

/

/ ADD INSTRUCTIONS

/

716000	A	IAD=716000	/SINGLE INTEGER
716100	A	EAD=716100	/DOUBLE INTEGER
716040	A	FAD=716040	/SINGLE FLOATING
716050	A	URFAD=716050	/UN=ROUNDED, SINGLE FLOATING
716060	A	UNFAD=716060	/UN=NORMALIZED, SINGLE FLOATING
716070	A	UUFAD=716070	/UN=ROUNDED, UN=NORMALIZED, SINGLE FLOATING
716140	A	DAD=716140	/DOUBLE FLOATING
716150	A	URDAD=716150	/UN=ROUNDED, DOUBLE FLOATING
716160	A	UNDAD=716160	/UN=NORMALIZED, DOUBLE FLOATING
716170	A	UUDAD=716170	/UN=ROUNDED, UN=NORMALIZED, DOUBLE FLOATING

/

/ SUBTRACT INSTRUCTIONS

/

710400	A	ISB=710400	/SINGLE INTEGER
710500	A	ESB=710500	/DOUBLE INTEGER
710440	A	FSB=710440	/SINGLE FLOATING
710450	A	URFSB=710450	/UN=ROUNDED, SINGLE FLOATING
710460	A	UNFSB=710460	/UN=NORMALIZED, SINGLE FLOATING
710470	A	UUFBS=710470	/UN=ROUNDED, UN=NORMALIZED, SINGLE FLOATING
710540	A	DSB=710540	/DOUBLE FLOATING
710550	A	URDSB=710550	/UN=ROUNDED, DOUBLE FLOATING
710560	A	UNDSB=710560	/UN=NORMALIZED, DOUBLE FLOATING
710570	A	UUDSB=710570	/UN=ROUNDED, UN=NORMALIZED, DOUBLE FLOATING

/

/ REVERSE SUBTRACT INSTRUCTIONS

/

711000	A	IRS=711000	/SINGLE INTEGER
711100	A	ERS=711100	/DOUBLE INTEGER
711040	A	FRS=711040	/SINGLE FLOATING
711050	A	URFRS=711050	/UN=ROUNDED, SINGLE FLOATING
711060	A	UNFRS=711060	/UN=NORMALIZED, SINGLE FLOATING
711070	A	UUFRS=711070	/UN=ROUNDED, UN=NORMALIZED, SINGLE FLOATING
711140	A	DRS=711140	/DOUBLE FLOATING
711150	A	URDRS=711150	/UN=ROUNDED, DOUBLE FLOATING
711160	A	UNDRS=711160	/UN=NORMALIZED, DOUBLE FLOATING
711170	A	UUDRS=711170	/UN=ROUNDED, UN=NORMALIZED, DOUBLE FLOATING

/

/ MULTIPLY INSTRUCTIONS

/

711400	A	IMP=711400	/SINGLE INTEGER
711500	A	EMP=711500	/DOUBLE INTEGER
711440	A	FMP=711440	/SINGLE FLOATING
711450	A	URFMP=711450	/UN=ROUNDED, SINGLE FLOATING
711460	A	UNFMP=711460	/UN=NORMALIZED, SINGLE FLOATING
711470	A	UUFMP=711470	/UN=ROUNDED, UN=NORMALIZED, SINGLE FLOATING
711540	A	DMP=711540	/DOUBLE FLOATING
711550	A	URDMP=711550	/UN=ROUNDED, DOUBLE FLOATING
711560	A	UNDMP=711560	/UN=NORMALIZED, DOUBLE FLOATING
711570	A	UUDMP=711570	/UN=ROUNDED, UN=NORMALIZED, DOUBLE FLOATING

/ DIVIDE INSTRUCTIONS

```

/
712000 A IDV=712000 /SINGLE INTEGER
712100 A EDV=712100 /DOUBLE INTEGER
712040 A FDV=712040 /SINGLE FLOATING
712050 A URFDV=712050 /UN=ROUNDED, SINGLE FLOATING
712140 A DDV=712140 /DOUBLE FLOATING
712150 A URDDV=712150 /UN=ROUNDED, DOUBLE FLOATING

```

/ REVERSE DIVIDE INSTRUCTIONS

```

/
712400 A IRD=712400 /SINGLE INTEGER
712500 A ERD=712500 /DOUBLE INTEGER
712440 A FRD=712440 /SINGLE FLOATING
712450 A URFRD=712450 /UN=ROUNDED, SINGLE FLOATING
712540 A ORD=712540 /DOUBLE FLOATING
712550 A URORD=712550 /UN=ROUNDED, DOUBLE FLOATING

```

/ LOAD INSTRUCTIONS

```

/
713000 A ILD=713000 /SINGLE INTEGER
713100 A ELD=713100 /DOUBLE INTEGER
713050 A FLD=713050 /SINGLE FLOATING
713070 A UNFLD=713070 /UN=NORMALIZED, SINGLE FLOATING
713150 A DLD=713150 /DOUBLE FLOATING
713170 A UNLDL=713170 /UN=NORMALIZED, DOUBLE FLOATING

```

/ STORE INSTRUCTIONS

```

/
713600 A IST=713600 /SINGLE INTEGER
713700 A EST=713700 /DOUBLE INTEGER
713640 A FST=713640 /SINGLE FLOATING
713650 A URFST=713650 /UN=ROUNDED, SINGLE FLOATING
713660 A UNFST=713660 /UN=NORMALIZED, SINGLE FLOATING
713670 A UUFST=713670 /UN=ROUNDED, UN=NORMALIZED, SINGLE FLOATING
713750 A DST=713750 /DOUBLE FLOATING
713770 A UNNST=713770 /UN=NORMALIZED, DOUBLE FLOATING

```

/ LOAD & FLOAT INSTRUCTIONS

```

/
714010 A ILF=714010 /SINGLE INTEGER
714030 A UNILF=714030 /UN=NORMALIZED, SINGLE INTEGER
714110 A ELF=714110 /DOUBLE INTEGER
714130 A UNELF=714130 /UN=NORMALIZED, SINGLE INTEGER

```

/ LOAD & FIX INSTRUCTIONS

```

/
714400 A FLX=714400 /SINGLE FLOATING
714470 A URFLX=714470 /UN=ROUNDED, SINGLE FLOATING
714560 A DLX=714560 /DOUBLE FLOATING
714570 A URDLX=714570 /UN=ROUNDED, DOUBLE FLOATING

```

/ SWAP INSTRUCTIONS

```

/
715250 A SWQ=715250 /SWAP FMA & FMQ
715270 A UNSWQ=715270 /UN=NORMALIZED, SWAP FMA & FMQ
/
/ LOAD & SWAP INSTRUCTIONS
715000 A ILQ=715000 /SINGLE INTEGER
715100 A ELQ=715100 /DOUBLE INTEGER
715050 A FLQ=715050 /SINGLE FLOATING
715070 A UNFLQ=715070 /UN=NORMALIZED, SINGLE FLOATING
715150 A DLQ=715150 /DOUBLE FLOATING
715170 A UNDLQ=715170 /UN=NORMALIZED, DOUBLE FLOATING
/
/ FMA MODIFY INSTRUCTIONS
/
714210 A FLA=714210 /FLOAT FMA INTEGER
714230 A UNFLA=714230 /UN=NORMALIZED, FLOAT FMA, INTEGER
714660 A FXA=714660 /FIX FMA FLOATING
714670 A URFXA=714670 /UN=ROUNDED, FIX FMA, FLOATING
711200 A FZR=711200 /ZEROS TO FMA (EPA & ASIGN INCL.)
713271 A FAB=713271 /MAKE A SIGN POSITIVE
713272 A FNG=713272 /MAKE A SIGN NEGATIVE
713273 A FCM=713273 /COMPLIMENT A SIGN
713250 A FNM=713250 /NORMALIZE FMA
/
/ BRANCH INSTRUCTIONS
/
00032 R 716601 A BZA 716601 /BRANCH ON ZERO FMA
00033 R 716602 A BMA 716602 /BRANCH ON MINUS FMA
00034 R 716603 A BLE 716603 /BRANCH IF FMA LESS THAN OR EQUAL TO ZERO
00035 R 716604 A BPA 716604 /BRANCH ON FMA POSITIVE
00036 R 716606 A BRU 716606 /BRANCH UNCONDITIONAL
00037 R 716610 A BNA 716610 /BRANCH ON NON=ZERO FMA
00040 R 716620 A BAC 716620 /BRANCH IF CARRY OUT OF FMA
/
/ MISCELLANEOUS INSTRUCTIONS
/
710314 A FPT=710314 /FP15 TEST
715400 A LJE=715400 /LOAD JEA REGISTER
715600 A SJE=715600 /STORE JEA REGISTER
/
/ DIAGNOSTIC INSTRUCTIONS
/
717300 A DMN=717300 /DIAGNOSTIC MODE ON
717200 A DMF=717200 /DIAGNOSTIC MODE OFF
710000 A DRR=710000 /DIAGNOSTIC READ REGISTERS
710100 A DSR=710100 /DIAGNOSTIC STEP & READ REGISTERS
703304 A DBK=703304 /DEBREAK
705512 A RPL=705512

```

,EJECT

00041	R	004000	A	K00	004000
00042	R	400001	A	K01	400001
00043	R	777377	A	K02	777377
00044	R	377777	A	K03	377777
00045	R	200000	A	K04	200000
00046	R	000000	A	K05	0
00047	R	000400	A	K06	000400
00050	R	200000	A	K07	200000
00051	R	000043	A	K10	000043
00052	R	200000	A	K11	200000
00053	R	000000	A	K12	0
00054	R	600000	A	K13	600000
00055	R	000000	A	K14	0
00056	R	400000	A	K15	400000
00057	R	000000	A	K16	0
00060	R	000001	A	K17	000001
00061	R	777777	A	K20	777777
00062	R	177777	A	K21	177777
00063	R	777777	A	K22	777777
00064	R	777777	A	K23	777777
00065	R	777777	A	K24	777777
00066	R	200000	A	K25	200000
00067	R	000000	A	K26	0
00070	R	000000	A	K27	0
00071	R	000000	A	K30	0
00072	R	200000	A	K31	200000
00073	R	000000	A	K32	0
00074	R	000044	A	K33	000044
00075	R	200000	A	K34	200000
00076	R	000000	A	K35	0
00077	R	252525	A	K36	252525
00100	R	252525	A	K37	252525
00101	R	252525	A	K40	252525
00102	R	400000	A	K41	400000
00103	R	200000	A	K42	200000
00104	R	000000	A	K43	0
00105	R	777734	A	K44	777734
00106	R	200000	A	K45	200000
00107	R	000000	A	K46	0
00110	R	000001	A	K47	000001
00111	R	200000	A	K50	200000
00112	R	000000	A	K51	0
00113	R	777735	A	K52	777735
00114	R	252525	A	K53	252525
00115	R	252525	A	K54	252525
00116	R	000000	A	K55	0
00117	R	377777	A	K56	377777
00120	R	000003	A	K57	000003
00121	R	200000	A	K60	200000
00122	R	000000	A	K61	0
00123	R	400000	A	K62	400000
00124	R	000001	A	K63	000001
00125	R	577777	A	K64	577777

00126	R	777777	A	K65	777777
00127	R	600000	A	K66	600000
00130	R	000001	A	K67	000001
00131	R	200000	A	K70	200000
00132	R	777000	A	K71	777000
00133	R	377777	A	K72	377777
00134	R	777777	A	K73	777777
00135	R	000000	A	K74	0
00136	R	776777	A	K75	776777
00137	R	777776	A	K76	777776
00140	R	000046	A	K77	000046
00141	R	004100	A	K100	004100
00142	R	000032	A	K101	000032
00143	R	300000	A	K102	300000
00144	R	777000	A	K103	777000
00145	R	777777	A	K104	777777
00146	R	000002	A	K105	000002
00147	R	600000	A	K106	600000
00150	R	000000	A	K107	0
00151	R	733333	A	K110	733333
00152	R	333333	A	K111	333333
00153	R	000002	A	K112	000002
00154	R	200000	A	K113	200000
00155	R	000000	A	K114	0
00156	R	700000	A	K115	700000
00157	R	777001	A	K116	777001
00160	R	000000	A	K117	0
00161	R	333333	A	K120	333333
00162	R	333333	A	K121	333333
00163	R	777043	A	K122	777043
00164	R	000377	A	K123	000377
00165	R	777043	A	K124	777043
00166	R	400377	A	K125	400377
00167	R	000043	A	K126	000043
00170	R	000377	A	K127	000377
00171	R	777777	A	K130	777777
00172	R	000003	A	K131	000003
00173	R	600000	A	K132	600000
00174	R	000000	A	K133	0
00175	R	000300	A	K134	000300
00176	R	000000	A	K135	0
00177	R	000034	A	K136	000034
00200	R	000043	A	K137	000043
00201	R	400377	A	K140	400377
00202	R	777777	A	K141	777777
00203	R	000003	A	K142	000003
00204	R	200000	A	K143	200000
00205	R	000000	A	K144	0
00206	R	400300	A	K145	400300
00207	R	000000	A	K146	0
00210	R	777043	A	K147	777043
00211	R	377777	A	K150	377777
00212	R	000003	A	K151	000003

00213	R	000200	A	K152	000200
00214	R	777043	A	K153	777043
00215	R	777777	A	K154	777777
00216	R	000003	A	K155	000003
00217	R	400200	A	K156	400200
00220	R	000043	A	K157	000043
00221	R	377777	A	K160	377777
00222	R	777777	A	K161	777777
00223	R	000043	A	K162	000043
00224	R	777777	A	K163	777777
00225	R	777777	A	K164	777777
00226	R	000045	A	K165	000045
00227	R	225252	A	K166	225252
00230	R	752053	A	K167	752053
00231	R	322022	A	K170	322022
00232	R	625252	A	K171	625252
00233	R	722022	A	K172	722022
00234	R	752052	A	K173	752052
00235	R	525253	A	K174	525253
00236	R	525252	A	K175	525252
00237	R	322222	A	K176	322222
00240	R	222222	A	K177	222222
00241	R	004200	A	K200	004200
00242	R	722222	A	K201	722222
00243	R	000021	A	K202	000021
00244	R	000401	A	K203	000401
00245	R	377777	A	K204	377777
00246	R	000777	A	K205	000777
00247	R	777777	A	K206	777777
00250	R	000001	A	K207	000001
00251	R	377777	A	K210	377777
00252	R	377777	A	K211	377777
00253	R	777777	A	K212	777777
00254	R	377777	A	K213	377777
00255	R	777777	A	K214	777777
00256	R	000001	A	K215	000001
00257	R	377777	A	K216	377777
00260	R	777777	A	K217	777777
00261	R	000777	A	K220	000777
00262	R	377777	A	K221	377777
00263	R	000044	A	K222	000044
00264	R	377777	A	K223	377777
00265	R	777777	A	K224	777777
00266	R	400001	A	K225	400001
00267	R	377777	A	K226	377777
00270	R	777777	A	K227	777777
00271	R	000000	A	WK01	0
00272	R	000000	A	WK02	0
00273	R	000000	A	WK03	0

.EJECT

/INITIALIZE THE 'FPP15' TEST

```

INIT 0
00274 R 000000 A EBA
00275 R 707764 A LAC
00276 R 200274 R DAC
00277 R 040324 R DZM
00300 R 140020 R DZM
00301 R 140021 R DZM
00302 R 140022 R DZM
00303 R 146011 R DZM
00304 R 145742 R DZM
00305 R 145744 R DZM
00306 R 145746 R DZM
00307 R 145750 R DZM
00310 R 145770 R DZM
00311 R 105465 R JMS
00312 R 710314 A FPT
00313 R 605527 R JMP
00314 R 206037 R LAC
00315 R 040335 R DAC
00316 R 105254 R JMS
00317 R 206040 R LAC
00320 R 046027 R DAC
00321 R 777730 A LAW
00322 R 046023 R DAC
00323 R 605517 R JMP

INIT
SERVICE
SYSERR
SYSERR+1
ERRNO
JEATR
JEATR+2
JEATR+4
JEATR+6
JRETURN
HOLDSW
ERROR1
(T001
DSTSW0
CKLOOP
(771000
PGMLOP
-50
PASCNT
EXITM0

/CLEAR ERROR LOCATIONS
/CLEAR ALL 'JEA' LOCATIONS
/CHECK FOR HOLDSW
/TEST FOR 'FPP15'
/FPP15 IS NOT OUT THERE.
/SET DISTRIBUTION SWITCH
/TEST IF ERROR LOOPING IS REQUESTED
/START TEST

```

/SERVICE ENTRANCE FOR THE 'FPP15' TEST,

```

SERVICE 0
00324 R 000000 A EBA
00325 R 707764 A LAC
00326 R 750004 A LAS
00327 R 500010 R AND
00330 R 740200 A SZA
00331 R 605517 R JMP
00332 R 715400 A LJE
00333 R 006041 R (JEATR)
00334 R 620335 R JMP*
00335 R 000000 A DSTSW0

USERSW+10
EXITM0
DSTSW0

/IS THE HOLD SWITCH SET?
/YES, EXIT
/LOAD THE 'JEA' REGISTER.
/PROGRAM DISTRIBUTION LOCATION
/EJECT

```



```

00336 R 105446 R T001 JMS TSTADR
00337 R 713000 A ILD /PRE=SET ALL REGISTERS TO '0',
00340 R 000046 R K05
00341 R 715400 A LJE /LJE K05: 000000
00342 R 000046 R K05 /RESULT: 000000
00343 R 715600 A SJE /STORE AND CHECK RESULT
00344 R 000271 R WK01
00345 R 200271 R LAC WK01
00346 R 506042 R AND (377777
00347 R 105165 R JMS CHECK0
00350 R 000005 A 5

/
00351 R 105446 R T002 JMS TSTADR
00352 R 715400 A LJE /LJE K20: 777777
00353 R 000061 R K20 /RESULT: 677777
00354 R 715600 A SJE /STORE AND CHECK RESULT
00355 R 000271 R WK01
00356 R 200271 R LAC WK01
00357 R 506042 R AND (377777
00360 R 246043 R XOR (277777
00361 R 105165 R JMS CHECK0

/
00362 R 105446 R T003 JMS TSTADR
00363 R 105151 R JMS LOADI /LOAD INDIRECT
00364 R 000046 R IT003 K05
00365 R 715400 A LJE /LJE K05: 000000
00366 R 400364 R IT003+400000 /RESULT: 000000
00367 R 715600 A SJE /STORE AND CHECK RESULT
00370 R 000271 R WK01
00371 R 200271 R LAC WK01
00372 R 506042 R AND (377777
00373 R 105165 R JMS CHECK0
00374 R 000070 A 70 /#70, LJE INDIRECT ERROR

/
00375 R 105446 R T004 JMS TSTADR
00376 R 715400 A LJE /LJE THE ADDRESS OF JEATR
00377 R 006041 R (JEATR
00400 R 105155 R JMS STOREI /SET UP TO STORE INDIRECT,
00401 R 715600 A SJE /STORE AND CHECK RESULT
00402 R 406030 R XWK01+400000
00403 R 200271 R LAC WK01
00404 R 506042 R AND (377777
00405 R 246041 R XOR (JEATR
00406 R 105165 R JMS CHECK0
00407 R 000071 A 71
,EJECT

```

00410	R	105446	R	T005	JMS	TSTADR	
00411	R	713000	A		ILD		/ILD K05; 000000
00412	R	000046	R		K05		
00413	R	713600	A		IST		/STORE AND CHECK RESULT
00414	R	000271	R		WK01		
00415	R	200271	R		LAC	WK01	
00416	R	105165	R		JMS	CHECK0	
00417	R	000006	A		6		
00420	R	105446	R	T006	JMS	TSTADR	
00421	R	713000	A		ILD		
00422	R	000046	R		K05		
00423	R	200032	R		LAC	BZA	/BZA = SHOULD BRANCH
00424	R	105452	R		JMS	BRANCH	
/							
00425	R	105446	R	T007	JMS	TSTADR	
00426	R	713000	A		ILD		
00427	R	000056	R		K15		
00430	R	200032	R		LAC	BZA	/BZA = SHOULD NOT BRANCH
00431	R	105460	R		JMS	NOBRCH	
/							
00432	R	105446	R	T010	JMS	TSTADR	
00433	R	713000	A		ILD		
00434	R	000046	R		K05		
00435	R	200033	R		LAC	BMA	/BMA = SHOULD NOT BRANCH
00436	R	105460	R		JMS	NOBRCH	
/							
00437	R	105446	R	T011	JMS	TSTADR	
00440	R	713000	A		ILD		
00441	R	000056	R		K15		
00442	R	200033	R		LAC	BMA	/BMA = SHOULD BRANCH
00443	R	105452	R		JMS	BRANCH	
/							
00444	R	105446	R	T012	JMS	TSTADR	
00445	R	713000	A		ILD		
00446	R	000046	R		K05		
00447	R	200035	R		LAC	BPA	/BPA = SHOULD BRANCH
00450	R	105452	R		JMS	BRANCH	
/							
00451	R	105446	R	T013	JMS	TSTADR	
00452	R	713000	A		ILD		
00453	R	000056	R		K15		
00454	R	200035	R		LAC	BPA	/BPA = SHOULD NOT BRANCH
00455	R	105460	R		JMS	NOBRCH	

.EJECT

00456	R	105446	R	T014	JMS	TSTADR	
00457	R	713000	A		ILD		
00460	R	000046	R		K05		
00461	R	200037	R		LAC	BNA	/BNA = SHOULD NOT BRANCH
00462	R	105460	R		JMS	NOBRCH	
/							
00463	R	105446	R	T015	JMS	TSTADR	
00464	R	713000	A		ILD		
00465	R	000056	R		K15		
00466	R	200037	R		LAC	BNA	/BNA = SHOULD BRANCH
00467	R	105452	R		JMS	BRANCH	
00470	R	105446	R	T016	JMS	TSTADR	
00471	R	105151	R		JMS	LOADI	/LOAD INDIRECT
00472	R	000044	R	IT016	K03		
00473	R	713000	A		ILD		/ILD K03: 377777
00474	R	400472	R		IT016+400000		/RESULT: 377777
00475	R	713600	A		IST		/STORE AND CHECK RESULT
00476	R	000271	R		WK01		
00477	R	200271	R		LAC	WK01	
00500	R	240044	R		XOR	K03	
00501	R	105165	R		JMS	CHECK0	
00502	R	000072	A		72		
00503	R	105446	R	T017	JMS	TSTADR	
00504	R	713000	A		ILD		/ILD K05: 000000
00505	R	000046	R		K05		/RESULT: 000000
00506	R	105155	R		JMS	STOREI	/SET UP TO STORE INDIRECT,
00507	R	713600	A		IST		/STORE AND CHECK RESULT
00510	R	406030	R		XWK01+400000		
00511	R	200271	R		LAC	WK01	
00512	R	105165	R		JMS	CHECK0	
00513	R	000073	A		73		
00514	R	105446	R	T020	JMS	TSTADR	
00515	R	713000	A		ILD		/ILD K01: 400001
00516	R	000042	R		K01		/RESULT: 400001
00517	R	713600	A		IST		/STORE AND CHECK RESULT
00520	R	000271	R		WK01		
00521	R	200271	R		LAC	WK01	
00522	R	240042	R		XOR	K01	
00523	R	105165	R		JMS	CHECK0	
00524	R	000006	A		6		
00525	R	105446	R	T021	JMS	TSTADR	
00526	R	713100	A		ELD		/ELD K15: 400000 000001
00527	R	000123	R		K62		/RESULT: 4000000 000001
00530	R	713700	A		EST		/STORE AND CHECK RESULT
00531	R	000271	R		WK01		
00532	R	200271	R		LAC	WK01	
00533	R	240123	R		XOR	K62	
00534	R	105165	R		JMS	CHECK0	
00535	R	000007	A		7		
00536	R	200272	R		LAC	WK02	
00537	R	240124	R		XOR	K63	
00540	R	105165	R		JMS	CHECK0	

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00541	R	105446	R	T022	JMS	TSTADR	
00542	R	713070	A		UNFLD		/UNFLD K02: 777377 377777
00543	R	000043	R		K02		/RESULT: 777377 377777
00544	R	713670	A		UUFST		/STORE AND CHECK RESULT
00545	R	000271	R		WK01		
00546	R	200271	R		LAC	WK01	
00547	R	240043	R		XOR	K02	
00550	R	105165	R		JMS	CHECK0	
00551	R	000010	A		10		
00552	R	200272	R		LAC	WK02	
00553	R	240044	R		XOR	K03	
00554	R	105165	R		JMS	CHECK0	
00555	R	105446	R	T023	JMS	TSTADR	
00556	R	713070	A		UNFLD		/UNFLD K06: 000400 200000
00557	R	000047	R		K06		/RESULT: 000400 200000
00560	R	713670	A		UUFST		/STORE AND CHECK RESULT
00561	R	000271	R		WK01		
00562	R	200271	R		LAC	WK01	
00563	R	240047	R		XOR	K06	
00564	R	105165	R		JMS	CHECK0	
00565	R	200272	R		LAC	WK02	
00566	R	240050	R		XOR	K07	
00567	R	105165	R		JMS	CHECK0	
00570	R	105446	R	T024	JMS	TSTADR	
00571	R	714030	A		UNILF		/UNILF K17: 000001
00572	R	000060	R		K17		/RESULT: 000043 000000 000001
00573	R	713770	A		UNDST		/STORE AND CHECK RESULT
00574	R	000271	R		WK01		
00575	R	200271	R		LAC	WK01	
00576	R	240051	R		XOR	K10	
00577	R	105165	R		JMS	CHECK0	
00600	R	200272	R		LAC	WK02	
00601	R	105165	R		JMS	CHECK0	
00602	R	200273	R		LAC	WK03	
00603	R	240060	R		XOR	K17	
00604	R	105165	R		JMS	CHECK0	
00605	R	105446	R	/	JMS	TSTADR	
00606	R	714470	A	T025	URFLX		/URFLX K71: 777000 377777
00607	R	000132	R		K71		/RESULT: 000000 000000 000000
00610	R	713770	A		UNDST		/STORE AND CHECK RESULT
00611	R	000271	R		WK01		
00612	R	200271	R		LAC	WK01	
00613	R	105165	R		JMS	CHECK0	
00614	R	000011	A		11		
00615	R	200272	R		LAC	WK02	
00616	R	105165	R		JMS	CHECK0	
00617	R	200273	R		LAC	WK03	
00620	R	105165	R		JMS	CHECK0	

.EJECT

00621	R	105446	R	T026	JMS	TSTADR	
00622	R	713100	A		ELD		/ELD K21: 177777 777777
00623	R	000062	R		K21		
00624	R	716100	A		EAD		/EAD K46: 000000 000001
00625	R	000107	R		K46		/RESULT: 200000 000000
00626	R	713700	A		EST		/STORE AND CHECK RESULT
00627	R	000271	R		WK01		
00630	R	200271	R		LAC	WK01	
00631	R	240045	R		XOR	K04	
00632	R	105165	R		JMS	CHECK0	
00633	R	000013	A		13		
00634	R	200272	R		LAC	WK02	
00635	R	105165	R		JMS	CHECK0	
00636	R	105446	R	T027	JMS	TSTADR	
00637	R	105151	R		JMS	LOADI	/LOAD INDIRECT
00640	R	000045	R	IT027	K04		
00641	R	713100	A		ELD		/ELD K04: 200000 000000
00642	R	400640	R		IT027+400000		/RESULT: 177777 777777
00643	R	716100	A		EAD		/EAD K22: 777777 777777
00644	R	000063	R		K22		/RESULT: 177777 777777
00645	R	713700	A		EST		/STORE AND CHECK RESULT
00646	R	000271	R		WK01		
00647	R	200271	R		LAC	WK01	
00650	R	240062	R		XOR	K21	
00651	R	105165	R		JMS	CHECK0	
00652	R	000074	A		74		
00653	R	200272	R		LAC	WK02	
00654	R	240063	R		XOR	K22	
00655	R	105165	R		JMS	CHECK0	
00656	R	105446	R	/			
00657	R	713100	A	T030	JMS	TSTADR	
00660	R	000054	R		ELD		/ELD K13: 600000 000001
00661	R	716100	A		K13		
00662	R	000107	R		EAD		/EAD K46: 000000 000001
00663	R	000107	R		K46		/RESULT: 600000 000001
00664	R	105155	R		JMS	STOREI	/SET UP TO STORE INDIRECT,
00664	R	713700	A		EST		/STORE AND CHECK RESULT
00665	R	406030	R		XWK01+400000		
00666	R	200271	R		LAC	WK01	
00667	R	240054	R		XOR	K13	
00670	R	105165	R		JMS	CHECK0	
00671	R	000075	A		75		
00672	R	200272	R		LAC	WK02	
00673	R	240060	R		XOR	K17	
00674	R	105165	R		JMS	CHECK0	
					EJECT		

00675	R	105446	R	T031	JMS	TSTADR	
00676	R	713100	A		ELD		/ELD K22: 777777 777777
00677	R	000063	R		K22		/ (FMA: 400000 000001)
00700	R	716100	A		EAD		/EAD K66: 600000 000001
00701	R	000127	R		K66		/RESULT: 600000 000000
00702	R	713700	A		EST		/STORE AND CHECK RESULT
00703	R	000271	R		WK01		
00704	R	200271	R		LAC	WK01	
00705	R	240054	R		XOR	K13	
00706	R	105165	R		JMS	CHECK0	
00707	R	000013	A		13		
00710	R	200272	R		LAC	WK02	
00711	R	105165	R		JMS	CHECK0	
00712	R	105446	R	T032	JMS	TSTADR	
00713	R	713170	A		UNLD		/UNLD K24: 777777 200000 000000
00714	R	000065	R		K24		
00715	R	716170	A		UUDAD		/UUDAD K20: 777777 177777 777777
00716	R	000061	R		K20		/RESULT: 777777 377777 777777
00717	R	713770	A		UNDST		/STORE AND CHECK RESULT
00720	R	000271	R		WK01		
00721	R	200271	R		LAC	WK01	
00722	R	240061	R		XOR	K20	
00723	R	105165	R		JMS	CHECK0	
00724	R	000014	A		14		
00725	R	200272	R		LAC	WK02	
00726	R	240044	R		XOR	K03	
00727	R	105165	R		JMS	CHECK0	
00730	R	200273	R		LAC	WK03	
00731	R	240061	R		XOR	K20	
00732	R	105165	R		JMS	CHECK0	
00733	R	105446	R	T033	JMS	TSTADR	
00734	R	713170	A		UNLD		/UNLD K26: 000000 000000 000000
00735	R	000067	R		K26		
00736	R	716170	A		UUDAD		/UUDAD K30: 000000 200000 000000
00737	R	000071	R		K30		/RESULT: 000000 200000 000000
00740	R	713770	A		UNDST		/STORE AND CHECK RESULT
00741	R	000271	R		WK01		
00742	R	200271	R		LAC	WK01	
00743	R	105165	R		JMS	CHECK0	
00744	R	200272	R		LAC	WK02	
00745	R	240045	R		XOR	K04	
00746	R	105165	R		JMS	CHECK0	
00747	R	200273	R		LAC	WK03	
00750	R	105165	R		JMS	CHECK0	
					EJECT		


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01032 R 105446 R T037 JMS TSTADR
01033 R 713170 A UNLDL /UNLDL K03; 377777 200000 000000
01034 R 000044 R K03
01035 R 105151 R JMS LOADI
01036 R 000102 R IT037 K41
01037 R 716170 A UUDAD /UUDAD K41; 400000 200000 000000
01040 R 401056 R IT037+400000 /RESULT; 377777 200000 000000
01041 R 713770 A UNDS /STORE AND CHECK RESULT
01042 R 000271 R WK01
01043 R 200271 R LAC WK01
01044 R 240044 R XOR K03
01045 R 105165 R JMS CHECK0
01046 R 000100 A 100
01047 R 200272 R LAC WK02
01050 R 240045 R XOR K04
01051 R 105165 R JMS CHECK0
01052 R 200273 R LAC WK03
01053 R 105165 R JMS CHECK0
01054 R 105446 R T040 JMS TSTADR
01055 R 105151 R JMS LOADI
01056 R 000071 R IT040 K30
01057 R 713170 A UNLDL /UNLDL K30; 000000 200000 000000
01060 R 401056 R IT040+400000
01061 R 105151 R JMS LOADI
01062 R 000105 R II040 K44
01063 R 716170 A UUDAD /UUDAD K44; 777734 200000 000000
01064 R 401062 R II040+400000 /RESULT; 000000 200000 000000
01065 R 713770 A UNDS /STORE AND CHECK RESULT
01066 R 000271 R WK01
01067 R 200271 R LAC WK01
01070 R 105165 R JMS CHECK0
01071 R 000101 A 101
01072 R 200272 R LAC WK02
01073 R 240045 R XOR K04
01074 R 105165 R JMS CHECK0
01075 R 200273 R LAC WK03
01076 R 105165 R JMS CHECK0
      .EJECT

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01077	R	105446	R	T041	JMS	TSTADR	
01100	R	713170	A		UNDLD		/UNDLD K35: 000000 252525 252525
01101	R	000076	R		K35		
01102	R	716170	A		UUDAD		/UUDAD K10: 000043 200000 000000
01103	R	000051	R		K10		/RESULT: 000043 200000 000000
01104	R	713770	A		UNDST		/STORE AND CHECK RESULT
01105	R	000271	R		WK01		
01106	R	200271	R		LAC	WK01	
01107	R	240051	R		XOR	K10	
01110	R	105165	R		JMS	CHECK0	
01111	R	000014	A		14		
01112	R	200272	R		LAC	WK02	
01113	R	240045	R		XOR	K04	
01114	R	105165	R		JMS	CHECK0	
01115	R	200273	R		LAC	WK03	
01116	R	105165	R		JMS	CHECK0	
/							
01117	R	105446	R	T042	JMS	TSTADR	
01120	R	713170	A		UNDLD		/UNDLD K30: 000000 200000 000000
01121	R	000071	R		K30		
01122	R	716170	A		UUDAD		/UUDAD K33: 000044 200000 000000
01123	R	000074	R		K33		/RESULT: 000044 200000 000000
01124	R	713770	A		UNDST		/STORE AND CHECK RESULT
01125	R	000271	R		WK01		
01126	R	200271	R		LAC	WK01	
01127	R	240074	R		XOR	K33	
01130	R	105165	R		JMS	CHECK0	
01131	R	200272	R		LAC	WK02	
01132	R	240045	R		XOR	K04	
01133	R	105165	R		JMS	CHECK0	
01134	R	200273	R		LAC	WK03	
01135	R	105165	R		JMS	CHECK0	
01136	R	105446	R	T043	JMS	TSTADR	
01137	R	713170	A		UNDLD		/UNDLD K41: 400000 200000 000000
01140	R	000102	R		K41		
01141	R	716170	A		UUDAD		/UUDAD K03: 377777 200000 000000
01142	R	000044	R		K03		/RESULT: 377777 200000 000000
01143	R	713770	A		UNDST		/STORE AND CHECK RESULT
01144	R	000271	R		WK01		
01145	R	200271	R		LAC	WK01	
01146	R	240044	R		XOR	K03	
01147	R	105165	R		JMS	CHECK0	
01150	R	200272	R		LAC	WK02	
01151	R	240045	R		XOR	K04	
01152	R	105165	R		JMS	CHECK0	
01153	R	200273	R		LAC	WK03	
01154	R	105165	R		JMS	CHECK0	

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01230	R	105446	R	T047	JMS	TSTADR	
01231	R	713170	A		UNLD		/UNLD K26: 000000 000000 000000
01232	R	000067	R		K26		
01233	R	716170	A		UUDAD		/UUDAD K47: 000001 200000 000000
01234	R	000110	R		K47		/RESULT: 000001 200000 000000
01235	R	713770	A		UNDST		/STORE AND CHECK RESULT
01236	R	000271	R		WK01		
01237	R	200271	R		LAC	WK01	
01240	R	240060	R		XOR	K17	
01241	R	105165	R		JMS	CHECK0	
01242	R	200272	R		LAC	WK02	
01243	R	240045	R		XOR	K04	
01244	R	105165	R		JMS	CHECK0	
01245	R	200273	R		LAC	WK03	
01246	R	105165	R		JMS	CHECK0	
01247	R	105446	R	T050	JMS	TSTADR	
01250	R	713170	A		UNLD		/UNLD K52: 777735 252525 252525
01251	R	000113	R		K52		
01252	R	716170	A		UUDAD		/UUDAD K30: 000000 200000 000000
01253	R	000071	R		K30		/RESULT: 000000 200000 000000
01254	R	713770	A		UNDST		/STORE AND CHECK RESULT
01255	R	000271	R		WK01		
01256	R	200271	R		LAC	WK01	
01257	R	105165	R		JMS	CHECK0	
01260	R	200272	R		LAC	WK02	
01261	R	240045	R		XOR	K04	
01262	R	105165	R		JMS	CHECK0	
01263	R	200273	R		LAC	WK03	
01264	R	105165	R		JMS	CHECK0	
01265	R	105446	R	T051	JMS	TSTADR	
01266	R	713170	A		UNLD		/UNLD K01: 400001 777377 377777
01267	R	000042	R		K01		
01270	R	716170	A		UUDAD		/UUDAD K33: 000044 200000 000000
01271	R	000074	R		K33		/RESULT: 000044 200000 000000
01272	R	713770	A		UNDST		/STORE AND CHECK RESULT
01273	R	000271	R		WK01		
01274	R	200271	R		LAC	WK01	
01275	R	240074	R		XOR	K33	
01276	R	105165	R		JMS	CHECK0	
01277	R	200272	R		LAC	WK02	
01300	R	240075	R		XOR	K34	
01301	R	105165	R		JMS	CHECK0	
01302	R	200273	R		LAC	WK03	
01303	R	105165	R		JMS	CHECK0	

.EJECT

01304	R	105446	R	T052	JMS	TSTADR			
01305	R	713100	A		ELD		/ELD	K04:	200000 000000
01306	R	000045	R		K04				
01307	R	710500	A		ESB		/ESB	K16:	000000 0000001
01310	R	000057	R		K16		/RESULT:	177777	777777
01311	R	713700	A		EST		/STORE	AND	CHECK RESULT
01312	R	000271	R		WK01				
01313	R	200271	R		LAC	WK01			
01314	R	240062	R		XOR	K21			
01315	R	105165	R		JMS	CHECK0			
01316	R	000015	A		15				
01317	R	200272	R		LAC	WK02			
01320	R	240061	R		XOR	K20			
01321	R	105165	R		JMS	CHECK0			
/									
01322	R	105446	R	T053	JMS	TSTADR			
01323	R	105151	R		JMS	LOADI			
01324	R	000063	R	IT053	K22				
01325	R	713100	A		ELD		/ELD	K22:	777777 777777
01326	R	401324	R		IT053+400000		/(FMA:	400000	000001)
01327	R	105151	R		JMS	LOADI			
01330	R	000045	R	II053	K04				
01331	R	710500	A		ESB		/ESB	K04:	200000 000000
01332	R	401330	R		II053+400000		/RESULT:	577777	777777
01333	R	713700	A		EST		/STORE	AND	CHECK RESULT
01334	R	406030	R		XWK01+400000				
01335	R	200271	R		LAC	WK01			
01336	R	240125	R		XOR	K64			
01337	R	105165	R		JMS	CHECK0			
01340	R	000101	A		101				
01341	R	200272	R		LAC	WK02			
01342	R	240126	R		XOR	K65			
01343	R	105165	R		JMS	CHECK0			
/									
01344	R	105446	R	T054	JMS	TSTADR			
01345	R	713100	A		ELD		/ELD	K21:	177777 777777
01346	R	000062	R		K21				
01347	R	710500	A		ESB		/ESB	K22:	777777 777777
01350	R	000063	R		K22		/RESULT:	200000	000000
01351	R	713700	A		EST		/STORE	AND	CHECK RESULT
01352	R	000271	R		WK01				
01353	R	200271	R		LAC	WK01			
01354	R	240045	R		XOR	K04			
01355	R	105165	R		JMS	CHECK0			
01356	R	000015	A		15				
01357	R	200272	R		LAC	WK02			
01360	R	105165	R		JMS	CHECK0			

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01361	R	105446	R	T055	JMS	TSTADR	
01362	R	713100	A		ELD		/ELD K13: 600000 000000
01363	R	000054	R		K13		
01364	R	710500	A		ESB		/ESB K22: 777777 777777
01365	R	000063	R		K22		/RESULT: 600000 000001
01366	R	713700	A		EST		/STORE AND CHECK RESULT
01367	R	000271	R		WK01		
01370	R	200271	R		LAC	WK01	
01371	R	240054	R		XOR	K13	
01372	R	105165	R		JMS	CHECK0	
01373	R	200272	R		LAC	WK02	
01374	R	240060	R		XOR	K17	
01375	R	105165	R		JMS	CHECK0	

01376	R	105446	R	T056	JMS	TSTADR	
01377	R	713170	A		UNDLD		/UNDLD K03: 377777 200000
01400	R	000044	R		K03		
01401	R	711170	A		UUDRS		/UUDRS K12: 000000 600000 000000
01402	R	000053	R		K12		/RESULT: 377777 600000 000000
01403	R	713770	A		UNDST		/STORE AND CHECK RESULT
01404	R	000271	R		WK01		
01405	R	200271	R		LAC	WK01	
01406	R	240044	R		XOR	K03	
01407	R	105165	R		JMS	CHECK0	
01410	R	000016	A		16		
01411	R	200272	R		LAC	WK02	
01412	R	240054	R		XOR	K13	
01413	R	105165	R		JMS	CHECK0	
01414	R	200273	R		LAC	WK03	
01415	R	105165	R		JMS	CHECK0	

01416	R	105446	R	T101	JMS	TSTADR	
01417	R	713000	A		ILD		/ILD K20: 777777
01420	R	000061	R		K20		/(FMA: 400000 000001)
01421	R	711400	A		IMP		/IMP K17: 000001
01422	R	000060	R		K17		/RESULT: 000001
01423	R	713600	A		IST		/STORE AND CHECK RESULT
01424	R	000271	R		WK01		
01425	R	200271	R		LAC	WK01	
01426	R	240061	R		XOR	K20	
01427	R	105165	R		JMS	CHECK0	
01430	R	000017	A		17		
01431	R	713000	A		ILD		/ILD K17: 000001
01432	R	000060	R		K17		
01433	R	711400	A		IMP		/IMP K20: 777777
01434	R	000061	R		K20		/RESULT: 777777
01435	R	713600	A		IST		/STORE AND CHECK RESULT
01436	R	000271	R		WK01		
01437	R	200271	R		LAC	WK01	
01440	R	240061	R		XOR	K20	
01441	R	105165	R		JMS	CHECK0	

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01520	R	105446	R	T106	JMS	TSTADR	
01521	R	713170	A		UNLD		/UNLD K57: 000003 200000 000000
01522	R	000120	R		K57		
01523	R	711570	A		UUDMP		/UUDMP K24: 777777 200000 000000
01524	R	000065	R		K24		/RESULT: 000002 100000 000000
01525	R	713770	A		UNDST		/STORE AND CHECK RESULT
01526	R	000271	R		WK01		
01527	R	200271	R		LAC	WK01	
01530	R	240146	R		XOR	K105	
01531	R	105165	R		JMS	CHECK0	
01532	R	000020	A		20		
01533	R	200272	R		LAC	WK02	
01534	R	246044	R		XOR	(100000	
01535	R	105165	R		JMS	CHECK0	
01536	R	200273	R		LAC	WK03	
01537	R	105165	R		JMS	CHECK0	
01540	R	105446	R	T107	JMS	TSTADR	
01541	R	713170	A		UNLD		/UNLD K24: 777777 200000 000000
01542	R	000065	R		K24		
01543	R	711570	A		UUDMP		/UUDMP K24: 777777 200000 000000
01544	R	000065	R		K24		/RESULT: 777776 100000 000000
01545	R	713770	A		UNDST		/STORE AND CHECK RESULT
01546	R	000271	R		WK01		
01547	R	200271	R		LAC	WK01	
01550	R	240137	R		XOR	K76	
01551	R	105165	R		JMS	CHECK0	
01552	R	200272	R		LAC	WK02	
01553	R	246044	R		XOR	(100000	
01554	R	105165	R		JMS	CHECK0	
01555	R	200273	R		LAC	WK03	
01556	R	105165	R		JMS	CHECK0	
01557	R	105446	R	T110	JMS	TSTADR	
01560	R	713000	A		ILD		/ILD K03: 277777
01561	R	000044	R		K03		
01562	R	712000	A		IDV		/IDV K17: 000001
01563	R	000060	R		K17		/RESULT: 000021 000000 377777
01564	R	713770	A		UNDST		/STORE AND CHECK RESULT
01565	R	000271	R		WK01		
01566	R	200271	R		LAC	WK01	
01567	R	240243	R		XOR	K202	
01570	R	105165	R		JMS	CHECK0	
01571	R	000021	A		21		
01572	R	200272	R		LAC	WK02	
01573	R	105165	R		JMS	CHECK0	
01574	R	200273	R		LAC	WK03	
01575	R	240044	R		XOR	K03	
01576	R	105165	R		JMS	CHECK0	
					.EJECT		

01577 R 105446 R T111 JMS TSTADR
 01600 R 713000 A ILD
 01601 R 000060 R K17
 01602 R 712400 A IRD
 01603 R 000044 R K03
 01604 R 713770 A UNDS
 01605 R 000271 R WK01
 01606 R 200271 R LAC WK01
 01607 R 240243 R XOR K202
 01610 R 105165 R JMS CHECK0
 01611 R 000022 A 22
 01612 R 200272 R LAC WK02
 01613 R 105165 R JMS CHECK0
 01614 R 200273 R LAC WK03
 01615 R 240044 R XOR K03
 01616 R 105165 R JMS CHECK0

/ILD K17: 000001
 /IRD K03: 377777
 /RESULT: 000021 000000 377777
 /STORE AND CHECK RESULT

01617 R 105446 R / T112 JMS TSTADR
 01620 R 713000 A ILD
 01621 R 000042 R K01
 01622 R 712000 A IDV
 01623 R 000060 R K17
 01624 R 713770 A UNDS
 01625 R 000271 R WK01
 01626 R 200271 R LAC WK01
 01627 R 240243 R XOR K202
 01630 R 105165 R JMS CHECK0
 01631 R 000021 A 21
 01632 R 200272 R LAC WK02
 01633 R 240123 R XOR K02
 01634 R 105165 R JMS CHECK0
 01635 R 200273 R LAC WK03
 01636 R 240044 R XOR K03
 01637 R 105165 R JMS CHECK0

/ILD K01: 400001
 /IDV K17: 000001
 /RESULT: 000021 400000 377777
 /STORE AND CHECK RESULT

.EJECT

01640	R	105446	R	T113	JMS	TSTADR	
01641	R	713000	A		ILD		/ILD K17: 000001
01642	R	000060	R		K17		
01643	R	712400	A		IRD		/IRD K01: 400001
01644	R	000042	R		K01		/RESULT: 000021 400000 377777
01645	R	713770	A		UNDST		/STORE AND CHECK RESULT
01646	R	000271	R		WK01		
01647	R	200271	R		LAC	WK01	
01650	R	240243	R		XOR	K202	
01651	R	105165	R		JMS	CHECK0	
01652	R	000022	A		22		
01653	R	200272	R		LAC	WK02	
01654	R	240123	R		XOR	K62	
01655	R	105165	R		JMS	CHECK0	
01656	R	200273	R		LAC	WK03	
01657	R	240044	R		XOR	K03	
01660	R	105165	R		JMS	CHECK0	
/							
01661	R	105446	R	T114	JMS	TSTADR	
01662	R	713000	A		ILD		/ILD K01: 400001
01663	R	000042	R		K01		
01664	R	712000	A		IDV		/IDV K20: 777777
01665	R	000061	R		K20		/RESULT: 000021 000000 377777
01666	R	713770	A		UNDST		/STORE AND CHECK RESULT
01667	R	000271	R		WK01		
01670	R	200271	R		LAC	WK01	
01671	R	240243	R		XOR	K202	
01672	R	105165	R		JMS	CHECK0	
01673	R	000021	A		21		
01674	R	200272	R		LAC	WK02	
01675	R	105165	R		JMS	CHECK0	
01676	R	200273	R		LAC	WK03	
01677	R	240044	R		XOR	K03	
01700	R	105165	R		JMS	CHECK0	
/							
01701	R	105446	R	T115	JMS	TSTADR	
01702	R	713000	A		ILD		/ILD K20: 777777
01703	R	000061	R		K20		
01704	R	712400	A		IRD		/IRD K01: 400001
01705	R	000042	R		K01		/RESULT: 000021 000000 377777
01706	R	713770	A		UNDST		/STORE AND CHECK RESULT
01707	R	000271	R		WK01		
01710	R	200271	R		LAC	WK01	
01711	R	240243	R		XOR	K202	
01712	R	105165	R		JMS	CHECK0	
01713	R	000022	A		22		
01714	R	200272	R		LAC	WK02	
01715	R	105165	R		JMS	CHECK0	
01716	R	200273	R		LAC	WK03	
01717	R	240044	R		XOR	K03	
01720	R	105165	R		JMS	CHECK0	

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01721	R	105446	R	T116	JMS	TSTADR			
01722	R	713100	A		ELD		/ELD K160:	377777	777777
01723	R	000221	R		K160				
01724	R	712100	A		EDV		/EDV K16:	000000	000001
01725	R	000057	R		K16		/RESULT:	000043	377777 777777
01726	R	713770	A		UNDST		/STORE AND CHECK RESULT		
01727	R	000271	R		WK01				
01730	R	200271	R		LAC	WK01			
01731	R	240051	R		XOR	K10			
01732	R	105165	R		JMS	CHECK0			
01733	R	000023	A		23				
01734	R	200272	R		LAC	WK02			
01735	R	240044	R		XOR	K03			
01736	R	105165	R		JMS	CHECK0			
01737	R	200273	R		LAC	WK03			
01740	R	240061	R		XOR	K20			
01741	R	105165	R		JMS	CHECK0			
01742	R	105446	R	T117	JMS	TSTADR			
01743	R	713100	A		ELD		/ELD K16:	000000	000001
01744	R	000057	R		K16				
01745	R	712500	A		ERD		/ERD K160:	377777	777777
01746	R	000221	R		K160		/RESULT:	000043	377777 777777
01747	R	713770	A		UNDST		/STORE AND CHECK RESULT		
01750	R	000271	R		WK01				
01751	R	200271	R		LAC	WK01			
01752	R	240051	R		XOR	K10			
01753	R	105165	R		JMS	CHECK0			
01754	R	000024	A		24				
01755	R	200272	R		LAC	WK02			
01756	R	240044	R		XOR	K03			
01757	R	105165	R		JMS	CHECK0			
01760	R	200273	R		LAC	WK03			
01761	R	240061	R		XOR	K20			
01762	R	105165	R		JMS	CHECK0			
01763	R	105446	R	T120	JMS	TSTADR			
01764	R	713100	A		ELD		/ELD K62:	400000	000001
01765	R	000123	R		K62				
01766	R	712100	A		EDV		/EDV K16:	000000	000001
01767	R	000057	R		K16		/RESULT:	000043	777777 777777
01770	R	713770	A		UNDST		/STORE AND CHECK RESULT		
01771	R	000271	R		WK01				
01772	R	200271	R		LAC	WK01			
01773	R	240051	R		XOR	K10			
01774	R	105165	R		JMS	CHECK0			
01775	R	000023	A		23				
01776	R	200272	R		LAC	WK02			
01777	R	240061	R		XOR	K20			
02000	R	105165	R		JMS	CHECK0			
02001	R	200273	R		LAC	WK03			
02002	R	240061	R		XOR	K20			
02003	R	105165	R		JMS	CHECK0			

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02004	R	105446	R	T121	JMS	TSTADR	
02005	R	713100	A		ELD		/ELD K16: 000000 000001
02006	R	000057	R		K16		
02007	R	712500	A		ERD		/ERD K62: 400000 000001
02010	R	000123	R		K62		/RESULT: 000043 777777 777777
02011	R	713770	A		UNDST		/STORE AND CHECK RESULT
02012	R	000271	R		WK01		
02013	R	200271	R		LAC	WK01	
02014	R	240051	R		XOR	K10	
02015	R	105165	R		JMS	CHECK0	
02016	R	000024	A		24		
02017	R	200272	R		LAC	WK02	
02020	R	240061	R		XOR	K20	
02021	R	105165	R		JMS	CHECK0	
02022	R	200273	R		LAC	WK03	
02023	R	240061	R		XOR	K20	
02024	R	105165	R		JMS	CHECK0	
02025	R	105446	R	T122	JMS	TSTADR	
02026	R	713100	A		ELD		/ELD K62: 400000 000001
02027	R	000123	R		K62		
02030	R	712100	A		EDV		/EDV K22: 777777 777777
02031	R	000063	R		K22		/RESULT: 000043 377777 777777
02032	R	713770	A		UNDST		/STORE AND CHECK RESULT
02033	R	000271	R		WK01		
02034	R	200271	R		LAC	WK01	
02035	R	240051	R		XOR	K10	
02036	R	105165	R		JMS	CHECK0	
02037	R	000023	A		23		
02040	R	200272	R		LAC	WK02	
02041	R	240044	R		XOR	K03	
02042	R	105165	R		JMS	CHECK0	
02043	R	200273	R		LAC	WK03	
02044	R	240061	R		XOR	K20	
02045	R	105165	R		JMS	CHECK0	
02046	R	105446	R	T123	JMS	TSTADR	
02047	R	713100	A		ELD		/ELD K22: 777777 777777
02050	R	000063	R		K22		
02051	R	712500	A		ERD		/ERD K62: 400000 000001
02052	R	000123	R		K62		/RESULT: 000043 377777 777777
02053	R	713770	A		UNDST		/STORE AND CHECK RESULT
02054	R	000271	R		WK01		
02055	R	200271	R		LAC	WK01	
02056	R	240051	R		XOR	K10	
02057	R	105165	R		JMS	CHECK0	
02060	R	000024	A		24		
02061	R	200272	R		LAC	WK02	
02062	R	240044	R		XOR	K03	
02063	R	105165	R		JMS	CHECK0	
02064	R	200273	R		LAC	WK03	
02065	R	240061	R		XOR	K20	
02066	R	105165	R		JMS	CHECK0	

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02067	R	105446	R	T140	JMS	TSTADR	
02070	R	713050	A		FLD		/FLD K122; 777043 000377
02071	R	000163	R		K122		
02072	R	716040	A		FAD		/FAD K133; 000000 000300
02073	R	000174	R		K133		/RESULT; 000032 377777 000001
02074	R	713770	A		UNDST		/STORE AND CHECK RESULT
02075	R	000271	R		WK01		
02076	R	200271	R		LAC	WK01	
02077	R	240142	R		XOR	K101	
02100	R	105165	R		JMS	CHECK0	
02101	R	000025	A		25		
02102	R	200272	R		LAC	WK02	
02103	R	240044	R		XOR	K03	
02104	R	105165	R		JMS	CHECK0	
02105	R	200273	R		LAC	WK03	
02106	R	240060	R		XOR	K17	
02107	R	105165	R		JMS	CHECK0	
/							
02110	R	105446	R	T141	JMS	TSTADR	
02111	R	713050	A		FLD		/FLD K122; 777043 000377
02112	R	000163	R		K122		
02113	R	716050	A		URFAD		/URFAD K133; 000000 000300
02114	R	000174	R		K133		/RESULT; 000032 377777 000000
02115	R	713770	A		UNDST		/STORE AND CHECK RESULT
02116	R	000271	R		WK01		
02117	R	200271	R		LAC	WK01	
02120	R	240142	R		XOR	K101	
02121	R	105165	R		JMS	CHECK0	
02122	R	000026	A		26		
02123	R	200272	R		LAC	WK02	
02124	R	240044	R		XOR	K03	
02125	R	105165	R		JMS	CHECK0	
02126	R	200273	R		LAC	WK03	
02127	R	105165	R		JMS	CHECK0	
/							
02130	R	105446	R	T142	JMS	TSTADR	
02131	R	713050	A		FLD		/FLD K122; 777043 000377
02132	R	000163	R		K122		
02133	R	716060	A		UNFAD		/UNFAD K133; 000000 000300
02134	R	000174	R		K133		/RESULT; 000032 377777 000001
02135	R	713770	A		UNDST		/STORE AND CHECK RESULT
02136	R	000271	R		WK01		
02137	R	200271	R		LAC	WK01	
02140	R	240142	R		XOR	K101	
02141	R	105165	R		JMS	CHECK0	
02142	R	000027	A		27		
02143	R	200272	R		LAC	WK02	
02144	R	240044	R		XOR	K03	
02145	R	105165	R		JMS	CHECK0	
02146	R	200273	R		LAC	WK03	
02147	R	240060	R		XOR	K17	
02150	R	105165	R		JMS	CHECK0	
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02151	R	105446	R	T143	JMS	TSTADR	
02152	R	713050	A		FLD		/FLD K124; 777043 400377
02153	R	000165	R		K124		
02154	R	716040	A		FAD		/FAD K133; 000000 000300
02155	R	000174	R		K133		/RESULT; 000032 777776 777777
02156	R	713770	A		UNDST		/STORE AND CHECK RESULT
02157	R	000271	R		WK01		
02160	R	200271	R		LAC	WK01	
02161	R	240142	R		XOR	K101	
02162	R	105165	R		JMS	CHECK0	
02163	R	000036	A		36		
02164	R	200272	R		LAC	WK02	
02165	R	240137	R		XOR	K76	
02166	R	105165	R		JMS	CHECK0	
02167	R	200273	R		LAC	WK03	
02170	R	240061	R		XOR	K20	
02171	R	105165	R		JMS	CHECK0	
/							
02172	R	105446	R	T174	JMS	TSTADR	
02173	R	713150	A		DLD		/DLD K157; 000043 377777 777777
02174	R	000220	R		K157		
02175	R	711550	A		URDMP		/URDMP K142; 000003 200000 000000
02176	R	000203	R		K142		/RESULT; 000045 377777 777777
02177	R	713770	A		UNDST		/STORE AND CHECK RESULT
02200	R	000271	R		WK01		
02201	R	200271	R		LAC	WK01	
02202	R	240226	R		XOR	K165	
02203	R	105165	R		JMS	CHECK0	
02204	R	000037	A		37		
02205	R	200272	R		LAC	WK02	
02206	R	240044	R		XOR	K03	
02207	R	105165	R		JMS	CHECK0	
02210	R	200273	R		LAC	WK03	
02211	R	240061	R		XOR	K20	
02212	R	105165	R		JMS	CHECK0	
/							
02213	R	105446	R	T175	JMS	TSTADR	
02214	R	713150	A		DLD		/DLD K157; 000043 377777 777777
02215	R	000220	R		K157		
02216	R	711560	A		UNDMP		/UNDMP K142; 000003 200000 000000
02217	R	000203	R		K142		/RESULT; 000046 200000 000000
02220	R	713770	A		UNDST		/STORE AND CHECK RESULT
02221	R	000271	R		WK01		
02222	R	200271	R		LAC	WK01	
02223	R	240140	R		XOR	K77	
02224	R	105165	R		JMS	CHECK0	
02225	R	000040	A		40		
02226	R	200272	R		LAC	WK02	
02227	R	240045	R		XOR	K04	
02230	R	105165	R		JMS	CHECK0	
02231	R	200273	R		LAC	WK03	
02232	R	105165	R		JMS	CHECK0	

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02315	R	105446	R	T201	JMS	TSTADR	
02316	R	713150	A		OLD		/OLD K162: 000043 777777 777777
02317	R	000223	R		K162		
02320	R	711540	A		DMP		/DMP K131: 000003 600000 000000
02321	R	000172	R		K131		/RESULT: 000045 377777 777777
02322	R	713770	A		UNDST		/STORE AND CHECK RESULT
02323	R	000271	R		WK01		
02324	R	200271	R		LAC	WK01	
02325	R	240226	R		XOR	K165	
02326	R	105165	R		JMS	CHECK0	
02327	R	000036	A		36		
02330	R	200272	R		LAC	WK02	
02331	R	240044	R		XOR	K03	
02332	R	105165	R		JMS	CHECK0	
02333	R	200273	R		LAC	WK03	
02334	R	240061	R		XOR	K20	
02335	R	105165	R		JMS	CHECK0	
/							
02336	R	105446	R	T202	JMS	TSTADR	
02337	R	713150	A		OLD		/OLD K162: 000043 777777 777777
02340	R	000223	R		K162		
02341	R	711550	A		URDMP		/URDMP K131: 000003 600000 000000
02342	R	000172	R		K131		/RESULT: 000045 377777 777777
02343	R	713770	A		UNDST		/STORE AND CHECK RESULT
02344	R	000271	R		WK01		
02345	R	200271	R		LAC	WK01	
02346	R	240226	R		XOR	K165	
02347	R	105165	R		JMS	CHECK0	
02350	R	000037	A		37		
02351	R	200272	R		LAC	WK02	
02352	R	240044	R		XOR	K03	
02353	R	105165	R		JMS	CHECK0	
02354	R	200273	R		LAC	WK03	
02355	R	240061	R		XOR	K20	
02356	R	105165	R		JMS	CHECK0	
/							
02357	R	105446	R	T203	JMS	TSTADR	
02360	R	713150	A		OLD		/OLD K162: 000043 777777 777777
02361	R	000223	R		K162		
02362	R	711560	A		UNDMP		/UNDMP K131: 000003 600000 000000
02363	R	000172	R		K131		/RESULT: 000046 200000 000000
02364	R	713770	A		UNDST		/STORE AND CHECK RESULT
02365	R	000271	R		WK01		
02366	R	200271	R		LAC	WK01	
02367	R	240140	R		XOR	K77	
02370	R	105165	R		JMS	CHECK0	
02371	R	000040	A		40		
02372	R	200272	R		LAC	WK02	
02373	R	240045	R		XOR	K04	
02374	R	105165	R		JMS	CHECK0	
02375	R	200273	R		LAC	WK03	
02376	R	105165	R		JMS	CHECK0	

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02377	R	105446	R	T204	JMS	TSTADR	
02400	R	713050	A		FLD		/FLD K71: 777000 377777
02401	R	000132	R		K71		
02402	R	712040	A		FDV		/FDV K117: 000000 333333
02403	R	000160	R		K117		/RESULT: 000001 225252 752053
02404	R	713770	A		UNDST		/STORE AND CHECK RESULT
02405	R	000271	R		WK01		
02406	R	200271	R		LAC	WK01	
02407	R	240060	R		XOR	K17	
02410	R	105165	R		JMS	CHECK0	
02411	R	000041	A		41		
02412	R	200272	R		LAC	WK02	
02413	R	240227	R		XOR	K166	
02414	R	105165	R		JMS	CHECK0	
02415	R	200273	R		LAC	WK03	
02416	R	240230	R		XOR	K167	
02417	R	105165	R		JMS	CHECK0	
02420	R	105446	R	T205	JMS	TSTADR	
02421	R	713050	A		FLD		/FLD K71: 777000 377777
02422	R	000132	R		K71		
02423	R	712050	A		URFDV		/URFDV K117: 000000 333333
02424	R	000160	R		K117		/RESULT: 000001 225252 752052
02425	R	713770	A		UNDST		/STORE AND CHECK RESULT
02426	R	000271	R		WK01		
02427	R	200271	R		LAC	WK01	
02430	R	240060	R		XOR	K17	
02431	R	105165	R		JMS	CHECK0	
02432	R	000042	A		42		
02433	R	200272	R		LAC	WK02	
02434	R	240227	R		XOR	K166	
02435	R	105165	R		JMS	CHECK0	
02436	R	200273	R		LAC	WK03	
02437	R	240234	R		XOR	K173	
02440	R	105165	R		JMS	CHECK0	
02441	R	105446	R	T206	JMS	TSTADR	
02442	R	713050	A		FLD		/FLD K103: 777000 777777
02443	R	000144	R		K103		
02444	R	712040	A		FDV		/FDV K117: 000000 333333
02445	R	000160	R		K117		/RESULT: 000001 625252 752053
02446	R	713770	A		UNDST		/STORE AND CHECK RESULT
02447	R	000271	R		WK01		
02450	R	200271	R		LAC	WK01	
02451	R	240060	R		XOR	K17	
02452	R	105165	R		JMS	CHECK0	
02453	R	000043	A		43		
02454	R	200272	R		LAC	WK02	
02455	R	240232	R		XOR	K171	
02456	R	105165	R		JMS	CHECK0	
02457	R	200273	R		LAC	WK03	
02460	R	240230	R		XOR	K167	
02461	R	105165	R		JMS	CHECK0	

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02462	R	105446	R	T207	JMS	TSTADR			
02463	R	713050	A		FLD		/FLD K103;	777000 777777	
02464	R	000144	R		K103				
02465	R	712050	A		URFDV		/URFDV K117;	000000 333333	
02466	R	000160	R		K117		/RESULT;	000001 625252 752052	
02467	R	713770	A		UNDST		/STORE AND CHECK RESULT		
02470	R	000271	R		WK01				
02471	R	200271	R		LAC	WK01			
02472	R	240060	R		XOR	K17			
02473	R	105165	R		JMS	CHECK0			
02474	R	000042	A		42				
02475	R	200272	R		LAC	WK02			
02476	R	240232	R		XOR	K171			
02477	R	105165	R		JMS	CHECK0			
02500	R	200273	R		LAC	WK03			
02501	R	240234	R		XOR	K173			
02502	R	105165	R		JMS	CHECK0			
/									
02503	R	105446	R	T210	JMS	TSTADR			
02504	R	105151	R		JMS	LOADI			
02505	R	000144	R	IT210	K103				
02506	R	713050	A		FLD		/FLD K103;	777000 777777	
02507	R	402505	R		IT210+400000				
02510	R	105151	R		JMS	LOADI			
02511	R	000150	R	II210	K107				
02512	R	712040	A		FDV		/FDV K107;	000000 733333	
02513	R	402511	R		II210+400000		/RESULT;	000001 225252 752053	
02514	R	713770	A		UNDST		/STORE AND CHECK RESULT		
02515	R	406030	R		XWK01+400000				
02516	R	200271	R		LAC	WK01			
02517	R	240060	R		XOR	K17			
02520	R	105165	R		JMS	CHECK0			
02521	R	000101	A		101				
02522	R	200271	R		LAC	WK01			
02523	R	240060	R		XOR	K17			
02524	R	105165	R		JMS	CHECK0			
02525	R	200272	R		LAC	WK02			
02526	R	240227	R		XOR	K166			
02527	R	105165	R		JMS	CHECK0			
02530	R	200273	R		LAC	WK03			
02531	R	240230	R		XOR	K167			
02532	R	105165	R		JMS	CHECK0			
					EJECT				

02533	R	105446	R	T211	JMS	TSTADR			
02534	R	713050	A		FLD		/FLD K103:	777000	777777
02535	R	000144	R		K103				
02536	R	712050	A		URFDV		/URFDV K107:	000000	733333
02537	R	000150	R		K107		/RESULT:	000001	225252 752052
02540	R	713770	A		UNDST		/STORE AND CHECK RESULT		
02541	R	000271	R		WK01				
02542	R	200271	R		LAC	WK01			
02543	R	240060	R		XOR	K17			
02544	R	105165	R		JMS	CHECK0			
02545	R	000042	A		42				
02546	R	200272	R		LAC	WK02			
02547	R	240227	R		XOR	K166			
02550	R	105165	R		JMS	CHECK0			
02551	R	200273	R		LAC	WK03			
02552	R	240234	R		XOR	K173			
02553	R	105165	R		JMS	CHECK0			
02554	R	105446	R	T212	JMS	TSTADR			
02555	R	713050	A		FLD		/FLD K107:	000000	733333
02556	R	000150	R		K107				
02557	R	712440	A		FRD		/FRD K103:	777000	777777
02560	R	000144	R		K103		/RESULT:	000001	225252 752053
02561	R	713770	A		UNDST		/STORE AND CHECK RESULT		
02562	R	000271	R		WK01				
02563	R	200271	R		LAC	WK01			
02564	R	240060	R		XOR	K17			
02565	R	105165	R		JMS	CHECK0			
02566	R	000044	A		44				
02567	R	200272	R		LAC	WK02			
02570	R	240227	R		XOR	K166			
02571	R	105165	R		JMS	CHECK0			
02572	R	200273	R		LAC	WK03			
02573	R	240230	R		XOR	K167			
02574	R	105165	R		JMS	CHECK0			
02575	R	105446	R	T213	JMS	TSTADR			
02576	R	713050	A		FLD		/FLD K107:	000000	733333
02577	R	000150	R		K107				
02600	R	712450	A		URFRD		/URFRD K103:	777000	777777
02601	R	000144	R		K103		/RESULT:	000001	225252 752052
02602	R	713770	A		UNDST		/STORE AND CHECK RESULT		
02603	R	000271	R		WK01				
02604	R	200271	R		LAC	WK01			
02605	R	240060	R		XOR	K17			
02606	R	105165	R		JMS	CHECK0			
02607	R	000045	A		45				
02610	R	200272	R		LAC	WK02			
02611	R	240227	R		XOR	K166			
02612	R	105165	R		JMS	CHECK0			
02613	R	200273	R		LAC	WK03			
02614	R	240234	R		XOR	K173			
02615	R	105165	R		JMS	CHECK0			

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02616	R	105446	R	T214	JMS	TSTADR	
02617	R	713150	A		DLD		/DLD K112: 000002 200000 000000
02620	R	000153	R		K112		
02621	R	712140	A		DDV		/DDV K117: 000000 333333 333333
02622	R	000160	R		K117		/RESULT: 000002 225252 525253
02623	R	713770	A		UNDST		/STORE AND CHECK RESULT
02624	R	000271	R		WK01		
02625	R	200271	R		LAC	WK01	
02626	R	240146	R		XOR	K105	
02627	R	105165	R		JMS	CHECK0	
02630	R	000046	A		46		
02631	R	200272	R		LAC	WK02	
02632	R	240227	R		XOR	K166	
02633	R	105165	R		JMS	CHECK0	
02634	R	200273	R		LAC	WK03	
02635	R	240235	R		XOR	K174	
02636	R	105165	R		JMS	CHECK0	
02637	R	105446	R	T215	JMS	TSTADR	
02640	R	713150	A		DLD		/DLD K112: 000002 200000 000000
02641	R	000153	R		K112		
02642	R	712150	A		URDDV		/URDDV K117: 000000 333333 333333
02643	R	000160	R		K117		/RESULT: 000002 225252 525252
02644	R	713770	A		UNDST		/STORE AND CHECK RESULT
02645	R	000271	R		WK01		
02646	R	200271	R		LAC	WK01	
02647	R	240146	R		XOR	K105	
02650	R	105165	R		JMS	CHECK0	
02651	R	000047	A		47		
02652	R	200272	R		LAC	WK02	
02653	R	240227	R		XOR	K166	
02654	R	105165	R		JMS	CHECK0	
02655	R	200273	R		LAC	WK03	
02656	R	240235	R		XOR	K175	
02657	R	105165	R		JMS	CHECK0	
					.EJECT		

02743	R	105446	R	T221	JMS	TSTADR		
02744	R	713150	A		DLD		/OLD K105:	000002 600000 000000
02745	R	000146	R		K105			
02746	R	712150	A		URDDV		/URDDV K107:	000000 733333 333333
02747	R	000150	R		K107		/RESULT:	000002 225252 525252
02750	R	713770	A		UNDST		/STORE AND CHECK RESULT	
02751	R	000271	R		WK01			
02752	R	200271	R		LAC	WK01		
02753	R	240146	R		XOR	K105		
02754	R	105165	R		JMS	CHECK0		
02755	R	000047	A		47			
02756	R	200272	R		LAC	WK02		
02757	R	240227	R		XOR	K166		
02760	R	105165	R		JMS	CHECK0		
02761	R	200273	R		LAC	WK03		
02762	R	240236	R		XOR	K175		
02763	R	105165	R		JMS	CHECK0		
02764	R	105446	R	T222	JMS	TSTADR		
02765	R	713150	A		DLD		/OLD K107:	000000 733333 333333
02766	R	000150	R		K107			
02767	R	712540	A		DRD		/CAUSE A DIVIDE BY 0	/DRD K105: 000002 600000
02770	R	000146	R		K105		/RESULT:	000002 225252 525253
02771	R	713770	A		UNDST		/STORE AND CHECK RESULT	
02772	R	000271	R		WK01			
02773	R	200271	R		LAC	WK01		
02774	R	240146	R		XOR	K105		
02775	R	105165	R		JMS	CHECK0		
02776	R	000051	A		51			
02777	R	200272	R		LAC	WK02		
03000	R	240227	R		XOR	K166		
03001	R	105165	R		JMS	CHECK0		
03002	R	200273	R		LAC	WK03		
03003	R	240236	R		XOR	K174		
03004	R	105165	R		JMS	CHECK0		
03005	R	105446	R	T223	JMS	TSTADR		
03006	R	713150	A		DLD		/OLD K107:	000000 733333 333333
03007	R	000150	R		K107			
03010	R	712550	A		URDRD		/URDRD K105:	000002 600000 000000
03011	R	000146	R		K105		/RESULT:	000002 225252 525252
03012	R	713770	A		UNDST		/STORE AND CHECK RESULT	
03013	R	000271	R		WK01			
03014	R	200271	R		LAC	WK01		
03015	R	240146	R		XOR	K105		
03016	R	105165	R		JMS	CHECK0		
03017	R	000052	A		52			
03020	R	200272	R		LAC	WK02		
03021	R	240227	R		XOR	K166		
03022	R	105165	R		JMS	CHECK0		
03023	R	200273	R		LAC	WK03		
03024	R	240236	R		XOR	K175		
03025	R	105165	R		JMS	CHECK0		

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03026	R	105446	R	T330	JMS	TSTADR		
03027	R	206045	R		LAC	(RT330		
03030	R	045770	R		DAC	JRETURN		/SET UP A RETURN FROM AN
03031	R	712000	A		IDV			/EXPECTED JEA
03032	R	000046	R		K05			/CAUSE A DIVIDE BY 0
03033	R	777777	A		LAW	=1		
03034	R	105165	R		JMS	CHECK0		/JEA DID NOT OCCUR
03035	R	000053	A		53			
03036	R	205752	R	RT330	LAC	JEAH		/JEA OCCURRED, CHECKTHAT
03037	R	246046	R		XOR	(JEATR+4		/ADDRESSES ARE CORRECT
03040	R	105165	R		JMS	CHECK0		
03041	R	000054	A		54			
03042	R	205746	R		LAC	JEATR+4		
03043	R	246047	R		XOR	(RT330=2		
03044	R	105165	R		JMS	CHECK0		
				/				
03045	R	105446	R	T331	JMS	TSTADR		
03046	R	206050	R		LAC	(RT331		
03047	R	045770	R		DAC	JRETURN		/SET UP A RETURN FROM AN
03050	R	713000	A		ILD			/EXPECTED JEA
03051	R	000046	R		K05			
03052	R	712400	A		IRD			/CAUSE A DIVIDE BY 0
03053	R	000046	R		K05			
03054	R	777777	A		LAW	=1		
03055	R	105165	R		JMS	CHECK0		/JEA DID NOT OCCUR
03056	R	000053	A		53			
03057	R	205752	R	RT331	LAC	JEAH		/JEA OCCURRED, CHECKTHAT
03060	R	246046	R		XOR	(JEATR+4		/ADDRESSES ARE CORRECT
03061	R	105165	R		JMS	CHECK0		
03062	R	000054	A		54			
03063	R	205746	R		LAC	JEATR+4		
03064	R	246051	R		XOR	(RT331=2		
03065	R	105165	R		JMS	CHECK0		
				/				
03066	R	105446	R	T332	JMS	TSTADR		
03067	R	206052	R		LAC	(RT332		
03070	R	045770	R		DAC	JRETURN		/SET UP A RETURN FROM AN
03071	R	712100	A		EDV			/EXPECTED JEA
03072	R	000067	R		K26			/CAUSE A DIVIDE BY 0
03073	R	777777	A		LAW	=1		
03074	R	105165	R		JMS	CHECK0		/JEA DID NOT OCCUR,
03075	R	000053	A		53			
03076	R	205752	R	RT332	LAC	JEAH		/JEA OCCURRED, CHECKTHAT
03077	R	246046	R		XOR	(JEATR+4		/ADDRESSES ARE CORRECT
03100	R	105165	R		JMS	CHECK0		
03101	R	000054	A		54			
03102	R	205746	R		LAC	JEATR+4		
03103	R	246053	R		XOR	(RT332=2		
03104	R	105165	R		JMS	CHECK0		

,EJECT

03105	R	105446	R	T333	JMS	TSTADR		
03106	R	206054	R		LAC	(RT333		/SET UP A RETURN FROM AN
03107	R	045770	R		DAC	JRETURN		/EXPECTED JEA
03110	R	713000	A		ILD			
03111	R	000046	R		K05			
03112	R	712500	A		ERD			/CAUSE A DIVIDE BY 0
03113	R	000067	R		K26			
03114	R	777777	A		LAW	=1		
03115	R	105165	R		JMS	CHECK0		/JEA DID NOT OCCUR,
03116	R	000053	A		53			
03117	R	205752	R	RT333	LAC	JEAH		/JEA OCCURRED, CHECKTHAT
03120	R	246046	R		XOR	(JEATR+4		/ADDRESSES ARE CORRECT
03121	R	105165	R		JMS	CHECK0		
03122	R	000054	A		54			
03123	R	205746	R		LAC	JEATR+4		
03124	R	246055	R		XOR	(RT333=2		
03125	R	105165	R		JMS	CHECK0		
/								
03126	R	105446	R	T334	JMS	TSTADR		
03127	R	206056	R		LAC	(RT334		/SET UP A RETURN FROM AN
03130	R	045770	R		DAC	JRETURN		/EXPECTED JEA
03131	R	713000	A		ILD			
03132	R	000046	R		K05			
03133	R	712040	A		FDV			/CAUSE A DIVIDE BY 0
03134	R	000067	R		K26			
03135	R	777777	A		LAW	=1		
03136	R	105165	R		JMS	CHECK0		/JEA DID NOT OCCUR,
03137	R	000053	A		53			
03140	R	205752	R	RT334	LAC	JEAH		/JEA OCCURRED, CHECKTHAT
03141	R	246046	R		XOR	(JEATR+4		/ADDRESSES ARE CORRECT
03142	R	105165	R		JMS	CHECK0		
03143	R	205746	R		LAC	JEATR+4		
03144	R	246057	R		XOR	(RT334=2		
03145	R	105165	R		JMS	CHECK0		
03146	R	000054	A		54			
/								
03147	R	105446	R	T335	JMS	TSTADR		
03150	R	206060	R		LAC	(RT335		/SET UP A RETURN FROM AN
03151	R	045770	R		DAC	JRETURN		/EXPECTED JEA
03152	R	713000	A		ILD			
03153	R	000046	R		K05			
03154	R	712440	A		FRD			/CAUSE A DIVIDE BY 0
03155	R	000067	R		K26			
03156	R	777777	A		LAW	=1		
03157	R	105165	R		JMS	CHECK0		/JEA DID NOT OCCUR,
03160	R	000053	A		53			

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03161	R	205752	R	RT335	LAC	JEAH	/JEA OCCURRED, CHECKTHAT
03162	R	246046	R		XOR	(JEATR+4	/ADDRESSES ARE CORRECT
03163	R	105165	R		JMS	CHECK0	
03164	R	000054	A		54		
03165	R	205746	R		LAC	JEATR+4	
03166	R	246061	R		XOR	(RT335=2	
03167	R	105165	R		JMS	CHECK0	
03170	R	105446	R	T336	JMS	TSTADR	
03171	R	206062	R		LAC	(RT336	/SET UP A RETURN FROM AN
03172	R	045770	R		DAC	JRETURN	/EXPECTED JEA
03173	R	713000	A		ILD		
03174	R	000046	R		K05		
03175	R	712140	A		DDV		/CAUSE A DIVIDE BY 0
03176	R	000067	R		K26		
03177	R	777777	A		LAW	=1	
03200	R	105165	R		JMS	CHECK0	
03201	R	000053	A		53		
03202	R	205752	R	RT336	LAC	JEAH	/JEA OCCURRED, CHECKTHAT
03203	R	246046	R		XOR	(JEATR+4	/ADDRESSES ARE CORRECT
03204	R	105165	R		JMS	CHECK0	
03205	R	000054	A		54		
03206	R	205746	R		LAC	JEATR+4	
03207	R	246063	R		XOR	(RT336=2	
03210	R	105165	R		JMS	CHECK0	
03211	R	105446	R	T337	JMS	TSTADR	
03212	R	206064	R		LAC	(RT337	/SET UP A RETURN FROM AN
03213	R	045770	R		DAC	JRETURN	/EXPECTED JEA
03214	R	713000	A		ILD		
03215	R	000046	R		K05		
03216	R	712540	A		DRD		
03217	R	000057	R		K26		
03220	R	777777	A		LAW	=1	
03221	R	105165	R		JMS	CHECK0	
03222	R	000053	A		53		
03223	R	205752	R	RT337	LAC	JEAH	/JEA OCCURRED, CHECKTHAT
03224	R	246046	R		XOR	(JEATR+4	/ADDRESSES ARE CORRECT
03225	R	105165	R		JMS	CHECK0	
03226	R	000054	A		54		
03227	R	205746	R		LAC	JEATR+4	
03230	R	246065	R		XOR	(RT337=2	
03231	R	105165	R		JMS	CHECK0	

,EJECT

03232	R	105446	R	T340	JMS	TSTADR	
03233	R	206066	R		LAC	(RT340	/SET UP A RETURN FROM AN
03234	R	045770	R		DAC	JRETURN	/EXPECTED JEA
03235	R	713000	A		ILD		/CAUSE AN OVERFLOW
03236	R	000044	R		K03		
03237	R	716000	A		IAD		
03240	R	000060	R		K17		
03241	R	713600	A		IST		
03242	R	000271	R		WK01		
03243	R	777777	A		LAW	=1	
03244	R	105165	R		JMS	CHECK0	
03245	R	000053	A		53		
03246	R	205752	R	RT340	LAC	JEAH	/JEA OCCURRED, CHECKTHAT
03247	R	246041	R		XOR	(JEATR+0	/ADDRESSES ARE CORRECT
03250	R	105165	R		JMS	CHECK0	
03251	R	000054	A		54		
03252	R	205742	R		LAC	JEATR+0	
03253	R	246067	R		XOR	(RT340=2	
03254	R	105165	R		JMS	CHECK0	
				/			
03255	R	105446	R	T341	JMS	TSTADR	
03256	R	206070	R		LAC	(RT341	/SET UP A RETURN FROM AN
03257	R	045770	R		DAC	JRETURN	/EXPECTED JEA
03260	R	713000	A		ILD		/CAUSE AN OVERFLOW
03261	R	000044	R		K03		
03262	R	710400	A		ISB		
03263	R	000061	R		K20		
03264	R	713600	A		IST		
03265	R	000271	R		WK01		
03266	R	777777	A		LAW	=1	
03267	R	105165	R		JMS	CHECK0	
03270	R	000053	A		53		
03271	R	205752	R	RT341	LAC	JEAH	/JEA OCCURRED, CHECKTHAT
03272	R	246041	R		XOR	(JEATR+0	/ADDRESSES ARE CORRECT
03273	R	105165	R		JMS	CHECK0	
03274	R	000054	A		54		
03275	R	205742	R		LAC	JEATR+0	
03276	R	246071	R		XOR	(RT341=2	
03277	R	105165	R		JMS	CHECK0	

,EJECT

03300	R	105446	R	T342	JMS	TSTADR	
03301	R	206072	R		LAC	(RT342	/SET UP A RETURN FROM AN
03302	R	045770	R		DAC	JRETURN	/EXPECTED JEA
03303	R	713100	A		ELD		/CAUSE AN OVERFLOW
03304	R	000133	R		K72		
03305	R	716100	A		EAD		
03306	R	000107	R		K46		
03307	R	777777	A		LAW	=1	
03310	R	105165	R		JMS	CHECK0	
03311	R	000053	A		53		
03312	R	205752	R	RT342	LAC	JEAH	/JEA OCCURRED, CHECKTHAT
03313	R	246041	R		XOR	(JEATR+0	/ADDRESSES ARE CORRECT
03314	R	105165	R		JMS	CHECK0	
03315	R	000054	A		54		
03316	R	205742	R		LAC	JEATR+0	
03317	R	246073	R		XOR	(RT342=2	
03320	R	105165	R		JMS	CHECK0	
03321	R	105446	R	T343	JMS	TSTADR	
03322	R	206074	R		LAC	(RT343	/SET UP A RETURN FROM AN
03323	R	045770	R		DAC	JRETURN	/EXPECTED JEA
03324	R	713100	A		ELD		/CAUSE AN OVERFLOW
03325	R	000133	R		K72		
03326	R	710500	A		ESB		
03327	R	000123	R		K62		
03330	R	777777	A		LAW	=1	
03331	R	105165	R		JMS	CHECK0	
03332	R	000053	A		53		
03333	R	205752	R	RT343	LAC	JEAH	/JEA OCCURRED, CHECKTHAT
03334	R	246041	R		XOR	(JEATR+0	/ADDRESSES ARE CORRECT
03335	R	105165	R		JMS	CHECK0	
03336	R	000054	A		54		
03337	R	205742	R		LAC	JEATR+0	
03340	R	246075	R		XOR	(RT343=2	
03341	R	105165	R		JMS	CHECK0	
03342	R	105446	R	T344	JMS	TSTADR	
03343	R	206076	R		LAC	(RT344	/SET UP A RETURN FROM AN
03344	R	045770	R		DAC	JRETURN	/EXPECTED JEA
03345	R	713000	A		ILD		/CAUSE AN OVERFLOW
03346	R	000044	R		K03		
03347	R	711400	A		IMP		
03350	R	000044	R		K03		
						.EJECT	

03351	R	713600	A		IST		
03352	R	000271	R		WK01		
03353	R	777777	A		LAW	=1	
03354	R	105165	R		JMS	CHECK0	
03355	R	000053	A		53		
03356	R	205752	R	RT344	LAC	JEAH	/JEA OCCURRED, CHECKTHAT
03357	R	246041	R		XOR	(JEATR+0	/ADDRESSES ARE CORRECT
03360	R	105165	R		JMS	CHECK0	
03361	R	000054	A		54		
03362	R	205742	R		LAC	JEATR+0	
03363	R	246077	R		XOR	(RT344=2	
03364	R	105165	R		JMS	CHECK0	
/							
03365	R	105446	R	T345	JMS	TSTADR	
03366	R	206100	R		LAC	(RT345	/SET UP A RETURN FROM AN
03367	R	045770	R		DAC	JRETURN	/EXPECTED JEA
03370	R	713000	A		ILD		/CAUSE AN OVERFLOW
03371	R	000042	R		K01		
03372	R	711400	A		IMP		
03373	R	000042	R		K01		
03374	R	713600	A		IST		
03375	R	000271	R		WK01		
03376	R	777777	A		LAW	=1	
03377	R	105165	R		JMS	CHECK0	
03400	R	000053	A		53		
03401	R	205752	R	RT345	LAC	JEAH	/JEA OCCURRED, CHECKTHAT
03402	R	246041	R		XOR	(JEATR+0	/ADDRESSES ARE CORRECT
03403	R	105165	R		JMS	CHECK0	
03404	R	000054	A		54		
03405	R	205742	R		LAC	JEATR+0	
03406	R	246101	R		XOR	(RT345=2	
03407	R	105165	R		JMS	CHECK0	
03410	R	105446	R	T346	JMS	TSTADR	
03411	R	206102	R		LAC	(RT346	/SET UP A RETURN FROM AN
03412	R	045770	R		DAC	JRETURN	/EXPECTED JEA
03413	R	713050	A		FLD		/CAUSE AN OVERFLOW
03414	R	000170	R		K127		
03415	R	711470	A		UUFMP		
03416	R	000250	R		K207		
03417	R	713640	A		FST		
03420	R	000271	R		WK01		
03421	R	777777	A		LAW	=1	
03422	R	105165	R		JMS	CHECK0	
03423	R	000053	A		53		
03424	R	205752	R	RT346	LAC	JEAH	/JEA OCCURRED, CHECKTHAT
03425	R	246041	R		XOR	(JEATR+0	/ADDRESSES ARE CORRECT
03426	R	105165	R		JMS	CHECK0	
03427	R	000054	A		54		
03430	R	205742	R		LAC	JEATR+0	
03431	R	246103	R		XOR	(RT346=2	
03432	R	105165	R		JMS	CHECK0	

,EJECT

03433	R	105446	R	T347	JMS	TSTADR	
03434	R	206104	R		LAC	(RT347	/SET UP A RETURN FROM AN
03435	R	045770	R		DAC	JRETURN	/EXPECTED JEA
03436	R	713050	A		FLD		/CAUSE AN OVERFLOW
03437	R	000170	R		K127		
03440	R	712050	A		URFDV		
03441	R	000261	R		K220		
03442	R	713640	A		FST		
03443	R	000271	R		WK01		
03444	R	777777	A		LAW	=1	
03445	R	105165	R		JMS	CHECK0	
03446	R	000053	A		53		
03447	R	205752	R	RT347	LAC	JEAH	/JEA OCCURRED, CHECKTHAT
03450	R	246041	R		XOR	(JEATR+0	/ADDRESSES ARE CORRECT
03451	R	105165	R		JMS	CHECK0	
03452	R	000054	A		54		
03453	R	205742	R		LAC	JEATR+0	
03454	R	246105	R		XOR	(RT347=2	
03455	R	105165	R		JMS	CHECK0	
				/			
03456	R	105446	R	T350	JMS	TSTADR	
03457	R	206106	R		LAC	(RT350	/SET UP A RETURN FROM AN
03460	R	045770	R		DAC	JRETURN	/EXPECTED JEA
03461	R	713170	A		UNDLD		/CAUSE AN OVERFLOW
03462	R	000251	R		K210		
03463	R	711570	A		UUDMP		
03464	R	000256	R		K215		
03465	R	777777	A		LAW	=1	
03466	R	105165	R		JMS	CHECK0	
03467	R	000053	A		53		
03470	R	205752	R	RT350	LAC	JEAH	/JEA OCCURRED, CHECKTHAT
03471	R	246041	R		XOR	(JEATR+0	/ADDRESSES ARE CORRECT
03472	R	105165	R		JMS	CHECK0	
03473	R	000054	A		54		
03474	R	205742	R		LAC	JEATR+0	
03475	R	246107	R		XOR	(RT350=2	
03476	R	105165	R		JMS	CHECK0	
03477	R	105446	R	T351	JMS	TSTADR	
03500	R	206110	R		LAC	(RT351	/SET UP A RETURN FROM AN
03501	R	045770	R		DAC	JRETURN	/EXPECTED JEA
03502	R	713170	A		UNDLD		/CAUSE AN OVERFLOW
03503	R	000251	R		K210		
03504	R	712150	A		URDDV		
03505	R	000253	R		K212		
03506	R	777777	A		LAW	=1	
03507	R	105165	R		JMS	CHECK0	
03510	R	000053	A		53		
03511	R	205752	R	RT351	LAC	JEAH	/JEA OCCURRED, CHECKTHAT
03512	R	246041	R		XOR	(JEATR+0	/ADDRESSES ARE CORRECT
03513	R	105165	R		JMS	CHECK0	
03514	R	000054	A		54		
03515	R	205742	R		LAC	JEATR+0	
					.EJECT		

03516	R	246111	R	XOR	(RT351=2	
03517	R	105165	R	JMS	CHECK0	
/						
03520	R	105446	R	T352	JMS	TSTADR
03521	R	206112	R	LAC	(RT352	/SET UP A RETURN FROM AN
03522	R	045770	R	DAC	JRETURN	/EXPECTED JEA
03523	R	714460	A	FLX		/CAUSE AN OVERFLOW
03524	R	000263	R	K222		
03525	R	777777	A	LAW	=1	
03526	R	105165	R	JMS	CHECK0	
03527	R	000053	A	53		
03530	R	205752	R	RT352	LAC	JEAH
03531	R	246041	R	XOR	(JEATR+0	/JEA OCCURRED, CHECKTHAT
03532	R	105165	R	JMS	CHECK0	/ADDRESSES ARE CORRECT
03533	R	000054	A	54		
03534	R	205742	R	LAC	JEATR+0	
03535	R	246113	R	XOR	(RT352=2	
03536	R	105165	R	JMS	CHECK0	
/						
03537	R	105446	R	T353	JMS	TSTADR
03540	R	206114	R	LAC	(RT353	/SET UP A RETURN FROM AN
03541	R	045770	R	DAC	JRETURN	/EXPECTED JEA
03542	R	714560	A	DLX		/CAUSE AN OVERFLOW
03543	R	000263	R	K222		
03544	R	777777	A	LAW	=1	
03545	R	105165	R	JMS	CHECK0	
03546	R	000053	A	53		
03547	R	205752	R	RT353	LAC	JEAH
03550	R	246041	R	XOR	(JEATR+0	/JEA OCCURRED, CHECKTHAT
03551	R	105165	R	JMS	CHECK0	/ADDRESSES ARE CORRECT
03552	R	000054	A	54		
03553	R	205742	R	LAC	JEATR+0	
03554	R	246115	R	XOR	(RT353=2	
03555	R	105165	R	JMS	CHECK0	

.EJECT

03556	R	105446	R	T354	JMS	TSTADR		
03557	R	206116	R		LAC	(RT354		/SET UP A RETURN FROM AN
03560	R	045770	R		DAC	JRETURN		/EXPECTED JEA
03561	R	713050	A		FLD			/CAUSE AN UNDERFLOW
03562	R	000244	R		K203			
03563	R	711470	A		UUFMP			
03564	R	000244	R		K203			
03565	R	713640	A		FST			
03566	R	000271	R		WK01			
03567	R	777777	A		LAW	=1		
03570	R	105165	R		JMS	CHECK0		
03571	R	000053	A		53			
03572	R	205752	R	RT354	LAC	JEAH		/JEA OCCURRED, CHECKTHAT
03573	R	246117	R		XOR	(JEATR+2		/ADDRESSES ARE CORRECT
03574	R	105165	R		JMS	CHECK0		
03575	R	000054	A		54			
03576	R	205744	R		LAC	JEATR+2		
03577	R	246120	R		XOR	(RT354-2		
03600	R	105165	R		JMS	CHECK0		
/								
03601	R	105446	R	T355	JMS	TSTADR		
03602	R	206121	R		LAC	(RT355		/SET UP A RETURN FROM AN
03603	R	045770	R		DAC	JRETURN		/EXPECTED JEA
03604	R	713050	A		FLD			/CAUSE AN UNDERFLOW
03605	R	000244	R		K203			
03606	R	712050	A		URFDV			
03607	R	000170	R		K127			
03610	R	713640	A		FST			
03611	R	000271	R		WK01			
03612	R	777777	A		LAW	=1		
03613	R	105165	R		JMS	CHECK0		
03614	R	000053	A		53			
03615	R	205752	R	RT355	LAC	JEAH		/JEA OCCURRED, CHECKTHAT
03616	R	246117	R		XOR	(JEATR+2		/ADDRESSES ARE CORRECT
03617	R	105165	R		JMS	CHECK0		
03620	R	000054	A		54			
03621	R	205744	R		LAC	JEATR+2		
03622	R	246122	R		XOR	(RT355-2		
03623	R	105165	R		JMS	CHECK0		

,EJECT

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03624 R 105446 R T356 JMS TSTADR
03625 R 206123 R LAC (RT356
03626 R 045770 R DAC JRETURN /SET UP A RETURN FROM AN
03627 R 713170 A UNLD /EXPECTED JEA
03630 R 000266 R K225 /CAUSE AN UNDERFLOW
03631 R 711570 A UODMP
03632 R 000266 R K225
03633 R 777777 A LAW =1
03634 R 105165 R JMS CHECK0
03635 R 000053 A 53
03636 R 205752 R RT356 LAC JEAH /JEA OCCURRED, CHECKTHAT
03637 R 246117 R XOR (JEATR+2 /ADDRESSES ARE CORRECT
03640 R 105165 R JMS CHECK0
03641 R 000054 A 54
03642 R 205744 R LAC JEATR+2
03643 R 246124 R XOR (RT356-2
03644 R 105165 R JMS CHECK0
03645 R 105446 R T357 JMS TSTADR
03646 R 206125 R LAC (RT357 /SET UP A RETURN FROM AN
03647 R 045770 R DAC JRETURN /EXPECTED JEA
03650 R 713170 A UNLD /CAUSE AN UNDERFLOW
03651 R 000266 R K225
03652 R 712150 A URDDV
03653 R 000251 R K210
03654 R 777777 A LAW =1
03655 R 105165 R JMS CHECK0
03656 R 000053 A 53
03657 R 205752 R RT357 LAC JEAH /JEA OCCURRED, CHECKTHAT
03660 R 246117 R XOR (JEATR+2 /ADDRESSES ARE CORRECT
03661 R 105165 R JMS CHECK0
03662 R 000054 A 54
03663 R 205744 R LAC JEATR+2
03664 R 246126 R XOR (RT357-2
03665 R 105165 R JMS CHECK0

/SET JRETURN TO 0 SO THAT ALL JEA'S ARE ILLEGAL AGAIN

03666 R 145770 R DZM JRETURN
03667 R 200001 R LAC USERSW+1
03670 R 740200 A SZA /IS EXTENDED MEMORY PRESENT?
03671 R 603675 R JMP ,+4 /YES, TEST IT,
03672 R 200002 R LAC USERSW+2
03673 R 741200 A SNA
03674 R 605143 R JMP T430 /EXIT TEST,
03675 R 105270 R JMS CRFIELD /CHECK FOR EXTENDED MEMORY
,EJECT

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03676	R	105446	R	T400	JMS	TSTADR		
03677	R	205375	R		LAC	FIELD1		
03700	R	046025	R		DAC	HOLFLD		/TEMP, STORAGE
03701	R	546127	R		SAD	(-1		/IS FIELD 0 OF BLOCK 1 AVAILABLE?
03702	R	603732	R		JMP	T401		/NO,CHECK NEXT FIELD
03703	R	346127	R		TAD	(-1		
03704	R	040017	A		DAC	17		/YES,SET 17=RANDOM ADDRESS=1
03705	R	206025	R		LAC	HOLFLD		/RESTORE DATA
03706	R	043711	R		DAC	,+3		/TO BE LOADED
03707	R	060017	A		DAC*	17		/STORE THE ADDRESS IN THE ADDRESS,
03710	R	713000	A		ILD			
03711	R	740040	A	IT400	XX			/=TO THE EXTENDED ADDRESS,
03712	R	713600	A		IST			/CHECK THAT THE FPP15 LOADED
03713	R	000271	R		WK01			/THE N0,=TO IT'S OWN ADDRESS
03714	R	200271	R		LAC	WK01		
03715	R	246025	R		XOR	HOLFLD		
03716	R	105165	R		JMS	CHECK0		
03717	R	000060	A		60			/#60, LOAD ERROR FROM EXTENDED MEMORY,
03720	R	713000	A		ILD			/ILD K05:000000
03721	R	000046	R		K05			
03722	R	713000	A		ILD			/ILD INDIRECT LOC,
03723	R	403711	R		IT400+400000			
03724	R	713600	A		IST			/CHECK THAT THE FPP15 LOADED
03725	R	000271	R		WK01			/THE N0,=TO IT'S OWN ADDRESS,
03726	R	200271	R		LAC	WK01		
03727	R	246025	R		XOR	HOLFLD		
03730	R	105165	R		JMS	CHECK0		
03731	R	000061	A		61			/#61,LOAD INDIRECT ERROR FROM EXTENDED MEMORY,
03732	R	105446	R	T401	JMS	TSTADR		
03733	R	205376	R		LAC	FIELD1+1		
03734	R	046025	R		DAC	HOLFLD		/TEMP, STORAGE
03735	R	546127	R		SAD	(-1		/IS FIELD 1 OF BLOCK 1 AVAILABLE?
03736	R	603767	R		JMP	T402		/NO,CHECK NEXT FIELD
03737	R	346127	R		TAD	(-1		
03740	R	040017	A		DAC	17		/YES,SET 17=RANDOM ADDRESS=1
03741	R	206025	R		LAC	HOLFLD		/RESTORE DATA
03742	R	043745	R		DAC	,+3		/TO BE LOADED
03743	R	060017	A		DAC*	17		/STORE THE ADDRESS IN THE ADDRESS,
03744	R	713000	A		ILD			
03745	R	740040	A	IT401	XX			/=TO THE EXTENDED ADDRESS,
03746	R	105155	R		JMS	STORE1		
03747	R	713600	A		IST			/CHECK THAT THE FPP15 LOADED
03750	R	406030	R		XWK01+400000			/THE N0,=TO IT'S OWN ADDRESS
03751	R	200271	R		LAC	WK01		
03752	R	246025	R		XOR	HOLFLD		
03753	R	105165	R		JMS	CHECK0		
03754	R	000062	A		62			/#62, STORE INDIRECT ERROR FROM EXT, MEMORY,
03755	R	713000	A		ILD			/ILD K05:000000
03756	R	000046	R		K05			
03757	R	713000	A		ILD			/ILD INDIRECT LOC,
03760	R	403745	R		IT401+400000			
03761	R	713600	A		IST			/CHECK THAT THE FPP15 LOADED

03762	R	000271	R	WK01		/THE N0,=TO IT'S OWN ADDRESS,
03763	R	200271	R	LAC	WK01	
03764	R	246025	R	XOR	HOLFLD	
03765	R	105165	R	JMS	CHECK0	
03766	R	000061	A	61		/#61,LOAD INDIRECT ERROR FROM EXTENDED MEMORY,
/						
03767	R	105446	R	T402	JMS	TSTADR
03770	R	205377	R	LAC	FIELD1+2	
03771	R	046025	R	DAC	HOLFLD	/TEMP, STORAGE
03772	R	546127	R	SAD	(=1	/IS FIELD 2 OF BLOCK 1 AVAILABLE?
03773	R	604023	R	JMP	T403	/NO,CHECK NEXT FIELD
03774	R	346127	R	TAD	(=1	
03775	R	040017	A	DAC	17	/YES,SET 17=RANDOM ADDRESS=1
03776	R	206025	R	LAC	HOLFLD	/RESTORE DATA
03777	R	044002	R	DAC	,+3	/TO BE LOADED
04000	R	060017	A	DAC*	17	/STORE THE ADDRESS IN THE ADDRESS,
04001	R	713000	A	ILD		
04002	R	740040	A	IT402	XX	/=TO THE EXTENDED ADDRESS,
04003	R	713600	A	IST		/CHECK THAT THE FPP15 LOADED
04004	R	000271	R	WK01		/THE N0,=TO IT'S OWN ADDRESS
04005	R	200271	R	LAC	WK01	
04006	R	246025	R	XOR	HOLFLD	
04007	R	105165	R	JMS	CHECK0	
04010	R	000060	A	60		/#60, LOAD ERROR FROM EXTENDED MEMORY,
04011	R	713000	A	ILD		/ILD K05:000000
04012	R	000046	R	K05		
04013	R	713000	A	ILD		/ILD INDIRECT LOC,
04014	R	404002	R	IT402+400000		
04015	R	713600	A	IST		/CHECK THAT THE FPP15 LOADED
04016	R	000271	R	WK01		/THE N0,=TO IT'S OWN ADDRESS,
04017	R	200271	R	LAC	WK01	
04020	R	246025	R	XOR	HOLFLD	
04021	R	105165	R	JMS	CHECK0	
04022	R	000061	A	61		/#61,LOAD INDIRECT ERROR FROM EXTENDED MEMORY,
/						
04023	R	105446	R	T403	JMS	TSTADR
04024	R	205400	R	LAC	FIELD1+3	
04025	R	046025	R	DAC	HOLFLD	/TEMP, STORAGE
04026	R	546127	R	SAD	(=1	/IS FIELD 3 OF BLOCK 1 AVAILABLE?
04027	R	604057	R	JMP	T404	/NO,CHECK NEXT FIELD
04030	R	346127	R	TAD	(=1	
04031	R	040017	A	DAC	17	/YES,SET 17=RANDOM ADDRESS=1
04032	R	206025	R	LAC	HOLFLD	/RESTORE DATA
04033	R	044036	R	DAC	,+3	/TO BE LOADED
04034	R	060017	A	DAC*	17	/STORE THE ADDRESS IN THE ADDRESS,
04035	R	713000	A	ILD		
04036	R	740040	A	IT403	XX	/=TO THE EXTENDED ADDRESS,
04037	R	713600	A	IST		/CHECK THAT THE FPP15 LOADED
04040	R	000271	R	WK01		/THE N0,=TO IT'S OWN ADDRESS
04041	R	200271	R	LAC	WK01	
04042	R	246025	R	XOR	HOLFLD	
04043	R	105165	R	JMS	CHECK0	
04044	R	000060	A	60		/#60, LOAD ERROR FROM EXTENDED MEMORY,

04045	R	713000	A		ILD		/ILD K05:000000
04046	R	000046	R		K05		
04047	R	713000	A		ILD		/ILD INDIRECT LOC,
04050	R	404036	R		IT403+400000		
04051	R	713600	A		IST		/CHECK THAT THE FPP15 LOADED
04052	R	000271	R		WK01		/THE N0,=TO IT'S OWN ADDRESS,
04053	R	200271	R		LAC	WK01	
04054	R	246025	R		XOR	HQLFLD	
04055	R	105165	R		JMS	CHECK0	
04056	R	000061	A		61		/#61,LOAD INDIRECT ERROR FROM EXTENDED MEMORY,
/							
04057	R	105446	R	T404	JMS	TSTADR	
04060	R	205401	R		LAC	FIELD1+4	
04061	R	046025	R		DAC	HQLFLD	/TEMP, STORAGE
04062	R	546127	R		SAD	(-1	/IS FIELD 4 OF BLOCK 1AVAILABLE?
04063	R	604114	R		JMP	T405	/NO,CHECK NEXT FIELD
04064	R	346127	R		TAD	(-1	
04065	R	040017	A		DAC	17	/YES,SET 17=RANDOM ADDRESS=1
04066	R	206025	R		LAC	HQLFLD	/RESTORE DATA
04067	R	044072	R		DAC	,+3	/TO BE LOADED
04070	R	060017	A		DAC*	17	/STORE THE ADDRESS IN THE ADDRESS,
04071	R	713000	A		ILD		
04072	R	740040	A	IT404	XX		/=TO THE EXTENDED ADDRESS,
04073	R	105155	R		JMS	STOREI	
04074	R	713600	A		IST		/CHECK THAT THE FPP15 LOADED
04075	R	406030	R		XWK01+400000		/THE N0,=TO IT'S OWN ADDRESS
04076	R	200271	R		LAC	WK01	
04077	R	246025	R		XOR	HQLFLD	
04100	R	105165	R		JMS	CHECK0	
04101	R	000062	A		62		/#62, STORE INDIRECT ERROR FROM EXT, MEMORY,
04102	R	713000	A		ILD		/ILD K05:000000
04103	R	000046	R		K05		
04104	R	713000	A		ILD		/ILD INDIRECT LOC,
04105	R	404072	R		IT404+400000		
04106	R	713600	A		IST		/CHECK THAT THE FPP15 LOADED
04107	R	000271	R		WK01		/THE N0,=TO IT'S OWN ADDRESS,
04110	R	200271	R		LAC	WK01	
04111	R	246025	R		XOR	HQLFLD	
04112	R	105165	R		JMS	CHECK0	
04113	R	000061	A		61		/#61,LOAD INDIRECT ERROR FROM EXTENDED MEMORY,
/							
04114	R	105446	R	T405	JMS	TSTADR	
04115	R	205402	R		LAC	FIELD1+5	
04116	R	046025	R		DAC	HQLFLD	/TEMP, STORAGE
04117	R	546127	R		SAD	(-1	/IS FIELD 5 OF BLOCK 1 AVAILABLE?
04120	R	604150	R		JMP	T406	/NO,CHECK NEXT FIELD
04121	R	346127	R		TAD	(-1	
04122	R	040017	A		DAC	17	/YES,SET 17=RANDOM ADDRESS=1
04123	R	206025	R		LAC	HQLFLD	/RESTORE DATA
04124	R	044127	R		DAC	,+3	/TO BE LOADED
04125	R	060017	A		DAC*	17	/STORE THE ADDRESS IN THE ADDRESS,
04126	R	713000	A		ILD		
04127	R	740040	A	IT405	XX		/=TO THE EXTENDED ADDRESS,

04130	R	713600	A	IST		/CHECK THAT THE FPP15 LOADED
04131	R	000271	R	WK01		/THE NO,=TO IT'S OWN ADDRESS
04132	R	200271	R	LAC	WK01	
04133	R	246025	R	XOR	HQLFLD	
04134	R	105165	R	JMS	CHECK0	
04135	R	000060	A	60		/#60, LOAD ERROR FROM EXTENDED MEMORY,
04136	R	713000	A	ILD		/ILD K05:000000
04137	R	000046	R	K05		
04140	R	713000	A	ILD		/ILD INDIRECT LOC,
04141	R	404127	R	IT405+400000		
04142	R	713600	A	IST		/CHECK THAT THE FPP15 LOADED
04143	R	000271	R	WK01		/THE NO,=TO IT'S OWN ADDRESS,
04144	R	200271	R	LAC	WK01	
04145	R	246025	R	XOR	HQLFLD	
04146	R	105165	R	JMS	CHECK0	
04147	R	000061	A	61		/#61,LOAD INDIRECT ERROR FROM EXTENDED MEMORY,
04150	R	105446	R	T406	JMS	TSTADR
04151	R	205403	R	LAC	FIELD1+6	
04152	R	046025	R	DAC	HQLFLD	/TEMP, STORAGE
04153	R	546127	R	SAD	(-1	/IS FIELD 6 OF BLOCK 1 AVAILABLE?
04154	R	604204	R	JMP	T407	/NO,CHECK NEXT FIELD
04155	R	346127	R	TAD	(-1	
04156	R	040017	A	DAC	17	/YES,SET 17=RANDOM ADDRESS=1
04157	R	206025	R	LAC	HQLFLD	/RESTORE DATA
04160	R	044163	R	DAC	,+3	/TO BE LOADED
04161	R	060017	A	DAC*	17	/STORE THE ADDRESS IN THE ADDRESS,
04162	R	713000	A	ILD		
04163	R	740040	A	IT406	XX	/=TO THE EXTENDED ADDRESS,
04164	R	713600	A	IST		/CHECK THAT THE FPP15 LOADED
04165	R	000271	R	WK01		/THE NO,=TO IT'S OWN ADDRESS
04166	R	200271	R	LAC	WK01	
04167	R	246025	R	XOR	HQLFLD	
04170	R	105165	R	JMS	CHECK0	
04171	R	000060	A	60		/#60, LOAD ERROR FROM EXTENDED MEMORY,
04172	R	713000	A	ILD		/ILD K05:000000
04173	R	000046	R	K05		
04174	R	713000	A	ILD		/ILD INDIRECT LOC,
04175	R	404163	R	IT406+400000		
04176	R	713600	A	IST		/CHECK THAT THE FPP15 LOADED
04177	R	000271	R	WK01		/THE NO,=TO IT'S OWN ADDRESS,
04200	R	200271	R	LAC	WK01	
04201	R	246025	R	XOR	HQLFLD	
04202	R	105165	R	JMS	CHECK0	
04203	R	000061	A	61		/#61,LOAD INDIRECT ERROR FROM EXTENDED MEMORY,
04204	R	105446	R	T407	JMS	TSTADR
04205	R	205404	R	LAC	FIELD1+7	
04206	R	046025	R	DAC	HQLFLD	/TEMP, STORAGE
04207	R	546127	R	SAD	(-1	/IS FIELD 7 OF BLOCK 1 AVAILABLE?
04210	R	604204	R	JMP	T410	/NO,CHECK NEXT FIELD
04211	R	346127	R	TAD	(-1	
04212	R	040017	A	DAC	17	/YES,SET 17=RANDOM ADDRESS=1

04213	R	206025	R	LAC	HOLFLD	/RESTORE DATA
04214	R	044217	R	DAC	,+3	/TO BE LOADED
04215	R	060017	A	DAC*	17	/STORE THE ADDRESS IN THE ADDRESS,
04216	R	713000	A	ILD		
04217	R	740040	A	IT407 XX		/=TO THE EXTENDED ADDRESS,
04220	R	713600	A	IST		/CHECK THAT THE FPP15 LOADED
04221	R	000271	R	WK01		/THE N0,=TO IT'S OWN ADDRESS
04222	R	200271	R	LAC	WK01	
04223	R	246025	R	XOR	HOLFLD	
04224	R	105165	R	JMS	CHECK0	
04225	R	000060	A	60		/#60, LOAD ERROR FROM EXTENDED MEMORY,
04226	R	713000	A	ILD		/ILD K05:000000
04227	R	000046	R	K05		
04230	R	713000	A	ILD		/ILD INDIRECT LOC,
04231	R	404217	R	IT407+400000		
04232	R	713600	A	IST		/CHECK THAT THE FPP15 LOADED
04233	R	000271	R	WK01		/THE N0,=TO IT'S OWN ADDRESS,
04234	R	200271	R	LAC	WK01	
04235	R	246025	R	XOR	HOLFLD	
04236	R	105165	R	JMS	CHECK0	
04237	R	000061	A	61		/#61,LOAD INDIRECT ERROR FROM EXTENDED MEMORY,
/						
04240	R	105446	R	T410 JMS	TSTADR	
04241	R	205405	R	LAC	FIELD2	
04242	R	046025	R	DAC	HOLFLD	/TEMP, STORAGE
04243	R	546127	R	SAD	(-1	/IS FIELD 0 OF BLOCK 2 AVAILABLE?
04244	R	604274	R	JMP	T411	/NO,CHECK NEXT FIELD
04245	R	346127	R	TAD	(-1	
04246	R	040017	A	DAC	17	/YES,SET 17=RANDOM ADDRESS=1
04247	R	206025	R	LAC	HOLFLD	/RESTORE DATA
04250	R	044253	R	DAC	,+3	/TO BE LOADED
04251	R	060017	A	DAC*	17	/STORE THE ADDRESS IN THE ADDRESS,
04252	R	713000	A	ILD		
04253	R	740040	A	IT410 XX		/=TO THE EXTENDED ADDRESS,
04254	R	713600	A	IST		/CHECK THAT THE FPP15 LOADED
04255	R	000271	R	WK01		/THE N0,=TO IT'S OWN ADDRESS
04256	R	200271	R	LAC	WK01	
04257	R	246025	R	XOR	HOLFLD	
04260	R	105165	R	JMS	CHECK0	
04261	R	000060	A	60		/#60, LOAD ERROR FROM EXTENDED MEMORY,
04262	R	713000	A	ILD		/ILD K05:000000
04263	R	000046	R	K05		
04264	R	713000	A	ILD		/ILD INDIRECT LOC,
04265	R	404253	R	IT410+400000		
04266	R	713600	A	IST		/CHECK THAT THE FPP15 LOADED
04267	R	000271	R	WK01		/THE N0,=TO IT'S OWN ADDRESS,
04270	R	200271	R	LAC	WK01	
04271	R	246025	R	XOR	HOLFLD	
04272	R	105165	R	JMS	CHECK0	
04273	R	000061	A	61		/#61,LOAD INDIRECT ERROR FROM EXTENDED MEMORY,
/						
04274	R	105446	R	T411 JMS	TSTADR	
04275	R	205406	R	LAC	FIELD2+1	

04276	R	046025	R	DAC	HOLFLD	/TEMP, STORAGE
04277	R	546127	R	SAD	(-1	/IS FIELD 1 OF BLOCK 2 AVAILABLE?
04300	R	604331	R	JMP	T412	/NO,CHECK NEXT FIELD
04301	R	346127	R	TAD	(-1	
04302	R	040017	A	DAC	17	/YES,SET 17=RANDOM ADDRESS=1
04303	R	206025	R	LAC	HOLFLD	/RESTORE DATA
04304	R	044307	R	DAC	,+3	/TO BE LOADED
04305	R	060017	A	DAC*	17	/STORE THE ADDRESS IN THE ADDRESS,
04306	R	713000	A	ILD		
04307	R	740040	A	IT411 XX		/=TO THE EXTENDED ADDRESS,
04310	R	105155	R	JMS	STOREI	
04311	R	713600	A	IST		/CHECK THAT THE FPP15 LOADED
04312	R	406030	R	XWK01+400000		/THE NO,=TO IT'S OWN ADDRESS
04313	R	200271	R	LAC	WK01	
04314	R	246025	R	XOR	HOLFLD	
04315	R	105165	R	JMS	CHECK0	
04316	R	000062	A	62		/#62, STORE INDIRECT ERROR FROM EXT. MEMORY,
04317	R	713000	A	ILD		/ILD K05:000000
04320	R	000046	R	K05		
04321	R	713000	A	ILD		/ILD INDIRECT LOC,
04322	R	404307	R	IT411+400000		
04323	R	713600	A	IST		/CHECK THAT THE FPP15 LOADED
04324	R	000271	R	WK01		/THE NO,=TO IT'S OWN ADDRESS,
04325	R	200271	R	LAC	WK01	
04326	R	246025	R	XOR	HOLFLD	
04327	R	105165	R	JMS	CHECK0	
04330	R	000061	A	61		/#61,LOAD INDIRECT ERROR FROM EXTENDED MEMORY,
04331	R	105446	R	T412 JMS	TSTADR	
04332	R	205407	R	LAC	FIELD2+2	
04333	R	046025	R	DAC	HOLFLD	/TEMP, STORAGE
04334	R	546127	R	SAD	(-1	/IS FIELD 2 OF BLOCK 2 AVAILABLE?
04335	R	604365	R	JMP	T413	/NO,CHECK NEXT FIELD
04336	R	546127	R	SAD	(-1	
04337	R	040017	A	DAC	17	/YES,SET 17=RANDOM ADDRESS=1
04340	R	206025	R	LAC	HOLFLD	/RESTORE DATA
04341	R	044344	R	DAC	,+3	/TO BE LOADED
04342	R	060017	A	DAC*	17	/STORE THE ADDRESS IN THE ADDRESS,
04343	R	713000	A	ILD		
04344	R	740040	A	IT412 XX		/=TO THE EXTENDED ADDRESS,
04345	R	713600	A	IST		/CHECK THAT THE FPP15 LOADED
04346	R	000271	R	WK01		/THE NO,=TO IT'S OWN ADDRESS
04347	R	200271	R	LAC	WK01	
04350	R	246025	R	XOR	HOLFLD	
04351	R	105165	R	JMS	CHECK0	
04352	R	000060	A	60		/#60, LOAD ERROR FROM EXTENDED MEMORY,
04353	R	713000	A	ILD		/ILD K05:000000
04354	R	000046	R	K05		
04355	R	713000	A	ILD		/ILD INDIRECT LOC,
04356	R	404344	R	IT412+400000		
04357	R	713600	A	IST		/CHECK THAT THE FPP15 LOADED
04360	R	000271	R	WK01		/THE NO,=TO IT'S OWN ADDRESS,
04361	R	200271	R	LAC	WK01	

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04362 R 246025 R      XOR      HOLFLD
04363 R 105165 R      JMS      CHECK0
04364 R 000061 A      61              /#60,LOAD INDIRECT ERROR FROM EXTENDED MEMORY,

/
04365 R 105446 R      T413    JMS      TSTADR
04366 R 205410 R      LAC      FIELD2+3
04367 R 046025 R      DAC      HOLFLD
04370 R 546127 R      SAD      (=1
04371 R 604421 R      JMP      T414
04372 R 346127 R      TAD      (=1
04373 R 040017 A      DAC      17
04374 R 206025 R      LAC      HOLFLD
04375 R 044400 R      DAC      ,+3
04376 R 060017 A      DAC*    17
04377 R 713000 A      ILD
04400 R 740040 A      IT413  XX
04401 R 713600 A      IST
04402 R 000271 R      WK01
04403 R 200271 R      LAC      WK01
04404 R 246025 R      XOR      HOLFLD
04405 R 105165 R      JMS      CHECK0
04406 R 000060 A      60
04407 R 713000 A      ILD
04410 R 000046 R      K05
04411 R 713000 A      ILD
04412 R 404400 R      IT413+400000
04413 R 713600 A      IST
04414 R 000271 R      WK01
04415 R 200271 R      LAC      WK01
04416 R 246025 R      XOR      HOLFLD
04417 R 105165 R      JMS      CHECK0
04420 R 000061 A      61              /#61,LOAD INDIRECT ERROR FROM EXTENDED MEMORY,

/
04421 R 105446 R      T414    JMS      TSTADR
04422 R 205411 R      LAC      FIELD2+4
04423 R 046025 R      DAC      HOLFLD
04424 R 546127 R      SAD      (=1
04425 R 604456 R      JMP      T415
04426 R 346127 R      TAD      (=1
04427 R 040017 A      DAC      17
04430 R 206025 R      LAC      HOLFLD
04431 R 044434 R      DAC      ,+3
04432 R 060017 A      DAC*    17
04433 R 713000 A      ILD
04434 R 740040 A      IT414  XX
04435 R 105155 R      JMS      STOREI
04436 R 713600 A      IST
04437 R 406030 R      XWK01+400000
04440 R 200271 R      LAC      WK01
04441 R 246025 R      XOR      HOLFLD
04442 R 105165 R      JMS      CHECK0
04443 R 000062 A      62
04444 R 713000 A      ILD

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/TEMP, STORAGE
/IS FIELD 3 OF BLOCK 2 AVAILABLE?
/NO,CHECK NEXT FIELD
/YES,SET 17=RANDOM ADDRESS=1
/RESTORE DATA
/TO BE LOADED
/STORE THE ADDRESS IN THE ADDRESS,

/=TO THE EXTENDED ADDRESS,
/CHECK THAT THE FPP15 LOADED
/THE N0,=TO IT'S OWN ADDRESS

/#60, LOAD ERROR FROM EXTENDED MEMORY,
/ILD K05:000000

/ILD INDIRECT LOC,

/CHECK THAT THE FPP15 LOADED
/THE N0,=TO IT'S OWN ADDRESS,

/#61,LOAD INDIRECT ERROR FROM EXTENDED MEMORY,

/TEMP, STORAGE
/IS FIELD 4 OF BLOCK 2 AVAILABLE?
/NO,CHECK NEXT FIELD
/YES,SET 17=RANDOM ADDRESS=1
/RESTORE DATA
/TO BE LOADED
/STORE THE ADDRESS IN THE ADDRESS,

/=TO THE EXTENDED ADDRESS,

/CHECK THAT THE FPP15 LOADED
/THE N0,=TO IT'S OWN ADDRESS

/#62, STORE INDIRECT ERROR FROM EXT, MEMORY,
/ILD K05:000000

04445	R	000046	R		K05		
04446	R	713000	A		ILD		/ILD INDIRECT LOC.
04447	R	404434	R		IT414+400000		
04450	R	713600	A		IST		/CHECK THAT THE FPP15 LOADED
04451	R	000271	R		WK01		/THE N0,=TO IT'S OWN ADDRESS.
04452	R	200271	R		LAC	WK01	
04453	R	246025	R		XOR	H0LFLD	
04454	R	105165	R		JMS	CHECK0	
04455	R	000061	A		61		/#61,LOAD INDIRECT ERROR FROM EXTENDED MEMORY.
/							
04456	R	105446	R	T415	JMS	TSTADR	
04457	R	205412	R		LAC	FIELD2+5	
04460	R	046025	R		DAC	H0LFLD	/TEMP, STORAGE
04461	R	546127	R		SAD	(-1	/IS FIELD 5 OF BLOCK 2 AVAILABLE?
04462	R	604512	R		JMP	T416	/NO,CHECK NEXT FIELD
04463	R	346127	R		TAD	(-1	
04464	R	040017	A		DAC	17	/YES,SET 17=RANDOM ADDRESS=1
04465	R	206025	R		LAC	H0LFLD	/RESTORE DATA
04466	R	044471	R		DAC	,+3	/TO BE LOADED
04467	R	060017	A		DAC*	17	/STORE THE ADDRESS IN THE ADDRESS.
04470	R	713000	A		ILD		
04471	R	740040	A	IT415	XX		/=TO THE EXTENDED ADDRESS,
04472	R	713600	A		IST		/CHECK THAT THE FPP15 LOADED
04473	R	000271	R		WK01		/THE N0,=TO IT'S OWN ADDRESS
04474	R	200271	R		LAC	WK01	
04475	R	246025	R		XOR	H0LFLD	
04476	R	105165	R		JMS	CHECK0	
04477	R	000060	A		60		/#60, LOAD ERROR FROM EXTENDED MEMORY,
04500	R	713000	A		ILD		/ILD K05:000000
04501	R	000046	R		K05		
04502	R	713000	A		ILD		/ILD INDIRECT LOC.
04503	R	404471	R		IT415+400000		
04504	R	713600	A		IST		/CHECK THAT THE FPP15 LOADED
04505	R	000271	R		WK01		/THE N0,=TO IT'S OWN ADDRESS.
04506	R	200271	R		LAC	WK01	
04507	R	246025	R		XOR	H0LFLD	
04510	R	105165	R		JMS	CHECK0	
04511	R	000061	A		61		/#61,LOAD INDIRECT ERROR FROM EXTENDED MEMORY.
/							
04512	R	105446	R	T416	JMS	TSTADR	
04513	R	205413	R		LAC	FIELD2+6	
04514	R	046025	R		DAC	H0LFLD	/TEMP, STORAGE
04515	R	546127	R		SAD	(-1	/IS FIELD 6 OF BLOCK 2 AVAILABLE?
04516	R	604546	R		JMP	T417	/NO,CHECK NEXT FIELD
04517	R	346127	R		TAD	(-1	
04520	R	040017	A		DAC	17	/YES,SET 17=RANDOM ADDRESS=1
04521	R	206025	R		LAC	H0LFLD	/RESTORE DATA
04522	R	044525	R		DAC	,+3	/TO BE LOADED
04523	R	060017	A		DAC*	17	/STORE THE ADDRESS IN THE ADDRESS.
04524	R	713000	A		ILD		
04525	R	740040	A	IT416	XX		/=TO THE EXTENDED ADDRESS,
04526	R	713600	A		IST		/CHECK THAT THE FPP15 LOADED
04527	R	000271	R		WK01		/THE N0,=TO IT'S OWN ADDRESS

04530	R	200271	R	LAC	WK01		
04531	R	246025	R	XOR	HOLFLD		
04532	R	105165	R	JMS	CHECK0		
04533	R	000060	A	60			/#60, LOAD ERROR FROM EXTENDED MEMORY,
04534	R	713000	A	ILD			/ILD K05:000000
04535	R	000046	R	K05			
04536	R	713000	A	ILD			/ILD INDIRECT LOC,
04537	R	404525	R	IT416+400000			
04540	R	713600	A	IST			/CHECK THAT THE FPP15 LOADED
04541	R	000271	R	WK01			/THE N0,=TO IT'S OWN ADDRESS,
04542	R	200271	R	LAC	WK01		
04543	R	246025	R	XOR	HOLFLD		
04544	R	105165	R	JMS	CHECK0		
04545	R	000061	A	61			/#61,LOAD INDIRECT ERROR FROM EXTENDED MEMORY,
04546	R	105446	R	T417 JMS	TSTADR		
04547	R	205414	R	LAC	FIELD2+7		
04550	R	046025	R	DAC	HOLFLD		/TEMP, STORAGE
04551	R	546127	R	SAD	(=1		/IS FIELD 7 OF BLOCK 2 AVAILABLE?
04552	R	604602	R	JMP	T420		/NO,CHECK NEXT FIELD
04553	R	346127	R	TAD	(=1		
04554	R	040017	A	DAC	17		/YES,SET 17=RANDOM ADDRESS=1
04555	R	206025	R	LAC	HOLFLD		/RESTORE DATA
04556	R	044561	R	DAC	,+3		/TO BE LOADED
04557	R	060017	A	DAC*	17		/STORE THE ADDRESS IN THE ADDRESS,
04560	R	713000	A	ILD			
04561	R	740040	A	IT417 XX			/=TO THE EXTENDED ADDRESS,
04562	R	713600	A	IST			/CHECK THAT THE FPP15 LOADED
04563	R	000271	R	WK01			/THE N0,=TO IT'S OWN ADDRESS
04564	R	200271	R	LAC	WK01		
04565	R	246025	R	XOR	HOLFLD		
04566	R	105165	R	JMS	CHECK0		
04567	R	000060	A	60			/#60, LOAD ERROR FROM EXTENDED MEMORY,
04570	R	713000	A	ILD			/ILD K05:000000
04571	R	000046	R	K05			
04572	R	713000	A	ILD			/ILD INDIRECT LOC,
04573	R	404561	R	IT417+400000			
04574	R	713600	A	IST			/CHECK THAT THE FPP15 LOADED
04575	R	000271	R	WK01			/THE N0,=TO IT'S OWN ADDRESS,
04576	R	200271	R	LAC	WK01		
04577	R	246025	R	XOR	HOLFLD		
04600	R	105165	R	JMS	CHECK0		
04601	R	000061	A	61			/#61,LOAD INDIRECT ERROR FROM EXTENDED MEMORY,
04602	R	105446	R	T420 JMS	TSTADR		
04603	R	205415	R	LAC	FIELD3		
04604	R	046025	R	DAC	HOLFLD		/TEMP, STORAGE
04605	R	546127	R	SAD	(=1		/IS FIELD 0 OF BLOCK 3 AVAILABLE?
04606	R	604636	R	JMP	T421		/NO,CHECK NEXT FIELD
04607	R	346127	R	TAD	(=1		
04610	R	040017	A	DAC	17		/YES,SET 17=RANDOM ADDRESS=1
04611	R	206025	R	LAC	HOLFLD		/RESTORE DATA
04612	R	044615	R	DAC	,+3		/TO BE LOADED

04613	R	060017	A		DAC*	17		/STORE THE ADDRESS IN THE ADDRESS,
04614	R	713000	A		ILD			
04615	R	740040	A	IT420	XX			/=TO THE EXTENDED ADDRESS,
04616	R	713600	A		IST			/CHECK THAT THE FPP15 LOADED
04617	R	000271	R		WK01			/THE N0,=TO IT'S OWN ADDRESS
04620	R	200271	R		LAC	WK01		
04621	R	246025	R		XOR	HOLFLD		
04622	R	105165	R		JMS	CHECK0		
04623	R	000060	A		60			/#60, LOAD ERROR FROM EXTENDED MEMORY,
04624	R	713000	A		ILD			/ILD K05:000000
04625	R	000046	R		K05			
04626	R	713000	A		ILD			/ILD INDIRECT LOC,
04627	R	404615	R		IT420+400000			
04630	R	713600	A		IST			/CHECK THAT THE FPP15 LOADED
04631	R	000271	R		WK01			/THE N0,=TO IT'S OWN ADDRESS,
04632	R	200271	R		LAC	WK01		
04633	R	246025	R		XOR	HOLFLD		
04634	R	105165	R		JMS	CHECK0		
04635	R	000061	A		61			/#61,LOAD INDIRECT ERROR FROM EXTENDED MEMORY,
04636	R	105446	R	/				
04637	R	205416	R	T421	JMS	TSTADR		
04640	R	046025	R		LAC	FIELD3+1		
04641	R	546127	R		DAC	HOLFLD		/TEMP, STORAGE
04642	R	604673	R		SAD	(=1		/IS FIELD 1 OF BLOCK 3 AVAILABLE?
04643	R	346127	R		JMP	T422		/NO,CHECK NEXT FIELD
04644	R	040017	A		TAD	(=1		
04645	R	206025	R		DAC	17		/YES,SET 17=RANDOM ADDRESS=1
04646	R	044651	R		LAC	HOLFLD		/RESTORE DATA
04647	R	060017	A		DAC	,+3		/TO BE LOADED
04650	R	713000	A		DAC*	17		/STORE THE ADDRESS IN THE ADDRESS,
04651	R	740040	A	IT421	ILD			/=TO THE EXTENDED ADDRESS,
04652	R	105155	R		XX			
04653	R	713600	A		JMS	STORE1		
04654	R	406030	R		IST			/CHECK THAT THE FPP15 LOADED
04655	R	200271	R		XWK01+400000			/THE N0,=TO IT'S OWN ADDRESS
04656	R	246025	R		LAC	WK01		
04657	R	105165	R		XOR	HOLFLD		
04660	R	000062	A		JMS	CHECK0		
04661	R	713000	A		62			/#62, STORE INDIRECT ERROR FROM EXT, MEMORY,
04662	R	000046	R		ILD			/ILD K05:000000
04663	R	713000	A		K05			
04664	R	404651	R		ILD			/ILD INDIRECT LOC,
04665	R	713600	A		IT421+400000			
04666	R	000271	R		IST			/CHECK THAT THE FPP15 LOADED
04667	R	200271	R		WK01			/THE N0,=TO IT'S OWN ADDRESS,
04670	R	246025	R		LAC	WK01		
04671	R	105165	R		XOR	HOLFLD		
04672	R	000061	A		JMS	CHECK0		
					61			/#61,LOAD INDIRECT ERROR FROM EXTENDED MEMORY,
04673	R	105446	R	/				
04674	R	205417	R	T422	JMS	TSTADR		
04675	R	046025	R		LAC	FIELD3+2		
					DAC	HOLFLD		/TEMP, STORAGE

04676 R 546127 R	SAD	(=1	/IS FIELD 2 OF BLOCK 3 AVAILABLE?
04677 R 604727 R	JMP	T423	/NO,CHECK NEXT FIELD
04700 R 346127 R	TAD	(=1	
04701 R 040017 A	DAC	17	/YES,SET 17=RANDOM ADDRESS=1
04702 R 206025 R	LAC	HQLFLD	/RESTORE DATA
04703 R 044706 R	DAC	,+3	/TO BE LOADED
04704 R 060017 A	DAC*	17	/STORE THE ADDRESS IN THE ADDRESS,
04705 R 713000 A	ILD		
04706 R 740040 A	IT422 XX		/=TO THE EXTENDED ADDRESS,
04707 R 713600 A	IST		/CHECK THAT THE FPP15 LOADED
04710 R 000271 R	WK01		/THE N0,=TO IT'S OWN ADDRESS
04711 R 200271 R	LAC	WK01	
04712 R 246025 R	XOR	HQLFLD	
04713 R 105165 R	JMS	CHECK0	
04714 R 000060 A	60		/#60, LOAD ERROR FROM EXTENDED MEMORY,
04715 R 713000 A	ILD		/ILD K05:000000
04716 R 000046 R	K05		
04717 R 713000 A	ILD		/ILD INDIRECT LOC,
04720 R 404706 R	IT422+400000		
04721 R 713600 A	IST		/CHECK THAT THE FPP15 LOADED
04722 R 000271 R	WK01		/THE N0,=TO IT'S OWN ADDRESS,
04723 R 200271 R	LAC	WK01	
04724 R 246025 R	XOR	HQLFLD	
04725 R 105165 R	JMS	CHECK0	
04726 R 000061 A	61		/#61,LOAD INDIRECT ERROR FROM EXTENDED MEMORY,
04727 R 105446 R	T423 JMS	TSTADR	
04730 R 205420 R	LAC	FIELDS+3	
04731 R 046025 R	DAC	HQLFLD	/TEMP, STORAGE
04732 R 546127 R	SAD	(=1	/IS FIELD 3 OF BLOCK 3 AVAILABLE?
04733 R 604763 R	JMP	T424	/NO,CHECK NEXT FIELD
04734 R 346127 R	TAD	(=1	
04735 R 040017 A	DAC	17	/YES,SET 17=RANDOM ADDRESS=1
04736 R 206025 R	LAC	HQLFLD	/RESTORE DATA
04737 R 044742 R	DAC	,+3	/TO BE LOADED
04740 R 060017 A	DAC*	17	/STORE THE ADDRESS IN THE ADDRESS,
04741 R 713000 A	ILD		
04742 R 740040 A	IT423 XX		/=TO THE EXTENDED ADDRESS,
04743 R 713600 A	IST		/CHECK THAT THE FPP15 LOADED
04744 R 000271 R	WK01		/THE N0,=TO IT'S OWN ADDRESS
04745 R 200271 R	LAC	WK01	
04746 R 246025 R	XOR	HQLFLD	
04747 R 105165 R	JMS	CHECK0	
04750 R 000060 A	60		/#60, LOAD ERROR FROM EXTENDED MEMORY,
04751 R 713000 A	ILD		/ILD K05:000000
04752 R 000046 R	K05		
04753 R 713000 A	ILD		/ILD INDIRECT LOC,
04754 R 404742 R	IT423+400000		
04755 R 713600 A	IST		/CHECK THAT THE FPP15 LOADED
04756 R 000271 R	WK01		/THE N0,=TO IT'S OWN ADDRESS,
04757 R 200271 R	LAC	WK01	
04760 R 246025 R	XOR	HQLFLD	
04761 R 105165 R	JMS	CHECK0	

```

04762 R 000061 A          61          /#61,LOAD INDIRECT ERROR FROM EXTENDED MEMORY,
/
04763 R 105446 R          T424      JMS      TSTADR
04764 R 205421 R          LAC      FIELD3+4
04765 R 046025 R          DAC      HOLFLD
04766 R 546127 R          SAD      (=1
04767 R 605017 R          JMP      T425
04770 R 346127 R          TAD      (=1
04771 R 040017 A          DAC      17
04772 R 206025 R          LAC      HOLFLD
04773 R 044776 R          DAC      ,+3
04774 R 060017 A          DAC*   17
04775 R 713000 A          ILD
04776 R 740040 A          IT424  XX
04777 R 713600 A          IST
05000 R 000271 R          WK01
05001 R 200271 R          LAC      WK01
05002 R 246025 R          XOR      HOLFLD
05003 R 105165 R          JMS      CHECK0
05004 R 000060 A          60
05005 R 713000 A          ILD
05006 R 000046 R          K05
05007 R 713000 A          ILD
05010 R 404776 R          IT424+400000
05011 R 713600 A          IST
05012 R 000271 R          WK01
05013 R 200271 R          LAC      WK01
05014 R 246025 R          XOR      HOLFLD
05015 R 105165 R          JMS      CHECK0
05016 R 000061 A          61          /#61,LOAD INDIRECT ERROR FROM EXTENDED MEMORY,
/
05017 R 105446 R          T425      JMS      TSTADR
05020 R 205422 R          LAC      FIELD3+5
05021 R 046025 R          DAC      HOLFLD
05022 R 546127 R          SAD      (=1
05023 R 605053 R          JMP      T426
05024 R 346127 R          TAD      (=1
05025 R 040017 A          DAC      17
05026 R 206025 R          LAC      HOLFLD
05027 R 045032 R          DAC      ,+3
05030 R 060017 A          DAC*   17
05031 R 713000 A          ILD
05032 R 740040 A          IT425  XX
05033 R 713600 A          IST
05034 R 000271 R          WK01
05035 R 200271 R          LAC      WK01
05036 R 246025 R          XOR      HOLFLD
05037 R 105165 R          JMS      CHECK0
05040 R 000060 A          60
05041 R 713000 A          ILD
05042 R 000046 R          K05
05043 R 713000 A          ILD
05044 R 405032 R          IT425+400000

```

```

05045 R 713000 A          IST          /CHECK THAT THE FPP15 LOADED
05046 R 000271 R          WK01         /THE N0,=TO IT'S OWN ADDRESS,
05047 R 200271 R          LAC          WK01
05050 R 246025 R          XOR          HOLFLD
05051 R 105165 R          JMS          CHECK0
05052 R 000061 A          61          /#61,LOAD INDIRECT ERROR FROM EXTENDED MEMORY,

05053 R 105446 R          T426        JMS          TSTADR
05054 R 205423 R          LAC          FIELDS+6
05055 R 046025 R          DAC          HOLFLD /TEMP. STORAGE
05056 R 546127 R          SAD          (=1   /IS FIELD 6 OF BLOCK 3 AVAILABLE?
05057 R 605107 R          JMP          T427 /NO,CHECK NEXT FIELD
05060 R 346127 R          TAD          (=1
05061 R 040017 A          DAC          17   /YES,SET 17=RANDOM ADDRESS=1
05062 R 206025 R          LAC          HOLFLD /RESTORE DATA
05063 R 045066 R          DAC          ,+3  /TO BE LOADED
05064 R 060017 A          DAC*         17   /STORE THE ADDRESS IN THE ADDRESS,
05065 R 713000 A          IT426      ILD
05066 R 740040 A          XX          /=TO THE EXTENDED ADDRESS,
05067 R 713600 A          IST          /CHECK THAT THE FPP15 LOADED
05070 R 000271 R          WK01         /THE N0,=TO IT'S OWN ADDRESS
05071 R 200271 R          LAC          WK01
05072 R 246025 R          XOR          HOLFLD
05073 R 105165 R          JMS          CHECK0
05074 R 000060 A          60          /#60, LOAD ERROR FROM EXTENDED MEMORY,
05075 R 713000 A          ILD          /ILD K05:000000
05076 R 000046 R          K05
05077 R 713000 A          ILD          /ILD INDIRECT LOC,
05100 R 405066 R          IT426+400000
05101 R 713600 A          IST          /CHECK THAT THE FPP15 LOADED
05102 R 000271 R          WK01         /THE N0,=TO IT'S OWN ADDRESS,
05103 R 200271 R          LAC          WK01
05104 R 246025 R          XOR          HOLFLD
05105 R 105165 R          JMS          CHECK0
05106 R 000061 A          61          /#61,LOAD INDIRECT ERROR FROM EXTENDED MEMORY,
          ,EJECT

```

05107	R	105446	R	T427	JMS	TSTADR		
05110	R	205424	R		LAC	FIELDS+7		
05111	R	046025	R		DAC	HQLFLD		/TEMP, STORAGE
05112	R	546127	R		SAD	(=1		/IS FIELD 7 OF BLOCK 3 AVAILBLE?
05113	R	605143	R		JMP	T430		/NO,CHECK NEXT FIELD
05114	R	346127	R		TAD	(=1		
05115	R	040017	A		DAC	17		/YES,SET 17=RANDOM ADDRESS=1
05116	R	206025	R		LAC	HQLFLD		/RESTORE DATA
05117	R	045122	R		DAC	,*3		/TO BE LOADED,
05120	R	060017	A		DAC*	17		/STORE THE ADDRESS IN THE ADDRESS,
05121	R	713000	A		ILD			
05122	R	740040	A	IT427	XX			/=TO THE EXTENDED ADDRESS,
05123	R	713600	A		IST			/CHECK THAT THE FPP15 LOADED
05124	R	000271	R		WK01			/THE NO,=TO IT'S OWN ADDRESS
05125	R	200271	R		LAC	WK01		
05126	R	246025	R		XOR	HQLFLD		
05127	R	105165	R		JMS	CHECK0		
05130	R	000060	A		60			/#60, LOAD ERROR FROM EXTENDED MEMORY,
05131	R	713000	A		ILD			/ILD K05:000000
05132	R	000046	R		K05			
05133	R	713000	A		ILD			/ILD INDIRECT LOC,
05134	R	405122	R		IT427+400000			
05135	R	713600	A		IST			/CHECK THAT THE FPP15 LOADED
05136	R	000271	R		WK01			/THE NO,=TO IT'S OWN ADDRESS,
05137	R	200271	R		LAC	WK01		
05140	R	246025	R		XOR	HQLFLD		
05141	R	105165	R		JMS	CHECK0		
05142	R	000061	A		61			/#61,LOAD INDIRECT ERROR FROM EXTENDED MEMORY,
05143	R	446027	R	T430	/			
05144	R	741000	A		ISZ	PGML0P		/INCREMENT PROGRAM LOOP CNTR,
05145	R	605522	R		SKP			
05146	R	206037	R		JMP	EXITM4		/TEST COMPLETE
05147	R	040335	R		LAC	(T001		
05150	R	605517	R		DAC	DSTSW0		
					JMP	EXITM5		
					,EJECT			

/ROUTINE TO SET UP AND ADDRESS TO TEST THE LOAD 'INDIRECT'
/FEATURE OF THE FP15.

05151 R 000000 A
05152 R 445151 R
05153 R 105155 R
05154 R 625151 R

LOADI 0
ISZ LOADI
JMS STOREI
JMP* LOADI

/ROUTINE TO SET UP AN ADDRESS TO TEST THE STORE 'INDIRECT'
/FEATURE OF THE FP15.

05155 R 000000 A
05156 R 206130 R
05157 R 046030 R
05160 R 206131 R
05161 R 046031 R
05162 R 206132 R
05163 R 046032 R
05164 R 625155 R

STOREI 0
LAC (WK01
DAC XWK01
LAC (WK02
DAC XWK02
LAC (WK03
DAC XWK03
JMP* STOREI

/COMMON SERVICE ROUTINE FOR ALL 'FPP15' TESTS, THE CONTENTS OF
/THE 'AC' SHOULD BE '0' FOR ALL TESTS WHEN THE ROUTINE IS ENTERED,
/ROUTINE ALSO INCREMENTS THE PASS COUNTER AND CHECKS FOR THE 'HOLDSW'.

05165 R 000000 A
05166 R 046014 R
05167 R 205165 R
05170 R 506133 R
05171 R 046016 R
05172 R 346134 R
05173 R 046013 R
05174 R 506135 R
05175 R 046017 R
05176 R 226013 R
05177 R 506136 R
05200 R 546137 R
05201 R 741000 A
05202 R 605207 R
05203 R 146015 R
05204 R 206014 R
05205 R 046013 R
05206 R 605226 R

CHECK0 0
DAC TEMP2 /SAVE 'AC'.
LAC CHECK0
AND (77777)
DAC TEMP4 /SAVE ADDRESS OF FAILURE.
TAD (=2
DAC TEMP1
AND (70000) /MASK FIELD BIT.
DAC TEMP5
LAC# TEMP1
AND (740000) /MASK MNEUMONIC
SAD (200000) /=TO 'LAC' ?
SKP /YES, DECODE BAD DATA,
JMP DECXOR /NO, DECODE GOOD&BAD DATA.
DZM TEMP3 /GOOD DATA =TO '0'.
LAC TEMP2 /RESTORE 'AC'
DAC TEMP1 /SAVE 'BAD' DATA.
JMP CHECK1
.EJECT

```

05207 R 226013 R DEEXOR LAC* TEMP1
05210 R 506140 R AND (7777 /GET ADDRESS OF GOOD DATA,
05211 R 346017 R TAD TEMP5 /ADD FIELD BITS,
05212 R 046015 R DAC TEMP3 /SAVE IT
05213 R 226015 R LAC* TEMP3
05214 R 046015 R DAC TEMP3 /SAVE GOOD DATA,
05215 R 206013 R LAC TEMP1
05216 R 346127 R TAD (-1
05217 R 046013 R DAC TEMP1
05220 R 226013 R LAC* TEMP1
05221 R 506140 R AND (7777 /MASK OUT ADDRESS
05222 R 346017 R TAD TEMP5 /ADD FIELD BITS,
05223 R 046013 R DAC TEMP1
05224 R 226013 R LAC* TEMP1
05225 R 046013 R DAC TEMP1 /SAVE BAD DATA,
05226 R 225165 R CHECK1 LAC* CHECK0 /GET THE ERROR CODE NO,
05227 R 506141 R AND (777600 /MASK OUT CODE NO,
05230 R 740200 A SZL /IS THE NEXT WORD THE CODE NO,?
05231 R 605235 R JMP CHKERR /NO, DON'T UPDATE ERROE CODE,
05232 R 225165 R LAC* CHECK0
05233 R 046011 R DAC ERRNO /YES, UPDATE THE ERROR CODE,
05234 R 445165 R ISZ CHECK0 /SET UP TO EXIT
05235 R 206014 R CHKERR LAC TEMP2 /RESTORE 'AC'
05236 R 740200 A SZL /IS 'AC' 0?
05237 R 105603 R JMS ERROR /REPORT ERROR
05240 R 105465 R JMS HOLDSW /CHECK FOR THE HOLD SWITCH,
05241 R 206026 R LAC ERLOOP
05242 R 741200 A SNA /IS TEST IN ERROR LOOP?
05243 R 605246 R JMP ,+3 /NO, CONTINUE
05244 R 040335 R DAC DSTSW0 /YES, SET UP TO LOOP TEST
05245 R 605517 R JMP EXITM5
05246 R 446023 R ISZ PASCNT /INCREMENT THE PASS COUNTER
05247 R 625165 R JMP* CHECK0
05250 R 777730 A LAW -50
05251 R 046023 R DAC PASCNT /RESET COUNTER
05252 R 105502 R JMS PCNEXT /EXIT !=5!
05253 R 625165 R JMP* CHECK0 /RESUME TESTING
/
.EJECT

```

/CHECK BIT 2 OF USERSW TO SEE IF ERROR LOOPING
 /IS REQUESTED, IF SO, EXAMINE USERSW+3 FOR THE
 /ADDRESS OF THE FAILING TEST TO BE LOOPED,

```

05254 R 000000 A      CKLOOP /
05255 R 146026 R      DZM      ERLOOP      /CLEAR ERROR LOOP SWITCH
05256 R 200000 R      LAC      USERSW
05257 R 506044 R      AND      (100000      /MASK OUT BIT 2
05260 R 741200 A      SNA
05261 R 625254 R      JMP*     CKLOOP      /IS BIT 2 SET?
05262 R 200003 R      LAC      USERSW+3      /NO, EXIT
05263 R 741200 A      SNA
05264 R 625254 R      JMP*     CKLOOP      /HAS AN ERROR LOOP ADDRESS BEEN SET?
05265 R 040335 R      DAC      DSTSW0      /NO, EXIT
05266 R 046026 R      DAC      ERLOOP      /SET DISTRIBUTION SWITCH
05267 R 625254 R      JMP*     CKLOOP      /SET LOOP SWITCH

```

/EXAMINE LOCATION 'USERSW+1' AND '+2' FOR THE PRESENTS
 /OF EXTENDED MEMORY FIELDS,

```

05270 R 000000 A      CKFIELD /
05271 R 105352 R      JMS      CLRFLD      /CLEAR FIELD TABLE
05272 R 200001 R      LAC      USERSW+1
05273 R 046013 R      DAC      TEMP1
05274 R 741200 A      SNA
05275 R 605311 R      JMP      CKFLD3      /IS BLOCK 1 OR 2 AVAILABLE?
05276 R 206044 R      LAC      (100000      /NO, CHECK FOR BLOCK 3
05277 R 046020 R      DAC      BLOCK      /YES
05300 R 206142 R      LAC      (FIELD01
05301 R 105320 R      JMS      SETFLD
05302 R 200001 R      LAC      USERSW+1      /SET UP BLOCK1
05303 R 742030 A      SWHA
05304 R 046013 R      DAC      TEMP1
05305 R 206137 R      LAC      (200000
05306 R 046020 R      DAC      BLOCK
05307 R 206143 R      LAC      (FIELD2
05310 R 105320 R      JMS      SETFLD      /SET UP BLOCK 2
05311 R 200003 R      CKFLD3 LAC      USERSW+3
05312 R 046013 R      DAC      TEMP1
05313 R 206144 R      LAC      (300000
05314 R 046020 R      DAC      BLOCK
05315 R 206145 R      LAC      (FIELD3
05316 R 105320 R      JMS      SETFLD      /SET UP BLOCK 3
05317 R 625270 R      JMP*     CKFIELD

```

/EJECT


```

05320 R 000000 A SETFLD 0
05321 R 046014 R DAC TEMP2 /SAVE 'FIELD' ADDRESS
05322 R 777770 A LAW -10
05323 R 046015 R DAC TEMP3
05324 R 206146 R LAC (FLDTAB
05325 R 046016 R DAC TEMP4
05326 R 206013 R SETFL1 LAC TEMP1
05327 R 740100 A SMA /IS FIELD
05330 R 605342 R JMP STEPPD /NO, CHECK NEXT FIELD
05331 R 226016 R LAC* TEMP4 /YES, GET FIELD BITS
05332 R 346020 R TAD BLOCK /ADD BLOCK BITS
05333 R 046017 R DAC TEMP5
05334 R 105425 R JMS RANGEN
05335 R 741200 A SNA
05336 R 605334 R JMP ,=2
05337 R 506140 R AND (7777
05340 R 346017 R TAD TEMP5
05341 R 066014 R DAC* TEMP2
05342 R 206013 R STEPPD LAC TEMP1
05343 R 744010 A CLLRAL
05344 R 046013 R DAC TEMP1
05345 R 446014 R ISZ TEMP2
05346 R 446016 R ISZ TEMP4
05347 R 446015 R ISZ TEMP3
05350 R 605326 R JMP SETFL1
05351 R 625320 R JMP* SETFLD
/
05352 R 000000 A CLRFLD 0
05353 R 206142 R LAC (FIELD1
05354 R 046013 R DAC TEMP1
05355 R 777750 A LAW -30
05356 R 046014 R DAC TEMP2
05357 R 777777 A LAW -1
05360 R 066013 R DAC* TEMP1
05361 R 446013 R ISZ TEMP1
05362 R 446014 R ISZ TEMP2
05363 R 605360 R JMP ,=3
05364 R 625352 R JMP* CLRFLD
/
05365 R 000000 A FLDTAB 00000 /FIELD '0'
05366 R 010000 A 10000 /FIELD '1'
05367 R 020000 A 20000 /FIELD '2'
05370 R 030000 A 30000 /FIELD '3'
05371 R 040000 A 40000 /FIELD '4'
05372 R 050000 A 50000 /FIELD '5'
05373 R 060000 A 60000 /FIELD '6'
05374 R 070000 A 70000 /FIELD '7'
05375 R A FIELD1 ,BLOCK 10 /STORAGE OF BLOCK1'S FIELDS
05405 R A FIELD2 ,BLOCK 10
05415 R A FIELD3 ,BLOCK 10
,EJECT

```

/RANDOM NUMBER GENERATOR, EXIT WITH NO, IN A.C.

```

05425 R 000000 A   RANGEN /
05426 R 340000 A   TAD      0
05427 R 346033 R   TAD      RANA
05430 R 346034 R   TAD      RANB
05431 R 346035 R   TAD      RANC
05432 R 046033 R   DAC      RANA
05433 R 750010 A   GLK
05434 R 346033 R   TAD      RANA
05435 R 346034 R   TAD      RANB
05436 R 346035 R   TAD      RANC
05437 R 046034 R   DAC      RANB
05440 R 750010 A   GLK
05441 R 346033 R   TAD      RANA
05442 R 346034 R   TAD      RANB
05443 R 346035 R   TAD      RANC
05444 R 046035 R   DAC      RANC
05445 R 625425 R   JMP*    RANGEN

```

/SET UP THE PC FOR AN ERROR LOOP ADDRESS FOR ANY TEST,

```

05446 R 000000 A   TSTADR /
05447 R 740000 A   NOP
05450 R 740000 A   NOP
05451 R 625446 R   JMP*    TSTADR

```

/SUBROUTINE TO TEST FOR NAY FPP15 BRANCH
/INSTRUCTION TO BRANCH, ENTERED WITH THE BRANCH
/IOT IN THE 'AC',

```

05452 R 000000 A   BRANCH /
05453 R 045454 R   DAC      ,+1           /STORE 'BRANCH' INSTRUCTION,
05454 R 740040 A   XX                /EXECUTE 'BRANCH',
05455 R 005457 R   ,+2                /SHOULD BRANCH TO EXIT
05456 R 105536 R   JMS      ERROR2     /'BRANCH' FAILED
05457 R 625452 R   JMP*    BRANCH

```

/SUBROUTINE TO TEST FOR A 'NO' BRANCH CONDITION,
/ENTERED WITH THE BRANCH IOT IN THE 'AC',

```

05460 R 000000 A   NOBRCH /
05461 R 045462 R   DAC      ,+1           /STORE BRANCH 'IOT',
05462 R 740040 A   XX
05463 R 005561 R   ERROR3           /'ILLEGAL' BRANCH
05464 R 625460 R   JMP*    NOBRCH     /'OK' NO BRANCH OCCURED

```

/
 ,EJECT

/TEST FOR DATA 'SW10' WHICH INHIBITS THE 'FPP15' TEST,

```

05465 R 000000 A   HOLDSW 0
05466 R 750004 A     LAC     SAS
05467 R 500010 R     AND     USERSW+10           /DATA 'SW10'
05470 R 741200 A     SNA
05471 R 625465 R     JMP*    HOLDSW           /IS SWITCH SET?
05472 R 200335 R     LAC     DSTSW0           /NO, EXIT
05473 R 046024 R     DAC     SAVDST           /SAVE DSTSW0
05474 R 206147 R     LAC     (HOLD,1           /YES, HALT PROGRAM
05475 R 040335 R     DAC     DSTSW0
05476 R 605517 R     JMP     EXITM5           /EXIT '5'
05477 R 206024 R   HOLD,1 LAC     SAVDST
05500 R 040335 R     DAC     DSTSW0           /RESTORE RETURN ADDRESS
05501 R 605466 R     JMP     HOLDSW+1         /RETEST SWITCH

```

/SUBROUTINE TO UPDATE "DSTSW0" ON EXITING

```

05502 R 000000 A   PCNEXT 0
05503 R 205502 R     LAC     PCNEXT
05504 R 040335 R     DAC     DSTSW0
05505 R 605517 R     JMP     EXITM5

```

/RE-SET 'DSTSW0' TO CONTINUE AFTER TYPING ERROR,

```

05506 R 000000 A   EXTERR 0
05507 R 200335 R     LAC     DSTSW0
05510 R 046036 R     DAC     SAVADR#
05511 R 206150 R     LAC     (,+3
05512 R 040335 R     DAC     DSTSW0
05513 R 620324 R     JMP*    SERVICE
05514 R 206036 R     LAC     SAVADR
05515 R 040335 R     DAC     DSTSW0
05516 R 625506 R     JMP*    EXTERR

```

/SUBROUTINE TO EXIT '5',

```

05517 R 777773 A   EXITM5 LAW     =5
05520 R 040020 R     DAC     SYSERR
05521 R 620324 R     JMP*    SERVICE

```

/SETUP TO TYPE 'DONE',

```

05522 R 777774 A   EXITM4 LAW     =4
05523 R 040020 R     DAC     SYSERR
05524 R 140021 R     OZM    SYSERR+1
05525 R 140022 R     OZM    SYSERR+2
05526 R 620324 R     JMP*    SERVICE

```

/ERROR1, FP15 CONFIGURATION NOT PRESENT

```

05527 R 777777 A   ERROR1 LAW     =1
05530 R 040020 R     DAC     SYSERR
05531 R 206151 R     LAC     (1           /ERROR CODE
05532 R 040022 R     DAC     ERCODE
05533 R 777777 A     LAW     =1
05534 R 040021 R     DAC     ERCODE-1
05535 R 620324 R     JMP*    SERVICE

```

,EJECT

```

/*****
/ERROR FORMAT FOR ERRORS 2,3 AS FOLLOWS:
/
/FPP15  ERCODE(2,3)    BR=IOT  (FMA)
/*****
/ERROR2, NO BRANCH WITH CONDITIONS SET

```

```

05536 R 000000 A
05537 R 777776 A
05540 R 040020 R
05541 R 206152 R
05542 R 040022 R
05543 R 777775 A
05544 R 040021 R
05545 R 205454 R
05546 R 040023 R
05547 R 713600 A
05550 R 006022 R
05551 R 206022 R
05552 R 040024 R
05553 R 105506 R
05554 R 206026 R
05555 R 741200 A
05556 R 625536 R
05557 R 040335 R
05560 R 626026 R

```

```

ERROR2 0
LAW      =2
DAC      SYSERR
LAC      (2
DAC      ERCODE      /ERROR2
LAW      =3
DAC      ERCODE=1
LAC      NOBRCH+2
DAC      ERCODE+1    /SAVE 'BRANCH' IOT
IST
RESULT   /STORE 'FMA'
LAC      RESULT
DAC      ERCODE+2    /=TO 'FMA'
JMS      EXTERR
LAC      ERLOOP
SNA
JMP*     ERROR2      /IS ERROR LOOP SWITCH SET?
DAC      DSTSW0     /NO, CONTINUE
JMP*     ERLOOP     /YES SET LOOP

```

```

/ERROR3, A 'BRANCH' WAS EXECUTED WITHOUT CONDITIONS SET,

```

```

05561 R 777776 A
05562 R 040020 R
05563 R 206153 R
05564 R 040022 R
05565 R 777775 A
05566 R 040021 R
05567 R 205462 R
05570 R 040023 R
05571 R 713600 A
05572 R 006022 R
05573 R 206022 R
05574 R 040024 R
05575 R 105506 R
05576 R 206026 R
05577 R 741200 A
05600 R 625460 R
05601 R 040335 R
05602 R 626026 R

```

```

ERROR3 LAW      =2
DAC      SYSERR
LAC      (3
DAC      ERCODE
LAW      =3
DAC      ERCODE=1
LAC      NOBRCH+2
DAC      ERCODE+1    /SAVE 'BRANCH' IOT
IST
RESULT   /SAVE 'FMA'
LAC      RESULT
DAC      ERCODE+2    /=TO 'FMA'
JMS      EXTERR
LAC      ERLOOP
SNA
JMP*     NOBRCH
DAC      DSTSW0
JMP*     ERLOOP
.EJECT

```

```

/*****
/
/ERROR FORMAT FOR ERRORS 5-101 AS FOLLOWS:
/
/FPP15 = ERCODE = BAD DATA = EXPECTED DATA = LST. ADDR. = LOOP ADDR,
/MBH   MBL   SIR   EPA   FAH   FAL   EPB   FBH
/FBL   MQH   MQL   ADH   ADL   JEA   STA   ADR
/*****
/ERROR SERVICE ROUTINE FOR ALL ERRORS
/EXCEPT 'BRANCH' AND 'JEA' ERRORS,
/

```

```

05603 R 000000 A
05604 R 777776 A
05605 R 040020 R
05606 R 206011 R
05607 R 040022 R
05610 R 206013 R
05611 R 040023 R
05612 R 206015 R
05613 R 040024 R
05614 R 206016 R
05615 R 346127 R
05616 R 046016 R
05617 R 206154 R
05620 R 740031 A
05621 R 346016 R
05622 R 040025 R
05623 R 205446 R
05624 R 506133 R
05625 R 346127 R
05626 R 040026 R
05627 R 777773 A
05630 R 040021 R
05631 R 105506 R
05632 R 105634 R
05633 R 625603 R

```

```

ERROR 0
LAW -2
DAC SYSERR
LAC ERRNO
DAC ERCODE /#1, TYPE OF ERROR,
LAC TEMP1 /#2, BAD DATA,
DAC ERCODE+1 /#3, EXPECTED DATA
LAC TEMP3
DAC ERCODE+2
LAC TEMP4
TAD (-1
DAC TEMP4 /SAVE 'CHECK0' ADDRESS,
LAC (USERSW
TCA
TAD TEMP4
DAC ERCODE+3 /#4, LISTING ADDRESS,
LAC TSTADR
AND (77777
TAD (-1
DAC ERCODE+4 /#5, LOOP ADDR, FOR FAILING TEST,
LAW -5
DAC ERCODE-1
JMS EXTERR /TYPE OUT ERROR HEADER,
JMS SETDMP
JMP# ERROR
,EJECT

```

```

05634 R 000000 A SETDMP 0
05635 R 146012 R DZM APION /IS 'API' ON?
05636 R 705512 A RPL
05637 R 046012 R DAC APION /SET 'API' SWITCH
05640 R 705514 A ISA+10 /TURN 'API' OFF
05641 R 700002 A IOF /TURN INTERRUPT OFF,
05642 R 717300 A DMN /TURN ON FPP DIAG. MODE
05643 R 000000 A 0
05644 R 710314 A FPT /DUMMY INSTRUCTION
05645 R 000000 A 0
05646 R 710177 A DSR+77 /READ REGISTERS,
05647 R 005771 R RTABL /STORE DATA IN TABLE
05650 R 710100 A DSR
05651 R 005771 R RTABL
05652 R 703304 A DBK /TURN DIAG MODE OFF,
05653 R 700042 A ION /ENABLE 'PI'
05654 R 206012 R LAC APION
05655 R 506155 R AND (400000
05656 R 705504 A ISA /ENABLE 'API' IF IT WAS ON,
05657 R 206156 R LAC (RTABL
05660 R 046013 R DAC TEMP1
05661 R 105666 R JMS DMPREG /PRINT OUT FIRST '8' REG,
05662 R 105506 R JMS EXTERR
05663 R 105666 R JMS DMPREG /PRINT OUT LAST '8' REG,
05664 R 105506 R JMS EXTERR
05665 R 625634 R JMP* SETDMP
/
05666 R 000000 A DMPREG 0
05667 R 777770 A LAW =10
05670 R 046014 R DAC TEMP2
05671 R 777776 A LAW =2
05672 R 040020 R DAC SYSERR
05673 R 777770 A LAW =10
05674 R 040021 R DAC ERCODE=1
05675 R 206157 R LAC (ERCODE
05676 R 046015 R DAC TEMP3
05677 R 226013 R LAC# TEMP1
05700 R 066015 R DAC# TEMP3
05701 R 446013 R ISZ TEMP1
05702 R 446015 R ISZ TEMP3
05703 R 446014 R ISZ TEMP2
05704 R 605677 R JMP =5
05705 R 625666 R JMP* DMPREG
EJECT

```

/ERROR4 EXIT FOR AN UNEXPECTED 'JEA' BREAK,

```

05706 R 000000 A   JEAERR 0
05707 R 777776 A     LAW     =2
05710 R 040020 R     DAC     SYSERR
05711 R 777776 A     LAW     =2
05712 R 040021 R     DAC     ERCODE=1
05713 R 206160 R     LAC     (4
05714 R 040022 R     DAC     ERCODE     /#1,ERCODE 4 FOR ILLEGAL JEA
05715 R 205752 R     LAC     JEAH
05716 R 546041 R     SAD     (JEATR     /JEA 'OVERFLOW' ERROR?
05717 R 741000 A     SKP
05720 R 605723 R     JMP     ,+3     /YES
05721 R 206151 R     LAC     (1     /NO
05722 R 605736 R     JMP     JEAER1     /OVERFLOW=1
05723 R 546117 R     SAD     (JEATR+2     /JEA 'UNDERFLOW' ERROR?
05724 R 741000 A     SKP
05725 R 605730 R     JMP     ,+3     /YES
05726 R 206152 R     LAC     (2     /NO
05727 R 605736 R     JMP     JEAER1     /UNDERFLOW=2
05730 R 546046 R     SAD     (JEATR+4     /JEA 'DIVIDE' ERROR?
05731 R 741000 A     SKP
05732 R 605735 R     JMP     ,+3
05733 R 206153 R     LAC     (3     /DIVIDE=3
05734 R 605736 R     JMP     JEAER1
05735 R 206160 R     LAC     (4     /FPP15 MEM, VIOL.
05736 R 040023 R   JEAER1 DAC     ERCODE+1     /#2,TYPE OF 'JEA' ERROR.
05737 R 105506 R     JMS     EXTERR
05740 R 105634 R     JMS     SETDMP     /DUMP OUT 16 FPU REG.
05741 R 625706 R     JMP*    JEAERR
          ,EJECT

```

/SET UP THE 'JEA' REGISTER HANDLER,

```

/
05742 R 000000 A JEATR 0 /OVERFLOWTRAP
05743 R 105752 R JMS JEAH /UNDERFLOWTRAP
05744 R 000000 A 0 /DIVIDE BY 0TRAP
05745 R 105752 R JMS JEAH /PPU MEM, VIOL,TRAP
05746 R 000000 A 0
05747 R 105752 R JMS JEAH
05750 R 000000 A 0 /ALL JEA'S COME HERE
05751 R 105752 R JMS JEAH /BACK UP JEAH TO BE EQUAL TO
05752 R 000000 A JEAH /THE A JMS TSTADRAL JEATR ENTRY LOC.
05753 R 205752 R LAC JEAH
05754 R 506161 R AND (177777
05755 R 346134 R TAD (-2
05756 R 045752 R DAC JEAH
05757 R 225752 R LAC# JEAH
05760 R 506161 R AND (177777
05761 R 065752 R DAC# JEAH
05762 R 205770 R LAC JRETURN
05763 R 740200 A SZA
05764 R 605767 R JMP ,+3 /IS JRETURN=0
05765 R 105706 R JEAEC JMS JEAERR /NO, THE JEA WAS EXPECTED
05766 R 625752 R JMP# JEAH /YES, JEA WAS NOT EXPECTED,
05767 R 625770 R JMP# JRETURN
05770 R 000000 A JRETURN 0 /THIS LOC, WILL BE SET, BYTHE
/TESTTHAT IS GOING TO CAUSE
/AN EXPECTED JEA, TO RETURN TO
/THATTEST, AT ALL OTHER TIMES,
/WHEN A JEA IS NOT EXPECTED,
/THIS LOC WILL=0

```

.EJECT


```

/
/
05771 R 000000 A RTABL 0
05772 R 000000 A MBL 0
05773 R 000000 A SIR 0
05774 R 000000 A EPA 0
05775 R 000000 A FAH 0
05776 R 000000 A FAL 0
05777 R 000000 A EPB 0
06000 R 000000 A FBH 0
06001 R 000000 A FBL 0
06002 R 000000 A MQH 0
06003 R 000000 A MQL 0
06004 R 000000 A ADH 0
06005 R 000000 A ADL 0
06006 R 000000 A JEA 0
06007 R 000000 A STA 0
06010 R 000000 A ADR 0
/
06011 R 000000 A ERRN0 0
06012 R 000000 A APION 0
06013 R 000000 A TEMP1 0
06014 R 000000 A TEMP2 0
06015 R 000000 A TEMP3 0
06016 R 000000 A TEMP4 0
06017 R 000000 A TEMP5 0
06020 R 000000 A BLOCK 0
06021 R 000000 A CNTR 0
06022 R 000000 A RESULT 0
06023 R 000000 A PASCNT 0
06024 R 000000 A SAVDST 0
06025 R 000000 A HOLFLD 0
06026 R 000000 A ERLOOP 0
06027 R 000000 A PGMLOP 0
06030 R 000000 A XWK01 0
06031 R 000000 A XWK02 0
06032 R 000000 A XWK03 0
06033 R 713610 A RANA 713610
06034 R 123456 A RANB 123456
06035 R 654321 A RANC 654321
,EJECT

```

```

/USED BY ALL DIAGNOSTIC READ INSTRUCTIONS
/IN THE INSTRUCTION TESTS AND IN SUB-PROGRAM
/FPSTEP

```

.END USERSW

000000 R
06037 R 000336 R #L
06040 R 771000 A #L
06041 R 005742 R #L
06042 R 377777 A #L
06043 R 277777 A #L
06044 R 100000 A #L
06045 R 003036 R #L
06046 R 005746 R #L
06047 R 003034 R #L
06050 R 003057 R #L
06051 R 003055 R #L
06052 R 003076 R #L
06053 R 003074 R #L
06054 R 003117 R #L
06055 R 003115 R #L
06056 R 003140 R #L
06057 R 003136 R #L
06060 R 003161 R #L
06061 R 003157 R #L
06062 R 003202 R #L
06063 R 003200 R #L
06064 R 003223 R #L
06065 R 003221 R #L
06066 R 003246 R #L
06067 R 003244 R #L
06070 R 003271 R #L
06071 R 003267 R #L
06072 R 003312 R #L
06073 R 003310 R #L
06074 R 003333 R #L
06075 R 003331 R #L
06076 R 003356 R #L
06077 R 003354 R #L
06100 R 003401 R #L
06101 R 003377 R #L
06102 R 003424 R #L
06103 R 003422 R #L
06104 R 003447 R #L
06105 R 003445 R #L
06106 R 003470 R #L
06107 R 003466 R #L
06110 R 003511 R #L
06111 R 003507 R #L
06112 R 003530 R #L
06113 R 003526 R #L
06114 R 003547 R #L
06115 R 003545 R #L
06116 R 003572 R #L
06117 R 005744 R #L
06120 R 003570 R #L
06121 R 003615 R #L
06122 R 003613 R #L

06123 R 003636 R #L
06124 R 003634 R #L
06125 R 003657 R #L
06126 R 003655 R #L
06127 R 777777 A #L
06130 R 000271 R #L
06131 R 000272 R #L
06132 R 000273 R #L
06133 R 077777 A #L
06134 R 777776 A #L
06135 R 070000 A #L
06136 R 740000 A #L
06137 R 200000 A #L
06140 R 007777 A #L
06141 R 777600 A #L
06142 R 005375 R #L
06143 R 005405 R #L
06144 R 300000 A #L
06145 R 005415 R #L
06146 R 005365 R #L
06147 R 005477 R #L
06150 R 005514 R #L
06151 R 000001 A #L
06152 R 000002 A #L
06153 R 000003 A #L
06154 R 000000 R #L
06155 R 400000 A #L
06156 R 005771 R #L
06157 R 000022 R #L
06160 R 000004 A #L
06161 R 177777 A #L

SIZE=06217

NO ERROR LINES

ADH	06004	R	ADL	06005	R	ADR	06010	R	APION	06012	R
BAC	00040	R	BLE	00034	R	BLOCK	06020	R	BMA	00033	R
BNA	00037	R	BPA	00035	R	BRANCH	05452	R	BRU	00036	R
BZA	00032	R	CHECK0	05165	R	CHECK1	05226	R	CHKERR	05235	R
CKFIEL	05270	R	CKFLD3	05311	R	CKLOOP	05254	R	CLRFLD	05352	R
CNTR	06021	R	DAD	716140	A	DBK	703304	A	DDV	712140	A
DECXOR	05207	R	DLD	713150	A	DLQ	715150	A	DLX	714560	A
DMF	717200	A	DMN	717300	A	DMP	711540	A	DMPREG	05666	R
DRD	712540	A	DRR	710000	A	DRS	711140	A	DSB	710540	A
USR	710100	A	DST	713750	A	DSTSW0	00335	R	EAD	716100	A
EDV	712100	A	ELD	713100	A	ELF	714110	A	ELQ	715100	A
EMP	711500	A	EPA	05774	R	EPB	05777	R	ERCODE	00022	R
ERD	712500	A	ERLOOP	06026	R	ERRN0	06011	R	ERROR	05603	R
ERROR1	05527	R	ERROR2	05536	R	ERROR3	05561	R	ERS	711100	A
ESB	710500	A	EST	713700	A	EXITM4	05522	R	EXITM5	05517	R
EXTERR	05506	R	FAB	713271	A	FAD	716040	A	FAH	05775	R
FAL	05776	R	FBH	06000	R	FBL	06001	R	FCM	713273	A
F0V	712040	A	FIELD1	05375	R	FIELD2	05405	R	FIELD3	05415	R
FLA	714210	A	FLD	713050	A	FLDTAB	05365	R	FLQ	715050	A
FLX	714460	A	FMP	711440	A	FNG	713272	A	FNM	713250	A
FPT	710314	A	FRD	712440	A	FRS	711040	A	FSB	710440	A
FST	713640	A	FXA	714660	A	FZR	711200	A	HOLDSW	05465	R
HOLD.1	05477	R	HOLFLD	06025	R	IAD	716000	A	IDV	712000	A
II040	01062	R	II053	01330	R	II105	01502	R	II210	02511	R
ILD	713000	A	ILF	714010	A	ILQ	715000	A	IMP	711400	A
INIT	00274	R	IRD	712400	A	IRS	711000	A	ISB	710400	A
IST	713600	A	IT003	00364	R	IT016	00472	R	IT027	00640	R
IT035	00771	R	IT037	01036	R	IT040	01056	R	IT053	01324	R
IT105	01476	R	IT210	02505	R	IT400	03711	R	IT401	03745	R
IT402	04002	R	IT403	04036	R	IT404	04072	R	IT405	04127	R
IT406	04163	R	IT407	04217	R	IT410	04253	R	IT411	04307	R
IT412	04344	R	IT413	04400	R	IT414	04434	R	IT415	04471	R
IT416	04525	R	IT417	04561	R	IT420	04615	R	IT421	04651	R
IT422	04706	R	IT423	04742	R	IT424	04776	R	IT425	05032	R
IT426	05066	R	IT427	05122	R	JEA	06006	R	JEAEC	05765	R
JEAERR	05706	R	JEAER1	05736	R	JEAH	05752	R	JEATR	05742	R
JRETUR	05770	R	K00	00041	R	K01	00042	R	K02	00043	R
K03	00044	R	K04	00045	R	K05	00046	R	K06	00047	R
K07	00050	R	K10	00051	R	K100	00141	R	K101	00142	R
K102	00143	R	K103	00144	R	K104	00145	R	K105	00146	R
K106	00147	R	K107	00150	R	K11	00052	R	K110	00151	R
K111	00152	R	K112	00153	R	K113	00154	R	K114	00155	R
K115	00156	R	K116	00157	R	K117	00160	R	K12	00053	R
K120	00161	R	K121	00162	R	K122	00163	R	K123	00164	R
K124	00165	R	K125	00166	R	K126	00167	R	K127	00170	R
K13	00054	R	K130	00171	R	K131	00172	R	K132	00173	R
K133	00174	R	K134	00175	R	K135	00176	R	K136	00177	R
K137	00200	R	K14	00055	R	K140	00201	R	K141	00202	R
K142	00203	R	K143	00204	R	K144	00205	R	K145	00206	R
K146	00207	R	K147	00210	R	K15	00056	R	K150	00211	R
K151	00212	R	K152	00213	R	K153	00214	R	K154	00215	R
K155	00216	R	K156	00217	R	K157	00220	R	K16	00057	R
K160	00221	R	K161	00222	R	K162	00223	R	K163	00224	R

K164	00225	R	K165	00226	R	K166	00227	R	K167	00230	R
K17	00060	R	K170	00231	R	K171	00232	R	K172	00233	R
K173	00234	R	K174	00235	R	K175	00236	R	K176	00237	R
K177	00240	R	K20	00061	R	K200	00241	R	K201	00242	R
K202	00243	R	K203	00244	R	K204	00245	R	K205	00246	R
K206	00247	R	K207	00250	R	K21	00062	R	K210	00251	R
K211	00252	R	K212	00253	R	K213	00254	R	K214	00255	R
K215	00256	R	K216	00257	R	K217	00260	R	K22	00063	R
K220	00261	R	K221	00262	R	K222	00263	R	K223	00264	R
K224	00265	R	K225	00266	R	K226	00267	R	K227	00270	R
K23	00064	R	K24	00065	R	K25	00066	R	K26	00067	R
K27	00070	R	K30	00071	R	K31	00072	R	K32	00073	R
K33	00074	R	K34	00075	R	K35	00076	R	K36	00077	R
K37	00100	R	K40	00101	R	K41	00102	R	K42	00103	R
K43	00104	R	K44	00105	R	K45	00106	R	K46	00107	R
K47	00110	R	K50	00111	R	K51	00112	R	K52	00113	R
K53	00114	R	K54	00115	R	K55	00116	R	K56	00117	R
K57	00120	R	K60	00121	R	K61	00122	R	K62	00123	R
K63	00124	R	K64	00125	R	K65	00126	R	K66	00127	R
K67	00130	R	K70	00131	R	K71	00132	R	K72	00133	R
K73	00134	R	K74	00135	R	K75	00136	R	K76	00137	R
K77	00140	R	LJE	715400	A	LOADI	05151	R	MBL	05772	R
MQH	06002	R	ML	06003	R	NOBRCH	05460	R	PASCNT	06023	R
PCNEXT	05502	R	PGMLOP	06027	R	RANA	06033	R	RANB	06034	R
RANC	06035	R	RANGEN	05425	R	RESULT	06022	R	RPL	705512	A
RTABL	05771	R	RT330	03036	R	RT331	03057	R	RT332	03076	R
RT333	03117	R	RT334	03140	R	RT335	03161	R	RT336	03202	R
RT337	03223	R	RT340	03246	R	RT341	03271	R	RT342	03312	R
RT343	03333	R	RT344	03356	R	RT345	03401	R	RT346	03424	R
RT347	03447	R	RT350	03470	R	RT351	03511	R	RT352	03530	R
RT353	03547	R	RT354	03572	R	RT355	03615	R	RT356	03636	R
RT357	03657	R	SAVADR	06036	R	SAVDST	06024	R	SERVIC	00324	R
SETDMP	05634	R	SETFLD	05320	R	SETFL1	05326	R	SIR	05773	R
SJE	715600	A	STA	06007	R	STEPFD	05342	R	STOREI	05155	R
SWG	715250	A	SYSERR	00020	R	TEMP1	06013	R	TEMP2	06014	R
TEMP3	06015	R	TEMP4	06016	R	TEMP5	06017	R	TSTADR	05446	R
T001	00336	R	T002	00351	R	T003	00362	R	T004	00375	R
T005	00410	R	T006	00420	R	T007	00425	R	T010	00432	R
T011	00437	R	T012	00444	R	T013	00451	R	T014	00456	R
T015	00463	R	T016	00470	R	T017	00503	R	T020	00514	R
T021	00525	R	T022	00541	R	T023	00555	R	T024	00570	R
T025	00605	R	T026	00621	R	T027	00636	R	T030	00656	R
T031	00675	R	T032	00712	R	T033	00733	R	T034	00751	R
T035	00767	R	T036	01011	R	T037	01032	R	T040	01054	R
T041	01077	R	T042	01117	R	T043	01136	R	T044	01155	R
T045	01173	R	T046	01212	R	T047	01230	R	T050	01247	R
T051	01265	R	T052	01304	R	T053	01322	R	T054	01344	R
T055	01361	R	T056	01376	R	T101	01416	R	T103	01442	R
T104	01454	R	T105	01474	R	T106	01520	R	T107	01540	R
T110	01557	R	T111	01577	R	T112	01617	R	T113	01640	R
T114	01661	R	T115	01701	R	T116	01721	R	T117	01742	R
T120	01763	R	T121	02004	R	T122	02025	R	T123	02046	R
T140	02067	R	T141	02110	R	T142	02130	R	T143	02151	R

T174	02172	R	T175	02213	R	T176	02233	R	T177	02254	R
T200	02275	R	T201	02315	R	T202	02336	R	T203	02357	R
T204	02377	R	T205	02420	R	T206	02441	R	T207	02462	R
T210	02503	R	T211	02533	R	T212	02554	R	T213	02575	R
T214	02616	R	T215	02637	R	T216	02660	R	T217	02701	R
T220	02722	R	T221	02743	R	T222	02764	R	T223	03005	R
T330	03026	R	T331	03045	R	T332	03066	R	T333	03105	R
T334	03126	R	T335	03147	R	T336	03170	R	T337	03211	R
T340	03232	R	T341	03255	R	T342	03300	R	T343	03321	R
T344	03342	R	T345	03365	R	T346	03410	R	T347	03433	R
T350	03456	R	T351	03477	R	T352	03520	R	T353	03537	R
T354	03556	R	T355	03601	R	T356	03624	R	T357	03645	R
T400	03676	R	T401	03732	R	T402	03767	R	T403	04023	R
T404	04057	R	T405	04114	R	T406	04150	R	T407	04204	R
T410	04240	R	T411	04274	R	T412	04331	R	T413	04365	R
T414	04421	R	T415	04456	R	T416	04512	R	T417	04546	R
T420	04602	R	T421	04636	R	T422	04673	R	T423	04727	R
T424	04763	R	T425	05017	R	T426	05053	R	T427	05107	R
T430	05143	R	UNDA0	716160	A	UNDL0	713170	A	UNDLQ	715170	A
UNDM0	711560	A	UNDRS	711160	A	UNDSB	710560	A	UNDST	713770	A
UNELF	714130	A	UNFAD	716060	A	UNFLA	714230	A	UNFLD	713070	A
UNFLQ	715070	A	UNFMP	711460	A	UNFRS	711060	A	UNFSB	710460	A
UNFST	713660	A	UNILF	714030	A	UNSWQ	715270	A	URDAD	716150	A
URDDV	712150	A	URDLX	714570	A	URDMP	711550	A	URDRQ	712550	A
URDRS	711150	A	URDSB	710550	A	URFAD	716050	A	URFDV	712050	A
URFLX	714470	A	URFMP	711450	A	URFRD	712450	A	URFRS	711050	A
URFSB	710450	A	URFST	713650	A	URFXA	714670	A	USERSW	00000	R
UUDAD	716170	A	UUDMP	711570	A	UUDRS	711170	A	UUDSB	710570	A
UUFAD	716070	A	UUFMP	711470	A	UUFRS	711070	A	UUFSS	710470	A
UUFST	713670	A	WK01	00271	R	WK02	00272	R	WK03	00273	R
XWK01	06030	R	XWK02	06031	R	XWK03	06032	R			

USERSW	00000 R	SYSERR	00020 R	ERCODE	00022 R	BZA	00032 R
BMA	00033 R	BLE	00034 R	BPA	00035 R	BRU	00036 R
BNA	00037 R	BAC	00040 R	K00	00041 R	K01	00042 R
K02	00043 R	K03	00044 R	K04	00045 R	K05	00046 R
K06	00047 R	K07	00050 R	K10	00051 R	K11	00052 R
K12	00053 R	K13	00054 R	K14	00055 R	K15	00056 R
K16	00057 R	K17	00060 R	K20	00061 R	K21	00062 R
K22	00063 R	K23	00064 R	K24	00065 R	K25	00066 R
K26	00067 R	K27	00070 R	K30	00071 R	K31	00072 R
K32	00073 R	K33	00074 R	K34	00075 R	K35	00076 R
K36	00077 R	K37	00100 R	K40	00101 R	K41	00102 R
K42	00103 R	K43	00104 R	K44	00105 R	K45	00106 R
K46	00107 R	K47	00110 R	K50	00111 R	K51	00112 R
K52	00113 R	K53	00114 R	K54	00115 R	K55	00116 R
K56	00117 R	K57	00120 R	K60	00121 R	K61	00122 R
K62	00123 R	K63	00124 R	K64	00125 R	K65	00126 R
K66	00127 R	K67	00130 R	K70	00131 R	K71	00132 R
K72	00133 R	K73	00134 R	K74	00135 R	K75	00136 R
K76	00137 R	K77	00140 R	K100	00141 R	K101	00142 R
K102	00143 R	K103	00144 R	K104	00145 R	K105	00146 R
K106	00147 R	K107	00150 R	K110	00151 R	K111	00152 R
K112	00153 R	K113	00154 R	K114	00155 R	K115	00156 R
K116	00157 R	K117	00160 R	K120	00161 R	K121	00162 R
K122	00163 R	K123	00164 R	K124	00165 R	K125	00166 R
K126	00167 R	K127	00170 R	K130	00171 R	K131	00172 R
K132	00173 R	K133	00174 R	K134	00175 R	K135	00176 R
K136	00177 R	K137	00200 R	K140	00201 R	K141	00202 R
K142	00203 R	K143	00204 R	K144	00205 R	K145	00206 R
K146	00207 R	K147	00210 R	K150	00211 R	K151	00212 R
K152	00213 R	K153	00214 R	K154	00215 R	K155	00216 R
K156	00217 R	K157	00220 R	K160	00221 R	K161	00222 R
K162	00223 R	K163	00224 R	K164	00225 R	K165	00226 R
K166	00227 R	K167	00230 R	K170	00231 R	K171	00232 R
K172	00233 R	K173	00234 R	K174	00235 R	K175	00236 R
K176	00237 R	K177	00240 R	K200	00241 R	K201	00242 R
K202	00243 R	K203	00244 R	K204	00245 R	K205	00246 R
K206	00247 R	K207	00250 R	K210	00251 R	K211	00252 R
K212	00253 R	K213	00254 R	K214	00255 R	K215	00256 R
K216	00257 R	K217	00260 R	K220	00261 R	K221	00262 R
K222	00263 R	K223	00264 R	K224	00265 R	K225	00266 R
K226	00267 R	K227	00270 R	WK01	00271 R	WK02	00272 R
WK03	00273 R	INIT	00274 R	SERVIC	00324 R	DSTSW0	00335 R
T001	00336 R	T002	00351 R	T003	00362 R	IT003	00364 R
T004	00375 R	T005	00410 R	T006	00420 R	T007	00425 R
T010	00432 R	T011	00437 R	T012	00444 R	T013	00451 R
T014	00456 R	T015	00463 R	T016	00470 R	IT016	00472 R
T017	00503 R	T020	00514 R	T021	00525 R	T022	00541 R
T023	00555 R	T024	00570 R	T025	00605 R	T026	00621 R
T027	00636 R	IT027	00640 R	T030	00656 R	T031	00675 R
T032	00712 R	T033	00733 R	T034	00751 R	T035	00767 R
IT035	00771 R	T036	01011 R	T037	01032 R	IT037	01036 R
T040	01054 R	IT040	01056 R	IT040	01062 R	T041	01077 R
T042	01117 R	T043	01136 R	T044	01155 R	T045	01173 R

T046	01212 R	T047	01230 R	T050	01247 R	T051	01265 R
T052	01304 R	T053	01322 R	IT053	01324 R	IT053	01330 R
T054	01344 R	T055	01361 R	T056	01376 R	T101	01416 R
T103	01442 R	T104	01454 R	T105	01474 R	IT105	01476 R
IT105	01502 R	T106	01520 R	T107	01540 R	T110	01557 R
T111	01577 R	T112	01617 R	T113	01640 R	T114	01661 R
T115	01701 R	T116	01721 R	T117	01742 R	T120	01763 R
T121	02004 R	T122	02025 R	T123	02046 R	T140	02067 R
T141	02110 R	T142	02130 R	T143	02151 R	T174	02172 R
T175	02213 R	T176	02233 R	T177	02254 R	T200	02275 R
T201	02315 R	T202	02336 R	T203	02357 R	T204	02377 R
T205	02420 R	T206	02441 R	T207	02462 R	T210	02503 R
IT210	02505 R	IT210	02511 R	T211	02533 R	T212	02554 R
T213	02575 R	T214	02616 R	T215	02637 R	T216	02660 R
T217	02701 R	T220	02722 R	T221	02743 R	T222	02764 R
T223	03005 R	T330	03026 R	RT330	03036 R	T331	03045 R
RT331	03057 R	T332	03066 R	RT332	03076 R	T333	03105 R
RT333	03117 R	T334	03126 R	RT334	03140 R	T335	03147 R
RT335	03161 R	T336	03170 R	RT336	03202 R	T337	03211 R
RT337	03223 R	T340	03232 R	RT340	03246 R	T341	03255 R
RT341	03271 R	T342	03300 R	RT342	03312 R	T343	03321 R
RT343	03333 R	T344	03342 R	RT344	03356 R	T345	03365 R
RT345	03401 R	T346	03410 R	RT346	03424 R	T347	03433 R
RT347	03447 R	T350	03456 R	RT350	03470 R	T351	03477 R
RT351	03511 R	T352	03520 R	RT352	03530 R	T353	03537 R
RT353	03547 R	T354	03556 R	RT354	03572 R	T355	03601 R
RT355	03615 R	T356	03624 R	RT356	03636 R	T357	03645 R
RT357	03657 R	T400	03676 R	IT400	03711 R	T401	03732 R
IT401	03745 R	T402	03767 R	IT402	04002 R	T403	04023 R
IT403	04036 R	T404	04057 R	IT404	04072 R	T405	04114 R
IT405	04127 R	T406	04150 R	IT406	04163 R	T407	04204 R
IT407	04217 R	T410	04240 R	IT410	04253 R	T411	04274 R
IT411	04307 R	T412	04331 R	IT412	04344 R	T413	04365 R
IT413	04400 R	T414	04421 R	IT414	04434 R	T415	04456 R
IT415	04471 R	T416	04512 R	IT416	04525 R	T417	04546 R
IT417	04561 R	T420	04602 R	IT420	04615 R	T421	04636 R
IT421	04651 R	T422	04673 R	IT422	04706 R	T423	04727 R
IT423	04742 R	T424	04763 R	IT424	04776 R	T425	05017 R
IT425	05032 R	T426	05053 R	IT426	05066 R	T427	05107 R
IT427	05122 R	T430	05143 R	LOADI	05151 R	STOREI	05155 R
CHECK0	05165 R	DECXOR	05207 R	CHECK1	05226 R	CHKERR	05235 R
CKLOP	05254 R	CKFIELD	05270 R	CKFLD3	05311 R	SETFLD	05320 R
SETFL1	05326 R	STEPFD	05342 R	CLRFLD	05352 R	FLDTAB	05365 R
FIELD1	05375 R	FIELD2	05405 R	FIELD3	05415 R	RANGEN	05425 R
TSTADR	05446 R	BRANCH	05452 R	NOBRCH	05460 R	HOLDSW	05465 R
HOLD.1	05477 R	PCNEXT	05502 R	EXTERR	05506 R	EXITM5	05517 R
EXITM4	05522 R	ERROR1	05527 R	ERROR2	05536 R	ERROR3	05561 R
ERROR	05603 R	SETDMP	05634 R	DMPREG	05666 R	JEAERR	05706 R
JEAER1	05736 R	JEATR	05742 R	JEAH	05752 R	JEAEC	05765 R
JRETUR	05770 R	RTABL	05771 R	MBL	05772 R	SIR	05773 R
EPA	05774 R	FAH	05775 R	FAL	05776 R	EPB	05777 R
FBH	06000 R	FBL	06001 R	MQH	06002 R	SQL	06003 R
ADH	06004 R	ADL	06005 R	JEA	06006 R	STA	06007 R

ADR	06010	R	ERRN0	06011	R	APION	06012	R	TEMP1	06013	R
TEMP2	06014	R	TEMP3	06015	R	TEMP4	06016	R	TEMP5	06017	R
BLOCK	06020	R	CNTR	06021	R	RESULT	06022	R	PASCNT	06023	R
SAVDST	06024	R	HOLFLD	06025	R	ERLOOP	06026	R	PGMLOP	06027	R
XWK01	06030	R	XWK02	06031	R	XWK03	06032	R	RANA	06033	R
RANB	06034	R	RANC	06035	R	SAVADR	06036	R	DBK	703304	A
RPL	705512	A	DRR	710000	A	DSR	710100	A	FPT	710314	A
ISB	710400	A	FSB	710440	A	URFSB	710450	A	UNFSB	710460	A
UUFBS	710470	A	ESB	710500	A	DSB	710540	A	URDSB	710550	A
UNDSB	710560	A	UUDSB	710570	A	IRS	711000	A	FRS	711040	A
URFRS	711050	A	UNFRS	711060	A	UUFRS	711070	A	ERS	711100	A
DRS	711140	A	URDRS	711150	A	UNDRS	711160	A	UUDRS	711170	A
FZR	711200	A	IMP	711400	A	FMP	711440	A	URFMP	711450	A
UNFMP	711460	A	UUFMP	711470	A	EMP	711500	A	DMP	711540	A
URDMP	711550	A	UNDMP	711560	A	UUDMP	711570	A	IDV	712000	A
FDV	712040	A	URFDV	712050	A	EDV	712100	A	DDV	712140	A
URDDV	712150	A	IRD	712400	A	FRD	712440	A	URFRD	712450	A
ERD	712500	A	DRD	712540	A	URDRD	712550	A	ILD	713000	A
FLD	713050	A	UNFLD	713070	A	ELD	713100	A	DLD	713150	A
UNOLD	713170	A	FNM	713250	A	FAB	713271	A	FNG	713272	A
FCM	713273	A	IST	713600	A	FST	713640	A	URFST	713650	A
UNFST	713660	A	UUFST	713670	A	EST	713700	A	DST	713750	A
UNDST	713770	A	ILF	714010	A	UNILF	714030	A	ELF	714110	A
UNELF	714130	A	FLA	714210	A	UNFLA	714230	A	FLX	714460	A
URFLX	714470	A	DLX	714560	A	URDLX	714570	A	FXA	714660	A
URFXA	714670	A	ILQ	715000	A	FLQ	715050	A	UNFLQ	715070	A
ELQ	715100	A	DLQ	715150	A	UNDLQ	715170	A	SWQ	715250	A
UNSWQ	715270	A	LJE	715400	A	SJE	715600	A	IAD	716000	A
FAD	716040	A	URFAD	716050	A	UNFAD	716060	A	UUFAD	716070	A
EAD	716100	A	DAD	716140	A	URDAD	716150	A	UNDAD	716160	A
UUDAD	716170	A	DMF	717200	A	DMN	717300	A			