

IDENTIFICATION

PRODUCT CODE: MAINDEC-8/E-D0AB
PRODUCT NAME: PDP-8/E INSTRUCTION TEST 1
DATE CREATED: MAY 10, 1971
MAINTAINER: DIAGNOSTIC GROUP
AUTHOR: ED FORTMILLER

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1. ABSTRACT

THIS IS A DIAGNOSTIC PROGRAM FOR TESTING THE AND, TAD,
OPERATE, AND BASIC MQ, INSTRUCTIONS OF THE PDP-8/E ONLY.

2. REQUIREMENTS

2.1 EQUIPMENT

A PDP-8/E EQUIPPED WITH TELETYPE.

2.2 STORAGE

THIS PROGRAM USES LOCATIONS 0000-5314. THE BINARY LOADER MUST
BE STORED IN THE LAST MEMORY PAGE.

2.3 PRELIMINARY PROGRAMS

3. LOADING PROCEDURE

3.1 METHOD

THE STANDARD BINARY LOADER IS USED.

4. STARTING PROCEDURE

4.1 CONTROL SWITCH SETTINGS

SR=7777

4.2 STARTING ADDRESS

0200

4.3 OPERATOR ACTION

1. SET SR TO 200 AND PRESS LOAD ADDRESS.
2. SET SR TO 7777 AND PUSH CLEAR AND CONTINUE
3. PROGRAM WILL HALT. MA=147
4. IF AC IS NOT EQUAL TO 0000 AN ERROR HAS OCCURRED.
5. PUSH CONTINUE. PROGRAM WILL RUN UNTIL STOPPED OR UNTIL
AN ERROR IS ENCOUNTERED.

5. OPERATING PROCEDURE

SAME AS SECTION 4.

6. ERRORS

6.1 ERROR HALTS AND DESCRIPTION

SEE LISTING.

6.2 ERROR RECOVERY

IF IT IS DESIRED TO LOOP ON THE TEST CAUSING THE ERROR, REPLACE THE OPERATE INSTRUCTION(S) PRECEDING THE HLT WITH A JMP TO THE BEGINNING OF THE TEST.

7. RESTRICTIONS

7.1 STARTING RESTRICTIONS: NONE

7.2 OPERATING RESTRICTIONS: NONE

8. MISCELLANEOUS

8.1 EXECUTION TIME

THE TELETYPE BELL RINGS AT THE END OF 1440 PROGRAM PASSES WHICH IS APPROXIMATELY EVERY 5 SECONDS.

9.

PROGRAM DESCRIPTION

THE PROGRAM CONSISTS OF MANY INDIVIDUAL TESTS. IN MOST CASES EACH TEST CHECKS ONLY ONE FUNCTION AND USES PREVIOUSLY TESTED FUNCTIONS AS A BASIS FOR THE TEST. THE PROGRAM COUNTER ACTION IS STRICTLY SEQUENTIAL EXCEPT FOR SKIPS. THE ONLY JMP INSTRUCTIONS USED ARE AT THE BEGINNING AND END OF THE PROGRAM. THE SEQUENCE OF TESTING IS AS FOLLOWS:

1. TEST ALL OPERATE FUNCTIONS INDIVIDUALLY EXCEPT FOR ROTATES.
2. TEST "TAD" INSTRUCTION.
3. TEST ROTATE FUNCTIONS.
4. TEST "BSW" INSTRUCTION.
5. GROUP 1 OPERATE INSTRUCTION TEST. ALL POSSIBLE COMBINATIONS.
6. GROUP 2 OPERATE INSTRUCTION TEST. ALL POSSIBLE COMBINATIONS.
7. MQ INSTRUCTION TEST. ALL POSSIBLE COMBINATIONS.
8. TEST "AND" INSTRUCTION.

THE TELETYPE BELL RINGS APPROXIMATELY EVERY 5 SECONDS.

10.

LISTING

/PDP-8/E INSTRUCTION TEST 1 MAINDEC-8E-D0AB
 /COPYRIGHT 1970, 1971, DIGITAL EQUIPMENT CORP., MAYNARD, MASS. 01754
 /TAPE 1

7002	BSW=7002	/SWAP BYTES IN AC
7401	NOPE=7401	/NOP
7601	CLAE=7601	/CLEAR AC
7421	MQL=7421	/LOAD MQ FROM AC THEN CLEAR AC
7501	MQA=7501	/INCLUSIVE OR, MQ AND AC
7621	CAM=7621	/CLEAR AC AND MQ
7521	SWP=7521	/SWAP AC AND MQ
7701	ACL=7701	/LOAD AC FROM MQ, CLEAR MQ

0000	0000	*0
0000	0000	0
0001	0001	JMP 1
0002	0002	0002
0003	0003	0003
0004	0000	0
0005	0000	0000
0006	7402	HALT, HLT
0007	7000	NOOP, NOP
0010	0000	0

/CONSTANTS AND VARIABLES

0020	0020	*20
0020	0000	K0000, 0000
0021	0001	K0001, 0001
0022	0002	K0002, 0002
0023	0003	K3, 3
0024	0004	K0004, 0004
0025	0006	K6, 6
0026	0010	K0010, 0010
0027	0014	K14, 14
0030	0020	K0020, 0020
0031	0030	K30, 30
0032	0040	K0040, 0040
0033	0060	K60, 60
0034	0100	K0100, 0100
0035	0140	K140, 140
0036	0200	K0200, 0200
0037	0300	K300, 300
0040	0400	K0400, 0400
0041	0600	K600, 600
0042	1000	K1000, 1000
0043	1234	K1234, 1234
0044	1400	K1400, 1400
0045	2000	K2000, 2000
0046	3000	K3000, 3000
0047	3312	K3312, 3312
0050	4000	K4000, 4000
0051	7717	K7717, 7717
0052	7776	K7776, 7776
0053	7775	K7775, 7775

0054	7773	K7773,	7773
0055	7767	K7767,	7767
0056	7757	K7757,	7757
0057	7737	K7737,	7737
0060	7177	K7177,	7177
0061	7677	K7677,	7677
0062	7577	K7577,	7577
0063	7377	K7377,	7377
0064	6777	K6777,	6777
0065	5777	K5777,	5777
0066	3777	K3777,	3777
0067	7777	K7777,	7777
0070	5252	K5252,	5252
0071	2525	K2525,	2525
0072	6000	K6000,	6000
0073	7000	K7000,	7000
0074	7400	K7400,	7400
0075	7600	K7600,	7600
0076	7740	K7740,	7740
0077	7760	K7760,	7760
0100	7770	K7770,	7770
0101	7774	K7774,	7774

0102	0007	K0007,	0007
0103	0067	K0067,	0067
0104	0017	K0017,	0017
0105	0037	K0037,	0037
0106	0077	K0077,	0077
0107	0177	K0177,	0177
0110	0377	K0377,	0377
0111	0777	K0777,	0777
0112	1777	K1777,	1777
0113	7700	K7700,	7700
0114	5225	K5225,	5225
0115	2552	K2552,	2552
0116	0770	K0770,	0770
0117	7007	K7007,	7007
0120	0207	BEL,	0207
0121	5140	BLCNT,	-2640
0122	5140	BLCNT,	-2640

0144	1067	*144	
0145	7200	/TAD,CLA,HLT,TEST	
0146	7402	START, TAD K7777	
		CLA	
		HLT	

0147	7410	/SKIP TEST	
0150	7402	SKP	
		HLT	
0151	7200	/SEA TEST 1	
		CLA	

/AC SHOULD=0
/SET SR TO 7777, CONTINUE

/SKP FAILED

0152	7440	SZA	
0153	7402	HLT	/SZA SHOULD HAVE SKIPPED
			/AC SHOULD EQUAL ZERO
0154	7450	SNA	
0155	7410	SKP	
0156	7402	HLT	/SNA SHOULD NOT HAVE SKIPPED
			/AC SHOULD EQUAL ZERO

/SZA TEST 2

0157	7200	CLA	
0160	1050	TAD K4000	
0161	7440	SZA	
0162	7410	SKP	
0163	7402	HLT	/SZA SHOULD NOT HAVE SKIPPED
			/AC SHOULD EQUAL 4000
0164	7450	SNA	
0165	7402	HLT	/SNA SHOULD HAVE SKIPPED
			/AC SHOULD EQUAL 4000

/SZA TEST 3

0166	7200	CLA	
0167	1045	TAD K2000	
0170	7440	SZA	
0171	7410	SKP	
0172	7402	HLT	/SZA SHOULD NOT HAVE SKIPPED
			/AC SHOULD EQUAL 2000
0173	7450	SNA	
0174	7402	HLT	/SNA SHOULD HAVE SKIPPED
0175	7000	NOP	/AC SHOULD EQUAL 2000
0176	7000	NOP	
0177	7410	SKP	/SKIP OVER JMP START.

	0200	*200	
0200	5144	BEGIN, JMP START	/BEGINNING OF INSTRUCTION TEST 1.

/SZA TEST 4

0201	7200	CLA	
0202	1042	TAD K1000	
0203	7440	SZA	
0204	7410	SKP	
0205	7402	HLT	/SZA SHOULD NOT HAVE SKIPPED
			/AC SHOULD EQUAL 1000
0206	7450	SNA	
0207	7402	HLT	/SNA SHOULD HAVE SKIPPED
			/AC SHOULD EQUAL 10000

/SZA TEST 5

0210	7200	CLA	
0211	1040	TAD K0400	
0212	7440	SZA	
0213	7410	SKP	
0214	7402	HLT	/SZA SHOULD NOT HAVE SKIPPED
			/AC SHOULD EQUAL 0400
0215	7450	SNA	
0216	7402	HLT	/SNA SHOULD HAVE SKIPPED
			/AC SHOULD EQUAL 0400

/SZA TEST 6

0217 7200 CLA
0220 1036 TAD K0200
0221 7440 SZA
0222 7410 SKP
0223 7402 HLT

/SZA SHOULD NOT HAVE SKIPPED
/AC SHOULD EQUAL 0200

0224 7450 SNA
0225 7402 HLT

/SNA SHOULD HAVE SKIPPED
/AC SHOULD EQUAL 0200

/SZA TEST 7

0226 7200 CLA
0227 1034 TAD K0100
0230 7440 SZA
0231 7410 SKP
0232 7402 HLT

/SZA SHOULD NOT HAVE SKIPPED
/AC SHOULD EQUAL 0100

0233 7450 SNA
0234 7402 HLT

/SNA SHOULD HAVE SKIPPED
/AC SHOULD EQUAL 0100

/SZA TEST 8

0235 7200 CLA
0236 1032 TAD K0040
0237 7440 SZA
0240 7410 SKP
0241 7402 HLT

/SZA SHOULD NOT HAVE SKIPPED
/AC SHOULD EQUAL 0040

0242 7450 SNA
0243 7402 HLT

/SNA SHOULD HAVE SKIPPED
/AC SHOULD EQUAL 0040

/SZA TEST 9

0244 7200 CLA
0245 1030 TAD K0020
0246 7440 SZA
0247 7410 SKP
0250 7402 HLT

/SZA SHOULD NOT HAVE SKIPPED
/AC SHOULD EQUAL 0020

0251 7450 SNA
0252 7402 HLT

/SNA SHOULD HAVE SKIPPED
/AC SHOULD EQUAL 0020

/SZA TEST 10

0253 7200 CLA
0254 1026 TAD K0010
0255 7440 SZA
0256 7410 SKP
0257 7402 HLT

/SZA SHOULD NOT HAVE SKIPPED
/AC SHOULD EQUAL 0010

0260 7450 SNA
0261 7402 HLT

/SNA SHOULD HAVE SKIPPED
/AC SHOULD EQUAL 0010

/SZA TEST 11

0262 7200 CLA
0263 1024 TAD K0004

0264	7440	SZA	
0265	7410	SKP	
0266	7402	HLT	/SZA SHOULD NOT HAVE SKIPPED
			/AC SHOULD EQUAL 0004
0267	7450	SNA	
0270	7402	HLT	/SNA SHOULD HAVE SKIPPED
			/AC SHOULD EQUAL 0004

/SZA TEST 12

0271	7200	CLA	
0272	1022	TAD K0002	
0273	7440	SZA	
0274	7410	SKP	
0275	7402	HLT	/SZA SHOULD NOT HAVE SKIPPED
			/AC SHOULD EQUAL 0002
0276	7450	SNA	
0277	7402	HLT	/SNA SHOULD HAVE SKIPPED
			/AC SHOULD EQUAL 0002

/SZA TEST 13

0300	7200	CLA	
0301	1021	TAD K0001	
0302	7440	SZA	
0303	7410	SKP	
0304	7402	HLT	/SZA SHOULD NOT HAVE SKIPPED
			/AC SHOULD EQUAL 0001
0305	7450	SNA	
0306	7402	HLT	/SNA SHOULD HAVE SKIPPED
			/AC SHOULD EQUAL 0001

/SPA TEST 1

0307	7200	CLA	
0310	1066	TAD K3777	
0311	7510	SPA	
0312	7402	HLT	/SPA SHOULD HAVE SKIPPED
			/AC SHOULD EQUAL 3777

/SPA TEST 2

0313	7200	CLA	
0314	1050	TAD K4000	
0315	7510	SPA	
0316	7410	SKP	
0317	7402	HLT	/SPA SHOULD NOT HAVE SKIPPED
			/AC SHOULD EQUAL 4000

/SMA TEST 1

0320	7200	CLA	
0321	1066	TAD K3777	
0322	7500	SMA	
0323	7410	SKP	
0324	7402	HLT	/SMA SHOULD NOT HAVE SKIPPED
			/AC SHOULD EQUAL 3777

/SMA TEST 2

0325	7200	CLA	
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0326	1050	TAD K4000	
0327	7500	SMA	
0330	7402	HLT	/SMA SHOULD HAVE SKIPPED
			/AC SHOULD EQUAL 4000

		/CMA TEST 1	
0331	7200	CLA	
0332	1067	TAD K7777	
0333	7040	CMA	
0334	7440	SZA	
0335	7402	HLT	/CMA DID NOT COMPLEMENT AC
			/AC SHOULD EQUAL 0000

		/CMA - TAD TEST 1	
0336	7200	CLA	
0337	1071	TAD K2525	
0340	7040	CMA	
0341	7450	SNA	
0342	7402	HLT	/TAD OR CMA ERROR
			/AC SHOULD EQUAL 5252

0343	1071	TAD K2525	
0344	7040	CMA	
0345	7440	SZA	
0346	7402	HLT	/TAD OR CMA ERROR
			/AC SHOULD EQUAL 0000

		/CMA - TAD TEST 2	
0347	7200	CLA	
0350	1070	TAD K5252	
0351	7040	CMA	
0352	7450	SNA	
0353	7402	HLT	/TAD OR CMA ERROR
			/AC SHOULD EQUAL 2525

0354	1070	TAD K5252	
0355	7040	CMA	
0356	7440	SZA	
0357	7402	HLT	/TAD OR CMA ERROR
			/AC SHOULD EQUAL 0000

		/CMA - TAD TEST 3	
0360	7200	CLA	
0361	1067	TAD K7777	
0362	7040	CMA	
0363	7440	SZA	
0364	7402	HLT	/TAD OR CMA ERROR
			/AC SHOULD EQUAL 0000

		/IAC TEST 1	
0365	7200	CLA	
0366	7001	IAC	
0367	7440	SZA	
0370	7410	SKP	
0371	7402	HLT	/IAC DID NOT INCREMENT
			/AC SHOULD EQUAL 0001

		/IAC TEST 2	
0372	7200	CLA	
0373	1067	TAD K7777	
0374	7001	IAC	

0375 7440 SZA
0376 7402 HLT

/IAC DID NOT INCREMENT
/AC SHOULD EQUAL 0000

/IAC TEST 3

0377 7200 CLA
0400 1101 TAD K7774
0401 7001 IAC
0402 7001 IAC
0403 7001 IAC
0404 7001 IAC
0405 7440 SZA
0406 7402 HLT

/IAC NOT INCREMENTING
/AC SHOULD EQUAL 0000

/SZL TEST 1

0407 7200 CLA
0410 7100 CLL
0411 7004 RAL
0412 7430 SZL
0413 7402 HLT

/CLEAR LINK
/CLEAR LINK SAFETY
/SZL SHOULD HAVE SKIPPED
/LINK SHOULD EQUAL ZERO

/SZL TEST 2

0414 7200 CLA
0415 7100 CLL
0416 7020 CML
0417 1050 TAD K4000
0420 7004 RAL
0421 7430 SZL
0422 7410 SKP
0423 7402 HLT

/CLEAR LINK
/COMPLEMENT LINK
/SET LINK SAFETY

/SZL SHOULD NOT HAVE SKIPPED
/LINK SHOULD EQUAL ONE

/SNL TEST 1

0424 7200 CLA
0425 7100 CLL
0426 7004 RAL
0427 7420 SNL
0430 7410 SKP
0431 7402 HLT

/CLEAR LINK
/CLEAR LINK SAFETY

/SNL SHOULD NOT HAVE SKIPPED
/LINK SHOULD EQUAL ZERO

/SNL TEST 2

0432 7200 CLA
0433 7100 CLL
0434 7020 CML
0435 1050 TAD K4000
0436 7004 RAL
0437 7420 SNL
0440 7402 HLT

/CLEAR LINK
/COMPLEMENT LINK
/SET LINK SAFETY

/SNL SHOULD HAVE SKIPPED
/LINK SHOULD EQUAL ONE

/CLL TEST 1

0441 7200 CLA
0442 1050 TAD K4000

0443	7024	RAL	/SET LINK
0444	7420	SNL	
0445	5252	JMP CLL11	/CANNOT SET LINK WITH RAL
			/TRY A CML
0446	7100	CLL1, CLL	
0447	7430	SZL	
0450	7402	HLT	/CLL DID NOT CLEAR LINK
			/LINK SHOULD EQUAL ONE
0451	5256	JMP .+5	
0452	7020	CLL11, CML	/SET LINK
0453	7420	SNL	
0454	7402	HLT	/CANNOT SET LINK WITH
			/RAL OR CML. CANNOT
			/PERFORM CLL TEST 1
0455	5246	JMP CLL1	
		/CML TEST 1	
0456	7100	CMLT1, CLL	
0457	7430	SZL	
0460	7402	HLT	/CLL DID NOT CLEAR LINK
0461	7020	CML	
0462	7420	SNL	
0463	7402	HLT	/CML DID NOT SET LINK
0464	7020	CML	
0465	7430	SZL	
0466	7402	HLT	/CML DID NOT RESET LINK
		/CLA TEST 1 (OPERATE GROUP 2)	
0467	7200	CLA	
0470	1067	TAD K7777	
0471	7600	7600	
0472	7440	SZA	
0473	7402	HLT	/CLA (7600) DID NOT CLEAR AC
			/AC SHOULD EQUAL 0000
		/DSR TEST 1	
0474	7200	CLA	
0475	7404	OSR	
0476	7040	CMA	
0477	7440	SZA	
0500	7402	HLT	/DSR DID NOT SET AC TO 7777
			/AC SHOULD=0
		/NOP TEST 1 (OPERATE GROUP 1)	
0501	7200	CLA	
0502	7100	CLL	/AC AND LINK EQUAL ZERO
0503	7000	7000	/TEST INSTRUCTION
0504	7450	SNA	
0505	7430	SZL	
0506	7402	HLT	/NOP FAILURE
			/AC AND LINK SHOULD BE ZERO
		/NOP TEST 2 (OPERATE GROUP 2)	
0507	7200	CLA	

0510	7100	CLL	/AC AND LINK EQUAL ZERO
0511	7400	7400	/TEST INSTRUCTION
0512	7450	SNA	
0513	7430	SZL	
0514	7402	HLT	/NOP FAILURE
			/AC AND LINK SHOULD BE ZERO

/TAD TEST 1

0515	7200	CLA	
0516	1066	TAD K3777	/OPERAND 1
0517	1050	TAD K4000	/OPERAND 2
0520	7040	CMA	
0521	7440	SZA	
0522	7402	HLT	

/TAD ERROR
/AC SHOULD EQUAL 0000

/TAD TEST 2

0523	7200	CLA	
0524	1065	TAD K5777	/OPERAND 1
0525	1045	TAD K2000	/OPERAND 2
0526	7040	CMA	
0527	7440	SZA	
0530	7402	HLT	

/TAD ERROR
/AC SHOULD EQUAL 0000

/TAD TEST 3

0531	7200	CLA	
0532	1064	TAD K6777	/OPERAND 1
0533	1042	TAD K1000	/OPERAND 2
0534	7040	CMA	
0535	7440	SZA	
0536	7402	HLT	

/TAD ERROR
/AC SHOULD EQUAL 0000

/TAD TEST 4

0537	7200	CLA	
0540	1063	TAD K7377	/OPERAND 1
0541	1040	TAD K0400	/OPERAND 2
0542	7040	CMA	
0543	7440	SZA	
0544	7402	HLT	

/TAD ERROR
/AC SHOULD EQUAL 0000

/TAD TEST 5

0545	7200	CLA	
0546	1062	TAD K7577	/OPERAND 1
0547	1036	TAD K0200	/OPERAND 2
0550	7040	CMA	
0551	7440	SZA	
0552	7402	HLT	

/TAD ERROR
/AC SHOULD EQUAL 0000

/TAD TEST 6

0553	7200	CLA	
0554	1061	TAD K7677	/OPERAND 1
0555	1034	TAD K0100	/OPERAND 2
0556	7040	CMA	
0557	7440	SZA	
0560	7402	HLT	

/TAD ERROR

/AC SHOULD EQUAL 0000

/TAD TEST 7

0561	7200	CLA
0562	1057	TAD K7737
0563	1032	TAD K0040
0564	7040	CMA
0565	7440	SZA
0566	7402	HLT

/OPERAND 1

/OPERAND 2

/TAD ERROR

/AC SHOULD EQUAL 0000

/TAD TEST 8

0567	7200	CLA
0570	1056	TAD K7757
0571	1030	TAD K0020
0572	7040	CMA
0573	7440	SZA

/OPERAND 1

/OPERAND 2

0574	7402	HLT
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/TAD ERROR

/AC SHOULD EQUAL 0000

/TAD TEST 9

0575	7200	CLA
0576	1055	TAD K7767
0577	1026	TAD K0010
0600	7040	CMA
0601	7440	SZA
0602	7402	HLT

/OPERAND 1

/OPERAND 2

/TAD ERROR

/AC SHOULD EQUAL 0000

/TAD TEST 10

0603	7200	CLA
0604	1054	TAD K7773
0605	1024	TAD K0004
0606	7040	CMA
0607	7440	SZA
0610	7402	HLT

/OPERAND 1

/OPERAND 2

/TAD ERROR

/AC SHOULD EQUAL 0000

/TAD TEST 11

0611	7200	CLA
0612	1053	TAD K7775
0613	1022	TAD K0002
0614	7040	CMA
0615	7440	SZA
0616	7402	HLT

/OPERAND 1

/OPERAND 2

/TAD ERROR

/TAD TEST 12

0617	7200	CLA
0620	1052	TAD K7776
0621	1021	TAD K0001
0622	7040	CMA
0623	7440	SZA
0624	7402	HLT

/OPERAND 1

/OPERAND 2

/TAD ERROR

/AC SHOULD EQUAL 0000

/TAD TEST 13

0625	7200	CLA
0626	7100	CLL
0627	1050	TAD K4000

/OPERAND 1

0630	1050	TAD K4000	/OPERAND 2
0631	7430	SZL	
0632	7440	SEA	
0633	7402	HLT	/TAD ERROR. AC SHOULD EQUAL 0000 /LINK SHOULD BE EQUAL ONE.

/TAD TEST 14			
0634	7200	CLA	
0635	7100	CLL	
0636	1072	TAD K6000	/OPERAND 1
0637	1045	TAD K2000	/OPERAND 2
0640	7430	SZL	
0641	7440	SEA	
0642	7402	HLT	/TAD ERROR. AC SHOULD EQUAL 0000 /LINK SHOULD EQUAL ONE

/TAD TEST 15			
0643	7200	CLA	
0644	7100	CLL	
0645	1073	TAD K7000	/OPERAND 1
0646	1042	TAD K1000	/OPERAND 2
0647	7430	SZL	
0650	7440	SEA	
0651	7402	HLT	/TAD ERROR. AC SHOULD EQUAL 0000 /LINK SHOULD EQUAL ONE

/TAD TEST 16			
0652	7200	CLA	
0653	7100	CLL	
0654	1074	TAD K7400	/OPERAND 1
0655	1040	TAD K0400	/OPERAND 2
0656	7430	SZL	
0657	7440	SEA	
0660	7402	HLT	/TAD ERROR. AC SHOULD EQUAL 0000 /LINK SHOULD EQUAL ONE

/TAD TEST 17			
0661	7200	CLA	
0662	7100	CLL	
0663	1075	TAD K7600	/OPERAND 1
0664	1036	TAD K0200	/OPERAND 2
0665	7430	SZL	
0666	7440	SEA	
0667	7402	HLT	/TAD ERROR. AC SHOULD EQUAL 0000 /LINK SHOULD EQUAL ONE

/TAD TEST 18			
0670	7200	CLA	
0671	7100	CLL	
0672	1113	TAD K7700	/OPERAND 1
0673	1034	TAD K0100	/OPERAND 2
0674	7430	SZL	
0675	7440	SEA	
0676	7402	HLT	/TAD ERROR. AC SHOULD EQUAL 0000 /LINK SHOULD EQUAL ONE

/TAD TEST 19			
0677	7200	CLA	
0700	7100	CLL	

0701	1076	TAD K7740	/OPERAND 1
0702	1032	TAD K0040	/OPERAND 2
0703	7430	SZL	
0704	7440	SZA	
0705	7402	HLT	/TAD ERROR. AC SHOULD EQUAL 0000
			/LINK SHOULD EQUAL ONE
/TAD TEST 20			
0706	7200	CLA	
0707	7100	CLL	
0710	1077	TAD K7760	/OPERAND 1
0711	1030	TAD K0020	/OPERAND 2
0712	7430	SZL	
0713	7440	SZA	
0714	7402	HLT	/TAD ERROR. AC SHOULD EQUAL 0000
			/LINK SHOULD EQUAL ONE
/TAD TEST 21			
0715	7200	CLA	
0716	7100	CLL	
0717	1100	TAD K7770	/OPERAND 1
0720	1026	TAD K0010	/OPERAND 2
0721	7430	SZL	
0722	7440	SZA	/TAD ERROR AC SHOULD EQUAL 0000
0723	7402	HLT	/LINK SHOULD EQUAL ONE
/TAD TEST 22			
0724	7200	CLA	
0725	7100	CLL	
0726	1101	TAD K7774	/OPERAND 1
0727	1024	TAD K0004	/OPERAND 2
0730	7430	SZL	
0731	7440	SZA	
0732	7402	HLT	/TAD ERROR. AC SHOULD EQUAL 0000
			/LINK SHOULD EQUAL ONE
/TAD TEST 23			
0733	7200	CLA	
0734	7100	CLL	
0735	1032	TAD K7776	/OPERAND 1
0736	1022	TAD K0002	/OPERAND 2
0737	7430	SZL	
0740	7440	SZA	
0741	7402	HLT	/TAD ERROR. AC SHOULD EQUAL 0000
			/LINK SHOULD EQUAL ONE
/TAD TEST 24			
0742	7200	CLA	
0743	7100	CLL	
0744	1067	TAD K7777	/OPERAND 1
0745	1021	TAD K0001	/OPERAND 2
0746	7430	SZL	
0747	7440	SZA	
0750	7402	HLT	/TAD ERROR. AC SHOULD EQUAL 0000
			/LINK SHOULD EQUAL ONE

```

/TAD TEST 25
0751 7200 CLA
0752 7100 CLL
0753 7020 CML
0754 1050 TAD K4000 /OPERAND 1
0755 1050 TAD K4000 /OPERAND 2
0756 7420 SNL
0757 7440 SEA
0760 7402 HLT /TAD ERROR, AC SHOULD EQUAL 0000
                /LINK SHOULD EQUAL ZERO

```

```

/TAD TEST 26
0761 7200 CLA
0762 7100 CLL
0763 1066 TAD K3777 /OPERAND 1
0764 1045 TAD K2000 /OPERAND 2
0765 1045 TAD K2000 /OPERAND 3
0766 7040 CMA
0767 7420 SNL
0770 7440 SEA
0771 7402 HLT /TAD ERROR, AC SHOULD EQUAL 0000
                /LINK SHOULD EQUAL ZERO

```

```

/TAD TEST 27
0772 7200 CLA
0773 7100 CLL
0774 1065 TAD K5777 /OPERAND 1
0775 1042 TAD K1000 /OPERAND 2
0776 1042 TAD K1000 /OPERAND 3
0777 7040 CMA
1000 7420 SNL
1001 7440 SEA /TAD ERROR AC SHOULD EQUAL 0000
1002 7402 HLT /LINK SHOULD EQUAL ZERO

```

```

/TAD TEST 28
1003 7200 CLA
1004 7100 CLL
1005 1064 TAD K6777 /OPERAND 1
1006 1040 TAD K0400 /OPERAND 2
1007 1040 TAD K0400 /OPERAND 3
1010 7040 CMA
1011 7420 SNL
1012 7440 SEA
1013 7402 HLT /TAD ERROR, AC SHOULD EQUAL 0000
                /LINK SHOULD EQUAL ZERO

```

```

/TAD TEST 29
1014 7200 CLA
1015 7100 CLL
1016 1063 TAD K7377 /OPERAND 1
1017 1036 TAD K0200 /OPERAND 2
1020 1036 TAD K0200 /OPERAND 3
1021 7040 CMA
1022 7420 SNL
1023 7440 SEA
1024 7402 HLT /TAD ERROR, AC SOULD EQUAL 0000
                /LINK SHOULD EQUAL ZERO

```

/TAD TEST 30

1025	7200	CLA
1026	7100	CLL
1027	1062	TAD K7577
1030	1034	TAD K0100
1031	1034	TAD K0100
1032	7040	CMA
1033	7420	SNL
1034	7440	SEA
1035	7402	HLT

/OPERAND 1
/OPERAND 2
/OPERAND 3

/TAD ERROR. AC SHOULD EQUAL 0000
/LINK SHOULD EQUAL ZERO

/TAD TEST 31

1036	7200	CLA
1037	7100	CLL
1040	1061	TAD K7677
1041	1032	TAD K0040
1042	1032	TAD K0040
1043	7040	CMA
1044	7420	SNL
1045	7440	SEA
1046	7402	HLT

/OPERAND 1
/OPERAND 2
/OPERAND 3

/TAD ERROR. AC SHOULD EQUAL 0000
/LINK SHOULD EQUAL ZERO

/TAD TEST 32

1047	7200	CLA
1050	7100	CLL
1051	1057	TAD K7737
1052	1030	TAD K0020
1053	1030	TAD K0020
1054	7040	CMA
1055	7420	SNL
1056	7440	SEA
1057	7402	HLT

/OPERAND 1
/OPERAND 2
/OPERAND 3

/TAD ERROR. AC SHOULD EQUAL 0000
/LINK SHOULD EQUAL ZERO

/TAD TEST 33

1060	7200	CLA
1061	7100	CLL
1062	1056	TAD K7757
1063	1026	TAD K0010
1064	1026	TAD K0010
1065	7040	CMA
1066	7420	SNL
1067	7440	SEA
1070	7402	HLT

/OPERAND 1
/OPERAND 2
/OPERAND 3

/TAD ERROR. AC SHOULD EQUAL 0000
/LINK SHOULD EQUAL ZERO

/TAD TEST 34

1071	7200	CLA
1072	7100	CLL
1073	1055	TAD K7767
1074	1024	TAD K0004
1075	1024	TAD K0004
1076	7040	CMA
1077	7420	SNL
1100	7440	SEA

/OPERAND 1
/OPERAND 2
/OPERAND 3

```

1101 7402          HLT          /TAD ERROR, AC SHOULD EQUAL 0000
                                   /LINK SHOULD EQUAL ZERO

                                   /TAD TEST 35
1102 7200          CLA
1103 7100          CLL
1104 1054          TAD K7773      /OPERAND 1
1105 1022          TAD K0002      /OPERAND 2
1106 1022          TAD K0002      /OPERAND 3
1107 7040          CMA
1110 7420          SNL
1111 7440          SZA
1112 7402          HLT          /TAD ERROR, AC SHOULD EQUAL 0000
                                   /LINK SHOULD EQUAL ZERO

```

```

                                   /TAD TEST 36
1113 7200          CLA
1114 7100          CLL
1115 1053          TAD K7775      /OPERAND 1
1116 1021          TAD K0001      /OPERAND 2
1117 1021          TAD K0001      /OPERAND 3
1120 7040          CMA
1121 7420          SNL
1122 7430          SEL
1123 7402          HLT          /TAD ERROR, AC SHOULD EQUAL 0000
                                   /LINK SHOULD EQUAL ZERO

```

```

                                   /TAD TEST 37
1124 7200          CLA          /10:MB, CR.
1125 7100          CLL
1126 1021          TAD K0001      /0+1=1
1127 1023          TAD K3        /1+3=4
1130 1054          TAD K7773      /4+7773=7777
1131 7040          CMA          /0
1132 7420          SNL
1133 7440          SZA
1134 7402          HLT          /TAD ERROR, AC AND LINK SHOULD BE ZERO.

```

```

                                   /TAD TEST 38.
1135 7200          CLA          /9: MB, CR.
1136 7100          CLL
1137 1022          TAD K0002      /0+2=2
1140 1025          TAD K6        /2+6=10
1141 1055          TAD K7767      /10+7767=7777
1142 7040          CMA          /0
1143 7420          SNL
1144 7440          SZA
1145 7402          HLT          /TAD ERROR, AC AND LINK SHOULD BE ZERO.

```

```

                                   /TAD TEST 39.
1146 7200          CLA          /8: MB, CR.
1147 7100          CLL
1150 1024          TAD K0004      /0+4=4
1151 1027          TAD K14       /4+14=20

```

1152	1056	TAD K7757	/20+7757=7777
1153	7040	CMA	/0
1154	7420	SNL	
1155	7440	SZA	
1156	7402	HLT	/TAD ERROR, AC AND LINK SHOULD BE ZERO.

/TAD TEST 40.

/7: MB, CR.

1157	7200	CLA	
1160	7100	CLL	
1161	1026	TAD K0010	/0+10=10
1162	1031	TAD K30	/10+30=40
1163	1057	TAD K7737	/40+7737=7777
1164	7040	CMA	/0
1165	7420	SNL	
1166	7440	SZA	
1167	7402	HLT	/TAD ERROR, AC AND LINK SHOULD BE ZERO.

/TAD TEST 41.

/6: MB, CR.

1170	7200	CLA	
1171	7100	CLL	
1172	1030	TAD K0020	/0+20=20
1173	1033	TAD K60	/20+60=100
1174	1061	TAD K7677	/100+7677=7777
1175	7040	CMA	/0
1176	7420	SNL	
1177	7440	SZA	
1200	7402	HLT	/TAD ERROR, AC AND LINK SHOULD BE ZERO.

/TAD TEST 42.

/5: MB, CR.

1201	7200	CLA	
1202	7100	CLL	
1203	1032	TAD K0040	/0+40=40
1204	1035	TAD K140	/40+140=200
1205	1062	TAD K7577	/200+7577=7777
1206	7040	CMA	/0
1207	7420	SNL	
1210	7440	SZA	/
1211	7402	HLT	/TAD ERROR, AC AND LINK SHOULD BE ZERO.

/TAD TEST 43.

/4: MB, CR.

1212	7200	CLA	
1213	7100	CLL	
1214	1034	TAD K0100	/0+100=100
1215	1037	TAD K300	/100+300=400
1216	1063	TAD K7377	/400+7377=7777
1217	7040	CMA	/0
1220	7420	SNL	
1221	7440	SZA	
1222	7402	HLT	/TAD ERROR, AC AND LINK SHOULD BE ZERO.

/TAD TEST 44.

/3: MB, CR.

1223	7200	CLA	
1224	7100	CLL	
1225	1036	TAD K0200	/0+200=200
1226	1041	TAD K600	/200+600=1000

1227	1064	TAD K6777	/1000+6777=7777
1230	7040	CMA	/0
1231	7420	SNL	
1232	7440	SZA	
1233	7402	HLT	/TAD ERROR. AC AND LINK SHOULD BE ZERO.

/TAD TEST 45. /2: MB, CR.

1234	7200	CLA	
1235	7100	CLL	/
1236	1040	TAD K0400	/0+400=400
1237	1044	TAD K1400	/400+1400=2000
1240	1065	TAD K5777	/2000+5777=7777
1241	7040	CMA	/0
1242	7420	SNL	
1243	7440	SZA	
1244	7402	HLT	/TAD ERROR. AC AND LINK SHOULD BE ZERO.

/TAD TEST 46 /1: MB, CR.

1245	7200	CLA	
1246	7100	CLL	
1247	1042	TAD K1000	/0+1000=1000
1250	1046	TAD K3000	/1000+3000=4000
1251	1066	TAD K3777	/4000+3777=7777
1252	7040	CMA	/0
1253	7420	SNL	
1254	7440	SZA	
1255	7402	HLT	/TAD ERROR. AC AND LINK SHOULD BE ZERO.

/TAD TEST 47 /0: MB, CR

1256	7200	CLA	
1257	7100	CLL	
1260	1045	TAD K2000	/0+2000=2000
1261	1072	TAD K6000	/2000+6000=1 0000
1262	7430	SZL	
1263	7440	SZA	
1264	7402	HLT	/TAD ERROR. LINK SHOULD = 1. AC SHOULD = 0000.

/TAD TEST 48.

1265	7200	CLA	
1266	7100	CLL	
1267	1067	TAD K7777	/0+7777=7777
1270	1021	TAD K0001	/7777+1=1 0000
1271	7430	SZL	
1272	7440	SZA	/
1273	7402	HLT	/TAD ERROR. LINK SHOULD = 1. AC SHOULD = 0000.

/TAD TEST 49.

/10: AC, MB, CR.

1274	7200	CLA	
1275	7100	CLL	
1276	1023	TAD K3	/0+3=3
1277	1023	TAD K3	/3+3=6
1300	1100	TAD K7770	/6+7770=7776
1301	1021	TAD K0001	/7776+1=7777
1302	7040	CMA	/0

1303 7420
1304 7440
1305 7402

SNL
SZA
HLT

/TAD ERROR. AC AND LINK SHOULD BE ZERO.

/TAD TEST 50.

/9: AC, MB, CR.

1306 7200
1307 7100
1310 1025
1311 1025
1312 1077
1313 1023
1314 7040
1315 7420
1316 7440
1317 7402

CLA
CLL
TAD K6
TAD K6
TAD K7760
TAD K3
CMA
SNL
SZA
HLT

/0+6=6
/6+6=14
/14+7760=7774
/7774+3=7777
/0

/TAD ERROR. AC AND LINK SHOULD BE ZERO.

/TAD TEST 51.

/8: AC, MB, CR.

1320 7200
1321 7100
1322 1027
1323 1027
1324 1076
1325 1102
1326 7040
1327 7420
1330 7440
1331 7402

CLA
CLL
TAD K14
TAD K14
TAD K7740
TAD K0007
CMA
SNL
SZA
HLT

/0+14=14
/14+14=30
/30+7740=7770
/7770+7=7777
/0

/TAD ERROR. AC AND LINK SHOULD BE ZERO.

/TAD TEST 52.

/7: AC, MB, CR.

1332 7200
1333 7100
1334 1031
1335 1031
1336 1051
1337 7040
1340 7420
1341 7440
1342 7402

CLA
CLL
TAD K30
TAD K30
TAD K7717
CMA
SNL
SZA
HLT

/0+30=30
/30+30=60
/60+7717=7777
/0

/TAD ERROR. AC AND LINK SHOULD BE ZERO.

/TAD TEST 53.

/6: AC, MB, CR.

1343 7200
1344 7100
1345 1033
1346 1033
1347 1075
1350 1105
1351 7040
1352 7420
1353 7440
1354 7402

CLA
CLL
TAD K60
TAD K60
TAD K7600
TAD K0037
CMA
SNL
SZA
HLT

/60+60=120
/120+7600=7720
/7720+37=7757
/0

/TAD ERROR. AC AND LINK SHOULD BE ZERO.

/TAD TEST 54.

/5: AC, MB, CR.

1355 7200
1356 7100

CLA
CLL

1357	1035	TAD K140	
1360	1035	TAD K140	/140+140=300
1361	1074	TAD K7400	/300+7400=7700
1362	1106	TAD K0077	/7700+77=7777
1363	7040	CMA	/0
1364	7420	SNL	
1365	7440	SEA	
1366	7402	HLT	/TAD ERROR. AC AND LINK SHOULD BE ZERO.

/TAD TEST 55.

/4: AC, MB, CR.

1367	7200	CLA	
1370	7100	CLL	
1371	1037	TAD K300	/0+300=300
1372	1037	TAD K300	/300+300=600
1373	1060	TAD K7177	/600+7177=7777
1374	7040	CMA	/0
1375	7420	SNL	
1376	7440	SEA	
1377	7402	HLT	/TAD ERROR. AC AND LINK SHOULD BE ZERO.

/TAD TEST 56.

/3: AC, MB, CR.

1400	7200	CLA	
1401	7100	CLL	
1402	1041	TAD K600	/0+600=600
1403	1041	TAD K600	/600+600=1200
1404	1072	TAD K6000	/1200+6000=7200
1405	1110	TAD K0377	/7200+377=7777
1406	7040	CMA	
1407	7420	SNL	
1410	7440	SEA	
1411	7402	HLT	/TAD ERROR. AC AND LINK SHOULD BE ZERO.

/TAD TEST 57.

/2: AC, MB, CR.

1412	7200	CLA	
1413	7100	CLL	
1414	1044	TAD K1400	/0+1400=1400
1415	1044	TAD K1400	/1400+1400=3000
1416	1050	TAD K4000	/3000+4000=7000
1417	1111	TAD K0777	/7000+777=7777
1420	7040	CMA	/0
1421	7420	SNL	
1422	7440	SEA	
1423	7402	HLT	/TAD ERROR. AC AND LI K SHOULD BE ZERO.

/TAD TEST 58.

/1: AC, MB, CR.

1424	7200	CLA	
1425	7100	CLL	
1426	1046	TAD K3000	/0+3000=3000
1427	1046	TAD K3000	/3000+3000=6000
1430	1112	TAD K1777	/6000+1777=7777
1431	7040	CMA	/0
1432	7420	SNL	
1433	7440	SEA	
1434	7402	HLT	/TAD ERROR. AC AND LINK SHOULD BE ZERO

```
/TAD TEST 59.
1435 7200 CLA
1436 7100 CLL
1437 1072 TAD K6000
1440 1072 TAD K6000
1441 1066 TAD K3777
1442 7040 CMA
1443 7430 SEL
1444 7440 SEA
1445 7402 HLT

/TAD TEST 60.
1446 7200 CLA
1447 7100 CLL
1448 1067 TAD K7777
1451 1067 TAD K7777
1452 1021 TAD K0001
1453 7040 CMA
1454 7430 SEL
1455 7440 SEA
1456 7402 HLT

/RAR TEST 1
1457 7200 CLA
1460 7100 CLL
1461 1021 TAD K0001
1462 7010 RAR
1463 7420 SNL
1464 7402 HLT

/RAR TEST 2
1465 7200 CLA
1466 7100 CLL
1467 1020 TAD K0000
1470 7010 RAR
1471 7440 SEA
1472 7402 HLT

/RAR TEST 3
1473 7200 CLA
1474 7100 CLL
1475 1020 TAD K0000
1476 7010 RAR
1477 7430 SEL
1500 7402 HLT

/RAR TEST 4
1501 7200 CLA
1502 7100 CLL
1503 7020 CML
1504 1020 TAD K0000
```

/0: AC, MB, CR.

/

/0+6000=6000

/6000+6000=1 4000

/1 4000+3777=1 7777

/1 0000

/TAD ERROR. LINK SHOULD BE 1. AC SHOULD BE ZERO.

/

/0+7777=7777

/7777+7777=1 7776

/1 7776+1=1 7777

/1 0000

/TAD ERROR. LINK SHOULD BE 1. AC SHOULD BE ZERO.

/ROTATE PATTERN

/RAR FAILED. LINK DROPPED A BIT

/LINK SHOULD EQUAL A ONE

/ROTATE PATTERN

/RAR FAILED. AC PICKED UP A BIT

/A ONE IN AC EQUALS THE PICKED UP BIT

/ROTATE PATTERN

/RAL FAILED. LINK PICKED UP A BIT

/LINK SHOULD EQUAL ZERO

/ROTATE PATTERN

1505 7010
1506 7430
1507 7402

RAR
SZL
HLT

/RAR LINK PICKED UP A BIT
/LINK SHOULD EQUAL ZERO

/RAR TEST 5

1510 7200
1511 7100
1512 7020
1513 1067
1514 7010
1515 7040
1516 7440
1517 7402

CLA
CLL
CML
TAD K7777
RAR
CMA
SZA
HLT

/ROTATE PATTERN

/RAR FAILED AC DROPPED A BIT
/A ONE IN AC EQUALS THE DROPPED BIT

/RAR TEST 6

1520 7200
1521 7100
1522 7020
1523 1020
1524 7010
1525 1066
1526 7040
1527 7450
1530 7430
1531 7402

CLA
CLL
CML
TAD K0000
RAR
TAD K3777
CMA
SNA
SZL
HLT

/ROTATE PATTERN

/RAR FAILED AC AND LINK
/SHOULD EQUAL 0000

/RAR TEST 7

1532 7200
1533 7100
1534 1050
1535 7010
1536 1065
1537 7040
1540 7450
1541 7430
1542 7402

CLA
CLL
TAD K4000
RAR
TAD K5777
CMA
SNA
SZL
HLT

/ROTATE PATTERN

/RAR FAILED AC AND LINK SHOULD
/EQUAL 0000

/RAR TEST 8

1543 7200
1544 7100
1545 1045
1546 7010
1547 1064
1550 7040
1551 7450
1552 7430
1553 7402

CLA
CLL
TAD K2000
RAR
TAD K6777
CMA
SNA
SZL
HLT

/ROTATE PATTERN

/RAR FAILED AC AND LINK SHOULD
/EQUAL 0000

/RAR TEST 9

1554 7200
1555 7100
1556 1042

CLA
CLL
TAD K1000

/ROTATE PATTERN

1557	7010	RAR
1560	1063	TAD K7377
1561	7040	CMA
1562	7450	SNA
1563	7430	SZL
1564	7402	HLT

/RAR FAILED AC AND LINK SHOULD
/EQUAL 0000

/RAR TEST 10

1565	7200	CLA
1566	7100	CLL
1567	1040	TAD K0400
1570	7010	RAR
1571	1062	TAD K7577
1572	7040	CMA
1573	7450	SNA
1574	7430	SZL
1575	7402	HLT

/ROTATE PATTERN

/RAR FAILED AC AND LINK
/SHOULD EQUAL 0000

/RAR TEST 11

1576	7200	CLA
1577	7100	CLL
1600	1036	TAD K0200
1601	7010	RAR
1602	1061	TAD K7677
1603	7040	CMA
1604	7450	SNA
1605	7430	SZL
1606	7402	HLT

/ROTATE PATTERN

/RAR FAILED AC AND LINK
/EQUAL 0000

/RAR TEST 12

1607	7200	CLA
1610	7100	CLL
1611	1034	TAD K0100
1612	7010	RAR
1613	1057	TAD K7737
1614	7040	CMA
1615	7450	SNA
1616	7430	SZL
1617	7402	HLT

/ROTATE PATTERN

/RAR FAILED AC AND LINK
/SHOULD EQUAL 0000

/RAR TEST 13

1620	7200	CLA
1621	7100	CLL
1622	1032	TAD K0040
1623	7010	RAR
1624	1056	TAD K7757
1625	7040	CMA
1626	7450	SNA
1627	7430	SZL
1630	7402	HLT

/ROTATE PATTERN

/RAR FAILED AC AND LINK

/SHOULD EQUAL 0000

PAUSE

/INSTRUCTION TEST 1

/TAPE 2

/RAR TEST 14

1631	7200	CLA	
1632	7100	CLL	
1633	1030	TAD K0020	/ROTATE PATTERN
1634	7010	RAR	
1635	1055	TAD K7767	
1636	7040	CMA	
1637	7450	SNA	
1640	7430	SZL	
1641	7402	HLT	/RAR FAILED AC AND LINK

/SHOULD EQUAL 0000

/RAR TEST 15

1642	7200	CLA	
1643	7100	CLL	
1644	1026	TAD K0010	/ROTATE PATTERN
1645	7010	RAR	
1646	1054	TAD K7773	
1647	7040	CMA	
1650	7450	SNA	
1651	7430	SZL	
1652	7402	HLT	/RAR FAILED AC AND LINK

/SHOULD EQUAL 0000

/RAR TEST 16

1653	7200	CLA	
1654	7100	CLL	
1655	1024	TAD K0004	/ROTATE PATTERN
1656	7010	RAR	
1657	1053	TAD K7775	
1660	7040	CMA	
1661	7450	SNA	
1662	7430	SZL	
1663	7402	HLT	/RAR FAILED AC AND LINK

/SHOULD EQUAL 0000

/RAR TEST 17

1664	7200	CLA	
1665	7100	CLL	
1666	1022	TAD K0002	/ROTATE PATTERN
1667	7010	RAR	
1670	1052	TAD K7776	
1671	7040	CMA	
1672	7450	SNA	
1673	7430	SZL	
1674	7402	HLT	/RAR FAILED AC AND LINK

/SHOULD EQUAL 0000

1675	7200	/RAR TEST 18	
1676	7100	CLA	
1677	1021	CLL	
1700	7010	TAD K0001	/ROTATE PATTERN
1701	1067	RAR	
1702	7040	TAD K7777	
1703	7450	CMA	
1704	7420	SNA	
1705	7402	SNL	
		HLT	/RAR FAILED AC AND LINK
			/SHOULD EQUAL 0000
1706	7200	/RTR TEST 1	
1707	7100	CLA	
1710	1022	CLL	
1711	7012	TAD K0002	/ROTATE PATTERN
1712	7420	RTR	
1713	7402	SNL	
		HLT	/RTR FAILED LINK DROPPED
			/A BIT LINK SHOULD EQUAL A ONE
1714	7200	/RTR TEST 2	
1715	7100	CLA	
1716	1020	CLL	
1717	7012	TAD K0000	/ROTATE PATTERN
1720	7440	RTR	
1721	7402	SZA	
		HLT	/RTR FAILED AC PICKED UP A BIT
			/A ONE IN AC EQUALS THE PICKED UP BIT
1722	7200	/RTR TEST 3	
1723	7100	CLA	
1724	1020	CLL	
1725	7012	TAD K0000	/ROTATE PATTERN
1726	7430	RTR	
1727	7402	SZL	
		HLT	/RTR LINK PICKED UP A BIT
			/LINK SHOULD EQUAL ZERO
1730	7200	/RTR TEST 4	
1731	7100	CLA	
1732	7020	CLL	
1733	1020	CML	
1734	7012	TAD K0000	/ROTATE PATTERN
1735	7430	RTR	
1736	7402	SZL	
		HLT	/RTR LINK PICKED UP A BIT
			/LINK SHOULD EQUAL ZERO
1737	7200	/RTR TEST 5	
1740	7100	CLA	
1741	7020	CLL	
1742	1067	CML	
1743	7012	TAD K7777	/ROTATE PATTERN
1744	7040	RTR	
1745	7440	CMA	
		SZA	

1746	7402	HLT	/RTR AC DROPPED A BIT A ONE IN /AC EQUALS THE DROPPED BIT
/RTR TEST 6			
1747	7200	CLA	
1750	7100	CLL	
1751	7020	CML	
1752	1020	TAD K0000	/ROTATE PATTERN
1753	7012	RTR	
1754	1065	TAD K5777	
1755	7040	CMA	
1756	7450	SNA	
1757	7430	SZL	
1760	7402	HLT	/RTR FAILED AC AND LINK /SHOULD EQUAL 0000
/RTR TEST 7			
1761	7200	CLA	
1762	7100	CLL	
1763	1050	TAD K4000	/ROTATE PATTERN
1764	7012	RTR	
1765	1064	TAD K6777	
1766	7040	CMA	
1767	7450	SNA	
1770	7430	SZL	
1771	7402	HLT	/RTR FAILED AC AND LINK /SHOULD EQUAL 0000
/RTR TEST 8			
1772	7200	CLA	
1773	7100	CLL	
1774	1045	TAD K2000	/ROTATE PATTERN
1775	7012	RTR	
1776	1063	TAD K7377	
1777	7040	CMA	
2000	7450	SNA	
2001	7430	SZL	
2002	7402	HLT	/RTR FAILED AC AND LINK /SHOULD EQUAL 0000
/RTR TEST 9			
2003	7200	CLA	
2004	7100	CLL	
2005	1042	TAD K1000	/ROTATE PATTERN
2006	7012	RTR	
2007	1062	TAD K7577	
2010	7040	CMA	
2011	7450	SNA	
2012	7430	SZL	
2013	7402	HLT	/RTR FAILED AC AND LINK /SHOULD EQUAL 0000
/RTR TEST 10			
2014	7200	CLA	
2015	7100	CLL	
2016	1040	TAD K0400	/ROTAATE PATTERN
2017	7012	RTR	
2020	1061	TAD K7677	

2021 7040
2022 7450
2023 7430
2024 7402

CMA
SNA
SZL
HLT

/RTR FAILED AC AND LINK
/SHOULD EQUAL 0000

/RTR TEST 11

2025 7200
2026 7100
2027 1036
2030 7012
2031 1057
2032 7040
2033 7450
2034 7430
2035 7402

CLA
CLL
TAD K0200
RTR
TAD K7737
CMA
SNA
SZL
HLT

/ROTATE PATTERN

/RTR FAILED AC AND LINK
/SHOULD EQUAL 0000

/RTR TEST 12

2036 7200
2037 7100
2040 1034
2041 7012
2042 1056
2043 7040
2044 7450
2045 7430
2046 7402

CLA
CLL
TAD K0100
RTR
TAD K7757
CMA
SNA
SZL
HLT

/ROTATE PATTERN

/RTR FAILED AC AND LINK
/SHOULD EQUAL 0000

/RTR TEST 13

2047 7200
2050 7100
2051 1032
2052 7012
2053 1055
2054 7040
2055 7450
2056 7430
2057 7402

CLA
CLL
TAD K0040
RTR
TAD K7767
CMA
SNA
SZL
HLT

/ROTATE PATTERN

/RTR FAILED AC AND LINK
/SHOULD EQUAL 0000

/RTR TEST 14

2060 7200
2061 7100
2062 1030
2063 7012
2064 1054
2065 7040
2066 7450
2067 7430
2070 7402

CLA
CLL
TAD K0020
RTR
TAD K7773
CMA
SNA
SZL
HLT

/ROTATE PATTERN

/RTR FAILED AC AND LINK
/SHOULD EQUAL 0000

/RTR TEST 15

2071 7200
2072 7100
2073 1026

CLA
CLL
TAD K0010

/ROTATE PATTERN

2074	7012	RTR	
2075	1053	TAD K7775	
2076	7040	CMA	
2077	7450	SNA	
2100	7430	SZL	
2101	7402	HLT	/RTR FAILED AC AND LINK

/SHOULD EQUAL 0000

/RTR TEST 16

2102	7300	CLA CLL	
2103	1024	TAD K0004	/ROTATE PATTERN
2104	7012	RTR	
2105	1052	TAD K7776	
2106	7040	CMA	
2107	7450	SNA	
2110	7430	SZL	
2111	7402	HLT	/RTR FAILED AC AND LINK

/SHOULD EQUAL 0000

/RTR TEST 17

2112	7200	CLA	
2113	7100	CLL	
2114	1022	TAD K0002	/ROTATE PATTERN
2115	7012	RTR	
2116	7450	SNA	
2117	7420	SNL	
2120	7402	HLT	/RTR FAILED, AC SHOULD EQUAL

/0000, LINK SHOULD EQUAL ONE

/RTR TEST 18

2121	7200	CLA	
2122	7100	CLL	
2123	1021	TAD K0001	/ROTATE PATTERN
2124	7012	RTR	
2125	1066	TAD K3777	
2126	7040	CMA	
2127	7450	SNA	
2130	7430	SZL	
2131	7402	HLT	/RTR FAILED, AC AND LINK

/SHOULD BE ZERO

/RAL TEST 1

2132	7200	CLA	
2133	7100	CLL	
2134	1050	TAD K4000	/ROTATE PATTERN
2135	7004	RAL	
2136	7430	SZL	
2137	7440	SZA	
2140	7402	HLT	/RAL FAILED, AC SHOULD EQUAL 0000

/LINK SHOULD EQUAL ONE.

/RAL TEST 2

2141	7200	CLA	
2142	7100	CLL	
2143	1020	TAD K0000	/ROTATE PATTERN
2144	7004	RAL	
2145	7420	SNL	
2146	7440	SZA	

2147 7402 HLT /RAL FAILED. AC SHOULD EQUAL 0000
/LINK SHOULD EQUAL ZERO

/RAL TEST 3
2150 7200 CLA
2151 7100 CLL
2152 7020 CML
2153 1020 TAD K0000 /ROTATE PATTERN. LINK=1
2154 7004 RAL
2155 7430 SZL
2156 7402 HLT /RAL FAILURE. AC SHOULD EQUAL 0001
/LINK SHOULD EQUAL ZERO

/RAL TEST 4
2157 7200 CLA
2160 7100 CLL
2161 7020 CML
2162 1067 TAD K7777 /ROTATE PATTERN. LINK=1
2163 7004 RAL
2164 7040 CMA
2165 7440 SEA
2166 7402 HLT /RAL FAILURE. LINK SHOULD EQUAL ONE
/AC SHOULD EQUAL 0000

/RAL TEST 5
2167 7200 CLA
2170 7100 CLL
2171 1045 TAD K2000 /ROTATE PATTERN
2172 7004 RAL
2173 1066 TAD K3777
2174 7040 CMA
2175 7450 SNA
2176 7430 SZL
2177 7402 HLT /RAL FAILURE. AC SHOULD EQUAL 0000
/LINK SHOULD EQUAL ONE

/RAL TEST 6
2200 7200 CLA
2201 7100 CLL
2202 1042 TAD K1000 /ROTATE PATTERN
2203 7004 RAL
2204 1065 TAD K5777
2205 7040 CMA
2206 7440 SEA
2207 7402 HLT /RAL FAILURE. AC SHOULD EQUAL 0000
/LINK SHOULD EQUAL ZERO

/RAL TEST 7
2210 7200 CLA
2211 7100 CLL
2212 1040 TAD K0400 /ROTATE PATTERN
2213 7004 RAL
2214 1064 TAD K6777
2215 7040 CMA
2216 7450 SNA
2217 7430 SZL

2220	7402	HLT	/RAL FAILURE. AC SHOULD EQUAL 0000
			/LINK SHOULD EQUAL ZERO
		/RAL TEST 8	
2221	7200	CLA	
2222	7100	CLL	
2223	1036	TAD K0200	/ROTATE PATTERN
2224	7004	RAL	
2225	1063	TAD K7377	
2226	7040	CMA	
2227	7450	SNA	
2230	7430	SZL	/RAL FAILURE AC SHOULD EQUAL 0000
2231	7402	HLT	/LINK SHOULD EQUAL ZERO
		/RAL TEST 9	
2232	7200	CLA	
2233	7100	CLL	
2234	1034	TAD K0100	/ROTATE PATTERN
2235	7004	RAL	
2236	1062	TAD K7577	
2237	7040	CMA	
2240	7450	SNA	
2241	7430	SZL	/RAL FAILURE AC SHOULD EQUAL 0000
2242	7402	HLT	/LINK SHOULD EQUAL ZERO
		/RAL TEST 10	
2243	7200	CLA	
2244	7100	CLL	
2245	1032	TAD K0040	/ROTATE PATTERN
2246	7004	RAL	
2247	1061	TAD K7677	
2250	7040	CMA	
2251	7450	SNA	
2252	7430	SZL	/RAL FAILURE AC SHOULD EQUAL 0000
2253	7402	HLT	/LINK SHOULD EQUAL A ZERO
		/RAL TEST 11	
2254	7200	CLA	
2255	7100	CLL	
2256	1030	TAD K0020	/ROTATE PATTERN
2257	7004	RAL	
2260	1057	TAD K7737	
2261	7040	CMA	
2262	7450	SNA	
2263	7430	SZL	/RAL FAILURE AC SHOULD EQUAL 0000
2264	7402	HLT	/LINK SHOULD EQUAL A ZERO
		/RAL TEST 12	
2265	7200	CLA	
2266	7100	CLL	
2267	1026	TAD K0010	/ROTATE PATTTERN
2270	7004	RAL	
2271	1056	TAD K7757	
2272	7040	CMA	
2273	7450	SNA	
2274	7430	SZL	/RAL FAILURE AC SHOULD EQUAL 0000
2275	7402	HLT	/LINK SHOULD EQUAL A ZERO

```

      /RAL TEST 13
2276 7200      CLA
2277 7100      CLL
2300 1024      TAD K0004      /ROTATE PATTERN
2301 7004      RAL
2302 1055      TAD K7767
2303 7040      CMA
2304 7450      SNA
2305 7430      SEL      /RAL FAILED AC SHOULD EQUAL 0000
2306 7402      HLT      /LINK SHOULD EQUAL A ZERO

      /RAL TEST 14
2307 7200      CLA
2310 7100      CLL
2311 1022      TAD K0002      /ROTATE PATTERN
2312 7004      RAL
2313 1054      TAD K7773
2314 7040      CMA
2315 7450      SNA
2316 7430      SEL      /RAL FAILED AC SHOULD EQUAL 0000
2317 7402      HLT      /LINK SHOULD EQUAL A ZERO

      /RAL TEST 15
2320 7200      CLA
2321 7100      CLL
2322 1021      TAD K0001      /ROTATE PATTERN
2323 7004      RAL
2324 1053      TAD K7775
2325 7040      CMA
2326 7450      SNA
2327 7430      SEL      /RAL FAILED AC SHOULD EQUAL 0000
2330 7402      HLT      /LINK SHOULD EQUAL ZERO

      /RAL TEST 16
2331 7200      CLA
2332 7100      CLL
2333 7020      CML
2334 7004      RAL
2335 1052      TAD K7776
2336 7040      CMA
2337 7450      SNA
2340 7430      SEL
2341 7402      HLT      /RAL FAILED AC SHOULD EQUAL 0000
                        /LINK SHOULD EQUAL ZERO

      /RTL TEST 1
2342 7200      CLA
2343 7100      CLL
2344 1045      TAD K2000
2345 7006      RTL
2346 7420      SNL
2347 7402      HLT      /RTL LINK DROPPED A BIT
                        /LINK SHOULD EQUAL A ONE

      /RTL TEST 2
2350 7200      CLA
```

2351	7100	CLL	
2352	1020	TAD K0000	/ROTATE PATTERN
2353	7006	RTL	
2354	7440	SZA	
2355	7402	HLT	/RTL AC PICKED UP A BIT
			/A ONE IN AC EQUALS THE PICKED UP

		/RTL TEST 3	
2356	7200	CLA	
2357	7100	CLL	
2360	1020	TAD K0000	/ROTATE PATTERN
2361	7006	RTL	
2362	7430	SZL	
2363	7402	HLT	/RTL LINK PICKED UP A BIT
			/LINK SHOULD EQUAL ZERO

		/RTL TEST 4	
2364	7200	CLA	
2365	7100	CLL	
2366	7020	CML	
2367	1020	TAD K0000	/ROTATE PATTERN
2370	7006	RTL	
2371	7430	SZL	
2372	7402	HLT	/RTL FAILURE. LINK PICKED UP A BIT
			/LINK SHOULD EQUAL A ZERO

		/RTL TEST 5	
2373	7200	CLA	
2374	7100	CLL	
2375	7020	CML	
2376	1067	TAD K7777	/ROTATE PATTERN
2377	7006	RTL	
2400	7040	CHA	
2401	7440	SZA	
2402	7402	HLT	/RTL FAILURE. DROPPED A BIT

		/RTL TEST 6	
2403	7200	CLA	
2404	7100	CLL	
2405	1050	TAD K4000	/ROTATE PATTERN
2406	7006	RTL	
2407	1052	TAD K7776	
2410	7040	CHA	
2411	7450	SNA	
2412	7430	SZL	
2413	7402	HLT	/RTL FAILED AC AND LINK SHOULD EQUAL 0000

		/RTL TEST 7	
2414	7200	CLA	
2415	7100	CLL	
2416	1045	TAD K2000	/ROTATE PATTERN
2417	7006	RTL	
2420	7450	SNA	
2421	7420	SNL	
2422	7402	HLT	/RTL FAILED AC AND LINK SHOULD
			/EQUAL 0000

		/RTL TEST 8	
2423	7200	CLA	

2424	7100	CLL	
2425	1042	TAD K1000	/ROTATE PATTERN
2426	7006	RTL	
2427	1066	TAD K3777	
2430	7040	CMA	
2431	7450	SNA	
2432	7430	SZL	
2433	7402	HLT	/RTL FAILED AC AND LINK SHOULD /EQUAL 0000

/RTL TEST 9			
2434	7200	CLA	
2435	7100	CLL	
2436	1040	TAD K0400	/ROTATE PATTERN
2437	7006	RTL	
2440	1065	TAD K5777	
2441	7040	CMA	
2442	7450	SNA	
2443	7430	SZL	
2444	7402	HLT	/RTL FAILED AC AND LINK SHOULD /EQUAL ZERO

/RTL TEST 10			
2445	7200	CLA	
2446	7100	CLL	
2447	1036	TAD K0200	/ROTATE PATTERN
2450	7006	RTL	
2451	1064	TAD K6777	
2452	7040	CMA	
2453	7450	SNA	
2454	7430	SZL	
2455	7402	HLT	/RTL FAILED AC AND LINK SHOULD /EQUAL 0000

/RTL TEST 11			
2456	7200	CLA	
2457	7100	CLL	
2460	1034	TAD K0100	/ROTATE PATTERN
2461	7006	RTL	
2462	1063	TAD K7377	
2463	7040	CMA	
2464	7450	SNA	
2465	7430	SZL	
2466	7402	HLT	/RTL FAILED AC AND LINK SHOULD /EQUAL 0000

/RTL TEST 12			
2467	7200	CLA	
2470	7100	CLL	
2471	1032	TAD K0040	/ROTATE PATTERN
2472	7006	RTL	
2473	1062	TAD K7577	
2474	7040	CMA	
2475	7450	SNA	
2476	7430	SZL	
2477	7402	HLT	/RTL FAILED AC AND LINK SHOULD /EQUAL 0000

```
2500 7200      /RTL TEST 13      CLA
2501 7100      CLL
2502 1030      TAD K0020      /ROTATE PATTERN
2503 7006      RTL
2504 1061      TAD K7677
2505 7040      CMA
2506 7450      SNA
2507 7430      SZL
2510 7402      HLT      /RTL FAILED AC AND LINK SHOULD
                        /EQUAL 0000
```

```
2511 7200      /RTL TEST 14      CLA
2512 7100      CLL
2513 1026      TAD K0010      /ROTATE PATTERN
2514 7006      RTL
2515 1057      TAD K7737
2516 7040      CMA
2517 7450      SNA
2520 7430      SZL
2521 7402      HLT      /RTL FAILED AC AND LINK SHOULD
```

```
2522 7200      /RTL TEST 15      CLA
2523 7100      CLL
2524 1024      TAD K0004      /ROTATE PATTERN
2525 7006      RTL
2526 1056      TAD K7757
2527 7040      CMA
2530 7450      SNA
2531 7430      SZL
2532 7402      HLT      /RTL FAILED AC AND LINK SHOULD
                        /EQUAL 0000
```

```
2533 7200      /RTL TEST 16      CLA
2534 7100      CLL
2535 1022      TAD K0002      /ROTATE PATTERN
2536 7006      RTL
2537 1055      TAD K7767
2540 7040      CMA
2541 7450      SNA
2542 7430      SZL
2543 7402      HLT      /RTL FAILED AC AND LINK
                        /SHOULD EQUAL 0000
```

```
2544 7200      /RTL TEST 17      CLA
2545 7100      CLL
2546 1021      TAD K0001      /ROTATE PATTERN
2547 7006      RTL
2550 1054      TAD K7773
2551 7040      CMA
2552 7450      SNA
```

2553 7430
2554 7422

SZL
HLT

/RTL FAILED AC AND LINK
/SHOULD EQUAL 0000

/RTL TEST 18

2555 7200
2556 7100
2557 7020
2560 7006
2561 1053
2562 7040
2563 7450
2564 7430
2565 7402

CLA
CLL
CML
RTL
TAD K7775
CMA
SNA
SZL
HLT

/RTL FAILED AC AND LINK
/SHOULD EQUAL 0000

/BSW TEST 1

2566 7200
2567 7100
2570 7040
2571 7002
2572 7040
2573 7420
2574 7440
2575 7402

CLA
CLL
CMA
BSW
CMA
SNL
SZA
HLT

/AC=7777
/SWAP BYTES AC SHOULD EQUAL 7777
/DID LINK SET?
/BSW FAILED
/AC AND LINK SHOULD=0000

/BSW TEST 2

2576 7200
2577 7100
2600 7020
2601 7002
2602 7450
2603 7420
2604 7402

CLA
CLL
CML
BSW
SNA
SNL
HLT

/LINK=1
/SWAP BYTES AC SHOULD EQUAL 0000
/BSW CAUSED THE LINK
/TO ROTATE

/BSW TEST 3

2605 7200
2606 7100
2607 1113
2610 7002
2611 1113
2612 7040
2613 7420
2614 7440
2615 7402

CLA
CLL
TAD K7700
BSW
TAD K7700
CMA
SNL
SZA
HLT

/AC=7700
/SWAP BYTES AC SHOULD EQUAL 0077
/AC=7777
/AC=0000
/BSW FAILED AC AND LINK
/SHOULD=0000

/BSW TEST 4

2616 7200
2617 7100
2620 1106
2621 7002
2622 1106
2623 7040
2624 7420
2625 7440

CLA
CLL
TAD K0077
BSW
TAD K0077
CMA
SNL
SZA

/AC=0077
/SWAP BYTES AC SHOULD EQUAL 7700
/AC=7777

2626	7402	HLT	/BSW FAILED AC AND LINK /SHOULD=0000
/BSW TEST 5			
2627	7300	CLA CLL	
2630	1116	TAD K0770	
2631	7002	BSW	/SWAP BYTES AC SHOULD EQUAL 7007
2632	1116	TAD K0770	
2633	7040	CMA	
2634	7420	SNL	
2635	7440	SZA	
2636	7402	HLT	/BSW FAILED AC AND LINK /SHOULD EQUAL 0000
/BSW TEST 6			
2637	7320	CLA CLL CML	
2640	1117	TAD K7007	
2641	7002	BSW	/SWAP BYTES AC SHOULD EQUAL 0770
2642	1117	TAD K7007	
2643	7040	CMA	
2644	7430	SZL	
2645	7440	SZA	
2646	7402	HLT	/BSW FAILED AC /SHOULD EQUAL 0000 AND LINK=1
/BSW TEST 7			
2647	7200	CLA	
2650	7100	CLL	
2651	1114	TAD K5225	/AC=5225
2652	7002	BSW	/SWAP BYTES AC SHOULD EQUAL 2552
2653	1114	TAD K5225	/AC=7777
2654	7040	CMA	
2655	7420	SNL	
2656	7440	SZA	
2657	7402	HLT	/BSW FAILED AC AND LINK /SHOULD=0000
/BSW TEST 8			
2660	7200	CLA	
2661	7100	CLL	
2662	1115	TAD K2552	/AC=2552
2663	7002	BSW	/SWAP BYTES AC SHOULD EQUAL 5225
2664	1115	TAD K2552	/AC=7777
2665	7040	CMA	
2666	7420	SNL	
2667	7440	SZA	
2670	7402	HLT	/BSW FAILED AC AND LINK /SHOULD=0000
/GROUP 1 OPERATE TEST 1			
2671	7200	CLA	/CLEAR AC
2672	7100	CLL	/CLEAR LINK
2673	7040	CMA	/AC EQUALS 7777
2674	7020	CML	/LINK EQUALS ONE
2675	7300	CLA CLL	/TEST COMBINATION
2676	7420	SNL	
2677	7440	SZA	
2700	7402	HLT	/CLA CLL FAILED. LINK SHOULD BE 0

```

/AC SHOULD EQUAL 0000
/AC EQUALS 0000
/AC EQUALS 2525
/TEST COMBINATION
/CLA CMA ERROR. AC SHOULD
/BE 0000

/GROUP 1 OPERATE TEST 2
2701 7200 CLA
2702 1071 TAD K2525
2703 7240 CLA CMA
2704 7040 CMA
2705 7440 SEA
2706 7402 HLT

/GROUP 1 OPERATE TEST 3
2707 7200 CLA
2710 7100 CLL
2711 7040 CMA
2712 7140 CLL CMA
2713 7420 SNL
2714 7440 SEA
2715 7402 HLT

/AC=7777 LINK=1
/TEST COMBINATION
/CLL CMA FAILED. AC AND LINK
/SHOULD BE ZERO

/GROUP 1 OPERATE TEST 4
2716 7100 CLL
2717 7020 CML
2720 7200 CLA
2721 7040 CMA
2722 7340 CLA CMA CLL
2723 7040 CMA
2724 7420 SNL
2725 7440 SEA
2726 7402 HLT

/CLL CMA FAILED. AC AND LINK
/SHOULD BE ZERO
/LINK=1
/AC=7777
/TEST COMBINATION
/CLA CMA CLL FAILED. AC AND
/LINK SHOULD BE ZERO

/GROUP 1 OPERATE TEST 5
2727 7200 CLA
2730 7100 CLL
2731 7040 CMA
2732 7220 CLA CML
2733 7430 SEL
2734 7440 SEA
2735 7402 HLT

/CLL CML FAILED. AC SHOULD EQUAL
/0000. LINK SHOULD BE A ONE
/LINK=0
/AC=7777
/TEST COMBINATION

/GROUP 1 OPERATE TEST 6
2736 7100 CLL
2737 7020 CML
2740 7120 CLL CML
2741 7420 SNL
2742 7402 HLT

/CLL CML FAILED
/LINK SHOULD BE A ONE
/LINK=1
/TEST COMBINATION

/GROUP 1 OPERATE TEST 7
2743 7100 CLL
2744 7120 CLL CML
2745 7420 SNL
2746 7402 HLT

/CLL CML FAILED.
/LINK SHOULD BE A ONE
/LINK=0
/TEST COMBINATION

/GROUP 1 OPERATE TEST 8
2747 7120 CLL CML
/LINK=1
```

2750	7240	CLA CMA	/AC=7777
2751	7320	CLA CLL CML	/TEST COMBINATION
2752	7430	SZL	
2753	7440	SZA	
2754	7402	HLT	/CLA CLL CML FAILED. LINK SHOULD /BE 1, AC SHOULD BE ZERO

/GROUP 1 OPERATE TEST 9

2755	7340	CLA CLL CMA	/LINK=0, AC=7777
2756	7320	CLA CLL CML	/TEST COMBINATION
2757	7430	SZL	
2760	7440	SZA	
2761	7402	HLT	/CLA CLL CML FAILED. LINK SHOULD /BE 1, AC SHOULD BE ZERO

/GROUP 1 OPERATE TEST 10

2762	7340	CLA CLL CMA	/AC=7777, LINK=0
2763	7060	CMA CML	/TEST COMBINATION
2764	7430	SZL	
2765	7440	SZA	
2766	7402	HLT	/CMA CML FAILED. AC SHOULD BE /0000 LINK SHOULD EQUAL ONE.

/GROUP 1 OPERATE TEST 11

2767	7300	CLA CLL	/AC AND LINK=0
2770	1071	TAD K2525	/AC=2525
2771	7340	CLA CMA CLL	/TEST COMBINATION
2772	7040	CMA	
2773	7420	SNL	
2774	7440	SZA	
2775	7402	HLT	/CLA CMA CML FAILED. AC SHOULD BE /0000. LINK SHOULD EQUAL ZERO

/GROUP 1 OPERATE TEST 12

2776	7300	CLL CLA	/AC AND LINK=0
2777	1071	TAD K2525	/AC=2525
3000	7160	CLL CMA CML	/TEST COMBINATION
3001	1071	TAD K2525	
3002	7040	CMA	
3003	7430	SZL	
3004	7440	SZA	
3005	7402	HLT	/CLL CMA CML FAILED. AC SHOULD BE /0000. LINK SHOULD EQUAL ONE

/GROUP 1 OPERATE TEST 13

3006	7300	CLA CLL	
3007	7020	CML	/AC=0000. LINK=1
3010	7160	CLL CMA CML	/TEST COMBINATION
3011	7040	CMA	
3012	7430	SZL	
3013	7440	SZA	
3014	7402	HLT	/CLL CMA CML FAILED. AC SHOULD /BE 0000. LINK SHOULD BE ONE

/GROUP 1 OPERATE TEST 14

3015	7300	CLA CLL	
3016	1071	TAD K2525	/AC=2525, LINK=0

3017	7360	CLA CLL CMA CML	/TEST COMBINATION
3020	7040	CMA	
3021	7430	SZL	
3022	7440	SZA	
3023	7402	HLT	/CLA CLL CMA CML FAILED. AC SHOULD /BE 0000 LINK SHOULD EQUAL ONE.

/GROUP 1 OPERATE TEST 15

3024	7320	CLA CLL CML	
3025	1070	TAD K5252	/AC=5252, LINK=1
3026	7360	CLA CLL CMA CML	/TEST COMBINATION
3027	7040	CMA	
3030	7430	SZL	
3031	7440	SZA	
3032	7402	HLT	/CLA CLL CMA CML FAILED. AC SHOULD /BE 000, LINK SHOULD EQUAL ONE

/GROUP 1 OPERATE TEST 16

3033	7200	CLA	
3034	1071	TAD K2525	/AC=2525
3035	7201	CLA IAC	/TEST COMBINATION
3036	1052	TAD K7776	
3037	7040	CMA	
3040	7440	SZA	
3041	7402	HLT	/CLA IAC FAILED /AC SHOULD EQUAL 0000

/GROUP 1 OPERATE TEST 17

3042	7320	CLL CML CLA	
3043	1052	TAD K7776	/AC=7776. LINK=1
3044	7101	CLL IAC	/TEST COMBINATION
3045	7040	CMA	
3046	7420	SNL	
3047	7440	SZA	
3050	7402	HLT	/CLL IAC FAILED. AC AND LINK /SHOULD EQUAL ZERO

/GROUP 1 OPERATE TEST 18

3051	7320	CLA CLL CML	
3052	1071	TAD K2525	/AC=2525 LINK=1
3053	7301	CLA CLL IAC	/TEST COMBINATION
3054	1052	TAD K7776	
3055	7040	CMA	
3056	7420	SNL	
3057	7440	SZA	
3060	7402	HLT	/CLA CLL IAC FAILED. AC AND LINK /SHOULD BE ZERO

/GROUP 1 OPERATE TEST 19

3061	7300	CLA CLL	/AC=0 LINK=0
3062	7041	CMA IAC	/TEST COMBINATION
3063	7430	SZL	
3064	7440	SZA	
3065	7402	HLT	/CMA IAC FAILED. AC SHOULD EQUAL /0000. LINK SHOULD EQUAL ONE

/GROUP 1 OPERATE TEST 20

3066	7300	CLA CLL	
3067	1071	TAD K2525	/AC=2525 LINK=0

3070	7241	CLA CMA IAC	/TEST COMBINATION
3071	7430	SZL	
3072	7440	SZA	
3073	7402	HLT	/CLA CMA IAC FAILED. AC SHOULD /EQUAL 0000. LINK SHOULD BE ONE.

/GROUP 1 OPERATE TEST 21

3074	7320	CLL CLA CML	/AC=0000 LINK=1
3075	1021	TAD K0001	/AC=0001
3076	7141	CLL CMA IAC	/TEST COMBINATION
3077	7040	CMA	
3100	7420	SNL	
3101	7440	SZA	
3102	7402	HLT	/CLL CMA IAC FAILED. AC SHOULD BE /0000 LINK SHOULD BE 0

/GROUP 1 OPERATE TEST 22

3103	7320	CLA CLL CML	
3104	1071	TAD K2525	/AC=2525 LINK=1
3105	7341	CLA CLL CMA IAC	/TEST COMBINATION
3106	7430	SZL	
3107	7440	SZA	
3110	7402	HLT	/CLA CLL CMA IAC FAILED. AC SHOULD BE /0000. LINK SHOULD BE ONE

/GROUP 1 OPERATE TEST 23

3111	7300	CLA CLL	
3112	1070	TAD K5252	/AC=5252 LINK=0
3113	7341	CLA CLL CMA IAC	/TEST COMBINATION
3114	7430	SZL	
3115	7440	SZA	
3116	7402	HLT	/CLA CLL CMA IAC FAILED AC SHOULD /BE 0000. LINK SHOULD BE ONE

/GROUP 1 OPERATE TEST 24

3117	7300	CLA CLL	
3120	1052	TAD K7776	/AC=7776 LINK=0
3121	7021	CML IAC	/TEST COMBINATION
3122	7040	CMA	
3123	7430	SZL	
3124	7440	SZA	
3125	7402	HLT	/CML IAC FAILED AC SHOULD BE /0000. LINK SHOULD BE ONE

/GROUP 1 OPERATE TEST 25

3126	7320	CLA CLL CML	
3127	1052	TAD K7776	/AC =7776 LINK=1
3130	7021	CML IAC	/TEST COMBINATION
3131	7040	CMA	
3132	7420	SNL	
3133	7440	SZA	
3134	7402	HLT	/CML IAC FAILED. AC SHOULD BE /0000. LINK SHOULD BE ZERO

/GROUP 1 OPERATE TEST 26

3135	7300	CLA CLL	
3136	1071	TAD K2525	/AC=2525 LINK=0
3137	7221	CLA CML IAC	/TEST COMBINATION
3140	1052	TAD K7776	

3141	7040	CMA	
3142	7430	SEL	
3143	7440	SZA	
3144	7402	HLT	/CLA CML IAC FAILED. AC SHOULD BE /0000. LINK SHOULD EQUAL ONE

/GROUP 1 OPERATE TEST 27

3145	7520	CLA CLL CML	/AC=0000 LINK=1
3146	1052	TAD K7776	/AC=7776
3147	7121	CLL CML IAC	/TEST COMBINATION
3150	7040	CMA	
3151	7430	SEL	
3152	7440	SZA	
3153	7402	HLT	/CLL CML IAC FAILURE. AC SHOULD BE /0000. LINK SHOULD EQUAL ONE.

/GROUP 1 OPERATE TEST 28

3154	7300	CLA CLL	
3155	1052	TAD K7776	/AC=7776 LINK=0
3156	7121	CLL CML IAC	/TEST COMBINATION
3157	7040	CMA	
3160	7430	SEL	
3161	7440	SZA	
3162	7402	HLT	/CLL CML IAC FAILED. AC SHOULD /BE 0000. LINK SHOULD BE ONE

/GROUP 1 OPERATE TEST 29

3163	7300	CLA CLL	
3164	1071	TAD K2525	/AC=2525. LINK=0
3165	7321	CLA CLL CML IAC	/TEST COMBINATION
3166	1052	TAD K7776	
3167	7040	CMA	
3170	7430	SEL	
3171	7440	SZA	
3172	7402	HLT	/CLA CLL CML IAC FAILED. AC SHOULD /BE 0000. LINK SHOULD BE ONE

/GROUP 1 OPERATE TEST 30

3173	7320	CLA CLL CML	
3174	1071	TAD K2525	/AC=2525 LINK=1
3175	7321	CLA CLL CML IAC	/TEST COMBINATION
3176	1052	TAD K7776	
3177	7040	CMA	
3200	7430	SEL	
3201	7440	SZA	
3202	7402	HLT	/CLA CLL CML IAC FAILED. AC SHOULD /BE 0000. LINK SHOULD BE ONE

/GROUP 1 OPERATE TEST 31

3203	7300	CLA CLL	
3204	1021	TAD K0001	/AC=0001 LINK=0
3205	7061	CMA CML IAC	/TEST COMBINATION
3206	7040	CMA	
3207	7430	SEL	
3210	7440	SZA	
3211	7402	HLT	/CMA CML IAC FAILED. AC SHOULD

/BE 0000. LINK SHOULD BE ONE

/GROUP 1 OPERATE TEST 32

3212	7320	CLA CLL CML	
3213	1021	TAD K0001	/AC=0001 LINK=1
3214	7061	CMA CML IAC	/TEST COMBINATION
3215	7040	CMA	
3216	7420	SNL	
3217	7440	SZA	
3220	7402	HLT	/CMA CML IAC FAILURE. AC SHOULD BE /0000. LINK SHOULD BE ZERO

/GROUP 1 OPERATE TEST 33

3221	7300	CLA CLL	/AC=0000 LINK=0
3222	1071	TAD K2525	/AC=2525
3223	7261	CLA CMA CML IAC	/TEST COMBINATION
3224	7420	SNL	
3225	7430	SZL	
3226	7402	HLT	/CLA CMA CML IAC FAILED. AC SHOULD /BE 0000. LINK SHOULD BE ZERO

/GROUP 1 OPERATE TEST 34

3227	7320	CLA CLL CML	
3230	1071	TAD K2525	/AC=2525 LINK=1
3231	7261	CLA CMA CML IAC	/TEST COMBINATION
3232	7430	SZL	
3233	7440	SZA	
3234	7402	HLT	/CLA CMA CML IAC FAILED. AC SHOULD /BE 0000. LINK SHOULD BE ONE

/GROUP 1 OPERATE TEST 35

3235	7300	CLA CLL	
3236	1021	TAD K0001	/AC=0001 LINK=0
3237	7161	CLL CMA CML IAC	/TEST COMBINATION
3240	7040	CMA	
3241	7430	SZL	
3242	7440	SZA	
3243	7402	HLT	/CLL CMA CML IAC FAILED. AC SHOULD BE /0000. LINK SHOULD BE ONE

/GROUP 1 OPERATE TEST 36

3244	7320	CLA CLL CML	
3245	1021	TAD K0001	/AC=0001 LINK=1
3246	7161	CLL CMA CML IAC	/TEST COMBINATION
3247	7040	CMA	
3250	7430	SZL	
3251	7440	SZA	
3252	7402	HLT	/CLL CMA CML IAC FAILED. AC SHOULD BE /0000. LINK SHOULD BE ONE

/GROUP 1 OPERATE TEST 37

3253	7300	CLA CLL	
3254	1071	TAD K2525	/AC=2525 LINK=0
3255	7361	CLA CLL CMA CML IAC	/TEST COMBINATION
3256	7420	SNL	
3257	7440	SZA	
3260	7402	HLT	/CLA CLL CMA CML IAC FAILURE AC AND /LINK SHOULD EQUAL ZERO

/GROUP 1 OPERATE TEST 38

3261	7360	CLA CMA CLL CML	/AC=7777 LINK=1
3262	7210	CLA RAR	/TEST COMBINATION
3263	1066	TAD K3777	
3264	7040	CMA	
3265	7420	SNL	
3266	7440	SZA	
3267	7402	HLT	/CLA RAR FAILED. LINK AND /AC SHOULD EQUAL ZERO

/GROUP 1 OPERATE TEST 39

3270	7360	CLA CMA CLL CML	/AC=7777 LINK=1
3271	7204	CLA RAL	/TEST COMBINATION
3272	1052	TAD K7776	
3273	7040	CMA	
3274	7420	SNL	
3275	7440	SZA	
3276	7402	HLT	/CLA RAL FAILED LINK AND /AC SHOULD EQUAL ZERO

/GROUP 1 OPERATE TEST 40

3277	7360	CLA CMA CLL CML	/AC=7777 LINK =1
3300	7212	CLA RTR	/TEST COMBINATION
3301	1065	TAD K5777	
3302	7040	CMA	
3303	7420	SNL	
3304	7440	SZA	
3305	7402	HLT	/CLA RTR FAILED. AC AND /LINK SHOULD BE ZERO

/GROUP 1 OPERATE TEST 41

3306	7360	CLA CMA CLL CML	/AC=7777, LINK=1
3307	7206	CLA RTL	/TEST COMBINATION
3310	1053	TAD K7775	
3311	7040	CMA	
3312	7420	SNL	
3313	7440	SZA	
3314	7402	HLT	/CLA RTL FAILED. AC AND LINK /SHOULDBE ZERO

/GROUP 1 OPERATE TEST 42

3315	7320	CLA CLL CML	
3316	1032	TAD K0040	/AC=0040 LINK=1
3317	7110	CLL RAR	/TEST COMBINATION
3320	1056	TAD K7757	
3321	7040	CMA	
3322	7420	SNL	
3323	7440	SZA	
3324	7402	HLT	/CLL RAR FAILED. AC AND LINK /SHOULDBE ZERO

/GROUP 1 OPERATE TEST 43

3325	7320	CLA CLL CML	
3326	1032	TAD K0040	/AC=0040 LINK=1
3327	7104	CLL RAL	/TEST COMBINATION
3330	1061	TAD K7677	
3331	7040	CMA	

3332	7420	SNL	
3333	7440	SZA	
3334	7402	HLT	/CLL RAL FAILED. AC AND LINK /SHOULD BE ZERO

/GROUP 1 OPERATE TEST 44

3335	7320	CLA CLL CML	
3336	1032	TAD K0040	/AC=0040 LINK=1
3337	7112	CLL RTR	/TEST COMBINATION
3340	1055	TAD K7767	
3341	7040	CMA	
3342	7420	SNL	
3343	7440	SZA	
3344	7402	HLT	/CLL RTR FAILED. AC AND LINK /SHOULD BE ZERO

/GROUP 1 OPERATE TEST 45

3345	7320	CLA CLL CML	
3346	1032	TAD K0040	/AC=0040 LINK=1
3347	7106	CLL RTL	/TEST COMBINATION
3350	1062	TAD K7577	
3351	7040	CMA	
3352	7420	SNL	
3353	7440	SZA	
3354	7402	HLT	/CLL RTL FAILED. AC AND LINK /SHOULD BE ZERO

/GROUP 1 OPERATE TEST 46

3355	7360	CLA CLL CML CMA	/AC=7777 LINK=1
3356	7310	CLL CLA RAR	/TEST COMBINATION
3357	7420	SNL	
3360	7440	SZA	
3361	7402	HLT	/CLL CLA RAR FAILED AC AND /LINK SHOULD BE ZERO

/GROUP 1 OPERATE TEST 47

3362	7360	CLA CMA CLL CML	/AC=7777 LINK=1
3363	7304	CLL CLA RAL	/TEST COMBINATION
3364	7420	SNL	
3365	7430	SZL	
3366	7402	HLT	/CLL CLA RAL FAILED. AC AND /LINK SHOULD BE ZERO

/GROUP 1 OPERATE TEST 48

3367	7360	CLA CMA CLL CML	/AC=7777 LINK=1
3370	7312	CLA CLL RTR	/TEST COMBINATION
3371	7420	SNL	
3372	7440	SZA	
3373	7402	HLT	/CLA CLL RTL FAILED. AC AND /LINK SHOULD BE ZERO

/GROUP 1 OPERATE TEST 49

3374	7360	CLA CMA CLL CML	/AC=7777 LINK=1
3375	7306	CLA CLL RTL	/TEST COMBINATION
3376	7420	SNL	
3377	7440	SZA	
3400	7402	HLT	/CLA CLL RTL FAILED. AC AND /LINK SHOULD EQUAL ZERO

/GROUP 1 OPERATE TEST 50

3401	7300	CLA CLL	/AC=0000 LINK=0
3402	7030	CML RAR	/TEST COMBINATION
3403	1066	TAD K3777	
3404	7040	CMA	
3405	7420	SNL	
3406	7440	SZA	
3407	7402	HLT	/CML RAR FAILED. AC AND LINK /SHOULD BE ZERO

/GROUP 1 OPERATE TEST 51

3410	7300	CLA CLL	/AC=0000 LINK =0
3411	7024	CML RAL	/TEST COMBINATION
3412	1052	TAD K7776	
3413	7040	CMA	
3414	7420	SNL	
3415	7440	SZA	
3416	7402	HLT	/CML RAL FAILED. AC AND LINK /SHOULD BE ZERO.

/GROUP 1 OPERATE TEST 52

3417	7300	CLA CLL	/AC=0000 LINK=0
3420	7032	CML RTR	/TEST COMBINATION
3421	1065	TAD K5777	
3422	7040	CMA	
3423	7420	SNL	
3424	7440	SZA	
3425	7402	HLT	/CML RTR FAILED. AC AND LINK /SHOULD EQUAL ZERO

/GROUP 1 OPERATE TEST 53

3426	7300	CLA CLL	/AC=0000 LINK=0
3427	7026	CML RTL	/TEST COMBINATION
3430	1053	TAD K7779	
3431	7040	CMA	
3432	7420	SNL	
3433	7440	SZA	
3434	7402	HLT	/CML RTL FAILED. AC AND LINK /SHOULD EQUAL ZERO

/GROUP 1 OPERATE TEST 54

3435	7300	CLA CLL	
3436	1070	TAD K5252	/AC=5252 LINK=0
3437	7230	CLA CML RAR	/TEST COMBINATION
3440	1066	TAD K3777	
3441	7040	CMA	
3442	7420	SNL	
3443	7440	SZA	
3444	7402	HLT	/CLA CML RAR FAILED. AC AND

PAUSE

/INSTRUCTION TEST - 1

/GROUP 1 OPERATE TEST 55

/TAPE 3

3445	7300	CLA CLL	
3446	1070	TAD K5252	/AC=5252 LINK=0
3447	7224	CLA CML RAL	/TEST COMBINATION

3450	1052	TAD K7776	
3451	7040	CMA	
3452	7420	SNL	
3453	7440	SZA	
3454	7402	HLT	/CLA CML RAL FAILED. AC AND /LINK SHOULD BE ZERO

/GROUP 1 OPERATE TEST 56

3455	7300	CLA CLL	
3456	1070	TAD K5252	/AC=5252 LINK=0
3457	7232	CLA CML RTR	/TEST COMBINATION
3460	1065	TAD K5777	
3461	7040	CMA	
3462	7420	SNL	
3463	7440	SZA	
3464	7402	HLT	/CLA CML RTR FAILED. AC AND /LINK SHOULD BE ZERO

/GROUP 1 OPERATE TEST 57

3465	7300	CLA CLL	
3466	1070	TAD K5252	/AC=5252 LINK=0
3467	7226	CLA CML RTL	/TEST COMBINATION
3470	1053	TAD K7775	
3471	7040	CMA	
3472	7420	SNL	
3473	7440	SZA	
3474	7402	HLT	/CLA CML RTL FAILED. AC AND /LINK SHOULD EQUAL ZERO

/GROUP 1 OPERATE TEST 58

3475	7300	CLA CLL	/AC=0000 LINK=0
3476	7130	CLL CML RAR	/TEST COMBINATION
3477	7004	RAL	
3500	7430	SZL	
3501	7440	SZA	
3502	7402	HLT	/CLL CML RAR FAILED. AC SHOULD /BE 0000 LINK SHOULD BE 1

/GROUP 1 OPERATE TEST 59

3503	7320	CLA CLL CML	/AC=0000 LINK=1
3504	7130	CLL CML RAR	/TEST COMBINATION
3505	7004	RAL	
3506	7430	SZL	
3507	7440	SZA	
3510	7402	HLT	/CLL CML RAR FAILED. AC SHOULD BE /0000. LINK SHOULD BE A ONE

/GROUP 1 OPERATE TEST 60

3511	7300	CLA CLL	/AC=0000 LINK=0
3512	7124	CLL CML RAL	/TEST COMBINATION
3513	7010	RAR	
3514	7430	SZL	
3515	7440	SZA	
3516	7402	HLT	/CLL CML RAL FAILED. AC SHOULD /EQUAL 0000. LINK SHOULD BE ONE

/GROUP 1 OPERATE TEST 61

3517	7320	CLA CLL CML	/AC=0000 LINK=1
3520	7124	CLL CML RAL	/TEST COMBINATION

```

3521 7010      RAR
3522 7430      SZL
3523 7440      SZA
3524 7402      HLT          /CLL CML RAL FAILED. AC SHOULD
                             /EQUAL 0000. LINK SHOULD BE ONE

```

/GROUP 1 OPERATE TEST 62

```

3525 7300      CLA CLL          /AC=0000 LINK=0
3526 7132      CLL CML RTR      /TEST COMBINATION
3527 7006      RTL
3530 7430      SZL
3531 7440      SZA
3532 7402      HLT          /CLL CML RTR FAILED. AC SHOULD
                             /BE 0000. LINK SHOULD BE ONE

```

/GROUP 1 OPERATE TEST 63

```

3533 7320      CLA CLL CML      /AC=0000 LINK=1
3534 7132      CLL CML RTR      /TEST COMBINATION
3535 7006      RTL
3536 7430      SZL
3537 7440      SZA
3540 7402      HLT          /CLL CML RTR FAILED. AC SHOULD
                             /BE 0000 LINK SHOULD BE ONE.

```

/GROUP 1 OPERATE TEST 64

```

3541 7300      CLA CLL          /AC=0000 LINK=0
3542 7126      CLL CML RTL      /TEST COMBINATION
3543 7012      RTR
3544 7430      SZL
3545 7440      SZA
3546 7402      HLT          /CLL CML RTL FAILED. AC SHOULD
                             /BE 0000. LINK SHOULD BE A ONE

```

/GROUP 1 OPERATE TEST 65

```

3547 7320      CLA CLL CML      /AC=0000 LINK=1
3550 7126      CLL CML RTL      /TEST COMBINATION
3551 7012      RTR
3552 7430      SZL
3553 7440      SZA
3554 7402      HLT          /CLL CML RTL FAILED. AC SHOULD
                             /BE 0000. LINK SHOULD BE A ONE.

```

/GROUP 1 OPERATE TEST 66

```

3555 7300      CLA CLL
3556 1070      TAD K5252          /AC=5252 LINK=0
3557 7330      CLA CLL CML RAR /TEST COMBINATION
3560 7004      RAL
3561 7430      SZL
3562 7440      SZA
3563 7402      HLT          /CLA CLL CML RAR FAILED. AC SHOULD
                             /BE 0000. LINK SHOULD BE ONE

```

/GROUP 1 OPERATE TEST 67

```

3564 7320      CLA CLL CML
3565 1071      TAD K2525          /AC=2525 LINK=1
3566 7330      CLA CLL CML RAR /TEST COMBINATION
3567 7004      RAL
3570 7430      SZL
3571 7440      SZA

```

3572 7402 HLT /CLA CLL CML RAR FAILED. AC SHOULD
/BE 0000, LINK SHOULD BE ONE

/GROUP 1 OPERATE TEST 68

3573 7300 CLA CLL
3574 1071 TAD K2525 /AC=2525 LINK=0
3575 7324 CLA CLL CML RAL /TEST COMBINATION
3576 7010 RAR
3577 7430 SZL
3600 7440 SZA
3601 7402 HLT /CLA CLL CML RAL FAILED. AC SHOULD
/BE 0000, LINK SHOULD BE ONE

/GROUP 1 OPERATE TEST 69

3602 7320 CLA CLL CML
3603 1070 TAD K5252 /AC=5252 LINK=1
3604 7324 CLA CLL CML RAL /TEST COMBINATION
3605 7010 RAR
3606 7430 SZL
3607 7440 SZA
3610 7402 HLT /CLA CLL CML RAL FAILED. AC SHOULD
/BE 0000 LINK SHOULD BE A ONE

/GROUP 1 OPERATE TEST 70

3611 7300 CLA CLL
3612 1071 TAD K2525 /AC=2525 LINK=0
3613 7332 CLA CLL CML RTR /TEST COMBINATION
3614 7006 RTL
3615 7430 SZL
3616 7440 SZA
3617 7402 HLT /CLA CLL CML RTR FAILED. AC SHOULD
/BE 0000, LINK SHOULD BE A ONE

/GROUP 1 OPERATE TEST 71

3620 7320 CLA CLL CML
3621 1070 TAD K5252 /AC=5252 LINK=1
3622 7332 CLA CLL CML RTR /TEST COMBINATION
3623 7006 RTL
3624 7430 SZL
3625 7440 SZA
3626 7402 HLT /CLA CLL CML RTR FAILED. AC SHOULD
/BE 0000, LINK SHOULD BE A ONE

/GROUP 1 OPERATE TEST 72

3627 7300 CLL CLA
3630 1071 TAD K2525 /AC=2525 LINK=0
3631 7326 CLA CLL CML RTL /TEST COMBINATION
3632 7012 RTR
3633 7430 SZL
3634 7440 SZA
3635 7402 HLT /CLA CLL CML RTL FAILED. AC SHOULD
/BE 0000, LINK SHOULD BE A ZERO

/GROUP 1 OPERATE TEST 73

3636 7320 CLL CLA CML
3637 1070 TAD K5252 /AC=5252 LINK=1
3640 7326 CLA CLL CML RTL /TEST COMBINATION

3641	7012	RTR	
3642	7430	SZL	
3643	7440	SZA	
3644	7402	HLT	/CLA CLL CML RTL FAILED. AC SHOULD /BE 0000, LINK SHOULD BE A ONE

/GROUP 1 OPERATE TEST 74

3645	7300	CLA CLL	
3646	1067	TAD K7777	/TEST PATTERN
3647	7041	CIA	/AC EQUALS 0001
3650	1052	TAD K7776	
3651	7040	CMA	
3652	7420	SNL	
3653	7440	SZA	/CIA FAILED AC SHOULD EQUAL 0000
3654	7402	HLT	/LINK SHOULD EQUAL A ZERO

/GROUP 1 OPERATE TEST 75

3655	7300	CLA CLL	
3656	1052	TAD K7776	/TEST PATTERN
3657	7041	CIA	/AC EQUALS 0002
3660	1053	TAD K7775	
3661	7040	CMA	
3662	7420	SNL	
3663	7440	SZA	/CIA FAILED AC SHOULD EQUAL 0000
3664	7402	HLT	/LINK SHOULD EQUAL A ZERO

/GROUP 1 OPERATE TEST 76

3665	7300	CLA CLL	
3666	1101	TAD K7774	/TEST PATTERN
3667	7041	CIA	/AC EQUALS 0004
3670	1054	TAD K7773	
3671	7040	CMA	
3672	7420	SNL	
3673	7440	SZA	/CIA FAILED AC SHOULD EQUAL 0000
3674	7402	HLT	/LINK SHOULD EQUAL ZERO

/GROUP 1 OPERATE TEST 77

3675	7300	CLA CLL	
3676	1100	TAD K7770	/TEST PATTERN
3677	7041	CIA	/AC EQUALS 0010
3700	1055	TAD K7767	
3701	7040	CMA	
3702	7420	SNL	
3703	7440	SZA	
3704	7402	HLT	/CIA FAILED AC SHOULD EQUAL 0000

/GROUP 1 OPERATE TEST 78

3705	7300	CLA CLL	
3706	1077	TAD K7760	/TEST PATTERN
3707	7041	CIA	/AC EQUALS 0020
3710	1056	TAD K7757	
3711	7040	CMA	
3712	7420	SNL	
3713	7440	SZA	
3714	7402	HLT	/CIA FAILED AC SHOULD EQUAL 0000 /LINK SHOULD EQUAL ZERO

/GROUP 1 OPERATE TEST 79

3715	7300	CLA CLL	
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3716	1076	TAD K7740	/TEST PATTERN
3717	7041	CIA	
3720	1057	TAD K7737	/AC EQUALS 0040
3721	7040	CMA	
3722	7420	SNL	
3723	7440	SZA	
3724	7402	HLT	/CIA FAILED AC SHOULD EQUAL 0000 /LINK SHOULD EQUAL ZERO

/GROUP 1 OPERATE TEST 80			
3725	7300	CLA CLL	
3726	1113	TAD K7700	/TEST PATTERN
3727	7041	CIA	/AC EQUALS 0100
3730	1061	TAD K7677	
3731	7040	CMA	
3732	7420	SNL	
3733	7440	SZA	
3734	7402	HLT	/CIA FAILED A SHOULD EQUAL 0000 /LINK SHOULD EQUAL ZERO

/GROUP 1 OPERATE TEST 81			
3735	7300	CLA CLL	
3736	1075	TAD K7600	/TEST PATTERN
3737	7041	CIA	/AC EQUALS 0200
3740	1062	TAD K7577	
3741	7040	CMA	
3742	7420	SNL	
3743	7440	SZA	
3744	7402	HLT	/CIA FAILED AC SHOULD EQUAL 0000 /LINK SHOULD EQUAL ZERO

/GROUP 1 OPERATE TEST 82			
3745	7300	CLA CLL	
3746	1074	TAD K7400	/TEST PATTERN
3747	7041	CIA	/AC EQUALS 0400
3750	1063	TAD K7377	
3751	7040	CMA	
3752	7420	SNL	
3753	7440	SZA	
3754	7402	HLT	/CIA FAILED AC SHOULD EQUAL 0000 /LINK SHOULD EQUAL ZERO

/GROUP 1 OPERATE TEST 83			
3755	7300	CLA CLL	
3756	1073	TAD K7000	/TEST PATTERN
3757	7041	CIA	/AC EQUALS 1000
3760	1064	TAD K6777	
3761	7040	CMA	
3762	7420	SNL	
3763	7440	SZA	
3764	7402	HLT	/CIA FAILED AC SHOULD EQUAL 0000 /LINK SHOULD EQUAL ZERO

/GROUP 1 OPERATE TEST 84			
3765	7300	CLA CLL	
3766	1072	TAD K6000	/TEST PATTERN

3767	7041	CIA	/AC EQUALS 2000
3770	1065	TAD K5777	
3771	7040	CMA	
3772	7420	SNL	
3773	7440	SZA	
3774	7402	HLT	/CIA FAILED AC SHOULD EQUAL 0000 /LINK SHOULD EQUAL ZERO

/GROUP 1 OPERATE TEST 85

3775	7300	CLA CLL	
3776	1050	TAD K4000	/TEST PATTERN
3777	7041	CIA	/AC EQUALS 4000
4000	1066	TAD K3777	
4001	7040	CMA	
4002	7420	SNL	
4003	7440	SZA	
4004	7402	HLT	/CIA FALED AC SHOULD EQUUA 000 /LINK SHOULD EQUALL ZERO

/GROUP 1 OPERATE TEST 86

4005	7300	CLA CLL	
4006	1020	TAD K0000	/TEST PATTERN
4007	7041	CIA	/AC EQUALS 0000, LINK EQUALS A ONE
4010	7450	SNA	
4011	7420	SNL	
4012	7402	HLT	/CIA FAILED AC SHOULD EQUAL 0000 /LINK SHOULD EQUAL A ONE

/GROUP OPERATE TEST 87

4013	7340	CLA CMA CLL	/AC=7777,L=0
4014	7311	CLA CLL IAC RAR	/AC=0,L=1
4015	7430	SZL	
4016	7440	SZA	
4017	7402	HLT	/ERROR; LINC NOT SET OR /AC NOT 0

/GROUP 1 OPERATE TEST 88

4020	7360	CLA CMA CLL CML	/AC=7777,L=1
4021	7305	CLA CLL IAC RAL	/AC=2,L=0
4022	7430	SZL	
4023	7402	HLT	/ERROR; LINC NOT 0
4024	7041	CMA IAC	
4025	1022	TAD K0002	
4026	7440	SZA	
4027	7402	HLT	/ERROR AC NOT=2

/GROUP 1 OPERATE TEST 89

4030	7320	CLA CLL CML	/AC=0,L=1
4031	7313	CLA CLL IAC RTR	/AC=4000,L=0
4032	7430	SZL	
4033	7402	HLT	/ERROR; LINC NOT 0
4034	7500	SMA	
4035	7402	HLT	/ERROR; AC NOT 4000

/GROUP 1 OPERATE TEST 90

4036	7360	CLA CMA CLL CML	/AC=7777,L=1
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4037	7307	CLA CLL IAC RTL	/AC=4,LINC=0
4040	7430	SZL	
4041	7402	HLT	/ERROR: LINC NOT 0
4042	7041	CMA IAC	
4043	1024	TAD K0004	
4044	7440	SZA	
4045	7402	HLT	/ERROR: AC NOT 4

/GROUP 1 OPERATE TEST 91

4046	7300	CLA CLL	/AC=0, L=0
4047	7331	CLA CLL CML IAC RAR	/AC=4000, L=1
4050	7520	SMA SNL	
4051	7402	HLT	/ERROR: AC NOT 4000 OR /LINC NOT 1

/GROUP 1 OPERATE TEST 92

4052	7300	CLA CLL	/AC=0,L=0
4053	7345	CLA CMA CLL IAC RAL	/AC=0001,L=0
4054	7430	SZL	
4055	7402	HLT	/LINC NOT=0
4056	7041	CMA IAC	
4057	1021	TAD K0001	
4060	7440	SZA	
4061	7402	HLT	/AC NOT 0001

/GROUP 1 OPERATE TEST 93

4062	7360	CLA CMA CLL CML	/AC=7777,L=1
4063	7373	CLA CMA CLL CML IAC RTR	/AC=0,L=0
4064	7440	SZA	
4065	7402	HLT	/ERROR:
4066	7430	SZL	
4067	7402	HLT	/ERROR:

/GROUP 1 OPERATE TEST 94

4070	7332	CLA CLL CML RTR	/L=0 AC=2000
4071	7006	RTL	/L=1 AC=0000
4072	7430	SZL	
4073	7440	SZA	
4074	7402	HLT	/CLA CLL CML RTR OR RTL FAILED

/GROUP 1 OPERATE TEST 95

4075	7360	CLA CMA CLL CML	
4076	7342	CLA CLL CMA BSW/AC=7777	LINK=0
4077	7040	CMA	
4100	7420	SNL	
4101	7440	SZA	
4102	7402	HLT	/7742 FAILED

/GROUP 1 OPERATE TEST 96

4103	7360	CLA CMA CLL CML	
4104	7303	CLA CLL IAC BSW	/AC=0100 LINK=0
4105	1061	TAD K7677	/AC=7777
4106	7040	CMA	/AC=0000

4107 7420 SNL
4110 7440 SZA
4111 7402 HLT /7703 FAILED

/GROUP 1 OPERATE TEST 97
4112 7360 CLA CMA CLL CML
4113 7343 CLA CLL CMA IAC BSW /AC=0000 LINK=1
4114 7430 SZL
4115 7440 SZA
4116 7402 HLT /7743 FAILED

/GROUP 1 OPERATE TEST 98
4117 7360 CLA CMA CLL CML
4120 7363 CLA CLL CMA CML IAC BSW /AC=0000 LINK=0
4121 7420 SNL
4122 7440 SZA
4123 7402 HLT /7763 FAILED

/GROUP 1 OPERATE TEST 99
4124 7300 CLA CLL
4125 1043 TAD K1234
4126 7063 CMA CML IAC BSW /AC=4465 L=1
4127 1047 TAD K3312
4130 7040 CMA
4131 7430 SZL
4132 7440 SZA
4133 7402 HLT /7063 FAILED

/GROUP 1 OPERATE TEST 100
4134 7332 CLA CLL CML RTR /AC=2000 L=1
4135 7063 CMA CML IAC BSW /AC=0060 L=1
4136 1051 TAD K7717 /AC=7777 L=1
4137 7040 CMA
4140 7430 SZL
4141 7440 SZA
4142 7402 HLT /7063 FAILED

/GROUP 2 OPERATE TEST 1
4143 7240 CLA CMA /AC=7777
4144 7700 CLA SMA /TEST COMBINATION
4145 7402 HLT /CLA SMA DID NOT SKIP
/AC SHOULD BE 0000
4146 7440 SZA
4147 7402 HLT /CLA SMA DID NOT CLEAR AC
/AC SHOULD BE 0000

/GROUP 2 OPERATE TEST 2
4150 7240 CLA CMA /AC=7777
4151 7640 CLA SZA /TEST COMBINATION
4152 7440 SZA
4153 7402 HLT /CLA SZA SKIPPED OR AC NOT
/CLEARED TO 0000

/GROUP 2 OPERATE TEST 3
4154 7240 CLA CMA /AC=7777

4155	7540	SMA SZA	/TEST COMBINATION
4156	7402	HLT	/SMA SZA SHOULD HAVE SKIPPED
			/AC SHOULD EQUAL 7777
/GROUP 2 OPERATE TEST 4			
4157	7200	CLA	/AC=0000
4160	7540	SMA SZA	/TEST COMBINATION
4161	7402	HLT	/SMA SZA SHOULD HAVE SKIPPED
			/AC SHOULD EQUAL 0000
/GROUP 2 OPERATE TEST 5			
4162	7200	CLA	
4163	1066	TAD K3777	/AC=3777
4164	7540	SMA SZA	/TEST COMBINATION
4165	7450	SNA	
4166	7402	HLT	/SMA SZA SHOULD NOT HAVE SKIPPED
			/AC SHOULD EQUAL 3777
/GROUP 2 OPERATE TEST 6			
4167	7240	CLA CMA	/AC=7777
4170	7740	CLA SMA SZA	/TEST COMBINATION
4171	7402	HLT	/CLA SMA SZA SHOULD HAVE SKIPPED
			/AC SHOULD BE 0000
4172	7440	SZA	
4173	7402	HLT	/AC WAS NOT CLEARED
			/AC SHOULD BE 0000
/GROUP 2 OPERATE TEST 7			
4174	7200	CLA	/AC=0000
4175	7740	CLA SMA SZA	/TEST COMBINATION
4176	7402	HLT	/CLA SMA SZA SHOULD HAVE SKIPPED
			/AC SHOULD BE 0000
4177	7440	SZA	
4200	7402	HLT	/AC WAS NOT CLEARED
			/AC SHOULD BE 0000
/GROUP 2 OPERATE TEST 8			
4201	7200	CLA	
4202	1066	TAD K3777	/AC=3777
4203	7740	CLA SMA SZA	/TEST COMBINATION
4204	7440	SZA	
4205	7402	HLT	/SMA SZA DID NOT SKIP OR AC
			/NOT CLEARED TO 0000
/GROUP 2 OPERATE TEST 9			
4206	7300	CLL CLA	/LINK=0
4207	1070	TAD K5252	/AC=5252
4210	7620	CLA SNL	/TEST COMBINATION
4211	7440	SZA	
4212	7402	HLT	/SNL SKIPPED OR AC NOT CLEARED
			/AC AND LINK SHOULD EQUAL ZERO
/GROUP 2 OPERATE TEST 10			
4213	7320	CLA CLL CML	
4214	1071	TAD K2525	/AC=2525 LINK=1
4215	7620	CLA SNL	/TEST COMBINATION
4216	7402	HLT	/SNL DID NOT SKIP

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4217 7440          SZA          /LINK SHOULD EQUAL ONE
4220 7402          HLT          /CLA SNL DID NOT CLEAR AC
                                   /AC SHOULD EQUAL 0000

/GROUP 2 OPERATE TEST 11
4221 7300          CLA CLL      /AC=0000 LINK=0
4222 7520          SMA SNL      /TEST COMBINATION
4223 7440          SZA
4224 7402          HLT          /SMA SNL SKIPPED. AC AND LINK
                                   /SHOULD EQUAL ZERO

/GROUP 2 OPERATE TEST 12
4225 7320          CLA CLL CML  /AC=0000 LINK=1
4226 7520          SMA SNL      /TEST COMBINATION
4227 7402          HLT          /SNL SHOULD HAVE SKIPPED. LINK = 1

/GROUP 2 OPERATE TEST 13
4230 7300          CLA CLL      /AC=4000 LINK=0
4231 1050          TAD K4000
4232 7520          SMA SNL      /TEST COMBINATION
4233 7402          HLT          /SMA SHOULD HAVE SKIPPED
                                   /AC=4000

/GROUP 2 OPERATE TEST 14
4234 7320          CLA CLL CML  /AC=4000 LINK=1
4235 1050          TAD K4000
4236 7520          SMA SNL      /TEST COMBINATION
4237 7402          HLT          /SMA SNL SHOULD HAVE SKIPPED
                                   /AC=4000 LINK=1

/GROUP 2 OPERATE TEST 15
4240 7300          CLA CLL      /AC=0000 LINK=0
4241 7720          CLA SMA SNL  /TEST COMBINATION
4242 7440          SZA
4243 7402          HLT          /SMA SNL SKIPPED. AC AND LINK
                                   /SHOULD BE ZERO

/GROUP 2 OPERATE TEST 16
4244 7320          CLA CLL CML  /AC=0000 LINK=1
4245 7720          CLA SMA SNL  /TEST COMBINATION
4246 7402          HLT          /SNL SHOULD HAVE SKIPPED
                                   /LINK=1
4247 7440          SZA
4250 7402          HLT          /CLA SMA SNL DID NOT CLEAR AC
                                   /AC SHOULD EQUAL ZERO

/GROUP 2 OPERATE TEST 17
4251 7300          CLA CLL      /AC=4000 LINK=0
4252 1050          TAD K4000
4253 7720          CLA SMA SNL  /TEST COMBINATION
4254 7402          HLT          /SMA SHOULD HAVE SKIPPED
                                   /AC SHOULD EQUAL 0000 LINK=0
4255 7440          SZA
4256 7402          HLT          /CLA SMA SNL DID NOT CLEAR AC
                                   /AC SHOULD EQUAL 0000

/GROUP 2 OPERATE TEST 18
4257 7320          CLA CLL CML  /AC=4000 LINK=1
4260 1050          TAD K4000
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4261	7720	CLA SMA SNL	/TEST COMBINATION
4262	7402	HLT	/CLA SMA SNL SHOULD HAVE SKIPPED
			/AC SHOULD BE 0000 LINK=1
4263	7440	SZA	
4264	7402	HLT	/CLA SMA SNL DID NOT CLEAR AC
			/AC SHOULD BE 0000 LINK=1
/GROUP 2 OPERATE TEST 19			
4265	7300	CLA CLL	/AC=0000 LINK=0
4266	7460	SZA SNL	/TEST COMBINATION
4267	7402	HLT	/SZA SNL DID NOT SKIP
			/AC=0000
/GROUP 2 OPERATE TEST 20			
4270	7320	CLL CLA CML	/AC=0000 LINK=1
4271	7460	SZA SNL	/TEST COMBINATION
4272	7402	HLT	/SZA SNL DID NOT SKIP
			/AC=0000 LINK=1
/GROUP 2 OPERATE TEST 21			
4273	7300	CLA CLL	
4274	1040	TAD K0400	/AC=0400 LINK=0
4275	7460	SZA SNL	/TEST COMBINATION
4276	7450	SNA	
4277	7402	HLT	/SZA SNL SKIPPED
			/AC=0400 LINK=0
/GROUP 2 OPERATE TEST 22			
4300	7320	CLA CLL CML	
4301	1032	TAD K0040	/AC=0040 LINK=1
4302	7460	SZA SNL	/TEST COMBINATION
4303	7402	HLT	/SZA SNL SHOULD HAVE SKIPPED
			/LINK=1
/GROUP 2 OPERATE TEST 23			
4304	7300	CLA CLL	/AC=0000 LINK=0
4305	7660	CLA SZA SNL	/TEST COMBINATION
4306	7402	HLT	/CLA SZA SNL SHOULD HAVE SKIPPED
			/AC AND LINK SHOULD EQUAL ZERO
4307	7440	SZA	
4310	7402	HLT	/CLA SZA SNL DID NOT CLEAR AC
			/AC SHOULD BE 0000
/GROUP 2 OPERATE TEST 24			
4311	7320	CLA CLL CML	/AC=0000 LINK=1
4312	7660	CLA SZA SNL	/TEST COMBINATION
4313	7402	HLT	/CLA SZA SNL SHOULD HAVE SKIPPED
			/AC=0000 LINK=1
4314	7440	SZA	
4315	7402	HLT	/CLA SZA SNL DID NOT CLEAR AC
			/AC SHOULD EQUAL 0000
/GROUP 2 OPERATE TEST 25			
4316	7320	CLA CLL CML	
4317	1036	TAD K0200	/AC=0200 LINK=1
4320	7660	CLA SZA SNL	/TEST COMBINATION OR
4321	7402	HLT	/CLA SZA SNL SHOULD HAVE SKIPPED
			/LINK=1
4322	7440	SZA	
4323	7402	HLT	/CLA SZA SNL DID NOT CLEAR AC

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/AC SHOULD EQUAL 0000
/GROUP 2 OPERATE TEST 26
4324 7300 CLA CLL
4325 1045 TAD K2000 /AC=2000 LINK=0
4326 7660 CLA SZA SNL /TEST COMBINATION
4327 7440 SZA
4330 7402 HLT /CLA SZA SNL FAILED, AC AND
/ LINK SHOULD EQUAL ZERO

/GROUP 2 OPERATE TEST 27
4331 7300 CLA CLL /AC=0000 LINK=0
4332 7560 SMA SZA SNL /TEST COMBINATION
4333 7402 HLT /SMA SZA SNL SHOULD HAVE SKIPPED
/AC=0000 LINK=0

/GROUP 2 OPERATE TEST 28
4334 7320 CLA CLL CML
4335 1066 TAD K3777 /AC=3777 LINK=1
4336 7560 SMA SZA SNL /TEST COMBINATION
4337 7402 HLT /SMA SZA SNL SHOULD HAVE SKIPPED
/AC=3777 LINK=1

/GROUP 2 OPERATE TEST 29
4340 7300 CLA CLL
4341 1050 TAD K4000 /AC=4000 LINK=0
4342 7560 SMA SZA SNL /TEST COMBINATION
4343 7402 HLT /SMA SZA SNL SHOULD HAVE SKIPPED
/AC=4000 LINK=0

/GROUP 2 OPERATE TEST 30
4344 7300 CLA CLL
4345 1066 TAD K3777 /AC=3777 LINK=0
4346 7560 SMA SZA SNL /TEST COMBINATION
4347 7450 SNA
4350 7402 HLT /SMA SZA SNL SHOULD NOT HAVE
/ SKIPPED, AC=3777 LINK=0

/GROUP 2 OPERATE TEST 31
4351 7300 CLA CLL /AC=0000 LINK=0
4352 7760 CLA SMA SZA SNL /TEST COMBINATION
4353 7402 HLT /CLA SMA SZA SNL SHOULD HAVE SKIPPED
/AC SHOULD EQUAL 0000
4354 7440 SZA
4355 7402 HLT /AC NOT ZERO AFTER CLA SMA SZA SNL
/AC SHOULD BE 0000 LINK=0

/GROUP 2 OPERATE TEST 32
4356 7320 CLA CLL CML
4357 1066 TAD K3777 /AC=3777 LINK=1
4360 7760 CLA SMA SZA SNL /TEST COMBINATION
4361 7402 HLT /CLA SMA SZA SNL DID NOT SKIP
/AC SHOULD BE 0000 LINK=1
4362 7440 SZA
4363 7402 HLT /CLA SMA SZA SNL DID NOT CLEAR AC
/AC SHOULD EQUAL 0000 LINK=1

/GROUP 2 OPERATE TEST 33
4364 7300 CLA CLL

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4365	1050	TAD K4000	/AC=4000 LINK=0
4366	7760	CLA SMA SZA SNL	/TEST COMBINATION
4367	7402	HLT	/CLA SMA SZA SNL SHOULD HAVE SKIPPED
			/AC SHOULD BE 0000. LINK=0
4370	7440	SZA	
4371	7402	HLT	/CLA SMA SZA SNL DID NOT CLEAR AC
			/AC SHOULD EQUAL 0000

/GROUP 2 OPERATE TEST 34

4372	7300	CLA CLL	
4373	1066	TAD K3777	/AC=3777 LINK=0
4374	7760	CLA SMA SZA SNL	/TEST COMBINATION
4375	7440	SZA	
4376	7402	HLT	/CLA SMA SZA SNL FAILED. AC
			/SHOULD BE ZERO. LINK=0

/GROUP 2 OPERATE TEST 35

4377	7300	CLA CLL	/AC=0000 LINK=0
4400	7410	SKP	/TEST INSTRUCTION
4401	7402	HLT	/SKIP FAILED
			/AC AND LINK EQUAL ZERO

/GROUP 2 OPERATE TEST 36

4402	7320	CLA CLL CML	/AC=0000 LINK=1
4403	7410	SKP	/TEST INSTRUCTION
4404	7402	HLT	/SKIP FAILED
			/AC=0000 LINK=1

/GROUP 2 OPERATE TEST 37

4405	7320	CLA CLL CML	
4406	1066	TAD K3777	/AC=3777 LINK=1
4407	7410	SKP	/TEST INSTRUCTION
4410	7402	HLT	/SKIP FAILED
			/AC=3777 LINK=1

/GROUP 2 OPERATE TEST 38

4411	7300	CLA CLL	
4412	1066	TAD K3777	/AC=3777 LINK=0
4413	7410	SKP	/TEST INSTRUCTION
4414	7402	HLT	/SKIP FAILED
			/AC=3777 LINK=0

/GROUP 2 OPERATE TEST 39

4415	7200	CLA	
4416	1066	TAD K3777	/AC=3777
4417	7710	CLA SPA	/TEST COMBINATION
4420	7402	HLT	/CLA SPA DID NOT SKIP. AC
			/SHOULD BE ZERO
4421	7440	SZA	
4422	7402	HLT	/CLA SPA DID NOT CLEAR AC
			/AC SHOULD EQUAL ZERO

/GROUP 2 OPERATE TEST 40

4423	7200	CLA	
4424	1050	TAD K4000	/AC=4000
4425	7710	CLA SPA	/TEST COMBINATION
4426	7440	SZA	
4427	7402	HLT	/CLA SPA FAILED. AC SHOULD
			/EQUAL 0000

/GROUP 2 OPERATE TEST 41

4430	7240	CLA CMA	/AC=7777
4431	7650	CLA SNA	/TEST COMBINATION
4432	7402	HLT	/CLA SNA DID NOT SKIP
			/AC SHOULD BE 0000
/GROUP 2 OPERATE TEST 42			
4433	7200	CLA	/AC=0000
4434	7650	CLA SNA	/TEST COMBINATION
4435	7440	SZA	
4436	7402	HLT	/CLA SNA FAILED
			/AC SHOULD EQUAL 0000
/GROUP 2 OPERATE TEST 43			
4437	7200	CLA	/AC=0000
4440	7550	SPA SNA	/TEST COMBINATION (AND)
4441	7440	SZA	
4442	7402	HLT	/SPA SNA SKIPPED
			/AC=0000
/GROUP 2 OPERATE TEST 44			
4443	7200	CLA	
4444	1066	TAD K3777	/AC=3777
4445	7550	SPA SNA	/TEST COMBINATION (AND)
4446	7402	HLT	/SPA SNA FAILED TO SKIP
			/AC=3777
/GROUP 2 OPERATE TEST 45			
4447	7200	CLA	
4450	1050	TAD K4000	/AC=4000
4451	7550	SPA SNA	/TEST COMBINATION (AND)
4452	7450	SNA	
4453	7402	HLT	/SPA SNA SKIPPED.
			/AC=4000
/GROUP 2 OPERATE TEST 46			
4454	7200	CLA	/AC=0000
4455	7750	CLA SPA SNA	/TEST COMBINATION (AND)
4456	7440	SZA	
4457	7402	HLT	/CLA SPA SNA FAILED.
			/AC SHOULD BE 0000
/GROUP 2 OPERATE TEST 47			
4460	7200	CLA	
4461	1066	TAD K3777	/AC=3777
4462	7750	CLA SPA SNA	/TEST COMBINATION (AND)
4463	7402	HLT	/CLA SPA SNA DID NOT SKIP
			/AC SHOULD BE 0000
4464	7440	SZA	
4465	7402	HLT	/CLA SPA SNA DID NOT CLEAR THE AC
			/AC SHOULD EQUAL 0000
/GROUP 2 OPERATE TEST 48			
4466	7200	CLA	
4467	1050	TAD K4000	/AC=4000
4470	7750	CLA SPA SNA	/TEST COMBINATION (AND)
4471	7440	SZA	
4472	7402	HLT	/CLA SPA SNA FAILED
			/AC SHOULD EQUAL ZERO

PAUSE

/INSTRUCTION TEST - TAPE 4
/GROUP 2 OPERATE TEST 49

4473	7300	CLA CLL	
4474	1070	TAD K5252	/AC=5252 LINK=0
4475	7630	CLA SZL	/TEST COMBINATION
4476	7402	HLT	/CLA SZL DID NOT SKIP
			/AC AND LINK SHOULD BE 0
4477	7440	SZA	
4500	7402	HLT	/CLA SZL DID NOT CLEAR AC
			/AC SHOULD BE ZERO. LINK=0

/GROUP 2 OPERATE TEST 50

4501	7360	CLA CLL CML CMA	/AC=7777 LINK=1
4502	7630	CLA SZL	/TEST COMBINATION (AND)
4503	7440	SZA	
4504	7402	HLT	/CLA SZL FAILED. AC SHOULD
			/BE 0000. LINK=1

/GROUP 2 OPERATE TEST 51

4505	7300	CLA CLL	
4506	1066	TAD K3777	/AC=3777 LINK=0
4507	7530	SPA SZL	/TEST COMBINATION (AND)
4510	7402	HLT	/SPA SZL DID NOT SKIP
			/AC=3777 LINK=0

/GROUP 2 OPERATE TEST 52

4511	7320	CLA CLL CML	
4512	1066	TAD K3777	/AC=3777 LINK=1
4513	7530	SPA SZL	/TEST COMBINATION (AND)
4514	7450	SNA	
4515	7402	HLT	/SPA SZL SKIPPED
			/AC=3777 LINK=1

/GROUP 2 OPERATE TEST 53

4516	7300	CLA CLL	
4517	1050	TAD K4000	/AC=4000 LINK=0
4520	7530	SPA SZL	/TEST COMBINATION (AND)
4521	7500	SMA	
4522	7402	HLT	/SPA SZL SKIPPED
			/AC=4000 LINK=0

/GROUP 2 OPERATE TEST 54

4523	7300	CLA CLL	
4524	1066	TAD K3777	/AC=3777 LINK=0
4525	7730	CLA SPA SZL	/TEST COMBINATION (AND)
4526	7402	HLT	/CLA SPA SZL SHOULD HAVE SKIPPED
			/AC SHOULD BE 0000. LINK=0
4527	7440	SZA	
4530	7402	HLT	/CLA SPA SZL DID NOT CLEAR THE AC
			/AC SHOULD BE 0000

/GROUP 2 OPERATE TEST 55

4531	7320	CLA CLL CML	
4532	1066	TAD K3777	/AC=3777 LINK=1
4533	7730	CLA SPA SZL	/TEST COMBINATION (AND)

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4534 7440      SZA
4535 7402      HLT              /CLA SPA SZL FAILED
                                   /AC SHOULD EQUAL 0000 LINK=1
/GROUP 2 OPERATE TEST 56
4536 7300      CLA CLL
4537 1050      TAD K4000        /AC=4000 LINK=0
4540 7730      CLA SPA SZL    /TEST COMBINATION (AND)
4541 7440      SZA
4542 7402      HLT              /CLA SPA SZL FAILED
                                   /AC SHOULD EQUAL 0000 LINK=0
/GROUP 2 OPERATE TEST 57
4543 7300      CLA CLL
4544 1050      TAD K4000        /AC=4000 LINK=0
4545 7470      SNA SZL        /TEST COMBINATION (AND)
4546 7402      HLT              /SNA SZL DID NOT SKIP
                                   /AC = 4000 LINK=0
/GROUP 2 OPERATE TEST 58
4547 7320      CLA CLL CML
4550 1050      TAD K4000        /AC=4000 LINK=1
4551 7470      SNA SZL        /TEST COMBINATION (AND)
4552 7420      SNL
4553 7402      HLT              /SNA SZL SKIPPED
                                   /AC=4000 LINK=1
/GROUP 2 OPERATE TEST 59
4554 7300      CLA CLL        /AC=0000 LINK=0
4555 7470      SNA SZL        /TEST COMBINATION (AND)
4556 7430      SZL
4557 7402      HLT              /SNA SZL SKIPPED
                                   /AC=0000 LINK=0
/GROUP 2 OPERATE TEST 60
4560 7320      CLA CLL CML
4561 1050      TAD K4000        /AC=4000 LINK=1
4562 7670      CLA SNA SZL    /TEST COMBINATION (AND)
4563 7440      SZA
4564 7402      HLT              /CLA SNA SZL FAILED, AC SHOULD
                                   /BE 0000, LINK=1

/GROUP 2 OPERATE TEST 61
4565 7300      CLA CLL
4566 1050      TAD K4000        /AC=4000 LINK=0
4567 7670      CLA SNA SZL    /TEST COMBINATION (AND)
4570 7402      HLT              /CLA SNA SZL DID NOT SKIP
                                   /AC SHOULD BE 0000, LINK=0
4571 7440      SZA
4572 7402      HLT              /CLA SNA SZL DID NOT CLEAR AC
                                   /AC AND LINK SHOULD BE ZERO
/GROUP 2 OPERATE TEST 62
4573 7300      CLA CLL        /AC=0000 LINK=0
4574 7670      CLA SNA SZL    /TEST COMBINATION (AND)
4575 7440      SZA
4576 7402      HLT              /CLA SNA SZL FAILED, AC SHOULD
                                   /BE 0000, LINK=0
/GROUP 2 OPERATE TEST 63
4577 7300      CLA CLL

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4600	1066	TAD K3777	/AC=3777 LINK=0
4601	7570	SPA SNA SZL	/TEST COMBINATION (AND)
4602	7402	HLT	/SPA SNA SZL DID NOT SKIP
			/AC=3777 LINK=0

/GROUP 2 OPERATE TEST 64

4603	7320	CLA CLL CML	
4604	1066	TAD K3777	/AC=3777 LINK=1
4605	7570	SPA SNA SZL	/TEST COMBINATION (AND)
4606	7420	SNL	
4607	7402	HLT	/SPA SNA SZL SKIPPED
			/AC=3777 LINK=1

/GROUP 2 OPERATE TEST 65

4610	7300	CLA CLL	/AC=0000 LINK=0
4611	7570	SPA SNA SZL	/TEST COMBINATION (AND)
4612	7430	SZL	
4613	7402	HLT	/SPA SNA SZL SKIPPED
			/AC=0000 LINK=0

/GROUP 2 OPERATE TEST 66

4614	7300	CLA CLL	
4615	1050	TAD K4000	/AC=4000 LINK=0
4616	7570	SPA SNA SZL	/TEST COMBINATION (AND)
4617	7430	SZL	
4620	7402	HLT	/SPA SNA SZL SKIPPED
			/AC=4000 LINK=0

/GROUP 2 OPERATE TEST 67

4621	7300	CLA CLL	
4622	1066	TAD K3777	/AC=3777 LINK=0
4623	7770	CLA SPA SNA SZL	/TEST COMBINATION (AND)
4624	7402	HLT	/CLA SPA SNA SZL DID NOT SKIP
			/AC AND LINK SHOULD BE ZERO
4625	7440	SZA	
4626	7402	HLT	/CLA SPA SNA SZL DID NOT CLEAR AC
			/AC AND LINK SHOULD BE ZERO

/GROUP 2 OPERATE TEST 68

4627	7320	CLA CLL CML	
4630	1066	TAD K3777	/AC=3777 LINK=1
4631	7770	CLA SPA SNA SZL	/TEST COMBINATION (AND)
4632	7440	SZA	
4633	7402	HLT	/CLA SPA SNA SZL FAILED. AC SHOULD
			/BE 0000. LINK SHOULD EQUAL ONE

/GROUP 2 OPERATE TEST 69

4634	7300	CLA CLL	
4635	1050	TAD K4000	/AC=4000 LINK=0
4636	7770	CLA SPA SNA SZL	/TEST COMBINATION (AND)
4637	7440	SZA	
4640	7402	HLT	/CLA SPA SNA SZL FAILED. AC SHOULD
			/BE 0000. LINK SHOULD EQUAL ZERO

/GROUP 2 OPERATE TEST 70

4641	7300	CLA CLL	/AC=0000 LINK=0
4642	7770	CLA SPA SNA SZL	/TEST COMBINATION (AND)
4643	7440	SZA	
4644	7402	HLT	/CLA SPA SNA SZL FAILED. AC AND

/LINK SHOULD BE ZERO.

/GROUP 2 OPERATE TEST 71

4645	7200	CLA	
4646	1070	TAD K5252	/AC=5252
4647	7604	CLA OSR	/TEST COMBINATION
4650	7040	CMA	
4651	7440	SZA	
4652	7402	HLT	/CLA OSR FAILED /AC SHOULD BE 0000

/GROUP 2 OPERATE TEST 72

4653	7200	CLA	
4654	1050	TAD K4000	/AC=4000
4655	7504	SMA OSR	/TEST COMBINATION
4656	7402	HLT	/SMA OSR FAILED TO SKIP /AC SHOULD BE 7777
4657	7040	CMA	
4660	7440	SZA	
4661	7402	HLT	/SMA OSR FAILED /AC SHOULD BE 0000

/GROUP 2 OPERATE TEST 73

4662	7200	CLA	/AC=0000
4663	7444	SZA OSR	/TEST COMBINATION
4664	7402	HLT	/SZA OSR FAILED TO SKIP /AC SHOULD BE 0000
4665	7040	CMA	
4666	7440	SZA	
4667	7402	HLT	/SZA OSR FAILED. /AC SHOULD BE 0000

/GROUP 2 OPERATE TEST 74

4670	7320	CLL CML CLA	/LINK=1
4671	7424	SNL OSR	/TEST COMBINATION
4672	7402	HLT	/SNL OSR FAILED TO SKIP /AC SHOULD BE 7777
4673	7040	CMA	
4674	7440	SZA	
4675	7402	HLT	/SNL OSR FAILED. /AC SHOULD BE 0000

/GROUP 2 OPERATE TEST 75

4676	7300	CLA CLL	
4677	1066	TAD K3777	/AC=3777 LINK=0
4700	7764	CLA SMA SZA SNL OSR	/TEST COMBINATION
4701	7450	SNA	
4702	7402	HLT	/CLA SMA SZA SNL OSR FAILED. /AC SHOULD BE 7777. LINK=0
4703	7040	CMA	
4704	7440	SZA	
4705	7402	HLT	/CLA SMA SZA SNL OSR FAILED /AC SHOULD EQUAL ZERO

/GROUP 2 OPERATE TEST 76

4706	7200	CLA	/AC=0000
4707	7414	SKP OSR	/TEST COMBINATION
4710	7402	HLT	/SKP OSR DID NOT SKIP /AC SHOULD BE 7777

4711	7040	CMA	
4712	7440	SZA	
4713	7402	HLT	/SKP OSR FAILED /AC SHOULD EQUAL ZERO

/GROUP 2 OPERATE TEST 77

4714	7200	CLA	/AC=0000
4715	7514	SPA OSR	/TEST COMBINATION
4716	7402	HLT	/SPA OSR DID NOT SKIP /AC SHOULD EQUAL 7777

4717	7040	CMA	
4720	7440	SZA	
4721	7402	HLT	/SPA OSR FAILED. /AC SHOULD BE 0000

/GROUP 2 OPERATE TEST 78

4722	7200	CLA	
4723	1040	TAD K0400	/AC=0400
4724	7454	SNA OSR	/TEST COMBINATION
4725	7402	HLT	/SNA OSR DID NOT SKIP /AC SHOULD BE 7777

4726	7040	CMA	
4727	7440	SZA	
4730	7402	HLT	/SNA OSR FAILED /AC SHOULD BE 0000

/GROUP 2 OPERATE TEST 79

4731	7300	CLA CLL	/LINK=0 AC=0000
4732	7434	SZL OSR	/TEST COMBINATION
4733	7402	HLT	/SZL OSR DID NOT SKIP /AC SHOULD BE 7777

4734	7040	CMA	
4735	7440	SZA	
4736	7402	HLT	/SZL OSR FAILED /AC SHOULD BE 0000

/GROUP 2 OPERATE TEST 80

4737	7300	CLA CLL	
4740	1066	TAD K3777	/AC=3777 LINK=0
4741	7774	CLA SPA SNA SZL OSR	/TEST COMBINATION (AND)
4742	7402	HLT	/ABOVE MESS DID NOT SKIP /AC SHOULD BE 7777

4743	7040	CMA	
4744	7440	SZA	
4745	7402	HLT	/CLA SPA SNA SZL OSR FAILED /AC SHOULD BE 0000

/MQ OPERATE TEST 1

4746	7360	CLA CMA CLL CML	/AC=7777 LINK=1
4747	7601	CLAE	/AC=0000 LINK=1
4750	7430	SZL	
4751	7440	SZA	
4752	7402	HLT	/7601 FAILED

/MQ OPERATE TEST 2

4753	7360	CLA CLL CMA CML	/AC=7777 L=1
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4754	7401	NOPE	/AC=7777 L=1 (NOP)
4755	7040	CMA	
4756	7430	SZL	
4757	7440	SZA	
4760	7402	HLT	/7401 FAILED

/MQ OPERATE TEST 3			
4761	7360	CLA CMA CLL CML	/AC=7777 LINK=1
4762	7421	MQL	/AC=0000 LINK=1
4763	7430	SZL	
4764	7440	SZA	
4765	7402	HLT	/MQL DID NOT CLEAR AC

/MQ OPERATE TEST 4			
4766	7300	CLA CLL	
4767	7421	MQL	/MQ=0000, AC=0000
4770	7040	CMA	/AC=7777
4771	7501	MQA	/AC=7777, MQ=0000
4772	7040	CMA	/AC=0000
4773	7420	SNL	
4774	7440	SZA	
4775	7402	HLT	/MQ DID NOT EQUAL 0000 OR MQA FAILED

/MQ OPERATE TEST 5			
4776	7340	CLA CMA CLL	
4777	7421	MQL	/MQ=7777, AC=0000
5000	7501	MQA	/AC=7777, MQ=7777
5001	7040	CMA	
5002	7420	SNL	
5003	7440	SZA	
5004	7402	HLT	/MQ DID NOT EQUAL 7777 OR MQA FAILED

/MQ OPERATE TEST 6			
5005	7601	CLAE	/CLEAR AC
5006	1070	TAD K5252	
5007	7421	MQL	/MQ=5252, AC=0000
5010	1071	TAD K2525	
5011	7501	MQA	/AC=7777, MQ=5252
5012	7040	CMA	
5013	7440	SZA	
5014	7402	HLT	/MQ DID NOT EQUAL 5252 OR MQA FAILED

/MQ OPERATE TEST 7			
5015	7360	CLA CMA CLL CML	
5016	7421	MQL	/MQ=7777, AC=0000
5017	7040	CMA	/AC=7777
5020	7621	CAM	/AC AND MQ.=0000
5021	7440	SZA	
5022	7402	HLT	/AC SHOULD EQUAL 0000
5023	7501	MQA	/AC=0000, MQ=0000
5024	7430	SZL	
5025	7440	SZA	
5026	7402	HLT	/CAM DID NOT CLEAR MQ /OR LINK WAS CLEARED

/MQ OPERATE TEST 8

5027	7601	CLAE	/CLEAR AC
5030	7421	SQL	/MQ=0000 AC=0000
5031	7040	CMA	
5032	7701	ACL	/AC=0000 MQ=0000
5033	7440	SZA	
5034	7402	HLT	/ACL FAILED
5035	7501	MQA	/AC=0000 MQ=0000
5036	7440	SZA	
5037	7402	HLT	/MQ SHOULD EQUAL 0000

/MQ OPERATE TEST 9

5040	7240	CLA CMA	
5041	7421	SQL	/MQ=7777 AC=0000
5042	7701	ACL	/AC=7777 MQ=7777
5043	7040	CMA	
5044	7440	SZA	
5045	7402	HLT	/ACL FAILED
5046	7501	MQA	/AC=7777, MQ=7777
5047	7040	CMA	
5050	7440	SZA	
5051	7402	HLT	/MQ SHOULD EQUAL 7777

/MQ OPERATE TEST 10

5052	7601	CLAE	/CLEAR AC
5053	1070	TAD K5252	
5054	7421	SQL	/MQ=5252 AC=0000
5055	1071	TAD K2525	
5056	7701	ACL	/AC=5252 MQ=5252
5057	1071	TAD K2525	
5060	7040	CMA	
5061	7440	SZA	
5062	7402	HLT	/ACL FAILED
5063	7501	MQA	/AC=5252 MQ=5252
5064	1071	TAD K2525	
5065	7040	CMA	
5066	7440	SZA	
5067	7402	HLT	/MQ SHOULD EQUAL 5252

/MQ OPERATE TEST 11

5070	7601	CLAE	/CLEAR AC
5071	1071	TAD K2525	
5072	7421	SQL	/MQ=2525 AC=0000
5073	1070	TAD K5252	
5074	7701	ACL	/AC=2525 MQ=2525
5075	1070	TAD K5252	
5076	7040	CMA	
5077	7440	SZA	
5100	7402	HLT	/ACL FAILED
5101	7501	MQA	/AC=2525 MQ=2525
5102	1070	TAD K5252	
5103	7040	CMA	
5104	7440	SZA	
5105	7402	HLT	/MQ SHOULD EQUAL 2525

/MQ OPERATE TEST 12

5106	7621	CAM	/MQ=0000 AC=0000
5107	7040	CMA	/AC=7777
5110	7521	SWP	/MQ=7777 AC=0000
5111	7440	SZA	
5112	7402	HLT	/AC SHOULD EQUAL 0000
5113	7701	ACL	/AC=7777 MQ=7777
5114	7040	CMA	
5115	7440	SZA	
5116	7402	HLT	/MQ SHOULD EQUAL 7777

/MQ OPERATE TEST 13

5117	7621	CAM	/MQ=0000 AC=0000
5120	7040	CMA	
5121	7421	MQL	/MQ=7777 AC=0000
5122	7521	SWP	/MQ=0000 AC=7777
5123	7040	CMA	
5124	7440	SZA	
5125	7402	HLT	
5126	7701	ACL	/AC=0000 MQ=0000
5127	7440	SZA	
5130	7402	HLT	/MQ SHOULD EQUAL 0000

/MQ OPERATE TEST 14

5131	7621	CAM	/MQ=0000 AC=0000
5132	1070	TAD K5252	
5133	7421	MQL	/MQ=5252 AC=0000
5134	1071	TAD K2525	
5135	7521	SWP	/MQ=2525 AC=5252
5136	1071	TAD K2525	
5137	7040	CMA	
5140	7440	SZA	
5141	7402	HLT	/SWP FAILED
5142	7701	ACL	/AC=2525 MQ=2525
5143	1070	TAD K5252	
5144	7040	CMA	
5145	7440	SZA	
5146	7402	HLT	/SWP FAILED MQ SHOULD EQUAL 2525

/MQ OPERATE TEST 15

5147	7621	CAM	/MQ=0000 AC=0000
5150	1071	TAD K2525	
5151	7421	MQL	/MQ=2525 AC=0000
5152	1070	TAD K5252	/AC=5252
5153	7521	SWP	/MQ=5252 AC=2525
5154	1070	TAD K5252	
5155	7040	CMA	
5156	7440	SZA	
5157	7402	HLT	/SWP FAILED
5160	7701	ACL	/AC=5252 MQ=5252
5161	1071	TAD K2525	
5162	7040	CMA	
5163	7440	SZA	

5164 7402

HLT

/SWP FAILED MQ SHOULD EQUAL 5252

/MQ OPERATE TEST 16

5165 7621

CAM

/MQ=0000 AC=0000

5166 7040

CMA

/AC=7777

5167 7721

CLAE SWP

/AC=0000 MQ=0000

5170 7440

SZA

5171 7402

HLT

/CLAE SWP FAILED AC SHOULD EQUAL 0000

5172 7701

ACL

/AC=0000 MQ=0000

5173 7440

SZA

5174 7402

HLT

/CLAE SWP FAILED MQ SHOULD EQUAL 0000

/MQ OPERATE TEST 17

5175 7621

CAM

/MQ=0000 AC=0000

5176 7040

CMA

5177 7421

MQL

/MQ=7777 AC=0000

5200 7721

CLAE SWP

/AC=7777 MQ=0000

5201 7040

CMA

5202 7440

SZA

5203 7402

HLT

/CLAE SWP FAILED

5204 7701

ACL

/AC=0000 MQ=0000

5205 7440

SZA

5206 7402

HLT

/CLAE SWP FAILED MQ SHOULD EQUAL 0000

/MQ OPERATE TEST 18

5207 7621

CAM

/MQ=0000 AC=0000

5210 1071

TAD K2525

5211 7421

MQL

/MQ=2525 MQ=0000

5212 1070

TAD K5252

/AC=5252

5213 7721

CLAE SWP

/AC=2525 MQ=0000

5214 1070

TAD K5252

5215 7040

CMA

5216 7440

SZA

5217 7402

HLT

/CLAE FAILED

5220 7701

ACL

/AC=0000 MQ=0000

5221 7440

SZA

5222 7402

HLT

/CLAE FAILED MQ SHOULD EQUAL 0000

/AND TEST 1

5223 7200

CLA

5224 0067

AND K7777

5225 7440

SZA

5226 7402

HLT

/AND FAILED AC SHOULD
/BE 0000

/AND TEST 2

5227 7240

CLA CMA

5230 0020

AND K0000

5231 7440

SZA

5232 7402

HLT

/AND FAILED
/AC SHOULD EQUAL 0000

/AND TEST 3

5233 7520

CLA CLL CML

5234	1067	TAD K7777	/AC=7777 LINK=1
5235	0067	AND K7777	
5236	7040	CMA	
5237	7430	SZL	
5240	7440	SZA	
5241	7402	HLT	/AND FAILED. AC SHOULD BE
			/0000. LINK SHOULD EQUAL ONE

/AND TEST 4

5242	7300	CLA CLL	
5243	1071	TAD K2525	/AC=2525 LINK=0
5244	0070	AND K5252	
5245	7420	SNL	
5246	7440	SZA	
5247	7402	HLT	/AND FAILED. AC SHOULD BE
			/0000. LINK SHOULD BE 0

/AND TEST 5

5250	7300	CLA CLL	
5251	1070	TAD K5252	/AC=5252 LINK=0
5252	0071	AND K2525	
5253	7420	SNL	
5254	7440	SZA	
5255	7402	HLT	/AND FAILED. AC SHOULD BE
			/0000. LINK SHOULD BE 0

/AND TEST 6

5256	7300	CLA CLL	
5257	1052	TAD K7776	/AC=7776 LINK=0
5260	0070	AND K5252	/TEST INSTRUCTION
5261	7041	CIA	/AC=2526
5262	1070	TAD K5252	/AC=0000 LINK=1
5263	7430	SZL	
5264	7440	SZA	
5265	7402	HLT	/AND FAILURE. AC SHOULD BE
			/0000. LINK SHOULD BE ONE

/AND TEST 7

5266	7300	CLA CLL	
5267	1071	TAD K2525	/AC=2525 LINK=0
5270	0071	AND K2525	/TEST INSTRUCTION
5271	7041	CIA	/AC=5253
5272	1071	TAD K2525	/AC=0000 LINK = 1
5273	7430	SZL	
5274	7440	SZA	
5275	7402	HLT	/AND FAILED. AC SHOULD BE
			/0000. LINK SHOULD BE ONE.

/CHECK FOR BELL

5276	7200	CLA	
5277	1121	TAD BLCNT	
5300	7001	IAC	
5301	3121	OCA BLCNT	
5302	1121	TAD BLCNT	
5303	7640	SZA CLA	
5304	5147	JMP START+3	
5305	1122	TAD BLCNT	

5306 3121 DCA BLCNT

/RING BELL

5307	1120	TAD BEL
5310	6046	TLS
5311	6041	TSF
5312	5311	JMP .-1
5313	6042	TCF
5314	5147	JMP START+3

S

ACL	7701	K600	0041
BEGIN	0200	K6000	0072
BEL	0120	K6777	0064
BLCNT	0121	K7000	0073
BLCON	0122	K7007	0117
BSW	7022	K7177	0060
CAM	7621	K7377	0063
CLAE	7601	K7400	0074
CLL1	0446	K7577	0062
CLL11	0452	K7600	0075
CMLT1	0456	K7677	0061
HALT	0006	K7700	0113
K0000	0020	K7717	0051
K0001	0021	K7737	0057
K0002	0022	K7740	0076
K0004	0024	K7757	0056
K0007	0102	K7760	0077
K0010	0026	K7767	0055
K0017	0104	K7770	0100
K0020	0030	K7773	0054
K0037	0105	K7774	0101
K0040	0032	K7775	0053
K0067	0103	K7776	0052
K0077	0106	K7777	0067
K0100	0034	MOA	7501
K0177	0107	MOI	7421
K0200	0036	NOOP	0007
K0377	0110	NOPE	7401
K0400	0040	START	0144
K0770	0116	SWP	7521
K0777	0111		
K1000	0042		
K1234	0043		
K14	0027		
K140	0035		
K1400	0044		
K1777	0112		
K2000	0045		
K2525	0071		
K2552	0115		
K3	0023		
K30	0031		
K300	0037		
K3000	0046		
K3312	0047		
K3777	0066		
K4000	0050		
K5225	0114		
K5252	0070		
K5777	0065		
K6	0025		
K60	0033		

ERRORS DETECTED: 0

LINKS GENERATED: 2

RUN-TIME: 30 SECONDS

2K CORE USED