

IDENTIFICATION

Product Code: MAINDEC-8/I-D01C-D
Product Name: Instruction Test 1
Date Created: December 10, 1969
Maintainer: Diagnostic Group

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1. ABSTRACT

This is a diagnostic program for testing the AND, TAD, and OPERATE instructions of the PDP-8I ONLY.

2. REQUIREMENTS

2.1 Equipment

A PDP-8I equipped with Teletype.

2.2 Storage

This program uses locations 0000-4421. 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

0144

4.3 Operator Action

1. Set SR to 144 and press LOAD ADDRESS.

2. Set SR to 7777 and push START.

3. Program will halt. MA=146

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 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 second.

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 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. Group 1 operate instruction test. All possible combinations.

5. Group 2 operate instruction test. All possible combinations.

6. Test AND instruction.

The Teletype bell rings after each 128 program loops.

10. LISTING

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/INSTRUCTION TEST - 1
/TAPE 1

0000	0000	*0
0000	0000	0
0021	5021	JMP 1
0022	6002	0002
0023	0003	0003
0024	0000	0
0025	0000	0000
0006	7402	HALT, HLT
0007	7000	NOP, NOP
0010	0000	0

/CONSTANTS AND VARIABLES

0020	0000	*20
0021	0001	K0000, 0000
0022	0002	K0001, 0001
0023	0004	K0002, 0002
0024	0010	K0004, 0004
0025	0020	K0010, 0010
0026	0040	K0020, 0020
0027	0100	K0040, 0040
0030	0200	K0100, 0100
0031	0400	K0200, 0200
0032	1000	K0400, 0400
0033	2000	K1000, 1000
0034	4000	K2000, 2000
0035	7776	K4000, 4000
0036	7775	K7776, 7776
0037	7773	K7775, 7775
0040	7767	K7773, 7773
0041	7757	K7767, 7767
0042	7737	K7757, 7757
0043	7677	K7737, 7737
0044	7577	K7677, 7677
0045	7377	K7577, 7577
0046	6777	K7377, 7377
0047	5777	K6777, 6777
0050	3777	K5777, 5777
0051	7777	K3777, 3777
0052	5252	K7777, 7777
0053	2525	K5252, 5252
0054	6002	K2525, 2525
0055	7000	K6002, 6000
0056	7400	K7000, 7000
0057	7000	K7400, 7400
0060	7740	K7000, 7000
0061	7760	K7740, 7740
0062	7770	K7760, 7760
0063	7774	K7770, 7770
0064	0003	K7774, 7774
		K0003, 0003

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0065	0007	K0007,	0007
0066	0267	K0067,	0067
0067	0217	K0017,	0017
0070	0237	K0037,	0037
0071	0077	K0077,	0077
0072	0177	K0177,	0177
0073	0377	K0377,	0377
0074	0777	K0777,	0777
0075	1777	K1777,	1777
0076	7700	K7700,	7700

0144 *144
/TAD,CLA,HLT,TEST
0144 1051 START: TAD K7/77
0145 7200 CLA
0146 7402 HLT /AC SHOULD=0
/SET SR TO 7777, CONTINUE

0147 7410 SKP
0150 7402 HLT /SKP FAILED

/SZA TEST 1
0151 7200 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

/SZA TEST 2
0157 7200 CLA
0160 1034 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 1033 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
/AC SHOULD EQUAL 2000
0175 7000 NOP
0176 7000 NOP
0177 7000 NOP

J222 *222

/SZA TEST 4

0220	7222	CLA	
0221	1032	TAD	K1000
0222	7442	SZA	
0223	7412	SKP	
0224	7402	HLT	/SZA SHOULD NOT HAVE SKIPPED /AC SHOULD EQUAL 1000
0225	7450	SNA	
0226	7402	HLT	/SNA SHOULD HAVE SKIPPED /AC SHOULD EQUAL 10000

/SZA TEST 5

0207	7200	CLA	
0210	1031	TAD	K0400
0211	7442	SZA	
0212	7410	SKP	
0213	7402	HLT	/SZA SHOULD NOT HAVE SKIPPED /AC SHOULD EQUAL 0400
0214	7450	SNA	
0215	7402	HLT	/SNA SHOULD HAVE SKIPPED /AC SHOULD EQUAL 0400

/SZA TEST 6

0216	7200	CLA	
0217	1032	TAD	K0200
0220	7442	SZA	
0221	7410	SKP	
0222	7402	HLT	/SZA SHOULD NOT HAVE SKIPPED /AC SHOULD EQUAL 0200
0223	7450	SNA	
0224	7402	HLT	/SNA SHOULD HAVE SKIPPED /AC SHOULD EQUAL 0200

/SZA TEST 7

0225	7200	CLA	
0226	1027	TAD	K0100
0227	7442	SZA	
0230	7412	SKP	
0231	7402	HLT	/SZA SHOULD NOT HAVE SKIPPED /AC SHOULD EQUAL 0100
0232	7450	SNA	
0233	7402	HLT	/SNA SHOULD HAVE SKIPPED /AC SHOULD EQUAL 0100

/SEA TEST 8

0234	7200	CLA	
0235	1026	TAD	K0E40
0236	7440	SZA	
0237	7410	SKP	
0240	7402	HLT	
			/SZA SHOULD NOT HAVE SKIPPED
			/AC SHOULD EQUAL 0040
0241	7450	SNA	
0242	7402	HLT	
			/SNA SHOULD HAVE SKIPPED
			/AC SHOULD EQUAL 0040

/SZA TEST 9

0243	7200	CLA	
0244	1025	TAD	K0020
0245	7440	SZA	
0246	7410	SKP	
0247	7402	HLT	
			/SZA SHOULD NOT HAVE SKIPPED
			/AC SHOULD EQUAL 0020
0250	7450	SNA	
0251	7402	HLT	
			/SNA SHOULD HAVE SKIPPED
			/AC SHOULD EQUAL 0020

/SZA TEST 10

0252	7200	CLA	
0253	1024	TAD	K0010
0254	7440	SZA	
0255	7410	SKP	
0256	7402	HLT	
			/SZA SHOULD NOT HAVE SKIPPED
			/AC SHOULD EQUAL 0010
0257	7450	SNA	
0260	7402	HLT	
			/SNA SHOULD HAVE SKIPPED
			/AC SHOULD EQUAL 0010

/SZA TEST 11

0261	7200	CLA	
0262	1023	TAD	K0004
0263	7440	SZA	
0264	7410	SKP	
0265	7402	HLT	
			/SZA SHOULD NOT HAVE SKIPPED
			/AC SHOULD EQUAL 0004
0266	7450	SNA	
0267	7402	HLT	
			/SNA SHOULD HAVE SKIPPED
			/AC SHOULD EQUAL 0004

/INSTRUCTION TEST - 1

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/SZA TEST 12

0270	7200	CLA	
0271	1022	TAD K0002	
0272	7440	SZA	
0273	7410	SKP	
0274	7402	HLT	/SZA SHOULD NOT HAVE SKIPPED /AC SHOULD EQUAL 0002
0275	7450	SNA	
0276	7402	HLT	/SNA SHOULD HAVE SKIPPED /AC SHOULD EQUAL 0002

/SZA TEST 13

0277	7200	CLA	
0300	1021	TAD K0001	
0301	7440	SZA	
0302	7410	SKP	
0303	7402	HLT	/SZA SHOULD NOT HAVE SKIPPED /AC SHOULD EQUAL 0001
0304	7450	SNA	
0305	7402	HLT	/SNA SHOULD HAVE SKIPPED /AC SHOULD EQUAL 0001

/SPA TEST 1

0306	7200	CLA	
0307	1050	TAD K3777	
0310	7510	SPA	
0311	7402	HLT	/SPA SHOULD HAVE SKIPPED /AC SHOULD EQUAL 3777

/SPA TEST 2

0312	7200	CLA	
0313	1034	TAD K4000	
0314	7510	SPA	
0315	7410	SKP	
0316	7402	HLT	/SPA SHOULD NOT HAVE SKIPPED /AC SHOULD EQUAL 4000

/SMA TEST 1

0317	7200	CLA	
0320	1050	TAD K3777	
0321	7500	SMA	
0322	7410	SKP	
0323	7402	HLT	/SMA SHOULD NOT HAVE SKIPPED /AC SHOULD EQUAL 3777

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/SMA TEST 2

0324	7232	CLA	
0325	1054	TAD	K4000
0326	7500	SMA	
0327	7402	HLT	

/SMA SHOULD HAVE SKIPPED
/AC SHOULD EQUAL 4000

/CMA TEST 1

0330	7200	CLA	
0331	1051	TAD	K7777
0332	7040	CMA	
0333	7440	SZA	
0334	7402	HLT	

/CMA DID NOT COMPLEMENT AC
/AC SHOULD EQUAL 0000

/CMA - TAD TEST 1

0335	7200	CLA	
0336	1053	TAD	K2525
0337	7040	CMA	
0340	7450	SNA	
0341	7402	HLT	

/TAD OR CMA ERROR
/AC SHOULD EQUAL 5252

0342	1053	TAD	K2525
0343	7040	CMA	
0344	7440	SZA	
0345	7402	HLT	

/TAD OR CMA ERROR
/AC SHOULD EQUAL 0000

/CMA - TAD TEST 2

0346	7200	CLA	
0347	1052	TAD	K5252
0350	7040	CMA	
0351	7450	SNA	
0352	7402	HLT	

/TAD OR CMA ERROR
/AC SHOULD EQUAL 2525

0353	1052	TAD	K5252
0354	7040	CMA	
0355	7440	SZA	
0356	7402	HLT	

/TAD OR CMA ERROR
/AC SHOULD EQUAL 0000

/CMA - TAD TEST 3

0357	7200	CLA	
0360	1051	TAD K7777	
0361	7040	CMA	
0362	7440	SZA	
0363	7402	HLT	/TAD OR CMA ERROR /AC SHOULD EQUAL 0000

/IAC TEST 1

0364	7200	CLA	
0365	7001	IAC	
0366	7440	SZA	
0367	7410	SKP	
0370	7402	HLT	/IAC DID NOT INCREMENT /AC SHOULD EQUAL 0001

/IAC TEST 2

0371	7200	CLA	
0372	1051	TAD K7777	
0373	7001	IAC	
0374	7440	SZA	
0375	7402	HLT	/IAC DID NOT INCREMENT /AC SHOULD EQUAL 0000

0376	7000	NOP	
0377	7000	NOP	
0400	*400		

/IAC TEST 3

0400	7200	CLA	
0401	1063	TAD K7774	
0402	7001	IAC	
0403	7001	IAC	
0404	7001	IAC	
0405	7001	IAC	
0406	7440	SZA	
0407	7402	HLT	/IAC NOT INCREMENTING /AC SHOULD EQUAL 0000

/S2L TEST 1

0410	7200	CLA	
0411	7100	CLL	/CLEAR LINK
0412	7004	RAL	/CLEAR LINK SAFETY
0413	7430	SZL	
0414	7402	HLT	/S2L SHOULD HAVE SKIPPED /LINK SHOULD EQUAL ZERO

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/S2L TEST 2

0415	7200	CLA	
0416	7100	CLL	/CLEAR LINK
0417	7020	CML	/COMPLEMENT LINK
0420	1034	TAD K4000	
0421	7004	RAL	/SET LINK SAFETY
0422	7432	SZL	
0423	7410	SKP	
0424	7402	HLT	/S2L SHOULD NOT HAVE SKIPPED /LINK SHOULD EQUAL ONE

/SNL TEST 1

0425	7200	CLA	
0426	7100	CLL	/CLEAR LINK
0427	7004	RAL	/CLEAR LINK SAFETY
0430	7420	SNL	
0431	7410	SKP	
0432	7402	HLT	/SNL SHOULD NOT HAVE SKIPPED /LINK SHOULD EQUAL ZERO

/SNL TEST 2

0433	7200	CLA	
0434	7100	CLL	/CLEAR LINK
0435	7020	CML	/COMPLEMENT LINK
0436	1034	TAD K4000	
0437	7004	RAL	/SET LINK SAFETY
0440	7420	SNL	
0441	7402	HLT	/SNL SHOULD HAVE SKIPPED /LINK SHOULD EQUAL ONE

/CLL TEST 1
0442 7200 CLA
0443 1034 TAD K4000
0444 7004 RAL /SET LINK
0445 7420 SNL
0446 5253 JMP CLL11 /CANNOT SET LINK WITH RAL
/TRY A CML
0447 7100 CLL1, CLL
0450 7430 SRL
0451 7402 HLT /CLL DID NOT CLEAR LINK
/LINK SHOULD EQUAL ONE
0452 5257 JMP ,+5
0453 7020 CLL11, CML /SET LINK
0454 7420 SNL
0455 7402 HLT /CANNOT SET LINK WITH
/RAL OR CML. CANNOT
/PERFORM CLL TEST 1
0456 5247 JMP CLL1

/CML TEST 1
0457 7100 CMLT1, CLL
0460 7430 SRL
0461 7402 HLT /CLL DID NOT CLEAR LINK
0462 7020 CML
0463 7420 SNL
0464 7402 HLT /CML DID NOT SET LINK
0465 7020 CML
0466 7430 SRL
0467 7402 HLT /CML DID NOT RESET LINK
/CLA TEST 1 (OPERATE GROUP 2)
0470 7200 CLA
0471 1051 TAD K7777
0472 7600 7600
0473 7440 SZA
0474 7402 HLT /CLA (7600) DID NOT CLEAR AC
/AC SHOULD EQUAL 0000

/OSR TEST 1
0475 7200 CLA
0476 7404 OSR
0477 7040 CMA
0500 7440 SZA
0501 7402 HLT /OSR DID NOT SET AC TO 7777
/AC SHOULD=0

/NOP TEST 1 (OPERATE GROUP 1)

0532	7200	CLA	
0533	7100	CLL	/AC AND LINK EQUAL ZERO
0534	7000	7000	/TEST INSTRUCTION
0535	7450	SVA	
0536	7430	SZL	
0537	7402	HLT	/NOP FAILURE /AC AND LINK SHOULD BE ZERO

/NOP TEST 2 (OPERATE GROUP 2)

0510	7200	CLA	
0511	7100	CLL	/AC AND LINK EQUAL ZERO
0512	7400	7400	/TEST INSTRUCTION
0513	7450	SVA	
0514	7430	SZL	
0515	7402	HLT	/NOP FAILURE /AC AND LINK SHOULD BE ZERO

/TAD TEST 1

0516	7200	CLA	
0517	1050	TAD K3777	/OPERAND 1
0520	1034	TAD K4000	/OPERAND 2
0521	7040	CMA	
0522	7440	SZA	
0523	7402	HLT	/TAD ERROR /AC SHOULD EQUAL 0000

/TAD TEST 2

0524	7200	CLA	
0525	1047	TAD K5777	/OPERAND 1
0526	1033	TAD K2000	/OPERAND 2
0527	7040	CMA	
0530	7440	SZA	
0531	7402	HLT	/TAD ERROR /AC SHOULD EQUAL 0000

/TAD TEST 3

0532	7200	CLA	
0533	1046	TAD K6777	/OPERAND 1
0534	1032	TAD K1000	/OPERAND 2
0535	7040	CMA	
0536	7440	SZA	
0537	7402	HLT	/TAD ERROR /AC SHOULD EQUAL 0000

/TAD TEST 4

0540	7200	CLA	
0541	1045	TAD K7377	/OPERAND 1
0542	1031	TAD K8400	/OPERAND 2
0543	7040	CMA	
0544	7440	SZA	
0545	7402	HLT	/TAD ERROR /AC SHOULD EQUAL 0000

/TAD TEST 5

0546	7200	CLA	
0547	1044	TAD K7277	/OPERAND 1

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0550 1030 TAD K0220
0551 7040 CMA
0552 7440 SZA
0553 7402 HLT

/OPERAND 2

/TAD ERROR
/AC SHOULD EQUAL 0000

/TAD TEST 6
0554 7200 CLA
0555 1243 TAD K7677 /OPERAND 1
0556 1227 TAD K0100 /OPERAND 2
0557 7040 CMA
0560 7440 SZA
0561 7402 HLT /TAD ERROR
/AC SHOULD EQUAL 0000

/TAD TEST 7
0562 7200 CLA
0563 1042 TAD K7737 /OPERAND 1
0564 1026 TAD K0040 /OPERAND 2
0565 7040 CMA
0566 7440 SZA
0567 7402 HLT /TAD ERROR
/AC SHOULD EQUAL 0000

/TAD TEST 8
0570 7200 CLA
0571 1041 TAD K7757 /OPERAND 1
0572 1025 TAD K0020 /OPERAND 2
0573 7040 CMA
0574 7440 SZA

0575 7402 HLT /TAD ERROR
/AC SHOULD EQUAL 0000

0576 7000 NOP
0577 7000 NOP
0600 *600 /TAD TEST 9
0600 7200 CLA
0601 1040 TAD K7767 /OPERAND 1
0602 1024 TAD K0010 /OPERAND 2
0603 7040 CMA
0604 7440 SZA
0605 7402 HLT /TAD ERROR
/AC SHOULD EQUAL 0000

/TAD TEST 10
0606 7200 CLA
0607 1037 TAD K7773 /OPERAND 1
0610 1023 TAD K0004 /OPERAND 2
0611 7040 CMA
0612 7440 SZA
0613 7402 HLT /TAD ERROR
 /AC SHOULD EQUAL 0000

 /TAD TEST 11
0614 7200 CLA
0615 1036 TAD K7775 /OPERAND 1
0616 1022 TAD K0002 /OPERAND 2
0617 7040 CMA
0620 7440 SZA
0621 7402 HLT /TAD ERROR

 /TAD TEST 12
0622 7200 CLA
0623 1035 TAD K7776 /OPERAND 1
0624 1021 TAD K0001 /OPERAND 2
0625 7040 CMA
0626 7440 SZA
0627 7402 HLT /TAD ERROR
 /AC SHOULD EQUAL 0000

 /TAD TEST 13
0630 7200 CLA
0631 7100 CLL
0632 1034 TAD K4000 /OPERAND 1
0633 1034 TAD K4000 /OPERAND 2
0634 7430 SZL
0635 7440 SZA
0636 7402 HLT /TAD ERROR, AC SHOULD EQUAL 0000
 /LINK SHOULD BE EQUAL ONE.

/TAD TEST 14

0637	7200	CLA	
0640	7100	CLL	
0641	1054	TAD K6000	/OPERAND 1
0642	1033	TAD K2000	/OPERAND 2
0643	7430	SZL	
0644	7440	SZA	
0645	7402	HLT	/TAD ERROR, AC SHOULD EQUAL 0000 /LINK SHOULD EQUAL ONE

/TAD TEST 15

0646	7200	CLA	
0647	7100	CLL	
0650	1055	TAD K7000	/OPERAND 1
0651	1032	TAD K1000	/OPERAND 2
0652	7430	SZL	
0653	7440	SZA	
0654	7402	HLT	/TAD ERROR, AC SHOULD EQUAL 0000 /LINK SHOULD EQUAL ONE

/TAD TEST 16

0655	7200	CLA	
0656	7100	CLL	
0657	1056	TAD K7400	/OPERAND 1
0660	1031	TAD K0400	/OPERAND 2
0661	7430	SZL	
0662	7440	SZA	
0663	7402	HLT	/TAD ERROR, AC SHOULD EQUAL 0000 /LINK SHOULD EQUAL ONE

/TAD TEST 17

0664	7200	CLA	
0665	7100	CLL	
0666	1057	TAD K7600	/OPERAND 1
0667	1030	TAD K0200	/OPERAND 2
0670	7430	SZL	
0671	7440	SZA	
0672	7402	HLT	/TAD ERROR, AC SHOULD EQUAL 0000 /LINK SHOULD EQUAL ONE

/TAD TEST 18

0673	7200	CLA	
0674	7100	CLL	
0675	1076	TAD K7700	/OPERAND 1
0676	1027	TAD K0100	/OPERAND 2
0677	7430	SZL	
0700	7440	SZA	
0721	7402	HLT	/TAD ERROR, AC SHOULD EQUAL 0000 /LINK SHOULD EQUAL ONE

/TAD TEST 19

0772	7200	CLA	
0763	7100	CLL	

0704	1060	TAD K7740	/OPERAND 1
0705	1026	TAD K0040	/OPERAND 2
0706	7430	SZL	
0707	7440	SZA	
0710	7402	HLT	/TAD ERROR, AC SHOULD EQUAL 0000 /LINK SHOULD EQUAL ONE
/TAD TEST 20			
0711	7200	CLA	
0712	7100	CLL	
0713	1061	TAD K7760	/OPERAND 1
0714	1025	TAD K0020	/OPERAND 2
0715	7430	SZL	
0716	7440	SZA	
0717	7402	HLT	/TAD ERROR, AC SHOULD EQUAL 0000 /LINK SHOULD EQUAL ONE
/TAD TEST 21			
0720	7200	CLA	
0721	7100	CLL	
0722	1062	TAD K7770	/OPERAND 1
0723	1024	TAD K0010	/OPERAND 2
0724	7430	SZL	
0725	7440	SZA	
0726	7402	HLT	/TAD ERROR AC SHOULD EQUAL 0000 /LINK SHOULD EQUAL ONE
/TAD TEST 22			
0727	7200	CLA	
0730	7100	CLL	
0731	1063	TAD K7774	/OPERAND 1
0732	1023	TAD K0004	/OPERAND 2
0733	7430	SZL	
0734	7440	SZA	
0735	7402	HLT	/TAD ERROR, AC SHOULD EQUAL 0000 /LINK SHOULD EQUAL ONE
/TAD TEST 23			
0736	7200	CLA	
0737	7100	CLL	
0740	1035	TAD K7776	/OPERAND 1
0741	1022	TAD K0002	/OPERAND 2
0742	7430	SZL	
0743	7440	SZA	
0744	7402	HLT	/TAD ERROR, AC SHOULD EQUAL 0000 /LINK SHOULD EQUAL ONE

/TAD TEST 24

0745	7200	CLA	
0746	7100	CLL	
0747	1051	TAD K777	/OPERAND 1
0750	1021	TAD K0001	/OPERAND 2
0751	7430	SZL	
0752	7440	SZA	
0753	7402	HLT	/TAD ERROR, AC SHOULD EQUAL 0000 /LINK SHOULD EQUAL ONE

/TAD TEST 25

0754	7200	CLA	
0755	7100	CLL	
0756	7020	CML	
0757	1034	TAD K4000	/OPERAND 1
0760	1034	TAD K4000	/OPERAND 2
0761	7420	SNL	
0762	7440	SZA	
0763	7402	HLT	/TAD ERROR, AC SHOULD EQUAL 0000 /LINK SHOULD EQUAL ZERO

/TAD TEST 26

0764	7200	CLA	
0765	7100	CLL	
0766	1050	TAD K3777	/OPERAND 1
0767	1033	TAD K2000	/OPERAND 2
0770	1033	TAD K2000	/OPERAND 3
0771	7440	CMA	
0772	7420	SNL	
0773	7440	SZA	
0774	7402	HLT	/TAD ERROR, AC SHOULD EQUAL 0000 /LINK SHOULD EQUAL ZERO

0775 7000 NOP

0776 7000 NOP

0777 7000 NOP

1000 *1000

/TAD TEST 27

1000	7200	CLA	
1001	7100	CLL	
1002	1047	TAD K5777	/OPERAND 1
1003	1032	TAD K1000	/OPERAND 2
1004	1032	TAD K1000	/OPERAND 3
1005	7040	CMA	
1006	7420	SNL	
1007	7440	SZA	/TAD ERROR AC SHOULD EQUAL 0000
1010	7402	HLT	/LINK SHOULD EQUAL ZERO

/TAD TEST 28

1011	7200	CLA	
1012	7100	CLL	
1013	1046	TAD K6777	/OPERAND 1
1014	1031	TAD K0400	/OPERAND 2
1015	1031	TAD K0400	/OPERAND 3
1016	7040	CMA	
1017	7420	SNL	
1020	7440	SZA	
1021	7402	HLT	/TAD ERROR, AC SHOULD EQUAL 0000 /LINK SHOULD EQUAL ZERO

/TAD TEST 29

1022	7200	CLA	
1023	7100	CLL	
1024	1045	TAD K7377	/OPERAND 1
1025	1030	TAD K0200	/OPERAND 2
1026	1030	TAD K0200	/OPERAND 3
1027	7040	CMA	
1030	7420	SNL	
1031	7440	SZA	
1032	7402	HLT	/TAD ERROR, AC SHOULD EQUAL 0000 /LINK SHOULD EQUAL ZERO

/TAD TEST 30

1033	7200	CLA	
1034	7100	CLL	
1035	1044	TAD K7577	/OPERAND 1
1036	1027	TAD K0100	/OPERAND 2
1037	1027	TAD K0100	/OPERAND 3
1040	7040	CMA	
1041	7420	SNL	
1042	7440	SZA	
1043	7402	HLT	/TAD ERROR, AC SHOULD EQUAL 0000 /LINK SHOULD EQUAL ZERO

/TAD TEST 31

1044	7200	CLA	
1045	7100	CLL	
1046	1043	TAD K7677	/OPERAND 1
1047	1026	TAD K0040	/OPERAND 2
1050	1026	TAD K0040	/OPERAND 3
1051	7040	CMA	
1052	7420	SNL	
1053	7440	SZA	
1054	7402	HLT	/TAD ERROR, AC SHOULD EQUAL 0000 /LINK SHOULD EQUAL ZERO

/TAD TEST 32

1055	7200	CLA	
1256	7100	CLL	
1257	1042	TAD K7737	/OPERAND 1
1060	1025	TAD K0020	/OPERAND 2
1261	1025	TAD K0020	/OPERAND 3
1062	7040	CMA	
1263	7420	SNL	
1064	7440	SZA	
1265	7402	HLT	/TAD ERROR, AC SHOULD EQUAL 0000 /LINK SHOULD EQUAL ZERO

/TAD TEST 33

1066	7200	CLA	
1067	7100	CLL	
1070	1041	TAD K7757	/OPERAND 1
1071	1024	TAD K0010	/OPERAND 2
1272	1024	TAD K0010	/OPERAND 3
1273	7240	CMA	
1074	7420	SNL	
1075	7440	SZA	
1276	7402	HLT	/TAD ERROR, AC SHOULD EQUAL 0000 /LINK SHOULD EQUAL ZERO

/TAD TEST 34

1077	7200	CLA	
1100	7100	CLL	
1101	1040	TAD K7767	/OPERAND 1
1102	1023	TAD K0004	/OPERAND 2
1103	1023	TAD K0004	/OPERAND 3
1104	7040	CMA	
1105	7420	SNL	
1106	7440	SZA	
1107	7402	HLT	/TAD ERROR, AC SHOULD EQUAL 0000 /LINK SHOULD EQUAL ZERO

/TAD TEST 35

1110	7200	CLA	
1111	7100	CLL	
1112	1037	TAD K7773	/OPERAND 1
1113	1022	TAD K0002	/OPERAND 2
1114	1022	TAD K0002	/OPERAND 3
1115	7040	CMA	
1116	7420	SNL	
1117	7440	SZA	
1120	7402	HLT	/TAD ERROR, AC SHOULD EQUAL 0000 /LINK SHOULD EQUAL ZERO

/TAD TEST 36

1121	7200	CLA	
1122	7100	CLL	
1123	1036	TAD K7775	/OPERAND 1
1124	1021	TAD K0001	/OPERAND 2
1125	1021	TAD K0001	/OPERAND 3
1126	7040	CMA	
1127	7420	SVL	
1130	7430	SZL	
1131	7402	HLT	/TAD ERROR, AC SHOULD EQUAL 0000 /LINK SHOULD EQUAL ZERO

/RAR TEST 1

1132	7200	CLA	
1133	7100	CLL	
1134	1021	TAD K0001	/ROTATE PATTERN
1135	7010	RAR	
1136	7420	SVL	
1137	7420	HLT	/RAR FAILED, LINK DROPPED A BIT /LINK SHOULD EQUAL A ONE

/RAR TEST 2

1140	7200	CLA	
1141	7100	CLL	
1142	1020	TAD K0000	/ROTATE PATTERN
1143	7410	RAN	
1144	7440	SZA	
1145	7402	HLT	/RAR FAILED, AC PICKED UP A BIT /A ONE IN AC EQUALS THE PICKED UP BIT

/RAR TEST 3

1146	7200	CLA	
1147	7100	CLL	
1150	1020	TAD K0000	/ROTATE PATTERN
1151	7010	RAR	
1152	7430	SZL	
1153	7402	HLT	/RAL FAILED, LINK PICKED UP A BIT /LINK SHOULD EQUAL ZERO

/RAR TEST 4
1154 7200 CLA
1155 7100 CLL
1156 7020 CML
1157 1020 TAD K0000 /ROTATE PATTERN
1160 7010 RAR
1161 7430 SZL
1162 7402 HLT /RAR LINK PICKED UP A BIT
/LINK SHOULD EQUAL ZERO

/RAR TEST 5
1163 7200 CLA
1164 7100 CLL
1165 7020 CML
1166 1051 TAD K7777 /ROTATE PATTERN
1167 7010 RAR
1170 7040 CMA
1171 7440 SZA
1172 7402 HLT /RAR FAILED AC DROPPED A BIT
/A ONE IN AC EQUALS THE DROPPED BIT

1173 7000 NOP
1174 7000 NOP
1175 7000 NOP
1176 7000 NOP
1177 7000 NOP
1200 *1200
/RAR TEST 6
1200 7200 CLA
1201 7100 CLL
1202 7020 CML
1203 1020 TAD K0000 /ROTATE PATTERN
1204 7010 RAR
1205 1050 TAD K5777
1206 7040 CMA
1207 7450 SNA
1210 7430 SZL
1211 7402 HLT /RAR FAILED AC AND LINK
/SHOULD EQUAL 0000

/RAR TEST 7
1212 7200 CLA
1213 7100 CLL
1214 1034 TAD K4000 /ROTATE PATTERN
1215 7010 RAR
1216 1047 TAD K5777
1217 7040 CMA
1220 7450 SNA
1221 7430 SZL
1222 7402 HLT /RAR FAILED AC AND LINK SHOULD
/EQUAL 0000

/RAR TEST 8

1223	7200	CLA
1224	7100	CLL
1225	1033	TAD K2000
1226	7010	RAR
1227	1046	TAD K6777
1230	7040	CMA
1231	7450	SNA
1232	7430	SZL
1233	7402	HLT

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

/RAR TEST 9

1234	7200	CLA
1235	7100	CLL
1236	1032	TAD K1000
1237	7010	RAR
1240	1045	TAD K7377
1241	7040	CMA
1242	7450	SNA
1243	7430	SZL
1244	7402	HLT

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

/RAR TEST 10

1245	7200	CLA
1246	7100	CLL
1247	1031	TAD K0400
1250	7010	RAR
1251	1044	TAD K7577
1252	7040	CMA
1253	7450	SNA
1254	7430	SZL
1255	7402	HLT

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

/RAR TEST 11

1256	7200	CLA
1257	7100	CLL
1260	1030	TAD K0200
1261	7010	RAR
1262	1043	TAD K7677
1263	7040	CMA
1264	7450	SNA
1265	7430	SZL
1266	7402	HLT

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

/RAR TEST 12

1267	7200	CLA
1270	7100	CLL
1271	1027	TAD K0100
1272	7010	RAR
1273	1042	TAD K7737
1274	7040	CMA
1275	7450	SNA
1276	7430	SZL
1277	7402	HLT

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

/RAR TEST 13

1300	7200	CLA
1301	7100	CLL
1302	1026	TAD K0040
1303	7010	RAR
1304	1041	TAD K7757
1305	7040	CMA
1306	7450	SNA
1307	7430	SZL
1310	7402	HLT

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

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PAUSE

/INSTRUCTION TEST 1

/TAPE 2

/RAR TEST 14

1311	7200	CLA	
1312	7100	CLL	
1313	1025	TAD K0020	/ROTATE PATTERN
1314	7010	RAR	
1315	1040	TAD K7767	
1316	7040	CMA	
1317	7450	SNA	
1320	7430	SZL	
1321	7402	HLT	/RAR FAILED AC AND LINK /SHOULD EQUAL 0000

/RAR TEST 15

1322	7200	CLA	
1323	7100	CLL	
1324	1024	TAD K0010	/ROTATE PATTERN
1325	7010	RAR	
1326	1037	TAD K7773	
1327	7042	CMA	
1330	7450	SNA	
1331	7430	SZL	
1332	7402	HLT	/RAR FAILED AC AND LINK /SHOULD EQUAL 0000

/RAR TEST 16

1333	7200	CLA	
1334	7100	CLL	
1335	1023	TAD K0004	/ROTATE PATTERN
1336	7010	RAR	
1337	1035	TAD K7775	
1340	7040	CMA	
1341	7450	SNA	
1342	7430	SZL	
1343	7402	HLT	/RAR FAILED AC AND LINK /SHOULD EQUAL 0000

/RAR TEST 17

1344	7200	CLA	
1345	7100	CLL	
1346	1022	TAD K0002	/ROTATE PATTERN
1347	7010	RAR	
1350	1035	TAD K7776	
1351	7040	CMA	
1352	7450	SNA	
1353	7430	SZL	
1354	7402	HLT	/RAR FAILED AC AND LINK /SHOULD EQUAL 0000

/RAR TEST 18

1355	7200	CLA	
1356	7100	CLL	
1357	1021	TAD K0001	/ROTATE PATTERN
1360	7010	RAR	
1361	1051	TAD K7777	
1362	7040	CMA	
1363	7450	SNA	
1364	7420	SNL	
1365	7402	HLT	/RAR FAILED AC AND LINK /SHOULD EQUAL 0000

/RTR TEST 1

1366	7200	CLA	
1367	7100	CLL	
1370	1022	TAD K0002	/ROTATE PATTERN
1371	7012	RTR	
1372	7420	SNL	
1373	7402	HLT	/RTR FAILED LINK DROPPED /A BIT LINK SHOULD EQUAL A ONE
1374	7000	NOP	
1375	7000	NOP	
1376	7000	NOP	
1377	7000	NOP	
	1400	*1400	

/RTR TEST 2

1400	7200	CLA	
1401	7100	CLL	
1402	1020	TAD K0000	/ROTATE PATTERN
1403	7012	RTR	
1404	7440	SZA	
1405	7402	HLT	/RTR FAILED AC PICKED UP A BIT /A ONE IN AC EQUALS THE PICKED UP BIT

/RTR TEST 3

1406	7200	CLA	
1407	7100	CLL	
1410	1020	TAD K0002	/ROTATE PATTERN
1411	7012	RTR	
1412	7430	SZL	
1413	7402	HLT	/RTR LINK PICKED UP A BIT /LINK SHOULD EQUAL ZERO

/RTR TEST 4

1414	7200	CLA	
1415	7100	CLL	
1416	7020	CML	
1417	1020	TAD K0000	/ROTATE PATTERN
1420	7012	RTR	
1421	7430	SZL	
1422	7402	HLT	/RTR LINK PICKED UP A BIT /LINK SHOULD EQUAL ZERO

/RTR TEST 5

1423	7200	CLA	
1424	7100	CLL	
1425	7020	CML	
1426	1051	TAD K7777	/ROTATE PATTERN
1427	7012	RTR	
1430	7040	CMA	
1431	7440	SZA	
1432	7402	HLT	/RTR AC DROPPED A BIT A ONE IN /AC EQUALS THE DROPPED BIT

/RTR TEST 6

1433	7200	CLA	
1434	7100	CLL	
1435	7020	CML	
1436	1020	TAD K0000	/ROTATE PATTERN
1437	7012	RTR	
1440	1047	TAD K5777	
1441	7040	CMA	
1442	7450	SNA	
1443	7430	SZL	
1444	7402	HLT	/RTR FAILED AC AND LINK /SHOULD EQUAL 0000

/RTR TEST 7

1445	7200	CLA	
1446	7100	CLL	
1447	1034	TAD K4000	/ROTATE PATTERN
1450	7012	RTR	
1451	1046	TAD K6777	
1452	7040	CMA	
1453	7450	SNA	
1454	7430	SZL	
1455	7402	HLT	/RTR FAILED AC AND LINK /SHOULD EQUAL 0000

/RTR TEST 8

1456	7200	CLA	
1457	7100	CLL	
1460	1033	TAD K2000	/ROTATE PATTERN
1461	7012	RTR	
1462	1045	TAD K7377	
1463	7040	CMA	
1464	7450	SNA	
1465	7430	SZL	
1466	7402	HLT	/RTR FAILED AC AND LINK /SHOULD EQUAL 0000

/RTR TEST 9

1467	7282	CLA
1472	7100	CLL
1471	1032	TAD K1000
1472	7012	RTR
1473	1044	TAD K7577
1474	7240	CMA
1475	7450	SNA
1476	7430	SZL
1477	7402	HLT

/RTR FAILED AC AND LINK
/SHOULD EQUAL 0000

/RTR TEST 10

1500	7200	CLA
1521	7100	CLL
1522	1031	TAD K0400
1503	7012	RTR
1504	1043	TAD K7577
1505	7040	CMA
1526	7450	SNA
1507	7430	SZL
1510	7402	HLT

/RTR FAILED AC AND LINK
/SHOULD EQUAL 0000

/RTR TEST 11

1511	7200	CLA
1512	7100	CLL
1513	1030	TAD K0200
1514	7012	RTR
1515	1042	TAD K7737
1516	7240	CMA
1517	7450	SVA
1520	7430	SZL
1521	7402	HLT

/RTR FAILED AC AND LINK
/SHOULD EQUAL 0000

/RTR TEST 12

1522	7200	CLA
1523	7100	CLL
1524	1027	TAD K0100
1525	7012	RTR
1526	1041	TAD K7757
1527	7040	CMA
1530	7450	SNA
1531	7430	SZL
1532	7402	HLT

/RTR FAILED AC AND LINK
/SHOULD EQUAL 0000

/RTR TEST 13

1533	7200	CLA	
1534	7100	CLL	
1535	1026	TAD K0040	/ROTATE PATTERN
1536	7012	RTR	
1537	1040	TAD K7767	
1540	7040	CMA	
1541	7450	SNA	
1542	7430	SZL	
1543	7402	HLT	/RTR FAILED AC AND LINK /SHOULD EQUAL 0000

/RTR TEST 14

1544	7200	CLA	
1545	7100	CLL	
1546	1025	TAD K0020	/ROTATE PATTERN
1547	7012	RTR	
1550	1037	TAD K7773	
1551	7040	CMA	
1552	7450	SNA	
1553	7430	SZL	
1554	7402	HLT	/RTR FAILED AC AND LINK /SHOULD EQUAL 0000

/RTR TEST 15

1555	7200	CLA	
1556	7100	CLL	
1557	1024	TAD K0010	/ROTATE PATTERN
1560	7012	RTR	
1561	1036	TAD K7775	
1562	7040	CMA	
1563	7450	SNA	
1564	7430	SZL	
1565	7402	HLT	/RTR FAILED AC AND LINK /SHOULD EQUAL 0000

/RTR TEST 16

1566	7300	CLA CLL	
1567	1023	TAD K0004	/ROTATE PATTERN
1570	7012	RTR	
1571	1035	TAD K7776	
1572	7040	CMA	
1573	7450	SNA	
1574	7430	SZL	
1575	7402	HLT	/RTR FAILED AC AND LINK /SHOULD EQUAL 0000

1576 7222 NOP
1577 7222 NOP
1600 *1622 /RTR TEST 17
1622 7200 CLA
1621 7100 CLL
1622 1022 TAD K0002 /ROTATE PATTERN
1623 7012 RTR
1624 7450 SNA
1625 7422 SNL
1626 7402 HLT /RTR FAILED, AC SHOULD EQUAL
/0000, LINK SHOULD EQUAL ONE
/RTR TEST 18
1627 7200 CLA
1610 7100 CLL
1611 1221 TAD K0001 /ROTATE PATTERN
1612 7012 RTR
1613 1050 TAD K3777
1614 7040 CMA
1615 7450 SNA
1616 7432 SZL
1617 7402 HLT /RTR FAILED, AC AND LINK
/SHOULD BE ZERO
/RAL TEST 1
1620 7200 CLA
1621 7100 CLL
1622 1034 TAD K4000 /ROTATE PATTERN
1623 7004 RAL
1624 7430 SZL
1625 7440 SZA
1626 7402 HLT /RAL FAILED, AC SHOULD EQUAL 0000
/LINK SHOULD EQUAL ONE,
/RAL TEST 2
1627 7200 CLA
1630 7100 CLL
1631 1020 TAD K0000 /ROTATE PATTERN
1632 7004 RAL
1633 7420 SNL
1634 7440 SZA
1635 7402 HLT /RAL FAILED, AC SHOULD EQUAL 0000
/LINK SHOULD EQUAL ZERO

/RAL TEST 3

1636	7222	CLA	
1637	7122	CLL	
1648	7222	CML	
1641	1222	TAD K0000	/ROTATE PATTERN, LINK=1
1642	7224	RAL	
1643	7430	SZL	
1644	7422	HLT	/RAL FAILURE, AC SHOULD EQUAL 0001 /LINK SHOULD EQUAL ZERO

/RAL TEST 4

1645	7200	CLA	
1646	7100	CLL	
1647	7220	CML	
1652	1051	TAD K7777	/ROTATE PATTERN, LINK=1
1651	7204	RAL	
1652	7240	CMA	
1653	7440	SZA	
1654	7422	HLT	/RAL FAILURE, LINK SHOULD EQUAL ONE /AC SHOULD EQUAL 0000

/RAL TEST 5

1655	7200	CLA	
1656	7100	CLL	
1657	1033	TAD K2000	/ROTATE PATTERN
1660	7204	RAL	
1661	1250	TAD K5777	
1662	7240	CMA	
1663	7450	SNA	
1664	7430	SZL	
1665	7402	HLT	/RAL FAILURE, AC SHOULD EQUAL 0000 /LINK SHOULD EQUAL ONE

/RAL TEST 6

1666	7200	CLA	
1667	7100	CLL	
1670	1032	TAD K1000	/ROTATE PATTERN
1671	7204	RAL	
1672	1247	TAD K5777	
1673	7240	CMA	
1674	7440	SZA	
1675	7402	HLT	/RAL FAILURE, AC SHOULD EQUAL 0000 /LINK SHOULD EQUAL ZERO

/RAL TEST 7

1676	7200	CLA	
1677	7100	CLL	
1700	1031	TAD K0400	/ROTATE PATTERN
1721	7004	RAL	
1722	1046	TAD K6777	
1723	7242	CMA	
1724	7450	SNA	
1725	7430	SZL	
1726	7402	HLT	/RAL FAILURE, AC SHOULD EQUAL 0000 /LINK SHOULD EQUAL ZERO

/RAL TEST 8

1707	7200	CLA	
1710	7100	CLL	
1711	1030	TAD K0200	/ROTATE PATTERN
1712	7004	RAL	
1713	1045	TAD K7577	
1714	7040	CMA	
1715	7450	SNA	
1716	7430	SZL	
1717	7402	HLT	/RAL FAILURE AC SHOULD EQUAL 0000 /LINK SHOULD EQUAL ZERO

/RAL TEST 9

1724	7200	CLA	
1721	7100	CLL	
1722	1027	TAD K0100	/ROTATE PATTERN
1723	7004	RAL	
1724	1044	TAD K7577	
1725	7040	CMA	
1726	7450	SNA	
1727	7430	SZL	
1730	7402	HLT	/RAL FAILURE AC SHOULD EQUAL 0000 /LINK SHOULD EQUAL ZERO

/RAL TEST 10

1731	7222	CLA	
1732	7122	CLL	
1733	1226	TAD K0040	/ROTATE PATTERN
1734	7204	RAL	
1735	1243	TAD K/677	
1736	7242	CMA	
1737	7450	SNA	
1740	7432	SZL	/RAL FAILURE AC SHOULD EQUAL 0000
1741	7422	HLT	/LINK SHOULD EQUAL A ZERO

/RAL TEST 11

1742	7222	CLA	
1743	7122	CLL	
1744	1225	TAD K00420	/ROTATE PATTERN
1745	7224	RAL	
1746	1242	TAD K/737	
1747	7242	CMA	
1750	7450	SNA	
1751	7430	SZL	/RAL FAILURE AC SHOULD EQUAL 0000
1752	7422	HLT	/LINK SHOULD EQUAL A ZERO

/RAL TEST 12

1753	7222	CLA	
1754	7122	CLL	
1755	1224	TAD K0010	/ROTATE PATTTERN
1756	7204	RAL	
1757	1241	TAD K7757	
1760	7240	CMA	
1761	7450	SNA	
1762	7430	SZL	/RAL FAILURE AC SHOULD EQUAL 0000
1763	7422	HLT	/LINK SHOULD EQUAL A ZERO

/RAL TEST 13

1764	7200	CLA	
1765	7100	CLL	
1766	1223	TAD K0004	/ROTATE PATTERN
1767	7004	RAL	
1770	1040	TAD K7767	
1771	7040	CMA	
1772	7400	SNA	
1773	7430	SZL	/RAL FAILED AC SHOULD EQUAL 0000
1774	7422	HLT	/LINK SHOULD EQUAL A ZERO
1775	7002	NOP	
1776	7400	NOP	
1777	7000	NOP	
2000	*2000		

/RAL TEST 14

2202	7200	CLA	
2201	7100	CLL	
2202	1022	TAD K0002	/ROTATE PATTERN
2203	7004	RAL	
2204	1037	TAD K7773	
2205	7040	CMA	
2206	7450	SNA	
2207	7430	SZL	/RAL FAILED AC SHOULD EQUAL 0000
2208	7400	HLT	/LINK SHOULD EQUAL A ZERO

/RAL TEST 15

2211	7200	CLA	
2212	7100	CLL	
2213	1021	TAD K0001	/ROTATE PATTERN
2214	7004	RAL	
2215	1036	TAD K7775	
2216	7040	CMA	
2217	7450	SNA	
2220	7430	SZL	/RAL FAILED AC SHOULD EQUAL 0000
2221	7400	HLT	/LINK SHOULD EQUAL ZERO

/RAL TEST 16

2222	7200	CLA	
2223	7100	CLL	
2224	7020	CML	
2225	7004	RAL	
2226	1035	TAD K7776	
2227	7040	CMA	
2230	7450	SNA	
2331	7430	SZL	/RAL FAILED AC SHOULD EQUAL 0000
2332	7400	HLT	/LINK SHOULD EQUAL ZERO

/RTL TEST 1

2033	7200	CLA
2034	7100	CLL
2035	1020	TAD K2000
2036	7006	RTL
2037	7420	SZL
2040	7402	HLT

/RTL LINK DROPPED A BIT
/LINK SHOULD EQUAL A ONE

/RTL TEST 2

2041	7200	CLA
2042	7100	CLL
2043	1020	TAD K0000
2044	7006	RTL
2045	7440	SZA
2046	7402	HLT

/ROTATE PATTERN

/RTL AC PICKED UP A BIT
/A ONE IN AC EQUALS THE PICKED UP

/RTL TEST 3

2047	7200	CLA
2050	7100	CLL
2051	1020	TAD K0000
2052	7006	RTL
2053	7430	SZL
2054	7402	HLT

/ROTATE PATTERN

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

/RTL TEST 4

2055	7200	CLA
2056	7100	CLL
2057	7020	CML
2060	1020	TAD K0000
2061	7006	RTL
2062	7430	SZL
2063	7402	HLT

/ROTATE PATTERN

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

/RTL TEST 5

2064	7200	CLA
2065	7100	CLL
2066	7020	CML
2067	1051	TAD K7777
2070	7006	RTL
2071	7040	CMA
2072	7442	SZA
2073	7402	HLT

/ROTATE PATTERN

/RTL TEST 6

2074	7200	CLA
2075	7100	CLL
2076	1034	TAD K4000
2077	7006	RTL
2100	1035	TAD K7776
2101	7040	CMA
2102	7450	SNA
2103	7430	SZL
2104	7402	HLT

/ROTATE PATTERN

/RTL FAILED AC AND LINK SHOULD EQUAL 0000

/RTL TEST 7

2105	7200	CLA
2106	7100	CLL
2107	1033	TAD K2000
2110	7006	RTL
2111	7450	SNA
2112	7420	SNL
2113	7402	HLT

/ROTATE PATTERN

/RTL FAILED AC AND LINK SHOULD
/EQUAL 0000

/RTL TEST 8

2114	7200	CLA
2115	7100	CLL
2116	1032	TAD K1000
2117	7006	RTL
2120	1050	TAD K3777
2121	7040	CMA
2122	7450	SNA
2123	7430	SZL
2124	7402	HLT

/ROTATE PATTERN

/RTL FAILED AC AND LINK SHOULD
/EQUAL 0000

/RTL TEST 9

2125	7200	CLA
2126	7100	CLL
2127	1031	TAD K0400
2130	7006	RTL
2131	1047	TAD K0777
2132	7040	CMA
2133	7450	SNA
2134	7430	SZL
2135	7402	HLT

/RTL FAILED AC AND LINK SHOULD
/EQUAL ZERO

/RTL TEST 10

2136	7200	CLA
2137	7100	CLL
2140	1030	TAD K0200
2141	7006	RTL
2142	1046	TAD K6777
2143	7040	CMA
2144	7450	SNA
2145	7430	SZL
2146	7402	HLT

/RTL FAILED AC AND LINK SHOULD
/EQUAL 0000

/RTL TEST 11

2147	7200	CLA
2150	7100	CLL
2151	1027	TAD K0100
2152	7006	RTL
2153	1045	TAD K7377
2154	7040	CMA
2155	7450	SNA
2156	7430	SZL
2157	7402	HLT

/RTL FAILED AC AND LINK SHOULD
/EQUAL 0000

/RTL TEST 12

2160	7200	CLA
2161	7100	CLL
2162	1026	TAD K0040
2163	7006	RTL
2164	1044	TAD K7577
2165	7040	CMA
2166	7450	SNA
2167	7430	SZL
2170	7402	HLT

/RTL FAILED AC AND LINK SHOULD
/EQUAL 0000

2171	7000	NOP	
2172	7000	NOP	
2173	7000	NOP	
2174	7000	NOP	
2175	7000	NOP	
2176	7000	NOP	
2177	7000	NOP	
	2200	*2200	
		/RTL TEST 13	
2200	7200	CLA	
2201	7100	CLL	
2202	1025	TAD K0020	/ROTATE PATTERN
2203	7006	RTL	
2204	1043	TAD K7677	
2205	7040	CMA	
2206	7450	SNA	
2207	7430	SZL	
2210	7402	HLT	/RTL FAILED AC AND LINK SHOULD /EQUAL 0000
		/RTL TEST 14	
2211	7200	CLA	
2212	7100	CLL	
2213	1024	TAD K0010	/ROTATE PATTERN
2214	7006	RTL	
2215	1042	TAD K7737	
2216	7040	CMA	
2217	7450	SNA	
2220	7430	SZL	
2221	7402	HLT	/RTL FAILED AC AND LINK SHOULD
		/RTL TEST 15	
2222	7200	CLA	
2223	7100	CLL	
2224	1023	TAD K0004	/ROTATE PATTERN
2225	7006	RTL	
2226	1041	TAD K7757	
2227	7040	CMA	
2230	7450	SNA	
2231	7430	SZL	
2232	7402	HLT	/RTL FAILED AC AND LINK SHOULD /EQUAL 0000
		/RTL TEST 16	
2233	7200	CLA	
2234	7100	CLL	
2235	1022	TAD K0002	/ROTATE PATTERN
2236	7006	RTL	
2237	1040	TAD K7767	
2240	7040	CMA	
2241	7450	SNA	
2242	7432	SZL	
2243	7402	HLT	/RTL FAILED AC AND LINK /SHOULD EQUAL 0000

/RTL TEST 17

2244	7200	CLA	
2245	7100	CLL	
2246	1021	TAD K0001	/ROTATE PATTERN
2247	7006	RTL	
2250	1037	TAD K7773	
2251	7040	CMA	
2252	7450	SNA	
2253	7430	SZL	
2254	7402	HLT	/RTL FAILED AC AND LINK /SHOULD EQUAL 0000

/RTL TEST 18

2255	7200	CLA	
2256	7100	CLL	
2257	7020	CML	
2260	7006	RTL	
2261	1036	TAD K7775	
2262	7040	CMA	
2263	7450	SNA	
2264	7430	SZL	
2265	7402	HLT	/RTL FAILED AC AND LINK /SHOULD EQUAL 0000

/GROUP 1 OPERATE TEST 1

2266	7200	CLA	/CLEAR AC
2267	7100	CLL	/CLEAR LINK
2270	7040	CMA	/AC EQUALS 7777
2271	7020	CML	/LINK EQUALS ONE
2272	7300	CLA CLL	/TEST COMBINATION
2273	7420	SNL	
2274	7440	SZA	
2275	7402	HLT	/CLA CLL FAILED, LINK SHOULD BE 0 /AC SHOULD EQUAL 0000

/GROUP 1 OPERATE TEST 2

2276	7200	CLA	/AC EQUALS 0000
2277	1053	TAD K2525	/AC EQUALS 2525
2300	7240	CLA CMA	/TEST COMBINATION
2301	7040	CMA	
2322	7440	SZA	
2303	7402	HLT	/CLA CMA ERROR, AC SHOULD /BE 0000

/GROUP 1 OPERATE TEST 3

2324	7200	CLA	
2325	7100	CLL	
2326	7040	CMA	/AC=7777 LINK=1
2327	7140	CLL CMA	/TEST COMBINATION
2310	7420	SNL	
2311	7440	SZA	
2312	7402	HLT	/CLL CMA FAILED, AC AND LINK /SHOULD BE ZERO

/GROUP 1 OPERATE TEST 4

2313	7100	CLL	
2314	7020	CML	/LINK=1
2315	7200	CLA	
2316	7240	CMA	/AC=7777
2317	7340	CLA CMA CLL	/TEST COMBINATION
2320	7040	CMA	
2321	7420	SNL	
2322	7440	SZA	
2323	7402	HLT	/CLA CMA CLL FAILED, AC AND /LINK SHOULD BE ZERO

/GROUP 1 OPERATE TEST 5

2324 7200 CLA
2325 7100 CLL /LINK=0
2326 7040 CMA /AC=7777
2327 7220 CLA CML /TEST COMBINATION
2330 7430 SZA
2331 7440 SZA
2332 7402 HLT /CLA CML FAILED, AC SHOULD EQUAL
/0000, LINK SHOULD BE A ONE

/GROUP 1 OPERATE TEST 6

2333 7100 CLL
2334 7020 CML /LINK=1
2335 7120 CLL CML /TEST COMBINATION
2336 7420 SNL
2337 7402 HLT /CLL CML FAILED
/LINK SHOULD BE A ONE

/GROUP 1 OPERATE TEST 7

2340 7100 CLL /LINK=0
2341 7120 CLL CML /TEST COMBINATION
2342 7420 SNL
2343 7402 HLT /CLL CML FAILED,
/LINK SHOULD BE A ONE

/GROUP 1 OPERATE TEST 8

2344 7120 CLL CML /LINK=1
2345 7240 CLA CMA /AC=7777
2346 7320 CLA CLL CML /TEST COMBINATION
2347 7430 SZA
2350 7440 SZA
2351 7402 HLT /CLA CLL CML FAILED, LINK SHOULD
/BE 1, AC SHOULD BE ZERO

/GROUP 1 OPERATE TEST 9

2352 7340 CLA CLL CMA /LINK=0, AC=7777
2353 7320 CLA CLL CML /TEST COMBINATION
2354 7430 SZA
2355 7440 SZA
2356 7402 HLT /CLA CLL CML FAILED, LINK SHOULD
/BE 1, AC SHOULD BE ZERO

/GROUP 1 OPERATE TEST 10
2357 7340 CLA CLL CMA /AC=7777, LINK=0
2360 7260 CMA CML /TEST COMBINATION
2361 7430 S2L
2362 7440 S2A
2363 7402 HLT /CMA CML FAILED, AC SHOULD BE
/0000, LINK SHOULD EQUAL ONE.

/GROUP 1 OPERATE TEST 11
2364 7300 CLA CLL /AC AND LINK=0
2365 1053 TAD K2525 /AC=2525
2366 7340 CLA CMA CLL /TEST COMBINATION
2367 7040 CMA
2370 7420 S2L
2371 7440 S2A
2372 7402 HLT /CLA CMA CML FAILED, AC SHOULD BE
/0000, LINK SHOULD EQUAL ZERO

2373 7000 NOP
2374 7000 NOP
2375 7000 NOP
2376 7000 NOP
2377 7000 NOP
2400 *2400
/GROUP 1 OPERATE TEST 12
2400 7300 CLL CLL /AC AND LINK=0
2401 1053 TAD K2525 /AC=2525
2402 7160 CLL CMA CML /TEST COMBINATION
2403 1053 TAD K2525
2404 7040 CMA
2405 7430 S2L
2406 7440 S2A
2407 7402 HLT /CLL CMA CML FAILED, AC SHOULD BE
/0000, LINK SHOULD EQUAL ONE

/GROUP 1 OPERATE TEST 13
2410 7300 CLA CLL
2411 7020 CML /AC=0000, LINK=1
2412 7160 CLL CMA CML /TEST COMBINATION
2413 7040 CMA
2414 7430 S2L
2415 7440 S2A
2416 7402 HLT /CLL CMA CML FAILED, AC SHOULD
/BE 0000, LINK SHOULD BE ONE

/GROUP 1 OPERATE TEST 14

2417 7300 CLA CLL
2420 1053 TAD K2525 /AC=2525, LINK=0
2421 7360 CLA CLL CMA CML /TEST COMBINATION
2422 7040 CMA
2423 7430 SEL
2424 7440 SZA
2425 7402 HLT /CLA CLL CMA CML FAILED, AC SHOULD
/BE 0000 LINK SHOULD EQUAL ONE,

/GROUP 1 OPERATE TEST 15

2426 7320 CLA CLL CML
2427 1052 TAD K5252 /AC=5252, LINK=1
2430 7360 CLA CLL CMA CML /TEST COMBINATION
2431 7040 CMA
2432 7430 SEL
2433 7440 SZA
2434 7402 HLT /CLA CLL CMA CML FAILED, AC SHOULD
/BE 000, LINK SHOULD EQUAL ONE

/GROUP 1 OPERATE TEST 16

2435 7200 CLA
2436 1053 TAD K2525 /AC=2525
2437 7201 CLA IAC /TEST COMBINATION
2440 1035 TAD K7776
2441 7040 CMA
2442 7440 SZA
2443 7402 HLT /CLA IAC FAILED
/AC SHOULD EQUAL 0000

/GROUP 1 OPERATE TEST 17

2444 7320 CLL CML CLA
2445 1035 TAD K7776 /AC=7776, LINK=1
2446 7101 CLL IAC /TEST COMBINATION
2447 7040 CMA
2450 7420 SNL
2451 7440 SZA
2452 7402 HLT /CLL IAC FAILED, AC AND LINK
/SHOULD EQUAL ZERO

/GROUP 1 OPERATE TEST 18
2453 7320 CLA CLL CML
2454 1053 TAD K2525 /AC=2525 LINK=1
2455 7301 CLA CLL IAC /TEST COMBINATION
2456 1035 TAD K7776
2457 7040 CMA
2460 7420 SNL
2461 7440 SZA
2462 7402 HLT /CLA CLL IAC FAILED, AC AND LINK
/SHOULD BE ZERO
/GROUP 1 OPERATE TEST 19
2463 7300 CLA CLL /AC=0 LINK=0
2464 7041 CMA IAC /TEST COMBINATION
2465 7430 SZA
2466 7440 SZA
2467 7402 HLT /CMA IAC FAILED, AC SHOULD EQUAL
/0000, LINK SHOULD EQUAL ONE
/GROUP 1 OPERATE TEST 20
2470 7300 CLA CLL
2471 1053 TAD K2525 /AC=2525 LINK=0
2472 7241 CLA CMA IAC /TEST COMBINATION
2473 7430 SZA
2474 7440 SZA
2475 7402 HLT /CLA CMA IAC FAILED, AC SHOULD
EQUAL 0000, LINK SHOULD BE ONE,
/GROUP 1 OPERATE TEST 21
2476 7320 CLL CLL CML /AC=0000 LINK=1
2477 1021 TAD K0001 /AC=0001
2500 7141 CLL CMA IAC /TEST COMBINATION
2501 7040 CMA
2502 7420 SNL
2503 7440 SZA
2504 7402 HLT /CLL CMA IAC FAILED, AC SHOULD BE
/0000 LINK SHOULD BE 0
/GROUP 1 OPERATE TEST 22
2505 7320 CLA CLL CML
2506 1053 TAD K2525 /AC=2525 LINK=1
2507 7341 CLA CLL CMA IAC /TEST COMBINATION
2510 7430 SZA
2511 7440 SZA
2512 7402 HLT /CLA CLL CMA IAC FAILED, AC SHOULD BE
/0000, LINK SHOULD BE ONE

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/GROUP 1 OPERATE TEST 23

2513	7300	CLA CLL	
2514	1052	TAD K5252	/AC=5252 LINK=0
2515	7341	CLA CLL CMA IAC	/TEST COMBINATION
2516	7430	SZL	
2517	7440	SZA	
2520	7402	HLT	/CLA CLL CMA IAC FAILED AC SHOULD /BE 0000, LINK SHOULD BE ONE

/GROUP 1 OPERATE TEST 24

2521	7500	CLA CLL	
2522	1035	TAD K7776	/AC=7776 LINK=0
2523	7021	CML IAC	/TEST COMBINATION
2524	7040	CMA	
2525	7430	SZL	
2526	7440	SZA	
2527	7402	HLT	/CML IAC FAILED AC SHOULD BE /0000, LINK SHOULD BE ONE

/GROUP 1 OPERATE TEST 25

2530	7320	CLA CLL CML	
2531	1035	TAD K7776	/AC =7776 LINK=1
2532	7021	CML IAC	/TEST COMBINATION
2533	7040	CMA	
2534	7420	SNL	
2535	7440	SZA	
2536	7402	HLT	/CML IAC FAILED, AC SHOULD BE /0000, LINK SHOULD BE ZERO

/GROUP 1 OPERATE TEST 26

2537	7300	CLA CLL	
2540	1053	TAD K2525	/AC=2525 LINK=0
2541	7221	CLA CML IAC	/TEST COMBINATION
2542	1035	TAD K7776	
2543	7040	CMA	
2544	7430	SZL	
2545	7440	SZA	
2546	7402	HLT	/CLA CML IAC FAILED, AC SHOULD BE /0000, LINK SHOULD EQUAL ONE

/GROUP 1 OPERATE TEST 27

2547	7320	CLA CLL CML	/AC=0000 LINK=1
2550	1035	TAD K7776	/AC=7776
2551	7121	CLL CML IAC	/TEST COMBINATION
2552	7040	CMA	
2553	7430	SZL	
2554	7440	SZA	
2555	7402	HLT	/CLL CML IAC FAILURE, AC SHOULD BE /0000, LINK SHOULD EQUAL ONE,

/GROUP 1 OPERATE TEST 28

2556	7300	CLA CLL
2557	1055	TAD K7776 /AC=7776 LINK=0
2560	7121	CLL CML IAC /TEST COMBINATION
2561	7040	CMA
2562	7430	SZL
2563	7440	SZA
2564	7402	HLT /CLL CML IAC FAILED, AC SHOULD /BE 0000, LINK SHOULD BE ONE

/GROUP 1 OPERATE TEST 29

2565	7300	CLA CLL
2566	1053	TAD K2225 /AC=2225, LINK=0
2567	7321	CLA CLL CML IAC /TEST COMBINATION
2570	1035	TAD K7776
2571	7040	CMA
2572	7430	SZL
2573	7440	SZA
2574	7402	HLT /CLA CLL CML IAC FAILED, AC SHOULD /BE 0000, LINK SHOULD BE ONE

2575	7000	NOP
2576	7000	NOP
2577	7000	NOP

2600 *2600

/GROUP 1 OPERATE TEST 30

2600	7320	CLA CLL CML
2601	1053	TAD K2225 /AC=2225 LINK=1
2602	7321	CLA CLL CML IAC /TEST COMBINATION
2603	1035	TAD K7776
2604	7040	CMA
2605	7430	SZL
2606	7440	SZA
2607	7402	HLT /CLA CLL CML IAC FAILED, AC SHOULD /BE 0000, LINK SHOULD BE ONE

/GROUP 1 OPERATE TEST 31

2610 7300 CLA CLL
2611 1021 TAD K0001 /AC=0001 LINK=0
2612 7061 CMA CML IAC /TEST COMBINATION
2613 7040 CMA
2614 7430 S2L
2615 7440 S2A
2616 7402 HLT /CMA CML IAC FAILED, AC SHOULD
/BE 0000, LINK SHOULD BE ONE

/GROUP 1 OPERATE TEST 32

2617 7320 CLA CLL CML
2620 1021 TAD K0001 /AC=0001 LINK=1
2621 7061 CMA CML IAC /TEST COMBINATION
2622 7040 CMA
2623 7420 S2L
2624 7440 S2A
2625 7402 HLT /CMA CML IAC FAILURE, AC SHOULD BE
/BE 0000, LINK SHOULD BE ZERO

/GROUP 1 OPERATE TEST 33

2626 7300 CLA CLL /AC=0000 LINK=0
2627 1053 TAD K2525 /AC=2525
2630 7261 CLA CMA CML IAC /TEST COMBINATION
2631 7420 S2L
2632 7430 S2L
2633 7402 HLT /CLA CMA CML IAC FAILED, AC SHOULD
/BE 0000, LINK SHOULD BE ZERO

/GROUP 1 OPERATE TEST 34

2634 7320 CLA CLL CML
2635 1053 TAD K2525 /AC=2525 LINK=1
2636 7261 CLA CMA CML IAC /TEST COMBINATION
2637 7430 S2L
2640 7440 S2A
2641 7402 HLT /CLA CMA CML IAC FAILED, AC SHOULD
/BE 0000, LINK SHOULD BE ONE

/GROUP 1 OPERATE TEST 35

2642 7300 CLA CLL
2643 1021 TAD K0001 /AC=2021 LINK=0
2644 7161 CLL CMA CML IAC /TEST COMBINATION
2645 7240 CMA
2646 7430 S2L
2647 7440 S2A
2650 7422 HLT /CLL CMA CML IAC FAILED, AC SHOULD BE
/0000, LINK SHOULD BE ONE

/GROUP 1 OPERATE TEST 36

2651 7320 CLA CLL CML
2652 1021 TAD K0001 /AC=0001 LINK=1
2653 7161 CLL CMA CML IAC /TEST COMBINATION
2654 7040 CMA
2655 7430 S2L
2656 7440 S2A
2657 7402 HLT /CLL CMA CML IAC FAILED, AC SHOULD BE
/0000, LINK SHOULD BE ONE

/GROUP 1 OPERATE TEST 37

2660 7300 CLA CLL
2661 1053 TAD K2525 /AC=2525 LINK=0
2662 7361 CLA CLL CMA CML IAC /TEST COMBINATION
2663 7420 SNL
2664 7440 S2A
2665 7402 HLT /CLA CLL CMA CML IAC FAILURE AC AND
LINK SHOULD EQUAL ZERO

/GROUP 1 OPERATE TEST 38

2666 7360 CLA CMA CLL CML /AC=7777 LINK=1
2667 7210 CLA RAR /TEST COMBINATION
2670 1050 TAD K5777
2671 7040 CMA
2672 7420 SNL
2673 7440 S2A
2674 7402 HLT /CLA RAR FAILED, LINK AND
AC SHOULD EQUAL ZERO

/GROUP 1 OPERATE TEST 39

2675 7360 CLA CMA CLL CML /AC=7777 LINK#1
2676 7204 CLA RAL /TEST COMBINATION
2677 1035 TAD K7776
2720 7040 CMA
2701 7420 SNL
2702 7440 SZA
2703 7402 HLT /CLA RAL FAILED LINK AND
/AC SHOULD EQUAL ZERO

/GROUP 1 OPERATE TEST 40

2704 7360 CLA CMA CLL CML /AC=7777 LINK #1
2705 7212 CLA RTR /TEST COMBINATION
2706 1047 TAD K5777
2707 7040 CMA
2710 7420 SNL
2711 7440 SZA
2712 7402 HLT /CLA RTR FAILED, AC AND
/LINK SHOULD BE ZERO

/GROUP 1 OPERATE TEST 41

2713 7560 CLA CMA CLL CML /AC=7777, LINK#1
2714 7206 CLA RTL /TEST COMBINATION
2715 1036 TAD K7775
2716 7040 CMA
2717 7420 SNL
2720 7440 SZA
2721 7402 HLT /CLA RTL FAILED, AC AND LINK
/SHOULD BE ZERO

/GROUP 1 OPERATE TEST 42

2722 7320 CLA CLL CML
2723 1026 TAD K0040 /AC=0040 LINK#1
2724 7110 CLL RAR /TEST COMBINATION
2725 1041 TAD K7757
2726 7040 CMA
2727 7420 SNL
2730 7440 SZA
2731 7402 HLT /CLL RAR FAILED, AC AND LINK
/SHOULD BE ZERO

/GROUP 1 OPERATE TEST 43

2732	7320	CLA CLL CML	
2733	1026	TAD K0040	/AC=2040 LINK#1
2734	7124	CLL RAL	/TEST COMBINATION
2735	1043	TAD K7577	
2736	7240	CMA	
2737	7420	SNL	
2740	7440	SZA	
2741	7402	HLT	/CLL RAL FAILED, AC AND LINK /SHOULD BE ZERO

/GROUP 1 OPERATE TEST 44

2742	7320	CLA CLL CML	
2743	1026	TAD K0040	/AC=2040 LINK#1
2744	7112	CLL RTR	/TEST COMBINATION
2745	1040	TAD K7767	
2746	7040	CMA	
2747	7420	SNL	
2750	7440	SZA	
2751	7402	HLT	/CLL RTR FAILED, AC AND LINK /SHOULD BE ZERO

/GROUP 1 OPERATE TEST 45

2752	7320	CLA CLL CML	
2753	1026	TAD K0040	/AC=2040 LINK#1
2754	7106	CLL RTL	/TEST COMBINATION
2755	1044	TAD K7577	
2756	7040	CMA	
2757	7420	SNL	
2760	7440	SZA	
2761	7402	HLT	/CLL RTL FAILED, AC AND LINK /SHOULD BE ZERO

/GROUP 1 OPERATE TEST 46

2762	7360	CLA CLL CML CMA	/AC=7777 LINK#1
2763	7310	CLL CLA RAR	/TEST COMBINATION
2764	7420	SNL	
2765	7440	SZA	
2766	7402	HLT	/CLL CLA RAR FAILED AC AND /LINK SHOULD BE ZERO

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/GROUP 1 OPERATE TEST 47

2767 7360 CLA CMA CLL CML /AC=7777 LINK=1
2770 7304 CLL CLA RAL /TEST COMBINATION
2771 7422 SNL
2772 7432 SZA
2773 7402 HLT /CLL CLA RAL FAILED, AC AND
/LINK SHOULD BE ZERO

2774 7220 NOP
2775 7000 NOP
2776 7002 NOP
2777 7000 NOP
3000

*3000 /GROUP 1 OPERATE TEST 48

3020 7360 CLA CMA CLL CML /AC=7777 LINK=1
3021 7312 CLL CLL RTR /TEST COMBINATION
3022 7420 SNL
3023 7442 SZA
3024 7402 HLT /CLA CLL RTL FAILED, AC AND
/LINK SHOULD BE ZERO

/GROUP 1 OPERATE TEST 49

3025 7360 CLA CMA CLL CML /AC=7777 LINK=1
3026 7306 CLL CLL RTL /TEST COMBINATION
3027 7420 SNL
3028 7440 SZA
3029 7402 HLT /CLA CLL RTL FAILED, AC AND
/LINK SHOULD EQUAL ZERO

/GROUP 1 OPERATE TEST 50

3032 7300 CLA CLL /AC=0000 LINK=0
3033 7030 CML RAR /TEST COMBINATION
3034 1050 TAD K3777
3035 7240 CMA
3036 7420 SNL
3037 7440 SZA
3038 7402 HLT /CML RAR FAILED, AC AND LINK
/SHOULD BE ZERO

/GROUP 1 OPERATE TEST 51

3021	7300	CLA CLL	/AC=0000 LINK=0
3022	7224	CML RAL	/TEST COMBINATION
3023	1035	TAD K7776	
3024	7440	CMA	
3025	7420	SNL	
3026	7440	SZA	
3027	7402	HLT	/CML RAL FAILED, AC AND LINK /SHOULD BE ZERO.

/GROUP 1 OPERATE TEST 52

3030	7300	CLA CLL	/AC=0000 LINK=0
3031	7032	CML RTR	/TEST COMBINATION
3032	1047	TAD K5777	
3033	7040	CMA	
3034	7420	SNL	
3035	7440	SZA	
3036	7402	HLT	/CML RTR FAILED, AC AND LINK /SHOULD EQUAL ZERO

/GROUP 1 OPERATE TEST 53

3037	7300	CLA CLL	/AC=0000 LINK=0
3040	7226	CML RTL	/TEST COMBINATION
3041	1036	TAD K7775	
3042	7042	CMA	
3043	7420	SNL	
3044	7440	SZA	
3045	7402	HLT	/CML RTL FAILED, AC AND LINK /SHOULD EQUAL ZERO

/GROUP 1 OPERATE TEST 54

3046	7300	CLA CLL	
3047	1052	TAD K5252	/AC=5252 LINK=0
3050	7230	CLA CML RAR	/TEST COMBINATION
3051	1050	TAD K3777	
3052	7040	CMA	
3053	7420	SNL	
3054	7440	SZA	
3055	7402	HLT	/CLA CML RAR FAILED, AC AND

PAUSE

/INSTRUCTION TEST - 1

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/INSTRUCTION TEST - 1

/GROUP 1 OPERATE TEST 55

/TAPE 3

3056	7300	CLA CLL	
3057	1052	TAD K5252	/AC=5252 LINK=0
3060	7224	CLA CML RAL	/TEST COMBINATION
3061	1035	TAD K7776	
3062	7040	CMA	
3063	7420	SNL	
3064	7440	SZA	
3065	7402	HLT	/CLA CML RAL FAILED, AC AND /LINK SHOULD BE ZERO

/GROUP 1 OPERATE TEST 56

3066	7300	CLA CLL	
3067	1052	TAD K5252	/AC=5252 LINK=0
3070	7232	CLA CML RTR	/TEST COMBINATION
3071	1047	TAD K5777	
3072	7040	CMA	
3073	7420	SNL	
3074	7440	SZA	
3075	7402	HLT	/CLA CML RTR FAILED, AC AND /LINK SHOULD BE ZERO

/GROUP 1 OPERATE TEST 57

3076	7300	CLA CLL	
3077	1052	TAD K5252	/AC=5252 LINK=0
3100	7226	CLA CML RTL	/TEST COMBINATION
3101	1036	TAD K7775	
3102	7040	CMA	
3103	7420	SNL	
3104	7440	SZA	
3105	7402	HLT	/CLA CML RTL FAILED, AC AND /LINK SHOULD EQUAL ZERO

/GROUP 1 OPERATE TEST 58

3106	7300	CLA CLL	/AC=0000 LINK=0
3107	7130	CLL CML RAR	/TEST COMBINATION
3110	7004	RAL	
3111	7430	SZL	
3112	7440	SZA	
3113	7402	HLT	/CLL CML RAR FAILED, AC SHOULD /BE 0000 LINK SHOULD BE 1

/GROUP 1 OPERATE TEST 59
3114 7320 CLA CLL CML /AC=0000 LINK=1
3115 7130 CLL CML RAR /TEST COMBINATION
3116 7004 RAL
3117 7430 SZL
3120 7440 SZA
3121 7402 HLT /CLL CML RAR FAILED, AC SHOULD BE
/0000, LINK SHOULD BE A ONE
/GROUP 1 OPERATE TEST 60
3122 7300 CLA CLL /AC=0000 LINK=0
3123 7124 CLL CML RAL /TEST COMBINATION
3124 7010 RAR
3125 7430 SZL
3126 7440 SZA
3127 7402 HLT /CLL CML RAL FAILED, AC SHOULD
/EQUAL 0000, LINK SHOULD BE ONE
/GROUP 1 OPERATE TEST 61
3130 7320 CLA CLL CML /AC=0000 LINK=1
3131 7124 CLL CML RAL /TEST COMBINATION
3132 7010 RAR
3133 7430 SZL
3134 7440 SZA
3135 7402 HLT /CLL CML RAL FAILED, AC SHOULD
/EQUAL 0000, LINK SHOULD BE ONE
/GROUP 1 OPERATE TEST 62
3136 7300 CLA CLL /AC=0000 LINK=0
3137 7132 CLL CML RTR /TEST COMBINATION
3140 7006 RTL
3141 7430 SZL
3142 7440 SZA
3143 7402 HLT /CLL CML RTR FAILED, AC SHOULD
/BE 0000, LINK SHOULD BE ONE

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/GROUP 1 OPERATE TEST 63

3144 7320 CLA CLL CML /AC=2220 LINK=1
3145 7132 CLL CML RTR /TEST COMBINATION
3146 7006 RTL
3147 7430 SZL
3150 7440 SZA
3151 7402 HLT /CLL CML RTR FAILED, AC SHOULD
/BE 2220 LINK SHOULD BE ONE,

/GROUP 1 OPERATE TEST 64

3152 7300 CLA CLL /AC=2220 LINK=0
3153 7126 CLL CML RTL /TEST COMBINATION
3154 7012 RTL
3155 7430 SZL
3156 7440 SZA
3157 7402 HLT /CLL CML RTL FAILED, AC SHOULD
/BE 0020, LINK SHOULD BE A ONE

/GROUP 1 OPERATE TEST 65

3160 7320 CLA CLL CML /AC=0000 LINK=1
3161 7126 CLL CML RTL /TEST COMBINATION
3162 7012 RTL
3163 7430 SZL
3164 7440 SZA
3165 7402 HLT /CLL CML RTL FAILED, AC SHOULD
/BE 0000, LINK SHOULD BE A ONE,

/GROUP 1 OPERATE TEST 66

3166 7300 CLA CLL
3167 1052 TAD K5252 /AC=5252 LINK=0
3170 7330 CLA CLL CML RAR /TEST COMBINATION
3171 7004 RAL
3172 7430 SZL
3173 7440 SZA
3174 7402 HLT /CLA CLL CML RAR FAILED, AC SHOULD
/BE 0000, LINK SHOULD BE ONE

3175 7000 NOP
3176 7000 NOP
3177 7000 NOP

3200 *3200

/GROUP 1 OPERATE TEST 67

3200 7320 CLA CLL CML
3201 1053 TAD K2525 /AC=2525 LINK=1
3202 7330 CLA CLL CML RAR /TEST COMBINATION
3203 7004 RAL
3204 7430 SZL
3205 7440 SZA
3206 7402 HLT /CLA CLL CML RAR FAILED, AC SHOULD
/BE 0000, LINK SHOULD BE ONE

/GROUP 1 OPERATE TEST 68

3217 7300 CLA CLL
3218 1053 TAD K2525 /AC=2525 LINK=0
3211 7324 CLA CLL CML RAL /TEST COMBINATION
3212 7410 RAR
3213 7430 SZL
3214 7440 SZA
3215 7462 HLT /CLA CLL CML RAL FAILED, AC SHOULD
/BE 0000, LINK SHOULD BE ONE

/GROUP 1 OPERATE TEST 69

3216 7320 CLA CLL CML
3217 1052 TAD K5252 /AC=5252 LINK=1
3220 7324 CLA CLL CML RAL /TEST COMBINATION
3221 7410 RAR
3222 7430 SZL
3223 7440 SZA
3224 7462 HLT /CLA CLL CML RAL FAILED, AC SHOULD
/BE 0000 LINK SHOULD BE A ONE

/GROUP 1 OPERATE TEST 70

3225 7300 CLA CLL
3226 1053 TAD K2525 /AC=2525 LINK=0
3227 7332 CLA CLL CML RTR /TEST COMBINATION
3234 7406 RTL
3231 7430 SZL
3232 7440 SZA
3233 7462 HLT /CLA CLL CML RTR FAILED, AC SHOULD
/BE 0000, LINK SHOULD BE A ONE

/GROUP 1 OPERATE TEST 71

3234 7320 CLA CLL CML
3235 1052 TAD K5252 /AC=5252 LINK=1
3236 7332 CLA CLL CML RTR /TEST COMBINATION
3237 7006 RTL
3240 7430 S2L
3241 7440 S2A
3242 7402 HLT /CLA CLL CML RTR FAILED, AC SHOULD
/BE 0000, LINK SHOULD BE A ONE

/GROUP 1 OPERATE TEST 72

3243 7300 CLL CLA
3244 1053 TAD K2525 /AC=2525 LINK=0
3245 7326 CLA CLL CML RTL /TEST COMBINATION
3246 7012 RTR
3247 7430 S2L
3250 7440 S2A
3251 7402 HLT . . /CLA CLL CML RTL FAILED, AC SHOULD
/BE 0000, LINK SHOULD BE A ZERO

/GROUP 1 OPERATE TEST 73

3252 7320 CLL CLA CML
3253 1052 TAD K5252 /AC=5252 LINK=1
3254 7326 CLA CLL CML RTL /TEST COMBINATION
3255 7012 RTR
3256 7430 S2L
3257 7440 S2A
3260 7402 HLT /CLA CLL CML RTL FAILED, AC SHOULD
/BE 0000, LINK SHOULD BE A ONE

/GROUP 1 OPERATE TEST 74

3261 7300 CLA CLL
3262 1051 TAD K7777 /TEST PATTERN
3263 7041 CIA /AC EQUALS 0001
3264 1035 TAD K7776
3265 7040 CMA
3266 7420 SNL
3267 7440 S2A /CIA FAILED AC SHOULD EQUAL 0000
3270 7402 HLT /LINK SHOULD EQUAL A ZERO

/GROUP 1 OPERATE TEST 75

3271 7300 CLA CLL
3272 1035 TAD K7776 /TEST PATTERN
3273 7041 CIA /AC EQUALS 0002
3274 1036 TAD K7775
3275 7040 CMA
3276 7420 SNL
3277 7440 S2A /CIA FAILED AC SHOULD EQUAL 0000
3300 7402 HLT /LINK SHOULD EQUAL A ZERO

/GROUP 1 OPERATE TEST 76

3301	7300	CLA CLL
3302	1063	TAD K7774 /TEST PATTERN
3303	7041	CIA /AC EQUALS 0004
3304	1037	TAD K7773
3305	7040	CMA
3306	7420	SNL
3307	7440	SZA /CIA FAILED AC SHOULD EQUAL 0000
3310	7402	HLT /LINK SHOULD EQUAL ZERO

/GROUP 1 OPERATE TEST 77

3311	7300	CLA CLL
3312	1062	TAD K7770 /TEST PATTERN
3313	7041	CIA /AC EQUALS 0010
3314	1040	TAD K7767
3315	7040	CMA
3316	7420	SNL
3317	7440	SZA
3320	7402	HLT /CIA FAILED AC SHOULD EQUAL 0000

/GROUP 1 OPERATE TEST 78

3321	7300	CLA CLL
3322	1061	TAD K7760 /TEST PATTERN
3323	7041	CIA /AC EQUALS 0020
3324	1041	TAD K7757
3325	7040	CMA
3326	7420	SNL
3327	7440	SZA
3330	7402	HLT /CIA FAILED AC SHOULD EQUAL 0000 /LINK SHOULD EQUAL ZERO

/GROUP 1 OPERATE TEST 79

3331	7300	CLA CLL
3332	1060	TAD K7740 /TEST PATTERN
3333	7041	CIA
3334	1042	TAD K7737 /AC EQUALS 0040
3335	7040	CMA
3336	7420	SNL
3337	7440	SZA
3340	7402	HLT /CIA FAILED AC SHOULD EQUAL 0000 /LINK SHOULD EQUAL ZERO

/GROUP 1 OPERATE TEST 80

3341	7300	CLA CLL	
3342	1076	TAD K7700	/TEST PATTERN
3343	7041	CIA	/AC EQUALS 0100
3344	1043	TAD K7677	
3345	7040	CMA	
3346	7420	SNL	
3347	7440	SZA	
3350	7402	HLT	/CIA FAILED A SHOULD EQUAL 0000 /LINK SHOULD EQUAL ZERO

/GROUP 1 OPERATE TEST 81

3351	7300	CLA CLL	
3352	1057	TAD K7600	/TEST PATTERN
3353	7041	CIA	/AC EQUALS 0200
3354	1044	TAD K7577	
3355	7040	CMA	
3356	7420	SNL	
3357	7440	SZA	
3360	7402	HLT	/CIA FAILED AC SHOULD EQUAL 0000 /LINK SHOULD EQUAL ZERO

/GROUP 1 OPERATE TEST 82

3361	7300	CLA CLL	
3362	1056	TAD K7400	/TEST PATTERN
3363	7041	CIA	/AC EQUALS 0400
3364	1045	TAD K7377	
3365	7040	CMA	
3366	7420	SNL	
3367	7440	SZA	
3370	7402	HLT	/CIA FAILED AC SHOULD EQUAL 0000 /LINK SHOULD EQUAL ZERO

3371 7000 NOP
3372 7000 NOP
3373 7000 NOP
3374 7000 NOP
3375 7000 NOP
3376 7000 NOP
3377 7000 NOP
3400 *3403

/GROUP 1 OPERATE TEST 83

3400 7300 CLA CLL
3401 1055 TAD K7000 /TEST PATTERN
3402 7041 CIA /AC EQUALS 1000
3403 1046 TAD K6777
3404 7040 CMA
3405 7420 SNL
3406 7440 SZA
3407 7402 HLT /CIA FAILED AC SHOULD EQUAL 0000
/LINK SHOULD EQUAL ZERO

/GROUP 1 OPERATE TEST 84

3410 7300 CLA CLL
3411 1054 TAD K6000 /TEST PATTERN
3412 7041 CIA /AC EQUALS 2000
3413 1047 TAD K5777
3414 7040 CMA
3415 7420 SNL
3416 7440 SZA
3417 7402 HLT /CIA FAILED AC SHOULD EQUAL 0000
/LINK SHOULD EQUAL ZERO

/GROUP 1 OPERATE TEST 85

3420 7300 CLA CLL
3421 1034 TAD K4000 /TEST PATTERN
3422 7041 CIA /AC EQUALS 4000
3423 1050 TAD K3777
3424 7040 CMA
3425 7420 SNL
3426 7440 SZA
3427 7402 HLT /CIA FAILED AC SHOULD EQUAL 0000
/LINK SHOULD EQUAL ZERO

/GROUP 1 OPERATE TEST 86

3430 7300 CLA CLL
3431 1020 TAD K0000 /TEST PATTERN
3432 7041 CIA /AC EQUALS 0000, LINK EQUALS A ONE
3433 7450 SNA
3434 7420 SNL
3435 7402 HLT /CIA FAILED AC SHOULD EQUAL 0000
/LINK SHOULD EQUAL A ONE

/GROUP OPERATE TEST 87

3436 7340 CLA CMA CLL /AC=7777,L=0
3437 7311 CLA CLL IAC RAR /AC=0,L=1
3440 7430 S2L
3441 7440 SZA
3442 7402 HLT /ERROR: LINC NOT SET OR
/AC NOT 0

/GROUP 1 OPERATE TEST 88

3443 7360 CLA CMA CLL CML /AC=7777,L=1
3444 7305 CLA CLL IAC RAL /AC=2,L=0
3445 7430 S2L
3446 7402 HLT /ERROR: LINC NOT 0
3447 7041 CMA IAC
3450 1022 TAD K0002
3451 7440 SZA
3452 7402 HLT /ERROR AC NOTE2

/GROUP 1 OPERATE TEST 89

3453 7520 CLA CLL CML /AC=0,L=1
3454 7313 CLA CLL IAC RTR /AC=4000,L=0
3455 7430 S2L
3456 7402 HLT /ERROR: LINC NOT 0
3457 7500 SMA
3460 7402 HLT /ERROR: AC NOT 4000

/GROUP 1 OPERATE TEST 90

3461 7360 CLA CMA CLL CML /AC=7777,L=1
3462 7307 CLA CLL IAC RTL /AC=4,LINC=0
3463 7430 S2L
3464 7402 HLT /ERROR: LINC NOT 0
3465 7041 CMA IAC
3466 1023 TAD K0004
3467 7440 SZA
3470 7402 HLT /ERROR: AC NOT 4

/GROUP 1 OPERATE TEST 91

3471 7300 CLA CLL /AC=0, L=0
3472 7331 CLA CLL CML IAC RAR /AC=4000, L=1
3473 7520 SMA SNL
3474 7402 HLT /ERROR: AC NOT 4000 OR
/LINC NOT 1

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/GROUP 1 OPERATE TEST 92

3475	7300	CLA CLL	/AC=0,L=2
3476	7345	CLA CMA CLL IAC RAL	/AC=0001,L=0
3477	7430	SZL	
3500	7402	HLT	/LINC NOT=0
3501	7041	CMA IAC	
3502	1021	TAD K0001	
3523	7440	SZA	
3504	7402	HLT	/AC NOT 0001

/GROUP 1 OPERATE TEST 93

3505	7360	CLA CMA CLL CML	/AC=7777,L=1
3526	7373	CLA CMA CLL CML IAC RTR	/AC=0,L=0
3527	7440	SZA	
3510	7402	HLT	/ERROR!
3511	7430	SZL	
3512	7402	HLT	/ERROR!

/GROUP 2 OPERATE TEST 1

3513 7240 CLA CMA /AC=7777
3514 7720 CLA SMA /TEST COMBINATION
3515 7402 HLT /CLA SMA DID NOT SKIP
/AC SHOULD BE 0000
3516 7442 SZA
3517 7402 HLT /CLA SMA DID NOT CLEAR AC
/AC SHOULD BE 0000

/GROUP 2 OPERATE TEST 2

3520 7240 CLA CMA /AC=7777
3521 7640 CLA SZA /TEST COMBINATION
3522 7440 SZA
3523 7402 HLT /CLA SZA SKIPPED OR AC NOT
/CLEARED TO 0000

/GROUP 2 OPERATE TEST 3

3524 7240 CLA CMA /AC=7777
3525 7540 SMA SZA /TEST COMBINATION
3526 7402 HLT /SMA SZA SHOULD HAVE SKIPPED
/AC SHOULD EQUAL 7777

/GROUP 2 OPERATE TEST 4

3527 7200 CLA /AC=0000
3530 7540 SMA SZA /TEST COMBINATION
3531 7402 HLT /SMA SZA SHOULD HAVE SKIPPED
/AC SHOULD EQUAL 0000

/GROUP 2 OPERATE TEST 5

3532 7200 CLA
3533 1050 TAD K3777 /AC=3777
3534 7540 SMA SZA /TEST COMBINATION
3535 7450 SNA
3536 7402 HLT /SMA SZA SHOULD NOT HAVE SKIPPED
/AC SHOULD EQUAL 3777

/GROUP 2 OPERATE TEST 6

3537	7240	CLA CMA	/AC=7777
3542	7740	CLA SMA SZA	/TEST COMBINATION
3541	7402	HLT	/CLA SMA SZA SHOULD HAVE SKIPPED /AC SHOULD BE 0000
3542	7440	SZA	
3543	7402	HLT	/AC WAS NOT CLEARED /AC SHOULD BE 0000

/GROUP 2 OPERATE TEST 7

3544	7200	CLA	/AC=0000
3545	7740	CLA SMA SZA	/TEST COMBINATION
3546	7402	HLT	/CLA SMA SZA SHOULD HAVE SKIPPED /AC SHOULD BE 0000
3547	7440	SZA	
3550	7402	HLT	/AC WAS NOT CLEARED /AC SHOULD BE 0000

/GROUP 2 OPERATE TEST 8

3551	7200	CLA	
3552	1050	TAD K3777	/AC=3777
3553	7740	CLA SMA SZA	/TEST COMBINATION
3554	7440	SZA	
3555	7402	HLT	/SMA SZA DID NOT SKIP OR AC /NOT CLEARED TO 0000

/GROUP 2 OPERATE TEST 9

3556	7300	CLL CLA	/LINK=0
3557	1052	TAD K5252	/AC=5252
3560	7620	CLA SNL	/TEST COMBINATION
3561	7440	SZA	
3562	7402	HLT	/SNL SKIPPED OR AC NOT CLEARED /AC AND LINK SHOULD EQUAL ZERO

/GROUP 2 OPERATE TEST 10

3563	7320	CLA CLL CML	
3564	1053	TAD K2525	/AC=2525 LINK=1
3565	7620	CLA SNL	/TEST COMBINATION
3566	7402	HLT	/SNL DID NOT SKIP
			/LINK SHOULD EQUAL ONE
3567	7440	SZA	
3570	7402	HLT	/CLA SNL DID NOT CLEAR AC
			/AC SHOULD EQUAL 0000

/GROUP 2 OPERATE TEST 11

3571	7300	CLA CLL	/AC=0000 LINK=0
3572	7520	SMA SNL	/TEST COMBINATION
3573	7440	SZA	
3574	7402	HLT	/SMA SNL SKIPPED, AC AND LINK
			/SHOULD EQUAL ZERO

/GROUP 2 OPERATE TEST 12

3575	7320	CLA CLL CML	/AC=0000 LINK=1
3576	7520	SMA SNL	/TEST COMBINATION
3577	7402	HLT	/SNL SHOULD HAVE SKIPPED, LINK = 1

/GROUP 2 OPERATE TEST 13

3600	7300	CLA CLL	
3601	1034	TAD K4000	/AC=4000 LINK=0
3602	7520	SMA SNL	/TEST COMBINATION
3603	7402	HLT	/SMA SHOULD HAVE SKIPPED
			/AC=4000

/GROUP 2 OPERATE TEST 14

3604	7320	CLA CLL CML	
3605	1034	TAD K4000	/AC=4000 LINK=1
3606	7520	SMA SNL	/TEST COMBINATION
3607	7402	HLT	/SMA SNL SHOULD HAVE SKIPPED
			/AC=4000 LINK=1

/GROUP 2 OPERATE TEST 15
3610 7300 CLA CLL /AC=0000 LINK=0
3611 7720 CLA SMA SNL /TEST COMBINATION
3612 7440 SZA
3613 7402 HLT /SMA SNL SKIPPED, AC AND LINK
/SHOULD BE ZERO
/GROUP 2 OPERATE TEST 16
3614 7320 CLA CLL CML /AC=0000 LINK=1
3615 7720 CLA SMA SNL /TEST COMBINATION
3616 7402 HLT /SMA SNL SHOULD HAVE SKIPPED
/LINK=1
3617 7440 SZA
3620 7402 HLT /CLA SMA SNL DID NOT CLEAR AC
/AC SHOULD EQUAL ZERO
/GROUP 2 OPERATE TEST 17
3621 7500 CLA CLL
3622 1034 TAD K4000 /AC=4000 LINK=0
3623 7720 CLA SMA SNL /TEST COMBINATION
3624 7402 HLT /SMA SHOULD HAVE SKIPPED
/AC SHOULD EQUAL 0000 LINK=0
3625 7440 SZA
3626 7402 HLT /CLA SMA SNL DID NOT CLEAR AC
/AC SHOULD EQUAL 0000
/GROUP 2 OPERATE TEST 18
3627 7320 CLA CLL CML /AC=4000 LINK=1
3630 1034 TAD K4000 /AC=4000 LINK=1
3631 7720 CLA SMA SNL /TEST COMBINATION
3632 7402 HLT /CLA SMA SNL SHOULD HAVE SKIPPED
/AC SHOULD BE 0000 LINK=1
3633 7440 SZA
3634 7402 HLT /CLA SMA SNL DID NOT CLEAR AC
/AC SHOULD BE 0000 LINK=1
/GROUP 2 OPERATE TEST 19
3635 7500 CLA CLL /AC=0000 LINK=0
3636 7460 SZA SNL /TEST COMBINATION
3637 7402 HLT /SZA SNL DID NOT SKIP
/AC=0000
/GROUP 2 OPERATE TEST 20
3640 7320 CLL CLA CML /AC=0000 LINK=1
3641 7460 SZA SNL /TEST COMBINATION
3642 7402 HLT /SZA SNL DID NOT SKIP
/AC=0000 LINK=1

/GROUP 2 OPERATE TEST 21

3643 7320 CLA CLL
3644 1231 TAD K0400 /AC=0400 LINK=0
3645 7460 SZA SNL /TEST COMBINATION
3646 7450 SNA
3647 7402 HLT /SZA SNL SKIPPED
/AC=0400 LINK=0

/GROUP 2 OPERATE TEST 22

3650 7320 CLA CLL CML
3651 1026 TAD K0040 /AC=0040 LINK=1
3652 7460 SZA SNL /TEST COMBINATION
3653 7402 HLT /SZA SNL SHOULD HAVE SKIPPED
/LINK=1

/GROUP 2 OPERATE TEST 23

3654 7300 CLA CLL /AC=0000 LINK=0
3655 7660 CLA SZA SNL /TEST COMBINATION
3656 7402 HLT /CLA SZA SNL SHOULD HAVE SKIPPED
/AC AND LINK SHOULD EQUAL ZERO
3657 7440 SZA
3660 7402 HLT /CLA SZA SNL DID NOT CLEAR AC
/AC SHOULD BE 0000

/GROUP 2 OPERATE TEST 24

3661 7320 CLA CLL CML /AC=0000 LINK=1
3662 7660 CLA SZA SNL /TEST COMBINATION
3663 7402 HLT /CLA SZA SNL SHOULD HAVE SKIPPED
/AC=0000 LINK=1
3664 7440 SZA
3665 7402 HLT /CLA SZA SNL DID NOT CLEAR AC
/AC SHOULD EQUAL 0000

/GROUP 2 OPERATE TEST 25

3666 7320 CLA CLL CML
3667 1030 TAD K0200 /AC=0200 LINK=1
3670 7660 CLA SZA SNL /TEST COMBINATION OR
3671 7402 HLT /CLA SZA SNL SHOULD HAVE SKIPPED
/LINK=1
3672 7440 SZA
3673 7402 HLT /CLA SZA SNL DID NOT CLEAR AC
/AC SHOULD EQUAL 0000

/GROUP 2 OPERATE TEST 26

3674 7300 CLA CLL
3675 1033 TAD K2000 /AC=2000 LINK=0
3676 7660 CLA SZA SNL /TEST COMBINATION
3677 7440 SZA
3700 7402 HLT /CLA SZA SNL FAILED, AC AND
/LINK SHOULD EQUAL ZERO

/GROUP 2 OPERATE TEST 27

3701 7300 CLA CLL /AC=0000 LINK=0
3702 7560 SMA SZA SNL /TEST COMBINATION
3703 7402 HLT /SMA SZA SNL SHOULD HAVE SKIPPED
/AC=0000 LINK=0

/GROUP 2 OPERATE TEST 28

3704 7320 CLA CLL CML
3705 1050 TAD K3777 /AC=3777 LINK=1
3706 7560 SMA SZA SNL /TEST COMBINATION
3707 7402 HLT /SMA SZA SNL SHOULD HAVE SKIPPED
/AC=3777 LINK=1

/GROUP 2 OPERATE TEST 29

3710 7300 CLA CLL
3711 1034 TAD K4000 /AC=4000 LINK=0
3712 7560 SMA SZA SNL /TEST COMBINATION
3713 7402 HLT /SMA SZA SNL SHOULD HAVE SKIPPED
/AC=4000 LINK=0

/GROUP 2 OPERATE TEST 30

3714 7300 CLA CLL
3715 1050 TAD K3777 /AC=3777 LINK=0
3716 7560 SMA SZA SNL /TEST COMBINATION
3717 7450 SNA
3720 7402 HLT /SMA SZA SNL SHOULD NOT HAVE
/SKIPPED, AC=3777 LINK=0

/GROUP 2 OPERATE TEST 31

3721 7300 CLA CLL /AC=0000 LINK=0
3722 7760 CLA SMA SZA SNL /TEST COMBINATION
3723 7402 HLT /CLA SMA SZA SNL SHOULD HAVE SKIPPED
/AC SHOULD EQUAL 0000
3724 7440 SZA
3725 7402 HLT /AC NOT ZERO AFTER CLA SMA SZA SNL
/AC SHOULD BE 0000 LINK=0

/GROUP 2 OPERATE TEST 32

3726 7320 CLA CLL CML
3727 1050 TAD K3777 /AC=3777 LINK=1
3730 7760 CLA SMA SZA SNL /TEST COMBINATION
3731 7402 HLT /CLA SMA SZA SNL DID NOT SKIP
/AC SHOULD BE 0000 LINK=1
3732 7440 SZA
3733 7402 HLT /CLA SMA SZA SNL DID NOT CLEAR AC
/AC SHOULD EQUAL 0000 LINK=1

/GROUP 2 OPERATE TEST 33

3734 7300 CLA CLL
3735 1034 TAD K4000 /AC=4000 LINK=0
3736 7760 CLA SMA SZA SNL /TEST COMBINATION
3737 7402 HLT /CLA SMA SZA SNL SHOULD HAVE SKIPPED
/AC SHOULD BE 0000, LINK=0
3740 7440 SZA
3741 7402 HLT /CLA SMA SZA SNL DID NOT CLEAR AC
/AC SHOULD EQUAL 0000

/GROUP 2 OPERATE TEST 34

3742 7300 CLA CLL
3743 1050 TAD K3777 /AC=3777 LINK=0
3744 7760 CLA SMA SZA SNL /TEST COMBINATION
3745 7440 SZA
3746 7402 HLT /CLA SMA SZA SNL FAILED, AC
/SHOULD BE ZERO, LINK=0

/GROUP 2 OPERATE TEST 35

3747 7300 CLA CLL /AC=0000 LINK=0
3750 7410 SKP /TEST INSTRUCTION
3751 7402 HLT /SKIP FAILED
/AC AND LINK EQUAL ZERO

/GROUP 2 OPERATE TEST 36

3752 7320 CLA CLL CML /AC=2000 LINK=1
3753 7410 SKP /TEST INSTRUCTION
3754 7402 HLT /SKIP FAILED
/AC=0000 LINK=1

/GROUP 2 OPERATE TEST 37

3755 7320 CLA CLL CML
3756 1050 TAD K~~9~~777 /AC=3777 LINK=1
3757 7410 SKP /TEST INSTRUCTION
3760 7402 HLT /SKIP FAILED
/AC=3777 LINK=1

/GROUP 2 OPERATE TEST 38

3761 7300 CLA CLL
3762 1050 TAD K~~9~~777 /AC=3777 LINK=0
3763 7410 SKP /TEST INSTRUCTION
3764 7402 HLT /SKIP FAILED
/AC=3777 LINK=0

/GROUP 2 OPERATE TEST 39

3765 7200 CLA
3766 1050 TAD K~~9~~777 /AC=3777
3767 7710 CLA SPA /TEST COMBINATION
3770 7402 HLT /CLA SPA DID NOT SKIP, AC
/SHOULD BE ZERO
3771 7440 SZA
3772 7402 HLT /CLA SPA DID NOT CLEAR AC
/AC SHOULD EQUAL ZERO

/GROUP 2 OPERATE TEST 40

3773 7200 CLA
3774 1054 TAD K4000 /AC=4000
3775 7710 CLA SPA /TEST COMBINATION
3776 7440 SZA
3777 7402 HLT /CLA SPA FAILED, AC SHOULD
/EQUAL 0000

4000 *4000

/GROUP 2 OPERATE TEST 41

4000 7240 CLA CMA /AC=7777
4001 7650 CLA SNA /TEST COMBINATION
4002 7402 HLT /CLA SNA DID NOT SKIP
/AC SHOULD BE 0000

/GROUP 2 OPERATE TEST 42

4003 7200 CLA
4004 7650 CLA SNA /TEST COMBINATION
4005 7440 SZA
4006 7402 HLT /CLA SNA FAILED
/AC SHOULD EQUAL 0000

/INSTRUCTION TEST - 1

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/GROUP 2 OPERATE TEST 43

4237	7200	CLA	/AC=0000
4244	7550	SPA SNA	/TEST COMBINATION (AND)
4211	7440	SZA	
4212	7402	HLT	/SPA SNA SKIPPED /AC=0000

/GROUP 2 OPERATE TEST 44

4213	7200	CLA	
4214	1050	TAD K3777	/AC=3777
4215	7550	SPA SNA	/TEST COMBINATION (AND)
4216	7402	HLT	/SPA SNA FAILED TO SKIP /AC=3777

/GROUP 2 OPERATE TEST 45

4217	7200	CLA	
4020	1034	TAD K4000	/AC=4000
4221	7550	SPA SNA	/TEST COMBINATION (AND)
4222	7450	SNA	
4023	7402	HLT	/SPA SNA SKIPPED /AC=4000

/GROUP 2 OPERATE TEST 46

4024	7200	CLA	/AC=0000
4225	7750	CLA SPA SNA	/TEST COMBINATION (AND)
4226	7440	SZA	
4227	7402	HLT	/CLA SPA SNA FAILED, /AC SHOULD BE 0000

/GROUP 2 OPERATE TEST 47

4030	7200	CLA	
4031	1050	TAD K3777	/AC=3777
4032	7750	CLA SPA SNA	/TEST COMBINATION (AND)
4233	7402	HLT	/CLA SPA SNA DID NOT SKIP /AC SHOULD BE 0000
4234	7440	SZA	
4035	7402	HLT	/CLA SPA SNA DID NOT CLEAR THE AC /AC SHOULD EQUAL 0000

/GROUP 2 OPERATE TEST 48

4036	7200	CLA	
4037	1034	TAD K4000	/AC=4000
4040	7750	CLA SPA SNA	/TEST COMBINATION (AND)
4241	7440	SZA	
4042	7402	HLT	/CLA SPA SNA FAILED /AC SHOULD EQUAL ZERO

PAUSE

/INSTRUCTION TEST - TAPE 4

/GROUP 2 OPERATE TEST 49

4243 7322 CLA CLL
4244 1252 TAD K5252 /AC=5252 LINK=2
4245 7630 CLA SEL /TEST COMBINATION
4246 7442 HLT /CLA SEL DID NOT SKIP
/AC AND LINK SHOULD BE 7
4247 7440 SZA
4250 7422 HLT /CLA SEL DID NOT CLEAR AC
/AC SHOULD BE ZERO, LINK=0

/GROUP 2 OPERATE TEST 50

4251 7362 CLA CLL CML CMA /AC=7777 LINK=1
4252 7530 CLA SEL /TEST COMBINATION (AND)
4253 7440 SZA
4254 7422 HLT /CLA SEL FAILED, AC SHOULD
/BE 0000, LINK=1

/GROUP 2 OPERATE TEST 51

4255 7320 CLA CLL
4256 1250 TAD K3777 /AC=3777 LINK=2
4257 7230 SPA SEL /TEST COMBINATION (AND)
4258 7422 HLT /SPA SEL DID NOT SKIP
/AC=3777 LINK=0

/GROUP 2 OPERATE TEST 52

4261 7322 CLA CLL CML
4262 1252 TAD K3777 /AC=3777 LINK=1
4263 7230 SPA SEL /TEST COMBINATION (AND)
4264 7450 SNA
4265 7422 HLT /SPA SEL SKIPPED
/AC=3777 LINK=1

/GROUP 2 OPERATE TEST 53

4266 7320 CLA CLL
4267 1254 TAD K4600 /AC=4600 LINK=0
4268 7230 SPA SEL /TEST COMBINATION (AND)
4270 7520 SMA
4272 7422 HLT /SPA SEL SKIPPED
/AC=4600 LINK=0

/GROUP 2 OPERATE TEST 54

4273 7320 CLA CLL
4274 1250 TAD K3777 /AC=3777 LINK=0
4275 7230 CLA SPA SEL /TEST COMBINATION (AND)
4276 7422 HLT /CLA SPA SEL SHOULD HAVE SKIPPED
/AC SHOULD BE 0000, LINK=0
4277 7440 SZA
4278 7422 HLT /CLA SPA SEL DID NOT CLEAR THE AC
/AC SHOULD BE 0000

/GROUP 2 OPERATE TEST 55

4101 7320 CLA CLL CML
4102 1050 TAD K3777 /AC=3777 LINK=1
4103 7730 CLA SPA SZL /TEST COMBINATION (AND)
4104 7440 SZA
4105 7402 HLT /CLA SPA SZL FAILED
/AC SHOULD EQUAL 0000 LINK=1

/GROUP 2 OPERATE TEST 56

4106 7300 CLA CLL
4107 1034 TAD K4000 /AC=4000 LINK=0
4110 7730 CLA SPA SZL /TEST COMBINATION (AND)
4111 7440 SZA
4112 7402 HLT /CLA SPA SZL FAILED
/AC SHOULD EQUAL 0000 LINK=0

/GROUP 2 OPERATE TEST 57

4113 7300 CLA CLL
4114 1034 TAD K4000 /AC=4000 LINK=0
4115 7470 SNA SZL /TEST COMBINATION (AND)
4116 7402 HLT /SNA SZL DID NOT SKIP
/AC = 4000 LINK=0

/GROUP 2 OPERATE TEST 58

4117 7320 CLA CLL CML
4120 1034 TAD K4000 /AC=4000 LINK=1
4121 7470 SNA SZL /TEST COMBINATION (AND)
4122 7420 SNL
4123 7402 HLT /SNA SZL SKIPPED
/AC=4000 LINK=1

/GROUP 2 OPERATE TEST 59

4124 7300 CLA CLL /AC=0000 LINK=0
4125 7470 SNA SZL /TEST COMBINATION (AND)
4126 7430 SZL
4127 7402 HLT /SNA SZL SKIPPED
/AC=0000 LINK=0

/GROUP 2 OPERATE TEST 60

4130 7320 CLA CLL CML
4131 1034 TAD K4000 /AC=4000 LINK=1
4132 7670 CLA SNA SZL /TEST COMBINATION (AND)
4133 7440 SZA
4134 7402 HLT /CLA SNA SZL FAILED, AC SHOULD
/BE 0000, LINK=1

/GROUP 2 OPERATE TEST 61

4135	7300	CLA CLL	
4136	1034	TAD K4000	/AC=4000 LINK=0
4137	7670	CLA SNA SZL	/TEST COMBINATION (AND)
4140	7402	HLT	/CLA SNA SZL DID NOT SKIP
			/AC SHOULD BE 0000, LINK=0
4141	7440	SZA	
4142	7402	HLT	/CLA SNA SZL DID NOT CLEAR AC
			/AC AND LINK SHOULD BE ZERO

/GROUP 2 OPERATE TEST 62

4143	7300	CLA CLL	/AC=0000 LINK=0
4144	7670	CLA SNA SZL	/TEST COMBINATION (AND)
4145	7440	SZA	
4146	7402	HLT	/CLA SNA SZL FAILED, AC SHOULD
			/BE 0000, LINK=0

/GROUP 2 OPERATE TEST 63

4147	7300	CLA CLL	
4150	1050	TAD K3777	/AC=3777 LINK=0
4151	7570	SPA SNA SZL	/TEST COMBINATION (AND)
4152	7402	HLT	/SPA SNA SZL DID NOT SKIP
			/AC=3777 LINK=0

/GROUP 2 OPERATE TEST 64

4153	7320	CLA CLL CML	
4154	1050	TAD K3777	/AC=3777 LINK=1
4155	7570	SPA SNA SZL	/TEST COMBINATION (AND)
4156	7420	SNL	
4157	7402	HLT	/SPA SNA SZL SKIPPED
			/AC=3777 LINK=1

/GROUP 2 OPERATE TEST 65

4160	7300	CLA CLL	/AC=0000 LINK=0
4161	7570	SPA SNA SZL	/TEST COMBINATION (AND)
4162	7430	SZL	
4163	7402	HLT	/SPA SNA SZL SKIPPED
			/AC=0000 LINK=0

/GROUP 2 OPERATE TEST 66

4164	7300	CLA CLL	
4165	1034	TAD K4000	/AC=4000 LINK=0
4166	7570	SPA SNA SZL	/TEST COMBINATION (AND)
4167	7430	SZL	
4170	7402	HLT	/SPA SNA SZL SKIPPED
			/AC=4000 LINK=0

/GROUP 2 OPERATE TEST 67

4171	7300	CLA CLL	
4172	1050	TAD K3777	/AC=3777 LINK=0
4173	7770	CLA SPA SNA SZL	/TEST COMBINATION (AND)
4174	7402	HLT	/CLA SPA SNA SZL DID NOT SKIP /AC AND LINK SHOULD BE ZERO
4175	7440	SZA	
4176	7402	HLT	/CLA SPA SNA SZL DID NOT CLEAR AC /AC AND LINK SHOULD BE ZERO
4177	7000	NOP	
	4200	#4200	

/GROUP 2 OPERATE TEST 68

4200	7320	CLA CLL CML	
4201	1050	TAD K3777	/AC=3777 LINK=1
4202	7770	CLA SPA SNA SZL	/TEST COMBINATION (AND)
4203	7440	SZA	
4204	7402	HLT	/CLA SPA SNA SZL FAILED, AC SHOULD /BE 0000, LINK SHOULD EQUAL ONE

/GROUP 2 OPERATE TEST 69

4205	7300	CLA CLL	
4206	1034	TAD K4000	/AC=4000 LINK=0
4207	7770	CLA SPA SNA SZL	/TEST COMBINATION (AND)
4210	7440	SZA	
4211	7402	HLT	/CLA SPA SNA SZL FAILED, AC SHOULD /BE 0000, LINK SHOULD EQUAL ZERO

/GROUP 2 OPERATE TEST 70

4212	7300	CLA CLL	/AC=0000 LINK=0
4213	7770	CLA SPA SNA SZL	/TEST COMBINATION (AND)
4214	7440	SZA	
4215	7402	HLT	/CLA SPA SNA SZL FAILED, AC AND /LINK SHOULD BE ZERO,

/GROUP 2 OPERATE TEST 71

4216	7200	CLA	
4217	1052	TAD K5252	/AC=5252
4220	7604	CLA OSR	/TEST COMBINATION
4221	7040	CMA	
4222	7440	SZA	
4223	7402	HLT	/CLA OSR FAILED /AC SHOULD BE 0000

/GROUP 2 OPERATE TEST 72

4224 7200 CLA
4225 1034 TAD K4000 /AC=4000
4226 7204 SMA OSR /TEST COMBINATION
4227 7402 HLT /SMA OSR FAILED TO SKIP
/AC SHOULD BE 7777
4230 7040 CMA
4231 7440 SZA
4232 7402 HLT /SMA OSR FAILED
/AC SHOULD BE 0000

/GROUP 2 OPERATE TEST 73

4233 7200 CLA /AC=0000
4234 7444 SZA OSR /TEST COMBINATION
4235 7402 HLT /SZA OSR FAILED TO SKIP
/AC SHOULD BE 0000
4236 7040 CMA
4237 7440 SZA
4240 7402 HLT /SZA OSR FAILED,
/AC SHOULD BE 0000

/GROUP 2 OPERATE TEST 74

4241 7320 CLL CML CLA /LINK=1
4242 7424 SNL OSR /TEST COMBINATION
4243 7402 HLT /SNL OSR FAILED TO SKIP
/AC SHOULD BE 7777
4244 7240 CMA
4245 7440 SZA
4246 7402 HLT /SNL OSR FAILED,
/AC SHOULD BE 0000

/GROUP 2 OPERATE TEST 75

4247 7300 CLA CLL
4250 1050 TAD K3777 /AC=3777 LINK=0
4251 7764 CLA SMA SZA SNL OSR /TEST COMBINATION
4252 7450 SVA
4253 7402 HLT /CLA SMA SZA SNL OSR FAILED,
/AC SHOULD BE 7777, LINK=0
4254 7040 CMA
4255 7440 SZA
4256 7402 HLT /CLA SMA SZA SNL OSR FAILED
/AC SHOULD EQUAL ZERO

/GROUP 2 OPERATE TEST 76

4257 7200 CLA /AC=0000
4260 7414 SKP OSR /TEST COMBINATION
4261 7402 HLT /SKP OSR DID NOT SKIP
/AC SHOULD BE 7777
4262 7240 CMA
4263 7440 SZA
4264 7402 HLT /SKP OSR FAILED
/AC SHOULD EQUAL ZERO

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/GROUP 2 OPERATE TEST 77

4265	7200	CLA	/AC=0000
4266	7514	SPA OSR	/TEST COMBINATION
4267	7402	HLT	/SPA OSR DID NOT SKIP /AC SHOULD EQUAL 7777
4270	7040	CMA	
4271	7440	SZA	
4272	7402	HLT	/SPA OSR FAILED, /AC SHOULD BE 0000

/GROUP 2 OPERATE TEST 78

4273	7200	CLA	
4274	1031	TAD K0400	/AC=0400
4275	7454	SNA OSR	/TEST COMBINATION
4276	7402	HLT	/SNA OSR DID NOT SKIP /AC SHOULD BE 7777
4277	7040	CMA	
4300	7440	SZA	
4301	7402	HLT	/SNA OSR FAILED /AC SHOULD BE 0000

/GROUP 2 OPERATE TEST 79

4302	7300	CLA CLL	/LINK=0 AC=0000
4303	7434	SZL OSR	/TEST COMBINATION
4304	7402	HLT	/SZL OSR DID NOT SKIP /AC SHOULD BE 7777
4305	7040	CMA	
4306	7440	SZA	
4307	7402	HLT	/SZL OSR FAILED /AC SHOULD BE 0000

/GROUP 2 OPERATE TEST 80

4310	7300	CLA CLL	
4311	1050	TAD K3777	/AC=3777 LINK=0
4312	7774	CLA SPA SNA SZL OSR	/TEST COMBINATION (AND)
4313	7402	HLT	/ABOVE MESS DID NOT SKIP /AC SHOULD BE 7777
4314	7040	CMA	
4315	7440	SZA	
4316	7402	HLT	/CLA SPA SNA SZL OSR FAILED /AC SHOULD BE 0000

/AND TEST 1

4317	7200	CLA
4320	0051	AND K7777
4321	7440	SZA
4322	7402	HLT

/AND FAILED AC SHOULD
/BE 0000

/AND TEST 2

4323	7240	CLA CMA
4324	0020	AND K0000
4325	7440	SZA
4326	7402	HLT

/AND FAILED
/AC SHOULD EQUAL 0000

/AND TEST 3

4327	7320	CLA CLL CML
4330	1051	TAD K7777
4331	0051	AND K7777
4332	7040	CMA
4333	7430	SZL
4334	7440	SZA
4335	7402	HLT

/AC=7777 LINK=1

/AND FAILED, AC SHOULD BE
/0000, LINK SHOULD EQUAL ONE

/AND TEST 4

4336	7300	CLA CLL
4337	1053	TAD K2525
4340	0052	AND K5252
4341	7420	SNL
4342	7440	SZA
4343	7402	HLT

/AC=2525 LINK=2

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

/AND TEST 5

4344	7300	CLA CLL
4345	1052	TAD K5252
4346	0053	AND K2525
4347	7420	SNL
4350	7440	SZA
4351	7402	HLT

/AC=5252 LINK=0

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

/AND TEST 6

4352	7300	CLA CLL	
4353	1053	TAD K7776	/AC=7776 LINK=0
4354	0052	AND K5252	/TEST INSTRUCTION
4355	7041	CIA	/AC=2526
4356	1052	TAD K5252	/AC=0000 LINK=1
4357	7430	SZL	
4360	7440	SZA	
4361	7402	HLT	/AND FAILURE, AC SHOULD BE /0000, LINK SHOULD BE ONE

/AND TEST 7

4362	7300	CLA CLL	
4363	1053	TAD K5255	/AC=2525 LINK=0
4364	0053	AND K5255	/TEST INSTRUCTION
4365	7041	CIA	/AC=5253
4366	1053	TAD K2525	/AC=0000 LINK = 1
4367	7430	SZL	
4370	7440	SZA	
4371	7402	HLT	/AND FAILED, AC SHOULD BE /0000, LINK SHOULD BE ONE,
4372	7000	NOP	
4373	7000	NOP	
4374	7000	NOP	
4375	7000	NOP	
4376	7000	NOP	
4377	7000	NOP	
	4400	*4400	

/CHECK FOR BELL

4400	7200	CLA	
4401	1222	TAD BLCNT	
4402	7001	IAC	
4403	3220	DCA BLCNT	
4404	1220	TAD BLCNT	
4405	7640	SZA CLA	
4406	5147	JMP START+3	
4407	1221	TAD BLCON	
4410	3220	DCA BLCNT	

/RING BELL

4411	1217	TAD BEL	
4412	6046	TLS	
4413	6041	TSF	
4414	5213	JMP ,=1	
4415	6042	TCF	
4416	5147	JMP START+3	

4417	2227	BELL, 2227	
4420	7000	BLCNT, -2220	
4421	7000	BLCON, -2220	

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MAINDEC EVALUATION REQUEST

After sufficient familiarization with the operation and documentation of this MAINDEC, please indicate your assessment of the following areas and return this form to Digital Equipment Corporation.

IDENTIFICATION: MAINDEC NO. _____ Program Title _____

USAGE: Used by: Field Service Production Other _____

Frequency of Usage: Daily Weekly Monthly

SUGGESTIONS FOR IMPROVEMENT

1. Are the program loading and operating instructions: clear? , incomplete? , difficult to follow?

2. Do the error reports and program documentation provide sufficient diagnostic information: in all cases? , in most cases? , in very few cases? . Suggestions for improvement:

3. Is the program effective in isolating malfunctions: in all cases? , in most cases? , in very few cases? . Would additional Scope loops or Switch Register control be helpful? _____
Suggestions for improvement:

4. Does the program ever fail to detect malfunctions exposed by other software? _____
Were Margins used? _____ Please describe malfunction in detail:

5. Does the program ever report non-existent malfunctions? _____
Please indicate erroneous report and any pertinent operating conditions:

6. Does this MAINDEC ever expose malfunctions in the Central Processor or other peripheral units not detected by the appropriate MAINDEC? _____
Please describe malfunction and MAINDEC(S) used:

7. Does the document provide a general understanding of the functional programming requirements of the system? Good , Fair , None . Would a general description of programming requirements increase the effectiveness of this MAINDEC? _____

Remarks:

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