

TC2-TC11

TEST 2

MD-11-DZTCB-D

EP-DZTCB-D-DL-B

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MADE IN USA

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EOF1DZDROCSEQ
PDP10 411

00010000

770608

PDP10 411

HOR1DZTCBDSEQ

00010000

770608

IDENTIFICATION

PRODUCT CODE: MAINDEC-11-DZTCB-D-D

PRODUCT NAME: TC2-TC11 TEST #2

PRODUCT DATE: JULY 1977

MAINTAINER: DIAGNOSTIC ENGINEERING

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1.0 GENERAL PROGRAM INFORMATION

1.1 ABSTRACT

TC2 - TC11 TEST2 IS USED TO TEST THE TC11 DECTAPE CONTROL. TC2 USES THE MAINTENANCE BIT FEATURE OF THE TC11 CONTROL TO CHECK THE TC11 CONTROL WITHOUT DEPENDING ON DECTAPE TRANSPORT MOVEMENT. PRIOR TO ACTUAL USE OF THE MAINTENANCE BIT FEATURE, CORRECT OPERATION OF THE INTERRUPT CIRCUITS IS CHECKED, AND THE MAINTENANCE BIT ITSELF IS CHECKED.

2.1.2 SYSTEM REQUIREMENTS

1.21 HARDWARE REQUIREMENTS

- A) PDP-11 SYSTEM (12k CORE).
- B) ASR33/35 TELETYPE.
- C) TC11 DECTAPE CONTROL AND AT LEAST ONE TUS6 DUAL TRANSPORT.

THE TELETYPE AND TC11 CONTROL MUST HAVE THEIR STANDARD PERIPHERAL ADDRESSES, INTERRUPT LEVELS, AND INTERRUPT VECTOR ADDRESSES. REFER TO SECTION 7.2 IF YOUR SYSTEM DOES NOT HAVE STANDARD PERIPHERAL ADDRESSES.

1.11 SOFTWARE REQUIREMENTS

THIS PROGRAM IS ABLE TO RUN "STAND ALONE" OR UNDER CONTROL OF THE ACT11 MONITOR

1.3 RELATED DOCUMENTS AND STANDARDS

SEE THE ACT11/XXDP PROGRAMERS GUIDE FOR INFORMATION ON RUNNING UNDER ACT 11

1.4 SUGGESTED PREREQUISITES

IT IS RECOMMENDED THAT ALL MAINDECS THAT CHECK OUT THE BASIC CPU BE RUN BEFORE TC2.

1.5 FAILURE ASSUMPTIONS

THROUGHOUT THIS PROGRAM IT IS ASSUMED THAT THE BASIC CPU IS IN GOOD RUNNING ORDER. IF IT IS NOT THE INFORMATION GAINED BY RUNNING THIS PROGRAM IS LIKELY TO BE FALSE (OR NONEXISTANT IF THE PROGRAM WILL NOT RUN).

2.0 OPERATING INSTRUCTIONS

2.10 LOADING PROCEDURES

THIS PROGRAM'S OBJECT TAPE IS PUNCHED IN ABSOLUTE FORMAT. THE ABS LOADER IS USED TO LOAD THE PROGRAM UNDER STAND ALONE MODE. FOR INFORMATION ON PROGRAM LOADING UNDER CONTROL OF THE VARIOUS MONITOR SYSTEMS, REFER TO THE DOCUMENTS NAMES IN SECTION 1.3 ABOVE. UNDER STAND ALONE MODE, AFTER ASCERTAINING THAT THE ABS LOADER PROGRAM IS IN THE PDP-11, FOLLOW THESE STEPS TO LOAD TC2:

- A) PUT THE TC2 BINARY TAPE INTO THE PAPER TAPE READER
- B) SET THE PDP-11 CONSOLE SWITCHES TO 37750
- C) DEPRESS LOAD ADDRESS
- D) DEPRESS START (TAPE SHOULD READ IN)

4.0 STARTING PROCEDURE

- A) UNIT 0: REMOTE/WRITE LOCK/. ALL OTHER UNITS OFF.
- B) WALL SWITCH ON, WRTM SWITCH OFF.
- C) LOAD ADDRESS 000200.
- D) PRESS START.
- E) THE PROGRAM IDENTIFIES ITSELF, TYPES SETUP INSTRUCTIONS, SR OPTIONS MESSAGE, AND HALTS.
- F) MAKE SURE THAT THE SETUP (STEPS A AND B) HAS BEEN PROPERLY DONE AND SELECT DESIRED SR OPTIONS, IF ANY. NORMAL SR SETTING IS 000000.
- G) PRESS CONT. THE PROGRAM BEGINS EXECUTION.
- H) AT THE END OF EACH PASS THE PASS COUNT IS PRINTED
- I) REFER TO SECTION 6.2 IF ERROR PRINTOUTS OCCUR.

2.4 EXECUTION TIME

EXECUTION TIME IS DEPENDENT ON WHICH MODEL OF PDP11 THE PROGRAM IS TO BE RUN ON. ANY TIMES GIVEN APPLY TO THE PDP-11 MODEL 40 UNLESS OTHERWISE STATED

- A) ONE NORMAL ERROR FREE PASS TAKES APPROXIMATELY 10 SECONDS
- B) ONE SINGLE ITERATION PASS (SR11=1) TAKES ABOUT 5 SECONDS.

*****NOTE*****

THE SINGLE ITERATION PASS IS A CONVENIENT WAY TO QUICKLY DETERMINE IF ANY SOLID PROBLEMS EXIST. FOR A THOROUGH TEST, THE NORMAL ITERATION PASS SHOULD BE RUN.

6.0 ERROR INFORMATION

ERRORS ARE REPORTED IN THIS PROGRAM BY THE FOLLOWING METHODS:

- A) UNCONDITIONAL ERROR HALTS, OR
- B) ERROR PRINTOUT FOLLOWED BY OPTIONAL ERROR HALT.

6.1 UNCONDITIONAL ERROR HALTS

AN UNCONDITIONAL ERROR HALT WILL OCCUR AT THE ADDRESSES LISTED BELOW IF THROUGH HARDWARE OR SOFTWARE FAILURE, PROGRAM CONTROL IS TRANSFERRED TO AN UNEXPECTED AREA BETWEEN 000000 AND 000176.

000002 RESERVED AREA

000016 DEBUG TRAP

000022 IOT TRAP

000040 THROUGH 000176 - SYSTEM SOFTWARE AND INTERRUPT VECTOR AREA
TO FIND OUT WHERE THE PROGRAM WAS AT THE TIME THE FAILURE OCCURRED,

- A) EXAMINE CONTENTS OF REGISTER 6. (ADDRESS 177706).
- B) TRANSFER THE CONTENTS OF REG 6 TO THE SR, LOAD ADDRESS AND EXAMINE.
- C) THE DATA SHOWN IN THE DATA LIGHTS IS THE VALUE OF THE PC WHEN THE FAILURE OCCURRED.
- D) LOCATE IN PROGRAM LISTING THE DISPLAYED PC VALUE.
- E) THE INSTRUCTION THAT IMMEDIATELY PRECEDES THE ONE REFERENCED BY THE DISPLAYED PC VALUE IS THE INSTRUCTION THAT WAS/WAS BEING EXECUTED WHEN THE FAILURE OCCURRED.

AN UNCONDITIONAL ERROR HALT FAILURE IS AN ABNORMAL CONDITION INDICATING A HARDWARE FAILURE, OR MOST UNLIKELY, A PROGRAM FAILURE. THIS PROGRAM ASSUMES THAT THE PROCESSOR IS IN OPERATING CONDITION IN ORDER TO PERFORM ITS TESTS. ANY FURTHER STEPS REQUIRED TO DIAGNOSE AN UNCONDITIONAL ERROR HALT ARE NOT WITHIN THE SCOPE OF THIS PROGRAM.

6.2 ERROR PRINTOUTS

THERE ARE 2 TYPES OF ERROR PRINTOUTS, NORMAL ERROR PRINTOUTS AND FATAL ERROR PRINTOUTS. EACH TYPE IS GENERATED BY THE SYSMAC .ERROR SUBROUTINE. THE ".ERROR" SUBROUTINE IS CALLED BY AN "ERROR NN(Trap+N)" STATEMENT IN THE PROGRAM LISTING. A NORMAL ERROR PRINTOUT LOOKS AS FOLLOWS:

PC	SP	PS	TEST	TCCM	TCST	ADDITIONAL INFO
XXXXXX	XXXXXX	XXXXXX	XXXXXX	XXXXXX	XXXXXX	XXXXXX XXXXXX

WHERE:

PC
XXXXXX IS THE ADDRESS OF THE ERROR CALL

SP
XXXXXX IS THE VALUE OF THE STACK POINTER

PS
XXXXXX IS THE VALUE OF THE PROCESSOR STATUS WORD

TEST
XXXXXX IS THE NUMBER OF THE FAILING ROUTINE

TCCM
XXXXXX IS THE VALUE OF THE DECTAPE COMMAND REGISTER

TCST
XXXXXX IS THE CONTENTS OF THE DECTAPE STATUS REGISTER

ADDITIONAL INFORMATION CAN VARY FROM TEST TO TEST AND FURTHER DESCRIBES THE ERROR.

AFTER THE PRINTOUT IS COMPLETED, THE PROGRAM WILL HALT AT COMMON ERROR HALT IF SR15 IS SET.
WHEN AN ERROR PRINTOUT OCCURS:

- A) LOOK UP THE ADDRESS REFERENCED BY PC OYYYYY IN THE LISTING.
- B) OPPOSITE THE PC VALUE AN "ERROR" STATEMENT WILL BE FOUND, AND IN THE COMMENTS SECTION, A DESCRIPTION OF THE ERROR.
- C) AT THE BEGINNING OF THE TEST ROUTINE A DESCRIPTION OF THE TEST WILL BE FOUND.

FATAL ERRORS ARE UNEXPECTED TRAPS TO EITHER LOCATION 4 OR TO LOCATION 10.
WHEN THESE OCCUR A FATAL ERROR MESSAGE IS PRINTED OUT IN THE FOLLOWING FORMAT.

FATAL ERROR TRAP TO LOC XX FROM LOCATION XXXXXX

WHERE X IS THE TRAP VECTOR LOCATION(4 OR 10) AND XXXXXX IS THE PLACE THAT THE PROGRAM WAS EXECUTING AT WHEN THE FATAL ERROR TRAP OCCURRED. AFTER THE MESSAGE IS PRINTED THE PROGRAM ATTEMPTS TO RESTART ITSELF AT LOCATION 000200 THE STANDARD SR OPTIONS ARE DESCRIBED HERE.

SR15 HALT ON ERROR. WITH SR15 SET TO A 1, THE PROGRAM WILL HALT AFTER AN ERROR OCCURS. PRESSING 'CONT WILL CAUSE PROGRAM TO RESUME OPERATION.

SR14 SCOPE. THIS OPTION CAUSES THE PROGRAM TO REMAIN IN THE CURRENT TEST ROUTINE. WHEN THE OPTION IS REMOVED, THE PROGRAM WILL COMPLETE THE CURRENT ROUTINE, AND WILL THEN GO ON TO THE NEXT ROUTINE.

SR13 INHIBIT ERROR PRINTOUT. THIS OPTION IF SET, WILL REMOVE ALL ERROR PRINTOUTS.

SR11 PROGRAM TO EXECUTE EACH TEST ONLY ONCE, INSTEAD OF THE NORMAL NUMBER OF ITERATIONS SELECTED FOR EACH TEST. THIS ALLOWS FOR A "QUICK CHECK" OF THE TC11 HARDWARE.

SR10 BELL ON ERROR. SETTING THIS SWITCH TO A 1 WILL CAUSE THE PROGRAM TO SOUND THE BELL WHEN AN ERROR IS FOUND. THIS SWITCH DOES NOT INTERFERE WITH THE FUNCTIONS OF SW15 AND SW13

SR08 SELECT ROUTINE. WITH SR8 SET, THE PROGRAM WILL RUN NORMALLY UNTIL THE ROUTINE SPECIFIED IN SR7 THROUGH SR0 IS ENCOUNTERED. THE PROGRAM WILL REMAIN LOOPING IN THE SPECIFIED ROUTINE, UNTIL EITHER SR8 IS CHANGED, OR UNTIL THE VALUE OF SWITCHES SR7 THROUGH SR0 CHANGES

SR7-SR0 TEST SELECT. THE NUMBER SET IN THESE SWITCHES IS THE NUMBER OF THE TEST THAT WILL BE LOCKED ONTO IF SR8 IS SET IF SR8 IS SET TO A 0 THEN SR7 THROUGH SR0 HAVE NO EFFECT ON THE OPERATION OF THE PROGRAM

7.2 TESTING TC11 AT NON-STANDARD ADDRESSES AND/OR VECTORS

THIS PROGRAM CAN TEST THE TC11 AT NON-STANDARD ADDRESSES AND VECTORS PROVIDED THOSE ADDRESSES AND VECTORS ARE PROVIDED TO THE PROGRAM AS FOLLOWS:

A) AFTER LOADING PROGRAM REFER TO PROGRAM LISTING AND CHANGE LOCATIONS 001004 THROUGH 001020 TO REFLECT THE NEW TC11 ADDRESSES AND VECTORS.

B) PROCEED TO USE THE PROGRAM, OR

7.0 PROGRAM LISTING

GO1

MAINDEC-11-DZTCB-D TC11 TEST #2 MACY11 27(100%) 18-FEB-77 11:33
DZTCB0.P11 18-FEB-77 10:59 TABLE OF CONTENTS

31		OPERATIONAL SWITCH SETTINGS
55		BASIC DEFINITIONS
168		TRAP CATCHER
178		STARTING ADDRESS(ES)
342		COMMON TAGS
478		ERROR POINTER TABLE
870		INITIALIZE THE COMMON TAGS
924	T0001	
938	T0002	
953	T0003	
967	T0004	
983	T0005	
1004	T0006	
1021	T0007	
1039	T0010	
1060	T0011	
1082	T0012	
1109	T0013	
1134	T0014	
1150	T0015	
1169	T0016	
1200	T0017	
1230	T0020	
1251	T0021	
1280	T0022	
1301	T0023	
1331	T0024	
1356	T0025	
1384	T0026	
1411	T0027	
1439	T0030	
1464	T0031	
1518	T0032	
1578	T0033	
1624	T0034	
1672	T0035	
1720	T0036	
1767	T0037	
1804	T0040	
1870	T0041	
1939	T0042	
1987	T0043	
2041	T0044	
2081	T0045	
2141	T0046	
2153	T0047	
2164	T0050	
2175	T0051	
2186	T0052	
2197	T0053	
2211	T0054	
2222	T0055	
2265	T0056	
2268		END OF PASS ROUTINE
2607		SCOPE HANDLER ROUTINE
2691		ERROR HANDLER ROUTINE

H01

MAINDEC-11-DZTCB-D TC11 TEST #2 MACY11 27(1006) 18-FEB-77 11:33
DZTCB0.P11 18-FEB-77 10:59 TABLE OF CONTENTS

2751	POWER DOWN AND UP ROUTINES
2820	TYPE ROUTINE
2892	CONVERT BINARY TO DECIMAL AND TYPE ROUTINE
2968	BINARY TO OCTAL (ASCII) AND TYPE
3047	ERROR MESSAGE TYPEOUT ROUTINE
3097	TRAP DECODER
3149	TRAP TABLE

MAINDEC-11-DZTCB-D TC11 TEST #2 MACY11 27(1006) 18-FEB-77 11:33 PAGE 1
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167400
 000000

000000

000000

000000

000000

```
.ABS
.ENABL AMA
.LIST MC,MD,BIN,LD,SEQ,ME
.NLIST CND
$SWR=167400
$TN=0
.ENABL ABS
.MCALL .HEADER,.SCATCH,.SEOP,.EQUAT
.MCALL .SWRHI,.SWRLO,$SCOPE,SETUP
.MCALL .STYPOCT,.STYPDEC,.STRAP,$POWER
.MCALL .ERROR,.STYPE,STARS,.SERATYP
.MCALL .SCTAG
.SETUP (. $SCOPE,.SEOP,$POWER,.STRAP,.ERROR)
.LIST
.HEADER (MAINDEC-11-DZTCB-D TC11 TEST #2),(1972,1977),(J. COMEAU)
.TITLE MAINDEC-11-DZTCB-D TC11 TEST #2
;COPYRIGHT (C) 1972,1977
;DIGITAL EQUIPMENT CORP.
;MAYNARD, MASS. 01754
;
;PROGRAM BY J. COMEAU
;
;THIS PROGRAM WAS ASSEMBLED USING THE POP-11 MAINDEC SYSMAC
;PACKAGE (MAINDEC-11-DZQAC-C3), JAN 19, 1977.
;
.SWRHI
.SBTTL OPERATIONAL SWITCH SETTINGS
;
; SWITCH USE
; -----
; 15 HALT ON ERROR
; 14 LOOP ON TEST
; 13 INHIBIT ERROR TYPEOUTS
; 11 INHIBIT ITERATIONS
; 10 BELL ON ERROR
; 9 LOOP ON ERROR
.LIST
; 8 LOOP ON TEST IN SWR(7:0)
.MACRO .SWRLO S07,S06,S05,S04,S03,S02,S01,S00
.IIF NB (S07),: 7 S07
.IIF NB (S06),: 6 S06
.IIF NB (S05),: 5 S05
.IIF NB (S04),: 4 S04
.IIF NB (S03),: 3 S03
.IIF NB (S02),: 2 S02
.IIF NB (S01),: 1 S01
.IIF NB (S00),: 0 S00
.ENDM .SWRLO
; 7-0 # OF TEST TO LOOP ON IF SWR(8) IS SET
.EQUAT
.SBTTL BASIC DEFINITIONS
;INITIAL ADDRESS OF THE STACK POINTER *** 1100 ***
```

J01

MAINDEC-11-DZTCB-D TC11 TEST #2
DZTCB0.P11 18-FEB-77 10:59

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BASIC DEFINITIONS

57	001100	STACK= 1100	
58		.EQUIV FMT,ERROR	::BASIC DEFINITION OF ERROR CALL
59		.EQUIV TOT,SCOPE	::BASIC DEFINITION OF SCOPE CALL
60			
61		;#MISCELLANEOUS DEFINITIONS	
62	000011	HT= 11	::CODE FOR HORIZONTAL TAB
63	000012	LF= 12	::CODE FOR LINE FEED
64	000015	CR= 15	::CODE FOR CARRIAGE RETURN
65	000200	CRLF= 200	::CODE FOR CARRIAGE RETURN-LINE FEED
66	177776	PS= 177776	::PROCESSOR STATUS WORD
67		.EQUIV PS,PSW	
68	177774	\$TKLMT= 177774	::STACK LIMIT REGISTER
69	177772	PIRQ= 177772	::PROGRAM INTERRUPT REQUEST REGISTER
70	177570	DSWR= 177570	::HARDWARE SWITCH REGISTER
71	177570	DDISP= 177570	::HARDWARE DISPLAY REGISTER
72			
73		;#GENERAL PURPOSE REGISTER DEFINITIONS	
74	000000	R0= %0	::GENERAL REGISTER
75	000001	R1= %1	::GENERAL REGISTER
76	000002	R2= %2	::GENERAL REGISTER
77	000003	R3= %3	::GENERAL REGISTER
78	000004	R4= %4	::GENERAL REGISTER
79	000005	R5= %5	::GENERAL REGISTER
80	000006	R6= %6	::GENERAL REGISTER
81	000007	R7= %7	::GENERAL REGISTER
82	000006	SP= %6	::STACK POINTER
83	000007	PC= %7	::PROGRAM COUNTER
84			
85		;#PRIORITY LEVEL DEFINITIONS	
86	000000	PR0= 0	::PRIORITY LEVEL 0
87	000040	PR1= 40	::PRIORITY LEVEL 1
88	000100	PR2= 100	::PRIORITY LEVEL 2
89	000140	PR3= 140	::PRIORITY LEVEL 3
90	000200	PR4= 200	::PRIORITY LEVEL 4
91	000240	PR5= 240	::PRIORITY LEVEL 5
92	000300	PR6= 300	::PRIORITY LEVEL 6
93	000340	PR7= 340	::PRIORITY LEVEL 7
94			
95		;#"SWITCH REGISTER" SWITCH DEFINITIONS	
96	100000	SW15= 100000	
97	040000	SW14= 40000	
98	020000	SW13= 20000	
99	010000	SW12= 10000	
100	004000	SW11= 4000	
101	002000	SW10= 2000	
102	001000	SW09= 1000	
103	000400	SW08= 400	
104	000200	SW07= 200	
105	000100	SW06= 100	
106	000040	SW05= 40	
107	000020	SW04= 20	
108	000010	SW03= 10	
109	000004	SW02= 4	
110	000002	SW01= 2	
111	000001	SW00= 1	
112		.EQUIV SW09,SW9	

K01

MAINDEC-11-DZTCB-D TC11 TEST #2
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BASIC DEFINITIONS

```

113 .EQUIV SW08,SW8
114 .EQUIV SW07,SW7
115 .EQUIV SW06,SW6
116 .EQUIV SW05,SW5
117 .EQUIV SW04,SW4
118 .EQUIV SW03,SW3
119 .EQUIV SW02,SW2
120 .EQUIV SW01,SW1
121 .EQUIV SW00,SW0
122
123 .#DATA BIT DEFINITIONS (BIT00 TO BIT15)
124 BIT15= 100000
125 BIT14= 40000
126 BIT13= 20000
127 BIT12= 10000
128 BIT11= 4000
129 BIT10= 2000
130 BIT09= 1000
131 BIT08= 400
132 BIT07= 200
133 BIT06= 100
134 BIT05= 40
135 BIT04= 20
136 BIT03= 10
137 BIT02= 4
138 BIT01= 2
139 BIT00= 1
140 .EQUIV BIT09,BIT9
141 .EQUIV BIT08,BIT8
142 .EQUIV BIT07,BIT7
143 .EQUIV BIT06,BIT6
144 .EQUIV BIT05,BIT5
145 .EQUIV BIT04,BIT4
146 .EQUIV BIT03,BIT3
147 .EQUIV BIT02,BIT2
148 .EQUIV BIT01,BIT1
149 .EQUIV BIT00,BIT0
150
151 .#BASIC "CPU" TRAP VECTOR ADDRESSES
152 ERRVEC= 4 ;; TIME OUT AND OTHER ERRORS
153 RESVEC= 10 ;; RESERVED AND ILLEGAL INSTRUCTIONS
154 TBITVEC= 14 ;; "T" BIT
155 TRIVEC= 14 ;; TRACE TRAP
156 BPTVEC= 14 ;; BREAKPOINT TRAP (BPT)
157 IOTVEC= 20 ;; INPUT/OUTPUT TRAP (IOT) **SCOPE**
158 PWAVEC= 24 ;; POWER FAIL
159 EMTVEC= 30 ;; EMULATOR TRAP (EMT) **ERROR**
160 TRAPVEC= 34 ;; "TRAP" TRAP
161 TKVEC= 60 ;; TTY KEYBOARD VECTOR
162 TPVEC= 64 ;; TTY PRINTER VECTOR
163 PIRQVEC= 240 ;; PROGRAM INTERRUPT REQUEST VECTOR
164 .LIST
165 ;MISCELANIOUS EQUATES
166 .$CATCH START
167 .SBTTL TRAP CATCHER
168

```

000000

L01

MAINDEC-11-DZTCB-D TC11 TEST #2
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TRAP CATCHER

```

169      000000
170
171
172
173
174      000174
175 000174 000000
176 000176 000000
177
178 000200 000137 002312
179
180      001000
181      000240
182      000000
183      100000
184      005746
185      024646
186      005726
187      022626
188      000007
189      177777
190      000003
191      000207
192      000040
193      177777
194      106000
195      040000
196      020000
197      000000
198      000004
199      000010
200      000014
201      000020
202      000024
203      000030
204      000034
205      020000
206      010000
207      004000
208      000000
209 000204 000240
210      000000
211      000400
212      001000
213      001400
214      002000
215      002400
216      003000
217      003400
218      000100
219      000000
220      000002
221      000004
222      000006
223      000010
224      000012

```

```

      .=0
;#ALL UNUSED LOCATIONS FROM 4 - 776 CONTAIN A ".+2,HALT"
;#SEQUENCE TO CATCH ILLEGAL TRAPS AND INTERRUPTS
;#LOCATION 0 CONTAINS 0 TO CATCH IMPROPERLY LOADED VECTORS
.LIST
      .=174
DISPREG: .WORD 0      ;;SOFTWARE DISPLAY REGISTER
SWREG:   .WORD 0      ;;SOFTWARE SWITCH REGISTER
.SBTTL   STARTING ADDRESS(ES)
JMP      @#START ;;JUMP TO STARTING ADDRESS OF PROGRAM
;EQUATES
SPBOT=1000
NOP=240
OPEN=0
MANUAL=BIT15
PUSH=005746
PUSH2=024646
POPSP=005726
POPSP2=022626
BELL=007
TLAST=-1
TRC=3
RTSPC=207
I=40
X=-1
A=BIT15
B=BIT14
C=BIT13
V0=0
V1=4
V2=10
V3=14
V4=20
V5=24
V6=30
V7=34
MAINT=BIT13
DINH=BIT12
REV=BIT11
FWD=0
NOP
U0=0
U1=BIT8
U2=BIT9
U3=BIT9!BIT8
U4=BIT10
U5=BIT10!BIT8
U6=BIT10!BIT9
U7=BIT10!BIT9!BIT8
IE=BIT6
SAT=0
RNUM=BIT1
RDATA=BIT2
RALL=BIT2!BIT1
SST=BIT3
WRTM=BIT3!BIT1

```


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MAINDEC-11-DZTCB-D TC11 TEST #2
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 STARTING ADDRESS(ES)

```

225      000014      WDATA=BIT3:BIT2
226      000016      WALL=BIT3:BIT2:BIT1
227      000001      DO=BIT0
228      000000      EMTX=0
229      .MACRO      ADITAG
230      TCST:      177340      ;TC11 STATUS REGISTER.
231      ICCM:      177342      ;TC11 COMMAND REGISTER.
232      TCWC:      177344      ;TC11 WORD COUNT REGISTER.
233      TCBA:      177346      ;TC11 BUS ADDRESS REGISTER.
234      TCDT:      177350      ;TC11 DATA REGISTER.
235      TCVTR:      214      ;TC11 INTERRUPT VECTOR
236      TCLVL:      300      ;TC11 INTERRUPT PRIORITY LEVEL.
237      TPS:      177564      ;LSP CSR
238      TPB:      177566      ;LSP BUFFER
239      COOCAL:      OPEN
240      RTNNO:      OPEN
241      NXTST:      OPEN
242      CURTST:      OPEN
243      CRBUF:      OPEN
244      CRBUFA:      OPEN
245      CTRA:      OPEN
246      SBDAT1:      50505
247      127272
248      SBDAT2:      72727
249      105050
250      SBDAT3:      72727
251      105056
252      POWPUS:      .WORD      000000
253      POWPOP:      .WORD      000000
254      TCCMT:      OPEN
255      TCSTT:      OPEN
256      .ENDM      ADITAG
257
258      ;
259      .MACRO      SETRAP
260      MOV      #TRAP0,2#4      ;SETUP FATAL TRAP VECTOR JUST IN CASE
261      MOV      #340,2#6      ;NO INTERRUPTS WHILE SERVICING FATAL ERRORS
262      .ENDM      SETRAP
263      .MACR      C55
264      .BYTE      I,0,I,I,0,I      ;MTK CODE 55. REV END ZONE MARK.
265      .ENDM
266      .MACR      C25
267      .BYTE      0,I,0,I,0,I      ;MTK CODE 25. EXTENSION MARK.
268      .ENDM
269      .MACR      C26      B0,B1,B2,B3,B4,B5
270      .BYTE      0!B0,I!B1,0!B2,I!B3,I!B4,0!B5      ;FWD BLOCK MARK.
271      .ENDM
272      .MACR      C32      B0,B1,B2,B3,B4,B5
273      .BYTE      0!B0,I!B1,I!B2,0!B3,I!B4,0!B5      ;REV GUARD.
274      .ENDM
275      .MACR      C10      B0,B1,B2,B3,B4,B5
276      .BYTE      0!B0,0!B1,I!B2,0!B3,0!B4,0!B5      ;MTK CODE 10.
277      .ENDM
278      .MACR      C70      B0,B1,B2,B3,B4,B5
279      .BYTE      I!B0,I!B1,I!B2,0!B3,0!B4,0!B5      ;MTK CODE 70. DATA MARK.
280      .ENDM

```

NO1

MAINDEC-11-DZTCB-D TC11 TEST #2
DZTCB0.P11 18-FEB-77 10:59

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STARTING ADDRESS(ES)

```

281 .MACR C73      80,81,82,83,84,85
282 .BYTE 1!80,1!81,1!82,0!83,1!84,1!85 ;MTK CODE 73. DATA MARK.
283 .ENDM
284 .MACR C51      80,81,82,83,84,85
285 .BYTE 1!80,0!81,1!82,0!83,0!84,1!85 ;MTK CODE 51. FWD GUARD.
286 .ENDM
287 .MACR C45      80,81,82,83,84,85
288 .BYTE 1!80,0!81,0!82,1!83,0!84,1!85 ;MTK CODE 45. REV BLOCK MARK.
289 .ENDM
290 .MACR C22
291 .BYTE 0,1,0,0,1,0 ;MTK CODE 22. FWD END ZONE.
292 .ENDM
293 .MACR CEND
294 .BYTE -1
295 .ENDM
296 .MACR EMT
297 .BYTE 1,1,1,0,0,1
298 .ENDM
299 .MACR MTCOD MTADR,CNT
300 JSR RS,LMTCOD ;CALL LOAD MT CODES SUB.
301 MTADR ;ADDRESS OF MARK TRACK CODES.
302 CNT ;MARK TRACK CODE COUNT.
303 .ENDM
304 .MACR MTCOE CALADR,MTADR,CNT
305 JSR RS,LMTCOE ;CALL LOAD MT CODES SUBROUTINE.
306 CALADR ;ADDR TO GO AFTER EACH CODE PASSED.
307 MTADR ;ADDRESS OF MARK TRACK CODES.
308 CNT ;MARK TRACK CODE COUNT.
309 .ENDM
310 .MACR EMTDEF NAMEA,NAMEB
311 .WORD NAMEB ;POINTER FOR EMT CALL NAMEA
312 .NLIST
313 NAMEA=EMT+EMTX
314 EMTX=EMTX+1
315 .LIST
316 .ENDM
317 .MACRO SCOMAC
318 CLR 2TCCM
319 CLR 2(SP) ;PS TO =0 AFTER WE EXIT THE SCOPE ROUTINE
320 JSR PC,SRSETT
321 JSR PC,RSTMTK
322 .ENDM SCOMAC
323 .=50
324 .WORD 0
325 .WORD 0
326 .SCHTAG 10,10,ADITAG,1100
327 .MACRO $SCHREG A,B
328 $REG'A: .WORD 0 ;CONTAINS (($REGAD)+B)
329 .NLIST
330 SCH1=$CH1+1
331 SCH2=$CH2+2
332 .LIST
333 .ENDM $SCHREG
334 .MACRO $SCHTMP A
335 $TMP'A: .WORD 0 ;;USER DEFINED
336 .NLIST

```

000050 000050
000051 000000
000052 000000
000054

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STARTING ADDRESS(ES)

337
338
339
340

SCM4=SCM4+1
.LIST
.ENDM SSCMTMP
.PAGE

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COMMON TAGS

.SBTTL COMMON TAGS

STARS

; THIS TABLE CONTAINS VARIOUS COMMON STORAGE LOCATIONS
; USED IN THE PROGRAM.

341
342
343 000054
344
345
346
347
348 001100
349 001100
350 001100 000000
351 001102 000
352 001103 000
353 001104 000000
354 001106 000000
355 001110 000000
356 001112 000000
357 001114 000
358 001115 001
359 001116 000000
360 001120 000000
361 001122 000000
362 001124 000000
363 001126 000000
364 001130 000000
365 001132 000000
366 001134 000
367 001135 000
368 001136 000000
369 001140 177570
370 001142 177570
371 001144 177560
372 001146 177562
373 001150 177564
374 001152 177566
375 001154 000
376 001155 002
377 001156 012
378 001157 000
379
380 001160 000000
381
382
383 000010
384
385
386 001162
387 001162 000000
388
389 001164
390 001164 000000
391
392 001166
393 001166 000000
394
395 001170
396 001170 000000

.=1100

\$CMTAG: .WORD 0
\$PASS: .BYTE 0
\$STNM: .BYTE 0
\$ERFLG: .BYTE 0
\$ICNT: .WORD 0
\$LPADR: .WORD 0
\$LPERR: .WORD 0
\$ERTTL: .WORD 0
\$ITEMB: .BYTE 0
\$ERMAX: .BYTE 1
\$ERRPC: .WORD 0
\$GADR: .WORD 0
\$BADADR: .WORD 0
\$GDOAT: .WORD 0
\$BDOAT: .WORD 0
\$AUTOB: .BYTE 0
\$INTAG: .BYTE 0
\$SWR: .WORD DSWR
\$DISPLAY: .WORD DOISP
\$TKS: 177560
\$TKB: 177562
\$TPS: 177564
\$TPB: 177566
\$NULL: .BYTE 0
\$FILLS: .BYTE 2
\$FILLC: .BYTE 12
\$TPFLG: .BYTE 0
\$LIST
\$REGAD: .WORD 0

.LIST

.REPT \$CM3
\$SCHREG \SCM1,\SCM2
.ENDR
\$SCHREG \SCM1,\SCM2
\$REGO: .WORD 0
\$LIST
\$SCHREG \SCM1,\SCM2
\$REG1: .WORD 0
\$LIST
\$SCHREG \SCM1,\SCM2
\$REG2: .WORD 0
\$LIST
\$SCHREG \SCM1,\SCM2
\$REG3: .WORD 0

;; START OF COMMON TAGS
;; CONTAINS PASS COUNT
;; CONTAINS THE TEST NUMBER
;; CONTAINS ERROR FLAG
;; CONTAINS SUBTEST ITERATION COUNT
;; CONTAINS SCOPE LOOP ADDRESS
;; CONTAINS SCOPE RETURN FOR ERRORS
;; CONTAINS TOTAL ERRORS DETECTED
;; CONTAINS ITEM CONTROL BYTE
;; CONTAINS MAX. ERRORS PER TEST
;; CONTAINS PC OF LAST ERROR INSTRUCTION
;; CONTAINS ADDRESS OF 'GOOD' DATA
;; CONTAINS ADDRESS OF 'BAD' DATA
;; CONTAINS 'GOOD' DATA
;; CONTAINS 'BAD' DATA
;; RESERVED--NOT TO BE USED
;; AUTOMATIC MODE INDICATOR
;; INTERRUPT MODE INDICATOR
;; ADDRESS OF SWITCH REGISTER
;; ADDRESS OF DISPLAY REGISTER
;; TTY KBD STATUS
;; TTY KBD BUFFER
;; TTY PRINTER STATUS REG. ADDRESS
;; TTY PRINTER BUFFER REG. ADDRESS
;; CONTAINS NULL CHARACTER FOR FILLS
;; CONTAINS # OF FILLER CHARACTERS REQUIRED
;; INSERT FILL CHARS. AFTER A "LINE FEED"
;; "TERMINAL AVAILABLE" FLAG (BIT<07>=0=YES)
;; CONTAINS THE ADDRESS FROM
;; WHICH (\$REGO) WAS OBTAINED

;; CONTAINS ((\$REGAD)+0)

;; CONTAINS ((\$REGAD)+2)

;; CONTAINS ((\$REGAD)+4)

;; CONTAINS ((\$REGAD)+6)

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COMMON TAGS

397			.LIST		
398	001172		SSCHREG \SCM1,\SCM2		
399	001172	000000	SREG4: .WORD 0		;;CONTAINS ((SREGAD)+10)
400			.LIST		
401	001174		SSCHREG \SCM1,\SCM2		
402	001174	000000	SREG5: .WORD 0		;;CONTAINS ((SREGAD)+12)
403			.LIST		
404	001176		SSCHREG \SCM1,\SCM2		
405	001176	000000	SREG6: .WORD 0		;;CONTAINS ((SREGAD)+14)
406			.LIST		
407	001200		SSCHREG \SCM1,\SCM2		
408	001200	000000	SREG7: .WORD 0		;;CONTAINS ((SREGAD)+16)
409			.LIST		
410			.LIST		
411		000010	.REPT 10		
412			SSCHTMP \SCM4		
413			.ENDR		
414	001202		SSCHTMP \SCM4		
415	001202	000000	STMP0: .WORD 0		;;USER DEFINED
416			.LIST		
417	001204		SSCHTMP \SCM4		
418	001204	000000	STMP1: .WORD 0		;;USER DEFINED
419			.LIST		
420	001206		SSCHTMP \SCM4		
421	001206	000000	STMP2: .WORD 0		;;USER DEFINED
422			.LIST		
423	001210		SSCHTMP \SCM4		
424	001210	000000	STMP3: .WORD 0		;;USER DEFINED
425			.LIST		
426	001212		SSCHTMP \SCM4		
427	001212	000000	STMP4: .WORD 0		;;USER DEFINED
428			.LIST		
429	001214		SSCHTMP \SCM4		
430	001214	000000	STMP5: .WORD 0		;;USER DEFINED
431			.LIST		
432	001216		SSCHTMP \SCM4		
433	001216	000000	STMP6: .WORD 0		;;USER DEFINED
434			.LIST		
435	001220		SSCHTMP \SCM4		
436	001220	000000	STMP7: .WORD 0		;;USER DEFINED
437			.LIST		
438	001222	000000	STIMES: 0		;;MAX. NUMBER OF ITERATIONS
439	001224	000000	SESCAPE: 0		;;ESCAPE ON ERROR ADDRESS
440	001226	177607	SBELL: .ASCIZ <207><377><377>		;;CODE FOR BELL
441	001232	077	SQUES: .ASCII /?/		;;QUESTION MARK
442	001233	015	SCRLF: .ASCII <15>		;;CARRIAGE RETURN
443	001234	000012	SLF: .ASCIZ <12>		;;LINE FEED
444	001236		STARS		
445			*****		
446			.IRP A,<ADITAG>		
447			A		
448			.ENDM		
449	001236		ADITAG		
450	001236	177340	TCST: 177340		;;TC11 STATUS REGISTER.
451	001240	177342	TCCM: 177342		;;TC11 COMMAND REGISTER.
452	001242	177344	TCWC: 177344		;;TC11 WORD COUNT REGISTER.

000377

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MAINDEC-11-DZTCB-0 TC11 TEST #2
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COMMON TAGS

453 001244 177346
454 001246 177350
455 001250 000214
456 001252 000300
457 001254 177564
458 001256 177566
459 001260 000000
460 001262 000000
461 001264 000000
462 001266 000000
463 001270 000000
464 001272 000000
465 001274 000000
466 001276 050505
467 001300 127272
468 001302 072727
469 001304 105050
470 001306 072727
471 001310 105056
472 001312 000000
473 001314 000000
474 001316 000000
475 001320 000000
476

TCBA: 177346
TCDT: 177350
TCVTR: 214
TCLVL: 300
TPS: 177564
TPB: 177566
COOCL: OPEN
RTNNO: OPEN
NXTST: OPEN
CURTST: OPEN
CRBUF: OPEN
CRBUFA: OPEN
CTRA: OPEN
SBDAT1: 50505
127272
SBDAT2: 72727
105050
SBDAT3: 72727
105056
POWPUS: .WORD 000000
POWPOP: .WORD 000000
TCCMT: OPEN
TCSTT: OPEN
.PAGE

:TC11 BUS ADDRESS REGISTER.
:TC11 DATA REGISTER.
:TC11 INTERRUPT VECTOR
:TC11 INTERRUPT PRIORITY LEVEL.
:LSP CSR
:LSP BUFFER

MAINDEC-11-DZTCB-D TC11 TEST #2
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EPROR POINTER TABLE

.SBTTL ERROR POINTER TABLE

;*THIS TABLE CONTAINS THE INFORMATION FOR EACH ERROR THAT CAN OCCUR.
;*THE INFORMATION IS OBTAINED BY USING THE INDEX NUMBER FOUND IN
;*LOCATION SITE#B, THIS NUMBER INDICATES WHICH ITEM IN THE TABLE IS PERTINENT.
;*NOTE1: IF SITE#B IS 0 THE ONLY PERTINENT DATA IS (\$ERRPC).
;*NOTE2: EACH ITEM IN THE TABLE CONTAINS 4 POINTERS EXPLAINED AS FOLLOWS:

;* EM :POINTS TO THE ERROR MESSAGE
;* DH :POINTS TO THE DATA HEADER
;* DT :POINTS TO THE DATA
;* DF :POINTS TO THE DATA FORMAT

\$ERRTB:

477									
478									
479									
480									
481									
482									
483									
484									
485									
486									
487									
488									
489									
490									
491	001322								
492									
493	001322	016115	EM1	:	"SAT (STOP ALL TRANSPORTS) COMMAND DID NOT CLEAR READY"				
494	001324	016203	EH1	:	" PC SP PS TEST# TCCM TCST"				
495	001326	016262	ET1	:	\$ERRPC, \$REG6, \$REG7, \$REG5, \$REG2, \$REG1				
496	001330	000000							
497									
498									
499	001332	016300	EM2	:	"SST (STOP SELECTED TRANSPORT) DID NOT CLEAR READY"				
500	001334	016362	EH2	:	" PC SP PS TEST# TCCM TCST"				
501	001336	016440	ET2	:	\$ERRPC, \$REG6, \$REG7, \$REG5, \$REG2, \$REG1				
502	001340	000000							
503									
504									
505	001342	016456	EM3	:	"READY BIT DID NOT CAUSE AN INTERRUPT"				
506	001344	016523	EH3	:	" PC SP PS TEST# TCCM TCST"				
507	001346	016602	ET3	:	\$ERRPC, \$REG6, \$REG7, \$REG5, \$REG2, \$REG1				
508	001350	000000							
509									
510									
511	001352	016620	EM4	:	"READY BIT CAUSED AN INTERRUPT WITH PROCESSOR AND TC11 AT SAME PRIORITY"				
512	001354	016727	EH4	:	" PC SP PS TEST# TCCM TCST"				
513	001356	017006	ET4	:	\$ERRPC, \$REG6, \$REG7, \$REG5, \$REG2, \$REG1				
514	001360	000000							
515									
516									
517	001362	017024	EM5	:	"TC11 FAILED TO INTERRUPT"				
518	001364	017055	EH5	:	" PC SP PS TEST# TCCM TCST"				
519	001366	017134	ET5	:	\$ERRPC, \$REG6, \$REG7, \$REG5, \$REG2, \$REG1				
520	001370	000000							
521									
522									
523	001372	017152	EM6	:	"TC11 DID NOT DROP INTERRUPT REQUEST AFTER IT WAS ACKNOWLEDGED"				
524	001374	017247	EH6	:	" PC SP PS TEST# TCCM TCST"				
525	001376	017326	ET6	:	\$ERRPC, \$REG6, \$REG7, \$REG5, \$REG2, \$REG1				
526	001400	000000							
527									
528									
529	001402	017344	EM7	:	"DOING A RESET INSTRUCTION DID NOT CLEAR UPS"				
530	001404	017420	EH7	:	" PC SP PS TEST# TCCM TCST"				
531	001406	017476	ET7	:	\$ERRPC, \$REG6, \$REG7, \$REG5, \$REG2, \$REG1				
532	001410	000000							

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 MAINDEC-11-DZTCB-D TC11 TEST #2
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 ERROR POINTER TABLE

533				
534				
535	001412	017514	EM10	;"ENTERING MAINTANENCE MODE DID NOT SET UPS"
536	001414	017566	EH10	;" PC SP PS TEST# TCCM TCST"
537	001416	017644	ET10	;"\$ERRPC,\$REG6,\$REG7,\$REG5,\$REG2,\$REG1"
538	001420	000000	000000	
539				
540				
541	001422	017662	EM11	;"UPS DID NOT CLEAR WHEN LEAVING MAINTANENCE MODE"
542	001424	017742	EH11	;" PC SP PS TEST# TCCM TCST"
543	001426	020020	ET11	;"\$ERRPC,\$REG6,\$REG7,\$REG5,\$REG2,\$REG1"
544	001430	000000	000000	
545				
546				
547	001432	020036	EM12	;"TCST BIT 0 CAN BE SET WHILE IN MAINTANENCE MODE"
548	001434	020116	EH12	;" PC SP PS TEST# TCCM TCST"
549	001436	020174	ET12	;"\$ERRPC,\$REG6,\$REG7,\$REG5,\$REG2,\$REG1"
550	001440	000000	000000	
551				
552				
553	001442	020212	EM13	;"TCST BIT 1 CAN BE SET WHILE IN MAINTANENCE MODE"
554	001444	020272	EH13	;" PC SP PS TEST# TCCM TCST"
555	001446	020350	ET13	;"\$ERRPC,\$REG6,\$REG7,\$REG5,\$REG2,\$REG1"
556	001450	000000	000000	
557				
558				
559	001452	020366	EM14	;"WRTM COMMAND WITH WRTM SWITCH DISABLED FAILED TO SET ILO ERROR"
560	001454	020465	EH14	;" PC SP PS TEST# TCCM TCST"
561	001456	020544	ET14	;"\$ERRPC,\$REG6,\$REG7,\$REG5,\$REG2,\$REG1"
562	001460	000000	000000	
563				
564				
565	001462	020562	EM15	;"ILO ERROR FAILED TO SET THE 'ERROR' BIT"
566	001464	020632	EH15	;" PC SP PS TEST# TCCM TCST"
567	001466	020710	ET15	;"\$ERRPC,\$REG6,\$REG7,\$REG5,\$REG2,\$REG1"
568	001470	000000	000000	
569				
570				
571	001472	020726	EM16	;"CLEARING ILLEGAL OP FAILED TO CLEAR ILO ERROR"
572	001474	021004	EH16	;" PC SP PS TEST# TCCM TCST"
573	001476	021062	ET16	;"\$ERRPC,\$REG6,\$REG7,\$REG5,\$REG2,\$REG1"
574	001500	000000	000000	
575				
576				
577	001502	021100	EM17	;"CLEARING ILLEGAL OP FAILED TO CLEAR THE 'ERROR' BIT"
578	001504	021164	EH17	;" PC SP PS TEST# TCCM TCST"
579	001506	021242	ET17	;"\$ERRPC,\$REG6,\$REG7,\$REG5,\$REG2,\$REG1"
580	001510	000000	000000	
581				
582				
583	001512	021260	EM20	;"WRTM WITH WRTM SWITCH OFF DID NOT SET ILO ERROR BIT"
584	001514	021344	EH20	;" PC SP PS TEST# TCCM TCST"
585	001516	021422	ET20	;"\$ERRPC,\$REG6,\$REG7,\$REG5,\$REG2,\$REG1"
586	001520	000000	000000	
587				
588				

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 MAINDEC-11-DZTCB-D TC11 TEST #2
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 ERROR POINTER TABLE

589	001522	021440	EM21	;"ILO ERROR SETTING DID NOT CAUSE THE 'ERROR' BIT TO SET"
590	001524	021527	EH21	;" PC SP PS TEST# TCCM TCST"
591	001526	021606	ET21	;"\$ERRPC,\$REG6,\$REG7,\$REG5,\$REG2,\$REG1"
592	001530	000000	000000	
593				
594				
595	001532	021624	EM22	;"CLEARING ERROR BIT ALSO CLEARED ILO ERROR"
596	001534	021676	EH22	;" PC SP PS TEST# TCCM TCST"
597	001536	021754	ET22	;"\$ERRPC,\$REG6,\$REG7,\$REG5,\$REG2,\$REG1"
598	001540	000000	000000	
599				
600				
601	001542	021772	EM23	;"THE 'ERROR' BIT DID NOT SET"
602	001544	022026	EH23	;" PC SP PS TEST# TCCM TCST"
603	001546	022104	ET23	;"\$ERRPC,\$REG6,\$REG7,\$REG5,\$REG2,\$REG1"
604	001550	000000	000000	
605				
606				
607	001552	022122	EM24	;"THE 'ERROR' BIT SET DID NOT CAUSE AN INTERRUPT"
608	001554	022201	EH24	;" PC SP PS TEST# TCCM TCST"
609	001556	022260	ET24	;"\$ERRPC,\$REG6,\$REG7,\$REG5,\$REG2,\$REG1"
610	001560	000000	000000	
611				
612				
613	001562	022276	EM25	;"DOING A RESET INSTRUCTION DID NOT SET THE READY BIT"
614	001564	022362	EH25	;" PC SP PS TEST# TCCM TCST"
615	001566	022440	ET25	;"\$ERRPC,\$REG6,\$REG7,\$REG5,\$REG2,\$REG1"
616	001570	000000	000000	
617				
618				
619	001572	022456	EM26	;"TEST EXECUTION IS OUT OF ORDER"
620	001574	022515	EH26	;" PC SP PS TEST# TEST# S/B"
621	001576	022570	ET26	;"\$ERRPC,\$REG6,\$REG7,\$REG5,TEST# S/B"
622	001600	000000	000000	
623				
624				
625	001602	022604	EM27	;"ERROR TRYING TO READ A BLOCK MARK"
626	001604	022646	EH27	;" PC SP PS TEST# TCCM TCST"
627	001606	022724	ET27	;"\$ERRPC,\$REG6,\$REG7,\$REG5,\$REG2,\$REG1"
628	001610	000000	000000	
629				
630				
631	001612	022742	EM30	;"READY WAS NOT SET AFTER BLOCK MARK WAS SHIFTED INTO THE WINDOW REGISTE"
632	001614	023052	EH30	;" PC SP PS TEST# TCCM TCST"
633	001616	023130	ET30	;"\$ERRPC,\$REG6,\$REG7,\$REG5,\$REG2,\$REG1"
634	001620	000000	000000	
635				
636				
637	001622	023146	EM31	;"INCORRECT BLOCK # IN DATA REG AFTER BLOCK MARK WAS DETECTED"
638	001624	023242	EH31	;" PC SP PS TEST# TCCM TCST"
639	001626	023342	ET31	;"\$ERRPC,\$REG6,\$REG7,\$REG5,\$REG2,\$REG1"
640	001630	000000	000000	
641				
642				
643	001632	023364	EM32	;"MTE WAS NOT SET BY AN ILLEGAL MARK TRACK CODE"
644	001634	023442	EH32	;" PC SP PS TEST# TCCM TCST"

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ERROR POINTER TABLE

645	001636	023520	ET32	; \$ERRPC, \$REG6, \$REG7, \$REG5, \$REG2, \$REG1			
646	001640	000000	000000				
647							
648							
649	001642	023536	EM33	;"MTE SETTING FAILED TO SET THE 'ERROR' BIT"			
650	001644	023610	EH33	;" PC SP PS TEST# TCCM TCST"			
651	001646	023666	ET33	; \$ERRPC, \$REG6, \$REG7, \$REG5, \$REG2, \$REG1			
652	001650	000000	000000				
653							
654							
655	001652	023704	EM34	;"ENDZ BIT DID NOT SET WHEN ENDZ MARK DETECTED"			
656	001654	023761	EH34	;" PC SP PS TEST# TCCM TCST"			
657	001656	024040	ET34	; \$ERRPC, \$REG6, \$REG7, \$REG5, \$REG2, \$REG1			
658	001660	000000	000000				
659							
660							
661	001662	023704	EM34				
662	001664	023761	EH34				
663	001666	024040	ET34				
664	001670	000000	0000				
665	001672	024234	EM36	;"MARK TRACK CODE 55 WAS MISTAKEN FOR END ZONE"			
666	001674	024311	EH36	;" PC SP PS TEST# TCCM TCST"			
667	001676	024370	ET36	; \$ERRPC, \$REG6, \$REG7, \$REG5, \$REG2, \$REG1			
668	001700	000000	000000				
669							
670							
671	001702	024406	EM37	;"ERROR"			
672	001704	024414	EH37	;" PC SP PS TEST# TCCM TCST"			
673	001706	024472	ET37	; \$ERRPC, \$REG6, \$REG7, \$REG5, \$REG2, \$REG1			
674	001710	000000	000000				
675							
676							
677	001712	024510	EM40	;"READY BIT DID NOT SET"			
678	001714	024536	EH40	;" PC SP PS TEST# TCCM TCST"			
679	001716	024614	ET40	; \$ERRPC, \$REG6, \$REG7, \$REG5, \$REG2, \$REG1			
680	001720	000000	000000				
681							
682							
683	001722	024632	EM41	;"THE 'ERROR' BIT SHOULD NOT HAVE SET"			
684	001724	024676	EH41	;" PC SP PS TEST# TCCM TCST"			
685	001726	024754	ET41	; \$ERRPC, \$REG6, \$REG7, \$REG5, \$REG2, \$REG1			
686	001730	000000	000000				
687							
688							
689	001732	024772	EM42	;"READY BIT SHOULD NOT HAVE SET"			
690	001734	025030	EH42	;" PC SP PS TEST# TCCM TCST"			
691	001736	025106	ET42	; \$ERRPC, \$REG6, \$REG7, \$REG5, \$REG2, \$REG1			
692	001740	000000	000000				
693							
694							
695	001742	025124	EM43	;"WORD TRANSFERED INCORRECTLY TO CORE"			
696	001744	025170	EH43	;" PC SP PS TEST# TCCM TCST RBUF RBUF S/B"			
697	001746	025272	ET43	; \$ERRPC, \$REG6, \$REG7, \$REG5, \$REG2, \$REG1, RBUF RBUF S/B			
698	001750	000000	000000				
699							
700							

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 MAINDEC-11-DZTCB-D TC11 TEST #2
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 ERROR POINTER TABLE

701	001752	025314	EM44	:"WORD COUNT INCREMENTED IMPROPERLY"					
702	001754	025356	EH44	:" PC SP PS TEST# TCCM TCST TCWC"					
703	001756	025460	ET44	:"\$ERRPC,\$REG6,\$REG7,\$REG5,\$REG2,\$REG1,TCWC"					
704	001760	000000	000000						
705									
706									
707	001762	025502	EM45	:"TCBA INCREMENTED IMPROPERLY"					
708	001764	025536	EH45	:" PC SP PS TEST# TCCM TCST TCBA"					
709	001766	025640	ET45	:"\$ERRPC,\$REG6,\$REG7,\$REG5,\$REG2,\$REG1,TCBA"					
710	001770	000000	000000						
711									
712									
713	001772	025662	EM46	:"PARITY ERROR"					
714	001774	025677	EH46	:" PC SP PS TEST# TCCM TCST"					
715	001776	025756	ET46	:"\$ERRPC,\$REG6,\$REG7,\$REG5,\$REG2,\$REG1"					
716	002000	000000	000000						
717									
718									
719	002002	025774	EM47	:"READY DID NOT SET AFTER READING WAS COMPLETED"					
720	002004	026052	EH47	:" PC SP PS TEST# TCCM TCST"					
721	002006	026130	ET47	:"\$ERRPC,\$REG6,\$REG7,\$REG5,\$REG2,\$REG1"					
722	002010	000000	000000						
723									
724									
725	002012	026146	EM50	:"TRANSFERED TOO MANY WORDS"					
726	002014	026200	EH50	:" PC SP PS TEST# TCCM TCST RBUF+2"					
727	002016	026270	ET50	:"\$ERRPC,\$REG6,\$REG7,\$REG5,\$REG2,\$REG1,RBUF+2"					
728	002020	000000	000000						
729									
730									
731	002022	026310	EM51	:"TCBA CONTAINS AN INCORRECT ADDRESS"					
732	002024	026353	EH51	:" PC SP PS TEST# TCCM TCST TCBA TCBA S/B"					
733	002026	026454	ET51	:"\$ERRPC,\$REG6,\$REG7,\$REG5,\$REG2,\$REG1,TCBA TCBA S/B"					
734	002030	000000	000000						
735									
736									
737	002032	026476	EM52	:"PARITY ERROR WAS NOT DETECTED"					
738	002034	026535	EH52	:" PC SP PS TEST# TCCM TCST"					
739	002036	026624	ET52	:"\$ERRPC,\$REG6,\$REG7,\$REG5,\$REG2,\$REG1"					
740	002040	000000	000000						
741									
742									
743	002042	026644	EM53	:"PARITY ERROR DID NOT SET THE 'ERROR' BIT"					
744	002044	026715	EH53	:" PC SP PS TEST# TCCM TCST"					
745	002046	027004	ET53	:"\$ERRPC,\$REG6,\$REG7,\$REG5,\$REG2,\$REG1"					
746	002050	000000	000000						
747									
748									
749	002052	027024	EM54	:"PARITY ERROR BIT WILL NOT CLEAR"					
750	002054	027064	EH54	:" PC SP PS TEST# TCCM TCST"					
751	002056	027152	ET54	:"\$ERRPC,\$REG6,\$REG7,\$REG5,\$REG2,\$REG1"					
752	002060	000000	000000						
753									
754									
755	002062	027172	EM55	:"BLOCK MISS SHOULD NOT HAVE SET"					
756	002064	027231	EH55	:" PC SP PS TEST# TCCM TCST"					

K02

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 ERROR POINTER TABLE

757	002066	027320	ET55	;SERRPC,\$REG6,\$REG7,\$REG5,\$REG2,\$REG1
758	002070	000000	000000	
759				
760				
761	002072	027340	EM56	;"RDATA WAS ISSUED BUT BLOCK MISS FAILED TO SET"
762	002074	027416	EH56	;" PC SP PS TEST# TCCM TCST"
763	002076	027504	ET56	;SERRPC,\$REG6,\$REG7,\$REG5,\$REG2,\$REG1
764	002100	000000	000000	
765				
766				
767	002102	027524	EM57	;"BLOCK MISS SETTING DID NOT SET THE 'ERROR' BIT"
768	002104	027603	EH57	;" PC SP PS TEST# TCCM TCST"
769	002106	027672	ET57	;SERRPC,\$REG6,\$REG7,\$REG5,\$REG2,\$REG1
770	002110	000000	000000	
771				
772				
773	002112	027712	EM60	;"CLEARING ERROR BIT FAILED TO CLEAR BLOCK MISS"
774	002114	027770	EH60	;" PC SP PS TEST# TCCM TCST"
775	002116	030056	ET60	;SERRPC,\$REG6,\$REG7,\$REG5,\$REG2,\$REG1
776	002120	000000	000000	
777				
778				
779	002122	030076	EM61	;"FORWARD CHECKSUM WAS WRITTEN INCORRECTLY INTO CORE"
780	002124	030161	EH61	;" PC SP PS TEST# TCCM TCST RBUF+514"
781	002126	030260	ET61	;SERRPC,\$REG6,\$REG7,\$REG5,\$REG2,\$REG1,RBUF+514
782	002130	000000	000000	
783				
784				
785	002132	030302	EM62	;"TCWC WAS MODIFIED DURING RAL"
786	002134	030340	EH62	;" PC SP PS TEST# TCCM TCST TCWC"
787	002136	030426	ET62	;SERRPC,\$REG6,\$REG7,\$REG5,\$REG2,\$REG1,TCWC
788	002140	000000	000000	
789				
790				
791	002142	030446	EM63	;"TCBA WAS MODIFIED DURING RAL"
792	002144	030504	EH63	;" PC SP PS TEST# TCCM TCST TCBA"
793	002146	030606	ET63	;SERRPC,\$REG6,\$REG7,\$REG5,\$REG2,\$REG1,TCBA
794	002150	000000	000000	
795				
796				
797	002152	030626	EM64	;"DATA MISS DID NOT SET"
798	002154	030654	EH64	;" PC SP PS TEST# TCCM TCST"
799	002156	030742	ET64	;SERRPC,\$REG6,\$REG7,\$REG5,\$REG2,\$REG1
800	002160	000000	000000	
801				
802				
803	002162	030762	EM65	;"DATA MISS SETTING DID NOT CAUSE THE 'ERROR' BIT TO SET"
804	002164	031051	EH65	;" PC SP PS TEST# TCCM TCST"
805	002166	031130	ET65	;SERRPC,\$REG6,\$REG7,\$REG5,\$REG2,\$REG1
806	002170	000000	000000	
807				
808				
809	002172	031146	EM66	;"CLEARING THE 'ERROR' BIT DID NOT CAUSE DATA MISS TO BE CLEARED"
810	002174	031245	EH66	;" PC SP PS TEST# TCCM TCST"
811	002176	031324	ET66	;SERRPC,\$REG6,\$REG7,\$REG5,\$REG2,\$REG1
812	002200	000000	000000	

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ERROR POINTER TABLE

813									
814									
815	002202	031342	EM67	;	"READY BIT WAS NOT SET AFTER THE DATA WAS WRITTEN"				
816	002204	031423	EH67	;	PC SP PS TEST# TCCM TCST				
817	002206	031502	ET67	;	SERRPC, \$REG6, \$REG7, \$REG5, \$REG2, \$REG1				
818	002210	000000	000000						
819									
820									
821	002212	031520	EM70	;	"THE REVERSE CHECKSUM WAS WRITTEN INCORRECTLY"				
822	002214	031575	EH70	;	PC SP PS TEST# TCCM TCST RBUF+512 RBUF+512 S/B				
823	002216	031704	ET70	;	SERRPC, \$REG6, \$REG7, \$REG5, \$REG2, \$REG1, RBUF+512 RBUF+512 S/B				
824	002220	000000	000000						
825									
826									
827	002222	031726	EM71	;	"WORD COUNT MODIFIED DURING WRITE ALL"				
828	002224	031774	EH71	;	PC SP PS TEST# TCCM TCST TCWC				
829	002226	032062	ET71	;	SERRPC, \$REG6, \$REG7, \$REG5, \$REG2, \$REG1, TCWC				
830	002230	000000	000000						
831									
832									
833	002232	032102	EM72	;	"TCBA MODIFIED DURING WRITE ALL"				
834	002234	032142	EH72	;	PC SP PS TEST# TCCM TCST TCBA				
835	002236	032230	ET72	;	SERRPC, \$REG6, \$REG7, \$REG5, \$REG2, \$REG1, TCBA				
836	002240	000000	000000						
837									
838									
839	002242	032250	EM73	;	"SSI DID NOT CAUSE A SELECT ERROR"				
840	002244	032311	EH73	;	PC SP PS TEST# TCCM TCST				
841	002246	032370	ET73	;	SERRPC, \$REG6, \$REG7, \$REG5, \$REG2, \$REG1				
842	002250	000000	000000						
843	002252	032406	EM74						
844	002254	032461	EH74						
845	002256	032520	ET74						
846	002260	000000	0000						
847									
848	002262	032532	EM75						
849	002264	032605	EH75						
850	002266	032644	ET75						
851	002270	000000	0000						
852									
853	002272	032656	EM76						
854	002274	032731	EH76						
855	002276	032770	ET76						
856	002300	000000	0000						
857									
858	002302	033002	EM77						
859	002304	033055	EH77						
860	002306	033114	ET77						
861	002310	000000	0000						
862	002312								
863									
864	002312	000240	NOP						
865	002314	000240	NOP						
866	002316	000240	NOP						
867	002320	000240	NOP						
868	002322		SETUP						

.SETUP (<.\$EOP,.\$SCOPE,.\$STRAP,.\$ERROR,.\$POWER>)

LIST
START:

NOP
NOP
NOP
NOP
SETUP 1000

M02

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INITIALIZE THE COMMON TAGS

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869      .SBTTL INITIALIZE THE COMMON TAGS
870      ;;CLEAR THE COMMON TAGS ($CHTAG) AREA
871      MOV     $CHTAG,R6      ;;FIRST LOCATION TO BE CLEARED
872      CLR     (R6)+          ;;CLEAR MEMORY LOCATION
873      CMP     $SWR,R6      ;;DONE?
874      BNE     -6            ;;LOOP BACK IF NO
875      MOV     $1000,SP      ;;SETUP THE STACK POINTER
876      ;;INITIALIZE A FEW VECTORS
877      MOV     $SCOPE,$IOTVEC ;;IOT VECTOR FOR SCOPE ROUTINE
878      MOV     $340,$IOTVEC+2 ;;LEVEL 7
879      MOV     $ERROR,$EMTVEC  ;;EMT VECTOR FOR ERROR ROUTINE
880      MOV     $340,$EMTVEC+2 ;;LEVEL 7
881      MOV     $TRAP,$TRAPVEC  ;;TRAP VECTOR FOR TRAP CALLS
882      MOV     $340,$TRAPVEC+2 ;;LEVEL 7
883      MOV     $SPWRON,$PWAVEC ;;POWER FAILURE VECTOR
884      MOV     $340,$PWAVEC+2 ;;LEVEL 7
885      MOV     $ENDCT,$SEOPCT  ;;SETUP END-OF-PROGRAM COUNTER
886      CLR     $TIMES          ;;INITIALIZE NUMBER OF ITERATIONS
887      CLR     $ESCAPE         ;;CLEAR THE ESCAPE ON ERROR ADDRESS
888      MOV     $1,$SERMAX      ;;ALLOW ONE ERROR PER TEST
889      MOV     $,$SLPADR       ;;INITIALIZE THE LOOP ADDRESS FOR SCOPE
890      MOV     $,$SLPERR       ;;SETUP THE ERROR LOOP ADDRESS
891
892      .LIST
893      SWSU
894      ;;SIZE FOR A HARDWARE SWITCH REGISTER. IF NOT FOUND OR IT IS
895      ;;EQUAL TO A "-1" SETUP FOR A SOFTWARE SWITCH REGISTER.
896      MOV     $ERRVEC, -(SP)   ;;SAVE ERROR VECTOR
897      MOV     $64,$ERRVEC     ;;SET UP ERROR VECTOR
898      MOV     $DSWR,$SWR      ;;SETUP FOR A HARDWARE SWITCH REGISTER
899      MOV     $DISP,$DISPLAY  ;;AND A HARDWARE DISPLAY REGISTER
900      CMP     $-1,$SWR        ;;TRY TO REFERENCE HARDWARE SWR
901      BNE     $66$            ;;BRANCH IF NO TIMEOUT TRAP OCCURRED
902      BR      $65$            ;;AND THE HARDWARE SWR IS NOT = -1
903      BR      $65$            ;;BRANCH IF NO TIMEOUT
904      MOV     $65$,(SP)       ;;SET UP FOR TRAP RETURN
905      RTI
906      MOV     $SWREG,$SWR     ;;POINT TO SOFTWARE SWR
907      MOV     $DISPREG,$DISPLAY ;;RESTORE ERROR VECTOR
908      MOV     (SP)+,$ERRVEC
909      MOV     $1000,SP        ;;SET BOTTOM OF SP STACK.
910      CLR     $RTNNO
911      TYPE    $,SCLF
912      TYPE    $,STMS         ;;PRINTOUT STARTUP MESSAGE
913      NOP
914      HALT
915      HERE IS YOUR CHANCE TO SET THE SWITCH REGISTER
916      STARTX: TST     $42
917      BEQ     $GETROD
918      GETROD: CLR     $PSW
919      MOV     $1000,SP        ;;SET BOTTOM OF STACK.
920      JSR     $PC,$SRSETT     ;;ISSUE RESET.
921      JSR     $PC,$RSTMTK     ;;RESTORE MARK TRACK.
922      JMP     $T0001
923      .SBTTL T0001
924      ;;CHECK THAT THE TCCM REGISTER CAN BE ACCESSED WITHOUT A TRAP OCCURING

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N02

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T0001

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925
926 002630 000004
927 002632 012737 002676 000004
928 002640 012737 000340 000006
929 002646 012706 001000
930 002652 004737 011730
931 002656 000001
932 002660 012706 001000
933 002664 005777 176350
934 002670 005077 176344
935 002674 000401
936 002676 104074
937
938
939
940 002700 000004
941 002702 012737 002746 000004
942 002710 012737 000340 000006
943 002716 012706 001000
944 002722 004737 011730
945 002726 000002
946 002730 012706 001000
947 002734 005777 176276
948 002740 005077 176272
949 002744 000401
950 002746 104075
951
952
953
954 002750 000004
955 002752 012737 003016 000004
956 002760 012737 000340 000006
957 002766 012706 001000
958 002772 004737 011730
959 002776 000003
960 003000 012706 001000
961 003004 005777 176232
962 003010 005077 176226
963 003014 000401
964 003016 104076
965
966
967
968 003020 000004
969 003022 012737 003066 000004
970 003030 012737 000340 000006
971 003036 012706 001000
972 003042 004737 011730
973 003046 000004
974 003050 012706 001000
975 003054 005777 176164
976 003060 005077 176160
977 003064 000401
978 003066 104077
979
980

*****
T0001: SCOPE
      MOV      #A0001,2#4      ;SETUP THE FATAL TRAP VECTOR
      MOV      #340,2#6      ;MAKE SURE WE GET NO INTERRUPTS IF WE TRAP
      MOV      #1000,SP      ;SETUP THE STACK POINTER
      JSR      PC,TORDER      ;MAKE SURE TESTS ARE IN PROPER SEQUENCE
      00001      ;HERE LIES THE NUMBER OF THIS TEST
R0001: MOV      #1000,SP      ;INIT THE STACK POINTER
      TST      @TCCH          ;TRY TO READ THE TCCM
      CLR      @TCCH          ;TRY TO MODIFY THE TCCM
      BR       T0002          ;NO ERRORS. GO ON TO THE NEXT TEXT
A0001: ERROR    74           ;COULD NOT ACCESS TCCM
      SBTTL T0002
;CHECK THAT THE TCST REGISTER CAN BE ACCESSED WITHOUT A TRAP OCCURING
*****
T0002: SCOPE
      MOV      #A0002,2#4      ;SETUP THE FATAL TRAP VECTOR
      MOV      #340,2#6      ;MAKE SURE WE GET NO INTERRUPTS IF WE TRAP
      MOV      #1000,SP      ;SETUP THE STACK POINTER
      JSR      PC,TORDER      ;MAKE SURE TESTS ARE IN PROPER SEQUENCE
      00002      ;HERE LIES THE NUMBER OF THIS TEST
R0002: MOV      #1000,SP      ;INIT THE STACK POINTER
      TST      @TCST          ;TRY TO READ THE TCST
      CLR      @TCST          ;TRY TO MODIFY THE TCST
      BR       T0003          ;NO ERRORS. GO ON TO THE NEXT TEXT
A0002: ERROR    75           ;COULD NOT ACCESS TCST
      SBTTL T0003
;CHECK THAT THE TCWC REGISTER CAN BE ACCESSED WITHOUT A TRAP OCCURING
*****
T0003: SCOPE
      MOV      #A0003,2#4      ;SETUP THE FATAL TRAP VECTOR
      MOV      #340,2#6      ;MAKE SURE WE GET NO INTERRUPTS IF WE TRAP
      MOV      #1000,SP      ;SETUP THE STACK POINTER
      JSR      PC,TORDER      ;MAKE SURE TESTS ARE IN PROPER SEQUENCE
      00003      ;HERE LIES THE NUMBER OF THIS TEST
R0003: MOV      #1000,SP      ;INIT THE STACK POINTER
      TST      @TCWC          ;TRY TO READ THE TCWC
      CLR      @TCWC          ;TRY TO MODIFY THE TCWC
      BR       T0004          ;NO ERRORS. GO ON TO THE NEXT TEXT
A0003: ERROR    76           ;COULD NOT ACCESS TCWC
      SBTTL T0004
;CHECK THAT THE TCBA REGISTER CAN BE ACCESSED WITHOUT A TRAP OCCURING
*****
T0004: SCOPE
      MOV      #A0004,2#4      ;SETUP THE FATAL TRAP VECTOR
      MOV      #340,2#6      ;MAKE SURE WE GET NO INTERRUPTS IF WE TRAP
      MOV      #1000,SP      ;SETUP THE STACK POINTER
      JSR      PC,TORDER      ;MAKE SURE TESTS ARE IN PROPER SEQUENCE
      00004      ;HERE LIES THE NUMBER OF THIS TEST
R0004: MOV      #1000,SP      ;INIT THE STACK POINTER
      TST      @TCBA          ;TRY TO READ THE TCBA
      CLR      @TCBA          ;TRY TO MODIFY THE TCBA
      BR       T0005          ;NO ERRORS. GO ON TO THE NEXT TEXT
A0004: ERROR    77           ;COULD NOT ACCESS TCBA

;CHECK THAT ISSUING A SAT COMMAND (STOP ALL TRANSPORTS) CAUSES READY BIT

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T0004

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981 ;TO CLEAR IMMEDIATELY (TCCM BIT 7).
982 .SBTTL T0005
983 *****
984 T0005: SCOPE
985      MOV      #TRAP4,4      ;SETUP FATAL TRAP VECTORS
986      MOV      #TRAP10,10
987      MOV      #340,6
988      MOV      #340,12
989      MOV      #1000,SP      ;SETUP THE STACK POINTER
990      JSR      PC,TORDER     ;MAKE SURE TESTS ARE IN PROPER SEQUENCE
991      00005      HERE LIES THE NUMBER OF THIS TEST
992      MOV      TCCM,R0      ;TCCM ADDR TO R0.
993      CLR      (0)          ;SELECT UD, FUNCTION 0. (SAT COMMAND).
994      INC      (0)          ;DO.
995      TSTB     (0)          ;SEE IF READY IS SET.
996      BPL      A0005        ;BR IF READY NOT SET. (OK).
997      ERROR 1              ;SAT COMMAND FAILED TO CLEAR READY.
998
999 A0005:      MOV      #1000,SP      ;RESTORE THE STACK POINTER
1000      BR      T0006          ;GO ON TO THE NEXT TEST
1001 ;CHECK THAT ISSUING SST COMMAND (STOP SELECTED TRANSPORT) CAUSES READY
1002 ;BIT TO CLEAR IMMEDIATELY (TCCM BIT 7)
1003 .SBTTL T0006
1004 *****
1005 T0006: SCOPE
1006      MOV      #1000,SP      ;SETUP THE STACK POINTER
1007      JSR      PC,TORDER     ;MAKE SURE TESTS ARE IN PROPER SEQUENCE
1008      00006      HERE LIES THE NUMBER OF THIS TEST
1009      MOV      TCCM,R0      ;TCCM ADDR TO R0.
1010      MOV      #10,(0)      ;SELECT UD,FUNCTION 100. (SST COMMAND).
1011      INC      (0)          ;DO.
1012      TSTB     (0)          ;SEE IF READY IS SET.
1013      BPL      A0006        ;BR IF READY NOT SET. (OK).
1014      ERROR 2              ;SST COMMAND FAILED TO CLEAR READY.
1015
1016 A0006:      MOV      #1000,SP      ;RESTORE THE STACK POINTER
1017      BR      T0007          ;GO ON TO THE NEXT TEST
1018 ;TEST THAT READY BIT CAN CAUSE AN INTERRUPT. IF THE INTERRUPT IS SERVICED,
1019 ;IT WILL HAVE OCCURRED AT THE CORRECT VECTOR.
1020 .SBTTL T0007
1021 *****
1022 T0007: SCOPE
1023      MOV      #1000,SP      ;SETUP THE STACK POINTER
1024      JSR      PC,TORDER     ;MAKE SURE TESTS ARE IN PROPER SEQUENCE
1025      00007      HERE LIES THE NUMBER OF THIS TEST
1026      JSR      PC,STTCV      ;SET INTERRUPT VECTOR TO CB.
1027      A0007
1028      CLR      @TCCM          ;DISABLE TC11 INTERRUPTS.
1029      CLR      PSW            ;SET PROCESSOR PRIORITY 0.
1030      BIS      #BIT6,@TCCM    ;ENABLE TC11 INTERRUPTS.
1031      NOP
1032      ERROR 3              ;READY DID NOT INTERRUPT.
1033
1034 A0007:      MOV      #1000,SP      ;RESTORE THE STACK POINTER
1035      BR      T0010          ;GO ON TO THE NEXT TEST
1036 ;TEST THAT READY DOES NOT CAUSE INTERRUPT WITH PROCESSOR AT SAME PRIORITY

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C03

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 T0007

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1037 ;LEVEL AS THE TC11 INTERRUPT PRIORITY.
1038 .SBTTL T0010
1039 *****
1040 T0010: SCOPE
1041      MOV      #1000,SP      ;SETUP THE STACK POINTER
1042      JSR      PC,TORDER    ;MAKE SURE TESTS ARE IN PROPER SEQUENCE
1043      00010      ;HERE LIES THE NUMBER OF THIS TEST
1044      JSR      PC,STTCV     ;SET INTERRUPT VECTOR TO DC.
1045      00010
1046      MOV      TCLVL,PSW    ;SET PROCESSOR TO SAME PRTY AS TC11.
1047      CLR      @TCCM        ;DISABLE TC11 INTERRUPTS.
1048      BIS      #BIT6,@TCCM  ;ENABLE TC11 INTERRUPTS.
1049      NOP
1050      A0010:    CLR      @TCCM      ;DISABLE TC11 INTERRUPTS. (OK).
1051
1052      MOV      #1000,SP      ;RESTORE THE STACK POINTER
1053      BR       T0011        ;GO ON TO THE NEXT TEST
1054      B0010:    ERROR
1055      BR       A0010        ;HERE IF INT. OCCURS.
1056      ;TC11 INTERRUPTED, WITH PROCESSOR AT SAME
1057      ;PRTY AS TC11 INTERRUPT PRTY.
1058      ;TEST THAT TC11 INTERRUPTS WHEN PROCESSOR IS AT PRIORITY ONE LEVEL LOWER
1059      ;THAN THE TC11 INTERRUPT PRIORITY.
1060      .SBTTL T0011
1061      *****
1062      T0011:    SCOPE
1063      MOV      #1000,SP      ;SETUP THE STACK POINTER
1064      JSR      PC,TORDER    ;MAKE SURE TESTS ARE IN PROPER SEQUENCE
1065      00011      ;HERE LIES THE NUMBER OF THIS TEST
1066      JSR      PC,STTCV     ;SET INTERRUPT VECTOR TO EB.
1067      A0011
1068      CLR      @TCCM        ;DISABLE TC11 INTERRUPTS.
1069      MOV      TCLVL,PSW    ;SET PROCESSOR TO PRTY ONE LEVEL LOWER
1070      SUB      #40,PSW      ;THAN TC11 INTERRUPT PRTY.
1071      BIS      #BIT6,@TCCM  ;ENABLE TC11 INTERRUPTS.
1072      NOP
1073      ERROR 3
1074      BR       B0011        ;TC11 FAILED TO INT. WITH PROCESSOR AT
1075      A0011:    POPSP2      ;PRTY ONE LEVEL LOWER THAN TC11 INT. PRTY.
1076      B0011:    CLR      @TCCM    ;HERE IF INT. OCCURS. POP STACK TWICE.
1077      MOV      #1000,SP      ;DISABLE TC11 INTERRUPTS.
1078      BR       T0012        ;RESTORE THE STACK POINTER
1079
1080      ;TEST TC11 DOES NOT REINTERRUPT AFTER INITIAL INTERRUPT HAS BEEN SERVICED.
1081      .SBTTL T0012
1082      *****
1083      T0012:    SCOPE
1084      MOV      #1000,SP      ;SETUP THE STACK POINTER
1085      JSR      PC,TORDER    ;MAKE SURE TESTS ARE IN PROPER SEQUENCE
1086      00012      ;HERE LIES THE NUMBER OF THIS TEST
1087      JSR      PC,STTCV     ;SET INTERRUPT VECTOR TO FC.
1088      B0012
1089      CLR      @TCCM        ;DISABLE TC11 INTERRUPTS.
1090      CLR      PSW          ;SET PROCESSOR PRTY 0.
1091      BIS      #BIT6,@TCCM  ;ENABLE TC11 INTERRUPTS.
1092      NOP

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D03

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T0012

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1093 003512 104005
1094 003514 005077 175520
1095
1096 003520 012706 001000
1097 003524 000413
1098 003526 012777 003546 175514
1099 003534 012716 003542
1100 003540 000002
1101 003542 000240
1102 003544 000763
1103 003546 022626
1104 003550 104006
1105 003552 000760
1106
1107
1108
1109
1110 003554 000004
1111 003556 012706 001000
1112 003562 004737 011730
1113 003566 000013
1114 003570 032777 000200 175440
1115 003576 001402
1116 003600 104007
1117 003602 000421
1118 003604 052777 020000 175426
1119 003612 032777 000200 175416
1120 003620 001002
1121 003622 104010
1122 003624 000410
1123 003626 042777 020000 175404
1124 003634 032777 000200 175374
1125 003642 001401
1126 003644 104011
1127 003646 052777 020000 175364
1128 003654 004737 012162
1129
1130 003660 012706 001000
1131 003664 000400
1132
1133
1134
1135 003666 000004
1136 003670 012706 001000
1137 003674 004737 011730
1138 003700 000014
1139 003702 052777 020000 175330
1140 003710 052777 000001 175320
1141 003716 032777 000001 175312
1142 003724 001401
1143 003726 104012
1144 003730 004737 012162
1145
1146 003734 012706 001000
1147 003740 000400
1148

R0012: CLR 5 ;TC11 FAILED TO INTERRUPT.
;DISABLE TC11 INTERRUPTS.

MOV #1000,SP ;RESTORE THE STACK POINTER
BR T0013 ;GO ON TO THE NEXT TEST
R0012: MOV #00012,ATCVTR ;CHANGE INT POINTER TO FE.
MOV #C0012,ASP ;CHANGE INT EXIT POINTER TO FD.
RTI ;EXIT INTERRUPT
NOP ;OK IF NO INT. REOCCURS.
BR A0012
D0012: POPSP2 ;HERE IF REINTERRUPT OCCURS.
ERROR 6 ;TC11 REINTERRUPTED AFTER RTI.
BR A0012

;TEST THAT SETTING MAINTENANCE BIT (TCM BIT 13) SETS UPS BIT (TCST BIT 7)
;THAT CLEARING MAINTENANCE BIT CLEARS UPS, AND THAT RESET CLEARS UPS.
.SBTL T0013
*****
T0013: SCOPE
MOV #1000,SP ;SETUP THE STACK POINTER
JSR PC,TORDER ;MAKE SURE TESTS ARE IN PROPER SEQUENCE
D0013 ;HERE LIES THE NUMBER OF THIS TEST
R0013: BIT #BIT7,ATCST ;SEE IF UPS IS CLEAR.
BEQ A0013 ;BR IF UPS IS CLEAR.
ERROR 7 ;RESET FAILED TO CLEAR UPS.
BR C0013
A0013: BIS #BIT13,ATCCM ;SET MAINTENANCE BIT.
BIT #BIT7,ATCST ;SEE IF UPS IS SET.
BNE B0013 ;BR IF UPS IS SET.
ERROR 10 ;MAINT BIT FAILED TO SET UPS.
BR C0013
B0013: BIC #BIT13,ATCCM ;CLEAR MAINT BIT.
BIT #BIT7,ATCST ;SEE IF UPS IS CLEAR.
BEQ C0013 ;BR IF UPS IS CLEAR.
ERROR 11 ;CLEARING MAINT. BIT FAILED TO CLEAR UPS.
C0013: BIS #BIT13,ATCCM ;SET MAINT BIT TO SET UPS.
JSR PC,SRSETT ;ISSUE RESET TO CLEAR MAINT AND UPS BITS.

MOV #1000,SP ;RESTORE THE STACK POINTER
BR T0014 ;GO ON TO THE NEXT TEST

;TEST THAT SETTING MAINT. BIT DISABLES LOADING XD16 (TCST BIT 0).
.SBTL T0014
*****
T0014: SCOPE
MOV #1000,SP ;SETUP THE STACK POINTER
JSR PC,TORDER ;MAKE SURE TESTS ARE IN PROPER SEQUENCE
D0014 ;HERE LIES THE NUMBER OF THIS TEST
R0014: BIS #BIT13,ATCCM ;SET MAINTENANCE BIT.
BIS #BIT0,ATCST ;TRY SETTING XD16.
BIT #BIT0,ATCST ;SEE IF XD16 IS SET.
BEQ A0014 ;BR IF XD16 IS CLEAR.
ERROR 12 ;MAINT BIT SET FAILS TO PREVENT LOADING
A0014: JSR PC,SRSETT ;OF XD16.

MOV #1000,SP ;RESTORE THE STACK POINTER
BR T0015 ;GO ON TO THE NEXT TEST

;TEST THAT SETTING MAINT. BIT DISABLES LOADING XD17 (TCST BIT 1).

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T0015

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1149 .SBTTL T0015
1150 *****
1151 003742 000004
1152 003744 012706 001000
1153 003750 004737 011730
1154 003754 000015
1155 003756 052777 020000 175254 R0015: BIS #BIT13,ATCCM ;SETUP THE STACK POINTER
1156 003764 052777 000002 175244 BIS #BIT1,ATCST ;MAKE SURE TESTS ARE IN PROPER SEQUENCE
1157 003772 032777 000002 175236 BIT #BIT1,ATCST ;HERE LIES THE NUMBER OF THIS TEST
1158 004000 001401 BEQ A0015 ;SET MAINTENANCE BIT.
1159 004002 104013 ERROR 13 ;TRY SETTING XD17.
1160 004004 004737 012162 A0015: JSR PC,SRSETT ;SEE IF XD17 IS SET.
1161 ;BR IF XD17 IS CLEAR.
1162 004010 012706 001000 MOV #1000,SP ;RESTORE THE STACK POINTER
1163 004014 000400 BR T0016 ;GO ON TO THE NEXT TEST
1164
1165 ;CHECK THAT ISSUING WRTM COMMAND WITH WRTM SWITCH OFF CAUSES AN ILO ERROR.
1166 ; (ILLEGAL OP- TCST BIT 12), AND THAT ERROR BIT SETS.; (TCCM BIT 15).
1167 ;TEST DONE WITH MAINTENANCE BIT SET.
1168 .SBTTL T0016
1169 *****
1170 004016 000004
1171 004020 012706 001000
1172 004024 004737 011730
1173 004030 000016
1174 004032 012777 020012 175200 R0016: MOV #MAINT!FWD!UD!WRTM,ATCCM ;SETUP THE STACK POINTER
1175 004040 000240 NOP ;MAKE SURE TESTS ARE IN PROPER SEQUENCE
1176 004042 032777 010000 175166 BIT #BIT12,ATCST ;HERE LIES THE NUMBER OF THIS TEST
1177 004050 001002 BNE A0016 ;SEE IF ILO ERROR IS SET.
1178 004052 104014 ERROR 14 ;BR IF ILO ERR IS SET.
1179 004054 000421 BR D0016 ;WRTM COMMAND WITH WRTM SWITCH DISABLED
1180 004056 005777 175156 A0016: TST ATCCM ;FAILED TO SET ILO ERROR.
1181 004062 100402 BMI B0016 ;SEE IF ERROR BIT IS SET.
1182 004064 104015 ERROR 15 ;BR IF ERROR BIT IS SET.
1183 004066 000414 BR D0016 ;ILO ERR FAILED TO SET ERROR BIT.
1184 004070 005077 175144 B0016: CLR ATCCM ;CLEAR ILLEGAL COMMAND.
1185 004074 032777 010000 175134 BIT #BIT12,ATCST ;SEE IF ILO ERROR IS SET.
1186 004102 001402 BEQ C0016 ;BR IF ILO ERROR IS CLEAR.
1187 004104 104016 ERROR 16 ;CLEARING ILLEGAL OP FAILED TO CLEAR
1188 004106 000404 BR D0016 ;ILO ERROR.
1189 004110 005777 175124 C0016: TST ATCCM ;SEE IF ERROR BIT IS CLEAR.
1190 004114 100001 BPL D0016 ;BR IF ERROR IS CLEAR.
1191 004116 104017 ERROR 17 ;CLEARING ILLEGAL OP FAILED TO
1192 004120 004737 012162 D0016: JSR PC,SRSETT ;CLEAR ERROR BIT.
1193
1194 004124 012706 001000 MOV #1000,SP ;RESTORE THE STACK POINTER
1195 004130 000400 BR T0017 ;GO ON TO THE NEXT TEST
1196
1197 ;CHECK THAT ISSUING WRTM COMMAND (WRITE TIMING AND MARK) WITH WRTM SWITCH
1198 ;OFF CAUSES AN ILO ERROR (ILLEGAL OP- TCST BIT 12) AND THAT ERROR BIT SETS.
1199 ; (TCCM BIT 15). TEST DONE WITH MAINTENANCE BIT SET.
1200 .SBTTL T0017
1201 *****
1202 004132 000004
1203 004134 012706 001000
1204 004140 004737 011730
1205 004144 000017
1206
1207 T0017: SCOPE
1208 MOV #1000,SP ;SETUP THE STACK POINTER
1209 JSR PC,TORDER ;MAKE SURE TESTS ARE IN PROPER SEQUENCE
1210 D0017 ;HERE LIES THE NUMBER OF THIS TEST

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1205 004146 012777 020012 175064 R0017: MOV #MAINT!FWD!UD!WRTM,@TCCM
1206 004154 000240 NOP
1207 004156 032777 010000 175052 BIT #BIT12,@TCST ;SEE IF ILO ERR IS SET.
1208 004164 001002 BNE A0017 ;BR IF ILO SET.
1209 004166 104020 ERROR 20 ;WRTM WITH WRTM SW OFF FAILED TO SET
1210 004170 000421 BR D0017 ;ILO ERROR.
1211 004172 005777 175042 A0017: TST @TCCM ;ERROR BIT SET?
1212 004176 100402 BMI B0017 ;BR IF ERROR BIT SET.
1213 004200 104021 ERROR 21 ;ERROR BIT NOT SET WITH ILO ERR SET.
1214 004202 000414 BR D0017
1215 004204 005077 175030 B0017: CLR @TCCM ;CLEAR ILLEGAL COMMAND.
1216 004210 032777 010000 175020 BIT #BIT12,@TCST ;SEE IF ILO ER IS CLEAR.
1217 004216 001402 BEQ C0017 ;BR IF ILO ERR IS CLEAR.
1218 004220 104016 ERROR 16 ;CLEARING ILLEGAL OP FAILED TO
1219 004222 000404 BR D0017 ;CLEAR ILO ERR.
1220 004224 005777 175010 C0017: TST @TCCM ;ERROR BIT SET?
1221 004230 100001 BPL D0017 ;BR IF ERROR BIT IS CLEAR.
1222 004232 104017 ERROR 17 ;CLEARING ILLEGAL OP FAILED TO
1223 004234 004737 012162 D0017: JSR PC,SRSET* ;CLEAR ERROR BIT.
1224 004240 012706 001000 MOV #1000,SP ;RESTORE THE STACK POINTER
1225 004244 000400 BR T0020 ;GO ON TO THE NEXT TEST
1226
1227 ;TEST THAT CLEARING ERROR BIT DOES NOT CLEAR ILO ERROR.
1228 ;SBTTL T0020
1229 *****
1230 T0020: SCOPE
1231 004246 000004 MOV #1000,SP ;SETUP THE STACK POINTER
1232 004250 012706 001000 JSR PC,TORDER ;MAKE SURE TESTS ARE IN PROPER SEQUENCE
1233 004254 004737 011730 D0020 ;HERE LIES THE NUMBER OF THIS TEST
1234 004260 000020 R0020: MOV #MAINT!FWD!UD!WRTM,@TCCM
1235 004262 012777 020012 174750 NOP
1236 004270 000240 TST @TCCM ;ERROR SET?
1237 004272 005777 174742 BMI A0020 ;BR IF ERROR BIT IS SET.
1238 004276 100402 ERROR 23 ;ERROR BIT FAILED TO SET.
1239 004300 104023 BR B0020
1240 004302 000410 A0020: BIC #BIT15,@TCCM ;TRY CLEARING ERROR BIT.
1241 004304 042777 100000 174726 BIT #BIT12,@TCST ;ILO SET?
1242 004312 032777 010000 174716 BNE B0020 ;BR IF ILO IS SET.
1243 004320 001001 ERROR 22 ;O TO ERROR BIT CLEARED ILO ERROR.
1244 004322 104022 B0020: JSR PC,SRSETT ;RESET.
1245 004324 004737 012162
1246
1247 004330 012706 001000 MOV #1000,SP ;RESTORE THE STACK POINTER
1248 004334 000400 BR T0021 ;GO ON TO THE NEXT TEST
1249 ;TEST THAT ERROR BIT (TCCM BIT15) IS ABLE TO CAUSE AN INTERRUPT.
1250 ;SBTTL T0021
1251 *****
1252 T0021: SCOPE
1253 004336 000004 MOV #1000,SP ;SETUP THE STACK POINTER
1254 004340 012706 001000 JSR PC,TORDER ;MAKE SURE TESTS ARE IN PROPER SEQUENCE
1255 004344 004737 011730 D0021 ;HERE LIES THE NUMBER OF THIS TEST
1256 004350 000021 R0021: JSR PC,STTCV ;SET TC11 INT. VECTOR TO MB.
1257 004352 004737 012136 A0021
1258 004356 004404 CLR @TCCM ;DISABLE TC11 INTERRUPTS.
1259 004360 005077 174654 CLR PSW ;SET PRY 0.
1260 004364 005037 177776 BIS #BIT6,@TCCM ;ENABLE TC11 INTERRUPTS.
1261 004370 052777 000100 174642

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1261 004376 000240      NOP
1262 004400 104005      ERROR 5          ;TC11 FAILED TO INTERRUPT.
1263 004402 000415      BR      D0021
1264 004404 012777 004434 174636 A0021: MOV      #C0021,@TCVTR ;CHANGE INT VECTOR TO MD.
1265 004412 012716 004420      MOV      #B0021,@SP    ;CHANGE INT EXIT POINTER TO MC.
1266 004416 000002      RTI          ;EXIT INTERRUPT.
1267 004420 052777 020012 174612 B0021: BIS      #MAINT!FWD!UD!WRTH,@TCCM
1268 004426 000240      NOP
1269 004430 104024      ERROR 24          ;ERROR BIT FAILED TO INTERRUPT.
1270 004432 000401      BR      D0021
1271 004434 022626      C0021: POPSP2          ;HERE IF ERROR INTERRUPTS.
1272 004436 005077 174576      D0021: CLR      @TCCM      ;DISABLE INT. CLEAR ILLEGAL OP.
1273
1274 004442 012706 001000      MOV      #1000,SP    ;RESTORE THE STACK POINTER
1275 004446 000400      BR      T0022          ;GO ON TO THE NEXT TEST
1276
1277      ;TEST THAT ISSUING RNUM COMMAND (READ BLOCK #) CLEARS READY BIT.
1278      ;RESET INSTRUCTION SHOULD SET READY. TEST DONE WITH MAINT. BIT SET.
1279      .SBTTL T0022
1280      *****
1281 004450 000004      T0022: SCOPE
1282 004452 012706 001000      MOV      #1000,SP    ;SETUP THE STACK POINTER
1283 004456 004737 011730      JSR      PC,TORDER ;MAKE SURE TESTS ARE IN PROPER SEQUENCE
1284 004462 000022      D0022          ;HERE LIES THE NUMBER OF THIS TEST
1285 004464 105777 174550      R0022: TSTB      @TCCM      ;READY SET?
1286 004470 100402      BMI      A0022          ;BR IF READY IS SET.
1287 004472 104025      ERROR 25          ;RESET DID NOT FORCE READY TO SET.
1288 004474 000407      BR      B0022
1289 004476 012777 020703 174534 A0022: MOV      #MAINT!UD!FWD!RNUM!DO,@TCCM
1290 004504 105777 174530      TSTB      @TCCM      ;READY CLEAR?
1291 004510 100001      BPL      B0022          ;BR IF READY IS CLEAR.
1292 004512 104076      ERROR 76          ;RNUM,DO, FAILED TO CLEAR READY.
1293 004514 004737 012162      B0022: JSR      PC,SRSETT ;ISSUE RESET TO FORCE READY TO SET.
1294
1295 004520 012706 001000      MOV      #1000,SP    ;RESTORE THE STACK POINTER
1296 004524 000400      BR      T0023          ;GO ON TO THE NEXT TEST
1297
1298      ;TEST THAT TC11 CONTROL CAN RECOGNIZE A BLOCK MARK. WITH MAINT BIT SET,
1299      ;RNUM COMMAND IS ISSUED. A SUBROUTINE PROVIDES TIMING AND MARK DATA.
1300      ;WHEN THE BLOCK MARK HAS BEEN SHIFTED INTO THE WINDOW, THE READY BIT SHOULD SET.
1301      .SBTTL T0023
1302      *****
1303 004526 000004      T0023: SCOPE
1304 004530 012706 001000      MOV      #1000,SP    ;SETUP THE STACK POINTER
1305 004534 004737 011730      JSR      PC,TORDER ;MAKE SURE TESTS ARE IN PROPER SEQUENCE
1306 004540 000023      D0023          ;HERE LIES THE NUMBER OF THIS TEST
1307 004542 005077 174472      R0023: CLR      @TCCM
1308 004546 012777 020003 174464      MOV      #MAINT!UD!FWD!RNUM!DO,@TCCM
1309 004554 004537 012636      MTCOD      MTK7,6 ;CALL LOAD MT CODES SUB.
1310 004560 033164      JSR      R5,LATCOD ;ADDRESS OF MARK TRACK CODES.
1311 004562 000006      MTK7,6 ;MARK TRACK CODE COUNT.
1312 004564 005777 174450      TST      @TCCM      ;ERROR BIT SET?
1313 004570 100002      BPL      ALJ23          ;BR IF NO ERROR.
1314 004572 104027      ERROR 27          ;ERROR BIT SET. EXAMINE TCST OR LIGHT PANEL.
1315 004574 000404      BR      B0023
1316 004576 105777 174436      A0023: TSTB      @TCCM      ;READY BIT SET?

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 T0023

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1317 004602 100401      BMI      B0023      ;BR IF READY IS SET.
1318 004604 104030      ERROR 30      ;READY NOT SET AFTER BLOCK MARK WAS
1319                                     ;SHIFTED INTO WINDOW REG WITH RNUM COMMAND
1320                                     ;IN EFFECT. EVERYTHING IS SUSPECT AT THIS
1321                                     ;POINT. ABILITY TO SHIFT TIMING AND MARK
1322                                     ;DATA WHILE IN MAINT MODE HAS NOT BEEN
1323 004606                                     B0023:
1324 004606 012706 001000      MOV      #1000,SP      ;RESTORE THE STACK POINTER
1325 004612 000400      BR      T0024      ;GO ON TO THE NEXT TEST
1326                                     ;TEST THAT TC11 CONTROL TRANSFERS THE BLOCK NUMBER TO THE DATA REGISTER
1327                                     ;WHEN BLOCK MARK IS DETECTED AND CONTROL IS DOING RNUM COMMAND. A SUBROUTINE
1328                                     ;PROVIDES TIMING, MARK, AND DATA. WHEN THE READY BIT SETS, THE BLOCK #
1329                                     ;EXPECTED IN THE DATA REGISTER IS 000525.
1330                                     .SBTTL T0024
1331                                     *****
1332 004614 000004      T0024: SCOPE
1333 004616 012706 001000      MOV      #1000,SP      ;SETUP THE STACK POINTER
1334 004622 004737 011730      JSR      PC,TORDER      ;MAKE SURE TESTS ARE IN PROPER SEQUENCE
1335 004626 000024      00024      ;HERE LIES THE NUMBER OF THIS TEST
1336 004630 005077 174404      R0024: CLR      @TCCM
1337 004634 012777 020003 174376      MOV      #MAINT!UO!FWD!RNUM!DO,@TCCM
1338 004642      MTCOD      MTK7,6
1339 004642 004537 012636      JSR      RS,LATCOD      ;CALL LOAD MT CODES SUB.
1340 004646 033164      MTK7      ;ADDRESS OF MARK TRACK CODES.
1341 004650 000006      6      ;MARK TRACK CODE COUNT.
1342 004652 022777 052525 174366      CMP      #52525,@TCDT      ;TCDT=52525?
1343 004660 001415      BEQ      A0024      ;BR IF TCDT CORRECT.
1344 004662 017737 174360 001172      MOV      @TCDT,$REG4      ;SETUP BLOK # FOR PRINTOUT
1345 004670 012737 052525 001162      MOV      #52525,$REG0      ;SETUP GOOD BLOK # TO PRINTOUT
1346 004676 017737 174344 001172      MOV      @TCDT,$REG4      ;SETUP BLOK # FOR PRINTOUT
1347 004704 012737 052525 001162      MOV      #52525,$REG0      ;SETUP GOOD BLOK # TO PRINTOUT
1348 004712 104031      ERROR 31      ;ERROR. BLOK # IN TCDT NOT 52525. EXAMINE TCDT.
1349 004714
1350 004714 012706 001000      A0024: MOV      #1000,SP      ;RESTORE THE STACK POINTER
1351 004720 000400      BR      T0025      ;GO ON TO THE NEXT TEST
1352                                     ;TEST THAT TC11 CONTROL IS ABLE TO DETECT AN INCORRECT MARK TRACK CODE.
1353                                     ;A SUBROUTINE PROVIDES TIMING AND MARK DATA WHILE CONTROL IS IN RNUM
1354                                     ;COMMAND. WHEN THE INCORRECT MARK IS SHIFTED, THE MTE AND ERR BITS SHOULD SET.
1355                                     .SBTTL T0025
1356                                     *****
1357 004722 000004      T0025: SCOPE
1358 004724 012706 001000      MOV      #1000,SP      ;SETUP THE STACK POINTER
1359 004730 004737 011730      JSR      PC,TORDER      ;MAKE SURE TESTS ARE IN PROPER SEQUENCE
1360 004734 000025      00025      ;HERE LIES THE NUMBER OF THIS TEST
1361 004736 004537 012610      R0025: JSR      RS,BMOVE      ;SET INVALID CODE IN MARK TRACK.
1362 004742 033134      MTKER
1363 004744 033236      MTKVAR
1364 004746 000006      6
1365 004750 012777 020003 174262      MOV      #MAINT!UO!FWD!RNUM!DO,@TCCM
1366 004756      MTCOD      MTK7,9
1367 004756 004537 012636      JSR      RS,LATCOD      ;CALL LOAD MT CODES SUB.
1368 004762 033164      MTK7      ;ADDRESS OF MARK TRACK CODES.
1369 004764 000011      9      ;MARK TRACK CODE COUNT.
1370 004766 032777 020000 174242      BIT      #BIT13,@TCST      ;MTE BIT SET? (MARK TRACK ERROR).
1371 004774 001002      BNE      A0025      ;BR IF MTE BIT IS SET.
1372 004776 104032      ERROR 32      ;INVALID MARK TRACK CODE FAILED TO SET MTE.

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T0025

1373 005000 000404
1374 005002 005777 174232
1375 005006 100401
1376 005010 104033
1377 005012
1378 005012 012706 001000
1379 005016 000400

A0025: BR B0025
TST @TCCM ;ERROR BIT SET?
BMI B0025 ;BR IF ERROR BIT IS SET.
ERROR 33 ;MTE BIT FAILED TO SET ERROR BIT.
B0025: MOV #1000,SP ;RESTORE THE STACK POINTER
BR T0026 ;GO ON TO THE NEXT TEST
;TEST THAT TC11 CONTROL DETECTS END ZONE MARK CODES. A SUBROUTINE PROVIDES
;TIMING AND MARK DATA WHILE CONTROL IS IN RNUM COMMAND. WHEN THE ENDZ
;MARK CODE IS SHIFTED INTO THE WINDOW, THE ENDZ AND ERROR BITS SHOULD SET.
SBTTL T0026

1385 005020 000004
1386 005022 012706 001000
1387 005026 004737 011730
1388 005032 000026
1389 005034 004537 012610
1390 005040 033142
1391 005042 033214
1392 005044 000006
1393 005046 012777 020003 174164
1394 005054
1395 005054 004537 012636
1396 005060 033164
1397 005062 000005
1398 005064 005777 174146
1399 005070 100402
1400 005072 104034
1401 005074 000404
1402 005076 005777 174136
1403 005102 100401
1404 005104 104035
1405 005106
1406 005106 012706 001000
1407 005112 000400

T0026: SCOPE
MOV #1000,SP ;SETUP THE STACK POINTER
JSR PC,TORDER ;MAKE SURE TESTS ARE IN PROPER SEQUENCE
00026 ;HERE LIES THE NUMBER OF THIS TEST
R0026: JSR RS,BMOVE ;SET END CODE IN MARK TRACK.
MTKEND
MTK5
6
MOV #MAINT!UD!FWD!RNUM!DO,@TCCM
MTCOD MTK7,5
JSR RS,LATCOD ;CALL LOAD MT CODES SUB.
MTK7 ;ADDRESS OF MARK TRACK CODES.
5 ;MARK TRACK CODE COUNT.
TST @TCST ;ENDZ BIT SET?
BMI A0026 ;BR IF ENDZ BIT IS SET.
ERROR 34 ;ENDZ MARK FAILED TO SET ENDZ BIT.
BR B0026
A0026: TST @TCCM ;ERROR BIT SET?
BMI B0026 ;BR IF ERROR BIT IS SET.
ERROR 35 ;ENDZ BIT FAILED TO SET ERROR BIT.
B0026: MOV #1000,SP ;RESTORE THE STACK POINTER
BR T0027 ;GO ON TO THE NEXT TEST
;TEST THAT TC11 CONTROL DOES NOT RECOGNIZE MARK TRACK CODE 55 AS END ZONE
;BLOCK MARK. SUBROUTINE PROVIDES TIMING AND MARK DATA.
SBTTL T0027

1412 005114 000004
1413 005116 012706 001000
1414 005122 004737 011730
1415 005126 000027
1416 005130 004537 012610
1417 005134 033150
1418 005136 033214
1419 005140 000006
1420 005142 005077 174072
1421 005146 012777 020003 174064
1422 005154
1423 005154 004537 012636
1424 005160 033164
1425 005162 000005
1426 005164 005777 174046
1427 005170 100002
1428 005172 104036

T0027: SCOPE
MOV #1000,SP ;SETUP THE STACK POINTER
JSR PC,TORDER ;MAKE SURE TESTS ARE IN PROPER SEQUENCE
00027 ;HERE LIES THE NUMBER OF THIS TEST
R0027: JSR RS,BMOVE ;SET CODE 55 IN MARK TRACK.
MTK55
MTK5
6
CLR @TCCM
MOV #MAINT!UD!FWD!RNUM!DO,@TCCM
MTCOD MTK7,5
JSR RS,LATCOD ;CALL LOAD MT CODES SUB.
MTK7 ;ADDRESS OF MARK TRACK CODES.
5 ;MARK TRACK CODE COUNT.
TST @TCST ;ENDZ BIT SET?
BPL A0027 ;BR IF NOT SET.
ERROR 36 ;MARK CODE 55 INTERPRETED AS END ZONE.

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T0027

1429 005174 000404
1430 005176 005777 174036
1431 005202 100001
1432 005204 104037
1433 005206
1434 005206 012706 001000
1435 005212 000400
1436
1437
1438
1439
1440 005214 000004
1441 005216 012706 001000
1442 005222 004737 011730
1443 005226 000030
1444 005230 004737 012136
1445 005234 005274
1446 005236 005077 173776
1447 005242 012777 020103 173770
1448 005250
1449 005250 004537 012636
1450 005254 033164
1451 005256 000004
1452 005260 105777 173754
1453 005264 100402
1454 005266 104040
1455 005270 000401
1456 005272 104003
1457 005274
1458 005274 012706 001000
1459 005300 000400
1460
1461
1462
1463
1464
1465 005302 000004
1466 005304 012706 001000
1467 005310 004737 011730
1468 005314 000031
1469 005316 004737 012432
1470 005322 004737 012136
1471 005326 005472
1472 005330 005077 173704
1473 005334 012777 020103 173676
1474 005342
1475 005342 004537 012636
1476 005346 033164
1477 005350 000007
1478 005352 005777 173662
1479 005356 100002
1480 005360 104041
1481 005362 000440
1482 005364 105777 173650
1483 005370 100002
1484 005372 104042

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A0027: BR      B0027
        TST     @TCCM      ; ERROR BIT SET?
        BPL     B0027      ; BR IF NO ERROR.
        ERROR 37           ; ERROR BIT SET. EXAMINE TCST.

B0027: MOV     #1000,SP      ; RESTORE THE STACK POINTER
        BR      T0030      ; GO ON TO THE NEXT TEST
; TEST THAT TC11 INTERRUPTS. RNUM COMMAND IS ISSUED. SUBROUTINE PROVIDES
; TIMING AND MARK. WHEN BLOCK IS FOUND INTERRUPT SHOULD OCCUR.
; SBTTL T0030
; *****
T0030: SCOPE
        MOV     #1000,SP      ; SETUP THE STACK POINTER
        JSR     PC,TORDER     ; MAKE SURE TESTS ARE IN PROPER SEQUENCE
        00030              ; HERE LIES THE NUMBER OF THIS TEST
R0030: JSR     PC,STTCV       ; SET INTERRUPT VECTOR TO UE.
        00030
        CLR     @TCCM
        MOV     @MAINT!UO!FWD!IE!RNUM!DO,@TCCM
        MTCOD   MTK7,4
        JSR     RS,LATCOD     ; CALL LOAD MT CODES SUB.
        MTK7              ; ADDRESS OF MARK TRACK CODES.
        4                 ; MARK TRACK CODE COUNT.
        TSTB    @TCCM        ; READY SET?
        BMI     A0030        ; BR IF READY SET.
        ERROR 40            ; READY DID NOT SET.
        BR      00030
A0030: ERROR 3              ; READY FAILED TO INTERRUPT.
D0030: MOV     #1000,SP      ; RESTORE THE STACK POINTER
        BR      T0031      ; GO ON TO THE NEXT TEST
; TEST THAT TC11 IS ABLE TO TRANSFER ONE WORD TO CORE STORAGE. SUBROUTINE
; PROVIDES TIMING AND MARK. AFTER BLOCK IS "FOUND" TEST SWITCHES TO
; RDATA COMMAND WITH WORD COUNT OF -1.
; SBTTL T0031
; *****
T0031: SCOPE
        MOV     #1000,SP      ; SETUP THE STACK POINTER
        JSR     PC,TORDER     ; MAKE SURE TESTS ARE IN PROPER SEQUENCE
        00031              ; HERE LIES THE NUMBER OF THIS TEST
R0031: JSR     PC,CLRBUF      ; CLEAR READ BUFFER.
        JSR     PC,STTCV      ; SET INTERRUPT VECTOR TO VG.
        00031
        CLR     @TCCM
        MOV     @MAINT!UO!FWD!IE!RNUM!DO,@TCCM
        MTCOD   MTK7,7
        JSR     RS,LATCOD     ; CALL LOAD MT CODES SUB.
        MTK7              ; ADDRESS OF MARK TRACK CODES.
        7                 ; MARK TRACK CODE COUNT.
        TST     @TCCM        ; ERROR BIT SET?
        BPL     A0031        ; BR IF NO ERROR.
        ERROR 41            ; ERROR BIT SET. EXAMINE TCST.
        BR      F0031
A0031: TSTB    @TCCM        ; READY BIT SET?
        BPL     B0031        ; BR IF READY NOT SET.
        ERROR 42            ; READY SHOULD NOT BE SET.

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1485 005374 000433
1486 005376 022737 050505 036306 B0031: BR F0031
1487 005404 001405 050505 001162 B0031: CMP #50505,RBUF ;SEE IF 1ST WORD IN RBUF IS 50505.
1488 005406 012737 050505 001162 B0031: BEQ C0031 ;BR IF WORD IS 50505.
1489 005414 104043 050505 001162 B0031: MOV #50505,$REG0 ;GOOD DATA FOR PRINTOUT
1490 005416 000422 050505 001162 B0031: ERROR 43 ;WORD IN RBUF IS NOT 50505. EXAMINE RBUF.
1491 005420 005777 173616 C0031: BR F0031 ;TRANSFER MAY NOT HAVE OCCURRED.
1492 005424 001407 173616 C0031: TST @TCWC ;WORD COUNT 0?
1493 005426 017737 173610 001172 C0031: BEQ D0031 ;BR IF WORD COUNT IS 0.
1494 005434 005077 173522 C0031: MOV @TCWC,$REG4 ;PREPARE ERONIOUS WORD COUNT FOR PRINTOUT
1495 005440 104044 173522 C0031: CLR @SREG0 ;PREPARE GOOD WORD COUNT INFO FOR PRINTOUT
1496 005442 000410 173522 C0031: ERROR 44 ;WORD COUNT NOT 0.
1497 005444 022777 036310 173572 D0031: BR F0031
1498 005452 001404 036310 173572 D0031: CMP #RBUF+2,@TCBA ;DID BUS ADDRESS INCREMENT CORRECTLY?
1499 005454 017737 173564 001172 D0031: BEQ F0031 ;BR IF TCBA IS CORRECT.
1500 005462 104045 173564 001172 D0031: MOV @TCBA,$REG4 ;TCBA DID NOT INCREMENT OR DID IT INCORRECTLY.
1501 005464 104045 173564 001172 D0031: ERROR 45
1502 005464 012706 001000 F0031: MOV #1000,SP ;RESTORE THE STACK POINTER
1503 005470 000421 001000 F0031: BR T0032 ;GO ON TO THE NEXT TEST
1504 005472 005777 173542 G0031: TST @TCCM ;HERE WHEN RNUM INTERRUPTS. ERROR BIT SET?
1505 005476 100004 173542 G0031: BPL I0031 ;BR IF NO ERROR.
1506 005500 104041 173542 G0031: ERROR 41 ;ERROR BIT SET. EXAMINE TCST.
1507
1508 005502 012706 001000 I0031: MOV #1000,SP ;RESTORE THE STACK POINTER
1509 005506 000412 001000 I0031: BR T0032 ;GO ON TO THE NEXT TEST
1510 005510 012777 177777 173524 I0031: MOV #-1,@TCWC ;SET WORD COUNT TO -1.
1511 005516 012777 036306 173520 I0031: MOV #RBUF,@TCBA ;SET BUS ADDR TO RBUF.
1512 005524 112777 000005 173506 I0031: MOVB #RDATA!DO,@TCCM ;READ DATA COMMAND.
1513 005532 000002 000005 173506 I0031: RTI ;EXIT INTERRUPT.
1514 ;TEST THAT RDATA COMMAND WITH WORD COUNT SET TO -1 TRANSFERS ONLY ONE WORD.
1515 ;THAT READY IS SET WHEN THE ENTIRE 256 WORD BLOCK HAS BEEN PROCESSED, AND
1516 ;THAT NO PARITY ERROR OCCURS. TEST DONE UNDER MAINTENANCE MODE.
1517 .SBTTL T0032
1518 *****
1519 005534 000004 000004 001000 T0032: SCOPE
1520 005536 012706 001000 011730 T0032: MOV #1000,SP ;SETUP THE STACK POINTER
1521 005542 004737 011730 T0032: JSR PC,TORDER ;MAKE SURE TESTS ARE IN PRPOER SEQUENCE
1522 005546 000032 011730 T0032: D0032 ;HERE LIES THE NUMBER OF THIS TEST
1523 005550 004737 012432 R0032: JSR PC,CLRBUF ;CLEAR READ BUFFER.
1524 005554 004737 012136 R0032: JSR PC,STTCV ;SET INTERRUPT VECTOR TO WI.
1525 005558 005744 012432 R0032: I0032
1526 005562 005077 173452 R0032: CLR @TCCM
1527 005566 012777 020103 173444 R0032: MOV #MAINT!UD!FWD!IE!RNUM!DO,@TCCM
1528 005574 004537 012636 R0032: MTC00 MTK7,267.
1529 005578 004537 012636 R0032: JSR RS,LATC00 ;CALL LOAD MT CODES SUB.
1530 005600 033164 012636 R0032: MTK7 ;ADDRESS OF MARK TRACK CODES.
1531 005602 000413 012636 R0032: 267. ;MARK TRACK CODE COUNT.
1532 005604 005777 173430 R0032: TST @TCCM ;ERROR BIT SET?
1533 005610 100010 173430 R0032: BPL B0032 ;BR IF NO ERROR.
1534 005612 032777 040000 173416 R0032: BIT #BIT14,@TCST ;WAS IT PARITY ERROR?
1535 005620 001402 040000 173416 R0032: BEQ A0032 ;BR IF NOT PARITY ERROR.
1536 005622 104046 040000 173416 R0032: ERROR 46 ;PARITY ERROR.
1537 005624 000444 040000 173416 R0032: BR H0032
1538 005626 104041 040000 173416 R0032: ERROR 41 ;ERROR BIT SET. NOT DUE TO PARITY ERROR.
1539 005630 000442 040000 173416 R0032: BR H0032
1540 005632 105777 173402 B0032: TSTB @TCCM ;READY BIT SET?

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1541	005636	100402				BMI	C0032		BR IF READY IS SET.
1542	005640	104047				ERROR 47			READY FAILED TO SET AFTER COMPLETION
1543	005642	000435				BR	H0032		OF RDATA COMMAND.
1544	005644	022737	050505	036306	C0032:	CHP	#50505,RBUF		1ST WORD EQUAL 50505?
1545	005652	001405				BEQ	D0032		BR IF WORD IS 50505.
1546	005654	012737	050505	001162		MOV	#50505,\$REG0		GOOD DATA FOR PRINTOUT
1547	005662	104043				ERROR 43			1ST WORD DID NOT TRANSFER TO RBUF CORRECTLY.
1548	005664	000424				BR	H0032		
1549	005666	005737	036310		D0032:	TST	RBUF+2		RBUF+2 EQUAL 0?
1550	005672	001402				BEQ	F0032		BR IF RBUF+2 EQUAL 0.
1551	005674	104050				ERROR 50			RBUF+2 NOT 0. NO DATA SHOULD HAVE
1552	005676	000417				BR	H0032		TRANSFERRED TO IT.
1553	005700	005777	173336		F0032:	TST	@TCWC		WORD COUNT 0?
1554	005704	001407				BEQ	G0032		BR IF WORD COUNT IS 0.
1555	005706	017737	173330	001172		MOV	@TCWC,\$REG4		PREPARE ERONIOUS WORD COUNT FOR PRINTOUT
1556	005714	005077	173242			CLR	\$SREG0		PREPARE GOOD WORD COUNT INFO FOR PRINTOUT
1557	005720	104044				ERROR 44			WORD COUNT NOT 0.
1558	005722	000405				BR	H0032		
1559	005724	022777	036310	173312	G0032:	CHP	#RBUF+2,@TCBA		IS BUS ADDR CORRECT?
1560	005732	001401				BEQ	H0032		BR IF TCBA OK.
1561	005734	104045				ERROR 45			TCBA ADDR INCORRECT. SHOULD CONTAIN RBUF+2.
1562	005736				H0032:				
1563	005736	012706	001000			MOV	#1000,SP		RESTORE THE STACK POINTER
1564	005742	000421				BR	T0032		GO ON TO THE NEXT TEST
1565	005744	005777	173270		I0032:	TST	@TC		HERE WHEN RNUM INTERRUPTS. ERROR?
1566	005750	100004				BPL	K0032		BR IF NO ERROR.
1567	005752	104041				ERROR 41			ERROR BIT SET. EXAMINE TCST.
1568									
1569	005754	012706	001000			MOV	#1000,SP		RESTORE THE STACK POINTER
1570	005760	000412				BR	T0032		GO ON TO THE NEXT TEST
1571	005762	012777	177777	173252	K0032:	MOV	#-1,@TCWC		SET WORD COUNT TO -1.
1572	005770	012777	036306	173246		MOV	#RBUF,@TCBA		SET BUS ADDR TO RBUF.
1573	005776	112777	000005	173234		MOVB	#RDATA:00,@TCCH		READ DATA COMMAND.
1574	006004	000002				RTI			EXIT INTERRUPT.
1575									
1576									
1577									
1578									
1579	006006	000004							
1580	006010	012706	001000			MOV	#1000,SP		SETUP THE STACK POINTER
1581	006014	004737	011730			JSR	PC,TORDER		MAKE SURE TESTS ARE IN PRPOER SEQUENCE
1582	006020	000033							HERE LIES THE NUMBER OF THIS TEST
1583	006022	004737	013114		R0033:	JSR	PC,MBCKSM		BAD CHECKSUM TO FCKSM.
1584	006026	004737	012432			JSR	PC,CLRBUF		CLEAR READ BUFFER.
1585	006032	004737	012136			JSR	PC,STTCV		SET INTERRUPT VECTOR TO XE.
1586	006036	006154							
1587	006040	005077	173174			CLR	@TCCH		
1588	006044	012777	020103	173166		MOV	#MAINT!UO!FWD!IE!RNUM!DO,@TCCH		
1589	006052					MTCC0	MTK7,267		
1590	006052	004537	012636			JSR	RS,LATCC0		CALL LOAD MT CODES SUB.
1591	006056	033164				MTK7			ADDRESS OF MARK TRACK CODES.
1592	006060	000413				267.			MARK TRACK CODE COUNT.
1593	006062	032777	040000	173146		BIT	#BIT14,@TCST		PARITY ERROR SET?
1594	006070	001005				BNE	A0033		BR IF PARITY ERROR SET.
1595	006072	017737	173144	001162		MOV	@TCWC,\$RE:0		
1596	006100	104052				ERROR 52			PARITY ERROR NOT DETECTED.(BIT NOT SET).

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1597	006102	000421				BR	C0033		
1598	006104	005777	173130		A0033:	TST	ATCCM		;ERROR BIT SET?
1599	006110	100405				BMI	B0033		;BR IF ERROR BIT SET.
1600	006112	017737	173124	001162		MOV	ATCWC, SREG0		
1601	006120	104053				ERROR 53			;PARITY ERROR DID NOT SET ERROR BIT.
1602	006122	000411				BR	C0033		
1603	006124	005077	173110		B0033:	CLR	ATCCM		;CLEAR COMMAND REGISTER.
1604	006130	005777	173104			TST	ATCCM		;ERROR BIT CLEAR?
1605	006134	100004				BPL	C0033		;BR IF ERROR BIT IS CLEAR.
1606	006136	017737	173100	001162		MOV	ATCWC, SREG0		
1607	006144	104054				ERROR 54			;CLEARING TCCM FAILED TO CLEAR PARITY ERROR.
1608	006146				C0033:				
1609	006146	012706	001000			MOV	#1000, SP		;RESTORE THE STACK POINTER
1610	006152	000421				BR	T0034		;GO ON TO THE NEXT TEST
1611	006154	005777	173060		D0033:	TST	ATCCM		;HERE WHEN RNUM INTERRUPTS. ERROR?
1612	006160	100004				BPL	G0033		;BR IF NO ERROR.
1613	006162	104041				ERROR 41			;ERROR BIT SET. EXAMINE TCST.
1614									
1615	006164	012706	001000			MOV	#1000, SP		;RESTORE THE STACK POINTER
1616	006170	000412				BR	T0034		;GO ON TO THE NEXT TEST
1617	006172	012777	177777	173042	G0033:	MOV	#-1, ATCWC		; -1 TO WORD COUNT.
1618	006200	012777	036306	173036		MOV	#RBUF, ATCBA		;SET BUS ADDR TO RBUF.
1619	006206	112777	000005	173024		MOV	#RDATA!DO, ATCCM		;RDATA COM AND.
1620	006214	000002				RTI			;EXIT INTERRUPT.
1621									;READ 256 WORDS WITH RDATA COMMAND UNDER MAINTENANCE MODE. ALL DATA SHOULD
1622									;TRANSFER CORRECTLY. NO CONTROL ERRORS SHOULD OCCUR.
1623									;SMTTL T0034
1624									*****
1625	006216	000004			T0034:	SCOPE			
1626	006220	012706	001000			MOV	#1000, SP		;SETUP THE STACK POINTER
1627	006224	004737	011730			JSR	PC, TORDER		;MAKE SURE TESTS ARE IN PROPER SEQUENCE
1628	006230	000034				00034			;HERE LIES THE NUMBER OF THIS TEST
1629	006232	004737	012432		R0034:	JSR	PC, CLRBUF		;CLEAR READ BUFFER.
1630	006236	004737	012136			JSR	PC, STTCV		;SET INTERRUPT VECTOR TO YF.
1631	006242	006360				F0034			
1632	006244	005077	172770			CLR	ATCCM		
1633	006250	012777	020103	172762		MOV	#MAINT!DO!FWD!IE!RNUM!DO, ATCCM		
1634	006256					MTCD	MTK7, 267.		
1635	006256	004537	012636			JSR	R5, LATCD		;CALL LOAD MT CODES SUB.
1636	006262	033164				MTK7			;ADDRESS OF MARK TRACK CODES.
1637	006264	000413				267.			;MARK TRACK CODE COUNT.
1638	006266	005777	172746			TST	ATCCM		;ERROR BIT SET?
1639	006272	100002				BPL	A0034		;BR IF NO ERROR.
1640	006274	104041				ERROR 41			;ERROR BIT SET. EXAMINE TCST.
1641	006276	000425				BR	D0034		
1642	006300	005777	172736		A0034:	TST	ATCWC		;WORD COUNT 0?
1643	006304	001407				BEQ	B0034		;BR IF WORD COUNT IS 0.
1644	006306	017737	172730	001172		MOV	ATCWC, SREG4		;PREPARE ERONIOUS WORD COUNT FOR PRINTOUT
1645	006314	005077	172642			CLR	ATCWC		;PREPARE GOOD WORD COUNT INFO FOR PRINTOUT
1646	006320	104044				ERROR 44			;WORD COUNT NOT 0.
1647	006322	000413				BR	D0034		
1648	006324	022777	037306	172712	B0034:	CMP	#RBUF+512., ATCBA		;BUS ADDR CORRECT?
1649	006332	001402				BEQ	C0034		;BR IF TCBA OK.
1650	006334	104051				ERROR 51			;TCBA INCORRECT. SHOULD BE EQUAL TO
1651	006336	000405				BR	D0034		;RBUF+512.
1652	006340	004537	013130		C0034:	JSR	R5, CKDAT		;COMPARE 256 WORDS STARTING AT RBUF.

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T0034

1653	006344	001276				SBDAT1		;REPORT ANY ERRORS.
1654	006346	036306				RBUF		
1655	006350	000400				256.		
1656	006352							
1657	006352	012706	001000			D0034:	MOV #1000,SP	;RESTORE THE STACK POINTER
1658	006356	000421					BR T0035	;GO ON TO THE NEXT TEST
1659	006360	005777	172654			F0034:	TST @TCM	;HERE WHEN RNUM INTERRUPTS. ERROR?
1660	006364	100004					BPL H0034	;BR IF NO ERROR.
1661	006366	104041					ERROR 41	;ERROR BIT SET. EXAMINE TCST.
1662								
1663	006370	012706	001000				MOV #1000,SP	;RESTORE THE STACK POINTER
1664	006374	000412					BR T0035	;GO ON TO THE NEXT TEST
1665	006376	012777	177400	172636		H0034:	MOV #-256,@TCWC	; -256 TO WORD COUNT.
1666	006404	012777	036306	172632			MOV @RBUF,@TCBA	;SET BUS ADDR TO RBUF.
1667	006412	112777	000005	172620			MOVB @RDATA!DO,@TCM	;READ DATA COMMAND.
1668	006420	000002					RTI	;EXIT INTERRUPT.
1669								;READ 2 DATA BLOCKS (512 WORDS) WITH RDATA COMMAND UNDER MAINTENANCE MODE.
1670								;ALL DATA SHOULD TRANSFER CORRECTLY. NO ERRORS SHOULD OCCUR.
1671								;SMTTL T0035
1672								*****
1673	006422	000004				T0035:	SCOPE	
1674	006424	012706	001000				MOV #1000,SP	;SETUP THE STACK POINTER
1675	006430	004737	011730				JSR PC,TORDER	;MAKE SURE TESTS ARE IN PROPER SEQUENCE
1676	006434	000035					00035	;HERE LIES THE NUMBER OF THIS TEST
1677	006436	004737	012432			R0035:	JSR PC,CLRBUF	;CLEAR READ BUFFER.
1678	006442	004737	012136				JSR PC,STTCV	;SET INTERRUPT VECTOR TOZF.
1679	006446	006564					F0035	
1680	006450	005077	172564				CLR @TCM	
1681	006454	012777	020103	172556			MOV @MAINT!UO!FWD!IE!RNUM!DO,@TCM	
1682	006462						MTCOD MTK7,534.	
1683	006462	004537	012636				JSR RS,LATCOD	;CALL LOAD MT CODES SUB.
1684	006466	033164					MTK7	;ADDRESS OF MARK TRACK CODES.
1685	006470	001026					534.	;MARK TRACK CODE COUNT.
1686	006472	005777	172542				TST @TCM	;ERROR BIT SET?
1687	006476	100002					BPL A0035	;BR IF NO ERROR.
1688	006500	104041					ERROR 41	;ERROR BIT SET EXAMINE TCST.
1689	006502	000425					BR D0035	
1690	006504	005777	172532			A0035:	TST @TCWC	;WORD COUNT 0?
1691	006510	001407					BEQ B0035	;BR IF WORD COUNT IS 0.
1692	006512	017737	172524	001172			MOV @TCWC,\$REG4	;PREPARE ERONIOUS WORD COUNT FOR PRINTOUT
1693	006520	005077	172436				CLR @REG4	;PREPARE GOOD WORD COUNT INFO FOR PRINTOUT
1694	006524	104044					ERROR 44	;WORD COUNT NOT 0.
1695	006526	000413					BR D0035	
1696	006530	022777	040306	172506		B0035:	CMP @RBUF+1024.,@TCBA	;TCBA CORRECT?
1697	006536	001402					BEQ C0035	;BR IF TCBA IS OK.
1698	006540	104045					ERROR 45	;TCBA INCORRECT. SHOULD BE RBUF+1024.
1699	006542	000405					BR D0035	
1700	006544	004537	013130			C0035:	JSR RS,CKDAT	;COMPARE 512 WORDS STARTING AT RBUF.
1701	006550	001276					SBDAT1	;REPORT ANY ERRORS.
1702	006552	036306					RBUF	
1703	006554	001000					512.	
1704	006556					D0035:	MOV #1000,SP	;RESTORE THE STACK POINTER
1705	006562	012706	001000				BR T0036	;GO ON TO THE NEXT TEST
1706	006564	000421				F0035:	TST @TCM	;HERE WHEN RNUM INTERRUPTS. ERROR?
1707	006564	005777	172450				BPL H0035	;BR IF NO ERROR.
1708	006570	100004						

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 T0035

1709	006572	104041			ERROR 41		;ERROR BIT SET. EXAMINE TCST.
1710							
1711	006574	012706	001000		MOV	#1000,SP	;RESTORE THE STACK POINTER
1712	006600	000412			BR	T0036	;GO ON TO THE NEXT TEST
1713	006602	012777	177000	172432	H0035: MOV	#-512,ATCWC	; -512 TO WORD COUNT.
1714	006610	012777	036306	172426	MOV	#RBUF,ATCBA	;SET BUS ADDR TO RBUF.
1715	006616	112777	000005	172414	MOVB	#RDATA!DO,ATCCM	;READ DATA COMMAND.
1716	006624	000002			RTI		;EXIT INTERRUPT.
1717							;READ 1.5 BLOCKS (384 WORDS) WITH RDATA COMMAND UNDER MAINTENANCE MODE.
1718							;ALL DATA SHOULD TRANSFER CORRECTLY. NO ERRORS SHOULD OCCUR.
1719							.S8TTL T0036
1720							*****
1721	006626	000004			T0036: SCOPE		
1722	006630	012706	001000		MOV	#1000,SP	;SETUP THE STACK POINTER
1723	006634	004737	011730		JSR	PC,TORDER	;MAKE SURE TESTS ARE IN PROPER SEQUENCE
1724	006640	000036				00036	;HERE LIES THE NUMBER OF THIS TEST
1725	006642	004737	012432		R0036: JSR	PC,CLRBUF	;CLEAR READ BUFFER.
1726	006646	004737	012136		JSR	PC,STTCV	;SET INTERRUPT VECTOR TO AIF.
1727	006652	006766			F0036		
1728	006654	005077	172360		CLR	ATCCM	
1729	006660	012777	020103	172352	MOV	#MAINT!UO!FWD!IE!RNUM!DO,ATCCM	
1730	006666				MTCCO	MTK7,534.	
1731	006672	004537	012636		JSR	RS,LATCCO	;CALL LOAD MT CODES SUB.
1732	006674	033164			MTK7		;ADDRESS OF MARK TRACK CODES.
1733	006676	001026			534.		;MARK TRACK CODE COUNT.
1734	006702	005777	172336		TST	ATCCM	;ERROR BIT SET?
1735	006704	100002			BPL	A0036	;BR IF NO ERROR.
1736	006706	104041			ERROR 41		;ERROR BIT SET. EXAMINE TCST.
1737	006710	000424			BR	00036	
1738	006714	005777	172326		A0036: TST	ATCWC	;WORD COUNT 0?
1739	006716	001407			BEQ	00036	;BR IF WORD COUNT 0.
1740	006724	017737	172320	001172	MOV	ATCWC,\$REG4	;PREPARE ERONIOUS WORD COUNT FOR PRINTOUT
1741	006732	005077	172232		CLR	\$REG0	;PREPARE GOOD WORD COUNT INFO FOR PRINTOUT
1742	006734	000412			ERROR 44		;WORD COUNT NOT 0.
1743	006736	022777	037706	172302	B0036: CMP	#RBUF+768.,ATCBA	;TCBA CORRECT?
1744	006742	001401			BEQ	00036	;BR IF TCBA OK.
1745	006744	104045			ERROR 45		;TCBA INCORRECT. SHOULD BE RBUF+768.
1746	006746	004537	013130		C0036: JSR	RS,CKDAT	;COMPARE 384 WORDS STARTING AT RBUF.
1747	006752	001276			S8DAT1		;REPORT ANY ERRORS.
1748	006754	036306			RBUF		
1749	006756	000600			384.		
1750	006760				D0036:		
1751	006762	012706	001000		MOV	#1000,SP	;RESTORE THE STACK POINTER
1752	006764	000421			BR	T0037	;GO ON TO THE NEXT TEST
1753	006766	005777	172246		F0036: TST	ATCCM	;HERE WHEN RNUM INTERRUPTS. ERROR?
1754	006772	100004			BPL	H0036	;BR IF NO ERROR.
1755	006774	104041			ERROR 41		;ERROR BIT SET. EXAMINE TCST.
1756							
1757							
1758	006776	012706	001000		MOV	#1000,SP	;RESTORE THE STACK POINTER
1759	007002	000412			BR	T0037	;GO ON TO THE NEXT TEST
1760	007004	012777	177200	172230	H0036: MOV	#-384,ATCWC	; -384 TO WORD COUNT.
1761	007012	012777	036306	172224	MOV	#RBUF,ATCBA	;SET BUS ADDR TO RBUF.
1762	007020	112777	000005	172212	MOVB	#RDATA!DO,ATCCM	;READ DATA COMMAND.
1763	007026	000002			RTI		;EXIT INTERRUPT.
1764							;COMPLEMENT OBVERSE READ TEST. READ ONE BLOCK (256 WORDS) WITH RDATA IN REVERSE.

C04

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 T0036

;ALL DATA SHOULD COMPLEMENT OBERSE CORRECTLY. NO CONTROL ERRORS SHOULD OCCUR.

;SBTTL T0037

;*****

T0037: SCOPE

 MOV #1000,SP
 JSR PC,TORDER

 ;SETUP THE STACK POINTER
 ;MAKE SURE TESTS ARE IN PROPER SEQUENCE
 ;HERE LIES THE NUMBER OF THIS TEST
 ;CLEAR READ BUFFER
 ;SET INTERRUPT VECTOR TO BID

 R0037: JSR PC,CLRBUF
 JSR PC,STTCV

C0037:

 CLR @TCCM
 MOV @MAINT!UO!REV!IE!RNUM!DO,@TCCM
 MTK00 MTK7,267.
 JSR RS,LATC00

 ;CALL LOAD MT CODES SUB.
 ;ADDRESS OF MARK TRACK CODES.
 ;MARK TRACK CODE COUNT.
 ;ERROR BIT SET?
 ;BR IF NO ERROR.
 ;ERROR BIT SET. EXAMINE TCST.

 TST @TCCM
 BPL A0037
 ERROR 41

 A0037: JSR RS,CKDAT
 SBOAT2
 RBUF
 256.

 ;COMPARE 256 WORDS STARTING AT RBUF.
 ;REPORT ANY ERRORS.

 B0037: MOV #1000,SP
 BR T0040
 C0037: TST @TCCM
 BPL F0037
 ERROR 41

 ;RESTORE THE STACK POINTER
 ;GO ON TO THE NEXT TEST
 ;HERE WHEN RNUM INTERRUPTS. ERROR.
 ;BR IF NO ERROR.
 ;ERROR BIT SET. EXAMINE TCST.

 F0037: MOV #1000,SP
 BR T0040
 MOV #-256,@TCCM
 MOV @RBUF,@TCBA
 MOV @RDATA!DO,@TCCM
 RTI

 ;RESTORE THE STACK POINTER
 ;GO ON TO THE NEXT TEST
 ;-256 TO AND COUNT.
 ;ADDR OF RBUF TO BUS ADDRESS.
 ;READ DATA COMMAND.
 ;EXIT INTERRUPT

;CHECK FOR CORRECT OPERATION OF BLOCK MISS ERROR.

;SBTTL T0040

;*****

T0040: SCOPE

 MOV #1000,SP
 JSR PC,TORDER

 ;SETUP THE STACK POINTER
 ;MAKE SURE TESTS ARE IN PROPER SEQUENCE
 ;HERE LIES THE NUMBER OF THIS TEST

R0040: CLR @TCCM

 MOV #-2,@TCCM
 MOV @RBUF,@TCBA
 MOV @MAINT!UO!FWD!RNUM!DO,@TCCM

 ;-2 TO WORD COUNT.
 ;RBUF ADDR TO TCBA.

MTK00

 MTK7,5
 JSR RS,LATC00

 ;CALL LOAD MT CODES SUB.
 ;ADDRESS OF MARK TRACK CODES.
 ;MARK TRACK CODE COUNT.

 TST @TCCM
 BPL A0040
 R0040A: ERROR 41
 BR F0040

 ;ERROR BIT SET?
 ;BR IF NO ERROR.
 ;ERROR BIT SET EXAMINE TCST.

1765				
1766				
1767				
1768	007030	000004		
1769	007032	012706	001000	
1770	007036	004737	011730	
1771	007042	000037		
1772	007044	004737	012432	
1773	007050	004737	012136	
1774	007054	007132		
1775	007056	005077	172156	
1776	007062	012777	024103	172150
1777	007070			
1778	007070	004537	012636	
1779	007074	033164		
1780	007076	000413		
1781	007100	005777	172134	
1782	007104	100002		
1783	007106	104041		
1784	007110	000405		
1785	007112	004537	013130	
1786	007116	001302		
1787	007120	036306		
1788	007122	000400		
1789	007124			
1790	007124	012706	001000	
1791	007130	000421		
1792	007132	005777	172102	
1793	007136	100004		
1794	007140	104041		
1795				
1796	007142	012706	001000	
1797	007146	000412		
1798	007150	012777	177400	172064
1799	007156	012777	036306	172060
1800	007164	112777	000005	172046
1801	007172	000002		
1802				
1803				
1804				
1805	007174	000004		
1806	007176	012706	001000	
1807	007202	004737	011730	
1808	007206	000040		
1809	007210	005077	172024	
1810	007214	012777	177776	172020
1811	007222	012777	036306	172014
1812	007230	012777	020003	172002
1813	007236			
1814	007236	004537	012636	
1815	007242	033164		
1816	007244	000005		
1817	007246	005777	171766	
1818	007252	100002		
1819	007254	104041		
1820	007256	000506		

004

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1821 007260 112777 000005 171752 A0040: MOV8 #RDATA!DO,ATCCM ;ISSUE RDATA COMMAND.
1822 007266 004537 012636 MTC00 MTK7A,2
1823 007266 004537 012636 JSR RS,LATC00 ;CALL LOAD MT CODES SUB.
1824 007272 033222 MTK7A ;ADDRESS OF MARK TRACK CODES.
1825 007274 000002 2 ;MARK TRACK CODE COUNT.
1826 007276 032777 002000 171732 BIT #BIT10,ATCST ;BLOCK MISS ERROR SET?
1827 007304 001405 BEQ B0040 ;BR IF NO BLOCK MISS. OK.
1828 007306 017737 171730 001162 MOV ATCWC,$REGO ;MAKE WORD COUNT INFO PRINTABLE
1829 007314 104055 ERROR 55 ;BLOCK MISS SET WHEN RDATA ISSUED JUST
1830 007316 000466 BR F0040 ;BEFORE REV CHECK MARK. SHOULDN'T HAVE.
1831 007320 005077 171714 B0040: CLR ATCCM
1832 007324 012777 177776 171710 MOV #-2,ATCWC ; -2 TO WORD COUNT.
1833 007332 012777 036306 171704 MOV #RBUF,ATCBA ;RBUF ADDR TO TCBA.
1834 007340 012777 020003 171672 MOV #MAINT!UO!FWD!RNUM!DO,ATCCM
1835 007346 MTC00 MTK7,6
1836 007346 004537 012636 JSR RS,LATC00 ;CALL LOAD MT CODES SUB.
1837 007352 033164 MTK7 ;ADDRESS OF MARK TRACK CODES.
1838 007354 003006 6 ;MARK TRACK CODE COUNT.
1839 007356 005777 171656 TST ATCCM ;ERROR BIT SET?
1840 007362 100734 BMI R0040A ;BR IF ERROR BIT SET?
1841 007364 112777 000005 171646 MOV8 #RDATA!DO,ATCCM ;ISSUE RDATA COMMAND.
1842 007372 MTC00 MTK7B,2
1843 007372 004537 012636 JSR RS,LATC00 ;CALL LOAD MT CODES SUB.
1844 007376 033230 MTK7B ;ADDRESS OF MARK TRACK CODES.
1845 007400 000002 2 ;MARK TRACK CODE COUNT.
1846 007402 032777 002000 171626 BIT #BIT10,ATCST ;BLOCK MISS ERROR SET?
1847 007410 001005 BNE C0040 ;BR IF BLOCK MISS.
1848 007412 017737 171624 001162 MOV ATCWC,$REGO ;MAKE WORD COUNT INFO PRINTABLE
1849 007420 104056 ERROR 56 ;BLOCK MISS FAILED TO SET WHEN RDATA ISSUED
1850 007422 000424 BR F0040 ;RIGHT AFTER REV CHECK MARK. IT SHOULD HAVE.
1851 007424 005777 171610 C0040: TST ATCCM ;ERROR BIT SET?
1852 007430 100405 BMI D0040 ;BR IF ERROR BIT SET.
1853 007432 017737 171604 001162 MOV ATCWC,$REGO ;MAKE WORD COUNT INFO PRINTABLE
1854 007440 104057 ERROR 57 ;BLOCK MISS FAILED TO SET ERROR BIT.
1855 007442 000414 BR F0040
1856 007444 005077 171570 D0040: CLR ATCCM ;0 TO ERROR BIT.
1857 007450 032777 002000 171562 BIT #BIT10,ATCCM ;BLOCK MISS CLEARED?
1858 007456 001406 BEQ F0040 ;BR IF BLOCK MISS CLEARED.
1859 007460 017737 171556 001162 MOV ATCWC,$REGO ;MAKE WORD COUNT INFO PRINTABLE
1860 007466 104060 ERROR 60 ;0 TO ERROR FAILED TO CLEAR BLOCK MISS.
1861 007470 004737 012162 JSR PC,SRSETT
1862 007474 F0040:
1863 007474 012706 001000 MOV #1000,SP ;RESTORE THE STACK POINTER
1864 007500 000400 BR T0041 ;GO ON TO THE NEXT TEST
1865 ;READ ALL TEST (RALL)
1866 ;AFTER BLOCK IS FOUND, SWITCH TO RALL. READ 258 WORDS. 1ST WORD READ SHOULD BE
1867 ;THE REVERSE CHECKSUM (SHOULD BE 0). LAST WORD READ SHOULD BE THE FORWARD
1868 ;CHECKSUM (SHOULD BE 770000). ALL OTHER WORDS SHOULD BE DATA.
1869 .SBTTL T0041
1870 *****
1871 007502 000004 T0041: SCOPE
1872 007504 012706 001000 MOV #1000,SP ;SETUP THE STACK POINTER
1873 007510 004737 011730 JSR PC,TORDER ;MAKE SURE TESTS ARE IN PROPER SEQUENCE
1874 007514 000041 00041 ;HERE LIES THE NUMBER OF THIS TEST
1875 007516 004737 012432 R0041: JSR PC,CLRBUF ;CLEAR READ BUFFER.
1876 007522 004737 012136 JSR PC,STTCV ;SET INTERRUPT VECTOR TO EIF.

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E04

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1877	007526	007716			F0041			
1878	007530	005077	171504		CLR	@TCCM		
1879	007534	012777	020103	171476	MOV	#MAINT!UO!FWD!IE!RNUM!DO,@TCCM		
1880	007542				MTCCO	MTK7,267.		
1881	007542	004537	012636		JSR	RS,LATCOO		:CALL LOAD MT CODES SUB.
1882	007546	033164			MTK7			:ADDRESS OF MARK TRACK CODES.
1883	007550	000413			267.			:MARK TRACK CODE COUNT.
1884	007552	005777	171462		TST	@TCCM		:ERROR BIT SET?
1885	007556	100002			BPL	R0041B		:BR IF NO ERROR.
1886	007560	104041			ERROR 41			:ERROR BIT SET. EXAMINE TCST.
1887	007562	000461			BR	G0041		
1888	007564	017724	171456		MOV	@TCOT,(4)+		:SAVE DATA IN READ BUFFER.
1889	007570	005337	001274		DEC	CTRA		:258 WORDS READ?
1890	007574	001401			BEQ	A0041		:BR IF 258 WORDS READ.
1891	007576	000002			RTI			:NOT DONE YET. EXIT INTERRUPT.
1892	007600	005737	036306		TST	RBUF		:1ST WORD IN RBUF EQUAL 0?
1893	007604	001416			BEQ	D0041		:BR IF 1ST WORD IS 0.
1894	007606	022737	055555	036306	CMP	#55555,RBUF		:1ST WORD EQUAL 55555?
1895	007614	001002			BNE	B0041		:BR IF NOT 55555.
1896	007616	104043			ERROR 43			:55555. 1ST WORD READ WITH RALL WAS
1897	007620	000442			BR	G0041		:REV GUARD INSTEAD OF REV CHECKSUM.
1898	007622	022737	066666	036306	CMP	#66666,RBUF		:1ST WORD EQUAL 66666?
1899	007630	001002			BNE	C0041		:BR IF NOT 66666.
1900	007632	104043			ERROR 43			:66666. 1ST WORD READ WITH RALL WAS
1901	007634	000434			BR	G0041		:REV LOCK INSTEAD OF REV CHECKSUM.
1902	007636	104043			C0041: ERROR 43			:1ST WORD READ WITH RALL WAS NOT
1903	007640	000432			BR	G0041		:REV CHECKSUM. EXAMINE RBUF (1ST WORD).
1904	007642	004537	013130		D0041: JSR	RS,CKDAT		
1905	007646	001276			SBDAT1			
1906	007650	036310			RBUF+2			
1907	007652	000400			256.			
1908	007654	022737	170000	037310	CMP	#170000,RBUF+514.;FWD CHKSUM EQUAL 170000? 1ST WORD READ.		
1909	007662	001402			BEQ	D0041A		
1910	007664	104061			ERROR 61			:LAST WORD READ SHOULD HAVE BEEN THE FWD CHECKSUM.
1911	007666	000417			BR	G0041		:IN CORE IT SHOULD BE 170000.
1912	007670	005777	171346		D0041A: TST	@TCWC		:WORD COUNT STILL 0?
1913	007674	001402			BEQ	D0041B		
1914	007676	104062			ERROR 62			:TCWC (WORD COUNT) WAS MODIFIED DURING
1915	007700	000412			BR	G0041		:RALL. SHOULDN'T HAVE.
1916	007702	022777	036306	171334	D0041B: CMP	#RBUF,@TCBA		:BUS ADDRESS STILL EQUAL #RBUF?
1917	007710	001406			BEQ	G0041		
1918	007712	104063			ERROR 63			:TCBA (BUS ADDRESS) MODIFIED DURING
1919	007714	000404			BR	G0041		:RALL. SHOULDN'T HAVE.
1920	007716	005777	171316		F0041: TST	@TCCM		:HERE WHEN RNUM INTERRUPTS. ERROR!
1921	007722	100004			BPL	I0041		:BR IF NO ERROR.
1922	007724	104041			ERROR 41			:ERROR BIT SET. EXAMINE TCST.
1923	007726				G0041:			
1924	007726	012706	001000		MOV	#1000,SP		:RESTORE THE STACK POINTER
1925	007732	000421			BR	T0042		:GO ON TO THE NEXT TEST
1926	007734	012737	000402	001274	I0041: MOV	#258,CTRA		:NUMBER OF WORDS TO READ TO CTRA.
1927	007742	012704	036306		MOV	#RBUF,R4		:ADDR TO STORE DATA TO R4.
1928	007746	005077	171270		CLR	@TCWC		:ZERO WORD COUNT.
1929	007752	012777	036306	171264	MOV	#RBUF,@TCBA		:SET BUS ADDRESS TO RBUF.
1930	007760	004737	012136		JSR	PC,STCV		:SET INTERRUPT VECTOR TO E1AA.
1931	007764	007552			R0041A			
1932	007766	112777	000107	171244	MOVB	#TALL!IE!DO,@TCCM		:RALL COMMAND.

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T0041

1933 007774 000002

1934
1935

1936
1937

1938
1939

1940 007776 000004

1941 010000 012706 001000

1942 010004 004737 011730

1943 010010 000042

1944 010012 004737 012136

1945 010016 010120

1946 010020 005077 171214

1947 010024 012777 020103 171206

1948 010032

1949 010032 004537 012636

1950 010036 033164

1951 010040 000007

1952 010042 032777 001000 171166

1953 010050 001002

1954 010052 104064

1955 010054 000416

1956 010056 005777 171156

1957 010062 100402

1958 010064 104065

1959 010066 000411

1960 010070 005077 171144

1961 010074 032777 001000 171134

1962 010102 001403

1963 010104 104066

1964 010106 004737 012162

1965 010112

1966 010112 012706 001000

1967 010116 000422

1968 010120 005777 171114

1969 010124 100004

1970 010126 104041

1971

1972 010130 012706 001000

1973 010134 000413

1974 010136 004737 012136

1975 010142 010154

1976 010144 112777 000107 171066

1977 010152 000002

1978 010154 112777 000007 171056

1979 010162 000002

1980

1981

1982

1983

1984

1985

1986

1987

1988 010164 000004

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RTI                                     ;EXIT INTERRUPT.
;DATA MISS TEST. TEST THAT DATA MISS ERROR SETS WHEN DATA REGISTER (TCDT) IS
;NOT REFERENCED UNDER RALL COMMAND, BEFORE THE NEXT DATA WORD IS LOADED INTO
;THE DATA REGISTER. (READY BIT IS CLEARED WHEN IN RALL BY REFERENCING
;THE DATA REGISTER (TCDT).
.SBTL T0042
*****
T0042: SCOPE
MOV #1000,SP ;SETUP THE STACK POINTER
JSR PC,TORDER ;MAKE SURE TESTS ARE IN PROPER SEQUENCE
00042 ;HERE LIES THE NUMBER OF THIS TEST
R0042: JSR PC,STTCV ;SET INTERRUPT VECTOR TO FIE.
00042
CLR @TCCM
MOV #MAINT!UO!FWD!IE!RNUM!DO,@TCCM
MTCO0 MTK7,7
JSR RS,LATCOO ;CALL LOAD MT CODES SUB.
MTK7 ;ADDRESS OF MARK TRACK CODES.
7 ;MARK TRACK CODE COUNT.
BIT #BIT9,@TCST ;DATA MISS ERROR SET?
BNE R0042 ;BR IF DATA MISS IS SET.
ERROR 64 ;DATA MISS FAILED TO SET.
BR C0042
A0042: TST @TCCM ;ERROR BIT SET?
BMI B0042 ;BR IF ERROR BIT SET.
ERROR 65 ;DATA MISS FAILED TO SET ERROR BIT.
BR C0042
B0042: CLR @TCCM ;0 TO ERROR BIT.
BIT #BIT9,@TCST ;DATA MISS CLEARED?
BEQ C0042 ;BR IF DATA MISS IS CLEAR.
ERROR 66 ;0 TO ERROR FAILED TO CLEAR DATA MISS.
JSR PC,SRSETT
C0042: MOV #1000,SP ;RESTORE THE STACK POINTER
BR T0043 ;GO ON TO THE NEXT TEST
D0042: TST @TCCM ;HERE WHEN RNUM INTERRUPTS. ERROR?
BPL G0042 ;BR IF NO ERROR.
ERROR 41 ;ERROR BIT SET. EXAMINE TCST.
MOV #1000,SP ;RESTORE THE STACK POINTER
BR T0043 ;GO ON TO THE NEXT TEST
G0042: JSR PC,STTCV ;SET INTERRUPT VECTOR TO FIE.
H0042: MOV #RALL!IE!DO,@TCCM ;ISSUE RALL. IE SET.
RTI ;EXIT INTERRUPT.
H0042: MOV #RALL!DO,@TCCM ;HERE WHEN RALL INTERRUPTS. DISABLE INTERRUPTS,
RTI ;DO NOT READ TCDT, EXIT INTERRUPT.
;WRITE DATA TEST. AFTER BLOCK NUMBER IS "FOUND" ISSUE WDATA COMMAND
;UNDER MAINTENANCE MODE. WORD COUNT = -256, TCBA = RBUF. AFTER
;EACH MARK TRACK CODE IS PASSED, THE DATA IN THE DATA REGISTER IS SAVED.
;WHEN THE OPERATION IS COMPLETED, A COMPARE OF WRITE DATA AND THE DATA
;REGISTER DATA SAVED IS MADE TO SEE IF THEY MATCH. WORD COUNT AND TCBA
;ARE ALSO CHECKED FOR CORRECT CONTENTS.
.SBTL T0043
*****
T0043: SCOPE

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G04

MAINDEC-11-DZTCB-D TC11 TEST #2 MACY11 27(1006) 18-FEB-77 11:33 PAGE 38
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1989	010166	012706	001000			MOV	#1000, SP	; SETUP THE STACK POINTER
1990	010172	004737	011730			JSR	PC, TORDER	; MAKE SURE TESTS ARE IN PROPER SEQUENCE
1991	010176	000043				00043		; HERE LIES THE NUMBER OF THIS TEST
1992	010200	004737	013014		R0043:	JSR	PC, LBOAT1	; SET UP WRITE DATA (256 WORDS).
1993	010204	005077	171030			CLR	@TCOM	
1994	010210	012777	020003	171022		MOV	#MAINT!UO!FWD!RNUM!DO, @TCOM	
1995	010216					MTCO0	MTK7 5	
1996	010216	004537	012636			JSR	RS, LMTCO0	; CALL LOAD MT CODES SUB.
1997	010222	033164				MTK7		; ADDRESS OF MARK TRACK CODES.
1998	010224	000005				5		; MARK TRACK CODE COUNT.
1999	010226	005777	171006			TST	@TCOM	; ERROR BIT SET?
2000	010232	100002				BPL	R0043	; BR IF NO ERROR.
2001	010234	104041				ERROR 41		; ERROR BIT SET. EXAMINE TCST.
2002	010236	000457				BR	G0043	
2003	010240	012777	177400	170774	R0043:	MOV	#-256, @TCWC	; -256 TO WORD COUNT.
2004	010246	012777	036306	170770		MOV	#RBUF, @TCBA	; ADDR OF RBUF TO TCBA.
2005	010254	012704	037306			MOV	#RBUF+512, R4	; ADDR TO SAVE TCDT DATA TO R4.
2006	010260	112777	000015	170752		MOV8	#WDATA!DO, @TCOM	; ISSUE WDATA COMMAND.
2007	010266					MTCOE	H0043, MTK7A, 262.	
2008	010266	004537	013006			JSR	RS, LMTCOE	; CALL LOAD MT CODES SUBROUTINE.
2009	010272	010404				H0043		; ADDR TO GO AFTER EACH CODE PASSED.
2010	010274	033222				MTK7A		; ADDRESS OF MARK TRACK CODES.
2011	010276	000406				262.		; MARK TRACK CODE COUNT.
2012	010300	005777	170734			TST	@TCOM	; ERROR BIT SET?
2013	010304	100002				BPL	B0043	; BR IF NO ERROR.
2014	010306	104041				ERROR 41		; ERROR BIT SET. EXAMINE TCST.
2015	010310	000432				BR	G0043	
2016	010312	105777	170722		B0043:	TSTB	@TCOM	; READY BIT SET?
2017	010316	100402				BMI	C0043	; BR IF READY IS SET.
2018	010320	104067				ERROR 67		; READY BIT FAILED TO SET.
2019	010322	000425				BR	G0043	
2020	010324	005777	170712		C0043:	TST	@TCWC	; WORD COUNT 0?
2021	010330	001407				BEQ	D0043	; BR IF WORD COUNT IS 0.
2022	010332	017737	170704	001172		MOV	@TCWC, \$REG4	; PREPARE ERONIOUS WORD COUNT FOR PRINTOUT
2023	010340	005077	170616			CLR	@SREG0	; PREPARE GOOD WORD COUNT INFO FOR PRINTOUT
2024	010344	104044				ERROR 44		; WORD COUNT NOT 0.
2025	010346	000413				BR	G0043	
2026	010350	022777	037306	170666	D0043:	CMP	#RBUF+512., @TCBA	; TCBA CORRECT?
2027	010356	001402				BEQ	F0043	; BR IF TCBA CORRECT.
2028	010360	104045				ERROR 45		; TCBA INCORRECT. SHOULD BE RBUF+512.
2029	010362	000405				BR	G0043	
2030	010364	004537	013130		F0043:	JSR	RS, CKDAT	; COMPARE WRITE DATA AGAINST TCDT SAVED
2031	010370	001276				SBOAT1		; DATA. REPORT ERRORS.
2032	010372	037306				RBUF+512.		
2033	010374	000400				256.		
2034	010376				G0043:			
2035	010376	012706	001000			MOV	#1000, SP	; RESTORE THE STACK POINTER
2036	010402	000403				BR	T0044	; GO ON TO THE NEXT TEST
2037	010404	017724	170636		H0043:	MOV	@TCDT, (4)+	; HERE AFTER EACH MARK CODE IS PASSED.
2038	010410	000002				RTI		; SAVE TCDT DATA AND EXIT IOT TRAP.
2039								
2040								
2041								
2042	010412	000004						
2043	010414	012706	001000					
2044	010420	004737	011730					

; WRITE DATA COMPLEMENT OBVERSE TEST.
 .SBTTL T0044

 T0044: SCOPE
 MOV #1000, SP ; SETUP THE STACK POINTER
 JSR PC, TORDER ; MAKE SURE TESTS ARE IN PROPER SEQUENCE

Address	Hex	Dec	Label	Op	Op2	Op3	Op4	Op5	Op6	Op7	Op8	Op9	Op10	Op11	Op12	Op13	Op14	Op15	Op16	Op17	Op18	Op19	Op20	Op21	Op22	Op23	Op24	Op25	Op26	Op27	Op28	Op29	Op30	Op31	Op32	Op33	Op34	Op35	Op36	Op37	Op38	Op39	Op40	Op41	Op42	Op43	Op44	Op45	Op46	Op47	Op48	Op49	Op50	Op51	Op52	Op53	Op54	Op55	Op56	Op57	Op58	Op59	Op60	Op61	Op62	Op63	Op64	Op65	Op66	Op67	Op68	Op69	Op70	Op71	Op72	Op73	Op74	Op75	Op76	Op77	Op78	Op79	Op80	Op81	Op82	Op83	Op84	Op85	Op86	Op87	Op88	Op89	Op90	Op91	Op92	Op93	Op94	Op95	Op96	Op97	Op98	Op99	Op100	Op101	Op102	Op103	Op104	Op105	Op106	Op107	Op108	Op109	Op110	Op111	Op112	Op113	Op114	Op115	Op116	Op117	Op118	Op119	Op120	Op121	Op122	Op123	Op124	Op125	Op126	Op127	Op128	Op129	Op130	Op131	Op132	Op133	Op134	Op135	Op136	Op137	Op138	Op139	Op140	Op141	Op142	Op143	Op144	Op145	Op146	Op147	Op148	Op149	Op150	Op151	Op152	Op153	Op154	Op155	Op156	Op157	Op158	Op159	Op160	Op161	Op162	Op163	Op164	Op165	Op166	Op167	Op168	Op169	Op170	Op171	Op172	Op173	Op174	Op175	Op176	Op177	Op178	Op179	Op180	Op181	Op182	Op183	Op184	Op185	Op186	Op187	Op188	Op189	Op190	Op191	Op192	Op193	Op194	Op195	Op196	Op197	Op198	Op199	Op200	Op201	Op202	Op203	Op204	Op205	Op206	Op207	Op208	Op209	Op210	Op211	Op212	Op213	Op214	Op215	Op216	Op217	Op218	Op219	Op220	Op221	Op222	Op223	Op224	Op225	Op226	Op227	Op228	Op229	Op230	Op231	Op232	Op233	Op234	Op235	Op236	Op237	Op238	Op239	Op240	Op241	Op242	Op243	Op244	Op245	Op246	Op247	Op248	Op249	Op250	Op251	Op252	Op253	Op254	Op255	Op256	Op257	Op258	Op259	Op260	Op261	Op262	Op263	Op264	Op265	Op266	Op267	Op268	Op269	Op270	Op271	Op272	Op273	Op274	Op275	Op276	Op277	Op278	Op279	Op280	Op281	Op282	Op283	Op284	Op285	Op286	Op287	Op288	Op289	Op290	Op291	Op292	Op293	Op294	Op295	Op296	Op297	Op298	Op299	Op300	Op301	Op302	Op303	Op304	Op305	Op306	Op307	Op308	Op309	Op310	Op311	Op312	Op313	Op314	Op315	Op316	Op317	Op318	Op319	Op320	Op321	Op322	Op323	Op324	Op325	Op326	Op327	Op328	Op329	Op330	Op331	Op332	Op333	Op334	Op335	Op336	Op337	Op338	Op339	Op340	Op341	Op342	Op343	Op344	Op345	Op346	Op347	Op348	Op349	Op350	Op351	Op352	Op353	Op354	Op355	Op356	Op357	Op358	Op359	Op360	Op361	Op362	Op363	Op364	Op365	Op366	Op367	Op368	Op369	Op370	Op371	Op372	Op373	Op374	Op375	Op376	Op377	Op378	Op379	Op380	Op381	Op382	Op383	Op384	Op385	Op386	Op387	Op388	Op389	Op390	Op391	Op392	Op393	Op394	Op395	Op396	Op397	Op398	Op399	Op400	Op401	Op402	Op403	Op404	Op405	Op406	Op407	Op408	Op409	Op410	Op411	Op412	Op413	Op414	Op415	Op416	Op41
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MAINDEC-11-DZTCB-D TC11 TEST #2 MACY11 27(1006) 18-FEB-77 11:33 PAGE 40
 DZTCB0.P11 18-FEB-77 10:59 T0045

2101	010664	012737	000402	001274	MOV	#258, CTRA	; # OF WORDS TO WRITE TO CTRA.
2102	010672	004737	012136		JSR	PC, STICV	; SET INTERRUPT VECTOR TO IIC.
2103	010676	010720			B0045		
2104	010700	112777	000117	170332	MOV	#HALL! IE! DO, ATCCM	; ISSUE WRITE ALL COMMAND. INTERRUPT ENABLED.
2105	010706				NTCOE	I0045, MTK5, 260.	
2106	010706	004537	013006		JSR	RS, LNTCOE	; CALL LOAD MT CODES SUBROUTINE.
2107	010712	011030			I0045		; ADDR TO GO AFTER EACH CODE PASSED.
2108	010714	033214			MTK5		; ADDRESS OF MARK TRACK CODES.
2109	010716	000404			260.		; MARK TRACK CODE COUNT.
2110	010720	005777	170314		B0045: TST	ATCCM	; ERROR BIT SET?
2111	010724	100002			BPL	B0045A	; BR IF NO ERROR.
2112	010726	104041			ERROR 41		; ERROR BIT SET. EXAMINE TCST.
2113	010730	000434			BR	G0045	
2114	010732	012377	170310		B0045A: MOV	(3)+, ATCDT	; WRITE DATA TO TCDT.
2115	010736	005337	001274		DEC	CTRA	; WROTE 257 WORDS?
2116	010742	001401			BEQ	C0045	; BR IF 257 WORDS WRITTEN.
2117	010744	000002			RTI		; NOT DONE. EXIT INTERRUPT.
2118	010745	005737	037306		C0045: TST	ATRBUF+512.	; 1ST WORD WRITTEN EQUAL 0?
2119	010752	001404			BEQ	D0045	; BR IF FIRST WORD 0.
2120	010754	005037	001162		CLR	SREGO	
2121	010760	104070			ERROR 70		; 1ST WORD WRITTEN NOT 0. (REV CHECKSUM).
2122	010762	000417			BR	G0045	
2123	010764	004537	013130		D0045: JSR	RS, CKDAT	; CHECK THAT SAVED TCDT DATA MATCHES
2124	010770	001276			SBDAT1		; WRITE DATA.
2125	010772	037310			RBUF+514.		
2126	010774	000400			256.		
2127	010776	005777	170240		TST	ATCWC	; WORD COUNT STILL 0?
2128	011002	001402			BEQ	F0045	; BR IF WORD COUNT IS 0.
2129	011004	104071			ERROR 71		; WORD COUNT MODIFIED DURING WRITE ALL.
2130	011006	000405			BR	G0045	
2131	011010	022777	036306	170226	F0045: CMP	ATRBUF, ATCBA	; TCBA STILL EQUAL RBUF?
2132	011016	001401			BEQ	G0045	; BR IF TCBA STILL SAME.
2133	011020	104072			ERROR 72		; TCBA MODIFIED DURING WRITE ALL.
2134	011022				G0045:		
2135	011022	012706	001000		MOV	#1000, SP	; RESTORE THE STACK POINTER
2136	011026	000403			BR	T0046	; GO ON TO THE NEXT TEST
2137	011030	017724	170212		I0045: MOV	ATCDT, (4)+	; HERE AFTER EACH MARK CODE IS PASSED.
2138	011034	000002			RTI		; SAVE TCDT DATA AND EXIT IOT TRAP.
2139							
2140					.SBTTL T0046		
2141					*****		
2142	011036	000004			T0046: SCOPE		
2143	011040	012706	001000		MOV	#1000, SP	; SETUP THE STACK POINTER
2144	011044	004737	011730		JSR	PC, TORDER	; MAKE SURE TESTS ARE IN PROPER SEQUENCE
2145	011050	000046			00046		; HERE LIES THE NUMBER OF THIS TEST
2146	011052	004537	013256		R0046: JSR	RS, CKSELE	; SST TO U1.
2147	011056	000400			U1		
2148	011060	104073			ERROR 73		; SST TO U1 DID NOT CAUSE SELECT ERROR.
2149							
2150	011062	012706	001000		MOV	#1000, SP	; RESTORE THE STACK POINTER
2151	011066	000400			BR	T0047	; GO ON TO THE NEXT TEST
2152					.SBTTL T0047		
2153					*****		
2154	011070	000004			T0047: SCOPE		
2155	011072	012706	001000		MOV	#1000, SP	; SETUP THE STACK POINTER
2156	011076	004737	011730		JSR	PC, TORDER	; MAKE SURE TESTS ARE IN PROPER SEQUENCE

J04

MAINDEC-11-DZTCB-D TC11 TEST #2
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T0047

2157 011102 000047
2158 011104 004537 013256
2159 011110 001000
2160 011112 104073
2161
2162 011114 012706 001000
2163
2164
2165 011120 000004
2166 011122 012706 001000
2167 011126 004737 011730
2168 011132 000050
2169 011134 004537 013256
2170 011140 001400
2171 011142 104073
2172
2173 011144 012706 001000
2174
2175
2176 011150 000004
2177 011152 012706 001000
2178 011156 004737 011730
2179 011162 000051
2180 011164 004537 013256
2181 011170 002000
2182 011172 104073
2183
2184 011174 012706 001000
2185
2186
2187 011200 000004
2188 011202 012706 001000
2189 011206 004737 011730
2190 011212 000052
2191 011214 004537 013256
2192 011220 002400
2193 011222 104073
2194
2195 011224 012706 001000
2196
2197
2198 011230 000004
2199 011232 012706 001000
2200 011236 004737 011730
2201 011242 000053
2202 011244 004537 013256
2203 011250 003000
2204 011252 104073
2205 011254 000240
2206 011256 000240
2207 011260 000240
2208
2209 011262 012706 001000
2210
2211
2212 011266 000004

R0047: 00047 ; HERE LIES THE NUMBER OF THIS TEST
JSR R5,CKSELE ; SST TO U2.
U2
ERROR 73 ; SST TO U2 DID NOT CAUSE SELECT ERROR.

MOV #1000,SP ; RESTORE THE STACK POINTER
.SBTTL T0050

T0050: SCOPE
MOV #1000,SP ; SETUP THE STACK POINTER
JSR PC,TORDER ; MAKE SURE TESTS ARE IN PROPER SEQUENCE
00050 ; HERE LIES THE NUMBER OF THIS TEST
R0050: JSR R5,CKSELE ; SST TO U1.
U3
ERROR 73 ; SST TO U3 DID NOT CAUSE SELECT ERROR.

MOV #1000,SP ; RESTORE THE STACK POINTER
.SBTTL T0051

T0051: SCOPE
MOV #1000,SP ; SETUP THE STACK POINTER
JSR PC,TORDER ; MAKE SURE TESTS ARE IN PROPER SEQUENCE
00051 ; HERE LIES THE NUMBER OF THIS TEST
R0051: JSR R5,CKSELE ; ISSUE A SST COMMAND
U4
ERROR 73 ; SST TO U4 DID NOT CAUSE SELECT ERROR.

MOV #1000,SP ; RESTORE THE STACK POINTER
.SBTTL T0052

T0052: SCOPE
MOV #1000,SP ; SETUP THE STACK POINTER
JSR PC,TORDER ; MAKE SURE TESTS ARE IN PROPER SEQUENCE
00052 ; HERE LIES THE NUMBER OF THIS TEST
R0052: JSR R5,CKSELE ; ISSUE A SST COMMAND
U5
ERROR 73 ; SST TO U5 DID NOT CAUSE SELECT ERROR.

MOV #1000,SP ; RESTORE THE STACK POINTER
.SBTTL T0053

T0053: SCOPE
MOV #1000,SP ; SETUP THE STACK POINTER
JSR PC,TORDER ; MAKE SURE TESTS ARE IN PROPER SEQUENCE
00053 ; HERE LIES THE NUMBER OF THIS TEST
R0053: JSR R5,CKSELE ; ISSUE A SST COMMAND
U6
ERROR 73 ; SST TO U6 DID NOT CAUSE SELECT ERROR.
NOP
NOP
NOP

MOV #1000,SP ; RESTORE THE STACK POINTER
.SBTTL T0054

T0054: SCOPE

K04

MAINDEC-11-DZTCB-D TC11 TEST #2
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T0054

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2213 011270 012706 001000      MOV      #1000,SP      ;SETUP THE STACK POINTER
2214 011274 004737 011730      JSR      PC,TORDER    ;MAKE SURE TESTS ARE IN PROPER SEQUENCE
2215 011300 000054              00054      ;HERE LIES THE NUM ER OF THIS TEST
2216 011302 004537 013256      RO054: JSR      RS,CKSELE    ;ISSUE A SST COMMAND
2217 011306 003400              U7              ;
2218 011310 104073              ERROR 73      ;SST TO U7 DID NOT CAUSE SELECT ERROR.
2219
2220 011312 012706 001000      MOV      #1000,SP      ;RESTORE THE STACK POINTER
2221 .S8TTL T0055
2222 *****
2223 011316 000004      T0055: SCOPE
2224 011320 012706 001000      MOV      #1000,SP      ;SETUP THE STACK POINTER
2225 011324 004737 011730      JSR      PC,TORDER    ;MAKE SURE TESTS ARE IN PROPER SEQUENCE
2226 011330 000055              00055      ;HERE LIES THE NUMBER OF THIS TEST
2227 011332 004737 013046      JSR      PC,LBBIND    ;LOAD BUFFER WITH BINARY DATA.
2228 011336 005077 167676      CLR      @TCCH
2229 011342 012777 020003 167670      MOV      #MAINT!UO!FWD!RNUM!DO,@TCCH
2230 011350              MTCOD      MTK7,5
2231 011350 004537 012636      JSR      RS,LATCOD    ;CALL LOAD MT CODES SUB.
2232 011354 033164              MTK7      ;ADDRESS OF MARK TRACK CODES.
2233 011356 000005              5      ;MARK TRACK CODE COUNT.
2234 011360 005777 167654      TST      @TCCH      ;ERROR BIT SET?
2235 011364 100002              BPL      A0055      ;BR IF NO ERROR.
2236 011366 104041              ERROR 41      ;ERROR BIT SET. EXAMINE TCST.
2237 011370 000441              BR      00055
2238 011372 012777 177400 167642      A0055: MOV      #-256,@TCWC    ;-256 TO WORD COUNT.
2239 011400 012777 036306 167636      MOV      #R1,@TCBA    ;RBUF ADDR TO TCBA.
2240 011406 012704 037306      MOV      #RBUF+512.,R4 ;ADDR TO SAVE TCST DATA TO R4.
2241 011412 112777 000015 167620      MOV      #DATA!DO,@TCCH ;ISSUE WRITE DATA COMMAND.
2242 011420              MTCOE      FO055,MTK7A,262.
2243 011420 004537 013006      JSR      RS,LATCOE    ;CALL LOAD MT CODES SUBROUTINE.
2244 011424 011502              FO055      ;ADDR TO GO AFTER EACH CODE PASSED.
2245 011426 033222              MTK7A    ;ADDRESS OF MARK TRACK CODES.
2246 011430 000406              262.      ;MARK TRACK CODE COUNT.
2247 011432 005777 167602      TST      @TCCH      ;ERROR BIT SET?
2248 011436 100002              BPL      B0055      ;BR IF NO ERROR.
2249 011440 104044              ERROR 44      ;ERROR BIT SET. EXAMINE TCST.
2250 011442 000414              BR      00055
2251 011444 012701 037306      B0055: MOV      #RBUF+512.,R1 ;ADDR OF DATA TO CHECK TO R1.
2252 011450 012703 036306      MOV      #RBUF,R3     ;ADDR OF EXPECTED DATA TO R3.
2253 011454 012702 000400      MOV      #256.,R2     ;# OF WORDS TO CHECK TO R2.
2254 011460 005037 013254      CLR      WDCNT
2255 011464 004737 013202      C0055: JSR      PC,COTCK ;CHECK DATA WORD.
2256 011470 005302              DEC      R2      ;ALL WORDS CHECKED?
2257 011472 001374              BNE      C0055      ;BR IF NOT DONE YET.
2258 011474
2259 011474 012706 001000      D0055: MOV      #1000,SP      ;RESTORE THE STACK POINTER
2260 011500 000403              BR      T0056      ;GO ON TO THE NEXT TEST
2261 011502 017724 167540      FO055: MOV      @TCOT,(4)+ ;HERE AFTER EACH MARK CODE IS PASSED.
2262 011506 000002              RTI      ;SAVE TCOT DATA AND EXIT.
2263
2264 .S8TTL T0056
2265 011510 000004      T0056: SCOPE
2266 011512              .SEOP STARTX,PASCNT
2267 .S8TTL END OF PASS ROUTINE
2268

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L04

MAINDEC-11-DZTCB-D TC11 TEST #2
DZTCB0.P11 18-FEB-77 10:59

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END OF PASS ROUTINE

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2269 011512
2270
2271
2272
2273
2274
2275
2276 011512
2277 011512 000004
2278
2279 011514 005037 001102
2280 011520 005037 001222
2281 011524 005237 001100
2282 011530 042737 100000 001100
2283 011536 005327
2284 011540 000001
2285 011542 003022
2286 011544 012737
2287 011546 000001
2288 011550 011540
2289 011552 104401 011617
2290 011556
2291 011556 013746 001100
2292 011562 104405
2293 011564 104401 011614
2294 011570 013700 000042
2295 011574 001405
2296
2297 011576 000005
2298 011600 004710
2299 011602 000240
2300 011604 000240
2301 011606 000240
2302 011610
2303 011610 000137
2304 011612 002574
2305 011614 377 377 000
2306 011617 015 042412 042116
2307 011624 050040 051501 020123
2308 011632 000043
2309
2310 011634 012737 015717 011672
2311 011642 000403
2312 011644 012737 015575 011672
2313 011652 011600
2314 011654 162700 000002
2315 011660 012706 001000
2316 011664 005046
2317 011666 004737 014230
2318 011672 000000
2319 011674 010016
2320 011676 104402
2321 011700 104401 001233
2322 011704 104401 015645
2323 011710 000240
2324 011712 000240

STARS
;*****
;INCREMENT THE PASS NUMBER ($PASS)
;TYPE "END PASS #XXXXX" (WHERE XXXXX IS A DECIMAL NUMBER)
;IF THERES A MONITOR GO TO IT
;IF THERE ISN'T JUMP TO STARTX

SEOP:
SCOPE
.LIST
CLR $STNM ;ZERO THE TEST NUMBER
CLR $TIMES ;ZERO THE NUMBER OF ITERATIONS
INC $PASS ;INCREMENT THE PASS NUMBER
BIC #100000,$PASS ;DON'T ALLOW A NEG. NUMBER
DEC (PC)+ ;LOOP?
SEOPCT: .WORD 1
BGT $DOAGN ;YES
MOV (PC)+,$(PC)+ ;RESTORE COUNTER
SENDCT: .WORD 1
SEOPCT
TYPE $ENDMG ;TYPE "END PASS #"
TYPDEC $PASS
MOV $PASS,-(SP) ;SAVE $PASS FOR TYPEOUT
TYPDS ;GO TYPE--DECIMAL ASCII WITH SIGN
TYPE $ENULL ;TYPE A NULL CHARACTER
$GET42: MOV $42,RO ;GET MONITOR ADDRESS
BEQ $DOAGN ;BRANCH IF NO MONITOR
.LIST
RESET
SENDAD: JSR PC,(RO) ;CLEAR THE WORLD
NOP ;GO TO MONITOR
NOP ;SAVE ROOM
NOP ;FOR
NOP ;ACT11
$DOAGN:
JMP $(PC)+ ;RETURN
$RTNAD: .WORD STARTX
$ENULL: .BYTE -1,-1,0 ;NULL CHARACTER STRING
$ENDMG: .ASCIZ <15><12>/END PASS #/

;* THIS ROUTINE HANDLES FATAL TRAP ERRORS
TRAP10: MOV $TRPM10,TMESAD ;ADDRESS OF TRAP TO 10 MESSAGE TO THE MESSAGE PO
BR TRAPX ;ENTER THE FATAL TRAP ERROR REPORT ROUTINE
TRAP4: MOV $TRPM45,TMESAD
TRAPX: MOV (SP),RO ;SAVE PC OF WHERE TRAP OCCURRED
SUB #2,RO ;MAKE IT POINT EXACTLY AT THE OFFENDING WORD
MOV #1000,SP ;MAKE SURE THAT THE STACK GIVES NO PROBLEMS
CLR -(SP) ;FAKEOUT THE PRINTOUT ROUTINE
JSR PC,$TYPE ;PRINT THE TRAP MESSAGE
TMESAD: 000000 ;ADDRESS OF THE TRAP MESSAGE GOES HERE
MOV RO,(SP) ;PUT ERROR PC BACK ONTO THE STACK
TYPDC
TRYAGN: TYPE $SCRLF
TYPE $TRPMES ;THEN PRINTOUT THE TRAP MESSAGE
NOP ;PATCHING SPACE, THOUGHTFULLY PROVIDED
NOP ;PATCHING SPACE, THOUGHTFULLY PROVIDED

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M04

 MAINDEC-11-DZTCB-D TC11 TEST #2
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 END OF PASS ROUTINE

2325	011714	000240			NOP		;PATCHING SPACE, THOUGHTFULLY PROVIDED
2326	011716	000240			NOP		;PATCHING SPACE, THOUGHTFULLY PROVIDED
2327	011720	000240			NOP		;PATCHING SPACE, THOUGHTFULLY PROVIDED
2328	011722	000005			RESET		
2329	011724	000137	002312		JMP	2#START	
2330					;SUBROUTINE TO CHECK TO MAKE SURE THAT EACH TEST IN		
2331					;RUNNING WHEN IT SHOULD		
2332	011730	011637	001162		TORDER: MOV	(SP), SREG0	;GET ADDRESS OF TEST #
2333	011734	062716	000002		ADD	#2, (SP)	;BUMP RETURN ADDRESS TO HOP OVER THE IN LINE TEST #
2334	011740	123777	001102	167214	CMPB	\$TSTM, SREG0	;FIND OUT IF THE TEST #'S MATCH
2335	011746	001410			BEQ	TORDER	;IF THEY DO HOP OVER THE ERROR SIGNAL STUFF
2336	011750	013737	001162	001164	MOV	SREG0, SREG1	;SAVE ADDRESS OF TEST
2337	011756	017737	167200	001162	MOV	SREG0, SREG0	;GET TEST# WAS DATA READY FOR PRINTOUT
2338	011764	104026			ERROR	26	;PRINTOUT "OUT OF ORDER" MESSAGE
2339	011766	000744			BR	TRYAGN	;GO TRY TO START OVER
2340	011770	000207			TORDER: RTS	PC	;RETURN
2341					;SAVE REGS 0 TO 4 SUBROUTINE.		
2342	011772	012666	177764		SV04: MOV	(6)+, -12.(6)	;MOVE PC UPSTACK.
2343	011776	012737	000207	012050	MOV	RTSPC, SV05C	
2344	012004	000412			BR	SV05B	
2345					;SUB TO SAVE REGS 0 TO 5 AND PLACE JSR PC IN R5.		
2346	012006	012737	000240	012050	SV05S: MOV	#NOP, SV05C	
2347	012014	000403			BR	SV05A	
2348					;SUB TO SAVE REGS 0 TO 5.		
2349	012016	012737	000207	012050	SV05: MOV	RTSPC, SV05C	
2350	012024	012666	177762		SV05A: MOV	(6)+, -14.(6)	;MOVE PC UPSTACK.
2351	012030	010546			MOV	R5, -(6)	
2352	012032	010446			SV05B: MOV	R4, -(6)	
2353	012034	010346			MOV	R3, -(6)	
2354	012036	010246			MOV	R2, -(6)	
2355	012040	010146			MOV	R1, -(6)	
2356	012042	01004			MOV	R0, -(6)	
2357	012044	162706	000002		SUB	#2, SP	
2358	012050	000207			SV05C: RTS	PC	;RTS PC OR NOP.
2359	012052	016605	000016		MOV	14.(6), R5	;JSR PC TO R5.
2360	012056	000207			RTS	PC	;EXIT.
2361					;RESTORE REGS 0 TO 4 SUBROUTINE.		
2362	012060	062706	000002		RS04: ADD	#2, SP	
2363	012064	012600			MOV	(6)+, R0	;RESTORE REGS 0 TO 4.
2364	012066	012601			MOV	(6)+, R1	
2365	012070	012602			MOV	(6)+, R2	
2366	012072	012603			MOV	(6)+, R3	
2367	012074	012604			MOV	(6)+, R4	
2368	012076	016646	177764		MOV	-12.(6), -(6)	;MOVE PC DOWN STACK.
2369	012102	000207			RTS	PC	;EXIT
2370					;SUB TO SET R5 IN EMT PC AND RESTORE REGS 0 TO 5.		
2371	012104	010566	000016		RS05S: MOV	R5, 14.(6)	;SET EMT PC TO R5 CONTENTS.
2372					;SUB TO RESTORE REGS 0 TO 5.		
2373	012110	062706	000002		RS05: ADD	#2, SP	
2374	012114	012600			MOV	(6)+, R0	
2375	012116	012601			MOV	(6)+, R1	
2376	012120	012602			MOV	(6)+, R2	
2377	012122	012603			MOV	(6)+, R3	
2378	012124	012604			MOV	(6)+, R4	
2379	012126	012605			MOV	(6)+, R5	
2380	012130	016646	177762		MOV	-14.(6), -(6)	;MOVE PC DOWNSTACK.

N04

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2381 012134 000207
2382 012136 004737 012006
2383 012142 013701 001250
2384 012146 012521
2385 012150 013721 001252
2386 012154 004737 012104
2387 012160 000207
2388 012162 010046
2389 012164 012700 052525
2390 012170 005100
2391 012172 010037 012166
2392 012176 000005
2393 012200 012600
2394 012202 000207
2395 012204 004537 012610
2396 012210 033126
2397 012212 033236
2398 012214 000006
2399 012216 004537 012610
2400 012222 033156
2401 012224 033214
2402 012226 000006
2403 012230 004537 012610
2404 012234 036267
2405 012236 036230
2406 012240 000006
2407 012242 000207
2408 012244 004737 012006
2409 012250 010500
2410 012252 005740
2411 012254 000000
2412 012256 004737 012104
2413 012262 000207
2414 012264 013700 012332
2415 012270 006100
2416 012272 006100
2417 012274 063700 012334
2418 012300 010037 012332
2419 012304 006100
2420 012306 006100
2421 012310 063700 012334
2422 012314 006100
2423 012316 006100
2424 012320 010037 012334
2425 012324 013700 012332
2426 012330 000207
2427 012332 001233
2428 012334 007622
2429 012336 004737 012006
2430 012342 012500
2431 012344 005037 177776

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RTS PC ;EXIT
:ROUTINE TO SET TC11 INTERRUPT VECTOR AND PRIORITY
STTCV: JSR PC,SV055
MOV TCVTR,R1 ;VECTOR TO R1.
MOV (5)+,(1)+ ;SET DESIRED VECTOR.
MOV TCLVL,(1)+ ;SET TC11 PRIORITY.
JSR PC,RS055
RTS PC

:ROUTINE TO ISSUE RESET.
SRSETT: MOV RO,-(6) ;PUSH RO.
MOV #52525,RO ;DATA TO RO.
COM RO ;COMPLEMENT (RO).
MOV RO,SRSETT+4 ; (RO) TO SRSETT+4.
RESET ;ISSUE RESET. (RO) IS
MOV (6)+,RO ;RESTORE RO.
RTS PC ;EXIT
RSTMTK: JSR RS,BMOVE ;RESTORE MTKVAR MARK CODE.
MTKC10 ;AND GOOD CHECKSUM.
MTKVAR
6
JSR RS,BMOVE
MTKSP
MTKS
6
JSR RS,BMOVE
GCKSM
FCKSM
6
RTS PC ;EXIT.

:COMMON HALT ROUTINE
CHLT: JSR PC,SV055
MOV RS,RO ;DEVELOP ADDR OF CALLER.
TST -(0)
HALT ;HALT CALL ADDR IN DATA LIGTHS.
JSR PC,RS055
RTS PC ;EXIT.

:RANDOM NUMBER GENERATOR. ROUTINE EXITS WITH NUMBER IN REGISTER D.
RNGEN: MOV RP1,RO
ROL RO
ROL RO
ADD RP2,RO
MOV RO,RP1
ROL RO
ROL RO
ADD RP2,RO
ROL RO
ROL RO
MOV RO,RP2
MOV RP1,RO
RTS PC ;EXIT. NUMBER IN RO

RP1: 1233
RP2: 7622

:SUBROUTINE TO DELAY A SPECIFIED NUMBER OF MILLISECONDS
DLY: JSR PC,SV055
MOV (5)+,RO ;DELAY COUNT TO RO.
CLR PSW ;SET PRIORITY 0.

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MAINDEC-11-DZTC8-D TC11 TEST #2
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END OF PASS ROUTINE

2437	012350	012701	000226		DLYA: MOV #226,R1 ; 1 MSEC COUNT TO R1.
2438	012354	005301			DLYB: DEC R1 ; DECREMENT 1 MSEC COUNT.
2439	012356	001376			BNE DLYB ; BR IF NOT 0.
2440	012360	005300			DEC R0 ; DECREMENT DELAY COUNT.
2441	012362	001372			BNE DLYA ; BR IF NOT DONE DELAYING.
2442	012364	004737	012104		JSR PC,RSOSS
2443	012370	000207			RTS PC ; EXIT.
2444					; SUBROUTINE TO STALL A RANDOM NUMBER OF MILLISECONDS. MAXIMUM STALL
2445					; DETERMINED BY CONTENTS OF LOC STLMSK.
2446	012372	004737	012006		STAL: JSR PC,SVOSS
2447	012376	004737	012264		JSR PC,RNGEN ; GO GET RANDOM NUMBER.
2448	012402	043700	012430		BIC STLMSK,R0 ; 8 IN R0. APPLY STALL MASK.
2449	012406	001407			BEG STALB ; BRANCH IF RESULT IS 0.
2450	012410	010037	012420		MOV R0,STALA
2451	012414	004737	012336		JSR PC,DLY ; DELAY
2452	012420	000000			STALA: OPEN ; DELAY COUNT
2453	012422	004737	012104		JSR PC,RSOSS
2454	012426	000207			STALB: RTS PC ; DONE. EXIT.
2455	012430	000000			STLMSK: OPEN ; STALL MASK.
2456					; SUBROUTINE TO CLEAR DECTAPE READ BUFFER.
2457	012432	005037	036306		CLRBUF: CLR RBUF ; CLEAR 512 WORD READ BUFFER.
2458	012436	004537	012610		JSR RS,BMOVE ; TO ALL 0'S.
2459	012442	036306			RBUF
2460	012444	036307			RBUF+1
2461	012446	001777			1023.
2462	012450	000207			RTS PC ; EXIT.
2463					; SUBROUTINE TO INITIALIZE BINARY COUNT PATTERNS
2464	012452	012737	177777	012474	INBIN: MOV # -1,RIND ; SET ALL VARIABLES
2465	012460	004537	012610		JSR RS,BMOVE ; TO MINUS 1.
2466	012464	012474			RIND
2467	012466	012475			RIND+1
2468	012470	000013			11.
2469	012472	000207			RTS PC ; EXIT
2470	012474	000000			RIND: OPEN
2471	012476	000000			PT0: OPEN
2472	012500	000000			PT1: OPEN
2473	012502	000000			PIND: OPEN
2474	012504	000000			PTOP: OPEN
2475	012506	000000			PTIP: OPEN
2476					; SPECIAL BINARY COUNT PATTERN SUBROUTINE. EXITS WITH BIN CHAR IN R0
2477	012510	013737	012476	012500	GTBIN: MOV PTO,PT1 ; PREVIOUS BIN CHAR TO PT1
2478	012516	005137	012500		COM PT1
2479	012522	005137	012474		COM RIND
2480	012526	001002			BNE .+6
2481	012530	005237	012500		INC PT1
2482	012534	013737	012500	012476	MOV PT1,PT0 ; SAVE BIN CHAR IN PTO
2483	012542	013700	012500		MOV PT1,R0 ; BIN CHAR TO R0.
2484	012546	000207			RTS PC ; EXIT.
2485	012550	013737	012504	012506	GTBINP: MOV PTO,PTIP ; PREVIOUS BIN CHAR TO PTIP
2486	012556	005137	012506		COM PTIP
2487	012562	005137	012502		COM PIND
2488	012566	001002			BNE .+6
2489	012570	005237	012506		INC PTIP
2490	012574	013737	012506	012504	MOV PTIP,PTOP ; SAVE BIN CHAR IN PTO.
2491	012602	013701	012506		MOV PTIP,R1 ; BIN CHAR TO R1.
2492	012606	000207			RTS PC ; EXIT.

Address	Hex	Dec	Label	Operation	Comment
2493	012610	004737	011772	BMOVE: JSR PC,SV04	SAVE REGS.
2494	012614	012501		MOV (5)+,R1	GET FROM ADDRESS
2495	012616	012502		MOV (5)+,R2	GET TO ADDRESS
2496	012620	012503		MOV (5)+,R3	GET COUNT
2497	012622	112122		BMOVA: MOV (1)+,(2)+	MOVE BYTE
2498	012624	005303		DEC R3	DECREMENT COUNT
2500	012626	001375		BNE BMOVA	BRANCH IF NOT DONE.
2501	012630	004737	012060	JSR PC,RS04	RESTORE REGS.
2502	012634	000205		RTS RS	DONE EXIT
2503				SUB TO PASS	TIMING, MARK, AND DATA TO TC11 CONTROL UNDER MAINTENANCE MODE.
2504	012636	005037	001260	LMTCD: CLR CODCAL	DO NOT CALL CODE AFTER EACH MARK
2505	012642	012537	012776	LMTCAA: MOV (5)+,MTKADR	GET MARK TRACK ADDRESS.
2506	012646	012537	013002	MOV (5)+,CDCNT	GET NTH CODE COUNT.
2507	012652	052777	020000	BIS #BIT13,BTCM	SET MAINTENANCE BIT.
2508	012660	013737	013002	MOV CODCT,CDCTR	CODE COUNT TO CODE COUNTER.
2509	012666	013701	001236	MOV TCST,R1	ADDR CONTAINING TCST ADDR TO R1.
2510	012672	012702	000100	MOV #100,R2	
2511	012676	013700	012776	LMTCA: MOV MTKADR,R0	MARK TRACK ADDR TO R0.
2512	012702	012737	000006	LMTCB: MOV #6,BTCTR	6 TO BIT COUNTER.
2513	012710	111011		LMTCC: MOV (0),(1)	SET MARK TRACK BIT AND DATA.
2514	012712	150210		BISB R2,(0)	
2515	012714	111011		MOVB (0),(1)	TP1. LOADS MARK TRACK.
2516	012716	111011		MOVB (0),(1)	RELOAD DATA.
2517	012720	140210		BICB R2,(0)	
2518	012722	112011		MOVB (0)+,(1)	TP0. SHIFTS DATA IN RMB.
2519	012724	005337	013000	DEC BTCTR	6TH BIT SET?
2520	012730	001413		BEQ LMTCE	BR IF 6TH BIT SET.
2521	012732	022737	000002	013000	NOT 6TH. 4TH BIT SET?
2522	012740	001363		BNE LMTCC	BRANCH IF NOT.
2523	012742	005737	001260	TST CODCAL	DO WE WANT TO CALL CODE
2524	012746	001760		BEQ LMTCC	DO NOT IF CODE CALL SWITCH = 0
2525	012750	005046		CLR -(6)	IF ITS NOT =0 FAKE A INTERRUPT
2526	012752	004777	166302	JSR PC,ACODCAL	TO LOCATION SPECIFIED IN CODE CALL SWITCH
2527	012756	000754		BR LMTCC	
2528	012760	005337	013004	LMTCE: DEC CDCTR	NTH CODE SET?
2529	012764	001001		BNE LMTCD	BRANCH IF NOT.
2530	012766	000205		RTS RS	EXIT.
2531	012770	105710		LMTCD: TSTB #R0	LAST CODE?
2532	012772	100343		BPL LMTCB	BRANCH IF NOT LAST CODE.
2533	012774	000740		BR LMTCA	LAST CODE.
2534	012776	000000		MTKADR: OPEN	
2535	013000	000000		BTCTR: OPEN	
2536	013012	000000		CDCNT: OPEN	
2537	013014	000000		CDCTR: OPEN	
2538	013006	012537	001260	LMTCOE: MOV (5)+,CODCAL	SAVE ADDRESS TO GO TO AFTER EACH MARK
2539	013012	000713		BR LMTCAA	
2540	013014	004737	012432	LBOAT1: JSR PC,CLRBUF	CLEAR BUFFER AREA.
2541	013020	004537	012610	JSR RS,BMOVE	LOAD 256 WORD BUFFER WITH SBOAT1 DATA.
2542	013024	001276		SBOAT1	
2543	013026	036306		RBUF	
2544	013030	000004		4	
2545	013032	004537	012610	JSR RS,BMOVE	
2546	013036	036306		RBUF	
2547	013040	036312		RBUF+4	
2548	013042	000774		508.	

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2549	013044	000207			RTS	PC	;EXIT.
2550	013046	004737	011772		LBBIND: JSR	PC,SV04	
2551	013052	004737	012432		JSR	PC,CLRBUF	;CLEAR BUFFER AREA AND FILL
2552	013056	012704	036306		MOV	#RBUF,R4	;256 WORD BUFFER WITH BINARY DATA.
2553	013062	012737	000400	013112	MOV	#256,CTRLB	
2554	013070	004737	012510		LBINDA: JSR	PC,GTBIN	;GET BINARY WORD.
2555	013074	010024			MOV	R0,(4)+	;STORE PER R4.
2556	013076	005337	013112		DEC	CTRLB	;256 WORDS STORED?
2557	013102	001372			BNE	LBINDA	;BR IF NOT DONE YET.
2558	013104	004737	012060		JSR	PC,R504	
2559	013110	000207			RTS	PC	;DONE. EXIT.
2560	013112	000000			CTRLB: OPEN		
2561	013114	004537	012610		MBCKSM: JSR	R5,BMOVE	;BAD CHECKSUM TO FCKSM.
2562	013120	036275			BCKSM		
2563	013122	036230			FCKSM		
2564	013124	000006			6		
2565	013126	000207			RTS	PC	;EXIT.
2566	013130	004737	011772		CKDAT: JSR	PC,SV04	;SAVE REGS.
2567	013134	012537	013250		MOV	(5)+,SBOAT	;ADDR OF S/B DATA TO SBOAT.
2568	013140	012501			MOV	(5)+,R1	;ADDR OF DATA TO R1.
2569	013142	012502			MOV	(5)+,R2	;WORD COUNT TO R2.
2570	013144	005037	013254		CLR	WOCNT	;CLEAR # OF WORD BEING CHECKED.
2571	013150	013703	013250		CKDTA: MOV	SBOAT,R3	;ADDR OF S/B DATA TO R3.
2572	013154	004737	013202		JSR	PC,CDTCK	;GO CHECK DATA.
2573	013160	005302			DEC	R2	;LAST WORD CHECKED?
2574	013162	001404			BEQ	CKDTB	;BR IF LAST WORD CHECKED.
2575	013164	004737	013202		JSR	PC,CDTCK	;CHECK ANOTHER WORD.
2576	013170	005302			DEC	R2	;LAST WORD CHECKED?
2577	013172	001366			BNE	CKDTA	;BR IF NOT LAST WORD.
2578	013174	004737	012060		CKDTB: JSR	PC,R504	;RESTORE REGS.
2579	013200	000205			RTS	R5	;EXIT.
2580	013202	010137	013252		CDTCK: MOV	R1,DATADR	;ADDR OF DATA TO DATADR.
2581	013206	012337	001270		MOV	(3)+,CRBUF	;S/B WORD TO CRBUF.
2582	013212	012137	001272		MOV	(1)+,CRBUFA	;WAS WORD TO CRBUFA.
2583	013216	005237	013254		INC	WOCNT	;INCREMENT WORD NUMBER.
2584	013222	007737	001270	001272	CMF	CRBUF,CRBUFA	;COMPARE S/B AND WAS DATA.
2585	013230	001001			BNE	CDTCKA	;BR IF DATA NOT SAME.
2586	013232	000207			RTS	PC	;EXIT.
2587	013234	016737	000004	013246	CDTCKA: MOV	4(PC),MLPC	;MAKE MAIN LINE PC ACCESSIBLE
2588							
2589	013242	104035			ERROR	35	;PRINTOUT ERROR MESSAGE
2590	013244	000207			RTS	PC	;EXIT
2591	013246	000000			MLPC: 000000		
2592	013250	000000			SBOAT: OPEN		
2593	013252	000000			DATADR: OPEN		
2594	013254	000000			WOCNT: OPEN		
2595	013256	012537	015326		CKSELE: MOV	(5)+,CKSELT	;UNIT # TO CKSELT.
2596	013262	052737	000011	015326	BIS	#SST!DO,CKSELT	;ISSUE SST TO DESIRED UNIT.
2597	013270	013777	015326	165742	MOV	CKSELT,@TCM	;WAIT FOR READY.
2598	013276	105777	165736		TSTB	@TCM	
2599	013302	100375			BPL	.-4	
2600	013304	032777	004000	165724	BIT	#BIT11,@TCST	;SELECT ERROR SET?
2601	013312	001001			BNE	.-4	;BR IF SELECT ERROR SET.
2602	013314	000205			RTS	R5	;ERROR EXIT. SELECT ERROR SHOULD BE SET.
2603	013316	062705	000006		ADD	#6,R5	
2604	013322	000205			RTS	R5	;OK EXIT.

E05

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END OF PASS ROUTINE

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2605 013324 .SSCOPE 4,SCOMAC
2606 .SBTTL SCOPE HANDLER ROUTINE
2607
2608 013324 STARS
2609 *****
2610 *THIS ROUTINE CONTROLS THE LOOPING OF SUBTESTS. IT WILL INCREMENT
2611 *AND LOAD THE TEST NUMBER(STSTNM) INTO THE DISPLAY REG.(DISPLAY<7:0>)
2612 *AND LOAD THE ERROR FLAG (SERFLG) INTO DISPLAY<15:08>
2613 *THE SWITCH OPTIONS PROVIDED BY THIS ROUTINE ARE:
2614 *SW14=1 LOOP ON TEST
2615 *SW11=1 INHIBIT ITERATIONS
2616 *SW09=1 LOOP ON ERROR
2617 .LIST
2618 *SW08=1 LOOP ON TEST IN SWR<7:0>
2619 *CALL
2620 * SCOPE ;;SCOPE=10T
2621
2622 013324 $SCOPE:
2623 .IRP NEWINS,<SCOMAC>
2624 NEWINS
2625 .ENDM
2626 SCOMAC
2627 013324 005077 165710 CLR 2TCOM
2628 013330 005066 000002 CLR 2(SP) ;PS TO =0 AFTER WE EXIT THE SCOPE ROUTINE
2629 013334 004737 012162 JSR PC,SRSETT
2630 013340 004737 012204 JSR PC,RSTMTK
2631 013344 032777 040000 165566 15: BIT 2BIT14,2SWR ;;LOOP ON PRESENT TEST?
2632 013352 001111 BNE $OVER YES IF SW14=1
2633 *****START OF CODE FOR THE XOR TESTER*****
2634 013354 000416 $XTSTR: BR 6$ IF RUNNING ON THE "XOR" TESTER CHANGE
2635 THIS INSTRUCTION TO A "NOP" (NOP=240)
2636 013356 013746 000004 MOV 2$ERRVEC,-(SP) SAVE THE CONTENTS OF THE ERROR VECTOR
2637 013362 012737 013402 000004 MOV 2$5,2$ERRVEC SET FOR TIMEOUT
2638 013370 005737 177060 TST 2$177060 TIME OUT ON XOR?
2639 013374 012637 000004 MOV (SP)+,2$ERRVEC RESTORE THE ERROR VECTOR
2640 013400 000463 BR $SVLAD GO TO THE NEXT TEST
2641 013402 022626 5$: CMP (SP)+,(SP)+ CLEAR THE STACK AFTER A TIME OUT
2642 013404 012637 000004 MOV (SP)+,2$ERRVEC RESTORE THE ERROR VECTOR
2643 013410 000423 BR 7$ LOOP ON THE PRESENT TEST
2644 013412 6$: *****END OF CODE FOR THE XOR TESTER*****
2645 013412 032777 000400 165520 BIT 2BIT08,2SWR LOOP ON SPEC. TEST?
2646 013420 001404 BEQ 2$ BR IF NO
2647 013422 127737 165512 001102 CMPB 2$SWR,STSTNM ON THE RIGHT TEST? SWR<7:0>
2648 013430 001462 BEQ $OVER BR IF YES
2649 013432 105737 001103 2$: TSTB $ERFLG HAS AN ERROR OCCURRED?
2650 013436 001421 BEQ 3$ BR IF NO
2651 013440 123737 001115 001103 CMPB $ERMAX,$ERFLG MAX. ERRORS FOR THIS TEST OCCURRED?
2652 013446 101015 BHI 3$ BR IF NO
2653 013450 032777 001000 165462 BIT 2BIT09,2SWR LOOP ON ERROR?
2654 013456 001404 BEQ 4$ BR IF NO
2655 013460 013737 001110 001106 7$: MOV $LPERR,$LPADR SET LOOP ADDRESS TO LAST SCOPE
2656 013466 000443 BR $OVER
2657 013470 105037 001103 4$: CLRB $ERFLG ZERO THE ERROR FLAG
2658 013474 005037 001222 CLR $TIMES CLEAR THE NUMBER OF ITERATIONS TO MAKE
2659 013500 000415 BR 1$ ESCAPE TO THE NEXT TEST
2660 013502 032777 004000 165430 3$: BIT 2BIT11,2SWR INHIBIT ITERATIONS?

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 SCOPE HANDLER ROUTINE

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2661 013510 001011 BNE 1$
2662 013512 005737 001100 TST $PASS
2663 013516 001406 BEQ 1$
2664 013520 005237 001104 INC $ICNT
2665 013524 023737 001222 001104 CMP $TIMES,$ICNT
2666 013532 002021 BGE $OVER
2667 013534 012737 000001 001104 1$: MOV #1,$ICNT
2668 013542 013737 013612 001222 MOV $MXCNT,$TIMES
2669 013550 105237 001102 $SVLAD: INCB $STNM
2670 013554 011637 001106 MOV (SP),$LPADR
2671 013560 011637 001110 MOV (SP),$LPERR
2672 013564 005037 001224 CLR $ESCAPE
2673 013570 112737 000001 001115 MOVB #1,$ERMAX
2674 013576 013777 001102 165336 $OVER: MOV $STNM,$DISPLAY
2675 013604 013716 001106 MOV $LPADR,(SP)
2676 013610 000002 RTI
2677 013612 000004 $MXCNT: 4
2678 .MACRO SAVE
2679 MOV SP,$REG6
2680 SUB #4,$REG6
2681 MOV 2(SP),$REG7
2682 CLR $REG5
2683 MOVB $STNM,$REG5
2684 MOV @TCCH,$REG2
2685 MOV @TCST,$REG1
2686 MOV @TCBA,$REG3
2687 .ENDM SAVE
2688 013614 .ERROR $ERRTYP,SAVE
2689 .SBTTL ERROR HANDLER ROUTINE
2690
2691 013614 STARS
2692 *****
2693 *THIS ROUTINE WILL INCREMENT THE ERROR FLAG AND THE ERROR COUNT,
2694 *SAVE THE ERROR ITEM NUMBER AND THE ADDRESS OF THE ERROR CALL
2695 *AND GO TO $ERRTYP ON ERROR
2696 *THE SWITCH OPTIONS PROVIDED BY THIS ROUTINE ARE:
2697 *$SW15=1 HALT ON ERROR
2698 *$SW13=1 INHIBIT ERROR TYPEOUTS
2699 *$SW10=1 BELL ON ERROR
2700 *$SW09=1 LOOP ON ERROR
2701 *CALL
2702 * ERROR N ;;ERROR=EMT AND N=ERROR ITEM NUMBER
2703
2704 013614 $ERROR:
2705 .IRP NEWINS,<SAVE>
2706 NEWINS
2707 .ENDM
2708 013614 SAVE
2709 013614 010637 001176 MOV SP,$REG6
2710 013620 162737 000004 001176 SUB #4,$REG6
2711 013626 016637 000002 001200 MOV 2(SP),$REG7
2712 013634 005037 001174 CLR $REG5
2713 013640 113737 001102 001174 MOVB $STNM,$REG5
2714 013646 017737 165366 001166 MOV @TCCH,$REG2
2715 013654 017737 165356 001164 MOV @TCST,$REG1
2716 013662 017737 165356 001170 MOV @TCBA,$REG3

```

```

BR IF YES
IF FIRST PASS OF PROGRAM
INHIBIT ITERATIONS
INCREMENT ITERATION COUNT
CHECK THE NUMBER OF ITERATIONS MADE
BR IF MORE ITERATION REQUIRED
REINITIALIZE THE ITERATION COUNTER
SET NUMBER OF ITERATIONS TO DO
COUNT TEST NUMBERS
SAVE SCOPE LOOP ADDRESS
SAVE ERROR LOOP ADDRESS
CLEAR THE ESCAPE FROM ERROR ADDRESS
ONLY ALLOW ONE(1) ERROR ON NEXT TEST
DISPLAY TEST NUMBER
FUDGE RETURN ADDRESS
FIXES PS
MAX. NUMBER OF ITERATIONS

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 ERROR HANDLER ROUTINE

2717	013670	105237	001103	7\$:	INCB	SERFLG	;; SET THE ERROR FLAG
2718	013674	001775			BEQ	7\$	;; DON'T LET THE FLAG GO TO ZERO
2719	013676	013777	001102 165236		MOV	STSTNM, 20ISPLAY	;; DISPLAY TEST NUMBER AND ERROR FLAG
2720	013704	032777	002000 165226		BIT	#BIT10, 2SWR	;; BELL ON ERROR?
2721	013712	001402			BEQ	1\$	;; NO - SKIP
2722	013714	104401	001226		TYPE	\$BELL	;; RING BELL
2723	013720	005237	001112	1\$:	INC	\$ERTTL	;; COUNT THE NUMBER OF ERRORS
2724	013724	011637	001116		MOV	(SP), \$ERRPC	;; GET ADDRESS OF ERROR INSTRUCTION
2725	013730	162737	000002 001116		SUB	#2, \$ERRPC	
2726	013736	117737	165154 001114		MOVB	2\$ERRPC, \$ITEMB	;; STRIP AND SAVE THE ERROR ITEM CODE
2727	013744	032777	020000 165166		BIT	#BIT13, 2SWR	;; SKIP TYPEOUT IF SET
2728	013752	001004			BNE	20\$	;; SKIP TYPEOUTS
2729	013754	004737	015122		JSR	PC, \$ERRTYP	;; GO TO USER ERROR ROUTINE
2730	013760	104401	001233		TYPE	\$CALF	
2731	013764			20\$:			
2732	013764	005777	165150	2\$:	TST	2SWR	;; HALT ON ERROR
2733	013770	100001			BPL	3\$	;; SKIP IF CONTINUE
2734	013772	000000			HALT		;; HALT ON ERROR!
2735	013774	032777	001000 165136	3\$:	BIT	#BIT09, 2SWR	;; LOOP ON ERROR SWITCH SET?
2736	014002	001402			BEQ	4\$	;; BR IF NO
2737	014004	013716	001110		MOV	\$LPERR, (SP)	;; FUDGE RETURN FOR LOOPING
2738	014010	005737	001224	4\$:	TST	\$ESCAPE	;; CHECK FOR AN ESCAPE ADDRESS
2739	014014	001402			BEQ	5\$	;; BR IF NONE
2740	014016	013716	001224		MOV	\$ESCAPE, (SP)	;; FUDGE RETURN ADDRESS FOR ESCAPE
2741	014022			5\$:			
2742				.LIST			
2743	014022	022737	011600 000042		CMP	#SENDAD, 2#42	;; ACT-11 AUTO-ACCEPT?
2744	014030	001001			BNE	6\$	;; BRANCH IF NO
2745	014032	000000			HALT		;; YES
2746	014034			6\$:			
2747	014034	000002			RTI		;; RETURN
2748	014036				. \$POWER	<<POWPUS>, <POWPOP>, <POWMES>>	
2749					. SBTTL	POWER DOWN AND UP ROUTINES	
2750							
2751	014036				STARS		
2752					;; *****		
2753					;; POWER DOWN ROUTINE		
2754	014036	012737	014212 000024	\$PWDRN:	MOV	#\$ILLUP, 2#PWVVEC	;; SET FOR FAST UP
2755	014044	012737	000340 000026		MOV	#340, 2#PWVVEC+2	;; PRI0:7
2756	014052				PUSH	<R0, R1, R2, R3, R4, R5>	
2757				.IRP	B, <R0, R1, R2, R3, R4, R5>		
2758					MOV	B, -(SP)	;; PUSH B ON STACK
2759				.ENDM			
2760	014052	010046			MOV	R0, -(SP)	;; PUSH R0 ON STACK
2761	014054	010146			MOV	R1, -(SP)	;; PUSH R1 ON STACK
2762	014056	010246			MOV	R2, -(SP)	;; PUSH R2 ON STACK
2763	014060	010346			MOV	R3, -(SP)	;; PUSH R3 ON STACK
2764	014062	010446			MOV	R4, -(SP)	;; PUSH R4 ON STACK
2765	014064	010546			MOV	R5, -(SP)	;; PUSH R5 ON STACK
2766	014066				PUSH	<<POWPUS>, <POWPOP>, <POWMES>>	
2767				.IRP	B, <<POWPUS>, <POWPOP>, <POWMES>>		
2768					MOV	B, -(SP)	;; PUSH B ON STACK
2769				.ENDM			
2770	014066	013746	001312		MOV	POWPUS, -(SP)	;; PUSH POWPUS ON STACK
2771	014072	013746	001314		MOV	POWPOP, -(SP)	;; PUSH POWPOP ON STACK
2772	014076	013746	016050		MOV	POWMES, -(SP)	;; PUSH POWMES ON STACK

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 POWER DOWN AND UP ROUTINES

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2773 014102 .IRP PUSH @SWR
2774 B, @SWR
2775 MOV B, -(SP) ;; PUSH B ON STACK
2776 .ENDM
2777 014102 017746 165032 MOV @SWR, -(SP) ;; PUSH @SWR ON STACK
2778 014106 010637 014216 MOV SP, $SAVR6 ;; SAVE SP
2779 014112 012737 014124 000024 MOV @SPWRUP, @SPWRVEC ;; SET UP VECTOR
2780 014120 000000 HALT
2781 014122 000776 BR .-2 ;; HANG UP
2782
2783 014124 STARS
2784 *****
2785 :POWER UP ROUTINE
2786 014124 012737 014212 000024 $PWRUP: MOV $SILLUP, @SPWRVEC ;; SET FOR FAST DOWN
2787 014132 013706 014216 MOV $SAVR6, SP ;; GET SP
2788 014136 005037 014216 CLR $SAVR6 ;; WAIT LOOP FOR THE TTY
2789 014142 005237 014216 1$: INC $SAVR6 ;; WAIT FOR THE INC
2790 014146 001375 BNE 1$ ;; OF <POWUP>, <POWPOP>, <POWMES> WORD
2791 014150 POP @SWR
2792 .IRP B, @SWR
2793 MOV (SP)+, B ;; POP STACK INTO B
2794 .ENDM
2795 014150 012677 164764 MOV (SP)+, @SWR ;; POP STACK INTO @SWR
2796 014154 POP <R5, R4, R3, R2, R1, R0>
2797 .IRP B, <R5, R4, R3, R2, R1, R0>
2798 MOV (SP)+, B ;; POP STACK INTO B
2799 .ENDM
2800 014154 012605 MOV (SP)+, R5 ;; POP STACK INTO R5
2801 014156 012604 MOV (SP)+, R4 ;; POP STACK INTO R4
2802 014160 012603 MOV (SP)+, R3 ;; POP STACK INTO R3
2803 014162 012602 MOV (SP)+, R2 ;; POP STACK INTO R2
2804 014164 012601 MOV (SP)+, R1 ;; POP STACK INTO R1
2805 014166 012600 MOV (SP)+, R0 ;; POP STACK INTO R0
2806 014170 012737 014036 000024 MOV @SPWRUP, @SPWRVEC ;; SET UP THE POWER DOWN VECTOR
2807 014176 012737 000340 000026 MOV @340, @SPWRVEC+2 ;; PRI0:7
2808 014204 104401 TYPE ;; REPORT THE POWER FAILURE
2809 014206 014220 $PWRMG: .WORD $POWER ;; POWER FAIL MESSAGE POINTER
2810 014210 000002 RTI
2811 014212 000000 $SILLUP: HALT ;; THE POWER UP SEQUENCE WAS STARTED
2812 014214 000776 BR .-2 ;; BEFORE THE POWER DOWN WAS COMPLETE
2813 014216 000000 $SAVR6: 0 ;; PUT THE SP HERE
2814 014220 005015 047520 042527 $POWER: .ASCIZ <15><12>"POWER"
2815 014226 000122 .EVEN
2816
2817 014230 .STYPE
2818 .SBTTL TYPE ROUTINE
2819
2820 014230 STARS
2821 *****
2822 :ROUTINE TO TYPE ASCIZ MESSAGE. MESSAGE MUST TERMINATE WITH A 0 BYTE.
2823 :THE ROUTINE WILL INSERT A NUMBER OF NULL CHARACTERS AFTER A LINE FEED.
2824 :NOTE1: $NULL CONTAINS THE CHARACTER TO BE USED AS THE FILLER CHARACTER.
2825 :NOTE2: $FILLS CONTAINS THE NUMBER OF FILLER CHARACTERS REQUIRED.
2826 :NOTE3: $FILLC CONTAINS THE CHARACTER TO FILL AFTER.
2827 :
2828 :*CALL:

```

MAINDEC-11-DZTCB-D TC11 TEST #2
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TYPE ROUTINE

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2829 ;*1) USING A TRAP INSTRUCTION
2830 ;*      TYPE      ,MESADR      ;;MESADR IS FIRST ADDRESS OF AN ASCIZ STRING
2831 ;*OR
2832 ;*      TYPE
2833 ;*      MESADR
2834 ;*
2835
2836 014230 105737 001157 $TYPE: TSTB STPFLG      ;; IS THERE A TERMINAL?
2837 014234 100002      BPL 1$      ;; BR IF YES
2838 014236 000000      HALT      ;; HALT HERE IF NO TERMINAL
2839 014240 000407      BR 3$      ;; LEAVE
2840 014242 010046 1$: MOV R0,-(SP) ;; SAVE R0
2841 014244 017600 000002 2$: MOV 22(SP),R0 ;; GET ADDRESS OF ASCIZ STRING
2842 014250 112046      MOVB (R0)+,-(SP) ;; PUSH CHARACTER TO BE TYPED ONTO STACK
2843 014252 001005      BNE 4$      ;; BR IF IT ISN'T THE TERMINATOR
2844 014254 005726      TST (SP)+    ;; IF TERMINATOR POP IT OFF THE STACK
2845 014256 012600 60$: MOV (SP)+,R0 ;; RESTORE R0
2846 014260 062716 000002 3$: ADD #2,(SP) ;; ADJUST RETURN PC
2847 014264 000002      RTI      ;; RETURN
2848 014266 122716 000011 4$: CMPB #HT,(SP) ;; BRANCH IF <HT>
2849 014272 001430      BEQ 8$      ;;
2850 014274 122716 000200      CMPB #CRLF,(SP) ;; BRANCH IF NOT <CRLF>
2851 014300 001006      BNE 5$      ;;
2852 014302 005726      TST (SP)+    ;; POP <CR><LF> EQUIV
2853 014304 104401      TYPE      ;; TYPE A CR AND LF
2854 014306 001233      SCRLF
2855 014310 105037 014444      CLRB $CHARCNT ;; CLEAR CHARACTER COUNT
2856 014314 000755      BR 2$      ;; GET NEXT CHARACTER
2857 014316 004737 014400 5$: JSR PC,$TYPEPC ;; GO TYPE THIS CHARACTER
2858 014322 123726 001156 6$: CMPB $FILLC,(SP)+ ;; IS IT TIME FOR FILLER CHARS.?
2859 014326 001350      BNE 2$      ;; IF NO GO GET NEXT CHAR.
2860 014330 013746 001154      MOV $NULL,-(SP) ;; GET # OF FILLER CHARS. NEEDED
2861      ;; AND THE NULL CHAR.
2862 014334 105366 000001 7$: DECB 1(SP) ;; DOES A NULL NEED TO BE TYPED?
2863 014340 002770      BLT 6$      ;; BR IF NO--GO POP THE NULL OFF OF STACK
2864 014342 004737 014400      JSR PC,$TYPEPC ;; GO TYPE A NULL
2865 014346 105337 014444      DECB $CHARCNT ;; DO NOT COUNT AS A COUNT
2866 014352 000770      BR 7$      ;; LOOP
2867
2868 ;HORIZONTAL TAB PROCESSOR
2869
2870 014354 112716 000040 8$: MOVB #' (SP) ;; REPLACE TAB WITH SPACE
2871 014360 004737 014400 9$: JSR PC,$TYPEPC ;; TYPE A SPACE
2872 014364 132737 000007 014444 BITB #7,$CHARCNT ;; BRANCH IF NOT AT
2873 014372 001372      BNE 9$      ;; TAB STOP
2874 014374 005726      TST (SP)+    ;; POP SPACE OFF STACK
2875 014376 000724      BR 2$      ;; GET NEXT CHARACTER
2876 014400 105777 164544 $TYPEPC: TSTB 2$TPS ;; WAIT UNTIL PRINTER IS READY
2877 014404 100375      BPL $TYPEPC
2878 014406 116677 000002 164536 MOVB 2(SP),2$TPB ;; LOAD CHAR TO BE TYPED INTO DATA REG.
2879 014414 122766 000015 000002 CMPB #CR,2(SP) ;; IS CHARACTER A CARRIAGE RETURN?
2880 014422 001003      BNE 1$      ;; BRANCH IF NO
2881 014424 105037 014444      CLRB $CHARCNT ;; YES--CLEAR CHARACTER COUNT
2882 014430 000406      BR $TYPEPC ;; EXIT
2883 014432 122766 000012 000002 1$: CMPB #LF,2(SP) ;; IS CHARACTER A LINE FEED?
2884 014440 001402      BEQ $TYPEPC ;; BRANCH IF YES

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 TYPE ROUTINE

2885	014442	105227			INCB	(PC)+	::COUNT THE CHARACTER
2886	014444	000000			\$CHARCNT: WORD	0	::CHARACTER COUNT STORAGE
2887	014446	000207			\$TYPEX: RTS	PC	
2888							
2889	014450				.STYPDEC		
2890					.SBTTL	CONVERT BINARY TO DECIMAL AND TYPE ROUTINE	
2891							
2892	014450				STARTS		
2893					*****		
2894					THIS ROUTINE IS USED TO CHANGE A 16-BIT BINARY NUMBER TO A 5-DIGIT		
2895					SIGNED DECIMAL (ASCII) NUMBER AND TYPE IT. DEPENDING ON WHETHER THE		
2896					NUMBER IS POSITIVE OR NEGATIVE A SPACE OR A MINUS SIGN WILL BE TYPED		
2897					BEFORE THE FIRST DIGIT OF THE NUMBER. LEADING ZEROS WILL ALWAYS BE		
2898					REPLACED WITH SPACES.		
2899					*CALL:		
2900					* MOV NUM,-(SP)		::PUT THE BINARY NUMBER ON THE STACK
2901					* TYPDS		::GO TO THE ROUTINE
2902							
2903	014450				\$TYPDS: PUSH	(R0,R1,R2,R3,R5)	
2904					.IRP	B,(R0,R1,R2,R3,R5)	
2905					MOV	B,-(SP)	::PUSH B ON STACK
2906					.ENDM		
2907	014450	010046			MOV	R0,-(SP)	::PUSH R0 ON STACK
2908	014452	010146			MOV	R1,-(SP)	::PUSH R1 ON STACK
2909	014454	010246			MOV	R2,-(SP)	::PUSH R2 ON STACK
2910	014456	010346			MOV	R3,-(SP)	::PUSH R3 ON STACK
2911	014460	010546			MOV	R5,-(SP)	::PUSH R5 ON STACK
2912	014462	012746	020200		MOV	#20200,-(SP)	::SET BLANK SWITCH AND SIGN
2913	014466	016605	000020		MOV	20(SP),R5	::GET THE INPUT NUMBER
2914	014472	100004			BPL	1\$	::BR IF INPUT IS POS.
2915	014474	005405			NEG	R5	::MAKE THE BINARY NUMBER POS.
2916	014476	112766	000055	000001	MOVB	#'-,1(SP)	::MAKE THE ASCII NUMBER NEG.
2917	014504	005000			1\$: CLR	R0	::ZERO THE CONSTANTS INDEX
2918	014506	012703	014664		MOV	#\$0BLK,R3	::SETUP THE OUTPUT POINTER
2919	014512	112723	000040		MOVB	#',(R3)+	::SET THE FIRST CHARACTER TO A BLANK
2920	014516	005002			2\$: CLR	R2	::CLEAR THE BCD NUMBER
2921	014520	016001	014654		MOV	\$0TBL(R0),R1	::GET THE CONSTANT
2922	014524	160105			3\$: SUB	R1,R5	::FORM THIS BCD DIGIT
2923	014526	002402			BLT	4\$	::BR IF DONE
2924	014530	005202			INC	R2	::INCREASE THE BCD DIGIT BY 1
2925	014532	000774			BR	3\$	
2926	014534	060105			4\$: ADD	R1,R5	::ADD BACK THE CONSTANT
2927	014536	005702			TST	R2	::CHECK IF BCD DIGIT=0
2928	014540	001002			BNE	5\$	::FALL THROUGH IF 0
2929	014542	105716			TSTB	(SP)	::STILL DOING LEADING 0'S?
2930	014544	100407			BMI	7\$	::BR IF YES
2931	014546	106316			5\$: ASLB	(SP)	::MSD?
2932	014550	103003			BCC	6\$	::BR IF NO
2933	014552	116663	000001	177777	MOVB	1(SP)-1(R3)	::YES--SET THE SIGN
2934	014560	052702	000060		6\$: BIS	#'0,R2	::MAKE THE BCD DIGIT ASCII
2935	014564	052702	000040		7\$: BIS	#'0,R2	::MAKE IT A SPACE IF NOT ALREADY A DIGIT
2936	014570	110223			MOVB	R2,(R3)+	::PUT THIS CHARACTER IN THE OUTPUT BUFFER
2937	014572	005720			TST	(R0)+	::JUST INCREMENTING
2938	014574	020027	000010		CMP	R0,#10	::CHECK THE TABLE INDEX
2939	014600	002746			BLT	2\$	::GO DO THE NEXT DIGIT
2940	014602	003002			BGT	8\$	::GO TO EXIT

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 MAINDEC-11-DZTCB-0 TC11 TEST #2
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 CONVERT BINARY TO DECIMAL AND TYPE ROUTINE

2941	014604	010502			MOV	R5,R2	;; GET THE LSD
2942	014606	000764			BR	65	;; GO CHANGE TO ASCII
2943	014610	105726			BS:	TSTB (SP)+	;; WAS THE LSD THE FIRST NON-ZERO?
2944	014612	100003				BPL 95	;; BR IF NO
2945	014614	116663	177777	177776	95:	MOV8 -1(SP),-2(R3)	;; YES--SET THE SIGN FOR TYPING
2946	014622	105013				CLRB (R3)	;; SET THE TERMINATOR
2947	014624					POP <R5,R3,R2,R1,R0>	
2948					.IRP	B,<R5,R3,R2,R1,R0>	
2949						MOV (SP)+,B	;; POP STACK INTO B
2950					.ENDM		
2951	014624	012605				MOV (SP)+,R5	;; POP STACK INTO R5
2952	014626	012603				MOV (SP)+,R3	;; POP STACK INTO R3
2953	014630	012602				MOV (SP)+,R2	;; POP STACK INTO R2
2954	014632	012601				MOV (SP)+,R1	;; POP STACK INTO R1
2955	014634	012600				MOV (SP)+,R0	;; POP STACK INTO R0
2956	014636	104401	014664			TYPE \$DBLK	;; NOW TYPE THE NUMBER
2957	014642	016666	000002	000004		MOV 2(SP),4(SP)	;; ADJUST THE STACK
2958	014650	012616				MOV (SP)+,(SP)	
2959	014652	000002				RTI	;; RETURN TO USER
2960	014654	023420			\$DTBL:	10000.	
2961	014656	001750				1000.	
2962	014660	000144				100.	
2963	014662	000012				10.	
2964	014664	000004			\$DBLK:	.BLKW 4	
2965	014674				.STYPOCT		
2966					.SBTTL	BINARY TO OCTAL (ASCII) AND TYPE	
2967					STARS		
2968	014674				*****		
2969					;; THIS ROUTINE IS USED TO CHANGE A 16-BIT BINARY NUMBER TO A 6-DIGIT		
2970					;; OCTAL (ASCII) NUMBER AND TYPE IT.		
2971					;; \$TYPOS---ENTER HERE TO SETUP SUPPRESS ZEROS AND NUMBER OF DIGITS TO TYPE		
2972					;; CALL:		
2973					;; MOV NUM,-(SP)	;; NUMBER TO BE TYPED	
2974					;; TYPOS	;; CALL FOR TYPEOUT	
2975					;; .BYTE N	;; N=1 TO 6 FOR NUMBER OF DIGITS TO TYPE	
2976					;; .BYTE M	;; M=1 OR 0	
2977						;; 1=TYPE LEADING ZEROS	
2978						;; 0=SUPPRESS LEADING ZEROS	
2979							
2980					;; \$STYPON---ENTER HERE TO TYPE OUT WITH THE SAME PARAMETERS AS THE LAST		
2981					;; \$TYPOS OR \$STYPOC		
2982					;; CALL:		
2983					;; MOV NUM,-(SP)	;; NUMBER TO BE TYPED	
2984					;; TYPON	;; CALL FOR TYPEOUT	
2985							
2986					;; \$STYPOC---ENTER HERE FOR TYPEOUT OF A 16 BIT NUMBER		
2987					;; CALL:		
2988					;; MOV NUM,-(SP)	;; NUMBER TO BE TYPED	
2989					;; TYPOC	;; CALL FOR TYPEOUT	
2990							
2991							
2992	014674	017646	000000		\$TYPOS:	MOV 2(SP),-(SP)	;; PICKUP THE MODE
2993	014700	116637	000001	015117		MOV8 1(SP),\$OFILL	;; LOAD ZERO FILL SWITCH
2994	014706	112637	015121			MOV8 (SP)+,\$OMODE+1	;; NUMBER OF DIGITS TO TYPE
2995	014712	062716	000002			ADD 2,(SP)	;; ADJUST RETURN ADDRESS
2996	014716	000406				BR \$TYPON	

L05

MAINDEC-11-DZTCB-D TC11 TEST #2 MACY11 27(1005) 18-FEB-77 11:33 PAGE 56
 DZTCB0.P11 18-FEB-77 10:59 BINARY TO OCTAL (ASCII) AND TYPE

```

2997 014720 112737 000001 015117 $TYPOC: MOVB #1,$OFILL ;; SET THE ZERO FILL SWITCH
2998 014726 112737 000006 015121 MOVB #6,$SOMODE+1 ;; SET FOR SIX(6) DIGITS
2999 014734 112737 000005 015116 $TYPON: MOVB #5,$SOCNT ;; SET THE ITERATION COUNT
3000 014742 010346 MOV R3,-(SP) ;; SAVE R3
3001 014744 010446 MOV R4,-(SP) ;; SAVE R4
3002 014746 010546 MOV R5,-(SP) ;; SAVE R5
3003 014750 113704 015121 MOVB $SOMODE+1,R4 ;; GET THE NUMBER OF DIGITS TO TYPE
3004 014754 005404 NEG R4
3005 014756 062704 000006 ADD #6,R4 ;; SUBTRACT IT FOR MAX. ALLOWED
3006 014762 110437 015120 MOVB R4,$SOMODE ;; SAVE IT FOR USE
3007 014766 113704 015117 MOVB $OFILL,R4 ;; GET THE ZERO FILL SWITCH
3008 014772 016605 000012 MOV 12(SP),R5 ;; PICKUP THE INPUT NUMBER
3009 014776 005003 CLR R3 ;; CLEAR THE OUTPUT WORD
3010 015000 006105 1$: ROL R5 ;; ROTATE MSB INTO "C"
3011 015002 000404 BR 3$ ;; GO DO MSB
3012 015004 006105 2$: ROL R5 ;; FORM THIS DIGIT
3013 015006 006105 ROL R5
3014 015010 006105 ROL R5
3015 015012 010503 MOV R5,R3
3016 015014 006103 3$: ROL R3 ;; GET LSB OF THIS DIGIT
3017 015016 105337 015120 DECB $SOMODE ;; TYPE THIS DIGIT?
3018 015022 100016 BPL 7$ ;; BR IF NO
3019 015024 042703 177770 BIC #177770,R3 ;; GET RID OF JUNK
3020 015030 001002 BNE 4$ ;; TEST FOR 0
3021 015032 005704 TST R4 ;; SUPPRESS THIS 0?
3022 015034 001403 BEQ 5$ ;; BR IF YES
3023 015036 005204 4$: INC R4 ;; DON'T SUPPRESS ANYMORE 0'S
3024 015040 052703 000060 BIS #'0,R3 ;; MAKE THIS DIGIT ASCII
3025 015044 052703 000040 5$: BIS #' ,R3 ;; MAKE ASCII IF NOT ALREADY
3026 015050 110337 015114 MOVB R3,$$ ;; SAVE FOR TYPING
3027 015054 104401 015114 TYPE $$ ;; GO TYPE THIS DIGIT
3028 015060 105337 015116 7$: DECB $SOCNT ;; COUNT BY 1
3029 015064 003347 BGT 2$ ;; BR IF MORE TO DO
3030 015066 002402 BLT 6$ ;; BR IF DONE
3031 015070 005204 INC R4 ;; INSURE LAST DIGIT ISN'T A BLANK
3032 015072 000744 BR 2$ ;; GO DO THE LAST DIGIT
3033 015074 012605 6$: MOV (SP)+,R5 ;; RESTORE R5
3034 015076 012604 MOV (SP)+,R4 ;; RESTORE R4
3035 015100 012603 MOV (SP)+,R3 ;; RESTORE R3
3036 015102 016666 000002 000004 MOV 2(SP),4(SP) ;; SET THE STACK FOR RETURNING
3037 015110 012616 MOV (SP)+,(SP)
3038 015112 000002 RTI ;; RETURN
3039 015114 000 8$: .BYTE 0 ;; STORAGE FOR ASCII DIGIT
3040 015115 000 .BYTE 0 ;; TERMINATOR FOR TYPE ROUTINE
3041 015116 000 $SOCNT: .BYTE 0 ;; OCTAL DIGIT COUNTER
3042 015117 000 $OFILL: .BYTE 0 ;; ZERO FILL SWITCH
3043 015120 000000 $SOMODE: .WORD 0 ;; NUMBER OF DIGITS TO TYPE
3044 015122 .SERRTYP
3045 .SBTTL ERROR MESSAGE TYPEOUT ROUTINE
3046
3047 015122 STARS
3048 *****
3049 ;THIS ROUTINE USES THE "ITEM CONTROL BYTE" ($ITEMB) TO DETERMINE WHICH
3050 ;ERROR IS TO BE REPORTED. IT THEN OBTAINS, FROM THE "ERROR TABLE" ($ERRTB),
3051 ;AND REPORTS THE APPROPRIATE INFORMATION CONCERNING THE ERROR.
3052

```

M05

MAINDEC-11-DZTCB-D TC11 TEST #2
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ERROR MESSAGE TYPEOUT ROUTINE

```

3053 015122
3054 015122 104401 001233
3055 015126 010046
3056 015130 005000
3057 015132 153700 001114
3058 015136 001004
3059
3060 015140
3061 015140 013746 001116
3062
3063 015144 104402
3064 015146 000426
3065 015150 005300
3066 015152 006300
3067 015154 006300
3068 015156 006300
3069 015160 062700 001322
3070 015164 012037 015174
3071 015170 001404
3072 015172 104401
3073 015174 000000
3074 015176 104401 001233
3075 015202 012037 015212
3076 015206 001404
3077 015210 104401
3078 015212 000000
3079 015214 104401 001233
3080 015220 011000
3081 015222 001004
3082 015224 012600
3083 015226 104401 001233
3084 015232 000207
3085 015234
3086 015234 013046
3087 015236 104402
3088 015240 005710
3089 015242 001770
3090 015244 104401 015252
3091 015250 000771
3092 015252 020040 000
3093 015256
3094 015256
3095
3096
3097 015256
3098
3099
3100
3101
3102
3103
3104 015256 010046
3105 015260 116600 000002
3106 015264 005740
3107 015266 111000
3108 015270 006300

```

```

SERRTYP:
      TYPE      $CRLF      ;; "CARRIAGE RETURN" & "LINE FEED"
      MOV       RO, -(SP)   ;; SAVE RO
      CLR       RO         ;; PICKUP THE ITEM INDEX
      BISB      2($ITEMB, RO
      BNE       1$         ;; IF ITEM NUMBER IS ZERO, JUST
                          ;; TYPE THE PC OF THE ERROR
      TYPOCT    $ERRPC, (ERROR ADDRESS)
      MOV       $ERRPC, -(SP) ;; SAVE $ERRPC FOR TYPEOUT
                          ;; ERROR ADDRESS
      TYPOC     6$         ;; GO TYPE--OCTAL ASCII(ALL DIGITS)
      BR        6$         ;; GET OUT
1$:    DEC      RO         ;; ADJUST THE INDEX SO THAT IT WILL
      ASL      RO         ;; WORK FOR THE ERROR TABLE
      ASL      RO
      ASL      RO
      ADD      $ERRTB, RO   ;; FORM TABLE POINTER
      MOV      (RO)+, 2$   ;; PICKUP "ERROR MESSAGE" POINTER
      BEQ      3$         ;; SKIP TYPEOUT IF NO POINTER
      TYPE     0           ;; TYPE THE "ERROR MESSAGE"
2$:    .WORD    0           ;; "ERROR MESSAGE" POINTER GOES HERE
      TYPE     $CRLF      ;; "CARRIAGE RETURN" & "LINE FEED"
3$:    MOV      (RO)+, 4$   ;; PICKUP "DATA HEADER" POINTER
      BEQ      5$         ;; SKIP TYPEOUT IF 0
      TYPE     0           ;; TYPE THE "DATA HEADER"
4$:    .WORD    0           ;; "DATA HEADER" POINTER GOES HERE
      TYPE     $CRLF      ;; "CARRIAGE RETURN" & "LINE FEED"
5$:    MOV      (RO), RO   ;; PICKUP "DATA TABLE" POINTER
      BNE      7$         ;; GO TYPE THE DATA
      MOV      (SP)+, RO   ;; RESTORE RO
6$:    TYPE     $CRLF      ;; "CARRIAGE RETURN" & "LINE FEED"
      RTS      PC         ;; RETURN
7$:    TYPOCT   2(RO)+     ;; TYPE AN OCTAL NUMBER
      MOV      2(RO)+, -(SP) ;; SAVE 2(RO)+ FOR TYPEOUT
      TYPOC     7$         ;; GO TYPE--OCTAL ASCII(ALL DIGITS)
      TST      (RO)       ;; IS THERE ANOTHER NUMBER?
      BEQ      6$         ;; BR IF NO
      TYPE     8$         ;; TYPE TWO(2) SPACES
      BR       7$         ;; LOOP
8$:    .ASCIZ   / /       ;; TWO(2) SPACES
      .EVEN
      .STRAP
      .SBTTL   TRAP DECODER

STARS
*****
; THIS ROUTINE WILL PICKUP THE LOWER BYTE OF THE "TRAP" INSTRUCTION
; AND USE IT TO INDEX THROUGH THE TRAP TABLE FOR THE STARTING ADDRESS
; OF THE DESIRED ROUTINE. THEN USING THE ADDRESS OBTAINED IT WILL
; GO TO THAT ROUTINE.

STRAP: MOV      RO, -(SP)   ;; SAVE RO
      MOV      2(SP), RO   ;; GET TRAP ADDRESS
      TST      -(RO)       ;; BACKUP BY 2
      MOV      (RO), RO    ;; GET RIGHT BYTE OF TRAP
      ASL      RO         ;; POSITION FOR INDEXING

```


N05

MAINDEC-11-DZTCB-D TC11 TEST #2
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TRAP DECODER

3109 015272 016000 015312

MOV STRPAD(RO),RO ;;INDEX TO TABLE
RTS RO ;;GO TO ROUTINE

3110 015276 000200
3111
3112
3113
3114
3115 015300 011646
3116 015302 016666 000004 000002
3117 015310 000002
3118
3119
3120
3121
3122
3123
3124
3125
3126
3127
3128
3129
3130
3131
3132
3133
3134
3135
3136
3137
3138
3139
3140
3141
3142
3143
3144
3145 015312
3146 015312
3147
3148
3149
3150
3151
3152
3153
3154 015312 015300
3155
3156 015314 014230
3157
3158 015316
3159 015316
3160
3161 015316 014720
3162
3163 015320
3164 015320

;;THIS IS USE TO HANDLE THE "GETPRI" MACRO

STRAP2: MOV (SP),-(SP) ;;MOVE THE PC DOWN
MOV 4(SP),2(SP) ;;MOVE THE PSW DOWN
RTI ;;RESTORE THE PSW

.MACRO SETTRAP A,B,MSG
\$\$SET A,B,\<TRAP+STRP>,\STRP,<MSG>

.NLIST
STRP=STRP+1
.LIST
.ENDM SETTRAP
.MACRO \$\$SET A,B,C,D,COMNT
.IF EQ STRP-1
.SBTTL TRAP TABLE

;*THIS TABLE CONTAINS THE STARTING ADDRESSES OF THE ROUTINES CALLED
;*BY THE "TRAP" INSTRUCTION.

ROUTINE

STRPAD: .WORD STRAP2
.ENDC
.IIF NDF GMS,.NLIST
A=C
.IIF NDF GMS,.LIST
B ;;CALL=A TRAP+D(C) COMNT
.ENDM \$\$SET
.MACRO TRMTRP
STERM=-STRPAD
.ENDM TRMTRP
.LIST

SETTRAP TYPE,STYPE,↑/TTY TYPEOUT ROUTINE/
\$\$SET TYPE,STYPE,\<TRAP+STRP>,\STRP,<TTY TYPEOUT ROUTINE>
.SBTTL TRAP TABLE

;*THIS TABLE CONTAINS THE STARTING ADDRESSES OF THE ROUTINES CALLED
;*BY THE "TRAP" INSTRUCTION.

ROUTINE

STRPAD: .WORD STRAP2
.LIST
STYPE ;;CALL=TYPE TRAP+1(104401) TTY TYPEOUT ROUTINE
.LIST
SETTRAP TYPOC,STYPOC,↑/TYPE OCTAL NUMBER (WITH LEADING ZEROS)/
\$\$SET TYPOC,STYPOC,\<TRAP+STRP>,\STRP,<TYPE OCTAL NUMBER (WITH LEADING ZEROS)>
.LIST
STYPOC ;;CALL=TYPOC TRAP+2(104402) TYPE OCTAL NUMBER (WITH LEADING ZEROS)
.LIST
SETTRAP TYPOS,STYPOS,↑/TYPE OCTAL NUMBER (NO LEADING ZEROS)/
\$\$SET TYPOS,STYPOS,\<TRAP+STRP>,\STRP,<TYPE OCTAL NUMBER (NO LEADING ZEROS)>

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TRAP TABLE

3165
3166 015320 014674
3167
3168 015322
3169 015322
3170
3171 015322 014734
3172
3173 015324
3174 015324
3175
3176 015324 014450
3177
3178
3179
3180 015326 000000
3181 015330 055104 041524 026502
3182 015336 020104 020055 041524
3183 015344 030461 052040 051505
3184 015352 006524 012
3185 015355 123 052105 052440
3186 015362 044516 030124 052040
3187 015370 020117 042522 047515
3188 015376 042524 040440 042116
3189 015404 053440 044522 042524
3190 015412 046040 041517 027113
3191 015420 046101 020114 052117
3192 015426 042510 020122 047125
3193 015434 052111 020123 043117
3194 015442 027106 005015
3195 015446 051127 046524 051440
3196 015454 044527 041524 020110
3197 015462 043117 026106 053440
3198 015470 046101 020114 053523
3199 015476 052111 044103 047440
3200 015504 027116 005015 000
3201 015511 015 051412 052105
3202 015516 051440 020122 050117
3203 015524 044524 047117 027123
3204 015532 047040 051117 040515
3205 015540 020114 051123 036440
3206 015546 030040 000
3207 015551 015 044412 053116
3208 015556 046101 042111 052040
3209 015564 051505 027124 000
3210 015571 007
3211 015572 025045 000
3212 015575 106 052101 046101
3213 015602 042440 051122 051117
3214 015610 052040 040522 020120
3215 015616 047524 046040 041517
3216 015624 052101 047511 020116
3217 015632 020064 051106 046517
3218 015640 046040 041517 000
3219 015645 050 041077 042101
3220 015652 041440 052520 024477

.LIST
STYPOS ;;CALL=TYPOS TRAP+3(104403) TYPE OCTAL NUMBER (NO LEADING ZEROS)
.LIST
SETTRAP TYPON,STYPON,1/TYPE OCTAL NUMBER (AS PER LAST CALL)/
\$\$SET TYPON,STYPON,\<TRAP+STRAP>,\STRAP,<TYPE OCTAL NUMBER (AS PER LAST CALL)>
.LIST
STYPON ;;CALL=TYPON TRAP+4(104404) TYPE OCTAL NUMBER (AS PER LAST CALL)
.LIST
SETTRAP TYPDS,STYPDS,1/TYPE DECIMAL NUMBER (WITH SIGN)/
\$\$SET TYPDS,STYPDS,\<TRAP+STRAP>,\STRAP,<TYPE DECIMAL NUMBER (WITH SIGN)>
.LIST
STYPDS ;;CALL=TYPDS TRAP+5(104405) TYPE DECIMAL NUMBER (WITH SIGN)
.LIST

CKSELT: OPEN
STMES: .ASCII 'DZTCB-D - TC11 TEST'<15><12>

.ASCII 'SET UNITS TO REMOTE AND WRITE LOCK.'

.ASCII 'ALL OTHER UNITS OFF.'<15><12>

.ASCII 'WRTM SWITCH OFF, WALL SWITCH ON.'<15><12>

ASETSR: .ASCIIZ <15><12>'SET SR OPTIONS. NORMAL SR = 0'

AINCRT: .ASCIIZ <15><12>'INVALID TEST.'

APGENO: .BYTE 007
.ASCIIZ 'X*'
TRPMHS: .ASCIIZ "FATAL ERROR TRAP TO LOCATION 4 FROM LOC"

TRPMES: .ASCIIZ "(?BAD CPU?) ATTEMPTING TO RESTART PROGRAM"

C06

MAINDEC-11-DZTCB-D
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TRAP TABLE

3221	015660	040440	052124	046505
3222	015666	052120	047111	020107
3223	015674	047524	051040	051505
3224	015702	040424	052122	050040
3225	015710	047522	051107	046501
3226	015716	000		
3227	015717	106	052101	046101
3228	015724	042440	051122	051117
3229	015732	052040	040522	020120
3230	015740	047524	046040	041517
3231	015746	052101	047511	020116
3232	015754	030061	043040	047522
3233	015762	020115	047514	020103
3234	015770	000		
3235	015771	124	051505	051524
3236	015776	040440	042522	047440
3237	016004	052125	047440	020106
3238	016012	042523	052521	047105
3239	016020	042503	026440	026440
3240	016026	026440	051040	051505
3241	016034	040524	052122	047111
3242	016042	027107	027056	000056
3243	016050	005015	042522	052123
3244	016056	051101	044524	043516
3245	016064	040440	052106	051105
3246	016072	040440	050040	053517
3247	016100	051105	043040	044501
3248	016106	052514	042522	005015
3249	016114	000		
3250	016115	123	052101	024040
3251	016122	052123	050117	040440
3252	016130	046114	052040	040522
3253	016136	051516	047520	052122
3254	016144	024523	041440	046517
3255	016152	040515	042116	042040
3256	016160	042111	047040	052117
3257	016166	041440	042514	051101
3258	016174	051040	040505	054504
3259	016202	000		
3260	016203	040	050040	020103
3261	016210	020040	020040	051440
3262	016216	020120	020040	020040
3263	016224	050040	020123	020040
3264	016232	020040	042524	052123
3265	016240	020043	020040	041524
3266	016246	046503	020040	020040
3267	016254	041524	052123	000
3268		016262		
3269	016262	001116	001176	001200
3270	016270	001174	001166	001164
3271	016276	000000		
3272				
3273				
3274	016300	051523	020124	051450
3275	016306	047524	020120	042523
3276	016314	042514	052103	042105

TRPM10: .ASCIZ "FATAL ERROR TRAP TO LOCATION 10 FROM LOC "

RESTART: .ASCIZ "TESTS ARE OUT OF SEQUENCE - - - RESTARTING...."

POWRES: .ASCIZ <15> <12> "RESTARTING AFTER A POWER FAILURE"<15> <12>

EM1: .ASCIZ "SAT (STOP ALL TRANSPORTS) COMMAND DID NOT CLEAR READY"

EH1: .ASCIZ " PC SP PS TEST# TCCM TCST"

EVEN
ET1: \$ERRPC, \$REG6, \$REG7, \$REG5, \$REG2, \$REG1
000000

EM2: .ASCIZ "SST (STOP SELECTED TRANSPORT) DID NOT CLEAR READY"

D06

MAINDEC-11-DZTCB-D TC11 TEST #2 MACY11 27(1006) 18-FEB-77 11:33 PAGE 61
 DZTCB0.P11 18-FEB-77 10:59 TRAP TABLE

3277	016322	052040	040522	051516	
3278	016330	047520	052122	020051	
3279	016336	044504	020104	047516	
3280	016344	020124	046103	040505	
3281	016352	030122	042522	042101	
3282	016360	000131			
3283	016362	020040	041520	020040	EH2: .ASCIZ " PC SP PS TEST# TCCM TCST"
3284	016370	020040	020040	050123	
3285	016376	020040	020040	020040	
3286	016404	051520	020040	020040	
3287	016412	052040	051505	021524	
3288	016420	020040	052040	041503	
3289	016426	020115	020040	052040	
3290	016434	051503	000124		
3291					
3292	016440	001116	001176	001200	EVEN
3293	016446	001174	001166	001164	ET2: \$ERRPC,\$REG6,\$REG7,\$REG5,\$REG2,\$REG1
3294	016454	000000			000000
3295					
3296					
3297	016456	042522	042101	020131	EM3: .ASCIZ "READY BIT DID NOT CAUSE AN INTERRUPT"
3298	016464	044502	020124	044504	
3299	016472	020104	047516	020124	
3300	016500	040503	051525	020105	
3301	016506	047101	044440	052116	
3302	016514	051105	052522	052120	
3303	016522	000			
3304	016523	040	050040	020103	EH3: .ASCIZ " PC SP PS TEST# TCCM TCST"
3305	016530	020040	020040	051440	
3306	016536	020120	020040	020040	
3307	016544	050040	020123	020040	
3308	016552	020040	042524	052123	
3309	016560	020043	020040	041524	
3310	016566	046503	020040	020040	
3311	016574	041524	052123	000	
3312		016602			EVEN
3313	016602	001116	001176	001200	ET3: \$ERRPC,\$REG6,\$REG7,\$REG5,\$REG2,\$REG1
3314	016610	001174	001166	001164	000000
3315	016616	000000			
3316					
3317					
3318	016620	042522	042101	020131	EM4: .ASCIZ "READY BIT CAUSED AN INTERRUPT WITH PROCESSOR AND TC11 AT SAME PRIORITY"
3319	016626	044502	020124	040503	
3320	016634	051525	042105	040440	
3321	016642	020116	047111	042524	
3322	016650	051122	050125	020124	
3323	016656	044527	044124	050040	
3324	016664	047522	042503	051523	
3325	016672	051117	040440	042116	
3326	016700	052040	030503	020061	
3327	016706	052101	051440	046501	
3328	016714	020105	051120	047511	
3329	016722	044522	054524	000	
3330	016727	040	050040	020103	EH4: .ASCIZ " PC SP PS TEST# TCCM TCST"
3331	016734	020040	020040	051440	
3332	016742	020120	020040	020040	

E06

 MAINDEC-11-DZTCB-D TC11 TEST #2
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 TRAP TABLE

3333	016750	050040	020123	020040	
3334	016756	020040	042524	052123	
3335	016764	020043	020040	041524	
3336	016772	046503	020040	020040	
3337	017000	041524	052123	000	
3338		017006			.EVEN
3339	017006	001116	001176	001200	ET4: SERRPC, \$REG6, \$REG7, \$REG5, \$REG2, \$REG1
3340	017014	001174	001166	001164	
3341	017022	000000			000000
3342					
3343					
3344	017024	041524	030461	043040	EM5: .ASCIZ "TC11 FAILED TO INTERRUPT"
3345	017032	044501	042514	020104	
3346	017040	047524	044440	052116	
3347	017046	051105	052522	052120	
3348	017054	000			
3349	017055	040	050040	020103	EM5: .ASCIZ " PC SP PS TEST# TCCM TCST"
3350	017062	020040	020040	051440	
3351	017070	020120	020040	020040	
3352	017076	050040	020123	020040	
3353	017104	020040	042524	052123	
3354	017112	020043	020040	041524	
3355	017120	046503	020040	020040	
3356	017126	041524	052123	000	
3357		017134			.EVEN
3358	017134	001116	001176	001200	ET5: SERRPC, \$REG6, \$REG7, \$REG5, \$REG2, \$REG1
3359	017142	001174	001166	001164	
3360	017150	000000			000000
3361					
3362					
3363	017152	041524	030461	042040	EM6: .ASCIZ "TC11 DID NOT DROP INTERRUPT REQUEST AFTER IT WAS ACKNOLEDGED"
3364	017160	042111	047040	052117	
3365	017166	042040	047522	020120	
3366	017174	047111	042524	051122	
3367	017202	050125	020124	042522	
3368	017210	052521	051505	020124	
3369	017216	043101	042524	020122	
3370	017224	052111	053440	051501	
3371	017232	040440	045503	047516	
3372	017240	042514	043504	042105	
3373	017246	000			
3374	017247	040	050040	020103	EM6: .ASCIZ " PC SP PS TEST# TCCM TCST"
3375	017254	020040	020040	051440	
3376	017262	020120	020040	020040	
3377	017270	050040	020123	020040	
3378	017276	020040	042524	052123	
3379	017304	020043	020040	041524	
3380	017312	046503	020040	020040	
3381	017320	041524	052123	000	
3382		017326			.EVEN
3383	017326	001116	001176	001200	ET6: SERRPC, \$REG6, \$REG7, \$REG5, \$REG2, \$REG1
3384	017334	001174	001166	001164	
3385	017342	000000			000000
3386					
3387					
3388	017344	047504	047111	020107	EM7: .ASCIZ "DOING A RESET INSTRUCTION DID NOT CLEAR UPS"

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TRAP TABLE

3389	017352	020101	042522	042523
3390	017360	020124	047111	052123
3391	017366	042522	052103	047511
3392	017374	020116	044504	020104
3393	017402	047516	020124	046103
3394	017410	040505	020122	050125
3395	017416	000123		
3396	017420	020040	041520	020040
3397	017426	020040	020040	050123
3398	017434	020040	020040	020040
3399	017442	051520	020040	020040
3400	017450	052040	051505	021524
3401	017456	020040	052040	041503
3402	017464	020115	020040	052040
3403	017472	051503	000124	
3404				
3405	017476	001116	001176	001200
3406	017504	001174	001166	001164
3407	017512	000000		
3408				
3409				
3410	017514	047105	042524	044522
3411	017522	043516	046440	044501
3412	017530	052116	047101	047105
3413	017536	042503	046440	042117
3414	017544	020105	044504	020104
3415	017552	047516	020124	042523
3416	017560	020124	050125	000123
3417	017566	020040	041520	020040
3418	017574	020040	020040	050123
3419	017602	020040	020040	020040
3420	017610	051520	020040	020040
3421	017616	052040	051505	021524
3422	017624	020040	052040	041503
3423	017632	020115	020040	052040
3424	017640	051503	000124	
3425				
3426	017644	001116	001176	001200
3427	017652	001174	001166	001164
3428	017660	000000		
3429				
3430				
3431	017662	050125	020123	044504
3432	017670	020104	047516	020124
3433	017676	046103	040505	020122
3434	017704	044127	047105	046040
3435	017712	040505	044526	043516
3436	017720	046440	044501	052116
3437	017726	047101	047105	042503
3438	017734	046440	042117	000105
3439	017742	020040	041520	020040
3440	017750	020040	020040	050123
3441	017756	020040	020040	020040
3442	017764	051520	020040	020040
3443	017772	052040	051505	021524
3444	020000	020040	052040	041503

EH7: .ASCIZ " PC SP PS TEST# TCCM TCST"

.EVEN

ET7: \$ERRPC, \$REG6, \$REG7, \$REG5, \$REG2, \$REG1

000000

EM10: .ASCIZ "ENTERING MAINTANENCE MODE DID NOT SET UPS"

EH10: .ASCIZ " PC SP PS TEST# TCCM TCST"

.EVEN

ET10: \$ERRPC, \$REG6, \$REG7, \$REG5, \$REG2, \$REG1

000000

EM11: .ASCIZ "UPS DID NOT CLEAR WHEN LEAVING MAINTANENCE MODE"

EH11: .ASCIZ " PC SP PS TEST# TCCM TCST"

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TRAP TABLE

3445	020006	020115	020040	052040	
3446	020014	051503	000124		
3447					.EVEN
3448	020020	001116	001176	001200	ET11: SERRPC, SREG6, SREG7, SREG5, SREG2, SREG1
3449	020026	001174	001166	001164	
3450	020034	000000			000000
3451					
3452					
3453	020036	041524	052123	041040	EM12: .ASCIZ "TCST BIT 0 CAN BE SET WHILE IN MAINTANENCE MODE"
3454	020044	052111	030040	041440	
3455	020052	047101	041040	020105	
3456	020060	042523	020124	044127	
3457	020066	046111	020105	047111	
3458	020074	046440	044501	052116	
3459	020102	047101	047105	042503	
3460	020110	046440	042117	000105	
3461	020116	020040	041520	020040	EH12: .ASCIZ " PC SP PS TEST# TCCM TCST"
3462	020124	020040	020040	050123	
3463	020132	020040	020040	020040	
3464	020140	051520	020040	020040	
3465	020146	052040	051505	021524	
3466	020154	020040	052040	041503	
3467	020162	020115	020040	052040	
3468	020170	051503	000124		
3469					.EVEN
3470	020174	001116	001176	001200	ET12: SERRPC, SREG6, SREG7, SREG5, SREG2, SREG1
3471	020202	001174	001166	001164	
3472	020210	000000			000000
3473					
3474					
3475	020212	041524	052123	041040	EM13: .ASCIZ "TCST BIT 1 CAN BE SET WHILE IN MAINTANENCE MODE"
3476	020220	052111	030040	041440	
3477	020226	047101	041040	020105	
3478	020234	042523	020124	044127	
3479	020242	046111	020105	047111	
3480	020250	046440	044501	052116	
3481	020256	047101	047105	042503	
3482	020264	046440	042117	000105	
3483	020272	020040	041520	020040	EH13: .ASCIZ " PC SP PS TEST# TCCM TCST"
3484	020300	020040	020040	050123	
3485	020306	020040	020040	020040	
3486	020314	051520	020040	020040	
3487	020322	052040	051505	021524	
3488	020330	020040	052040	041503	
3489	020336	020115	020040	052040	
3490	020344	051503	000124		
3491					.EVEN
3492	020350	001116	001176	001200	ET13: SERRPC, SREG6, SREG7, SREG5, SREG2, SREG1
3493	020356	001174	001166	001164	
3494	020364	000000			000000
3495					
3496					
3497	020366	051127	046524	041440	EM14: .ASCIZ "WRTM COMMAND WITH WRTM SWITCH DISABLED FAILED TO SET ILO ERROR"
3498	020374	046517	040515	042116	
3499	020402	053440	052111	020110	
3500	020410	051127	046524	051440	

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TRAP TABLE

3501	020416	044527	041524	020110							
3502	020424	044504	040523	046102							
3503	020432	042105	043040	044501							
3504	020440	042514	020104	047524							
3505	020446	051440	052105	044440							
3506	020454	047514	042440	051122							
3507	020462	051117	000								
3508	020465	040	050040	020103	EH14:	.ASCIZ	" PC	SP	PS	TEST#	TCCM TCST"
3509	020472	020040	020040	051440							
3510	020500	020120	020040	020040							
3511	020506	01 040	020123	020040							
3512	020514	020040	042524	052123							
3513	020522	020043	020040	041524							
3514	020530	046503	020040	020040							
3515	020536	041524	052123	000							
3516		020544			.EVEN						
3517	020544	001116	001176	001200	ET14:	SERRPC, SREG6, SREG7, SREG5, SREG2, SREG1					
3518	020552	001174	001166	001164							
3519	020560	000000									
3520											
3521											
3522	020562	046111	020117	051105	EM15:	.ASCIZ	"ILO ERROR FAILED TO SET THE 'ERROR' BIT"				
3523	020570	047522	020122	040506							
3524	020576	046111	042105	052040							
3525	020604	020117	042523	020124							
3526	020612	044124	020105	042447							
3527	020620	051122	051117	020047							
3528	020626	044502	000124								
3529	020632	020040	041520	020040	EH15:	.ASCIZ	" PC	SP	PS	TEST#	TCCM TCST"
3530	020640	020040	020040	050123							
3531	020646	020040	020040	020040							
3532	020654	051520	020040	020040							
3533	020662	052040	051505	021524							
3534	020670	020040	052040	041503							
3535	020676	020115	020040	052040							
3536	020704	051503	000124								
3537					.EVEN						
3538	020710	001116	001176	001200	ET15:	SERRPC, SREG6, SREG7, SREG5, SREG2, SREG1					
3539	020716	001174	001166	001164							
3540	020724	000000									
3541											
3542											
3543	020726	046103	040505	044522	EM16:	.ASCIZ	"CLEARING ILLEGAL OP FAILED TO CLEAR ILO ERROR"				
3544	020734	043516	044440	046114							
3545	020742	043505	046101	047440							
3546	020750	020120	040506	046111							
3547	020756	042105	052040	020117							
3548	020764	046103	040505	020122							
3549	020772	046111	020117	051105							
3550	021000	047522	000122								
3551	021004	020040	041520	020040	EH16:	.ASCIZ	" PC	SP	PS	TEST#	TCCM TCST"
3552	021012	020040	020040	050123							
3553	021020	020040	020040	020040							
3554	021026	051520	020040	020040							
3555	021034	052040	051505	021524							
3556	021042	020040	052040	041503							

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TRAP TABLE

3557	021050	020115	020040	052040	
3558	021056	051503	000124		
3559					EVEN
3560	021062	001116	001176	001200	ET16: SERRPC, SREG6, SREG7, SREG5, SREG2, SREG1
3561	021070	001174	001166	001164	
3562	021076	000000			000000
3563					
3564					
3565	021100	046103	040505	044522	EM17: .ASCIZ "CLEARING ILLEGAL OP FAILED TO CLEAR THE 'ERROR' BIT"
3566	021106	043516	044440	046114	
3567	021114	043505	046101	047440	
3568	021122	020120	040506	046111	
3569	021130	042105	052040	020117	
3570	021136	046103	040505	020122	
3571	021144	044124	020105	042447	
3572	021152	051122	051117	020047	
3573	021160	044502	000124		
3574	021164	020040	041520	020040	EH17: .ASCIZ " PC SP PS TEST# TCCM TCST"
3575	021172	020040	020040	050123	
3576	021200	020040	020040	020040	
3577	021206	051520	020040	020040	
3578	021214	052040	051505	021524	
3579	021222	020040	052040	041503	
3580	021230	020115	020040	052040	
3581	021236	051503	000124		
3582					EVEN
3583	021242	001116	001176	001200	ET17: SERRPC, SREG6, SREG7, SREG5, SREG2, SREG1
3584	021250	001174	001166	001164	
3585	021256	000000			000000
3586					
3587					
3588	021260	051127	046524	053440	EM20: .ASCIZ "WRTM WITH WRTM SWITCH OFF DID NOT SET ILO ERROR BIT"
3589	021266	052111	020110	051127	
3590	021274	046524	051440	044527	
3591	021302	041524	020110	043117	
3592	021310	020106	044504	020104	
3593	021316	047516	020124	042523	
3594	021324	020124	046111	020117	
3595	021332	051105	047522	020122	
3596	021340	044502	000124		
3597	021344	020040	041520	020040	EH20: .ASCIZ " PC SP PS TEST# TCCM TCST"
3598	021352	020040	020040	050123	
3599	021360	020040	020040	020040	
3600	021366	051520	020040	020040	
3601	021374	052040	051505	021524	
3602	021402	020040	052040	041503	
3603	021410	020115	020040	052040	
3604	021416	051503	000124		
3605					EVEN
3606	021422	001116	001176	001200	ET20: SERRPC, SREG6, SREG7, SREG5, SREG2, SREG1
3607	021430	001174	001166	001164	
3608	021436	000000			000000
3609					
3610					
3611	021440	046111	020117	051105	EM21: .ASCIZ "ILO ERROR SETTING DID NOT CAUSE THE 'ERROR' BIT TO SET"
3612	021446	047522	020122	042523	

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TRAP TABLE

3613	021454	052124	047111	020107						
3614	021462	044504	020104	047516						
3615	021470	020124	040503	051525						
3616	021476	020105	044124	020105						
3617	021504	042447	051122	051117						
3618	021512	020047	044502	020124						
3619	021520	047524	051440	052105						
3620	021526	000								
3621	021527	040	050040	020103	EH21:	.ASCIZ	"	PC	SP	PS
3622	021534	020040	020040	051440		TEST#	TCCM	TCST"		
3623	021542	020120	020040	020040						
3624	021550	050040	020123	020040						
3625	021556	020040	042524	052123						
3626	021564	020043	020040	041524						
3627	021572	046503	020040	020040						
3628	021600	041524	052123	000						
3629		021606								
3630	021606	001116	001176	001200	EVEN					
3631	021614	001174	001166	001164	ET21:	\$ERRPC,\$REG6,\$REG7,\$REG5,\$REG2,\$REG1				
3632	021622	000000				000000				
3633										
3634										
3635	021624	046103	040505	044522	EM22:	.ASCIZ	"CLEARING ERROR BIT ALSO CLEARED ILO ERROR"			
3636	021632	043516	042440	051122						
3637	021640	051117	041040	052111						
3638	021646	040440	051514	020117						
3639	021654	046103	040505	042522						
3640	021662	020104	046111	020117						
3641	021670	051105	047522	000122						
3642	021676	020040	041520	020040	EH22:	.ASCIZ	"	PC	SP	PS
3643	021704	020040	020040	050123		TEST#	TCCM	TCST"		
3644	021712	020040	020040	020040						
3645	021720	051520	020040	020040						
3646	021726	052040	051505	021524						
3647	021734	020040	052040	041503						
3648	021742	020115	020040	052040						
3649	021750	051503	000124							
3650										
3651	021754	001116	001176	001200	EVEN					
3652	021762	001174	001166	001164	ET22:	\$ERRPC,\$REG6,\$REG7,\$REG5,\$REG2,\$REG1				
3653	021770	000000				000000				
3654										
3655										
3656	021772	044124	020105	042447	EM23:	.ASCIZ	"THE 'ERROR' BIT DID NOT SET"			
3657	022000	051122	051117	020047						
3658	022006	044502	020124	044504						
3659	041014	020104	047516	020124						
3660	041022	042523	000124							
3661	041030	041520	020040	020040	EH23:	.ASCIZ	"	PC	SP	PS
3662	041034	020040	020040	050123		TEST#	TCCM	TCST"		
3663	022042	020040	020040	020040						
3664	022050	051520	020040	020040						
3665	041056	052040	051505	021524						
3666	041064	020040	052040	041503						
3667	022072	020115	020040	052040						
3668	022100	051503	000124							

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TRAP TABLE

3669					.EVEN	
3670	022104	001116	001176	001200	ET23:	\$ERRPC, \$REG6, \$REG7, \$REG5, \$REG2, \$REG1
3671	022112	001174	001166	001164		
3672	022120	000000				000000
3673						
3674						
3675	022122	044124	020105	042447	EM24:	.ASCIZ "THE 'ERROR' BIT SET DID NOT CAUSE AN INTERRUPT"
3676	022130	051122	051117	020047		
3677	022136	044502	020124	042523		
3678	022144	020124	044504	020104		
3679	022152	047516	020124	040503		
3680	022160	051525	020105	047101		
3681	022166	044440	052116	051105		
3682	022174	052522	052120	000		
3683	022201	040	050040	020103	EM24:	.ASCIZ " PC SP PS TEST# TCCM TCST"
3684	022206	020040	020040	051440		
3685	022214	020120	020040	020040		
3686	022222	050040	020123	020040		
3687	022230	020040	042524	052123		
3688	022236	020043	020040	041524		
3689	022244	046503	020040	020040		
3690	022252	041524	052123	000		
3691		022260			.EVEN	
3692	022260	001116	001176	001200	ET24:	\$ERRPC, \$REG6, \$REG7, \$REG5, \$REG2, \$REG1
3693	022266	001174	001166	001164		
3694	022274	000000				000000
3695						
3696						
3697	022276	047504	047111	020107	EM25:	.ASCIZ "DOING A RESET INSTRUCTION DID NOT SET THE READY BIT"
3698	022304	020101	042522	042523		
3699	022312	020124	047111	052123		
3700	022320	052522	052103	047511		
3701	022326	020116	044504	020104		
3702	022334	047516	020124	042523		
3703	022342	020124	044124	020105		
3704	022350	042522	042101	020131		
3705	022356	044502	000124			
3706	022362	020040	041520	020040	EM25:	.ASCIZ " PC SP PS TEST# TCCM TCST"
3707	022370	020040	020040	050123		
3708	022376	020040	040	020040		
3709	022404	051520	020040	020040		
3710	022412	052040	051505	021524		
3711	022420	020040	052040	041503		
3712	022426	020115	020040	052040		
3713	022434	051503	000124			
3714					.EVEN	
3715	022440	001116	001176	001200	ET25:	\$ERRPC, \$REG6, \$REG7, \$REG5, \$REG2, \$REG1
3716	022446	001174	001166	001164		
3717	022454	000000				000000
3718						
3719						
3720	022456	042524	052123	042440	EM26:	.ASCIZ "TEST EXECUTION IS OUT OF ORDER"
3721	022464	042530	052503	044524		
3722	022472	047117	044440	020123		
3723	022500	052517	020124	043117		
3724	022506	047440	042122	051105		

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MAINDEC-11-DZTCB-D TC11 TEST #2 MACY11 27(1006) 18-FEB-77 11:33 PAGE 69
DZTCB0.P11 18-FEB-77 10:59 TRAP TABLE

3725	022514	000								
3726	022515	040	050040	020103	EH26:	.ASCIZ	"	PC	SP	PS
3727	022522	020040	020040	051440						TEST#
3728	022530	020120	020040	020040						TEST#
3729	022536	050040	020123	020040						S/B"
3730	022544	020040	042524	052123						
3731	022552	020043	052040	051505						
3732	022560	021524	051440	041057						
3733	022566	000								
3734	022570	022570			.EVEN					
3735	022576	001116	001176	001200	ET26:	SERRPC,	\$REG6,	\$REG7,	\$REG0,	\$REG5
3736	022576	001162	001174							
3737	022602	000000								000000
3738										
3739										
3740	022604	051105	047522	020122	EM27:	.ASCIZ	"	ERROR TRYING TO READ A BLOCK MARK"		
3741	022612	051124	044531	043516						
3742	022620	052040	020117	042522						
3743	022626	042101	040440	041040						
3744	022634	047514	045503	046440						
3745	022642	051101	000113							
3746	022646	020040	041520	020040	EH27:	.ASCIZ	"	PC	SP	PS
3747	022654	020040	020040	050123						TEST#
3748	022662	020040	020040	020040						TCCM
3749	022670	051520	020040	020040						TCST"
3750	022676	052040	051505	021524						
3751	022704	020040	052040	041503						
3752	022712	020115	020040	052040						
3753	022720	051503	000124							
3754					.EVEN					
3755	022724	001116	001176	001200	ET27:	SERRPC,	\$REG6,	\$REG7,	\$REG5,	\$REG2,
3756	022732	001174	001166	001164						\$REG1
3757	022740	000000								000000
3758										
3759										
3760	022742	042522	042101	020131	EM30:	.ASCIZ	"	READY WAS NOT SET AFTER BLOCK MARK WAS SHIFTED INTO THE WINDOW REGISTER"		
3761	022750	040527	020123	047516						
3762	022756	020124	042523	020124						
3763	022764	043101	042524	020122						
3764	022772	046102	041517	020113						
3765	023000	040515	045522	053440						
3766	023006	051501	051440	044510						
3767	023014	052106	042105	044440						
3768	023022	052116	020117	044124						
3769	023030	020105	044527	042116						
3770	023036	053517	051040	043505						
3771	023044	051511	042524	000122						
3772	023052	020040	041520	020040	EH30:	.ASCIZ	"	PC	SP	PS
3773	023060	020040	020040	050123						TEST#
3774	023066	020040	020040	020040						TCCM
3775	023074	051520	020040	020040						TCST"
3776	023102	052040	051505	021524						
3777	023110	020040	052040	041503						
3778	023116	020115	020040	052040						
3779	023124	051503	000124							
3780					.EVEN					

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MAINDEC-11-DZTCB-D TC11 TEST #2 MACY11 27(1006) 18-FEB-77 11:33 PAGE 70
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3781	023130	001116	001176	001200	ET30:	\$ERRPC,\$REG6,\$REG7,\$REG5,\$REG2,\$REG1
3782	023136	001174	001166	001164		
3783	023144	000000				000000
3784						
3785						
3786	023146	047111	047503	051122	EM31:	.ASCIZ "INCORRECT BLOCK # IN DATA REG AFTER BLOCK MARK WAS DETECTED"
3787	023154	041505	020124	046102		
3788	023162	041517	020113	020043		
3789	023170	047111	042040	052101		
3790	023176	020101	042522	020107		
3791	023204	043101	042524	020122		
3792	023212	046102	041517	020113		
3793	023220	040515	045522	053440		
3794	023226	051501	042040	052105		
3795	023234	041505	042524	000104		
3796	023242	020040	041520	020040	EH31:	.ASCIZ " PC SP PS TEST# TCCM TCST TCDT TCDT S/B"
3797	023250	020040	020040	050123		
3798	023256	020040	020040	020040		
3799	023264	051520	020040	020040		
3800	023272	052040	051505	021524		
3801	023300	020040	052040	041503		
3802	023306	020115	020040	052040		
3803	023314	051503	020124	020040		
3804	023322	052040	042103	020124		
3805	023330	052040	042103	020124		
3806	023336	027523	000102			
3807					.EVEN	
3808	023342	001116	001176	001200	ET31:	\$ERRPC,\$REG6,\$REG7,\$REG5,\$REG2,\$REG1,\$REG4,\$REG0
3809	023350	001174	001166	001164		
3810	023356	001172	001162			
3811	023362	000000				000000
3812						
3813						
3814	023364	052115	020105	040527	EM32:	.ASCIZ "MTE WAS NOT SET BY AN ILLEGAL MARK TRACK CODE"
3815	023372	020123	047516	020124		
3816	023400	042523	020124	054502		
3817	023406	040440	020116	046111		
3818	023414	042514	040507	020114		
3819	023422	040515	045522	052040		
3820	023430	040522	045503	041440		
3821	023436	042117	000105			
3822	023442	020040	041520	020040	EH32:	.ASCIZ " PC SP PS TEST# TCCM TCST"
3823	023450	020040	020040	050123		
3824	023456	020040	020040	020040		
3825	023464	051520	020040	020040		
3826	023472	052040	051505	021524		
3827	023500	020040	052040	041503		
3828	023506	020115	020040	052040		
3829	023514	051503	000124			
3830					.EVEN	
3831	023520	001116	001176	001200	ET32:	\$ERRPC,\$REG6,\$REG7,\$REG5,\$REG2,\$REG1
3832	023526	001174	001166	001164		
3833	023534	000000				000000
3834						
3835						
3836	023536	052115	020105	042523	EM33:	.ASCIZ "MTE SETTING FAILED TO SET THE 'ERROR' BIT"

3837	023544	052124	047111	020107
3838	023552	040506	046111	042105
3839	023560	052040	020117	042523
3840	023566	020124	044124	020105
3841	023574	042447	051122	051117
3842	023602	020047	044502	000124
3843	023610	020040	041520	020040
3844	023616	020040	020040	050123
3845	023624	020040	020040	020040
3846	023632	051520	050040	020040
3847	023640	052040	051505	021524
3848	023646	020040	052040	041503
3849	023654	020115	020040	052040
3850	023662	051503	000124	
3851				
3852	023666	001116	001176	001200
3853	023674	001174	001166	001164
3854	023702	000000		
3855				
3856				
3857	023704	047105	055104	041040
3858	023712	052111	042040	042111
3859	023720	047040	052117	051440
3860	023726	052105	053440	042510
3861	023734	020116	047105	055104
3862	023742	046440	051101	020113
3863	023750	042504	042524	052103
3864	023756	042105	000	
3865	023761	040	050040	020103
3866	023766	020040	020040	051440
3867	023774	020120	020040	020040
3868	024002	050040	020123	020040
3869	024010	020040	042524	052123
3870	024016	020043	020040	041524
3871	024024	046503	020040	020040
3872	024032	041524	052123	000
3873		024040		
3874	024040	001116	001176	001200
3875	024046	001174	001166	001164
3876	024054	000000		
3877				
3878				
3879	024056	040504	040524	052040
3880	024064	040522	051516	042506
3881	024072	042522	020104	047111
3882	024100	047503	042522	052103
3883	024106	054514	000	
3884	024111	040	050040	020103
3885	024116	020040	020040	020040
3886	024124	050123	020040	020040
3887	024132	020040	051520	020040
3888	024140	020040	042524	052123
3889	024146	020043	020040	052040
3890	024154	041503	020115	020040
3891	024162	052040	051503	020124
3892	024170	042040	052101	020101

EH33: .ASCIZ " PC SP PS TEST# TCCM TCST"

```

.EVEN
ET33:  $ERRPC,$REG6,$REG7,$REG5,$REG2,$REG1
      000000

```

EM34: .ASCIZ "ENDZ BIT DID NOT SET WHEN ENDZ MARK DETECTED"

EH34: .ASCIZ " PC SP PS TEST# TCCM TCST"

```

.EVEN
ET34:  $ERRPC,$REG6,$REG7,$REG5,$REG2,$REG1
      000000

```

EM35: .ASCIZ "DATA TRANSFERED INCORECTLY"

EH35: .ASCIZ " PC SP PS TEST# TCCM TCST DATA S/B DATA WAS"

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TRAP TABLE

3893	024176	027523	020102	040504	
3894	024204	040524	053440	051501	
3895	024212	000			
3896		024214			.EVEN
3897	024214	001116	001176	001200	ET35: SERRPC, \$REG6, \$REG7, \$REG5, \$REG2, \$REG1, CRBUF, CRBUFA
3898	024222	001174	001166	001164	
3899	024230	001270	001272		
3900	024234	040515	045522	052040	EM36: .ASCIZ "MARK TRACK CODE 55 WAS MISTAKEN FOR END ZONE"
3901	024242	040522	045503	041440	
3902	024250	042117	020105	032465	
3903	024256	053440	051501	046440	
3904	024264	051511	040524	042513	
3905	024272	020116	047506	020122	
3906	024300	047105	020104	047532	
3907	024306	042516	000		
3908	024311	040	050040	020103	EM36: .ASCIZ " PC SP PS TEST# TCCM TCST"
3909	024316	020040	020040	051440	
3910	024324	020120	020040	020040	
3911	024332	020040	020123	020040	
3912	024340	020040	042524	052123	
3913	024346	020043	020040	041524	
3914	024354	046503	020040	020040	
3915	024362	041524	052123	000	
3916		024370			.EVEN
3917	024370	001116	001176	001200	ET36: SERRPC, \$REG6, \$REG7, \$REG5, \$REG2, \$REG1
3918	024376	001174	001166	001164	
3919	024404	000000			000000
3920					
3921					
3922	024406	051105	047522	000122	EM37: .ASCIZ "ERROR"
3923	024414	020040	041520	020040	EH37: .ASCIZ " PC SP PS TEST# TCCM TCST"
3924	024422	020040	020040	050123	
3925	024430	020040	020040	020040	
3926	024436	051520	020040	020040	
3927	024444	052040	051505	021524	
3928	024452	020040	052040	041503	
3929	024460	020115	020040	052040	
3930	024466	051503	000124		
3931					.EVEN
3932	024472	001116	001176	001200	ET37: SERRPC, \$REG6, \$REG7, \$REG5, \$REG2, \$REG1
3933	024500	001174	001166	001164	
3934	024506	000000			000000
3935					
3936					
3937	024510	042522	042101	020131	EM40: .ASCIZ "READY BIT DID NOT SET"
3938	024516	044502	020124	044504	
3939	024524	020104	047516	020124	
3940	024532	042523	000124		
3941	024536	020040	041520	020040	EM40: .ASCIZ " PC SP PS TEST# TCCM TCST"
3942	024544	020040	020040	050123	
3943	024552	020040	020040	020040	
3944	024560	051520	020040	020040	
3945	024566	052040	051505	021524	
3946	024574	020040	052040	041503	
3947	024602	020115	020040	052040	
3948	024610	051503	000124		

MAINDEC-11-07TC8-D TC11 TEST #2 MACY11 27(1006) 18-FEB-77 11:33 PAGE 73
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3949					.EVEN	
3950	024614	001116	001176	001200	ET40:	\$ERRPC,\$REG6,\$REG7,\$REG5,\$REG2,\$REG1
3951	024622	001174	001166	001164		
3952	024630	000000				000000
3953						
3954						
3955	024632	044124	020105	042447	EM41:	.ASCIZ "THE 'ERROR' BIT SHOULD NOT HAVE SET"
3956	024640	051122	051117	020047		
3957	024646	044502	020124	044123		
3958	024654	052517	042114	047040		
3959	024662	052117	044040	053101		
3960	024670	020105	042523	000124		
3961	024676	020040	041520	020040	EH41:	.ASCIZ " PC SP PS TEST# TCCM TCST"
3962	024704	020040	020040	050123		
3963	024712	020040	020040	020040		
3964	024720	051520	020040	020040		
3965	024726	052040	051505	021524		
3966	024734	020040	052040	041503		
3967	024742	020115	020040	052040		
3968	024750	051503	000124			
3969					.EVEN	
3970	024754	001116	001176	001200	ET41:	\$ERRPC,\$REG6,\$REG7,\$REG5,\$REG2,\$REG1
3971	024762	001174	001166	001164		
3972	024770	000000				000000
3973						
3974						
3975	024772	042522	042101	020131	EM42:	.ASCIZ "READY BIT SHOULD NOT HAVE SET"
3976	025000	044502	020124	044123		
3977	025006	052517	042114	047040		
3978	025014	052117	044040	053101		
3979	025022	020105	042523	000124		
3980	025030	020040	041520	020040	EH42:	.ASCIZ " PC SP PS TEST# TCCM TCST"
3981	025036	020040	020040	050123		
3982	025044	020040	020040	020040		
3983	025052	051520	020040	020040		
3984	025060	052040	051505	021524		
3985	025066	020040	052040	041503		
3986	025074	020115	020040	052040		
3987	025102	051503	000124			
3988					.EVEN	
3989	025106	001116	001176	001200	ET42:	\$ERRPC,\$REG6,\$REG7,\$REG5,\$REG2,\$REG1
3990	025114	001174	001166	001164		
3991	025122	000000				000000
3992						
3993						
3994	025124	047527	042122	052040	EM43:	.ASCIZ "WORD TRANSFERED INCORRECTLY TO CORE"
3995	025132	040522	051516	042506		
3996	025140	042522	020104	047111		
3997	025146	047503	051122	041505		
3998	025154	046124	020131	047524		
3999	025162	041440	051117	000105		
4000	025170	020040	041520	020040	EH43:	.ASCIZ " PC SP PS TEST# TCCM TCST RBUF RBUF S/B"
4001	025176	020040	020040	050123		
4002	025204	020040	020040	020040		
4003	025212	051520	020040	020040		
4004	025220	052040	051505	021524		

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TRAP TABLE

4005	025226	020040	052040	041503
4006	025234	020115	020040	052040
4007	025242	051503	020124	020040
4008	025250	051040	052502	020106
4009	025256	020040	051040	052502
4010	025264	020106	027523	000102
4011				
4012	025272	001116	001176	001200
4013	025300	001174	001166	001164
4014	025306	036306	001162	
4015	025312	000000		
4016				
4017				
4018	025314	047527	042122	041440
4019	025322	052517	052116	044440
4020	025330	041516	042522	042515
4021	025336	052116	042105	044440
4022	025344	050115	047522	042520
4023	025352	046122	000131	
4024	025356	020040	041520	020040
4025	025364	020040	020040	050123
4026	025372	020040	020040	020040
4027	025400	051520	020040	020040
4028	025406	052040	051505	021524
4029	025414	020040	052040	041503
4030	025422	020115	020040	052040
4031	025430	051503	020124	020040
4032	025436	052040	053503	020103
4033	025444	020040	041524	041527
4034	025452	051440	041057	000
4035		025460		
4036	025460	001116	001176	001200
4037	025466	001174	001166	001164
4038	025474	001172	001162	
4039	025500	000000		
4040				
4041				
4042	025502	041524	040502	044440
4043	025510	041516	042522	042515
4044	025516	052116	042105	044440
4045	025524	050115	047522	042520
4046	025532	046122	000131	
4047	025536	020040	041520	020040
4048	025544	020040	020040	050123
4049	025552	020040	020040	020040
4050	025560	051520	020040	020040
4051	025566	052040	051505	021524
4052	025574	020040	052040	041503
4053	025602	020115	020040	052040
4054	025610	051503	020124	020040
4055	025616	052040	041103	020101
4056	025624	020040	041524	040502
4057	025632	051440	041057	000
4058		025640		
4059	025640	001116	001176	001200
4060	025646	001174	001166	001164

.EVEN

ET43:

\$ERRPC, \$REG6, \$REG7, \$REG5, \$REG2, \$REG1, RBUF, \$REG0

000000

EM44:

.ASCIZ "WORD COUNT INCREMENTED IMPROPERLY"

EM44:

.ASCIZ " PC SP PS TEST# TCCM TCST TCWC TCWC S/B"

.EVEN

ET44:

\$ERRPC, \$REG6, \$REG7, \$REG5, \$REG2, \$REG1, \$REG4, \$REG0

000000

EM45:

.ASCIZ "TCBA INCREMENTED IMPROPERLY"

EM45:

.ASCIZ " PC SP PS TEST# TCCM TCST TCBA TCBA S/B"

.EVEN

ET45:

\$ERRPC, \$REG6, \$REG7, \$REG5, \$REG2, \$REG1, \$REG4, RBUF+2

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MAINDEC-11-DZTCB-D TC11 TEST #2 MACY11 27(1006) 18-FEB-77 11:33 PAGE 75
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4061	025654	001172	036310							
4062	025660	000000		000000						
4063										
4064										
4065	025662	040520	044522	054524	EM46:	.ASCIZ	"PARITY ERROR"			
4066	025670	042440	051122	051117						
4067	025676	000								
4068	025677	040	050040	020103	EM46:	.ASCIZ	" PC SP PS TEST# TCCM TCST"			
4069	025704	020040	020040	051440						
4070	025712	020120	020040	020040						
4071	025720	050040	020123	020040						
4072	025726	020040	042524	052123						
4073	025734	020043	020040	041524						
4074	025742	046503	020040	020040						
4075	025750	041524	052123	000						
4076		025756			.EVEN					
4077	025756	001116	001176	001200	ET46:	\$ERRPC, \$REG6, \$REG7, \$REG5, \$REG2, \$REG1				
4078	025764	001174	001166	001164						
4079	025772	000000			000000					
4080										
4081										
4082	025774	042522	042101	020131	EM47:	.ASCIZ	"READY DID NOT SET AFTER READING WAS COMPLETED"			
4083	026002	044504	020104	047516						
4084	026010	020124	042523	020124						
4085	026016	043101	042524	020122						
4086	026024	042522	042101	047111						
4087	026032	020107	040527	020123						
4088	026040	047503	050115	042514						
4089	026046	042524	000104							
4090	026052	020040	041520	020040	EM47:	.ASCIZ	" PC SP PS TEST# TCCM TCST"			
4091	026060	020040	020040	050123						
4092	026066	020040	020040	020040						
4093	026074	051520	020040	020040						
4094	026102	052040	051505	021524						
4095	026110	020040	052040	041503						
4096	026116	020115	020040	052040						
4097	026124	051503	000124							
4098					.EVEN					
4099	026130	001116	001176	001200	ET47:	\$ERRPC, \$REG6, \$REG7, \$REG5, \$REG2, \$REG1				
4100	026136	001174	001166	001164						
4101	026144	000000			000000					
4102										
4103										
4104	026146	051124	047101	043123	EM50:	.ASCIZ	"TRANSFERED TOO MANY WORDS"			
4105	026154	051105	042105	052040						
4106	026162	047517	046440	047101						
4107	026170	020131	047527	042122						
4108	026176	000123								
4109	026200	020040	041520	020040	EM50:	.ASCIZ	" PC SP PS TEST# TCCM TCST RBUF+2"			
4110	026206	020040	020040	050123						
4111	026214	020040	020040	020040						
4112	026222	051520	020040	020040						
4113	026230	052040	051505	021524						
4114	026236	020040	052040	041503						
4115	026244	020115	020040	052040						
4116	026252	051503	020124	020040						

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TRAP TABLE

4117	026260	051040	052502	025506	
4118	026266	000062			
4119					.EVEN
4120	026270	001116	001176	001200	ET50: \$ERRPC, \$REG6, \$REG7, \$REG5, \$REG2, \$REG1, RBUF+2
4121	026276	001174	001166	001164	
4122	026304	036310			
4123	026306	000000			000000
4124					
4125					
4126	026310	041524	040502	041440	EMS1: .ASCIZ "TCBA CONTAINS AN INCORRECT ADDRESS"
4127	026316	047117	040524	047111	
4128	026324	020123	047101	044440	
4129	026332	041516	051117	042522	
4130	026340	052103	040440	042104	
4131	026346	042522	051523	000	
4132	026353	040	050040	020103	EMS1: .ASCIZ " PC SP PS TEST# TCCM TCST TCBA TCBA S/B"
4133	026360	020040	020040	051440	
4134	026366	020120	020040	020040	
4135	026374	050040	020123	020040	
4136	026402	020040	042524	052123	
4137	026410	020043	020040	041524	
4138	026416	046503	020040	020040	
4139	026424	041524	052123	020040	
4140	026432	020040	041524	040502	
4141	026440	020040	052040	041103	
4142	026446	020101	027523	000102	
4143					.EVEN
4144	026454	001116	001176	001200	ET51: \$ERRPC, \$REG6, \$REG7, \$REG5, \$REG2, \$REG1, \$REG3, RBUF+512
4145	026462	001174	001166	001164	
4146	026470	001170	037020		
4147	026474	000000			000000
4148					
4149					
4150	026476	040520	051122	052111	EMS2: .ASCIZ "PARRITY ERROR WAS NOT DETECTED"
4151	026504	020131	051105	047522	
4152	026512	020122	040527	020123	
4153	026520	047516	020124	042504	
4154	026526	042524	052103	042105	
4155	026534	000			
4156	026535	040	050040	020103	EMS2: .ASCIZ " PC SP PS TEST# TCCM TCST TCWC"
4157	026542	020040	020040	051440	
4158	026550	020120	020040	020040	
4159	026556	050040	020123	020040	
4160	026564	020040	042524	052123	
4161	026572	020043	020040	041524	
4162	026600	046503	020040	020040	
4163	026606	041524	052123	020040	
4164	026614	020040	041524	041527	
4165	026622	000			
4166		026624			.EVEN
4167	026624	001116	001176	001200	ET52: \$ERRPC, \$REG6, \$REG7, \$REG5, \$REG2, \$REG1, \$REG0
4168	026632	001174	001166	001164	
4169	026640	001162			
4170	026642	000000			000000
4171					
4172					

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TRAP TABLE

4173	026644	040520	044522	054524	EM53:	.ASCIZ "PARITY ERROR DID NOT SET THE 'ERROR' BIT"						
4174	026652	042440	051122	051117								
4175	026660	042040	042111	047040								
4176	026666	052117	051440	052105								
4177	026674	052040	042510	023440								
4178	026702	051105	047522	023522								
4179	026710	041040	052111	000								
4180	026715	040	050040	020103	EM53:	.ASCIZ " PC SP PS TEST# TCCM TCST TCMC"						
4181	026722	020040	020040	051440								
4182	026730	020120	020040	020040								
4183	026736	050040	020123	020040								
4184	026744	020040	042524	052123								
4185	026752	020043	020040	041524								
4186	026760	046503	020040	020040								
4187	026766	041524	052123	020040								
4188	026774	020040	041524	041527								
4189	027002	000										
4190		027004			EVEN							
4191	027004	001116	001176	001200	ET53:	SERAPC, \$REG6, \$REG7, \$REG5, \$REG2, \$REG1, \$REG0						
4192	027012	001174	001166	001164								
4193	027020	001162										
4194	027022	000000				000000						
4195												
4196												
4197	027024	040520	044522	054524	EM54:	.ASCIZ "PARITY ERROR BIT WILL NOT CLEAR"						
4198	027032	042440	051122	051117								
4199	027040	041040	052111	053440								
4200	027046	046111	020114	047516								
4201	027054	020124	046103	040505								
4202	027062	000122										
4203	027064	020040	041520	020040	EM54:	.ASCIZ " PC SP PS TEST# TCCM TCST TCMC"						
4204	027072	020040	020040	050123								
4205	027100	020040	020040	020040								
4206	027106	051520	020040	020040								
4207	027114	052040	051505	021524								
4208	027122	020040	052040	041503								
4209	027130	020115	020040	052040								
4210	027136	051503	020124	020040								
4211	027144	052040	053503	000103								
4212					EVEN							
4213	027152	001116	001176	001200	ET54:	SERAPC, \$REG6, \$REG7, \$REG5, \$REG2, \$REG1, \$REG0						
4214	027160	001174	001166	001164								
4215	027166	001162										
4216	027170	000000				000000						
4217												
4218												
4219	027172	046102	041517	020113	EM55:	.ASCIZ "BLOCK MISS SHOULD NOT HAVE SET"						
4220	027200	044515	051523	051440								
4221	027206	047110	046125	020104								
4222	027214	047516	020124	040510								
4223	027222	042526	051440	052105								
4224	027230	000										
4225	027231	040	050040	020103	EM55:	.ASCIZ " PC SP PS TEST# TCCM TCST TCMC"						
4226	027236	020040	020040	051440								
4227	027244	020120	020040	020040								
4228	027252	050040	020123	020040								

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TRAP TABLE

4229	027260	020040	042524	052123
4230	027266	041043	020040	041524
4231	027274	046503	041040	020040
4232	027302	041524	052123	020040
4233	027310	020040	041524	041527
4234	027316	000		
4235		027320		
4236	027320	001116	001176	001200
4237	027336	001174	001166	001164
4238	027334	001162		
4239	027336	000000		
4240				
4241				
4242	027340	042122	052101	020101
4243	027346	040527	020123	051511
4244	027354	051523	042105	041040
4245	027362	052125	041040	047514
4246	027370	045503	046440	051511
4247	027376	020123	040506	046111
4248	027404	042105	052040	020117
4249	027412	042523	000124	
4250	027416	021040	041520	020040
4251	027424	021040	020040	050123
4252	027432	020040	020040	020040
4253	027440	051520	020040	020040
4254	027446	052040	051505	021524
4255	027454	020040	052040	041503
4256	027462	020115	020040	052040
4257	027470	051503	020124	020040
4258	027476	052040	053503	000103
4259				
4260	027504	001116	001176	001200
4261	027512	001174	001166	001164
4262	027520	001162		
4263	027522	000000		
4264				
4265				
4266	027524	046102	041517	020113
4267	027532	044515	051523	051440
4268	027540	052105	044524	043516
4269	027546	042040	042111	047040
4270	027554	052117	051440	052105
4271	027562	052040	042510	023440
4272	027570	051105	047522	023522
4273	027576	041040	052111	000
4274	027603	040	050040	020103
4275	027610	020040	020040	051440
4276	027616	020120	020040	020040
4277	027624	050040	020123	020040
4278	027632	020040	042524	052123
4279	027640	020043	020040	041524
4280	027646	046503	020040	020040
4281	027654	041524	052123	020040
4282	027662	020040	041524	041527
4283	027670	000		
4284		027672		

.EVEN

ET55: \$ERRPC, \$REG6, \$REG7, \$REG5, \$REG2, \$REG1, \$REG0

000000

EM56:

.ASCIZ "RODATA WAS ISSUED BUT BLOCK MISS FAILED TO SET"

EM56:

.ASCIZ " PC SP PS TEST# TCCM TCST TCWC"

.EVEN

ET56: \$ERRPC, \$REG6, \$REG7, \$REG5, \$REG2, \$REG1, \$REG0

000000

EM57:

.ASCIZ "BLOCK MISS SETTING DID NOT SET THE 'ERROR' BIT"

EM57:

.ASCIZ " PC SP PS TEST# TCCM TCST TCWC"

.EVEN

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TRAP TABLE

4285	027672	001116	001176	001200	ET57:	\$ERRPC, \$REG6, \$REG7, \$REG5, \$REG2, \$REG1, \$REG0
4286	027700	001174	001166	001164		
4287	027706	001162				
4288	027710	000000				000000
4289						
4290						
4291	027712	046103	040505	044522	EH60:	.ASCIZ "CLEARING ERROR BIT FAILED TO CLEAR BLOCK MISS"
4292	027720	043516	042440	051122		
4293	027726	051117	041040	052111		
4294	027734	043040	044501	042514		
4295	027742	020104	047524	041440		
4296	027750	042514	051101	041040		
4297	027756	047514	045503	046440		
4298	027764	051511	000123			
4299	027770	020040	041520	020040	EH60:	.ASCIZ " PC SP PS TEST# TCCM TCST TCWC"
4300	027776	020040	020040	050123		
4301	030004	020040	020040	020040		
4302	030012	051520	020040	020040		
4303	030020	052040	051505	021524		
4304	030026	020040	052040	041503		
4305	030034	020115	020040	052040		
4306	030042	051503	020124	020040		
4307	030050	052040	053503	000103		
4308					.EVEN	
4309	030056	001116	001176	001200	ET60:	\$ERRPC, \$REG6, \$REG7, \$REG5, \$REG2, \$REG1, \$REG0
4310	030064	001174	001166	001164		
4311	030072	001162				
4312	030074	000000				000000
4313						
4314						
4315	030076	047506	053522	051101	EH61:	.ASCIZ "FORWARD CHECKSUM WAS WRITTEN INCORRECTLY INTO CORE"
4316	030104	020104	044103	041505		
4317	030112	051513	046525	053440		
4318	030120	051501	053440	044522		
4319	030126	052124	047105	044440		
4320	030134	041516	051117	042522		
4321	030142	052103	054514	044440		
4322	030150	052116	020117	047503		
4323	030156	042522	000			
4324	030161	040	050040	020103	EH61:	.ASCIZ " PC SP PS TEST# TCCM TCST RBUF+514 TCWC"
4325	030166	020040	020040	051440		
4326	030174	020120	020040	020040		
4327	030202	050040	020123	020040		
4328	030210	020040	042524	052123		
4329	030216	020043	020040	041524		
4330	030224	046503	020040	020040		
4331	030232	041524	052123	020040		
4332	030240	051040	052502	025506		
4333	030246	030465	020064	041524		
4334	030254	041527	000			
4335		030260			.EVEN	
4336	030260	001116	001176	001200	ET61:	\$ERRPC, \$REG6, \$REG7, \$REG5, \$REG2, \$REG1, RBUF+514, \$REG0
4337	030266	001174	001166	001164		
4338	030274	037022	001162			
4339	030300	000000				000000
4340						

Address	Hex1	Hex2	Hex3	Hex4	Label	Text
4341	030302	041524	041527	053440	EM62:	.ASCIZ "TCWC WAS MODIFIED DURING RAL"
4342	030310	051501	046440	042117		
4343	030316	043111	042511	020104		
4344	030324	052504	051122	047111		
4345	030332	020107	040522	000114		
4346	030340	020040	041520	020040	EH62:	.ASCIZ " PC SP PS TEST# TCCM TCST TCWC"
4347	030346	020040	020040	050123		
4348	030354	020040	020040	020040		
4349	030362	051520	020040	020040		
4350	030370	052040	051505	021524		
4351	030376	020040	052040	041503		
4352	030404	020115	020040	052040		
4353	030412	051503	020124	020040		
4354	030420	052040	053503	000103		
4355					.EVEN	
4356	030426	001116	001176	001200	ET62:	\$ERRPC,\$REG6,\$REG7,\$REG5,\$REG2,\$REG1,TCWC
4357	030434	001174	001166	001164		
4358	030442	001242				
4359	030444	000000				000000
4360						
4361						
4362						
4363	030446	041524	040502	053440	EM63:	.ASCIZ "TCBA WAS MODIFIED DURING RAL"
4364	030454	051501	046440	042117		
4365	030462	043111	042511	020104		
4366	030470	052504	051122	047111		
4367	030476	020107	040522	000114		
4368	030504	020040	041520	020040	EH63:	.ASCIZ " PC SP PS TEST# TCCM TCST TCBA TCBA S/B"
4369	030512	020040	020040	050123		
4370	030520	020040	020040	020040		
4371	030526	051520	020040	020040		
4372	030534	052040	051505	021524		
4373	030542	020040	052040	041503		
4374	030550	020115	020040	052040		
4375	030556	051503	020124	020040		
4376	030564	052040	041103	020101		
4377	030572	020040	052040	041103		
4378	030600	020101	027523	000102		
4379					.EVEN	
4380	030606	001116	001176	001200	ET63:	\$ERRPC,\$REG6,\$REG7,\$REG5,\$REG2,\$REG1,\$REG3
4381	030614	001174	001166	001164		
4382	030622	001170				
4383	030624	000000				000000
4384						
4385						
4386	030626	040504	040524	046440	EM64:	.ASCIZ "DATA MISS DID NOT SET"
4387	030634	051511	020123	044504		
4388	030642	020104	047516	020124		
4389	030650	042523	000124			
4390	030654	020040	041520	020040	EH64:	.ASCIZ " PC SP PS TEST# TCCM TCST TCWC"
4391	030662	020040	020040	050123		
4392	030670	020040	020040	020040		
4393	030676	051520	020040	020040		
4394	030704	052040	051505	021524		
4395	030712	020040	052040	041503		
4396	030720	020115	020040	052040		

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4397	030726	051503	020124	020040	
4398	030734	052040	053503	000103	
4399					.EVEN
4400	030742	001116	001176	001200	ET64: \$ERRPC, \$REG6, \$REG7, \$REG5, \$REG2, \$REG1, \$REG0
4401	030750	001174	001166	001164	
4402	030756	001162			
4403	030760	000000			000000
4404					
4405					
4406	030762	040504	040524	046440	EM65: .ASCIZ "DATA MISS SETTING DID NOT CAUSE THE 'ERROR' BIT TO SET"
4407	030770	051511	020123	042523	
4408	030776	052124	047111	020107	
4409	031004	044504	020104	047516	
4410	031012	020124	040503	051525	
4411	031020	020105	044124	020105	
4412	031026	042447	051122	051117	
4413	031034	020047	044502	020124	
4414	031042	041524	051440	052105	
4415	031050	000			
4416	031051	040	050040	020103	EM65: .ASCIZ " PC SP PS TEST# TCCM TCST"
4417	031056	020040	020040	051440	
4418	031064	020120	020040	020040	
4419	031072	050040	020123	020040	
4420	031100	020040	042524	052123	
4421	031106	020043	020040	041524	
4422	031114	046503	020040	020040	
4423	031122	041524	052123	000	
4424		031130			.EVEN
4425	031130	001116	001176	001200	ET65: \$ERRPC, \$REG6, \$REG7, \$REG5, \$REG2, \$REG1
4426	031136	001174	001166	001164	
4427	031144	000000			000000
4428					
4429					
4430	031146	046103	040505	044522	EM66: .ASCIZ "CLEARING THE 'ERROR' BIT DID NOT CAUSE DATA MISS TO BE CLEARED"
4431	031154	043516	052040	042510	
4432	031162	023440	051105	047522	
4433	031170	023527	041040	052111	
4434	031176	042040	042111	047040	
4435	031204	052117	041440	052501	
4436	031212	042523	042040	052101	
4437	031220	020101	044515	051523	
4438	031226	052040	020117	042502	
4439	031234	041440	042514	051101	
4440	031242	042105	000		
4441	031245	040	050040	020103	EM66: .ASCIZ " PC SP PS TEST# TCCM TCST"
4442	031252	020040	020040	051440	
4443	031260	020120	020040	020040	
4444	031266	050040	020123	020040	
4445	031274	020040	042524	052123	
4446	031302	020043	020040	041524	
4447	031310	046503	020040	020040	
4448	031316	041524	052123	000	
4449		031324			.EVEN
4450	031324	001116	001176	001200	ET66: \$ERRPC, \$REG6, \$REG7, \$REG5, \$REG2, \$REG1
4451	031332	001174	001166	001164	
4452	031340	000000			000000

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Address	Hex Data	Hex Data	Hex Data	Hex Data	Label	Text
4505	031342	042522	042101	020131	EM67:	.ASCIZ "READY BIT WAS NOT SET AFTER THE DATA WAS WRITTEN"
4506	031350	044502	020124	040527		
4507	031356	020123	047516	020124		
4508	031364	042523	020124	043101		
4509	031372	042524	020122	044124		
4510	031400	020105	040504	040524		
4511	031406	053440	051501	053440		
4512	031414	044522	052124	047105		
4513	031422	000				
4514	031423	040	050040	020103	EH67:	.ASCIZ " PC SP PS TEST# TCCM TCST"
4515	031430	020040	020040	051440		
4516	031436	020120	020040	020040		
4517	031444	050040	020123	020040		
4518	031452	020040	042524	052123		
4519	031460	020043	020040	041524		
4520	031466	046503	020040	020040		
4521	031474	041524	052123	000		
4522		031502			.EVEN	
4523	031502	001116	001176	001200	ET67:	\$ERRPC,\$REG6,\$REG7,\$REG5,\$REG2,\$REG1
4524	031510	001174	001166	001164		
4525	031516	000000				000000
4526						
4527						
4528	031520	044124	020105	042522	EM70:	.ASCIZ "THE REVERSE CHECKSUM WAS WRITTEN INCORRECTLY"
4529	031526	042526	051522	020105		
4530	031534	044103	041505	051513		
4531	031542	046523	053440	051501		
4532	031550	053440	044522	052124		
4533	031556	047105	044440	041516		
4534	031564	051117	042522	052103		
4535	031572	054514	000			
4536	031575	040	050040	020103	EH70:	.ASCIZ " PC SP PS TEST# TCCM TCST RBUF+512 RBUF+512 S/B"
4537	031602	020040	020040	051440		
4538	031610	020120	020040	020040		
4539	031616	050040	020123	020040		
4540	031624	020040	042524	052123		
4541	031632	020043	020040	041524		
4542	031640	046503	020040	020040		
4543	031646	041524	052123	020040		
4544	031654	051040	052502	025506		
4545	031662	030465	020062	041122		
4546	031670	043125	032453	031061		
4547	031676	051440	041057	000		
4548		031704			.EVEN	
4549	031704	001116	001176	001200	ET70:	\$ERRPC,\$REG6,\$REG7,\$REG5,\$REG2,\$REG1,RBUF+512,\$REG0
4550	031712	001174	001166	001164		
4551	031720	037020	001162			
4552	031724	000000				000000
4553						
4554						
4555	031726	047527	042122	041440	EM71:	.ASCIZ "WORD COUNT MODIFIED DURING WRITE ALL"
4556	031734	052517	052116	046440		
4557	031742	042117	043111	042511		
4558	031750	020104	052504	051122		

MAINDEC-11-DZTCB-D TC11 TEST #2 MACY11 27(1006) 18-FEB-77 11:33 PAGE 83
DZTCB0.P11 18-FEB-77 10:59 TRAP TABLE

4509	031756	047111	020107	051127									
4510	031764	052111	020105	046101									
4511	031772	000114											
4512	031774	020040	041520	020040	EH71:	.ASCIZ	" PC	SP	PS	TEST#	TCCM	TCST	TCWC"
4513	032002	020040	020040	050123									
4514	032010	020040	020040	020040									
4515	032016	051520	020040	020040									
4516	032024	052040	051505	021524									
4517	032032	020040	052040	041503									
4518	032040	020115	020040	052040									
4519	032046	051503	020124	020040									
4520	032054	052040	053503	000103									
4521					.EVEN								
4522	032062	001116	001176	001200	ET71:	\$ERRPC,\$REG6,\$REG7,\$REG5,\$REG2,\$REG1,TCWC							
4523	032070	001174	001166	001164									
4524	032076	001242											
4525	032100	000000				000000							
4526													
4527													
4528	032102	041524	040502	046440	EM72:	.ASCIZ	"TCBA MODIFIED DURING WRITE ALL"						
4529	032110	042117	043111	042511									
4530	032116	020104	052504	051122									
4531	032124	047111	020107	051127									
4532	032132	052111	020105	046101									
4533	032140	000114											
4534	032142	020040	041520	020040	EH72:	.ASCIZ	" PC	SP	PS	TEST#	TCCM	TCST	TCBA"
4535	032150	020040	020040	050123									
4536	032156	020040	020040	020040									
4537	032164	051520	020040	020040									
4538	032172	052040	051505	021524									
4539	032200	020040	052040	041503									
4540	032206	020115	020040	052040									
4541	032214	051503	020124	020040									
4542	032222	052040	041103	000101									
4543					.EVEN								
4544	032230	001116	001176	001200	ET72:	\$ERRPC,\$REG6,\$REG7,\$REG5,\$REG2,\$REG1,\$REG3							
4545	032236	001174	001166	001164									
4546	032244	001170											
4547	032246	000000				000000							
4548													
4549													
4550	032250	051523	020124	044504	EM73:	.ASCIZ	"SST DID NOT CAUSE A SELECT ERROR"						
4551	032256	020104	047516	020124									
4552	032264	040503	051525	020105									
4553	032272	020101	042523	042514</									

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MAINDEC-11-DZTCB-D TC11 TEST #2 MACY11 27(1006) 18-FEB-77 11:33 PAGE 84
 DZTCB0.P11 18-FEB-77 10:59 TRAP TABLE

4565	032370	001116	001176	001200	ET73:	\$ERRPC,\$REG6,\$REG7,\$REG5,\$REG2,\$REG1
4566	032376	001174	001166	001164		
4567	032404	000000				000000
4568						
4569	032406	051124	050101	042520	EM74:	.ASCIZ "TRAPPED TO LOC 4 ATTEMPTING TO ACCESS TCCM"
4570	032414	020104	047524	046040		
4571	032422	041517	032040	040440		
4572	032430	052124	046505	052120		
4573	032436	047111	020107	047524		
4574	032444	040440	041503	051505		
4575	032452	020123	041524	046503		
4576	032460	000				
4577	032461	040	050040	020103	EH74:	.ASCIZ " PC SP PS TEST#"
4578	032466	020040	020040	051440		
4579	032474	020120	020040	020040		
4580	032502	050040	020123	020040		
4581	032510	020040	042524	052123		
4582	032516	000043				
4583					.EVEN	
4584	032520	001116	001176	001200	ET74:	\$ERRPC,\$REG6,\$REG7,\$REG5
4585	032526	001174				
4586	032530	000000				000000
4587	032532	051124	050101	042520	EM75:	.ASCIZ "TRAPPED TO LOC 4 ATTEMPTING TO ACCESS TCST"
4588	032540	020104	047524	046040		
4589	032546	041517	032040	040440		
4590	032554	052124	046505	052120		
4591	032562	047111	020107	047524		
4592	032570	040440	041503	051505		
4593	032576	020123	041524	052123		
4594	032604	000				
4595	032605	040	050040	020103	EH75:	.ASCIZ " PC SP PS TEST#"
4596	032612	020040	020040	051440		
4597	032620	020120	020040	020040		
4598	032626	050040	020123	020040		
4599	032634	020040	042524	052123		
4600	032642	000043				
4601					.EVEN	
4602	032644	001116	001176	001200	ET75:	\$ERRPC,\$REG6,\$REG7,\$REG5
4603	032652	001174				
4604	032654	000000				000000
4605	032656	051124	050101	042520	EM76:	.ASCIZ "TRAPPED TO LOC 4 ATTEMPTING TO ACCESS TCWC"
4606	032664	020104	047524	046040		
4607	032672	041517	032040	040440		
4608	032700	052124	046505	052120		
4609	032706	047111	020107	047524		
4610	032714	040440	041503	051505		
4611	032722	020123	041524	041527		
4612	032730	000				
4613	032731	040	050040	020103	EH76:	.ASCIZ " PC SP PS TEST#"
4614	032736	020040	020040	051440		
4615	032744	020120	020040	020040		
4616	032752	050040	020123	020040		
4617	032760	020040	042524	052123		
4618	032766	000043				
4619					.EVEN	
4620	032770	001116	001176	001200	ET76:	\$ERRPC,\$REG6,\$REG7,\$REG5

MAINDEC-11-02TC8-D TC11 TEST #2 MACY11 27(1006) 18-FEB-77 11:33 PAGE 85
 02TC8D.P11 18-FEB-77 10:59 TRAP TABLE

4621	032776	001174					
4622	033000	000000				000000	
4623	033002	051124	050101	042520	EM77:	.ASCIZ	"TRAPPED TO LOC 4 ATTEMPTING TO ACCESS TCBA"
4624	033010	020104	047524	046040			
4625	033016	041517	032040	040440			
4626	033024	052124	046505	052120			
4627	033032	047111	020107	047524			
4628	033040	040440	041503	051505			
4629	033046	020123	041524	040502			
4630	033054	000					
4631	033055	040	050040	020103	EH77:	.ASCIZ	" PC SP PS TEST#"
4632	033062	020040	020040	051440			
4633	033070	020120	020040	020040			
4634	033076	050040	020123	020040			
4635	033104	020040	042524	052123			
4636	033112	000043					
4637					.EVEN		
4638	033114	001116	001176	001200	ET77:	\$ERRPC,\$REG6,\$REG7,\$REG5	
4639	033122	001174					
4640	033124	000000				000000	
4641	033126				MTKC10:		
4642	033126					C10	V7,V2,V7,V2,V7,V2
4643	033126	034	010	074		.BYTE	0!V7,0!V2,I!V7,0!V2,0!V7,0!V2 ;MTK CODE 10.
4644	033131	010	034	010			
4645	033134				MTKER:		
4646	033134					EMTE	
4647	033134	040	040	040		.BYTE	I,I,I,0,0,I
4648	033137	000	000	040			
4649	033142				MTKEND:		
4650	033142					C22	
4651	033142	000	040	000		.BYTE	0,I,0,0,I,0 ;MTK CODE 22. FWD END ZONE.
4652	033145	000	040	000			
4653	033150				MTK55:		
4654	033150					C55	
4655	033150	040	000	040		.BYTE	I,0,I,I,0,I ;MTK CODE 55. REV END ZONE MARK.
4656	033153	040	000	040			
4657	033156				MTKSP:		
4658	033156					C10	V0,V6,V6,V6,V6,V6
4659	033156	000	030	070		.BYTE	0!V0,0!V6,I!V6,0!V6,0!V6,0!V6 ;MTK CODE 10.
4660	033161	030	030	030			
4661	033164				MTK7:		
4662	033164					C25	
4663	033164	000	040	000		.BYTE	0,I,0,I,0,I ;MTK CODE 25. EXTENSION MARK.
4664	033167	040	000	040			
4665	033172					C25	
4666	033172	000	040	000		.BYTE	0,I,0,I,0,I ;MTK CODE 25. EXTENSION MARK.
4667	033175	040	000	040			
4668	033200					C26	V0,V5,V2,V5,V2,V5
4669	033200	000	064	010		.BYTE	0!V0,I!V5,0!V2,I!V5,I!V2,0!V5 ;FWD BLOCK MARK.
4670	033203	064	050	024			
4671	033206					C32	V0,V5,V5,V5,V5,V5
4672	033206	000	064	064		.BYTE	0!V0,I!V5,I!V5,0!V5,I!V5,0!V5 ;REV GUARD.
4673	033211	024	064	024			
4674	033214				MTK5:		
4675	033214					C10	V0,V6,V6,V6,V6,V6
4676	033214	000	030	070		.BYTE	0!V0,0!V6,I!V6,0!V6,0!V6,0!V6 ;MTK CODE 10.

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MAINDEC-11-DZTCB-D TC11 TEST #2 MACY11 27(1006) 18-FEB-77 11:33 PAGE 86
 DZTCB0.P11 18-FEB-77 10:59 TRAP TABLE

4677	033217	030	030	030	MTK7A:		
4678	033222				C10	V0, V0, V0, V0, V0, V0	
4679	033222				.BYTE	0!V0, 0!V0, 1!V0, 0!V0, 0!V0, 0!V0	; MTK CODE 10.
4680	033222	000	000	040			
4681	033225	000	000	000	MTK7B:		
4682	033230				C10	V0, V5, V0, V5, V0, V5	
4683	033230				.BYTE	0!V0, 0!V5, 1!V0, 0!V5, 0!V0, 0!V5	; MTK CODE 10.
4684	033230	000	024	040			
4685	033233	024	000	024	MTKVAR:		
4686	033236				C10	V7, V2, V7, V2, V7, V2	
4687	033236				.BYTE	0!V7, 0!V2, 1!V7, 0!V2, 0!V7, 0!V2	; MTK CODE 10.
4688	033236	034	010	074			
4689	033241	010	034	010			
4690		000176			.REPT	126.	
4691					C70	V0, V5, V0, V5, V0, V5	
4692					C70	V7, V2, V7, V2, V7, V2	
4693					.ENOR		
4694	033244				C70	V0, V5, V0, V5, V0, V5	
4695	033244	040	064	040	.BYTE	1!V0, 1!V5, 1!V0, 0!V5, 0!V0, 0!V5	; MTK CODE 70. DATA MARK.
4696	033247	024	000	024			
4697	033252				C70	V7, V2, V7, V2, V7, V2	
4698	033252	074	050	074	.BYTE	1!V7, 1!V2, 1!V7, 0!V2, 0!V7, 0!V2	; MTK CODE 70. DATA MARK.
4699	033255	010	034	010			
4700	033260				C70	V0, V5, V0, V5, V0, V5	
4701	033260	040	064	040	.BYTE	1!V0, 1!V5, 1!V0, 0!V5, 0!V0, 0!V5	; MTK CODE 70. DATA MARK.
4702	033263	024	000	024			
4703	033266				C70	V7, V2, V7, V2, V7, V2	
4704	033266	074	050	074	.BYTE	1!V7, 1!V2, 1!V7, 0!V2, 0!V7, 0!V2	; MTK CODE 70. DATA MARK.
4705	033271	010	034	010			
4706	033274				C70	V0, V5, V0, V5, V0, V5	
4707	033274	040	064	040	.BYTE	1!V0, 1!V5, 1!V0, 0!V5, 0!V0, 0!V5	; MTK CODE 70. DATA MARK.
4708	033277	024	000	024			
4709	033302				C70	V7, V2, V7, V2, V7, V2	
4710	033302	074	050	074	.BYTE	1!V7, 1!V2, 1!V7, 0!V2, 0!V7, 0!V2	; MTK CODE 70. DATA MARK.
4711	033305	010	034	010			
4712	033310				C70	V0, V5, V0, V5, V0, V5	
4713	033310	040	064	040	.BYTE	1!V0, 1!V5, 1!V0, 0!V5, 0!V0, 0!V5	; MTK CODE 70. DATA MARK.
4714	033313	024	000	024			
4715	033316				C70	V7, V2, V7, V2, V7, V2	
4716	033316	074	050	074	.BYTE	1!V7, 1!V2, 1!V7, 0!V2, 0!V7, 0!V2	; MTK CODE 70. DATA MARK.
4717	033321	010	034	010			
4718	033324				C70	V0, V5, V0, V5, V0, V5	
4719	033324	040	064	040	.BYTE	1!V0, 1!V5, 1!V0, 0!V5, 0!V0, 0!V5	; MTK CODE 70. DATA MARK.
4720	033327	024	000	024			
4721	033332				C70	V7, V2, V7, V2, V7, V2	
4722	033332	074	050	074	.BYTE	1!V7, 1!V2, 1!V7, 0!V2, 0!V7, 0!V2	; MTK CODE 70. DATA MARK.
4723	033335	010	034	010			
4724	033340				C70	V0, V5, V0, V5, V0, V5	
4725	033340	040	064	040	.BYTE	1!V0, 1!V5, 1!V0, 0!V5, 0!V0, 0!V5	; MTK CODE 70. DATA MARK.
4726	033343	024	000	024			
4727	033346				C70	V7, V2, V7, V2, V7, V2	
4728	033346	074	050	074	.BYTE	1!V7, 1!V2, 1!V7, 0!V2, 0!V7, 0!V2	; MTK CODE 70. DATA MARK.
4729	033351	010	034	010			
4730	033354				C70	V0, V5, V0, V5, V0, V5	
4731	033354	040	064	040	.BYTE	1!V0, 1!V5, 1!V0, 0!V5, 0!V0, 0!V5	; MTK CODE 70. DATA MARK.
4732	033357	024	000	024			

4733	033362				C70	V7,V2,V7,V2,V7,V2	
4734	033363	074	050	074	.BYTE	I!V7,I!V2,I!V7,O!V2,O!V7,O!V2	;MTK CODE 70. DATA MARK.
4735	033365	010	034	010			
4736	033370				C70	V0,V5,V0,V5,V0,V5	
4737	033370	040	064	040	.BYTE	I!V0,I!V5,I!V0,O!V5,O!V0,O!V5	;MTK CODE 70. DATA MARK.
4738	033373	024	000	024			
4739	033376				C70	V7,V2,V7,V2,V7,V2	
4740	033376	074	050	074	.BYTE	I!V7,I!V2,I!V7,O!V2,O!V7,O!V2	;MTK CODE 70. DATA MARK.
4741	033401	010	034	010			
4742	033404				C70	V0,V5,V0,V5,V0,V5	
4743	033404	040	064	040	.BYTE	I!V0,I!V5,I!V0,O!V5,O!V0,O!V5	;MTK CODE 70. DATA MARK.
4744	033407	024	000	024			
4745	033412				C70	V7,V2,V7,V2,V7,V2	
4746	033412	074	050	074	.BYTE	I!V7,I!V2,I!V7,O!V2,O!V7,O!V2	;MTK CODE 70. DATA MARK.
4747	033415	010	034	010			
4748	033420				C70	V0,V5,V0,V5,V0,V5	
4749	033420	040	064	040	.BYTE	I!V0,I!V5,I!V0,O!V5,O!V0,O!V5	;MTK CODE 70. DATA MARK.
4750	033423	024	000	024			
4751	033426				C70	V7,V2,V7,V2,V7,V2	
4752	033426	074	050	074	.BYTE	I!V7,I!V2,I!V7,O!V2,O!V7,O!V2	;MTK CODE 70. DATA MARK.
4753	033431	010	034	010			
4754	033434				C70	V0,V5,V0,V5,V0,V5	
4755	033434	040	064	040	.BYTE	I!V0,I!V5,I!V0,O!V5,O!V0,O!V5	;MTK CODE 70. DATA MARK.
4756	033437	024	000	024			
4757	033442				C70	V7,V2,V7,V2,V7,V2	
4758	033442	074	050	074	.BYTE	I!V7,I!V2,I!V7,O!V2,O!V7,O!V2	;MTK CODE 70. DATA MARK.
4759	033445	010	034	010			
4760	033450				C70	V0,V5,V0,V5,V0,V5	
4761	033450	040	064	040	.BYTE	I!V0,I!V5,I!V0,O!V5,O!V0,O!V5	;MTK CODE 70. DATA MARK.
4762	033453	024	000	024			
4763	033456				C70	V7,V2,V7,V2,V7,V2	
4764	033456	074	050	074	.BYTE	I!V7,I!V2,I!V7,O!V2,O!V7,O!V2	;MTK CODE 70. DATA MARK.
4765	033461	010	034	010			
4766	033464				C70	V0,V5,V0,V5,V0,V5	
4767	033464	040	064	040	.BYTE	I!V0,I!V5,I!V0,O!V5,O!V0,O!V5	;MTK CODE 70. DATA MARK.
4768	033467	024	000	024			
4769	033472				C70	V7,V2,V7,V2,V7,V2	
4770	033472	074	050	074	.BYTE	I!V7,I!V2,I!V7,O!V2,O!V7,O!V2	;MTK CODE 70. DATA MARK.
4771	033475	010	034	010			
4772	033500				C70	V0,V5,V0,V5,V0,V5	
4773	033500	040	064	040	.BYTE	I!V0,I!V5,I!V0,O!V5,O!V0,O!V5	;MTK CODE 70. DATA MARK.
4774	033503	024	000	024			
4775	033506				C70	V7,V2,V7,V2,V7,V2	
4776	033506	074	050	074	.BYTE	I!V7,I!V2,I!V7,O!V2,O!V7,O!V2	;MTK CODE 70. DATA MARK.
4777	033511	010	034	010			
4778	033514				C70	V0,V5,V0,V5,V0,V5	
4779	033514	040	064	040	.BYTE	I!V0,I!V5,I!V0,O!V5,O!V0,O!V5	;MTK CODE 70. DATA MARK.
4780	033517	024	000	024			
4781	033522				C70	V7,V2,V7,V2,V7,V2	
4782	033522	074	050	074	.BYTE	I!V7,I!V2,I!V7,O!V2,O!V7,O!V2	;MTK CODE 70. DATA MARK.
4783	033525	010	034	010			
4784	033530				C70	V0,V5,V0,V5,V0,V5	
4785	033530	040	064	040	.BYTE	I!V0,I!V5,I!V0,O!V5,O!V0,O!V5	;MTK CODE 70. DATA MARK.
4786	033533	024	000	024			
4787	033536				C70	V7,V2,V7,V2,V7,V2	
4788	033536	074	050	074	.BYTE	I!V7,I!V2,I!V7,O!V2,O!V7,O!V2	;MTK CODE 70. DATA MARK.

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MAINDEC-11-DZTC8-D TC11 TEST #2 MACY11 27(1006) 18-FEB-77 11:33 PAGE 88
 DZTC80.P11 18-FEB-77 10:59 TRAP TABLE

4789	033541	010	034	010	C70	V0,V5,V0,V5,V0,V5	
4790	033544				.BYTE	I!V0,I!V5,I!V0,O!V5,O!V0,O!V5	;MTK CODE 70. DATA MARK.
4791	033544	040	064	040			
4792	033547	024	000	024			
4793	033552				C70	V7,V2,V7,V2,V7,V2	
4794	033552	074	050	074	.BYTE	I!V7,I!V2,I!V7,O!V2,O!V7,O!V2	;MTK CODE 70. DATA MARK.
4795	033555	010	034	010			
4796	033560				C70	V0,V5,V0,V5,V0,V5	
4797	033560	040	064	040	.BYTE	I!V0,I!V5,I!V0,O!V5,O!V0,O!V5	;MTK CODE 70. DATA MARK.
4798	033563	024	000	024			
4799	033566				C70	V7,V2,V7,V2,V7,V2	
4800	033566	074	050	074	.BYTE	I!V7,I!V2,I!V7,O!V2,O!V7,O!V2	;MTK CODE 70. DATA MARK.
4801	033571	010	034	010			
4802	033574				C70	V0,V5,V0,V5,V0,V5	
4803	033574	040	064	040	.BYTE	I!V0,I!V5,I!V0,O!V5,O!V0,O!V5	;MTK CODE 70. DATA MARK.
4804	033577	024	000	024			
4805	033602				C70	V7,V2,V7,V2,V7,V2	
4806	033602	074	050	074	.BYTE	I!V7,I!V2,I!V7,O!V2,O!V7,O!V2	;MTK CODE 70. DATA MARK.
4807	033605	010	034	010			
4808	033610				C70	V0,V5,V0,V5,V0,V5	
4809	033610	040	064	040	.BYTE	I!V0,I!V5,I!V0,O!V5,O!V0,O!V5	;MTK CODE 70. DATA MARK.
4810	033613	024	000	024			
4811	033616				C70	V7,V2,V7,V2,V7,V2	
4812	033616	074	050	074	.BYTE	I!V7,I!V2,I!V7,O!V2,O!V7,O!V2	;MTK CODE 70. DATA MARK.
4813	033621	010	034	010			
4814	033624				C70	V0,V5,V0,V5,V0,V5	
4815	033624	040	064	040	.BYTE	I!V0,I!V5,I!V0,O!V5,O!V0,O!V5	;MTK CODE 70. DATA MARK.
4816	033627	024	000	024			
4817	033632				C70	V7,V2,V7,V2,V7,V2	
4818	033632	074	050	074	.BYTE	I!V7,I!V2,I!V7,O!V2,O!V7,O!V2	;MTK CODE 70. DATA MARK.
4819	033635	010	034	010			
4820	033640				C70	V0,V5,V0,V5,V0,V5	
4821	033640	040	064	040	.BYTE	I!V0,I!V5,I!V0,O!V5,O!V0,O!V5	;MTK CODE 70. DATA MARK.
4822	033643	024	000	024			
4823	033646				C70	V7,V2,V7,V2,V7,V2	
4824	033646	074	050	074	.BYTE	I!V7,I!V2,I!V7,O!V2,O!V7,O!V2	;MTK CODE 70. DATA MARK.
4825	033651	010	034	010			
4826	033654				C70	V0,V5,V0,V5,V0,V5	
4827	033654	040	064	040	.BYTE	I!V0,I!V5,I!V0,O!V5,O!V0,O!V5	;MTK CODE 70. DATA MARK.
4828	033657	024	000	024			
4829	033662				C70	V7,V2,V7,V2,V7,V2	
4830	033662	074	050	074	.BYTE	I!V7,I!V2,I!V7,O!V2,O!V7,O!V2	;MTK CODE 70. DATA MARK.
4831	033665	010	034	010			
4832	033670				C70	V0,V5,V0,V5,V0,V5	
4833	033670	040	064	040	.BYTE	I!V0,I!V5,I!V0,O!V5,O!V0,O!V5	;MTK CODE 70. DATA MARK.
4834	033673	024	000	024			
4835	033676				C70	V7,V2,V7,V2,V7,V2	
4836	033676	074	050	074	.BYTE	I!V7,I!V2,I!V7,O!V2,O!V7,O!V2	;MTK CODE 70. DATA MARK.
4837	033701	010	034	010			
4838	033704				C70	V0,V5,V0,V5,V0,V5	
4839	033704	040	064	040	.BYTE	I!V0,I!V5,I!V0,O!V5,O!V0,O!V5	;MTK CODE 70. DATA MARK.
4840	033707	024	000	024			
4841	033712				C70	V7,V2,V7,V2,V7,V2	
4842	033712	074	050	074	.BYTE	I!V7,I!V2,I!V7,O!V2,O!V7,O!V2	;MTK CODE 70. DATA MARK.
4843	033715	010	034	010			
4844	033720				C70	V0,V5,V0,V5,V0,V5	

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DZTCB0.P11TC11 TEST #2
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TRAP TABLE

4845	033720	040	064	040	.BYTE	I!V0,I!V5,I!V0,0!V5,0!V0,0!V5	;MTK CODE 70. DATA MARK.
4846	033723	024	000	024			
4847	033726				C70	V7,V2,V7,V2,V7,V2	
4848	033726	074	050	074	.BYTE	I!V7,I!V2,I!V7,0!V2,0!V7,0!V2	;MTK CODE 70. DATA MARK.
4849	033731	010	034	010			
4850	033734				C70	V0,V5,V0,V5,V0,V5	
4851	033734	040	064	040	.BYTE	I!V0,I!V5,I!V0,0!V5,0!V0,0!V5	;MTK CODE 70. DATA MARK.
4852	033737	024	000	024			
4853	033742				C70	V7,V2,V7,V2,V7,V2	
4854	033742	074	050	074	.BYTE	I!V7,I!V2,I!V7,0!V2,0!V7,0!V2	;MTK CODE 70. DATA MARK.
4855	033745	010	034	010			
4856	033750				C70	V0,V5,V0,V5,V0,V5	
4857	033750	040	064	040	.BYTE	I!V0,I!V5,I!V0,0!V5,0!V0,0!V5	;MTK CODE 70. DATA MARK.
4858	033753	024	000	024			
4859	033756				C70	V7,V2,V7,V2,V7,V2	
4860	033756	074	050	074	.BYTE	I!V7,I!V2,I!V7,0!V2,0!V7,0!V2	;MTK CODE 70. DATA MARK.
4861	033761	010	034	010			
4862	033764				C70	V0,V5,V0,V5,V0,V5	
4863	033764	040	064	040	.BYTE	I!V0,I!V5,I!V0,0!V5,0!V0,0!V5	;MTK CODE 70. DATA MARK.
4864	033767	024	000	024			
4865	033772				C70	V7,V2,V7,V2,V7,V2	
4866	033772	074	050	074	.BYTE	I!V7,I!V2,I!V7,0!V2,0!V7,0!V2	;MTK CODE 70. DATA MARK.
4867	033775	010	034	010			
4868	034000				C70	V0,V5,V0,V5,V0,V5	
4869	034000	040	064	040	.BYTE	I!V0,I!V5,I!V0,0!V5,0!V0,0!V5	;MTK CODE 70. DATA MARK.
4870	034003	024	000	024			
4871	034006				C70	V7,V2,V7,V2,V7,V2	
4872	034006	074	050	074	.BYTE	I!V7,I!V2,I!V7,0!V2,0!V7,0!V2	;MTK CODE 70. DATA MARK.
4873	034011	010	034	010			
4874	034014				C70	V0,V5,V0,V5,V0,V5	
4875	034014	040	064	040	.BYTE	I!V0,I!V5,I!V0,0!V5,0!V0,0!V5	;MTK CODE 70. DATA MARK.
4876	034017	024	000	024			
4877	034022				C70	V7,V2,V7,V2,V7,V2	
4878	034022	074	050	074	.BYTE	I!V7,I!V2,I!V7,0!V2,0!V7,0!V2	;MTK CODE 70. DATA MARK.
4879	034025	010	034	010			
4880	034030				C70	V0,V5,V0,V5,V0,V5	
4881	034030	040	064	040	.BYTE	I!V0,I!V5,I!V0,0!V5,0!V0,0!V5	;MTK CODE 70. DATA MARK.
4882	034033	024	000	024			
4883	034036				C70	V7,V2,V7,V2,V7,V2	
4884	034036	074	050	074	.BYTE	I!V7,I!V2,I!V7,0!V2,0!V7,0!V2	;MTK CODE 70. DATA MARK.
4885	034041	010	034	010			
4886	034044				C70	V0,V5,V0,V5,V0,V5	
4887	034044	040	064	040	.BYTE	I!V0,I!V5,I!V0,0!V5,0!V0,0!V5	;MTK CODE 70. DATA MARK.
4888	034047	024	000	024			
4889	034052				C70	V7,V2,V7,V2,V7,V2	
4890	034052	074	050	074	.BYTE	I!V7,I!V2,I!V7,0!V2,0!V7,0!V2	;MTK CODE 70. DATA MARK.
4891	034055	010	034	010			
4892	034060				C70	V0,V5,V0,V5,V0,V5	
4893	034060	040	064	040	.BYTE	I!V0,I!V5,I!V0,0!V5,0!V0,0!V5	;MTK CODE 70. DATA MARK.
4894	034063	024	000	024			
4895	034066				C70	V7,V2,V7,V2,V7,V2	
4896	034066	074	050	074	.BYTE	I!V7,I!V2,I!V7,0!V2,0!V7,0!V2	;MTK CODE 70. DATA MARK.
4897	034071	010	034	010			
4898	034074				C70	V0,V5,V0,V5,V0,V5	
4899	034074	040	064	040	.BYTE	I!V0,I!V5,I!V0,0!V5,0!V0,0!V5	;MTK CODE 70. DATA MARK.
4900	034077	024	000	024			

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M3INDEC-11-DZTCB-D
DZTCB0.P11TC11 TEST #2
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TRAP TABLE

4901	034110	074	050	074	C70	V7,V2,V7,V2,V7,V2	
4902	034110	010	034	010	.BYTE	I!V7,I!V2,I!V7,0!V2,0!V7,0!V2	;MTK CODE 70. DATA MARK.
4903	034110						
4904	034110						
4905	034110	040	064	040	C70	V0,V5,V0,V5,V0,V5	
4906	034110	024	000	024	.BYTE	I!V0,I!V5,I!V0,0!V5,0!V0,0!V5	;MTK CODE 70. DATA MARK.
4907	034116						
4908	034116	074	050	074	C70	V7,V2,V7,V2,V7,V2	
4909	034121	010	034	010	.BYTE	I!V7,I!V2,I!V7,0!V2,0!V7,0!V2	;MTK CODE 70. DATA MARK.
4910	034122						
4911	034122	040	064	040	C70	V0,V5,V0,V5,V0,V5	
4912	034127	024	000	024	.BYTE	I!V0,I!V5,I!V0,0!V5,0!V0,0!V5	;MTK CODE 70. DATA MARK.
4913	034130						
4914	034130	074	050	074	C70	V7,V2,V7,V2,V7,V2	
4915	034135	010	034	010	.BYTE	I!V7,I!V2,I!V7,0!V2,0!V7,0!V2	;MTK CODE 70. DATA MARK.
4916	034140						
4917	034140	040	064	040	C70	V0,V5,V0,V5,V0,V5	
4918	034143	024	000	024	.BYTE	I!V0,I!V5,I!V0,0!V5,0!V0,0!V5	;MTK CODE 70. DATA MARK.
4919	034146						
4920	034146	074	050	074	C70	V7,V2,V7,V2,V7,V2	
4921	034151	010	034	010	.BYTE	I!V7,I!V2,I!V7,0!V2,0!V7,0!V2	;MTK CODE 70. DATA MARK.
4922	034154						
4923	034154	040	064	040	C70	V0,V5,V0,V5,V0,V5	
4924	034157	024	000	024	.BYTE	I!V0,I!V5,I!V0,0!V5,0!V0,0!V5	;MTK CODE 70. DATA MARK.
4925	034160						
4926	034160	074	050	074	C70	V7,V2,V7,V2,V7,V2	
4927	034165	010	034	010	.BYTE	I!V7,I!V2,I!V7,0!V2,0!V7,0!V2	;MTK CODE 70. DATA MARK.
4928	034170						
4929	034170	040	064	040	C70	V0,V5,V0,V5,V0,V5	
4930	034173	024	000	024	.BYTE	I!V0,I!V5,I!V0,0!V5,0!V0,0!V5	;MTK CODE 70. DATA MARK.
4931	034176						
4932	034176	074	050	074	C70	V7,V2,V7,V2,V7,V2	
4933	034201	010	034	010	.BYTE	I!V7,I!V2,I!V7,0!V2,0!V7,0!V2	;MTK CODE 70. DATA MARK.
4934	034204						
4935	034204	040	064	040	C70	V0,V5,V0,V5,V0,V5	
4936	034207	024	000	024	.BYTE	I!V0,I!V5,I!V0,0!V5,0!V0,0!V5	;MTK CODE 70. DATA MARK.
4937	034212						
4938	034212	074	050	074	C70	V7,V2,V7,V2,V7,V2	
4939	034215	010	034	010	.BYTE	I!V7,I!V2,I!V7,0!V2,0!V7,0!V2	;MTK CODE 70. DATA MARK.
4940	034220						
4941	034220	040	064	040	C70	V0,V5,V0,V5,V0,V5	
4942	034223	024	000	024	.BYTE	I!V0,I!V5,I!V0,0!V5,0!V0,0!V5	;MTK CODE 70. DATA MARK.
4943	034226						
4944	034226	074	050	074	C70	V7,V2,V7,V2,V7,V2	
4945	034231	010	034	010	.BYTE	I!V7,I!V2,I!V7,0!V2,0!V7,0!V2	;MTK CODE 70. DATA MARK.
4946	034234						
4947	034234	040	064	040	C70	V0,V5,V0,V5,V0,V5	
4948	034237	024	000	024	.BYTE	I!V0,I!V5,I!V0,0!V5,0!V0,0!V5	;MTK CODE 70. DATA MARK.
4949	034242						
4950	034242	074	050	074	C70	V7,V2,V7,V2,V7,V2	
4951	034245	010	034	010	.BYTE	I!V7,I!V2,I!V7,0!V2,0!V7,0!V2	;MTK CODE 70. DATA MARK.
4952	034250						
4953	034250	040	064	040	C70	V0,V5,V0,V5,V0,V5	
4954	034253	024	000	024	.BYTE	I!V0,I!V5,I!V0,0!V5,0!V0,0!V5	;MTK CODE 70. DATA MARK.
4955	034256						
4956	034256	074	050	074	C70	V7,V2,V7,V2,V7,V2	
					.BYTE	I!V7,I!V2,I!V7,0!V2,0!V7,0!V2	;MTK CODE 70. DATA MARK.

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MAINDEC-11-0ZTCB-D TC11 TEST #2 MACY11 27(1006) 18-FEB-77 11:33 PAGE 91
 0ZTCB0.P11 18-FEB-77 10:59 TRAP TABLE

4957	034261	010	034	010	C70	V0,V5,V0,V5,V0,V5	
4958	034264				.BYTE	I!V0,I!V5,I!V0,0!V5,0!V0,0!V5	;MTK CODE 70. DATA MARK.
4959	034264	040	064	040			
4960	034267	024	000	024			
4961	034272				C70	V7,V2,V7,V2,V7,V2	
4962	034272	074	050	074	.BYTE	I!V7,I!V2,I!V7,0!V2,0!V7,0!V2	;MTK CODE 70. DATA MARK.
4963	034275	010	034	010			
4964	034300				C70	V0,V5,V0,V5,V0,V5	
4965	034300	040	064	040	.BYTE	I!V0,I!V5,I!V0,0!V5,0!V0,0!V5	;MTK CODE 70. DATA MARK.
4966	034303	024	000	024			
4967	034306				C70	V7,V2,V7,V2,V7,V2	
4968	034306	074	050	074	.BYTE	I!V7,I!V2,I!V7,0!V2,0!V7,0!V2	;MTK CODE 70. DATA MARK.
4969	034311	010	034	010			
4970	034314				C70	V0,V5,V0,V5,V0,V5	
4971	034314	040	064	040	.BYTE	I!V0,I!V5,I!V0,0!V5,0!V0,0!V5	;MTK CODE 70. DATA MARK.
4972	034317	024	000	024			
4973	034322				C70	V7,V2,V7,V2,V7,V2	
4974	034322	074	050	074	.BYTE	I!V7,I!V2,I!V7,0!V2,0!V7,0!V2	;MTK CODE 70. DATA MARK.
4975	034325	010	034	010			
4976	034330				C70	V0,V5,V0,V5,V0,V5	
4977	034330	040	064	040	.BYTE	I!V0,I!V5,I!V0,0!V5,0!V0,0!V5	;MTK CODE 70. DATA MARK.
4978	034333	024	000	024			
4979	034336				C70	V7,V2,V7,V2,V7,V2	
4980	034336	074	050	074	.BYTE	I!V7,I!V2,I!V7,0!V2,0!V7,0!V2	;MTK CODE 70. DATA MARK.
4981	034341	010	034	010			
4982	034344				C70	V0,V5,V0,V5,V0,V5	
4983	034344	040	064	040	.BYTE	I!V0,I!V5,I!V0,0!V5,0!V0,0!V5	;MTK CODE 70. DATA MARK.
4984	034347	024	000	024			
4985	034352				C70	V7,V2,V7,V2,V7,V2	
4986	034352	074	050	074	.BYTE	I!V7,I!V2,I!V7,0!V2,0!V7,0!V2	;MTK CODE 70. DATA MARK.
4987	034355	010	034	010			
4988	034360				C70	V0,V5,V0,V5,V0,V5	
4989	034360	040	064	040	.BYTE	I!V0,I!V5,I!V0,0!V5,0!V0,0!V5	;MTK CODE 70. DATA MARK.
4990	034363	024	000	024			
4991	034366				C70	V7,V2,V7,V2,V7,V2	
4992	034366	074	050	074	.BYTE	I!V7,I!V2,I!V7,0!V2,0!V7,0!V2	;MTK CODE 70. DATA MARK.
4993	034371	010	034	010			
4994	034374				C70	V0,V5,V0,V5,V0,V5	
4995	034374	040	064	040	.BYTE	I!V0,I!V5,I!V0,0!V5,0!V0,0!V5	;MTK CODE 70. DATA MARK.
4996	034377	024	000	024			
4997	034402				C70	V7,V2,V7,V2,V7,V2	
4998	034402	074	050	074	.BYTE	I!V7,I!V2,I!V7,0!V2,0!V7,0!V2	;MTK CODE 70. DATA MARK.
4999	034405	010	034	010			
5000	034410				C70	V0,V5,V0,V5,V0,V5	
5001	034410	040	064	040	.BYTE	I!V0,I!V5,I!V0,0!V5,0!V0,0!V5	;MTK CODE 70. DATA MARK.
5002	034413	024	000	024			
5003	034416				C70	V7,V2,V7,V2,V7,V2	
5004	034416	074	050	074	.BYTE	I!V7,I!V2,I!V7,0!V2,0!V7,0!V2	;MTK CODE 70. DATA MARK.
5005	034421	010	034	010			
5006	034424				C70	V0,V5,V0,V5,V0,V5	
5007	034424	040	064	040	.BYTE	I!V0,I!V5,I!V0,0!V5,0!V0,0!V5	;MTK CODE 70. DATA MARK.
5008	034427	024	000	024			
5009	034432				C70	V7,V2,V7,V2,V7,V2	
5010	034432	074	050	074	.BYTE	I!V7,I!V2,I!V7,0!V2,0!V7,0!V2	;MTK CODE 70. DATA MARK.
5011	034435	010	034	010			
5012	034440				C70	V0,V5,V0,V5,V0,V5	

MAINDEC-11-DZTCB-D
DZTCB0.P11

TC11 TEST #2
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TRAP TABLE

5013	034440	040	064	040	.BYTE	I!V0,I!V5,I!V0,0!V5,0!V0,0!V5	;MTK CODE 70. DATA MARK.
5014	034443	024	000	024			
5015	034446				C70	V7,V2,V7,V2,V7,V2	
5016	034446	074	050	074	.BYTE	I!V7,I!V2,I!V7,0!V2,0!V7,0!V2	;MTK CODE 70. DATA MARK.
5017	034451	010	034	010			
5018	034454				C70	V0,V5,V0,V5,V0,V5	
5019	034454	040	064	040	.BYTE	I!V0,I!V5,I!V0,0!V5,0!V0,0!V5	;MTK CODE 70. DATA MARK.
5020	034457	024	000	024			
5021	034462				C70	V7,V2,V7,V2,V7,V2	
5022	034462	074	050	074	.BYTE	I!V7,I!V2,I!V7,0!V2,0!V7,0!V2	;MTK CODE 70. DATA MARK.
5023	034465	010	034	010			
5024	034470				C70	V0,V5,V0,V5,V0,V5	
5025	034470	040	064	040	.BYTE	I!V0,I!V5,I!V0,0!V5,0!V0,0!V5	;MTK CODE 70. DATA MARK.
5026	034473	024	000	024			
5027	034476				C70	V7,V2,V7,V2,V7,V2	
5028	034476	074	050	074	.BYTE	I!V7,I!V2,I!V7,0!V2,0!V7,0!V2	;MTK CODE 70. DATA MARK.
5029	034501	010	034	010			
5030	034504				C70	V0,V5,V0,V5,V0,V5	
5031	034504	040	064	040	.BYTE	I!V0,I!V5,I!V0,0!V5,0!V0,0!V5	;MTK CODE 70. DATA MARK.
5032	034507	024	000	024			
5033	034512				C70	V7,V2,V7,V2,V7,V2	
5034	034512	074	050	074	.BYTE	I!V7,I!V2,I!V7,0!V2,0!V7,0!V2	;MTK CODE 70. DATA MARK.
5035	034515	010	034	010			
5036	034520				C70	V0,V5,V0,V5,V0,V5	
5037	034520	040	064	040	.BYTE	I!V0,I!V5,I!V0,0!V5,0!V0,0!V5	;MTK CODE 70. DATA MARK.
5038	034523	024	000	024			
5039	034526				C70	V7,V2,V7,V2,V7,V2	
5040	034526	074	050	074	.BYTE	I!V7,I!V2,I!V7,0!V2,0!V7,0!V2	;MTK CODE 70. DATA MARK.
5041	034531	010	034	010			
5042	034534				C70	V0,V5,V0,V5,V0,V5	
5043	034534	040	064	040	.BYTE	I!V0,I!V5,I!V0,0!V5,0!V0,0!V5	;MTK CODE 70. DATA MARK.
5044	034537	024	000	024			
5045	034542				C70	V7,V2,V7,V2,V7,V2	
5046	034542	074	050	074	.BYTE	I!V7,I!V2,I!V7,0!V2,0!V7,0!V2	;MTK CODE 70. DATA MARK.
5047	034545	010	034	010			
5048	034550				C70	V0,V5,V0,V5,V0,V5	
5049	034550	040	064	040	.BYTE	I!V0,I!V5,I!V0,0!V5,0!V0,0!V5	;MTK CODE 70. DATA MARK.
5050	034553	024	000	024			
5051	034556				C70	V7,V2,V7,V2,V7,V2	
5052	034556	074	050	074	.BYTE	I!V7,I!V2,I!V7,0!V2,0!V7,0!V2	;MTK CODE 70. DATA MARK.
5053	034561	010	034	010			
5054	034564				C70	V0,V5,V0,V5,V0,V5	
5055	034564	040	064	040	.BYTE	I!V0,I!V5,I!V0,0!V5,0!V0,0!V5	;MTK CODE 70. DATA MARK.
5056	034567	024	000	024			
5057	034572				C70	V7,V2,V7,V2,V7,V2	
5058	034572	074	050	074	.BYTE	I!V7,I!V2,I!V7,0!V2,0!V7,0!V2	;MTK CODE 70. DATA MARK.
5059	034575	010	034	010			
5060	034600				C70	V0,V5,V0,V5,V0,V5	
5061	034600	040	064	040	.BYTE	I!V0,I!V5,I!V0,0!V5,0!V0,0!V5	;MTK CODE 70. DATA MARK.
5062	034603	024	000	024			
5063	034606				C70	V7,V2,V7,V2,V7,V2	
5064	034606	074	050	074	.BYTE	I!V7,I!V2,I!V7,0!V2,0!V7,0!V2	;MTK CODE 70. DATA MARK.
5065	034611	010	034	010			
5066	034614				C70	V0,V5,V0,V5,V0,V5	
5067	034614	040	064	040	.BYTE	I!V0,I!V5,I!V0,0!V5,0!V0,0!V5	;MTK CODE 70. DATA MARK.
5068	034617	024	000	024			

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M3INDEC-11-DZTCB-D
DZTCB0.P11TC11 TEST #2
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TRAP TABLE

5069	034622				C70	V7,V2,V7,V2,V7,V2	
5070	034622	074	050	074	.BYTE	I!V7,I!V2,I!V7,O!V2,O!V7,O!V2	;MTK CODE 70. DATA MARK.
5071	034625	010	034	010			
5072	034630				C70	V0,V5,V0,V5,V0,V5	
5073	034630	040	064	040	.BYTE	I!V0,I!V5,I!V0,O!V5,O!V0,O!V5	;MTK CODE 70. DATA MARK.
5074	034633	024	000	024			
5075	034636				C70	V7,V2,V7,V2,V7,V2	
5076	034636	074	050	074	.BYTE	I!V7,I!V2,I!V7,O!V2,O!V7,O!V2	;MTK CODE 70. DATA MARK.
5077	034641	010	034	010			
5078	034644				C70	V0,V5,V0,V5,V0,V5	
5079	034644	040	064	040	.BYTE	I!V0,I!V5,I!V0,O!V5,O!V0,O!V5	;MTK CODE 70. DATA MARK.
5080	034647	024	000	024			
5081	034652				C70	V7,V2,V7,V2,V7,V2	
5082	034652	074	050	074	.BYTE	I!V7,I!V2,I!V7,O!V2,O!V7,O!V2	;MTK CODE 70. DATA MARK.
5083	034655	010	034	010			
5084	034660				C70	V0,V5,V0,V5,V0,V5	
5085	034660	040	064	040	.BYTE	I!V0,I!V5,I!V0,O!V5,O!V0,O!V5	;MTK CODE 70. DATA MARK.
5086	034663	024	000	024			
5087	034666				C70	V7,V2,V7,V2,V7,V2	
5088	034666	074	050	074	.BYTE	I!V7,I!V2,I!V7,O!V2,O!V7,O!V2	;MTK CODE 70. DATA MARK.
5089	034671	010	034	010			
5090	034674				C70	V0,V5,V0,V5,V0,V5	
5091	034674	040	064	040	.BYTE	I!V0,I!V5,I!V0,O!V5,O!V0,O!V5	;MTK CODE 70. DATA MARK.
5092	034677	024	000	024			
5093	034702				C70	V7,V2,V7,V2,V7,V2	
5094	034702	074	050	074	.BYTE	I!V7,I!V2,I!V7,O!V2,O!V7,O!V2	;MTK CODE 70. DATA MARK.
5095	034705	010	034	010			
5096	034710				C70	V0,V5,V0,V5,V0,V5	
5097	034710	040	064	040	.BYTE	I!V0,I!V5,I!V0,O!V5,O!V0,O!V5	;MTK CODE 70. DATA MARK.
5098	034713	024	000	024			
5099	034716				C70	V7,V2,V7,V2,V7,V2	
5100	034716	074	050	074	.BYTE	I!V7,I!V2,I!V7,O!V2,O!V7,O!V2	;MTK CODE 70. DATA MARK.
5101	034721	010	034	010			
5102	034724				C70	V0,V5,V0,V5,V0,V5	
5103	034724	040	064	040	.BYTE	I!V0,I!V5,I!V0,O!V5,O!V0,O!V5	;MTK CODE 70. DATA MARK.
5104	034727	024	000	024			
5105	034732				C70	V7,V2,V7,V2,V7,V2	
5106	034732	074	050	074	.BYTE	I!V7,I!V2,I!V7,O!V2,O!V7,O!V2	;MTK CODE 70. DATA MARK.
5107	034735	010	034	010			
5108	034740				C70	V0,V5,V0,V5,V0,V5	
5109	034740	040	064	040	.BYTE	I!V0,I!V5,I!V0,O!V5,O!V0,O!V5	;MTK CODE 70. DATA MARK.
5110	034743	024	000	024			
5111	034746				C70	V7,V2,V7,V2,V7,V2	
5112	034746	074	050	074	.BYTE	I!V7,I!V2,I!V7,O!V2,O!V7,O!V2	;MTK CODE 70. DATA MARK.
5113	034751	010	034	010			
5114	034754				C70	V0,V5,V0,V5,V0,V5	
5115	034754	040	064	040	.BYTE	I!V0,I!V5,I!V0,O!V5,O!V0,O!V5	;MTK CODE 70. DATA MARK.
5116	034757	024	000	024			
5117	034762				C70	V7,V2,V7,V2,V7,V2	
5118	034762	074	050	074	.BYTE	I!V7,I!V2,I!V7,O!V2,O!V7,O!V2	;MTK CODE 70. DATA MARK.
5119	034765	010	034	010			
5120	034770				C70	V0,V5,V0,V5,V0,V5	
5121	034770	040	064	040	.BYTE	I!V0,I!V5,I!V0,O!V5,O!V0,O!V5	;MTK CODE 70. DATA MARK.
5122	034773	024	000	024			
5123	034776				C70	V7,V2,V7,V2,V7,V2	
5124	034776	074	050	074	.BYTE	I!V7,I!V2,I!V7,O!V2,O!V7,O!V2	;MTK CODE 70. DATA MARK.

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 DZTCB0.P11 18-FEB-77 10:59 TRAP TABLE

5125	035001	010	034	010	C70	V0,V5,V0,V5,V0,V5	
5126	035004				.BYTE	I!V0,I!V5,I!V0,O!V5,O!V0,O!V5	;MTK CODE 70. DATA MARK.
5127	035004	040	064	040			
5128	035007	024	000	024			
5129	035012				C70	V7,V2,V7,V2,V7,V2	
5130	035012	074	050	074	.BYTE	I!V7,I!V2,I!V7,O!V2,O!V7,O!V2	;MTK CODE 70. DATA MARK.
5131	035015	010	034	010			
5132	035020				C70	V0,V5,V0,V5,V0,V5	
5133	035020	040	064	040	.BYTE	I!V0,I!V5,I!V0,O!V5,O!V0,O!V5	;MTK CODE 70. DATA MARK.
5134	035023	024	000	024			
5135	035026				C70	V7,V2,V7,V2,V7,V2	
5136	035026	074	050	074	.BYTE	I!V7,I!V2,I!V7,O!V2,O!V7,O!V2	;MTK CODE 70. DATA MARK.
5137	035031	010	034	010			
5138	035034				C70	V0,V5,V0,V5,V0,V5	
5139	035034	040	064	040	.BYTE	I!V0,I!V5,I!V0,O!V5,O!V0,O!V5	;MTK CODE 70. DATA MARK.
5140	035037	024	000	024			
5141	035042				C70	V7,V2,V7,V2,V7,V2	
5142	035042	074	050	074	.BYTE	I!V7,I!V2,I!V7,O!V2,O!V7,O!V2	;MTK CODE 70. DATA MARK.
5143	035045	010	034	010			
5144	035050				C70	V0,V5,V0,V5,V0,V5	
5145	035050	040	064	040	.BYTE	I!V0,I!V5,I!V0,O!V5,O!V0,O!V5	;MTK CODE 70. DATA MARK.
5146	035053	024	000	024			
5147	035056				C70	V7,V2,V7,V2,V7,V2	
5148	035056	074	050	074	.BYTE	I!V7,I!V2,I!V7,O!V2,O!V7,O!V2	;MTK CODE 70. DATA MARK.
5149	035061	010	034	010			
5150	035064				C70	V0,V5,V0,V5,V0,V5	
5151	035064	040	064	040	.BYTE	I!V0,I!V5,I!V0,O!V5,O!V0,O!V5	;MTK CODE 70. DATA MARK.
5152	035067	024	000	024			
5153	035072				C70	V7,V2,V7,V2,V7,V2	
5154	035072	074	050	074	.BYTE	I!V7,I!V2,I!V7,O!V2,O!V7,O!V2	;MTK CODE 70. DATA MARK.
5155	035075	010	034	010			
5156	035100				C70	V0,V5,V0,V5,V0,V5	
5157	035100	040	064	040	.BYTE	I!V0,I!V5,I!V0,O!V5,O!V0,O!V5	;MTK CODE 70. DATA MARK.
5158	035103	024	000	024			
5159	035106				C70	V7,V2,V7,V2,V7,V2	
5160	035106	074	050	074	.BYTE	I!V7,I!V2,I!V7,O!V2,O!V7,O!V2	;MTK CODE 70. DATA MARK.
5161	035111	010	034	010			
5162	035114				C70	V0,V5,V0,V5,V0,V5	
5163	035114	040	064	040	.BYTE	I!V0,I!V5,I!V0,O!V5,O!V0,O!V5	;MTK CODE 70. DATA MARK.
5164	035117	024	000	024			
5165	035122				C70	V7,V2,V7,V2,V7,V2	
5166	035122	074	050	074	.BYTE	I!V7,I!V2,I!V7,O!V2,O!V7,O!V2	;MTK CODE 70. DATA MARK.
5167	035125	010	034	010			
5168	035130				C70	V0,V5,V0,V5,V0,V5	
5169	035130	040	064	040	.BYTE	I!V0,I!V5,I!V0,O!V5,O!V0,O!V5	;MTK CODE 70. DATA MARK.
5170	035133	024	000	024			
5171	035136				C70	V7,V2,V7,V2,V7,V2	
5172	035136	074	050	074	.BYTE	I!V7,I!V2,I!V7,O!V2,O!V7,O!V2	;MTK CODE 70. DATA MARK.
5173	035141	010	034	010			
5174	035144				C70	V0,V5,V0,V5,V0,V5	
5175	035144	040	064	040	.BYTE	I!V0,I!V5,I!V0,O!V5,O!V0,O!V5	;MTK CODE 70. DATA MARK.
5176	035147	024	000	024			
5177	035152				C70	V7,V2,V7,V2,V7,V2	
5178	035152	074	050	074	.BYTE	I!V7,I!V2,I!V7,O!V2,O!V7,O!V2	;MTK CODE 70. DATA MARK.
5179	035155	010	034	010			
5180	035160				C70	V0,V5,V0,V5,V0,V5	

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DZTCB0.P11TC11 TEST #2
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TRAP TABLE

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5181	035160	040	064	040	.BYTE	I!V0,I!V5,I!V0,0!V5,0!V0,0!V5	;MTK CODE 70. DATA MARK.
5182	035163	024	000	024			
5183	035166				C70	V7,V2,V7,V2,V7,V2	
5184	035166	074	050	074	.BYTE	I!V7,I!V2,I!V7,0!V2,0!V7,0!V2	;MTK CODE 70. DATA MARK.
5185	035171	010	034	010			
5186	035174				C70	V0,V5,V0,V5,V0,V5	
5187	035174	040	064	040	.BYTE	I!V0,I!V5,I!V0,0!V5,0!V0,0!V5	;MTK CODE 70. DATA MARK.
5188	035177	024	000	024			
5189	035202				C70	V7,V2,V7,V2,V7,V2	
5190	035202	074	050	074	.BYTE	I!V7,I!V2,I!V7,0!V2,0!V7,0!V2	;MTK CODE 70. DATA MARK.
5191	035205	010	034	010			
5192	035210				C70	V0,V5,V0,V5,V0,V5	
5193	035210	040	064	040	.BYTE	I!V0,I!V5,I!V0,0!V5,0!V0,0!V5	;MTK CODE 70. DATA MARK.
5194	035213	024	000	024			
5195	035216				C70	V7,V2,V7,V2,V7,V2	
5196	035216	074	050	074	.BYTE	I!V7,I!V2,I!V7,0!V2,0!V7,0!V2	;MTK CODE 70. DATA MARK.
5197	035221	010	034	010			
5198	035224				C70	V0,V5,V0,V5,V0,V5	
5199	035224	040	064	040	.BYTE	I!V0,I!V5,I!V0,0!V5,0!V0,0!V5	;MTK CODE 70. DATA MARK.
5200	035227	024	000	024			
5201	035232				C70	V7,V2,V7,V2,V7,V2	
5202	035232	074	050	074	.BYTE	I!V7,I!V2,I!V7,0!V2,0!V7,0!V2	;MTK CODE 70. DATA MARK.
5203	035235	010	034	010			
5204	035240				C70	V0,V5,V0,V5,V0,V5	
5205	035240	040	064	040	.BYTE	I!V0,I!V5,I!V0,0!V5,0!V0,0!V5	;MTK CODE 70. DATA MARK.
5206	035243	024	000	024			
5207	035246				C70	V7,V2,V7,V2,V7,V2	
5208	035246	074	050	074	.BYTE	I!V7,I!V2,I!V7,0!V2,0!V7,0!V2	;MTK CODE 70. DATA MARK.
5209	035251	010	034	010			
5210	035254				C70	V0,V5,V0,V5,V0,V5	
5211	035254	040	064	040	.BYTE	I!V0,I!V5,I!V0,0!V5,0!V0,0!V5	;MTK CODE 70. DATA MARK.
5212	035257	024	000	024			
5213	035262				C70	V7,V2,V7,V2,V7,V2	
5214	035262	074	050	074	.BYTE	I!V7,I!V2,I!V7,0!V2,0!V7,0!V2	;MTK CODE 70. DATA MARK.
5215	035265	010	034	010			
5216	035270				C70	V0,V5,V0,V5,V0,V5	
5217	035270	040	064	040	.BYTE	I!V0,I!V5,I!V0,0!V5,0!V0,0!V5	;MTK CODE 70. DATA MARK.
5218	035273	024	000	024			
5219	035276				C70	V7,V2,V7,V2,V7,V2	
5220	035276	074	050	074	.BYTE	I!V7,I!V2,I!V7,0!V2,0!V7,0!V2	;MTK CODE 70. DATA MARK.
5221	035301	010	034	010			
5222	035304				C70	V0,V5,V0,V5,V0,V5	
5223	035304	040	064	040	.BYTE	I!V0,I!V5,I!V0,0!V5,0!V0,0!V5	;MTK CODE 70. DATA MARK.
5224	035307	024	000	024			
5225	035312				C70	V7,V2,V7,V2,V7,V2	
5226	035312	074	050	074	.BYTE	I!V7,I!V2,I!V7,0!V2,0!V7,0!V2	;MTK CODE 70. DATA MARK.
5227	035315	010	034	010			
5228	035320				C70	V0,V5,V0,V5,V0,V5	
5229	035320	040	064	040	.BYTE	I!V0,I!V5,I!V0,0!V5,0!V0,0!V5	;MTK CODE 70. DATA MARK.
5230	035323	024	000	024			
5231	035326				C70	V7,V2,V7,V2,V7,V2	
5232	035326	074	050	074	.BYTE	I!V7,I!V2,I!V7,0!V2,0!V7,0!V2	;MTK CODE 70. DATA MARK.
5233	035331	010	034	010			
5234	035334				C70	V0,V5,V0,V5,V0,V5	
5235	035334	040	064	040	.BYTE	I!V0,I!V5,I!V0,0!V5,0!V0,0!V5	;MTK CODE 70. DATA MARK.
5236	035337	024	000	024			

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M3INDEC-11-DZTCB-D TC11 TEST #2 MACY11 27(1006) 18-FEB-77 11:33 PAGE 96
DZTCB0.P11 18-FEB-77 10:59 TRAP TABLE

5237	035342				C70	V7,V2,V7,V2,V7,V2	
5238	035342	074	050	074	.BYTE	I!V7,I!V2,I!V7,O!V2,O!V7,O!V2	;MTK CODE 70. DATA MARK.
5239	035345	010	034	010			
5240	035350				C70	V0,V5,V0,V5,V0,V5	
5241	035350	040	064	040	.BYTE	I!V0,I!V5,I!V0,O!V5,O!V0,O!V5	;MTK CODE 70. DATA MARK.
5242	035353	024	000	024			
5243	035356				C70	V7,V2,V7,V2,V7,V2	
5244	035356	074	050	074	.BYTE	I!V7,I!V2,I!V7,O!V2,O!V7,O!V2	;MTK CODE 70. DATA MARK.
5245	035361	010	034	010			
5246	035364				C70	V0,V5,V0,V5,V0,V5	
5247	035364	040	064	040	.BYTE	I!V0,I!V5,I!V0,O!V5,O!V0,O!V5	;MTK CODE 70. DATA MARK.
5248	035367	024	000	024			
5249	035372				C70	V7,V2,V7,V2,V7,V2	
5250	035372	074	050	074	.BYTE	I!V7,I!V2,I!V7,O!V2,O!V7,O!V2	;MTK CODE 70. DATA MARK.
5251	035375	010	034	010			
5252	035400				C70	V0,V5,V0,V5,V0,V5	
5253	035400	040	064	040	.BYTE	I!V0,I!V5,I!V0,O!V5,O!V0,O!V5	;MTK CODE 70. DATA MARK.
5254	035403	024	000	024			
5255	035406				C70	V7,V2,V7,V2,V7,V2	
5256	035406	074	050	074	.BYTE	I!V7,I!V2,I!V7,O!V2,O!V7,O!V2	;MTK CODE 70. DATA MARK.
5257	035411	010	034	010			
5258	035414				C70	V0,V5,V0,V5,V0,V5	
5259	035414	040	064	040	.BYTE	I!V0,I!V5,I!V0,O!V5,O!V0,O!V5	;MTK CODE 70. DATA MARK.
5260	035417	024	000	024			
5261	035422				C70	V7,V2,V7,V2,V7,V2	
5262	035422	074	050	074	.BYTE	I!V7,I!V2,I!V7,O!V2,O!V7,O!V2	;MTK CODE 70. DATA MARK.
5263	035425	010	034	010			
5264	035430				C70	V0,V5,V0,V5,V0,V5	
5265	035430	040	064	040	.BYTE	I!V0,I!V5,I!V0,O!V5,O!V0,O!V5	;MTK CODE 70. DATA MARK.
5266	035433	024	000	024			
5267	035436				C70	V7,V2,V7,V2,V7,V2	
5268	035436	074	050	074	.BYTE	I!V7,I!V2,I!V7,O!V2,O!V7,O!V2	;MTK CODE 70. DATA MARK.
5269	035441	010	034	010			
5270	035444				C70	V0,V5,V0,V5,V0,V5	
5271	035444	040	064	040	.BYTE	I!V0,I!V5,I!V0,O!V5,O!V0,O!V5	;MTK CODE 70. DATA MARK.
5272	035447	024	000	024			
5273	035452				C70	V7,V2,V7,V2,V7,V2	
5274	035452	074	050	074	.BYTE	I!V7,I!V2,I!V7,O!V2,O!V7,O!V2	;MTK CODE 70. DATA MARK.
5275	035455	010	034	010			
5276	035460				C70	V0,V5,V0,V5,V0,V5	
5277	035460	040	064	040	.BYTE	I!V0,I!V5,I!V0,O!V5,O!V0,O!V5	;MTK CODE 70. DATA MARK.
5278	035463	024	000	024			
5279	035466				C70	V7,V2,V7,V2,V7,V2	
5280	035466	074	050	074	.BYTE	I!V7,I!V2,I!V7,O!V2,O!V7,O!V2	;MTK CODE 70. DATA MARK.
5281	035471	010	034	010			
5282	035474				C70	V0,V5,V0,V5,V0,V5	
5283	035474	040	064	040	.BYTE	I!V0,I!V5,I!V0,O!V5,O!V0,O!V5	;MTK CODE 70. DATA MARK.
5284	035477	024	000	024			
5285	035502				C70	V7,V2,V7,V2,V7,V2	
5286	035502	074	050	074	.BYTE	I!V7,I!V2,I!V7,O!V2,O!V7,O!V2	;MTK CODE 70. DATA MARK.
5287	035505	010	034	010			
5288	035510				C70	V0,V5,V0,V5,V0,V5	
5289	035510	040	064	040	.BYTE	I!V0,I!V5,I!V0,O!V5,O!V0,O!V5	;MTK CODE 70. DATA MARK.
5290	035513	024	000	024			
5291	035516				C70	V7,V2,V7,V2,V7,V2	
5292	035516	074	050	074	.BYTE	I!V7,I!V2,I!V7,O!V2,O!V7,O!V2	;MTK CODE 70. DATA MARK.

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MAINDEC-11-DZTCB-D TC11 TEST #2 MACY11 27(1006) 18-FEB-77 11:33 PAGE 97
DZTCB0.P11 18-FEB-77 10:59 TRAP TABLE

5293	035521	010	034	010	C70	V0,V5,V0,V5,V0,V5	
5294	035524				.BYTE	I!V0,I!V5,I!V0,O!V5,O!V0,O!V5	;MTK CODE 70. DATA MARK.
5295	035524	040	064	040			
5296	035527	024	000	024			
5297	035532				C70	V7,V2,V7,V2,V7,V2	
5298	035532	074	050	074	.BYTE	I!V7,I!V2,I!V7,O!V2,O!V7,O!V2	;MTK CODE 70. DATA MARK.
5299	035535	010	034	010			
5300	035540				C70	V0,V5,V0,V5,V0,V5	
5301	035540	040	064	040	.BYTE	I!V0,I!V5,I!V0,O!V5,O!V0,O!V5	;MTK CODE 70. DATA MARK.
5302	035543	024	000	024			
5303	035546				C70	V7,V2,V7,V2,V7,V2	
5304	035546	074	050	074	.BYTE	I!V7,I!V2,I!V7,O!V2,O!V7,O!V2	;MTK CODE 70. DATA MARK.
5305	035551	010	034	010			
5306	035554				C70	V0,V5,V0,V5,V0,V5	
5307	035554	040	064	040	.BYTE	I!V0,I!V5,I!V0,O!V5,O!V0,O!V5	;MTK CODE 70. DATA MARK.
5308	035557	024	000	024			
5309	035562				C70	V7,V2,V7,V2,V7,V2	
5310	035562	074	050	074	.BYTE	I!V7,I!V2,I!V7,O!V2,O!V7,O!V2	;MTK CODE 70. DATA MARK.
5311	035565	010	034	010			
5312	035570				C70	V0,V5,V0,V5,V0,V5	
5313	035570	040	064	040	.BYTE	I!V0,I!V5,I!V0,O!V5,O!V0,O!V5	;MTK CODE 70. DATA MARK.
5314	035573	024	000	024			
5315	035576				C70	V7,V2,V7,V2,V7,V2	
5316	035576	074	050	074	.BYTE	I!V7,I!V2,I!V7,O!V2,O!V7,O!V2	;MTK CODE 70. DATA MARK.
5317	035601	010	034	010			
5318	035604				C70	V0,V5,V0,V5,V0,V5	
5319	035604	040	064	040	.BYTE	I!V0,I!V5,I!V0,O!V5,O!V0,O!V5	;MTK CODE 70. DATA MARK.
5320	035607	024	000	024			
5321	035612				C70	V7,V2,V7,V2,V7,V2	
5322	035612	074	050	074	.BYTE	I!V7,I!V2,I!V7,O!V2,O!V7,O!V2	;MTK CODE 70. DATA MARK.
5323	035615	010	034	010			
5324	035620				C70	V0,V5,V0,V5,V0,V5	
5325	035620	040	064	040	.BYTE	I!V0,I!V5,I!V0,O!V5,O!V0,O!V5	;MTK CODE 70. DATA MARK.
5326	035623	024	000	024			
5327	035626				C70	V7,V2,V7,V2,V7,V2	
5328	035626	074	050	074	.BYTE	I!V7,I!V2,I!V7,O!V2,O!V7,O!V2	;MTK CODE 70. DATA MARK.
5329	035631	010	034	010			
5330	035634				C70	V0,V5,V0,V5,V0,V5	
5331	035634	040	064	040	.BYTE	I!V0,I!V5,I!V0,O!V5,O!V0,O!V5	;MTK CODE 70. DATA MARK.
5332	035637	024	000	024			
5333	035642				C70	V7,V2,V7,V2,V7,V2	
5334	035642	074	050	074	.BYTE	I!V7,I!V2,I!V7,O!V2,O!V7,O!V2	;MTK CODE 70. DATA MARK.
5335	035645	010	034	010			
5336	035650				C70	V0,V5,V0,V5,V0,V5	
5337	035650	040	064	040	.BYTE	I!V0,I!V5,I!V0,O!V5,O!V0,O!V5	;MTK CODE 70. DATA MARK.
5338	035653	024	000	024			
5339	035656				C70	V7,V2,V7,V2,V7,V2	
5340	035656	074	050	074	.BYTE	I!V7,I!V2,I!V7,O!V2,O!V7,O!V2	;MTK CODE 70. DATA MARK.
5341	035661	010	034	010			
5342	035664				C70	V0,V5,V0,V5,V0,V5	
5343	035664	040	064	040	.BYTE	I!V0,I!V5,I!V0,O!V5,O!V0,O!V5	;MTK CODE 70. DATA MARK.
5344	035667	024	000	024			
5345	035672				C70	V7,V2,V7,V2,V7,V2	
5346	035672	074	050	074	.BYTE	I!V7,I!V2,I!V7,O!V2,O!V7,O!V2	;MTK CODE 70. DATA MARK.
5347	035675	010	034	010			
5348	035700				C70	V0,V5,V0,V5,V0,V5	

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 MAINDEC-11-DZTCB-D TC11 TEST #2
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 TRAP TABLE

5349	035700	040	064	040	.BYTE	I!V0,I!V5,I!V0,0!V5,0!V0,0!V5	;MTK CODE 70. DATA MARK.
5350	035703	024	000	024			
5351	035706				C70	V7,V2,V7,V2,V7,V2	
5352	035706	074	050	074	.BYTE	I!V7,I!V2,I!V7,0!V2,0!V7,0!V2	;MTK CODE 70. DATA MARK.
5353	035711	010	034	010			
5354	035714				C70	V0,V5,V0,V5,V0,V5	
5355	035714	040	064	040	.BYTE	I!V0,I!V5,I!V0,0!V5,0!V0,0!V5	;MTK CODE 70. DATA MARK.
5356	035717	024	000	024			
5357	035722				C70	V7,V2,V7,V2,V7,V2	
5358	035722	074	050	074	.BYTE	I!V7,I!V2,I!V7,0!V2,0!V7,0!V2	;MTK CODE 70. DATA MARK.
5359	035725	010	034	010			
5360	035730				C70	V0,V5,V0,V5,V0,V5	
5361	035730	040	064	040	.BYTE	I!V0,I!V5,I!V0,0!V5,0!V0,0!V5	;MTK CODE 70. DATA MARK.
5362	035733	024	000	024			
5363	035736				C70	V7,V2,V7,V2,V7,V2	
5364	035736	074	050	074	.BYTE	I!V7,I!V2,I!V7,0!V2,0!V7,0!V2	;MTK CODE 70. DATA MARK.
5365	035741	010	034	010			
5366	035744				C70	V0,V5,V0,V5,V0,V5	
5367	035744	040	064	040	.BYTE	I!V0,I!V5,I!V0,0!V5,0!V0,0!V5	;MTK CODE 70. DATA MARK.
5368	035747	024	000	024			
5369	035752				C70	V7,V2,V7,V2,V7,V2	
5370	035752	074	050	074	.BYTE	I!V7,I!V2,I!V7,0!V2,0!V7,0!V2	;MTK CODE 70. DATA MARK.
5371	035755	010	034	010			
5372	035760				C70	V0,V5,V0,V5,V0,V5	
5373	035760	040	064	040	.BYTE	I!V0,I!V5,I!V0,0!V5,0!V0,0!V5	;MTK CODE 70. DATA MARK.
5374	035763	024	000	024			
5375	035766				C70	V7,V2,V7,V2,V7,V2	
5376	035766	074	050	074	.BYTE	I!V7,I!V2,I!V7,0!V2,0!V7,0!V2	;MTK CODE 70. DATA MARK.
5377	035771	010	034	010			
5378	035774				C70	V0,V5,V0,V5,V0,V5	
5379	035774	040	064	040	.BYTE	I!V0,I!V5,I!V0,0!V5,0!V0,0!V5	;MTK CODE 70. DATA MARK.
5380	035777	024	000	024			
5381	036002				C70	V7,V2,V7,V2,V7,V2	
5382	036002	074	050	074	.BYTE	I!V7,I!V2,I!V7,0!V2,0!V7,0!V2	;MTK CODE 70. DATA MARK.
5383	036005	010	034	010			
5384	036010				C70	V0,V5,V0,V5,V0,V5	
5385	036010	040	064	040	.BYTE	I!V0,I!V5,I!V0,0!V5,0!V0,0!V5	;MTK CODE 70. DATA MARK.
5386	036013	024	000	024			
5387	036016				C70	V7,V2,V7,V2,V7,V2	
5388	036016	074	050	074	.BYTE	I!V7,I!V2,I!V7,0!V2,0!V7,0!V2	;MTK CODE 70. DATA MARK.
5389	036021	010	034	010			
5390	036024				C70	V0,V5,V0,V5,V0,V5	
5391	036024	040	064	040	.BYTE	I!V0,I!V5,I!V0,0!V5,0!V0,0!V5	;MTK CODE 70. DATA MARK.
5392	036027	024	000	024			
5393	036032				C70	V7,V2,V7,V2,V7,V2	
5394	036032	074	050	074	.BYTE	I!V7,I!V2,I!V7,0!V2,0!V7,0!V2	;MTK CODE 70. DATA MARK.
5395	036035	010	034	010			
5396	036040				C70	V0,V5,V0,V5,V0,V5	
5397	036040	040	064	040	.BYTE	I!V0,I!V5,I!V0,0!V5,0!V0,0!V5	;MTK CODE 70. DATA MARK.
5398	036043	024	000	024			
5399	036046				C70	V7,V2,V7,V2,V7,V2	
5400	036046	074	050	074	.BYTE	I!V7,I!V2,I!V7,0!V2,0!V7,0!V2	;MTK CODE 70. DATA MARK.
5401	036051	010	034	010			
5402	036054				C70	V0,V5,V0,V5,V0,V5	
5403	036054	040	064	040	.BYTE	I!V0,I!V5,I!V0,0!V5,0!V0,0!V5	;MTK CODE 70. DATA MARK.
5404	036057	024	000	024			

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 MAINDEC-11-DZTC8-0 TC11 TEST #2
 DZTC80.P11 18-FEB-77 10:59

 MACY11 27(1006) 18-FEB-77 11:33 PAGE 99
 TRAP TABLE

5405	036062				C70	V7,V2,V7,V2,V7,V2	
5406	036062	074	050	074	.BYTE	I!V7,I!V2,I!V7,0!V2,0!V7,0!V2	;MTK CODE 70. DATA MARK.
5407	036065	010	034	010			
5408	036070				C70	V0,V5,V0,V5,V0,V5	
5409	036070	040	064	040	.BYTE	I!V0,I!V5,I!V0,0!V5,0!V0,0!V5	;MTK CODE 70. DATA MARK.
5410	036073	024	000	024			
5411	036076				C70	V7,V2,V7,V2,V7,V2	
5412	036076	074	050	074	.BYTE	I!V7,I!V2,I!V7,0!V2,0!V7,0!V2	;MTK CODE 70. DATA MARK.
5413	036101	010	034	010			
5414	036104				C70	V0,V5,V0,V5,V0,V5	
5415	036104	040	064	040	.BYTE	I!V0,I!V5,I!V0,0!V5,0!V0,0!V5	;MTK CODE 70. DATA MARK.
5416	036107	024	000	024			
5417	036112				C70	V7,V2,V7,V2,V7,V2	
5418	036112	074	050	074	.BYTE	I!V7,I!V2,I!V7,0!V2,0!V7,0!V2	;MTK CODE 70. DATA MARK.
5419	036115	010	034	010			
5420	036120				C70	V0,V5,V0,V5,V0,V5	
5421	036120	040	064	040	.BYTE	I!V0,I!V5,I!V0,0!V5,0!V0,0!V5	;MTK CODE 70. DATA MARK.
5422	036123	024	000	024			
5423	036126				C70	V7,V2,V7,V2,V7,V2	
5424	036126	074	050	074	.BYTE	I!V7,I!V2,I!V7,0!V2,0!V7,0!V2	;MTK CODE 70. DATA MARK.
5425	036131	010	034	010			
5426	036134				C70	V0,V5,V0,V5,V0,V5	
5427	036134	040	064	040	.BYTE	I!V0,I!V5,I!V0,0!V5,0!V0,0!V5	;MTK CODE 70. DATA MARK.
5428	036137	024	000	024			
5429	036142				C70	V7,V2,V7,V2,V7,V2	
5430	036142	074	050	074	.BYTE	I!V7,I!V2,I!V7,0!V2,0!V7,0!V2	;MTK CODE 70. DATA MARK.
5431	036145	010	034	010			
5432	036150				C70	V0,V5,V0,V5,V0,V5	
5433	036150	040	064	040	.BYTE	I!V0,I!V5,I!V0,0!V5,0!V0,0!V5	;MTK CODE 70. DATA MARK.
5434	036153	024	000	024			
5435	036156				C70	V7,V2,V7,V2,V7,V2	
5436	036156	074	050	074	.BYTE	I!V7,I!V2,I!V7,0!V2,0!V7,0!V2	;MTK CODE 70. DATA MARK.
5437	036161	010	034	010			
5438	036164				C70	V0,V5,V0,V5,V0,V5	
5439	036164	040	064	040	.BYTE	I!V0,I!V5,I!V0,0!V5,0!V0,0!V5	;MTK CODE 70. DATA MARK.
5440	036167	024	000	024			
5441	036172				C70	V7,V2,V7,V2,V7,V2	
5442	036172	074	050	074	.BYTE	I!V7,I!V2,I!V7,0!V2,0!V7,0!V2	;MTK CODE 70. DATA MARK.
5443	036175	010	034	010			
5444	036200				C70	V0,V5,V0,V5,V0,V5	
5445	036200	040	064	040	.BYTE	I!V0,I!V5,I!V0,0!V5,0!V0,0!V5	;MTK CODE 70. DATA MARK.
5446	036203	024	000	024			
5447	036206				C70	V7,V2,V7,V2,V7,V2	
5448	036206	074	050	074	.BYTE	I!V7,I!V2,I!V7,0!V2,0!V7,0!V2	;MTK CODE 70. DATA MARK.
5449	036211	010	034	010			
5450	036214				C73	V0,V5,V0,V5,V0,V5	
5451	036214	040	064	040	.BYTE	I!V0,I!V5,I!V0,0!V5,I!V0,I!V5	;MTK CODE 73. DATA MARK.
5452	036217	024	040	064			
5453	036222				C73	V7,V2,V7,V2,V7,V2	
5454	036222	074	050	074	.BYTE	I!V7,I!V2,I!V7,0!V2,I!V7,I!V2	;MTK CODE 73. DATA MARK.
5455	036225	010	074	050			
5456	036230				FCKSM:		
5457	036230				C73	V0,V0,V0,V0,V0,V0	
5458	036230	040	040	040	.BYTE	I!V0,I!V0,I!V0,0!V0,I!V0,I!V0	;MTK CODE 73. DATA MARK.
5459	036233	000	040	040			
5460	036236				C73	V0,V0,V0,V0,V0,V0	

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MAINDEC-11-DZTCB-0 TC11 TEST #2 MACY11 27(1006) 18-FEB-77 11:33 PAGE 100
DZTCB0.P11 18-FEB-77 10:59 TRAP TABLE

5461	036236	040	040	040	.BYTE	I!VO,I!VO,I!VO,O!VO,I!VO,I!VO	;MTK CODE 73. DATA MARK.
5462	036241	000	040	040			
5463	036244				C51	VO,VO,VO,VO,VO,VO	
5464	036244	040	000	040	.BYTE	I!VO,O!VO,I!VO,O!VO,O!VO,I!VO	;MTK CODE 51. FWD GUARD.
5465	036247	000	000	040			
5466	036252				C45	VO,VO,VO,VO,VO,VO	
5467	036252	040	000	030	.BYTE	I!VO,O!VO,O!VO,I!VO,O!VO,I!VO	;MTK CODE 45. REV BLOCK MARK.
5468	036255	040	000	040			
5469	036260				C25		
5470	036260	000	040	000	.BYTE	O,I,O,I,O,I	;MTK CODE 25. EXTENSION MARK.
5471	036263	040	000	040			
5472	036266				CEND		
5473	036266	377			.BYTE	-1	
5474	036267				GCKSM:		
5475	036267				C73	V7,V7,VO,VO,VO,VO	
5476	036267	074	074	040	.BYTE	I!V7,I!V7,I!VO,O!VO,I!VO,I!VO	;MTK CODE 73. DATA MARK.
5477	036272	000	040	040			
5478	036275				BCKSM:		
5479	036275				C73	VO,VO,VO,VO,VO,VO	
5480	036275	040	040	040	.BYTE	I!VO,I!VO,I!VO,O!VO,I!VO,I!VO	;MTK CODE 73. DATA MARK.
5481	036300	000	040	040			
5482		036304			.EVEN		
5483	036304	000000			OPEN		
5484		036306			RBUF=.		
5485		040306			.RBUF+1024.		
5486		000001			.END		

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MAINDEC-11-DZTCB-D TC11 TEST #2
DZTCB0.P11 18-FEB-77 10:59

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CROSS REFERENCE TABLE -- USER SYMBOLS

A	= 100000	194#		
A1NCRT	015551	3207#		
APGEN0	015571	3210#		
ASETSA	015511	3201#		
A0001	002676	927	936#	
A0002	002746	941	950#	
A0003	003016	955	964#	
A0004	003066	969	978#	
A0005	003152	996	998#	
A0006	003214	1013	1015#	
A0007	003266	1027	1033#	
A0010	003340	1050#	1056	
A0011	003434	1066	1074#	
A0012	003514	1094#	1102	1105
A0013	003604	1115	1118#	
A0014	003730	1142	1144#	
A0015	004004	1158	1160#	
A0016	004056	1177	1180#	
A0017	004172	1208	1211#	
A0020	004304	1238	1241#	
A0021	004404	1257	1264#	
A0022	004476	1286	1289#	
A0023	004576	1313	1316#	
A0024	004714	1343	1349#	
A0025	005002	1371	1374#	
A0026	005076	1399	1402#	
A0027	005176	1427	1430#	
A0030	005272	1453	1456#	
A0031	005364	1479	1482#	
A0032	005626	1535	1538#	
A0033	006104	1594	1598#	
A0034	006300	1639	1642#	
A0035	006504	1687	1690#	
A0036	006710	1735	1738#	
A0037	007112	1782	1785#	
A0040	007260	1818	1821#	
A0041	007600	1890	1892#	
A0042	010056	1953	1956#	
A0043	010240	2000	2003#	
A0044	010466	2054	2057#	
A0045	010642	2094	2097#	
A0055	011372	2235	2238#	
B	= 040000	195#		
BCKSM	036275	2562	5478#	
BELL	= 000007	188#		
BIT0	= 000001	149#	227	1140 1141
BIT00	= 000001	139#	149	
BIT01	= 000002	138#	148	
BIT02	= 000004	137#	147	
BIT03	= 000010	136#	146	
BIT04	= 000020	135#	145	
BIT05	= 000040	134#	144	
BIT06	= 000100	133#	143	
BIT07	= 000200	132#	142	
BIT08	= 000400	131#	141	2645
BIT09	= 001000	130#	140	2653 2735

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HQ1. DEC-11-DZTCB-0
 DZTCB0.P11 18-FI

TC11 TEST #2
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CROSS REFERENCE TABLE -- USER SYMBOLS

BIT1	=	000002	148#	220	222	224	226	1156	1157								
BIT10	=	002000	129#	214	215	216	217	1826	1846	1857	2720						
BIT11	=	004000	128#	207	2600	2660											
BIT12	=	010000	127#	206	1176	1185	1207	1216	1242								
BIT13	=	020000	126#	196	205	1118	1123	1127	1139	1155	1370	2507	2727				
BIT14	=	040000	125#	195	1534	1543	2631										
BIT15	=	100000	124#	183	194	1241											
BIT2	=	000004	147#	221	222	225	226										
BIT3	=	000010	146#	223	224	225	226										
BIT4	=	000020	145#														
BIT5	=	000040	144#														
BIT6	=	000100	143#	218	1030	1048	1070	1091	1260								
BIT7	=	000200	142#	1114	1119	1124											
BIT8	=	000400	141#	211	213	215	217										
BIT9	=	001000	140#	212	213	216	217	1952	1961								
BMOVE		012622	2498#	2500													
BMOVE		012610	1361	1389	1416	2397	2401	2405	2458	2465	2494#	2541	2545	2561			
BPTVEC=		000014	156#														
BTCTR		013000	2512#	2519#	2521	2535#											
B0010		003352	1045	1054#													
B0011		003436	1073	1075#													
B0012		003526	1088	1098#													
B0013		003626	1120	1123#													
B0016		004070	1181	1184#													
B0017		004204	1212	1215#													
B0020		004324	1240	1243	1245#												
B0021		004420	1265	1267#													
B0022		004514	1288	1291	1293#												
B0023		004606	1315	1317	1323#												
B0025		005012	1373	1375	1377#												
B0026		005106	1401	1403	1405#												
B0027		005206	1429	1431	1433#												
B0031		005376	1483	1486#													
B0032		005632	1533	1540#													
B0033		006124	1599	1603#													
B0034		006324	1643	1648#													
B0035		006530	1691	1696#													
B0036		006734	1739	1744#													
B0037		007124	1784	1789#		</											

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 DZTCBD.P11 18-FEB-77 10:59 CROSS REFERENCE TABLE -- USER SYMBOLS

CKSELE	013256	2146	2158	2169	2180	2191	2202	2216	2595#								
CKSELT	015326	2535#	2596#	2597	3180#												
CLABUF	012432	1469	1523	1584	1629	1677	1725	1772	1875	2457#	2540	2551					
COOCAL	001260	459#	2504#	2523	2526	2538#											
CR =	000015	64#	2879	2839													
CRBUF	001270	463#	2581#	2584	3897												
CRBUFA	001272	464#	2582#	2584	3897												
CRUF =	000200	65#	2850	2889													
CTRA	001274	465#	1689#	1926#	2101#	2115#											
CTRLB	013112	2553#	2556#	2560#													
CURTST	001266	462#															
CO012	003542	1099	1101#														
CO013	003646	1117	1122	1125	1127#												
CO016	004110	1186	1189#														
CO017	004224	1217	1220#														
CO021	004434	1264	1271#														
CO031	005420	1487	1491#														
CO032	005644	1541	1544#														
CO033	006146	1597	1602	1605	1608#												
CO034	006340	1649	1652#														
CO035	006544	1697	1700#														
CO036	006746	1745	1747#														
CO037	007132	1774	1792#														
CO040	007424	1847	1851#														
CO041	007636	1899	1902#														
CO042	010112	1955	1959	1962	1965#												
CO043	010324	2017	2020#														
CO044	010552	2056	2069	2074#													
CO045	010746	2116	2118#														
CO055	011464	2255#	2257														
DATADR	013252	2580#	2593#														
DOISP =	177570	71#	370	898													
DINH =	010000	206#															
DISPLA	001142	370#	898#	906#	2674#	2719#											
DISPRE	000174	175#	906														
DLY	012336	2434#	2451														
DLYA	012350	2437#	2441														
DLYB	012354	2438#	2439														
DO =	000001	227#	1289	1307	1337	1365	1393	1421	1447	1473	1512	1527	1573	1588			
		1619															

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 MAINDEC-11-DZTCB-D TC11 TEST #2
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 CROSS REFERENCE TABLE -- USER SYMBOLS

00041A	007670	1909	1912#	
00041B	007702	1913	1916#	
00042	010120	1945	1968#	
00043	010350	2021	2026#	
00044	010560	2063	2077#	
00045	010764	2119	2123#	
00055	011474	2237	2250#	2258#
EH1	016203	494	3260#	
EH10	017566	536	3417#	
EH11	017742	542	3439#	
EH12	020116	548	3461#	
EH13	020272	554	3483#	
EH14	020465	560	3508#	
EH15	020632	566	3529#	
EH16	021004	572	3551#	
EH17	021164	578	3574#	
EH2	016362	500	3283#	
EH20	021344	584	3597#	
EH21	021527	590	3621#	
EH22	021676	596	3642#	
EH23	022026	602	3661#	
EH24	022201	608	3683#	
EH25	022362	614	3706#	
EH26	022515	620	3726#	
EH27	022646	626	3746#	
EH3	016523	506	3304#	
EH30	023052	632	3772#	
EH31	023242	638	3796#	
EH32	023442	644	3822#	
EH33	023610	650	3843#	
EH34	023761	656	662	3865#
EH35	024111	3884#		
EH36	024311	666	3908#	
EH37	024414	672	3923#	
EH4	016727	512	3330#	
EH40	024536	678	3941#	
EH41	024676	684	3961#	
EH42	025030	690	3980#	
EH43	025170	696	4000#	
EH44	025356	702	4024#	
EH45	025536	708	4047#	
EH46	025677	714	4068#	
EH47	026052	720	4090#	
EH5	017055	518	3349#	
EH50	026200	726	4109#	
EH51	026353	732	4132#	
EH52	026535	738	4156#	
EH53	026715	744	4180#	
EH54	027064	750	4203#	
EH55	027231	756	4225#	
EH56	027416	762	4250#	
EH57	027603	768	4274#	
EH6	017247	524	3374#	
EH60	027770	774	4299#	
EH61	030161	780	4324#	
EH62	030340	786	4347#	

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CROSS REFERENCE TABLE -- USER SYMBOLS

EH63	030504	792	4368#	
EH64	030654	798	4390#	
EH65	031051	804	4416#	
EH66	031245	810	4441#	
EH67	031423	816	4464#	
EH7	017420	530	3396#	
EH70	031575	822	4486#	
EH71	031774	828	4512#	
EH72	032142	834	4534#	
EH73	032311	840	4556#	
EH74	032461	844	4577#	
EH75	032605	849	4595#	
EH76	032731	854	4613#	
EH77	033055	859	4631#	
ENTVEC=	000030	159#	879#	880#
ENTX =	000000	228#		
EM1	016115	493	3250#	
EM10	017514	535	3410#	
EM11	017662	541	3431#	
EM12	020036	547	3453#	
EM13	020212	553	3475#	
EM14	020366	559	3497#	
EM15	020562	565	3522#	
EM16	020726	571	3543#	
EM17	021100	577	3565#	
EM2	016300	499	3274#	
EM20	021260	583	3588#	
EM21	021440	589	3611#	
EM22	021624	595	3635#	
EM23	021772	601	3656#	
EM24	022122	607	3675#	
EM25	022276	613	3697#	
EM26	022456	619	3720#	
EM27	022604	625	3740#	
EM3	016456	505	3297#	
EM30	022742	631	3760#	
EM31	023146	637	3786#	
EM32	023364	643	3814#	
EM33	023536	649	3836#	
EM34	023704	655	661	3857#
EM35	024056	3879#		
EM36	024234	665	3900#	
EM37	024406	671	3922#	
EM4	015620	511	3318#	
EM40	024510	677	3937#	
EM41	024632	683	3955#	
EM42	024772	689	3975#	
EM43	025124	695	3994#	
EM44	025314	701	4018#	
EM45	025502	707	4042#	
EM46	025662	713	4065#	
EM47	025774	719	4082#	
EM5	017024	517	3344#	
EM50	026146	725	4104#	
EM51	026310	731	4126#	
EM52	026476	737	4150#	

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 MAINDEC-11-DZTCB-D TC11 TEST #2
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 CROSS REFERENCE TABLE -- USER SYMBOLS

EM53	026644	743	4173#
EM54	027024	749	4197#
EM55	027172	755	4219#
EM56	027340	761	4242#
EM57	027524	767	4266#
EM6	017152	523	3363#
EM60	027712	773	4291#
EM61	030076	779	4315#
EM62	030302	785	4342#
EM63	030446	791	4363#
EM64	030626	797	4386#
EM65	030762	803	4406#
EM66	031146	809	4430#
EM67	031342	815	4455#
EM7	017344	529	3388#
EM70	031520	821	4478#
EM71	031726	827	4505#
EM72	032102	833	4528#
EM73	032250	839	4550#
EM74	032406	843	4569#
EM75	032532	848	4587#
EM76	032656	853	4605#
EM77	033002	858	4623#
ERRVEC=	000004	152#	895
ET1	016262	495	3269#
ET10	017644	537	3426#
ET11	020020	543	3448#
ET12	020174	549	3470#
ET13	020350	555	3492#
ET14	020544	561	3517#
ET15	020710	567	3538#
ET16	021062	573	3560#
ET17	021242	579	3583#
ET2	016440	501	3292#
ET20	021422	585	3606#
ET21	021606	591	3630#
ET22	021754	597	3651#
ET23	022104	603	3670#
ET24	022260	609	3692#
ET25	022440	615	3715#
ET26	022570	621	3735#
ET27	022724	627	3755#
ET3	016602	507	3313#
ET30	023130	633	3781#
ET31	023342	639	3808#
ET32	023520	645	3831#
ET33	023666	651	3852#
ET34	024040	657	663
ET35	024214	3897#	
ET36	024370	667	3917#
ET37	024472	673	3932#
ET4	017006	513	3339#
ET40	024614	679	3950#
ET41	024754	685	3970#
ET42	025106	691	3989#
ET43	025272	697	4012#

896# 907# 2636 2637# 2639# 2642#

3874#

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MAINDEC-11-OZTCB-D TC11 TEST #2
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CROSS REFERENCE TABLE -- USER SYMBOLS

ET44	025460	703	4036#																
ET45	025640	709	4059#																
ET46	025756	715	4077#																
ET47	026130	721	4099#																
ETS	017134	519	3358#																
ET50	026270	727	4120#																
ET51	026454	733	4144#																
ET52	026624	739	4167#																
ET53	027004	745	4191#																
ET54	027152	751	4213#																
ET55	027320	757	4236#																
ET56	027504	763	4260#																
ET57	027672	769	4285#																
ET6	017326	525	3383#																
ET60	030056	775	4309#																
ET61	030260	781	4336#																
ET62	030426	787	4357#																
ET63	030606	793	4380#																
ET64	030742	799	4400#																
ET65	031130	805	4425#																
ET66	031324	811	4450#																
ET67	031502	817	4473#																
ET7	017476	531	3405#																
ET70	031704	823	4499#																
ET71	032062	829	4522#																
ET72	032230	835	4544#																
ET73	032370	841	4565#																
ET74	032520	845	4584#																
ET75	032644	850	4602#																
ET76	032770	855	4620#																
ET77	033114	860	4638#																
FCKSM	036230	2407	2563	5456#															
FWD	= 000000	208#	1174	1205	1235	1267	1289	1307	1337	1365	1393	1421	1447	1473					
		1527	1588	1633	1681	1729	1812	1834	1879	1947	1994	2088	2229						
F0031	005464	1481	1485	1490	1496	1498	1501#												
F0032	005700	1550	1553#																
F0034	006360	1631	1659#																
F0035	006564	1679	1707#																

G0045	= 011022	2096	2113	2122	2130	2132	2134#								
HT	= 000011	62#	2848	2889											
H0032	005736	1537	1539	1543	1548	1552	1558	1560	1562#						
H0034	006376	1660	1665#												
H0035	006602	1708	1713#												
H0036	007004	1755	1760#												
H0042	010154	1975	1978#												
H0043	010404	2009	2037#												
I	= 000040	192#	4643	4647	4651	4655	4659	4663	4666	4669	4672	4676	4680	4684	
		4688	4695	4698	4701	4704	4707	4710	4713	4716	4719	4722	4725	4728	
		4731	4734	4737	4740	4743	4746	4749	4752	4755	4758	4761	4764	4767	
		4770	4773	4776	4779	4782	4785	4788	4791	4794	4797	4800	4803	4806	
		4809	4812	4815	4818	4821	4824	4827	4830	4833	4836	4839	4842	4845	
		4848	4851	4854	4857	4860	4863	4866	4869	4872	4875	4878	4881	4884	
		4887	4890	4893	4896	4899	4902	4905	4908	4911	4914	4917	4920	4923	
		4926	4929	4932	4935	4938	4941	4944	4947	4950	4953	4956	4959	4962	
		4965	4968	4971	4974	4977	4980	4983	4986	4989	4992	4995	4998	5001	
		5004	5007	5010	5013	5016	5019	5022	5025	5028	5031	5034	5037	5040	
		5043	5046	5049	5052	5055	5058	5061	5064	5067	5070	5073	5076	5079	
		5082	5085	5088	5091	5094	5097	5100	5103	5106	5109	5112	5115	5118	
		5121	5124	5127	5130	5133	5136	5139	5142	5145	5148	5151	5154	5157	
		5160	5163	5166	5169	5172	5175	5178	5181	5184	5187	5190	5193	5196	
		5199	5202	5205	5208	5211	5214	5217	5220	5223	5226	5229	5232	5235	
		5238	5241	5244	5247	5250	5253	5256	5259	5262	5265	5268	5271	5274	
		5277	5280	5283	5286	5289	5292	5295	5298	5301	5304	5307	5310	5313	
		5316	5319	5322	5325	5328	5331	5334	5337	5340	5343	5346	5349	5352	
		5355	5358	5361	5364	5367	5370	5373	5376	5379	5382	5385	5388	5391	
		5394	5397	5400	5403	5406	5409	5412	5415	5418	5421	5424	5427	5430	
		5433	5436	5439	5442	5445	5448	5451	5454	5458	5461	5464	5467	5470	
		5476	5480												
IE	= 000100	218#	1447	1473	1527	1588	1633	1681	1729	1776	1879	1932	1947	1976	
		2104													
INBIN	012452	2464#													
IOTVEC=	000020	157#	877*	878*											
I0031	005510	1505	1510#												

MACINDEC-11-DZTCB-D TC11 TEST #2 MACY11 27(1006) 18-FEB-77 11:33 PAGE 110
DZTCB0.P11 18-FEB-77 10:59 CROSS REFERENCE TABLE -- USER SYMBOLS

[illegible]

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DZTCB0.P11 18-FEB-77 10:59 CROSS REFERENCE TABLE -- USER SYMBOLS

RNUM	= 000002
RP1	012332
RP2	012334
RSTMTX	012204
RS04	012060
RS05	012110
RS05S	012104
RTNNO	001262
RTSPC	= 000207
R0001	002660
R0002	002730
R0003	003000
R0004	003050
R0005	003134
R0006	003174
R0007	003236
R0010	003310
R0011	003372
R0012	003464
R0013	003570
R0014	003702
R0015	003756
R0016	004032
R0017	004146
R0020	004262
R0021	004352
R0022	004464
R0023	004542
R0024	004630
R0025	004736
R0026	005034
R0027	005130
R0030	005230
R0031	005316
R0032	005550
R0033	006022
R0034	006232
R0035	006436
R0036	006642
R0037	007044
R0040	007210
R0040A	007254
R0041	007516
R0041A	007532
R0041B	007564
R0042	010012
R0043	010200
R0044	010426
R0045	010602
R0046	011052
R0047	011104
R0050	011134
R0051	011164
R0052	011214
R0053	011244
	220#
	1729#
	2418#
	2421#
	921#
	2362#
	2373#
	2371#
	460#
	191#
	932#
	946#
	960#
	974#
	992#
	1009#
	1026#
	1044#
	1065#
	1087#
	1114#
	1139#
	1155#
	1174#
	1205#
	1235#
	1256#
	1285#
	1306#
	1336#
	1361#
	1389#
	1416#
	1444#
	1469#
	1523#
	1583#
	1629#
	1677#
	1725#
	1772#
	1809#
	1819#
	1875#
	1884#
	1885#
	1944#
	1992#
	2046#
	2086#
	2146#
	2158#
	2169#
	2180#
	2191#
	2202#
	1289#
	1776#
	1812#
	1834#
	1879#
	1365#
	1393#
	1421#
	1447#
	1473#
	1527#
	1588#
	1633#
	1681#
	2422#
	2429#
	2431#
	2428*
	2432#
	2630#
	2501#
	2558#
	2578#
	2387#
	910#
	2343#
	2349#
	2415#
	2442#
	2453#
	1840#
	1931#
	1888#

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M2INDEC-11-DZTC8-D TC11 TEST #2
 DZTC8D.P11 18-FEB-77 10:59

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CROSS REFERENCE TABLE -- USER SYMBOLS

[illegible]

MAINDEC-11-DZTCB-D TC11 TEST #2 MACY11 27(1006) 18-FEB-77 11:33 PAGE 113
DZTCB0.P11 18-FEB-77 10:59 CROSS REFERENCE TABLE -- USER SYMBOLS

TCBA	001244	453#	975	976#	1497	1499	1511#	1559	1572#	1618#	1648	1666#	1696	1714#
		1744	1761#	1799#	1811#	1833#	1916	1929#	2004#	2026	2058#	2098#	2131	2239#
		2716												
TCCM	001240	451#	933	934#	992	1009	1028#	1030#	1047#	1048#	1050#	1067#	1070#	1075#
		1089#	1091#	1094#	1118#	1123#	1127#	1139#	1155#	1174#	1180	1184#	1189	1205#
		1211	1215#	1220	1235#	1237	1241#	1258#	1260#	1267#	1272#	1285	1289#	1290
		1306#	1307#	1312	1316	1336#	1337#	1365#	1374	1393#	1402	1420#	1421#	1430
		1446#	1447#	1452	1472#	1473#	1478	1482	1504	1512#	1526#	1527#	1532	1540
		1565	1573#	1587#	1588#	1598	1603#	1604	1611	1619#	1632#	1633#	1638	1659
		1667#	1680#	1681#	1686	1707	1715#	1728#	1729#	1734	1754	1762#	1775#	1776#
		1781	1792	1800#	1809#	1812#	1817	1821#	1831#	1834#	1839	1841#	1851	1856#
		1857	1878#	1879#	1884	1920	1932#	1946#	1947#	1956	1960#	1968	1976#	1978#
		1993#	1994#	1999	2006#	2012	2016	2047#	2048#	2053	2060#	2066	2087#	2088#
		2093	2104#	2110	2228#	2229#	2234	2241#	2247	2507#	2597#	2598	2627#	2714
TCCMT	001316	474#												
TCOT	001246	454#	1342	1344	1346	1888	2037	2077	2114#	2137	2261			
TCLVL	001252	456#	1046	1068	2386									
TCST	001236	450#	947	948#	1114	1119	1124	1140#	1141	1156#	1157	1176	1185	1207
		1216	1242	1370	1398	1426	1534	1593	1826	1846	1952	1961	2509	2600
		2715												
TCSTT	001320	475#												
TCVTR	001250	455#	1098#	1264#	2384									
TCWC	001242	452#	961	962#	1491	1493	1510#	1553	1555	1571#	1595	1600	1606	1617#
		1642	1644	1665#	1690	1692	1713#	1738	1740	1760#	1798#	1810#	1828	1832#
		1848	1853	1859	1912	1928#	2003#	2020	2022	2057#	2097#	2127	2238#	4357
		4522												
TKVEC =	000060	161#												
TLAST =	177777	189#												
TMSAD	011672	2310#	2312#	2318#										
TORDER	011730	930	944	958	972	990	1007	1024	1042	1063	1085	1112	1137	1153
		1172	1203	1233	1254	1283	1304	1334	1359	1387	1414	1442	1467	1521
		1581	1627	1675	1723	1770	1807	1873	1942	1990	2044	2084	2144	2156
		2167	2178	2189	2200	2214	2225	2332#						
TPB	001256	458#												
TPS	001254	457#												

MAINDEC-11-DZTCB-D TC11 TEST #2 MACY11 27(1006) 18-FEB-77 11:33 PAGE 114
DZTCB0.P11 18-FEB-77 10:59 CROSS REFERENCE TABLE -- USER SYMBOLS

[illegible]

MAINDEC-11-DZTCB-D TC11 TEST #2 MACY11 27(1006) 18-FEB-77 11:33 PAGE 115
DZTCBD.P11 18-FEB-77 10:59 CROSS REFERENCE TABLE -- USER SYMBOLS

			4887	4893	4899	4905	4911	4917	4923	4929	4935	4941	4947	4953	4959
			4965	4971	4977	4983	4989	4995	5001	5007	5013	5019	5025	5031	5037
			5043	5049	5055	5061	5067	5073	5079	5085	5091	5097	5103	5109	5115
			5121	5127	5133	5139	5145	5151	5157	5163	5169	5175	5181	5187	5193
			5199	5205	5211	5217	5223	5229	5235	5241	5247	5253	5259	5265	5271
			5277	5283	5289	5295	5301	5307	5313	5319	5325	5331	5337	5343	5349
			5355	5361	5367	5373	5379	5385	5391	5397	5403	5409	5415	5421	5427
			5433	5439	5445	5451	5458	5461	5464	5467	5476	5480			
V1	=	000004	198#												
V2	=	000010	199#	4643	4669	4688	4698	4704	4710	4716	4722	4728	4734	4740	4746
			4752	4758	4764	4770	4776	4782	4788	4794	4800	4806	4812	4818	4824
			4830	4836	4842	4848	4854	4860	4866	4872	4878	4884	4890	4896	4902
			4908	4914	4920	4926	4932	4938	4944	4950	4956	4962	4968	4974	4980
			4986	4992	4998	5004	5010	5016	5022	5028	5034	5040	5046	5052	5058
			5064	5070	5076	5082	5088	5094	5100	5106	5112	5118	5124	5130	5136
			5142	5148	5154	5160	5166	5172	5178	5184	5190	5196	5202	5208	5214
			5220	5226	5232	5238	5244	5250	5256	5262	5268	5274	5280	5286	5292
			5298	5304	5310	5316	5322	5328	5334	5340	5346	5352	5358	5364	5370
			5376	5382	5388	5394	5400	5406	5412	5418	5424	5430	5436	5442	5448
			5454												
V3	=	000014	200#												
V4	=	000020	201#												
V5	=	000024	202#	4669	4672	4684	4695	4701	4707	4713	4719	4725	4731	4737	4743
			4749	4755	4761	4767	4773	4779	4785	4791	4797	4803	4809	4815	4821
			4827	4833	4839	4845	4851	4857	4863	4869	4875	4881	4887	4893	4899
			4905	4911	4917	4923	4929	4935	4941	4947	4953	4959	4965	4971	4977
			4983	4989	4995	5001	5007	5013	5019	5025	5031	5037	5043	5049	5055
			5061	5067	5073	5079	5085	5091	5097	5103	5109	5115	5121	5127	5133
			5139	5145	5151	5157	5163	5169	5175	5181	5187	5193	5199	5205	5211
			5217	5223	5229	5235	5241	5247	5253	5259	5265	5271	5277	5283	5289
			5295	5301	5307	5313	5319	5325	5331	5337	5343	5349	5355	5361	5367
			5373	5379	5385	5391	5397	5403	5409	5415	5421	5427	5433	5439	5445
			5451												

MAINDEC-11-DZTCB-D TC11 TEST #2 MACY11 27(1006) 18-FEB-77 11:33 PAGE 116
DZTCB0.P11 18-FEB-77 10:59 CROSS REFERENCE TABLE -- USER SYMBOLS

[illegible]

MAINDEC-11-DZTCB-D TC11 TEST #2 MACY11 27(1006) 18-FEB-77 11:33 PAGE 117
DZTCB0.P11 18-FEB-77 10:59 CROSS REFERENCE TABLE -- USER SYMBOLS

SQUES	001232	441#	2748	2889											
SROCHR=	*****	U	3180												
SRODEC=	*****	U	3180												
SROLIN=	*****	U	3180												
SRODCT=	*****	U	3180												
SREGAD	001160		380#												
SREGO	001162		387#	1345*	1347*	1488*	1494*	1546*	1556*	1595*	1600*	1606*	1645*	1693*	1741*
			1828*	1848*	1853*	1859*	2023*	2120*	2332*	2334	2336	2337*	3735	3808	4012
			4036	4167	4191	4213	4236	4260	4285	4309	4336	4400	4499		
SREG1	001164		390#	2336*	2715*	3269	3292	3313	3339	3358	3383	3405	3426	3448	3470
			3492	3517	3538	3560	3583	3606	3630	3651	3670	3692	3715	3755	3781
			3808	3831	3852	3874	3897	3917	3932	3950	3970	3989	4012	4036	4059
			4077	4099	4120	4144	4167	4191	4213	4236	4260	4285	4309	4336	4357
			4380	4400	4425	4450	4473	4499	4522	4544	4565				
SREG2	001166		393#	2714*	3269	3292	3313	3339	3358	3383	3405	3426	3448	3470	3492
			3517	3538	3560	3583	3606	3630	3651	3670	3692	3715	3755	3781	3808
			3831	3852	3874	3897	3917	3932	3950	3970	3989	4012	4036	4059	4077
			4099	4120	4144	4167	4191	4213	4236	4260	4285	4309	4336	4357	4380
			4400	4425	4450	4473	4499	4522	4544	4565					
SREG3	001170		396#	2716*	4144	4380	4544								
SREG4	001172		399#	1344*	1346*	1493*	1499*	1555*	1644*	1692*	1740*	2022*	3808	4036	4059
SREG5	001174		402#	2712*	2713*	3269	3292	3313	3339	3358	3383	3405	3426	3448	3470
			3492	3517	3538	3560	3583	3606	3630	3651	3670	3692	3715	3735	3755
			3781	3808	3831	3852	3874	3897	3917	3932	3950	3970	3989	4012	4036
			4059	4077	4099	4120	4144	4167	4191	4213	4236	4260	4285	4309	4336
			4357	4380	4400	4425	4450	4473	4499	4522	4544	4565	4584	4602	4620
			4638												
SREG6	001176		405#	2709*	2710*	3269	3292	3313	3339	3358	3383	3405	3426	3448	3470
			3492	3517	3538	3560	3583	3606	3630	3651	3670	3692	3715	3735	3755
			3781	3808	3831	3852	3874	3897	3917	3932	3950	3970	3989	4012	4036
			4059	4077	4099	4120	4144	4167	4191	4213	4236	4260	4285	4309	4336
			4357	4380	4400	4425	4450	4473	4499	4522	4544	4565	4584	4602	4620
			4638												
SREG7	001200		408#	2711*	3269	3292	3313	3339	3358	3383	3405	3426	3448	3470	3492
			3517	3538											

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 MAINDEC-11-DZTCB-D TC11 TEST #2
 DZTCB0.P11 18-FEB-77 10:59

 MACY11 27(1006) 18-FEB-77 11:33 PAGE 118
 CROSS REFERENCE TABLE -- USER SYMBOLS

\$TMP1	001204	418#																
\$TMP2	001206	421#																
\$TMP3	001210	424#																
\$TMP4	001212	427#																
\$TMP5	001214	430#																
\$TMP6	001216	433#																
\$TMP7	001220	436#																
\$TN =	000000	9#	29															
\$TPB	001152	374#	2878#	2889														
\$TPFLG	001157	378#	2836	2889														
\$TPS	001150	373#	2876	2889														
\$TRAP	015256	881	3104#															
\$TRAP2	015300	3115#	3154															
\$TRP =	000006	3144#	3146	3147	3157#	3159	3160	3162#	3164	3165	3167#	3169	3170	3172#				
		3174	3175	3177#														
\$TRPAD	015312	3109	3154#															
\$STNM	001102	351#	2279#	2334	2612	2647	2669#	2674	2678	2713	2719	2748						
\$STPBN=	***** U	3178																
\$STPOS	014450	2903#	3173	3176														
\$STPE	014230	2317	2836#	3145	3156													
\$STPEC	014400	2857	2864	2871	2876#	2877												
\$STPEX	014446	2882	2884	2887#														
\$STPOC	014720	2997#	3158	3161														
\$STPON	014734	2996	2999#	3171														
\$STPOS	014674	2992#	3166															
\$XTSTR	013354	2634#																
\$SGETH=	000000	2296#	2297															
\$OFILL	015117	2993#	2997#	3007	3042#													
\$4OCAT=	***** U	2631	2729															
.	= 040306	169#	173	174#	323#	348#	444	874	889	890	2305	2309	2480	2488				
		2599	2601	2677	2678	2748	2781	2812	2889	2964#	3093#	3268#	3312#	3338#				
		3357#	3382#	3516#	3629#	3691#	3734#	3873#	3896#	3916#	4035#	4058#	4076#	4166#				
		4190#	4235#	4284#	4335#	4424#	4449#	4472#	4498#	4564#	5482#	5484	5485#					

ADITAG	229#	449													
CEND	293#	5472													
COMMEN	164#														
C10	275#	4642	4658	4675	4679	4683	4687								
C22	290#	4650													
C25	266#	4662	4665	5469											
C26	269#	4668													
C32	272#	4671													
C45	287#	5466													
C51	284#	5463													
C55	263#	4654													
C70	278#	4694	4697	4700	4703	4706	4709	4712	4715	4718	4721	4724	4727	4730	4733
	4736#	4739	4742	4745	4748	4751	4754	4757	4760	4763	4766	4769	4772	4775	4778
	4781#	4784	4787	4790	4793	4796	4799	4802	4805	4808	4811	4814	4817	4820	4823
	4826#	4829	4832	4835	4838	4841	4844	4847	4850	4853	4856	4859	4862	4865	4868
	4871#	4874	4877	4880	4883	4886	4889	4892	4895	4898	4901	4904	4907	4910	4913
	4916#	4919	4922	4925	4928	4931	4934	4937	4940	4943	4946	4949	4952	4955	4958
	4961#	4964	4967	4970	4973	4976	4979	4982	4985	4988	4991	4994	4997	5000	5003
	5006#	5009	5012	5015	5018	5021	5024	5027	5030	5033	5036	5039	5042	5045	5048
	5051#	5054	5057	5060	5063	5066	5069	5072	5075	5078	5081	5084	5087	5090	5093
	5096#	5099	5102	5105	5108	5111	5114	5117	5120	5123	5126	5129	5132	5135	5138
	5141#	5144	5147	5150	5153	5156	5159	5162	5165	5168	5171	5174	5177	5180	5183
	5186#	5189	5192	5195	5198	5201	5204	5207	5210	5213	5216	5219	5222	5225	5228
	5231#	5234	5237	5240	5243	5246	5249	5252	5255	5258	5261	5264	5267	5270	5273
	5276#	5279	5282	5285	5288	5291	5294	5297	5300	5303	5306	5309	5312	5315	5318
	5321#	5324	5327	5330	5333	5336	5339	5342	5345	5348	5351	5354	5357	5360	5363
	5366#	5369	5372	5375	5378	5381	5384	5387	5390	5393	5396	5399	5402	5405	5408
	5411#	5414	5417	5420	5423	5426	5429	5432	5435	5438	5441	5444	5447		
C73	281#	5450	5453	5457	5460	5475	5479								
EMTDEF	310#														
EMTE	296#	4646													
ENDCOM	164#														
ERROR	58#	936	950	964	978	997	1014	1032	1054	1072	1093	1104	1116	1121	1126
	1143#	1159	1178	1182	1187	1191	1209	1213	1218	1222	1239	1244	1262	1269	1287
	1292#	1314	1318	1348	1372	1376	1400	1404	1428	1432	1454	145			

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MAINDEC-11-DZTCB-D TC11 TEST #2 MACY11 27(1006) 18-FEB-77 11:33 PAGE 121
 DZTCB0.P11 18-FEB-77 10:59 CROSS REFERENCE TABLE -- MACRO NAMES

	2223	2265	2277											
SETPRI	1648													
SETRAP	2598													
SETTRA	31198	3145	3158	3163	3168	3173								
SETUP	1648	868												
SKIP	1648													
SLASH	1648													
SPACE	1648													
STARS	148	1648	343	444	2269	2608	2691	2751	2783	2820	2892	2968	3047	3097
SWRSU	1648	8918	892											
TRMTRP	31418													
TYPBIN	1648													
TYPDEC	1648	2290												
TYPNAM	1648													
TYPNUM	1648													
TYPPCS	1648													
TYP OCT	1648	3060	3085											
TYPTXT	1648													
SSCHRE	3278	386	389	392	395	398	401	404	407					
SSCHTM	3348	414	417	420	423	426	429	432	435					
SSESCA	1648													
SSNEWT	1648													
SSSET	31258	3146	3159	3164	3169	3174								
SSSKIP	1648													
.EQUAT	118	53												
.HEADE	118	18												
.SETUP	128	16	862											
.SWRHI	128	29												
.SWRLO	128	428												
.SCATC	118	166												
.SCHTA	158	326												
.SEOP	118	2266												
.SERRO	148	2688												
.SERRT	148	3044												
.SPOWE	138	2748												
.SSCOP	128	2605												
.STRAP	138	3094												
.STYPD	138	2889												
.STYPE	148	2817												
.STYPO	138	2965												

. ABS. 040306 000

ERRORS DETECTED: 0
 DEFAULT GLOBALS GENERATED: 0

DZTCB0.BIN,DZTCB0.LST/CRF/SOL=DZTCB0.P11
 RUN-TIME: 19 12 2 SECONDS
 RUN-TIME RATIO: 157/35=4.4
 CORE USED: 22K (44 PAGES)