND	4F11893

03775	0	07400	4	03271		TSX	TESTD0,4		* TEST FOR ENDMK.	4F11894
03776	0	07400	4	01731		TSX	CIT00,4		* GO MAKE THE FOLLOWING CIT ENTRY=	4F11895
03777	0	00000	0	01107		PZE	1C+2		WORD 1--DECR= INTFORMNO (LOCATION)	4F11896
04000	0	00000	0	01601		PZE	L(TRA)		WORD 2--TRA000 (OP AND DECR)	4F11897
04001	0	00000	0	01110		PZE	1C+3		WORD 3--VARIABLE N IADDRESS)	4F11898
04002	0	00000	0	01406		PZE	L(0)		WORD 4--000000 IREL ADDR AND TAG).	4F11899
04003	0	02000	0	04030		TRA	C0202		GO TO ENTER 1C,1C+1 INTO TIFGO.	4F11900
04004	0	07400	4	01707	C0220	TSX	C0190,4		* EXAMINE NEXT NB CHARACTER,	4F11901
04005	0	07400	4	03305		TSX	TESTG0,4		* WHICH SHOULD BE A COMMA.	4F11902
04006	0	07400	4	01707		TSX	C0190,4		* OBTAIN IN ACC NEXT NB CHAR, ANO	4F11903
04007	0	07400	2	01624		TSX	C0160,4		* OBTAIN IN 1G THE FXD-PT. VARIABLE,	4F11904
04010	0	07400	4	03271		TSX	TESTD0,4		* WHICH SHOULD BE FOLLOWED BY ENDMK.	4F11905
04011	0	50000	0	01407		CLA	L(1)		PREPARE PROPER FORM OF SUBSCRIPT	4F11906
04012	0	60100	0	01131		STO	E+3		COMBINATION AS	4F11907
04013	0	60100	0	01100		STO	DIMCTR		INPUT TO SUBSCRIPT ANALYSIS=	4F11908
04014	0	50000	0	01112		CLA	1G		E+3 = 1ST COEFFICIENT,	4F11909
04015	0	60100	0	01132		STO	E+4		E+6 = 1ST SUBSCRIPT VARIABLE,	4F11910
04016	0	60000	0	01137		STZ	E+9		E+9 = ADDEND OF SUBSCRIPT,	4F11911
04017	0	07400	4	03027		TSX	CSA000,4		* DIMCTR = DIMENSION OF VARIABLE.	4F11912
04020	0	50000	0	01126		CLA	E		OUTPUT FROM CSA IS FOUND IN	4F11913
04021	0	77100	0	00030		ARS	24		E = I--TAUTAG (GENERAL TAG) 1-11.	4F11914
04022	0	60100	0	01113		STO	2G		ADJUST AND SAVE FOR COMP. INSTR.	4F11915
04023	0	07400	4	01731		TSX	CIT00,4		* GO MAKE THE FOLLOWING CIT ENTRY=	4F11916
04024	0	00000	0	01107		PZE	1C+2		WORD 1--DECR-INTFORMNO(LOCATION)	4F11917
04025	0	00000	0	01601		PZE	L(TRA)		WORD 2--TRA000(OP ANO 0ECR)	4F11918
04026	0	00000	0	01406		PZE	L(0)		WORD 3--000000(ADDRESS)	4F11919
04027	0	00000	0	01113		PZE	2G		WORD 4--ADDR = TAUTAG FOR I	4F11920
							C0200= ENTPY POINT USED BY C0400,C1000.			4F11921
04030	0	07400	1	03321	C0202	TSX	TET00,1		* GO TO TET TO ENTER 1C AND 1C+1	4F11922
04031	0	00000	0	00002		PZE	2		INTO TIFGO TABLE ITABLE 2).	4F11923
04032	1	00372	0	03440	CTRAD	TXI	CA010,0,250		* EXIT TO PROCESS NEXT STATEMENT.	4F11924
							END OF PROGRAM C0200.			4F11925
							*****			4F11926
							C0300/ CALLS=C0190X,C0190,C0390,TEST.,DIAG,C0180,TET00,			4F11927
							=STATEB.			4F11928
							C0300 PROCESSES IF STATEMENTS.			4F11929
04033	-0	53400	4	00030	C0300	LXD	EIFNO,4		PLACE THE CURRENT INTERNAL FORMULA	4F11931
04034	-0	75400	4	00000		PXD	,4		NUMBER IN THE DECREMENT OF 1C	4F11932
04035	-0	76000	0	00003		SSM			WITH SIGN SET TO MINUS	4F11933
04036	0	60100	0	01105		STO	1C		FOR FUTURE TIFGO ENTRY.	4F11934
04037	0	07400	4	01671		TSX	C0190X,4		* SET CHCTR AND FWA TO BEGIN SCAN.	4F11935
04040	0	07400	4	01707		TSX	C0190,4		* OBTAIN IN AC THE 1ST NB CHAR (I).	4F11936
04041	0	56000	0	01433		LDQ	L(X)		REPLACE THE CHARACTER I	4F11937
04042	0	07400	4	01675		TSX	C0390,4		* WITH THE CHARACTER X.	4F11938
04043	0	56000	0	01373		LDQ	L(10)		REPLACE THE CHARACTER F	4F11939
04044	0	07400	4	01675		TSX	C0390,4		* WITH THE CHARACTER 001010.	4F11940
04045	0	07400	4	03275		TSX	TESTE0,4		* IF NOT LPAREN -- THEN ERROR.	4F11941
04046	0	56000	0	01400		LDQ	AEQUAL		REPLACE THE CHARACTER LPAREN	4F11942
04047	0	07400	4	01675		TSX	C0390,4		* WITH THE CHARACTER EQUAL.	4F11943
04050	0	53400	2	01407		LXA	L(1),2		SET XR2 FOR COUNTING PARENTHESES.	4F11944
04051	0	02000	0	04053		TRA	*+2			4F11945
04052	0	07400	4	01707	C0302	TSX	C0190,4		* MAKE SURE THAT NEXT NB CHARACTER	4F11946
04053	0	34000	0	01374		CAS	ENDMK		IS NOT AN ENDMARK.	4F11947

	04054	0	02000	0	03272		TRA	ERR77P		* MACHINE ERROR, GO TO DIAGNOSTIC.	4F11948
	04055	0	07400	4	03400		TSX	DIAG,4		* PROGRAM ERROR, GO TO DIAGNOSTIC.	4F11949
	04056	0	34000	0	01375		CAS	ALPAR		IF IT IS A LPAREN,	4F11950
D	04057	1	00000	0	04061		TXI	C0303,0		THEN ADD 1 TO PAREN COUNT, AND	4F11951
	04060	1	00001	2	04052		TXI	C0302,2,1		GO EXAMINE NEXT CHARACTER.	4F11952
	04061	0	40200	0	01377	C0303	SUB	ARPAR		IF IT IS A RPAREN,	4F11953
	04062	-0	10000	0	04052		TNZ	C0302		THEN TEST PAREN COUNT, AND IF IT	4F11954
	04063	2	00001	2	04052		TIX	C0302,2,1		CAN NO, BE REDUCED,MATE IS FOUND.	4F11955
	04064	0	56000	0	01374		LDQ	ENDMK		SO REPLACE THE CHARACTER RPAREN	4F11956
	04065	0	07400	4	01675		TSX	C0390,4		* WITH THE CHARACTER ENDMK.	4F11957
	04066	0	07400	2	01655		TSX	C0180,2		* BINARY EQUIVALENT OF BETA 1.	4F11958
	04067	0	07400	4	03305		TSX	TESTG0,4		* THIS SHOULD BE FOLLOWED BY A COMMA.	4F11959
	04070	0	50000	0	01112		CLA	1G		MOVE BETA1	4F11960
	04071	0	62100	0	01105		STA	1C		TO ADDRESS OF 1C.	4F11961
	04072	0	07400	4	01707		TSX	C0190,4		* AND PROCEED TO FORM	4F11962
	04073	0	07400	2	01655		TSX	C0180,2		* THE BINARY EQUIVALENT OF BETA 2.	4F11963
	04074	0	07400	4	03305		TSX	TESTG0,4		* THIS SHOULD BE FOLLOWED BY A COMMA.	4F11964
	04075	0	50000	0	01112		CLA	1G		MOVE BETA2	4F11965
	04076	0	76700	0	00022		ALS	18		TO DECR PART	4F11966
	04077	0	60100	0	01106		STO	1C+1		OF 1C+1.	4F11967
	04100	0	07400	4	01707		TSX	C0190,4		* AND PROCEED TO FORM	4F11968
	04101	0	07400	2	01655		TSX	C0180,2		* THE BINARY EQUIVALENT OF BETA 3.	4F11969
	04102	0	07400	4	03271		TSX	TESTD0,4		* THIS SHOULD BE FOLLOWED BY ENOMARK.	4F11970
	04103	0	50000	0	01112		CLA	1G		MOVE BETA3	4F11971
	04104	0	62100	0	01106		STA	1C+1		TO ADDRESS OF 1C+1.	4F11972
D	04105	1	00000	0	06323		TXI	ARITH,0		* EXIT TO ARITH FOR FINAL PROCESSING.	4F11973
								END OF PROGRAM C0300.			4F11974
								* * * * *			4F11975
											4F11976
								C0400/ CALLS=C0190,C0180,TEST.,CIT00,C0200.			4F11977
								C0400 PROCESSES IF (SENSE SWITCH STATEMENTS.			4F11978
	04106	0	50000	0	01441	C0400	CLA	L(112)		FOR SENSE SWITCH	4F11979
	04107	0	60100	0	01115		STO	1H		SET 1H TO 112, AND PREPARE TO	4F11980
	04110	0	50000	0	01565		CLA	L(PSE)		SET 2H TO PSE.	4F11981
								C0401= ENTRY POINT USED BY C0500.			4F11982
	04111	0	60100	0	01116	C0401	STO	2H		SET 2H FOR SENSE SWITCH OR LIGHT.	4F11983
	04112	0	07400	4	01707		TSX	C0190,4		* PROCEED TO FORM THE BINARY	4F11984
	04113	0	07400	2	01655		TSX	C0180,2		* EQUIVALENT OF SW OR SL NUMBER.	4F11985
	04114	0	07400	4	03301		TSX	TESTF0,4		* THIS SHOULD BE FOLLOWED BY RPAREN.	4F11986
	04115	0	50000	0	01411		CLA	L(3)		STORE 3	4F11987
	04116	0	60100	0	01105		STO	1C		IN ADDRESS OF 1C.	4F11988
	04117	0	50000	0	01112		CLA	1G		ADD THE PROPER INCREMENT TO THE	4F11989
	04120	0	40000	0	01115		ADD	1H		NUMBER OF SENSE SWITCH OR LIGHT,	4F11990
	04121	0	76700	0	00022		ALS	18		AND ADJUST TO THE DECREMENT.	4F11991
								C0402= ENTRY POINT USED BY C0600.			4F11992
	04122	0	60100	0	01110	C0402	STO	1C+3		SET 1C+3 FOR CIT ENTRY.	4F11993
	04123	-0	53400	4	00030		LXD	EIFNO,4		PLACE THE CURRENT INTERNAL FORMULA	4F11994
	04124	-0	75400	4	00000		PXD	,4		NUMBER IN THE DECREMENT OF	4F11995
	04125	0	62200	0	01105		STD	1C		1C FOR FUTURE TIFGO ENTRY, AND	4F11996
	04126	0	60100	0	01107		STO	1C+2		1C+2 FOR FUTURE CIT ENTRY.	4F11997
	04127	0	07400	4	01707		TSX	C0190,4		* PROCEED TO FORM THE BINARY	4F11998
	04130	0	07400	2	01655		TSX	C0180,2		* EQUIVALENT OF BETA 1,	4F11999
	04131	0	07400	4	03305		TSX	TESTG0,4		* WHICH SHOULD BE FOLLOWED BY COMMA.	4F12000
	04132	0	50000	0	01112		CLA	1G		BRING UP,	4F12001


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C0900/ CALLS=C0190,CIT00,DIAG. CALLER=C1300.              4F12056
C0900 PROCESSES PAUSE STATEMENTS.                          4F12057
04170 -0 53400 2 04175 C0900  LXD C090X,2                SET XR2 FOR EXIT TO CA000.  4F12058
C0901= ENTRY POINT USED BY C1300.                         4F12059
04171  0 60000 0 01112 C0901  STZ 1G                    CLEAR 1G.                4F12060
04172  0 07400 4 01707 C0902  TSX C0190,4               * TEST NEXT NON-BLANK CHARACTER 4F12061
04173  0 34000 0 01374      CAS ENDMK                    FOR END OF STATEMENT MARK. 4F12062
04174  0 02000 0 03272      TRA ERR77P                  * MACHINE ERROR, GO TO DIAGNOSTIC. 4F12063
04175  1 74341 0 04202 C090X TXI C0903,0,-CA010+1      IF NOT END OF STATEMENT, THEN 4F12064
04176  0 40000 0 01112      ADD 1G                        ADD 1G TO DIGIT,          4F12065
04177  0 76700 0 00003      ALS 3                      MULTIPLY BY 8,           4F12066
04200  0 60100 0 01112      STO 1G                        AND STORE BACK IN 1G.    4F12067
04201  1 00000 0 04172      TXI C0902,0               CONTINUE UNTIL END OF STATEMENT. 4F12068
04202  0 50000 0 01112 C0903 CLA 1G                      THEN PLACE OCTAL ALPHA    4F12069
04203  0 76700 0 00017      ALS 15                     IN THE DECREMENT         4F12070
04204  0 60100 0 01105      STO 1C                      OF 1C FOR FUTURE CIT ENTRY. 4F12071
04205 -0 53400 4 00030      LXD EIFNO,4           PLACE THE CURRENT INTERNAL FORMULA 4F12072
04206 -0 75400 4 00000      PXD ,4                     NUMBER IN THE DECREMENT   4F12073
04207  0 60100 0 01106      STO 1C+1              OF 1C+1,WITH ZEROS ELSEWHERE. 4F12074
04210  0 07400 4 01731      TSX CIT00,4           * GO MAKE THE FOLLOWING CIT ENTRY= 4F12075
04211  0 00000 0 01106      PZE 1C+1             WORD1--DECR = INTFORMNO (LOCATION) 4F12076
04212  0 00000 0 01554      PZE L(HPR)           WORD2--HPR000 (OP AND DECR)      4F12077
04213  0 00000 0 01406      PZE L(0)             WORD3--000000 (ADDRESS)         4F12078
04214  0 00000 0 01105      PZE 1C               WORD4--DECR = ALPHA, REST ZEROS. 4F12079
04215  0 02000 2 00001      TRA 1,2              * EXIT TO CA000, OR TO C1300.    4F12080
END OF PROGRAM C0900.                                       4F12081
* * * * * * * * * * * * * * * * * * * * * * * * * * * * * 4F12082
* * * * * * * * * * * * * * * * * * * * * * * * * * * * * 4F12083
C1000/ USES=C0200. CALLS=GETIFN,C0190,C0180,DIAG,C0160,TEST.. 4F12084
CIT00.                                                       4F12085
C1000 PROCESSES ASSIGN STATEMENTS.                          4F12086
04216  0 07400 4 02366 C1000 TSX GETIFN,4               * GET INTERNAL FORMULA NUMBER IN 1C 4F12087
04217  0 60100 0 01107      STO 1C+2              AND 1C+2,WITH ZEROS ELSEWHERE. 4F12088
04220  0 50000 0 01414      CLA L(6)             STORE 6 IN                4F12089
04221  0 62100 0 01105      STA 1C              ADDRE=S OF 1C.           4F12090
04222  0 07400 2 01654      TSX C0180X,2        * GO FORM BINARY EQUIV OF ALPHA. 4F12091
04223  0 40200 0 01432      SUB L(T)            IF NEXT CHARACTER IS NOT T, THEN 4F12093
04224  0 10000 0 04226      TZE *+2             THIS IS AN                4F12094
04225  0 07400 4 03400      TSX DIAG,4         * ERROR - GO TO THE DIAGNOSTIC. 4F12095
04226  0 07400 4 01707      TSX C0190,4        * EXAMINE NEXT NON-BLANK CHARACTER 4F12096
04227  0 40200 0 01425      SUB L(0)            AND IF IT IS NOT O, THEN     4F12097
04230 -0 10000 0 04225      TNZ *-3             ERROR, GO TO DIAGNOSTIC.     4F12098
04231  0 50000 0 01112      CLA 1G              PUT BIN EQUIV OF ALPHA      4F12099
04232  0 60100 0 01106      STO 1C+1           IN ADDRESS OF 1C+1.        4F12100
04233  0 07400 4 01707      TSX C0190,4        * PROCEED TO ASSEMBLE IN 1G     4F12101
04234  0 07400 2 01624      TSX C0160,2        * THE SYMBOL N.               4F12102
04235  0 07400 4 03271      TSX TESTD0,4      * THE NEXT NB CHAR SHOULD BE ENDMK. 4F12103
04236  0 07400 4 01731      TSX CIT00,4        * GO MAKE THE FOLLOWING CIT ENTRY= 4F12104
04237  0 00000 0 01107      PZE 1C+2           WORD1--DECR = INTFORMNO (LOCATION) 4F12105
04240  0 00000 0 01541      PZE L(CLA)         WORD2--CLA000 (OP AND DECR)     4F12106
04241  0 00000 0 01406      PZE L(0)           WORD3--000000 (ADDRESS)        4F12107
04242  0 00000 0 01406      PZE L(0)           WORD4--000000 (RELADDR AN0 TAG). 4F12108
04243  0 07400 4 01731      TSX CIT00,4        * STORE SECOND COMPILED INSTRUCTION= 4F12109
04244  0 00000 0 01406      PZE L(0)           WORD1--000000 (ALL ZEROS)      4F12110

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04245	0	00000	0	01572	PZE L(STO)	WORD2--STO000 (OP AND DECR)	4F12111
04246	0	00000	0	01112	PZE 1G	WORD3--SYMBOL N IADDRESS)	4F12112
04247	0	00000	0	01406	PZE L(0)	WORD4--000000 (REL ADDR AND TAG).	4F12113
04250	0	02000	0	04030	TRA C0202	* CONTINUE BY USING PROGRAM C02.	4F12114
					END OF PROGRAM C1000.		4F12115
					*****		4F12116
					C1100/ CALLS=C0190,C0180,TEST.,GETIFN,CIT00.		4F12117
					C1100 PROCESSES SENSE LIGHT STATEMENTS.		4F12118
04251	0	07400	2	01654	C1100 TSX C0180X,2	* GO FORM BINARY EQUIV OF SL NUMBER.	4F12119
04252	0	07400	4	03271	TSX TESTD0,4	* THE NEXT NB CHARACTER SHD BE ENDMK.	4F12120
04253	0	50000	0	01112	CLA 1G	STORE SENSE LIGHT NUMBER	4F12121
04254	0	40000	0	01440	ADD L(96)	PLUS 96	4F12122
04255	0	76700	0	00022	ALS 18	IN DECR	4F12123
04256	0	60100	0	01112	STO 1G	OF 1G.	4F12124
04257	0	07400	4	02366	TSX GETIFN,4	* GET INTERNAL FORMULA NUMBER IN 1C.	4F12125
04260	0	07400	4	01731	TSX CIT00,4	* GO MAKE THE FOLLOWING CIT ENTRY=	4F12126
04261	0	00000	0	01105	PZE 1C	WORD1--DECR = INTFORMNO (LOCATION)	4F12127
04262	0	00000	0	01565	PZE L(PSE)	WORD2--PSE000 (OP AND DECREMENT)	4F12128
04263	0	00000	0	01406	PZE L(0)	WORD3--000000 (ADDRESS PART)	4F12129
04264	0	00000	0	01112	PZE 1G	WORD4--DECR = 96+ALPHA,REST ZEROS.	4F12130
04265	1	00000	0	03440	TXI CA010,0	* EXIT TO PROCESS NEXT STATEMENT.	4F12131
					END OF PROGRAM C1100.		4F12132
					*****		4F12133
					C1200/ CALLS=C0190,C0160,TEST.,DIM.SR,DIAG,C0180,DRTABS.		4F12134
					C1200 PROCESSES DIMENSION STATEMENTS.		4F12135
04266	0	07400	4	01707	C1200 TSX C0190,4	* PROCEED TO ASSEMBLE IN 1G	4F12136
04267	0	07400	2	01624	TSX C0160,2	* THE VARIABLE SYMBOL.	4F12137
04270	0	07400	4	03275	TSX TESTE0,4	* NEXT NB CHARACTER SHOULD BE LPAREN.	4F12138
04271	0	50000	0	01112	CLA 1G	PUT VARIABLE SYMBOL	4F12139
04272	0	60100	0	01105	STO 1C	IN 1C.	4F12140
04273	0	60100	0	01130	STO E+2	ALSO IN E+2. THEN	4F12141
04274	0	07400	4	01771	TSX DIM1SR,4	* GO SEARCH DIM1 TABLE.	4F12142
04275	0	02000	0	04277	TRA C1280	THEN IF NOT	4F12143
04276	0	02000	0	04304	TRA C1299	FOUND,	4F12144
04277	0	07400	4	01775	C1280 TSX DIM2SR,4	* GO SEARCH DIM2 TABLE.	4F12145
04300	0	02000	0	04302	TRA C1281	THEN IF NOT	4F12146
04301	0	02000	0	04304	TRA C1299	FOUND,	4F12147
04302	0	07400	4	02005	C1281 TSX DIM3SR,4	* GO SEARCH DIM3 TABLE.	4F12148
04303	0	02000	0	04305	TRA C1282	DO NOT CONTINUE IF	4F12149
04304	0	07400	4	03400	C1299 TSX DIAG,4	* VARIABLE PREVIOUSLY APPEARED.	4F12150
04305	0	07400	2	01654	C1282 TSX C0180X,2	* GO FORM BINARY EQUIV OF D1.	4F12151
04306	0	40200	0	01377	SUB CLOS	IF NOT 1 DIMENSION,	4F12152
04307	0	10000	0	04330	TZE C1210	THEN	4F12153
04310	0	50000	0	01112	CLA 1G	PUT D1	4F12154
04311	0	76700	0	00022	ALS 18	IN DECR	4F12155
04312	0	60100	0	01106	STO 1C+1	OF 1C+1.	4F12156
04313	0	07400	2	01654	TSX C0180X,2	* GO FORM BINARY EQUIV OF D2.	4F12157
04314	0	40200	0	01377	SUB CLOS	IF NOT 2 DIMENSION,	4F12158
04315	0	10000	0	04334	TZE C1220	THEN	4F12159
04316	0	50000	0	01112	CLA 1G	PUT D2	4F12160
04317	0	62100	0	01106	STA 1C+1	IN ADDRESS OF 1C+1.	4F12161
04320	0	07400	2	01654	TSX C0180X,2	* GO FORM BINARY EQUIV OF D3.	4F12162

	04321	0	40200	0	01377		SUB CLOS		IF MORE THAN 3 DIMENSION,	4F12169
	04322	0	10000	0	04324		TZE *+2		THIS IS AN	4F12170
	04323	0	07400	4	03400		TSX DIAG,4	*	ERROR - GO TO THE DIAGNOSTIC.	4F12171
	04324	0	50000	0	01112		CLA 1G		IF 3 DIMENSION, PUT D3	4F12172
	04325	0	60100	0	01107		STO 1C+2		IN 1C+2, AND	4F12173
	04326	0	07400	4	00467		TSX DIM3IX,4	*	GO MAKE DIM3 ENTRY.	4F12174
D	04327	1	00000	0	04337		TXI C1201,0		GO TO TEST FOR END OF STATEMENT.	4F12175
	04330	0	50000	0	01112	C1210	CLA 1G		IF 1 DIMENSION, PUT D1	4F12176
	04331	0	60100	0	01106		STO 1C+1		IN 1C+1, AND	4F12177
	04332	0	07400	4	00455		TSX DIM1IX,4	*	GO MAKE DIM1 ENTRY. THEN	4F12178
D	04333	1	00000	0	04337		TXI C1201,0		GO TO TEST FOR END OF STATEMENT.	4F12179
	04334	0	50000	0	01112	C1220	CLA 1G		IF 2 DIMENSION, PUT D2 IN	4F12180
	04335	0	62100	0	01106		STA 1C+1		ADDRESS PART OF 1C+1. AND	4F12181
	04336	0	07400	4	00462		TSX DIM2IX,4	*	GO MAKE DIM2 ENTRY. THEN	4F12182
	04337	0	07400	4	01707	C1201	TSX C0190,4	*	OBTAIN NB CHAR FOLLOWING RPAREN.	4F12183
	04340	0	07400	4	03247		TSX TESTA0,4	*	TEST FOR COMMA OR ENDMARK.	4F12184
	04341	-0	10000	0	04266		TNZ C1200		IF CHARACTER IS ENDMARK, THEN	4F12185
D	04342	1	00000	0	03440		TXI CA010,0	*	EXIT TO PROCESS NEXT STATEMENT.	4F12186
							END OF PROGRAM C1200.			4F12187
							* * * * *			*4F12188
										4F12189
							C1300/ CALLS=C0901,TET00,CIT00.			4F12190
							C1300 PROCESSES STOP STATEMENTS.			4F12191
	04343	0	07400	1	03321	C1300	TSX TET00,1	*	GO MAKE EIFNO ENTRY	4F12192
	04344	0	00000	0	00017		PZE 15		IN TSTOP TABLE.	4F12193
	04345	0	07400	2	04171		TSX C0901,2	*	USE C0900 TO BEGIN PROCESSING.	4F12194
	04346	0	07400	4	01731		TSX CIT00,4	*	GO MAKE FOLLOWING CIT ENTRY=	4F12195
	04347	0	00000	0	01406		PZE L(0)		WORD1--ALL ZEROS	4F12196
	04350	0	00000	0	01601		PZE L(TRA)		WORD2--TRA000 (OP+DECR)	4F12197
	04351	0	00000	0	01106		PZE 1C+1		WORD3--DECR = INTFORMNO (SYMBOL)	4F12198
	04352	0	00000	0	01406		PZE L(0)		WORD4--ZEROS (REL ADDR AND TAG)	4F12199
D	04353	1	00000	0	03440		TXI CA010,0	*	EXIT TO PROCESS NEXT STATEMENT.	4F12200
							END OF PROGRAM C1300.			4F12201
							* * * * *			*4F12202
										4F12203
							C1400/ CALLS=C0190,C0180,TEST.,TET00.			4F12204
							C1400 PROCESSES FREQUENCY STATEMENTS.			4F12205
	04354	0	07400	2	01654	C1400	TSX C0180X,2	*	GO FORM BINARY EQUIV OF EFN.	4F122006
	04355	0	07400	4	03275		TSX TESTE0,4	*	CHARACTER SHOULD BE A LPAREN.	4F12208
	04356	0	50200	0	01112		CLS 1G		CHANGE SIGN OF SYMBOL	4F12209
	04357	0	60100	0	01112		STO 1G		TO MINUS.	4F12210
	04360	0	07400	1	03321		TSX TET00,1	*	GO TO PROGRAM TET TO ENTER	4F12211
	04361	0	00000	0	00007		PZE 7		SYMBOL INTO FRET (TABLE 7), AND	4F12212
	04362	0	07400	2	01654	C1401	TSX C0180X,2	*	GO FORM BINARY EQUIV OF M(1).	4F12213
	04363	0	60100	0	01105		STO 1C		SAVE CHAR IN ACC.	4F12215
	04364	0	07400	1	03321		TSX TET00,1	*	GO TO PROGRAM TET TO ENTER M(1)	4F12216
	04365	0	00000	0	00007		PZE 7		INTO TABLE FRET (TABLE7), AND	4F12217
	04366	0	50000	0	01105		CLA 1C		RESTORE CHAR IN ACC, AND	4F12218
	04367	0	07400	4	03255		TSX TESTB0,4	*	TEST FOR , OR).	4F12219
	04370	-0	10000	0	04362		TNZ C1401		IF RIGHT PARENTHESIS, THEN	4F12220
	04371	0	07400	4	01707		TSX C0190,4	*	OBTAIN IN ACC NEXT NBCHAR, AND	4F12221
	04372	0	07400	4	03247		TSX TESTA0,4	*	TEST FOR COMMA OR ENDMARK.	4F12222
	04373	-0	10000	0	04354		TNZ C1400		IF ENDMARK, THIS STATEMENT IS DONE.	4F12223
D	04374	1	00000	0	03440		TXI CA010,0	*	EXIT TO PROCESS NEXT STATEMENT.	4F12224

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END OF PROGRAM C1400.
* * * * * 4F12225
* * * * * 4F12226
* * * * * 4F12227
C1500/ CALLS=C0190,TEST.,C0160,C01B0,TET00.
C1500 PROCESSES EQUIVALENCE STATEMENTS.
04375 0 07400 4 01707 C1500 TSX C0190,4 * OBTAIN NEXT NBCHAR IN ACC. 4F12230
04376 0 07400 4 03275 TSX TESTE0,4 * CHARACTER SHOULD BE A LPAREN. 4F12231
04377 0 50000 0 01407 C1501 CLA L(1) INITIALIZE 1C 4F12232
04400 0 60100 0 01106 STO 1C+1 TO 1. 4F12233
04401 0 07400 4 01707 TSX C0190,4 * OBTAIN NEXT NBCHAR IN ACC AND 4F12234
04402 0 07400 2 01624 TSX C0160,2 * OBTAIN IN 1G THE SYMBOL V. 4F12235
04403 0 56000 0 01112 LDQ 1G MOVE V 4F12236
04404 -0 60000 0 01105 STQ 1C INTO 1C. 4F12237
04405 0 34000 0 01375 CAS ALPAR EXAMINE CHARACTER LEFT IN THE AC, 4F12238
D 04406 1 00000 0 04416 TXI C1503,0 AND IF 4F12239
D 04407 1 00000 0 04411 TXI C1502,0 CHARACTER IS A LEFT PARENTHESIS, 4F12240
D 04410 1 00000 0 04416 TXI C1503,0 THEN 4F12241
04411 0 07400 2 01654 C1502 TSX C0180X,2 * GO FORM BINARY EQUIV OF N. 4F12242
04412 0 07400 4 03301 TSX TESTF0,4 * 1ST NON-NUMERIC SHOULD BE A RPAREN. 4F12244
04413 0 50000 0 01112 CLA 1G PUT BIN EQUIV OF N 4F12245
04414 0 60100 0 01106 STO 1C+1 IN 1C+1. 4F12246
04415 0 07400 4 01707 TSX C0190,4 * OBTAIN NEXT NBCHAR IN AC, AND 4F12247
04416 0 07400 4 03255 C1503 TSX TESTB0,4 * TEST FOR COMMA OR RPAREN. 4F12248
04417 0 10000 0 04423 TZE C1504 IF COMMA, THEN 4F12249
04420 0 07400 1 03321 TSX TET00,1 * GO TO PROGRAM TET TO ENTER SYMBOL 4F12250
04421 0 00000 0 00010 PZE 8 AND N IN EQUIT (TABLE 8), AND 4F12251
D 04422 1 00000 0 04377 TXI C1501,0 RETURN TO CONTINUE PROCESSING X. 4F12252
04423 0 50200 0 01106 C1504 CLS 1C+1 MAKE SIGN OF N MINUS SINCE 4F12253
04424 0 60100 0 01106 STO 1C+1 TNIS IS LAST ITEM. 4F12254
04425 0 07400 1 03321 TSX TET00,1 * GO TO PROGRAM TET TO ENTER SYMBOL 4F12255
04426 0 00000 0 00010 PZE 8 AND N IN EQUIT (TABLE 8), AND 4F12256
04427 0 07400 4 01707 TSX C0190,4 * OBTAIN NEXT NBCHAR IN ACC, AND 4F12257
04430 0 07400 4 03247 TSX TESTA0,4 * TEST FOR COMMA OR ENDMARK. 4F12258
04431 -0 10000 0 04375 TNZ C1500 IF ENDMARK, THEN 4F12259
D 04432 1 00000 0 03440 TXI CA010,0 * EXIT TO PROCESS NEXT STATEMENT. 4F12260
END OF PROGRAM C1500.
* * * * * 4F12261
* * * * * 4F12262
* * * * * 4F12263
C1600/ CALLS=C0190,TEST.,GIF,BSS.
C1600 PROCESSES CONTINUE STATEMENTS.
04433 0 07400 4 01707 C1600 TSX C0190,4 * OBTAIN NEXT NBCHAR IN ACC. 4F12266
04434 0 07400 4 03271 TSX TESTD0,4 * CHARACTER SHOULD BE AN ENDMARK. 4F12267
04435 0 07400 4 02375 TSX GIF,4 * GET INTERNAL FORMULA NUMBER, AND 4F12268
04436 0 07400 2 05674 TSX BSS,2 * GO COMPILER= IFN BSS 0. 4F12269
D 04437 1 00000 0 03440 TXI CA010,0 * EXIT TO PROCESS NEXT STATEMENT. 4F12270
END OF PROGRAM C1600.
* * * * * 4F12271
* * * * * 4F12272
* * * * * 4F12273
C3000/ CALLS=DIAG,C0190,C0160,TEST.,SUBX00,TET00,TESTFX.
C3000 PROCESSES SUBROUTINE AND FUNCTION STATEMENTS.
04440 -0 50000 0 00422 C3500 CAL TXHOP 4F12274
04441 0 63000 0 04454 STP C3003 4F12275
04442 -0 53400 4 00030 C3000 LXI EIFNO,4 EXAMINE INTERNAL FORMULA NO., AND 4F12278
04443 -3 00001 4 04445 TXL *+2,4,1 IF NOT THE 1ST STATEMENT, THEN 4F12279

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	04444	0	07400	4	03400		TSX	DIAG,4		*	ERROR - GO TO THE DIAGNOSTIC.	4F12280
	04445	0	50000	0	01121		CLA	ARGCNT			SET ARGCNT TO INDICATE TO LATER	4F12281
	04446	0	76000	0	00003		SSP				RETURN THAT THERE WAS A PRECEEDING	4F12282
	04447	0	60100	0	01121		STO	ARGCNT			SUBROUTINE OR FUNCTION STATEMENT.	4F12283
	04450	0	07400	4	01707		TSX	C0190,4		*	IF 1ST CHARACTER OF NAME IS	4F12284
	04451	0	07400	4	03311		TSX	TESTH0,4		*	NUMERIC, THEN GO TO THE DIAGNOSTIC.	4F12285
	04452	0	07400	2	01624		TSX	C0160,2		*	ASSEMBLE NAME IN 1G.	4F12286
	04453	0	07400	4	03263		TSX	TESTC0,4		*	NEXT CHAR SHD BE LPAREN OR ENDMARK.	4F12287
D	04454	-3	00000	0	04457	C3003	TXL	*+3,0				4F12288
	04455	0	50000	0	01112		CLA	1G				4F12289
	04456	0	60100	0	01332		STO	FSNAME				4F12290
	04457	0	07400	4	03224		TSX	SUBX00,4		*	FILL OUT NAME WITH BLANKS.	4F12291
	04460	0	07400	1	03321		TSX	TET00,1		*	GO ENTER NAME	4F12292
	04461	0	00000	0	00013		PZE	11			IN SUBDEF TABLE.	4F12293
	04462	-0	53400	4	00030		LXD	EIFNO,4			PLACE	4F12294
	04463	-0	75400	4	00000		PXD	,4			INTERNAL FORMULA NUMBER	4F12295
	04464	0	60100	0	01347		STO	G			IN G.	4F12296
D	04465	1	00000	0	04506		TXI	C3002,0			GO TEST FOR END OF STATEMENT.	4F12297
	04466	0	40000	0	01374	C3001	ADD	ENDMK			IF NOT ENDMARK, RESTORE CHARACTER	4F12298
	04467	0	07400	4	03311		TSX	TESTH0,4		*	WHICH SHOULD BE NON-NUMERIC	4F12299
	04470	0	60100	0	01331		STO	FIRSTC			1ST CHARACTER OF ARGUMENT.	4F12300
	04471	0	07400	2	01624		TSX	C0160,2		*	ASSEMBLE ARGUMENT IN 1G.	4F12301
	04472	0	07400	4	03255		TSX	TESTB0,4		*	NEXT CHAR SHD BE COMMA OR RPAREN.	4F12302
	04473	0	50000	0	01112		CLA	1G			MOVE ARGUMENT	4F12303
	04474	0	60100	0	01350		STO	G+1			INTO G+1.	4F12304
	04475	0	07400	1	03241		TSX	TESTFX,1		*	GO TEST FOR FIXED OR FLOATING PT.	4F12305
D	04476	1	00000	0	04501		TXI	C3004,0			IF FLOATING PT., SKIP FORVAL ENTRY.	4F12306
	04477	0	07400	1	03321		TSX	TET00,1		*	IF FIXED POINT, GO MAKE ENTRY	4F12307
	04500	0	00000	0	00006		PZE	6			IN FORVAL TABLE.	4F12308
	04501	0	07400	1	03321	C3004	TSX	TET00,1		*	IN BOTH CASES, MAKE ENTRIES IN	4F12309
	04502	0	00000	0	00013		PZE	11			SUBDEF TABLE.	4F12310
	04503	0	50000	0	01121		CLA	ARGCNT			UPDATE	4F12311
	04504	0	40000	0	01454		ADD	D1			ARGUMENT COUNT	4F12312
	04505	0	60100	0	01121		STO	ARGCNT			BY 1. AND	4F12313
	04506	0	07400	4	01707	C3002	TSX	C0190,4		*	EXAMINE NEXT NON-BLANK CHARACTER.	4F12314
	04507	0	40200	0	01374		SUB	ENDMK			IF NOT ENDMARK, THEN	4F12315
	04510	-0	10000	0	04466		TNZ	C3001			GO PROCESS NEXT ARGUMENT.	4F12316
D	04511	1	00000	0	03440		TXI	CA010,0		*	OTHERWISE, EXIT TO CA000.	4F12317
								END OF PROGRAM C3000.				4F12318
								* * * * *				4F12319
								C3100/ CALLS=C0190,DIAG,TEST.,C0160,TET00.				4F12321
								C3100 PROCESSES COMMON STATEMENTS.				4F12322
	04512	0	07400	4	01707	C3100	TSX	C0190,4		*	GET FIRST NON-BLANK CHAR OF SYMBOL	4F12323
	04513	0	07400	4	03311		TSX	TESTH0,4		*	WHICH SHOULD BE NON-NUMERIC.	4F12324
	04514	0	07400	2	01624		TSX	C0160,2		*	ASSEMBLE SYMBOL IN 1G, AND TEST	4F12325
	04515	0	07400	4	03247		TSX	TESTA0,4		*	NEXT CHARACTER FOR COMMA OR ENDMK.	4F12326
	04516	0	73400	4	00000		PAX	,4			SAVE RESULT OF TEST IN XR4, AND	4F12327
	04517	0	07400	1	03321		TSX	TET00,1		*	GO ENTER THIS SYMBOL	4F12328
	04520	0	00000	0	00014		PZE	12			IN COMMON TABLE.	4F12329
	04521	0	50000	0	00365		CLA	SBDFCN			ANY ENTRIES IN SUBDEF	4F123291
	04522	0	10000	0	04534		TZE	C3101			INDICATE THIS IS NOT A	4F123292
	04523	0	50000	0	01454		CLA	2E18			MAIN PROGRAM. SINCE THIS	4F123293
	04524	0	60100	0	01347		STO	G			IS A COMMON	4F123294

04525	-0	50000	0	01112	CAL	1G	STATEMENT WHICH	4F123296
04526	0	60200	0	01350	SLW	G+1	APPEARS IN A SUBPROGRAM	4F123297
04527	0	77100	0	00036	ARS	30	ENTER ANY4	4F123298
04530	0	07400	1	03242	TSX	TESTFX+1,1	* FIXED POINT	4F123299
04531	0	02000	0	04534	TRA	C3101	VARIABLES	4F123300
04532	0	07400	1	03321	TSX	TET00,1	* IN	4F123301
04533	0	00000	0	00006	PZE	6	FORVAL TABLE.	4F123302
04534	3	00000	4	04512	C3101	TXH C3100,4,0	IF CHARACTER WAS COMMA, REPEAT.	4F123303
D	04535	1	00000	0	03440	TXI CA010,0	* IF ENDMK, EXIT TO CA000.	4F12331
						END OF PROGRAM C3100.		4F12332
						* * * * *		*4F12333
								4F12334
						C3200/ CALLS=C0190,TEST.,GETIFN,DIAG,CIT00,JIF(GIF).		4F12335
						C3200 PROCESSES RETURN STATEMENTS.		4F12336
04536	0	07400	4	01707	C3200	TSX C0190,4	* EXAMINE NEXT NON-BLANK CHARACTER,	4F12337
04537	0	07400	4	03271	TSX	TESTD0,4	* WHICH SHOULD BE AN ENDMARK.	4F12338
04540	0	07400	4	02366	TSX	GETIFN,4	* GET INTERNAL FORMULA NUMBER IN 1C.	4F12339
04541	0	07400	4	02372	TSX	JIF,4	* SET SL TO ALPHA+1.	4F12340
04542	0	50000	0	01121	CLA	ARGCNT	TEST ARGCNT FOR PRECEEDING	4F12341
04543	0	12000	0	04545	TPL	*+2	SUBROUTINE - IF NONE, THEN	4F12342
04544	0	07400	4	03400	TSX	DIAG,4	* ERROR - GO TO THE DIAGNOSTIC.	4F12343
04545	0	50000	0	01332	CLA	FNAME		4F12344
04546	0	10000	0	04555	TZE	*+7		4F12345
04547	0	07400	4	01731	TSX	CIT00,4	* GO MAKE THE FOLLOWING CIT ENTRY=	4F12346
04550	0	00000	0	01105	PZE	1C	WORD1--O(IFN)000	4F12347
04551	0	00000	0	01541	PZE	L(CLA)	WORD2--CLA000	4F12348
04552	0	00000	0	01332	PZE	FNAME	WORD3--NAME OF FUNCTION	4F12349
04553	0	00000	0	01406	PZE	L(0)	WORD4--000000	4F12350
04554	0	60000	0	01105	STZ	1C	CLEAR 1C.	4F12351
04555	0	07400	4	01731	TSX	CIT00,4	* GO MAKE THE FOLLOWING CIT ENTRY=	4F12352
04556	0	00000	0	01105	PZE	1C	WORD1--O(IFN)000	4F12353
04557	0	00000	0	01561	PZE	L(LXD)	WORD2--LXD000	4F12354
04560	0	00000	0	01523	PZE	DOLSGN	WORD3--\$	4F12355
04561	0	00000	0	01407	PZE	L(1)	WORD4--000001	4F12356
04562	0	07400	4	01731	TSX	CIT00,4	* GO MAKE THE FOLLOWING CIT ENTRY=	4F12357
04563	0	00000	0	01406	PZE	L(0)	WORD1--000000	4F12358
04564	0	00000	0	01561	PZE	L(LXD)	WORD2--LXD000	4F12359
04565	0	00000	0	01523	PZE	DOLSGN	WORD3--\$	4F12360
04566	0	00000	0	01456	PZE	ABTAG2	WORD4--001002	4F12361
04567	0	07400	4	01731	TSX	CIT00,4	* GO MAKE THE FOLLOWING CIT ENTRY=	4F12362
04570	0	00000	0	01406	PZE	L(0)	WORD1--000000	4F12363
04571	0	00000	0	01570	PZE	L(QXD)	WORD2--QXD000	4F12364
04572	0	00000	0	01523	PZE	DOLSGN	WORD3--\$	4F12365
04573	0	00000	0	01460	PZE	ABTAG3	WORD4--002000	4F12366
04574	0	07400	4	01731	TSX	CIT00,4	* GO MAKE THE FOLLOWING CIT ENTRY=	4F12367
04575	0	00000	0	01367	PZE	SL	WORD1--O(IFN+1)000	4F12368
04576	0	00000	0	01567	PZE	L(QPR)	WORD2--OPR000	4F12369
04577	0	00000	0	01406	PZE	L(0)	WORD3--000000	4F12370
04600	0	00000	0	01121	PZE	ARGCNT	WORD4--O(N+1)004	4F12371
04601	0	07400	4	01731	TSX	CIT00,4	* GO MAKE THE FOLLOWING CIT ENTRY=	4F12372
04602	0	00000	0	01406	PZE	L(0)	WORD1--000000	4F12373
04603	0	00000	0	01601	PZE	L(TRA)	WORD2--TRA000	4F12374
04604	0	00000	0	01367	PZE	SL	WORD3--O(IFN+1)000	4F12375
04605	0	00000	0	01406	PZE	L(0)	WORD4--000000	4F12376

D	04606	1	00000	0	03440	TXI	CA010,0	* EXIT TO PROCESS NEXT STATEMENT.	4F12377
							END OF PROGRAM C3200.		4F12378
							*****		*4F12379
							C3300/ CALLS=C0390,C0190X,C0190,TEST..,ARITH,SUBX00.		4F12380
							C3300 PROCESSES CALL STATEMENTS.		4F12381
	04607	0	07400	4	01707	C3300	TSX C0190,4	* IF 1ST CHARACTER OF NAME IS	4F12383
	04610	0	07400	4	03311		TSX TESTH0,4	* NUMERIC, THEN GO TO THE DIAGNOSTIC.	4F12384
	04611	0	07400	2	01624		TSX C0160,2	* COLLECT THF REST OF THE NAME, WHICH	4F12385
	04612	0	07400	4	03263		TSX TESTC0,4	* SHD BE FOLLOWED BY LPAREN OR ENDMK.	4F12386
	04613	0	10000	0	04632		TZE C3301	IF LPAREN, THEN CHANGE CALL TO A	4F12387
	04614	0	07400	4	01671		TSX C0190X,4	* PSEUDO-ARITHMETIC FORMULA (Z10=).	4F12388
	04615	0	07400	4	01707		TSX C0190,4	* PICKUP THE CHARACTER C,	4F12389
	04616	0	56000	0	01434		LDQ L(Z)	AND	4F12390
	04617	0	07400	4	01675		TSX C0390,4	* REPLACE C WITH Z.	4F12391
	04620	0	56000	0	01373		LDQ L(10)	AND	4F12392
	04621	0	07400	4	01675		TSX C0390,4	* REPLACE A WITH TEN.	4F12393
	04622	0	56000	0	01400		LDQ EQUAL	AND	4F12394
	04623	0	07400	4	01675		TSX C0390,4	* REPLACE FIRST L WITH =.	4F12395
	04624	0	56000	0	01430		LDQ BLANK	AND	4F12396
	04625	0	07400	4	01675		TSX C0390,4	* REPLACE SECOND L WITH BLANK.	4F12397
	04626	0	50000	0	00030		CLA EIFNO	PUT 1ST IFN OF THIS CALL IN CALLNM	4F12398
	04627	0	77100	0	00022		ARS 18	FOR LATER TABLE ENTRY OF	4F12399
	04630	0	62100	0	01123		STA CALLNM	FIRST / LAST NUMBERS OF CALLS.	4F12400
D	04631	1	00000	0	06323		TXI ARITH,0	* THEN EXIT TO ARITH TO PROCESS.	4F12401
	04632	0	07400	4	03224	C3301	TSX SUBX00,4	* IF THERE ARE NO ARGUMENTS, THEN	4F12402
	04633	0	50000	0	01112		CLA 1G	AFTER COMPLETING NAME WITH BLANKS,	4F12403
	04634	0	60100	0	01347		STO G	MOVE IT INTO G, AND	4F12404
	04635	0	07400	1	03321		TSX TET00,1	* GO ENTER NAME	4F12405
	04636	0	00000	0	00011		PZE 9	IN CLOSUB TABLE.	4F12406
	04637	0	07400	4	02366		TSX GETIFN,4	* PUT INTERNAL FORMULA NUMBER IN 1C.	4F12407
	04640	0	07400	4	01731		TSX CIT00,4	* GO MAKE THE FOLLOWING CIT ENTRY=	4F12408
	04641	0	00000	0	01105		PZE 1C	WORD1--0(IFN)000	4F12409
	04642	0	00000	0	01575		PZE L(SXD)	WORD2--SXD000	4F12410
	04643	0	00000	0	01505		PZE X(	WORD3--700000	4F12411
	04644	0	00000	0	01412		PZE L(4)	WORD4--000004	4F12412
	04645	0	07400	4	01731		TSX CIT00,4	* GO MAKE THE FOLLOWING CIT ENTRY=	4F12413
	04646	0	00000	0	01406		PZE L(0)	WORD1--000000	4F12414
	04647	0	00000	0	01602		PZE L(TSX)	WORD2--TSX000	4F12415
	04650	0	00000	0	01112		PZE 1G	WORD3--(NAME)	4F12416
	04651	0	00000	0	01412		PZE L(4)	WORD4--000004	4F12417
	04652	0	07400	4	03401		TSX FLTR00,4	* GO MAKE FLOW TRACING INSTRUCTIONS.	4F12418
	04653	0	00000	0	01406		PZE L(0)	WORD1--000000	4F12419
	04654	0	00000	0	01561		PZE L(LXD)	WORD2--LXD000	4F12420
	04655	0	00000	0	01505		PZE X(	WORD3--700000	4F12421
	04656	0	00000	0	01412		PZE L(4)	WORD4--000004	4F12422
D	04657	1	00000	0	03440		TXI CA010,0	* EXIT TO PROCESS NEXT STATEMENT.	4F12423
							END OF PROGRAM C3300.		4F12424
							*****		*4F12425
							C3400/ CALLS=C0190,DIAG,TEST...		4F12426
							C3400 PROCESSES END STATEMENTS.		4F12427
	04660	0	53400	2	01413	C3400	LXA L(5),2	PREPARE TO SET 5 SS SIMULATORS.	4F12428
	04661	0	07400	4	01707	C3405	TSX C0190,4	* PICKUP CONSTANT,	4F12429

	04662	0	34000	0	01410		CAS L(2)		WHICH SHOULD BE 0,1, OR 2.	4F12431
	04663	0	07400	4	03400		TSX DIAG,4	*	OTHERWISE, GO TO THE DIAGNOSTIC.	4F12432
D	04664	1	00000	0	04666		TXI C3410,0		SIMULATOR IS PRESET TO 2.	4F12433
	04665	0	60100	2	00036		STO ENDI1+5,2		IF 0 OR 1, SET PROPER SIMULATOR.	4F12434
	04666	0	07400	4	01707	C3410	TSX C0190,4	*	SKIP NEXT NON-BLANK CHARACTER, AND	4F12435
	04667	2	00001	2	04661		TIX C3405,2,1		REPEAT PROCESS FOR 5 CONSTANTS.	4F12436
	04670	0	07400	4	01707		TSX C0190,4	*	EXAMINE NEXT NON-BLANK CHARACTER,	4F12437
	04671	0	07400	4	03271		TSX TESTD0,4	*	WHICH SHOULD BE AN ENDMK.	4F12438
D	04672	1	00000	0	03440		TXI CA010,0	*	EXIT TO PROCESS NEXT STATEMENT.	4F12439
							END OF PROGRAM C3400.			4F12440
							* * * * *			*4F12441
										4F12442
							STATEA/3-PROCESS INPUT-OUTPUT STATEMENTS=			4F12443
										4F12444
							* * * * *			*4F12445
										4F12446
							RDC/ CALLS=INPUT,BEG,DIAG,ETMSW,LIB,CIT,JIF.			4F12447
							RDC PROCESSES READ STATEMENTS.			4F12448
	04673	0	50000	0	01437	RDC	CLA A81		SET THE ADDRESS FIELD OF	4F12449
	04674	0	62100	0	02067		STA ENT		ENT (NTR000) TO 81.	4F12450
	04675	0	07400	2	06002		TSX INPUT,2	*	GO COMPILE CAL *, AND XIT (LEV).	4F12451
	04676	0	50000	0	06127		CLA CSH		PICKUP (CSH) TO	4F12452
							TSC= ENTRY POINT USED BY RIT.			4F12453
	04677	0	60100	0	06143	TSC	STO TSA		SET TSA.	4F12454
	04700	-0	50000	0	06133		CAL RTN		MOVE (RTN)	4F12455
	04701	0	60200	0	06141		SLW END		INTO END.	4F12456
	04702	0	50000	0	06130		CLA DBC		PICKUP (DBC) TO	4F12457
							TTC= ENTRY POINT USED BY RDP.			4F12458
	04703	0	60100	0	06144	TTC	STO TTA		SET TTA.	4F12459
	04704	0	07400	4	05603		TSX BEG,4	*	CONVERT CONSTANT FORMAT NUMBER.	4F12460
	04705	0	07400	4	03400		TSX DIAG,4	*	ATTEMPT TO USE VARIABLE FORMAT NO.	4F12461
	04706	-0	10000	4	00004		TNZ 4,4		GO TO THE DIAGNOSTIC, IF THERE WAS	4F12462
	04707	0	07400	4	03400		TSX DIAG,4	*	NO FORMAT NUMBER GIVEN.	4F12463
	04710	0	62100	0	01366		STA SET		MOVE BINARY FORMAT NUMBER INTO SET.	4F12464
	04711	-0	50000	0	06114		CAL NTR		MOVE NTR000	4F12465
	04712	0	60200	0	17401		SLW OP		INTO OP.	4F12466
	04713	0	50000	0	00415		CLA TXLOP		SET OP-SWITCHES,	4F12467
	04714	0	63000	0	05754		STP ETMSW ,		ETMSW AND LTMSW,	4F12468
	04715	0	63000	0	05757		STP LTMSW		TO NO TRANSFER CASE.	4F12469
	04716	0	07400	4	05754		TSX ETMSW,4	*	O0 COMPILE ETM.	4F12470
	04717	0	07400	4	06023		TSX LIB,4	*	MAKE CLOSUB ENTRY, AND COMPILE=	4F12471
	04720	0	00000	0	01406		PZE L(0)		WORD1--000000	4F12472
	04721	0	00000	0	01537		PZE CAL		WORD2--CAL000	4F12473
	04722	0	00000	0	06144		PZE TTA		WORD3--(DBC) OR (BDC)	4F12474
	04723	0	00000	0	01406		PZE L(0)		WORD4--000000	4F12475
	04724	0	07400	4	01731		TSX CIT,4	*	GO MAKE THE FOLIOING CIT ENTRY=	4F12476
	04725	0	00000	0	01406		PZE L(0)		WORD1--000000	4F12477
	04726	0	00000	0	06120		PZE SLW		WORD2--SLW000	4F12478
	04727	0	00000	0	01406		PZE L(0)		WORD3--000000	4F12479
	04730	0	00000	0	01454		PZE D1		WORD4--001000	4F12480
	04731	0	07400	4	06023		TSX LIB,4	*	MAKE CL0SUB ENTRY, AND COMPILE=	4F12481
	04732	0	00000	0	01406		PZE L(0)		WORD1--000000	4F12482
	04733	0	00000	0	01537		PZE CAL		WORD2--CAL000	4F12483
	04734	0	00000	0	06143		PZE TSA		WORD3--(CSH) OR (TSH)	4F12404

	04735	0	00000	0	01406		PZE L(0)	WORD4--000000	4F12405
	04736	0	07400	4	01731		TSX CIT,4	* GO MAKE THE FOLLOWING CIT ENTRY=	4F12486
	04737	0	00000	0	01371		PZE TL	NORD1--0(IFN)0(248)	4F12487
	04740	0	00000	0	02067		PZE ENT	WORD2--NTR0(81, OR UNIT, OR 00)	4F12486
	04741	0	00000	0	01366		PZE SET	WORD3--800(FORMAT NUMBER)	4F12489
	04742	0	00000	0	01406		PZE L(0)	WORD4--000000	4F12490
	04743	0	07400	4	02372		TSX JIF,4	* GO JUMP IFN, AND SET SL AND TL.	4F12491
							BXT = EXIT SWITCH TO RSC OR LAST, USED BY WBT,RBT,WRD.	4F12492	
D	04744	1	00000	0	05141	BXT	TXI RSC,0	* EXIT TO SCAN LIST, IF THERE IS ONE.	4F12493
							END OF PROGRAM RDC.	4F12494	
							* * * * *	4F12495	
							RIT/ CALLS=INPUT,BEG,VRD. USES=RDC.	4F12496	
							RIT PROCESSES READ INPUT TAPE STATEMENTS.	4F12497	
	04745	0	07400	2	06002	RIT	TSX INPUT,2	* GO COMPILE CAL *, AND XIT (LEV).	4F12499
	04746	0	07400	4	05603		TSX BEG,4	* SCAN AND TEST TYPE OF UNIT SYMBOL.	4F12500
	04747	0	07400	4	06036		TSX VRD,4	* IF VARIABLE, ENTER FORVAR AND CITS.	4F12501
	04750	0	62100	0	02067		STA ENT	IF CONSTANT, SET ENT= NTR0(UNIT).	4F12502
	04751	0	50000	0	06137		CLA TSH	PICKUP (TSH) TO SET TSA, AND	4F12503
D	04752	1	00000	0	04677		TXI TSC,0	* CONTINUE BY USING PROGRAM RDC.	4F12504
							END OF PROGRAM RIT.	4F12505	
							* * * * *	4F12506	
							RDP/ CALLS=OUTPUT. USES=RDC.	4F12507	
							RDP PROCESSES PRINT STATEMENTS.	4F12508	
	04753	-0	75400	0	00000	RDP	PXD ,0	RESET ENT	4F12510
	04754	0	62100	0	02067		STA ENT	TO NTR000.	4F12511
	04755	0	07400	2	06004		TSX OUTPUT,2	* GO COMPILE CAL *, AND XIT (LEV).	4F12512
	04756	0	50000	0	06135		CLA SPH	PICKUP (SPH), AND	4F12513
							TSD= ENTRY POINT USED BY WOT, PDC.	4F12514	
	04757	0	60100	0	06143	TSD	STO TSA	SET TSA.	4F12515
	04760	-0	50000	0	06131		CAL FIL	MOVE (FIL)	4F12516
	04761	0	60200	0	06141		SLW END	INTO END.	4F12517
	04762	0	50000	0	06126		CLA BDC	PICKUP (BDC) TO SET TTA, AND	4F12518
D	04763	1	00000	0	04703		TXI TTC,0	* CONTINUE BY USING PROGRAM RDC.	4F12519
							END OF PROGRAM RDP.	4F12520	
							* * * * *	4F12521	
							WOT/ CALLS=OUTPUT,BEG,VRD. USES=RDP.	4F12522	
							WOT PROCESSES WRITE OUTPUT TAPE STATEMENTS.	4F12523	
	04764	0	07400	2	06004	WOT	TSX OUTPUT,2	* GO COMPILE CAL *, AND XIT (LEV).	4F12524
	04765	0	07400	4	05603		TSX BEG,4	* SCAN AND TEST TYPE OF UNIT SYMBOL.	4F12525
	04766	0	07400	4	06036		TSX VRD,4	* IF VARIABLE, ENTER FORVAR AND CITS.	4F12526
	04767	0	62100	0	02067		STA ENT	IF CONSTANT, SET ENT= NTR0(UNIT).	4F12527
	04770	0	50000	0	06136		CLA STH	PICKUP (STH) TO SET TSA, AND	4F12528
D	04771	1	00000	0	04757		TXI TSD,0	* CONTINUE BY USING PROGRAM RDP.	4F12529
							END OF PROGRAM WOT.	4F12530	
							* * * * *	4F12531	
							PDC/ CALLS=OUTPUT. USES=RDP.	4F12532	
							PDC PROCESSES PUNCH STATEMENTS.	4F12533	
	04772	-0	75400	0	00000	PDC	PXD ,0	RESET ENT	4F12534
	04773	0	62100	0	02067		STA ENT	TO NTR000.	4F12535
	04774	0	07400	2	06004		TSX OUTPUT,2	* GO COMPILE CAL *, AND XIT (LEV).	4F12536
								4F12537	
								4F12538	

	04775	0	50000	0	06134		CLA SCH	PICKUP (SCH) TO SET TSA, AND	4F12539
D	04776	1	00000	0	04757		TXI TSD,0	* CONTINUE BY USING PROGRAM RDP.	4F12540
							END OF PROGRAM PDC.		4F12541
							* * * * *		*4F12542
									4F12543
							WBT/ CALLS=OUTPUT,BRW,CIT.		4F12544
							WBT PROCESSES WRITE TAPE STATEMENTS.		4F12545
	04777	-0	50000	0	06124	WBT	CAL WTB	MOVE WTB0004	4F12546
	05000	0	60200	0	17401		SLW OP	INTO OP.	4F12547
	05001	0	07400	2	06004		TSX OUTPUT,2	* GO COMPILE CAL *, AND XIT (LEV).	4F12548
	05002	-0	50000	0	01475		CAL BTA	PICKUP BINARY TAPE ADDRESS, AND	4F12549
	05003	0	07400	4	05646		TSX BRW,4	* COMPILE INSTRS TO SET UNIT DESIG.	4F12550
	05004	0	07400	4	01731		TSX CIT,4	* GO MAKE THE FOLLOWING CIT ENTRY=	4F12551
	05005	0	00000	0	01406		PZE L(0)	WORD1--000000	4F12552
	05006	0	00000	0	01544		PZE CPY	WORD2--CPY000	4F12553
	05007	0	00000	0	01504		PZE ZER	WORD3--600000	4F12554
	05010	0	00000	0	01457		PZE D2	WORD4--002000	4F12555
D	05011	1	00000	0	04744		TXI BXT,0	* EXIT TO SCAN LIST, IF THERE IS ONE.	4F12556
							END OF PROGRAM WBT.		4F12557
							* * * * *		*4F12558
									4F12559
							RBT/ CALLS=INPUT,BRW,CIT.		4F12560
							RBT PROCESSES READ TAPE STATEMENTS.		4F12561
	05012	-0	50000	0	06117	RBT	CAL RTB	MOVE RTB000	4F12562
	05013	0	60200	0	17401		SLW OP	INTO OP.	4F12563
	05014	0	07400	2	06002		TSX INPUT,2	* GO COMPILE CAL *, AND XIT (LEV).	4F12564
	05015	-0	50000	0	01475		CAL BTA	PICKUP BINARY TAPE ADDRESS, AND	4F12565
	05016	0	07400	4	05646		TSX BRW,4	* COMPILE INSTRS TO SET UNIT DESIG.	4F12566
	05017	0	07400	4	01731		TSX CIT,4	* GO MAKE THE FOLLOWING CIT ENTRY=	4F12567
	05020	0	00000	0	01406		PZE L(0)	WORD1--000000	4F12568
	05021	0	00000	0	01544		PZE CPY	WORD2--CPY000	4F12569
	05022	0	00000	0	01500		PZE DMP	WORD3--100000	4F12570
	05023	0	00000	0	01406		PZE L(0)	WORD4--000000	4F12571
	05024	0	07400	4	01731		TSX CIT,4	* GO MAKE THE FOLLOWING CIT ENTRY=	4F12572
	05025	0	00000	0	01406		PZE L(0)	WORD1--000000	4F12573
	05026	0	00000	0	06125		PZE XIT	WORD2--XIT000	4F12574
	05027	0	00000	0	01510		PZE 15P	WORD3--*00000	4F12575
	05030	0	00000	0	01461		PZE D3CN	WORD4--003000	4F12576
	05031	0	07400	4	01731		TSX CIT,4	* GO MAKE THE FOLLOWING CIT ENTRY=	4F12577
	05032	0	00000	0	01406		PZE L(0)	WORD1--000000	4F12578
	05033	0	00000	0	01554		PZE HPR	WORD2--HPR000	4F12579
	05034	0	00000	0	01406		PZE L(0)	WORD3--000000	4F12580
	05035	0	00000	0	01406		PZE L(0)	WORD4--000000	4F12581
	05036	0	07400	4	01731		TSX CIT,4	* GO MAKE THE FOLLOWING CIT ENTRY=	4F12582
	05037	0	00000	0	01406		PZE L(0)	WORD1--000000	4F12583
	05040	0	00000	0	06125		PZE XIT	WORD2--XIT000	4F12584
	05041	0	00000	0	01371		PZE TL	WORD3--0(IFN)0(248)	4F12585
	05042	0	00000	0	01406		PZE L(0)	WORD4--000000	4F12586
D	05043	1	00000	0	04744		TXI BXT,0	* EXIT TO SCAN LIST, IF THEPE IS ONE.	4F12587
							END OF PROGRAM RBT.		4F12588
							* * * * *		*4F12589
									4F12590
							WRD/ CALLS=OUTPUT,BRW,CIT.		4F12591
							WRD PROCESSES WRITE DRUM STATEMENTS.		4F12592

						END OF PROGRAM RWN.	4F12647
						* * * * *	*4F12648
						BSP/ USES=EFT.	4F12649
						BSP PROCESSES BACKSPACE TAPE STATEMENTS.	4F12650
	05111	-0	50000	0	06111	BSP CAL BST PICKUP BST000 TO SET OP, AND	4F12651
D	05112	1	00000	0	05067	TXI TPO,0 * CONTINUE BY USING PROGRAM EFT.	4F12652
						END OF PROGRAM BSP.	4F12653
						* * * * *	*4F12654
						FOR/ CALLS=TET00.	4F12655
						FOR PROCESSES FORMAT STATEMENTS.	4F12656
	05113	-0	50000	0	00030	FOR CAL EIFNO MOVE EXTERNAL FORMULA NUMBER	4F12657
	05114	0	62100	0	01366	STA SET INTO THE ADDRESS OF SET,	4F12658
	05115	-0	50000	0	01366	CAL SET AND MOVE SET (8000(EFN))	4F12659
	05116	0	60200	0	01347	SLW G INTO G.	4F12660
	05117	-0	53400	1	01724	LXD CHCTR,1 SET XR1 = CHARACTER COUNT.	4F12661
	05120	-0	53400	2	01614	LXD FWA,2 SET XR2 = -(CURRENT F-WORD ADDR).	4F12662
	05121	-3	00001	1	05137	TXL NFFW,1,1 UNLESS POSITIONED AT THE	4F12663
	05122	1	77777	1	05123	TXI *+1,1,-1 BEGINNING OF A FORMAT WORD,	4F12664
	05123	0	56000	0	01365	LDQ RESIDU THEN PICKUP AND	4F12665
	05124	-0	50000	0	01526	CAL BLANKS PRECEED WITH BLANKS ANY	4F12666
	05125	-0	76300	0	00006	NFC LGL 6 CHARACTERS	4F12667
	05126	2	00001	1	05125	TIX NFC,1,1 REMAINING IN THE MQ, AND	4F12668
	05127	0	60200	0	01350	NFW SLW G+1 MOVE FORMAT WORDS INTO G+1.	4F12669
	05130	0	07400	1	03321	TSX TET00,1 * GO ENTER THEN IN	4F12670
	05131	0	00000	0	00012	PZE 10 THE FORMAT TABLE.	4F12671
	05132	-0	50000	0	01350	CAL G+1 WHEN THE	4F12672
	05133	-0	32000	0	01374	ANA ENDMK END OF STATEMENT MARK	4F12673
	05134	0	40200	0	01374	SUB ENDMK HAS BEEN ENTERED,	4F12674
	05135	0	10000	0	03440	TZE CA010 * EXIT TO PROCESS NEXT STATEMENT.	4F12675
	05136	0	60000	0	01347	STZ G PRECEED ALL BUT 1ST ENTRY WITH 0.	4F12676
	05137	-0	50000	2	00000	NFFW CAL 0,2 PICKUP NEXT FORMAT WORD,	4F12677
	05140	1	77777	2	05127	TXI NFW,2,-1 UPDATE SCAN INDEX, AND CONTINUE.	4F12678
						END OF PROGRAM FOR.	4F12679
						* * * * *	*4F12680
						RSC/ CALLS=C0190,DIAG.	4F12681
						RSC SCANS EACH CHARACTER IN A STATEMENT UNTIL EQUALITY IS	4F12682
						FOUND ON ONE OF THE PUNCTUATION MARKS IN THE CTEST BLOCK IN	4F12683
						COMMON. THEN A TAGGED EXIT IS MADE THROUGH THE BLOCK OF	4F12684
						CONTROL TRANSFERS INDICATED BY THE ADDRESS STORED IN CEXIT.	4F12685
						RSC = ENTRY POINT FROM THE BXT SWITCH IN RDC, AND FROM SPC.	4F12686
	05141	-0	50000	0	05361	RSC CAL FLINE RESET TEMPORARY	4F12687
	05142	0	62100	0	01372	STA TLINE TABLE LINE COUNTER.	4F12688
	05143	0	60000	0	17400	STZ DOLEV CLEAR DO LEVEL COUNTER.	4F12689
	05144	0	60000	0	01351	STZ GTAG CLEAR GENERALIZED TAG.	4F12690
						LSC = ENTRY POINT FROM SPC.	4F12691
	05145	-0	50000	0	05204	LSC CAL LISTR SET CONTROL TRANSFER	4F12692
						CXS = ENTRY POINT FROM EQS, BEG.	4F12693
	05146	0	62100	0	05156	CXS STA CEXIT FOR LIST SCAN.	4F12694
						NXS = ENTRY POINT FROM LPR, SPC, CMA.	4F12695
	05147	0	53400	2	01414	NXS LXA L(6),2 RESET SYMBOL CHARACTER COUNT	4F12696
	05150	-0	63400	2	05637	SXD CSJ,2 AND SHIFT COUNT.	4F12697

	05151	0	60000	0	17404	STZ	SYM	CLEAR SYMBOL WORKING STORAGE.	4F12701
								NXC = ENTRY POINT FROM CMA.	4F12702
	05152	0	07400	4	01707	NXC	TSX C0190,4	* OBTAIN NEXT NB CHARACTER IN THE AC.	4F12703
	05153	0	53400	4	02652	CLOAD	LXA CTESTX,4	SET XR4 TO PICK CONTROL CHARACTERS.	4F12704
	05154	0	34000	4	01406	CCOMP	CAS CTEST,4	COMPARE CHARACTER WITH CONSTANTS.	4F12705
D	05155	-3	00000	0	05160		TXL BUILD,0	IF EQUALITY IS FOUND ON SOME	4F12706
	05156	0	02000	4	00000	CEXIT	TRA **,4	* CONTROL CHAR, EXIT TO TRA LIST.	4F12707
	05157	2	00001	4	05154		TIX CCOMP,4,1	CONTINUE THROUGH PUNCTUATION.	4F12708
	05160	-0	53400	4	05637	BUILD	LXD CSJ,4	BUILD A	4F12709
	05161	0	60100	4	17316		STO CHR,4	SYMBOL	4F12710
	05162	-2	00001	4	05167		TNX LCT,4,1	COMPOSED OF	4F12711
	05163	0	76700	2	00044		ALS 36,2	SIX OR LESS CHARACTERS.	4F12712
	05164	-0	63400	4	05637	CSZ	SXD CSJ,4	SAVE SYMBOL CHARACTER COUNT.	4F12713
	05165	-0	60200	0	17404		ORS SYM	ALSO, SAVE EACH	4F12714
	05166	1	00006	2	05152		TXI NXC,2,6	CHARACTER SEPARATELY.	4F12715
	05167	-3	00044	2	05171	LCT	TXL LCS,2,36	GO TO DIAGNOSTIC IF	4F12716
	05170	0	07400	4	03400		TSX DIAG,4	* MORE THAN 6 CHARACTERS IN SYMBOL.	4F12717
	05171	1	77777	4	05164	LCS	TXI CSZ,4,-1	ADJUST COUNT, AND CONTINUE SCAN.	4F12718
							END OF PROGRAM RSC.		4F12719
							*****		4F12720
							LISTR/ CONTROL TRANSFERS FOR LIST SCAN=		4F12721
D	05172	1	00000	0	05547		TXI EMK,0	* ENDMARK	4F12722
D	05173	1	00000	0	05205		TXI LPR,0	* (	4F12723
D	05174	1	00000	0	05413		TXI CMA,0	* ,	4F12724
D	05175	1	00000	0	05377		TXI RPR,0	*)	4F12725
D	05176	1	00000	0	05261		TXI EQS,0	* =	4F12726
D	05177	1	00000	0	05200		TXI ILC,0	- (ILLEGAL CHARACTER IN I/O LIST).	4F12727
	05200	0	07400	4	03400	ILC	TSX DIAG,4	* / (ILLEGAL CHARACTER IN I/O LIST).	4F12728
D	05201	1	00000	0	05200		TXI ILC,0	. (ILLEGAL CHARACTER IN I/O LIST).	4F12729
D	05202	1	00000	0	05200		TXI ILC,0	+ (ILLEGAL CHARACTER IN I/O LIST).	4F12730
D	05203	1	00000	0	05200		TXI ILC,0	* (ILLEGAL CHARACTER IN I/O LIST).	4F12731
	05204	0	00000	0	05204	LISTR	PZE LISTR	INDEXING ADDRESS FOR ABOVE LIST.	4F12732
							*****		4F12733
							LPR/ CALLS=TYP,SS000,RA000,C0190,TEST.,LTMSW,CIT,JIF,DIAG,		4F12734
							BSS. USES=CMA,RSC.		4F12735
							EPR = ENTRY POINT TAKEN WHEN LPAREN IS MET IN LIST SCAN.		4F12736
	05205	-0	50000	0	17404	LPR	CAL SYM	TEST FOR SUBSCRIPT OR DO NEST.	4F12737
	05206	0	10000	0	05230		TZE LPRD	IF SUBSCRIPT, THEN	4F12738
	05207	0	07400	4	05624		TSX TYP,4	* IF VARIABLE SYMBOL CONTAINS LESS	4F12739
	05210	0	02000	4	00003		TRA 3,4	THAN 6 CHARACTERS, ADD A BLANK.	4F12740
D	05211	1	00000	0	05416		TXI ERRC,0	* ON CONSTANT RETURN, GO TO DIAG.	4F12741
	05212	-0	50000	0	17404		CAL SYM	MOVE SYMBOL	4F12742
	05213	0	60200	0	01130		SLW E+2	INTO E+2, AND	4F12743
	05214	0	60200	0	17403		SLW SA	COMPILE SYMBOLIC ADDRESS.	4F12744
	05215	0	07400	4	02614		TSX SS000,4	* GO SCAN AND PROCESS SUBSCRIPT.	4F12745
	05216	0	07400	4	02437		TSX RA000,4	* THEN GO =OMPUTE RELATIVE ADDRESS.	4F12746
	05217	0	07400	4	01707		TSX C0190,4	* EXAMINE NEXT NON-BLANK CHARACTER	4F12747
	05220	0	34000	0	01377		CAS CLOS		4F12748
	05221	0	02000	0	05226		TRA *+5		4F12749
	05222	0	02000	0	05224		TRA *+2		4F12750
	05223	0	02000	0	05226		TRA *+3		4F12751
	05224	0	60000	0	17400		STZ DOLEV		4F12752

	05225	0	07400	4	01707		TSX	C0190,4			4F12755
	05226	0	07400	4	03247		TSX	TESTA0,4		* FOR EITHER COMMA OR ENDMARK.	4F12756
D	05227	1	00000	0	05421		TXI	CMA7,0		* AND CONTINUE BY USING PROGRAM CMA.	4F12757
	05230	-0	50000	0	17400	LPRD	CAL	DOLEV		IF THE BEGINNING OF A DO NEST,	4F12758
	05231	0	10000	0	05242		TZE	LPR3		AND DOLEV IS NOT ZERO, THEN	4F12759
	05232	0	53400	4	17400		LXA	DOLEV,4		TEST FOR NULL FORMULA.	4F12760
	05233	-3	00000	4	05236		TXL	LPRE,4,0		IF NULL, GO ESTABLISH POSITION.	4F12761
	05234	0	07400	4	05757		TSX	LTMSW,4		* OTHERWISE, COMPILE LTM, AND	4F12762
D	05235	1	00000	0	05241		TXI	LPR4,0		AND GO JUMP IFN.	4F12763
	05236	-0	50000	0	01367	LPRE	CAL	SL		IF C(SL) 00 NOT = 0,	4F12764
	05237	0	10000	0	05241		TZE	*+2		THEN	4F12765
	05240	0	07400	2	05674		TSX	BSS,2		* GO COMPILE= IFN BSS 0.	4F12766
	05241	0	07400	4	02372	LPR4	TSX	JIF,4		* GO JUMP IFN, AND SET SL AND TL.	4F12767
	05242	-0	53400	4	17400	LPR3	LXD	DOLEV,4		INCREASE THE C(DOLEV D)	4F12768
	05243	1	00001	4	05244		TXI	LPR1,4,1		BY 1, AND	4F12769
	05244	-0	75400	4	00000	LPR1	PXD	,4		SET THE C(DOLEV A)	4F12770
	05245	0	60200	0	17400		SLW	DOLEV		TO ZERO.	4F12771
	05246	-0	50000	0	01372		CAL	TLINE		NOTE AT	4F12772
	05247	0	62100	0	05254		STA	LPR2		THIS LEVEL	4F12773
	05250	0	60100	4	17400		STO	DOLEV,4		THE LOCATION IN TLDO	4F12774
	05251	0	40000	0	01413		ADD	L(5)		OF THIS DO FORMULA	4F12775
	05252	0	62100	0	01372		STA	TLINE		AND INCREASE LINE IN TLINE.	4F12776
	05253	0	50200	0	01371		CLS	TL		MOVE -(0(IFN)0(248)) INTO THE	4F12777
	05254	0	60100	0	00000	LPR2	STO	**		LOCATION WORD OF CURRENT TEMP DO.	4F12778
	05255	0	07400	4	02372		TSX	JIF,4		* GO JUMP IFN, AND SET SL AND TL.	4F12779
	05256	-0	53400	4	17400		LXD	DOLEV,4		IF 3 OR FEWER LEVELS IN LIST DO,	4F12780
	05257	-3	00003	4	05147		TXL	NXS,4,3		* RETURN TO LIST SCAN.	4F12781
	05260	0	07400	4	03400		TSX	DIAG,4		* OTHERWISE, GO TO DIAGNOSTIC.	4F12782
								END OF PROGRAM LPR.			4F12783
								*****			4F12784
								EQS/ CALLS=DIAG. USES=RSC.			4F12785
								EQS = ENTRY POINT WHEN EQUAL SIGN IS MET IN LIST CAN.			4F12786
	05261	-0	53400	4	17400	EQS	LXD	DOLEV,4		TEST THE LEGALITY OF EQUAL SIGN,	4F12787
	05262	3	00000	4	05264		TXH	EQS2,4,0		AND GO TO DIAG ON THE ATTEMPT TO	4F12788
	05263	0	07400	4	03400		TSX	DIAG,4		* SPECIFY SUBSCRIPT RANGE WITHOUT (.	4F12789
	05264	-0	50000	4	17400	EQS2	CAL	DOLEV,4		INITIALIZE SPECIFICATION	4F12790
	05265	0	62100	0	05331		STA	SPC2		OF GENERATED DO FORMULA	4F12791
	05266	0	62100	0	05345		STA	SPC5		AT CURRENT LEVEL.	4F12792
	05267	0	40000	0	01407		ADD	L(1)		PREPARE TO ENTER FORMULA NUMBERS	4F12793
	05270	0	62100	0	05302		STA	EQS1		IN LOCATION WORD,SUBSCRIPT IN	4F12794
	05271	0	40000	0	01412		ADD	L(4)		SYMBOL WORD, AND SUBSCRIPT SPECS	4F12795
	05272	0	62100	0	05333		STA	SPC3		IN TEMPDO ENTRY.	4F12796
	05273	0	53400	4	01411		LXA	L(3),4		PREPARE TO COUNT THE	4F12797
	05274	-0	63400	4	05304		SXD	NSJ,4		NUMBER OF SPECIFICATIONS.	4F12798
	05275	-0	50000	0	17404		CAL	SYM		OBTAIN SUBSCRIPT	4F12799
	05276	3	00044	2	05302		TXH	EQS1,2,36		FOR THIS DO, AND	4F12800
	05277	-0	50000	0	01430		CAL	BLANK		STORE IN PROPER	4F12801
	05300	0	76700	2	00044		ALS	36,2		LINE OF TEMPORARY	4F12802
	05301	-0	50100	0	17404		ORA	SYM		LIST DO TABLE.	4F12803
	05302	0	60200	0	00000	EQS1	SLW	**		(SUBSCRIPT SYMBOL WORD)	4F12804
	05303	-0	50000	0	05317		CAL	SPCTR		SET CONTROL LOOP FOR	4F12805
	05304	1	00000	0	05146	NSJ	TXI	CXS,0,**		* EXIT TO SPECIFICATION.	4F12806
								END OF PROGRAM EQS.			5F12807

Code	OP	MA	MO	ME	FL	TX	TX	TX	TX	TX	
						SPCTR/	CONTROL	TRANSFERS	FOR	SPECIFICATION	SCAN=-
											4F12809
											4F12810
											4F12811
						TSX	DIAG,4		*	E (ILLEGAL IN CONTROL FOR LIST DO).	4F12812
						TSX	DIAG,4	ICC	*	((ILLEGAL IN CONTROL FOR LIST DO).	4F12813
D						TXI	SPC,0		*	,	4F12814
D						TXI	SPCX,0		*	)	4F12815
D						TXI	ICC,0		=	(ILLEGAL IN CONTROL FOR LIST DO).	4F12816
D						TXI	ICC,0		-	(ILLEGAL IN CONTROL FOR LIST DO).	4F12817
D						TXI	ICC,0		/	(ILLEGAL IN CONTROL FOR LIST DO).	4F12818
D						TXI	ICC,0		.	(ILLEGAL IN CONTROL FOR LIST DO).	4F12819
D						TXI	ICC,0		+	(ILLEGAL IN CONTROL FOR LIST DO).	4F12820
D						TXI	ICC,0		*	(ILLEGAL IN CONTROL FOR LIST DO).	4F12821
						PZE	SPCTR	SPCTR		INDEXING ADDRESS FOR ABOVE LIST.	4F12822
											*4F12823
											4F12824
										SPC/ CALLS=TYP,LTMSW,JIF,TET00. USES=RSC.	4F12825
										SPCX = ENTRY POINT WHEN RPAREN IS MET IN SPECIFICATION SCAN.	4F12826
						CAL	SPC1	SPCX		PREPARE FOR END OF SPECIFICATION.	4F12827
						STO	SPC1			SET SPC1 OP-SWITCH TO NOP CASE.	4F12828
										SPC = ENTRY POINT WHEN COMMA IS MET IN SPECIFICATION SCAN.	4F12829
						TSX	TYP,4	SPC	*	GO TEST TYPE OF SUBSCRIPT SPEC.	4F12830
D						TXI	SPCS,0			IF FIXED POINT CONSTANT,	4F12831
						LXD	NSJ,4			SET C(XR4) = SPECIFICATION COUNT,	4F12832
D						TXI	SPC3,0			AND GO ENTER CONSTANT IN TABLE.	4F12833
						LXD	NSJ,4	SPCS		OTHERWISE, SET SPEC COUNT AND	4F12834
						CAL	TAG4			IF VARIABLE, NOTE BY	4F12835
						ARS	3,4			PLACING BIT IN TAG FIELD	4F12836
						ORS	**	SPC2		OF TABLE ENTRY.	4F12837
						CAL	SYM			PICKUP VARIABLE SYMBOL AND	4F12838
						SLW	** ,4	SPC3		ENTER N SUB J IN TABLE.	4F12839
						TNX	SPC4,4,1			REDUCE J.	4F12840
						SXD	NSJ,4			SAVE SPEC COUNT, AND	4F12841
D						TXL	NXS,0	SPC1	*	EXIT TO SCAN, IF SWITCH IS TXL.	4F12842
						CAL	L(1)			SET N SUB 3 = 1 IF NOT	4F12843
D						TXI	SPC3,0			OTHERWISE SPECIFIED.	4F12844
						CLS	SPC1	SPC4		RESTORE SPC1 EXIT.	4F12845
						STO	SPC1			(3 SPECS HAVE BEEN TREATED)	4F12846
						CAL	EIFNO			ALSO RESTORE INTERNAL FORMULA NO.	4F12847
						ARS	18			(PUT BETA IN TEMPDO TABLE)	4F12848
										SPC5 = ENTRY POINT USED BY RPR.	4F12849
						STA	**	SPC5		SET BETA EQUAL TO IFNO.	4F12850
						LXA	DOLEV,4			EXAMINE DOLEV ADDRESS FOR ZERO TO	4F12851
						TXL	SPCR,4,0			TEST NEED FOR LTM, JIF AFTER).	4F12852
						TSX	LTMSW,4		*	GO COMPILE LTM.	4F12853
						TSX	JIF,4		*	GO JUMP IFN, AND SET SL AND TL.	4F12854
						LXD	DOLEV,4	SPCR		DECREASE DOLEV D	4F12855
						TXI	SPC6,4,-1			BY 1, AND INDICATE A TREATED LEVEL.	4F12856
						PXD	,4	SPC6		IF NOT ZERO,	4F12857
						SLW	DOLEV			THEN ALL LEVELS ARE NOT TREATED.	4F12858
						TXH	LSC,4,0		*	RETURN TO SCAN NEXT LEVEL.	4F12859
						CLA	TLINE			IF LEVEL IS ZERO	4F12860
						STA	SPC7			ENTER GENERATED	4F12861
						PAX	TLDOS,2	FLINE		DO FORMULAS IN TDO BY	4F12862

	05362	1	60373	2	05363		TXI	*+1,2,-TLDOS		SUBROUTINE TET.		4F12863
	05363	0	53400	4	01413	SPC9	LXA	L(5),4		(MOVE EACH		4F12864
	05364	0	50000	2	00000	SPC7	CLA	** ,2		TEMPD0 TABLE ENTRY		4F12865
	05365	0	60100	4	01112		STO	1C+5,4		INTO 1C...1C+4,		4F12866
	05366	-2	00001	2	05370		TXN	SPC8,2,1		AND THEN		4F12867
	05367	2	00001	4	05364		TIX	SPC7,4,1		WHEN DONE,		4F12868
	05370	0	53400	4	01105	SPC8	LXA	1C,4		TEST TO SKIP		4F12869
	05371	-3	00000	4	05374		TXL	SPCT,4,0		NULL DO.		4F12870
	05372	0	07400	1	03321		TSX	TET00,1	*	GO MAKE AN ENTRY		4F12871
	05373	0	00000	0	00001		PZE	1		IN TDO TABLE.)AND WHEN THE WHOLE		4F12872
	05374	3	00001	2	05363	SPCT	TXH	SPC9,2,1		DO NEST HAS BEEN ENTERED,		4F12873
	05375	0	07400	4	02372		TSX	JIF,4	*	GO JUMP IFN, AND SET SL ANO TL.		4F12874
D	05376	1	00000	0	05141	RESET	TXI	RSC,0	*	THEN EXIT TO CONTINUE LIST SCAN.		4F12875
								END OF PROGRAM SPC.				4F12876
								*****				4F12877
								RPR/ CALLS=DIAG. USES=CMA,SPC.				4F12878
								RPR = ENTRY POINT WHEN RPAREN IS MET 1N LIST SCAN.				4F12879
	05377	-0	53400	4	17400	RPR	LXD	DOLEV,4		TEST LEGALITY OF 1.		4F12881
	05400	3	00000	4	05402		TXH	RPS,4,0		IF THERE ARE TOO MANY) IN LIST,		4F12882
	05401	0	07400	4	03400		TSX	DIAG,4	*	GO TO THE DIAGNOSTIC.		4F12883
	05402	-0	50000	4	17400	RPS	CAL	DOLEV,4		NULLIFY DO AT CURRENT LEVEL.		4F12884
	05403	0	62100	0	05345		STA	SPC5		SET SPC5 ADDRESS,		4F12885
	05404	0	50000	0	05411		CLA	RPA		SET CMA3 SWITCH TO RETURN TO		4F12886
	05405	0	62100	0	05546		STA	CMA3		RPT, AND IF ANY CHARACTERS		4F12887
	05406	3	00006	2	05414		TXH	CMA1,2,6	*	WERE COLLECTED, EXIT,TO CMA.		4F12888
								RPT = REENTRY POINT USED BY CMA.				4F12889
	05407	0	50000	0	05336	RPT	CLA	SPC1		RESET CMA3 SWITCH		4F12890
	05410	0	62100	0	05546		STA	CMA3		TO NXS,		4F12891
	05411	-0	75400	0	05407	RPA	PXD	RPT,0		CLEAR THE AC, AND		4F12892
D	05412	1	00000	0	05345		TXI	SPC5,0	*	CONTINUE BY USING PROGRAM SPC.		4F12893
								END OF PROGRAM RPR.				4F12894
								*****				4F12895
								CMA/ CALLS=TYP,DIAG,ETMSW,DIM.SR,IFFIX,TET00,DRTABS,JIF,CIT,				4F12896
								LTMSW. USES=RSC.				4F12897
								CMA = ENTRY POINT WHEN COMMA IS MET IN LIST SCAN.				4F12898
	05413	-3	00006	2	05152	CMA	TXL	NXC,2,6	*	IF NOTHING COLLECTED, RETURN -SCAN.		4F12899
								CMA1 = ENTRY POINT USED BY EMK.				4F12900
	05414	0	07400	4	05624	CMA1	TSX	TYP,4	*	TYPE TEST FOR NON-SUBSCR. VAR.		4F12902
	05415	0	02000	4	00003		TRA	3,4		ILLEGAL USE OF CONSTANT IN LIST,		4F12903
	05416	0	07400	4	03400	ERRC	TSX	DIAG,4	*	GO TO THE DIAGNOSTIC.		4F12904
	05417	-0	50000	0	17404		CAL	SYM		INVE VARIABLE SYMBOL		4F12905
	05420	0	60200	0	17403	CMA4	SLW	SA		INTO SA. AND		4F12906
								CMA7 = ENTRY POINT USED BY LPR.				4F12907
	05421	0	53400	4	17400	CMA7	LXA	DOLEV,4		IF DOLEV ADDRESS = 0, AND IF		4F12908
	05422	3	00000	4	05424		TXH	CMA6,4,0		ETMSW IS SET TO TXH (NOP CASE),		4F12909
	05423	0	07400	4	05754		TSX	ETMSW,4	*	GO COMPILER ETM, AND CLEAR SL.		4F12910
	05424	-0	50000	0	17400	CMA6	CAL	DOLEV		IN ANY CASE,		4F12911
	05425	0	40000	0	01407		ADD	L(1)		UPDATE DOLEV ADDRESS		4F12912
	05426	0	60100	0	17400		STO	DOLEV		BY 1, AND THEN		4F12913
	05427	0	50000	0	01351		CLA	GTAG		SET GENERALIZED TAG.		4F12914
	05430	0	60100	0	17402		STO	RA		(RELATIVE ADDRESS)		4F12915
	05431	0	10000	0	05436		TZE	DIMSR		IF THIS VARIABLE HAS A SUBSCRIPT,		4F12916

	05432	0	50000	0	01147		CLA EPS		AND IF SUBSCRIPT	4F12917
	05433	-0	10000	0	05537		TNZ CMA5		IS A CONSTANT,	4F12918
	05434	0	62100	0	17402		STA RA		TMEN CLEAR THE ADDRESS OF RA.	4F12919
D	05435	1	00000	0	05537		TXI CMA5,0		THEN GO MAKE CIT ENTRY.	4F12920
	05436	-0	50000	0	17403	DIMS R	CAL SA		IF THIS VARIABLE	4F12921
	05437	0	60200	0	01130		SLW E+2		DOES NOT HAVE A SUBSCRIPT, THEN	4F12922
	05440	0	07400	4	01771	RD1	TSX DIM1SR,4	*	GO SEARCH DIM1 TABLE.	4F12923
D	05441	1	00000	0	05444		TXI RD2,0		IF FOUND, THEN	4F12924
	05442	0	50000	0	01101	CS1	CLA D12		PICKUP DIMENSION 1	4F12925
D	05443	1	00000	0	05467		TXI DVS,0		AND GO TEST SIZE. OTHERWISE,	4F12926
	05444	0	07400	4	01775	RD2	TSX DIM2SR,4	*	GO SEARCH DIM2 TABLE.	4F12927
D	05445	1	00000	0	05455		TXI RD3,0		AND IF FOUND,	4F12928
	05446	0	56000	0	01101	CS2	LDQ D12		PICKUP	4F12929
	05447	0	60000	0	01361		STZ N2		DIMENSION 1 AND	4F12930
	05450	-0	62000	0	01361		SLQ N2		DIMENSION 2	4F12931
	05451	-0	76300	0	00022		LGL 18		AND MULTIPLY	4F12932
	05452	0	20000	0	01361		MPY N2		THEM TOGETHER.	4F12933
	05453	0	77100	0	00001		ARS 1		THEN	4F12934
D	05454	1	00000	0	05467		TXI DVS,0		GO TEST THE PRODUCT. OTHERWISE,	4F12935
	05455	0	07400	4	02005	RD3	TSX DIM3SR,4	*	GO SEARCH DIM3 TABLE.	4F12936
D	05456	1	00000	0	05533		TXI NODIM,0		AND IF FOUND,	4F12937
	05457	0	56000	0	01101	CS3	LDQ D12		PICKUP	4F12938
	05460	0	60000	0	01361		STZ N2		DIMENSION 1,	4F12939
	05461	-0	62000	0	01361		SLQ N2		DIMENSION 2,	4F12940
	05462	-0	76300	0	00022		LGL 18		AND DIMENSION 3.	4F12941
	05463	0	20000	0	01361		MPY N2		MULTIPLY	4F12942
	05464	0	76500	0	00022		LRS 18		THEM TOGETHER,	4F12943
	05465	0	20000	0	01102		MPY D3		AND IF	4F12944
	05466	0	76300	0	00021		LLS 17		THEIR	4F12945
	05467	0	40200	0	01407	DVS	SUB L(1)		PRODUCT IS	4F12946
	05470	0	10000	0	05533		TZE NODIM		GREATER THAN 1, THEN	4F12947
	05471	0	76700	0	00022		ALS 18		PLACE DIMENSION-1 IN THE	4F12948
	05472	0	60100	0	01347		STO G		DECREMENT OF G, AND	4F12949
	05473	0	07400	4	00417		TSX FXCNIX,4	*	GO ENTER IN FIXCON, AND GET TAG.	4F12950
	05474	0	76700	0	00022		ALS 18		ADJUST, AND STORE TAG IN THE	4F12951
	05475	0	62200	0	01364		STD RAT		INCREMENT OF RAT. THEN	4F12952
	05476	0	07400	4	02372		TSX JIF,4	*	GO JUMP IFN, AND SET SL AND TL.	4F12953
	05477	0	07400	4	01731		TSX CIT,4	*	GO MAKE THE FOLLOWING CIT ENTRY=	4F12954
	05500	0	00000	0	01367		PZE SL		WORD1--0(IFN)000	4F12955
	05501	0	00000	0	01561		PZE LXD		WORD2--LXD000	4F12956
	05502	0	00000	0	01501		PZE 2P		WORD3--200000	4F12957
	05503	0	00000	0	01364		PZE RAT		WORD4--0(FIXCON TAG)008	4F12958
	05504	0	07400	4	02372		TSX JIF,4	*	GO JONP IFN, AND SET SL AND TL.	4F12959
	05505	0	07400	4	05754		TSX ETMSW,4	*	IF ETMSW = NOP, COMPILE ETM, SL=0.	4F12960
	05506	0	07400	4	01731		TSX CIT,4	*	GO MAKE THE FOLLOWING CIT ENTRY=	4F12961
	05507	0	00000	0	01367		PZE SL		WORD1--0(IFN)000 OR 000000	4F12962
	05510	0	00000	0	17401		PZE OP		WORD2--(OPERATION CODE)	4F12963
	05511	0	00000	0	17403		PZE SA		WORD3--(SYMBOLIC ADDRESS)	4F12964
	05512	0	00000	0	01416		PZE ST		WORD4--000008	4F12965
	05513	0	60000	0	01367		STZ SL		CLEAR SL, AND	4F12966
	05514	0	07400	4	05757		TSX LTMSW,4	*	IF LTMSW = NOP, COMPILE LTM. SL=0.	4F12967
	05515	0	07400	4	02375		TSX GIF,4	*	GET IFN IN SL AND TL.	4F12968
	05516	0	07400	4	01731		TSX CIT,4	*	GO MAKE THE FOLLOWING CIT ENTRY=	4F12969
	05517	0	00000	0	01406		PZE L(0)		WORD1--000000	4F12970

	05520	0	00000	0	01576		PZE	TIX		WORD2--TIX001	4F12971
	05521	0	00000	0	01367		PZE	SL		WORD3--0(IFN)0004	4F12972
	05522	0	00000	0	01416		PZE	ST		WORD4--000008	4F12973
	05523	0	60000	0	01367		STZ	SL		CLEAR SL, AND	4F12974
	05524	0	07400	4	05754		TSX	ETMSW,4		* IF ETMSW = NOP, COMPILE ETM, SL=0.	4F12975
	05525	0	07400	4	01731		TSX	CIT,4		* GO MAKE THE FOLLOWING CIT ENTRY=	4F12976
	05526	0	00000	0	01406		PZE	L(0)		WORD1--000000	4F12977
	05527	0	00000	0	01546		PZE	DED		WORD2--DED000	4F12978
	05530	0	00000	0	01406		PZE	L(0)		WORD3--000000	4F12979
	05531	0	00000	0	01416		PZE	ST		WORD4--000008	4F12980
D	05532	1	00000	0	05537		TXI	CMA5,0		IF THE PRODUCT OF DIMENSIONS IS	4F12981
	05533	0	07400	1	05773	NODIM	TSX	IFFIX,1		* LESS THAN 2, TEST TYPE OF VARIABLE,	4F12982
D	05534	1	00000	0	05537		TXI	CMA5,0		AND IF FIXED POINT,	4F12983
	05535	0	07400	1	03321		TSX	TET00,1		* GO ENTER VARIABLE IN	4F12984
	05536	0	00000	0	00000	INOUT	PZE	**		EITHER FORVAL OR FORVAR TABLE.	4F12985
	05537	0	07400	4	01731	CMA5	TSX	CIT,4		* GO MAKE THE FOLLOWING CIT ENTRY=	4F12986
	05540	0	00000	0	01367		PZE	SL		WORD1--0(IFN)000 OR 000000	4F12987
	05541	0	00000	0	17401		PZE	OP		WORD2--NTR000 OR CPY000	4F12988
	05542	0	00000	0	17403		PZE	SA		WORD3--(SYMBOL)	4F12989
	05543	0	00000	0	17402		PZE	RA		WORD4--(RELATIVE ADDRESS)	4F12990
	05544	0	60000	0	01367		STZ	SL		CLEAR SL, AND	4F12991
	05545	0	60000	0	01351		STZ	GTAG		CLEAR GTAG. THEN TAKE EXIT	4F12992
D	05546	1	00000	0	05147	CMA3	TXI	NXS,0		* SWITCH TO RPT OR NXS.	4F12993
								END OF PROGRAM CMA.			4F12994
								*****			4F12995
								EMK/ CALLS=DIAG,LTMSW,JIF,CIT,LIB,TET00. USES=CMA.			4F12997
								EMK = ENTRY POINT WHEN AN ENDMARK IS MET IN LIST SCAN.			4F12998
	05547	3	00006	2	05414	EMK	TXH	CMA1,2,6		* IF NO CHARACTERS REMAIN, THEN	4F12999
	05550	-0	53400	4	17400		LXD	DOLEV,4		CHECK THE NUMBER OF PARENTHESES.	4F13000
	05551	-3	00000	4	05553		TXL	FIN,4,0		IF THERE ARE TOO MANY LPARENS,	4F13001
	05552	0	07400	4	03400		TSX	DIAG,4		* GO TO THE DIAGNOSTIC. OTHERWISE,	4F13002
	05553	0	07400	4	05757	FIN	TSX	LTMSW,4		* IF LTMSW = NOP, COMPILE LTM. SL=0.	4F13003
	05554	0	07400	4	02372		TSX	JIF,4		* GO JUMP IFN, AND SET SL AND TL.	4F13004
								LAST = ENTRY POINT SET BY BXT SWITCH.			4F13005
	05555	0	07400	4	01731	LAST	TSX	CIT,4		* GO MAKE THE FOLLOWING CIT ENTRY=	4F13006
	05556	0	00000	0	01367		PZE	SL		WORD1--0(IFN)000	4F13007
	05557	0	00000	0	01537		PZE	CAL		WORD2--CAL000	4F13008
	05560	0	00000	0	01510		PZE	15P		WORD3--*00000	4F13009
	05561	0	00000	0	01406		PZE	L(0)		WORD4--000000	4F13010
	05562	0	07400	4	06023		TSX	LIB,4		* MAKE CLOSUR ENTRY, AND COMPILE=	4F13011
	05563	0	00000	0	01406		PZE	L(0)		WORD1--000000	4F13012
	05564	0	00000	0	06125		PZE	XIT		WORD2--XITO00	4F13013
	05565	0	00000	0	06141		PZE	END		WORD3--(RTN) OR (FIL)	4F13014
	05566	0	00000	0	01406		PZE	L(0)		WORD4--000000	4F13015
								FINI = ENTRY POINT USED BY EFT.			4F13016
	05567	0	50000	0	05376	FINI	CLA	RESET		RESET BXT SWITCH	4F13017
	05570	0	62100	0	04744		STA	BXT		TO RSC.	4F13018
	05571	0	50000	0	01151		CLA	F-1		TEST FOR AN EXTERNAL	4F13019
	05572	0	40200	0	01477		SUB	5BLANS		STATEMENT NUMBER, AND IF NONE,	4F13020
	05573	0	10000	0	03440		TZE	CA010		* EXIT TO PROCESS NEXT STATEMENT.	4F13021
	05574	-0	50000	0	01520		CAL	MINUS0		OTHERWISE, SET THE SIGN	4F13022
	05575	-0	60200	0	00030		ORS	EIFNO		OF EIFNO TO MINUS, AND	4F13023
	05576	0	07400	1	03321		TSX	TET00,1		* GO ENTER -(EIFNO)	4F13024


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05644 1 77777 2 05636 TXI CSJ-1,2,-1 AND WHEN DONE, 4F13077
05645 0 02000 4 00002 INT TRA 2,4 * TAKE CONSTANT EXIT TO CALLER. 4F13078
      END OF PROGRAM BEG(TYP). 4F13079
      * * * * * 4F13080
      * * * * * 4F13081
      BRW,4/ CALLS=JIF,BEG,VRA,CIT. CALLERS=WBT,RBT,WRD. 4F13082
05646 -0 63400 4 06054 BRW SXD XRW,4 SAVE THE C(XR4), AND 4F13083
05647 0 60200 0 06140 SLW CON SET CON = 0 OR ,,144 OR ,,192. 4F13084
05650 0 07400 4 02372 TSX JIF,4 * GO JUMP IFN, AND SET SL AND TL. 4F13085
05651 0 07400 4 05603 TSX BEG,4 * GO SCAN AND TEST TYPE OF SYMBOL. 4F13086
05652 0 07400 4 06032 TSX VRA,4 * IF VARIABLE, ENTER FORVAR AND CITS. 4F13087
05653 0 76700 0 00022 ALS 18 IF CONSTANT, ADJUST CONVERTED 4F13088
05654 0 60100 0 17402 STO RA NUMBER, AND SET RA. 4F13089
05655 0 07400 4 01731 TSX CIT,4 * GO MAKE THE FOLLOWING CIT ENTRY= 4F13090
05656 0 00000 0 01371 PZE TL WORD1--0(IFN)0(248) 4F13091
05657 0 00000 0 17401 PZE OP WORD2--(WTB,RBT,WRD,RDD)000 4F13092
05660 0 00000 0 01406 PZE L(0) WORD3--000000 4F13093
05661 0 00000 0 17402 PZE RA WORD4--000000 OR 0(UNIT)000 4F13094
05662 -0 50000 0 01544 CAL CPY MOVE CPY000 4F13095
05663 0 60200 0 17401 SLW OP INTO OP. 4F13096
05664 -0 50000 0 00415 CAL TXLOP SET OP-SWITCHES, 4F13097
05665 0 63000 0 05754 STP ETMSW ETMSW AND LTMSW, 4F13098
05666 0 63000 0 05757 STP LTMSW TO THE TRA CASE. 4F13099
05667 -0 50000 0 06133 CAL RTN MOVE (RTN) 4F13100
05670 0 60200 0 06141 SLW END INTO END. 4F13101
05671 0 60000 0 01367 STZ SL CLEAR SL, 4F13102
05672 -0 53400 4 06054 LXN XRW,4 RESTORE THE C(XR4), AND 4F13103
05673 0 02000 4 00001 TRA 1,4 * EXIT TO CALLER. 4F13104
      END OF PROGRAM BRW. 4F13105
      * * * * * 4F13106
      * * * * * 4F13107
      BSS,2/ CALLS=CIT00. CALLERS=LPR,C1600. 4F13108
      BSS COMPILES= IFN BSS 0. 4F13109
05674 0 07400 4 01731 BSS TSX CIT00,4 * GO MAKE FOLLOWING CIT ENTRY= 4F13110
05675 0 00000 0 01367 PZE SL WORD1--0(IFN)000 4F13111
05676 0 00000 0 01536 PZE L(BSS) WORD2--BSS000 4F13112
05677 0 00000 0 01406 PZE L(0) WORD3--000000 4F13113
05700 0 00000 0 01406 PZE L(0) WORD4--000000 4F13114
05701 0 02000 2 00001 TRA 1,2 * EXIT TO CALLER+1. 4F13115
      END OF PROGRAM BSS. 4F13116
      * * * * * 4F13117
      * * * * * 4F13118
      CA100,4/ CALLS=DIAG. CALLER=CA000. 4F13119
      CA100 READS NEXT SOURCE PROGRAM CARD (1 TAPE RECORD). 4F13120
05702 0 53400 2 01413 CA100 LXN TERC,2 PREPARE TO COUNT 4F13121
05703 -0 63400 2 01112 SXD 1G,2 TAPE READING ERRORS. 4F13122
05704 -0 76000 0 00012 RTT TURN OFF TAPE CHECK INDICATOR. 4F13123
05705 0 76100 0 00000 NOP PROCEED TO NEXT INSTRUCTION. 4F13124
05706 0 76200 0 00202 CA101 RDS 130 SELECT SOURCE TAPE FOR READING. 4F13125
05707 0 53400 2 01420 LXN L(12),2 INITIALIZE INDEX B FOR 12 CYCLES OF 4F13126
      COPY LOOP. 4F13127
05710 0 70000 2 01347 CA102 CPY FT+12,2 COPY INTO FT REGION 4F13128
05711 0 02000 0 05721 TRA CA103 NEXT SOURCE PROGRAM CARD. 4F13129
05712 0 02000 0 05740 TRA CA120 END OF FILE, GO FINISH LAST STATEM. 4F13130

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	05713	-0	53400	2	01112	CA130	LXD	1G,2	TEST TAPE ERROR COUNTER	4F13131
	05714	2	00001	2	05716		TIX	CA131,2,1	BY TRYING TO REDUCE BY 1.	4F13132
	05715	0	07400	4	03400		TSX	DIAG,4	* FAILED 5 TIMES IN READING TAPE 2.	4F13133
	05716	-0	63400	2	01112	CA131	SXD	1G,2	SAVE REDUCED VALUE IN COUNTER.	4F13134
	05717	0	76400	0	00202		BST	130	BACKSPACE FORMULA TAPE,	4F13135
	05720	0	02000	0	05706		TRA	CA101	AND GO BACK TO READ AGAIN.	4F13136
	05721	2	00001	2	05710	CA103	TIX	CA102,2,1	TEST EXIT FROM LOOP.	4F13137
	05722	0	76600	0	00333		IOD		DELAY UNTIL TAPE DISCONNECTS.	4F13138
	05723	-0	76000	0	00012		RTT		CHECK READING OF TAPE.	4F13139
D	05724	1	00000	0	05713		TXI	CA130,0	IF INCORRECT, GO CHECK ERROR COUNT.	4F13140
	05725	0	53400	2	01420		LXA	L(12),2	PREPARE TO SCAN 12 WORDS OF CARD.	4F13141
	05726	0	50000	0	01526	CA112	CLA	BLANKS	TEST	4F13142
	05727	0	40200	2	01347		SUB	FT+12,2	FOR	4F13143
	05730	-0	10000	0	05733		TNZ	CA113	BLANK	4F13144
	05731	2	00001	2	05726		TIX	CA112,2,1	CARD.	4F13145
	05732	0	02000	0	05702		TRA	CA100	IF BLANK, GO TO READ NEXT CARD.	4F13146
	05733	-0	50000	0	01333	CA113	CAL	FT	IF NOT BLANK,	4F13147
	05734	0	77100	0	00036		ARS	30	EXAMINE FIRST	4F13148
	05735	0	40200	0	01421		SUB	L(C)	CHARACTER TO	4F13149
	05736	0	10000	0	05702		TZE	CA100	TEST FOR COMMENT CARD.	4F13150
	05737	0	02000	4	00001		TRA	1,4	* EXIT IF NEITHER BLANK NOR COMMENT.	4F13151
	05740	0	60000	0	01333	CA120	STZ	FT	INDICATE THAT FINAL	4F13152
	05741	-0	63400	0	02575		SXD	ENDWRD,0	STATEMENT HAS BEEN READ IN.	4F13153
	05742	0	02000	4	00001		TRA	1,4	* EXIT TO MAIN ROUTINE TO FINISH.	4F13154
								END OF PROGRAM CA100.		4F13155
								* * * * *		*4F13156
										4F13157
								CC500,4/ CALLER=CC000.		4F13158
								CC500 BRINGS NEXT CHARACTER OF DICTIONARY INTO AC(30-35).		4F13159
	05743	-0	75400	0	00000	CC500	PXD	,0	CLEAR THE AC.	4F13160
	05744	2	00001	2	05752		TIX	CC502,2,1	IF NO DICTIONARY CHARACTERS	4F13161
	05745	-0	53400	2	01113		LXD	2G,2	REMAIN IN THE MO, THEN	4F13162
	05746	0	56000	2	06145		LDQ	DIC,2	REFILL WITH NEXT DICTIONARY WORD.	4F13163
	05747	1	77777	2	05750		TXI	CC501,2,-1	RESET THE	4F13164
	05750	-0	63400	2	01113	CC501	SXD	2G,2	DICTIONARY WORD TAG, AND	4F13165
	05751	0	53400	2	01414		LXA	L(6),2	SET THE CHARACTER COUNT = 6.	4F13166
	05752	-0	76300	0	00006	CC502	LGL	6	SMIFT CHAR INTO AC(30-35),	4F13167
	05753	0	02000	4	00001		TRA	1,4	* AND RETURN TO CALLER.	4F13168
								END OF PROGRAM CC500.		4F13169
								* * * * *		*4F13170
										4F13171
								ETMSW(LTMSW),4/ CALLS=CIT. CALLERS=RDC,LPR,SPC,CMA,EMK.		4F13172
								ETMSW = ENTRY POINT USED BY RDC,CMA.		4F13173
D	05754	-3	00000	0	05772	ETMSW	TXL	NOTTM,0	SWITCH (TXL=TRA, TXH=NOPI.	4F13174
	05755	-0	50000	0	06112		CAL	ETM	PICKUP ETM000, AND	4F13175
	05756	1	00000	0	05761	XR4X	TXI	SETOP,0,**	GO SET OP.	4F13176
								LTMSW = ENTRY POINT USED BY LPR,SPC,CMA,EMK.		4F13177
D	05757	-3	00000	0	05772	LTMSW	TXL	NOTTM,0	SWITCH (TXL=TRA, TXH=NOP).	4F13178
	05760	-0	50000	0	06113		CAL	LTM	PICKUP LTM000, AND	4F13179
	05761	0	60200	0	06142	SETOP	SLW	TOP	SET TOP.	4F13180
	05762	-0	63400	4	05756		SXD	XR4X,4	SAVE THE C(XR4), AND	4F13181
	05763	0	07400	4	01731		TSX	CIT,4	* GO MAKE THE FOLLOWING CIT ENTRY=	4F13182
	05764	0	00000	0	01367		PZE	SL	WORD1--0(IFN)000	4F13183
	05765	0	00000	0	06142		PZE	TOP	WORD2--ETM000 OR LTM000	4F13184

					VRA(VRD) , 4/ CALLS=IFFIX,DIAG,TET00,CIT,DRTABS,JIF.		4F13239
					CALLERS=RIT,WOT,EFT.		4F13240
					VRA = ENTRY POINT USED BY EFT.		4F13241
06032	0	50000	0	02400	VRA CLA L(TL)	RESET TPOA ADDRESS	4F13242
06033	0	62100	0	05102	STA TPOA	TO TL.	4F13243
06034	-0	50000	0	00415	CAL TXLOP	PREPARE TO SET OP-SWITCH TO TRA.	4F13244
06035	1	77777	4	06037	TXI VRD1,4,-1	SET RETURN TO TSX+2, AND GO SET OP.	4F13245
					VRD = ENTRY POINT USED BY	RIT,WOT.	4F13246
06036	0	50000	0	00415	VRD CLA TXLOP	PREPARE TO SET OP-SWITCH TO NOP.	4F13247
06037	0	63000	0	06052	VRD1 STP VRX	SET VRX OP-SWITCH.	4F13248
06040	-0	63400	4	06052	STD VRX,4	SAVE THE C(XR4) FOR RETURN.	4F13249
06041	0	07400	1	05773	TSX IFFIX,1	* SET UP IFN AND SYMBOL FOR FORVAR.	4F13250
06042	0	07400	4	03400	TSX DIAG,4	* ILLEGAL USE OF FLOATING VARIABLE.	4F13251
06043	0	07400	1	03321	TSX TET00,1	* IF SYMBOL IS FXD-PT, GO MAKE	4F13252
06044	0	00000	0	00005	PZE 5	ENTRY IN FORVAR TABLE.	4F13253
06045	0	07400	4	01731	TSX CIT,4	* GO MAKE THE FOLLOWING CIT ENTRY=	4F13254
06046	0	00000	0	01367	PZE SL	WORD1--0(IFN)000	4F13255
06047	0	00000	0	01537	PZE CAL	WORD2--CAL000	4F13256
06050	0	00000	0	17404	PZE SYM	WORD3--(FXD-PT SYMBOL)	4F13257
06051	0	00000	0	01406	PZE L(0)	WORD4--000000	4F13258
06052	3	00000	0	06055	VRX TXH VDA,0,**	SWITCH (TXL=TRA, TXH=NOP).	4F13259
06053	-0	50000	0	06121	CAL STD	PICKUP STD000, AND	4F13260
06054	1	00000	0	06076	XRW TXI RVX,0,**	GO SET TOP.	4F13261
06055	0	50000	0	06140	VDA CLA CON	IF CON	4F13262
06056	0	10000	0	06070	TZE SDA	IS NOT ZERO,	4F13263
06057	0	60100	0	01347	STO G	THEN	4F13264
06060	0	07400	4	00417	TSX FXCNIX,4	* ENTER CON IN FIXCON,AND GET TAG.	4F13265
06061	0	76700	0	00022	ALS 18	ADJUST TAG, AND	4F13266
06062	0	60100	0	17402	STO RA	SET RA.	4F13267
06063	0	07400	4	01731	TSX CIT,4	* GO MAKE THE FOLLOWING CIT ENTRY.	4F13268
06064	0	00000	0	01406	PZE L(0)	WORD1--000000	4F13269
06065	0	00000	0	01532	PZE ADD	WORD2--ADD000	4F13270
06066	0	00000	0	01501	PZE 2P	WORD3--200000	4F13271
06067	0	00000	0	17402	PZE RA	WORD4--(FIXCON TAG)	4F13272
06070	0	07400	4	01731	SDA TSX CIT,4	* GO MAKE THE FOLLOWING CIT ENTRY=	4F13273
06071	0	00000	0	01406	PZE L(0)	WORD1--000000	4F13274
06072	0	00000	0	01535	PZE ARS	WORD2--ARS000	4F13275
06073	0	00000	0	01406	PZE L(0)	WORD3--000000	4F13276
06074	0	00000	0	01466	PZE D18	NORD4--0(18)000	4F13277
06075	-0	50000	0	01571	CAL STA	PICKUP STA000, AND	4F13278
06076	0	60200	0	06142	RVX SLW TOP	SET TOP TO STA OR STD.	4F13279
06077	0	07400	4	02372	TSX JIF,4	* GO JUMP IFN, AND SET SL AND TL.	4F13280
06100	0	07400	4	01731	TSX CIT,4	* GO MAKE THE FOLLOWING CIT ENTRY=	4F13281
06101	0	00000	0	01406	PZE L(0)	WORD1--000000	4F13282
06102	0	00000	0	06142	PZE TOP	WORD2--STA000 OR STD000	4F13283
06103	0	00000	0	01371	PZE TL	WORD3--0(IFN)000	4F13284
06104	0	00000	0	01406	PZE L(0)	WORD4--000000	4F13285
06105	-0	75400	0	05555	NLA PXD LAST,0	CLEAR THE AC,	4F13286
06106	-0	53400	4	06052	LXD VRX,4	RESTORE THE C(XR4), AND	4F13287
06107	0	02000	4	00001	TRA 1,4	* EXIT TO CALLER.	4F13288
					END OF PROGRAM VRA(VRD).		4F13289
					* * * * *		*4F13290
							4F13291
					STATEA/5-CONSTANTS AND VARIABLES USED BY STATE A=		4F13292

06110	222324000000	BCD	BCD	1BCD000	CONSTANT	USED	BY	IOT.	4F13293
06111	226263000000	BST	BCD	1BST000	CONSTANT	USED	BY	IOT.	4F13294
06112	256344000000	ETM	BCD	1ETM000	CONSTANT	USED	BY	IOT.	4F13295
06113	436344000000	LTM	BCD	1LTM000	CONSTANT	USED	BY	IOT.	4F13296
06114	456351000000	NTR	BCD	1NTR000	CONSTANT	USED	BY	IOT.	4F13297
06115	512451000000	RDR	BCD	1RDR000	CONSTANT	USED	BY	IOT.	4F13298
06116	512566000000	REW	BCD	1REW000	CONSTANT	USED	BY	IOT.	4F13299
06117	516322000000	RTB	BCD	1RTB000	CONSTANT	USED	BY	IOT.	4F13300
06120	624366000000	SLW	BCD	1SLW000	CONSTANT	USED	BY	IOT.	4F13301
06121	626324000000	STD	BCD	1STD000	CONSTANT	USED	BY	IOT.	4F13302
06122	662451000000	WDR	BCD	1WDR000	CONSTANT	USED	BY	IOT.	4F13303
06123	662526000000	WEF	BCD	1WEF000	CONSTANT	USED	BY	IOT.	4F13304
06124	666322000000	WTB	BCD	1WTB000	CONSTANT	USED	BY	IOT.	4F13305
06125	673163000000	XIT	BCD	1XIT000	CONSTANT	USED	BY	IOT.	4F13306
06126	742224233460	BDC	BCD	1(BDC)	CONSTANT	USED	BY	IOT.	4F13307
06127	742362303460	CSH	BCD	1(CSH)	CONSTANT	USED	BY	IOT.	4F13308
06130	742422233460	DBC	BCD	1(DBC)	CONSTANT	USED	BY	IOT.	4F13309
06131	742631433460	FIL	BCD	1(FIL)	CONSTANT	USED	BY	IOT.	4F13310
06132	744325653460	LEV	BCD	1(LEV)	CONSTANT	USED	BY	IOT.	4F13311
06133	745163453460	RTN	BCD	1(RTN)	CONSTANT	USED	BY	IOT.	4F13312
06134	746223303460	SCH	BCD	1(SCH)	CONSTANT	USED	BY	IOT.	4F13313
06135	746247303460	SPH	BCD	1(SPH)	CONSTANT	USED	BY	IOT.	4F13314
06136	746263303460	STH	BCD	1(STH)	CONSTANT	USED	BY	IOT.	4F13315
06137	746362303460	TSH	BCD	1(TSH)	CONSTANT	USED	BY	IOT.	4F13316
									4F13317
									4F13318
		06140	CON	BSS	1	VARIABLE	USED	BY	4F13319
06141	0 00000 0 00000	END	PZE	**	VARIABLE	USED	BY	IOT.	4F13320
		06142	TOP	BSS	1	VARIABLE	USED	BY	4F13322
06143	0 00000 0 00000	TSA	PZE	**	VARIABLE	USED	BY	IOT.	4F13323
06144	0 00000 0 00000	TTA	PZE	**	VARIABLE	USED	BY	IOT.	4F13324
									4F13325
									4F13326
									4F13327
06145	+244677274663	DIC	OCT	244677274663	DO-GOT				4F13328
06146	-067731267462		OCT	-67731267462	O-IF(S				4F13329
06147	+254562256266		OCT	254562256266	ENSESW				4F13330
06150	+316323307731		OCT	316323307731	ITCH-I				4F13331
06151	+267462254562		OCT	267462254562	F(SENS				4F13332
06152	+254331273063		OCT	254331273063	ELIGHT				4F13333
06153	-373126243165		OCT	-373126243165	-IFDIV				4F13334
06154	+312425233025		OCT	312425233025	IDECHE				4F13335
06155	+234277312621		OCT	234277312621	CK-IFA				4F13336
06156	+232364446443		OCT	232364446443	CCUMUL				4F13337
06157	+216346514665		OCT	216346514665	ATOROV				4F13338
06160	+255126434666		OCT	255126434666	ERFLOW				4F13339
06161	-373126506446		OCT	-373126506446	-IFQUO				4F13340
06162	-233125456346		OCT	-233125456346	TIENTO				4F13341
06163	-252551264346		OCT	-252551264346	VERFLO				4F13342
06164	-267731267721		OCT	-267731267721	W-IF-A				4F13343
06165	-226231274577		OCT	-226231274577	SSIGN-				4F13344
06166	-226346477747		OCT	-226346477747	STOP-P				4F13345
06167	+216462257762		OCT	216462257762	AUSE-S				4F13346
06170	+254562254331		OCT	254562254331	ENSELI				4F13347
06171	+273063772431		OCT	273063772431	GHT-DI				4F13347

06172	-042545623146	OCT	-42545623146	MENSIO	4F13348
06173	-057725506431	OCT	-57725506431	N-EQUI	4F13349
06174	-252143254523	OCT	-252143254523	VALENC	4F13350
06175	+257726512550	OCT	257726512550	E-FREQ	4F13351
06176	-242545237077	OCT	-242545237077	UENCY-	4F13352
06177	+234645633145	OCT	234645633145	CONTIN	4F13353
06200	-242577512521	OCT	-242577512521	UE-REA	4F13354
06201	+246321472577	OCT	246321472577	DTAPE-	4F13355
06202	-112521243145	OCT	-112521243145	READIN	4F13356
06203	-076463632147	OCT	-76463632147	PUTTAP	4F13357
06204	+257751252124	OCT	257751252124	E-READ	4F13358
06205	+245164447751	OCT	245164447751	DRUM-R	4F13359
06206	+252124776651	OCT	252124776651	EAD-WR	4F13360
06207	+316325632147	OCT	316325632147	ITETAP	4F13361
06210	+257766513163	OCT	257766513163	E-WRIT	4F13362
06211	+254664634764	OCT	254664634764	EOUTPU	4F13363
06212	-236321472577	OCT	-236321472577	TTAPE-	4F13364
06213	-265131632524	OCT	-265131632524	WRITED	4F13365
06214	-116444774751	OCT	-116444774751	RUM-PR	4F13366
06215	+314563774764	OCT	314563774764	INT-PU	4F13367
06216	-052330775125	OCT	-52330775125	NCH-RE	4F13368
06217	-263145247722	OCT	-263145247722	WIND-B	4F13369
06220	+212342624721	OCT	212342624721	ACKSPA	4F13370
06221	+232577254524	OCT	232577254524	CE-END	4F13371
06222	+263143257726	OCT	263143257726	FILE-F	4F13372
06223	-065144216377	OCT	-65144216377	ORMAT-	4F13373
06224	-226422514664	OCT	-226422514664	SUBROU	4F13374
06225	-233145257723	OCT	-233145257723	TINE-C	4F13375
06226	-064444464577	OCT	-064444464577	OMMON-	4F13376
06227	-112563645145	OCT	-112563645145	RETURN	4F13377
06230	-372321434377	OCT	-372321434377	-CALL-	4F13378
06231	+254524747726	OCT	254524747726	END(-F	4F13379
06232	-244523633146	OCT	-244523633146	UNCTIO	4F13380
06233	-057777777777	OCT	-057777777777	N-----	4F13381
	06234	BSS	10		4F133815
				END OF DICTIONARY.	4F13382
				* * * * *	4F13383
					4F13384
				T/ TRANSFER TABLE (USED BY CC000).	4F13385

D	06246	1	00000	0	03653	T	TXI	C0100,0	DO.	4F13386
D	06247	1	00000	0	03720		TXI	C0200,0	GO TO.	4F13387
D	06250	1	00000	0	04106		TXI	C0400,0	IF (SENSE SWITCH.	4F13388
D	06251	1	00000	0	04150		TXI	C0500,0	IF (SENSE LIGHT.	4F13389
D	06252	1	00000	0	04154		TXI	C0600,0	IF DIVIDE CHECK.	4F13390
D	06253	1	00000	0	04162		TXI	C0700,0	IF AC OVERFLOW.	4F13391
D	06254	1	00000	0	04166		TXI	C0800,0	IF MQ OVERFLOW.	4F13392
D	06255	1	00000	0	04033		TXI	C0300,0	IF.	4F13393
D	06256	1	00000	0	04216		TXI	C1000,0	ASSIGN.	4F13394
D	06257	1	00000	0	04343		TXI	C1300,0	STOP.	4F13395
D	06260	1	00000	0	04170		TXI	C0900,0	PAUSE.	4F13396
D	06261	1	00000	0	04251		TXI	C1100,0	SENSE LIGHT.	4F13397
D	06262	-3	00000	0	04266		TXL	C1200,0	DIMENSION.	4F13398
D	06263	-3	00000	0	04375		TXL	C1500,0	EQUIVALENCE.	4F13399
D	06264	-3	00000	0	04354		TXL	C1400,0	FREQUENCY.	4F13400

D	06265	1	00000	0	04433	TXI	C1600,0	CONTINUE.	4F13401	
D	06266	1	00000	0	05012	TXI	RBT,0	READ TAPE.	4F13402	
D	06267	1	00000	0	04745	TXI	RIT,0	READ INPUT TAPE.	4F13403	
D	06270	1	00000	0	05063	TXI	RDD,0	READ DRUM.	4F13404	
D	06271	1	00000	0	04673	TXI	RDC,0	READ CARD.	4F13405	
D	06272	1	00000	0	04777	TXI	WBT,0	WRITE TAPE.	4F13406	
D	06273	1	00000	0	04764	TXI	WOT,0	WRITE OUTPUT TAPE.	4F13407	
D	06274	1	00000	0	05044	TXI	WRD,0	WRITE DRUM.	4F13408	
D	06275	1	00000	0	04753	TXI	RDP,0	PRINT.	4F13409	
D	06276	1	00000	0	04772	TXI	PDC,0	PUNCH.	4F13410	
D	06277	1	00000	0	05107	TXI	RWN,0	REWIND.	4F13411	
D	06300	1	00000	0	05111	TXI	BSP,0	BACKSPACE.	4F13412	
D	06301	1	00000	0	05066	TXI	EFT,0	END FILE.	4F13413	
D	06302	-3	00000	0	05113	TXL	FOR,0	FORMAT.	4F13414	
D	06303	-3	00000	0	04442	TXL	C3000,0	SUBROUTINE.	4F13415	
D	06304	-3	00000	0	04512	TXL	C3100,0	COMMON.	4F13416	
D	06305	1	00000	0	04536	TXI	C3200,0	RETURN.	4F13417	
D	06306	1	00000	0	04607	TXI	C3300,0	CALL.	4F13418	
D	06307	-3	00000	0	04660	TXL	C3400,0	END.	4F13419	
D	06310	-3	00000	0	04440	TXL	C3500,0	FUNCTION.	4F13420	
					06311	BSS	10		4F134205	
								END OF TRANSFER TABLE.	4F13421	
					06323	STATEB	BSS	0	4F134215	
								* * * * *	*4F13422	
									4F13423	
					17307	ORG	3783+4096		4F13424	
					17307	BIN	BSS	1	4F13425	
								VARIABLE USED BY IOT.	4F13425	
					17316	CHR	BES	6	4F13426	
								VARIABLE USED BY IOT.	4	4F13426
					17316		BSS	50	4F13427	
								PARAMETERS FOR TLDOS TABLE -IOT.	4F13427	
					17400	DOLEV	BSS	1	4F13428	
								PARAMETERS FOR TLDOS TABLE -IOT.	4F13428	
					17401	OP	BSS	1	4F13429	
								VARIABLE USED BY IOT.	4F13429	
					17402	RA	BSS	1	4F13430	
								VARIABLE USED BY IOT.	4F13430	
					17403	SA	BSS	1	4F13431	
								VARIABLE USED BY IOT.	4F13431	
					17404	SYM	BSS	1	4F13432	
								VARIABLE USED BY IOT.	4F13432	
					17405	TLDOS	BSS	250	4F13433	
								DO TABLE USED BY IOT.	4F13433	
								END OF WORKING STORAGE USED BY STATEA.	4F13434	
								* * * * *	*4F13435	
									4F13436	
								END OF THE NON-ARITHMETIC PART OF SECTION ONE.	4F13437	
								* * * * *	*4F13438	
									4F13438	
								* * * * *	*4F13439	
									4F13440	
								ARITHMETIC / STATE B=	4F13441	
					00000	ORG	0		4F13442	
					00000	0	00471	0	06323	4F13443
					00001	0	00000	0	12764	4F13444
									06323	4F134441
										4F13445
										4F13446
								THIS IS A RECODED VERSION OF STATE B OF SECTION ONE, 704	4F13446	
								FORTRAN II. THE SCAN HAS BEEN COMPLETELY RECODED AND LEVEL	4F13447	
								ANALYSIS HAS BEEN FOLDED OVER.	4F13448	
									4F13449	
								STATE B CONSISTS OF TWO PARTS...SCAN AND LEVEL ANALYSIS.	4F13450	
								THE SCAN IS LEFT TO RIGHT OVER THE SOURCE STATEMENT WHICH IS	4F13451	

IN THE F REGION OF COMMON AND IS IN BCD. 4F13452
 EACH FIXED POINT CONSTANT, FLOATING POINT CONSTANT, AND BCD 4F13453
 (HOLLERITH) ARGUMENT IN CALL NAME STATEMENTS ARE ENTERED IN 4F13454
 TABLES AND GIVEN AN INTERNAL VARIABLE NAME. 4F13455
 LEVEL ANALYSIS IS PERFORMED FOR EACH ELEMENT OF THE STATEMENT 4F13456
 WHERE AN ELEMENT IS DEFINED AS A VARIABLE, FUNCTION NAME OR (4F13457
 AND THE OPERATOR WHICH PRECEDES IT. 4F13458

06323	0	76000	0	00140	SLF			4F13459
06324	0	50000	0	07624	CLA	SIG1ST		4F13460
06325	0	60100	0	00445	STO	SIG1IX-3		4F13461
06326	0	60000	0	01122	STZ	ARGCTR	CLEAR	4F13462
06327	0	60000	0	01124	STZ	CHSAVE	X	4F13463
06330	0	60000	0	01117	STZ	3LBAR	X	4F13464
06331	0	60000	0	01360	STZ	NBAR	X	4F13465
06332	0	60000	0	15277	STZ	CBAR	X	4F13466
06333	0	60000	0	15300	STZ	ABAR	X	4F13467
06334	0	60000	0	15301	STZ	FSTYPE	X	4F13468
06335	-0	53400	4	01507	LXD	1BAR,4	SET NBAR=-1	4F13469
06336	-0	63400	4	01360	SXD	NBAR,4	X	4F13470
06337	-0	50000	0	01500	CAL	E(	SET ARERAS - E(	4F13471
06340	0	60200	0	01120	SLW	ARERAS	X	4F13472
06341	0	07400	4	01671	TSX	C0190X,4	SET FWA - -F AND CHCTR - 0	4F13473
06342	-0	50000	0	00422	CAL	TXHOP	SET SWITCHES FOR LEFT SCAN.	4F13474
06343	0	63000	0	06446	STP	MS093	X	4F13475
06344	0	63000	0	06652	STP	MS310	X	4F13476
06345	0	63000	0	06633	STP	MS321	X	4F13477
06346	-0	50000	0	01512	CAL	ADPLUS	SET OP TO ADDITION	4F13478
06347	0	60200	0	01127	SLW	E+1	X	4F13479
06350	0	60000	0	15303	STZ	FNBITS	CLEAR FUNCTION NAME INDICATOR	4F13480
06351	0	60000	0	15304	STZ	FNCTR	CLEAR FUNCTION ARG COUNTER.	4F13481
06352	0	60000	0	01347	STZ	G	CLEAR RECEIVING CELL.	4F13482
06353	0	50200	0	01406	CLS	L(0)	SET E = -0	4F13483
06354	0	60100	0	01126	STO	E	X	4F13484
06355	0	53400	2	01414	LXA	L(6),2	SET IR2 FOR SIX CHARS.	4F13485
06356	-0	50000	0	01124	CAL	CHSAVE	CHAR IN CHSAVE, IF ANY, TO AC.	4F13486
06357	-0	10000	0	06361	TNZ	MS041	X	4F13487
06360	0	07400	4	01707	TSX	C0190,4	CHSAVE EMPTY, GET NEXT CHAR.	4F13488
06361	0	34000	0	01417	CAS	L(9)	IS CHAR. NUMERIC.	4F13489
06362	0	02000	0	06367	TRA	MS050	N/, TAKE TRA	4F13490
06363	3	00000	0	07302	TXH	CM4100,0		4F13491
06364	0	07400	4	07346	TSX	ROYCNV,4	X	4F13492
06365	0	02000	0	06713	TRA	HOLL	RETURN 1, THIS WAS HOLLERITH.	4F13493
06366	0	02000	0	06761	TRA	LATXH	THIS WAS FIXED OR FLOATING CONSTANT.	4F13494
06367	0	53400	4	01373	LXA	L(10),4	PREPARE TO TEST FOR PUNCTUATION.	4F13495
06370	0	34000	4	01406	CAS	CTEST,4		4F13496
06371	0	02000	0	06373	TRA	MS052	X	4F13497
06372	0	02000	0	06426	TRA	MS090	CHAR IS SOME PUNCTUATION.	4F13498
06373	2	00001	4	06370	TIX	MS051,4,1	X	4F13499
06374	0	76700	2	00044	ALS	36,2	POSITION CHAR FOR BUILDING SYMBOL.	4F13500
06375	-0	60200	0	01347	ORS	G	ADD CHAR TO THOSE IN G.	4F13501
06376	1	00006	2	06377	TXI	MS061,2,6	UPDATE POSITIONING TAG.	4F13502
06377	0	07400	4	01707	TSX	C0190,4	GET NEXT CHAR.	4F13503
06400	0	53400	4	01373	LXA	L(10),4	PREPARE TO TEST FOR PUNCTUATION.	4F13504
06401	0	34000	4	01406	CAS	CTEST,4	X	4F13505

06402	0	02000	0	06404		TRA MS072	X	4F13506
06403	0	02000	0	06430		TRA MS091	CHAR IS SOME PUNCTUATION.	4F13507
06404	2	00001	4	06401	MS072	TIX MS071,4,1	X	4F13508
06405	-3	00022	2	06374		TXL MS060,2,18	IF THIS IS CHAR 1, 2 /R 3 GO BUILD G.	4F13509
06406	0	34000	0	01422		CAS L(F)	IS THIS AN F ENDING FUNCTION NAME.	4F13510
06407	0	02000	0	06411		TRA MS073	X	4F13511
06410	0	02000	0	06413		TRA MS080	MAYBE, GO LOOK AT NEXT CHAR.	4F13512
06411	-3	00044	2	06374	MS073	TXL MS060,2,36	TEST FOR UNDER 7 CHARS.	4F13513
06412	0	07400	4	03400	MS074	TSX DIAG,4	BUILD G, 7TH CHAR IS ERROR.	4F13514
06413	0	07400	4	01707	MS080	TSX C0190,4	GET NEXT CHAR.	4F13515
06414	0	34000	0	01375		CAS OPEN	TEST FOR (.	4F13516
06415	0	02000	0	06417		TRA MS081	X	4F13517
06416	0	02000	0	06440		TRA MS092	YES, THIS IS A FUNCTION NAME.	4F13518
06417	0	60100	0	01331	MS081	STO FIRSTC	NO, SAVE CURRENT CHAR.	4F13519
06420	-0	50000	0	01422		CAL L(F)	ADD F TO CONTENTS OF G.	4F13520
06421	0	76700	2	00044		ALS 36,2	X	4F13521
06422	-0	60200	0	01347		ORS G	X	4F13522
06423	3	00044	2	06412		TXH MS074,2,36	TEST FOR 7TH CHAR, YES IS ERROR.	4F13523
06424	0	50000	0	01331		CLA FIRSTC	RESTORE CURRENT CHAR.	4F13524
06425	1	00006	2	06400		TXI MS070,2,6	UPDATE POSITIONING TAG.	4F13525
06426	0	60000	0	01124	MS090	STZ CHSAVE	CLEAR	4F13526
06427	0	02000	4	06562		TRA TRBLKA,4		4F13527
06430	0	60200	0	01124	MS091	SLW CHSAVE	OP IS IN NEXT ELEMENT, SAVE.	4F13528
06431	-0	50000	0	01430		CAL BLANK	ADD,BLANK TO CHARS IN G.	4F13529
06432	0	76700	2	00044		ALS 36,2	X	4F13530
06433	-0	60200	0	01347		ORS G	X	4F13531
06434	0	56000	0	01347		LDQ G	MOVE G TO E+2 AND TO G+1.	4F13532
06435	-0	60000	0	01130		STQ E+2	X	4F13533
06436	-0	60000	0	01350		STQ G+1	X	4F13534
06437	0	02000	4	06612		TRA TRBLKB,4	NOW BRANCH TO INDIVIDUAL ROUTINE	4F13535
06440	-0	75400	0	00000	MS092	PXD ,0	CLEAR	4F13536
06441	0	56000	0	01526		LDQ BLANKS	ADD BLANKS TO SUBROUTINE NAME IN G.	4F13537
06442	-0	76300	2	00052		LGL 42,2	X	4F13538
06443	-0	50100	0	01347		ORA G	X	4F13539
06444	0	60200	0	01347		SLW G	X	4F13540
06445	0	60200	0	01130		SLW E+2	MOVE FUNCTION NAME TO E+2.	4F13541
06446	0	00000	0	06711	MS093	*** MS335,0	TXH FOR LEFT SIDE, TXL FOR RIGHT SIDE.	4F13542
06447	-0	53400	4	00470		LXD BK,4	THIS IS ARITH FUNCTION STATEMENT.	4F13543
06450	0	60200	4	00471		SLW FORSUB,4	ENTER FUNCTION NAME IN FORSUB TABLE.	4F13544
06451	-0	50000	0	00030		CAL EIFNO	ENTER INTERNAL FORMULA NO IN FORSUB.	4F13545
06452	-0	32000	0	01527		ANA MASK1	X	4F13546
06453	0	60100	4	00472		STO FORSUB+1,4	X	4F13547
06454	1	77776	4	06455		TXI FS010,4,-2	UPDATE COUNT OF ENTRIES IN FORSUB.	4F13548
06455	-0	63400	4	00470	FS010	SXD BK,4	X	4F13549
06456	0	07400	4	01707	FS020	TSX C0190,4	GET FIRST CHAR OF ARGUMENT.	4F13550
06457	0	34000	0	01400		CAS EQUAL	TEST FOR EQUAL.	4F13551
06460	0	02000	0	06462		TRA FS030	X	4F13552
06461	0	02000	0	06640		TRA MS322	GO MOVE FROM E, E+1, E+2 TO LEFT, LEFT+1,+24	4F13553
06462	0	34000	0	01417	FS030	CAS L(9)	TEST FOR ILLEGAL ARGUMENT.	4F13554
06463	0	02000	0	06466		TRA FS040	LEGAL, CONTINUE	4F13555
06464	3	00000	0	07312	MS9002	TXH CM4200,0		4F13556
06465	0	07400	4	03400		TSX DIAG,4	BEGINS NUMERIC, ERROR.	4F13557
06466	0	07400	2	01624	FS040	TSX C0160,2	COLLECT ARGUMENT NAME IN 1G.	4F13558
06467	0	07400	4	03255		TSX TESTB0,4	TEST CHAR FOLLOWING ARG FOR , OR)	4F13559

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06470	-0	53400	2	01122	LXD ARGCTR,2	GET COUNT OF ARGUMENTS	4F13560
06471	0	56000	0	01112	LDQ 1G	ENTER ARGUMENT NAME IN ARGREG TABLE.	4F13561
06472	-0	60000	2	15215	STQ ARGREG,2	X	4F13562
06473	1	77777	2	06474	TXI FS050,2,-1	UPDATE COUNT OF ARGUMENTS.	4F13563
06474	-0	63400	2	01122	FS050 SXD ARGCTR,2		4F13564
06475	3	77716	2	06456	TXH FS020,2,-50	TEST FOR ARGREG TABLE OVERFLOW.	4F13565
06476	0	07400	4	03400	TSX DIAG,4	YES, ERROR.	4F13566
06477	0	07400	4	07353	MS200 TSX DECPNT,4	CONVERT BCD NUMBER TO BINARY	4F13567
06500	0	07400	4	03400	TSX DIAG,4	HOLLERITH RETURN, ERROR.	4F13568
06501	0	02000	0	06761	TRA LATXH	FLOATING POINT CONSTANT RETURN.	4F13569
06502	0	76000	0	00141	MS210 SLN 1	TURN , LITE ON.	4F13570
06503	-0	53400	1	01117	LXD 3LBAR,1	PERFORM LEVEL ANALYSIS FOR ,	4F13571
06504	-0	53400	4	15300	LXD ABAR,4		4F13572
06505	0	50200	4	15301	CLS ALPHA-4,4		4F13573
06506	0	60100	1	15520	STO LAMBDA,1		4F13574
06507	-0	50000	0	01522	CAL ADSPOP		4F13575
06510	0	60200	1	15521	SLW LAMBDA+1,1		4F13576
06511	0	50000	0	01360	CLA NBAR		4F13577
06512	0	77100	0	00022	ARS 18		4F13578
06513	0	60100	1	15522	STO LAMBDA+2,1		4F13579
06514	1	77775	1	06515	TXI MS211,1,-3		4F13580
06515	-0	63400	1	01117	MS211 SXD 3LBAR,1		4F13581
06516	-0	53400	1	01360	LXD NBAR,1		4F13582
06517	-0	63400	1	15277	SXD CBAR,1		4F13583
06520	1	77777	1	06521	TXI MS212,1,-1		4F13584
06521	-0	63400	1	01360	MS212 SXD NBAR,1		4F13585
06522	1	00003	4	06523	TXI MS213,4,3		4F13586
06523	-0	63400	4	15300	MS213 SXD ABAR,4		4F13587
06524	0	02000	0	06346	TRA MS010		4F13588
06525	-0	53400	4	15300	MS220 LXD ABAR,4	PERFORM LEVEL ANALYSIS FOR)	4F13589
06526	0	50000	4	15301	CLA ALPHA-4,4		4F13590
06527	0	73400	1	00000	PAX ,1		4F13591
06530	-0	63400	1	15277	SXD CBAR,1		4F13592
06531	1	00004	4	06532	TXI MS221,4,4		4F13593
06532	-0	63400	4	15300	MS221 SXD ABAR,4		4F13594
06533	0	02000	0	07310	TRA MS020		4F13595
06534	-0	53400	4	15300	MS230 LXD ABAR,4	PERFORM LEVEL ANALYSIS FOE ENDMK.	4F13596
06535	1	00003	4	06536	TXI MS231,4,3		4F13597
06536	-3	00000	4	06540	MS231 TXL MS232,4,0	FINISHED, HAS LEVEL BEEN REDUCED TO ZERO,	4F13598
06537	0	07400	4	03400	TSX DIAG,4	NO, ERROR.	4F13599
06540	-0	53400	4	01122	MS232 LXD ARGCTR,4	WAS THIS AN ARITH FUNCTION STATEMENT	4F13600
06541	-3	00000	4	07625	TXL STATEC,4,0		4F13601
06542	-0	50000	0	15301	CAL FSTYPE	YES, UPDATE FUNCTION TYPE AND	4F13602
06543	0	40000	0	01407	ADD L(1)	COMPLETE FORSUB ENTRY BY ASSIGNING	4F13603
06544	-0	53400	1	00470	LXD BK,1	TYPE NUMBER.	4F13604
06545	0	62100	1	00470	STA FORSUB-1,1	X	4F13605
06546	-0	60200	0	01120	ORS ARERAS	ALSO SAVE FOR LATER REFERENC.	4F13606
06547	0	02000	0	07625	TRA STATEC		4F13607
06550	0	02000	0	06534	TRA MS230	ENDMK	4F13608
06551	0	02000	0	06575	TRA MS260	(	4F13609
06552	0	02000	0	06502	TRA MS210	,	4F13610
06553	0	02000	0	06525	TRA MS220	)	4F13611
06554	0	07400	4	03400	MSERR= TSX DIAG,4	=	4F13612
06555	0	02000	0	06572	TRA MS250	-	4F13613

06556	0	02000	0	06572	TRA	MS250	/	4F13614
06557	0	02000	0	06477	TRA	MS200	.	4F13615
06560	0	02000	0	06572	TRA	MS250	+	4F13616
06561	0	76700	0	00036	MS240	ALS 30	* SAVE *	4F13617
				06562	TRBLKA	BSS 0		4F13618
06562	0	60200	0	01127	SLW	E+1	X	4F13619
06563	0	07400	4	01707	TSX	C0190,4	GET NEXT CHAR.	4F13620
06564	0	34000	0	01405	CAS	STAR	IS IT *	4F13621
06565	0	02000	0	06361	TRA	MS041	X	4F13622
06566	0	02000	0	06570	TRA	MS241	YES, THIS WAS **	4F13623
06567	0	02000	0	06361	TRA	MS041	NO, GO COMPARE TO OTHER PUNCTUATION.	4F13624
06570	-0	50000	0	01525	MS241	CAL STRSTR	REPLACE * WITH **	4F13625
06571	0	02000	0	06573	TRA	MS251	X	4F13626
06572	0	76700	0	00036	MS250	ALS 30	POSITION CHAR WHICH IS + OR - OR /	4F13627
06573	0	60200	0	01127	MS251	SLW E+1	PUT CURRENT OP IN E+1.	4F13628
06574	0	02000	0	06356	TRA	MS040	NOW GO COLLECT SYMBOL.	4F13629
06575	0	76700	0	00036	MS260	ALS 30	(TO SYMBOL WORD	4F13630
06576	0	60200	0	01130	SLW	E+2	X	4F13631
06577	0	02000	0	06757	TRA	LATXL	GO PERFORM LEVEL ANALYSIS FOR (	4F13632
06600	0	02000	0	06611	TRA	MS300	ENDMK	4F13633
06601	0	02000	0	06632	TRA	MS320	(	4F13634
06602	0	02000	0	06611	TRA	MS300	,	4F13635
06603	0	02000	0	06611	TRA	MS300	)	4F13636
06604	0	02000	0	06652	TRA	MS310	=	4F13637
06605	0	02000	0	06611	TRA	MS300	-	4F13638
06606	0	02000	0	06611	TRA	MS300	/	4F13639
06607	0	07400	4	03400	TSX	DIAG,4	.	4F13640
06610	0	02000	0	06611	TRA	MS300	+	4F13641
06611	-0	75400	0	00000	MS300	PXD ,0	* CLEAR	4F13642
				06612	TRBLKB	BSS 0	BASE ADDRESS FOR TAGGED TRANSFER.	4F13643
06612	-0	76300	0	00006	LGL	6	GET FIRST CHAR OF SYMBOL.	4F13644
06613	0	07400	1	03242	TSX	TESTFX+1,1	TEST FOR FIXED OR FLOATING POINT.	4F13645
06614	0	02000	0	06757	TRA	LATXL	FLOATING, GO PERFORM LEVEL ANALYSIS.	4F13646
06615	-0	50000	0	00030	CAL	EIFNO	FIXED, PREPARE FORVAR ENTRY.	4F13647
06616	-0	32000	0	01527	ANA	MASK1	X	4F13648
06617	0	60200	0	01347	SLW	G	X	4F13649
06620	0	07400	1	03321	TSX	TET00,1	MAKE FORVAR ENTRY.	4F13650
06621	0	00000	0	00005		5	X	4F13651
06622	-0	75400	0	00000	PXD	,0		4F13652
06623	0	56000	0	01356	LDQ	LEFT+2		4F13653
06624	-0	76300	0	00014	LGL	12		4F13654
06625	0	40200	0	01451	SUB	CALLER		4F13655
06626	-0	10000	0	06757	TNZ	LATXL		4F13656
06627	0	07400	1	03321	TSX	TET00,1		4F13657
06630	0	00000	0	00006		6		4F13658
06631	0	02000	0	06757	TRA	LATXL	GO PERFORM LEVEL ANALYSIS.	4F13659
06632	0	60000	0	01124	MS320	STZ CHSAVE	CLEAR CELL FOR OP.	4F13660
06633		00000	0	06666	MS321	*** MS330,0	TXH ON LEFT, TXL ON RIGHT OF = SIGN.	4F13661
06634	0	07400	4	07333	TSX	SS000X,4	GO PROCESS SUBSCRIPT COMBINATION.	4F13662
06635	0	07400	4	01707	TSX	C0190,4	GET NEXT CHAR.	4F13663
06636	0	40200	0	01400	SUB	EQUAL	TEST FOR EQUAL SIGN.	4F13664
06637	-0	10000	0	06554	TNZ	MSERR=	NO, ERROR.	4F13665
06640	0	53400	4	01411	MS322	LXA L(3),4	MOVE CONTENT4 OF E WORDS TO LEFT WORDS.	4F13666
06641	0	56000	4	01131	MS323	LDQ E+3,4	X	4F13667

06642	-0	60000	4	01357		STQ LEFT+3,4	X	4F13668
06643	2	00001	4	06641		TIX MS323,4,1	X	4F13669
06644	-0	50000	0	00415	MS311	CAL TXLOP	SET SWITCHES FOR RIGHT SIDE SCAN.	4F13670
06645	0	63000	0	06446		STP MS093	X	4F13671
06646	0	63000	0	06652		STP MS310	X	4F13672
06647	0	63000	0	06633		STP MS321	X	4F13673
06650	0	76000	0	00141		SLN 1	TURN = OR) LITE ON.	4F13674
06651	0	02000	0	06346		TRA MS010	GO SCAN NEXT ELEMENT.	4F13675
06652	0	00000	0	06554	MS310	*** MSERR=,0	TXH FOR LEFT, TXL FOR RIGHT OF EQUAL SIGN.	4F13676
06653	0	60000	0	01124		STZ CHSAVE	CLEAR	4F13677
06654	-0	75400	0	00000		PXD ,0	CLEAR AC.	4F136775
06655	-0	76300	0	00006		LGL 6	GET FIRST CHAR OF SYMBOL.	4F13678
06656	0	07400	1	03242		TSX TESTFX+1,1	TEST FOR FIXED OR FLOATING POINT	4F13679
06657	0	02000	0	06640		TRA MS322	FLOATING,	4F13680
06660	-0	50000	0	00030		CAL EIFNO	FIXED, PREPARE FORVAL ENTRY.	4F13681
06661	-0	32000	0	01527		ANA MASK1	X	4F13682
06662	0	60200	0	01347		SLW G	X	4F13683
06663	0	07400	1	03321		TSX TET00,1	MAKE FORVAL ENTRY.	4F13684
06664	0	00000	0	00006		6	X	4F13685
06665	0	02000	0	06640		TRA MS322		4F13686
06666	0	07400	4	01771	MS330	TSX DIM1SR,4	SEARCH FOR THIS NAME IN THE DIM1, DIM2,	4F13687
06667	0	02000	0	06671		TRA MS331	AND DIM3 TABLES. IF IT IS FOUND IN ONE OF	4F13688
06670	0	02000	0	06676		TRA MS333	THESE TABLES IT IS A SUBSCRIPTED VARIABLE	4F13689
06671	0	07400	4	01775	MS331	TSX DIM2SR,4	OF THAT NUMBER OF DIMENSIONS. IF IT IS NOT	4F13690
06672	0	02000	0	06674		TRA MS332	FOUND IN ANY DIMENSION TABLE THEN IT IS	4F13691
06673	0	02000	0	06676		TRA MS333	ASSUMED TO BE THE NAME OF A FORTRAN II	4F13692
06674	0	07400	4	02005	MS332	TSX DIM3SR,4	SUBROUTINE OR FUNCTION COMPILED SEPARATELY.	4F13693
06675	0	02000	0	06700		TRA MS334	X	4F13694
06676	0	07400	4	07333	MS333	TSX SS000X,4	GO PROCESS SUBSCRIPT COMBINATION.	4F13695
06677	0	02000	0	06761		TRA LATXH	GO PERFORM LEVEL ANALYSIS.	4F13696
06700	-0	50000	0	01471	MS334	CAL FNIND	NOT FOUND, TREAT AS FUNCTION NAME.	4F13697
06701	0	60200	0	15303		SLW FNBITS	X	4F13698
06702	-0	75400	0	00000		PXD ,0	X	4F13699
06703	0	56000	0	01526		LDQ BLANKS	COMPLETE NAME WITH BLANKS.	4F13700
06704	-0	76300	2	00052		LGL 42,2	X	4F13701
06705	-0	60200	0	01347		ORS G	X	4F13702
06706	-0	60200	0	01130		ORS E+2	X	4F13703
06707	0	07400	1	03321		TSX TET00,1	ENTER NAME IN CLOSUB TABLE.	4F13704
06710	0	00000	0	00011		9	X	4F13705
06711	0	76000	0	00142	MS335	SLN 2	TURN FUNCTION LITE ON.	4F13706
06712	0	02000	0	06757		TRA LATXL	GO PERFORM LEVEL ANALYSIS.	4F13707
06713	0	60000	0	01124	HOLL	STZ CHSAVE	CLEAR CHSAVE	4F13708
06714	-0	50000	0	01352		CAL HOLCNT	GET CURRENT H(+I WORD	4F13709
06715	0	60200	0	01130		SLW E+2		4F13710
06716	0	53400	2	01103		LXA N,2	GET NUMBER OF CHARACTERS IN THIS ARG	4F13711
06717	-0	53400	4	01724		LXD CHCTR,4	GET CURRENT RESIDUE CHAR COUNT	4F13712
06720	0	56000	0	01365		LDQ RESIDU	GET CURRENT RESIDU WORD	4F13713
06721	0	53400	1	01414	C3351	LXA L(6),1	SET TO COLLECT SIX CHARS	4F13714
06722	-0	75400	0	00000		PXD 0,0	CLEAR AC	4F13715
06723	-2	00001	4	06736	C3352	TNX C3354,4,1	TEST FOR NO MORE CHARS IN RESIDU	4F13716
06724	-0	76300	0	00006	C33525	LGL 6	GET NEXT CHAR	4F13717
06725	0	60200	0	01112		SLW 1G	STORE WORD	4F13718
06726	-0	32000	0	01374		ANA ENDMK	BLANK ALL EXCEPT CURRENT CHAR	4F13719
06727	0	40200	0	01374		SUB ENDMK	TEST FOR INTERNAL ENDMK	4F13720

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06730	-0	10000	0	06732	TNZ	C3353			4F13721
06731	0	07400	4	03400	TSX	DIAG,4		YES, ERROR, GO TO DIAGNOSTIC.	4F13722
06732	-0	50000	0	01112	C3353	CAL	1G	RETRIEVE WORD	4F13723
06733	-2	00001	2	06746	TNX	C3358,2,1		TEST FOR ALL CHARS COLLECTED	4F13724
06734	-2	00001	1	06744	TNX	C3356,1,1		TEST FOR SIX CHARS COLLECTED	4F13725
06735	0	02000	0	06723	TRA	C3352		NOT SIX CHARS YET, CONTINUE COLLECTING	4F13726
06736	-0	53400	4	01614	C3354	LXD	FWA,4	LOAD MQ WITH NEXT F REGION WORD	4F13727
06737	0	56000	4	00000		LDQ	0,4		4F13728
06740	1	77777	4	06741	TXI	C3355,4,-1		UPDATE FWA	4F13729
06741	-0	63400	4	01614	C3355	SXD	FWA,4		4F13730
06742	0	53400	4	01414		LXA	L(6),4	RESET MQ CHAR CQUNT TO SIX	4F13731
06743	0	02000	0	06724	TRA	C33525		CONTINUE COLLECTING	4F13732
06744	0	07400	1	07322	C3356	TSX	C3390,1	GO TO ENTER WORD IN HOLARG TABLE	4F13733
06745	1	00000	0	06721	C3357	TXI	C3351,0,**	RETURN TO CONTINUE COLLECTING	4F13734
06746	-0	60000	0	01365	C3358	STQ	RESIDU	UPDATE RESIDU	4F13735
06747	-0	63400	4	01724		SXD	CHCTR,4	UPDATE CHCTR	4F13736
06750	-2	00001	1	06754		TNX	C3360,1,1	TEST FOR SIX CHARS IN AC, DEC IR1	4F13737
06751	0	56000	0	01526		LDQ	BLANKS	NOT SIX CHARS, PREPARE TO ADD BLANKS	4F13738
06752	-0	76300	0	00006	C3359	LGL	6	ADD BLANKS	4F13739
06753	2	00001	1	06752		TIX	C3359,1,1		4F13740
06754	0	07400	1	07322	C3360	TSX	C3390,1	GO TO ENTER WORD IN HOLARG TABLE	4F13741
06755	-0	50000	0	01531		CAL	ALL1	GET WORD OF ONES	4F13742
06756	0	07400	1	07322		TSX	C3390,1	GO TO ENTER WORD IN HOLARG TABLE	4F13743
							LEVEL ANALYSIS		4F13744
06757	-0	50000	0	00415	LATXL	CAL	TXLOP		4F13745
06760	0	02000	0	06762		TRA	LATXL+3		4F13746
06761	-0	50000	0	00422	LATXH	CAL	TXHOP		4F13747
06762	0	63000	0	07307		STP	CM4105		4F13748
06763	0	53400	1	01406	LA0000	LXA	L(0),A		4F13749
06764	0	50000	0	01130		CLA	E+2		4F13750
06765	-0	76000	0	00142		SLT	2	IS THIS A FUNCTION NAME	4F13751
06766	0	02000	0	07027		TRA	LA0000+36	NO	4F13752
06767	0	76000	0	00142		SLN	2	YES - TURN F LITE BACK ON	4F13753
06770	-0	53400	4	00470		LXD	BK,C	IS FORSUB EMPTY	4F13754
06771	-3	00000	4	07000		TXL	LA0000+13,C,0	YES. GO SET FS BITS TO 0	4F13755
06772	-0	63400	4	06777		SXD	LA0000+12,C		4F13756
06773	0	34000	1	00471		CAS	FORSUB,A	SEARCH FN NAME IN FORSUB	4F13757
06774	1	77776	1	06777		TXI	LA0000+12,A,-2		4F13758
06775	0	02000	0	07002		TRA	LA0000+15		4F13759
06776	1	77776	1	06777		TXI	LA0000+12,A,-2		4F13760
06777	3	00000	1	06773		TXH	LA0000+8,A,0		4F13761
07000	0	60000	0	15302		STZ	FSBITS	SET FSBITS TO 0	4F13762
07001	0	02000	0	07014		TRA	LA0000+25		4F13763
07002	-0	50000	1	00472		CAL	FORSUB+1,A	FN NAME IN FORSUB	4F13764
07003	-0	32000	0	01452		ANA	MASK2	EXTRACT TYPE NUMBER	4F14765
07004	-0	53400	4	01122		LXD	ARGCTR,C	IS THIS A FUNCTION STATEMENT	4F13766
07005	-3	00000	4	07011		TXL	LA0000+22,C,0	NO	4F13767
07006	0	34000	0	15301		CAS	FSTYPE	YES - UPDATE FS TYPE	4F13768
07007	0	62100	0	15301		STA	FSTYPE		4F13769
07010	3	00000	0	00000		TXH	0,0		4F13770
07011	0	76700	0	00007		ALS	7		4F13771
07012	-0	50100	0	01464		ORA	FSIND		4F13772
07013	0	60200	0	15302		SLW	FSBITS		4F137)3
07014	-0	53400	1	01117		LXD	3LBAR,A	LOAD LA COUNTERS	4F13774

07015	-0	53400	2	01360	LXD	NBAR,B		4F13775	
07016	-0	53400	4	15300	LXD	ABAR,C		4F13776	
07017	-3	00000	1	07043	TXL	LA0003,A,0		4F13777	
07020	3	75520	1	07022	TXH	LA0001,A,-1200		4F13778	
07021	0	07400	4	03400	TSX	DIAG,4	ERROR..LAMBDA TABLE EXCEEDED.	4F13779	
07022	3	77323	2	07024	LA0001	TXH	LA0002,B,-301	4F13780	
07023	0	07400	4	03400	TSX	DIAG,4	ERROR..BETA TABLE EXCEEDED	4F13781	
07024	-3	00000	4	07043	LA0002	TXL	LA0003,C,0	4F13782	
07025	3	77565	4	07043	TXH	LA0003,C,-139		4F13783	
07026	0	07400	4	03400	TSX	DIAG,4	ERROR..ALPHA TABLE EXCEEDED	4F13784	
07027	-0	53400	4	01122	LXD	ARGCTR,C	VARIABLE OR (	4F13785
07030	-3	00000	4	07000	TXL	LA0000+13,C,0	NOT AN FS - GO SET FS BITS TO 0	4F13786	
07031	-0	63400	4	07036	SXD	LA0000+43,C	FUNCTION STATEMENT	4F13787	
07032	0	34000	1	15215	CAS	ARGREG,A	SEARCH FREE VARIABLE TABLE	4F13788	
07033	1	77777	1	07036	TXI	LA0000+43,A,-1		4F13789	
07034	0	02000	0	07040	TRA	MS1018		4F13790	
07035	1	77777	1	07036	TXI	LA0000+43,A,-1		4F13791	
07036	3	00000	1	07032	TXH	LA0000+39,A,0		4F13792	
07037	0	02000	0	07000	TRA	LA0000+13	NOT PRESENT - GO SET FSBITS TO 0	4F13793	
07040	-0	75400	1	00000	MS1018	PXD	0,A	PRESENT - STORE TYPE IN FSBITS	4F13794
07041	0	77100	0	00013	ARS	11		4F13795	
07042	0	02000	0	07012	TRA	LA0000+23		4F13796	
07043	0	50000	0	06464	LA0003	CLA	MS9002	4F13797	
07044	0	62100	0	07251	STA	LA4320		4F13798	
07045	-0	75400	0	00000	PXD	0,0		4F13799	
07046	0	56000	0	01130	LDQ	E+2		4F13800	
07047	-0	60000	1	15533	STQ	LAMBDA+11,A		4F13801	
07050	-0	60000	1	15530	STQ	LAMBDA+8,A		4F13802	
07051	-0	60000	1	15525	STQ	LAMBDA+5,A		4F13803	
07052	-0	76300	0	00006	LGL	6		4F13804	
07053	0	60100	0	01331	STO	FIRSTC		4F13805	
07054	0	40200	0	01375	SUB	OPEN		4F13806	
07055	0	10000	0	07064	TZE	LA003		4F13807	
07056	0	50000	0	06363	CLA	MS4007		4F13808	
07057	-0	76000	0	00142	SLT	2		4F13809	
07060	0	02000	0	07063	TRA	LA002		4F13810	
07061	0	76000	0	00142	SLN	2		4F13811	
07062	0	50000	0	07112	CLA	FINI03		4F13812	
07063	0	62100	0	07251	LA002	STA	LA4320	4F13813	
07064	0	50000	0	01126	LA003	CLA	E	4F13814	
07065	0	60100	1	15531	STO	LAMBDA+9,A		4F13815	
07066	0	60100	1	15526	STO	LAMBDA+6,A		4F13816	
07067	0	60100	1	15523	STO	LAMBDA+3,A		4F13817	
07070	-0	50000	0	01522	CAL	ADSPOP		4F13818	
07071	0	60200	1	15535	SLW	LAMBDA+13,A		4F13819	
07072	0	60200	1	15532	SLW	LAMBDA+10,A		4F13820	
07073	0	60200	1	15527	SLW	LAMBDA+7,A		4F13821	
07074	-0	75400	0	00000	PXD	,0		4F13822	
07075	0	56000	0	01127	LDQ	E+1		4F13823	
07076	-0	60000	1	15521	STQ	LAMBDA+1,A		4F13824	
07077	-0	76300	0	00006	LGL	6		4F13825	
07100	0	34000	0	01405	CAS	STAR		4F13826	
07101	0	02000	0	07145	TRA	LA0015	/ SIGN	4F13827	
07102	0	02000	0	07135	TRA	LA0010	* OR ** SIGN	4F13828	

07103	-0	76000	0	00142	SLT	2		+ OR - SIGN	4F13829
07104	0	02000	0	07121	TRA	LA0044			4F13830
07105	1	77775	2	07106	TXI	MS1033,B,-3		-N TO -(N+3)	4F13831
07106	-0	75400	2	00000	PXD	,B	MS1033		4F13832
07107	0	77100	0	00022	ARS	18			4F13833
07110	0	60100	1	15536	STO	LAMBDA+14,A		STO (N+3) IN LAMBDA+3 (L+4)+2	4F13834
07111	1	00001	2	07112	TXI	FINI03,B,1		-(N+3) TO -(N+2)	4F13835
07112	-0	75400	2	07315	PXD	CM4300,B	FINI03		4F13836
07113	0	77100	0	00022	ARS	18			4F13837
07114	-0	76000	0	00003	SSM				4F13838
07115	0	60100	1	15534	STO	LAMBDA+12,A		STO -(N+2) IN LAMBDA+3 (L+4)	4F13839
07116	-0	76000	0	00141	SLT	1	LA0041		4F13840
07117	1	00001	2	07213	TXI	L43130,B,1		UNARY... -(N+2) TO -(N+1)	4F13841
07120	1	00001	2	07155	TXI	L13130,B,1		BINARY... -(N+2) TO -(N+1)	4F13842
07121	0	50000	0	01331	CLA	FIRSTC	LA0044		4F13843
07122	0	34000	0	01375	CAS	OPEN		EXAMINE SYMBOL	4F13844
07123	0	02000	0	07125	TRA	LA0050			4F13845
07124	1	77775	2	07130	TXI	LA0058,B,-3		-N TO -(N+3)	4F13846
07125	-0	76000	0	00141	SLT	1	LA0050		4F13847
07126	1	77777	2	07217	TXI	LA4000,B,-1		UNARY... -NTO -(N+1)	4F13848
07127	1	77777	2	07161	TXI	LA1000,B,-1		BINARY... -N TO -(N+1)	4F13849
07130	-0	75400	2	00000	PXD	,B	LA0058		4F13850
07131	0	77100	0	00022	ARS	18			4F13851
07132	0	60100	1	15533	STO	LAMBDA+11,A		STO S(N+3) IN LAMBDA +3(L+3)+2	4F13852
07133	0	40000	0	01407	ADD	L(1)		FORM -(N+2) IN ADD (ACC)	4F13853
07134	1	00001	2	07116	TXI	LA0041,2,1			4F13854
07135	0	16200	0	07145	TQP	LA0015	LA0010	GO TO * ROUTINE	4F13855
07136	-0	76000	0	00142	SLT	2		**	4F13856
07137	0	02000	0	07141	TRA	LA0072			4F13857
07140	1	77777	2	07174	TXI	L23000,B,-1		-N TO -(N+1)	4F13858
07141	0	50000	0	01331	CLA	FIRSTC	LA0072		4F13859
07142	0	40200	0	01375	SUB	OPEN			4F13860
07143	-0	10000	0	07207	TNZ	LA2000			4F13861
07144	1	77777	2	07167	TXI	L22000,B,-1		-N TO -(N+1)	4F13862
07145	-0	76000	0	00142	SLT	2	LA0015	* OR /	4F13863
07146	0	02000	0	07150	TRA	LA0021			4F13864
07147	1	77776	2	07257	TXI	L33000,B,-2		-N TO -(N+2)	4F13865
07150	0	50000	0	01331	CLA	FIRSTC	LA0021		4F13066
07151	0	34000	0	01375	CAS	OPEN			4F13867
07152	1	77777	2	07272	TXI	LA3000,B,-1			4F13868
07153	1	77776	2	07252	TXI	L32000,B,-2		-N TO -N(+2)	4F13869
07154	1	77777	2	07272	TXI	LA3000,B,-1			4F13870
07155	0	60200	4	15310	SLW	ALPHA+3,C	L13130	STO -(N+2) IN ALPHA+A+3	4F13871
07156	0	50200	0	01406	CLS	L(0)			4F13872
07157	0	60100	1	15531	STO	LAMBDA+9,A		STO -0 IN LAMBDA +3(L+3)	4F13873
07160	0	76000	0	00141	SLN	1			4F13074
07161	0	50200	0	15277	CLS	CBAR	LA1000		4F13875
07162	0	77100	0	00022	ARS	18			4F13876
07163	0	60200	4	15305	SLW	ALPHA,C		STO -C IN ALPHA+A	4F13877
07164	1	77775	4	07165	TXI	LA1040,C,-3		-A TO -(A+3)	4F13878
07165	-0	63400	4	15300	SXD	ABAR,C	LA1040		4F13879
07166	0	02000	0	07220	TRA	LA4010			4F13880
07167	-0	75400	2	00000	PXD	,B	L22000		4F13881
07170	0	77100	0	00022	ARS	18			4F13882

07171	0	60100	1	15525		STO LAMBDA+5,A	STO S(N+1) IN LAMBDA+3(L+1)+2	4F13883
07172	0	40000	0	01407		ADD L(1)		4F13884
07173	1	00001	2	07203		TXI L23130,B,1	-(N+1) TO -N	4F13885
07174	-0	75400	2	00000	L23000	PXD ,B		4F13886
07175	0	77100	0	00022		ARS 18		4F13887
07176	0	60100	1	15530		STO LAMBDA+8,A	STO S(N+1) IN LAMBDA+3(L+2)+2	4F13888
07177	0	40000	0	01407		ADD L(1)		4F13889
07200	-0	76000	0	00003		SSM		4F13890
07201	1	00001	2	07202		TXI L23090,B,1	-(N+1) TO -N	4F13891
07202	0	60100	1	15526	L23090	STO LAMBDA+6,A	STO -N IN LAMBDA+3(L+2)	4F13892
07203	0	60200	4	15305	L23130	SLW ALPHA,C	STO -N IN ALPHA +A	4F13893
07204	0	50200	0	01406		CLS L(0)		4F13894
07205	0	60100	1	15523		STO LAMBDA+3,A	STO -0 IN LAMBDA+3(L+1)	4F13895
07206	0	76000	0	00141		SLN 1		4F13896
07207	0	50200	4	15304	LA2000	CLS ALPHA-1,C		4F13897
07210	0	60100	1	15520		STO LAMBDA,A	STO C(ALPHA+A-1) IN LAMBDA+3L	4F13898
07211	0	50000	0	01360		CLA NBAR		4F13899
07212	1	00006	1	07240		TXI LA4180,A,6		4F13900
07213	0	60200	4	15305	L43130	SLW ALPHA,C	STO -(N+2) IN ALPHA+A	4F13901
07214	0	50200	0	01406		CLS L(0)		4F13902
07215	0	60100	1	15531		STO LAMBDA+9,A	STO -0 IN LAMBDA+3(L+3)	4F13903
07216	0	76000	0	00141		SLN 1		4F13904
07217	0	50200	4	15302	LA4000	CLS ALPHA-3,C		4F13905
07220	0	60100	1	15520	LA4010	STO LAMBDA,A	STO C(ALPHA+A-3) IN LAMBDA+3L	4F13906
07221	0	50200	0	01360		CLS NBAR		4F13907
07222	0	77100	0	00022		ARS 18		4F13908
07223	0	60200	4	15303		SLW ALPHA-2,C	STO-N IN ALPHA+A-2	4F13909
07224	0	60200	1	15522		SLW LAMBDA+2,A	STO S(N) IN LAMBDA+3L+2	4F13910
07225	0	60100	1	15523		STO LAMBDA+3,A	STO -N IN LAMBDA+3(L+1)	4F13911
07226	-0	75400	2	00000		PXD ,B		4F13912
07227	0	77100	0	00022		ARS 18		4F13913
07230	0	60100	1	15525		STO LAMBDA+5,A	STO S(N+1) IN LAMBDA+3(L+1)+2	4F13914
07231	0	60100	4	15304		STO ALPHA-1,C	STO-(N,1) IN ALPHA+A-1	4F13915
07232	-0	76000	0	00003		SSM		4F13916
07233	0	60100	1	15526		STO LAMBDA+6,A	STO -(N+1) IN LAMBDA+3IL+2)	4F13917
07234	1	77777	2	07235		TXI LA4150,B,-1	-(N+1) TO -(N+2)	4F13916
07235	-0	50000	0	01524	LA4150	CAL ADSTAR		4F13919
07236	0	60200	1	15524		SLW LAMBDA+4,A	STO * IN LAMBDA+3(L+1)+1	4F13920
07237	-0	75400	2	00000	LA4170	PXD ,B		4F13921
07240	0	77100	0	00022	LA4180	ARS 18		4F13922
07241	0	60100	1	15530		STO LAMBDA+8,A	STOS(N+2) IN LAMBDA+3(L+2)+2	4F13923
07242	-0	60200	1	15531		ORS LAMBDA+9,A	STO -(N+2) IN LAMBDA+3(L+3)	4F13924
07243	-0	50000	0	01525		CAL STRSTR		4F13925
07244	0	60200	1	15527		SLW LAMBDA+7,A	STO SPOP IN LAMBDA+3(L+2)+1	4F13926
07245	-0	50000	0	01522		CAL ADSPOP		4F13927
07246	-0	50100	0	15302		ORA FSBITS		4F13928
07247	-0	50100	0	15303		ORA FNBITS		4F13929
07250	0	60200	1	15532		SLW LAMBDA+10,A	STO SPOP IN LAMBDA+3(L+3)+1	4F13930
07251	1	77767	1	00000	LA4320	TXI **,A,-9		4F13931
07252	-0	75400	2	00000	L32000	PXD ,B		4F13932
07253	0	77100	0	00022		ARS 18		4F13933
07254	0	60100	1	15530		STO LAMBDA+8,A	STO 5(N+2) IN LAMBDA+3(L+2)+2	4F13934
07255	0	40000	0	01407		ADD L(1)		4F13935
07256	1	00001	2	07266		TXI L33130,B,1	-(N+2) TO -(N+1)	4F13936

07257	-0	75400	2	00000	L33000	PXD	,B			4F13937
07260	0	77100	0	00022		ARS	18			4F13938
07261	0	60100	1	15533		STO	LAMBDA+11,A	STO S(N+2) IN LAMBDA+3(L+3)+2		4F13939
07262	0	40000	0	01407		ADD	L(1)			4F13940
07263	-0	76000	0	00003		SSM				4F13941
07264	1	00001	2	07265		TXI	L33090,B,1	-(N+2) TO -(N+1)		4F13942
07265	0	60100	1	15531	L33090	STO	LAMBDA+9,A	STO -(N+1) IN LAMBDA+3(L+3)		4F13943
07266	0	60200	4	15305	L33130	SLW	ALPHA,C	STO -(N+1) IN ALPHA+A		4F13944
07267	0	50200	0	01406		CLS	L(0)			4F13945
07270	0	60100	1	15526		STO	LAMBDA+6,A			4F13946
07271	0	76000	0	00141		SLN	1			4F13947
07272	0	50200	4	15303	LA3000	CLS	ALPHA-2,C			4F13948
07273	0	60100	1	15520		STO	LAMBDA,A	STO C(ALPHA+A-2) IN LAMBDA+3L		4F13949
07274	0	50200	0	01360		CLS	NBAR			4F13950
07275	0	77100	0	00022		ARS	18			4F13951
07276	0	60200	4	15304		SLW	ALPHA-1,C	STO -N IN ALPHA+A-1		4F13952
07277	0	60200	1	15522		STO	LAMBDA+2,A	STO S(N) IN LAMBDA+3L+2		4F13953
07300	0	60100	1	15523		STO	LAMBDA+3,A	STO -N IN LAMBDA+3(L+1)		4F13954
07301	1	00003	1	07237		TXI	LA4170,A,3			4F13955
07302	1	77775	1	07303	CM4100	TXI	CM4101,A,-3	LA COUNTER MODIFICATION ROUTINES		4F13956
07303	-0	63400	1	01117	CM4101	SXD	3LBAR,A			4F13957
07304	-0	63400	2	15277	CM4102	SXD	CBAR,B			4F13958
07305	1	77777	2	07306		TXI	CM4104,B,-1			4F13959
07306	-0	63400	2	01360	CM4104	SXD	NBAR,B			4F13960
07307		00000	0	06346	CM4105	***	MS010,0			4F13961
07310	-0	50000	0	01524	MS020	CAL	ADSTAR			4F13962
07311	0	02000	0	06347		TRA	MS030			4F13963
07312	1	77775	1	07313	CM4200	TXI	CM4201,A,-3			4F13964
07313	-0	63400	1	01117	CM4201	SXD	3LBAR,A			4F13965
07314	1	77777	4	07320		TXI	CM4303,C,-1			4F13966
07315	1	77772	1	07316	CM4300	TXI	CM4301,A,-6			4F13967
07316	-0	63400	1	01117	CM4301	SXD	3LBAR,A			4F13968
07317	1	77777	4	07320		TXI	CM4303,C,-1			4F13969
07320	-0	63400	4	15300	CM4303	SXD	ABAR,C			4F13970
07321	1	77777	2	07304		TXI	CM4102,B,-1			4F13971
							* * * * *			4F13972
										4F13973
										4F13974
										4F13975
07322	-0	63400	1	06745	C3390	SXD	C3357,1	CLOSED SUBROUTINE TO MAKE ENTRIES IN HOLARG TABLE		4F13976
07323	0	60200	0	01112		SLW	1G	SAVE CALLING IR		4F13977
07324	0	07400	1	03321		TSX	TET00,1	MOVE WORD TO BE ENTERED TO 1G		4F13978
07325	0	00000	0	00015			13	GO TO ENTER WORD IN HOLARG TABLE		4F13979
07326	0	50000	0	01352		CLA	HOLCNT			4F13980
07327	0	40000	0	01407		ADD	L(1)	UPDATE HOLCNT		4F13981
07330	0	60100	0	01352		STO	HOLCNT			4F13982
07331	-0	53400	1	06745		LXD	C3357,1	RELOAD CALLING IR		4F13983
07332	0	02000	1	00001		TRA	1,1	RETURN TO CALLER+1		4F13984
							* * * * *			4F13985
										4F13986
										4F13987
										4F13988
07333	-0	63400	4	07366	SS000X	SXD	SSIR4,4	PROGRAM TO SIMPLIFY THE TREATMENT OF RELATIVE ADDRESSES IN SECTION ONE THRU THE USE OF THE RA000 SUBROUTINE BY STATE B.		4F13989
07334	0	07400	4	02614		TSX	SS000,4	SAVE CALLING TAG.		4F13990
07335	0	07400	4	02437		TSX	RA000,4	GO TO SUBSCRIPT SCAN AND ANALYSIS ROUTINE.		4F13991
								GO TO RELATIVE ADDRESS COMPUTATION ROUTINE.		4F13992

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	07414	0	76700	0	00022	MS9506	ALS	18	STORE IN THE	4F14045
	07415	0	60100	0	01347		STO	G	DECREMENT OF G, AND	4F14046
	07416	0	07400	4	00417		TSX	FXCNIX,4	* GO MAKE FIXCON ENTRY.	4F14047
	07417	-0	50100	0	01517		ORA	FIXVAR	CREATE INTERNAL FXD-P, VARIABLE,AND	4F14048
D	07420	1	00000	0	07521		TXI	EXITR,0	GO TAKE EXITR.	4F14049
	07421	0	14000	0	07426	NC3	TOV	NC8	IF THERE WAS NO OVERFLOW,	4F14050
	07422	0	60100	0	01103		STO	N	SAVE PARTIAL RESULT, AND	4F14051
	07423	0	50200	0	01407		CLS	L(1)	SUBTRACT 1 FROM DOE	4F14052
	07424	0	40000	0	01100	NC9	ADD	DOE	TO ADJUST EXPONENT	4F14053
	07425	0	60100	0	01100		STO	DOE	IN FINAL RESULT.	4F14054
D	07426	1	00000	0	07362	NC8	TXI	NC5,0	THEN GO PICK UP NEXT CHARACTER.	4F14055
	07427	0	50000	0	01407	NC4	CLA	L(1)	ADD 1 TO DOE ,	4F14056
D	07430	1	00000	0	07424		TXI	NC9,0	IF THERE WAS INTEGER OVERFLOW.	4F14057
	07431	0	07400	4	01707	EC1	TSX	C0190,4	* GO GET NEXT NB CHARACTER IN THE AC.	4F14058
	07432	0	60200	0	01124		SLW	CHSAVE	SAVE IT FOR STATE B, AND	4F14059
	07433	0	60000	0	01101		STZ	EKE	CLEAR EKE (EXPLICIT EXPONENT).	4F14060
	07434	0	34000	0	01401		CAS	11Z	COMPARE CHARACTER WITH A DASH.	4F14061
D	07435	1	00000	0	07465		TXI	FN5,0	IF GREATER THAN 32, GO OUT.	4F14062
D	07436	1	00000	0	07444		TXI	EC3,0	IF A DASH, SET EKE MINUS.	4F14063
	07437	0	34000	0	01404		CAS	12Z	IF LESS THAN 32, COMPARE WITH PLUS.	4F14064
D	07440	1	00000	0	07465		TXI	FN5,0	IF GREATER THAN 16, GO OUT.	4F14065
D	07441	1	00000	0	07451		TXI	EC6,0	IF PLUS, GO EXAMINE NEXT CHAR.	4F14066
	07442	0	34000	0	01420		CAS	MINUS	IF LESS THAN 16,COMPARE WITH MINUS.	4F14067
D	07443	1	00000	0	07465		TXI	FN5,0	IF GREATER THAN 12, GO OUT.	4F14068
	07444	0	50200	0	01101	EC3	CLS	EKE	IF MINUS, SET EKE TO -0.	4F14069
	07445	0	34000	0	01373		CAS	TEN	COMPARE WITH TEN.	4F14070
D	07446	1	00000	0	07465		TXI	FN5,0	IF NON-NUMERIC, GO EXAMINE NEXT CH.	4F14071
	07447	-0	75400	0	00000	EC4	PXD	,0	CLEAR ACC,	4F14072
	07450	0	60100	0	01101	EC5	STO	EKE	SAVE PARTIAL RESULT(OR 0) IN EKE.	4F14073
	07451	0	07400	4	01707	EC6	TSX	C0190,4	* GO GET NEXT NB CHARACTER IN THE AC.	4F14074
	07452	0	60200	0	01124		SLW	CHSAVE	SAVE IT FOR STATE B,	4F14075
	07453	0	34000	0	01373		CAS	TEN	AND COMPARE WITH TEN.	4F14076
D	07454	1	00000	0	07465		TXI	FN5,0	CHAR EXCEEDS 10, SO IS NON-NUMERIC.	4F14077
	07455	-0	75400	0	00000		PXD	,0	CLEAR THE AC (MACHINE ERROR).	4F14078
	07456	0	60100	0	01102		STO	H	CHARACTER IS NUMERIC, SO HOLD IT.	4F14079
	07457	0	50000	0	01101		CLA	EKE	MULTIPLY THE PREVIOUS	4F14080
	07460	0	76700	0	00002		ALS	2	PARTIAL RESULT (OR ZERO)	4F14081
	07461	0	40000	0	01101		ADD	EKE	BY 10,	4F14082
	07462	0	76700	0	00001		ALS	1	AND ADD IN	4F14083
	07463	0	36100	0	01102		ACL	H	THE CURRENT DIGIT.	4F14084
D	07464	1	00000	0	07450		TXI	EC5,0	CONTINUE UNTIL NON-NUMERIC IS MET.	4F14085
	07465	0	50000	0	01101	FN5	CLA	EKE	COMBINE EXPLICIT EXPONENT	4F14086
	07466	0	40000	0	01100		ADD	DOE	WITH IMPLICIT EXPONENT,	4F14087
	07467	0	60100	0	01100		STO	DOE	AND SAVE IN DOE.	4F14088
	07470	0	50000	0	01103	FN4	CLA	N	IF N CONTAINS ZERO, TAKE	4F14089
	07471	0	10000	0	07516		TZE	MS9500	FLO PT CONSTANT RETURN.	4F14090
	07472	0	62100	0	07535		STA	K1	PUT INTEGER INTO FLO PT WORD,	4F14091
	07473	0	77100	0	00017		ARS	15	ADJUST, AND	4F14092
	07474	0	10000	0	07476		TZE	FN1	IF MORE THAN 15 BITS IN LENGTH	4F14093
	07475	-0	50100	0	07536		ORA	K2	AFFIX CORRECT EXPONENT.	4F14094
	07476	0	30000	0	07535	FN1	FAD	K1	THEN FLOATING ADD THE RESULT	4F14095
	07477	-0	77300	0	00010		RQL	8	OF INTEGER CONVERSION, AND	4F14096
	07500	0	76000	0	00010		RND		ROUND --TO OBTAIN	4F14097
	07501	-0	50100	0	07537		ORA	K3	NORMALIZED RESULT.	4F14098

	07502	0	53400	1	01100	LXA	DOE,1	EXAMINE THE C(DOE), AND	4F14099
	07503	-3	00000	1	07516	TXL	MS9500,1,0	IF ZERO, TAKE FLO PT RETURN.	4F14100
	07504	-3	00062	1	07506	TXL	FN2,1,50	IF GREATER THAN 50, THEN	4F14101
D	07505	1	00000	0	07532	TXI	CER,0	ERROR. --GO TO DIAGNOSTIC.	4F14102
	07506	0	56000	0	01100	LDQ	DOE	DETERMINE WHETHER INTEGER WAS	4F14103
	07507	0	16200	0	07524	TQP	FN3	TO THE RIGHT OR TO THE LEFT OF DP.	4F14104
	07510	0	24100	1	07623	FDP	TAB,1	IF TO THE RIGHT, DIVIDE BY A	4F14105
	07511	-0	60000	0	01103	STQ	N	SUITABLE CONSTANT	4F14106
	07512	0	50000	0	01103	CLA	N	TO ADJUST RESULT	4F14107
	07513	0	36100	0	07540	ACL	K4	AND TEST FOR OUT OF RANGE.	4F14108
	07514	-0	76000	0	00001	PBT		IF P=1, SKIP TO ARITH RETURN.	4F14109
D	07515	1	00000	0	07532	TXI	CER,0	ERROR. --GO TO DIAGNOSTIC.	4F14110
	07516	0	60100	0	01347	MS9500	STO	G, AND	4F14111
	07517	0	07400	4	00424	TSX	FLCNIX,4	* GO MAKE FLOCON ENTRY.	4F14112
	07520	-0	50100	0	01513	ORA	FLOVAR	CREATE INTERNAL FLO-PT VARIABLE,	4F14113
	07521	0	60200	0	01130	EXITR	SLW	E+2,	4F14114
	07522	-0	53400	4	07352	LXD	EXIT,4	RESTORE THE C(XR4), AND	4F14115
	07523	0	02000	4	00002	TRA	2,4	* RETURN TO MAIN ROUTINE.	4F14116
	07524	0	60100	0	01103	FN3	STO	N	4F14117
	07525	0	56000	0	01103	LDQ	N	TO THE LEFT OF THE DECIMAL POINT,	4F14118
	07526	0	26000	1	07623	FMP	TAB,1	MULTIPLY BY A SUITABLE	4F14119
	07527	0	36100	0	07541	ACL	K5	CONSTANT TO ADJUST AND TEST RANGE.	4F14120
	07530	-0	76000	0	00001	PBT		IF P=1, SKIP TO ERROR.	4F14121
D	07531	1	00000	0	07516	TXI	MS9500,0	RETURN TO ARITHMETIC ROUTINE.	4F14122
	07532	0	07400	4	03400	CER	TSX	DIAG,4	* CONVERSION ERROR, GO TO DIAGNOSTIC.
	07533	-0	53400	4	07352	HEXIT	LXD	EXIT,4	4F14123
	07534	0	02000	4	00001	TRA	1,4	RESTORE THE C(XR4), AND	4F14124
								* RETURN TO MAIN ROUTINE.	4F14125
									4F14126
	07535	+2330000000000			K1	OCT	2330000000000	CONSTANT USED BY ROYCNV.	4F14127
	07536	+2520000000000			K2	OCT	2520000000000	CONSTANT USED BY ROYCNV.	4F14128
	07537	+0004000000000			K3	OCT	400000000	CONSTANT USED BY ROYCNV.	4F14129
	07540	+3350000000000			K4	OCT	3350000000000	CONSTANT USED BY ROYCNV.	4F14130
	07541	+0430000000000			K5	OCT	4300000000000	CONSTANT USED BY ROYCNV.	4F14131
	07542	0000000000025			L(E)	BCD	100000E	CONSTANT USED BY ROYCNV.	4F14132
									4F14133
	07543	+375536246150				OCT	375536246150	48-TABLE USED BY ROYCNV.	4F14134
	07544	+372430204754				OCT	372430204754	47-TABLE USED BY ROYCNV.	4F14135
	07545	+366700324573				OCT	366700324573	46-TABLE USED BY ROYCNV.	4F14136
	07546	+363546566774				OCT	363546566774	45-TABLE USED BY ROYCNV.	4F14137
	07547	+360436770626				OCT	360436770626	44-TABLE USED BY ROYCNV.	4F14138
	07550	+354713132675				OCT	354713132675	43-TABLE USED BY ROYCNV.	4F14139
	07551	+351557257061				OCT	351557257061	42-TABLE USED BY ROYCNV.	4F14140
	07552	+346445677215				OCT	346445677215	41-TABLE USED BY ROYCNV.	4F14141
	07553	+342726145174				OCT	342726145174	40-TABLE USED BY ROYCNV.	4F14142
	07554	+337570120775				OCT	337570120775	39-TABLE USED BY ROYCNV.	4F14143
	07555	+334454732312				OCT	334454732312	38-TABLE USED BY ROYCNV.	4F14144
	07556	+330741367020				OCT	330741367020	37-TABLE USED BY ROYCNV.	4F14145
	07557	+325601137163				OCT	325601137163	36-TABLE USED BY ROYCNV.	4F14146
	07560	+322464114134				OCT	322464114134	35-TABLE USED BY ROYCNV.	4F14147
	07561	+316755023372				OCT	316755023372	34-TABLE USED BY ROYCNV.	4F14148
	07562	+313612334310				OCT	313612334310	33-TABLE USED BY ROYCNV.	4F14149
	07563	+310473426555				OCT	310473426555	32-TABLE USED BY ROYCNV.	4F14150
	07564	+304770675742				OCT	304770675742	31-TABLE USED BY ROYCNV.	4F14151
	07565	+301623713116				OCT	301623713116	30-TABLE USED BY ROYCNV.	4F14152

07566	+276503074076	OCT	276503074076	29-TABLE	USED	BY	ROYCNV.	4F14153
07567	+273402374713	OCT	273402374713	28-TABLE	USED	BY	ROYCNV.	4F14154
07570	+267635456171	OCT	267635456171	27-TABLE	USED	BY	ROYCNV.	4F14155
07571	+264512676456	OCT	264512676456	26-TABLE	USED	BY	ROYCNV.	4F14156
07572	+261410545213	OCT	261410545213	25-TABLE	USED	BY	ROYCNV.	4F14157
07573	+255647410337	OCT	255647410337	24-TABLE	USED	BY	ROYCNV.	4F14158
07574	+252522640262	OCT	252522640262	23-TABLE	USED	BY	ROYCNV.	4F14159
07575	+247417031702	OCT	247417031702	22-TABLE	USED	BY	ROYCNV.	4F14160
07576	+243661534466	OCT	243661534466	21-TABLE	USED	BY	ROYCNV.	4F14161
07577	+240532743536	OCT	240532743536	20-TABLE	USED	BY	ROYCNV.	4F14162
07600	+235425434430	OCT	235425434430	19-TABLE	USED	BY	ROYCNV.	4F14163
07601	+231674055530	OCT	231674055530	18-TABLE	USED	BY	ROYCNV.	4F14164
07602	+226543212741	OCT	226543212741	17-TABLE	USED	BY	ROYCNV.	4F14165
07603	+223434157116	OCT	223434157116	16-TABLE	USED	BY	ROYCNV.	4F14166
07604	+217706576512	OCT	217706576512	15-TABLE	USED	BY	ROYCNV.	4F14167
07605	+214553630410	OCT	214553630410	14-TABLE	USED	BY	ROYCNV.	4F14168
07606	+211443023471	OCT	211443023471	13-TABLE	USED	BY	ROYCNV.	4F14169
07607	+205721522451	OCT	205721522451	12-TABLE	USED	BY	ROYCNV.	4F14170
07610	+202564416672	OCT	202564416672	11-TABLE	USED	BY	ROYCNV.	4F14171
07611	+177452013710	OCT	177452013710	10-TABLE	USED	BY	ROYCNV.	4F14172
07612	+173734654500	OCT	173734654500	09-TABLE	USED	BY	ROYCNV.	4F14173
07613	+170575360400	OCT	170575360400	08-TABLE	USED	BY	ROYCNV.	4F14174
07614	+165461132000	OCT	165461132000	07-TABLE	USED	BY	ROYCNV.	4F14175
07615	+161750220000	OCT	161750220000	06-TABLE	USED	BY	ROYCNV.	4F14176
07616	+156606500000	OCT	156606500000	05-TABLE	USED	BY	ROYCNV.	4F14177
07617	+153470400000	OCT	153470400000	04-TABLE	USED	BY	ROYCNV.	4F14178
07620	+147764000000	OCT	147764000000	03-TABLE	USED	BY	ROYCNV.	4F14179
07621	+144620000000	OCT	144620000000	02-TABLE	USED	BY	ROYCNV.	4F14180
07622	+141500000000	OCT	141500000000	01-TABLE	USED	BY	ROYCNV.	4F14181
07623	+136400000000	TAB	OCT 136400000000	00-TABLE	USED	BY	ROYCNV.	4F14182
			END OF PROGRAM ROYCNV.					4F14183
			* * * * *					*4F14184
								4F14185
07624	0 00001 0 01230	SIG1ST	PZE SIGMA1+2,,1					4F14186
	07625	STATEC	BSS 0					4F141865
								4F14187
	15215	ORG	2701+4096					4F14188
	15215	ARGREG	BSS 50					4F14189
	15277	CBAR	BSS 1					4F14190
	15300	ABAR	BSS 1					4F14191
	15301	FSTYPE	BSS 1					4F14192
	15302	FSBITS	BSS 1					4F14193
	15303	FNBITS	BSS 1					4F14194
	15304	FNCTR	BSS 1					4F14195
	15305	ALPHA	BSS 139					4F14196
	15520	LAMBDA	BSS 1200					4F14197
			END OF ARITHMETIC / STATE B.					4F14198
			* * * * *					*4F14199
								4F14200
			ARITHMETIC / STATE C=					4F14201
			STATE C. PERFOPMS OPTIMIZATION ON LAMBDA TABLE.					4F14204
								4F14205
	07625	ORG	STATEC					4F14206
07625	0 56000 0 01406	R00000	LDQ L(0)			CLEAR	MQ	4F14207

07626	-0	53400	1	01360		LXD NBAR,A		LDXA WITH -N		4F14208
07627	-0	63400	1	07636		SXD R00700,A				4F14209
07630	-0	63400	1	07714		SXD R05200,A				4F14210
07631	-0	63400	1	10266		SXD AS0800,A				4F14211
07632	-0	63400	1	10313		SXD AS2900,A				4F14212
07633	0	53400	7	01406		LXA L(0),7		CLEAR XA,XB,XC,		4F14213
07634	-0	60000	2	15044	R00500	STQ BETA,B				4F14214
07635	1	77777	2	07636		TXI R00700,B,-1				4F14215
07636	3	00000	2	07634	R00700	TXH R00500,B,0				4F14216
07637	0	50000	0	01117		CLA 3LBAR				4F14217
07640	0	62200	0	07651		STD R01700				4F14218
07641	0	62200	0	07726		STD R06200				4F14219
07642	0	50000	1	15520	R01000	CLA LAMBDA,A		ADD INTO GAMMA COUNTERS		4F14220
07643	0	73400	2	00000		PAX 0,B				4F14221
07644	0	50000	2	15044		CLA BETA,B				4F14222
07645	0	40000	0	01506		ADD BETAD1		(-3)*2**18+(-3)		4F14223
07646	0	62200	2	15044		STD BETA,B				4F14224
07647	0	62100	2	15044		STA BETA,B				4F14225
07650	1	77775	1	07651		TXI R01700,A,-3				4F14226
07651	3	00000	1	07642	R01700	TXH R01000,A,0		-3L IN XA AT END		4F14227
07652	3	77772	1	07703	R01800	TXH R04200,A,-6		EXIT FROM SINGLE ELEMENT REDUCTION		4F14228
07653	0	50000	1	15515		CLA LAMBDA-3,A				4F14229
07654	0	73400	2	00000		PAX 0,B				4F14230
07655	0	50000	2	15044		CLA BETA,B				4F14231
07656	0	40200	0	01506		SUB BETAD1				4F14232
07657	0	10000	0	07661		TZE R02600				4F14233
07660	1	00003	1	07652		TXI R01800,A,3				4F14234
07661	0	56000	1	15516	R02600	LDQ LAMBDA-2,A		SINGLE ELEMENT		4F14235
07662	-0	76300	0	00006		LGL 6		EXAMINE OPERATION		4F14236
07663	0	40200	0	01401		SUB 11Z				4F14237
07664	-0	10000	0	07666		TNZ R03200				4F14238
07665	1	00003	1	07652		TXI R01800,A,3				4F14239
07666	-0	50000	0	01527	R03200	CAL MASK1		SINGLE ELEMENT, NON-UNARY OP		4F14240
07667	0	32000	1	15515		ANS LAMBDA-3,A		EXTRACT TAGS AND STORE BACK		4F14241
07670	0	50000	1	15512		CLA LAMBDA-6,A				4F14242
07671	-0	50100	1	15515		ORA LAMBDA-3,A				4F14243
07672	0	60200	1	15512		SLW LAMBDA-6,A				4F14244
07673	-0	50000	1	15516		CAL LAMBDA-2,A		EXTRACT FS BITS AND STORE BACK		4F14245
07674	-0	32000	0	01470		ANA MASK5				4F14246
07675	-0	60200	1	15513		ORS LAMBDA-5,A				4F14247
07676	-0	50000	1	15517		CAL LAMBDA-1,A		STORE BACK SYMBOL		4F14248
07677	0	60200	1	15514		SLW LAMBDA-4,A				4F14249
07700	0	60000	2	15044		STZ BETA,B		REDUCE GAMMA COUNT TO 0		4F14250
07701	0	60000	1	15515		STZ LAMBDA-3,A		CLEAR TAG WORD		4F14251
07702	1	00003	1	07652		TXI R01800,A,3		RESUME SCAN-BACK		4F14252
07703	0	60000	0	01347	R04200	STZ G				4F14253
07704	0	53400	7	01406		LXA L(0),7		CLEAR XA,XB,XC		4F14254
07705	0	50000	2	15044	R04500	CLA BETA,B		SET ORIGINS OF SCRIPL TABLE		4F14255
07706	0	10000	0	07713		TZE R05100				4F14256
07707	0	56000	0	01347		LDQ G				4F14257
07710	-0	62000	2	15044		SLQ BETA,B				4F14258
07711	0	40000	0	01347		ADD G				4F14259
07712	0	62200	0	01347		STD G				4F14260
07713	1	77777	2	07714	R05100	TXI R05200,B,-1				4F14261

07714	3	00000	2	07705	R05200	TXH R04500,B,0	DEC(K)=DEC(ACC)=-3P AT END	4F14262
07715	-0	50000	1	15520	R05300	CAL LAMBDA,A	STRING BEADS... COMPRESS LAMBDA TABLE	4F14263
07716	0	10000	0	07725		TZE R06100		4F14264
07717	0	60200	4	15520		SLW LAMBDA,C		4F14265
07720	0	50000	1	15521		CLA LAMBDA+1,A		4F14266
07721	0	60100	4	15521		STO LAMBDA+1,C		4F14267
07722	0	50000	1	15522		CLA LAMBDA+2,A		4F14268
07723	0	60100	4	15522		STO LAMBDA+2,C		4F14269
07724	1	77775	4	07725		TXI R06100,C,-3		4F14270
07725	1	77775	1	07726	R06100	TXI R06200,A,-3		4F14271
07726	3	00000	1	07715	R06200	TXH R05300,A,0		4F14272
07727	-0	63400	4	07750		SXD R07800,C	-3P IN XC AT END	4F14273
07730	-0	63400	4	10074		SXD CS0760,C		4F14274
07731	0	53400	1	01406		LXA L(0),A		4F14275
07732	0	50000	1	15520	R06400	CLA LAMBDA,A	STORE ORDERED, REDUCED LAMBDA TABLE	4F14276
07733	0	73400	2	00000		PAX 0,B	IN SCRIPL TABLE	4F14277
07734	0	50000	2	15044		CLA BETA,B		4F14278
07735	-0	73400	4	00000		PDX 0,C		4F14279
07736	0	50000	1	15520		CLA LAMBDA,A		4F14280
07737	0	60100	4	16650		STO SCRIPL,C		4F14281
07740	0	50000	1	15521		CLA LAMBDA+1,A		4F14282
07741	0	60100	4	16651		STO SCRIPL+1,C		4F14283
07742	0	50000	1	15522		CLA LAMBDA+2,A		4F14284
07743	0	60100	4	16652		STO SCRIPL+2,C		4F14285
07744	1	77775	4	07745		TXI R07500,C,-3		4F14286
07745	-0	75400	4	00000	R07500	PXD 0,C		4F14287
07746	0	62200	2	15044		STD BETA,B		4F14288
07747	1	77775	1	07750		TXI R07800,A,-3		4F14289
07750	3	00000	1	07732	R07800	TXH R06400,A,0	-3P IN XA AT END	4F14290
07751	0	56000	0	01406	CS0000	LDQ L(0)	ELIMINATE COMMON,SEGMENTS	4F14291
07752	-0	50000	1	16645	CS0010	CAL SCRIPL-3,A		4F14292
07753	0	10000	0	07762		TZE CS0080	ERASED SEGMENT - CONTINUE BACK-SCAN	4F14293
07754	0	73400	2	00000	CS0030	PAX 0,B		4F14294
07755	-3	00000	2	10062		TXL CS0660,B,0	EXIT FROM CS ROUTINE	4F14295
07756	0	62100	0	07754		STA CS0030		4F14296
07757	0	50000	2	15044		CLA BETA,B		4F14297
07760	0	73400	4	00000	CS0060	PAX 0,C		4F14298
07761	-3	77772	4	07763		TXL CS0090,C,-6	AT LEAST TWO ELEMENTS	4F14299
07762	1	00003	1	07752	CS0080	TXI CS0010,A,3	ONE ELEMENT OR ERASED SEGMENT	4F14300
07763	-0	63400	1	10036	CS0090	SXD CS0470,A	SAVE XA	4F14301
07764	-0	63400	4	01357		SXD LENGTH,C	SAVE XC, CONTAINING LENGTH OF SEGMENT	4F14302
07765	-3	00000	4	07770	CS0100	TXL CS0130,C,0	SEARCH UP FOR MATCHING SEGMENT	4F14303
07766	1	00003	1	07767		TXI CS0120,A,3		4F14304
07767	1	00003	4	07765	CS0120	TXI CS0100,C,3		4F14305
07770	-0	50000	1	16645	CS0130	CAL SCRIPL-3,A		4F14306
07771	-0	10000	0	07773		TNZ CS0151		4F14307
07772	1	00003	1	07770		TXI CS0130,A,3	ERASED SEGMENT	4F14308
07773	0	73400	2	00000	CS0151	PAX 0,B		4F14309
07774	-3	00000	2	10055		TXL CS0610,B,0	GO ON TO NEXT SEGMENT	4F14310
07775	0	62100	0	07760		STA CS0060		4F14311
07776	0	50000	2	15044		CLA BETA,B		4F14312
07777	0	73400	4	00000		PAX 0,C		4F14313
10000	-0	75400	4	00000		PXD 0,C		4F14314
10001	0	40200	0	01357		SUB LENGTH		4F14315

10002	-0	10000	0	07765		TNZ	CS0100		NOT SAME LENGTH SEGMENT-CONTINUE SEARCH	4F14316
10003	-0	53400	2	10036		LXD	CS0470,B		SAME LENGTH SEGMENT	4F14317
10004	-0	63400	1	10054		SXD	CS0600,A			4F14318
10005	-3	00000	4	10032	CS0250	TXL	CS0430,C,0		MATCHING SEGMENTS	4F14319
10006	0	50000	2	16647		CLA	SCRIPL-1,B			4F14320
10007	0	40200	1	16647		SUB	SCRIPL-1,A			4F14321
10010	-0	10000	0	07765		TNZ	CS0100			4F14322
10011	-0	50000	2	16645		CAL	SCRIPL-3,B		SYMBOLS MATCH	4F14323
10012	-0	32000	0	01527		ANA	MASK1			4F14324
10013	0	60200	0	01347		SLW	G			4F14325
10014	-0	50000	1	16645		CAL	SCRIPL-3,A			4F14326
10015	-0	32000	0	01527		ANA	MASK1			4F14327
10016	0	76000	0	00006		COM				4F14328
10017	0	36100	0	01347		ACL	G			4F14329
10020	0	76000	0	00006		COM				4F14330
10021	-0	10000	0	07765		TNZ	CS0100			4F14331
10022	0	50000	2	16646		CLA	SCRIPL-2,B		TAGS MATCH	4F14332
10023	0	77100	0	00006		ARS	6			4F14333
10024	0	76700	0	00006		ALS	6			4F14334
10025	0	40200	1	16646		SUB	SCRIPL-2,A			4F14335
10026	-0	10000	0	07765		TNZ	CS0100			4F14336
10027	1	00003	1	10030		TXI	CS0360,A,3		OPS MATCH	4F14337
10030	1	00003	2	10031	CS0360	TXI	CS0370,B,3			4F14338
10031	1	00003	4	10005	CS0370	TXI	CS0250,C,3			4F14339
10032	-0	50000	1	16650	CS0430	CAL	SCRIPL,A		MATCHING SEGMENTS	4F14340
10033	-0	32000	0	01452		ANA	MASK2		SEARCH FOR REFERENCES	4F14341
10034	0	34000	1	16647	CS0450	CAS	SCRIPL-1,A			4F14342
10035	1	00003	1	10034		TXI	CS0450,A,3			4F14343
10036	1	00000	0	10040	CS0470	TXI	CS0490,0,0			4F14344
10037	1	00003	1	10034		TXI	CS0450,A,3			4F14345
10040	0	50000	0	07754	CS0490	CLA	CS0030		CHANGE REFERENCE	4F14346
10041	0	62100	1	16647		STA	SCRIPL-1,A			4F14347
10042	-0	53400	4	01357		LXD	LENGTH,C			4F14348
10043	-0	53400	1	10054		LXD	CS0600,A			4F14349
10044	-3	00000	4	10050	CS0530	TXL	CS0570,C,0		ERASE DUPLICATE SEGMENT	4F14350
10045	-0	60000	1	16645		STQ	SCRIPL-3,A			4F14351
10046	1	00003	1	10047		TXI	CS0560,A,3			4F14352
10047	1	00003	4	10044	CS0560	TXI	CS0530,C,3			4F14353
10050	0	53400	4	07760	CS0570	LXA	CS0060,C			4F14354
10051	-0	60000	4	15044		STQ	BETA,C			4F14355
10052	-0	50000	0	01401		CAL	11Z		STORE CS BIT	4F14356
10053	-0	60200	2	16651		ORS	SCRIPL+1,B			4F14357
10054	1	00000	0	07770	CS0600	TXI	CS0130,0,0			4F14358
10055	-0	53400	1	10036	CS0610	LXD	CS0470,A			4F14359
10056	-0	53400	4	01357		LXD	LENGTH,C			4F14360
10057	-3	00000	4	07752	CS0630	TXL	CS0010,C,0			4F14361
10060	1	00003	1	10061		TXI	CS0650,A,3			4F14362
10061	1	00003	4	10057	CS0650	TXI	CS0630,C,3			4F14363
10062	0	53400	5	01406	CS0660	LXA	L(0),5		STRING BEADS... COMPRESS SCRIPL TABLE	4F14364
10063	-0	50000	1	16650	CS0670	CAL	SCRIPL,A			4F14365
10064	0	10000	0	10073		TZE	CS0750			4F14366
10065	0	60200	4	16650		SLW	SCRIPL,C			4F14367
10066	0	50000	1	16651		CLA	SCRIPL+1,A			4F14368
10067	0	60100	4	16651		STO	SCRIPL+1,C			4F14369

10070	0	50000	1	16652	CLA	SCRIPL+2,A		4F14370	
10071	0	60100	4	16652	STO	SCRIPL+2,C		4F14371	
10072	1	77775	4	10073	TXI	CS0750,C,-3		4F14372	
10073	1	77775	1	10074	CS0750	TXI CS0760,A,-3		4F14373	
10074	3	00000	1	10063	CS0760	TXH CS0670,A,0		4F14374	
10075	-0	63400	4	10111	SXD	PM0080,C	-3Q IN XC AT END	4F14375	
10076	-0	63400	4	10300	SXD	AS1800,C		4F14376	
10077	-0	63400	4	10323	SXD	AS3600,C		4F14377	
10100	0	76000	0	00140	PM0000	SLF	TURN OFF ALL SENSE LITES	4F14378	
10101	0	53400	1	01406	LXA	L(0),A	PERMUTE * AND /	4F14379	
10102	0	50000	1	16650	PM0010	CLA	SCRIPL,A	4F14380	
10103	0	73400	2	00000	PAX	0,B		4F14381	
10104	0	50000	2	15044	CLA	BETA,B		4F14382	
10105	0	73400	4	00000	PAX	0,C	LDXC WITH SEGMENT LENGTH	4F14383	
10106	-0	63400	4	10110	SXD	PM0070,C		4F14384	
10107	-3	77767	4	10113	TXL	PM0100,C,-9		4F14385	
10110	1	00000	1	10111	PM0070	TXI	PM0080,A,0	LENGTH LESS THAN 3 OR OD NOT = TO *	4F14386
10111	-3	00000	1	10256	PM0080	TXL	AS0000,A,0	EXIT FROM PERMUTATION ROUTINE	4F14387
10112	0	02000	0	10102	TRA	PM0010		4F14388	
10113	0	56000	1	16651	PM0100	LDQ	SCRIPL+1,A	SEGMENT LENGTH AT LEAST = TO 3	4F14389
10114	-0	75400	0	00000	PXD	0,0		4F14390	
10115	-0	76300	0	00006	LGL	6		4F14391	
10116	0	40200	0	01405	SUB	STAR		4F14392	
10117	-0	10000	0	10110	TNZ	PM0070		4F14393	
10120	0	16200	0	10122	TQP	PM0170		4F14394	
10121	0	02000	0	10110	TRA	PM0070		4F14395	
10122	-0	63400	4	10131	PM0170	SXD	PM0260,C	4F14396	
10123	-0	63400	4	10147	SXD	PM0400,C		4F14397	
10124	-0	63400	4	10200	SXD	PM0680,C		4F14398	
10125	0	53400	4	01406	LXA	L(0),C	LDXC WITH 0	4F14399	
10126	1	77775	1	10127	TXI	PM0240,A,-3		4F14400	
10127	0	76000	0	00143	PM0240	SLN	3	TURN * LITE ON	4F14401
10130	1	77775	4	10131	PM0250	TXI	PM0260,C,-3	4F14402	
10131	-3	00000	4	10212	PM0260	TXL	PM0790,C,0	EXIT	4F14403
10132	-0	63400	4	10142	SXD	PM0340,C		4F14404	
10133	-0	53400	2	10134	LXD	PM0290,B		4F14405	
10134	1	00000	3	10135	PM0290	TXI	PM0300,3,0	XA TO XA AND XB	4F14406
10135	-0	75400	0	00000	PM0300	PXD	0,0	4F14407	
10136	0	56000	1	16651	LDQ	SCRIPL+1,A		4F14408	
10137	-0	76300	0	00006	LGL	6		4F14409	
10140	0	34000	0	01402	CAS	SLASH		4F14410	
10141	0	00007	0	00000	FEXUB	HTR	0,0,7	4F14411	
10142	-3	00000	0	10174	PM0340	TXL	PM0640,0,0	/ SIGN	4F14412
10143	-0	76000	0	00143	SLT	3	* SIGN... IS * LITE ON	4F14413	
10144	1	77775	1	10127	TXI	PM0240,A,-3	NO	4F14414	
10145	1	77775	2	10146	TXI	PM0390,B,-3	YES - SEARCH FOR / SIGN	4F14415	
10146	1	77775	4	10147	PM0390	TXI	PM0400,C,-3	4F14416	
10147	-3	00000	4	10210	PM0400	TXL	PM0770,C,0	EXIT	4F14417
10150	-0	75400	0	00000	PXD	0,0		4F14418	
10151	0	56000	2	16651	LDQ	SCRIPL+1,B		4F14419	
10152	-0	76300	0	00006	LGL	6		4F14420	
10153	0	40200	0	01402	SUB	SLASH		4F14421	
10154	0	10000	0	10156	TZE	PM0480		4F14422	
10155	1	77775	2	10146	TXI	PM0390,B,-3		4F14423	

10156	0	50000	1	16650	PM0480	CLA	SCRIPL,A	PERMUTE TAG WORDS	4F14424
10157	0	56000	2	16650		LDQ	SCRIPL,B		4F14425
10160	-0	60000	1	16650		STQ	SCRIPL,A		4F14426
10161	0	60100	2	16650		STO	SCRIPL,B		4F14427
10162	0	50000	1	16651		CLA	SCRIPL+1,A	PERMUTE OP WORDS	4F14428
10163	0	56000	2	16651		LDQ	SCRIPL+1,B		4F14429
10164	-0	60000	1	16651		STQ	SCRIPL+1,A		4F14430
10165	0	60100	2	16651		STO	SCRIPL+1,B		4F14431
10166	0	50000	1	16652		CLA	SCRIPL+2,A	PERMUTE SYMBOL WORDS	4F14432
10167	0	56000	2	16652		LDQ	SCRIPL+2,B		4F14433
10170	-0	60000	1	16652		STQ	SCRIPL+2,A		4F14434
10171	0	60100	2	16652		STO	SCRIPL+2,B		4F14435
10172	-0	53400	4	10142		LXD	PM0340,C		4F14436
10173	1	77775	1	10130		TXI	PM0250,A,-3	RESUME SEGMENT SCAN	4F14437
10174	-0	76000	0	00143	PM0640	SLT	3	/ SIGN... IS * LITE ON	4F14438
10175	1	77775	2	10177	PM0650	TXI	PM0670,B,-3	NO	4F14439
10176	1	77775	1	10130		TXI	PM0250,A,-3		4F14440
10177	1	77775	4	10200	PM0670	TXI	PM0680,C,-3		4F14441
10200	-3	00000	4	10210	PM0680	TXL	PM0770,C,0		4F14442
10201	-0	75400	0	00000		PXD	0,0		4F14443
10202	0	56000	2	16651		LDQ	SCRIPL+1,B		4F14444
10203	-0	76300	0	00006		LGL	6		4F14445
10204	0	40200	0	01402		SUB	SLASH		4F14446
10205	0	10000	0	10175		TZE	PM0650		4F14447
10206	0	76000	0	00143		SLN	3	TORN * LITE ON	4F14448
10207	0	02000	0	10156		TRA	PM0480		4F14449
10210	-0	53400	1	10211	PM0770	LXD	PM0780,A		4F14450
10211	1	00000	3	10212	PM0780	TXI	PM0790,3,0	XB TO XA,XB	4F14451
10212	-0	75400	0	00000	PM0790	PXD	0,0		4F14452
10213	0	56000	1	16646		LDQ	SCRIPL-2,A		4F14453
10214	-0	76300	0	00006		LGL	6		4F14454
10215	0	40200	0	01402		SUB	SLASH		4F14455
10216	0	10000	0	10111		TZE	PM0080	... / - EXIT FROM SEGMENT SCAN	4F14456
10217	-0	75400	0	00000		PXD	0,0		4F14457
10220	0	56000	1	16643		LDQ	SCRIPL-5,A		4F14458
10221	-0	76300	0	00006		LGL	6		4F14459
10222	0	40200	0	01402		SUB	SLASH		4F14460
10223	0	10000	0	10111		TZE	PM0080	... / * - EXIT FROM SEGMENT SCAN	4F14461
10224	0	50000	1	16645		CLA	SCRIPL-3,A	... **	4F14462
10225	0	60100	0	01126		STO	E		4F14463
10226	0	50000	1	16646		CLA	SCRIPL-2,A		4F14464
10227	0	60100	0	01127		STO	E+1		4F14465
10230	0	50000	1	16647		CLA	SCRIPL-1,A		4F14466
10231	0	60100	0	01130		STO	E+2		4F14467
10232	1	00003	1	10233		TXI	PM0980,A,3		4F14468
10233	1	00003	4	10234	PM0980	TXI	PM0990,C,3		4F14469
10234	-3	00000	4	10244	PM0990	TXL	PM1070,C,0	FINIS	4F14470
10235	0	50000	1	16645		CLA	SCRIPL-3,A		4F14471
10236	0	60100	1	16650		STO	SCRIPL,A		4F14472
10237	0	50000	1	16646		CLA	SCRIPL-2,A		4F14473
10240	0	60100	1	16651		STO	SCRIPL+1,A		4F14474
10241	0	50000	1	16647		CLA	SCRIPL-1,A		4F14475
10242	0	60100	1	16652		STO	SCRIPL+2,A		4F14476
10243	1	00003	1	10233		TXI	PM0980,A,3		4F14477

10244	0	50000	0	01126	PM1070	CLA	E		4F14478
10245	0	60100	1	16650		STO	SCRIPL,A		4F14479
10246	0	50000	0	01127		CLA	E+1		4F14480
10247	0	60100	1	16651		STO	SCRIPL+1,A		4F14481
10250	0	50000	0	01130		CLA	E+2		4F14482
10251	0	60100	1	16652		STO	SCRIPL+2,A		4F14483
10252	-0	50000	1	16654		CAL	SCRIPL+4,A	PRESERVE CS BIT	4F14464
10253	-0	32000	0	01401		ANA	11Z		4F14485
10254	-0	60200	1	16651		ORS	SCRIPL+1,A		4F14486
10255	0	02000	0	10110		TRA	PM0070		4F14487
10256	0	53400	7	01406	AS0000	LXA	L(0),7	RENUMBER SEGMENT OF SCRIPL	4F14488
10257	0	50000	2	15044	AS0100	CLA	BETA,B		4F14489
10260	0	10000	0	10265		TZE	AS0700		4F14490
10261	-0	75400	4	00000		PXD	0,C		4F14491
10262	0	77100	0	00022		ARS	18		4F14492
10263	0	62100	2	15044		STA	BETA,B		4F14493
10264	1	77777	4	10265		TXI	AS0700,C,-1		4F14494
10265	1	77777	2	10266	AS0700	TXI	AS0800,B,-1		4F14495
10266	3	00000	2	10257	AS0800	TXH	AS0100,B,0		4F14496
10267	0	50000	1	16650	AS0900	CLA	SCRIPL,A		4F14497
10270	0	73400	2	00000		PAX	0,B		4F14498
10271	0	50000	2	15044		CLA	BETA,B		4F14499
10272	0	62100	1	16650		STA	SCRIPL,A		4F14500
10273	0	56000	1	16652		LDQ	SCRIPL+2,A		4F14501
10274	-0	76300	0	00001		LGL	1		4F14502
10275	0	76000	0	00001		LBT			4F14503
10276	0	16200	0	10302		TQP	AS2000		4F14504
10277	1	77775	1	10300		TXI	AS1800,A,-3		4F14505
10300	3	00000	1	10267	AS1800	TXH	AS0900,A,0		4F14506
10301	0	02000	0	10307		TRA	AS2500		4F14507
10302	-0	76300	0	00043	AS2000	LGL	35		4F14508
10303	0	73400	2	00000		PAX	0,B		4F14509
10304	0	50000	2	15044		CLA	BETA,B		4F14510
10305	0	62100	1	16652		STA	SCRIPL+2,A		4F14511
10306	1	77775	1	10300		TXI	AS1800,A,-3		4F14512
10307	0	53400	3	01406	AS2500	LXA	L(0),3	LDXA,XB WITH 0	4F14513
10310	0	56000	0	01406		LDQ	L(0)	CLEAR MQ	4F14514
10311	-0	60000	2	15044	AS2700	STQ	BETA,B	RECLEAR BETA TABLE	4F14515
10312	1	77777	2	10313		TXI	AS2900,B,-1		4F14516
10313	3	00000	2	10311	AS2900	TXH	AS2700,B,0		4F14517
10314	0	50000	1	16650	AS3000	CLA	SCRIPL,A	ADD INTO GAMMA COUNTERS	4F14518
10315	0	73400	2	00000		PAX	0,B		4F14519
10316	0	50000	2	15044		CLA	BETA,B		4F14520
10317	0	40000	0	01462		ADD	BETAD2	3*2**18+(-3)	4F14521
10320	0	62200	2	15044		STD	BETA,B		4F14522
10321	0	62100	2	15044		STA	BETA,B		4F14523
10322	1	77775	1	10323		TXI	AS3600,A,-3		4F14524
10323	3	00000	1	10314	AS3600	TXH	AS3000,A,0	-3Q IN XA AT END	4F14525
10324	-0	63400	1	01117		SXD	3QBAR,A	-3Q TO 3QBAR = 3LBAR	4F14526
10325	-0	50000	1	16645	CCS000	CAL	SCRIPL-3,A	ELIMINATE COMMON SUBEXPRESSIONS	4F14527
10326	0	73400	2	00000		PAX	0,B	LOAD XB WITH S(I)	4F14528
10327	-3	00000	2	10354		TXL	CCS240,B,0	EXIT AT S(0)	4F14529
10330	-0	50000	2	15044		CAL	BETA,B	OBTAIN LENGTH OF S(I)	4F14530
10331	0	62200	0	10332		STD	CCS060	AND BACK UP TO	4F14531

10332	1	00000	1	10333	CCS060	TXI	CCS070,A,0	BEGINNING OF CURRENT SEGMENT	4F14532
10333	-0	50000	1	16651	CCS070	CAL	SCRIPL+1,A	OBTAIN OP1 (S(I))	4F14533
10334	-0	32000	0	01401		ANA	11Z	EXTRACT CS-BIT	4F14534
10335	0	10000	0	10325		TZE	CCS000	CONTINUE TO S(I-1)	4F14535
10336	-0	75400	2	00000		PXD	0,B		4F14536
10337	0	77100	0	00022		ARS	18		4F14537
10340	0	53400	4	01406		LXA	L(0),C	TO S(I)	4F14538
10341	-0	53400	2	10342		LXD	CCS140,B	AND KEEP COUNT OF SAME	4F14539
10342	1	00000	3	10343	CCS140	TXI	CCS150,3,0	XA TO XA,XB	4F14540
10343	-3	00000	2	10350	CCS150	TXL	CCS200,B,0	SEARCH-UP FINISHED. EXAMINE COUNT	4F14541
10344	0	34000	2	16647		CAS	SCRIPL-1,B		4F14542
10345	1	00003	2	10343		TXI	CCS150,B,3	CONTINUE SEARCH	4F14543
10346	1	00001	4	10347		TXI	CCS190,C,1	RAISE REF COUNTER AND	4F14544
10347	1	00003	2	10343	CCS190	TXI	CCS150,B,3	CONTINUE SEARCH	4F14545
10350	3	00001	4	10325	CCS200	TXH	CCS000,C,1	MULTIPLE REFERENCE	4F14546
10351	-0	50000	0	01530		CAL	MASK4	SINGLE REFERENCE - SO SET	4F14547
10352	0	32000	1	16651		ANS	SCRIPL+1,A	OP1(S(I))30 TO 0, AND	4F14548
10353	0	02000	0	10325		TRA	CCS000	CONTINUE FOR S(I-1)	4F14549
10354	-0	53400	1	10323	CCS240	LXD	AS3600,A	-3Q TO XA	4F14550
10355	-3	00000	1	10610	PL0000	TXL	LK0000,A,0	GO TO LINKAGE	4F14551
10356	0	50000	1	16645		CLA	SCRIPL-3,A		4F14552
10357	0	73400	2	00000		PAX	0,B		4F14553
10360	-0	50000	2	15044		CAL	BETA,B		4F14554
10361	0	73400	4	00000		PAX	0,C		4F14555
10362	0	62200	0	10363		STD	PL0060		4F14556
10363	1	00000	1	10364	PL0060	TXI	PL0070,A,0	SET XA TO BEGINNING OF S(I)	4F14557
10364	-0	75400	0	00000	PL0070	PXD	0,0		4F14558
10365	0	56000	1	16651		LDQ	SCRIPL+1,A	OBTAIN	4F14559
10366	-0	76300	0	00006		LGL	6	AND	4F14560
10367	0	34000	0	01427		CAS	SPECOP	EXAMINE OP1 (S(I))	4F14561
10370	0	02000	0	10465		TRA	PL0680		4F14562
10371	0	02000	0	10427		TRA	PL0460		4F14563
10372	-0	75400	0	00000	PL0130	PXD	0,0	OP1 (S(I)) IS +, - OR *	4F14564
10373	0	56000	1	16652		LDQ	SCRIPL+2,A	OBTAIN	4F14565
10374	-0	76300	0	00001		LGL	1	AND	4F14566
10375	0	76000	0	00001		LBT		EXAMINE SYM1 (S(I))	4F14567
10376	0	16200	0	10410		TQP	PL0300		4F14568
10377	-0	76300	0	00005		LGL	5	EX (IN)TERNAL VARIABLE	4F14569
10400	0	34000	0	01423	PL0135	CAS	L(H)	IS SYM1 (S(I)) FIX OR FLO PT	4F14570
10401	0	34000	0	01425		CAS	L(O)		4F14571
10402	0	02000	0	10405		TRA	PL0240	FLO PT... SET OP1 (S(I)) 32 = 1	4F14572
10403	0	02000	0	10405		TRA	PL0240	FLO PT... DITTO	4F14573
10404	0	02000	0	10355		TRA	PL0000	FIX PT... OP1 (S(I)) 32 = 0	4F14574
10405	-0	50000	0	01416	PL0240	CAL	L(8)	SET OP1 (S(I)) 32 = 1	4F14575
10406	-0	60200	1	16651	PL0250	ORS	SCRIPL+1,A		4F14576
10407	1	00000	0	10355	PL0260	TXI	PL0000,0,0	CONTINUE SCAN	4F14577
10410	-0	53400	2	10411	PL0300	LXD	PL0310,B	SYM1 (S(I)) = SOME S(J)	4F14578
10411	1	00000	3	10412	PL0310	TXI	PL0320,3,0	XA TO XA,XB	4F14579
10412	-0	63400	4	10413	PL0320	SXD	PL0330,C		4F14580
10413	1	00000	2	10414	PL0330	TXI	PL0340,B,0		4F14581
10414	-0	50000	2	16650	PL0340	CAL	SCRIPL,B		4F14582
10415	0	73400	4	00000		PAX	0,C		4F14583
10416	-0	32000	0	01452		ANA	MASK2		4F14584
10417	0	40200	1	16652		SUB	SCRIPL+2,A		4F14585

10420	0	10000	0	10424	TZE	PL0420			4F14586
10421	0	50000	4	15044	CLA	BETA,C			4F14587
10422	0	73400	4	00000	PAX	0,C			4F14588
10423	0	02000	0	10412	TRA	PL0320			4F14589
10424	-0	50000	2	16651	PL0420	CAL	SCRIPL+1,B	SYM1(S(I)) = S(J)	4F14590
10425	-0	32000	0	01416	ANA	L(8)		EXTRACT OP1 (S(J)) 32 AND GO	4F14591
10426	0	02000	0	10406	TRA	PL0250		SET OP1 (S(I)) 32 = OP1 (S(J)) 32	4F14592
10427	-0	76300	0	00007	PL0460	LGL	7	OP1 (S(I)) IS SPOP	4F14593
10430	0	16200	0	10437	TQP	PL0465			4F14594
10431	0	56000	1	16652	PL0461	LDQ	SCRIPL+2,A	FS NAME -	4F14595
10432	-0	75400	0	00000	PXD	0,0		EXAMINE SUM1 (S(I)) S,1-5	4F14596
10433	-0	76300	0	00006	LGL	6			4F14597
10434	0	40200	0	01433	SUB	L(X)			4F14598
10435	-0	10000	0	10405	TNZ	PL0240		FLO PT... GO SET OP1 (S(I)) 32 = 1	4F14599
10436	0	02000	0	10355	TRA	PL0000		FIX PT ... OP1 (S(I)) 32 = 0	4F14600
10437	0	76000	0	00001	PL0465	LBT			4F14601
10440	0	02000	0	10445	TRA	PL0470			4F14602
10441	0	56000	1	16652	LDQ	SCRIPL+2,A			4F14603
10442	-0	75400	0	00000	PXD	,0			4F14604
10443	-0	76300	0	00006	LGL	6			4F14605
10444	0	02000	0	10400	TRA	PL0135			4F14606
10445	0	50000	1	16652	PL0470	CLA	SCRIPL+2,A	NOT AN FS NAME	4F14607
10446	0	53400	2	01406	LXA	L(0),B			4F14608
10447	0	34000	2	11117	PL0480	CAS	OPSUB,B		4F14609
10450	1	77777	2	10453	TXI	PL0520,B,-1			4F14610
10451	0	02000	0	10462	TRA	PL0650			4F14611
10452	1	77777	2	10453	TXI	PL0520,B,-1			4F14612
10453	3	77754	2	10447	PL0520	TXH	PL0480,B,-20		4F14613
10454	0	60100	0	01347	STO	G			4F14614
10455	-0	63400	1	10407	SXD	PL0260,A			4F14615
10456	0	07400	1	03321	TSX	TET00,A			4F14616
10457	0	00000	0	00011	HTR	9			4F14617
10460	-0	53400	1	10407	LXD	PL0260,A			4F14618
10461	0	02000	0	10431	TRA	PL0461			4F14619
10462	-0	50000	0	01412	PL0650	CAL	L(4)	SET OP1 (S(I)) 33 =1	4F14620
10463	-0	60200	1	16651	ORS	SCRIPL+1,A			4F14621
10464	0	02000	0	10431	TRA	PL0461			4F14622
10465	0	16200	0	10372	PL0680	TQP	PL0130		4F14623
10466	-0	75400	0	00000	PXD	0,0		OP1 (S(I) IS **	4F14624
10467	0	56000	1	16652	LDQ	SCRIPL+2,A		OBTAIN AND	4F14625
10470	-0	76300	0	00001	LGL	1		EXAMINE	4F14626
10471	0	76000	0	00001	LBT			SYM1 (S(I))	4F14627
10472	0	16200	0	10550	TQP	PL1000			4F14628
10473	-0	76300	0	00005	LGL	5		EX (IN)TERNAL VARIABLE	4F14629
10474	0	34000	0	01423	CAS	L(H)		IS OT FIX OR FLO PT	4F14630
10475	0	34000	0	01425	CAS	L(O)			4F14631
10476	0	02000	0	10501	TRA	PL0800			4F14632
10477	0	02000	0	10501	TRA	PL0800			4F14633
10500	0	02000	0	10503	TRA	PL0830		FIX PT	4F14634
10501	-0	50000	0	01416	PL0800	CAL	L(8)	FLO PT... SET OP1 (S(I)) 32 = 1	4F14635
10502	-0	60200	1	16651	PL0820	ORS	SCRIPL+1,A		4F14636
10503	-0	75400	0	00000	PL0830	PXD	0,0		4F14637
10504	0	56000	1	16655	LDQ	SCRIPL+5,A		OBTAIN	4F14638
10505	-0	76300	0	00001	LGL	1		AND	4F14639

10506	0	76000	0	00001	LBT	EXAMINE	4F14640
10507	0	16200	0	10567	TQP PL1200	SYM2 (S(I))	4F14641
10510	-0	76300	0	00005	LGL 5		4F14642
10511	0	34000	0	01423	CAS L(H)		4F14643
10512	0	34000	0	01425	CAS L(O)		4F14644
10513	0	02000	0	10545	TRA PL0940	SYM2 (S(I)) IS FLO PT, SO GO	4F14645
10514	0	02000	0	10545	TRA PL0940	SET OP2 (S(I)) 32 = 1	4F14646
10515	-0	75400	0	00000	PL0850 PXD 0,0	SYM2(S(I)) IS FIX PT	4F14647
10516	-0	76300	0	00006	LGL 6		4F14648
10517	0	40200	0	01375	SUB OPEN		4F14649
10520	-0	10000	0	10355	TNZ PL0000	SYM2 (S(I)) IS EXTERNAL	4F14650
10521	-0	76300	0	00031	LGL 25	SYM2 (S(I)) IS INTERNAL (AND FIX PT)	4F14651
10522	0	40000	0	10537	ADD PL0880		4F14652
10523	0	62100	0	10515	STA PL0850		4F14653
10524	0	76200	0	00302	RDR FXCODR		4F14654
10525	0	46000	0	10515	LDA PL0850		4F14655
10526	0	70000	0	01347	CPY G		4F14656
10527	0	70000	0	01350	CPY G+1		4F14657
10530	0	50000	0	01347	CLA G		4F14658
10531	0	34000	0	01350	CAS G+1		4F14659
10532	0	02000	0	10534	TRA *+2	GO TO THE DIAGNOSTIC.	4F14660
10533	0	02000	0	10535	TRA PL1570		4F14661
10534	0	07400	4	03400	TSX DIAG,4	* GO TO THE DIAGNOSTIC.	4F14662
10535	0	10000	0	10355	PL1570 TZE PL0000	EXP IS 0, SO OP1 (S(I)) 33 = 0	4F14663
10536	0	34000	0	10141	CAS FEXUB		4F14664
10537	3	00000	0	00002	PL0880 TXH FIXCON,0,0	EXP NOT LESS THAN 7, SO	4F14665
10540	0	02000	0	10355	TRA PL0000	OP1 (S(I)) 33 = 0	4F14666
10541	0	60100	1	16655	STO SCRIPL+5,A	EXP LESS THAN 7, SO STORE EXP	4F14667
10542	-0	50000	0	01412	CAL L(4)	AS SYM2 (S(I)) AND SET	4F14668
10543	-0	60200	1	16651	ORS SCRIPL+1,A	OP1 (S(I)) 33 = 1	4F14669
10544	0	02000	0	10355	TRA PL0000		4F14670
10545	-0	50000	0	01416	PL0940 CAL L(8)	SYM2 (S(I)) IS FLO PT	4F14671
10546	-0	60200	1	16654	ORS SCRIPL+4,A	SET OP2 (S(I)) 32 = 1	4F14672
10547	0	02000	0	10355	TRA PL0000		4F14673
10550	-0	53400	2	10551	PL1000 LXD PL1010,B	SYM1 (S(I)) IS SOME S(J)	4F14674
10551	1	00000	3	10552	PL1010 TXI PL1020,3,0	XA TO XA,XB	4F14675
10552	-0	63400	4	10553	PL1020 SXD PL1030,C		4F14676
10553	1	00000	2	10554	PL1030 TXI PL1040,B,0		4F14677
10554	-0	50000	2	16650	PL1040 CAL SCRIPL,B		4F14678
10555	0	73400	4	00000	PAX 0,C		4F14679
10556	-0	32000	0	01452	ANA MASK2		4F14680
10557	0	40200	1	16652	SUB SCRIPL+2,A		4F14681
10560	0	10000	0	10564	TZE PL1130		4F14682
10561	0	50000	4	15044	CLA BETA,C		4F14683
10562	0	73400	4	00000	PAX 0,C		4F14684
10563	0	02000	0	10552	TRA PL1020		4F14685
10564	-0	50000	2	16651	PL1130 CAL SCRIPL+1,B		4F14686
10565	-0	32000	0	01416	ANA L(8)		4F14687
10566	0	02000	0	10502	TRA PL0820		4F14688
10567	-0	53400	2	10570	PL1200 LXD PL1210,B	SYM2 (S(I)) = SOME S(K)	4F14689
10570	1	00000	3	10571	PL1210 TXI PL1220,3,0	XA TO XA,XB	4F14690
10571	-0	53400	4	10603	PL1220 LXD PL1330,C	LKXC WITH -6	4F14691
10572	-0	63400	4	10573	PL1230 SXD PL1240,C		4F14692
10573	1	00000	2	10574	PL1240 TXI PL1250,B,0		4F14693

10574	-0	50000	2	16650	PL1250	CAL	SCRIPL,B			4F14694
10575	0	73400	4	00000		PAX	0,C			4F14695
10576	-0	32000	0	01452		ANA	MASK2			4F14696
10577	0	40200	1	16655		SUB	SCRIPL+5,A			4F14697
10600	0	10000	0	10604		TZE	PL1340		SYM2(S(I)) = S(K)	4F14698
10601	0	50000	4	15044		CLA	BETA,C			4F14699
10602	0	73400	4	00000		PAX	0,C			4F14700
10603	1	77772	0	10572	PL1330	TXI	PL1230,0,-6			4F14701
10604	-0	50000	2	16651	PL1340	CAL	SCRIPL+1,B		SET OP2(S(I)) 32 = OP1 (S(K)) 32	4F14702
10605	-0	32000	0	01416		ANA	L(8)			4F14703
10606	-0	60200	1	16654		ORS	SCRIPL+4,A			4F14704
10607	0	02000	0	10355		TRA	PL0000		RESUME SCAN	4F14705
10610	-0	53400	1	10323	LK0000	LXD	AS3600,A		-3Q TO XA	4F14706
10611	-0	50000	1	16645	LK0030	CAL	SCRIPL-3,A			4F14707
10612	0	73400	2	00000		PAX	0,B		S(I) TO XB	4F14708
10613	-3	00000	2	11020		TXL	LK1610,B,0		EXIT UPON ENCOUNTERING S(0)	4F14709
10614	0	56000	1	16646		LDQ	SCRIPL-2,A		PLACE LAST OP OP S(I) IN MQ	4F14710
10615	0	50000	2	15044		CLA	BETA,B			4F14711
10616	0	62200	0	10617		STD	LK0110			4F14712
10617	1	00000	1	10620	LK0110	TXI	LK0120,A,0		MOVE XA TO BEGINNING OF S(I)	4F14713
10620	-0	53400	4	10621	LK0120	LXD	LK0130,C			4F14714
10621	1	00000	5	10622	LK0130	TXI	LK0140,5,0		XA TO XA,XC	4F14715
10622	-0	63400	1	10323	LK0140	SXD	AS3600,A			4F14716
10623	0	50000	2	15043		CLA	BETA-1,B			4F14717
10624	-0	73400	2	00000		PDX	0,B		LENGTH OF S(I-1) TO XB	4F14718
10625	-0	63400	2	10626		SXD	LK0180,B			4F14719
10626	1	00000	4	10627	LK0180	TXI	LK0190,C,0		MOVE XC TO BEGINNING OF S(I-1)	4F14720
10627	0	16200	0	10753	LK0190	TQP	LK1200		S(I) TYPE AC	4F14721
10630	-0	77300	0	00001		RQL	1			4F14722
10631	0	16200	0	10753		TQP	LK1200		S(I) TYPE AC	4F14723
10632	-0	50000	0	01404		CAL	12Z		S(I) RESULTS IN MQ (TYPE MQ)	4F14724
10633	-0	60200	1	16651		ORS	SCRIPL+1,A		SET OP1 (S(I)) 31 = 1	4F14725
10634	-0	75400	0	00000		PXD	0,0			4F14726
10635	0	56000	4	16651		LDQ	SCRIPL+1,C		PLACE OP1 (S(I-1)) IN MQ	4F14727
10636	-0	76300	0	00006		LGL	6			4F14728
10637	0	34000	0	01427		CAS	SPECOP			4F14729
10640	0	02000	0	10643		TRA	LK0320			4F14730
10641	0	02000	0	10730		TRA	LK0950			4F14731
10642	0	02000	0	10611		TRA	LK0030		S(I)TYPTMQ, S(I-1)TYPEAC . OP1(S(I))29=0	4F14732
10643	0	16200	0	10664	LK0320	TQP	LK0570			4F14733
10644	-0	76300	0	00033		LGL	27		S(I)TYPE MQ, OP1(S(I-1)) = **	4F14734
10645	-0	50000	1	16650		CAL	SCRIPL,A			4F14735
10646	-0	32000	0	01452		ANA	MASK2		EXTRACT S(I) IN ACC	4F14736
10647	0	16200	0	10657		TQP	LK0480		OP1 (S(I-1)) 33 = 0	4F14737
10650	0	40200	4	16652		SUB	SCRIPL+2,C		OP1 (S(I-1)) 33 = 1. OPEN ** SUBROUTINE.	4F14738
10651	-0	10000	0	10611		TNZ	LK0030		SET OP1 (S(I)) 29 = OP1 (S(I-1)) 35 = 0	4F14739
10652	-0	50000	0	01411		CAL	L(3)		S(I) = SYM1 (S(I-1)), SO	4F14740
10653	-0	60200	4	16651	LK0430	ORS	SCRIPL+1,C			4F14741
10654	-0	50000	0	01436	LK0440	CAL	BIT29			4F14742
10655	-0	60200	1	16651		ORS	SCRIPL+1,A			4F14743
10656	0	02000	0	10611		TRA	LK0030		OP1 (S(I-1)) = 0. CLOSED ** SUBROUTINE.	4F14744
10657	0	40200	4	16655	LK0480	SUB	SCRIPL+5,C			4F14745
10660	-0	10000	0	10611		TNZ	LK0030		SET OP1,S(I)29=OP1(S(I-1))35=0	4F14746
10661	-0	50000	0	01407		CAL	L(1)		S(I) = SYM2 (S(I-1)), S0	4F14747

10662	-0	60200	4	16654	ORS	SCRIPL+4,C	SET OP2 (S(I-1)) 35 = 1	4F14748	
10663	0	02000	0	10654	TRA	LK0440		4F14749	
10664	-0	75400	0	00000	LK0570	PXD 0,0	S(I) TYPE MQ, OP1 (S(I-1)) = *	4F14750	
10665	0	56000	4	16654	LDQ	SCRIPL+4,C	FLACE PO2 (S(I-1)) IN MQ	4F14751	
10666	-0	76300	0	00006	LGL	6	IS OP2 (S(I-1)) = *	4F14752	
10667	0	40200	0	01405	SUB	STAR		4F14753	
10670	-0	10000	0	10611	TNZ	LK0030	NO - SET OP1 (S(I)) 29 = OP1 (S(I-1)) 35 =04	4F14754	
10671	-0	50000	0	01410	CAL	L(2)	YES	4F14755	
10672	-0	60200	4	16651	ORS	SCRIPL+1,C	SET OP1(S(I-1))34=1	4F14756	
10673	-0	50000	1	16650	LK0630	CAL	SCRIPL,A	4F14757	
10674	-0	32000	0	01452	ANA	MASK2	SEARCH FOR S(I) IN S(I-1)	4F14758	
10675	-3	00000	2	10610	LK0650	TXL	LK0000,B,0	NOT FOUND AT ALL	4F14759
10676	0	34000	1	16647	CAS	SCRIPL-1,A		4F14760	
10677	1	00003	1	10702	TXI	LK0700,A,3		4F14761	
10700	0	02000	0	10703	TRA	LK0710		4F14762	
10701	1	00003	1	10702	TXI	LK0700,A,3	NOT FOUND - CONTINUE SEARCH	4F14763	
10702	1	77775	2	10675	LK0700	TXI	LK0650,B,-3	4F14764	
10703	0	56000	1	16646	LK0710	LDQ	SCRIPL-2,A	S(I) IS SYMJ (S(I-1))	4F14765
10704	-0	77300	0	00001	RQL	1	IS OPJ (S(I-1)) = *	4F14766	
10705	0	16200	0	10707	TQP	LK0750		4F14767	
10706	1	00003	1	10702	TXI	LK0700,A,3	NO... CONTINUE SEARCH	4F14768	
10707	0	50000	4	16650	LK0750	CLA	SCRIPL,C	YES...PERMUTE EL1(S(I-1)) WITH ELJIS(I-1))	4F14769
10710	0	56000	1	16645	LDQ	SCRIPL-3,A	EXCHANGE	4F14770	
10711	0	60100	1	16645	STO	SCRIPL-3,A	TAG	4F14771	
10712	-0	60000	4	16650	STQ	SCRIPL,C	WORDS	4F14772	
10713	-0	50000	4	16651	CAL	SCRIPL+1,C	PLACE OP1 (S(I-1)) IN ACC	4F14773	
10714	0	56000	1	16646	LDQ	SCRIPL-2,A	PLACE OPJ (S(I-1)) IN MQ	4F14774	
10715	0	60200	1	16646	SLW	SCRIPL-2,A	EXCHANGE	4F14775	
10716	-0	60000	4	16651	STQ	SCRIPL+1,C	OP	4F14776	
10717	-0	32000	0	01452	ANA	MASK2	WORDS AND	4F14777	
10720	-0	60200	4	16651	ORS	SCRIPL+1,C	SET OP1(S(I-1))30-33= OPJ(S(I-1))30-33	4F14778	
10721	0	50000	4	16652	CLA	SCRIPL+2,C	THEN	4F14779	
10722	0	56000	1	16647	LDQ	SCRIPL-1,A	EXCHANGE	4F14780	
10723	0	60100	1	16647	STO	SCRIPL-1,A	SYMBOL	4F14781	
10724	-0	60000	4	16652	STQ	SCRIPL+2,C	WORDS	4F14782	
10725	-0	53400	1	10323	LXD	AS3600,A	RESTORE XA	4F14783	
10726	-0	50000	0	01407	LK0900	CAL	L(1)	AND	4F14784
10727	0	02000	0	10653	TRA	LK0430		4F14785	
10730	-0	77300	0	00033	LK0950	RQL	27	S(I) TYPE MQ, OP1 (S(I-1)) = SPOP	4F14786
10731	-0	50000	1	16650	CAL	SCRIPL,A		4F14787	
10732	-0	32000	0	01452	ANA	MASK2	EXTRACT S(I) IN ACC	4F14788	
10733	0	16200	0	10742	TQP	LK1050	OP1 (S(I-1)) 33 = 0 (CLOSED SUBROUTINE)	4F14789	
10734	3	00006	2	10611	TXH	LK0030,B,6	OPEN MULTIV... SET OP1 (S(I)) 29 = 0	4F14790	
10735	0	40200	4	16655	SUB	SCRIPL+5,C	OPEN UNIV... IS S(I) = SUM2 (S(I-1))	4F14791	
10736	-0	10000	0	10611	TNZ	LK0030	NO... SET OP1 (S(I))29 = OP2 (S(I-1))35 = 04	4F14792	
10737	-0	50000	0	01411	CAL	L(3)	AND	4F14793	
10740	-0	60200	4	16654	ORS	SCRIPL+4,C	SET OP2 (S(I-1))34 = OP2 (S(I-1))35 = 1	4F14794	
10741	0	02000	0	10654	TRA	LK0440		4F14795	
10742	-0	77300	0	00017	LK1050	RQL	15	4F14796	
10743	0	16200	0	10745	TQP	LK1100	TEST OP1(S(I-1))12	4F14797	
10744	0	02000	0	10611	TRA	LK0030	FN-NAME	4F14798	
10745	-3	00006	2	10611	LK1100	TXL	LK0030,B,6	CLOSED UNIV. SBRTN	4F14799
10746	0	40200	4	16660	SUB	SCRIPL+8,C	CLOSED MULTIV. SBRTN	4F14800	
10747	-0	10000	0	10611	TNZ	LK0030	S(I) NOT = SYM3 (S (I-1))	4F14801	

10750	-0	50000	0	01407	CAL L(1)	S(I) = SYM3 (S(I-1)), S0	4F14802
10751	-0	60200	4	16657	ORS SCRIPL+7,C	SET OP3 (S(I-1))35 = 1	4F14803
10752	0	02000	0	10654	TRA LK0440		4F14804
10753	-0	75400	0	00000	LK1200 PXD 0,0	S(I) TYPE AC	4F14805
10754	0	56000	4	16651	LDQ SCRIPL+1,C	PLACE OP1 (S(I-1)) IN MQ	4F14806
10755	-0	76300	0	00006	LGL 6		4F14807
10756	0	34000	0	01427	CAS SPECOP		4F14808
10757	0	02000	0	10771	TRA LK1340		4F14809
10760	0	02000	0	11007	TRA LK1470		4F14810
10761	-0	50000	1	16650	CAL SCRIPL,A	S(I) TYPE AC, OP1 (S(I-1)) = + OR -	4F14811
10762	-0	32000	0	01452	ANA MASK2	SEARCH FOR S(I) IN S(I-1)	4F14812
10763	-3	00000	2	10610	LK1280 TXL LK0000,B,0	NOT FOUND AT ALL	4F14813
10764	0	34000	1	16647	CAS SCRIPL-1,A		4F14814
10765	1	00003	1	10770	TXI LK1330,A,3		4F14815
10766	0	02000	0	10707	TRA LK0750	S(I) = SOME SYMJ (S(I-1))... GO PERMUTE	4F14816
10767	1	00003	1	10770	TXI LK1330,A,3	NOT FOUND... CONTINUE SEARCH	4F14817
10770	1	77775	2	10763	LK1330 TXI LK1280,B,-3		4F14818
10771	0	16200	0	10777	LK1340 TQP LK1410		4F14819
10772	-0	50000	1	16650	CAL SCRIPL,A	S(I) TYPE AC, OP1 (S(I-1)) = **	4F14820
10773	-0	32000	0	01452	ANA MASK2		4F14821
10774	0	40200	4	16652	SUB SCRIPL+2,C	IS S(I) = SYM1 (S(I-1))	4F14822
10775	-0	10000	0	10611	TNZ LK0030	NO	4F14823
10776	0	02000	0	10726	TRA LK0900	YES	4F14824
10777	-0	75400	0	00000	LK1410 PXD 0,0	S(I) TYPE AC, OP1 (S(I-1)) = *	4F14825
11000	0	56000	4	16654	LDQ SCRIPL+4,C		4F14826
11001	-0	76300	0	00006	LGL 6	IS OP2 (S(I-1)) = 1	4F14827
11002	0	40200	0	01402	SUB SLASH		4F14828
11003	0	10000	0	10673	TZE LK0630	YES	4F14829
11004	-0	50000	0	01410	CAL L(2)	NO	4F14830
11005	-0	60200	4	16651	ORS SCRIPL+1,C	SET OP1 (S(I-1)) 34 = 1	4F14831
11006	0	02000	0	10610	TRA LK0000		4F14832
11007	-0	77300	0	00033	LK1470 RQL 27	S(I) TYPE AC, OP1 (S(I-1)) = SPOP	4F14833
11010	-0	50000	1	16650	CAL SCRIPL,A		4F14834
11011	-0	32000	0	01452	ANA MASK2	EXTRACT S(I) IN ACC	4F14835
11012	0	16200	0	11015	TQP LK1530		4F14836
11013	3	00006	2	10611	TXH LK0030,B,6	OPEN MULTIV.	4F14837
11014	0	02000	0	10657	LK1520 TRA LK0480		4F14838
11015	-0	77300	0	00017	LK1530 RQL 15		4F14839
11016	0	16200	0	10657	TQP LK0480		4F14840
11017	0	02000	0	10611	TRA LK0030	FN-NAME	4F14841
11020	-0	53400	2	15044	LK1610 LXD BETA,B	IS S(0) A SINGLE ELEMENT	4F14842
11021	-0	75400	0	00000	PXD 0,0		4F14843
11022	0	56000	1	16646	LDQ SCRIPL-2,A		4F14844
11023	3	00003	2	11042	TXH LK1780,B,3	NO	4F14845
11024	-0	76300	0	00006	LGL 6	YES	4F14846
11025	0	40200	0	01401	SUB 11Z	IS OP (S(0)) = + OR -	4F14847
11026	0	10000	0	11047	TZE LKK000	OP (S(0)) = -	4F14848
11027	-0	50000	0	16652	CAL SCRIPL+2	OP (S(0)) = +	4F14849
11030	-0	32000	0	01527	ANA MASK1	DOES SYM (S(0)) = S(1)	4F14850
11031	-0	10000	0	11047	TNZ LKK000	NO	4F14851
11032	-0	50000	0	16654	CAL SCRIPL+4	YES - PLACE OP1 (S(1)) IN ACC	4F14852
11033	-0	32000	0	01404	ANA 12Z		4F14853
11034	0	10000	0	11047	TZE LKK000	OP1 (S(1)) 31 = 0	4F14854
11035	-0	60200	0	16651	ORS SCRIPL+1	SET OP (S(0)) 31 = 1	4F14855

11036	0	76700	0	00002	ALS	2			4F14856
11037	-0	60200	0	16654	ORS	SCRIPL+4	SET OP1 (S(1)) 29 = 1		4F14857
11040	0	77100	0	00006	ARS	6			4F14858
11041	0	02000	0	11046	TRA	LK1820			4F14859
11042	0	16200	0	11047	LK1780	TQP LKK000	S(0) TYPT AC		4F14860
11043	-0	77300	0	00001		RQL 1			4F14861
11044	0	16200	0	11047		TQP LKK000	S(0) TYPE AC		4F14862
11045	-0	50000	0	01404		CAL 12Z	S(0) TYPE MQ, SO		4F14863
11046	-0	60200	0	16651	LK1820	ORS SCRIPL+1			4F14864
11047	-0	53400	5	01117	LKK000	LXD 3QBAR,5	-3Q TO XA,XC		4F14865
11050	-0	50000	4	16645		CAL SCRIPL-3,C			4F14866
11051	0	73400	2	00000		PAX 0,B			4F14867
11052	0	50000	2	15044		CLA BETA,B			4F14868
11053	0	62200	0	11054		STD LKK050			4F14869
11054	1	00000	4	11055	LKK050	TXI LKK060,C,0	BACK UP XA TO 1ST ELEMENT OF LAST SEGMENT		4F14870
11055	-0	75400	0	00000	LKK060	PXD 0,0			4F14871
11056	0	56000	4	16651		LDQ SCRIPL+1,C	PLACE OP1 OF LAST SEGMENT IN MQ		4F14872
11057	-0	76300	0	00006		LGL 6			4F14873
11060	0	40200	0	01405		SUB STAR			4F14874
11061	-0	10000	0	11070		TNZ PC0000			4F14875
11062	0	16200	0	11064		TQP LKK130			4F14876
11063	0	02000	0	11070		TRA PC0000			4F14877
11064	0	56000	4	16654	LKK130	LDQ SCRIPL+4,C	OP1 OF LAST SEGMENT IS *		4F14878
11065	-0	76300	0	00002		LGL 2			4F14879
11066	0	76000	0	00001		LBT			4F14880
11067	-0	60200	4	16651		ORS SCRIPL+1,C	OP2 IS *, SO SET OP1 (S(L)) 34 = 1		4F14881
11070	-0	53400	4	01122	PC0000	LXD ARGCTR,C	IS THIS AN FS		4F14882
11071	3	00000	4	11073		TXH PC0030,C,0			4F14883
11072	1	00001	4	11074		TXI PC0040,C,1	NO		4F14884
11073	0	53400	4	01406	PC0030	LXA L(0),C	YES		4F14885
11074	-0	50000	1	16645	PC0040	CAL SCRIPL-3,A			4F14886
11075	0	73400	2	00000		PAX 0,B			4F14887
11076	-3	00000	2	11112		TXL PC0190,B,0	EXIT AT S(0)		4F14888
11077	0	50000	2	15044		CLA BETA,B			4F14889
11100	0	62200	0	11101		STD PC0100			4F14890
11101	1	00000	1	11102	PC0100	TXI PC0110,A,0			4F14891
11102	0	56000	1	16651	PC0110	LDQ SCRIPL+1,A	PLACE OP1 (S(I)) IN MQ		4F14892
11103	-0	76300	0	00036		LGL 30			4F14893
11104	0	76000	0	00001		LBT			4F14894
11105	1	00454	0	11107	PC0140	TXI PC0160,0,300			4F14895
11106	0	16200	0	11074		TQP PC0040	OP1 (S(I)) 29= 1 AND OP1 (S(I)) 30 = 0		4F14896
11107	-0	75400	4	00000	PC0160	PXD 0,C	OP1 (S(I)) 29 = 0 OR OP1 (S(1)) 30 = 1		4F14897
11110	0	62200	2	15044		STD BETA,B	STORE ERAS. REL. ADD. COUNT IN BETA,		4F14898
11111	1	00001	4	11074		TXI PC0040,C,1	AND UPDATE FOR NEXT SEGMENT		4F14899
11112	-0	53400	2	11105	PC0190	LXD PC0140,B			4F14900
11113	0	50000	2	15520	PC0200	CLA BETA+300,B			4F14901
11114	0	60100	2	16650		STO CPBETA+300,B			4F14902
11115	2	00001	2	11113		TIX PC0200,B,1			4F14903
11116	0	02000	0	11155		TRA STATED	GO FETCH STATE D		4F14904
						* * * * *			4F14905
									4F14906
						DICTIONARY OF OPEN SUBROUTINES FOLLOWS			4F14907
11117	-272122626060			OPSUB	OCT	672122626060	XABS		4F14908
11120	+212262606060				OCT	212262606060	ABS		4F14909

11121	-273145636060	OCT	673145636060	XINT	4F14910				
11122	+314563606060	OCT	314563606060	INT	4F14911				
11123	-274446246060	OCT	674446246060	XMOD	4F14912				
11124	-044624606060	OCT	444624606060	MOD	4F14913				
11125	-274421670060	OCT	674421670060	XMAX0	4F14914				
11126	-042167016060	OCT	442167016060	MAX1	4F14915				
11127	-274421670160	OCT	674421670160	XMAX1	4F14916				
11130	-042167006060	OCT	442167006060	MAX0	4F14917				
11131	-274431450060	OCT	674431450060	XMIN0	4F14918				
11132	-043145016060	OCT	443145016060	MIN1	4F14919				
11133	-274431450160	OCT	674431450160	XMIN1	4F14920				
11134	-043145006060	OCT	443145006060	MIN0	4F14921				
11135	+264346216360	OCT	264346216360	FLOAT	4F14922				
11136	-272631676060	OCT	672631676060	XFIX	4F14923				
11137	-223127456060	OCT	623127456060	SIGN	4F14924				
11140	-276231274560	OCT	676231274560	XSIGN	4F14925				
11141	-272431446060	OCT	672431446060	XDIM	4F14926				
11142	+243144606060	OCT	243144606060	DIM	4F14927				
	11143	BSS	10		4F14928				
			* * * * *		*4F14929				
	11155	STATED	BSS	0	4F149295				
					4F14930				
	15044	ORG	2596+4096		4F14931				
	15044	BETA	BSS	300	4F14932				
			END OF ARITHMETIC / STATE C.		4F14933				
			* * * * *		*4F14934				
					4F14935				
			ARITHMETIC / STATE D=		4F14936				
	11155	ORG	STATED		4F14939				
11155	-0	53400	1	01117	MC0000	LXD	3QBAR,A	MODE CHECKING ROUTINE	4F14940
11156	-0	63400	1	11227		SXD	MC0420,A		4F14941
11157	0	53400	1	01406		LXA	L(0),A		4F14942
11160	-0	63400	1	11176	MC0030	SXD	XASAVE,A		4F14943
11161	-0	50000	1	16650		CAL	SCRIPL,A		4F14944
11162	0	73400	2	00000	MC0050	PAX	,2	S(I) TO XB	4F14945
11163	0	50000	2	16174		CLA	CPBETA,B		4F14946
11164	0	73400	2	00454	MC0070	PAX	TAU2,B		4F14947
11165	-0	63400	2	11226		SXD	MC0410,B		4F14946
11166	-0	63400	2	11233		SXD	MC0460,B		4F14949
11167	3	77772	2	11226		TXH	MC0410,B,-6	SINGLE ELEMENT - GO ONTO S(I+1)	4F14950
11170	0	76000	0	00140		SLF		TURN OFF ALL SENSE LITES	4F14951
11171	-0	75400	0	00000		PXD	0,0	CLEAR ACC	4F14952
11172	0	56000	1	16651		LDQ	SCRIPL+1,A	PLACE OP1 (S(I)) IN MQ	4F14953
11173	-0	76300	0	00006		LGL	6		4F14954
11174	0	34000	0	01427		CAS	SPECOP		4F14955
11175	0	16200	0	11177		TQP	MC0180		4F14956
11176	1	00000	0	11226	XASAVE	TXI	MC0410,0,0		4F14957
11177	-0	76300	0	00032	MC0180	LGL	26	OP1 (S(I)) = +, - OR *	4F14958
11200	0	16200	0	11202		TQP	MC0210	FIX PT	4F14959
11201	0	76000	0	00141		SLN	1	FLO PT	4F14960
11202	-0	75400	0	00000	MC0210	PXD	0,0		4F14961
11203	0	56000	1	16652		LDQ	SCRIPL+2,A	PLACE SYMJ (S(I)) IN MQ - J = 1....	4F14962
11204	-0	76300	0	00001		LGL	1		4F14963
11205	0	76000	0	00001		LBT			4F14964

11206	0	16200	0	11231	TQP	MC0440			4F14965
11207	-0	76300	0	00005	LGL	5		SYMJ (S(I)) IS A VARIABLE	4F14966
11210	0	34000	0	01423	CAS	L(H)			4F14967
11211	0	34000	0	01425	CAS	L(O)			4F14968
11212	1	00000	0	11217	XBSAVE	TXI	MC0340,0,0	FLO PT	4F14969
11213	0	02000	0	11217	TRA	MC0340		FLO PT	4F14970
11214	-0	76000	0	00141	MC0310	SLT	1	SYMJ (S(I)) IS A FIX PT VARIABLE	4F14971
11215	1	00003	2	11223	TXI	MC0380,B,3		OK	4F14972
11216	0	07400	4	03400	TSX	DIAG,4		ERROR.. FLO PT LITE ON	4F14973
11217	-0	76000	0	00141	MC0340	SLT	1	SYMJ(S(I)) IS A FLO PT VARIABLE	4F14974
11220	0	07400	4	03400	TSX	DIAG,4		ERROR.. FLO PT LITE OFF	4F14975
11221	0	76000	0	00141	SLN	1		RESTORE FLO PT LITE	4F14976
11222	1	00003	2	11223	TXI	MC0380,B,3			4F14977
11223	-3	00000	2	11225	MC0380	TXL	MC0400,B,0	FINISHED WITH S(I)	4F14978
11224	1	77775	1	11202	TXI	MC0210,A,-3		CONTINUE SCANNING S(I). J TO J+1	4F14979
11225	-0	53400	1	11176	MC0400	LXD	XASAVE,A	GO TO S(I+1)	4F14980
11226	1	00000	1	11227	MC0410	TXI	MC0420,A,0		4F14981
11227	3	00000	1	11160	MC0420	TXH	MC0030,A,0		4F14982
11230	0	02000	0	11254	TRA	CP0000		EXIT TO COMPILER	4F14983
11231	-0	63400	2	11212	MC0440	SXD	XBSAVE,B	SYMJ (S(ITT = SAME S(K)	4F14984
11232	-0	53400	4	11176	LXD	XASAVE,C			4F14985
11233	1	00000	4	11234	MC0460	TXI	MC0470,C,0	MOVE XC TO 1ST ELEMENT OF S(I+1)	4F14986
11234	-0	50000	4	16650	MC0470	CAL	SCRIPL,C		4F14987
11235	-0	32000	0	01452	ANA	MASK2		EXTRACT S(K) IN ACC	4F14988
11236	0	34000	1	16652	CAS	SCRIPL+2,A		AND COMPARE WITH SYMJ (S(I))	4F14989
11237	0	02000	0	11241	TRA	MC0520			4F14990
11240	0	02000	0	11246	TRA	MC0570			4F14991
11241	0	73400	2	01226	MC0520	PAX	SIGMA1,B	S(K) TO XB	4F14992
11242	0	50000	2	16174	CLA	CPBETA,B			4F14993
11243	0	73400	2	00000	MC0540	PAX	TAU1,B		4F14994
11244	-0	63400	2	11245	SXD	MC0560,B			4F14995
11245	1	00000	4	11234	MC0560	TXI	MC0470,C,0		4F14996
11246	-0	53400	2	11212	MC0570	LXD	XBSAVE,B	SYMJ (S(I)) = S(K) FOR SOME K	4F14997
11247	-0	50000	4	16651	CAL	SCRIPL+1,C		PLACE OP1 (S(K)) IN ACC	4F14998
11250	0	77100	0	00003	ARS	3			4F14999
11251	0	76000	0	00001	LBT				4F15000
11252	0	02000	0	11214	TRA	MC0310		S(K) IS FIX PT	4F15001
11253	0	02000	0	11217	TRA	MC0340		S(K) IS FLO PT	4F15002
									4F15003
11254	0	76000	0	00140	CP0000	SLF		TURN OFF ALL SENSE LITES	4F15004
11255	0	60000	0	16160	STZ	FNSW			4F15005
11256	-0	53400	4	01122	LXD	ARGCTR,C		IS THIS AN FS STATEMENT	4F15006
11257	-3	00000	4	11265	TXL	CP0090,C,0		NO	4F15007
11260	0	07400	4	01731	TSX	CIT00,C		YES - COMPILE FOUR 36 - BIT	4F15008
11261	0	00000	0	01531	HTR	ALL1		STRINGS IN 1 AS A PRELUDE TO	4F15009
11262	0	00000	0	01531	HTR	ALL1		FS STATEMENT COMPILATION	4F15010
11263	0	00000	0	01531	HTR	ALL1			4F15011
11264	0	00000	0	01531	HTR	ALL1			4F15012
11265	-0	50000	0	00030	CP0090	CAL	EIFNO		4F15013
11266	-0	32000	0	01527	ANA	MASK1			4F15014
11267	0	60200	0	16164	SLW	CW		STO INT. FORM. NO. IN DEC. FIELD OF CW.	4F15015
11270	-0	53400	1	01117	LXD	3QBAR,A		-3Q TO XA	4F15016
11271	0	50000	1	16645	CP0130	CLA	SCRIPL-3,A	EXTRACT CURRENT S(II	4F15017
11272	0	73400	2	00000	CP0140	PAX	,2		4F15018

11273	0	50000	2	16174	CLA	CPBETA,B		4F15019
11274	0	62200	0	01363	STD	PHI(I)	STO ERAS. REL. ADD. IN PHI (I)	4F15020
11275	-0	32000	0	01452	ANA	MASK2		4F15021
11276	0	73400	2	01356	CP0180	PAX	TAU3,B	4F15022
11277	-0	63400	2	11324	SXD	CP0400,B		4F15023
11300	0	76000	0	00006	COM			4F15024
11301	0	40000	0	01407	ADD	L(1)		4F15025
11302	0	76700	0	00022	ALS	18		4F15026
11303	0	62200	0	11304	STD	CP0240		4F15027
11304	1	00000	1	11305	CP0240	TXI	CP0250,A,0	4F15028
11305	-0	63400	1	01117	CP0250	SXD	3QBAR,A	4F15029
11306	0	56000	1	16651	LDQ	SCRIPL+1,A	EXAMINE OP1 (S(I))I 29,30,31,32	4F15030
11307	-0	76300	0	00036	LGL	30		4F15031
11310	0	76000	0	00001	LBT			4F15032
11311	0	02000	0	11313	TRA	CP0310	OP1 (S(I)) 29 = 0	4F15033
11312	0	16200	0	11321	TQP	CP0370	OP1 (S(I)) 30 = 0	4F15034
11313	0	76000	0	00141	CP0310	SLN	1	4F15035
11314	-0	77300	0	00001	RQL	1	OP1 (S(I)) 29 = 0 OR OP1 (S(I)) 30 = 1, SO	4F15036
11315	0	16200	0	11317	TQP	CP0350	SET STORE LITE	4F15037
11316	0	76000	0	00142	SLN	2	OP1 (S(I)) 31 = 0, SO SET STO LITE	4F15038
11317	-0	77300	0	00001	CP0350	RQL	1	4F15039
11320	0	02000	0	11322	TRA	CP0380		4F15040
11321	-0	77300	0	00002	CP0370	RQL	2	4F15041
11322	0	16200	0	11326	CP0380	TQP	CP0420	4F15042
11323	-0	76000	0	00144	SLT	4	TEST OP1 (S(I)) 32	4F15043
11324	3	00000	0	00000	CP0400	TXH	0,0,0	4F15044
11325	0	02000	0	11327	TRA	CP0430		4F15045
11326	0	76000	0	00144	CP0420	SLN	4	4F15046
11327	-0	75400	0	00000	CP0430	PXD	0,0	4F15047
11330	0	56000	1	16651	LDQ	SCRIPL+1,A	OP1 (S(II)) 32 = 0, SO SET FXPTSW	4F15048
11331	-0	76300	0	00006	LGL	6	PLACE OP1 (S(I)) IN MQ	4F15049
11332	0	34000	0	01427	CAS	SPECOP		4F15050
11333	1	00000	0	11407	TXI	CP0960,0,0		4F15051
11334	1	77775	1	11543	TXI	CP2040,A,-3		4F15052
11335	0	40200	0	01401	SUB	11Z		4F15053
11336	0	10000	0	11365	TZE	CP0760		4F15054
11337	-0	76300	0	00035	LGL	29	OP1 (S(I)) = +	4F15055
11340	0	16200	0	11425	TQP	CP1130	OP1 (S(I)) 35 = 0	4F15056
11341	-0	53400	2	11324	CP0540	LXD	CP0400,B	4F15057
11342	1	00003	2	11343	TXI	CP0560,B,3		4F15058
11343	-3	00000	2	12337	CP0560	TXL	ES0000,B,0	4F15059
11344	-0	63400	2	11324	SXD	CP0400,B	GO TO END-OF-SEGMENT SBRTN	4F15060
11345	1	77775	1	11346	TXI	CP0590,A,-3		4F15061
11346	-0	75400	0	00000	CP0590	PXD	0,0	4F15062
11347	0	56000	1	16651	LDQ	SCRIPL+1,A	PLACE OPJ (S(I)) IN MQ	4F15063
11350	-0	76300	0	00006	LGL	6		4F15064
11351	0	34000	0	01405	CAS	STAR		4F15065
11352	0	02000	0	11433	TRA	CP1200	OPJ (S(I)) = /	4F15066
11353	0	02000	0	11506	TRA	CP1720	OPJ (S(I)) = *	4F15067
11354	0	40200	0	01401	SUB	11Z		4F15068
11355	0	10000	0	11400	TZE	CP0880	OPJ (S(I)) = -	4F15069
11356	-0	50000	0	01550	CAL	L(FAD)	OPJ (S(I)) = +	4F15070
11357	-0	76000	0	00144	SLT	4		4F15071
11360	0	02000	0	11363	TRA	CP0740		4F15072

11361	0	76000	0	00144	SLN 4	FIX PT. RESTORE FXPTSW	4F15073
11362	-0	50000	0	01532	CAL L(ADD)		4F15074
11363	0	60200	0	16165	CP0740 SLW CW+1		4F15075
11364	0	02000	0	11503	TRA CP1690		4F15076
11365	-0	76300	0	00035	CP0760 LGL 29	OP1 (S(I)) = -	4F15077
11366	0	16200	0	11375	TQP CP0850		4F15078
11367	-0	50000	0	01540	CAL L(CHS)	C81 (SI))) 35 = 1, SO	4F15079
11370	0	60200	0	16165	SLW CW+1	COMPILE CHS FOR 1ST ELEMENT	4F15080
11371	0	60000	0	16166	STZ CW+2		4F15081
11372	0	60000	0	16167	STZ CW+3		4F15082
11373	0	07400	2	12621	TSX COMP,B		4F15083
11374	0	02000	0	11341	TRA CP0540		4F15084
11375	-0	50000	0	01543	CP0850 CAL L(CLS)	OP1 (S(I)) 35 = 0, SO	4F15085
11376	0	60200	0	16165	SLW CW+1	COMPILE CLS SYM1 (S(I)) FOR 1ST ELEMENT	4F15086
11377	0	02000	0	11427	TRA CP1150		4F15087
11400	-0	50000	0	01553	CP0880 CAL L(FSB)	OPJ (SII)I = -	4F15088
11401	-0	76000	0	00144	SLT 4		4F15089
11402	0	02000	0	11405	TRA CP0940		4F15090
11403	0	76000	0	00144	SLN 4	FIX PT. RESTORE FXPTSW	4F15091
11404	-0	50000	0	01574	CAL L(SUB)		4F15092
11405	0	60200	0	16165	CP0940 SLW CW+1		4F15093
11406	0	02000	0	11503	TRA CP1690		4F15094
11407	0	16200	0	11411	CP0960 TQP CP0980		4F15095
11410	0	02000	0	12100	TRA CP4140		4F15096
11411	-0	76300	0	00035	CP0980 LGL 29	OP1 (S(I)) = *	4F15097
11412	0	76000	0	00143	SLN 3	TURN LITE 3 ON	4F15098
11413	0	76000	0	00001	LBT	TEST OP1 (S(I)) 34	4F15099
11414	0	02000	0	11417	TRA CP1050	OP1 (S(I)) 34 = 0, SO LEAVE LITE 3 ON	4F15100
11415	-0	76000	0	00143	SLT 3	OP1 (S(I)) 34 = 1, SO TURN LITE 3 OFF	4F15101
11416	3	00000	0	00000	TXH 0,0,0		4F15102
11417	0	16200	0	11421	CP1050 TQP CP1070		4F15103
11420	0	02000	0	11341	TRA CP0540	OP1 (S(I)) 35 = 1, SO GO MODIFY J	4F15104
11421	-0	50000	0	01556	CP1070 CAL L(LDQ)	OP1 (S(I)) 35 = 0	4F15105
11422	-0	76000	0	00143	SLT 3		4F15106
11423	0	02000	0	11426	TRA CP1140	EL1 (S(I)) TO MQ	4F15107
11424	0	76000	0	00143	SLN 3	EL1 (S(I)) TO ACC	4F15108
11425	-0	50000	0	01541	CP1130 CAL L(CLA)		4F15109
11426	0	60200	0	16165	CP1140 SLW CW+1		4F15110
11427	0	07400	4	12627	CP1150 TSX AC0000,C	ADDRESS COMPILE SYM1 (S(I))	4F15111
11430	0	07400	2	12621	TSX COMP,B		4F15112
11431	0	60000	0	16164	STZ CW	RESET CW	4F15113
11432	0	02000	0	11341	TRA CP0540	GO MODIFY J	4F15114
11433	-0	76000	0	00143	CP1200 SLT 3	OPJ (S(I)) = /	4F15115
11434	0	02000	0	11446	TRA CP1330		4F15116
11435	-0	76000	0	00144	SLT 4	PREDECESSOR IN ACC	4F15117
11436	0	02000	0	11501	TRA CP1670	FLO PT.	4F15118
11437	0	76000	0	00144	SLN 4	FIX PT. RESTORE FXPTSW	4F15119
11440	0	07400	4	01731	TSX CIT00,C	COMPILE LRS 35	4F15120
11441	0	00000	0	01406	HTR L(0)		4F15121
11442	0	00000	0	01560	HTR L(LRS)		4F15122
11443	0	00000	0	01406	HTR L(0)		4F15123
11444	0	00000	0	01472	HTR DEC35		4F15124
11445	0	02000	0	11451	TRA CP1450		4F15125
11446	-0	76000	0	00144	CP1330 SLT 4	PREDECESSOR IN MQ	4F15126

11447	0	02000	0	11470	TRA	CP1570	AND SEGMENT IS	4F15127
11450	0	76000	0	00144	SLN	4	FIX PT. RESTORE FXPTSW	4F15128
11451	0	50000	0	01547	CP1450	CLA	L(DVP)	4F15129
11452	0	60100	0	16165		STO	CW+1	4F15130
11453	0	07400	4	12627	TSX	AC0000,C	ADDRESS COMPILE SYMJ (S(I))	4F15131
11454	0	07400	2	12621	TSX	COMP,B	COMPILE DVP SYMJ (S(I))	4F15132
11455	0	07400	4	01731	TSX	CIT00,C	COMPILE CLM	4F15133
11456	0	00000	0	01406	HTR	L(0)		4F15134
11457	0	00000	0	01542	HTR	L(CLM)		4F15135
11460	0	00000	0	01406	HTR	L(0)		4F15136
11461	0	00000	0	01406	HTR	L(0)		4F15137
11462	0	07400	4	01731	TSX	CIT00,C	COMPILE LLS 18	4F15138
11463	0	00000	0	01406	HTR	L(0)		4F15139
11464	0	00000	0	01557	HTR	L(LLS)		4F15140
11465	0	00000	0	01406	HTR	L(0)		4F15141
11466	0	00000	0	01466	HTR	DEC18		4F15142
11467	0	02000	0	11341	TRA	CP0540	GO MODIFY J	4F15143
11470	0	50000	0	01573	CP1570	CLA	L(STQ)	PREDECESSOR IN MQ
11471	0	60100	0	16165	STO	CW+1	AND SEGMENT IS FLO PT	4F15144
11472	0	50000	0	01505	CLA	X(		4F15145
11473	0	60100	0	16166	STO	CW+2		4F15146
11474	0	60000	0	16167	STZ	CW+3		4F15147
11475	0	07400	2	12621	TSX	COMP,B	COMPILE STQ 700000	4F15148
11476	0	50000	0	01541	CLA	L(CLA)		4F15149
11477	0	60100	0	16165	STO	CW+1		4F15150
11500	0	07400	2	12621	TSX	COMP,B	COMPILE CLA 700000	4F15151
11501	0	50000	0	01551	CP1670	CLA	LIFDP)	4F15152
11502	0	60100	0	16165	STO	CW+1	COMPILE FDP SYMJ (S(I))	4F15153
11503	0	07400	4	12627	CP1690	TSX	AC0000,C	ADDRESS COMPILE SYMJ (S(I))
11504	0	07400	2	12621	TSX	COMP,B		4F15154
11505	0	02000	0	11341	TRA	CP0540	GO MODIFY J	4F15155
11506	-0	76000	0	00143	CP1720	SLT	3	OPJ(S(I))=*
11507	0	02000	0	11521	TRA	CP1840		4F15156
11510	0	50000	0	01572	CLA	L(STO)	PREDECESSOR IN ACC	4F15157
11511	0	60100	0	16165	STO	CW+1		4F15158
11512	0	50000	0	01505	CLA	X(		4F15159
11513	0	60100	0	16166	STO	CW+2		4F15160
11514	0	60000	0	16167	STZ	CW+3		4F15161
11515	0	07400	2	12621	TSX	COMP,B	COMPILE STO 700000	4F15162
11516	0	50000	0	01556	CLA	L(LDQ)		4F15163
11517	0	60100	0	16165	STO	CW+1		4F15164
11520	0	07400	2	12621	TSX	COMP,B	COMPILE LDQ 700000	4F15165
11521	0	76000	0	00143	CP1840	SLN	3	TURN LATE 3 ON
11522	0	07400	4	12627	TSX	AC0000,C	ADDRESS COMPILE SYMJ(S(I))	4F15166
11523	-0	76000	0	00144	SLT	4		4F15167
11524	0	02000	0	11537	TRA	CP2000		4F15168
11525	0	76000	0	00144	SLN	4	FIX PT. RESTORE FXPTSW	4F15169
11526	0	50000	0	01562	CLA	L(MPY)		4F15170
11527	0	60100	0	16165	STO	CW+1		4F15171
11530	0	07400	2	12621	TSX	COMP,B	COMPILE MPY SYMJ(S(I))	4F15172
11531	0	07400	4	01731	TSX	CIT00,C	COMPILE ALS 17	4F15173
11532	0	00000	0	01406	HTR	L(0)		4F15174
11533	0	00000	0	01533	HTR	L(ALS)		4F15175
11534	0	00000	0	01406	HTR	L(0)		4F15176

11535	0	00000	0	01465	HTR	DEC17			4F15181	
11536	0	02000	0	11341	TRA	CP0540	GO	MODIFY J	4F15182	
11537	0	50000	0	01552	CP2000	CLA	L(FMP)	FLO PT.	4F15183	
11540	0	60100	0	16165	STO	CW+1			4F15184	
11541	0	07400	2	12621	TSX	COMP,B	COMPILE	FMP SYMJ(S(I))	4F15185	
11542	0	02000	0	11341	TRA	CP0540	GO	MODIFY J.	4F15186	
11543	-0	76300	0	00007	CP2040	LGL	7	OP1(S(I))=SPOP	4F15187	
11544	0	76000	0	00001	LBT		TEST	OP1(S(I))12	4F15188	
11545	0	16200	0	11665	TQP	CP2650	LIB	OR OPEN FUNCTION	4F15189	
11546	0	16200	0	12210	TQP	CP5000	FN-FUNCTION		4F15190	
11547	-0	75400	0	00000	PXD	0,0	FS-FUNCTION		4F15191	
11550	0	76300	0	00017	LLS	15	PUT	TYPE NO IN ADD(ACC)	4F15192	
11551	-0	50100	0	01503	ORA	P(	FORM	4...TYPE NO.	4F15193
11552	0	60200	0	16162	SLW	ARGORG	AND	STO IN ARGORG	4F15194	
11553	-0	32000	0	01452	ANA	MASK2			4F15195	
11554	-0	50100	0	01505	ORA	X(	FORM	7...TYPE NO.	4F15196
11555	0	60200	0	16163	SLW	XRSAVE	AND	STO IN XRSAVE	4F15197	
11556	0	50000	1	16651	CLA	SCRIPL+1,A			4F15198	
11557	0	76000	0	00001	LBT		EXAMINE	OP2(S(I))35	4F15199	
11560	0	02000	0	11567	TRA	CP2150	1ST	ARG STORED	4F15200	
11561	0	07400	4	01731	CP2100	TSX	CIT00,C	1ST	ARG IN ACC	4F15201
11562	0	00000	0	01406	HTR	L(0)	COMPILE	STO 4...TYPE NO. + 0	4F15202	
11563	0	00000	0	01572	HTR	L(STO)			4F15203	
11564	0	00000	0	16162	HTR	ARGORG			4F15204	
11565	0	00000	0	01406	HTR	L(0)			4F15205	
11566	1	77775	1	11574	TXI	CP2200,A,-3	GO	ON TO OP3(S(I))	4F15206	
11567	-0	50000	0	01541	CP2150	CAL	L(CLA)		4F15207	
11570	0	60200	0	16165	SLW	CW+1			4F15208	
11571	0	07400	4	12627	TSX	AC0000,C	ADDRESS	COMPILE SYM2(S(I))	4F15209	
11572	0	07400	2	12621	TSX	COMP,B	COMPILE	CLA SYM2(S(I))	4F15210	
11573	0	02000	0	11561	TRA	CP2100			4F15211	
11574	0	60000	0	16164	CP2200	STZ	CW	RESET	CW	4F15212
11575	-0	53400	2	11324	LXD	CP0400,B			4F15213	
11576	1	00003	2	11577	TXI	CP2230,B,3			4F15214	
11577	3	77772	2	11642	CP2230	TXH	CP2500,B,-6	FINISHED	WITH S(I)	4F15215
11600	-0	63400	2	11324	SXD	CP0400,B			4F15216	
11601	0	50000	1	16651	CLA	SCRIPL+1,A			4F15217	
11602	0	76000	0	00001	LBT		EXAMINE	OP3(S(I))35	4F15218	
11603	0	02000	0	11612	TRA	CP2300	2ND	ARG STORED	4F15219	
11604	0	07400	4	01731	CP2250	TSX	CIT00,C	2ND	ARG IN MQ	4F15220
11605	0	00000	0	01406	HTR	L(0)	COMPILE	STQ 4...TYPE NO. + 1	4F15221	
11606	0	00000	0	01573	HTR	L(STQ)			4F15222	
11607	0	00000	0	16162	HTR	ARGORG			4F15223	
11610	0	00000	0	01454	HTR	2E18			4F15224	
11611	1	77775	1	11617	TXI	CP2350,A,-3	GO	ON TO SYM4(S(I))	4F15225	
11612	-0	50000	0	01556	CP2300	CAL	L(LDQ)		4F15226	
11613	0	60200	0	16165	SLW	CW+1			4F15227	
11614	0	07400	4	12627	TSX	AC0000,C	ADDRESS	COMPILE SYM3(S(I))	4F15228	
11615	0	07400	2	12621	TSX	COMP,B	COMPILE	LDQ SYM3(S(I))	4F15229	
11616	0	02000	0	11604	TRA	CP2250			4F15230	
11617	0	50000	0	01521	CP2350	CLA	DECM12	INITIALIZE	DEC(P(CNTR) TO 2	4F15231
11620	0	60200	0	16161	SLW	P(CNTR)			4F15232	
11621	-0	53400	2	11324	CP2370	LXD	CP0400,B		4F15233	
11622	1	00003	2	11623	TXI	CP2390,B,3			4F15234	

11623	3	77772	2	11642	CP2390	TXH	CP2500,B,-6	FINISHED WITH S(I)	4F15235
11624	-0	63400	2	11324		SXD	CP0400,B		4F15236
11625	-0	50000	0	01541		CAL	L(CLA)		4F15237
11626	0	60200	0	16165		SLW	CW+1		4F15238
11627	0	07400	4	12627		TSX	AC0000,C	ADDRESS COMPILE SYMJ(S(I)), J=4,...	4F15239
11630	0	07400	2	12621		TSX	COMP,B	COMPILE CLA SYMJ(S(I)), J=4,...	4F15240
11631	0	07400	4	01731		TSX	CIT00,C	COMPILE STO 4...TYPE NO. + J-2, J=4,...	4F15241
11632	0	00000	0	01406		HTR	L(0)		4F15242
11633	0	00000	0	01572		HTR	L(STO)		4F15243
11634	0	00000	0	16162		HTR	ARGORG		4F15244
11635	0	00000	0	16161		HTR	P(CNTR)		4F15245
11636	0	50000	0	16161		CLA	P(CNTR)	UPDATE P(CNTR	4F15246
11637	0	40000	0	01454		ADD	2E18		4F15247
11640	0	60100	0	16161		STO	P(CNTR)		4F15248
11641	1	77775	1	11621		TXI	CP2370,A,-3		4F15249
11642	-0	53400	1	01117	CP2500	LXD	3QBAR,A	FINISHED WITH S(I)	4F15250
11643	-0	50000	0	01575		CAL	L(SXD)		4F15251
11644	0	60200	0	16165		SLW	CW+1		4F15252
11645	-0	50000	0	16163		CAL	XRSAVE		4F15253
11646	0	60200	0	16166		SLW	CW+2		4F15254
11647	-0	50000	0	01412		CAL	L(4)		4F15255
11650	0	60200	0	16167		SLW	CW+3		4F15256
11651	0	07400	2	12621		TSX	COMP,B	COMPILE SXD 7...TYPE NO. , 4	4F15257
11652	-0	50000	0	01602		CAL	L(TSX)		4F15258
11653	0	60200	0	16165		SLW	CW+1		4F15259
11654	-0	50000	1	16652		CAL	SCRIPL+2,A		4F15260
11655	0	60200	0	16166		SLW	CW+2		4F15261
11656	0	07400	2	12621		TSX	COMP,B	COMPILE TSX SYM1(S(I)),4	4F15262
11657	-0	50000	0	01561		CAL	L(LXD) ,		4F15263
11660	0	60200	0	16165		SLW	CW+1		4F15264
11661	-0	50000	0	16163		CAL	XRSAVE		4F15265
11662	0	60200	0	16166		SLW	CW+2		4F15266
11663	0	02000	0	12756		TRA	CP6000		4F15267
11664	1	00000	0	12337	CP5830	TXI	ES0000,0,0		4F15268
									4F15269
11665	-0	76300	0	00024	CP2650	LGL	20	TEST OPI(S(I))33	4F15270
11666	0	16200	0	11734		TQP	CP3060	0... LIB. SBRTN	4F15271
11667	0	50200	0	16164		CLS	CW	1... OPEN SBRTN	4F15272
11670	0	60100	0	16164		STO	CW	CW TO -CW	4F15273
11671	0	50000	1	16647		CLA	SCRIPL-1,A		4F15274
11672	0	60100	0	16166		STO	CW+2		4F15275
11673	0	07400	2	12621		TSX	COMP,B	COMPILE FUNCTION NAME	4F15276
11674	0	60000	0	16164		STZ	CW	RESET CW	4F15277
11675	-0	53400	2	11324		LXD	CP0400,B		4F15278
11676	-3	77767	2	11720		TXL	CP2930,B,-9		4F15279
11677	-0	50000	0	01531		CAL	ALL1	OPEN UNIVARIATE FUNCTION	4F15280
11700	0	60200	0	16164		SLW	CW		4F15281
11701	0	50000	1	16651		CLA	SCRIPL+1,A		4F15282
11702	0	76000	0	00001		LBT		EXAMINE OP2(S(I))35	4F15283
11703	0	02000	0	11716		TRA	CP2900	0... ARG STORED	4F15284
11704	0	77100	0	00001		ARS	1	1... ARG NOT STORED	4F15285
11705	0	56000	0	01512		LDQ	ADPLUS		4F15286
11706	0	76000	0	00001		LBT			4F15287
11707	0	02000	0	11711		TRA	CP2860		4F15288

11710	0	56000	0	01524		LDQ	ADSTAR			4F15289
11711	-0	60000	0	16166	CP2860	STQ	CW+2			4F15290
11712	0	60000	0	16167		STZ	CW+3			4F15291
11713	0	07400	2	12621	CP2880	TSX	COMP,B	COMPILE ACC OR MQ INDICATOR		4F15292
11714	0	60000	0	16164		STZ	CW	RESET CW		4F15293
11715	0	02000	0	12337		TRA	ES0000			4F15294
11716	0	07400	4	12627	CP2900	TSX	AC0000,C	ADDRESS COMPILE SYM2(S(I))		4F15295
11717	0	02000	0	11713		TRA	CP2880	GO COMPILE SYM2(S(I))		4F15296
11720	0	07400	4	12627	CP2930	TSX	AC0000,C	OPEN MULTIVARIATE FUNCTION		4F15297
11721	-0	53400	2	11324		LXD	CP0400,B			4F15298
11722	1	00003	2	11723		TXI	CP2960,B,3			4F15299
11723	3	77772	2	11727	CP2960	TXH	CP3000,B,-6			4F15300
11724	-0	63400	2	11324		SXD	CP0400,B			4F15301
11725	0	07400	2	12621		TSX	COMP,B	COMPILE SYMJ(S(I))		4F15302
11726	1	77775	1	11720		TXI	CP2930,A,-3			4F15303
11727	-0	50000	0	01531	CP3000	CAL	ALL1			4F15304
11730	0	60200	0	16164		SLW	CW			4F15305
11731	0	07400	2	12621		TSX	COMP,B	COMPILE LAST ARGUMENT NAME		4F15306
11732	0	60000	0	16164		STZ	CW	RESET CW		4F15307
11733	0	02000	0	12337		TRA	ES0000	GO TO END-OF-SEGMENT SBR TN		4F15308
11734	-3	77767	2	11763	CP3060	TXL	CP3350,B,-9			4F15309
11735	0	50000	1	16651		CLA	SCRIP L+1,A	CLOSED UNIVARIATE FUNCTION		4F15310
11736	0	76000	0	00001		LBT		EXAMINE OP2(S(I))35		4F15311
11737	0	02000	0	11755		TRA	CP3280	0... ARG STORED		4F15312
11740	0	50000	0	01575	CP3100	CLA	L(SXD)	1... ARG IN ACC		4F15313
11741	0	60100	0	16165		STO	CW+1			4F15314
11742	0	50000	0	01505		CLA	X(			4F15315
11743	0	60100	0	16166		STO	CW+2			4F15316
11744	0	50000	0	01412		CLA	L(4)			4F15317
11745	0	60100	0	16167		STO	CW+3			4F15318
11746	0	07400	2	12621		TSX	COMP,B	COMPILE SXD7...0,4		4F15319
11747	0	50000	0	01602		CLA	L(TSX)			4F15320
11750	0	60100	0	16165		STO	CW+1			4F15321
11751	0	50000	1	16647		CLA	SCRIP L-1,A			4F15322
11752	0	60100	0	16166		STO	CW+2			4F15323
11753	0	07400	2	12621		TSX	COMP,B	COMPILE TSX SYM1(S(I)),4		4F15324
11754	0	02000	0	12332		TRA	CP5780	COMPILE FLOW TRACE INFO AND LXD 7(,4		4F15325
11755	0	50000	0	01541	CP3280	CLA	L(CLA)			4F15331
11756	0	60100	0	16165		STO	CW+1			4F15332
11757	0	07400	4	12627		TSX	AC0000,C	ADDRESS COMPILE SYM2(S(I))		4F15333
11760	0	07400	2	12621		TSX	COMP,B	COMPILE CLA SYM2(S(I))		4F15334
11761	0	60000	0	16164		STZ	CW	RESET CW		4F15335
11762	0	02000	0	11740		TRA	CP3100	GO COMPILE SXD,TSX,LXD SEQUENCE		4F15336
11763	-3	77764	2	12007	CP3350	TXL	CP3560,B,-12			4F15337
11764	0	50000	1	16651		CLA	SCRIP L+1,A	CLOSED BIVARIATE FUNCTION		4F15338
11765	0	76000	0	00001		LBT		EXAMINE OP2(S(I))35		4F15339
11766	0	02000	0	11775		TRA	CP3450	0... ARG1 STORED		4F15340
11767	0	50000	0	01556	CP3390	CLA	L(LDQ)	1... ARG1 IN ACC		4F15341
11770	0	60100	0	16165		STO	CW+1			4F15342
11771	1	77775	1	11772		TXI	CP3420,A,-3			4F15343
11772	0	07400	4	12627	CP3420	TSX	AC0000,C	ADDRESS COMPILE SYM3(S(I))		4F15344
11773	0	07400	2	12621		TSX	COMP,B	COMPILE LDQ SYM3(S(I))		4F15345
11774	1	00003	1	11740		TXI	CP3100,A,3	GO COMPILE SXD,TSX,LXD SEQUENCE		4F15346
11775	0	50000	1	16654	CP3450	CLA	SCRIP L+4,A			4F15347

11776	0	76000	0	00001	LBT	EXAMINE OP3(S(I))35	4F15348
11777	0	02000	0	12001	TRA CP3490	0... ARG2 STORED	4F15349
12000	0	02000	0	11755	TRA CP3280	1... ARG2 IN MQ	4F15350
12001	0	50000	0	01541	CP3490 CLA L(CLA)		4F15351
12002	0	60100	0	16165	STO CW+1		4F15352
12003	0	07400	4	12627	TSX AC0000,C	ADDRESS COMPILE SYM2(SI))	4F15353
12004	0	07400	2	12621	TSX COMP,B	COMPILE CLA SYM2(S(I))	4F15354
12005	0	60000	0	16164	STZ CW	REST CW	4F15355
12006	0	02000	0	11767	TRA CP3390	GO COMPILE LDQ,SXD,TSX,LXD SEQUENCE	4F15356
12007	0	50000	1	16651	CP3560 CLA SCRIPL+1,A	CLOSED MULTIVARIATE FUNCTION	4F15357
12010	0	76000	0	00001	LBT	EXAMINE OP2(S(I))35	4F15358
12011	1	77772	1	12041	TXI CP3820,A,-6	0... ARG1 STORED	4F15359
12012	1	77772	1	12013	TXI CP3600,A,-6	1... ARG1 IN ACC	4F15360
12013	0	50000	0	01521	CP3600 CLA DECM12		4F15361
12014	0	60100	0	16161	STO P(CNTR	INITIALIZE P(CNTR TO -2	4F15362
12015	0	50000	0	01556	CP3620 CLA L(LDQ)		4F15363
12016	0	60100	0	16165	STO CW+1		4F15364
12017	0	07400	4	12627	TSX AC0000,C	ADDRESS COMPILE SYMJ(S(I)) FOR J=4,5,...	4F15365
12020	0	07400	2	12621	TSX COMP,B	COMPILE LDQ SYMJ(S(I))	4F15366
12021	0	50000	0	01573	CLA L(STQ)		4F15367
12022	0	60100	0	16165	STO CW+1		4F15368
12023	0	50000	0	01503	CLA P(		4F15369
12024	0	60100	0	16166	STO CW+2		4F15370
12025	0	50000	0	16161	CLA P(CNTR		4F15371
12026	0	60100	0	16167	STO CW+3		4F15372
12027	0	40200	0	01454	SUB 2E18		4F15373
12030	0	60100	0	16161	STO P(CNTR		4F15374
12031	0	07400	2	12621	TSX COMP,B	COMPILE STQ 4...0-(J-2)	4F15375
12032	-0	53400	2	11324	LXD CP0400,B		4F15376
12033	1	00003	2	12034	TXI CP3770,B,3		4F15377
12034	-3	77764	2	12037	CP3770 TXL CP3800,B,-12		4F15378
12035	-0	53400	1	01117	LXD 3QBAR,A	FINISHED WITH ARG VECTOR	4F15379
12036	1	77775	1	11767	TXI CP3390,A,-3		4F15380
12037	-0	63400	2	11324	CP3800 SXD CP0400,B		4F15381
12040	1	77775	1	12015	TXI CP3620,A,-3	GO PICK UP NEXT ARG.	4F15382
12041	0	50000	1	16646	CP3820 CLA SCRIPL-2,A		4F15383
12042	0	76000	0	00001	LBT	EXAMINE OP3(S(I))35	4F15384
12043	1	00006	1	12072	TXI CP4070,A,6	0... ARG2 STORED	4F15385
12044	0	50000	0	01521	CLA DECM12	1... ARG2 IN MQ	4F15386
12045	0	60100	0	16161	STO P(CNTR		4F15387
12046	0	50000	0	01541	CP3870 CLA L(CLA)		4F15388
12047	0	60100	0	16165	STO CW+1		4F15389
12050	0	07400	4	12627	TSX AC0000,C	ADDRESS COMPILE SYMJ(S(I)) FOR J=4,5,...	4F15390
12051	0	07400	2	12621	TSX COMP,B	COMPILE CLA SYMJ(S(I))	4F15391
12052	0	50000	0	01572	CLA L(STO)		4F15392
12053	0	60100	0	16165	STO CW+1		4F15393
12054	0	50000	0	01503	CLA P(		4F15394
12055	0	60100	0	16166	STO CW+2		4F15395
12056	0	50000	0	16161	CLA P(CNTR		4F15396
12057	0	60100	0	16167	STO CW+3		4F15397
12060	0	40200	0	01454	SUB 2E18		4F15398
12061	0	60100	0	16161	STO P(CNTR		4F15399
12062	0	07400	2	12621	TSX COMP,B	COMPILE STO 4...0-(J-2)	4F15400
12063	-0	53400	2	11324	LXD CP0400,B		4F15401

12064	1	00003	2	12065		TXI	CP4020,B,3		4F15402
12065	-3	77764	2	12070	CP4020	TXL	CP4050,B,-12		4F15403
12066	-0	53400	1	01117		LXD	3QBAR,A	FINISHED WITH ARG VECTOR	4F15404
12067	1	77775	1	11755		TXI	CP3280,A,-3		4F15405
12070	-0	63400	2	11324	CP4050	SXD	CP0400,B		4F15406
12071	1	77775	1	12046		TXI	CP3870,A,-3	GO PICK UP NEXT ARG	4F15407
12072	0	50000	0	01541	CP4070	CLA	L(CLA)		4F15408
12073	0	60100	0	16165		STO	CW+1		4F15409
12074	0	07400	4	12627		TSX	AC0000,C	ADDRESS COMPILE SYM2(S(I))	4F15410
12075	0	07400	2	12621		TSX	COMP,B	COMPILE CLASYM2(S(I))	4F15411
12076	0	60000	0	16164		STZ	CW	RESET CW	4F15412
12077	1	77772	1	12013		TXI	CP3600,A,-6		4F15413
12100	-0	76300	0	00033	CP4140	LGL	27	OP1(S(I))=**	4F15414
12101	0	16200	0	12132		TQP	CP4410	CLOSED SBRTN SINCE OP1(S(I))33=0	4F15415
12102	0	76000	0	00001		LBT		OPEN SBRTN SINCE OP1(S(I))33=1	4F15416
12103	0	02000	0	12106		TRA	CP4200	BASE FIX PT SINCE OP1(S(I))32=0	4F15417
12104	0	50000	0	01525		CLA	STRSTR	BASE FLO PT SINCE OP1(S(II))I32=1	4F15418
12105	0	02000	0	12107		TRA	CP4210		4F15419
12106	0	50000	0	01524	CP4200	CLA	ADSTAR		4F15420
12107	0	60100	0	16165	CP4210	STO	CW+1		4F15421
12110	-0	76300	0	00002		LGL	2	EXAMINE OP1(S(I))35	4F15422
12111	0	16200	0	12120		TQP	CP4310	0... BASE STORED	4F15423
12112	0	56000	0	01524		LDQ	ADSTAR	1... BASE NOT STORED	4F15424
12113	0	76000	0	00001		LBT		EXAMINE OP1(S(I))34	4F15425
12114	0	56000	0	01512		LDQ	ADPLUS	0... BASE IN ACC	4F15426
12115	-0	60000	0	16166		STQ	CW+2	1...BASE IN MQ	4F15427
12116	0	60000	0	16167		STZ	CW+3		4F15428
12117	0	02000	0	12121		TRA	CP4320		4F15429
12120	0	07400	4	12627	CP4310	TSX	AC0000,C	ADDRESS COMPILE SYM1(S(I))	4F15430
12121	0	50200	0	16164	CP4320	CLS	CW		4F15431
12122	0	60100	0	16164		STO	CW	CW TO -CW	4F15432
12123	0	07400	2	12621		TSX	COMP,B	COMPILE BASE	4F15433
12124	0	60000	0	16164		STZ	CW	RESET CW	4F15434
12125	0	50000	1	16655		CLA	SCRIPL+5,A		4F15435
12126	0	60100	0	16166		STO	CW+2		4F15436
12127	0	07400	2	12621		TSX	COMP,B	COMPILE FIX PT CONSTANT EXPONENT	4F15437
12130	0	60000	0	16165		STZ	CW+1	RESET CW+1	4F15438
12131	0	02000	0	12337		TRA	ES0000		4F15439
12132	-0	76300	0	00003	CP4410	LGL	3	CLOSED EXP. SBRTN	4F15440
12133	0	76000	0	00001		LBT		EXAMINE OP1(S(I))35	4F15441
12134	0	02000	0	12177		TRA	CP4860	0... BASE STORED	4F15442
12135	0	50000	0	01556	CP4440	CLA	L(LDQ)	1... BASE IN ACC.	4F15443
12136	0	60100	0	16165		STO	CW+1		4F15444
12137	1	77775	1	12140		TXI	CP4470,A,-3		4F15445
12140	0	07400	4	12627	CP4470	TSX	AC0000,C	ADDRESS COMPILE SYM2(S(I))	4F15446
12141	0	07400	2	12621		TSX	COMP,B	COMPILE LDQ SYM2 (S(I))	4F15447
12142	0	50000	0	01575	CP4490	CLA	L(SXD)		4F15448
12143	0	60100	0	16165		STO	CW+1		4F15449
12144	0	50000	0	01505		CLA	X(		4F15450
12145	0	60100	0	16166		STO	CW+2		4F15451
12146	0	50000	0	01412		CLA	L(4)		4F15452
12147	0	60100	0	16167		STO	CW+3		4F15453
12150	0	07400	2	12621		TSX	COMP,B	COMPILE SXD 7...0,4	4F15454
12151	0	50000	0	01602		CLA	L(TSX)		4F15455

12152	0	60100	0	16165	STO	CW+1			4F15456
12153	0	50000	1	16651	CLA	SCRIPL+1,A			4F15457
12154	0	77100	0	00003	ARS	3			4F15458
12155	0	76000	0	00001	LBT		EXAMINE OP2(S(I))32		4F15459
12156	1	00003	1	12164	TXI	CP4660,A,3	0...		4F15460
12157	0	50000	0	01516	CLA	FLFL	1... FLO**FLO		4F15461
12160	0	56000	1	16646	LDQ	SCRIPL-2,A	EXAMINE OP1(S(I))32 TO CHECK		4F15462
12161	-0	77300	0	00040	RQL	32	FOR MIXED EXPONENTIAL EXPRESSION		4F15463
12162	0	16200	0	11216	TQP	MC0310+2	ERROR FIX PT BASE, FLOAT EXP.		4F15464
12163	0	02000	0	12171	TRA	CP4730			4F15465
12164	0	56000	1	16651	LDQ	SCRIPL+1,A			4F15466
12165	-0	77300	0	00040	RQL	32	EXAMINE OP1(SI))32		4F15467
12166	0	50000	0	01514	CLA	FXFX			4F15468
12167	0	16200	0	12171	TQP	CP4730	0...FX**FX		4F15469
12170	0	50000	0	01515	CLA	FLFX	1... FL**FX		4F15470
12171	0	60100	0	16166	STO	CW+2			4F15471
12172	0	60100	0	01347	STO	G			4F15472
12173	0	07400	2	12621	TSX	COMP,B	COMPILE TSX FXFX/FLEX/FLFL,4		4F15473
12174	0	07400	1	03321	TSX	TET00,A			4F15474
12175	0	00000	0	00011	HTR	9			4F15475
12176	0	02000	0	12332	TRA	CP5780	COMPILE FLOW TRACE INFO AND LXD 7(,4		4F15476
12177	0	50000	0	01541	CLA	L(CLA)			4F15482
12200	0	60100	0	16165	STO	CW+1			4F15483
12201	0	07400	4	12627	TSX	AC0000,C	ADDRESS COMPILE SYM1(S(I))		4F15484
12202	0	07400	2	12621	TSX	COMP,B	COMPILE CLA SYM1(S(I))		4F15485
12203	0	60000	0	16164	STZ	CW			4F15486
12204	0	50000	1	16654	CLA	SCRIPL+4,A			4F15487
12205	0	76000	0	00001	LBT		EXAMINE OP2(S(I))35		4F15488
12206	1	00000	0	12135	TXI	CP4440,0,0	0...EXP STORED		4F15489
12207	1	77775	1	12142	TXI	CP4490,A,-3	1... EXP IN MQ		4F15490
									4F15491
12210	0	50000	0	00030	CLA	EIFNO	FN FUNCTION		4F15492
12211	0	40000	0	01454	ADD	2E18	UPDATE EIFNO		4F15493
12212	0	60100	0	00030	STO	EIFNO	AND		4F15494
12213	0	60100	0	16160	STO	FNSW	SET FN SWITCH		4F15495
12214	0	62200	0	01105	STD	1C	KEEP 1C UPDATED FOR PENDING TIFGO ENTRY.		4F15496
12215	0	53400	4	01407	LXA	L(1),C	INITIALIZE STAIK TO 1		4F15497
12216	0	50000	1	16650	CLA	SCRIPL,A	EXAMINE TAGJ(S(I)), J=2,...		4F15498
12217	-0	12000	0	12233	TMI	CP5180	NONSUBSCRIPTED		4F15499
12220	-0	63400	2	11664	SXD	CP5830,B	SOBSCRIPTED-IS THERE A GENERAL TAG		4F15500
12221	-0	63400	4	12314	SXD	STACTR,C			4F15501
12222	0	07400	4	12627	TSX	AC0000,C			4F15502
12223	-0	50000	0	16173	CAL	TAGPRT			4F15503
12224	-0	10000	0	12237	TNZ	CP5220	GENERAL TAG PRESENT		4F15504
12225	-0	50000	0	16167	CAL	CW+3	NO GENERAL TAG PRESENT,SO PLACE		4F15505
12226	0	77100	0	00013	ARS	11	RELATIVE ADDRESS IN OPJ(S(II))14-28 AND		4F15506
12227	-0	50100	0	01474	ORA	NGTBIT	SET OPJ(S(I))10=1 FROM NGTBIT		4F15507
12230	-0	60200	1	16651	ORS	SCRIPL+1,A			4F15508
12231	-0	53400	4	12314	LXD	STACTR,C			4F15509
12232	-0	53400	2	11664	LXD	CP5830,B			4F15510
12233	1	00003	2	12234	CP5180	TXI	CP5190,B,3		4F15511
12234	3	77772	2	12267	CP5190	TXH	CP5460,B,-6	FINISHED WITH PRELUDE,IF ANY	4F15512
12235	1	00001	4	12236	TXI	CP5210,C,1	NOT FINISHED-STAIK=STAIK+1		4F15513
12236	1	77775	1	12216	CP5210	TXI	CP5050,A,-3	GO ON TO NEXT ARGUMENT	4F15513

12237	-0	50000	0	01566	CP5220	CAL	L(PXD)		4F15515
12240	0	60200	0	16165		SLW	CW+1		4F15516
12241	0	07400	2	12621		TSX	COMP,B	COMPILE PXD SYMJ(S(I)), TAGJ(S(I))	4F15517
12242	0	60000	0	16164		STZ	CW	RESET CW	4F15518
12243	0	07400	4	01731		TSX	CIT00,C	COMPILE ARS 18	4F15519
12244	0	00000	0	01406		HTR	L(0)		4F15520
12245	0	00000	0	01535		HTR	L(ARS)		4F15521
12246	0	00000	0	01406		HTR	L(0)		4F15522
12247	0	00000	0	01466		HTR	DEC18		4F15523
12250	0	07400	4	01731		TSX	CIT00,C	COMPILE ADD *-2	4F15524
12251	0	00000	0	01406		HTR	L(0)		4F15525
12252	0	00000	0	01532		HTR	L(ADD)		4F15526
12253	0	00000	0	01511		HTR	PROCTR		4F15527
12254	0	00000	0	01521		HTR	DECM12		4F15528
12255	-0	50000	0	01571		CAL	L(STA)		4F15529
12256	0	60200	0	16165		SLW	CW+1		4F15530
12257	-0	50000	0	00030		CAL	EIFNO		4F15531
12260	-0	32000	0	01527		ANA	MASK1		4F15532
12261	0	60200	0	16166		SLW	CW+2		4F15533
12262	-0	53400	4	12314		LXD	STACTR,C		4F15534
12263	-0	75400	4	00000		PXD	0,C		4F15535
12264	0	60200	0	16167		SLW	CW+3		4F15536
12265	0	07400	2	12621		TSX	COMP,B	COMPILE STA IFN+STAIX	4F15537
12266	1	00000	0	12231		TXI	CP5160,0,0	GO ON TO NEXT ARGUMENT,IF ANY	4F15538
12267	-0	53400	1	01117	CP5460	LXD	3QBAR,A		4F15539
12270	-0	50000	0	01575		CAL	L(SXD)		4F15540
12271	0	60200	0	16165		SLW	CW+1		4F15541
12272	-0	50000	0	01505		CAL	X(		4F15542
12273	0	60200	0	16166		SLW	CW+2		4F15543
12274	-0	50000	0	01412		CAL	L(4)		4F15544
12275	0	60200	0	16167		SLW	CW+3		4F15545
12276	0	07400	2	12621		TSX	COMP,B	COMPILE SXD 7,4	4F15546
12277	-0	50000	0	00030		CAL	EIFNO		4F15547
12300	-0	32000	0	01527		ANA	MASK1		4F15548
12301	0	60200	0	16164		SLW	CW		4F15549
12302	-0	50000	0	01602		CAL	L(TSX)		4F15550
12303	0	60200	0	16165		SLW	CW+1		4F15551
12304	-0	50000	1	16652		CAL	SCRIPL+2,A		4F15552
12305	0	60200	0	16166		SLW	CW+2		4F15553
12306	0	07400	2	12621		TSX	COMP,B	COMPILE TSX SYM1(S(I)),4	4F15554
12307	0	60000	0	16164		STZ	CW	RESET CW	4F15555
12310	1	77775	1	12311		TXI	CP5680,A,-3	POSITION XA TO SYM2(S(I))	4F15556
12311	0	50000	1	16650	CP5680	CLA	SCRIPL,A		4F15557
12312	0	12000	0	12315		TPL	CP5700		4F15558
12313	0	07400	4	12627		TSX	AC0000,C	NONSUBSCRIPTED	4F15559
12314	1	00000	0	12324	STACTR	TXI	CP5720,0,0		4F15560
12315	0	56000	1	16651	CP5700	LDQ	SCRIPL+1,A	SUBSCRIPTED	4F15561
12316	-0	76300	0	00013		LGL	11		4F15562
12317	0	76000	0	00001		LBT			4F15563
12320	0	56000	0	01406		LDQ	L(0)	GENERAL TAG PRESENT	4F15564
12321	-0	60000	0	16167		STQ	CW+3	NO GENERAL TAG PRESENT	4F15565
12322	-0	50000	1	16652		CAL	SCRIPL+2,A		4F15566
12323	0	60200	0	16166		SLW	CW+2		4F15567
12324	0	07400	2	12621	CP5720	TSX	COMP,B	COMPILE TSX SYMJ(S(I)) , J=2,...	4F15568

12325	-0	53400	2	11324	LXD	CP0400,B		4F15569
12326	1	00003	2	12327	TXI	CP5750,B,3		4F15570
12327	3	77772	2	12332	CP5750	TXH	CP5780,B,-6	4F15571
12330	-0	63400	2	11324	SXD	CP0400,B	FINISHED SCANNING	4F15572
12331	1	77775	1	12311	TXI	CP5680,A,-3		4F15573
12332	0	07400	4	03401	CP5780	TSX	FLTR00,4	4F15574
12333	0	00000	0	01406	HTR	L(0)	COMPILE FLOW TRACE INFO AND LXD 7(,4	4F15575
12334	0	00000	0	01561	HTR	L(LXD)		4F15576
12335	0	00000	0	01505	HTR	X(		4F15577
12336	0	00000	0	01412	HTR	L(4)		4F15578
12337	-0	53400	1	01117	ES0000	LXD	3QBAR,A	4F15579
12340	-0	76000	0	00141	SLT	1	-3Q TO XA	4F15580
12341	0	02000	0	11271	TRA	CP0130	GO TO NEXT SEGMENT	4F15581
12342	-0	50000	1	16650	CAL	SCRIPL,A		4F15582
12343	-0	32000	0	01452	ANA	MASK2		4F15583
12344	0	10000	0	12357	TZE	ES0160		4F15584
12345	0	50000	0	01120	CLA	ARERAS	S(I) NOT = S(0)	4F15585
12346	0	60100	0	16166	STO	CW+2		4F15586
12347	0	50000	0	01363	CLA	PHI(I)		4F15587
12350	0	60100	0	16167	STO	CW+3		4F15588
12351	0	50000	0	01573	CLA	L(STQ)		4F15589
12352	-0	76000	0	00142	SLT	2		4F15590
12353	0	50000	0	01572	CLA	L(STO)		4F15591
12354	0	60100	0	16165	STO	CW+1		4F15592
12355	0	07400	2	12621	TSX	COMP,B	COMPILE STO/STQ 1... TYPE NO + PHI(I)	4F15593
12356	0	02000	0	11271	TRA	CP0130	GO TO NEXT SEGMENT	4F15594
12357	0	56000	0	01356	ES0160	LDQ	LEFT+2	4F15595
12360	-0	76300	0	00014	LGL	12	S(I)=S(0)	4F15596
12361	0	34000	0	01450	CAS	IFSVM	IS THIS AN IF STATEMENT	4F15597
12362	0	02000	0	12364	TRA	ES0200		4F15598
12363	0	02000	0	12556	TRA	ES1500		4F15599
12364	0	34000	0	01451	ES0200	CAS	CALLER	4F15600
12365	0	02000	0	12367	TRA	ES0210	IS THIS A CALL STATEMENT	4F15601
12366	0	02000	0	12561	TRA	ES1520		4F15602
12367	0	34000	0	01447	ES0210	CAS	SAPSYM	4F15603
12370	0	02000	0	12372	TRA	ES0220		4F15604
12371	0	02000	0	12615	TRA	ES1710		4F15605
12372	0	77100	0	00006	ES0220	ARS	6	4F15606
12373	-0	53400	4	01122	LXD	ARGCTR,C	IS THIS A FUNCTION STATEMENT	4F15607
12374	3	00000	4	12533	TXH	ES1300,C,0	YES	4F15608
12375	0	34000	0	01423	CAS	L(H)	NOT A FUNCTION STATEMENT	4F15609
12376	0	34000	0	01425	CAS	L(O)		4F15610
12377	0	02000	0	12465	TRA	ES0300		4F15611
12400	0	02000	0	12465	TRA	ES0300		4F15612
12401	-0	76000	0	00144	SLT	4		4F15613
12402	0	02000	0	12420	TRA	ES0870		4F15614
12403	0	50000	0	01573	ES0710	CLA	L(STQ)	4F15615
12404	-0	76000	0	00142	SLT	2	FX(FLO) PT ON LEFT, FX(FLO) PT ON RIGHT	4F15616
12405	0	50000	0	01572	ES0730	CLA	L(STO)	4F15617
12406	0	60100	0	16165	STO	CW+1		4F15618
12407	0	50000	0	01354	CLA	LEFT		4F15619
12410	0	60100	0	16170	STO	TAGWRD		4F15620
12411	0	50000	0	01355	CLA	LEFT+1		4F15621
12412	0	60100	0	16171	STO	OPWORD		4F15622

12413	0	50000	0	01356	CLA LEFT+2		4F15623
12414	0	60100	0	16172	STO SYMWRD		4F15624
12415	0	07400	4	12635	TSX AC0060,C	ADDRESS COMPILE VARIABLE ON LEFT	4F15625
12416	0	07400	2	12621	TSX COMP,B	COMPILE STO/STQ LEFT+2	4F15626
12417	0	02000	0	12601	TRA ES1590	EXIT TO FETCH STATE A	4F15627
12420	-0	76000	0	00142	ES0870 SLT 2	FX PT ON LEFT, FLO PT ON RIGHT	4F15628
12421	0	02000	0	12433	TRA ES0990		4F15629
12422	0	50000	0	01573	CLA L(STQ)	RESULT ON RIGHT APPEARS IN MQ	4F15630
12423	0	60100	0	16165	STO CW+1		4F15631
12424	0	50000	0	01505	CLA X(		4F15632
12425	0	60100	0	16166	STO CW+2		4F15633
12426	0	60000	0	16167	STZ CW+3		4F15634
12427	0	07400	2	12621	TSX COMP,B	COMPILE STQ 700000	4F15635
12430	0	50000	0	01541	CLA L(CLA)		4F15636
12431	0	60100	0	16165	STO CW+1		4F15637
12432	0	07400	2	12621	TSX COMP,B	COMPILE CLA 700000	4F15638
12433	0	07400	4	01731	ES0990 TSX CIT00,C	COMPILE FIXING INSTRUCTIONS, WHEN	4F15639
12434	0	00000	0	01406	HTR L(0)	RESULT ON RIGHT IS IN ACC.	4F15640
12435	0	00000	0	01603	HTR L(UFA)		4F15641
12436	0	00000	0	01504	HTR O(		4F15642
12437	0	00000	0	01406	HTR L(0)		4F15643
12440	0	07400	4	01731	TSX CIT00,C		4F15644
12441	0	00000	0	01406	HTR L(0)		4F15645
12442	0	00000	0	01560	HTR L(LRS)		4F15646
12443	0	00000	0	01406	HTR L(0)		4F15647
12444	0	00000	0	01406	HTR L(0)		4F15648
12445	0	07400	4	01731	TSX CIT00,C		4F15649
12446	0	00000	0	01406	HTR L(0)		4F15650
12447	0	00000	0	01534	HTR L(ANA)		4F15651
12450	0	00000	0	01504	HTR O(		4F15652
12451	0	00000	0	01454	HTR 2E18		4F15653
12452	0	07400	4	01731	TSX CIT00,C		4F15654
12453	0	00000	0	01406	HTR L(0)		4F15655
12454	0	00000	0	01557	HTR L(LLS)		4F15656
12455	0	00000	0	01406	HTR L(0)		4F15657
12456	0	00000	0	01406	HTR L(0)		4F15658
12457	0	07400	4	01731	TSX CIT00,C		4F15659
12460	0	00000	0	01406	HTR L(0)		4F15660
12461	0	00000	0	01533	HTR L(ALS)		4F15661
12462	0	00000	0	01406	HTR L(0)		4F15662
12463	0	00000	0	01466	HTR DEC18		4F15663
12464	0	02000	0	12521	TRA ES0610		4F15664
12465	-0	76000	0	00144	ES0300 SLT 4		4F15665
12466	0	02000	0	12403	TRA ES0710		4F15666
12467	-0	76000	0	00142	ES0320 SLT 2	FLO PT ON LEFT, FX PT ON RIGHT	4F15667
12470	0	02000	0	12502	TRA ES0440		4F15668
12471	0	50000	0	01573	CLA L(STQ)	RESULT ON RIGHT APPEARS IN MQ	4F15669
12472	0	60100	0	16165	STO CW+1		4F15670
12473	0	50000	0	01505	CLA X(		4F15671
12474	0	60100	0	16166	STO CW+2		4F15672
12475	0	60000	0	16167	STZ CW+3		4F15673
12476	0	07400	2	12621	TSX COMP,B	COMPILE STQ 700000	4F15674
12477	0	50000	0	01541	CLA L(CLA)		4F15675
12500	0	60100	0	16165	STO CW+1		4F15676

12501	0	07400	2	12621	TSX COMP,B	COMPILE CLA 700000	4F15677
12502	0	07400	4	01731	ES0440 TSX CIT00,C	COMPILE FLOATING INSTRUCTIONS, WHEN	4F15678
12503	0	00000	0	01406	HTR L(0)	RESULT ON RIGHT IS IN ACC	4F15679
12504	0	00000	0	01560	HTR L(LRS)		4F15680
12505	0	00000	0	01406	HTR L(0)		4F15681
12506	0	00000	0	01466	HTR DEC18		4F15682
12507	0	07400	4	01731	TSX CIT00,C		4F15683
12510	0	00000	0	01406	HTR L(0)		4F15684
12511	0	00000	0	01564	HTR L(ORA)		4F15685
12512	0	00000	0	01504	HTR O(		4F15686
12513	0	00000	0	01406	HTR L(0)		4F15687
12514	0	07400	4	01731	TSX CIT00,C		4F15688
12515	0	00000	0	01406	HTR L(0)		4F15689
12516	0	00000	0	01550	HTR L(FAD)		4F15690
12517	0	00000	0	01504	HTR O(		4F15691
12520	0	00000	0	01406	HTR L(0)		4F15692
12521	-0	53400	4	01122	ES0610 LXD ARGCTR,C	IS THIS A FUNCTION STATEMENT	4F15693
12522	-3	00000	4	12405	TXL ES0730,C,0	NO	4F15694
12523	0	50000	0	01601	ES0630 CLA L(TRA)	YES	4F15695
12524	0	60100	0	16165	STO CW+1		4F15696
12525	0	60000	0	16166	STZ CW+2		4F15697
12526	-0	50000	0	01454	CAL 2E18		4F15698
12527	-0	50100	0	01412	ORA L(4)		4F15699
12530	0	60200	0	16167	SLW CW+3		4F15700
12531	0	07400	2	12621	TSX COMP,B	COMPILE TRA 1,4	4F15701
12532	0	02000	0	12601	TRA ES1590	EXIT TO FETCH STATE A	4F15702
12533	0	40200	0	01433	ES1300 SUB L(X)		4F15703
12534	0	10000	0	12540	TZE ES1360		4F15704
12535	-0	76000	0	00144	SLT 4		4F15705
12536	0	02000	0	12542	TRA ES1380		4F15706
12537	0	02000	0	12467	TRA ES0320		4F15707
12540	-0	76000	0	00144	ES1360 SLT 4		4F15708
12541	0	02000	0	12420	TRA ES0870		4F15709
12542	-0	76000	0	00142	ES1380 SLT 2		4F15710
12543	0	02000	0	12523	TRA ES0630		4F15711
12544	0	50000	0	01573	CLA L(STQ)		4F15712
12545	0	60100	0	16165	STO CW+1		4F15713
12546	0	50000	0	01505	CLA X(		4F15714
12547	0	60100	0	16166	STO CW+2		4F15715
12550	0	60000	0	16167	STZ CW+3		4F15716
12551	0	07400	2	12621	TSX COMP,B	COMPILE STQ 700000	4F15717
12552	0	50000	0	01541	CLA L(CLA)		4F15718
12553	0	60100	0	16165	STO CW+1		4F15719
12554	0	07400	2	12621	TSX COMP,B	COMPILE CLA 700000	4F15720
12555	0	02000	0	12523	TRA ES0630		4F15721
12556	0	07400	1	03321	ES1500 TSX TET00,1	* GO TO PROGRAM TET TO ENTER 1C,1C+1	4F15722
12557	0	00000	0	00002	PZE 2	INTO TIFGO TABLE (TABLE 2).	4F15723
12560	0	02000	0	12565	TRA ES1530		4F15724
12561	-0	53400	4	00030	ES1520 LXD EIFNO,4		4F15725
12562	-0	63400	4	01123	SXD CALLNM,4	PREPARE ENTRY FOR TABLE OF CALL FIRST AND	4F15726
12563	0	07400	1	03321	TSX TET00,1	LAST IFN NUMBERS.	4F15727
12564	0	00000	0	00020	16		4F15728
12565	-0	76000	0	00142	ES1530 SLT 2		4F15729
12566	0	02000	0	12601	TRA ES1590	EXIT TO FETCH STATE A	4F15730

12567	0	07400	4	01731	TSX	CIT00,C	COMPILE LLS 37	4F15731
12570	0	00000	0	01406		L(0)		4F15732
12571	0	00000	0	01573		L(STQ)		4F15733
12572	0	00000	0	01505		X(		4F15734
12573	0	00000	0	01406		L(0)		4F15735
12574	0	07400	4	01731	TSX	CIT00,4		4F15736
12575	0	00000	0	01406		L(0)		4F15737
12576	0	00000	0	01541		L(CLA)		4F15738
12577	0	00000	0	01505		X(		4F15739
12600	0	00000	0	01406		L(0)		4F15740
12601	0	50000	0	16160	ES1590	CLA	FNSW	4F15741
12602	0	10000	0	03440		TZE	MTR000	4F15742
12603	0	50000	0	01151		CLA	F-1	4F15743
12604	0	40200	0	01477		SUB	5BLANS	4F15744
12605	0	10000	0	03440		TZE	MTR000	4F15745
12606	0	50200	0	00030		CLS	EIFNO	4F15746
12607	0	60100	0	00030		STO	EIFNO	4F15747
12610	0	07400	1	03321	TSX	TET00,A		4F15748
12611	0	00000	0	00000		HTR	0	4F15749
12612	0	50200	0	00030		CLS	EIFNO	4F15750
12613	0	60100	0	00030		STO	EIFNO	4F15751
12614	0	02000	0	03440		TRA	MTR000	4F15752
12615	-0	53400	2	00637	ES1710	LXD	BBOX,B	4F15753
12616	0	50000	0	01362		CLA	OPNWRD	4F15754
12617	0	60100	2	00635		STO	CIB-3,B	4F15755
12620	0	02000	0	03440		TRA	MTR000	4F15756
								4F15757
12621	0	07400	4	01731	COMP	TSX	CIT00,C	4F15758
12622	0	00000	0	16164		HTR	CW	4F15759
12623	0	00000	0	16165		HTR	CW+1	4F15760
12624	0	00000	0	16166		HTR	CW+2	4F15761
12625	0	00000	0	16167		HTR	CW+3	4F15762
12626	0	02000	2	00001		TRA	1,B	4F15763
								4F15764
12627	0	50000	1	16650	AC0000	CLA	SCRIPL,A	4F15765
12630	0	60100	0	16170		STO	TAGWRD	4F15766
12631	0	50000	1	16651		CLA	SCRIPL+1,A	4F15767
12632	0	60100	0	16171		STO	OPWORD	4F15768
12633	0	50000	1	16652		CLA	SCRIPL+2,A	4F15769
12634	0	60100	0	16172		STO	SYMWRD	4F15770
12635	-0	50000	0	16170	AC0060	CAL	TAGWRD	4F15771
12636	-0	32000	0	01527		ANA	MASK1	4F15772
12637	-0	76000	0	00001		PBT		4F15773
12640	0	02000	0	12721		TRA	AC0540	4F15774
12641	-0	75400	0	00000		PXD	0,0	4F15775
12642	0	56000	0	16172		LDQ	SYMWRD	4F15776
12643	-0	76300	0	00001		LGL	1	4F15777
12644	0	76000	0	00001		LBT		4F15778
12645	0	16200	0	12712		TQP	AC0460	4F15779
12646	-0	76300	0	00013		LGL	11	4F15780
12647	0	40200	0	01444		SUB	L(A(	4F15781
12650	0	10000	0	12705		TZE	AC0410	4F15782
12651	0	40000	0	01444		ADD	L(A(	4F15783
12652	0	40200	0	01446		SUB	L(I(	4F15784

EXTRACT TAGS IN ACC.

NON-SUBSCRIPTED SYMBOL

SYMBOL IS SOME S(K)

NON-SUBSCRIPTED EX/INTERNAL VARIABLE

IS THIS A FLO PT CONSTANT

YES

NO

IS THIS A FIX PT CONSTANT

12653	0	10000	0	12703	TZE AC0390	YES	4F15785
12654	0	40000	0	01446	ADD L(I(	NO	4F15786
12655	0	40200	0	01445	SUB L(H(	IS THIS A HOLLERITH FIELD	4F15787
12656	0	10000	0	12701	TZE AC0350	YES	4F15788
12657	0	56000	0	16171	LDQ OPWORD	NON-SUBSCRIPTD0 EXTERNAL VARIABLE	4F15789
12660	-0	76300	0	00015	LGL 13	IS THIS A FREE VARIABLE	4F15790
12661	0	16200	0	12676	TQP AC0340	NO	4F15791
12662	0	76300	0	00017	LLS 15	YES	4F15792
12663	0	76000	0	00006	COM		4F15793
12664	0	40200	0	01407	SUB L(1)		4F15794
12665	0	73400	2	00000	PAX 0,B		4F15795
12666	-0	75400	2	00000	PXD 0,B		4F15796
12667	0	60200	0	16167	SLW CW+3	STORE ARGUMENT BUFFER RELATIVE ADDRESS	4F15797
12670	-0	53400	2	00470	LXD BK,B		4F15798
12671	-0	50000	2	00470	CAL FORSUB-1,B		4F15799
12672	-0	32000	0	01452	ANA MASK2	EXTRACT FUNCTION STATEMENT TYPE	4F15800
12673	-0	50100	0	01503	ORA P(		4F15801
12674	0	60200	0	16166	AC0320 SLW CW+2		4F15802
12675	0	02000	4	00001	TRA 1,C	RETURN	4F15803
12676	0	60000	0	16167	AC0340 STZ CW+3	NON-SUBSCRIPTED, REAL VARIABLE	4F15804
12677	-0	50000	0	16172	CAL SYMWWRD		4F15805
12700	0	02000	0	12674	TRA AC0320		4F15806
12701	-0	50000	0	01522	AC0350 CAL H(		4F15807
12702	0	02000	0	12706	TRA AC0420		4F15808
12703	0	50000	0	01501	AC0390 CLA I(	FIX PT INTERNAL VARIABLE	4F15809
12704	0	02000	0	12706	TRA AC0420		4F15810
12705	0	50000	0	01502	AC0410 CLA A(	FLO PT INTERNAL VARIABLE	4F15811
12706	0	60100	0	16166	AC0420 STO CW+2		4F15812
12707	-0	77300	0	00006	RQL 6		4F15813
12710	-0	60000	0	16167	STQ CW+3		4F15814
12711	0	02000	4	00001	TRA 1,C	RETURN	4F15815
12712	-0	76300	0	00043	AC0460 LGL 35	SYMBOL IS SOME S(K).	4F15816
12713	0	73400	2	00000	TDRADD PAX 0,B		4F15817
12714	-0	50000	2	16174	CAL CPBETA,B		4F15818
12715	-0	32000	0	01527	ANA MASK1	EXTRACT PHI(K)	4F15819
12716	0	60200	0	16167	SLW CW+3		4F15820
12717	-0	50000	0	01120	CAL ARERAS		4F15821
12720	0	02000	0	12674	TRA AC0320		4F15822
12721	0	60200	0	16170	AC0540 SLW TAGWRD	SUBSCRIPTED VARIABLE	4F15823
12722	0	56000	0	16170	LDQ TAGWRD		4F15824
12723	-0	75400	0	00000	PXD ,0	CLEAR AC.	4F15825
12724	-0	76300	0	00014	LGL 12	I-TAU TAGS TO AC.	4F15826
12725	0	60200	0	16167	SLW CW+3	STORE FOR NEXT CIT ENTRY.	4F15827
12726	0	16200	0	12731	TQP *+3		4F15828
12727	0	60000	0	16167	STZ CW+3		4F15829
12730	-0	50000	0	01454	CAL 2E18	REPLACE NULL TAG.	4F15830
12731	0	60200	0	16173	SLW TAGPRT	SAVE FOR LATER USE.	4F15831
12732	-0	76300	0	00001	LGL 1		4F15832
12733	-0	75400	0	00000	PXD ,0	CLEAR AC.	4F15833
12734	-0	76300	0	00010	LGL 8	FORM TWICE SIGMA TAG.	4F15834
12735	0	76700	0	00001	ALS 1		4F15835
12736	0	40100	0	00446	ADM SIG1IX-2	FORM BASE OF TABLE + SIGMA TAG.	4F15836
12737	0	62100	0	12740	STA SDRADD		4F15837
12740	-0	75400	0	00000	SDRADD PXD **,0		4F15838

01377	ARPAR	SYN	CLOS		4F15885
01535	ARS	SYN	L(ARS)		4F15886
00002	B	EQU	2		4F15887
00004	C	EQU	4		4F15888
01537	CAL	SYN	L(CAL)		4F15889
01731	CIT	SYN	CIT00		4F15890
01150	CITMQR	SYN	E1C	ERASABLE STORAGE.	4F15891
00223	CITTAP	SYN	147	COMPILED INSTRUCTION TAPE.	4F15892
01101	CITXR1	SYN	ERASE+1	ERASABLE STORAGE.	4F15893
01102	CITXR2	SYN	ERASE+2	ERASABLE STORAGE.	4F15894
01544	CPY	SYN	L(CPY)		4F15895
01454	D1	SYN	2E18		4F15896
01101	D12	SYN	ERASE+1	COMMON WORKING STORAGE.	4F15897
01466	D18	SYN	DEC18		4F15898
01102	D3	SYN	ERASE+2	COMMON WORKING STORAGE.	4F15899
01546	DED	SYN	L(DED)		4F15900
00310	DIM1	SYN	0200	DRUM TABLE ORIGIN -DRTABS,DIM.SR.	4F15905
00764	DIM2	SYN	0500	DRUM TABLE ORIGIN -DRTABS,DIM.SR.	4F15906
01440	DIM3	SYN	0800	DRUM TABLE ORIGIN -DRTABS,DIM.9R.	4F15907
01100	DIMCTR	SYN	ERASE	COMMON WORKING STORAGE.	4F15908
01500	DMP	SYN	E(		4F15909
01100	DOE	SYN	ERASE	COMMON WORKING STORAGE.	4F15910
01103	DRCKSM	SYN	ERASE+3	COMMON WORKING STORAGE.	4F15911
01104	DRMADR	SYN	ERASE+4	ERASABLE STORAGE.	4F15912
01413	DRMERC	SYN	L(5)	NUMBER OF DRUM READING ATTEMPTS.	4F15913
01100	DRSYM	SYN	ERASE	COMMON WORKING STORAGE.	4F15914
01100	E1TDR	SYN	ERASE	COMMON WORKING STORAGE.	4F15915
01101	E2C	SYN	ERASE+1	COMMON WORKING STORAGE.	4F15916
01101	E2TDR	SYN	ERASE+1	COMMON WORKING STORAGE.	4F15917
01102	E3C	SYN	ERASE+2	COMMON WORKING STORAGE.	4F15918
01102	E3TDR	SYN	ERASE+2	COMMON WORKING STORAGE.	4F15919
01101	EKE	SYN	ERASE+1	COMMON WORKING STORAGE.	4F15920
01103	ENONO	SYN	ERASE+3	COMMON WORKING STORAGE.	4F15921
01104	FEOD	SYN	ERASE+4	COMMON WORKING STORAGE.	4F15922
00002	FIXCON	SYN	0002	DRUM TABLE ORIGIN -DRTABS.	4F15923
00312	FLOCON	SYN	202	DRUM TABLE ORIGIN -DRTABS.	4F15924
00002	FXCODR	SYN	2		4F15925
01102	H	SYN	ERASE+2	COMMON WORKING STORAGE.	4F15926
01522	H(	SYN	ADSPOP		4F15927
01554	HPR	SYN	L(HPR)		4F15928
01555	LDA	SYN	L(LDA)		4F15929
01561	LXD	SYN	L(LXD)		4F15930
01373	L(10)	SYN	TEN		4F15931
01400	L(11)	SYN	EQUAL		4F15932
01420	L(12)	SYN	MINUS		4F15933
01454	L(1DI	SYN	2E18		4F15934
01374	L(63)	SYN	ENDMK		4F15935
03440	MEMORG	SYN	1824	MEMORY ORIGIN FOR ALL STATES.	4F15936
01452	MSK	SYN	MASK2		4F15937
03440	MTR000	SYN	STATEA		4F15938
01103	N	SYN	ERASE+3	COMMON WORKING STORAGE.	4F15943
01404	PLUS	SYN	12Z		4F15945
01566	PXD	SYN	L(PXD)		4F15946
01100	RAXR4	SYN	ERASE	COMMON WORKING STORAGE.	4F15947

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01226 SIGMA1 SYN 0662 DRUM TABLE ORIGIN -DRTABS. 4F15948
01101 SR6WRK SYN ERASE+1 ERASABLE STORAGE. 4F15949
01416 ST SYN L(8) 4F15950
01571 STA SYN L(STA) 4F15951
01104 STCKSM SYN ERASE+4 COMMON WORKING STORAGE. 4F15952
00224 TABTAP SYN 148 TABLE TAPE. 4F15953
01453 TAG4 SYN 2E17 4F15954
00000 TAU1 SYN 0000 DRUM TABLE ORIGIN -DRTABS. 4F15955
00454 TAU2 SYN 0300 DRUM TABLE ORIGIN -DRTABS. 4F15956
01356 TAU3 SYN 0750 DRUM TABLE ORIGIN -DRTABS. 4F15957
01413 TERC SYN L(5) TAPE ERROR COUNTER. 4F15958
01103 TETMQR SYN ERASE+3 ERASABLE STORAGE. 4F15959
01102 TETWRK SYN ERASE+2 ERASABLE STORAGE. 4F15960
01100 TETXR2 SYN ERASE ERASABLE STORAGE. 4F15961
01101 TETXR4 SYN ERASE+1 ERASABLE STORAGE. 4F15962
01576 TIX SYN L(TIX) 4F15963
01504 ZER SYN O( 4F15964
00000 .. EQU 0 4F15965

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END OF SYNONYMS USED BY SECTION ONE. 4F15966
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END OF SECTION ONE. 4F15968
A 00000 END 4F15969
4F15970

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SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	5910	0	0	0	0
LIB	0	0	0	0	0
COL	5910	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 5918

NUMBER OF SYMBOLS, DEF 1354,DEFOP 0,UNDEF 0

REM 704 FORTRAN II, SECTION V, TAG ANALYSIS, 8-1-6-2 F5G00010

704 FORTRAN II, SECTION V, TAG ANALYSIS, 8-1-6-2	F5G00010
DAVID STERNLIGHT I.B.M. WORLD HEADQUARTERS 5 NOV 58.	F5G00020
INTRODUCTION	F5G00030
TNE GENERAL PHILOSOPHY OF SECTION 5 IS TO REDUCE A PROGRAM	F5G00040
USING AS MANY INDEX REGISTERS AS NEEDED TO ONE USING 3 INDEX	F5G00050
REGISTERS IN AS EFFICIENT A MEANS AS POSSIBLE, CALLING ON	F5G00060
INDEX CELLS WHICH ARE STORAGE LOCATIONS, TO RETAIN DISPLACED	F5G00070
INFORMATION WHEN THE CONTENTS OF AN INDEX REGISTER MUST BE	F5G00080
REPLACED. THUS THE INDEX CELLS CORRESPOND TO ORIGINAL INDEX	F5G00090
REGISTERS USED IN THE FORTRAN OBJECT PROGRAM BEFORE SECTION5.	F5G00100
THE MAIN PROBLEMS SECTION 5 HANDLES ARE THOSE OF KEEPING	F5G00110
INDEX CELLS UP TO DATE, AND EFFICIENTLY SEEING TO IT THAT THEF	F5G00120
3 INDEX REGISTERS CONTAIN THE PROPER INFORMATION AT ALL	F5G00130
TIMES FOR THE CORRECT EXECUTION OF TAGGED INSTRUCTIONS.	F5G00140
GENERALLY, SECTION 5 COMPILES SX,S WHENEVER AN INDEX CELL	F5G00150
MUST BE UPDATED SO THAT IF AN INDEX QUANTITY IS NEEDED AND	F5G00160
NOT PRESENT IN AN INDEX REGISTER, AN LX CAN BE USED WITHOUT	F5G00170
CONCERN ABOUT WHAT IS WIPED OUT. THE SKILLFUL PLACEMENT OF	F5G00180
THESE SX,S IS ONE OF THE MAJOR JOBS OF SECTION 5.	F5G00190
THE PROGRAM IS ANALYZED USING THE CONCEPT OF BASIC BLOCKS,	F5G00200
PROGRAM UNITS HAVING A SINGLE ENTRY AND EXIT POINT, AS DEFIN-	F5G00210
ED BY SECTION 4. THE LINKS BETWEEN BASIC BLOCKS ARE LABELED	F5G00220
BY FREQUENCY IN SECTION 4, BY ACTUAL PROGRAM SIMULATION.	F5G00230
SECTION 5 ANALYSES THE OBJECT PROGRAM BY STARTING WITH THE	F5G00240
HIGHEST FREQUENCY LINK BETWEEN BB,S AND EXPANDING OUTWARD	F5G00250
ALONG PREDECESSOR AND SUCCESSOR BASIC BLOCKS. THE AREA FORM-	F5G00260
ED IN THIS MANNER IS A PORTION OF THE OBJECT PROGRAM AND IS	F5G00270
CALLED A LOOPLIST. THIS IS TREATED TO REDUCE THE NUMBER OF	F5G00280
INDEX REGISTERS TO 3, IS THEN CALLED A REGION, AND CAN ENTER	F5G00290
FUTURE LOOPLISTS. THE LOOPLIST PROCESS IS CONTINUED,	F5G00300
CONSTANTLY EXPANDING THE TREATED AREA OF THE OBJECT PROGRAM	F5G00310
BY THE INCLUSION OF ALREADY TREATED REGIONS IN THE CURRENT	F5G00320
LOOPLIST WHERE APPROPRIATE TO THE FLOW OF THE PROGRAM. THESEF	F5G00330
REGIONS BECOME A PART OF THIS LATEST LOOPLIST,S REGION AT THEF	F5G00340
END OF THE LOOPLIST TREATMENT, FORMING A NEW, SINGLE REGION.	F5G00350
FINALLY THE ENTIRE PROGRAM HAS BEEN TREATED. A FURTHER PRIN-	F5G00360
CIPLE USED BY SECTION 5 IS TO COMPILE THE UPDATING SX,S AS	F5G00370
LATE AS POSSIBLE TO TRADE OBJECT PROGRAM SPACE FOR TIME,	F5G00380
SINCE THE LATER THE SX IS COMPILED, THE LOWER THE FREQUENCY	F5G00390
OF TRANSFERS BETWEEN BLOCKS, HENCE THE FEWER THE EXECUTIONS	F5G00400
OF THE SX.	F5G00410
LPLST IS FORMED IN CORES BY SECTION 5 PART 1. IT SUMMARIZES	F5G00420
EACH NEW REGION TO BE TREATED. PREFIX CODES ARE 2=OPAQUE	F5G00430
REGION, 1=TRANSPARENT REGION (AT LEAST ONE INDEX REGISTER	F5G00440
FREE) AND PREFIX CODE 0=BASIC BLOCKS. THE BB NUMBER	F5G00450
IS CONTAINED IN THE DECREMENT OR ADDRESS. 77777 INDICATES	F5G00460
LPLST ENTRY IS AT END OF REGION OR LPLST EXIT IS AT BEGINNINGF	F5G00470
OF REGION, SPECIFIED BY BB NUMBER. 000000 INDICATES NOTHING	F5G00480
INTERVENING BETWEEN THAT POINT AND THE NEXT DECREMENT OR	F5G00490
ADDRESS. A WORD OF FULL SEVENS, CALLED SENTINEL, TERMINATES	F5G00500
EPLST. THUS A NEW REGION TO BE TREATED MIGHT HAVE A LPLST	F5G00510
BEFORE TREATMENT LIKE	F5G00520
277777 000014	F5G00530
000023 000000	F5G00540

100026 000033	F5G00550
200003 777777	F5G00560
777777 777777.	F5G00570
TNIS MEANS ENTRY IN OPAQUE REGION ENDING IN BB 14, THEN COMES	F5G00580
BB23, THEN IMMEDIATELY FOLLOWS A TRANSPARENT REGION FROM	F5G00590
BB 26 TO BB 33, THEN AN OPAQUE REGION ENTERING AT BB 3,	F5G00600
TERMINATING THIS LPLST. WHEN TREATED, THIS ENTIRE LPLST	F5G00610
BECOMES A NEW, SINGLE REGION, ENCOMPASSING THE OLD REGIONS	F5G00620
AND BB,S IN IT, WHICH WILL DISAPPEAR.	F5G00630
REG TABLE, IN CORES, HAS 1 WORD PER EXISTING REGION. PREFIX	F5G00640
INDICATES EXISTENCE IN REGION OF LX,S TO THE IR,S ,	F5G00650
DECREMENT=FIRST BB NO. IN REGION, TAG BITS=EMPTINESS	F5G00660
THROUGHOUT REGION OF IR,S.	F5G00670
INPUT TABLES INCLUDE PRED, SUCC, BBB, ALL ON DRUM.	F5G00680
SUCC IS FIRST DRUM TABLE. IT IS PREPARED BY SECTION 4,	F5G00690
ORDERED ON BB NUMBER. IT IS PING PONGED BETWEEN DRUM AND	F5G00700
CORES BY THE SE6 ROUTINE.	F5G00710
THE WORD FORMAT IS SIGN BIT MADE NEGATIVE BY X89 WHEN A LINK	F5G00720
IS TREATED. BITS 1-14=FREQUENCY OF LINK, ADDRESS=NO. OF	F5G00730
SUCCESSOR BASIC BLOCK.	F5G00740
PRED IS THE SECOND DRUM TABLE. IT IS PREPARED BY SECTION 4.	F5G00750
PRED IS ORDERED ON BB NUMBER AND PING PONGED BETWEEN DRUM AND	F5G00760
CORES BY THE SE5 ROUTINE.	F5G00770
WORD FORMAT IS SIGN BIT NEGATIVE WHEN LINK TREATED.	F5G00780
BITS 1-14=FREQUENCY OF LINK. BITS 15-17 CALL FOR LX,S TO	F5G00790
THE 3 INDEX REGISTERS AND BITS 18-20 CALL FOR SX,S TO APPRO-	F5G00800
PRIATE INDEX CELLS. THESE SX,S WILL LATER BE COMPILED	F5G00810
BETWEEN BASIC BLOCKS BY PART 4 OF SECTION 5. THE ADDRESS	F5G00820
CONTAINS THE NUMBER OF THE PREDECESSOR BASIC BLOCK.	F5G00830
BBB IS THE THIRD DRUM TABLE, AND IS PREPARED BY SECTION 4.	F5G00840
THERE IS A 6 WORD ENTRY FOR EACH BB, AND A FINAL DUMMY ENTRY.	F5G00850
THE SE AND SE1 ROUTINES PING PONG BBB BETWEEN DRUM AND CORES.	F5G00860
WORD FORMAT FROM SECTION 4. FIRST WORD DECR=STARTING POIN,	F5G00870
IN SUCC, ADDRESS=STARTING POINT IN PRED OF ENTRIES	F5G00880
REFERRING TO THIS BASIC BLOCK. FIRST WORD PREFIX CONTAINS	F5G00890
CODE DESCRIBING TYPE OF ENDING BB HAS. CODING IS....	F5G00900
000=DO WITH AN IF, 001=MSE, 010=PROBABILITY BRANCH	F5G00910
011=CERTAINTY BRANCH, 100=DO WITHOUT AN IF, 101=GO TO N,	F5G00920
110=STOP. SECOND WORD, BITS 12-17=PERMUTATION NUMBERS,	F5G00930
INITIALIZED TO 33 BY SECTION 4. ADDRESS=ORDINAL NUMBER OF	F5G00940
FIRST TAGLIST ENTRY BELONGING TO THIS BB. REMAINING WORDS	F5G00950
INITIALIZED TO ZEROES BY SECTION 4.	F5G00960
IN SECTION 5 PART 1, FURTHER ENTRIES ARE MADE. SECOND WORD	F5G00970
BITS S-2 INDICATE IR ACTIVITY IN THIS BB. PERMUTATION NOS.	F5G00980
MAY UNDERGO CHANGE. WORDS 3-5 RECORD ENTRY AND EXIT CONDS.	F5G00990
FOR THE 3 INDEX REGISTERS IN THE DECREMENT AND ADDRESS.	F5G01000
WORD 6 DECR=REGION NUMBER BB CURRENTLY BELONGS TO.	F5G01010
ADDRESS=NUMBER OF NEXT BB IN REGION.	F5G01020
STAG IS THE FOURTH DRUM TABLE. INITIALIZED TO ZEROES AT SEC.	F5G01030
5 PART 1 START. ONE 4 BIT ENTRY FOR EACH TAGLIST INSTRUCTION	F5G01040
IS MADE IN SECTION 5 PART 1 AND READ IN PART 4. BITS S-8	F5G01050
CALL FOR AN SX PRECEDING THE TAGLIST INSTRUCTION, BITS 9-17	F5G01060
FOR AN LX FOLLOWING. BITS 18-35 IN PAIRS SPECIFY THE INDEX	F5G01070
REGISTER TAGLIST INSTRUCTION IS TO USE. THUS PRED RECORDS	F5G01080

INTER BB LX,S AND SX,S AND STAG RECORDS INTRA-BB LX,S AND F5G01090
 SX,S. STAG IS HANDED BY THE SE4 ROUTINE. F5G01100
 CMTAG, THE CORE BUFFER FOR TAGLIST, HAS THE SAME WORD F5G01110
 FORMAT, THAT IS, THE DECREMENT CONTAINS THE INSTRUCTION F5G01120
 CLASS, CODED FROM 0 TO 6, AND THE ADDRESS CONTAINS THE F5G01130
 SYMBOLIC ADDRESS, AS FOLLOWS, BITS 24-26 CONTAIN TAU 1,2, F5G01140
 OR 3, AND BITS 27-35 CONTAIN THE NUMBER OF THE ENTRY IN THAT F5G01150
 TAU TABLE. NOTE THAT IN THE OUTPUT, THE SYMBOLIC ADDRESS OF F5G01160
 INDEX CELLS IS, TAU 1=G, TAU 2=10, TAU 3=1G, AND THIS F5G01170
 SYMBOL IS FOLLOWED BY THE NUMBER OF THE ENTRY. THUS A F5G01180
 TAGLIST ENTRY IN THE ADDRESS OF 003005 BECOMES 1G5, THAT IS, F5G01190
 TAU 3, ENTRY 5. THE INSTRUCTION CLASSES AS FOLLOWS, IN DECF5G01200
 L=LXA,LXD,PAX,PDX. 2=LXP. 3=DED. 4 IS UNUSED BUT AVAIL. F5G01210
 FOR TNX. 5=ACTIVE INSTR LIKE TIX AND TXI. 6=PASSIVE INSTR. F5G01220
 A PASSIVE INSTR IS A TAGGED INSTR THAT DOES NOT CHANGE THE F5G01230
 CONTENTS OF THE INDEX REGISTER. 7=UNUSED BUT AVAIL. FOR TIX. F5G01240
 WHEN 7 IS USED FOR A TIX, IT REPRESENTS A TIX USED AS A F5G01250
 TRANSFER, NOT AN ACTIVE TIX. ACTIVE INSTRUCTIONS MAY F5G01260
 BE RECOGNIZED BY THEIR ADDRESSES, WHICH ARE OF THE FORM *+Q F5G01270
 WHERE Q IS SOME CONSTANT. F5G01280
 CORE INFORMATION TRANSFERRED BETWEEN SECTION 4 AND SECTION 5 F5G01290
 IS IN THE LAST 4 CORE LOCATIONS, CALLED KEYS. F5G01300
 GIVING DRUM TABLE LENGTHS. TAPE TABLES USED FOR INPUT F5G01310
 INCLUDE TAGLIST AND CIT. INTERMEDIATE TABLES INCLUDE THE F5G01320
 ABOVE AND STAG, LPLST, CMTAG, AND REG. CMTAG IS A CORE F5G01330
 BUFFER FOR TAGLIST. THE DRUM TABLES ALSO APPEAR IN CORE F5G01340
 IN BUFFER LOADS WHEN THE SOURCE PROGRAM EXCEEDS A CERTAIN F5G01350
 COMBINATION OF THE FACTORS OF LENGTH AND COMPLEXITY OF F5G01360
 TRANSFER STRUCTURE. OUTPUT TABLES INCLUDE CIT ON TAPE. F5G01370
 TAGLIST, ON TAPE 3, IS HANDLED BY THE S4 SUBROUTINE. IT IS AF5G01380
 SEQUENTIAL LIST OF ALL TAGGED OBJECT PROGRAM INSTRUCTIONS F5G01390
 RESULTING FROM SECTION 3. EACH ENTRY IS ONE WORD. THE F5G01400
 PREFIX DESCRIBES THE TYPE OF INSTRUCTION AND THE ADDRESS F5G01410
 CONTAINS SYMBOLIC INDEX REGISTER,S NAME. F5G01420

BY USING LARGER MACHINE SIZE THAN 4K, THE PROGRAM F5G01430
 TABLE SPACE IN CORE CAN BE INCREASED, PROVIDING FASTER F5G01440
 COMPILING AND REDUCING THE AMOUNT OF DRUM PING PONGING. F5G01450
 IN ADDITION, SENSE SWITCH 4, WHEN 00WN, PROVIDES UP TO F5G01460
 20 PER CENT FASTER COMPILING ON LARGER SOURCE PROGRAMS, AT F5G01470
 A NEGLIGIBLE LOSS, IN MOST CASES, IN OBJECT PROGRAM F5G01480
 EFFICIENCY. THIS SENSE SWITCH HAS NO EFFECT ON SHORTER F5G01490
 PROGRAMS. F5G01500

IN ORDER TO INCREASE TABLE SPACE AS DESCRIBED ABOVE, F5G01510
 SECTION IV OF FORTRAN, THE FLOW PASS OF TAG ANALYSIS, MUST F5G01520
 BE ADJUSTED AS TO LENGTHS OF DRUM TABLE BUFFER LOADS PASSED F5G01530
 ON TO SECTION V, AND THE POSITION OF INFORMATION AT THE END F5G01540
 OF CORES, HERE SAID TO BE IN KEYS, MUST BE CHANGED. F5G01550
 IN SECTION V, MSIZE AS WELL AS OTHER ITEMS SPECIFIED IN F5G01560
 THE FOLLOWING PARAMETER LIST MUST BE CHANGED. F5G01570

8-1-6-2 PARAMETER LIST F5G01580

20000	MSIZE EQU 8192	8-1-6-2 MEMORY SIZE	F5G01590
00226	FP1 EQU 150	8-1-6-2 REG TABLE SIZE	F5G01600
00074	S3P1 EQU 60	8-1-6-2 LPLST TABLE SIZE	F5G01610
00360	STL EQU 240	8-1-6-2 STAG LENGTH	F5G01620

					FIXED PARAMETER LIST, INDEP. OF CORESIZE	F5G01670
17774	KEYS	SYN	MSIZE-4		CONSTANTS TO RELATE PROGRAM TO TABLES	F5G01680
					ORDER OF DRUM TABLES IS SUCC STARTING AT ZERO, FOLLOWED BY	F5G01690
					PRED, BBB, AND STAG, WHICH IS FILLED IN BY SECTION V.	F5G01700
					THE ORDER OF INFORMATION IN KEYS IS ... KEYS=NUMBER OF BBS,	F5G01710
					KEYS+1=START OF PRED, KEYS+2=START OF BBB, AND KEYS+3=STAG.	F5G01720
00004	INSTTP	EQU	4		COMPILED INST ON TAPE 4	F5G01730
00003	TAPE	EQU	3		OUTPUT TAPE IS 3	F5G01740
00003	OTAPE	EQU	3		OUTPUT TAPE IS 3	F5G01750
00003	BLT	EQU	3		BLOCK LIST ON TAPE 3	F5G01760
00002	ACTPE	EQU	2		ASSIGN CONSTANTS ON TAPE 2	F5G01770
00001	RECNO	EQU	1		NO OF CIT RECORDS IN AT ONE TIME	F5G01780
00144	ZINST	EQU	RECNO*100		LENGTH OF INST TABLE	F5G01790
00144	LCLST	EQU	100		LENGTH OF OUTPUT BLOCK, COMPILED INSTR	F5G01800
00200	NSXD	EQU	128		NO. OF SXD CASES IN SXD LIST	F5G01810
00024	PTL1	EQU	20		SPACE FOR PATCHES, PART 1	F5G01811
00051	PTL2	EQU	41		SPACE FOR PATCHES, PART 2.	F5G01812
00052	PTL3	EQU	42		SPACE FOR PATCHES, PART 3	F5G01813
00042	PTL4	EQU	34		SPACE FOR PATCHES, PART 4.	F5G01814
00000	SET	EQU	0		INITIAL DRUM ADDRESS	F5G01820
00000	K	EQU	0		INITIAL DRUM ADDRESS	F5G01830
					EDITOR RECORD NO. 75	F5G01840
					FOR CONTROL CARD INFORMATION, SEE END OF ASSEMBLY.	F5G01850
					NO DIAGNOSTIC CALLER FOLLOWS	F5G01870
					PART 1A	F5G01880
					OPTIMIZE INDEXING EXCEPT FOR PERMUTATION, GO TO N,	F5G01890
					INSTRUCTION COMPILATION.	F5G01900
00030	ORG		24		ROUTINE TO TRANSFER NEXT	F5G01910
					PROGRAM PART	F5G01930
00030	0	76200	0	00221	RTB 1 SKIP DIAGNOSTIC	F5G01940
00031	0	02000	0	00004	TRA 4 READ NEXT PROGRAM RECORD	F5G01950
					THE ROUTINES SE, SE1, SE4, SE5, SE6 MANIPULATE DRUM TABLES	F5G01960
					AUCC, PRED, BBB, AND STAG. THEY ARE ENTERED WITH THE WANTED	F5G01970
					ITEM IN THE AC. THEY LOAD IX1 FOR IMMEDIATE REFERENCE TO THE	F5G01980
					STATED ITEM. AFTER SAVING CORES ON THE DRUM WHERE NECESSARY,	F5G01990
					THEY BRING IN THE APPROPRIATE PART OF DRUM TABLES. IF THE	F5G02000
					ITEM IS ALREADY IN CORES, OF COURSE NO SAVING OR DRUM	F5G02010
					MANIPULATION IS NECESSARY.	F5G02020
00032	0	76700	0	00022	SE4 ALS 18	F5G02030
00033	-0	32000	0	00303	ANA SEK4	F5G02040
00034	0	07400	2	00101	TSX SE21,2	F5G02050
					PARAMETERS FOR STAG TABLE	F5G02060
00035	0	00000	0	00000	STAGP HTR 0 N(0)	F5G02070
00036	0	00000	0	00000	HTR 0 N(1)	F5G02080
00037	0	00360	0	00000	HTR 0,0,STAGL N(S)	F5G02090
00040	0	00000	0	00000	HTR 0,0,SET N(L)	F5G02100
00041	0	00000	0	00001	HTR 1 S	F5G02110
00042	0	00000	0	00000	HTR SET D(0)	F5G02120
00043	0	00000	0	05263	HTR STAG A	F5G02130
					PARAMETERS FOR SUCC. TABLE	F5G02140
00044	-0	32000	0	00303	SE6 ANA SEK4	F5G02150
00045	0	07400	2	00101	TSX SE21,2	F5G02160
00046	0	00000	0	00000	SUCCP HTR 0 N(0)	F5G02170

00047	-0000000000001		OCT	-1	N(1)		F5G02180
00050	0 01037 0 00000		HTR	0,0	SUCCL N(S)		F5G02190
00051	0 00000 0 00000		HTR	SET	N(L)		F5G02200
00052	0 00000 0 00001		HTR	1	S		F5G02210
00053	0 00000 0 00000		HTR	0	D(0)		F5G02220
00054	0 00000 0 16734		HTR	SUCC	A		F5G02230
					PARAMETERS FOR PRED. TABLE		F5G02240
00055	0 76700 0 00022	SE5	ALS	18			F5G02250
00056	-0 32000 0 00303		ANA	SEK4			F5G02260
00057	0 07400 2 00101		TSX	SE21,2			F5G02270
00060	0 00000 0 00000	PREDP	HTR	0	N(0)		F5G02280
00061	-0000000000001		OCT	-1	N(1)		F5G02290
00062	0 01037 0 00000		HTR	0,0	PREDL N(S)		F5G02300
00063	0 00000 0 00000		HTR	SET	N(L)		F5G02310
00064	0 00000 0 00001		HTR	1	S		F5G02320
00065	0 00000 0 00000		HTR	SET	D(0)		F5G02330
00066	0 00000 0 15674		HTR	PRED	A		F5G02340
					PARAMETERS FOR BBB TABLE		F5G02350
00067	0 76700 0 00022	SE1	ALS	18	BB NO. IN ADDR.		F5G02360
00070	-0 32000 0 00303	SE	ANA	SEK4	BB NO. IN DECR.		F5G02370
00071	0 07400 2 00101		TSX	SE21,2			F5G02380
00072	0 00000 0 00000	BBBP	HTR	0	N(0) IN DECR. 1ST BB IN CM		F5G02390
00073	-0000000000001		OCT	-1	N(1) IN DECR, LAST BB IN CM +1		F5G02400
00074	0 00420 0 00000		HTR	0,0	BBBL N(S) IN DECR, NO. + BBS POS. IN CM		F5G02410
00075	0 00000 0 00000		HTR	SET	N(L) IN DECR, NO. OF BBS		F5G02420
00076	0 00000 0 00006		HTR	6	S IN ADDR., NO. OF WDS PER BB		F5G02430
00077	0 00000 0 00000		HTR	SET	D(0) IN ADDR., INITIAL DRUM ADDR.		F5G02440
00100	0 00000 0 12533		HTR	BBB	A IN ADDR., INITIAL CM ADDR		F5G02450
					2 ED PARAMETER IS + OR - ACCORDING		F5G02460
					AS CM BLOCK IS FULL OR EMPTY		F5G02470
					SR FOR SHUFFLING TABLES TO AND FROM DRUM		F5G02480
00101	0 60100 0 00306	SE21	STO	SEV2	STORE ITEM NO., N		F5G02490
00102	0 34000 2 00002		CAS	2,2	IS N IN CM		F5G02500
00103	3 00000 0 00000		TXH	-,-,-			F5G02510
00104	-3 00000 0 00106		TXL	SE42,0,-			F5G02520
00105	0 02000 0 00156		TRA	SE41	POSSIBLY		F5G02530
00106	-0 63400 4 00311	SE42	SXD	SEV5,4	NO, STORE RETURN INDEX		F5G02540
00107	0 50000 2 00002		CLA	2,2			F5G02550
00110	-0 12000 0 00120		TMI	SE35	IS CM BLOCK EMPTY		F5G02560
00111	0 07400 4 00262		TSX	SE22,4	NO, FORM CHECK SUM		F5G02570
00112	0 50000 0 00273		CLA	SE23			F5G02580
00113	0 62100 0 00115		STA	SE24	STORE		F5G02590
00114	0 50000 0 00307		CLA	SEV3	CHECK		F5G02600
00115	0 60100 0 00000	SE24	STO	SET	SUM		F5G02610
00116	0 50000 0 00277		CLA	SEK			F5G02620
00117	0 07400 4 00166		TSX	SE26,4			F5G02630
00120	0 50000 0 00314	SE35	CLA	ZERO			F5G02640
00121	0 56000 0 00306		LDQ	SEV2	N(0)=(INT. PT. (N/N(S)).N(S)		F5G02650
00122	0 22100 2 00003		DVP	3,2			F5G02660
00123	0 20000 2 00003		MPY	3,2			F5G02670
00124	-0 60000 2 00001		STQ	1,2	N(1)=MIN (N (0)+N(S),N(L))		F5G02680
00125	0 50000 2 00001		CLA	1,2			F5G02690
00126	0 40000 2 00003		ADD	3,2			F5G02700
00127	0 56000 2 00004		LDQ	4,2			F5G02710

00130	-0	60000	2	00002		STQ	2,2		F5G02720
00131	0	04000	0	00133		TLQ	SE36		F5G02730
00132	0	60100	2	00002		STO	2,2		F5G02740
00133	0	50000	0	00300	SE36	CLA	SEK1 TRANSFER IN A		F5G02750
00134	0	07400	4	00166		TSX	SE26,4 BLOCK OF THE TABLE		F5G02760
00135	0	07400	4	00262		TSX	SE22,4 CHECK SUM		F5G02770
00136	0	50000	0	00273		CLA	SE23 COMPARE		F5G02780
00137	0	62100	0	00140		STA	SE37 CHECK		F5G02790
00140	0	50000	0	00000	SE37	CLA	SET SUMS		F5G02800
00141	0	34000	0	00307		CAS	SEV3		F5G02810
00142	0	02000	0	00144	SE45	TRA	SE43		F5G02820
00143	0	02000	0	00152		TRA	SE40 AGREE		F5G02630
00144	-0	53400	4	00151	SE43	LXD	TPCT,4 REPEAT 5 TIMES		F5G02840
00145	1	00001	4	00146		TXI	SE44,4,1		F5G02850
00146	-0	63400	4	00151	SE44	SXD	TPCT,4		F5G02860
00147	-3	00004	4	00133		TXL	SE36,4,4 TRY AGAIN		F5G02870
00150	0	07400	4	00004		TSX	4,4 TRIED 5 TIMES GO TO DIAGNOSTIC		F5G02880
							NOTE ON THIS 150 STOP. THIS DRUM CHECKSUM STOP MAY BE CAUSED		F5G02890
							BY MACHINE ERROR.		F5G02900
							IF IX 2 CONTAINS TABLE IS AND CHECK		F5G02910
							77744 STAG 40		F5G02920
							77732 SUCC 51 ALL		F5G02930
							77721 PRED 63 OCTAL		F5G02940
							77707 BBB 75		F5G02950
							TO SEE IF THE CHECKED LOCATION CONTENTS ARE LESS		F5G02960
							THAN THE CONTENTS OF 306 OCTAL. IF SO, SOURCE PROGRAM, RATH-		F5G02970
							ER THAN MACHINE ERROR IS LIKELY. THE ERROR COULD BE		F5G02980
							A. TRANSFER TO A NON-EXECUTABLE INSTRUCTION.		F5G02990
							B. UNREACHABLE EXECUTABLE INSTRUCTION IN PROGRAM.		F5G03000
							C. LAST STATEMENT OF A DO IS A TRANSFER.		F5G03010
							D. INCORRECT NUMBER OF ENTRIES IN A FREQUENCY STATEMENT.		F5G03020
00151	0	00000	0	00000	TPCT	HTR	-		F5G03030
00152	-0	63400	0	00151	SE40	SXD	TPCT,0 RESET TAPECOUNT		F5G03040
00153	-0	53400	4	00311		LXD	SEV5,4 RESTORE RETURN INDEX		F5G03050
00154	0	50000	0	00306		CLA	SEV2 GET N AGANIN		F5G03060
00155	0	02000	0	00156		TRA	SE41		F5G03070
							THE ITEM MIGHT BE IN STORAGE		F5G03080
00156	0	40200	2	00001	SE41	SUB	1,2 N-N(01		F5G03090
00157	-0	12000	0	00106		TMI	SE42 DOES IT LIE IN STORAGE		F5G03100
00160	0	76500	0	00043		LRS	35 YES,INDEX=		F5G03110
00161	0	20000	2	00005		MPY	5,2 COM((N-N(0).S)		F5G03120
00162	0	76300	0	00021		LLS	17		F5G03130
00163	0	40200	0	00304		SUB	SEK5		F5G03140
00164	0	73400	1	00000		PAX	0,1		F5G03150
00165	0	02000	4	00001		TRA	1,4		F5G03160
							DRUM TRANSFER SUBROUTINE PROPER		F5G03170
00166	-0	63400	4	00310	SE26	SXD	SEV4,4 STORE RETURN INDEX AND ITEM NO. TO BE TRANSFERRED		F5G03180
00167	0	60100	0	00260		STO	SE25 STORE READ-WRITE INDICATOR		F5G03190
00170	0	56000	2	00003		LDQ	3,2 FORM		F5G03200
00171	0	20000	2	00005		MPY	5,2 N(S)*S+1		F5G03210
00172	0	76300	0	00021		LLS	17 AND		F5G03220
00173	0	40000	0	00315		ADD	ONEA STORE		F5G03230
00174	0	60100	0	00305		STO	SEV1 IT		
00175	0	50000	0	00314		CLA	ZERO FORM		F5G03250

00176	0	56000	2	00001	LDQ 1,2 ((N(O)/N(S))	F5G03260
00177	0	22100	2	00003	DVP 3,2 (N(S)(S+1))	F5G03270
00200	0	20000	0	00305	MPY SEV1	F5G03280
00201	-0	60000	0	00305	STQ SEV1 INITIAL DRUM ADDRESS	F5G03290
00202	0	50000	2	00006	CLA 6,2 =D(0)+(NON(S))\$(N(S).S=1)	F5G03300
00203	0	40000	0	00305	ADD SEV1	F5G03310
00204	0	60100	0	00313	STO SEV7 SET LDA INSTRUCTIONS	F5G03320
00205	0	76700	0	00007	ALS 7 COMPUTE THE	F5G03330
00206	0	76000	0	00006	COM DRUM SELECTION	F5G03340
00207	-0	73400	1	00000	PDX 0,1 INDEX	F5G03350
00210	0	07400	4	00260	TSX SE25,4 SELECT DRUM	F5G03360
00211	0	50000	2	00002	CLA 2,2	F5G03370
00212	0	40200	2	00001	SUB 1,2 (N(1)-N(0))S	F5G03380
00213	0	76500	0	00065	LRS 53 INTO MQ	F5G03390
00214	0	20000	2	00005	MPY 5,2	F5G03400
00215	0	50000	0	00313	CLA SEV7 FORM NO. OF	F5G03410
00216	-0	32000	0	00301	ANA SEK2 WORDS LEFT ON	F5G03420
00217	0	40200	0	00302	SUB SEK3 DRUM GROUP	F5G03430
00220	0	76000	0	00003	SSP	F5G03440
00221	0	04000	0	00247	TLQ SE31 MUST BLOCK BE SPLIT	F5G03450
00222	0	73400	4	00000	PAX 0,4 YES	F5G03460
00223	0	40000	2	00007	ADD 7,2 SET INDEX AND	F5G03470
00224	0	62100	0	00236	STA SE27 COMPUTE ADDRESS OF 1ST CPY	F5G03480
00225	0	40200	2	00007	SUB 7,2 COMPUTE NO.	F5G03490
00226	-0	60000	0	00305	STQ SEV1 OF WORDS IN	F5G03500
00227	0	40200	0	00305	SUB SEV1 2 ED TRANSFER	F5G03510
00230	0	40200	0	00315	SUB ONEA	F5G03520
00231	0	76000	0	00003	SSP	F5G03530
00232	0	60100	0	00305	STO SEV1	F5G03540
00233	0	40000	0	00236	ADD SE27	F5G03550
00234	0	62100	0	00243	STA SE29 SET 2 ED CPY	F5G03560
00235	0	46000	0	00313	SE28 LDA SEV7	F5G03570
00236	0	70000	4	00000	SE27 CPY SET,4 TRANSFER	F5G03580
00237	2	00001	4	00236	TIX SE27,4,1 1ST BLOCK OF WORDS	F5G03590
00240	2	00001	1	00241	TIX SE30,1,1 DECREASE C(1) BY 1	F5G03600
00241	0	07400	4	00260	SE30 TSX SE25,4 SELECT DRUM	F5G03610
00242	0	53400	4	00305	LXA SEV1,4	F5G03620
00243	0	70000	4	00000	SE29 CPY SET,4 TRANSFER	F5G03630
00244	2	00001	4	00243	TIX SE29,4,1 2 EDBLOCK	F5G03640
00245	-0	53400	4	00310	SE34 LXD SEV4,4	F5G03650
00246	0	02000	4	00001	TRA 1,4 RETURN	F5G03660
00247	0	76300	0	00043	SE31 LLS 35 (N(1)-N(0)).S+1	F5G03670
00250	0	40000	0	00315	ADD ONEA WORDS ARE TO	F5G03680
00251	0	73400	4	00000	PAX 0,4 BE TRANSFERED	F5G03690
00252	0	40000	2	00007	ADD 7,2	F5G03700
00253	0	62100	0	00255	STA SE32	F5G03710
00254	0	46000	0	00313	SE33 LDA SEV7	F5G03720
00255	0	70000	4	00000	SE32 CPY SET,4	F5G03730
00256	2	00001	4	00255	TIX SE32,4,1	F5G03740
00257	0	02000	0	00245	TRA SE34	F5G03750
00260	0	76200	1	00300	SE25 RDS 192,1 (OR WRS) DRUM	F5G03760
00261	0	02000	4	00001	TRA 1,4 SELECTION SUBROUTINE.	F5G03770
					CHECK SUM SUBROUTINE	F5G03780
00262	0	50000	2	00002	SE22 CLA 2,2	F5G03790

00263	0	40200	2	00001	SUB	1,2	COMPUTE	F5G03800
00264	0	76500	0	00043	LRS	35	(N(1)-N(0)).S	F5G03610
00265	0	20000	2	00005	MPY	5,2	THE NUMBER OF WORDS	F5G03820
00266	0	76300	0	00021	LLS	17	TO BE SUM	F5G03830
00267	0	73400	1	00000	PAX	0,1	CHECKED	F5G03840
00270	0	40000	2	00007	ADD	7,2	COMPUTE AND STORE ADDRESS OF WORD	F5G03850 F5G03860
00271	0	62100	0	00273	STA	SE23	FOLLOWING LAST TABLE WORD.	F5G03870
00272	0	50000	0	00314	CLA	ZERO	CLEAR SUM CHECK.	F5G03880
00273	0	36100	1	00000	ACL	-,1	FORM THE	F5G03890
00274	2	00001	1	00273	TIX	SE23,1,1	SUM CHECK.	F5G03900
00275	0	60200	0	00307	SLW	SEV3		F5G03910
00276	0	02000	4	00001	TRA	1,4		F5G03920
00277	0	76600	1	00300	SEK	WRS	192,1 WRS,192,1	F5G03930
00300	0	76200	1	00300	SEK1	RDS	192,1 RDS,192,1	F5G03940
00301	0	00000	0	03777	SEK2	HTR	2047 MASK TO EXTRACT LAST 11 BIT	F5G03950
00302	0	00000	0	04000	SEK3	HTR	2048 2048 IN ADDR.	F5G03960
00303	0	77777	0	00000	SEK4	HTR	0,0,-1 IN DECR. PART	F5G03970
00304	0	00000	1	00000	SEK5	HTR	0,1 2 15	F5G03980
00305	0	00000	0	00000	SEV1		NS.S+1 TEMP STORAGE	F5G03990
00306	0	00000	0	00000	SEV2		STORAGE OF N (DECR.)	F5G04000
00307	0	00000	0	00000	SEV3		STORAGE OF CK SUM.	F5G04010
00310	0	00000	0	00000	SEV4		RETURN FROM SE 26	F5G04020
00311	0	00000	0	00000	SEV5		RETURN FROM SE	F5G04030
00312	0	00000	0	00000	SEV6		STORE N TO BE TRANSFERRED	F5G04040
00313	0	00000	0	00000	SEV7		INITIAL DRUM ADDR.	F5G04050
00314	+00000000000000			ZERO	OCT	0		F5G04060
00315	0	00000	0	00001	ONEA	HTR	1	F5G04070
00316	0	00001	0	00000	ONED	HTR	0,0,1 CONSTANTS USED IN S1	F5G04080 F5G04090
00317	0	00006	0	00000	S1K2	HTR	0,0,6 CONSTANT WHICH LOOKS LIKE PASS. REF.	F5G04100
00320	0	00000	0	00010	S1K3	HTR	8 NO. OF S3 VARIABLES SAVED.	F5G04110
				00317	C	SYN	S1K2	F5G04120
00321	0	77777	0	00000	S2K1	HTR	0,0,-1 ONES IN DECR. PART.	F5G04130
00322	0	00001	0	00000	S2K2	HTR	0,0,1 CONST. USED TO TEST FOR LX.	F5G04140
00323	-37777777777777			S3K1	OCT	-37777777777777	END LOOP LIST SENTENTIAL	F5G04150
00324	0	77777	7	77777	S3K2	HTR	-1,-1,-1 USED FOR CF TO FIND OUT IF THIS IS BB	F5G04160
00325	0	00074	0	00000	S3K3	HTR	0,0,S3P1 INITIALIZING CONST. FOR LOOP LIST	F5G04170
00326	+00000077777777			S3K4	OCT	777777	MASK TO EXTRACT LAST 1/2 WORD.	F5G04180
00327	0	77777	0	00000	S3K5	HTR	0,0,-1 MASK TO EXTRACT INST. TYPE CONSTANTS OF S4	F5G04190 F5G04200
00330	0	00000	0	04615	S4K1		CMTL SIZE OF STORAGE FOR TAG TABLE.	F5G04210
00331	0	00000	0	00017	S4K2	HTR	15 NO OF TAGS PER RECORD.	F5G04220
00332	0	00000	0	05716	S4K3	HTR	CMTAG THE L CONSTANTS MUST BE AHEAD OF THOSE FOR S5	F5G04230 F5G04240
00333	+00000077777776			LK1	OCT	777776	E,HASH SYMBOL	F5G04250
00334	-20000000000000			LK2	OCT	-20000000000000	CONSTANT= FOR EXTRACTING	F5G04260
00335	-30000000000000			LK3	OCT	-30000000000000	1ST 2,3 BITS OF WORD RESPT. CONSTANTS FOR MATCHING SUBROUTINE	F5G04270 F5G04280
00336	+00000077777777			S5K1	OCT	777777	PHI,EMPTINESS 444	F5G04290
00337	+00000077777775			S5K2	OCT	777775	CONSTANT USED TO TEST-FOR REAL TAGS	F5G04300
00340	-00000000000000			S5K3	OCT	-0 -0		F5G04310
00341	0	00000	0	00002	S5K4	HTR	2 +2	F5G04320
00342	0	00000	0	00003	S5K5	HTR	3 +3	F5G04330

00343	0 00000 0 00010	S5K6	HTR 8 +8	F5G04340
00344	0 00000 0 00004	S9K1	HTR 4 +4	F5G04350
00345	0 00000 1 00000	S9K2	0,1 MASK FOR PHI DIGIT NO. 1	F5G04360
00346	0 00000 2 00000		0,2 MASK FOR PHI DIGIT NO. 2	F5G04370
00347	0 00000 4 00000		0,4 MASK FOR PHI DIGIT NO. 3	F5G04380
00350	0 00003 0 00000	S9K3	HTR 0,0,3 MASK TO EXTRACT 2 BITS IN DECR.	F5G04390
00351	0 00000 0 07776	SAK1	4094 CONST USED TO TEST NON EXISTENT BB CONSTANTS OF SB	F5G04400
00352	+0010000000000	SBK1	OCT +0010000000000 CONST. USED TO GENERATE SX BIT. AD.	F5G04410
00353	0 00000 0 77777	SBK2	HTR -1 USED TO EXTRACT ADDR.	F5G04420
00354	0 00004 0 00000	SBK3	HTR 0,0,4 CONST. TO GENERATE SX BIT FOR TRANSFER	F5G04430
00355	0 04741 0 00000	SCK1	HTR 0,0,LPLST	F5G04440
00356	+177777077777	FK1	OCT 177777077777 TRANSPARANT REGION CONST	F5G04450
00357	+277777077777	FK2	OCT 277777077777 OPAQUE REGION CONST	F5G04460
00360	0 00000 7 00000	FK3	HTR 0,7 MASK TO EXTRACT TAG.	F5G04470
00361	+177777777777	FK4	OCT 177777777777 CONST TO TEST FOR OPAQUE REG.	F5G04480
00362	0 00000 0 00226	FK5	HTR FP1 LENGTH OF REGION LIST	F5G04490
00363	-0000000000000	XK3	OCT -0 3 CONSTANTS USED TO	F5G04500
00364	+2000000000000		OCT 2000000000000 CHANGE REGION WDS.	F5G04510
00365	+1000000000000		OCT 1000000000000 TO INDICATE IRS LX ED.	F5G04520
00366	-3777760000000	XK4	OCT -3777760000000 E,HASH SYMBOL,IN LQT HALF	F5G04530
00367	-3000000000000	XK5	OCT -3000000000000 MASK FOR PREFIX	F5G04540
00370	+2000000000000	XK6	OCT 2000000000000	F5G04550
00371	0 00000 0 00011	XK9	HTR 9	F5G04560
	00363	XK10	SYN XK3 MASK TO EXTRACT 1ST IN BB FIT.	F5G04570
00372	+0000010000000	XK11	OCT 1000000 CONST. TO GENERAGE LX BIT.	F5G04580
00373	0 00005 0 00000	XK12	HTR 0,0,5 4 CONSTS. USED TO TEST FOR ACTIVE	F5G04590
00374	0 00004 0 00000	XK13	HTR 0,0,4 TNX	F5G04600
00375	0 00007 0 00000	XK14	HTR 0,0,7 TIX	F5G04610
00376	0 00002 0 00000	XK15	HTR 0,0,2 LXP	F5G04620
00377	0 00000 4 00000	XK16	HTR 0,4 CONST. TO GENERATE LX BIT.	F5G04630
00400	1 00000 0 00000	XK17	PON CONST. TO SEPARATE TYPES	F5G04640
	00366	XK18	SYN XK4 E IN LEFT HALF WORD.	F5G04650
00401	-3777770000000	XK19	OCT -3777770000000 MASK LEFT HALF WORD.	F5G04660
00402	-3777007777777	XK20	OCT -3777007777777 CONST. TO DELETE PERM. NOS.	F5G04670
00403	0 00003 0 00000	XK21	HTR 0,0,3 CONST. TO TEST FOR DED INST.	F5G04680
00404	-3777770777777	XK22	OCT -3777770777777 CONST. TO DELETE PHIS.	F5G04690
00405	0 00000 1 00000	XK23	HTR 0,1	F5G04700
00406	0 00000 2 00000		HTR 0,2	F5G04710
00407	0 00000 4 00000		HTR 0,4	F5G04720
00410	0 00000 0 00000	Slv1	TEMP. STORAGE FOR	F5G04730
00411	0 00000 0 00000		HTR -	F5G04740
00412	0 00000 0 00000		HTR - 1ST 9 VARIABLES	F5G04750
00413	0 00000 0 00000		HTR - IN S3	F5G04760
00414	0 00000 0 00000		HTR -	F5G04770
00415	0 00000 0 00000		HTR -	F5G04780
00416	0 00000 0 00000		HTR -	F5G04790
00417	0 00000 0 00000		HTR -	F5G04800
00420	0 00000 0 00000	Slv3	THE CLA IN S3	F5G04810
00421	0 00000 0 00000	Slv4	RETURN INDEX	F5G04820
00422	0 00000 0 00000	Slv5	(+/-)=DECIDE ON (MOST/LEAST) REPL. I.R.	F5G04830
00423	0 00000 0 00000	Slv6	TEMP	F5.04850
00424	0 00000 0 00000	Slv7	STORAGE	F5G04860
			THE IR1,2,3 CELLS SIMULATE OBJECT MACHINE INDEX REGISTERS,	F5G04870

					AND CONTAIN A REAL TAG, THE EMPTY SYMBOL 777777, OR THE HASH F5G04880	
					SYMBOL 777776. IHASH MEANS THE REGISTER IS NOT EMPTY BUT F5G04890	
					ITS CONTENTS HAVE NO VALUE, I.E. LXP COMPILED IN SECTION 3 ORF5G04900	
					DED COMPILED IN SECTION 2. (LXP IS A WARNING THAT ALTHOUGH IRF5G04910	
					IS VALUELESS, IT WILL BE LOADED VERY SOON WITH A NEW VALUE.) F5G04920	
00425	0	00000	0	00000	IR1	THE 3 I.R.S IN F5G04930
00426	0	00000	0	00000	IR2	THE LAST 1/2 OF REGISTER F5G04940
00427	0	00000	0	00000	IR3	F5G04950
00430	0	00000	0	00000	IRR	HOLDS 3,2,1 IF IR1,2,3 SELECTED F5G04960
00431	0	00000	0	00000	IND1	+ OR - ACCORDING AS IR1 FOUND OR IR1 NOT FOUND F5G04970
00432	0	00000	0	00000	IND2	+ OR - ACCORDING AS IR2 FOUND OR IR2 NOT FOUND F5G04980
00433	0	00000	0	00000	IND3	+ OR - ACCORDING AS IR3 FOUND OR IR3 NOT FOUND F5G04990
00434	0	00000	0	00000	IN4	+F OR - IF IR HAS OR HASNT BEEN FOUND F5G05000
						VARIABLES OF S3 SUBROUTINE F5G05010
00435	0	00000	0	00000	S3V1	LOCATION OF 1ST TAG IN BB F5G05020
00436	0	00000	0	00000	S3V2	TAG COUNTER, IN DECR. PART. F5G05030
00437	0	00000	0	00000	S3V3	+ NO. OF TAGS LEFT IN BB AFTER TIX, OR- F5G05040
00440	0	00000	0	00000	S3V4	LOOP LIST INDEX. F5G05050
00441	0	00000	0	00000	1TAG	THE TAN-TAG F5G05060
00442	0	00000	0	00000	TPE	THE TYPE OF INSTR. F5G05070
00443	0	00000	0	00000	INTAG	TAG + INSTR. TYPE (ENTRY IN TAG LIST) F5G05080
00444	0	00000	0	00000	S3V5	LOOP LIST QUANTITY F5G05090
00445	0	00000	0	00000	S3V8	RETURN INDEX F5G05100
00446	0	00000	0	00000	S3V6	(1ST TAG IN BB-1ST TAG IN C.M.) F5G05110
00447	0	00000	0	00000	S3V7	NO. OF WORDS LEFT IN C.M. F5G05120
00450	0	00000	0	00000	S3V9	(+/-)= (THIS IS NOT NEW BB/THIS IS NEW BB) F5G05130
						VARIABLES OF S4 F5G05140
00451	0	00000	0	00000	S4V1	LOC OF 1ST TAG IN CMTAG F5G05150
00452	0	00000	0	00000	S4V2	LOC OF 1ST TAG IN NEXT RECORD (TAPE POS.) F5G05160
00453	0	00000	0	00000	S4V3	(LOC OF LAST TAG)+ 1 F5G05170
						ABOVE MUST BE SET AT START. F5G05180
00454	0	00000	0	00000	S4V4	(LOC. OF 1ST TAG IN BB-POS OF TAPE) F5G05190
						VARIABLES FOR MATCHING SUBROUTINE S5 F5G05200
00455	0	00000	0	00000	IR4	TEMP. STORAGE FOR C (IR1) F5G05210
00456	0	00000	0	00000	IR5	TEMP. STORAGE FOR C (IR2) F5G05220
00457	0	00000	0	00000	IR6	TEMP. STORAGE FOR C (IR3) F5G05230
00460	0	00000	0	00000	ENC	COUNTER OF = F5G05240
00461	0	00000	0	00000	IRC	COUNTER OF = F5G05250
						THE IN 1,2,3, EN4,5,6 CELLS ARE LOADED BY THE S5 ROUTINE F5G05260
						FOR PERMUTATION OF INDEX REGISTER ASSIGNMENT THROUGHOUT AN F5G05270
						ALREADY TREATED REGION UPON ENTRY TO THIS REGION IN LPLST. F5G05280
						OPTIMIZED MATCH TO CURRENT CONTENTS OF IR1,2,3 IS SECURED BY F5G05290
						PERMUTING THE ENTIRE REGION AS NECESSARY. THE IN1,2,3 F5G05300
						AND EN4,5,6 CELLS LINK THE OUTMODED SYSTEM EN1,2,3, EX1,2,3 F5G05310
						ACT1,2,3 FOR THIS REGION WITH THE ABSOLUTE SYSTEM IR1,2,3, F5G05320
						AC1,2,3, LX1,2,3. FOR EXAMPLE EN4 IS 3,2,OR1 DEPENDING ON F5G05330
						WHETHER THE CORRESPONDENT OF EN1 IS IR 1,2,OR 3. INVERSELY, F5G05340
						IN1 IS 3,2,OR1 FOR THE CORRESPONDENT OF IR1 EQUAL TO EN1,2,3. F5G05350
00462	0	00000	0	00000	IN1	INDEX OF CORRES OF IR1 F5G05360
00463	0	00000	0	00000	IN2	INDEX OF CORRES OF IR2 F5G05370
00464	0	00000	0	00000	IN3	INDEX OF CORRES OF IR3 F5G05380
00465	0	00000	0	00000	EN4	INDEX OF CORRES OF EN1 F5G05390
00466	0	00000	0	00000	EN5	INDEX OF CORRES OF EN2 F5G05400
00467	0	00000	0	00000	EN6	INDEX OF CORRES OF EN3 F5G05410

00470	0	00000	0	00000	EN1	THE ENTRANCE REQUIREM	F5G05420
00471	0	00000	0	00000	EN2	ENTS EN1,ENZ,EN3.	F5G05430
00472	0	00000	0	00000	EN3		F5G05440
00473	0	00000	0	00000	S5V1	TEMP. STORE FOR RETURN INDEX.	F5G05450
00474	0	00000	0	00000	S5V2	TEMP STORE FOR LOOP LIST QUANT.	F5G05460
00475	0	00000	0	00000	S9V1	TEMP. STORE FOR BB NO.	F5G05470
00476	0	00000	0	00000	S9V2	TEMP. STORE FOR RETURN INDEX	F5G05480
00477	0	00000	0	00000	S9V4	TEMP. STORE FOR REGION WORD.	F5G05490
						VARIABLES OF SA SUBROUTINE (WHICH GETS EXIT CONDITITIONS)	F5G05500
00500	0	00000	0	00000	SAV1	TEMP STORE FOR PERMUTATION NOS.	F5G05510
00501	0	00000	0	00000	SAV2	RETURN INDEX.	F5G05520
00502	0	00000	0	00000	SAV3	TEMP. STORE FOR REGION WORD.	F5G05530
						THE EX1,2,3 CELLS CONTAIN THE EXIT REQUIREMENTS FOR A BB THAT	F5G05540
						HAS ALREADY BEEN TREATED.	F5G05550
00503	0	00000	0	00000	EX1	3 EXIT CONDITIONS	F5G05560
00504	0	00000	0	00000	EX2		F5G05570
00505	0	00000	0	00000	EX3		F5G05580
						THE ACT 1,2,3 CELLS CONTAIN ACTIVITY OF AN ALREADY TREATED BB	F5G05590
00506	0	00000	0	00000	ACT1	3 ACTIVE	F5G05600
00507	0	00000	0	00000	HTR -	INDICATORS	F5G05610
00510	0	00000	0	00000	HTR -		F5G05620
						VARIABLES OF SB	F5G05630
00511	0	00000	0	00000	SBV1	RETURN INDEX	F5G05640
00512	0	00000	0	00000	SBV2	TEMP. STORAGE.	F5G05650
00513	0	00000	0	00000	SBV3	TEMP. STORAGE.	F5G05660
00514	0	00000	0	00000	SBV4	INDEX OF REGISTER WHICH IS ACTIVE.	F5G05670
00515	0	00000	0	00000	SBV5	STORAGE FOR PERMUTATION NOS.	F5G05680
00516	0	00000	0	00000	SCV1	RETURN INDEX	F5G05690
00517	0	00000	0	00000	SCV2	INDEX OF BB.	F5G05700
00520	0	00000	0	00000	SCV3	INDEX OF POSITION IN LOOP LIST	F5G05710
00521	0	00000	0	00000	ACIND	+ OR - MEANS 2ED OR ACTIVE PASS	F5G05720
00522	0	00000	0	00000	SDV1	STORE FOR RETURN INDEX.	F5G05730
00523	0	00000	0	00000	SDV2	INDEX OF ACTIVE I.R.	F5G05740
00524	0	00000	0	00000	SDV3	THE PERMUTATION NOS.	F5G05750
00525	0	00000	0	00000	SDV4	TEMP. STORE FOR INDEX OF BB	F5G05760
00526	0	00000	0	00000	SFV1	ACTIVE INDICATOR FORMED HERE.	F5G05770
00527	0	00000	0	00000	SFV2	RETURN INDEX.	F5G05780
00530	0	00000	0	00000	SGV1	RETURN INDEX	F5G05790
00531	0	00000	0	00000	SGV2	PERMUTED REGION WORD	F5G05800
00532	0	00000	0	00000	FV1	HIGHEST FREQ. IN REGION (I.C. PRED. TABLE ENTRY)	F5G05810
00533	0	00000	0	00000	FV2	BB NO. OF BB HAVING HIGHEST FREQ. (ADDR.)	F5G05820
00534	0	00000	0	00000	FV3	PRED. NO. (I.C. 0TH WORD FROM BB. (ADDR.)	F5G05830
00535	0	00000	0	00000	FV4	WORD HAVING REGION NO. (5TH BB WORD)	F5G05840
00536	0	00000	0	00000	FV5	CURRENT BB NO. BEING CONSIDERED. (ADDR.)	F5G05850
00537	0	00000	0	00000	FV6	RETURN INDEX OF F1,F80	F5G05860
00540	0	00000	0	00000	FV7	PRED. NO. BEING CONSIDERED IN B.B. (ADDR.)	F5G05870
00541	0	00000	0	00000	FV8	FIRST PRED. FROM NEXT B.B. (ADDR.)	F5G05880
00542	0	00000	0	00000	FV9	0,0,- TEMP STORE FORCURRENT SUCC IN DECR ONLY	F5G05890
00543	0	00000	0	00000	FV10	0,0,- TEMP STORE IN DECR ONLY, CURRENT SUCC	F5G05900
00544	0	00000	0	00000	FV101	HIGHEST FREQ. IN BB (PRED. TABLE ENTRY)	F5G05910
00545	0	00000	0	00000	FV102	BB NO. BEING CONSIDERED. (ADDR.)	F5G05920
00546	0	00000	0	00000	FV103	PRED. NO. (0TH WORD FROM BB) (ADDR.)	F5G05930
00547	0	00000	0	00000	FV104	WORD HAVING REGION. NO.	F5G05940
00550	0	00000	0	00000	LPIND	+ OR - IF IT ISNT OF IS A LOOP	F5G05950

00551	0	00000	0	00000	LV1	THE CONDITIONS OF THE I.R.S	F5G05960
00552	0	00000	0	00000	LV2	AT END OF THE	F5G05970
00553	0	00000	0	00000	LV3	1ST LXING PASS.	F5G05980
00554	0	00000	0	00000	LV4	THE LOOP LIST QUANTITY	F5G05990
00555	0	00000	0	00000	LV5	WORD FROM BB WITH PRED. AND SUCC. LOCS	F5G06000
						VARIABLES OF 2ED LXING PASS.	F5G06010
						ACTIVITY. WHEN SIMULATING A NEW BB IN THE 2ND LXING PASS,	F5G06020
						IF AN LX, TXI, OR TIX IS ENCOUNTERED, THE APPROPRIATE INDEX	F5G06030
						REGISTER BECOMES ACTIVE. THIS IS PLUS ACTIVITY. IF THE SAME	F5G06040
						REGISTER MUST BE DISPLACED IN THE SAME LPLST, SB IS ENTERED	F5G06050
						TO RECORD AN SX NECESSARY. SINCE THE ACTIVITY IS PLUS, THE	F5G06060
						SX WILL BE COMPILED IN STAG IMMEDIATELY AFTER THE ACTIVE	F5G06070
						INSTRUCTION. THIS SX ENDS THE ACTIVITY, COMPLETELY TAKING	F5G06080
						CARE OF THE PROBLEM. AT THE END OF LPLST, IF THE INDEX	F5G06090
						REGISTER IS STILL ACTIVE, OR IF, DURING LPLST, AN ACTIVE	F5G06100
						REGISTER FALLS OBSOLETE BY A DED OR LXD, THEN ALL THE BLOCKS	F5G06110
						IN WHICH IT IS ACTIVE ARE MARKED BY SC, MAKING THIS ACTIVITY	F5G06120
						MINUS. THIS, UNLIKE PLUS ACTIVITY, CAN NEVER BE ENDED. THE	F5G06130
						APPEARANCE OF A MINUS BB IN A FUTURE LPLST CAUSES THE	F5G06140
						APPROPRIATE AC1,2,OR3 TO CONTAIN MINUS ACTIVITY AND WHENEVER	F5G06150
						THE CORRESPONDING INDEX REGISTER MUST BE DISPLACED, AN SB	F5G06160
						ENTRY WILL CAUSE AN SX TO BE COMPILED IN THE PRED LINK FROM	F5G06170
						THAT BB. THIS POSTPONEMENT OF SX COMPILATION AFTER AN ACTIVE	F5G06180
						INSTRUCTION FOR AS LONG AS POSSIBLE PRODUCES A LARGER NUMBER	F5G06190
						OF SX,S THAN STRICTLY NECESSARY, BUT PLACES THEM IN LOW	F5G06200
						FREQUENCY PATHS, TRADING OBJECT PROGRAM SPACE FOR OBJECT	F5G06210
						PROGRAM TIME.	F5G06220
						THE AC1,2,3 CELLS DESCRIBE THE ACTIVITY STATUS OF IR1,2,3.	F5G06230
						ZERO..NOT ACTIVE, PLUS ACTIVITY..ACTIVE INSTRUCTION IN A	F5G06240
						BB NOT TREATED UNTIL THIS LPLST. AC1,2,3 CONTAINS INFO.	F5G06250
						FOR SB TO MAKE A STAG ENTRY AT THE ACTIVE INSTRUCTION.	F5G06260
						MINUS ACTIVITY..ACTIVE INSTR. IN BB ALREADY IN A REGION.	F5G06270
						AC1,2,3 CONTAINS INFO. FOR SB TO MAKE A PRED ENTRY AT LINK	F5G06280
						OUT OF THE REGION.	F5G06290
00556	0	00000	0	00000	AC1	3 ACTIVE INDICATORS,+0 MEANS NOT ACTIVE	F5G06300
00557	0	00000	0	00000	AC2	IF + VE,THEN ACTIVE THING IS INSTR., DECR. IS	F5G06310
00560	0	00000	0	00000	AC3	LOC. OF BB IN LOOP LIST,ADDR. IS LOC. OF Y-TAG. IF-VE,	F5G06320
00561	0	00000	0	00000	HTR	0 ACTIVE THING IS TRANSFER, LOC. IN LP LST IN DECR.	F5G06330
						THE LX1,2,3 CELLS CONTAIN THE ENTRANCE REQUIREMENTS FOR A BB.	F5G06340
00562	0	00000	0	00000	LX1	3 ENTRANCE REQUIREMENTS OF A BB	F5G06350
00563	0	00000	0	00000	LX2	BUILT UP HERE. +0 MEANS	F5G06360
00564	0	00000	0	00000	LX3	NO ENTRANCE REQU. DETERMINED.	F5G06370
00565	0	00000	0	00000	XV1	IN DECR., INDEX OF CURRENT REGION	F5G06380
00566	0	00000	0	00000	XV2	THE NEW REGION WORD.	F5G06390
00567	0	00000	0	00000	XV3	THE WORD POSITION IN STAG	F5G06400
00570	0	00000	0	00000	XV4	THE DIGIT INDEX WITHIN THE WORD.	F5G06410
00571	0	00000	0	00000	XV5	THE LOCATION OF CURRENT TAG (INSTR.)	F5G06420
00572	0	00000	0	00000	XV6	NEAR XO7,C.F. OF TNX BRANCH,NEAR X85, TAG	F5G06430
00573	0	00000	0	00000	XV7	XO7 TO X09+,INDEX OF BB,NEAR X85,TAG	F5G06440
00574	0	00000	0	00000	XV8	INDEX OF BB NE-R X33	F5G06450
						PERMUTATION. WHEN INDEX REGISTER ASSIGNMENTS THROUGHOUT AN	F5G06460
						ALREADY TREATED REGION ARE PERMUTED, STAG, PRED AND BBB MUST	F5G06470
						BE UPDATED. INSTEAD, WORD 2 OF BBB CONTAINS PERMUTATION	F5G06480
						NUMBERS THROUGH WHICH THESE TABLES ARE READ, AND UPDATING	F5G06490

					REQUIRES ONLY THESE NUMBERS TO BE CHANGED. IN SECTION 5 PART	F5G06500
					2 WHEN THE FINAL CONFIGURATION HAS BEEN REACHED, THE TABLES	F5G06510
					THEMSELVES ARE ACTUALLY UPDATED.	F5G06520
00575	0	00000	0	00000	THE PERMUTATION NOS.	F5G06530
00576	0	00000	0	00000	INDEX OF I.R. IN BB CONSIDERED.	F5G06540
00577	0	00000	0	00000		F5G06550
00600	0	00000	0	00000		F5G06560
00601	0	00000	0	00000	INDEX OF PARTICULAR BB X40 ON	F5G06570
00602	0	00000	0	00000	TEMP. STORE FOR 2 INDEXES	F5G06580
00603	0	00000	0	00000	WHILE USING SUBROUTINE.	F5G06590
00604	0	00000	0	00000	TEMP. STORE FOR PRED.=,X91-2+X90,X92 X97 ON	F5G06600
00605	0	00000	0	00000	TEMP. STORE FOR OLD REGION WD.,X74	F5G06610
00606	0	00000	0	00000	IN ADDR.,X111,NO. OF SUCC. WE SEARCH FOR.	F5G06620
00607	0	00000	0	00000	TEMP STORE FOR PREVIOUS LPLST QUANTITY	F5G06630
00610	0	00000	0	00000	TEMP STORE IN DECR. ONLY	F5G06640
00611	0	00000	0	00000	TEMP STORE FOR TAG NEAR X43	F5G06650
00612	0	00000	0	00000	NUMBER OF LAST BB FOR WHICH REGION NO. WAS ADDED	F5G06660
00613	0	00000	0	00000	DECR ONLY , TEMP STORE FOR REGION INDEX	F5G06670
00614	0	00000	0	00000	0 OR NOT0 IF IS OR ISNT SAME AS 1ST REGION	F5G06680
00615	0	00000	0	00000	TEMP. STORE FOR PRED. TABLE ENTRY.	F5G06690
00616	0	00000	0	00000	TEMP. STORE FOR INDEX OF I.R.	F5G06700
00617	0	00000	0	00000	TEMP. STORE FOR PERM. NOS.	F5G06710
					THE S1 AND S111 ROUTINES SELECT THE MOST (S1) OR THE LEAST	F5G06720
					(S111) REPLACEABLE INDEX REGISTERS BY SCANNING AHEAD	F5G06730
					THROUGH LPLST. THE IR WHOSE CONTENTS ARE REQUIRED AGAIN	F5G06740
					SOONEST (LAST) IS THE LEAST (MOST) REPLACEABLE. THESE	F5G06750
					ROUTINES USE THE S2 SUBROUTINE, WHICH ACTUALLY TRIES TO	F5G06760
					SELECT AN IR.	F5G06770
00620	-0	76000	0	00003	SSM SET INDICATOR TO-MEANING	F5G06780
00621	0	02000	0	00623	TRA S109 SEARCH FOR LEAST REPLACEABLE I.R.	F5G06790
00622	0	76000	0	00003	S1 SSP SET INDICATOR TO + MEANING	F5G06800
00623	0	60100	0	00422	S109 STO S1V5 SEARCH FOR MOST REPLACEABLE I.R.	F5G06810
00624	-0	63400	4	00421	SXD S1V4,4 STORE RETURN INDEX.	F5G06820
00625	-0	76000	0	00003	SSM SET	F5G06830
00626	0	60100	0	00431	STO IND1 INDICATORS	F5G06840
00627	0	60100	0	00432	STO IND2 TO	F5G06850
00630	0	60100	0	00433	STO IND3 NOT	F5G06860
00631	0	60100	0	00434	STO IN4 FOUND.	F5G06870
00632	-0	53400	2	00641	LXD S123,2 SET TO LOOP FOR EMPTY I.R.	F5G06880
00633	0	53400	1	00342	S119 LXA S5K5,1 SET COUNT TO 3, N TO 1	F5G06890
00634	0	50000	1	00430	S120 CLA IR1+3,1 IS IRN EMPTY OR	F5G06900
00635	0	34000	2	00000	CAS 0,2 (FILLED WITH HASH)	F5G06910
00636	-3	77445	0	00640	S121 TXL S122,0,-LK1 NO, COM(LOC. OF HASH) IN DECR.	F5G06920
00637	0	02000	0	00644	TRA S124 YES,	F5G06930
00640	2	00001	1	00634	S122 TIX S120,1,1 NO,COUNT TO 3,N=N+1	F5G06940
00641	3	77442	2	00662	S123 TXH S127,2,-S5K1 HAVE WE LOOKED FOR HASH	F5G06950
00642	-0	53400	2	00636	LXD S121,2 NO,SET TO LOOP FOR HASH.	F5G06960
00643	0	02000	0	00633	TRA S119	F5G06970
00644	0	50200	0	00422	S124 CLS S1V5 LOOKING FOR MOST REPLACEABLE	F5G06980
00645	-0	12000	0	00656	TMI S129 I.R.	F5G06990
00646	0	60100	1	00434	STO IND1+3,1 NO, RECORD IRN ELIMINATED	F5G07000
00647	0	56000	0	00434	LDQ IN4	F5G07010
00650	0	60100	0	00434	STO IN4 RECORD SOME IR ELIMINATED	F5G07020
00651	0	16200	0	00653	TQP S128 HAS AN IR BEEN ELIMINATED BEFORE	F5G07030

00652	0	02000	0	00640	TRA S122	NO,	F5G07040
00653	0	53400	1	00342	S128 LX A S5K5,1 SET COUNT TO 3,N=1		F5G07050
00654	0	50000	1	00434	S126 CLA IND1+3,1 HAS IRN		F5G07060
00655	0	12000	0	00660	TPL S125 BEEN ELIMINATED		F5G07070
00656	-0	63400	1	00430	S129 SXD IRR,1 NO,SELECT IRN		F5G07080
00657	0	02000	4	00001	TRA 1,4 AND RETURN.		F5G07090
00660	2	00001	1	00654	S125 TIX S126,1,1 COUNT TO 3,N=N+1		F5G07100
00661	0	07400	4	00004	S130 TSX 4,4 DIAGNOSTIC, THERE IS AN ERROR.		F5G07110
00662	0	50000	0	01122	S127 CLA S39		F5G07120
00663	0	60100	0	00420	STO S1V3 STORE ASIDE		F5G07130
00664	0	53400	4	00320	LXA S1K3,4 THE		F5G07140
00665	0	50000	4	00445	S112 CLA S3V1+8,4 STATE		F5G07150
00666	0	60100	4	00420	STO S1V1+8,4 OF THE		F5G07160
00667	2	00001	4	00665	TIX S112,4,1 S3 ROUTINE.		F5G07170
00670	0	07400	4	01023	S11 TSX S3,4 GET NEXT TAG		F5G07180
00671	0	02000	0	00706	TRA S103 COME HERE IF TAG NOT GOT.		F5G07190
00672	0	50000	0	00410	CLA S1V1		F5G07200
00673	0	34000	0	00435	CAS S3V1 IS THE LOOP COMPLETED		F5G07210
00674	0	02000	0	00676	TRA S104 NO		F5G07220
00675	0	02000	0	00701	TRA S135 PERHAPS		F5G07230
00676	0	07400	4	00766	S104 TSX S2,4 NO		F5G07240
00677	0	02000	0	00745	TRA S16 COME HERE IF IR DECIDED ON		F5G07250
00700	0	02000	0	00670	TRA S11 COME HERE IF NOT DECIDED ON		F5G07260
00701	0	50000	0	00411	S135 CLA S1V1+1 IS THE LOOP COMPLETED		F5G07270
00702	0	34000	0	00436	CAS S3V2		F5G07280
00703	0	02000	0	00676	TRA S104		F5G07290
00704	0	02000	0	00741	TRA S102 YES		F5G07300
00705	0	02000	0	00676	TRA S104		F5G07310
00706	0	34000	0	00323	S103 CAS S3K1 IS THIS AN END LOOP LIST		F5G07320
00707	0	02000	0	00711	TRA S105 NO		F5G07330
00710	0	02000	0	00763	TRA S101 YES		F5G07340
00711	0	50000	0	00444	S105 CLA S3V5 GET LOOP LIST QUANTITY AGAIN.		F5G07350
00712	0	34000	0	00324	CAS S3K2 IS IT A BB		F5G07360
00713	0	76100	0	00000	NOP NO,IT IS EITHER A TRANSPARENT		F5G07370
00714	0	02000	0	00716	TRA P001 OR OPAQUE REGION		F5G07380
00715	0	02000	0	00670	TRA S11 YES		F5G07390
00716	0	34000	0	00417	P001 CAS S1V1+7		F5G07400
00717	0	02000	0	00721	TRA S136		F5G07410
00720	0	02000	0	00741	TRA S102		F5G07420
00721	0	07400	4	00070	S136 TSX SE,4 GET BB WHICH CONTAINS ENTR. REQU.		F5G07430
00722	0	56000	0	00317	LDQ S1K2 MAKE THIS LOOK LIKE A		F5G07440
00723	-0	60000	0	00442	STQ TPE PASSIVE REFERENCE.		F5G07450
00724	0	53400	4	00342	LXA S5K5,4 SET COUNT TO 3.		F5G07460
00725	-0	50000	1	12535	S115 CAL BBB+2,1 PUT THIS TAU TAG		F5G07470
00726	0	77100	0	00022	ARS 18 IN LOCATION		F5G07480
00727	0	60200	0	00441	SLW 1TAG TAG		F5G07490
00730	-0	63400	1	00423	SXD S1V6,1 STORE THE		F5G07500
00731	-0	63400	4	00424	SXD S1V7,4 INDEXES.		F5G07510
00732	0	07400	4	00766	TSX S2,4 TRY TO SELECT AN I.R.		F5G07520
00733	0	02000	0	00745	TRA S16 COME HERE IF I.R. SELECTED.		F5G07530
00734	-0	53400	1	00423	LXD S1V6,1 AND HERE IF NOT. RESTORE		F5G07540
00735	-0	53400	4	00424	LXD S1V7,4 THE INDEXES.		F5G07550
00736	1	77777	1	00737	TXI S114,1,-1 DECREASE ENTR. INDEX		F5G07560
00737	2	00001	4	00725	S114 TIX S115,4,1 COUNT TO 3.		F5G07570

THE TAG FEED EXIT. IN THE LATTER IT FEEDS THE NEXT ITEM FROM F5G08120
 LPLST AND TAKES THE LPLST FEED EXIT. WHEN IT COMES TO A F5G08130
 EPLST ITEM WHICH IS A BB AND NOT IN A REGION, IT GOES TO F5G08140
 FEED TAG STATE AND STAYS THERE UNTIL THE LAST TAGLIST ITEM INF5G08150
 THAT BB HAS BEEN FED. THEN IT RETURNS TO LPLST FEED. WHEN F5G08160
 SENTINEL IS FED THE ROUTINE RE-INITIALIZES ITSELF TO THE F5G08170
 BEGINNING OF LPLST AND STAYS IN FEED LPLST STATE. IT USES F5G08180
 THE S4 SUBROUTINE FOR HANDLING TAPE 3 DURING TAGLIST FEEDING. F5G08190

01023	-0	53400	1	00436	S3	LXD S3V2,1 ARE THERE ANY	F5G08200
01024	2	00001	1	01122		TIX S39,1,1	F5G08210
01025	-0	63400	4	00445		SXD S3V8,4 NO,STORE RETURN INDEX	F5G08220
01026	0	50000	0	00437		CLA S3V3	F5G08230
01027	0	60100	0	00450		STO S3V9	F5G08240
01030	0	12000	0	01114		TPL S300 ARE THERE ANY MORE TAGS IN BB	F5G08250
01031	-0	53400	1	00440		LXD S3V4,1 NO	F5G08260
01032	0	50000	0	00444		CLA S3V5 WAS THE LAST THING	F5G08270
01033	0	12000	0	01035		TPL S306 AN END LPLST	F5G08280
01034	-0	53400	1	00325		LXD S3K3,1 YES, RESET LPLST IN0EX	F5G08290
01035	0	50000	1	05035	S306	CLA LPLST+S3P1,1 GET LOOP LIST QUANTITY	F5G08300
01036	0	60100	0	00444		STO S3V5 QUANTITY.	F5G08310
01037	1	77777	1	01040		TXI S31,1,-1	F5G08320
01040	-0	63400	1	00440	S31	SXD S3V4,1 THE INDEX.	F5G08330
01041	0	34000	0	00323		CAS S3K1 IS THIS END OF LOOP LIST	F5G08340
01042	0	02000	0	01044		TRA S32 NO,	F5G08350
01043	0	02000	0	01052		TRA S35 YES,	F5G08360
01044	0	34000	0	00324	S32	CAS S3K2	F5G08370
01045	0	76100	0	00000		NOP NO	F5G08380
01046	0	02000	0	01050		TRA S305	F5G08390
01047	0	02000	0	01053		TRA S34 YES	F5G08400
01050	-0	53400	4	00445	S305	LXD S3V8,4	F5G08410
01051	0	50000	0	00444		CLA S3V5 RETURN WITH LOOP	F5G08420
01052	0	02000	4	00001	S35	TRA 1,4 LIST QUANTITY	F5G08430
01053	0	07400	4	00070	S34	TSX SE,4 GET INDEX OF BB	F5G08440
01054	0	50000	1	12534		CLA BBB+1,1	F5G08450
01055	-0	32000	0	00326		ANA S3K4 GET AND STORE THE	F5G08460
01056	0	60100	0	00435	S303	STO S3V1 TAG LOCATION.	F5G08470
01057	0	07400	4	01133		TSX S4,4 GO TO PUT TAG IN CM.	F5G08480
01060	0	60100	0	00446		STO S3V6 STORE (1ST BB TAG-1ST TAG IN C.M.)	F5G08490
01061	0	40200	0	00330		SUB S4K1 FORM NO. OF	F5G08500
01062	0	76000	0	00003		SSP WDS LEFT IN C.M.	F5G08510
01063	0	60100	0	00447		STO S3V7	F5G08520
01064	0	50000	0	00444		CLA S3V5 GET THE	F5G08530
01065	0	40000	0	00316		ADD ONED LOC. OF 1ST	F5G08540
01066	0	07400	4	00070		TSX SE,4 TAG IN	F5G08550
01067	0	50000	1	12534		CLA BBB+1,1 NEXT BB.	F5G08560
01070	-0	32000	0	00326		ANA S3K4	F5G08570
01071	0	40200	0	00435		SUB S3V1 IS NO. OF TAGS IN BB LESS	F5G08580
01072	0	34000	0	00447		CAS S3V7 THAN OR EQUAL TO SPACE IN C.M.	F5G08590
01073	0	02000	0	01076		TRA S304	F5G08600
01074	0	02000	0	01117		TRA S36 YES,	F5G08610
01075	0	02000	0	01117		TRA S36 YES,	F5G08620
01076	0	40200	0	00447	S304	SUB S3V7 STORE S EXCESS OF TAGS	F5G08630
01077	0	60100	0	00437		STO S3V3	F5G08640
01100	0	50000	0	00447		CLA S3V7	F5G08650

01101	0	73400	1	00000	S302	PAX 0,1 SET COUNT OF NO. OF TAGS.	F5G08660
01102	1	00001	1	01103	S37	TXI S38,1,1	F5G08670
01103	-0	63400	1	00436	S38	SXD S3V2,1	F5G08680
01104	0	40000	0	00332		ADD S4K3 SET ADDRESS OF	F5G08690
01105	0	40000	0	00446		ADD S3V6 CLA	F5G08700
01106	0	62100	0	01122		STA S39 INSTRUCTION.	F5G08710
01107	-0	53400	4	00445		LXD S3V8,4	F5G08720
01110	0	50000	0	00450		CLA S3V9 IS THIS A	F5G08730
01111	0	12000	0	01023		TPL S3 NEW BB	F5G08740
01112	0	50000	0	00444		CLA S3V5 YES,RETURN WITH	F5G08750
01113	0	02000	4	00001		TRA 1,4 LOOP LIST QUANTITY.	F5G08760
01114	0	50000	0	00451	S300	CLA S4V1 NEXT TAG NEEDED HAS	F5G08770
01115	0	40000	0	00330		ADD S4K1 LOC. (S+1ST TAG IN C.M.)	F5G08780
01116	0	02000	0	01056		TRA S303	F5G08790
01117	0	56000	0	00323	S36	LDQ S3K1	F5G08800
01120	-0	60000	0	00437		STQ S3V3	F5G08810
01121	0	02000	0	01101		TRA S302	F5G08820
01122	0	50000	1	00000	S39	CLA -,1 GET TAG WORD	F5G08830
01123	-0	63400	1	00436		SXD S3V2,1	F5G08840
01124	0	60100	0	00443		STO INTAG AND	F5G08850
01125	-0	32000	0	00326		ANA S3K4 SEPARATE TYPE	F5G08860
01126	0	60100	0	00441		STO 1TAG FROM	F5G08870
01127	-0	50000	0	00327		CAL S3K5 TAU-TAG.	F5G08880
01130	-0	32000	0	00443		ANA INTAG	F5G08890
01131	0	60100	0	00442		STO TPE	F5G08900
01132	0	02000	4	00002		TRA 2,4	F5G08910
01133	0	50000	0	00435	S4	CLA S3V1 FORM (LOC. OF 1ST TAG IN BB	F5G08920
01134	0	40200	0	00451		SUB S4V1 -LOC. OF 1ST TAG IN CM)	F5G08930
01135	-0	12000	0	01142		TMI S41 IS TAG IN C.M.	F5G08940
01136	0	34000	0	00330		CAS S4K1 POSSIBLY,IS IT FOR SURE	F5G08950
01137	0	76100	0	00000		NOP NO	F5G08960
01140	0	02000	0	01142		TRA S41 NO	F5G08970
01141	0	02000	4	00001		TRA 1,4 YES. RETURN.	F5G08980
01142	0	50000	0	00435	S41	CLA S3V1 NO,FORM (LOC. OF 1ST TAG IN BB	F5G08990
01143	0	40200	0	00452		SUB S4V2 -POSITION OF TAPE)	F5G09000
01144	-0	12000	0	01166		TMI S42 MUST WE RUN TAPE BACK WORDS	F5G09010
01145	0	60100	0	00454		STO S4V4 NO,	F5G09020
01146	0	50000	0	00453		CLA S4V3 CAN ALL THE FOLLOWING TAGS	F5G09030
01147	0	40200	0	00452		SUB S4V2 BE PUT IN C.M.	F5G09040
01150	0	34000	0	00330		CAS S4K1	F5G09050
01151	0	02000	0	01154		TRA S401 NO	F5G09060
01152	0	02000	0	01173		TRA S45 YES,GO,TO SET COUNT	F5G09070
01153	0	02000	0	01173		TRA S45 YES,TO NO. OF TAGS IN BB.	F5G09080
01154	0	50000	0	00454	S401	CLA S4V4	F5G09090
01155	0	34000	0	00331		CAS S4K2 IS TAG IN NEXT RECORD	F5G09100
01156	0	76100	0	00000		NOP NO	F5G09110
01157	0	02000	0	01161		TRA S47	F5G09120
01160	0	02000	0	01172		TRA S44 YES	F5G09130
01161	0	76200	0	00223	S47	RTB TAPE NO, SPACE FWD 1 REC.	F5G09140
01162	0	50000	0	00452		CLA S4V2 ADJUST TAPE POSITION	F5G09150
01163	0	40000	0	00331		ADD S4K2	F5G09160
01164	0	60100	0	00452	S43	STO S4V2	F5G09170
01165	0	02000	0	01142		TRA S41	F5G09180
01166	0	76400	0	00203	S42	BST TAPE ADJUST TAPE POSITION	F5G09190

01167	0	50000	0	00452	CLA S4V2 AFTER BACKSPACING	F5G09200
01170	0	40200	0	00331	SUB S4K2 ONE RECORD.	F5G09210
01171	0	02000	0	01164	TRA S43	F5G09220
01172	0	50000	0	00330 S44	CLA S4K1 SET COUNT TO STORAGE SIZE.	F5G09230
01173	0	73400	2	00000 S45	PAX 0,2	F5G09240
01174	0	40000	0	00332	ADD S4K3 SET CPY	F5G09250
01175	0	62100	0	01207	STA S46 ADDRESS.	F5G09=60
01176	0	50000	0	00452	CLA S4V2	F5G09270
01177	0	60100	0	00451	STO S4V1	F5G09280
01200	0	76200	0	00223 S49	RTB TAPE	F5G09290
01201	-0	63400	2	01210	SXD S407,2 STORE (2) IN CASE OF TAPE CHECK	F5G09300
01202	-0	76000	0	00012	RTT TURN OFF TAPE	F5G09310
01203	0	76100	0	00000	NOP CHECK.	F5G09320
01204	0	50000	0	00452	CLA S4V2 ADJUST	F5G09330
01205	0	40000	0	00331	ADD S4K2 TAPE	F5G09340
01206	0	60100	0	00452	STO S4V2 POSITION	F5G09350
01207	0	70000	2	00000 S46	CPY -,2	F5G09360
01210	1	00000	0	01216 S407	TXI S48,0,- VALUE OF (2) STORED HERE	F5G09370
01211	0	07400	4	00004	TSX 4,4 END OF FILE OCCURRED,DIAGNOSTIC	F5G09380
01212	-0	63400	4	01244	SXD S405,4	F5G09390
01213	0	07400	4	01226	TSX S406,4 CHECK REDUNDANCY BITS	F5G09400
01214	-0	53400	4	01244	LXD S405,4	F5G09410
01215	0	02000	0	01200	TRA S49	F5G09420
01216	2	00001	2	01207 S48	TIX S46,2,1 COUNT NO. OF WORDS CPYED.	F5G09430
01217	0	70000	0	00454 S409	CPY S4V4 COPY OUT TO	F5G09440
01220	0	02000	0	01217	TRA S409 END OF RECORD.	F5G09450
01221	0	07400	4	00004	TSX 4,4 ERRONEOUS END OF FILE,DIAGNOSTIC	F5G09460
01222	-0	63400	4	01244	SXD S405,4 CHECK REDUNDANCY BITS	F5G09470
01223	0	07400	4	01226	TSX S406,4	F5G09480
01224	-0	53400	4	01244	LXD S405,4	F5G09490
01225	0	02000	0	01133	TRA S4	F5G09500
01226	0	76600	0	00333 S406	IOD	F5G09510
01227	-0	76000	0	00012	RTT	F5G09520
01230	0	02000	0	01233	TRA S402 TRY AGAIN	F5G09530
01231	-0	63400	0	00151	SXD TPCT,0 RESETS REPEAT COUNT	F5G09540
01232	0	02000	4	00001 S404	TRA 1,4 RETURN	F5G09550
01233	0	76400	0	00203 S402	BST TAPE PREPARE TO READ AGAIN	F5G09560
01234	-0	53400	2	00151	LXD TPCT,2 FIVE TIMES	F5G09570
01235	1	00001	2	01236	TXI S402A,2,1	F5G09580
01236	-0	63400	2	00151 S402A	SXD TPCT,2	F5G09590
01237	-3	00004	2	01241	TXL S402B,2,4 GO ON	F5G09600
01240	0	07400	4	00004	TSX 4,4 NO GOOD,DIAGNOSTIC	F5G09610
01241	-0	53400	2	01210 S402B	LXD S407,2 RESET INDEX	F5G09620
01242	0	76200	0	00223	RTB TAPE	F5G09630
01243	-0	53400	4	01244	LXD S405,4	F5G09640
01244	1	00000	0	01207 S405	TXI S46,0,- RETURN ADDR. STORED HERE	F5G09650
					TNE S5 SUBROUTINE LOADS EN1,2,3 FROM THE ENTRANCE CONDITIONS	F5G09660
					OF THE ENTRY BB IN A REGION WHEN THE REGION IS ENCOUNTERED	F5G09670
					IN LPLST. IN ADDITION, THE PERMUTATION OF INDEX REGISTERS	F5G09680
					THE REGION PROVIDING THE BEST MATCH BETWEEN IR1,2,3 AND	F5G09690
					EN1,2,3 IS LEFT IN CELLS IN1,2,3 AND EN4,5,6 BY S5. S5 USES	F5G09700
					S1,S111,S6,S7,S9, AS SUBROUTINES.	F5G09710
01245	-0	63400	4	00473 S5	SXD S5V1,4 STORE RETURN INDEX	F5G09720
01246	0	60100	0	00474	STO S5V2 STORE LOOP LIST QUANTITY	F5G09730

01247	0	07400	4	01466	TSX S9,4 GET THE ENTRANCE	F5G09740
					REQUIREMENTS	F5G09750
01250	0	50000	0	00340	CLA S5K3	F5G09760
01251	0	53400	2	00343	LXA S5K6,2 STORE -0S IN THE COUNTER OF THIS + OF REAL	F5G09770
01252	0	60100	2	00470	STO ENC+8,2 STORE -0S IN THE	F5G09780
01253	2	00001	2	01252	TIX S51,2,1 REGISTERS.	F5G09790
01254	0	53400	1	00342	LXA S5K5,1 SET INDEX FOR EN1,N=1	F5G09800
01255	0	53400	2	00342	LXA S5K5,2 SET INDEX FOR IR1, M EQUALS 1	F5G09810
01256	0	50000	1	00473	CLA EN1+3,1	F5G09820
01257	0	34000	0	00336	CAS S5K1 IS ENN EMPTY	F5G09830
01260	0	02000	0	01262	TRA S55 NO	F5G09840
01261	0	02000	0	01427	TRA S58 YES	F5G09850
01262	0	56000	2	00465	LDQ IN1+3,2 NO	F5G09860
01263	0	16200	0	01267	TQP S56 IS IRM ASSIGNED	F5G09870
01264	0	34000	2	00430	CAS IR1+3,2 NO,IS C(ENM)=C(IRM)	F5G09880
01265	0	02000	0	01267	TRA S56 NO.	F5G09890
01266	0	02000	0	01433	TRA S59 YES.	F5G09900
01267	2	00001	2	01262	TIX S55,2,1 NO. THRU WITH IRS	F5G09910
01270	2	00001	1	01255	TIX S54,1,1 YES. THRU WITH ENS	F5G09920
01271	0	53400	2	00342	LXA S5K5,2 YES,SET INDEX FOR IR1,M=1	F5G09930
01272	0	53400	1	00342	LXA S5K5,1 SET INDEX FOR EN1,N=1	F5G09940
01273	0	50000	2	00430	CLA IR1+3,2	F5G09950
01274	0	34000	0	00336	CAS S5K1 IS IRM EMPTY	F5G09960
01275	0	02000	0	01277	TRA S511 NO	F5G09970
01276	0	02000	0	01310	TRA S513 YES	F5G09980
01277	0	56000	2	00465	LDQ IN1+3,2 NO	F5G09990
01300	0	16200	0	01320	TQP S514 IS IRM ASSIGNED	F5G10000
01301	0	34000	0	00337	CAS S5K2 NO,IS C(IRM)REAL	F5G10010
01302	0	02000	0	01320	TRA S514 NO,	F5G10020
01303	0	02000	0	01320	TRA S514 NO,	F5G10030
01304	0	50000	0	00461	CLA IRC INCREASE REAL	F5G10040
01305	0	40000	0	00315	ADD ONEA UNASSIGNED TAG	F5G10050
01306	0	60100	0	00461	STO IRC COUNTER.	F5G10060
01307	0	02000	0	01320	TRA S514	F5G10070
01310	0	50000	1	00470	CLA EN4+3,1 HAS ENN	F5G10080
01311	0	12000	0	01317	TPL S537 BEEN ASSIGNED	F5G10090
01312	0	56000	0	00337	LDQ S5K2 NO,IS C(ENN)	F5G10100
01313	0	50000	1	00473	CLA EN1+3,1 REAL	F5G10110
01314	0	04000	0	01317	TLQ S537	F5G10120
01315	0	07400	4	01443	TSX S6,4 YES,MAKE IRM=ENN	F5G10130
01316	0	02000	0	01320	TRA S514	F5G10140
01317	2	00001	1	01310	TIX S513,1,1 ARE WE THRU WITH EN S	F5G10150
01320	2	00001	2	01272	TIX S510,2,1 YES, ARE WE THRU WITH IRS	F5G10160
01321	0	50000	0	00460	CLA ENC YES.	F5G10170
01322	-0	12000	0	01327	TMI S515 ARE THERE NO EMPTY ENS	F5G10180
01323	0	34000	0	00341	CAS S5K4 HOW MANY EMPTY ENS.	F5G10190
01324	0	02000	0	01327	TRA S515 3 OR 0	F5G10200
01325	0	02000	0	01343	TRA S520 2 EMPTY EN	F5G10210
01326	0	02000	0	01366	TRA S526 1 EMPTY EN	F5G10220
01327	0	53400	1	00342	LXA S5K5,1 3 OR 0 EMPTY EN,N=1	F5G10230
01330	0	53400	2	00342	LXA S5K5,2 M=1	F5G10240
01331	0	50000	1	00470	CLA EN4+3,1	F5G10250
01332	0	12000	0	01340	TPL S516 ENN ASSIGNED	F5G10260
01333	0	50000	2	00465	CLA IN1+3,2 NO,IRM	F5G10270

01334	0	12000	0	01337	TPL S517 ASSIGNED	F5G10280
01335	0	07400	4	01443	TSX S6,4 NO,MAKE IRM=IRN	F5G10290
01336	0	02000	0	01340	TRA S516	F5G10300
01337	2	00001	2	01333 S517	TIX S518,2,1	F5G10310
01340	2	00001	1	01330 S516	TIX S519,1,1	F5G10320
01341	-0	53400	4	00473	LXD S5V1,4	F5G10330
01342	0	02000	4	00001	TRA 1,4 RETURN	F5G10340
01343	0	50000	0	00461 S520	CLA IRC	F5G10350
01344	0	34000	0	00341	CAS S5K4 ARE THERE 3 REAL UNASSNED TAGS IN THE IRS	F5G10360
01345	0	02000	0	01350	TRA S536	F5G10370
01346	0	02000	0	01405	TRA S531 1,NO,GO MATCH EMPTY ENS	F5G10380
01347	0	02000	0	01405	TRA S531 2,NO. WITH ANY REAL UNASS. IRS	F5G10390
01350	0	07400	4	01450 S536	TSX S7,4 3, YES, TO COPY IRS, ETC.	F5G10400
01351	0	07400	4	00622	TSX S1,4 SELECT MOST REPLACEABLE I.R.	F5G10410
01352	0	53400	1	00342	LXA S5K5,1	F5G10420
01353	0	07400	4	01435	TSX S595,4	F5G10430
01354	0	50000	1	00473 S521	CLA EN1+3,1 IS EN	F5G10440
01355	0	34000	0	00336	CAS S5K1 EMPTY	F5G10450
01356	0	02000	0	01360	TRA S522 NO	F5G10460
01357	2	00001	1	01354	TIX S521,1,1 INDEX COUNTER OF IR S	F5G10470
01360	0	07400	4	01443 S522	TSX S6,4 MADE ENN = IRM	F5G10480
01361	0	53400	1	00342 S529	LXA S5K5,1	F5G10490
01362	0	50000	1	00460 S525	CLA IR4+3,1 REPLACE THE IRS	F5G10500
01363	0	60100	1	00430	STO IR1+3,1	F5G10510
01364	2	00001	1	01362	TIX S525,1,1	F5G10520
01365	0	02000	0	01327	TRA S515	F5G10530
01366	0	56000	0	00461 S526	LDQ IRC	F5G10540
01367	0	50000	0	00341	CLA S5K4 ARE THERE 2 OR 3 REAL	F5G10550
01370	0	04000	0	01403	TLQ S530 UNASSNED TAGS	F5G10560
01371	0	07400	4	01450	TSX S7,4 YES,COPY IRS	F5G10570
01372	0	07400	4	00620	TSX S111,4 LOOK FOR LEAST REPLACEABLE I.R.	F5G10580
01373	0	07400	4	01435	TSX S595,4	F5G10590
01374	0	53400	1	00342	LXA S5K5,1 ASSIGN THE EMPTY	F5G10600
01375	0	50000	1	00473 S527	CLA EN1+3,1 EN TO THE IR	F5G10610
01376	0	34000	0	00336	CAS S5K1 SELECTED	F5G10620
01377	0	02000	0	01401	TRA S528	F5G10630
01400	0	07400	4	01443	TSX S6,4 BY	F5G10640
01401	2	00001	1	01375 S528	TIX S527,1,1 S111.	F5G10650
01402	0	02000	0	01361	TRA S529	F5G10660
01403	0	16200	0	01405 S530	TQP S531 IS THERE ONE REAL TAG	F5G10670
01404	0	02000	0	01327	TRA S515 NO,GO MATCH ARBITRARILY.	F5G10680
01405	0	53400	1	00342 S531	LXA S5K5,1 SET COUNT TO 3,N=1	F5G10690
01406	0	53400	2	00342	LXA S5K5,2 SET COUNT TO 3,M=1	F5G10700
01407	0	50000	1	00473 S532	CLA EN1+3,1 IS ENN	F5G10710
01410	0	34000	0	00336	CAS S5K1 EMPTY	F5G10720
01411	0	02000	0	01413	TRA S533 NO,	F5G10730
01412	0	02000	0	01415	TRA S534 YES,	F5G10740
01413	2	00001	1	01407 S533	TIX S532,1,1 NO,THRU WITH ENS	F5G10750
01414	0	02000	0	01327	TRA S515 YES.	F5G10760
01415	0	50000	2	00465 S534	CLA IN1+3,2	F5G10770
01416	0	12000	0	01425	TPL S535	F5G10780
01417	0	50000	2	00430	CLA IR1+3,2 NO	F5G10790
01420	0	34000	0	00337	CAS S5K2 IS C (IRM) REAL	F5G10800
01421	0	76100	0	00000	NOP NO	F5G10810

01422	0	02000	0	01425	TRA S535	F5G10820
01423	0	07400	4	01443	TSX S6,4 YES	F5G10830
01424	0	02000	0	01327	TRA S515	F5G10840
01425	2	00001	2	01415	TIX S534,2,1 NO	F5G10850
01426	0	02000	0	01413	TRA S533	F5G10860
01427	0	50000	0	00460	S58 CLA ENC YESENM EMPTY	F5G10870
01430	0	40000	0	00315	ADD ONEA INCREASE COUNTER	F5G10880
01431	0	60100	0	00460	STO ENC OF NO. OF EMPTY ENS.	F5G10890
01432	0	02000	0	01270	TRA S57	F5G10900
01433	0	07400	4	01443	S59 TSX S6,4 MAKE IRM=ENN	F5G10910
01434	0	02000	0	01270	TRA S57	F5G10920
01435	-0	53400	2	00430	S595 LXD IRR,2	F5G10930
01436	0	50000	2	00430	CLA IR1+3,2	F5G10940
01437	0	34000	0	01465	CAS S7K1	F5G10950
01440	0	02000	4	00001	TRA 1,4	F5G10960
01441	0	02000	0	01361	TRA S529	F5G10970
01442	0	02000	4	00001	TRA 1,4	F5G10980
01443	-0	75400	1	00000	S6 PXD 0,1	F5G10990
01444	0	60100	2	00465	STO IN1+3,2	F5G11000
01445	-0	75400	2	00000	PXD 0,2	F5G11010
01446	0	60100	1	00470	STO EN4+3,1	F5G11020
01447	0	02000	4	00001	TRA 1,4	F5G11030
01450	0	53400	1	00342	S7 LXA S5K5,1 SET COUNT TO 3,M=1	F5G11040
01451	0	50000	1	00430	S71 CLA IR1+3,1 COPY ASIDE C(IRM)	F5G11050
01452	0	60100	1	00460	STO IR4+3,1	F5G11060
01453	0	56000	1	00465	LDQ IN1+3,1 IRM ASSIGNED	F5G11070
01454	0	16200	0	01461	TQP S72	F5G11080
01455	0	34000	0	00337	CAS S5K2 NO, IS C(IRM) REAL	F5G11090
01456	0	76100	0	00000	NOP	F5G11100
01457	0	02000	0	01461	TRA S72 NO	F5G11110
01460	0	02000	0	01463	TRA S73 YES.	F5G11120
01461	0	50000	0	01465	S72 CLA S7K1 NO,REPLACE C(IRM)	F5G11130
01462	0	60100	1	00430	STO IR1+3,1 BY IMPOSSIBLE TAG.	F5G11140
01463	2	00001	1	01451	S73 TIX S71,1,1 COUNT TO 3,M=M+1	F5G11150
01464	0	02000	4	00001	TRA 1,4 RETURN	F5G11160
01465	+000000777760			S7K1	OCT 777760 IMPOSSIBLE TAG VALUE. THE S9 SUBROUTINE LOADS EN1,2,3.	F5G11170
01466	-0	63400	4	00476	S9 SXD S9V2,4 STORE RETURN INDEX.	F5G11180
01467	0	07400	4	00070	TSX SE,4 MAKE SURE BB IS IN C+M+	F5G11190
01470	0	50000	1	12540	CLA BBB+5,1 GET AND	F5G11200
01471	-0	73400	2	00000	PDX 0,2 STORE THE	F5G11210
01472	0	50000	2	05263	CLA REG,2 REGION	F5G11220
01473	0	60100	0	00477	STO S9V4 WORD+	F5G11230
01474	0	53400	2	00342	LXA S5K5,2 SET COUNT TO 3,N=1	F5G11240
01475	0	50000	1	12534	CLA BBB+1,1 STORE THE WORD	F5G11250
01476	0	60100	0	00475	STO S9V1 CONTAINING THE PERMATATION NOS.	F5G11260
01477	0	50000	0	00475	S92 CLA S9V1 EXTRACT THE N TH	F5G11270
01500	0	77100	2	00003	ARS 3,2 PERMUTATION NO.	F5G11280
01501	0	77100	2	00003	ARS 3,2 AND PUT IT	F5G11290
01502	-0	32000	0	00350	ANA S9K3 IN	F5G11300
01503	-0	73400	4	00000	PDX 0,4 INDEX 4.	F5G11310
01504	-0	50000	0	00477	CAL S9V4 IS THIS	F5G11320
01505	-0	32000	4	00350	ANA S9K2+3,4 AN EMPTY	F5G11330
01506	0	10000	0	01515	TZE S93 I.R.	F5G11340
						F5G11350

01507	0	50000	0	00336		CLA S5K1 YES,STORE EMPTINESS SYMBOL	F5G11360
01510	0	60100	4	00473	S94	STO EN1+3,4	F5G11370
01511	1	77777	1	01512		TXI S91,1,-1 DOWN THE ENTR. INDEX	F5G11380
01512	2	00001	2	01477	S91	TIX S92,2,1 COUNT TO 3	F5G11390
01513	-0	53400	4	00476		LXD S9V2,4	F5G11400
01514	0	02000	4	00001		TRA 1,4 RETURN	F5G11410
01515	-0	50000	1	12535	S93	CAL BBB+2,1 SET THE	F5G11420
01516	0	77100	0	00022		ARS 18 ENTRANCE REQUIREMENT.	F5G11430
01517	0	34000	0	00336		CAS S5K1 IS IT AN EMPTINESS SYMBOL	F5G11440
01520	0	02000	0	01510		TRA S94 NO,	F5G11450
01521	0	50000	0	00333		CLA LK1 YES,STORE E,(HASH SYMBOL).	F5G11460
01522	0	02000	0	01510		TRA S94 NO,	F5G11470
						THE SA SUBROUTINE LOADS EX1,2,3 ANO ACT1,2,3 FROM EXIT	F5G11480
						CONDITIONS AND ACTIVITY BITS (PREFIX, WORD 2, BBB) OF THE	F5G11490
						EXIT BB IN A REGION.	F5G11500
01523	-0	63400	4	00501	SA	SXD SAV2,4 STORE RETURN INDEX.	F5G11510
01524	-0	32000	0	00353		ANA SBK2 IF THIS IS AN IMPOSSIBLE BB,	F5G11520
01525	0	56000	0	00351		LDQ SAK1 RETURN AT ONCE, DOING NOTHING	F5G11530
01526	0	04000	4	00001		TLQ 1,4	F5G11540
01527	0	07400	4	00067		TSX SE1,4 MAKE SURE BB IS IN CM.	F5G11550
01530	0	50000	1	12540		CLA BBB+5,1 GET AND	F5G11560
01531	-0	73400	2	00000		PDX 0,2 STORE	F5G11570
01532	0	50000	2	05263		CLA REG,2 REGION	F5G11580
01533	0	60100	0	00502		STO SAV3 WORD.	F5G11590
01534	0	50000	1	12534		CLA BBB+1,1 GET AND STORE THE	F5G11600
01535	0	60100	0	00500		STO SAV1 WORD HAVING PERMUTATION NOS.	F5G11610
01536	0	53400	2	00342		LXA S5K5,2 SET COUNT TO 3,N=N+1	F5G11620
01537	-0	50000	0	00500	SA1	CAL SAV1 PUT PERMUTATION	F5G11630
01540	0	77100	2	00003		ARS 3,2 NUMBER	F5G11640
01541	0	77100	2	00003		ARS 3,2 IN	F5G11650
01542	-0	32000	0	00350		ANA S9K3 INDEX 4	F5G11660
01543	-0	73400	4	00000		PDX 0,4	F5G11670
01544	-0	50000	0	00502		CAL SAV3 IS THIS	F5G11680
01545	-0	32000	4	00350		ANA S9K2+3,4 AN EMPTY	F5G11690
01546	0	10000	0	01560		TZE SA2 EXIT	F5G11700
01547	0	50000	0	00336		CLA S5K1 YES,STORE EMPTINESS SYMBOL.	F5G11710
01550	0	60100	4	00506	SA4	STO EX1+3,4	F5G11720
01551	-0	50000	0	00500	SA5	CAL SAV1 STORE THE	F5G11730
01552	0	76700	2	00003		ALS 3,2 ACTIVE	F5G11740
01553	0	60200	4	00511		SLW ACT1+3,4 INDICATOR	F5G11750
01554	1	77777	1	01555		TXI SA3,1,-1	F5G11760
01555	2	00001	2	01537	SA3	TIX SA1,2,1 COUNT TO 3	F5G11770
01556	-0	53400	4	00501		LXD SAV2,4	F5G11780
01557	0	02000	4	00001		TRA 1,4 RETURN	F5G11790
01560	-0	50000	1	12535	SA2	CAL BBB+2,1	F5G11800
01561	-0	32000	0	00326		ANA S3K4 IS THIS	F5G11810
01562	0	34000	0	00336		CAS S5K1 AN EMPTY SYMBOL	F5G11820
01563	0	02000	0	01550		TRA SA4 NO	F5G11830
01564	0	50000	0	00333		CLA LK1 YES REPLACE BY E.	F5G11840
01565	0	02000	0	01550		TRA SA4 NO	F5G11850
						THE SB SUBROUTINE ENTERS A BIT IN PRED OR STAG TO REQUEST SX	F5G11860
						COMPILATION. THE APPROPRIATE ACTIVITY CELL AC1,2, OR 3 IS	F5G11870
						EXAMINED. IF IT IS NEGATIVE (ACTIVE INSTRUCTION IN A BB	F5G11880
						ALREADY IN A REGION), THE SX BIT IS PLACED IN PRED IN THE	F5G11890

					LINK OUT OF THE REGION. IF IT IS POSITIVE (ACTIVE INSTRUC.	F5G11900	
					IN A BB IN THIS LPLST), THE SX BIT IS PLACED IN THE STAG	F5G11910	
					TABLE AT THE ACTIVE INSTRUCTION. THE APPROPRIATE AC1,2, OR 3	F5G11920	
					IS ALSO TURNED OFF BY SB.	F5G11930	
01566	-0	63400	1	00514	SB	SXD SBV4,1 STORE INDEX OF ACTIVE I.R+	F5G11940
01567	-0	63400	4	00511		SXD SBV1,4 STORE INDEX OF RETURN,	F5G11950
01570	0	50000	1	00561		CLA AC1+3,1 IS THE ACTIVE THING	F5G11960
01571	0	12000	0	01641		TPL SB1 AN INSTRUCTION	F5G11970
01572	-0	73400	1	00000		PDX 0,1 NO	F5G11980
01573	0	50000	1	05035		CLA LPLST+S3P1,1 GET + STORE	F5G11990
01574	0	34000	0	00324		CAS S3K2 PRED. BB	F5G12000
01575	0	76100	0	00000		NOP	F5G12010
01576	0	02000	0	01600		TRA SB01	F5G12020
01577	0	77100	0	00022		ARS 18 NO	F5G12030
01600	0	62100	0	00513	SB01	STA SBV3	F5G12040
01601	0	50000	1	05036		CLA LPLST+S3P1+1,1	F5G12050
01602	0	34000	0	00323		CAS S3K1 END LOOP LIST SENTINEL	F5G12060
01603	0	02000	0	01605		TRA SB7 NO,	F5G12070
01604	0	50000	0	04741		CLA LPLST YES,SUCCESSOR IS 1ST ENTRY.	F5G12080
01605	0	07400	4	00070	SB7	TSX SE,4 NO,GET ADDR. OF	F5G12090
01606	0	50000	1	12534		CLA BBB+1,1 PRED.	F5G12100
01607	0	60100	0	00515		STO SBV5 STORE PERMUTATION NOS.	F5G12110
01610	0	50000	1	12533		CLA BBB,1 GET ADDR OF 1ST PRED.	F5G12120
01611	0	60200	0	00512	SB4	SLW SBV2	F5G12130
01612	0	07400	4	00055		TSX SE5,4	F5G12140
01613	-0	50000	1	15674		CAL PRED,1	F5G12150
01614	-0	32000	0	00353		ANA SBK2	F5G12160
01615	0	34000	0	00513		CAS SBV3 IS THIS THE RIGHT TRANSFER	F5G12170
01616	0	02000	0	01620		TRA SB2 NO	F5G12180
01617	0	02000	0	01623		TRA SB5 YES	F5G12190
01620	0	50000	0	00512	SB2	CLA SBV2 NO TRY NEXT PRED.	F5G12200
01621	0	40000	0	00315		ADD ONEA	F5G12210
01622	0	02000	0	01611		TRA SB4	F5G12220
01623	0	53400	2	00342	SB5	LXA S5K5,2	F5G12230
01624	-0	50000	0	00515	SB00	CAL SBV5 SEARCH PERMUTATION	F5G12240
01625	0	77100	2	00003		ARS 3,2 NOS. FOR THE INDEX	F5G12250
01626	0	77100	2	00003		ARS 3,2 STORED IN SBV4	F5G12260
01627	-0	32000	0	00350		ANA S9K3	F5G12270
01630	0	34000	0	00514		CAS SBV4 IS THIS PERMUTATION NO.	F5G12280
01631	0	02000	0	01633		TRA SB8 NO EQUAL TO THE ACTIVE	F5G12290
01632	0	02000	0	01635		TRA SB9 YES IR	F5G12300
01633	2	00001	2	01624	SB8	TIX SB00,2,1 NO	F5G12310
01634	0	07400	4	00004		TSX 4,4 DIAGNOSTIC,ERROR	F5G12320
01635	0	50000	0	00354	SB9	CLA SBK3 GENERATE NO STORE	F5G12330
01636	0	77100	2	00003		ARS 3,2 THE	F5G12340
01637	-0	60200	1	15674		ORS PRED,1 SX FIT IN	F5G12350
01640	0	02000	0	01654		TRA SB6 PRED. TABLE.	F5G12360
01641	-0	32000	0	00326	SB1	ANA S3K4	F5G12370
01642	0	76500	0	00043		LRS 35 COMPUTE NO. OF WORD IN	F5G12380
01643	0	22100	0	00371		DVP XK9 STAG AND POSITION OF SX	F5G12390
01644	0	73400	2	00000		PAX 0,2 FIT IN WORD.	F5G12400
01645	-0	50000	0	00352		CAL SBK1 GENERATE	F5G12410
01646	0	76700	2	00010		ALS 8,2 THE BIT	F5G12420
01647	0	60200	0	00512		SLW SBV2 TO	F5G12430

				STORE.		F5G12440
01650	0	76300	0	00043	LLS 35 GET NO. OF WORD OUT OF MQ.	F5G12450
01651	0	07400	4	00032	TSX SE4,4 MAKE SURE THE WD IS IN C.M.	F5G12460
01652	-0	50000	0	00512	CAL SBV2	F5G12470
01653	-0	60200	1	05263	ORS STAG,1	F5G12480
01654	0	50000	0	00314	CLA ZERO SET IR	F5G12490
01655	-0	53400	1	00514	LXD SBV4,1 TO F	F5G12500
01656	0	60100	1	00561	STO AC1+3,1 NOT ACTIVE.	F5G12510
01657	-0	53400	4	00511	LXD SBV1,4 RE-	F5G12520
01660	0	02000	4	00001	TRA 1,4 TURN	F5G12530
					THE SC SUBROUTINE HANDLES THE PROBLEM OF AN ACTIVE INDEX	F5G12540
					REGISTER WITH NO SUBSEQUENT LX IN THE PRESENT REGION. THIS	F5G12550
					POSTPONES THE NECESSITY OF AN SX UNTIL A LATER LX IS FOUND.	F5G12560
					THE ACTIVITY IS TRANSFERRED FROM AC1,2,3 TO PREFIX, WORD 2,	F5G12570
					BBB TABLE FOR ALL BB,S DURINC WHICH IN0EX REGISTER IS ACTIVE.	F5G12580
					THIS PERPETUATION OF ACTIVITY WHEN NOT TURNED OFF DURING THE	F5G12590
					TREATMENT OF THE SAME LPLST IN WHICH IT AROSE IS CALLED MARK-	F5G12600
					ING A SECTION OF LPLST ACTIVE. ALL BB,S BETWEEN THE ORIGIN	F5G12610
					OF THE ACTIVITY AND THE PRESENT POINT OF LPLST WHEN SC IS	F5G12620
					ENTERED ARE MARKED ACTIVE, AND THE DESIGNATED AC1,2,3 IS	F5G12630
					TURNED OFF. SD IS USED AS A SUBROUTINE, DOING THE ACTUAL	F5G12640
					MARKING OF BB,S ACTIVE.	F5G12650
01661	0	50000	1	00561	CLA AC1+3,1 IS IR	F5G12660
01662	0	10000	4	00001	TZE 1,4 ACTIVE	F5G12670
01663	-0	63400	4	00516	SXD SCV1,4 YES,STORE RETURN	F5G12680
01664	-0	63400	1	01736	SXD SC9,1 AND INDEX OF ACTIVE I.R+	F5G12690
01665	0	62200	0	00520	STD SCV3 STORE INDEX OF LOOP LIST.	F5G12700
01666	0	50000	0	00520	CLA SCV3 IS THIS THE CURRENT	F5G12710
01667	0	40200	0	00316	SUB ONED	F5G12720
01670	-0	40000	0	00440	SBM S3V4 IS THIS THE CURRENT LPLST INDEX	F5G12730
01671	-0	10000	0	01674	TNZ SC40	F5G12740
01672	0	50000	0	00521	CLA ACIND YES	F5G12750
01673	0	12000	4	00001	TPL 1,4 IS THIS THE ACTIVE PASS	F5G12760
01674	-0	53400	2	00520	LXD SCV3,2 YES	F5G12770
01675	0	50000	2	05035	CLA LPLST+S3P1,2	F5G12780
01676	0	34000	0	00324	CAS S3K2 IS 1ST AACTIVE QUANTITY A BB	F5G12790
01677	0	02000	0	01721	TRA SC02	F5G12800
01700	0	02000	0	01721	TRA SC02 NO	F5G12810
01701	0	02000	0	01734	TRA SC8 YES	F5G12820
01702	0	40200	0	00316	SUB ONED IS THIS CURRENT	F5G12830
01703	0	34000	0	00440	CAS S3V4 LOOP LIST INDEX	F5G12840
01704	0	02000	0	01706	TRA SC2 NO,	F5G12850
01705	0	02000	0	01725	TRA SC5 YES,	F5G12860
01706	-0	53400	2	00520	LXD SCV3,2 NO,	F5G12870
01707	0	50000	2	05035	CLA LPLST+S3P1,2	F5G12880
01710	0	34000	0	00323	CAS S3K1 IS IT END LOOP LIST	F5G12890
01711	0	02000	0	01713	TRA SC3 NO,	F5G12900
01712	0	02000	0	01732	TRA SC6 YES,	F5G12910
01713	0	34000	0	00324	SC3 CAS S3K2 NO,IS IT A BB	F5G12920
01714	0	76100	0	00000	NOP NO,	F5G12930
01715	0	02000	0	01717	TRA SC04	F5G12940
01716	0	02000	0	01734	TRA SC8 YES,	F5G12950
01717	-0	53400	2	01736	SC04 LXD SC9,2 NO, PUT INDEX OF ACTIVE IR	F5G12960
01720	0	07400	4	01753	TSX SD,4 IN 2. GO TO RECORD REGION ACTIVE.	F5G12970

01721	0	50000	0	00520	SC02	CLA SCV3 PREPARE TO GET	F5G12980
01722	0	40200	0	00316		SUB ONED NEXT	F5G12990
01723	0	62200	0	00520	SC7	STD SCV3 LOOP LIST QUANTITY.	F5G13000
01724	0	02000	0	01702		TRA SC4	F5G13010
01725	-0	53400	1	01736	SC5	LXD SC9,1	F5G13020
01726	0	50000	0	00314		CLA ZERO RECORD I.R. NOT	F5G13030
01727	0	60100	1	00561		STO AC1+3,1 ACTIVE ANYMORE.	F5G13040
01730	-0	53400	4	00516		LXD SCV1,4	F5G13050
01731	0	02000	4	00001		TRA 1,4 RETURN.	F5G13060
01732	0	50000	0	00325	SC6	CLA S3K3 ARRANGE TO GET 1ST LPLST QUANTITY	F5G13070
01733	0	02000	0	01723		TRA SC7 QUANTITY NEXT.	F5G13080
01734	0	07400	4	00070	SC8	TSX SE,4	F5G13090
01735	-0	63400	1	00517		SXD SCV2,1 GET INDEX OF BB	F5G13100
01736	1	00000	1	01737	SC9	TXI SC01,1,0 INCREASE INDEX BY INDEX OF OCT. I.R.	F5G13110
01737	0	50000	1	12540	SC01	CLA BBB+5,1 GET THE	F5G13120
01740	-0	32000	0	00326		ANA S3K4 EXIT CONDITION.	F5G13130
01741	-0	53400	2	01736		LXD SC9,2 IS EXIT COND. SAME	F5G13140
01742	0	34000	2	00430		CAS IR1+3,2 AS TAG IN ACTIVE I.RH	F5G13150
01743	0	02000	0	01721		TRA SC02 NO,	F5G13160
01744	0	02000	0	01746		TRA SC03 YES,	F5G13170
01745	0	02000	0	01721		TRA SC02 NO,	F5G13180
01746	-0	50000	0	00340	SC03	CAL S5K3 RECORD THAT BB IS	F5G13190
01747	0	77100	2	00003		ARS 3,2 ACTIVE	F5G13200
01750	-0	53400	1	00517		LXD SCV2,1 WO THIS	F5G13210
01751	-0	60200	1	12534		ORS BBB+1,1 I+R.	F5G13220
01752	0	02000	0	01721		TRA SC02	F5G13230
01753	-0	63400	2	00523	SD	SXD SDV2,2	F5G13240
01754	-0	63400	4	00522		SXD SDV1,4 STORE RETURN.	F5G13250
01755	0	07400	4	00070		TSX SE,4 GET INDEX OF BB	F5G13260
01756	0	50000	1	12540		CLA BBB+5,1 GET	F5G13070
01757	-0	73400	1	00000		PDX 0,1 REGION	F5G13280
01760	0	50000	1	05263		CLA REG,1 WORD.	F5G13290
01761	0	07400	4	00070		TSX SE,4 GET BB INDEX.	F5G13300
01762	-0	63400	1	00525	SD7	SXD SDV4,1	F5G13310
01763	0	50000	1	12534		CLA BBB+1,1 STORE	F5G13320
01764	0	60100	0	00524		STO SDV3 AWAY THE PERMUTATION NOS.	F5G13330
01765	0	53400	2	00342		LXA S5K5,2 SET COUNT TO 3,N=1	F5G13340
01766	-0	50000	0	00524	SD3	CAL SDV3 IS	F5G13350
01767	0	77100	2	00003		ARS 3,2 PERMUTATION NO.	F5G13360
01770	0	77100	2	00003		ARS 3,2	F5G13370
01771	-0	32000	0	00350		ANA S9K3 N EQUAL	F5G13380
01772	0	34000	0	00523		CAS SDV2 TO I.R. INDEX	F5G13390
01773	0	02000	0	01775		TRA SD1 NO	F5G13400
01774	0	02000	0	02000		TRA SD4 YES	F5G13410
01775	1	77777	1	01776	SD1	TXI SD1+1,1,-1 NO	F5G13420
01776	2	00001	2	01766	SD2	TIX SD3,2,1 COUNT TO 3	F5G13430
01777	0	07400	4	00004		TSX 4,4	F5G13440
02000	-0	50000	1	12535	SD4	CAL BBB+2,1	F5G13450
02001	-0	32000	0	00326		ANA S3K4 IS TAG IN	F5G13460
02002	-0	53400	4	00523		LXD SDV2,4 EXIT CONDITION	F5G13470
02003	-0	53400	1	00525		LXD SDV4,1 SAME AS IN ACTIVE I.R.	F5G13480
02004	0	34000	4	00430		CAS IR1+3,4	F5G13490
02005	0	02000	0	02007		TRA SD5 NO	F5G13500
02006	0	02000	0	02020		TRA SD9 YES,IS	F5G13510

02007	-0	50000	1	12540	SD5	CAL	BBB+5,1	NO THIS LAST		F5G13520
02010	-0	32000	0	00353		ANA	SBK2	BB		F5G13530
02011	0	34000	0	00353		CAS	SBK2	IN REGION		F5G13540
02012	0	02000	0	02014		TRA	SD6	NO		F5G13550
02013	0	02000	0	02016		TRA	SD8	YES		F5G13560
02014	0	07400	4	00067	SD6	TSX	SE1,4	NO		F5G13570
02015	0	02000	0	01762		TRA	SD7			F5G13580
02016	-0	53400	4	00522	SD8	LXD	SDV1,4	RETURN		F5G13590
02017	0	02000	4	00001		TRA	1,4			F5G13600
02020	-0	50000	0	00340	SD9	CAL	S5K3	RECORD THIS BB		F5G13610
02021	0	77100	2	00003		ARS	3,2	ACTIVE		F5G13620
02022	-0	60200	1	12534		ORS	BBB+1,1	WO THIS IR		F5G13630
02023	0	02000	0	02007		TRA	SD5			F5G13640
								THE SF SUBROUTINE FORMS APPROPRIATE AC1,2,3 ENTRY WHEN AN		F5G13650
								ACTIVE INSTRUCTION IS ENCOUNTERED.		F5G13660
02024	0	50000	0	00442	SF	CLA	TPE	IS THIS		F5G13670
02025	0	34000	0	00322		CAS	S2K2	AN LX		F5G13680
02026	0	02000	0	02030		TRA	SF1	NO,		F5G13690
02027	0	02000	0	02034		TRA	SF4	YES,		F5G13700
02030	0	34000	0	00373	SF1	CAS	XK12	NO,IS IT AN ACTIVE INSTR		F5G13710
02031	0	02000	4	00001		TRA	1,4	NO RETURN		F5G13720
02032	0	02000	0	02034		TRA	SF4	YES,		F5G13730
02033	0	02000	4	00001		TRA	1,4	NO		F5G13740
02034	0	50000	0	00571	SF4	CLA	XV5	FORM QUANTITY TO		F5G13750
02035	0	60100	0	00526		STO	SFV1	BE PUT		F5G13760
02036	-0	53400	2	00440		LXD	S3V4,2	INTO		F5G13770
02037	1	00001	2	02040		TXI	SF5,2,1	ACTIVE		F5G13780
02040	-0	63400	2	00526	SF5	SXD	SFV1,2	INDICATOR		F5G13790
02041	0	02000	4	00002		TRA	2,4			F5G13800
								PERMUTE THE PHI AND LX BITS SUBROUTINE		F5G13810
								THE SG SUBROUTINE PERMUTES AS INDICATED BY EN4,5,6 ON A REG		F5G13820
								ENTRY.		F5G13830
02042	-0	63400	4	00530	SG	SXD	SGV1,4	SAVE RETURN		F5G13840
02043	0	56000	0	00315		LDQ	ONEA	SET NEN LX AND PHI BITS TO ONEA		F5G13850
02044	-0	60000	0	00531		STQ	SGV2			F5G13860
02045	0	50000	0	00444		CLA	S3V5	GET INDEX OF REGION WORD		F5G13870
02046	0	07400	4	00070		TSX	SE,4			F5G13880
02047	0	50000	1	12540		CLA	BBB+5,1			F5G13890
02050	-0	73400	2	00000		PDX	0,2			F5G13900
02051	0	53400	4	00342		LXA	S5K5,4	SET COUNT TO 3		F5G13910
02052	0	50000	4	00470	SG1	CLA	EN4+3,4	FIND INDEX OF IR		F5G13920
02053	-0	73400	1	00000		PDX	0,1			F5G13930
02054	-0	50000	2	05263		CAL	REG,2	PERMUTE THE LX BIT		F5G13940
02055	0	76700	4	00003		ALS	3,4			F5G13950
02056	-0	32000	0	00340		ANA	S5K3			F5G13960
02057	0	77100	1	00003		ARS	3,1			F5G13970
02060	-0	60200	0	00531		ORS	SGV2			F5G13980
02061	-0	50000	2	05263		CAL	REG,2	PERMUTE THE PHI BIT		F5G13990
02062	0	77100	4	00003		ARS	3,4			F5G14000
02063	-0	32000	0	00405		ANA	XK23			F5G14010
02064	0	76700	1	00003		ALS	3,1			F5G14020
02065	-0	60200	0	00531		ORS	SGV2			F5G14030
02066	2	00001	4	02052		TIX	SG1,4,1	COUNT TO 3		F5G14040
02067	-0	50000	2	05263		CAL	REG,2			F5G14050

02070	-0	32000	0	00303	ANA	SEK4		F5G14060
02071	-0	50100	0	00531	ORA	SGV2		F5G14070
02072	0	60200	2	05263	SLW	REG,2		F5G14080
02073	-0	53400	4	00530	LXD	SGV1,4	RETURN	F5G14090
02074	0	02000	4	00001	TRA	1,4		F5G14100
							THE F1 SUBROUTINE FINDS THE HIGHEST FREQUENCY PRED ENTRY FOR	F5G14110
							A GIVEN BB AND STORES 1T IN FV 101.	F5G14120
02075	-0	63400	4	00537	F1	SXD	FV6,4 STORE RETURN	F5G14130
02076	0	56000	0	00314	LDQ	ZERO	SET HIGHEST	F5G14140
02077	-0	60000	0	00544	STQ	FV101	FREQ. TO 0.	F5G14150
02100	0	60100	0	00545	STO	FV102	STORE BB NO+	F5G14160
02101	0	07400	4	00067	TSX	SE1,4	GET INDEX OF BB	F5G14170
02102	0	50000	1	12540	CLA	BBB+5,1	STORE REGION	F5G14180
02103	0	60100	0	00547	STO	FV104	NO. WORD.	F5G14190
02104	-0	50000	1	12533	CAL	BBB,1	GET PRED.	F5G14200
02105	0	62100	0	00540	STA	FV7	NO. AND STORE IT	F5G14210
02106	-0	50000	0	00545	CAL	FV102	GET AND STORE	F5G14220
02107	0	40000	0	00315	ADD	ONEA	FIRST PRED. IN	F5G14230
02110	0	07400	4	00067	TSX	SE1,4	NEXT B.B.	F5G14240
02111	0	50000	1	12533	CLA	BBB,1		F5G14250
02112	0	62100	0	00541	STA	FV8		F5G14260
02113	0	50000	0	00540	CLA	FV7	IS THIS PRED.	F5G14270
02114	0	34000	0	00541	F4	CAS	FV8 IN SAME BB	F5G14280
02115	0	02000	0	02117	TRA	F2		F5G14290
02116	0	02000	0	02134	TRA	F5	NO	F5G14300
02117	0	07400	4	00055	F2	TSX	SE5,4 GET INDEX OF PRED	F5G14310
02120	0	50000	1	15674	CLA	PRED,1		F5G14320
02121	0	34000	0	00544	CAS	FV101	IS THIS FREQ. GREATER	F5G14330
02122	0	02000	0	02125	TRA	F92		F5G14340
02123	0	76100	0	00000	NOP			F5G14350
02124	0	02000	0	02130	TRA	F3	NO	F5G14360
02125	0	60100	0	00544	F92	STO	FV101 STORE NEW MAX.	F5G14370
02126	0	50000	0	00540	CLA	FV7	STORE NEW	F5G14380
02127	0	60100	0	00546	STO	FV103	PRED. NO.	F5G14390
02130	0	50000	0	00540	F3	CLA	FV7 ARRANGE TO	F5G14400
02131	0	40000	0	00315	ADD	ONEA	CONSIDER NEXT PRED.	F5G14410
02132	0	62100	0	00540	STA	FV7		F5G14420
02133	0	02000	0	02114	TRA	F4		F5G14430
02134	-0	53400	4	00537	F5	LXD	FV6,4	F5G14440
02135	0	02000	4	00001	TRA	1,4	RETURN	F5G14450
							THE F30 SUBROUTINE FINDS THE HIGHEST FREQUENCY SUCC ENTRY FOR	F5G14460
							A GIVEN BB AND STORES IT IN FV 101.	F5G14470
02136	-0	63400	4	00537	F30	SXD	FV6,4	F5G14480
02137	0	56000	0	00314	LDQ	ZERO	SET HIGHEST FREQH	F5G14490
02140	-0	60000	0	00544	STQ	FV101	TO 0.	F5G14500
02141	0	60100	0	00545	STO	FV102	STORE BB NO.	F5G14510
02142	0	07400	4	00070	TSX	SE,4		F5G14520
02143	0	50000	1	12540	CLA	BBB+5,1		F5G14530
02144	0	60100	0	00547	STO	FV104		F5G14540
02145	-0	50000	1	12533	CAL	BBB,1	GET SUCC. NO.	F5G14550
02146	0	62200	0	00542	STD	FV9	AND STORE IT	F5G14560
02147	-0	50000	0	00545	CAL	FV102	GET AND STORE	F5G14570
02150	0	40000	0	00316	ADD	ONED	SUCC.	F5G14580
02151	0	07400	4	00070	TSX	SE,4	NO.	F5G14590

02152	0	50000	1	12533	CLA	BBB,1 OF 1ST SUCC.	F5G14600
02153	0	62200	0	00543	STD	FV10 IN NEXT BB	F5G14610
02154	0	50000	0	00542	CLA	FV9	F5G14620
02155	0	34000	0	00543	F31	CAS FV10 IS SUCC IN SAME BB	F5G14630
02156	0	02000	0	02160	TRA	F32	F5G14640
02157	0	02000	0	02175	TRA	F34 NO.	F5G14650
02160	0	07400	4	00044	F32	TSX SE6,4 GET INDEX OF SUCC.	F5G14660
02161	0	50000	1	16734	CLA	SUCC,1	F5G14670
02162	0	34000	0	00544	CAS	FV101 IS THIS FREQ. GREATER	F5G14680
02163	0	02000	0	02166	TRA	F93	F5G14690
02164	0	76100	0	00000	NOP		F5G14700
02165	0	02000	0	02171	TRA	F33 NO	F5G14710
02166	0	60100	0	00544	F93	STO FV101 STORE NEW MAX.	F5G14720
02167	0	50000	0	00542	CLA	FV9 STORE NEW	F5G14730
02170	0	60100	0	00546	STO	FV103 SUCC. NO.	F5G14740
02171	0	50000	0	00542	F33	CLA FV9 ARRANGE TO CONSIDER	F5G14750
02172	0	40000	0	00316	ADD	ONED NEXT SUCC.	F5G14760
02173	0	62200	0	00542	STD	FV9	F5G14770
02174	0	02000	0	02155	TRA	F31	F5G14780
02175	-0	53400	4	00537	F34	LXD FV6,4	F5G14790
02176	0	02000	4	00001	TRA	1,4 RETURN	F5G14800
02177	0	50000	0	00314	F	CLA ZERO SET INDICATOR TO SAY	F5G14810
02200	0	60100	0	00550	STO	LPIND THIS ISNT A LOOP.	F5G14820
02201	0	60100	0	00532	STO	FV1 SET HIGHEST FREQ. TO 0.	F5G14630
02202	0	60100	0	00536	STO	FV5 SET TO CONSIDER 0TH BB	F5G14840
02203	0	50000	0	00536	F7	CLA FV5	F5G14850
02204	0	07400	4	02075	TSX	F1,4 FIND MOST FREQ. UNCONSIDERED TRANSFER	F5G14860
02205	0	50000	0	00544	CLA	FV101 IS IT GREATER THAN	F5G14870
02206	0	34000	0	00532	CAS	FV1 PREVIOUS MAXIMUM	F5G14880
02207	0	02000	0	02212	TRA	F85	F5G14890
02210	0	76100	0	00000	NOP		F5G14900
02211	0	02000	0	02221	TRA	F6 NO+	F5G14910
02212	0	60100	0	00532	F85	STO FV1 REPLACE PREV. MAX.	F5G14920
02213	0	50000	0	00545	CLA	FV102 AND BB NO.	F5G14930
02214	0	60100	0	00533	STO	FV2	F5G14940
02215	0	50000	0	00546	CLA	FV103 AND PRED. NO.	F5G14950
02216	0	60100	0	00534	STO	FV3	F5G14960
02217	0	50000	0	00547	CLA	FV104 AND REGION NO. WORD.	F5G14970
02220	0	60100	0	00535	STO	FV4	F5G14980
02221	0	50000	0	00536	F6	CLA FV5 ARRANGE TO CONSIDER NEXT	F5G14990
02222	0	40000	0	00315	ADD	ONEA B.B.	F5G15000
02223	0	60100	0	00536	STO	FV5	F5G15010
02224	0	40200	0	17774	SUB	KEYS	F5G15020
02225	0	40000	0	00315	ADD	ONEA	F5G15030
02226	-0	10000	0	02203	TNZ	F7 WAS THIS THE LAST BB	F5G15040
02227	0	76000	0	00012	F86	DCT YES, IF ANY DIVIDE CHECKS GO	F5G15050
02230	0	07400	4	00004	TSX	4,4 TO DIAGNOSTIC.	F5G15060
02231	0	50000	0	00532	CLA	FV1 NO DVD CHECKS, WERE THERE ANY	F5G15070
02232	-0	10000	0	02234	TNZ	F86A UNCONSIDERED PREDs	F5G15080
02233	0	02000	0	00030	TRA	R NO,CONTINUE PROGRAM, PART I DONE.	F5G15090
02234	0	50000	0	00535	F86A	CLA FV4 YES	F5G15100
02235	0	10000	0	02245	TZE	F9 IS THIS A REGION ALREADY	F5G15110
02236	-0	73400	1	00000	PDX	0,1 YES.	F5G15120
02237	0	50000	1	05263	CLA	REG,1 GET REGION WORD.	F5G15130

02240	-0	32000	0	00360	ANA FK3	F5G15140
02241	0	10000	0	02244	TZE F8 IS IT AN OPAQUE REGION	F5G15150
02242	0	50000	0	00356	CLA FK1 NO,GET TRANSPARENT REGION MARKER.	F5G15160
02243	0	02000	0	02245	TRA F9	F5G15170
02244	0	50000	0	00357	CLA FK2 GET OPAQUE REGION MARKER.	F5G15180
02245	0	60100	0	05033	F8 STO LPLST+S3P1-2	F5G15190
02246	0	50000	0	00533	F9 CLA FV2 STORE THE REGION MARKER	F5G15200
02247	0	76700	0	00022	ALS 18 AT END OF LPLST.	F5G15210
02250	0	62200	0	05033	STD LPLST+S3P1-2	F5G15220
02251	0	50000	0	00350	CLA S9K3 INITIALIZE THE STORING	F5G15230
02252	0	62200	0	02270	STD F11 POSITION IN LPLST.	F5G15240
02253	0	50000	0	00532	F23 CLA FV1 GET INDEX	F5G15250
02254	0	07400	4	00067	TSX SE1,4 OF BB UP FOR ENTRY.	F5G15260
02255	0	50000	1	12540	CLA BBB+5,1 IS THIS BB IN	F5G15270
02256	0	10000	0	02611	TZE F57 A REGION	F5G15280
02257	-0	73400	2	00000	PDX 0,2 YES	F5G15290
02260	0	50000	2	05263	CLA REG,2 GET AND STORE	F5G15300
02261	0	60100	0	00535	STO FV4 REGION WORD	F5G15310
02262	-0	32000	0	00360	ANA FK3	F5G15320
02263	0	10000	0	02603	TZE F55 IS IT AN OPAQUE REGION	F5G15330
02264	0	53400	1	00341	LXA S5K4,1 NO, TRANSPARENT	F5G15340
02265	0	50000	1	05035	F12 CLA LPLST+S3P1,1	F5G15350
02266	1	00001	1	02267	TXI F25,1,1 STORE INDEX OF LPLST QUANTITY BEING COMPARED.	F5G15360
02267	-0	63400	1	02412	F25 SXD F18,1	F5G15370
02270	3	00000	1	02321	F11 TXH F19,1,K ARE WE THRU WITH COMPARISONS	F5G15380
02271	0	34000	0	00324	CAS S3K2 NO,IS THIS BB ENTRY	F5G15390
02272	0	76100	0	00000	NOP	F5G15400
02273	0	02000	0	02275	TRA F87	F5G15410
02274	0	02000	0	02265	TRA F12 YES.	F5G15420
02275	0	07400	4	00070	F87 TSX SE,4 GET INDEX OF BB	F5G15430
02276	0	50000	1	12540	CLA BBB+5,1 GET	F5G15440
02277	-0	73400	1	00000	PDX 0,1 REGION	F5G15450
02300	0	50000	1	05263	CLA REG,1 WORD.	F5G15460
02301	-0	53400	1	02412	LXD F18,1	F5G15470
02302	0	34000	0	00535	CAS FV4 IS THIS THE SAME REGION	F5G15480
02303	0	02000	0	02265	TRA F12 NO	F5G15490
02304	0	02000	0	02306	TRA F100	F5G15500
02305	0	02000	0	02265	TRA F12 NO	F5G15510
02306	0	50000	0	00532	F100 CLA FV1 PUT EXIT BB NO.	F5G15520
02307	0	62100	1	05036	STA LPLST+S3P1+1,1 IN TR. REG. QUANTITY	F5G15530
02310	2	00001	1	02311	F13 TIX F24,1,1 GENERATE INDEX OF LAST THING TO BE MOVED UP.	F5G15540
02311	-0	53400	2	02270	F24 LXD F11,2 GET INDEX TO GENERATE INDEX OF 1ST THING	F5G15550
02312	-0	63400	1	02412	F43 SXD F18,1 STORE INDEX OF LAST THING	F5G15560
02313	0	56000	0	00323	LDQ S3K1 RECORD	F5G15570
02314	-0	60000	0	00550	STQ LPIND LOOP.	F5G15580
02315	2	00001	2	02316	TIX F14,2,1 GENERATE INDEX OF 1ST THING	F5G15590
02316	0	07400	4	02407	F14 TSX F15,4 GO TO MOVE LPLST QUANTITIES UP+	F5G15600
02317	0	07400	4	02651	TSX F80,4	F5G15610
02320	0	02000	0	02717	TRA L TO 1ST LXING PASS.	F5G15620
02321	0	50000	0	00356	F19 CLA FK1	F5G15630
02322	-0	53400	1	02270	LXD F11,1 STORE TRANSPARENT	F5G15640
02323	0	60100	1	05035	STO LPLST+S3P1,1 REGION MARKER	F5G15650
02324	0	50000	0	00532	CLA FV1	F5G15660
02325	0	62100	1	05035	STA LPLST+S3P1,1	F5G15670

02326	0	07400	4	00067		TSX SE1,4 FIND BB INDEX.	F5G15680
02327	0	50000	0	00314		CLA ZERO SET INITIAL MAX	F5G15690
02330	0	60100	0	00532		STO FV1 FREQ. TO 0+	F5G15700
02331	0	50000	1	12540		CLA BBB+5,1 GET THE	F5G15710
02332	-0	73400	1	00000		PDX 0,1 REGION	F5G15720
02333	0	50000	1	05263		CLA REG,1 WORD	F5G15730
02334	0	77100	0	00022		ARS 18	F5G15740
02335	0	07400	4	02075	F21	TSX F1,4 DETERMINE MOST FREQ. PRED IN BB.	F5G15750
02336	0	50000	0	00544		CLA FV101 IS IT MORE FREQ. THAN	F5G15760
02337	0	34000	0	00532		CAS FV1 PREV. MAX.	F5G15770
02340	0	02000	0	02343		TRA F88	F5G15780
02341	0	76100	0	00000		NOP	F5G15790
02342	0	02000	0	02352		TRA F20 NO.	F5G15800
02343	0	60100	0	00532	F88	STO FV1 REPLACE PREV. MAX.	F5G15810
02344	0	50000	0	00545		CLA FV102 AND BB NO.	F5G15820
02345	0	60100	0	00533		STO FV2 AND	F5G15830
02346	0	50000	0	00546		CLA FV103 PRED. NO.	F5G15840
02347	0	60100	0	00534		STO FV3 AND	F5G15850
02350	0	50000	0	00547		CLA FV104 REGION NO. WORD.	F5G15860
02351	0	60100	0	00535		STO FV4	F5G15870
02352	0	50000	0	00547	F20	CLA FV104 ARRANGE TO CONSIDER THE	F5G15880
02353	-0	32000	0	00353		ANA SBK2 NEXT B.B. IN REGION.	F5G15890
02354	0	34000	0	00353		CAS SBK2 ARE WE THRU WITH REGION	F5G15900
02355	0	02000	0	02335		TRA F21	F5G15910
02356	0	02000	0	02360		TRA F22 YES	F5G15920
02357	0	02000	0	02335		TRA F21	F5G15930
02360	0	50000	0	00532	F22	CLA FV1 WAS THERE AN UNCONSIDERED	F5G15940
02361	0	10000	0	02372		TZE F28 PRED	F5G15950
02362	0	50000	0	00533		CLA FV2 YES,STORE THE	F5G15960
02363	-0	53400	1	02270		LXD F11,1 ENTRY B.B.	F5G15970
02364	0	76700	0	00022		ALS 18 NO.	F5G15980
02365	0	62200	1	05035		STD LPLST+S3P1,1	F5G15990
02366	1	00001	1	02367		TXI F70,1,1 UP THE STORING INDEX	F5G16000
02367	-0	63400	1	02270	F70	SXD F11,1	F5G16010
02370	3	00074	1	02404		TXH F73,1,S3P1 IS LPLST FULL	F5G16020
02371	0	02000	0	02253		TRA F23	F5G16030
02372	-0	53400	2	02270	F28	LXD F11,2	F5G16040
02373	0	53400	1	00341	F56	LXA S5K4,1	F5G16050
02374	-0	63400	1	02412		SXD F18,1	F5G16060
02375	0	07400	4	02407		TSX F15,4 NONE LPLST UP.	F5G16070
02376	0	50000	0	04740		CLA LPLST-1	F5G16080
02377	0	34000	0	00361		CAS FK4 IS THIS AN OPAQUE REGION	F5G16090
02400	0	76100	0	00000		NOP	F5G16100
02401	0	02000	0	02706		TRA F75 TO 2ED LXING PASS.	F5G16110
02402	3	00002	1	02421	POO2	TXH F29,1,2	F5G16120
02403	0	02000	0	02706		TRA F75	F5G16130
02404	0	50000	0	00303	F73	CLA SEK4 STORE SPECIAL	F5G16140
02405	0	62200	0	04741		STD LPLST SYMBOL IN DECR. PART OF 1STSLPLST	F5G16150
02406	0	02000	0	02536		TRA F53 QUANTITY	F5G16160
02407	-0	53400	1	00325	F15	LXD S3K3,1 SET INDEX TO START OF LOOP LIST.	F5G16170
02410	0	50000	2	05035	F26	CLA LPLST+S3P1,2 MOVE THIS	F5G16180
02411	0	60100	1	05035		STO LPLST+S3P1,1 ENTRY UP.	F5G16190
02412	-3	00000	2	02415	F18	TXL F17,2,- IN DECR., THE INDEX OF LAST TO BE MOVED.	F5G16200
02413	2	00001	1	02414		TIX F16,1,1 NO.	F5G16210

02414	2	00001	2	02410	F16	TIX F26,2,1 ARE WE FINISHED COPYING	F5G16220
02415	0	60100	0	04740	F17	STO LPLST-1 CASE OF LOOP,STORE PRED. OF 1ST ELEMENT.	F5G16230
02416	0	50000	0	00323		CLA S3K1 STORE THE END	F5G16240
02417	0	60100	1	05036		STO LPLST+S3P1+1,1 LOOP LIST QUANTITY.	F5G16250
02420	0	02000	4	00001		TRA 1,4	F5G16260
02421	-0	63400	1	02527	F29	SXD F39,1 INITIALIZE STORING LOCATION.	F5G16270
02422	0	34000	0	00324	F64	CAS S3K2 ISNT OPAQUE REGIONH IS IT BE	F5G16280
02423	0	76100	0	00000		NOP NO.	F5G16290
02424	0	02000	0	02426		TRA F89	F5G16300
02425	0	02000	0	02543		TRA F44 YES.	F5G16310
02426	0	56000	0	00314	F89	LDQ ZERO NO, SET INITIAL	F5G16320
02427	-0	60000	0	00532		STQ FV1 FREQ+ TO 0.	F5G16330
02430	0	07400	4	00070		TSX SE,4 GET	F5G16340
02431	0	50000	1	12540		CLA BBB+5,1 REGION	F5G16350
02432	-0	73400	1	00000		PDX 0,1 NO.	F5G16360
02433	0	50000	1	05263		CLA REG,1 GET NO. OF 1ST BB IN REGION	F5G16370
02434	0	07400	4	02136	F35	TSX F30,4 DETERMINE MOST FREQ SUCC IN BB	F5G16380
02435	0	50000	0	00544		CLA FV101 IS IT MORE FREQ. THAN	F5G16390
02436	0	34000	0	00532		CAS FV1 PREV+ MAX	F5G16400
02437	0	02000	0	02442		TRA F90	F5G16410
02440	0	76100	0	00000		NOP YES,	F5G16420
02441	0	02000	0	02451		TRA F36 NO	F5G16430
02442	0	60100	0	00532	F90	STO FV1 YES, REPLACE PREV.MAX.	F5G16440
02443	0	50000	0	00545		CLA FV102 AND BB NO.	F5G16450
02444	0	60100	0	00533		STO FV2 AND	F5G16460
02445	0	50000	0	00546		CLA FV103 SUCC. NO+	F5G16470
02446	0	60100	0	00534		STO FV3 AND	F5G16480
02447	0	50000	0	00547		CLA FV104 REGION NO. WORD	F5G16490
02450	0	60100	0	00535		STO FV4	F5G16500
02451	0	50000	0	00547	F36	CLA FV104 ARRANGE TO CONSIDER THE	F5G16510
02452	-0	32000	0	00353		ANA SBK2 NEXT BB IN REGION	F5G16520
02453	0	34000	0	00353		CAS SBK2 IS IT LAST BB IN REGION	F5G16530
02454	0	02000	0	02456		TRA F94	F5G16540
02455	0	02000	0	02460		TRA F37 YES	F5G16550
02456	0	76700	0	00022	F94	ALS 18	F5G16560
02457	0	02000	0	02434		TRA F35	F5G16570
02460	0	50000	0	00532	F37	CLA FV1 WAS THERE AN UNCONSIDERED	F5G16580
02461	-0	53400	1	02527		LXD F39,1 SUCC	F5G16590
02462	0	10000	0	02550		TZE F47	F5G16600
02463	0	50000	0	00533		CLA FV2 EXIT BB	F5G16610
02464	0	77100	0	00022		ARS 18 NO.	F5G16620
02465	0	62100	1	05035		STA LPLST+S3P1,1	F5G16630
02466	2	00001	1	02467	F45	TIX F62,1,1 DOWN THE STORING	F5G16640
02467	-0	63400	1	02527	F62	SXD F39,1 INDEX.	F5G16650
02470	0	50000	0	00532		CLA FV1 GET INDEX OF	F5G16660
02471	0	07400	4	00067		TSX SE1,4 BB UP FOR ENTRY.	F5G16670
02472	0	50000	1	12540		CLA BBB+5,1 IS THIS BB IN	F5G16680
02473	0	10000	0	02553		TZE F48 A REGION	F5G16690
02474	-0	73400	2	00000		PDX 0,2 YES.	F5G16700
02475	0	50000	2	05263		CLA REG,2 GET AND	F5G16710
02476	0	60100	0	00535		STO FV4 STORE REGION WORD.	F5G16720
02477	-0	32000	0	00360		ANA FK3 IS IT IN AN	F5G16730
02500	0	10000	0	02574		TZE F54 OPAGUE REGION	F5G16740
02501	-0	53400	1	02527		LXD F39,1 NO.	F5G16750

02502	0	50000	0	00356	CLA FK1 STORE TRANSPARENT REGION	F5G16760
02503	0	60100	1	05035	STO LPLST+S3P1,1 MARKER	F5G16770
02504	0	50000	0	00532	CLA FV1 WITH	F5G16780
02505	0	76700	0	00022	ALS 18 ENTRY	F5G16790
02506	0	62200	1	05035	STD LPLST+S3P1,1 BB NO. IN DECR.	F5G16800
02507	-0	53400	2	00325	LXD S3K3,2 SET INDEX TO 1ST ELEMENT IN LPLST.	F5G16810
02510	0	50000	2	05035	F38 CLA LPLST+S3P1,2	F5G16820
02511	0	34000	0	00324	CAS S3K2 IS THIS A BB ENTRY	F5G16830
02512	0	76100	0	00000	NOP	F5G16840
02513	0	02000	0	02515	TRA F91	F5G16850
02514	0	02000	0	02526	TRA F40 YES	F5G16860
02515	-0	63400	2	02412	F91 SXD F18,2 STOREINDEX OF QUANTITYBEING C.F. ED	F5G16870
02516	0	07400	4	00067	TSX SE1,4	F5G16860
02517	0	50000	1	12540	CLA BBB+5,1 GET	F5G16890
02520	-0	73400	2	00000	PDX 0,2 REGION WORD.	F5G16900
02521	0	50000	2	05263	CLA REG,2	F5G16910
02522	-0	53400	2	02412	LXD F18,2 GET INDEX OF QUANTITY BEING COMPARED.	F5G16920
02523	0	34000	0	00535	CAS FV4 IS THIS NAME REGION	F5G16930
02524	0	02000	0	02526	TRA F40	F5G16940
02525	0	02000	0	02531	TRA F41 YES	F5G16950
02526	2	00001	2	02527	F40 TIX F39,2,1	F5G16960
02527	-3	00000	2	02535	F39 TXL F42,2,- IS THIS INDEX OF QUANTITY BEING COMPARED	F5G16970
02530	0	02000	0	02510	TRA F38 NO	F5G16980
02531	0	50000	2	05035	F41 CLA LPLST+S3P1,2 PUT EXIT BB NO.	F5G16990
02532	-0	53400	1	02527	LXD F39,1 FROM PREVIOUS QUANTITY	F5G17000
02533	0	62100	1	05035	STA LPLST+S3P1,1 IN THIS LATEST ONE.	F5G17010
02534	0	02000	0	02312	TRA F43	F5G17020
02535	3	00002	2	02541	F42 TXH F63,2,2 IS LPLST FULL	F5G17030
02536	0	50000	0	00323	F53 CLA S3K1 STORE END	F5G17040
02537	0	60100	0	05034	STO LPLST+S3P1-1 LOOP LIST SENTINEL.	F5G17050
02540	0	02000	0	02706	TRA F75 GO TO DEAL WITH STRING.	F5G17060
02541	0	50000	2	05035	F63 CLA LPLST+S3P1,2	F5G17070
02542	0	02000	0	02422	TRA F64	F5G17080
02543	0	07400	4	02136	F44 TSX F30,4 DETERMINE MOST FREQ. SUCC. IN BB.	F5G17090
02544	0	50000	0	00544	CLA FV101 STORE THE	F5G17100
02545	0	60100	0	00532	STO FV1 MOST FREQ. SUCC. AWAY.	F5G17110
02546	-0	53400	1	02527	LXD F39,1	F5G17120
02547	-0	10000	0	02466	TNZ F45 WAS THERE AN UNCONSIDERED SUCC.	F5G17130
02550	0	50000	0	00323	F47 CLA S3K1 NO,RECORD AN	F5G17140
02551	0	60100	1	05036	STO LPLST+S3P1+1,1 END LOOP LIST SENTINEL.	F5G17150
02552	0	02000	0	02706	TRA F75	F5G17160
02553	-0	53400	1	02527	F48 LXD F39,1 ENTER BB	F5G17170
02554	0	50000	0	00532	CLA FV1 NO. AND MARKER	F5G17100
02555	-0	32000	0	00353	ANA SBK2 IN	F5G17190
02556	0	76700	0	00022	ALS 18 LPLST	F5G17200
02557	0	60100	0	00535	STO FV4	F5G17210
02560	0	60100	1	05035	STO LPLST+S3P1,1	F5G17220
02561	-0	63400	1	02570	SXD F50,1	F5G17230
02562	-0	53400	2	00325	LXD S3K3,2 S + TO	F5G17240
02563	0	50000	2	05035	F51 CLA LPLST+S3P1,2	F5G17250
02564	0	34000	0	00535	CAS FV4 IS THIS SAME BB AS NEW ENTRY	F5G17260
02565	0	02000	0	02567	TRA F49	F5G17270
02566	0	02000	0	02312	TRA F43 YES	F5G17280
02567	2	00001	2	02570	F49 TIX F50,2,1 DECREASE COMPARISON INDEX.	F5G17290

02570	-3	00000	2	02572	F50	TXL F52,2,- IS THIS INDEX OF NEW QUANTITY	F5G17300
02571	0	02000	0	02563		TRA F51 NO.	F5G17310
02572	3	00002	2	02541	F52	TXH F63,2,2 IS LPLST FULL	F5G17320
02573	0	02000	0	02536		TRA F53 YES.	F5G17330
02574	-0	53400	1	02527	F54	LXD F39,1 IS OPAQUE REGION	F5G17340
02575	0	50000	0	00357		CLA FK2 ENTER OPAQUE	F5G17350
02576	0	60100	1	05035		STO LPLST+S3P1,1 REGION MARKER	F5G17360
02577	0	50000	0	00532		CLA FV1 WITH CORRECT	F5G17370
02600	0	76700	0	00022		ALS 18 ENTRY BB	F5G17380
02601	0	62200	1	05035		STD LPLST+S3P1,1 NO.	F5G17390
02602	0	02000	0	02550		TRA F47	F5G17400
02603	-0	53400	2	02270	F55	LXD F11,2 STORE THE	F5G17410
02604	0	50000	0	00357		CLA FK2 OPAQUE	F5G17420
02605	0	60100	2	05035		STO LPLST+S3P1,2 REGION MARKR	F5G17430
02606	0	50000	0	00532		CLA FV1 WITH	F5G17440
02607	0	62100	2	05035		STA LPLST+S3P1,2 EXIT BB	F5G17450
02610	0	02000	0	02373		TRA F56 NO.	F5G17460
02611	0	50000	0	00532	F57	CLA FV1 PUT THE	F5G17470
02612	-0	32000	0	00353		ANA SBK2 B.B. NO.	F5G17480
02613	0	76700	0	00022		ALS 18 IN	F5G17490
02614	0	60100	0	00535		STO FV4 DECR. PART.	F5G17500
02615	0	50000	0	02270		CLA F11 SET THE END	F5G17510
02616	0	62200	0	02623		STD F59 TEST.	F5G17520
02617	0	53400	1	00341		LXA S5K4,1 SET INDEX OF 1ST LPLST TO BE COMPARED	F5G17530
02620	0	50000	1	05035	F61	CLA LPLST+S3P1,1	F5G17540
02621	1	00001	1	02622		TXI F58,1,1	F5G17550
02622	-0	63400	1	02412	F58	SXD F18,1	F5G17560
02623	3	00000	1	02630	F59	TXH F60,1,- WAS THAT THE LAST QUANTITY	F5G17570
02624	0	34000	0	00535		CAS FV4 IS THIS THE SAME BB.	F5G17580
02625	0	02000	0	02620		TRA F61	F5G17590
02626	0	02000	0	02310		TRA F13 YES	F5G17600
02627	0	02000	0	02620		TRA F61	F5G17610
02630	-0	53400	1	02270	F60	LXD F11,1	F5G17620
02631	0	50000	0	00532		CLA FV1 STORE THE	F5G17630
02632	-0	32000	0	00353		ANA SBK2 BB	F5G17640
02633	0	76700	0	00022		ALS 18 MARKER.	F5G17650
02634	0	60100	1	05035		STO LPLST+S3P1,1	F5G17660
02635	0	50000	0	00532		CLA FV1	F5G17670
02636	0	07400	4	02075		TSX F1,4 FIND MOST FREQ. PRED. OF BB.	F5G17680
02637	0	50000	0	00544		CLA FV101 DOES B.B. HAVE	F5G17690
02640	0	60100	0	00532		STO FV1 UNCONSIDERED PRED.	F5G17700
02641	-0	10000	0	02644		TNZ F71	F5G17710
02642	-0	53400	2	02270		LXD F11,2 NO,GO TO MOVE LPLST UP.	F5G17720
02643	0	02000	0	02373		TRA F56	F5G17730
02644	-0	53400	1	02270	F71	LXD F11,1	F5G17740
02645	1	00001	1	02646		TXI F72,1,1 UP THE STORING INDEX	F5G17750
02646	-0	63400	1	02270	F72	SXD F11,1	F5G17760
02647	3	00074	1	02536		TXH F53,1,S3P1 IS LPLST FULL	F5G17770
02650	0	02000	0	02253		TRA F23 NO.	F5G17780
02651	0	53400	1	00362	F80	LXA FK5,1 FIND	F5G17790
02652	0	50000	1	05263	F81	CLA REG,1 THE 1ST AVAILABLE REGION	F5G17800
02653	0	10000	0	02656		TZE F82 POSITION.	F5G17810
02654	2	00001	1	02652		TIX F81,1,1	F5G17820
02655	0	07400	4	00004		TSX 4,4 DIAGNOSTIC, ERROR	F5G17830

02656	-0	63400	1	00565	F82	SXD	XV1,1	STORE THE INDEX	F5G17840
								OF THE NEW REGION WORD	F5G17850
02657	0	56000	0	00314	F83	LDQ	ZERO	STORE INITIAL	F5G17860
02660	-0	60000	0	00566		STQ	XV2	VALUE OF REGION	F5G17870
02661	0	02000	4	00001		TRA	1,4		F5G17880
02662	0	07400	4	01523	F78	TSX	SA,4	GET EXIT CONDITIONS OF REGION.	F5G17890
02663	0	53400	1	00342		LXA	S5K5,1	PUT EXIT	F5G17900
02664	0	56000	0	00314		LDQ	ZERO		F5G17910
02665	0	50000	1	00506	F76	CLA	EX1+3,1	CONDITONS	F5G17920
02666	0	60100	1	00430		STO	IR1+3,1	INTO	F5G17930
02667	0	50000	1	00511		CLA	ACT1+3,1	I+R.S	F5G17940
02670	-0	60000	1	00561		STQ	AC1+3,1		F5G17950
02671	0	12000	0	02675		TPL	F77	IS THIS EXIT ACTIVE	F5G17960
02672	0	50000	0	00325		CLA	S3K3	YES,FORM AND	F5G17970
02673	-0	76000	0	00003		SSM		STORE ACTIVE	F5G17980
02674	0	60100	1	00561		STO	AC1+3,1	INDICATOR	F5G17990
02675	2	00001	1	02665	F77	TIX	F76,1,1	COUNT TO 3	F5G18000
02676	0	50000	0	00325		CLA	S3K3	INITIALIZE	F5G18010
02677	0	40200	0	00316		SUB	ONED	LOOP LIST	F5G18020
02700	0	60100	0	00440		STO	S3V4	TO ITS	F5G18030
02701	0	60100	0	00444		STO	S3V5		F5G18040
02702	0	50000	0	00340		CLA	S5K3	2ED	F5G18050
02703	0	60100	0	00437		STO	S3V3	ELEMENT	F5G18060
02704	-0	63400	0	00436		SXD	S3V2,0		F5G18070
02705	0	02000	0	03072		TRA	X32		F5G18080
02706	0	07400	4	02651	F75	TSX	F80,4	DETERMINE NEW REGION INDEX	F5G18090
02707	0	50000	0	04741		CLA	LPLST	IS 1ST	F5G18100
02710	0	56000	0	00324		LDQ	S3K2	ELEMENT OF LPLST A TRANSPARENT	F5G18110
02711	0	04000	0	02662		TLQ	F78	ON OPAQUE REGION	F5G18120
02712	0	53400	1	00342		LXA	S5K5,1	NO,INITIALIZE	F5G18130
02713	0	50000	0	00336		CLA	S5K1	THE	F5G18140
02714	0	60100	1	00430	F79	STO	IR1+3,1	I.R.S	F5G18150
02715	2	00001	1	02714		TIX	F79,1,1	TO EMPTINESS	F5G18160
02716	0	02000	0	03061		TRA	X		F5G18170
								FIRST LXING PASS.	F5G18180
02717	-0	63400	0	02763	L	SXD	ROT3,0		F5G18190
02720	-0	63400	0	02756		SXD	ROT1,0		F5G18200
02721	0	53400	1	00342	INIZ	LXA	S5K5,1	INITIALIZE	F5G18210
02722	0	50000	0	00336		CLA	S5K1	THE	F5G18220
02723	0	60100	1	00430	L23	STO	IR1+3,1	INDEX REGISTERS	F5G18230
02724	2	00001	1	02723		TIX	L23,1,1	TO EMPTINESS.	F5G18240
02725	0	56000	0	00325		LDQ	S3K3		F5G18250
02726	-0	60000	0	00440		STQ	S3V4	INITIALIZE THE	F5G18260
02727	0	56000	0	00340		LDQ	S5K3	LOOP LIST.	F5G18270
02730	-0	60000	0	00437		STQ	S3V3	MAKE SURE THAT THE	F5G18280
02731	-0	63400	0	00436		SXD	S3V2,0		F5G18290
02732	0	07400	4	01023	1L4	TSX	S3,4	GET NEXT TAG.	F5G18300
02733	0	02000	0	03013		TRA	L6	*RETURN HERE IF TAG WASNT GOTTEN.	F5G18310
02734	0	53400	1	00342		LXA	S5K5,1	SET COUNT TO 3,N=1	F5G18320
02735	0	50000	0	00441		CLA	1TAG	IS CL (TAG) EQUAL	F5G18330
02736	0	34000	1	00430	L2	CAS	IR1+3,1	TO C (IRN)	F5G18340
02737	0	02000	0	02741		TRA	L1	NO.	F5G18350
02740	0	02000	0	03000		TRA	1L3	YES	F5G18360
02741	2	00001	1	02736	L1	TIX	L2,1,1	NO. COUNT TO 3,N=N+1	F5G18370

02742	0	50000	0	00442	CLA TPE IS THIS	F5G18380
02743	0	34000	0	00376	CAS XK15 AN LXP INSTR.	F5G18390
02744	0	02000	0	02746	TRA L18 NO,	F5G18400
02745	0	02000	0	02752	TRA ROT0 YES	F5G18410
02746	0	34000	0	00403	L18 CAS XK21 NO,IS IT A DED INSTR.	F5G18420
02747	0	02000	0	02773	TRA L17 NO	F5G18430
02750	0	02000	0	02752	TRA ROT0 YES	F5G18440
02751	0	02000	0	02773	TRA L17	F5G18450
02752	-0	53400	2	00440	ROT0 LXD S3V4,2	F5G18460
02753	-3	00072	2	02732	TXL 1L4,2,S3P1-2	F5G18470
02754	-0	53400	2	02763	LXD ROT3,2	F5G18480
02755	1	77777	2	02756	TXI ROT1,2,-1	F5G18490
02756	-3	00000	2	02732	ROT1 TXL 1L4,2,-	F5G18500
02757	-0	63400	2	02763	SXD ROT3,2	F5G18510
02760	-0	53400	2	00314	LXD ZERO,2	F5G18520
02761	0	50000	2	04741	ROT2 CLA LPLST,2	F5G18530
02762	0	34000	0	00323	CAS S3K1	F5G18540
02763	-3	00000	0	02765	ROT3 TXL ROT4,0,-	F5G18550
02764	-3	00000	0	02767	TXL ROT5,0,-	F5G18560
02765	0	60100	2	04740	ROT4 STO LPLST-1,2	F5G18570
02766	1	77777	2	02761	TXI ROT2,2,-1	F5G18580
02767	-0	63400	2	02756	ROT5 SXD ROT1,2	F5G18590
02770	0	50000	0	04740	CLA LPLST-1	F5G18600
02771	0	60100	2	04740	STO LPLST-1,2	F5G18610
02772	0	02000	0	02721	TRA INIZ	F5G18620
02773	0	07400	4	00622	L17 TSX S1,4 SELECT MOST REPLACEABLE I.R.	F5G18630
02774	-0	53400	4	00430	LXD IRR,4 PLACE TAU-TAG	F5G18640
02775	0	50000	0	00441	CLA 1TAG IN APPROPRIATE	F5G18650
02776	0	60100	4	00430	STO IR1+3,4 I.R.	F5G18660
02777	0	02000	0	02732	TRA 1L4	F5G18670
03000	0	50000	0	00442	L13 CLA TPE IS THIS AN LXP	F5G18680
03001	0	34000	0	00376	CAS XK15	F5G18690
03002	0	02000	0	03004	TRA 1L19	F5G18700
03003	0	02000	0	03010	TRA L5 YES	F5G18710
03004	0	34000	0	00403	L119 CAS XK21 IS IT AN DED	F5G18720
03005	0	02000	0	02732	TRA 1L4	F5G18730
03006	0	02000	0	03010	TRA L5 YES.	F5G18740
03007	0	02000	0	02732	TRA 1L4	F5G18750
03010	0	50000	0	00333	L5 CLA LK1 PLACE AN E IHASH	F5G18760
03011	0	60100	1	00430	STO IR1+3,1 SYMBOL) IN	F5G18770
03012	0	02000	0	02732	TRA 1L4 RIGHT IR,	F5G18780
03013	0	60100	0	00554	L6 STO LV4 IS THIS AN END OF LOOP	F5G18790
03014	0	34000	0	00323	CAS S3K1 LIST SENTINEL	F5G18800
03015	0	02000	0	03017	TRA L14 NO,	F5G18810
03016	0	02000	0	03051	TRA L15 YES,	F5G18820
03017	-0	50000	0	00554	L14 CAL LV4 IS	F5G18830
03020	-0	32000	0	00335	ANA LK3 THIS A	F5G18840
03021	0	10000	0	02732	TZE 1L4 BB	F5G18850
03022	0	50000	0	00554	CLA LV4 NO,FORM CORRESPONDENCE	F5G18860
03023	0	07400	4	01245	TSX S5,4 BETWEEN IRS AND ENS	F5G18870
03024	0	50000	0	00554	CLA LV4 GET + STORE EXIT CONDITIONS	F5G18880
03025	0	07400	4	01523	TSX SA,4 AND (USELESSLY+ OCTIVE INDICATORS.	F5G18890
03026	0	53400	1	00342	LXA S5K5,1 SET COUNT TO 3,N=1	F5G18900
03027	0	50000	1	00470	L11 CLA EN4+3,1 PUT CORRESPONDENCE INDEX	F5G18910

03030	-0	73400	2	00000		PDX 0,2 IN 2.	F5G18920
03031	0	50000	1	00506		CLA EX1+3,1 IS THIS EXIT CONDITION	F5G18930
03032	0	34000	0	00336		CAS S5K1 EMPTY	F5G18940
03033	0	02000	0	03035		TRA L13 NO,	F5G18950
03034	0	02000	0	03040		TRA P003	F5G18960
03035	0	60100	2	00430	L13	STO IR1+3,2 NO,REPLACE C (IR) BY EXIT CONDITION.	F5G16970
03036	2	00001	1	03027	L10	TIX L11,1,1 COUNT TO 3,N*M+1	F5G18980
03037	0	02000	0	02732		TRA 1L4	F5G18990
03040	0	50000	2	00430	P003	CLA IR1+3,2	F5G19000
03041	0	56000	0	00333		LDQ LK1	F5G19010
03042	0	04000	0	03036		TLQ L10	F5G19020
03043	0	53400	4	00342		LXA S5K5,4	F5G19030
03044	0	34000	4	00506	P003A	CAS EX1+3,4	F5G19040
03045	0	02000	0	03047		TRA P003B	F5G19050
03046	-0	60000	2	00430		STQ IR1+3,2	F5G19060
03047	2	00001	4	03044	P003B	TIX P003A,4,1	F5G19070
03050	0	02000	0	03036		TRA L10	F5G19080
03051	0	53400	1	00342	L15	LXA S5K5,1 COPY ASIDE THE FINAL	F5G19090
03052	0	50000	1	00430	L16	CLA IR1+3,1 CONTENTS	F5G19100
03053	0	34000	0	00333		CAS LK1 (IF REAL, OTHERWISE	F5G19110
03054	0	76100	0	00000		NOP	F5G19120
03055	0	50000	0	00336		CLA S5K1 SET TO	F5G19130
03056	0	60100	1	00430		STO IR1+3,1 EMPTY)	F5G19140
03057	0	60100	1	00554		STO LV1+3,1 OF THE	F5G19150
03060	2	00001	1	03052		TIX L16,1,1 IRS	F5G19160
						TNE SECOND LXING PASS FOLLOWS.	F5G19170
						PRECEDED BY 1ST LXING PASS	F5G19180
03061	0	56000	0	00325	X	LDQ S3K3 INITIALIZE THE	F5G19190
03062	-0	60000	0	00440		STQ S3V4 LOOP LIST AND	F5G19200
03063	0	56000	0	00340		LDQ S5K3 MAKE SURE TAG	F5G19210
03064	-0	60000	0	00437		STQ S3V3 LOC. GETS SET.	F5G19220
03065	-0	63400	1	00436		SXD S3V2,1	F5G19230
03066	0	50000	0	00314	X21	CLA ZERO SET ACTIVE INDICATORS	F5G19240
03067	0	60100	0	00556		STO AC1 TO	F5G19250
03070	0	60100	0	00557		STO AC2	F5G19260
03071	0	60100	0	00560		STO AC3 NOT ACTIVE.	F5G19270
03072	0	50000	0	00314	X32	CLA ZERO SET LX INDICATORS	F5G19280
03073	0	60100	0	00562		STO LX1 TO	F5G19290
03074	0	60100	0	00563		STO LX2 NOT	F5G19300
03075	0	60100	0	00564		STO LX3 LX ED.	F5G19310
03076	0	60100	0	00521		STO ACIND SET IND. TO SAY THIS IS 2ED LXING PASS	F5G19320
03077	0	07400	4	01023	X3	TSX S3,4 TRY TO GET NEXT TAG.	F5G19330
03100	0	02000	0	03322		TRA X13 COME HERE IF TAG NOT GOT.	F5G19340
03101	0	50000	0	01122		CLA S39 COMPUTE LOCATIONS OF	F5G19350
03102	-0	32000	0	00353		ANA SBK2 THIS TAG=(ADDR. FOLLOWING	F5G19360
03103	0	40000	0	00451		ADD S4V1 TIX BLACK + L (CM)-	F5G19370
03104	0	40200	0	00332		SUB S4K3 CMTAG-INDEX OF TAG	F5G19380
03105	0	76700	0	00022		ALS 18	F5G19390
03106	-0	40000	0	00436		SBM S3V2	F5G19400
03107	0	76500	0	00065		LRS 53 THEN FORM LOC/9	F5G19410
03110	-0	60000	0	00571		STQ XV5 AND REMAINDER	F5G19420
03111	0	22100	0	00371		DVP XK9 STORE INTEG. PART	F5G19430
03112	-0	60000	0	00567		STQ XV3 AND REMAINDER.	F5G19440
03113	0	60100	0	00570		STO XV4	F5G19450

03114	0	53400	1	00342	LXA S5K5,1 SET COUNT TO 3,N=1	F5G19460
03115	0	50000	0	00441	CLA 1TAG	F5G19470
03116	0	34000	1	00430	X2 CAS IR1+3,1 IS CONTENTS OF IRN SAME AS OF TAG	F5G19480
03117	0	02000	0	03121	TRA X1 NO	F5G19490
03120	0	02000	0	03257	TRA X7 YES	F5G19500
03121	2	00001	1	03116	X1 TIX X2,1,1 NO COUNT OT 3,N=N+1	F5G19510
03122	0	50000	0	00442	CLA TPE IS THIS AN	F5G19520
03123	0	34000	0	00376	CAS XK15 LX PRIME	F5G19530
03124	0	02000	0	03126	TRA X103 NO	F5G19540
03125	0	02000	0	03131	TRA X8 YES. COMPILE LXD FOR LXP.	F5G19550
03126	0	34000	0	00403	X103 CAS XK21 IS IT A DED	F5G19560
03127	0	02000	0	03131	TRA X8	F5G19570
03130	0	02000	0	03077	TRA X3 YES	F5G19580
03131	0	07400	4	00622	X8 TSX S1,4 SELECT MOST REPLACEABLE I.R.	F5G19590
03132	-0	53400	1	00430	LXD IRR,1 PLACE TAU-TAG	F5G19600
03133	0	50000	0	00441	CLA 1TAG IN SELECTED	F5G19610
03134	0	60100	1	00430	STO IR1+3,1 I.R.	F5G19620
03135	0	50000	1	00561	CLA AC1+3,1 IS THIS	F5G19630
03136	0	10000	0	03140	TZE X4 IR ACTIVE	F5G19640
03137	0	07400	4	01566	TSX SB,4 YES,RECORD SXD NECESSARY.	F5G19650
03140	0	50000	0	00442	X4 CLA TPE 1S THIS	F5G19660
03141	0	34000	0	00322	CAS S2K2 AN LX	F5G19670
03142	0	02000	0	03144	TRA X5 NO	F5G19680
03143	0	02000	0	03155	TRA X14 YES	F5G19690
03144	-0	50000	0	00443	X5 CAL INTAG IS THIS 1ST INSTR.	F5G19700
03145	-0	32000	0	00363	ANA XK10 IN A BB	F5G19710
03146	-0	10000	0	03204	TNZ X9	F5G19720
03147	0	50000	0	00567	CLA XV3 NO,	F5G19730
03150	0	07400	4	00032	TSX SE4,4 DETERMINE INDEX IN STAG	F5G19740
03151	0	53400	2	00570	LXA XV4,2	F5G19750
03152	-0	50000	0	00372	CAL XK11 GENERATE	F5G19760
03153	0	76700	2	00010	ALS 8,2 LX BIT	F5G19770
03154	-0	60200	1	05263	ORS STAG,1 STORE IN STAG.	F5G19780
03155	0	07400	4	02024	X14 TSX SF,4 CHECK IF AN ACTIVE INSTR.	F5G19790
03156	0	02000	0	03162	TRA X01 COME HERE IF NOT ACTIVE	F5G19800
03157	-0	53400	1	00430	LXD IRR,1 ACTIVE-STQRE ACTIVE	F5G19810
03160	0	50000	0	00526	CLA SFV1 INDICATOR	F5G19820
03161	0	60100	1	00561	STO AC1+3,1	F5G19830
03162	-0	53400	2	00430	X01 LXD IRR,2	F5G19840
03163	0	50000	2	00565	CLA LX1+3,2 WAS AN ENTRANCE REQUIREMENT	F5G19850
03164	-0	10000	0	03167	TNZ X19 BEEN DETERMINED FOR THIS BB.	F5G19860
03165	0	50000	0	00333	CLA LK1 NO,RECORD HASH	F5G19870
03166	0	60100	2	00565	STO LX1+3,2 AS ENTRANCE REQUIREMENT	F5G19880
03167	-0	50000	0	00340	X19 CAL S5K3 RECORD THAT THERE IS AN	F5G19890
03170	0	77100	2	00003	ARS 3,2 LX FOR THIS IR IN	F5G19900
03171	-0	60200	0	00566	ORS XV2 REGION.	F5G19910
03172	0	50000	0	00567	X02 CLA XV3 RECORD THE	F5G19920
03173	0	07400	4	00032	TSX SE4,4 SPECIFIC	F5G19930
03174	-0	50000	0	00570	CAL XV4 TAG	F5G19940
03175	0	76000	0	00006	COM IN	F5G19950
03176	0	73400	2	00000	PAX 0,2 THE	F5G19960
03177	-0	50000	0	00430	CAL IRR STAG	F5G19970
03200	0	77100	2	00000	ARS 0,2 TABLE	F5G19980
03201	0	77100	2	00000	ARS 0,2	F5G19990

03202	-0	60200	1	05263	ORS STAG,1	F5G20000
03203	0	02000	0	03077	TRA X3	F5G20010
03204	-0	53400	1	00440	X9 LXD S3V4,1 GET	F5G20020
03205	-3	00072	1	03212	TXL XI1+1,1,S3P1-2	F5G20030
03206	0	50000	0	00550	CLA LPIND	F5G20040
03207	-0	12000	0	03212	TMI XI1+1	F5G20050
03210	-0	53400	2	00430	LXD IRR,2	F5G20060
03211	0	02000	0	03243	XI1 TRA X16-3	F5G20070
03212	0	50000	1	05033	CLA LPLST+S3P1-2,1 AND	F5G20080
03213	0	34000	0	00324	CAS S3K2 STORE	F5G20090
03214	0	76100	0	00000	NOP BB	F5G20100
03215	0	02000	0	03217	TRA X117	F5G20110
03216	0	77100	0	00022	ARS 18 PRED	F5G20120
03217	0	62100	0	00513	X117 STA SBV3 NO.	F5G20130
03220	0	50000	1	05034	CLA LPLST+S3P1-1,1	F5G20140
03221	0	07400	4	00070	TSX SE,4 GET ADDR. OF	F5G20150
03222	0	50000	1	12533	CLA BBB,1 1ST PRED.	F5G20160
03223	0	60200	0	00512	X03 SLW SBV2	F5G20170
03224	0	07400	4	00055	TSX SE5,4 GET PRED.	F5G20180
03225	-0	50000	1	15674	CAL PRED,1	F5G20190
03226	-0	32000	0	00353	ANA SBK2	F5G20200
03227	0	34000	0	00513	CAS SBV3 IS THIS RIGHT PRED.	F5G20210
03230	0	02000	0	03232	TRA X04 NO	F5G20220
03231	0	02000	0	03235	TRA X05 YES	F5G20230
03232	0	50000	0	00512	X04 CLA SBV2 NO ARRANGE TO	F5G20240
03233	0	40000	0	00315	ADD ONEA TRY NEXT	F5G20250
03234	0	02000	0	03223	TRA X03 PRED.	F5G20260
03235	-0	53400	2	00430	X05 LXD IRR,2 PUT LX	F5G20270
03236	-0	50000	0	00377	CAL XK16 BIT INTO	F5G20280
03237	0	77100	2	00003	ARS 3,2 PRED.	F5G20290
03240	-0	60200	1	15674	ORS PRED,1 TABLE.	F5G20300
03241	-0	53400	4	00440	LXD S3V4,4	F5G20310
03242	-0	60200	4	05034	ORS LPLST+S3P1-1,4	F5G20320
03243	0	50000	2	00430	CLA IR1+3,2 SET ENTR. REQU.	F5G20330
03244	0	60100	2	00565	STO LX1+3,2	F5G20340
03245	0	02000	0	03155	TRA X14	F5G20350
03246	0	07400	4	01661	X16 TSX SC,4 RECORD I.R. ACTIVE IN SECTION OF LPLST	F5G20360
03247	0	56000	0	00333	LDQ LK1	F5G20370
03250	0	50000	1	00565	CLA LX1+3,1 HAS THIS	F5G20380
03251	-0	10000	0	03253	TNZ X100 ENTR. REQU. BEEN DETERMINED	F5G20390
03252	-0	60000	1	00565	STQ LX1+3,1 NO,RECORD ENTR. REOU. IS AN E.	F5G20400
03253	-0	60000	1	00430	X100 STQ IR1+3,1 ERASE THIS I.R.	F5G20410
03254	0	50000	0	00314	CLA ZERO RECORD THAT THIS	F5G20420
03255	0	60100	1	00561	STO AC1+3,1 I.R. ISNT ACTIVE.	F5G20430
03256	0	02000	0	03172	TRA X02	F5G20440
03257	-0	63400	1	00430	X7 SXD IRR,1	F5G20450
03260	0	50000	0	00442	CLA TPE IS THIS	F5G20460
03261	0	34000	0	00376	CAS XK15 AN LXP	F5G20470
03262	0	02000	0	03264	TRA X104 NO	F5G20480
03263	0	02000	0	03246	TRA X16 YES.	F5G20490
03264	0	34000	0	00403	X104 CAS XK21 IS IT A DED	F5G20500
03265	0	02000	0	03267	TRA X15	F5G20510
03266	0	02000	0	03246	TRA X16 YES.	F5G20520
03267	0	07400	4	02024	X15 TSX SF,4 DETERMINE ACTIVITY.	F5G20530

03270	0	02000	0	03275	TRA X17 COME HERE IF NOT ACTIVE.	F5G20540
03271	-0	53400	1	00430	LXD IRR,1	F5G20550
03272	0	07400	4	01661	TSX SC,4 RECORD PART OF LOOP LIST ACTIVE.	F5G20560
03273	0	50000	0	00526	CLA SFV1 STORE ACTIVE	F5G20570
03274	0	60100	1	00561	STO AC1+3,1 INDICATOR.	F5G20580
03275	0	50000	0	00442	X17 CLA TPE	F5G20590
03276	0	34000	0	00322	CAS S2K2 IS THIS AN LX	F5G20600
03277	0	02000	0	03301	TRA X18	F5G20610
03300	0	02000	0	03162	TRA X01 YES.	F5G20620
03301	-0	53400	1	00430	X18 LXD IRR,1	F5G20630
03302	0	50000	1	00565	CLA LX1+3,1 WAS THIS	F5G20640
03303	-0	10000	0	03172	TNZ X02 I.R. LX ED	F5G20650
03304	0	50000	1	00430	CLA IR1+3,1 NO,STORE THE TAG	F5G20660
03305	0	60100	1	00565	STO LX1+3,1 IN TH LX INDICATOR.	F5G20670
03306	0	02000	0	03172	TRA X02	F5G20680
03307	0	07400	4	00070	X22 TSX SE,4 MAKE SURE BB IS IN C+M.	F5G20690
03310	0	53400	2	00342	LXA S5K5,2	F5G20700
03311	0	50000	2	00565	X25 CLA LX1+3,2	F5G20710
03312	-0	10000	0	03314	TNZ X23 HAS THIS ENTRANCE REQ. BEEN FOUND	F5G20720
03313	0	50000	2	00430	CLA IR1+3,2 NO,ENTRANCE = EXIT.	F5G20730
03314	0	76700	0	00022	X23 ALS 18 PUT ENTR. REQ. IN LEFT.	F5G20740
03315	0	40000	2	00430	ADD IR1+3,2 ADD THE EXIT REQUIREMENTS.	F5G20750
03316	0	60200	1	12535	SLW BBB+2,1	F5G20760
03317	1	77777	1	03320	TXI X24,1,-1 DOWN INDEX OF ENTR-EXIT REQU.	F5G20770
03320	2	00001	2	03311	X24 TIX X25,2,1 COUNT TO 3	F5G20780
03321	0	02000	0	03353	TRA X26	F5G20790
03322	-0	53400	1	00440	X13 LXD S3V4,1 GET LOOP LIST QUANTITY	F5G20800
03323	3	00072	1	03353	TXH X26,1,S3P1-2 TRANSFER IF THIS IS 1ST IN LPLST	F5G20810
03324	0	50000	1	05033	CLA LPLST+S3P1-2,1 OF PREVIOUS QUANTITY	F5G20820
03325	0	60100	0	00607	STO XV19	F5G20830
03326	0	56000	0	00324	LDQ S3K2 WAS IT	F5G20840
03327	0	04000	0	03331	TLQ X126 A BB	F5G20850
03330	0	77100	0	00022	ARS 18 YES	F5G20860
03331	-0	32000	0	00326	X126 ANA S3K4 IS THERE	F5G20870
03332	0	56000	0	00351	LDQ SAK1	F5G20880
03333	0	04000	0	03346	TLQ X129	F5G20890
03334	0	07400	4	00067	TSX SE1,4 YES, GET EXIT BB	F5G20900
03335	0	50000	1	12533	CLA BBB,1 WAS THAT BB	F5G20910
03336	0	77100	0	00041	ARS 33 TERMINATED BY	F5G20920
03337	0	40000	0	00315	ADD ONEA A	F5G20930
03340	-0	10000	0	03346	TNZ X129 GO TO N	F5G20940
03341	0	53400	1	00342	LXA S5K5,1 YES, SET COUNT TO 3	F5G20950
03342	0	50000	1	00561	X128 CLA AC1+3,1 IS THIS IR	F5G20960
03343	0	10000	0	03345	TZE X127 ACTIVE	F5G20970
03344	0	07400	4	01566	TSX SB,4 YES, RECORD SXD NECESSARY	F5G20980
03345	2	00001	1	03342	X127 TIX X128,1,1 COUNT TO 3	F5G20990
03346	0	50000	0	00607	X129 CLA XV19 GET	F5G21000
03347	0	34000	0	00324	CAS S3K2	F5G21010
03350	0	76100	0	00000	NOP NO	F5G21020
03351	0	02000	0	03353	TRA X26	F5G21030
03352	0	02000	0	03307	TRA X22 YES,	F5G21040
03353	0	50000	0	00444	X26 CLA S3V5 NO	F5G21050
03354	0	34000	0	00323	CAS S3K1 IS THIS AN END-LOOP-LIST	F5G21060
03355	0	02000	0	03357	TRA X31 NO	F5G21070

03356	0	02000	0	04370	TRA X88	YES	F5G21080
03357	-0	50000	0	00444	X31	CAL S3V5	F5G21090
03360	-0	32000	0	00335	ANA	LK3	F5G21100
03361	0	34000	0	00400	CAS	XK17 WHAT TYPE ENTRY IS THIS	F5G21110
03362	0	02000	0	03365	TRA	X118	F5G21120
03363	0	02000	0	04043	TRA	X33 TRANSPARENT REGION	F5G21130
03364	0	02000	0	03072	TRA	X32 BB	F5G21140
03365	0	50000	0	00444	X118	CLA S3V5 OPAQUE REGION	F5G21150
03366	0	07400	4	00070	TSX	SE,4 IS	F5G21160
03367	0	50000	1	12540	CLA	BBB+5,1 THIS	F5G21170
03370	0	60100	0	00614	STO	XV24	F5G21180
03371	0	62200	0	00613	STD	XV23 THE	F5G21190
03372	0	50000	0	04741	CLA	LPLST SAME	F5G21200
03373	0	56000	0	00361	LDQ	FK4	F5G21210
03374	0	04000	0	03376	TLQ	X221	F5G21220
03375	1	00000	0	03404	TXI	X213,0,-	F5G21230
03376	0	07400	4	00067	X221	TSX SE1,4 REGION	F5G21240
03377	0	50000	1	12540	CLA	BBB+5,1 AS	F5G21250
03400	-0	32000	0	00321	ANA	S2K1 AT THE BEGINNING	F5G21260
03401	0	40200	0	00613	SUB	XV23 OF THE	F5G21270
03402	0	60100	0	00614	STO	XV24 STORE IND. OF SAMENESS OF 1ST REGION	F5G21280
03403	0	10000	0	03724	TZE	X61 LPLST	F5G21290
03404	0	50000	0	00444	X213	CLA S3V5	F5G21300
03405	0	07400	4	01245	X57	TSX S5,4 NO,MATCH ENTR. REQU.	F5G21310
03406	-0	53400	1	00613	X63	LXD XV23,1 GET	F5G21320
03407	0	50000	1	05263	CLA	REG,1 REGION WORD	F5G21330
03410	0	07400	4	00070	TSX	SE,4 CST INDEX OF 1ST BB	F5G21340
03411	-0	50000	1	12534	X209	CAL BBB+1,1 GET THE	F5G21350
03412	0	60200	0	00575	SLW	XV9 ORIGINAL PERM. NOS.	F5G21360
03413	-0	32000	0	00402	ANA	XK20 STORE WORD TO	F5G21370
03414	0	60200	0	00574	SLW	XV8 CONTAIN NEW PERM. NOS.	F5G21380
03415	0	53400	2	00342	LXA	S5K5,2 SET COUNT TO 3	F5G21390
03416	-0	50000	0	00575	X210	CAL XV9 GET THE	F5G21400
03417	0	77100	2	00003	ARS	3,2	F5G21410
03420	0	77100	2	00003	ARS	3,2 PERM. NO. AND	F5G21420
03421	-0	32000	0	00350	ANA	S9K3 PUT IT	F5G21430
03422	-0	73400	4	00000	PDX	0,4 IN 4.	F5G21440
03423	0	50000	4	00470	CLA	EN4+3,4 GET THE	F5G21450
03424	0	76700	2	00003	ALS	3,2 CORRESPONDENCE	F5G21460
03425	0	76700	2	00003	ALS	3,2 OF THE ENTR. REQUIREMENTS	F5G21470
03426	-0	60200	0	00574	ORS	XV8 FORM NEW PERM.	F5G21480
03427	2	00001	2	03416	TIX	X210,2,1	F5G21490
03430	-0	50000	0	00574	CAL	XV8 STORE NEW PERM.	F5G21500
03431	0	62200	1	12534	STD	BBB+1,1 NOS.	F5G21510
03432	0	50000	1	12540	CLA	BBB+5,1 IS THIS THE LAST	F5G21520
03433	-0	32000	0	00353	ANA	SBK2 BB IN REGION	F5G21530
03434	0	34000	0	00353	CAS	SBK2	F5G21540
03435	0	02000	0	03437	TRA	X211 NO.	F5G21550
03436	0	02000	0	03441	TRA	X212 YES, DONE	F5G21560
03437	0	07400	4	00067	X211	TSX SE1,4 ARRANGE TO DO NEXT	F5G21570
03440	0	02000	0	03411	TRA	X209 BB.	F5G21580
03441	0	53400	1	00342	X212	LXA S5K5,1 SET COUNT TO 3	F5G21590
03442	0	50000	1	00465	X60	CLA IN1+3,1 GET INDEX	F5G21600
03443	-0	73400	2	00000	PDX	0,2 OF EN.	F5G21610

03444	0	50000	2	00473	CLA EN1+3,2 IS C(ENM)	F5G21620
03445	0	34000	1	00430	CAS IR1+3,1 =C(IRN)	F5G21630
03446	0	02000	0	03450	TRA X58	F5G21640
03447	0	02000	0	03734	TRA X64 YES,	F5G21650
03450	0	34000	0	00337 X58	CAS S5K2 IS C(ENM) REAL	F5G21660
03451	0	76100	0	00000	NOP NO,	F5G21670
03452	0	02000	0	03454	TRA X119	F5G21680
03453	0	02000	0	03771	TRA X67 YES,	F5G21690
03454	0	50000	1	00561 X119	CLA AC1+3,1 NO,IS	F5G21700
03455	0	10000	0	03457 X102	TZE X59 IRN ACTIVE	F5G21710
03456	0	07400	4	01566 X65	TSX SB,4 YES,RECORD SXD NECESSARY.	F5G21720
03457	2	00001	1	03442 X59	TIX X60,1,1	F5G21730
03460	0	07400	4	02042	TSX SG,4 PERMUTE REGION WORD	F5G21740
03461	0	50000	0	04741 X89	CLA LPLST	F5G21750
03462	0	34000	0	00324	CAS S3K2 IS IT A BB	F5G21760
03463	0	07400	4	00067	TSX SE1,4 NO	F5G21770
03464	0	02000	0	03466	TRA X206	F5G21780
03465	0	02000	0	03471	TRA X207	F5G21790
03466	0	50000	1	12540 X206	CLA BBB+5,1	F5G21800
03467	-0	73400	1	00000	PDX 0,1	F5G21810
03470	0	50000	1	05263	CLA REG,1 FORM NO OF 1ST BB IN REGION	F5G21820
03471	0	62200	0	00566 X207	STD XV2	F5G21830
03472	0	53400	1	00342	LXA S5K5,1	F5G21840
03473	0	50000	0	00336 X116	CLA S5K1	F5G21850
03474	0	34000	1	00430	CAS IR1+3,1 IS THIS IR EMPTY	F5G21860
03475	0	02000	0	03500	TRA X115	F5G21870
03476	-0	50000	1	00410	CAL XK23+3,1 YES, INITIALIZE IR	F5G21880
03477	-0	60200	0	00566	ORS XV2 TO EMPTYNESS	F5G21890
03500	2	00001	1	03473 X115	TIX X116,1,1 COUNT TO 3	F5G21900
03501	-0	53400	2	00325	LXD S3K3,2 PREPARE TO SCAN LOOP LIST	F5G21910
03502	-0	63400	2	00600	SXD XV12,2	F5G21920
03503	0	50000	2	05035 X79	CLA LPLST+S3P1,2	F5G21930
03504	0	34000	0	00323	CAS S3K1 IS THIS END LOOP LIST	F5G21940
03505	0	02000	0	03507	TRA X120	F5G21950
03506	0	02000	0	03717	TRA X81 YES.	F5G21960
03507	0	34000	0	00324 X120	CAS S3K2 IS IT A BB	F5G21970
03510	0	76100	0	00000	NOP	F5G21980
03511	0	02000	0	03513	TRA X121	F5G21990
03512	0	77100	0	00022	ARS 18 YES.	F5G22000
03513	0	62100	0	00513 X121	STA SBV3 STORE EXIT BB NO.	F5G22010
03514	0	50000	2	05036	CLA LPLST+S3P1+1,2	F5G22020
03515	0	34000	0	00323	CAS S3K1 IS NEXT QUANTITY AN END LPLST	F5G22030
03516	0	02000	0	03520	TRA X107	F5G22040
03517	0	02000	0	03603	TRA X114 YES.	F5G22050
03520	0	77100	0	00022 X107	ARS 18	F5G22060
03521	0	62100	0	00606	STA XV18 STORE ENTRY BB NO.	F5G22070
03522	0	40000	0	00315	ADD ONEA	F5G22080
03523	0	07400	4	00067	TSX SE1,4	F5G22090
03524	-0	50000	1	12533	CAL BBB,1	F5G22100
03525	-0	32000	0	00353	ANA SBK2	F5G22110
03526	0	60100	0	00515	STO SBV5	F5G22120
03527	0	50000	0	00606	CLA XV18	F5G22130
03530	0	07400	4	00067	TSX SE1,4	F5G22140
03531	0	50000	1	12533	CLA BBB,1	F5G22150

03532	-0	32000	0	00353	ANA SBK2		F5G22160
03533	0	60200	0	00512	SLW SBV2	X109	F5G22170
03534	0	07400	4	00055	TSX SE5,4		F5G22180
03535	-0	50000	1	15674	CAL PRED,1		F5G22190
03536	-0	32000	0	00353	ANA SBK2		F5G22200
03537	0	34000	0	00513	CAS SBV3	IS THIS THE RIGHT TRANSFER	F5G22210
03540	0	02000	0	03542	TRA X108		F5G22220
03541	0	02000	0	03550	TRA X110	YES	F5G22230
03542	0	50000	0	00512	CLA SBV2	ARRANGE TO TRY	F5G22240
03543	0	40000	0	00315	ADD ONEA	NEXT PRED.	F5G22250
03544	0	34000	0	00515	CAS SBV5	IS THIS PRED ENTRY IN SAME BB	F5G22260
03545	0	02000	0	03533	TRA X109		F5G22270
03546	0	02000	0	03554	TRA X222		F5G22280
03547	0	02000	0	03533	TRA X109		F5G22290
03550	0	50000	1	15674	CLA PRED,1	SET SIGN	F5G22300
03551	-0	76000	0	00003	SSM OF PRED.		F5G22310
03552	0	60100	1	15674	STO PRED,1	ENTRY NEGATIVE.	F5G22320
03553	0	02000	0	03542	TRA X108		F5G22330
03554	0	50000	0	00513	CLA SBV3	GET INDEX	F5G22340
03555	0	40000	0	00315	ADD ONEA		F5G22350
03556	0	07400	4	00067	TSX SE1,4	OF	F5G22360
03557	0	50000	1	12533	CLA BBB,1		F5G22370
03560	-0	32000	0	00321	ANA S2K1		F5G22380
03561	0	60100	0	00515	STO SBV5		F5G22390
03562	0	50000	0	00513	CLA SBV3		F5G22400
03563	0	07400	4	00067	TSX SE1,4		F5G22410
03564	0	50000	1	12533	CLA BBB,1		F5G22420
03565	-0	32000	0	00321	ANA S2K1		F5G22430
03566	0	60200	0	00512	SLW SBV2	X112	F5G22440
03567	0	07400	4	00044	TSX SE6,4		F5G22450
03570	-0	50000	1	16734	CAL SUCC,1		F5G22460
03571	-0	32000	0	00353	ANA SBK2		F5G22470
03572	0	34000	0	00606	CAS XV18	IS THIS RIGHT SUCC.	F5G22480
03573	0	02000	0	03575	TRA X111		F5G22490
03574	0	02000	0	03607	TRA X113		F5G22500
03575	0	50000	0	00512	CLA SBV2	ARRANGE TO TRY NEXT SUCC.	F5G22510
03576	0	40000	0	00316	ADD ONED		F5G22520
03577	0	34000	0	00515	CAS SBV5	IS THIS SUCC IN SAME BB	F5G22530
03600	0	02000	0	03566	TRA X112		F5G22540
03601	0	02000	0	03613	TRA X74		F5G22550
03602	0	02000	0	03566	TRA X112		F5G22560
03603	0	50000	0	00550	CLA LPIND	IS THIS	F5G22570
03604	0	12000	0	03613	TPL X74	A LOOP	F5G22580
03605	0	50000	0	04741	CLA LPLST	YES	F5G22590
03606	0	02000	0	03520	TRA X107		F5G22600
03607	0	50000	1	16734	CLA SUCC,1	SET SIGN	F5G22610
03610	-0	76000	0	00003	SSM OF SUCC+	ENTRY	F5G22620
03611	0	60100	1	16734	STO SUCC,1	NEGATIVE	F5G22630
03612	0	02000	0	03575	TRA X111		F5G22640
03613	-0	53400	2	00600	LXD XV12,2	X74	F5G22650
03614	0	50000	2	05035	CLA LPLST+S3P1,2		F5G22660
03615	0	34000	0	00324	CAS S3K2	IS IT A BB	F5G22670
03616	0	76100	0	00000	NOP		F5G22680
03617	0	02000	0	03621	TRA X122		F5G22690

03620	0	02000	0	03662	TRA X80 YES	F5G22700
03621	-0	73400	4	00000 X122	PDX 0,4	F5G22710
03622	3	77776	4	03624	TXH X205,4,-2 IS THE DECR. AN IMPOSSIBLE BB	F5G22720
03623	0	77100	0	00022	ARS 18	F5G22730
03624	0	07400	4	00067 X205	TSX SE1,4	F5G22740
03625	0	50000	1	12540	CLA BBB+5,1 THE	F5G22750
03626	-0	73400	1	00000	PDX 0,1 REOEON	F5G22760
03627	-0	50000	1	05263	CAL REG,1 WORD	F5G22770
03630	0	60200	0	00605	SLW XV17	F5G22780
03631	0	10000	0	03655	TZE X105 HAS THIS REGION ALREADY BEEN RENUMBERED	F5G22790
03632	-0	32000	0	00335	ANA LK3 OR THE LX BITS FOR	F5G22800
03633	-0	60200	0	00566	ORS XV2 OLD REGION IN NEW REGION WORD.	F5G22810
03634	-0	50000	0	00404	CAL XK22 AND THE OLD PHI	F5G22820
03635	-0	50100	0	00605	ORA XV17 BITS	F5G22830
03636	0	32000	0	00566	ANS XV2 INTO NEW REGION WORD.	F5G22840
03637	0	50000	0	00314	CLA ZERO CLEAR OLD	F5G22850
03640	0	60100	1	05263	STO REG,1 REGION WORD.	F5G22860
03641	0	50000	0	00605	CLA XV17 GET INDEX OF	F5G22870
03642	0	77100	0	00022	ARS 18 FIRST BB IN REG	F5G22880
03643	0	62100	0	00612 X75	STA XV22 STOREBB NO.	F5G22890
03644	0	07400	4	00067	TSX SE1,4 GET INDEX OF BB	F5G22900
03645	0	50000	0	00565 X101	CLA XV1 STORE THE	F5G22910
03646	0	62200	1	12540	STD BBB+5,1 NEW REGION NO.	F5G22920
03647	0	50000	1	12540	CLA BBB+5,1 IS THIS THE	F5G22930
03650	-0	32000	0	00353	ANA SBK2 LAST BB	F5G22940
03651	0	34000	0	00353	CAS SBK2 OF THE REGION	F5G22950
03652	0	02000	0	03643	TRA X75	F5G22960
03653	0	02000	0	03665	TRA X76 YES.	F5G22970
03654	0	02000	0	03643	TRA X75	F5G22980
03655	0	50000	0	00612 X105	CLA XV22 RECORD THAT PREVIOUSLY	F5G22990
03656	0	07400	4	00067	TSX SE1,4 NUMBERED BB	F5G23000
03657	0	50000	0	00404	CLA XK22 WAS LAST	F5G23010
03660	0	62100	1	12540	STA BBB+5,1 ONE IN NEW REGION.	F5G23020
03661	0	02000	0	03717	TRA X81 FINISHED RENUMBERING.	F5G23030
03662	0	77100	0	00022 X80	ARS 18	F5G23040
03663	0	62100	0	00612	STA XV22	F5G23050
03664	0	07400	4	00067	TSX SE1,4	F5G23060
03665	-0	53400	2	00600 X76	LXD XV12,2	F5G23070
03666	1	77777	2	03667 X140	TXI X140+1,2,-1	F5G23080
03667	-0	63400	2	00600	SXD XV12,2	F5G23090
03670	0	50000	2	05035 X77	CLA LPLST+S3P1,2	F5G23100
03671	0	34000	0	00323	CAS S3K1 IS THIS END LOOP LIST	F5G23110
03672	1	00000	0	03700 X219	TXI X217,0,- SEE X217+2	F5G23120
03673	0	50000	0	00336	CLA S5K1 YES	F5G23130
03674	0	62100	1	12540 X216	STA BBB+5,1 RECORD THE NEXT BB NO.	F5G23140
03675	0	50000	0	00565	CLA XV1 RECORD THE	F5G23150
03676	0	62200	1	12540	STD BBB+5,1 NEW REGION	F5G23160
03677	0	02000	0	03503	TRA X79 NO.	F5G23170
03700	0	56000	0	00324 X217	LDQ S3K2	F5G23180
03701	0	04000	0	03704	TLQ X220	F5G23190
03702	0	77100	0	00022 X215	ARS 18 NO	F5G23200
03703	1	00000	0	03674 X218	TXI X216,0,-	F5G23210
03704	-0	63400	2	03672 X220	SXD X219,2	F5G23220
03705	0	07400	4	00070	TSX SE,4	F5G23230

03706	0	50000	1	12540	CLA	BBB+5,1		F5G23240
03707	-0	73400	1	00000	PDX	0,1		F5G23250
03710	0	50000	1	05263	CLA	REG,1	GET REGION WORD	F5G23260
03711	0	62200	0	03703	STD	X218		F5G23270
03712	0	50000	0	00612	CLA	XV22		F5G23280
03713	0	07400	4	00067	TSX	SE1,4		F5G23290
03714	0	50000	0	03703	CLA	X218		F5G23300
03715	-0	53400	2	03672	LXD	X219,2		F5G23310
03716	1	00000	0	03702	TXI	X215,-,-		F5G23320
03717	0	50000	0	00566	CLA	XV2	X81	F5G23330
03720	-0	50100	0	00315	ORA	ONEA		F5G23340
03721	-0	53400	1	00565	LXD	XV1,1	NEW REGION	F5G23350
03722	0	60100	1	05263	STO	REG,1	WORD.	F5G23360
03723	0	02000	0	02177	TRA	F		F5G23370
03724	0	53400	1	00342	LXA	S5K5,1	X61	F5G23380
03725	-0	75400	1	00000	PXD	0,1	PLACE APPROPRIATE NOS.	F5G23390
03726	0	62200	1	00465	STD	IN1+3,1	IN CORRSEPENDENCE	F5G23400
03727	0	62200	1	00470	STD	EN4+3,1	TABLES	F5G23410
03730	2	00001	1	03725	TIX	X62,1,1		F5G23420
03731	0	50000	0	00444	CLA	S3V5		F5G23430
03732	0	07400	4	01466	TSX	S9,4	GET THE ENTRANCE REQUIREMENTS	F5G23440
03733	0	02000	0	03406	TRA	X63		F5G23450
03734	0	50000	1	00561	CLA	AC1+3,1	IS THIS I.R.	F5G23460
03735	0	10000	0	03457	TZE	X59	ACTIVE	F5G23470
03736	-0	53400	4	00440	LXD	S3V4,4	YES.	F5G23480
03737	0	50000	4	05034	CLA	LPLST+S3P1-1,4	GET	F5G23490
03740	-0	63400	1	00577	SXD	XV11,1	THE	F5G23500
03741	-0	63400	2	00600	SXD	XV12,2	REGION	F5G23510
03742	0	07400	4	00070	TSX	SE,4	WORD	F5G23520
03743	0	50000	1	12540	CLA	BBB+5,1	IN	F5G23530
03744	-0	73400	4	00000	PDX	0,4	THE	F5G23540
03745	0	56000	4	05263	LDQ	REG,4	MQ.	F5G23550
03746	-0	53400	1	00577	LXD	XV11,1	HAS THERE	F5G23560
03747	-0	53400	2	00600	LXD	XV12,2		F5G23570
03750	-0	77300	2	00003	RQL	3,2	BEEN AN LX	F5G23580
03751	0	16200	0	03753	TQP	X66	FOR THIS I.R.	F5G23590
03752	0	02000	0	03456	TRA	X65	YES	F5G23600
03753	0	50000	0	00614	CLA	XV24	X66	F5G23610
03754	-0	10000	0	03762	TNZ	X208	IS THIS SAME REG. AS BEGINS STRING	F5G23620
03755	0	50000	0	04741	CLA	LPLST	YES	F5G23630
03756	0	07400	4	01523	TSX	SA,4	GET ACTIVE INDS. AT START OF STRING	F5G23640
03757	-0	53400	1	00577	LXD	XV11,1		F5G23650
03760	0	50000	1	00511	CLA	ACT1+3,1	WAS THIS IR ACTIVE AT START	F5G23660
03761	0	12000	0	03456	TPL	X65		F5G23670
03762	-0	53400	4	00440	LXD	S3V4,4	YES, MARK ALL	F5G23680
03763	0	50000	4	05034	CLA	LPLST+S3P1-1,4	BBS IN OPAQUE	F5G23690
03764	-0	53400	2	00577	LXD	XV11,2	REGION ACTIVE	F5G23700
03765	0	07400	4	01753	TSX	SD,4		F5G23710
03766	-0	53400	1	00577	LXD	XV11,1		F5G23720
03767	0	07400	4	01661	TSX	SC,4	MARK SECTION OF LLLST ACTIVE	F5G23730
03770	0	02000	0	03457	TRA	X59		F5G23740
03771	-0	63400	1	00577	SXD	XV11,1	X67	F5G23750
03772	-0	53400	1	00440	LXD	S3V4,1	GET	F5G23760
03773	0	50000	1	05033	CLA	LPLST+S3P1-2,1	PRED+ NO	F5G23770

03774	0	34000	0	00324	CAS S3K2 IS THIS A BB	F5G23780
03775	0	76100	0	00000	NOP NO,	F5G23790
03776	0	02000	0	04000	TRA X123	F5G23800
03777	0	77100	0	00022	ARS 18 YES,SHIFT BB NO RIGHT.	F5G23810
04000	0	62100	0	00513	STA SBV3 AND STORE IT	F5G23020
04001	0	50000	1	05034	CLA LPLST+S3P1-1,1 GET INDEX OF	F5G23830
04002	0	07400	4	00070	TSX SE,4 THIS BB	F5G23840
04003	0	50000	1	12534	CLA BBB+1,1 GET TO STORE	F5G23050
04004	0	60100	0	00575	STO XV9 PREM. NO.	F5G23060
04005	0	50000	1	12533	CLA BBB,1 GET PRED. NO.	F5G23070
04006	0	60200	0	00512	SLW SBV2	F5G23880
04007	0	07400	4	00055	TSX SE5,4 GET INDEX OF PRED.	F5G23890
04010	-0	50000	1	15674	CAL PRED,1 IS THIS THE	F5G23900
04011	-0	32000	0	00353	ANA SBK2 RIGHT PRED	F5G23910
04012	0	34000	0	00513	CAS SBV3	F5G23920
04013	0	02000	0	04015	TRA X69	F5G23930
04014	0	02000	0	04020	TRA X70 YES.	F5G23940
04015	0	50000	0	00512	CLA SBV2	F5G23950
04016	0	40000	0	00315	ADD ONEA	F5G23960
04017	0	02000	0	04006	TRA X68	F5G23970
04020	0	53400	4	00342	LXA S5K5,4 SET COUNT TO 3	F5G23980
04021	-0	50000	0	00575	CAL XV9 FIND	F5G23990
04022	0	77100	4	00003	ARS 3,4 THE	F5G24000
04023	0	77100	4	00003	ARS 3,4 PERM+ NO.	F5G24010
04024	-0	32000	0	00350	ANA S9K3	F5G24020
04025	0	34000	0	00577	CAS XV11 IS THIS THE RIGHT I.R.	F5G24030
04026	0	02000	0	04030	TRA X71 NO,	F5G24040
04027	0	02000	0	04032	TRA X73 YES,	F5G24050
04030	2	00001	4	04021	TIX X72,4,1 NO,	F5G24060
04031	0	07400	4	00004	TSX 4,4 DIAGNOSTIC, ERROR.	F5G24070
04032	-0	50000	0	00377	CAL XK16 RECORD THAT AN	F5G24080
04033	0	77100	4	00003	ARS 3,4 LX IS	F5G24090
04034	-0	60200	1	15674	ORS PRED,1 NECESSARY.	F5G24100
04035	-0	53400	4	00577	LXD XV11,4 RECORD	F5G24110
04036	-0	50000	0	00340	CAL S5K3 LX	F5G24120
04037	0	77100	4	00003	ARS 3,4 FOR THIS I.R.	F5G24130
04040	-0	60200	0	00566	ORS XV2 IN THIS REGION.	F5G24140
04041	-0	53400	1	00577	LXD XV11,1	F5G24150
04042	0	02000	0	03454	TRA X119	F5G24160
04043	0	50000	0	00444	CLA S3V5	F5G24170
04044	0	07400	4	01245	TSX S5,4 MATCH ENTRANCE REQU.	F5G24180
04045	0	50000	0	00444	CLA S3V5	F5G24190
04046	0	07400	4	01523	TSX SA,4 GET EXIT COND.	F5G24200
04047	0	50000	0	00444	CLA S3V5	F5G24210
04050	0	07400	4	00070	TSX SE,4 GET INDEX OF	F5G24220
04051	0	50000	1	12540	CLA BBB+5,1 B.B.	F5G24230
04052	-0	73400	1	00000	PDX 0,1 GET	F5G24240
04053	0	50000	1	05263	CLA REG,1 REGION	F5G24250
04054	0	07400	4	00070	TSX SE,4 WORD.	F5G24260
04055	-0	63400	1	00601	SXD XV13,1 GET INDEX OF FIRST BB.	F5G24270
04056	-0	50000	1	12534	CAL BBB+1,1 CLEAR REGISTER TO	F5G24280
04057	0	60200	0	00575	SLW XV9 CONTAIN PERM. NOS.	F5G24290
04060	-0	32000	0	00402	ANA XK20 GET ORIGINAL PERM. NOS.	F5G24300
04061	0	60200	0	00574	SLW XV8	F5G24310

04062	0	53400	2	00342	LXA S5K5,2 SET COUNT TO 3.	F5G24320
04063	-0	50000	0	00575	X38 CAL XV9 GET THE	F5G24330
04064	0	77100	2	00003	ARS 3,2 PERM.	F5G24340
04065	0	77100	2	00003	ARS 3,2 NO. AND	F5G24350
04066	-0	32000	0	00350	ANA S9K3 PUT IT	F5G24360
04067	-0	73400	4	00000	PDX 0,4 IN 4.	F5G24370
04070	0	50000	4	00470	CLA EN4+3,4 GET THE CORRESPONDENCE	F5G24380
04071	0	76700	2	00003	ALS 3,2 OF THE ENTR,	F5G24390
04072	0	76700	2	00003	ALS 3,2 REQUIREMENTS.	F5G24400
04073	-0	60200	0	00574	ORS XV8 FORM NEW PERM. NOS.	F5G24410
04074	-0	63400	1	00576	SXD XV10,1	F5G24420
04075	0	50000	4	00470	CLA EN4+3,4	F5G24430
04076	-0	73400	1	00000	PDX 0,1 GET INDEX OF I.R.	F5G24440
04077	0	50000	4	00473	CLA EN1+3,4	F5G24450
04100	0	34000	0	00336	CAS S5K1 IS ENM EMPTY	F5G24460
04101	0	02000	0	04103	TRA X34 NO,	F5G24470
04102	0	02000	0	04150	TRA X41 YES,	F5G24480
04103	0	34000	0	00333	X34 CAS LK1 NO,IS C(ENM)=E	F5G24490
04104	0	02000	0	04106	TRA X35 NO,	F5G24500
04105	0	02000	0	04111	TRA X36 YES,	F5G24510
04106	0	34000	1	00430	X35 CAS IR1+3,1 C-(ENM)=C(IRN)	F5G24520
04107	0	02000	0	04111	TRA X36 NO	F5G24530
04110	0	02000	0	04132	TRA X43 YES	F5G24540
04111	-0	53400	1	00576	X36 LXD XV10,1 NO	F5G24550
04112	1	77777	1	04113	X42 TXI X42+1,1,-1	F5G24560
04113	2	00001	2	04063	X37 TIX X38,2,1 COUNT TO 3	F5G24570
04114	-0	50000	0	00574	CAL XV8 STORE NEW	F5G24580
04115	0	62200	1	12531	STD BBB-2,1 PERM. NOS.	F5G24590
04116	0	63000	1	12531	STP BBB-2,1 AND ACTIVE INDICATORS	F5G24600
04117	0	50000	1	12535	CLA BBB+2,1 IS THIS	F5G24610
04120	-0	32000	0	00353	ANA SBK2 LAST BB IN REGION	F5G24620
04121	0	34000	0	00353	CAS SBK2	F5G24630
04122	0	02000	0	04124	TRA X39	F5G24640
04123	0	02000	0	04217	TRA X45 YES,DONE.	F5G24650
04124	0	07400	4	00067	X39 TSX SE1,4 GET INDEX OF NEXT B.B.	F5G24660
04125	0	02000	0	04055	TRA X40	F5G24670
04126	0	50000	4	00506	X200 CLA EX1+3,4 IS CONTENTS OF IR	F5G24680
04127	0	56000	0	00337	LDQ S5K2 AT EXIT	F5G24690
04130	0	04000	0	04135	TLQ X130 REAL	F5G24700
04131	0	02000	0	04111	TRA X36 YES	F5G24710
04132	0	50000	4	00511	X43 CLA ACT1+3,4	F5G24720
04133	-0	63400	1	05664	PW0 SXD W2+1,1	F5G24730
04134	0	12000	0	04126	TPL X200 IS IT ACTIVE AT EXIT	F5G24740
04135	0	50000	1	00561	X130 CLA AC1+3,1 YES,IS THIS IR ACTIVE	F5G24750
04136	0	10000	0	04111	TZE X36	F5G24760
04137	0	50000	1	00430	CLA IR1+3,1 YES	F5G24770
04140	0	60100	0	00611	STO XV21	F5G24780
04141	-0	53400	1	00576	LXD XV10,1 DOES THIS BB CONTAIN THE	F5G24790
04142	0	50000	1	12535	CLA BBB+2,1 SAME TAG IN THIS POSITION	F5G24800
04143	-0	32000	0	00336	ANA S5K1	F5G24810
04144	0	34000	0	00611	CAS XV21	F5G24820
04145	0	02000	0	05644	TRA W0	F5G24830
04146	0	02000	0	04213	TRA X44 YES.	F5G24840
04147	0	02000	0	05644	TRA W0	F5G24850

					C(XV10)= INDEX OF PARTICULAR	F5G24860	
					ENTRANCE REQUIREMENT.	F5G24870	
04150	0	50000	1	00430	X41	CLA IR1+3,1	F5G24880
04151	0	60100	0	00572		STO XV6	F5G24890
04152	0	76700	0	00022		ALS 18 STORE AWAY THIS	F5G24900
04153	0	40000	1	00430		ADD IR1+3,1 TAG TEMPORARILY.	F5G24910
04154	0	60200	0	00573		SLW XV7	F5G24920
04155	0	50000	1	00430		CLA IR1+3,1 IS THIS	F5G24930
04156	0	56000	0	00337		LDQ S5K2 TAG	F5G24940
04157	0	04000	0	04176		TLQ X201	F5G24950
04160	-0	53400	1	00601		LXD XV13,1	F5G24960
04161	0	53400	4	00342		LXA S5K5,4 SET COUNT TO 3.	F5G24970
04162	-0	50000	1	12535	X85	CAL BBB+2,1	F5G24980
04163	0	76500	0	00022		LRS 18	F5G24990
04164	0	34000	0	00572		CAS XV6 IS ENTR. REQU. EQUAL TO TAG	F5G25000
04165	0	02000	0	04167		TRA X82 NO,	F5G25010
04166	0	02000	0	04202		TRA X86 YES,	F5G25020
04167	0	50000	0	00314	X82	CLA ZERO NO,	F5G25030
04170	0	76300	0	00022		LLS 18	F5G25040
04171	0	34000	0	00572		CAS XV6 IS TAG EQUAL TO EXIT COND.	F5G25050
04172	0	02000	0	04174		TRA X83	F5G25060
04173	0	02000	0	04206		TRA X87 YES	F5G25070
04174	1	77777	1	04175	X83	TXI X83+1,1,-1	F5G25080
04175	2	00001	4	04162	X84	TIX X85,4,1 COUNT TO 3.	F5G25090
04176	0	50000	0	00573	X201	CLA XV7 STORE THE	F5G25100
04177	-0	53400	1	00576		LXD XV10,1 NEW ENTRANCE-	F5G25110
04200	0	60100	1	12535		STO BBB+2,1 EXIT REQUI.	F5G25120
04201	0	02000	0	04112		TRA X42	F5G25130
04202	-0	50000	0	00366	X86	CAL XK18 PUT AN E	F5G25140
04203	0	62200	0	00573		STD XV7 IN THE ENTR. REQU.	F5G25150
04204	0	63000	0	00573		STP XV7	F5G25160
04205	0	02000	0	04167		TRA X82	F5G25170
04206	-0	50000	0	00573	X87	CAL XV7 PLACE E	F5G25180
04207	-0	32000	0	00401		ANA XK19 IN	F5G25190
04210	0	40000	0	00333		ADD LK1 EXIT	F5G25200
04211	0	60200	0	00573		SLW XV7 REQUIREMENT.	F5G25210
04212	0	02000	0	04174		TRA X83	F5G25220
04213	-0	50000	0	00340	X44	CAL S5K3 RECORD THIS	F5G25230
04214	0	77100	2	00003		ARS 3,2 I.R.	F5G25240
04215	-0	60200	0	00574		ORS XV8 ACTIVE	F5G25250
04216	0	02000	0	04112		TRA X42	F5G25260
04217	0	53400	2	00342	X45	LXA S5K5,2	F5G25270
04220	-0	63400	2	00602	X56	SXD XV14,2	F5G25280
04221	0	50000	2	00470		CLA EN4+3,2	F5G25290
04222	-0	73400	4	00000		PDX 0,4 GET INDEX	F5G25300
04223	-0	63400	4	00514		SXD SBV4,4 OF I.R.	F5G25310
04224	0	50000	2	00473		CLA EN1+3,2	F5G25320
04225	0	34000	0	00336		CAS S5K1 IS ENM EMPTY	F5G25330
04226	0	02000	0	04230		TRA X46	F5G25340
04227	0	02000	0	04343		TRA X223	F5G25350
04230	0	34000	0	00333	X46	CAS LK1 IS THERE HASH IN ENM	F5G25360
04231	0	02000	0	04233		TRA X134	F5G25370
04232	0	02000	0	04307		TRA X55 YES	F5G25380
04233	0	34000	4	00430	X134	CAS IR1+3,4 DOES CONTENTS OF IR EQUAL CONTENTS OF EN	F5G25390

04234	0	02000	0	04236	TRA X47	NO	F5G25400
04235	0	02000	0	04357	TRA X131	YES	F5G25410
04236	-0	53400	1	00440	X47	LXD S3V4,1 GET AND	F5G25420
04237	0	50000	1	05033	CLA LPLST+S3P1-2,1 STORE PRED.	F5G25430	
04240	0	34000	0	00324	CAS S3K2 BB	F5G25440	
04241	0	76100	0	00000	NOP NO.	F5G25450	
04242	0	02000	0	04244	TRA X124	F5G25460	
04243	0	77100	0	00022	ARS 18	F5G25470	
04244	0	62100	0	00513	X124	STA SBV3	F5G25480
04245	0	50000	1	05034	CLA LPLST+S3P1-1,1 GET	F5G25490	
04246	0	07400	4	00070	TSX SE,4 BB NO.	F5G25500	
04247	0	50000	1	12534	CLA BBB+1,1 STORE THE	F5G25510	
04250	0	60100	0	00575	STO XV9 PERM. NOS.	F5G25520	
04251	0	50000	1	12540	CLA BBB+5,1	F5G25530	
04252	-0	73400	4	00000	PDX 0,4	F5G25540	
04253	-0	53400	2	00602	LXD XV14,2	F5G25550	
04254	-0	50000	0	00340	CAL S5K3	F5G25560	
04255	0	77100	2	00003	ARS 3,2	F5G25570	
04256	-0	60200	4	05263	ORS REG,4	F5G25580	
04257	0	50000	1	12533	CLA BBB,1 GET PRED. NO.	F5G25590	
04260	0	60200	0	00512	X48	SLW SBV2 STORE PRED. NO.	F5G25600
04261	0	07400	4	00055	TSX SE5,4 OBTAIN PRED. INDEX.	F5G25610	
04262	-0	50000	1	15674	CAL PRED,1 IS THIS	F5G25620	
04263	-0	32000	0	00353	ANA SBK2 THE CORRECT	F5G25630	
04264	0	34000	0	00513	CAS SBV3 PRED	F5G25640	
04265	0	02000	0	04267	TRA X49	F5G25650	
04266	0	02000	0	04272	TRA X50 YES.	F5G25660	
04267	0	50000	0	00512	X49	CLA SBV2 ARRANGE TO	F5G25670
04270	0	40000	0	00315	ADD ONEA TRY NEXT PREDECESSOR.	F5G25680	
04271	0	02000	0	04260	TRA X48	F5G25690	
04272	0	53400	4	00342	X50	LXA S5K5,4 1 HAS INDEX OF PRED.	F5G25700
04273	-0	50000	0	00575	X52	CAL XV9 EXTRACT	F5G25710
04274	0	77100	4	00003	ARS 3,4 THE	F5G25720	
04275	0	77100	4	00003	ARS 3,4 PERM.	F5G25730	
04276	-0	32000	0	00350	ANA S9K3 NO.	F5G25740	
04277	0	34000	0	00514	CAS SBV4 IS THIS THE PERM. NO.	F5G25750	
04300	0	02000	0	04302	TRA X51	F5G25760	
04301	0	02000	0	04304	TRA X53 YES.	F5G25770	
04302	2	00001	4	04273	X51	TIX X52,4,1	F5G25780
04303	0	07400	4	00004	TSX 4,4 DIAGNOSTIC, ERROR.	F5G25790	
04304	-0	50000	0	00377	X53	CAL XK16 GENERATE	F5G25800
04305	0	77100	4	00003	ARS 3,4 THE LX BIT.	F5G25810	
04306	-0	60200	1	15674	ORS PRED,1 INSERT LX BIT.	F5G25820	
04307	-0	53400	1	00514	X55	LXD SBV4,1 IS THE	F5G25830
04310	0	50000	1	00561	CLA AC1+3,1 I.R.	F5G25840	
04311	0	10000	0	04313	TZE X135 ACTIVE	F5G25850	
04312	0	07400	4	01566	TSX SB,4 YES,RECORD SXD NEEDED.	F5G25860	
04313	-0	53400	2	00602	X135	LXD XV14,2 REPLACE IR	F5G25870
04314	-0	53400	4	00514	LXD SBV4,4 BY EXIT CONDITIONS	F5G25880	
04315	0	50000	2	00506	CLA EX1+3,2 OF THE	F5G25890	
04316	0	60100	4	00430	STO IR1+3,4 REGION	F5G25900	
04317	0	50000	2	00511	X136	CLA ACT1+3,2 IS IR	F5G25910
04320	0	12000	0	04325	TPL X54 ACTIVE AT EXIT	F5G25920	
04321	0	50000	0	00440	CLA S3V4 SET	F5G25930	

04322	-0	76000	0	00003	SSM	ACTIVE	F5G25940
04323	0	40200	0	00316	SUB ONED	INDICATOR	F5G25950
04324	0	60100	4	00561	STO AC1+3,4		F5G25960
04325	-0	53400	2	00602	LXD XV14,2	COUNT TO	F5G25970
04326	2	00001	2	04220	TIX X56,2,1	3	F5G25980
04327	0	07400	4	02042	TSX SG,4	PERMUTE REGION WORD	F5G25990
04330	-0	50000	2	05263	CAL REG,2		F5G26000
04331	-0	32000	0	00404	ANA XK22		F5G26010
04332	0	60200	2	05263	SLW REG,2		F5G26020
04333	0	53400	4	00342	LXA S5K5,4		F5G26030
04334	0	50000	4	00430	XY1 CLA IR1+3,4		F5G26040
04335	0	40200	0	00336	SUB S5K1		F5G26050
04336	-0	10000	0	04341	TNZ XY2		F5G26060
04337	-0	50000	4	00410	CAL XK23+3,4		F5G26070
04340	-0	60200	2	05263	ORS REG,2		F5G26080
04341	2	00001	4	04334	XY2 TIX XY1,4,1		F5G26090
04342	0	02000	0	03077	TRA X3		F5G26100
04343	0	50000	4	00430	X223 CLA IR1+3,4	IS CONTENTS OF IR REAL	F5G26110
04344	0	56000	0	00337	LDQ S5K2		F5G26120
04345	0	04000	0	04325	TLQ X54		F5G26130
04346	0	53400	1	00342	LXA S5K5,1	YES, SET COUNT TO 3	F5G26140
04347	0	34000	1	00506	X225 CAS EX1+3,1	IS CONTENTS SAME AS EXIT CONDITIONS	F5G26150
04350	0	02000	0	04352	TRA X224		F5G26160
04351	0	02000	0	04354	TRA X226	YES	F5G26170
04352	2	00001	1	04347	X224 TIX X225,1,1	COUNT TO 3	F5G26180
04353	0	02000	0	04325	TRA X54		F5G26190
04354	0	50000	0	00333	X226 CLA LK1	REPLACE IR BY E	F5G26200
04355	0	60100	4	00430	STO IR1+3,4		F5G26210
04356	0	02000	0	04325	TRA X54		F5G26220
04357	0	56000	2	00506	X131 LDQ EX1+3,2	IS THE EXIT	F5G26230
04360	0	50000	0	00337	CLA S5K2	CONDITION REAL FOR THIS IR	F5G26240
04361	0	04000	0	04365	TLQ X132		F5G26250
04362	-0	53400	1	00514	X133 LXD SBV4,1	NO	F5G26260
04363	0	07400	4	01661	TSX SC,4	RECORD PART OF LPLST ACTIVE	F5G26270
04364	0	02000	0	04313	TRA X135		F5G26280
04365	0	50000	2	00511	X132 CLA ACT1+3,2	IS THIS IR ACTIVE	F5G26290
04366	0	12000	0	04313	TPL X135	AT EXIT OF REGION	F5G26300
04367	0	02000	0	04362	TRA X133	YES	F5G26310
04370	0	50000	0	00550	X88 CLA LPIND		F5G26320
04371	0	12000	0	04416	TPL XY3	IS THIS A LOOP	F5G26330
04372	0	50000	0	04740	CLA LPLST-1 YES		F5G26340
04373	0	34000	0	00324	CAS S3K2	IS LAST LPLST QUANTITY A BB	F5G26350
04374	0	76100	0	00000	NOP NO,		F5G26360
04375	0	02000	0	04377	TRA X125		F5G26370
04376	0	77100	0	00022	ARS 18 YES		F5G26380
04377	0	62100	0	00513	X125 STA SBV3	STORE PRED. NO.	F5G26390
04400	0	50000	0	04741	CLA LPLST		F5G26400
04401	0	07400	4	00070	TSX SE,4	GET INDEX OF 1ST BB IN LOOP.	F5G26410
04402	-0	63400	1	00574	SXD XV8,1	STORE INDEX OF 1ST BB	F5G26420
04403	0	50000	1	12533	CLA BBB,1		F5G26430
04404	0	60200	0	00604	X91 SLW XV16	STORE PRED. NO.	F5G26440
04405	0	07400	4	00055	TSX SE5,4	GET INDEX OF PRED.	F5G26450
04406	0	50000	1	15674	CLA PRED,1 IS		F5G26460
04407	-0	32000	0	00353	ANA SBK2	THIS THE	F5G26470

04410	0	34000	0	00513	CAS SBV3 RIGHT PRED	F5G26460
04411	0	02000	0	04413	TRA X90	F5G26490
04412	0	02000	0	04445	TRA X92 YES	F5G26500
04413	0	50000	0	00604	CLA XV16	F5G26510
04414	0	40000	0	00315	ADD ONEA	F5G26520
04415	0	02000	0	04404	TRA X91	F5G26530
04416	0	53400	1	00342	LXA S5K5,1	F5G26540
04417	0	07400	4	01661	TSX SC,4	F5G26550
04420	2	00001	1	04417	TIX XY4,1,1	F5G26560
04421	0	02000	0	03461	TRA X89	F5G26570
04422	-0	63400	1	04444	SXD X137,1	F5G26580
04423	0	34000	1	00430	CAS IR1+3,1 IS CONTENTS OF IRN EQUAL TO CONTENTS OF ENM	F5G26590
04424	0	02000	0	04426	TRA X98	F5G26600
04425	0	02000	0	04473	TRA X93 YES	F5G26610
04426	-0	50000	0	00340	CAL S5K3 RECORD LX FOR	F5G26620
04427	0	77100	1	00003	ARS 3,1 THIS IR IN THIS	F5G26630
04430	-0	53400	1	00565	LXD XV1,1 REGION.	F5G26640
04431	-0	60200	1	05263	ORS REG,1	F5G26650
04432	-0	63400	4	00602	SXD XV14,4 GET	F5G26660
04433	-0	63400	2	00603	SXD XV15,2 INDEX	F5G26670
04434	0	50000	0	00604	CLA XV16 OF	F5G26680
04435	0	07400	4	00055	TSX SE5,4 PRED.	F5G26690
04436	-0	53400	4	00602	LXD XV14,4	F5G26700
04437	-0	53400	2	00603	LXD XV15,2	F5G26710
04440	-0	50000	0	00377	CAL XK16 RECORD	F5G26720
04441	0	77100	4	00003	ARS 3,4 LX	F5G26730
04442	-0	60200	1	15674	ORS PRED,1 NECESSARY.	F5G26740
04443	-0	53400	1	04444	LXD X137,1	F5G26750
04444	1	00000	0	04464	TXI X96,0,-	F5G26760
04445	-0	53400	2	00574	LXD XV8,2	F5G26770
04446	0	53400	4	00342	LXA S5K5,4 SET COUNT TO 3	F5G26760
04447	0	50000	2	12534	CLA BBB+1,2 GET THE WORD WITH	F5G26790
04450	0	60100	0	00575	STO XV9 PERM. NOS.	F5G26800
04451	-0	50000	0	00575	CAL XV9 GET	F5G26810
04452	0	77100	4	00003	ARS 3,4 INDEX	F5G26820
04453	0	77100	4	00003	ARS 3,4 OF	F5G26830
04454	-0	32000	0	00350	ANA S9K3 THE	F5G26640
04455	-0	73400	1	00000	PDX 0,1 I.R.	F5G26850
04456	-0	50000	2	12535	CAL BBB+2,2 GET ENTRANCE	F5G26860
04457	0	77100	0	00022	ARS 18 REQUIREMENT.	F5G26870
04460	0	34000	0	00337	CAS S5K2 IS ENM REAL	F5G26880
04461	0	76100	0	00000	NOP	F5G26890
04462	0	02000	0	04464	TRA X96 NO	F5G26900
04463	0	02000	0	04422	TRA X97 YES	F5G26910
04464	0	50000	1	00561	CLA AC1+3,1 IS IRN	F5G26920
04465	0	10000	0	04473	TZE X93 ACTIVE	F5G26930
04466	-0	63400	2	00602	SXD XV14,2 YES,	F5G26940
04467	-0	63400	4	00603	SXD XV15,4	F5G26950
04470	0	07400	4	01566	TSX SB,4 RECORD SXD NECESSARY.	F5G26960
04471	-0	53400	2	00602	LXD XV14,2	F5G26970
04472	-0	53400	4	00603	LXD XV15,4	F5G26980
04473	1	77777	2	04474	TXI X93+1,2,-1	F5G26990
04474	2	00001	4	04451	TIX X95,4,1 COUNT TO 3	F5G27000
					ACTIVE PASS.	F5G27010

				FOLLOWS 2 ED LXING PASS.	F5G27020	
04475	0	56000	0	00325	LDQ S3K3 INITIALIZE THE	F5G27030
04476	-0	60000	0	00440	STQ S3V4 LOOP LIST	F5G27040
04477	0	56000	0	00340	LDQ S5K3 AND	F5G27050
04500	-0	60000	0	00437	STQ S3V3 MAKE SURE TAG	F5G27060
04501	-0	60000	0	00521	STQ ACIND SET IND. TO SAY THIS IS ACTIVE PASS	F5G27070
04502	-0	63400	0	00436	SXD S3V2,0 LOCATION GETS SET	F5G27080
04503	0	50000	0	00314	A3 CLA ZERO ARE	F5G27090
04504	0	40100	0	00556	ADM AC1 THERE	F5G27100
04505	0	40100	0	00557	ADM AC2 ANY	F5G27110
04506	0	40100	0	00560	ADM AC3 ACTIVE I.R.S	F5G27120
04507	0	10000	0	03461	TZE X89 LEFT GO TO RENUMBER.	F5G27130
04510	0	07400	4	01023	TSX S3,4 YES. TRY TO GET NEXT TAG.	F5G27140
04511	0	02000	0	04644	TRA A12 COME HERE IF TAG NOT GOT	F5G27150
04512	0	50000	0	01122	CLA S39 COMPUTE LOCATION OF THIS	F5G27160
04513	-0	32000	0	00353	ANA SBK2 TAG=(ADDR. FOLLOWING	F5G27170
04514	0	40000	0	00451	ADD S4V1 TIX BLOCK + L(CM)-CM TAG	F5G27180
04515	0	40200	0	00332	SUB S4K3 - INDEX OF TAG.)	F5G27190
04516	0	76700	0	00022	ALS 18	F5G27200
04517	-0	40000	0	00436	SBM S3V2	F5G27210
04520	0	76500	0	00065	LRS 53	F5G27220
04521	-0	60000	0	00571	STQ XV5	F5G27230
04522	0	22100	0	00371	DVP XK9 FORM LOC/9 AND	F5G27240
04523	-0	60000	0	00567	STQ XV3 REMAINDER	F5G27250
04524	0	60100	0	00570	STO XV4	F5G27260
04525	0	50000	0	00442	CLA TPE IS THIS	F5G27270
04526	0	34000	0	00322	CAS S2K2 AN LX	F5G27280
04527	0	02000	0	04531	TRA A1	F5G27290
04530	0	02000	0	04570	TRA A5 YES	F5G27300
04531	0	34000	0	00376	A1 CAS XK15 IS IT AN LX PRIME	F5G27310
04532	0	02000	0	04534	TRA A20	F5G27320
04533	0	02000	0	04614	TRA A8 YES	F5G27330
04534	0	34000	0	00403	A20 CAS XK21 IS IT A DED	F5G27340
04535	0	02000	0	04537	TRA A21	F5G27350
04536	0	02000	0	04614	TRA A8 YES.	F5G27360
04537	0	34000	0	00373	A21 CAS XK12 IS IT AN ACTIVE INSTR.	F5G27370
04540	0	02000	0	04542	TRA A2	F5G27380
04541	0	02000	0	04570	TRA A5 YES.	F5G27390
04542	0	50000	0	00567	A2 CLA XV3 GET INDEX	F5G27400
04543	0	07400	4	00032	TSX SE4,4 OF STAG ENTRY.	F5G27410
04544	0	53400	2	00570	LXA XV4,2 IS THERE	F5G27420
04545	-0	50000	1	05263	CAL STAG,1 AN LX	F5G27430
04546	0	77100	2	00010	ARS 8,2 IN FRONT	F5G27440
04547	-0	32000	0	00372	ANA XK11 OF	F5G27450
04550	0	34000	0	00372	CAS XK11 THIS INSTR.	F5G27460
04551	0	02000	0	04503	TRA A3	F5G27470
04552	0	02000	0	04554	TRA A4 YES.	F5G27480
04553	0	02000	0	04503	TRA A3	F5G27490
04554	-0	50000	0	00570	A4 CAL XV4 GET	F5G27500
04555	0	76000	0	00006	COM THE	F5G27510
04556	0	73400	2	00000	PAX 0,2 S-TAG	F5G27520
04557	-0	50000	1	05263	CAL STAG,1 IN	F5G27530
04560	0	76700	2	00000	ALS 0,2 DECR.	F5G27540
04561	0	76700	2	00000	ALS 0,2 PART.	F5G27550

04562	-0	32000	0	00350	ANA S9K3		F5G27560
04563	-0	73400	1	00000	PDX 0,1		F5G27570
04564	0	50000	1	00561	CLA AC1+3,1 IS THE CORRESPONDING		F5G27580
04565	0	10000	0	04503	TZE A3 I.R. ACTIVE		F5G27590
04566	0	07400	4	01566	TSX SB,4 YES,RECORD SXD NECESSARY		F5G27600
04567	0	02000	0	04503	TRA A3		F5G27610
04570	0	50000	0	00567	CLA XV3	A5	F5G27620
04571	0	07400	4	00032	TSX SE4,4 GET STAG INDEX.		F5G27630
04572	-0	50000	0	00570	CAL XV4		F5G27640
04573	0	76000	0	00006	COM IS IT		F5G27650
04574	0	73400	2	00000	PAX 0,2 TO		F5G27660
04575	-0	50000	1	05263	CAL STAG,1 AN		F5G27670
04576	0	76700	2	00000	ALS 0,2		F5G27680
04577	0	76700	2	00000	ALS 0,2 ACTIVE		F5G27690
04600	-0	32000	0	00350	ANA S9K3		F5G27700
04601	-0	73400	1	00000	PDX 0,1 IR		F5G27710
04602	0	50000	1	00561	CLA AC1+3,1		F5G27720
04603	0	10000	0	04503	TZE A3		F5G27730
04604	0	50000	1	00430	CLA IR1+3,1 IS IT	A51	F5G27740
04605	0	34000	0	00441	CAS 1TAG	SAME TAU-TAG	F5G27750
04606	0	02000	0	04610	TRA A6		F5G27760
04607	0	02000	0	04612	TRA A7 YES		F5G27770
04610	0	07400	4	01566	TSX SB,4 RECORD SXD NEEDED.	A6	F5G27780
04611	0	02000	0	04503	TRA A3		F5G27790
04612	0	07400	4	01661	TSX SC,4 RECORD CERTAIN PART OF	A7	F5G27800
04613	0	02000	0	04503	TRA A3 LOOP LIST ACTIVE.		F5G27810
04614	0	50000	0	00567	CLA XV3 GET	A8	F5G27820
04615	0	07400	4	00032	TSX SE4,4 THE		F5G27830
04616	-0	50000	0	00570	CAL XV4		F5G27840
04617	0	76000	0	00006	COM S-TAG		F5G27850
04620	0	73400	2	00000	PAX 0,2 OF		F5G27860
04621	-0	50000	1	05263	CAL STAG,1		F5G27870
04622	0	60100	0	00423	STO S1V6		F5G27871
04623	0	76700	2	00000	ALS 0,2 THIS		F5G27880
04624	0	76700	2	00000	ALS 0,2 INSTR.		F5G27890
04625	-0	32000	0	00350	ANA S9K3		F5G27900
04626	-0	73400	1	00000	PDX 0,1		F5G27910
04627	0	10000	0	04503	TZE A3 DOES THIS INSTR HAVE AN S-TAG		F5G27920
04630	0	50000	1	00561	CLA AC1+3,1 YES.		F5G27930
04631	0	10000	0	04503	TZE A3	IS THIS IR ACTIVE	F5G27940
04632	0	50000	0	00314	CLA ZERO		F5G27941
04633	-0	75400	2	00000	PXD 0,2		F5G27942
04634	0	76000	0	00006	COM		F5G27943
04635	-0	73400	4	00000	PDX 0,4		F5G27944
04636	0	50000	0	00423	CLA S1V6		F5G27945
04637	0	77100	4	00010	ARS 8,4		F5G27946
04640	-0	32000	0	00316	ANA ONED		F5G27947
04641	-0	10000	0	04604	TNZ A51		F5G27948
04642	0	07400	4	01661	TSX SC,4 YES,RECORD SECTION OF LPLST ACTIVE		F5G27950
04643	0	02000	0	04503	TRA A3		F5G27960
04644	-0	53400	1	00440	LXD S3V4,1	GET INDEX OF LPLST QUANTITY	F5G27970
04645	0	50000	1	05033	CLA LPLST+S3P1-2,1	GET PREVIOUS LPLST QUANTITY	F5G27980
04646	0	60100	0	00607	STO XV19		F5G27990
04647	0	56000	0	00324	LDQ S3K2	WAS IT A	F5G28000

04650	0	04000	0	04663	TLQ	A28		F5G28010
04651	0	07400	4	00070	TSX	SE,4	YES, WAS THAT	F5G28020
04652	0	50000	1	12533	CLA	BBB,1	BB TERMINATED	F5G28030
04653	0	77100	0	00041	ARS	33	BY A	F5G28040
04654	0	40000	0	00315	ADD	ONEA	GO TO N	F5G28050
04655	-0	10000	0	04663	TNZ	A28		F5G28060
04656	0	53400	1	00342	LXA	S5K5,1	YES	F5G28070
04657	0	50000	1	00561	CLA	AC1+3,1	IS THIS	F5G28080
04660	0	10000	0	04662	TZE	A27	IR ACTIVE	F5G28090
04661	0	07400	4	01566	TSX	SB,4	YES, RECORD SXD NECESSARY	F5G28100
04662	2	00001	1	04657	TIX	A26,1,1		F5G28110
04663	0	50000	0	00444	CLA	S3V5		F5G28120
04664	0	56000	0	00324	LDQ	S3K2	IS THIS	F5G28130
04665	0	04000	0	04700	TLQ	A35	ATR. REGION	F5G28140
04666	-0	32000	0	00336	ANA	S5K1	NO, BB	F5G28150
04667	0	10000	0	04503	TZE	A3		F5G28160
04670	0	76700	0	00003	ALS	3		F5G28170
04671	-0	73400	1	00000	PDX	0,1		F5G28180
04672	-3	00002	1	04674	TXL	AP1,1,2		F5G28190
04673	1	77777	1	04674	TXI	AP1,1,-1		F5G28200
04674	0	50000	1	00561	CLA	AC1+3,1		F5G28210
04675	0	10000	0	04503	TZE	A3		F5G28220
04676	0	07400	4	01566	TSX	SB,4		F5G28230
04677	0	02000	0	04503	TRA	A3		F5G28240
04700	0	07400	4	00070	TSX	SE,4		F5G28250
04701	0	50000	1	12540	CLA	BBB+5,1		F5G28260
04702	-0	73400	2	00000	PDX	0,2	INDEX OF REGION TO 2	F5G28270
04703	0	50000	2	05263	CLA	REG,2	GET REGION	F5G28260
04704	0	60100	0	00607	STO	XV19		F5G28290
04705	0	53400	1	00342	LXA	S5K5,1		F5G28300
04706	-0	50000	0	00607	CAL	XV19		F5G28310
04707	0	76700	1	00003	ALS	3,1		F5G28320
04710	-0	76000	0	00001	PBT		IS THERE AN LX FOR THIS IR	F5G28330
04711	0	02000	0	04715	TRA	A30		F5G28340
04712	0	50000	1	00561	CLA	AC1+3,1	YES	F5G28350
04713	0	10000	0	04715	TZE	A30	IS THIS IR ACTIVE	F5G28360
04714	0	07400	4	01566	TSX	SB,4	YES, RECORD SXD NECESSARY	F5G28370
04715	2	00001	1	04706	TIX	A31,1,1		F5G28380
04716	0	50000	0	00444	CLA	S3V5		F5G28390
04717	0	07400	4	01523	TSX	SA,4	GET THE EXIT CONDITIONS	F5G28400
04720	0	53400	1	00342	LXA	S5K5,1		F5G28410
04721	0	50000	1	00561	CLA	AC1+3,1		F5G28420
04722	0	10000	0	04736	TZE	A32	IS THIS IR ACTIVE	F5G28430
04723	0	50000	1	00506	CLA	EX1+3,1	YES	F5G28440
04724	0	56000	0	00337	LDQ	S5K2		F5G28450
04725	0	04000	0	04730	TLQ	A33	IS THE EXIT CONDITION REAL	F5G28460
04726	0	50000	1	00511	CLA	ACT1+3,1	YES	F5G28470
04727	0	12000	0	04736	TPL	A32	IS THE IR ACTIVE AT EXIT	F5G28480
04730	-0	63400	1	00610	SXD	XV20,1	YES	F5G28490
04731	-0	53400	2	00610	LXD	XV20,2		F5G28500
04732	0	50000	0	00444	CLA	S3V5		F5G28510
04733	0	07400	4	01753	TSX	SD,4	RECORD TR. REG. ACTIVE	F5G28520
04734	-0	53400	1	00610	LXD	XV20,1		F5G28530
04735	0	07400	4	01661	TSX	SC,4	RECORD SECTION OF LPLST ACTIVE	F5G28540

04736	2	00001	1	04721	A32	TIX	A34,1,1	COUNT TO 3	F5G28550
04737	0	02000	0	04503		TRA	A3		F5G28560
04740	0	50000	0	00376	QP	CLA	XK15		F5G28580
04741	-0	32000	0	00020		ANA	16		F5G28590
04742	0	77100	0	00001		ARS	1		F5G28600
04743	0	62200	0	00103		STD	SE21+2		F5G28610
04744	0	10000	0	00030		TZE	R		F5G28620
04745	-0	53400	4	00063		LXD	PREDP+3,4		F5G28630
04746	0	50000	0	00075		CLA	BBBBP+3		F5G28640
04747	-3	00000	4	00030	QP0	TXL	R,4,0		F5G28650
04750	1	77777	4	04751		TXI	QP1,4,-1		F5G28660
04751	-0	63400	4	00104	QP1	SXD	SE21+3,4		F5G28670
04752	0	40200	0	00316		SUB	ONED		F5G28680
04753	0	07400	4	00070		TSX	SE,4		F5G28690
04754	-0	53400	4	00072		LXD	BBBBP,4		F5G28700
04755	1	00417	4	04756		TXI	QP2,4,BBBL-1		F5G28710
04756	-0	63400	4	04767	QP2	SXD	QP4,4		F5G28720
04757	-0	63400	4	04771		SXD	QP5,4		F5G28730
04760	0	53400	4	12533		LXA	BBB,4		F5G28740
04761	-0	63400	4	04775		SXD	QP8,4		F5G28750
04762	-0	53400	4	00104		LXD	SE21+3,4		F5G28760
04763	-0	75400	4	00000	QP3	PXD	0,4		F5G28770
04764	0	07400	4	00056		TSX	SE5+1,4		F5G28780
04765	0	50200	1	15674		CLS	PRED,1		F5G28790
04766	0	73400	4	00000		PAX	0,4		F5G28800
04767	3	00000	4	04772	QP4	TXH	QP6,4,-		F5G28810
04770	1	00420	4	04771		TXI	QP5,4,BBBL		F5G28820
04771	3	00000	4	04773	QP5	TXH	QP7,4,-		F5G28830
04772	0	60100	1	15674	QP6	STO	PRED,1		F5G28840
04773	-0	53400	4	00306	QP7	LXD	SEV2,4		F5G28850
04774	0	50000	0	00072		CLA	BBBBP		F5G28860
04775	-3	00000	4	04747	QP8	TXL	QP0,4,-		F5G28870
04776	1	77777	4	04763		TXI	QP3,4,-1		F5G28880
				04741		ORG	QP+1 LPLST MUST START AT SAME PLACE AS QP AND OTHERS.		F5G28890
							STORAGE ASSIGNMENT (TABLES)		F5G28900
				04741	LPLST	BSS	S3P1 SPACE FOR LOOP LIST TABLE		F5G28910
				05263	REG	BES	FP1 SPACE FOR REGION WORDS		F5G28920
				12510	SPACE	EQU	MSIZE-5-REG STORAGE SPACE LEFT		F5G28930
				00360	STAGL	SYN	STL		F5G28940
05263	0	00000	0	00000	STAG	HTR	-		F5G28950
05264	0	00000	0	00000		HTR	-		F5G28960
05265	0	00000	0	00000		HTR	-		F5G28960
05266	0	00000	0	00000		HTR	-		F5G28960
05267	0	00000	0	00000		HTR	-		F5G28960
05270	0	00000	0	00000		HTR	-		F5G28960
05271	0	00000	0	00000		HTR	-		F5G28960
05272	0	00000	0	00000		HTR	-		F5G28960
05273	0	00000	0	00000		HTR	-		F5G28960
05274	0	00000	0	00000		HTR	-		F5G28960
05275	0	00000	0	00000		HTR	-		F5G28960
05276	0	00000	0	00000		HTR	-		F5G28960
05277	0	00000	0	00000		HTR	-		F5G28960
05300	0	00000	0	00000		HTR	-		F5G28960
05301	0	00000	0	00000		HTR	-		F5G28960

05632	0	00000	0	00000	HTR	-	F5G28960
05633	0	00000	0	00000	HTR	-	F5G28960
05634	0	00000	0	00000	HTR	-	F5G28960
05635	0	00000	0	00000	HTR	-	F5G28960
05636	0	00000	0	00000	HTR	-	F5G28960
05637	0	00000	0	00000	HTR	-	F5G28960
05640	0	00000	0	00000	HTR	-	F5G28960
05641	0	00000	0	00000	HTR	-	F5G28960
05642	0	00000	0	00000	HTR	-	F5G28960
05643	0	00000	0	00000	HTR	-	F5G28960
05644	0	50000	1	12535	W0	CLA BBB+2,1	F5G28980
05645	0	77100	0	00022		ARS 18	F5G28990
05646	0	40200	0	00611		SUB XV21	F5G29000
05647	0	10000	0	04112		TZE X42	F5G29010
05650	0	53400	1	00342		LXA S5K5,1	F5G29020
05651	-0	53400	4	00601		LXD XV13,4	F5G29030
05652	0	50000	4	12535	W1	CLA BBB+2,4	F5G29040
05653	0	76500	0	00022		LRS 18	F5G29050
05654	0	40200	0	00611		SUB XV21	F5G29060
05655	0	10000	0	05665		TZE W3	F5G29070
05656	0	50000	0	00314		CLA ZERO	F5G29080
05657	0	76300	0	00022		LLS 18	F5G29090
05660	0	40200	0	00611		SUB XV21	F5G29100
05661	0	10000	0	05665		TZE W3	F5G29110
05662	1	77777	4	05663		TXI W2,4,-1	F5G29120
05663	2	00001	1	05652	W2	TIX W1,1,1	F5G29130
05664	-3	00000	0	04111		TXL X36,-,-	F5G29140
05665	-0	63400	2	05671	W3	SXD W4,2	F5G29150
05666	-0	53400	1	05664		LXD W2+1,1	F5G29160
05667	0	07400	4	01566		TSX SB,4	F5G29170
05670	-0	53400	2	05671		LXD W4,2	F5G29180
05671	-3	00000	0	04111	W4	TXL X36,-,-	F5G29190
				05672	BSS	PTL1 SPACE FOR PATCHES	F5G29200
				04615	CMTL	SYN 9*SPACE/20/15*15	F5G29210
				05716	CMTAG	BSS CMTL	F5G29220
				00420	BBBL	SYN 6*SPACE/20/6	F5G29230
				12533	BBB	BSS BBBL*6+1	F5G29240
				15674	PRED	SYN BBB+BBBL*6+1	F5G29250
				02100	SPAC1	EQU MSIZE-4-PRED	F5G29260
				01037	PREDL	EQU SPAC1/2-1	F5G29270
				15674		BSS PREDL+1	F5G29280
				01037	SUCCL	SYN PREDL	F5G29290
				16734	SUCC	BSS SUCC+1	F5G29300
						EDITOR RECORD NO. 76	F5G29310
						FOR CONTROL CARD INFORMATION, SEE END OF ASSEMBLY.	F5G29320
						DIAGNOSTIC CALLER FOLLOWS	F5G29340
						PART 1B	F5G29350
						INITIALIZATION AND PRED LIMIT FOR FAST COMPILING.	F5G29360
				15674	ORG	PRED	F5G29370
15674	0	53400	1	00362	I	LXA FK5,1 CLEAR REG. TABLE	F5G29380
15675	0	76000	0	00012		DCT CLEAR DIVIDE CHECK LIGHT	F5G29390
15676	0	76100	0	00000		NOP IN CASE DIVIDE CHECK IS ON	F5G29400
15677	0	50000	0	00314		CLA ZERO	F5G29410
15700	0	60100	1	05263	I11	STO REG,1	F5G29420

15701	2	00001	1	15700	TIX I11,1,1	F5G29430
15702	0	76000	0	00140	PSE 96 TURN OFF SENSE LIGHTS.	F5G29440
15703	0	50000	0	17777	CLA KEYS+3 INITIALIZE	F5G29441
15704	0	60100	0	00042	STO STAGP+5 DRUM ADDR. OF STAG	F5G29450
15705	0	50000	0	17775	CLA KEYS+1	F5G29460
15706	0	60100	0	00065	STO PREDP+5	F5G29470
15707	0	50000	0	17776	CLA KEYS+2	F5G29480
15710	0	60100	0	00077	STO BBBP+5 DRUM ADDR. OF BB.B.	F5G29490
15711	0	50000	0	17774	CLA KEYS	F5G29500
15712	0	76700	0	00022	ALS 18	F5G29510
15713	0	60100	0	00075	STO BBBP+3 NO. OF BASIC BLOCKS.	F5G29520
15714	0	40200	0	00316	SUB ONED	F5G29530
15715	0	07400	4	00070	TSX SE,4	F5G29540
15716	0	50000	1	12533	CLA BBB,1	F5G29550
15717	0	62200	0	00051	STD SUCCP+3 LOCATION OF LAST SUCC	F5G29560
15720	0	76700	0	00022	ALS 18	F5G29570
15721	0	62200	0	00063	STD PREDP+3 LOCATION OF LAST PRED	F5G29580
15722	0	50000	1	12534	CLA BBB+1,1	F5G29590
15723	-0	32000	0	00326	ANA S3K4	F5G29600
15724	0	60100	0	00453	STO S4V3	F5G29610
15725	0	76500	0	00043	LRS 35	F5G29620
15726	0	22100	0	00331	DVP S4K2 COMPUTE	F5G29630
15727	-0	60000	0	16005	STQ IV1 THE	F5G29640
15730	0	10000	0	15732	TZE I1 LOCATION	F5G29650
15731	0	50000	0	00315	CLA ONEA WHICH A TAG	F5G29660
15732	0	40000	0	16005	I1 ADD IV1 WOULD HAVE	F5G29670
15733	0	76500	0	00043	LRS 35 IF IT	F5G29680
15734	0	20000	0	00331	MPY S4K2 WERE FIRST IN	F5G29690
15735	0	76300	0	00043	LLS 35 THE NEXT RECORD.	F5G29700
15736	0	60100	0	00452	STO S4V2	F5G29710
15737	0	60100	0	00451	STO S4V1	F5G29720
15740	0	50000	1	12534	CLA BBB+1,1 DETERMINE NO.	F5G29730
15741	-0	32000	0	00326	ANA S3K4 OF ENTRIES IN	F5G29740
15742	0	76500	0	00043	LRS 35 STAG.	F5G29750
15743	0	22100	0	00371	DVP XK9	F5G29760
15744	-0	60000	0	16005	STQ IV1	F5G29770
15745	0	10000	0	15747	TZE I10	F5G29780
15746	0	50000	0	00315	CLA ONEA	F5G29790
15747	0	40000	0	16005	I10 ADD IV1 INITIALIZE	F5G29800
15750	0	76700	0	00022	ALS 18	F5G29010
15751	0	60100	0	00040	STO STAGP+3 OF ENTRIES IN STAG	F5G29820
15752	0	76500	0	00043	LRS 35 COMPUTE	F5G29830
15753	0	22100	0	00037	DVP STAGP+2 THE	F5G29840
15754	0	10000	0	15756	TZE I3 DRUM	F5G29850
15755	0	50000	0	00315	CLA ONEA ADDR.	F5G29860
15756	-0	60000	0	16006	I3 STQ IV2 FOLLOWING	F5G29870
15757	0	40000	0	16006	ADD IV2 THE	F5G29880
15760	0	76700	0	00022	ALS 18	F5G29890
15761	0	40000	0	00040	ADD STAGP+3 STAG	F5G29900
15762	0	77100	0	00022	ARS 18	F5G29910
15763	0	40000	0	00042	ADD STAGP+5 TABLE.	F5G29920
15764	0	56000	0	16010	LDQ IK1	F5G29930
15765	0	04000	0	16004	TLQ I7	F5G29940
15766	0	50000	0	00036	I6 CLA STAGP+1	F5G29950

15767	0	34000	0	00040	CAS STAGP+3	ARE WE THRU STORING 0 S	F5G29960
15770	0	02000	0	15772	TRA I4		F5G29970
15771	0	02000	0	16011	TRA I9		F5G29980
15772	0	60100	0	00035	I4	STO STAGP SET N(0) TO OLD N(1)	F5G29990
15773	0	40000	0	00037		ADD STAGP+2 SET N(1) TO MIN (OLD N(1)+N.,	F5G30000
15774	0	56000	0	00040	LDQ STAGP+3	N(L)	F5G30010
15775	-0	60000	0	00036	STQ STAGP+1		F5G30020
15776	0	04000	0	16000	TLQ I5		F5G30030
15777	0	60100	0	00036	STO STAGP+1		F5G30040
16000	0	50000	0	00277	I5	CLA SEK	F5G30050
16001	0	53400	2	16007	LXA IK2,2		F5G30060
16002	0	07400	4	00166	TSX SE26,4	STORE BLOCK OF 0S	F5G30070
16003	0	02000	0	15766	TRA I6		F5G30080
16004	0	07400	4	00004	I7	TSX 4,4 TO DIAGNOSTIC	F5G30090
16005	0	00000	0	00000	IV1		F5G30100
16006	0	00000	0	00000	IV2		F5G30110
16007	0	00000	0	77744	IK2	1-STAGP	F5G30120
16010	0	00000	0	17777	IK1	HTR 8191	F5G30130
16011	0	07400	4	01133	I9	TSX S4,4	F5G30140
16012	0	77200	0	00204	REW INSTTP	REWIND THE COMPILED INST TAPE	F5G30150
16013	0	50000	0	17775	CLA KEYS+1		F5G30160
16014	-0	10000	0	04740	TNZ LPLST-1		F5G30170
16015	0	60100	0	00550	STO LPIND		F5G30180
16016	0	60100	0	04740	STO LPLST-1		F5G30190
16017	0	60100	0	04741	STO LPLST		F5G30200
16020	0	50000	0	00323	CLA S3K1		F5G30210
16021	0	60100	0	04742	STO LPLST+1		F5G30220
16022	-0	53400	4	00317	LXD S1K2,4	SKIP DIAGNOSTICS	F5G30230
16023	0	76200	0	00221	I9A	RTB 1 AND ANTIPINGPONG	F5G30240
16024	2	00001	4	16023	TIX I9A,4,1	SIX RECORDS	F5G30250
16025	0	02000	0	02706	TRA F75		F5G30260
						EDITOR RECORD NO. 78	F5G30270
						FOR CONTROL CARD INFORMATION, SEE END OF ASSEMBLY.	F5G30280
						DIAGNOSTIC CALLER FOLLOWS	F5G30300
						PART 1C	F5G30310
						SUCC LIMIT FOR FAST COMPILING	F5G30320
						04740	F5G30330
04740	-0	53400	1	00103	QS	ORG LPLST-1	F5G30340
04741	-3	00000	1	02177		LXD SE21+2,1	F5G30350
04742	-0	53400	4	00051		TXL F,1,0	F5G30360
04743	0	50000	0	00075		LXD SUCCP+3,4	F5G30370
04744	-3	00000	4	02177	QS0	CLA BBBP+3	F5G30380
04745	1	77777	4	04746		TXL F,4,0	F5G30390
04746	-0	63400	4	00104	QS1	TXI QS1,4,-1	F5G30400
04747	0	40200	0	00316		SXD SE21+3,4	F5G30410
04750	0	07400	4	00070		SUB ONED	F5G30420
04751	-0	53400	4	00072		TSX SE,4	F5G30430
04752	1	00417	4	04753		LXD BBBP,4	F5G30440
04753	-0	63400	4	04764	QS2	TXI QS2,4,BBBL-1	F5G30450
04754	-0	63400	4	04766		SXD QS4,4	F5G30460
04755	-0	53400	4	12533		SXD QS5,4	F5G30470
04756	-0	63400	4	04772		LXD BBB,4	F5G30480
04757	-0	53400	4	00104		SXD QS8,4	F5G30490
04760	-0	75400	4	00000	QS3	LXD SE21+3,4	F5G30500
						PXD 0,4	

04761	0	07400	4	00044		TSX SE6,4		F5G30510
04762	0	50200	1	16734		CLS SUCC,1		F5G30520
04763	0	73400	4	00000		PAX 0,4		F5G30530
04764	3	00000	4	04767	QS4	TXH QS6,4,-		F5G30540
04765	1	00420	4	04766		TXI QS5,4, BBBL		F5G30550
04766	3	00000	4	04770	QS5	TXH QS7,4,-		F5G30560
04767	0	60100	1	16734	QS6	STO SUCC,1		F5G30570
04770	-0	53400	4	00306	QS7	LXD SEV2,4		F5G30580
04771	0	50000	0	00072		CLA BBBP		F5G30590
04772	-3	00000	4	04744	QS8	TXL QS0,4,-		F5G30600
04773	1	77777	4	04760		TXI QS3,4,-1		F5G30610

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FOR CONTROL CARD INFORMATION, SEE END OF ASSEMBLY.
DIAGNOSTIC CALLER FOLLOWS

PART 1D
PRED UNDO FROM FAST COMPILING

				04740		ORG LPLST-1		F5G30620
04740	-0	53400	1	00103	QPU	LXD SE21+2,1		F5G30630
04741	-3	00000	1	00030		TXL R,1,0		F5G30650
04742	-0	53400	4	00063		LXD PREDP+3,4		F5G30660
04743	0	50000	0	00075		CLA BBBP+3		F5G30670
04744	-3	00000	4	00030	QPU0	TXL R,4,0		F5G30680
04745	1	77777	4	04746		TXI QPU1,4,-1		F5G30690
04746	-0	63400	4	00104	QPU1	SXD SE21+3,4		F5G30700
04747	0	40200	0	00316		SUB ONED		F5G30710
04750	0	07400	4	00070		TSX SE,4		F5G30720
04751	-0	53400	4	00072		LXD BBBP,4		F5G30730
04752	1	00417	4	04753		TXI QPU2,4, BBBL-1		F5G30740
04753	-0	63400	4	04764	QPU2	SXD QPU4,4		F5G30750
04754	-0	63400	4	04766		SXD QPU5,4		F5G30760
04755	0	53400	4	12533		LXA BBB,4		F5G30770
04756	-0	63400	4	04772		SXD QPU8,4		F5G30780
04757	-0	53400	4	00104		LXD SE21+3,4		F5G30790
04760	-0	75400	4	00000	QPU3	PXD 0,4		F5G30800
04761	0	07400	4	00056		TSX SE5+1,4		F5G30810
04762	0	50200	1	15674		CLS PRED,1		F5G30820
04763	0	73400	4	00000		PAX 0,4		F5G30830
04764	3	00000	4	04767	QPU4	TXH QPU6,4,-		F5G30840
04765	1	00420	4	04766		TXI QPU5,4, BBBL		F5G30850
04766	3	00000	4	04770	QPU5	TXH QPU7,4,-		F5G30860
04767	0	60100	1	15674	QPU6	STO PRED,1		F5G30870
04770	-0	53400	4	00306	QPU7	LXD SEV2,4		F5G30880
04771	0	50000	0	00072		CLA BBBP		F5G30890
04772	-3	00000	4	04744	QPU8	TXL QPU0,4,-		F5G30900
04773	1	77777	4	04760		TXI QPU3,4,-1		F5G30910

EDITOR RECORD NO. 82
FOR CONTROL CARD INFORMATION, SEE END OF ASSEMBLY.
DIAGNOSTIC CALLER FOLLOWS

PART 1E
SUCC UNDO FROM FAST COMPILING

				04740		ORG LPLST-1		F5G30920
04740	-0	53400	1	00103	QSU	LXD SE21+2,1		F5G30930
04741	-3	00000	1	02177		TXL F,1,0		F5G30940
04742	-0	53400	4	00051		LXD SUCCP+3,4		F5G30950

04743	0	50000	0	00075		CLA	BBBP+3		F5G31070
04744	-3	00000	4	02177	QSU0	TXL	F,4,0		F5G31080
04745	1	77777	4	04746		TXI	QSU1,4,-1		F5G31090
04746	-0	63400	4	00104	QSU1	SXD	SE21+3,4		F5G31100
04747	0	40200	0	00316		SUB	ONED		F5G31110
04750	0	07400	4	00070		TSX	SE,4		F5G31120
04751	-0	53400	4	00072		LXD	BBBP,4		F5G31130
04752	1	00417	4	04753		TXI	QSU2,4, BBBL-1		F5G31140
04753	-0	63400	4	04764	QSU2	SXD	QSU4,4		F5G31150
04754	-0	63400	4	04766		SXD	QSU5,4		F5G31160
04755	-0	53400	4	12533		LXD	BBB,4		F5G31170
04756	-0	63400	4	04772		SXD	QSU8,4		F5G31180
04757	-0	53400	4	00104		LXD	SE21+3,4		F5G31190
04760	-0	75400	4	00000	QSU3	PXD	0,4		F5G31200
04761	0	07400	4	00044		TSX	SE6,4		F5G31210
04762	0	50200	1	16734		CLS	SUCC,1		F5G31220
04763	0	73400	4	00000		PAX	0,4		F5G31230
04764	3	00000	4	04767	QSU4	TXH	QSU6,4,-		F5G31240
04765	1	00420	4	04766		TXI	QSU5,4, BBBL		F5G31250
04766	3	00000	4	04770	QSU5	TXH	QSU7,4,-		F5G31260
04767	0	60100	1	16734	QSU6	STO	SUCC,1		F5G31270
04770	-0	53400	4	00306	QSU7	LXD	SEV2,4		F5G31280
04771	0	50000	0	00072		CLA	BBBP		F5G31290
04772	-3	00000	4	04744	QSU8	TXL	QSU0,4,-		F5G31300
04773	1	77777	4	04760		TXI	QSU3,4,-1		F5G31310

EDITOR RECORD NO. 84

FOR CONTROL CARD INFORMATION, SEE END OF ASSEMBLY.

DIAGNOSTIC CALLER FOLLOWS

PART 2

PERMUTE RESULTS AND COMBINE BB LIST WITH BB TABLE

				00317		ORG	C		F5G31320
00317	0	00000	0	77777	BLV09	HTR	-1	BB NO. OF LAST GO TO N	F5G31330
00320	0	76200	0	00223	BL12	RTB	BLT	FIND THE END OF FILE PRECEEDING BB LIST	F5G31340
00321	0	70000	0	00655	BL13	CPY	BLIST		F5G31350
00322	0	02000	0	00320		TRA	BL12		F5G31360
00323	0	02000	0	00325		TRA	BL6		F5G31370
00324	0	02000	0	00320		TRA	BL12		F5G31380
00325	-0	53400	2	00332	BL6	LXD	CON1,2		F5G31390
00326	0	76200	0	00223	BL5	RTB	BLT		F5G31400
00327	0	53400	1	00332		LXA	CON1,1		F5G31410
00330	0	70000	1	00655	BL1	CPY	BLIST,1	COPY BB LIST INTO CS	F5G31420
00331	1	77777	1	00330		TXI	BL1,1,-1		F5G31430
00332	0	00005	0	00000	CON1		0,0,5		F5G31440
00333	0	76600	0	00333		IOD			F5G31450
00334	-0	76000	0	00012		RTT			F5G31460
00335	0	02000	0	00435		TRA	BL4	ERROR	F5G31470
00336	0	50000	0	17774		CLA	KEYS	O.K. COMPUTE TEST CONSTANT	F5G31480
00337	0	40200	0	00552		SUB	TWO		F5G31490
00340	0	60100	0	00566		STO	BLV3		F5G31500
00341	0	50000	0	00314		CLA	ZERO		F5G31510
00342	0	07400	4	00032		TSX	SE4,4	STAG WORD	F5G31520
00343	0	50000	1	05263		CLA	STAG,1		F5G31530
00344	0	60100	0	00602		STO	BLV07		F5G31540
00345	0	50000	0	00564		CLA	BLV1		F5G31550

00346	0	56000	0	00566	BL3	LDQ BLV3	HAVE WE ALREADY DEALT WITH LAST BB	F5G31620
00347	0	04000	0	00541		TLQ BL06	YES , GO TO READ IN NEXT PART	F5G31630
00350	0	40000	0	00315		ADD ONEA		F5G31640
00351	0	07400	4	00067		TSX SE1,4	GET UNDEX OF NEXT BB	F5G31650
00352	0	50000	1	12534		CLA BBB+1,1	STORE THE NO. OF THE	F5G31660
00353	-0	32000	0	00554		ANA RMSK	FIRST TAG IN	F5G31670
00354	0	60100	0	00571		STO BLV6	NEXT BB. ,	F5G31680
00355	0	50000	1	12533		CLA BBB,1		F5G31690
00356	-0	32000	0	00553		ANA 2AMSK		F5G31700
00357	0	60100	0	00570		STO BLV5	STORE AWAY NO. OF U1ST PRED IN NEXT BB.	F5G31710
00360	0	50000	0	00564		CLA BLV1		F5G31720
00361	0	07400	4	00067		TSX SE1,4		F5G31730
00362	-0	53400	2	00565		LXD BLV2,2		F5G31740
00363	0	50000	2	00655		CLA BLIST,2	REPLACE LAST WORD OF BBB ENTRY	F5G31750
00364	0	60100	1	12540		STO BBB+5,1	BY THE LOCATION FROM THE BB LIST.	F5G31760
00365	1	77777	2	00366	BL2	TXI BL2+1,2,-1		F5G31770
00366	-0	63400	2	00565		SXD BLV2,2		F5G31780
00367	0	50000	1	12534		CLA BBB+1,1	STORE PERMUTATION NOS.	F5G31790
00370	0	60100	0	00572		STO BLV7		F5G31800
00371	-0	63400	1	00567		SXD BLV4,1		F5G31810
00372	0	50000	1	12534		CLA BBB+1,1	GET	F5G31820
00373	-0	32000	0	00554		ANA RMSK	OF 1ST TAG IN BB	F5G31830
00374	0	40200	0	00571		SUB BLV6	FORM COUNT OF NO. OF T.GS	F5G31840
00375	0	40200	0	00315		SUB ONEA		F5G31850
00376	0	73400	2	00000		PAX 0,2	COUNT OF NO. OF TAGS INTO 2.	F5G31860
00377	-0	63400	2	00600		SXD BLV05,2	STORE COUNT OF NO. OF TAGS	F5G31870
00400	0	50000	1	12533		CLA BBB,1		F5G31880
00401	-0	32000	0	00553		ANA 2AMSK		F5G31890
00402	0	60100	0	00575	BL9	STO BLV01		F5G31900
00403	0	34000	0	00570		CAS BLV5	IS THIS PRED IN SAME BB	F5G31910
00404	0	02000	0	00406		TRA BL7	YES	F5G31920
00405	0	02000	0	00440		TRA BL01	NO	F5G31930
00406	0	07400	4	00055	BL7	TSX SE5,4	YES, GET INDEX OF PRED	F5G31940
00407	-0	50000	0	00555		CAL SALM		F5G31950
00410	0	60200	0	00574		SLW BLV9		F5G31960
00411	-0	50000	1	15674		CAL PRED,1		F5G31970
00412	0	60200	0	00573		SLW BLV8	STODRE OLD PRED WORD	F5G31980
00413	0	32000	0	00574		ANS BLV9	INT INITIALIZE NEW PRED WORD	F5G31990
00414	-0	53400	2	00550		LXD 2LD3,2	SET COUNT TO 3	F5G32000
00415	-0	50000	0	00572	BL8	CAL BLV7	PLACE THE	F5G32010
00416	0	77100	2	00003		ARS 3,2	PERMUTATION NO.	F5G32020
00417	0	77100	2	00003		ARS 3,2	IN REGISTER 4	F5G32030
00420	-0	32000	0	00550		ANA 2LD3		F5G32040
00421	-0	73400	4	00000		PDX 0,4		F5G32050
00422	-0	50000	0	00573		CAL BLV8	PERMUTE	F5G32060
00423	0	76700	2	00003		ALS 3,2	THE LXD	F5G32070
00424	-0	32000	0	00557		ANA BITMK	AND SXD	F5G32080
00425	0	77100	4	00003		ARS 3,4	BITS IN THE	F5G32090
00426	-0	60200	0	00574		ORS BLV9	PRED ENTRY	F5G32100
00427	2	00001	2	00415		TIX BL8,2,1	COUNT TO 3	F5G32110
00430	0	50000	0	00574		CLA BLV9		F5G32120
00431	0	60100	1	15674		STO PRED,1	STORE PRED ENTRY WITH PERMUTED BITS	F5G32130
00432	0	50000	0	00575		CLA BLV01	ARRANGE TO CONSIDER	F5G32140
00433	0	40000	0	00315		ADD ONEA	NEXT PRED ENTRY	F5G32150

00434	0	02000	0	00402	TRA	BL9			F5G32160	
00435	0	76400	0	00203	BL4	BST	BLT	TAPE CHECK	BACKSPACE TAPE	F5G32170
00436	2	00001	2	00326		TIX	BL5,2,1	TRY 5 TIMES		F5G32160
00437	0	07400	4	00004		TSX	4,4 THEN	START	DIAGNOSTIC.	F5G32190
00440	-0	53400	1	00600	BL01	LXD	BLV05,1			F5G32200
00441	-2	00001	1	00504	BL03	TNX	BL04,1,1	IS THERE ANOTHER TAG IN BB		F5G32210
00442	-0	53400	2	00577		LXD	BLV04,2	YES		F5G32220
00443	2	00001	2	00466		TIX	BL02,2,1	HAVE WE EXHAUSTED STAG WORD		F5G32230
00444	-0	63400	1	00600		SXD	BLV05,1	YES, STORE COUNT OF NO. OF TAGS		F5G32240
00445	-0	53400	2	00603		LXD	BLV08,2	STORE		F5G32250
00446	0	50000	0	00602		CLA	BLV07	OLD PERMUTED		F5G32260
00447	0	60100	2	05263		STO	STAG,2	STAG WORD		F5G32270
00450	0	50000	0	00314		CLA	ZERO			F5G32280
00451	0	60100	0	00602		STO	BLV07			F5G32290
00452	0	50000	0	00576		CLA	BLV03	GET		F5G32300
00453	0	07400	4	00032		TSX	SE4,4	NEXT		F5G32310
00454	-0	63400	1	00603		SXD	BLV08,1	STAG		F5G32320
00455	-0	50000	1	05263		CAL	STAG,1	WORD		F5G32330
00456	0	60200	0	00601		SLW	BLV06	STORE STAG WORD		F5G32340
00457	-0	32000	0	00560		ANA	LMSK	AND		F5G32350
00460	0	60200	0	00602		SLW	BLV07	INITIALIZE NEW STAG WORD		F5G32360
00461	0	50000	0	00576		CLA	BLV03	INCREASE THE		F5G32370
00462	0	40000	0	00315		ADD	ONEA	STAG WORD NO.		F5G32380
00463	0	60100	0	00576		STO	BLV03			F5G32390
00464	-0	53400	2	00551		LXD	2LD9,2	RESET COUNT TO 9		F5G32400
00465	-0	53400	1	00600		LXD	BLV05,1	RESTORE 1		F5G32410
00466	-0	63400	2	00577	BL02	SXD	BLV04,2	STORE COUNTER		F5G32420
00467	-0	50000	0	00601		CAL	BLV06			F5G32430
00470	0	76700	0	00002		ALS	2			F5G32440
00471	0	60200	0	00601		SLW	BLV06			F5G32450
00472	-0	32000	0	00550		ANA	2LD3	EXTRACT TAG		F5G32460
00473	-0	73400	4	00000		PDX	0,4			F5G32470
00474	-0	50000	0	00572		CAL	BLV7	PERMUTE		F5G32480
00475	0	77100	4	00003		ARS	3,4			F5G32490
00476	0	77100	4	00003		ARS	3,4	THE		F5G32500
00477	-0	32000	0	00550		ANA	2LD3	TAG		F5G32510
00500	0	77100	2	00012		ARS	10,2			F5G32520
00501	0	77100	2	00012		ARS	10,2			F5G32530
00502	-0	60200	0	00602		ORS	BLV07	FORM NEW TAG WORD		F5G32540
00503	0	02000	0	00441		TRA	BL03			F5G32550
00504	-0	53400	1	00567	BL04	LXD	BLV4,1	GET INDEX OF BB		F5G32560
00505	0	50000	1	12533		CLA	BBB,1	IS		F5G32570
00506	0	77100	0	00041		ARS	33	THIS		F5G32560
00507	0	40000	0	00315		ADD	ONEA	A GO N		F5G32590
00510	-0	10000	0	00516		TNZ	BL07	NO		F5G32600
00511	0	50000	0	00317		CLA	BLV09	YES, STORE BB NO.		F5G32610
00512	0	76700	0	00022		ALS	18	OF LAST		F5G32620
00513	0	62200	1	12534		STD	BBB+1,1	GO N ENCOUNTERED		F5G32630
00514	0	50000	0	00564		CLA	BLV1	STORE PRESENT		F5G32640
00515	0	60100	0	00317		STO	BLV09	BB NO.		F5G32650
00516	-0	53400	2	00550	BL07	LXD	2LD3,2	SET COUNT TO 3		F5G32660
00517	-0	50000	0	00572	BL09	CAL	BLV7			F5G32670
00520	0	77100	2	00003		ARS	3,2			F5G32680
00521	0	77100	2	00003		ARS	3,2	GET PERMUTATION NO.		F5G32690

00522	-0	32000	0	00550	ANA	2LD3			F5G32700
00523	-0	73400	4	00000	PDX	0,4			F5G32710
00524	0	50000	1	12535	CLA	BBB+2,1	PERMUTE		F5G32720
00525	0	60100	4	00564	STO	EXCO,4	ENTRANCE-EXIT REQUIREMENTS		F5G32730
00526	1	77777	1	00527	TXI	BL08+1,1,-1		BL08	F5G32740
00527	2	00001	2	00517	TIX	BL09,2,1	COUNT TO 3		F5G32750
00530	-0	53400	2	00550	LXD	2LD3,2	PLACE PERMUTED		F5G32760
00531	0	50000	2	00564	CLA	EXCO,2	ENTRANCE-EXIT COND.	BL10	F5G32770
00532	0	60100	1	12532	STO	BBB-1,1	BACK IN BB		F5G32780
00533	1	77777	1	00534	TXI	BL11+1,1,-1		BL11	F5G32790
00534	2	00001	2	00531	TIX	BL10,2,1	COUNT TO 3		F5G32800
00535	0	50000	0	00564	CLA	BLV1	PREPARE TO DEAL WITH	BL05	F5G32810
00536	0	40000	0	00315	ADD	ONEA	WITH NEXT BB		F5G32820
00537	0	60100	0	00564	STO	BLV1			F5G32830
00540	0	02000	0	00346	TRA	BL3			F5G32840
00541	0	07400	4	00067	TSX	SE1,4	PUT EDN MARK INTO THF DUMMEY BB	BL06	F5G32850
00542	0	50000	0	00556	CLA	EN2MK			F5G32860
00543	0	60100	1	12540	STO	BBB+5,1			F5G32870
00544	0	50000	0	00602	CLA	BLV07	STORE		F5G32880
00545	-0	53400	2	00603	LXD	BLV08,2	OLD		F5G32890
00546	0	60100	2	05263	STO	STAG,2	STAG WORD		F5G32900
00547	0	02000	0	00030	TRA	R	READ NEXT PART		F5G32910
00550	0	00003	0	00000	2LD3	0,0,3			F5G32920
00551	0	00011	0	00000	2LD9	0,0,9			F5G32930
00552	0	00000	0	00002	TWO	2			F5G32940
00553	0	00000	0	77777	2AMSK	-1	ADDRESS MASK		F5G32950
00554	0	00000	7	77777	RMSK	-1,-1	RIGHT HALF MASK		F5G32960
00555	-377770077777				SALM	OCT -377770077777	MS MASK OUT SXD AND LXD PRED REULTS		F5G32970
00556	3	77777	7	77777	EN2MK	PTH -1,-1,-1	PUT IN LOCATION OF DUMMEY BB		F5G32980
00557	0	00004	4	00000	BITMK	0,4,4	MASK TO EXTRACT ONE SXD AND LXD BIT		F5G32990
00560	-377777000000				LMSK	OCT -377777000000			F5G33000
				00564	EXCO	BES 3	THE ENTRANCE-EXIT CONDITIONS PERMUTED		F5G33010
00564	0	00000	0	00000	BLV1		BBNO.		F5G33020
00565	0	00000	0	00000	BLV2		INDEX IN BB LIST		F5G33030
00566	0	00000	0	00000	BLV3		TEST CONSTANT		F5G33040
00567	0	00000	0	00000	BLV4		INDEX OF BB		F5G33050
00570	0	00000	0	00000	BLV5		1ST PRED NO. IN NEXT BB		F5G33060
00571	0	00000	0	00000	BLV6		UST TAG IN NEXT BB		F5G33070
00572	0	00000	0	00000	BLV7		PERMUTTTION NOS.		F5G33080
00573	0	00000	0	00000	BLV8		OLD PRED ENTRY		F5G33090
00574	0	00000	0	00000	BLV9		NEW, PERMUTED, PRED ENTRY		F5G33100
00575	0	00000	0	00000	BLV01		CURRENT PRED. NO.		F5G33110
00576	0	00000	0	00000	BLV03		NO. OF STAG WORD, INITIALLY ZERO		F5G33120
00577	0	00000	0	00000	BLV04		COUNTER TO 9, INITIALLY ZERO		F5G33130
00600	0	00000	0	00000	BLV05		COUNT OF NO. OF TAGS IN BB		F5G33140
00601	0	00000	0	00000	BLV06		STAG WORD		F5G33150
00602	0	00000	0	00000	BLV07		NEW, PERMUTED, STAG WORD		F5G33160
00603	0	00000	0	00000	BLV08		INDEX OF OLD STAG WORD		F5G33170
				00604	BSS	PTL2	SPACE FOR PATCHES		F5G33180
00655	0	00000	0	00000	BLIST				F5G33190
							EDITOR RECORD NO. 86		F5G33200
							FOR CONTROL CARD INFORMATION, SEE END OF ASSEMBLY.		F5G33210
							DIAGNOSTIC CALLER FOLLOWS		F5G33230
							PART 3		F5G33240

				CHANGE LXD AND SXD RESULTS TO BE COMPATIBLE WITH GO TO	F5G33250
				N RESTRICTION. MODIFY ASSIGN CONSTANT TABLE.	F5G33260
				C CONTAINS THE BB NO. OF THE GO TO N	F5G33270
		00320		ORG C+1	F5G33280
00320	0	76200	0	00222 START RTB ACTPE LOCATE THE END OF FILE BEFORE ASSIGN CONSTANT	F5G33290
00321	0	70000	0	00573 CPY ACV12	F5G33300
00322	0	02000	0	00320 TRA START	F5G33310
00323	0	02000	0	00330 TRA RDIN	F5G33320
00324	0	02000	0	00320 TRA START	F5G33330
00325	0	76400	0	00202 ERR BST ACTPE BACKSPACE TAPE TO TRY AGAIN	F5G33340
00326	2	00001	2	00331 TIX AAC2,2,1 COUNT TO 5	F5G33350
00327	0	07400	4	00004 TSX 4,4 TO DIAGNOSTIC	F5G33360
00330	-0	53400	2	00555 RDIN LXD 3LD3,2	F5G33370
00331	0	76200	0	00222 AAC2 RTB ACTPE	F5G33360
00332	0	70000	0	00573 CPY ACV12 COPY THE EXTRA WORD	F5G33390
00333	0	53400	1	00314 LXA ZERO,1	F5G33400
00334	0	70000	1	00647 AAC1 CPY ASCON,1	F5G33410
00335	1	77777	1	00334 TXI AAC1,1,-1	F5G33420
00336	0	07400	4	00004 TSX 4,4	F5G33430
00337	0	76600	0	00333 IOD CHECK REDUNDANCY BITS	F5G33440
00340	-0	76000	0	00012 RTT	F5G33450
00341	0	02000	0	00325 TRA ERR THERR IS AN ERROR	F5G33460
00342	0	76200	0	00222 RTB ACTPE	F5G33470
00343	0	76200	0	00222 RTB ACTPE	F5G33480
00344	0	76200	0	00222 RTB ACTPE	F5G33490
00345	0	76600	0	00333 IOD	F5G33500
00346	-0	63400	1	00527 SXD ACV1,1 O.K. STORE RECORD OF NO. OF ENTRIES	F5G33510
00347	-0	63400	1	00541 SXD AC22,1	F5G33520
00350	0	50000	0	00317 CLA C	F5G33530
00351	0	56000	0	00560 AC15 LDQ ACK1 GET BB NO. OF 1ST GO TO N	F5G33540
00352	0	04000	0	00520 TLQ AC16 WAS THIS THE LAST GO TO N	F5G33550
00353	0	40000	0	00315 ADD ONEA NO	F5G33560
00354	0	07400	4	00067 TSX SE1,4	F5G33570
00355	-0	50000	1	12533 CAL BBB,1 FIND NO. OF 1ST SUCC IN NEXT BB	F5G33580
00356	0	77100	0	00022 ARS 18	F5G33590
00357	0	62100	0	00562 STA ACV3	F5G33600
00360	0	50000	0	00317 CLA C	F5G33610
00361	0	07400	4	00067 TSX SE1,4	F5G33620
00362	0	50000	0	00314 CLA ZERO CLEAR THE COMBINED SXDD CASE	F5G33630
00363	0	60100	0	00563 STO ACV4	F5G33640
00364	-0	50000	1	12533 CAL BBB,1 FIND THE NO. OF 1ST SUCC IN THIS BB	F5G33650
00365	0	77100	0	00022 ARS 18	F5G33660
00366	-0	32000	0	00552 ANA AMSK	F5G33670
00367	0	60100	0	00561 AC13 STO ACV2	F5G33680
00370	0	34000	0	00562 CAS ACV3 IS THIS SUCC IN SAME BB	F5G33690
00371	0	02000	0	00373 TRA AAC3 YES	F5G33700
00372	0	02000	0	00506 TRA AC14 NO	F5G33710
00373	0	76700	0	00022 AAC3 ALS 18	F5G33720
00374	0	07400	4	00044 TSX SE6,4 YES GET BB NO. OF SUCESSOR	F5G33730
00375	-0	50000	1	16734 CAL SUCC,1	F5G33740
00376	0	62100	0	00567 STA ACV8	F5G33750
00377	0	40000	0	00315 ADD ONEA FIN NO. OF 1ST PRED ENTRY NEXT BBB	F5G33760
00400	0	07400	4	00067 TSX SE1,4	F5G33770
00401	0	50000	1	12533 CLA BBB,1	F5G33780

00402	0	62100	0	00565	STA ACV6		F5G33790
00403	0	50000	0	00314	CLA ZERO		F5G33800
00404	0	60100	0	00571	STO ACV10	PRESET COMBINED LXO CASE TO 0	F5G33810
00405	0	50000	0	00567	CLA ACV8	FIND NO. OF 1ST PRED IN THIS BB	F5G33820
00406	0	07400	4	00067	TSX SE1,4		F5G33830
00407	-0	50000	1	12533	CAL BBB,1		F5G33840
00410	-0	32000	0	00552	ANA AMSK		F5G33850
00411	0	62100	0	00570	STA ACV9	RECORD 1ST PRED FOR FUTURE USE	F5G33860
00412	0	62100	0	00566	AC7 STA ACV7		F5G33870
00413	0	34000	0	00565	CAS ACV6	IS THIS PRED IN SAME BB	F5G33880
00414	0	02000	0	00416	TRA AC4		F5G33890
00415	0	02000	0	00444	TRA AC8	NO	F5G33900
00416	0	07400	4	00055	AC4 TSX SE5,4	IS THIS THE TRANSFER FROM CURRENTLY CONSIDERED	F5G33910
00417	-0	50000	1	15674	CAL PRED,1	ED GO TO NP	F5G33920
00420	-0	32000	0	00552	ANA AMSK		F5G33930
00421	0	40200	0	00317	SUB C		F5G33940
00422	-0	10000	0	00427	TNZ AC5	IF NOT SKIP THE ORING OF SXD CASE	F5G33950
00423	-0	50000	1	15674	CAL PRED,1	OR THE SXD CASE INTO COMBINED SXD CASE	F5G33960
00424	-0	60200	0	00563	ORS ACV4		F5G33970
00425	-0	50000	0	00554	CAL NTMSK		F5G33980
00426	0	32000	1	15674	ANS PRED,1		F5G33990
00427	-0	50000	1	15674	AC5 CAL PRED,1	IS THE BB WHICH IS PREDECESSOR	F5G34000
00430	-0	63400	1	00572	SXD ACV11,1	A GO TO N	F5G34010
00431	0	07400	4	00067	TSX SE1,4		F5G34020
00432	0	50000	1	12533	CLA BBB,1		F5G34030
00433	0	77100	0	00041	ARS 33		F5G34040
00434	0	40000	0	00315	ADD ONEA		F5G34050
00435	-0	10000	0	00441	TNZ AC6		F5G34060
00436	-0	53400	2	00572	LXD ACV11,2	YES, OR THE LXD XCASE INTO THE	F5G34070
00437	-0	50000	2	15674	CAL PRED,2	COMBINED LXD CASE	F5G34080
00440	-0	60200	0	00571	ORS ACV10		F5G34090
00441	0	50000	0	00566	AC6 CLA ACV7		F5G34100
00442	0	40000	0	00315	ADD ONEA		F5G34110
00443	0	02000	0	00412	TRA AC7		F5G34120
00444	-0	50000	0	00571	AC8 CAL ACV10	IS THE COMBINED LXD CASE ZERO	F5G34130
00445	-0	32000	0	00553	ANA TMSK		F5G34140
00446	0	10000	0	00503	TZE AC12		F5G34150
00447	0	50000	0	00567	CLA ACV8	NO, HAS THIS BB ALREADY BEEN	F5G34160
00450	0	07400	4	00067	TSX SE1,4	CONSIDERED	F5G34170
00451	0	56000	1	12533	LDQ BBB,1	AS A SUCCESSOR TO	F5G34180
00452	-0	77300	0	00024	RQL 20	A GO TO N	F5G34190
00453	0	16200	0	00455	TQP AC18		F5G34200
00454	0	02000	0	00503	TRA AC12		F5G34210
00455	0	50000	0	00557	AC18 CLA LT1		F5G34220
00456	-0	60200	1	12533	ORS BBB,1	RECORD THAT THIS BB HAS BEEN CONSIDERED AS	F5G34230
00457	0	50000	0	00570	CLA ACV9	ECT..PE PREPARE TO SCAN ALL PRED ENTRIES	F5G34240
00460	0	62100	0	00566	AC11 STA ACV7		F5G34250
00461	0	34000	0	00565	CAS ACV6	IS THIS PRED IN SAME BB	F5G34260
00462	0	02000	0	00464	TRA AC9		F5G34270
00463	0	02000	0	00531	TRA AC19	NO	F5G34280
00464	0	07400	4	00055	AC9 TSX SE5,4	DETERMINE IF THE BB WHICH	F5G34290
00465	-0	63400	1	00572	SXD ACV11,1	IS THE PREDECESSOR OF THIS ONE	F5G34300
00466	0	50000	1	15674	CLA PRED,1	IS A GO TO N	F5G34310
00467	0	07400	4	00067	TSX SE1,4		F5G34320

00470	0	50000	1	12533	CLA	BBB,1		F5G34330	
00471	0	77100	0	00041	ARS	33		F5G34340	
00472	0	40000	0	00315	ADD	ONEA		F5G34350	
00473	-0	10000	0	00500	TNZ	AC10		F5G34360	
00474	-0	53400	2	00572	LXD	ACV11,2	IT IS A GO TO N	F5G34370	
00475	0	50000	0	00571	CLA	ACV10	REPLACE LXD CASE BY THE	F5G34380	
00476	-0	32000	0	00553	ANA	TMSK	COMBINED LXD CASE	F5G34390	
00477	-0	60200	2	15674	ORS	PRED,2		F5G34400	
00500	0	50000	0	00566	AC10	CLA	ACV7	ARRANGE TO TREAT NEXT PRED ENTRY	F5G34410
00501	0	40000	0	00315	ADD	ONEA		F5G34420	
00502	0	02000	0	00460	TRA	AC11		F5G34430	
00503	0	50000	0	00561	AC12	CLA	ACV2		F5G34440
00504	0	40000	0	00315	ADD	ONEA	ARRANGE TO TREAT NEXT SUCC ENTRY	F5G34450	
00505	0	02000	0	00367	TRA	AC13		F5G34460	
00506	0	50000	0	00317	AC14	CLA	C	STORE COMBINED	F5G34470
00507	0	07400	4	00067	TSX	SE1,4	SXDCASE IN PREFIX	F5G34480	
00510	0	50000	0	00563	CLA	ACV4	OF 2ED WORD OF BBB ENTRY	F5G34490	
00511	0	76700	0	00017	ALS	15		F5G34500	
00512	0	63000	1	12534	STP	BBB+1,1		F5G34510	
00513	0	50000	1	12534	CLA	BBB+1,1	GET NEXT GO TO N NUMBER	F5G34520	
00514	0	77100	0	00022	ARS	18		F5G34530	
00515	-0	32000	0	00552	ANA	AMSK		F5G34540	
00516	0	60100	0	00317	STO	C		F5G34550	
00517	0	02000	0	00351	TRA	AC15		F5G34560	
00520	0	76600	0	00222	AC16	WTB	ACTPE	WRITE ASSIGN CONSTANTS BACK ON TAPE	F5G34570
00521	0	53400	1	00314	LXA	ZERO,1		F5G34580	
00522	-0	53400	2	00527	LXD	ACV1,2		F5G34590	
00523	0	70000	0	00573	CPY	ACV12		F5G34600	
00524	-3	00000	2	00030	TXL	R,2,0	IF NO ASSIGN CONST., GO TO NEXT PART	F5G34610	
00525	0	70000	1	00647	AC17	CPY	ASCON,1	F5G34620	
00526	1	77777	1	00527	TXI	ACV1,1,-1		F5G34630	
00527	-3	00000	1	00030	ACV1	TXL	R,1,SET	F5G34640	
00530	0	02000	0	00525	TRA	AC17		F5G34650	
00531	0	50000	0	00567	AC19	CLA	ACV8	F5G34660	
00532	0	07400	4	00067	TSX	SE1,4		F5G34670	
00533	0	53400	2	00314	LXA	ZERO,2		F5G34680	
00534	0	50000	1	12540	AC25	CLA	BBB+5,1	F5G34690	
00535	0	34000	2	00647	AC23	CAS	ASCON,2	IS THIS ASSIGN CONST. EQUAL TO THE	F5G34700
00536	0	02000	0	00540	TRA	AC20	LOCATION OF 1ST INST IN BB	F5G34710	
00537	0	02000	0	00543	TRA	AC24	YES	F5G34720	
00540	-3	00000	2	00542	AC20	TXL	AC21,2,0	F5G34730	
00541	-3	00000	2	00503	AC22	TXL	AC12,2,SET	F5G34740	
00542	1	77777	2	00535	AC21	TXI	AC23,2,-1	F5G34750	
00543	-0	50000	0	00571	AC24	CAL	ACV10	REPLACE ASSIGN CONST. BY NEW	F5G34760
00544	-0	32000	0	00553	ANA	TMSK	LOCATION SYMBOL	F5G34770	
00545	0	77100	0	00005	ARS	5		F5G34780	
00546	0	40000	0	00567	ADD	ACV8		F5G34790	
00547	0	36100	0	00556	ACL	LXDC		F5G34800	
00550	0	60200	2	00647	SLW	ASCON,2		F5G34810	
00551	0	02000	0	00534	TRA	AC25		F5G34820	
00552	0	00000	0	77777	AMSK	HTR	-1	F5G34830	
00553	0	00000	7	00000	TMSK	HTR	0,-1	F5G34840	
00554	-3	77770	77777		NTMSK	OCT	7777077777	F5G34050	
00555	0	00005	0	00000	3LD3		0,0,5	F5G34860	

00556	+150000000000	LXDC	OCT 150000000000	THE NUMBER IDENTIFYING THE LOC. OF AN LXD	F5G34870
00557	0 00000 1 00000	LT1	HTR 0,1		F5G34880
00560	+000000077776	ACK1	OCT 77776		F5G34890
00561	0 00000 0 00000	ACV2		NO. OF CURRENT SUCC. OF THIS BB IN ADDR.	F5G34900
00562	0 00000 0 00000	ACV3		NO. OF 1ST SUCC IN NEXT BB IN ADDR	F5G34910
00563	0 00000 0 00000	ACV4		COMBINED SXD CASE LAST OCTAL DIGIT IN DECR	F5G34920
00564	0 00000 0 00000	ACV5		NO. OF CURRENT PRED IN ADDR	F5G34930
00565	0 00000 0 00000	ACV6		NO. OF 1ST PRED IN NEXT BB IN ADDR	F5G34940
00566	0 00000 0 00000	ACV7		MO. OF CURRENT PRED IN THIS BB IN ADDR	F5G34950
00567	0 00000 0 00000	ACV8		BB NO. OF SUCCESSOR IN ADDR	F5G34960
00570	0 00000 0 00000	ACV9		NO. OF 1ST PRED IN THE SUCCESSOR BB IN ADDR	F5G34970
00571	0 00000 0 00000	ACV10		THE COMBINED LXD CASE	F5G34980
00572	0 00000 0 00000	ACV11		TEMP. STORE FOR PRED TABLE INDEX AT AC5	F5G34990
00573	0 00000 0 00000	ACV12		EXTRA WORD FROM ASSIGN CONSTANT RECORD	F5G35000
00574	0 00000 0 00000	ACV13		TEMP. STORE FOR LOCATION OF 1ST INST. IN BB	F5G35010
	00647	ASCON	BES PTL3	SPACE FOR PATCHES	F5G35020
				EDITOR RECORD NO. 88	F5G35030
				FOR CONTROL CARD INFORMATION, SEE END OF ASSEMBLY.	F5G35040
				DIAGNOSTIC CALLER FOLLOWS	F5G35060
				PART 4	F5G35070
				COMPILE INSTRUCTIONS FROM PREVIOUS RESULTS	F5G35080
				CONSTANTS	F5G35090
	00317		ORG C		F5G35100
00317	0 00000 0 00003	L3	3		F5G35110
00320	0 00000 0 00004	L4	4		F5G35120
00321	0 00000 0 00007	L7	7		F5G35130
00322	0 00000 0 00023	L19	19		F5G35140
	00316	LD1	SYN ONED		F5G35150
00323	0 00002 0 00000	LD2	0,0,2		F5G35160
00324	0 00003 0 00000	LD3	0,0,3		F5G35170
00325	0 00004 0 00000	LD4	0,0,4		F5G35180
00326	0 00007 0 00000	LD7	0,0,7		F5G35190
00327	0 00010 0 00000	LD8	0,0,8		F5G35200
00330	0 00011 0 00000	LD9	0,0,9		F5G35210
00331	0 00014 0 00000	LD12	0,0,12		F5G35220
00332	0 00000 7 00000	LT7	0,7		F5G35230
00333	0 00000 0 77754	LM20	-20		F5G35240
00334	0 00000 0 77774	LM4	-4		F5G35250
00335	0 77777 0 00000	DECMK	0,0,-1	DECREMENT MASK	F5G35260
00336	3 77777 7 77777	ENDMK	PTH -1,-1,-1		F5G35270
00337	0 00000 0 77777	ADDMK	-1		F5G35280
00340	+000000777770	STMSK	OCT 777770		F5G35290
00341	0 00007 7 00000	PRMK	0,7,7	MASK FOR PRED RESULTS	F5G35300
00342	0 00000 7 77777	TAGMK	-1,-1	MASK FOR TAU- TAGS	F5G35310
00343	-3 77777 0 00000	LFTMSK	MTH 0,0,-1		F5G35320
	00343	SMK3	SYN LFTMSK		F5G35330
00344	634743000000	LTPL	BCD 1TPL000		F5G35340
00345	436747000000	LLXP	BCD 1LXP000		F5G35350
00346	627045000000	LSYN	BCD 1SYN000		F5G35360
00347	242524000000	LDED	BCD 1DED000		F5G35370
00350	635121000000	LTRA	BCD 1TRA000		F5G35380
00351	636267000000	LTSX	BCD 1TSX000		F5G35390
00352	226262000000	LBSS	BCD 1BSS000	BSS IN BCD.	F5G35391
00353	+076225000000	LPSE	OCT 76225000000		F5G35400

00354	+060000000000	GSYM	OCT	60000000000	GARBAGE SYMBLE	F5G35410
00355	0 00004 0 00004	T4SYM	PZE	4,0,4	TAG 4 AND RELATIVE PART 4	F5G35420
00356	0 00000 0 00004			4	4 NUMBERS TO CONVERT S-TAG	F5G35430
00357	0 00000 0 00002			2		F5G35440
00360	0 00000 0 00001			1		F5G35450
00361	0 00000 0 00000	VSTAG	PZE	0		F5G35460
00362	0 00000 0 00001	RECSC	HTR	RECNO	ADDR, NO. OF RECS. BROUGHT IN , C.I.T.	F5G35470
00363	0 02000 0 00000	LCOUT	TRA	-	TRANSFER TO EXIT ROUTINE	F5G35480
00364	+035121000000		OCT	35121000000	TRA OP CODE	F5G35490
00365	+041104000000		OCT	41104000000	PSE-TRA	F5G35500
00366	-033642000000		OCT	-33642000000	DCT-PSE	F5G35510
00367	-024000000000		OCT	-24000000000	RTT-DCT	F5G35520
00370	+027642000000		OCT	27642000000	MSE-RTT	F5G35530
00371	-007100000000		OCT	-71000000000	TZE-MSE	F5G35540
00372	-032154000000		OCT	-32154000000	HPR-TZE	F5G35550
00373	+031316000000	LNTOP	OCT	31316000000	TSX-HPR	F5G35560
00374	+035121000000		OCT	35121000000		F5G35570
00375	+001622000000		OCT	16220000000	TXL-TRA	F5G35580
00376	-031772000000		OCT	-31772000000	HPR-TXL	F5G35590
00377	+031400000000	LTROP	OCT	31400000000	TTR-HPR	F5G35600
00400	-370000000000	FSTLT	OCT	-370000000000		F5G35610
00401	-230000000000	FSTT	OCT	-230000000000		F5G35620
00402	+170000000000	PCC	OCT	170000000000	MEANS LOCATION OF THIS INST.	F5G35630
00403	-300000000000	PFXMK	OCT	-300000000000		F5G35640
00404	+000770000000	XXPSX	OCT	770000000	CONSTANTS TO TEST PSE ADDR.	F5G35650
00405	+000160000000	XX16X	OCT	160000000		F5G35660
00406	+000360000000	XX360	OCT	360000000		F5G35670
00407	+00000077777	SHK1	OCT	77777	CONST. TO EXTRACT R. HALF WORD	F5G35680
	00320	SHK2	SYN	L4		F5G35690
00410	+160000000000	SIK2	OCT	160000000000	I.D. FOR LOCATION OF SXD	F5G35700
00411	626724000000	SIK3	BCD	1SXD000	SXD IN BCD	F5G35710
	00411	LSXD	SYN	SIK3		F5G35720
	00410	IDSXD	SYN	SIK2		F5G35730
00412	0 00000 0 00144	SKK1		LCLST		F5G35740
	00350	SLK1	SYN	LTRA	TRA IN BCD	F5G35750
00413	+150000000000	SMK1	OCT	150000000000	I.D. FOR LOCATION OF LXD	F5G35760
00414	436724000000	SMK2	BCD	1LXD000	LXD IN BCD	F5G35770
	00414	LLXD	SYN	SMK2		F5G35780
					FOR SMK3 SEE LFTMSK	F5G35790
00415	+140000000000	SMK4	OCT	140000000000	I.D. FOR TAU-TAG	F5G35800
	00413	SLK2	SYN	SMK1		F5G35810
	00413	IDLXD	SYN	SMK1		F5G35820
	00415	IDTAG	SYN	SMK4		F5G35830
00416	-000000000000	Z1K3	OCT	-0		F5G35840
	00416	MZE	SYN	Z1K3		F5G35850
00417	0 77776 0 00000	Z2K1		0,0,-2	THE INDEXES NEEDED TO REFER	F5G35860
00420	0 77772 0 00000			0,0,-6	TO THE BOTTOM POSITIONS	F5G35870
00421	0 77766 0 00000			0,0,-10	IN LIST1, LIST2, LIST3, RESPT.	F5G35880
00422	0 00007 0 00003	Z2K2	HTR	3,0,7	NO. OF LISTS, NO. OF CASES	F5G35890
00423	0 00000 0 00001	CASE	HTR	1		F5G35900
00424	0 00000 0 00002			2		F5G35910
00425	0 00000 0 00004			4		F5G35920
00426	0 00000 0 00003			3		F5G35930
00427	0 00000 0 00005			5		F5G35940

00430	0	00000	0	00006		6		F5G35950
00431	0	00000	0	00007		7		F5G35960
00432	+000032212110	Z2K3	OCT	32212110			CONST. TO DETERMINE NO. 1 S IN 3 BITS	F5G35970
00433	+000030000000	Z2K4	DEC	3B14				F5G35980
00434	0	00000	0	00007	Z2K5	HTR	7	F5G35990
00435	0	00000	0	77777	Z4K1		-1	F5G36000
00436	0	00000	0	00000	Z4K2		0	F5G36010
00437	0	00000	0	01000	LNSXD	NSXD*4		F5G36020
00440	0	77770	0	00000	Z7K1	0,0,-8		F5G36030
00441	0	77764	0	00000		0,0,-12		F5G36040
00442	0	77760	0	00000		0,0,-16		F5G36050
							THE DEFINITION OF TEMP. AND VARIABLE STORAGE LOCATIONS	F5G36060
00443	-0	00001	0	00000	BBNO	MZE	0,0,1	F5G36070
00444	0	00000	0	00000	NXTLOC			F5G36080
00445	0	00000	0	00000	OUTBX			F5G36090
00446	0	00000	0	00000	ERRBX			F5G36100
00447	0	00000	0	00000	BBOX			F5G36110
00450	0	00000	0	00000	BBOX1			F5G36120
00451	0	00000	0	00000	ABOX			F5G36130
00452	0	00000	0	00000	TAG			F5G36140
00453	0	00000	0	00000	STAGN1			F5G36150
00454	0	00000	0	00000	STAGN2			F5G36160
00455	0	00000	0	00000	9CNT			F5G36170
00456	-0000000000001	STGWD	DEC	-1				F5G36180
00457	0	00000	0	00000	TMP10			F5G36190
00460	0	00000	0	00000	CIND			F5G36200
00461	-0	00000	0	00000	CPIND	MZE		F5G36210
00462	0	00000	0	00000	ARG1			F5G36220
00463	0	00000	0	00000	MBOX			F5G36230
00464	0	00000	0	00000	SUCNO			F5G36240
00465	0	00000	0	00000	SXD0			F5G36250
00466	0	00000	0	00000	SXD1			F5G36260
00467	0	00000	0	00000	SXD2			F5G36270
00470	0	00000	0	00000	SXD3			F5G36280
00471	0	00000	0	00000	SADV1			F5G36290
00472	0	00000	0	00000	SADV2			F5G36300
00473	0	00000	0	00000	SADV3			F5G36310
00474	0	00000	0	00000	SADV4			F5G36320
00475	0	00000	0	00000	SADV5			F5G36330
00476	0	00000	0	00000	SHV1			F5G36340
00477	0	00000	0	00000	SHV2			F5G36350
00500	0	00000	0	00000	SIV1			F5G36360
00501	0	00000	0	00000	SIV2			F5G36370
00502	0	00000	0	00000	SIV3			F5G36380
00503	0	00000	0	00000	SIV4			F5G36390
00504	0	00000	0	00000	SIV5			F5G36400
00505	0	00000	0	00000	SIV6			F5G36410
00506	0	00000	0	00000	SJV1			F5G36420
00507	0	00000	0	00000	SJV2			F5G36430
00510	0	00000	0	00000	SJV3			F5G36440
		00655	CLST	BES	LCLST		THE NEW LIST OF COMPILED INST.	F5G36450
00655	0	00144	0	00000	SKV1	0,0,LCLST	INDEX FOR NEXT ENTRY IN CLST	F5G36460
						SKV1 COMES ALREADY INITIALIZED		F5G36470
00656	0	00000	0	00000	SLV1		RETURN INDEX	F5G36480

00657	0	00000	0	00000	SLV2		LOCATION TO BE ATTACHED TO TRA	F5G36490
00660	0	00000	0	00000	SLV3		+ OR - MEANS ISNT OR IS HANGING TRAO	F5G36500
00661	0	00000	0	00000	SMV1		RETURN INDEX	F5G36510
00662	0	00000	0	00000	SMV2		TAG TO BE COMPIED	F5G36520
00663	0	00000	0	00000	SMV3		STORE INDEX OF QUANTITY IN LIST	F5G36530
00664	0	00000	0	00000	SMV4		LOCATION , TEMP. STORE	F5G36540
00665	0	00000	0	00000	Z1V2		NO. OF 1ST PRED. IN NEXT BB	F5G36550
00666	0	00000	0	00000	Z1V3		NO. OF PRED BEING CONSIDERED	F5G36560
00667	0	00000	0	00000	Z1V5		THE CASES	F5G36570
00670	0	00000	0	00000	Z1V8		THE LOC. OF 1ST PRED IN BB, USED IN Z4	F5G36580
00671	0	00000	0	00000	Z2V1		IN DECREMENTS, THE INDEXES	F5G36590
00672	0	00000	0	00000			THE TOP ENTRIES	F5G36600
00673	0	00000	0	00000			IN THE 3 LXD LISTS	F5G36610
00674	0	00000	0	00000	Z2V2		IN ADDR., NO. OF 1S IN DIFFERENCE	F5G36620
00675	0	00000	0	00000	Z2V3		IN DECR., INDEX OF LIST GIVING MIN. DIFFERENC	F5G36630
				00676	LIST1	BSS 4		F5G36640
				00702	LIST2	BSS 4		F5G36650
				00706	LIST3	BSS 4		F5G36660
				00715	LLIND	BES 3		F5G36670
00715	0	00000	0	00000	Z4V1		+ OR - MEANS LIST NOT TO BE OR TOBE COMPIED	F5G36670
00716	0	00000	0	00000	Z5V1		TEMP. STORE , LXD CASE IN ADDR.	F5G36680
00717	0	00000	0	00000	Z7V1		INDEX IN SYN TABLE	F5G36690
00720	0	00000	0	00000	Z7V2		INDEX OF LIST	F5G36700
							+ OR - MEANS 1ST OR 2ED TIME THRU	F5G36710
				00735	NDINS	BES 12	BLOCK FOR 3 EXTRA COMPIED INST.	F5G36720
				01101	INST	BES RECNO*100	THE BLOCK FOR THE COMPIED INSTR	F5G36730
01101	-0	00000	0	00000	SXST	MZE	- OR + MEANS NO SEQUENTIAL TRANSFER OR S. T.	F5G36740
				01102		BSS 3		F5G36750
							THE SXD INST. ASSOCIATED WITH SEQUENTIAL TRANSFER	F5G36760
				01105	SXAS0	BSS 4	ASSOCIATED WITH 0 LXD CASE	F5G36770
				01111	SXAS1	BSS 4	WITH 1ST LXD LIST	F5G36780
				01115	SXAS2	BSS 4	2ED LIST	F5G36790
				01121	SXAS3	BSS 4	3RD	F5G36800
				01125	SXAS	BSS 4*NSXD	THE LIST OF SXD INST.	F5G36810
02125	-0	00000	0	00000	SYN	MZE	SYN CARD TABLE STORED BACKWARD	F5G36820
							WHEN ENTERED WITH PRESENT BB NO. IN ADDR OF ARG1 AND BBNO.	F5G36830
							OFA SUCCESSOR BB IN ADDR. OF AC, SAD FIGURES OUT WHAT THE ADF	F5G36840
							DRESS OF CORRESPONDING TRANSFER INST. SHOULD BE AND RETURNS	F5G36850
							WITH THE ADDR IN LOGICAL AC	F5G36860
02126	-0	63400	4	00471	SAD	SXD SADV1,4	STORE RETURN	F5G36870
02127	-0	32000	0	00337	ANA	ADDMK	STORE THE SUCC. NO.	F5G36880
02130	0	60100	0	00475	STO	SADV5		F5G36890
02131	0	07400	4	00067	TSX	SE1,4		F5G36900
02132	0	50000	1	12540	CLA	BBB+5,1		F5G36910
02133	0	60100	0	00472	STO	SADV2		F5G36920
02134	0	50000	1	12533	CLA	BBB,1		F5G36930
02135	-0	32000	0	00337	ANA	ADDMK		F5G36940
02136	0	60200	0	00474	SLW	SADV4		F5G36950
02137	0	60200	0	00473	SAD1	SLW SADV3		F5G36960
02140	0	07400	4	00055	TSX	SE5,4		F5G36970
02141	0	50000	1	15674	CLA	PRED,1		F5G36980
02142	-0	32000	0	00337	ANA	ADDMK	IS THIS THE CORRECT	F5G36990
02143	0	40200	0	00462	SUB	ARG1	PRED ENTRY	F5G37000
02144	0	10000	0	02150	TZE	SAD2		F5G37010
02145	-0	50000	0	00473	CAL	SADV3	NO, TRY NEXT RETURN	F5G37020

02146	0	40000	0	00315		ADD ONEA		F5G37030
02147	0	02000	0	02137		TRA SAD1		F5G37040
02150	-0	50000	1	15674	SAD2	CAL PRED,1	IS THE SXD CASE 0	F5G37050
02151	-0	32000	0	00326		ANA LD7		F5G37060
02152	0	10000	0	02160		TZE SAD3	YES	F5G37070
02153	0	50000	0	00473		CLA SADV3	NO, FORM THE SYMBOLIC ADDR.	F5G37080
02154	0	40200	0	00474		SUB SADV4	AS ID FOR SXD PLUS NO. OF PRED WITHIN	F5G37090
02155	0	76700	0	00012		ALS 10	THE BB * 1024 PLUS BB NO.	F5G37100
02156	0	40000	0	00410		ADD IDSXD		F5G37110
02157	0	02000	0	02165		TRA SAD6		F5G37120
02160	0	50000	1	15674	SAD3	CLA PRED,1	IS THE LXD CASE ZERO	F5G37130
02161	-0	32000	0	00332		ANA LT7		F5G37140
02162	0	10000	0	02170		TZE SAD4		F5G37150
02163	0	77100	0	00005		ARS 5	NO, FORM TH SYMBOLIC ADOR.	F5G37160
02164	0	40000	0	00413		ADD IDLXD	AS 1024* LXD CASE PLUS BB NO. PLUS	F5G37170
02165	0	40000	0	00475	SAD6	ADD SADV5	I. D. FOR AN LXD	F5G37180
02166	-0	53400	4	00471	SAD5	LXD SADV1,4		F5G37190
02167	0	02000	4	00001		TRA 1,4		F5G37200
02170	-0	50000	0	00472	SAD4	CAL SADV2		F5G37210
02171	0	02000	0	02166		TRA SAD5		F5G37220
						THIS ROUTINE COMPILES CURRENT INST) IF INDICATOR IN CPIND		F5G37230
						INDICATES IT SHOULD BE		F5G37240
02172	0	50000	0	00461	SCMI	CLA CPIND	SHOULD INST. BE COMPILED	F5G37250
02173	0	12000	0	02206		TPL SCMI1		F5G37260
02174	-0	63400	4	00457		SXD TMP10,4	YES, COMPILE THE INST	F5G37270
02175	0	50000	2	01101		CLA INST,2		F5G37280
02176	0	07400	4	02367		TSX SK,4		F5G37290
02177	0	50000	2	01100		CLA INST-1,2		F5G37300
02200	0	07400	4	02367		TSX SK,4		F5G37310
02201	0	50000	2	01077		CLA INST-2,2		F5G37320
02202	0	07400	4	02367		TSX SK,4		F5G37330
02203	0	50000	2	01076		CLA INST-3,2		F5G37340
02204	0	07400	4	02367		TSX SK,4		F5G37350
02205	-0	53400	4	00457		LXD TMP10,4		F5G37360
02206	-0	76000	0	00003	SCMI1	SSM		F5G37370
02207	0	60100	0	00461		STO CPIND	RECORD INST SHOULD BE COMPILED	F5G37380
02210	0	02000	4	00001		TRA 1,4		F5G37390
						DETERMINE AN SXD CASE SUBROUTINE		F5G37400
02211	-0	63400	4	00476	SH	SXD SHV1,4	STORE RETURN	F5G37410
02212	0	53400	4	00320		LXA SHK2,4	CLEAR	F5G37420
02213	0	56000	0	00314		LDQ ZERO	THE	F5G37430
02214	-0	60000	4	00471	SH1	STQ SXD0+4,4	SXD	F5G37440
02215	2	00001	4	02214		TIX SH1,4,1	POSITIONS 0-3	F5G37450
02216	0	62100	0	00465		STA SXD0	STORE THE PRED NO.	F5G37460
02217	0	07400	4	00055		TSX SE5,4	GET INDEX OF PRED	F5G37470
02220	0	50000	1	15674		CLA PRED,1	GET AND	F5G37480
02221	0	60100	0	00477		STO SHV2	STORE PRED ENTRY	F5G37490
02222	0	07400	4	00067		TSX SE1,4	GET INDEX OF BBB TABLE ENTRY	F5G37500
02223	-0	53400	4	00324		LXD LD3,4	NO, SET COUNT TO 3	F5G37510
02224	0	56000	0	00477	SH2	LDQ SHV2	IS	F5G37520
02225	-0	77300	4	00022		RQL 18,4	SXD REQUIRED	F5G37530
02226	0	16200	0	02232		TQP SH3	FOR THIS I.R.	F5G37540
02227	0	50000	1	12535		CLA BBB+2,1	YES, GET AND	F5G37550
02230	-0	32000	0	00342		ANA TAGMK	EXTRACT THE	F5G37560

02231	0	60100	4	00471		STO SXD1+3,4	EXIT CONDITIONS	F5G37570
02232	1	77777	1	02233	SH3	TXI SH3+1,1,-1	DOWN THE EXIT CONDITIONS	F5G37580
02233	2	00001	4	02224		TIX SH2,4,1	COUNT TO 3	F5G37590
02234	-0	50000	0	00477	SH4	CAL SHV2	GET	F5G37600
02235	-0	32000	0	00332		ANA LT7	AND STORE	F5G37610
02236	0	76700	0	00003		ALS 3	LXD CASE	F5G37620
02237	0	62200	0	00465		STD SXD0		F5G37630
02240	-0	53400	4	00476		LXD SHV1,4		F5G37640
02241	0	02000	4	00001		TRA 1,4	RETURN	F5G37650
						COMPILE AN SXD	CASE SUBROUTINE	F5G37660
02242	-0	63400	4	00501	SI	SXD SIV2,4	STORE RETURN	F5G37670
02243	-0	63400	1	00500		SXD SIV1,1	STORE INDEX OF SXD CASE	F5G37680
02244	0	07400	4	02426		TSX SL1,4	RECORD ANY HANGING TRANSFER	F5G37690
02245	-0	50000	0	00443		CAL BBNO		F5G37700
02246	0	77100	0	00022		ARS 18		F5G37710
02247	0	60100	0	00657		STO SLV2	STORE BB NO.	F5G37720
02250	0	07400	4	00067		TSX SE1,4	GET INDEX OF BB	F5G37730
02251	0	50000	1	12533		CLA BBB,1		F5G37740
02252	-0	32000	0	00337		ANA ADDMK		F5G37750
02253	0	60100	0	00503		STO SIV4	STORE LOC. OF 1ST PRED IN BB	F5G37760
02254	-0	53400	1	00500		LXD SIV1,1	FORM	F5G37770
02255	0	50000	1	01101		CLA SXST,1	LOC. OF THIS PRED -	F5G37780
02256	-0	32000	0	00337		ANA ADDMK	LOC. OF 1ST PRED IN BB	F5G37790
02257	0	40200	0	00503		SUB SIV4		F5G37800
02260	0	76700	0	00012		ALS 10		F5G37810
02261	0	40000	0	00657		ADD SLV2		F5G37820
02262	0	40000	0	00410		ADD SIK2		F5G37830
02263	0	60100	0	00657		STO SLV2	STORE THE LOC. OF 1ST SXD	F5G37840
02264	-0	53400	2	00324		LXD LD3,2		F5G37850
02265	0	50000	1	01102	SI2	CLA SXST+1,1		F5G37860
02266	0	10000	0	02305		TZE SI1	IS THIS TAG 0	F5G37870
02267	-0	63400	1	00504		SXD SIV5,1	NO, PRESERVE INDEX 1	F5G37880
02270	0	60100	0	00505		STO SIV6	PRESERVE THE TAG	F5G37890
02271	0	50000	0	00657		CLA SLV2	PUT LOCATION WORD ON TAPE	F5G37900
02272	0	07400	4	02367		TSX SK,4		F5G37910
02273	0	50000	0	00314		CLA ZERO	AND RESET TO 0	F5G37920
02274	0	60100	0	00657		STO SLV2		F5G37930
02275	0	50000	0	00411		CLA SIK3	PUT SXD ON TAPE	F5G37940
02276	0	07400	4	02367		TSX SK,4		F5G37950
02277	0	50000	0	00505		CLA SIV6	14*2**-5+TAU-TAG IS	F5G37960
02300	0	40000	0	00415		ADD SMK4	SYMBOLIC ADDRESS	F5G37970
02301	0	07400	4	02367		TSX SK,4		F5G37980
02302	0	50000	2	00361		CLA VSTAG,2		F5G37990
02303	0	07400	4	02367		TSX SK,4	PUT S-TAG ON TAPE	F5G38000
02304	-0	53400	1	00504		LXD SIV5,1		F5G38010
02305	1	77777	1	02306	SI1	TXI SI1+1,1,-1		F5G38020
02306	2	00001	2	02265		TIX SI2,2,1	COUNT TO 3, FORM N+1	F5G38030
02307	-0	53400	1	00500		LXD SIV1,1		F5G38040
02310	0	50000	1	01101		CLA SXST,1		F5G38050
02311	-0	73400	2	00000		PDX 0,2		F5G38060
02312	-3	00000	2	02321		TXL SI3,2,0	IS THE LXD CASE 0	F5G38070
02313	-3	00000	1	02325		TXL SI4,1,0	NO, IS THIS THE ST POSITION	F5G38080
02314	3	77757	1	02334		TXH SI6,1,-16-1	IS THIS ASSOCIATED WITH A LIST	F5G38090
02315	0	77100	0	00022	SI5	ARS 18	NO	F5G38100

02316	0	07400	4	02403	TSX SL,4	COMPILE A TRA TO LXD CASE	F5G38110
02317	-0	53400	4	00501	LXD SIV2,4		F5G38120
02320	0	02000	4	00003	TRA 3,4	RETURN TO LOC. OF TSX + 3	F5G38130
02321	0	50200	0	00315	SI3 CLS ONEA	RECORD THAT THERE IS	F5G38140
02322	0	60100	0	00660	STO SLV3	A HANGING TRA TO 0 CASE	F5G38150
02323	-0	53400	4	00501	LXD SIV2,4		F5G38160
02324	0	02000	4	00001	TRA 1,4	RETURN TO LOC. OF TSX +1	F5G38170
02325	0	60100	0	00465	SI4 STO SXD0	STORE LXD CASE AS ARG FOR SJ	F5G38180
02326	0	07400	4	02336	TSX SJ,4	IS SXD CASE INST POS. ASSOC. WITH LIST	F5G38190
02327	0	00000	0	00000		SHOULDN'T BE WITH CASE 0	F5G38200
02330	0	02000	0	02334	TRA SI6	YES	F5G38210
02331	-0	53400	1	00500	LXD SIV1,1	NO	F5G38220
02332	0	50000	1	01101	CLA SXST,1		F5G38230
02333	0	02000	0	02315	TRA SI5	GO TO COMPILE TRA TO LXD CASE	F5G38240
02334	-0	53400	4	00501	SI6 LXD SIV2,4	RETURN TO 2 FOLLOWING TSX WITH	F5G38250
02335	0	02000	4	00002	TRA 2,4	INDEX OF TOP QUANTITY IN 1 AND LIST INDEX IN2	F5G38260
					DETERMINE IF THE SXD CASE IS ASSOCIATED WITH AN LXD LIST		F5G38270
02336	-0	63400	4	00507	SJ SXD SJV2,4		F5G38280
02337	0	50000	0	00465	CLA SXD0		F5G38290
02340	-0	32000	0	00335	ANA DECMK		F5G38300
02341	0	60100	0	00506	STO SJV1		F5G38310
02342	0	10000	0	02363	TZE SJ3	IS THIS THE 0 LXD CASE	F5G38320
02343	-0	53400	4	00314	LXD ZERO,4	NO, SET COUNT TO 3, N TO 1	F5G38330
02344	-0	53400	2	00324	LXD LD3,2	2 HAS THE COUNTER	F5G38340
02345	0	50000	4	01111	SJ2 CLA SXAS1,4		F5G38350
02346	0	12000	0	02357	TPL SJ1	DOES THE LIST ALREADY HAVE SXD	F5G38360
02347	0	50000	2	00674	CLA Z2V1+3,2	NO	F5G38370
02350	-0	73400	1	00000	PDX 0,1	GET INDEX OF TOP QUANTITY	F5G38380
02351	0	50000	1	00676	CLA LIST1,1		F5G38390
02352	0	76700	0	00022	ALS 18		F5G38400
02353	0	40200	0	00506	SUB SJV1	IS THIS CASE SAME AS CASE HEADUNG LIST N	F5G38410
02354	-0	10000	0	02357	TNZ SJ1		F5G38420
02355	-0	53400	4	00507	LXD SJV2,4	YES	F5G38430
02356	0	02000	4	00002	TRA 2,4	RETURN, INDEX OF TOP OF LIST IN 1	F5G38440
02357	1	77777	4	02360	SJ1 TXI SJ1+1,4,-1		F5G38450
02360	2	00001	2	02345	TIX SJ2,2,1	COUNT TO 3	F5G38460
02361	-0	53400	4	00507	LXD SJV2,4		F5G38470
02362	0	02000	4	00003	TRA 3,4		F5G38480
02363	-0	53400	4	00507	SJ3 LXD SJV2,4		F5G38490
02364	0	50000	0	01105	CLA SXAS0		F5G38500
02365	0	12000	4	00003	TPL 3,4		F5G38510
02366	0	02000	4	00001	TRA 1,4		F5G38520
					PUT WORD OF COMPILED INST ON TAPE		F5G38530
02367	-0	53400	1	00655	SK LXD SKV1,1		F5G38540
02370	0	60100	1	00655	STO CLST,1	STORE THE WORD IN CLST	F5G38550
02371	2	00001	1	02401	TIX SK1,1,1	COUNT NO OF WORDS IS CLST FULL	F5G38560
02372	0	53400	1	00412	LXA SKK1,1	YES	F5G38570
02373	-0	63400	1	00655	SXD SKV1,1	RESET THE INDEX	F5G38580
02374	0	76600	0	00223	WTB OTAPE	WRITE THE BLOCK ON	F5G38590
02375	0	70000	1	00655	SK2 CPY CLST,1	THE OUTPUT TAPE	F5G38600
02376	2	00001	1	02375	TIX SK2,1,1		F5G38610
02377	0	76600	0	00333	IOD		F5G38620
02400	0	02000	4	00001	TRA 1,4		F5G38630
02401	-0	63400	1	00655	SK1 SXD SKV1,1	STORE INDEX OF NEXT WORD	F5G38640

02402	0	02000	4	00001	TRA 1,4		F5G38650
					SUBROUTINE FOR COMPILING TRA TO LXD CASE		F5G38660
02403	-0	32000	0	00434	SL ANA Z2K5	FORM	F5G38670
02404	0	76700	0	00012	ALS 10	THE	F5G38680
02405	0	40000	0	00413	ADD SLK2	ADDRESS	F5G38690
02406	0	60100	0	00657	STO SLV2	OF	F5G38700
02407	0	50000	0	00443	CLA BBNO	THE	F5G38710
02410	-0	32000	0	00335	ANA DECMK		F5G38720
02411	0	77100	0	00022	ARS 18	TRA IN	F5G38730
02412	-0	60200	0	00657	ORS SLV2	SLV2	F5G38740
02413	-0	63400	4	00656	SXD SLV1,4	STORE RETURJ	F5G38750
02414	0	50000	0	00314	SL2 CLA ZERO	PUT 0 LOCATION	F5G38760
02415	0	07400	4	02367	TSX SK,4	ON TAPE	F5G38770
02416	0	50000	0	00350	CLA LTRA		F5G38780
02417	0	07400	4	02367	TSX SK,4	PUT SYMB. ADDR. ON TAPE	F5G38790
02420	0	50000	0	00657	CLA SLV2		F5G38800
02421	0	07400	4	02367	TSX SK,4	PUT SYMB. ADDR ON TAPE	F5G38810
02422	0	50000	0	00314	CLA ZERO		F5G38820
02423	0	07400	4	02367	TSX SK,4	ANOTHER 0	F5G38830
02424	-0	53400	4	00656	LXD SLV1,4		F5G38840
02425	0	02000	4	00001	TRA 1,4		F5G38850
					SUBROUTINE FOR PUTTING HANGING TRA 0 ON TAPE		F5G38860
02426	0	50000	0	00660	SL1 CLA SLV3		F5G38870
02427	0	12000	4	00001	TPL 1,4	RETURN IF THERE IS NO HANGING TRA0	F5G38880
02430	-0	63400	4	00656	SXD SLV1,4	OTHERWISE , STORE RETURN AND	F5G38890
02431	0	50000	0	00443	CLA BBNO	GET	F5G38900
02432	0	07400	4	00070	TSX SE,4	THE	F5G38910
02433	0	50000	1	12540	CLA BBB+5,1	SYMBOLIC LOCATION	F5G38920
02434	0	60100	0	00657	STO SLV2	OF 1ST INST IN BB AND	F5G38930
02435	0	50000	0	00314	CLA ZERO	STORE IN SYNBOBIS ADDR WORD	F5G38940
02436	0	60100	0	00660	STO SLV3	SET INDICATOR TO SAY NO HANGING TRA	F5G38950
02437	0	02000	0	02414	TRA SL2		F5G38960
					COMPILE AN LXD LIST		F5G38970
02440	0	50000	2	00715	SM CLA LLIND,2	IMMEDIATELY RETURN IF LIST IS	F5G38980
02441	0	12000	4	00001	TPL 1,4	ALREADY COMPOLED	F5G38990
02442	0	60200	2	00715	SLW LLIND,2	RECORD LIST ALREADY COMPILED	F5G39000
02443	-0	63400	4	00661	SXD SMV1,4	STORE RETURN	F5G39010
02444	0	50000	2	00422	CLA Z2K1+3,2	COMPUTE THE	F5G39020
02445	0	40200	0	00316	SUB ONED	INDEX OF SUB BOTTEM	F5G39030
02446	0	62200	0	02453	STD SM1	POSITION OF LIDT	F5G39040
02447	0	62200	0	02513	STD SM5	SET END TEST	F5G39050
02450	0	50000	1	00676	SM6 CLA LIST1,1		F5G39060
02451	-0	12000	0	02521	TMI SM8	DOES THIS ELEMENT OF LIST REPRESENT AN LXD	F5G39070
02452	-3	00000	1	02454	TXL SM1+1,1,0		F5G39080
02453	-3	00000	1	02455	SM1 TXL SM10,1,SET	YES, IS ELEMENT IN SUB BOTTOM POS.	F5G39090
02454	-0	40000	1	00677	SBM LIST1+1,1	NO	F5G39100
02455	0	60100	0	00662	SM10 STO SMV2	STORE THE TAG AWAY	F5G39110
02456	0	50000	0	00443	CLA BBNO	FORN	F5G39120
02457	-0	32000	0	00335	ANA DECMK	THE	F5G39130
02460	0	76500	0	00034	LRS 28	LOCATION	F5G39140
02461	0	50000	1	00676	CLA LIST1,1		F5G39150
02462	0	76300	0	00012	LLS 10		F5G39160
02463	0	40000	0	00413	ADD SMK1		F5G39170
02464	-0	63400	1	00663	SXD SMV3,1	STORE INDEX OF LIST QUANTITY	F5G39180

02465	0	60100	0	00664		STO	SMV4		F5G39190
02466	0	07400	4	02426		TSX	SL1,4	RECORD ANY HANGING TRA0	F5G39200
02467	0	50000	0	00664		CLA	SMV4		F5G39210
02470	0	07400	4	02367		TSX	SK,4	COMPILE THE LOCATION	F5G39220
02471	0	50000	0	00414		CLA	SMK2		F5G39230
02472	0	07400	4	02367		TSX	SK,4	COMPILE LXD	F5G39240
02473	0	50000	0	00443		CLA	BBNO		F5G39250
02474	0	07400	4	00070		TSX	SE,4	FIND INDEX OF BB	F5G39260
02475	0	50000	0	00662		CLA	SMV2		F5G39270
02476	0	34000	0	00320	SM3	CAS	L4	IS THIS THE CORRECT ENT. REQUIREMENT	F5G39280
02477	0	02000	0	02501		TRA	SM2		F5G39290
02500	0	02000	0	02503		TRA	SM4	YES	F5G39300
02501	0	76700	0	00001	SM2	ALS	1	NO, SHIFT IT LEFT ONE	F5G39310
02502	1	77777	1	02476		TXI	SM3,1,-1	AND INDEX TO NEXT ENRR. REQUIREMENT	F5G39320
02503	-0	50000	1	12535	SM4	CAL	BBB+2,1	FORM	F5G39330
02504	0	77100	0	00022		ARS	18	AND COMPILE	F5G39340
02505	0	40000	0	00415		ADD	SMK4	THE	F5G39350
02506	0	07400	4	02367		TSX	SK,4		F5G39360
02507	0	50000	0	00662		CLA	SMV2	COMPILE THE TAG	F5G39370
02510	0	07400	4	02367		TSX	SK,4		F5G39380
02511	-0	53400	1	00663		LXD	SMV3,1	IS THE ELEMENT IN SUB BOTTOM POSITION	F5G39390
02512	-3	00000	1	02514		TXL	SM5+1,1,0		F5G39400
02513	-3	00000	1	02515	SM5	TXL	SM7,1,SET		F5G39410
02514	1	77777	1	02450		TXI	SM6,1,-1	NO, INDEX TO NEXT LIST POS.	F5G39420
02515	0	50200	0	00315	SM7	CLS	ONEA		F5G39430
02516	0	60100	0	00660		STO	SLV3	RECORD THAT THERE IS HANGING TRA 0	F5G39440
02517	-0	53400	4	00661	SM9	LXD	SMV1,4		F5G39450
02520	0	02000	4	00001		TRA	1,4	RETURN	F5G39460
02521	0	10000	0	02515	SM8	TZE	SM7	GO TO RECORD HANGING TRA	F5G39470
02522	0	76000	0	00003		SSP			F5G39480
02523	0	07400	4	02403		TSX	SL,4	RECORD A TRA TO LXD CASE	F5G39490
02524	0	02000	0	02517		TRA	SM9		F5G39500
								THE METHODS OF BRINGNING IN BLOCKS OF COMPILED INST. AND	F5G39510
								CHECKING FOR ENDINGS IS THE SAME AS IN PASS 2 OF FLOW ANAL.	F5G39520
02525	-2	00144	2	02527	FNDAS	TXN	2FNDS,2,ZINST	IS BLOCK OF INST. ALL USED	F5G39530
02526	0	07400	4	03472		TSX	RDINS,4	YES, READ IN NEXT BLOCK	F5G39540
02527	-0	50000	2	01076	2FNDS	CAL	INST-3,2	IS THIS INST. TAGGED	F5G39550
02530	-0	32000	0	00340		ANA	STMSK		F5G39560
02531	0	10000	0	03336		TZE	CI7A		F5G39570
02532	-0	53400	4	00455	CI4	LXD	9CNT,4	YES	F5G39580
02533	2	00001	4	02547		TIX	CI5,4,1	COUNT TO 9, IS STAG WORD EXHAUSTED	F5G39590
02534	-0	63400	2	00447		SXD	BBOX,2	YES, GET ANOTHER	F5G39600
02535	0	50000	0	00456		CLA	STGWD	INCREASE THE NO. OF CURRENT STAG WORD	F5G39610
02536	0	40000	0	00315		ADD	ONEA		F5G39620
02537	0	60100	0	00456		STO	STGWD		F5G39630
02540	0	07400	4	00032		TSX	SE4,4	GET INDEX OF NEXT STAG WORD	F5G39640
02541	0	50000	1	05263		CLA	STAG,1		F5G39650
02542	0	60100	0	00454		STO	STAGN2	GET AND STORE	F5G39660
02543	0	76700	0	00002		ALS	2		F5G39670
02544	0	60100	0	00453		STO	STAGN1	THE STAG WORD	F5G39680
02545	-0	53400	2	00447		LXD	BBOX,2	RESTORE INDEX REGISER 2	F5G39690
02546	-0	53400	4	00330		LXD	LD9,4	RESET COUNT TO 9	F5G39700
02547	-0	63400	4	00455	CI5	SXD	9CNT,4		F5G39710
02550	-0	50000	2	01076		CAL	INST-3,2		F5G39720

02551	-0	32000	0	00342	ANA TAGMK	EXTRACT THE TAG	F5G39730
02552	0	60100	0	00452	STO TAG		F5G39740
02553	-0	50000	0	00453	CAL STAGN1		F5G39750
02554	-0	32000	0	00324	ANA LD3	EXTRACT THE S-TAG	F5G39760
02555	-0	73400	4	00000	PDX 0,4		F5G39770
02556	-0	50000	4	00361	CAL VSTAG,4	CONVERT S-TAG TO 1,2, OR 4	F5G39780
02557	0	62100	2	01076	STA INST-3,2	REPLACE TAU-TAG BY S-TAG	F5G39790
02560	0	40200	0	00320	SUB L4	IS THE TAG 4	F5G39800
02561	-0	10000	0	02564	TNZ CI5A		F5G39810
02562	-0	76000	0	00003	SSM		F5G39820
02563	0	60100	0	00460	STO CIND	YES, RECORD IR 4 NECESSARY	F5G39830
02564	-0	50000	0	00454	CI5A CAL STAGN2		F5G39840
02565	0	76700	0	00011	ALS 9		F5G39850
02566	-0	76000	0	00001	PBT	IS AN LXD NECESSARY	F5G39860
02567	0	02000	0	02602	TRA SKLX	NO	F5G39870
02570	0	50000	0	00314	CLA ZERO	YES	F5G39880
02571	0	07400	4	02367	TSX SK,4	COMPILE LOCATION OF 0	F5G39890
02572	0	50000	0	00414	CLA SMK2	COMPILE LXD	F5G39900
02573	0	07400	4	02367	TSX SK,4		F5G39910
02574	0	50000	0	00452	CLA TAG	COMPILE THE SYMB. ADDR. OF THE CELL	F5G39920
02575	-0	50100	0	00415	ORA SMK4		F5G39930
02576	0	07400	4	02367	TSX SK,4		F5G39940
02577	0	50000	2	01076	CLA INST-3,2	COMPILE THE S-TAG	F5G39950
02600	-0	32000	0	00337	ANA ADDMK		F5G39960
02601	0	07400	4	02367	TSX SK,4		F5G39970
02602	-0	50000	2	01100	SKLX CAL INST-1,2		F5G39980
02603	-0	32000	0	00343	ANA LFTMSK		F5G39990
02604	0	60200	0	00457	SLW TMP10		F5G40000
02605	0	50000	0	00457	CLA TMP10		F5G40010
02606	0	34000	0	00345	CAS LLXP	IS THIS AN LXP	F5G40020
02607	0	02000	0	02637	TRA CI1		F5G40030
02610	0	02000	0	02612	TRA SKLY	YES.	F5G40031
02611	0	02000	0	02637	TRA CI1		F5G40032
02612	-0	50000	0	00454	SKLY CAL STAGN2		F5G40040
02613	0	76700	0	00011	ALS 9		F5G40041
02614	-0	76000	0	00001	PBT	IS LXD NECESSARY.	F5G40042
02615	0	02000	0	03462	TRA CI3A	NO.	F5G40043
02616	0	50000	2	01076	CLA INST-3,2	YES. IS S-TAG=4.	F5G40044
02617	0	60200	0	00461	SLW CPIND	RECORD DONT COMPILE.	F5G40045
02620	-0	32000	0	00337	ANA ADDMK		F5G40046
02621	0	40200	0	00320	SUB L4		F5G40047
02622	-0	10000	0	02667	TNZ CI6	NOT 4.	F5G40048
02623	-0	50000	2	01074	CAL INST-5,2	IS NEXT INSTR	F5G40049
02624	-0	32000	0	00343	ANA LFTMSK		F5G40050
02625	0	60200	0	00457	SLW TMP10	AN LXD	F5G40051
02626	0	50000	0	00457	CLA TMP10		F5G40052
02627	0	40200	0	00414	SUB LLXD	WITH REAL	F5G40053
02630	-0	10000	0	02667	TNZ CI6	IR4.	F5G40054
02631	0	50000	2	01072	CLA INST-7,2		F5G40055
02632	-0	32000	0	00337	ANA ADDMK	IF SO,	F5G40056
02633	0	40200	0	00320	SUB L4		F5G40057
02634	-0	10000	0	02667	TNZ CI6	TURN ON	F5G40058
02635	0	76000	0	00141	PSE 97		F5G40059
02636	0	02000	0	02667	TRA CI6	SENSE LIGHT.	F5G40060

02637	0	34000	0	00347	CI1	CAS LDED	IS IT A DED	F5G40061
02640	0	02000	0	02642		TRA CI2		F5G40062
02641	0	02000	0	03462		TRA CI3A	YES	F5G40070
02642	0	50000	0	00454	CI2	CLA STAGN2		F5G40080
02643	0	12000	0	02667		TPL CI6	IS SXD REQUIRED	F5G40090
02644	0	50000	2	01101		CLA INST,2	NEITHER LXP NOR DED, COMPILE THE	F5G40100
02645	0	07400	4	02367		TSX SK,4	INST.	F5G40110
02646	0	50000	2	01100		CLA INST-1,2		F5G40120
02647	0	07400	4	02367		TSX SK,4		F5G40130
02650	0	50000	2	01077		CLA INST-2,2		F5G40140
02651	0	07400	4	02367		TSX SK,4		F5G40150
02652	0	50000	2	01076		CLA INST-3,2		F5G40160
02653	0	07400	4	02367		TSX SK,4		F5G40170
02654	0	50000	0	00314		CLA ZERO	YES, COMPILE AN SXD, ZERO LOCATION	F5G40180
02655	0	60100	0	00461		STO CPIND	RECORD THAT THIS INST. SHOULDNT BE CONPILED	F5G40190
02656	0	07400	4	02367		TSX SK,4		F5G40200
02657	0	50000	0	00411		CLA SIK3	SXD IN BCD	F5G40210
02660	0	07400	4	02367		TSX SK,4		F5G40220
02661	0	50000	0	00452		CLA TAG	SYMB. ADDR. OF TAU-TAG CELL	F5G40230
02662	-0	50100	0	00415		ORA SMK4		F5G40240
02663	0	07400	4	02367		TSX SK,4		F5G40250
02664	0	50000	2	01076		CLA INST-3,2	AND TAG WORD	F5G40260
02665	-0	32000	0	00337		ANA ADDMK		F5G40270
02666	0	07400	4	02367		TSX SK,4		F5G40280
02667	-0	50000	0	00453	CI6	CAL STAGN1	NO SXD REQUIRED.	F5G40290
02670	0	76700	0	00002		ALS 2		F5G40300
02671	0	60200	0	00453		SLW STAGN1		F5G40310
02672	-0	50000	0	00454		CAL STAGN2		F5G40320
02673	0	76700	0	00001		ALS 1		F5G40330
02674	0	60200	0	00454		SLW STAGN2		F5G40340
02675	0	02000	0	02700		TRA CKLOC	GO TO CHECK FOR ENDINGS	F5G40350
02676	-0	76000	0	00003	CI7	SSM		F5G40360
02677	0	60100	0	00461		STO CPIND	RECODD LATER COMPILING NECESSARY	F5G40370
						NOW THE END OF	BB IS CHECKED FOR	F5G40380
02700	0	50000	2	01101	CKLOC	CLA INST,2	IF NO LOCATION SYMBOL, THIS CANT BE	F5G40390
02701	0	10000	0	02723		TZE TR3S	ENSING OTHER THAN CERTAINTY	F5G40400
02702	0	50000	2	01075		CLA INST-4,2	IS THIS LAST INST IN BB	F5G40410
02703	0	40200	0	00444		SUB NXTLOC		F5G40420
02704	0	10000	0	02743		TZE ENDBB	YES, LOOK FOR TYPE OF ENDING	F5G40430
02705	-0	53400	4	00327		LXD LD8,4	NO, CHECK FOR ENDING OF GROUP OF INST	F5G40440
02706	-0	50000	2	01100		CAL INST-1,2		F5G40450
02707	-0	32000	0	00335		ANA DECMK	LOOK AT OP CODE	F5G40460
02710	0	40200	4	00374	SUBP	SUB LNTOP+1,4	COMPARE TO OP CODES OF POSSIBLE	F5G40470
02711	0	10000	4	02737		TZE TRTIN+1,4	ENDINGS TRANSFER WHEN FOUND	F5G40480
02712	2	00001	4	02710		TIX SUBP,4,1	TRY NEXT POSSIBILITY	F5G40490
02713	-0	50000	2	01100		CAL INST-1,2	NOT FOUND, LOOK FORCONDITIONAL TRANSFER	F5G40500
02714	-0	32000	0	00400	6ANA	ANA FSTLT		F5G40510
02715	0	60200	0	00457		SLW TMP10		F5G40520
02716	0	50000	0	00457		CLA TMP10		F5G40530
02717	0	40200	0	00401		SUB FSTT		F5G40540
02720	0	10000	0	03162		TZE TTYPE	IS A CONDITIONAL TRANSFER	F5G40550
02721	0	07400	4	02172	NOEND	TSX SCMI,4	NOT AN END OD BB COMPILE INST	F5G40560
02722	1	00004	2	02525		TXI FNDAS,2,4	IF IT NEEDS TO BE	F5G40570
02723	0	50000	2	01075	TR3S	CLA INST-4,2	IS THIS LAST INST IN BB	F5G40580

02724	0	40200	0	00444		SUB	NXTLOC			F5G40590
02725	0	10000	0	03042		TZE	SEQTR	YES		F5G40600
02726	0	02000	0	02721		TRA	NOEND	NO		F5G40610
							TRANSFER VECTOR	SEE SUBP+1 ABOVE		F5G40620
02727	0	02000	0	03046		TRA	GOTOV	TRA IS OP CODE		F5G40630
02730	0	02000	0	03115		TRA	IF2PS	PSE		F5G40640
02731	0	02000	0	03171		TRA	IF2CS	DCT		F5G40650
02732	0	02000	0	03171		TRA	IF2CS	RTT		F5G40660
02733	0	02000	0	03125		TRA	MSECS	MSE		F5G40670
02734	0	02000	0	03226		TRA	IF3CS	TZE		F5G40680
02735	0	02000	0	03324		TRA	STPCSZ	HPR		F5G40690
02736	0	02000	0	02721	TRTIN	TRA	NOEND	TSX		F5G40700
							THE FOLLOWING IS 4 WORD TRANSFER VECTOR, SEE ENDBB BELOW			F5G40710
02737	0	02000	0	02752		TRA	TRACS	TRACS OP CODE		F5G40720
02740	0	02000	0	03037		TRA	DOCS	TXL		F5G40730
02741	0	02000	0	03042		TRA	PAUSE	HPR		F5G40740
02742	0	02000	0	02755	TRTTR	TRA	TRAC3	TTR		F5G40750
02743	-0	53400	4	00325	ENDBB	LXD	LD4,4	THIS INST ENDS A BASIC		F5G40760
02744	0	50000	2	01100		CLA	INST-1,2	BLOCK LOOKAT OP CODE		F5G40770
02745	-0	32000	0	00335		ANA	DECMK	FOR TYPE OF ENDING		F5G40780
02746	0	40200	4	00400	6SUB	SUB	LTROP+1,4			F5G40790
02747	0	10000	4	02743		TZE	TRTTR+1,4	TRANSFER IF IOUND		F5G40800
02750	2	00001	4	02746		TXI	6SUB,4,1	TRY NEXT POSSIBILITY		F5G40810
02751	0	02000	0	03042		TRA	SEQTR			F5G40820
02752	-0	50000	2	01077	TRACS	CAL	INST-2,2	OP CODE IS TRA SEE IF ADDRESS		F5G40830
02753	-0	32000	0	00403		ANA	PFXMK	IS IN PROGRAM UNCONDITITONAL TRANSFER		F5G40840
02754	-0	10000	0	02772		TNZ	GOTON	IF TRANSFER IT IS A GO TO N		F5G40850
02755	-0	63400	2	00447	TRAC3	SXD	BBOX,2	THIS IS GO TO ALPHA		F5G40860
02756	-0	50000	0	00443		CAL	BBNO			F5G40870
02757	0	77100	0	00022		ARS	18			F5G40880
02760	0	60100	0	00462		STO	ARG1	STORE BBNO AS ARGUMENT OF SAD		F5G40890
02761	0	07400	4	00067		TSX	SE1,4			F5G40900
02762	-0	50000	1	12533		CAL	BBB,1			F5G40910
02763	0	07400	4	00044		TSX	SE6,4	GET SUCC. TABLE ENTRY		F5G40920
02764	-0	50000	1	16734		CAL	SUCC,1			F5G40930
02765	0	07400	4	02126		TSX	SAD,4	GO TO DETERMINE SYMBOLIC ADDRESS		F5G40940
02766	-0	53400	2	00447		LXD	BBOX,2			F5G40950
02767	0	60200	2	01077		SLW	INST-2,2	TEPLACE SYMBOLIC ADDR.		F5G40960
02770	0	07400	4	02172		TSX	SCMI,4	COMPILE THE INSTR		F5G40970
02771	1	00004	2	03544		TXI	BEGBB,2,4	BEGINNING OF BB, INDEX TO NEXT INSTR		F5G40980
02772	-0	63400	2	00447	GOTON	SXD	BBOX,2			F5G40990
02773	0	50000	0	00443		CLA	BBNO			F5G41000
02774	0	07400	4	00070		TSX	SE,4			F5G41010
02775	0	50000	1	12533		CLA	BBB,1	CHECK TO MAKE SURE THIS IS GO TO N		F5G41020
02776	0	77100	0	00041		ARS	33			F5G41030
02777	0	40000	0	00315		ADD	ONEA			F5G41040
03000	0	10000	0	03002		TZE	GON1			F5G41050
03001	0	07400	4	00004		TSX	4,4	DIAGNOSTIC THIS ISNT GO N		F5G41060
03002	-0	50000	1	12534	GON1	CAL	BBB+1,1			F5G41070
03003	0	77100	0	00041		ARS	33	PUT SXD CASE IN TMP10		F5G41080
03004	0	60200	0	00457		SLW	TMP10			F5G41090
							NOW ANY SXD BEFIR GO TO N ARE COMPILED			F5G41100
03005	-0	53400	2	00324		LXD	LD3,2			F5G41110
03006	0	50000	2	00361	GON3	CLA	VSTAG,2	DOES THIS THIS IR NEED SXD		F5G41120

03007	-0	32000	0	00457		ANA	TMP10			F5G41130
03010	0	10000	0	03032		TZE	GON2			F5G41140
03011	-0	63400	1	00451		SXD	ABOX,1	YES		F5G41150
03012	0	56000	0	00314		LDQ	ZERO	REPLACE LOCATION BY 0 AND		F5G41160
03013	-0	53400	4	00447		LXD	BBOX,4	PUT LOCATION ON THE		F5G41170
03014	0	50000	4	01101		CLA	INST,4	SXD INST.		F5G41180
03015	-0	60000	4	01101		STQ	INST,4	SXDINST		F5G41190
03016	0	07400	4	02367		TSX	SK,4			F5G41200
03017	0	50000	0	00411		CLA	LSXD			F5G41210
03020	0	07400	4	02367		TSX	SK,4			F5G41220
03021	-0	53400	1	00451		LXD	ABOX,1			F5G41230
03022	-0	50000	1	12535		CAL	BBB+2,1			F5G41240
03023	-0	32000	0	00342		ANA	TAGMK			F5G41250
03024	-0	50100	0	00415		ORA	IDTAG			F5G41260
03025	0	07400	4	02367		TSX	SK,4			F5G41270
03026	-0	50000	0	00457		CAL	TMP10			F5G41280
03027	-0	32000	2	00361		ANA	VSTAG,2			F5G41290
03030	0	07400	4	02367		TSX	SK,4			F5G41300
03031	-0	53400	1	00451		LXD	ABOX,1			F5G41310
03032	1	77777	1	03033	GON2	TXI	GON2+1,1,-1			F5G41320
03033	2	00001	2	03006		TIX	GON3,2,1			F5G41330
03034	-0	53400	2	00447		LXD	BBOX,2			F5G41340
03035	0	07400	4	02172		TSX	SCMI,4	COMPILE THE INST		F5G41350
03036	1	00004	2	03544		TXI	BEGBB,2,4			F5G41360
03037	-0	75400	0	00000	DOCS	PXD	0,0			F5G41370
03040	0	60100	0	01101		STO	SXST	T RECORD THERE IS SEQUENTIAL TRANSFER		F5G41380
03041	0	02000	0	02755		TRA	TRAC3	OTHERWISE DO EXACTLY AS FOR TRA TRANSFER		F5G41390
03042	-0	75400	0	00000	PAUSE	PXD	0,0			F5G41400
				03042	SEQTR	SYN	PAUSE			F5G41410
03043	0	60100	0	01101		STO	SXST	RECORD SEQUENTIAL TRANSFER		F5G41420
03044	0	07400	4	02172		TSX	SCMI,4			F5G41430
03045	1	00004	2	03544		TXI	BEGBB,2,4			F5G41440
03046	0	07400	4	02172	GOTOV	TSX	SCMI,4	COMPILE INST IF NECESSARY		F5G41450
03047	0	50000	2	01076		CLA	INST-3,2	FIND NO. OF BRANCHES IN VECTOR		F5G41460
03050	0	40200	0	00316		SUB	LD1			F5G41470
03051	0	62200	0	00463		STD	MBOX			F5G41480
03052	0	50000	0	00443		CLA	BBNO			F5G41490
03053	0	77100	0	00022		ARS	18	STORE BBNO FOR SAD ROUTINE		F5G41500
03054	0	60100	0	00462		STO	ARG1			F5G41510
03055	1	00004	2	03056	GOV4	TXI	GOV4+1,2,4			F5G41520
03056	-0	63400	2	00450		SXD	BBOX1,2			F5G41530
03057	0	07400	4	00067		TSX	SE1,4			F5G41540
03060	0	50000	1	12533		CLA	BBB,1			F5G41550
03061	0	60200	0	00464		SLW	SUCNO	STORE NO OF 1ST SUCCESSOR		F5G41560
03062	-0	53400	2	00450		LXD	BBOX1,2			F5G41570
03063	-2	00144	2	03065	13TNX	TNX	GOV1,2,ZINST	IS BLOCK OF INST ALL USED		F5G41580
03064	0	07400	4	03472		TSX	RDINS,4	T READ NEXT BLOCK		F5G41590
03065	-0	63400	2	00450	GOV1	SXD	BBOX1,2			F5G41600
03066	-0	50000	0	00464		CAL	SUCNO			F5G41610
03067	0	07400	4	00044		TSX	SE6,4			F5G41620
03070	0	50000	1	16734		CLA	SUCC,1			F5G41630
03071	0	07400	4	02126		TSX	SAD,4	FINF NEW SYMBOLIC ADDR FOR THIS TRANSFER		F5G41640
03072	-0	53400	2	00450		LXD	BBOX1,2			F5G41650
03073	0	60200	0	00457		SLW	TMP10	STORE SYMBOLIC ADDR.		F5G41660

03074	-0	53400	4	00463	LXD	MBOX,4			F5G41670
03075	2	00001	4	03101	TIX	GOV2,4,1	IS THIS THE LAST TRANSFER		F5G41680
03076	0	50000	2	01077	CLA	INST-2,2			F5G41690
03077	0	40200	0	00444	SUB	NXTLOC	1ST INST IN NEXT BB, IS IT		F5G41700
03100	0	10000	0	03104	TZE	GOV3			F5G41710
03101	0	50000	0	00457	GOV2	CLA	TMP10	NO	F5G41720
03102	0	60100	2	01077	STO	INST-2,2			F5G41730
03103	0	07400	4	02172	TSX	SCMI,4	COMPILE THE INXT		F5G41740
03104	1	00004	2	03105	GOV3	TXI	GOV3+1,2,4		F5G41750
03105	-0	50000	0	00464	CAL	SUCNO			F5G41760
03106	0	40000	0	00316	ADD	ONED			F5G41770
03107	0	60200	0	00464	SLW	SUCNO			F5G41780
03110	-0	53400	4	00463	LXD	MBOX,4			F5G41790
03111	1	77777	4	03112	GOV5	TXI	GOV5+1,4,-1		F5G41800
03112	-0	63400	4	00463	SXD	MBOX,4			F5G41810
03113	3	00000	4	03063	TXH	13TNX,4,0	IS THIS LAST TRA OF VECTOR		F5G41820
03114	0	02000	0	03544	TRA	BEGBB	YES		F5G41830
03115	0	50000	2	01076	IF2PS	CLA	INST-3,2	THIS IS PSE LOOK AT ADDRESS TO	F5G41840
03116	-0	32000	0	00404	ANA	XXPSX	SEE IF IT IS 164-6		F5G41850
03117	0	40200	0	00405	SUB	XX16X			F5G41860
03120	0	10000	0	03125	TZE	PSTCS	YES, IT IS A TEST		F5G41870
03121	0	50000	2	01076	CLA	INST-3,2			F5G41880
03122	-0	32000	0	00335	ANA	DECMK	NO, SEE IF ADDR IS 360		F5G41890
03123	0	40200	0	00406	SUB	XX360			F5G41900
03124	-0	10000	0	02721	TNZ	NOEND	NO, THIS ISNT BB END		F5G41910
03125	0	07400	4	02172	PSTCS	TSX	SCMI,4	THIS IS A PSE TEST INST	F5G41920
				03125	MSECS	SYN	PSTCS	OR AN MSE INST	F5G41930
03126	1	00004	2	03127	PS1	TXI	PS1+1,2,4	INEXD TO CONSIER 1ST TRANSFER	F5G41940
03127	-0	63400	2	00450	SXD	BBOX1,2			F5G41950
03130	-0	50000	0	00443	CAL	BBNO			F5G41960
03131	0	77100	0	00022	ARS	18			F5G41970
03132	0	60100	0	00462	STO	ARG1	STORE BBNO AS ARGUMENT FOR SAD		F5G41980
03133	0	07400	4	00067	TSX	SE1,4			F5G41990
03134	-0	50000	1	12533	CAL	BBB,1			F5G42000
03135	0	60100	0	00464	STO	SUCNO	GETNUMBER OF 1ST SUCCESSOR		F5G42010
03136	0	40000	0	00316	ADD	LD1			F5G42020
03137	0	07400	4	00044	TSX	SE6,4	GET THE SECOND SUCC ENTRY		F5G42030
03140	0	50000	1	16734	CLA	SUCC,1			F5G42040
03141	0	07400	4	02126	TSX	SAD,4			F5G42050
03142	-0	53400	2	00450	LXD	BBOX1,2			F5G42060
03143	0	60200	2	01077	SLW	INST-2,2	REPLACE SYMBOLIC ADDRESS		F5G42070
03144	0	07400	4	02172	TSX	SCMI,4			F5G42080
03145	1	00004	2	03146	PS2	TXI	PS2+1,2,4	INCREASE INSTR INDEX	F5G42090
03146	0	50000	2	01077	CLA	INST-2,2	IS THIS A SEQUENTIAL TRANSFER		F5G42100
03147	0	40200	0	00444	SUB	NXTLOC			F5G42110
03150	0	10000	0	03307	TZE	PS3	YES, SKIP COMPILING THE INST		F5G42120
03151	-0	63400	2	00450	SXD	BBOX1,2	NO		F5G42130
03152	0	50000	0	00464	CLA	SUCNO			F5G42140
03153	0	07400	4	00044	TSX	SE6,4			F5G42150
03154	0	50000	1	16734	CLA	SUCC,1			F5G42160
03155	0	07400	4	02126	TSX	SAD,4	DETERMINE THE SYMBQLIC ADDRESS		F5G42170
03156	-0	53400	2	00450	LXD	BBOX1,2			F5G42180
03157	0	60200	2	01077	SLW	INST-2,2	REPLACE SYMBOLIC ADDRESS		F5G42190
03160	0	07400	4	02172	TSX	SCMI,4	COMPILE THE INST.		F5G42200

03161	1	00004	2	03544		TXI	BEGBB,2,4		F5G42210
03162	0	50000	2	01077	TTYTYPE	CLA	INST-2,2	IS THIS TRANSFER TO NEXT INST.	F5G42220
03163	0	34000	2	01101		CAS	INST,2		F5G42230
03164	0	02000	0	03166		TRA	TTYP1		F5G42240
03165	0	02000	0	02721		TRA	NOEND	YES	F5G42250
03166	0	40200	0	00402	TTYYP1	SUB	PCC		F5G42260
03167	0	10000	0	02721		TZE	NOEND	YES	F5G42270
03170	0	02000	0	03173		TRA	CNDTR	NO, IS CONDITIONAL TRANSFER	F5G42280
03171	0	07400	4	02172	IF2CS	TSX	SCMI,4	THIS IS DCT OR RTT	F5G42290
03172	1	00004	2	03173	RT1	TXI	RT1+1,2,4	INDEX TO CONSIDER 1ST TRANSFER	F5G42300
03173	-0	63400	2	00450	CNDTR	SXD	BBOX1,2	STORE BBNO. AS ARGUMENT	F5G42310
03174	-0	50000	0	00443		CAL	BBNO	STORE BBNO AS ARGUMENT	F5G42320
03175	0	77100	0	00022		ARS	18	OF SAD	F5G42330
03176	0	60100	0	00462		STO	ARG1		F5G42340
03177	0	07400	4	00067		TSX	SE1,4		F5G42350
03200	-0	50000	1	12533		CAL	BBB,1		F5G42360
03201	0	60100	0	00464		STO	SUCNO		F5G42370
03202	0	07400	4	00044		TSX	SE6,4	GET THE 1ST SUCC ENTRY	F5G42380
03203	0	50000	1	16734		CLA	SUCC,1		F5G42390
03204	0	07400	4	02126		TSX	SAD,4		F5G42400
03205	-0	53400	2	00450		LXD	BBOX1,2		F5G42410
03206	0	60200	2	01077		SLW	INST-2,2	REPLACE SYMBOLIC ADDRESS	F5G42420
03207	0	07400	4	02172		TSX	SCMI,4	COMPILE THE INST	F5G42430
03210	1	00004	2	03211	RT2	TXI	RT2+1,2,4		F5G42440
03211	0	50000	2	01077		CLA	INST-2,2	IS THIS A SEQUENTIAL TRANSFER	F5G42450
03212	0	40200	0	00444		SUB	NXTLOC		F5G42460
03213	0	10000	0	03307		TZE	PS3	YES, SKIP COMPILING THE INST	F5G42470
03214	-0	63400	2	00450		SXD	BBOX1,2		F5G42480
03215	0	50000	0	00464		CLA	SUCNO		F5G42490
03216	0	40000	0	00316		ADD	LD1		F5G42500
03217	0	07400	4	00044		TSX	SE6,4		F5G42510
03220	0	50000	1	16734		CLA	SUCC,1		F5G42520
03221	0	07400	4	02126		TSX	SAD,4	DETERMINE THE SYMBOLIC ADDR	F5G42530
03222	-0	53400	2	00450		LXD	BBOX1,2		F5G42540
03223	0	60200	2	01077		SLW	INST-2,2		F5G42550
03224	0	07400	4	02172		TSX	SCMI,4	COMPILE THE TRANSFER	F5G42560
03225	1	00004	2	03544		TXI	BEGBB,2,4		F5G42570
03226	-0	63400	2	00450	IF3CS	SXD	BBOX1,2	THIS IS A TZE INST I. E. AN IF	F5G42580
03227	-0	50000	0	00443		CAL	BBNO		F5G42590
03230	0	77100	0	00022		ARS	18	STORE BB NO. FOR SUBROUTINE	F5G42600
03231	0	60100	0	00462		STO	ARG1		F5G42610
03232	0	07400	4	00067		TSX	SE1,4	ARGUMENT	F5G42620
03233	-0	50000	1	12533		CAL	BBB,1		F5G42630
03234	0	60100	0	00464		STO	SUCNO		F5G42640
03235	0	40000	0	00316		ADD	LD1	GET THE SUCC ENTRY	F5G42650
03236	0	07400	4	00044		TSX	SE6,4	FOR THE TZE	F5G42660
03237	0	50000	1	16734		CLA	SUCC,1		F5G42670
03240	0	07400	4	02126		TSX	SAD,4		F5G42680
03241	-0	53400	2	00450		LXD	BBOX1,2		F5G42690
03242	0	60200	2	01077		SLW	INST-2,2	REPLACE THE SYMBOLIC ADDREAS	F5G42700
03243	0	07400	4	02172		TSX	SCMI,4	COMPILE THE TZE	F5G42710
03244	1	00004	2	03245	IF1	TXI	IF1+1,2,4		F5G42720
03245	-0	50000	2	01100		CAL	INST-1,2	CHECK NEXT INST TO SEE	F5G42730
03246	-0	32000	0	00343		ANA	LFTMSK	IF IT IS TPL	F5G42740

03247	0	60200	0	00457	SLW	TMP10			F5G42750
03250	0	50000	0	00457	CLA	TMP10			F5G42760
03251	0	40200	0	00344	SUB	LTPL			F5G42770
03252	0	10000	0	03254	TZE	16CLA			F5G42780
03253	0	07400	4	00004	IFHPR	TSX	4,4	IF NOT, DIAGNOSTIC	F5G42790
03254	0	50000	2	01077	16CLA	CLA	INST-2,2	DOES THIS EXIT GO TO NEXT BB	F5G42800
03255	0	40200	0	00444	SUB	NXTLOC			F5G42810
03256	-0	10000	0	03265	TNZ	IF2			F5G42820
03257	0	50000	2	01073	CLA	INST-6,2		YES, DOES NEXT ONE ALSO	F5G42830
03260	0	40200	0	00444	SUB	NXTLOC			F5G42840
03261	-0	10000	0	03265	TNZ	IF2			F5G42850
03262	-0	75400	0	00000	PXD	0,0		YES, RECORD SEQUENTIAL TRANSFER	F5G42860
03263	0	60100	0	01101	STO	SXST			F5G42870
03264	1	00010	2	03544	TXI	BEGBB,2,8			F5G42880
03265	-0	63400	2	00450	IF2	SXD	BBOX1,2	COMPILE THE TPL	F5G42890
03266	0	50000	0	00464	CLA	SUCNO			F5G42900
03267	0	07400	4	00044	TSX	SE6,4			F5G42910
03270	0	50000	1	16734	CLA	SUCC,1			F5G42920
03271	0	07400	4	02126	TSX	SAD,4		FIND AND	F5G42930
03272	-0	53400	2	00450	LXD	BBOX1,2		REPLACE	F5G42940
03273	0	60200	2	01077	SLW	INST-2,2		SYMBOLIC ADDRESS	F5G42950
03274	0	07400	4	02172	TSX	SCMI,4			F5G42960
03275	1	00004	2	03276	IF3	TXI	IF3+1,2,4		F5G42970
03276	-0	50000	2	01100	CAL	INST-1,2		IS THIS TRA	F5G42980
03277	-0	32000	0	00343	ANA	LFTMSK			F5G42990
03300	0	60200	0	00457	SLW	TMP10			F5G43000
03301	0	50000	0	00457	CLA	TMP10			F5G43010
03302	0	40200	0	00350	SUB	LTRA			F5G43020
03303	-0	10000	0	03253	TNZ	IFHPR		IF NOT , STOP	F5G43030
03304	0	50000	2	01077	CLA	INST-2,2		YES IT IS IS THIS A	F5G43040
03305	0	40200	0	00444	SUB	NXTLOC		SEQUENTIAL TRANSFER	F5G43050
03306	-0	10000	0	03312	TNZ	IF4			F5G43060
03307	-0	75400	0	00000	PS3	PXD	0,0	YES, RECORD THAT	F5G43070
03310	0	60100	0	01101	STO	SXST			F5G43080
03311	1	00004	2	03544	TXI	BEGBB,2,4			F5G43090
03312	-0	63400	2	00450	IF4	SXD	BBOX1,2	CONPILE THE TRA	F5G43100
03313	0	50000	0	00464	CLA	SUCNO			F5G43110
03314	0	40000	0	00323	ADD	LD2			F5G43120
03315	0	07400	4	00044	TSX	SE6,4			F5G43130
03316	0	50000	1	16734	CLA	SUCC,1		IF NECESSARY	F5G43140
03317	0	07400	4	02126	TSX	SAD,4		MODIFY THE	F5G43150
03320	-0	53400	2	00450	LXD	BBOX1,2		SYMBOLIC	F5G43160
03321	0	60200	2	01077	SLW	INST-2,2		AADDRESS	F5G43170
03322	0	07400	4	02172	TSX	SCMI,4			F5G43180
03323	1	00004	2	03544	TXI	BEGBB,2,4			F5G43190
03324	0	50000	2	01074	STPCSZ	CLA	INST-5,2		F5G43200
03325	0	40200	0	00350	SUB	LTRA			F5G43210
03326	-0	10000	0	02721	TNZ	NOEND			F5G43220
03327	0	50000	2	01101	CLA	INST,2			F5G43230
03330	0	40200	2	01073	SUB	INST-6,2			F5G43240
03331	-0	10000	0	02721	TNZ	NOEND			F5G43250
03332	0	07400	4	02172	STPCS	TSX	SCMI,4	COMPILE THE TWO INXT	F5G43260
03333	1	00004	2	03334	STP1	TXI	STP1+1,2,4	AND GO TO STAET BB	F5G43270
03334	0	07400	4	02172	TSX	SCMI,4			F5G43280

03421	-0	32000	0	00337	ANA	ADDMK			F5G43840
03422	0	40200	0	00320	SUB	L4			F5G43850
03423	-0	10000	0	02676	TNZ	CI7		NO, GO TO COMPILE THE INST.	F5G43860
03424	0	50000	0	00460	CLA	CIND		YES. IS IR4 NECESSARY.	F5G43870
03425	0	12000	0	03460	TPL	CI7E		NO, GO TO REPRESS LATER COMPILING OF INST	F5G43880
03426	-0	76000	0	00141	MSE	97		CHECK FOR LXP WHICH WAS LXD-D.	F5G43881
03427	0	02000	0	03432	TRA	CI7C1		NO SUCH.	F5G43882
03430	0	76000	0	00003	SSP			THERE WAS, SUPPRESS LATER COMPILING	F5G43883
03431	0	02000	0	03460	TRA	CI7E		OF INST.	F5G43884
03432	-0	50000	2	01074	CI7C1	CAL	INST-5,2	IS FOLLOWING INSTR AN SXD.	F5G43885
03433	-0	32000	0	00343	ANA	LFTMSK			F5G43900
03434	0	60200	0	00457	SLW	TMP10			F5G43910
03435	0	50000	0	00457	CLA	TMP10			F5G43920
03436	0	40200	0	00411	SUB	LSXD			F5G43930
03437	-0	10000	0	03450	TNZ	CI7D			F5G43940
03440	-0	50000	2	01072	CAL	INST-7,2		YES, IS THE TAG A 4	F5G43950
03441	-0	32000	0	00337	ANA	ADDMK			F5G43960
03442	0	40200	0	00320	SUB	L4			F5G43970
03443	-0	10000	0	03450	TNZ	CI7D			F5G43980
03444	0	50000	2	01075	CLA	INST-4,2		IS SXD FIRST INSTR	F5G43990
03445	0	40200	0	00444	SUB	NXTLOC		OF NEXT BB.	F5G44000
03446	0	10000	0	03450	TZE	CI7D		YES, COMPILE LX.	F5G44010
03447	1	00010	2	02525	TXI	FNDAS,2,8		NO--DELETE LX, SX.	F5G44020
03450	0	50000	0	00314	CI7D	CLA	ZERO	CLMPILE THE LXD WITH GARBAGE	F5G44030
03451	0	07400	4	02367	TSX	SK,4		SYMBOLADDEAA AND TAG 4	F5G44040
03452	0	50000	0	00414	CLA	LLXD			F5G44050
03453	0	07400	4	02367	TSX	SK,4			F5G44060
03454	0	50000	0	00354	CLA	GSYM			F5G44070
03455	0	07400	4	02367	TSX	SK,4			F5G44080
03456	0	50000	0	00355	CLA	T4SYM			F5G44090
03457	0	07400	4	02367	TSX	SK,4			F5G44100
03460	0	60100	0	00461	CI7E	STO	CPIND	SURPRESS LATER COMPILING INST SET +	F5G44110
03461	0	02000	0	02700	TRA	CKLOC			F5G44120
03462	0	50000	2	01076	CI3A	CLA	INST-3,2	IS THE S-TAG EQUAL TO 4	F5G44130
03463	0	60200	0	00461	SLW	CPIND		RECORD INST. NOT TO BE COMPILED	F5G44140
03464	-0	32000	0	00337	ANA	ADDMK			F5G44150
03465	0	40200	0	00320	SUB	L4			F5G44160
03466	-0	10000	0	02667	TNZ	CI6			F5G44170
03467	-0	75400	0	00000	PXD	0,0		YES, RECORD IR4 NOT NECESSARY	F5G44180
03470	0	60100	0	00460	STO	CIND			F5G44190
03471	0	02000	0	02667	TRA	CI6		SINCE LXP OR DED, SKIP COMPILING INST.	F5G44200
								THIS ROUTINE READS ANOTHER BLOCK OF COMPILED INST INTO CS	F5G44210
								AND SHIFTS THE EXTRA INST TO THE BEGINNING OF BLOCK	F5G44220
03472	-0	63400	4	00445	RDINS	SXD	OUTBX,4	SAVE RETURN INDEX	F5G44230
03473	0	50000	0	00320	CLA	L4		SET ERBXX FOR 5 TRIES	F5G44240
03474	0	60100	0	00446	STO	ERBXX			F5G44250
03475	-0	63400	1	00447	SXD	BBOX,1		SAVE INDEX 1	F5G44260
03476	-0	53400	4	00331	LXD	LD12,4		SHIFT EX,RA INST FROM END	F5G44270
03477	0	50000	4	00735	D1CLA	CLA	NDINS,4	OF BLOCK TO BEGINNING	F5G44280
03500	0	60100	4	01101	STO	INST,4			F5G44290
03501	2	00001	4	03477	TIX	D1CLA,4,1		IS BLOCK SHIFTED	F5G44300
03502	0	76200	0	00224	D1RDS	RTB	INSTTP	SELECT INST TAPE	F5G44310
03503	0	53400	1	00362	LXA	RECSC,1		YES, SET INDEX FOR NO. OF RECORDS	F5G44320
03504	0	70000	4	01065	D1CPY	CPY	INST-12,4	COPY BLOCK OF INST	F5G44330

03572	0	07400	4	00070		TSX SE,4	BB	F5G44880
03573	0	50000	1	12540		CLA BBB+5,1		F5G44890
03574	0	60100	0	00444		STO NXTLOC		F5G44900
						DETERMINE WHICH LXD CASES EXIST , RESULT IN Z1V5		F5G44910
03575	0	56000	0	00314	Z1	LDQ ZERO	INITIALIZE THE EXISTENCE	F5G44920
03576	-0	60000	0	00667		STQ Z1V5	INDICATOR WORD	F5G44930
03577	0	50000	1	12533		CLA BBB,1	GET AND STORE NO. OF 1ST PRED IN	F5G44940
03600	0	62100	0	00665		STA Z1V2	NEXT BB	F5G44950
03601	-0	50000	0	00443		CAL BBNO		F5G44960
03602	0	07400	4	00070		TSX SE,4		F5G44970
03603	-0	50000	1	12533		CAL BBB,1	STORE THE NO OF	F5G44980
03604	0	62100	0	00666		STA Z1V3	1ST PRED IN	F5G44990
03605	0	62100	0	00670		STA Z1V8	THIS BB	F5G45000
03606	0	50000	0	00666		CLA Z1V3		F5G45010
03607	0	34000	0	00665	Z15	CAS Z1V2	IS THIS PRED IN SAME BB	F5G45020
03610	0	02000	0	03612		TRA Z12	YES	F5G45030
03611	0	02000	0	03626		TRA Z2	NO	F5G45040
03612	0	07400	4	00055	Z12	TSX SE5,4		F5G45050
03613	0	50000	1	15674		CLA PRED,1	DETERMINE THE	F5G45060
03614	-0	32000	0	00332		ANA LT7	LXD CASE	F5G45070
03615	0	76700	0	00003		ALS 3		F5G45080
03616	-0	73400	4	00000		PDX 0,4		F5G45090
03617	-0	50000	0	00416		CAL Z1K3	STORE BIT AS INDICATOR	F5G45100
03620	0	77100	4	00007		ARS 7,4	FOR THIS	F5G45110
03621	-0	60200	0	00667		ORS Z1V5	LXD CASE	F5G45120
03622	0	50000	0	00666		CLA Z1V3		F5G45130
03623	0	40000	0	00315		ADD ONEA	ARRANGE TO DEAL WITH NEXT	F5G45140
03624	0	62100	0	00666		STA Z1V3	PRED	F5G45150
03625	0	02000	0	03607		TRA Z15		F5G45160
						THIS OPEN S. R. FORMS THE LXD LISTS FROM TNE INFO LEFT IN		F5G45170
						Z1V5 BY Z1		F5G45180
03626	0	56000	0	00314	Z2	LDQ ZERO		F5G45190
03627	0	53400	1	00422		LXA Z2K2,1		F5G45200
03630	-0	60000	1	00715	Z21	STQ LLIND,1	SET THE 3 INDEXDS TO THE SUB	F5G45210
03631	0	50000	1	00422		CLA Z2K1+3,1	BOTTOM POSITIONS	F5G45220
03632	0	40200	0	00316		SUB ONED	IN THE 3 LISTS AND ALL	F5G45230
03633	0	60100	1	00674		STO Z2V1+3,1	INDICATORS TO SAY COMPILED	F5G45240
03634	2	00001	1	03630		TIX Z21,1,1		F5G45250
03635	-0	53400	1	00331		LXD LD12,1		F5G45260
03636	0	50000	0	00416		CLA MZE	PLACE -0 S IN THE	F5G45270
03637	0	60100	1	00712	Z28	STO LIST1+12,1	LXD LISTS	F5G45280
03640	2	00001	1	03637		TIX Z28,1,1		F5G45290
03641	-0	53400	1	00422		LXD Z2K2,1	SET TO BEGINNING OF CASE LIST	F5G45300
03642	0	56000	0	00667	Z25	LDQ Z1V5	DID	F5G45310
03643	0	50000	1	00432		CLA CASE+7,1	THIS	F5G45320
03644	0	73400	2	00000		PAX 0,2	CASE	F5G45330
03645	-0	77300	2	00007		RQL 7,2	OCCURR	F5G45340
03646	0	16200	0	03711		TQP Z26		F5G45350
03647	0	50000	0	00434		CLA Z2K5	YES, SET NO OF ONES IN	F5G45360
03650	0	60100	0	00674		STO Z2V2	DIFFERENCE TO HIGH NUMBER	F5G45370
03651	0	53400	2	00422		LXA Z2K2,2	INITIALIZE TO 1ST LIST	F5G45380
03652	0	56000	0	00314	Z23	LDQ ZERO	IS P004	F5G45390
03653	0	50000	2	00674		CLA Z2V1+3,2		F5G45400
03654	-0	73400	4	00000	R004	PDX 0,4	QUANTITY IN THE LIST	F5G45410

03655	0	50000	4	00676	CLA LIST1,4	IS THE TOP	F5G45420
03656	-0	32000	1	00432	ANA CASE+7,1	YES, DETERMINE	F5G45430
03657	-0	40000	4	00676	SBM LIST1,4	CONTAINED IN THIS	F5G45440
03660	-0	10000	0	03676	TNZ Z27	CASE	F5G45450
03661	0	50000	1	00432	CLA CASE+7,1	YES, DETERMINE	F5G45460
03662	0	40200	4	00676	SUB LIST1,4	THE NO.	F5G45470
03663	0	76500	0	00025	LRS 21	OF ONES	F5G45480
03664	0	20000	0	00433	MPY Z2K4	IN THE	F5G45490
03665	0	62100	0	03667	STA Z22 LOGICAL		F5G45500
03666	0	50000	0	00432	CLA Z2K3	DIFFERENCE	F5G45510
03667	0	77100	0	00000	Z22 ARS SET		F5G45520
03670	-0	32000	0	00434	ANA Z2K5		F5G45530
03671	0	34000	0	00674	CAS Z2V2	IS THE NUMBER OF ONES IN THE	F5G45540
03672	0	02000	0	03676	TRA Z27	DIFFERENCE LESS THAN OR EQUAL TO	F5G45550
03673	0	02000	0	03676	TRA Z27	THE PREVIOUS MINIMUM. NO	F5G45560
03674	0	60100	0	00674	STO Z2V2 ,	YES, STORE NEW MIN	F5G45570
03675	-0	63400	2	00675	SXD Z2V3,2	STORE INDEX OF LIST OF GIVING NEW MIN	F5G45580
03676	2	00001	2	03652	Z27 TIX Z23,2,1	COUNT TO 3 LISTS ARE WE THRU	F5G45590
03677	-0	53400	2	00675	LXD Z2V3,2	UES, GET INDEX OF LIST WITH MIN DIFF	F5G45600
03700	0	50000	2	00674	CLA Z2V1+3,2	STIRE	F5G45610
03701	-0	73400	4	00000	PDX 0,4	THIS	F5G45620
03702	0	50000	1	00432	CLA CASE+7,1	CASE AT TOP OF	F5G45630
03703	1	00001	4	03704	Z24 TXI Z24+1,4,1	THAT LIST	F5G45640
03704	0	60100	4	00676	STO LIST1,4		F5G45650
03705	-0	75400	4	00000	PXD 0,4	STORE INDEX OF TOP	F5G45660
03706	0	60100	2	00674	STO Z2V1+3,2	POSITION IN THAT LIST	F5G45670
03707	0	50000	0	00416	CLA MZE	STORE INDICATION THAT THE	F5G45680
03710	0	60100	2	00715	STO LLIND,2	LIST IS TO BE COMPILED	F5G45690
03711	2	00001	1	03642	Z26 TIX Z25,1,1	COUNT THE 7 CASES	F5G45700
					EXPAND TNE LXD	LISTS	F5G45710
03712	0	50000	0	00434	Z3 CLA Z2K5	IS THE	F5G45720
03713	-0	40000	0	00700	SBM LIST1+2	BOTTOM ENTRY OF	F5G45730
03714	0	10000	0	04003	TZE Z307	LIST1 A CASE 7	F5G45740
03715	0	50000	0	00700	CLA LIST1+2	NO, DO THE BOTTOMS	F5G45750
03716	-0	32000	0	00704	ANA LIST2+2	OF LISTS 1 AND 2 HAVE	F5G45760
03717	0	10000	0	03766	TZE Z35	A NON ZERO INTERSECTION	F5G45770
03720	0	34000	0	00700	CAS LIST1+2	YES, DOES INTERSECTION EQUAL 1	F5G45780
03721	0	02000	0	03723	TRA Z31		F5G45790
03722	0	02000	0	03760	TRA Z33	YES	F5G45800
03723	0	34000	0	00704	Z31 CAS LIST2+2	IS IT EQUAL TO BOTTOM OF 2	F5G45810
03724	0	02000	0	03726	TRA Z32		F5G45820
03725	0	02000	0	03763	TRA Z34	YES	F5G45830
03726	0	60100	0	00701	Z32 STO LIST1+3	STORE INTERSECTION IN SUB1	F5G45840
03727	-0	76000	0	00003	SSM	POSITITON AND -(INTER.) IN	F5G45850
03730	0	60100	0	00705	STO LIST2+3	SUB2 POS.	F5G45860
03731	0	02000	0	04015	TRA Z306		F5G45870
03732	-0	76000	0	00003	Z38 SSM	ENTER -INTER1 AND 3	F5G45880
03733	0	60100	0	00711	STO LIST3+3	IN SUB3 POS.	F5G45890
03734	0	02000	0	04015	TRA Z306		F5G45900
03735	-0	76000	0	00003	Z39 SSM	ENTER - INTER 1 AND 3	F5G45910
03736	0	60100	0	00701	STO LIST1+3	INSUV1 POS.	F5G45920
03737	0	02000	0	04015	TRA Z306		F5G45930
03740	0	50000	0	00704	Z300 CLA LIST2+2	DO BOTTOM ENTRIES	F5G45940
03741	-0	32000	0	00710	ANA LIST3+2	OF 2 AND 3 HAVE	F5G45950

03742	0	10000	0	04015	TZE Z306	NONZERO INTERSECTION	F5G45960
03743	0	34000	0	00704	CAS LIST2+2	YES, IS INTRE 2 AND 3	F5G45970
03744	0	02000	0	03746	TRA Z301		F5G45980
03745	0	02000	0	03755	TRA Z303	YES	F5G45990
03746	0	34000	0	00710	Z301 CAS LIST3+2	IS INTERSECTION EQUAL TO BOTTOM OF LIST 3	F5G46000
03747	0	02000	0	03751	TRA Z302		F5G46010
03750	0	02000	0	04013	TRA Z304	YES	F5G46020
03751	0	60100	0	00711	Z302 STO LIST3+3	STORE INTER 2 AND 3 IN SUB 3 POS.	F5G46030
03752	-0	76000	0	00003	SSM	AND -INTER IN	F5G46040
03753	0	60100	0	00705	STO LIST2+3	SUB 2 POS.	F5G46050
03754	0	02000	0	04015	TRA Z306		F5G46060
03755	-0	76000	0	00003	Z303 SSM	ENTER -(INTER 2 AND 3)	F5G46070
03756	0	60100	0	00711	STO LIST3+3	IN SUB 3 POS.	F5G46080
03757	0	02000	0	04015	TRA Z306		F5G46090
03760	-0	76000	0	00003	Z33 SSM	ENTER -(INTER 1 AND 2)	F5G46100
03761	0	60100	0	00705	STO LIST2+3	IN SUB 2 POS.	F5G46110
03762	0	02000	0	04015	TRA Z306		F5G46120
03763	-0	76000	0	00003	Z34 SSM	STORE -(INTER 1 AND 2)	F5G46130
03764	0	60100	0	00701	STO LIST1+3	IN SUB 1 POS.	F5G46140
03765	0	02000	0	04015	TRA Z306		F5G46150
03766	0	50000	0	00700	Z35 CLA LIST1+2	DO BOTTOM ENTRIES IN	F5G46160
03767	-0	32000	0	00710	ANA LIST3+2	1 AND 3 HAVE NONZERO	F5G46170
03770	0	10000	0	03740	TZE Z300	INTERSECTION	F5G46180
03771	0	34000	0	00700	CAS LIST1+2	YES, IS IT EQUAL TO BOT. 1	F5G46190
03772	0	02000	0	03774	TRA Z36		F5G46200
03773	0	02000	0	03732	TRA Z38	YES	F5G46210
03774	0	34000	0	00710	Z36 CAS LIST3+2	TO THE BOTTOM ENTRY IN 3	F5G46220
03775	0	02000	0	03777	TRA Z37		F5G46230
03776	0	02000	0	03735	TRA Z39	YES	F5G46240
03777	0	60100	0	00711	Z37 STO LIST3+3	ENTER INTER 1 AND 3 IN SUB	F5G46250
04000	-0	76000	0	00003	SSM	3 POS. AND -(INTER) IN	F5G46260
04001	0	60100	0	00701	STO LIST1+3	SUB1 POS.	F5G46270
04002	0	02000	0	04015	TRA Z306		F5G46280
04003	-0	63400	0	00671	Z307 SXD Z2V1,0	CREATE THE LIST	F5G46290
04004	0	50000	0	00321	CLA L7		F5G46300
04005	0	60100	0	00676	STO LIST1		F5G46310
04006	0	50000	0	00317	CLA L3		F5G46320
04007	0	60100	0	00677	STO LIST1+1		F5G46330
04010	0	50000	0	00315	CLA ONEA		F5G46340
04011	0	60100	0	00700	STO LIST1+2		F5G46350
04012	0	02000	0	04053	TRA Z4		F5G46360
04013	-0	76000	0	00003	Z304 SSM	ENTER - INTER 2 AND 3	F5G46370
04014	0	60100	0	00705	Z305 STO LIST2+3	INSUB2 POS.	F5G46300
04015	-0	53400	2	00324	Z306 LXD LD3,2	SET COUNT TO 3	F5G46390
04016	0	53400	1	00314	LXA ZERO,1	SET TO INSPECT 1ST LIST	F5G46400
04017	0	50000	1	00700	Z309 CLA LIST1+2,1		F5G46410
04020	0	10000	0	04031	TZE Z308	IS THE BOTTOM ENTRY ZERO	F5G46420
04021	0	40200	0	00315	SUB ONEA	NO	F5G46430
04022	-0	32000	1	00700	ANA LIST1+2,1	DOES IT HAVE TWO ONES	F5G46440
04023	0	10000	0	04031	TZE Z308		F5G46450
04024	0	60100	0	00457	STO TMP10	YES	F5G46460
04025	0	50000	1	00701	CLA LIST1+3,1	IS THE SUB BOTTOM	F5G46470
04026	-0	10000	0	04031	TNZ Z308	ENTRY ZERO	F5G46480
04027	0	50000	0	00457	CLA TMP10	YES	F5G46490

04030	0	60100	1	00701	STO	LIST1+3,1		F5G46500
04031	1	77774	1	04032	Z308	TXI Z308+1,1,-4	PREPARE FOR NEXT LIST	F5G46510
04032	2	00001	2	04017	TIX	Z309,2,1	COUNT TO 3	F5G46520
04033	0	50000	0	00434	CLA	Z2K5		F5G46530
04034	-0	40000	0	00677	SBM	LIST1+1		F5G46540
04035	-0	10000	0	04053	TNZ	Z4		F5G46550
04036	0	50000	0	00700	CLA	LIST1+2		F5G46560
04037	0	40200	0	00315	SUB	ONEA		F5G46570
04040	-0	32000	0	00700	ANA	LIST1+2		F5G46580
04041	-0	10000	0	04053	TNZ	Z4		F5G46590
04042	0	50000	0	00700	CLA	LIST1+2		F5G46600
04043	0	60100	0	00701	STO	LIST1+3		F5G46610
04044	0	50000	0	00434	CLA	Z2K5		F5G46620
04045	0	40200	0	00700	SUB	LIST1+2		F5G46630
04046	0	60100	0	00700	STO	LIST1+2		F5G46640
04047	0	40200	0	00315	SUB	ONEA		F5G46650
04050	0	32000	0	00700	ANS	LIST1+2		F5G46660
04051	-0	50000	0	00701	CAL	LIST1+3		F5G46670
04052	-0	60200	0	00700	ORS	LIST1+2		F5G46680
						DETECT AND COMPILE ANY SEQUENTIAL TRANSFER		F5G46690
04053	0	56000	0	00416	Z4	LDQ MZE	PUT MINUS ZEROS IN	F5G46700
04054	-0	60000	0	01125	STQ	SXAS	THE ASSOCIATED	F5G46710
04055	0	53400	4	00322	LXA	L19,4	SXDPOSITIONS	F5G46720
04056	-0	60000	4	01125	Z411	STQ SXST+20,4		F5G46730
04057	2	00001	4	04056	TIX	Z411,4,1		F5G46740
04060	0	50000	0	01101	CLA	SXST		F5G46750
04061	-0	12000	0	04140	TMI	Z5	IS THERE A SEQUENTIAL TRANSFER	F5G46760
04062	-0	50000	0	00443	CAL	BBNO	YES	F5G46770
04063	0	77100	0	00022	ARS	18		F5G46780
04064	0	40200	0	00315	SUB	ONEA		F5G46790
04065	0	60100	0	00457	STO	TMP10	PUT NO OF PREV. BB IN TMP10	F5G46800
04066	0	50000	0	00670	CLA	Z1V8	INITIALIZE 1ST PRED NO THIS BB	F5G46810
04067	0	60100	0	00666	Z49	STO Z1V3		F5G46820
04070	0	07400	4	00055	TSX	SE5,4		F5G46830
04071	-0	50000	1	15674	CAL	PRED,1		F5G46840
04072	-0	32000	0	00337	ANA	ADDMK	IS THIS THE SEQUENTIAL	F5G46850
04073	0	40200	0	00457	SUB	TMP10	TRANSFERS PRED ENTRY	F5G46860
04074	0	10000	0	04100	TZE	Z410		F5G46870
04075	-0	50000	0	00666	CAL	Z1V3	NO, TRY NEXT ONE	F5G46880
04076	0	40000	0	00315	ADD	ONEA		F5G46890
04077	0	02000	0	04067	TRA	Z49		F5G46900
04100	0	50000	0	00666	Z410	CLA Z1V3	GET THE PRED NO	F5G46910
04101	0	07400	4	02211	TSX	SH,4	FORM THE SXD CASE	F5G46920
04102	0	50000	0	00466	CLA	SXD1		F5G46930
04103	0	40000	0	00467	ADD	SXD2		F5G46940
04104	0	40000	0	00470	ADD	SXD3		F5G46950
04105	0	10000	0	04117	TZE	Z44	IS THIS A 0 SXD CASE	F5G46960
04106	0	53400	4	00320	LXA	L4,4	ISNT 0 SXD CASE	F5G46970
04107	0	50000	4	00471	Z41	CLA SXD1+3,4	RECORD SXD CASE	F5G46980
04110	0	60100	4	01105	STO	SXST+4,4	IN POSITION ASSOCIATED	F5G46990
04111	2	00001	4	04107	TIX	Z41,4,1	WITH SEQUENTIAL TRANSFER	F5G47000
04112	0	53400	1	00314	LXA	ZERO,1	COMPILE THE SXD	F5G47010
04113	0	07400	4	02242	TSX	SI,4	INST. WITH	F5G47020
04114	0	02000	0	04140	TRA	Z47	(1) ASSOCIATED SXD WITH 0 LXD CASE	F5G47030

04115	0	07400	4	02440	Z42	TSX SM,4	(2)ASSOCIATED	WITH AN LXD LIST	F5G47040
04116	0	02000	0	04140		TRA Z47	(3) NOT ASSOCIATED	(TRA COMPILED)	F5G47050
04117	-0	53400	4	00465	Z44	LXD SXD0,4			F5G47060
04120	-3	00000	4	04136		TXL Z46,4,0	DOES IT HAVE A 0 LXD CASE		F5G47070
04121	-0	75400	4	00000		PXD 0,4	NO		F5G47080
04122	0	77100	0	00022		ARS 18	LXD CASE TO AC (ADDR)		F5G47090
04123	0	60100	0	00715		STO Z4V1			F5G47100
04124	-0	53400	2	00324		LXD LD3,2	SET COUNT TO 3 , N=1		F5G47110
04125	0	50000	2	00674	Z45	CLA Z2V1+3,2	GET INDEX		F5G47120
04126	-0	73400	1	00000		PDX 0,1	OF TOP QUANTITY IN LIST N		F5G47130
04127	0	50000	1	00676		CLA LIST1,1	IS THE LXD CASE OF THIS SXD		F5G47140
04130	0	40200	0	00715		SUB Z4V1	CASE THE SAME AS		F5G47150
04131	0	10000	0	04115		TZE Z42	THE TOP QUANTITY IN LIST N		F5G47160
04132	2	00001	2	04125		TIX Z45,2,1	NO, COUNT TO 3		F5G47170
04133	0	50000	0	00715		CLA Z4V1	COMPILE A		F5G47180
04134	0	07400	4	02403		TSX SL,4	TRA (LXD)		F5G47190
04135	0	02000	0	04140		TRA Z47			F5G47200
04136	0	50200	0	00315	Z46	CLS ONEA	RECORD THAT THERE		F5G47210
04137	0	60100	0	00660	Z48	STO SLV3	IS A HANGING TRA 0CASE		F5G47220
				04140	Z47	SYN Z48+1			F5G47230
						FORM THE SXD LIST AND THE SYN CARD LIST			F5G47240
04140	0	50000	0	00316	Z5	CLA ONED	SET INDEX IN SYN TABLE		F5G47250
04141	0	60100	0	00716		STO Z5V1			F5G47260
04142	0	50000	0	00670		CLA Z1V8	RESET 1 ST PRED IN BB		F5G47270
04143	0	60100	0	00666	Z53	STO Z1V3			F5G47280
04144	0	40200	0	00665		SUB Z1V2	IS THIS PRED IN SAME BB		F5G47290
04145	0	10000	0	04263		TZE Z6	NO, ADD FINISHED		F5G47300
04146	0	50000	0	01101		CLA SXST	YES		F5G47310
04147	-0	12000	0	04153		TMI Z51	WAS THERE A SEQUENTIAL TRANSFER		F5G47320
04150	-0	32000	0	00337		ANA ADDMK	YES, EXTRACT ADDRESS		F5G47330
04151	0	40200	0	00666		SUB Z1V3	HAS PRED ALREDY BEEN CONSIDERED		F5G47340
04152	0	10000	0	04213		TZE Z55	AS A SEQUENTIAL TRANSFER		F5G47350
04153	0	50000	0	00666	Z51	CLA Z1V3	NO		F5G47360
04154	0	07400	4	02211		TSX SH,4	GENERATE SXD CASE		F5G47370
04155	0	50000	0	00466		CLA SXD1	IS THE		F5G47380
04156	0	40000	0	00467		ADD SXD2	SXD CASE		F5G47390
04157	0	40000	0	00470		ADD SXD3	ZERO		F5G47400
04160	0	10000	0	04213		TZE Z55			F5G47410
04161	0	53400	1	00314		LXA ZERO,1	NO, PREPARE T SCAN SXD LIST		F5G47420
04162	0	50000	1	01101	Z503	CLA SXST,1	IS	SUBSXDO	F5G47430
04163	-0	32000	0	00335		ANA DECMK			F5G47440
04164	0	60100	0	00457		STO TMP10			F5G47450
04165	0	50000	0	00465		CLA SXD0			F5G47460
04166	-0	32000	0	00335		ANA DECMK			F5G47470
04167	0	40200	0	00457		SUB TMP10			F5G47480
04170	-0	10000	0	04216		TNZ Z54			F5G47490
04171	0	50000	1	01102		CLA SXST+1,1	THIS SXD CASE		F5G47500
04172	0	40200	0	00466		SUB SXD1			F5G47510
04173	-0	10000	0	04216		TNZ Z54			F5G47520
04174	0	50000	1	01103		CLA SXST+2,1	SAME AS		F5G47530
04175	0	40200	0	00467		SUB SXD2			F5G47540
04176	-0	10000	0	04216		TNZ Z54			F5G47550
04177	0	50000	1	01104		CLA SXST+3,1	THE ONE ALREADY		F5G47560
04200	0	40200	0	00470		SUB SXD3	STORED		F5G47570

04201	-0	10000	0	04216		TNZ	Z54		F5G47580
04202	0	50000	1	01101		CLA	SXST,1	YES, STORE INDICATION	F5G47590
04203	-0	53400	2	00716		LXD	Z5V1,2		F5G47600
04204	-0	32000	0	00337		ANA	ADDMK	SYN,2 CARD	F5G47610
04205	0	60100	2	02125		STO	SYN,2	IN THE	F5G47620
04206	0	50000	0	00465		CLA	SXD0	SYN	F5G47630
04207	0	76700	0	00022		ALS	18	LIST	F5G47640
04210	0	62200	2	02125		STD	SYN,2		F5G47650
04211	1	00001	2	04212	Z52	TXI	Z52+1,2,1		F5G47660
04212	-0	63400	2	00716		SXD	Z5V1,2		F5G47670
04213	0	50000	0	00666	Z55	CLA	Z1V3	PREPARE TO DEAL WITH NEXT PRED	F5G47680
04214	0	40000	0	00315		ADD	ONEA		F5G47690
04215	0	02000	0	04143		TRA	Z53		F5G47700
04216	0	50000	1	01101	Z54	CLA	SXST,1		F5G47710
04217	0	12000	0	04232		TPL	Z502	IS THIS SXD POS. EMPTY	F5G47720
04220	-0	53400	2	00324		LXD	LD3,2	YES	F5G47730
04221	-3	00000	1	04232		TXL	Z502,1,0	IS THIS ST CASE	F5G47740
04222	3	77773	1	04233		TXH	Z504,1,-4-1	NO, IS THIS 0 LIST CASE	F5G47750
04223	3	77767	1	04242		TXH	Z507,1,-8-1	NO 1ST	F5G47760
04224	3	77763	1	04241		TXH	Z506,1,-12-1	2ED	F5G47770
04225	3	77757	1	04240		TXH	Z505,1,-16-1	3RD	F5G47780
04226	0	07400	4	04252		TSX	Z500,4	ENTER THE SXD CASE IN THE LIST	F5G47790
04227	0	50000	0	00416		CLA	MZE		F5G47800
04230	0	60100	1	01105		STO	SXST+4,1	STORE END MARK FOR SYN CAEDS	F5G47810
04231	0	02000	0	04213		TRA	Z55		F5G47820
04232	1	77774	1	04162	Z502	TXI	Z503,1,-4	EXAMINE NEXT SXD CASE	F5G47830
04233	-0	50000	0	00465	Z504	CAL	SXD0	ZERO LIST CASE	F5G47840
04234	-0	32000	0	00335		ANA	DECMK	IS THE LXD CASE 0	F5G47850
04235	-0	10000	0	04232		TNZ	Z502		F5G47860
04236	0	07400	4	04252		TSX	Z500,4	YES, ENTER SXD CASE IN	F5G47870
04237	0	02000	0	04213		TRA	Z55	ASSOCIATED POSITION	F5G47880
04240	2	00001	2	04241	Z505	TIX	Z505+1,2,1	GENERATE INDEX OF LIST	F5G47890
04241	2	00001	2	04242	Z506	TIX	Z506+1,2,1		F5G47900
04242	-0	50000	2	00674	Z507	CAL	Z2V1+3,2	IS	F5G47910
04243	-0	73400	4	00000		PDX	0,4	THE	F5G47920
04244	0	50000	0	00465		CLA	SXD0	LXD	F5G47930
04245	0	77100	0	00022		ARS	18	CASE THE	F5G47940
04246	0	40200	4	00676		SUB	LIST1,4	SAME	F5G47950
04247	-0	10000	0	04232		TNZ	Z502		F5G47960
04250	0	07400	4	04252		TSX	Z500,4	YES	F5G47970
04251	0	02000	0	04213		TRA	Z55		F5G47980
								SUBROUTINE FOR ENTERING SXD CASE IN SXD LIST	F5G47990
04252	0	50000	0	00465	Z500	CLA	SXD0		F5G48000
04253	0	60100	1	01101		STO	SXST,1		F5G48010
04254	0	50000	0	00466		CLA	SXD1		F5G48020
04255	0	60100	1	01102		STO	SXST+1,1		F5G48030
04256	0	50000	0	00467		CLA	SXD2		F5G48040
04257	0	60100	1	01103		STO	SXST+2,1		F5G48050
04260	0	50000	0	00470		CLA	SXD3		F5G48060
04261	0	60100	1	01104		STO	SXST+3,1		F5G48070
04262	0	02000	4	00001		TRA	1,4		F5G48080
								COMPILE THE SXD LIST	F5G48090
04263	0	53400	1	00333	Z6	LXA	LM20,1	SET TO START OF SXD LIST	F5G48100
04264	0	50000	1	01101	Z61	CLA	SXST,1		F5G48110

04265	-0	12000	0	04274	TMI	Z7	IS THIS SXD POSITION EMPTY	F5G48120
04266	-0	63400	1	04271	SXD	Z6V1,1	NO	F5G48130
04267	0	07400	4	02242	TSX	SI,4	COMPILE THE SXD CASE WITH	F5G48140
04270	0	76100	0	00000	NOP		(1) 0 LXD CASE, OR	F5G48150
04271	3	00000	0	00000	Z6V1	TXH 0,0,SET	(2) THIS RETURN CANT OCCURR	F5G48160
04272	-0	53400	1	04271	LXD	Z6V1,1	(3) TRA ALREADY CONPILED	F5G48170
04273	1	77774	1	04264	TXI	Z61,1,-4		F5G48180
						COMPILE TNE LXD LISTS AND ASSOCIATED SXD S		F5G48190
04274	-0	53400	2	00324	Z7	LXD LD3,2	SET TO BEGIN SCAN OF LISTS	F5G48200
04275	0	50000	2	00422	Z72	CLA Z2K1+3,2		F5G48210
04276	-0	73400	1	00000	PDX	0,1	PUT INDEX OF BOTTOM POSITION IN 1	F5G48220
04277	0	50000	1	00676	CLA	LIST1,1		F5G48230
04300	-0	12000	0	04350	TMI	Z75	YES, IS IT A TRA(0) CASE	F5G48240
04301	0	10000	0	04320	TZE	Z73	IS THE LIST FILLED	F5G48250
04302	0	50000	1	00677	CLA	LIST1+1,1	PERHAPS, IS IT A FOR SURE	F5G48260
04303	0	10000	0	04350	TZE	Z75	IT IS IF EITHER THE SUB BOTTOM	F5G48270
04304	0	12000	0	04350	TPL	Z75	ENTRY IS -0 OR POSITIVE	F5G48280
04305	0	50000	0	00720	CLA	Z7V2		F5G48290
04306	-0	12000	0	04320	TMI	Z73	IS THIS 1ST TIME THRU	F5G48300
04307	0	50000	2	00443	Z76	CLA Z7K1+3,2	YES	F5G48310
04310	-0	73400	1	00000	PDX	0,1	IS THERE ASSOCIATED	F5G48320
04311	0	50000	1	01101	CLA	SXST,1	SXDLIST	F5G48330
04312	-0	63400	2	00717	SXD	Z7V1,2		F5G48340
04313	-0	12000	0	04344	TMI	Z74		F5G48350
04314	0	07400	4	02242	TSX	SI,4	YES, COMPILE SXD CASE	F5G48360
04315	0	02000	0	04317	TRA	Z71		F5G48370
04316	0	02000	0	04333	TRA	Z77	COMPILE	F5G48380
04317	-0	53400	2	00717	Z71	LXD Z7V1,2		F5G48390
04320	2	00001	2	04275	Z73	TIX Z72,2,1	COUNT TO 3	F5G46400
04321	0	50200	0	00720	CLS	Z7V2	IS THIS 1ST TIME THRU	F5G48410
04322	0	60100	0	00720	STO	Z7V2		F5G48420
04323	-0	12000	0	04274	TMI	Z7	YES, OO BACK CLASXST	F5G48430
04324	0	50000	0	01105	CLA	SXAS0	IS THERE A 0 ASSOCIATED SXD CASE	F5G46440
04325	-0	12000	0	04353	TMI	Z8		F5G48450
04326	0	53400	1	00334	LXA	LM4,1	YES	F5G48460
04327	0	07400	4	02242	TSX	SI,4	COMPILE SXD CASE	F5G48470
04330	0	02000	0	04353	TRA	Z8		F5G48480
04331	0	02000	0	04353	TRA	Z8		F5G48490
04332	0	02000	0	04353	TRA	Z8		F5G48500
04333	-0	53400	2	00717	Z77	LXD Z7V1,2		F5G46510
04334	0	50000	2	00715	CLA	Z4V1,2		F5G48520
04335	-0	12000	0	04344	TMI	Z74		F5G48530
04336	0	50000	2	00443	CLA	Z7K1+3,2		F5G48540
04337	-0	73400	1	00000	PDX	0,1		F5G48550
04340	0	50000	1	01101	CLA	SXST,1		F5G48560
04341	0	77100	0	00022	ARS	18		F5G46570
04342	0	07400	4	02403	TSX	SL,4		F5G48580
04343	0	02000	0	04317	TRA	Z71		F5G48590
04344	0	50000	2	00674	Z74	CLA Z2V1+3,2	COMPILE THE LXD LIST	F5G48600
04345	-0	73400	1	00000	PDX	0,1		F5G48610
04346	0	07400	4	02440	TSX	SM,4		F5G48620
04347	0	02000	0	04317	TRA	Z71		F5G48630
04350	0	50000	0	00720	Z75	CLA Z7V2	IS THIS 1ST TIME THRU	F5G48640
04351	-0	12000	0	04307	TMI	Z76	NO, 2ED TIME	F5G48650

04352	0	02000	0	04320	TRA	Z73	YES	F5G48660
							COMPILE ANY SYN CARDS	F5G48670
04353	-0	50000	0	00443	Z8	CAL	BBNO	F5G48680
04354	0	77100	0	00022		ARS	18	F5G48690
04355	0	60100	0	00457		STO	TMP10	F5G48700
04356	0	07400	4	00067		TSX	SE1,4	F5G48710
04357	-0	50000	1	12533		CAL	BBB,1	F5G48720
04360	-0	32000	0	00337		ANA	ADDMK	F5G48730
04361	0	76700	0	00012		ALS	10	F5G48740
04362	0	40200	0	00457		SUB	TMP10	F5G48750
04363	0	40200	0	00410		SUB	IDSXD	F5G48760
04364	0	60100	0	00457		STO	TMP10	F5G48770
04365	-0	53400	2	00716		LXD	Z5V1,2	F5G48780
04366	-3	00001	2	04407	Z81	TXL	Z83,2,1	F5G48790
04367	2	00001	2	04370	Z82	TIX	Z82+1,2,1	F5G48800
04370	-0	50000	2	02125		CAL	SYN,2	F5G48810
04371	-0	32000	0	00335		ANA	DECMK	F5G48820
04372	0	77100	0	00010		ARS	8	F5G48830
04373	0	40200	0	00457		SUB	TMP10	F5G48840
04374	0	07400	4	02367		TSX	SK,4	F5G48850
04375	0	50000	0	00346		CLA	LSYN	F5G48860
04376	0	07400	4	02367		TSX	SK,4	F5G48870
04377	-0	50000	2	02125		CAL	SYN,2	F5G48880
04400	-0	32000	0	00337		ANA	ADDMK	F5G48890
04401	0	76700	0	00012		ALS	10	F5G48900
04402	0	40200	0	00457		SUB	TMP10	F5G48910
04403	0	07400	4	02367		TSX	SK,4	F5G48920
04404	0	50000	0	00314		CLA	ZERO	F5G48930
04405	0	07400	4	02367		TSX	SK,4	F5G48940
04406	0	02000	0	04366		TRA	Z81	F5G48950
04407	-0	53400	2	00450	Z83	LXD	BBOX1,2	F5G48960
04410	0	50000	0	00416		CLA	MZE	F5G48970
04411	0	60100	0	01101		STO	SXST	F5G48980
04412	0	02000	0	02525		TRA	FNDAS	F5G48990
							WRITE THE LAST BLOCK OF C.I. T. ON TAPE	F5G49000
							AFTER PUTTING RELATIVE CONSTANT ROUTINES AT END	F5G49010
04413	0	76200	0	00224	LSTBB	RTB	INSTTP	F5G49020
04414	0	70000	0	00457		CPY	TMP10	F5G49030
04415	0	02000	0	04420		TRA	EF3	F5G49040
04416	0	02000	0	04413		TRA	LSTBB	F5G49050
04417	0	07400	4	00004		TSX	4,4	F5G49060
04420	-0	53400	4	00325	EF3	LXD	LD4,4	F5G49070
04421	0	53400	3	00337	EFRTB	LXA	ADDMK,3	F5G49080
04422	0	76200	0	00224		RTB	INSTTP	F5G49090
04423	0	70000	1	04516	EFPCPY	CPY	RELSR,1	F5G49100
04424	1	77777	1	04423		TXI	EFCPY,1,-1	F5G49110
04425	0	02000	0	04436		TRA	EFREW	F5G49120
04426	0	76600	0	00333		IOD		F5G49130
04427	-0	76000	0	00012		RTT		F5G49140
04430	0	02000	0	04451		TRA	EFERR	F5G49150
04431	-0	63400	1	04432		SXD	EFTXL,1	F5G49160
04432	-3	00000	2	04421	EFTXL	TXL	EFRTB,2,SET	F5G49170
04433	0	50000	2	04516		CLA	RELSR,2	F5G49180
04434	0	07400	4	02367		TSX	SK,4	F5G49190

04435	1	77777	2	04432	TXI	EFTXL,2,-1		F5G49200
04436	0	77200	0	00204	EFREW	REW INSTTP	REWIND THE TAPE	F5G49210
04437	0	53400	1	00412	LXA	SKK1,1	SET 1 TO LENGTH OF CS BLOCK	F5G49220
04440	-0	53400	4	00655	LXD	SKV1,4	INDEX OF NEXTCLST POSITION	F5G49230
04441	-0	63400	4	04444	SXD	LSTXL,4		F5G49240
04442	3	00143	4	04447	TXH	LSWEF,4,LCLST-1	IS BLOCK EMPTY	F5G49250
04443	0	76600	0	00223	WTB	OTAPE	NO, WRITE	F5G49260
04444	-3	00000	1	04447	LSTXL	TXL LSWEF,1,-	IT ON TAPE	F5G49270
04445	0	70000	1	00655	CPY	CLST,1		F5G49280
04446	1	77777	1	04444	TXI	LSTXL,1,-1		F5G49290
04447	0	77000	0	00203	LSWEF	WEF OTAPE	WRITE AN END FILE	F5G49300
04450	0	02000	0	00030	TRA	R		F5G49310
04451	0	76400	0	00204	EFERR	BST INSTTP		F5G49320
04452	2	00001	4	04421	TIX	EFRTB,4,1		F5G49330
04453	0	07400	4	00004	TSX	4,4	4TH ERROR, TO DIAGNOSTIC	F5G49340
				04454	BSS	PTL4	SPACE FOR PATCHES	F5G49350
04516	0	00000	0	00000	RELSR		START OF REL. CONST. ROUTINES	F5G49360
				00000	ORG	0		F5G49370
00000	0	00004	0	00030	HTR	R,0,4	CONTROL CARD PART 1.	F5G49371
00001	0	00000	0	05715	HTR	CMTAG-1		F5G49372
				00000	ORG	0		F5G49373
00000	0	15674	0	15674	HTR	PRED,0,PRED	CONTROL CARD PART 1B.	F5G49374
00001	0	00000	0	16025	HTR	I9A+2		F5G49375
				00000	ORG	0		F5G49376
00000	0	04740	0	04740	HTR	QS,0,QS	CONTROL CARD, PART 1C.	F5G49377
00001	0	00000	0	04773	HTR	QS8+1		F5G49378
				00000	ORG	0		F5G49379
00000	0	04740	0	04740	HTR	QPU,0,QPU	CONTROL CARD, PART 1D.	F5G49380
00001	0	00000	0	04773	HTR	QPU8+1		F5G49381
				00000	ORG	0		F5G49382
00000	0	04740	0	04740	HTR	QSU,0,QSU	CONTROL CARD, PART 1E.	F5G49383
00001	0	00000	0	04773	HTR	QSU8+1		F5G49384
				00000	ORG	0		F5G49385
00000	0	00320	0	00317	HTR	BLV09,0,BL12	CONTROL CARD, PART 2.	F5G49386
00001	0	00000	0	00655	HTR	BLIST		F5G49387
				00000	ORG	0		F5G49388
00000	0	00320	0	00320	HTR	START,0,START	CONTROL CARD, PART 3.	F5G49389
00001	0	00000	0	00647	HTR	ASCON		F5G49390
				00000	ORG	0		F5G49391
00000	0	03541	0	00317	HTR	L3,0,PASS2	CONTROL CARD, PART 4.	F5G49392
00001	0	00000	0	04516	HTR	RELSR		F5G49393
				03541	END	PASS2		F5G49394

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	4988	0	0	0	0
LIB	0	0	0	0	0
COL	5466	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 5235

NUMBER OF SYMBOLS, DEF 1244,DEFOP 0,UNDEF 0

00030

ORG 24

704 FORTRAN II / DBC / 12 JAN 59.

THE FOLLOWING CONVENTIONS ARE USED IN THIS LISTING=
 ** IN THE ADDRESS, TAG, OR DECREMENT OF AN INSTRUCTION
 INDICATES THAT THIS FIELD WILL BE MODIFIED BY THE PROGRAM.
 * IN COL/36 INDICATES THE INSTRUCTION IS A TRANSFER OUT OF
 THIS LOGICAL BLOCK OR SUBROUTINE.
 C IN COL/34 INDICATES THE INSTRUCTION WAS CORRECTED.
 P IN COL/32 INDICATES THE INSTRUCTION WAS INSERTED (PATCH).
 * * * * *

CONTROL CARD FOR DBC.

		00000		ORG 0		DBC/C01	
						DBC/C02	
00000	0	00000	0	00723	PZE TAB+1	DBC/C03	
00001	0	00000	0	77731	PZE COMMON	DBC/C04	
00002	742422233460				BCD 1(DBC)	DBC/C05	
00003	0	00000	0	00000	PZE (DBC)	DBC/C06	
					END OF DBC CONTROL CARD.	DBC/C07	
					* * * * *	DBC/C08	
						DBC/C09	
		00000		ORG 0		DBC/O01	
					(DBC)/ CALLS=LINE,READ. CALLER=MAIN PROGRAM.	DBC/O02	
					(DBC) CONTROLS DECIMAL TO BINARY CONVERSION AND INPUT.	DBC/O03	
00000	0	02100	0	00001 (DBC)	TTR NEW	INSTRUCTION EXECUTED IN LOCATION 1. DBC/O04	
					NEW = ENTRY POINT FROM MAIN PROGRAM (C(AC)= ADDRESS OF INPUT	DBC/O05	
					ROUTINE TO HANDLE CURRLNT INPUT, AND C(0)= LOCATION OF THE	DBC/O06	
					CURRENT FORMAT STATEMENT).	DBC/O07	
00001	-0	76000	0	00007 NEW	LTM	SET RBCD TO CALL THE INDICATED	DBC/O08
00002	0	62100	0	00304	STA TYPE	TYPE OF INPUT ROUTINE.	DBC/O09
00003	-0	50000	0	00000	CAL 0	SET INPUT FORMAT STATEMENT	DBC/O10
00004	0	62100	0	00007	STA CALL	LOCATION.	DBC/O11
00005	0	40000	0	00626	ADD ONE	SET EXIT	DBC/O12
00006	0	62100	0	00015	STA FX4	TO MAIN PROGRAM.	DBC/O13
00007	-0	50000	0	00000 CALL	CAL **	OBTAIN FORMAT STATEMENT	DBC/O14
00010	-0	63400	4	00015	SXD FX4,4	FOR SCAN.	DBC/O15
00011	0	07400	4	00036	TSX LINE,4	* GO SCAN FORMAT.	DBC/O16
00012	-0	53400	4	00015	LXD FX4,4	WHEN DONE, RESTORE C(XR4).	DBC/O17
00013	-0	50000	0	00016	CAL TRAP	SET LOCATION 1 FOR FUTURE	DBC/O18
00014	0	60200	0	00001	SLW 1	TRAP TRANSFER TO SEEK, AND	DBC/O19
00015	1	00000	0	00000 FX4	TXI **,0,**	* TRANSFER CONTROL TO MAIN PROGRAM.	DBC/O20
					THE MAIN PROGRAM CONTROLS	ALL INDEXING OF THE LIST.	DBC/O21
00016	0	02100	0	00017 TRAP	TTR SEEK	INSTRUCTION EXECUTED IN LOCATION 1. DBC/O22	
					SEEK = REENTRY POINT FROM MAIN PROGRAM (C(0)= LOCATION OF	DBC/O23	
					THE ADDRESS OF THE NEXT	INPUT NUMBERS).	DBC/O24
00017	-0	76000	0	00007 SEEK	LTM	PICKUP NTR INSTRUCTION, AND	DBC/O25
00020	-0	50000	0	00000	CAL 0	SET LOCATION	DBC/O26
00021	0	62100	0	00024	STA SETL	OF INPUT NUMBERS.	DBC/O27
00022	0	40000	0	00626	ADD ONE	SET LOCATION FOR	DBC/O28
00023	0	62100	0	00035	STA OUT	RETURN TO MAIN PROGRAM.	DBC/O29
00024	0	50000	0	00000 SETL	CLA **	PICKUP LOCATION OF INPUT	DBC/O30
00025	0	60100	0	00033 STO	STO PUT	AND SET ADDRESS AND TAG OF PUT.	DBC/O31
00026	0	56000	0	00025	LDQ STO	SET PUT OP	DBC/O32
00027	-0	62000	0	00033	SLQ PUT	TO STO.	DBC/O33

00030	-0	63400	4	00015	SXD	FX4,4	SAVE THE C(XR4), AND	DBC/034
00031	0	07400	4	00316	TSX	READ,4	* GO READ AND CONVERT INPUT.	DBC/035
00032	-0	53400	4	00015	LXD	FX4,4	RESTORE THE C(XR4).	DBC/036
00033	0	60100	0	00000	PUT	STO **,**	STORE INPUT NUMBER.	DBC/037
00034	0	76000	0	00007	ETM		REPEAT UNTIL LIST IS EXHAUSTED,	DBC/038
00035	0	02100	0	00000	OUT	TTR **	* UNDER CONTROL OF THE MAIN PROGRAM.	DBC/039
						END OF PROGRAM (DBC).		DBC/040
						* * * * *	* * * * *	DBC/041
								DBC/042
						LINE,4/ CALLS=RBCD,FIELD. USES=READ. CALLER=(DBC).		DBC/043
						LINE SCANS THE FORMAT STATEMENT FOR EACH LINE OF INPUT.		DBC/044
00036	-0	63400	4	00116	LINE	SXD AX4,4	SAVE THE C(XR4) FOR RETURN.	DBC/045
00037	-0	63400	1	00114		SXD AX1,1	SAVE THE ORIGINAL C(XR1), AND	DBC/046
00040	-0	63400	2	00115		SXD AX2,2	SAVE THE ORIGINAL C(XR2).	DBC/047
00041	0	76000	0	00006		COM	COMPLEMENT THE C(AC), AND SET	DBC/048
00042	0	62200	0	00066		STD UNIT	UNIT DECREMENT= -(CURRENT UNIT).	DBC/049
00043	0	60000	0	77737		STZ PEX	SET PEX (SCALE FACTOR) = 0, AND	DBC/050
00044	0	60000	0	77731		STZ INT	SET INT = 0.	DBC/051
00045	0	62100	0	00102		STA SCAN5	SAVE THE C(AC) ADDRESS, AND	DBC/052
00046	0	07400	2	00303		TSX RBCD,2	* GO READ INPUT UNIT RECORD. THEN	DBC/053
00047	0	53400	2	00102		LXA SCAN5,2	SET XR2= -(CURRENT FORMAT LOC.),AND	DBC/054
00050	-0	53400	1	00067		LXD SEVEN,1	SET XR1 = 7, AND PICKUP THE	DBC/055
00051	0	56000	2	77777		LDQ -1,2	1ST WORD OF CURRENT FORMAT.	DBC/056
						CCLPAR = ENTRY POINT WHEN	A LPAREN IS MET IN FORMAT SCAN.	DBC/057
00052	-0	63400	1	00120	CCLPAR	SXD BX1,1	SAVE THE CURRENT CHARACTER COUNT,	DBC/058
00053	-0	63400	2	00121		SXD BX2,2	SCAN POSITION, AND FORMAT WORD,	DBC/059
00054	-0	60000	0	77735		STQ MQR	FOR POSSIBLE REPETITION OF GROUP.	DBC/060
00055	0	53400	4	77731		LXA INT,4	SET GROUP CONTROL COUNT FOR THE	DBC/061
00056	-0	63400	4	00122		SXD BX4,4	INDICATED NUMBER OF REPETITIONS,	DBC/062
00057	-0	63400	4	00265		SXD GROUPX,4	AND SAVE FOR POSSIBLE RESCAN.	DBC/063
						SCAN = ENTRY POINT FOR CCCMMA,CCSCFP,CCINPT,RESCAN.		DBC/064
00060	0	60000	0	77731	SCAN	STZ INT	CLEAR INT WORKING STORAGE, AND	DBC/065
00061	1	00006	0	00102	SIX	TXI SCAN5,0,6	GO RESUME SCAN.	DBC/066
00062	-0	53400	1	00061	SCAN1	LXD SIX,1	RESET FORMAT CHARACTER COUNT, AND	DBC/067
00063	0	56000	2	77777		LDQ -1,2	PICKUP NEXT FORMAT WORD.	DBC/068
00064	-0	76300	0	00006	SCAN2	LGL 6	EXAMINE NEXT CHARACTER,	DBC/069
00065	0	34000	0	00631		CAS BLANK	AND IF BLANK,	DBC/070
00066	1	00000	0	00070	UNIT	TXI SCAN3,0,**	THEN	DBC/071
00067	1	00007	0	00102	SEVEN	TXI SCAN5,0,7	GO EXAMINE NEXT CHARACTER.	DBC/072
00070	0	34000	0	00630	SCAN3	CAS L(9)	IF NOT BLANK, COMPARE WITH NINE,	DBC/073
00071	1	00000	0	00105		TXI SCAN6,0	IF NON-NUMERIC, COMPARE CCTEST.	DBC/074
00072	0	76100	0	00000		NOP	IF NUMERIC, THEN	DBC/075
00073	0	60100	0	77732		STO DIG	CONVERT	DBC/076
00074	0	50000	0	77731		CLA INT	SUCCESSIVE	DBC/077
00075	0	76700	0	00002		ALS 2	BCD	DBC/078
00076	0	40000	0	77731		ADD INT	0IGITS	DBC/079
00077	0	76700	0	00001		ALS 1	T0 BINARY,	DBC/080
00100	0	36100	0	77732		ACL DIG	T0 SET INT= SCALE FACTOR,	DBC/081
						SCAN4 = ENTRY POINT USED BY CCSCFM.		DBC/082
00101	0	60100	0	77731	SCAN4	STO INT	CURRENT FIELD OR GROUP CONTROL.	DBC/083
						SCAN5 = ENTRY POINT USED BY CCDcpt.		DBC/084
00102	-0	75400	0	00000	SCAN5	PXD **,0	CLEAR THE AC, AND UPDATE COUNT.	DBC/085
00103	2	00001	1	00064		TIX SCAN2,1,1	WHEN N0 CHARACTERS REMAIN,	DBC/086
00104	1	77777	2	00062		TXI SCAN1,2,-1	ADJUST SCAN POSITION, AND REPEAT.	DBC/087

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SCAN6 = ENTRY POINT USED BY CCDcpt. DBC/088
00105 -0 53400 4 00107 SCAN6 LXD NCC,4 WHEN A NON-NUMERIC IS MET, DBC/089
00106 0 34000 4 00626 SCAN7 CAS CCTEST,4 SCAN LIST OF CONTROL CHARACTERS, DBC/090
00107 1 00014 0 00111 NCC TXI SCAN8,0,12 AND IF EQUALITY IS FOUND, DBC/091
00110 0 02000 4 00127 TRA FRMTR,4 * TAKE THE INDICATED TRANSFER. DBC/092
00111 2 00001 4 00106 SCAN8 TIX SCAN7,4,1 IF NOT FOUND IN CONTROL LIST, THEN DBC/093
00112 0 42000 1 00005 HPR 5,1 STOP. PRESS START TO CONTINUE. DBC/0935
END OF PROGRAM LINE. DBC/097
* * * * * DBC/098
* * * * * DBC/099
FRMTR / CONTROL TRANSFERS FOR FORMAT SCAN = DBC/100
D 00113 1 00000 0 00127 TXI CCEDMK,0 END OF FORMAT STATEMENT. DBC/1005
00114 1 00000 0 00052 AX1 TXI CCLPAR,0,** BEGIN FORMAT OR GROUP. DBC/101
00115 1 00000 0 00132 AX2 TXI CCCMMA,0,** END FIELD. DBC/102
00116 1 00000 0 00137 AX4 TXI CCSLSH,0,** END LINE OR RECORD. DBC/103
D 00117 1 00000 0 00142 TXI CCSCFP,0 SCALE FACTOR PLUS. DBC/104
00120 1 00000 0 00145 BX1 TXI CCSCFM,0,** SCALE FACTOR MINUS. DBC/105
00121 1 00000 0 00147 BX2 TXI CCRPAR,0,** END FORMAT OR GROUP. DBC/106
00122 1 00000 0 00153 BX4 TXI CCDcpt,0,** ROUNDING OF INPUT NUMBER. DBC/107
D 00123 1 00000 0 00172 TXI CCINPT,0 DECIMAL INPUT. DBC/108
00124 1 00000 0 00177 CX1 TXI CCHNPT,0,** HOLLERITH FIELD INPUT. DBC/109
00125 1 00000 0 00250 CX2 TXI CCFNPT,0,** FIXED POINT INPUT. DBC/110
00126 1 00000 0 00254 CX4 TXI CCENPT,0,** FLOATING POINT INPUT. DBC/111
00127 FRMTR BSS 0 DBC/112
* * * * * DBC/113
* * * * * DBC/114
CCEDMK/ CALLS=FIELD. USES=MAIN PROGRAM. DBC/1141
00127 0 07400 4 00266 CCEDMK TSX FIELD,4 CCEDMK = ENTRY POINT WHEN AN ENDMK IS MET IN FORMAT SCAN. DBC/1142
* GO PROCESS UNDER FIELD CONTROL. DBC/1143
00130 -0 50000 0 00273 CAL TXLOP THEN GO SET CNVSW TO RESCAN FORMAT DBC/1144
D 00131 1 00000 0 00275 TXI SETSW,0 * IF LIST IS NOT EXHAUSTED. DBC/1145
END OF PROGRAM CCEDMK. DBC/1146
* * * * * DBC/1147
* * * * * DBC/1148
CCCMMA/ CALLS=FIELD. USES=LINE(SCAN). DBC/115
00132 0 07400 4 00266 CCCMMA TSX FIELD,4 CCCMMA = ENTRY POINT WHEN A COMMA IS MET IN FORMAT SCAN. DBC/116
* GO PROCESS UNDER FIELD CONTROL. DBC/117
RESUME = ENTRY POINT USED BY CCSLSH,CCRPAR,CCHNPT. DBC/118
00133 -0 53400 1 00124 RESUME LXD CX1,1 WHEN DONE, RESTORE CHARACTER COUNT, DBC/119
00134 -0 53400 2 00125 LXD CX2,2 RESTORE SCAN POSITION, AND DBC/120
00135 0 56000 0 77734 LDQ MQ CURRENT FORMAT WORD. THEN DBC/121
D 00136 1 00000 0 00060 TXI SCAN,0 * GO RESUME SCAN. DBC/122
END OF PROGRAM CCCMMA. DBC/123
* * * * * DBC/124
* * * * * DBC/125
* * * * * DBC/126
CCSLSH/ CALLS=FIELD,RBCD. USES=CCCMMA. DBC/126
CCSLSH = ENTRY POINT WHEN A SLASH IS MET IN FORMAT SCAN. DBC/127
00137 0 07400 4 00266 CCSLSH TSX FIELD,4 * GO PROCESS UNDER FIELD CONTROL. DBC/128
00140 0 07400 2 00303 TSX RBCD,2 * WHEN DONE, READ A RECORD, AND DBC/129
D 00141 1 00000 0 00133 TXI RESUME,0 * GO RESUME SCAN. DBC/130
END OF PROGRAM CCSLSH. DBC/131
* * * * * DBC/132
* * * * * DBC/133
CCSCFP/ USES=LINE(SCAN). DBC/I34

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                                CCHNPT/ USES=CCMMA.                                DBC/188
                                CCHNPT = ENTRY POINT WHEN AN H IS MET IN FORMAT SCAN. DBC/189
00177  0 53400 4 77731 CCHNPT LXA INT,4                                DBC/190
00200  0 56000 0 77736                                LDQ MQD                                DBC/191
00201 -0 63400 2 00125                                SXD CX2,2                                DBC/192
00202 -0 50000 2 77777                                CAL -1,2                                DBC/193
00203 -0 53400 2 00347                                LXD DX1,2                                DBC/194
00204 -2 00001 1 00222                                TNX HNP5,1,1                                DBC/195
00205 -0 63400 1 00124                                SXD CX1,1                                DBC/196
00206  0 77100 0 00006 HNP11 ARS 6                                DBC/197
00207  2 00001 1 00206                                TIX HNP11,1,1                                DBC/198
00210 -0 53400 1 00124                                LXD CX1,1                                DBC/199
00211  2 00001 2 00217 HNP21 TIX HNP4,2,1                                DBC/200
00212 -0 53400 2 00350                                LXD DX2,2                                DBC/201
00213  1 77777 2 00214                                TXI HNP3,2,-1                                DBC/202
00214  0 56000 2 77751 HNP31 LDQ BCD,2                                DBC/203
00215 -0 63400 2 00350                                SXD DX2,2                                DBC/204
00216 -0 53400 2 00061                                LXD SIX,2                                DBC/205
00217 -0 76300 0 00006 HNP41 LGL 6                                DBC/206
00220 -2 00001 4 00230                                TNX HNP7,4,1                                DBC/207
00221  2 00001 1 00211                                TIX HNP2,1,1                                DBC/208
00222 -0 53400 1 00125 HNP51 LXD CX2,1                                DBC/209
00223  0 60200 1 77777                                SLW -1,1                                DBC/210
00224  1 77777 1 00225                                TXI HNP6,1,-1                                DBC/211
00225 -0 63400 1 00125 HNP61 SXD CX2,1                                DBC/212
00226 -0 53400 1 00061                                LXD SIX,1                                DBC/213
D 00227  1 00000 0 00211                                TXI HNP2,0                                DBC/214
00230 -0 63400 2 00347 HNP71 SXD DX1,2                                DBC/215
00231 -0 53400 2 00125                                LXD CX2,2                                DBC/216
00232 -0 60000 0 77736                                STQ MQD                                DBC/217
00233 -0 63400 1 00124                                SXD CX1,1                                DBC/218
00234 -3 00001 1 00246                                TXL HNP11,1,1                                DBC/219
00235  0 56000 2 77777                                LDQ -1,2                                DBC/220
00236 -0 77300 0 00006 HNP81 RQL 6                                DBC/221
00237  1 00001 1 00240                                TXI HNP9,1,1                                DBC/222
00240 -3 00006 1 00236 HNP91 TXL HNP8,1,6                                DBC/223
00241 -0 60000 0 77734                                STQ MQ                                DBC/224
00242 -0 53400 1 00124                                LXD CX1,1                                DBC/225
00243 -2 00001 1 00246                                TNX HNP11,1,1                                DBC/226
00244 -0 76300 0 00006 HNP101 LGL 6                                DBC/227
00245  2 00001 1 00244                                TIX HNP10,1,1                                DBC/228
D 00246  0 60200 2 77777 HNP111 SLW -1,2                                DBC/229
D 00247  1 00000 0 00133                                TXI RESUME,0                                DBC/230
                                * GO RE9UME SCAN.                                DBC/231
                                END OF PROGRAM CCHNPT.                                DBC/232
                                * * * * *                                DBC/233
                                * * * * *                                DBC/234
                                * * * * *                                DBC/235
                                CCFNPT/ USES=CCINPT.                                DBC/235
                                CCFNPT = ENTRY POINT WHEN AN F IS MET IN FORMAT SCAN. DBC/236
00250  0 50200 0 77737 CCFNPT CLS PEX                                DBC/237
                                SETXP = ENTRY POINT USED BY CCENPT.                                DBC/238
00251  0 60100 0 77740 SETXP STO EXP                                DBC/239
00252  0 50000 0 00273                                CLA TXLOP                                DBC/240
D 00253  1 00000 0 00173                                TXI SETFX,0                                DBC/241
                                * GO SET FIXSW TO NOP.                                DBC/241

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                                END OF PROGRAM CCFNPT.                                DBC/242
                                * * * * *                                *DBC/243
                                DBC/244
                                EOENPT/ USES=CCFNPT.                                DBC/245
                                COENPT,= ENTRY POINT WHEN AN E IS MET IN FORMAT SCAN. DBC/246
00254 -0 75400 0 00000 CCENPT PXD ,0 CLEAR THE AC, AND                                DBC/247
D 00255 1 00000 0 00251 TXI SETXP,0 * GO SET EXPONENT AND FIXSW.                                DBC/248
                                END OF PROGRAM CCENPT.                                DBC/249
                                * * * * *                                *DBC/250
                                DBC/251
                                RESCAN/ CALLS=RBCD. USES=LINE(SCAN).                                DBC/252
                                RESCAN = ENTRY POINT USED BY READ.                                DBC/253
00256 -0 63400 4 00116 RESCAN SXD AX4,4 FOR RETURN FROM FORMAT SCAN.                                DBC/256
00257 0 07400 2 00303 TSX RBCD,2 * GO READ A RECORD.                                DBC/257
00260 -0 53400 4 00265 LXI GROUPX,4 THEN PICKUP ORIGINAL GROUP COUNT TODBC/258
                                GROUP = ENTRY POINT USED BY CCRPAR.                                DBC/259
00261 -0 63400 4 00122 GROUP SXD BX4,4 UPDATE GROUP CONTROL.                                DBC/260
00262 -0 53400 1 00120 LXI BX1,1 RESET CHARACTER COUNT,                                DBC/261
00263 -0 53400 2 00121 LXI BX2,2 RESET SCAN POSITION, AND                                DBC/262
00264 0 56000 0 77735 LDQ MQR PICKUP 1ST FORMAT WORD OF GROUP.                                DBC/263
00265 1 00000 0 00060 GROUPX TXI SCAN,0,** * GO RESCAN THIS GROUP.                                DBC/264
                                END OF PROGRAM RESCAN.                                DBC/265
                                * * * * *                                *DBC/266
                                DBC/267
                                FIELD,4/ USES READ. CALLERS=LINE(SCAN),CCMMA,CCLSH,CCRPAR.DBC/268
                                FIELD CONTROLS THE REPEATED INPUT OF THE CURRENT FIELD. DBC/269
00266 -0 63400 4 00126 FIELD SXD CX4,4 SAVE THE C(XR4) FOR RETURN.                                DBC/270
00267 -0 63400 1 00124 SXI CX1,1 SAVE THE CHARACTER COUNT,                                DBC/271
00270 -0 63400 2 00125 SXI CX2,2 THE SCAN POSITION, AND                                DBC/272
00271 -0 60000 0 77734 STQ MQ THE CURRENT FORMAT WORD.                                DBC/273
00272 0 53400 4 77731 LXI INT,4 EXAMINE INT, AND                                DBC/274
00273 -3 00000 4 00300 TXLOP TXL DONE,4,0 IF NOT ZERO, THEN                                DBC/275
00274 0 50000 0 00273 CLA TXLOP PICKUP TXHOP TO                                DBC/276
                                SETSW = ENTRY POINT USED BY LINE(SCAN8).                                DBC/277
00275 0 63000 0 00321 SETSW STP CNVSW SET CONVERSION SWITCH.                                DBC/278
00276 0 50000 0 77733 CLA DATUM THEN PICKUP DATUM,                                DBC/279
D 00277 1 00000 0 00606 TXI LIST,0 * GO STORE, AND EXAMINE LIST.                                DBC/280
                                DONE = ENTRY POINT USED BY READ.                                DBC/281
00300 -0 53400 4 00126 DONE LXI CX4,4 WHEN DONE, RESTORE THE C(XR4), AND DBC/282
00301 0 02000 4 00001 TRA 1,4 * RETURN TO CALLER.                                DBC/283
                                END OF PROGRAM FIELD.                                DBC/284
                                * * * * *                                *DBC/285
                                DBC/286
                                RBCD,2/ CALLS=(CSH),(TSH). CALLERS=LINE,CCLSH,=ESCAN. DBC/287
                                RBCD READS CURRENT INPUT RECORD INTO BCD BUFFER.                                DBC/288
00302 0 42000 1 00000 EOF HPR 0,1 EOF HALT / PRESS START TO REPEAT.                                DBC/289
00303 -0 53400 1 00066 RBCD LXI UNIT,1 SET XR1 FOR CURRENT UNIT, AND                                DBC/290
00304 0 07400 4 00000 TYPE TSX **,4 * GO TO INDICATED INPUT ROUTINE.                                DBC/291
00305 0 77777 0 77751 PZE BCD,,-1 (INPUT BUFFER)                                DBC/292
                                DCR1 = END-OF-FILE RETURN FROM INPUT ROUTINE.                                DBC/293
00306 1 00001 0 00302 DCR1 TXI EOF,0,1 GO TO END-OF-FILE STOP.                                DBC/294
                                N=R1+1 = NORMAL RETURN FROM INPUT ROUTINE.                                DBC/295
00307 -0 50000 0 00306 CAL DCR1 FOR CURRENT INPUT, RESET                                DBC/296
00310 0 62200 0 00347 STD DX1 INPUT CHARACTER COUNT AND                                DBC/297

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00311	0	62200	0	00350	STD DX2	INPUT WORD COUNT TO ONE. THEN	DBC/298
00312	0	02000	2	00001	TRA 1,2	* EXIT TO CALLER.	DBC/299
					END OF PROGRAM RBCD.		DBC/300
					* * * * *		DBC/301
					REA0,4/ USES=FIELD,LINE. CALLERS=IDBC),LINEIRESCAN).		DBC/302
					READ DOES INTEGER, FIXED, AND FLOATING POINT CONVERSION.		DBC/303
					XREAD = EXIT FROM READ WHEN FORMAT IS EXHAUSTED.		DBC/304
00313	-0	63400	4	00321	XREAD SXD CNVSW,4	SAVE THE C(XR4), AND	DBC/305
00314	0	07400	4	00256	TSX RESCAN,4	* GO RESCAN FORMAT. THEN RETURN,	DBC/306
00315	-0	53400	4	00321	LXD CNVSW,4	AFTER GETTING FORMAT.	DBC/3061
					READ = ENTRY POINT USED BY (DBC).		DBC/307
00316	-0	63400	4	00116	READ SXD AX4,4	SAVE THE C(XR4) FOR RETURN TO LIST.	DBC/308
00317	-0	63400	1	00114	SXD AX1,1	SAVE THE ORIGINAL C(XR1),	DBC/309
00320	-0	63400	2	00115	SXD AX2,2	SAVE THE ORIGINAL C(XR2), AND	DBC/310
00321	-3	00000	0	00313	CNVSW TXL XREAD,0,**	SWITCH (TXL=TRA, TXH=NOP).	DBC/311
							DBC/312
00322	0	50000	0	00634	CLA MZE		DBC/313
00323	0	60100	0	77743	STO N		DBC/314
00324	0	60200	0	77747	SLW V		DBC/315
00325	0	60200	0	77742	SLW DG		DBC/316
00326	0	50200	0	77732	CLS DIG		DBC/317
00327	0	60100	0	77750	STO D		DBC/318
00330	0	50000	0	77740	CLA EXP		DBC/319
00331	0	60100	0	77744	STO E		DBC/320
00332	0	53400	4	77731	LXA INT,4		DBC/321
00333	0	56000	0	77736	LDQ MQD		DBC/322
00334	-0	53400	1	00347	LXD DX1,1		DBC/323
00335	-0	53400	2	00350	LXD DX2,2		DBC/324
00336	-0	14000	0	00337	TNO F6		DBC/325
00337	2	00001	1	00343	F6 TIX F1,1,1		DBC/326
00340	1	77777	2	00341	TXI F2,2,-1		DBC/327
00341	-0	53400	1	00061	F2 LXD SIX,1		DBC/328
00342	0	56000	2	77751	LDQ BCD,2		DBC/329
00343	-0	75400	0	00000	F1 PXD ,0		DBC/330
00344	-0	76300	0	00006	LGL 6		DBC/331
00345	-3	00000	4	00520	TXL D6,4,0		DBC/332
00346	0	34000	0	00631	CAS BLANK		DBC/333
00347	1	00000	0	00363	DX1 TXI STOP1,0,**		DBC/334
00350	1	00000	0	00367	DX2 TXI F3,0,**		DBC/335
00351	0	34000	0	00617	CAS MINUS		DBC/336
D	00352	1	00000	0	00363	TXI STOP1,0	DBC/337
D	00353	1	00000	0	00361	TXI F4,0	DBC/338
	00354	0	34000	0	00632	CAS PLUS	DBC/339
D	00355	1	00000	0	00454	TXI C5L,0	DBC/340
D	00356	1	00000	0	00364	TXI F5,0	DBC/341
	00357	0	34000	0	00633	CAS NEGAT	DBC/342
D	00360	1	00000	0	00363	TXI STOP1,0	DBC/343
	00361	0	50000	0	00634	F4 CLA MZE	DBC/344
	00362	0	34000	0	00627	CAS TEN	DBC/345
	00363	0	42000	1	00001	STOP1 HPR 1,1	DBC/346
	00364	-0	75400	0	00000	F5 PXD ,0	DBC/347
	00365	0	60100	0	77742	STO DG	DBC/348
D	00366	1	00000	0	00516	TXI D9,0	DBC/349

D	00367	2	00001	4	00337	F3	TIX F6,4,1	DBC/350
	00370	1	00000	0	00520		TXI D6,0	DBC/351
	00371	-2	00001	4	00417	E1	TNX E5,4,1	DBC/352
	00372	2	00001	1	00376		TIX E2,1,1	DBC/353
	00373	1	77777	2	00374		TXI E3,2,-1	DBC/354
	00374	-0	53400	1	00061	E3	LXD SIX,1	DBC/355
	00375	0	56000	2	77751		LDQ BCD,2	DBC/356
	00376	-0	75400	0	00000	E2	PXD ,0	DBC/357
	00377	-0	76300	0	00006		LGL 6	DBC/358
	00400	0	34000	0	00631		CAS BLANK	DBC/359
D	00401	1	00000	0	00416		TXI STOP2,0	DBC/360
D	00402	1	00000	0	00371		TXI E1,0	DBC/361
	00403	-0	63400	4	00424		SXD ER,4	DBC/362
	00404	0	34000	0	00617	C2L	CAS MINUS	DBC/363
D	00405	1	00000	0	00424		TXI ER,0	DBC/364
D	00406	1	00000	0	00414		TXI E4,0	DBC/365
	00407	0	34000	0	00632	C4L	CAS PLUS	DBC/366
D	00410	1	00000	0	00424		TXI ER,0	DBC/367
D	00411	1	00000	0	00417		TXI E5,0	DBC/368
	00412	0	34000	0	00633		CAS NEGAT	DBC/369
D	00413	1	00000	0	00424		TXI ER,0	DBC/370
	00414	0	50000	0	00634	E4	CLA MZE	DBC/371
	00415	0	34000	0	00627		CAS TEN	DBC/372
	00416	0	42000	1	00002	STOP2	HPR 2,1	DBC/373
	00417	-0	75400	0	00000	E5	PXD ,0	DBC/374
	00420	0	60100	0	77744		STO E	DBC/375
	00421	-2	00001	4	00520		TNX D6,4,1	DBC/376
	00422	2	00001	1	00430	E9	TIX E6,1,1	DBC/377
	00423	1	77777	2	00426		TXI E7,2,-1	DBC/378
	00424	3	00000	4	00452	ER	TXH STOP4,4,**	DBC/379
D	00425	1	00000	0	00416		TXI STOP2,0	DBC/380
	00426	-0	53400	1	00061	E7	LXD SIX,1	DBC/381
	00427	0	56000	2	77751		LDQ BCD,2	DBC/382
	00430	-0	75400	0	00000	E6	PXD ,0	DBC/383
	00431	-0	76300	0	00006		LGL 6	DBC/384
	00432	0	34000	0	00631		CAS BLANK	DBC/385
D	00433	1	00000	0	00436		TXI STOP3,0	DBC/386
D	00434	1	00000	0	00437		TXI E8,0	DBC/387
	00435	0	34000	0	00627		CAS TEN	DBC/388
	00436	0	42000	1	00003	STOP3	HPR 3,1	DBC/389
	00437	-0	75400	0	00000	E8	PXD ,0	DBC/390
	00440	0	60100	0	77742		STO DG	DBC/391
	00441	0	50000	0	77744		CLA E	DBC/392
	00442	0	76700	0	00002		ALS 2	DBC/393
	00443	0	40000	0	77744		ADD E	DBC/394
	00444	0	76700	0	00001		ALS 1	DBC/395
	00445	0	36100	0	77742		ACL DG	DBC/396
	00446	0	60100	0	77744		STO E	DBC/397
	00447	2	00001	4	00422		TIX E9,4,1	DBC/398
D	00450	1	00000	0	00520		TXI D6,0	DBC/399
	00451	0	34000	0	00631	C1L	CAS BLANK	DBC/400
	00452	0	42000	1	00004	STOP4	HPR 4,1	DBC/401
D	00453	1	00000	0	00506		TXI D7,0	DBC/402
	00454	-0	63400	4	77746	C5L	SXD U,4	DBC/403

	00455	0	62200	0	00424	STD ER	DBC/404
	00456	0	34000	0	00621	CAS POINT	DBC/405
D	00457	1	00000	0	00404	TXI C2L,0	DBC/406
	00460	1	77777	4	00465	TXI C3L,4,-1	DBC/407
	00461	0	34000	0	00625	CAS EXPON	DBC/408
D	00462	1	00000	0	00452	TXI STOP4,0	DBC/409
D	00463	1	00000	0	00371	TXI E1,0	DBC/410
D	00464	1	00000	0	00407	TXI C4L,0	DBC/411
	00465	-0	75400	4	00000	C3L PXD ,4	DBC/412
	00466	0	77100	0	00022	ARS 18	DBC/413
	00467	0	60100	0	77746	STO U	DBC/414
	00470	0	60100	0	77750	STO D	DBC/415
	00471	1	00001	4	00517	TXI D8,4,1	DBC/416
	00472	0	50000	0	77747	D4 CLA V	DBC/417
	00473	0	40000	0	00626	ADD ONE	DBC/418
	00474	0	60100	0	77747	STO V	DBC/419
	00475	-2	00001	4	00520	TNX D6,4,1	DBC/420
	00476	2	00001	1	00502	D5 TIX D1,1,1	DBC/421
	00477	1	77777	2	00500	TXI D2,2,-1	DBC/422
	00500	0	53400	1	00503	D2 LXA D3,1	DBC/423
	00501	0	56000	2	77751	LDQ BCD,2	DBC/424
	00502	-0	75400	0	00000	D1 PXD ,0	DBC/425
	00503	-0	76300	0	00006	D3 LGL 6	DBC/426
	00504	0	34000	0	00627	CAS TEN	DBC/427
D	00505	1	00000	0	00451	TXI C1L,0	DBC/428
	00506	-0	75400	0	00000	D7 PXD ,0	DBC/429
	00507	0	62100	0	77742	STA DG	DBC/430
	00510	0	50000	0	77743	CLA N	DBC/431
	00511	0	76700	0	00002	ALS 2	DBC/432
	00512	0	40000	0	77743	ADD N	DBC/433
	00513	0	76700	0	00001	ALS 1	DBC/434
	00514	0	40000	0	77742	ADD DG	DBC/435
	00515	0	14000	0	00472	TOV D4	DBC/436
	00516	0	60100	0	77743	D9 STO N	DBC/437
	00517	2	00001	4	00476	D8 TIX D5,4,1	DBC/438
	00520	0	50000	0	77743	D6 CLA N	DBC/439
	00521	-0	60000	0	77736	STQ MQD	DBC/440
	00522	-0	63400	1	00347	SXD DX1,1	DBC/441
	00523	-0	63400	2	00350	SXD DX2,2	DBC/442
D	00524	-3	00000	0	00600	FIXSW TXL T1,0	DBC/443
	00525	0	10000	0	00601	TZE T2	DBC/444
	00526	0	50000	0	77750	CLA D	DBC/445
	00527	-0	12000	0	00533	TMI ADE	DBC/446
	00530	0	50000	0	77746	CLA U	DBC/447
	00531	0	77100	0	00022	ARS 18	DBC/448
	00532	0	40200	0	77750	SUB D	DBC/449
	00533	0	40000	0	77744	ADE ADD E	DBC/450
	00534	0	40000	0	77747	ADD V	DBC/451
	00535	0	60100	0	77750	STO D	DBC/452
	00536	0	50000	0	77743	CLA N	DBC/453
	00537	0	62100	0	00635	STA K1	DBC/454
	00540	0	77100	0	00017	ARS 15	DBC/455
	00541	-0	50100	0	00636	ORA K2	DBC/456
	00542	0	30000	0	00636	FAD K2	DBC/457

00543	0	60100	0	77745	STO F		DBC/458
00544	0	76000	0	00000	CLM		DBC/459
00545	-0	50100	0	00635	ORA K1		DBC/460
00546	0	30000	0	77745	FAD F		DBC/461
00547	-0	77300	0	00010	RQL 8		DBC/462
00550	0	76000	0	00010	RND		DBC/463
00551	-0	50100	0	00637	ORA K3		DBC/464
00552	0	53400	4	77750	LXA D,4		DBC/465
00553	-3	00000	4	00601	TXL T2,4,0		DBC/466
00554	0	56000	0	77750	LDQ D		DBC/467
00555	0	16200	0	00566	TQP T4		DBC/468
00556	3	00061	4	00564	TXH T5,4,49		DBC/469
00557	0	24100	4	00722	FDP TAB,4		DBC/470
00560	-0	60000	0	77745	STQ F		DBC/471
00561	0	50000	0	77745	CLA F		DBC/472
00562	0	36100	0	00640	ACL K4		DBC/473
00563	-0	76000	0	00001	PBT		DBC/474
00564	0	76000	0	00000	T5 CLM		DBC/475
D 00565	1	00000	0	00601	TXI T2,0		DBC/476
00566	0	60100	0	77745	T4 STO F		DBC/477
00567	3	00061	4	00575	TXH T3,4,49		DBC/478
00570	0	56000	0	77745	LDQ F		DBC/479
00571	0	26000	4	00722	FMP TAB,4		DBC/480
00572	0	36100	0	00641	ACL K5		DBC/481
00573	-0	76000	0	00001	PBT		DBC/482
D 00574	1	00000	0	00601	TXI T2,0		DBC/483
00575	0	76000	0	00000	T3 CLM		DBC/484
00576	0	76000	0	00006	COM		DBC/485
D 00577	1	00000	0	00601	TXI T2,0		DBC/486
00600	0	76700	0	00022	T1 ALS 18		DBC/487
00601	-0	53400	4	00604	T2 LXD COUNT,4	UPDATE FIELD COUNT, AND	DBC/488
00602	2	00001	4	00605	TIX MORE,4,1	IF EXHAUSTED, THEN	DBC/489
00603	0	60100	0	77733	STO DATUM	SAVE THE CONVERTED FIELD, AND	DBC/490
00604	1	00000	0	00300	COUNT TXI DONE,0,**	* (FIELD REPEAT COUNT)EXAMINE FORMAT.	DBC/491
00605	-0	63400	4	00604	MORE SXD COUNT,4	OTHERWISE, GO EXAMINE LIST.	DBC/492
					LIST = ENTRY POINT USED BY FIELD.		DBC/493
00606	-0	53400	4	00116	LIST LXD AX4,4	SET XR4 FOR INDICATED RETURN,	DBC/494
00607	-0	53400	1	00114	LXD AX1,1	RESTORE THE ORIGINAL C(XR1),	DBC/495
00610	-0	53400	2	00115	LXD AX2,2	RESTORE THE ORIGINAL C(XR2I), AND	DBC/496
00611	0	02000	4	00001	TRA 1,4	* GO STORE (OR CONVERT) INPUT.	DBC/497
					END OF PROGRAM READ.		DBC/498
					*****		DBC/499
					CONSTANTS AND WORKING STORAGE USED BY DBC.		DBC/500
							DBC/501
00612	+0000000000077	ENDMK	OCT	77		CCTEST-12.	DBC/5015
00613	0000000000074	(	BCD	100000(		CCTEST-11.	DBC/502
00614	0000000000073	COMMA	BCD	100000,		CCTEST-10.	DBC/503
00615	0000000000061	SLASH	BCD	100000/		CCTEST-9.	DBC/504
00616	0000000000047	P	BCD	100000P		CCTEST-8.	DBC/505
00617	0000000000040	MINUS	BCD	100000-		CCTEST-7.	DBC/506
00620	0000000000034	)	BCD	100000)		CCTEST-6.	DBC/507
00621	0000000000033	POINT	BCD	100000.		CCTEST-5.	DBC/508
00622	0000000000031	I	BCD	100000I		CCTEST-4.	DBC/509
00623	0000000000030	H	BCD	100000H		CCTEST-3.	DBC/510

00624	0000000000026	FCC	BCD	100000F	CCTEST-2.	DBC/511
00625	0000000000025	EXPON	BCD	100000E	CCTEST-1.	DBC/512
	00626	CCTEST	BSS	0	INDEXING ADDRESS FOR ABOVE LIST.	DBC/513
00626	+0000000000001	ONE	DEC	1	CONSTANT USED BY DBC.	DBC/514
00627	+0000000000012	TEN	DEC	10	CONSTANT USED BY DBC.	DBC/515
00630	0 00000 0 00011	L(9)	PZE	9	CONSTANT USED BY DBC.	DBC/5155
00631	0000000000060	BLANK	BCD	100000	CONSTANT USED BY DBC.	DBC/516
00632	0000000000020	PLUS	BCD	100000+	CONSTANT USED BY DBC.	DBC/517
00633	0000000000014	NEGAT	BCD	100000'	CONSTANT USED BY DBC.	DBC/518
00634	-0 00000 0 00000	MZE	MZE		CONSTANT USED BY DBC.	DBC/519
00635	+2330000000000	K1	DEC	155B8	CONSTANT USED BY DBC.	DBC/520
00636	+2520000000000	K2	DEC	170B8	CONSTANT USED BY DBC.	DBC/521
00637	+0004000000000	K3	DEC	1B9	CONSTANT USED BY DBC.	DBC/522
00640	+3350000000000	K4	DEC	221B8	CONSTANT USED BY DBC.	DBC/523
00641	+0430000000000	K5	DEC	35B8	CONSTANT USED BY DBC.	DBC/524
00642	+375536246150		OCT	375536246150	48-TABLE USED BY DBC.	DBC/525
00643	+372430204755		OCT	372430204755	47-TABLE USED BY DBC.	DBC/526
00644	+366700324573		OCT	366700324573	46-TABLE USED BY DBC.	DBC/527
00645	+363546566774		OCT	363546566774	45-TABLE USED BY DBC.	DBC/528
00646	+360436770626		OCT	360436770626	44-TABLE USED BY DBC.	DBC/529
00647	+354713132675		OCT	354713132675	43-TABLE USED BY DBC.	DBC/530
00650	+351557257061		OCT	351557257061	42-TABLE USED BY DBC.	DBC/531
00651	+346445677215		OCT	346445677215	41-TABLE USED BY DBC.	DBC/532
00652	+342726145174		OCT	342726145174	40-TABLE USED BY DBC.	DBC/533
00653	+337570120775		OCT	337570120775	39-TABLE USED BY DBC.	DBC/534
00654	+334454732312		OCT	334454732312	38-TABLE USED BY DBC.	DBC/535
00655	+330741367020		OCT	330741367020	37-TABLE USED BY DBC.	DBC/536
00656	+325601137163		OCT	325601137163	36-TABLE USED BY DBC.	DBC/537
00657	+322464114134		OCT	322464114134	35-TABLE USED BY DBC.	DBC/538
00660	+316755023372		OCT	316755023372	34-TABLE USED BY DBC.	DBC/539
00661	+313612334310		OCT	313612334310	33-TABLE USED BY DBC.	DBC/540
00662	+310473426555		OCT	310473426555	32-TABLE USED BY DBC.	DBC/541
00663	+304770675742		OCT	304770675742	31-TABLE USED BY DBC.	DBC/542
00664	+301623713116		OCT	301623713116	30-TABLE USED BY DBC.	DBC/543
00665	+276503074076		OCT	276503074076	29-TABLE USED BY DBC.	DBC/544
00666	+273402374713		OCT	273402374713	28-TABLE USED BY DBC.	DBC/545
00667	+267635456171		OCT	267635456171	27-TABLE USED BY DBC.	DBC/546
00670	+264512676456		OCT	264512676456	26-TABLE USED BY DBC.	DBC/547
00671	+261410545213		OCT	261410545213	25-TABLE USED BY DBC.	DBC/548
00672	+255647410337		OCT	255647410337	24-TABLE USED BY DBC.	DBC/549
00673	+252522640262		OCT	252522640262	23-TABLE USED BY DBC.	DBC/550
00674	+247417031702		OCT	247417031702	22-TABLE USED BY DBC.	DBC/551
00675	+243661534466		OCT	243661534466	21-TABLE USED BY DBC.	DBC/552
00676	+240532743536		OCT	240532743536	20-TABLE USED BY DBC.	DBC/553
00677	+235425434430		OCT	235425434430	19-TABLE USED BY DBC.	DBC/554
00700	+231674055530		OCT	231674055530	18-TABLE USED BY DBC.	DBC/555
00701	+226543212741		OCT	226543212741	17-TABLE USED BY DBC.	DBC/556
00702	+223434157116		OCT	223434157116	16-TABLE USED BY DBC.	DBC/557
00703	+217706576512		OCT	217706576512	15-TABLE USED BY DBC.	DBC/558
00704	+214553630410		OCT	214553630410	14-TABLE USED BY DBC.	DBC/559
00705	+211443023471		OCT	211443023471	13-TABLE USED BY DBC.	DBC/560
00706	+205721522451		OCT	205721522451	12-TABLE USED BY DBC.	DBC/561
00707	+202564416672		OCT	202564416672	11-TABLE USED BY DBC.	DBC/562
00710	+177452013710		OCT	177452013710	10-TABLE USED BY DBC.	DBC/563

00711	+173734654500	OCT	173734654500	09-TABLE	USED BY DBC.	DBC/564
00712	+170575360400	OCT	170575360400	08-TABLE	USED BY DBC.	DBC/565
00713	+165461132000	OCT	165461132000	07-TABLE	USED BY DBC.	DBC/566
00714	+161750220000	OCT	161750220000	06-TABLE	USED BY DBC.	DBC/567
00715	+156606500000	OCT	156606500000	05-TABLE	USED BY DBC.	DBC/568
00716	+153470400000	OCT	153470400000	04-TABLE	USED BY DBC.	DBC/569
00717	+147764000000	OCT	147764000000	03-TABLE	USED BY DBC.	DBC/570
00720	+144620000000	OCT	144620000000	02-TABLE	USED BX DBC.	DBC/571
00721	+141500000000	OCT	141500000000	01-TABLE	USED BY DBC.	DBC/572
00722	+136400000000	TAB	OCT 136400000000	00-TABLE	USED BY DBC.	DBC/573
	77731	COMMON	ORG -39			DBC/574
	77731	INT	BSS 1	VARIABLE	USED BY DBC.	DBC/575
	77732	DIG	BSS 1	VARIABLE	USED BY DBC.	DBC/576
	77733	DATUM	BSS 1	VARIABLE	USED BY DBC.	DBC/577
	77734	MQ	BSS 1	VARIABLE	USED BY DBC.	DBC/578
	77735	MQR	BSS 1	VARIABLE	USED BY DBC.	DBC/579
	77736	MQD	BSS 1	VARIABLE	USED BY DBC.	DBC/580
	77737	PEX	BSS 1	VARIABLE	USED BY DBC.	DBC/581
	77740	EXP	BSS 1	VARIABLE	USED BY DBC.	DBC/582
	77741	ND	BSS 1	VARIABLE	USED BY DBC.	DBC/563
	77742	DG	BSS 1	VARIABLE	USED BY DBC.	DBC/584
	77743	N	BSS 1	VARIABLE	USED BY DBC.	DBC/585
	77744	E	BSS 1	VARIABLE	USED BY DBC.	DBC/586
	77745	F	BSS 1	VARIABLE	USED BY DBC.	DBC/587
	77746	U	BSS 1	VARIABLE	USED BY DBC.	DBC/588
	77747	V	BSS 1	VARIABLE	USED BY DBC.	DBC/589
	77750	D	BSS 1	VARIABLE	USED BY DBC.	DBC/590
	77751	BCD	BSS 14	VARIABLE	USED BY DBC.	DBC/591
				END OF CONSTANTS AND WORKING STORAGE USED BY DBC.		DBC/592
				* * * * *		DBC/593
A	00000	END				DBC/594

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	625	0	0	0	0
LIB	0	0	0	0	0
COL	625	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 634

NUMBER OF SYMBOLS, DEF 167,DEFOP 0,UNDEF 0
ABS

		CONTROL CARD FOR CSH.				CSH/C01	
		00000	ORG 0			CSH/C02	
00000	0	00000	0	00211	PZE C7+13	CSH/C03	
00001	0	00000	0	77767	PZE COMMON	CSH/C04	
00002	742362303460				BCD 1(CSH)	CSH/C05	
00003	0	00000	0	00003	3	CSH/C06	
					END OF CSH CONTROL CARD	CSH/C07	
					CSH FOR FORTRAN II	CSH 0001	
		00000	ORG 0			CSH 0002	
		77767	COMMON SYN -9			CSH 0003	
00000	0	42000	2	00000	B17 HPR 0,2	NON-HOLLERITH CHARACTER ON CARD	
00001	-0	53400	1	00016	LXD B2,1	RESTART AFTER ERROR	
00002	-0	53400	2	00020	LXD B3,2	X	
00003	0	76200	0	00321	RDBCD RCD		
00004	0	70000	0	77776	CPY L		
TD	00005	-3	00000	0	00007	TXL B1	X
	00006	0	02000	4	00002	TRA 2,4	END OF FILE EXIT
	00007	-0	60000	0	77770	B1 STQ LS	SET LEFT SUM
	00010	-0	63400	1	00016	SXD B2,1	SAVE INDEX REGISTERS
	00011	-0	63400	2	00020	SXD B3,2	X
	00012	-0	53400	1	00026	LXD B4,1	SET DIGIT ROW COUNT
	00013	0	70000	0	77777	CPY R	COPY 9 RIGHT ROW AND
	00014	-0	60000	0	77771	STQ RS	SET RIGHT SUM
TD	00015	0	07400	2	00156	TSX C1,2	ENTER CONVERSION LOOP
	00016	-3	00000	0	00021	B2 TXL B5	LEAVE CONVERSION LOOP
	00017	0	76700	0	00001	ALS 1	
TD	00020	-3	00000	0	00064	B3 TXL C2	INITIALIZE BCD RECORD
	00021	0	70000	0	77772	B5 CPY 8L	COPY 8 ROW AND
	00022	-0	60000	0	77770	STQ LS	USE AS SUM
	00023	0	70000	0	77773	CPY 8R	X
	00024	-0	60000	0	77771	STQ RS	X
	00025	0	07400	2	00156	TSX C1,2	ENTER CONVERSION LOOP
	00026	-3	00010	0	00031	B4 TXL B6,0,8	LEAVE CONVERSION LOOP
	00027	0	76700	0	00003	ALS 3	ADD 8 TIMES 8 ROW
TD	00030	-3	00000	0	00063	TXL C3	X
	00031	-0	50000	0	77776	B6 CAL L	USE 9 ROW AS SUM
	00032	0	60200	0	77770	SLW LS	X
	00033	-0	50000	0	77777	CAL R	X
	00034	0	60200	0	77771	SLW RS	X
	00035	-3	00001	1	00112	B13 TXL B7,1,1	TEST FOR ZERO ROW
	00036	0	70000	0	77776	B14 CPY L	COPY LEFT ROW AND
TD	00037	-3	00000	0	00073	TXL B8	TEST FOR END OF RECORD
	00040	0	02000	0	00000	TRA B17	
	00041	-0	50000	0	77770	B9 CAL LS	SAVE LEFT ZONE SUM
	00042	0	60200	0	77776	SLW L	X
	00043	-0	50000	0	77772	CAL LDS	FORM INDICATOR FOR
	00044	0	76000	0	00006	COM	ZERO AND X AND / OR Y
	00045	-0	32000	0	77774	ANA LZ	IN LEFT ROWS
	00046	0	32000	0	77770	ANS LS	X
	00047	-0	50000	0	77771	CAL RS	SAVE RIGHT ZONE SUM
	00050	0	60200	0	77777	SLW R	X
	00051	-0	50000	0	77773	CAL RDS	FORM INDICATOR FOR
	00052	0	76000	0	00006	COM	ZERO AND X AND/OR Y
	00053	-0	32000	0	77775	ANA RZ	IN RIGHT ROWS

	00054	0	32000	0	77771		ANS RS	X	CSH 004B
	00055	0	07400	2	00156		TSX C1,2	ENTER CONVERSION LOOP	CSH 0049
TD	00056	-3	00000	0	00132		TXL B15	LEAVE CONVERSION LOOP	CSH 0050
	00057	0	60200	0	77767		SLW TP	MULTIPLY INDICATOR	CSH 0051
	00060	0	76700	0	00002		ALS 2	BITS BY TEN	CSH 0052
	00061	0	36100	0	77767		ACL TP	X	CSH 0053
	00062	0	76700	0	00001		ALS 1	X	CSH 0054
	00063	0	36100	1	00000	C3	ACL 0,1	ADD TO BCD RECORD	CSH 0055
	00064	0	60200	1	00000	C2	SLW 0,1	STORE IN BCD RECORD	CSH 0056
	00065	2	00001	1	00174		TIX C7,1,1	COUNT WORDS	CSH 0057
	00066	0	50200	0	00162	C11	CLS C4	INVERT ROW SWITCH AND	CSH 0058
	00067	0	60100	0	00162		STO C4	TEST FOR RIGHT ROW DONE	CSH 0059
	00070	-0	73400	1	00003	ICSH)	PDX RDBCD,1	RESTORE ROW COUNT	CSH 0060
	00071	-0	12000	2	00001		TMI 1,2	TRANSFER IF RIGHT ROW DONE	CSH 0061
TD	00072	1	00000	0	00157	C10	TXI C9	GO CONVERT RIGHT ROW	CSH 0062
	00073	-0	50000	0	77776	B8	CAL L	TEST LEFT ROW FOR	CSH 0063
	00074	-0	32000	0	77770		ANA LS	ILLEGAL DOUBLE PUNCH	CSH 0064
	00075	-0	10000	0	00000		TNZ B17	X	CSH 0065
	00076	-0	50000	0	77776	B10	CAL L	FORM LOGICAL SUM	CSH 0066
	00077	-0	60200	0	77770		ORS LS	OF LEFT ROWS	CSH 0067
	00100	0	70000	0	77777		CPY R	COPY RIGHT ROW AND	CSH 0068
	00101	-0	50000	0	77777		CAL R	TEST FOR ILLEGAL	CSH 0069
	00102	-0	32000	0	77771		ANA RS	DOUBLE PUNCH	CSH 0070
	00103	-0	10000	0	00000		TNZ B17	X	CSH 0071
	00104	-0	50000	0	77777	B11	CAL R	FORM LOGICAL SUM OF	CSH 0072
	00105	-0	60200	0	77771		ORS RS	RIGHT ROWS	CSH 0073
	00106	-2	00001	1	00126		TNX B12,1,1	TEST FOR ZONE ROWS	CSH 0074
	00107	0	07400	2	00156		TSX C1,2	ENTER CONVERSION LOOP	CSH 0075
TD	00110	-3	00000	0	00035		TXL B13	LEAVE CONVERSION LOOP	CSH 0076
TD	00111	-3	00000	0	00063		TXL C3	ADD TO BCD RECORD	CSH 0077
	00112	-0	50000	0	77772	B7	CAL 8L	ADD 8 LEFT ROW TO	CSH 0078
	00113	-0	50100	0	77770		ORA LS	LEFT LOGICAL SUM	CSH 0079
	00114	0	60200	0	77772		SLW LDS	X	CSH 0080
	00115	0	70000	0	77774		CPY LZ	COPY ZERO LEFT AND	CSH 0081
	00116	-0	32000	0	77774		ANA LZ	FORM INDICATOR FOR	CSH 0082
	00117	0	60200	0	77770		SLW LS	BOTH DIGIT AND ZERO	CSH 0083
	00120	-0	50000	0	77773		CAL 8R	ADD 8 RIGHT ROW TO	CSH 0084
	00121	-0	50100	0	77771		ORA RS	RIGHT LOGICAL SUM	CSH 0085
	00122	0	60200	0	77773		SLW RDS	X	CSH 0086
	00123	0	70000	0	77775		CPY RZ	COPY ZERO RIGHT AND	CSH 0087
	00124	-0	32000	0	77775		ANA RZ	FORM INDICATOR FOR	CSH 0088
	00125	0	60200	0	77771		SLW RS	BOTH DIGIT AND ZERO	CSH 0089
	00126	0	07400	2	00156	B12	TSX C1,2	ENTER CONVERSION LOOP	CSH 0090
TD	00127	-3	00000	0	00036		TXL B14	LEAVE CONVERSION LOOP	CSH 0091
	00130	0	76700	0	00004		ALS 4	SHIFT TO ZONE POSITION	CSH 0092
TD	00131	-3	00000	0	00063		TXL C3	X	CSH 0093
	00132	-0	50000	0	77772	B15	CAL LDS	FORM INDICATOR FOR	CSH 0094
	00133	-0	50100	0	77774		ORA LZ	BLANK COLUMNS IN	CSH 0095
	00134	-0	50100	0	77776		ORA L	LEFT HALF OF CARD	CSH 0096
	00135	0	76000	0	00006		COM	X	CSH 0097
	00136	0	60200	0	77770		SLW LS	X	CSH 0098
	00137	-0	50000	0	77773		CAL RDS	FORM INDICATOR FOR	CSH 0099
	00140	-0	50100	0	77775		ORA RZ	BLANK COLUMNS IN	CSH 0100
	00141	-0	50100	0	77777		ORA R	RIGHT HALF OF CARD	CSH 0101

	00142	0	76000	0	00006		COM		X	CSH	0102
	00143	0	60200	0	77771		SLW RS		X	CSH	0103
	00144	0	07400	2	00156		TSX C1,2		ENTER CONVERSION LOOP	CSH	0104
TD	00145	-3	00000	0	00153		TXL B16		LEAVE CONVERSION LOOP	CSH	0105
	00146	0	60200	0	77767		SLW TP		MULTIPLY INDICATOR	CSH	0106
	00147	0	76700	0	00001		ALS 1		BITS BY 3 AND	CSH	0107
	00150	0	36100	0	77767		ACL TP		SHIFT TO ZONE POSITION	CSH	0108
	00151	0	76700	0	00004		ALS 4		X	CSH	0109
TD	00152	-3	00000	0	00063		TXL C3		X	CSH	0110
	00153	-0	53400	1	00016	B16	LXD B2,1		RESTORE INDEX REGISTERS	CSH	0111
	00154	-0	53400	2	00020		LXD B3,2		AND RETURN TO MAIN	CSH	0112
	00155	0	02000	4	00003		TRA 3,4		PROGRAM	CSH	0113
	00156	-0	63400	1	00162	C1	SXD C4,1		SAVE ROW COUNT	CSH	0114
	00157	-0	50000	4	00001	C9	CAL 1,4		INITIALIZE ADDRESSES	CSH	0115
	00160	0	40100	0	00174		ADM C7		X ADD 6	CSH	0116
	00161	0	56000	0	77770	C6	LDQ LS		OBTAIN LEFT SUM	CSH	0117
	00162	-3	00000	0	00165	C4	TXL C8,**,**		TRANSFER IF LEFT ROW	CSH	011B
	00163	0	40100	0	00174		ADM C7		RIGHT ROW, ADD 6 MORE	CSH	0119
	00164	0	56000	0	77771		LDQ RS		OBTAIN RIGHT SUM AND	CSH	0120
	00165	0	62100	0	00064	C8	STA C2		SET BCD RECORD ADDRESS	CSH	0121
	00166	0	62100	0	00063		STA C3		X	CSH	0122
	00167	3	00001	1	00173		TXH C5,1,1		SKIP TEST IF DIGIT ROW	CSH	0123
	00170	-0	60000	0	77767		STQ TP		TEST FOR NO SUM	CSH	0124
	00171	-0	50000	0	77767		CAL TP		X	CSH	0125
	00172	0	10000	0	00066		TZE C11		X	CSH	0126
	00173	0	53400	1	00174	C5	LXA C7,1		SET WORD COUNT	CSH	0127
T	00174	-0	75400	0	00006	C7	PXD 6		CONVERT ROW	CSH	0128
	00175	-0	76300	0	00001		LGL 1		X	CSH	0129
	00176	0	76700	0	00005		ALS 5		X	CSH	0130
	00177	-0	76300	0	00001		LGL 1		X	CSH	0131
	00200	0	76700	0	00005		ALS 5		X	CSH	0132
	00201	-0	76300	0	00001		LGL 1		X	CSH	0133
	00202	0	76700	0	00005		ALS 5		X	CSH	0134
	00203	-0	76300	0	00001		LGL 1		X	CSH	0135
	00204	0	76700	0	00005		ALS 5		X	CSH	0136
	00205	-0	76300	0	00001		LGL 1		X	CSH	0137
	00206	0	76700	0	00005		ALS 5		X	CSH	0138
	00207	-0	76300	0	00001		LGL 1		X	CSH	0139
	00210	0	02000	2	00002		TRA 2,2		EXIT FOR ROW PROCEDURE	CSH	0140
					77767		ORG COMMON			CSH	0141
					77767	TP	BSS 1		TEMPORARY	CSH	0142
					77770	LS	BSS 1		LEFT SUM	CSH	0143
					77771	RS	BSS 1		RIGHT SUM	CSH	0144
					77772	LDS	BSS 1		LEFT DIGIT SUM	CSH	0145
					77773	RDS	BSS 1		RIGHT DIGIT SUM	CSH	0146
					77774	LZ	BSS 1		LEFT ZERO ROW	CSH	0147
					77775	RZ	BSS 1		RIGHT ZERO ROW	CSH	0148
					77776	L	BSS 1		LEFT ROW	CSH	0149
					77777	R	BSS 1		RIGHT ROW	CSH	0150
					77772	8L	SYN LDS		8 LEFT ROW	CSH	0151
					77773	8R	SYN RDS		8 RIGHT ROW	CSH	0152
A					00000		END			CSH	0153

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	161	0	0	0	0
LIB	0	0	0	0	0
COL	161	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 169

NUMBER OF SYMBOLS, DEF 42,DEFOP 0,UNDEF 0
ABS

				CONTROL CARD FOR TSH.		
		00000		ORG	0	TSH/C01
00000	0	00000	0	PZE	BAD+1	TSH/C02
00001	0	00000	0	PZE		TSH/C03
00002	746362303460			BCD	1(TSH)	TSH/C04
00003	0	00000	0	PZE		TSH/C05
					END OF TSH CONTROL CARD.	TSH/C06
		00000		ORG	0	TSH/C07
00000	-0	63400	2	RTD	SXD X2,2	TSH000
00001	-0	76000	0	RTT		TSH001
00002	0	76100	0	(TSH) NOP	RTD	TSH002
00003	0	50000	4	CLA	1,4	TSH003
00004	0	62100	0	STA	CPY	TSH004
00005	0	50000	0	CLA	BAC	TSH005
00006	0	60100	0	REP	STO ERR	TSH006
00007	0	76200	1	RDS	127,1	TSH007
00010	-0	53400	2	LXD	BAC,2	TSH008
00011	0	70000	2	CPY	CPY *,2	TSH009
00012	1	77777	2	TXI	CPY,2,-1	TSH010
00013	1	00001	4	TXI	RES,4,1	TSH011
00014	-0	76000	0	RTT		TSH012
U	00015	00000	0	ERR	***	TSH013
00016	-0	53400	2	RES	LXD X2,2	TSH014
00017	0	02000	4	TRA	3,4	TSH015
00020	0	76400	1	TRY	BST 127,1	TSH016
00021	0	50000	0	CLA	BAD	TSH017
TD	00022	1	00000	X2	TXI REP	TSH018
TD	00023	1	00000	BAC	TXI TRY	TSH019
00024	0	42000	3	BAD	HPR 0,3	TSH020
A		00000			END	TSH021
						TSH022

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	31	0	0	0	0
LIB	0	0	0	0	0
COL	31	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 39

NUMBER OF SYMBOLS, DEF 10,DEFOP 0,UNDEF 0

REM 704 FORTRAN II / BDC / 12 JAN 59.

THE FOLLOWING CONVENTIONS ARE USED IN THIS LISTING=
 ** IN THE ADDRESS, TAG, OR DECREMENT OF AN INSTRUCTION
 INDICATES THAT THIS FIELD WILL BE MODIFIED BY THE PROGRAM.
 * IN COL/36 INDICATES THE INSTRUCTION IS A TRANSFER OUT OF
 THIS LOGICAL BLOCK OR SUBROUTINE.
 C IN COL/34 INDICATES THE INSTRUCTION WAS CORRECTED.
 P IN COL/32 INDICATES THE INSTRUCTION WAS INSERTED (PATCH).
 * * * * *

CONTROL CARD FOR BDC.

A		00000	ORG		BDC/C01
		00000	PZE	TAB+1,,1	BDC/C02
		00001	PZE	COMMON	BDC/C03
		00002	BCD	1(BDC)	BDC/C04
		00003	PZE	(BDC)	BDC/C05
		00004	BCD	1(FIL)	BDC/C06
		00005	MZE	(FIL)	BDC/C07
				END OF BDC CONTROL CARD.	BDC/C08
				* * * * *	BDC/C13
		00000	ORG	0	BDC/001
				(BDC)/ CALLS=LINE,PRINT. CALLER=MAIN PROGRAM.	BDC/002
				(BDC) CONTROLS BINARY TO DECIMAL CONVERSION AND OUTPUT.	BDC/003
		00000	BCD	1(RTN)	BDC/0035
		00001	TTR	NEW	INSTRUCTION EXECUTED IN LOCATION 1.
				NEW = ENTRY POINT FROM MAIN PROGRAM (CIAC)= ADDRESS OF OUTPUT	BDC/004
				ROUTINE TO HANDLE CURRENT OUTPUT, AND C(0)= LOCATION OF THE	BDC/005
				CURRENT FORMAT STATEMENT).	BDC/006
		00002	LTM	NEW	SET FILLW TO CALL THE INDICATED
		00003	STA	TYPE	TYPE OF OUTPUT ROUTINE.
		00004	CAL	0	SET OUTPUT FORMAT STATEMENT
		00005	STA	CALL	LOCATION.
		00006	ADD	ONE	SET EXIT
		00007	STA	FX4	TO MAIN PROGRAM.
		00010	CAL	**	OBTAIN FORMAT STATEMENT
		00011	SXD	FX4,4	FOR SCAN.
		00012	TSX	LINE,4	* GO SCAN FORMAT.
		00013	LXD	FX4,4	WHEN DONE, RESTORE C(XR4).
		00014	CAL	TRAP	SET LOCATION 1 FOR FUTURE
		00015	SLW	1	TRAP TRANSFER TO SEEK, AND
		00016	TXI	** ,0,**	* TRANSFER CONTROL TO MAIN PROGRAM.
				THE MAIN PROGRAM CONTROLS ALL INDEXING OF THE LIST.	BDC/020
		00017	TTR	SEEK	INSTRUCTION EXECUTED IN LOCATION 1.
				SEEK = REENTRY POINT FROM MAIN PROGRAM (C(0)= LOCATION OF	BDC/021
				THE ADDRESS OF THE NEXT OUTPUT NUMBERS).	BDC/022
		00020	LTM	SEEK	PICKUP NTR INSTRUCTION, AND
		00021	CAL	0	SET LOCATION
		00022	STA	SETL	OF OUTPUT NUMBERS.
		00023	ADD	ONE	SET LOCATION FOR
		00024	STA	OUT	RETURN TO MAIN PROGRAM.
		00025	CAL	**	PICKUP LOCATION OF OUTPUT
		00026	SLW	GET	AND SET ADDRESS AND TAG OF GET.

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00027 0 56000 0 00042 LDQ CLA SET GET OP BDC/032
00030 -0 62000 0 00031 SLQ GET TO CLA. BDC/033
00031 0 50000 0 00000 GET CLA **, ** GET OUTPUT NUMBER. BDC/034
00032 -0 63400 4 00016 SXD FX4,4 SAVE THE C(XR4), AND BDC/035
00033 0 07400 4 00315 TSX PRINT,4 * GO CONVERT AND PRINT OUTPUT. BDC/036
00034 -0 53400 4 00016 LXD FX4,4 RESTORE THE C(XR4). BDC/037
00035 0 76000 0 00007 ETM REPEAT UNTIL LIST IS EXHAUSTED, BDC/038
00036 0 02100 0 00000 OUT TTR ** * UNDER CONTROL OF THE MAIN PROGRAM. BDC/039
      END OF PROGRAM (BDC). BDC/040
      * * * * * BDC/041
      * * * * * BDC/042
      (FIL)/ CALLS=FILLW. USES=(RTN). CALLER=MAIN PROGRAM. BDC/043
      (FIL) CONTROLS TRANSMISSION OF ANY REMAINING OUTPUT FROM REC. BDC/044
00037 0 40000 0 00600 (FIL) ADD TWO SET ADDRESS FOR BDC/045
00040 0 62100 0 00055 STA RET RETURN TO MAIN PROGRAM. BDC/046
00041 -0 76000 0 00007 LTM IF NO BDC/047
00042 0 50000 0 00476 CLA CLA PACK OUTPUT REMAINS BDC/048
00043 0 40200 0 00545 SUB FILT IN REC BUFFER, BDC/049
00044 -0 10000 0 00050 TNZ LAST OR IN BDC/050
00045 0 50000 0 77777 CLA WORD WORD INDICATOR, BDC/051
00046 0 40200 0 00577 SUB ONE THEN BDC/052
00047 0 10000 0 00053 TZE EXIT * EXIT TO RESTORE ALL INDICATORS. BDC/053
00050 -0 63400 4 00016 LAST SXD FX4,4 OTHERWISE, SAVE THE C(XR4), AND BDC/054
00051 0 07400 4 00515 TSX FILLW,4 * GO TRANSMIT REMAINING OUTPUT. BDC/055
00052 -0 53400 4 00016 LXD FX4,4 RESTORE THE C(XR4), AND BDC/056
00053 -0 50000 0 00053 EXIT CAL EXIT PICKUP EXIT ADDRESS, AND BDC/057
00054 1 00000 0 00000 FILLX TXI (RTN),0,** * EXIT TO RESTORE ALL INDICATORS. BDC/0575
00055 0 02100 0 00000 RET TTR ** THEN RETURN TO MAIN PROGRAM BDC/0576
      END OF PROGRAM (FIL). BDC/05B
      * * * * * BDC/059
      * * * * * BDC/060
      LINE,4/ CALLS=RESET,FIELD,FILLW. USES=PRINT. CALLER=(BDC). BDC/156
      LINE SCANS THE FORMAT STATEMENT FOR EACH LINE OF OUTPUT. BDC/157
00056 -0 63400 4 00135 LINE SXD AX4,4 SAVE THE C(XR4) FOR RETURN. BDC/158
00057 -0 63400 1 00133 SXD AX1,1 SAVE THE ORIGINAL C(XR1), AND BDC/159
00060 -0 63400 2 00134 SXD AX2,2 SAVE THE ORIGINAL C(XR2). BDC/160
00061 0 76000 0 00006 COM COMPLEMENT THE C(AC), AND BDC/161
00062 0 73400 2 00007 SEVEN PAX 7,2 SET XR2= -(CURRENT FORMAT LOC.), AND BDC/162
00063 0 62200 0 00105 STD UNIT UNIT DECREMENT= -(CURRENT UNIT). BDC/163
00064 0 60000 0 77750 STZ PEX SET PEX (SCALE FACTOR) = 0, AND BDC/164
00065 0 07400 4 00544 TSX RESET,4 * SET REC=BLANKS, PACK=REC, WORD=1. BDC/165
00066 0 60100 0 77745 STO INT SET INT = I. BDC/166
00067 0 53400 1 00062 LXA SEVEN,1 SET XR1 = 7, AND PICKUP THE BDC/167
00070 0 56000 2 77777 LDQ -1,2 1ST WORD OF CURRENT FORMAT. BDC/168
      CCLPAR = ENTRY POINT WHEN A LPAREN IS MET IN FORMAT SCAN. BDC/169
00071 -0 63400 1 00137 CCLPAR SXD BX1,1 SAVE THE CURRENT CHARACTER COUNT, BDC/170
00072 -0 63400 2 00140 SXD BX2,2 SCAN POSITION, AND FORMAT WORD, BDC/171
00073 -0 60000 0 77752 STQ MQR FOR POSSIBLE REPETITION OF GROUP. BDC/172
00074 0 53400 4 77745 LXA INT,4 SET GROUP CONTROL COUNT FOR THE BDC/173
00075 -0 63400 4 00141 SXD BX4,4 INDICATED NUMBER OF REPETITIONS, BDC/174
00076 -0 63400 4 00274 SXD GROUPX,4 AND SAVE FOR POSSIBLE RESCAN. BDC/175
      SCAN = ENTRY POINT FOR CCCMMA,CCSCFP,CCIOUT,CCHOUT,RESCAN. BDC/176
00077 0 60000 0 77745 SCAN STZ INT CLEAR INT WORKING STORAGE, AND BDC/177
00100 1 00006 0 00121 SIX TXI SCAN5,0,6 GO RESUME SCAN. BDC/178

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	00101	-0	53400	1	00100	SCAN1	LXD SIX,1	RESET FORMAT CHARACTER COUNT, AND	BDC/179
	00102	0	56000	2	77777		LDQ -1,2	PICKUP NEXT FORMAT WORD.	BDC/180
	00103	-0	76300	0	00006	SCAN2	LGL 6	EXAMINE NEXT CHARACTER,	BDC/181
	00104	0	34000	0	00570		CAS BLANK	AND IF BLANK,	BDC/182
	00105	1	00000	0	00107	UNIT	TXI SCAN3,0,**	THEN	BDC/183
D	00106	1	00000	0	00121		TXI SCAN5,0	GO EXAMINE NEXT CHARACTER.	BDC/184
	00107	0	34000	0	00601	SCAN3	CAS L(9)	IF NOT BLANK, COMPARE WITH NINE,	BDC/185
D	00110	1	00000	0	00124		TXI SCAN6,0	IF NON-NUMERIC, COMPARE CCTEST.	BDC/186
	00111	0	76100	0	00000		NOP	IF NUMERIC, THEN	BDC/187
	00112	0	60100	0	77746		STO DIG	CONVERT	BDC/188
	00113	0	50000	0	77745		CLA INT	SUCCESSIVE	BDC/189
	00114	0	76700	0	00002		ALS 2	BCD	BDC/190
	00115	0	40000	0	77745		ADD INT	DIGITS	BDC/191
	00116	0	76700	0	00001		ALS 1	TO BINARY,	BDC/192
	00117	0	36100	0	77746		ACL DIG	TO SET INT= SCALE FACTOR,	BDC/193
							SCAN4 = ENTRY POINT USED BY CCSCFM.		BDC/194
	00120	0	60100	0	77745	SCAN4	STO INT	CURRENT FIELD OR GROUP CONTROL.	BDC/195
							SCAN5 = ENTRY POINT USED BY CCDcpt.		BDC/196
	00121	-0	75400	0	00311	SCAN5	PXD XPRINT,0	CLEAR THE AC, AND UPDATE COUNT.	BDC/197
	00122	2	00001	1	00103		TIX SCAN2,1,1	WHEN NO CHARACTERS REMAIN,	BDC/198
	00123	1	77777	2	00101		TXI SCAN1,2,-1	ADJUST SCAN POSITION, AND REPEAT.	BDC/199
							SCAN6 = ENTRY POINT USED BY CCDcpt.		BDC/200
	00124	-0	53400	4	00126	SCAN6	LXD NCC,4	WHEN A NON-NUMERIC IS MET,	BDC/201
	00125	0	34000	4	00567	SCAN7	CAS CCTEST,4	SCAN LIST OF CONTROL CHARACTERS,	BDC/202
	00126	1	00014	0	00130	NCC	TXI SCAN8,0,12	AND IF EQUALITY IS FOUND,	BDC/203
	00127	0	02000	4	00146		TRA FRMTR,4	* TAKE THE INDICATED TRANSFER.	BDC/204
	00130	2	00001	4	00125	SCAN8	TIX SCAN7,4,1	IF NOT FOUND IN CONTROL LIST, THEN	BDC/205
	00131	0	42000	1	00005		HPR 5,1	STOP. PRESS START TO CONTINUE.	BDC/2055
							END OF PROGRAM LINE.		BDC/210
							* * * * *		BDC/211
							FRMTR / CONTROL TRANSFERS FOR FORMAT SCAN =		BDC/212
									BDC/213
D	00132	1	00000	0	00146		TXI CCEDMK,0	END OF FORMAT STATEMENT.	BDC/2135
	00133	1	00000	0	00071	AX1	TXI CCLPAR,0,**	BEGIN FORMAT OR GROUP.	BDC/214
	00134	1	00000	0	00152	AX2	TXI CCCMMA,0,**	END FIELD.	BDC/215
	00135	1	00000	0	00157	AX4	TXI CCSLSH,0,**	END LINE OR RECORD.	BDC/216
D	00136	1	00000	0	00162		TXI CCSCFP,0	SCALE FACTOR PLUS.	BDC/217
	00137	1	00000	0	00165	BX1	TXI CCSCFM,0,**	SCALE FACTOR MINUS.	BDC/218
	00140	1	00000	0	00167	BX2	TXI CCRPAR,0,**	END FORMAT OR GROUP.	BDC/219
	00141	1	00000	0	00173	BX4	TXI CCDcpt,0,**	ROUNDING OF OUTPUT NUMBER.	BDC/220
D	00142	1	00000	0	00212		TXI CCIOUT,0	DECIMAL OUTPUT.	BDC/221
	00143	1	00000	0	00217	CX1	TXI CCHOUT,0,**	HOLLERITH FIELD OUTPUT.	BDC/222
	00144	1	00000	0	00243	CX2	TXI CCFOUT,0,**	FIXED POINT OUTPUT.	BDC/223
	00145	1	00000	0	00254	CX4	TXI CCEOUT,0,**	FLOATING POINT OUTPUT.	BDC/224
					00146	FRMTR	BSS 0		BDC/225
							* * * * *		BDC/226
							CCEDMK/ CALLS=FIELD,MAIN PROGRAM.		BDC/227
							CCEDMK = ENTRY POINT WHEN AN ENDMARK IS MET IN FORMAT SCAN.		BDC/2271
	00146	0	07400	4	00275	CCEDMK	TSX FIELD,4	* GO PROCESS UNDER FIELD CONTROL.	BDC/2272
	00147	0	50000	0	00121		CLA SCAN5	WHEN DONE, SET	BDC/2273
	00150	0	62100	0	00317		STA CNVSW	CONVERSION SWITCH TO RESCAN, AND	BDC/2274
D	00151	1	00000	0	00513		TXI LIST,0	* GO SEE IF LIST IS EXHAUSTED.	BDC/2275
							END OF PROGRAM CCEDMK.		BDC/2276

					PRINT,4/ USES=FIELD,LINE. CALLERS=(BDC),LINE(RESCAN).	BDC/389
					PRINT DOES INTEGER, FIXED, AND FLOATING POINT CONVERSION.	BDC/390
					XPRINT = EXIT FROM PRINT WHEN FORMAT IS EXHAUSTED.	BDC/391
00311	-0	63400	4	00317	XPRINT SXD CNVSW,4	BDC/392
00312	0	07400	4	00263	TSX RESCAN,4	BDC/3921
00313	-0	53400	4	00317	LXD CNVSW,4	BDC/3922
00314	0	50000	0	77747	CLA DATUM	BDC/393
					PRINT = ENTRY POINT USED BY (BDC).	BDC/394
00315	-0	63400	4	00135	PRINT SXD AX4,4	BDC/395
00316	0	60100	0	77747	STO DATUM	BDC/396
00317	1	00000	0	00000	CNVSW TXI **,0,**	BDC/397
					FLT = ENTRY POINT FOR FLOATING POINT CONVERSION.	BDC/398
00320	0	10000	0	00433	FLT TZE CNVN	BDC/399
00321	0	76500	0	00033	LRS 27	BDC/400
00322	0	76000	0	00003	SSP	BDC/401
00323	0	40200	0	00575	SUB BASE	BDC/402
00324	0	76500	0	00043	LRS 35	BDC/403
00325	0	20000	0	00576	MPY LOG2	BDC/404
00326	0	60100	0	77742	STO EXP	BDC/405
00327	0	12000	0	00340	TPL FLT1	BDC/406
00330	0	40200	0	77750	SUB PEX	BDC/407
00331	0	73400	4	00370	FAD PAX FXD,4	BDC/408
00332	0	56000	0	77747	LDQ DATUM	BDC/409
00333	0	26000	4	00671	FMP TAB-1,4	BDC/410
00334	0	76000	0	00003	SSP	BDC/411
00335	0	53400	4	77750	LXA PEX,4	BDC/412
00336	0	40200	4	00672	SUB TAB,4	BDC/413
00337	1	00000	0	00344	TXI FLT4,0	BDC/414
00340	0	73400	4	00320	FLT1 PAX FLT,4	BDC/415
00341	0	50000	4	00672	CLA TAB,4	BDC/416
00342	-0	40000	0	77747	SBM DATUM	BDC/417
00343	0	40000	0	00574	ADD BIAS	BDC/418
00344	0	12000	0	00350	FLT4 TPL FLT2	BDC/419
00345	-0	50000	0	77742	CAL EXP	BDC/420
00346	0	40000	0	00577	ADD ONE	BDC/421
00347	0	60200	0	77742	SLW EXP	BDC/422
00350	-0	50000	0	00566	FLT2 CAL E	BDC/423
00351	0	60200	0	77736	SLW CHAR-4	BDC/424
00352	0	50000	0	77742	CLA EXP	BDC/425
00353	0	40200	0	77750	SUB PEX	BDC/426
00354	0	60100	0	77742	STO EXP	BDC/427
00355	-0	50000	0	00570	CAL BLANK	BDC/428
00356	0	56000	0	77742	LDQ EXP	BDC/429
00357	0	16200	0	00361	TQP FLT3	BDC/430
00360	-0	50000	0	00560	CAL MINUS	BDC/431
00361	0	60200	0	77737	FLT3 SLW CHAR-3	BDC/432
00362	-0	75400	0	00445	IAD PXD INTG,0	BDC/433
00363	0	22100	0	00571	DVP TEN	BDC/434
00364	-0	60000	0	77740	STQ CHAR-2	BDC/435
00365	0	60200	0	77741	SLW CHAR-1	BDC/436
00366	0	50000	0	77747	CLA DATUM	BDC/437
00367	1	00000	0	00371	TXI CNV,0	BDC/438
					FXD = ENTRY POINT FOR FIXED POINT CONVERSION.	BDC/439
00370	0	10000	0	00433	FXD TZE CNVN	BDC/440
					TEST OUTPUT NUMBER FOR ZERO.	

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	00371	0	53400	4	77742	CNV	LXA EXP,4	TEST FOR SCALING.	BDC/441
	00372	-3	00000	4	00400		TXL CNV1,4,0		BDC/442
	00373	0	56000	0	77742		LDQ EXP		BDC/443
	00374	0	16200	0	00402		TQP CNV2		BDC/444
	00375	0	56000	0	77747		LDQ DATUM		BDC/445
	00376	0	26000	4	00672		FMP TAB,4		BDC/446
	00377	0	36100	0	00574		ACL BIAS		BDC/447
	00400	-0	30000	0	00572	CNV1	UFA FIXN	FIX INTERNAL FLOATING BINARY NO.	BDC/448
D	00401	1	00000	0	00406		TXI CNVN1,0		BDC/449
	00402	0	24100	4	00672	CNV2	FDP TAB,4		BDC/450
	00403	-0	60000	0	77744		STQ FD		BDC/451
	00404	0	50000	0	77744		CLA FD		BDC/452
	00405	-0	30000	0	00573		UFA FIXQ		BDC/453
	00406	0	76300	0	00010	CNVN1	LLS 8		BDC/454
	00407	0	76700	0	00002		ALS 2		BDC/455
	00410	0	77100	0	00012		ARS 10		BDC/456
	00411	0	60100	0	77743		STO ND	STORE INTEGRAL PART.	BDC/457
	00412	-0	60000	0	77744		STQ FD	STORE FRACTIONAL PART.	BDC/458
	00413	0	53400	4	77746		LXA DIG,4		BDC/459
	00414	0	50000	0	77744		CLA FD	SKIP FRACTIONAL.	BDC/460
	00415	0	36100	4	00613		ACL RND,4		BDC/461
	00416	0	76500	0	00043		LRS 35	ROUND NUMBER.	BDC/462
	00417	0	40000	0	77743		ADD ND		BDC/463
	00420	0	60100	0	77743		STO ND		BDC/464
	00421	-3	00000	4	00440		TXL CNV3,4,0	TEST FOR FRACTION WANTED.	BDC/465
	00422	-0	60000	0	77744	CNV4	STQ FD		BDC/466
	00423	0	76700	0	00004		ALS 4	CONVERT FRACTIONAL PART.	BDC/467
	00424	0	76300	0	00041		LLS 33		BDC/468
	00425	0	40000	0	77744		ADD FD		BDC/469
	00426	0	76500	0	00040		LRS 32		BDC/470
	00427	0	60200	4	00000	CNV5	SLW **,4	(FXD=CHAR, FLT=CHAR-4)	BDC/471
	00430	2	00001	4	00422		TIX CNV4,4,1		BDC/472
	00431	0	50000	0	77743		CLA ND	OBTAIN INTEGRAL PART.	BDC/473
D	00432	1	00000	0	00440		TXI CNV3,0		BDC/474
	00433	0	53400	4	77746	CNVN	LXA DIG,4		BDC/475
	00434	0	56000	0	00570		LDQ BLANK		BDC/476
	00435	1	00000	4	00436	CLR	TXI CLR1,4,**	(FXD=1, FLT=5)	BDC/477
	00436	-0	60000	4	77742	CLR1	STQ CHAR,4		BDC/478
	00437	2	00001	4	00436		TIX CLR1,4,1		BDC/479
	00440	0	53400	4	77746	CNV3	LXA DIG,4		BDC/480
	00441	1	00000	4	00442	CNV6	TXI CNV7,4,**	(FXD=1, FLT=5)	BDC/481
	00442	0	56000	0	00562	CNV7	LDQ POINT	ESTABLISH POINT.	BDC/482
	00443	-0	60000	4	77742		STQ CHAR,4		BDC/483
D	00444	1	00000	0	00447		TXI CNV11,0		BDC/484
							INTG = ENTRY POINT FOR INTEGER CONVERSION.		BDC/485
	00445	-0	53400	4	00577	INTG	LXD ONE,4		BDC/486
	00446	0	77100	0	00022		ARS 18		BDC/487
	00447	0	76500	0	00043	CNV11	LRS 35		BDC/488
	00450	0	22100	0	00571	CNV9	DVP TEN	CONVERT INTEGRAL PART.	BDC/489
	00451	0	60200	4	77741		SLW CHAR-1,4		BDC/490
	00452	-0	60000	0	77743		STQ ND		BDC/491
	00453	0	50000	0	77743		CLA ND		BDC/492
	00454	0	10000	0	00457		TZE CNV8		BDC/493
	00455	0	76000	0	00000		CLM		BDC/494

00456	1	00001	4	00450	TXI	CNV9,4,1		BDC/495
00457	-0	50000	0	00570	CNV8	CAL BLANK	PUT SIGN IN SPREAD BCD.	BDC/496
00460	0	16200	0	00462		TQP CNV12		BDC/497
00461	-0	50000	0	00560		CAL MINUS		BDC/498
00462	0	60200	4	77740	CNV12	SLW CHAR-2,4		BDC/499
00463	-0	50000	0	00570		CAL BLANK		BDC/500
00464	1	00003	4	00467	TXI	CLR2,4,3		BDC/501
00465	0	60200	4	77742	CLR3	SLW CHAR,4		BDC/502
00466	1	00001	4	00467	TXI	CLR2,4,1		BDC/503
00467	-3	00000	4	00465	CLR2	TXL CLR3,4,**	(COLUMN WIDTH OF THIS FIELD)	BDC/504
00470	-0	53400	4	00467		LXD CLR2,4		BDC/505
00471	-0	50000	0	77777		CAL WORD	PACK RECORD INTO	BDC/506
00472	0	14000	0	00473		TOV PACK2	FULL WORDS.	BDC/507
00473	0	76700	0	00006	PACK2	ALS 6		BDC/508
00474	0	40000	4	77742		ADD CHAR,4		BDC/509
00475	-0	14000	0	00503		TNO PACK3		BDC/510
00476	0	60200	0	00000	PACK	SLW **	(CURRENT ADDRESS IN REC BUFFER)	BDC/511
00477	-0	50000	0	00476		CAL PACK		BDC/512
00500	0	40000	0	00577		ADD ONE		BDC/513
00501	0	62100	0	00476		STA PACK		BDC/514
00502	-0	50000	0	00577		CAL ONE		BDC/515
00503	2	00001	4	00473	PACK3	TIX PACK2,4,1	WHEN THIS FIELD HAS BEEN PROCESSED,	BDC/516
00504	0	60200	0	77777		SLW WORD	SAVE ANY REMAINDER, AND	BDC/517
00505	-0	53400	4	00511		LXD COUNT,4	COUNT NUMBER OF	BDC/518
00506	2	00001	4	00512		TIX MORE,4,1	WORDS CONVERTED.	BDC/519
00507	-0	63400	1	00133		SXD AX1,1	IF FIELD COUNT HAS BEEN EXHAUSTED,	BDC/520
00510	-0	63400	2	00134		SXD AX2,2	RESTORE THE C(XR1),C(XR2), AND	BDC/521
00511	1	00000	0	00307	COUNT	TXI DONE,0,**	* (FIELD REPEAT COUNT) EXIT TO FIELD.	BDC/522
00512	-0	63400	4	00511	MORE	SXD COUNT,4	OTHERWISE, GO GET MORE L1ST.	BDC/523
						LIST = ENTRY POINT USED BY LINE(SCAN),FIELD.		BDC/524
00513	-0	53400	4	00135	LIST	LXD AX4,4	RESTORE THE C(XR4I), ANO	BDC/525
00514	0	02000	4	00001		TRA 1,4	* GO GET NEXT OUTPUT NUMBER.	BDC/526
						END OF PROGRAM PRINT.		BDC/527
						* * * * *		BDC/528
								BDC/529
						FILLW(RESET),4/ CALLERS=IFIL),LINE,CCSLSH,RESCAN.		BDC/530
						FILLW FILLS OUT LAST WORD,CONTROLS OUTPUT, AND RESETS.		BDC/531
00515	-0	63400	4	00054	FILLW	SXD FILLX,4	SAVE THE C(XR4) FOR RETURN.	BDC/532
00516	0	53400	4	00476		LXA PACK,4	SET XR4 = REC + NO. WORDS ENTERED.	BDC/533
00517	-0	50000	0	77777		CAL WORD	EXAMINE	BDC/534
00520	0	40200	0	00577		SUB ONE	WORD INDICATOR, AND	BDC/535
00521	0	10000	0	00533		TZE FILL1	IF NOT ZERO, THEN	BDC/536
00522	-0	50000	0	00476		CAL PACK	SET ADDRESS	BDC/537
00523	0	62100	0	00531		STA FILL3	FOR LAST WORD.	BDC/538
00524	-0	50000	0	77777		CAL WORD	PICKUP WORD,	BDC/539
00525	0	14000	0	00526		TOV FILL4	AND	BDC/540
00526	0	76700	0	00006	FILL4	ALS 6	FILL OUT	BDC/541
00527	0	40000	0	00570		ADD BLANK	WITH BLANKS.	BDC/542
00530	-0	14000	0	00526		TNO FILL4	WHEN DONE,	BDC/543
00531	0	60200	0	00000	FILL3	SLW **	STORE LAST WORD.	BDC/544
00532	1	00001	4	00533		TXI FILL1,4,1	UPDATE, AND SET	BDC/545
00533	2	77753	4	00535	FILL1	TIX FILL2,4,REC	XR4 AND THE DECREMENT OF FILL	BDC/546
00534	0	53400	4	00577		LXA ONE,4	TO THE NUMBER OF WORDS ENTERED	BDC/547
00535	-0	63400	4	00542	FILL2	SXD FILL,4	IN REC BUFFER. THEN	BDC/548

00536	-0	53400	4	00105	LXD	UNIT,4	SELECT	CURRENT	OUTPUT	UNIT.	BDC/549			
00537	3	77776	4	00541	TXH	TYPE,4,-2	PUNCH	OR	PRINT	OUTPUT.	BDC/550			
00540	0	76600	4	00177	WRS	127,4	BCD	TAPE	OUTPUT.	BDC/551				
00541	0	07400	4	00000	TYPE	TSX **,4	*	GO	TO	INDICATED	OUTPUT	ROUTINE.	BDC/552	
00542	0	00000	0	77753	FILL	PZE	REC,,**	(DECREMENT	=	NO.	WORDS	ENTERE0)	BDC/553
00543	-0	53400	4	00054	LXD	FILLX,4	F	REENTRY	FROM	OUTPUT	ROUTINE.	BDC/554		
						RESET =	ENTRY	POINT	USED	BY	LINE.	BDC/555		
00544	-0	50000	0	00567	RESET	CAL	BLANKS	RESET	REC	BDC/556				
00545	0	60200	0	77753	FILT	SLW	REC	TO	BLANKS,	BDC/557				
00546	-0	50000	0	00542	CAL	FILL	PACK	ADDRESS	BDC/558					
00547	0	62100	0	00476	STA	PACK	TO	REC, AN0	BDC/559					
00550	-0	50000	0	00577	CAL	ONE	PICKUP	1	TO	BDC/560				
00551	0	60200	0	77777	SLW	WORD	SET	WORD	INDICATOR.	BDC/561				
00552	0	02000	4	00001	TRA	1,4	*	EXIT	TO	CALLER.	BDC/562			
						END	OF	PROGRAM	FILLW(RESET).	BDC/563				
						* * * * *	BDC/564							
						CONSTANTS	AND	WORKING	STORAGE	USDO	BY	FIL/BDC.	BDC/566	
00553	+0000000000077	ENDMK	OCT	77		CCTEST	-12.	BDC/565						
00554	0000000000074	(	BCD	100000(		CCTEST	-11.	BDC/566			
00555	0000000000073	COMMA	BCD	100000,		CCTEST	-10.	BDC/567						
00556	0000000000061	SLASH	BCD	100000/		CCTEST	-9.	BDC/568						
00557	0000000000047	P	BCD	100000P		CCTEST	-8.	BDC/569						
00560	0000000000040	MINUS	BCD	100000-		CCTEST	-7.	BDC/570						
00561	0000000000034	)	BCD	100000)		CCTEST	-6.	BDC/571					
00562	0000000000033	POINT	BCD	100000.		CCTEST	-5.	BDC/572						
00563	0000000000031	I	BCD	100000I		CCTEST	-4.	BDC/573						
00564	0000000000030	H	BCD	100000H		CCTEST	-3.	BDC/574						
00565	0000000000026	F	BCD	100000F		CCTEST	-2.	BDC/575						
00566	0000000000025	E	BCD	100000E		CCTEST	-1.	BDC/576						
	00567	CCTEST	BSS	0		INDEXING	ADDRESS	FOR	ABOVE	LIST.	BDC/578			
00567	60606060606060	BLANKS	BCD	1		CONSTANT	USED	BY	FIL/BDC.	BDC/579				
00570	0000000000060	BLANK	BCD	100000		CONSTANT	USED	BY	FIL/BDC.	BDC/580				
00571	+0000000000012	TEN	DEC	10		CONSTANT	USED	BY	FIL/BDC.	BDC/581				
00572	+2330000000000	FIXN	DEC	155B8		CONSTANT	USED	BY	FIL/BDC.	BDC/582				
00573	+2660000000000	FIXQ	DEC	182B8		CONSTANT	USED	BY	FIL/BDC.	BDC/583				
00574	+0330000000000	BIAS	DEC	27B8		CONSTANT	USED	BY	FIL/BDC.	BDC/584				
00575	+0000000000200	BASE	DEC	128		CONSTANT	USED	BY	FIL/BDC.	BDC/585				
00576	+115040462343	LOG2	DEC	.301029957B		CONSTANT	USED	BY	FIL/BDC.	BDC/586				
00577	+0000000000001	ONE	DEC	1		CONSTANT	USED	BY	FIL/BDC.	BDC/587				
00600	0 00000 0 00002	TWO	PZE	2		CONSTANT	USED	BY	FIL/BDC.	BDC/5875				
00601	0 00000 0 00011	L(9)	PZE	9		CONSTANT	USED	BY	FIL/BDC.	BDC/5876				
00602	+0000000000021		DEC	.5BE-9		09-TABLE	USED	BY	FIL/BDC.	BDC/588				
00603	+0000000000253		DEC	.5BE-8		08-TABLE	USED	BY	FIL/BDC.	BDC/589				
00604	+0000000003265		DEC	.5BE-7		07-TABLE	USED	BY	FIL/BDC.	BDC/590				
00605	+0000000041433		DEC	.5BE-6		06-TABLE	USED	BY	FIL/BDC.	BDC/591				
00606	+0000000517426		DEC	.5BE-5		05-TABLE	USED	BY	FIL/BDC.	BDC/592				
00607	+000006433342		DEC	.5BE-4		04-TABLE	USED	BY	FIL/BDC.	BDC/593				
00610	+000101422335		DEC	.5BE-3		03-TABLE	USED	BY	FIL/BDC.	BDC/594				
00611	+001217270243		DEC	.5BE-2		02-TABLE	USED	BY	FIL/BDC.	BDC/595				
00612	+014631463146		DEC	.5BE-1		01-TABLE	USED	BY	FIL/BDC.	BDC/596				
00613	+2000000000000	RND	DEC	.5B		00-TABLE	USED	BY	FIL/BDC.	BDC/597				
00614	+376700324573		OCT	376700324573		46-TABLE	USED	BY	FIL/BDC.	BDC/598				
00615	+373546566774		OCT	373546566774		45-TABLE	USED	BY	FIL/BDC.	BDC/599				

00616	+370436770626	OCT	370436770626	44-TABLE	USED	BY	FIL/BDC.	BDC/600
00617	+364713132675	OCT	364713132675	43-TABLE	USED	BY	FIL/BDC.	BDC/601
00620	+361557257061	OCT	361557257061	42-TABLE	USED	BY	FIL/BDC.	BDC/602
00621	+356445677215	OCT	356445677215	41-TABLE	USED	BY	FIL/BDC.	BDC/603
00622	+352726145174	OCT	352726145174	40-TABLE	USED	BY	FIL/BDC.	BDC/604
00623	+347570120775	OCT	347570120775	39-TABLE	USED	BY	FIL/BDC.	BDC/605
00624	+344454732312	OCT	344454732312	38-TABLE	USED	BY	FIL/BDC.	BDC/606
00625	+340741367020	OCT	340741367020	37-TABLE	USED	BY	FIL/BDC.	BDC/607
00626	+335601137163	OCT	335601137163	36-TABLE	USED	BY	FIL/BOC.	BDC/608
00627	+332464114134	OCT	332464114134	35-TABLE	USED	BY	FIL/BDC.	BDC/609
00630	+326755023372	OCT	326755023372	34-TABLE	USED	BY	FIL/BDC.	BDC/610
00631	+323612334310	OCT	323612334310	33-TABLE	USED	BY	FIL/BDC.	BDC/611
00632	+320473426555	OCT	320473426555	32-TABLE	USED	BY	FIL/BOC.	BDC/612
00633	+314770675742	OCT	314770675742	31-TABLE	USED	BY	FIL/BDC.	BDC/613
00634	+311623713116	OCT	311623713116	30-TABLE	USED	BY	FIL/BDC.	BDC/614
00635	+306503074076	OCT	306503074076	29-TABLE	USED	BY	FIL/BDC.	BDC/615
00636	+303402374713	OCT	303402374713	28-TABLE	USED	BY	FIL/BDC.	BDC/616
00637	+277635456171	OCT	277635456171	27-TABLE	USED	BY	FIL/BDC.	BDC/617
00640	+274512676456	OCT	274512676456	26-TABLE	USED	BY	FIL/BOC.	BDC/618
00641	+271410545213	OCT	271410545213	25-TABLE	USED	BY	FIL/BDC.	BDC/619
00642	+265647410337	OCT	265647410337	24-TABLE	USED	BY	FIL/BDC.	BDC/620
00643	+262522640262	OCT	262522640262	23-TABLE	USED	BY	FIL/BDC.	BDC/621
00644	+257417031702	OCT	257417031702	22-TABLE	USED	BY	FIL/BDC.	BDC/622
00645	+253661534466	OCT	253661534466	21-TABLE	USED	BY	FIL/BDC.	BDC/623
00646	+250532743536	OCT	250532743536	20-TABLE	USED	BY	FIL/BDC.	BDC/624
00647	+245425434430	OCT	245425434430	19-TABLE	USED	BY	FIL/BDC.	BDC/625
00650	+241674055530	OCT	241674055530	18-TABLE	USED	BY	FIL/BDC.	BDC/626
00651	+236543212741	OCT	236543212741	17-TABLE	USED	BY	FIL/BDC.	BDC/627
00652	+233434157116	OCT	233434157116	16-TABLE	USED	BY	FIL/BDC.	BDC/628
00653	+227706576512	OCT	227706576512	15-TABLE	USED	BY	FIL/BDC.	BDC/629
00654	+224553630410	OCT	224553630410	14-TABLE	USED	BY	FIL/BDC.	BDC/630
00655	+221443023471	OCT	221443023471	13-TABLE	USED	BY	FIL/BDC.	BDC/631
00656	+215721522451	OCT	215721522451	12-TABLE	USED	BY	FIL/BDC.	BDC/632
00657	+212564416672	OCT	212564416672	11-TABLE	USED	BY	FIL/BDC.	BDC/633
00660	+207452013710	OCT	207452013710	10-TABLE	USED	BY	FIL/BDC.	BDC/634
00661	+203734654500	OCT	203734654500	09-TABLE	USED	BY	FIL/BDC.	BDC/635
00662	+200575360400	OCT	200575360400	08-TABLE	USED	BY	FIL/BDC.	BDC/636
00663	+175461132000	OCT	175461132000	07-TABLE	USED	BY	FIL/BDC.	BDC/637
00664	+171750220000	OCT	171750220000	06-TABLE	USED	BY	FIL/BDC.	BDC/638
00665	+166606500000	OCT	166606500000	05-TABLE	USED	BY	FIL/BDC.	BDC/639
00666	+163470400000	OCT	163470400000	04-TABLE	USED	BY	FIL/BDC.	BDC/640
00667	+157764000000	OCT	157764000000	03-TABLE	USED	BY	FIL/BDC.	BDC/641
00670	+154620000000	OCT	154620000000	02-TABLE	USED	BY	FIL/BDC.	BDC/642
00671	+151500000000	OCT	151500000000	01-TABLE	USED	BY	FIL/BDC.	BDC/643
00672	+146400000000	TAB	OCT 146400000000	00-TABLE	USED	BY	FIL/BDC.	BDC/644
	77552	COMMON	ORG -150	COMMON	WORKING	STORAGE=		BDC/645
	77742	CHAR	BES 120	VARIABLE	USED	BY	FIL/BDC.	BDC/646
	77742	EXP	BSS 1	VARIABLE	USED	BY	FIL/BDC.	BDC/647
	77743	ND	BSS 1	VARIABLE	USED	BY	FIL/BDC.	BDC/648
	77744	FD	BSS 1	VARIABLE	USED	BY	FIL/BDC.	BDC/649
	77745	INT	BSS 1	VARIABLE	USED	BY	FIL/BDC.	BDC/650
	77746	DIG	BSS 1	VARIABLE	USED	BY	FIL/BDC.	BDC/651
	77747	DATUM	BSS 1	VARIABLE	USED	BY	FIL/BDC.	BDC/652
	77750	PEX	BSS 1	VARIABLE	USED	BY	FIL/BDC.	BDC/653

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77751 MQ BSS 1 VARIABLE USED BY FIL/BDC. BDC/654
77752 MQR BSS 1 VARIABLE USED BY FIL/BDC. BDC/655
77753 REC BSS 20 VARIABLE USED BY FIL/BDC. BDC/656
77777 WORD BSS 1 VARIABLE USED BY FIL/BDC. BDC/657
END OF CONSTANTS AND WORKING STORAGE USED BY FIL/BDC. BDC/658
* * * * * BDC/659
A 00000 END BDC/660

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SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	601	0	0	0	0
LIB	0	0	0	0	0
COL	601	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 610

NUMBER OF SYMBOLS, DEF 153,DEFOP 0,UNDEF 0
ABS

				CONTROL CARD FOR SCH.		SCH/C01	
		00000		ORG 0		SCH/C02	
00000	0	00000	0	00132	PZE COL1+1	SCH/C03	
00001	0	00000	0	77701	PZE COMMON	SCH/C04	
00002	746223303460				BCD 1(SCH)	SCH/C00	
00003	0	00000	0	00000	PZE	SCH/C06	
				END OF SCH CONTROL CARD.		SCH/C07	
		00000		ORG 0		SCH 0001	
		77701	COMMON	SYN -63		SCH2P11	
00000	-0	63400	1	00104	FIRST SXD X1,1	SCH 0002	
00001	-0	63400	2	00112	SXD X2,2	SCH 0003	
00002	-0	63400	4	00130	SXD X4,4	SCH 0004	
00003	-0	50000	0	00005	CAL PR6	SCH 0005	
00004	0	60200	0	00000	SLW 0	SCH 0006	
TD	00005	-3	00000	0	00006	PR6 TXL START	SCH 0007
	00006	-0	53400	4	00130	START LXN X4,4	SCH 0008
	00007	0	50000	4	00001	CLA 1,4	SCH 0009
	00010	0	77100	0	00022	ARS 18	SCH 0010
	00011	0	40000	4	00001	ADD 1,4	SCH 0011
	00012	-0	73400	4	00000	(SCH) PDX FIRST,4	SCH 0012
	00013	-0	63400	4	00005	SXD PR6,4	SCH 0013
	00014	0	62100	0	00021	STA PR2	SCH 0014
	00015	0	62100	0	00043	STA CI9	SCH 0015
	00016	0	76600	0	00341	WPU	SCH 0016
	00017	0	50000	0	00127	CLA BLNKS	SCH 0017
	00020	-0	53400	4	00056	LXD CI4,4	SCH 0018
	00021	0	34000	4	00000	PR2 CAS 0,4	SCH 0019
	00022	1	77777	4	00025	TXI PR1,4,-1	SCH 0020
	00023	1	00001	4	00021	TXI PR2,4,1	SCH 0021
	00024	1	77777	4	00025	TXI PR1,4,-1	SCH 0022
	00025	-0	63400	4	00062	PR1 SXD CI6,4	SCH 0023
	00026	-0	63400	4	00074	SXD CI8,4	SCH 0024
	00027	-0	63400	4	00031	SXD PR8,4	SCH 0025
	00030	-0	53400	4	00005	LXD PR6,4	SCH 0026
D	00031	-2	00000	4	00033	PR8 TNX PR5,4	SCH 0027
	00032	-0	53400	4	00005	PR3 LXD PR6,4	SCH 0028
	00033	0	53400	2	00035	PR5 LXA PR7,2	SCH 0029
	00034	-0	53400	1	00077	LXD YZ1,1	SCH 0030
T	00035	-0	75400	0	00000	PR7 PXD	SCH 0031
	00036	0	60200	1	77742	PR4 SLW LT,1	SCH 0032
	00037	0	60200	1	77722	SLW RT,1	SCH 0033
	00040	2	00001	1	00036	TIX PR4,1,1	SCH 0034
	00041	-0	50000	0	00131	CIR CAL COL1	SCH 0035
	00042	0	60200	0	77701	CI2 SLW COL	SCH 0036
	00043	0	56000	4	00000	CI9 LDQ 0,4	SCH 0037
	00044	-0	63400	4	00116	SXD OZ2,4	SCH 0038
	00045	0	53400	4	00047	LXA Q6,4	SCH 0039
T	00046	-0	75400	0	00014	CI1 PXD 12	SCH 0040
	00047	-0	76300	0	00006	Q6 LGL 6	SCH 0041
	00050	0	73400	1	00000	PAX 0,1	SCH 0042
	00051	-0	50000	0	77701	CAL COL	SCH 0043
	00052	0	77100	4	00006	ARS 6,4	SCH 0044
	00053	2	00020	1	00077	TIX YZ1,1,16	SCH 0045
	00054	3	00017	1	00102	TXH YZ2,1,15	SCH 0046

	00055	-0	60200	3	77737	CI5	ORS D,3	STORE DIGIT	SCH 0047
	00056	2	00001	4	00046	CI4	TIX CI1,4,1	COUNT CHARACTERS	SCH 0048
	00057	0	77100	0	00001	CI3	ARS 1	SHIFT AND TEST COLUMN	SCH 0049
	00060	-0	53400	4	00116		LXD OZ2,4	RESTORE GROUP COUNT	SCH 0050
	00061	1	77777	4	00062		TXI CI6,4,-1	COUNT GROUPS	SCH 0051
D	00062	-3	00000	4	00064	CI6	TXL CI7,4	TEST FOR LAST NON-BLANK GR.	SCH 0052
	00063	-0	10000	0	00042		TNZ CI2	TEST.FOR END OF ROW	SCH 0053
	00064	-0	50000	2	77724	CI7	CAL 8.3,2	FORM TRUE 8,4	SCH 0054
	00065	-0	60200	2	77727		ORS D-8,2	AND 3 ROWS AND	SCH 0055
	00066	-0	60200	2	77734		ORS D-3,2	MOVE8.4 AND 8.3	SCH 0056
	00067	0	60200	2	77725		SLW 8.2,2	ROWS	SCH 0057
	00070	-0	50000	2	77723		CAL 8.4,2	FORM TRUE8.4	SCH 0058
	00071	-0	60200	2	77727		ORS D-8,2		SCH 0059
	00072	-0	60200	2	77733		ORS D-4,2		SCH 0060
	00073	0	60200	2	77724		SLW 8.3,2	X	SCH 0061
D	00074	-3	00000	4	00117	CI8	TXL WP,4	TEST FOR END	SCH 0062
	00075	3	00017	2	00117		TXH WP,2,15	TEST FOR RIGHT HALF	SCH 0063
	00076	1	00020	2	00041		TXI CIR,2,16	INITIALIZE RIGHT HALF	SCH 0064
	00077	2	00020	1	00105	YZ1	TIX XZ1,1,16	TEST FOR 16/CH/32	SCH 0065
	00100	3	00017	1	00110		TXH XZ2,1,15	TEST FOR X-ZONE	SCH 0066
	00101	-0	60200	3	77737		ORS D,3	STORE DIGIT	SCH 0067
	00102	-0	60200	2	77741	YZ2	ORS Y,2	STORE Y-ZONE	SCH 0068
	00103	2	00001	4	00046		TIX CI1,4,1	COUNT CHARACTERS	SCH 0069
TD	00104	-3	00000	0	00057	X1	TXL CI3	OBTAIN NEXT GROUP	SCH 0070
	00105	2	00020	1	00113	XZ1	TIX OZ1,1,16	TEST FOR 32/CH/48	SCH 0071
	00106	3	00017	1	00056		TXH CI4,1,15	TEST FOR BLANK	SCH 0072
	00107	-0	60200	3	77737		ORS D,3	STORE DIGIT	SCH 0073
	00110	-0	60200	2	77740	XZ2	ORS X,2	STORE X-ZONE	SCH 0074
	00111	2	00001	4	00046		TIX CI1,4,1	COUNT CHARACTERS	SCH 0075
TD	00112	-3	00000	0	00057	X2	TXL CI3	OBTAIN NEXT GROUP	SCH 0076
	00113	-0	60200	2	77737	OZ1	ORS Z,2	STORE 0-ZONE	SCH 0077
	00114	-0	60200	3	77737		ORS D,3		SCH 0078
	00115	2	00001	4	00046		TIX CI1,4,1	COUNT CHARACTERS	SCH 0079
TD	00116	-3	00000	0	00057	OZ2	TXL CI3		SCH 0080
	00117	0	53400	1	00046	WP	LXA CI1,1		SCH 0081
	00120	0	70000	1	77742	WP3	CPY LT,1	COPY CARD IMAGE	SCH 0082
	00121	0	70000	1	77722		CPY RT,1		SCH 0083
	00122	2	00001	1	00120		TIX WP3,1,1		SCH 0084
	00123	-0	53400	1	00104		LXD X1,1		SCH 0085
	00124	-0	53400	2	00112		LXD X2,2		SCH 0086
	00125	-0	53400	4	00130	WT2	LXD X4,4		SCH 0087
	00126	0	02000	4	00002		TRA 2,4		SCH 0088
	00127	606060606060				BLNKS	BCD 1		SCH 0089
	00130	0	00000	0	00001	X4	HTR 1		SCH 0090
	00131	-0	00000	0	00000	COL1	MZE		SCH 0091
					77701		ORG -63		SCH 0092
					77701	COL	BSS 1		SCH 0093
					77722	RT	BES 16		SCH 0094
					77722	8.5	BSS 1		SCH 0095
					77723	8.4	BSS 1		SCH 0096
					77724	8.3	BSS 1		SCH 0097
					77725	8.2	BSS 1		SCH 0098
					77737	D	BES 9		SCH 0099
					77737	Z	BSS 1		SCH 0100

77740 X BSS 1
77741 Y BSS 1
77742 LT SYN Y+1
00000 END

SCH 0101
SCH 0102
SCH 0103
SCH 0104

A

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	113	0	0	0	0
LIB	0	0	0	0	0
COL	113	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 121

NUMBER OF SYMBOLS, DEF 48,DEFOP 0,UNDEF 0
ABS

		CONTROL CARD FOR SPH.				SPH/C01
		00000	ORG 0			SPH/C02
00000	0 00000 0 00236		PZE COL1+1			SPH/C03
00001	0 00000 0 77653		PZE COMMON			SPH/C04
00002	746247303460		BCD 1(SPH)			SPH/C05
00003	0 00000 0 00003		3			SPH/C06
			END OF SPH CONTROL CARD.			SPH/C07
			SPH FOR FORTRAN II			SPH 0001
		00000	ORG 0			SPH 0002
		77653	COMMON SYN -85			SPH 0003
00000	-0 53400 1 00140	RPT	LXD X1,1		PREPARE TO CAUSE LINE	SPH 0004
00001	-0 53400 2 00146		LXD X2,2		TO BE PRINTED AGAIN AND THE	SPH 0005
00002	-0 53400 4 00031		LXD X4,4		PROGRAM TO CONTINUE	SPH 0006
00003	0 50000 4 00001	LMT	CLA 1,4		OBTAIN STARTING LOCATION OF BUFFER AREA *	SPH 0007
00004	0 62100 0 00021		STA T5		SUPPLY ADDRESS	SPH 0008
00005	0 77100 0 00022		ARS 18		* FOR LINE IMAGE IN BCD	SPH 0009
00006	0 40000 4 00001		ADD 1,4		X	SPH 0010
00007	-0 63400 1 00140		SXD X1,1			SPH 0011
00010	-0 63400 2 00146		SXD X2,2			SPH 0012
00011	-0 63400 4 00031		SXD X4,4			SPH 0013
00012	-0 73400 4 00013	L11	PDX 11,4		SAVE LOCATION	SPH 0014
00013	0 62100 0 00052		STA PR2			SPH 0015
00014	0 62100 0 00077		STA CI9			SPH 0016
00015	-0 63400 4 00026		SXD PR6,4		SAVE LOCATION	SPH 0017
00016	-0 50000 0 00222		CAL DEL			SPH 0018
00017	0 60200 0 00104		SLW 1ST			SPH 0019
00020	0 76200 0 00361	T4	RPR		SELECT PRINTER	SPH 0020
00021	-0 50000 0 00021	T5	CAL *		OBTAINFIRST CHARACTER	SPH 0021
00022	0 77100 0 00036		ARS 30		X	SPH 0022
00023	0 10000 0 00220		TZE SP4		DOUBLE SPACE IF ZERO	SPH 0023
00024	0 34000 0 00233		CAS YZONE		TEST FOR SPACE SUPPRESS	SPH 0024
TD	00025	-3 00000 0 00027	Z2	TXL BK	NO	SPH 0025
TD	00026	-3 00000 0 00047	PR6	TXL RPR+1	SUPPRESS SPACE	SPH 0026
	00027	0 34000 0 00234	BK	CAS BNK	TEST FOR BLANK	SPH 0027
TD	00030	-3 00000 0 00032	OZ2	TXL DIGF	100	SPH 0028
TD	00031	-3 00000 0 00050	X4	TXL RPR+2		SPH 0029
	00032	0 76000 0 00372	DIGF	SPR 10	SET 0HANNEL SKIP	SPH 0030
	00033	-0 32000 0 00034		ANA MK	MASK OUT ZONE	SPH 0031
	00034	0 73400 1 00017	MK	PAX 15,1	OBTAIN SPR COMBINATION	SPH 0032
	00035	1 00001 1 00036		TXI N2,1,1	X	SPH 0033
	00036	-2 00010 1 00040	N2	TNX N3,1,8	X	SPH 0034
	00037	0 76000 0 00370		SPR 8	X	SPH 0035
	00040	-2 00004 1 00042	N3	TNX N4,1,4	X	SPH 0036
	00041	0 76000 0 00364		SPR 4	X	SPH 0037
	00042	-2 00002 1 00044	N4	TNX N5,1,2	X	SPH 0038
	00043	0 76000 0 00362		SPR 2	X	SPH 0039
	00044	-2 00001 1 00046	N5	TNX RPR,1,1	X	SPH 0040
	00045	0 76000 0 00361		SPR 1	X	SPH 0041
	00046	0 76200 0 00361	RPR	RPR	SELECT PRINTER AGAIN	SPH 0042
	00047	0 76000 0 00365		SPR 5	SUPPRESS SPACE	SPH 0043
	00050	0 50000 0 00232		CLA BLNKS	FIND LAST NON-BLANK GROUP	SPH 0044
	00051	-0 53400 4 00112		LXD CI4,4	X	SPH 0045
	00052	0 34000 4 00000	PR2	CAS 0,4	X	SPH 0046
	00053	1 77777 4 00056		TXI PR1,4,-1	X	SPH 0047

	00054	1	00001	4	00052		TXI PR2,4,1	X	SPH 0048
	00055	1	77777	4	00056		TXI PR1,4,-1	X	SPH 0049
	00056	-0	63400	4	00116	PR1	SXD CI6,4	STORE END TEST	SPH 0050
	00057	-0	63400	4	00130		SXD CI8,4	X	SPH 0051
	00060	-0	63400	4	00063		SXD PR8,4	X	SPH 0052
	00061	-0	63400	4	00213		SXD WP4,4	X	SPH 0053
	00062	-0	53400	4	00026		LXD PR6,4	X	SPH 0054
D	00063	-2	00000	4	00067	PR8	TNX PR5,4		SPH 0055
	00064	-3	00014	4	00066		TXL PR3,4,12		SPH 0056
	00065	0	76000	0	00370		SPR 8	FIRST CYCLE	SPH 0057
	00066	-0	53400	4	00026	PR3	LXD PR6,4	INITIALIZE GROUP COUNT	SPH 0058
	00067	0	53400	2	00071	PR5	LXA PR7,2	INITIALIZE LEFT SETUP	SPH 0059
	00070	-0	53400	1	00133		LXD YZ1,1	CLEAR CARD IMAGE	SPH 0060
T	00071	-0	75400	0	00000	PR7	PXD	X	SPH 0061
	00072	0	60200	1	77714	PR4	SLW LT,1	X	SPH 0062
	00073	0	60200	1	77674		SLW RT,1	X	SPH 0063
	00074	2	00001	1	00072		TIX PR4,1,1	X	SPH 0064
	00075	-0	50000	0	00235	CIR	CAL COL1	INITIALIZE COLUMN INDICATOR	SPH 0065
	00076	0	60200	0	77653	CI2	SLW COL	X	SPH 0066
	00077	0	56000	4	00000	CI9	LDQ 0,4	OBTAIN GROUP	SPH 0067
	00100	-0	63400	4	00030		SXD OZ2,4	STORE GROUP COUNT	SPH 0068
	00101	0	53400	4	00103		LXA Q6,4	SET CHARACTER COUNT	SPH 0069
T	00102	-0	75400	0	00003	CI1	PXD LMT		SPH 0070
	00103	-0	76300	0	00006	Q6	LGL 6		SPH 0071
	00104	0	73400	1	00000	1ST	PAX 0,1		SPH 0072
	00105	-0	50000	0	77653		CAL COL	POSITION COLUMN INDICATOR	SPH 0073
	00106	0	77100	4	00006		ARS 6,4	X	SPH 0074
	00107	2	00020	1	00133		TIX YZ1,1,16	TEST FOR DIGIT	SPH 0075
	00110	3	00017	1	00136		TXH YZ2,1,15	TEST FOR Y-ZONE	SPH 0076
	00111	-0	60200	3	77711	CI5	ORS D,3	STORE DIGIT	SPH 0077
	00112	2	00001	4	00102	CI4	TIX CI1,4,1	COUNT CHARACTERS	SPH 0078
	00113	0	77100	0	00001	CI3	ARS 1	SHIFT AND TEST COLUMN	SPH 0079
	00114	-0	53400	4	00030		LXD OZ2,4	RESTORE GROUP COUNT	SPH 0080
	00115	1	77777	4	00116		TXI CI6,4,-1	COUNT GROUPS	SPH 0081
D	00116	-3	00000	4	00120	CI6	TXL CI7,4	TEST FOR LAST NON-BLANK GROUP	SPH 0082
	00117	-0	10000	0	00076		TNZ CI2	TEST FOR END OF ROW	SPH 0083
	00120	-0	50000	2	77676	CI7	CAL 8.3,2	FORM TRUE 8.4	SPH 0084
	00121	-0	60200	2	77701		ORS D-8,2	AND 3 ROWS AND	SPH 0085
	00122	-0	60200	2	77706		ORS D-3,2	MOVE 8.4 AND 8.3	SPH 0086
	00123	0	60200	2	77677		SLW 8.2,2	ROWS	SPH 0087
	00124	-0	50000	2	77675		CAL 8.4,2	FORM TRUE 8.4	SPH 0088
	00125	-0	60200	2	77701		ORS D-8,2	X	SPH 0089
	00126	-0	60200	2	77705		ORS D-4,2	X	SPH 0090
	00127	0	60200	2	77676		SLW 8.3,2	X	SPH 0091
D	00130	-3	00000	4	00153	CI8	TXL WP,4	TEST FOR END	SPH 0092
	00131	3	00017	2	00153		TXH WP,2,15	TEST FOR RIGHT HALF	SPH 0093
	00132	1	00020	2	00075		TXI CIR,2,16	INITIALIZE RIGHT HALF	SPH 0094
	00133	2	00020	1	00141	YZ1	TIX XZ1,1,16	TEST FOR I6/CH/32	SPH 0095
	00134	3	00017	1	00144		TXH XZ2,1,15	TEST FOR X-ZONE	SPH 0096
	00135	-0	60200	3	77711		ORS D,3	STORE DIGIT	SPH 0097
	00136	-0	60200	2	77713	YZ2	ORS Y,2	STORE Y-ZONE	SPH 0098
	00137	2	00001	4	00102		TIX CI1,4,1	COUNT CHARACTERS	SPH 0099
TD	00140	-3	00000	0	00113	X1	TXL CI3	OBTAIN NEXT GROUP	SPH 0100
	00141	2	00020	1	00147	XZ1	TIX OZ1,1,16	TEST FOR 32/CH/48	SPH 0101

	00142	3	00017	1	00112		TXH	CI4,1,15		TEST FOR BLANK		SPH	0102
	00143	-0	60200	3	77711		ORS	D,3		STORE DIGIT		SPH	0103
	00144	-0	60200	2	77712	XZ2	ORS	X,2		STORE X-ZONE		SPH	0104
	00145	2	00001	4	00102		TIX	CI1,4,1		COUNT CHARACTERS		SPH	0105
TD	00146	-3	00000	0	00113	X2	TXL	CI3		OBTAIN NEXT GROUP		SPH	0106
	00147	-0	60200	2	77711	OZ1	ORS	Z,2		STORE 0-ZONE		SPH	0107
	00150	-0	60200	3	77711		ORS	D,3		STORE DIGIT		SPH	0108
	00151	2	00001	4	00102		TIX	CI1,4,1		COUNT CHARACTERS		SPH	0109
TD	00152	-3	00000	0	00113		TXL	CI3				SPH	0110
	00153	-0	53400	1	00025	WP	LXD	Z2,1		COPY LOOP		SPH	0111
	00154	0	70000	1	77700	C	CPY	LT-12,1		CARD IMAGE COPIES		SPH	0112
	00155	0	70000	1	77660		CPY	RT-12,1		X		SPH	0113
	00156	1	77777	1	00157		TXI	T2,1,-1				SPH	0114
	00157	3	77767	1	00154	T2	TXH	C,1,-9		TEST FOR ECHO		SPH	0115
	00160	0	70000	1	77703		CPY	LECHO-9,1		ECHO COPIES		SPH	0116
	00161	0	70000	1	77716		CPY	RECHO-9,1		X		SPH	0117
	00162	3	77764	1	00154		TXH	C,1,-12		TEST FOR END OF CARD IMAGE		SPH	0118
	00163	3	77755	1	00156		TXH	T2-1,1,-19		TEST FOR END OF ECHOS		SPH	0119
	00164	0	53400	1	00217		LXA	L2,1				SPH	0120
	00165	-0	50000	1	77716	CL	CAL	LECHO+2,1		8.3 AND 8.4 ECHOS INTO		SPH	0121
	00166	-0	60200	0	77717		ORS	LECHO+3		8 AND 3 AND 4 ECHO ROWS		SPH	0122
	00167	-0	60200	1	77725		ORS	LECHO+9,1		X		SPH	0123
	00170	-0	50000	1	77731		CAL	RECHO+2,1		X		SPH	0124
	00171	-0	60200	0	77732		ORS	RECHO+3		X		SPH	0125
	00172	-0	60200	1	77740		ORS	RECHO+9,1		X		SPH	0126
	00173	2	00001	1	00165		TIX	CL,1,1		X		SPH	0127
	00174	0	53400	1	00012		LXA	L11,1				SPH	0128
	00175	-0	50000	1	77711	T9	CAL	8.4L+11,1		LEFT ECHO CHECK		SPH	0129
	00176	0	76000	0	00006		COM			X		SPH	0130
	00177	0	36100	1	77727		ACL	LECHO+11,1		X		SPH	0131
	00200	0	76000	0	00006		COM			X		SPH	0132
	00201	-0	10000	0	00207		TNZ	ERRL		LEFT ECHO CHECK EPROR		SPH	0133
	00202	-0	50000	1	77671	R	CAL	8.4R+11,1		RIGHT ECHO CHECK		SPH	0134
	00203	0	76000	0	00006		COM			X		SPH	0135
	00204	0	36100	1	77742		ACL	RECHO+11,1		X		SPH	0136
	00205	0	76000	0	00006		COM			X		SPH	0137
	00206	0	10000	0	00212		TZE	ERR+1		RIGHT ECHO CHECK ERROR		SPH	0138
	00207	0	56000	0	00226	ERRL	LDQ	RES		SET UP FOR SECOND ATTEMPT TO PRINT LINE		SPH	0139
	00210	-0	60000	0	00000		STQ	0		X		SPH	0140
	00211	0	42000	4	00000	ERR	HPR	0,4		ECHO CHECK ERROR. RESTART OR CONTINUE		SPH	0141
	00212	2	00001	1	00175		TIX	T9,1,1		CONTINUE		SPH	0142
D	00213	3	00000	4	00227	WP4	TXH	WP5,4		TEST FOR SECOND CYCLE		SPH	0143
	00214	-0	53400	1	00140		LXD	X1,1		NO, RELOAD INDEX REGISTERS AND RETURN		SPH	0144
	00215	-0	53400	2	00146		LXD	X2,2		X		SPH	0145
	00216	-0	53400	4	00031	WT2	LXD	X4,4		X		SPH	0146
	00217	0	02000	4	00002	L2	TRA	2,4		X		SPH	0147
	00220	0	76000	0	00364	SP4	SPR	4		DOUBLE SPACE		SPH	0148
TD	00221	-3	00000	0	00050		TXL	RPR+2				SPH	0149
TD	00222	-3	00000	0	00223	DEL	TXL	FIX				SPH	0150
	00223	-0	50000	0	00034	FIX	CAL	MK				SPH	0151
	00224	0	60200	0	00104		SLW	1ST				SPH	0152
	00225	2	00001	4	00102		TIX	CI1,4,1				SPH	0153
	00226	0	02000	0	00000	RES	TRA	RPT				SPH	0154
	00227	0	76200	0	00361	WP5	RPR			SELECT PRINTER AGAIN		SPH	0155

00230	0 76000 0 00371	SPR 9	SECOND CYCLE	SPH 0156
00231	-3 00014 0 00067	WP2 TXL PR5,0,12	CONVERT REST OF LINE	SPH 0157
00232	606060606060	BLNKS BCD 1		SPH 0158
00233	+0000000000020	YZONE OCT 20		SPH 0159
00234	+0000000000060	BNK OCT 60		SPH 0160
00235	-0 00000 0 00000	COL1 MZE		SPH 0161
	77653	ORG COMMON		SPH 0162
	77653	COL BSS 1		SPH 0163
	77674	RT BES 16		SPH 0164
	77674	8.5 BSS 1		SPH 0165
	77675	8.4 BSS 1		SPH 0166
	77676	8.3 BSS 1		SPH 0167
	77677	8.2 BSS 1		SPH 0168
	77711	D BES 9		SPH 0169
	77711	Z BSS 1		SPH 0170
	77712	X BSS 1		SPH 0171
	77713	Y BSS 1		SPH 0172
	77714	LT SYN Y+1		SPH 0173
	77676	8.4L SYN LT-14		SPH 0174
	77656	8.4R SYN RT-14		SPH 0175
	77714	LECHO BSS 11		SPH 0176
	77727	RECHO BSS 11		SPH 0177
	00102	(SPH) SYN CI1		SPH 0178
A	00000	END		SPH 0179

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	187	0	0	0	0
LIB	0	0	0	0	0
COL	187	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 195

NUMBER OF SYMBOLS, DEF 81,DEFOP 0,UNDEF 0
ABS

00000 0 00000 0 00014
 00001 0 00000 0 00000
 00002 746263303460
 00003 0 00000 0 00000

CONTROL CARD FOR STH.
 ORG 0
 PZE X4+1
 PZE
 BCD 1(STH)
 PZE

STH/C01
 STH/C02
 STH/C03
 STH/C04
 STH/C05
 STH/C06
 STH/C07

END OF STH CONTROL CARD.

00000 0 50000 4 00001
 00001 0 77100 0 00022
 00002 0 40000 4 00001
 00003 -0 63400 4 00013
 00004 -0 73400 4 00000
 00005 0 62100 0 00006
 00006 0 70000 4 00000
 00007 2 00001 4 00006
 00010 0 76600 0 00333
 00011 -0 53400 4 00013
 00012 0 02000 4 00002
 00013 0 00000 0 00001
 A 00000

ORG 0
 WOT CLA 1,4 CALCULATE ADDRESS
 ARS 18 FOR COPY INSTRUCTION
 ADD 1,4 X
 SXD X4,4 SAVE INDEX REGISTER
 (STH) PDX WOT,4 COUNT OF WORDS PER RECORD TO IR4
 STA WT1 SUPPLY ADDRESS TO CPY INSTRUCTION
 WT1 CPY 0,4 COPY RECORD TO OUTPUT TAPE
 TIX WT1,4,1 X
 IOD INPUT OUTPUT DELAY
 LXD X4,4 RESTORE IR4, RETURN TO
 TRA 2,4 MAIN PROGRAM
 X4 HTR 1 STORAGE FOR INDEX REGISTER 4
 END

STHF2001
 STHF2002
 STHF2003
 STHF2004
 STHF2005
 STHF2006
 STHF2007
 STHF2008
 STHF2009
 STHF2010
 STHF2011
 STHF2012
 STHF2013
 STHF2014

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	22	0	0	0	0
LIB	0	0	0	0	0
COL	22	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 30

NUMBER OF SYMBOLS, DEF 4,DEFOP 0,UNDEF 0
 ABS

LRT/CO0

CONTROL CARD FOR LRT.

A		00000		ORG		LRT/C01
	00000	0	00000	0	00120	LRT/C02
	00001	0	00000	0	00000	LRT/C03
	00002	744325653460		PZE		LRT/C04
	00003	0	00000	0	00000	LRT/C05
	00004	745163453460		PZE	(LEV)	LRT/C06
	00005	0	00000	0	00041	LRT/C07
				BCD	1(RTN)	LRT/C08
				PZE	(RTN) ,	LRT/C09
					END OF LRT CONTROL CARD.	LRT/C09
					* * * * *	

A		00000		ORG		LRT/C
					(LEV)/ CALLER=MAIN PROGRAM.	LRT/001
					(LEV) SAVES ALL INDICATORS BEFORE I/O TRANSMISSION.	LRT/002
	00000	0	40000	0	00114 (LEV)	LRT/003
	00001	0	62100	0	00040	LRT/004
	00002	-0	76000	0	00012	LRT/005
	00003	0	76100	0	00000	LRT/006
	00004	0	62100	0	00075	LRT/007
	00005	-0	63400	1	00017	LRT/008
	00006	-0	63400	2	00046	LRT/009
	00007	-0	63400	4	00111	LRT/010
	00010	-0	50000	0	00000	LRT/011
	00011	0	60200	0	00112	LRT/012
	00012	-0	50000	0	00001	LRT/013
	00013	0	60200	0	00113	LRT/014
	00014	-0	50000	0	00020	LRT/015
	00015	0	60200	0	00001	LRT/016
	00016	0	50000	0	00023	LRT/017
	00017	1	00000	0	00022 ERX1	LRT/018
	00020	0	02100	0	00021 TON	LRT/019
	00021	0	76000	0	00002 CHS	LRT/020
	00022	0	60100	0	00065 SET	LRT/021
	00023	-0	76000	0	00007 LTM	LRT/022
	00024	0	50000	0	00064 CLA	LRT/023
	00025	0	14000	0	00027 TOV	LRT/024
	00026	0	50000	0	00025 CLA	LRT/025
	00027	0	62200	0	00060 SETAC	LRT/026
	00030	0	50000	0	00064 CLA	LRT/027
	00031	0	16100	0	00033 TQO	LRT/028
	00032	0	50000	0	00031 CLA	LRT/029
	00033	0	62200	0	00061 SETMQ	LRT/030
	00034	0	50000	0	00035 CLA	LRT/031
	00035	0	76000	0	00012 DCT	LRT/032
	00036	0	50000	0	00064 CLA	LRT/033
	00037	0	60100	0	00063 STO	LRT/034
	00040	0	02100	0	00000 BAK	LRT/035
					TTR **	LRT/036
					END OF PROGRAM (LEV).	LRT/037
					* * * * *	LRT/038
					(RTNI/ CALLERS=MAIN PROGRAM, (FIL).	LRT/039
					(RTN) RESTORES ALL INDICATORS AFTER I/O TRANSMISSION.	LRT/040
	00041	-0	76000	0	00007 (RTN)	LRT/041
	00042	0	40000	0	00114	LRT/042
					LTM	LRT/041
					ADD L(2)	LRT/042

00043	0	62100	0	00066	STA RET	TO CONTROL LOOP.	LRT/043
00044	0	76600	0	00333	IOD	INPUT-OUTPUT DELAY.	LRT/044
00045	-0	76000	0	00012	RTT	IF BINARY TAPE READING WAS NOT	LRT/045
00046	1	00000	0	00067	ERX2 TXI TRY,0,**	CORRECT, THEN TRY AGAIN.	LRT/046
00047	-0	50000	0	00071	GOOD CAL TXLOP	OTHERWISE, CONTINUE.	LRT/047
00050	0	63000	0	00067	STP TRY	SET TRY TO TRANSFER CASE.	LRT/048
					RES = ENTRY POINT USED BY (FIL).		LRT/049
00051	-0	50000	0	00112	RES CAL C(0)	RESTORE	LRT/050
00052	0	60200	0	00000	SLW 0	THE C(0).	LRT/051
00053	-0	50000	0	00113	CAL C(1)	RESTORE	LRT/052
00054	0	60200	0	00001	SLW 1	THE C(1).	LRT/053
00055	0	76600	0	00333	IOD	INPUT-OUTPUT DELAY.	LRT/054
00056	0	56000	0	00115	LDQ MAX	FORCE ALL TEST	LRT/055
00057	0	26000	0	00115	FMP MAX	CONDITIONS ON, AND THEN	LRT/056
00060	0	00000	0	00061	AVR PZE QVR,,**	RESTORE ORIGINAL AC OV CONDITION.	LRT/057
00061	0	00000	0	00062	QVR PZE NXT,,**	RESTORE ORIGINAL MQ OV CONDITION.	LRT/058
00062	0	22100	0	00116	NXT DVP ZER	AND THEN	LRT/059
00063	0	00000	0	00000	DCR PZE **	RESTORE ORIGINAL DIVIDE CHECK COND.	LRT/060
00064	0	76100	0	00000	NOP NOP	AND THEN	LRT/061
00065	0	00000	0	00000	RTM PZE **	RESTORE ORIGINAL TRAP MODE COND.	LRT/062
00066	0	02100	0	00000	RET TTR **	* EXIT TO MAIN PROGRAM.	LRT/063
D 00067	-3	00000	0	00072	TRY TXL TRY1,0	OPSWITCH (TXL=TRA, TXH=NOP).	LRT/064
00070	0	42000	7	00007	HPR 7,7	HALT AFTER 2ND FAILURE.	LRT/065
D 00071	-3	00000	0	00047	TXLOP TXL GOOD,0	PRESS START TO ACCEPT RECORD.	LRT/066
00072	0	50000	0	00071	TRY1 CLA TXLOP	SET TRY TO NO TRANSFER CASE	LRT/067
00073	0	63000	0	00067	STP TRY	FOR 2ND ATTEMPT AT READING RECORD.	LRT/068
00074	0	53400	1	00116	LXA ZER,1	SET XR1 = 0, AND	LRT/069
00075	0	56000	1	00000	RT LDQ **,1	OBTAIN RTB LOCATION.	LRT/070
00076	-0	75400	0	00000	PXD ,0	OBTAIN OPERATION	LST/071
00077	-0	76300	0	00014	LGL 12	BITS, AND TEST	LRT/072
00100	0	40200	0	00117	SUB BT	FOR LOCATION RTB.	LRT/073
00101	0	10000	0	00103	TZE CONT	IF NOT, THEN ADJUST THE	LRT/074
00102	1	77777	1	00075	TXI RT,1,-1	C(XR1), AND CONTINUE SEARCH.	LRT/075
00103	-0	76300	0	00030	CONT LGL 24	WHEN FOUND, SET	LRT/076
00104	0	62100	0	00105	STA BST	CURRENT TAPE ADDRESS.	LRT/077
00105	0	76400	0	00200	BST BST **	BACKSPACE CURRENT TAPE.	LRT/078
00106	-0	53400	1	00017	LXD ERX1,1	RESTORE THE	LRT/079
00107	-0	53400	2	00046	LXD ERX2,2	ORIGINAL CONTENTS OF	LRT/080
00110	-0	53400	4	00111	LXD ERX4,4	XR1,XR2, AND XR4.	LRT/081
00111	1	00000	0	00040	ERX4 TXI BAK,0,**	* EXIT TO MAIN PROGRAM FOR 2ND TRY.	LRT/082
					END OF PROGRAM (RTN).		LRT/083
					*****		*LRT/084
							LRT/085
					CONSTANTS AND WORKING STORAGE USED BY LEV/RTN/FIL/BDC.		LRT/086
00112	0	00000	0	00000	C(0) PZE **	VARIABLE USED BY LEV/RTN/FIL/BDC.	LRT/087
00113	0	00000	0	00000	C(1) PZE **	VARIABLE USED BY LEV/RTN/FIL/BDC.	LRT/088
00114	0	00000	0	00002	L(2) PZE 2	CONSTANT USED BY LEV/RTN/FIL/BDC.	LRT/089
00115	+3777777777777				MAX OCT 377777777777	CONSTANT USED BY LEV/RTN/FIL/BDC.	LRT/090
00116	0	00000	0	00000	ZER PZE 0	CONSTANT USED BY LEV/RTN/FIL/BDC.	LRT/091
00117	+000000000762				BT OCT 000000000762	CONSTANT USED BY LEV/RTN/FIL/BDC.	LRT/092
					END OF CONSTANTS AND WORKING STORAGE USED BY LEV/RTN.		LRT/093
					*****		*LRT/094
							LRT/095
A		00000			END		LRT/096

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	109	0	0	0	0
LIB	0	0	0	0	0
COL	109	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 117

NUMBER OF SYMBOLS, DEF 36,DEFOP 0,UNDEF 0
ABS

				CONTROL CARD FOR EXP(1		XP1/C01
	00000			ORG 0		XP1/C02
	00000	0 00000	0 00042	PZE EXP+1		XP1/C03
	00001	0 00000	0 77776	PZE FACTOR		XP1/C04
	00002	256747740160		BCD 1EXP(1		XP1/C05
	00003	0 00000	0 00000	PZE		XP1/C06
				END OF EXP(1 CONTROL CARD.		XP1/C07
		00000		ORG 0		EXP10001
				EXPONENTIATION SUBROUTINE		EXP10002
				FIXED POINT BASE, FIXED POINT EXPONENT		EXP10003
	00000	0 10000	4 00001	EXP(1 TZE 1,4	EXIT FOR ZERO BASE	EXP10004
	00001	0 77100	0 00022	ARS 18		EXP10005
	00002	0 60100	0 77777	STO POWER	SAVE BASE	EXP10006
	00003	0 76300	0 00021	LLS 17		EXP10007
	00004	0 62100	0 00041	STA EXP		EXP10008
	00005	0 50000	0 00041	CLA EXP		EXP10009
	00006	-0 10000	0 00011	TNZ ENZ		EXP10010
	00007	0 56000	0 00040	LDQ FIXONE		EXP10011
	00010	0 02000	0 00036	TRA EXIT		EXP10012
	00011	0 50000	0 00040	ENZ CLA FIXONE		EXP10013
	00012	-0 40000	0 77777	SBM POWER		EXP10014
	00013	0 10000	0 00016	TZE N		EXP10015
	00014	0 16200	0 00016	TQP N		EXP10016
	00015	0 02000	0 00036	TRA EXIT		EXP10017
	00016	0 50000	0 00040	N CLA FIXONE		EXP10018
	00017	0 60100	0 77776	STO FACTOR	X	EXP10019
	00020	0 50000	0 00041	CLA1 CLA EXP	IS POWER	EXP10020
	00021	0 76000	0 00001	LBT	A FACTOR	EXP10021
	00022	0 02000	0 00026	TRA CLA2	NO	EXP10022
	00023	0 56000	0 77777	LDQ POWER	YEB	EXP10023
	00024	0 20000	0 77776	MPY FACTOR		EXP10024
	00025	-0 60000	0 77776	STQ FACTOR		EXP10025
	00026	0 50000	0 00041	CLA2 CLA EXP		EXP10026
	00027	0 77100	0 00001	ARS 1		EXP10027
	00030	0 60100	0 00041	STO EXP		EXP10028
	00031	0 10000	0 00036	TZE EXIT		EXP10029
	00032	0 56000	0 77777	LDQ POWER	COMPUTE	EXP10030
	00033	0 20000	0 77777	MPY POWER	NEXT	EXP10031
	00034	-0 60000	0 77777	STQ POWER	POWER	EXP10032
	00035	0 02000	0 00020	TRA CLA1		EXP10033
	00036	0 76300	0 00065	EXIT LLS 53		EXP10034
	00037	0 02000	4 00001	TRA 1,4		EXP10035
				WORKING STORAGE		EXP10036
	00040	+0000000000001		FIXONE DEC 1		EXP10037
	00041	0 00000	0 00000	EXP		EXP1003B
			77777	POWER SYN -1		EXP10039
			77776	FACTOR SYN -2		EXP10040
A		00000		END		EXP10041

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	49	0	0	0	0
LIB	0	0	0	0	0

COL 49 0 0 0 0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 57

NUMBER OF SYMBOLS, DEF 10,DEFOP 0,UNDEF 0
ABS

					CONTROL CARD FOR EXP(2		XP2/C01
		00000			ORG 0		XP2/C02
	00000	0 00000	0 00050		PZE EXP+1		XP2/C03
	00001	0 00000	0 77776		PZE FACTOR		XP2/C04
	00002	256747740260			BCD 1EXP(2		XP2/C05
	00003	0 00000	0 00000		PZE		XP2/C06
					END OF EXP(2 CONTROL CARD.		XP2/C07
		00000			ORG 0		EXP20001
					EXPONENTIATION SUBROUTINE		EXP20002
					FLOATING POINT BASE, FIXED POINT EXPONENT		EXP20003
	00000	0 10000	4 00001	EXP(2	TZE 1,4	EXIT FOR ZERO BASE	EXP20004
	00001	-0 63400	2 00022		SXD SAVEX,2		EXP20005
	00002	0 16200	0 00005		TQP MQPOS		EXP20006
	00003	-0 53400	2 00004		LXD NEGONE,2	SET NEGATIVE MQ INDICATOR	EXP20007
	00004	-3 77777	0 00006	NEGONE	TXL MQPOS+1,0,-1		EXP20008
	00005	-0 53400	2 00037	MQPOS	LXD TXL,2	SET POSITIVE MQ INDICATOR	EXP20009
	00006	0 60100	0 77777		STO POWER	INITIALIZATION	EXP20010
T	00007	-0 75400	0 00000		PXD		EXP20011
	00010	0 76300	0 00021		LLS 17	X	EXP20012
	00011	0 62100	0 00047		STA EXP	X	EXP20013
	00012	0 50000	0 00047		CLA EXP		EXP20014
	00013	-0 10000	0 00016		TNZ N		EXP20015
	00014	0 50000	0 00046		CLA FLOONE		EXP20016
	00015	0 02000	0 00044		TRA EXIT		EXP20017
	00016	0 50000	0 00046	N	CLA FLOONE	X	EXP20018
	00017	0 60100	0 77776		STO FACTOR	X	EXP20019
	00020	0 50000	0 00047	CLA1	CLA EXP	IS POWER	EXP20020
	00021	0 76000	0 00001		LBT	A FACTOR	EXP20021
TD	00022	-3 00000	0 00026	SAVEX	TXL CLA2	NO	EXP20022
	00023	0 56000	0 77777		LDQ POWER	YES	EXP20023
	00024	0 26000	0 77776		FMP FACTOR		EXP20024
	00025	0 60100	0 77776		STO FACTOR		EXP20025
	00026	0 50000	0 00047	CLA2	CLA EXP		EXP20026
	00027	0 77100	0 00001		ARS 1		EXP20027
	00030	0 60100	0 00047		STO EXP		EXP20028
	00031	0 10000	0 00036		TZE TXL-1		EXP20029
	00032	0 56000	0 77777		LDQ POWER		EXP20030
	00033	0 26000	0 77777		FMP POWER		EXP20031
	00034	0 60100	0 77777		STO POWER		EXP20032
	00035	0 02000	0 00020		TRA CLA1		EXP20033
	00036	0 50000	0 77776		CLA FACTOR		EXP20034
D	00037	-3 00000	2 00044	TXL	TXL EXIT,2		EXP20035
	00040	0 50000	0 00046		CLA FLOONE		EXP20036
	00041	0 24000	0 77776		FDH FACTOR		EXP20037
T	00042	-0 75400	0 00000		PXD		EXP20038
	00043	0 76300	0 00043		LLS 35		EXP20039
	00044	-0 53400	2 00022	EXIT	LXD SAVEX,2		EXP20040
					WORKING STORAGE		EXP20041
	00045	0 02000	4 00001		TRA 1,4		EXP20042
	00046	+2014000000000		FLOONE	DEC 1.0		EXP20043
	00047	0 00000	0 00000	EXP			EXP20044
		77777		POWER	SYN -1		EXP20045
		77776		FACTOR	SYN -2		
A		00000			END		EXP20047

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	55	0	0	0	0
LIB	0	0	0	0	0
COL	55	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 63

NUMBER OF SYMBOLS, DEF 13,DEFOP 0,UNDEF 0
ABS

		CONTROL CARD FOR EXP(3			XP3/C01
	00000		ORG 0		XP3/C02
00000	0 00000 0 00161		113		XP3/C03
00001	0 00000 0 77770		-8		XP3/C04
00002	256747740360		BCD 1EXP(3		XP3/C05
00003	0 00000 0 00000		PZE		XP3/C06
00004	256747606060		BCD 1EXP		XP3/C07
00005	-0 00000 0 00010		MZE 8		XP3/C08
00006	434627606060		BCD 1LOG		XP3/C09
00007	-0 00000 0 00107		MZE 71		XP3/C10
	00000		END OF EXP(3 CONTROL CARD.		XP3/C11
			ORG 0		EXP30001
			EXPONENTIATION SUBROUTINE		EXP30002
			FLOATING POINT BASE, FLOATING POINT EXPONENT		EXP30003
00000	0 10000 4 00001	EXP(3	TZE 1,4	BASE ZERO	EXP30004
00001	0 76000 0 00003		SSP		EXP30005
00002	-0 63400 4 77770		SXD TXL,4		EXP30006
00003	-0 60000 0 77772		STQ EXP1		EXP30007
00004	0 07400 4 00111		TSX LOG,4		EXP30008
00005	0 76500 0 00043		LRS 35		EXP30009
00006	0 26000 0 77772		FMP EXP1		EXP30010
00007	0 07400 4 00012		TSX EXP,4		EXP30011
00010	-0 53400 4 77770	LXD	LXD TXL,4		EXP30012
00011	0 02000 4 00001		TRA 1,4		EXP30013
			LAS816 EXPONENTIAL SUBROUTINE		EXP30014
00012	0 60100 0 77773	S816EX	STO COMMON+00000,0,00000		EXP30015
00013	0 76000 0 00003		SSP 00000,0,00000		EXP30016
00014	0 40200 0 00101		SUB S816EX+00055,0,00000		EXP30017
00015	0 76500 0 00000		LRS 00000,0,00000		EXP30018
00016	-0 75400 0 00000		PXD 00000,0,00000		EXP30019
00017	0 16200 0 00075		TQP S816EX+00051,0,00000		EXP30020
00020	0 40100 0 77773		ADM COMMON+00000,0,00000		EXP30021
00021	0 56000 0 00110		LDQ S816EX+00062,0,00000		EXP30022
00022	0 40200 0 00107		SUB S816EX+00061,0,00000		EXP30023
00023	-0 12000 0 00033		TMI S816EX+00017,0,00000		EXP30024
00024	0 76500 0 00033		LRS 00027,0,00000		EXP30025
00025	0 62100 0 00027		STA S816EX+00013,0,00000		EXP30026
00026	-0 75400 0 00000		PXD 00000,0,00000		EXP30027
00027	0 76300 0 00000		LLS 00000,0,00000		EXP30028
00030	0 22000 0 00102		DVH S816EX+00056,0,00000		EXP30029
00031	0 77100 0 00010		ARS 00008,0,00000		EXP30030
00032	-0 77300 0 00033		RQL 00027,0,00000		EXP30031
00033	0 40000 0 00107		ADD S816EX+00061,0,00000		EXP30032
00034	-0 60000 0 77774		STQ COMMON+00001,0,00000		EXP30033
00035	0 30000 0 00107		FAD S816EX+00061,0,00000		EXP30034
00036	0 60100 0 77775		STO COMMON+00002,0,00000		EXP30035
00037	0 56000 0 77775		LDQ COMMON+00002,0,00000		EXP30036
00040	0 26000 0 77775		FMP COMMON+00002,0,00000		EXP30037
00041	0 60100 0 77776		STO COMMON+00003,0,00000		EXP30038
00042	0 30000 0 00103		FAD S816EX+00057,0,00000		EXP30039
00043	0 60100 0 77777		STO COMMON+00004,0,00000		EXP30040
00044	0 50000 0 00104		CLA S816EX+00058,0,00000		EXP30041
00045	0 24000 0 77777		FDH COMMON+00004,0,00000		EXP30042
00046	-0 60000 0 77777		STQ COMMON+00004,0,00000		EXP30043

00047	0	50000	0	00105	CLA	S816EX+00059,0,00000	EXP30044
00050	0	30000	0	77777	FAD	COMMON+00004,0,00000	EXP30045
00051	0	60100	0	77777	STO	COMMON+00004,0,00000	EXP30046
00052	0	56000	0	77777	LDQ	COMMON+00004,0,00000	EXP30047
00053	0	26000	0	77776	FMP	COMMON+00003,0,00000	EXP30048
00054	0	30000	0	00106	FAD	S816EX+00060,0,00000	EXP30049
00055	0	60100	0	77776	STO	COMMON+00003,0,00000	EXP30050
00056	0	30200	0	77775	FSB	COMMON+00002,0,00000	EXP30051
00057	0	60100	0	77777	STO	COMMON+00004,0,00000	EXP30052
00060	0	50000	0	77776	CLA	COMMON+00003,0,00000	EXP30053
00061	0	30000	0	77775	FAD	COMMON+00002,0,00000	EXP30054
00062	0	40000	0	77774	ADD	COMMON+00001,0,00000	EXP30055
00063	0	60100	0	77776	STO	COMMON+00003,0,00000	EXP30056
00064	0	56000	0	77773	LDQ	COMMON+00000,0,00000	EXP30057
00065	0	16200	0	00071	TQP	S816EX+00047,0,00000	EXP30058
00066	0	50000	0	77777	CLA	COMMON+00004,0,00000	EXP30059
00067	0	56000	0	77776	LDQ	COMMON+00003,0,00000	EXP30060
00070	-0	60000	0	77777	STQ	COMMON+00004,0,00000	EXP30061
00071	0	24000	0	77777	FDH	COMMON+00004,0,00000	EXP30062
00072	-0	60000	0	77773	STQ	COMMON+00000,0,00000	EXP30063
00073	0	50000	0	77773	CLA	COMMON+00000,0,00000	EXP30064
00074	0	02000	4	00001	TRA	00001,4,00000	EXP30065
00075	0	56000	0	77773	LDQ	COMMON+00000,0,00000	EXP30066
00076	0	04000	4	00001	TLQ	00001,4,00000	EXP30067
00077	0	76000	0	00006	COM	00000,0,00000	EXP30068
00100	0	02000	4	00001	TRA	00001,4,00000	EXP30069
00101	+207535146314				DEC	8.730000000000E01	EXP30070
00102	+261344137676				OCT	261344137676	EXP30071
00103	+206520000000				DEC	4.200000000000E01	EXP30072
00104	+203471463146				DEC	4.900000000000E00	EXP30073
00105	+174631463146				DEC	5.000000000000E-02	EXP30074
00106	+202400000000				DEC	2.000000000000E00	EXP30075
00107	+200000000000				OCT	200000000000	EXP30076
00110	+000000000000				OCT	000000000000	EXP30077
					LA	S820 NATURAL LOGARITHM SUBROUTINE	EXP30078
00111	0	10000	4	00001	LAS820 TZE	00001,4,00000	EXP30079
00112	0	76000	0	00003	SSP		EXP30080
00113	0	76500	0	00033	LRS	00027,0,00000	EXP30081
00114	-0	60000	0	77773	STQ	COMMON+00000,0,00000	EXP30082
00115	0	76700	0	00023	ALS	00019,0,00000	EXP30083
00116	-0	50100	0	00147	ORA	LAS820+00030,0,00000	EXP30084
00117	0	30200	0	00150	FSB	LAS820+00031,0,00000	EXP30085
00120	0	60100	0	77774	STO	COMMON+00001,0,00000	EXP30086
00121	0	50000	0	77773	CLA	COMMON+00000,0,00000	EXP30087
00122	0	76500	0	00010	LRS	00008,0,00000	EXP30088
00123	-0	50100	0	00151	ORA	LAS820+00032,0,00000	EXP30089
00124	0	30000	0	00152	FAD	LAS820+00033,0,00000	EXP30090
00125	0	60100	0	77773	STO	COMMON+00000,0,00000	EXP30091
00126	0	30200	0	00153	FSB	LAS820+00034,0,00000	EXP30092
00127	0	24000	0	77773	FDH	COMMON+00000,0,00000	EXP30093
00130	-0	60000	0	77773	STQ	COMMON+00000,0,00000	EXP30094
00131	0	26000	0	77773	FMP	COMMON+00000,0,00000	EXP30095
00132	0	60100	0	77775	STO	COMMON+00002,0,00000	EXP30096
00133	0	56000	0	00156	LDQ	LAS820+00037,0,00000	EXP30097

00134	0	26000	0	77775	FMP	COMMON+00002,0,00000	EXP30098
00135	0	30000	0	00155	FAD	LAS820+00036,0,00000	EXP30099
00136	0	76500	0	00043	LRS	00035,0,00000	EXP30100
00137	0	26000	0	77775	FMP	COMMON+00002,0,00000	EXP30101
00140	0	30000	0	00154	FAD	LAS820+00035,0,00000	EXP30102
00141	0	76500	0	00043	LRS	00035,0,00000	EXP30103
00142	0	26000	0	77773	FMP	COMMON+00000,0,00000	EXP30104
00143	0	30000	0	77774	FAD	COMMON+00001,0,00000	EXP30105
00144	0	76500	0	00043	LRS	00035,0,00000	EXP30106
00145	0	26000	0	00157	FMP	LAS820+00038,0,00000	EXP30107
00146	0	02000	4	00001	TRA	00001,4,00000	EXP30108
00147	+21000000000000				OCT	21000000000000	EXP30109
00150	+210401000000				DEC	1.285000000000E02	EXP30110
00151	+20000000000000				OCT	20000000000000	EXP30111
00152	+200552023631				DEC	7.07106781187E-01	EXP30112
00153	+201552023631				DEC	1.41421356237E00	EXP30113
00154	+202561251001				DEC	2.88539129030E00	EXP30114
00155	+200754213603				DEC	9.61470632300E-01	EXP30115
00156	+200462532521				DEC	5.98978649600E-01	EXP30116
00157	+200542710277				DEC	6.93147180560E-01	EXP30117
		77773	COMMON	SYN	-5		EXP30118
		77772	EXP1	SYN	-6		EXP30119
		77771	BASE	SYN	-7		EXP30120
		77770	TXL	SYN	-8		EXP30I21
		00111	LOG	SYN	LAS820		EXP30I22
		00012	EXP	SYN	S816EX		EXP30I23
A		00000		END			EXP30I24

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	136	0	0	0	0
LIB	0	0	0	0	0
COL	136	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 144

NUMBER OF SYMBOLS, DEF 10,DEFOP 0,UNDEF 0
ABS

				CONTROL CARD FOR LOG.		LOG/C01
	00000	0	00000	0	00052	LOG/C02
	00001	0	00000	0	77775	LOG/C03
	00002	434627606060				LOG/C04
	00003	0	00000	0	00000	LOG/C05
				PZE		LOG/C06
				END OF LOG CONTROL CARD		LOG/C07
A			00000	ORG		LOG 0002
				LAS820 NATURAL LOGARITHM SUBROUTINE		LOG 0003
	00000	0	10000	4	00001	LOG 0004
	00001	0	76000	0	00003	LOG 0005
	00002	0	76500	0	00033	LOG 0006
	00003	-0	60000	0	77775	LOG 0007
	00004	0	76700	0	00023	LOG 0008
	00005	-0	50100	0	00036	LOG 0009
	00006	0	30200	0	00037	LOG 0010
	00007	0	60100	0	77776	LOG 0011
	00010	0	50000	0	77775	LOG 0012
	00011	0	76500	0	00010	LOG 0013
	00012	-0	50100	0	00040	LOG 0014
	00013	0	30000	0	00041	LOG 0015
	00014	0	60100	0	77775	LOG 0016
	00015	0	30200	0	00042	LOG 0017
	00016	0	24000	0	77775	LOG 0018
	00017	-0	60000	0	77775	LOG 0019
	00020	0	26000	0	77775	LOG 0020
	00021	0	60100	0	77777	LOG 0021
	00022	0	56000	0	00045	LOG 0022
	00023	0	26000	0	77777	LOG 0023
	00024	0	30000	0	00044	LOG 0024
	00025	0	76500	0	00043	LOG 0025
	00026	0	26000	0	77777	LOG 0026
	00027	0	30000	0	00043	LOG 0027
	00030	0	76500	0	00043	LOG 0028
	00031	0	26000	0	77775	LOG 0029
	00032	0	30000	0	77776	LOG 0030
	00033	0	76500	0	00043	LOG 0031
	00034	0	26000	0	00046	LOG 0032
	00035	0	02000	4	00001	LOG 0033
	00036	+2100000000000				LOG 0034
	00037	+210401000000				LOG 0035
	00040	+2000000000000				LOG 0036
	00041	+200552023631				LOG 0037
	00042	+201552023631				LOG 0038
	00043	+202561251001				LOG 0039
	00044	+200754213603				LOG 0040
	00045	+200462532521				LOG 0041
	00046	+200542710277				LOG 0042
		77775	COMMON	SYN	-3	LOG 0043
A		00000		END		LOG 0044

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
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INP	51	0	0	0	0
LIB	0	0	0	0	0
COL	51	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 59

NUMBER OF SYMBOLS, DEF 2,DEFOP 0,UNDEF 0
REL

F2SIN00I

00057	0	56000	0	77775	COMCA	LDQ	Z	COMMON CALC., B3	F2SIN056
00060	-0	20000	0	77775		MPR	Z		F2SIN057
00061	0	60100	0	77777		STO	ZSQ	B6	F2SIN058
00062	0	40000	1	00147		ADD	CONST+4,1	24.1B6, 50. B6	F2SIN059
00063	0	60100	0	77776		STO	SOR		F2SIN060
00064	0	50000	1	00150		CLA	CONST+5,1	2287B13, 1042B11	F2SIN061
00065	0	22000	0	77776		DVH	SOR		F2SIN062
00066	-0	60000	0	77776		STQ	SOR		F2SIN063
00067	0	50000	0	77776		CLA	SOR		F2SIN064
00070	0	40000	1	00153		ADD	CONST+8,1	82.5B7, -19.B5	F2SIN065
00071	0	76700	0	00001		ALS	1	B6, BITS IN P,Q	F2SIN066
00072	0	40000	0	77777		ADD	ZSQ		F2SIN067
00073	0	77100	1	00006		ARS	6,1	B8	F2SIN068
00074	-3	00002	1	00123		TXL	S,1,2		F2SIN069
00075	0	60100	0	77776		STO	SOR		F2SIN070
00076	0	50000	0	77777		CLA	ZSQ		F2SIN071
00077	0	76500	0	00002		LRS	2		F2SIN072
00100	0	40000	0	77777		ADD	ZSQ		F2SIN073
00101	0	76300	0	00001		LLS	1		F2SIN074
00102	0	40000	0	00150		ADD	CONST+5	-3276B13	F2SIN075
00103	0	22000	0	77776		DVH	SOR		F2SIN076
00104	-0	60000	0	77776		STQ	SOR		F2SIN077
00105	0	50000	0	77776		CLA	SOR		F2SIN078
00106	0	40000	0	00152		ADD	CONST+7	19.477B5	F2SIN079
00107	0	76500	0	00002		LRS	2		F2SIN080
00110	0	40200	0	77777		SUB	ZSQ		F2SIN081
00111	0	56000	0	77774		LDQ	SPMLT		F2SIN082
00112	0	76300	0	00010		LLS	8		F2SIN083
00113	-0	76000	0	00001		PBT			F2SIN084
00114	1	00001	1	00115		TXI	RTSH,1,1	XR...5 FOR OCOS	F2SIN085
00115	0	77100	1	00015	RTSH	ARS	13,1	9 OR 8	F2SIN086
00116	0	36100	1	00145		ACL	CHAR+5,1	127 OR 128	F2SIN087
00117	-0	53400	1	00021		LXD	SAVE,1		F2SIN088
00120	3		4	00122	FINI	TXH	FINI+2,4,..		F2SIN089
00121	0	02000	4	00001		TRA	1,4	LEAVE ON	F2SIN090
00122	0	14000	0	00121		TOV	FINI+1	TURN OFF	F2SIN091
00123	0	40000	0	00141	S	ADD	CHAR+1	126	F2SIN092
00124	0	60100	0	77777		STO	ZSQ		F2SIN093
00125	0	56000	0	77777		LDQ	ZSQ		F2SIN094
00126	0	26000	0	77774		FMP	SPMLT		F2SIN095
00127	0	02000	0	00117		TRA	FINI-1		F2SIN096
00130	0	50000	0	00120	LOW	CLA	FINI		F2SIN097
00131	0	76700	0	00011		ALS	9		F2SIN97A
00132	0	50000	0	77774		CLA	SPMLT		F2SIN97B
00133	0	02000	0	00117		TRA	FINI-1		F2SIN098
00134	-0	63400	0	00120	NOVFL	SXD	INDIC,0	CLEAR DECREMENT OF INDIC	F2SIN099
00135	0	02000	0	00010		TRA	OVTST+2		F2SIN100
								CONSTANTS	F2SIN101
				00120	INDIC	SYN	FINI		F2SIN102
00136	+144417665210				PI	DEC	3.14159265359B3		F2SIN103
00137	+062207732503				PIHLF	DEC	1.57079632679B3		F2SIN104
00140	+1770000000000				CHAR	OCT	1770000000000		F2SIN105
00141	+2000000000000					OCT	2000000000000		F2SIN106
00142	+011463146314				TEST	DEC	.3B3		F2SIN107

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00143 +140450575062      CONST DEC 24.1448946943B6,2287.443195687B13,50.0302454854B6      F2SIN108
00144 +107367056521
00145 +310075742536
00146 +202273236275      DEC 1042.9267081438B11,82.58030199563B7,-3276.33995164B13      F2SIN109
00147 +245122165275
00150 -146305340704
00151 -236610717605      DEC -19.8459242632B5,19.477149451B5      F2SIN110
00152 +233642316731
00153 +201622077325      FPHLF DEC 1.57079632679      F2SIN111
      77774 COMMON EQU -4      F2SIN112
      77774 SPMLT EQU COMMON      F2SIN113
      77775 REDA EQU COMMON+1      F2SIN114
      77775 Z EQU COMMON+1      F2SIN115
      77776 SOR EQU COMMON+2      F2SIN116
      77777 ZSQ EQU COMMON+3      F2SIN117
      00000 END 0      F2SIN118
      00001 0 ..

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SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	120	0	0	0	0
LIB	0	0	0	0	0
COL	120	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 134

NUMBER OF SYMBOLS, DEF 30,DEFOP 0,UNDEF 1
REL

F2EXP001

		00000		ORG 0		F2EXP002
				FLOATING POINT EXPONENTIAL SUBROUTINE, FORTRAN VERSION		F2EXP003
	EXP	00000	0 60100 0 77777	STO M	STORE ARGUMENT	F2EXP004
		00001	0 56000 0 00046	LDQ MAX	TEST IF OUT OF RANGE	F2EXP005
		00002	0 04000 4 00001	TLQ 1,4	IF TOO LARGE ERROR RETURN	F2EXP006
		00003	0 76000 0 00002	CHS		F2E6P007
		00004	0 04000 0 00044	TLQ T1	IF TOO SMALL RETURN WITH ZERO	F2LXP008
		00005	0 76500 0 00033	LRS 27		F2EXP009
		00006	-0 76000 0 00003	SSM		F2EXP010
		00007	0 40000 0 00050	ADD CHAR	CONVERT TO FIXED POINT	F2EXP011
		00010	0 62100 0 00012	STA SH1		F2EXP012
		00011	0 20000 0 00047	MPY LOGE	X TIMES LOG E BASE 2	F2EXP013
A	SH1	00012	0 76500 0 00000	LRS	SEPARATE INTEGER AND FRACTION	F2EXP014
		00013	0 76700 0 00033	ALS 27		F2EXP015
		00014	0 60100 0 77777	STO M		F2EXP016
		00015	0 76500 0 00004	LRS 4		F2EXP017
		00016	-0 60000 0 77776	STQ F		F2EXP018
		00017	0 20000 0 77776	MPY F	COMPUTE FRACTION SQUARED	F2EXP019
		00020	0 60100 0 77775	STO SQ	COMPUTE CONTINUED FRACTION	F2EXP020
		00021	0 40000 0 00053	ADD A	8,27 SCALING	F2EXP021
		00022	0 60100 0 77774	STO T	8,27	F2EXP022
		00023	0 50000 0 00054	CLA B	12,23	F2EXP023
		00024	0 22100 0 77774	DVP T	8,27 4,31	F2EXP024
		00025	-0 60000 0 77774	STQ T	4,31	F2EXP025
		00026	0 56000 0 77775	LDQ SQ	8,27	F2EXP026
		00027	0 20000 0 00055	MPY C	0,35 8,27	F2EXP027
		00030	0 76300 0 00004	LLS 4	4,31	F2EXP028
		00031	0 40200 0 77774	SUB T	4,3I	F2EXP029
		00032	0 40000 0 00056	ADD D	4,3I	F2EXP030
		00033	0 40200 0 77776	SUB F	4,3I	F2EXP031
		00034	0 60100 0 77774	STO T	4,3I	F2EXP032
		00035	0 50000 0 77776	CLA F	5,3I NUMERATOR EQUALS 2F	F2EXP033
		00036	0 22100 0 77774	DVP T	4,31 1,34	F2EXP034
		00037	-0 60000 0 77774	STQ T		F2EXP035
		00040	0 50000 0 77774	CLA T		F2EXP036
		00041	0 76500 0 00010	LRS 8		F2EXP037
		00042	-0 50100 0 00052	ORA CH1		
		00043	0 30000 0 00051	FAD CH		
	T1	00044	0 40000 0 77777	ADD M		F2EXP039
		00045	0 02000 4 00001	TRA 1,4	RETURN1	FZEXP040
					OONSTANTS	F2EXP041
		00046	+207540071260	MAX DEC 88.028		F2EXP042
		00047	-270524354513	LOGE DEC -1.4426950409B1		F2EXP043
		00050	+000000000242	CHAR OCT 242		F2EXP044
		00051	+201400000000	CH OCT 201400000000		F2EXP045
	CH1	00052	+201000000000	OCT 201000000000		
	A	00053	+127325604305	DEC 87.417497202B8		F2EXP046
	B	00054	+046477071523	DEC 617.9722695B12		F2EXP047
	C	00055	+010676467774	DEC .03465735903B0		F2EXP048
	D	00056	+237214030720	DEC 9.9545957821B4		F2EXP049
					ERASABLES	F2EXP050
		77777	M	EQU -1		F2EXP051
		77776	F	EQU -2		F2EXP052
		77775	SQ	EQU -3		F2EXP053

77774 T EQU -4
00000 END 0

F2EXP054
F2EXP055

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	57	0	0	0	0
LIB	0	0	0	0	0
COL	57	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 65

NUMBER OF SYMBOLS, DEF 16,DEFOP 0,UNDEF 0
ABS

				CONTROL CARD FOR SQRT.		SQRT/C01
	00000	0	00000	0	00025	SQRT/C02
	00001	0	00000	0	77776	SQRT/C03
	00002	625051636060				SQRT/C04
	00003	0	00000	0	00000	SQRT/C05
						SQRT/C06
						SQRT/C07
				END OF SQRT CONTROL CARD.		SQRT0001
				ORG 0		SQRT0002
				CL SOR3 SQUARE ROOT SUBROUTINE		SQRT0003
				FUNCTION NAME ... SQRTF		SQRT0004
	00000	0	10000	4	00001	SQRT TZE 1,4
	00001	0	76000	0	00003	SSP SQRT OF ZERO IS ZERO
	00002	0	60100	0	77776	P2 STO COMMON SET SIGN X PLUS
	00003	-0	50100	0	00022	ORA C X
	00004	0	77100	0	00001	ARS 1 MAKE POWER ODD
	00005	0	40000	0	00023	ADD C+1 NORMALIZED Y0 IN A.C.
	00006	-0	63400	4	00024	SXD C+2,4
	00007	0	53400	4	00024	LXA C+2,4
	00010	0	60100	0	77777	P1 STO COMMON+1
	00011	0	50000	0	77776	CLA COMMON S TO RE Y0
	00012	0	24000	0	77777	FDH COMMON+1
	00013	0	50000	0	77777	CLA COMMON+1
	00014	-0	60000	0	77777	STQ COMMON+1
	00015	0	30000	0	77777	FAD COMMON+1
	00016	0	40200	0	00022	SUB C
	00017	2	00001	4	00010	TIX P1,4,1
	00020	-0	53400	4	00024	LXD C+2,4
	00021	0	02000	4	00001	TRA 1,4
	00022	+00100000000000				C OCT 1000000000,100000000000,4
	00023	+10000000000000				
	00024	+00000000000004				
		77776	COMMON	SYN	-2	SQRT0019
A		00000		END		SQRT0020
						SQRT0021
						SQRT0022
						SQRT0023
						SQRT0024

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	32	0	0	0	0
LIB	0	0	0	0	0
COL	32	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 42

NUMBER OF SYMBOLS, DEF 5,DEFOP 0,UNDEF 0

REL

F2ATN001

		00000		ORG 0		F2ATN002
				FLOATING POINT ARCTANGENT SUBROUTINE, FORTRAN VERSION		F2ATN003
00000	-0	63400	1	00121	ATAN SXD I1,1	F2ATN004
00001	-0	12000	0	00063	TMI T100	F2ATN005
00002	0	60100	0	77777	T30 STO X	F2ATN006
00003	0	40200	0	00072	SUB MAX	F2ATN007
00004	-0	12000	0	00007	TMI T21	F2ATN008
00005	0	50000	0	00120	CLA PIOV2	F2ATN009
00006	0	02000	4	00001	TRA 1,4	F2ATN010
00007	0	40000	0	00071	T21 ADD MIN	F2ATN011
00010	0	12000	0	00013	TPL T22	F2ATN012
00011	0	50000	0	77777	CLA X	F2ATN013
00012	0	02000	4	00001	TRA 1,4	F2ATN014
00013	0	53400	1	00121	T22 LXI I1,1	F2ATN015
00014	0	50000	0	77777	T17 CLA X	F2ATN016
00015	0	40200	1	00076	SUB A,1	F2ATN017
00016	-0	12000	0	00020	TMI T1	F2ATN018
00017	1	00001	1	00014	TXI T17,1,1	F2ATN019
00020	3	00000	1	00024	T1 TXH T2,1,0	F2ATN020
00021	0	56000	0	77777	LDQ X	F2ATN021
00022	0	26000	0	00117	FMP L	F2ATN022
00023	0	02000	0	00037	TRA T11	F2ATN023
00024	-0	75400	1	00000	T2 PXD 0,1	F2ATN024
00025	0	40200	0	00123	SUB CHAR	F2ATN025
00026	-0	73400	1	00000	PDX 0,1	F2ATN026
00027	0	50000	0	77777	T3 CLA X	F2ATN027
00030	0	30000	1	00072	FAD MAX,1	F2ATN028
00031	0	60100	0	77776	STO T	F2ATN029
00032	0	50200	1	00102	CLS B,1	F2ATN030
00033	0	24100	0	77776	FDP T	F2ATN031
00034	-0	60000	0	77776	STQ T	F2ATN032
00035	0	50000	0	77776	CLA T	F2ATN033
00036	0	30000	1	00076	FAD A,1	F2ATN034
00037	0	60100	0	77777	T11 STO X	F2ATN035
00040	0	56000	0	77777	LDQ X	F2ATN036
00041	0	26000	0	77777	FMP X	F2ATN037
00042	0	60100	0	77775	STO SQ	F2ATN038
00043	0	30000	0	00114	FAD C1	F2ATN039
00044	0	60100	0	77776	STO T	F2ATN040
00045	0	50200	0	00115	CLS C2	F2ATN041
00046	0	24100	0	77776	FDP T	F2ATN042
00047	-0	60000	0	77776	STQ T	F2ATN043
00050	0	50000	0	77776	CLA T	F2ATN044
00051	0	30000	0	00116	FAD C3	F2ATN045
00052	0	30000	0	77775	FAD SQ	F2ATN046
00053	0	60100	0	77776	STO T	F2ATN047
00054	0	50000	0	77777	CLA X	F2ATN048
00055	0	24100	0	77776	FDP T	F2ATN049
00056	-0	60000	0	77776	STQ T	F2ATN050
00057	0	50000	0	77776	CLA T	F2ATN051
00060	0	30000	1	00107	FAD N,1	F2ATN052
00061	-0	53400	1	00121	LXD I1,1	F2ATN053
00062	0	02000	4	00001	TRA 1,4	F2ATN054
00063	-0	63400	4	00122	T100 SXD I4,4	F2ATN055

00064	0 76000 0 00003	SSP			F2ATN056
00065	0 07400 4 00002	TSX T30,4	ARRANGE TO SET RETURN NEGATIVE		F2ATN057
00066	-0 53400 4 00122	LXD I4,4			F2ATN058
00067	-0 76000 0 00003	SSM			F2ATN059
00070	0 02000 4 00001	TRA 1,4			F2ATN060
			CONSTANTS		F2ATN061
00071	+0700000000000	MIN OCT 0700000000000			F2ATN062
00072	+2330000000000	MAX OCT 2330000000000			F2ATN063
00073	+202537532534	DEC 2.7474774195			F2ATN064
00074	+201461055415	DEC 1.1917535926			F2ATN065
00075	+200447464721	DEC .57735026919			F2ATN066
00076	+176551074172	A DEC .17632698071			F2ATN067
00077	+177714301134	DEC .44958721409			F2ATN068
00100	+176617307170	DEC .19501422424			F2ATN069
00101	+175602761366	DEC .94475498595E-1			F2ATN070
00102	+173730570600	B DEC .288535059E-1			F2ATN071
00103	+201546070234	DEC 1.398867082			F2ATN072
00104	+177625431617	DEC .39604526598			F2ATN073
00105	+176676654157	DEC .21818181818			F2ATN074
00106	+176531427747	DEC .1687240152			F2ATN075
00107	+0000000000000	N DEC 0			F2ATN076
00110	+177545343022	DEC .3490658504			F2ATN077
00111	+200545343022	DEC .6981317008			F2ATN078
00112	+201414052216	DEC 1.047197551			F2ATN079
00113	+201545343022	DEC 1.396263402			F2ATN080
00114	+174642612432	C1 DEC .0511119459			F2ATN081
00115	+170543147755	C2 DEC .00270998425			F2ATN082
00116	+176673545053	C3 DEC .21664913599			F2ATN083
00117	+176517101123	L DEC .16363636363			F2ATN084
00120	+201622077325	PIOV2 DEC 1.57079633			F2ATN085
00121	0 00000 0 00000	I1			F2ATN086
00122	0 00000 0 00000	I4			F2ATN087
00123	+2000000000000	CHAR OCT 2000000000000			F2ATN088
			ERASABLES		F2ATN089
	77777	X EQU -1			F2ATN090
	77776	T EQU -2			F2ATN091
	77775	SQ EQU -3			F2ATN092
	00000	END 0			F2ATN093

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	93	0	0	0	0
LIB	0	0	0	0	0
COL	93	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 101

NUMBER OF SYMBOLS, DEF 26,DEFOP 0,UNDEF 0
REL

F2TNH001

		00000		ORG 0		F2TNH002
				FLOATING POINT HYPERBOLIC TANGENT SUBROUTINE, FORTRAN VERSION		F2TNH003
00000	0	60100	0	77776	TANH STO F	F2TNH004
00001	0	76000	0	00003	SSP	F2TNH005
00002	0	40200	0	00115	SUB MIN	F2TNH006
00003	0	12000	0	00006	TPL T5	F2TNH007
00004	0	50000	0	77776	CLA F	F2TNH008
00005	0	02000	4	00001	TRA 1,4	F2TNH009
00006	0	40200	0	00114	T5 SUB MAX	F2TNH010
00007	-0	12000	0	00012	TMI T6	F2TNH011
00010	0	50000	0	00120	CLA CH	F2TNH012
00011	0	02000	4	00001	TRA 1,4	F2TNH013
00012	0	50000	0	77776	T6 CLA F	F2TNH014
00013	0	76500	0	00033	LRS 27	F2TNH015
00014	-0	76000	0	00003	SSM	F2TNH016
00015	0	40000	0	00117	ADD CHAR	F2TNH017
00016	0	62100	0	00020	STA SH1	F2TNH018
00017	0	20000	0	00116	MPY LOGE	F2TNH019
A 00020	0	76500	0	00000	SH1 LRS	F2TNH020
00021	0	76700	0	00033	ALS 27	F2TNH021
00022	0	60100	0	77777	STO M	F2TNH022
00023	0	76300	0	00002	LLS 2	F2TNH023
00024	0	10000	0	00071	TZE T2	F2TNH024
00025	0	76500	0	00006	LRS 6	F2TNH025
00026	-0	60000	0	77776	STQ F	F2TNH026
00027	0	20000	0	77776	MPY F	F2TNH027
00030	0	60100	0	77775	STO SQ	F2TNH028
00031	0	40000	0	00121	ADD A	F2TNH029
00032	0	60100	0	77774	STO T	F2TNH030
00033	0	50000	0	00122	CLA B	F2TNH031
00034	0	22100	0	77774	DVP T	F2TNH032
00035	-0	60000	0	77774	STQ T	F2TNH033
00036	0	56000	0	77775	LDQ SQ	F2TNH034
00037	0	20000	0	00123	MPY C	F2TNH035
00040	0	76300	0	00004	LLS 4	F2TNH036
00041	0	40200	0	77774	SUB T	F2TNH037
00042	0	40000	0	00124	ADD D	F2TNH038
00043	0	40200	0	77776	SUB F	F2TNH039
00044	0	60100	0	77774	STO T	F2TNH040
00045	0	50000	0	77776	CLA F	F2TNH041
00046	0	22100	0	77774	DVP T	F2TNH042
00047	-0	60000	0	77774	STQ T	F2TNH043
00050	0	50000	0	77774	CLA T	F2TNH044
00051	0	76500	0	00010	LRS 8	F2TNH045
00052	0	40000	0	00120	ADD CH	F2TNH046
00053	0	40000	0	77777	T1 ADD M	F2TNH047
00054	0	60100	0	77777	STO M	F2TNH048
00055	0	50000	0	00120	CLA CH	F2TNH049
00056	0	24100	0	77777	FDP M	F2TNH050
00057	-0	60000	0	77776	STQ F	F2TNH051
00060	0	50000	0	77777	CLA M	F2TNH052
00061	0	30000	0	77776	FAD F	F2TNH053
00062	0	60100	0	77774	STO T	F2TNH054
00063	0	50000	0	77777	CLA M	F2TNH055

00064	0	30200	0	77776		FSB	F			F2TNH056
00065	0	24100	0	77774	T10	FDP	T			F2TNH057
00066	-0	60000	0	77774		STQ	T			F2TNH058
00067	0	50000	0	77774		CLA	T			F2TNH059
00070	0	02000	4	00001		TRA	1,4	RETURN		F2TNH060
00071	0	56000	0	77776	T2	LDQ	F	COMPUTE TANH 4LOGE IF X SMALL		F2TNH061
00072	0	26000	0	00130		FMP	4LOGE	COMPUTE X TIMES 4LOGE		F2TNH062
00073	0	60100	0	77776		STO	F			F2TNH063
00074	0	56000	0	77776		LDQ	F			F2TNH064
00075	0	26000	0	77776		FMP	F			F2TNH065
00076	0	60100	0	77775		STO	SQ			F2TNH066
00077	0	30000	0	00127		FAD	D1	COMPUTE CONTINUED FRACTION		F2TNH067
00100	0	60100	0	77774		STO	T			F2TNH068
00101	0	50000	0	00126		CLA	C1			F2TNH069
00102	0	24100	0	77774		FDP	T			F2TNH070
00103	-0	60000	0	77774		STQ	T			F2TNH071
00104	0	50000	0	77774		CLA	T			F2TNH072
00105	0	30000	0	00125		FAD	B1			F2TNH073
00106	0	76500	0	00043		LRS	35			F2TNH074
00107	0	26000	0	77775		FMP	SQ			F2TNH075
00110	0	30000	0	00130		FAD	4LOGE			F2TNH076
00111	0	60100	0	77774		STO	T			F2TNH077
00112	0	50000	0	77776		CLA	F			F2TNH078
00113	0	02000	0	00065		TRA	T10			F2TNH079
								CONSTANTS		F2TNH080
00114	+0170000000000				MAX	OCT	0170000000000			F2TNH081
00115	+165544410070				MIN	DEC	.00034			F2TNH082
00116	+270524354513				LOGE	DEC	1.4426950409B1			F2TNH083
00117	+000000000242				CHAR	OCT	242			F2TNH084
00120	+2014000000000				CH	OCT	2014000000000			F2TNH085
00121	+127325604305				A	DEC	87.417497202B8			F2TNH086
00122	+046477071523				B	DEC	617.9722695B12			F2TNH087
00123	+010676467774				C	DEC	.03465735903B0			F2TNH088
00124	+237214030720				D	DEC	9.9545957821B4			F2TNH089
00125	+173433723377				B1	DEC	.01732867951			F2TNH090
00126	+204704333566				C1	DEC	14.1384114018			F2TNH091
00127	+211535527021				D1	DEC	349.6699888			F2TNH092
00130	+203561250731				4LOGE	DEC	5.7707801636			F2TNH093
								ERASABLES		F2TNH094
		77777	M		EQU	-1				F2TNH095
		77776	F		EQU	-2				F2TNH096
		77775	SQ		EQU	-3				F2TNH097
		77774	T		EQU	-4				F2TNH098
		00000			END	0				F2TNH099

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	99	0	0	0	0
LIB	0	0	0	0	0
COL	99	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 107

NUMBER OF SYMBOLS, DEF 24,DEFOP 0,UNDEF 0
REM FNEDT2 REVISED FORTRAN EDITING PROGRAM EDT 0001

			00040		ORG 32		EDT 0001
							EDT 0002
00040	0	77200	0	00201	REW 1	REWIND	EDT 0003
00041	0	77200	0	00205	REW 5	TAPES	EDT 0004
00042	-0	50000	0	00162	CAL IDEOF	INITIALISE THIS CARD	EDT 0005
00043	0	60200	0	00163	SLW THISCD	TO END FILE	EDT 0006
00044	0	07400	4	00166	TSX ONE2CS,4	TSX TO TRANSCRIBE SPECIAL FIRST RCD	EDT 0007
00045	-0	50000	0	00163	REENTR CAL THISCD	MAIN LOOP REENTRY	EDT 0008
00046	0	76700	0	00003	ALS 3	MOVE THIS CARD	EDT 0009
00047	0	60200	0	00164	SLW LASTCD	INTO LAST CARD	EDT 0010
00050	0	76200	0	00321	RCD	READ	EDT 0011
00051	-0	53400	1	00161	LXD ZERO14,1	THE NEXT CARD	EDT 0012
00052	0	70000	1	00010	A1 CPY CDBUF,1	INTO	EDT 0013
00053	1	77777	1	00052	TXI A1,1,-1	CARD BUFFER	EDT 0014
00054	0	00000	0	00054	A2 HTR A2	FALSE END OF FILE IN READING CARD	EDT 0015
00055	-0	50000	0	00010	CAL CDBUF	TEST	EDT 0016
00056	0	76000	0	00006	COM		EDT 0017
00057	0	62200	0	00063	STD A4		EDT 0018
00060	-0	50000	0	00010	CAL CDBUF	CHECK	EDT 0019
00061	-0	53400	1	00161	LXD ZERO14,1		EDT 0020
00062	1	77777	1	00063	A3 TXI A4,1,-1		EDT 0021
00063	-3	00063	1	00066	A4 TXL A5,1,*	SUM	EDT 0022
00064	0	36100	1	00011	ACL CDBUF+1,1		EDT 0023
00065	0	02000	0	00062	TRA A3		EDT 0024
00066	0	76000	0	00006	A5 COM		EDT 0025
00067	0	36100	0	00011	ACL CDBUF+1		EDT 0026
00070	0	76000	0	00006	COM		EDT 0027
00071	0	10000	0	00073	TZE A6		EDT 0028
00072	0	42000	0	00000	HPR	CHECK SUM ERROR IN READING CARD	EDT 0029
00073	-0	50000	0	00010	A6 CAL CDBUF	SET UP	EDT 0030
00074	0	77100	0	00041	ARS 33	THIS CARD	EDT 0031
00075	0	62100	0	00163	STA THISCD	AND	EDT 0032
00076	-0	50100	0	00164	ORA LASTCD	SITUATION	EDT 0033
00077	0	60200	0	00165	SLW SITWD	WORD	EDT 0034
00100	0	53400	1	00161	LXA ZERO14,1	TABLE SEARCH	EDT 0035
00101	-0	50000	1	00161	A7 CAL TABLE+14,1		EDT 0036
00102	0	76500	0	00022	LRS 18	FOR	EDT 0037
00103	0	34000	0	00165	CAS SITWD		EDT 0038
00104	0	02000	0	00106	TRA A8	SITUATION	EDT 0039
00105	0	02000	0	00110	TRA A9		EDT 0040
00106	2	00001	1	00101	A8 TIX A7,1,1		EDT 0041
00107	0	00000	0	00107	ILLEGL HTR ILLEGL	SEARCH FAILED. ILLEGAL SITUATION.	EDT 0042
00110	0	76300	0	00022	A9 LLS 18		EDT 0043
00111	0	62100	0	00112	STA A10		EDT 0044
00112	0	02000	0	00112	A10 TRA *		EDT 0045
							EDT 0046
							EDT 0047
							EDT 0048
							EDT 0049
00113	0	07400	4	00210	EOFEND TSX LB,4	SEQUENCE EOF-END	EDT 0050
00114	0	07400	4	00214	EOFMR TSX SAVE,4	SEQUENCE EOF-MR	EDT 0051
00115	0	07400	4	00225	TSX CLEAR,4		EDT 0052
00116	0	07400	4	00233	TSX READ,4		EDT 0053
00117	0	02000	0	00045	TRA REENTR		EOT 0054

THERE FOLLOW THE 8 POSSIBLE SITUATION SUBROUTINES

00120	0	07400	4	00214	EOFNR	TSX	SAVE,4	SEQUENCE EOF-NR	EOT	0055
00121	0	07400	4	00225		TSX	CLEAR,4		EDT	0056
00122	0	02000	0	00045		TRA	REENTR		EDT	0057
00123	0	07400	4	00302	PRGEND	TSX	WRITE,4	SEQUENCE PROG-END	EDT	0058
00124	0	07400	4	00210		TSX	LB,4	MR-END	EDT	0059
00125	0	07400	4	00302	PRGEOF	TSX	WRITE,4	SEQUENCE PROG-EOF	EDT	0060
00126	0	77000	0	00221		WEF	145	MR-EOF	EDT	0061
00127	0	02000	0	00045		TRA	REENTR		EDT	0062
00130	0	07400	4	00330	PRGPRG	TSX	MOVE,4	SEQUENCE PROG-PROG	EDT	0063
00131	0	02000	0	00045		TRA	REENTR	MR-PROG, NR-PROG	EDT	0064
00132	0	07400	4	00302	PRGMR	TSX	WRITE,4	SEQUENCE PROG-MR	EDT	0065
00133	0	07400	4	00214		TSX	SAVE,4	MR-MR	EDT	0066
00134	0	07400	4	00225		TSX	CLEAR,4		EDT	0067
00135	0	07400	4	00233		TSX	READ,4		EDT	0068
00136	0	02000	0	00045		TRA	REENTR		EDT	0069
00137	0	07400	4	00302	PRGMR	TSX	WRITE,4	SEQUENCE PROG-NR	EDT	0070
00140	0	07400	4	00214		TSX	SAVE,4	MR-NR	EDT	0071
00141	0	07400	4	00225		TSX	CLEAR,4		EDT	0072
00142	0	02000	0	00045		TRA	REENTR		EDT	0073
00143	0	00047	0	00113	TABLE		EOFEND,0,39	TABLE OF SITUATIONS	EDT	0074
00144	0	00041	0	00114			EOFMR,0,33		EDT	0075
00145	0	00042	0	00120			EOFNR,0,34		EDT	0076
00146	0	00007	0	00123			PRGEND,0,7		EDT	0077
00147	0	00004	0	00125			PRGEOF,0,4		EDT	0078
00150	0	00000	0	00130			PRGPRG,0,0		EDT	0079
00151	0	00001	0	00132			PRGMR,0,1		EDT	0080
00152	0	00002	0	00137			PRGMR,0,2		EDT	0081
00153	0	00017	0	00123			PRGEND,0,15		EDT	0082
00154	0	00014	0	00125			PRGEOF,0,12		EDT	0083
00155	0	00010	0	00130			PRGPRG,0,8		EOT	0084
00156	0	00011	0	00132			PRGMR,0,9		EDT	0085
00157	0	00012	0	00137			PRGMR,0,10		EDT	0086
00160	0	00020	0	00130			PRGPRG,0,16		EDT	0087
00161	0	00000	0	00016	ZERO14		14		EDT	0088
00162	0	00000	0	00004	IDEOF		4		EDT	0089
00163	0	00000	0	00000	THISCD				EDT	0090
00164	0	00000	0	00000	LASTCD				EDT	0091
00165	0	00000	0	00000	SITWD				EDT	0092
				00010	CDBUF	SYN	8		EDT	0093
								THERE FOLLOW THE 7 SUBROUTINES	EDT	0094
								ONE2CS, LB, SAVE, CLEAR, READ, WRITE, MOVE	EDT	0095
									EDT	0096
00166	-0	76000	0	00012	ONE2CS	RTT		TRANSCRIBES	EDT	0097
00167	0	76100	0	00000		NOP		SPECIAL	EDT	0098
00170	0	76200	0	00225		RTB	5	IST RECORD	EDT	0099
00171	-0	53400	1	00161		LXD	ZERO14,1			
00172	0	53400	2	00207		LXA	ZEROTW,2			
00173	0	76200	0	00321		RCD				
00174	0	70000	1	00353	CS1	CPY	MAINBF,1			
00175	1	77777	1	00174		TXI	CS1,1,-1			
00176	0	00000	0	00176		HTR	*			
00177	2	00001	2	00173		TIX	CS1-1,2,1			
00200	-0	53400	1	00161		LXD	ZERO14,1			
00201	0	76600	0	00221		WTB	1			

00202	0	70000	1	00353	CS2	CPY	MAINBF,1				
00203	1	77777	1	00204		TXI	CS3,1,-1				
00204	3	77745	1	00202	CS3	TXH	CS2,1,-27				
00205	0	76600	0	00333		IOD					
00206	0	02000	4	00001		TRA	1,4				
00207	0	00000	0	00002	ZEROTW		2				
											EDT 0124
00210	0	76200	0	00321	LB	RCD		PRESSES LOAD CARDS BUTTON			EDT 0125
00211	0	70000	0	00000		CPY	0				EDT 0126
00212	0	70000	0	00001		CPY	1				EDT 0127
00213	0	02000	0	00000		TRA	0				EDT 0128
											EDT 0129
00214	-0	50000	0	00012	SAVE	CAL	CDBUF+2	SAVES CONTROL INFORMATION			EDT 0130
00215	0	60200	0	00222		SLW	EIGHTL	FROM MR OR NR CARD			EDT 0131
00216	0	62100	0	00224		STA	NEWBEG				EDT 0132
00217	-0	50000	0	00013		CAL	CDBUF+3				EDT 0133
00220	0	60200	0	00223		SLW	EIGHTR				EDT 0134
00221	0	02000	4	00001		TRA	1,4				EDT 0135
00222	0	00000	0	00000	EIGHTL						EDT 0136
00223	0	00000	0	00000	EIGHTR						EDT 0137
00224	0	00000	0	00000	NEWBEG						EDT 0138
											EDT 0139
00225	-0	75400	0	00000	CLEAR	PXD	0,0	CLEAR MAIN BUFFER			EDT 0140
00226	0	53400	1	00232		LXA	BUFSIZ,1				EDT 0141
00227	0	60200	1	00000	CL1	SLW	0,1				EDT 0142
00230	2	00001	1	00227		TIX	CL1,1,1				EDT 0143
00231	0	02000	4	00001		TRA	1,4				EDT 0144
00232	0	00000	0	77425	BUFSIZ		-MAINBF				EDT 0145
											EDT 0146
00233	-0	76000	0	00012	READ	RTT		READS RECORD			EDT 0147
00234	0	76100	0	00000		NOP		FROM			EDT 0148
00235	0	76200	0	00225		RTB	5	INSTER TAPE			EDT 0149
00236	-0	75400	0	00000		PXD	0,0	INTO MAIN BUFFER			EDT 0150
00237	-0	53400	1	00161		LXD	ZERO14,1				EDT 0151
00240	0	70000	0	00277		CPY	CHKSUM				EDT 0152
00241	0	02000	0	00243		TRA	RD1				EDT 0153
00242	0	02000	0	00233		TRA	READ				EDT 0154
00243	-0	70000	0	00300	RD1	CAD	FSTWD				EDT 0155
00244	-0	32000	0	00301		ANA	ADDMK				EDT 0156
00245	0	40200	0	00224		SUB	NEWBEG				EOT 0157
00246	-0	12000	0	00267		TMI	RD6				EOT 0158
00247	0	76000	0	00006		COM					EDT 0159
00250	0	73400	1	00000	RD2	PAX	0,1				EDT 0160
00251	-0	50000	0	00300		CAL	FSTWD				EDT 0161
00252	-3	00352	1	00271	RD3	TXL	RD7,1,MAINBF-1				EDT 0162
00253	-0	70000	1	00352		CAD	MAINBF-1,1				EOT 0163
00254	1	77777	1	00252	RD4	TXI	RD3,1,-1				EOT 0164
00255	0	00000	0	00001	L1	HTR	1	FALSE EOF IN READING MASTER TAPE			EDT 0165
00256	-0	77300	0	00377	RD5	RQL	255				EDT 0166
00257	-0	77300	0	00377		RQL	255				EDT 0167
00260	-0	76000	0	00012		RTT					EDT 0168
00261	0	02000	0	00275		TRA	RD8				EDT 0169
00262	0	76000	0	00006		COM					EDT 0170
00263	0	36100	0	00277		ACL	CHKSUM				EDT 0171

00264	0	76000	0	00006		COM		EDT	0172
00265	-0	10000	0	00275		TNZ RD8		EDT	0173
00266	0	02000	4	00001		TRA 1,4		EDT	0174
00267	0	40000	0	00255	RD6	ADD L1		EDT	0175
00270	0	02000	0	00250		TRA RD2		EDT	0176
00271	-0	70000	0	00000	RD7	CAD 0		EDT	0177
00272	0	02000	0	00254		TRA RD4		EDT	0178
00273	0	02000	0	00255		TRA L1		EDT	0179
00274	0	02000	0	00256		TRA RD5		EDT	0180
00275	0	76400	0	00205	RD8	BST 5		EDT	0181
00276	0	00000	0	00233		HTR READ	ERROR IN READING MASTER TAPE	EDT	0182
00277	0	00000	0	00000	CHKSUM			EDT	0183
00300	0	00000	0	00000	FSTWD			EDT	0184
00301	0	00000	0	77777	ADDMK	-1		EDT	0185
								EDT	0186
00302	0	50000	0	00223	WRITE	CLA EIGHTR	WRITES RECORD FROM MAIN BUFFER	EDT	0187
00303	0	40200	0	00224		SUB NEWBEG	INTO SECONDARY TAPE	EDT	0188
00304	-0	12000	4	00001		TMI 1,4		EDT	0189
00305	0	76700	0	00022		ALS 18		EDT	0190
00306	0	76000	0	00006		COM		EDT	0191
00307	0	62200	0	00315		STD WR2		EDT	0192
00310	0	62200	0	00324		STD WR4		EDT	0193
00311	-0	53400	3	00161		LXD ZERO14,3		EDT	0194
00312	-0	50000	0	00222		CAL EIGHTL		EDT	0195
00313	0	36100	1	00353	WR1	ACL MAINBF,1		EDT	0196
00314	1	77777	1	00315		TXI WR2,1,-1		EDT	0197
00315	3	00315	1	00313	WR2	TXH WR1,1,*		EDT	0198
00316	0	60200	0	00277		SLW CHKSUM		EDT	0199
00317	0	76600	0	00221		WTB 1		EDT	0200
00320	0	70000	0	00277		CPY CHKSUM		EDT	0201
00321	0	70000	0	00222		CPY EIGHTL		EDT	0202
00322	0	70000	2	00353	WR3	CPY MAINBF,2		EDT	0203
00323	1	77777	2	00324		TXI WR4,2,-1		EDT	0204
00324	3	00324	2	00326	WR4	TXH WR5,2,*		EDT	0205
00325	0	02000	4	00001		TRA 1,4		EDT	0206
00326	3	00353	2	00322	WR5	TXH WR3,2,MAINBF		EDT	0207
00327	0	00000	4	00001		HTR 1,4	TRYING TO WRITE TOO LONG A RECORD	EDT	0208
								EDT	0209
00330	-0	50000	0	00010	MOVE	CAL CDBUF	MOVES A PROGRAM CARD FROM	EDT	0210
00331	0	76000	0	00006		COM	THE CARD BUFFER INTO THE	EDT	0211
00332	0	62200	0	00343		STD MV3	CORRECT PART OF THE MAIN BUFFER	EDT	0212
00333	-0	53400	1	00161		LXD ZERO14,1		EDT	0213
00334	-0	50000	0	00010		CAL CDBUF		EDT	0214
00335	-0	32000	0	00301		ANA ADDMK		EDT	0215
00336	0	40200	0	00224		SUB NEWBEG		EDT	0216
00337	-0	12000	0	00350		TMI MV5		EDT	0217
00340	0	76000	0	00006		COM		EDT	0218
00341	0	73400	2	00000	MV1	PAX 0,2		EDT	0219
00342	1	77777	1	00343	MV2	TXI MV3,1,-1		EDT	0220
00343	-3	00343	1	00352	MV3	TXL MV6,1,*		EDT	0221
00344	-0	50000	1	00011		CAL CDBUF+1,1		EDT	0222
00345	-3	00352	2	00347		TXL MV4,2,MAINBF-1		EDT	0223
00346	0	60200	2	00352		SLW MAINBF-1,2		EDT	0224
00347	1	77777	2	00342	MV4	TXI MV2,2,-1		EDT	0225

00350 0 40000 0 00255 MV5 ADD L1
00351 0 02000 0 00341 TRA MV1
00352 0 02000 4 00001 MV6 TRA 1,4

00353 0 00000 0 00000 MAINBF
00040 END 32

MAIN BUFFER STARTS HERE

EDT 0226
EDT 0227
EDT 0228
EDT 0229
EDT 0230
EDT 0231

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	222	0	0	0	0
LIB	0	0	0	0	0
COL	222	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 231

NUMBER OF SYMBOLS, DEF 67,DEFOP 0,UNDEF 0
END

A 00000 END

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	1	0	0	0	0
LIB	0	0	0	0	0
COL	1	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 10

NUMBER OF SYMBOLS, DEF 1,DEFOP 0,UNDEF 0
START LXA L(0),3 PERMANENT LIBRARIAN ENTRY POINT

00000	0	53400	3	00143	START	LXA	L(0),3		PERMANENT LIBRARIAN ENTRY POINT
00001	0	60000	0	00150		STZ	ERASE		
00002	0	76200	0	00321	RCD		RCD		
00003	-0	70000	0	00144		CAD	9L		
00004	0	02000	0	00006		TRA	CPY9R		
00005	0	02000	0	00130		TRA	EXIT		EOF
00006	0	70000	0	00145	CPY9R	CPY	9R		
00007	0	50000	0	00144		CLA	9L		
00010	0	10000	0	00130		TZE	EXIT		
00011	0	76000	0	00006		COM			
00012	-0	73400	4	00000		PDX	0,4		
00013	1	00001	4	00014		TXI	CPY9R+6,4,1		
00014	-3	77700	4	00134		TXL	PASSGL,4,-64		
00015	0	50000	0	00144		CLA	9L		
00016	0	76700	0	00001		ALS	1		
00017	-0	76000	0	00001		PBT			
00020	0	02000	0	00041		TRA	BINARY CARD		
00021	1	77776	4	00023		TXI	CPAREL-2,4,-2		
00022	-0	63400	4	00027		SXD	TXHREL,4		
00023	-0	75400	0	00000		PXD			
00024	0	60000	0	00150		STZ	ERASE		
00025	-0	70000	2	00152	CPAREL	CAD	RELREG,2		
00026	1	77777	2	00027		TXI	TXHREL,2,-1		
00027	3	00027	2	00025	TXHREL	TXH	CPAREL,2,*		
00030	0	07400	4	00071		TSX	CHSTST,4		
00031	0	76600	0	00221		WTB	1		
00032	-3	00000	1	00035		TXL	TSXREL,1,0		
00033	0	07400	4	00111		TSX	WRBIN,4		
00034	0	76600	0	00221		WTB	1		
00035	0	07400	4	00102	TSXREL	TSX	WRREL,4		
00036	0	60000	0	00146		STZ	9LB,0,STZ		
00037	0	60000	0	00147		STZ	9RB,0,STZ		
00040	0	02000	0	00002		TRA	RCD		
00041	-0	75400	0	00000	BINARY	PXD			
00042	-0	70000	1	00200	CPABIN	CAD	BINREG,1		
00043	1	77777	1	00044		TXI	TXHBIN-1,1,-1		
00044	1	00001	4	00045		TXI	TXHBIN,4,1		
00045	3	00000	4	00042	TXHBIN	TXH	CPABIN,4,0		
00046	0	07400	4	00071		TSX	CHSTST,4		
00047	0	50000	0	00144		CLA	9L		
00050	0	40000	0	00146		ADD	9LB		
00051	0	60100	0	00146		STO	9LB		
00052	0	50000	0	00150		CLA	ERASE		
00053	0	10000	0	00066		TZE	CHER		
00054	0	50000	0	00145		CLA	9R		
00055	-0	12000	0	00060		TMI	CHSIGN		
00056	0	36100	0	00151		ACL	L(1)		
00057	0	02000	0	00061		TRA	NORM		
00060	0	76000	0	00003	CHSIGN	SSP			
00061	0	60200	0	00145	NORM	SLW	9R		
00062	-0	50000	0	00145		CAL	9R		
00063	0	36100	0	00147		ACL	9RB		
00064	0	60200	0	00147		SLW	9RB		
00065	0	02000	0	00002		TRA	RCD		

T

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00066	0	50000	0	00151	CHER	CLA	L(1)		
00067	0	60100	0	00150		STO	ERASE		
00070	0	02000	0	00062		TRA	NORM+1		
00071	0	36100	0	00144	CHSTST	ACL	9L		
00072	0	60200	0	00142		SLW	CHS		
00073	0	76600	0	00333		IOD			
00074	0	76600	0	00333		IOD			
00075	0	50000	0	00145		CLA	9R		
00076	0	34000	0	00142		CAS	CHS		
00077	0	00000	4	00001		HTR	1,4		CARD READING ERROR
00100	0	02000	4	00001		TRA	1,4		
00101	0	02000	0	00077		TRA	WRREL-3		
00102	0	50000	0	00141	WRREL	CLA	LIREL)		
00103	0	62100	0	00121		STA	CPY		
00104	-0	63400	2	00123		SXD	CPY+2,2		
00105	0	70000	0	00144		CPY	9L		
00106	0	53400	2	00143		LXA	L(0),2		
00107	0	70000	0	00145		CPY	9R		
00110	-3	00000	0	00117	RETURN	TXL	XR,0		
00111	0	50000	0	00140	WRBIN	CLA	LIBIN)		
00112	0	62100	0	00121		STA	CPY		
00113	0	70000	0	00146		CPY	9LB		
00114	-0	63400	1	00123		SXD	CPY+2,1		
00115	0	53400	1	00143		LXA	L(0),1		
00116	0	70000	0	00147		CPY	9RB		
00117	-0	63400	4	00110	XR	SXD	RETURN,4		
00120	0	53400	4	00143		LXA	L(0),4		
00121	0	70000	4	00121	CPY	CPY	*,4		
00122	1	77777	4	00123		TXI	CPY+2,4,-1		
00123	3	00123	4	00121		TXH	CPY,4,*		
00124	-0	53400	4	00110		LXD	RETURN,4		
00125	0	76600	0	00333		IOD			
00126	0	76600	0	00333		IOD			
00127	0	02000	4	00001		TRA	1,4		
00130	0	76200	0	00321	EXIT	RCD			
00131	0	70000	0	00000		CPY	0		
00132	0	70000	0	00001		CPY	1		
00133	0	02000	0	00000		TRA	0		
00134	-0	53400	4	00137	PASSGL	LXD	PASSGL+3,4		BY-PASS
00135	0	76200	0	00321		RCD			GENERAL
00136	2	00001	4	00135		TIX	PASSGL+1,4,1		LIBRARIAN
00137	-3	00016	0	00000		TXL	RCD-2,0,14		G.L. CARD COUNT
00140	0	00000	0	00200	LIBIN)	BINREG			
00141	0	00000	0	00152	LIREL)	RELREG			
00142	0	00000	0	00000	CHS				
00143	0	00000	0	00000	L(0)				
00144	0	00000	0	00000	9L				
00145	0	00000	0	00000	9R				
00146	0	00000	0	00000	9LB				
00147	0	00000	0	00000	9RB				
00150	0	00000	0	00000	ERASE	HTR	0		
00151	+377777777777				L(1)	OCT	377777777777		
				00152	RELREG	BSS	22		
				00200	BINREG	BSS	1		

D

60000 STZ EQU 24576
00000 END START

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	110	0	0	0	0
LIB	0	0	0	0	0
COL	110	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 119

NUMBER OF SYMBOLS, DEF 33,DEFOP 0,UNDEF 0
REM GENERAL LIBRARIAN GLIB2

					GENERAL LIBRARIAN	GLIB2	
			00030		ORG 24		
	00030	0	77200	0	00225	DUP000	REW SOURCE GENERAL LIBRARIAN
	00031	0	77200	0	00221		REW OBJECT
	00032	-0	76000	0	00012		RTT TURN OFF RTT TRIGGER
ATD	00033	3	00000	0	00000		TXH
	00034	-0	53400	7	00040		LXD DUP020,7 INITIALIZE INDEX REGISTERS TO 27
	00035	0	76200	0	00225		RDS SOURCE READ 1-CS FROM SOURCE
	00036	0	70000	1	00507	DUP010	CPY RECORD+27,1
	00037	1	77777	1	00036		TXI DUP010,1,-1
	00040	0	00033	0	00000	DUP020	HTR 0,0,27 MACHINE ERROR
	00041	0	76600	0	00333		IOD EOR-DELAY
	00042	-0	76000	0	00012		RTT
	00043	0	00000	0	00030		HTR DUP000 RTT ERROR-- TRY AGAIN
	00044	0	76600	0	00221		WRS OBJECT WRITE 1-CS ONTO OBJECT
	00045	0	70000	2	00507	DUP030	CPY RECORD+27,2
	00046	2	00001	2	00045		TIX DUP030,2,1
	00047	0	76600	0	00333		IOD
	00050	-0	76000	0	00012		RTT TURN OFF RTT TRIGGER
	00051	3	00000	0	00156	DUP031	TXH DUP170,0,0
	00052	0	76400	0	00221		BST OBJECT
	00053	0	76200	0	00221		RDS OBJECT READ BACK 1-CS FROM OBJECT
	00054	0	70000	0	00453	DUP040	CPY DUMMY
	00055	0	02000	0	00060		TRA DUP050
A	00056	0	00000	0	00000		HTR
	00057	0	02000	0	00065		TRA DUP060 EOR
	00060	0	50000	4	00507	DUP050	CLA RECORD+27,4
	00061	0	34000	0	00453		CAS DUMMY
	00062	0	00000	0	00030		HTR DUP000 WORD COMP. FAILS-READING
	00063	1	77777	4	00054		TXI DUP040,4,-1
	00064	0	00000	0	00030		HTR DUP000 FROM OBJECT
	00065	3	00000	4	00427	DUP060	TXH DUP280,4,0 ERROR-INCOMPLETE OBJECT RECORD
	00066	0	76600	0	00333		IOD
	00067	-0	76000	0	00012		RTT
	00070	0	00000	0	00030		HTR DUP000 RTT ERROR READING BACK OBJECT 1-CS
	00071	-0	53400	7	00051	DUP070	LXD DUP031,7 INITIALIZE INDEX REG TO 0
T	00072	-0	75400	0	00000		PXD CLEAR AC
	00073	0	76200	0	00225	DUP071	RDS SOURCE READ SOURCE 1ST/2ND FILE RECORD
	00074	0	70000	1	00454		CPY RECORD,1
	00075	1	77777	1	00100		TXI DUP090,1,-1
	00076	0	02000	0	00144	DUP080	TRA DUP160 EOF
A	00077	0	00000	0	00000		HTR MACHINE ERROR
	00100	-0	70000	1	00454	DUP090	CAD RECORD,1
	00101	1	77777	1	00100		TXI DUP090,1,-1
A	00102	0	00000	0	00000		HTR MACHINE ERROR
	00103	0	76000	0	00006		COM EOR
	00104	0	36100	0	00454		ACL RECORD
	00105	0	76000	0	00006		COM
	00106	0	10000	0	00110		TZE DUP100
	00107	0	00000	0	00430		HTR DUP290 CKSM FAILS READING SOURCE 1ST/2ND FILE
	00110	0	76600	0	00333	DUP100	IOD
	00111	-0	76000	0	00012		RTT
	00112	0	00000	0	00432		HTR DUP300 RTT ERROR-BST AND TRY AGAIN
	00113	-0	63400	1	00120		SXD DUP120,1

	00114	-0	63400	1	00137	SXD	DUP150,1	
	00115	0	76600	0	00221	WRS	OBJECT	WRITE OBJECT 1ST/2ND FILE RECORD
	00116	0	70000	2	00454	DUP110	CPY RECORD,2	
	00117	1	77777	2	00120	TXI	DUP120,2,-1	
	00120	3	00000	2	00116	DUP120	TXH DUP110,2,**	
	00121	0	76600	0	00333	DUP121	IOD	
	00122	-0	76000	0	00012	RTT		TUON OFF RTT TRIGGER
ATD	00123	3	00000	0	00000	TXH		
	00124	0	76400	0	00221	BST	OBJECT	
	00125	0	76200	0	00221	RDS	OBJECT	READ BACK OBJECT 1ST/2ND FILE RECORD
	00126	0	70000	0	00453	DUP130	CPY DUMMY	
	00127	0	02000	0	00132	TRA	DUP140	
A	00130	0	00000	0	00000	HTR		MACHINE ERROR
	00131	0	02000	0	00137	TRA	DUP150	EOR
	00132	0	50000	4	00454	DUP140	CLA RECORD,4	
	00133	0	34000	0	00453	CAS	DUMMY	
	00134	0	00000	0	00434	HTR	DUP310	COMP. ERROR ON 1ST/2ND FILE RECORD
	00135	1	77777	4	00126	TXI	DUP130,4,-1	
	00136	0	00000	0	00434	HTR	DUP310	COMP. ERROR ON 1ST/2ND FILE RECORD.
	00137	3	00000	4	00436	DUP150	TXH DUP320,4,**	ERROR-INCOMPLETE OBJECT RECORD
	00140	0	76600	0	00333	IOD		
	00141	-0	76000	0	00012	RTT		
	00142	0	00000	0	00434	HTR	DUP310	RTT ERROR-BST AN0 TRY AGAIN
	00143	0	02000	0	00071	TRA	DUP070	
	00144	0	76600	0	00333	DUP160	IOD	
	00145	-0	76000	0	00012	RTT		
	00146	0	00000	0	00444	HTR	DUP340	RTT ERROR - BST TWICE ON SOURCE
	00147	0	77000	0	00221	WEF	OBJECT	WRITE 1ST EOF
	00150	0	76600	0	00333	IOD		
	00151	-0	76000	0	00012	RTT		TURN OFF RTT TRIGGER
ATD	00152	3	00000	0	00000	TXH		
	00153	0	50000	0	00051	CLA	DUP031	
	00154	0	62100	0	00076	STA	DUP080	
	00155	0	02000	0	00071	TRA	DUP070	
	00156	0	76600	0	00333	DUP170	IOD	
	00157	-0	76000	0	00012	RTT		
	00160	0	00000	0	00444	HTR	DUP340	RTT ERROR- BST TWICE ON SOURCE
	00161	0	77000	0	00221	WEF	OBJECT	WRITE 2ND EOF
	00162	0	76600	0	00333	DUP171	IOD	
	00163	-0	76000	0	00012	RTT		TURN OFF RTT TRIGGER
ATD	00164	3	00000	0	00000	TXH		
	00165	-0	53400	7	00051	DUP180	LXD DUP031,7	INITIALIZE INDEX REG TO 0
T	00166	-0	75400	0	00000	PXD		CLEAR AC
	00167	0	76200	0	00225	DUP181	RDS SOURCE	READ SOURCE 3RD FILE RECORD
	00170	-0	70000	1	00454	CAD	RECORD,1	
	00171	1	77777	1	00174	TXI	DUP190,1,-1	
A	00172	0	00000	0	00000	HTR		FALSE 3RD FILE EOF MARK.
A	00173	0	00000	0	00000	HTR		MACHINE ERROR
	00174	0	70000	1	00454	DUP190	CPY RECORD,1	CPY CKSM INTO RECORD+1
	00175	1	77777	1	00176	TXI	DUP200,1,-1	
	00176	-0	70000	1	00454	DUP200	CAD RECORD,1	
	00177	1	77777	1	00176	TXI	DUP200,1,-1	
A	00200	0	00000	0	00000	HTR		MACHINE ERROR
	00201	0	76100	0	00000	SWITCH	NOP	

	00202	0	76000	0	00006	COM		EOR
	00203	0	36100	0	00455	ACL RECORD+1		
	00204	0	76000	0	00006	COM		
	00205	0	10000	0	00207	TZE DUP210		
	00206	0	00000	0	00450	HTR DUP350		CKSM FAILS READING SOURCE 3RD FILE
	00207	0	76600	0	00333	DUP210 IOD		
	00210	-0	76000	0	00012	RTT		
	00211	0	00000	0	00450	HTR DUP350		RTT ERROR-BST
	00212	-0	63400	1	00217	SXD DUP230,1		
	00213	-0	63400	1	00236	SXD DUP260,1		
	00214	0	76600	0	00221	WRS OBJECT		WRITE OBJECT 3RD FILE RECORD
	00215	0	70000	2	00454	DUP220 CPY RECORD,2		
	00216	1	77777	2	00217	TXI DUP230,2,-1		
	00217	3	00000	2	00215	DUP230 TXH DUP220,2,**		
	00220	0	76600	0	00333	DUP231 IOD		
	00221	-0	76000	0	00012	RTT		TURN OFF RTT TRIGGER
ATD	00222	3	00000	0	00000	TXH		
	00223	0	76400	0	00221	BST OBJECT		
	00224	0	76200	0	00221	RDS OBJECT		READ BACK OBJECT 3RD FILE RECORD
	00225	0	70000	0	00453	DUP240 CPY DUMMY		
	00226	0	02000	0	00231	TRA DUP250		
A	00227	0	00000	0	00000	HTR		MACHINE ERROR
	00230	0	02000	0	00236	TRA DUP260		EOR
	00231	0	50000	4	00454	DUP250 CLA RECORD,4		
	00232	0	34000	0	00453	CAS DUMMY		
	00233	0	00000	0	00452	HTR DUP360		COMP. ERROR ON 3RD FILE
	00234	1	77777	4	00225	TXI DUP240,4,-1		
	00235	0	00000	0	00452	HTR DUP360		ERROR- INCOMPLETE OBJECT RECORD
D	00236	3	00000	4	00454	DUP260 TXH DUP370,4		
	00237	0	76600	0	00333	IOD		
	00240	-0	76000	0	00012	RTT		
	00241	0	00000	0	00452	HTR DUP360		
	00242	-0	50000	0	00460	CAL RECORD+4		
	00243	0	40200	0	00416	SUB NAME		
	00244	-0	10000	0	00165	TNZ DUP180		
	00245	-0	50000	0	00425	CAL TRAN		
	00246	0	60200	0	00201	SLW SWITCH		
	00247	0	02000	0	00165	TRA DUP180		
	00250	0	53400	3	00415	EXIT1 LXA L(0),3		
	00251	0	60000	0	00423	STZ ERASE		
	00252	0	76200	0	00321	RCD		
	00253	-0	70000	0	00417	CAD 9L		
	00254	0	02000	0	00256	TRA CPY9R		
	00255	0	02000	0	00406	TRA EXIT		EOF
	00256	0	70000	0	00420	CPY9R CPY 9R		
	00257	0	50000	0	00417	CLA 9L		
	00260	0	10000	0	00406	TZE EXIT		
	00261	0	76000	0	00006	COM		
	00262	-0	73400	4	00000	PDX 0,4		
	00263	1	00001	4	00264	TXI CPY9R+6,4,1		
	00264	0	50000	0	00417	CLA 9L		
	00265	0	76700	0	00001	ALS 1		
	00266	-0	76000	0	00001	PBT		
	00267	0	02000	0	00310	TRA BINARY CARD		

T	00270	1	77776	4	00272	TXI	CPAREL-2,4,-2	
	00271	-0	63400	4	00276	SXD	TXHREL,4	
	00272	-0	75400	0	00000	PXD		
	00273	0	60000	0	00423	STZ	ERASE	
	00274	-0	70000	2	00460	CPAREL	CAD RELREG,2	
	00275	1	77777	2	00276	TXI	TXHREL,2,-1	
	00276	3	00276	2	00274	TXHREL	TXH CPAREL,2,*	
	00277	0	07400	4	00340	TSX	CHSTST,4	
	00300	0	76600	0	00221	WTB	1	
	00301	-3	00000	1	00304	TXL	TSXREL,1,0	
	00302	0	07400	4	00360	TSX	WRBIN,4	
	00303	0	76600	0	00221	WTB	1	
	00304	0	07400	4	00351	TSXREL	TSX WRREL,4	
	00305	0	60000	0	00421	STZ	9LB,0,STZ	
	00306	0	60000	0	00422	STZ	9RB,0,STZ	
	00307	0	02000	0	00252	TRA	RCD	
T	00310	-0	75400	0	00000	BINARY	PXD	
	00311	-0	70000	1	00506	CPABIN	CAD BINREG,1	
	00312	1	77777	1	00313	TXI	TXHBIN-1,1,-1	
	00313	1	00001	4	00314	TXI	TXHBIN,4,1	
	00314	3	00000	4	00311	TXHBIN	TXH CPABIN,4,0	
	00315	0	07400	4	00340	TSX	CHSTST,4	
	00316	0	50000	0	00417	CLA	9L	
	00317	0	40000	0	00421	ADD	9LB	
	00320	0	60100	0	00421	STO	9LB	
	00321	0	50000	0	00423	CLA	ERASE	
	00322	0	10000	0	00335	TZE	CHER	
	00323	0	50000	0	00420	CLA	9R	
	00324	-0	12000	0	00327	TMI	CHSIGN	
	00325	0	36100	0	00424	ACL	L(1)	
	00326	0	02000	0	00330	TRA	NORM	
	00327	0	76000	0	00003	CHSIGN	SSP	
	00330	0	60200	0	00420	NORM	SLW 9R	
	00331	-0	50000	0	00420	CAL	9R	
	00332	0	36100	0	00422	ACL	9RB	
	00333	0	60200	0	00422	SLW	9RB	
	00334	0	02000	0	00252	TRA	RCD	
	00335	0	50000	0	00424	CHER	CLA L(1)	
	00336	0	60100	0	00423	STO	ERASE	
	00337	0	02000	0	00331	TRA	NORM+1	
	00340	0	36100	0	00417	CHSTST	ACL 9L	
	00341	0	60200	0	00414	SLW	CHS	
	00342	0	76600	0	00333	IOD		
	00343	0	76600	0	00333	IOD		
	00344	0	50000	0	00420	CLA	9R	
	00345	0	34000	0	00414	CAS	CHS	
	00346	0	00000	4	00001	HTR	1,4	CARD READING ERROR
	00347	0	02000	4	00001	TRA	1,4	
	00350	0	02000	0	00346	TRA	WRREL-3	
	00351	0	50000	0	00413	WRREL	CLA L(REL)	
	00352	0	62100	0	00370	STA	CPY	
	00353	-0	63400	2	00372	SXD	CPY+2,2	
	00354	0	70000	0	00417	CPY	9L	
	00355	0	53400	2	00415	LXA	L(0),2	

D	00356	0	70000	0	00420	CPY	9R		
	00357	-3	00000	0	00366	RETURN	TXL	XR,0	
	00360	0	50000	0	00412	WRBIN	CLA	L(BIN)	
	00361	0	62100	0	00370		STA	CPY	
	00362	0	70000	0	00421		CPY	9LB	
	00363	-0	63400	1	00372		SXD	CPY+2,1	
	00364	0	53400	1	00415		LXA	L(0),1	
	00365	0	70000	0	00422		CPY	9RB	
	00366	-0	63400	4	00357	XR	SXD	RETURN,4	
	00367	0	53400	4	00415		LXA	L(0),4	
	00370	0	70000	4	00370	CPY		*,4	
	00371	1	77777	4	00372		TXI	CPY+2,4,-1	
	00372	3	00372	4	00370		TXH	CPY,4,*	
	00373	-0	53400	4	00357		LXD	RETURN,4	
	00374	0	76600	0	00333		IOD		
	00375	0	76600	0	00333		IOD		
	00376	0	02000	4	00001		TRA	1,4	
	00377	0	60200	0	00426	RELBIN	SLW	HOLD	
	00400	0	50000	0	00417		CLA	9L	
	00401	0	76700	0	00001		ALS	1	
	00402	-0	76000	0	00001		PBT		
	00403	0	02000	0	00250		TRA	EXIT1	RECORD IS THE 1ST CONTROL CARD OF GEN. LIB.
	00404	-0	50000	0	00426		CAL	HOLD	
	00405	0	02000	0	00202		TRA	SWITCH+1	RETURN TO READING PERMANENT LIB.
	00406	0	76200	0	00321	EXIT	RCD		PULL IN FNDE2
	00407	0	70000	0	00000		CPY	0	
	00410	0	70000	0	00001		CPY	1	
	00411	0	02000	0	00000		TRA	0	
	00412	0	00000	0	00506	L(BIN)		BINREG	
	00413	0	00000	0	00460	L(REL)		RELREG	
	00414	0	00000	0	00000	CHS			
	00415	0	00000	0	00000	L(0)			
	00416	256747740360				NAME	BCD	1EXP(3)	
	00417	0	00000	0	00000	9L			
	00420	0	00000	0	00000	9R			
	00421	0	00000	0	00000	9LB			
	00422	0	00000	0	00000	9RB			
	00423	0	00000	0	00000	ERASE	HTR	0	
	00424	+377777777777				L(1)	OCT	377777777777	
	00425	0	02000	0	00377	TRAN	TRA	RELBIN	
	00426	0	00000	0	00000	HOLD			
	00427	0	00000	0	00030	DUP280	HTR	DUP000	
	00430	-0	76000	0	00012	DUP290	RTT		
ATD	00431	3	00000	0	00000		TXH		
	00432	0	76400	0	00225	DUP300	BST	SOURCE	
	00433	0	02000	0	00071		TRA	DUP070	
	00434	-0	53400	4	00051	DUP310	LXD	DUP031,4	
	00435	0	02000	0	00121		TRA	DUP121	
	00436	0	00000	0	00437	DUP320	HTR	DUP330	
	00437	-0	76000	0	00012	DUP330	RTT		
ATD	00440	3	00000	0	00000		TXH		
	00441	0	76400	0	00225		BST	SOURCE	
	00442	0	76400	0	00221		BST	OBJECT	
	00443	0	02000	0	00071		TRA	DUP070	

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00444 0 76400 0 00225 DUP340 BST SOURCE
00445 0 76400 0 00225          BST SOURCE
00446 0 76200 0 00225          RDS SOURCE
00447 0 02000 0 00073          TRA DUP071
00450 0 76400 0 00225 DUP350 BST SOURCE
00451 0 02000 0 00162          TRA DUP171
00452 -0 53400 4 00051 DUP360 LXD DUP031,4
00453 0 02000 0 00220          TRA DUP231
00454 0 00000 0 00455 DUP370 HTR DUP380
00455 0 76400 0 00225 DUP380 BST SOURCE
00456 0 76400 0 00221          BST OBJECT
00457 0 02000 0 00162          TRA DUP171
          00460 RELREG BSS 22
          00506 BINREG BSS 1
          60000 STZ     EQU 24576
          00225 SOURCE SYN 149
          00221 OBJECT SYN 145
          00454 RECORD SYN 300
          00453 DUMMY  SYN 299
          00030          END 24

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SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	290	0	0	0	0
LIB	0	0	0	0	0
COL	290	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 299

NUMBER OF SYMBOLS, DEF 85,DEFOP 0,UNDEF 0
 REM TAPE DUPLICATING PROGRAM F2TCVP

TAPE DUPLICATING PROGRAM F2TCVP

				00030		ORG 24	
	00030	0	77200	0	00225	DUP000	REW SOURCE
	00031	0	77200	0	00221		REW OBJECT
	00032	-0	76000	0	00012		RTT
ATD	00033	3	00000	0	00000		TURN OFF RTT TRIGGER
	00034	-0	53400	7	00040		LXD DUP020,7
	00035	0	76200	0	00225		RDS SOURCE
	00036	0	70000	1	00507	DUP010	CPY RECORD+27,1
	00037	1	77777	1	00036		TXI DUP010,1,-1
	00040	0	00033	0	00000	DUP020	HTR 0,0,27
	00041	0	76600	0	00333		IOD
	00042	-0	76000	0	00012		RTT
	00043	0	00000	0	00030		HTR DUP000
	00044	0	76600	0	00221		WRS OBJECT
	00045	0	70000	2	00507	DUP030	CPY RECORD+27,2
	00046	2	00001	2	00045		TIX DUP030,2,1
	00047	0	76600	0	00333		IOD
	00050	-0	76000	0	00012		RTT
	00051	3	00000	0	00156	DUP031	TXH DUP170,0,0
	00052	0	76400	0	00221		BST OBJECT
	00053	0	76200	0	00221		RDS OBJECT
	00054	0	70000	0	00453	DUP040	CPY DUMMY
	00055	0	02000	0	00060		TRA DUP050
A	00056	0	00000	0	00000		HTR
	00057	0	02000	0	00065		TRA DUP060
	00060	0	50000	4	00507	DUP050	CLA RECORD+27,4
	00061	0	34000	0	00453		CAS DUMMY
	00062	0	00000	0	00030		HTR DUP000
	00063	1	77777	4	00054		TXI DUP040,4,-1
	00064	0	00000	0	00030		HTR DUP000
	00065	3	00000	4	00321	DUP060	TXH DUP280,4,0
	00066	0	76600	0	00333		IOD
	00067	-0	76000	0	00012		RTT
	00070	0	00000	0	00030		HTR DUP000
	00071	-0	53400	7	00051	DUP070	LXD DUP031,7
T	00072	-0	75400	0	00000		PXD
	00073	0	76200	0	00225	DUP071	RDS SOURCE
	00074	0	70000	1	00454		CPY RECORD,1
	00075	1	77777	1	00100		TXI DUP090,1,-1
	00076	0	02000	0	00144	DUP080	TRA DUP160
A	00077	0	00000	0	00000		HTR
	00100	-0	70000	1	00454	DUP090	CAD RECORD,1
	00101	1	77777	1	00100		TXI DUP090,1,-1
A	00102	0	00000	0	00000		HTR
	00103	0	76000	0	00006		COM
	00104	0	36100	0	00454		ACL RECORD
	00105	0	76000	0	00006		COM
	00106	0	10000	0	00110		TZE DUP100
	00107	0	00000	0	00322		HTR DUP290
	00110	0	76600	0	00333	DUP100	IOD
	00111	-0	76000	0	00012		RTT
	00112	0	00000	0	00324		HTR DUP300
	00113	-0	63400	1	00120		SXD DUP120,1

CKSM FAILS READING SOURCE 1ST/2ND FILE

	00114	-0	63400	1	00137	SXD	DUP150,1	
	00115	0	76600	0	00221	WRS	OBJECT	WRITE OBJECT 1ST/2ND FILE RECORD
	00116	0	70000	2	00454	DUP110	CPY RECORD,2	
	00117	1	77777	2	00120	TXI	DUP120,2,-1	
	00120	3	00000	2	00116	DUP120	TXH DUP110,2,**	
	00121	0	76600	0	00333	DUP121	IOD	
	00122	-0	76000	0	00012	RTT		TURN OFF RTT TRIGGER
ATD	00123	3	00000	0	00000	TXH		
	00124	0	76400	0	00221	BST	OBJECT	
	00125	0	76200	0	00221	RDS	OBJECT	READ BACK OBJECT 1ST/2ND FILE RECORD
	00126	0	70000	0	00453	DUP130	CPY DUMMY	
	00127	0	02000	0	00132	TRA	DUP140	
A	00130	0	00000	0	00000	HTR		MACHINE ERROR
	00131	0	02000	0	00137	TRA	DUP150	EOR
	00132	0	50000	4	00454	DUP140	CLA RECORD,4	
	00133	0	34000	0	00453	CAS	DUMMY	
	00134	0	00000	0	00326	HTR	DUP310	COMP. ERROR ON 1ST/2ND FILE RECORD
	00135	1	77777	4	00126	TXI	DUP130,4,-1	
	00136	0	00000	0	00326	HTR	DUP310	DITTO
	00137	3	00000	4	00330	DUP150	TXH DUP320,4,**	ERROR-INCOMPLETE OBJECT RECORD
	00140	0	76600	0	00333	IOD		
	00141	-0	76000	0	00012	RTT		
	00142	0	00000	0	00326	HTR	DUP310	RTT ERROR-BST AND TRY AGAIN
	00143	0	02000	0	00071	TRA	DUP070	
	00144	0	76600	0	00333	DUP160	IOD	
	00145	-0	76000	0	00012	RTT		
	00146	0	00000	0	00336	HTR	DUP340	RTT ERROR - BST TWICE ON SOURCE
	00147	0	77000	0	00221	WEF	OBJECT	WRITE 1ST EOF
	00150	0	76600	0	00333	IOD		
	00151	-0	76000	0	00012	RTT		TURN OFF RTT TRIGGER
ATD	00152	3	00000	0	00000	TXH		
	00153	0	50000	0	00051	CLA	DUP031	
	00154	0	62100	0	00076	STA	DUP080	
	00155	0	02000	0	00071	TRA	DUP070	
	00156	0	76600	0	00333	DUP170	IOD	
	00157	-0	76000	0	00012	RTT		
	00160	0	00000	0	00336	HTR	DUP340	RTT ERROR- BST TWICE ON SOURCE
	00161	0	77000	0	00221	WEF	OBJECT	WRITE 2ND EOF
	00162	0	76600	0	00333	DUP171	IOD	
	00163	-0	76000	0	00012	RTT		TURN OFF RTT TRIGGER
ATD	00164	3	00000	0	00000	TXH		
	00165	-0	53400	7	00051	DUP180	LXD DUP031,7	INITIALIZE INDEX REG TO 0
T	00166	-0	75400	0	00000	PXD		CLEAR AC
	00167	0	76200	0	00225	DUP181	RDS SOURCE	READ SOURCE 3RD FILE RECORD
	00170	-0	70000	1	00454	CAD	RECORD,1	
	00171	1	77777	1	00174	TXI	DUP190,1,-1	
	00172	0	02000	0	00242	TRA	DUP270	EOF
A	00173	0	00000	0	00000	HTR		MACHINE ERROR
	00174	0	70000	1	00454	DUP190	CPY RECORD,1	CPY CKSM INTO RECORD+1
	00175	1	77777	1	00176	TXI	DUP200,1,-1	
	00176	-0	70000	1	00454	DUP200	CAD RECORD,1	
	00177	1	77777	1	00176	TXI	DUP200,1,-1	
A	00200	0	00000	0	00000	HTR		MACHINE ERROR
	00201	0	76000	0	00006	COM		EOR

	00202	0	36100	0	00455	ACL	RECORD+1		
	00203	0	76000	0	00006	COM			
	00204	0	10000	0	00206	TZE	DUP210		
	00205	0	00000	0	00342	HTR	DUP350		CKSM FAILS READING SOURCE 3RD FILE
	00206	0	76600	0	00333	DUP210	IOD		
	00207	-0	76000	0	00012	RTT			
	00210	0	00000	0	00342	HTR	DUP350		RTT ERROR-BST
	00211	-0	63400	1	00216	SXD	DUP230,1		
	00212	-0	63400	1	00235	SXD	DUP260,1		
	00213	0	76600	0	00221	WRS	OBJECT		WRITE OBJECT 3RD FILE RECORD
	00214	0	70000	2	00454	DUP220	CPY RECORD,2		
	00215	1	77777	2	00216	TXI	DUP230,2,-1		
	00216	3	00000	2	00214	DUP230	TXH DUP220,2,**		
	00217	0	76600	0	00333	DUP231	IOD		
	00220	-0	76000	0	00012	RTT			TURN OFF RTT TRIGGER
ATD	00221	3	00000	0	00000	TXH			
	00222	0	76400	0	00221	BST	OBJECT		
	00223	0	76200	0	00221	RDS	OBJECT		READ BACK OBJECT 3RD FILE RECORD
	00224	0	70000	0	00453	DUP240	CPY DUMMY		
	00225	0	02000	0	00230	TRA	DUP250		
A	00226	0	00000	0	00000	HTR			MACHINE ERROR
	00227	0	02000	0	00235	TRA	DUP260		EOR
	00230	0	50000	4	00454	DUP250	CLA RECORD,4		
	00231	0	34000	0	00453	CAS	DUMMY		
	00232	0	00000	0	00344	HTR	DUP360		COMP. ERROR ON 3RD FILE
	00233	1	77777	4	00224	TXI	DUP240,4,-1		
	00234	0	00000	0	00344	HTR	DUP360		ERROR- INCOMPLETE OBJECT RECORD
D	00235	3	00000	4	00346	DUP260	TXH DUP370,4		
	00236	0	76600	0	00333	IOD			
	00237	-0	76000	0	00012	RTT			
	00240	0	00000	0	00344	HTR	DUP360		RTT ERROR-BST
	00241	0	02000	0	00165	TRA	DUP180		
	00242	0	76600	0	00333	DUP270	IOD		
	00243	-0	76000	0	00012	RTT			
	00244	0	00000	0	00352	HTR	DUP390		RTT ERROR - BST TWICE
	00245	0	77000	0	00221	WEF	OBJECT		WRITE 3RD FILE EOF
	00246	-0	53400	7	00051	FILE40	LXD DUP031,7		DUPLICATE FILE 4
T	00247	-0	75400	0	00000	PXD			
	00250	0	76200	0	00225	RDS	SOURCE		READ SOURCE FILE 4 RECORD
	00251	0	70000	1	00454	FILE41	CPY RECORD,1		
	00252	1	77777	1	00251	TXI	FILE41,1,-1		
	00253	0	02000	0	00310	TRA	FILE47		EOF
	00254	0	76600	0	00333	IOD			EOR
	00255	-0	76000	0	00012	RTT			
	00256	0	00000	0	00356	HTR	FIL4E1		RTT ERROR - BST AND TRY AGAIN
	00257	-0	63400	1	00264	SXD	FILE43,1		
	00260	-0	63400	1	00303	SXD	FILE46,1		
	00261	0	76600	0	00221	WRS	OBJECT		WRITE OBJECT 4TH FILE RECORD
	00262	0	70000	2	00454	FILE42	CPY RECORD,2		
	00263	1	77777	2	00264	TXI	FILE43,2,-1		
	00264	3	00000	2	00262	FILE43	TXH FILE42,2,**		
	00265	0	76600	0	00333	FILE50	IOD		
	00266	-0	76000	0	00012	RTT			TURN OFF RTT TRIGGER
ATD	00267	3	00000	0	00000	TXH			

	00270	0	76400	0	00221	BST	OBJECT		
	00271	0	76200	0	00221	RDS	OBJECT	READ	BACK OBJECT 4TH FILE RECORD
	00272	0	70000	0	00453	FILE44	CPY DUMMY		
	00273	0	02000	0	00276	TRA	FILE45		
A	00274	0	00000	0	00000	HTR		MACHINE	ERROR
	00275	0	02000	0	00303	TRA	FILE46	EOR	
	00276	0	50000	4	00454	FILE45	CLA RECORD, 4		
	00277	0	34000	0	00453	CAS	DUMMY		
	00300	0	00000	0	00360	HTR	FIL4E2	COMP.	ERROR ON 4TH FILE RECORD
	00301	1	77777	4	00272	TXI	FILE44, 4, -1		
	00302	0	00000	0	00360	HTR	FIL4E2	COMP.	ERROR ON 4TH FILE RECORD
	00303	3	00000	4	00366	FILE46	TXH FIL4E4, 4, **	ERROR	- INCOMPLETE OBJECT RECORD
	00304	0	76600	0	00333	IOD			
	00305	-0	76000	0	00012	RTT			
	00306	0	00000	0	00360	HTR	FIL4E2	RTT	ERROR - BST AND TRY AGAIN
	00307	0	02000	0	00246	TRA	FILE40		
	00310	0	76600	0	00333	FILE47	IOD		
	00311	-0	76000	0	00012	RTT			
	00312	0	00000	0	00362	HTR	FIL4E3	RTT	ERROR - BST TWICE ON SOURCE
	00313	0	77000	0	00221	WEF	OBJECT	WRITE	4TH FILE EOF
	00314	0	77200	0	00225	REW	SOURCE		
	00315	0	77200	0	00221	REW	OBJECT		
	00316	-0	76000	0	00012	RTT			
ATD	00317	3	00000	0	00000	TXH			
A	00320	0	00000	0	00000	HTR		FINAL	STOP.
	00321	0	00000	0	00030	DUP280	HTR DUP000		
	00322	-0	76000	0	00012	DUP290	RTT		
ATD	00323	3	00000	0	00000	TXH			
	00324	0	76400	0	00225	DUP300	BST SOURCE		
	00325	0	02000	0	00071	TRA	DUP070		
	00326	-0	53400	4	00051	DUP310	LXD DUP031, 4		
	00327	0	02000	0	00121	TRA	DUP121		
	00330	0	00000	0	00331	DUP320	HTR DUP330		
	00331	-0	76000	0	00012	DUP330	RTT		
ATD	00332	3	00000	0	00000	TXH			
	00333	0	76400	0	00225	BST	SOURCE		
	00334	0	76400	0	00221	BST	OBJECT		
	00335	0	02000	0	00071	TRA	DUP070		
	00336	0	76400	0	00225	DUP340	BST SOURCE		
	00337	0	76400	0	00225	BST	SOURCE		
	00340	0	76200	0	00225	RDS	SOURCE		
	00341	0	02000	0	00073	TRA	DUP071		
	00342	0	76400	0	00225	DUP350	BST SOURCE		
	00343	0	02000	0	00162	TRA	DUP171		
	00344	-0	53400	4	00051	DUP360	LXD DUP031, 4		
	00345	0	02000	0	00217	TRA	DUP231		
	00346	0	00000	0	00347	DUP370	HTR DUP380		
	00347	0	76400	0	00225	DUP380	BST SOURCE		
	00350	0	76400	0	00221	BST	OBJECT		
	00351	0	02000	0	00162	TRA	DUP171		
	00352	0	76400	0	00225	DUP390	BST SOURCE		
	00353	0	76400	0	00225	BST	SOURCE		
	00354	0	76200	0	00225	RDS	SOURCE		
	00355	0	02000	0	00167	TRA	DUP181		


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00356 0 76400 0 00225 FIL4E1 BST SOURCE
00357 0 02000 0 00246          TRA FILE40
00360 -0 53400 4 00051 FIL4E2 LXD DUP031,4
00361 0 02000 0 00265          TRA FILE50
00362 0 76400 0 00225 FIL4E3 BST SOURCE
00363 0 76400 0 00225          BST SOURCE
00364 0 76200 0 00225          RDS SOURCE
00365 0 02000 0 00250          TRA FILE40+2
00366 0 00000 0 00367 FIL4E4 HTR FIL4E5
00367 -0 76000 0 00012 FIL4E5 RTT
ATD 00370 3 00000 0 00000          TXH
00371 0 76400 0 00225          BST SOURCE
00372 0 76400 0 00221          BST OBJECT
00373 0 02000 0 00246          TRA FILE40
          00225 SOURCE SYN 149
          00221 OBJECT SYN 145
          00454 RECORD SYN 300
          00453 DUMMY SYN 299
          00030          END 24

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SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	235	0	0	0	0
LIB	0	0	0	0	0
COL	235	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 244

NUMBER OF SYMBOLS, DEF 64,DEFOP 0,UNDEF 0
LIST SYN 32575

				77477	LIST	SYN	32575		
				77452	TABL	SYN	32554		
				77453	TOOMCH	SYN	LIST-20		
				00000		ORG	0		
00000	0	53400	1	00000	VR	LXA	0,1		
00001	0	70000	1	00002	SM	CPY	2,1		
00002	1	77777	1	00001		TXI	SM,1,-1		
00003	0	00000	1	00000	TG	HTR	0,1		
00004	-0	76000	0	00007		LTM			
00005	0	76200	0	00321	X	RCD			
00006	0	70000	1	77452	RB	CPY	LIST-21,1		
00007	1	77777	1	00006	LB	TXI	RB,1,-1		
00010	0	00000	0	00000	R				
00011	3	77470	1	00005		TXH	X,1,-200		
00012	-0	53400	1	77715		LXD	M,1		
00013	-0	63400	1	77715		SXD	M,1		
00014	0	60000	0	77453		STZ	LIST-20		
00015	0	76200	0	00321	READ	RCD			
00016	0	70000	0	00000		CPY	VR		
00017	0	02000	0	77500		TRA	TEST		
00020	0	00000	0	00015		HTR	READ		
00021	0	60000	2	00000	END	STZ	0,2		
00022	2	00001	2	00021		TIX	END,2,1		
00023	0	14000	0	00024		TOV	PROG		
00024	0	02000	0	00000	PROG	TRA			
00025	0	00000	0	00000	T				
00026	0	00000	0	00030	S		24		
00027	+00000000	77777			ADDRS	OCT	000000077777		
		77500				ORG	LIST+1		
77500	0	50000	0	00000	TEST	CLA	VR		
77501	0	70000	0	00001		CPY	SM		
77502	-0	12000	0	77626		TMI	PASS1		PREFIX IS 4 IF PROGRAM CARD
77503	0	10000	0	00015		TZE	READ		
77504	0	60000	0	77777		STZ	PRTST		SIGNAL END LOADING SEQUENTIAL PROG. CARDS
77505	-0	53400	1	00000		LXD	VR,1		
77506	-3	00037	1	77516		TXL	REG,1,31		
77507	3	00040	1	00000		TXH	0,1,32		
77510	0	62100	0	00025		STA	T		
77511	0	40000	0	00026		ADD	S		
77512	0	62100	0	00026		STA	S		
77513	0	50000	0	00001		CLA	SM		
77514	0	62100	0	77520		STA	U		
77515	0	02000	0	00015		TRA	READ		
77516	0	62100	0	00010	REG	STA	R		
77517	0	77100	0	00017		ARS	15		
77520	-0	73400	4	00000	U	PDX	0,4		
77521	-3	00001	4	77524		TXL	NR,4,1		
77522	0	07400	2	77611		TSX	LT,2		
77523	0	62100	0	00010		STA	R		
77524	-0	50000	0	00000	NR	CAL	VR		
77525	0	77100	0	00022		ARS	18		
77526	0	40000	0	00010		ADD	R		
77527	0	62100	0	77531		STA	TR		
77530	-0	53400	2	00000		LXD	VR,2		

A

D	77531	-3	00000	2	00000	TR	TXL	0,2	
	77532	0	62100	0	77577		STA	TA	
	77533	0	62100	0	77601		STA	SA	
	77534	0	62100	0	77572		STA	SD	
	77535	0	62100	0	77566		STA	TD	
	77536	0	62100	0	77543	B	STA	CP	
	77537	-0	50000	0	00000		CAL	VR	
	77540	-3	00001	4	77543		TXL	CP,4,1	
	77541	-0	70000	0	00007		CAD	LB	
	77542	-0	70000	0	00006		CAD	RB	
	77543	-0	70000	2	00000	CP	CAD	0,2	
	77544	2	00001	2	77543		TIX	CP,2,1	
	77545	-3	00000	4	77551		TXL	CT,4,0	
	77546	-3	00001	4	00015		TXL	READ,4,1	
	77547	-3	00002	4	77551		TXL	CT,4,2	
	77550	-3	00003	4	77561		TXL	RL,4,3	
	77551	0	60200	0	00000	CT	SLW	VR	
	77552	0	50000	0	00001		CLA	SM	
	77553	0	10000	0	77557		TZE	RT	
	77554	0	40200	0	00000		SUB	VR	
	77555	0	10000	0	77557		TZE	RT	
	77556	0	42000	0	00000		HPR		
	77557	-3	00001	4	00015	RT	TXL	READ,4,1	
	77560	3	00003	4	77642		TXH	SR,4,3	
	77561	0	56000	0	00006	RL	LDQ	RB	
	77562	0	50000	0	00007	DB	CLA	LB	
	77563	-0	76300	0	00001		LGL	1	
	77564	0	60200	0	00007		SLW	LB	
	77565	0	12000	0	77573		TPL	AB	
	77566	0	50000	1	00000	TD	CLA	0,1	
	77567	0	77100	0	00022		ARS	18	
	77570	0	07400	2	77604		TSX	CB,2	
	77571	0	76700	0	00022		ALS	18	
	77572	0	62200	1	00000	SD	STD	0,1	
	77573	0	50000	0	00007	AB	CLA	LB	
	77574	-0	76300	0	00001		LGL	1	
	77575	0	60200	0	00007		SLW	LB	
	77576	0	12000	0	77602		TPL	TV	
	77577	0	50000	1	00000	TA	CLA	0,1	
	77600	0	07400	2	77604		TSX	CB,2	
	77601	0	62100	1	00000	SA	STA	0,1	
	77602	2	00001	1	77562	TV	TIX	DB,1,1	
	77603	0	02000	0	00015		TRA	READ	
	77604	0	62100	0	00010	CB	STA	R	
	77605	0	50000	0	00007		CLA	LB	
	77606	-0	76300	0	00001		LGL	1	
	77607	0	60200	0	00007		SLW	LB	
	77610	-0	12000	0	77612		TMI	LTA	WILL ADDRESS BE MISLEADING
	77611	0	76000	0	00141	LT	SLN	1	NO, CODE IS 10, TURN ON SENSE LIGHT
	77612	0	50200	0	00010	LTA	CLS	R	DOES THIS ADDRESS REFER TO PROGRAM OR DATA
	77613	0	40000	0	00025		ADD	T	
	77614	0	12000	0	77622		TPL	ADDS	
	77615	-0	76000	0	00141		SLT	1	APPEARS TO BE DATA, BUT WHAT WAS CODE
	77616	0	02000	0	77624		TRA	PROGRM	ACTUALLY PROGRAM, ADD CURRENT INCREMENT

77617	0	50000	0	00010	DATA	CLA R	IS DATA REFERENCE, DECREMENT
77620	0	40100	0	77520		ADM U	
77621	0	02000	2	00001		TRA 1,2	
77622	-0	76000	0	00141	ADDS	SLT 1	APPEARS TO BE PROGRAM, WHAT WAS CODE
77623	0	02000	0	77617		TRA DATA	ACTUALLY IS DATA REFERENCE, DECREMENT
77624	0	40200	0	00026	PROGRM	SUB S	
77625	0	02000	2	00001		TRA 1,2	
77626	-0	73400	2	00000	PASS1	PDX 0,2	- WORD COUNT IN DEC. OF AC
77627	-3	00000	2	77770		TXL PASS2,2,0	WORD COUNT IS 0, GO TO 2ND PASS
77630	0	40000	0	77771		ADD TAG	- LENGTH OF SYMB. TABLE IN DEC.
77631	0	40000	0	77640		ADD DECTWO	TO ALLOW SPACE IN TABLE FOR LOC. + LENGTH
77632	0	62200	0	77713		STD STOP	STORE NEW LENGTH IN INST. TO STOP RELOC.
77633	0	40200	0	77715		SUB M	ADDRS. TABLE + 1 - WORD COUNT + LENGTH TAB
77634	0	62200	0	77667		STD OVLP	STORE LOWEST ADDRS. FOUND, TO COMPARE TO S
77635	0	36100	0	00000		ACL VR	
77636	0	40200	0	77640		SUB DECTWO	
77637	0	77100	0	00022		ARS 18	
77640	2	00002	2	77641	DECTWO	TIX TXB,2,2	
77641	0	07400	4	77536	TXB	TSX B,4	FORCE IR 4 FOR CHECK SUM, BUT NOT RELOCATE
77642	-0	53400	1	77771	SR	LXD TAG,1	LOAD OLD TABLE LENGTH
77643	0	50000	0	77777		CLA PRTST	HAS ANOTHER PROGRAM CARD PRECEDED
77644	0	10000	0	77652		TZE ONLY1	THIS ONE
77645	0	50000	0	00007		CLA LB	YES, LB HAS NAME, RB HAS
77646	0	60100	1	77451		STO TABL-1,1	ENTRY POINT
77647	0	50000	0	00006		CLA RB	
77650	0	60100	1	77452		STO TABL,1	
77651	2	00002	1	77704		TIX NCARDS,1,2	SKIP, COMPARISONS ALREADY DONE
77652	0	50000	0	00026	ONLY1	CLA S	STORE LOCATION OF TRA VECTOR IN
77653	0	60000	1	77451		STZ TABL-1,1	
77654	0	60100	1	77452		STO TABL,1	SYMBOL TABLE, S HAS ADDRESS ONLY
77655	-0	53400	4	00007		LXD LB,4	
77656	3	00000	4	77661		TXH CLAS,4,0	
77657	0	50000	0	77776		CLA BTMASK	
77660	0	60100	1	77451		STO TABL-1,1	
77661	0	50000	0	00007	CLAS	CLA LB	STORE LENGTH OF VECTOR IN
77662	0	62200	1	77451		STD TABL-1,1	SYMBOL TABLE
77663	0	62100	0	00025		STA T	STORE LENGTH OF ROUTINE IN T
77664	0	40000	0	00026		ADD S	UPDATE S
77665	0	62100	0	00026		STA S	
77666	0	73400	2	00000		PAX 0,2	COMPARE S TO LOWEST ADDRESS OF TABLE
77667	3	00000	2	00003	OVLP	TXH TG,2,0	TRA TG, TABLE + INST. OVERLAP
77670	0	50000	0	77520		CLA U	FIND LOWEST ADDRESS DATA WILL USE
77671	0	40200	0	00006		SUB RB	
77672	0	73400	4	00000		PAX 0,4	
77673	-0	75400	4	00000		PXD 0,4	
77674	0	77100	0	00022		ARS 18	
77675	0	10000	0	77677		TZE ACLA	
77676	0	34000	0	00027		CAS ADDRS	
77677	0	50000	0	00027	ACLA	CLA ADDRS	
77700	0	76100	0	00000		NOP	
77701	0	60100	0	00027		STO ADDRS	
77702	0	40200	0	00026		SUB S	
77703	-0	12000	0	77453		TMI TOOMCH	TRA TOOMCH, DATA + INSTR. WILL OVERLAP
77704	-0	63400	2	77777	NCARDS	SXD PRTST,2	SIGNAL TO SEQUENTIAL PROGRAM CARDS

77705	0	60000	0	00007		STZ LB		MAY COMPLEMENT IF 1 IS FOUND
77706	1	00002	1	77707		TXI LTT,1,2		TO GET PAST LOC. + LENGTH OF VECTOR
77707	0	50000	1	77452	LTT	CLA TABL,1		
77710	0	07400	2	77604		TSX CB,2		RELOCATE ENTRY POINTS IN TABLE
77711	0	62100	1	77452		STA TABL,1		
77712	1	00002	1	77713		TXI STOP,1,2		
77713	-3	00000	1	77707	STOP	TXL LTT,1,0		
77714	-0	63400	1	77771		SXD TAG,1		SAVE LENGTH OF TABLE
77715	-2	77452	0	00015	M	TNX READ,0,TABL		
77716	-0	50000	2	77453	VEC	CAL TABL+1,2		
77717	-0	10000	0	77723		TNZ G3		
77720	0	50000	2	77454		CLA TABL+2,2		
77721	0	62100	0	00024		STA PROG		
77722	0	02000	0	77770		TRA PASS2		
77723	-0	32000	0	77776	G3	ANA BTMASK		
77724	-0	10000	0	77770		TNZ PASS2		
77725	0	50000	2	77453		CLA TABL+1,2		
77726	-0	73400	4	00000	OLDU	PDX 0,4		LENGTH OF VECTOR
77727	0	77100	0	00022		ARS 18		
77730	0	40000	2	77454		ADD TABL+2,2		PLUS LOACTION OF VECTOR
77731	0	62100	0	77736		STA A		
77732	0	62100	0	77764		STA AA		
77733	0	62100	0	77766		STA AAA		
77734	0	62100	0	77741		STA ABB		
77735	-0	53400	1	77771	NXTVC	LXD TAG,1		LENGTH OF SYMBOL TABLE
77736	-0	50000	4	00000	A	CAL 0,4		
77737	-0	32000	0	77776		ANA BTMASK		
77740	0	10000	0	77767		TZE TIXVEC		
77741	0	50000	4	00000	ABB	CLA 0,4		LOOK FOR FIRST NAME IN TRA VECTOR
77742	0	34000	1	77453	NXTNAM	CAS TABL+1,1		IN SYMBOL TABLE
77743	0	02100	0	77745	TTR	TTR G4		
77744	0	02000	0	77763		TRA FIX		
77745	2	00002	1	77742	G4	TIX NXTNAM,1,2		LOOK AT NEXT NAME IN TABLE
77746	0	60100	0	00006	SAVNAM	STO RB		
77747	-0	53400	1	77753		LXD TWTY,1		
77750	0	50000	1	77477	CMPR	CLA LIST,1		
77751	0	10000	0	77757		TZE STONAM		STORE IN FIRST EMPTY CELL
77752	0	34000	0	00006		CAS RB		IF NEW NAME
77753	-2	00024	0	77755	TWTY	TNX G2,0,20		
77754	0	02000	0	77767		TRA TIXVEC		ALREADY IN TABLE, IGNORE
77755	2	00001	1	77750	G2	TIX CMPR,1,1		
77756	0	00000	0	77770		HTR PASS2		MORE THAN 20 ENTRIES TO BE SEARCHED FOR
77757	0	50000	0	00006	STONAM	CLA RB		
77760	0	60100	1	77477		STO LIST,1		
77761	0	60000	1	77500		STZ LIST+1,1		
77762	0	02000	0	77767		TRA TIXVEC		
77763	0	50000	0	77743	FIX	CLA TTR		
77764	0	60100	4	00000	AA	STO 0,4		
77765	0	50000	1	77454		CLA TABL+2,1		
77766	0	62100	4	00000	AAA	STA 0,4		
77767	2	00001	4	77735	TIXVEC	TIX NXTVC,4,1		GET NEXT NAME IN VECTOR
77770	1	00002	2	77771	PASS2	TXI TAG,2,2		IR 2 IS 0 AT BEGINING
77771	-3	00000	2	77716	TAG	TXL VEC,2,0		
77772	0	50000	0	77453		CLA TABL+1		0 IF ALL NAMES WERE FOUND

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77773 -0 10000 0 77775      TNZ SEARCH
77774  1 00324 2 00021      TXI END,2,212          CLEARS SYMBOL TABLE, LIST + LOADER
77775  0 00000 0 00014 SEARCH HTR READ-1
77776 -3000000000000 BTMASK OCT 7000000000000
77777  0 00000 0 00000      PRTST
A                                     00000      END

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SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	224	0	0	0	0
LIB	0	0	0	0	0
COL	224	0	0	0	0

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NUMBER OF ON-LINE INPUT RECORDS          0
NUMBER OF OFF-LINE PRINT RECORDS        231
NUMBER OF SYMBOLS,  DEF      74,DEFOP    0,UNDEF  0
                        FUL

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			01303	LOCREC	SYN	707	
			00000		ORG	0	
00000	0	53400	1	00000	A	LXA	0,1
							BOOTSTRAP FOR FIRST CARD
00001	0	70000	1	00002	B	CPY	2,1
00002	1	77777	1	00001	C	TXI	1,1,-1
00003	0	00001	0	00000	ONEDEC	HTR	0,0,1
00004	-3	77540	1	00012	RD	TXL	WEF1,1,-160
00005	0	76200	0	00321		RCD	
00006	0	70000	1	05642	CPLODR	CPY	3000-22,1
							COPY REST OF EDITOR INTO UPPER MEMORY
00007	1	77777	1	00006		TXI	CPLODR,1,-1
00010	0	00000	0	00004		HTR	RD
00011	0	02000	0	00004		TRA	RD
00012	0	77000	0	00201	WEF1	WEF	1
00013	-0	76000	0	00012		RTT	
							TURN OFF INDICATOR
00014	0	76100	0	00000		NOP	
00015	0	02000	0	05670		TRA	RCD
00016	0	00000	0	00001	ONE	HTR	1
00017	0	00000	0	00036	REC2	HTR	30
00020	0	00000	0	01303	ERREC	HTR	LOCREC
00021	0	00000	0	00001	RDREC	HTR	1
							REC NUMBER IN DIAG FILE, 1ST WORD OF REC
00022	0	00006	0	00000	RDWDC	HTR	0,0,6
							WORD COUNT OF RECORD READ FROM TAPE 5
00023	0	00000	0	00000	REC	HTR	0
							REC NUMBER FROM NEW REC CARD
00024	0	00000	0	00000	ERAS	HTR	0
00025	0	00006	0	00000	WDC	HTR	0,0,6
00026	0	00000	0	00006	SIX	HTR	6
00027	0	00000	0	00000	TPCONT	HTR	0
				05670		ORG	3000
05670	0	76200	0	00321	RCD	RCD	
05671	0	70000	0	00000		CPY	A
05672	0	02000	0	05674		TRA	TEST
05673	0	00000	0	05670		HTR	RCD
05674	0	70000	0	00001	TEST	CPY	B
05675	0	50000	0	00000		CLA	A
05676	-0	12000	0	05715		TMI	CONCRD
							MINUS IF NEW RECORD CARD
05677	0	62100	0	05705		STA	COPY
							SAVE ADDRESS OF FIRST INSTRUCTION
05700	0	77100	0	00022		ARS	18
05701	0	73400	4	00000		PAX	0,4
							WORD COUNT INTO IR 4
05702	0	40200	0	05705		SUB	COPY
							ADD FIRST ADDRESS
05703	0	62100	0	05705		STA	COPY
							STORE BASE ADDRESS IN COPY LOOP
05704	-0	50000	0	00000		CAL	A
05705	-0	70000	4	00000	COPY	CAD	0,4
05706	2	00001	4	05705		TIX	COPY,4,1
05707	0	60200	0	00002		SLW	C
05710	0	50000	0	00001		CLA	B
05711	0	10000	0	05670		TZE	RCD
05712	0	40200	0	00002		SUB	C
05713	0	10000	0	05670		TZE	RCD
05714	0	00000	0	05670		HTR	RCD
							IGNORE CHECK SUM
05715	0	70000	0	00001	CONCRD	CPY	B
							8L OVER 9R, REST OF CARD IS IGNORED
05716	0	02000	0	06101		TRA	END2
							WILL BE REPLACED BY NOP
05717	0	50000	0	00023		CLA	REC
05720	0	10000	0	05741		TZE	NX
							INIT. 0, OR HAS NUMBER OF DIAG. REC. FROM
05721	0	50000	0	00000		CLA	A
							LAST NEW REC. CARD, REMAINS 0 IF WEF ONLY
05722	-0	10000	0	05741		TNZ	NX
							IS NEW CONTROL CARD WEF, 9L IS -0

05723	0	02000	0	05733	TRA	WTREC1	WRITE CURRENT BUFFER
05724	0	07400	4	05777	ALL	TSX READ,4	YES, END OF CHANGES, HAS ALL OF MASTER
05725	0	50000	0	00021	CLA	RDREC	BEEN WRITTEN, RDREC WILL BE -
05726	-0	12000	0	05735	TMI	END	
05727	0	50000	0	00022	CLA	RDWDC	NO, READ IN NEXT RECORD FROM MASTER
05730	0	62200	0	00025	STD	WDC	
05731	0	50000	0	06013	CLA	RDLOOP	
05732	0	62100	0	06051	STA	WTLOOP	
05733	0	07400	4	06046	WTREC1	TSX WRITE,4	WRITE ON NEW TAPE
05734	0	02000	0	05724	TRA	ALL	AND GET NEXT FROM MASTER
05735	0	77000	0	00201	END	WEF 1	
05736	0	77200	0	00201		REW 1	
05737	0	60000	0	07777		STZ 4095	
05740	0	02000	0	07777		TRA 4095	
05741	0	50000	0	00000	NX	CLA A	IF ONLY THIS PROGRAM AND WEF CARD
05742	0	10000	0	05733	TZE	WTREC1	WRITE ALL OF MASTER WITHOUT CHANGES
05743	0	62100	0	00023	STA	REC	OTHERWISE SAVE NEW RECORD NUMBER
05744	0	50000	0	00021	NX1	CLA RDREC	GET NUMBER OF REC LEFT IN CORES BY READ
05745	-0	12000	0	05761	TMI	NX4	MINUS IF NO MORE RECORDS ON MASTER
05746	0	40200	0	00023	SUB	REC	IS RECORD IN CORE THE ONE CALLED FOR
05747	0	12000	0	05757	TPL	NX3	
05750	0	50000	0	00022	CLA	RDWDC	NOT YET, WRITE CORE RECORD ON NEW TAPE
05751	0	62200	0	00025	STD	WDC	
05752	0	50000	0	06013	CLA	RDLOOP	
05753	0	62100	0	06051	STA	WTLOOP	
05754	0	07400	4	06046	TSX	WRITE,4	
05755	0	07400	4	05777	TSX	READ,4	BRING NEXT RECORD FROM MASTER AND
05756	0	02000	0	05744	TRA	NX1	TEST AGAINST NEW RECORD CARD
05757	0	10000	0	05761	NX3	TZE NX4	IF CORRECT REC, SET WORD COUNT ETC.
05760	0	76400	0	00205	BST	5	READ 1 TOO MANY, SOME REC DELETED
05761	0	50000	0	00001	NX4	CLA B	
05762	0	40000	0	00016	ADD	ONE	ADD 1 TO LAST ADDRESS FOR WRITE LOOP
05763	0	62100	0	06051	STA	WTLOOP	
05764	0	62100	0	00024	STA	ERAS	
05765	0	77100	0	00022	ARS	18	
05766	0	40200	0	00024	SUB	ERAS	IF LAST ADDRESS NOT GREATER THAN
05767	0	10000	0	05774	TZE	DELETE	FIRST ADDRESS DELETE THIS REC WHEN COPYING
05770	0	12000	0	05774	TPL	DELETE	MASTER
05771	0	76700	0	00022	ALS	18	
05772	0	62200	0	00025	STD	WDC	
05773	0	02000	0	05670	TRA	RCD	
05774	0	60000	0	00022	DELETE	STZ RDWDC	
05775	0	60000	0	00025		STZ WDC	
05776	0	02000	0	05670		TRA RCD	
05777	0	50000	0	00021	READ	CLA RDREC	
06000	-0	12000	0	06033	TMI	OUT	HAS END OF FILE BEEN REACHED
06001	0	40200	0	00016	SUB	ONE	IF 1ST RECORD STILL IN CORE, SET
06002	-0	10000	0	06005	TNZ	RD2	ADDRESS TO READ IN 2ND RECORD
06003	0	50000	0	00017	CLA	REC2	
06004	0	02000	0	06006	TRA	RD3	
06005	0	50000	0	00020	RD2	CLA ERREC	3RD, 4TH ETC, ADDRESS IS LOCREC IN REC 2
06006	0	62100	0	06013	RD3	STA RDLOOP	
06007	0	62100	0	06031		STA SETREC	
06010	0	60000	0	00027		STZ TPCONT	

06011	-0	53400	2	00016	RDAGIN	LXD	ONE,2		IE., ZERO
06012	0	76200	0	00225		RTB	5		
06013	0	70000	2	00037	RDLOOP	CPY	31,2		
06014	1	77777	2	06013		TXI	RDLOOP,2,-1		
06015	0	02000	0	06034		TRA	SETEOF		
06016	0	76600	0	00333		IOD			
06017	-0	76000	0	00012		RTT			
06020	0	02000	0	06037		TRA	BSTP5		
06021	-0	75400	2	00000	FXWDC	PXD	0,2		
06022	0	76000	0	00006		COM			
06023	0	40000	0	00003		ADD	ONEDEC		RECOMPLIMENT WORD COUNT
06024	0	62200	0	00022		STD	RDWDC		AND FIND BASE ADDRESS
06025	0	77100	0	00022		ARS	18		
06026	0	76000	0	00003		SSP			
06027	0	40000	0	06013		ADD	RDLOOP		ADD WORD COUNT TO FIRST ADDRESS
06030	0	62100	0	06013		STA	RDLOOP		
06031	0	50000	0	00000	SETREC	CLA	0		FIRST WORD OF RECORD HAS RECORD NUMBER
06032	0	62100	0	00021		STA	RDREC		
06033	0	02000	4	00001	OUT	TRA	1,4		
06034	-0	76000	0	00003	SETEOF	SSM			SET RDREC - IF END OF MASTER FILE
06035	0	60100	0	00021		STO	RDREC		
06036	0	02000	4	00001		TRA	1,4		
06037	-0	53400	1	00027	BSTP5	LXD	TPCONT,1		
06040	-3	00017	1	06042		TXL	TRABST,1,15		
06041	0	00000	0	06021		HTR	FXWDC		PRESS START TO ACCEPT
06042	0	76400	0	00205	TRABST	BST	5		
06043	1	00001	1	06044		TXI	MM,1,1		
06044	-0	63400	1	00027	MM	SXD	TPCONT,1		
06045	0	02000	0	06011		TRA	RDAGIN		
06046	-0	53400	2	00025	WRITE	LXD	WDC,2		WORD COUNT ZERO TO DELETE RECORD
06047	-3	00000	2	06053		TXL	WTOUT,2,0		
06050	0	76600	0	00221		WTB	1		
06051	0	70000	2	00037	WTLOOP	CPY	31,2		
06052	2	00001	2	06051		TIX	WTLOOP,2,1		
06053	0	02000	4	00001	WTOUT	TRA	1,4		
06054	0	76200	0	00225	ISDIAG	RTB	5		SPACE OVER LIBRARY
06055	0	70000	0	06101		CPY	RTB1+1		
06056	0	02000	0	06054		TRA	ISDIAG		
06057	0	76200	0	00225		RTB	5		
06060	0	53400	2	00026		LXA	SIX,2		IF MASTER FILE DOES NOT HAVE DIAG.,
06061	0	70000	2	00037	ISCP	CPY	31,2		SET READ TO IGNORE, OTHERWISE
06062	2	00001	2	06061		TIX	ISCP,2,1		FIRST RECORD WILL BE IN CORES
06063	0	76100	0	00000	NOP	NOP			
06064	0	50000	0	00031		CLA	25		
06065	0	40200	0	06077		SUB	TEST1		
06066	-0	10000	0	06072		TNZ	TST1		
06067	0	50000	0	00032		CLA	26		
06070	0	40200	0	06100		SUB	RTB1		
06071	0	10000	0	06074		TZE	TST2		
06072	-0	76000	0	00003	TST1	SSM			
06073	0	60100	0	00021		STO	RDREC		
06074	0	50000	0	06063	TST2	CLA	NOP		
06075	0	60100	0	05716		STO	CONCRD+1		
06076	0	02000	0	05717		TRA	CONCRD+2		

TD 06077 3 00000 0 00001 TEST1 TXH 1
06100 0 76200 0 00221 RTB1 RTB 1
06101 0 76200 0 00225 END2 RTB 5
06102 0 02000 0 06054 TRA ISDIAG
A 00000 END 44

SPACE OVER END FILE GAP AT END FILE 2

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	168	0	0	0	0
LIB	0	0	0	0	0
COL	168	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 176

NUMBER OF SYMBOLS, DEF 53,DEFOP 0,UNDEF 0
ORG 1 FORCE NEW RECORD

				00001	ORG 1	FORCE NEW RECORD
	00001	0	00031	0	00036	HTR X-1,0,25
				00031	ORG 25	CARD FOR DE
TD	00031	3	00000	0	00001	TXH 1
	00032	0	76200	0	00221	RTB 1
	00033	-0	53400	1	00036	LXD ZERO,1
	00034	0	70000	1	00036	CPY 30,1
	00035	1	77777	1	00034	TXI CP,1,-1
	00036	0	00000	0	00000	ZERO HTR 0,
	00037	0	00000	0	00000	X
A				00000		END

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	11	0	0	0	0
LIB	0	0	0	0	0
COL	11	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 20

NUMBER OF SYMBOLS, DEF 3,DEFOP 0,UNDEF 0
 ORG 2 FORCE NEW RECORD

			00002		ORG 2	FORCE NEW RECORD
				E	HED	
	00002	0	00036	0	03630	HTR XZY-1,0,30
					00036	CARD FOR DE
TD	00036	3	00000	0	00002	ORG 30
					77777	TXH 2
				LIST	SYN 32767	MAIN RECORD
	00037	0	53400	1	01227	LXA ADDMSK,1
	00040	-0	75400	1	00000	PXD 0,1
	00041	0	40000	0	01233	ADD DECONE
	00042	0	60100	0	01234	STO PREFX1
	00043	-0	75400	4	00000	PXD 0,4
	00044	0	40200	0	01234	SUB PREFX1
	00045	0	62200	0	01235	STD ERWORD
	00046	0	76600	0	00361	WPR
	00047	0	76000	0	00367	SPR 7
	00050	0	07400	4	00740	TSX PRINT,4
	00051	0	00172	0	00155	HTR PR1,0,PR1+13
	00052	0	76600	0	00361	WPR
	00053	0	76600	0	00361	WPR
	00054	0	76600	0	00361	WPR
	00055	0	76600	0	00361	WPR
	00056	0	76100	0	00000	NOP
	00057	0	76100	0	00000	NOP
	00060	0	50000	0	00002	CLA 2
	00061	-0	32000	0	01227	ANA ADDMSK
	00062	0	60100	0	01236	STO RECORD
	00063	0	40200	0	00220	SUB TW13
	00064	-0	10000	0	00070	TNZ NOTNA
	00065	0	07400	4	00740	TSX PRINT,4
	00066	0	00220	0	00205	HTR ISNONA,0,ISNONA+11
	00067	0	02000	0	00117	TRA SEARCH-1
	00070	0	50000	0	01236	CLA RECORD
	00071	0	07400	4	00676	TSX BINDEC,4
	00072	0	07400	4	00602	TSX LAJUST,4
	00073	0	60200	0	00204	SLW FOREC
	00074	0	07400	4	00740	TSX PRINT,4
	00075	0	00205	0	00172	HTR PR2,0,FOREC+1
	00076	0	50000	0	01235	CLA ERWORD
	00077	0	77100	0	00022	ARS 18
	00100	0	07400	4	00730	TSX OCTBCD,4
	00101	0	60200	0	01257	SLW ERAS
	00102	-0	50000	0	01255	CAL LOC+3
	00103	0	77100	0	00030	ARS 24
	00104	0	56000	0	01257	LDQ ERAS
	00105	-0	76300	0	00030	LGL 24
	00106	0	60200	0	01255	SLW LOC+3
	00107	-0	76300	0	00014	LGL 12
	00110	0	56000	0	00717	LDQ BLANKS
	00111	-0	76300	0	00030	LGL 24
	00112	0	60200	0	01256	SLW LOC+4
	00113	0	07400	4	00740	TSX PRINT,4
	00114	0	01257	0	01252	HTR LOC,0,LOC+5
	00115	0	76600	0	00361	WPR
	00116	0	76600	0	00361	WPR

00117	-0	53400	4	02346	LXD	ERLIST,4	
00120	0	50000	4	02346	SEARCH	CLA	ERLIST,4 ASSORTED TSX IN DEC FIELD
00121	0	34000	0	01235	CAS	ERWORD	OF FIRST WORD OF LIST
00122	0	02000	0	00124	TRA	TIXA	
00123	0	02000	0	00130	TRA	HAVE	
00124	2	00002	4	00120	TIXA	TIX	SEARCH,4,2
00125	0	02000	0	00137	TRA	LXDA	UNIDENTIFYABLE, BRING IN RECORD ZERO
00126	0	76100	0	00000	NOP		
00127	0	76100	0	00000	NOP		
00130	0	50000	4	02347	HAVE	CLA	ERLIST+1,4 DUPLICATE STOPS SHOULD BE MARKED MINUS
00131	-0	12000	0	00145		TMI	DUP SECOND WORD HAS NUMBER OF RECORDS
00132	-0	73400	4	00000	PD	PDX	0,4 TO BE SPACED OVER BEFORE READING
00133	2	00003	4	00134		TIX	RTBA,4,3 REDUCE NUMBER IF NOT REC 1, NOW SAME AS
00134	0	76200	0	00221	RTBA	RTB	1 EDITOR RECORD NUMBER
00135	0	70000	0	00031		CPY	25
00136	2	00001	4	00134		TIX	RTBA,4,1
00137	-0	53400	4	01232	LXDA	LXD	ZERO,4
00140	0	76200	0	00221		RTB	1
00141	0	70000	4	01303	CPYREC	CPY	LOCREC,4 END RECORD SKIP WILL CONTROL
00142	1	77777	4	00141		TXI	CPYREC,4,-1 COPY AND TRANSFER
00143	0	76100	0	00000	NOP	NOP	
00144	0	02000	0	01304		TRA	LOCREC+1 SKIP RECORD NUMBER
00145	-0	32000	0	01227	DUP	ANA	ADDMSK 2ND WORD WILL HAVE CORRECT ERROR RECORD
00146	0	34000	0	01236		CAS	RECORD NUMBER IN ADDRESS, FOR CORRECT FORTRAN
00147	0	02000	0	00151		TRA	NOTREC RECORD NUMBER IN THE CASE OF
00150	0	02000	0	00153		TRA	HAVREC DUPLICATE STOPS.
00151	2	00002	4	00120	NOTREC	TIX	SEARCH,4,2
00152	0	02000	0	00137		TRA	LXDA IF END OF LIST, PRINT REC. ZERO
00153	0	50000	4	02347	HAVREC	CLA	ERLIST+1,4
00154	0	02000	0	00132		TRA	PD
00155	606060606060				PR1	BCD	7
00156	606060606060						
00157	606060606060						
00160	606060606060						
00161	606060606060						
00162	606060606060						
00163	606060606060						
00164	264651635121					BCD	6FORTRAN DIAGNOSTIC PROGRAM RESULTS
00165	456024312127						
00166	454662633123						
00167	604751462751						
00170	214460512562						
00171	644363626060						
00172	606060606060				PR2	BCD	2
00173	606060606060						
00174	255151465160					BCD	8ERROR WHILE COMPILING IN FORTRAN RECORD NUMBER
00175	663031432560						
00176	234644473143						
00177	314527603145						
00200	602646516351						
00201	214560512523						
00202	465124604564						
00203	442225516060						
A 00204	0	00000	0	00000	FOREC	HTR	

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00205 606060606060 ISNONA BCD 2
00206 606060606060
00207 255151465160 BCD 9ERROR FOUND DURING SCAN OF TABLES COMPILED BY 1 PRIME.
00210 264664452460
00211 246451314527
00212 606223214560
00213 462660632122
00214 432562602346
00215 444731432524
00216 602270600160
00217 475131442533
00220 0 00000 0 00325 TW13 HTR 213
00221 -0 53400 2 00000 DIGRTN LXN 0,2 RESET MEMORY
00222 0 50000 0 00314 CLA CPDR LOOP AT LOC. 0,1 AND 2 WILL
00223 0 60100 0 00000 STO 0 COPY 2045 WORDS FROM DRUM 4
00224 0 50000 0 00315 CLA TIXO BEGINNING AT LOC. 3
00225 0 60100 0 00001 STO 1
00226 0 50000 0 00316 CLA HTR4
00227 0 60100 0 00002 STO 2
00230 0 50000 0 00674 RESTRT CLA PRTEST SHOULD FOOTNOTE BE PRINTED
00231 0 10000 0 00235 TZE WPREND
00232 0 76600 0 00361 WPR YES
00233 0 07400 4 00740 TSX PRINT,4
00234 0 00505 0 00463 HTR NEARBT,0,NEARBT+18
00235 0 76600 0 00361 WPREND WPR
00236 0 76600 0 00361 WPR
00237 0 76600 0 00361 WPR
00240 0 76600 0 00361 WPR
00241 0 77200 0 00202 REW 2 REWIND SO PROBLEM CAN BE RE-RUN
00242 0 77200 0 00201 REW 1
00243 0 76100 0 00000 NOP J CANNON
00244 0 76100 0 00000 NOP
00245 0 76000 0 00166 SIXTST SWT 6 SHOULD CHOICE TO NEXT BATCH BE PRINTED
00246 0 02000 0 00251 TRA SPACE1 NO
00247 0 50000 0 00304 CLA PRALT SURE
00250 0 60100 0 00261 STO PRNT1
00251 0 76200 0 00221 SPACE1 RTB 1 SPACE OVER FIRST FILE IN SYSTEM
00252 0 70000 0 01257 CPY ERAS
00253 0 02000 0 00251 TRA SPACE1
00254 0 76200 0 00221 SKIP RTB 1 OVER REC 1, FILE 2, OUR TRA 4, THEIR WHO KNOWS
00255 0 76100 0 00000 NOP
00256 0 07400 4 00740 TSX PRINT,4
00257 0 00360 0 00320 HTR END,0,END+32
00260 0 07400 4 00740 TSX PRINT,4
00261 0 00376 0 00360 PRNT1 HTR END1,0,END1+14
00262 0 76600 0 00361 WPR
00263 +076000000140 OCT 076000000140 TURN OFF ALL SENSE LIGHTS
00264 0 76600 0 00361 WPR
00265 0 76000 0 00362 SPR 2 EJECT SHEET
00266 0 76600 0 00333 DONE IOD
00267 -0 76000 0 00012 RTT
00270 0 76100 0 00000 NOP
00271 0 02000 0 03534 TRA ENDPCH
00272 0 50000 0 00317 SPEND CLA BST1 BACKSPACE OVER FILE MARK

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00273	0	60100	0	00254	STO SKIP	AND OVER SOURCE ERROR RECORD
00274	0	60100	0	00255	STO SKIP+1	
00275	0	76000	0	00166	SWT 6	
00276	0	02000	0	00305	TRA NDWP	
00277	0	50000	0	00311	CLA PRNT2	
00300	0	60100	0	00261	STO PRNT1	
00301	0	50000	0	00143	FX6TST CLA NOP	
00302	0	60100	0	00245	STO SIXTST	
00303	0	02000	0	00221	TRA DIGRTN	
00304	0	03631	0	03540	HTR MACEN,0,MACEN+57	
00305	0	50000	0	00143	NDWP CLA NOP	DO NOT PRINT A LAST COMMENT
00306	0	60100	0	00260	STO PRNT1-1	
00307	0	60100	0	00261	STO PRNT1	
00310	0	02000	0	00301	TRA FX6TST	
00311	0	00417	0	00376	PRNT2 HTR END2,0,END2+17	MAY CONTINUE NEXT BATCH
00312	0	00463	0	00417	PRNT4 HTR END3,0,END3+36	
00313	0	03775	0	00003	DRUM HTR 3,0,2045	
00314	0	70000	4	04000	CPDR CPY 2048,4	
00315	2	00001	4	00000	TIXO TIX 0,4,1	
00316	0	02000	0	00004	HTR4 TRA 4	
00317	0	76400	0	00201	BST1 BST 1	
00320	606060606060				END BCD 7	
00321	606060606060					
00322	606060606060					
00323	606060606060					
00324	606060606060					
00325	606060606060					
00326	606060606060					
00327	254524604626				BCD END OF DIAGNOSTIC PROGRAM RESULTS.	
00330	602431212745					
00331	466263312360					
00332	475146275121					
00333	446051256264					
00334	436362336060					
00335	606060606060					
00336	606060606060					
00337	606060606060					
00340	606060606060					
00341	606060606060				BCD	
00342	606060606060					
00343	606060606060					
00344	606060606060					
00345	606060606060					
00346	606060606060					
00347	606060606060					
00350	606060606060					
00351	606060606060					
00352	606060606060					
00353	475146275121				BCD 5PROGRAM CANNOT BE CONTINUED.	
00354	446023214545					
00355	466360222560					
00356	234645633145					
00357	642524336060					
00360	606060606060	END1			BCD 7	

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00361 606060606060
00362 606060606060
00363 606060606060
00364 606060606060
00365 606060606060
00366 606060606060
00367 475125626260      BCD 7PRESS START IF YOU WISH TO RE-RUN PROBLEM.
00370 626321516360
00371 312660704664
00372 606631623060
00373 634660512540
00374 516445604751
00375 462243254433
00376 606060606060      END2   BCD 7
00377 606060606060
00400 606060606060
00401 606060606060
00402 606060606060
00403 606060606060
00404 606060606060
00405 633025606270      BCD   THE SYSTEM WILL CONTINUE BATCH COMPILING
00406 626325446066
00407 314343602346
00410 456331456425
00411 602221632330
00412 602346444731
00413 433145276060
00414 606060606060
00415 606060606060
00416 606060606060
00417 606060606060      END3   BCD 7
00420 606060606060
00421 606060606060
00422 606060606060
00423 606060606060
00424 606060606060
00425 606060606060
00426 475125626260      BCD   PRESS START IF YOU WISH TO CONTINUE BATCH COMPILING, OR KEY
00427 626321516360
00430 312660704664
00431 606631623060
00432 634660234645
00433 633145642560
00434 222163233060
00435 234644473143
00436 314527736046
00437 516042257060
00440 314560000706      BCD   IN 076000 000141,
00441 000000600000
00442 000104017360
00443 606060606060
00444 606060606060
00445 606060606060
00446 606060606060
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00447 606060606060
 00450 606060606060
 00451 606060606060
 00452 214524604751
 00453 256262606263
 00454 215163603126
 00455 607046646066
 00456 316230606346
 00457 605125405164
 00460 456047514622
 00461 432544336060
 00462 606060606060
 00463 606060606060
 00464 546063303162
 00465 606263216325
 00466 442545636030
 00467 216260454660
 00470 264651446443
 00471 216045644422
 00472 255133606063
 00473 302560264651
 00474 446443216045
 00475 644422255160
 00476 216262312745
 00477 252460216045
 00500 253127302246
 00501 513145276062
 00502 632163254425
 00503 456360316260
 00504 273165254533
 00505 -0 63400 4 00531
 00506 0 50000 0 00527
 00507 0 77100 0 00022
 00510 -0 32000 0 01227
 00511 0 07400 4 00613
 00512 0 60200 0 00536
 00513 0 50000 0 00527
 00514 -0 32000 0 01227
 00515 0 07400 4 00613
 00516 0 07400 4 00602
 00517 0 60200 0 00540
 00520 -0 50000 0 00530
 00521 0 07400 4 00543
 00522 0 60200 0 00542
 00523 0 07400 4 00740
 00524 0 00543 0 00532
 00525 -0 53400 4 00531
 00526 0 02000 4 00001
 00527 0 00000 0 00000
 00530 0 00000 0 00000
 00531 0 00000 0 00000
 00532 606060606060
 00533 606060606060
 00534 606060606060

BCD 9AND PRESS START IF YOU WISH TO RE-RUN PROBLEM.

NEARBT BCD 1
 BCD * THIS STATEMENT HAS NO FORMULA NUMBER. THE FORMULA NUMBER

BCD 7ASSIGNED A NEIGHBORING STATEMENT IS GIVEN.

FX4PR SXD IR4,4 THIS ROUTINE PRINTS ALPH DO BETA FOR I
 CLA ALFBET GETS ALPHA, OR NEAREST PRECEDING ALPHA,
 ARS 18 AND BETA FROM WORD ALFBET, SYMBOL
 ANA ADDMSK FROM WORD SYM
 TSX EXBETA,4
 SLW DOALF BLANKS ARE TO RIGHT OF WORD
 CLA ALFBET
 ANA ADDMSK
 TSX EXBETA,4
 TSX LAJUST,4 ADJUST FOR TRAILING BLANKS
 SLW DOBET
 CAL SYM
 TSX ZEROUT,4 UNPACK WORD
 SLW DOSYM
 TSX PRINT,4
 HTR PRDO,0,PRDO+9
 LXD IR4,4
 TRA 1,4
 ALFBET HTR
 SYM HTR
 IR4 HTR
 PRDO BCD 4

A
 A
 A

	00535	606060606060				
A	00536	0 00000 0 00000	DOALF	HTR		
	00537	606024466060		BCD 1 DO		
A	00540	0 00000 0 00000	DOBET	HTR		
	00541	602646516060		BCD 1 FOR		
A	00542	0 00000 0 00000	DOSYM	HTR		
	00543	-0 63400 4 00563	ZEROUT	SXD ZER6,4	ENTER CAL.BCD WORD WHICH FORTRAN HAS STORED	
	00544	-0 53400 4 00564		LXD SIX,4	LEFT ADJUSTED, FOLLOWED BY 1 BLANK AND	
	00545	0 60200 0 00562	ZER1	SLW ZER5	PADDLED OUT WITH ZEROS	
	00546	-0 32000 0 01231		ANA CHMASK	IE., OCT 000000000077	
	00547	-0 10000 0 00553		TNZ ZER2		
	00550	-0 50000 0 00562		CAL ZER5	LAST CHARACTER WAS ZERO	
	00551	0 77100 0 00006		ARS 6	SHIFT OUT OF AC	
	00552	2 00001 4 00545		TIX ZER1,4,1		
	00553	-0 50000 0 00562	ZER2	CAL ZER5		
	00554	0 56000 0 00717		LDQ BLANKS		
	00555	3 00005 4 00560	ZER3	TXH ZER4,4,5		
	00556	-0 76300 0 00006		LGL 6	NOW SHIFT IN A BLANK FOR EVERY 0 TAKEN OUT	
	00557	1 00001 4 00555		TXI ZER3,4,1		
	00560	-0 53400 4 00563	ZER4	LXD ZER6,4	LEAVE, BCD AND BLANKS, MUST BE SAVED	
	00561	0 02000 4 00001		TRA 1,4	WITH SLW	
A	00562	0 00000 0 00000	ZER5	HTR		
A	00563	0 00000 0 00000	ZER6	HTR		
	00564	0 00006 0 00000	SIX	HTR 0,0,6		
	00565	0 60200 0 00577	RAJUST	SLW RAJ1	ENTER, CAL BCD, LEFT ADJUSTED PLUS BLANKS	
	00566	-0 32000 0 01231		ANA CHMASK	IE., OCT 000000000077	
	00567	0 40200 0 00600		SUB 01BLNK		
	00570	-0 10000 0 00575		TNZ RAJ2		
	00571	-0 50000 0 00577		CAL RAJ1	YES, MOVE WORD AND ADD BLANK AT FRONT	
	00572	0 77100 0 00006		ARS 6	IS LAST CHARACTER A BLANK	
	00573	0 36100 0 00601		ACL RBLNK		
	00574	0 02000 0 00565		TRA RAJUST		
	00575	-0 50000 0 00577	RAJ2	CAL RAJ1	LEAVES AC WITH LEADING BLANKS, MUST BE	
	00576	0 02000 4 00001		TRA 1,4	SAVED WITH SLW	
A	00577	0 00000 0 00000	RAJ1	HTR		
	00600	000000000060	01BLNK	BCD 100000		
	00601	600000000000	RBLNK	BCD 1 00000		
	00602	0 56000 0 00612	LAJUST	LDQ BLNKO	ENTER, CAL BCD NUMBER, LEADING BLANKS	
	00603	0 14000 0 00604	LAJ1	TOV LAJ2	TURN OFF INDICATOR	
	00604	-0 76300 0 00001	LAJ2	LGL 1	NUMBER HAS ZERO ZONE, BLANK WILL TURN	
	00605	-0 14000 0 00610		TNO LAJ3	ON INDICATOR	
	00606	-0 76300 0 00005		LGL 5		
	00607	0 02000 0 00603		TRA LAJ1		
	00610	0 77100 0 00001	LAJ3	ARS 1	FIRST BIT FROM Q BACK TO P	
	00611	0 02000 4 00001		TRA 1,4	EXIT TRAILING BLANKS,MUST BE SAVED WITH SLW	
	00612	606060606000	BLNKO	BCD 1 0	WILL STOP ROUTINE IF WORD IS ALL BLANKS.	
					ENTER WITH INTERNAL FORMULA NUMBER IN ADDRESS OF AC	
					EXIT WITH EXTERNAL FORMULA NUMBER, OR NEAREST PRECEDING	
					EXTERNAL FORMULA NUMBER, IN BCD IN LOGICAL PORTION	
					OF AC. THIS MUST BE SAVED WITH SLW. NUMBER WILL	
					BE FOLLOWED BY ASTERISK WHEN EXACT MATCH IS NOT FOUND	
		77013	TEIFIN	SYN	LIST-500	
	00613	0 76700 0 00022	EXBETA	ALS	18	
	00614	0 62200 0 00675	STD	BETAEX		

00615	-0	63400	4	00671	SXD	XB10,4	
00616	-0	53400	4	00640	LXD	INCOR,4	
00617	3	00000	4	00644	TXH	XB4,4,0	IF TEIFNO IN MEMORY, SKIP READ IN
00620	0	77200	0	00202	REW	2	
00621	0	53400	4	00671	LXA	XB10,4	4 FILES TO BE SPACED OVER
00622	0	76200	0	00222	XB1	RTB 2	
00623	0	70000	0	77012	CPY	TEIFIN-1	
00624	0	02000	0	00622	TRA	XB1	SPACE OVER RECORDS UNTIL END FILE SKIP
00625	2	00001	4	00622	TIX	XB1,4,1	
00626	0	53400	4	00640	LXA	INCOR,4	
00627	0	76200	0	00222	XB2	RTB 2	
00630	0	70000	0	77012	CPY	TEIFIN-1	
00631	2	00001	4	00627	TIX	XB2,4,1	
00632	-0	53400	4	01232	LXD	ZERO,4	
00633	0	76200	0	00222	RTB	2	
00634	0	70000	0	77012	CPY	TEIFIN-1	IGNORE IDENTIFICATION AND WORD COUNT
00635	0	70000	0	77012	CPY	TEIFIN-1	
00636	0	70000	4	77012	XB3	CPY TEIFIN-1,4	READ IN TEIFNO UNTIL END OF RECORD SKIP
00637	1	00001	4	00636	TXI	XB3,4,1	
00640	0	00000	0	00004	INCOR	HTR 4	
00641	3	00000	4	00643	TXH	XB4A,4,0	
00642	-0	53400	4	01233	LXD	DECONE,4	SET READ IN TO FAIL IF NO TEIFNO ENTRIES
00643	-0	63400	4	00640	XB4A	SXD INCOR,4	
00644	0	50000	4	77013	XB4	CLA TEIFIN,4	COMPARE INTERNAL FORMULA NUMBERS
00645	-0	32000	0	01230	ANA	DECMSK	
00646	0	34000	0	00675	CAS	BETAEX	TO THE ONE BEING ASKED FOR
00647	0	02000	0	00665	TRA	XB8	
00650	0	02000	0	00667	TRA	XB9	
00651	0	50000	0	01227	XB5	CLA ADDMSK	SET TEST TO ADD ASTERISK TO END OF NUMBER
00652	0	60100	0	00674	STO	PRTEST	SET END OF DIAG TO PRINT FOOTNOTE
00653	0	60100	0	00672	STO	XB11	
00654	0	50000	4	77013	XB6	CLA TEIFIN,4	GET EXTERNAL FORMULA NUMBER
00655	-0	32000	0	01227	ANA	ADDMSK	
00656	0	07400	4	00676	TSX	BINDEC,4	CONVERT TO BCD DECIMAL
00657	0	53400	4	00672	LXA	XB11,4	
00660	0	56000	0	00673	LDQ	ASTRSK	
00661	-3	00000	4	00663	TXL	XB7,4,0	SHOULD ASTERISK BE ADDED
00662	-0	76300	0	00006	LGL	6	YES
00663	-0	53400	4	00671	XB7	LXD XB10,4	
00664	0	02000	4	00001	TRA	1,4	
00665	2	00001	4	00644	XB8	TIX XB4,4,1	COMPARE TO NEXT, OR
00666	0	02000	0	00651	TRA	XB5	PRINT FIRST ENTRY WITH ASTERISK
00667	0	60000	0	00672	XB9	STZ XB11	SET TEST TO PRINT NUMBER ONLY
00670	0	02000	0	00654	TRA	XB6	
00671	0	00000	0	00004	XB10	HTR 4,0,0	
00672	0	00000	0	00000	XB11	HTR 0	
00673	546060606060				ASTRSK	BCD 1*	
00674	0	00000	0	00000	PRTEST	HTR 0	
00675	0	00000	0	00000	BETAEX	HTR 0	
							ENTER, BINARY NUMBER IN ADDRESS AC. EXIT DECIMAL NUMBER IN BCD IN LOGICAL PORTION OF AC. MUST BE SAVED WITH SLW
00676	0	76000	0	00003	BINDEC	SSP	JUST IN CASE
00677	0	76500	0	00043	LRS	35	

00700	-0	63400	4	00720	SXD	BINA,4	
00701	-0	53400	4	00714	LXD	BINB,4	
00702	0	50000	0	00721	CNV	CLA	TEN
00703	0	04000	0	00710	TLQ	FIN	
00704	-0	75400	0	00000	PXD	0,0	
00705	0	22100	0	00721	DVP	TEN	
00706	0	60200	4	00730	SLW	DIG,4	SAVE REMAINDER IN 1 WORD OF BLOCK
00707	1	00001	4	00702	TXI	CNV,4,1	UP WORD COUNT OF BLOCK
00710	-0	60000	4	00730	FIN	STQ	DIG,4
00711	-0	50000	0	00717	CAL	BLANKS	START WITH BLANKS
00712	0	76700	0	00006	DEC	ALS	6
00713	-0	50100	4	00730	ORA	DIG,4	AND BRING IN REMAINDER FROM ABOVE
00714	2	00001	4	00712	BINB	TIX	DEC,4,1
00715	-0	53400	4	00720	LXD	BINA,4	
00716	0	02000	4	00001	TRA	1,4	
00717	60606060606060				BLANKS	BCD	1
00720	0	00000	0	00000	BINA	HTR	
00721	+00000000000012				TEN	DEC	10
			00730	DIG	BES	6	
							ENTER WITH OCTAL NUMBER IN ADDRESS OF AC. EXIT OCTAL CONVERTED TO BCD IN LOGICAL PORTION OF AC. THIS MUST BE SAVED WITH SLW
00730	0	76500	0	00017	OCTBCD	LRS	15
00731	0	50000	0	00737	CLA	BLANK	AC ZERO EXEPT FOR END BLANK
00732	-0	14000	0	00733	TNO	OCT	TURN OFF INDICATOR
00733	0	76700	0	00003	OCT	ALS	3
00734	0	76300	0	00003		LLS	3
00735	-0	14000	0	00733	TNO	OCT	END BLANK WILL TURN ON INDICATOR
00736	0	02000	4	00001	TRA	1,4	
00737	00000000000060				BLANK	BCD	100000
			00740	PRINT	BSS	0	
			00004	C	EQU	4	
00740	0	50000	4	00001	RAN	CLA	1,4
00741	0	62100	0	00772	STA	RNA	
00742	0	77100	0	00022	ARS	18	
00743	0	60100	0	00773	STO	RNB	
00744	-0	63400	4	00774	SXD	RNC,4	
00745	0	50000	0	00772	RN40	CLA	RNA
00746	0	40000	0	00775	ADD	RND	
00747	0	34000	0	00773	CAS	RNB	
00750	0	76100	0	00000	NOP		
00751	0	02000	0	00762	TRA	RN50	
00752	0	76700	0	00022	ALS	18	
00753	0	40000	0	00772	ADD	RNA	
00754	0	60100	0	00760	STO	RAN10	
00755	0	77100	0	00022	ARS	18	
00756	0	62100	0	00772	STA	RNA	
00757	0	07400	4	00776	TSX	WOT,C	
00760	0	00000	0	00000	RAN10	HTR	
00761	0	02000	0	00745	TRA	RN40	
00762	0	50000	0	00773	RN50	CLA	RNB
00763	0	76700	0	00022	ALS	18	
00764	0	40000	0	00772	ADD	RNA	
00765	0	60100	0	00767	STO	RN60	

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	00766	0	07400	4	00776		TSX	WOT,C	
A	00767	0	00000	0	00000	RN60	HTR		
	00770	-0	53400	4	00774		LXD	RNC,C	
	00771	0	02000	4	00002		TRA	2,C	
A	00772	0	00000	0	00000	RNA	HTR		
A	00773	0	00000	0	00000	RNB	HTR		
A	00774	0	00000	0	00000	RNC	HTR		
	00775	0	00000	0	00024	RND	HTR	20	
	00776	-0	63400	1	01073	WOT	SXD	X1,1	
	00777	-0	63400	2	01101		SXD	X2,2	
	01000	0	50000	4	00001		CLA	1,4	
	01001	0	62200	0	01125		STD	X4	X
	01002	0	77100	0	00022		ARS	18	X
	01003	0	40000	0	01125		ADD	X4	X
	01004	0	62100	0	01032		STA	CI9	X
	01005	0	40200	4	00001		SUB	1,4	B-A+1 IN AC
	01006	0	10000	4	00002		TZE	2,4	
	01007	-0	12000	4	00002		TMI	2,4	
	01010	-0	63400	4	01125		SXD	X4,4	
	01011	0	73400	4	00013	L11	PAX	11,4	
	01012	-0	63400	4	01123		SXD	PR6,4	
	01013	0	76600	0	00361	RPR	WPR		
	01014	0	76100	0	00000		NOP		
	01015	-0	53400	4	01123		LXD	PR6,4	X
D	01016	-2	00000	4	01022	PR8	TNX	PR5,4	
	01017	-3	00014	4	01021		TXL	PR3,4,12	
	01020	0	76000	0	00370		SPR	8	FIRST CYCLE
	01021	-0	53400	4	01123	PR3	LXD	PR6,4	INITIALIZE GROUP COUNT
	01022	0	53400	2	01024	PR5	LXA	PR7,2	INITIALIZE LEFT SETUP
	01023	-0	53400	1	01066		LXD	YZ1,1	CLEAR CARD IMAGE
T	01024	-0	75400	0	00000	PR7	PXD		X
	01025	0	60200	1	01173	PR4	SLW	LT,1	X
	01026	0	60200	1	01153		SLW	RT,1	X
	01027	2	00001	1	01025		TIX	PR4,1,1	X
	01030	-0	50000	0	01131	CIR	CAL	COL1	INITIALIZE COLUMN INDICATOR
	01031	0	60200	0	01132	CI2	SLW	COL	X
	01032	0	56000	4	00000	CI9	LDQ	0,4	OBTAIN GROUP
	01033	-0	63400	4	01226		SXD	OZ2,4	STORE GROUP COUNT
	01034	0	53400	4	01036		LXA	Q6,4	SET CHARACTER COUNT
T	01035	-0	75400	0	00000	CI1	PXD		
	01036	-0	76300	0	00006	Q6	LGL	6	
	01037	0	73400	1	00000		PAX	0,1	
	01040	-0	50000	0	01132		CAL	COL	POSITION COLUMN INDICATOR
	01041	0	77100	4	00006		ARS	6,4	X
	01042	2	00020	1	01066		TIX	YZ1,1,16	TEST FOR DIGIT
	01043	3	00017	1	01071		TXH	YZ2,1,15	TEST FOR Y-ZONE
	01044	-0	60200	3	01170	CI5	ORS	D,3	STORE DIGIT
	01045	2	00001	4	01035	CI4	TIX	CI1,4,1	COUNT CHARACTERS
	01046	0	77100	0	00001	CI3	ARS	1	SHIFT AND TEST COLUMN
	01047	-0	53400	4	01226		LXD	OZ2,4	RESTORE GROUP COUNT
	01050	1	77777	4	01051		TXI	CI6,4,-1	COUNT GROUPS
D	01051	-3	00000	4	01053	CI6	TXL	CI7,4	TEST FOR LAST NON-BLANK GROUP
	01052	-0	10000	0	01031		TNZ	CI2	TEST FOR END OF ROW
	01053	-0	50000	2	01155	CI7	CAL	8.3,2	FORM TRUE 8,4

	01054	-0	60200	2	01160		ORS D-8,2	AND 3 ROWS AND
	01055	-0	60200	2	01165		ORS D-3,2	MOVE 8.4 AND 8.3
	01056	0	60200	2	01156		SLW 8.2,2	ROWS
	01057	-0	50000	2	01154		CAL 8.4,2	FORM TRUE 8.4
	01060	-0	60200	2	01160		ORS D-8,2	X
	01061	-0	60200	2	01164		ORS D-4,2	X
	01062	0	60200	2	01155		SLW 8.3,2	X
D	01063	-3	00000	4	01106	CI8	TXL WP,4	TEST FOR END
	01064	3	00017	2	01106		TXH WP,2,15	TEST FOR RIGHT HALF
	01065	1	00020	2	01030		TXI CIR,2,16	INITIALIZE RIGHT HALF
	01066	2	00020	1	01074	YZ1	TIX XZ1,1,16	TEST FOR 16/CH/32
	01067	3	00017	1	01077		TXH XZ2,1,15	TEST FOR X-ZONE
	01070	-0	60200	3	01170		ORS D,3	STORE DIGIT
	01071	-0	60200	2	01172	YZ2	ORS Y,2	STORE Y-ZONE
	01072	2	00001	4	01035		TIX CI1,4,1	COUNT CHARACTERS
TD	01073	-3	00000	0	01046	X1	TXL CI3	OBTAIN NEXT GROUP
	01074	2	00020	1	01102	XZ1	TIX OZ1,1,16	TEST FOR 32/CH/48
	01075	3	00017	1	01045		TXH CI4,1,15	TEST FOR BLANK
	01076	-0	60200	3	01170		ORS D,3	STORE DIGIT
	01077	-0	60200	2	01171	XZ2	ORS X,2	STORE X-ZONE
	01100	2	00001	4	01035		TIX CI1,4,1	COUNT CHARACTERS
TD	01101	-3	00000	0	01046	X2	TXL CI3	OBTAIN NEXT GROUP
	01102	-0	60200	2	01170	OZ1	ORS Z,2	STORE O-ZONE
	01103	-0	60200	3	01170		ORS D,3	STORE DIGIT
	01104	2	00001	4	01035		TIX CI1,4,1	COUNT CHARACTERS
TD	01105	-3	00000	0	01046		TXL CI3	
	01106	0	53400	1	01226	WP7	LXA OZ,1	COPY LOOP
	01107	0	70000	1	01157	CRAN	CPY LT-12,1	
	01110	0	70000	1	01137		CPY RT-12,1	X
	01111	1	77777	1	01112		TXI T2,1,-1	
	01112	3	77764	1	01107	T2	TXH CRAN,1,-12	
D	01113	3	00000	4	01120	WP4	TXH WP5,4	
	01114	-0	53400	1	01073		LXD X1,1	NO, RELOAD INDEX REGISTERS AND RETURN
	01115	-0	53400	2	01101		LXD X2,2	X
	01116	-0	53400	4	01125	WT2	LXD X4,4	X
	01117	0	02000	4	00002	L2	TRA 2,4	X
	01120	0	76600	0	00361	WP5	WPR	
	01121	0	76000	0	00371		SPR 9	SECOND CYCLE
	01122	-3	00014	0	01022	WP2	TXL PR5,0,12	CONVERT REST OF LINE
A	01123	0	00000	0	00000	PR6	HTR	
	01124	606060606060				BLNKS	BCD 1	
A	01125	0	00000	0	00000	X4	HTR	
	01126	+0000000000020				YZONE	OCT 20	
	01127	+0000000000060				BNK	OCT 60	
	01130	+377777777777				MK2	OCT 377777777777	
	01131	-0	00000	0	00000	COL1	MZE	
					01132	COL	BSS 1	
					01153	RT	BES 16	
					01153	8.5	BSS 1	
					01154	8.4	BSS 1	
					01155	8.3	BSS 1	
					01156	8.2	BSS 1	
					01170	D	BES 9	
					01170	Z	BSS 1	

		01171	X	BSS	1	
		01172	Y	BSS	1	
		01173	LT	SYN	Y+1	
		01155	8.4L	SYN	LT-14	
		01135	8.4R	SYN	RT-14	
		01173		BSS	27	
A	01226	0 00000 0 00000	OZ	HTR		
		01226	OZ2	SYN	OZ	
		01106	WP	SYN	WP7	
	01227	+0000000077777	ADDMSK	OCT	000000077777	
	01230	+0777770000000	DECMSK	OCT	077777000000	
	01231	+0000000000077	CHMASK	OCT	000000000077	
	01232	0 00000 0 00000	ZERO	HTR	0	
	01233	+0000010000000	DECONE	OCT	000001000000	
	01234	0 00000 0 00000	PREFX1	HTR	0	
	01235	0 00000 0 00000	ERWORD	HTR	0	
	01236	0 00000 0 00000	RECORD			
	01237	606060606060	MACHIN	BCD	2	
	01240	606060606060				
	01241	442123303145		BCD	3MACHINE ERROR	
	01242	256025515146				
	01243	516060606060				
	01244	606060606060	SOURCE	BCD	2	
	01245	606060606060				
	01246	624664512325		BCD	4SOURCE PROGRAM ERROR	
	01247	604751462751				
	01250	214460255151				
	01251	465160606060				
	01252	606060606060	LOC	BCD	2	
	01253	606060606060				
	01254	434623216331		BCD	3LOCATION	
	01255	464560606060				
	01256	606060606060				
		01257	ERAS	BSS	20	
	01303	0 00000 0 00000	LOCREC	HTR	0	FOR PATCHING ETC.
	01304	+0010170000000		OCT	001017000000	ALL ERROR RECORDS READ IN HERE OVER LIST
	01305	0 00001 0 00000		HTR	0,0,1	ERROR IN 1 DOUBLE PRIME
	01306	+0000360000000		OCT	000036000000	ERROR RECORD 1
	01307	0 00170 0 00000		HTR	0,0,120	53
	01310	+0000370000000		OCT	000037000000	36
	01311	0 00216 0 00000		HTR	0,0,142	90
	01312	+0000410000000		OCT	000041000000	37
	01313	0 00047 0 00000		HTR	0,0,39	60
	01314	+0000460000000		OCT	000046000000	41
	01315	0 00140 0 00000		HTR	0,0,96	90
	01316	+0000470000000		OCT	000047000000	46
	01317	0 00047 0 00000		HTR	0,0,39	58
	01320	+0000510000000		OCT	000051000000	47
	01321	0 00163 0 00000		HTR	0,0,115	56
	01322	+0000600000000		OCT	000060000000	51
	01323	0 00205 0 00000		HTR	0,0,133	56
	01324	+0000610000000		OCT	000061000000	60
	01325	0 00101 0 00000		HTR	0,0,65	47
	01326	+0000620000000		OCT	000062000000	61
						53

01327	0 00174 0 00000	HTR 0,0,124	62
01330	+000063000000	OCT 000063000000	53
01331	0 00174 0 00000	HTR 0,0,124	63
01332	+000064000000	OCT 000064000000	71
01333	0 00060 0 00000	HTR 0,0,48	64
01334	+000066000000	OCT 000066000000	53
01335	0 00174 0 00000	HTR 0,0,124	66
01336	+000067000000	OCT 000067000000	53
01337	0 00174 0 00000	HTR 0,0,124	67
01340	+000070000000	OCT 000070000000	92
01341	0 00047 0 00000	HTR 0,0,39	70
01342	+000072000000	OCT 000072000000	53
01343	-0 00174 0 00065	MZE 53,0,124	72
01344	+000072000000	OCT 000072000000	60
01345	0 00056 0 00000	HTR 0,0,46	72
01346	+000073000000	OCT 000073000000	53
01347	0 00174 0 00000	HTR 0,0,124	73
01350	+000074000000	OCT 000074000000	56
01351	0 00112 0 00000	HTR 0,0,74	74
01352	+000103000000	OCT 000103000000	67
01353	0 00060 0 00000	HTR 0,0,48	103
01354	+000106000000	OCT 000106000000	53
01355	0 00006 0 00000	HTR 0,0,6	106
01356	+000107000000	OCT 000107000000	58
01357	-0 00050 0 00072	MZE 58,0,40	107
01360	+000107000000	OCT 000107000000	92
01361	0 00046 0 00000	HTR 0,0,38	107
01362	+000116000000	OCT 000116000000	53
01363	0 00102 0 00000	HTR 0,0,66	116
01364	+000123000000	OCT 000123000000	47
01365	-0 00047 0 00057	MZE 47,0,39	123
01366	+000123000000	OCT 000123000000	53
01367	0 00160 0 00000	HTR 0,0,112	123
01370	+000124000000	OCT 000124000000	53
01371	0 00160 0 00000	HTR 0,0,112	124
01372	+000132000000	OCT 000132000000	53
01373	-0 00102 0 00065	MZE 53,0,66	132
01374	+000132000000	OCT 000132000000	60
01375	0 00274 0 00000	HTR 0,0,188	132
01376	+000140000000	OCT 000140000000	56
01377	0 00047 0 00000	HTR 0,0,39	140
01400	+000141000000	OCT 000141000000	92
01401	0 00142 0 00000	HTR 0,0,98	141
01402	+000150000000	OCT 000150000000	75
01403	0 00065 0 00000	HTR 0,0,53	150
01404	+000160000000	OCT 000160000000	67
01405	0 00060 0 00000	HTR 0,0,48	160
01406	+000161000000	OCT 000161000000	56
01407	0 00050 0 00000	HTR 0,0,40	161
01410	+000173000000	OCT 000173000000	60
01411	0 00274 0 00000	HTR 0,0,188	173
01412	+000216000000	OCT 000216000000	47
01413	0 00050 0 00000	HTR 0,0,40	216
01414	+000222000000	OCT 000222000000	94

01415	-0 00066 0 00136	MZE 94,0,54	222
01416	+000222000000	OCT 000222000000	105
01417	-0 00047 0 00151	MZE 105,0,39	222
01420	+000222000000	OCT 000222000000	107
01421	-0 00067 0 00153	MZE 107,0,55	222
01422	+000222000000	OCT 000222000000	115
01423	0 00047 0 00000	HTR 0,0,39	222
01424	+000223000000	OCT 000223000000	113
01425	0 00155 0 00000	HTR 0,0,109	223
01426	+000227000000	OCT 000227000000	60
01427	0 00274 0 00000	HTR 0,0,188	227
01430	+000230000000	OCT 000230000000	101
01431	0 00047 0 00000	HTR 0,0,39	230
01432	+000241000000	OCT 000241000000	107
01433	-0 00070 0 00153	MZE 107,0,56	241
01434	+000241000000	OCT 000241000000	115
01435	0 00046 0 00000	HTR 0,0,38	241
01436	+000245000000	OCT 000245000000	9
01437	-0 00147 0 00011	MZE 9,0,103	245
01440	+000245000000	OCT 000245000000	105
01441	0 00046 0 00000	HTR 0,0,38	245
01442	+000246000000	OCT 000246000000	92
01443	0 00047 0 00000	HTR 0,0,39	246
01444	+003672000000	OCT 003672000000	115
01445	0 00222 0 00000	HTR 0,0,146	3672
01446	+000247000000	OCT 000247000000	101
01447	0 00046 0 00000	HTR 0,0,38	247
01450	+000252000000	OCT 000252000000	60
01451	-0 00274 0 00074	MZE 60,0,188	252
01452	+000252000000	OCT 000252000000	105
01453	0 00244 0 00000	HTR 0,0,164	252
01454	+000255000000	OCT 000255000000	103
01455	0 00156 0 00000	HTR 0,0,110	255
01456	+000256000000	OCT 000256000000	73
01457	0 00060 0 00000	HTR 0,0,48	256
01460	+000260000000	OCT 000260000000	96
01461	-0 00046 0 00140	MZE 96,0,38	260
01462	+000260000000	OCT 000260000000	98
01463	0 00046 0 00000	HTR 0,0,38	260
01464	+000263000000	OCT 000263000000	67
01465	0 00060 0 00000	HTR 0,0,48	263
01466	+000264000000	OCT 000264000000	7
01467	0 00150 0 00000	HTR 0,0,104	264
01470	+000270000000	OCT 000270000000	56
01471	0 00017 0 00000	HTR 0,0,15	270
01472	+000277000000	OCT 000277000000	92
01473	-0 00046 0 00134	MZE 92,0,38	277
01474	+000277000000	OCT 000277000000	113
01475	0 00037 0 00000	HTR 0,0,31	277
01476	+000301000000	OCT 000301000000	67
01477	0 00247 0 00000	HTR 0,0,167	301
01500	+003730000000	OCT 003730000000	115
01501	0 00151 0 00000	HTR 0,0,105	3730
01502	+000303000000	OCT 000303000000	73

01503	0 00124 0 00000	HTR 0,0,84	303
01504	+0003050000000	OCT 0003050000000	56
01505	-0 00047 0 00070	MZE 56,0,39	305
01506	+0003050000000	OCT 0003050000000	60
01507	0 00274 0 00000	HTR 0,0,188	305
01510	+0003110000000	OCT 0003110000000	9
01511	0 00152 0 00000	HTR 0,0,106	311
01512	+0003120000000	OCT 0003120000000	113
01513	0 00245 0 00000	HTR 0,0,165	312
01514	+0003140000000	OCT 0003140000000	90
01515	0 00167 0 00000	HTR 0,0,119	314
01516	+0003210000000	OCT 0003210000000	90
01517	0 00217 0 00000	HTR 0,0,143	321
01520	+0003270000000	OCT 0003270000000	86
01521	0 00133 0 00000	HTR 0,0,91	327
01522	+0003300000000	OCT 0003300000000	90
01523	0 00141 0 00000	HTR 0,0,97	330
01524	+0003310000000	OCT 0003310000000	58
01525	0 00164 0 00000	HTR 0,0,116	331
01526	+0003340000000	OCT 0003340000000	56
01527	-0 00050 0 00070	MZE 56,0,40	334
01530	+0003340000000	OCT 0003340000000	60
01531	0 00274 0 00000	HTR 0,0,188	334
01532	+0003360000000	OCT 0003360000000	86
01533	0 00213 0 00000	HTR 0,0,139	336
01534	+0003400000000	OCT 0003400000000	58
01535	0 00206 0 00000	HTR 0,0,134	340
01536	+0003410000000	OCT 0003410000000	96
01537	-0 00040 0 00140	MZE 96,0,32	341
01540	+0003410000000	OCT 0003410000000	67
01541	-0 00060 0 00103	MZE 67,0,48	341
01542	+0003410000000	OCT 0003410000000	98
01543	0 00040 0 00000	HTR 0,0,32	341
01544	+0003450000000	OCT 0003450000000	5
01545	0 00242 0 00000	HTR 0,0,162	345
01546	+0003500000000	OCT 0003500000000	58
01547	-0 00113 0 00072	MZE 58,0,75	350
01550	+0003500000000	OCT 0003500000000	62
01551	0 00125 0 00000	HTR 0,0,85	350
01552	+0003520000000	OCT 0003520000000	113
01553	0 00041 0 00000	HTR 0,0,33	352
01554	+0003540000000	OCT 0003540000000	64
01555	0 00235 0 00000	HTR 0,0,157	354
01556	+0003560000000	OCT 0003560000000	92
01557	0 00143 0 00000	HTR 0,0,99	356
01560	+0003570000000	OCT 0003570000000	58
01561	0 00165 0 00000	HTR 0,0,117	357
01562	+0003630000000	OCT 0003630000000	60
01563	0 00274 0 00000	HTR 0,0,188	363
01564	+0003660000000	OCT 0003660000000	58
01565	0 00207 0 00000	HTR 0,0,135	366
01566	+0003750000000	OCT 0003750000000	58
01567	0 00114 0 00000	HTR 0,0,76	375
01570	+0003770000000	OCT 0003770000000	56

01571	-0 00274 0 00070	MZE 56,0,188	377
01572	+000377000000	OCT 000377000000	115
01573	0 00042 0 00000	HTR 0,0,34	377
01574	+000410000000	OCT 000410000000	58
01575	-0 00115 0 00072	MZE 58,0,77	410
01576	+000410000000	OCT 000410000000	96
01577	0 00153 0 00000	HTR 0,0,107	410
01600	+000417000000	OCT 000417000000	58
01601	0 00210 0 00000	HTR 0,0,136	417
01602	+000424000000	OCT 000424000000	56
01603	0 00274 0 00000	HTR 0,0,188	424
01604	+000425000000	OCT 000425000000	67
01605	-0 00036 0 00103	MZE 67,0,30	425
01606	+000425000000	OCT 000425000000	73
01607	-0 00267 0 00111	MZE 73,0,183	425
01610	+000425000000	OCT 000425000000	98
01611	0 00046 0 00000	HTR 0,0,38	425
01612	+000427000000	OCT 000427000000	96
01613	0 00223 0 00000	HTR 0,0,147	427
01614	+000430000000	OCT 000430000000	58
01615	0 00116 0 00000	HTR 0,0,78	430
01616	+000434000000	OCT 000434000000	62
01617	0 00023 0 00000	HTR 0,0,19	434
01620	+000437000000	OCT 000437000000	84
01621	0 00134 0 00000	HTR 0,0,92	437
01622	+000441000000	OCT 000441000000	98
01623	0 00044 0 00000	HTR 0,0,36	441
01624	+000442000000	OCT 000442000000	60
01625	-0 00274 0 00074	MZE 60,0,188	442
01626	+000442000000	OCT 000442000000	96
01627	0 00047 0 00000	HTR 0,0,39	442
01630	+000443000000	OCT 000443000000	103
01631	0 00243 0 00000	HTR 0,0,163	443
01632	+000446000000	OCT 000446000000	58
01633	0 00117 0 00000	HTR 0,0,79	446
01634	+000454000000	OCT 000454000000	62
01635	-0 00211 0 00076	MZE 62,0,137	454
01636	+000454000000	OCT 000454000000	64
01637	0 00024 0 00000	HTR 0,0,20	454
01640	+000460000000	OCT 000460000000	98
01641	0 00154 0 00000	HTR 0,0,108	460
01642	+000465000000	OCT 000465000000	96
01643	0 00046 0 00000	HTR 0,0,38	465
01644	+000500000000	OCT 000500000000	96
01645	0 00047 0 00000	HTR 0,0,39	500
01646	+000510000000	OCT 000510000000	56
01647	-0 00120 0 00070	MZE 56,0,80	510
01650	+000510000000	OCT 000510000000	73
01651	0 00270 0 00000	HTR 0,0,184	510
01652	+000517000000	OCT 000517000000	62
01653	0 00126 0 00000	HTR 0,0,86	517
01654	+000520000000	OCT 000520000000	56
01655	-0 00121 0 00070	MZE 56,0,81	520
01656	+000520000000	OCT 000520000000	113

01657	0 00243 0 00000	HTR 0,0,163	520
01660	+000521000000	OCT 000521000000	60
01661	0 00274 0 00000	HTR 0,0,188	521
01662	+000524000000	OCT 000524000000	62
01663	0 00166 0 00000	HTR 0,0,118	524
01664	+000533000000	OCT 000533000000	92
01665	0 00033 0 00000	HTR 0,0,27	533
01666	+000534000000	OCT 000534000000	62
01667	0 00212 0 00000	HTR 0,0,138	534
01670	+000544000000	OCT 000544000000	60
01671	0 00274 0 00000	HTR 0,0,188	544
01672	+000546000000	OCT 000546000000	2
01673	0 00043 0 00000	HTR 0,0,35	546
01674	+000553000000	OCT 000553000000	62
01675	0 00127 0 00000	HTR 0,0,87	553
01676	+000556000000	OCT 000556000000	64
01677	0 00237 0 00000	HTR 0,0,159	556
01700	+000562000000	OCT 000562000000	92
01701	-0 00144 0 00134	MZE 92,0,100	562
01702	+000562000000	OCT 000562000000	113
01703	0 00045 0 00000	HTR 0,0,37	562
01704	+000604000000	OCT 000604000000	92
01705	0 00034 0 00000	HTR 0,0,28	604
01706	+000607000000	OCT 000607000000	60
01707	0 00047 0 00000	HTR 0,0,39	607
01710	+000613000000	OCT 000613000000	56
01711	0 00274 0 00000	HTR 0,0,188	613
01712	+000624000000	OCT 000624000000	98
01713	0 00224 0 00000	HTR 0,0,148	624
01714	+000627000000	OCT 000627000000	60
01715	0 00050 0 00000	HTR 0,0,40	627
01716	+000643000000	OCT 000643000000	64
01717	0 00025 0 00000	HTR 0,0,21	643
01720	+000654000000	OCT 000654000000	56
01721	0 00274 0 00000	HTR 0,0,188	654
01722	+000661000000	OCT 000661000000	75
01723	0 00246 0 00000	HTR 0,0,166	661
01724	+000674000000	OCT 000674000000	60
01725	0 00122 0 00000	HTR 0,0,82	674
01726	+000707000000	OCT 000707000000	64
01727	0 00024 0 00000	HTR 0,0,20	707
01730	+000711000000	OCT 000711000000	62
01731	0 00236 0 00000	HTR 0,0,158	711
01732	+000716000000	OCT 000716000000	62
01733	0 00130 0 00000	HTR 0,0,88	716
01734	+000720000000	OCT 000720000000	60
01735	0 00123 0 00000	HTR 0,0,83	720
01736	+000734000000	OCT 000734000000	45
01737	0 00047 0 00000	HTR 0,0,39	734
01740	+000747000000	OCT 000747000000	56
01741	0 00020 0 00000	HTR 0,0,16	747
01742	+000750000000	OCT 000750000000	56
01743	0 00020 0 00000	HTR 0,0,16	750
01744	+000756000000	OCT 000756000000	64

01745	0 00026 0 00000	HTR 0,0,22	756
01746	+000762000000	OCT 000762000000	75
01747	0 00251 0 00000	HTR 0,0,169	762
01750	+000765000000	OCT 000765000000	92
01751	0 00145 0 00000	HTR 0,0,101	765
01752	+001000000000	OCT 001000000000	56
01753	0 00274 0 00000	HTR 0,0,188	1000
01754	+001001000000	OCT 001001000000	24
01755	0 00157 0 00000	HTR 0,0,111	1001
01756	+001006000000	OCT 001006000000	45
01757	0 00055 0 00000	HTR 0,0,45	1006
01760	+001022000000	OCT 001022000000	75
01761	0 00246 0 00000	HTR 0,0,166	1022
01762	+001023000000	OCT 001023000000	64
01763	0 00131 0 00000	HTR 0,0,89	1023
01764	+001031000000	OCT 001031000000	24
01765	0 00075 0 00000	HTR 0,0,61	1031
01766	+001041000000	OCT 001041000000	64
01767	0 00027 0 00000	HTR 0,0,23	1041
01770	+001076000000	OCT 001076000000	45
01771	0 00253 0 00000	HTR 0,0,171	1076
01772	+001135000000	OCT 001135000000	62
01773	-0 00057 0 00076	MZE 62,0,47	1135
01774	+001135000000	OCT 001135000000	92
01775	0 00146 0 00000	HTR 0,0,102	1135
01776	+001141000000	OCT 001141000000	45
01777	0 00050 0 00000	HTR 0,0,40	1141
02000	+001160000000	OCT 001160000000	22
02001	0 00277 0 00000	HTR 0,0,191	1160
02002	+001175000000	OCT 001175000000	62
02003	0 00132 0 00000	HTR 0,0,90	1175
02004	+001211000000	OCT 001211000000	75
02005	0 00214 0 00000	HTR 0,0,140	1211
02006	+001221000000	OCT 001221000000	22
02007	-0 00076 0 00026	MZE 22,0,62	1221
02010	+001221000000	OCT 001221000000	75
02011	0 00215 0 00000	HTR 0,0,141	1221
02012	+001231000000	OCT 001231000000	45
02013	0 00063 0 00000	HTR 0,0,51	1231
02014	+001234000000	OCT 001234000000	62
02015	0 00271 0 00000	HTR 0,0,185	1234
02016	+001240000000	OCT 001240000000	75
02017	0 00135 0 00000	HTR 0,0,93	1240
02020	+001261000000	OCT 001261000000	62
02021	0 00272 0 00000	HTR 0,0,186	1261
02022	+001274000000	OCT 001274000000	22
02023	0 00071 0 00000	HTR 0,0,57	1274
02024	+001307000000	OCT 001307000000	22
02025	0 00252 0 00000	HTR 0,0,170	1307
02026	+001320000000	OCT 001320000000	56
02027	0 00274 0 00000	HTR 0,0,188	1320
02030	+001341000000	OCT 001341000000	92
02031	0 00220 0 00000	HTR 0,0,144	1341
02032	+001345000000	OCT 001345000000	22

02033	0 00072 0 00000	HTR 0,0,58	1345
02034	+001347000000	OCT 001347000000	92
02035	0 00221 0 00000	HTR 0,0,145	1347
02036	+001377000000	OCT 001377000000	22
02037	0 00073 0 00000	HTR 0,0,59	1377
02040	+001444000000	OCT 001444000000	22
02041	0 00074 0 00000	HTR 0,0,60	1444
02042	+001531000000	OCT 001531000000	56
02043	0 00274 0 00000	HTR 0,0,188	1531
02044	+001634000000	OCT 001634000000	75
02045	0 00251 0 00000	HTR 0,0,169	1634
02046	+001767000000	OCT 001767000000	56
02047	0 00274 0 00000	HTR 0,0,188	1767
02050	+001777000000	OCT 001777000000	75
02051	0 00251 0 00000	HTR 0,0,169	1777
02052	+002230000000	OCT 002230000000	75
02053	0 00273 0 00000	HTR 0,0,187	2230
02054	+002155000000	OCT 002155000000	56
02055	0 00021 0 00000	HTR 0,0,17	2155
02056	+002163000000	OCT 002163000000	56
02057	0 00022 0 00000	HTR 0,0,18	2163
02060	+002655000000	OCT 002655000000	75
02061	0 00031 0 00000	HTR 0,0,25	2655
02062	+003001000000	OCT 003001000000	88
02063	0 00240 0 00000	HTR 0,0,160	3001
02064	+003064000000	OCT 003064000000	65
02065	0 00250 0 00000	HTR 0,0,168	3064
02066	+003143000000	OCT 003143000000	65
02067	0 00060 0 00000	HTR 0,0,48	3143
02070	+003156000000	OCT 003156000000	65
02071	0 00030 0 00000	HTR 0,0,24	3156
02072	+003253000000	OCT 003253000000	88
02073	0 00241 0 00000	HTR 0,0,161	3253
02074	+003540000000	OCT 003540000000	8B
02075	0 00136 0 00000	HTR 0,0,94	3540
02076	+004006000000	OCT 004006000000	51
02077	0 00053 0 00000	HTR 0,0,43	4006
02100	+004007000000	OCT 004007000000	51
02101	0 00053 0 00000	HTR 0,0,43	4007
02102	+004026000000	OCT 004026000000	51
02103	0 00103 0 00000	HTR 0,0,67	4026
02104	+004031000000	OCT 004031000000	75
02105	0 00251 0 00000	HTR 0,0,169	4031
02106	+004035000000	OCT 004035000000	51
02107	0 00200 0 00000	HTR 0,0,128	4035
02110	+004040000000	OCT 004040000000	51
02111	0 00007 0 00000	HTR 0,0,7	4040
02112	+004054000000	OCT 004054000000	51
02113	0 00104 0 00000	HTR 0,0,68	4054
02114	+004124000000	OCT 004124000000	51
02115	0 00256 0 00000	HTR 0,0,174	4124
02116	+004155000000	OCT 004155000000	34
02117	0 00105 0 00000	HTR 0,0,69	4155
02120	+004157000000	OCT 004157000000	51

02121	0 00257 0 00000	HTR 0,0,175	4157
02122	+0041600000000	OCT 0041600000000	34
02123	0 00010 0 00000	HTR 0,0,8	4160
02124	+0041610000000	OCT 0041610000000	34
02125	0 00201 0 00000	HTR 0,0,129	4161
02126	+0043030000000	OCT 0043030000000	75
02127	0 00251 0 00000	HTR 0,0,169	4303
02130	+0043070000000	OCT 0043070000000	51
02131	0 00064 0 00000	HTR 0,0,52	430I
02132	+0044170000000	OCT 0044170000000	88
02133	0 00171 0 00000	HTR 0,0,121	4417
02134	+0044050000000	OCT 0044050000000	34
02135	0 00260 0 00000	HTR 0,0,176	4405
02136	+0044530000000	OCT 0044530000000	88
02137	0 00137 0 00000	HTR 0,0,95	4453
02140	+0045330000000	OCT 0045330000000	51
02141	0 00261 0 00000	HTR 0,0,177	4533
02142	+0045700000000	OCT 0045700000000	34
02143	0 00061 0 00000	HTR 0,0,49	4570
02144	+0046230000000	OCT 0046230000000	51
02145	0 00254 0 00000	HTR 0,0,172	4623
02146	+0046660000000	OCT 0046660000000	51
02147	0 00050 0 00000	HTR 0,0,40	4666
02150	+0050370000000	OCT 0050370000000	34
02151	0 00011 0 00000	HTR 0,0,9	5037
02152	+0052320000000	OCT 0052320000000	34
02153	0 00255 0 00000	HTR 0,0,173	5232
02154	+0052730000000	OCT 0052730000000	34
02155	0 00275 0 00000	HTR 0,0,189	5273
02156	+0055600000000	OCT 0055600000000	34
02157	0 00051 0 00000	HTR 0,0,41	5560
02160	+0057210000000	OCT 0057210000000	27
02161	0 00262 0 00000	HTR 0,0,178	5721
02162	+0057420000000	OCT 0057420000000	27
02163	0 00231 0 00000	HTR 0,0,153	5742
02164	+0057630000000	OCT 0057630000000	27
02165	0 00231 0 00000	HTR 0,0,153	5763
02166	+0057640000000	OCT 0057640000000	27
02167	0 00231 0 00000	HTR 0,0,153	5764
02170	+0057730000000	OCT 0057730000000	51
02171	0 00232 0 00000	HTR 0,0,154	5773
02172	+0060040000000	OCT 0060040000000	32
02173	0 00225 0 00000	HTR 0,0,149	6004
02174	+0060440000000	OCT 0060440000000	27
02175	0 00012 0 00000	HTR 0,0,10	6044
02176	+0060630000000	OCT 0060630000000	32
02177	0 00275 0 00000	HTR 0,0,189	6063
02200	+0060650000000	OCT 0060650000000	27
02201	0 00013 0 00000	HTR 0,0,11	6065
02202	+0062340000000	OCT 0062340000000	51
02203	0 00014 0 00000	HTR 0,0,12	6234
02204	+0062530000000	OCT 0062530000000	32
02205	0 00263 0 00000	HTR 0,0,179	6253
02206	+0062560000000	OCT 0062560000000	32

02207	0 00263 0 00000	HTR 0,0,179	6256
02210	+006353000000	OCT 006353000000	51
02211	0 00233 0 00000	HTR 0,0,155	6353
02212	+006357000000	OCT 006357000000	29
02213	0 00050 0 00000	HTR 0,0,40	6357
02214	+006373000000	OCT 006373000000	27
02215	0 00227 0 00000	HTR 0,0,151	6373
02216	+006376000000	OCT 006376000000	27
02217	0 00230 0 00000	HTR 0,0,152	6376
02220	+006432000000	OCT 006432000000	27
02221	0 00015 0 00000	HTR 0,0,13	6432
02222	+006475000000	OCT 006475000000	32
02223	0 00275 0 00000	HTR 0,0,189	6475
02224	+006534000000	OCT 006534000000	27
02225	0 00012 0 00000	HTR 0,0,10	6534
02226	+006635000000	OCT 006635000000	27
02227	0 00264 0 00000	HTR 0,0,180	6635
02230	+006710000000	OCT 006710000000	27
02231	0 00226 0 00000	HTR 0,0,150	6710
02232	+006736000000	OCT 006736000000	41
02233	0 00161 0 00000	HTR 0,0,113	6736
02234	+006737000000	OCT 006737000000	41
02235	0 00161 0 00000	HTR 0,0,113	6737
02236	+006744000000	OCT 006744000000	41
02237	0 00106 0 00000	HTR 0,0,70	6744
02240	+006762000000	OCT 006762000000	43
02241	0 00050 0 00000	HTR 0,0,40	6762
02242	+006765000000	OCT 006765000000	37
02243	0 00054 0 00000	HTR 0,0,44	6765
02244	+006767000000	OCT 006767000000	39
02245	0 00107 0 00000	HTR 0,0,71	6767
02246	+007023000000	OCT 007023000000	27
02247	0 00265 0 00000	HTR 0,0,181	7023
02250	+007027000000	OCT 007027000000	37
02251	0 00050 0 00000	HTR 0,0,40	7027
02252	+007045000000	OCT 007045000000	43
02253	0 00016 0 00000	HTR 0,0,14	7045
02254	+007052000000	OCT 007052000000	37
02255	0 00202 0 00000	HTR 0,0,130	7052
02256	+007053000000	OCT 007053000000	37
02257	0 00172 0 00000	HTR 0,0,122	7053
02260	+007056000000	OCT 007056000000	37
02261	0 00202 0 00000	HTR 0,0,130	7056
02262	+007057000000	OCT 007057000000	37
02263	0 00172 0 00000	HTR 0,0,122	7057
02264	+007070000000	OCT 007070000000	37
02265	0 00110 0 00000	HTR 0,0,72	7070
02266	+007073000000	OCT 007073000000	39
02267	0 00266 0 00000	HTR 0,0,182	7073
02270	+007075000000	OCT 007075000000	27
02271	0 00175 0 00000	HTR 0,0,125	7075
02272	+007076000000	OCT 007076000000	27
02273	0 00175 0 00000	HTR 0,0,125	7076
02274	+007100000000	OCT 007100000000	55

02275	0 00035 0 00000	HTR	0,0,29	7100	
02276	+007103000000	OCT	007103000000	27	
02277	0 00203 0 00000	HTR	0,0,131	7103	
02300	+007110000000	OCT	007110000000	43	
02301	0 00234 0 00000	HTR	0,0,156	7110	
02302	+007112000000	OCT	007112000000	27	
02303	0 00162 0 00000	HTR	0,0,114	7112	
02304	+007123000000	OCT	007123000000	27	
02305	0 00111 0 00000	HTR	0,0,73	7123	
02306	+007135000000	OCT	007135000000	27	
02307	0 00204 0 00000	HTR	0,0,132	7135	
02310	+007143000000	OCT	007143000000	55	
02311	0 00274 0 00000	HTR	0,0,188	7143	
02312	+007250000000	OCT	007250000000	27	
02313	0 00173 0 00000	HTR	0,0,123	7250	
02314	+007303000000	OCT	007303000000	41	
02315	0 00016 0 00000	HTR	0,0,14	7303	
02316	+007320000000	OCT	007320000000	27	DO NEST
02317	0 00005 0 00000	HTR	0,0,5	7320	DO NESTING
02320	+007454000000	OCT	007454000000	75	
02321	0 00032 0 00000	HTR	0,0,26	7454	
02322	+007555000000	OCT	007555000000	21	
02323	0 00177 0 00000	HTR	0,0,127	7555	
02324	+007563000000	OCT	007563000000	21	
02325	0 00176 0 00000	HTR	0,0,126	7563	
02326	+007620000000	OCT	007620000000	21	
02327	0 00276 0 00000	HTR	0,0,190	7620	
02330	+007627000000	OCT	007627000000	21	
02331	0 00100 0 00000	HTR	0,0,64	7627	
02332	+007632000000	OCT	007632000000	36	
02333	0 00011 0 00000	HTR	0,0,9	7632	
02334	+007720000000	OCT	007720000000	21	
02335	0 00077 0 00000	HTR	0,0,63	7720	
02336	+007751000000	OCT	007751000000	21	
02337	-0 00300 0 00026	MZE	22,0,192	7751	
02340	+007751000000	OCT	007751000000	36	
02341	0 00062 0 00000	HTR	0,0,50	7751	
02342	+007760000000	OCT	007760000000	30	
02343	0 00052 0 00000	HTR	0,0,42	7760	
02344	+016004000000	OCT	016004000000	75	
02345	0 00032 0 00000	HTR	0,0,26	16004	
02346	0 01042 0 00000	ERLIST	HTR 0,0,ERLIST-1-LOCREC	DEC HAS NUMBER OF ENTRIES SO FAR	
	03534	ORG	1884	WAS 83534	
03534	-0 53400 4 00313	ENDPCH	LXD DRUM,4		
03535	0 76200 0 00304		RDR 4		
03536	0 46000 0 00313		LDA DRUM		
03537	0 02000 0 00000		TRA 0		
03540	606060606060	MACEN	BCD 7		
03541	606060606060				
03542	606060606060				
03543	606060606060				
03544	606060606060				
03545	606060606060				
03546	606060606060				

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03547 475125626260          BCD  PRESS START IF YOU WISH TO RE-RUN PROBLEM
03550 626321516360
03551 312660704664
03552 606631623060
03553 634660512540
03554 516445604751
03555 462243254460
03556 606060606060
03557 606060606060
03560 606060606060
03561 606060606060          BCD
03562 606060606060
03563 606060606060
03564 606060606060
03565 606060606060
03566 606060606060
03567 606060606060
03570 606060606060
03571 606060606060
03572 606060606060
03573 465160422570          BCD  OR KEY IN 076000 000141
03574 603145600007
03575 060000006000
03576 000001040160
03577 606060606060
03600 606060606060
03601 606060606060
03602 606060606060
03603 606060606060
03604 606060606060
03605 606060606060          BCD
03606 606060606060
03607 606060606060
03610 606060606060
03611 606060606060
03612 606060606060
03613 606060606060
03614 606060606060
03615 606060606060
03616 606060606060
03617 214524604751          BCD  AND PRESS START IF YOU WISH TO CONTINUE BATCH COMPILING
03620 256262606263
03621 215163603126
03622 607046646066
03623 316230606346
03624 602346456331
03625 456425602221
03626 632330602346
03627 444731433145
03630 276060606060
03631 0 00000 0 00000 XZY

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EXPOSE EXTERNAL SYMBOLS RPC

0 HED

00740 PRINT SYN E\$PRINT

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00272 SPEND SYN E$SPEND
01257 ERAS SYN E$ERAS
01232 ZERO SYN E$ZERO
00312 PRNT4 SYN E$PRNT4
00311 PRNT2 SYN E$PRNT2
00316 HTR4 SYN E$HTR4
77777 LIST SYN E$LIST
00530 SYM SYN E$SYM
00505 FX4PR SYN E$FX4PR
00137 LXDA SYN E$LXDA
00266 DONE SYN E$DONE
00000 END

```

A

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	1061	0	0	0	0
LIB	0	0	0	0	0
COL	1061	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 1263

NUMBER OF SYMBOLS, DEF 195,DEFOP 0,UNDEF 0
 ORG 3 FORCE NEW RECORD

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00003          00003          ORG 3          FORCE NEW RECORD
00003 0 01303 0 01330      HTR X-1,0,LOCREC      CARD FOR DE
                                01303          ORG LOCREC
TD 01303 3 00000 0 00003      TXH 3          STOP NOT IN THIS LIST
01304 0 50000 0 01235      CLA ERWORD
01305 0 77100 0 00022      ARS 18
01306 0 07400 4 00730      TSX OCTBCD,4
01307 0 60200 0 01315      SLW NOLIST
01310 0 07400 4 00740      TSX PRINT,4
01311 0 01331 0 01313      HTR PR,0,PR+14
01312 0 02000 0 00221      TRA DIGRTN
01313 606060606060        PR          BCD 2
01314 606060606060
A 01315 0 00000 0 00000      NOLIST HTR
01316 606330316260        BCD THIS ERROR IS NOT LISTED IN THE DIAGNOSTIC PROGRAM ERROR LI
01317 255151465160
01320 316260454663
01321 604331626325
01322 246031456063
01323 302560243121
01324 274546626331
01325 236047514627
01326 512144602551
01327 514651604331
01330 626333606060        BCD 1ST.
01331 0 00000 0 00000      X
A          00000          END

```

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	18	0	0	0	0
LIB	0	0	0	0	0
COL	18	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 36

NUMBER OF SYMBOLS, DEF 198,DEFOP 0,UNDEF 0
 ORG 4 FORCE NEW RECORD

				00004	ORG 4	FORCE NEW RECORD	
	00004	0	01303	0	03533	HTR X-1,0,LOCREC	CARD FOR DE
					01303	ORG LOCREC	
TD	01303	3	00000	0	00004	TXH 4	1 DOUBLE PRIME
	01304	-0	53400	1	00030	LXD 24,1	IN DEC OF 24,1 NUMBER OF ENTRIES
	01305	2	00001	1	01307	TIX A,1,1	MADE BY NON-ARITHMETIC DIAGNOSTIC
	01306	-0	53400	1	01232	LXD ZERO,1	
	01307	-0	63400	1	01334	A SXD NXTER,1	SET END OF ERROR LIST TEST
	01310	-0	53400	1	01232	LXD ZERO,1	
	01311	0	76600	0	00361	AB WPR	SPACE BETWEEN ERROR COMMENTS
	01312	-0	53400	2	01232	LXD ZERO,2	
	01313	0	50000	1	77777	CLA LIST,1	
	01314	-0	32000	0	01230	ANA DECMSK	
	01315	0	40200	0	01234	SUB PREFX1	GET UNCOMPLIMENTED LOCATION
	01316	-0	32000	0	01230	ANA DECMSK	
	01317	0	34000	2	03532	AE CAS ER1PRM,2	2 WORD ENTRIES IN THIS LIST
	01320	0	02000	0	01322	TRA AC	
	01321	0	02000	0	01325	TRA BHAV	
	01322	1	00002	2	01323	AC TXI AD,2,2	
	01323	-3	00076	2	01317	AD TXL AE,2,62	62 STOPS IN LIST SO FAR
	01324	0	02000	0	01330	TRA NO	CANNOT IDENTIFY
	01325	0	50000	2	03533	BHAV CLA ER1PRM+1,2	
	01326	0	62100	0	01327	STA BA	
A	01327	0	02000	0	00000	BA TRA	
	01330	0	76400	0	00201	NO BST 1	SPACE BACK TO PRINT RECORD ZERO
	01331	0	76400	0	00201	BST 1	
	01332	0	60100	0	01235	STO ERWORD	AND SAVE OCTAL LOCATION
	01333	0	02000	0	00137	TRA LXDA	
	01334	-3	00000	1	01311	NXTER TXL AB,1,0	NUMBER OF ERROR ENTRIES MINUS 1
	01335	0	76600	0	00361	WPR	FINISHED WITH ERROR LIST, SPACE PRINTER
	01336	0	50000	0	00316	CLA HTR4	
	01337	0	60100	0	00271	STO DONE+3	
	01340	0	02000	0	00272	TRA SPEND	
	01341	0	50000	1	77776	TEIFNO CLA LIST-1,1	BETA, WHICH IS DUPLICATED IN SOURCE
	01342	-0	32000	0	01227	ANA ADDMSK	PROGRAM, IS IN ADDRESS OF LIST
	01343	0	07400	4	00676	TSX BINDEC,4	
	01344	0	60200	0	01355	SLW TBETA	
	01345	0	07400	4	00740	TSX PRINT,4	
	01346	0	01365	0	01350	HTR PRTEIF,0,PRTEIF+13	
	01347	1	00002	1	01334	TXI NXTER,1,2	2WORD ENTRIES IN ERROR LIST
	01350	60606060606060				PRTEIF BCD 2	
	01351	60606060606060					
	01352	633025602646				BCD 3THE FORMULA NUMBER	
	01353	514464432160					
	01354	456444222551					
A	01355	0	00000	0	00000	TBETA HTR	
	01356	603162602464				BCD 7 IS DUPLICATED IN THE SOURCE PROGRAM	
	01357	474331232163					
	01360	252460314560					
	01361	633025606246					
	01362	645123256047					
	01363	514627512144					
	01364	606060606060					
	01365	0	50000	0	01541	MINB1 CLA ADTMI	SELECT ADDRESS OF PARTICULAR TIFGO ENTRY

01366	0	73400	4	00000		PAX 0,4	FOR PRINT ROUTINE
01367	0	62100	0	01504		STA WHICH A	
01370	-0	50000	0	01445		CAL N1	AND PICK UP BCD FOR COMMENT
01371	1	00042	4	01451		TXI BETAPR,4,34	ADD LENGTH OF COMMENT TO ADDRESS
01372	0	50000	0	01541	MINB2	CLA ADTMI	
01373	0	73400	4	00000		PAX 0,4	
01374	0	62100	0	01504		STA WHICH A	
01375	-0	50000	0	01446		CAL N2	
01376	1	00042	4	01451		TXI BETAPR,4,34	
01377	0	50000	0	01541	MINB3	CLA ADTMI	
01400	0	73400	4	00000		PAX 0,4	
01401	0	62100	0	01504		STA WHICH A	
01402	-0	50000	0	01447		CAL N3	
01403	1	00042	4	01451		TXI BETAPR,4,34	
01404	0	50000	0	01542	TSXTFO	CLA ADTZR	
01405	0	73400	4	00000		PAX 0,4	
01406	0	62100	0	01504		STA WHICH A	
01407	-0	50000	0	01444		CAL N	
01410	1	00042	4	01451		TXI BETAPR,4,34	
01411	0	50000	0	01543	BTIFG1	CLA ADT1	
01412	0	73400	4	00000		PAX 0,4	
01413	0	62100	0	01504		STA WHICH A	
01414	-0	50000	0	01443		CAL SOMN	
01415	1	00042	4	01451		TXI BETAPR,4,34	
01416	0	50000	0	01544	BTIFG2	CLA ADT2	
01417	0	02000	0	01412		TRA BTIFG1+1	
01420	0	50000	0	01545	B1TIF3	CLA ADT3	
01421	0	02000	0	01366		TRA MINB1+1	
01422	0	50000	0	01545	B2TIF3	CLA ADT3	
01423	0	02000	0	01373		TRA MINB2+1	
01424	0	50000	0	01546	B1TIF4	CLA ADT4	
01425	0	02000	0	01366		TRA MINB1+1	
01426	0	50000	0	01546	B2TIF4	CLA ADT4	
01427	0	02000	0	01373		TRA MINB2+1	
01430	0	50000	0	01547	B1TIF5	CLA ADT5	
01431	0	02000	0	01366		TRA MINB1+1	
01432	0	50000	0	01547	B2TIF5	CLA ADT5	
01433	0	02000	0	01373		TRA MINB2+1	
01434	0	50000	0	01550	TIF6B	CLA ADT6	
01435	0	02000	0	01405		TRA TSXTFO+1	
01436	0	50000	0	01551	DONOB T	CLA ADDO	SAME PROCESS AS FOR TIFGO ENTRIES
01437	0	73400	4	00000		PAX 0,4	
01440	0	62100	0	01504		STA WHICH A	
01441	-0	50000	0	01450		CAL B	
01442	1	00016	4	01451		TXI BETAPR,4,14	
01443	624644256045				SOMN	BCD 1SOME N	
01444	456060606060				N	BCD 1N	
01445	450160606060				N1	BCD 1N1	
01446	450260606060				N2	BCD 1N2	
01447	450360606060				N3	BCD 1N3	
01450	226060606060				B	BCD 1B	
01451	-0	63400	4	01504	BETAPR	SXD WHICH A,4	SOME TIFGO, OR DO, STATEMENT REFERS TO
01452	0	60200	0	01526		SLW BETAWD	A NONEXISTANT BETA
01453	0	56000	0	01526		LDQ BETAWD	MOVE WORD INTO COMMENT

01454	-0	50000	0	01525	CAL	BETAWD-1		
01455	0	77100	0	00022	ARS	18		
01456	-0	76300	0	00022	LGL	18		
01457	0	60200	0	01525	SLW	BETAWD-1		
01460	-0	76300	0	00022	LGL	18		
01461	0	56000	0	00717	LDQ	BLANKS		
01462	-0	76300	0	00022	LGL	18		
01463	0	60200	0	01526	SLW	BETAWD		
01464	0	50000	1	77777	CLA	LIST,1		
01465	0	07400	4	00613	TSX	EXBETA,4		
01466	0	07400	4	00602	TSX	LAJUST,4		
01467	0	60200	0	01513	SLW	FORMNB		
01470	0	56000	0	01513	LDQ	FORMNB	MOVE EXTERNAL FORMULA NUMBER	
01471	-0	50000	0	01512	CAL	FORMNB-1	INTO COMMENT	
01472	0	77100	0	00006	ARS	6		
01473	-0	76300	0	00006	LGL	6		
01474	0	60200	0	01512	SLW	FORMNB-1		
01475	-0	76300	0	00036	LGL	30		
01476	0	56000	0	00717	LDQ	BLANKS		
01477	-0	76300	0	00006	LGL	6		
01500	0	60200	0	01513	SLW	FORMNB		
01501	0	07400	4	00740	TSX	PRINT,4		
01502	0	01541	0	01506	HTR	NOBETA,0,NOBETA+27		
01503	0	07400	4	00740	TSX	PRINT,4		
01504	0	00000	0	00000	WHICHA			
01505	1	00001	1	01334	TXI	NXTER,1,1	1 WORD ENTRY IN ERROR LIST	
01506	60606060606060				NOBETA	BCD 2		
01507	60606060606060							
01510	626321632544				BCD	3STATEMENT NUMBER		
01511	254563604564							
01512	442225516060							
01513	0	00000	0	00000	FORMNB	HTR		
01514	512526255162				BCD	REFERS TO A NON-EXISTENT FORMULA NUMBER CORRESPONDING TO		
01515	606346602160							
01516	454645402567							
01517	316263254563							
01520	602646514464							
01521	432160456444							
01522	222551602346							
01523	515125624746							
01524	452431452760							
01525	634660606060							
01526	606060606060				BETAWD	BCD 6		
01527	606060606060							
01530	606060606060							
01531	606060606060							
01532	606060606060							
01533	606060606060							
01534	314560633025				BCD	5IN THE TYPE OF STATEMENT		
01535	606370472560							
01536	462660626321							
01537	632544254563							
01540	606060606060							
01541	0	00000	0	01552	ADTMI	HTR	TISMIN	

A

01542	0	00000	0	01614	ADTZR	HTR	TISZRO		
01543	0	00000	0	01656	ADT1	HTR	TIS1		
01544	0	00000	0	01720	ADT2	HTR	TIS2		
01545	0	00000	0	01762	ADT3	HTR	TIS3		
01546	0	00000	0	02024	ADT4	HTR	TIS4		
01547	0	00000	0	02066	ADT5	HTR	TIS5		
01550	0	00000	0	02130	ADT6	HTR	TIS6		
01551	0	00000	0	02172	ADDO	HTR	DOS		
01552	606060606060				TISMIN	BCD	4		
01553	606060606060								
01554	606060606060								
01555	606060606060								
01556	602160603126				BCD	A	IF (E) N1, N2, N3		
01557	607460256034								
01560	604501736045								
01561	027360450360								
01562	606060606060								
01563	606060606060								
01564	606060606060								
01565	606060606060								
01566	606060606060								
01567	606060606060								
01570	606060606060				BCD				
01571	606060606060								
01572	606060606060								
01573	606060606060								
01574	606060606060								
01575	606060606060								
01576	606060606060								
01577	606060606060								
01600	606060606060								
01601	606060606060								
01602	606060606060				BCD				
01603	606060606060								
01604	606060606060								
01605	606060606060								
01606	606060606060								
01607	606060606060								
01610	606060606060								
01611	606060606060								
01612	606060606060								
01613	606060606060								
01614	606060606060				TISZRO	BCD	4		
01615	606060606060								
01616	606060606060								
01617	606060606060								
01620	602160602746				BCD	A	GO TO N		
01621	606346604560								
01622	606060606060								
01623	606060606060								
01624	606060606060								
01625	606060606060								
01626	606060606060								
01627	606060606060								

01630	606060606060	
01631	606060606060	
01632	606060606060	BCD
01633	606060606060	
01634	606060606060	
01635	606060606060	
01636	606060606060	
01637	606060606060	
01640	606060606060	
01641	606060606060	
01642	606060606060	
01643	606060606060	
01644	606060606060	BCD
01645	606060606060	
01646	606060606060	
01647	606060606060	
01650	606060606060	
01651	606060606060	
01652	606060606060	
01653	606060606060	
01654	606060606060	
01655	606060606060	
01656	606060606060	TIS1 BCD 4
01657	606060606060	
01660	606060606060	
01661	606060606060	
01662	602160602746	BCD A GO TO L (N1, N2, NM)
01663	606346604360	
01664	746045017360	
01665	450273604544	
01666	603460606060	
01667	606060606060	
01670	606060606060	
01671	606060606060	
01672	606060606060	
01673	606060606060	
01674	606060606060	BCD
01675	606060606060	
01676	606060606060	
01677	606060606060	
01700	606060606060	
01701	606060606060	
01702	606060606060	
01703	606060606060	
01704	606060606060	
01705	606060606060	
01706	606060606060	BCD
01707	606060606060	
01710	606060606060	
01711	606060606060	
01712	606060606060	
01713	606060606060	
01714	606060606060	
01715	606060606060	

01716	606060606060		
01717	606060606060		
01720	606060606060	TIS2	BCD 4
01721	606060606060		
01722	606060606060		
01723	606060606060		
01724	602160602746	BCD	A GO TO (N1, N2, NM) J
01725	606346607460		
01726	450173604502		
01727	736045446034		
01730	604160606060		
01731	606060606060		
01732	606060606060		
01733	606060606060		
01734	606060606060		
01735	606060606060		
01736	606060606060	BCD	
01737	606060606060		
01740	606060606060		
01741	606060606060		
01742	606060606060		
01743	606060606060		
01744	606060606060		
01745	606060606060		
01746	606060606060		
01747	606060606060		
01750	606060606060	BCD	
01751	606060606060		
01752	606060606060		
01753	606060606060		
01754	606060606060		
01755	606060606060		
01756	606060606060		
01757	606060606060		
01760	606060606060		
01761	606060606060		
01762	606060606060	TIS3	BCD 4
01763	606060606060		
01764	606060606060		
01765	606060606060		
01766	602160603126	BCD	A IF (SENSE SWITCH K) N1, N2
01767	607460622545		
01770	622560626631		
01771	632330604260		
01772	346045017360		
01773	450260606060		
01774	606060606060		
01775	606060606060		
01776	606060606060		
01777	606060606060		
02000	606060606060	BCD	9
02001	606060606060		
02002	606060606060		
02003	606060606060		

02004	606060606060	
02005	606060606060	
02006	606060606060	
02007	606060606060	
02010	606060606060	
02011	465160606060	BCD 10R
02012	602160603126	BCD A IF (SENSE LIGHT K) N1, N2
02013	607460622545	
02014	622560433127	
02015	306360426034	
02016	604501736045	
02017	026060606060	
02020	606060606060	
02021	606060606060	
02022	606060606060	
02023	606060606060	
02024	606060606060	TIS4 BCD 4
02025	606060606060	
02026	606060606060	
02027	606060606060	
02030	602160603126	BCD A IF DIVIDE CHECK N1, N2
02031	602431653124	
02032	256023302523	
02033	426045017360	
02034	450260606060	
02035	606060606060	
02036	606060606060	
02037	606060606060	
02040	606060606060	
02041	606060606060	
02042	606060606060	BCD
02043	606060606060	
02044	606060606060	
02045	606060606060	
02046	606060606060	
02047	606060606060	
02050	606060606060	
02051	606060606060	
02052	606060606060	
02053	606060606060	
02054	606060606060	BCD
02055	606060606060	
02056	606060606060	
02057	606060606060	
02060	606060606060	
02061	606060606060	
02062	606060606060	
02063	606060606060	
02064	606060606060	
02065	606060606060	
02066	606060606060	TIS5 BCD 4
02067	606060606060	
02070	606060606060	
02071	606060606060	

02072	602160603126	BCD	A	IF ACCUMULATOR OVERFLOW N1, N2
02073	602123236444			
02074	644321634651			
02075	604665255126			
02076	434666604501			
02077	736045026060			
02100	606060606060			
02101	606060606060			
02102	606060606060			
02103	606060606060			
02104	606060606060	BCD	9	
02105	606060606060			
02106	606060606060			
02107	606060606060			
02110	606060606060			
02111	606060606060			
02112	606060606060			
02113	606060606060			
02114	606060606060			
02115	465160606060	BCD	10R	
02116	602160603126	BCD	A	IF QUOTIENT OVERFLOW N1, N2
02117	605064466331			
02120	254563604665			
02121	255126434666			
02122	604501736045			
02123	026060606060			
02124	606060606060			
02125	606060606060			
02126	606060606060			
02127	606060606060			
02130	606060606060	TIS6	BCD	4
02131	606060606060			
02132	606060606060			
02133	606060606060			
02134	602160602162	BCD	A	ASSIGN K TO N
02135	623127456042			
02136	606346604560			
02137	606060606060			
02140	606060606060			
02141	606060606060			
02142	606060606060			
02143	606060606060			
02144	606060606060			
02145	606060606060			
02146	606060606060	BCD		
02147	606060606060			
02150	606060606060			
02151	606060606060			
02152	606060606060			
02153	606060606060			
02154	606060606060			
02155	606060606060			
02156	606060606060			
02157	606060606060			

02160	606060606060			BCD	
02161	606060606060				
02162	606060606060				
02163	606060606060				
02164	606060606060				
02165	606060606060				
02166	606060606060				
02167	606060606060				
02170	606060606060				
02171	606060606060				
02172	606060606060	DOS		BCD 4	
02173	606060606060				
02174	606060606060				
02175	606060606060				
02176	602160602446			BCD A DO B I = N1, N2, N3	
02177	602260316013				
02200	604501736045				
02201	027360450360				
02202	606060606060				
02203	606060606060				
02204	606060606060				
02205	606060606060				
02206	606060606060				
02207	606060606060				
02210	-0 53400 4 02256	TSXH	LXD	XTABLE,4	FIND THE KIND OF TIFGO ENTRY WHICH
02211	0 50000 1 77777		CLA	LIST,1	IS TRYING TO TURN CONTROL OVER TO A
02212	0 76700 0 00022		ALS	18	NON-EXECUTABLE STATEMENT
02213	-0 32000 0 01230		ANA	DECMSK	
02214	0 40200 0 01234		SUB	PREFX1	
02215	-0 32000 0 01230		ANA	DECMSK	
02216	0 34000 4 02256	TSHCAS	CAS	XTABLE,4	
02217	0 02000 0 02221		TRA	TSXH1	
02220	0 02000 0 02223		TRA	HVNOX	
02221	2 00002 4 02216	TSXH1	TIX	TSHCAS,4,2	
02222	0 02000 0 01330		TRA	NO	CANNOT IDENTIFY, PRINT OCTAL LOCATION
02223	0 50000 4 02257	HVNOX	CLA	XTABLE+1,4	
02224	0 62100 0 02225		STA	TSHTRA	
02225	0 02000 0 00000	TSHTRA	TRA		
02226	+000316000000		OCT	000316000000	
02227	0 00000 0 02257		HTR	SAVEB1	
02230	+000327000000		OCT	000327000000	
02231	0 00000 0 02261		HTR	SAVEB2	
02232	+000337000000		OCT	000337000000	
02233	0 00000 0 02262		HTR	SAVEB3	
02234	+000352000000		OCT	000352000000	
02235	0 00000 0 02263		HTR	TIFOB	
02236	+000374000000		OCT	000374000000	
02237	0 00000 0 02265		HTR	TRADX1	
02240	+000421000000		OCT	000421000000	
02241	0 00000 0 02267		HTR	TRADX2	
02242	+000443000000		OCT	000443000000	
02243	0 00000 0 02271		HTR	TIF3B1	
02244	+000453000000		OCT	000453000000	
02245	0 00000 0 02273		HTR	TIF3B2	

A

02246	+000467000000		OCT	000467000000
02247	0 00000 0 02274		HTR	TIF4B1,
02250	+000477000000		OCT	000477000000
02251	0 00000 0 02276		HTR	TIF4B2
02252	+000513000000		OCT	000513000000
02253	0 00000 0 02277		HTR	TIF5B1
02254	+000523000000		OCT	000523000000
02255	0 00000 0 02300		HTR	TIF5B2
02256	0 00030 0 00000	XTABLE	HTR	0,0,24
02257	0 50000 0 01541	SAVEB1	CLA	ADTMI
02260	0 02000 0 02301		TRA	NOXBTA
02261	0 02000 0 02257	SAVEB2	TRA	SAVEB1
02262	0 02000 0 02257	SAVEB3	TRA	SAVEB1
02263	0 50000 0 01542	TIFOB	CLA	ADTZR
02264	0 02000 0 02301		TRA	NOXBTA
02265	0 50000 0 01543	TRADX1	CLA	ADT1
02266	0 02000 0 02301		TRA	NOXBTA
02267	0 50000 0 01544	TRADX2	CLA	ADT2
02270	0 02000 0 02301		TRA	NOXBTA
02271	0 50000 0 01545	TIF3B1	CLA	ADT3
02272	0 02000 0 02301		TRA	NOXBTA
02273	0 02000 0 02271	TIF3B2	TRA	TIF3B1
02274	0 50000 0 01546	TIF4B1	CLA	ADT4
02275	0 02000 0 02301		TRA	NOXBTA
02276	0 02000 0 02274	TIF4B2	TRA	TIF4B1
02277	0 02000 0 02300	TIF5B1	TRA	TIF5B2
02300	0 50000 0 01547	TIF5B2	CLA	ADT5
02301	0 62100 0 02343	NOXBTA	STA	ADTD
02302	0 40000 0 02401		ADD	DEC34
02303	0 76700 0 00022		ALS	18
02304	0 62200 0 02343		STD	ADTD
02305	0 50000 1 77776		CLA	LIST-1,1
02306	0 07400 4 00613		TSX	EXBETA,4
02307	0 07400 4 00602		TSX	LAJUST,4
02310	0 60200 0 01257		SLW	ERAS
02311	-0 50000 0 02364		CAL	TIFOR
02312	0 77100 0 00014		ARS	12
02313	0 56000 0 01257		LDQ	ERAS
02314	-0 76300 0 00014		LGL	12
02315	0 60200 0 02364		SLW	TIFOR
02316	-0 76300 0 00030		LGL	24
02317	0 56000 0 00717		LDQ	BLANKS
02320	-0 76300 0 00014		LGL	12
02321	0 60200 0 02365		SLW	TIFOR+1
02322	0 50000 1 77776		CLA	LIST-1,1
02323	0 77100 0 00022		ARS	18
02324	0 07400 4 00613		TSX	EXBETA,4
02325	0 07400 4 00602		TSX	LAJUST,4
02326	0 60200 0 01257		SLW	ERAS
02327	-0 50000 0 02351		CAL	NONB-1
02330	0 56000 0 01257		LDQ	ERAS
02331	0 77100 0 00006		ARS	6
02332	-0 76300 0 00006		LGL	6
02333	0 60200 0 02351		SLW	NONB-1

A TIFGO STATEMENT HAS ATTEMPTED TO
TURN OVER CONTROL OF THE PROGRAM TO A
NON EXECUTABLE STATEMENT

GET EXTERNAL NUMBER OF TIFGO ENTRY

GET EXTERNAL NUMBER OF STATEMENT
WHICH IS NOT EXECUTABLE

02334	-0 76300 0 00036		LGL 30	
02335	0 56000 0 00717		LDQ BLANKS	
02336	-0 76300 0 00006		LGL 6	
02337	0 60200 0 02352		SLW NONB	
02340	0 07400 4 00740		TSX PRINT,4	
02341	0 02401 0 02345		HTR BTNONX,0,BTNONX+28	
02342	0 07400 4 00740		TSX PRINT,4	
A 02343	0 00000 0 00000	ADDTD	HTR	
02344	1 00002 1 01334		TXI NXTER,1,2	2WORD ENTRY IN ERROR LIST
02345	606060606060	BTNONX	BCD 2	
02346	606060606060			
02347	626321632544		BCD 2STATEMENT NU	
02350	254563604564			
02351	442225516060		BCD 1MBER	
A 02352	0 00000 0 00000	NONB	HTR	
02353	316260454663		BCD 9IS NOT EXECUTABLE.	IT IS REFERRED TO BY STATEMENT NUM
02354	602567252364			
02355	632122432533			
02356	606031636031			
02357	626051252625			
02360	515125246063			
02361	466022706062			
02362	632163254425			
02363	456360456444			
02364	222551606060	TIFOR	BCD 7BER	
02365	606060606060			
02366	606060606060			
02367	606060606060			
02370	606060606060			
02371	606060606060			
02372	606060606060			
02373	663031233060		BCD 6WHICH IS OF THE FOLLOWING TYPE	
02374	316260462660			
02375	633025602646			
02376	434346663145			
02377	276063704725			
02400	606060606060			
02401	0 00000 0 00042	DEC34	HTR 34	
02402	0 50000 1 77776	DOBTNX	CLA LIST-1,1	BETA IS NOT AN EXECUTABLE STATEMENT
02403	0 60100 0 00527		STO ALFBET	IN ALPHA DO BETA
02404	0 50000 1 77775		CLA LIST-2,1	
02405	0 60100 0 00530		STO SYM	
02406	0 07400 4 00740		TSX PRINT,4	
02407	0 02426 0 02412		HTR DOBTX,0,DOBTX+12	
02410	0 07400 4 00505		TSX FX4PR,4	PRINT DO STATEMENT
02411	1 00003 1 01334		TXI NXTER,1,3	3 WORD ENTRY IN ERROR LIST
02412	606060606060	DOBTX	BCD 2	
02413	606060606060			
02414	633025605121		BCD THE RANGE OF THIS DO ENDS WITH A NON-EXECUTABLE STATEMENT	
02415	452725604626			
02416	606330316260			
02417	244660254524			
02420	626066316330			
02421	602160454645			

02422	402567252364			
02423	632122432560			
02424	626321632544			
02425	254563606060			
02426	0 50000 1 77776	CONBET	CLA LIST-1,1	IN ALPHA DO BETA, BETA IS A CONDITIONAL
02427	0 60100 0 00527		STO ALFBET	TRANSFER, THAT IS, A TIFGO ENTRY
02430	0 50000 1 77775		CLA LIST-2,1	
02431	0 60100 0 00530		STO SYM	
02432	0 07400 4 00740		TSX PRINT,4	
02433	0 02453 0 02436		HTR CONBT,0,CONBT+13	
02434	0 07400 4 00505		TSX FX4PR,4	PRINT DO STATEMENT
02435	1 00003 1 01334		TXI NXTER,1,3	3 WORD ENTRY IN ERROR LIST
02436	606060606060	CONBT	BCD 2	
02437	606060606060			
02440	633025605121		BCD	THE RANGE OF THIS DO ENDS WITH A CONDITIONAL TRANSFER STATEM
02441	452725604626			
02442	606330316260			
02443	244660254524			
02444	626066316330			
02445	602160234645			
02446	243163314645			
02447	214360635121			
02450	456226255160			
02451	626321632544			
02452	254563606060		BCD 1ENT	
02453	0 50000 1 77776	DOALNX	CLA LIST-1,1	ALPHA PLUS 1, IN ALPHA DO BETA,
02454	0 60100 0 00527		STO ALFBET	IS NOT EXECUTABLE
02455	0 50000 1 77775		CLA LIST-2,1	
02456	0 60100 0 00530		STO SYM	
02457	0 07400 4 00740		TSX PRINT,4	
02460	0 02502 0 02463		HTR DOALX,0,DOALX+15	
02461	0 07400 4 00505		TSX FX4PR,4	PRINT DO STATEMENT
02462	1 00003 1 01334		TXI NXTER,1,3	3 WORD ENTRIES IN ERROR LIST
02463	606060606060	DOALX	BCD 2	
02464	606060606060			
02465	633025606263		BCD	THE STATEMENT IMMEDIATELY FOLLOWING THIS DO IS NOT AN EXECUT
02466	216325442545			
02467	636031444425			
02470	243121632543			
02471	706026464343			
02472	466631452760			
02473	633031626024			
02474	466031626045			
02475	466360214560			
02476	256725236463			
02477	212243256062		BCD 3ABLE	STATEMENT
02500	632163254425			
02501	456360606060			
02502	0 50000 1 77777	CHBTSX	CLA LIST,1	THE SYMBOL, OR A VARIABLE IN A DO STATEMENT
02503	0 76700 0 00022		ALS 18	DOES NOT BEGIN WITH I J K ETC
02504	-0 32000 0 01230		ANA DECMSK	
02505	0 40200 0 01234		SUB PREFIX1	CONVERT TSX TO NUMBER OF STOP WHERE THIS
02506	-0 32000 0 01230		ANA DECMSK	
02507	0 53400 4 01232		LXA ZERO,4	WAS PICKED UP

02576	244660626321		BCD 2DO STATEMENT	
02577	632544254563			
02600	606060606060	VRPR	BCD 2	
02601	606060606060			
02602	633025606060	THE	BCD 1THE	
02603	606031452425		BCD 3 INDEXING PARAMET	
02604	673145276047			
02605	215121442563			
02606	255173606060	DOPRAM	BCD 1ER,	
02607	606060607360		BCD 4 , IS INCORRECT.	
02610	316260314523			
02611	465151252363			
02612	336060606060			
02613	+000716000000		OCT 000716000000	
02614	035124606060		BCD 13RD	IJKN3 IN NON-ARITH DIAG
02615	+000703000000		OCT 000703000000	
02616	024524606060		BCD 12ND	IJKN2
02617	+000670000000		OCT 000670000000	
02620	016263606060		BCD 11ST	IJKN1
02621	+000656000000		OCT 000656000000	IJKSYM
02622	0 00000 0 00000	BLIST	HTR 0	ZERO INDICATES TO PROGRAM THIS IS SYMBOL
02623	0 50000 1 77775	CHBDO	CLA LIST-2,1	ARRANGE TO PRINT DO STATEMENT
02624	0 60100 0 00527		STO ALFBET	
02625	0 50000 1 77774		CLA LIST-3,1	
02626	0 60100 0 00530		STO SYM	
02627	0 07400 4 00740		TSX PRINT,4	
02630	0 02656 0 02633		HTR CHDOPR,0,CHDOPR+19	
02631	0 07400 4 00505		TSX FX4PR,4	
02632	1 00004 1 01334		TXI NXTER,1,4	4 WORD ENTRIES IN ERROR LIST
02633	606060606060	CHDOPR	BCD 2	
02634	606060606060			
02635	214560314563		BCD AN INTEGER VARIABLE MUST BEGIN WITH I J K L M OR N.	THE IND
02636	252725516065			
02637	215131212243			
02640	256044646263			
02641	602225273145			
02642	606631633060			
02643	316041604260			
02644	436044604651			
02645	604533606063			
02646	302560314524			
02647	256760627044		BCD 7EX SYMBOL IS INCORRECT IN THE STATEMENT	
02650	224643603162			
02651	603145234651			
02652	512523636031			
02653	456063302560			
02654	626321632544			
02655	254563606060			
02656	-0 53400 2 01232	CHATSX	LXD ZERO,2	AN ILLEGAL CHARACTER HAS BEEN FOUND IN
02657	0 50000 1 77777		CLA LIST,1	SOME NAME
02660	0 76700 0 00022		ALS 18	UNCOMPLIMENTED LOCATION WILL SHOW
02661	-0 32000 0 01230		ANA DECMSK	KIND OF STATEMENT USING THIS NAME
02662	0 40200 0 01234		SUB PREFX1	
02663	-0 32000 0 01230		ANA DECMSK	

02664	0	34000	2	02704	CB	CAS	CHA2WD,2	IS THIS FROM ONE OF THE SIZ, COMMON
02665	0	02000	0	02667		TRA	TXIC	FUNCTION ETC., STATEMENTS
02666	0	02000	0	02717		TRA	PR2WD	
02667	1	00002	2	02670	TXIC	TXI	CA,2,2	
02670	-3	00006	2	02664	CA	TXL	CB,2,6	
02671	0	34000	2	02716	CC	CAS	CHA3WD,2	OR DOES THE NAME APPEAR IN A D0 STATEMENT
02672	0	02000	0	02674		TRA	CTIX	
02673	0	02000	0	03020		TRA	PR3WD	
02674	2	00002	2	02671	CTIX	TIX	CC,2,2	
02675	0	02000	0	01330		TRA	NO	PRINT UNIDENTIFYABLE STOP
02676	+000131000000					OCT	000131000000	
02677	0	00000	0	03000		HTR	FRSB	TSXA IN NON ARITH DIAG
02700	+000143000000					OCT	000143000000	
02701	0	00000	0	02770		HTR	SZ	TSXB
02702	+000163000000					OCT	000163000000	
02703	0	00000	0	03010		HTR	SBAR	TSXC
02704	+000175000000				CHA2WD	OCT	000175000000	
02705	0	00000	0	02760		HTR	CMON	TSXD
02706	+000653000000					OCT	000653000000	
02707	0	00000	0	00000		HTR	0	PUNSYN
02710	+000665000000					OCT	000665000000	
02711	600162636031					BCD	1 1ST I	PUNN1
02712	+000700000000					OCT	000700000000	
02713	600245246031					BCD	1 2ND I	PUNN2
02714	+000713000000					OCT	000713000000	
02715	600351246031					BCD	1 3RD I	PUNN3
02716	0	00000	0	00000	CHA3WD			
02717	0	50000	2	02705	PR2WD	CLA	CHA2WD+1,2	PRINT IDENTIFICATION OF STATEMENT
02720	0	62100	0	02722		STA	CHACLA	IN WHICH NAME WAS FOUND
02721	-0	53400	2	01232		LXD	ZERO,2	TRANSFER 8 WORDS ABOUT STATEMENT
02722	0	50000	2	00000	CHACLA	CLA	0,2	INTO COMMENT
02723	0	60100	2	02750		STO	DA,2	
02724	1	77777	2	02725		TXI	CHATXH,2,-1	
02725	3	77770	2	02722	CHATXH	TXH	CHACLA,2,-8	
02726	-0	50000	1	77776		CAL	LIST-1,1	
02727	0	07400	4	00543		TSX	ZEROUT,4	UNPACK NAME AND MOVE TO RIGHT
02730	0	07400	4	00565		TSX	RAJUST,4	
02731	0	60200	0	02741		SLW	D	
02732	0	07400	4	00740		TSX	PRINT,4	
02733	0	02760	0	02735		HTR	PRCHA,0,PRCHA+19	
02734	1	00002	1	01334		TXI	NXTER,1,2	2 WORD ENTRY IN ERROR LIST
02735	606060606060				PRCHA	BCD	2	
02736	606060606060							
02737	633025606270					BCD	2THE SYMBOL,	
02740	442246437360							
02741	0	00000	0	00000	D	HTR		
02742	736023464563					BCD	6, CONTAINS AN ILLEGAL CHARACTER. IT	
02743	213145626021							
02744	456031434325							
02745	272143602330							
02746	215121236325							
02747	513360603163							
02750	606060606060				DA	BCD	8	
02751	606060606060							

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02752	606060606060			
02753	606060606060			
02754	606060606060			
02755	606060606060			
02756	606060606060			
02757	606060606060			
02760	602147472521	CMON	BCD 8 APPEARS IN A COMMON STATEMENT.	
02761	516260314560			
02762	216023464444			
02763	464560626321			
02764	632544254563			
02765	336060606060			
02766	606060606060			
02767	606060606060			
02770	602147472521	SZ	BCD 8 APPEARS IN A DIMENSION STATEMENT.	
02771	516260314560			
02772	216024314425			
02773	456231464560			
02774	626321632544			
02775	254563336060			
02776	606060606060			
02777	606060606060			
03000	602147472521	FRSB	BCD 8 APPEARS AS THE NAME OF A FORTRAN FUNCTION.	
03001	516260216260			
03002	633025604521			
03003	442560462660			
03004	216026465163			
03005	512145602664			
03006	452363314645			
03007	336060606060			
03010	602147472521	SBAR	BCD 8 APPEARS AS AN ARGUMENT OF A SUBROUTINE.	
03011	516260216260			
03012	214560215127			
03013	644425456360			
03014	462660216062			
03015	642251466463			
03016	314525336060			
03017	606060606060			
03020	0 50000 2 02717	PR3WD	CLA CHA3WD+1,2	1ST,2ND,OR 3RD PARAMETER
03021	0 10000 0 03060		TZE SYMDO	ZERO IF SYMBOL REFERED TO
03022	0 60100 0 03047		STO PAR	
03023	-0 50000 1 77776		CAL LIST-1,1	UNPACK NAME AND MOVE TO RIGHT
03024	0 07400 4 00543		TSX ZEROOUT,4	
03025	0 07400 4 00565		TSX RAJUST,4	
03026	0 60200 0 03053		SLW WRPAR	
03027	0 07400 4 00740		TSX PRINT,4	
03030	0 03060 0 03037		HTR PARAPR,0,PARAPR+17	
03031	0 50000 1 77775		CLA LIST-2,1	PRINT ALPHA TO BETA STATEMENT AND
03032	0 60100 0 00527		STO ALFBET	SYMBOL
03033	0 50000 1 77774		CLA LIST-3,1	
03034	0 60100 0 00530		STO SYM	
03035	0 07400 4 00505		TSX FX4PR,4	
03036	1 00004 1 01334		TXI NXTER,1,4	4 WORD ENTRIES IN ERROR LIST
03037	606060606060	PARAPR	BCD 2	

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03040 606060606060
03041 633025512560          BCD 6THERE IS AN ILLEGAL CHARACTER IN THE
03042 316260214560
03043 314343252721
03044 436023302151
03045 212363255160
03046 314560633025
A 03047 0 00000 0 00000 PAR      HTR
03050 452425673145          BCD 3NDEXING PARAMETER
03051 276047215121
03052 442563255160
A 03053 0 00000 0 00000 WRPAR    HTR
03054 736046266063          BCD 4, OF THE DO STATEMENT
03055 302560244660
03056 626321632544
03057 254563606060
03060 0 07400 4 00740 SYMDO     TSX PRINT,4
03061 0 03106 0 03070          HTR SYMDPR,0 ,SYMDPR+14
03062 0 50000 1 77775          CLA LIST-2,1
03063 0 60100 0 00527          STO ALFBET          PRINT ALPHA DO BETA FOR SYMBOL
03064 0 50000 1 77774          CLA LIST-3,1          WITH ILLEGAL CHARACTER
03065 0 60100 0 00530          STO SYM
03066 0 07400 4 00505          TSX FX4PR,4
03067 1 00004 1 01334          TXI NXTER,1,4          4 WORD ENTRIES IN ERROR LIST
03070 606060606060          SYMDPR BCD 2
03071 606060606060
03072 633025512560          BCD  THERE IS AN ILLEGAL CHARACTER IN THE INDEXING SYMBOL OF THE
03073 316260214560
03074 314343252721
03075 436023302151
03076 212363255160
03077 314560633025
03100 603145242567
03101 314527606270
03102 442246436046
03103 266063302560
03104 244660626321          BCD 2DO STATEMENT
03105 632544254563
03106 0 50000 1 77777 NOTRA    CLA LIST,1          ALPHA+1,INTERNAL FORMULA NUMBER,
03107 -0 32000 0 01227          ANA ADDMSK          IN ADDRESS OF LIST. THIS IS NUMBER OF AN
03110 0 07400 4 00613          TSX EXBETA,4          EXECUTABLE STATEMENT WHICH FOLLOWS A
03111 0 07400 4 00602          TSX LAJUST,4          TIFGO ENTRY OR A STOP, BUT WHICH IS NEVER
03112 0 60200 0 03137          SLW EXTN1           TRANSFERED TO IN THE FLOW OF THE PROBLEM
03113 0 07400 4 00740          TSX PRINT,4
03114 0 03140 0 03116          HTR PRNOTR,0 ,PRNOTR+18
03115 1 00001 1 01334          TXI NXTER,1,1          1 WORD ENTRY IN ERROR LIST
03116 606060606060          PRNOTR BCD 2
03117 606060606060
03120 216047215163          BCD  A PART OF THE PROGRAM CANNOT BE REACHED.  IT IS LOCATED AT 0
03121 604626606330
03122 256047514627
03123 512144602321
03124 454546636022
03125 256051252123

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03126 302524336060
03127 316360316260
03130 434623216325
03131 246021636046
03132 516041646263 BCD 5R JUST BELOW STATEMENT NUMBER
03133 602225434666
03134 606263216325
03135 442545636045
03136 644422255160
A 03137 0 00000 0 00000 EXTN1 HTR
03140 0 50000 1 77777 FRETIF CLA LIST,1 INTERNAL FORMULA NUMBER
03141 0 07400 4 00613 TSX EXBETA,4 IN ADDRESS OF LIST. SECTION 4 WILL STOP
03142 0 07400 4 00602 TSX LAJUST,4 WHEN THERE ARE MORE BRANCHES THAN
03143 0 60200 0 03165 SLW FRALFA NECESSARY FOR A TIFGO ENTRY.
03144 0 07400 4 00740 TSX PRINT,4
03145 0 03166 0 03147 HTR PRFREQ,0,PRFREQ+15
03146 1 00001 1 01334 TXI NXTER,1,1 1 WORD ENTRY IN ERROR LIST
03147 606060606060 PRFREQ BCD 2
03150 606060606060
03151 216026512550 BCD A FREQUENCY STATEMENT CONTAINS TOO MANY BRANCHES FOR THE FOR
03152 642545237060
03153 626321632544
03154 254563602346
03155 456321314562
03156 606346466044
03157 214570602251
03160 214523302562
03161 602646516063
03162 302560264651
03163 446443216045 BCD 2MULA NUMBER
03164 644422255160
A 03165 0 00000 0 00000 FRALFA HTR
03166 -0 50000 1 77776 NOTEQV CAL LIST-1,1 THIS IS STILL IN BCD FORM, BUT MAY BE
03167 0 07400 4 00543 TSX ZEROUT,4 FOLLOWED BY 1 BLANK AND ZEROS. THIS NAME
03170 0 60200 0 03221 SLW EQWD HAS BEEN ASSIGNED INCONSISTANT VALUES IN
03171 0 56000 0 03221 LDQ EQWD EQUIVALENCE STATEMENTS
03172 -0 50000 0 03220 CAL EQWD-1
03173 0 77100 0 00014 ARS 12 MOVE WORD INTO REST OF COMMENT
03174 -0 76300 0 00014 LGL 12
03175 0 60200 0 03220 SLW EQWD-1
03176 -0 76300 0 00030 LGL 24
03177 0 56000 0 00717 LDQ BLANKS
03200 -0 76300 0 00014 LGL 12
03201 0 60200 0 03221 SLW EQWD
03202 0 07400 4 00740 TSX PRINT,4
03203 0 03222 0 03205 HTR PREQ,0,PREQ+13
03204 1 00002 1 01334 TXI NXTER,1,2 2 WORD ENTRIES IN ERROR LIST
03205 606060606060 PREQ BCD 2
03206 606060606060
03207 214560314523 BCD AN INCONSISTENT EQUIVALENCE STATEMENT HAS BEEN MADE ABOUT
03210 464562316263
03211 254563602550
03212 643165214325
03213 452325606263

03214	216325442545				
03215	636030216260				
03216	222525456044				
03217	212425602122				
03220	466463606060				
A 03221	0 00000 0 00000	EQWD	HTR		
03222	0 07400 4 00740	BADWC	TSX PRINT,4		
03223	0 01244 0 01237		HTR MACHIN,0,MACHIN+5		
03224	0 50000 1 77776		CLA LIST-1,1		
03225	0 07400 4 00730		TSX OCTBCD,4		
03226	0 60200 0 01257		SLW ERAS		
03227	0 56000 0 01257		LDQ ERAS		
03230	-0 50000 0 03314		CAL BDWD		
03231	0 77100 0 00030		ARS 24		
03232	-0 76300 0 00030		LGL 24		
03233	0 60200 0 03314		SLW BDWD		
03234	-0 76300 0 00014		LGL 12		
03235	0 56000 0 00717		LDQ BLANKS		
03236	-0 76300 0 00030		LGL 24		
03237	0 60200 0 03315		SLW BDWD+1		
03240	0 07400 4 00740		TSX PRINT,4		
03241	0 03410 0 03300		HTR PRBDWC,0,PRBDWC+72		
03242	0 02000 0 03275		TRA ENDMAC		
03243	0 07400 4 00740	NOIDEN	TSX PRINT,4		
03244	0 01244 0 01237		HTR MACHIN,0,MACHIN+5		
03245	0 50000 1 77776		CLA LIST-1,1		
03246	0 07400 4 00730		TSX OCTBCD,4		
03247	0 60200 0 01257		SLW ERAS		
03250	0 56000 0 01257		LDQ ERAS		
03251	-0 50000 0 03423		CAL IDENWD		
03252	0 77100 0 00022		ARS 18		
03253	-0 76300 0 00022		LGL 18		
03254	0 60200 0 03423		SLW IDENWD		
03255	-0 76300 0 00022		LGL 18		
03256	0 56000 0 03424		LDQ IDENWD+1		
03257	-0 77300 0 00022		RQL 18		
03260	-0 76300 0 00022		LGL 18		
03261	0 60200 0 03424		SLW IDENWD+1		
03262	0 07400 4 00740		TSX PRINT,4		
03263	0 03431 0 03410		HTR PRNOI,0,PRNOI+17		
03264	0 07400 4 00740		TSX PRINT,4		
03265	0 03410 0 03350		HTR MACHER,0,MACHER+32		
03266	0 02000 0 03275		TRA ENDMAC		
03267	0 07400 4 00740	WHATIF	TSX PRINT,4		
03270	0 01244 0 01237		HTR MACHIN,0,MACHIN+5		
03271	0 07400 4 00740		TSX PRINT,4		
03272	0 03446 0 03431		HTR NOTIF,0,NOTIF+13		
03273	0 07400 4 00740		TSX PRINT,4		
03274	0 03364 0 03350		HTR MACHER,0,MACHER+12		
03275	0 50000 0 00316	ENDMAC	CLA HTR4	SET RETURN SO PROBLEM CAN BE	
03276	0 60100 0 00266		STO DONE	RE-RUN FOR MACHINE ERROR	
03277	0 02000 0 00230		TRA RESTRT		
03300	606060606060	PRBDWC	BCD 2		
03301	606060606060				

03302	255151465160	BCD	ERROR IN READING RECORD FROM TAPE 2.	RECORD IDENTIFICATION
03303	314560512521			
03304	243145276051			
03305	252346512460			
03306	265146446063			
03307	214725600233			
03310	606051252346			
03311	512460312425			
03312	456331263123			
03313	216331464560			
03314	316260606060	BDWD	BCD	IS
03315	606060606060			
03316	606060606060			
03317	606060606060			
03320	606060606060			
03321	606060606060			
03322	606060606060			
03323	606060606060			
03324	606060606060			
03325	606060606060			
03326	664651246023	BCD	WORD COUNT DOES NOT AGREE WITH COUNT IN RECORD.	
03327	466445636024			
03330	462562604546			
03331	636021275125			
03332	256066316330			
03333	602346644563			
03334	603145605125			
03335	234651243360			
03336	606060606060			
03337	606060606060			
03340	606060606060	BCD	8	
03341	606060606060			
03342	606060606060			
03343	606060606060			
03344	606060606060			
03345	606060606060			
03346	606060606060			
03347	606060606060			
03350	606060606060	MACHER	BCD	2
03351	606060606060			
03352	475146222122	BCD	PROBABLY MACHINE ERROR WHEN TABLE WAS COMPILED BY 1 PRIME.	
03353	437060442123			
03354	303145256025			
03355	515146516066			
03356	302545606321			
03357	224325606621			
03360	626023464447			
03361	314325246022			
03362	706001604751			
03363	314425336060			
03364	606060606060	BCD		
03365	606060606060			
03366	606060606060			
03367	606060606060			

03370	606060606060	
03371	606060606060	
03372	606060606060	
03373	606060606060	
03374	606060606060	
03375	606060606060	
03376	263165256021	BCD FIVE ATTEMPTS HAVE BEEN MADE TO READ THIS RECORD CORRECTLY.
03377	636325444763	
03400	626030216525	
03401	602225254560	
03402	442124256063	
03403	466051252124	
03404	606330316260	
03405	512523465124	
03406	602346515125	
03407	236343703360	
03410	606060606060	PRNOI BCD 2
03411	606060606060	
03412	512523465124	BCD 9RECORD FROM TAPE 2 CANNOT BE IDENTIFIED. THIS RECORD
03413	602651464460	
03414	632147256002	
03415	602321454546	
03416	636022256031	
03417	242545633126	
03420	312524336060	
03421	633031626051	
03422	252346512460	
03423	302162606060	IDENWD BCD 1HAS
03424	606060603145	BCD 5 IN ADDRESS OF FIRST WORD.
03425	602124245125	
03426	626260462660	
03427	263151626360	
03430	664651243360	
03431	606060606060	NOTIF BCD 2
03432	606060606060	
03433	254563517060	BCD ENTRY IN TIFGO, RECORD 6, FILE 5, TAPE 2, CANNOT BE IDENTIFI
03434	314560633126	
03435	274673605125	
03436	234651246006	
03437	736026314325	
03440	600573606321	
03441	472560027360	
03442	232145454663	
03443	602225603124	
03444	254563312631	
03445	252433606060	BCD 1ED.
03446	+000301000000	OCT 000301000000
03447	0 00000 0 03267	HTR WHATIF
03450	+001125000000	OCT 001125000000
03451	0 00000 0 02502	HTR CHBTSX
03452	+000650000000	OCT 000650000000
03453	0 00000 0 02453	HTR DOALNX
03454	+000641000000	OCT 000641000000
03455	0 00000 0 02402	HTR DOBTNX

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03456 +000727000000    OCT 000727000000
03457 0 00000 0 02426  HTR CONBET
03460 +000623000000    OCT 000623000000
03461 0 00000 0 01436  HTR DONOBT
03462 +001062000000    OCT 001062000000
03463 0 00000 0 02210  HTR TSXH
03464 +000534000000    OCT 000534000000
03465 0 00000 0 01434  HTR TIF6B
03466 +000521000000    OCT 000521000000
03467 0 00000 0 01432  HTR B2TIF5
03470 +000511000000    OCT 000511000000
03471 0 00000 0 01430  HTR B1TIF5
03472 +000475000000    OCT 000475000000
03473 0 00000 0 01426  HTR B2TIF4
03474 +000465000000    OCT 000465000000
03475 0 00000 0 01424  HTR B1TIF4
03476 +000451000000    OCT 000451000000
03477 0 00000 0 01422  HTR B2TIF3
03500 +000441000000    OCT 000441000000
03501 0 00000 0 01420  HTR B1TIF3
03502 +000417000000    OCT 000417000000
03503 0 00000 0 01416  HTR BTIFG2
03504 +000372000000    OCT 000372000000
03505 0 00000 0 01411  HTR BTIFG1
03506 +000350000000    OCT 000350000000
03507 0 00000 0 01404  HTR TSXTFO
03510 +000335000000    OCT 000335000000
03511 0 00000 0 01377  HTR MINB3
03512 +000325000000    OCT 000325000000
03513 0 00000 0 01372  HTR MINB2
03514 +000314000000    OCT 000314000000
03515 0 00000 0 01365  HTR MINB1
03516 +000775000000    OCT 000775000000
03517 0 00000 0 03166  HTR NOTEQV
03520 +000762000000    OCT 000762000000
03521 0 00000 0 03140  HTR FRETIF
03522 +000070000000    OCT 000070000000
03523 0 00000 0 03222  HTR BADWC
03524 +000110000000    OCT 000110000000
03525 0 00000 0 03243  HTR NOIDEN
03526 +000576000000    OCT 000576000000
03527 0 00000 0 03106  HTR NOTRA
03530 +000212000000    OCT 000212000000
03531 0 00000 0 01341  HTR TEIFNO
03532 +001110000000    ER1PRM OCT 001110000000
03533 0 00000 0 02656  HTR CHATSX
03534 0 00000 0 00000 X

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IE., TSXE FROM NON-ARITH DIAP

A

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END

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	632	0	0	0	0
LIB	0	0	0	0	0

COL 632 0 0 0 0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 1191

NUMBER OF SYMBOLS, DEF 337, DEFOP 0, UNDEF 0
ORG 5 FORCE NEW RECORD

				00005		ORG 5	FORCE NEW RECORD
	00005	0	01303	0	01421	HTR X-1,0,LOCREC	CARD FOR DE
					01303	ORG LOCREC	
TD	01303	3	00000	0	00005	TXH 5,	7320 FT 27
					07302	ERNBR SYN 3778	OCTAL 7302
	01304	0	07400	4	00740	TSX PRINT,4	
	01305	0	01252	0	01244	HTR SOURCE,0,SOURCE+6	
	01306	-0	53400	1	07302	LXD ERNBR,1	
	01307	2	00002	1	01310	TIX DONX1,1,2	
	01310	-0	63400	1	01336	DONX1 SXD DOTST,1	
	01311	-0	53400	1	01232	LXD ZERO,1	
	01312	0	50000	1	77777	NXTDO CLA LIST,1	
	01313	0	10000	0	01343	TZE ONEDO	
	01314	0	50000	0	01421	CLA MORDOS	DO NOT PRINT COMMENT FOR SUCCEEDING
	01315	-0	10000	0	01322	TNZ DO1	ERRORS
	01316	0	07400	4	00740	TSX PRINT,4	
	01317	0	01372	0	01355	HTR NONEST,0,NONEST+13	
	01320	-0	63400	4	01421	SXD MORDOS,4	
	01321	0	76600	0	00361	WPR	
	01322	0	50000	1	77777	DO1 CLA LIST,1	
	01323	0	60100	0	00527	STO ALFBET	
	01324	0	50000	1	77776	CLA LIST-1,1	
	01325	0	60100	0	00530	STO SYM	
	01326	0	07400	4	00505	TSX FX4PR,4	PRINT 1ST DO
	01327	0	50000	1	77775	CLA LIST-2,1	AND 2ND
	01330	0	60100	0	00527	STO ALFBET	
	01331	0	50000	1	77774	CLA LIST-3,1	
	01332	0	60100	0	00530	STO SYM	
	01333	0	07400	4	00505	TSX FX4PR,4	
	01334	0	76600	0	00361	WPR	
	01335	1	00004	1	01336	TXI DOTST,1,4	
	01336	-3	00000	1	01312	DOTST TXL NXTDO,1,0	
	01337	0	76600	0	00361	WPR	
	01340	0	07400	4	00740	TSX PRINT,4	
	01341	0	01403	0	01372	HTR ENDNST,0,ENDNST+9	
	01342	0	02000	0	00272	TRA SPEND	
	01343	0	60000	0	01421	ONEDO STZ MORDOS	
	01344	0	76600	0	00361	WPR	
	01345	0	07400	4	00740	TSX PRINT,4	
	01346	0	01421	0	01403	HTR DOPR,0,DOPR+14	
	01347	0	50000	1	77776	CLA LIST-1,1	
	01350	0	60100	0	00527	STO ALFBET	
	01351	0	50000	1	77775	CLA LIST-2,1	
	01352	0	60100	0	00530	STO SYM	
	01353	0	07400	4	00505	TSX FX4PR,4	
	01354	1	00003	1	01336	TXI DOTST,1,3	
	01355	606060606060				NONEST BCD 2	
	01356	606060606060					
	01357	633025602446				BCD THE DO STATEMENTS IN THE FOLLOWING LIST ARE NOT CORRECTLY NE	
	01360	606263216325					
	01361	442545636260					
	01362	314560633025					
	01363	602646434346					
	01364	663145276043					

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01365 316263602151
01366 256045466360
01367 234651512523
01370 634370604525
01371 626325246060          BCD 1STED
01372 606060606060        ENDNST BCD 2
01373 606060606060
01374 234651512523          BCD 7CORRECT THE DO NESTING BEFORE REASSEMBLY.
01375 636063302560
01376 244660452562
01377 633145276022
01400 252646512560
01401 512521626225
01402 442243703360
01403 606060606060        DOPR   BCD 2
01404 606060606060
01405 633025606263          BCD   THE STATEMENT NUMBER ENDING A DO IS ABOVE IT IN THE SOURCE P
01406 216325442545
01407 636045644422
01410 255160254524
01411 314527602160
01412 244660316260
01413 212246652560
01414 316360314560
01415 633025606246
01416 645123256047
01417 514627512144          BCD 2ROGRAM.
01420 336060606060
01421 0 00000 0 00000 MORDOS HTR 0
01422 0 00000 0 00000 X
A      00000          END

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SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	58	0	0	0	0
LIB	0	0	0	0	0
COL	58	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 94

NUMBER OF SYMBOLS, DEF 206,DEFOP 0,UNDEF 0
 ORG 6 FORCE NEW RECORD

			00006		ORG 6	FORCE NEW RECORD
	00006	0	01303	0	01436	HTR X-1,0,LOCREC
					01303	CARD FOR DE
					01303	ORG LOCREC
TD	01303	3	00000	0	00006	TXH 6
	01304	0	07400	4	00740	106 FT 53
	01305	0	01252	0	01244	TSX PRINT,4
	01306	0	76200	0	00304	HTR SOURCE,0,SOURCE+6
	01307	0	46000	0	01350	RDDR RDR 4
	01310	0	53400	1	01351	NOR BUFFER NOW ON DRUM 4.
	01311	0	70000	1	01276	LDA A
	01312	0	70000	1	01277	LXA L(15),1
	01313	0	70000	1	01277	COPYW CPY ERAS+15,1
	01314	0	70000	1	01277	CPY ERAS+16,1
	01315	2	00001	1	01311	CPY ERAS+16,1
	01316	0	53400	1	01351	CPY ERAS+16,1
	01317	0	50000	1	01276	TIX COPYW,1,1
	01320	-0	10000	0	01331	LXA L(15),1
	01321	2	00001	1	01317	NEXT CLA ERAS+15,1
	01322	0	50000	0	01351	IF NOT LOCATION SYMBOL OF CIT,
	01323	0	76700	0	00002	WORD WILL BE ZERO.
	01324	0	40000	0	01350	TNZ PROCES
	01325	0	62100	0	01350	TIX NEXT,1,1
	01326	0	40200	0	01352	CLA L(15)
	01327	-0	10000	0	01306	ALS 2
	01330	0	50000	0	01232	ADD A
	01331	0	77100	0	00022	STA A
	01332	0	07400	4	00613	SUB BUFSIZ
	01333	0	60200	0	01257	TNZ RDDR
	01334	-0	50000	0	01373	CLA ZERO
	01335	0	77100	0	00030	PROCES ARS 18
	01336	0	56000	0	01257	IN THE DECREMENT THERE IS THE
	01337	-0	76300	0	00030	ALPHA OF SOME STATEMENT NUMBER.
	01340	0	60200	0	01373	TSX EXBETA,4
	01341	-0	76300	0	00014	SLW ERAS
	01342	0	56000	0	00717	CAL PR1
	01343	-0	76300	0	00030	ARS 24
	01344	0	60200	0	01374	LDQ ERAS
	01345	0	07400	4	00740	LGL 24
	01346	0	01437	0	01353	SLW PR1
	01347	0	02000	0	00272	LGL 12
	01350	0	00000	0	00310	LDQ BLANKS
	01351	0	00000	0	00017	LGL 24
	01352	0	00000	0	07700	SLW PR1+1
	01353	60606060606060				TSX PRINT,4
	01354	60606060606060				HTR PR,0,PR+52
	01355	633025606225				TRA SPEND
	01356	636046266024				HTR8200
	01357	466026465144				STARTING DRUM ADDRESS
	01360	644321626066				L(15) HTR 15
	01361	303123306022				HTR 4032
	01362	252731456260				SIZE OF NOR BUFFER + INITIAL ADDRESS.
	01363	465160632551				PR BCD 2
	01364	443145216325				
	01365	626031456063				BCD THE SET OF DO FORMULAS WHICH BEGINS OR TERMINATES IN THE VIC

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01366 302560653123
01367 314531637060          BCD 4INITY OF STATEMENT NUMBE
01370 462660626321
01371 632544254563
01372 604564442225
01373 516060606060      PR1   BCD 6R
01374 606060606060
01375 606060606060
01376 606060606060
01377 606060606060
01400 606060606060
01401 302162602731          BCD  HAS GIVEN RISE TO TOO MANY INSTRUCTIONS.  REWRITE PROGRAM AN
01402 652545605131
01403 622560634660
01404 634646604421
01405 457060314562
01406 635164236331
01407 464562336060
01410 512566513163
01411 256047514627
01412 512144602145
01413 246062314447          BCD  D SIMPLIFY DO NESTING
01414 433126706024
01415 466045256263
01416 314527606060
01417 606060606060
01420 606060606060
01421 606060606060
01422 606060606060
01423 606060606060
01424 606060606060
01425 465160512524          BCD  OR REDUCE THE NUMBER OF SUBSCRIPT COMBINATIONS.
01426 642325606330
01427 256045644422
01430 255160462660
01431 626422622351
01432 314763602346
01433 442231452163
01434 314645623360
01435 606060606060
01436 606060606060
01437 0 00000 0 00000 X
A          00000          END

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SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	53	0	0	0	0
LIB	0	0	0	0	0
COL	53	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0
NUMBER OF OFF-LINE PRINT RECORDS 106

NUMBER OF SYMBOLS, DEF 205,DEFOP 0,UNDEF 0
ORG 7 FORCE NEW RECORD

			00007	ORG 7	FORCE NEW RECORD	
	00007	0	01303 0	01404	HTR X-1,0,LOCREC	CARD FOR DE
			01303	ORG LOCREC		
TD	01303	3	00000 0	00007	TXH 7	4040 FT 51
	01304	0	07400 4	00740	TSX PRINT,4	
	01305	0	01252 0	01244	HTR SOURCE,0,SOURCE+6	
	01306	0	76200 0	00304	RDR 4	TAGTAG TABLE ON DRUM 4.
	01307	0	46000 0	01332	LDA A	
	01310	0	70000 0	01257	CPY ERAS	COPY FIRST WORD OF 4 WORD ENTRY.
	01311	0	50000 0	01257	CLA ERAS	
	01312	0	77100 0	00022	ARS 18	
	01313	0	07400 4	00613	TSX EXBETA,4	
	01314	0	60200 0	01257	SLW ERAS	
	01315	-0	50000 0	01346	CAL PR1	
	01316	0	77100 0	00014	ARS 12	
	01317	0	56000 0	01257	LDQ ERAS	
	01320	-0	76300 0	00014	LGL 12	
	01321	0	60200 0	01346	SLW PR1	
	01322	-0	76300 0	00030	LGL 24	
	01323	0	56000 0	01347	LDQ PR2	
	01324	-0	77300 0	00030	RQL 24	
	01325	-0	76300 0	00014	LGL 12	
	01326	0	60200 0	01347	SLW PR2	
	01327	0	07400 4	00740	TSX PRINT,4	
	01330	0	01405 0	01333	HTR PR,0,PR+42	
	01331	0	02000 0	00272	TRA SPEND	
	01332	0	00000 0	02064	A HTR81076	
	01333	606060606060	PR	BCD 2		
	01334	606060606060				
	01335	632127632127		BCD 9TAGTAG TABLE SIZE HAS BEEN EXCEEDED.	DO STATEMENT NUM	
	01336	606321224325				
	01337	606231712560				
	01340	302162602225				
	01341	254560256723				
	01342	252524252433				
	01343	606024466062				
	01344	632163254425				
	01345	456360456444				
	01346	222551600102	PR1	BCD 1BER 12		
	01347	030405546031	PR2	BCD 1345* I		
	01350	626046452560		BCD 9S ONE OF A NEST OF DO STATEMENTS		
	01351	462660216045				
	01352	256263604626				
	01353	602446606263				
	01354	216325442545				
	01355	636260606060				
	01356	606060606060				
	01357	606060606060				
	01360	606060606060				
	01361	663031233060		BCD WHICH CONTAINS, OR HAS GIVEN RISE TO, TOO MANY SUBSCRIPT COM		
	01362	234645632131				
	01363	456273604651				
	01364	603021626027				
	01365	316525456051				

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01366 316225606346
01367 736063464660
01370 442145706062
01371 642262235131
01372 476360234644
01373 223145216331          BCD BINATIONS.  REWRITE SOURCE PROGRAM.
01374 464562336060
01375 512566513163
01376 256062466451
01377 232560475146
01400 275121443360
01401 606060606060
01402 606060606060
01403 606060606060
01404 606060606060
01405 0 00000 0 00000 X
A          00000          END

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SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	37	0	0	0	0
LIB	0	0	0	0	0
COL	37	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 80

NUMBER OF SYMBOLS, DEF 200,DEFOP 0,UNDEF 0
 ORG 8 FORCE NEW RECORD

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00010          00010          ORG 8          FORCE NEW RECORD
00010 0 01303 0 01332      HTR X-1,0,LOCREC      CARD FOR DE
          01303          ORG LOCREC
TD 01303 3 00000 0 00010      TXH 8          4160 FT 34
01304 0 07400 4 00740      TSX PRINT,4
01305 0 01252 0 01244      HTR SOURCE,0,SOURCE+6
01306 0 07400 4 00740      TSX PRINT,4
01307 0 01333 0 01311      HTR PR,0,PR+18
01310 0 02000 0 00272      TRA SPEND
01311 60606060606060        PR      BCD 2
01312 60606060606060
01313 475146275121          BCD PROGRAM HAS MORE THAN 50 DO STATEMENTS IN A NEST. REWRITE P
01314 446030216260
01315 444651256063
01316 302145600500
01317 602446606263
01320 216325442545
01321 636260314560
01322 216045256263
01323 336060512566
01324 513163256047
01325 514627512144          BCD 6ROGRAM WITH SIMPLER DO STRUCTURE.
01326 606631633060
01327 623144474325
01330 516024466062
01331 635164236364
01332 512533606060
01333 0 00000 0 00000 X
A          00000          END

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SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	15	0	0	0	0
LIB	0	0	0	0	0
COL	15	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 38

NUMBER OF SYMBOLS, DEF 197,DEFOP 0,UNDEF 0
 ORG 9 FORCE NEW RECORD

				00011	ORG 9	FORCE NEW RECORD	
	00011	0	01303	0	01612	HTR X-1,0,LOCREC	CARD FOR DE,
				01303	ORG LOCREC		
TD	01303	3	00000	0	00011	TXH 9	5037 FT 34
						9	7632 FT 36
	01304	0	07400	4	00740	TSX PRINT,4	
	01305	0	01252	0	01244	HTR SOURCE,0,SOURCE+6	
	01306	-0	53400	1	27721	LXD877777,1	
	01307	-3	00001	1	01515	TXL DRMTAG,1,1	
	01310	-3	00002	1	01370	TXL CHGTAG,1,2	
	01311	-3	00003	1	01520	TXL NAMKEY,1,3	
	01312	-3	00004	1	01522	TXL TRASTO,1,4	
	01313	0	07400	4	00740	TSX PRINT,4	
	01314	0	01370	0	01316	HTR PR,0,PR+42	
	01315	0	02000	0	00272	TRA SPEND	
	01316	606060606060				BCD 2	
	01317	606060606060					
	01320	636267234644				BCD	TSXCOM TABLE EXCEEDS BUFFER SIZE. THERE ARE TOO MANY RELATI
	01321	606321224325					
	01322	602567232525					
	01323	246260226426					
	01324	262551606231					
	01325	712533606063					
	01326	302551256021					
	01327	512560634646					
	01330	604421457060					
	01331	512543216331				BCD	VE CONSTANT DEFINITIONS.
	01332	652560234645					
	01333	626321456360					
	01334	242526314531					
	01335	633146456233					
	01336	606060606060					
	01337	606060606060					
	01340	606060606060					
	01341	606060606060					
	01342	606060606060					
	01343	606060606060					
	01344	633025606321				BCD	THE TABLE IS CUMULATIVE OVER THE ENTIRE PROBLEM. REWRITE SO
	01345	224325603162					
	01346	602364446443					
	01347	216331652560					
	01350	466525516063					
	01351	302560254563					
	01352	315125604751					
	01353	462243254433					
	01354	606051256651					
	01355	316325606246				BCD	URCE PROGRAM.
	01356	645123256047					
	01357	514627512144					
	01360	336060606060					
	01361	606060606060					
	01362	606060606060					
	01363	606060606060					
	01364	606060606060					

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01365 606060606060
01366 606060606060
01367 606060606060
01370 0 07400 4 00740 CHGTAG TSX PRINT,4
01371 0 01515 0 01373 HTR PR1,0,PR1+82
01372 0 02000 0 00272 TRA SPEND
01373 606060606060 PR1 BCD 2
01374 606060606060
01375 233027632127 BCD CHGTAG TABLE EXCEEDS BUFFER SIZE. AN ENTRY IS MADE IN THIS
01376 606321224325
01377 602567232525
01400 246260226426
01401 262551606231
01402 712533606021
01403 456025456351
01404 706031626044
01405 212425603145
01406 606330316260
01407 632122432560 BCD TABLE WHEN THERE ARE AT LEAST TWO
01410 663025456063
01411 302551256021
01412 512560216360
01413 432521626360
01414 636646606060
01415 606060606060
01416 606060606060
01417 606060606060
01420 606060606060
01421 626422622351 BCD SUBSCRIPT COMBINATIONS WITH THE SAME SYMBOLS, COEFFICIENTS,
01422 314763602346
01423 442231452163
01424 314645626066
01425 316330606330
01426 256062214425
01427 606270442246
01430 436273602346
01431 252626312331
01432 254563627360
01433 214524604325 BCD AND LEADING DIMENSIONS
01434 212431452760
01435 243144254562
01436 314645626060
01437 606060606060
01440 606060606060
01441 606060606060
01442 606060606060
01443 606060606060
01444 606060606060
01445 663163303145 BCD WITHIN THE SAME NEST WHICH HAS AT LEAST ONE, BUT NOT ALL, CO
01446 606330256062
01447 214425604525
01450 626360663031
01451 233060302162
01452 602163604325

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01453 216263604645
01454 257360226463
01455 604546636021
01456 434373602346
01457 456351464343          BCD  NTROLLING DOS IN COMMON.
01460 314527602446
01461 626031456023
01462 464444464533
01463 606060606060
01464 606060606060
01465 606060606060
01466 606060606060
01467 606060606060
01470 606060606060
01471 633025606321          BCD  THE TABLE IS CUMULATIVE OVER ALL NESTS IN THE PROBLEM.  REWR
01472 224325603162
01473 602364446443
01474 216331652560
01475 466525516021
01476 434360452562
01477 636260314560
01500 633025604751
01501 462243254433
01502 606051256651
01503 316325606246          BCD  ITE SOURCE PROGRAM.
01504 645123256047
01505 514627512144
01506 336060606060
01507 606060606060
01510 606060606060
01511 606060606060
01512 606060606060
01513 606060606060
01514 606060606060
01515 0 50000 0 01611 DRMTAG CLA DRTG
01516 0 60100 0 01527          STO PR3
01517 0 02000 0 01522          TRA TRASTO
01520 0 50000 0 01612 NAMKEY CLA NMKY
01521 0 60100 0 01527          STO PR3
01522 0 07400 4 00740 TRASTO TSX PRINT,4
01523 0 01611 0 01525          HTR PR2,0,PR2+52
01524 0 02000 0 00272          TRA SPEND
01525 606060606060          PR2   BCD 2
01526 606060606060
01527 635121626346          PR3   BCD  TRASTO TABLE EXCEEDS BUFFER SIZE.  THE SUBSCRIPT COMBINATION
01530 606321224325
01531 602567232525
01532 246260226426
01533 262551606231
01534 712533606063
01535 302560626422
01536 622351314763
01537 602346442231
01540 452163314645

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01541 626021452460          BCD S AND FLOW STRUCTURE IS TOO COMPLEX
01542 264346666062
01543 635164236364
01544 512560316260
01545 634646602346
01546 444743256760
01547 606060606060
01550 606060606060
01551 606060606060
01552 606060606060
01553 663163303145          BCD WITHIN DO NESTS. THIS TABLE IS CUMULATIVE OVER ALL NESTS.
01554 602446604525
01555 626362336060
01556 633031626063
01557 212243256031
01560 626023644464
01561 432163316525
01562 604665255160
01563 214343604525
01564 626362336060
01565 512566513163          BCD REWRITE SOURCE PROGRAM AND
01566 256062466451
01567 232560475146
01570 275121446021
01571 452460606060
01572 606060606060
01573 606060606060
01574 606060606060
01575 606060606060
01576 606060606060
01577 623144474331          BCD SIMPLIFY SUBSCRIPT COMBINATIONS OR DO NEST STRUCTURE.
01600 267060626422
01601 622351314763
01602 602346442231
01603 452163314645
01604 626046516024
01605 466045256263
01606 606263516423
01607 636451253360
01610 606060606060
01611 245144632127          DRTG BCD 1DRMTAG
01612 452144422570          NMKY BCD 1NAMKEY
01613 0 00000 0 00000 X
A              00000          END

```

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	51	0	0	0	0
LIB	0	0	0	0	0
COL	51	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 215

NUMBER OF SYMBOLS, DEF 206,DEFOP 0,UNDEF 0
ORG 10 FORCE NEW RECORD


```

00012          00012          ORG 10          FORCE NEW RECORD
00012  0 01303 0 01343      HTR X-1,0,LOCREC      CARD FOR DE
                                01303          ORG LOCREC
TD  01303  3 00000 0 00012      TXH 10          6044 FT 27
                                10          6534 FT 27
01304  0 07400 4 00740      TSX PRINT,4
01305  0 01252 0 01244      HTR SOURCE,0,SOURCE+6
01306  0 07400 4 00740      TSX PRINT,4
01307  0 01344 0 01311      HTR PR,0,PR+27
01310  0 02000 0 00272      TRA SPEND
01311  60606060606060        PR          BCD 2
01312  60606060606060
01313  635121456226          BCD TRANSFER ADDRESS LEVEL IS GREATER THAN 20. REPROGRAM TO ELI
01314  255160212424
01315  512562626043
01316  256525436031
01317  626027512521
01320  632551606330
01321  214560020033
01322  606051254751
01323  462751214460
01324  634660254331
01325  443145216325          BCD MINUTE TRANSFERS TO DOS
01326  606351214562
01327  262551626063
01330  466024466260
01331  60606060606060
01332  60606060606060
01333  60606060606060
01334  60606060606060
01335  60606060606060
01336  60606060606060
01337  663163306043          BCD 5WITH LEVELS GREATER THAN 20.
01340  256525436260
01341  275125216325
01342  516063302145
01343  600200336060
01344  0 00000 0 00000 X
A          00000          END

```

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	17	0	0	0	0
LIB	0	0	0	0	0
COL	17	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 48

NUMBER OF SYMBOLS, DEF 197,DEFOP 0,UNDEF 0
 ORG 11 FORCE NEW RECORD

			00013	ORG 11	FORCE NEW RECORD	
	00013	0	01303 0	01345	HTR X-1,0,LOCREC	CARD FOR DE
			01303	ORG LOCREC		
TD	01303	3	00000 0	00013	TXH 11	6065 FT 27
	01304	0	07400 4	00740	TSX PRINT,4	
	01305	0	01252 0	01244	HTR SOURCE,0,SOURCE+6	
	01306	0	50000 0	06300	CLA 3264	6300 OCTAL
	01307	0	77100 0	00022	ARS 18	
	01310	0	07400 4	00613	TSX EXBETA,4	
	01311	0	60200 0	01257	SLW ERAS	
	01312	0	56000 0	01257	LDQ ERAS	
	01313	-0	50000 0	01332	CAL PR1	
	01314	0	77100 0	00006	ARS 6	
	01315	-0	76300 0	00006	LGL 6	
	01316	0	60200 0	01332	SLW PR1	
	01317	-0	76300 0	00036	LGL 30	
	01320	0	56000 0	00717	LDQ BLANKS	
	01321	-0	76300 0	00006	LGL 6	
	01322	0	60200 0	01333	SLW PR2	
	01323	0	07400 4	00740	TSX PRINT,4	
	01324	0	01346 0	01326	HTR PR,0,PR+16	
	01325	0	02000 0	00272	TRA SPEND	
	01326		606060606060	PR	BCD 2	
	01327		606060606060			
	01330		626321632544		BCD 2STATEMENT NU	
	01331		254563604564			
	01332		442225516060	PR1	BCD 1MBER	
	01333		606060606060	PR2	BCD 1	
	01334		635121456226		BCD TRANSFERS INTO THE RANGE OF A DO FROM OUTSIDE ITS RANGE.	
	01335		255162603145			
	01336		634660633025			
	01337		605121452725			
	01340		604626602160			
	01341		244660265146			
	01342		446046646362			
	01343		312425603163			
	01344		626051214527			
	01345		253360606060			
	01346	0	00000 0	00000 X		
A			00000		END	

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	30	0	0	0	0
LIB	0	0	0	0	0
COL	30	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 49

NUMBER OF SYMBOLS, DEF 199,DEFOP 0,UNDEF 0
 ORG 12 FORCE NEW RECORD

			00014	ORG 12	FORCE NEW RECORD
	00014	0	01303 0	HTR X-1,0,LOCREC	CARD FOR DE
			01303	ORG LOCREC	
TD	01303	3	00000 0	TXH 12	6234 FT 51
	01304	0	07400 4	TSX PRINT,4	
	01305	0	01252 0	HTR SOURCE,0,SOURCE+6	
	01306	0	50000 0	CLA 2724	VCTR - OCTAL 5244
	01307	0	77100 0	ARS 18	
	01310	0	07400 4	TSX EXBETA,4	
	01311	0	60200 0	SLW BETA	
	01312	0	56000 0	LDQ BETA	
	01313	-0	50000 0	CAL BLANKS	
	01314	-0	76300 0	LGL 30	
	01315	0	60200 0	SLW BETA	-
	01316	0	56000 0	LDQ BETA+1	
	01317	-0	76300 0	LGL 30	
	01320	0	60200 0	SLW BETA+1	
	01321	0	07400 4	TSX PRINT,4	
	01322	0	01374 0	HTR PR,0,PR+40	
	01323	0	02000 0	TRA SPEND	
	01324	606060606060	PR	BCD 2	
	01325	606060606060			
	01326	634646604421		BCD 6TOO MANY DOS END AT STATEMENT NUMBER	
	01327	457060244662			
	01330	602545246021			
	01331	636062632163			
	01332	254425456360			
	01333	456444222551			
	01334	600102030405	BETA	BCD 1 12345	
	01335	336060633060		BCD . TH IS CONDITION, IN CONJUNCTION WITH SUBSCRIPT CONFIGURAT	
	01336	316260234645			
	01337	243163314645			
	01340	736031456023			
	01341	464541644523			
	01342	633146456066			
	01343	316330606264			
	01344	226223513147			
	01345	636023464526			
	01346	312764512163			
	01347	314645627360		BCD 3IONS,	
	01350	606060606060			
	01351	606060606060			
	01352	302162605125		BCD HAS RESULTED IN TOO MANY INSTRUCTIONS. REWRITE PROGRAM AND	
	01353	626443632524			
	01354	603145606346			
	01355	466044214570			
	01356	603145626351			
	01357	642363314645			
	01360	623360605125			
	01361	665131632560			
	01362	475146275121			
	01363	446021452460			
	01364	622547215121		BCD 8SEPARATE DO ENDS BY USING CONTINUE STATEMENTS.	
	01365	632560244660			

01366 254524626022
01367 706064623145
01370 276023464563
01371 314564256062
01372 632163254425
01373 456362336060
01374 0 00000 0 00000 X

A 00000 END

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	30	0	0	0	0
LIB	0	0	0	0	0
COL	30	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 71

NUMBER OF SYMBOLS, DEF 198,DEFOP 0,UNDEF 0
ORG 13 FORCE NEW RECORD

```

00015          00015          ORG 13          FORCE NEW RECORD
00015 0 01303 0 01334      HTR X-1,0,LOCREC      CARD FOR DE
                                01303          ORG LOCREC
TD 01303 3 00000 0 00015      TXH 13          6432 FT 27
01304 0 07400 4 00740      TSX PRINT,4
01305 0 01252 0 01244      HTR SOURCE,0,SOURCE+6
01306 0 07400 4 00740      TSX PRINT,4
01307 0 01335 0 01311      HTR PR,0,PR+20
01310 0 02000 0 00272      TRA SPEND
01311 60606060606060        PR          BCD 2
01312 60606060606060
01313 633025606521          BCD THE VARIABLE PARAMETER OF A DO IS REDEFINED BY THE INDEX SYM
01314 513121224325
01315 604721512144
01316 256325516046
01317 266021602446
01320 603162605125
01321 242526314525
01322 246022706063
01323 302560314524
01324 256760627044
01325 224643604626          BCD 8BOL OF A DO STATEMENT WITHIN THE DO.
01326 602160244660
01327 626321632544
01330 254563606631
01331 633031456063
01332 302560244633
01333 606060606060
01334 606060606060
01335 0 00000 0 00000 X
A          00000          END

```

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	15	0	0	0	0
LIB	0	0	0	0	0
COL	15	0	0	0	0

```

NUMBER OF ON-LINE INPUT RECORDS          0
NUMBER OF OFF-LINE PRINT RECORDS        40
NUMBER OF SYMBOLS, DEF 197,DEFOP 0,UNDEF 0
          ORG 14          FORCE NEW RECORD

```

				00016	ORG 14	FORCE NEW RECORD
	00016	0	01303	0 01355	HTR X-1,0,LOCREC	CARD FOR DE
				01303	ORG LOCREC	
TD	01303	3	00000	0 00016	TXH 14	7303 FT 4I
					14	7045 FT 43
	01304	0	07400	4 00740	TSX PRINT,4	
	01305	0	01252	0 01244	HTR SOURCE,0,SOURCE+6	
	01306	0	07400	4 00740	TSX PRINT,4	
	01307	0	01356	0 01311	HTR PR,0,PR+37	
	01310	0	02000	0 00272	TRA SPEND	
	01311	60606060606060			BCD 2	
					PR	
	01312	60606060606060				
	01313	214560314563			BCD AN INTERMEDIATE CORE TABLE IS FULL.	REWRITE SOURCE PROGRAM
	01314	255144252431				
	01315	216325602346				
	01316	512560632122				
	01317	432560316260				
	01320	266443433360				
	01321	605125665131				
	01322	632560624664				
	01323	512325604751				
	01324	462751214460				
	01325	214524604446			BCD AND MODIFY THE NUMBER OF PURE RELATIVE CONSTANT	
	01326	243126706063				
	01327	302560456444				
	01330	222551604626				
	01331	604764512560				
	01332	512543216331				
	01333	652560234645				
	01334	626321456360				
	01335	606060606060				
	01336	606060606060				
	01337	626422622351			BCD SUBSCRIPT COMBINATIONS, IE., SUBSCRIPTS, NO SYMBOL OF WHICH	
	01340	314763602346				
	01341	442231452163				
	01342	314645627360				
	01343	312533736062				
	01344	642262235131				
	01345	476362736045				
	01346	466062704422				
	01347	464360462660				
	01350	663031233060				
	01351	316260644524			BCD 5IS UNDER CONTROL OF A DO.	
	01352	255160234645				
	01353	635146436046				
	01354	266021602446				
	01355	336060606060				
	01356	0 00000	0 00000	X		
A			00000		END	

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	18	0	0	0	0

LIB	0	0	0	0	0
COL	18	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 58

NUMBER OF SYMBOLS, DEF 197,DEFOP 0,UNDEF 0
ORG 15 FORCE NEW RECORD

			00017	ORG 15	FORCE NEW RECORD
	00017	0	01303 0 01432	HTR X-1,0,LOCREC	CARD FOR DE
			01303	ORG LOCREC	
TD	01303	3	00000 0 00017	TXH 15	270 FT 56
	01304	0	07400 4 00740	TSX PRINT,4	
	01305	0	01252 0 01244	HTR SOURCE,0,SOURCE+6	
	01306	0	07400 4 00740	TSX PRINT,4	
	01307	0	01433 0 01311	HTR PR,0,PR+82	
	01310	0	02000 0 00272	TRA SPEND	
	01311	606060606060	PR	BCD 2	
	01312	606060606060			
	01313	233027632127		BCD	CHGTAG TABLE EXCEEDS BUFFER SIZE. AN ENTRY IS MADE IN THIS
	01314	606321224325			
	01315	602567232525			
	01316	246260226426			
	01317	262551606231			
	01320	712533606021			
	01321	456025456351			
	01322	706031626044			
	01323	212425603145			
	01324	606330316260			
	01325	632122432560		BCD	TABLE WHEN THERE ARE AT LEAST TWO
	01326	663025456063			
	01327	302551256021			
	01330	512560216360			
	01331	432521626360			
	01332	636646606060			
	01333	606060606060			
	01334	606060606060			
	01335	606060606060			
	01336	606060606060			
	01337	626422622351		BCD	SUBSCRIPT COMBINATIONS WITH THE SAME SYMBOLS, COEFFICIENTS,
	01340	314763602346			
	01341	442231452163			
	01342	314645626066			
	01343	316330606330			
	01344	256062214425			
	01345	606270442246			
	01346	436273602346			
	01347	252626312331			
	01350	254563627360			
	01351	214524604325		BCD	AND LEADING DIMENSIONS
	01352	212431452760			
	01353	243144254562			
	01354	314645626060			
	01355	606060606060			
	01356	606060606060			
	01357	606060606060			
	01360	606060606060			
	01361	606060606060			
	01362	606060606060			
	01363	663163303145		BCD	WITHIN THE SAME NEST WHICH HAS AT LEAST ONE, BUT NOT ALL, CO
	01364	606330256062			
	01365	214425604525			

01366 626360663031
 01367 233060302162
 01370 602163604325
 01371 216263604645
 01372 257360226463
 01373 604546636021
 01374 434373602346
 01375 456351464343
 01376 314527602446
 01377 626031456023
 01400 4644444464533
 01401 606060606060
 01402 606060606060
 01403 606060606060
 01404 606060606060
 01405 606060606060
 01406 606060606060
 01407 633025606321
 01410 224325603162
 01411 602364446443
 01412 216331652560
 01413 466525516021
 01414 434360452562
 01415 636260314560
 01416 633025604751
 01417 462243254433
 01420 606051256651
 01421 316325606246
 01422 645123256047
 01423 514627512144
 01424 336060606060
 01425 606060606060
 01426 606060606060
 01427 606060606060
 01430 606060606060
 01431 606060606060
 01432 606060606060
 01433 0 00000 0 00000 X

BCD NTROLLING DOS IN COMMON.

BCD THE TABLE IS CUMULATIVE OVER ALL NESTS IN THE PROBLEM. REWR

BCD ITE SOURCE PROGRAM.

A 00000 END

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	21	0	0	0	0
LIB	0	0	0	0	0
COL	21	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 102

NUMBER OF SYMBOLS, DEF 197,DEFOP 0,UNDEF 0
 ORG 16 FORCE NEW RECORD

				00020	ORG 16	FORCE NEW RECORD
	00020	0	01303	0 01333	HTR X-1,0,LOCREC	CARD FOR DE
				01303	ORG LOCREC	
TD	01303	3	00000	0 00020	TXH 16	750 FT 56
					16	747 FT 56
	01304	0	07400	4 00740	TSX PRINT,4	
	01305	0	01252	0 01244	HTR SOURCE,0,SOURCE+6	
	01306	0	07400	4 00740	TSX PRINT,4	
	01307	0	01334	0 01311	HTR PR,0,PR+19	
	01310	0	02000	0 00272	TRA SPEND	
	01311	60606060606060			BCD 2	
				PR		
	01312	60606060606060				
	01313	216026465163			BCD A FORTRAN FUNCTION HAS BEEN DEFINED AT A POINT IN THE SOURCE	
	01314	512145602664				
	01315	452363314645				
	01316	603021626022				
	01317	252545602425				
	01320	263145252460				
	01321	216360216047				
	01322	463145636031				
	01323	456063302560				
	01324	624664512325				
	01325	604751462751			BCD 7 PROGRAM OTHER THAN AT ITS BEGINNING.	
	01326	214460466330				
	01327	255160633021				
	01330	456021636031				
	01331	636260222527				
	01332	314545314527				
	01333	336060606060				
	01334	0 00000	0 00000	X		
A			00000		END	

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	16	0	0	0	0
LIB	0	0	0	0	0
COL	16	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 40

NUMBER OF SYMBOLS, DEF 197,DEFOP 0,UNDEF 0
 ORG 17 FORCE NEW RECORD

```

00021          00021          ORG 17          FORCE NEW RECORD
00021 0 01303 0 01325      HTR X-1,0,LOCREC      CARD FOR DE
                                01303          ORG LOCREC
TD 01303 3 00000 0 00021      TXH 17          2155 FT 56
01304 0 07400 4 00740      TSX PRINT,4
01305 0 01252 0 01244      HTR SOURCE,0,SOURCE+6
01306 0 07400 4 00740      TSX PRINT,4
01307 0 01326 0 01311      HTR PR,0,PR+13
01310 0 02000 0 00272      TRA SPEND
01311 60606060606060        PR          BCD 2
01312 60606060606060
01313 216044644363          BCD A MULTIVARIATE OPEN SUBROUTINE HAS ONLY ONE ARGUMENT SPECIFI
01314 316521513121
01315 632560464725
01316 456062642251
01317 466463314525
01320 603021626046
01321 454370604645
01322 256021512764
01323 442545636062
01324 472523312631
01325 252433606060        BCD 1ED.
01326 0 00000 0 00000 X          END
A          00000

```

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	15	0	0	0	0
LIB	0	0	0	0	0
COL	15	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 33

NUMBER OF SYMBOLS, DEF 197,DEFOP 0,UNDEF 0
 ORG 18 FORCE NEW RECORD

```

00022      00022      ORG 18      FORCE NEW RECORD
00022 0 01303 0 01327 HTR X-1,0,LOCREC CARD FOR DE
01303      01303      ORG LOCREC
TD 01303 3 00000 0 00022 TXH 18      2163 FT 56
01304 0 07400 4 00740 TSX PRINT,4
01305 0 01252 0 01244 HTR SOURCE,0,SOURCE+6
01306 0 07400 4 00740 TSX PRINT,4
01307 0 01330 0 01311 HTR PR,0,PR+15
01310 0 02000 0 00272 TRA SPEND
01311 60606060606060 PR BCD 2
01312 60606060606060
01313 444651256021 BCD MORE ARGUMENTS HAVE BEEN SUPPLIED THAN ARE REQUIRED BY AN OP
01314 5127644442545
01315 636260302165
01316 256022252545
01317 606264474743
01320 312524606330
01321 214560215125
01322 605125506431
01323 512524602270
01324 602145604647
01325 254560626422 BCD 3EN SUBROUTINE.
01326 514664633145
01327 253360606060
01330 0 00000 0 00000 X
A 00000 END

```

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	15	0	0	0	0
LIB	0	0	0	0	0
COL	15	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 35

NUMBER OF SYMBOLS, DEF 197,DEFOP 0,UNDEF 0
 ORG 19 FORCE NEW RECORD

```

00023          00023          ORG 19          FORCE NEW RECORD
00023 0 01303 0 01351      HTR X-1,0,LOCREC      CARD FOR DE
                                01303          ORG LOCREC
TD 01303 3 00000 0 00023      TXH 19          434 FT 62
01304 0 07400 4 00740      TSX PRINT,4
01305 0 01252 0 01244      HTR SOURCE,0,SOURCE+6
01306 0 07400 4 00740      TSX PRINT,4
01307 0 01352 0 01311      HTR PR,0,PR+33
01310 0 02000 0 00272      TRA SPEND
01311 60606060606060        PR          BCD 2
01312 60606060606060
01313 264346666046          BCD FLOW OF PROGRAM IS TOO COMPLEX.  NEXT ENTRY CANNOT BE MADE I
01314 266047514627
01315 512144603162
01316 606346466023
01317 464447432567
01320 336060452567
01321 636025456351
01322 706023214545
01323 466360222560
01324 442124256031
01325 456043316263          BCD N LIST OF BASIC BLOCKS.
01326 604626602221
01327 623123602243
01330 462342623360
01331 606060606060
01332 606060606060
01333 606060606060
01334 606060606060
01335 606060606060
01336 606060606060
01337 512566513163          BCD REWRITE PROGRAM WITH FEWER TRANSFER ADDRESSES, OR DO IN TWO
01340 256047514627
01341 512144606631
01342 633060262566
01343 255160635121
01344 456226255160
01345 212424512562
01346 622562736046
01347 516024466031
01350 456063664660
01351 472151636233          BCD 1PARTS.
01352 0 00000 0 00000 X          00000          END
A

```

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	17	0	0	0	0
LIB	0	0	0	0	0
COL	17	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 53

NUMBER OF SYMBOLS, DEF 197,DEFOP 0,UNDEF 0
ORG 20 FORCE NEW RECORD

```

00024          00024          ORG 20          FORCE NEW RECORD
00024 0 01303 0 01330      HTR X-1,0,LOCREC      CARD FOR DE
                                01303          ORG LOCREC
TD 01303 3 00000 0 00024      TXH 20          454 FT 64
                                20          707 FT 64
01304 0 07400 4 00740      TSX PRINT,4
01305 0 01252 0 01244      HTR SOURCE,0,SOURCE+6
01306 0 07400 4 00740      TSX PRINT,4
01307 0 01331 0 01311      HTR PR,0,PR+16
01310 0 02000 0 00272      TRA SPEND
01311 60606060606060        PR          BCD 2
01312 60606060606060
01313 216047215163          BCD A PART OF THE SOURCE PROGRAM HAS NO POSSIBLE PATH OF FLOW TO
01314 604626606330
01315 256062466451
01316 232560475146
01317 275121446030
01320 216260454660
01321 474662623122
01322 432560472163
01323 306046266026
01324 434666606346
01325 603163336060          BCD 4 IT. CHECK PROGRAM.
01326 233025234260
01327 475146275121
01330 443360606060
01331 0 00000 0 00000 X
A          00000          END

```

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	16	0	0	0	0
LIB	0	0	0	0	0
COL	16	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 37

NUMBER OF SYMBOLS, DEF 197,DEFOP 0,UNDEF 0
 ORG 21 FORCE NEW RECORD


```

00026          00026          ORG 22          FORCE NEW RECORD
00026 0 01303 0 01334      HTR X-1,0,LOCREC      CARD FOR DE
                                01303          ORG LOCREC
TD 01303 3 00000 0 00026      TXH 22          756 FT 64
01304 0 07400 4 00740      TSX PRINT,4
01305 0 01252 0 01244      HTR SOURCE,0,SOURCE+6
01306 0 07400 4 00740      TSX PRINT,4
01307 0 01335 0 01311      HTR PR,0,PR+20
01310 0 02000 0 00272      TRA SPEND
01311 60606060606060        PR          BCD 2
01312 60606060606060
01313 263167244662          BCD FIXDOS TABLE IS FULL.  THERE ARE TOO MANY TRANSFERS TO DO ST
01314 606321224325
01315 603162602664
01316 434333606063
01317 302551256021
01320 512560634646
01321 604421457060
01322 635121456226
01323 255162606346
01324 602446606263
01325 216325442545          BCD 8ATEMENTS.  REWRITE SOURCE PROGRAM.
01326 636233606051
01327 256651316325
01330 606246645123
01331 256047514627
01332 512144336060
01333 606060606060
01334 606060606060
01335 0 00000 0 00000 X
A          00000          END

```

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	15	0	0	0	0
LIB	0	0	0	0	0
COL	15	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 40

NUMBER OF SYMBOLS, DEF 197,DEFOP 0,UNDEF 0
 ORG 23 FORCE NEW RECORD

```

00027          00027          ORG 23          FORCE NEW RECORD
00027 0 01303 0 01342 HTR X-1,0,LOCREC CARD FOR DE
          01303          ORG LOCREC
TD 01303 3 00000 0 00027 TXH 23          1041 FT 64
01304 0 07400 4 00740 TSX PRINT,4
01305 0 01252 0 01244 HTR SOURCE,0,SOURCE+6
01306 0 07400 4 00740 TSX PRINT,4
01307 0 01343 0 01311 HTR PR,0,PR+26
01310 0 02000 0 00272 TRA SPEND
01311 6060606060606060 PR BCD 2
01312 6060606060606060
01313 622563606321 BCD SET TABLE IS FULL. THERE ARE TOO MANY ASSIGN OR SENSE LIGHT
01314 224325603162
01315 602664434333
01316 606063302551
01317 256021512560
01320 634646604421
01321 457060216262
01322 312745604651
01323 606225456225
01324 604331273063
01325 606263216325 BCD STATEMENTS, OR TOO MANY TRANSFERS TO DOS.
01326 442545636273
01327 604651606346
01330 466044214570
01331 606351214562
01332 262551626063
01333 466024466233
01334 6060606060606060
01335 6060606060606060
01336 6060606060606060
01337 512566513163 BCD 4REWRITE SOURCE PROGRAM.
01340 256062466451
01341 232560475146
01342 275121443360
01343 0 00000 0 00000 X
A          00000          END

```

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	16	0	0	0	0
LIB	0	0	0	0	0
COL	16	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 46

NUMBER OF SYMBOLS, DEF 197,DEFOP 0,UNDEF 0
 ORG 24 FORCE NEW RECORD

```

00030          00030          ORG 24          FORCE NEW RECORD
00030 0 01303 0 01346      HTR X-1,0,LOCREC      CARD FOR DE
                                01303          ORG LOCREC
TD 01303 3 00000 0 00030      TXH 24          3156 FT 64
01304 0 07400 4 00740      TSX PRINT,4
01305 0 01252 0 01244      HTR SOURCE,0,SOURCE+6
01306 0 07400 4 00740      TSX PRINT,4
01307 0 01347 0 01311      HTR PR,0,PR+30
01310 0 02000 0 00272      TRA SPEND
01311 60606060606060        PR          BCD 2
01312 60606060606060
01313 264346666046          BCD FLOW OF PROGRAM IS TOO COMPLEX. TRA TABLE HAS TOO MANY ENTR
01314 266047514627
01315 512144603162
01316 606346466023
01317 464447432567
01320 336060635121
01321 606321224325
01322 603021626063
01323 464660442145
01324 706025456351
01325 312562336060          BCD IES. REWRITE PROGRAM WITH
01326 512566513163
01327 256047514627
01330 512144606631
01331 633060606060
01332 606060606060
01333 606060606060
01334 606060606060
01335 606060606060
01336 606060606060
01337 262566255160          BCD 8FEWER TRANSFER ADDRESSES, OR DO IN TWO PARTS.
01340 635121456226
01341 255160212424
01342 512562622562
01343 736046516024
01344 466031456063
01345 664660472151
01346 636233606060
01347 0 00000 0 00000 X
A          00000          END

```

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	16	0	0	0	0
LIB	0	0	0	0	0
COL	16	0	0	0	0

```

NUMBER OF ON-LINE INPUT RECORDS          0
NUMBER OF OFF-LINE PRINT RECORDS        50
NUMBER OF SYMBOLS,  DEF  197,DEFOP      0,UNDEF  0

```



```

00031          00031          ORG 25          FORCE NEW RECORD
00031 0 01303 0 01333      HTR X-1,0,LOCREC      CARD FOR DE
                                01303          ORG LOCREC
TD 01303 3 00000 0 00031      TXH 25          2655 FT 75
01304 0 07400 4 00740      TSX PRINT,4
01305 0 01252 0 01244      HTR SOURCE,0,SOURCE+6
01306 0 07400 4 00740      TSX PRINT,4
01307 0 01334 0 01311      HTR PR,0,PR+19
01310 0 02000 0 00272      TRA SPEND
01311 60606060606060        PR          BCD 2
01312 60606060606060
01313 623171256046          BCD SIZE OF REGION TABLE EXCEEDS 50 ENTRIES.  PROBABLY TOO MANY
01314 266051252731
01315 464560632122
01316 432560256723
01317 252524626005
01320 006025456351
01321 312562336060
01322 475146222122
01323 437060634646
01324 604421457060
01325 622547215121          BCD 7SEPARATE DO NESTS.  REPROGRAM PROBLEM.
01326 632560244660
01327 452562636233
01330 606051254751
01331 462751214460
01332 475146224325
01333 443360606060
01334 0 00000 0 00000 X
A          00000          END

```

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	15	0	0	0	0
LIB	0	0	0	0	0
COL	15	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 39

NUMBER OF SYMBOLS, DEF 197,DEFOP 0,UNDEF 0
 ORG 26 FORCE NEW RECORD

```

00032          00032          ORG 26          FORCE NEW RECORD
00032 0 01303 0 01334      HTR X-1,0,LOCREC      CARD FOR DE
                                01303          ORG LOCREC
TD 01303 3 00000 0 00032      TXH 26          16004 FT 75
                                26          7447 FT 75
01304 0 07400 4 00740      TSX PRINT,4
01305 0 01252 0 01244      HTR SOURCE,0,SOURCE+6
01306 0 07400 4 00740      TSX PRINT,4
01307 0 01335 0 01311      HTR PR,0,PR+20
01310 0 02000 0 00272      TRA SPEND
01311 60606060606060        PR          BCD 2
01312 60606060606060
01313 622523633146          BCD SECTION 5 TABLES EXCEED DRUM SIZE.  PROBLEM IS TOO LONG, OR
01314 456005606321
01315 224325626025
01316 672325252460
01317 245164446062
01320 317125336060
01321 475146224325
01322 446031626063
01323 464660434645
01324 277360465160
01325 302162606346          BCD 8HAS TOO MANY TRANSFERS.  REPROGRAM PROBLEM.
01326 466044214570
01327 606351214562
01330 262551623360
01331 605125475146
01332 275121446047
01333 514622432544
01334 336060606060
01335 0 00000 0 00000 X
A          00000          END

```

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	16	0	0	0	0
LIB	0	0	0	0	0
COL	16	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 41

NUMBER OF SYMBOLS, DEF 197,DEFOP 0,UNDEF 0
 ORG 27 FORCE NEW RECORD

```

00033          00033          ORG 27          FORCE NEW RECORD
00033 0 01303 0 01334      HTR X-1,0,LOCREC      CARD FOR DE
                                01303          ORG LOCREC
TD 01303 3 00000 0 00033      TXH 27          533 FT 92
01304 0 07400 4 00740      TSX PRINT,4
01305 0 01252 0 01244      HTR SOURCE,0,SOURCE+6
01306 0 07400 4 00740      TSX PRINT,4
01307 0 01335 0 01311      HTR PR,0,PR+20
01310 0 02000 0 00272      TRA SPEND
01311 60606060606060        PR          BCD 2
01312 60606060606060
01313 633025512560          BCD THERE HAVE BEEN NO REFERENCES MADE IN THE PROGRAM TO A VARIA
01314 302165256022
01315 252545604546
01316 605125262551
01317 254523256260
01320 442124256031
01321 456063302560
01322 475146275121
01323 446063466021
01324 606521513121
01325 224325606630          BCD 8BLE WHICH WAS LISTED AS A SUBROUTINE ARGUMENT.
01326 312330606621
01327 626043316263
01330 252460216260
01331 216062642251
01332 466463314525
01333 602151276444
01334 254563336060
01335 0 00000 0 00000 X
A          00000          END

```

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	15	0	0	0	0
LIB	0	0	0	0	0
COL	15	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 40

NUMBER OF SYMBOLS, DEF 197,DEFOP 0,UNDEF 0
 ORG 28 FORCE NEW RECORD

```

00034      00034      ORG 28      FORCE NEW RECORD
00034 0 01303 0 01333 HTR X-1,0,LOCREC CARD FOR DE
          01303      ORG LOCREC
TD 01303 3 00000 0 00034 TXH 28      604 FT 92
01304 0 07400 4 00740 TSX PRINT,4
01305 0 01252 0 01244 HTR SOURCE,0,SOURCE+6
01306 0 07400 4 00740 TSX PRINT,4
01307 0 01334 0 01311 HTR PR,0,PR+19
01310 0 02000 0 00272 TRA SPEND
01311 60606060606060 PR BCD 2
01312 60606060606060
01313 633025512560 BCD THERE HAVE BEEN OVER 1,000 REFERENCES TO SUBROUTINE ARGUMENT
01314 302165256022
01315 252545604665
01316 255160017300
01317 000060512526
01320 255125452325
01321 626063466062
01322 642251466463
01323 314525602151
01324 276444254563
01325 626031456063 BCD 7S IN THE PROGRAM. MODIFY SOURCE PROGRAM.
01326 302560475146
01327 275121443360
01330 604446243126
01331 706062466451
01332 232560475146
01333 275121443360
01334 0 00000 0 00000 X
A          00000      END

```

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	15	0	0	0	0
LIB	0	0	0	0	0
COL	15	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 39

NUMBER OF SYMBOLS, DEF 197,DEFOP 0,UNDEF 0
 ORG 29 FORCE NEW RECORD

		00035	ORG 29	FORCE NEW RECORD
	00035	0 01303 0 01364	HTR X-1,0,LOCREC	CARD FOR DE
		01303	ORG LOCREC	
TD	01303	3 00000 0 00035	TXH 29	7100 FT 56
	01304	0 07400 4 00740	TSX PRINT,4	
	01305	0 01365 0 01307	HTR PR,0,PR+46	
	01306	0 02000 0 00272	TRA SPEND	
	01307	606060606060	BCD 2	
	01310	606060606060		
	01311	464725456062	BCD	OPEN SUBROUTINE NOT IN DICTIONARY USED BY SECTION 3. THIS I
	01312	642251466463		
	01313	314525604546		
	01314	636031456024		
	01315	312363314645		
	01316	215170606462		
	01317	252460227060		
	01320	622523633146		
	01321	456003336060		
	01322	633031626031		
	01323	452431232163	BCD	INDICATES THAT THE SYSTEM TAPE
	01324	256260633021		
	01325	636063302560		
	01326	627062632544		
	01327	606321472560		
	01330	606060606060		
	01331	606060606060		
	01332	606060606060		
	01333	606060606060		
	01334	606060606060		
	01335	662162603144	BCD	WAS IMPROPERLY EDITED WHEN ADDITION WAS MADE TO DICTIONARY O
	01336	475146472551		
	01337	437060252431		
	01340	632524606630		
	01341	254560212424		
	01342	316331464560		
	01343	662162604421		
	01344	242560634660		
	01345	243123633146		
	01346	452151706046		
	01347	266046472545	BCD	F OPEN SUBROUTINES USED BY
	01350	606264225146		
	01351	646331452562		
	01352	606462252460		
	01353	227060606060		
	01354	606060606060		
	01355	606060606060		
	01356	606060606060		
	01357	606060606060		
	01360	606060606060		
	01361	622523633146	BCD	4SECTION 1 AND SECTION 3.
	01362	456001602145		
	01363	246062252363		
	01364	314645600333		
	01365	0 00000 0 00000 X		

A 00000 END

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	16	0	0	0	0
LIB	0	0	0	0	0
COL	16	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 64

NUMBER OF SYMBOLS, DEF 197,DEFOP 0,UNDEF 0
ORG 30 FORCE NEW RECORD

```

00036 0 01303 0 01354 00036      ORG 30          FORCE NEW RECORD
01303 3 00000 0 00036 01303      HTR X-1,0,LOCREC  CARD FOR DE
01304 0 07400 4 00740 01303      ORG LOCREC
01305 0 01355 0 01315 01303      TXH 30          425 FT 67
01306 0 76000 0 00166 01303      TSX PRINT,4
01307 0 02000 0 00221 01303      HTR PR,0,PR+32
01310 0 50000 0 00312 01303      SWT 6
01311 0 60100 0 00311 01303      TRA DIGRTN
01312 0 50000 0 01232 01303      CLA PRNT4
01313 0 62200 0 00316 01303      STO PRNT2
01314 0 02000 0 00272 01303      CLA ZERO
01315 60606060606060 PR 01303      STD HTR4
01316 60606060606060 01303      TRA SPEND
01317 624664512325 01303      BCD 2
01320 604751462751 01303      BCD SOURCE PROGRAM CONTAINS AN ILLEGAL PATH OF FLOW, OR A MACHIN
01321 214460234645 01303
01322 632131456260 01303
01323 214560314343 01303
01324 252721436047 01303
01325 216330604626 01303
01326 602643466673 01303
01327 604651602160 01303
01330 442123303145 01303
01331 256025515146 01303      BCD E ERROR HAS RESULTED IN AN IMPOSSIBLE
01332 516030216260 01303
01333 512562644363 01303
01334 252460314560 01303
01335 214560314447 01303
01336 466262312243 01303
01337 256060606060 01303
01340 606060606060 01303
01341 606060606060 01303
01342 606060606060 01303
01343 302143636021 01303      BCD HALT AFTER A DIVIDE CHECK TEST. CHECK SOURCE PROGRAM.
01344 266325516021 01303
01345 602431653124 01303
01346 256023302523 01303
01347 426063256263 01303
01350 336060233025 01303
01351 234260624664 01303
01352 512325604751 01303
01353 462751214433 01303
01354 606060606060 01303
01355 0 00000 0 00000 X 01303      END
A 00000

```

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	20	0	0	0	0
LIB	0	0	0	0	0
COL	20	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0
NUMBER OF OFF-LINE PRINT RECORDS 56
NUMBER OF SYMBOLS, DEF 197,DEFOP 0,UNDEF 0
ORG 31 FORCE NEW RECORD

			00037	ORG 31	FORCE NEW RECORD	
	00037	0	01303 0	01400	HTR X-1,0,LOCREC	CARD FOR DE
			01303	ORG LOCREC		
TD	01303	3	00000 0	00037	TXH 31	277 FT 113
	01304	0	07400 4	00740	TSX PRINT,4	
	01305	0	01400 0	01315	HTR PR,0,PR+51	
	01306	0	76000 0	00166	SWT 6	
	01307	0	02000 0	00221	TRA DIGRTN	
	01310	0	50000 0	00312	CLA PRNT4	
	01311	0	60100 0	00311	STO PRNT2	
	01312	0	50000 0	01232	CLA ZERO	-
	01313	0	62200 0	00316	STD HTR4	
	01314	0	02000 0	00272	TRA SPEND	
	01315	606060606060			BCD 2	
	01316	606060606060	PR			
	01317	214560216363			BCD AN ATTEMPT TO FIND A NAME IN THE INTERNALLY DEFINED VARIABLE	
	01320	254447636063				
	01321	466026314524				
	01322	602160452144				
	01323	256031456063				
	01324	302560314563				
	01325	255145214343				
	01326	706024252631				
	01327	452524606521				
	01330	513121224325				
	01331	606321224325			BCD TABLE HAS FAILED. IF THE SOURCE PROGRAM BEING	
	01332	603021626026				
	01333	213143252433				
	01334	606031266063				
	01335	302560624664				
	01336	512325604751				
	01337	462751214460				
	01340	222531452760				
	01341	606060606060				
	01342	606060606060				
	01343	234644473143			BCD COMPILED IS EXTREMELY LARGE, THIS STOP MAY INDICATE AN OVERL	
	01344	252460316260				
	01345	256763512544				
	01346	254370604321				
	01347	512725736063				
	01350	303162606263				
	01351	464760442170				
	01352	603145243123				
	01353	216325602145				
	01354	604665255143				
	01355	214760462660			BCD AP OF TABLES IN CORE MEMORY. NAME IN QUESTION	
	01356	632122432562				
	01357	603145602346				
	01360	512560442544				
	01361	465170336060				
	01362	452144256031				
	01363	456050642562				
	01364	633146456060				
	01365	606060606060				

```

01366 606060606060
01367 316260626346          BCD IS STORED IN LEFT MOST 20 BITS OF LOCATION 157.
01370 512524603145
01371 604325266360
01372 444662636002
01373 006022316362
01374 604626604346
01375 232163314645
01376 600105073360
01377 606060606060
01400 606060606060
01401 0 00000 0 00000 X
A      00000          END

```

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	22	0	0	0	0
LIB	0	0	0	0	0
COL	22	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 76

NUMBER OF SYMBOLS, DEF 197,DEFOP 0,UNDEF 0
 ORG 32 FORCE NEW RECORD

				00040	ORG 32	FORCE NEW RECORD
	00040	0	01303	0 01404	HTR X-1,0,LOCREC	CARD FOR DE
				01303	ORG LOCREC	
TD	01303	3	00000	0 00040	TXH 32	341 FT 96
					32	341 FT 9B
	01304	0	07400	4 00740	TSX PRINT,4	
	01305	0	01405	0 01315	HTR PR,0,PR+56	
	01306	0	76000	0 00166	SWT 6	
	01307	0	02000	0 00221	TRA DIGRTN	
	01310	0	50000	0 00312	CLA PRNT4	
	01311	0	60100	0 00311	STO PRNT2	
	01312	0	50000	0 01232	CLA ZERO	
	01313	0	62200	0 00316	STD HTR4	
	01314	0	02000	0 00272	TRA SPEND	
	01315	606060606060			BCD 2	
	01316	606060606060	PR			
	01317	214560216363			BCD AN ATTEMPT HAS BEEN MADE TO ASSIGN TWO OR MORE STORAGE LOCAT	
	01320	254447636030				
	01321	216260222525				
	01322	456044212425				
	01323	606346602162				
	01324	623127456063				
	01325	664660465160				
	01326	444651256062				
	01327	634651212725				
	01330	604346232163				
	01331	314645626063			BCD IONS TO THE SAME VARIABLE NAME. FAILURE OF	
	01332	466063302560				
	01333	622144256065				
	01334	215131212243				
	01335	256045214425				
	01336	336060262131				
	01337	436451256046				
	01340	266060606060				
	01341	606060606060				
	01342	606060606060				
	01343	622523633146			BCD SECTION 1 PRIME OR SECTION 5 PRIME IN THE PREPARATION OF THE	
	01344	456001604751				
	01345	314425604651				
	01346	606225236331				
	01347	464560056047				
	01350	513144256031				
	01351	456063302560				
	01352	475125472151				
	01353	216331464560				
	01354	462660633025				
	01355	606321224325			BCD TABLES OF EQUIVALENCE CLASSES HAS OCCURRED,	
	01356	626046266025				
	01357	506431652143				
	01360	254523256023				
	01361	432162622562				
	01362	603021626046				
	01363	232364515125				
	01364	247360606060				

```

01365 606060606060
01366 606060606060
01367 465160633025          BCD OR THERE IS AN INCONSISTANCY IN COMMON, EQUIV, AND DIM SENTE
01370 512560316260
01371 214560314523
01372 464562316263
01373 214523706031
01374 456023464444
01375 464573602550
01376 643165736021
01377 452460243144
01400 606225456325
01401 452325626031          BCD 4NCES IN SOURCE LANGUAGE.
01402 456062466451
01403 232560432145
01404 276421272533
01405 0 00000 0 00000 X
A          00000          END

```

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	24	0	0	0	0
LIB	0	0	0	0	0
COL	24	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 81

NUMBER OF SYMBOLS, DEF 197,DEFOP 0,UNDEF 0
 ORG 33 FORCE NEW RECORD

			00041	ORG 33	FORCE NEW RECORD		
	00041	0	01303	0	01403	HTR X-1,0,LOCREC	CARD FOR DE
			01303			ORG LOCREC	
TD	01303	3	00000	0	00041	TXH 33	352 FT 113
	01304	0	76200	0	00304	RDR 4	
	01305	0	46000	0	01325	LDA A	
	01306	0	70000	0	01257	CPY ERAS	
	01307	-0	50000	0	01257	CAL ERAS	
	01310	0	77100	0	00022	ARS 18	
	01311	0	56000	0	00717	LDQ BLANKS	
	01312	-0	76300	0	00022	LGL 18	
	01313	0	60200	0	01403	SLW OP	
	01314	0	07400	4	00740	TSX PRINT,4	
	01315	0	01404	0	01326	HTR PR,0,PR+46	
	01316	0	76000	0	00166	SWT 6	
	01317	0	02000	0	00221	TRA DIGRTN	
	01320	0	50000	0	00312	CLA PRNT4	
	01321	0	60100	0	00311	STO PRNT2	
	01322	0	50000	0	01232	CLA ZERO	
	01323	0	62200	0	00316	STD HTR4	
	01324	0	02000	0	00272	TRA SPEND	
	01325	0	00000	0	01326	HTR8726	
	01326		606060606060			BCD 2	
				A			
				PR			
	01327		606060606060				
	01330		214560216363			BCD AN ATTEMPT TO FIND AN OPERATION ABBREVIATION IN THE TABLE OF	
	01331		254447636063				
	01332		466026314524				
	01333		602145604647				
	01334		255121633146				
	01335		456021222251				
	01336		256531216331				
	01337		464560314560				
	01340		633025606321				
	01341		224325604626				
	01342		606230215125			BCD SHARE OPERATIONS HAS FAILED. IF THE SOURCE	
	01343		604647255121				
	01344		633146456260				
	01345		302162602621				
	01346		314325243360				
	01347		603126606330				
	01350		256062466451				
	01351		232560606060				
	01352		606060606060				
	01353		606060606060				
	01354		475146275121			BCD PROGRAM BEING COMPILED IS EXTREMELY LARGE THIS MAY INDICATE	
	01355		446022253145				
	01356		276023464447				
	01357		314325246031				
	01360		626025676351				
	01361		254425437060				
	01362		432151272560				
	01363		633031626044				
	01364		217060314524				
	01365		312321632560				

```

01366 214560466525          BCD AN OVERLAP OF TABLES IN CORE MEMORY.
01367 514321476046
01370 266063212243
01371 256260314560
01372 234651256044
01373 254446517033
01374 606060606060
01375 606060606060
01376 606060606060
01377 606060606060
01400 633025604647          BCD 3THE OPERATION IS
01401 255121633146
01402 456031626060
01403 606060606060      OP      BCD 1
01404 0 00000 0 00000 X
A          00000          END

```

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	32	0	0	0	0
LIB	0	0	0	0	0
COL	32	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 79

NUMBER OF SYMBOLS, DEF 199,DEFOP 0,UNDEF 0
 ORG 34 FORCE NEW RECORD

				00042	ORG 34	FORCE NEW RECORD	
	00042	0	01303	0	01410	HTR X-1,0,LOCREC	CARD FOR DE
				01303	ORG LOCREC		
TD	01303	3	00000	0	00042	TXH 34	377 FT 115
	01304	0	76200	0	00304	RDR 4	
	01305	0	46000	0	01322	LDA A	
	01306	0	70000	0	01401	CPY ERWRD	
	01307	-0	50000	0	00717	CAL BLANKS	
	01310	0	56000	0	01401	LDQ ERWRD	
	01311	-0	76300	0	00036	LGL 30	
	01312	0	60200	0	01401	SLW ERWRD	
	01313	-0	76300	0	00006	LGL 6	
	01314	0	56000	0	00717	LDQ BLANKS	
	01315	-0	76300	0	00036	LGL 30	
	01316	0	60200	0	01402	SLW ERWRD+1	
	01317	0	07400	4	00740	TSX PRINT,4	
	01320	0	01411	0	01323	HTR PR,0,PR+54	
	01321	0	02000	0	00272	TRA SPEND	
	01322	0	00000	0	02540	A HTR81376	
	01323	606060606060				PR BCD 2	
	01324	606060606060					
	01325	255151465160					BCD ERROR IN CARD SEQUENCE OF LIBRARY PROGRAM ON SYSTEM TAPE 1.
	01326	314560232151					
	01327	246062255064					
	01330	254523256046					
	01331	266043312251					
	01332	215170604751					
	01333	462751214460					
	01334	464560627062					
	01335	632544606321					
	01336	472560013360					
	01337	602321512460					BCD CARD READ SHOULD BE
	01340	512521246062					
	01341	304664432460					
	01342	222560606060					
	01343	606060606060					
	01344	606060606060					
	01345	606060606060					
	01346	606060606060					
	01347	606060606060					
	01350	606060606060					
	01351	216023464563					BCD A CONTINUATION OF LIBRARY PROGRAM REQUESTED, BUT PROGRAM CAR
	01352	314564216331					
	01353	464560462660					
	01354	433122512151					
	01355	706047514627					
	01356	512144605125					
	01357	506425626325					
	01360	247360226463					
	01361	604751462751					
	01362	214460232151					
	01363	246030216260					BCD D HAS BEEN FOUND INSTEAD.
	01364	222525456026					
	01365	466445246031					

```

01366 456263252124
01367 336060606060
01370 606060606060
01371 606060606060
01372 606060606060
01373 606060606060
01374 606060606060
01375 076043252663          BCD 47 LEFT ROW OF CARD READS
01376 605146666046
01377 266023215124
01400 605125212462
01401 606060606060          ERWRD BCD 2
01402 606060606060
01403 263145246025          BCD 6 FIND ERROR AND REWRITE LIBRARY.
01404 515146516021
01405 452460512566
01406 513163256043
01407 312251215170
01410 336060606060
01411 0 00000 0 00000 X

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A          00000          END

```

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	30	0	0	0	0
LIB	0	0	0	0	0
COL	30	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 84

NUMBER OF SYMBOLS, DEF 199, DEFOP 0, UNDEF 0
 ORG 35 FORCE NEW RECORD

```

00043 00043      ORG 35      FORCE NEW RECORD
00043 0 01303 0 01352 HTR X-1,0,LOCREC  CARD FOR DE
                                01303      ORG LOCREC
TD 01303 3 00000 0 00043 TXH 35      543 FT 115
01304 0 07400 4 00740 TSX PRINT,4
01305 0 01353 0 01307 HTR PR,0,PR+36
01306 0 02000 0 00221 TRA DIGRTN
01307 606060606060 PR BCD 2
01310 606060606060
01311 632147256023 BCD TAPE CHECK IN READING RECORD FROM THE SYSTEM TAPE 1. FIVE A
01312 302523426031
01313 456051252124
01314 314527605125
01315 234651246026
01316 514644606330
01317 256062706263
01320 254460632147
01321 256001336060
01322 263165256021
01323 636325444763 BCD TTEMPTS HAVE BEEN MADE TO READ THIS
01324 626030216525
01325 602225254560
01326 442124256063
01327 466051252124
01330 606330316260
01331 606060606060
01332 606060606060
01333 606060606060
01334 606060606060
01335 512523465124 BCD RECORD CORRECTLY. MAY BE NECESSARY TO REWRITE LIBRARY FILE
01336 602346515125
01337 236343703360
01340 604421706022
01341 256045252325
01342 626221517060
01343 634660512566
01344 513163256043
01345 312251215170
01346 602631432560
01347 604645606330 BCD 4 ON THE SYSTEM TAPE.
01350 256062706263
01351 254460632147
01352 253360606060
01353 0 00000 0 00000 X
A                                00000      END

```

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	15	0	0	0	0
LIB	0	0	0	0	0
COL	15	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 54

NUMBER OF SYMBOLS, DEF 197,DEFOP 0,UNDEF 0
ORG 36 FORCE NEW RECORD

```

00044 0 01303 0 01354 00044      ORG 36          FORCE NEW RECORD
01303 3 00000 0 00044 01303      HTR X-1,0,LOCREC  CARD FOR DE
01304 0 07400 4 00740 01303      ORG LOCREC
01305 0 01355 0 01315 01303      TXH 36          441 FT 96
01306 0 76000 0 00166 01304      TSX PRINT,4
01307 0 02000 0 00221 01305      HTR PR,0,PR+32
01310 0 50000 0 00312 01306      SWT 6
01311 0 60100 0 00311 01307      TRA DIGRTN
01312 0 50000 0 01232 01310      CLA PRNT4
01313 0 62200 0 00316 01311      STO PRNT2
01314 0 02000 0 00272 01312      CLA ZERO
01315 60606060606060 PR 01313      STD HTR4
01316 60606060606060 01314      TRA SPEND
01317 216062642251 01315      BCD 2
01320 466463314525 01316      BCD A SUBROUTINE CALL NAME OR A LIBRARY FUNCTION HAS BEEN USED A
01321 602321434360 01317
01322 452144256046 01320
01323 516021604331 01321
01324 225121517060 01322
01325 266445236331 01323
01326 464560302162 01324
01327 602225254560 01325
01330 646225246021 01326
01331 626021606521 01327      BCD S A VARIABLE NAME, OR THERE HAS BEEN A MACHINE
01332 513121224325 01330
01333 604521442573 01331
01334 604651606330 01332
01335 255125603021 01333
01336 626022252545 01334
01337 602160442123 01335
01340 303145256060 01336
01341 606060606060 01337
01342 606060606060 01340
01343 255151465160 01341      BCD ERROR IN COMPILING THE NAME. CHECK SOURCE PROGRAM.
01344 314560234644 01342
01345 473143314527 01343
01346 606330256045 01344
01347 214425336060 01345
01350 233025234260 01346
01351 624664512325 01347
01352 604751462751 01350
01353 214433606060 01351
01354 606060606060 01352
01355 0 00000 0 00000 X 01353      END
A 00000

```

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	20	0	0	0	0
LIB	0	0	0	0	0
COL	20	0	0	0	0

			00045	ORG 37	FORCE NEW RECORD
	00045	0	01303 0	HTR X-1,0,LOCREC	CARD FOR DE
			01374		
			01303	ORG LOCREC	
TD	01303	3	00000 0	TXH 37	562 FT 113
	01304	0	07400 4	TSX PRINT,4	
	01305	0	01375 0	HTR PR,0,PR+48	
	01306	0	76000 0	SWT 6	
	01307	0	02000 0	TRA DIGRTN	
	01310	0	50000 0	CLA PRNT4	
	01311	0	60100 0	STO PRNT2	
	01312	0	50000 0	CLA ZERO	
	01313	0	62200 0	STD HTR4	
	01314	0	02000 0	TRA SPEND	
	01315		606060606060	BCD 2	
	01316		606060606060		
	01317		633025602162	BCD	THE ASSIGNMENT OF INSTRUCTION STORAGE LOCATIONS DOES NOT CHE
	01320		623127454425		
	01321		456360462660		
	01322		314562635164		
	01323		236331464560		
	01324		626346512127		
	01325		256043462321		
	01326		633146456260		
	01327		244625626045		
	01330		466360233025		
	01331		234260663163	BCD	CK WITH THAT GIVEN IN A PREVIOUS RECORD.
	01332		306063302163		
	01333		602731652545		
	01334		603145602160		
	01335		475125653146		
	01336		646260512523		
	01337		465124336060		
	01340		606060606060		
	01341		606060606060		
	01342		606060606060		
	01343		312660633025	BCD	IF THE SOURCE PROGRAM BEING COMPILED IS EXTREMELY LARGE, THI
	01344		606246645123		
	01345		256047514627		
	01346		512144602225		
	01347		314527602346		
	01350		444731432524		
	01351		603162602567		
	01352		635125442543		
	01353		706043215127		
	01354		257360633031	BCD	S STOP MAY INDICATE
	01355		626062634647		
	01356		604421706031		
	01357		452431232163		
	01360		256060606060		
	01361		606060606060		
	01362		606060606060		
	01363		606060606060		
	01364		606060606060		
	01365		606060606060		

01366 606060606060
01367 214560466525 BCD 6AN OVERLAP OF TABLES IN MEMORY.
01370 514321476046
01371 266063212243
01372 256260314560
01373 442544465170
01374 336060606060
01375 0 00000 0 00000 X

A 00000 END

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	22	0	0	0	0
LIB	0	0	0	0	0
COL	22	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 72

NUMBER OF SYMBOLS, DEF 197,DEFOP 0,UNDEF 0
ORG 38 FORCE NEW RECORD

				00046	ORG 38	FORCE NEW RECORD
					END OF FILE*****	
	00046	0	01303	0 01732	HTR X-1,0,LOCREC	CARD FOR DE
				01303	ORG LOCREC	
TD	01303	3	00000	0 00046	TXH 38	425 FT 98
					38	107 FT 92
					38	277 FT 92
					38	260 FT 96
					38	465 FT 96
					38	260 FT 98
					38	247 FT 101
					38	245 FT 105
					38	241 FT 115
	01304	0	07400	4 00740	TSX PRINT,4	
	01305	0	01244	0 01237	HTR MACHIN,0,MACHIN+5	
	01306	-0	53400	3 01232	LXD ZERO,3	
	01307	0	50000	1 01453	CLA A,1	
	01310	0	40200	0 01235	SUB ERWORD	
	01311	0	10000	0 01427	TZE B	
	01312	1	77763	1 01313	TXI C,1,-13	
	01313	3	77630	1 01307	TXH D,1,-13*8	
	01314	0	07400	4 00740	TSX PRINT,4	
	01315	0	01427	0 01317	HTR ER,0,ER+72	
	01316	0	00000	0 01452	HTR E	
	01317	606060606060			BCD 2	
	01320	606060606060				
	01321	434623216331			BCD LOCATION OF ERROR, WHICH HAS BEEN PRINTED, HAS CAUSED DIAGNO	
	01322	464560462660				
	01323	255151465173				
	01324	606630312330				
	01325	603021626022				
	01326	252545604751				
	01327	314563252473				
	01330	603021626023				
	01331	216462252460				
	01332	243121274546				
	01333	626331236051			BCD STIC RECORD NUMBER 38	
	01334	252346512460				
	01335	456444222551				
	01336	600310606060				
	01337	606060606060				
	01340	606060606060				
	01341	606060606060				
	01342	606060606060				
	01343	606060606060				
	01344	606060606060				
	01345	634660222560			BCD TO BE READ IN. THIS RECORD COMPARES THE LOCATION TO A LIST	
	01346	512521246031				
	01347	453360606330				
	01350	316260512523				
	01351	465124602346				
	01352	444721512562				
	01353	606330256043				
	01354	462321633146				

01355 456063466021
01356 604331626360
01357 462660076047
01360 466262312243
01361 256024516444
01362 605125212460
01363 262131436451
01364 256273602264
01365 636063302560
01366 622521512330
01367 606060606060
01370 606060606060
01371 302162602621
01372 314325243360
01373 606330256025
01374 515146516260
01375 215125604331
01376 626325246031
01377 456001040503
01400 736001040503
01401 604743646260
01402 010373602563
01403 233360604751
01404 256262606263
01405 215163603126
01406 607046646066
01407 316230606346
01410 606060606060
01411 606060606060
01412 606060606060
01413 606060606060
01414 606060606060
01415 512562634651
01416 256044212330
01417 314525606346
01420 606263216325
01421 603145606630
01422 312330602551
01423 514651604623
01424 236451512524
01425 336060606060
01426 606060606060
01427 0 50000 1 01454 B
01430 0 60100 2 01631
01431 1 77777 2 01432
01432 -3 77772 2 01434 F
01433 1 77777 1 01427
01434 0 50000 1 01455 G
01435 0 60100 0 01652
01436 0 50000 1 01456
01437 0 60100 0 01660
01440 0 50000 1 01457
01441 0 60100 0 01665
01442 0 50000 1 01460

BCD OF 7 POSSIBLE DRUM READ FAILURES, BUT THE SEARCH

BCD HAS FAILED. THE ERRORS ARE LISTED IN 1453, 1453 PLUS 13, ET

BCD C. PRESS START IF YOU WISH TO

BCD RESTORE MACHINE TO STATE IN WHICH ERROR OCCURRED.

CLA A1SIX,1
STO PR1SIX,2
TXI F,2,-1
TXL G,2,-6
TXI B,1,-1
CLA A1SIX+1,1
STO PR2
CLA A1SIX+2,1
STO PR3
CLA A1SIX+3,1
STO PR4TWO
CLA A1SIX+4,1

01443	0 60100 0 01666		STO PR4TWO+1	
01444	0 50000 1 01461		CLA A1SIX+5,1	
01445	0 60100 0 01700		STO PR5TWO	
01446	0 50000 1 01462		CLA A1SIX+6,1	
01447	0 60100 0 01701		STO PR5TWO+1	
01450	0 07400 4 00740		TSX PRINT,4	
01451	0 01733 0 01623		HTR PR,0,PR+72	
01452	0 02000 0 00221	E	TRA DIGRTN	
01453	+000425000000	A	OCT 000425000000	SECTION VI RECORD L62
01454	452760635121	A1SIX	BCD 6NG TRANSFER VECTOR TABLE	
01455	456226255160			
01456	652523634651			
01457	606321224325			
01460	606060606060			
01461	606060606060			
01462	516444600333	A2	BCD 1RUM 3.	
01463	600401013360	A3	BCD 1 411.	
01464	316260314560	A4TWO	BCD 2IS IN 413.	
01465	040103336060			
01466	314560060205	A5TWO	BCD 2IN 625. CO	
01467	336060602346			
01470	+000260000000		OCT 000260000000	SECTION VI RECORD L 61 OR 62
01471	452760255064		BCD 6NG EQUIT TABLE	
01472	316360632122			
01473	432560606060			
01474	606060606060			
01475	606060606060			
01476	606060606060			
01477	516444600133		BCD 1RUM 1.	
01500	600204013360		BCD 1 241.	
01501	316260314560		BCD 2IS IN 361.	
01502	030601336060			
01503	314560030602		BCD 2IN 362. CO	
01504	336060602346			
01505	+000465000000		OCT 000465000000	SECTION VI RECORD L61
01506	452760623171		BCD 6NG SIZE TABLE	
01507	256063212243			
01510	256060606060			
01511	606060606060			
01512	606060606060			
01513	606060606060			
01514	516444600233		BCD 1RUM 2.	
01515	600405003360		BCD 1 450.	
01516	316260314560		BCD 2IS IN 453.	
01517	040503336060			
01520	314560030602		BCD 2IN 362. CO	
01521	336060602346			
01522	+000247000000		OCT 000247000000	SECTION VI - RECORD L 64
01523	452760264651		BCD 6NG FORSUB TABLE	
01524	626422606321			
01525	224325606060			
01526	606060606060			
01527	606060606060			
01530	606060606060			

01531	516444600333	BCD 1RUM 3.
01532	600203033360	BCD 1 233.
01533	316260314560	BCD 2IS IN 235.
01534	020305336060	
01535	314560030702	BCD 2IN 372. CO
01536	336060602346	
01537	+000245000000	OCT 000245000000 SECTION VI - RECORD L66
01540	452760264651	BCD 6NG FORSUB TABLE
01541	626422606321	
01542	224325606060	
01543	606060606060	
01544	606060606060	
01545	606060606060	
01546	516444600333	BCD 1RUM 3.
01547	600203013360	BCD 1 231.
01550	316260314560	BCD 2IS IN 233.
01551	020303336060	
01552	314560050506	BCD 2IN 556. CO
01553	336060602346	
01554	+000241000000	OCT 000241000000 SECTION VI - RECORD L 73
01555	452760635121	BCD 6NG TRANSFER VECTOR TABLE
01556	456226255160	
01557	652523634651	
01560	606321224325	
01561	606060606060	
01562	606060606060	
01563	516444600333	BCD 1RUM 3.
01564	600202053360	BCD 1 225.
01565	316260314560	BCD 2IS IN 227.
01566	020207336060	
01567	314560010005	BCD 2IN 1054. CO
01570	043360602346	
01571	+000277000000	OCT 000277000000 SECTION PRE 6
01572	452760623171	BCD 6NG SIZE TABLE
01573	256063212243	
01574	256060606060	
01575	606060606060	
01576	606060606060	
01577	606060606060	
01600	516444600233	BCD 1RUM 2.
01601	600206023360	BCD 1 262.
01602	316260314560	BCD 2IS IN 265.
01603	020605336060	
01604	314560010305	BCD 2IN 1351. CO
01605	013360602346	
01606	+000107000000	OCT 000107000000 SECTION PRE 6
01607	452760635121	BCD 6NG TRANSFER VECTOR TABLE
01610	456226255160	
01611	652523634651	
01612	606321224325	
01613	606060606060	
01614	606060606060	
01615	516444600333	BCD 1RUM 3.
01616	600703336060	BCD 1 73.

01617	316260314560		BCD 2IS IN 75.
01620	070533606060		
01621	314560010306		BCD 2IN 1366. CO
01622	063360602346		
01623	606060606060	PR	BCD 2
01624	606060606060		
01625	233025234260		BCD 4CHECK SUM ERROR IN READI
01626	626444602551		
01627	514651603145		
01630	605125212431		
01631	452760635121	PR1SIX	BCD 6NG TRANSFER VECTOR TABLE
01632	456226255160		
01633	652523634651		
01634	606321224325		
01635	606060606060		
01636	606060606060		
01637	606060606060		BCD
01640	606060606060		
01641	606060606060		
01642	606060606060		
01643	606060606060		
01644	606060606060		
01645	606060606060		
01646	606060606060		
01647	606060606060		
01650	606060606060		
01651	265146446024		BCD 1FROM D
01652	516444600333	PR2	BCD 1RUM 3.
01653	606023464770		BCD 5 COPY LOOP BEGINS AT LOCATION
01654	604346464760		
01655	222527314562		
01656	602163604346		
01657	232163314645		
01660	600401013360	PR3	BCD 1 411.
01661	606062632151		BCD 4 STARTING DRUM ADDRESS
01662	633145276024		
01663	516444602124		
01664	245125626260		
01665	316260314560	PR4TWO	BCD 8IS IN 413.
01666	040103336060		
01667	606060606060		
01670	606060606060		
01671	606060606060		
01672	606060606060		
01673	606060606060		
01674	606060606060		
01675	245164446023		BCD 3DRUM CHECK SUM IS
01676	302523426062		
01677	644460316260		
01700	314560060205	PR5TWO	BCD 3IN 625. COMPUTED
01701	336060602346		
01702	444764632524		
01703	602330252342		BCD CHECK SUM IS NOT STORED, THEREFORE IT IS NOT AVAILABLE.
01704	606264446031		

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01705 626045466360
01706 626346512524
01707 736063302551
01710 252646512560
01711 316360316260
01712 454663602165
01713 213143212243
01714 253360606060
01715 606060606060
01716 606060606060
01717 606060606060
01720 606060606060
01721 263165256021
01722 636325444763
01723 626030216525
01724 602225254560
01725 442124256063
01726 466051252124
01727 606330316260
01730 632122432560
01731 234651512523
01732 634370336060
01733 0 00000 0 00000 X

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BCD 4

BCD FIVE ATTEMPTS HAVE BEEN MADE TO READ THIS TABLE CORRECTLY.

A 00000 END

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	118	0	0	0	0
LIB	0	0	0	0	0
COL	118	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 303

NUMBER OF SYMBOLS, DEF 215,DEFOP 0,UNDEF 0
 ORG 39 FORCE NEW RECORD

			00047	ORG 39	FORCE NEW RECORD
	00047	0 01303 0	02017	HTR X-1,0,LOCREC	CARD FOR DE
			01303	ORG LOCREC	
TD	01303	3 00000 0	00047	TXH 39	47 FT 56
				39	734 FT 45
				39	123 FT 47
				39	140 FT 56
				39	305 FT 56
				39	41 FT 60
				39	607 FT 60
				39	70 FT 92
				39	246 FT 92
				39	442 FT 96
				39	500 FT 96
				39	230 FT 101
				39	222 FT 105
				39	222 FT 115
	01304	0 07400 4	00740	TSX PRINT,4	
	01305	0 01244 0	01237	HTR MACHIN,0,MACHIN+5	
	01306	0 50000 0	01235	CLA ERWORD	
	01307	0 40000 0	01236	ADD RECORD	
	01310	0 60100 0	02020	STO X	
	01311	-0 53400 3	01232	LXD ZERO,3	
	01312	0 50000 1	01456	CLA A,1	D
	01313	0 40200 0	02020	SUB X	
	01314	0 10000 0	01432	TZE B	
	01315	1 77765 1	01316	TXI C,1,-11	
	01316	3 77546 1	01312	TXH D,1,-11*14	C
	01317	0 07400 4	00740	TSX PRINT,4	
	01320	0 01432 0	01322	HTR ER,0,ER+72	
	01321	0 00000 0	01455	HTR E	
	01322	606060606060		BCD 2	ER
	01323	606060606060			
	01324	434623216331		BCD LOCATION OF ERROR, WHICH HAS BEEN PRINTED, HAS CAUSED DIAGNO	
	01325	464560462660			
	01326	255151465173			
	01327	606630312330			
	01330	603021626022			
	01331	252545604751			
	01332	314563252473			
	01333	603021626023			
	01334	216462252460			
	01335	243121274546			
	01336	626331236051		BCD STIC RECORD NUMBER 39	
	01337	252346512460			
	01340	456444222551			
	01341	600311606060			
	01342	606060606060			
	01343	606060606060			
	01344	606060606060			
	01345	606060606060			
	01346	606060606060			
	01347	606060606060			
	01350	634660222560		BCD TO BE READ IN. THIS RECORD COMPARES THE LOCATION TO A LIST O	

01351 512521246031
01352 453360633031
01353 626051252346
01354 512460234644
01355 472151256260
01356 633025604346
01357 232163314645
01360 606346602160
01361 433162636046
01362 266001046047
01363 466262312243
01364 256024516444
01365 605125212460
01366 262131436451
01367 256273602264
01370 636063302560
01371 622521512330
01372 606060606060
01373 606060606060
01374 302162602621
01375 314325243360
01376 606330256025
01377 515146516260
01400 215125604331
01401 626325246031
01402 456001040506
01403 736001040506
01404 604743646260
01405 010173602563
01406 233360604751
01407 256262606263
01410 215163603126
01411 607046646066
01412 316230606346
01413 606060606060
01414 606060606060
01415 606060606060
01416 606060606060
01417 606060606060
01420 512562634651
01421 256044212330
01422 314525606346
01423 606263216325
01424 603145606630
01425 312330602551
01426 514651604623
01427 236451512524
01430 606060606060
01431 606060606060
01432 0 50000 1 01457 B
01433 0 60100 2 01722
01434 1 77777 2 01435
01435 -3 77774 2 01437 F
01436 1 77777 1 01432

BCD F 14 POSSIBLE DRUM READ FAILURES, BUT THE SEARCH

BCD HAS FAILED. THE ERRORS ARE LISTED IN 1456, 1456 PLUS 11, ET

BCD C. PRESS START IF YOU WISH TO

BCD RESTORE MACHINE TO STATE IN WHICH ERROR OCCURRED

CLA A1FOR,1
STO PR1FOR,2
TXI F,2,-1
TXL G,2,-4
TXI B,1,-1

01437	0	50000	1	01460	G	CLA	ALFOR+1,1		
01440	0	60100	0	01737		STO	PR2		
01441	0	50000	1	01461		CLA	ALFOR+2,1		
01442	0	60100	0	01745		STO	PR3		
01443	0	50000	1	01462		CLA	ALFOR+3,1		
01444	0	60100	0	01752		STO	PR4TWO		
01445	0	50000	1	01463		CLA	ALFOR+4,1		
01446	0	60100	0	01753		STO	PR4TWO+1		
01447	0	50000	1	01464		CLA	ALFOR+5,1		
01450	0	60100	0	01767		STO	PR5		
01451	0	50000	1	01465		CLA	ALFOR+6,1		
01452	0	60100	0	01774		STO	PR6		
01453	0	07400	4	00740		TSX	PRINT,4		
01454	0	02020	0	01710		HTR	PR,0,PR+72		
01455	0	02000	0	00221	E	TRA	DIGRTN		
01456	+000047000072				A	OCT	000047000072	SECTION II - FT 58	
01457	606351216263				ALFOR	BCD	4 TRASTO TABLE		
01460	466063212243								
01461	256060606060								
01462	606060606060								
01463	516444600333	A2				BCD	1RUM 3.		
01464	600306336060	A3				BCD	1 36.		
01465	626031456002	A4TWO				BCD	2S IN 2332.		
01466	030302336060								
01467	466002030405	A5				BCD	10 2345		
01470	020304063360	A6				BCD	12346.		
01471	+000041000074					OCT	000041000074	SECTION III - FT 60	
01472	606362672346					BCD	4 TSXCOM TABLE		
01473	446063212243								
01474	256060606060								
01475	606060606060								
01476	516444600333					BCD	1RUM 3.		
01477	600300336060					BCD	1 30.		
01500	626031456001					BCD	2S IN 1147.		
01501	010407336060								
01502	466001020206					BCD	10 1226		
01503	010202073360					BCD	11227.		
01504	+000607000074					OCT	000607000074	SECTION III - FT 60	
01505	602631672346					BCD	4 FIXCON TABLE		
01506	456063212243								
01507	256060606060								
01510	606060606060								
01511	516444600233					BCD	1RUM 2.		
01512	600507073360					BCD	1 577.		
01513	626071255146					BCD	2S ZERO.		
01514	336060606060								
01515	466001020206					BCD	10 1226		
01516	010202073360					BCD	11227.		
01517	+000123000057					OCT	000123000057	SECTION II - FT 47	BLOCK 5
01520	602631672346					BCD	4 FIXCON TABLE		
01521	456063212243								
01522	256060606060								
01523	606060606060								
01524	516444600233					BCD	1RUM 2.		

01525	600701336060	BCD 1 71.	
01526	626071255146	BCD 2S ZERO.	
01527	336060606060		
01530	466001020460	BCD 10 124	
01531	010205336060	BCD 1125.	
01532	+000734000055	OCT 000734000055	SECTION II - FT 45 BLOCK 4
01533	602631672346	BCD 4 FIXCON TABLE	
01534	456063212243		
01535	256060606060		
01536	606060606060		
01537	516444600233	BCD 1RUM 2.	
01540	600701003360	BCD 1 710.	
01541	626071255146	BCD 2S ZERO.	
01542	336060606060		
01543	466001000007	BCD 10 1007	
01544	010001003360	BCD 11010.	
01545	+000070000134	OCT 000070000134	SECTION PRE 6 - FT 92
01546	606351214562	BCD 4 TRANSFER VECTOR TABLE	
01547	262551606525		
01550	236346516063		
01551	212243256060		
01552	516444600333	BCD 1RUM 3.	
01553	600506336060	BCD 1 56.	
01554	626031456006	BCD 2S IN 60.	
01555	003360606060		
01556	466004050704	BCD 10 4574	
01557	040507053360	BCD 14575.	
01560	+000246000134	OCT 000246000134	SECTION PRE 6 - FT 92
01561	606231712560	BCD 4 SIZE TABLE	
01562	632122432560		
01563	606060606060		
01564	606060606060		
01565	516444600233	BCD 1RUM 2.	
01566	600203043360	BCD 1 234.	
01567	626031456002	BCD 2S IN 237.	
01570	030733606060		
01571	466001030500	BCD 10 1350	
01572	010305013360	BCD 11351.	
01573	+000442000140	OCT 000442000140	SECTION VI - FT 96 L 61
01574	606231712560	BCD 4 SIZE TABLE	
01575	632122432560		
01576	606060606060		
01577	606060606060		
01600	516444600233	BCD 1RUM 2.	
01601	600403003360	BCD 1 430.	
01602	626031456004	BCD 2S IN 433.	
01603	030333606060		
01604	466003060660	BCD 10 366	
01605	030602336060	BCD 1362.	
01606	+000500000140	OCT 000500000140	SECTION VI - FT 96 L 62
01607	602550643163	BCD 4 EQUIT TABLE	
01610	606321224325		
01611	606060606060		
01612	606060606060		

01613	516444600133	BCD 1RUM 1.		
01614	600406063360	BCD 1 466.		
01615	626031456004	BCD 2S IN 471.		
01616	070133606060			
01617	466003070060	BCD 10 370		
01620	030602336060	BCD 1362.		
01621	+000230000145	OCT 000230000145	SECTION VI - FT 101	L 64
01622	602646516264	BCD 4 FORSUB TABLE		
01623	226063212243			
01624	256060606060			
01625	606060606060			
01626	516444600333	BCD 1RUM 3.		
01627	600201053360	BCD 1 215.		
01630	626031456002	BCD 2S IN 217.		
01631	010733606060			
01632	466007000460	BCD 10 704		
01633	030702336060	BCD 1372.		
01634	+000222000151	OCT 000222000151	SECTION VI - FT 105	L 66
01635	602646516264	BCD 4 FORSUB TABLE		
01636	226063212243			
01637	256060606060			
01640	606060606060			
01641	516444600333	BCD 1RUM 3.		
01642	600201003360	BCD 1 210.		
01643	626031456002	BCD 2S IN 212.		
01644	010233606060			
01645	466007020360	BCD 10 723		
01646	050506336060	BCD 1556.		
01647	+000222000163	OCT 000222000163	SECTION VI - FT 115	L 73
01650	606351214562	BCD 4 TRANSFER VECTOR TABLE		
01651	262551606525			
01652	236346516063			
01653	212243256060			
01654	516444600333	BCD 1RUM 3.		
01655	600201003360	BCD 1 210.		
01656	626031456002	BCD 2S IN 212.		
01657	010233606060			
01660	466003020006	BCD 10 3206		
01661	010005043360	BCD 11054.		
01662	+000140000070	OCT 000140000070	SECTION III - FT 56	
01663	602330276321	BCD 4 CHGTAG TABLE		
01664	276063212243			
01665	256060606060			
01666	606060606060			
01667	516444600333	BCD 1RUM 3.		
01670	600102073360	BCD 1 127.		
01671	626031456002	BCD 2S IN 2170.		
01672	010700336060			
01673	466005070307	BCD 10 5737		
01674	050704003360	BCD 15740.		
01675	+000305000070	OCT 000305000070	SECTION III - FT 56	
01676	606267246367	BCD 4 SXDTX TABLE		
01677	606321224325			
01700	606060606060			

01701	606060606060	
01702	516444600133	BCD 1RUM 1.
01703	600207043360	BCD 1 274.
01704	626031456002	BCD 2S IN 2213.
01705	020103336060	
01706	466005070307	BCD 10 5737
01707	050704003360	BCD 15740.
01710	606060606060	PR BCD 2
01711	606060606060	
01712	233025234260	BCD 8CHECK SUM ERROR IN READING THE WORD COUNT OF THE
01713	626444602551	
01714	514651603145	
01715	605125212431	
01716	452760633025	
01717	606646512460	
01720	234664456360	
01721	462660633025	
01722	606351214562	PR1FOR BCD 4 TRANSFER VECTOR TABLE
01723	262551606525	
01724	236346516063	
01725	212243256060	
01726	606060606060	BCD 8
01727	606060606060	
01730	606060606060	
01731	606060606060	
01732	606060606060	
01733	606060606060	
01734	606060606060	
01735	606060606060	
01736	265146446024	BCD 1FROM D
01737	516444600333	PR2 BCD 1RUM 3.
01740	606023464770	BCD 5 COPY LOOP BEGINS AT LOCATION
01741	604346464760	
01742	222527314562	
01743	602163604346	
01744	232163314645	
01745	600102033360	PR3 BCD 1 123.
01746	606263215163	BCD 4 STARTING DRUM ADDRESS I
01747	314527602451	
01750	644460212424	
01751	512562626031	
01752	626031456001	PR4TWO BCD 8S IN 1234.
01753	020304336060	
01754	606060606060	
01755	606060606060	
01756	606060606060	
01757	606060606060	
01760	606060606060	
01761	606060606060	
01762	664651246023	BCD 5WORD COUNT HAS BEEN COPIED INT
01763	466445636030	
01764	216260222525	
01765	456023464731	
01766	252460314563	

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01767 006001020304 PR5 BCD 10 1234
01770 602145246031 BCD 4 AND ITS CHECK SUM INTO
01771 636260233025
01772 234260626444
01773 603145634660
01774 010203043360 PR6 BCD 1234.
01775 606060606060
01776 606060606060
01777 606060606060
02000 606060606060
02001 606060606060
02002 606060606060
02003 606060606060
02004 606060606060
02005 606060606060
02006 263165256021 BCD FIVE ATTEMPTS HAVE BEEN MADE TO READ THIS ENTRY CORRECTLY.
02007 636325444763
02010 626030216525
02011 602225254560
02012 442124256063
02013 466051252124
02014 606330316260
02015 254563517060
02016 234651512523
02017 634370336060
02020 0 00000 0 00000 X
A 00000 END

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SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	175	0	0	0	0
LIB	0	0	0	0	0
COL	175	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 360

NUMBER OF SYMBOLS, DEF 217,DEFOP 0,UNDEF 0
 ORG 40 FORCE NEW RECORD

				00050	ORG 40	FORCE NEW RECORD
	00050	0	01303	0 01714	HTR X-1,0,LOCREC	CARD FOR DE
				01303	ORG LOCREC	
TD	01303	3	00000	0 00050	TXH 40	4444 FT 51
					40	6357 FT 29
					40	7027 FT 36
					40	6762 FT 43
					40	1141 FT 45
					40	216 FT 47
					40	161 FT 56
					40	334 FT 56
					40	107 FT 58
					40	627 FT 60
	01304	0	07400	4 00740	TSX PRINT,4	
	01305	0	01244	0 01237	HTR MACHIN,0,MACHIN+5	
	01306	-0	53400	1 01232	LXD ZERO,1	
	01307	0	50000	1 01452	CLA A,1	
	01310	0	40200	0 01235	SUB ERWORD	
	01311	0	10000	0 01427	TZE B	
	01312	1	77767	1 01313	TXI C,1,-9	
	01313	3	77646	1 01307	TXH D,1,-9*10	
	01314	0	07400	4 00740	TSX PRINT,4	
	01315	0	01427	0 01317	HTR ER,0,ER+72	
	01316	0	00000	0 01451	HTR E	
	01317	606060606060			BCD 2	
	01320	606060606060				
	01321	434623216331			BCD LOCATION OF ERROR, WHICH HAS BEEN PRINTED, HAS CAUSED DIAGNO	
	01322	464560462660				
	01323	255151465173				
	01324	606630312330				
	01325	603021626022				
	01326	252545604751				
	01327	314563252473				
	01330	603021626023				
	01331	216462252460				
	01332	243121274546				
	01333	626331236051			BCD STIC RECORD NUMBER 40	
	01334	252346512460				
	01335	456444222551				
	01336	600400606060				
	01337	606060606060				
	01340	606060606060				
	01341	606060606060				
	01342	606060606060				
	01343	606060606060				
	01344	606060606060				
	01345	634660222560			BCD TO BE READ IN. THIS RECORD COMPARES THE LOCATION TO A LIST O	
	01346	512521246031				
	01347	453360633031				
	01350	626051252346				
	01351	512460234644				
	01352	472151256260				
	01353	633025604346				
	01354	232163314645				

01355	606346602160	
01356	433162636046	
01357	266001006047	BCD F 10 POSSIBLE DRUM READ FAILURES, BUT THE SEARCH
01360	466262312243	
01361	256024516444	
01362	605125212460	
01363	262131436451	
01364	256273602264	
01365	636063302560	
01366	622521512330	
01367	606060606060	
01370	606060606060	
01371	302162602621	BCD HAS FAILED. THE ERRORS ARE LISTED IN 1452, 1452 PLUS 9 ETC.
01372	314325243360	
01373	606330256025	
01374	515146516260	
01375	215125604331	
01376	626325246031	
01377	456001040502	
01400	736001040502	
01401	604743646260	
01402	116025632333	
01403	606047512562	BCD PRESS START IF YOU WISH TO
01404	626062632151	
01405	636031266070	
01406	466460663162	
01407	306063466060	
01410	606060606060	
01411	606060606060	
01412	606060606060	
01413	606060606060	
01414	606060606060	
01415	256263465125	BCD RESTORE MACHINE TO STATE IN WHICH ERROR OCCURRED.
01416	604421233031	
01417	452560634660	
01420	626321632560	
01421	314560663031	
01422	233060255151	
01423	465160462323	
01424	645151252433	
01425	606060606060	
01426	606060606060	
01427	0 50000 1 01453 B	CLA A1TWO,1
01430	0 60100 0 01615	STO PR1TWO
01431	0 50000 1 01454	CLA A1TWO+1,1
01432	0 60100 0 01616	STO PR1TWO+1
01433	0 50000 1 01455	CLA A2,1
01434	0 60100 0 01621	STO PR2
01435	0 50000 1 01456	CLA A3TWO,1
01436	0 60100 0 01636	STO PR3TWO
01437	0 50000 1 01457	CLA A3TWO+1,1
01440	0 60100 0 01637	STO PR3TWO+1
01441	0 50000 1 01460	CLA A4TWO,1
01442	0 60100 0 01644	STO PR4TWO

01443	0 50000 1 01461	CLA	A4TWO+1,1	
01444	0 60100 0 01645	STO	PR4TWO+1	
01445	0 50000 1 01462	CLA	A5,1	
01446	0 60100 0 01662	STO	PR5	
01447	0 07400 4 00740	TSX	PRINT,4	
01450	0 01715 0 01604	HTR	PR,0,PR+73	
01451	0 02000 0 00221	E	TRA DIGRTN	
01452	+004666000000	A	OCT 004666000000	SECTION II - BLOCK 5
01453	602631672346	A1TWO	BCD 2 FIXCON TABL	
01454	456063212243			
01455	023360606060	A2	BCD 12.	
01456	633146456004	A3TWO	BCD 2TION 4605.	
01457	060005336060			
01460	603145600502	A4TWO	BCD 2 IN 5214.	
01461	010433606060			
01462	266001606646	A5	BCD 1F 1 WO	
01463	+001141000000		OCT 001141000000	SECTION II - BLOCK 4
01464	602631672346		BCD 2 FIXCON TABL	
01465	456063212243			
01466	023360606060		BCD 12.	
01467	633146456001		BCD 2TION 1060.	
01470	000600336060			
01471	603145600104		BCD 2 IN 1401	
01472	000160606060			
01473	266001606646		BCD 1F 1 WO	
01474	+000627000000		OCT 000627000000	SECTION III - FT60
01475	602631672346		BCD 2 FIXCON TABL	
01476	456063212243			
01477	023360606060		BCD 12.	
01500	633146456006		BCD 2TION 610.	
01501	010033606060			
01502	603145600101		BCD 2 IN 1143.	
01503	040333606060			
01504	266001606646		BCD 1F 1 WO	
01505	+000161000000		OCT 000161000000	SECTION III - FT56
01506	602330276321		BCD 2 CHGTAG TABL	
01507	276063212243			
01510	033360606060		BCD 13.	
01511	633146456001		BCD 2TION 141.	
01512	040133606060			
01513	603145600201		BCD 2 IN 2172.	
01514	070233606060			
01515	266002606646		BCD 1F 2 WO	
01516	+007027000000		OCT 007027000000	SECTION II - BLOCK 3
01517	602646516521		BCD 2 FORVAL TABL	
01520	436063212243			
01521	023360606060		BCD 12.	
01522	633146456006		BCD 2TION 6776.	
01523	070706336060			
01524	603145600607		BCD 2 IN 6706.	
01525	000633606060			
01526	266002606646		BCD 1F 2 WO	
01527	+006762000000		OCT 006762000000	SECTION II - BLOCK 3-C
01530	606362672346		BCD 2 TSXCOM TABL	

01531	446063212243		
01532	033360606060	BCD 13.	
01533	633146456006	BCD 2TION 6723.	
01534	070203336060		
01535	603145600607	BCD 2 IN 6716.	
01536	010633606060		
01537	266002606646	BCD 1F 2 WO	
01540	+006357000000	OCT 006357000000	SECTION II - BLOCK2 - STATE B
01541	602646516521	BCD 2 FORVAL TABL	
01542	436063212243		
01543	023360606060	BCD 12.	
01544	633146456006	BCD 2TION 6211.	
01545	020101336060		
01546	603145600603	BCD 2 IN 6362.	
01547	060233606060		
01550	266002606646	BCD 1F 2 WO	
01551	+000107000000	OCT 000107000000	SECTION III - FT 58
01552	606351216263	BCD 2 TRASTO TABL	
01553	466063212243		
01554	033360606060	BCD 13.	
01555	633146456005	BCD 2TION 56.	
01556	063360606060		
01557	603145600203	BCD 2 IN 2336.	
01560	030633606060		
01561	266003606646	BCD 1F 3 WO	
01562	+000334000000	OCT 000334000000	SECTION III
01563	606062672463	BCD 2 SXDTX TABL	
01564	676063212243		
01565	013360606060	BCD 11.	
01566	633146456003	BCD 2TION 306.	
01567	000633606060		
01570	603145600202	BCD 2 IN 2214.	
01571	010433606060		
01572	266002606646	BCD 1F 2 WO	
01573	+000216000000	OCT 000216000000	SECTION II - BLOCK 5
01574	606021246321	BCD 2 ADTAG TABL	
01575	276063212243		
01576	033360606060	BCD 13.	
01577	633146456001	BCD 2TION 150.	
01600	050033606060		
01601	603145600201	BCD 2 IN 217.	
01602	073360606060		
01603	266004606646	BCD 1F 4 WO	
01604	606060606060	BCD 2	PR
01605	606060606060		
01606	233025234260	BCD 7CHECK SUM ERROR IN READING AN ENTRY OF THE	
01607	626444602551		
01610	514651603145		
01611	605125212431		
01612	452760214560		
01613	254563517060		
01614	462660633025		
01615	602631672346	PR1TWO BCD 2 FIXCON TABL	
01616	456063212243		

01617	256026514644		BCD 2E FROM DRUM
01620	602451644460		
01621	023360606060	PR2	BCD 92.
01622	606060606060		
01623	606060606060		
01624	606060606060		
01625	606060606060		
01626	606060606060		
01627	606060606060		
01630	606060606060		
01631	606060606060		
01632	234647706043		BCD 4COPY LOOP BEGINS AT LOCA
01633	464647602225		
01634	273145626021		
01635	636043462321		
01636	633146456001	PR3TWO	BCD 2TION 1234.
01637	020304336060		
01640	626321516331		BCD 4STARTING DRUM ADDRESS IS
01641	452760245164		
01642	446021242451		
01643	256262603162		
01644	603145600102	PR4TWO	BCD 2 IN 1234.
01645	030433606060		
01646	606060606060		BCD 8
01647	606060606060		
01650	606060606060		
01651	606060606060		
01652	606060606060		
01653	606060606060		
01654	606060606060		
01655	606060606060		
01656	633031626063		BCD 4THIS TABLE IS COMPOSED O
01657	212243256031		
01660	626023464447		
01661	466225246046		
01662	266001606646	PR5	BCD 1F 1 WO
01663	512460254563		BCD RD ENTRIES AND A CHECK SUM FOR EACH ENTRY.
01664	513125626021		
01665	452460216023		
01666	302523426062		
01667	644460264651		
01670	602521233060		
01671	254563517033		
01672	606060606060		
01673	606060606060		
01674	606060606060		
01675	606060606060		BCD 5
01676	606060606060		
01677	606060606060		
01700	606060606060		
01701	606060606060		
01702	263165256021		BCD FIVE ATTEMPTS HAVE BEEN MADE TO READ THE ENTIRE TABLE CORREC
01703	636325444763		
01704	626030216525		

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01705 602225254560
01706 442124256063
01707 466051252124
01710 606330256025
01711 456331512560
01712 632122432560
01713 234651512523
01714 634370336060      BCD 1TLY.
01715 0 00000 0 00000 X
A           00000      END

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SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	130	0	0	0	0
LIB	0	0	0	0	0
COL	130	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 289

NUMBER OF SYMBOLS, DEF 213,DEFOP 0,UNDEF 0
 ORG 41 FORCE NEW RECORD

			00051	ORG 41	FORCE NEW RECORD	
	00051	0	01303 0	01443	HTR X-1,0,LOCREC	CARD FOR DE
			01303	01303	ORG LOCREC	
TD	01303	3	00000 0	00051	TXH 41	5560 FT 34
	01304	0	07400 4	00740	TSX PRINT,4	
	01305	0	01244 0	01237	HTR MACHIN,0,MACHIN+5	
	01306	-0	53400 2	00000	LXD 0,2	IR 2EQUALS 2 FOR STATE B, BCD IS SET UP
	01307	3	00001 2	01322	TXH PRIN,2,1	
	01310	0	50000 0	01437	CLA A1	
	01311	0	60100 0	01336	STO PR1	
	01312	0	50000 0	01440	CLA A2	
	01313	0	60100 0	01400	STO PR2	
	01314	0	50000 0	01441	CLA A3	
	01315	0	60100 0	01403	STO PR3	
	01316	0	50000 0	01442	CLA A4	
	01317	0	60100 0	01411	STO PR4	
	01320	0	50000 0	01443	CLA A5	
	01321	0	60100 0	01416	STO PR5	
	01322	0	07400 4	00740	PRIN TSX PRINT,4	
	01323	0	01437 0	01325	HTR PR,0,PR+74	
	01324	0	02000 0	00221	TRA DIGRTN	
	01325	606060606060			PR BCD 2	
	01326	606060606060				
	01327	233025234260			BCD 7CHECK SUM ERROR IN READING DRUM 1. THE ST	
	01330	626444602551				
	01331	514651603145				
	01332	605125212431				
	01333	452760245164				
	01334	446001336060				
	01335	633025606263				
	01336	216325602260	PR1		BCD 1ATE B	
	01337	234624314527			BCD CODING USED BY SECTION II, BLOCK 2, HAS BEEN	
	01340	606462252460				
	01341	227060622523				
	01342	633146456031				
	01343	317360224346				
	01344	234260027360				
	01345	302162602225				
	01346	254560606060				
	01347	606060606060				
	01350	606060606060				
	01351	606060606060			BCD 2	
	01352	606060606060				
	01353	512521246031			BCD READ INTO LOCATIONS 5566 THROUGH 6565. THE COMPUTED CHECK S	
	01354	456346604346				
	01355	232163314645				
	01356	626005050606				
	01357	606330514664				
	01360	273060060506				
	01361	053360606330				
	01362	256023464447				
	01363	646325246023				
	01364	302523426062				
	01365	644473604346			BCD UM, LOCATION 5561, IS COMPARED TO THE PERMANENT	

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01366 232163314645
01367 600505060173
01370 603162602346
01371 444721512524
01372 606346606330
01373 256047255144
01374 214525456360
01375 606060606060
01376 606060606060
01377 626321632560
01400 226062644460 PR2 BCD 1STATE
01401 314560434623 PR2 BCD 3B SUM IN LOCATION
01402 216331464560
01403 050506023360 PR3 BCD 65562. COPY LOOP BEGINS AT LOCATION
01404 602346477060
01405 434646476022
01406 252731456260
01407 216360434623
01410 216331464560
01411 050503043360 PR4 BCD 55534. STARTING DRUM ADDRESS I
01412 606263215163
01413 314527602451
01414 644460212424
01415 512562626031
01416 626001000000 PR5 BCD 5S 1000.
01417 336060606060
01420 606060606060
01421 606060606060
01422 606060606060
01423 263165256021 BCD FIVE ATTEMPTS HAVE BEEN MADE TO READ THIS BLOCK OF PROGRAM C
01424 636325444763
01425 626030216525
01426 602225254560
01427 442124256063
01430 466051252124
01431 606330316260
01432 224346234260
01433 462660475146
01434 275121446023
01435 465151252363 BCD 2ORRECTLY.
01436 437033606060
01437 216325602160 A1 BCD 1ATE A
01440 216062644460 A2 BCD 1A SUM
01441 050506033360 A3 BCD 15563.
01442 050505053360 A4 BCD 15555.
01443 626071255146 A5 BCD 1S ZERO
01444 0 00000 0 00000 X
A 00000 END

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SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	43	0	0	0	0
LIB	0	0	0	0	0

COL 43 0 0 0 0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 111

NUMBER OF SYMBOLS, DEF 208,DEFOP 0,UNDEF 0
ORG 42 FORCE NEW RECORD

			00052	ORG 42	FORCE NEW RECORD	
	00052	0	01303 0	01471	HTR X-1,0,LOCREC	CARD FOR DE
			01303	ORG LOCREC		
TD	01303	3	00000 0	00052	TXH 42	7760 FT 30
	01304	0	07400 4	00740	TSX PRINT,4	
	01305	0	01244 0	01237	HTR MACHIN,0,MACHIN+5	
	01306	-0	53400 2	00000	LXD 0,2	IR2 EQUALS 2 FOR STATE B, BCD IS SETUP
	01307	3	00001 2	01322	TXH PRIN,2,1	
	01310	0	50000 0	01465	CLA A1	
	01311	0	60100 0	01336	STO PR1	
	01312	0	50000 0	01466	CLA A2	
	01313	0	60100 0	01363	STO PR2	
	01314	0	50000 0	01467	CLA A3	
	01315	0	60100 0	01424	STO PR3	
	01316	0	50000 0	01470	CLA A4	
	01317	0	60100 0	01427	STO PR4	
	01320	0	50000 0	01471	CLA A5	
	01321	0	60100 0	01442	STO PR5	
	01322	0	07400 4	00740	PRIN TSX PRINT,4	
	01323	0	01465 0	01325	HTR PR,0,PR+96	
	01324	0	02000 0	00221	TRA DIGRTN	
	01325	606060606060			PR BCD 2	
	01326	606060606060				
	01327	233025234260			BCD 7CHECK SUM ERROR IN READING DRUM 1. THE ST	
	01330	6264444602551				
	01331	514651603145				
	01332	605125212431				
	01333	452760245164				
	01334	446001336060				
	01335	633025606263				
	01336	216325602260	PR1		BCD 1ATE B	
	01337	234624314527			BCD CODING USED BY SECTION II, BLOCK 2, HAS JUST	
	01340	606462252460				
	01341	227060622523				
	01342	633146456031				
	01343	317360224346				
	01344	234260027360				
	01345	302162604164				
	01346	626360606060				
	01347	606060606060				
	01350	606060606060				
	01351	606060606060			BCD 2	
	01352	606060606060				
	01353	222525456066			BCD 8BEEN WRITTEN ON THE DRUM, BEGINNING AT LOCATION	
	01354	513163632545				
	01355	604645606330				
	01356	256024516444				
	01357	736022252731				
	01360	454531452760				
	01361	216360434623				
	01362	216331464560				
	01363	010000003360	PR2		BCD 11000.	
	01364	606346606525			BCD TO VERIFY THAT THIS HAS BEEN DONE CORRECTLY,	
	01365	513126706063				

01366 302163606330
01367 316260302162
01370 602225254560
01371 244645256023
01372 465151252363
01373 437073606060
01374 606060606060
01375 606060606060
01376 606060606060
01377 316360316260
01400 512521246022
01401 212342603145
01402 634660040506
01403 066063305146
01404 642730600505
01405 060533606063
01406 302560234644
01407 476463252460
01410 233025234260
01411 626444736043
01412 462321633146
01413 456007070703
01414 736031626023
01415 464447215125
01416 246063466021
01417 604725514421
01420 452545636060
01421 606060606060
01422 606060606060
01423 626321632560
01424 226062644460
01425 314560434623
01426 216331464560
01427 070706033360
01430 606330256062
01431 642251466463
01432 314525606630
01433 312330606651
01434 316325626021
01435 452460512521
01436 246260633025
01437 602451644460
01440 222527314562
01441 602163600707
01442 030033606060
01443 606060606060
01444 606060606060
01445 606060606060
01446 606060606060
01447 263165256021
01450 636325444763
01451 626030216525
01452 602225254560
01453 442124256063

BCD 1

BCD IT IS READ BACK INTO 4566 THROUGH 5565. THE COMPUTED CHECK

BCD SUM, LOCATION 7773, IS COMPARED TO A PERMANENT

PR3 BCD 1STATE
BCD 3B SUM IN LOCATION

PR4 BCD 17763.
BCD THE SUBROUTINE WHICH WRITES AND READS THE DRUM BEGINS AT 77

PR5 BCD 530.

BCD FIVE ATTEMPTS HAVE BEEN MADE TO WRITE AND READ THIS BLOCK OF

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01454 466066513163
01455 256021452460
01456 512521246063
01457 303162602243
01460 462342604626
01461 604751462751          BCD 4 PROGRAM CORRECTLY.
01462 214460234651
01463 512523634370
01464 336060606060
01465 216325602160      A1      BCD 1ATE A
01466 712551463360      A2      BCD 1ZERO.
01467 216062644460      A3      BCD 1A SUM
01470 070706043360      A4      BCD 17764.
01471 030233606060      A5      BCD 132.
01472 0 00000 0 00000 X
A          00000          END

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SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	47	0	0	0	0
LIB	0	0	0	0	0
COL	47	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 133

NUMBER OF SYMBOLS, DEF 208,DEFOP 0,UNDEF 0
 ORG 43 FORCE NEW RECORD

			00053	ORG 43	FORCE NEW RECORD		
	00053	0	01303	0	01423	HTR X-1,0,LOCREC	CARD FOR DE
			01303			ORG LOCREC	
TD	01303	3	00000	0	00053	TXH 43	4006 FT 51
						43	4007 FT 51
	01304	0	07400	4	00740	TSX PRINT,4	
	01305	0	01244	0	01237	HTR MACHIN,0,MACHIN+5	
	01306	0	50000	0	01235	CLA ERWORD	4007 IF ALPHA STATE, BCD NOT SET UP
	01307	0	40200	0	01325	SUB ALPHA	FOR ALPHA
	01310	-0	12000	0	01317	TMI PRIN	
	01311	0	50000	0	01322	CLA A1	
	01312	0	60100	0	01335	STO PR1	
	01313	0	50000	0	01323	CLA A2	
	01314	0	60100	0	01336	STO PR2	
	01315	0	50000	0	01324	CLA A3	
	01316	0	60100	0	01337	STO PR3	
	01317	0	07400	4	00740	PRIN TSX PRINT,4	
	01320	0	01424	0	01326	HTR PR,0,PR+62	
	01321	0	02000	0	00221	TRA DIGRTN	
	01322	446002336060				A1 BCD 1M 2.	
	01323	633025602143				A2 BCD 1THE AL	
	01324	473021606263				A3 BCD 1PHA ST	
	01325	+004007000000				ALPHA OCT 004007000000	
	01326	606060606060				PR BCD 2	
	01327	606060606060					
	01330	233025234260				BCD 5CHECK SUM ERROR IN READING DRU	
	01331	626444602551					
	01332	514651603145					
	01333	605125212431					
	01334	452760245164					
	01335	446001336060				PR1 BCD 1M 1.	
	01336	633025606022				PR2 BCD 1THE B	
	01337	256321606263				PR3 BCD ETA STATE CODING USED BY SECTION II, BLOCK 5, HAS BEEN READ	
	01340	216325602346					
	01341	243145276064					
	01342	622524602270					
	01343	606225236331					
	01344	464560313173					
	01345	602243462342					
	01346	600573603021					
	01347	626022252545					
	01350	605125212460					
	01351	606060606060				BCD 3	
	01352	606060606060					
	01353	606060606060					
	01354	314563466006				BCD INTO 6226 THROUGH 7225, STARTING FROM DRUM ADDRESS 1751.	TH
	01355	020206606330					
	01356	514664273060					
	01357	070202057360					
	01360	626321516331					
	01361	452760265146					
	01362	446024516444					
	01363	602124245125					
	01364	626260010705					

```

01365 013360606330
01366 256024516444      BCD E DRUM CHECK SUM IS IN 5202.
01367 602330252342
01370 6062644446031
01371 626031456005
01372 020002336060
01373 606060606060
01374 606060606060
01375 606060606060
01376 606060606060
01377 606060606060
01400 633025602346      BCD THE COMPUTED CHECK SUM IS IN 5203. FIVE ATTEMPTS HAVE BEEN
01401 444764632524
01402 602330252342
01403 6062644446031
01404 626031456005
01405 020003336060
01406 263165256021
01407 636325444763
01410 626030216525
01411 602225254560
01412 442124256063      BCD MADE TO READ THIS BLOCK OF PROGRAM CORRECTLY
01413 466051252124
01414 606330316260
01415 224346234260
01416 462660475146
01417 275121446023
01420 465151252363
01421 437060606060
01422 606060606060
01423 606060606060
01424 0 00000 0 00000 X
A          00000      END

```

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	36	0	0	0	0
LIB	0	0	0	0	0
COL	36	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 96

NUMBER OF SYMBOLS, DEF 205,DEFOP 0,UNDEF 0
 ORG 44 FORCE NEW RECORD

			00054	ORG 44	FORCE NEW RECORD		
	00054	0	01303	0	01441	HTR X-1,0,LOCREC	CARD FOR DE
			01303			ORG LOCREC	
TD	01303	3	00000	0	00054	TXH 44	6765 FT 36
	01304	0	07400	4	00740	TSX PRINT,4	
	01305	0	01237	0	01237	HTR MACHIN,0,MACHIN	
	01306	0	50000	0	06762	CLA 3570	OCTAL 6762 - DEC HAS CONTENTS IR1
	01307	0	77100	0	00022	ARS 18	
	01310	-0	32000	0	01227	ANA ADDMSK	
	01311	0	60100	0	01257	STO ERAS	
	01312	0	50000	0	01415	CLA PR1	
	01313	0	40200	0	01257	SUB ERAS	
	01314	0	07400	4	00730	TSX OCTBCD,4	
	01315	0	60200	0	01415	SLW PR1	
	01316	-0	50000	0	01414	CAL PR1-1	
	01317	0	56000	0	01415	LDQ PR1	
	01320	0	77100	0	00022	ARS 18	
	01321	-0	76300	0	00022	LGL 18	
	01322	0	60200	0	01414	SLW PR1-1	
	01323	-0	76300	0	00022	LGL 18	
	01324	0	56000	0	00717	LDQ BLANKS	
	01325	-0	76300	0	00022	LGL 18	
	01326	0	60200	0	01415	SLW PR1	
	01327	0	07400	4	00740	TSX PRINT,4	
	01330	0	01442	0	01332	HTR PR,0,PR+72	
	01331	0	02000	0	00221	TRA DIGRTN	
	01332	606060606060				BCD 2	
	01333	606060606060	PR				
	01334	233025234260				BCD CHECK SUM ERROR IN READING NAME TABLE FROM DRUM 3.	
	01335	6264444602551					
	01336	514651603145					
	01337	605125212431					
	01340	452760452144					
	01341	256063212243					
	01342	256026514644					
	01343	602451644460					
	01344	033360606060					
	01345	606060606060					
	01346	606060606060				BCD	
	01347	606060606060					
	01350	606060606060					
	01351	606060606060					
	01352	606060606060					
	01353	606060606060					
	01354	606060606060					
	01355	606060606060					
	01356	606060606060					
	01357	606060606060					
	01360	234647706043				BCD COPY LOOP BEGINS AT LOCATION 6731. STARTING DRUM ADDRESS IS	
	01361	464647602225					
	01362	273145626021					
	01363	636043462321					
	01364	633146456006					
	01365	070301336060					

01366 626321516331
 01367 452760245164
 01370 446021242451
 01371 256262603162
 01372 603145600607
 01373 000733606060
 01374 606060606060
 01375 606060606060
 01376 606060606060
 01377 606060606060
 01400 606060606060
 01401 606060606060
 01402 606060606060
 01403 606060606060
 01404 234644476463
 01405 252460233025
 01406 234260626444
 01407 603162603145
 01410 600607070133
 01411 602451644460
 01412 233025234260
 01413 626444603162
 01414 603145606060
 01415 +000000006771
 01416 606060606060
 01417 606060606060
 01420 606060606060
 01421 606060606060
 01422 606060606060
 01423 606060606060
 01424 606060606060
 01425 606060606060
 01426 606060606060
 01427 606060606060
 01430 263165256021
 01431 636325444763
 01432 626030216525
 01433 602225254560
 01434 442124256063
 01435 466051252124
 01436 606330316260
 01437 632122432560
 01440 234651512523
 01441 634370336060
 01442 0 00000 0 00000 X

BCD IN 6707.

BCD 9COMPUTED CHECK SUM IS IN 6771. DRUM CHECK SUM IS IN

PR1 OCT 000000006771
BCD

BCD FIVE ATTEMPTS HAVE BEEN MADE TO READ THIS TABLE CORRECTLY.

A

00000

END

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	38	0	0	0	0
LIB	0	0	0	0	0
COL	38	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 109

NUMBER OF SYMBOLS, DEF 198,DEFOP 0,UNDEF 0
ORG 45 FORCE NEW RECORD

			00055	ORG 45	FORCE NEW RECORD
	00055	0	01303 0	01447	HTR X-1,0,LOCREC
			01303		CARD FOR DE
	01303	3	00000 0	00055	ORG LOCREC
	01304	0	07400 4	00740	TXH 45
	01305	0	01244 0	01237	TSX PRINT,4
	01306	0	07400 4	00740	HTR MACHIN,0,MACHIN+5
	01307	0	01450 0	01311	TSX PRINT,4
	01310	0	02000 0	00221	HTR PR,0,PR+95
	01311	606060606060			TRA DIGRTN
TD					BCD 2
	01312	606060606060			
	01313	233025234260			BCD CHECK SUM ERROR IN READING TABLE IRV FROM DRUM 3. EITHER TH
	01314	6264444602551			
	01315	514651603145			
	01316	605125212431			
	01317	452760632122			
	01320	432560315165			
	01321	602651464460			
	01322	245164446003			
	01323	336060253163			
	01324	302551606330			
	01325	256066465124			BCD E WORD COUNT, LOCATION 1007,
	01326	602346644563			
	01327	736043462321			
	01330	633146456001			
	01331	000007736060			
	01332	606060606060			
	01333	606060606060			
	01334	606060606060			
	01335	606060606060			
	01336	606060606060			
	01337	244625626045			BCD DOES NOT AGREE WITH ITS OWN CHECK SUM, LOCATION 1010, OR THE
	01340	466360212751			
	01341	252560663163			
	01342	306031636260			
	01343	466645602330			
	01344	252342606264			
	01345	447360434623			
	01346	216331464560			
	01347	010001007360			
	01350	465160633025			
	01351	602346444764			BCD COMPUTED CHECK SUM OF THE TABLE,
	01352	632524602330			
	01353	252342606264			
	01354	446046266063			
	01355	302560632122			
	01356	432573606060			
	01357	606060606060			
	01360	606060606060			
	01361	606060606060			
	01362	606060606060			
	01363	434623216331			BCD LOCATION 1011, DOES NOT AGREE WITH THE DRUM CHECK SUM. THE
	01364	464560010001			
	01365	017360244625			

01366 626045466360
01367 212751252560
01370 663163306063
01371 302560245164
01372 446023302523
01373 426062644433
01374 606063302560
01375 245164446023
01376 302523426062
01377 644460302162
01400 602225254560
01401 234647312524
01402 606060606060
01403 606060606060
01404 606060606060
01405 606060606060
01406 606060606060
01407 314563466043
01410 462321633146
01411 456060740403
01412 056047436462
01413 606646512460
01414 234664456334
01415 336060234647
01416 706043464647
01417 602225273145
01420 626021636043
01421 462321633146
01422 456007050233
01423 606062632151
01424 633145276024
01425 516444602124
01426 245125626260
01427 316260010300
01430 043360606060
01431 606060606060
01432 606060606060
01433 263165256021
01434 636325444763
01435 626030216525
01436 602225254560
01437 442124256063
01440 466051252124
01441 606330256066
01442 465124602346
01443 644563602145
01444 246063302560
01445 632122432560
01446 234651512523
01447 634370336060
01450 0 00000 0 00000 X
A 00000

BCD DRUM CHECK SUM HAS BEEN COPIED

BCD INTO LOCATION (435 PLUS WORD COUNT). COPY LOOP BEGINS AT L

BCD OCATION 752. STARTING DRUM ADDRESS IS 1304.

BCD FIVE ATTEMPTS HAVE BEEN MADE TO READ THE WORD COUNT AND THE

BCD 3TABLE CORRECTLY.

END

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	23	0	0	0	0
LIB	0	0	0	0	0
COL	23	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 115

NUMBER OF SYMBOLS, DEF 197,DEFOP 0,UNDEF 0
ORG 46 FORCE NEW RECORD

			00056	ORG 46	FORCE NEW RECORD	
	00056	0	01303 0	01447	HTR X-1,0,LOCREC	CARD FOR DE
			01303	ORG LOCREC		
TD	01303	3	00000 0	00056	TXH 46	72 FT 60
	01304	0	07400 4	00740	TSX PRINT,4	
	01305	0	01244 0	01237	HTR MACHIN,0,MACHIN+5	
	01306	0	76200 0	00304	RDR 4	
	01307	0	46000 0	01337	LDA A	
	01310	0	70000 0	01257	CPY ERAS	IR1 IN DEC-WILL SHOW WHERE CHECK SUM IS
	01311	0	50000 0	01257	CLA ERAS	UNCOMPLIMENT
	01312	-0	32000 0	01230	ANA DECMSK	
	01313	0	40200 0	01234	SUB PREFX1	
	01314	0	77100 0	00022	ARS 18	
	01315	0	60000 0	01257	STZ ERAS	
	01316	0	62100 0	01257	STA ERAS	
	01317	0	50000 0	01423	CLA PR1	
	01320	0	40200 0	01257	SUB ERAS	
	01321	0	07400 4	00730	TSX OCTBCD,4	
	01322	0	60200 0	01423	SLW PR1	
	01323	-0	50000 0	01422	CAL PR1-1	
	01324	0	56000 0	01423	LDQ PR1	
	01325	0	77100 0	00014	ARS 12	
	01326	-0	76300 0	00014	LGL 12	
	01327	0	60200 0	01422	SLW PR1-1	
	01330	-0	76300 0	00030	LGL 24	
	01331	0	56000 0	00717	LDQ BLANKS	
	01332	-0	76300 0	00014	LGL 12	
	01333	0	60200 0	01423	SLW PR1	
	01334	0	07400 4	00740	TSX PRINT,4	
	01335	0	01450 0	01340	HTR PR,0,PR+72	
	01336	0	02000 0	00221	TRA DIGRTN	
	01337	0	00000 0	02313	A HTR81227	
	01340	606060606060	PR	BCD 2		
	01341	606060606060				
	01342	233025234260		BCD	CHECK SUM ERROR IN READING TSXCOM TABLE FROM DRUM 3.	
	01343	6264444602551				
	01344	514651603145				
	01345	605125212431				
	01346	452760636267				
	01347	234644606321				
	01350	224325602651				
	01351	464460245164				
	01352	446003336060				
	01353	606060606060				
	01354	606060606060		BCD		
	01355	606060606060				
	01356	606060606060				
	01357	606060606060				
	01360	606060606060				
	01361	606060606060				
	01362	606060606060				
	01363	606060606060				
	01364	606060606060				
	01365	606060606060				

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01366 234647706043          BCD COPY LOOP BEGINS AT LOCATION 42.  STARTING DRUM ADDRESS IS I
01367 464647602225
01370 273145626021
01371 636043462321
01372 633146456004
01373 023360606263
01374 215163314527
01375 602451644460
01376 212424512562
01377 626031626031
01400 456001010500          BCD N 1150.
01401 336060606060
01402 606060606060
01403 606060606060
01404 606060606060
01405 606060606060
01406 606060606060
01407 606060606060
01410 606060606060
01411 606060606060
01412 234644476463          BCD 9COMPUTED CHECK SUM IS IN 1226.  DRUM CHECK SUM IS IN
01413 252460233025
01414 234260626444
01415 603162603145
01416 600102020633
01417 606024516444
01420 602330252342
01421 606264446031
01422 626031456060
01423 +000000001230        PR1   OCT 000000001230
01424 606060606060          BCD
01425 606060606060
01426 606060606060
01427 606060606060
01430 606060606060
01431 606060606060
01432 606060606060
01433 606060606060
01434 606060606060
01435 606060606060
01436 263165256021          BCD FIVE ATTEMPTS HAVE BEEN MADE TO READ THIS TABLE CORRECTLY.
01437 636325444763
01440 626030216525
01441 602225254560
01442 442124256063
01443 466051252124
01444 606330316260
01445 632122432560
01446 234651512523
01447 634370336060
01450 0 00000 0 00000 X
      00000
A

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END

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	44	0	0	0	0
LIB	0	0	0	0	0
COL	44	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 115

NUMBER OF SYMBOLS, DEF 199,DEFOP 0,UNDEF 0
ORG 47 FORCE NEW RECORD

			00057	ORG 47	FORCE NEW RECORD	
	00057	0	01303 0	01470	HTR X-1,0,LOCREC	CARD FOR DE
			01303	ORG LOCREC		
TD	01303	3	00000 0	00057	TXH 47	1135 FT 62
	01304	0	07400 4	00740	TSX PRINT,4	
	01305	0	01244 0	01237	HTR MACHIN,0,MACHIN+5	
	01306	0	07400 4	00740	TSX PRINT,4	
	01307	0	01471 0	01311	HTR PR,0,PR+112	
	01310	0	02000 0	00221	TRA DIGRTN	
	01311	606060606060			BCD 2	
	01312	606060606060				
	01313	233025234260			BCD CHECK SUM ERROR IN READING DOCARE TABLE FROM DRUM 1. THIS T	
	01314	6264444602551				
	01315	514651603145				
	01316	605125212431				
	01317	452760244623				
	01320	215125606321				
	01321	224325602651				
	01322	464460245164				
	01323	446001336060				
	01324	633031626063				
	01325	212243256066			BCD ABLE WAS WRITTEN AS A 1 WORD ENTRY AND A	
	01326	216260665131				
	01327	636325456021				
	01330	626021600160				
	01331	664651246025				
	01332	456351706021				
	01333	452460216060				
	01334	606060606060				
	01335	606060606060				
	01336	606060606060				
	01337	233025234260			BCD CHECK SUM OF THAT ENTRY BEGINNING AT 2 ON THE DRUM. THE 1 W	
	01340	6264444604626				
	01341	606330216360				
	01342	254563517060				
	01343	222527314545				
	01344	314527602163				
	01345	600260464560				
	01346	633025602451				
	01347	644433606063				
	01350	302560016066				
	01351	465124602545			BCD ORD ENTRIES ARE COPIED BACKWARDS	
	01352	635131256260				
	01353	215125602346				
	01354	473125246022				
	01355	212342662151				
	01356	246260606060				
	01357	606060606060				
	01360	606060606060				
	01361	606060606060				
	01362	606060606060				
	01363	314563466023			BCD INTO CORES BEGINNING 4216. THEIR CHECK SUMS ARE COPIED BACK	
	01364	465125626022				
	01365	252731454531				

01366 452760040201
01367 063360606330
01370 253151602330
01371 252342606264
01372 446260215125
01373 602346473125
01374 246022212342
01375 662151246260
01376 314563466023
01377 465125626022
01400 252731454531
01401 452760216360
01402 040306033360
01403 606060606060
01404 606060606060
01405 606060606060
01406 606060606060
01407 216043462731
01410 232143606264
01411 446046266025
01412 212330604626
01413 606330256051
01414 256264436331
01415 452760632122
01416 432562603162
01417 602446452533
01420 606023302523
01421 426062644460
01422 462660633025
01423 602545635131
01424 256260316260
01425 314560010005
01426 336060606060
01427 606060606060
01430 606060606060
01431 606060606060
01432 606060606060
01433 233025234260
01434 626444604626
01435 606330256023
01436 302523426062
01437 644462603162
01440 603145600100
01441 063360606330
01442 256023464770
01443 604346464760
01444 222527314562
01445 602163604346
01446 232163314645
01447 600101000233
01450 606060606060
01451 606060606060
01452 606060606060
01453 606060606060

BCD WARDS INTO CORES BEGINNING AT 4363.

BCD A LOGICAL SUM OF EACH OF THE RESULTING TABLES IS DONE. CHEC

BCD K SUM OF THE ENTRIES IS IN 105.

BCD CHECK SUM OF THE CHECK SUMS IS IN 106. THE COPY LOOP BEGINS

BCD AT LOCATION 1102.

01454 606060606060
01455 606060606060
01456 606060606060
01457 263165256021
01460 636325444763
01461 626030216525
01462 602225254560
01463 442124256063
01464 466051252124
01465 606330316260
01466 512523465124
01467 602346515125
01470 236343703360
01471 0 00000 0 00000 X

BCD FIVE ATTEMPTS HAVE BEEN MADE TO READ THIS RECORD CORRECTLY.

A 00000 END

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	24	0	0	0	0
LIB	0	0	0	0	0
COL	24	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 132

NUMBER OF SYMBOLS, DEF 197,DEFOP 0,UNDEF 0
ORG 48 FORCE NEW RECORD

				00060	ORG 48	FORCE NEW RECORD
	00060	0	01303	0 01724	HTR X-1,0,LOCREC	CARD FOR DE
				01303	ORG LOCREC	
TD	01303	3	00000	0 00060	TXH 48	341 FT 677
					48	3143 FT 64
					48	103 FT 67
					48	160 FT 67
					46	263 FT 67
					48	64 FT 71
					48	256 FT 73
	01304	0	07400	4 00740	TSX PRINT,4	
	01305	0	01244	0 01237	HTR MACHIN,0,MACHIN+5	
	01306	-0	53400	3 01232	LXD ZERO,3	
	01307	0	50000	1 01453	CLA A,1	C1
	01310	0	40200	0 01235	SUB ERWORD	
	01311	0	10000	0 01427	TZE B	
	01312	1	77777	1 01313	TXI C,1,-1	
	01313	3	77636	1 01307	TXH C1,1,-14*7	C
	01314	0	07400	4 00740	TSX PRINT,4	
	01315	0	01427	0 01317	HTR ER,0,ER+72	
	01316	0	00000	0 01452	HTR D	
	01317	60606060606060			BCD 2	ER
	01320	60606060606060				
	01321	434623216331			BCD LOCATION OF ERROR, WHICH HAS BEEN PRINTED, HAS CAUSED DIAGNO	
	01322	464560462660				
	01323	255151465173				
	01324	606630312330				
	01325	603021626022				
	01326	252545604751				
	01327	314563252473				
	01330	603021626023				
	01331	216462252460				
	01332	243121274546				
	01333	626331236051			BCD STIC RECORD NUMBER 48	
	01334	252346512460				
	01335	456444222551				
	01336	600410606060				
	01337	606060606060				
	01340	606060606060				
	01341	606060606060				
	01342	606060606060				
	01343	606060606060				
	01344	606060606060				
	01345	634660222560			BCD TO BE READ IN. THIS RECORD COMPARES THE LOCATION TO A LIST	
	01346	512521246031				
	01347	453360606330				
	01350	316260512523				
	01351	465124602346				
	01352	444721512562				
	01353	606330256043				
	01354	462321633146				
	01355	456063466021				
	01356	604331626360				
	01357	462660076047			BCD OF 7 POSSIBLE DRUM READ FAILURES, BUT THE SEARCH	

01360 466262312243
01361 256024516444
01362 605125212460
01363 262131436451
01364 256273602264
01365 636063302560
01366 622521512330
01367 606060606060
01370 606060606060
01371 302162602621
01372 314325243360
01373 606330256025
01374 515146516260
01375 215125604331
01376 626325246031
01377 456001040701
01400 736001040701
01401 604743646260
01402 010473602563
01403 233360604751
01404 256262606263
01405 215163603126
01406 607046646066
01407 316230606346
01410 606060606060
01411 606060606060
01412 606060606060
01413 606060606060
01414 606060606060
01415 512562634651
01416 256044212330
01417 314525606346
01420 606263216325
01421 603145606630
01422 312330602551
01423 514651604623
01424 236451512524
01425 336060606060
01426 606060606060
01427 0 50000 1 01454 B
01430 0 60100 2 01623
01431 1 77777 2 01432
01432 1 77777 1 01433 B1
01433 3 77771 2 01427 B2
01434 0 50000 1 01454
01435 0 60100 0 01647
01436 0 50000 1 01455
01437 0 60100 0 01650
01440 0 50000 1 01456
01441 0 60100 0 01655
01442 0 50000 1 01457
01443 0 60100 0 01656
01444 0 50000 1 01460
01445 0 60100 0 01673

BCD HAS FAILED. THE ERRORS ARE LISTED IN 1471, 1471 PLUS 14, ET

BCD C. PRESS START IF YOU WISH TO

BCD RESTORE MACHINE TO STATE IN WHICH ERROR OCCURRED.

CLA A+1,1
STO PR1,2
TXI B1,2,-1
TXI B2,1,-1
TXH B,2,-7
CLA A+1,1
STO PR2TWO
CLA A+2,1
STO PR2TWO+1
CLA A+3,1
STO PR3TWO
CLA A+4,1
STO PR3TWO+1
CLA A+5,1
STO PR4

01446	0 50000 1 01461	CLA A+6,1
01447	0 60100 0 01700	STO PR5
01450	0 07400 4 00740	TSX PRINT,4
01451	0 01725 0 01615	HTR PR,0,PR+72
01452	0 02000 0 00221	TRA DIGRTN
01453	+000341000000	A OCT 000341000000 IN SECTION IV - PART 3
01454	452760265125	A1 BCD 7NG FRET TABLE FROM DRUM 2.
01455	636063212243	
01456	256026514644	
01457	602451644460	
01460	023360606060	
01461	606060606060	
01462	606060606060	
01463	633146456003	A2TWO BCD 2TION 300.
01464	000033606060	
01465	603145600500	A3TWO BCD 2 IN 50.
01466	336060606060	
01467	600506336060	A4 BCD 1 56.
01470	050533606060	A5 BCD 155.
01471	+003143000000	OCT 003143000000 IN SECTION IV - PART 2
01472	452760633126	BCD 7NG TIFRD TABLE FROM DRUM 1.
01473	512460632122	
01474	432560265146	
01475	446024516444	
01476	600133606060	
01477	606060606060	
01500	606060606060	
01501	633146456003	BCD 2TION 3066.
01502	000606336060	
01503	603145600401	BCD 2 IN 41.
01504	336060606060	
01505	600102013360	BCD 1 121.
01506	010207336060	BCD 1127.
01507	+000263000000	OCT 000263000000 IN SECTION IV - PART 3
01510	452760635121	BCD 7NG TRA TABLE FROM DRUM 1.
01511	606321224325	
01512	602651464460	
01513	245164446001	
01514	336060606060	
01515	606060606060	
01516	606060606060	
01517	633146456002	BCD 2TION 230.
01520	030033606060	
01521	607125514633	BCD 2 ZERO.
01522	606060606060	
01523	600506336060	BCD 1 56.
01524	050533606060	BCD 155.
01525	+000256000000	OCT 000256000000 IN SECTION IV - PART 6
01526	452760222243	BCD 7NG BBLIST TABLE FROM DRUM 3.
01527	316263606321	
01530	224325602651	
01531	464460245164	
01532	446003336060	
01533	606060606060	

01534	606060606060	
01535	633146456002	BCD 2TION 234.
01536	030433606060	
01537	603145600603	BCD 2 IN 63.
01540	336060606060	
01541	600700336060	BCD 1 70.
01542	060733606060	BCD 167.
01543	+000160000000	OCT 000160000000 IN SECTION IV - PART 3
01544	452760622563	BCD 7NG SET TABLE FROM DRUM 3.
01545	606321224325	
01546	602651464460	
01547	2451644446003	
01550	336060606060	
01551	606060606060	
01552	606060606060	
01553	633146456001	BCD 2TION 137.
01554	030733606060	
01555	603145600407	BCD 2 IN 47.
01556	336060606060	
01557	600506336060	BCD 1 56.
01560	050533606060	BCD 155.
01561	+000103000000	OCT 000103000000 IN SECTION IV - PART 3
01562	452760622563	BCD 7NG SET TABLE FROM DRUM 3.
01563	606321224325	
01564	602651464460	
01565	2451644446003	
01566	336060606060	
01567	606060606060	
01570	606060606060	
01571	633146456006	BCD 2TION 62.
01572	023360606060	
01573	603145600407	BCD 2 IN 47.
01574	336060606060	
01575	600506336060	BCD 1 56.
01576	050533606060	BCD 155.
01577	+000064000000	OCT 000064000000 IN SECTION IV - PART 5
01600	452760244643	BCD 7NG DOLIST TABLE FROM DRUM 1.
01601	316263606321	
01602	224325602651	
01603	464460245164	
01604	446001336060	
01605	606060606060	
01606	606060606060	
01607	633146456004	BCD 2TION 42.
01610	023360606060	
01611	603145600306	BCD 2 IN 36.
01612	336060606060	
01613	600307336060	BCD 1 37.
01614	040033606060	BCD 140.
01615	606060606060	BCD 2
01616	606060606060	
01617	233025234260	BCD 4CHECK SUM ERROR IN READI
01620	626444602551	
01621	514651603145	

PR

01622	605125212431		
01623	452760265125	PR1	BCD 7NG FRET TABLE FROM DRUM 2.
01624	636063212243		
01625	256026514644		
01626	602451644460		
01627	023360606060		
01630	606060606060		
01631	606060606060		
01632	606060606060		BCD 9
01633	606060606060		
01634	606060606060		
01635	606060606060		
01636	606060606060		
01637	606060606060		
01640	606060606060		
01641	606060606060		
01642	606060606060		
01643	234647706043		BCD 4COPY LOOP BEGINS AT LOCA
01644	464647602225		
01645	273145626021		
01646	636043462321		
01647	633146456003	PR2TWO	BCD 2TION 3.
01650	336060606060		
01651	626321516331		BCD 4STARTING DRUM ADDRESS IS
01652	452760245164		
01653	446021242451		
01654	256262603162		
01655	603145600500	PR3TWO	BCD IN 50.
01656	336060606060		
01657	606060606060		
01660	606060606060		
01661	606060606060		
01662	606060606060		
01663	606060606060		
01664	606060606060		
01665	606060606060		
01666	606060606060		
01667	234644476463		BCD 4COMPUTED CHECK SUM IS IN
01670	252460233025		
01671	234260626444		
01672	603162603145		
01673	600506336060	PR4	BCD 1 56.
01674	606060245164		BCD 4 DRUM CHECK SUM IS IN
01675	446023302523		
01676	426062644460		
01677	316260314560		
01700	050533606060	PR5	BCD 55.
01701	606060606060		
01702	606060606060		
01703	606060606060		
01704	606060606060		
01705	606060606060		
01706	606060606060		
01707	606060606060		

01710 606060606060
01711 606060606060
01712 606060606060
01713 263165256021
01714 636325444763
01715 626030216525
01716 602225254560
01717 442124256063
01720 466051252124
01721 606330316260
01722 632122432560
01723 234651512523
01724 634370336060
01725 0 00000 0 00000 X

BCD 1
BCD FIVE ATTEMPTS HAVE BEEN MADE TO READ THIS TABLE CORRECTLY.

A 00000 END

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	108	0	0	0	0
LIB	0	0	0	0	0
COL	108	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 294

NUMBER OF SYMBOLS, DEF 215,DEFOP 0,UNDEF 0
ORG 49 FORCE NEW RECORD

			00061		ORG 49	FORCE NEW RECORD
	00061	0	01303	0	01570	HTR X-1,0,LOCREC
					01303	CARD FOR DE
					01303	ORG LOCREC
TD	01303	3	00000	0	00061	TXH 49
					11004	4570 FT 34
					SUBORG	THIS IS SUBORG+3
	01304	0	07400	4	00740	TSX PRINT,4
	01305	0	01244	0	01237	HTR MACHIN,0,MACHIN+5
	01306	0	76200	0	00304	RDR 4
	01307	0	46000	0	01345	LDA TAG
	01310	0	70000	0	01345	CPY TAG
	01311	0	50000	0	01345	CLA TAG
	01312	0	76500	0	00011	LRS 9
	01313	0	73400	6	00000	PAX 0,6
T	01314	-0	75400	0	00000	PXD
	01315	0	76300	0	00011	LLS 9
	01316	0	60100	0	01346	STO SUBES1
	01317	0	76700	0	00001	ALS 1
	01320	0	60100	0	01347	STO SUBES2
	01321	0	50000	4	11004	CLA SUBORG,4
	01322	0	40000	0	01346	ADD SUBES1
	01323	0	40000	0	01347	ADD SUBES2
	01324	2	00001	4	01323	TIX SUB030,4,1
	01325	0	07400	4	00730	TSX OCTBCD,4
	01326	0	60200	0	01257	SLW ERAS
	01327	0	56000	0	01257	LDQ ERAS
	01330	-0	76300	0	00014	LGL 12
	01331	-0	50000	0	01406	CAL PR2
	01332	-0	76300	0	00022	LGL 18
	01333	0	60200	0	01406	SLW PR2
	01334	-0	76300	0	00006	LGL 6
	01335	0	56000	0	01407	LDQ PR3
	01336	-0	76300	0	00036	LGL 30
	01337	0	60200	0	01407	SLW PR3
	01340	0	50000	2	01353	CLA A+1,2
	01341	0	60100	0	01361	STO PR1
	01342	0	07400	4	00740	TSX PRINT,4
	01343	0	01571	0	01353	HTR PR,0,PR+142
	01344	0	02000	0	00221	TRA DIGRTN
	01345	0	00000	0	07164	TAG HTR83700
	01346	0	00000	0	00000	SUBES1
	01347	0	00000	0	00000	SUBES2
	01350	452760216006				BCD 1NG A 6
	01351	452760216004				BCD 1NG A 4
	01352	452760216002	A			BCD 1NG A 2
	01353	606060606060	PR			BCD 2
	01354	606060606060				
	01355	233025234260				BCD 4CHECK SUM ERROR IN READI
	01356	626444602551				
	01357	514651603145				
	01360	605125212431				
	01361	452760216002	PR1			BCD 1NG A 2
	01362	606646512460				BCD WORD ENTRY AND ITS CHECK SUM IN THE TAU TABLE ON DRUM 4.
	01363	254563517060				
	01364	214524603163				

01365 626023302523
01366 426062644460
01367 314560633025
01370 606321646063
01371 212243256046
01372 456024516444
01373 600433606060
01374 606060606060
01375 606060606060
01376 606060606060
01377 606060606060
01400 606060606060
01401 633025602451
01402 644460212424
01403 512562626046
01404 266063302560
01405 254563517060
01406 606060316260
01407 336060263160
01410 652560216363
01411 254447636260
01412 302165256022
01413 252545604421
01414 242560634660
01415 512521246060
01416 606060606060
01417 606060606060
01420 606060606060
01421 606060606060
01422 606060606060
01423 606060606060
01424 606060606060
01425 633025602545
01426 635170602346
01427 515125236343
01430 706026514644
01431 606330316260
01432 472151633123
01433 644321516021
01434 242451256262
01435 336060606060
01436 606060606060
01437 606060606060
01440 606060606060
01441 606060606060
01442 606060606060
01443 606060606060
01444 606060606060
01445 606060606060
01446 606060606060
01447 606060606060
01450 606060606060
01451 606060606060
01452 606060606060

BCD 5

BCD 5 THE DRUM ADDRESS OF THE ENTRY

PR2 BCD 1 IS
PR3 BCD 1. FI
BCD VE ATTEMPTS HAVE BEEN MADE TO READ

BCD 3

BCD THE ENTRY CORRECTLY FROM THIS PARTICULAR ADDRESS.

BCD

BCD

01453 606060606060
01454 606060606060
01455 606060606060
01456 606060606060
01457 606060606060
01460 606060606060
01461 606060606060
01462 606060606060
01463 606060606060
01464 606060606060
01465 606060606060
01466 606060606060
01467 606060606060
01470 606060606060
01471 606060606060
01472 606060606060
01473 606060606060
01474 606060606060
01475 314560465124
01476 255160634660
01477 232143436031
01500 456063303162
01501 602431212745
01502 466263312360
01503 663163304664
01504 636024316263
01505 645122314527
01506 602346512562
01507 736002000410
01510 606646512462
01511 604626604425
01512 444651706060
01513 606060606060
01514 606060606060
01515 606060606060
01516 606060606060
01517 606060606060
01520 606060606060
01521 302165256022
01522 252545605125
01523 212460464563
01524 466024516444
01525 600473602425
01526 626351467031
01527 452760633025
01530 606321646063
01531 212243256025
01532 456351312562
01533 602145246063
01534 302531516023
01535 302523426062
01536 644462336060
01537 606060606060
01540 606060606060

BCD

BCD IN ORDER TO CALL IN THIS DIAGNOSTIC WITHOUT DISTURBING CORES

BCD , 2048 WORDS OF MEMORY

BCD HAVE BEEN READ ONTO DRUM 4, DESTROYING THE TAU TABLE ENTRIES

BCD AND THEIR CHECK SUMS.

```

01541 606060606060
01542 606060606060
01543 606060606060
01544 606060606060
01545 442544465170
01546 606631434360
01547 222560512562
01550 634651252473
01551 602264636063
01552 302551256031
01553 626045466066
01554 217060634660
01555 234645263151
01556 446063302560
01557 233025234260
01560 626444602551
01561 514651604645
01562 606330256024
01563 516444336060
01564 606060606060
01565 606060606060
01566 606060606060
01567 606060606060
01570 606060606060
01571 0 00000 0 00000 X

```

BCD MEMORY WILL BE RESTORED, BUT THERE IS NO WAY TO CONFIRM THE

BCD CHECK SUM ERROR ON THE DRUM.

A 00000 END

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	67	0	0	0	0
LIB	0	0	0	0	0
COL	67	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 197

NUMBER OF SYMBOLS, DEF 206,DEFOP 0,UNDEF 0
 ORG 50 FORCE NEW RECORD

				00062	ORG 50	FORCE NEW RECORD
	00062	0	01303	0	01564	HTR X-1,0,LOCREC
					01303	ORG LOCREC
TD	01303	3	00000	0	00062	TXH 50
					14742	SYN86626
					17135	SUBORG SYN87773
	01304	0	07400	4	00740	TSX PRINT,4
	01305	0	01244	0	01237	HTR MACHIN,0,MACHIN+5
	01306	0	50000	0	14742	CLA TAG
	01307	0	76500	0	00011	LRS 9
	01310	0	73400	6	00000	PAX 0,6
T	01311	-0	75400	0	00000	PXD
	01312	0	76300	0	00011	LLS 9
	01313	0	60100	0	01345	STO SUBES1
	01314	0	76700	0	00001	ALS 1
	01315	0	60100	0	01346	STO SUBES2
	01316	0	50000	4	17135	CLA SUBORG,4
	01317	0	40000	0	01345	ADD SUBES1
	01320	0	40000	0	01346	SUB030 ADD SUBES2
	01321	2	00001	4	01320	TIX SUB030,4,1
	01322	0	07400	4	00730	TSX OCTBCD,4
	01323	0	60200	0	01257	SLW ERAS
	01324	0	56000	0	01257	LDQ ERAS
	01325	-0	76300	0	00014	LGL 12
	01326	-0	50000	0	01402	CAL PR2
	01327	-0	76300	0	00022	LGL 18
	01330	0	60200	0	01402	SLW PR2
	01331	-0	76300	0	00006	LGL 6
	01332	0	56000	0	01403	LDQ PR3
	01333	-0	76300	0	00036	LGL 30
	01334	0	60200	0	01403	SLW PR3
	01335	0	50000	2	01345	CLA A+1,2
	01336	0	60100	0	01355	STO PR1
	01337	0	07400	4	00740	TSX PRINT,4
	01340	0	01565	0	01347	HTR PR,0,PR+142
	01341	0	02000	0	00221	TRA DIGRTN
	01342	452760216006				BCD 1NG A 6
	01343	452760216004				BCD 1NG A 4
	01344	452760216002		A		BCD 1NG A 2
	01345	0	00000	0	00000	SUBES1
	01346	0	00000	0	00000	SUBES2
	01347	606060606060		PR		BCD 2
	01350	606060606060				
	01351	233025234260				BCD 4CHECK SUM ERROR IN READI
	01352	626444602551				
	01353	514651603145				
	01354	605125212431				
	01355	452760216002		PR1		BCD 1NG A 2
	01356	606646512460				BCD WORD ENTRY AND ITS CHECK SUM IN THE TAU TABLE ON DRUM 4.
	01357	254563517060				
	01360	214524603163				
	01361	626023302523				
	01362	426062644460				
	01363	314560633025				

01364 606321646063
01365 212243256046
01366 456024516444
01367 600433606060
01370 606060606060
01371 606060606060
01372 606060606060
01373 606060606060
01374 606060606060
01375 633025602451
01376 644460212424
01377 512562626046
01400 266063302560
01401 254563517060
01402 606060316260
01403 336060263160
01404 652560216363
01405 254447636260
01406 302165256022
01407 252545604421
01410 242560634660
01411 512521246060
01412 606060606060
01413 606060606060
01414 606060606060
01415 606060606060
01416 606060606060
01417 606060606060
01420 606060606060
01421 633025602545
01422 635170602346
01423 515125236343
01424 706026514644
01425 606330316260
01426 472151633123
01427 644321516021
01430 242451256262
01431 336060606060
01432 606060606060
01433 606060606060
01434 606060606060
01435 606060606060
01436 606060606060
01437 606060606060
01440 606060606060
01441 606060606060
01442 606060606060
01443 606060606060
01444 606060606060
01445 606060606060
01446 606060606060
01447 606060606060
01450 606060606060
01451 606060606060

BCD 5

BCD 5 THE DRUM ADDRESS OF THE ENTRY

PR2 BCD 1 IS
PR3 BCD 1. FI
BCD VE ATTEMPTS HAVE BEEN MADE TO READ

BCD 3

BCD THE ENTRY CORRECTLY FROM THIS PARTICULAR ADDRESS.

BCD

BCD

01452 606060606060
01453 606060606060
01454 606060606060
01455 606060606060
01456 606060606060
01457 606060606060
01460 606060606060
01461 606060606060
01462 606060606060
01463 606060606060
01464 606060606060
01465 606060606060
01466 606060606060
01467 606060606060
01470 606060606060
01471 314560465124
01472 255160634660
01473 232143436031
01474 456063303162
01475 602431212745
01476 466263312360
01477 663163304664
01500 636024316263
01501 645122314527
01502 602346512562
01503 736002000410
01504 606646512462
01505 604626604425
01506 444651706060
01507 606060606060
01510 606060606060
01511 606060606060
01512 606060606060
01513 606060606060
01514 606060606060
01515 302165256022
01516 252545605125
01517 212460464563
01520 466024516444
01521 600473602425
01522 626351467031
01523 452760633025
01524 606321646063
01525 212243256025
01526 456351312562
01527 602145246063
01530 302531516023
01531 302523426062
01532 644462336060
01533 606060606060
01534 606060606060
01535 606060606060
01536 606060606060
01537 606060606060

BCD

BCD IN ORDER TO CALL IN THIS DIAGNOSTIC WITHOUT DISTURBING CORES

BCD , 2048 WORDS OF MEMORY

BCD HAVE BEEN READ ONTO DRUM 4, DESTROYING THE TAU TABLE ENTRIES

BCD AND THEIR CHECK SUMS.

```

01540 606060606060
01541 442544465170          BCD MEMORY WILL BE RESTORED, BUT THERE IS NO WAY TO CONFIRM THE
01542 606631434360
01543 222560512562
01544 634651252473
01545 602264636063
01546 302551256031
01547 626045466066
01550 217060634660
01551 234645263151
01552 446063302560
01553 233025234260          BCD CHECK SUM ERROR ON THE DRUM.
01554 626444602551
01555 514651604645
01556 606330256024
01557 516444336060
01560 606060606060
01561 606060606060
01562 606060606060
01563 606060606060
01564 606060606060
01565 0 00000 0 00000 X
A          00000          END

```

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	64	0	0	0	0
LIB	0	0	0	0	0
COL	64	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 194

NUMBER OF SYMBOLS, DEF 206,DEFOP 0,UNDEF 0
 ORG 51 FORCE NEW RECORD

01366	452760216002	A	BCD 1NG A 2
01367	606060606060	PR	BCD 2
01370	606060606060		
01371	233025234260		BCD 4CHECK SUM ERROR IN READI
01372	626444602551		
01373	514651603145		
01374	605125212431		
01375	452760216002	PR1	BCD 1NG A 2
01376	606646512460		BCD WORD ENTRY AND ITS CHECK SUM IN THE TAU TABLE ON DRUM 4.
01377	254563517060		
01400	214524603163		
01401	626023302523		
01402	426062644460		
01403	314560633025		
01404	606321646063		
01405	212243256046		
01406	456024516444		
01407	600433606060		
01410	606060606060		BCD 5
01411	606060606060		
01412	606060606060		
01413	606060606060		
01414	606060606060		
01415	633025602451		BCD 5THE DRUM ADDRESS OF THE ENTRY
01416	644460212424		
01417	512562626046		
01420	266063302560		
01421	254563517060		
01422	606060316260	PR2	BCD 1 IS
01423	336060263160	PR3	BCD 1. FI
01424	652560216363		BCD VE ATTEMPTS HAVE BEEN MADE TO READ
01425	254447636260		
01426	302165256022		
01427	252545604421		
01430	242560634660		
01431	512521246060		
01432	606060606060		
01433	606060606060		
01434	606060606060		
01435	606060606060		
01436	606060606060		BCD 3
01437	606060606060		
01440	606060606060		
01441	633025602545		BCD THE ENTRY CORRECTLY FROM THIS PARTICULAR ADDRESS.
01442	635170602346		
01443	515125236343		
01444	706026514644		
01445	606330316260		
01446	472151633123		
01447	644321516021		
01450	242451256262		
01451	336060606060		
01452	606060606060		
01453	606060606060		BCD

01454 606060606060
01455 606060606060
01456 606060606060
01457 606060606060
01460 606060606060
01461 606060606060
01462 606060606060
01463 606060606060
01464 606060606060
01465 606060606060
01466 606060606060
01467 606060606060
01470 606060606060
01471 606060606060
01472 606060606060
01473 606060606060
01474 606060606060
01475 606060606060
01476 606060606060
01477 606060606060
01500 606060606060
01501 606060606060
01502 606060606060
01503 606060606060
01504 606060606060
01505 606060606060
01506 606060606060
01507 606060606060
01510 606060606060
01511 314560465124
01512 255160634660
01513 232143436031
01514 456063303162
01515 602431212745
01516 466263312360
01517 663163304664
01520 636024316263
01521 645122314527
01522 602346512562
01523 736002000410
01524 606646512462
01525 604626604425
01526 444651706060
01527 606060606060
01530 606060606060
01531 606060606060
01532 606060606060
01533 606060606060
01534 606060606060
01535 302165256022
01536 252545605125
01537 212460464563
01540 466024516444
01541 600473602425

BCD

BCD

BCD IN ORDER TO CALL IN THIS DIAGNOSTIC WITHOUT DISTURBING CORES

BCD , 2048 WORDS OF MEMORY

BCD HAVE BEEN READ ONTO DRUM 4, DESTROYING THE TAU TABLE ENTRIES

```

01542 626351467031
01543 452760633025
01544 606321646063
01545 212243256025
01546 456351312562
01547 602145246063
01550 302531516023
01551 302523426062
01552 644462336060
01553 606060606060
01554 606060606060
01555 606060606060
01556 606060606060
01557 606060606060
01560 606060606060
01561 442544465170
01562 606631434360
01563 222560512562
01564 634651252473
01565 602264636063
01566 302551256031
01567 626045466066
01570 217060634660
01571 234645263151
01572 446063302560
01573 233025234260
01574 626444602551
01575 514651604645
01576 606330256024
01577 516444336060
01600 606060606060
01601 606060606060
01602 606060606060
01603 606060606060
01604 606060606060
01605 0 00000 0 00000 X
A          00000

```

BCD AND THEIR CHECK SUMS.

BCD MEMORY WILL BE RESTORED, BUT THERE IS NO WAY TO CONFIRM THE

BCD CHECK SUM ERROR ON THE DRUM.

END

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	78	0	0	0	0
LIB	0	0	0	0	0
COL	78	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 208

NUMBER OF SYMBOLS, DEF 208,DEFOP 0,UNDEF 0
 ORG 52 FORCE NEW RECORD

				00064	ORG 52	FORCE NEW RECORD	
	00064	0	01303	0	01564	HTR X-1,0,LOCREC	CARD FOR DE
					01303	ORG LOCREC	
TD	01303	3	00000	0	00064	TXH 52	4307 FT 51
	01304	0	07400	4	00740	TSX PRINT,4	
	01305	0	01244	0	01237	HTR MACHIN,0,MACHIN+5	
					04331	SUBTAG SYN 2265	4331 OCTAL
					04327	SUBORG SYN 2263	4327 OCTAL - THIS IS SUBORG + 3
	01306	0	50000	0	04331	CLA SUBTAG	SAME AS INSTRUCTIONS 4246 THRO
	01307	0	76500	0	00011	LRS 9	4261 IN SECTION II
	01310	0	73400	6	00000	PAX 0,6	
T	01311	-0	75400	0	00000	PXD	AT END OF TIX, AC ADDRESS HAS
	01312	0	76300	0	00011	LLS 9	DRUM ADDRESS OF ENTRY AND
	01313	0	60100	0	01342	STO SUBES1	IR 2 EQUALS 1 FOR 2 WORD + CHECKSUM
	01314	0	76700	0	00001	ALS 1	2 FOR 4 WORD + SUM
	01315	0	60100	0	01343	STO SUBES2	3 FOR 6 WORD + SUM
	01316	0	50000	4	04327	CLA SUBORG,4	
	01317	0	40000	0	01342	ADD SUBES1	
	01320	0	40000	0	01343	SUB030 ADD SUBES2	
	01321	2	00001	4	01320	TIX SUB030,4,1	
	01322	0	07400	4	00730	TSX OCTBCD,4	
	01323	0	60200	0	01257	SLW ERAS	
	01324	0	56000	0	01257	LDQ ERAS	
	01325	-0	76300	0	00014	LGL 12	SHIFT OUT FIRST 2 BLANKS
	01326	-0	50000	0	01402	CAL PR2	
	01327	-0	76300	0	00022	LGL 18	
	01330	0	60200	0	01402	SLW PR2	
	01331	-0	76300	0	00006	LGL 6	
	01332	0	56000	0	01403	LDQ PR3	
	01333	-0	76300	0	00036	LGL 30	
	01334	0	60200	0	01403	SLW PR3	
	01335	0	50000	2	01347	CLA A+1,2	
	01336	0	60100	0	01355	STO PR1	
	01337	0	07400	4	00740	TSX PRINT,4	
	01340	0	01565	0	01347	HTR PR,0,PR+142	
	01341	0	02000	0	00221	TRA DIGRTN	
	01342	0	00000	0	00000	SUBES1	
	01343	0	00000	0	00000	SUBES2	
	01344	452760216006				BCD 1NG A 6	
	01345	452760216004				BCD 1NG A 4	
	01346	452760216002			A	BCD 1NG A 2	
	01347	606060606060			PR	BCD 2	
	01350	606060606060					
	01351	233025234260				BCD 4CHECK SUM ERROR IN READI	
	01352	626444602551					
	01353	514651603145					
	01354	605125212431					
	01355	452760216002			PR1	BCD 1NG A 2	
	01356	606646512460				BCD WORD ENTRY AND ITS CHECK SUM IN THE TAU TABLE ON DRUM 4.	
	01357	254563517060					
	01360	214524603163					
	01361	626023302523					
	01362	426062644460					
	01363	314560633025					

01364 606321646063
01365 212243256046
01366 456024516444
01367 600433606060
01370 606060606060
01371 606060606060
01372 606060606060
01373 606060606060
01374 606060606060
01375 633025602451
01376 644460212424
01377 512562626046
01400 266063302560
01401 254563517060
01402 606060316260
01403 336060263160
01404 652560216363
01405 254447636260
01406 302165256022
01407 252545604421
01410 242560634660
01411 512521246060
01412 606060606060
01413 606060606060
01414 606060606060
01415 606060606060
01416 606060606060
01417 606060606060
01420 606060606060
01421 633025602545
01422 635170602346
01423 515125236343
01424 706026514644
01425 606330316260
01426 472151633123
01427 644321516021
01430 242451256262
01431 336060606060
01432 606060606060
01433 606060606060
01434 606060606060
01435 606060606060
01436 606060606060
01437 606060606060
01440 606060606060
01441 606060606060
01442 606060606060
01443 606060606060
01444 606060606060
01445 606060606060
01446 606060606060
01447 606060606060
01450 606060606060
01451 606060606060

BCD 5

BCD 5 THE DRUM ADDRESS OF THE ENTRY

PR2 BCD 1 IS
PR3 BCD 1. FI
BCD VE ATTEMPTS HAVE BEEN MADE TO READ

BCD 3

BCD THE ENTRY CORRECTLY FROM THIS PARTICULAR ADDRESS.

BCD

BCD

01452 606060606060
01453 606060606060
01454 606060606060
01455 606060606060
01456 606060606060
01457 606060606060
01460 606060606060
01461 606060606060
01462 606060606060
01463 606060606060
01464 606060606060
01465 606060606060
01466 606060606060
01467 606060606060
01470 606060606060
01471 314560465124
01472 255160634660
01473 232143436031
01474 456063303162
01475 602431212745
01476 466263312360
01477 663163304664
01500 636024316263
01501 645122314527
01502 602346512562
01503 736002000410
01504 606646512462
01505 604626604425
01506 444651706060
01507 606060606060
01510 606060606060
01511 606060606060
01512 606060606060
01513 606060606060
01514 606060606060
01515 302165256022
01516 252545605125
01517 212460464563
01520 466024516444
01521 600473602425
01522 626351467031
01523 452760633025
01524 606321646063
01525 212243256025
01526 456351312562
01527 602145246063
01530 302531516023
01531 302523426062
01532 644462336060
01533 606060606060
01534 606060606060
01535 606060606060
01536 606060606060
01537 606060606060

BCD

BCD IN ORDER TO CALL IN THIS DIAGNOSTIC WITHOUT DISTURBING CORES

BCD , 2048 WORDS OF MEMORY

BCD HAVE BEEN READ ONTO DRUM 4, DESTROYING THE TAU TABLE ENTRIES

BCD AND THEIR CHECK SUMS.

```

01540 606060606060
01541 442544465170          BCD MEMORY WILL BE RESTORED, BUT THERE IS NO WAY TO CONFIRM THE
01542 606631434360
01543 222560512562
01544 634651252473
01545 602264636063
01546 302551256031
01547 626045466066
01550 217060634660
01551 234645263151
01552 446063302560
01553 233025234260          BCD CHECK SUM ERROR ON THE DRUM.
01554 626444602551
01555 514651604645
01556 606330256024
01557 516444336060
01560 606060606060
01561 606060606060
01562 606060606060
01563 606060606060
01564 606060606060
01565 0 00000 0 00000 X
A          00000          END

```

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	64	0	0	0	0
LIB	0	0	0	0	0
COL	64	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 194

NUMBER OF SYMBOLS, DEF 206,DEFOP 0,UNDEF 0
 ORG 53 FORCE NEW RECORD

			00065		ORG 53	FORCE NEW RECORD
	00065	0	01303	0	02746	HTR X-1,0,LOCREC
					01303	CARD FOR DE
					01303	ORG LOCREC
TD	01303	3	00000	0	00065	TXH 53
	01304	0	76200	0	00304	RDR 4
	01305	0	46000	0	02136	LDA D273
	01306	0	70000	0	02136	CPY D273
	01307	0	50000	0	02136	CLA D273
	01310	0	62100	0	01311	STA GETSUM
A	01311	0	50000	0	00000	GETSUM CLA
	01312	0	60100	0	02137	STO DRMSUM
	01313	0	76200	0	00304	RDR 4
	01314	0	46000	0	02140	LDA D307
	01315	0	70000	0	02140	CPY D307
	01316	0	76200	0	00304	RDR 4
	01317	0	46000	0	02141	LDA D313
	01320	0	70000	0	02141	CPY D313
	01321	-0	76000	0	00355	SLT8141
	01322	0	76100	0	00000	NOP
	01323	0	50000	0	01234	CLA PREFX1
	01324	0	40200	0	02142	SUB MEM4K
	01325	-0	10000	0	01327	TNZ LX
	01326	0	76000	0	00215	PSE8141
	01327	-0	53400	2	00000	LX LXD 0,2
	01330	-0	75400	2	00000	PXD 0,2
	01331	0	40200	0	01234	SUB PREFX1
	01332	-0	32000	0	01230	ANA DECMSK
	01333	0	53400	2	02135	LXA TAB,2
	01334	0	34000	2	02135	CAS TAB,2
	01335	0	02000	0	01337	TRA TIXT
	01336	0	02000	0	01655	TRA HAVE
	01337	2	00005	2	01334	TIXT TIX CAS,2,5
	01340	0	07400	4	00740	TSX PRINT,4
	01341	0	01655	0	01343	HTR ER,0,ER+202
	01342	0	00000	0	00221	HTR DIGRTN
	01343	606060606060				ER BCD 2
	01344	606060606060				
	01345	434623216331				BCD LOCATION OF ERROR, WHICH HAS BEEN PRINTED, HAS CAUSED DIAGNO
	01346	464560462660				
	01347	255151465173				
	01350	606630312330				
	01351	603021626022				
	01352	252545604751				
	01353	314563252473				
	01354	603021626023				
	01355	216462252460				
	01356	243121274546				
	01357	626331236051				BCD STIC RECORD NUMBER 53
	01360	252346512460				
	01361	456444222551				
	01362	600503606060				
	01363	606060606060				
	01364	606060606060				
	01365	606060606060				

01366 606060606060
01367 606060606060
01370 606060606060
01371 634660222560
01372 512521246031
01373 453360606330
01374 316260512523
01375 465124602346
01376 444721512562
01377 606330256002
01400 626023464447
01401 433144254563
01402 604626603145
01403 242567605125
01404 273162632551
01405 600260634660
01406 216043316263
01407 604626600460
01410 632122432560
01411 626346476273
01412 606060606060
01413 606060606060
01414 606060606060
01415 226463604546
01416 604421632330
01417 603021626022
01420 252545602646
01421 644524336060
01422 606060606060
01423 606060606060
01424 606060606060
01425 606060606060
01426 606060606060
01427 606060606060
01430 606060606060
01431 606060606060
01432 606060606060
01433 606060606060
01434 606060606060
01435 606060606060
01436 606060606060
01437 606060606060
01440 606060606060
01441 633025602346
01442 456325456362
01443 604626603151
01444 600260662551
01445 256062216525
01446 246031456063
01447 302560242523
01450 512544254563
01451 604626604346
01452 232163314645
01453 607125514633

BCD TO BE READ IN. THIS RECORD COMPARES THE 2S COMPLIMENT OF IN

BCD DEX REGISTER 2 TO A LIST OF 4 TABLE STOPS,

BCD BUT NO MATCH HAS BEEN FOUND.

BCD

BCD THE CONTENTS OF IR 2 WERE SAVED IN THE DECREMENT OF LOCATION

BCD ZERO.

01454 606060606060
01455 606060606060
01456 606060606060
01457 606060606060
01460 606060606060
01461 606060606060
01462 606060606060
01463 606060606060
01464 606060606060
01465 633031626024
01466 252351254425
01467 456360623046
01470 644324602550
01471 642143603333
01472 333360606060
01473 606060606060
01474 606060606060
01475 606060606060
01476 606060606060
01477 606060606060
01500 606060606060
01501 606060606060
01502 606060606060
01503 606060606060
01504 606060606060
01505 606060606060
01506 606060606060
01507 606060606060
01510 606060606060
01511 606060606060
01512 606060606060
01513 606060606007
01514 070704046060
01515 606263212760
01516 632122432560
01517 606060606060
01520 606060606060
01521 606060606060
01522 606060606060
01523 606060606060
01524 606060606060
01525 606060606060
01526 606060606060
01527 606060606060
01530 606060606060
01531 606060606060
01532 606060606060
01533 606060606060
01534 606060606060
01535 606060606060
01536 606060606060
01537 606060606007
01540 070703036060
01541 606264232360

BCD THIS DECREMENT SHOULD EQUAL

BCD

BCD 77744 STAG TABLE

BCD

BCD 77733 SUCC TABLE

01542	632122432560			
01543	606060606060			
01544	606060606060			
01545	606060606060			
01546	606060606060			
01547	606060606060	BCD		
01550	606060606060			
01551	606060606060			
01552	606060606060			
01553	606060606060			
01554	606060606060			
01555	606060606060			
01556	606060606060			
01557	606060606060			
01560	606060606060			
01561	606060606060	BCD	77721	PRED TABLE
01562	606060606060			
01563	606060606007			
01564	070702016060			
01565	604751252460			
01566	632122432560			
01567	606060606060			
01570	606060606060			
01571	606060606060			
01572	606060606060			
01573	606060606060	BCD		
01574	606060606060			
01575	606060606060			
01576	606060606060			
01577	606060606060			
01600	606060606060			
01601	606060606060			
01602	606060606060			
01603	606060606060			
01604	606060606060			
01605	606060606060	BCD	77707	BBB TABLE
01606	606060606060			
01607	606060606007			
01610	070700076060			
01611	602222226063			
01612	212243256060			
01613	606060606060			
01614	606060606060			
01615	606060606060			
01616	606060606060			
01617	606060606060	BCD		
01620	606060606060			
01621	606060606060			
01622	606060606060			
01623	606060606060			
01624	606060606060			
01625	606060606060			
01626	606060606060			
01627	606060606060			

01630	606060606060			
01631	512562626062		BCD PRESS START IF YOU WISH TO RESTORE MACHINE TO CONDITION IN WH	
01632	632151636031			
01633	266070466460			
01634	663162306063			
01635	466051256263			
01636	465125604421			
01637	233031452560			
01640	634660234645			
01641	243163314645			
01642	603145606630			
01643	312330602551		BCD ICH ERROR OCCURRED.	
01644	514651604623			
01645	236451512524			
01646	336060606060			
01647	606060606060			
01650	606060606060			
01651	606060606060			
01652	606060606060			
01653	606060606060			
01654	606060606060			
01655	0 50000 2 02136	HAVE	CLA TAB+1,2	BCD NAME OF TABLE
01656	0 60100 0 02162		STO PR1	
01657	0 50000 2 02141		CLA TAB+4,2	BCD LINE ABOUT SIZE OF TABLE ENTRIES
01660	0 60100 0 02101		STO PRTAB	
01661	0 76000 0 00141		SLN 1	
01662	0 02000 0 01664		TRA MEM8K	
01663	2 00001 2 01664		TIX MEM8K,2,1	
01664	0 50000 2 02137	MEM8K	CLA TAB+2,2	THIS IS ADDRESS OF 1ST WORD IN
01665	0 60100 0 02143		STO BUFADR	BUFFER FOR WHATEVER K
01666	0 50000 0 02136		CLA D273	SUBTRACT ADDRESS OF 1ST WORO IN
01667	-0 32000 0 01227		ANA ADDMSK	BUFFER FROM ADDRESS OF DRUM CHECK SUM
01670	0 40200 0 02143		SUB BUFADR	
01671	0 60100 0 02144		STO WDC	NOW HAVE ACTUAL WORD COUNT
01672	0 07400 4 00730		TSX OCTBCD,4	CONVERT TO BCD AND STORE IN COMMENT
01673	0 60200 0 01257		SLW ERAS	
01674	0 56000 0 01257		LDQ ERAS	
01675	-0 76300 0 00014		LGL 12	
01676	-0 50000 0 02327		CAL PR6	
01677	-0 76300 0 00022		LGL 18	
01700	0 60200 0 02327		SLW PR6	
01701	-0 76300 0 00006		LGL 6	
01702	0 56000 0 02330		LDQ PR7	
01703	-0 76300 0 00036		LGL 30	
01704	0 60200 0 02330		SLW PR7	
01705	0 50000 0 02143		CLA BUFADR	CONVERT ADDRESS OF 1ST WORD OF
01706	0 07400 4 00730		TSX OCTBCD,4	CORE BUFFER AND STORE IN COMMENT
01707	0 60200 0 01257		SLW ERAS	
01710	0 56000 0 01257		LDQ ERAS	
01711	-0 50000 0 02221		CAL ADMEM	
01712	-0 76300 0 00022		LGL 18	
01713	0 60200 0 02221		SLW ADMEM	
01714	-0 76300 0 00022		LGL 18	
01715	0 56000 0 00717		LDQ BLANKS	

01716	-0	76300	0	00022	LGL 18	
01717	0	60200	0	02222	SLW ADMEM+1	
01720	0	50000	0	02141	CLA D313	FIND NUMBER OF DRUM
01721	0	76700	0	00007	ALS 7	
01722	-0	73400	1	00000	PDX 0,1	
01723	0	50000	1	02110	CLA DRM,1	BCD TABLE
01724	0	60100	0	02171	STO PR4	
01725	0	50000	0	02141	CLA D313	
01726	-0	32000	0	02146	ANA DRUMSK	ADD WORD COUNT TO ADDRESS OF
01727	0	62100	0	02145	STA DRMADR	1ST WORD ON DRUM, SPLIT DRUM
01730	0	40000	0	02144	ADD WDC	IF BITS CAN BE MOVED INTO DECREMENT
01731	0	76700	0	00007	ALS 7	
01732	-0	73400	2	00000	PDX 0,2	
01733	-3	00000	2	01743	TXL ISDR4,2,0	
01734	1	00001	1	01735	TXI SPLIT,1,1	
01735	-0	50000	1	02110	SPLIT CAL DRM,1	NEXT BCD WORD FROM TABLE INTO
01736	0	56000	0	00717	LDQ BLANKS	COMMENT
01737	-0	76300	0	00006	LGL 6	
01740	0	60200	0	02202	SLW PR5	
01741	0	50000	0	02147	CLA PRSPLT	EXPAND FIRST COMMENT TO SHOW
01742	0	60100	0	02075	STO TSX1	SPLIT BUFFER
01743	-3	00002	1	01746	ISDR4 TXL GETLDA,1,2	IFF BUFFER ON DRUM 4, IT IS CLOBBERED
01744	0	50000	0	02150	CLA PRALL	PRINT SAME
01745	0	60100	0	02103	STO TSX2	
01746	0	50000	0	02145	GETLDA CLA DRMADR	CONVERT ADDRESS OF 1ST WORD ON
01747	0	07400	4	00730	TSX OCTBCD,4	THE DRUM AND STORE IN COMMENT
01750	0	60200	0	01257	SLW ERAS	
01751	0	56000	0	01257	LDQ ERAS	
01752	-0	76300	0	00014	LGL 12	
01753	-0	50000	0	02167	CAL PR2	
01754	-0	76300	0	00014	LGL 12	
01755	0	60200	0	02167	SLW PR2	
01756	-0	76300	0	00014	LGL 12	
01757	0	56000	0	02170	LDQ PR3	
01760	-0	76300	0	00030	LGL 24	
01761	0	60200	0	02170	SLW PR3	
01762	0	50000	0	02136	CLA D273	CONVERT AND STORE ADDRESS IN CORES
01763	0	07400	4	00730	TSX OCTBCD,4	OF DRUM CHECK SUM
01764	0	60200	0	02420	SLW PR9	
01765	0	56000	0	02140	LDQ D307	CONVERT ALL OF 36 BIT WORD TO PRINT
01766	-0	76300	0	00017	LGL 15	COMPUTED CHECK SUM
01767	0	07400	4	00730	TSX OCTBCD,4	
01770	0	60200	0	01257	SLW ERAS	
01771	0	56000	0	01257	LDQ ERAS	
T 01772	-0	75400	0	00000	PXD	
01773	-0	76300	0	00006	LGL 6	
01774	0	60200	0	01260	SLW ERAS+1	IE, STORE 00000B
T 01775	-0	75400	0	00000	PXD	
01776	-0	76300	0	00006	LGL 6	
01777	0	76700	0	00006	ALS 6	
02000	0	40000	0	01260	ADD ERAS+1	
02001	-0	76300	0	00030	LGL 24	
02002	0	60200	0	02376	SLW PR8	
02003	0	56000	0	02140	LDQ D307	

T	02004	-0	76300	0	00017	LGL	15
	02005	-0	75400	0	00000	PXD	
	02006	-0	76300	0	00014	LGL	12
	02007	0	07400	4	00730	TSX	OCTBCD, 4
	02010	0	60200	0	01257	SLW	ERAS
	02011	0	56000	0	01257	LDQ	ERAS
	02012	-0	76300	0	00022	LGL	18
	02013	0	76700	0	00006	ALS	6
	02014	0	40000	0	01260	ADD	ERAS+1
	02015	-0	76300	0	00006	LGL	6
	02016	0	76700	0	00006	ALS	6
	02017	0	40000	0	01260	ADD	ERAS+1
	02020	-0	76300	0	00014	LGL	12
	02021	0	60200	0	02377	SLW	PR8+1
	02022	0	56000	0	02140	LDQ	D307
	02023	-0	76300	0	00033	LGL	27
T	02024	-0	75400	0	00000	PXD	
	02025	-0	76300	0	00011	LGL	9
	02026	0	07400	4	00730	TSX	OCTBCD, 4
	02027	0	60200	0	01257	SLW	ERAS
	02030	0	56000	0	01257	LDQ	ERAS
	02031	-0	77300	0	00022	RQL	18
	02032	-0	76300	0	00022	LGL	18
	02033	0	56000	0	00717	LDQ	BLANKS
	02034	-0	76300	0	00022	LGL	18
	02035	0	60200	0	02400	SLW	PR8+2
	02036	0	56000	0	02137	LDQ	DRMSUM
T	02037	-0	75400	0	00000	PXD	
	02040	-0	76300	0	00003	LGL	3
	02041	0	76700	0	00006	ALS	6
	02042	-0	60200	0	02421	ORS	PR10
	02043	-0	76300	0	00017	LGL	15
	02044	0	07400	4	00730	TSX	OCTBCD, 4
	02045	0	60200	0	01257	SLW	ERAS
	02046	0	56000	0	01257	LDQ	ERAS
	02047	-0	77300	0	00006	RQL	6
	02050	-0	60000	0	02422	STQ	PR10+1
	02051	0	56000	0	02137	LDQ	DRMSUM
	02052	-0	76300	0	00022	LGL	18
T	02053	-0	75400	0	00000	PXD	
	02054	-0	76300	0	00017	LGL	15
	02055	-0	60000	0	01261	STQ	ERAS+2
	02056	0	07400	4	00730	TSX	OCTBCD, 4
	02057	0	60200	0	01257	SLW	ERAS
	02060	0	56000	0	01257	LDQ	ERAS
	02061	-0	76300	0	00014	LGL	12
	02062	0	76700	0	00006	ALS	6
	02063	0	40000	0	01260	ADD	ERAS+1
	02064	-0	76300	0	00030	LGL	24
	02065	0	60200	0	02423	SLW	PR10+2
	02066	0	56000	0	01261	LDQ	ERAS+2
T	02067	-0	75400	0	00000	PXD	
	02070	-0	76300	0	00003	LGL	3
	02071	0	56000	0	00717	LDQ	BLANKS

CONVERT AND STORE ALL OF 36 BIT
DRUM CHECK SUM

02072	-0	76300	0	00036	LGL	30	
02073	0	60200	0	02424	SLW	PR10+3	
02074	0	07400	4	00740	TSX	PRINT,4	
02075	0	02177	0	02151	TSX1	HTR PR,0,PR+22	
02076	0	07400	4	00740	TSX	PRINT,4	
02077	0	02223	0	02211	HTR	PRCR,0,PRCR+10	
02100	0	07400	4	00740	TSX	PRINT,4	
02101	0	00000	0	00000	PRTAB		
02102	0	07400	4	00740	TSX	PRINT,4	
02103	0	02603	0	02315	TSX2	HTR PRSZ,0,PRSZND	
02104	0	02000	0	00221	TRA	DIGRTN	
02105	24516444	6004			BCD	1DRUM 4	
02106	24516444	6003			BCD	1DRUM 3	
02107	24516444	6002			BCD	1DRUM 2	
02110	24516444	6001			DRM	BCD 1DRUM 1	
02111	0	00042	0	00000	STIR	HTR80,0,34	STAG DEC HAS IR2 COMPLEMENTED
02112	60626321	2760			BCD	1 STAG	IF TABLE STAG IR 2 IS 77744
02113	0	00000	0	12217	HTR	85263	BUFFER ADDRESS FIRST WORD 8K
02114	0	00000	0	11705	HTR	85061	DITTO 4K
02115	0	02251	0	02223	HTR	PRA,0,PRA+22	
02116	0	00055	0	00000	HTR	80,0,45	SUCC IR2 IS 77733
02117	60626423	2360			BCD	1 SUCC	
02120	0	00000	0	40536	HTR	816734	8K
02121	0	00000	0	16603	HTR	87555	4K
02122	0	02265	0	02251	HTR	PRB,0,PRB+12	
02123	0	00071	0	00000	HTR	80,0,57	PRED IR2 IS 77721
02124	60475125	2460			BCD	1 PRED	
02125	0	00000	0	36472	HTR	815674	8K
02126	0	00000	0	16251	HTR	87337	4K
02127	0	02301	0	02265	HTR	PRC,0,PRC+12	
02130	0	00107	0	00000	HTR	80,0,71	BBB IR2 IS 77707
02131	60602222	2260			BCD	1 BBB	
02132	0	00000	0	30365	HTR	812533	8K
02133	0	00000	0	14452	HTR	86442	4K
02134	0	02315	0	02301	HTR	PRD,0,PRD+12	
02135	0	00000	0	00024	TAB	HTR TAB-STIR	
02136	0	00000	0	00421	D273	HTR8273	
02137	0	00000	0	00000	DRMSUM		COPY ACL WITH ADDRESS OF DRUM SUM IN CORES
02140	0	00000	0	00463	D307	HTR8307	DRUM SUM FROM ADDRESS FOUND ABOVE
02141	0	00000	0	00471	D313	HTR8313	COMPUTED SUM PICKED UP FROM 307 AND STORED
02142	+01000000	00000			MEM4K	OCT 010000000000	DRUM SELECT AND INITIAL ADDRESS FROM 313
02143	0	00000	0	00000	BUFADR		CORE ADDRESS OF 1ST WORD OF TABLE
02144	0	00000	0	00000	WDC		ACTUAL WORD COUNT STORED HERE
02145	0	00000	0	00000	DRMADR		D313 ANA 3777 IS ADDRESS 1ST WORD ON DRUM
02146	0	00000	0	07301	DRUMSK	HTR83777	
02147	0	02211	0	02151	PRSPLT	HTR PR,0,PR+32	
02150	0	02747	0	02315	PRALL	HTR PRSZ,0,X	
02151	60606060	6060			PR	BCD 2	
02152	60606060	6060					
02153	23302523	4260			BCD	7CHECK SUM ERROR IN READING A BUFFER OF THE	
02154	62644446	02551					
02155	51465160	3145					
02156	60512521	2431					
02157	45276021	6022					

02160	642626255160			
02161	462660633025			
02162	606263212760	PR1	BCD 1 STAG	
02163	632122432573		BCD 4TABLE, BEGINNING AT ADDR	
02164	602225273145			
02165	453145276021			
02166	636021242451			
02167	606025626260	PR2	BCD 1 ESS	CHANGED TO ESS 12
02170	604645606060	PR3	BCD 1 ON	CHANGED TO 34 ON
02171	245164446001	PR4	BCD 6DRUM 1	
02172	606060606060			
02173	606060606060			
02174	606060606060			
02175	606060606060			
02176	606060606060			
02177	214524602346		BCD 3AND CONTINUED ON D	
02200	456331456425			
02201	246046456024			
02202	516444600233	PR5	BCD 7RUM 2.	
02203	606060606060			
02204	606060606060			
02205	606060606060			
02206	606060606060			
02207	606060606060			
02210	606060606060			
02211	606060606060	PRCR	BCD 2	
02212	606060606060			
02213	314560234651		BCD 6IN CORES, THE BUFFER BEGINS AT LOCAT	
02214	256273606330			
02215	256022642626			
02216	255160222527			
02217	314562602163			
02220	604346232163			
02221	606060314645	ADMEM	BCD 2 ION	C+ANGED TO ION 12345
02222	606060606060			
02223	606060606060	PRA	BCD 2	
02224	606060606060			
02225	633025606263		BCD THE STAG TABLE HAS A 4 BIT ENTRY FOR EACH TAGGED INSTRUCTION	
02226	212760632122			
02227	432560302162			
02230	602160046022			
02231	316360254563			
02232	517060264651			
02233	602521233060			
02234	632127272524			
02235	603145626351			
02236	642363314645			
02237	602346444731		BCD COMPILED. EACH STAG WORD HOLDS 9 ENTRIES.	
02240	432524336060			
02241	252123306062			
02242	632127606646			
02243	512460304643			
02244	246260116025			
02245	456351312562			

02246	336060606060			
02247	606060606060			
02250	606060606060			
02251	606060606060	PRB	BCD 2	
02252	606060606060			
02253	633025606264		BCD	THE SUCC TABLE HAS 1 WORD ENTRIES.
02254	232360632122			
02255	432560302162			
02256	600160664651			
02257	246025456351			
02260	312562336060			
02261	606060606060			
02262	606060606060			
02263	606060606060			
02264	606060606060			
02265	606060606060	PRC	BCD 2	
02266	606060606060			
02267	633025604751		BCD	THE PRED TABLE HAS 1 WORD ENTRIES.
02270	252460632122			
02271	432560302162			
02272	600160664651			
02273	246025456351			
02274	312562336060			
02275	606060606060			
02276	606060606060			
02277	606060606060			
02300	606060606060			
02301	606060606060	PRD	BCD 2	
02302	606060606060			
02303	633025602222		BCD	THE BBB TABLE HAS 6 WORD ENTRIES.
02304	226063212243			
02305	256030216260			
02306	066066465124			
02307	602545635131			
02310	256233606060			
02311	606060606060			
02312	606060606060			
02313	606060606060			
02314	606060606060			
02315	606060606060	PRSZ	BCD 2	
02316	606060606060			
02317	633025606321		BCD 8	THE TABLE WAS WRITTEN ON THE DRUM FROM A BUFFER
02320	224325606621			
02321	626066513163			
02322	632545604645			
02323	606330256024			
02324	516444602651			
02325	464460216022			
02326	642626255160			
02327	606060462660	PR6	BCD 1	OF (+ANGED TO OF 123
02330	606646512460	PR7	BCD 1	WORD CHANGED TO 4 WORD
02331	626046236321		BCD	S OCTAL.
02332	433360606060			
02333	606060606060			

02334	606060606060	
02335	606060606060	
02336	606060606060	
02337	606060606060	
02340	606060606060	
02341	606060606060	
02342	606060606060	
02343	252123306022	BCD EACH BUFFER IS FOLLOWED BY ITS CHECK SUM.
02344	642626255160	
02345	316260264643	
02346	434666252460	
02347	227060316362	
02350	602330252342	
02351	606264443360	
02352	606060606060	
02353	606060606060	
02354	606060606060	
02355	606060606060	BCD
02356	606060606060	
02357	606060606060	
02360	606060606060	
02361	606060606060	
02362	606060606060	
02363	606060606060	
02364	606060606060	
02365	606060606060	
02366	606060606060	
02367	633025602346	BCD 7THE COMPUTED CHECK SUM IN LOCATION 307 IS
02370	444764632524	
02371	602330252342	
02372	606264446031	
02373	456043462321	
02374	633146456003	
02375	000760316260	
02376	006000000000	PR8 BCD 0 00000 0 00000
02377	006000600000	
02400	000000606060	
02401	606060606060	
02402	606060606060	
02403	606060606060	
02404	606060606060	
02405	606060606060	
02406	606060606060	
02407	606060606060	
02410	606060606060	BCD 3
02411	606060606060	
02412	606060606060	
02413	633025602451	BCD 5THE DRUM CHECK SUM IN LOCATION
02414	644460233025	
02415	234260626444	
02416	603145604346	
02417	232163314645	
02420	600102030405	PR9 BCD 1 12345
02421	603162600060	PR10 BCD IS 0

02422 606060606060
02423 606060606060
02424 606060606060
02425 606060606060
02426 606060606060
02427 606060606060
02430 606060606060
02431 606060606060
02432 606060606060
02433 606060606060
02434 606060606060
02435 606060606060
02436 606060606060
02437 606060606060
02440 606060606060
02441 606060606060
02442 606060606060
02443 606060606060
02444 606060606060
02445 606060606060
02446 606060606060
02447 606060606060
02450 606060606060
02451 606060606060
02452 606060606060
02453 606060606060
02454 606060606060
02455 606060606060
02456 606060606060
02457 606060606060
02460 606060606060
02461 606060606060
02462 606060606060
02463 263165256021
02464 636325444763
02465 626030216525
02466 602225254560
02467 442124256063
02470 466051252124
02471 606330316260
02472 622523633146
02473 456046266063
02474 302560632122
02475 432560234651
02476 512523634370
02477 602651464460
02500 633025602451
02501 644433606060
02502 606060606060
02503 606060606060
02504 606060606060
02505 606060606060
02506 606060606060
02507 606060606060

BCD 4

BCD

BCD

BCD FIVE ATTEMPTS HAVE BEEN MADE TO READ THIS SECTION OF THE TAB

BCD LE CORRECTLY FROM THE DRUM.

BCD

02510 606060606060
02511 606060606060
02512 606060606060
02513 606060606060
02514 606060606060
02515 606060606060
02516 606060606060
02517 606060606060
02520 606060606060
02521 606060606060
02522 606060606060
02523 606060606060
02524 606060606060
02525 606060606060
02526 606060606060
02527 606060606060
02530 606060606060
02531 606060606060
02532 606060606060
02533 606060606060
02534 606060606060
02535 606060606060
02536 606060606060
02537 606060606060
02540 606060606060
02541 606060606060
02542 606060606060
02543 606060606060
02544 606060606060
02545 606060606060
02546 606060606060
02547 606060606060
02550 606060606060
02551 606060606060
02552 606060606060
02553 606060606060
02554 606060606060
02555 606060606060
02556 606060606060
02557 454663256040
02560 603126606330
02561 256023302523
02562 426062644460
02563 243162235125
02564 472145237060
02565 316260432151
02566 272573603163
02567 604421706031
02570 452431232163
02571 256021604721
02572 516360462660
02573 633025604751
02574 462751214460
02575 232145454663

BCD

BCD

BCD

BCD NOTE - IF THE CHECK SUM DISCREPANCY IS LARGE, IT MAY INDICAT

BCD E A PART OF THE PROGRAM CANNOT BE REACHED.

02576 602225605125
02577 212330252433
02600 606060606060
02601 606060606060
02602 606060606060
02603 606060606060
02604 606060606060
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02637 606060606060
02640 606060606060
02641 606060606060
02642 606060606060
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02646 606060606060
02647 606060606060
02650 606060606060
02651 606060606060
02652 606060606060
02653 314560465124
02654 255160634660
02655 232143436031
02656 456063303162
02657 602431212745
02660 466263312360
02661 663163304664
02662 636024316263
02663 645122314527

PRSZND BCD

BCD

BCD

BCD

BCD IN ORDER TO CALL IN THIS DIAGNOSTIC WITHOUT DISTURBING CORES

```

02664 602346512562
02665 736002000410      BCD , 2048 WORDS OF MEMORY HAVE BEEN WRITTEN
02666 606646512462
02667 604626604425
02670 444651706030
02671 216525602225
02672 254560665131
02673 636325456060
02674 606060606060
02675 606060606060
02676 606060606060
02677 464560634660      BCD ON TO DRUM 4, DESTROYING THE TABLES AND THEIR CHECK SUMS.
02700 245164446004
02701 736024256263
02702 514670314527
02703 606330256063
02704 212243256260
02705 214524606330
02706 253151602330
02707 252342606264
02710 446233606060
02711 606060606060      BCD
02712 606060606060
02713 606060606060
02714 606060606060
02715 606060606060
02716 606060606060
02717 606060606060
02720 606060606060
02721 606060606060
02722 606060606060
02723 442544465170      BCD MEMORY WILL BE RESTORED, BUT THERE IS NO WAY TO CONFIRM THE
02724 606631434360
02725 222560512562
02726 634651252473
02727 602264636063
02730 302551256031
02731 626045466066
02732 217060634660
02733 234645263151
02734 446063302560
02735 233025234260      BCD CHECK SUM ERROR ON THE DRUM.
02736 626444602551
02737 514651604645
02740 606330256024
02741 516444336060
02742 606060606060
02743 606060606060
02744 606060606060
02745 606060606060
02746 606060606060
02747 0 00000 0 00000 X
      00000
A

```

END

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	302	0	0	0	0
LIB	0	0	0	0	0
COL	302	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 818

NUMBER OF SYMBOLS, DEF 242,DEFOP 0,UNDEF 0
ORG 54 FORCE NEW RECORD

			00066	ORG 54	FORCE NEW RECORD
	00066	0	01303 0 01552	HTR X-1,0,LOCREC	CARD FOR DE
			01303	ORG LOCREC	
TD	01303	3	00000 0 00066	TXH 54	222 FT 94
	01304	0	07400 4 00740	TSX PRINT,4	
	01305	0	01244 0 01237	HTR MACHIN,0,MACHIN+5	
	01306	0	07400 4 00740	TSX PRINT,4	
	01307	0	01553 0 01311	HTR PR,0,PR+162	
	01310	0	02000 0 00221	TRA DIGRTN	
	01311	606060606060	PR	BCD 2	
	01312	606060606060			
	01313	233025234260		BCD CHECK SUM ERROR IN READING THE WORD COUNT OF THE EIFNO TABLE	
	01314	6264444602551			
	01315	514651603145			
	01316	605125212431			
	01317	452760633025			
	01320	606646512460			
	01321	234664456360			
	01322	462660633025			
	01323	602531264546			
	01324	606321224325			
	01325	602651464460		BCD FROM DRUM 4.	
	01326	245164446004			
	01327	336060606060			
	01330	606060606060			
	01331	606060606060			
	01332	606060606060			
	01333	606060606060			
	01334	606060606060			
	01335	606060606060			
	01336	606060606060			
	01337	633025602451		BCD THE DRUM ADDRESS OF THIS ENTRY IS 2, AND IT IS COPIED INTO C	
	01340	644460212424			
	01341	512562626046			
	01342	266063303162			
	01343	602545635170			
	01344	603162600273			
	01345	602145246031			
	01346	636031626023			
	01347	464731252460			
	01350	314563466023			
	01351	465125604346		BCD ORE LOCATION 165.	
	01352	232163314645			
	01353	600106053360			
	01354	606060606060			
	01355	606060606060			
	01356	606060606060			
	01357	606060606060			
	01360	606060606060			
	01361	606060606060			
	01362	606060606060			
	01363	316362602330		BCD ITS CHECK SUM IS COPIED FROM 3 INTO 223. THE COPY LOOP BEGI	
	01364	252342606264			
	01365	446031626023			

01366 464731252460
01367 265146446003
01370 603145634660
01371 020203336060
01372 633025602346
01373 477060434646
01374 476022252731
01375 456260216360
01376 020100336060
01377 606060606060
01400 606060606060
01401 606060606060
01402 606060606060
01403 606060606060
01404 606060606060
01405 606060606060
01406 606060606060
01407 263165256021
01410 636325444763
01411 626030216525
01412 602225254560
01413 442124256063
01414 466051252124
01415 606330316260
01416 464525602545
01417 635170602346
01420 515125236343
01421 703360606060
01422 606060606060
01423 606060606060
01424 606060606060
01425 606060606060
01426 606060606060
01427 606060606060
01430 606060606060
01431 606060606060
01432 606060606060
01433 606060606060
01434 606060606060
01435 606060606060
01436 606060606060
01437 606060606060
01440 606060606060
01441 606060606060
01442 606060606060
01443 606060606060
01444 606060606060
01445 606060606060
01446 606060606060
01447 606060606060
01450 606060606060
01451 606060606060
01452 606060606060
01453 606060606060

BCD NS AT 210.

BCD FIVE ATTEMPTS HAVE BEEN MADE TO READ THIS ONE ENTRY CORRECTL

BCD Y.

BCD

BCD

01454	606060606060	
01455	606060606060	
01456	606060606060	
01457	314560465124	BCD IN ORDER TO CALL IN THIS DIAGNOSTIC WITHOUT DISTURBING CORES
01460	255160634660	
01461	232143436031	
01462	456063303162	
01463	602431212745	
01464	466263312360	
01465	663163304664	
01466	636024316263	
01467	645122314527	
01470	602346512562	
01471	736002000410	BCD , 2048 WORDS OF MEMORY
01472	606646512462	
01473	604626604425	
01474	444651706060	
01475	606060606060	
01476	606060606060	
01477	606060606060	
01500	606060606060	
01501	606060606060	
01502	606060606060	
01503	302165256022	BCD HAVE BEEN READ ONTO DRUM 4, DESTROYING THE EIFNO WORD COUNT,
01504	252545605125	
01505	212460464563	
01506	466024516444	
01507	600473602425	
01510	626351467031	
01511	452760633025	
01512	602531264546	
01513	606646512460	
01514	234664456373	
01515	603163626023	BCD ITS CHECK SUM, AND THE TABLE.
01516	302523426062	
01517	644473602145	
01520	246063302560	
01521	632122432533	
01522	606060606060	
01523	606060606060	
01524	606060606060	
01525	606060606060	
01526	606060606060	
01527	442544465170	BCD MEMORY WILL BE RESTORED, BUT THERE IS NO WAY TO CONFIRM THE
01530	606631434360	
01531	222560512562	
01532	634651252473	
01533	602264636063	
01534	302551256031	
01535	626045466066	
01536	217060634660	
01537	234645263151	
01540	446063302560	
01541	233025234260	BCD CHECK SUM ERROR ON THE DRUM.

01542 626444602551
01543 514651604645
01544 606330256024
01545 516444336060
01546 606060606060
01547 606060606060
01550 606060606060
01551 606060606060
01552 606060606060
01553 0 00000 0 00000 X

A 00000 END

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	29	0	0	0	0
LIB	0	0	0	0	0
COL	29	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 182

NUMBER OF SYMBOLS, DEF 197,DEFOP 0,UNDEF 0
ORG 55 FORCE NEW RECORD

			00067	ORG 55	FORCE NEW RECORD
	00067	0	01303 0 01552	HTR X-1,0,LOCREC	CARD FOR DE
			01303	ORG LOCREC	
TD	01303	3	00000 0 00067	TXH 55	222 FT 107
	01304	0	07400 4 00740	TSX PRINT,4	
	01305	0	01244 0 01237	HTR MACHIN,0,MACHIN+5	
	01306	0	07400 4 00740	TSX PRINT,4	
	01307	0	01553 0 01311	HTR PR,0,PR+162	
	01310	0	02000 0 00221	TRA DIGRTN	
	01311	606060606060	PR	BCD 2	
	01312	606060606060			
	01313	233025234260		BCD CHECK SUM ERROR IN READING THE WORD COUNT OF THE EIFNO TABLE	
	01314	6264444602551			
	01315	514651603145			
	01316	605125212431			
	01317	452760633025			
	01320	606646512460			
	01321	234664456360			
	01322	462660633025			
	01323	602531264546			
	01324	606321224325			
	01325	602651464460		BCD FROM DRUM 4.	
	01326	245164446004			
	01327	336060606060			
	01330	606060606060			
	01331	606060606060			
	01332	606060606060			
	01333	606060606060			
	01334	606060606060			
	01335	606060606060			
	01336	606060606060			
	01337	633025602451		BCD THE DRUM ADDRESS OF THIS ENTRY IS 2, AND IT IS COPIED INTO C	
	01340	644460212424			
	01341	512562626046			
	01342	266063303162			
	01343	602545635170			
	01344	603162600273			
	01345	602145246031			
	01346	636031626023			
	01347	464731252460			
	01350	314563466023			
	01351	465125604346		BCD ORE LOCATION 2112.	
	01352	232163314645			
	01353	600201010233			
	01354	606060606060			
	01355	606060606060			
	01356	606060606060			
	01357	606060606060			
	01360	606060606060			
	01361	606060606060			
	01362	606060606060			
	01363	316362602330		BCD ITS CHECK SUM IS COPIED FROM 3 INTO 533. THE COPY LOOP BEGI	
	01364	252342606264			
	01365	446031626023			

01366 464731252460
01367 265146446003
01370 603145634660
01371 050303336060
01372 633025602346
01373 477060434646
01374 476022252731
01375 456260216360
01376 020100336060
01377 606060606060
01400 606060606060
01401 606060606060
01402 606060606060
01403 606060606060
01404 606060606060
01405 606060606060
01406 606060606060
01407 263165256021
01410 636325444763
01411 626030216525
01412 602225254560
01413 442124256063
01414 466051252124
01415 606330316260
01416 464525602545
01417 635170602346
01420 515125236343
01421 703360606060
01422 606060606060
01423 606060606060
01424 606060606060
01425 606060606060
01426 606060606060
01427 606060606060
01430 606060606060
01431 606060606060
01432 606060606060
01433 606060606060
01434 606060606060
01435 606060606060
01436 606060606060
01437 606060606060
01440 606060606060
01441 606060606060
01442 606060606060
01443 606060606060
01444 606060606060
01445 606060606060
01446 606060606060
01447 606060606060
01450 606060606060
01451 606060606060
01452 606060606060
01453 606060606060

BCD NS AT 210.

BCD FIVE ATTEMPTS HAVE BEEN MADE TO READ THIS ONE ENTRY CORRECTL

BCD Y.

BCD

BCD

01454	606060606060	
01455	606060606060	
01456	606060606060	
01457	314560465124	BCD IN ORDER TO CALL IN THIS DIAGNOSTIC WITHOUT DISTURBING CORES
01460	255160634660	
01461	232143436031	
01462	456063303162	
01463	602431212745	
01464	466263312360	
01465	663163304664	
01466	636024316263	
01467	645122314527	
01470	602346512562	
01471	736002000410	BCD , 2048 WORDS OF MEMORY
01472	606646512462	
01473	604626604425	
01474	444651706060	
01475	606060606060	
01476	606060606060	
01477	606060606060	
01500	606060606060	
01501	606060606060	
01502	606060606060	
01503	302165256022	BCD HAVE BEEN READ ONTO DRUM 4, DESTROYING THE EIFNO WORD COUNT,
01504	252545605125	
01505	212460464563	
01506	466024516444	
01507	600473602425	
01510	626351467031	
01511	452760633025	
01512	602531264546	
01513	606646512460	
01514	234664456373	
01515	603163626023	BCD ITS CHECK SUM, AND THE TABLE.
01516	302523426062	
01517	644473602145	
01520	246063302560	
01521	632122432533	
01522	606060606060	
01523	606060606060	
01524	606060606060	
01525	606060606060	
01526	606060606060	
01527	442544465170	BCD MEMORY WILL BE RESTORED, BUT THERE IS NO WAY TO CONFIRM THE
01530	606631434360	
01531	222560512562	
01532	634651252473	
01533	602264636063	
01534	302551256031	
01535	626045466066	
01536	217060634660	
01537	234645263151	
01540	446063302560	
01541	233025234260	BCD CHECK SUM ERROR ON THE DRUM.

01542 626444602551
01543 514651604645
01544 606330256024
01545 516444336060
01546 606060606060
01547 606060606060
01550 606060606060
01551 606060606060
01552 606060606060
01553 0 00000 0 00000 X

A 00000 END

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	29	0	0	0	0
LIB	0	0	0	0	0
COL	29	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 182

NUMBER OF SYMBOLS, DEF 197,DEFOP 0,UNDEF 0
ORG 56 FORCE NEW RECORD

			00070	ORG 56	FORCE NEW RECORD		
	00070	0	01303	0	01626	HTR X-1,0,LOCREC	CARD FOR DE
			01303			ORG LOCREC	
TD	01303	3	00000	0	00070	TXH 56	241 FT 107
	01304	0	07400	4	00740	TSX PRINT,4	
	01305	0	01244	0	01237	HTR MACHIN,0,MACHIN+5	
	01306	0	76200	0	00304	RDR 4	165 OCTAL, CONTAINS WORD COUNT
	01307	0	46000	0	01340	LDA A	
	01310	0	70000	0	01257	CPY ERAS	
	01311	0	50000	0	01257	CLA ERAS	
	01312	0	77100	0	00022	ARS 18	
	01313	0	60100	0	01271	STO ERAS+10	
	01314	0	07400	4	00676	TSX BINDEC,4	
	01315	0	60200	0	01257	SLW ERAS	
	01316	0	56000	0	01257	LDQ ERAS	
	01317	-0	50000	0	01404	CAL PR2	
	01320	-0	77300	0	00006	RQL 6	
	01321	-0	76300	0	00036	LGL 30	
	01322	0	60200	0	01404	SLW PR2	
	01323	0	50000	0	01337	CLA TEIFNO	
	01324	0	40200	0	01271	SUB ERAS+10	
	01325	0	07400	4	00730	TSX OCTBCD,4	
	01326	0	60200	0	01257	SLW ERAS	
	01327	0	56000	0	01257	LDQ ERAS	
	01330	-0	76300	0	00014	LGL 12	
	01331	-0	50000	0	01402	CAL PR1	
	01332	-0	76300	0	00030	LGL 24	
	01333	0	60200	0	01402	SLW PR1	
	01334	0	07400	4	00740	TSX PRINT,4	
	01335	0	01627	0	01341	HTR PR,0,PR+182	
	01336	0	02000	0	00221	TRA DIGRTN	
	01337	+000000000	02112			TEIFNO OCT 00000002112	
	01340	0	00000	0	00245	A HTR8165	
	01341	606060606060				PR BCD 2	
	01342	606060606060					
	01343	233025234260				BCD CHECK SUM ERROR IN READING THE EIFNO TABLE FROM DRUM 4.	
	01344	6264444602551					
	01345	514651603145					
	01346	605125212431					
	01347	452760633025					
	01350	602531264546					
	01351	606321224325					
	01352	602651464460					
	01353	245164446004					
	01354	336060606060					
	01355	606060606060				BCD	
	01356	606060606060					
	01357	606060606060					
	01360	606060606060					
	01361	606060606060					
	01362	606060606060					
	01363	606060606060					
	01364	606060606060					
	01365	606060606060					

01366	606060606060		
01367	633025602451		BCD THE DRUM ADDRESS OF THE FIRST ENTRY IS 4. THE TABLE IS COPI
01370	644460212424		
01371	512562626046		
01372	266063302560		
01373	263151626360		
01374	254563517060		
01375	316260043360		
01376	606330256063		
01377	212243256031		
01400	626023464731		
01401	252460314563		BCD 1ED INT
01402	606060604660	PR1	BCD 1 O
01403	602145246031		BCD 1 AND I
01404	606060606062	PR2	BCD 1 S
01405	606646512462		BCD 6 WORDS LONG.
01406	604346452733		
01407	606060606060		
01410	606060606060		
01411	606060606060		
01412	606060606060		
01413	633025602451		BCD THE DRUM CHECK SUM IS IN 533. THE COMPUTED CHECK SUM IS NOT
01414	644460233025		
01415	234260626444		
01416	603162603145		
01417	600503033360		
01420	606330256023		
01421	464447646325		
01422	246023302523		
01423	426062644460		
01424	316260454663		
01425	606263465125		BCD STORED, THEREFORE IT IS NOT AVAILABLE.
01426	247360633025		
01427	512526465125		
01430	603163603162		
01431	604546636021		
01432	652131432122		
01433	432533606060		
01434	606060606060		
01435	606060606060		
01436	606060606060		
01437	633025602346		BCD THE COPY LOOP BEGINS AT LOCATION 223.
01440	477060434646		
01441	476022252731		
01442	456260216360		
01443	434623216331		
01444	464560020203		
01445	336060606060		
01446	606060606060		
01447	606060606060		
01450	606060606060		
01451	606060606060		BCD
01452	606060606060		
01453	606060606060		

01454 606060606060
01455 606060606060
01456 606060606060
01457 606060606060
01460 606060606060
01461 606060606060
01462 606060606060
01463 263165256021
01464 636325444763
01465 626030216525
01466 602225254560
01467 442124256063
01470 466051252124
01471 606330256025
01472 312645466063
01473 212243256023
01474 465151252363
01475 437033606060
01476 606060606060
01477 606060606060
01500 606060606060
01501 606060606060
01502 606060606060
01503 606060606060
01504 606060606060
01505 606060606060
01506 606060606060
01507 606060606060
01510 606060606060
01511 606060606060
01512 606060606060
01513 606060606060
01514 606060606060
01515 606060606060
01516 606060606060
01517 606060606060
01520 606060606060
01521 606060606060
01522 606060606060
01523 606060606060
01524 606060606060
01525 606060606060
01526 606060606060
01527 606060606060
01530 606060606060
01531 606060606060
01532 606060606060
01533 314560465124
01534 255160634660
01535 232143436031
01536 456063303162
01537 602431212745
01540 466263312360
01541 663163304664

BCD FIVE ATTEMPTS HAVE BEEN MADE TO READ THE EIFNO TABLE CORRECT

BCD LY.

BCD

BCD

BCD IN ORDER TO CALL IN THIS DIAGNOSTIC WITHOUT DISTURBING CORES

01542 636024316263
01543 645122314527
01544 602346512562
01545 736002000410
01546 606646512462
01547 604626604425
01550 444651706060
01551 606060606060
01552 606060606060
01553 606060606060
01554 606060606060
01555 606060606060
01556 606060606060
01557 302165256022
01560 252545605125
01561 212460464563
01562 466024516444
01563 600473602425
01564 626351467031
01565 452760633025
01566 602531264546
01567 606646512460
01570 234664456373
01571 606330256063
01572 212243257360
01573 214524603163
01574 626023302523
01575 426062644433
01576 606060606060
01577 606060606060
01600 606060606060
01601 606060606060
01602 606060606060
01603 442544465170
01604 606631434360
01605 222560512562
01606 634651252473
01607 602264636063
01610 302551256031
01611 626045466066
01612 217060634660
01613 234645263151
01614 446063302560
01615 233025234260
01616 626444602551
01617 514651604645
01620 606330256024
01621 516444336060
01622 606060606060
01623 606060606060
01624 606060606060
01625 606060606060
01626 606060606060
01627 0 00000 0 00000 X

BCD , 2048 WORDS OF MEMORY

BCD HAVE BEEN READ ONTO DRUM 4, DESTROYING THE EIFNO WORD COUNT,

BCD THE TABLE, AND ITS CHECK SUM.

BCD MEMORY WILL BE RESTORED, BUT THERE IS NO WAY TO CONFIRM THE

BCD CHECK SUM ERROR ON THE DRUM.

A 00000 END

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	59	0	0	0	0
LIB	0	0	0	0	0
COL	59	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 226

NUMBER OF SYMBOLS, DEF 201,DEFOP 0,UNDEF 0
ORG 57 FORCE NEW RECORD

	00071			00071	ORG 57	FORCE NEW RECORD		
	00071	0	01303	0	01437	HTR X-1,0,LOCREC	CARD FOR DE	
				01303	ORG LOCREC			
TD	01303	3	00000	0	00071	TXH 57	1274 FT 22	
	01304	0	07400	4	00740	TSX PRINT,4		
	01305	0	01244	0	01237	HTR MACHIN,0,MACHIN+5		
	01306	0	76200	0	00304	RDR 4		
	01307	0	46000	0	01322	LDA A		
	01310	0	70000	0	01257	CPY ERAS		
	01311	0	50200	0	01323	CLS OTA	FORM LOCATION OF FIRST WORD IN TABLE	
	01312	0	40000	0	01257	ADD ERAS		
	01313	0	07400	4	00730	TSX OCTBCD,4		
	01314	0	56000	0	00717	LDQ BLANKS		
	01315	-0	76300	0	00006	LGL 6		
	01316	0	60200	0	01363	SLW PR1		
	01317	0	07400	4	00740	TSX PRINT,4		
	01320	0	01440	0	01324	HTR PR,0,PR+76		
	01321	0	02000	0	00221	TRA DIGRTN		
	01322	0	00000	0	02350	A	HTR81256	LOCATION OF WORD COUNT OF FLOCON TABLE
T	01323	-0	75400	0	12515	OTA	PXD85453	ADDRESS OF LAST TABLE ENTRY PLUS ONE.
	01324	606060606060				PR	BCD 2	
	01325	606060606060						
	01326	233025234260						
	01327	626444602551						
	01330	514651603145						
	01331	605125212431						
	01332	452760264346						
	01333	234645606321						
	01334	224325602651						
	01335	464460245164						
	01336	446002336060						
	01337	234647706043						
	01340	464647602225						BCD OOP BEGINS AT LOCATION 1250.
	01341	273145626021						
	01342	636043462321						
	01343	633146456001						
	01344	020500336060						
	01345	606060606060						
	01346	606060606060						
	01347	606060606060						
	01350	606060606060						
	01351	606060606060						
	01352	626321516331						BCD 9STARTING DRUM ADDRESS IS IN 551. THE TABLE BEGINS AT
	01353	452760245164						
	01354	446021242451						
	01355	256262603162						
	01356	603145600505						
	01357	013360606063						
	01360	302560632122						
	01361	432560222527						
	01362	314562602163						
	01363	600102030460				PR1		BCD 1 1234
	01364	214524602346						BCD AND CONSISTS OF BLOCKS OF FIFTY WORDS,
	01365	456231626362						

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01366 604626602243
01367 462342626046
01370 266026312663
01371 706066465124
01372 627360606060
01373 606060606060
01374 606060606060
01375 606060606060
01376 252123306022
01377 434623426047
01400 512523252425
01401 246022706031
01402 636260466645
01403 602330252342
01404 606264443360
01405 602330252342
01406 606264444431
01407 452760316260
01410 244645256022
01411 706021242440
01412 214524402321
01413 515170404346
01414 273123214360
01415 214524602346
01416 444743254425
01417 456333606060
01420 606060606060
01421 606060606060
01422 316360316260
01423 454663606263
01424 465125243360
01425 602631652560
01426 216363254447
01427 636260302165
01430 256022252545
01431 604421242560
01432 634660512521
01433 246063302560
01434 254563315125
01435 606321224325
01436 602346515125
01437 236343703360
01440 0 00000 0 00000 X

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BCD EACH BLOCK PRECEDED BY ITS OWN CHECK SUM. CHECK SUMMING IS

BCD DONE BY ADD-AND-CARRY-LOGICAL AND COMPLEMENT.

BCD IT IS NOT STORED. FIVE ATTEMPTS HAVE BEEN MADE TO READ THE

BCD 4ENTIRE TABLE CORRECTLY.

A 00000 END

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	33	0	0	0	0
LIB	0	0	0	0	0
COL	33	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 107

NUMBER OF SYMBOLS, DEF 200,DEFOP 0,UNDEF 0
ORG 58 FORCE NEW RECORD

		00072	ORG 58	FORCE NEW RECORD
	00072	0 01303 0 01420	HTR X-1,0,LOCREC	CARD FOR DE
		01303	ORG LOCREC	
TD	01303	3 00000 0 00072	TXH 58	1345 FT 22
	01304	0 07400 4 00740	TSX PRINT,4	
	01305	0 01244 0 01237	HTR MACHIN,0,MACHIN+5	
	01306	0 07400 4 00740	TSX PRINT,4	
	01307	0 01421 0 01311	HTR PR,0,PR+72	
	01310	0 02000 0 00221	TRA DIGRTN	
	01311	606060606060	BCD 2	
	01312	606060606060		
	01313	233025234260	BCD CHECK SUM ERROR IN READING DIM1 TABLE FROM DRUM 3. COPY LOO	
	01314	6264444602551		
	01315	514651603145		
	01316	605125212431		
	01317	452760243144		
	01320	016063212243		
	01321	256026514644		
	01322	602451644460		
	01323	033360602346		
	01324	477060434646		
	01325	476022252731	BCD P BEGINS AT LOCATION 1316. STARTING DRUM	
	01326	456260216360		
	01327	434623216331		
	01330	464560010301		
	01331	063360606263		
	01332	215163314527		
	01333	602451644460		
	01334	606060606060		
	01335	606060606060		
	01336	606060606060		
	01337	212424512562	BCD ADDRESS IS IN 614. THE TABLE IS COMPOSED OF TWO WORD ENTRIE	
	01340	626031626031		
	01341	456006010433		
	01342	606063302560		
	01343	632122432560		
	01344	316260234644		
	01345	474662252460		
	01346	462660636646		
	01347	606646512460		
	01350	254563513125		
	01351	627360252123	BCD S, EACH ENTRY FOLLOWED BY ITS OWN CHECK SUM.	
	01352	306025456351		
	01353	706026464343		
	01354	466625246022		
	01355	706031636260		
	01356	466645602330		
	01357	252342606264		
	01360	443360606060		
	01361	606060606060		
	01362	606060606060		
	01363	233025234260	BCD CHECK SUMMING IS DONE BY ADD-AND-CARRY-LOGICAL AND COMPLEMEN	
	01364	626444443145		
	01365	276031626024		


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01366 464525602270
01367 602124244021
01370 452440232151
01371 517040434627
01372 312321436021
01373 452460234644
01374 474325442545
01375 633360603163
01376 603162604546
01377 636062634651
01400 252433606026
01401 316525602163
01402 632544476362
01403 606060606060
01404 606060606060
01405 606060606060
01406 606060606060
01407 302165256022
01410 252545604421
01411 242560634660
01412 512521246063
01413 302560254563
01414 315125606321
01415 224325602346
01416 515125236343
01417 703360606060
01420 606060606060
01421 0 00000 0 00000 X
A          00000

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BCD T. IT IS NOT STORED. FIVE ATTEMPTS

BCD HAVE BEEN MADE TO READ THE ENTIRE TABLE CORRECTLY.

END

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	20	0	0	0	0
LIB	0	0	0	0	0
COL	20	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 92

NUMBER OF SYMBOLS, DEF 197,DEFOP 0,UNDEF 0
 ORG 59 FORCE NEW RECORD

			00073	ORG 59	FORCE NEW RECORD
	00073	0	01303 0 01420	HTR X-1,0,LOCREC	CARD FOR DE
			01303	ORG LOCREC	
TD	01303	3	00000 0 00073	TXH 59	1377 FT 22
	01304	0	07400 4 00740	TSX PRINT,4	
	01305	0	01244 0 01237	HTR MACHIN,0,MACHIN+5	
	01306	0	07400 4 00740	TSX PRINT,4	
	01307	0	01421 0 01311	HTR PR,0,PR+72	
	01310	0	02000 0 00221	TRA DIGRTN	
	01311	606060606060		BCD 2	
	01312	606060606060	PR		
	01313	233025234260		BCD CHECK SUM ERROR IN READING DIM2 TABLE FROM DRUM 3. COPY LOO	
	01314	6264444602551			
	01315	514651603145			
	01316	605125212431			
	01317	452760243144			
	01320	026063212243			
	01321	256026514644			
	01322	602451644460			
	01323	033360602346			
	01324	477060434646			
	01325	476022252731		BCD P BEGINS AT LOCATION 1350. STARTING DRUM	
	01326	456260216360			
	01327	434623216331			
	01330	464560010305			
	01331	003360606263			
	01332	215163314527			
	01333	602451644460			
	01334	606060606060			
	01335	606060606060			
	01336	606060606060			
	01337	212424512562		BCD ADDRESS IS IN 621. THE TABLE IS COMPOSED OF TWO WORD ENTRIE	
	01340	626031626031			
	01341	456006020133			
	01342	606063302560			
	01343	632122432560			
	01344	316260234644			
	01345	474662252460			
	01346	462660636646			
	01347	606646512460			
	01350	254563513125			
	01351	627360252123		BCD S, EACH ENTRY FOLLOWED BY ITS OWN CHECK SUM.	
	01352	306025456351			
	01353	706026464343			
	01354	466625246022			
	01355	706031636260			
	01356	466645602330			
	01357	252342606264			
	01360	443360606060			
	01361	606060606060			
	01362	606060606060			
	01363	233025234260		BCD CHECK SUMMING IS DONE BY AN ADD-AND-CARRY-LOGICAL AND COMPLE	
	01364	626444443145			
	01365	276031626024			

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01366 464525602270
01367 602145602124
01370 244021452440
01371 232151517040
01372 434627312321
01373 436021452460
01374 234644474325
01375 442545633360
01376 603163603162
01377 604546636062
01400 634651252433
01401 606026316525
01402 602163632544
01403 476362606060
01404 606060606060
01405 606060606060
01406 606060606060
01407 302165256022
01410 252545604421
01411 242560634660
01412 512521246063
01413 302560254563
01414 315125606321
01415 224325602346
01416 515125236343
01417 703360606060
01420 606060606060
01421 0 00000 0 00000 X
A          00000

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BCD MENT. IT IS NOT STORED. FIVE ATTEMPTS

BCD HAVE BEEN MADE TO READ THE ENTIRE TABLE CORRECTLY.

END

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	20	0	0	0	0
LIB	0	0	0	0	0
COL	20	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 92

NUMBER OF SYMBOLS, DEF 197,DEFOP 0,UNDEF 0
 ORG 60 FORCE NEW RECORD

			00074	ORG 60	FORCE NEW RECORD
	00074	0	01303 0 01420	HTR X-1,0,LOCREC	CARD FOR DE
			01303	ORG LOCREC	
TD	01303	3	00000 0 00074	TXH 60	1444 FT 22
	01304	0	07400 4 00740	TSX PRINT,4	
	01305	0	01244 0 01237	HTR MACHIN,0,MACHIN+5	
	01306	0	07400 4 00740	TSX PRINT,4	
	01307	0	01421 0 01311	HTR PR,0,PR+72	
	01310	0	02000 0 00221	TRA DIGRTN	
	01311	606060606060	PR	BCD 2	
	01312	606060606060			
	01313	233025234260		BCD CHECK SUM ERROR IN READING DIM3 TABLE FROM DRUM 3. COPY LOO	
	01314	6264444602551			
	01315	514651603145			
	01316	605125212431			
	01317	452760243144			
	01320	036063212243			
	01321	256026514644			
	01322	602451644460			
	01323	033360602346			
	01324	477060434646			
	01325	476022252731		BCD P BEGINS AT LOCATION 1413. STARTING DRUM	
	01326	456260216360			
	01327	434623216331			
	01330	464560010401			
	01331	033360606263			
	01332	215163314527			
	01333	602451644460			
	01334	606060606060			
	01335	606060606060			
	01336	606060606060			
	01337	212424512562		BCD ADDRESS IS IN 626. THE TABLE IS COMPOSED OF THREE WORD ENTR	
	01340	626031626031			
	01341	456006020633			
	01342	606063302560			
	01343	632122432560			
	01344	316260234644			
	01345	474662252460			
	01346	462660633051			
	01347	252560664651			
	01350	246025456351			
	01351	312562736025		BCD IES, EACH ENTRY FOLLOWED BY ITS OWN CHECK SUM.	
	01352	212330602545			
	01353	635170602646			
	01354	434346662524			
	01355	602270603163			
	01356	626046664560			
	01357	233025234260			
	01360	626444336060			
	01361	606060606060			
	01362	606060606060			
	01363	233025234260		BCD CHECK SUMMING IS DONE BY AN ADD-AND-CARRY-LOGICAL AND COMPLE	
	01364	626444443145			
	01365	276031626024			

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01366 464525602270
01367 602145602124
01370 244021452440
01371 232151517040
01372 434627312321
01373 436021452460
01374 234644474325
01375 442545633360
01376 603163603162
01377 604546636062
01400 634651252433
01401 606026316525
01402 602163632544
01403 476362606060
01404 606060606060
01405 606060606060
01406 606060606060
01407 302165256022
01410 252545604421
01411 242560634660
01412 512521246063
01413 302560254563
01414 315125606321
01415 224325602346
01416 515125236343
01417 703360606060
01420 606060606060
01421 0 00000 0 00000 X

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BCD MENT. IT IS NOT STORED. FIVE ATTEMPTS

BCD HAVE BEEN MADE TO READ THE ENTIRE TABLE CORRECTLY.

A 00000 END

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	20	0	0	0	0
LIB	0	0	0	0	0
COL	20	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 92

NUMBER OF SYMBOLS, DEF 197,DEFOP 0,UNDEF 0
 ORG 61 FORCE NEW RECORD

			00075		ORG 61	FORCE NEW RECORD	
	00075	0	01303	0	01350	HTR X-1,0,LOCREC	CARD FOR DE
			01303			ORG LOCREC	
TD	01303	3	00000	0	00075	TXH 61	1031 FT 24
	01304	0	07400	4	00740	TSX PRINT,4	
	01305	0	01244	0	01237	HTR MACHIN,0,MACHIN+5	
	01306	0	07400	4	00740	TSX PRINT,4	
	01307	0	01351	0	01311	HTR PR,0,PR+32	
	01310	0	02000	0	00221	TRA DIGRTN	
	01311	60606060606060				BCD 2	
	01312	60606060606060					
	01313	632147256023				BCD TAPE CHECK IN READING TIFGO TABLE, TAPE 2, FILE 5, RECORD 6.	
	01314	302523426031					
	01315	456051252124					
	01316	314527606331					
	01317	262746606321					
	01320	224325736063					
	01321	214725600273					
	01322	602631432560					
	01323	057360512523					
	01324	465124600633					
	01325	606023464770				BCD COPY LOOP BEGINS AT LOCATION 771.	
	01326	604346464760					
	01327	222527314562					
	01330	602163604346					
	01331	232163314645					
	01332	600707013360					
	01333	60606060606060					
	01334	60606060606060					
	01335	60606060606060					
	01336	60606060606060					
	01337	263165256021				BCD FIVE ATTEMPTS HAVE BEEN MADE TO READ THIS RECORD CORRECTLY.	
	01340	636325444763					
	01341	626030216525					
	01342	602225254560					
	01343	442124256063					
	01344	466051252124					
	01345	606330316260					
	01346	512523465124					
	01347	602346515125					
	01350	236343703360					
	01351	0	00000	0	00000	X	
A			00000				END

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	16	0	0	0	0
LIB	0	0	0	0	0
COL	16	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 52

NUMBER OF SYMBOLS, DEF 197,DEFOP 0,UNDEF 0
ORG 62 FORCE NEW RECORD

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00076 0 01303 0 01350 00076 ORG 62 FORCE NEW RECORD
01303 3 00000 0 00076 HTR X-1,0,LOCREC CARD FOR DE
01304 0 07400 4 00740 01303 ORG LOCREC
01305 0 01244 0 01237 TXH 62 1221 FT 22
01306 0 07400 4 00740 TSX PRINT,4
01307 0 01351 0 01311 HTR MACHIN,0,MACHIN+5
01310 0 02000 0 00221 TSX PRINT,4
01311 60606060606060 PR TRA PR,0,PR+32
01312 60606060606060 BCD 2
01313 632147256023 BCD TAPE CHECK IN READING A CIT RECORD FROM TAPE 3. COPY LOOP B
01314 302523426031
01315 456051252124
01316 314527602160
01317 233163605125
01320 234651246026
01321 514644606321
01322 472560033360
01323 602346477060
01324 434646476022
01325 252731456260 BCD EGINS AT LOCATION 1173.
01326 216360434623
01327 216331464560
01330 010107033360
01331 606060606060
01332 606060606060
01333 606060606060
01334 606060606060
01335 606060606060
01336 606060606060
01337 263165256021 BCD FIVE ATTEMPTS HAVE BEEN MADE TO READ THIS RECORD CORRECTLY.
01340 636325444763
01341 626030216525
01342 602225254560
01343 442124256063
01344 466051252124
01345 606330316260
01346 512523465124
01347 602346515125
01350 236343703360
01351 0 00000 0 00000 X
A 00000 END

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SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	16	0	0	0	0
LIB	0	0	0	0	0
COL	16	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 52

NUMBER OF SYMBOLS, DEF 197,DEFOP 0,UNDEF 0
ORG 63 FORCE NEW RECORD

			00077	ORG 63	FORCE NEW RECORD	
	00077	0	01303 0	01422	HTR X-1,0,LOCREC	CARD FOR DE
			01303	ORG LOCREC		
TD	01303	3	00000 0	00077	TXH 63	7720 FT 21
	01304	0	07400 4	00740	TSX PRINT,4	
	01305	0	01244 0	01237	HTR MACHIN,0,MACHIN+5	
	01306	0	07400 4	00740	TSX PRINT,4	
	01307	0	01423 0	01311	HTR PR,0,PR+74	
	01310	0	02000 0	00221	TRA DIGRTN	
	01311	606060606060			BCD 2	
	01312	606060606060				
	01313	632147256023			BCD TAPE CHECK IN READING A RECORD FROM TAPE 2.	THIS RECORD IS
	01314	302523426031				
	01315	456051252124				
	01316	314527602160				
	01317	512523465124				
	01320	602651464460				
	01321	632147256002				
	01322	336060633031				
	01323	626051252346				
	01324	512460316260				
	01325	216063212243			BCD A TABLE ASSEMBLED BY SECTION 1 PRIME	
	01326	256021626225				
	01327	442243252460				
	01330	227060622523				
	01331	633146456001				
	01332	604751314425				
	01333	606060606060				
	01334	606060606060				
	01335	606060606060				
	01336	606060606060				
	01337	265146446025			BCD FROM ENTRIES ON TAPE 3 INTO A BUFFER AND WRITTEN ON TAPE 2.	
	01340	456351312562				
	01341	604645606321				
	01342	472560036031				
	01343	456346602160				
	01344	226426262551				
	01345	602145246066				
	01346	513163632545				
	01347	604645606321				
	01350	472560023360				
	01351	606264225146			BCD SUBROUTINE WHICH WRITES THE TAPE BEGINS AT	
	01352	646331452560				
	01353	663031233060				
	01354	665131632562				
	01355	606330256063				
	01356	214725602225				
	01357	273145626021				
	01360	636060606060				
	01361	606060606060				
	01362	606060606060				
	01363	434623216331			BCD LOCATION 7656.	THE RECORD HAS BEEN READ BACK INTO LOCATION
	01364	464560070605				
	01365	063360606330				

```

01366 256051252346
01367 512460302162
01370 602225254560
01371 512521246022
01372 212342603145
01373 634660434623
01374 216331464560
01375 070603026021
01376 452460633025
01377 605163636031
01400 456263516423
01401 633146456030
01402 216260262131
01403 432524606060
01404 606060606060
01405 606060606060
01406 606060606060
01407 252123306063
01410 314425336060
01411 263165256021
01412 636325444763
01413 626030216525
01414 602225254560
01415 442124256063
01416 466066513163
01417 256063303162
01420 605125234651
01421 246023465151
01422 252363437033
01423 0 00000 0 00000 X

```

BCD 7632 AND THE RTT INSTRUCTION HAS FAILED

BCD EACH TIME. FIVE ATTEMPTS HAVE BEEN MADE TO WRITE THIS RECOR

BCD 2D CORRECTLY.

A 00000 00000 END

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	21	0	0	0	0
LIB	0	0	0	0	0
COL	21	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 94

NUMBER OF SYMBOLS, DEF 197,DEFOP 0,UNDEF 0
 ORG 64 FORCE NEW RECORD

			00100	ORG 64	FORCE NEW RECORD	
	00100	0	01303 0	01422	HTR X-1,0,LOCREC	CARD FOR DE
			01303	ORG LOCREC		
TD	01303	3	00000 0	00100	TXH 64	7627 FT 21
	01304	0	07400 4	00740	TSX PRINT,4	
	01305	0	01244 0	01237	HTR MACHIN,0,MACHIN+5	
	01306	0	07400 4	00740	TSX PRINT,4	
	01307	0	01423 0	01311	HTR PR,0,PR+74	
	01310	0	02000 0	00221	TRA DIGRTN	
	01311	606060606060			BCD 2	
	01312	606060606060				
	01313	632147256023			BCD TAPE CHECK IN READING A RECORD FROM TAPE 4.	THIS RECORD IS
	01314	302523426031				
	01315	456051252124				
	01316	314527602160				
	01317	512523465124				
	01320	602651464460				
	01321	632147256004				
	01322	336060633031				
	01323	626051252346				
	01324	512460316260			BCD A TABLE IDENTIFICATION WORD AND AN ENTRY	
	01325	216063212243				
	01326	256031242545				
	01327	633126312321				
	01330	633146456066				
	01331	465124602145				
	01332	246021456025				
	01333	456351706060				
	01334	606060606060				
	01335	606060606060				
	01336	606060606060				
	01337	442124256022			BCD MADE BY SECTION 1 ON TAPE 4.	SECTION 1 PRIME IS ATTEMPTING
	01340	706062252363				
	01341	314645600160				
	01342	464560632147				
	01343	256004336060				
	01344	622523633146				
	01345	456001604751				
	01346	314425603162				
	01347	602163632544				
	01350	476331452760				
	01351	634660476463			BCD TO PUT ALL THE SIMILAR ENTRIES INTO ONE	
	01352	602143436063				
	01353	302560623144				
	01354	314321516025				
	01355	456351312562				
	01356	603145634660				
	01357	464525606060				
	01360	606060606060				
	01361	606060606060				
	01362	606060606060				
	01363	226426262551			BCD BUFFER BEFORE WRITING THE TABLE ON TAPE 2.	COPY LOOP BEGINS
	01364	602225264651				
	01365	256066513163				

01366 314527606330
 01367 256063212243
 01370 256046456063
 01371 214725600233
 01372 606023464770
 01373 604346464760
 01374 222527314562
 01375 602163604346
 01376 232163314645
 01377 600705050033
 01400 606051252346
 01401 512460312425
 01402 456331263123
 01403 216331464560
 01404 606060606060
 01405 606060606060
 01406 606060606060
 01407 316260216360
 01410 070603013360
 01411 602631652560
 01412 216363254447
 01413 636260302165
 01414 256022252545
 01415 604421242560
 01416 634660512521
 01417 246063303162
 01420 605125234651
 01421 246023465151
 01422 252363437033
 01423 0 00000 0 00000 X
 A 00000

BCD AT LOCATION 7550. RECORD IDENTIFICATION

BCD IS AT 7631. FIVE ATTEMPTS HAVE BEEN MADE TO READ THIS RECOR

BCD 2D CORRECTLY.

END

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	21	0	0	0	0
LIB	0	0	0	0	0
COL	21	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 94

NUMBER OF SYMBOLS, DEF 197,DEFOP 0,UNDEF 0
 ORG 65 FORCE NEW RECORD

```

00101          00101          ORG 65          FORCE NEW RECORD
00101 0 01303 0 01350      HTR X-1,0,LOCREC      CARD FOR DE
                                01303          ORG LOCREC
TD 01303 3 00000 0 00101      TXH 65          61 FT 47
01304 0 07400 4 00740      TSX PRINT,4
01305 0 01244 0 01237      HTR MACHIN,0,MACHIN+5
01306 0 07400 4 00740      TSX PRINT,4
01307 0 01351 0 01311      HTR PR,0,PR+32
01310 0 02000 0 00221      TRA DIGRTN
01311 60606060606060        PR          BCD 2
01312 60606060606060
01313 632147256023          BCD TAPE CHECK IN READING 2 WORD RECORD FROM TAPE 2, FILE 7. CO
01314 302523426031
01315 456051252124
01316 314527600260
01317 664651246051
01320 252346512460
01321 265146446063
01322 214725600273
01323 602631432560
01324 073360602346
01325 477060434646        BCD PY LOOP IS AT LOCATION 30.
01326 476031626021
01327 636043462321
01330 633146456003
01331 003360606060
01332 606060606060
01333 606060606060
01334 606060606060
01335 606060606060
01336 606060606060
01337 263165256021        BCD FIVE ATTEMPTS HAVE BEEN MADE TO READ THIS RECORD CORRECTLY.
01340 636325444763
01341 626030216525
01342 602225254560
01343 442124256063
01344 466051252124
01345 606330316260
01346 512523465124
01347 602346515125
01350 236343703360
01351 0 00000 0 00000 X
A          00000          END

```

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	16	0	0	0	0
LIB	0	0	0	0	0
COL	16	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 52

NUMBER OF SYMBOLS, DEF 197,DEFOP 0,UNDEF 0
ORG 66 FORCE NEW RECORD

```

00102          00102          ORG 66          FORCE NEW RECORD
00102 0 01303 0 01350      HTR X-1,0,LOCREC      CARD FOR DE
          01303          ORG LOCREC
TD 01303 3 00000 0 00102      TXH 66          116 FT 53
          66          132 FT 53
01304 0 07400 4 00740      TSX PRINT,4
01305 0 01244 0 01237      HTR MACHIN,0,MACHIN+5
01306 0 07400 4 00740      TSX PRINT,4
01307 0 01351 0 01311      HTR PR,0,PR+32
01310 0 02000 0 00221      TRA DIGRTN
01311 60606060606060        PR      BCD 2
01312 60606060606060
01313 632147256023          BCD TAPE CHECK IN READING RECORD FROM TAPE 3, FILE 1. COPY LOOP
01314 302523426031
01315 456051252124
01316 314527605125
01317 234651246026
01320 514644606321
01321 472560037360
01322 263143256001
01323 336060234647
01324 706043464647
01325 603162602163          BCD IS AT LOCATION 51.
01326 604346232163
01327 314645600501
01330 336060606060
01331 606060606060
01332 606060606060
01333 606060606060
01334 606060606060
01335 606060606060
01336 606060606060
01337 263165256021          BCD FIVE ATTEMPTS HAVE BEEN MADE TO READ THIS RECORD CORRECTLY.
01340 636325444763
01341 626030216525
01342 602225254560
01343 442124256063
01344 466051252124
01345 606330316260
01346 512523465124
01347 602346515125
01350 236343703360
01351 0 00000 0 00000 X
A          00000          END

```

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	17	0	0	0	0
LIB	0	0	0	0	0
COL	17	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 53

NUMBER OF SYMBOLS, DEF 197, DEFOP 0, UNDEF 0
ORG 67 FORCE NEW RECORD

			00103	ORG 67	FORCE NEW RECORD
	00103	0	01303 0 01350	HTR X-1,0,LOCREC	CARD FOR DE
			01303	ORG LOCREC	
TD	01303	3	00000 0 00103	TXH 67	4026 FT 51
	01304	0	07400 4 00740	TSX PRINT,4	
	01305	0	01244 0 01237	HTR MACHIN,0,MACHIN+5	
	01306	0	07400 4 00740	TSX PRINT,4	
	01307	0	01351 0 01311	HTR PR,0,PR+32	
	01310	0	02000 0 00221	TRA DIGRTN	
	01311	606060606060	PR	BCD 2	
	01312	606060606060			
	01313	632147256023		BCD TAPE CHECK IN READING RECORD FROM TAPE 2, FILE 6. COPY LOOP	
	01314	302523426031			
	01315	456051252124			
	01316	314527605125			
	01317	234651246026			
	01320	514644606321			
	01321	472560027360			
	01322	263143256006			
	01323	336060234647			
	01324	706043464647			
	01325	603162602163		BCD IS AT LOCATION 4012.	
	01326	604346232163			
	01327	314645600400			
	01330	010233606060			
	01331	606060606060			
	01332	606060606060			
	01333	606060606060			
	01334	606060606060			
	01335	606060606060			
	01336	606060606060			
	01337	263165256021		BCD FIVE ATTEMPTS HAVE BEEN MADE TO READ THIS RECORD CORRECTLY.	
	01340	636325444763			
	01341	626030216525			
	01342	602225254560			
	01343	442124256063			
	01344	466051252124			
	01345	606330316260			
	01346	512523465124			
	01347	602346515125			
	01350	236343703360			
	01351	0 00000 0 00000 X			
A		00000		END	

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	16	0	0	0	0
LIB	0	0	0	0	0
COL	16	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 52

NUMBER OF SYMBOLS, DEF 197, DEFOP 0, UNDEF 0
ORG 68 FORCE NEW RECORD

```

00104          00104          ORG 68          FORCE NEW RECORD
00104 0 01303 0 01350      HTR X-1,0,LOCREC      CARD FOR DE
                                01303          ORG LOCREC
TD 01303 3 00000 0 00104      TXH 68          4054 FT 51
01304 0 07400 4 00740      TSX PRINT,4
01305 0 01244 0 01237      HTR MACHIN,0,MACHIN+5
01306 0 07400 4 00740      TSX PRINT,4
01307 0 01351 0 01311      HTR PR,0,PR+32
01310 0 02000 0 00221      TRA DIGRTN
01311 60606060606060        PR          BCD 2
01312 60606060606060
01313 632147256023          BCD TAPE CHECK IN READING TAGTAG RECORD FROM TAPE 4, FILE 2. CO
01314 302523426031
01315 456051252124
01316 314527606321
01317 276321276051
01320 252346512460
01321 265146446063
01322 214725600473
01323 602631432560
01324 023360602346
01325 477060434646        BCD PY LOOP IS AT LOCATION 4027.
01326 476031626021
01327 636043462321
01330 633146456004
01331 000207336060
01332 606060606060
01333 606060606060
01334 606060606060
01335 606060606060
01336 606060606060
01337 263165256021        BCD FIVE ATTEMPTS HAVE BEEN MADE TO READ THIS RECORD CORRECTLY.
01340 636325444763
01341 626030216525
01342 602225254560
01343 442124256063
01344 466051252124
01345 606330316260
01346 512523465124
01347 602346515125
01350 236343703360
01351 0 00000 0 00000 X
A          00000          END

```

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	16	0	0	0	0
LIB	0	0	0	0	0
COL	16	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 52

NUMBER OF SYMBOLS, DEF 197,DEFOP 0,UNDEF 0
ORG 69 FORCE NEW RECORD

			00105		ORG 69	FORCE NEW RECORD	
	00105	0	01303	0	01350	HTR X-1,0,LOCREC	CARD FOR DE
			01303			ORG LOCREC	
TD	01303	3	00000	0	00105	TXH 69	4155 FT 34
	01304	0	07400	4	00740	TSX PRINT,4	
	01305	0	01244	0	01237	HTR MACHIN,0,MACHIN+5	
	01306	0	07400	4	00740	TSX PRINT,4	
	01307	0	01351	0	01311	HTR PR,0,PR+32	
	01310	0	02000	0	00221	TRA DIGRTN	
	01311	60606060606060				BCD 2	
	01312	60606060606060					
	01313	632147256023				BCD TAPE CHECK IN READING DOTAG RECORD FROM TAPE 3, FILE 1. COP	
	01314	302523426031					
	01315	456051252124					
	01316	314527602446					
	01317	632127605125					
	01320	234651246026					
	01321	514644606321					
	01322	472560037360					
	01323	263143256001					
	01324	336060234647					
	01325	706043464647				BCD Y LOOP IS AT LOCATION 4116.	
	01326	603162602163					
	01327	604346232163					
	01330	314645600401					
	01331	010633606060					
	01332	606060606060					
	01333	606060606060					
	01334	606060606060					
	01335	606060606060					
	01336	606060606060					
	01337	263165256021				BCD FIVE ATTEMPTS HAVE BEEN MADE TO READ THIS RECORD CORRECTLY.	
	01340	636325444763					
	01341	626030216525					
	01342	602225254560					
	01343	442124256063					
	01344	466051252124					
	01345	606330316260					
	01346	512523465124					
	01347	602346515125					
	01350	236343703360					
	01351	0	00000	0	00000	X	
A			00000				END

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	16	0	0	0	0
LIB	0	0	0	0	0
COL	16	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 52

NUMBER OF SYMBOLS, DEF 197,DEFOP 0,UNDEF 0
ORG 70 FORCE NEW RECORD

```

00106          00106          ORG 70          FORCE NEW RECORD
00106 0 01303 0 01350      HTR X-1,0,LOCREC      CARD FOR DE
                                01303          ORG LOCREC
TD 01303 3 00000 0 00106      TXH 70          6744 FT 41
01304 0 07400 4 00740      TSX PRINT,4
01305 0 01244 0 01237      HTR MACHIN,0,MACHIN+5
01306 0 07400 4 00740      TSX PRINT,4
01307 0 01351 0 01311      HTR PR,0,PR+32
01310 0 02000 0 00221      TRA DIGRTN
01311 60606060606060        PR          BCD 2
01312 60606060606060
01313 314523465151          BCD INCORRECT RECORD TAPE 2, FILE 7. RECORD IS 2 WORDS, EACH IS
01314 252363605125
01315 234651246063
01316 214725600273
01317 602631432560
01320 073360605125
01321 234651246031
01322 626002606646
01323 512462736025
01324 212330603162
01325 605125234651          BCD RECORD COUNT OF FILE 6. RECORD HAS BEEN
01326 246023466445
01327 636046266026
01330 314325600633
01331 606051252346
01332 512460302162
01333 602225254560
01334 606060606060
01335 606060606060
01336 606060606060
01337 512521246006          BCD READ 6 TIMES AND FAILED EACH TIME TO FIND THE WORDS EQUAL.
01340 606331442562
01341 602145246026
01342 213143252460
01343 252123306063
01344 314425606346
01345 602631452460
01346 633025606646
01347 512462602550
01350 642143336060
01351 0 00000 0 00000 X
A          00000          END

```

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	16	0	0	0	0
LIB	0	0	0	0	0
COL	16	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 52

NUMBER OF SYMBOLS, DEF 197,DEFOP 0,UNDEF 0
ORG 71 FORCE NEW RECORD

			00107	ORG 71	FORCE NEW RECORD
	00107	0	01303 0 01350	HTR X-1,0,LOCREC	CARD FOR DE
			01303	ORG LOCREC	
TD	01303	3	00000 0 00107	TXH 71	6767 FT 39
	01304	0	07400 4 00740	TSX PRINT,4	
	01305	0	01244 0 01237	HTR MACHIN,0,MACHIN+5	
	01306	0	07400 4 00740	TSX PRINT,4	
	01307	0	01351 0 01311	HTR PR,0,PR+32	
	01310	0	02000 0 00221	TRA DIGRTN	
	01311	60606060606060		BCD 2	
	01312	60606060606060	PR		
	01313	632147256023		BCD TAPE CHECK IN READING DOTAG RECORD FROM TAPE 2, FILE 6. COP	
	01314	302523426031			
	01315	456051252124			
	01316	314527602446			
	01317	632127605125			
	01320	234651246026			
	01321	514644606321			
	01322	472560027360			
	01323	263143256006			
	01324	336060234647			
	01325	706043464647		BCD Y LOOP IS AT LOCATION 6730.	
	01326	603162602163			
	01327	604346232163			
	01330	314645600607			
	01331	030033606060			
	01332	606060606060			
	01333	606060606060			
	01334	606060606060			
	01335	606060606060			
	01336	606060606060			
	01337	263165256021		BCD FIVE ATTEMPTS HAVE BEEN MADE TO READ THIS RECORD CORRECTLY.	
	01340	636325444763			
	01341	626030216525			
	01342	602225254560			
	01343	442124256063			
	01344	466051252124			
	01345	606330316260			
	01346	512523465124			
	01347	602346515125			
	01350	236343703360			
	01351	0 00000 0 00000 X			
A		00000		END	

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	16	0	0	0	0
LIB	0	0	0	0	0
COL	16	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 52

NUMBER OF SYMBOLS, DEF 197, DEFOP 0, UNDEF 0
ORG 72 FORCE NEW RECORD

			00110	ORG 72	FORCE NEW RECORD	
	00110	0	01303 0	01413	HTR X-1,0,LOCREC	CARD FOR DE
			01303	ORG LOCREC		
TD	01303	3	00000 0	00110	TXH 72	7070 FT 36
	01304	0	07400 4	00740	TSX PRINT,4	
	01305	0	01244 0	01237	HTR MACHIN,0,MACHIN+5	
	01306	0	07400 4	00740	TSX PRINT,4	
	01307	0	01414 0	01311	HTR PR,0,PR+67	
	01310	0	02000 0	00221	TRA DIGRTN	
	01311	606060606060			BCD 2	
	01312	606060606060	PR			
	01313	632147256023			BCD TAPE CHECK IN READING DOTAG RECORD FROM TAPE 3, FILE 1. REC	
	01314	302523426031				
	01315	456051252124				
	01316	314527602446				
	01317	632127605125				
	01320	234651246026				
	01321	514644606321				
	01322	472560037360				
	01323	263143256001				
	01324	336060512523				
	01325	465124602346			BCD ORD CONTAINS A NUMBER OF 9 WORD ENTRIES.	
	01326	456321314562				
	01327	602160456444				
	01330	222551604626				
	01331	601160664651				
	01332	246025456351				
	01333	312562336060				
	01334	606060606060				
	01335	606060606060				
	01336	606060606060				
	01337	234647706043			BCD COPY LOOP AT LOCATION 7043 READS ONLY FIRST AND SECOND WORD	
	01340	464647602163				
	01341	604346232163				
	01342	314645600700				
	01343	040360512521				
	01344	246260464543				
	01345	706026315162				
	01346	636021452460				
	01347	622523464524				
	01350	606646512460				
	01351	462660252123			BCD OF EACH ENTRY, COPY AT LOCATION 7054 COPIES	
	01352	306025456351				
	01353	707360234647				
	01354	706021636043				
	01355	462321633146				
	01356	4560070000504				
	01357	602346473125				
	01360	626060606060				
	01361	606060606060				
	01362	606060606060				
	01363	466330255160			BCD OTHER 7 WORDS INTO ERASABLE STORAGE AND RETURNS TO 7043 FOR	
	01364	076066465124				
	01365	626031456346				

```

01366 602551216221
01367 224325606263
01370 465121272560
01371 214524605125
01372 636451456260
01373 634660070004
01374 036026465160
01375 452567636025      BCD NEXT ENTRY. FIVE ATTEMPTS HAVE BEEN MADE
01376 456351703360
01377 602631652560
01400 216363254447
01401 636260302165
01402 256022252545
01403 604421242560
01404 606060606060
01405 606060606060
01406 606060606060
01407 634660512521      BCD 5TO READ THIS RECORD CORRECTLY.
01410 246063303162
01411 605125234651
01412 246023465151
01413 252363437033
01414 0 00000 0 00000 X
A          00000      END

```

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	20	0	0	0	0
LIB	0	0	0	0	0
COL	20	0	0	0	0

```

NUMBER OF ON-LINE INPUT RECORDS      0
NUMBER OF OFF-LINE PRINT RECORDS     87
NUMBER OF SYMBOLS, DEF 197,DEFOP 0,UNDEF 0
          ORG 73          FORCE NEW RECORD

```

			00111	ORG 73	FORCE NEW RECORD		
	00111	0	01303	0	01554	HTR X-1,0,LOCREC	CARD FOR DE
			01303	ORG LOCREC			
TD	01303	3	00000	0	00111	TXH 73	7123 FT 27
	01304	0	07400	4	00740	TSX PRINT,4	
	01305	0	01244	0	01237	HTR MACHIN,0,MACHIN+5	
	01306	-0	53400	4	01232	LXD ZERO,4	
	01307	0	50000	0	07125	CLA 3669	7125 OCTAL
	01310	0	34000	4	01514	C	CAS TABLE,4
	01311	0	02000	0	01313	TRA A	
	01312	0	02000	0	01454	TRA HAVE	
	01313	1	00003	4	01314	A	TXI B,4,3
	01314	-3	00017	4	01310	B	TXL C,4,15
	01315	0	07400	4	00740	TSX PRINT,4	
	01316	0	01454	0	01320	HTR ER,0,ER+92	
	01317	0	00000	0	01472	HTR D	
	01320	60606060606060				ER	BCD 2
	01321	60606060606060					
	01322	434623216331					BCD LOCATION OF ERROR, WHICH HAS BEEN PRINTED, HAS CAUSED DIAGNO
	01323	464560462660					
	01324	255151465173					
	01325	606630312330					
	01326	603021626022					
	01327	252545604751					
	01330	314563252473					
	01331	603021626023					
	01332	216462252460					
	01333	243121274546					
	01334	626331236051					BCD STIC RECORD NUMBER 73
	01335	252346512460					
	01336	456444222551					
	01337	600703606060					
	01340	606060606060					
	01341	606060606060					
	01342	606060606060					
	01343	606060606060					
	01344	606060606060					
	01345	606060606060					
	01346	634660222560					BCD TO BE READ IN. THIS RECORD COMPARES THE IDENTIFICATION WORD
	01347	512521246031					
	01350	453360606330					
	01351	316260512523					
	01352	465124602346					
	01353	444721512562					
	01354	606330256031					
	01355	242545633126					
	01356	312321633146					
	01357	456066465124					
	01360	604626602160					BCD OF A TAPE RECORD, LOCATION 7125, TO A LIST
	01361	632147256051					
	01362	252346512473					
	01363	604346232163					
	01364	314645600701					
	01365	020573606346					

01366 602160433162
01367 636060606060
01370 606060606060
01371 606060606060
01372 462660066047
01373 466262312243
01374 256063214725
01375 603124254563
01376 312631232163
01377 314645606646
01400 512462736022
01401 646360633025
01402 606225215123
01403 306030216260
01404 262131432524
01405 336060632122
01406 432560312425
01407 456331263123
01410 216331464560
01411 664651246260
01412 606060606060
01413 606060606060
01414 606060606060
01415 606060606060
01416 215125603145
01417 600104060373
01420 600104060360
01421 474364626003
01422 736025632333
01423 606047512562
01424 626062632151
01425 636031266070
01426 466460663162
01427 306063466051
01430 256263465125
01431 604421233031
01432 452560634660
01433 234645243163
01434 314645603145
01435 606630312330
01436 606060606060
01437 606060606060
01440 606060606060
01441 606060606060
01442 255151465160
01443 462323645151
01444 252433606060
01445 606060606060
01446 606060606060
01447 606060606060
01450 606060606060
01451 606060606060
01452 606060606060
01453 606060606060

BCD OF 6 POSSIBLE TAPE IDENTIFICATION WORDS, BUT THE SEARCH HAS

BCD FAILED. TABLE IDENTIFICATION WORDS

BCD ARE IN 1463, 1463 PLUS 3, ETC. PRESS START IF YOU WISH TO R

BCD ESTORE MACHINE TO CONDITION IN WHICH

BCD ERROR OCCURRED.

01454	0	56000	4	01512	HAVE	LDQ	TABLE-2,4	
01455	-0	50000	0	01522		CAL	PR1	
01456	-0	76300	0	00014		LGL	12	
01457	0	60200	0	01522		SLW	PR1	
01460	-0	76300	0	00030		LGL	24	
01461	0	56000	0	01523		LDQ	PR2	
01462	-0	76300	0	00014		LGL	12	
01463	0	60200	0	01523		SLW	PR2	
01464	-0	50000	4	01513		CAL	TABLE-1,4	
01465	0	56000	0	01531		LDQ	PR3	
01466	-0	76300	0	00030		LGL	24	
01467	0	60200	0	01531		SLW	PR3	
01470	0	07400	4	00740		TSX	PRINT,4	
01471	0	01555	0	01515		HTR	PR,0,PR+32	
01472	0	02000	0	00221	D	TRA	DIGRTN	
01473	264651652143					BCD	1FORVAL	
01474	606060606011					BCD	1 9	NUMBER OF RECORD IN FILE 5
01475	0	00000	0	00006		HTR	6	IDENTIFICATION IN RECORD
01476	264651652151					BCD	1FORVAR	
01477	606060600100					BCD	1 10	
01500	0	00000	0	00005		HTR	5	
01501	264651632127					BCD	1FORTAG	
01502	606060600101					BCD	1 11	
01503	0	00000	0	00004		HTR	4	
01504	606351212460					BCD	1 TRAD	
01505	606060606007					BCD	1 7	
01506	0	00000	0	00003		HTR	3	
01507	606331262746					BCD	1 TIFGO	
01510	606060606006					BCD	1 6	
01511	0	00000	0	00002		HTR	2	
01512	606324466060					BCD	1 TDO	
01513	606060606010					BCD	1 8	
01514	0	00000	0	00001	TABLE	HTR	1	
01515	606060606060				PR	BCD	2	
01516	606060606060							
01517	632147256023					BCD	3TAPE CHECK IN READ	
01520	302523426031							
01521	456051252124							
01522	606031452760				PR1	BCD	1 ING	
01523	605160606060				PR2	BCD	1 R	
01524	252346512473					BCD	5ECORD, TAPE 2, FILE 5, RECORD	
01525	606321472560							
01526	027360263143							
01527	256005736051							
01530	252346512460							
01531	336060236060				PR3	BCD	1. C	
01532	464770604346					BCD	9OPY LOOP IS AT LOCATION 7066.	
01533	464760316260							
01534	216360434623							
01535	216331464560							
01536	070006063360							
01537	606060606060							
01540	606060606060							
01541	606060606060							

01542 606060606060
01543 263165256021
01544 636325444763
01545 626030216525
01546 602225254560
01547 442124256063
01550 466051252124
01551 606330316260
01552 512523465124
01553 602346515125
01554 236343703360
01555 0 00000 0 00000 X

BCD FIVE ATTEMPTS HAVE BEEN MADE TO READ THIS RECORD CORRECTLY.

A 00000 END

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	70	0	0	0	0
LIB	0	0	0	0	0
COL	70	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 184

NUMBER OF SYMBOLS, DEF 207,DEFOP 0,UNDEF 0
ORG 74 FORCE NEW RECORD

			00112	ORG 74	FORCE NEW RECORD
	00112	0	01303 0	01425	HTR X-1,0,LOCREC
			01303		CARD FOR DE
			00112	ORG LOCREC	
TD	01303	3	00000 0	00112	TXH 74
	01304	0	07400 4	00740	74 FT 56
	01305	0	01244 0	01237	TSX PRINT,4
	01306	0	07400 4	00740	HTR MACHIN,0,MACHIN+5
	01307	0	01426 0	01311	TSX PRINT,4
	01310	0	02000 0	00221	HTR PR,0,PR+77
	01311	60606060606060			TRA DIGRTN
	01312	60606060606060	PR		BCD 2
	01313	632147256023			BCD TAPE CHECK IN READING RECORD FROM TAPE 2. ERROR CHECKING IS
	01314	302523426031			
	01315	456051252124			
	01316	314527605125			
	01317	234651246026			
	01320	514644606321			
	01321	472560023360			
	01322	602551514651			
	01323	602330252342			
	01324	314527603162			
	01325	602163604346			BCD AT LOCATION 64, BUT THERE ARE
	01326	232163314645			
	01327	600604736022			
	01330	646360633025			
	01331	512560215125			
	01332	60606060606060			
	01333	60606060606060			
	01334	60606060606060			
	01335	60606060606060			
	01336	60606060606060			
	01337	036023464770			BCD 3 COPY LOOPS WHICH USE THIS CHECKING. LOCATION 30 TO READ T
	01340	604346464762			
	01341	606630312330			
	01342	606462256063			
	01343	303162602330			
	01344	252342314527			
	01345	336060434623			
	01346	216331464560			
	01347	030060634660			
	01350	512521246063			
	01351	302560016066			BCD HE 1 WORD RECORD IN FILE 7,
	01352	465124605125			
	01353	234651246031			
	01354	456026314325			
	01355	600773606060			
	01356	60606060606060			
	01357	60606060606060			
	01360	60606060606060			
	01361	60606060606060			
	01362	60606060606060			
	01363	434623216331			BCD LOCATION 43 TO READ FORTAG, THE 11TH RECORD IN FILE 5, OR LO
	01364	464560040360			
	01365	634660512521			

```

01366 246026465163
01367 212773606330
01370 256001016330
01371 605125234651
01372 246031456026
01373 314325600573
01374 604651604346
01375 232163314645
01376 600505076063
01377 466051252124
01400 602160016066
01401 465124606060
01402 606060606060
01403 606060606060
01404 606060606060
01405 606060606060
01406 606060606060
01407 512523465124
01410 603145602631
01411 432560033360
01412 602631652560
01413 216363254447
01414 636260302165
01415 256022252545
01416 604421242560
01417 634660512521
01420 246063303162
01421 605125234651
01422 246023465151
01423 252363437033
01424 606060606060
01425 606060606060
01426 0 00000 0 00000 X
A          00000

```

BCD CATION 557 TO READ A 1 WORD

BCD RECORD IN FILE 3. FIVE ATTEMPTS HAVE BEEN MADE TO READ THIS

BCD 5 RECORD CORRECTLY.

END

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	21	0	0	0	0
LIB	0	0	0	0	0
COL	21	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 97

NUMBER OF SYMBOLS, DEF 197,DEFOP 0,UNDEF 0
 ORG 75 FORCE NEW RECORD

```

00113          00113          ORG 75          FORCE NEW RECORD
00113 0 01303 0 01350      HTR X-1,0,LOCREC      CARD FOR DE
                                01303          ORG LOCREC
TD 01303 3 00000 0 00113      TXH 75          350 FT 58
01304 0 07400 4 00740      TSX PRINT,4
01305 0 01244 0 01237      HTR MACHIN,0,MACHIN+5
01306 0 07400 4 00740      TSX PRINT,4
01307 0 01351 0 01311      HTR PR,0,PR+32
01310 0 02000 0 00221      TRA DIGRTN
01311 60606060606060        PR          BCD 2
01312 60606060606060
01313 632147256023          BCD TAPE CHECK IN READING TIFGO RECORD FROM TAPE 2, FILE 5, RECO
01314 302523426031
01315 456051252124
01316 314527606331
01317 262746605125
01320 234651246026
01321 514644606321
01322 472560027360
01323 263143256005
01324 736051252346
01325 512460063360        BCD RD 6. COPY LOOP IS AT LOCATION 324.
01326 602346477060
01327 434646476031
01330 626021636043
01331 462321633146
01332 456003020433
01333 60606060606060
01334 60606060606060
01335 60606060606060
01336 60606060606060
01337 263165256021        BCD FIVE ATTEMPTS HAVE BEEN MADE TO READ THIS RECORD CORRECTLY.
01340 636325444763
01341 626030216525
01342 602225254560
01343 442124256063
01344 466051252124
01345 606330316260
01346 512523465124
01347 602346515125
01350 236343703360
01351 0 00000 0 00000 X
A          00000          END

```

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	16	0	0	0	0
LIB	0	0	0	0	0
COL	16	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 52

NUMBER OF SYMBOLS, DEF 197,DEFOP 0,UNDEF 0
ORG 76 FORCE NEW RECORD

```

00114          00114          ORG 76          FORCE NEW RECORD
00114 0 01303 0 01350      HTR X-1,0,LOCREC      CARD FOR DE
                                01303          ORG LOCREC
TD 01303 3 00000 0 00114      TXH 76          375 FT 58
01304 0 07400 4 00740      TSX PRINT,4
01305 0 01244 0 01237      HTR MACHIN,0,MACHIN+5
01306 0 07400 4 00740      TSX PRINT,4
01307 0 01351 0 01311      HTR PR,0,PR+32
01310 0 02000 0 00221      TRA DIGRTN
01311 60606060606060        PR          BCD 2
01312 60606060606060
01313 632147256023          BCD TAPE CHECK IN READING TRAD RECORD FROM TAPE 2, FILE 5, RECOR
01314 302523426031
01315 456051252124
01316 314527606351
01317 212460512523
01320 465124602651
01321 464460632147
01322 256002736026
01323 314325600573
01324 605125234651
01325 246007336060        BCD D 7. COPY LOOP IS AT LOCATION 352.
01326 234647706043
01327 464647603162
01330 602163604346
01331 232163314645
01332 600305023360
01333 60606060606060
01334 60606060606060
01335 60606060606060
01336 60606060606060
01337 263165256021        BCD FIVE ATTEMPTS HAVE BEEN MADE TO READ THIS RECORD CORRECTLY.
01340 636325444763
01341 626030216525
01342 602225254560
01343 442124256063
01344 466051252124
01345 606330316260
01346 512523465124
01347 602346515125
01350 236343703360
01351 0 00000 0 00000 X
A          00000          END

```

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	16	0	0	0	0
LIB	0	0	0	0	0
COL	16	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 52

NUMBER OF SYMBOLS, DEF 197,DEFOP 0,UNDEF 0
ORG 77 FORCE NEW RECORD

			00115	ORG 77	FORCE NEW RECORD
	00115	0	01303 0 01350	HTR X-1,0,LOCREC	CARD FOR DE
			01303	ORG LOCREC	
TD	01303	3	00000 0 00115	TXH 77	410 FT 58
	01304	0	07400 4 00740	TSX PRINT,4	
	01305	0	01244 0 01237	HTR MACHIN,0,MACHIN+5	
	01306	0	07400 4 00740	TSX PRINT,4	
	01307	0	01351 0 01311	HTR PR,0,PR+32	
	01310	0	02000 0 00221	TRA DIGRTN	
	01311	606060606060	PR	BCD 2	
	01312	606060606060			
	01313	632147256023		BCD TAPE CHECK IN READING THE FIRST WORD OF FILE 1, TAPE 4. COP	
	01314	302523426031			
	01315	456051252124			
	01316	314527606330			
	01317	256026315162			
	01320	636066465124			
	01321	604626602631			
	01322	432560017360			
	01323	632147256004			
	01324	336060234647			
	01325	706043464647		BCD Y LOOP IS AT LOCATION 401.	
	01326	603162602163			
	01327	604346232163			
	01330	314645600400			
	01331	013360606060			
	01332	606060606060			
	01333	606060606060			
	01334	606060606060			
	01335	606060606060			
	01336	606060606060			
	01337	263165256021		BCD FIVE ATTEMPTS HAVE BEEN MADE TO READ THIS ONE WORD CORRECTLY	
	01340	636325444763			
	01341	626030216525			
	01342	602225254560			
	01343	442124256063			
	01344	466051252124			
	01345	606330316260			
	01346	464525606646			
	01347	512460234651			
	01350	512523634370			
	01351	0 00000 0 00000 X			
A		00000		END	

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	16	0	0	0	0
LIB	0	0	0	0	0
COL	16	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 52

NUMBER OF SYMBOLS, DEF 197, DEFOP 0, UNDEF 0
ORG 78 FORCE NEW RECORD

```

00116          00116          ORG 78          FORCE NEW RECORD
00116 0 01303 0 01350      HTR X-1,0,LOCREC      CARD FOR DE
                                01303          ORG LOCREC
TD 01303 3 00000 0 00116      TXH 78          430 FT 58
01304 0 07400 4 00740      TSX PRINT,4
01305 0 01244 0 01237      HTR MACHIN,0,MACHIN+5
01306 0 07400 4 00740      TSX PRINT,4
01307 0 01351 0 01311      HTR PR,0,PR+32
01310 0 02000 0 00221      TRA DIGRTN
01311 6060606060606060      BCD 2
                                PR
01312 6060606060606060
01313 632147256023          BCD TAPE CHECK IN READING TRALEV RECORD FROM TAPE 4, FILE 1, REC
01314 302523426031
01315 456051252124
01316 314527606351
01317 214325656051
01320 252346512460
01321 265146446063
01322 214725600473
01323 602631432560
01324 017360512523
01325 465124600133          BCD ORD 1. COPY LOOP IS AT LOCATION 400.
01326 606023464770
01327 604346464760
01330 316260216360
01331 434623216331
01332 464560040000
01333 3360606060606060
01334 6060606060606060
01335 6060606060606060
01336 6060606060606060
01337 263165256021          BCD FIVE ATTEMPTS HAVE BEEN MADE TO READ THIS RECORD CORRECTLY.
01340 636325444763
01341 626030216525
01342 602225254560
01343 442124256063
01344 466051252124
01345 606330316260
01346 512523465124
01347 602346515125
01350 236343703360
01351 0 00000 0 00000 X
A                                00000      END

```

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	16	0	0	0	0
LIB	0	0	0	0	0
COL	16	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 52

NUMBER OF SYMBOLS, DEF 197, DEFOP 0, UNDEF 0
ORG 79 FORCE NEW RECORD

			00117	ORG 79	FORCE NEW RECORD
	00117	0	01303 0 01350	HTR X-1,0,LOCREC	CARD FOR DE
			01303	ORG LOCREC	
TD	01303	3	00000 0 00117	TXH 79	446 FT 58
	01304	0	07400 4 00740	TSX PRINT,4	
	01305	0	01244 0 01237	HTR MACHIN,0,MACHIN+5	
	01306	0	07400 4 00740	TSX PRINT,4	
	01307	0	01351 0 01311	HTR PR,0,PR+32	
	01310	0	02000 0 00221	TRA DIGRTN	
	01311	606060606060	PR	BCD 2	
	01312	606060606060			
	01313	632147256023		BCD TAPE CHECK IN READING TRALEV RECORD FROM TAPE 4, FILE 1, REC	
	01314	302523426031			
	01315	456051252124			
	01316	314527606351			
	01317	214325656051			
	01320	252346512460			
	01321	265146446063			
	01322	214725600473			
	01323	602631432560			
	01324	017360512523			
	01325	465124600233		BCD ORD 2. COPY LOOP IS AT LOCATION 432.	
	01326	606023464770			
	01327	604346464760			
	01330	316260216360			
	01331	434623216331			
	01332	464560040302			
	01333	336060606060			
	01334	606060606060			
	01335	606060606060			
	01336	606060606060			
	01337	263165256021		BCD FIVE ATTEMPTS HAVE BEEN MADE TO READ THIS RECORD CORRECTLY.	
	01340	636325444763			
	01341	626030216525			
	01342	602225254560			
	01343	442124256063			
	01344	466051252124			
	01345	606330316260			
	01346	512523465124			
	01347	602346515125			
	01350	236343703360			
	01351	0 00000 0 00000 X			
A		00000		END	

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	16	0	0	0	0
LIB	0	0	0	0	0
COL	16	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 52

NUMBER OF SYMBOLS, DEF 197, DEFOP 0, UNDEF 0
ORG 80 FORCE NEW RECORD

			00120		ORG 80	FORCE NEW RECORD	
	00120	0	01303	0	01350	HTR X-1,0,LOCREC	CARD FOR DE
			01303			ORG LOCREC	
TD	01303	3	00000	0	00120	TXH 80	510 FT 56
	01304	0	07400	4	00740	TSX PRINT,4	
	01305	0	01244	0	01237	HTR MACHIN,0,MACHIN+5	
	01306	0	07400	4	00740	TSX PRINT,4	
	01307	0	01351	0	01311	HTR PR,0,PR+32	
	01310	0	02000	0	00221	TRA DIGRTN	
	01311	60606060606060				BCD 2	
	01312	60606060606060					
	01313	632147256023				BCD TAPE CHECK IN READING CIT RECORD FROM TAPE 2. FILE 2. COPY	
	01314	302523426031					
	01315	456051252124					
	01316	314527602331					
	01317	636051252346					
	01320	512460265146					
	01321	446063214725					
	01322	600233602631					
	01323	432560023360					
	01324	602346477060					
	01325	434646476031				BCD LOOP IS AT LOCATION 506.	
	01326	626021636043					
	01327	462321633146					
	01330	456005000633					
	01331	60606060606060					
	01332	60606060606060					
	01333	60606060606060					
	01334	60606060606060					
	01335	60606060606060					
	01336	60606060606060					
	01337	263165256021				BCD FIVE ATTEMPTS HAVE BEEN MADE TO READ THIS RECORD CORRECTLY.	
	01340	636325444763					
	01341	626030216525					
	01342	602225254560					
	01343	442124256063					
	01344	466051252124					
	01345	606330316260					
	01346	512523465124					
	01347	602346515125					
	01350	236343703360					
	01351	0	00000	0	00000	X	
A			00000				END

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	16	0	0	0	0
LIB	0	0	0	0	0
COL	16	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 52

NUMBER OF SYMBOLS, DEF 197,DEFOP 0,UNDEF 0
ORG 81 FORCE NEW RECORD

```

00121          00121          ORG 81          FORCE NEW RECORD
00121 0 01303 0 01350      HTR X-1,0,LOCREC      CARD FOR DE
                                01303          ORG LOCREC
TD 01303 3 00000 0 00121      TXH 81          520 FT 56
01304 0 07400 4 00740      TSX PRINT,4
01305 0 01244 0 01237      HTR MACHIN,0,MACHIN+5
01306 0 07400 4 00740      TSX PRINT,4
01307 0 01351 0 01311      HTR PR,0,PR+32
01310 0 02000 0 00221      TRA DIGRTN
01311 60606060606060        PR          BCD 2
01312 60606060606060
01313 632147256023          BCD TAPE CHECK IN READING COMPDO RECORD FROM TAPE 4, FILE 2. CO
01314 302523426031
01315 456051252124
01316 314527602346
01317 444724466051
01320 252346512460
01321 265146446063
01322 214725600473
01323 602631432560
01324 023360602346
01325 477060434646        BCD PY LOOP IS AT LOCATION 516.
01326 476031626021
01327 636043462321
01330 633146456005
01331 010633606060
01332 606060606060
01333 606060606060
01334 606060606060
01335 606060606060
01336 606060606060
01337 263165256021        BCD FIVE ATTEMPTS HAVE BEEN MADE TO READ THIS RECORD CORRECTLY.
01340 636325444763
01341 626030216525
01342 602225254560
01343 442124256063
01344 466051252124
01345 606330316260
01346 512523465124
01347 602346515125
01350 236343703360
01351 0 00000 0 00000 X
A          00000          END

```

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	16	0	0	0	0
LIB	0	0	0	0	0
COL	16	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 52

NUMBER OF SYMBOLS, DEF 197, DEFOP 0, UNDEF 0
ORG 82 FORCE NEW RECORD

```

00122          00122          ORG 82          FORCE NEW RECORD
00122 0 01303 0 01353      HTR X-1,0,LOCREC      CARD FOR DE
                                01303          ORG LOCREC
TD 01303 3 00000 0 00122      TXH 82          674 FT 60
01304 0 07400 4 00740      TSX PRINT,4
01305 0 01244 0 01237      HTR MACHIN,0,MACHIN+5
01306 0 07400 4 00740      TSX PRINT,4
01307 0 01354 0 01311      HTR PR,0,PR+35
01310 0 02000 0 00221      TRA DIGRTN
01311 60606060606060        PR          BCD 2
01312 60606060606060
01313 632147256023          BCD TAPE CHECK IN READING A RECORD FROM THE TIFGO FILE. THIS IS
01314 302523426031
01315 456051252124
01316 314527602160
01317 512523465124
01320 602651464460
01321 633025606331
01322 262746602631
01323 432533606063
01324 303162603162
01325 606330256010        BCD THE 8TH FILE OF TAPE 2. COPY LOOP IS AT
01326 633060263143
01327 256046266063
01330 214725600233
01331 606023464770
01332 604346464760
01333 316260216360
01334 60606060606060
01335 60606060606060
01336 60606060606060
01337 434623216331        BCD LOCATION 654. FIVE ATTEMPTS HAVE BEEN MADE TO READ THIS REC
01340 464560060504
01341 336060263165
01342 256021636325
01343 444763626030
01344 216525602225
01345 254560442124
01346 256063466051
01347 252124606330
01350 316260512523
01351 465124602346        BCD 3ORD CORRECTLY.
01352 515125236343
01353 70336060606060
01354 0 00000 0 00000 X
A          00000          END

```

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	17	0	0	0	0
LIB	0	0	0	0	0
COL	17	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 55

NUMBER OF SYMBOLS, DEF 197,DEFOP 0,UNDEF 0
ORG 83 FORCE NEW RECORD

```

00123          00123          ORG 83          FORCE NEW RECORD
00123 0 01303 0 01355      HTR X-1,0,LOCREC      CARD FOR DE
                                01303          ORG LOCREC
TD 01303 3 00000 0 00123      TXH 83          720 FT 60
01304 0 07400 4 00740      TSX PRINT,4
01305 0 01244 0 01237      HTR MACHIN,0,MACHIN+5
01306 0 07400 4 00740      TSX PRINT,4
01307 0 01356 0 01311      HTR PR,0,PR+37
01310 0 02000 0 00221      TRA DIGRTN
01311 60606060606060        PR          BCD 2
01312 60606060606060
01313 632147256023          BCD TAPE CHECK IN READING A RECORD FROM TAPE 3, FILE 1. THIS FI
01314 302523426031
01315 456051252124
01316 314527602160
01317 512523465124
01320 602651464460
01321 632147256003
01322 736026314325
01323 600133606063
01324 303162602631
01325 432560316260        BCD LE IS A MERGE OF THE COMPAIL AND COMPDO FILES.
01326 216044255127
01327 256046266063
01330 302560234644
01331 472131436021
01332 452460234644
01333 472446602631
01334 432562336060
01335 606060606060
01336 606060606060
01337 234647706043        BCD COPY LOOP IS AT LOCATION 700. FIVE ATTEMPTS HAVE BEEN MADE
01340 464647603162
01341 602163604346
01342 232163314645
01343 6007000003360
01344 602631652560
01345 216363254447
01346 636260302165
01347 256022252545
01350 604421242560
01351 634660512521        BCD 5TO READ THIS RECORD CORRECTLY.
01352 246063303162
01353 605125234651
01354 246023465151
01355 252363437033
01356 0 00000 0 00000 X
A          00000          END

```

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	17	0	0	0	0
LIB	0	0	0	0	0

COL 17 0 0 0 0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 57

NUMBER OF SYMBOLS, DEF 197,DEFOP 0,UNDEF 0
ORG 84 FORCE NEW RECORD

			00124		ORG 84	FORCE NEW RECORD
	00124	0	01303	0	01350	HTR X-1,0,LOCREC
					01303	CARD FOR DE
					01303	ORG LOCREC
TD	01303	3	00000	0	00124	TXH 84
	01304	0	07400	4	00740	303 FT 73
	01305	0	01244	0	01237	TSX PRINT,4
	01306	0	07400	4	00740	HTR MACHIN,0,MACHIN+5
	01307	0	01351	0	01311	TSX PRINT,4
	01310	0	02000	0	00221	HTR PR,0,PR+32
	01311	60606060606060				TRA DIGRTN
	01312	60606060606060				BCD 2
	01313	632147256023				BCD TAPE CHECK IN READING CIT RECORD, TAPE 4, FILE 1. COPY LOOP
	01314	302523426031				
	01315	456051252124				
	01316	314527602331				
	01317	636051252346				
	01320	512473606321				
	01321	472560047360				
	01322	263143256001				
	01323	336060234647				
	01324	706043464647				
	01325	603162602163				BCD IS AT LOCATION 265.
	01326	604346232163				
	01327	314645600206				
	01330	053360606060				
	01331	606060606060				
	01332	606060606060				
	01333	606060606060				
	01334	606060606060				
	01335	606060606060				
	01336	606060606060				
	01337	263165256021				BCD FIVE ATTEMPTS HAVE BEEN MADE TO READ THIS RECORD CORRECTLY.
	01340	636325444763				
	01341	626030216525				
	01342	602225254560				
	01343	442124256063				
	01344	466051252124				
	01345	606330316260				
	01346	512523465124				
	01347	602346515125				
	01350	236343703360				
	01351	0	00000	0	00000	X
A			00000			END

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	16	0	0	0	0
LIB	0	0	0	0	0
COL	16	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 52

NUMBER OF SYMBOLS, DEF 197,DEFOP 0,UNDEF 0
ORG 85 FORCE NEW RECORD

			00125	ORG 85	FORCE NEW RECORD	
	00125	0	01303 0	01350	HTR X-1,0,LOCREC	CARD FOR DE
			01303	ORG LOCREC		
TD	01303	3	00000 0	00125	TXH 85	350 FT 62
	01304	0	07400 4	00740	TSX PRINT,4	
	01305	0	01244 0	01237	HTR MACHIN,0,MACHIN+5	
	01306	0	07400 4	00740	TSX PRINT,4	
	01307	0	01351 0	01311	HTR PR,0,PR+32	
	01310	0	02000 0	00221	TRA DIGRTN	
	01311	606060606060			BCD 2	
	01312	606060606060	PR			
	01313	632147256023			BCD TAPE CHECK IN READING CIT RECORD, TAPE 4, FILE 1. COPY LOOP	
	01314	302523426031				
	01315	456051252124				
	01316	314527602331				
	01317	636051252346				
	01320	512473606321				
	01321	472560047360				
	01322	263143256001				
	01323	336060234647				
	01324	706043464647				
	01325	603162602163			BCD IS AT LOCATION 327.	
	01326	604346232163				
	01327	314645600302				
	01330	073360606060				
	01331	606060606060				
	01332	606060606060				
	01333	606060606060				
	01334	606060606060				
	01335	606060606060				
	01336	606060606060				
	01337	263165256021			BCD FIVE ATTEMPTS HAVE BEEN MADE TO READ THIS RECORD CORRECTLY.	
	01340	636325444763				
	01341	626030216525				
	01342	602225254560				
	01343	442124256063				
	01344	466051252124				
	01345	606330316260				
	01346	512523465124				
	01347	602346515125				
	01350	236343703360				
	01351	0 00000 0	00000 X			
A			00000	END		

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	16	0	0	0	0
LIB	0	0	0	0	0
COL	16	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 52

NUMBER OF SYMBOLS, DEF 197,DEFOP 0,UNDEF 0
ORG 86 FORCE NEW RECORD

```

00126          00126          ORG 86          FORCE NEW RECORD
00126 0 01303 0 01350      HTR X-1,0,LOCREC      CARD FOR DE
                                01303          ORG LOCREC
TD 01303 3 00000 0 00126      TXH 86          517 FT 62
01304 0 07400 4 00740      TSX PRINT,4
01305 0 01244 0 01237      HTR MACHIN,0,MACHIN+5
01306 0 07400 4 00740      TSX PRINT,4
01307 0 01351 0 01311      HTR PR,0,PR+32
01310 0 02000 0 00221      TRA DIGRTN
01311 60606060606060        PR          BCD 2
01312 60606060606060
01313 632147256023          BCD TAPE CHECK IN READING TIFGO RECORD FROM TAPE 2, FILE 5, RECO
01314 302523426031
01315 456051252124
01316 314527606331
01317 262746605125
01320 234651246026
01321 514644606321
01322 472560027360
01323 263143256005
01324 736051252346
01325 512460063360        BCD RD 6. COPY LOOP IS AT LOCATION 522.
01326 602346477060
01327 434646476031
01330 626021636043
01331 462321633146
01332 456005020233
01333 60606060606060
01334 60606060606060
01335 60606060606060
01336 60606060606060
01337 263165256021        BCD FIVE ATTEMPTS HAVE BEEN MADE TO READ THIS RECORD CORRECTLY.
01340 636325444763
01341 626030216525
01342 602225254560
01343 442124256063
01344 466051252124
01345 606330316260
01346 512523465124
01347 602346515125
01350 236343703360
01351 0 00000 0 00000 X
A          00000          END

```

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	16	0	0	0	0
LIB	0	0	0	0	0
COL	16	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 52

NUMBER OF SYMBOLS, DEF 197,DEFOP 0,UNDEF 0
ORG 87 FORCE NEW RECORD

```

00127          00127          ORG 87          FORCE NEW RECORD
00127 0 01303 0 01350      HTR X-1,0,LOCREC      CARD FOR DE
                                01303          ORG LOCREC
TD 01303 3 00000 0 00127      TXH 87          553 FT 62
01304 0 07400 4 00740      TSX PRINT,4
01305 0 01244 0 01237      HTR MACHIN,0,MACHIN+5
01306 0 07400 4 00740      TSX PRINT,4
01307 0 01351 0 01311      HTR PR,0,PR+32
01310 0 02000 0 00221      TRA DIGRTN
01311 60606060606060        PR          BCD 2
01312 60606060606060
01313 632147256023          BCD TAPE CHECK IN READING TRAD RECORD FROM TAPE 2, FILE 5, RECOR
01314 302523426031
01315 456051252124
01316 314527606351
01317 212460512523
01320 465124602651
01321 464460632147
01322 256002736026
01323 314325600573
01324 605125234651
01325 246007336060        BCD D 7. COPY LOOP IS AT LOCATION 556.
01326 234647706043
01327 464647603162
01330 602163604346
01331 232163314645
01332 600505063360
01333 606060606060
01334 606060606060
01335 606060606060
01336 606060606060
01337 263165256021        BCD FIVE ATTEMPTS HAVE BEEN MADE TO READ THIS RECORD CORRECTLY.
01340 636325444763
01341 626030216525
01342 602225254560
01343 442124256063
01344 466051252124
01345 606330316260
01346 512523465124
01347 602346515125
01350 236343703360
01351 0 00000 0 00000 X
A          00000          END

```

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	16	0	0	0	0
LIB	0	0	0	0	0
COL	16	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 52

NUMBER OF SYMBOLS, DEF 197, DEFOP 0, UNDEF 0
ORG 88 FORCE NEW RECORD

```

00130          00130          ORG 88          FORCE NEW RECORD
00130 0 01303 0 01350      HTR X-1,0,LOCREC      CARD FOR DE
                                01303          ORG LOCREC
TD 01303 3 00000 0 00130      TXH 88          716 FT 62
01304 0 07400 4 00740      TSX PRINT,4
01305 0 01244 0 01237      HTR MACHIN,0,MACHIN+5
01306 0 07400 4 00740      TSX PRINT,4
01307 0 01351 0 01311      HTR PR,0,PR+32
01310 0 02000 0 00221      TRA DIGRTN
01311 60606060606060        PR          BCD 2
01312 60606060606060
01313 632147256023          BCD TAPE CHECK IN READING FRET RECORD FROM TAPE 2, FILE 5, RECOR
01314 302523426031
01315 456051252124
01316 314527602651
01317 256360512523
01320 465124602651
01321 464460632147
01322 256002736026
01323 314325600573
01324 605125234651
01325 246001023360          BCD D 12. COPY LOOP IS AT LOCATION 721.
01326 602346477060
01327 434646476031
01330 626021636043
01331 462321633146
01332 456007020133
01333 60606060606060
01334 60606060606060
01335 60606060606060
01336 60606060606060
01337 263165256021          BCD FIVE ATTEMPTS HAVE BEEN MADE TO READ THIS RECORD CORRECTLY.
01340 636325444763
01341 626030216525
01342 602225254560
01343 442124256063
01344 466051252124
01345 606330316260
01346 512523465124
01347 602346515125
01350 236343703360
01351 0 00000 0 00000 X
A          00000          END

```

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	16	0	0	0	0
LIB	0	0	0	0	0
COL	16	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 52

NUMBER OF SYMBOLS, DEF 197,DEFOP 0,UNDEF 0
ORG 89 FORCE NEW RECORD

```

00131          00131          ORG 89          FORCE NEW RECORD
00131 0 01303 0 01352      HTR X-1,0,LOCREC      CARD FOR DE
                                01303          ORG LOCREC
TD 01303 3 00000 0 00131      TXH 89          IO23 FT 64
01304 0 07400 4 00740      TSX PRINT,4
01305 0 01244 0 01237      HTR MACHIN,0,MACHIN+5
01306 0 07400 4 00740      TSX PRINT,4
01307 0 01353 0 01313      HTR PR,0,PR+32
01310 0 50000 0 01233      CLA DECONE          SET CONTROL FOR BST
01311 0 62200 0 00000      STD 0
01312 0 02000 0 00221      TRA DIGRTN
01313 606060606060        PR          BCD 2
01314 606060606060
01315 632147256023          BCD TAPE CHECK IN READING CIT RECORD, TAPE 4, FILE 1. COPY LOOP
01316 302523426031
01317 456051252124
01320 314527602331
01321 636051252346
01322 512473606321
01323 472560047360
01324 263143256001
01325 336060234647
01326 706043464647
01327 603162602163          BCD IS AT LOCATION 1026.
01330 604346232163
01331 314645600100
01332 020633606060
01333 606060606060
01334 606060606060
01335 606060606060
01336 606060606060
01337 606060606060
01340 606060606060
01341 263165256021          BCD FIVE ATTEMPTS HAVE BEEN MADE TO READ THIS RECORD CORRECTLY.
01342 636325444763
01343 626030216525
01344 602225254560
01345 442124256063
01346 466051252124
01347 606330316260
01350 512523465124
01351 602346515125
01352 236343703360
01353 0 00000 0 00000 X
A          00000          END

```

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	18	0	0	0	0
LIB	0	0	0	0	0
COL	18	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 54

NUMBER OF SYMBOLS, DEF 197,DEFOP 0,UNDEF 0
ORG 90 FORCE NEW RECORD

```

00132          00132          ORG 90          FORCE NEW RECORD
00132 0 01303 0 01350      HTR X-1,0,LOCREC      CARD FOR DE
                                01303          ORG LOCREC
TD 01303 3 00000 0 00132      TXH 90          1175 FT 62
01304 0 07400 4 00740      TSX PRINT,4
01305 0 01244 0 01237      HTR MACHIN,0,MACHIN+5
01306 0 07400 4 00740      TSX PRINT,4
01307 0 01351 0 01311      HTR PR,0,PR+32
01310 0 02000 0 00221      TRA DIGRTN
01311 60606060606060        PR          BCD 2
01312 60606060606060
01313 632147256023          BCD TAPE CHECK IN READING DOTAG RECORD, TAPE 2, FILE 6. COPY LO
01314 302523426031
01315 456051252124
01316 314527602446
01317 632127605125
01320 234651247360
01321 632147256002
01322 736026314325
01323 600633606023
01324 464770604346
01325 464760316260          BCD OP IS AT LOCATION 1200.
01326 216360434623
01327 216331464560
01330 010200003360
01331 60606060606060
01332 60606060606060
01333 60606060606060
01334 60606060606060
01335 60606060606060
01336 60606060606060
01337 263165256021          BCD FIVE ATTEMPTS HAVE BEEN MADE TO READ THIS RECORD CORRECTLY.
01340 636325444763
01341 626030216525
01342 602225254560
01343 442124256063
01344 466051252124
01345 606330316260
01346 512523465124
01347 602346515125
01350 236343703360
01351 0 00000 0 00000 X
A          00000          END

```

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	16	0	0	0	0
LIB	0	0	0	0	0
COL	16	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 52

NUMBER OF SYMBOLS, DEF 197,DEFOP 0,UNDEF 0
ORG 91 FORCE NEW RECORD

			00133	ORG 91	FORCE NEW RECORD	
	00133	0	01303 0	01350	HTR X-1,0,LOCREC	CARD FOR DE
			01303	ORG LOCREC		
TD	01303	3	00000 0	00133	TXH 91	327 FT 86
	01304	0	07400 4	00740	TSX PRINT,4	
	01305	0	01244 0	01237	HTR MACHIN,0,MACHIN+5	
	01306	0	07400 4	00740	TSX PRINT,4	
	01307	0	01351 0	01311	HTR PR,0,PR+32	
	01310	0	02000 0	00221	TRA DIGRTN	
	01311	606060606060			BCD 2	
	01312	606060606060	PR			
	01313	632147256023			BCD TAPE CHECK IN READING RECORD FROM TAPE 2. COPY LOOP IS AT L	
	01314	302523426031				
	01315	456051252124				
	01316	314527605125				
	01317	234651246026				
	01320	514644606321				
	01321	472560023360				
	01322	602346477060				
	01323	434646476031				
	01324	626021636043				
	01325	462321633146			BCD OCATION 330.	
	01326	456003030033				
	01327	606060606060				
	01330	606060606060				
	01331	606060606060				
	01332	606060606060				
	01333	606060606060				
	01334	606060606060				
	01335	606060606060				
	01336	606060606060				
	01337	263165256021			BCD FIVE ATTEMPTS HAVE BEEN MADE TO READ THIS RECORD CORRECTLY.	
	01340	636325444763				
	01341	626030216525				
	01342	602225254560				
	01343	442124256063				
	01344	466051252124				
	01345	606330316260				
	01346	512523465124				
	01347	602346515125				
	01350	236343703360				
	01351	0 00000 0	00000 X			
A			00000	END		

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	16	0	0	0	0
LIB	0	0	0	0	0
COL	16	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 52

NUMBER OF SYMBOLS, DEF 197,DEFOP 0,UNDEF 0
ORG 92 FORCE NEW RECORD

```

00134          00134          ORG 92          FORCE NEW RECORD
00134 0 01303 0 01350      HTR X-1,0,LOCREC      CARD FOR DE
                                01303          ORG LOCREC
TD 01303 3 00000 0 00134      TXH 92          437 FT 84
01304 0 07400 4 00740      TSX PRINT,4
01305 0 01244 0 01237      HTR MACHIN,0,MACHIN+5
01306 0 07400 4 00740      TSX PRINT,4
01307 0 01351 0 01311      HTR PR,0,PR+32
01310 0 02000 0 00221      TRA DIGRTN
01311 60606060606060        PR          BCD 2
01312 60606060606060
01313 632147256023          BCD TAPE CHECK IN READING RECORD FROM TAPE 3. COPY LOOP IS AT L
01314 302523426031
01315 456051252124
01316 314527605125
01317 234651246026
01320 514644606321
01321 472560033360
01322 602346477060
01323 434646476031
01324 626021636043
01325 462321633146        BCD OCATION 325.
01326 456003020533
01327 60606060606060
01330 60606060606060
01331 60606060606060
01332 60606060606060
01333 60606060606060
01334 60606060606060
01335 60606060606060
01336 60606060606060
01337 263165256021        BCD FIVE ATTEMPTS HAVE BEEN MADE TO READ THIS RECORD CORRECTLY.
01340 636325444763
01341 626030216525
01342 602225254560
01343 442124256063
01344 466051252124
01345 606330316260
01346 512523465124
01347 602346515125
01350 236343703360
01351 0 00000 0 00000 X
A          00000          END

```

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	16	0	0	0	0
LIB	0	0	0	0	0
COL	16	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 52

NUMBER OF SYMBOLS, DEF 197, DEFOP 0, UNDEF 0
ORG 93 FORCE NEW RECORD

			00135		ORG 93	FORCE NEW RECORD	
	00135	0	01303	0	01350	HTR X-1,0,LOCREC	CARD FOR DE
			01303			ORG LOCREC	
TD	01303	3	00000	0	00135	TXH 93	1240 FT 75
	01304	0	07400	4	00740	TSX PRINT,4	
	01305	0	01244	0	01237	HTR MACHIN,0,MACHIN+5	
	01306	0	07400	4	00740	TSX PRINT,4	
	01307	0	01351	0	01311	HTR PR,0,PR+32	
	01310	0	02000	0	00221	TRA DIGRTN	
	01311	60606060606060				BCD 2	
	01312	60606060606060					
	01313	632147256023				BCD	TAPE CHECK IN READING RECORD FROM TAPE 3, FILE 3. COPY LOOP
	01314	302523426031					
	01315	456051252124					
	01316	314527605125					
	01317	234651246026					
	01320	514644606321					
	01321	472560037360					
	01322	263143256003					
	01323	336060234647					
	01324	706043464647					
	01325	603162602163				BCD	IS AT LOCATION 1241.
	01326	604346232163					
	01327	314645600102					
	01330	040133606060					
	01331	606060606060					
	01332	606060606060					
	01333	606060606060					
	01334	606060606060					
	01335	606060606060					
	01336	606060606060					
	01337	263165256021				BCD	FIVE ATTEMPTS HAVE BEEN MADE TO READ THIS RECORD CORRECTLY.
	01340	636325444763					
	01341	626030216525					
	01342	602225254560					
	01343	442124256063					
	01344	466051252124					
	01345	606330316260					
	01346	512523465124					
	01347	602346515125					
	01350	236343703360					
	01351	0	00000	0	00000	X	
A			00000				END

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	16	0	0	0	0
LIB	0	0	0	0	0
COL	16	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 52

NUMBER OF SYMBOLS, DEF 197, DEFOP 0, UNDEF 0
ORG 94 FORCE NEW RECORD

```

00136 0 01303 0 00136 00136      ORG 94          FORCE NEW RECORD
00136 0 01303 0 01350 HTR X-1,0,LOCREC  CARD FOR DE
01303 3 00000 0 00136 01303      ORG LOCREC
01304 0 07400 4 00740 TXH 94          3540 FT 88
01305 0 01244 0 01237 TSX PRINT,4
01306 0 07400 4 00740 HTR MACHIN,0,MACHIN+5
01307 0 01351 0 01311 TSX PRINT,4
01310 0 02000 0 00221 HTR PR,0,PR+32
01311 6060606060606060 PR      TRA DIGRTN
01312 6060606060606060      BCD 2
01313 632147256023      BCD TAPE CHECK IN READING RECORD FROM TAPE 4. COPY LOOP IS AT L
01314 302523426031
01315 456051252124
01316 314527605125
01317 234651246026
01320 514644606321
01321 472560043360
01322 602346477060
01323 434646476031
01324 626021636043
01325 462321633146      BCD OCATION 3534.
01326 456003050304
01327 3360606060606060
01330 6060606060606060
01331 6060606060606060
01332 6060606060606060
01333 6060606060606060
01334 6060606060606060
01335 6060606060606060
01336 6060606060606060
01337 263165256021      BCD FIVE ATTEMPTS HAVE BEEN MADE TO READ THIS RECORD CORRECTLY.
01340 636325444763
01341 626030216525
01342 602225254560
01343 442124256063
01344 466051252124
01345 606330316260
01346 512523465124
01347 602346515125
01350 236343703360
01351 0 00000 0 00000 X
A      00000      END

```

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	16	0	0	0	0
LIB	0	0	0	0	0
COL	16	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 52

NUMBER OF SYMBOLS, DEF 197,DEFOP 0,UNDEF 0
ORG 95 FORCE NEW RECORD

```

00137          00137          ORG 95          FORCE NEW RECORD
00137 0 01303 0 01350      HTR X-1,0,LOCREC      CARD FOR DE
                                01303          ORG LOCREC
TD 01303 3 00000 0 00137      TXH 95          4453 FT 88
01304 0 07400 4 00740      TSX PRINT,4
01305 0 01244 0 01237      HTR MACHIN,0,MACHIN+5
01306 0 07400 4 00740      TSX PRINT,4
01307 0 01351 0 01311      HTR PR,0,PR+32
01310 0 02000 0 00221      TRA DIGRTN
01311 60606060606060        PR          BCD 2
01312 60606060606060
01313 632147256023          BCD TAPE CHECK IN READING RECORD FROM TAPE 4. COPY LOOP IS AT L
01314 302523426031
01315 456051252124
01316 314527605125
01317 234651246026
01320 514644606321
01321 472560043360
01322 602346477060
01323 434646476031
01324 626021636043
01325 462321633146          BCD OCATION 4421.
01326 456004040201
01327 336060606060
01330 606060606060
01331 606060606060
01332 606060606060
01333 606060606060
01334 606060606060
01335 606060606060
01336 606060606060
01337 263165256021          BCD FIVE ATTEMPTS HAVE BEEN MADE TO READ THIS RECORD CORRECTLY.
01340 636325444763
01341 626030216525
01342 602225254560
01343 442124256063
01344 466051252124
01345 606330316260
01346 512523465124
01347 602346515125
01350 236343703360
01351 0 00000 0 00000 X
A          00000          END

```

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	16	0	0	0	0
LIB	0	0	0	0	0
COL	16	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 52

NUMBER OF SYMBOLS, DEF 197, DEFOP 0, UNDEF 0
ORG 96 FORCE NEW RECORD

```

00140          00140          ORG 96          FORCE NEW RECORD
00140 0 01303 0 01350      HTR X-1,0,LOCREC      CARD FOR DE
                                01303          ORG LOCREC
TD 01303 3 00000 0 00140      TXH 96          46 FT 90
01304 0 07400 4 00740      TSX PRINT,4
01305 0 01244 0 01237      HTR MACHIN,0,MACHIN+5
01306 0 07400 4 00740      TSX PRINT,4
01307 0 01351 0 01311      HTR PR,0,PR+32
01310 0 02000 0 00221      TRA DIGRTN
01311 60606060606060        PR          BCD 2
01312 60606060606060
01313 632147256023          BCD TAPE CHECK IN READING RECORD FROM TAPE 3. COPY LOOP IS AT L
01314 302523426031
01315 456051252124
01316 314527605125
01317 234651246026
01320 514644606321
01321 472560033360
01322 602346477060
01323 434646476031
01324 626021636043
01325 462321633146          BCD OCATION 32.
01326 456003023360
01327 60606060606060
01330 60606060606060
01331 60606060606060
01332 60606060606060
01333 60606060606060
01334 60606060606060
01335 60606060606060
01336 60606060606060
01337 263165256021          BCD FIVE ATTEMPTS HAVE BEEN MADE TO READ THIS RECORD CORRECTLY.
01340 636325444763
01341 626030216525
01342 602225254560
01343 442124256063
01344 466051252124
01345 606330316260
01346 512523465124
01347 602346515125
01350 236343703360
01351 0 00000 0 00000 X
A          00000          END

```

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	16	0	0	0	0
LIB	0	0	0	0	0
COL	16	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 52

NUMBER OF SYMBOLS, DEF 197,DEFOP 0,UNDEF 0
ORG 95 FORCE NEW RECORD

```

00137          00137          ORG 95          FORCE NEW RECORD
00137 0 01303 0 01350      HTR X-1,0,LOCREC      CARD FOR DE
                                01303          ORG LOCREC
TD 01303 3 00000 0 00137      TXH 95          4453 FT 88
01304 0 07400 4 00740      TSX PRINT,4
01305 0 01244 0 01237      HTR MACHIN,0,MACHIN+5
01306 0 07400 4 00740      TSX PRINT,4
01307 0 01351 0 01311      HTR PR,0,PR+32
01310 0 02000 0 00221      TRA DIGRTN
01311 60606060606060        PR          BCD 2
01312 60606060606060
01313 632147256023          BCD TAPE CHECK IN READING RECORD FROM TAPE 4. COPY LOOP IS AT L
01314 302523426031
01315 456051252124
01316 314527605125
01317 234651246026
01320 514644606321
01321 472560043360
01322 602346477060
01323 434646476031
01324 626021636043
01325 462321633146          BCD OCATION 4421.
01326 456004040201
01327 336060606060
01330 606060606060
01331 606060606060
01332 606060606060
01333 606060606060
01334 606060606060
01335 606060606060
01336 606060606060
01337 263165256021          BCD FIVE ATTEMPTS HAVE BEEN MADE TO READ THIS RECORD CORRECTLY.
01340 636325444763
01341 626030216525
01342 602225254560
01343 442124256063
01344 466051252124
01345 606330316260
01346 512523465124
01347 602346515125
01350 236343703360
01351 0 00000 0 00000 X
A          00000          END

```

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	16	0	0	0	0
LIB	0	0	0	0	0
COL	16	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 52

NUMBER OF SYMBOLS, DEF 197, DEFOP 0, UNDEF 0
ORG 96 FORCE NEW RECORD

			00140	ORG 96	FORCE NEW RECORD
	00140	0	01303 0 01350	HTR X-1,0,LOCREC	CARD FOR DE
			01303	ORG LOCREC	
TD	01303	3	00000 0 00140	TXH 96	46 FT 90
	01304	0	07400 4 00740	TSX PRINT,4	
	01305	0	01244 0 01237	HTR MACHIN,0,MACHIN+5	
	01306	0	07400 4 00740	TSX PRINT,4	
	01307	0	01351 0 01311	HTR PR,0,PR+32	
	01310	0	02000 0 00221	TRA DIGRTN	
	01311	606060606060	PR	BCD 2	
	01312	606060606060			
	01313	632147256023		BCD TAPE CHECK IN READING RECORD FROM TAPE 3. COPY LOOP IS AT L	
	01314	302523426031			
	01315	456051252124			
	01316	314527605125			
	01317	234651246026			
	01320	514644606321			
	01321	472560033360			
	01322	602346477060			
	01323	434646476031			
	01324	626021636043			
	01325	462321633146		BCD OCATION 32.	
	01326	456003023360			
	01327	606060606060			
	01330	606060606060			
	01331	606060606060			
	01332	606060606060			
	01333	606060606060			
	01334	606060606060			
	01335	606060606060			
	01336	606060606060			
	01337	263165256021		BCD FIVE ATTEMPTS HAVE BEEN MADE TO READ THIS RECORD CORRECTLY.	
	01340	636325444763			
	01341	626030216525			
	01342	602225254560			
	01343	442124256063			
	01344	466051252124			
	01345	606330316260			
	01346	512523465124			
	01347	602346515125			
	01350	236343703360			
	01351	0 00000 0 00000 X			
A		00000		END	

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	16	0	0	0	0
LIB	0	0	0	0	0
COL	16	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 52

NUMBER OF SYMBOLS, DEF 197,DEFOP 0,UNDEF 0
ORG 97 FORCE NEW RECORD

```

00141          00141          ORG 97          FORCE NEW RECORD
00141 0 01303 0 01353      HTR X-1,0,LOCREC      CARD FOR DE
                                01303          ORG LOCREC
TD 01303 3 00000 0 00141      TXH 97          330 FT 90
01304 0 07400 4 00740      TSX PRINT,4
01305 0 01244 0 01237      HTR MACHIN,0,MACHIN+5
01306 0 07400 4 00740      TSX PRINT,4
01307 0 01354 0 01311      HTR PR,0,PR+35
01310 0 02000 0 00221      TRA DIGRTN
01311 60606060606060        PR          BCD 2
01312 60606060606060
01313 632147256023          BCD TAPE CHECK IN READING RECORD FROM TAPE 2. COPY LOOP IS AT L
01314 302523426031
01315 456051252124
01316 314527605125
01317 234651246026
01320 514644606321
01321 472560023360
01322 602346477060
01323 434646476031
01324 626021636043
01325 462321633146          BCD OCATION 304 AND READS FROM FILE 3,
01326 456003000460
01327 214524605125
01330 212462602651
01331 464460263143
01332 256003736060
01333 60606060606060
01334 60606060606060
01335 60606060606060
01336 60606060606060
01337 047360057360          BCD 4, 5, 7, 9 OR 10. FIVE ATTEMPTS HAVE BEEN MADE TO READ THIS
01340 077360116046
01341 516001003360
01342 602631652560
01343 216363254447
01344 636260302165
01345 256022252545
01346 604421242560
01347 634660512521
01350 246063303162
01351 605125234651          BCD 3 RECORD CORRECTLY.
01352 246023465151
01353 252363437033
01354 0 00000 0 00000 X
A          00000          END

```

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	17	0	0	0	0
LIB	0	0	0	0	0
COL	17	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 55

NUMBER OF SYMBOLS, DEF 197,DEFOP 0,UNDEF 0
ORG 98 FORCE NEW RECORD

		00142		ORG 98	FORCE NEW RECORD
	00142	0 01303 0 01355		HTR X-1,0,LOCREC	CARD FOR DE
		01303		ORG LOCREC	
TD	01303	3 00000 0 00142		TXH 98	141 FT 92
	01304	0 07400 4 00740		TSX PRINT,4	
	01305	0 01244 0 01237		HTR MACHIN,0,MACHIN+5	
	01306	0 07400 4 00740		TSX PRINT,4	
	01307	0 01356 0 01311		HTR PR,0,PR+37	
	01310	0 02000 0 00221		TRA DIGRTN	
	01311	606060606060	PR	BCD 2	
	01312	606060606060			
	01313	632147256023		BCD TAPE CHECK IN READING SUBROUTINE DEFINITION TABLE FROM TAPE	
	01314	302523426031			
	01315	456051252124			
	01316	314527606264			
	01317	225146646331			
	01320	452560242526			
	01321	314531633146			
	01322	456063212243			
	01323	256026514644			
	01324	606321472560			
	01325	027360512523		BCD 2, RECORD 2, FILE 5.	
	01326	465124600273			
	01327	602631432560			
	01330	053360606060			
	01331	606060606060			
	01332	606060606060			
	01333	606060606060			
	01334	606060606060			
	01335	606060606060			
	01336	606060606060			
	01337	234647706043		BCD COPY LOOP IS AT LOCATION 135. FIVE ATTEMPTS HAVE BEEN MADE	
	01340	464647603162			
	01341	602163604346			
	01342	232163314645			
	01343	600103053360			
	01344	602631652560			
	01345	216363254447			
	01346	636260302165			
	01347	256022252545			
	01350	604421242560			
	01351	634660512521		BCD 5TO READ THIS RECORD CORRECTLY.	
	01352	246063303162			
	01353	605125234651			
	01354	246023465151			
	01355	252363437033			
	01356	0 00000 0 00000 X			
A		00000		END	

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	17	0	0	0	0
LIB	0	0	0	0	0

COL 17 0 0 0 0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 57

NUMBER OF SYMBOLS, DEF 197,DEFOP 0,UNDEF 0
ORG 99 FORCE NEW RECORD

```

00143          00143          ORG 99          FORCE NEW RECORD
00143 0 01303 0 01343      HTR X-1,0,LOCREC      CARD FOR DE
                                01303          ORG LOCREC
TD 01303 3 00000 0 00143      TXH 99          356 FT 92
01304 0 07400 4 00740      TSX PRINT,4
01305 0 01244 0 01237      HTR MACHIN,0,MACHIN+5
01306 0 07400 4 00740      TSX PRINT,4
01307 0 01344 0 01311      HTR PR,0,PR+27
01310 0 02000 0 00221      TRA DIGRTN
01311 60606060606060        PR          BCD 2
01312 60606060606060
01313 632147256023          BCD TAPE CHECK IN READING CIT TABLE, TAPE 3. COPY LOOP IS AT LO
01314 302523426031
01315 456051252124
01316 314527602331
01317 636063212243
01320 257360632147
01321 256003336060
01322 234647706043
01323 464647603162
01324 602163604346
01325 232163314645          BCD CATION 352. FIVE ATTEMPTS HAVE BEEN MADE TO
01326 600305023360
01327 602631652560
01330 216363254447
01331 636260302165
01332 256022252545
01333 604421242560
01334 63466060606060
01335 60606060606060
01336 60606060606060
01337 512521246063          BCD 5READ THIS RECORD CORRECTLY.
01340 303162605125
01341 234651246023
01342 465151252363
01343 437033606060
01344 0 00000 0 00000 X
A          00000          END

```

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	16	0	0	0	0
LIB	0	0	0	0	0
COL	16	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 47

NUMBER OF SYMBOLS, DEF 197,DEFOP 0,UNDEF 0
 ORG 100 FORCE NEW RECORD


```

00144          00144          ORG 100          FORCE NEW RECORD
00144 0 01303 0 01350      HTR X-1,0,LOCREC      CARD FOR DE
                                01303          ORG LOCREC
TD 01303 3 00000 0 00144      TXH 100          562 FT 92
01304 0 07400 4 00740      TSX PRINT,4
01305 0 01244 0 01237      HTR MACHIN,0,MACHIN+5
01306 0 07400 4 00740      TSX PRINT,4
01307 0 01351 0 01311      HTR PR,0,PR+32
01310 0 02000 0 00221      TRA DIGRTN
01311 60606060606060        PR          BCD 2
01312 60606060606060
01313 632147256023          BCD TAPE CHECK IN READING OP TABLE FROM TAPE 2, FILE 6. COPY LO
01314 302523426031
01315 456051252124
01316 314527604647
01317 606321224325
01320 602651464460
01321 632147256002
01322 736026314325
01323 600633606023
01324 464770604346
01325 464760316260          BCD OP IS AT LOCATION 556.
01326 216360434623
01327 216331464560
01330 050506336060
01331 606060606060
01332 606060606060
01333 606060606060
01334 606060606060
01335 606060606060
01336 606060606060
01337 263165256021          BCD FIVE ATTEMPTS HAVE BEEN MADE TO READ THIS RECORD CORRECTLY.
01340 636325444763
01341 626030216525
01342 602225254560
01343 442124256063
01344 466051252124
01345 606330316260
01346 512523465124
01347 602346515125
01350 236343703360
01351 0 00000 0 00000 X
A          00000          END

```

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	16	0	0	0	0
LIB	0	0	0	0	0
COL	16	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 52

NUMBER OF SYMBOLS, DEF 197,DEFOP 0,UNDEF 0
ORG 101 FORCE NEW RECORD

```

00145      00145      ORG 101      FORCE NEW RECORD
00145 0 01303 0 01343 HTR X-1,0,LOCREC CARD FOR DE
01303      01303      ORG LOCREC
TD 01303 3 00000 0 00145 TXH 101      765 FT 92
01304 0 07400 4 00740 TSX PRINT,4
01305 0 01244 0 01237 HTR MACHIN,0,MACHIN+5
01306 0 07400 4 00740 TSX PRINT,4
01307 0 01344 0 01311 HTR PR,0,PR+27
01310 0 02000 0 00221 TRA DIGRTN
01311 60606060606060 PR BCD 2
01312 60606060606060
01313 632147256023 BCD TAPE CHECK IN READING CIT TABLE, TAPE 3. COPY LOOP IS AT LO
01314 302523426031
01315 456051252124
01316 314527602331
01317 636063212243
01320 257360632147
01321 256003336060
01322 234647706043
01323 464647603162
01324 602163604346
01325 232163314645 BCD CATION 761. FIVE ATTEMPTS HAVE BEEN MADE TO
01326 600706013360
01327 602631652560
01330 216363254447
01331 636260302165
01332 256022252545
01333 604421242560
01334 634660606060
01335 606060606060
01336 606060606060
01337 512521246063 BCD 5READ THIS RECORD CORRECTLY.
01340 303162605125
01341 234651246023
01342 465151252363
01343 437033606060
01344 0 00000 0 00000 X
A 00000 END

```

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	16	0	0	0	0
LIB	0	0	0	0	0
COL	16	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 47

NUMBER OF SYMBOLS, DEF 197,DEFOP 0,UNDEF 0
 ORG 102 FORCE NEW RECORD

			00146	ORG 102	FORCE NEW RECORD
	00146	0	01303 0 01350	HTR X-1,0,LOCREC	CARD FOR DE
			01303	ORG LOCREC	
TD	01303	3	00000 0 00146	TXH 102	1135 FT 92
	01304	0	07400 4 00740	TSX PRINT,4	
	01305	0	01244 0 01237	HTR MACHIN,0,MACHIN+5	
	01306	0	07400 4 00740	TSX PRINT,4	
	01307	0	01351 0 01311	HTR PR,0,PR+32	
	01310	0	02000 0 00221	TRA DIGRTN	
	01311	60606060606060	PR	BCD 2	
	01312	60606060606060			
	01313	632147256023		BCD TAPE CHECK IN READING HOLARG TABLE FROM TAPE 2, RECORD 4, FI	
	01314	302523426031			
	01315	456051252124			
	01316	314527603046			
	01317	432151276063			
	01320	212243256026			
	01321	514644606321			
	01322	472560027360			
	01323	512523465124			
	01324	600473602631			
	01325	432560053360		BCD LE 5. COPY LOOP IS AT LOCATION 1131.	
	01326	602346477060			
	01327	434646476031			
	01330	626021636043			
	01331	462321633146			
	01332	456001010301			
	01333	336060606060			
	01334	606060606060			
	01335	606060606060			
	01336	606060606060			
	01337	263165256021		BCD FIVE ATTEMPTS HAVE BEEN MADE TO READ THIS RECORD CORRECTLY.	
	01340	636325444763			
	01341	626030216525			
	01342	602225254560			
	01343	442124256063			
	01344	466051252124			
	01345	606330316260			
	01346	512523465124			
	01347	602346515125			
	01350	236343703360			
	01351	0 00000 0 00000 X			
A		00000		END	

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	16	0	0	0	0
LIB	0	0	0	0	0
COL	16	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 52

NUMBER OF SYMBOLS, DEF 197,DEFOP 0,UNDEF 0
ORG 103 FORCE NEW RECORD

			00147	ORG 103	FORCE NEW RECORD
	00147	0	01303 0	HTR X-1,0,LOCREC	CARD FOR DE
			01303	ORG LOCREC	
TD	01303	3	00000 0	TXH 103	245 FT 9
	01304	0	07400 4	TSX PRINT,4	
	01305	0	01244 0	HTR MACHIN,0,MACHIN+5	
	01306	0	07400 4	TSX PRINT,4	
	01307	0	01363 0	HTR PR,0,PR+42	
	01310	0	02000 0	TRA DIGRTN	
	01311	606060606060	PR	BCD 2	
	01312	606060606060			
	01313	632147256023		BCD TAPE CHECK IN READING RECORD FROM TAPE 2.	COPY LOOP IS AT L
	01314	302523426031			
	01315	456051252124			
	01316	314527605125			
	01317	234651246026			
	01320	514644606321			
	01321	472560023360			
	01322	602346477060			
	01323	434646476031			
	01324	626021636043			
	01325	462321633146		BCD OCATION 220.	FIVE ATTEMPTS HAVE BEEN MADE
	01326	456002020033			
	01327	606026316525			
	01330	602163632544			
	01331	476362603021			
	01332	652560222525			
	01333	456044212425			
	01334	606060606060			
	01335	606060606060			
	01336	606060606060			
	01337	634660512521		BCD TO READ THIS RECORD CORRECTLY.	PROGRAM CANNOT CONTINUE TO P
	01340	246063303162			
	01341	605125234651			
	01342	246023465151			
	01343	252363437033			
	01344	606047514627			
	01345	512144602321			
	01346	454546636023			
	01347	464563314564			
	01350	256063466047			
	01351	514623256262		BCD ROCESS LISTING TAPES FOR OUTPUT.	
	01352	604331626331			
	01353	452760632147			
	01354	256260264651			
	01355	604664634764			
	01356	633360606060			
	01357	606060606060			
	01360	606060606060			
	01361	606060606060			
	01362	606060606060			
	01363	0 00000 0	00000 X		
A			00000	END	

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	17	0	0	0	0
LIB	0	0	0	0	0
COL	17	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 62

NUMBER OF SYMBOLS, DEF 197,DEFOP 0,UNDEF 0
ORG 104 FORCE NEW RECORD

			00150	ORG 104	FORCE NEW RECORD
	00150	0	01303 0	01362	HTR X-1,0,LOCREC
			01303		CARD FOR DE
TD	01303	3	00000 0	00150	ORG LOCREC
	01304	0	07400 4	00740	TXH 104
	01305	0	01244 0	01237	TSX PRINT,4
	01306	0	07400 4	00740	HTR MACHIN,0,MACHIN+5
	01307	0	01363 0	01311	TSX PRINT,4
	01310	0	02000 0	00221	HTR PR,0,PR+42
	01311	606060606060			TRA DIGRTN
	01312	606060606060	PR		BCD 2
	01313	632147256023			BCD TAPE CHECK IN READING RECORD FROM TAPE 2. COPY LOOP IS AT L
	01314	302523426031			
	01315	456051252124			
	01316	314527605125			
	01317	234651246026			
	01320	514644606321			
	01321	472560023360			
	01322	602346477060			
	01323	434646476031			
	01324	626021636043			
	01325	462321633146			BCD OCATION 265. FIVE ATTEMPTS HAVE BEEN MADE
	01326	456002060533			
	01327	606026316525			
	01330	602163632544			
	01331	476362603021			
	01332	652560222525			
	01333	456044212425			
	01334	606060606060			
	01335	606060606060			
	01336	606060606060			
	01337	634660512521			BCD TO READ THIS RECORD CORRECTLY. PROGRAM CANNOT CONTINUE TO P
	01340	246063303162			
	01341	605125234651			
	01342	246023465151			
	01343	252363437033			
	01344	606047514627			
	01345	512144602321			
	01346	454546636023			
	01347	464563314564			
	01350	256063466047			
	01351	514623256262			BCD ROCESS LISTING TAPES FOR OUTPUT.
	01352	604331626331			
	01353	452760632147			
	01354	256260264651			
	01355	604664634764			
	01356	633360606060			
	01357	606060606060			
	01360	606060606060			
	01361	606060606060			
	01362	606060606060			
	01363	0 00000 0	00000 X		
A			00000	END	

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	17	0	0	0	0
LIB	0	0	0	0	0
COL	17	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 62

NUMBER OF SYMBOLS, DEF 197,DEFOP 0,UNDEF 0
ORG 105 FORCE NEW RECORD

			00151	ORG 105	FORCE NEW RECORD	
	00151	0	01303 0	01374	HTR X-1,0,LOCREC	CARD FOR DE
			01303	ORG LOCREC		
TD	01303	3	00000 0	00151	TXH 105	3730 FT 115
	01304	0	07400 4	00740	TSX PRINT,4	
	01305	0	01244 0	01237	HTR MACHIN,0,MACHIN+5	
	01306	0	07400 4	00740	TSX PRINT,4	
	01307	0	01375 0	01311	HTR PR,0,PR+52	
	01310	0	02000 0	00221	TRA DIGRTN	
	01311	606060606060			BCD 2	
	01312	606060606060				
	01313	632147256023			BCD TAPE CHECK IN READING TAPE RECORD OF CARD IMAGE FROM TAPE 3.	
	01314	302523426031				
	01315	456051252124				
	01316	314527606321				
	01317	472560512523				
	01320	465124604626				
	01321	602321512460				
	01322	314421272560				
	01323	265146446063				
	01324	214725600333				
	01325	606023464770			BCD COPY LOOP IS AT LOCATION 3655.	
	01326	604346464760				
	01327	316260216360				
	01330	434623216331				
	01331	464560030605				
	01332	053360606060				
	01333	606060606060				
	01334	606060606060				
	01335	606060606060				
	01336	606060606060				
	01337	633031626062			BCD THIS STOP MAY ALSO BE DUE TO AN INCORRECT RECORD WHICH CONTA	
	01340	634647604421				
	01341	706021436246				
	01342	602225602464				
	01343	256063466021				
	01344	456031452346				
	01345	515125236360				
	01346	512523465124				
	01347	606630312330				
	01350	602346456321				
	01351	314562604446			BCD INS MORE THAN 25 WORDS.	
	01352	512560633021				
	01353	456002056066				
	01354	465124623360				
	01355	606060606060				
	01356	606060606060				
	01357	606060606060				
	01360	606060606060				
	01361	606060606060				
	01362	606060606060				
	01363	263165256021			BCD FIVE ATTEMPTS HAVE BEEN MADE TO READ THIS RECORD CORRECTLY.	
	01364	636325444763				
	01365	626030216525				

01366 602225254560
01367 442124256063
01370 466051252124
01371 606330316260
01372 512523465124
01373 602346515125
01374 236343703360
01375 0 00000 0 00000 X

A 00000 END

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	18	0	0	0	0
LIB	0	0	0	0	0
COL	18	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 72

NUMBER OF SYMBOLS, DEF 197,DEFOP 0,UNDEF 0
ORG 106 FORCE NEW RECORD

			00152	ORG 106	FORCE NEW RECORD
	00152	0	01303 0	01362	HTR X-1,0,LOCREC
			01303		CARD FOR DE
TD	01303	3	00000 0	00152	ORG LOCREC
	01304	0	07400 4	00740	TXH 106
	01305	0	01244 0	01237	TSX PRINT,4
	01306	0	07400 4	00740	HTR MACHIN,0,MACHIN+5
	01307	0	01363 0	01311	TSX PRINT,4
	01310	0	02000 0	00221	HTR PR,0,PR+42
	01311	606060606060			TRA DIGRTN
	01312	606060606060	PR		BCD 2
	01313	632147256023			BCD TAPE CHECK IN READING RECORD FROM TAPE 3. COPY LOOP IS AT L
	01314	302523426031			
	01315	456051252124			
	01316	314527605125			
	01317	234651246026			
	01320	514644606321			
	01321	472560033360			
	01322	602346477060			
	01323	434646476031			
	01324	626021636043			
	01325	462321633146			BCD OCATION 263. FIVE ATTEMPTS HAVE BEEN MADE
	01326	456002060333			
	01327	606026316525			
	01330	602163632544			
	01331	476362603021			
	01332	652560222525			
	01333	456044212425			
	01334	606060606060			
	01335	606060606060			
	01336	606060606060			
	01337	634660512521			BCD TO READ THIS RECORD CORRECTLY. PROGRAM CANNOT CONTINUE TO P
	01340	246063303162			
	01341	605125234651			
	01342	246023465151			
	01343	252363437033			
	01344	606047514627			
	01345	512144602321			
	01346	454546636023			
	01347	464563314564			
	01350	256063466047			
	01351	514623256262			BCD ROCESS LISTING TAPES FOR OUTPUT.
	01352	604331626331			
	01353	452760632147			
	01354	256260264651			
	01355	604664634764			
	01356	633360606060			
	01357	606060606060			
	01360	606060606060			
	01361	606060606060			
	01362	606060606060			
	01363	0 00000 0	00000 X		
A			00000	END	

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	17	0	0	0	0
LIB	0	0	0	0	0
COL	17	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 62

NUMBER OF SYMBOLS, DEF 197,DEFOP 0,UNDEF 0
ORG 107 FORCE NEW RECORD

			00153	ORG 107	FORCE NEW RECORD
	00153	0 01303 0	01350	HTR X-1,0,LOCREC	CARD FOR DE
			01303	ORG LOCREC	
TD	01303	3 00000 0	00153	TXH 107	410 FT 96
	01304	0 07400 4	00740	TSX PRINT,4	
	01305	0 01244 0	01237	HTR MACHIN,0,MACHIN+5	
	01306	0 07400 4	00740	TSX PRINT,4	
	01307	0 01351 0	01311	HTR PR,0,PR+32	
	01310	0 02000 0	00221	TRA DIGRTN	
	01311	606060606060		BCD 2	
	01312	606060606060			
	01313	632147256023		BCD TAPE CHECK IN READING COMMON TABLE FROM TAPE 2, RECORD 3, FI,	
	01314	302523426031			
	01315	456051252124			
	01316	314527602346			
	01317	444446456063			
	01320	212243256026			
	01321	514644606321			
	01322	472560027360			
	01323	512523465124			
	01324	600373602631			
	01325	432560053360		BCD LE 5. COPY LOOP IS AT LOCATION 404.	
	01326	602346477060			
	01327	434646476031			
	01330	626021636043			
	01331	462321633146			
	01332	456004000433			
	01333	606060606060			
	01334	606060606060			
	01335	606060606060			
	01336	606060606060			
	01337	263165256021		BCD FIVE ATTEMPTS HAVE BEEN MADE TO READ THIS RECORD CORRECTLY.	
	01340	636325444763			
	01341	626030216525			
	01342	602225254560			
	01343	442124256063			
	01344	466051252124			
	01345	606330316260			
	01346	512523465124			
	01347	602346515125			
	01350	236343703360			
	01351	0 00000 0 00000 X			
A		00000		END	

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	16	0	0	0	0
LIB	0	0	0	0	0
COL	16	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 52

NUMBER OF SYMBOLS, DEF 197,DEFOP 0,UNDEF 0
ORG 108 FORCE NEW RECORD

			00154	ORG 108	FORCE NEW RECORD
	00154	0	01303 0 01350	HTR X-1,0,LOCREC	CARD FOR DE
			01303	ORG LOCREC	
TD	01303	3	00000 0 00154	TXH 108	460 FT 98
	01304	0	07400 4 00740	TSX PRINT,4	
	01305	0	01244 0 01237	HTR MACHIN,0,MACHIN+5	
	01306	0	07400 4 00740	TSX PRINT,4	
	01307	0	01351 0 01311	HTR PR,0,PR+32	
	01310	0	02000 0 00221	TRA DIGRTN	
	01311	60606060606060	PR	BCD 2	
	01312	60606060606060			
	01313	632147256023		BCD TAPE CHECK IN READING SUBDEF TABLE FROM TAPE 2, RECORD 2, FI	
	01314	302523426031			
	01315	456051252124			
	01316	314527606264			
	01317	222425266063			
	01320	212243256026			
	01321	514644606321			
	01322	472560027360			
	01323	512523465124			
	01324	600273602631			
	01325	432560053360		BCD LE 5. COPY LOOP IS AT LOCATION 454.	
	01326	602346477060			
	01327	434646476031			
	01330	626021636043			
	01331	462321633146			
	01332	456004050433			
	01333	60606060606060			
	01334	60606060606060			
	01335	60606060606060			
	01336	60606060606060			
	01337	263165256021		BCD FIVE ATTEMPTS HAVE BEEN MADE TO READ THIS RECORD CORRECTLY.	
	01340	636325444763			
	01341	626030216525			
	01342	602225254560			
	01343	442124256063			
	01344	466051252124			
	01345	606330316260			
	01346	512523465124			
	01347	602346515125			
	01350	236343703360			
	01351	0 00000 0 00000 X			
A		00000		END	

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	16	0	0	0	0
LIB	0	0	0	0	0
COL	16	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 52

NUMBER OF SYMBOLS, DEF 197,DEFOP 0,UNDEF 0
ORG 109 FORCE NEW RECORD

```

00155          00155          ORG 109          FORCE NEW RECORD
00155 0 01303 0 01350      HTR X-1,0,LOCREC      CARD FOR DE
                                01303          ORG LOCREC
TD 01303 3 00000 0 00155      TXH 109          223 FT 113
01304 0 07400 4 00740      TSX PRINT,4
01305 0 01244 0 01237      HTR MACHIN,0,MACHIN+5
01306 0 07400 4 00740      TSX PRINT,4
01307 0 01351 0 01311      HTR PR,0,PR+32
01310 0 02000 0 00221      TRA DIGRTN
01311 60606060606060        PR          BCD 2
01312 60606060606060
01313 632147256023          BCD TAPE CHECK IN READING CIT, TAPE 4, IN THE SECOND PASS OF CIT
01314 302523426031
01315 456051252124
01316 314527602331
01317 637360632147
01320 256004736031
01321 456063302560
01322 622523464524
01323 604721626260
01324 462660233163
01325 606321472560          BCD TAPE RECORD. COPY LOOP IS AT LOCATION 217.
01326 512523465124
01327 336060234647
01330 706043464647
01331 603162602163
01332 604346232163
01333 314645600201
01334 07336060606060
01335 60606060606060
01336 60606060606060
01337 263165256021          BCD FIVE ATTEMPTS HAVE BEEN MADE TO READ THIS RECORD CORRECTLY.
01340 636325444763
01341 626030216525
01342 602225254560
01343 442124256063
01344 466051252124
01345 606330316260
01346 512523465124
01347 602346515125
01350 236343703360
01351 0 00000 0 00000 X
A          00000          END

```

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	16	0	0	0	0
LIB	0	0	0	0	0
COL	16	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 52

NUMBER OF SYMBOLS, DEF 197,DEFOP 0,UNDEF 0
ORG 110 FORCE NEW RECORD

```

00156          00156          ORG 110          FORCE NEW RECORD
00156 0 01303 0 01350      HTR X-1,0,LOCREC      CARD FOR DE
                                01303          ORG LOCREC
TD 01303 3 00000 0 00156      TXH 110          255 FT 103
01304 0 07400 4 00740      TSX PRINT,4
01305 0 01244 0 01237      HTR MACHIN,0,MACHIN+5
01306 0 07400 4 00740      TSX PRINT,4
01307 0 01351 0 01311      HTR PR,0,PR+32
01310 0 02000 0 00221      TRA DIGRTN
01311 60606060606060        PR          BCD 2
01312 60606060606060
01313 632147256023          BCD TAPE CHECK IN READING RECORD OF COMPILED INSTRUCTIONS FROM T
01314 302523426031
01315 456051252124
01316 314527605125
01317 234651246046
01320 266023464447
01321 314325246031
01322 456263516423
01323 633146456260
01324 265146446063
01325 214725600433          BCD APE 4. COPY LOOP IS AT LOCATION 251.
01326 606023464770
01327 604346464760
01330 316260216360
01331 434623216331
01332 464560020501
01333 336060606060
01334 606060606060
01335 606060606060
01336 606060606060
01337 263165256021          BCD FIVE ATTEMPTS HAVE BEEN MADE TO READ THIS RECORD CORRECTLY.
01340 636325444763
01341 626030216525
01342 602225254560
01343 442124256063
01344 466051252124
01345 606330316260
01346 512523465124
01347 602346515125
01350 236343703360
01351 0 00000 0 00000 X
A          00000          END

```

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	16	0	0	0	0
LIB	0	0	0	0	0
COL	16	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 52

NUMBER OF SYMBOLS, DEF 197,DEFOP 0,UNDEF 0
ORG 111 FORCE NEW RECORD

			00157	ORG 111	FORCE NEW RECORD	
	00157	0	01303 0	01420	HTR X-1,0,LOCREC	CARD FOR DE
			01303	ORG LOCREC		
TD	01303	3	00000 0	00157	TXH 111	1001 FT 24
	01304	0	07400 4	00740	TSX PRINT,4	
	01305	0	01244 0	01237	HTR MACHIN,0,MACHIN+5	
	01306	0	07400 4	00740	TSX PRINT,4	
	01307	0	01421 0	01311	HTR PR,0,PR+72	
	01310	0	02000 0	00221	TRA DIGRTN	
	01311	606060606060			BCD 2	
	01312	606060606060				
	01313	632147256002			BCD TAPE 2 IS NOT CORRECTLY POSITIONED TO READ TIFGO TABLE, FILE	
	01314	603162604546				
	01315	636023465151				
	01316	252363437060				
	01317	474662316331				
	01320	464525246063				
	01321	466051252124				
	01322	606331262746				
	01323	606321224325				
	01324	736026314325				
	01325	600573605125			BCD 5, RECORD 6. THE FORTAG TABLE, RECORD 11,	
	01326	234651246006				
	01327	336060633025				
	01330	602646516321				
	01331	276063212243				
	01332	257360512523				
	01333	465124600101				
	01334	736060606060				
	01335	606060606060				
	01336	606060606060				
	01337	302162604164			BCD HAS JUST BEEN WRITTEN ON TAPE 2. BEGINNING AT LOCATION 764,	
	01340	626360222525				
	01341	456066513163				
	01342	632545604645				
	01343	606321472560				
	01344	023360602225				
	01345	273145453145				
	01346	276021636043				
	01347	462321633146				
	01350	456007060473				
	01351	606231676022			BCD SIX BST INSTRUCTIONS ARE GIVEN	
	01352	626360314562				
	01353	635164236331				
	01354	464562602151				
	01355	256027316525				
	01356	456060606060				
	01357	606060606060				
	01360	606060606060				
	01361	606060606060				
	01362	606060606060				
	01363	222526465125			BCD BEFORE THE RDS. THE CPY AT 775 SHOWS THAT THIS RECORD IS NO	
	01364	606330256051				
	01365	246233606063				

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01366 302560234770
01367 602163600707
01370 056062304666
01371 626063302163
01372 606330316260
01373 512523465124
01374 603162604546
01375 636063312627
01376 466074312425
01377 456331263123
01400 216331464560
01401 664651246031
01402 456007070405
01403 343360606060
01404 606060606060
01405 606060606060
01406 606060606060
01407 633025605125
01410 234651246031
01411 242545633126
01412 312321633146
01413 456046266063
01414 302560632147
01415 256031626031
01416 456007070407
01417 336060606060
01420 606060606060
01421 0 00000 0 00000 X
A          00000

```

BCD T TIFGO (IDENTIFICATION WORD IN 7745).

BCD THE RECORD IDENTIFICATION OF THE TAPE IS IN 7747.

END

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	20	0	0	0	0
LIB	0	0	0	0	0
COL	20	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 92

NUMBER OF SYMBOLS, DEF 197,DEFOP 0,UNDEF 0
 ORG 112 FORCE NEW RECORD

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00160          00160          ORG 112          FORCE NEW RECORD
00160 0 01303 0 01346      HTR X-1,0,LOCREC      CARD FOR DE
          01303          ORG LOCREC
TD 01303 3 00000 0 00160      TXH 112          123 FT 53
          I12          I24 FT 53
01304 0 07400 4 00740      TSX PRINT,4
01305 0 01244 0 01237      HTR MACHIN,0,MACHIN+5
01306 0 07400 4 00740      TSX PRINT,4
01307 0 01347 0 01311      HTR PR,0,PR+30
01310 0 02000 0 00221      TRA DIGRTN
01311 60606060606060        PR      BCD 2
01312 60606060606060
01313 254524604626          BCD END OF RECORD NOT PROPERLY REACHED, TAPE 3, FILE 1. TEST WO
01314 605125234651
01315 246045466360
01316 475146472551
01317 437060512521
01320 233025247360
01321 632147256003
01322 736026314325
01323 600133606063
01324 256263606646
01325 512460314560          BCD RD IN RECORD SHOWS THAT COPY AT
01326 512523465124
01327 606230466662
01330 606330216360
01331 234647706021
01332 636060606060
01333 606060606060
01334 606060606060
01335 606060606060
01336 606060606060
01337 434623216331          BCD 8LOCATION 122 SHOULD CAUSE END OF RECORD SKIP.
01340 464560010202
01341 606230466443
01342 246023216462
01343 256025452460
01344 462660512523
01345 465124606242
01346 314733606060
01347 0 00000 0 00000 X
A          00000          END

```

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	17	0	0	0	0
LIB	0	0	0	0	0
COL	17	0	0	0	0

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NUMBER OF ON-LINE INPUT RECORDS          0
NUMBER OF OFF-LINE PRINT RECORDS        51
NUMBER OF SYMBOLS,  DEF  197,DEFOP      0,UNDEF  0

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				00161	ORG 113	FORCE NEW RECORD	
	00161	0	01303	0	01374	HTR X-1,0,LOCREC	CARD FOR DE
				01303	ORG LOCREC		
TD	01303	3	00000	0	00161	TXH 113	6736 FT 41
						113	6737 FT 41
	01304	0	07400	4	00740	TSX PRINT,4	
	01305	0	01244	0	01237	HTR MACHIN,0,MACHIN+5	
	01306	0	07400	4	00740	TSX PRINT,4	
	01307	0	01375	0	01311	HTR PR,0,PR+52	
	01310	0	02000	0	00221	TRA DIGRTN	
	01311	606060606060				BCD 2	
					PR		
	01312	606060606060					
	01313	255151465160				BCD ERROR IN READING THE SINGLE 2 WORD RECORD FROM TAPE 2, FILE	
	01314	314560512521					
	01315	243145276063					
	01316	302560623145					
	01317	274325600260					
	01320	664651246051					
	01321	252346512460					
	01322	265146446063					
	01323	214725600273					
	01324	602631432560					
	01325	073360606321				BCD 7. TAPE SHOULD BE POSITIONED AFTER	
	01326	472560623046					
	01327	644324602225					
	01330	604746623163					
	01331	314645252460					
	01332	212663255160					
	01333	606060606060					
	01334	606060606060					
	01335	606060606060					
	01336	606060606060					
	01337	263143256044				BCD FILE MARK, FILE 7. BEGINNING AT 6730, TWO BST S ARE GIVEN,	
	01340	215142736026					
	01341	314325600733					
	01342	606022252731					
	01343	454531452760					
	01344	216360060703					
	01345	007360636646					
	01346	602262636062					
	01347	602151256027					
	01350	316525457360					
	01351	633025456021				BCD THEN AN RTB AND THREE CPY S.	
	01352	456051632260					
	01353	214524606330					
	01354	512525602347					
	01355	706062336060					
	01356	606060606060					
	01357	606060606060					
	01360	606060606060					
	01361	606060606060					
	01362	606060606060					
	01363	234647706021				BCD COPY AT LOCATION 6735 SHOULD CAUSE END OF RECORD SKIP.	
	01364	636043462321					

01365 633146456006
01366 070305606230
01367 466443246023
01370 216462256025
01371 452460462660
01372 512523465124
01373 606242314733
01374 606060606060
01375 0 00000 0 00000 X

A 00000 END

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	19	0	0	0	0
LIB	0	0	0	0	0
COL	19	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 73

NUMBER OF SYMBOLS, DEF 197,DEFOP 0,UNDEF 0
ORG 114 FORCE NEW RECORD

			00162	ORG 114	FORCE NEW RECORD
TD	00162	0	01303 0 01373	HTR X-1,0,LOCREC	CARD FOR DE
			01303	ORG LOCREC	
	01303	3	00000 0 00162	TXH 114	7112 FT 27
	01304	0	07400 4 00740	TSX PRINT,4	
	01305	0	01244 0 01237	HTR MACHIN,0,MACHIN+5	
	01306	0	07400 4 00740	TSX PRINT,4	
	01307	0	01374 0 01311	HTR PR,0,PR+51	
	01310	0	02000 0 00221	TRA DIGRTN	
	01311	606060606060		BCD 2	
	01312	606060606060	PR		
	01313	632147256002		BCD TAPE 2 IS NOT POSITIONED CORRECTLY TO READ RECORD FROM FILE	
	01314	603162604546			
	01315	636047466231			
	01316	633146452524			
	01317	602346515125			
	01320	236343706063			
	01321	466051252124			
	01322	605125234651			
	01323	246026514644			
	01324	602631432560			
	01325	053360602346		BCD 5. COPY LOOP AT LOCATION 7060 READS	
	01326	477060434646			
	01327	476021636043			
	01330	462321633146			
	01331	456007000600			
	01332	605125212462			
	01333	606060606060			
	01334	606060606060			
	01335	606060606060			
	01336	606060606060			
	01337	512523465124		BCD RECORDS 6 THROUGH 11 AND HAS FOUND THAT IDENTIFICATION OF RE	
	01340	626006606330			
	01341	514664273060			
	01342	010160214524			
	01343	603021626026			
	01344	466445246063			
	01345	302163603124			
	01346	254563312631			
	01347	232163314645			
	01350	604626605125			
	01351	234651247360		BCD CORD, LOCATION 7127,	
	01352	434623216331			
	01353	464560070102			
	01354	077360606060			
	01355	606060606060			
	01356	606060606060			
	01357	606060606060			
	01360	606060606060			
	01361	606060606060			
	01362	606060606060			
	01363	244625626045		BCD 9DOES NOT MATCH EXPECTED IDENTIFICATION, LOCATION 7125.	
	01364	466360442163			
	01365	233060256747			

01366 252363252460
01367 312425456331
01370 263123216331
01371 464573604346
01372 232163314645
01373 600701020533
01374 0 00000 0 00000 X

A 00000 END

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	18	0	0	0	0
LIB	0	0	0	0	0
COL	18	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 71

NUMBER OF SYMBOLS, DEF 197,DEFOP 0,UNDEF 0
ORG 115 FORCE NEW RECORD

			00163	ORG 115	FORCE NEW RECORD
	00163	0	01303 0 01420	HTR X-1,0,LOCREC	CARD FOR DE
			01303	ORG LOCREC	
TD	01303	3	00000 0 00163	TXH 115	51 FT 56
	01304	0	07400 4 00740	TSX PRINT,4	
	01305	0	01244 0 01237	HTR MACHIN,0,MACHIN+5	
	01306	0	07400 4 00740	TSX PRINT,4	
	01307	0	01421 0 01311	HTR PR,0,PR+72	
	01310	0	02000 0 00221	TRA DIGRTN	
	01311	606060606060	PR	BCD 2	
	01312	606060606060			
	01313	632147256002		BCD TAPE 2 IS NOT CORRECTLY POSITIONED TO READ FORTAG, FILE 5, R	
	01314	603162604546			
	01315	636023465151			
	01316	252363437060			
	01317	474662316331			
	01320	464525246063			
	01321	466051252124			
	01322	602646516321			
	01323	277360263143			
	01324	256005736051			
	01325	252346512460		BCD ECORD 11. ROUTINE AT LOCATION 31	
	01326	010133606051			
	01327	466463314525			
	01330	602163604346			
	01331	232163314645			
	01332	600301606060			
	01333	606060606060			
	01334	606060606060			
	01335	606060606060			
	01336	606060606060			
	01337	512521246260		BCD READS THE 1 WORD RECORD OF FILE 7 WHICH IS RECORD COUNT OF F	
	01340	633025600160			
	01341	664651246051			
	01342	252346512460			
	01343	462660263143			
	01344	256007606630			
	01345	312330603162			
	01346	605125234651			
	01347	246023466445			
	01350	636046266026			
	01351	314325600633		BCD ILE 6. 7 IS ADDED TO THIS COUNT AND	
	01352	606007603162			
	01353	602124242524			
	01354	606346606330			
	01355	316260234664			
	01356	456360214524			
	01357	606060606060			
	01360	606060606060			
	01361	606060606060			
	01362	606060606060			
	01363	633025606321		BCD THE TAPE IS BACKSPACED OVER FILE 6, FILE MARK AND THE LAST 4	
	01364	472560316260			
	01365	222123426247			

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01366 212325246046
01367 652551602631
01370 432560067360
01371 263143256044
01372 215142602145
01373 246063302560
01374 432162636004
01375 605125234651
01376 246260314560
01377 263143256005
01400 336060512523
01401 465124603124
01402 254563312631
01403 232163314645
01404 606060606060
01405 606060606060
01406 606060606060
01407 314560434623
01410 216331464560
01411 020302066062
01412 304666626063
01413 302163606330
01414 316260316260
01415 454663602646
01416 516321276051
01417 252346512433
01420 606060606060
01421 0 00000 0 00000 X
A      00000

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BCD RECORDS IN FILE 5. RECORD IDENTIFICATION

BCD IN LOCATION 2326 SHOWS THAT THIS IS NOT FORTAG RECORD.

END

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	20	0	0	0	0
LIB	0	0	0	0	0
COL	20	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 92

NUMBER OF SYMBOLS, DEF 197,DEFOP 0,UNDEF 0
 ORG 116 FORCE NEW RECORD

			00164	ORG 116	FORCE NEW RECORD
	00164	0	01303 0 01375	HTR X-1,0,LOCREC	CARD FOR DE
			01303	ORG LOCREC	
TD	01303	3	00000 0 00164	TXH 116	331 FT 58
	01304	0	07400 4 00740	TSX PRINT,4	
	01305	0	01244 0 01237	HTR MACHIN,0,MACHIN+5	
	01306	0	07400 4 00740	TSX PRINT,4	
	01307	0	01376 0 01311	HTR PR,0,PR+53	
	01310	0	02000 0 00221	TRA DIGRTN	
	01311	606060606060	PR	BCD 2	
	01312	606060606060			
	01313	632147256002		BCD TAPE 2 IS NOT CORRECTLY POSITIONED TO READ TIFGO RECORD.	RD
	01314	603162604546			
	01315	636023465151			
	01316	252363437060			
	01317	474662316331			
	01320	464525246063			
	01321	466051252124			
	01322	606331262746			
	01323	605125234651			
	01324	243360605124			
	01325	626043464647		BCD S LOOP AT LOCATION 30 HAS SPACED TAPE 2	
	01326	602163604346			
	01327	232163314645			
	01330	600300603021			
	01331	626062472123			
	01332	252460632147			
	01333	256002606060			
	01334	606060606060			
	01335	606060606060			
	01336	606060606060			
	01337	264651662151		BCD FORWARD FROM BEGINNING OF 3RD FILE TO BEGINNING OF TIFGO, FI	
	01340	246026514644			
	01341	602225273145			
	01342	453145276046			
	01343	266003512460			
	01344	263143256063			
	01345	466022252731			
	01346	454531452760			
	01347	462660633126			
	01350	274673602631			
	01351	432560057360		BCD LE 5, RECORD 6. IDENTIFICATION WORD	
	01352	512523465124			
	01353	600633606031			
	01354	242545633126			
	01355	312321633146			
	01356	456066465124			
	01357	606060606060			
	01360	606060606060			
	01361	606060606060			
	01362	606060606060			
	01363	462660512523		BCD OF RECORD IN LOCATION 5471, SHOWS THAT THIS IS NOT TIFGO REC	
	01364	465124603145			
	01365	604346232163			

01366 314645600504
01367 070173606230
01370 466662606330
01371 216360633031
01372 626031626045
01373 466360633126
01374 274660512523
01375 465124336060 BCD 1ORD.
01376 0 00000 0 00000 X

A 00000 END

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	19	0	0	0	0
LIB	0	0	0	0	0
COL	19	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 73

NUMBER OF SYMBOLS, DEF 197,DEFOP 0,UNDEF 0
ORG 117 FORCE NEW RECORD

			00165	ORG 117	FORCE NEW RECORD	
	00165	0	01303 0	01374	HTR X-1,0,LOCREC	CARD FOR DE
			01303	ORG LOCREC		
TD	01303	3	00000 0	00165	TXH 117	357 FT 58
	01304	0	07400 4	00740	TSX PRINT,4	
	01305	0	01244 0	01237	HTR MACHIN,0,MACHIN+5	
	01306	0	07400 4	00740	TSX PRINT,4	
	01307	0	01375 0	01311	HTR PR,0,PR+52	
	01310	0	02000 0	00221	TRA DIGRTN	
	01311	606060606060			BCD 2	
	01312	606060606060				
	01313	632147256002			BCD TAPE 2 IS NOT CORRECTLY POSITIONED TO READ TRAD, FILE 5, REC	
	01314	603162604546				
	01315	636023465151				
	01316	252363437060				
	01317	474662316331				
	01320	464525246063				
	01321	466051252124				
	01322	606351212473				
	01323	602631432560				
	01324	057360512523				
	01325	465124600733			BCD ORD 7. RECORD 6, TIFGO, HAS	
	01326	606051252346				
	01327	512460067360				
	01330	633126274673				
	01331	603021626060				
	01332	606060606060				
	01333	606060606060				
	01334	606060606060				
	01335	606060606060				
	01336	606060606060				
	01337	416462636022			BCD JUST BEEN READ SUCCESSFULLY, BUT IDENTIFICATION WORD, LOCATI	
	01340	252545605125				
	01341	212460626423				
	01342	232562622664				
	01343	434370736022				
	01344	646360312425				
	01345	456331263123				
	01346	216331464560				
	01347	664651247360				
	01350	434623216331				
	01351	464560060706			BCD ON 6766, SHOWS THAT NEXT RECORD IS NOT TRAD.	
	01352	067360623046				
	01353	666260633021				
	01354	636045256763				
	01355	605125234651				
	01356	246031626045				
	01357	466360635121				
	01360	243360606060				
	01361	606060606060				
	01362	606060606060				
	01363	234647706043			BCD COPY LOOP IS AT LOCATION 352.	
	01364	464647603162				
	01365	602163604346				

01366 232163314645
01367 600305023360
01370 606060606060
01371 606060606060
01372 606060606060
01373 606060606060
01374 606060606060
01375 0 00000 0 00000 X

A 00000 END

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	18	0	0	0	0
LIB	0	0	0	0	0
COL	18	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 72

NUMBER OF SYMBOLS, DEF 197,DEFOP 0,UNDEF 0
ORG 118 FORCE NEW RECORD

			00166	ORG 118	FORCE NEW RECORD	
	00166	0	01303 0	01430	HTR X-1,0,LOCREC	CARD FOR DE
			01303	ORG LOCREC		
TD	01303	3	00000 0	00166	TXH 118	524 FT 62
	01304	0	07400 4	00740	TSX PRINT,4	
	01305	0	01244 0	01237	HTR MACHIN,0,MACHIN+5	
	01306	0	07400 4	00740	TSX PRINT,4	
	01307	0	01431 0	01311	HTR PR,0,PR+80	
	01310	0	02000 0	00221	TRA DIGRTN	
	01311	606060606060			BCD 2	
	01312	606060606060	PR			
	01313	262131436451			BCD FAILURE TO READ CORRECT RECORD FROM TAPE 2, FILE 5. TAPE SH	
	01314	256063466051				
	01315	252124602346				
	01316	515125236360				
	01317	512523465124				
	01320	602651464460				
	01321	632147256002				
	01322	736026314325				
	01323	600533606063				
	01324	214725606230				
	01325	466443246022			BCD OULD BE POSITIONED TO READ RECORD 6, TIFGO,	
	01326	256047466231				
	01327	633146452524				
	01330	606346605125				
	01331	212460512523				
	01332	465124600673				
	01333	606331262746				
	01334	736060606060				
	01335	606060606060				
	01336	606060606060				
	01337	512523465124			BCD RECORD 7, TRAD, OR RECORD 12, FRET. ONE OF THE ROUTINES WHI	
	01340	600773606351				
	01341	212473604651				
	01342	605125234651				
	01343	246001027360				
	01344	265125633360				
	01345	604645256046				
	01346	266063302560				
	01347	514664633145				
	01350	256260663031				
	01351	233060646225			BCD CH USES INFORMATION FROM THESE RECORDS HAS	
	01352	626031452646				
	01353	514421633146				
	01354	456026514644				
	01355	606330256225				
	01356	605125234651				
	01357	246260302162				
	01360	606060606060				
	01361	606060606060				
	01362	606060606060				
	01363	264664452460			BCD FOUND THAT THE IDENTIFICATION OF THE RECORD DOES NOT MATCH T	
	01364	633021636063				
	01365	302560312425				

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01366 456331263123
01367 216331464560
01370 462660633025
01371 605125234651
01372 246024462562
01373 604546636044
01374 216323306063
01375 302560256747
01376 252363252460
01377 312425456331
01400 263123216331
01401 464533606063
01402 302560514664
01403 633145256060
01404 606060606060
01405 606060606060
01406 606060606060
01407 512521243145
01410 276021604721
01411 516331236443
01412 215160512523
01413 465124603162
01414 602163604346
01415 232163314645
01416 600403056026
01417 465160633126
01420 274673604346
01421 232163314645
01422 600502056026
01423 465160635121
01424 247360465160
01425 434623216331
01426 464560060403
01427 602646516026
01430 512563336060
01431 0 00000 0 00000 X
A          00000

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BCD HE EXPECTED IDENTIFICATION. THE ROUTINE

BCD READING A PARTICULAR RECORD IS AT LOCATION 435 FOR TIFGO, LO

BCD 8CATION 525 FOR TRAD, OR LOCATION 643 FOR FRET.

END

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	21	0	0	0	0
LIB	0	0	0	0	0
COL	21	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 100

NUMBER OF SYMBOLS, DEF 197,DEFOP 0,UNDEF 0
 ORG 119 FORCE NEW RECORD

			00167	ORG 119	FORCE NEW RECORD	
	00167	0	01303 0	01442	HTR X-1,0,LOCREC	CARD FOR DE
			01303	ORG LOCREC		
TD	01303	3	00000 0	00167	TXH 119	314 FT 90
	01304	0	07400 4	00740	TSX PRINT,4	
	01305	0	01244 0	01237	HTR MACHIN,0,MACHIN+5	
	01306	0	76200 0	00304	RDR 4	
	01307	0	46000 0	01344	LDA AA	
	01310	0	70000 0	01257	CPY ERAS	
	01311	-0	75400 0	00000	PXD 0,0	
	01312	0	56000 0	01257	LDQ ERAS	
	01313	-0	76300 0	00003	LGL 3	FIRST OCTAL NUMBER INTO COMMENT
	01314	-0	60200 0	01363	ORS A	
	01315	-0	76300 0	00017	LGL 15	
	01316	0	07400 4	00730	TSX OCTBCD,4	
	01317	0	60200 0	01364	SLW B	B 23456
	01320	0	56000 0	01257	LDQ ERAS	FIX TAG FIELD
	01321	-0	77300 0	00022	RQL 18	
	01322	-0	50000 0	00717	CAL BLANKS	
	01323	0	76700 0	00003	ALS 3	
	01324	-0	76300 0	00003	LGL 3	
	01325	0	60200 0	01365	SLW C	
	01326	0	50000 0	01257	CLA ERAS	
	01327	0	07400 4	00730	TSX OCTBCD,4	B 89101112
	01330	0	60200 0	01366	SLW D	
	01331	0	56000 0	01366	LDQ D	
	01332	-0	50000 0	01365	CAL C	
	01333	-0	76300 0	00030	LGL 24	8788910
	01334	0	60200 0	01365	SLW C	
	01335	-0	76300 0	00014	LGL 12	
	01336	0	56000 0	00717	LDQ BLANKS	
	01337	-0	76300 0	00030	LGL 24	
	01340	0	60200 0	01366	SLW D	11128888
	01341	0	07400 4	00740	TSX PRINT,4	
	01342	0	01443 0	01345	HTR PR,0,PR+62	
	01343	0	02000 0	00221	TRA DIGRTN	
	01344	0	00000 0	01144	AA HTR8612	
	01345	606060606060	PR	BCD 2		
	01346	606060606060				
	01347	632147256002		BCD	TAPE 2 IS NOT CORRECTLY POSITIONED.	CURRENT FILE 5 RECORD I
	01350	603162604546				
	01351	636023465151				
	01352	252363437060				
	01353	474662316331				
	01354	464525243360				
	01355	602364515125				
	01356	456360263143				
	01357	256005605125				
	01360	234651246031				
	01361	242545633126		BCD	2DENTIFICATIO	
	01362	312321633146				
	01363	456031626000		A BCD	1N IS 0	
A	01364	0	00000 0	00000	B HTR	
A	01365	0	00000 0	00000	C HTR	

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01366 606060606060          D BCD 5
01367 606060606060
01370 606060606060
01371 606060606060
01372 606060606060
01373 214524602446          BCD  AND DOES NOT MATCH EXPECTED RECORD IDENTIFICATION WHICH WAS
01374 256260454663
01375 604421632330
01376 602567472523
01377 632524605125
01400 234651246031
01401 242545633126
01402 312321633146
01403 456066303123
01404 306066216260
01405 314560633025          BCD  IN THE ACCUMULATOR AND IS NOT STORED.
01406 602123236444
01407 644321634651
01410 602145246031
01411 626045466360
01412 626346512524
01413 336060606060
01414 606060606060
01415 606060606060
01416 606060606060
01417 633031626062          BCD  THIS SUBROUTINE BEGINS AT 304 AND IS USED TO READ IN ANY OF
01420 642251466463
01421 314525602225
01422 273145626021
01423 636003000460
01424 214524603162
01425 606462252460
01426 634660512521
01427 246031456021
01430 457060462660
01431 633025605125          BCD  THE RECORDS IN FILE 5, TAPE 2.
01432 234651246260
01433 314560263143
01434 256005736063
01435 214725600233
01436 606060606060
01437 606060606060
01440 606060606060
01441 606060606060
01442 606060606060
01443 0 00000 0 00000 X
A          00000          END

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SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	51	0	0	0	0
LIB	0	0	0	0	0
COL	51	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0
NUMBER OF OFF-LINE PRINT RECORDS 110
NUMBER OF SYMBOLS, DEF 202,DEFOP 0,UNDEF 0
ORG 120 FORCE NEW RECORD


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00170          00170          ORG 120          FORCE NEW RECORD
00170 0 01303 0 01330 HTR X-1,0,LOCREC CARD FOR DE
          01303          ORG LOCREC
TD 01303 3 00000 0 00170 TXH 120          36 FT 53
01304 0 07400 4 00740 TSX PRINT,4
01305 0 01244 0 01237 HTR MACHIN,0,MACHIN+5
01306 0 07400 4 00740 TSX PRINT,4
01307 0 01331 0 01311 HTR PR,0,PR+16
01310 0 02000 0 00221 TRA DIGRTN
01311 60606060606060 PR BCD 2
01312 60606060606060
01313 262143622560 BCD FALSE END OF RECORD, TAPE 4. COPY LOOP AT LOCATION 30 IS SP
01314 254524604626
01315 605125234651
01316 247360632147
01317 256004336060
01320 234647706043
01321 464647602163
01322 604346232163
01323 314645600300
01324 603162606247
01325 212331452760 BCD 4ACING OVER FIRST FILE.
01326 466525516026
01327 315162636026
01330 314325336060
01331 0 00000 0 00000 X
A          00000          END

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SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	15	0	0	0	0
LIB	0	0	0	0	0
COL	15	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 36

NUMBER OF SYMBOLS, DEF 197,DEFOP 0,UNDEF 0
 ORG 121 FORCE NEW RECORD

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00171          00171          ORG 121          FORCE NEW RECORD
00171  0 01303 0 01331      HTR X-1,0,LOCREC      CARD FOR DE
                                01303          ORG LOCREC
TD  01303  3 00000 0 00171      TXH 121          4417 FT 88
01304  0 07400 4 00740      TSX PRINT,4
01305  0 01244 0 01237      HTR MACHIN,0,MACHIN+5
01306  0 07400 4 00740      TSX PRINT,4
01307  0 01332 0 01311      HTR PR,0,PR+17
01310  0 02000 0 00221      TRA DIGRTN
01311  60606060606060        PR          BCD 2
01312  60606060606060
01313  262143622560          BCD FALSE END OF RECORD, TAPE 4. COPY LOOP AT LOCATION 4413 IS
01314  254524604626
01315  605125234651
01316  247360632147
01317  256004336060
01320  234647706043
01321  464647602163
01322  604346232163
01323  314645600404
01324  010360316260
01325  215151214527          BCD 5ARRANGED TO FIND END OF FILE.
01326  252460634660
01327  263145246025
01330  452460462660
01331  263143253360
01332  0 00000 0 00000 X
A          00000          END

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SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	15	0	0	0	0
LIB	0	0	0	0	0
COL	15	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 37

NUMBER OF SYMBOLS, DEF 197,DEFOP 0,UNDEF 0
 ORG 122 FORCE NEW RECORD

				00172	ORG 122	FORCE NEW RECORD
	00172	0	01303	0 01353	HTR X-1,0,LOCREC	CARD FOR DE
				01303	ORG LOCREC	
TD	01303	3	00000	0 00172	TXH 122	7053 FT 36
					122	7057 FT 36
	01304	0	07400	4 00740	TSX PRINT,4	
	01305	0	01244	0 01237	HTR MACHIN,0,MACHIN+5	
	01306	0	07400	4 00740	TSX PRINT,4	
	01307	0	01354	0 01311	HTR PR,0,PR+35	
	01310	0	02000	0 00221	TRA DIGRTN	
	01311		606060606060		BCD 2	
				PR		
	01312		606060606060			
	01313		262143622560		BCD FALSE END OF RECORD READING DOTAG RECORD FROM TAPE 3, FILE 1	
	01314		254524604626			
	01315		605125234651			
	01316		246051252124			
	01317		314527602446			
	01320		632127605125			
	01321		234651246026			
	01322		514644606321			
	01323		472560037360			
	01324		263143256001			
	01325		336060512523		BCD . RECORD CONTAINS A NUMBER OF 9 WORD ENTRIES.	
	01326		465124602346			
	01327		456321314562			
	01330		602160456444			
	01331		222551604626			
	01332		601160664651			
	01333		246025456351			
	01334		312562336060			
	01335		606060606060			
	01336		606060606060			
	01337		234647706043		BCD COPY LOOP AT LOCATION 7043 READS ONLY FIRST AND SECOND WORD	
	01340		464647602163			
	01341		604346232163			
	01342		314645600700			
	01343		040360512521			
	01344		246260464543			
	01345		706026315162			
	01346		636021452460			
	01347		622523464524			
	01350		606646512460			
	01351		462660252123		BCD 3OF EACH ENTRY.	
	01352		306025456351			
	01353		703360606060			
A	01354	0	00000	0 00000 X		
				00000	END	

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	18	0	0	0	0
LIB	0	0	0	0	0
COL	18	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0
NUMBER OF OFF-LINE PRINT RECORDS 56
NUMBER OF SYMBOLS, DEF 197,DEFOP 0,UNDEF 0
ORG 123 FORCE NEW RECORD

			00173	ORG 123	FORCE NEW RECORD
	00173	0	01303 0 01350	HTR X-1,0,LOCREC	CARD FOR DE
			01303	ORG LOCREC	
TD	01303	3	00000 0 00173	TXH 123	7250 FT 27
	01304	0	07400 4 00740	TSX PRINT,4	
	01305	0	01244 0 01237	HTR MACHIN,0,MACHIN+5	
	01306	0	07400 4 00740	TSX PRINT,4	
	01307	0	01351 0 01311	HTR PR,0,PR+32	
	01310	0	02000 0 00221	TRA DIGRTN	
	01311	606060606060		BCD 2	
	01312	606060606060	PR		
	01313	262143622560		BCD FALSE END OF RECORD TAPE 2, FILE 5. COPY AT LOCATION 7245 S	
	01314	254524604626			
	01315	605125234651			
	01316	246063214725			
	01317	600273602631			
	01320	432560053360			
	01321	602346477060			
	01322	216360434623			
	01323	216331464560			
	01324	070204056062			
	01325	304664432460		BCD HOULD TRANSFER TO	
	01326	635121456226			
	01327	255160634660			
	01330	606060606060			
	01331	606060606060			
	01332	606060606060			
	01333	606060606060			
	01334	606060606060			
	01335	606060606060			
	01336	606060606060			
	01337	512462602163		BCD RDS AT LOCATION 7244, OR CAUSE FILE SKIP AT END OF FILE 5.	
	01340	604346232163			
	01341	314645600702			
	01342	040473604651			
	01343	602321646225			
	01344	602631432560			
	01345	624231476021			
	01346	636025452460			
	01347	462660263143			
	01350	256005336060			
	01351	0 00000 0 00000 X			
A		00000		END	

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	16	0	0	0	0
LIB	0	0	0	0	0
COL	16	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 52

NUMBER OF SYMBOLS, DEF 197,DEFOP 0,UNDEF 0
ORG 124 FORCE NEW RECORD

			00174	ORG 124	FORCE NEW RECORD
	00174	0	01303 0 01377	HTR X-1,0,LOCREC	CARD FOR DE
			01303	ORG LOCREC	
TD	01303	3	00000 0 00174	TXH 124	62 FT 53
				124	63 FT 53
				124	66 FT 53
				124	67 FT 53
				124	72 FT 53
				124	73 FT 53
	01304	0	07400 4 00740	TSX PRINT,4	
	01305	0	01244 0 01237	HTR MACHIN,0,MACHIN+5	
	01306	0	07400 4 00740	TSX PRINT,4	
	01307	0	01400 0 01311	HTR PR,0,PR+55	
	01310	0	02000 0 00221	TRA DIGRTN	
	01311	606060606060	PR	BCD 2	
	01312	606060606060			
	01313	262143622560		BCD FALSE END OF RECORD OR FALSE END OF FILE IN READING, TAPE 3,	
	01314	254524604626			
	01315	605125234651			
	01316	246046516026			
	01317	214362256025			
	01320	452460462660			
	01321	263143256031			
	01322	456051252124			
	01323	314527736063			
	01324	214725600373			
	01325	602631432560		BCD FILE 1, FROM VARIABLE LENGTH RECORD WHICH	
	01326	017360265146			
	01327	446065215131			
	01330	212243256043			
	01331	254527633060			
	01332	512523465124			
	01333	606630312330			
	01334	606060606060			
	01335	606060606060			
	01336	606060606060			
	01337	623046644324		BCD SHOULD HAVE BEEN WRITTEN AS A SERIES OF 4 WORD ENTRIES. COP	
	01340	603021652560			
	01341	222525456066			
	01342	513163632545			
	01343	602162602160			
	01344	622551312562			
	01345	604626600460			
	01346	664651246025			
	01347	456351312562			
	01350	336060234647			
	01351	706043464647		BCD Y LOOP AT LOCATION 53 READS	
	01352	602163604346			
	01353	232163314645			
	01354	600503605125			
	01355	212462606060			
	01356	606060606060			
	01357	606060606060			
	01360	606060606060			

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01361 606060606060
01362 606060606060
01363 046066465124          BCD 4 WORDS AT A TIME AND CHECKS AGAINST THIS IN READING 2ND, 3R
01364 626021636021
01365 606331442560
01366 214524602330
01367 252342626021
01370 272131456263
01371 606330316260
01372 314560512521
01373 243145276002
01374 452473600351
01375 246021452460          BCD 3D AND 4TH WORD.
01376 046330606646
01377 512433606060
01400 0 00000 0 00000 X
A      00000          END

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SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	24	0	0	0	0
LIB	0	0	0	0	0
COL	24	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 80

NUMBER OF SYMBOLS, DEF 197,DEFOP 0,UNDEF 0
 ORG 125 FORCE NEW RECORD

			00175	ORG 125	FORCE NEW RECORD
	00175	0	01303 0 01367	HTR X-1,0,LOCREC	CARD FOR DE
			01303	ORG LOCREC	
TD	01303	3	00000 0 00175	TXH 125	7075 FT 27
				125	7076 FT 27
	01304	0	07400 4 00740	TSX PRINT,4	
	01305	0	01244 0 01237	HTR MACHIN,0,MACHIN+5	
	01306	0	07400 4 00740	TSX PRINT,4	
	01307	0	01370 0 01311	HTR PR,0,PR+47	
	01310	0	02000 0 00221	TRA DIGRTN	
	01311		606060606060	BCD 2	
			PR		
	01312		606060606060		
	01313		262143622560	BCD FALSE END OF FILE OR FALSE END OF RECORD IN READING RECORD F	
	01314		254524604626		
	01315		602631432560		
	01316		465160262143		
	01317		622560254524		
	01320		604626605125		
	01321		234651246031		
	01322		456051252124		
	01323		314527605125		
	01324		234651246026		
	01325		514644606321	BCD ROM TAPE 2, FILE 5. RECORDS IN THIS FILE	
	01326		472560027360		
	01327		263143256005		
	01330		336060512523		
	01331		465124626031		
	01332		456063303162		
	01333		602631432560		
	01334		606060606060		
	01335		606060606060		
	01336		606060606060		
	01337		215125604431	BCD ARE MINIMUM 2 WORDS, IDENTIFICATION WORD AND WORD COUNT. CO	
	01340		453144644460		
	01341		026066465124		
	01342		627360312425		
	01343		456331263123		
	01344		216331464560		
	01345		664651246021		
	01346		452460664651		
	01347		246023466445		
	01350		633360602346		
	01351		477060434646	BCD PY LOOP AT LOCATION 7070 DOES NOT ATTEMPT	
	01352		476021636043		
	01353		462321633146		
	01354		456007000700		
	01355		602446256260		
	01356		454663602163		
	01357		632544476360		
	01360		606060606060		
	01361		606060606060		
	01362		606060606060		
	01363		634660512521	BCD 5TO READ MORE THAN 2 WORDS.	
	01364		246044465125		

01365 606330214560
01366 026066465124
01367 623360606060
01370 0 00000 0 00000 X
00000

A END

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	19	0	0	0	0
LIB	0	0	0	0	0
COL	19	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 68

NUMBER OF SYMBOLS, DEF 197,DEFOP 0,UNDEF 0
ORG 126 FORCE NEW RECORD

			00176	ORG 126	FORCE NEW RECORD
	00176	0	01303 0 01374	HTR X-1,0,LOCREC	CARD FOR DE
			01303	ORG LOCREC	
TD	01303	3	00000 0 00176	TXH 126	7563 FT 21
	01304	0	07400 4 00740	TSX PRINT,4	
	01305	0	01244 0 01237	HTR MACHIN,0,MACHIN+5	
	01306	0	07400 4 00740	TSX PRINT,4	
	01307	0	01375 0 01311	HTR PR,0,PR+52	
	01310	0	02000 0 00221	TRA DIGRTN	
	01311	606060606060	PR	BCD 2	
	01312	606060606060			
	01313	262143622560		BCD FALSE END OF FILE IN READING A RECORD FROM TAPE 4. COPY LOO	
	01314	254524604626			
	01315	602631432560			
	01316	314560512521			
	01317	243145276021			
	01320	605125234651			
	01321	246026514644			
	01322	606321472560			
	01323	043360602346			
	01324	477060434646			
	01325	476022252731		BCD P BEGINS AT LOCATION 7552.	
	01326	456260216360			
	01327	434623216331			
	01330	464560070505			
	01331	023360606060			
	01332	606060606060			
	01333	606060606060			
	01334	606060606060			
	01335	606060606060			
	01336	606060606060			
	01337	633025602346		BCD THE COPY AT LOCATION 7561 IS AT LEAST THE SECOND ONE GIVEN A	
	01340	477060216360			
	01341	434623216331			
	01342	464560070506			
	01343	016031626021			
	01344	636043252162			
	01345	636063302560			
	01346	622523464524			
	01347	604645256027			
	01350	316525456021			
	01351	452460316260		BCD ND IS PROGRAMMED TO FIND	
	01352	475146275121			
	01353	444425246063			
	01354	466026314524			
	01355	606060606060			
	01356	606060606060			
	01357	606060606060			
	01360	606060606060			
	01361	606060606060			
	01362	606060606060			
	01363	214560254524		BCD AN END OF RECORD SKIP.	
	01364	604626605125			
	01365	234651246062			

01366 423147336060
01367 606060606060
01370 606060606060
01371 606060606060
01372 606060606060
01373 606060606060
01374 606060606060
01375 0 00000 0 00000 X

A 00000 END

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	18	0	0	0	0
LIB	0	0	0	0	0
COL	18	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 72

NUMBER OF SYMBOLS, DEF 197,DEFOP 0,UNDEF 0
ORG 127 FORCE NEW RECORD

			00177	ORG 127	FORCE NEW RECORD
	00177	0	01303 0 01374	HTR X-1,0,LOCREC	CARD FOR DE
			01303	ORG LOCREC	
TD	01303	3	00000 0 00177	TXH 127	7555 FT 21
	01304	0	07400 4 00740	TSX PRINT,4	
	01305	0	01244 0 01237	HTR MACHIN,0,MACHIN+5	
	01306	0	07400 4 00740	TSX PRINT,4	
	01307	0	01375 0 01311	HTR PR,0,PR+52	
	01310	0	02000 0 00221	TRA DIGRTN	
	01311	606060606060		BCD 2	
	01312	606060606060	PR		
	01313	262143622560		BCD FALSE END OF FILE IN READING THE FIRST WORD OF A RECORD FROM	
	01314	254524604626			
	01315	602631432560			
	01316	314560512521			
	01317	243145276063			
	01320	302560263151			
	01321	626360664651			
	01322	246046266021			
	01323	605125234651			
	01324	246026514644			
	01325	606321472560		BCD TAPE 4. COPY LOOP IS AT LOCATION 7552.	
	01326	043360602346			
	01327	477060434646			
	01330	476031626021			
	01331	636043462321			
	01332	633146456007			
	01333	050502336060			
	01334	606060606060			
	01335	606060606060			
	01336	606060606060			
	01337	633025602346		BCD THE COPY AT LOCATION 7553 DOES NOT ATTEMPT TO READ MORE THAN	
	01340	477060216360			
	01341	434623216331			
	01342	464560070505			
	01343	036024462562			
	01344	604546636021			
	01345	636325444763			
	01346	606346605125			
	01347	212460444651			
	01350	256063302145			
	01351	606330256031		BCD THE IDENTIFICATION WORD OF THESE RECORDS,	
	01352	242545633126			
	01353	312321633146			
	01354	456066465124			
	01355	604626606330			
	01356	256225605125			
	01357	234651246273			
	01360	606060606060			
	01361	606060606060			
	01362	606060606060			
	01363	663031233060		BCD WHICH ARE AT LEAST TWO WORDS LONG.	
	01364	215125602163			
	01365	604325216263			

01366 606366466066
01367 465124626043
01370 464527336060
01371 606060606060
01372 606060606060
01373 606060606060
01374 606060606060
01375 0 00000 0 00000 X

A 00000 END

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	18	0	0	0	0
LIB	0	0	0	0	0
COL	18	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 72

NUMBER OF SYMBOLS, DEF 197,DEFOP 0,UNDEF 0
ORG 128 FORCE NEW RECORD

			00200		ORG 128	FORCE NEW RECORD	
	00200	0	01303	0	01350	HTR X-1,0,LOCREC	CARD FOR DE
			01303			ORG LOCREC	
TD	01303	3	00000	0	00200	TXH 128	4035 FT 51
	01304	0	07400	4	00740	TSX PRINT,4	
	01305	0	01244	0	01237	HTR MACHIN,0,MACHIN+5	
	01306	0	07400	4	00740	TSX PRINT,4	
	01307	0	01351	0	01311	HTR PR,0,PR+32	
	01310	0	02000	0	00221	TRA DIGRTN	
	01311	60606060606060				BCD 2	
	01312	60606060606060					
	01313	262143622560				BCD FALSE END OF FILE IN READING TAGTAG RECORD FROM TAPE 4, FILE	
	01314	254524604626					
	01315	602631432560					
	01316	314560512521					
	01317	243145276063					
	01320	212763212760					
	01321	512523465124					
	01322	602651464460					
	01323	632147256004					
	01324	736026314325					
	01325	600233606023				BCD 2. COPY LOOP IS AT LOCATION 4027.	
	01326	464770604346					
	01327	464760316260					
	01330	216360434623					
	01331	216331464560					
	01332	040002073360					
	01333	60606060606060					
	01334	60606060606060					
	01335	60606060606060					
	01336	60606060606060					
	01337	234647706021				BCD COPY AT 4033 IS PROGRAMMED TO FIND END OF RECORD SKIP.	
	01340	636004000303					
	01341	603162604751					
	01342	462751214444					
	01343	252460634660					
	01344	263145246025					
	01345	452460462660					
	01346	512523465124					
	01347	606242314733					
	01350	60606060606060					
	01351	0	00000	0	00000	X	
A			00000				END

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	16	0	0	0	0
LIB	0	0	0	0	0
COL	16	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 52

NUMBER OF SYMBOLS, DEF 197,DEFOP 0,UNDEF 0
ORG 129 FORCE NEW RECORD

				00201	ORG 129	FORCE NEW RECORD	
	00201	0	01303	0	01342	HTR X-1,0,LOCREC	CARD FOR DE
				01303	ORG LOCREC		
TD	01303	3	00000	0	00201	TXH 129	4161 FT 34
	01304	0	07400	4	00740	TSX PRINT,4	
	01305	0	01244	0	01237	HTR MACHIN,0,MACHIN+5	
	01306	0	07400	4	00740	TSX PRINT,4	
	01307	0	01343	0	01311	HTR PR,0,PR+26	
	01310	0	02000	0	00221	TRA DIGRTN	
	01311	60606060606060				BCD 2	
	01312	60606060606060					
	01313	262143622560				BCD FALSE END OF FILE IN READING DOTAG RECORD FROM TAPE 3, FILE	
	01314	254524604626					
	01315	602631432560					
	01316	314560512521					
	01317	243145276024					
	01320	466321276051					
	01321	252346512460					
	01322	265146446063					
	01323	214725600373					
	01324	602631432560					
	01325	013360602346				BCD 1. COPY LOOP AT LOCATION 4157 SHOULD CAUSE	
	01326	477060434646					
	01327	476021636043					
	01330	462321633146					
	01331	456004010507					
	01332	606230466443					
	01333	246023216462					
	01334	25606060606060					
	01335	60606060606060					
	01336	60606060606060					
	01337	254524604626				BCD 4END OF RECORD SKIP.	
	01340	605125234651					
	01341	246062423147					
	01342	33606060606060					
	01343	0	00000	0	00000	X	
A				00000		END	

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	16	0	0	0	0
LIB	0	0	0	0	0
COL	16	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 46

NUMBER OF SYMBOLS, DEF 197,DEFOP 0,UNDEF 0
 ORG 130 FORCE NEW RECORD

				00202	ORG 130	FORCE NEW RECORD
	00202	0	01303	0 01353	HTR X-1,0,LOCREC	CARD FOR DE
				01303	ORG LOCREC	
TD	01303	3	00000	0 00202	TXH 130	7052 FT 36
					I30	7056 FT 36
	01304	0	07400	4 00740	TSX PRINT,4	
	01305	0	01244	0 01237	HTR MACHIN,0,MACHIN+5	
	01306	0	07400	4 00740	TSX PRINT,4	
	01307	0	01354	0 01311	HTR PR,0,PR+35	
	01310	0	02000	0 00221	TRA DIGRTN	
	01311	60606060606060			BCD 2	
				PR		
	01312	60606060606060				
	01313	262143622560			BCD FALSE END OF FILE IN READING DOTAG RECORD FROM TAPE 3, FILE	
	01314	254524604626				
	01315	602631432560				
	01316	314560512521				
	01317	243145276024				
	01320	466321276051				
	01321	252346512460				
	01322	265146446063				
	01323	214725600373				
	01324	602631432560				
	01325	013360605125			BCD 1. RECORD CONTAINS A NUMBER OF 9 WORD ENTRIES.	
	01326	234651246023				
	01327	464563213145				
	01330	626021604564				
	01331	442225516046				
	01332	266011606646				
	01333	512460254563				
	01334	513125623360				
	01335	606060606060				
	01336	606060606060				
	01337	234647706043			BCD COPY LOOP AT LOCATION 7043 ONLY READS FIRST AND SECOND WORD	
	01340	464647602163				
	01341	604346232163				
	01342	314645600700				
	01343	040360464543				
	01344	706051252124				
	01345	626026315162				
	01346	636021452460				
	01347	622523464524				
	01350	606646512460				
	01351	462660252123			BCD 3OF EACH ENTRY.	
	01352	306025456351				
	01353	703360606060				
A	01354	0 00000	0 00000	X		
			00000		END	

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	18	0	0	0	0
LIB	0	0	0	0	0
COL	18	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0
NUMBER OF OFF-LINE PRINT RECORDS 56
NUMBER OF SYMBOLS, DEF 197,DEFOP 0,UNDEF 0
ORG 131 FORCE NEW RECORD

			00203	ORG 131	FORCE NEW RECORD
	00203	0	01303 0 01375	HTR X-1,0,LOCREC	CARD FOR DE
			01303	ORG LOCREC	
TD	01303	3	00000 0 00203	TXH 131	7103 FT 27
	01304	0	07400 4 00740	TSX PRINT,4	
	01305	0	01244 0 01237	HTR MACHIN,0,MACHIN+5	
	01306	0	07400 4 00740	TSX PRINT,4	
	01307	0	01376 0 01311	HTR PR,0,PR+53	
	01310	0	02000 0 00221	TRA DIGRTN	
	01311	606060606060		BCD 2	
	01312	606060606060	PR		
	01313	262143622560		BCD FALSE END OF FILE IN READING RECORD FROM TAPE 2, FILE 5.	RE
	01314	254524604626			
	01315	602631432560			
	01316	314560512521			
	01317	243145276051			
	01320	252346512460			
	01321	265146446063			
	01322	214725600273			
	01323	602631432560			
	01324	053360605125		BCD CORDS IN THIS FILE ARE MINIMUM 2 WORDS,	
	01325	234651246260			
	01326	314560633031			
	01327	626026314325			
	01330	602151256044			
	01331	314531446444			
	01332	600260664651			
	01333	246273606060			
	01334	606060606060			
	01335	606060606060			
	01336	606060606060			
	01337	312425456331		BCD IDENTIFICATION AND WORD COUNT. COPY AT LOCATION 7101 IS AT	
	01340	263123216331			
	01341	464560214524			
	01342	606646512460			
	01343	234664456333			
	01344	606023464770			
	01345	602163604346			
	01346	232163314645			
	01347	600701000160			
	01350	316260216360			
	01351	432521626360		BCD LEAST THIRD COPY GIVEN, AND IS PROGRAMMED	
	01352	633031512460			
	01353	234647706027			
	01354	316525457360			
	01355	214524603162			
	01356	604751462751			
	01357	214444252460			
	01360	606060606060			
	01361	606060606060			
	01362	606060606060			
	01363	634660263145		BCD TO FIND END OF RECORD SKIP. COPY LOOP BEGINS AT LOCATION 70	
	01364	246025452460			
	01365	462660512523			

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01366 465124606242
01367 314733606023
01370 464770604346
01371 464760222527
01372 314562602163
01373 604346232163
01374 314645600700
01375 070033606060      BCD 170.
01376 0 00000 0 00000 X
A          00000      END

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SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	19	0	0	0	0
LIB	0	0	0	0	0
COL	19	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 73

NUMBER OF SYMBOLS, DEF 197,DEFOP 0,UNDEF 0
 ORG 132 FORCE NEW RECORD

			00204	ORG 132	FORCE NEW RECORD
	00204	0	01303 0 01367	HTR X-1,0,LOCREC	CARD FOR DE
			01303	ORG LOCREC	
TD	01303	3	00000 0 00204	TXH 132	7135 FT 27
	01304	0	07400 4 00740	TSX PRINT,4	
	01305	0	01244 0 01237	HTR MACHIN,0,MACHIN+5	
	01306	0	07400 4 00740	TSX PRINT,4	
	01307	0	01370 0 01311	HTR PR,0,PR+47	
	01310	0	02000 0 00221	TRA DIGRTN	
	01311	606060606060	PR	BCD 2	
	01312	606060606060			
	01313	262143622560		BCD FALSE END OF FILE IN READING RECORD FROM TAPE 2, FILE 5, REC	
	01314	254524604626			
	01315	602631432560			
	01316	314560512521			
	01317	243145276051			
	01320	252346512460			
	01321	265146446063			
	01322	214725600273			
	01323	602631432560			
	01324	057360512523			
	01325	465124601033		BCD ORD 8. COPY LOOP IS GENERAL	
	01326	606023464770			
	01327	604346464760			
	01330	316260272545			
	01331	255121436060			
	01332	606060606060			
	01333	606060606060			
	01334	606060606060			
	01335	606060606060			
	01336	606060606060			
	01337	626422514664		BCD SUBROUTINE AT LOCATION 7060. COPY AT LOCATION 7133 IS PROGR	
	01340	633145256021			
	01341	636043462321			
	01342	633146456007			
	01343	000600336060			
	01344	234647706021			
	01345	636043462321			
	01346	633146456007			
	01347	010303603162			
	01350	604751462751			
	01351	214444252460		BCD AMMED TO FIND END OF RECORD SKIP	
	01352	634660263145			
	01353	246025452460			
	01354	462660512523			
	01355	465124606242			
	01356	314760606060			
	01357	606060606060			
	01360	606060606060			
	01361	606060606060			
	01362	606060606060			
	01363	264651606330		BCD 5FOR THIS SPECIFIC RECORD.	
	01364	316260624725			
	01365	233126312360			

01366 512523465124
01367 336060606060
01370 0 00000 0 00000 X

A 00000 END

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	18	0	0	0	0
LIB	0	0	0	0	0
COL	18	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 67

NUMBER OF SYMBOLS, DEF 197,DEFOP 0,UNDEF 0
ORG 133 FORCE NEW RECORD

				00205	ORG 133	FORCE NEW RECORD
	00205	0	01303	0 01356	HTR X-1,0,LOCREC	CARD FOR DE
				01303	ORG LOCREC	
TD	01303	3	00000	0 00205	TXH 133	60 FT 56
	01304	0	07400	4 00740	TSX PRINT,4	
	01305	0	01244	0 01237	HTR MACHIN,0,MACHIN+5	
	01306	0	07400	4 00740	TSX PRINT,4	
	01307	0	01357	0 01311	HTR PR,0,PR+38	
	01310	0	02000	0 00221	TRA DIGRTN	
	01311	60606060606060			BCD 2	
	01312	60606060606060				
	01313	262143622560			BCD FALSE END OF FILE IN READING FORTAG RECORD TAPE 2, FILE 5, R	
	01314	254524604626				
	01315	602631432560				
	01316	314560512521				
	01317	243145276026				
	01320	465163212760				
	01321	512523465124				
	01322	606321472560				
	01323	027360263143				
	01324	256005736051				
	01325	252346512460			BCD ECORD 11. THERE ARE 14 RECORDS	
	01326	010133606063				
	01327	302551256021				
	01330	512560010460				
	01331	512523465124				
	01332	626060606060				
	01333	606060606060				
	01334	606060606060				
	01335	606060606060				
	01336	606060606060				
	01337	314560633031			BCD IN THIS FILE. COPY LOOP IS AT LOCATION 43. COPY AT LOCATIO	
	01340	626026314325				
	01341	336060234647				
	01342	706043464647				
	01343	603162602163				
	01344	604346232163				
	01345	314645600403				
	01346	336060234647				
	01347	706021636043				
	01350	462321633146				
	01351	456005066062			BCD 6N 56 SHOULD FIND END OF RECORD SKIP.	
	01352	304664432460				
	01353	263145246025				
	01354	452460462660				
	01355	512523465124				
	01356	606242314733				
	01357	0 00000	0 00000	X		
A			00000		END	

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	17	0	0	0	0

LIB	0	0	0	0	0
COL	17	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 58

NUMBER OF SYMBOLS, DEF 197,DEFOP 0,UNDEF 0
ORG 134 FORCE NEW RECORD

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00206          00206          ORG 134          FORCE NEW RECORD
00206 0 01303 0 01350      HTR X-1,0,LOCREC      CARD FOR DE
                                01303          ORG LOCREC
TD 01303 3 00000 0 00206      TXH 134          340 FT 58
01304 0 07400 4 00740      TSX PRINT,4
01305 0 01244 0 01237      HTR MACHIN,0,MACHIN+5
01306 0 07400 4 00740      TSX PRINT,4
01307 0 01351 0 01311      HTR PR,0,PR+32
01310 0 02000 0 00221      TRA DIGRTN
01311 6060606060606060      BCD 2
                                PR
01312 6060606060606060
01313 262143622560          BCD FALSE END OF FILE IN READING TIFGO FROM TAPE 2, FILE 5, RECO
01314 254524604626
01315 602631432560
01316 314560512521
01317 243145276063
01320 312627466026
01321 514644606321
01322 472560027360
01323 263143256005
01324 736051252346
01325 512460063360          BCD RD 6. THERE ARE 14 RECORDS IN THIS FILE.
01326 606330255125
01327 602151256001
01330 046051252346
01331 512462603145
01332 606330316260
01333 263143253360
01334 6060606060606060
01335 6060606060606060
01336 6060606060606060
01337 234647706021          BCD COPY AT LOCATION 336 SHOULD FIND END OF RECORD SKIP.
01340 636043462321
01341 633146456003
01342 030660623046
01343 644324602631
01344 452460254524
01345 604626605125
01346 234651246062
01347 423147336060
01350 6060606060606060
01351 0 00000 0 00000 X
A                                00000      END

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SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	16	0	0	0	0
LIB	0	0	0	0	0
COL	16	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 52

NUMBER OF SYMBOLS, DEF 197,DEFOP 0,UNDEF 0
ORG 135 FORCE NEW RECORD

			00207	ORG 135	FORCE NEW RECORD
	00207	0	01303 0 01357	HTR X-1,0,LOCREC	CARD FOR DE
			01303	ORG LOCREC	
TD	01303	3	00000 0 00207	TXH 135	366 FT 58
	01304	0	07400 4 00740	TSX PRINT,4	
	01305	0	01244 0 01237	HTR MACHIN,0,MACHIN+5	
	01306	0	07400 4 00740	TSX PRINT,4	
	01307	0	01360 0 01311	HTR PR,0,PR+39	
	01310	0	02000 0 00221	TRA DIGRTN	
	01311	606060606060		BCD 2	
	01312	606060606060	PR		
	01313	262143622560		BCD FALSE END OF FILE IN READING TRAD RECORD TAPE 2, FILE 5, REC	
	01314	254524604626			
	01315	602631432560			
	01316	314560512521			
	01317	243145276063			
	01320	512124605125			
	01321	234651246063			
	01322	214725600273			
	01323	602631432560			
	01324	057360512523			
	01325	465124600733		BCD ORD 7. THERE ARE 14 RECORDS	
	01326	606063302551			
	01327	256021512560			
	01330	010460512523			
	01331	465124626060			
	01332	606060606060			
	01333	606060606060			
	01334	606060606060			
	01335	606060606060			
	01336	606060606060			
	01337	314560633031		BCD IN THIS FILE. COPY LOOP IS AT LOCATION 352. COPY AT LOCATI	
	01340	626026314325			
	01341	336060234647			
	01342	706043464647			
	01343	603162602163			
	01344	604346232163			
	01345	314645600305			
	01346	023360602346			
	01347	477060216360			
	01350	434623216331			
	01351	464560030604		BCD 7ON 364 SHOULD FIND END OF RECORD SKIP.	
	01352	606230466443			
	01353	246026314524			
	01354	602545246046			
	01355	266051252346			
	01356	512460624231			
	01357	473360606060			
	01360	0 00000 0 00000 X			
A			00000	END	

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
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INP	17	0	0	0	0
LIB	0	0	0	0	0
COL	17	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 59

NUMBER OF SYMBOLS, DEF 197,DEFOP 0,UNDEF 0
ORG 136 FORCE NEW RECORD

			00210		ORG 136	FORCE NEW RECORD
	00210	0	01303	0	01347	HTR X-1,0,LOCREC
			01303			CARD FOR DE
			01303			ORG LOCREC
TD	01303	3	00000	0	00210	TXH 136
	01304	0	07400	4	00740	417 FT 58
	01305	0	01244	0	01237	TSX PRINT,4
	01306	0	07400	4	00740	HTR MACHIN,0,MACHIN+5
	01307	0	01350	0	01311	TSX PRINT,4
	01310	0	02000	0	00221	HTR PR,0,PR+31
	01311	60606060606060				TRA DIGRTN
	01312	60606060606060				BCD 2
	01313	262143622560				
	01314	254524604626				BCD FALSE END OF FILE IN READING TRALEV RECORD FROM TAPE 4, FILE
	01315	602631432560				
	01316	314560512521				
	01317	243145276063				
	01320	512143256560				
	01321	512523465124				
	01322	602651464460				
	01323	632147256004				
	01324	736026314325				
	01325	600173605125				BCD 1, RECORD 1. COPY LOOP IS AT LOCATION 401.
	01326	234651246001				
	01327	336060234647				
	01330	706043464647				
	01331	603162602163				
	01332	604346232163				
	01333	314645600400				
	01334	01336060606060				
	01335	60606060606060				
	01336	60606060606060				
	01337	234647706021				BCD 9COPY AT LOCATION 415 SHOULD FIND END OF RECORD SKIP.
	01340	636043462321				
	01341	633146456004				
	01342	010560623046				
	01343	644324602631				
	01344	452460254524				
	01345	604626605125				
	01346	234651246062				
	01347	423147336060				
	01350	0	00000	0	00000	X
A			00000			END

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	16	0	0	0	0
LIB	0	0	0	0	0
COL	16	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 51

NUMBER OF SYMBOLS, DEF 197,DEFOP 0,UNDEF 0

ORG 137

FORCE NEW RECORD

```

00211          00211          ORG 137          FORCE NEW RECORD
00211 0 01303 0 01334      HTR X-1,0,LOCREC      CARD FOR DE
                                01303          ORG LOCREC
TD 01303 3 00000 0 00211      TXH 137          454 FT 62
01304 0 07400 4 00740      TSX PRINT,4
01305 0 01244 0 01237      HTR MACHIN,0,MACHIN+5
01306 0 07400 4 00740      TSX PRINT,4
01307 0 01335 0 01311      HTR PR,0,PR+20
01310 0 02000 0 00221      TRA DIGRTN
01311 60606060606060        PR          BCD 2
01312 60606060606060
01313 262143622560          BCD FALSE END OF FILE IN READING TIFGO RECORD FROM TAPE 2, FILE
01314 254524604626
01315 602631432560
01316 314560512521
01317 243145276063
01320 312627466051
01321 252346512460
01322 265146446063
01323 214725600273
01324 602631432560
01325 057360512523          BCD 85, RECORD 6. COPY LOOP IS AT LOCATION 447.
01326 465124600633
01327 606023464770
01330 604346464760
01331 316260216360
01332 434623216331
01333 464560040407
01334 336060606060
01335 0 00000 0 00000 X
A          00000          END

```

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	15	0	0	0	0
LIB	0	0	0	0	0
COL	15	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 40

NUMBER OF SYMBOLS, DEF 197,DEFOP 0,UNDEF 0
 ORG 138 FORCE NEW RECORD


```

00212          00212          ORG 138          FORCE NEW RECORD
00212 0 01303 0 01334      HTR X-1,0,LOCREC      CARD FOR DE
                                01303          ORG LOCREC
TD 01303 3 00000 0 00212      TXH 138          534 FT 62
01304 0 07400 4 00740      TSX PRINT,4
01305 0 01244 0 01237      HTR MACHIN,0,MACHIN+5
01306 0 07400 4 00740      TSX PRINT,4
01307 0 01335 0 01311      HTR PR,0,PR+20
01310 0 02000 0 00221      TRA DIGRTN
01311 6060606060606060        PR          BCD 2
01312 6060606060606060
01313 262143622560          BCD FALSE END OF FILE IN READING TRAD RECORD FROM TAPE 2, FILE 5
01314 254524604626
01315 602631432560
01316 314560512521
01317 243145276063
01320 512124605125
01321 234651246026
01322 514644606321
01323 472560027360
01324 263143256005
01325 736051252346          BCD 8, RECORD 7. COPY LOOP IS AT LOCATION 530.
01326 512460073360
01327 602346477060
01330 434646476031
01331 626021636043
01332 462321633146
01333 456005030033
01334 60606060606060
01335 0 00000 0 00000 X
A          00000          END

```

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	15	0	0	0	0
LIB	0	0	0	0	0
COL	15	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 40

NUMBER OF SYMBOLS, DEF 197,DEFOP 0,UNDEF 0
 ORG 139 FORCE NEW RECORD

			00213		ORG 139	FORCE NEW RECORD	
	00213	0	01303	0	01350	HTR X-1,0,LOCREC	CARD FOR DE
			01303			ORG LOCREC	
TD	01303	3	00000	0	00213	TXH 139	336 FT 86
	01304	0	07400	4	00740	TSX PRINT,4	
	01305	0	01244	0	01237	HTR MACHIN,0,MACHIN+5	
	01306	0	07400	4	00740	TSX PRINT,4	
	01307	0	01351	0	01311	HTR PR,0,PR+32	
	01310	0	02000	0	00221	TRA DIGRTN	
	01311	60606060606060				BCD 2	
	01312	60606060606060					
	01313	262143622560				BCD FALSE END OF FILE IN READING RECORD FROM TAPE 3, WHICH SHOUL	
	01314	254524604626					
	01315	602631432560					
	01316	314560512521					
	01317	243145276051					
	01320	252346512460					
	01321	265146446063					
	01322	214725600373					
	01323	606630312330					
	01324	606230466443					
	01325	246030216525				BCD D HAVE BEEN POSITIONED AFTER FILE MARK	
	01326	602225254560					
	01327	474662316331					
	01330	464525246021					
	01331	266325516026					
	01332	314325604421					
	01333	514260606060					
	01334	606060606060					
	01335	606060606060					
	01336	606060606060					
	01337	216360633025				BCD AT THE END OF THE 8TH FILE. COPY LOOP IS AT LOCATION 325.	
	01340	602545246046					
	01341	266063302560					
	01342	106330602631					
	01343	432533606023					
	01344	464770604346					
	01345	464760316260					
	01346	216360434623					
	01347	216331464560					
	01350	030205336060					
	01351	0	00000	0	00000	X	
A			00000				END

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	16	0	0	0	0
LIB	0	0	0	0	0
COL	16	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 52

NUMBER OF SYMBOLS, DEF 197,DEFOP 0,UNDEF 0
ORG 140 FORCE NEW RECORD

			00214	ORG 140	FORCE NEW RECORD
	00214	0	01303 0 01350	HTR X-1,0,LOCREC	CARD FOR DE
			01303	ORG LOCREC	
TD	01303	3	00000 0 00214	TXH 140	1211 FT 75
	01304	0	07400 4 00740	TSX PRINT,4	
	01305	0	01244 0 01237	HTR MACHIN,0,MACHIN+5	
	01306	0	07400 4 00740	TSX PRINT,4	
	01307	0	01351 0 01311	HTR PR,0,X	
	01310	0	02000 0 00221	TRA DIGRTN	
	01311	606060606060	PR	BCD 2	
	01312	606060606060			
	01313	262143622560		BCD FALSE END OF FILE IN READING RECORD FROM TAPE 3, FILE 3.	TH
	01314	254524604626			
	01315	602631432560			
	01316	314560512521			
	01317	243145276051			
	01320	252346512460			
	01321	265146446063			
	01322	214725600373			
	01323	602631432560			
	01324	033360606330		BCD ESE ARE 15 WORD RECORDS AND	
	01325	256225602151			
	01326	256001056066			
	01327	465124605125			
	01330	234651246260			
	01331	214524606060			
	01332	606060606060			
	01333	606060606060			
	01334	606060606060			
	01335	606060606060			
	01336	606060606060			
	01337	633025512560		BCD THERE IS AN END OF FILE MARK. COPY LOOP IS AT LOCATION 1172	
	01340	316260214560			
	01341	254524604626			
	01342	602631432560			
	01343	442151423360			
	01344	602346477060			
	01345	434646476031			
	01346	626021636043			
	01347	462321633146			
	01350	456001010702			
	01351	0 00000 0 00000 X			
A		00000		END	

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	16	0	0	0	0
LIB	0	0	0	0	0
COL	16	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 52

NUMBER OF SYMBOLS, DEF 197,DEFOP 0,UNDEF 0
ORG 141 FORCE NEW RECORD

			00215	ORG 141	FORCE NEW RECORD	
	00215	0	01303 0	01344	HTR X-1,0,LOCREC	CARD FOR DE
			01303	ORG LOCREC		
TD	01303	3	00000 0	00215	TXH 141	1221 FT 75
	01304	0	07400 4	00740	TSX PRINT,4	
	01305	0	01244 0	01237	HTR MACHIN,0,MACHIN+5	
	01306	0	07400 4	00740	TSX PRINT,4	
	01307	0	01345 0	01311	HTR PR,0,PR+28	
	01310	0	02000 0	00221	TRA DIGRTN	
	01311	606060606060			BCD 2	
	01312	606060606060	PR			
	01313	262143622560			BCD FALSE END OF FILE IN READING RECORD FROM TAPE 3, FILE 3.	TH
	01314	254524604626				
	01315	602631432560				
	01316	314560512521				
	01317	243145276051				
	01320	252346512460				
	01321	265146446063				
	01322	214725600373				
	01323	602631432560				
	01324	033360606330			BCD IS FILE DOES NOT HAVE A FILE MARK AT THE END.	
	01325	316260263143				
	01326	256024462562				
	01327	604546636030				
	01330	216525602160				
	01331	263143256044				
	01332	215142602163				
	01333	606330256025				
	01334	452433606060				
	01335	606060606060				
	01336	606060606060				
	01337	234647706043			BCD 6COPY LOOP IS AT LOCATION 1172.	
	01340	464647603162				
	01341	602163604346				
	01342	232163314645				
	01343	600101070233				
	01344	606060606060				
	01345	0 00000 0	00000 X			
A			00000		END	

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	16	0	0	0	0
LIB	0	0	0	0	0
COL	16	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 48

NUMBER OF SYMBOLS, DEF 197,DEFOP 0,UNDEF 0
 ORG 142 FORCE NEW RECORD

			00216	ORG 142	FORCE NEW RECORD
	00216	0	01303 0 01374	HTR X-1,0,LOCREC	CARD FOR DE
			01303	ORG LOCREC	
TD	01303	3	00000 0 00216	TXH 142	37 FT 90
	01304	0	07400 4 00740	TSX PRINT,4	
	01305	0	01244 0 01237	HTR MACHIN,0,MACHIN+5	
	01306	0	07400 4 00740	TSX PRINT,4	
	01307	0	01375 0 01311	HTR PR,0,PR+52	
	01310	0	02000 0 00221	TRA DIGRTN	
	01311	606060606060	PR	BCD 2	
	01312	606060606060			
	01313	262143622560		BCD FALSE END OF FILE IN READING CIT RECORD FROM TAPE 3, WHICH S	
	01314	254524604626			
	01315	602631432560			
	01316	314560512521			
	01317	243145276023			
	01320	316360512523			
	01321	465124602651			
	01322	464460632147			
	01323	256003736066			
	01324	303123306062		BCD HOULD HAVE BEEN POSITIONED AFTER FILE MARK.	
	01325	304664432460			
	01326	302165256022			
	01327	252545604746			
	01330	623163314645			
	01331	252460212663			
	01332	255160263143			
	01333	256044215142			
	01334	336060606060			
	01335	606060606060			
	01336	606060606060			
	01337	234647706043		BCD COPY LOOP BEGINS AT LOCATION 30 WITH 2 BST INSTRUCTIONS. CO	
	01340	464647602225			
	01341	273145626021			
	01342	636043462321			
	01343	633146456003			
	01344	006066316330			
	01345	600260226263			
	01346	603145626351			
	01347	642363314645			
	01350	623360602346			
	01351	477060216360		BCD PY AT 35 IS PROGRAMMED	
	01352	030560316260			
	01353	475146275121			
	01354	444425246060			
	01355	606060606060			
	01356	606060606060			
	01357	606060606060			
	01360	606060606060			
	01361	606060606060			
	01362	606060606060			
	01363	634660263145		BCD TO FIND END OF RECORD SKIP.	
	01364	246025452460			
	01365	462660512523			

01366 465124606242
01367 314733606060
01370 606060606060
01371 606060606060
01372 606060606060
01373 606060606060
01374 606060606060
01375 0 00000 0 00000 X

A 00000 END

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	18	0	0	0	0
LIB	0	0	0	0	0
COL	18	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 72

NUMBER OF SYMBOLS, DEF 197,DEFOP 0,UNDEF 0
ORG 143 FORCE NEW RECORD

			00217	ORG 143	FORCE NEW RECORD
	00217	0	01303 0 01362	HTR X-1,0,LOCREC	CARD FOR DE
			01303	ORG LOCREC	
TD	01303	3	00000 0 00217	TXH 143	321 FT 90
	01304	0	07400 4 00740	TSX PRINT,4	
	01305	0	01244 0 01237	HTR MACHIN,0,MACHIN+5	
	01306	0	07400 4 00740	TSX PRINT,4	
	01307	0	01363 0 01311	HTR PR,0,PR+42	
	01310	0	02000 0 00221	TRA DIGRTN	
	01311	606060606060	PR	BCD 2	
	01312	606060606060			
	01313	262143622560		BCD FALSE END OF FILE IN READING A RECORD FROM TAPE 2. COPY LOO	
	01314	254524604626			
	01315	602631432560			
	01316	314560512521			
	01317	243145276021			
	01320	605125234651			
	01321	246026514644			
	01322	606321472560			
	01323	023360602346			
	01324	477060434646			
	01325	476031626021		BCD P IS AT LOCATION 305 AND READS FROM	
	01326	636043462321			
	01327	633146456003			
	01330	000560214524			
	01331	605125212462			
	01332	602651464460			
	01333	606060606060			
	01334	606060606060			
	01335	606060606060			
	01336	606060606060			
	01337	263143256003		BCD FILE 3, 4, 5, 7, 9 OR 10. COPY AT LOCATION 317 IS PROGRAMME	
	01340	736004736005			
	01341	736007736011			
	01342	604651600100			
	01343	336060234647			
	01344	706021636043			
	01345	462321633146			
	01346	456003010760			
	01347	316260475146			
	01350	275121444425			
	01351	246063466026		BCD D TO FIND END OF RECORD SKIP.	
	01352	314524602545			
	01353	246046266051			
	01354	252346512460			
	01355	624231473360			
	01356	606060606060			
	01357	606060606060			
	01360	606060606060			
	01361	606060606060			
	01362	606060606060			
	01363	0 00000 0 00000 X			
A			00000	END	

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	17	0	0	0	0
LIB	0	0	0	0	0
COL	17	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 62

NUMBER OF SYMBOLS, DEF 197,DEFOP 0,UNDEF 0
ORG 144 FORCE NEW RECORD

```

00220          00220          ORG 144          FORCE NEW RECORD
00220 0 01303 0 01332      HTR X-1,0,LOCREC      CARD FOR DE
                                01303          ORG LOCREC
TD 01303 3 00000 0 00220      TXH 144          1341 FT 92
01304 0 07400 4 00740      TSX PRINT,4
01305 0 01244 0 01237      HTR MACHIN,0,MACHIN+5
01306 0 07400 4 00740      TSX PRINT,4
01307 0 01333 0 01311      HTR PR,0,PR+18
01310 0 02000 0 00221      TRA DIGRTN
01311 60606060606060        PR          BCD 2
01312 60606060606060
01313 262143622560          BCD FALSE END OF FILE IN READING RECORD FROM TAPE 2, RECORD 2, F
01314 254524604626
01315 602631432560
01316 314560512521
01317 243145276051
01320 252346512460
01321 265146446063
01322 214725600273
01323 605125234651
01324 246002736026
01325 314325600533          BCD 6ILE 5. COPY LOOP IS AT LOCATION 135.
01326 606023464770
01327 604346464760
01330 316260216360
01331 434623216331
01332 464560010305
01333 0 00000 0 00000 X
A          00000          END

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SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	15	0	0	0	0
LIB	0	0	0	0	0
COL	15	0	0	0	0

```

NUMBER OF ON-LINE INPUT RECORDS          0
NUMBER OF OFF-LINE PRINT RECORDS        38
NUMBER OF SYMBOLS, DEF 197,DEFOP 0,UNDEF 0
          ORG 145          FORCE NEW RECORD

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00221          00221          ORG 145          FORCE NEW RECORD
00221 0 01303 0 01333      HTR X-1,0,LOCREC      CARD FOR DE
                                01303          ORG LOCREC
TD 01303 3 00000 0 00221      TXH 145          1347 FT 92
01304 0 07400 4 00740      TSX PRINT,4
01305 0 01244 0 01237      HTR MACHIN,0,MACHIN+5
01306 0 07400 4 00740      TSX PRINT,4
01307 0 01334 0 01311      HTR PR,0,PR+19
01310 0 02000 0 00221      TRA DIGRTN
01311 60606060606060        PR          BCD 2
01312 60606060606060
01313 262143622560          BCD FALSE END OF FILE IN READING RECORD FROM TAPE 2, RECORD 4, F
01314 254524604626
01315 602631432560
01316 314560512521
01317 243145276051
01320 252346512460
01321 265146446063
01322 214725600273
01323 605125234651
01324 246004736026
01325 314325600533          BCD 7ILE 5. COPY LOOP IS AT LOCATION 1131.
01326 606023464770
01327 604346464760
01330 316260216360
01331 434623216331
01332 464560010103
01333 013360606060
01334 0 00000 0 00000 X
A          00000          END

```

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	15	0	0	0	0
LIB	0	0	0	0	0
COL	15	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 39

NUMBER OF SYMBOLS, DEF 197,DEFOP 0,UNDEF 0
 ORG 146 FORCE NEW RECORD

			00222		ORG 146	FORCE NEW RECORD
	00222	0	01303	0	01350	HTR X-1,0,LOCREC
			01303			CARD FOR DE
TD	01303	3	00000	0	00222	ORG LOCREC
	01304	0	07400	4	00740	TXH 146
	01305	0	01244	0	01237	3672 FT 115
	01306	0	07400	4	00740	TSX PRINT,4
	01307	0	01351	0	01311	HTR MACHIN,0,MACHIN+5
	01310	0	02000	0	00221	TSX PRINT,4
	01311	60606060606060				HTR PR,0,PR+32
	01312	60606060606060				TRA DIGRTN
	01313	262143622560				BCD 2
	01314	254524604626				BCD FALSE END OF FILE IN READING TAPE RECORD OF CARD IMAGE FROM
	01315	602631432560				
	01316	314560512521				
	01317	243145276063				
	01320	214725605125				
	01321	234651246046				
	01322	266023215124				
	01323	603144212725				
	01324	602651464460				
	01325	632147256003				BCD TAPE 3. COPY AT LOCATION 3670 SHOULD
	01326	336060234647				
	01327	706021636043				
	01330	462321633146				
	01331	456003060700				
	01332	606230466443				
	01333	246060606060				
	01334	606060606060				
	01335	606060606060				
	01336	606060606060				
	01337	232164622560				BCD CAUSE END OF RECORD SKIP. COPY LOOP IS AT LOCATION 3655.
	01340	254524604626				
	01341	605125234651				
	01342	246062423147				
	01343	336060234647				
	01344	706043464647				
	01345	603162602163				
	01346	604346232163				
	01347	314645600306				
	01350	050533606060				
	01351	0	00000	0	00000	X
A			00000			END

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	16	0	0	0	0
LIB	0	0	0	0	0
COL	16	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 52

NUMBER OF SYMBOLS, DEF 197,DEFOP 0,UNDEF 0
ORG 147 FORCE NEW RECORD

			00223	ORG 147	FORCE NEW RECORD
	00223	0	01303 0 01351	HTR X-1,0,LOCREC	CARD FOR DE
			01303	ORG LOCREC	
TD	01303	3	00000 0 00223	TXH 147	427 FT 96
	01304	0	07400 4 00740	TSX PRINT,4	
	01305	0	01244 0 01237	HTR MACHIN,0,MACHIN+5	
	01306	0	07400 4 00740	TSX PRINT,4	
	01307	0	01352 0 01311	HTR PR,0,PR+33	
	01310	0	02000 0 00221	TRA DIGRTN	
	01311	60606060606060		BCD 2	
	01312	60606060606060	PR		
	01313	262143622560		BCD FALSE END OF FILE IN READING THE COMMON RECORD FROM TAPE 2,	
	01314	254524604626			
	01315	602631432560			
	01316	314560512521			
	01317	243145276063			
	01320	302560234644			
	01321	444645605125			
	01322	234651246026			
	01323	514644606321			
	01324	472560027360			
	01325	512523465124		BCD RECORD 3, FILE 5. COPY LOOP IS AT LOCATION 404.	
	01326	600373602631			
	01327	432560053360			
	01330	602346477060			
	01331	434646476031			
	01332	626021636043			
	01333	462321633146			
	01334	456004000433			
	01335	60606060606060			
	01336	60606060606060			
	01337	234647706021		BCD COPY AT LOCATION 414 IS PROGRAMMED TO FIND END OF RECORD SKI	
	01340	636043462321			
	01341	633146456004			
	01342	010460316260			
	01343	475146275121			
	01344	444425246063			
	01345	466026314524			
	01346	602545246046			
	01347	266051252346			
	01350	512460624231			
	01351	47336060606060		BCD 1P.	
	01352	0 00000 0 00000 X			
A		00000		END	

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	17	0	0	0	0
LIB	0	0	0	0	0
COL	17	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 53

NUMBER OF SYMBOLS, DEF 197,DEFOP 0,UNDEF 0
ORG 148 FORCE NEW RECORD


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00224          00224          ORG 148          FORCE NEW RECORD
00224 0 01303 0 01352      HTR X-1,0,LOCREC      CARD FOR DE
                                01303          ORG LOCREC
TD 01303 3 00000 0 00224      TXH 148          624 FT 98
01304 0 07400 4 00740      TSX PRINT,4
01305 0 01244 0 01237      HTR MACHIN,0,MACHIN+5
01306 0 07400 4 00740      TSX PRINT,4
01307 0 01353 0 01311      HTR PR,0,PR+34
01310 0 02000 0 00221      TRA DIGRTN
01311 60606060606060        PR          BCD 2
01312 60606060606060
01313 262143622560          BCD FALSE END OF FILE IN READING SUBDEF TABLE FROM TAPE 2, RECOR
01314 254524604626
01315 602631432560
01316 314560512521
01317 243145276062
01320 642224252660
01321 632122432560
01322 265146446063
01323 214725600273
01324 605125234651
01325 246002736026          BCD D 2, FILE 5. COPY LOOP IS AT
01326 314325600533
01327 606023464770
01330 604346464760
01331 316260216360
01332 606060606060
01333 606060606060
01334 606060606060
01335 606060606060
01336 606060606060
01337 434623216331          BCD LOCATION 454. COPY AT 464 IS PROGRAMMED TO FIND END OF RECO
01340 464560040504
01341 336060234647
01342 706021636004
01343 060460316260
01344 475146275121
01345 444425246063
01346 466026314524
01347 602545246046
01350 266051252346
01351 512460624231          BCD 2RD SKIP.
01352 473360606060
01353 0 00000 0 00000 X
A          00000          END

```

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	17	0	0	0	0
LIB	0	0	0	0	0
COL	17	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 54

NUMBER OF SYMBOLS, DEF 197,DEFOP 0,UNDEF 0
ORG 149 FORCE NEW RECORD

			00225		ORG 149	FORCE NEW RECORD
	00225	0	01303	0	01357	HTR X-1,0,LOCREC
			01303			CARD FOR DE
			01303			ORG LOCREC
TD	01303	3	00000	0	00225	TXH 149
	01304	0	07400	4	00740	6004 FT 32
	01305	0	01244	0	01237	TSX PRINT,4
	01306	0	07400	4	00740	HTR MACHIN,0,MACHIN+5
	01307	0	01360	0	01311	TSX PRINT,4
	01310	0	02000	0	00221	HTR PR,0,PR+39
	01311	60606060606060				TRA DIGRTN
	01312	60606060606060				BCD 2
	01313	216062642262				BCD A SUBSCRIPT COMBINATION, AT LEAST 1 INDEX OF WHICH IS UNDER
	01314	235131476360				
	01315	234644223145				
	01316	216331464573				
	01317	602163604325				
	01320	216263600160				
	01321	314524256760				
	01322	462660663031				
	01323	233060316260				
	01324	644524255160				
	01325	234645635146				BCD CONTROL OF A DO, IS BEING EXAMINED.
	01326	436046266021				
	01327	602446736031				
	01330	626022253145				
	01331	276025672144				
	01332	314525243360				
	01333	606060606060				
	01334	606060606060				
	01335	606060606060				
	01336	606060606060				
	01337	216062642262				BCD A SUBSCRIPT HAS BEEN FOUND WITHOUT SUCH AN INDEX. THE LOGIC
	01340	235131476360				
	01341	302162602225				
	01342	254560264664				
	01343	452460663163				
	01344	304664636062				
	01345	642330602145				
	01346	603145242567				
	01347	336060633025				
	01350	604346273123				
	01351	604626606330				BCD 7 OF THE PROGRAM MAKES THIS IMPOSSIBLE.
	01352	256047514627				
	01353	512144604421				
	01354	422562606330				
	01355	316260314447				
	01356	466262312243				
	01357	253360606060				
	01360	0	00000	0	00000	X
A			00000			END

SHARE ASSEMBLER STATISTICS

TAPE TOTAL 1 FAIL 2 FAIL 3 FAIL 4 FAIL

INP	17	0	0	0	0
LIB	0	0	0	0	0
COL	17	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 59

NUMBER OF SYMBOLS, DEF 197,DEFOP 0,UNDEF 0
ORG 150 FORCE NEW RECORD

			00226	ORG 150	FORCE NEW RECORD
	00226	0	01303 0 01355	HTR X-1,0,LOCREC	CARD FOR DE
			01303	ORG LOCREC	
TD	01303	3	00000 0 00226	TXH 150	6710 FT 27
	01304	0	07400 4 00740	TSX PRINT,4	
	01305	0	01244 0 01237	HTR MACHIN,0,MACHIN+5	
	01306	0	07400 4 00740	TSX PRINT,4	
	01307	0	01356 0 01311	HTR PR,0,PR+37	
	01310	0	02000 0 00221	TRA DIGRTN	
	01311	606060606060	PR	BCD 2	
	01312	606060606060			
	01313	514664633145		BCD ROUTINE AT LOCATION 6711 SHOULD BE ABLE TO CONTINUE ANALYSIS	
	01314	256021636043			
	01315	462321633146			
	01316	456006070101			
	01317	606230466443			
	01320	246022256021			
	01321	224325606346			
	01322	602346456331			
	01323	456425602145			
	01324	214370623162			
	01325	604626604525		BCD OF NEXT DO IN NEST. CURRENT LEVEL FOR AN	
	01326	676360244660			
	01327	314560452562			
	01330	633360602364			
	01331	515125456360			
	01332	432565254360			
	01333	264651602145			
	01334	606060606060			
	01335	606060606060			
	01336	606060606060			
	01337	314545255160		BCD INNER DO HAS BEEN REDUCED TO 1. LOGIC OF THE PROGRAM MAKES	
	01340	244660302162			
	01341	602225254560			
	01342	512524642325			
	01343	246063466001			
	01344	336060434627			
	01345	312360462660			
	01346	633025604751			
	01347	462751214460			
	01350	442142256260			
	01351	633031626031		BCD 5THIS IMPOSSIBLE.	
	01352	444746626231			
	01353	224325336060			
	01354	606060606060			
	01355	606060606060			
	01356	0 00000 0 00000 X			
A		00000		END	

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	17	0	0	0	0
LIB	0	0	0	0	0

COL 17 0 0 0 0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 57

NUMBER OF SYMBOLS, DEF 197,DEFOP 0,UNDEF 0
ORG 151 FORCE NEW RECORD

```

00227          00227          ORG 151          FORCE NEW RECORD
00227 0 01303 0 01355      HTR X-1,0,LOCREC      CARD FOR DE
                                01303          ORG LOCREC
TD 01303 3 00000 0 00227      TXH 151          6373 FT 27
01304 0 07400 4 00740      TSX PRINT,4
01305 0 01244 0 01237      HTR MACHIN,0,MACHIN+5
01306 0 07400 4 00740      TSX PRINT,4
01307 0 01356 0 01311      HTR PR,0,PR+37
01310 0 02000 0 00221      TRA DIGRTN
01311 60606060606060        PR          BCD 2
01312 60606060606060
01313 216024466045          BCD A DO NESTED WITHIN ANOTHER DO HAS BEEN FOUND TO HAVE A LEVEL
01314 256263252460
01315 663163303145
01316 602145466330
01317 255160244660
01320 302162602225
01321 254560264664
01322 452460634660
01323 302165256021
01324 604325652543
01325 602162623127          BCD ASSIGNMENT LESS THAN OR EQUAL TO 1.
01326 454425456360
01327 432562626063
01330 302145604651
01331 602550642143
01332 606346600133
01333 60606060606060
01334 60606060606060
01335 60606060606060
01336 60606060606060
01337 633025604346          BCD THE LOGIC OF THE PROGRAM MAKES THIS IMPOSSIBLE. THE LEVEL CO
01340 273123604626
01341 606330256047
01342 514627512144
01343 604421422562
01344 606330316260
01345 314447466262
01346 312243253360
01347 633025604325
01350 652543602346
01351 644563603162          BCD 5UNT IS IN INDEX REGISTER 2.
01352 603145603145
01353 242567605125
01354 273162632551
01355 600233606060
01356 0 00000 0 00000 X
A          00000          END

```

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	17	0	0	0	0
LIB	0	0	0	0	0

COL 17 0 0 0 0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 57

NUMBER OF SYMBOLS, DEF 197,DEFOP 0,UNDEF 0
ORG 152 FORCE NEW RECORD

			00230	ORG 152	FORCE NEW RECORD
	00230	0	01303 0 01366	HTR X-1,0,LOCREC	CARD FOR DE
			01303	ORG LOCREC	
TD	01303	3	00000 0 00230	TXH 152	6376 FT 27
	01304	0	07400 4 00740	TSX PRINT,4	
	01305	0	01244 0 01237	HTR MACHIN,0,MACHIN+5	
	01306	0	07400 4 00740	TSX PRINT,4	
	01307	0	01367 0 01311	HTR PR,0,PR+46	
	01310	0	02000 0 00221	TRA DIGRTN	
	01311	606060606060	PR	BCD 2	
	01312	606060606060			
	01313	314524256760		BCD INDEX REGISTER 1 HAS BEEN INCREMENTED BEYOND THE MAXIMUM SET	
	01314	512527316263			
	01315	255160016030			
	01316	216260222525			
	01317	456031452351			
	01320	254425456325			
	01321	246022257046			
	01322	452460633025			
	01323	604421673144			
	01324	644460622563			
	01325	633145276047		BCD TING PERMISSABLE IN THIS SECTION OF PROGRAM,	
	01326	255144316262			
	01327	212243256031			
	01330	456063303162			
	01331	606225236331			
	01332	464560462660			
	01333	475146275121			
	01334	447360606060			
	01335	606060606060			
	01336	606060606060			
	01337	242562473163		BCD DESPITE A TEST IN THE ROUTINE WHICH PREVENTS THIS. PROGRAM	
	01340	256021606325			
	01341	626360314560			
	01342	633025605146			
	01343	646331452560			
	01344	663031233060			
	01345	475125652545			
	01346	636260633031			
	01347	623360604751			
	01350	462751214460			
	01351	623046644324		BCD SHOULD BE ABLE TO OBTAIN DOTAG ENTRY	
	01352	602225602122			
	01353	432560634660			
	01354	462263213145			
	01355	602446632127			
	01356	602545635170			
	01357	606060606060			
	01360	606060606060			
	01361	606060606060			
	01362	606060606060			
	01363	264651604525		BCD 4FOR NEXT OUTER DO.	
	01364	676360466463			
	01365	255160244633			

01366 606060606060
01367 0 00000 0 00000 X

A 00000 END

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	18	0	0	0	0
LIB	0	0	0	0	0
COL	18	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 66

NUMBER OF SYMBOLS, DEF 197,DEFOP 0,UNDEF 0
ORG 153 FORCE NEW RECORD

			00231		ORG 153	FORCE NEW RECORD
	00231	0	01303	0	01400	HTR X-1,0,LOCREC
			01303			CARD FOR DE
			01303	3	00000	0
TD			00231			ORG LOCREC
						TXH 153
						5742 FT 27
						153
						5763 FT 27
						153
						5764 FT 27
						6306 OCTAL
			06306		TIFX	SYN 3270
	01304	0	07400	4	00740	TSX PRINT,4
	01305	0	01244	0	01237	HTR MACHIN,0,MACHIN+5
	01306	0	50000	0	06306	CLA TIFX
	01307	0	77100	0	00022	ARS 18
	01310	0	62100	0	01400	STA TIFGO
	01311	0	50000	0	01377	CLA TIFZ
	01312	0	40200	0	01400	ADDRESS OF TIFGO BUFFER, THIS IS NOW
	01313	0	62100	0	01340	CN DRUM 4
	01314	0	76200	0	00304	STA A
	01315	0	46000	0	01340	RDR 4
	01316	0	70000	0	01400	LDA A
	01317	0	50000	0	01400	CPY TIFGO
	01320	0	77100	0	00022	CLA TIFGO
	01321	0	07400	4	00613	ARS 18
	01322	0	60200	0	01400	TSX EXBETA,4
	01323	-0	50000	0	01350	SLW TIFGO
	01324	0	77100	0	00022	CAL COMA
	01325	0	56000	0	01400	ARS 18
	01326	-0	76300	0	00022	LDQ TIFGO
	01327	0	60200	0	01350	LGL 18
	01330	-0	76300	0	00022	SLW COMA
	01331	0	56000	0	01351	LGL 18
	01332	-0	77300	0	00022	LDQ COMB
	01333	-0	76300	0	00022	RQL 18
	01334	0	60200	0	01351	LGL 18
	01335	0	07400	4	00740	SLW COMB
	01336	0	01377	0	01341	TSX PRINT,4
	01337	0	02000	0	00221	HTR PR,0,PR+30
	01340	0	00000	0	00000	TRA DIGRTN
	01341	606060606060				A
	01342	606060606060				PR
	01343	633025603126				BCD 2
	01344	604651602746				BCD 5THE IF OR GO TO STATEMENT NUMB
	01345	606346606263				
	01346	216325442545				
	01347	636045644422				
	01350	255160606060				COMA
	01351	606060603021				BCD 1ER
	01352	626022252545				BCD 1 HA
	01353	602162623127				BCD S BEEN ASSIGNED A CLASSIFICATION HIGHER THAN 6.
	01354	452524602160				
	01355	234321626231				
	01356	263123216331				
	01357	464560303127				
	01360	302551606330				
	01361	214560063360				
	01362	606060606060				

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01363 606060606060
01364 606060606060          BCD 3
01365 606060606060
01366 606060606060
01367 633025604346          BCD 8THE LOGIC OF THE PROGRAM MAKES THIS IMPOSSIBLE.
01370 273123604626
01371 606330256047
01372 514627512144
01373 604421422562
01374 606330316260
01375 314447466262
01376 312243253360
01377 0 00000 0 03670 TIFZ   HTR 1976          3670 OCTAL
01400 0 00000 0 00000 TIFGO  HTR 0
01401 0 00000 0 00000 X
A          00000          END

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SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	48	0	0	0	0
LIB	0	0	0	0	0
COL	48	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 79

NUMBER OF SYMBOLS, DEF 203,DEFOP 0,UNDEF 0
 ORG 154 FORCE NEW RECORD

				00232	ORG 154	FORCE NEW RECORD	
	00232	0	01303	0	01360	HTR X-1,0,LOCREC	CARD FOR DE
					01303	ORG LOCREC	
TD	01303	3	00000	0	00232	TXH 154	5773 FT 51
	01304	0	07400	4	00740	TSX PRINT,4	
	01305	0	01244	0	01237	HTR MACHIN,0,MACHIN+5	
	01306	0	07400	4	00740	TSX PRINT,4	
	01307	0	01361	0	01311	HTR PR,0,PR+40	
	01310	0	02000	0	00221	TRA DIGRTN	
	01311	60606060606060				BCD 2	
	01312	60606060606060					
	01313	234645632545				BCD CONTENTS OF DOIND (LOCATION 5230) DO NOT MATCH CONTENTS OF E	
	01314	636260462660					
	01315	244631452460					
	01316	744346232163					
	01317	314645600502					
	01320	030034602446					
	01321	604546636044					
	01322	216323306023					
	01323	464563254563					
	01324	626046266025					
	01325	316330255160				BCD IITHER TAG2+1,2 (LOCATION 3650), TAG2+2,2 OR	
	01326	632127022001					
	01327	730260607443					
	01330	462321633146					
	01331	456003060500					
	01332	347360606321					
	01333	270220027302					
	01334	606046516060					
	01335	606060606060					
	01336	606060606060					
	01337	632127022003				BCD TAG2+3,2. LOGIC OF PROGRAM MAKES THIS IMPOSSIBLE. SUBROUTI	
	01340	730233606043					
	01341	462731236046					
	01342	266047514627					
	01343	512144604421					
	01344	422562606330					
	01345	316260314447					
	01346	466262312243					
	01347	253360606264					
	01350	225146646331					
	01351	452560663031				BCD 8NE WHICH CANNOT FIND MATCH IS AT LOCATION 4204.	
	01352	233060232145					
	01353	454663602631					
	01354	452460442163					
	01355	233060316260					
	01356	216360434623					
	01357	216331464560					
	01360	040200043360					
	01361	0	00000	0	00000	X	
A					00000	END	

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
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INP	17	0	0	0	0
LIB	0	0	0	0	0
COL	17	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 60

NUMBER OF SYMBOLS, DEF 197,DEFOP 0,UNDEF 0
ORG 155 FORCE NEW RECORD

				00233	ORG 155	FORCE NEW RECORD
	00233	0	01303	0 01357	HTR X-1,0,LOCREC	CARD FOR DE
				01303	ORG LOCREC	
TD	01303	3	00000	0 00233	TXH 155	6353 FT 51
	01304	0	07400	4 00740	TSX PRINT,4	
	01305	0	01244	0 01237	HTR MACHIN,0,MACHIN+5	
	01306	0	07400	4 00740	TSX PRINT,4	
	01307	0	01360	0 01311	HTR PR,0,PR+39	
	01310	0	02000	0 00221	TRA DIGRTN	
	01311	60606060606060			BCD 2	
	01312	60606060606060				
	01313	632122432560			BCD TABLE SEARCH FAILURE.	LOGIC OF PROGRAM MAKES THIS IMPOSSIBL
	01314	622521512330				
	01315	602621314364				
	01316	512533606043				
	01317	462731236046				
	01320	266047514627				
	01321	512144604421				
	01322	422562606330				
	01323	316260314447				
	01324	466262312243				
	01325	253360606264			BCD E. SUBROUTINE AT LOCATION 6277 COMPILES	
	01326	225146646331				
	01327	452560216360				
	01330	434623216331				
	01331	464560060207				
	01332	076023464447				
	01333	314325626060				
	01334	60606060606060				
	01335	60606060606060				
	01336	60606060606060				
	01337	215127644425			BCD ARGUMENT (LOCATION 5243) WHICH SUBROUTINE AT LOCATION 6354 I	
	01340	456360744346				
	01341	232163314645				
	01342	600502040334				
	01343	606630312330				
	01344	606264225146				
	01345	646331452560				
	01346	216360434623				
	01347	216331464560				
	01350	060305046031				
	01351	626064452122			BCD 7S UNABLE TO MATCH IN A BLOCK OF CONSTANTS.	
	01352	432560634660				
	01353	442163233060				
	01354	314560216022				
	01355	434623426046				
	01356	266023464562				
	01357	632145636233				
	01360	0 00000	0 00000	X		
A			00000		END	

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
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INP	17	0	0	0	0
LIB	0	0	0	0	0
COL	17	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 59

NUMBER OF SYMBOLS, DEF 197,DEFOP 0,UNDEF 0
ORG 156 FORCE NEW RECORD

			00234	ORG 156	FORCE NEW RECORD
	00234	0	01303 0 01351	HTR X-1,0,LOCREC	CARD FOR DE
			01303	ORG LOCREC	
TD	01303	3	00000 0 00234	TXH 156	7110 FT 43
	01304	0	07400 4 00740	TSX PRINT,4	
	01305	0	01244 0 01237	HTR MACHIN,0,MACHIN+5	
	01306	0	07400 4 00740	TSX PRINT,4	
	01307	0	01352 0 01311	HTR PR,0,PR+33	
	01310	0	02000 0 00221	TRA DIGRTN	
	01311	606060606060	PR	BCD 2	
	01312	606060606060			
	01313	632122432560		BCD TABLE BEGINNING AT LOCATION 6400 HAS BEEN ORDERED BY ROUTINE	
	01314	222527314545			
	01315	314527602163			
	01316	604346232163			
	01317	314645600604			
	01320	000060302162			
	01321	602225254560			
	01322	465124255125			
	01323	246022706051			
	01324	466463314525			
	01325	602163604346		BCD AT LOCATION 7053.	
	01326	232163314645			
	01327	600700050333			
	01330	606060606060			
	01331	606060606060			
	01332	606060606060			
	01333	606060606060			
	01334	606060606060			
	01335	606060606060			
	01336	606060606060			
	01337	232162603145		BCD CAS INSTRUCTION AT LOCATION 7105 SHOWS THAT TABLE IS OUT OF	
	01340	626351642363			
	01341	314645602163			
	01342	604346232163			
	01343	314645600701			
	01344	000560623046			
	01345	666260633021			
	01346	636063212243			
	01347	256031626046			
	01350	646360462660			
	01351	465124255133		BCD 1ORDER.	
	01352	0 00000 0 00000 X			
A		00000		END	

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	17	0	0	0	0
LIB	0	0	0	0	0
COL	17	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 53

NUMBER OF SYMBOLS, DEF 197,DEFOP 0,UNDEF 0
ORG 157 FORCE NEW RECORD

			00235	ORG 157	FORCE NEW RECORD	
	00235	0	01303 0	01414	HTR X-1,0,LOCREC	CARD FOR DE
			01303	ORG LOCREC		
TD	01303	3	00000 0	00235	TXH 157	354 FT 64
	01304	0	07400 4	00740	TSX PRINT,4	
	01305	0	01244 0	01237	HTR MACHIN,0,MACHIN+5	
	01306	0	07400 4	00740	TSX PRINT,4	
	01307	0	01415 0	01311	HTR PR,0,PR+68	
	01310	0	02000 0	00221	TRA DIGRTN	
	01311	606060606060			BCD 2	
	01312	606060606060				
	01313	454660254563			BCD NO ENTRY IN TIFRED TABLE FOR A VARIABLE FROM AN ASSIGNED GO	
	01314	517060314560				
	01315	633126512524				
	01316	606321224325				
	01317	602646516021				
	01320	606521513121				
	01321	224325602651				
	01322	464460214560				
	01323	216262312745				
	01324	252460274660				
	01325	634660626321			BCD TO STATEMENT IN THE COMPILED INSTRUCTIONS.	
	01326	632544254563				
	01327	603145606330				
	01330	256023464447				
	01331	314325246031				
	01332	456263516423				
	01333	633146456233				
	01334	606060606060				
	01335	606060606060				
	01336	606060606060				
	01337	434627312360			BCD LOGIC OF THE PROGRAM MAKES THIS IMPOSSIBLE. STOP MAY BE DUE	
	01340	462660633025				
	01341	604751462751				
	01342	214460442142				
	01343	256260633031				
	01344	626031444746				
	01345	626231224325				
	01346	336060626346				
	01347	476044217060				
	01350	222560246425				
	01351	606346602551			BCD TO ERROR BY SUBROUTINE AT LOCATION 435 IN THE	
	01352	514651602270				
	01353	606264225146				
	01354	646331452560				
	01355	216360434623				
	01356	216331464560				
	01357	040305603145				
	01360	606330256060				
	01361	606060606060				
	01362	606060606060				
	01363	475125653146			BCD PREVIOUS FORTRAN RECORD, WHICH ACCUMULATES ASSIGNED GO TO EN	
	01364	646260264651				
	01365	635121456051				

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01366 252346512473
01367 606630312330
01370 602123236444
01371 644321632562
01372 602162623127
01373 452524602746
01374 606346602545
01375 635131256260          BCD TRIES AS IT READS TAPE 2 AND WRITES
01376 216260316360
01377 512521246260
01400 632147256002
01401 602145246066
01402 513163256260
01403 606060606060
01404 606060606060
01405 606060606060
01406 606060606060
01407 633025446021          BCD 6THEM AS THE TIFRED TABLE ON DRUM 1.
01410 626063302560
01411 633126512524
01412 606321224325
01413 604645602451
01414 644460013360
01415 0 00000 0 00000 X
A          00000          END

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SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	20	0	0	0	0
LIB	0	0	0	0	0
COL	20	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 88

NUMBER OF SYMBOLS, DEF 197,DEFOP 0,UNDEF 0
 ORG 158 FORCE NEW RECORD

			00236	ORG 158	FORCE NEW RECORD
	00236	0	01303 0 01360	HTR X-1,0,LOCREC	CARD FOR DE
			01303	ORG LOCREC	
TD	01303	3	00000 0 00236	TXH 158	711 FT 62
	01304	0	07400 4 00740	TSX PRINT,4	
	01305	0	01244 0 01237	HTR MACHIN,0,MACHIN+5	
	01306	0	07400 4 00740	TSX PRINT,4	
	01307	0	01361 0 01311	HTR PR,0,PR+40	
	01310	0	02000 0 00221	TRA DIGRTN	
	01311	606060606060	PR	BCD 2	
	01312	606060606060			
	01313	443162234644		BCD MISCOMPILED ENTRY IN FRET TABLE, TAPE 2, FILE 5, RECORD 12.	
	01314	473143252460			
	01315	254563517060			
	01316	314560265125			
	01317	636063212243			
	01320	257360632147			
	01321	256002736026			
	01322	314325600573			
	01323	605125234651			
	01324	246001023360			
	01325	604321626360		BCD LAST WORD OF RECORD INTRODUCES	
	01326	664651246046			
	01327	266051252346			
	01330	512460314563			
	01331	514624642325			
	01332	626060606060			
	01333	606060606060			
	01334	606060606060			
	01335	606060606060			
	01336	606060606060			
	01337	452566606263		BCD NEW STATEMENT NUMBER, BUT NO ENTRIES FOLLOW WHICH WOULD GIVE	
	01340	216325442545			
	01341	636045644422			
	01342	255173602264			
	01343	636045466025			
	01344	456351312562			
	01345	602646434346			
	01346	666066303123			
	01347	306066466443			
	01350	246027316525			
	01351	602651255064		BCD 8 FREQUENCY INFORMATION ABOUT THE STATEMENT.	
	01352	254523706031			
	01353	452646514421			
	01354	633146456021			
	01355	224664636063			
	01356	302560626321			
	01357	632544254563			
	01360	336060606060			
	01361	0 00000 0 00000 X			
A			00000	END	

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
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INP	17	0	0	0	0
LIB	0	0	0	0	0
COL	17	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 60

NUMBER OF SYMBOLS, DEF 197,DEFOP 0,UNDEF 0
ORG 159 FORCE NEW RECORD

		00237	ORG 159	FORCE NEW RECORD
TD	00237	0 01303 0 01370	HTR X-1,0,LOCREC	CARD FOR DE
		01303	ORG LOCREC	
	01303	3 00000 0 00237	TXH 159	556 FT 64
	01304	0 07400 4 00740	TSX PRINT,4	
	01305	0 01244 0 01237	HTR MACHIN,0,MACHIN+5	
	01306	0 07400 4 00740	TSX PRINT,4	
	01307	0 01371 0 01311	HTR PR,0,PR+48	
	01310	0 02000 0 00221	TRA DIGRTN	
	01311	606060606060	BCD 2	
	01312	606060606060		
	01313	443162234644	BCD MISCOMPILED ENTRY IN CIT TABLE.	THE TYPE OF STATEMENT A IF
	01314	473143252460		
	01315	254563517060		
	01316	314560233163		
	01317	606321224325		
	01320	336060633025		
	01321	606370472560		
	01322	462660626321		
	01323	632544254563		
	01324	602160312660		
	01325	742534604501	BCD (E) N1, N2, N3	
	01326	736045027360		
	01327	450360606060		
	01330	606060606060		
	01331	606060606060		
	01332	606060606060		
	01333	606060606060		
	01334	606060606060		
	01335	606060606060		
	01336	606060606060		
	01337	316260635121	BCD IS TRANSLATED TO TZE, TPL AND TRA.	A TZE HAS BEEN FOUND IN
	01340	456243216325		
	01341	246063466063		
	01342	712573606347		
	01343	436021452460		
	01344	635121336060		
	01345	216063712560		
	01346	302162602225		
	01347	254560264664		
	01350	452460314560		
	01351	632122432560	BCD TABLE OF COMPILED INSTRUCTIONS,	
	01352	462660234644		
	01353	473143252460		
	01354	314562635164		
	01355	236331464562		
	01356	736060606060		
	01357	606060606060		
	01360	606060606060		
	01361	606060606060		
	01362	606060606060		
	01363	663031233060	BCD 6WHICH IS NOT IN THIS SEQUENCE.	
	01364	316260454663		
	01365	603145606330		

01366 316260622550
01367 642545232533
01370 606060606060
01371 0 00000 0 00000 X
00000

A END

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	18	0	0	0	0
LIB	0	0	0	0	0
COL	18	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 68

NUMBER OF SYMBOLS, DEF 197,DEFOP 0,UNDEF 0
ORG 160 FORCE NEW RECORD

				00240	ORG 160	FORCE NEW RECORD
	00240	0	01303	0 01317	HTR X-1,0,LOCREC	CARD FOR DE
				01303	ORG LOCREC	
TD	01303	3	00000	0 00240	TXH 160	3001 FT 88
	01304	0	07400	4 00740	TSX PRINT,4	
	01305	0	01244	0 01237	HTR MACHIN,0,MACHIN+5	
	01306	0	07400	4 00740	TSX PRINT,4	
	01307	0	01320	0 01311	HTR PR,0,PR+7	
	01310	0	02000	0 00221	TRA DIGRTN	
	01311	60606060606060			BCD 2	
	01312	60606060606060				
	01313	443162234644			BCD 5MISCOMPILED GO TO STATEMENT.	
	01314	473143252460				
	01315	274660634660				
	01316	626321632544				
	01317	254563336060				
	01320	0 00000	0 00000	X		
A			00000		END	

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	14	0	0	0	0
LIB	0	0	0	0	0
COL	14	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 27

NUMBER OF SYMBOLS, DEF 197,DEFOP 0,UNDEF 0
 ORG 161 FORCE NEW RECORD

```

00241          00241          ORG 161          FORCE NEW RECORD
00241 0 01303 0 01317      HTR X-1,0,LOCREC      CARD FOR DE
                                01303          ORG LOCREC
TD 01303 3 00000 0 00241      TXH 161          3253 FT 88
01304 0 07400 4 00740      TSX PRINT,4
01305 0 01244 0 01237      HTR MACHIN,0,MACHIN+5
01306 0 07400 4 00740      TSX PRINT,4
01307 0 01320 0 01311      HTR PR,0,PR+7
01310 0 02000 0 00221      TRA DIGRTN
01311 60606060606060        PR          BCD 2
01312 60606060606060
01313 443162234644          BCD 5MISCOMPILED IF STATEMENT.
01314 473143252460
01315 312660626321
01316 632544254563
01317 33606060606060
01320 0 00000 0 00000 X
A          00000          END

```

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	14	0	0	0	0
LIB	0	0	0	0	0
COL	14	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 27

NUMBER OF SYMBOLS, DEF 197,DEFOP 0,UNDEF 0
 ORG 162 FORCE NEW RECORD

```

00242 00242          ORG 162          FORCE NEW RECORD
00242 0 01303 0 01331 HTR X-1,0,LOCREC  CARD FOR DE
01303 01303          ORG LOCREC
TD 01303 3 00000 0 00242 TXH 162          345 FT 5
01304 0 07400 4 00740 TSX PRINT,4
01305 0 01244 0 01237 HTR MACHIN,0,MACHIN+5
01306 0 07400 4 00740 TSX PRINT,4
01307 0 01332 0 01311 HTR PR,0,PR+17
01310 0 02000 0 00221 TRA DIGRTN
01311 60606060606060 PR BCD 2
01312 60606060606060
01313 443162234644 BCD MISCOMPILED NAME. IMPOSSIBLE BCD CHARACTER AS THE FIRST CHA
01314 473143252460
01315 452144253360
01316 603144474662
01317 623122432560
01320 222324602330
01321 215121236325
01322 516021626063
01323 302560263151
01324 626360233021
01325 512123632551 BCD 5RACTER IN A SYMBOLIC ADDRESS.
01326 603145602160
01327 627044224643
01330 312360212424
01331 512562623360
A 01332 0 00000 0 00000 X
00000          END

```

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	15	0	0	0	0
LIB	0	0	0	0	0
COL	15	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 37

NUMBER OF SYMBOLS, DEF 197,DEFOP 0,UNDEF 0
 ORG 163 FORCE NEW RECORD

				00243	ORG 163	FORCE NEW RECORD
	00243	0	01303	0 01316	HTR X-1,0,LOCREC	CARD FOR DE
				01303	ORG LOCREC	
TD	01303	3	00000	0 00243	TXH 163	443 FT 103
					163	520 FT 113
	01304	0	07400	4 00740	TSX PRINT,4	
	01305	0	01244	0 01237	HTR MACHIN,0,MACHIN+5	
	01306	0	07400	4 00740	TSX PRINT,4	
	01307	0	01317	0 01311	HTR PR,0,PR+6	
	01310	0	02000	0 00221	TRA DIGRTN	
	01311	606060606060			BCD 2	
				PR		
	01312	606060606060				
	01313	443162234644			BCD 4MISCOMPILED SYNONYM.	
	01314	473143252460				
	01315	627045464570				
	01316	443360606060				
	01317	0 00000	0 00000	X		
A			00000		END	

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	15	0	0	0	0
LIB	0	0	0	0	0
COL	15	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 27

NUMBER OF SYMBOLS, DEF 197,DEFOP 0,UNDEF 0
 ORG 164 FORCE NEW RECORD

```

00244          00244          ORG 164          FORCE NEW RECORD
00244 0 01303 0 01324      HTR X-1,0,LOCREC      CARD FOR DE
                                01303          ORG LOCREC
TD 01303 3 00000 0 00244      TXH 164          252 FT 105
01304 0 07400 4 00740      TSX PRINT,4
01305 0 01244 0 01237      HTR MACHIN,0,MACHIN+5
01306 0 07400 4 00740      TSX PRINT,4
01307 0 01325 0 01311      HTR PR,0,PR+12
01310 0 02000 0 00221      TRA DIGRTN
01311 60606060606060        PR          BCD 2
01312 60606060606060
01313 443162234644          BCD MISCOMPILED NAME. FORSUB ENTRY NOT IN SYMBOL TABLE.
01314 473143252460
01315 452144253360
01316 602646516264
01317 226025456351
01320 706045466360
01321 314560627044
01322 224643606321
01323 224325336060
01324 606060606060
01325 0 00000 0 00000 X
A                                00000          END

```

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	14	0	0	0	0
LIB	0	0	0	0	0
COL	14	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 32

NUMBER OF SYMBOLS, DEF 197,DEFOP 0,UNDEF 0
 ORG 165 FORCE NEW RECORD

```

00245      00245      ORG 165      FORCE NEW RECORD
00245 0 01303 0 01323 HTR X-1,0,LOCREC CARD FOR DE
01303      01303      ORG LOCREC
TD 01303 3 00000 0 00245 TXH 165      312 FT 113
01304 0 07400 4 00740 TSX PRINT,4
01305 0 01244 0 01237 HTR MACHIN,0,MACHIN+5
01306 0 07400 4 00740 TSX PRINT,4
01307 0 01324 0 01311 HTR PR,0,PR+11
01310 0 02000 0 00221 TRA DIGRTN
01311 60606060606060 PR BCD 2
01312 60606060606060
01313 443162234644 BCD 9MISCOMPILED NAME. VARIABLE NAME NOT IN SYMBOL TABLE.
01314 473143252460
01315 452144253360
01316 652151312122
01317 432560452144
01320 256045466360
01321 314560627044
01322 224643606321
01323 224325336060
01324 0 00000 0 00000 X
A      00000      END

```

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	14	0	0	0	0
LIB	0	0	0	0	0
COL	14	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 31

NUMBER OF SYMBOLS, DEF 197,DEFOP 0,UNDEF 0
 ORG 166 FORCE NEW RECORD

```

00246 0 01303 0 01332 00246      ORG 166          FORCE NEW RECORD
01303 3 00000 0 00246 01303      HTR X-1,0,LOCREC  CARD FOR DE
01303 3 00000 0 00246 01303      ORG LOCREC
01304 0 07400 4 00740 00246      TXH 166          661 FT 75
01305 0 01244 0 01237 01303      166          1022 FT 75
01306 0 07400 4 00740 01304      TSX PRINT,4
01307 0 01333 0 01311 01305      HTR MACHIN,0,MACHIN+5
01310 0 02000 0 00221 01306      TSX PRINT,4
01311 60606060606060 PR 01307      HTR PR,0,PR+18
01312 60606060606060 01310      TRA DIGRTN
01313 314524256760 01311      BCD 2
01314 512527316263 01312      BCD INDEX REGISTER FOR CURRENT TAG HAS NOT BEEN CHOSEN. LOGIC 0
01315 255160264651 01313
01316 602364515125 01314
01317 456360632127 01315
01320 603021626045 01316
01321 466360222525 01317
01322 456023304662 01320
01323 254533606043 01321
01324 462731236046 01322
01325 266047514627 01323      BCD 6F PROGRAM MAKES THIS IMPOSSIBLE.
01326 512144604421 01324
01327 422562606330 01325
01330 316260314447 01326
01331 466262312243 01327
01332 253360606060 01330
01333 0 00000 0 00000 X 01331      A 00000      END

```

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	16	0	0	0	0
LIB	0	0	0	0	0
COL	16	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 39

NUMBER OF SYMBOLS, DEF 197,DEFOP 0,UNDEF 0
 ORG 167 FORCE NEW RECORD

			00247	ORG 167	FORCE NEW RECORD
	00247	0	01303 0 01355	HTR X-1,0,LOCREC	CARD FOR DE
			01303	ORG LOCREC	
TD	01303	3	00000 0 00247	TXH 167	301 FT 67
	01304	0	07400 4 00740	TSX PRINT,4	
	01305	0	01244 0 01237	HTR MACHIN,0,MACHIN+5	
	01306	0	07400 4 00740	TSX PRINT,4	
	01307	0	01356 0 01311	HTR PR,0,PR+37	
	01310	0	02000 0 00221	TRA DIGRTN	
	01311	606060606060		BCD 2	
	01312	606060606060	PR		
	01313	626422514664		BCD SUBROUTINE AT LOCATION 276 HAS ATTEMPTED TO READ ANOTHER BUF	
	01314	633145256021			
	01315	636043462321			
	01316	633146456002			
	01317	070660302162			
	01320	602163632544			
	01321	476325246063			
	01322	466051252124			
	01323	602145466330			
	01324	255160226426			
	01325	262551604626		BCD FER OF THE FRET TABLE ON DRUM 2. A PREVIOUS	
	01326	606330256026			
	01327	512563606321			
	01330	224325604645			
	01331	602451644460			
	01332	023360602160			
	01333	475125653146			
	01334	646260606060			
	01335	606060606060			
	01336	606060606060			
	01337	472162626063		BCD PASS THROUGH THIS ROUTINE HAS SET A SIGNAL TO SHOW THAT ALL	
	01340	305146642730			
	01341	606330316260			
	01342	514664633145			
	01343	256030216260			
	01344	622563602160			
	01345	623127452143			
	01346	606346606230			
	01347	466660633021			
	01350	636021434360			
	01351	265125636025		BCD 5FRET ENTRIES ARE IN CORE.	
	01352	456351312562			
	01353	602151256031			
	01354	456023465125			
	01355	336060606060			
	01356	0 00000 0 00000 X			
A		00000		END	

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	17	0	0	0	0
LIB	0	0	0	0	0

COL 17 0 0 0 0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 57

NUMBER OF SYMBOLS, DEF 197,DEFOP 0,UNDEF 0
ORG 168 FORCE NEW RECORD

				00250	ORG 168	FORCE NEW RECORD
	00250	0	01303	0 01357	HTR X-1,0,LOCREC	CARD FOR DE
				01303	ORG LOCREC	
TD	01303	3	00000	0 00250	TXH 168	3064 FT 64
	01304	0	07400	4 00740	TSX PRINT,4	
	01305	0	01244	0 01237	HTR MACHIN,0,MACHIN+5	
	01306	0	07400	4 00740	TSX PRINT,4	
	01307	0	01360	0 01311	HTR PR,0,PR+39	
	01310	0	02000	0 00221	TRA DIGRTN	
	01311	60606060606060			BCD 2	
	01312	60606060606060				
	01313	626422514664			BCD SUBROUTINE AT LOCATION 3064 HAS ATTEMPTED TO READ ANOTHER BU	
	01314	633145256021				
	01315	636043462321				
	01316	633146456003				
	01317	000604603021				
	01320	626021636325				
	01321	444763252460				
	01322	634660512521				
	01323	246021454663				
	01324	302551602264				
	01325	262625516046			BCD FFER OF THE TIFRD TABLE FROM DRUM 1.	
	01326	266063302560				
	01327	633126512460				
	01330	632122432560				
	01331	265146446024				
	01332	516444600133				
	01333	60606060606060				
	01334	60606060606060				
	01335	60606060606060				
	01336	60606060606060				
	01337	216047512565			BCD A PREVIOUS PASS THROUGH THIS ROUTINE HAS SET A SIGNAL TO SHO	
	01340	314664626047				
	01341	216262606330				
	01342	514664273060				
	01343	633031626051				
	01344	466463314525				
	01345	603021626062				
	01346	256360216062				
	01347	312745214360				
	01350	634660623046				
	01351	666063302163			BCD 7W THAT ALL TIFRD ENTRIES ARE IN CORE.	
	01352	602143436063				
	01353	312651246025				
	01354	456351312562				
	01355	602151256031				
	01356	456023465125				
	01357	33606060606060				
	01360	0 00000	0 00000	X		
A			00000		END	

SHARE ASSEMBLER STATISTICS

TAPE TOTAL 1 FAIL 2 FAIL 3 FAIL 4 FAIL

INP	17	0	0	0	0
LIB	0	0	0	0	0
COL	17	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 59

NUMBER OF SYMBOLS, DEF 197,DEFOP 0,UNDEF 0
ORG 169 FORCE NEW RECORD

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00251          00251          ORG 169          FORCE NEW RECORD
00251 0 01303 0 01327 HTR X-1,0,LOCREC CARD FOR DE
          01303          ORG LOCREC
TD 01303 3 00000 0 00251 TXH 169          762 FT 75
          169          1634 FT 75
          169          1777 FT 75
          169          4031 FT 75
          169          4303 FT 75

01304 0 07400 4 00740 TSX PRINT,4
01305 0 01244 0 01237 HTR MACHIN,0,MACHIN+5
01306 0 07400 4 00740 TSX PRINT,4
01307 0 01330 0 01311 HTR PR,0,PR+15
01310 0 02000 0 00221 TRA DIGRTN
01311 60606060606060 PR BCD 2
01312 60606060606060
01313 472551446463 BCD PERMUTATION NUMBER MATCH NOT FOUND. LOGIC OF PROGRAM MAKES
01314 216331464560
01315 456444222551
01316 604421632330
01317 604546636026
01320 466445243360
01321 604346273123
01322 604626604751
01323 462751214460
01324 442142256260
01325 633031626031 BCD 3THIS IMPOSSIBLE.
01326 444746626231
01327 224325336060
01330 0 00000 0 00000 X
A          00000          END

```

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	19	0	0	0	0
LIB	0	0	0	0	0
COL	19	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 39

NUMBER OF SYMBOLS, DEF 197,DEFOP 0,UNDEF 0
 ORG 170 FORCE NEW RECORD

			00252	ORG 170	FORCE NEW RECORD
	00252	0	01303 0 01416	HTR X-1,0,LOCREC	CARD FOR DE
			01303	ORG LOCREC	
TD	01303	3	00000 0 00252	TXH 170	1307 FT 22
	01304	0	07400 4 00740	TSX PRINT,4	
	01305	0	01244 0 01237	HTR MACHIN,0,MACHIN+5	
	01306	0	07400 4 00740	TSX PRINT,4	
	01307	0	01417 0 01311	HTR PR,0,PR+70	
	01310	0	02000 0 00221	TRA DIGRTN	
	01311	606060606060	PR	BCD 2	
	01312	606060606060			
	01313	255151465160		BCD ERROR IN COMPUTING CHECK SUM OF FLOCON TABLE.	THIS TABLE CO
	01314	314560234644			
	01315	476463314527			
	01316	602330252342			
	01317	606264446046			
	01320	266026434623			
	01321	464560632122			
	01322	432533606063			
	01323	303162606321			
	01324	224325602346			
	01325	456231626362		BCD NSISTS OF BLOCKS OF FIFTY WORDS,	EACH BLOCK
	01326	604626602243			
	01327	462342626046			
	01330	266026312663			
	01331	706066465124			
	01332	627360252123			
	01333	306022434623			
	01334	426060606060			
	01335	606060606060			
	01336	606060606060			
	01337	475125232524		BCD PRECEDED BY ITS OWN CHECK SUM.	THE ACL INSTRUCTION AT LOCAT
	01340	252460227060			
	01341	316362604666			
	01342	456023302523			
	01343	426062644433			
	01344	606063302560			
	01345	212343603145			
	01346	626351642363			
	01347	314645602163			
	01350	604346232163			
	01351	314645600102		BCD ION 1261 HAS PICKED UP THE CHECK SUM OF	
	01352	060160302162			
	01353	604731234225			
	01354	246064476063			
	01355	302560233025			
	01356	234260626444			
	01357	604626606060			
	01360	606060606060			
	01361	606060606060			
	01362	606060606060			
	01363	633025604525		BCD THE NEXT BLOCK AND THE TNX INSTRUCTION AT 1263 SHOWS THAT TH	
	01364	676360224346			
	01365	234260214524			

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01366 606330256063
01367 456760314562
01370 635164236331
01371 464560216360
01372 010206036062
01373 304666626063
01374 302163606330
01375 255125602151
01376 256045466025
01377 456351312562
01400 603145606330
01401 256022434623
01402 423360606060
01403 606060606060
01404 606060606060
01405 606060606060
01406 606060606060
01407 633025604346
01410 273123604626
01411 606330256047
01412 514627512144
01413 604421422562
01414 606330316260
01415 314447466262
01416 312243253360
01417 0 00000 0 00000 X

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BCD ERE ARE NO ENTRIES IN THE BLOCK.

BCD 8THE LOGIC OF THE PROGRAM MAKES THIS IMPOSSIBLE.

A 00000 END

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	20	0	0	0	0
LIB	0	0	0	0	0
COL	20	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 90

NUMBER OF SYMBOLS, DEF 197,DEFOP 0,UNDEF 0
 ORG 171 FORCE NEW RECORD

				00253	ORG 171	FORCE NEW RECORD	
	00253	0	01303	0	01357	HTR X-1,0,LOCREC	CARD FOR DE
				01303	ORG LOCREC		
TD	01303	3	00000	0	00253	TXH 171	1076 FT 45
	01304	0	07400	4	00740	TSX PRINT,4	
	01305	0	01244	0	01237	HTR MACHIN,0,MACHIN+5	
	01306	0	07400	4	00740	TSX PRINT,4	
	01307	0	01360	0	01311	HTR PR,0,PR+39	
	01310	0	02000	0	00221	TRA DIGRTN	
	01311	60606060606060				BCD 2	
	01312	60606060606060					
	01313	314447466262				BCD IMPOSSIBLE TRANSFER TO FIRST INSTRUCTION FOLLOWING CAS INSTR	
	01314	312243256063					
	01315	512145622625					
	01316	516063466026					
	01317	315162636031					
	01320	456263516423					
	01321	633146456026					
	01322	464343466631					
	01323	452760232162					
	01324	603145626351					
	01325	642363314645				BCD UCTION AT LOCATION 1075. TLQ INSTRUCTION	
	01326	602163604346					
	01327	232163314645					
	01330	600100070533					
	01331	606063435060					
	01332	314562635164					
	01333	236331464560					
	01334	60606060606060					
	01335	60606060606060					
	01336	60606060606060					
	01337	216360434623				BCD AT LOCATION 1073 HAS JUST PROVED THAT WORD FROM LOCATION 140	
	01340	216331464560					
	01341	010007036030					
	01342	216260416462					
	01343	636047514665					
	01344	252460633021					
	01345	636066465124					
	01346	602651464460					
	01347	434623216331					
	01350	464560010400					
	01351	066031626043				BCD 76 IS LESS THAN WORD IN LOCATION 1410.	
	01352	256262606330					
	01353	214560664651					
	01354	246031456043					
	01355	462321633146					
	01356	456001040100					
	01357	33606060606060					
	01360	0	00000	0	00000	X	
A					00000	END	

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
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INP	17	0	0	0	0
LIB	0	0	0	0	0
COL	17	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 59

NUMBER OF SYMBOLS, DEF 197,DEFOP 0,UNDEF 0
ORG 172 FORCE NEW RECORD

				00254	ORG 172	FORCE NEW RECORD	
	00254	0	01303	0	01357	HTR X-1,0,LOCREC	CARD FOR DE
					01303	ORG LOCREC	
TD	01303	3	00000	0	00254	TXH 172	4623 FT 51
	01304	0	07400	4	00740	TSX PRINT,4	
	01305	0	01244	0	01237	HTR MACHIN,0,MACHIN+5	
	01306	0	07400	4	00740	TSX PRINT,4	
	01307	0	01360	0	01311	HTR PR,0,PR+39	
	01310	0	02000	0	00221	TRA DIGRTN	
	01311	60606060606060				BCD 2	
	01312	60606060606060					
	01313	314447466262				BCD IMPOSSIBLE TRANSFER TO FIRST INSTRUCTION FOLLOWING CAS INSTR	
	01314	312243256063					
	01315	512145622625					
	01316	516063466026					
	01317	315162636031					
	01320	456263516423					
	01321	633146456026					
	01322	464343466631					
	01323	452760232162					
	01324	603145626351					
	01325	642363314645				BCD UCTION AT LOCATION 4622. TLQ INSTRUCTION	
	01326	602163604346					
	01327	232163314645					
	01330	600406020233					
	01331	606063435060					
	01332	314562635164					
	01333	236331464560					
	01334	60606060606060					
	01335	60606060606060					
	01336	60606060606060					
	01337	216360434623				BCD AT LOCATION 4620 HAS JUST PROVED THAT WORD FROM LOCATION 524	
	01340	216331464560					
	01341	040602006030					
	01342	216260416462					
	01343	636047514665					
	01344	252460633021					
	01345	636066465124					
	01346	602651464460					
	01347	434623216331					
	01350	464560050204					
	01351	036031626043				BCD 73 IS LESS THAN WORD IN LOCATION 5246.	
	01352	256262606330					
	01353	214560664651					
	01354	246031456043					
	01355	462321633146					
	01356	456005020406					
	01357	33606060606060					
	01360	0	00000	0	00000	X	
A					00000		END

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
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INP	17	0	0	0	0
LIB	0	0	0	0	0
COL	17	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 59

NUMBER OF SYMBOLS, DEF 197,DEFOP 0,UNDEF 0
ORG 173 FORCE NEW RECORD

				00255	ORG 173	FORCE NEW RECORD
	00255	0	01303	0 01333	HTR X-1,0,LOCREC	CARD FOR DE
				01303	ORG LOCREC	
TD	01303	3	00000	0 00255	TXH 173	5232 FT 34
	01304	0	07400	4 00740	TSX PRINT,4	
	01305	0	01244	0 01237	HTR MACHIN,0,MACHIN+5	
	01306	0	07400	4 00740	TSX PRINT,4	
	01307	0	01334	0 01311	HTR PR,0,PR+19	
	01310	0	02000	0 00221	TRA DIGRTN	
	01311	60606060606060			BCD 2	
	01312	60606060606060				
	01313	314447466262			BCD IMPOSSIBLE ERROR RETURN FROM SUBROUTINE AT LOCATION 5566.	L
	01314	312243256025				
	01315	515146516051				
	01316	256364514560				
	01317	265146446062				
	01320	642251466463				
	01321	314525602163				
	01322	604346232163				
	01323	314645600505				
	01324	060633606043			BCD 7OGIC OF PROGRAM MAKES THIS IMPOSSIBLE.	
	01325	462731236046				
	01326	266047514627				
	01327	512144604421				
	01330	422562606330				
	01331	316260314447				
	01332	466262312243				
	01333	253360606060				
	01334	0 00000	0 00000	X		
A			00000		END	

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	15	0	0	0	0
LIB	0	0	0	0	0
COL	15	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 39

NUMBER OF SYMBOLS, DEF 197,DEFOP 0,UNDEF 0
 ORG 174 FORCE NEW RECORD

				00256	ORG 174	FORCE NEW RECORD	
	00256	0	01303	0	01347	HTR X-1,0,LOCREC	CARD FOR DE
					01303	ORG LOCREC	
TD	01303	3	00000	0	00256	TXH 174	4124 FT 51
	01304	0	07400	4	00740	TSX PRINT,4	
	01305	0	01244	0	01237	HTR MACHIN,0,MACHIN+5	
	01306	0	07400	4	00740	TSX PRINT,4	
	01307	0	01350	0	01311	HTR PR,0,PR+31	
	01310	0	02000	0	00221	TRA DIGRTN	
	01311	60606060606060				BCD 2	
	01312	60606060606060					
	01313	314447466262				BCD IMPOSSIBLE EQUALITY CONDITION AFTER CAS INSTRUCTION AT LOCAT	
	01314	312243256025					
	01315	506421433163					
	01316	706023464524					
	01317	316331464560					
	01320	212663255160					
	01321	232162603145					
	01322	626351642363					
	01323	314645602163					
	01324	604346232163					
	01325	314645600401				BCD ION 4122 WHICH COMPARES	
	01326	020260663031					
	01327	233060234644					
	01330	472151256260					
	01331	60606060606060					
	01332	60606060606060					
	01333	60606060606060					
	01334	60606060606060					
	01335	60606060606060					
	01336	60606060606060					
	01337	314563255145				BCD 9INTERNAL FORMULA NUMBERS OF DIFFERENT STATEMENTS.	
	01340	214360264651					
	01341	446443216045					
	01342	644422255162					
	01343	604626602431					
	01344	262625512545					
	01345	636062632163					
	01346	254425456362					
	01347	33606060606060					
	01350	0	00000	0	00000	X	
A			00000			END	

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	16	0	0	0	0
LIB	0	0	0	0	0
COL	16	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 51

NUMBER OF SYMBOLS, DEF 197,DEFOP 0,UNDEF 0

ORG 175

FORCE NEW RECORD

				00257	ORG 175	FORCE NEW RECORD
	00257	0	01303	0 01347	HTR X-1,0,LOCREC	CARD FOR DE
				01303	ORG LOCREC	
TD	01303	3	00000	0 00257	TXH 175	4157 FT 51
	01304	0	07400	4 00740	TSX PRINT,4	
	01305	0	01244	0 01237	HTR MACHIN,0,MACHIN+5	
	01306	0	07400	4 00740	TSX PRINT,4	
	01307	0	01350	0 01311	HTR PR,0,PR+31	
	01310	0	02000	0 00221	TRA DIGRTN	
	01311	60606060606060			BCD 2	
	01312	60606060606060				
	01313	314447466262			BCD IMPOSSIBLE EQUALITY CONDITION AFTER CAS INSTRUCTION AT LOCAT	
	01314	312243256025				
	01315	506421433163				
	01316	706023464524				
	01317	316331464560				
	01320	212663255160				
	01321	232162603145				
	01322	626351642363				
	01323	314645602163				
	01324	604346232163				
	01325	314645600401			BCD ION 4155 WHICH COMPARES	
	01326	050560663031				
	01327	233060234644				
	01330	472151256260				
	01331	60606060606060				
	01332	60606060606060				
	01333	60606060606060				
	01334	60606060606060				
	01335	60606060606060				
	01336	60606060606060				
	01337	314563255145			BCD 9INTERNAL FORMULA NUMBERS OF DIFFERENT STATEMENTS.	
	01340	214360264651				
	01341	446443216045				
	01342	644422255162				
	01343	604626602431				
	01344	262625512545				
	01345	636062632163				
	01346	254425456362				
	01347	33606060606060				
	01350	0 00000	0 00000	X		
A			00000		END	

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	16	0	0	0	0
LIB	0	0	0	0	0
COL	16	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 51

NUMBER OF SYMBOLS, DEF 197,DEFOP 0,UNDEF 0

ORG 176

FORCE NEW RECORD

				00260	ORG 176	FORCE NEW RECORD
	00260	0	01303	0 01347	HTR X-1,0,LOCREC	CARD FOR DE
				01303	ORG LOCREC	
TD	01303	3	00000	0 00260	TXH 176	4405 FT 34
	01304	0	07400	4 00740	TSX PRINT,4	
	01305	0	01244	0 01237	HTR MACHIN,0,MACHIN+5	
	01306	0	07400	4 00740	TSX PRINT,4	
	01307	0	01350	0 01311	HTR PR,0,PR+31	
	01310	0	02000	0 00221	TRA DIGRTN	
	01311	60606060606060			BCD 2	
	01312	60606060606060				
	01313	314447466262			BCD IMPOSSIBLE EQUALITY CONDITION AFTER CAS INSTRUCTION AT LOCAT	
	01314	312243256025				
	01315	506421433163				
	01316	706023464524				
	01317	316331464560				
	01320	212663255160				
	01321	232162603145				
	01322	626351642363				
	01323	314645602163				
	01324	604346232163				
	01325	314645600404			BCD ION 4403 WHICH COMPARES	
	01326	000360663031				
	01327	233060234644				
	01330	472151256260				
	01331	60606060606060				
	01332	60606060606060				
	01333	60606060606060				
	01334	60606060606060				
	01335	60606060606060				
	01336	60606060606060				
	01337	314563255145			BCD 9INTERNAL FORMULA NUMBERS OF DIFFERENT STATEMENTS.	
	01340	214360264651				
	01341	446443216045				
	01342	644422255162				
	01343	604626602431				
	01344	262625512545				
	01345	636062632163				
	01346	254425456362				
	01347	33606060606060				
	01350	0 00000	0 00000	X		
A			00000		END	

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	16	0	0	0	0
LIB	0	0	0	0	0
COL	16	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 51

NUMBER OF SYMBOLS, DEF 197,DEFOP 0,UNDEF 0

ORG 177

FORCE NEW RECORD

				00261	ORG 177	FORCE NEW RECORD
	00261	0	01303	0 01347	HTR X-1,0,LOCREC	CARD FOR DE
				01303	ORG LOCREC	
TD	01303	3	00000	0 00261	TXH 177	4533 FT 51
	01304	0	07400	4 00740	TSX PRINT,4	
	01305	0	01244	0 01237	HTR MACHIN,0,MACHIN+5	
	01306	0	07400	4 00740	TSX PRINT,4	
	01307	0	01350	0 01311	HTR PR,0,PR+31	
	01310	0	02000	0 00221	TRA DIGRTN	
	01311	60606060606060			BCD 2	
	01312	60606060606060				
	01313	314447466262			BCD IMPOSSIBLE EQUALITY CONDITION AFTER CAS INSTRUCTION AT LOCAT	
	01314	312243256025				
	01315	506421433163				
	01316	706023464524				
	01317	316331464560				
	01320	212663255160				
	01321	232162603145				
	01322	626351642363				
	01323	314645602163				
	01324	604346232163				
	01325	314645600405			BCD ION 4531 WHICH COMPARES	
	01326	030160663031				
	01327	233060234644				
	01330	472151256260				
	01331	606060606060				
	01332	606060606060				
	01333	606060606060				
	01334	606060606060				
	01335	606060606060				
	01336	606060606060				
	01337	314563255145			BCD 9INTERNAL FORMULA NUMBERS OF DIFFERENT STATEMENTS.	
	01340	214360264651				
	01341	446443216045				
	01342	644422255162				
	01343	604626602431				
	01344	262625512545				
	01345	636062632163				
	01346	254425456362				
	01347	336060606060				
	01350	0 00000	0 00000	X		
A			00000		END	

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	16	0	0	0	0
LIB	0	0	0	0	0
COL	16	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 51

NUMBER OF SYMBOLS, DEF 197,DEFOP 0,UNDEF 0

ORG 178

FORCE NEW RECORD

				00262	ORG 178	FORCE NEW RECORD
	00262	0	01303	0 01347	HTR X-1,0,LOCREC	CARD FOR DE
				01303	ORG LOCREC	
TD	01303	3	00000	0 00262	TXH 178	5721 FT 27
	01304	0	07400	4 00740	TSX PRINT,4	
	01305	0	01244	0 01237	HTR MACHIN,0,MACHIN+5	
	01306	0	07400	4 00740	TSX PRINT,4	
	01307	0	01350	0 01311	HTR PR,0,PR+31	
	01310	0	02000	0 00221	TRA DIGRTN	
	01311	60606060606060			BCD 2	
	01312	60606060606060				
	01313	314447466262			BCD IMPOSSIBLE EQUALITY CONDITION AFTER CAS INSTRUCTION AT LOCAT	
	01314	312243256025				
	01315	506421433163				
	01316	706023464524				
	01317	316331464560				
	01320	212663255160				
	01321	232162603145				
	01322	626351642363				
	01323	314645602163				
	01324	604346232163				
	01325	314645600507			BCD ION 5717 WHICH COMPARES	
	01326	010760663031				
	01327	233060234644				
	01330	472151256260				
	01331	60606060606060				
	01332	60606060606060				
	01333	60606060606060				
	01334	60606060606060				
	01335	60606060606060				
	01336	60606060606060				
	01337	314563255145			BCD 9INTERNAL FORMULA NUMBERS OF DIFFERENT STATEMENTS.	
	01340	214360264651				
	01341	446443216045				
	01342	644422255162				
	01343	604626602431				
	01344	262625512545				
	01345	636062632163				
	01346	254425456362				
	01347	33606060606060				
	01350	0 00000	0 00000	X		
A			00000		END	

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	16	0	0	0	0
LIB	0	0	0	0	0
COL	16	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 51

NUMBER OF SYMBOLS, DEF 197,DEFOP 0,UNDEF 0

ORG 179

FORCE NEW RECORD

				00263	ORG 179	FORCE NEW RECORD
	00263	0	01303	0 01347	HTR X-1,0,LOCREC	CARD FOR DE
				01303	ORG LOCREC	
TD	01303	3	00000	0 00263	TXH 179	6253 FT 32
					179	6256 FT 32
	01304	0	07400	4 00740	TSX PRINT,4	
	01305	0	01244	0 01237	HTR MACHIN,0,MACHIN+5	
	01306	0	07400	4 00740	TSX PRINT,4	
	01307	0	01350	0 01311	HTR PR,0,PR+31	
	01310	0	02000	0 00221	TRA DIGRTN	
	01311	60606060606060			BCD 2	
				PR		
	01312	60606060606060				
	01313	314447466262			BCD IMPOSSIBLE EQUALITY CONDITION AFTER CAS INSTRUCTION AT LOCAT	
	01314	312243256025				
	01315	506421433163				
	01316	706023464524				
	01317	316331464560				
	01320	212663255160				
	01321	232162603145				
	01322	626351642363				
	01323	314645602163				
	01324	604346232163				
	01325	314645600602			BCD ION 6251 OR 6254. ROUTINE ANALYSES DIFFERENT	
	01326	050160465160				
	01327	060205043360				
	01330	514664633145				
	01331	256021452143				
	01332	706225626024				
	01333	312626255125				
	01334	45636060606060				
	01335	60606060606060				
	01336	60606060606060				
	01337	626422622351			BCD 9SUBSCRIPTS AFTER DUPLICATES HAVE BEEN ELIMINATED.	
	01340	314763626021				
	01341	266325516024				
	01342	644743312321				
	01343	632562603021				
	01344	652560222525				
	01345	456025433144				
	01346	314521632524				
	01347	33606060606060				
	01350	0 00000	0 00000	X		
A			00000		END	

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	17	0	0	0	0
LIB	0	0	0	0	0
COL	17	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 52

NUMBER OF SYMBOLS, DEF 197,DEFOP 0,UNDEF 0
ORG 180 FORCE NEW RECORD

				00264	ORG 180	FORCE NEW RECORD
	00264	0	01303	0 01347	HTR X-1,0,LOCREC	CARD FOR DE
				01303	ORG LOCREC	
TD	01303	3	00000	0 00264	TXH 180	6635 FT 27
	01304	0	07400	4 00740	TSX PRINT,4	
	01305	0	01244	0 01237	HTR MACHIN,0,MACHIN+5	
	01306	0	07400	4 00740	TSX PRINT,4	
	01307	0	01350	0 01311	HTR PR,0,PR+31	
	01310	0	02000	0 00221	TRA DIGRTN	
	01311	60606060606060			BCD 2	
	01312	60606060606060				
	01313	314447466262			BCD IMPOSSIBLE EQUALITY CONDITION AFTER CAS INSTRUCTION AT LOCAT	
	01314	312243256025				
	01315	506421433163				
	01316	706023464524				
	01317	316331464560				
	01320	212663255160				
	01321	232162603145				
	01322	626351642363				
	01323	314645602163				
	01324	604346232163				
	01325	314645600606			BCD ION 6633 WHICH COMPARES	
	01326	030360663031				
	01327	233060234644				
	01330	472151256260				
	01331	606060606060				
	01332	606060606060				
	01333	606060606060				
	01334	606060606060				
	01335	606060606060				
	01336	606060606060				
	01337	314563255145			BCD 9INTERNAL FORMULA NUMBERS OF DIFFERENT STATEMENTS.	
	01340	214360264651				
	01341	446443216045				
	01342	644422255162				
	01343	604626602431				
	01344	262625512545				
	01345	636062632163				
	01346	254425456362				
	01347	336060606060				
	01350	0 00000	0 00000	X		
A			00000		END	

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	16	0	0	0	0
LIB	0	0	0	0	0
COL	16	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 51

NUMBER OF SYMBOLS, DEF 197,DEFOP 0,UNDEF 0

ORG 181

FORCE NEW RECORD

				00265	ORG 181	FORCE NEW RECORD	
	00265	0	01303	0	01347	HTR X-1,0,LOCREC	CARD FOR DE
					01303	ORG LOCREC	
TD	01303	3	00000	0	00265	TXH 181	7023 FT 27
	01304	0	07400	4	00740	TSX PRINT,4	
	01305	0	01244	0	01237	HTR MACHIN,0,MACHIN+5	
	01306	0	07400	4	00740	TSX PRINT,4	
	01307	0	01350	0	01311	HTR PR,0,PR+31	
	01310	0	02000	0	00221	TRA DIGRTN	
	01311	60606060606060				BCD 2	
	01312	60606060606060					
	01313	314447466262				BCD IMPOSSIBLE EQUALITY CONDITION AFTER CAS INSTRUCTION AT LOCAT	
	01314	312243256025					
	01315	506421433163					
	01316	706023464524					
	01317	316331464560					
	01320	212663255160					
	01321	232162603145					
	01322	626351642363					
	01323	314645602163					
	01324	604346232163					
	01325	314645600700				BCD ION 7021 WHICH COMPARES	
	01326	020160663031					
	01327	233060234644					
	01330	472151256260					
	01331	60606060606060					
	01332	60606060606060					
	01333	60606060606060					
	01334	60606060606060					
	01335	60606060606060					
	01336	60606060606060					
	01337	314563255145				BCD 9INTERNAL FORMULA NUMBERS OF DIFFERENT STATEMENTS	
	01340	214360264651					
	01341	446443216045					
	01342	644422255162					
	01343	604626602431					
	01344	262625512545					
	01345	636062632163					
	01346	254425456362					
	01347	60606060606060					
	01350	0	00000	0	00000	X	
A				00000		END	

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	16	0	0	0	0
LIB	0	0	0	0	0
COL	16	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 51

NUMBER OF SYMBOLS, DEF 197,DEFOP 0,UNDEF 0

ORG 182

FORCE NEW RECORD

				00266	ORG 182	FORCE NEW RECORD
	00266	0	01303	0 01347	HTR X-1,0,LOCREC	CARD FOR DE
				01303	ORG LOCREC	
TD	01303	3	00000	0 00266	TXH 182	7073 FT 39
	01304	0	07400	4 00740	TSX PRINT,4	
	01305	0	01244	0 01237	HTR MACHIN,0,MACHIN+5	
	01306	0	07400	4 00740	TSX PRINT,4	
	01307	0	01350	0 01311	HTR PR,0,PR+31	
	01310	0	02000	0 00221	TRA DIGRTN	
	01311	60606060606060			BCD 2	
	01312	60606060606060				
	01313	314447466262			BCD IMPOSSIBLE EQUALITY CONDITION AFTER CAS INSTRUCTION AT LOCAT	
	01314	312243256025				
	01315	506421433163				
	01316	706023464524				
	01317	316331464560				
	01320	212663255160				
	01321	232162603145				
	01322	626351642363				
	01323	314645602163				
	01324	604346232163				
	01325	314645600700			BCD ION 7071 WHICH COMPARES	
	01326	070160663031				
	01327	233060234644				
	01330	472151256260				
	01331	60606060606060				
	01332	60606060606060				
	01333	60606060606060				
	01334	60606060606060				
	01335	60606060606060				
	01336	60606060606060				
	01337	314563255145			BCD 9INTERNAL FORMULA NUMBERS OF DIFFERENT STATEMENTS.	
	01340	214360264651				
	01341	446443216045				
	01342	644422255162				
	01343	604626602431				
	01344	262625512545				
	01345	636062632163				
	01346	254425456362				
	01347	33606060606060				
	01350	0 00000	0 00000	X		
A			00000		END	

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	16	0	0	0	0
LIB	0	0	0	0	0
COL	16	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 51

NUMBER OF SYMBOLS, DEF 197,DEFOP 0,UNDEF 0

ORG 183

FORCE NEW RECORD

```

00267          00267          ORG 183          FORCE NEW RECORD
00267 0 01303 0 01346      HTR X-1,0,LOCREC      CARD FOR DE
                                01303          ORG LOCREC
TD 01303 3 00000 0 00267      TXH 183          425 FT 73
01304 0 07400 4 00740      TSX PRINT,4
01305 0 01244 0 01237      HTR MACHIN,0,MACHIN+5
01306 0 07400 4 00740      TSX PRINT,4
01307 0 01347 0 01311      HTR PR,0,PR+30
01310 0 02000 0 00221      TRA DIGRTN
01311 60606060606060        PR          BCD 2
01312 60606060606060
01313 243165316231          BCD DIVISION INSTRUCTIONS BEGINNING AT LOCATION 421 HAVE NOT BEE
01314 464560314562
01315 635164236331
01316 464562602225
01317 273145453145
01320 276021636043
01321 462321633146
01322 456004020160
01323 302165256045
01324 466360222525
01325 456025672523          BCD N EXECUTED.
01326 646325243360
01327 60606060606060
01330 60606060606060
01331 60606060606060
01332 60606060606060
01333 60606060606060
01334 60606060606060
01335 60606060606060
01336 60606060606060
01337 434627312360          BCD 8LOGIC OF THE PROGRAM MAKES THIS IMPOSSIBLE.
01340 462660633025
01341 604751462751
01342 214460442142
01343 256260633031
01344 626031444746
01345 626231224325
01346 33606060606060
01347 0 00000 0 00000 X
A          00000          END

```

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	16	0	0	0	0
LIB	0	0	0	0	0
COL	16	0	0	0	0

```

NUMBER OF ON-LINE INPUT RECORDS          0
NUMBER OF OFF-LINE PRINT RECORDS        50
NUMBER OF SYMBOLS,  DEF  197,DEFOP      0,UNDEF  0

```

ORG 184

FORCE NEW RECORD

```

00270          00270          ORG 184          FORCE NEW RECORD
00270 0 01303 0 01346      HTR X-1,0,LOCREC      CARD FOR DE
                                01303          ORG LOCREC
TD 01303 3 00000 0 00270      TXH 184          510 FT 73
01304 0 07400 4 00740      TSX PRINT,4
01305 0 01244 0 01237      HTR MACHIN,0,MACHIN+5
01306 0 07400 4 00740      TSX PRINT,4
01307 0 01347 0 01311      HTR PR,0,PR+30
01310 0 02000 0 00221      TRA DIGRTN
01311 60606060606060        PR          BCD 2
01312 60606060606060
01313 243165316231          BCD DIVISION INSTRUCTIONS BEGINNING AT LOCATION 501 HAVE NOT BEE
01314 464560314562
01315 635164236331
01316 464562602225
01317 273145453145
01320 276021636043
01321 462321633146
01322 456005000160
01323 302165256045
01324 466360222525
01325 456025672523          BCD N EXECUTED.
01326 646325243360
01327 60606060606060
01330 60606060606060
01331 60606060606060
01332 60606060606060
01333 60606060606060
01334 60606060606060
01335 60606060606060
01336 60606060606060
01337 434627312360          BCD 8LOGIC OF THE PROGRAM MAKES THIS IMPOSSIBLE.
01340 462660633025
01341 604751462751
01342 214460442142
01343 256260633031
01344 626031444746
01345 626231224325
01346 33606060606060
01347 0 00000 0 00000 X
A          00000          END

```

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	16	0	0	0	0
LIB	0	0	0	0	0
COL	16	0	0	0	0

```

NUMBER OF ON-LINE INPUT RECORDS          0
NUMBER OF OFF-LINE PRINT RECORDS        50
NUMBER OF SYMBOLS,  DEF  197,DEFOP      0,UNDEF  0

```


ORG 185

FORCE NEW RECORD

```

00271          00271          ORG 185          FORCE NEW RECORD
00271 0 01303 0 01346      HTR X-1,0,LOCREC      CARD FOR DE
                                01303          ORG LOCREC
TD 01303 3 00000 0 00271      TXH 185          1234 FT 62
01304 0 07400 4 00740      TSX PRINT,4
01305 0 01244 0 01237      HTR MACHIN,0,MACHIN+5
01306 0 07400 4 00740      TSX PRINT,4
01307 0 01347 0 01311      HTR PR,0,PR+30
01310 0 02000 0 00221      TRA DIGRTN
01311 60606060606060        PR          BCD 2
01312 60606060606060
01313 243165316231          BCD DIVISION INSTRUCTIONS BEGINNING AT LOCATION 1226 HAVE NOT BE
01314 464560314562
01315 635164236331
01316 464562602225
01317 273145453145
01320 276021636043
01321 462321633146
01322 456001020206
01323 603021652560
01324 454663602225
01325 254560256725          BCD EN EXECUTED.
01326 236463252433
01327 60606060606060
01330 60606060606060
01331 60606060606060
01332 60606060606060
01333 60606060606060
01334 60606060606060
01335 60606060606060
01336 60606060606060
01337 434627312360          BCD 8LOGIC OF THE PROGRAM MAKES THIS IMPOSSIBLE.
01340 462660633025
01341 604751462751
01342 214460442142
01343 256260633031
01344 626031444746
01345 626231224325
01346 33606060606060
01347 0 00000 0 00000 X
A          00000          END

```

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	16	0	0	0	0
LIB	0	0	0	0	0
COL	16	0	0	0	0

```

NUMBER OF ON-LINE INPUT RECORDS          0
NUMBER OF OFF-LINE PRINT RECORDS        50
NUMBER OF SYMBOLS,  DEF  197,DEFOP      0,UNDEF  0

```

ORG 186

FORCE NEW RECORD

```

00272          00272          ORG 186          FORCE NEW RECORD
00272 0 01303 0 01346      HTR X-1,0,LOCREC      CARD FOR DE
                                01303          ORG LOCREC
TD 01303 3 00000 0 00272      TXH 186          1261 FT 62
01304 0 07400 4 00740      TSX PRINT,4
01305 0 01244 0 01237      HTR MACHIN,0,MACHIN+5
01306 0 07400 4 00740      TSX PRINT,4
01307 0 01347 0 01311      HTR PR,0,PR+30
01310 0 02000 0 00221      TRA DIGRTN
01311 60606060606060        PR          BCD 2
01312 60606060606060
01313 243165316231          BCD DIVISION INSTRUCTIONS BEGINNING AT LOCATION 1253 HAVE NOT BE
01314 464560314562
01315 635164236331
01316 464562602225
01317 273145453145
01320 276021636043
01321 462321633146
01322 456001020503
01323 603021652560
01324 454663602225
01325 254560256725          BCD EN EXECUTED.
01326 236463252433
01327 60606060606060
01330 60606060606060
01331 60606060606060
01332 60606060606060
01333 60606060606060
01334 60606060606060
01335 60606060606060
01336 60606060606060
01337 434627312360          BCD 8LOGIC OF THE PROGRAM MAKES THIS IMPOSSIBLE.
01340 462660633025
01341 604751462751
01342 214460442142
01343 256260633031
01344 626031444746
01345 626231224325
01346 33606060606060
01347 0 00000 0 00000 X
A          00000          END

```

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	16	0	0	0	0
LIB	0	0	0	0	0
COL	16	0	0	0	0

```

NUMBER OF ON-LINE INPUT RECORDS          0
NUMBER OF OFF-LINE PRINT RECORDS        50
NUMBER OF SYMBOLS,  DEF  197,DEFOP      0,UNDEF  0

```

ORG 187

FORCE NEW RECORD

```

00273          00273          ORG 187          FORCE NEW RECORD
00273 0 01303 0 01325      HTR X-1,0,LOCREC      CARD FOR DE
                                01303          ORG LOCREC
TD 01303 3 00000 0 00273      TXH 187          2230 FT 75
01304 0 07400 4 00740      TSX PRINT,4
01305 0 01244 0 01237      HTR MACHIN,0,MACHIN+5
01306 0 07400 4 00740      TSX PRINT,4
01307 0 01326 0 01311      HTR PR,0,PR+13
01310 0 02000 0 00221      TRA DIGRTN
01311 60606060606060        PR          BCD 2
01312 60606060606060
01313 243165312425          BCD DIVIDE CHECK. LOGIC OF PROGRAM IS SUCH THAT THIS IS IMPOSSI
01314 602330252342
01315 336060434627
01316 312360462660
01317 475146275121
01320 446031626062
01321 642330606330
01322 216360633031
01323 626031626031
01324 444746626231
01325 224325336060          BCD 1BLE.
01326 0 00000 0 00000 X          END
A          00000

```

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	15	0	0	0	0
LIB	0	0	0	0	0
COL	15	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 33

NUMBER OF SYMBOLS, DEF 197,DEFOP 0,UNDEF 0
 ORG 188 FORCE NEW RECORD

				00274	ORG 188	FORCE NEW RECORD
	00274	0	01303	0 01472	HTR X-1,0,LOCREC	CARD FOR DE
				01303	ORG LOCREC	
TD	01303	3	00000	0 00274	TXH 188	377 FT 56
					188	424 FT 56
					188	613 FT 56
					188	654 FT 56
					I88	1000 FT 56
					188	1115 FT 56
					I88	1320 FT 56
					188	1531 FT 56
					188	1767 FT 56
					188	7143 FT 56
					I88	132 FT 60
					188	173 FT 60
					168	227 FT 60
					188	252 FT 60
					188	334 FT 60
					188	423 FT 60
					188	442 FT 60
					I8B	521 FT 60
					188	544 FT 60
					188	305 FT 60
					188	363 FT 60
	01304	0	07400	4 00740	TSX PRINT,4	
	01305	0	01244	0 01237	HTR MACHIN,0,MACHIN+5	
	01306	0	07400	4 00740	TSX PRINT,4	
	01307	0	01473	0 01311	HTR PR,0,PR+114	
	01310	0	02000	0 00221	TRA DIGRTN	
	01311	606060606060			BCD 2	
	01312	606060606060	PR			
	01313	262131436451			BCD FAILURE OF CAS INSTRUCTION OR INDEX REGISTERS IN EXAMINING 4	
	01314	256046266023				
	01315	216260314562				
	01316	635164236331				
	01317	464560465160				
	01320	314524256760				
	01321	512527316263				
	01322	255162603145				
	01323	602567214431				
	01324	453145276004				
	01325	606646512460			BCD WORD ENTRY FROM ONE OF THE RECORDS LISTED.	
	01326	254563517060				
	01327	265146446046				
	01330	452560462660				
	01331	633025605125				
	01332	234651246260				
	01333	433162632524				
	01334	336060606060				
	01335	606060606060				
	01336	606060606060				
	01337	254563517060			BCD ENTRY IS SHOWN TO BE GREATER THAN 4 WORDS. LOGIC OF THE PRO	
	01340	316260623046				
	01341	664560634660				

01342 222560275125
01343 216325516063
01344 302145600460
01345 664651246233
01346 606043462731
01347 236046266063
01350 302560475146
01351 275121446044
01352 214225626063
01353 303162603144
01354 474662623122
01355 432533606060
01356 606060606060
01357 606060606060
01360 606060606060
01361 606060606060
01362 606060606060
01363 606060606060
01364 606060606060
01365 233163605125
01366 234651247360
01367 632147256002
01370 736026314325
01371 600260606060
01372 606060606060
01373 606060606060
01374 606060606060
01375 606060606060
01376 606060606060
01377 606060606060
01400 606060606060
01401 606060606060
01402 606060606060
01403 606060606060
01404 606060606060
01405 606060606060
01406 606060606060
01407 606060606060
01410 606060606060
01411 234644472446
01412 605125234651
01413 247360632147
01414 256004736026
01415 314325600260
01416 606060606060
01417 606060606060
01420 606060606060
01421 606060606060
01422 606060606060
01423 606060606060
01424 606060606060
01425 606060606060
01426 606060606060
01427 606060606060

BCD GRAM MAKES THIS IMPOSSIBLE.

BCD 2

BCD CIT RECORD, TAPE 2, FILE 2

BCD

BCD COMPDO RECORD, TAPE 4, FILE 2

BCD


```

01430 606060606060
01431 606060606060
01432 606060606060
01433 606060606060
01434 606060606060
01435 244626314322          BCD DOFILB RECORD, TAPE 2, FILE 8
01436 605125234651
01437 247360632147
01440 256002736026
01441 314325601060
01442 606060606060
01443 606060606060
01444 606060606060
01445 606060606060
01446 606060606060
01447 606060606060          BCD
01450 606060606060
01451 606060606060
01452 606060606060
01453 606060606060
01454 606060606060
01455 606060606060
01456 606060606060
01457 606060606060
01460 606060606060
01461 442551272524          BCD MERGED COMPAIL AND COMPDO RECORDS, TAPE 3, FILE 1
01462 602346444721
01463 314360214524
01464 602346444724
01465 466051252346
01466 512462736063
01467 214725600373
01470 602631432560
01471 016060606060
01472 606060606060
01473 0 00000 0 00000 X
A          00000          END

```

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	45	0	0	0	0
LIB	0	0	0	0	0
COL	45	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 154

NUMBER OF SYMBOLS, DEF 197,DEFOP 0,UNDEF 0
 ORG 189 FORCE NEW RECORD

				00275	ORG 189	FORCE NEW RECORD
	00275	0	01303	0 01420	HTR X-1,0,LOCREC	CARD FOR DE
				01303	ORG LOCREC	
TD	01303	3	00000	0 00275	TXH 189	6063 FT 32
					189	6475 FT 32
					189	5273 FT 34
	01304	0	07400	4 00740	TSX PRINT,4	
	01305	0	01252	0 01244	HTR SOURCE,0,SOURCE+6	
	01306	0	76200	0 00304	RDR 4	
	01307	0	46000	0 01320	LDA A	
	01310	0	70000	0 00527	CPY ALFBET	
	01311	0	70000	0 00530	CPY SYM	
	01312	0	07400	4 00740	TSX PRINT,4	
	01313	0	01361	0 01321	HTR PR,0,PR+32	
	01314	0	07400	4 00505	TSX FX4PR,4	
	01315	0	07400	4 00740	TSX PRINT,4	
	01316	0	01421	0 01361	HTR PR1,0,PR1+32	
	01317	0	02000	0 00272	TRA SPEND	
	01320	0	00000	0 00037	A HTR831	
	01321	606060606060		PR	BCD 2	
	01322	606060606060				
	01323	214560314563			BCD AN INTERMEDIATE CORE TABLE IS FULL.	THE SUBSCRIPT COMBINATI
	01324	255144252431				
	01325	216325602346				
	01326	512560632122				
	01327	432560316260				
	01330	266443433360				
	01331	606330256062				
	01332	642262235131				
	01333	476360234644				
	01334	223145216331				
	01335	464562602145			BCD ONS AND FLOW STRUCTURE	
	01336	246026434666				
	01337	606263516423				
	01340	636451256060				
	01341	606060606060				
	01342	606060606060				
	01343	606060606060				
	01344	606060606060				
	01345	606060606060				
	01346	606060606060				
	01347	215125606346			BCD ARE TOO COMPLEX WITHIN A DO NEST.	THE STATEMENT
	01350	466023464447				
	01351	432567606631				
	01352	633031456021				
	01353	602446604525				
	01354	626333606063				
	01355	302560626321				
	01356	632544254563				
	01357	606060606060				
	01360	606060606060				
	01361	606060606060	PR1		BCD 2	
	01362	606060606060				
	01363	316260633025			BCD IS THE OUTERMOST DO OF THE NEST WHICH HAS CAUSED THE OVERFLO	

01364 604664632551
 01365 444662636024
 01366 466046266063
 01367 302560452562
 01370 636066303123
 01371 306030216260
 01372 232164622524
 01373 606330256046
 01374 652551264346
 01375 663360605125
 01376 665131632560
 01377 452562636021
 01400 452460623144
 01401 474331267060
 01402 606060606060
 01403 606060606060
 01404 606060606060
 01405 606060606060
 01406 606060606060
 01407 626422622351
 01410 314763602346
 01411 442231452163
 01412 314645626046
 01413 516026434666
 01414 606263516423
 01415 636451253360
 01416 606060606060
 01417 606060606060
 01420 606060606060
 01421 0 00000 0 00000 X
 A 00000

BCD W. REWRITE NEST AND SIMPLIFY

- ,

BCD SUBSCRIPT COMBINATIONS OR FLOW STRUCTURE.

END

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	30	0	0	0	0
LIB	0	0	0	0	0
COL	30	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 94

NUMBER OF SYMBOLS, DEF 199,DEFOP 0,UNDEF 0
 ORG 190 FORCE NEW RECORD

					00276	ORG 190	FORCE NEW RECORD
	00276	0	01303	0	01523	HTR X-1,0,LOCREC	CARD FOR DE
					01303	ORG LOCREC	
TD	01303	3	00000	0	00276	TXH 190	7620 FT 21
	01304	0	07400	4	00740	TSX PRINT,4	
	01305	0	01252	0	01244	HTR SOURCE,0,SOURCE+6	
	01306	0	50000	0	01227	CLA ADDMSK	PUT AWAY TABLE IDENTIFICATION WORD
					16531	IDWD SYN87513	TABLE IDENTIFICATION AT LOC 7513
	01307	-0	32000	0	16531	ANA IDWD	
	01310	0	60100	0	01257	STO ERAS	
	01311	0	53400	1	01232	LXA ZERO,1	
M	01312	0	50000	1	01464	SEARCH CLA TBLWD,1	TABLE SEARCH
	01313	0	40200	0	01257	SUB ERAS	
	01314	0	10000	0	01441	TZE PACK	
	01315	1	77776	1	01316	TXI A,1,-2	
M	01316	3	77740	1	01312	A TXH SEARCH,1,-32	
	01317	0	07400	4	00740	TSX PRINT,4	
	01320	0	01441	0	01323	HTR ER,0,ER+78	
	01321	0	00000	0	01322	HTR E	
	01322	0	02000	0	00221	E TRA DIGRTN	
	01323	60606060606060				ER BCD 2	
	01324	60606060606060					
	01325	216063212243					BCD A TABLE COMPILED BY SECTION 1 PRIME HAS EXCEEDED THE BUFFER
	01326	256023464447					
	01327	314325246022					
	01330	706062252363					
	01331	314645600160					
	01332	475131442560					
	01333	302162602567					
	01334	232525242524					
	01335	606330256022					
	01336	642626255160					
	01337	623171253360					BCD SIZE. THIS DIAGNOSTIC RECORD COMPARES
	01340	606330316260					
	01341	243121274546					
	01342	626331236051					
	01343	252346512460					
	01344	234644472151					
	01345	256260606060					
	01346	606060606060					
	01347	606060606060					
	01350	606060606060					
	01351	633025606321					BCD THE TABLE IDENTIFICATION WORD IN THE ADDRESS OF 7513 TO A LI
	01352	224325603124					
	01353	254563312631					
	01354	232163314645					
	01355	606646512460					
	01356	314560633025					
	01357	602124245125					
	01360	626260462660					
	01361	070501036063					
	01362	466021604331					
	01363	626360462660					BCD ST OF 16 POSSIBLE TABLES.
	01364	010660474662					

01365	623122432560		
01366	632122432562		
01367	336060606060		
01370	606060606060		
01371	606060606060		
01372	606060606060		
01373	606060606060		
01374	606060606060		
01375	633025606225	BCD	THE SEARCH HAS FAILED. THE ALLOWED TABLE IDENTIFICATION NUM
01376	215123306030		
01377	216260262131		
01400	432524336060		
01401	633025602143		
01402	434666252460		
01403	632122432560		
01404	312425456331		
01405	263123216331		
01406	464560456444		
01407	222551626021	BCD	BERS ARE IN LOCATIONS 1464,
01410	512560314560		
01411	434623216331		
01412	464562600104		
01413	060473606060		
01414	606060606060		
01415	606060606060		
01416	606060606060		
01417	606060606060		
01420	606060606060		
01421	010406046047	BCD	1464 PLUS 2, ETC. PRESS START IF YOU WISH TO RESTORE MACHIN
01422	436462600273		
01423	602563233360		
01424	604751256262		
01425	606263215163		
01426	603126607046		
01427	646066316230		
01430	606346605125		
01431	626346512560		
01432	442123303145		
01433	256063466062	BCD	6E TO STATE IN WHICH ERROR OCCURRED.
01434	632163256031		
01435	456066303123		
01436	306025515146		
01437	516046232364		
01440	515125243360		
01441	-0 50000 1 01465	PACK	CAL TBLWD+1,1
01442	0 60200 0 01450		SLW PR1
01443	0 07400 4 00740		TSX PRINT,4
01444	0 01464 0 01446		HTR PR,0,PR+14
01445	0 02000 0 00272		TRA SPEND
01446	606060606060	PR	BCD 2
01447	606060606060		
01450	606060606060	PR1	BCD 1
01451	606321224325	BCD	TABLE HAS EXCEEDED THE BUFFER SIZE. REWRITE SOURCE PROGRAM
01452	603021626025		

```

01453 672325252425
01454 246063302560
01455 226426262551
01456 606231712533
01457 606051256651
01460 316325606246
01461 645123256047
01462 514627512144
01463 336060606060          BCD 1.
01464 0 00000 0 00017 TBLWD HTR 15
01465 636263464762          BCD 1TSTOPS
01466 0 00000 0 00016          HTR 14
01467 454645256723          BCD 1NONEXC
01470 0 00000 0 00015          HTR 13
01471 304643215127          BCD 1HOLARG
01472 0 00000 0 00014          HTR 12
01473 234644444645          BCD 1COMMON
01474 0 00000 0 00013          HTR 11
01475 626422215127          BCD 1SUBARG
01476 0 00000 0 00012          HTR 10
01477 264651442163          BCD 1FORMAT
01500 0 00000 0 00011          HTR 9
01501 234346626422          BCD 1CLOSUB
01502 0 00000 0 00010          HTR 8
01503 255064316360          BCD 1EQUIT
01504 0 00000 0 00007          HTR 7
01505 265125636060          BCD 1FRET
01506 0 00000 0 00006          HTR 6
01507 264651652143          BCD 1FORVAL
01510 0 00000 0 00005          HTR 5
01511 264651652151          BCD 1FORVAR
01512 0 00000 0 00004          HTR 4
01513 264651632127          BCD 1FORTAG
01514 0 00000 0 00003          HTR 3
01515 635121246060          BCD 1TRAD
01516 0 00000 0 00002          HTR 2
01517 633126274660          BCD 1TIFGO
01520 0 00000 0 00001          HTR 1
01521 632446606060          BCD 1TDO
01522 0 00000 0 00000          HTR 0
01523 632531264546          BCD 1TEIFNO
01524 0 00000 0 00000 X          END
A              00000          SEARCH 01312,00120

```

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	73	0	0	0	0
LIB	0	0	0	0	0
COL	73	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 161

NUMBER OF SYMBOLS, DEF 205,DEFOP 0,UNDEF 0
ORG 191 FORCE NEW RECORD

```

00277 0 01303 0 01336 00277          ORG 191          FORCE NEW RECORD
01303 3 00000 0 00277          HTR X-1,0,LOCREC  CARD FOR DE
01304 0 07400 4 00740          01303          ORG LOCREC
01305 0 01252 0 01244          TXH 191          1160 FT 22
01306 0 07400 4 00740          TSX PRINT,4
01307 0 01337 0 01311          HTR SOURCE,0,SOURCE+6
01310 0 02000 0 00272          TSX PRINT,4
01311 60606060606060          HTR PR,0,PR+22
01312 60606060606060          TRA SPEND
01313 454660314562          BCD 2
01314 635164236331          BCD NO INSTRUCTIONS WERE COMPILED. CORRECT SOURCE PROGRAM TO HA
01315 464562606625
01316 512560234644
01317 473143252433
01320 606023465151
01321 252363606246
01322 645123256047
01323 514627512144
01324 606346603021
01325 652560216360          BCD VE AT LEAST ONE EXECUTABLE STATEMENT.
01326 432521626360
01327 464525602567
01330 252364632122
01331 432560626321
01332 632544254563
01333 336060606060
01334 606060606060
01335 606060606060
01336 606060606060
01337 0 00000 0 00000 X
A          00000          END

```

SHARE ASSEMBLER STATISTICS

TAPE	TOTAL	1 FAIL	2 FAIL	3 FAIL	4 FAIL
INP	15	0	0	0	0
LIB	0	0	0	0	0
COL	15	0	0	0	0

NUMBER OF ON-LINE INPUT RECORDS 0

NUMBER OF OFF-LINE PRINT RECORDS 42

NUMBER OF SYMBOLS, DEF 197,DEFOP 0,UNDEF 0
 ORG 192 FORCE NEW RECORD