

IDENTIFICATION

PRODUCT CODE: MAINDEC-8/E-D0AA
PRODUCT NAME: PDP-8/E INSTRUCTION TEST 1
DATE CREATED: OCTOBER 23, 1970
MAINTAINER: DIAGNOSTIC GROUP
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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 0000-4761. 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

200

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 = 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

256 PROGRAM LOOPS PER MINUTE.

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 JUMP 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 AFTER EACH 512 PROGRAM LOOPS.

10. LISTING

7002 /SWAP BYTES IN AC
7401 /NOP
7601 /CLEAR AC
7421 /LOAD HQ FROM AC THEN CLEAR AC
7501 /INCLUSIVE OR, HQ AND AC
7621 /CLEAR AC AND HQ
7521 /SWAP AC AND HQ
7701 /LOAD AC FROM HQ, CLEAR HQ

0000 0
0001 JMP 1
0002 0002
0003 0003
0004 0
0005 0000
0006 HALT
0007 NOP
0010 0

/CONSTANTS AND VARIABLES

0020 020
0001 K0000,
0002 K0001,
0003 K0002,
0004 K0004,
0010 K0010,
0020 K0020,
0040 K0040,
0100 K0100,
0200 K0200,
0400 K0400,
0800 K1000,
1234 K1234,
2000 K2000,
3312 K3312,
4000 K4000,
7717 K7717,
7776 K7776,
7775 K7775,
7773 K7773,
7767 K7767,
7757 K7757,
7737 K7737,
7677 K7677,
7577 K7577,
7377 K7377,
6777 K6777,
5777 K5777,
3777 K3777,

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0054 7777 7777, 7777
0055 5252 5252, 5252
0056 2525 2525, 2525
0057 6000 6000, 6000
0060 7000 7000, 7000
0061 7400 7400, 7400
0062 7600 7600, 7600
0063 7740 7740, 7740
0064 7760 7760, 7760
0065 7770 7770, 7770
0066 7774 7774, 7774
0067 0003 0003, 0003

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0070 0007 0007, 0007
0071 0067 0067, 0067
0072 0017 0017, 0017
0073 0037 0037, 0037
0074 0077 0077, 0077
0075 0177 0177, 0177
0076 0377 0377, 0377
0077 0777 0777, 0777
0100 1777 1777, 1777
0101 7700 7700, 7700
0102 5225 5225, 5225
0103 2552 2552, 2552
0104 0770 0770, 0770
0105 7007 7007, 7007
0106 0207 0207, 0207
0107 7000 7000, 7000
0110 7000 7000, 7000

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0144
0144 1054 /TAD,CLA,HLT.TEST
0145 7200 START, TAD K7777
0146 7402 CLA
HLT

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

```

0147 7410 /SKIP TEST SKP
0150 7402 HLT

```

/SKP FAILED

```

0151 7200 /SZA TEST 1 CLA
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

```

0157 7200 /SZA TEST 2 CLA
0160 1036 TAD K4000

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0161 7400 SZA
0162 7410 SKP
0163 7402 HLT

0164 7450 SNA
0165 7402 HLT

/ SZA SHOULD NOT HAVE SKIPPED
/ AC SHOULD EQUAL 4000

/ SNA SHOULD HAVE SKIPPED
/ AC SHOULD EQUAL 4000

```

```

/ SZA TEST 3
CLA
TAD K2000

0166 7200
0167 1034
0168 7440 SZA
0169 7410 SKP
0170 7402 HLT

0171 7450 SNA
0172 7402 HLT

0173 7450 SNA
0174 7402 HLT
0175 7000 NOP
0176 7000 NOP
0177 7410 SKP

/ SZA SHOULD NOT HAVE SKIPPED
/ AC SHOULD EQUAL 2000

/ SNA SHOULD HAVE SKIPPED
/ AC SHOULD EQUAL 2000

/ SKIP OVER JMP START.

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0200 BEGIN, JMP START
0201 / SZA TEST 4
CLA
TAD K1000

0202 7200
0203 1032
0204 7440 SZA
0205 7410 SKP
0206 7402 HLT

0207 7450 SNA
0208 7402 HLT

/ SZA SHOULD NOT HAVE SKIPPED
/ AC SHOULD EQUAL 1000

/ SNA SHOULD HAVE SKIPPED
/ AC SHOULD EQUAL 10000

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/ SZA TEST 5
CLA
TAD K0400

0210 7200
0211 1031
0212 7440 SZA
0213 7410 SKP
0214 7402 HLT

0215 7450 SNA
0216 7402 HLT

/ SZA SHOULD NOT HAVE SKIPPED
/ AC SHOULD EQUAL 0400

/ SNA SHOULD HAVE SKIPPED
/ AC SHOULD EQUAL 0400

```

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/ SZA TEST 6
CLA
TAD K0200

0217 7200
0218 1030
0219 7440 SZA
0220 7410 SKP
0221 7402 HLT

0222 7450 SNA
0223 7402 HLT

0224 7450 SNA
0225 7402 HLT

/ SZA SHOULD NOT HAVE SKIPPED
/ AC SHOULD EQUAL 0200

/ SNA SHOULD HAVE SKIPPED
/ AC SHOULD EQUAL 0200

```

/ SZA TEST 7

0226 7200
0227 1027
0230 7440
0231 7410
0232 7402

0233 7450
0234 7402

CLA
TAD K0100
SZA
SKP
HLT

SNA
HLT

/SZA SHOULD NOT HAVE SKIPPED
/AC SHOULD EQUAL 0100

/SNA SHOULD HAVE SKIPPED
/AC SHOULD EQUAL 0100

/SZA TEST 8

0235 7200
0236 1026
0237 7440
0240 7410
0241 7402

0242 7450
0243 7402

CLA
TAD K0040
SZA
SKP
HLT

SNA
HLT

/SZA SHOULD NOT HAVE SKIPPED
/AC SHOULD EQUAL 0040

/SNA SHOULD HAVE SKIPPED
/AC SHOULD EQUAL 0040

/SZA TEST 9

0244 7200
0245 1025
0246 7440
0247 7410
0250 7402

0251 7450
0252 7402

CLA
TAD K0020
SZA
SKP
HLT

SNA
HLT

/SZA SHOULD NOT HAVE SKIPPED
/AC SHOULD EQUAL 0020

/SNA SHOULD HAVE SKIPPED
/AC SHOULD EQUAL 0020

/SZA TEST 10

0253 7200
0254 1024
0255 7440
0256 7410
0257 7402

CLA
TAD K0010
SZA
SKP
HLT

/SZA SHOULD NOT HAVE SKIPPED
/AC SHOULD EQUAL 0010

0260 7450
0261 7402

SNA
HLT

/SNA SHOULD HAVE SKIPPED
/AC SHOULD EQUAL 0010

/SZA TEST 11

0262 7200
0263 1023
0264 7440
0265 7410
0266 7402

0267 7450
0270 7402

CLA
TAD K0004
SZA
SKP
HLT

SNA
HLT

/SZA SHOULD NOT HAVE SKIPPED
/AC SHOULD EQUAL 0004

/SNA SHOULD HAVE SKIPPED
/AC SHOULD EQUAL 0004

/SZA TEST 12

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

/SZA TEST 13			
0300	7200	CLA	
0301	1021	TAD	K0001
0302	7400	SZA	
0303	7410	SKP	
0304	7402	HLT	
/SZA SHOULD NOT HAVE SKIPPED			
/AC SHOULD EQUAL 0001			
0305	7450	SNA	
0306	7402	HLT	
/SNA SHOULD HAVE SKIPPED			
/AC SHOULD EQUAL 0001			

/SPA TEST 1			
0307	7200	CLA	
0310	1053	TAD	K3777
0311	7510	SPA	
0312	7402	HLT	
/SPA SHOULD HAVE SKIPPED			
/AC SHOULD EQUAL 3777			

/SPA TEST 2			
0313	7200	CLA	
0314	1036	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	1053	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	1036	TAD	K4000
0327	7500	SMA	
0330	7402	HLT	
/SMA SHOULD HAVE SKIPPED			
/AC SHOULD EQUAL 4000			

/CMA TEST 1			
0331	7200	CLA	
0332	1054	TAD	K7777
0333	7040	CMA	
0334	7440	SZA	
0335	7402	HLT	
/CMA DID NOT COMPLEMENT AC			

/CMA - TAD TEST 1

0336	7200	CLA	
0337	1056	TAD K0225	
0340	7040	CMA	
0341	7450	SNA	
0342	7402	HLT	
/TAD OR CMA ERROR			
0345	1056	TAD K0225	
0346	7040	CMA	
0349	7440	SZA	
0349	7402	HLT	
/TAD OR CMA ERROR			
/AC SHOULD EQUAL 0000			
/TAD OR CMA ERROR			
/AC SHOULD EQUAL 0000			
/TAD OR CMA ERROR			
/AC SHOULD EQUAL 0000			
/TAD OR CMA ERROR			
/AC SHOULD EQUAL 0000			

/CMA - TAD TEST 2

0347	7200	CLA	
0350	1056	TAD K5252	
0351	7040	CMA	
0352	7430	SNA	
0353	7402	HLT	
/TAD OR CMA ERROR			
0354	1055	TAD K5252	
0355	7040	CMA	
0356	7440	SZA	
0357	7402	HLT	
/TAD OR CMA ERROR			
/AC SHOULD EQUAL 0000			

/CMA - TAD TEST 3

0360	7200	CLA	
0361	1054	TAD K7777	
0362	7040	CMA	
0363	7440	SZA	
0364	7402	HLT	
/TAD OR CMA ERROR			
/AC SHOULD EQUAL 0000			

/IAC TEST 1

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

/IAC TEST 2

0372	7200	CLA	
0373	1054	TAD K7777	
0374	7001	IAC	
0375	7440	SZA	
0376	7402	HLT	
/IAC DID NOT INCREMENT			
/AC SHOULD EQUAL 0000			

/IAC TEST 3

0377	7200	CLA	
0400	1066	TAD K7774	
0401	7001	IAC	
0402	7001	IAC	
0403	7001	IAC	
0404	7001	IAC	

0403 7469
0406 7402

SEA
HLT

/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 1036
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 1036
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 1036
0443 7004
0444 7420
0445 5252

CLA
TAD K4000
RAL
SNL
JMP CLL11

/SET LINK
/TRY A CML
/CANNOT SET LINK WITH RAL

CLL11,
CLL

0446 7100
0447 7430
0450 7402

CLL
SZL
HLT

/CLL DID NOT CLEAR LINK
/LINK SHOULD EQUAL ONE

CLL11,
JMP .+5
CML

0451 5256
0452 7020

/SET LINK

0453 7420 SNL
 0454 7402 HLT
 /CANNOT SET LINK WITH
 /RAL OR CML. CANNOT
 /PERFORM CLL TEST 1

0455 5246 JMP CLL1

0456 7100 /CML TEST 1
 0457 7430 CMLT1, CLL
 0460 7402 SZL
 0461 7020 HLT
 0462 7420 CML
 0463 7402 SNL
 0464 7020 HLT
 0465 7430 CML
 0466 7402 SZL
 /CML DID NOT CLEAR LINK
 /CML DID NOT SET LINK
 /CML DID NOT RESET LINK

/CLA TEST 1 (OPERATE GROUP 2)

0467 7200 CLA
 0470 1054 TAD K777
 0471 7000 7600
 0472 7440 SZA
 0473 7402 HLT
 /CLA (7600) DID NOT CLEAR AC
 /AC SHOULD EQUAL 0000

/OSR TEST 1

0474 7200 CLA
 0475 7404 OSR
 0476 7040 CMA
 0477 7440 SZA
 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
 0503 7000 7000
 0504 7450 SNA
 0505 7430 SZL
 0506 7402 HLT
 /AC AND LINK EQUAL ZERO
 /TEST INSTRUCTION

/NOP FAILURE
 /AC AND LINK SHOULD BE ZERO

/NOP TEST 2 (OPERATE GROUP 2)

0507 7200 CLA
 0510 7100 CLL
 0511 7400 7400
 0512 7450 SNA
 0513 7430 SZL
 0514 7402 HLT
 /AC AND LINK EQUAL ZERO
 /TEST INSTRUCTION

/NOP FAILURE
 /AC AND LINK SHOULD BE ZERO

/TAD TEST 1

0515 7200 CLA
 0516 1053 TAD K3777
 0517 1036 TAD K4000
 /OPERAND 1
 /OPERAND 2

0520 7040	CHA				
0521 7440	SEA				
0522 7402	HLT				
/TAD TEST 2					
0523 7200	CLA				
0524 1052	TAD K5777			/OPERAND 1	
0525 1036	TAD K2000			/OPERAND 2	
0526 7060	CHA				
0527 7442	SEA				
0528 7402	HLT				
/TAD ERROR					
/AC SHOULD EQUAL 0000					
/TAD TEST 3					
0531 7200	CLA				
0532 1091	TAD K6777			/OPERAND 1	
0533 1032	TAD K1000			/OPERAND 2	
0534 7040	CHA				
0535 7440	SEA				
0536 7402	HLT				
/TAD ERROR					
/AC SHOULD EQUAL 0000					
/TAD TEST 4					
0537 7200	CLA				
0540 1090	TAD K7377			/OPERAND 1	
0541 1031	TAD K0400			/OPERAND 2	
0542 7040	CHA				
0543 7440	SEA				
0544 7402	HLT				
/TAD ERROR					
/AC SHOULD EQUAL 0000					
/TAD TEST 5					
0545 7200	CLA				
0546 1047	TAD K7577			/OPERAND 1	
0547 1030	TAD K0200			/OPERAND 2	
0550 7040	CHA				
0551 7440	SEA				
0552 7402	HLT				
/TAD ERROR					
/AC SHOULD EQUAL 0000					
/TAD TEST 6					
0553 7200	CLA				
0554 1046	TAD K7677			/OPERAND 1	
0555 1027	TAD K0100			/OPERAND 2	
0556 7040	CHA				
0557 7440	SEA				
0558 7402	HLT				
/TAD ERROR					
/AC SHOULD EQUAL 0000					
/TAD TEST 7					
0561 7200	CLA				
0562 1045	TAD K7737			/OPERAND 1	
0563 1026	TAD K0040			/OPERAND 2	
0564 7040	CHA				
0565 7440	SEA				
0566 7402	HLT				
/TAD ERROR					
/AC SHOULD EQUAL 0000					
/TAD TEST 8					

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0567 7200 CLA K7737 /OPERAND 1
0570 1044 TAD K0020 /OPERAND 2
0571 1025 CMA SZA
0572 7040 HLT
0573 7402 /TAD ERROR
0574 7402 /AC SHOULD EQUAL 0000

0575 7200 /TAD TEST 9
0576 1043 CLA K7767
0577 1024 TAD K0010
0580 7040 CMA
0601 7440 SZA
0602 7402 HLT
/TAD ERROR
/AC SHOULD EQUAL 0000

0575 7200 /OPERAND 1
0576 1043 /OPERAND 2
0577 1024
0580 7040
0601 7440
0602 7402
/TAD ERROR
/AC SHOULD EQUAL 0000

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0603 7200 /TAD TEST 10
0604 1042 CLA K7773
0605 1023 TAD K0004
0606 7040 CMA
0607 7440 SZA
0610 7402 HLT
/TAD ERROR
/AC SHOULD EQUAL 0000

0611 7200 /TAD TEST 11
0612 1041 CLA K7775
0613 1022 TAD K0002
0614 7040 CMA
0615 7440 SZA
0616 7402 HLT
/TAD ERROR
/AC SHOULD EQUAL 0000

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0617 7200 /TAD TEST 12
0620 1040 CLA K7776
0621 1021 TAD K0001
0622 7040 CMA
0623 7440 SZA
0624 7402 HLT
/TAD ERROR
/AC SHOULD EQUAL 0000

0625 7200 /TAD TEST 13
0626 7100 CLA
0627 1036 CLL
0630 1036 TAD K4000
0631 7430 SZA
0632 7440 SZA
0633 7402 HLT
/TAD ERROR, AC SHOULD EQUAL 0000
/LINK SHOULD BE EQUAL ONE.

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0634 7200 /TAD TEST 14
0635 7100 CLA
CLL

```

0636	1097	TAD K6000	/OPERAND 1
0637	1234	TAD K2000	/OPERAND 2
0640	7430	SEL	
0641	7440	SZA	
0642	7402	HLT	
/TAD TEST 15			
0643	7200	CLA	
0644	7100	CLL	
0645	1060	TAD K7000	/OPERAND 1
0646	1032	TAD K1000	/OPERAND 2
0647	7430	SEL	
0650	7440	SZA	
0651	7402	HLT	
/TAD TEST 16			
0652	7200	CLA	
0653	7100	CLL	
0654	1061	TAD K7400	/OPERAND 1
0655	1031	TAD K0400	/OPERAND 2
0656	7430	SEL	
0657	7440	SZA	
0660	7402	HLT	
/TAD TEST 17			
0661	7200	CLA	
0662	7100	CLL	
0663	1062	TAD K7600	/OPERAND 1
0664	1030	TAD K0200	/OPERAND 2
0665	7430	SEL	
0666	7440	SZA	
0667	7402	HLT	
/TAD TEST 18			
0670	7200	CLA	
0671	7100	CLL	
0672	1101	TAD K7700	/OPERAND 1
0673	1027	TAD K0100	/OPERAND 2
0674	7430	SEL	
0675	7440	SZA	
0676	7402	HLT	
/TAD TEST 19			
0677	7200	CLA	
0700	7100	CLL	
/TAD TEST 20			
0701	1063	TAD K7740	/OPERAND 1
0702	1026	TAD K0040	/OPERAND 2
0703	7430	SEL	
0704	7440	SZA	
0705	7402	HLT	
/TAD TEST 20			
0706	7200	CLA	


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0707 7100      CLL
0710 1064      TAD K7760
0711 1025      TAD K0020
0712 7430      SEL
0713 7440      SZA
0714 7402      HLT

/TAD TEST 21
0715 7200      CLA
0716 7100      CLL
0717 1065      TAD K7770
0720 1024      TAD K0010
0721 7430      SEL
0722 7440      SZA
0723 7402      HLT

/TAD TEST 22
0724 7200      CLA
0725 7100      CLL
0726 1066      TAD K7774
0727 1023      TAD K0004
0730 7430      SEL
0731 7440      SZA
0732 7402      HLT

/TAD TEST 23
0733 7200      CLA
0734 7100      CLL
0735 1040      TAD K7776
0736 1022      TAD K0002
0737 7430      SEL
0740 7440      SZA
0741 7402      HLT

/TAD TEST 24
0742 7200      CLA
0743 7100      CLL
0744 1054      TAD K7777
0745 1021      TAD K0001
0746 7430      SEL
0747 7440      SZA
0750 7402      HLT

/TAD TEST 25
0751 7200      CLA
0752 7100      CLL
0753 7020      CML
0754 1036      TAD K4000
0755 1036      TAD K4000
0756 7420      SNL
0757 7440      SZA
0760 7402      HLT

```

/OPERAND 1
/OPERAND 2

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

/OPERAND 1
/OPERAND 2

/TAD ERROR AC SHOULD EQUAL 0000
/LINK SHOULD EQUAL ONE

/OPERAND 1
/OPERAND 2

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

/OPERAND 1
/OPERAND 2

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

/OPERAND 1
/OPERAND 2

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

/OPERAND 1
/OPERAND 2

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

```

0761 7200
0762 7100
0763 1053
0764 1054
0765 1034
0766 7040
0767 7020
0770 7440
0771 7402

      /TAD TEST 26
      CLA
      CLL
      TAD K3777
      TAD K2000
      TAD K2000
      CMA
      SNL
      SEA
      HLT

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

      /TAD TEST 27
      CLA
      CLL
      TAD K5777
      TAD K1000
      TAD K1000
      CMA
      SNL
      SEA
      HLT

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

      /TAD TEST 28
      CLA
      CLL
      TAD K6777
      TAD K0400
      TAD K0400
      CMA
      SNL
      SEA
      HLT

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

      /TAD TEST 29
      CLA
      CLL
      TAD K7377
      TAD K0200
      TAD K0200
      CMA
      SNL
      SEA
      HLT

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

      /TAD TEST 30
      CLA
      CLL
      TAD K7577
      TAD K0100
      TAD K0100
      CMA
      SNL
      SEA
      HLT

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

```

/LINK SHOULD EQUAL ZERO

/TAD TEST 31

1036 7200
1037 7100
1040 1046
1041 1026
1042 1026
1043 7040
1044 7420
1045 7440
1046 7402

CLA
CLL
TAD K7677
TAD K0040
TAD K0040
CMA
SNL
SZA
HLT

/OPERAND 1
/OPERAND 2
/OPERAND 3

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

/TAD TEST 32

1047 7200
1048 7100
1051 1045
1052 1025
1053 1025
1054 7040
1055 7420
1056 7440
1057 7402

CLA
CLL
TAD K7737
TAD K0020
TAD K0020
CMA
SNL
SZA
HLT

/OPERAND 1
/OPERAND 2
/OPERAND 3

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

/TAD TEST 33

1060 7200
1061 7100
1062 1044
1063 1024
1064 1024
1065 7040
1066 7420
1067 7440
1070 7402

CLA
CLL
TAD K7757
TAD K0010
TAD K0010
CMA
SNL
SZA
HLT

/OPERAND 1
/OPERAND 2
/OPERAND 3

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

/TAD TEST 34

1071 7200
1072 7100
1073 1043
1074 1023
1075 1023
1076 7040
1077 7420
1100 7440
1101 7402

CLA
CLL
TAD K7767
TAD K0004
TAD K0004
CMA
SNL
SZA
HLT

/OPERAND 1
/OPERAND 2
/OPERAND 3

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

/TAD TEST 35

1102 7200
1103 7100
1104 1042
1105 1022
1106 1022
1107 7040
1110 7420

CLA
CLL
TAD K7773
TAD K0002
TAD K0002
CMA
SNL

/OPERAND 1
/OPERAND 2
/OPERAND 3

1111 7540
1112 7402

SZA
HLT

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

/TAD TEST 36

1113 7200
1114 7100
1115 1041
1116 1021
1117 1021
1118 7040
1119 7420
1120 7430
1121 7402

CLA
CLL
TAD K7773
TAD K0001
TAD K3001
CMA
SNL
SEL
HLT

/OPERAND 1
/OPERAND 2
/OPERAND 3

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

/RAR TEST 1

1124 7200
1125 7100
1126 1021
1127 7010
1128 7420
1129 7402

CLA
CLL
TAD K0001
RAR
SNL
HLT

/ROTATE PATTERN

/RAR FAILED, LINK DROPPED A BIT
/LINK SHOULD EQUAL A ONE

/RAR TEST 2

1132 7200
1133 7100
1134 1020
1135 7010
1136 7400
1137 7402

CLA
CLL
TAD K0000
RAR
SZA
HLT

/ROTATE PATTERN

/RAR FAILED, AC PICKED UP A BIT
/A ONE IN AC EQUALS THE PICKED UP BIT

/RAR TEST 3

1140 7200
1141 7100
1142 1020
1143 7010
1144 7430
1145 7402

CLA
CLL
TAD K0000
RAR
SEL
HLT

/ROTATE PATTERN

/RAL FAILED, LINK PICKED UP A BIT
/LINK SHOULD EQUAL ZERO

/RAR TEST 4

1146 7200
1147 7100
1148 7020
1149 1020
1150 7010
1151 7430
1152 7402

CLA
CLL
CML
TAD K0000
RAR
SEL
HLT

/ROTATE PATTERN

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

/RAR TEST 5

1155 7200
1156 7100
1157 7020

CLA
CLL
CML

1150 1054 TAD K7777
 1161 7010 RAR
 1162 7040 CMA
 1163 7440 SZA
 1164 7402 HLT
 /RAR FAILED AC DROPPED A BIT
 /A ONE IN AC EQUALS THE DROPPED BIT

/ROTATE PATTERN
 /ROTATE PATTERN
 /RAR FAILED AC AND LINK
 /SHOULD EQUAL 0000

/ROTATE PATTERN
 /RAR FAILED AC AND LINK SHOULD
 /EQUAL 0000

/ROTATE PATTERN
 /RAR FAILED AC AND LINK SHOULD
 /EQUAL 0000

/ROTATE PATTERN
 /RAR FAILED AC AND LINK SHOULD
 /EQUAL 0000

```
1252 7200
1253 7100
1254 1031
1255 7010
1256 1047
1257 7040
1258 7450
1259 7430
1260 7402

/RAR TEST 10
CLA
CLL
TAD K0100
RAR
TAD K7577
CMA
SNA
SEL
HLT

/RAR FAILED AC AND LINK
/SHOULD EQUAL 0000

/ROTATE PATTERN
```

```
1243 7200
1244 7100
1245 1030
1246 7010
1247 1046
1250 7040
1251 7450
1252 7430
1253 7402

/RAR TEST 11
CLA
CLL
TAD K0200
RAR
TAD K7677
CMA
SNA
SEL
HLT

/RAR FAILED AC AND LINK
/EQUAL 0000

/ROTATE PATTERN
```

```
1254 7200
1255 7100
1256 1027
1257 7010
1258 1040
1259 7040
1261 7450
1262 7430
1263 7402

/RAR TEST 12
CLA
CLL
TAD K0100
RAR
TAD K7737
CMA
SNA
SEL
HLT

/RAR FAILED AC AND LINK
/SHOULD EQUAL 0000

/ROTATE PATTERN
```

```
1265 7200
1266 7100
1267 1026
1270 7010
1271 1044
1272 7040
1273 7450
1274 7430
1275 7402

/RAR TEST 13
CLA
CLL
TAD K0040
RAR
TAD K7757
CMA
SNA
SEL
HLT

/RAR FAILED AC AND LINK
/SHOULD EQUAL 0000

/ROTATE PATTERN
```

PAUSE

INSTRUCTION TEST 1

2547

IRAR TEST 14

1276	7200
1277	7100
1300	1025
1301	7010
1302	1043
1303	7040
1304	7450
1305	7430
1306	7402

CLL TAD K0020
RAR TAD K7767
CMA SNA
SEL HL

/ROTATE PATIENT

/PAR FAILED AC AND LINK
/SHOULD EQUAL 0000

IRAR TEST 15

1307	7200
1310	7100
1311	1024
1312	7010
1313	1042
1314	7040
1315	7450
1316	7430
1317	7402

CLL TAD K0010
RAR TAD K7773
CMA SNA SELT
HLT

/ROTATE PATTERN

/RAR FAILED AC AND LINK
/SHOULD EQUAL 0000

/RAR TEST 16

1320 7200
1321 7100
1322 1023
1323 7010
1324 1041
1325 7040
1326 7450
1327 7430
1330 7402

CLA
CLL
TAD K0004
RAR
TAD K7775
CMA
SNA
SEL
HLT

/ROTATE PATTERN

/RAR FAILED AC AND LINK
/SHOULD EQUAL 0000

PAR TEST 17

1331	7200
1332	7100
1333	1022
1334	7010
1335	1040
1336	7040
1337	7450
1340	7430
1341	7402

CLA K0002
CLL K7776
TAD
RAD
TAD
CMA
SNA
SEL
HL

/ROYATE PATTERN

/RAR FAILED AC AND LINK
/SHOULD EQUAL 0000

IRAR TEST 18

1342	7200
1343	7100
1344	1021
1345	7010
1346	1054
1347	7040

CLA
CLL
YAD K0001
RAD K7777
CMA

/ROTATE PATTERN

1350 7450	SNA		
1351 7420	SNL		/RAR FAILED AC AND LINK
1352 7402	HLT		/SHOULD EQUAL 0000
/RTR TEST 1			
1353 7200	CLA		
1354 7100	CLL		/ROTATE PATTERN
1355 1022	TAD K0002		
1356 7012	RTR		/RTR FAILED LINK DROPPED
1357 7420	SNL		/A BIT LINK SHOULD EQUAL A ONE
1358 7402	HLT		
/RTR TEST 2			
1361 7200	CLA		
1362 7100	CLL		/ROTATE PATTERN
1363 1020	TAD K0000		
1364 7012	RTR		/RTR FAILED AC PICKED UP A BIT
1365 7440	SEA		/A ONE IN AC EQUALS THE PICKED UP BIT
1366 7402	HLT		
/RTR TEST 3			
1367 7200	CLA		
1370 7100	CLL		/ROTATE PATTERN
1371 1020	TAD K0000		
1372 7012	RTR		/RTR LINK PICKED UP A BIT
1373 7430	SZL		/LINK SHOULD EQUAL ZERO
1374 7402	HLT		
/RTR TEST 4			
1375 7200	CLA		
1376 7100	CLL		/ROTATE PATTERN
1377 7020	CML		
1400 1020	TAD K0000		
1401 7012	RTR		/RTR LINK PICKED UP A BIT
1402 7430	SZL		/LINK SHOULD EQUAL ZERO
1403 7402	HLT		
/RTR TEST 5			
1404 7200	CLA		
1405 7100	CLL		/ROTATE PATTERN
1406 7020	CML		
1407 1034	TAD K7777		
1410 7012	RTR		/RTR AC DROPPED A BIT A ONE IN
1411 7040	GMA		/AC EQUALS THE DROPPED BIT
1412 7440	SEA		
1413 7402	HLT		
/RTR TEST 6			
1414 7200	CLA		
1415 7100	CLL		/ROTATE PATTERN
1416 7020	CML		
1417 1020	TAD K0000		
1420 7012	RTR		

1421 1052
1422 7040
1423 7450
1424 7430
1425 7402

TAD K5777
CMA
SNA
SEL
HLT

/RTR FAILED AC AND LINK
/SHOULD EQUAL 0000

/RTR TEST 7

1426 7200
1427 7100
1430 1036
1431 7012
1432 1051
1433 7040
1434 7450
1435 7430
1436 7402

CLA
CLL
TAD K4000
RTR
TAD K6777
CMA
SNA
SEL
HLT

/ROTATE PATTERN

/RTR TEST 8

1437 7200
1440 7100
1441 1034
1442 7012
1443 1050
1444 7040
1445 7450
1446 7430
1447 7402

CLA
CLL
TAD K2000
RTR
TAD K7377
CMA
SNA
SEL
HLT

/ROTATE PATTERN

/RTR TEST 9

1450 7200
1451 7100
1452 1032
1453 7012
1454 1047
1455 7040
1456 7450
1457 7430
1460 7402

CLA
CLL
TAD K1000
RTR
TAD K7577
CMA
SNA
SEL
HLT

/ROTATE PATTERN

/RTR TEST 10

1461 7200
1462 7100
1463 1031
1464 7012
1465 1046
1466 7040
1467 7450
1470 7430
1471 7402

CLA
CLL
TAD K0400
RTR
TAD K7677
CMA
SNA
SEL
HLT

/ROTAATE PATTERN

/RTR TEST 11

1472 7200
1473 7100

CLA
CLL

/RTR FAILED AC AND LINK
/SHOULD EQUAL 0000

/ROTATE PATTERN

1474 1030
1475 7012
1476 1045
1477 7040
1500 7450
1501 7430
1502 7402

/RTR FAILED AC AND LINK
/SHOULD EQUAL 0000

/RTR TEST 12

1503 7200
1504 7100
1505 1027
1506 7012
1507 1044
1510 7040
1511 7450
1512 7430
1513 7402

/ROTATE PATTERN

CLA
CLL
TAD K0100
RTR
TAD K7757
CMA
SNA
SEL
HLT

/RTR FAILED AC AND LINK
/SHOULD EQUAL 0000

/RTR TEST 13

1514 7200
1515 7100
1516 1026
1517 7012
1520 1043
1521 7040
1522 7450
1523 7430
1524 7402

/ROTATE PATTERN

CLA
CLL
TAD K0040
RTR
TAD K7767
CMA
SNA
SEL
HLT

/RTR FAILED AC AND LINK
/SHOULD EQUAL 0000

/RTR TEST 14

1525 7200
1526 7100
1527 1025
1530 7012
1531 1042
1532 7040
1533 7450
1534 7430
1535 7402

/ROTATE PATTERN

CLA
CLL
TAD K0020
RTR
TAD K7773
CMA
SNA
SEL
HLT

/RTR FAILED AC AND LINK
/SHOULD EQUAL 0000

/RTR TEST 15

1536 7200
1537 7100
1540 1024
1541 7012
1542 1041
1543 7040
1544 7450
1545 7430
1546 7402

/ROTATE PATTERN

CLA
CLL
TAD K0010
RTR
TAD K7775
CMA
SNA
SEL
HLT

/RTR FAILED AC AND LINK
/SHOULD EQUAL 0000

/RTR TEST 16

1547 7300
1550 1023
1551 7012
1552 1040
1553 7040
1554 7450
1555 7430
1556 7402

CLA CLL
YAD K0004
RTR
YAD K7776
CMA
SNA
SEL
HLT

/RTR FAILED AC AND LINK
/SHOULD EQUAL 0000

/RTR TEST 17

1557 7200
1560 7100
1561 1022
1562 7012
1563 7450
1564 7420
1565 7402

CLA
CLL
YAD K0002
RTR
SNA
SNL
HLT

/ROTATE PATTERN

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

/RTR TEST 18

1566 7200
1567 7100
1570 1021
1571 7012
1572 1053
1573 7040
1574 7450
1575 7430
1576 7402

CLA
CLL
YAD K0001
RTR
YAD K3777
CMA
SNA
SEL
HLT

/ROTATE PATTERN

/RTR FAILED, AC AND LINK
/SHOULD BE ZERO

/RAL TEST 1

1577 7200
1600 7100
1601 1036
1602 7004
1603 7430
1604 7440
1605 7402

CLA
CLL
YAD K4000
RAL
SEL
SEA
HLT

/ROTATE PATTERN

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

/RAL TEST 2

1606 7200
1607 7100
1610 1020
1611 7004
1612 7420
1613 7440
1614 7402

CLA
CLL
YAD K0000
RAL
SNL
SEA
HLT

/ROTATE PATTERN

/RAL FAILED, AC SHOULD EQUAL 0000
/LINK SHOULD EQUAL ZERO

/RAL TEST 3

1615 7200
1616 7100
1617 7020

CLA
CLL
CML

1620 1020 TAD K0000
 1621 7004 RAL
 1622 7430 SZL
 1623 7402 HLT
 /RAL TEST 4
 1624 7200 CLA
 1625 7100 CLL
 1626 7020 CML
 1627 1034 TAD K7777
 1630 7004 RAL
 1631 7040 CMA
 1632 7440 SZA
 1633 7402 HLT
 /ROTATE PATTERN, LINK#1
 /RAL FAILURE, AC SHOULD EQUAL 0001
 /LINK SHOULD EQUAL ZERO

/RAL FAILURE, LINK SHOULD EQUAL ONE
 /AC SHOULD EQUAL 0000

/ROTATE PATTERN

/RAL FAILURE, AC SHOULD EQUAL 0000
 /LINK SHOULD EQUAL ONE

/RAL FAILURE, AC SHOULD EQUAL 0000
 /LINK SHOULD EQUAL ZERO

/RAL FAILURE, AC SHOULD EQUAL 0000
 /LINK SHOULD EQUAL ZERO

/ROTATE PATTERN

1634 7200 CLA
 1635 7100 CLL
 1636 1034 TAD K2000
 1637 7004 RAL
 1640 1053 TAD K3777
 1641 7040 CMA
 1642 7490 SNA
 1643 7430 SZL
 1644 7402 HLT
 /RAL TEST 5

1645 7200 CLA
 1646 7100 CLL
 1647 1032 TAD K1000
 1650 7004 RAL
 1651 1052 TAD K5777
 1652 7040 CMA
 1653 7440 SZA
 1654 7402 HLT
 /RAL TEST 6

1655 7200 CLA
 1656 7100 CLL
 1657 1031 TAD K0400
 1660 7004 RAL
 1661 1051 TAD K6777
 1662 7040 CMA
 1663 7450 SNA
 1664 7430 SZL
 1665 7402 HLT
 /RAL TEST 7

1666 7200 CLA
 1667 7100 CLL
 1670 1030 TAD K0200
 1671 7004 RAL
 /RAL TEST 8

/ROTATE PATTERN

1672	1050	TAD K7377	
1673	7040	CMA	
1674	7450	SNA	/RAL FAILURE AC SHOULD EQUAL 0000
1675	7430	SEL	/LINK SHOULD EQUAL ZERO
1676	7402	HLT	
/RAL TEST 9			
1677	7200	CLA	
1700	7100	CLL	/ROTATE PATTERN
1701	1027	TAD K0100	
1702	7004	RAL	
1703	1047	TAD K7577	
1704	7040	CMA	
1705	7450	SNA	/RAL FAILURE AC SHOULD EQUAL 0000
1706	7430	SEL	/LINK SHOULD EQUAL ZERO
1707	7402	HLT	

/RAL TEST 10			
1710	7200	CLA	
1711	7100	CLL	/ROTATE PATTERN
1712	1026	TAD K0040	
1713	7004	RAL	
1714	1046	TAD K7677	
1715	7040	CMA	
1716	7450	SNA	
1717	7430	SEL	/RAL FAILURE AC SHOULD EQUAL 0000
1720	7402	HLT	/LINK SHOULD EQUAL A ZERO
/RAL TEST 11			
1721	7200	CLA	
1722	7100	CLL	/ROTATE PATTERN
1723	1025	TAD K0020	
1724	7004	RAL	
1725	1045	TAD K7737	
1726	7040	CMA	
1727	7450	SNA	
1730	7430	SEL	/RAL FAILURE AC SHOULD EQUAL 0000
1731	7402	HLT	/LINK SHOULD EQUAL A ZERO

/RAL TEST 12			
1732	7200	CLA	
1733	7100	CLL	/ROTATE PATTERN
1734	1024	TAD K0010	
1735	7004	RAL	
1736	1044	TAD K7757	
1737	7040	CMA	
1740	7450	SNA	
1741	7430	SEL	/RAL FAILURE AC SHOULD EQUAL 0000
1742	7402	HLT	/LINK SHOULD EQUAL A ZERO

/RAL TEST 13			
1743	7200	CLA	
1744	7100	CLL	/ROTATE PATTERN
1745	1023	TAD K0004	
1746	7004	RAL	
1747	1043	TAD K7767	

2024 7100 CLL
2025 1020 TAD K0000
2026 7006 RTL
2027 7430 SEL
2030 7402 HLT

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

/RTL TEST 4
2031 7200 CLA
2032 7100 CLL
2033 7020 CML
2034 1020 TAD K0000
2035 7006 RTL
2036 7430 SEL
2037 7402 HLT

/ROTATE PATTERN
/ROTATE PATTERN

/RTL FAILURE. LINK PICKED UP A BIT
/LINK SHOULD EQUAL A ZERO

/RTL TEST 5
2040 7200 CLA
2041 7100 CLL
2042 7020 CML
2043 1054 TAD K7777
2044 7006 RTL
2045 7040 CMA
2046 7440 SZA
2047 7402 HLT

/ROTATE PATTERN

/RTL FAILURE. DROPPED A BIT

/RTL TEST 6
2050 7200 CLA
2051 7100 CLL
2052 1036 TAD K4000
2053 7006 RTL
2054 1040 TAD K7776
2055 7040 CMA
2056 7450 SNA
2057 7430 SEL
2060 7402 HLT

/ROTATE PATTERN

/RTL FAILED AC AND LINK SHOULD EQUAL 0000

/RTL TEST 7
2061 7200 CLA
2062 7100 CLL
2063 1034 TAD K2000
2064 7006 RTL
2065 7430 SNA
2066 7420 SML
2067 7402 HLT

/ROTATE PATTERN

/RTL FAILED AC AND LINK SHOULD
/EQUAL 0000

/RTL TEST 8
2070 7200 CLA
2071 7100 CLL
2072 1032 TAD K1000
2073 7006 RTL
2074 1053 TAD K3777
2075 7040 CMA
2076 7450 SNA
2077 7430 SEL
2100 7402 HLT

/ROTATE PATTERN

/RTL FAILED AC AND LINK SHOULD

2101 7200	/RTL TEST 9	CLA		
2102 7100		CLL		/ROTATE PATTERN
2103 1031		YAD K0400		
2104 7006		RTL		
2105 1032		YAD K5777		
2106 7040		CMA		
2107 7450		SNA		
2110 7430		SZL	/RTL FAILED AC AND LINK SHOULD	
2111 7402		HLT	/EQUAL ZERO	
2112 7200	/RTL TEST 10	CLA		
2113 7100		CLL		/ROTATE PATTERN
2114 1030		YAD K0200		
2115 7006		RTL		
2116 1051		YAD K6777		
2117 7040		CMA		
2120 7450		SNA		
2121 7430		SZL	/RTL FAILED AC AND LINK SHOULD	
2122 7402		HLT	/EQUAL 0000	
2123 7200	/RTL TEST 11	CLA		
2124 7100		CLL		/ROTATE PATTERN
2125 1027		YAD K0100		
2126 7006		RTL		
2127 1050		YAD K7377		
2130 7040		CMA		
2131 7450		SNA		
2132 7430		SZL	/RTL FAILED AC AND LINK SHOULD	
2133 7402		HLT	/EQUAL 0000	
2134 7200	/RTL TEST 12	CLA		
2135 7100		CLL		/ROTATE PATTERN
2136 1026		YAD K0010		
2137 7006		RTL		
2140 1047		YAD K7577		
2141 7040		CMA		
2142 7450		SNA		
2143 7430		SZL	/RTL FAILED AC AND LINK SHOULD	
2144 7402		HLT	/EQUAL 0000	
2145 7200	/RTL TEST 13	CLA		
2146 7100		CLL		/ROTATE PATTERN
2147 1025		YAD K0020		
2150 7006		RTL		
2151 1046		YAD K7677		


```

2152 7040 CMA
2153 7450 SNA
2154 7430 SZL
2155 7402 HLT

/RTL TEST 14
2156 7200 CLA
2157 7100 CLL
2160 1024 TAD K0010
2161 7006 RTL
2162 1045 TAD K7737
2163 7040 CMA
2164 7450 SNA
2165 7430 SZL
2166 7402 HLT

/RTL TEST 15
2167 7200 CLA
2170 7100 CLL
2171 1023 TAD K0004
2172 7006 RTL
2173 1044 TAD K7757
2174 7040 CMA
2175 7450 SNA
2176 7430 SZL
2177 7402 HLT

/RTL TEST 16
2200 7200 CLA
2201 7100 CLL
2202 1022 TAD K0002
2203 7006 RTL
2204 1043 TAD K7767
2205 7040 CMA
2206 7430 SNA
2207 7430 SZL
2210 7402 HLT

/RTL TEST 17
2241 7200 CLA
2242 7100 CLL
2243 1021 TAD K0001
2244 7006 RTL
2245 1042 TAD K7773
2246 7040 CMA
2247 7450 SNA
2250 7430 SZL
2251 7402 HLT

/RTL TEST 18
2222 7200 CLA
2223 7100 CLL
2224 7020 CML
2225 7006 RTL
    
```

/RTL FAILED AC AND LINK SHOULD
 /EQUAL 0000

/RTL FAILED AC AND LINK SHOULD

/ROTATE PATTERN

/RTL FAILED AC AND LINK SHOULD
 /EQUAL 0000

/ROTATE PATTERN

/RTL FAILED AC AND LINK
 /SHOULD EQUAL 0000

/ROTATE PATTERN

/RTL FAILED AC AND LINK
 /SHOULD EQUAL 0000

2226 1041
2227 7040
2230 7450
2231 7430
2232 7402

TAD K7773
CMA
SNA
SEL
HLT

/RTL FAILED AC AND LINK
/SHOULD EQUAL 0000

2233 7200
2234 7100
2235 7040
2236 7002
2237 7040
2240 7420
2241 7440
2242 7402

/BSW TEST 1
CLA
CLL
CMA
BSW
CMA
SNL
SEA
HLT

/AC=7777
/SWAP BYTES AC SHOULD EQUAL 7777

/DID LINK SET?

/BSW FAILED
/AC AND LINK SHOULD=0000

2243 7200
2244 7100
2245 7020
2246 7002
2247 7400
2250 7400
2251 7402

/BSW TEST 2
CLA
CLL
CHL
BSW
SNA
SNL
HLT

/LINK=1
/SWAP BYTES AC SHOULD EQUAL 0000

/BSW CAUSED THE LINK
/TO ROTATE

2252 7200
2253 7100
2254 1101
2255 7002
2256 1101
2257 7000
2260 7420
2261 7440
2262 7402

/BSW TEST 3
CLA
CLL
TAD K7700
BSW
TAD K7700
CMA
SNL
SEA
HLT

/AC=7700
/SWAP BYTES AC SHOULD EQUAL 0077
/AC=7777
/AC=0000

/BSW FAILED AC AND LINK
/SHOULD=0000

2263 7200
2264 7100
2265 1074
2266 7002
2267 1074
2270 7040
2271 7420
2272 7440
2273 7402

/BSW TEST 4
CLA
CLL
TAD K0077
BSW
TAD K0077
CMA
SNL
SEA
HLT

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

2274 7300
2275 1104
2276 7002
2277 1104
2300 7040

/BSW TEST 5
CLA CLL
TAD K0770
BSW
TAD K0770
CMA

/BSW FAILED AC AND LINK
/SHOULD=0000

/SWAP BYTES AC SHOULD EQUAL 7007

/PDR-8/E INSTRUCTION TEST 1 PAL10 V141 8-MAR-71 13:53 PAGE 1-29

2301 7420 SNL
2302 7440 SZA
2303 7402 HLT

/BSW TEST 6
2304 7320 CLA CLL CML
2305 1105 TAD K7007
2306 7002 BSW
2307 1105 TAD K7007
2310 7040 CMA
2311 7430 SZL
2312 7440 SZA
2313 7402 HLT

/BSW TEST 7
2314 7200 CLA
2315 7100 CLL
2316 1102 TAD K5225
2317 7002 BSW
2320 1102 TAD K5225
2321 7040 CMA
2322 7420 SNL
2323 7440 SZA
2324 7402 HLT

/BSW TEST 8
2325 7200 CLA
2326 7100 CLL
2327 1103 TAD K2552
2330 7002 BSW
2331 1103 TAD K2552
2332 7040 CMA
2333 7420 SNL
2334 7440 SZA
2335 7402 HLT

/GROUP 1 OPERATE TEST 1
2336 7200 /CLEAR AC
2337 7100 /CLEAR LINK
2340 7040 /AC EQUALS 7777
2341 7020 /LINK EQUALS ONE
2342 7300 /TEST COMBINATION
2343 7420
2344 7440
2345 7402

/GROUP 1 OPERATE TEST 2
2346 7200 CLA
2347 1056 TAD K2525
2350 7240 CLA CMA
2351 7040 CMA
2352 7440 SZA
2353 7402 HLT

/BSW FAILED AC AND LINK
/SHOULD EQUAL 0000

/SWAP BYTES AC SHOULD EQUAL 0770

/BSW FAILED AC
/SHOULD EQUAL 0000 AND LINK=1

/AC=5225
/SWAP BYTES AC SHOULD EQUAL 2552
/AC=7777

/BSW FAILED AC AND LINK
/SHOULD=0000

/AC=2552
/SWAP BYTES AC SHOULD EQUAL 5225
/AC=7777

/BSW FAILED AC AND LINK
/SHOULD=0000

/CLA CLL FAILED. LINK SHOULD BE 0
/AC SHOULD EQUAL 0000
/AC EQUALS 0000
/AC EQUALS 2525
/TEST COMBINATION
/CLA CMA ERROR. AC SHOULD

2354 7200 /GROUP 1 OPERATE TEST 3
2355 7100 CLA
2356 7040 CLL
2357 7140 CMA
2360 7420 CLL CMA
2361 7440 SNL
2362 7402 SZA
/BE 0000
/AC=7777 LINK=1
/TEST COMBINATION
/CLL CMA FAILED. AC AND LINK
/SHOULD BE ZERO
2363 7100 /GROUP 1 OPERATE TEST 4
2364 7020 CLL
2365 7200 CML
2366 7040 CLA
2367 7340 CMA
2370 7040 CLA CMA CLL
2371 7420 CMA
2372 7440 SNL
2373 7402 SZA
/LINK=1
/AC=7777
/TEST COMBINATION
/CLA CMA CLL FAILED. AC AND
/LINK SHOULD BE ZERO

2374 7200 /GROUP 1 OPERATE TEST 5
2375 7100 CLA
2376 7040 CLL
2377 7220 CMA
2400 7430 CLA CML
2401 7440 SZL
2402 7402 SZA
/LINK=0
/AC=7777
/TEST COMBINATION
/CLA CML FAILED. AC SHOULD EQUAL
/0000. LINK SHOULD BE A ONE

2403 7100 /GROUP 1 OPERATE TEST 6
2404 7020 CLL
2405 7120 CML
2406 7420 SNL
2407 7402 HLT
/LINK=1
/TEST COMBINATION
/CLL CML FAILED
/LINK SHOULD BE A ONE

2410 7100 /GROUP 1 OPERATE TEST 7
2411 7120 CLL
2412 7420 CML
2413 7402 SNL
/LINK=0
/TEST COMBINATION
/CLL CML FAILED.
/LINK SHOULD BE A ONE

2414 7120 /GROUP 1 OPERATE TEST 8
2415 7240 CLL CML
2416 7320 CLA CMA
2417 7430 CLA CLL CML
2420 7440 SZL
2421 7402 SZA
/LINK=1
/AC=7777
/TEST COMBINATION
/CLA CLL CML FAILED. LINK SHOULD
/BE 1. AC SHOULD BE ZERO
/LINK=0, AC=7777
2422 7340 /GROUP 1 OPERATE TEST 9
CLA CLL CMA

2483 7320 CLA CLL CML /
2484 7430 SEL /TEST COMB, ION
2425 7440 SEA /CLA CLL CML FAILED, LINK SHOULD
2426 7402 HLT /BE 1, AC SHOULD BE ZERO

/GROUP 1 OPERATE TEST 10
2427 7340 CLA CLL CMA /AC=7777, LINK=0
2430 7060 CMA CML /TEST COMBINATION
2431 7430 SEL
2432 7440 SEA
2433 7402 HLT

/GROUP 1 OPERATE TEST 11
2434 7300 CLA CLL /AC AND LINK=0
2435 1056 TAD K2525 /AC=2525
2436 7340 CLA CMA CLL /TEST COMBINATION
2437 7040 CMA
2440 7420 SNL
2441 7440 SEA
2442 7402 HLT

/CLA CMA CML FAILED, AC SHOULD BE
/0000, LINK SHOULD EQUAL ZERO

/GROUP 1 OPERATE TEST 12
2443 7300 CLL CLA /AC AND LINK=0
2444 1056 TAD K2525 /AC=2525
2445 7160 CLL CMA CML /TEST COMBINATION
2446 1056 TAD K2525
2447 7040 CMA
2450 7430 SEL
2451 7440 SEA
2452 7402 HLT

/CLL CMA CML FAILED, AC SHOULD BE
/0000, LINK SHOULD EQUAL ONE

/GROUP 1 OPERATE TEST 13
2453 7300 CLA CLL /AC=0000, LINK=1
2454 7020 CML /TEST COMBINATION
2455 7160 CLL CMA CML
2456 7040 CMA
2457 7430 SEL
2460 7440 SEA
2461 7402 HLT

/CLL CMA CML FAILED, AC SHOULD
/BE 0000, LINK SHOULD BE ONE

/GROUP 1 OPERATE TEST 14
2462 7300 CLA CLL /AC=2525, LINK=0
2463 1056 TAD K2525 /TEST COMBINATION
2464 7360 CLA CLL CMA CML
2465 7040 CMA
2466 7430 SEL
2467 7440 SEA
2470 7402 HLT

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

/GROUP 1 OPERATE TEST 15
2471 7320 CLA CLL CML

```
2472 1055      YAD K2525
2473 7360      CLA CLL CMA CML /TEST COMBINATION
2474 7246      CMA
2475 7430      SEL
2476 7440      SEA
2477 7402      HLT

/CLA CLL CMA CML FAILED. AC SHOULD
/BE 000. LINK SHOULD EQUAL ONE

/GROUP 1 OPERATE TEST 16
  CLA
  TAD K2525
  CLA IAC
  YAD K7776
  CMA
  SEA
  HLT

/AC=2525
/TEST COMBINATION

/CLA IAC FAILED
/AC SHOULD EQUAL 0000

/GROUP 1 OPERATE TEST 17
  CLL CML CLA
  YAD K7776
  CLL IAC
  CMA
  SNL
  SEA
  HLT

/AC=7776. LINK=1
/TEST COMBINATION

/CLL IAC FAILED. AC AND LINK
/SHOULD EQUAL ZERO
```

```
/GROUP 1 OPERATE TEST 18
  CLA CLL CML
  YAD K2525
  CLA CLL IAC
  YAD K7776
  CMA
  SNL
  SEA
  HLT

/AC=2525 LINK=1
/TEST COMBINATION

/CLA CLL IAC FAILED. AC AND LINK
/SHOULD BE ZERO

/AC=0 LINK=0
/TEST COMBINATION

/CHA IAC FAILED. AC SHOULD EQUAL
/0000. LINK SHOULD EQUAL ONE

/GROUP 1 OPERATE TEST 19
  CLA CLL
  CMA IAC
  SEL
  SEA
  HLT

/AC=0 LINK=0
/TEST COMBINATION

/CHA IAC FAILED. AC SHOULD EQUAL
/0000. LINK SHOULD EQUAL ONE

/GROUP 1 OPERATE TEST 20
  CLA CLL
  YAD K2525
  CLA CMA IAC
  SEL
  SEA
  HLT

/AC=2525 LINK=0
/TEST COMBINATION

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

/AC=0000 LINK=1
/AC=0001

/GROUP 1 OPERATE TEST 21
  CLL CLA CML
  YAD K0001

/AC=0000 LINK=1
/AC=0001
```

```

2543 7141    CLL CMA IAC / /TEST COMB( ION
2544 7040    CMA
2545 7420    SNL
2546 7440    SZA
2547 7402    HLT

/CLL CMA IAC FAILED. AC SHOULD BE
/0000 LINK SHOULD BE 0

/GROUP 1 OPERATE TEST 22
2550 7320    CLA CLL CML
2551 1056    TAD K2525 /AC=2525 LINK=1
2552 7341    CLA CLL CMA IAC /TEST COMBINATION
2553 7430    SEL
2554 7440    SZA
2555 7402    HLT

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

```

```

/GROUP 1 OPERATE TEST 23
2556 7300    CLA CLL
2557 1055    TAD K5252 /AC=5252 LINK=0
2560 7341    CLA CLL CMA IAC /TEST COMBINATION
2561 7430    SEL
2562 7440    SZA
2563 7402    HLT

/CLA CLL CMA IAC FAILED AC SHOULD
/BE 0000, LINK SHOULD BE ONE

/GROUP 1 OPERATE TEST 24
2564 7300    CLA CLL
2565 1040    TAD K7776 /AC=7776 LINK=0
2566 7021    CML IAC
2567 7040    CMA
2570 7430    SEL
2571 7440    SZA
2572 7402    HLT

/CML IAC FAILED AC SHOULD BE
/0000, LINK SHOULD BE ONE

```

```

/GROUP 1 OPERATE TEST 25
2573 7320    CLA CLL CML
2574 1040    TAD K7776 /AC =7776 LINK=1
2575 7021    CML IAC
2576 7040    CMA
2577 7420    SNL
2600 7440    SZA
2601 7402    HLT

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

```

```

/GROUP 1 OPERATE TEST 26
2602 7300    CLA CLL
2603 1056    TAD K2525 /AC=2525 LINK=0
2604 7221    CLA CML IAC
2605 1040    TAD K7776
2606 7040    CMA
2607 7430    SEL
2610 7440    SZA
2611 7402    HLT

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

/GROUP 1 OPERATE TEST 27
2612 7320    CLA CLL CML /AC=0000 LINK=1
2613 1040    TAD K7776 /AC=7776

```

2614 7121
2615 7040 CMA
2616 7432 SZL
2617 7440 SEA
2620 7402 HLT

CLL CML IAC /TEST COMBINATION

/CLL CML IAC FAILURE. AC SHOULD BE /0000. LINK SHOULD EQUAL ONE.

/GROUP 1 OPERATE TEST 28

2621 7300 CLA CLL
2622 1040 TAD K7776 /AC=7776 LINK=0
2623 7121 CLL CML IAC /TEST COMBINATION
2624 7040 CMA
2625 7430 SZL
2626 7440 SEA
2627 7402 HLT

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

/GROUP 1 OPERATE TEST 29

2630 7300 CLA CLL
2631 1056 TAD K2525 /AC=2525. LINK=0
2632 7321 CLA CLL CML IAC /TEST COMBINATION
2633 1040 TAD K7776
2634 7040 CMA
2635 7430 SZL
2636 7440 SEA
2637 7402 HLT

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

/GROUP 1 OPERATE TEST 30

2640 7320 CLA CLL CML
2641 1056 TAD K2525 /AC=2525 LINK=1
2642 7321 CLA CLL CML IAC /TEST COMBINATION
2643 1040 TAD K7776
2644 7040 CMA
2645 7430 SZL
2646 7440 SEA
2647 7402 HLT

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

/GROUP 1 OPERATE TEST 31

2650 7300 CLA CLL
2651 1021 TAD K0001 /AC=0001 LINK=0
2652 7061 CMA CML IAC /TEST COMBINATION
2653 7040 CMA
2654 7430 SZL
2655 7440 SEA
2656 7402 HLT

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

/GROUP 1 OPERATE TEST 32

2657 7320 CLA CLL CML
2660 1021 TAD K0001 /AC=0001 LINK=1
2661 7061 CMA CML IAC /TEST COMBINATION
2662 7040 CMA
2663 7420 SNL
2664 7440 SEA


```

/POP-8/F INSTRUCTION TEST 1 PAL10 V141 0-MAR-71 13:53 PAGE 1-38
2665 7402 HLT /CMA CML IAC FAILURE. AC SHOULD BE
/0000. LINK SHOULD BE ZERO
/GROUP 1 OPERATE TEST 33 /AC=0000 LINK=0
2666 7300 CLA CLL /AC=2525
2667 1056 TAD K2525 /AC=2525
2670 7261 CLA CMA CML IAC /TEST COMBINATION
2671 7420 SNL
2672 7430 SEL
2673 7402 HLT /CLA CMA CML IAC FAILED. AC SHOULD
/BE 0000. LINK SHOULD BE ZERO
/GROUP 1 OPERATE TEST 34
2674 7320 CLA CLL CML
2675 1056 TAD K2525 /AC=2525 LINK=1
2676 7261 CLA CMA CML IAC /TEST COMBINATION
2677 7430 SEL
2680 7440 SEA
2701 7402 HLT /CLA CMA CML IAC FAILED. AC SHOULD
/BE 0000. LINK SHOULD BE ONE
/GROUP 1 OPERATE TEST 35
2702 7300 CLA CLL /AC=0001 LINK=0
2703 1021 TAD K0001 /AC=0001 LINK=0
2704 7161 CLL CMA CML IAC /TEST COMBINATION
2705 7040 CMA
2706 7430 SEL
2707 7440 SEA
2710 7402 HLT /CLL CMA CML IAC FAILED. AC SHOULD BE
/0000. LINK SHOULD BE ONE
/GROUP 1 OPERATE TEST 36
2711 7320 CLA CLL CML /AC=0001 LINK=1
2712 1021 TAD K0001 /AC=0001 LINK=1
2713 7161 CLL CMA CML IAC /TEST COMBINATION
2714 7040 CMA
2715 7430 SEL
2716 7440 SEA
2717 7402 HLT /CLL CMA CML IAC FAILED. AC SHOULD BE
/0000. LINK SHOULD BE ONE
/GROUP 1 OPERATE TEST 37
2720 7300 CLA CLL /AC=2525 LINK=0
2721 1056 TAD K2525 /AC=2525 LINK=0
2722 7361 CLA CLL CMA CML IAC /TEST COMBINATION
2723 7420 SNL
2724 7440 SEA
2725 7402 HLT /CLA CLL CMA CML IAC FAILURE AC AND
/LINK SHOULD EQUAL ZERO
/GROUP 1 OPERATE TEST 38
2726 7360 CLA CMA CLL CML /AC=7777 LINK=1
2727 7210 CLA RAR /TEST COMBINATION
2730 1053 TAD K3777
2731 7040 CMA
2732 7420 SNL
2733 7440 SEA
2734 7402 HLT /CLA RAR FAILED. LINK AND
/AC SHOULD EQUAL ZERO

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/ GROUP 1 OPERATE TEST 39
  7360 CLA CMA CLL CML /AC=7777 LINK=1
  7204 CLA RAL /TEST COMBINATION
  2737 TAD K7776
  7040 CMA
  7040 CMA
  2741 SNL
  7420 SZA
  2742 SZA
  7440 HLT
  2743 HLT

/CLA RAL FAILED LINK AND
/AC SHOULD EQUAL ZERO

/ GROUP 1 OPERATE TEST 40
  7360 CLA CMA CLL CML /AC=7777 LINK=1
  7212 CLA RTR /TEST COMBINATION
  2745 TAD K5777
  7040 CMA
  2747 SNL
  7040 SZA
  2750 SZA
  7420 HLT
  2751 HLT
  7440 HLT
  2752 HLT

/CLA RTR FAILED. AC AND
/LINK SHOULD BE ZERO

/ GROUP 1 OPERATE TEST 41
  7360 CLA CMA CLL CML /AC=7777, LINK=1
  7206 CLA RTL /TEST COMBINATION
  2753 TAD K7775
  7040 CMA
  2755 CMA
  7040 SNL
  2757 SZA
  7420 HLT
  2760 HLT
  7402 HLT

/CLA RTL FAILED. AC AND LINK
/SHOULD BE ZERO

/ GROUP 1 OPERATE TEST 42
  7320 CLA CLL CML
  1026 TAD K0040 /AC=0040 LINK=1
  2763 CLL RAR /TEST COMBINATION
  7110 TAD K7757
  2765 CMA
  7040 SNL
  2766 SZA
  2767 HLT
  7420 HLT
  7440 HLT
  2770 HLT
  2771 HLT

/CLA RAR FAILED. AC AND LINK
/SHOULD BE ZERO

/ GROUP 1 OPERATE TEST 43
  7320 CLA CLL CML
  1026 TAD K0040 /AC=0040 LINK=1
  2772 CLL RAL /TEST COMBINATION
  2773 TAD K7677
  2774 CMA
  2775 SNL
  2776 SZA
  2777 HLT
  3000 HLT
  3001 HLT

/CLA RAL FAILED. AC AND LINK
/SHOULD BE ZERO

/ GROUP 1 OPERATE TEST 44
  7320 CLA CLL CML
  1026 TAD K0040 /AC=0040 LINK=1
  3003 CLL RTR /TEST COMBINATION
  3004 HLT
  7112 HLT

```

```

3005 1043
3006 7040
3007 7420
3010 7440
3011 7402

TAD K7767
CMA
SNL
SZA
HLT

/CLL RTR FAILED. AC AND LINK
/SHOULD BE ZERO

```

```

/GROUP 1 OPERATE TEST 45
CLA CLL CML
TAD K0040
CLL RTL
TAD K7577
CMA
SNL
SZA
HLT

/AC=0040 LINK=1
/TEST COMBINATION

```

```

/CLL RTL FAILED. AC AND LINK
/SHOULD BE ZERO

/CLL CLA RAR FAILED AC AND
/LINK SHOULD BE ZERO

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/CLL CLA RAR FAILED AC AND
/LINK SHOULD BE ZERO

/CLL CLA RAR FAILED AC AND
/LINK SHOULD BE ZERO

```

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/CLL CLA RAR FAILED AC AND
/LINK SHOULD BE ZERO

/CLL CLA RAR FAILED AC AND
/LINK SHOULD BE ZERO

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/CLL CLA RAR FAILED AC AND
/LINK SHOULD BE ZERO

/CLL CLA RAR FAILED AC AND
/LINK SHOULD BE ZERO

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/CLL CLA RAR FAILED AC AND
/LINK SHOULD BE ZERO

/CLL CLA RAR FAILED AC AND
/LINK SHOULD BE ZERO

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/CLL CLA RAR FAILED AC AND
/LINK SHOULD BE ZERO

/CLL CLA RAR FAILED AC AND
/LINK SHOULD BE ZERO

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/CLL CLA RAR FAILED AC AND
/LINK SHOULD BE ZERO

/CLL CLA RAR FAILED AC AND
/LINK SHOULD BE ZERO

```

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3055 7300 /GROUP 1 OPERATE TEST 51 /AC=0000 LINK=0
3056 7024 CML CLL /TEST COMBINATION
3057 1040 CML RAL
3060 7040 TAD K7776
3061 7420 CMA
3062 7440 SNL
3063 7402 SZA
HLT

/CML RAL FAILED. AC AND LINK
/SHOULD BE ZERO.

/GROUP 1 OPERATE TEST 52
3064 7300 CML CLL
3065 7032 CML RTR /AC=0000 LINK=0
3066 1052 TAD K5777 /TEST COMBINATION
3067 7040 CMA
3070 7420 SNL
3071 7440 SZA
3072 7402 HLT

/CML RTR FAILED. AC AND LINK
/SHOULD EQUAL ZERO

/GROUP 1 OPERATE TEST 53
3073 7300 CML CLL /AC=0000 LINK=0
3074 7026 CML RTL /TEST COMBINATION
3075 1041 TAD K7775
3076 7040 CMA
3077 7420 SNL
3100 7440 SZA
3101 7402 HLT

/CML RTL FAILED. AC AND LINK
/SHOULD EQUAL ZERO

/GROUP 1 OPERATE TEST 54
3102 7300 CML CLL /AC=5252 LINK=0
3103 1055 TAD K5252 /TEST COMBINATION
3104 7230 CML RAL
3105 1053 TAD K3777
3106 7040 CMA
3107 7420 SNL
3110 7440 SZA
3111 7402 HLT

/CLA CML RAL FAILED. AC AND
/SHOULD EQUAL ZERO

PAUSE

/INSTRUCTION TEST - 1
/GROUP 1 OPERATE TEST 55
/TAPE 3
3112 7300 CML CLL /AC=5252 LINK=0
3113 1055 TAD K5252 /TEST COMBINATION
3114 7224 CML RAL
3115 1040 TAD K7776
3116 7040 CMA
3117 7420 SNL
3120 7440 SZA
3121 7402 HLT

/CLA CML RAL FAILED. AC AND
/LINK SHOULD BE ZERO

/GROUP 1 OPERATE TEST 56
3122 7300 CML CLL

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3123 1055 TAD K5252
 3124 7232 CLA CML RTR
 3125 1052 TAD K5777
 3126 7040 CMA
 3127 7420 SNL
 3130 7440 SZA
 3131 7402 HLT

/GROUP 1 OPERATE TEST 57
 CLA CLL
 TAD K5252
 CLA CML RTR
 TAD K7775
 CMA
 SNL
 SZA
 HLT

/GROUP 1 OPERATE TEST 58
 CLA CLL
 CLL CML RAR
 RAL
 SEL
 SZA
 HLT

/CLA CML RTR FAILED, AC AND
 /LINK SHOULD BE ZERO

/GROUP 1 OPERATE TEST 59
 CLA CLL CML
 CLL CML RAR
 RAL
 SEL
 SZA
 HLT

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

/GROUP 1 OPERATE TEST 60
 CLA CLL
 CLL CML RAL
 RAR
 SEL
 SZA
 HLT

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

/GROUP 1 OPERATE TEST 61
 CLA CLL CML
 CLL CML RAL
 RAR
 SEL
 SZA
 HLT

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

/GROUP 1 OPERATE TEST 62
 CLA CLL
 CLL CML RTR

3132 7300
 3133 1055
 3134 7226
 3135 1041
 3136 7040
 3137 7420
 3140 7440
 3141 7402

3142 7300
 3143 7130
 3144 7004
 3145 7430
 3146 7440
 3147 7402

3150 7300
 3151 7130
 3152 7004
 3153 7430
 3154 7440
 3155 7402

3156 7300
 3157 7124
 3160 7010
 3161 7430
 3162 7440
 3163 7402

3164 7320
 3165 7124
 3166 7010
 3167 7430
 3170 7440
 3171 7402

3172 7300
 3173 7132

3174 7006
3175 7430
3176 7440
3177 7402

RTL
SEL
SEA
HLT

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

3200 7320
3201 7132
3202 7006
3203 7430
3204 7440
3205 7402

CLA CLL CML
CLL CML RTR
RTL
SEL
SEA
HLT

/GROUP 1 OPERATE TEST 63
/AC=0000 LINK=1
/TEST COMBINATION

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

3206 7300
3207 7126
3210 7012
3211 7430
3212 7440
3213 7402

CLA CLL
CLL CML RTL
RTR
SEL
SEA
HLT

/GROUP 1 OPERATE TEST 64
/AC=0000 LINK=0
/TEST COMBINATION

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

3214 7320
3215 7126
3216 7012
3217 7430
3220 7440
3221 7402

CLA CLL CML
CLL CML RTL
RTR
SEL
SEA
HLT

/GROUP 1 OPERATE TEST 65
/AC=0000 LINK=1
/TEST COMBINATION

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

3222 7300
3223 1055
3224 7330
3225 7004
3226 7430
3227 7440
3230 7402

CLA CLL
TAD K252
CLA CLL CML RAR
RAL
SEL
SEA
HLT

/GROUP 1 OPERATE TEST 66
/AC=5252 LINK=0
/TEST COMBINATION

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

3231 7320
3232 1056
3233 7330
3234 7004
3235 7430
3236 7440
3237 7402

CLA CLL CML
TAD K2525
CLA CLL CML RAR
RAL
SEL
SEA
HLT

/GROUP 1 OPERATE TEST 67
/AC=2525 LINK=1
/TEST COMBINATION

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

3240 7300
3241 1056
3242 7324

CLA CLL
TAD K2525
CLA CLL CML RAL

/GROUP 1 OPERATE TEST 68
/AC=2525 LINK=0
/TEST COMBINATION

3243 7010 RAR
3244 7430 SZL
3245 7440 SZA
3246 7402 HLT
/CLA CLL CML RAL FAILED. AC SHOULD
/BE 0000, LINK SHOULD BE ONE

/GROUP 1 OPERATE TEST 69

3247 7320 CLA CLL CML
3250 1055 TAD K5252 /AC=5252 LINK=1
3251 7324 CLA CLL CML RAL /TEST COMBINATION
3252 7010 RAR
3253 7430 SZL
3254 7440 SZA
3255 7402 HLT

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

/GROUP 1 OPERATE TEST 70

3256 7300 CLA CLL
3207 1056 TAD K2525 /AC=2525 LINK=0
3260 7332 CLA CLL CML RTR /TEST COMBINATION
3261 7006 RTL
3262 7430 SZL
3263 7440 SZA
3264 7402 HLT

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

/GROUP 1 OPERATE TEST 71

3265 7320 CLA CLL CML
3266 1055 TAD K5252 /AC=5252 LINK=1
3267 7332 CLA CLL CML RTR /TEST COMBINATION
3270 7006 RTL
3271 7430 SZL
3272 7440 SZA
3273 7402 HLT

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

/GROUP 1 OPERATE TEST 72

3274 7300 CLL CLA
3275 1056 TAD K2525 /AC=2525 LINK=0
3276 7326 CLA CLL CML RTL /TEST COMBINATION
3277 7012 RTR
3300 7430 SZL
3301 7440 SZA
3302 7402 HLT

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

/GROUP 1 OPERATE TEST 73

3303 7320 CLL CLA CML
3304 1055 TAD K5252 /AC=5252 LINK=1
3305 7326 CLA CLL CML RTL /TEST COMBINATION
3306 7012 RTR
3307 7430 SZL
3310 7440 SZA
3311 7402 HLT

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

/GROUP 1 OPERATE TEST 74

3312 7300 CLA CLL
3313 1054 TAD K7777 /TEST PATTERN

```
3314 7541 CIA
3315 1040 TAD K7776
3316 7040 CMA
3317 7420 SNL
3320 7440 SZA
3321 7402 HLT
/GROUP 1 OPERATE TEST 75
3322 7300 CLA CLL
3323 1040 TAD K7776
3324 7041 CIA
3325 1041 TAD K7775
3326 7040 CMA
3327 7420 SNL
3330 7440 SZA
3331 7402 HLT
/AC EQUALS 0001
/AC EQUALS 0001
/CIA FAILED AC SHOULD EQUAL 0000
/LINK SHOULD EQUAL A ZERO
/CIA FAILED AC SHOULD EQUAL 0000
/LINK SHOULD EQUAL A ZERO
```

```
/GROUP 1 OPERATE TEST 76
3332 7300 CLA CLL
3333 1066 TAD K7774
3334 7041 CIA
3335 1042 TAD K7773
3336 7040 CMA
3337 7420 SNL
3340 7440 SZA
3341 7402 HLT
/TEST PATTERN
/AC EQUALS 0004
/CIA FAILED AC SHOULD EQUAL 0000
/LINK SHOULD EQUAL ZERO
/TEST PATTERN
/AC EQUALS 0010
/CIA FAILED AC SHOULD EQUAL 0000
/LINK SHOULD EQUAL ZERO
```

```
/GROUP 1 OPERATE TEST 77
3342 7300 CLA CLL
3343 1065 TAD K7770
3344 7041 CIA
3345 1043 TAD K7767
3346 7040 CMA
3347 7420 SNL
3350 7440 SZA
3351 7402 HLT
/TEST PATTERN
/AC EQUALS 0010
/CIA FAILED AC SHOULD EQUAL 0000
/LINK SHOULD EQUAL ZERO
/TEST PATTERN
/AC EQUALS 0020
/CIA FAILED AC SHOULD EQUAL 0000
/LINK SHOULD EQUAL ZERO
```

```
/GROUP 1 OPERATE TEST 78
3352 7300 CLA CLL
3353 1064 TAD K7760
3354 7041 CIA
3355 1044 TAD K7757
3356 7040 CMA
3357 7420 SNL
3360 7440 SZA
3361 7402 HLT
/TEST PATTERN
/AC EQUALS 0020
/CIA FAILED AC SHOULD EQUAL 0000
/LINK SHOULD EQUAL ZERO
/TEST PATTERN
/AC EQUALS 0040
/CIA FAILED AC SHOULD EQUAL 0000
/LINK SHOULD EQUAL ZERO
```

```
/GROUP 1 OPERATE TEST 79
3362 7300 CLA CLL
3363 1063 TAD K7740
3364 7041 CIA
3365 1045 TAD K7737
3366 7040 CMA
3367 7420 SNL
3370 7440 SZA
3371 7402 HLT
/TEST PATTERN
/AC EQUALS 0040
/CIA FAILED AC SHOULD EQUAL 0000
/LINK SHOULD EQUAL ZERO
```



```

3372 7300 /GROUP 1 OPERATE TEST 80
3373 1101 CLA CLL
3374 7041 TAD K7700 /TEST PATTERN
3375 1046 CIA /AC EQUALS 0100
3376 7040 TAD K7677
3377 7420 CMA
3400 7440 SNL
3401 7402 SEA
HLT

3402 7300 /GROUP 1 OPERATE TEST 81
3403 1062 CLA CLL
3404 7041 TAD K7600 /TEST PATTERN
3405 1047 CIA /AC EQUALS 0200
3406 7040 TAD K7577
3407 7420 CMA
3410 7440 SNL
3411 7402 SEA
HLT

3412 7300 /GROUP 1 OPERATE TEST 82
3413 1061 CLA CLL
3414 7041 TAD K7400 /TEST PATTERN
3415 1050 CIA /AC EQUALS 0400
3416 7040 TAD K7377
3417 7420 CMA
3420 7440 SNL
3421 7402 SEA
HLT

3422 7300 /GROUP 1 OPERATE TEST 83
3423 1060 CLA CLL
3424 7041 TAD K7000 /TEST PATTERN
3425 1051 CIA /AC EQUALS 1000
3426 7040 TAD K6777
3427 7420 CMA
3430 7440 SNL
3431 7402 SEA
HLT

3432 7300 /GROUP 1 OPERATE TEST 84
3433 1057 CLA CLL
3434 7041 TAD K6000 /TEST PATTERN
3435 1052 CIA /AC EQUALS 2000
3436 7040 TAD K5777
3437 7420 CMA
3440 7440 SNL
3441 7402 SEA
HLT

3442 7300 /GROUP 1 OPERATE TEST 85
3443 1057 CLA CLL
3444 7041 TAD K6000 /TEST PATTERN
3445 1052 CIA /AC EQUALS 2000
3446 7040 TAD K5777
3447 7420 CMA
3448 7440 SNL
3449 7402 SEA
HLT

```

/CIA FAILED A SHOULD EQUAL 0000
/LINK SHOULD EQUAL ZERO

/TEST PATTERN
/AC EQUALS 0200

/CIA FAILED AC SHOULD EQUAL 0000
/LINK SHOULD EQUAL ZERO

/TEST PATTERN
/AC EQUALS 0400

/CIA FAILED AC SHOULD EQUAL 0000
/LINK SHOULD EQUAL ZERO

/TEST PATTERN
/AC EQUALS 1000

/CIA FAILED AC SHOULD EQUAL 0000
/LINK SHOULD EQUAL ZERO

/TEST PATTERN
/AC EQUALS 2000

/CIA FAILED AC SHOULD EQUAL 0000
/LINK SHOULD EQUAL ZERO

```

3432 7309 CLA CLL
3443 1026 TAD K0000
3444 7041 CIA /TEST PATTERN
3445 1053 TAD K3777 /AC EQUALS 4000
3446 7040 CMA
3447 7420 SNL
3450 7440 SZA
3451 7402 HLT

/GROUP 1 OPERATE TEST 86
3452 7300 CLA CLL
3453 1020 TAD K0000
3454 7041 CIA /TEST PATTERN
3455 7450 SNA /AC EQUALS 0000, LINK EQUALS A ONE
3456 7420 SNL
3457 7402 HLT /CIA FAILED AC SHOULD EQUAL 0000
/ LINK SHOULD EQUAL A ONE

/GROUP OPERATE TEST 87
3460 7340 CLA CMA CLL /AC=7777,L=0
3461 7311 CLA CLL IAC RAR /AC=0,L=1
3462 7430 SZL
3463 7440 SZA /ERROR; LINC NOT SET OR
3464 7402 HLT /AC NOT 0

/GROUP 1 OPERATE TEST 88
3465 7360 CLA CMA CLL CML /AC=7777,L=1
3466 7305 CLA CLL IAC RAL /AC=2,L=0
3467 7430 SZL
3470 7402 HLT /ERROR; LINC NOT 0
3471 7041 CMA IAC
3472 1022 TAD K0002
3473 7440 SZA
3474 7402 HLT /ERROR AC NOT=2

/GROUP 1 OPERATE TEST 89
3475 7320 CLA CLL CML /AC=0,L=1
3476 7313 CLA CLL IAC RTR /AC=4000,L=0
3477 7430 SZL
3500 7402 HLT /ERROR; LINC NOT 0
3501 7500 SNA
3502 7402 HLT /ERROR; AC NOT 4000

/GROUP 1 OPERATE TEST 90
3503 7360 CLA CMA CLL CML /AC=7777,L=1
3504 7307 CLA CLL IAC RTL /AC=4,LINC=0
3505 7430 SZL
3506 7402 HLT /ERROR; LINC NOT 0
3507 7041 CMA IAC
3510 1023 TAD K0004
3511 7440 SZA
3512 7402 HLT /ERROR; AC NOT 4

```

```

3513 7300
3514 7331
3515 7520
3516 7402

/OPERATE TEST 91
CLA CLL /AC=0, L=0
CLA CLL CML IAC RAR /AC=4000, L=1
SMA SNL
HLT
ERROR: AC NOT 4000 OR
/LINC NOT 1

```

```

3517 7300
3520 7345
3521 7430
3522 7402
3523 7041
3524 1021
3525 7440
3526 7402

/OPERATE TEST 92
CLA CLL /AC=0, L=0
CLA CMA CLL IAC RAL /AC=0001, L=0
SEL
HLT /LINC NOT=0
CMA IAC
TAD K0001
SEA
HLT /AC NOT 0001

```

```

3527 7360
3530 7373
3531 7440
3532 7402
3533 7430
3534 7402

/OPERATE TEST 93
CLA CMA CLL CML /AC=7777, L=1
CLA CMA CLL CML IAC RTR /AC=0, L=0
SEA
HLT /ERROR:
SEL
HLT /ERROR:

```

```

3535 7332
3536 7006
3537 7430
3540 7440
3541 7402

/OPERATE TEST 94
CLA CLL CML RTR /L=0 AC=2000
RTL /L=1 AC=0000
SEL
SEA
HLT /CLA CLL CML RTR OR RTL FAILED

```

```

3542 7360
3543 7342
3544 7040
3545 7420
3546 7440
3547 7402

/OPERATE TEST 95
CLA CMA CLL CML
CLA CLL CMA BSW/AC=7777 LINK=0
CMA
SNL
SEA
HLT /7742 FAILED

```

```

3550 7360
3551 7303
3552 1046
3553 7040
3554 7420
3555 7440
3556 7402

/OPERATE TEST 96
CLA CMA CLL CML
CLA CLL IAC BSW /AC=0100 LINK=0
TAD K7677 /AC=7777
CMA /AC=0000
SNL
SEA
HLT /7703 FAILED

```

```

3557 7360
3560 7343
3561 7430

/OPERATE TEST 97
CLA CMA CLL CML
CLA CLL CMA IAC BSW /AC=0000 LINK=1
SEL

```

3562	7400	SEA			
3563	7402	HLT		/7743 FAILED	
/GROUP 1 OPERATE TEST 98					
3564	7360	CLA CMA CLL CML			
3565	7363	CLA CLL CMA CML	IAC BSW	/AC=0000	LINK=0
3566	7420	SNL			
3567	7440	SEA			
3570	7402	HLT		/7763 FAILED	
/GROUP 1 OPERATE TEST 99					
3571	7300	CLA CLL			
3572	1033	TAD	K1234		
3573	7063	CMA CML	IAC BSW	/AC=4465	L=1
3574	1035	TAD	K3312		
3575	7040	CMA			
3576	7430	SZL			
3577	7440	SEA			
3600	7402	HLT		/7063 FAILED	
/GROUP 1 OPERATE TEST 100					
3601	7332	CLA CLL CML RTR		/AC=2000	L=1
3602	7063	CMA CML	IAC BSW	/AC=0060	L=1
3603	1037	TAD	K7717	/AC=7777	L=1
3604	7040	CMA			
3605	7430	SZL			
3606	7440	SEA			
3607	7402	HLT		/7063 FAILED	
/GROUP 2 OPERATE TEST 1					
3610	7240	CLA CMA		/AC=7777	
3611	7700	CLA SMA		/TEST COMBINATION	
3612	7402	HLT		/CLA SMA DID NOT SKIP	
				/AC SHOULD BE 0000	
3613	7440	SEA		/CLA SMA DID NOT CLEAR AC	
3614	7402	HLT		/AC SHOULD BE 0000	
/GROUP 2 OPERATE TEST 2					
3615	7240	CLA CMA		/AC=7777	
3616	7640	CLA SZA		/TEST COMBINATION	
3617	7440	SZA		/CLA SZA SKIPPED OR AC NOT	
3620	7402	HLT		/Cleared TO 0000	
/GROUP 2 OPERATE TEST 3					
3621	7240	CLA CMA		/AC=7777	
3622	7540	SMA SZA		/TEST COMBINATION	
3623	7402	HLT		/SMA SZA SHOULD HAVE SKIPPED	
				/AC SHOULD EQUAL 7777	
/GROUP 2 OPERATE TEST 4					
3624	7200	CLA		/AC=0000	
3625	7540	SMA SZA		/TEST COMBINATION	
3626	7402	HLT		/SMA SZA SHOULD HAVE SKIPPED	
				/AC SHOULD EQUAL 0000	

[illegible]

3670	7400	SEA			
3671	7402	HLT		/SMA SNL SKIPPED. AC AND LINK	
				/SHOULD EQUAL ZERO	
/GROUP 2 OPERATE TEST 12					
3672	7320	CLA CLL CML		/AC=0000 LINK=1	
3673	7520	SMA SNL		/TEST COMBINATION	
3674	7402	HLT		/SNL SHOULD HAVE SKIPPED. LINK = 1	
/GROUP 2 OPERATE TEST 13					
3675	7300	CLA CLL		/AC=4000 LINK=0	
3676	1036	TAD K4000		/TEST COMBINATION	
3677	7520	SMA SNL		/SMA SHOULD HAVE SKIPPED	
3700	7402	HLT		/AC=4000	
/GROUP 2 OPERATE TEST 14					
3701	7320	CLA CLL CML		/AC=4000 LINK=1	
3702	1036	TAD K4000		/TEST COMBINATION	
3703	7520	SMA SNL		/SMA SNL SHOULD HAVE SKIPPED	
3704	7402	HLT		/AC=4000 LINK=1	
/GROUP 2 OPERATE TEST 15					
3705	7300	CLA CLL		/AC=0000 LINK=0	
3706	7720	CLA SMA SNL		/TEST COMBINATION	
3707	7440	SEA			
3710	7402	HLT		/SMA SNL SKIPPED. AC AND LINK	
				/SHOULD BE ZERO	
/GROUP 2 OPERATE TEST 16					
3711	7320	CLA CLL CML		/AC=0000 LINK=1	
3712	7720	CLA SMA SNL		/TEST COMBINATION	
3713	7402	HLT		/SNL SHOULD HAVE SKIPPED	
				/LINK=1	
3714	7440	SEA			
3715	7402	HLT		/CLA SMA SNL DID NOT CLEAR AC	
				/AC SHOULD EQUAL ZERO	
/GROUP 2 OPERATE TEST 17					
3716	7300	CLA CLL		/AC=4000 LINK=0	
3717	1036	TAD K4000		/TEST COMBINATION	
3720	7720	CLA SMA SNL		/SMA SHOULD HAVE SKIPPED	
3721	7402	HLT		/AC SHOULD EQUAL 0000 LINK=0	
3722	7440	SEA			
3723	7402	HLT		/CLA SMA SNL DID NOT CLEAR AC	
				/AC SHOULD EQUAL 0000	
/GROUP 2 OPERATE TEST 18					
3724	7320	CLA CLL CML		/AC=4000 LINK=1	
3725	1036	TAD K4000		/TEST COMBINATION	
3726	7720	CLA SMA SNL		/CLA SMA SNL SHOULD HAVE SKIPPED	
3727	7402	HLT		/AC SHOULD BE 0000 LINK=1	
3730	7440	SEA			
3731	7402	HLT		/CLA SMA SNL DID NOT CLEAR AC	
				/AC SHOULD BE 0000 LINK=1	
/GROUP 2 OPERATE TEST 19					
3732	7300	CLA CLL		/AC=0000 LINK=0	

```

3733 7460 SZA SNL /TEST COMB /ION
3734 7402 HLT /SZA SNL DID NOT SKIP
/AC=0000
/GROUP 2 OPERATE TEST 20
3735 7320 CLL CLA CML /AC=0000 LINK=1
3736 7460 SZA SNL /TEST COMBINATION
3737 7402 HLT /SZA SNL DID NOT SKIP
/AC=0000 LINK=1

```

```

/GROUP 2 OPERATE TEST 21
3740 7300 CLA CLL /AC=0400 LINK=0
3741 1031 TAD K0400 /TEST COMBINATION
3742 7460 SZA SNL /SZA SNL SKIPPED
3743 7450 SNA /AC=0400 LINK=0
3744 7402 HLT

```

```

/GROUP 2 OPERATE TEST 22
3745 7320 CLA CLL CML /AC=0040 LINK=1
3746 1026 TAD K0040 /TEST COMBINATION
3747 7460 SZA SNL /SZA SNL SHOULD HAVE SKIPPED
3750 7402 HLT /LINK=1

```

```

/GROUP 2 OPERATE TEST 23
3751 7300 CLA CLL /AC=0000 LINK=0
3752 7660 CLA SZA SNL /TEST COMBINATION
3753 7402 HLT /CLA SZA SNL SHOULD HAVE SKIPPED
/AC AND LINK SHOULD EQUAL ZERO
3754 7440 SZA /CLA SZA SNL DID NOT CLEAR AC
3755 7402 HLT /AC SHOULD BE 0000

```

```

/GROUP 2 OPERATE TEST 24
3756 7320 CLA CLL CML /AC=0000 LINK=1
3757 7660 CLA SZA SNL /TEST COMBINATION
3760 7402 HLT /CLA SZA SNL SHOULD HAVE SKIPPED
/AC=0000 LINK=1
3761 7440 SZA /CLA SZA SNL DID NOT CLEAR AC
3762 7402 HLT /AC SHOULD EQUAL 0000

```

```

/GROUP 2 OPERATE TEST 25
3763 7320 CLA CLL CML /AC=0200 LINK=1
3764 1030 TAD K0200 /TEST COMBINATION OR
3765 7660 CLA SZA SNL /CLA SZA SNL SHOULD HAVE SKIPPED
3766 7402 HLT /LINK=1

```

```

3767 7440 SZA /CLA SZA SNL DID NOT CLEAR AC
3770 7402 HLT /AC SHOULD EQUAL 0000

```

```

/GROUP 2 OPERATE TEST 26
3771 7300 CLA CLL /AC=2000 LINK=0
3772 1034 TAD K2000 /TEST COMBINATION
3773 7660 CLA SZA SNL /CLA SZA SNL FAILED, AC AND
3774 7440 SZA /LINK SHOULD EQUAL ZERO
3775 7402 HLT

```

3776	7300	/GROUP 2 OPERATE TEST 27	/AC=0000 LINK=0
3777	7560	CLA CLL	/TEST COMBINATION
4000	7402	SMA SZA SNL	/SMA SZA SNL SHOULD HAVE SKIPPED
		HLT	/AC=0000 LINK=0
4001	7320	/GROUP 2 OPERATE TEST 28	/AC=3777 LINK=1
4002	1053	CLA CLL CML	/TEST COMBINATION
4003	7560	TAD K3777	/SMA SZA SNL SHOULD HAVE SKIPPED
4004	7402	SMA SZA SNL	/AC=3777 LINK=1
		HLT	
4005	7300	/GROUP 2 OPERATE TEST 29	/AC=4000 LINK=0
4006	1036	CLA CLL	/TEST COMBINATION
4007	7560	TAD K4000	/SMA SZA SNL SHOULD HAVE SKIPPED
4010	7402	SMA SZA SNL	/AC=4000 LINK=0
		HLT	
4011	7300	/GROUP 2 OPERATE TEST 30	/AC=3777 LINK=0
4012	1053	CLA CLL	/TEST COMBINATION
4013	7560	TAD K3777	/SMA SZA SNL SHOULD NOT HAVE
4014	7450	SMA SZA SNL	/SKIPPED, AC=3777 LINK=0
4015	7402	SNA	
		HLT	
4016	7300	/GROUP 2 OPERATE TEST 31	/AC=0000 LINK=0
4017	7760	CLA CLL	/TEST COMBINATION
4020	7402	CLA SMA SZA SNL	/CLA SMA SZA SNL SHOULD HAVE SKIPPED
		HLT	/AC SHOULD EQUAL 0000
4021	7440	SZA	/AC NOT ZERO AFTER CLA SMA SZA SNL
4022	7402	HLT	/AC SHOULD BE 0000 LINK=0
4023	7320	/GROUP 2 OPERATE TEST 32	/AC=3777 LINK=1
4024	1053	CLA CLL CML	/TEST COMBINATION
4025	7760	TAD K3777	/CLA SMA SZA SNL DID NOT SKIP
4026	7402	CLA SMA SZA SNL	/AC SHOULD BE 0000 LINK=1
		HLT	
4027	7440	SZA	/CLA SMA SZA SNL DID NOT CLEAR AC
4030	7402	HLT	/AC SHOULD EQUAL 0000 LINK=1
4031	7300	/GROUP 2 OPERATE TEST 33	/AC=4000 LINK=0
4032	1036	CLA CLL	/TEST COMBINATION
4033	7760	TAD K4000	/CLA SMA SZA SNL SHOULD HAVE SKIPPED
4034	7402	CLA SMA SZA SNL	/AC SHOULD BE 0000. LINK=0
		HLT	
4035	7440	SZA	/CLA SMA SZA SNL DID NOT CLEAR AC
4036	7402	HLT	/AC SHOULD EQUAL 0000
		/GROUP 2 OPERATE TEST 34	


```

4037 7300 CLA CLL
4040 1053 TAD K3777 /AC=3777 LINK=0
4041 7760 CLA SMA SZA SNL /TEST COMBINATION
4042 7440 SZA
4043 7402 HLT

/GROUP 2 OPERATE TEST 35
4044 7300 CLA CLL /AC=0000 LINK=0
4045 7410 SKP /TEST INSTRUCTION
4046 7402 HLT /SKIP FAILED
/AC AND LINK EQUAL ZERO

/GROUP 2 OPERATE TEST 36
4047 7320 CLA CLL CML /AC=0000 LINK=1
4050 7410 SKP /TEST INSTRUCTION
4051 7402 HLT /SKIP FAILED
/AC=0000 LINK=1

```

```

/GROUP 2 OPERATE TEST 37
4052 7320 CLA CLL CML /AC=3777 LINK=1
4053 1053 TAD K3777 /TEST INSTRUCTION
4054 7410 SKP /SKIP FAILED
4055 7402 HLT /AC=3777 LINK=1

```

```

/GROUP 2 OPERATE TEST 38
4056 7300 CLA CLL /AC=3777 LINK=0
4057 1053 TAD K3777 /TEST INSTRUCTION
4060 7410 SKP /SKIP FAILED
4061 7402 HLT /AC=3777 LINK=0

```

```

/GROUP 2 OPERATE TEST 39
4062 7200 CLA /AC=3777
4063 1053 TAD K3777 /TEST COMBINATION
4064 7710 CLA SPA /CLA SPA DID NOT SKIP. AC
4065 7402 HLT /SHOULD BE ZERO
SZA
4066 7440 /CLA SPA DID NOT CLEAR AC
4067 7402 HLT /AC SHOULD EQUAL ZERO

```

```

/GROUP 2 OPERATE TEST 40
4070 7200 CLA /AC=4000
4071 1036 TAD K4000 /TEST COMBINATION
4072 7710 CLA SPA
4073 7440 SZA /CLA SPA FAILED. AC SHOULD
4074 7402 HLT /EQUAL 0000

```

```

/GROUP 2 OPERATE TEST 41
4075 7240 CLA CMA /AC=7777
4076 7650 CLA SNA /TEST COMBINATION
4077 7402 HLT /CLA SNA DID NOT SKIP
/AC SHOULD BE 0000

```

```

/GROUP 2 OPERATE TEST 42
4100 7200 CLA /AC=0000
4101 7650 CLA SNA /TEST COMBINATION
4102 7440 SZA

```

4103 7402
HLT
/CLA SNA FAIL
/AC SHOULD BE 0000

/GROUP 2 OPERATE TEST 43
4104 7200 CLA /AC=0000
4105 7550 SPA SNA /TEST COMBINATION (AND)
4106 7440 SZA
4107 7402 HLT /SPA SNA SKIPPED
/AC=0000

/GROUP 2 OPERATE TEST 44
4110 7200 CLA /AC=3777
4111 1053 TAD K3777 /TEST COMBINATION (AND)
4112 7550 SPA SNA /SPA SNA FAILED TO SKIP
4113 7402 HLT /AC=3777

/GROUP 2 OPERATE TEST 45
4114 7200 CLA /AC=4000
4115 1036 TAD K4000 /TEST COMBINATION (AND)
4116 7550 SPA SNA
4117 7450 SNA /SPA SNA SKIPPED
4120 7402 HLT /AC=4000

/GROUP 2 OPERATE TEST 46
4121 7200 CLA /AC=0000
4122 7750 CLA SPA SNA /TEST COMBINATION (AND)
4123 7440 SZA
4124 7402 HLT /CLA SPA SNA FAILED
/AC SHOULD BE 0000

/GROUP 2 OPERATE TEST 47
4125 7200 CLA /AC=3777
4126 1053 TAD K3777 /TEST COMBINATION (AND)
4127 7750 CLA SPA SNA /CLA SPA SNA DID NOT SKIP
4130 7402 HLT /AC SHOULD BE 0000

4131 7440 SZA /CLA SPA SNA DID NOT CLEAR THE AC
4132 7402 HLT /AC SHOULD BE 0000

/GROUP 2 OPERATE TEST 48
4133 7200 CLA /AC=4000
4134 1036 TAD K4000 /TEST COMBINATION (AND)
4135 7750 CLA SPA SNA
4136 7440 SZA /CLA SPA SNA FAILED
4137 7402 HLT /AC SHOULD BE 0000

PAUSE

/INSTRUCTION TEST - TAPE 4
/GROUP 2 OPERATE TEST 49
4140 7300 CLA CLL /AC=5252 LINK=0
4141 1055 TAD K5252 /TEST COMBINATION
4142 7630 CLA SZA

4143 7402 HLT /CLA SZL LINK=0 NOT SKIP
/AC AND LINK SHOULD BE 0
4144 7440 SZA /CLA SZL DID NOT CLEAR AC
4145 7402 HLT /AC SHOULD BE ZERO. LINK=0

/GROUP 2 OPERATE TEST 50
4146 7360 CLA CLL CML CMA /AC=7777 LINK=1
4147 7630 CLA SZL /TEST COMBINATION (AND)
4150 7440 SZA
4151 7402 HLT /CLA SZL FAILED. AC SHOULD
/BE 0000. LINK=1

/GROUP 2 OPERATE TEST 51
4152 7300 CLA CLL /AC=3777 LINK=0
4153 1053 TAD K3777 /TEST COMBINATION (AND)
4154 7530 SPA SZL /SPA SZL DID NOT SKIP
4155 7402 HLT /AC=3777 LINK=0

/GROUP 2 OPERATE TEST 52
4156 7320 CLA CLL CML /AC=3777 LINK=1
4157 1053 TAD K3777 /TEST COMBINATION (AND)
4160 7530 SPA SZL /SPA SZL SKIPPED
4161 7450 SNA /AC=3777 LINK=1
4162 7402 HLT

/GROUP 2 OPERATE TEST 53
4163 7300 CLA CLL /AC=4000 LINK=0
4164 1036 TAD K4000 /TEST COMBINATION (AND)
4165 7530 SPA SZL /SPA SZL SKIPPED
4166 7500 SNA /AC=4000 LINK=0
4167 7402 HLT

/GROUP 2 OPERATE TEST 54
4170 7300 CLA CLL /AC=3777 LINK=0
4171 1053 TAD K3777 /TEST COMBINATION (AND)
4172 7730 CLA SPA SZL /CLA SPA SZL SHOULD HAVE SKIPPED
4173 7402 HLT /AC SHOULD BE 0000. LINK=0
4174 7440 SZA /CLA SPA SZL DID NOT CLEAR THE AC
4175 7402 HLT /AC SHOULD BE 0000

/GROUP 2 OPERATE TEST 55
4176 7320 CLA CLL CML /AC=3777 LINK=1
4177 1053 TAD K3777 /TEST COMBINATION (AND)
4200 7730 CLA SPA SZL /CLA SPA SZL FAILED
4201 7440 SZA /AC SHOULD EQUAL 0000 LINK=1
4202 7402 HLT

/GROUP 2 OPERATE TEST 56
4203 7300 CLA CLL /AC=4000 LINK=0
4204 1036 TAD K4000 /TEST COMBINATION (AND)
4205 7730 CLA SPA SZL
4206 7440 SZA

```
4207 7402 /GROUP 2 OPERATE TEST 57
      HLT
      CLA CLL
      TAD K4000
      SNA SZL
      HLT
      /AC=4000 LINK=0
      /TEST COMBINATION (AND)
      /SNA SZL DID NOT SKIP
      /AC = 4000 LINK=0

4210 7300 /GROUP 2 OPERATE TEST 58
4211 1036 CLA CLL CML
4212 7470 TAD K4000
4213 7402 SNA SZL
      SNL
      HLT
      /AC=4000 LINK=1
      /TEST COMBINATION (AND)

4221 7300 /GROUP 2 OPERATE TEST 59
4222 7470 CLA CLL
4223 7430 SNA SZL
4224 7402 SZL
      HLT
      /AC=0000 LINK=0
      /TEST COMBINATION (AND)
      /SNA SZL SKIPPED
      /AC=4000 LINK=1

4225 7320 /GROUP 2 OPERATE TEST 60
4226 1036 CLA CLL CML
4227 7670 TAD K4000
4230 7440 CLA SNA SZL
4231 7402 SZA
      HLT
      /AC=4000 LINK=1
      /TEST COMBINATION (AND)
      /CLA SNA SZL FAILED. AC SHOULD
      /BE 0000. LINK=1

4232 7300 /GROUP 2 OPERATE TEST 61
4233 1036 CLA CLL
4234 7670 TAD K4000
4235 7402 CLA SNA SZL
      HLT
      /AC=4000 LINK=0
      /TEST COMBINATION (AND)
      /CLA SNA SZL DID NOT SKIP
      /AC SHOULD BE 0000. LINK=0
      /CLA SNA SZL DID NOT CLEAR AC
      /AC AND LINK SHOULD BE ZERO

4236 7440 /GROUP 2 OPERATE TEST 62
4237 7402 SZA
      HLT
      /AC=0000 LINK=0
      /TEST COMBINATION (AND)
      /CLA SNA SZL FAILED. AC SHOULD
      /BE 0000. LINK=0

4240 7300 /GROUP 2 OPERATE TEST 63
4241 7670 CLA CLL
4242 7440 CLA SNA SZL
4243 7402 SZA
      HLT
      /AC=3777 LINK=0
      /TEST COMBINATION (AND)
      /SPA SNA SZL DID NOT SKIP
      /AC=3777 LINK=0

4244 7300 /GROUP 2 OPERATE TEST 64
4245 1053 CLA CLL CML
4246 7570 TAD K3777
4247 7402 SPA SNA SZL
      HLT
      /AC=3777 LINK=1
      /TEST COMBINATION (AND)
```

4253 7420 SNL
4254 7402 HLT
/SPA SNA SZL SKIPPED
/AC=3777 LINK=1

/GROUP 2 OPERATE TEST 65
4255 7300 CLA CLL /AC=0000 LINK=0
4256 7570 SPA SNA SZL /TEST COMBINATION (AND)
4257 7430 SZL
4260 7402 HLT
/SPA SNA SZL SKIPPED
/AC=0000 LINK=0

/GROUP 2 OPERATE TEST 66
4261 7300 CLA CLL /AC=4000 LINK=0
4262 1036 TAD K4000 /TEST COMBINATION (AND)
4263 7570 SPA SNA SZL
4264 7430 SZL
4265 7402 HLT
/SPA SNA SZL SKIPPED
/AC=4000 LINK=0

/GROUP 2 OPERATE TEST 67
4266 7300 CLA CLL /AC=3777 LINK=0
4267 1053 TAD K3777
4270 7770 CLA SPA SNA SZL /TEST COMBINATION (AND)
4271 7402 HLT /CLA SPA SNA SZL DID NOT SKIP
/AC AND LINK SHOULD BE ZERO
4272 7440 SZA
4273 7402 HLT
/CLA SPA SNA SZL DID NOT CLEAR AC
/AC AND LINK SHOULD BE ZERO

/GROUP 2 OPERATE TEST 68
4274 7320 CLA CLL CML
4275 1053 TAD K3777 /AC=3777 LINK=1
4276 7770 CLA SPA SNA SZL /TEST COMBINATION (AND)
4277 7440 SZA
4300 7402 HLT
/CLA SPA SNA SZL FAILED. AC SHOULD
/BE 0000. LINK SHOULD EQUAL ONE

/GROUP 2 OPERATE TEST 69
4301 7300 CLA CLL /AC=4000 LINK=0
4302 1036 TAD K4000 /TEST COMBINATION (AND)
4303 7770 CLA SPA SNA SZL
4304 7440 SZA
4305 7402 HLT
/CLA SPA SNA SZL FAILED. AC SHOULD
/BE 0000. LINK SHOULD EQUAL ZERO

/GROUP 2 OPERATE TEST 70
4306 7300 CLA CLL /AC=0000 LINK=0
4307 7770 CLA SPA SNA SZL /TEST COMBINATION (AND)
4310 7440 SZA
4311 7402 HLT
/CLA SPA SNA SZL FAILED. AC AND
/LINK SHOULD BE ZERO.

/GROUP 2 OPERATE TEST 71
4312 7200 CLA
4313 1055 TAD K5252 /AC=5252
4314 7604 CLA OSR /TEST COMBINATION
4315 7040 CMA
4316 7440 SZA
4317 7402 HLT
/CLA OSR FAILED

/AC SHOULD BE 0000

/GROUP 2 OPERATE TEST 72

4320	7200	CLA	/AC=0000
4321	1036	TAD K4000	/TEST COMBINATION
4322	7504	SMA OSR	/SMA OSR FAILED TO SKIP
4323	7402	HLT	/AC SHOULD BE 7777
4324	7040	CMA	
4325	7440	SZA	/SMA OSR FAILED
4326	7402	HLT	/AC SHOULD BE 0000

/GROUP 2 OPERATE TEST 73

4327	7200	CLA	/AC=0000
4330	7444	SZA OSR	/TEST COMBINATION
4331	7402	HLT	/SZA OSR FAILED TO SKIP
4332	7040	CMA	/AC SHOULD BE 0000
4333	7440	SZA	
4334	7402	HLT	/SZA OSR FAILED
			/AC SHOULD BE 0000

/GROUP 2 OPERATE TEST 74

4335	7320	CLL CML CLA	/LINK=1
4336	7424	SNL OSR	/TEST COMBINATION
4337	7402	HLT	/SNL OSR FAILED TO SKIP
4340	7040	CMA	/AC SHOULD BE 7777
4341	7440	SZA	
4342	7402	HLT	/SNL OSR FAILED
			/AC SHOULD BE 0000

/GROUP 2 OPERATE TEST 75

4343	7300	CLA CLL	/AC=3777 LINK=0
4344	1053	TAD K3777	/TEST COMBINATION
4345	7764	CLA SMA SZA SNL OSR	
4346	7450	SNA	/CLA SMA SZA SNL OSR FAILED
4347	7402	HLT	/AC SHOULD BE 7777. LINK=0
4350	7040	CMA	
4351	7440	SZA	/CLA SMA SZA SNL OSR FAILED
4352	7402	HLT	/AC SHOULD EQUAL ZERO

/GROUP 2 OPERATE TEST 76

4353	7200	CLA	/AC=0000
4354	7414	SKP OSR	/TEST COMBINATION
4355	7402	HLT	/SKP OSR DID NOT SKIP
4356	7040	CMA	/AC SHOULD BE 7777
4357	7440	SZA	
4360	7402	HLT	/SKP OSR FAILED
			/AC SHOULD EQUAL ZERO

/GROUP 2 OPERATE TEST 77

4361	7200	CLA	/AC=0000
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4362 7514 SPA OSR
4363 7402 HLT
/TEST COMBINATION
/SPA OSR DID NOT SKIP
/AC SHOULD BE 7777

4364 7040 CMA
4365 7440 SZA
4366 7402 HLT
/SPA OSR FAILED.
/AC SHOULD BE 0000

/GROUP 2 OPERATE TEST 78

4367 7200 CLA
4370 1031 TAD K0400
4371 7454 SNA OSR
4372 7402 HLT
/AC=0400
/TEST COMBINATION
/SNA OSR DID NOT SKIP
/AC SHOULD BE 7777

4373 7040 CMA
4374 7440 SZA
4375 7402 HLT
/SNA OSR FAILED
/AC SHOULD BE 0000

/GROUP 2 OPERATE TEST 79

4376 7300 CLA CLL
4377 7434 SEL OSR
4400 7402 HLT
/LINK=0 AC=0000
/TEST COMBINATION
/SEL OSR DID NOT SKIP
/AC SHOULD BE 7777

4401 7040 CMA
4402 7440 SZA
4403 7402 HLT
/SEL OSR FAILED
/AC SHOULD BE 0000

/GROUP 2 OPERATE TEST 80

4404 7300 CLA CLL
4405 1053 TAD K3777
4406 7774 CLA SPA SNA SEL OSR
4407 7402 HLT
/AC=3777 LINK=0
/TEST COMBINATION (AND)
/ABOVE MESS DID NOT SKIP
/AC SHOULD BE 7777

4410 7040 CMA
4411 7440 SZA
4412 7402 HLT
/CLA SPA SNA SEL OSR FAILED
/AC SHOULD BE 0000

/MO OPERATE TEST 1

4413 7360 CLA CMA CLL CML
4414 7601 CLAE
4415 7430 SEL
4416 7440 SZA
4417 7402 HLT
/AC=7777 LINK=1
/AC=0000 LINK=1
/7601 FAILED

/MO OPERATE TEST 2

4420 7360 CLA CLL CMA CML
4421 7401 NOPE
4422 7040 CMA
4423 7430 SEL
4424 7440 SZA
4425 7402 HLT
/AC=7777 L=1
/AC=7777 L=1 (NOP)
/7401 FAILED

/MO OPERATE TEST 3

4426 7360 CLA CMA CLL CML
/AC=7777 LINK=1

4427 7421
4430 7430
4431 7440
4432 7402

SQL
SZL
SEA
HLT

/AC=0000 LINK=1

/MQL DID NOT CLEAR AC

/MQ OPERATE TEST 4

CLA CLL

4433 7320
4434 7421
4435 7040
4436 7501
4437 7040
4440 7420
4441 7440
4442 7402

/MQ=0000, AC=0000
/AC=7777
/AC=7777, MQ=0000
/AC=0000

/MQ DID NOT EQUAL 0000 OR MQA FAILED

/MQ OPERATE TEST 5

CLA CMA CLL

4443 7340
4444 7421
4445 7501
4446 7040
4447 7420
4450 7440
4451 7402

/MQ=7777, AC=0000
/AC=7777, MQ=7777

/MQ DID NOT EQUAL 7777 OR MQA FAILED

/MQ OPERATE TEST 6

CLAE

4452 7601
4453 1055
4454 7421
4455 1056
4456 7501
4457 7040
4460 7440
4461 7402

/CLEAR AC

/MQ=5252, AC=0000
/AC=7777, MQ=5252

/MQ DID NOT EQUAL 5252 OR MQA FAILED

/MQ OPERATE TEST 7

CLA CMA CLL CML

4462 7360
4463 7421
4464 7040
4465 7621
4466 7440
4467 7402
4470 7501
4471 7430
4472 7440
4473 7402

/MQ=7777, AC=0000
/AC=7777
/AC AND MQ.=0000

/AC SHOULD EQUAL 0000
/AC=0000, MQ=0000

/CAM DID NOT CLEAR MQ
/OR LINK WAS CLEARED

/MQ OPERATE TEST 8

CLAE

4474 7601
4475 7421
4476 7040
4477 7701
4500 7440
4501 7402

/CLEAR AC
/MQ=0000 AC=0000
/AC=0000 MQ=0000

/ACL FAILED

4502 7501
4503 7440
4504 7402
/MO OPERATE TEST 9
CLA CMA
MQL
ACL
CMA
SZA
HLT
/MO SHOULD EQUAL 0000

4505 7240
4506 7421
4507 7701
4510 7040
4511 7440
4512 7402
4513 7501
4514 7040
4515 7440
4516 7402
/MO OPERATE TEST 10
CLAE
TAD K5252
MQL
TAD K2525
ACL
TAD K2525
CMA
SZA
HLT
/MO SHOULD EQUAL 7777

4517 7601
4520 1055
4521 7402
4522 1056
4523 7701
4524 1056
4525 7040
4526 7440
4527 7402
4530 7501
4531 1056
4532 7040
4533 7440
4534 7402
/MO OPERATE TEST 11
CLAE
TAD K2525
MQL
TAD K5252
ACL
TAD K5252
CMA
SZA
HLT
/MO SHOULD EQUAL 5252

4535 7601
4538 1056
4537 7421
4540 1055
4541 7701
4542 1055
4543 7040
4544 7440
4545 7402
4546 7501
4547 1055
4550 7040
4551 7440
4552 7402
/MO OPERATE TEST 12
CAM
CMA
SWP
SZA
HLT
/MO SHOULD EQUAL 0000

4553 7621
4554 7040
4555 7521
4556 7440
4557 7402
/MO SHOULD EQUAL 2525

4560 7701
4561 7040
4562 7440
4563 7402

ACL
CMA
SZA
HLT

/AC=7777 MQ=7777

/MQ SHOULD EQUAL 7777

/MQ OPERATE TEST 13

4564 7621
4565 7040
4566 7421
4567 7521
4570 7040
4571 7440
4572 7402
4573 7701
4574 7440
4575 7402

CAM
CMA
MQL
SWP
CMA
SZA
HLT
ACL
SZA
HLT

/MQ=0000 AC=0000

/MQ=7777 AC=0000

/MQ=0000 AC=7777

/AC=0000 MQ=0000

/MQ SHOULD EQUAL 0000

/MQ OPERATE TEST 14

4576 7621
4577 1055
4600 7421
4601 1056
4602 7521
4603 1056
4604 7040
4605 7440
4606 7402
4607 7701
4610 1055
4611 7040
4612 7440
4613 7402

CAM
TAD K5252
MQL
TAD K2525
SWP
TAD K2525
CMA
SZA
HLT
ACL
TAD K5252
CMA
SZA
HLT

/MQ=0000 AC=0000

/MQ=5252 AC=0000

/MQ=2525 AC=5252

/SWP FAILED

/AC=2525 MQ=2525

/SWP FAILED MQ SHOULD EQUAL 2525

/MQ OPERATE TEST 15

4614 7621
4615 1056
4616 7421
4617 1055
4620 7521
4621 1055
4622 7040
4623 7440
4624 7402
4625 7701
4626 1056
4627 7040
4630 7440
4631 7402

CAM
TAD K2525
MQL
TAD K5252
SWP
TAD K5252
CMA
SZA
HLT
ACL
TAD K2525
CMA
SZA
HLT

/MQ=0000 AC=0000

/MQ=2525 AC=0000

/AC=5252

/MQ=5252 AC=2525

/SWP FAILED

/AC=5252 MQ=5252

/SWP FAILED MQ SHOULD EQUAL 5252

/MQ OPERATE TEST 16

4632 7621
4633 7040
4634 7721
4635 7440

CAM
CMA
CLAE SWP
SZA

/MQ=0000 AC=0000

/AC=7777

/AC=0000 MQ=0000

INSTR 1 PAL10 VIA1 8-MAR-71 13:53 PAGE 1-61

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4636 7402 HLT
4637 7701 ACL
4640 7440 SZA
4641 7402 HLT

/MQ OPERATE TEST 17
4642 7621 CAM
4643 7040 CMA
4644 7421 MQL
4645 7721 CLAE SWP
4646 7040 CMA
4647 7440 SZA
4650 7402 HLT
4651 7701 ACL
4652 7440 SZA
4653 7402 HLT

/MQ=0000 AC=0000
/MQ=7777 AC=0000
/AC=7777 MQ=0000

/CLAE SWP FAILED MQ SHOULD EQUAL 0000

/MQ=0000 AC=0000
/MQ=2525 MQ=0000
/AC=5252
/AC=2525 MQ=0000

/CLAE SWP FAILED
/AC=0000 MQ=0000

/CLAE SWP FAILED MQ SHOULD EQUAL 0000

/MQ=0000 AC=0000
/MQ=2525 MQ=0000
/AC=5252
/AC=2525 MQ=0000

/CLAE SWP FAILED
/AC=0000 MQ=0000

/CLAE SWP FAILED MQ SHOULD EQUAL 0000

/AND TEST 1
CLA
AND K7777
SZA
HLT

/AND TEST 2
CLA CMA
AND K0000
SZA
HLT

/AND TEST 3
CLA CLL CML
TAD K7777
AND K7777
CMA
SEL
SZA
HLT

/AND TEST 4
CLA
AND K7777
SZA
HLT

/AND FAILED AC SHOULD
/BE 0000

/AND FAILED
/AC SHOULD EQUAL 0000

/AC=7777 LINK=1

/AND FAILED. AC SHOULD BE
/0000. LINK SHOULD EQUAL ONE
```

```

4707 7300      CLA CLL
4710 1056      TAD K2525
4711 0055      AND K5252
4712 7420      SNL
4713 7440      SZA
4714 7402      HLT

/AND TEST 5
4715 7300      CLA CLL
4716 1055      TAD K5252
4717 0056      AND K2525
4720 7420      SNL
4721 7440      SZA
4722 7402      HLT

/AND FAILED. AC SHOULD BE
/0000. LINK SHOULD BE 0

/AC=2525 LINK=0

/AND FAILED. AC SHOULD BE
/0000. LINK SHOULD BE 0

```

```

/AND TEST 6
4723 7300      CLA CLL
4724 1040      TAD K7776
4725 0055      AND K5252
4726 7041      CIA
4727 1055      TAD K5252
4730 7430      SZL
4731 7440      SZA
4732 7402      HLT

/AC=2526 /AC=0000 LINK=1
/AC=7776 LINK=0
/TEST INSTRUCTION

/AND FAILURE. AC SHOULD BE
/0000. LINK SHOULD BE ONE

/AC=5253 /AC=0000 LINK = 1
/AC=2525 /TEST INSTRUCTION

/AND FAILED. AC SHOULD BE
/0000. LINK SHOULD BE ONE.

```

```

/CHECK FOR BELL
4743 7200      CLA
4744 1107      TAD BLCNT
4745 7001      IAC
4746 3107      DCA BLCNT
4747 1107      TAD BLCNT
4750 7640      SZA CLA
4751 5147      JMP START+3
4752 1110      TAD BLCNT
4753 3107      DCA BLCNT

/RING BELL
4754 1106      TAD BEL
4755 6046      TLS
4756 6041      TSF
4757 5356      JMP -1
4760 6042      TCF

```

JMP START+3

4751 3147

[illegible]

ACL	7701	K7677	0046
BEGIN	0200	K7700	0131
BEL	0106	K7717	0037
BLCNT	0107	K7737	0045
BLCON	0110	K7740	0063
BSW	7002	K7757	0044
CAH	7621	K7760	0064
CLAE	7601	K7767	0043
CLL1	0446	K7770	0065
CLL11	0452	K7773	0042
CMLT1	0456	K7774	0066
HALT	0006	K7775	0041
K0000	0020	K7776	0040
K0001	0021	K7777	0054
K0002	0022	MOA	7501
K0003	0067	MOA	7421
K0004	0023	NOOP	0007
K0007	0070	NOPE	7401
K0010	0024	START	0144
K0017	0072	SWP	7521
K0020	0025		
K0037	0073		
K0040	0026		
K0067	0071		
K0077	0074		
K0100	0027		
K0177	0075		
K0200	0030		
K0377	0076		
K0400	0031		
K0770	0104		
K0777	0077		
K1000	0032		
K1234	0033		
K1777	0100		
K2000	0034		
K2525	0056		
K2552	0103		
K3312	0035		
K3777	0053		
K4000	0036		
K5225	0102		
K5252	0055		
K5777	0052		
K6000	0057		
K6777	0051		
K7000	0060		
K7007	0105		
K7377	0050		
K7400	0061		
K7577	0047		
K7600	0062		

ERRORS DETECTED: 2

LINKS GENERATED: 2

RUN-TIME: 26 SECONDS

2K CORE USED

