

ENTRY POINTS

FROM	ENTER THIS MAP		

MAP	ENTRY	PAGE	STEP
NUMBER	POINT	NUMBER	NUMBER

EA02	A	1	001
EA03	A	1	001

EXIT POINTS

EXIT THIS MAP		TO	

PAGE	STEP	MAP	ENTRY
NUMBER	NUMBER	NUMBER	POINT

9	036	EA12	A
5	016	EA14	A
7	022	EA14	A
8	028	EA14	A
9	034	EA14	A
2	002	EA40	A

001
(ENTRY POINT A)

THIS TEST UNIT WILL NEVER TAKE THE YES LEG

THIS IS AN MDI 'MANUAL MODE' MAP.
(SEE DIAGNOSTIC SERVICE GUIDE 05.00.00).
TO USE IT: LOAD AND EXECUTE THE MAP PROGRAM (BXXXX WHERE XXXX=MAP#).
WHEN CE ACTION IS NEEDED DCP HALTS AND DISPLAYS MAP # AND STEP #. SEE THE HARD COPY MAP FOR THE CE ACTION.

IF THE 'LOOP STEP TO STEP' OPTION IS USED IN THIS MAP THE LOOP MUST INCLUDE STEP 001. ALL STEPS NEED STEP 001 FOR SETUP.

LOAD CONTROL STORAGE WITH
ENGINEERING CHANGES
RESULT=F?
MDI=\$TUXX,TEA04,2,000F,EQ,PLNG=4,
PARM=EA10

Y N
| |
| |
| |
| |
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| |
| |

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2 2
A B

1 1

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002

GO TO MAP EA40, ENTRY POINT A.
MDI=\$GOTO,TYPE=XTRNL,MAP=EA40,
EP=A

003

(ENTRY POINT B)
REQUEST DEVICE ADDRESS TO BE
TESTED
RESULT=0?
MDI=\$TUXX,TEAFF,2,0000,EQ

ENTER "FXX", WHERE XX= DEVICE
ADDRESS

Y N

004

GO TO MAP 0070
MDI=\$FIXT

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C
2

FPMLC MANUAL MAP

MAP EA10-3

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005

(ENTRY POINT C)
INSTALL A WRAP CONNECTOR ON THE
CABLE OR DEVICE ADDRESS SELECTED.

INSTALL WRAP CONNECTOR P/N
6825399 DIRECTLY ON 4-LINE
ATTACHMENT FOR CURRENT LOOP
ADDRESSES.

USE WRAP CONNECTOR PN 2704136 FOR
EIA CABLE PN 1632208.

IF JAPANESE CABLE PN 2722052,
PLACE SWITCH TO "WRAP".

IF DIRECT CONNECT CABLE PN
1632211, USE WRAP PN 1633811

ENTER 1 FOR YES, OR 0 FOR NO IN
RESPONSE TO QUESTIONS

EIA CONNECTOR LOCATION:

+----+
| | J1
| | DEVICE ADDRESS
| | 3 OR 7
| |

+----+
+----+
| | J2
| | DEVICE ADDRESS
| | 2 OR 6
| |

+----+
+----+
| | J3
| | DEVICE ADDRESS
| | 1 OR 5
| |

+----+
+----+
| | J4
| | DEVICE ADDRESS
| | 0 OR 4
| |

CE RESPONSE NECESSARY.
IS THE WRAP CONNECTOR INSTALLED
ON THE CABLE OR DEVICE ADDRESS TO
BE TESTED?

MDI=\$QUES
Y N

006

GO TO STEP 005,
ENTRY POINT C.
MDI=\$GOTO,TYPE=INTRNL,EP=C

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4
D

MAP EA10-3

D
3

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007

RESET DEVICE
RESULTS=4?
MDI=\$TUXX,TEAF1,2,0004,EQ
Y N

RESET DEVICE

008

CHECK VOLTAGE, SEE CHART

CE RESPONSE NECESSARY.

VOLTAGE	PIN
+5V	D03,J03 P03,U03
GROUND	D08,J08 P08,U08

VOLTAGE GOOD?

MDI=\$QUES

Y N

009

VOLTAGE MISSING, GO TO POWER

MAP 1470

MDI=\$FIXT

010

RESET ERROR, EXCHANGE CARD

VERIFY THE REPAIR.

MDI=\$FIXT

011

PREPARE TO LEVEL 0

RESULT= 4?

MDI=\$TUXX,TEAF3,2,0004,EQ,PLNG=4,

PARM=0001

Y N

012

PREPARE LEVEL 0 ERROR, RESEAT/

EXCHANGE CONTROLLER CARD

VERIFY THE REPAIR.

MDI=\$FIXT

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5
E

E
4

FPMLC MANUAL MAP

MAP EA10-5

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013

(ENTRY POINT D)

CONNECT COMMUNICATIONS INDICATOR
PANEL TO CONTROLLER CARD AT TOP
CARD CONNECTOR J1, AND SET
SWITCHES TO 11100000

CE RESPONSE NECESSARY.

ARE SWITCHES SET?

MDI=\$QUES

Y N

014

GO TO STEP 013,

ENTRY POINT D.

MDI=\$GOTO,TYPE=INTRNL,EP=D

015

CHECK INDICATOR PANEL LAMPS

CE RESPONSE NECESSARY.

ARE ALL LAMPS FLASHING?

MDI=\$QUES

Y N

016

LAMPS BAD

GO TO MAP EA14, ENTRY POINT A.

MDI=\$GOTO,TYPE=XTRNL,MAP=EA14,

EP=A

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6
F

MAP EA10-5

F
5

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017
(ENTRY POINT E)
PLACE SWITCHES OF THE
COMMUNICATIONS INDICATOR PANEL TO
11111111.

ALL SWITCHES ON?

CE RESPONSE NECESSARY.

ALL SWITCHES ON?

MDI=\$QUES

Y N

018

GO TO STEP 017,

ENTRY POINT E.

MDI=\$GOTO,TYPE=INTRNL,EP=E

019

START CYCLE STEAL STATUS COMMAND

PREPARE CHECK INDICATOR PANEL
SWITCHES

TEST UNIT EA21

RESULT=0?

MDI=\$TUXX,TEA21,2,0000,EQ

Y N

020

EXCHANGE THE CONTROLLER CARD

VERIFY THE REPAIR.

MDI=\$FIXT

021

TEST STATUS WORD 2 FOR 11111111

TEST WORD 2 FOR CORRECT INDICATOR
PANEL STATUS

TEST UNIT EA31

RESULT= 0?

MDI=\$TUXX,TEA31,2,0000,EQ,PLNG=4,

PARM=00FF

Y N

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7 7

G H

G H
6 6

FPMLC MANUAL MAP

MAP EA10-7

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022

GO TO MAP EA14, ENTRY POINT A.
MDI=\$GOTO,TYPE=XTRNL,MAP=EA14,
EP=A

023

(ENTRY POINT F)
PLACE SWITCHES OF THE
COMMUNICATIONS INDICATOR PANEL TO
10101010.

ALTERNATE SWITCHES ON?

CE RESPONSE NECESSARY.

ALTERNATE SWITCHES ON?

MDI=\$QUES

Y N

024

GO TO STEP 023,
ENTRY POINT F.
MDI=\$GOTO,TYPE=INTRNL,EP=F

025

START CYCLE STEAL STATUS COMMAND
TEST UNIT EA21
RESULT=0?

MDI=\$TUXX,TEA21,2,0000,EQ

Y N

026

EXCHANGE THE CONTROLLER CARD
VERIFY THE REPAIR.
MDI=\$FIXT

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8
J

MAP EA10-7

J
7

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027

TEST STATUS WORD 2 FOR 10101010

TEST WORD 2 FOR CORRECT INDICATOR
PANEL STATUS

TEST UNIT EA31

RESULT= 0?

MDI=\$TUXX,TEA31,2,0000,EQ,PLNG=4,
PARM=00AA

Y N

|
| 028

| GO TO MAP EA14, ENTRY POINT A.

| MDI=\$GOTO,TYPE=XTRNL,MAP=EA14,

| EP=A

029

(ENTRY POINT G)

PLACE ALL SWITCHES OF THE
COMMUNICATIONS INDICATOR PANEL TO
00000000

ALL SWITCHES OFF

CE RESPONSE NECESSARY.

ARE ALL SWITCHES OFF?

MDI=\$QUES

Y N

|
| 030

| GO TO STEP 029,

| ENTRY POINT G.

| MDI=\$GOTO,TYPE=INTRNL,EP=G

031

START CYCLE STEAL STATUS COMMAND

PREPARE TO CHECK INDICATOR PANEL
SWITCHES

TEST UNIT EA21

RESULT=0?

MDI=\$TUXX,TEA21,2,0000,EQ

Y N

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|

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9 9

K L

K L
8 8

FPMLC MANUAL MAP

MAP EA10-9

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| |
| 032
| EXCHANGE THE CONTROLLER CARD
| VERIFY THE REPAIR.
| MDI=\$FIXT
|

033
TEST STATUS WORD 2 FOR ALL
00000000
TEST UNIT EA31
RESULT= 0?
MDI=\$TUXX,TEA31,2,0000,EQ,PLNG=4,
PARM=0000

TEST WORD 2 FOR CORRECT INDICATOR
PANEL STATUS

Y N

| 034

| GO TO MAP EA14, ENTRY POINT A.
| MDI=\$GOTO,TYPE=XTRNL,MAP=EA14,
| EP=A
|

035

TEST FOR CURRENT INTERFACE
RESULTS=0?
MDI=\$TUXX,TEA43,2,0000,EQ,PLNG=4,
PARM=000E

TEST FOR CURRENT INTERFACE

Y N

| 036

| CURRENT INTERFACE,GO TO MAP
| EA12
| GO TO MAP EA12, ENTRY POINT A.
| MDI=\$GOTO,TYPE=XTRNL,EP=A,
| MAP=EA12
|

037

SET CONTROL/SET MODE

SET MODE 7 DATA BITS, 1 STOP BIT,
NO PARITY

RESULT= 0
MDI=\$TUXX,TEA15,2,0000,EQ,
PLNG=19,PARM=0003/0007/00A4/5500

Y N

| |
| |
| |
| |

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1 1

EC326765 PEC988042

0 0

M N

MAP EA10-9

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038
TEST FOR LOST INTERRUPT
RESULTS=4?
MDI=\$TUXX,TEA49,2,0004,EQ
Y N

TEST FOR LOST INTERRUPT

039
INTERRUPT ERROR, EXCHANGE
CARD
VERIFY THE REPAIR.
MDI=\$FIXT

040
CHECK VOLTAGE, SEE CHART

VOLTAGE	PIN
+8.5V	G11
GROUND	D08,J08 P08,U08

CE RESPONSE NECESSARY.

VOLTAGE GOOD?
MDI=\$QUES
Y N

041
VOLTAGE MISSING, GO TO POWER
MAP 1470
MDI=\$FIXT

042
NO INTERRUPT, EXCHANGE CARD
VERIFY THE REPAIR.
MDI=\$FIXT

043
DIAGNOSTIC 2 COMMAND
RESULTS=0?
MDI=\$TUXX,TEA25,2,0000,EQ,PLNG=9,
PARM=2000/F407

TEST MODEM INTERFACE

Y N
| |
| |
| |
| |

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1 1
6 1
P Q

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Q
1
0

FPMLC MANUAL MAP

MAP EA10-11

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044

TEST FOR LOST INTERRUPT
RESULTS=4?
MDI=\$TUXX,TEA49,2,0004,EQ
Y N

TEST FOR LOST INTERRUPT

045

TEST FOR GOOD DTR/DSR WRAP
RESULTS=6?
MDI=\$TUXX,TEA49,2,0006,EQ
Y N

TEST FOR GOOD DTR/DSR WRAP

046

TEST FOR GOOD RTS/CTS WRAP
RESULTS=7?
MDI=\$TUXX,TEA49,2,0007,EQ
Y N

TEST FOR GOOD RTS/CTS WRAP

047

TEST FOR GOOD DATA WRAP
RESULTS=5?
MDI=\$TUXX,TEA49,2,0005,EQ
Y N

TEST FOR GOOD DATA WRAP

048

TEST FOR CARRIER DETECT
RESULTS=8?
MDI=\$TUXX,TEA49,2,0008,EQ
Y N

TEST FOR CARRIER DETECT

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1 1 1 1 1 1
6 5 4 3 2 2
R S T U V W

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MAP EA10-11

1 1

1 1 FEAT #2095/2096

| | PAGE 12 OF 17

| | 049

| TEST FOR INTERRUPT ERROR

| RESULTS=2?

| MDI=\$TUXX,TEA49,2,0002,EQ

| Y N

| | 050

| | BIT 4 OF DIAGNOSTIC WORD ON

| | WITH NO CLOCK AVAILABLE,

| | EXCHANGE ADAPTER CARD

| | VERIFY THE REPAIR.

| | MDI=\$FIXT

| | 051

| INTERRUPT ERROR ON DIAGNOSTIC

| COMMAND, EXCHANGE CARD

| VERIFY THE REPAIR.

| MDI=\$FIXT

| 052

CHECK MODEM CABLE CARRIER DETECT
LINE FOR CONTINUITY

CE RESPONSE NECESSARY.

TEST FOR INTERRUPT ERROR

EIA CABLE		
FROM CARD	TO MODEM	LINE NAME
A07	8	CARRIER DETECT

DIRECT CONNECT CABLE		
FROM CARD	TO TERMINAL	LINE NAME
A07	4 AND 5	CARRIER DETECT

IS THE CABLE GOOD?
(STEP 052 CONTINUES)

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MAP EA10-12

U
1
1

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(STEP 052 CONTINUED)

MDI=\$QUES

Y N

053

CARRIER DETECT FAILURE,

REPAIR/EXCHANGE THE MODEM

CABLE

VERIFY THE REPAIR.

MDI=\$FIXT

054

CARRIER DETECT FAILURE,

EXCHANGE ADAPTER CARD

VERIFY THE REPAIR.

MDI=\$FIXT

055

CHECK MODEM CABLE TRANSMIT DATA
AND RECEIVE DATA LINES FOR
CONTINUITY

CE RESPONSE NECESSARY.

EIA CABLE		
FROM CARD	TO MODEM	LINE NAME
A04	2	TRANSMIT DATA
B04	3	RECEIVE DATA

DIRECT CONNECT CABLE		
FROM CARD	TO TERMINAL	LINE NAME
A04	3	TRANSMIT DATA
B04	2	RECEIVE DATA

ARE BOTH LINES GOOD?
(STEP 055 CONTINUES)

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MAP EA10-13

1
1 FEAT #2095/2096

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(STEP 055 CONTINUED)

MDI=\$QUES

Y N

056

TRANSMIT DATA/RECEIVE DATA
WRAP FAILURE, REPAIR/EXCHANGE
THE MODEM CABLE
VERIFY THE REPAIR.

MDI=\$FIXT

057

TRANSMIT DATA/RECEIVE DATA WRAP
FAILURE, EXCHANGE ADAPTER CARD
VERIFY THE REPAIR.

MDI=\$FIXT

058

CHECK MODEM CABLE RTS AND CTS
LINES FOR CONTINUITY

CE RESPONSE NECESSARY.

EIA CABLE		
FROM CARD	TO MODEM	LINE NAME
A03	4	RTS
B03	5	CTS

DIRECT CONNECT CABLE		
FROM CARD	TO MODEM	LINE NAME
A03	8	RTS
B03	8	CTS

ARE BOTH LINES GOOD?

MDI=\$QUES

Y N

|
|
|
|
|
|
|

1 1
5 5
X Y

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S X Y FPMLC MANUAL MAP
1 1 1
1 4 4 FEAT #2095/2096

MAP EA10-15

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059
RTS/CTS WRAP FAILURE,
REPAIR/EXCHANGE MODEM CABLE
VERIFY THE REPAIR.
MDI=\$FIXT

060
RTS/CTS WRAP FAILURE, EXCHANGE
ADAPTER CARD
VERIFY THE REPAIR.
MDI=\$FIXT

061
CHECK MODEM CABLE DTR AND DSR
LINES FOR CONTINUITY

CE RESPONSE NECESSARY.

EIA CABLE		
FROM CARD	TO MODEM	LINE NAME
A01	20	DTR
B01	6	DSR

DIRECT CONNECT CABLE		
FROM CARD	TO MODEM	LINE NAME
A01	6	DTR
B01	6	DSR

ARE BOTH LINES GOOD?
MDI=\$QUES
Y N

062
DTR/DSR WRAP FAILURE,
REPAIR/EXCHANGE MODEM CABLE
VERIFY THE REPAIR.
MDI=\$FIXT

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EC326765 PEC988042

MAP EA10-15

1
6
Z

| | | PAGE 16 OF 17
| | |
| | |
| | | 063
| | | DTR/DSR WRAP FAILURE,
| | | EXCHANGE CARD
| | | VERIFY THE REPAIR.
| | | MDI=\$FIXT
| | |
| | | 064
| | | LOST INTERRUPT, EXCHANGE CARD
| | | VERIFY THE REPAIR.
| | | MDI=\$FIXT

065
DOES OPERATOR WANT TO RUN RING
TEST?
RESULTS=0?
MDI=\$TUXX,TEA33,2,0000,EQ
Y N

ENTER "1" FOR YES, "0" FOR NO

| | | 066
| | | (ENTRY POINT J)
| | | DISCONNECT EIA CABLE FROM
| | | ADAPTER CARD FOR LINE UNDER
| | | TEST AND JUMPER PIN A01 TO PIN
| | | B07.

JUMPER DTR TO RING INDICATOR

| | | *CE RESPONSE NECESSARY.*
| | | JUMPER INSTALLED?
| | | MDI=\$QUES
| | | Y N

| | | 067
| | | JUMPER NOT INSTALLED
| | | GO TO STEP 066,
| | | ENTRY POINT J.
| | | MDI=\$GOTO,TYPE=INTRNL,EP=J

A A FPMLC MANUAL MAP
A B
1 1 FEAT #2095/2096
6 6
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MAP EA10-17

| |
| |
| 068
| DIAGNOSTIC 2 COMMAND
| RESULTS=0?
| MDI=\$TUXX,TEA52,2,0000,EQ,
| PLNG=9,PARM=2000/0080
| Y N
| |
| | 069
| | RING INDICATOR ERROR,
| | EXCHANGE ADAPTER CARD
| | VERIFY THE REPAIR.
| | MDI=\$FIXT
| |
| 070
| DIAGNOSTIC 2 COMMAND
| RESULTS=0?
| MDI=\$TUXX,TEA52,2,0000,EQ,
| PLNG=9,PARM=2082/0000
| Y N
| |
| | 071
| | RING INDICATOR ERROR,
| | EXCHANGE ADAPTER CARD
| | VERIFY THE REPAIR.
| | MDI=\$FIXT
| |
| 072
| NO FAILURE FOUND WITH ADAPTER
| OR CABLE, SUSPECT MODEM
| INTERFACE
| MDI=\$FIXT
|
073
NO FAILURE FOUND WITH ADAPTER OR
CABLE, SUSPECT MODEM INTERFACE
MDI=\$FIXT

TURN ON RING INDICATOR

TURN OFF RING INDICATOR

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MAP EA10-17