

ENTRY POINTS

FROM	ENTER THIS MAP		
MAP NUMBER	ENTRY POINT	PAGE NUMBER	STEP NUMBER
0020	A	1	001
4000	A	1	001

EXIT POINTS

EXIT THIS MAP		TO	
PAGE NUMBER	STEP NUMBER	MAP NUMBER	ENTRY POINT
4	012	1470	A
6	027	1470	A
7	033	4071	A

001  
 (ENTRY POINT A)

THIS IS AN MDI 'MANUAL MODE' MAP.  
 (SEE THE DIAGNOSTIC SERVICE GUIDE 05.00.00).  
 LOAD AND EXECUTE MAP PROGRAM (B4C01).  
 IF CE ACTION IS NEEDED, DCP STOPS AND DISPLAYS  
 MAP # AND STEP #.  
 SEE THE PAPER MAP FOR THE CE ACTION TO TAKE.

SEE MLD VOLUME ONE (1).  
 SEE SD105 - TTY ATTACHMENT CARD JUMPERS.

SEE THE JUMPER(S) - 'INPUT SELECTION'.  
 SEE WHICH INPUT IS SELECTED WITH THE  
 JUMPER(S).  
 THE JUMPER(S) ARE FROM - 000 TO 111.

SELECTION '000' = CONTACT SENSE CLOSED.  
 SELECTION '100' = CONTACT SENSE OPEN.

THIS CHART IS AN AID.  
 USE SD105 FOR THE CORRECT INFORMATION.

INPUT SELECTION	INPUT SELECTED	INPUT =
000	CONTACT SENSE	CLOSED = DM*
001	TTL	MINUS = DM*
010	EIA +	MINUS = DM*
011	INTERNAL	TIME = DO**
100	CONTACT SENSE	OPEN = DM*
101	TTL	PLUS = DM*
110	EIA +	PLUS = DM*
111	INTERNAL	TIME = DO**

\* DM = DATA MARK      \*\* DO = DATA OUT

\*CE RESPONSE NECESSARY.\*

IS THE INPUT SELECTION JUMPERED FOR '000' OR  
 '100'?  
 MDI=\$QUES  
 Y N

002  
 SELECTION '010' = EIA+ MINUS.  
 SELECTION '110' = EIA+ PLUS.

\*CE RESPONSE NECESSARY.\*

IS THE INPUT SELECTION JUMPERED FOR '010' OR  
 '110'?  
 MDI=\$QUES  
 Y N

003  
 THE INPUT SELECTION IS NOT ONE OF THE  
 ABOVE.  
 GO TO PAGE 4, STEP 013,  
 ENTRY POINT D.  
 MDI=\$GOIO,TYPE=INTRNL,EP=D

004  
 THE INPUT SELECTION IS JUMPERED FOR '010' OR  
 '110'.  
 IBM SUPPLIES THE 12V FOR EIA+.  
 GO TO PAGE 3, STEP 011, ENTRY POINT C.  
 MDI=\$GOTO,TYPE=INTRNL,EP=C

A  
1

TTY ATTACHMENT CARD MAP

MAP 4001-2

FEATURE NUMBER 7845

PAGE 2 OF 7

005

SEE THE POWER SUPPLY FOR THIS BOARD.  
SEE IF A 12VDC REGULATOR CARD IS INSTALLED IN  
THE POWER SUPPLY.

\*CE RESPONSE NECESSARY.\*

IS A 12V REGULATOR CARD INSTALLED IN THE POWER  
SUPPLY?

MDI=\$QUES

Y N

006

THE CUSTOMER IS SUPPLYING THE POWER TO THE  
TTY CARD.

GO TO PAGE 3, STEP 008, ENTRY PCINT B.

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

007

SEE MID VOLUME ONE (1).

SEE SD105 - TTY ATTACHMENT CARD JUMPERS.

SEE IF THE JUMPER FOR THE 12VDC POWER IS  
INSTALLED ON THE TTY ATTACHMENT CARD.

\*CE RESPONSE NECESSARY.\*

IS THE 12VDC JUMPER INSTALLED ON THE CARD?

MDI=\$QUES

Y N

3 3  
B C

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MAP 4001-2

008  
(ENTRY POINT B)

THE CUSTOMER IS SUPPLYING THE POWER TO THE TTY CARD.  
SEE MLD VOLUME ONE (1).  
SEE SD105 - TTY ATTACHMENT CARD JUMPERS.

- DISCONNECT THE DEVICE, IF ANY.

DO NOT USE THE WRAP CONNECTOR.  
ENSURE JUMPER WIRES (PART NUMBER 829117 OR 2588263) ARE INSTALLED ON THE TTY CARD CONNECTOR

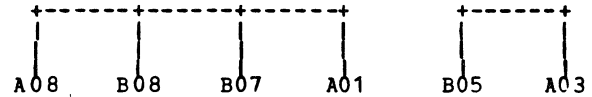
- SEE THE NOTE ----->

000 - CURRENT LOOP, CURRENT = MARK.  
THE POWER SUPPLY TO DRIVE THE TRANSMIT AND RECEIVE CURRENT LOOPS IS NOT FROM THE TTY CARD.  
THERE IS AN EXTERNAL POWER SUPPLY.

- INSTALL JUMPER:  
A08 TO B08 TO B07 TO A01.
- INSTALL JUMPER:  
B05 TO A03

USE A FOUR (4) POINT JUMPER TO TEST THIS CONFIGURATION. STRIP THE INSULATION AT THE CENTER OF TWO (2) JUMPER WIRES. SOLDER THIS PART OF THE TWO JUMPER WIRES TOGETHER. PLACE INSULATED TAPE ON THE WIRE AT THE SOLDER CONNECTION.

INSTALL THE JUMPER (S) AS NOTED FOR 000.



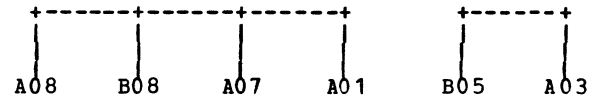
- SEE THE NOTE ----->

100 - CURRENT LOOP, NO CURRENT = MARK.  
THE POWER SUPPLY TO DRIVE THE TRANSMIT AND RECEIVE CURRENT LOOPS IS NOT FROM THE TTY CARD.  
THERE IS AN EXTERNAL POWER SUPPLY.

- INSTALL JUMPER:  
A08 TO B08 TO A07 TO A01.
- INSTALL JUMPER:  
B05 TO A03

USE A FOUR (4) POINT JUMPER TO TEST THIS CONFIGURATION. STRIP THE INSULATION AT THE CENTER OF TWO (2) JUMPER WIRES. SOLDER THIS PART OF THE TWO JUMPER WIRES TOGETHER. PLACE INSULATED TAPE ON THE WIRE AT THE SOLDER CONNECTION.

INSTALL THE JUMPER (S) AS NOTED FOR 000.



INSTALL THE JUMPERS AS NOTED ABOVE.

\*CE RESPONSE NECESSARY.\*

IS THE ACTION COMPLETE?  
MDI=\$QUES  
Y N

009  
THE JUMPER(S) ARE NOT INSTALLED.  
GO TO STEP 008,  
ENTRY POINT B.  
MDI=\$GOTC,TYPE=INTRNL,EP=B

010  
THE JUMPER(S) ARE INSTALLED.  
GO TO PAGE 6, STEP 019, ENTRY POINT G.  
MDI=\$GOTO,TYPE=INTRNL,EP=G

011  
(ENTRY POINT C)

MEASURE THE +12VDC AND -12VDC, FROM THE POWER SUPPLY, AT THE TTY ATTACHMENT CARD POSITION:  
-12VDC PIN B06  
+12VDC PIN B11

\*CE RESPONSE NECESSARY.\*

IS +12VDC AND -12VDC PRESENT AT THE CARD POSITION?  
MDI=\$QUES  
Y N

D E  
3 3

TTY ATTACHMENT CARD MAP

MAP 4001-4

FEATURE NUMBER 7845

PAGE 4 OF 7

012

A POWER SUPPLY IS NOT CORRECT.  
GO TO MAP 1470, ENTRY POINT A.  
MDI=\$FIXT

013

(ENTRY POINT D)

- SEE THE NOTE ----->

SEE MLD VOLUME ONE (1).  
SEE SD105 - TTY ATTACHMENT CARD JUMPERS.

- DISCONNECT THE DEVICE, IF ANY.

USE THE TTY CARD WRAP CONNECTOR (P/N  
1638834) FOR THE THREE COMMON CARD INPUT  
SELECTIONS. USE JUMPER(S) (E/N 2588263 AND  
829117) TO WRAP THE OTHER INPUT SELECTIONS

SEE IF ONE OF THE FOLLOWING INPUT SELECTIONS  
IS INSTALLED:

000 CURRENT LOOP, CURRENT = MARK.  
THE TTY CARD SUPPLIES POWER TO DRIVE  
THE TRANSMIT AND RECEIVE CURRENT LOOPS.  
THERE IS NO EXTERNAL POWER SUPPLY.

010 EIA, MINUS = MARK.

101 TTL, PLUS = MARK.

\*CE RESPONSE NECESSARY.\*

DO YOU HAVE ONE OF THE ABOVE INPUT SELECTIONS?

MDI=\$QUES

Y N

5 5  
F G

THE WRAP CONNECTOR HAS THE FOLLOWING THREE  
JUMPERS.

- (1) 000 CURRENT LOOP, CURRENT = MARK.  
THE TTY SUPPLIES POWER TO THE TRANSMIT  
AND RECEIVE CURRENT LOOPS.  
JUMPER - A07 TO A03
- (2) 010 EIA, MINUS = MARK.  
JUMPER - B06 TO A04
- (3) 101 TTL, PLUS = MARK  
JUMPER - B07 TO B04

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MAP 4001-4

014  
(ENTRY POINT E)

YOU DO NOT HAVE ONE OF THE THREE INPUT SELECTIONS TO USE WITH THE WRAP CONNECTOR P/N 1638834.  
USE JUMPER WIRE(S) P/N 258E263 CR P/N 829117.

SEE MLD VOLUME ONE (1).  
SEE SD105 - TTY ATTACHMENT CARD JUMPERS.

USE JUMPER(S) FOR THE FOLLOWING INPUT SELECTIONS.

001 TTL, MINUS = MARK.  
JUMPER - A07 TO B04

100 CURRENT LCCP, NC CURRENT = MARK.  
THE TTY CARD SUPPLIES POWER TO DRIVE THE TRANSMIT AND RECEIVE CURRENT LOOPS.  
THERE IS NC EXTERNAL POWER SUPPLY.  
JUMPER - E07 TO A03

110 EIA, PLUS = MARK.  
DO EITHER OF THE FOLLOWING:

(1) CHANGE THE CARD JUMPER(S) TO:  
EIA INTERFACE, MINUS = MARK.

- INSTALL THE WRAP CONNECTOR.
- RUN PROGRAM 4001.

IF TESTING IS COMPLETE:  
CHANGE THE CARD JUMPER(S) TO:  
EIA INTERFACE, PLUS = MARK.

(2) DO NOT RUN PROGRAM 4001.  
ERRORS ARE SENSED UNLESS THE CARD INTERFACE IS CHANGED TO:  
EIA MINUS = MARK

INSTALL THE JUMPER(S) AS NOTED ABOVE.

\*CE RESPONSE NECESSARY.\*

IS THE ACTION COMPLETE?

MDI=\$QUES

Y N

015  
THE JUMPER(S) ARE NOT INSTALLED.  
GO TO STEP 014,  
ENTRY POINT E.  
MDI=\$GOTC,TYPE=INTRNL,EP=E

016  
THE JUMPER(S) ARE INSTALLED.  
GO TO PAGE 6, STEP 019, ENTRY POINT G.  
MDI=\$GOTO,TYPE=INTRNL,EP=G

017  
(ENTRY POINT F)

INSTALL THE WRAP CONNECTOR P/N 1638834.

\*CE RESPONSE NECESSARY.\*

IS THE WRAP CONNECTOR INSTALLED?

MDI=\$QUES

Y N

018  
THE WRAP CONNECTOR IS NOT INSTALLED.  
GO TO STEP 017, ENTRY POINT F.  
MDI=\$GOTO,TYPE=INTRNL,EP=F

H  
5

TTY ATTACHMENT CARD MAP  
FEATURE NUMBER 7845  
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MAP 4001-6

019  
(ENTRY POINT G)

IDLE TIME FOR TEST.

MDI=\$TUXX,T400E,2,0000,EC

Y N

020  
CONTINUE ON THE NEXT STEP.  
MDI=\$NVLD

021  
THE TEST IS OPERATING.

MDI=\$TUXX,T4001,02,0000,EQ

Y N

022  
ENSURE THE JUMPERS ON THE TTY ATTACHMENT  
CARD ARE CORRECT.  
EXCHANGE THE TTY ATTACHMENT CARD.  
- VERIFY THE REPAIR.  
MDI=\$FIXT

023  
(ENTRY POINT H)

- RECONNECT THE DEVICE, IF ANY.

\*CE RESPONSE NECESSARY.\*

IS THE DEVICE RECONNECTED?

MDI=\$QUES

Y N

024  
THE DEVICE IS NOT CONNECTED.  
GO TO STEP 023, ENTRY POINT H.  
MDI=\$GOTO,TYPE=INTRNL,EP=H

025  
IS THE TEST CORRECT?  
MDI=\$TUXX,T400F,2,0000,EQ

Y N

026  
SEE MLD VOLUME ONE (1).  
SD100 - TTY CARD SIGNAL NAMES.

SEE THE VOLTAGES AT THE TTY ATTACHMENT CARD  
POSITION.

\*CE RESPONSE NECESSARY.\*

ARE THE VOLTAGES AT THE TTY ATTACHMENT CARD  
POSITION CORRECT?

MDI=\$QUES

Y N

027  
REPAIR THE VOLTAGE THAT IS NOT CORRECT.  
GO TO MAP 1470, ENTRY POINT A.  
MDI=\$FIXT

028  
\*CE RESPONSE NECESSARY.\*

IS THE TTY ATTACHMENT/CABLE SEATED  
CORRECTLY?

MDI=\$QUES

Y N

029  
RESEAT THE TTY ATTACHMENT CARD/CABLE  
CORRECTLY.  
- VERIFY THE REPAIR.  
MDI=\$FIXT

IF LOOPING, YOU MAY UNSEAT THE DEVICE CABLE,  
UNLESS IT IS THE ALTERNATE CONSOLE DEVICE. IF  
IT IS THIS CONSOLE, ENSURE THE DEVICE CABLE IS  
CONNECTED.

7 7  
J K

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MAP 4001-6

J K  
6 6

TTY ATTACHMENT CARD MAP

MAP 4001-7

FEATURE NUMBER 7845

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030

- EXCHANGE THE TTY ATTACHMENT CARD.

ENSURE THE JUMPERS ON THE TTY ATTACHMENT  
CARD ARE CORRECT. SEE MLD VOLUME 1 LOGIC  
SD105 FOR JUMPER INFORMATION.

- VERIFY THE REPAIR.

MDI=\$FIXT

031

SEE IF THERE IS A REPORTED ERROR ON THE TTY  
ATTACHMENT CARD OR TTY DEVICE.

ARE YOU HERE AS A RESULT OF A REPORTED ERROR?

MDI=\$QUES

Y N

032

MDI=\$STOP

033

THERE IS A REPORTED ERROR.  
REFERENCE THIS STEP IN MAP 4001.  
GO TO MAP 4071, ENTRY POINT A.

MDI=\$FIXT

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MAP 4001-7