

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	0
0001	5001		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	BLCON,	-2640

	0144	*144	
		/TAD,CLA,HLT,TEST	
0144	1067	START,	TAD K7777
0145	7200	CLA	
0146	7402	HLT	
		/SKIP TEST	
0147	7410	SKP	
0150	7402	HLT	
		/SEA TEST 1	
0151	7200	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	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 7430 SNA
0277 7402 HLT

/SNA SHOULD HAVE SKIPPED
/AC SHOULD EQUAL 0002

/SZA TEST 13

0300 7200 CLA
0301 1021 TAD K0001
0302 7440 SEA
0303 7410 SKP
0304 7402 HLT

/SEA 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

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	SEA		
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	SEA		
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	SEA		
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	SEA		
0364	7402	HLT		/TAD OR CMA ERROR /AC SHOULD EQUAL 0000
/IAC TEST 1				
0365	7200	CLA		
0366	7001	IAC		
0367	7440	SEA		
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
0376 7402

SZA
HLT

/IAC DID NOT INCREMENT
/AC SHOULD EQUAL 0000

/IAC TEST 3

0377 7200
0400 1101
0401 7001
0402 7001
0403 7001
0404 7001
0405 7440
0406 7402

CLA
TAD K7774
IAC
IAC
IAC
IAC
SZA
HLT

/IAC NOT INCREMENTING
/AC SHOULD EQUAL 0000

/SZL TEST 1

0407 7200
0410 7100
0411 7004
0412 7430
0413 7402

CLA
CLL
RAL
SZL
HLT

/CLEAR LINK
/CLEAR LINK SAFETY

/SZL SHOULD HAVE SKIPPED
/LINK SHOULD EQUAL ZERO

/SZL TEST 2

0414 7200
0415 7100
0416 7020
0417 1050
0420 7004
0421 7430
0422 7410
0423 7402

CLA
CLL
CML
TAD K4000
RAL
SZL
SKP
HLT

/CLEAR LINK
/COMPLEMENT LINK

/SET LINK SAFETY

/SZL SHOULD NOT HAVE SKIPPED
/LINK SHOULD EQUAL ONE

/SNL TEST 1

0424 7200
0425 7100
0426 7004
0427 7420
0430 7410
0431 7402

CLA
CLL
RAL
SNL
SKP
HLT

/CLEAR LINK
/CLEAR LINK SAFETY

/SNL SHOULD NOT HAVE SKIPPED
/LINK SHOULD EQUAL ZERO

/SNL TEST 2

0432 7200
0433 7100
0434 7020
0435 1050
0436 7004
0437 7420
0440 7402

CLA
CLL
CML
TAD K4000
RAL
SNL
HLT

/CLEAR LINK
/COMPLEMENT LINK

/SET LINK SAFETY

/SNL SHOULD HAVE SKIPPED
/LINK SHOULD EQUAL ONE

/CLL TEST 1

0441 7200
0442 1050

CLA
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

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/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
/CMA TEST 1 (OPERATE GROUP 2)
0467 7200      CLA
0470 1067      TAB K7777
0471 7600      7600
0472 7440      SEA
0473 7402      HLT      /CLA (7600) DID NOT CLEAR AC
                                     /AC SHOULD EQUAL 0000

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/OSR TEST 1
0474 7200      CLA
0475 7404      OSR
0476 7040      CMA
0477 7440      SEA
0500 7402      HLT      /OSR 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)

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0507 7200      CLA

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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

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/AC SHOULD EQUAL 0000

/TAD TEST 7
0561 7200      CLA
0562 1057      TAD K7737      /OPERAND 1
0563 1032      TAD K0040      /OPERAND 2
0564 7040      CMA
0565 7440      SZA
0566 7402      HLT
/TAD ERROR
/AC SHOULD EQUAL 0000

/TAD TEST 8
0567 7200      CLA
0570 1056      TAD K7757      /OPERAND 1
0571 1030      TAD K0020      /OPERAND 2
0572 7040      CMA
0573 7440      SZA
0574 7402      HLT
/TAD ERROR
/AC SHOULD EQUAL 0000

/TAD TEST 9
0575 7200      CLA
0576 1055      TAD K7767      /OPERAND 1
0577 1026      TAD K0010      /OPERAND 2
0600 7040      CMA
0601 7440      SZA
0602 7402      HLT
/TAD ERROR
/AC SHOULD EQUAL 0000

/TAD TEST 10
0603 7200      CLA
0604 1054      TAD K7773      /OPERAND 1
0605 1024      TAD K0004      /OPERAND 2
0606 7040      CMA
0607 7440      SZA
0610 7402      HLT
/TAD ERROR
/AC SHOULD EQUAL 0000

/TAD TEST 11
0611 7200      CLA
0612 1053      TAD K7775      /OPERAND 1
0613 1022      TAD K0002      /OPERAND 2
0614 7040      CMA
0615 7440      SZA
0616 7402      HLT
/TAD ERROR

/TAD TEST 12
0617 7200      CLA
0620 1052      TAD K7776      /OPERAND 1
0621 1021      TAD K0001      /OPERAND 2
0622 7040      CMA
0623 7440      SZA
0624 7402      HLT
/TAD ERROR
/AC SHOULD EQUAL 0000

/TAD TEST 13
0625 7200      CLA
0626 7100      CLL
0627 1050      TAD K4000      /OPERAND 1

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0630	1050	TAD K4000	/OPERAND 2
0631	7430	SZL	
0632	7440	SZA	
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	SZA	
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	SZA	
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	SZA	
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	SZA	
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	SZA	
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      SEA
0705 7402      HLT
                /TAD ERROR. AC SHOULD EQUAL 0000
                /LINK SHOULD EQUAL ONE
    
```

/TAD TEST 20

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0706 7200      CLA
0707 7100      CLL
0710 1077      TAD K7760      /OPERAND 1
0711 1030      TAD K0020      /OPERAND 2
0712 7430      SZL
0713 7440      SEA
0714 7402      HLT
                /TAD ERROR. AC SHOULD EQUAL 0000
                /LINK SHOULD EQUAL ONE
    
```

/TAD TEST 21

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0715 7200      CLA
0716 7100      CLL
0717 1100      TAD K7770      /OPERAND 1
0720 1026      TAD K0010      /OPERAND 2
0721 7430      SZL
0722 7440      SEA
0723 7402      HLT
                /TAD ERROR AC SHOULD EQUAL 0000
                /LINK SHOULD EQUAL ONE
    
```

/TAD TEST 22

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0724 7200      CLA
0725 7100      CLL
0726 1101      TAD K7774      /OPERAND 1
0727 1024      TAD K0004      /OPERAND 2
0730 7430      SEL
0731 7440      SEA
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      SEL
0740 7440      SEA
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      SEA
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      SZA
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      SZA
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      SZA      /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      SZA
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      SZA
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 /OPERAND 1
1030 1034 TAD K0100 /OPERAND 2
1031 1034 TAD K0100 /OPERAND 3
1032 7040 CMA
1033 7420 SNL
1034 7440 SZA
1035 7402 HLT
/TAD ERROR. AC SHOULD EQUAL 0000
/LINK SHOULD EQUAL ZERO

/TAD TEST 31
1036 7200 CLA
1037 7100 CLL
1040 1061 TAD K7677 /OPERAND 1
1041 1032 TAD K0040 /OPERAND 2
1042 1032 TAD K0040 /OPERAND 3
1043 7040 CMA
1044 7420 SNL
1045 7440 SZA
1046 7402 HLT
/TAD ERROR. AC SHOULD EQUAL 0000
/LINK SHOULD EQUAL ZERO

/TAD TEST 32
1047 7200 CLA
1050 7100 CLL
1051 1057 TAD K7737 /OPERAND 1
1052 1030 TAD K0020 /OPERAND 2
1053 1030 TAD K0020 /OPERAND 3
1054 7040 CMA
1055 7420 SNL
1056 7440 SZA
1057 7402 HLT
/TAD ERROR. AC SHOULD EQUAL 0000
/LINK SHOULD EQUAL ZERO

/TAD TEST 33
1060 7200 CLA
1061 7100 CLL
1062 1056 TAD K7757 /OPERAND 1
1063 1026 TAD K0010 /OPERAND 2
1064 1026 TAD K0010 /OPERAND 3
1065 7040 CMA
1066 7420 SNL
1067 7440 SZA
1070 7402 HLT
/TAD ERROR. AC SHOULD EQUAL 0000
/LINK SHOULD EQUAL ZERO

/TAD TEST 34
1071 7200 CLA
1072 7100 CLL
1073 1055 TAD K7767 /OPERAND 1
1074 1024 TAD K0004 /OPERAND 2
1075 1024 TAD K0004 /OPERAND 3
1076 7040 CMA
1077 7420 SNL
1100 7440 SZA

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 SZL
1123 7402 HLT

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

/TAD TEST 37

/10;MB, CR.

1124 7200 CLA
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.

/9; MB, CR.

1135 7200 CLA
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.

/8; MB, CR.

1146 7200 CLA
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	SEA	
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	SEA	
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	SEA	
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	SEA	/
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	SEA	
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	SEA	
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	SEA	
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	SEA	
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	SEA	
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	SEA	/
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	SNL	
1304	7440	SZA	
1305	7402	HLT	/TAD ERROR. AC AND LINK SHOULD BE ZERO.
		/TAD TEST 50.	/9: AC, MB, CR.
1306	7200	CLA	
1307	7100	CLL	
1310	1025	TAD K6	/0+6=6
1311	1025	TAD K6	/6+6=14
1312	1077	TAD K7760	/14+7760=7774
1313	1023	TAD K3	/7774+3=7777
1314	7040	CMA	/0
1315	7420	SNL	
1316	7440	SZA	
1317	7402	HLT	/TAD ERROR. AC AND LINK SHOULD BE ZERO.
		/TAD TEST 51.	/8: AC, MB, CR.
1320	7200	CLA	
1321	7100	CLL	
1322	1027	TAD K14	/0+14=14
1323	1027	TAD K14	/14+14=30
1324	1076	TAD K7740	/30+7740=7770
1325	1102	TAD K0007	/7770+7=7777
1326	7040	CMA	/0
1327	7420	SNL	
1330	7440	SZA	
1331	7402	HLT	/TAD ERROR. AC AND LINK SHOULD BE ZERO.
		/TAD TEST 52.	/7: AC, MB, CR.
1332	7200	CLA	
1333	7100	CLL	
1334	1031	TAD K30	/0+30=30
1335	1031	TAD K30	/30+30=60
1336	1051	TAD K7717	/60+7717=7777
1337	7040	CMA	/0
1340	7420	SNL	
1341	7440	SZA	
1342	7402	HLT	/TAD ERROR. AC AND LINK SHOULD BE ZERO.
		/TAD TEST 53.	/6: AC, MB, CR.
1343	7200	CLA	
1344	7100	CLL	
1345	1033	TAD K60	
1346	1033	TAD K60	/60+60=140
1347	1075	TAD K7600	/140+7600=7740
1350	1105	TAD K0037	/7740+37=7777
1351	7040	CMA	/0
1352	7420	SNL	
1353	7440	SZA	
1354	7402	HLT	/TAD ERROR. AC AND LINK SHOULD BE ZERO.
		/TAD TEST 54.	/5: AC, MB, CR
1355	7200	CLA	
1356	7100	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	SZA	
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	SZA	
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	/1400+6000=7400
1405	1110	TAD K0377	/7400+377=7777
1406	7040	CMA	
1407	7420	SNL	
1410	7440	SZA	
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	SZA	
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	SZA	
1434	7402	HLT	/TAD ERROR, AC AND LINK SHOULD BE ZERO

1435	7200	/TAD TEST 59.	CLA	/0: AC, MB, CR.
1436	7100		CLL	/
1437	1072		TAD K6000	/0+6000=6000
1440	1072		TAD K6000	/6000+6000=1 4000
1441	1066		TAD K3777	/1 4000+3777=1 7777
1442	7040		CMA	/1 0000
1443	7430		SZL	
1444	7440		SZA	
1445	7402		HLT	/TAD ERROR. LINK SHOULD BE 1. AC SHOULD BE ZERO.

1446	7200	/TAD TEST 60.	CLA	/
1447	7100		CLL	
1450	1067		TAD K7777	/0+7777=7777
1451	1067		TAD K7777	/7777+7777=1 7776
1452	1021		TAD K0001	/1 7776+1=1 7777
1453	7040		CMA	/1 0000
1454	7430		SZL	
1455	7440		SZA	
1456	7402		HLT	/TAD ERROR. LINK SHOULD BE 1. AC SHOULD BE ZERO.

1457	7200	/RAR TEST 1	CLA	
1460	7100		CLL	
1461	1021		TAD K0001	/ROTATE PATTERN
1462	7010		RAR	
1463	7420		SNL	
1464	7402		HLT	/RAR FAILED. LINK DROPPED A BIT
				/LINK SHOULD EQUAL A ONE

1465	7200	/RAR TEST 2	CLA	
1466	7100		CLL	
1467	1020		TAD K0000	/ROTATE PATTERN
1470	7010		RAR	
1471	7440		SZA	
1472	7402		HLT	/RAR FAILED. AC PICKED UP A BIT
				/A ONE IN AC EQUALS THE PICKED UP BIT

1473	7200	/RAR TEST 3	CLA	
1474	7100		CLL	
1475	1020		TAD K0000	/ROTATE PATTERN
1476	7010		RAR	
1477	7430		SZL	
1500	7402		HLT	/RAL FAILED. LINK PICKED UP A BIT
				/LINK SHOULD EQUAL ZERO

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

1505 7010 RAR
1506 7430 SZL
1507 7402 HLT

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

/RAR TEST 5

1510 7200 CLA
1511 7100 CLL
1512 7020 CML
1513 1067 TAD K7777
1514 7010 RAR
1515 7040 CMA
1516 7440 SEA
1517 7402 HLT

/ROTATE PATTERN

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

/RAR TEST 6

1520 7200 CLA
1521 7100 CLL
1522 7020 CML
1523 1020 TAD K0000
1524 7010 RAR
1525 1066 TAD K3777
1526 7040 CMA
1527 7450 SNA
1530 7430 SZL
1531 7402 HLT

/ROTATE PATTERN

/RAR FAILED AC AND LINK
/SHOULD EQUAL 0000

/RAR TEST 7

1532 7200 CLA
1533 7100 CLL
1534 1050 TAD K4000
1535 7010 RAR
1536 1065 TAD K5777
1537 7040 CMA
1540 7450 SNA
1541 7430 SZL
1542 7402 HLT

/ROTATE PATTERN

/RAR FAILED AC AND LINK SHOULD
/EQUAL 0000

/RAR TEST 8

1543 7200 CLA
1544 7100 CLL
1545 1045 TAD K2000
1546 7010 RAR
1547 1064 TAD K6777
1550 7040 CMA
1551 7450 SNA
1552 7430 SZL
1553 7402 HLT

/ROTATE PATTERN

/RAR FAILED AC AND LINK SHOULD
/EQUAL 0000

/RAR TEST 9

1554 7200 CLA
1555 7100 CLL
1556 1042 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

		/RAR TEST 18	
1675	7200	CLA	
1676	7100	CLL	
1677	1021	TAD K0001	/ROTATE PATTERN
1700	7010	RAR	
1701	1067	TAD K7777	
1702	7040	CMA	
1703	7450	SNA	
1704	7420	SNL	
1705	7402	HLT	/RAR FAILED AC AND LINK /SHOULD EQUAL 0000
		/RTR TEST 1	
1706	7200	CLA	
1707	7100	CLL	
1710	1022	TAD K0002	/ROTATE PATTERN
1711	7012	RTR	
1712	7420	SNL	
1713	7402	HLT	/RTR FAILED LINK DROPPED /A BIT LINK SHOULD EQUAL A ONE
		/RTR TEST 2	
1714	7200	CLA	
1715	7100	CLL	
1716	1020	TAD K0000	/ROTATE PATTERN
1717	7012	RTR	
1720	7440	SZA	
1721	7402	HLT	/RTR FAILED AC PICKED UP A BIT /A ONE IN AC EQUALS THE PICKED UP BIT
		/RTR TEST 3	
1722	7200	CLA	
1723	7100	CLL	
1724	1020	TAD K0000	/ROTATE PATTERN
1725	7012	RTR	
1726	7430	SZL	
1727	7402	HLT	/RTR LINK PICKED UP A BIT /LINK SHOULD EQUAL ZERO
		/RTR TEST 4	
1730	7200	CLA	
1731	7100	CLL	
1732	7020	CML	
1733	1020	TAD K0000	/ROTATE PATTERN
1734	7012	RTR	
1735	7430	SZL	
1736	7402	HLT	/RTR LINK PICKED UP A BIT /LINK SHOULD EQUAL ZERO
		/RTR TEST 5	
1737	7200	CLA	
1740	7100	CLL	
1741	7020	CML	
1742	1067	TAD K7777	/ROTATE PATTERN
1743	7012	RTR	
1744	7040	CMA	
1745	7440	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 CMA
2022 7450 SNA
2023 7430 SZL
2024 7402 HLT

/RTR FAILED AC AND LINK
/SHOULD EQUAL 0000

/RTR TEST 11

2025 7200 CLA
2026 7100 CLL
2027 1036 TAD K0200
2030 7012 RTR
2031 1057 TAD K7737
2032 7040 CMA
2033 7450 SNA
2034 7430 SZL
2035 7402 HLT

/ROTATE PATTERN

/RTR FAILED AC AND LINK
/SHOULD EQUAL 0000

/RTR TEST 12

2036 7200 CLA
2037 7100 CLL
2040 1034 TAD K0100
2041 7012 RTR
2042 1056 TAD K7757
2043 7040 CMA
2044 7450 SNA
2045 7430 SZL
2046 7402 HLT

/ROTATE PATTERN

/RTR FAILED AC AND LINK
/SHOULD EQUAL 0000

/RTR TEST 13

2047 7200 CLA
2050 7100 CLL
2051 1032 TAD K0040
2052 7012 RTR
2053 1055 TAD K7767
2054 7040 CMA
2055 7450 SNA
2056 7430 SZL
2057 7402 HLT

/ROTATE PATTERN

/RTR FAILED AC AND LINK
/SHOULD EQUAL 0000

/RTR TEST 14

2060 7200 CLA
2061 7100 CLL
2062 1030 TAD K0020
2063 7012 RTR
2064 1054 TAD K7773
2065 7040 CMA
2066 7450 SNA
2067 7430 SZL
2070 7402 HLT

/ROTATE PATTERN

/RTR FAILED AC AND LINK
/SHOULD EQUAL 0000

/RTR TEST 15

2071 7200 CLA
2072 7100 CLL
2073 1026 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
2104	7012	RTR
2105	1052	TAD K7776
2106	7040	CMA
2107	7450	SNA
2110	7430	SZL
2111	7402	HLT

/ROTATE PATTERN

/RTR FAILED AC AND LINK
/SHOULD EQUAL 0000

/RTR TEST 17

2112	7200	CLA
2113	7100	CLL
2114	1022	TAD K0002
2115	7012	RTR
2116	7450	SNA
2117	7420	SNL
2120	7402	HLT

/ROTATE PATTERN

/RTR FAILED. AC SHOULD EQUAL
/0000, LINK SHOULD EQUAL ONE

/RTR TEST 18

2121	7200	CLA
2122	7100	CLL
2123	1021	TAD K0001
2124	7012	RTR
2125	1066	TAD K3777
2126	7040	CMA
2127	7450	SNA
2130	7430	SZL
2131	7402	HLT

/ROTATE PATTERN

/RTR FAILED. AC AND LINK
/SHOULD BE ZERO

/RAL TEST 1

2132	7200	CLA
2133	7100	CLL
2134	1050	TAD K4000
2135	7004	RAL
2136	7430	SEL
2137	7440	SZA
2140	7402	HLT

/ROTATE PATTERN

/RAL FAILED. AC SHOULD EQUAL 0000
/LINK SHOULD EQUAL ONE.

/RAL TEST 2

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

/ROTATE PATTERN

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

SZA

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

SZA

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

2221 7200 /RAL TEST 8
2222 7100 CLA
2223 1036 CLL
2224 7004 TAD K0200 /ROTATE PATTERN
2225 1063 RAL
2226 7040 TAD K7377
2227 7450 CMA
2230 7430 SNA
2231 7402 SZL /RAL FAILURE AC SHOULD EQUAL 0000
HLT /LINK SHOULD EQUAL ZERO

2232 7200 /RAL TEST 9
2233 7100 CLA
2234 1034 CLL
2235 7004 TAD K0100 /ROTATE PATTERN
2236 1062 RAL
2237 7040 TAD K7577
2240 7450 CMA
2241 7430 SNA
2242 7402 SZL /RAL FAILURE AC SHOULD EQUAL 0000
HLT /LINK SHOULD EQUAL ZERO

2243 7200 /RAL TEST 10
2244 7100 CLA
2245 1032 CLL
2246 7004 TAD K0040 /ROTATE PATTERN
2247 1061 RAL
2250 7040 TAD K7677
2251 7450 CMA
2252 7430 SNA
2253 7402 SZL /RAL FAILURE AC SHOULD EQUAL 0000
HLT /LINK SHOULD EQUAL A ZERO

2254 7200 /RAL TEST 11
2255 7100 CLA
2256 1030 CLL
2257 7004 TAD K0020 /ROTATE PATTERN
2260 1057 RAL
2261 7040 TAD K7737
2262 7450 CMA
2263 7430 SNA
2264 7402 SZL /RAL FAILURE AC SHOULD EQUAL 0000
HLT /LINK SHOULD EQUAL A ZERO

2265 7200 /RAL TEST 12
2266 7100 CLA
2267 1026 CLL
2270 7004 TAD K0010 /ROTATE PATTERN
2271 1056 RAL
2272 7040 TAD K7757
2273 7450 CMA
2274 7430 SNA
2275 7402 SZL /RAL FAILURE AC SHOULD EQUAL 0000
HLT /LINK SHOULD EQUAL A ZERO

```

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

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

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

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

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

2350 7200
/RTL TEST 2
  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	CMA	
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	CMA	
2411	7450	SNA	
2412	7430	SEL	
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 7402

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


```

/AC SHOULD EQUAL 0000
/GROUP 1 OPERATE TEST 2
2701 7200      CLA      /AC EQUALS 0000
2702 1071     TAD K2525 /AC EQUALS 2525
2703 7240     CLA CMA  /TEST COMBINATION
2704 7040     CMA
2705 7440     SEA
2706 7402     HLT      /CLA CMA ERROR. AC SHOULD
                        /BE 0000

/GROUP 1 OPERATE TEST 3
2707 7200      CLA
2710 7100      CLL
2711 7040      CMA      /AC=7777 LINK=1
2712 7140      CLL CMA  /TEST COMBINATION
2713 7420      SNL
2714 7440      SEA
2715 7402      HLT      /CLL CMA FAILED. AC AND LINK
                        /SHOULD BE ZERO

/GROUP 1 OPERATE TEST 4
2716 7100      CLL
2717 7020      CML      /LINK=1
2720 7200      CLA
2721 7040      CMA      /AC=7777
2722 7340      CLA CMA CLL /TEST COMBINATION
2723 7040      CMA
2724 7420      SNL
2725 7440      SEA
2726 7402      HLT      /CLA CMA CLL FAILED. AC AND
                        /LINK SHOULD BE ZERO

/GROUP 1 OPERATE TEST 5
2727 7200      CLA
2730 7100      CLL      /LINK=0
2731 7040      CMA      /AC=7777
2732 7220      CLA CML  /TEST COMBINATION
2733 7430      SEL
2734 7440      SEA
2735 7402      HLT      /CLA CML FAILED. AC SHOULD EQUAL
                        /0000. LINK SHOULD BE A ONE

/GROUP 1 OPERATE TEST 6
2736 7100      CLL
2737 7020      CML      /LINK=1
2740 7120      CLL CML  /TEST COMBINATION
2741 7420      SNL
2742 7402      HLT      /CLL CML FAILED
                        /LINK SHOULD BE A ONE

/GROUP 1 OPERATE TEST 7
2743 7100      CLL
2744 7120      CLL CML  /LINK=0
2745 7420      SNL      /TEST COMBINATION
2746 7402      HLT      /CLL CML FAILED.
                        /LINK SHOULD BE A ONE

/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
 3000 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 7520 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	SZL	
3143	7440	SEA	
3144	7402	HLT	/CLA CML IAC FAILED. AC SHOULD BE /0000. LINK SHOULD EQUAL ONE

/GROUP 1 OPERATE TEST 27

3145	7320	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	SZL	
3152	7440	SEA	
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	SZL	
3161	7440	SEA	
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	SZL	
3171	7440	SEA	
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	SZL	
3201	7440	SEA	
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	SZL	
3210	7440	SEA	
3211	7402	HLT	/CMA CML IAC FAILED. AC SHOULD

/BE 0000. LINK SHOULD BE ONE

/GROUP 1 OPERATE TEST 32

3212 7320
3213 1021
3214 7061
3215 7040
3216 7420
3217 7440
3220 7402

CLA CLL CML
TAD K0001 /AC=0001 LINK=1
CMA CML IAC /TEST COMBINATION

CMA
SNL
SZA
HLT

/CMA CML IAC FAILURE. AC SHOULD BE
/0000. LINK SHOULD BE ZERO

/GROUP 1 OPERATE TEST 33

3221 7300
3222 1071
3223 7261
3224 7420
3225 7430
3226 7402

CLA CLL /AC=0000 LINK=0
TAD K2525 /AC=2525
CLA CMA CML IAC /TEST COMBINATION

SNL
SZA
HLT

/CLA CMA CML IAC FAILED. AC SHOULD
/BE 0000. LINK SHOULD BE ZERO

/GROUP 1 OPERATE TEST 34

3227 7320
3230 1071
3231 7261
3232 7430
3233 7440
3234 7402

CLA CLL CML
TAD K2525 /AC=2525 LINK=1
CLA CMA CML IAC /TEST COMBINATION

SZA
SZA
HLT

/CLA CMA CML IAC FAILED. AC SHOULD
/BE 0000. LINK SHOULD BE ONE

/GROUP 1 OPERATE TEST 35

3235 7300
3236 1021
3237 7161
3240 7040
3241 7430
3242 7440
3243 7402

CLA CLL
TAD K0001 /AC=0001 LINK=0
CLL CMA CML IAC /TEST COMBINATION

CMA
SZA
SZA
HLT

/CLL CMA CML IAC FAILED. AC SHOULD BE
/0000. LINK SHOULD BE ONE

/GROUP 1 OPERATE TEST 36

3244 7320
3245 1021
3246 7161
3247 7040
3250 7430
3251 7440
3252 7402

CLA CLL CML
TAD K0001 /AC=0001 LINK=1
CLL CMA CML IAC /TEST COMBINATION

CMA
SZA
SZA
HLT

/CLL CMA CML IAC FAILED. AC SHOULD BE
/0000. LINK SHOULD BE ONE

/GROUP 1 OPERATE TEST 37

3253 7300
3254 1071
3255 7361
3256 7420
3257 7440
3260 7402

CLA CLL
TAD K2525 /AC=2525 LINK=0
CLA CLL CMA CML IAC /TEST COMBINATION

SNL
SZA
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 /SHOULD BE 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 7520 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 SZA
 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	SEA	
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	SEA	
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	SEA	
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 K7775	
3431	7040	CMA	
3432	7420	SNL	
3433	7440	SEA	
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	SEA	
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 S2L
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 S2L
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 S2L
3515 7440 SZA
3516 7402 HLT /CLL CML RAL FAILED. AC SHOULD
/EQUAL 0000. LINK SHOULD BE ONE

/GROUP 1 OPERATE TEST 61

3517 7520 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
3574 1071
3575 7324
3576 7010
3577 7430
3600 7440
3601 7402

CLA CLL
TAD K2525 /AC=2525 LINK=0
CLA CLL CML RAL /TEST COMBINATION

RAR
SZL
SZA
HLT

/CLA CLL CML RAL FAILED. AC SHOULD
/BE 0000, LINK SHOULD BE ONE

/GROUP 1 OPERATE TEST 69

3602 7320
3603 1070
3604 7324
3605 7010
3606 7430
3607 7440
3610 7402

CLA CLL CML
TAD K5252 /AC=5252 LINK=1
CLA CLL CML RAL /TEST COMBINATION

RAR
SZL
SZA
HLT

/CLA CLL CML RAL FAILED. AC SHOULD
/BE 0000 LINK SHOULD BE A ONE

/GROUP 1 OPERATE TEST 70

3611 7300
3612 1071
3613 7332
3614 7006
3615 7430
3616 7440
3617 7402

CLA CLL
TAD K2525 /AC=2525 LINK=0
CLA CLL CML RTR /TEST COMBINATION

RTL
SZL
SZA
HLT

/CLA CLL CML RTR FAILED. AC SHOULD
/BE 0000, LINK SHOULD BE A ONE

/GROUP 1 OPERATE TEST 71

3620 7320
3621 1070
3622 7332
3623 7006
3624 7430
3625 7440
3626 7402

CLA CLL CML
TAD K5252 /AC=5252 LINK=1
CLA CLL CML RTR /TEST COMBINATION

RTL
SZL
SZA
HLT

/CLA CLL CML RTR FAILED. AC SHOULD
/BE 0000, LINK SHOULD BE A ONE

/GROUP 1 OPERATE TEST 72

3627 7300
3630 1071
3631 7326
3632 7012
3633 7430
3634 7440
3635 7402

CLL CLA
TAD K2525 /AC=2525 LINK=0
CLA CLL CML RTL /TEST COMBINATION

RTR
SZL
SZA
HLT

/CLA CLL CML RTL FAILED. AC SHOULD
/BE 0000, LINK SHOULD BE A ZERO

/GROUP 1 OPERATE TEST 73

3636 7320
3637 1070
3640 7326

CLL CLA CML
TAD K5252 /AC=5252 LINK=1
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

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

/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 FAILED AC SHOULD EQUUA 000

/LINK SHOULD EQUAL 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

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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

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/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

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/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

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/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

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/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

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/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
4231 1050          TAD K4000          /AC=4000 LINK=0
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
4235 1050          TAD K4000          /AC=4000 LINK=1
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
4252 1050          TAD K4000          /AC=4000 LINK=0
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
4260 1050          TAD K4000          /AC=4000 LINK=1

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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	7520	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	7520	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	7520	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          SEA
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          SEA
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
------	------	-----------------	--------------

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      MQL      /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      MQL      /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      MQL      /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      MQL      /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	7002	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	MQA	7501
K0177	0107	MQL	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: 0

RUN-TIME: 30 SECONDS

2K CORE USED