

ENTRY POINTS

FROM	ENTER THIS MAP		
MAP NUMBER	ENTRY POINT	PAGE NUMBER	STEP NUMBER
0000	A	1	001
0000	A	1	002
0000	A	1	003
0000	A	1	004
0000	A	1	005
0000	A	1	006
0000	A	1	007
0000	A	1	008
0000	A	1	009
0000	A	1	010
0000	A	1	011
0000	A	1	012
0000	A	1	013
0000	A	1	014
0000	A	1	015
0000	A	1	016
0000	A	1	017
0000	A	1	018
0000	A	1	019
0000	A	1	020
0000	A	1	021
0000	A	1	022
0000	A	1	023
0000	A	1	024
0000	A	1	025
0000	A	1	026
0000	A	1	027
0000	A	1	028
0000	A	1	029
0000	A	1	030
0000	A	1	031
0000	A	1	032
0000	A	1	033
0000	A	1	034
0000	A	1	035
0000	A	1	036
0000	A	1	037
0000	A	1	038
0000	A	1	039
0000	A	1	040
0000	A	1	041
0000	A	1	042
0000	A	1	043
0000	A	1	044
0000	A	1	045
0000	A	1	046
0000	A	1	047
0000	A	1	048
0000	A	1	049
0000	A	1	050

EXIT POINTS

EXIT THIS MAP		TO	
PAGE NUMBER	STEP NUMBER	MAP NUMBER	ENTRY POINT
001	022	0071	A
002	024	0071	A
003	031	0071	A
004	036	0071	A
005	037	0071	A
006	040	0071	A
007	043	0071	A
008	043	0071	A
009	043	0071	A
010	043	0071	A
011	043	0071	A
012	043	0071	A
013	043	0071	A
014	043	0071	A
015	043	0071	A
016	043	0071	A
017	043	0071	A
018	043	0071	A
019	043	0071	A
020	043	0071	A
021	043	0071	A
022	043	0071	A
023	043	0071	A
024	043	0071	A
025	043	0071	A
026	043	0071	A
027	043	0071	A
028	043	0071	A
029	043	0071	A
030	043	0071	A
031	043	0071	A
032	043	0071	A
033	043	0071	A
034	043	0071	A
035	043	0071	A
036	043	0071	A
037	043	0071	A
038	043	0071	A
039	043	0071	A
040	043	0071	A
041	043	0071	A
042	043	0071	A
043	043	0071	A
044	043	0071	A
045	043	0071	A
046	043	0071	A
047	043	0071	A
048	043	0071	A
049	043	0071	A
050	043	0071	A

001  
 (ENTRY POINT A)  
 SYSTEM IS:

THE PROCESSING UNIT YOU ARE USING TO RUN  
 DIAGNOSTIC(S) AND ITS ASSOCIATED ATTACHMENT(S)  
 AND DEVICE(S).

IF ANY OTHER MAP HAS INSTRUCTED YOU TO MOVE OR  
 REMOVE CARD(S), RETURN THE SYSTEM TO THE  
 ORIGINAL CONFIGURATION.

IS THIS YOUR FIRST ENTRY INTO THIS MAP?  
 N

002  
 GO TO MAP 0071, ENTRY POINT A.

003  
 SOME CHANNEL PROBLEMS CAUSE MORE THAN ONE  
 FAILURE, SUCH AS:

1. MORE THAN ONE FAILURE IN THE 'AUTO' RUN PROGRAM.
2. MORE THAN ONE FAILURE IN THE CONFIGURATION PROGRAM.
3. MORE THAN ONE FAILURE IN A COMMUNICATION ATTACHMENT WITH MORE THAN ONE DEVICE.
4. MORE THAN ONE FAILURE IN A SUBSYSTEM WITH MORE THAN ONE DEVICE.
5. MORE THAN ONE FAILURE IN AN ATTACHMENT WITH MORE THAN ONE DEVICE.

IF THE FAILURE THAT SENT YOU HERE WAS ONLY ONE  
 (1) FAILURE,  
 - ANSWER THE FOLLOWING QUESTION 'NO'.

IS THE PROBLEM THAT SENT YOU HERE A 'MORE THAN  
 ONE' FAILURE?  
 N

004  
 (ENTRY POINT CT)

IF THE PROCESSING UNIT CAN RUN  
 DIAGNOSTIC(S), AS FOLLOWS:

1. IF THE DIAGNOSTICS CAN PRINT OR DISPLAY A 'RDY ENTER' MESSAGE.
2. IF A PROGRAMMER OR C E CONSOLE IS THE CONSOLE, 3800 IS IN THE DATA LEDS;  
 - ANSWER THE FOLLOWING QUESTION 'YES'.

IF THE PROCESSING UNIT CAN NOT RUN  
 DIAGNOSTIC(S), AS FOLLOWS:

1. IF THE FAILURE WAS AT POWER ON TIME (NO FFFF IN THE DATA LEDS).
2. YOU CAN NOT IPL THE SYSTEM.  
 - ANSWER THE FOLLOWING QUESTION 'NO'.

CAN THE PROCESSING UNIT BE USED TO RUN  
 DIAGNOSTIC(S)?  
 N

1  
 2  
 A  
 B  
 C

C

005  
(ENTRY POINT SF)

-----  
THE METHOD USED IN THIS MAP IS REMOVAL  
-----

THESE CONDITIONS MUST BE MET FOR THIS MAP TO BE EFFECTIVE.

1. A DIAGNOSTIC OR ANY TEST MUST SHOW A FAILURE.
2. MAP(S) CANNOT IDENTIFY OR REPAIR THE FAILURE.

SYSTEM IS:

THE PROCESSING UNIT YOU ARE USING TO DIAGNOSE THE PROBLEM, AND ITS ASSOCIATED ATTACHMENT(S) AND DEVICE(S).

- SEE NOTE ONE (1) ---->

SEE IF THE ALTERNATE CONSOLE, IF INSTALLED, HAS PRINTED OR DISPLAYED A MESSAGE SINCE THE LAST IPL.

HAS THE ALTERNATE CONSOLE PRINTED OR DISPLAYED A MESSAGE SINCE THE LAST IPL?

N

- 006
- POWER THE SYSTEM OFF.
  - POWER THE SYSTEM ON.
  - SEE NOTE TWO (2) ---->

DETERMINE PER NOTE TWO (2) IN WHAT STEP YOUR FIRST FAILURE OCCURRED. USE THE STEP NUMBER AND ERROR INDICATIONS OBSERVED TO ANSWER QUESTION WHEN REQUESTED IN THIS MAP.  
'TEST FAIL WITH SAME FAILURE INDICATIONS?'

DOES THE SYSTEM FAIL IN STEPS ONE (1) OR TWO (2)?

N

007  
DOES THE SYSTEM FAIL IN STEPS THREE (3) THROUGH SIX (6)?

N

D  
E  
F  
G

NOTE ONE (1)

IF PROGRAMMER CONSOLE OR C. E. MAINTENANCE CONSOLE TOOL IS THE ONLY CONSOLE USED BEFORE ENTERING THIS MAP, REFERENCE 'DIAGNOSTIC SERVICE GUIDE', 07.01.00, 'PROGRAMMER CONSOLE OPERATION.'

NOTE TWO (2)

THIS TABLE IS A LIST OF THE INDICATOR(S) FOR A CORRECTLY OPERATING SYSTEM. NOTE THE FIRST STEP IN WHICH YOUR SYSTEM INDICATIONS ARE DIFFERENT AND RECORD THE DIFFERENCES. THIS IS THE FIRST FAILURE POINT FOR THIS MAP.

GO TO THE NEXT QUESTION AND USING THIS RECORDED INFORMATION, ANSWER THE QUESTION. (THIS IS THE FAILURE INDICATION FOR THIS MAP)

1. THE SYSTEM SHOULD POWER ON WITH 'FFFF' IN THE DATA LAMPS AND ALL OTHER LED(S) CORRECT FOR THE SYSTEM.
2. AFTER PRESSING THE RESET KEY, '0000' SHOULD BE IN THE DATA LAMPS AND ALL OTHER LED(S) CORRECT FOR THE SYSTEM.
3. AFTER PRESSING THE LOAD KEY, 'XXXX' WILL BE IN THE DATA LAMPS. AFTER ONE MINUTE, DCP SHOULD LOAD.
4. WHEN DCP IS LOADED CORRECTLY, A 'RDY ENTER' MESSAGE WILL BE INDICATED ON THE ALTERNATE CONSOLE AND/OR '3800' IN THE DATA LAMPS.
5. IN AUTO MODE, ALL DEVICE(S) WILL BE TESTED.
6. IF IN MANUAL MODE A SELECTED DEVICE WILL BE TESTED.

008  
THE 'FAILURE INDICATION' IS IN SOME OTHER  
TEST MAY BE IN 'SYSTEM TEST', 'FRIEND', OR  
OTHER TEST. 'FAILURE INDICATION' FROM THE  
FALLING TEST FOR THE 'FAILURE INDICATION' IN  
THIS MAP.  
GO TO STEP 009, ENTRY POINT B.

009  
(ENTRY POINT B)  
REFERENCE FIRST FAILURE RECORDED IN NOTE TWO  
(2).  
USE THIS FIRST FAILURE INDICATOR TO DETERMINE  
THE PROBLEM.

- POWER THE SYSTEM OFF.
- SEE NOTE THREE (3) ---->

NOTE THREE (3).

UNSEAT, MEANING ELECTRICALLY ISOLATE. IT IS  
ONLY NECESSARY TO PULL OUT CARD(S) ONE INCH.

-----  
\*\*\*\*\* CAUTION \*\*\*\*\*  
DO NOT REMOVE CARD(S) FROM CARD GUIDE(S)  
-----

LEAVE THE DISKETTE UNIT AND ITS ATTACHMENT  
CARD SEATED IN THE BOARD ON THE SYSTEM.  
UNLESS UNSEATED EARLIER, ALL OTHER ATTACHMENT  
CARD(S), IF ANY, MUST BE UNSEATED NOW.

IF AN EXPANSION BOARD IS CABLED TO THIS  
PROCESSING UNIT BOARD, THE ATTACHMENT CARD(S)  
INSTALLED IN IT MUST BE UNSEATED, UNLESS THE  
CUSTOMER WILL NOT PERMIT THIS.

DO NOT UNSEAT THESE CARD(S), IF INSTALLED:

- 
- ADDRESS TRANSLATOR CARD.
- CHANNEL REPOWER CARD(S).
- FLOATING POINT CARD.
- PROCESSING UNIT CARD(S).
- TWO CHANNEL SWITCH CARD(S).
- STORAGE CARD(S).

ON A 4952 PROCESSING UNIT:

-----  
THE DISKETTE ATTACHMENT CARD IS NORMALLY  
INSTALLED IN THE CARD LOCATION NEXT TO THE  
PROCESSING UNIT CARD.

ON A 4953 PROCESSING UNIT:

-----  
THE DISKETTE ATTACHMENT CARD IS NORMALLY  
INSTALLED IN THE CARD LOCATION NEXT TO THE  
LAST STORAGE CARD INSTALLED ON THE SYSTEM.

ON A 4954 PROCESSING UNIT:

-----  
THE DISKETTE ATTACHMENT CARD IS NORMALLY  
INSTALLED IN THE CARD LOCATION NEXT TO THE  
PROCESSING UNIT CARD OR NEXT TO A STORAGE CARD  
IF INSTALLED ON THE SYSTEM.

ON A 4955 PROCESSING UNIT:

-----  
THE DISKETTE ATTACHMENT CARD IS NORMALLY  
INSTALLED IN THE CARD LOCATION NEXT TO THE  
PROCESSING UNIT CARD OR NEXT TO THE FLOATING  
POINT CARD, IF INSTALLED.

IS THE DISKETTE ATTACHMENT CARD INSTALLED IN  
ONE OF THESE LOCATION(S)?

Y N  
010  
ARE YOU USING A 4955 PROCESSING UNIT TO RUN  
THE DIAGNOSTIC(S)?

Y N  
011  
ARE YOU USING A 4953 PROCESSING UNIT TO  
RUN THE DIAGNOSTIC(S)?

012  
YOU HAVE A 4952 PROCESSING UNIT INSTALLED.

- INSTALL A POLL JUMPER FROM PIN M11 TO PIN M12 IN EACH CARD POSITION WHERE A CARD IS UNSEATED.
- SEE MLD VOLUME 1.
- SEE THE CORRECT BOARD LOGIC (AXXXX) FOR THE POLL NETWORK.

GO TO PAGE 5, STEP 015,  
ENTRY POINT C.

013  
YOU HAVE A 4953 PROCESSING UNIT INSTALLED.  
THE 4953 HAS A PROCESSING UNIT WITH STORAGE  
CARD(S) INSTALLED STARTING IN THE CARD  
LOCATION NEXT TO THE PROCESSING UNIT.  
NO OPEN CARD LOCATION(S) ARE PERMITTED  
BETWEEN THE PROCESSING UNIT AND THE LAST  
STORAGE CARD INSTALLED.

- INSTALL A POLL JUMPER FROM PIN M11 TO PIN M12 IN EACH CARD POSITION WHERE A CARD IS UNSEATED.
- SEE MLD VOLUME 1.
- SEE THE CORRECT BOARD LOGIC (AXXXX) FOR THE POLL NETWORK.

GO TO PAGE 5, STEP 015, ENTRY POINT C.

- 014
- INSTALL A POLL JUMPER FROM PIN M11 TO PIN M12 IN EACH CARD POSITION WHERE A CARD IS UNSEATED.
  - SEE MLD VOLUME 1.
  - SEE THE CORRECT BOARD LOGIC (AXXXX) FOR THE POLL NETWORK.

GO TO PAGE 5, STEP 015, ENTRY POINT C.

H

015

(ENTRY POINT C)

- POWER THE SYSTEM ON.  
LOAD, IF NECESSARY, AND RUN TO FAILURE POINT.

- SEE NOTE FOUR (4) --->  
IT MUST BE READ AND UNDERSTOOD BEFORE GOING ON.

NOTE FOUR (4)

IF YOU ARE USING THE CONFIGURATION PROGRAM AS THE 'ERROR INDICATION', REFERENCE DIAGNOSTIC SERVICE GUIDE 06.02.00. FOR MORE INFORMATION.

IF YOU ARE NOT USING THE CONFIGURATION PROGRAM AS THE 'ERROR INDICATION', THERE WILL BE CONFIGURATION ERROR(S), ONE FOR EACH CARD UNSEATED. THERE SHOULD BE AN 'IN TABLE - NOT IN HARDWARE' (DATA LAMPS = 3841) MESSAGE FOR EACH CARD UNSEATED.

-----  
THESE ERRORS SHOULD BE IGNORED  
THEY ARE NOT ERROR INDICATIONS  
-----

TO TERMINATE THE CONFIGURATION PROGRAM ON AN ALTERNATE CONSOLE WITH ITS KEYBOARD WORKING, WHEN THE MESSAGE ON THE ALTERNATE CONSOLE IS: 'CONFIGURATION ERRORS'  
'01 = TERMINATE'  
'02 = PRINT ALL ERRORS'  
'03 = PRINT OPTIONS'  
'04 = BYPASS TWO CHANNEL SWITCH ERROR'

ENTER ON KEYBOARD AS FOLLOWS:

F01 ENTER OR RETURN  
01 = TERMINATE

TO TERMINATE THE CONFIGURATION PROGRAM IF THE PROGRAMMER CONSOLE IS THE INPUT DEVICE OR IF AN ALTERNATE CONSOLE WITH KEYBOARD IS NOT WORKING, SEE TABLE ONE (1) BELOW.

TABLE ONE (1)

DATA LAMPS EQUAL	ENTER ON CONSOLE
3801.....ALTERNATE CONSOLE NOT AVAILABLE	(D) 6 (I) (I)
382A.....DISCONNECT CUSTOMER INTERFACE	(D) 6 (I) (I)
3822.....TERMINATE CONFIGURATION PROGRAM	{D} IF {I} {D} 0100 {I} (I)
3800.....RDY ENTER	AUTO OR MANUAL RUN

{D} - PRESS THE DATA BUFFER KEY.  
{I} - PRESS THE CONSOLE INTERRUPT KEY.

REFERENCE DIAGNOSTIC SERVICE GUIDE, 07.01.00., FOR PROGRAMMER CONSOLE OPERATION.

DOES THE TEST FAIL WITH SAME FAILURE INDICATIONS?

N

8 6  
M N

N  
5

CHANNEL ATTACHMENT - DEVICE MAP  
PAPER ONLY MAP  
PAGE 6 OF 20

MAP 0070-6

016  
DISKETTE UNIT AND PROCESSING UNIT AND STORAGE  
ARE O.K.

- POWER THE SYSTEM OFF.

IF POLL JUMPERS WERE NOT INSTALLED IN THE CARD  
POSITION(S) WHERE CARD(S) ARE UNSEATED:

- INSTALL A POLL JUMPER FROM PIN M11 TO PIN  
M12 IN EACH CARD POSITION WHERE A CARD IS  
UNSEATED.
- SEE MLD VOLUME 1.
- SEE THE CORRECT BOARD LOGIC (AXXXX) FOR THE  
POLL NETWORK.

IS AN ALTERNATE CONSOLE AVAILABLE TO THE  
PROCESSING UNIT, IF USABLE OR NOT?

N

017  
YOU DO NOT HAVE AN ALTERNATE CONSOLE.  
YOU ARE USING THE CONSOLE LAMPS AND SWITCHES  
TO COMMUNICATE WITH PROCESSING UNIT.  
REMEMBER CONFIGURATION ERRORS WILL HAVE TO  
BE VERIFIED WHEN USING THIS MAP.  
REFERENCE DIAGNOSTIC SERVICE GUIDE 07.01.00,  
CONSOLE OPERATION, FOR AID IN USING CONSOLE  
TO RUN A DIAGNOSTIC.

GO TO PAGE 15, STEP 070, ENTRY POINT G.

Z  
P

20NOV81 PN1635008  
EC466795 PEC987889  
MAP 0070-6

018  
(ENTRY POINT D)

- POWER THE SYSTEM OFF.
- ALTERNATE CONSOLE ATTACHMENT CARD IS UNSEATED.  
SEAT THE ALTERNATE CONSOLE ATTACHMENT CARD.
- REMOVE THE POLL JUMPER FROM PIN M11 TO PIN M12 IN THE CARD POSITION WHERE THE CARD WAS JUST SEATED.
- SEE MLD VOLUME 1.
- SEE THE CORRECT BOARD LOGIC (AXXXX) FOR THE POLL NETWORK.
- POWER THE SYSTEM ON.
- LOAD, IF NECESSARY, AND RUN TO THE FAILURE POINT.
- SEE NOTE FIVE (5) --->  
IT MUST BE READ AND UNDERSTOOD BEFORE GOING ON.

NOTE FIVE (5)

IF YOU ARE USING THE CONFIGURATION PROGRAM AS THE 'ERROR INDICATION', REFERENCE DIAGNOSTIC SERVICE GUIDE 06.02.00. FOR MORE INFORMATION.

IF YOU ARE NOT USING THE CONFIGURATION PROGRAM AS THE 'ERROR INDICATION', THERE WILL BE CONFIGURATION ERROR(S), ONE FOR EACH CARD UNSEATED. THERE SHOULD BE AN 'IN TABLE - NOT IN HARDWARE' (DATA LAMPS = 3841) MESSAGE FOR EACH CARD UNSEATED.

```

+-----+
| THESE ERRORS SHOULD BE IGNORED |
| THEY ARE NOT ERROR INDICATIONS |
+-----+
  
```

TO TERMINATE THE CONFIGURATION PROGRAM ON AN ALTERNATE CONSOLE WITH ITS KEYBOARD WORKING, WHEN THE MESSAGE ON THE ALTERNATE CONSOLE IS: 'CONFIGURATION ERRORS'

- '01 = TERMINATE'
- '02 = PRINT ALL ERRORS'
- '03 = PRINT OPTIONS'
- '04 = BYPASS TWO CHANNEL SWITCH ERROR'

ENTER ON KEYBOARD AS FOLLOWS:

```

FO1 = TERMINATE ENTER OR RETURN
O1 = TERMINATE
  
```

TO TERMINATE THE CONFIGURATION PROGRAM IF THE PROGRAMMER CONSOLE IS THE INPUT DEVICE OR IF AN ALTERNATE CONSOLE WITH KEYBOARD IS NOT WORKING, SEE TABLE ONE (1) BELOW.

TABLE ONE (1)

DATA LAMPS EQUAL	ENTER ON CONSOLE
3801 ALTERNATE CONSOLE NOT AVAILABLE	{D} 6 {I} (I)
382A DISCONNECT CUSTOMER INTERFACE	{D} 6 {I} (I)
3822 TERMINATE CONFIGURATION PROGRAM	{D} 0100 IF {I} (I)
3800.....RDY ENTER	AUTO OR MANUAL RUN

{D} - PRESS THE DATA BUFFER KEY.  
{I} - PRESS THE CONSOLE INTERRUPT KEY.

REFERENCE DIAGNOSTIC SERVICE GUIDE, 07.01.00., FOR PROGRAMMER CONSOLE OPERATION.

DOES THE TEST FAIL WITH THE SAME FAILURE INDICATIONS?  
N

019  
THE PROCESSING UNIT, DISKETTE UNIT AND ALTERNATE CONSOLE ARE NOT FAILING BECAUSE OF CONFIGURATION OF THE SYSTEM AT THIS POINT. THERE MAY BE CONFIGURATION ERRORS ON THE ALTERNATE CONSOLE. THE CONFIGURATION ERRORS FOR AN UNSEATED CARD ARE:  
'IN TABLE NOT IN HARDWARE.'

THEY ARE TO BE IGNORED, UNLESS THEY ARE PART OF THE ORIGINAL FAILURE INDICATIONS. GO TO PAGE 15, STEP 070, ENTRY POINT G.

020  
- POWER THE SYSTEM OFF.

EXCHANGE THE ALTERNATE CONSOLE ATTACHMENT  
CARD WITH A KNOWN GOOD CARD.  
REVIEW THE JUMPERING ON ATTACHMENT CARD.  
- POWER THE SYSTEM ON.

LOAD, IF NECESSARY, AND RUN TO THE FAILURE  
POINT.

DOES THE TEST FAIL WITH THE SAME FAILURE  
INDICATIONS?

Y  
N

021  
THE ALTERNATE CONSOLE ATTACHMENT CARD  
FAILED.  
- VERIFY THE REPAIR

022  
HAS THE DISKETTE UNIT ATTACHMENT CARD BEEN  
EXCHANGED BEFORE?

Y  
N

023  
GO TO STEP 025,  
ENTRY POINT DU.

024  
IF AN ATTACHMENT/DEVICE CARD(S) WAS  
EXCHANGED IN THE MAP, IT IS THE 'SUSPECT  
ATTACHMENT CARD' IN MAP 0071.  
GO TO MAP 0071, ENTRY POINT A.

025  
(ENTRY POINT DU)

THE DISKETTE UNIT MAY BE THE FAILING  
ATTACHMENT/DEVICE.

- POWER THE SYSTEM OFF.  
- SEE IF THE DISKETTE UNIT ATTACHMENT CARD WAS  
EXCHANGED PREVIOUSLY.

WAS THE DISKETTE UNIT ATTACHMENT CARD  
EXCHANGED PREVIOUSLY?

Y  
N

026  
THE ADDRESS JUMPERING AND ALL OTHER JUMPERS  
SHOULD BE CORRECT ON THE ATTACHMENT CARD.

- INSPECT THE JUMPERING ON DISKETTE UNIT  
ATTACHMENT CARD.

IS THE ADDRESS JUMPERING AND ALL OTHER  
JUMPERS CORRECT?

Y  
N

027  
- CORRECT THE JUMPERING ON DISKETTE UNIT  
ATTACHMENT CARD.  
- VERIFY THE REPAIR

028  
- SEE IF ANOTHER DISKETTE UNIT IS AVAILABLE  
TO THE PROCESSING UNIT.  
- SEE IF ANOTHER ATTACHMENT CARD IS  
AVAILABLE TO THE PROCESSING UNIT.  
YOU MUST HAVE ANOTHER ATTACHMENT CARD AND A  
DISKETTE UNIT AVAILABLE, NOT THE ATTACHMENT/  
DEVICE USED PREVIOUSLY.

IS THERE ANOTHER ATTACHMENT/DISKETTE UNIT  
AVAILABLE AS NOTED ABOVE?

Y  
N

029  
- EXCHANGE THE DISKETTE UNIT ATTACHMENT  
CARD WITH A KNOWN GOOD CARD.  
- POWER THE SYSTEM ON.

LOAD, IF NECESSARY, AND RUN TO THE FAILURE  
POINT.

DOES THE TEST FAIL WITH THE SAME FAILURE  
INDICATIONS?

Y  
N

030  
THE DISKETTE UNIT ATTACHMENT CARD  
FAILED.  
- VERIFY THE REPAIR

031  
- IF AN ATTACHMENT/DEVICE CARD(S) WAS EXCHANGED IN THE MAP, IT IS THE SUSPECT ATTACHMENT CARD IN MAP 0071. GO TO MAP 0071, ENTRY POINT A.

032  
- SEE IF THIS AVAILABLE ATTACHMENT/DISKETTE UNIT IS JUMPERED FOR A LOAD DEVICE.

IS IT JUMPERED FOR A LOAD DEVICE?

N

033  
- ENSURE THE IPL JUMPERING ON THE ATTACHMENT CARD IS FOR THIS DISKETTE UNIT TO BE A LOAD DEVICE.  
- SEE THE DISKETTE UNIT MAINTENANCE INFORMATION MANUAL FOR JUMPERING INSTRUCTIONS.  
GO TO STEP 034, ENTRY POINT E.

034  
(ENTRY POINT E)

- SEAT OR INSTALL THE AVAILABLE DISKETTE UNIT ATTACHMENT CARD AND DEVICE, WHEN NECESSARY.  
- REMOVE THE POLL JUMPER FROM PIN M11 TO PIN M12 IN THE CARD POSITION WHERE THE CARD WAS JUST SEATED.  
- UNSEAT THE SUSPECT DISKETTE UNIT ATTACHMENT CARD USED PREVIOUSLY FOR THE LOAD DEVICE TO RUN THE DIAGNOSTIC.  
- INSTALL A POLL JUMPER FROM PIN M11 TO PIN M12 IN EACH CARD POSITION WHERE A CARD IS UNSEATED.  
- POWER THE SYSTEM ON.

LOAD, IF NECESSARY, FROM THIS DISKETTE UNIT AND RUN TO THE FAILURE POINT.

DOES THE TEST FAIL WITH THE SAME FAILURE INDICATIONS?

N

035  
THE ORIGINAL DISKETTE ATTACHMENT/ DEVICE UNSEATED IS NOW SUSPECT.

- POWER THE SYSTEM OFF.  
- SEAT THE SUSPECT DISKETTE UNIT ATTACHMENT CARD.  
- POWER THE SYSTEM ON.

IF THE DISKETTE UNIT IS:	GO TO MAP PROLOG:
4962 MODEL 2(F)	4800
4963 MODEL 2(F) OR A	4800
4964	4800
4965	4800
4966	4800
4969	4800
4953 MODEL C	4800
4954 MODEL C	4800

- RUN THE 4X00 MAP DIAGNOSTIC USING THE WORKING DISKETTE UNIT FOR THE LOAD DEVICE.

036  
- POWER THE SYSTEM OFF.  
- RETURN THE ORIGINAL DISKETTE UNIT ATTACHMENT CARD AND DEVICE TO ORIGINAL CONDITIONS.  
- RETURN THE AVAILABLE DISKETTE UNIT ATTACHMENT CARD AND DEVICE TO ORIGINAL CONDITIONS.

POLL ON THE BOARD AND THE IPL JUMPER(S) ON THE ATTACHMENT CARD(S) MUST BE RETURNED TO THE ORIGINAL CONDITIONS.

IF AN ATTACHMENT/DEVICE CARD(S) WAS EXCHANGED IN THE MAP, IT IS THE SUSPECT ATTACHMENT CARD IN MAP 0071. GO TO MAP 0071, ENTRY POINT A.

037  
IF AN ATTACHMENT/DEVICE CARD(S) WAS  
EXCHANGED IN THE MAP, IT IS THE 'SUSPECT  
ATTACHMENT CARD' IN MAP 0071  
GO TO MAP 0071, ENTRY POINT A.

038

- SEE NOTE TWO (2).

YOU SHOULD HAVE RECORDED THE FIRST FAILURE  
INDICATION  
USE THE FIRST FAILURE INDICATION TO DETERMINE  
THE PROBLEM.

- POWER THE SYSTEM OFF.

IF AN EXPANSION BOARD IS CABLED TO THIS  
PROCESSING UNIT BOARD, THE ATTACHMENT CARD(S)  
INSTALLED IN IT MUST BE UNSEATED, UNLESS THE  
CUSTOMER WILL NOT PERMIT THIS.

DO NOT UNSEAT THESE CARD(S), IF INSTALLED:

-----  
ADDRESS TRANSLATOR CARD.  
CHANNEL REPOWER CARD(S).  
FLOATING POINT CARD.  
PROCESSING UNIT CARD(S).  
TWO CHANNEL SWITCH CARD(S).  
STORAGE CARD(S).  
-----

- UNSEAT ALL I/O ATTACHMENT CARD(S) INCLUDING  
DISKETTE UNIT ATTACHMENT CARD.

UNSEAT, MEANING ELECTRICALLY ISOLATE. IT IS  
ONLY NECESSARY TO PULL OUT CARD(S) ONE INCH.

-----  
\*\*\*\*\* CAUTION \*\*\*\*\*  
-----

DO NOT REMOVE CARD(S) FROM CARD GUIDE(S)  
-----

- POWER THE SYSTEM ON.  
- SEE THE FAILURE INDICATION NOTED PREVIOUSLY.  
(FAILURE IS IN STEPS ONE OR TWO).

DOES THE TEST FAIL WITH THE SAME FAILURE  
INDICATIONS?

Y  
N

039  
THE PROCESSING UNIT AND STORAGE ARE O.K.

- SEAT THE DISKETTE UNIT ATTACHMENT CARD.  
GO TO PAGE 3, STEP 009, ENTRY POINT B.

040

- POWER THE SYSTEM OFF.  
GO TO MAP 0071, ENTRY POINT PR.

B D  
1 2

CHANNEL ATTACHMENT - DEVICE MAP  
PAPER ONLY MAP  
PAGE 11 OF 20

MAP 0070-11

041  
- POWER THE SYSTEM OFF.  
- LEAVE THE ALTERNATE CONSOLE AND THE DISKETTE UNIT AND THEIR ATTACHMENT CARD(S) SEATED IN THE BOARD ON THE SYSTEM.  
IF AN EXPANSION BOARD IS CABLED TO THIS PROCESSING UNIT BOARD, THE ATTACHMENT CARD(S) INSTALLED IN IT MUST BE UNSEATED, UNLESS THE CUSTOMER WILL NOT PERMIT THIS.

DO NOT UNSEAT THESE CARD(S), IF INSTALLED:

-----  
ADDRESS TRANSLATOR CARD.  
CHANNEL REPOWER CARD(S).  
FLOATING POINT CARD.  
PROCESSING UNIT CARD(S).  
TWO CHANNEL SWITCH CARD(S).  
STORAGE CARD(S).  
- UNSEAT ALL OTHER ATTACHMENT CARD(S), IF ANY.

UNSEAT, MEANING ELECTRICALLY ISOLATE. IT IS ONLY NECESSARY TO PULL CARD OUT ONE INCH.

- DO NOT REMOVE CARD(S) FROM THEIR GUIDES.  
- POWER THE SYSTEM ON.

LOAD, IF NECESSARY, AND SEE IF THERE IS A FAILURE.  
A CONFIGURATION ERROR CAUSED BY UNSEATED CARDS IS NOT A FAILURE.

DOES THE TEST FAIL WITH THE SAME FAILURE INDICATIONS?

Y  
N

042  
THE PROCESSING UNIT AND STORAGE ARE O.K.  
THE ALTERNATE CONSOLE AND DISKETTE UNIT ARE O.K.  
GO TO PAGE 15, STEP 070,  
ENTRY POINT G.

043  
- POWER THE SYSTEM OFF.

GO TO MAP 0071, ENTRY POINT PR.

044  
- DO NOT RUN MANUAL DIAGNOSTICS ON AN ATTACHMENT OR DEVICE THAT IS NOT SUSPECT. THE MANUAL MAPS WILL FAIL AND CALL OUT A FIELD REPLACEMENT UNIT FOR EACH MAP RUN. REMEMBER - YOU HAVE A CHANNEL PROBLEM.  
- SEE THE SUSPECT ATTACHMENT OR DEVICE THAT SENT YOU HERE.  
- SEE IF ALL THE MANUAL DIAGNOSTICS HAVE BEEN RUN ON THIS SUSPECT ATTACHMENT OR DEVICE.

HAVE ALL THE MANUAL DIAGNOSTICS BEEN RUN ON THE SUSPECT DEVICE?

Y  
N

045  
- RUN THE MANUAL DIAGNOSTICS ON THE SUSPECT ATTACHMENT OR DEVICE.  
- SEE IF A FIELD REPLACEMENT UNIT IS FOUND.  
- SEE IF THIS FIELD REPLACEMENT UNIT WAS EXCHANGED PREVIOUSLY.

WAS IT EXCHANGED BEFORE ENTERING THIS MAP?

Y  
N

046  
- EXCHANGE THE FIELD REPLACEMENT UNIT.  
IF NO REPAIR:  
GO TO PAGE 2, STEP 005,  
ENTRY POINT SF.

047  
GO TO PAGE 2, STEP 005, ENTRY POINT SF.

048  
GO TO PAGE 2, STEP 005, ENTRY POINT SF.

049  
↑  
THERE IS 'MORE THAN ONE FAILURE' ON THE SYSTEM.

- SEE IF A CHANNEL REPOWER CARD IS INSTALLED ON THE SYSTEM.

IS A CHANNEL REPOWER CARD INSTALLED ON THE SYSTEM?  
N

050  
(ENTRY POINT TC)

- SEE IF A TWO CHANNEL SWITCH IS INSTALLED ON THE SYSTEM.

IS A TWO CHANNEL SWITCH CARD INSTALLED ON THE SYSTEM?  
N

051  
(ENTRY POINT ME)

- SEE IF THE DEVICE(S) HAVING ERRORS ARE INSTALLED IN THE SAME CARD FILE.

ARE ALL THE ERRORS IN THE SAME CARD FILE?  
N

052  
- SEE IF ALL THE DEVICE(S) HAVING ERRORS ARE PART OF A SUBSYSTEM.

A 'SUBSYSTEM' IS:

-----  
4982        SENSOR I/O (SIO)  
4987        PROGRAMMABLE COMMUNICATION

ARE ALL THE ERRORS IN THE SAME SUBSYSTEM?  
N

053  
- SEE IF ALL THE DEVICE(S) HAVING ERRORS HAVE THE SAME ATTACHMENT CARD.

DO ALL THE ERRORS HAVE THE SAME ATTACHMENT CARD?  
N

1  
2  
U  
V  
W  
X  
Y  
Z

054  
GO TO PAGE 1, STEP 004,  
ENTRY POINT CT.

055  
- SEE IF THIS ATTACHMENT CARD WAS  
EXCHANGED BEFORE ENTERING THIS MAP.

HAS THIS ATTACHMENT CARD BEEN EXCHANGED  
BEFORE ENTERING THIS MAP?

N

056  
EXCHANGE THE ATTACHMENT CARD.  
IF NO REPAIR,  
GO TO PAGE 1, STEP 004,  
ENTRY POINT CT.

057  
GO TO PAGE 2, STEP 005,  
ENTRY POINT SF.

058  
- GO TO THE SUBSYSTEM PROLOG.  
- RUN ALL MANUAL MAP(S) NOT RUN ALREADY  
FOR THE PROBLEM BEFORE STARTING THIS  
MAP  
(ONLY IF THE SUBSYSTEM MAP SHOWS A  
FAILURE)

A 'SUBSYSTEM' IS:

-----  
4982 SENSOR I/O (SIO)  
4987 PROGRAMMABLE COMMUNICATION

DO THESE MAP(S) CALL OUT THE SAME FIELD  
REPLACEMENT UNIT?

N

059  
- EXCHANGE THE FIELD REPLACEMENT UNIT.  
IF NO REPAIR,  
GO TO PAGE 2, STEP 005,  
ENTRY POINT SF.

060  
- DO NOT EXCHANGE THE FIELD REPLACEMENT  
UNIT.

THE FIELD REPLACEMENT UNIT HAS BEEN  
EXCHANGED ONCE.  
GO TO PAGE 2, STEP 005,  
ENTRY POINT SF.

061  
- DO A VOLTAGE CHECK ON THE BOARD.  
- SEE THE CORRECT BOARD LOGIC(S).

ARE ALL THE VOLTAGES CORRECT?

N

062  
TO CORRECT THE POWER PROBLEM:  
GO TO MAP 1470, ENTRY POINT A.

063  
GO TO PAGE 1, STEP 004, ENTRY POINT CT.

064  
- POWER THE SYSTEM OFF.

IF MORE THAN ONE (1) TWO CHANNEL SWITCH CARD  
IS INSTALLED, USE THEM FOR FIELD REPLACEMENT  
UNIT ISOLATION.

- EXCHANGE THE TWO CHANNEL SWITCH CARD WITH A  
KNOWN GOOD CARD.  
- POWER THE SYSTEM ON.

DOES THE TEST FAIL WITH THE SAME INDICATIONS?

N

065  
THE TWO CHANNEL SWITCH CARD IS BAD.  
- VERIFY THE REPAIR

066  
GO TO PAGE 12, STEP 051, ENTRY POINT ME.

U  
2

CHANNEL ATTACHMENT - DEVICE MAP  
PAPER ONLY MAP  
PAGE 14 OF 20

MAP 0070-14

067

- POWER THE SYSTEM OFF.

IF MORE THAN ONE (1) CHANNEL REPOWER CARD IS  
INSTALLED, USE THEM FOR FIELD REPLACEMENT UNIT  
ISOLATION.

- EXCHANGE THE CHANNEL REPOWER CARD WITH A  
KNOWN GOOD CARD.  
- POWER THE SYSTEM ON.

DOES THE TEST FAIL WITH THE SAME INDICATIONS?

N

068

THE CHANNEL REPOWER CARD IS BAD.  
- VERIFY THE REPAIR

069

GO TO PAGE 12, STEP 050, ENTRY POINT TC.

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MAP 0070-14

070  
(ENTRY POINT G)

BECAUSE OF THE VARIABLES IN A SYSTEM CONFIGURATION, IT IS NOT POSSIBLE FOR THIS MAP TO GIVE EXACT INSTRUCTION(S) ON HOW TO JUMPER THE POLL LINE(S). THE IMPORTANT POINT TO REMEMBER IS TWO CONSECUTIVE CARD LOCATION(S) CANNOT BE LEFT EMPTY.

INSTALL A POLL JUMPER FROM PIN M11 TO PIN M12 IN THE CARD POSITION(S) WHEN A CARD IS UNSEATED.

REMOVE A POLL JUMPER FROM PIN M11 TO PIN M12 IN THE CARD POSITION WHEN A CARD IS SEATED.

NOTE

POLL IS SENT FROM BOARD TO BOARD THROUGH CABLE(S), WHICH ARE NOT REMOVED AT THIS TIME.

SEE THE PROCESSING UNIT THEORY DIAGRAMS MANUAL, 'POLL' FOR THE CIRCUIT DESCRIPTION.

NOTE

IF POLL IS NOT JUMPERED CORRECTLY, THE SYMPTOM IS:  
4952 PROCESSING UNIT

AFTER PRESSING LOAD KEY, THE DATA LAMPS WILL DISPLAY '00E0' AND NO IPL WILL OCCUR.

4953 PROCESSING UNIT

WHEN POWERED ON, THE DATA LAMPS WILL DISPLAY '0025' OR '0026' WITH THE CHECK LAMP ON.

4955 PROCESSING UNIT

AFTER PRESSING LOAD KEY, THE DATA LAMPS WILL DISPLAY '00E0' AND NO IPL WILL OCCUR.

IF YOU SEE THE ABOVE INDICATIONS, REVIEW POLL JUMPERING.  
SEE ALL THE POLL JUMPERS INSTALLED ON THE BOARD.

THERE MUST BE A POLL JUMPER INSTALLED ON PIN M11 TO PIN M12 FOR EVERY CARD UNSEATED AT THIS TIME.

THERE MUST NOT BE AN EMPTY (NO CARD INSTALLED) POSITION ON BOTH SIDES OF ANY CARD POSITION THAT HAS A POLL JUMPER INSTALLED.

IF BOTH SIDES OF A CARD POSITION THAT HAS A POLL JUMPER INSTALLED ARE EMPTY (NO CARD INSTALLED), THEN ONE OF THEM MUST HAVE A POLL JUMPER FROM PIN M11 TO PIN M12.

SEE THE CORRECT BOARD LOGIC(S) FOR THE POLL NETWORK.

IF THE FAILURE WAS IN AN ATTACHMENT/DEVICE MAP, AND A CARD WAS EXCHANGED IN THE MAP AND THE PROBLEM WAS NOT REPAIRED, THE ATTACHMENT OR DEVICE IS A 'SUSPECT ATTACHMENT'. ANSWER THE FOLLOWING QUESTION 'YES':

IS ANY ATTACHMENT SUSPECT?

N  
071  
GO TO PAGE 17, STEP 076, ENTRY POINT H.

1  
6  
A

A  
A  
S

072

- SEAT THE SUSPECT ATTACHMENT CARD.
  - POWER THE SYSTEM OFF.
  - REMOVE THE POLL JUMPER FROM PIN M11 TO PIN M12 IN THE CARD POSITION WHERE THE CARD WAS JUST SEATED.
  - SEE MLD VOLUME 1.
  - SEE THE CORRECT BOARD LOGIC (AXXXX) FOR THE POLL NETWORK.
  - POWER THE SYSTEM ON.
- LOAD, IF NECESSARY, AND RUN TO THE FAILURE POINT.

FROM THIS POINT ON IN THIS MAP, IF THE FAILURE INDICATION REFERENCED BEFORE IS IN STEPS THREE (3) THROUGH SIX (6) OF NOTE TWO (2), THE CONFIGURATION PROGRAM MAY INDICATE ERRORS.

- SEE NOTE SIX (6) ---->

IT MUST BE READ AND UNDERSTOOD BEFORE GOING ON.

NOTE SIX (6)

IF YOU ARE USING THE CONFIGURATION PROGRAM AS THE 'ERROR INDICATION', REFERENCE DIAGNOSTIC SERVICE GUIDE 06.02.00. FOR MORE INFORMATION.

IF YOU ARE NOT USING THE CONFIGURATION PROGRAM AS THE 'ERROR INDICATION', THERE WILL BE CONFIGURATION ERROR(S), ONE FOR EACH CARD UNSEATED. THERE SHOULD BE AN 'IN TABLE - NOT IN HARDWARE' (DATA LAMPS = 3841) MESSAGE FOR EACH CARD UNSEATED.

```

+-----+
| THESE ERRORS SHOULD BE IGNORED |
| THEY ARE NOT ERROR INDICATIONS |
+-----+

```

TO TERMINATE THE CONFIGURATION PROGRAM ON AN ALTERNATE CONSOLE WITH ITS KEYBOARD WORKING, WHEN THE MESSAGE ON THE ALTERNATE CONSOLE IS:

- 'CONFIGURATION ERRORS'
- '01 = TERMINATE'
- '02 = TERMINATE ERRORS'
- '03 = PRINT OPTIONS'
- '04 = BYPASS TWO CHANNEL SWITCH ERROR'

ENTER ON KEYBOARD AS FOLLOWS:

- F01 ENTER OR RETURN
- 01 = TERMINATE

TO TERMINATE THE CONFIGURATION PROGRAM IF THE PROGRAMMER CONSOLE IS THE INPUT DEVICE OR IF AN ALTERNATE CONSOLE WITH KEYBOARD IS NOT WORKING, SEE TABLE ONE (1) BELOW.

TABLE ONE (1)

DATA LAMPS EQUAL	ENTER ON CONSOLE
3801.....ALTERNATE CONSOLE NOT AVAILABLE	{D} 6      {I} {I}
382A.....DISCONNECT CUSTOMER INTERFACE	{D} 6      {I} {I}
3822.....TERMINATE CONFIGURATION PROGRAM	{D}    IF {I} {D} 0100 {I} {I}
3800.....RDY ENTER	AUTO OR MANUAL RUN

{D} - PRESS THE DATA BUFFER KEY.  
{I} - PRESS THE CONSOLE INTERRUPT KEY.

REFERENCE DIAGNOSTIC SERVICE GUIDE, 07.01.00., FOR PROGRAMMER CONSOLE OPERATION.

DOES THE TEST FAIL WITH THE SAME FAILURE INDICATIONS?

N

073

IS THERE ANY SUSPECT ATTACHMENT CARD THAT IS UNSEATED NOW?

N

074

IS THERE ANY ATTACHMENT CARD THAT IS UNSEATED NOW?

N

075

THE PROBLEM IS INTERMITTENT OR THERE MAY HAVE BEEN A LOOSE CARD OR CABLE.  
GO TO MAP 0072, ENTRY POINT A.

1 1 1  
A B C D

A  
D  
6

076  
(ENTRY POINT H)

- POWER THE SYSTEM OFF.

SEAT AN ATTACHMENT CARD THAT HAS NOT BEEN TESTED.

- REMOVE THE POLL JUMPER FROM PIN M11 TO PIN M12 IN THE CARD POSITION WHERE THE CARD WAS JUST SEATED.

- SEE MLD VOLUME 1.  
- SEE THE CORRECT BOARD LOGIC (AXXXX) FOR THE POLL NETWORK.

- POWER THE SYSTEM ON.

LOAD, IF NECESSARY, AND RUN TO THE FAILURE POINT.

- SEE NOTE SEVEN (7) ---->

NOTE SEVEN (7)

IF YOU ARE USING THE CONFIGURATION PROGRAM AS THE 'ERROR INDICATION', REFERENCE DIAGNOSTIC SERVICE GUIDE 06.02.00. FOR MORE INFORMATION.

IF YOU ARE NOT USING THE CONFIGURATION PROGRAM AS THE 'ERROR INDICATION', THERE WILL BE CONFIGURATION ERROR(S), ONE FOR EACH CARD UNSEATED. THERE SHOULD BE AN 'IN TABLE - NOT IN HARDWARE' (DATA LAMPS = 3841) MESSAGE FOR EACH CARD UNSEATED.

-----  
THESE ERRORS SHOULD BE IGNORED  
THEY ARE NOT ERROR INDICATIONS  
-----

TO TERMINATE THE CONFIGURATION PROGRAM ON AN ALTERNATE CONSOLE WITH ITS KEYBOARD WORKING, WHEN THE MESSAGE ON THE ALTERNATE CONSOLE IS:

- 'CONFIGURATION ERRORS'
- '01 = TERMINATE'
- '02 = PRINT ALL ERRORS'
- '03 = PRINT OPTIONS'
- '04 = BYPASS TWO CHANNEL SWITCH ERROR'

ENTER ON KEYBOARD AS FOLLOWS:

- F01 ENTER OR RETURN
- 01 = TERMINATE

TO TERMINATE THE CONFIGURATION PROGRAM IF THE PROGRAMMER CONSOLE IS THE INPUT DEVICE OR IF AN ALTERNATE CONSOLE WITH KEYBOARD IS NOT WORKING, SEE TABLE ONE (1) BELOW.

TABLE ONE (1)

DATA LAMPS EQUAL	ENTER ON CONSOLE
3801.....ALTERNATE CONSOLE NOT AVAILABLE	(D) 6 (I) (I)
382A....DISCONNECT CUSTOMER INTERFACE	(D) 6 (I) (I)
3822....TERMINATE CONFIGURATION PROGRAM	(D) IF (I) (D) 0100 (I) (I)
3800.....RDY ENTER	AUTO OR MANUAL RUN

(D) - PRESS THE DATA BUFFER KEY.  
(I) - PRESS THE CONSOLE INTERRUPT KEY.

REFERENCE DIAGNOSTIC SERVICE GUIDE, 07.01.00., FOR PROGRAMMER CONSOLE OPERATION.

DOES THE TEST FAIL WITH THE SAME FAILURE INDICATIONS?

N

077  
SEE IF ANY ATTACHMENT CARD(S) ARE UNSEATED IN BOARD(S) THAT HAVE NOT BEEN TESTED.

ARE THERE ANY ATTACHMENT CARD(S) THAT HAVE NOT BEEN TESTED?

Y  
N

078  
THE PROBLEM IS INTERMITTENT.  
GO TO MAP 0072, ENTRY POINT A.

079  
GO TO STEP 076, ENTRY POINT H.

1  
0  
A  
E

A A A  
B C E  
6 6 7

CHANNEL ATTACHMENT - DEVICE MAP  
PAPER ONLY MAP  
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MAP 0070-18

080  
GO TO STEP 082,  
ENTRY POINT I.

081  
GO TO PAGE 15, STEP 070, ENTRY POINT G.

082  
(ENTRY POINT I)

- POWER THE SYSTEM OFF.

THE LAST ATTACHMENT CARD SEATED MAY BE THE  
ATTACHMENT CARD THAT CAUSED THE FAILURE.  
INSTALL THE FAILING ATTACHMENT CARD INTO THE  
FIRST AVAILABLE EMPTY CARD LOCATION ON THE  
SAME BOARD.  
IF NECESSARY, JUMPER THE POLL LINE(S).  
- POWER THE SYSTEM ON.

LOAD, IF NECESSARY, AND RUN TO THE FAILURE  
POINT.

DOES THE TEST FAIL WITH THE SAME FAILURE  
INDICATIONS?

Y  
N

083  
THE ORIGINAL CARD LOCATION THE ATTACHMENT  
WAS INSTALLED IN IS BAD.  
DO A VOLTAGE TEST ON VOLTAGE PINS IN THIS  
LOCATION.  
VISUALLY INSPECT THE PIN(S), WIRE(S), CARD  
LOCATION(S) FOR VISIBLE MECHANICAL PROBLEMS.

ARE THERE MECHANICAL PROBLEMS IN THESE  
AREAS?

Y  
N

084  
THE PROBLEM MAY BE IN THE PROCESSING UNIT  
BOARD, OR THE EXPANSION UNIT BOARD AND ITS  
CABLE(S), IF INSTALLED.  
GO TO MAP 0071, ENTRY POINT PR.

085  
REPAIR THE PROBLEM.  
- VERIFY THE REPAIR

086  
- POWER THE SYSTEM OFF.

SUSPECT PROBLEM IS IN THE ORIGINAL FAILING  
ATTACHMENT CARD.  
SEE IF THIS SUSPECT ATTACHMENT CARD HAS BEEN  
EXCHANGED IN ANOTHER MAP.

WAS THIS 'SUSPECT ATTACHMENT CARD' EXCHANGED  
IN ANOTHER MAP?

Y  
N

087  
EXCHANGE THE SUSPECT ATTACHMENT CARD WITH A  
KNOWN GOOD ATTACHMENT CARD WITH THE SAME  
PART NUMBER INTO ITS ORIGINAL BOARD  
LOCATION.

NOTE -  
IF THE SYSTEM HAS ANOTHER ATTACHMENT CARD  
WITH THE SAME PART NUMBER INSTALLED, IT CAN  
BE USED TO DETERMINE THE PROBLEM.

NOTE

IF THE FIELD REPLACEMENT UNIT SUSPECTED IS  
PART OF A MORE THAN ONE CARD ATTACHMENT,  
SIMILAR TO A 4962, A 4982, A COMMUNICATION  
FEATURE, A TWO CHANNEL SWITCH CARD, OR A  
CHANNEL REPOWER CARD, ANY OF THE OTHER  
CARD(S) OR ASSOCIATED CABLE(S) ARE SUSPECT  
THIS MAP CANNOT ISOLATE TO A PROBLEM IF IT  
IS IN THE DEVICE CIRCUIT(S).

- POWER THE SYSTEM ON.

LOAD, IF NECESSARY, AND RUN TO THE FAILURE  
POINT.

DOES THE TEST RUN O.K.?

Y  
N

A A A  
B C E  
6 6 7

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A  
H  
B

CHANNEL ATTACHMENT - DEVICE MAP  
PAPER ONLY MAP  
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MAP 0070-19

088  
(ENTRY POINT CR)

WAS A VOLTAGE TEST DONE ON THE BOARD AND PINS  
TO THIS ATTACHMENT?

Y  
N

089  
REFERENCE THE SUITABLE ALD FOR THE SUSPECT  
ATTACHMENT.  
TEST FOR ALL VOLTAGES ON THE BOARD AND CARD,  
IF INDICATED.

ARE THE VOLTAGES ALL CORRECT?

Y  
N

090  
TRACE THE BAD VOLTAGE PATH TO THE SOURCE  
ON THE BOARD.  
REFERENCE THE CORRECT BOARD ALD FOR THE  
VOLTAGE NETWORK ON THE BOARD.  
TEST THE VOLTAGES WHERE THEY COME ON THE  
BOARD.

IS THE VOLTAGE PROBLEM ON THE BOARD?

Y  
N

091  
GO TO MAP 1470, ENTRY POINT A.

092  
REFERENCE THE CORRECT BOARD ALD.  
CORRECT THE FAILING CONDITION ON THE  
BOARD.  
IF YOU CANNOT CORRECT THE PROBLEM ON THE  
BOARD,  
GO TO MAP 1470, ENTRY POINT A.

093  
GO TO STEP 094, ENTRY POINT PB.

094  
(ENTRY POINT PB)

THE PROBLEM CAN BE IN DEVICE OR PROCESSING  
UNIT CARD(S).

VERIFY THE ADDRESS JUMPERS ON ATTACHMENT CARD  
ARE CORRECT.  
REFERENCE THE CONFIGURATION TABLE FOR THE  
ADDRESS OF THIS ATTACHMENT.  
ENSURE THERE ARE NO SAME ADDRESS(ES) ON THE  
SYSTEM.  
ENSURE ANY OTHER JUMPERING, IF NECESSARY, IS  
CORRECT.  
GO TO THE MAP PROLOG FOR INFORMATION OF THE  
ATTACHMENT OR DEVICE, AND THE PROBLEM.

CAN THE ATTACHMENT OR DEVICE MAP BE USED?

Y  
N

095  
IF THE ATTACHMENT OR DEVICE DIAGNOSTIC WILL  
NOT RUN, OR IF THERE IS NO REPAIR, DO NOT  
RETURN TO THIS MAP.  
IF AN ATTACHMENT OR DEVICE CARD WAS  
EXCHANGED IN THE MAP, IT IS THE 'SUSPECT  
ATTACHMENT CARD' IN MAP 0071.  
GO TO MAP 0071, ENTRY POINT A.

096  
RUN ALL MANUAL MAP(S) NOT RUN ALREADY FOR THE  
PROBLEM BEFORE STARTING THIS MAP.  
(ONLY IF AN ATTACHMENT OR DEVICE MAP SHOWS A  
FAILURE)

DO THESE MAP(S) CALL OUT THE SAME FIELD  
REPLACEMENT UNIT?

Y  
N

097  
EXCHANGE THE FIELD REPLACEMENT UNIT.  
IF NO REPAIR, USE IT AS THE 'SUSPECT  
ATTACHMENT' AND  
GO TO MAP 0071, ENTRY POINT A.

098  
DO NOT EXCHANGE THE FIELD REPLACEMENT UNIT.  
THE FIELD REPLACEMENT UNIT HAS BEEN EXCHANGED.  
USE IT AS THE 'SUSPECT ATTACHMENT' AND  
GO TO MAP 0071, ENTRY POINT A.

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MAP 0070-19

A  
F  
8

CHANNEL ATTACHMENT - DEVICE MAP  
PAPER ONLY MAP  
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MAP 0070-20

099

- POWER THE SYSTEM OFF.

THE ATTACHMENT CARD MAY BE BAD.  
INSTALL THE SUSPECT ATTACHMENT CARD IN THE  
BOARD IN ITS ORIGINAL LOCATION.  
KEEP THE REMOVED ATTACHMENT CARD.  
IT IS A KNOWN GOOD CARD.

VERIFY THE CORRECT ATTACHMENT ADDRESS ON THE  
ATTACHMENT CARD.

IS THE ATTACHMENT ADDRESS JUMPERED  
CORRECTLY?

Y  
N

100

CORRECT THE ADDRESS JUMPERS.  
ENSURE THE CONFIGURATION TABLE IS CORRECT  
FOR THIS ADDRESS.  
- VERIFY THE REPAIR

101

VISUALLY INSPECT THE ATTACHMENT CARD AND  
VERIFY THAT ALL JUMPERS, IF ANY, ARE  
INSTALLED CORRECTLY.

ARE THE JUMPERS INSTALLED CORRECTLY?

Y  
N

102

CORRECT THE PROBLEM.  
- VERIFY THE REPAIR

103

THE ATTACHMENT CARD IS FAILING.  
EXCHANGE WITH THE KNOWN GOOD CARD USED  
BEFORE.  
INSTALL CORRECT JUMPERING.  
- VERIFY THE REPAIR

04

GO TO PAGE 19, STEP 088, ENTRY POINT CR.

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MAP 0070-20