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IDENTIFICATION

PRODUCT CODE:	MAINDEC-8E-DØIA-D-(D)
PRODUCT NAME:	BASIC JMP-JMS TEST
DATE CREATED:	NOVEMBER 5, 1970
MAINTAINER:	DIAGNOSTICS GROUP
AUTHOR:	BRUCE HANSEN

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1. ABSTRACT

This is a diagnostic program for testing the JMP and JMS instructions of the PDP-8E.

2. REQUIREMENTS

2.1 Equipment

A PDP-8E equipped with Teletype.

2.2 Storage

This program uses most of memory. The Binary Loader must be stored in the last memory page.

2.3 Preliminary Programs

Maindec-8E-D00AA and Maindec-8E-D00BA

3. LOADING PROCEDURE

3.1 Method

The standard Binary Loader is used.

4. STARTING PROCEDURE

4.1 Control Switch Settings (none)

4.2 Starting Address

2000

4.3 Restart Addresses

600

704

4.4 Operator Action

- a. Set SR to 200 and press LOAD ADDRESS.
- b. Push clear and then continue. The program will store parts of the RIM and Binary Loaders that will be destroyed, and then JMP to 4200 to begin testing.

5. OPERATING PROCEDURES

5.1 Program Restarts

Since the loaders are already stored, a program restart should begin at 600 not 200.

5.2 Program End

To restore the loaders at the conclusion of the test, start at 704. When the program halts, restoration is completed (PC=736).

6. ERRORS

6.1 Error Halts and Description

See listing, section 10.

6.2 Error Recovery

In most cases it is possible to insert a JMP instruction in the error halt position to return the program to the failing test. This forms a program loop on the failing test and allows the problem to be investigated with an oscilloscope. In cases where a scope mode loop cannot be maintained due to the instability of the JMP or JMS instruction and its failing condition, it will probably be advantageous to simulate this same problem using the Random JMP Test, Maindec-8E-DØHA, or Random JMS Test, Maindec-8E-DØJA.

7. RESTRICTIONS (none)

8. MISCELLANEOUS

8.1 Execution Time

Three hundred and Forty-five program loops per second. A bell is sounded every 10 seconds, which equals 3456 program loops.

9. PROGRAM DESCRIPTION

The program is made up of 82 individual tests for JMP and JMS. An octal counter located at memory location 0136 always holds the number of the present test. For test 1 location, 0136 contains 0000 and for test 82, 0136 contains 0121. Each test performs the following functions:

- a. Check location 0136 for proper test number.
- b. Performs additional checking such as verification of the stored PC (program counter) on a JMS.
- c. Advances test counter.
- d. Sets up for next test.
- e. JMPs or JMSs to the next test. These JMP and JMS instructions are the ones being tested.

If the PC does not arrive at the proper place after performing steps above, it either falls into the background field of HLTS or into another area of the program. If the field of HLTS is encountered, the program halts immediately. If a program field is entered, it is most likely that the program will halt when the test counter check is made (location 136 equals the test count). In a few remote cases it is possible for the test counter to be advanced by one, following the erroneous JMP or JMS and before the halt. It is also possible for the program, on an error condition, to enter the loaders stored in the last memory page. All of these possibilities should be kept in mind when analyzing an error.

Test 0 through 19 are tests for same page jumping using direct addressing. Tests 20 through 45 test the JMP instruction with indirect addressing. In these cases the address that the program jumps to is always the complement of its present address. JMS Tests 1 through 12 are test for the same page using direct addressing. JMS Tests 13 through 35 test JMS in the same manner as JMP is tested in test 20 through 45.

The Teletype bell is sounded every 10 seconds (3456 program cycles).

0000	*0	0	JMP 1
0001		2	
0002		3	
0003		0	
0004		0	
0005		HLT	
0006		HLT	
0007		HLT	
0010		HLT	
0011		HLT	
0012		HLT	
0013		HLT	
0014		HLT	
0015		HLT	
0016		HLT	
0017		HLT	
0020		HLT	
0021		HLT	

0022	*22	0	
0023	K0.	1	
0024	K1,	2	
0025	K2,	4	
0026	K4,	10	
0027	K10,	20	
0030	K40,	40	
0031	K100,	100	
0032	K200,	200	
0033	K400,	400	
0034	K1000,	1000	
0035	K2000,	2000	
0036	K4000,	4000	
0037	K3777,	3777	
0042	*42	5777	
0043	K5777,	5777	
0044	K6777,	6777	
0045	K7377,	7377	
0046	K7577,	7577	
0047	K7677,	7677	
0050	K7737,	7737	
0051	K7757,	7757	
0052	K7767,	7767	
0053	K7773,	7773	
0054	K7775,	7775	
0055	K7776,	7776	
0056	K7777,	7777	
0057	K4620,	4620	
0060	K4640,	4640	
0061	K4660,	4660	
0062	K4700,	4700	
	K4720,	4720	

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0063	4740	K4740,	4740
0064	4760	K4760,	4760
0065	5000	K5000,	5000
0066	5020	K5020,	5020
0067	5040	K5040,	5040
0070	5060	K5060,	5060
0071	5100	K5100,	5100
0072	5120	K5120,	5120
0073	5140	K5140,	5140
0074	5160	K5160,	5160
0075	5200	K5200,	5200
0076	5220	K5220,	5220
0102	5240	*102	
0103	5260	K5260,	5260
0104	5300	K5300,	5300
0105	5320	K5320,	5320
0106	5340	K5340,	5340
0107	5360	K5360,	5360
0110	5400	K5400,	5400
0111	5420	K5420,	5420
0112	5440	K5440,	5440
0113	7777	M1,	-1
0114	7776	M2,	-2
0115	7775	M3,	-3
0116	7774	M4,	-4
0117	7773	M5,	-5
0120	7772	M6,	-6
0121	7771	M7,	-7
0122	7770	M10,	-10
0123	7767	M11,	-11
0124	7766	M12,	-12
0125	7765	M13,	-13
0126	7764	M14,	-14
0127	7763	M15,	-15
0130	7762	M16,	-16
0131	7761	M17,	-17
0132	7760	M20,	-20
0133	7757	M21,	-21
0134	7756	M22,	-22
0135	7755	M23,	-23
0136	0000	PNTCNT,	0
0137	2410	K2410,	2410
0140	2440	K2440,	2440
0141	2470	K2470,	2470
0142	2520	K2520,	2520
0143	2600	K2600,	2600
0144	2630	K2630,	2630
0145	2660	K2660,	2660
0146	2710	K2710,	2710
0147	2740	K2740,	2740
0150	3000	K3000,	3000
0151	3030	K3030,	3030

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/BASIC JMP-JMS TEST

0152 3060 K3060, 3060
 0153 3110 K3110, 3110
 0154 3140 K3140, 3140
 0155 3200 K3200, 3200

0156 3230 K3230, 3230
 0157 3260 K3260, 3260
 0160 3310 K3310, 3310
 0161 3340 K3340, 3340
 0162 3400 K3400, 3400
 0163 3430 K3430, 3430
 0164 3460 K3460, 3460
 0165 3510 K3510, 3510
 0166 3540 K3540, 3540

0170 *170
 0171 DO,
 0172 TAD K7402
 0173 DCA I 10
 0174 TAD 10
 0175 JMP I DO
 K7402, 7402

0200 *200
 0201 0601
 0202 0600
 0203 0601
 0204 0600
 0205 0601
 0206 0600
 0207 0601
 0208 0600
 0209 0601
 0210 0600
 0211 0601
 0212 0600
 0213 0601
 0214 0600
 0215 0601
 0216 0600
 0217 0601
 0218 0600
 0219 0601
 0220 0600
 0221 0601
 0222 0600
 0223 0601
 0224 0600
 0225 0601
 0226 0600
 0227 0601
 0228 0600
 0229 0601
 0230 0600
 0231 0601
 0232 0600
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 0255 0601
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 0257 0601
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 0259 0601
 0260 0600
 0261 0601
 0262 0600
 0263 0601
 0264 0600
 0265 0601
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 0267 0601
 0268 0600
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 0270 0600
 0271 0601
 0272 0600
 0273 0601
 0274 0600
 0275 0601
 0276 0600
 0277 0601
 0278 0600
 0279 0601
 0280 0600
 0281 0601
 0282 0600
 0283 0601
 0284 0600
 0285 0601
 0286 0600
 0287 0601
 0288 0600
 0289 0601
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 0291 0601
 0292 0600
 0293 0601
 0294 0600
 0295 0601
 0296 0600
 0297 0601
 0298 0600
 0299 0601
 0300 0600

/STORE LOADER INSTRUCTIONS
 /THAT WILL BE DESTROYED

0600 *600
 0601 7200
 0602 1453
 0603 3343
 0604 1452
 0605 3344
 0606 1736
 0607 3345
 0608 1451
 0609 3346
 0610 1737
 0611 3347
 0612 1450
 0613 3348
 0614 1738
 0615 3349
 0616 1451
 0617 3350
 0618 1739
 0619 3351
 0620 1452
 0621 3352
 0622 1740
 0623 3353
 0624 1741
 0625 3354
 0626 1742
 0627 3355
 0628 1743
 0629 3356
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 0631 3357
 0632 1745
 0633 3358
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 0635 3359
 0636 1747
 0637 3360
 0638 1748
 0639 3361
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 0641 3362
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 0645 3364
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 0677 3380
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 0821 3452
 0822 1840
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 0842 1850
 0843 3463
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 0862 1860
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 0866 1862
 0867 3475
 0868 1863
 0869 3476
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 0876 1867
 0877 3480
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 0880 1869
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 0906 1882
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 1156 2007
 1157 3620
 1158 2008
 1159 3621
 1160 2009
 1161 3622
 1162 2010
 1163 3623
 1164 2011
 1165 3624
 1166 2012
 1167 3625
 1168 2013
 1169 3626
 1170 2014
 1171 3627
 1172 2015
 1173 3628
 1174 2016
 1175 3629
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 1312 2085
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 1315 3699
 1316 2087
 1317 3700
 1318 2088
 1319 3701
 1320 2089
 1321 3702
 1322 2090
 1323 3703

```

0623 1446 TAD I K7677
0624 3394 DCA STOR+11
0625 1742 TAD I K00
0626 3355 DCA STOR+12
0627 1455 TAD I K7777
0630 3356 DCA STOR+13
0631 7300 CLA CLL
0632 1264 TAD K175
0633 3010 DCA 10
0634 4170 JMS DO
0635 1265 TAD M577
0636 7640 SEA CLA
0637 5234 JMP -3
0640 1266 TAD K756
0641 3010 DCA 10
0642 4170 JMS DO
0643 1267 TAD M1777
0644 7640 SEA CLA
0645 5242 JMP -3
0646 1270 TAD K3572
0647 3010 DCA 10
0650 4170 JMS DO
0651 1271 TAD M4177
0652 7640 SEA CLA
0653 5250 JMP -3
0654 1272 TAD K5451
0655 3010 DCA 10
0656 4170 JMS DO
0657 1273 TAD M7600
0660 7640 SEA CLA
0661 5256 JMP -3
0662 5300 JMP RESTAR
0663 4200 BEGIN
0664 0175 K175,
0665 7201 M577,
0666 0756 K756,
0667 0001 M1777,
0670 3572 K3572,
0671 3601 M4177,
0672 5451 K5451,
0673 0200 M7600,

```

/RESTORE LOADER INSTRUCTIONS

```

0700 1303 *700
0701 3200 RESTAR,
0702 5303 TAD RENEW
0703 5663 DCA SAVE
0704 7200 JMP RENEW
0705 1343 JMP I HALT+7
0706 3453 REFILL,
0707 1344 CLA
07 3452 TAD STOR
DCA I K7775
DCA I K7775

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0711 1345 TAD STOR+2
0712 1346 DCA I K74
0713 1346 TAD STOR+3
0714 1347 DCA I K7767
0715 1347 TAD STOR+4
0716 1347 DCA I K70
0717 1350 TAD STOR+5
0720 1350 DCA I K7757
0721 1351 TAD STOR+6
0722 1340 DCA I K60
0723 1352 TAD STOR+7
0724 1347 DCA I K7737
0725 1353 TAD STOR+10
0726 1341 DCA I K740
0727 1354 TAD STOR+11
0730 1346 DCA I K7677
0731 1355 TAD STOR+12
0732 1342 DCA I K00
0733 1356 TAD STOR+13
0734 1355 DCA I K7777
0735 1402 HLT
    
```

/CONSTANTS

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0736 7774 K74, 7774
0737 7770 K70, 7770
0740 7760 K60, 7760
0741 7740 K740, 7740
0742 7700 K00, 7700
0743 0000 STOR, 0
0744 0000 0
0745 0000 0
0746 0000 0
0747 1742 -6036
0750 0000 0
0751 0000 0
0752 0000 0
0753 0000 0
0754 0000 0
0755 0000 0
0756 0000 0

/STORE LOC 7775
/+1 STORE LOC 7773
/+2 STORE LOC 7774
/+3 STORE LOC 7767
/+4 STORE LOC 7750
/+5 STORE LOC 7757
/+6 STORE LOC 7760
/+7 STORE LOC 7737
/+10 STORE LOC 7740
/+11 STORE LOC 7677
/+12 STORE LOC 7700
/+13 STORE LOC 7777
    
```

```

4200 4200 CLA
4201 3136 DCA PNTCNT

/JUMP TEST 0 COUNTER=0
JMP +1
4202 3203 TAD PNTCNT
4203 1136 SZA
4204 7440 HLT
4205 7402 TAD PNTCNT
4206 1136
    
```

/CHECK COUNTER
/JMP COUNTER WRONG

/BASIC JMP-JMS TEST PAL10 V141 11-NOV-72

```

4207 7001 IAC /ADVANCE COUNTER
4210 3136 DCA PNTCNT

/JUMP TEST 1 COUNTER=1
4211 5213 JMP .+2
4212 7402 HLT /JMP FAILED
4213 1136 TAD PNTCNT
4214 1113 TAD M1
4215 7440 SEA /CHECK COUNTER
4216 7402 HLT /JMP COUNTER WRONG
4217 1136 TAD PNTCNT
4220 7001 IAC /ADVANCE COUNTER
4221 3136 DCA PNTCNT

/JUMP TEST 2 COUNTER=2
4222 5223 JMP .+3
4223 7402 HLT /JMP FAILED
4224 7402 HLT
4225 1136 TAD PNTCNT
4226 1114 TAD M2
4227 7440 SEA /CHECK COUNTER
4230 7402 HLT /JMP COUNTER WRONG
4231 1136 TAD PNTCNT
4232 7001 IAC
4233 3136 DCA PNTCNT

/JUMP TEST 3 COUNTER=3
4234 5240 JMP .+4
4235 7402 HLT /JMP FAILED
4236 7402 HLT
4237 7402 HLT
4240 1136 TAD PNTCNT
4241 1115 TAD M3
4242 7440 SEA /CHECK COUNTER
4243 7402 HLT /JMP COUNTER WRONG
4244 1136 TAD PNTCNT
4245 7001 IAC /ADVANCE COUNTER
4246 3136 DCA PNTCNT

/JUMP TEST 4 COUNTER=4
4247 5254 JMP .+5
4250 7402 HLT /JMP FAILED
4251 7402 HLT
4252 7402 HLT
4253 7402 HLT
4254 1136 TAD PNTCNT
4255 1116 TAD M4
4256 7440 SEA /CHECK COUNTER
4257 7402 HLT /JMP COUNTER WRONG
4260 1136 TAD PNTCNT
4261 7001 IAC /ADVANCE COUNTER
4262 3136 DCA PNTCNT

/JUMP TEST 5 COUNTER=5

```

/BASIC JMP-JMS TEST	PAL10	V141	11-NOV-78
4263	9271	JMP .+6	
4264	7402	HLT	/JMP FAILED
4265	7402	HLT	/
4266	7402	HLT	/
4267	7402	HLT	/
4270	7402	HLT	/
4271	1136	TAD PNTCNT	
4272	1117	TAD M5	
4273	7440	SEA	/CHECK COUNTER
4274	7402	HLT	/JMP COUNTER WRONG
4275	1136	TAD PNTCNT	
4276	7001	IAC	/ADVANCE COUNTER
4277	3136	DCA PNTCNT	
/JUMP TEST 6 COUNTER=6			
4300	5307	JMP .+7	
4301	7402	HLT	/JMP FAILED
4302	7402	HLT	/
4303	7402	HLT	/
4304	7402	HLT	/
4305	7402	HLT	/
4306	7402	HLT	/
4307	1136	TAD PNTCNT	
4310	1120	TAD M6	
4311	7440	SEA	/CHECK COUNTER
4312	7402	HLT	/JMP COUNTER WRONG
4313	1136	TAD PNTCNT	
4314	7001	IAC	/ADVANCE COUNTER
4315	3136	DCA PNTCNT	
/JUMP TEST 7 COUNTER=7			
4316	5326	JMP .+10	
4317	7402	HLT	/JMP FAILED
4320	7402	HLT	/
4321	7402	HLT	/
4322	7402	HLT	/
4323	7402	HLT	/
4324	7402	HLT	/
4325	7402	HLT	/
4326	1136	TAD PNTCNT	
4327	1121	TAD M7	
4330	7440	SEA	/CHECK COUNTER
4331	7402	HLT	/JMP COUNTER WRONG
4332	1136	TAD PNTCNT	
4333	7001	IAC	/ADVANCE COUNTER
4334	3136	DCA PNTCNT	
/JUMP TEST 8 COUNTER=10			
4335	5346	JMP .+11	
4336	7402	HLT	/JMP FAILED
4337	7402	HLT	/
4340	7402	HLT	/
4341	7402	HLT	/
4342	7402	HLT	/

11-NOV-70

V141

PAL10

BASIC JMP-JMS TEST

```

4343 7402 HLT /
4344 7402 HLT /
4345 7402 HLT /
4346 1136 TAD PNTCNT /CHECK COUNTER
4347 1122 TAD M10 /JMP COUNTER WRONG
4350 7440 SEA /ADVANCE COUNTER
4351 7402 HLT
4352 1136 TAD PNTCNT
4353 7001 IAC
4354 3136 DCA PNTCNT

```

```

/JUMP TEST 9 COUNTER=11
3355 JMP .+12
3356 7402 HLT /JMP FAILED
3357 7402 HLT /
3358 7402 HLT /
3359 7402 HLT /
3360 7402 HLT /
3361 7402 HLT /
3362 7402 HLT /
3363 7402 HLT /
3364 7402 HLT /
3365 7402 HLT /
3366 7402 HLT
3367 1136 TAD PNTCNT
3370 1123 TAD M10
3371 7440 SEA /CHECK COUNTER
3372 7402 HLT /JMP COUNTER WRONG
3373 1136 TAD PNTCNT /ADVANCE COUNTER
3374 7001 IAC
3375 3136 DCA PNTCNT
3376 7000 NOP
3377 7000 NOP

```

```

4400 /JUMP TEST 10 COUNTER=12
4400 JMP .+1
4401 1136 TAD PNTCNT
4402 1124 TAD M12
4403 7440 SEA /CHECK COUNTER
4404 7402 HLT /JMP COUNTER WRONG
4405 1136 TAD PNTCNT /ADVANCE COUNTER
4406 7001 IAC
4407 3136 DCA PNTCNT

/JUMP TEST 11 COUNTER=13
4410 JMP .+2 /JMP FAILED
4411 7402 HLT
4412 1136 TAD PNTCNT
4413 1125 TAD M13
4414 7440 SEA /CHECK COUNTER
4415 7402 HLT /JMP COUNTER WRONG
4416 1136 TAD PNTCNT /ADVANCE COUNTER
4417 7001 IAC
4418 3136 DCA PNTCNT

```

PAL10 V141 11-NOV-70

/BASIC JMP-JMS TEST

```
4421 5224 /JUMP TEST 12 COUNTER=14
4422 7402 JMP .+3
4423 7402 HLT /JMP FAILED
4424 1136 HLT /
4425 1126 TAD PNTCNT
4426 7440 TAD M14
4427 7402 SEA /CHECK COUNTER
4428 1136 HLT /JMP COUNTER WRONG
4429 1136 TAD PNTCNT /ADVANCE COUNTER
4430 7001 IAC
4431 3136 DCA PNTCNT
4432

4433 5237 /JUMP TEST 13 COUNTER=15
4434 7402 JMP .+4
4435 7402 HLT /JMP FAILED
4436 7402 HLT /
4437 1136 TAD PNTCNT
4438 1127 TAD M15
4439 7440 SEA /CHECK COUNTER
4440 7402 HLT /JMP COUNTER WRONG
4441 1136 TAD PNTCNT /ADVANCE COUNTER
4442 7001 IAC
4443 3136 DCA PNTCNT
4444

4445
```

```
4446 5253 /JUMP TEST 14 COUNTER=16
4447 7402 JMP .+5
4448 7402 HLT /JMP FAILED
4449 7402 HLT /
4450 7402 HLT /
4451 1136 TAD PNTCNT
4452 1138 TAD M16
4453 7440 SEA /CHECK COUNTER
4454 7402 HLT /JMP COUNTER WRONG
4455 1136 TAD PNTCNT /ADVANCE COUNTER
4456 7001 IAC
4457 3136 DCA PNTCNT
4458

4459 5270 /JUMP TEST 15 COUNTER=17
4460 7402 JMP .+6
4461 7402 HLT /JMP FAILED
4462 7402 HLT /
4463 7402 HLT /
4464 7402 HLT /
4465 1136 TAD PNTCNT
4466 1131 TAD M17
4467 7440 SEA /CHECK COUNTER
4468 7402 HLT /JMP COUNTER WRONG
4469 1136 TAD PNTCNT /ADVANCE COUNTER
4470 7001 IAC
4471 3136 DCA PNTCNT
4472

4473
4474
4475
4476
```

```
4477 9306 /JUMP TEST 16 COUNTER=20
4500 7402 JMP .-7
4501 7402 HLT /JMP FAILED
4502 7402 HLT /
4503 7402 HLT /
4504 7402 HLT /
4505 7402 HLT /
4506 1136 TAD PNTCNT
4507 1132 TAD M20
4510 7402 SZA /CHECK COUNTER
4511 7402 HLT /JMP COUNTER WRONG
4512 1136 TAD PNTCNT
4513 7001 IAC /ADVANCE COUNTER
4514 1136 DCA PNTCNT

4515 9325 /JUMP TEST 17 COUNTER=21
4516 7402 JMP .-16
4517 7402 HLT /JMP FAILED
4520 7402 HLT /
4521 7402 HLT /
4522 7402 HLT /
4523 7402 HLT /
4524 7402 HLT /

4525 1136 TAD PNTCNT
4526 1133 TAD M21
4527 7402 SZA /CHECK COUNTER
4530 7402 HLT /JMP COUNTER WRONG
4531 1136 TAD PNTCNT
4532 7001 IAC /ADVANCE COUNTER
4533 1136 DCA PNTCNT

4534 9345 /JUMP TEST 18 COUNTER=22
4535 7402 JMP .-11
4536 7402 HLT /JMP FAILED
4537 7402 HLT /
4540 7402 HLT /
4541 7402 HLT /
4542 7402 HLT /
4543 7402 HLT /
4544 7402 HLT /
4545 1136 TAD PNTCNT
4546 1134 TAD M22
4547 7402 SZA /CHECK COUNTER
4550 7402 HLT /JMP COUNTER WRONG
4551 1136 TAD PNTCNT
4552 7001 IAC /ADVANCE COUNTER
4553 1136 DCA PNTCNT

4554 9353 /JUMP TEST 19 COUNTER=23
```


4554	5366	JMP	.*12		
4555	7402	HLT		/JMP FAILED	
4556	7402	HLT		/	
4557	7402	HLT		/	
4560	7402	HLT		/	
4561	7402	HLT		/	
4562	7402	HLT		/	
4563	7402	HLT		/	
4564	7402	HLT		/	
4565	7402	HLT		/	
4566	1136	TAD	PNTCNT		
4567	1136	TAD	M25		
4570	7402	SEA		/CHECK COUNTER	
4571	7402	HLT		/JMP COUNTER WRONG	
4572	1136	TAD	PNTCNT		
4573	7001	IAC		/ADVANCE COUNTER	
4574	3136	DCA	PNTCNT		
4575	7000	NOP			
4576	7000	NOP			
4577	7000	NOP			
4600	1205	/JMP TEST 20	COUNTER=24		
4601	3455	TAD	PK1		
4602	1206	DCA	I K7777		
4603	3422	TAD	PK2		
4604	5455	DCA	I K8		
4605	5422	JMP	I K7777		
4606	5456	JMP	I K8		
		JMP	I K4620		
4620	1136	TAD	PNTCNT		
4621	1236	TAD	M24		
4622	7440	SEA		/CHECK COUNTER	
4623	7402	HLT		/JMP COUNTER WRONG	
4624	1136	TAD	PNTCNT		
4625	7001	IAC		/ADVANCE COUNTER	
4626	3136	DCA	PNTCNT		
4627	1234	/JMP TEST 21	COUNTER=25		
4630	3454	TAD	PK3		
4631	1235	DCA	I K7776		
4632	3423	TAD	PK4		
4633	5454	DCA	I K1		
4634	5423	JMP	I K7776		
4635	5457	JMP	I K1		
4636	7754	JMP	I K4640		
		M24.	-24		
4640	1136	TAD	PNTCNT		
4641	1256	TAD	M25		
4642	7440	SEA		/CHECK COUNTER	
4643	7402	HLT		/JMP COUNTER WRONG	

```

4644 1136 TAD PNTCNT
4645 7001 IAC
4646 3136 DCA PNTCNT

/JMP TEST 22 COUNTER=26
4647 1254 TAD PK5
4648 3453 DCA I K7775
4649 1255 TAD PK6
4650 3424 DCA I K2
4651 5453 JMP I K7775
4652 5424 JMP I K2
4653 5660 JMP I 4660
4654 7753 -25
4655
4656 *4660

4660 1136 TAD PNTCNT
4661 1276 TAD M26
4662 7440 SEA
4663 7402 HLT
4664 1136 TAD PNTCNT
4665 7001 IAC
4666 3136 DCA PNTCNT

/JMP TEST 23 COUNTER=27
4667 1274 TAD PK7
4668 3482 DCA I K7773
4669 1275 TAD PK8
4670 3425 DCA I K4
4671 5452 JMP I K7773
4672 5425 JMP I K4
4673 5461 JMP I K4700
4674 7752 -26
4675
4676 *4700

4700 1136 TAD PNTCNT
4701 1316 TAD M27
4702 7440 SEA
4703 7402 HLT
4704 1136 TAD PNTCNT
4705 7001 IAC
4706 3136 DCA PNTCNT

/JMP TEST 24 COUNTER=30
4707 1314 TAD PK9
4708 3451 DCA I K7767
4709 1315 TAD PK10
4710 3426 DCA I K10
4711 5451 JMP I K7767
4712 5426 JMP I K10
4713 5462 JMP I K4720
4714 7751 -27
4715
4716 *4720

4720 1136 TAD PNTCNT

```

11-NOV

PA 10

JMS

/BASIC

/JMS

/JMS

/JMS

/JMS

4721 1336 TAD M30
 4722 7440 SEA /CHECK COUNTER
 4723 7402 HLT /JMP COUNTER WRONG
 4724 1136 TAD PNTCNT
 4725 7001 IAC /ADVANCE COUNTER
 4726 3136 DCA PNTCNT

/JMP TEST 25 COUNTER=31

4727 1334 TAD PK11
 4728 3450 DCA I K7757
 4731 1335 TAD PK12
 4732 3427 DCA I K20
 4733 5450 JMP I K7757
 4734 5427 JMP I K20
 4735 5463 JMP I K4740
 4736 7750 M30, -30

PK11,
 PK12,
 M30,

4740 4740 TAD PNTCNT
 4741 1336 TAD M31
 4742 7440 SEA /CHECK COUNTER
 4743 7402 HLT /JMP COUNTER WRONG
 4744 1136 TAD PNTCNT
 4745 7001 IAC /ADVANCE COUNTER
 4746 3136 DCA PNTCNT

*4740

/JMP TEST 26 COUNTER=32

4747 1334 TAD PK13
 4750 3447 DCA I K7737
 4751 1355 TAD PK14
 4752 3430 DCA I K40
 4753 3447 JMP I K7737
 4754 5430 JMP I K40
 4755 5464 JMP I K4760
 4756 7747 M31, -31

PK13,
 PK14,
 M31,

4760 4760 TAD PNTCNT
 4761 1336 TAD M32
 4762 7440 SEA /CHECK COUNTER
 4763 7402 HLT /JMP COUNTER WRONG
 4764 1136 TAD PNTCNT
 4765 7001 IAC /ADVANCE COUNTER
 4766 3136 DCA PNTCNT

*4760

/JMP TEST 27 COUNTER=33

4767 1374 TAD PK15
 4770 3446 DCA I K7677
 4771 1375 TAD PK16
 4772 3431 DCA I K102
 4773 5446 JMP I K7757
 4774 5431 JMP I K20
 4775 5465 JMP I K4800
 4776 7746 M32, -32

PK15,
 PK16,
 M32,

```

5000          *5000
5001          TAD PNTCNT
5002          TAD M35
5003          SZA
5004          HLT
5005          TAD PNTCNT
5006          IAC
5007          DCA PNTCNT
                    /CHECK COUNTER
                    /JMP COUNTER WRONG
                    /ADVANCE COUNTER

```

/JMP TEST 20 COUNTER=34

```

5008          TAD PK17
5009          DCA I K7577
5010          TAD PK18
5011          DCA I K200
5012          JMP I K7577
5013          JMP I K200
5014          JMP I K5020
5015          PK17
5016          PK18,
5017          M35,
5018          -33

```

*5020

```

5020          TAD PNTCNT
5021          TAD M34
5022          SZA
5023          HLT
5024          TAD PNTCNT
5025          IAC
5026          DCA PNTCNT

```

/CHECK COUNTER
/JMP COUNTER WRONG
/ADVANCE COUNTER

/JMP TEST 20 COUNTER=35

```

5027          TAD PK19
5028          DCA I K7377
5029          TAD PK20
5030          DCA I K400
5031          JMP I K7377
5032          JMP I K400
5033          PK19
5034          PK20,
5035          M34,
5036          -34

```

*5040

```

5040          TAD PNTCNT
5041          TAD M35
5042          SZA
5043          HLT
5044          TAD PNTCNT
5045          IAC
5046          DCA PNTCNT

```

/CHECK COUNTER
/JMP COUNTER WRONG
/ADVANCE COUNTER

/JMP TEST 30 COUNTER=36

```

5047          TAD PK21
5048          DCA I K6777
5049          TAD PK22
5050          DCA I K1000

```

11-NOV-70

V141

PAL10

/BASIC JMP-JMS TEST

```

5053 5443 JMP I K6777
5054 5434 PK21, JMP I K1000
5055 5470 PK22, JMP I K5060
5056 7743 M35, -35

5060 *5060
5060 1136 TAD PNTCNT
5061 1276 TAD M36
5062 7440 SZA /CHECK COUNTER
5063 7402 HLT /JMP COUNTER WRONG
5064 1136 TAD PNTCNT /ADVANCE COUNTER
5065 7001 IAC
5066 3136 DCA PNTCNT

/JMP TEST 31 COUNTER=37
5067 1274 TAD PK23
5070 3442 DCA I K5777
5071 1275 TAD PK24
5072 3435 DCA I K2000
5073 3442 JMP I K5777
5074 3435 JMP I K2000
5075 3471 PK23, JMP I K5100
5076 7742 PK24, -36
M36,

5100 *5100
5100 1136 TAD PNTCNT
5101 1316 TAD M37
5102 7440 SZA /CHECK COUNTER
5103 7402 HLT /JMP COUNTER WRONG
5104 1136 TAD PNTCNT /ADVANCE COUNTER
5105 7001 IAC
5106 3136 DCA PNTCNT

/JMP TEST 32 COUNTER=40
5107 1314 TAD PK25
5110 3437 DCA I K3777
5111 1315 TAD PK26
5112 3436 DCA I K4000
5113 3437 JMP I K3777
5114 3436 JMP I K4000
5115 3472 PK25, JMP I K5120
5116 7741 PK26, -37
M37,

5120 *5120
5120 1136 TAD PNTCNT
5121 1336 TAD M40
5122 7440 SZA /CHECK COUNTER
5123 7402 HLT /JMP COUNTER WRONG
5124 1136 TAD PNTCNT /ADVANCE COUNTER
5125 7001 IAC
5126 3136 DCA PNTCNT

```

/JMP TEST 33 COUNTER=41

```

5127 1334
5130 3422
5130 3422
5131 1335
5132 3455
5133 3422
5134 5455
5135 5473
5136 7740

PK27,
PK28,
M40,
-40

*5140

5140
5136
5141 1336
5142 7440
5143 7402
5144 1136
5145 7001
5146 3136

TAD PNTCNT
TAD M41
SZA
HLT
TAD PNTCNT
IAC
DCA PNTCNT

/CHECK COUNTER
/JMP COUNTER WRONG

/ADVANCE COUNTER

```

/JMP TEST 34 COUNTER=42

```

5147 1334
5150 3423
5151 1335
5152 3454
5153 3423
5154 5454
5155 5474
5156 7737

PK29,
PK30,
M41,
-41

*5160

5160 1136
5161 1376
5162 7440
5163 7402
5164 1136
5165 7001
5166 3136

TAD PNTCNT
TAD M42
SZA
HLT
TAD PNTCNT
IAC
DCA PNTCNT

/CHECK COUNTER
/JMP COUNTER WRONG

/ADVANCE COUNTER

```

/JMP TEST 35 COUNTER=43

```

5167 1374
5170 3424
5171 1375
5172 3453
5173 5424
5174 5453
5175 5475
5176 7736

PK31,
PK32,
M42,
-42

*5200

5200
5201 1136
5202 7440
5203 7402
5204 1136

TAD PNTCNT
TAD M43
SZA
HLT
TAD PNTCNT

/CHECK COUNTER
/JMP COUNTER WRONG

```

V141 11-NOV-70

PAL10

/BASIC JMP-JMS TEST

5205 7001
5206 3136IAC
DCA PNTCNT

/ADVANCE COUNTER

/JMP TEST 36 COUNTER=44

5207 1214
5210 3425
5211 1215
5212 3452
5213 5425
5214 5452
5215 5476
5216 7735TAD PK33
DCA I K4
TAD PK34
DCA I K7773
JMP I K4
JMP I K7773
JMP I K5220
-43PK33,
PK34,
M43,

*5220

5220 9220
5221 1136
5222 1236
5223 7440
5224 7402
5225 1136
5226 7001
5227 3136TAD PNTCNT
TAD M44
SZA
HLT
TAD PNTCNT
IAC
DCA PNTCNT/CHECK COUNTER
/JMP COUNTER WRONG
/ADVANCE COUNTER

/JMP TEST 37 COUNTER=45

5227 1234
5230 3426
5231 1235
5232 3451
5233 5426
5234 5451
5235 5502
5236 7734TAD PK35
DCA I K10
TAD PK36
DCA I K7767
JMP I K10
JMP I K7767
JMP I K5240
-44PK35,
PK36,
M44,

*5240

5240 5240
5241 1136
5242 1256
5243 7440
5244 7402
5245 1136
5246 7001
5247 3136TAD PNTCNT
TAD M45
SZA
HLT
TAD PNTCNT
IAC
DCA PNTCNT/CHECK COUNTER
/JMP COUNTER WRONG
/ADVANCE COUNTER

/JMP TEST 3 COUNTER=46

5247 1254
5250 3427
5251 1255
5252 3450
5253 5427
5254 5450
5255 5503
5256 7733TAD PK37
DCA I K20
TAD PK38
DCA I K7757
JMP I K20
JMP I K7757
JMP I K5260
-45PK37,
PK38,
M45,

*5260

5260 5260
5261 1136
5262 1276TAD PNTCNT
TAD M46

V141 11-NOV-70

PAL10

/BASIC JMP-JMS TEST

5262	7440	SEA	/CHECK COUNTER
5263	7402	HLT	/JMP COUNTER WRONG
5264	1136	TAD PNTCNT	
5265	7001	IAC	/ADVANCE COUNTER
5266	3136	DCA PNTCNT	
5267	1274	/JMP TEST 39	COUNTER=47
5270	3430	TAD PK39	
5271	1275	DCA I K40	
5272	3447	TAD PK40	
5273	5430	DCA I K7737	
5274	5447	JMP I K40	
5275	5504	JMP I K7737	
5276	7732	JMP I K5300	
		M46,	-46
5300	1136	*5300	
5301	1316	TAD PNTCNT	
5302	7440	TAD M47	
5303	7402	SEA	/CHECK COUNTER
5304	1136	HLT	/JMP COUNTER WRONG
5305	7001	TAD PNTCNT	
5306	3136	IAC	/ADVANCE COUNTER
		DCA PNTCNT	
5307	1314	/JMP TEST 40	COUNTER=50
5310	3431	TAD PK41	
5311	1315	DCA I K100	
5312	3446	TAD PK42	
5313	5431	DCA I K7677	
5314	5446	JMP I K100	
5315	5505	JMP I K7677	
5316	7731	JMP I K5320	
		M47,	-47
5320	1136	*5320	
5321	1336	TAD PNTCNT	
5322	7440	TAD M50	
5323	7402	SEA	/CHECK COUNTER
5324	1136	HLT	/JMP COUNTER WRONG
5325	7001	TAD PNTCNT	
5326	3136	IAC	/ADVANCE COUNTER
		DCA PNTCNT	
5327	1334	/JMP TEST 41	COUNTER=51
5330	3432	TAD PK43	
5331	1335	DCA I K200	
5332	3445	TAD PK44	
5333	5432	DCA I K7577	
5334	5445	JMP I K200	
5335	5506	JMP I K7577	
5336	7730	JMP I K5340	
		M50,	-50

V141 11-NOV-70

PAL10 BASIC JMP-JMS TEST

5340	5340	*5340	TAD PNTCNT	
5341	1136		TAD M51	
5342	1356		SEA	/CHECK COUNTER
5343	7440		HLT	/JMP COUNTER WRONG
5344	7402		TAD PNTCNT	
5345	1136		IAC	/ADVANCE COUNTER
5346	7001		DCA PNTCNT	
5347	3136			
5348			/JMP TEST 42 COUNTER=52	
5349	1354		TAD PK45	
5350	3433		DCA I K400	
5351	1355		TAD PK46	
5352	3444		DCA I K7377	
5353	5433		JMP I K400	
5354	5444	PK45,	JMP I K7377	
5355	5507	PK46,	JMP I K5360	
5356	7727	M51,	-51	

5360	5360	*5360	TAD PNTCNT	
5361	1136		TAD M52	
5362	1376		SEA	/CHECK COUNTER
5363	7440		HLT	/JMP COUNTER WRONG
5364	7402		TAD PNTCNT	
5365	1136		IAC	/ADVANCE COUNTER
5366	7001		DCA PNTCNT	

/JMP TEST 43 COUNTER=53

5374	5374		TAD PK47	
5375	3434		DCA I K1000	
5376	1375		TAD PK48	
5377	3443		DCA I K6777	
5378	5434		JMP I K1000	
5379	5443		JMP I K6777	
5380	5510	PK47,	JMP I K5400	
5381	7726	PK48,	-52	
5382		M52,		

5400	5400	*5400	TAD PNTCNT	
5401	1136		TAD M53	
5402	1216		SEA	/CHECK COUNTER
5403	7440		HLT	/JMP COUNTER WRONG
5404	7402		TAD PNTCNT	
5405	1136		IAC	/ADVANCE COUNTER
5406	7001		DCA PNTCNT	
5407	3136			

/JMP TEST 44 COUNTER=54

5414	5414		TAD PK49	
5415	1214		DCA I K2000	
5416	3435		TAD PK50	
5417	1215		DCA I K5777	
5418	3442		JMP I K2000	
5419	5435		JMP I K5777	
5420	5442	PK49,		

```

5415 5511 PK50, JMP I K5420
5416 7725 M53, -53

5420 *5420
5420 1136 TAD PNTCNT
5421 1236 TAD M54
5422 7440 SZA /CHECK COUNTER
5423 7402 HLT /JMP COUNTER WRONG
5424 1136 TAD PNTCNT
5425 7001 IAC /ADVANCE COUNTER
5426 3136 DCA PNTCNT

/JMP TEST 45 COUNTER=55
5427 1234 TAD PK51
5430 3436 DCA I K4000
5431 1235 TAD PK52
5432 3437 DCA I K3777
5433 5436 JMP I K4000
5434 5437 JMP I K3777
5435 5512 JMP I K5440
5436 7724 M54, -54

*5440
5440 1136 TAD PNTCNT
5441 1250 TAD M55
5442 7440 SZA /CHECK COUNTER WRONG
5443 7402 HLT /JMP COUNTER WRONG
5444 1136 TAD PNTCNT
5445 7001 IAC /ADVANCE COUNTER
5446 3136 DCA PNTCNT

/JMS TEST 1 COUNTER=56
5447 5651 JMP I AFM
5450 7723 M55, -55
5451 2002 AFM, FRM

*2002
2002 2002 JMS TO
2003 4203 JMP .
2004 1136 TAD PNTCNT
2005 1222 TAD M56
2006 7440 SZA /CHECK COUNTER WRONG
2007 7402 HLT /JMP COUNTER WRONG
2010 1224 TAD AFM
2011 7041 CIA
2012 1203 TAD TO
2013 7440 SZA /CHECK STORED ADDRESS
2014 7402 HLT /JMS FAILED
2015 3203 DCA TO /CLEAR STORED PC
2016 1136 TAD PNTCNT
2017 7001 IAC
2020 3136 DCA PNTCNT
2021 7410 SKP
2022 7722 M56, -56

```

11-NOV-78

PAL 10

TEEN

BASIC JMP-JMS TEST

2023	7410	SKP
2024	2003	AFM,
		FRM+1

/JMS TEST 2 COUNTER=57

2025	4227	JMS TO1	
2026	7402	HLT	FRM1,
2027	5227	JMP	TO1,
2028	1136	TAD PNTCNT	
2030	1246	TAD M57	
2031	7440	SEA	/CHECK COUNTER
2032	7440	HLT	/JMP COUNTER WRONG
2033	7402	TAD AFRM1	
2034	1250	CIA	
2035	7041	TAD TO1	
2036	1227	SEA	/CHECK STORED ADDRESS
2037	7440	HLT	/JMS FAILED
2040	7402	DCA TO1	/CLEAR STORED PC
2041	3227	TAD PNTCNT	
2042	1136	IAC	
2043	7001	DCA PNTCNT	
2044	3136	SKP	
2045	7410		

2046	7721	M57,	-57
2047	7410		SKP
2050	2026	AFM1,	AFM1

/JMS TEST 3 COUNTER=60

2051	4254	JMS T02	
2052	7402	HLT	FRM2,
2053	7402	HLT	
2054	9254	JMP	T02,
2055	1136	TAD PNTCNT	
2056	1275	TAD M60	
2057	7440	SEA	
2060	7402	HLT	
2061	1273	TAD AFRM2	
2062	7041	CIA	
2063	1254	TAD T02	
2064	7440	SEA	
2065	7402	HLT	
2066	3254	DCA T02	
2067	1136	TAD PNTCNT	
2070	7001	IAC	
2071	3136	DCA PNTCNT	
2072	7410	SKP	
2073	2052	AFRM2,	
2074	7410	SKP	
2075	7720	M60,	
		-60	

/JMS TEST 4 COUNTER=61

2076	4302		JMS T03
2077	7402	FRM3,	HLT
2100	7402		HLT
2101	7402		HLT

2102	5302	JMP	
2103	1136	TAD PNTCNT	
2104	1323	TAD M61	
2105	7440	SEA	/CHECK COUNTER
2106	7402	HLT	/JMP COUNTER WRONG
2107	1321	TAD AFRM3	
2110	7041	CIA	
2111	1302	TAD T03	
2112	7445	SEA	/CHECK STORED ADDRESS
2113	7402	HLT	/JMS FAILED
2114	3302	DCA T03	/CLEAR STORED PC
2115	1136	TAD PNTCNT	
2116	7001	IAC	
2117	3136	DCA PNTCNT	
2120	7410	SKP	
2121	2077	AFRM3,	
2122	7410	SKP	
2123	7717	M61.	

/JMS TEST 5 COUNTER=62

2124	4330	JMS T04	
2125	7402	HLT	
2126	7402	HLT	
2127	7402	HLT	
2130	5330	JMP	
2131	1136	TAD PNTCNT	
2132	1351	TAD M62	
2133	7440	SEA	/CHECK COUNTER
2134	7402	HLT	/JMP COUNTER WRONG
2135	1347	TAD AFRM4	
2136	7041	CIA	
2137	1330	TAD T04	
2140	7440	SEA	/CHECK STORED ADDRESS
2141	7402	HLT	/JMS FAILED
2142	5330	DCA T04	/CLEAR STORED PC
2143	1136	TAD PNTCNT	
2144	7001	IAC	
2145	3136	DCA PNTCNT	
2146	7410	SKP	
2147	2125	AFRM4,	
2150	7410	SKP	
2151	7716	M62.	

/JMS TEST 6 COUNTER=63

2152	4356	JMS T05	
2153	7402	HLT	
2154	7402	HLT	
2155	7402	HLT	
2156	5356	JMP	
2157	1136	TAD PNTCNT	
2160	1377	TAD M63	
2161	7440	SEA	/CHECK COUNTER

V141 11-NOV-70

PAL10

/BASIC JMP-JMS TEST

```

2162 7402 HLT
2163 1375 TAD AFRM5
2164 7041 CIA
2165 1356 TAD T05
2166 7440 SZA
2167 7402 HLT
2170 3356 DCA T05
2171 1156 TAD PNTCNT
2172 7001 IAC
2173 3136 DCA PNTCNT
2174 7410 SKP
2175 2153 AFRM5, FRM5
2176 7410 SKP
2177 7715 M63, -63

```

/JMP COUNTER WRONG

```

/CHECK STORED ADDRESS
/JMS FAILED
/CLEAR STORED PC

```

PAUSE

/TAPE # 2

2200 *2200

/JMS TEST 7 COUNTER=64

```

2200 7000 NOP
2201 4202 JMS T06
2202 9202 JMP .
2203 1136 TAD PNTCNT
2204 1221 TAD M64
2205 7440 SZA
2206 7402 HLT
2207 1202 TAD T06
2210 7041 CIA
2211 1223 TAD AT06
2212 7440 SZA
2213 7402 HLT
2214 3202 DCA T06
2215 1136 TAD PNTCNT
2216 7001 IAC
2217 3136 DCA PNTCNT
2220 7410 SKP
2221 7714 -64
2222 7410 SKP
2223 2202 AT06, T06

```

```

/CHECK COUNTER WRONG
/JMP COUNTER WRONG

```

```

/CHECK STORED ADDRESS
/JMS FAILED
/CLEAR STORED PC

```

/JMS TEST 8 COUNTER=65

```

4226 7402 JMS T07
4227 5226 HLT
4228 1136 JMP .
4229 1245 TAD PNTCNT
4230 7440 TAD M65
4231 7402 SZA
4232 1247 HLT
4233 7041 TAD AFRM7
4234 1226 CIA
4235 1226 TAD T07

```

```

/CHECK COUNTER
/JMP COUNTER WRONG

```

```

2236 7440 SEA
2237 7402 HLT
2240 3226 DCA T07
2241 1136 TAD PNTCNT
2242 7001 IAC
2243 3136 DCA PNTCNT
2244 7410 SKP
2245 7713 M65,
2246 7410 SKP
2247 2225 AFRM7, FRM7

```

```

/JMS TEST 9 COUNTER=66
2250 4253 JMS T08
2251 7402 HLT
2252 7402 HLT
2253 5253 JMP
2254 1136 TAD PNTCNT
2255 1274 TAD M66
2256 7440 SEA
2257 7402 HLT
2260 1253 TAD T08
2261 7041 CIA
2262 1272 TAD AFRM8
2263 7440 SEA
2264 7402 HLT
2265 3253 DCA T08
2266 1136 TAD PNTCNT
2267 7001 IAC
2270 3136 DCA PNTCNT
2271 7410 SKP
2272 2251 AFRM8, FRM8
2273 7410 SKP
2274 7712 M66,

```

```

/JMS TEST 10 COUNTER=67
2275 4301 JMS T09
2276 7402 HLT
2277 7402 HLT
2300 7402 HLT
2301 5301 JMP
2302 1136 TAD PNTCNT
2303 1322 TAD M67
2304 7440 SEA
2305 7402 HLT
2306 1301 TAD T09
2307 7041 CIA
2310 1320 TAD AFRM9
2311 7440 SEA
2312 7402 HLT
2313 3301 DCA T09
2314 1136 TAD PNTCNT
2315 7001 IAC
2316 3136 DCA PNTCNT
2317 7410 SKP

```

```

/JMS TEST 10 COUNTER=67
2275 4301 JMS T09
2276 7402 HLT
2277 7402 HLT
2300 7402 HLT
2301 5301 JMP
2302 1136 TAD PNTCNT
2303 1322 TAD M67
2304 7440 SEA
2305 7402 HLT
2306 1301 TAD T09
2307 7041 CIA
2310 1320 TAD AFRM9
2311 7440 SEA
2312 7402 HLT
2313 3301 DCA T09
2314 1136 TAD PNTCNT
2315 7001 IAC
2316 3136 DCA PNTCNT
2317 7410 SKP

```

11-NOV-70

V141

PAL10

/BASIC JMP-JMS TEST

```
2320 2276 AFRM9, FRM9
2321 7410 SKP
2322 7711 M67, -67

2323 4330 /JMS TEST 11 COUNTER =70
2324 7402 JMS T010
2325 7402 HLT
2326 7402 HLT
2327 7402 HLT

2330 5330 JMP
2331 1136 TAD PNTCNT
2332 1351 TAD M70
2333 7440 SZA
2334 7402 HLT
2335 1330 TAD T010
2336 7041 CIA
2337 1347 TAD AFRM10
2340 7440 SZA
2341 7402 HLT
2342 3330 DCA T010
2343 1136 TAD PNTCNT
2344 7001 IAC
2345 3136 DCA PNTCNT
2346 7410 SKP
2347 2324 AFRM10, FRM10
2350 7410 SKP

2351 7710 M70, -70

2352 4356 /JMS TEST 11 COUNTER=71
2353 7402 JMS T011
2354 7402 HLT
2355 7402 HLT
2356 5356 JMP
2357 1136 TAD PNTCNT
2360 1377 TAD M71
2361 7440 SZA
2362 7402 HLT
2363 1356 TAD T011
2364 7041 CIA
2365 1375 TAD AFRM11
2366 7440 SZA
2367 7402 HLT
2370 3356 DCA T011
2371 1136 TAD PNTCNT
2372 7001 IAC
2373 3136 DCA PNTCNT
2374 7410 SKP
2375 2353 AFRM11, FRM11
2376 7410 SKP
2377 7707 M71, -71
```

```
2400      *2400
          /JMS TEST 12  COUNTER=72
2400      TAD RK1
2401      DCA I K7777
2402      TAD RK2
2403      DCA I K1
2404      JMP I K1
2405      JMP I K2410
2406      JMS I K7776
          RK1,
          RK2,
          *2410
2410      TAD PNTCNT
2411      TAD M72
2412      SZA
2413      HLT
2414      TAD I K7776
2415      TAD K7776
2416      SZA
2417      HLT
2420      DCA I K7776
2421      TAD PNTCNT
2422      IAC
2423      DCA PNTCNT
          /CHECK COUNTER
          /JMP COUNTER WRONG
          /CHECK STORED ADDRESS
          /JMS FAILED
          /CLEAR STORED ADDRESS
          /ADVANCE COUNTER

          /JMS TEST 13  COUNTER=73
2424      TAD RK3
2425      DCA I K7776
2426      TAD RK4
2427      DCA I K2
2430      JMP I K2
2431      JMP I K2440
2432      JMS I K7775
2433      -72
          RK3,
          RK4,
          M72,
          *2440
2440      TAD PNTCNT
2441      TAD M73
2442      SZA
2443      HLT
2444      TAD I K7775
2445      TAD K7775
2446      SZA
2447      HLT
2450      DCA I K7775
2451      TAD PNTCNT
2452      IAC
2453      DCA PNTCNT
          /CHECK COUNTER
          /JMP COUNTER WRONG
          /CHECK STORED ADDRESS
          /JMS FAILED
          /CLEAR STORED ADDRESS
          /ADVANCE COUNTER

          /JMS TEST 14  COUNTER=74
2454      TAD RK5
2455      1261
```


2455	3664	DCA I K7774	
2456	1262	TAD RK6	
2457	3425	DCA I K4	
2460	5425	JMP I K4	
2461	5541	JMP I K2470	
2462	4452	JMS I K7773	
2463	7705	-73	
2464	7774	K7774,	7774
*2470			
2470	1136	TAD PNTCNT	
2471	1313	TAD M74	
2472	7440	SEA	/CHECK COUNTER
2473	7402	HLT	/JMP COUNTER WRONG
2474	1452	TAD I K7773	
2475	1092	TAD K7773	
2476	7440	SEA	/CHECK STORED ADDRESS
2477	7402	HLT	/JMS FAILED
2500	3452	DCA I K7773	/CLEAR STORED ADDRESS
2501	1136	TAD PNTCNT	
2502	7001	IAC	/ADVANCE COUNTER
2503	3136	DCA PNTCNT	
/JMS TEST 15 COUNTER=75			
2504	1311	TAD RK7	
2505	3714	DCA I K7770	
2506	1312	TAD RK8	
2507	3426	DCA I K10	
2510	5426	JMP I K10	
2511	5542	JMP I K2520	
2512	4451	JMS I K7767	
2513	7704	-74	
2514	7770	K7770,	7770
*2520			
2520	1136	TAD PNTCNT	
2521	1343	TAD M75	
2522	7440	SEA	/CHECK COUNTER
2523	7402	HLT	/JMP COUNTER WRONG
2524	1451	TAD I K7767	
2525	1091	TAD K7767	
2526	7440	SEA	/CHECK STORED ADDRESS
2527	7402	HLT	/JMS FAILED
2530	3451	DCA I K7767	/CLEAR STORED ADDRESS
2531	1136	TAD PNTCNT	
2532	7001	IAC	/ADVANCE COUNTER
2533	3136	DCA PNTCNT	
/JMS TEST 16 COUNTER=76			
2534	1341	TAD RK9	
2535	3744	DCA I K7760	
2536	1342	TAD RK10	
2537	3427	DCA I K20	
2540	5427	JMP I K20	

2541	5543	RK9,	JMP I K2600		
2542	4450	RK10,	JMS I K7757		
2543	7703	M75,	-75		
2544	7760	K7760,	7760		
2600	2600	*2600			
2601	1136		TAD PNTCNT		
2602	1223		TAD M76		
2603	7440		SEA	/CHECK COUNTER	
2604	7402		HLT	/JMP COUNTER WRONG	
2605	1450		TAD I K7757		
2606	1050		TAD K7757		
2607	7440		SEA	/CHECK STORED ADDRESS	
2608	7402		HLT	/JMS FAILED	
2609	3450		DCA I K7757	/CLEAR STORED ADDRESS	
2610	1136		TAD PNTCNT		
2611	1136		IAC	/ADVANCE COUNTER	
2612	7001		DCA PNTCNT		
2613	3136				
2614	1221		/JMS TEST 17	COUNTER=77	
2615	3624		TAD RK11		
2616	1222		DCA I K7740		
2617	3430		TAD RK12		
2618	3430		DCA I K40		
2619	5430		JMP I K40		
2620	5544	RK11,	JMP I K2630		
2621	4447	RK12,	JMS I K7737		
2622	7702	M76,	-76		
2623	7740	K7740,	7740		
2624					
2630	2630	*2630			
2631	1136		TAD PNTCNT		
2632	1253		TAD M77		
2633	7440		SEA	/CHECK COUNTER	
2634	7402		HLT	/JMP COUNTER WRONG	
2635	1447		TAD I K7737		
2636	1047		TAD K7737		
2637	7440		SEA	/CHECK STORED ADDRESS	
2638	7402		HLT	/JMS FAILED	
2639	3447		DCA I K7737	/CLEAR STORED ADDRESS	
2640	1136		TAD PNTCNT		
2641	1136		IAC	/ADVANCE COUNTER	
2642	7001		DCA PNTCNT		
2643	3136				
2644	1251		/JMS TEST 18	COUNTER=100	
2645	3654		TAD RK13		
2646	1252		DCA I K7700		
2647	3431		TAD RK14		
2648	3431		DCA I K100		
2649	5431		JMP I K100		
2650	5545	RK13,	JMP I K2660		
2651	4446	RK14,	JMS I K7677		
2652	7701	M77,	-77		
2653	7700	K7700,	7700		
2654					

2660 *2660
 2660 1136 TAD PNTCNT
 2661 1303 TAD M100
 2662 7440 SEA
 2663 7402 HLT
 2664 1446 TAD I K7677
 2665 1046 TAD K7677
 2666 7440 SEA
 2667 7402 HLT
 2670 3446 DCA I K7677
 2671 1136 TAD PNTCNT
 2672 7001 IAC
 2673 3136 DCA PNTCNT
 /CHECK COUNTER WRONG
 /JMS COUNTER WRONG
 /CHECK STORED ADDRESS
 /JMS FAILED
 /CLEAR STORED ADDRESS
 /ADVANCE COUNTER

/JMS TEST 19 COUNTER=101

2674 1301 TAD RK15
 2675 3704 DCA I K7600
 2676 1302 TAD RK16
 2677 3432 DCA I K200
 2700 5432 JMP I K200
 2701 5546 JMP I K2710
 2702 4445 JMS I K7577
 2703 7700 -100
 2704 7600 K7600, 7600

2710 *2710
 2710 1136 TAD PNTCNT
 2711 1333 TAD M101
 2712 7440 SEA
 2713 7402 HLT
 2714 1445 TAD I K7577
 2715 1045 TAD K7577
 2716 7440 SEA
 2717 7402 HLT
 2720 3445 DCA I K7577
 2721 1136 TAD PNTCNT
 2722 7001 IAC
 2723 3136 DCA PNTCNT
 /CHECK COUNTER WRONG
 /JMP COUNTER WRONG
 /CHECK STORED ADDRESS
 /JMS FAILED
 /CLEAR STORED ADDRESS
 /ADVANCE COUNTER

/JMS TEST 20 COUNTER=102

2724 1331 TAD RK17
 2725 3734 DCA I K7400
 2726 1332 TAD RK18
 2727 3433 DCA I K400
 2730 5433 JMP I K400
 2731 5547 JMP I K2740
 2732 4444 JMS I K7377
 2733 7677 -101
 2734 7400 K7400, 7400

2740 *2742
 2740 1136 TAD PNTCNT

2741 1363 TAD M102
2742 7440 SZA
2743 7402 HLT
2744 1444 TAD I K7377
2745 1044 TAD K7377
2746 7440 SZA
2747 7402 HLT
2750 3444 DCA I K7377
2751 1136 TAD PNTCNT
2752 7001 IAC
2753 3136 DCA PNTCNT

/CHECK COUNTER
/JMP COUNTER WRONG

/CHECK STORED ADDRESS
/JMS FAILED
/CLEAR STORED ADDRESS
/ADVANCE COUNTER

/JMS TEST 21 COUNTER=103

2754 1361 TAD RK19
2755 3764 DCA I K7000
2756 1362 TAD RK20
2757 3434 DCA I K1000
2760 5434 JMP I K1000
2761 5550 JMP I K3000
2762 4443 JMS I K6777
2763 7676 -102
2764 7000 K7000,

RK19,
RK20,
M102,
K7000,

*3000

3000 TAD PNTCNT
3001 1136 TAD M103
3002 7440 SZA
3003 7402 HLT
3004 1443 TAD I K6777
3005 1043 TAD K6777
3006 7440 SZA
3007 7402 HLT
3010 3443 DCA I K6777
3011 1136 TAD PNTCNT
3012 7001 IAC
3013 3136 DCA PNTCNT

/CHECK COUNTER
/JMP COUNTER WRONG

/CHECK STORED ADDRESS
/JMS FAILED
/CLEAR STORED ADDRESS
/ADVANCE COUNTER

/JMS TEST 22 COUNTER=104

3014 1221 TAD RK21
3015 3624 DCA I K6000
3016 1222 TAD RK22
3017 3435 DCA I K2000
3020 5435 JMP I K2000
3021 5551 JMP I K3030
3022 4442 JMS I K5777
3023 7675 -103
3024 6000 K6000,

RK21,
RK22,
M103,
K6000,

*3030

3030 TAD PNTCNT
3031 1136 TAD M104
3032 1253 SZA
3033 7440 HLT
3034 1442 TAD I K5777

/CHECK COUNTER
/JMP COUNTER WRONG

13:17

V141 - 11-NOV-70

PAL10

/BASIC JMP-JMS TEST

3035 1042 TAD K5777 /CHECK STORED ADDRESS
 3036 7440 SZA /JMS FAILED
 3037 7402 HLT /CLEAR STORED ADDRESS
 3040 3442 DCA I K5777 /ADVANCE COUNTER
 3041 1136 TAD PNTCNT
 3042 7001 IAC
 3043 3136 DCA PNTCNT

/JMS TEST 23 COUNTER=105

3044 1251 TAD RK23
 3045 3654 DCA I K4001
 3046 1252 TAD RK24
 3047 3437 DCA I K3777
 3050 5437 JMP I K3777
 3051 5552 RK23, JMP I K3060
 3052 4436 RK24, JMS I K4000
 3053 7674 M104, -104
 3054 4001 K4001, 4001

*3060

3060 1136 TAD PNTCNT
 3061 1303 TAD M105
 3062 7440 SZA /CHECK COUNTER
 3063 7402 HLT /JMP COUNTER WRONG
 3064 1436 TAD I K4000
 3065 1036 TAD K4000
 3066 7440 SZA
 3067 7402 HLT

3070 3436 DCA I K4000 /CHECK STORED ADDRESS
 3071 1136 TAD PNTCNT /JMS FAILED
 3072 7001 IAC /CLEAR STORED ADDRESS
 3073 3136 DCA PNTCNT /ADVANCE COUNTER

/JMS TEST 24 COUNTER=106

3074 1301 TAD RK25
 3075 3704 DCA I K2001
 3076 1302 TAD RK26
 3077 3442 DCA I K5777
 3100 5442 JMP I K5777
 3101 5553 JMP I K3110
 3102 4435 JMS I K2000
 3103 7673 M105, -105
 3104 2001 K2001, 2001

*3110

3110 1136 TAD PNTCNT
 3111 1333 TAD M106
 3112 7440 SZA /CHECK COUNTER
 3113 7402 HLT /JMP COUNTER WRONG
 3114 1435 TAD I K2000
 3115 1035 TAD K2000
 3116 7440 SZA /CHECK STORED ADDRESS
 3117 7402 HLT /JMS FAILED
 3120 3435 DCA I K2000 /CLEAR STORED ADDRESS

3121	1136	TAD PNTCNT	
3122	7001	IAC	/ADVANCE COUNTER
3123	3136	DCA PNTCNT	
/JMS TEST 25 COUNTER=107			
3124	1331	TAD RK27	
3125	3734	DCA I K1001	
3126	1332	TAD RK28	
3127	3443	DCA I K6777	
3130	5443	JMP I K6777	
3131	5554	JMP I K3140	
3132	4434	JMS I K1000	
3133	7672	-106	
3134	1001	1001	
*3140			
3140	1136	TAD PNTCNT	
3141	1363	TAD M107	
3142	7440	SEA	/CHECK COUNTER
3143	7402	HLT	/JMP COUNTER WRONG
3144	1434	TAD I K1000	
3145	1034	TAD K1000	
3146	7440	SEA	/CHECK STORED ADDRESS
3147	7402	HLT	/JMS FAILED
3150	3434	DCA I K1000	/CLEAR STORED ADDRESS
3151	1136	TAD PNTCNT	
3152	7001	IAC	/ADVANCE COUNTER
3153	3136	DCA PNTCNT	
/JMS TEST 26 COUNTER=110			
3154	1361	TAD RK29	
3155	3764	DCA I K401	
3156	1362	TAD RK30	
3157	3444	DCA I K7377	
3160	5444	JMP I K7377	
3161	5555	JMP I K3200	
3162	4433	JMS I K400	
3163	7671	-107	
3164	0401	401	
*3200			
3200	1136	TAD PNTCNT	
3201	1223	TAD M110	
3202	7440	SEA	/CHECK COUNTER
3203	7402	HLT	/JMP COUNTER WRONG
3204	1433	TAD I K400	
3205	1033	TAD K400	
3206	7440	SEA	/CHECK STORED ADDRESS
3207	7402	HLT	/JMS FAILED
3210	3433	DCA I K400	/CLEAR STORED ADDRESS
3211	1136	TAD PNTCNT	
3212	7001	IAC	/ADVANCE COUNTER
3213	3136	DCA PNTCNT	

11-NOV-70

V141

PAL10

COUNTER=111

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3214 1221 /BASIC JMP-JMS TEST
3215 3624 TAD RK31
3216 1222 DCA I K201
3217 3445 TAD RK32
3220 5445 DCA I K7577
3221 5556 JMP I K7577
3222 4432 JMP I K3230
3223 7670 RK31,
3224 0201 RK32,
      M110,
      K201,
      *3230
3230 1130 TAD PNTCNT
3231 1250 TAD M111
3232 7440 SEA
3233 7402 HLT
3234 1432 TAD I K200
3235 1032 TAD K200
3236 7440 SEA
3237 7402 HLT
3240 3432 DCA I K200
3241 1136 TAD PNTCNT
3242 7001 IAC
3243 3136 DCA PNTCNT
      /CHECK COUNTER
      /JMP COUNTER WRONG
      /CHECK STORED ADDRESS
      /JMS FAILED
      /CLEAR STORED ADDRESS
      /ADVANCE COUNTER

```

COUNTER=112

```

3244 1251 /JMS TEST 28 COUNTER =112
3245 3654 TAD RK33
3246 1252 DCA I K101
3247 3446 TAD RK34
3250 5446 DCA I K7677
3251 5557 JMP I K7677
3252 4431 JMP I K3260
3253 7667 JMS I K100
3254 0101 -111
      101
      *3260
3260 1130 TAD PNTCNT
3261 1303 TAD M112
3262 7440 SEA
3263 7402 HLT
3264 1431 TAD I K100
3265 1031 TAD K100
3266 7440 SEA
3267 7402 HLT
3270 3431 DCA I K100
3271 1136 TAD PNTCNT
3272 7001 IAC
3273 3136 DCA PNTCNT
      /CHECK COUNTER
      /JMP COUNTER WRONG
      /CHECK STORED ADDRESS
      /JMS FAILED
      /CLEAR STORED ADDRESS
      /ADVANCE COUNTER
      /JMS TEST 29 COUNTER=113
3274 1301 TAD RK35
3275 3704 DCA I K41
3276 1302 TAD RK36

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3277 3447 DCA I K7737
3300 5447 JMP I K7737
3301 5560 RK35,
3302 4430 JMP I K3310
3303 7666 JMS I K40
3304 0041 -112
41
3310 *3310
3310 1136 TAD PNTCNT
3311 1333 TAD M113
3312 7440 SZA
3313 7402 HLT
3314 1430 TAD I K40
3315 1030 TAD K40
3316 7440 SZA
3317 7402 HLT
3320 3430 DCA I K40
3321 1136 TAD PNTCNT
3322 7001 IAC
3323 3136 DCA PNTCNT

/CHECK COUNTER
/JMP COUNTER WRONG

/CHECK STORED ADDRESS
/JMS FAILED
/CLEAR STORED ADDRESS

/ADVANCE COUNTER

/JMS TEST 30 COUNTER=114
TAD RK37
DCA I K21
TAD RK38
DCA I K7757
JMP I K7757
JMP I K3340
JMS I K20
-113
21
*3340
3340 1331 TAD PNTCNT
3340 1136 TAD M114
3341 1363 SZA
3342 7440 HLT
3343 7402 TAD I K20
3344 1427 TAD K20
3345 1027 SZA
3346 7440 HLT
3347 7402 DCA I K20
3350 3427 TAD PNTCNT
3351 1136 IAC
3352 7001 DCA PNTCNT
3353 3136

/CHECK COUNTER
/JMP COUNTER WRONG

/CHECK STORED ADDRESS
/JMS FAILED
/CLEAR STORED ADDRESS

/ADVANCE COUNTER

/JMS TEST 31 COUNTER=115
TAD RK39
DCA I K11
TAD RK40
DCA I K7767
JMP I K7767
RK39,
5562

```


3362	4426	RK40,	JMS I K10	
3363	7664	M114,	-114	
3364	0011	K11,	11	
3400	3400	*3400		
3400	1136		TAD PNTCNT	
3401	1223		TAD M115	
3402	7440		SEA	/CHECK COUNTER
3403	7402		HLT	/JMP COUNTER WRONG
3404	1426		TAD I K10	
3405	1026		TAD K10	
3406	7440		SEA	/CHECK STORED ADDRESS
3407	7402		HLT	/JMS FAILED
3410	3426		DCA I K10	/CLEAR STORED ADDRESS
3411	1136		TAD PNTCNT	
3412	7001		IAC	/ADVANCE COUNTER
3413	3136		DCA PNTCNT	

/JMS TEST 32 COUNTER=116

3414	1221		TAD RK41	
3415	3624		DCA I K5	
3416	1222		TAD RK42	
3417	3452		DCA I K7773	
3420	3452		JMP I K7773	
3421	5563		JMP I K3430	
3422	4425	RK41,	JMS I K4	
3423	7663	RK42,	-115	
3424	0005	M115,	5	
		K5,		

3430	3430	*3430		
3430	1136		TAD PNTCNT	
3431	1253		TAD M116	
3432	7440		SEA	/CHECK COUNTER
3433	7402		HLT	/JMP COUNTER WRONG
3434	1425		TAD I K4	
3435	1025		TAD K4	
3436	7440		SEA	/CHECK STORED ADDRESS
3437	7402		HLT	/JMS FAILED
3440	3425		DCA I K4	/CLEAR STORED ADDRESS
3441	1136		TAD PNTCNT	
3442	7001		IAC	/ADVANCE COUNTER
3443	3136		DCA PNTCNT	

/JMS TEST 33 COUNTER=117

3444	1251		TAD RK43	
3445	3654		DCA I K3	
3446	1252		TAD RK44	
3447	3453		DCA I K7775	
3450	3453		JMP I K7775	
3451	5564		JMP I K3460	
3452	4424	RK43,	JMS I K2	
3453	7662	RK44,	-116	
3454	0003	M116,	3	
		K3,		

```
3460      *3460
3460      TAD PNTCNT
3461      TAD M117
3462      SZA
3463      HLT
3464      TAD I K2
3465      TAD K2
3466      SZA
3467      HLT
3470      DCA I K2
3471      TAD PNTCNT
3472      IAC
3473      DCA PNTCNT

          /JMS TEST 34  COUNTER=120
3474      TAD RK45
3475      DCA I K2
3476      TAD RK46
3477      DCA I K7776
3500      JMP I K7776
3501      JMP I K3510
3502      JMS I K1
3503      -117

          /CHECK COUNTER
          /JMP COUNTER WRONG

          /CHECK STORED ADDRESS
          /JMS FAILED
          /CLEAR STORED ADDRESS
          /ADVANCE COUNTER

3510      *3510
3510      TAD PNTCNT
3511      TAD M120
3512      SZA
3513      HLT
3514      TAD I K1
3515      TAD K1
3516      SZA
3517      HLT
3520      DCA I K1
3521      TAD PNTCNT
3522      IAC
3523      DCA PNTCNT

          /JMS TEST 35  COUNTER=121
3524      TAD RK47
3525      DCA I K1
3526      TAD RK48

          DCA I K7777
          JMP I K7777
          JMP I K3540
          RK47,  JMS I K0
          RK48,  -120
          M120,

          *3540
3540      TAD PNTCNT
3541      TAD M121
3542      SZA
3543      HLT

          /CHECK COUNTER
          /JMP COUNTER WRONG
```

13:17

11-NOV-70

V141

PAL10

/BASIC JMP-JMS TEST

3544	1422	TAD I K0	
3545	1022	TAD K0	
3546	7440	SZA	/CHECK STORED ADDRESS
3547	7402	HLT	/JMS FAILED
3550	3422	DCA I K0	/CLEAR STORED ADDRESS
3551	1371	TAD BLCNT	
3552	7001	IAC	
3553	3371	DCA BLCNT	
3554	1371	TAD BLCNT	
3555	1372	TAD LIMIT	
3556	7640	SZA CLA	
3557	5766	JMP I BEL-1	
3560	3371	DCA BLCNT	
3561	1367	TAD BEL	
3562	6046	TLS	
3563	6041	TSP	
3564	5363	JMP I-1	
3565	5766	JMP I .+1	
3566	4200	4200	
3567	0207	207	BEL,
3570	7657	-121	M121,
3571	0000	0	BLCNT,
3572	1200	-6600	LIMIT,

\$

[illegible]

0600	11111111	11111111	11111111	11111111	11111111	11110000
0700	11111111	11111111	11111111	11111111	11111111	00000000

~~1200~~
~~1300~~

1400
1500
1600
1700

2000	00111111	11111111	11111111	11111111	11111111	11111111	11111111
2100	11111111	11111111	11111111	11111111	11111111	11111111	11111111
2200	11111111	11111111	11111111	11111111	11111111	11111111	11111111
2300	11111111	11111111	11111111	11111111	11111111	11111111	11111111
2400	11111110	11111111	11111111	11111111	11111111	11111111	11111111
2500	11111111	11111000	11111111	11111111	11111000	00000000	00000000
2600	11111111	11111111	11111000	11111111	11111111	11111111	11111111
2700	11111000	11111111	11111111	11111000	11111111	11111000	00000000

/BASIC JMP-JMS TEST PAL10 V141 11-NOV-70 .13117 PAGE 1-38

[illegible]

AFM	2024	K2520	0142	K5320	0105	M116	3453
AFRM	5451	K2600	0143	K5340	0106	M117	3503
AFRM1	2050	K2630	0144	K5360	0107	M12	0124
AFRM10	2347	K2660	0145	K5400	0110	M120	3533
AFRM11	2375	K2710	0146	K5420	0111	M121	3570
AFRM2	2073	K2740	0147	K5440	0112	M13	0125
AFRM3	2121	K3	3454	K5451	0672	M14	0126
AFRM4	2147	K3000	0150	K5777	0042	M15	0127
AFRM5	2175	K3030	0151	K60	0740	M16	0130
AFRM7	2247	K3060	0152	K6000	3024	M17	0131
AFRM8	2272	K3110	0153	K6777	0043	M1777	0667
AFRM9	2320	K3140	0154	K70	0737	M2	0114
AT06	2223	K3200	0155	K7000	2764	M20	0132
BEGIN	4200	K3230	0156	K7377	0044	M21	0133
BEL	3567	K3260	0157	K74	0736	M22	0134
BLCNT	3571	K3310	0160	K740	0741	M23	0135
DO	0170	K3340	0161	K7400	2734	M24	4636
FRM	2002	K3400	0162	K7402	0175	M25	4656
FRM1	2026	K3430	0163	K756	0666	M26	4676
FRM10	2324	K3460	0164	K7577	0045	M27	4716
FRM11	2353	K3510	0165	K7600	2704	M3	0115
FRM2	2052	K3540	0166	K7677	0046	M30	4736
FRM3	2077	K3572	0670	K7700	2654	M31	4756
FRM4	2125	K3777	0037	K7737	0047	M32	4776
FRM5	2153	K4	0025	K7740	2624	M33	5016
FRM7	2225	K40	0030	K7757	0050	M34	5036
FRM8	2251	K400	0033	K7760	2544	M35	5056
FRM9	2276	K4000	0036	K7767	0051	M36	5076
HALT1	0631	K4001	3054	K7770	2514	M37	5116
HALT2	0640	K401	3164	K7773	0052	M4	0116
HALT3	0646	K41	3304	K7774	2464	M40	5136
HALT4	0654	K4620	0056	K7775	0053	M41	5156
K0	0022	K4640	0057	K7776	0054	M4177	0671
K00	0742	K4660	0060	K7777	0055	M42	5176
K1	0023	K4700	0061	LIMIT	3572	M43	5216
K10	0026	K4720	0062	M1	0113	M44	5236
K100	0031	K4740	0063	M10	0122	M45	5256
K1000	0034	K4760	0064	M100	2703	M46	5276
K1001	3134	K5	3424	M101	2733	M47	5316
K101	3254	K5000	0065	M102	2763	M5	0117
K11	3364	K5020	0066	M103	3023	M50	5336
K175	0664	K5040	0067	M104	3053	M51	5356
K2	0024	K5060	0070	M105	3103	M52	5376
K20	0027	K5100	0071	M106	3133	M53	5416
K200	0032	K5120	0072	M107	3163	M54	5436
K2000	0035	K5140	0073	M11	0123	M55	5450
K2001	3104	K5160	0074	M110	3223	M56	2022
K201	3224	K5200	0075	M111	3253	M57	2046
K21	3334	K5220	0076	M112	3303	M577	0665
K2410	0137	K5240	0102	M113	3333	M6	0120
K2440	0140	K5260	0103	M114	3363	M60	2075
K2470	0141	K5300	0104	M115	3423	M61	2123

11-NOV-70

V141

PAL10

/BASIC JMP-JMS TEST

M62	2151	PK42	5315	RK39	3361
M63	2177	PK43	5334	RK4	2432
M64	2221	PK44	5335	RK40	3362
M65	2245	PK45	5354	RK41	3421
M66	2274	PK46	5355	RK42	3422
M67	2322	PK47	5374	RK43	3451
M7	0121	PK48	5375	RK44	3452
M70	2351	PK49	5414	RK45	3501
M71	2377	PK5	4654	RK46	3502
M72	2433	PK50	5415	RK47	3531
M73	2463	PK51	5434	RK48	3532
M74	2513	PK52	5435	RK5	2461
M75	2543	PK6	4655	RK6	2462
M76	2623	PK7	4674	RK7	2511
M7600	0673	PK8	4675	RK8	2512
M77	2653	PK9	4714	RK9	2541
PK1	4605	PNTCNT	0136	SAVE	0600
PK10	4715	REFILL	0704	SAVER	0201
PK11	4734	RENEW	0703	STOR	0743
PK12	4735	RESTAR	0700	TO	2003
PK13	4754	RK1	2405	T01	2027
PK14	4755	RK10	2542	T010	2330
PK15	4774	RK11	2621	T011	2356
PK16	4775	RK12	2622	T02	2054
PK17	5014	RK13	2651	T03	2102
PK18	5015	RK14	2652	T04	2130
PK19	5034	RK15	2701	T05	2156
PK2	4606	RK16	2702	T06	2202
PK20	5035	RK17	2731	T07	2226
PK21	5054	RK18	2732	T08	2253
PK22	5055	RK19	2761	T09	2301
PK23	5074	RK2	2406		
PK24	5075	RK20	2762		
PK25	5114	RK21	3021		
PK26	5115	RK22	3022		
PK27	5134	RK23	3051		
PK28	5135	RK24	3052		
PK29	5154	RK25	3101		
PK3	4634	RK26	3102		
PK30	5155	RK27	3131		
PK31	5174	RK28	3132		
PK32	5175	RK29	3161		
PK33	5214	RK3	2431		
PK34	5215	RK30	3162		
PK35	5234	RK31	3221		
PK36	5235	RK32	3222		
PK37	5254	RK33	3251		
PK38	5255	RK34	3252		
PK39	5274	RK35	3301		
PK4	4635	RK36	3302		
PK40	5275	RK37	3331		
PK41	5314	RK38	3332		

ERRORS DETECTED: 0

LINKS GENERATED: 0

RUN-TIME: 17 SECONDS

3K CORE USED