

ENTRY POINTS

FROM	ENTER THIS MAP		
MAP NUMBER	ENTRY POINT	PAGE NUMBER	STEP NUMBER
4801	A	1	001
4801	C	4	036
4802	B	5	045
4813	A	1	0C1
4840	A	1	001

EXIT POINTS

EXIT THIS MAP		TO	
PAGE NUMBER	STEP NUMBER	MAP NUMBER	ENTRY POINT
5	042	0070	A
7	065	0070	A
5	C41	4800	A
2	009	4830	C
1	CC7	4840	A
2	C11	4880	A
2	013	4880	A

001  
(ENTRY POINT A)

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 WILL DISPLAY MAP # AND STEP #. SEE THE HARD COPY MAP FOR THE CE ACTION.

BEFORE STARTING THIS MAP, RUN DISKETTE UNIT DEVICE MAPS WITH A DIFFERENT DIAGNOSTIC DISKETTE IF ONE IS AVAILABLE.

\*CE RESPONSE NECESSARY.\*  
DO THEY STILL FAIL?  
MDI=\$QUES  
Y N

002  
DIAGNOSTIC DISKETTE WAS BAD.  
MDI=\$FIXT

003  
NO DATA RECEIVED OR DATA RECEIVED WITH ERROR.

RECALIBRATE TO TRACK 00.  
GO TO NEXT STEP.  
MDI=\$TUXX,T4852,01,00,EC,PLNG=2,PARM=00  
Y N

004  
NO IS NOT VALID, GO TO NEXT STEP.  
MDI=\$NVLD

005  
READ WITH HEAD 0, THEN WITH HEAD 1.  
READ ERRORS OCCUR ON ONE HEAD ONLY?  
MDI=\$TUXX,T4851,01,C0,MX  
Y N

006  
VISUALLY CHECK CARRIAGE MOVEMENT BY SEEKING ELECTRICALLY SEVERAL TRACKS IN EACH DIRECTION.  
PROBE +HEAD ENGAGE(D05) ON THE CABLE TERMINATION CARD. SEE MIM PARA. A2.10.  
RECORD IF IT IS UP, DOWN OR PULSING.  
VOLTAGE FOR THE GENERAL LOGIC PROBE CAN BE FOUND ON THE DRIVE CONTROL CARD. THE MINUS (BLACK WIRE) IS CONNECTED TO GROUND. THE PLUS (RED WIRE) IS CONNECTED TO +5V. SEE MLD VOL. 1 SF140.

IF THE PROGRAMMER CONSOLE IS THE ACTIVE CONSOLE:  
ENTER '6' TO START THE LOOP, (B), 6, (I), (I).  
THE LOOP MAY BE DIFFICULT TO 'INTERRUPT' WHEN YOU ENTER YOUR ANSWER.  
(SEE DIAGNOSTIC SERVICE GUIDE, 07.01.00.)

\*CE RESPONSE NECESSARY.\*  
IS THE CARRIAGE SEEKING CORRECTLY? (SHOULD BE A SMOOTH SEEK.)  
MDI=\$QUXX,T4854,PLNG=8,PARM=4C/4C/4C  
Y N

007  
GO TO MAP 4840  
GO TO MAP 4840, ENTRY POINT A.  
MDI=\$GOTC,TYPE=XTRNL,MAP=4840,EP=A

B  
1

008  
IS DISK SPEEL CORRECT?  
MDI=\$TUXX,T4853,02,0001,OF  
Y N

009  
GO TO MAP 4830  
GO TO MAP 4830, ENTRY POINT C.  
MDI=\$GOTO,TYPE=XTRNL,MAP=4830,EF=C

010  
CHECK INPUT VOLTAGES '+ 5VDC', '- 5VDC', AND  
'+ 24VDC'.

SEE MID VCL.1 SF140 FOR TEST POINT(S).

\*CE RESPONSE NECESSARY.\*  
ARE VOLTAGES CORRECT?  
MDI=\$QUES  
Y N

011  
GO TO MAP 4880, ENTRY POINT A  
GO TO MAP 4880, ENTRY POINT A.  
MDI=\$FIXT

012  
CHECK THE VCLTAGES AGAIN AND WHIE LOOKING AT  
THE MULTIMETER POWER THE DISKETTE UNIT OFF.  
IT SHOULD TAKE AT LEAST 2 SECONDS FOR THE  
MULTIEMEIER TC FALL TO 1V.

\*CE RESEONSE NECESSARY.\*  
ARE VOLTAGES CORRECT?  
MDI=\$QUES  
Y N

013  
GO TO MAP 4880  
GO TO MAP 4880, ENTRY POINT A.  
MDI=\$FIXT

014  
TEMPORARILY JUMPER '- HEAD LCAD' IEST POINT ON  
DISKETTE DRIVE CONTROL CARD TO GROUND. THIS  
SHOULD ACIIVATE SCLENOID AND CAUSE BAIL TO  
LOAD THE HEAL.

SEE MLD VOL.1 SF140.

\*CE RESPONSE NECESSARY.\*  
DOES THE HEAD LOAD BAIL MOVE?  
MDI=\$QUES  
Y N

015  
PROBE '+ HEAD ENGAGE' ON THE DRIVE CONTEOL  
CARD. IT SHOULD BE DOWN. SEE MLD VOL.1  
SF140.

\*CE RESPONSE NECESSARY.\*  
IS LINE AT THE CORRECT LEVEL?  
MDI=\$QUES  
Y N

016  
PROBE + HEAD ENGAGE (D05) AT CABLE  
TERMINAIIION CARD. SEE MIM PARA A2.1C.

\*CE RESPONSE NECESSARY.\*

IS IT AT AN UP LEVEL TO?  
MDI=\$QUES  
Y N

017  
CHECK DISKETTE UNIT CAELE ASSEMBLY  
CONNECTIONS. IF OK EXCHANGE THEM.  
VERIFY THE REPAIR.  
MDI=\$FIXT

VOLTAGE FOR THE GENERAL LOGIC PROBE CAN BE  
FOUND ON THE DRIVE CONTROL CARD. THE  
MINUS (BLACK WIRE) IS CCONNECTED TO GROUND. THE  
PLUS (RED WIRE) IS CONNECTED TO +5V. SEE MLD  
VOL.1 SF140.

3 3 3  
C D E

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018  
CHECK DISKETTE UNIT ATTACHMENT CABLE. IF  
OK EXCHANGE THE ATTACHMENT CARD.  
VERIFY THE REPAIR.  
MDI=\$FIXT

019  
CHECK HEAD LOAD SOLENOID RESISTANCE ACROSS  
J04 AND G05 ON CONNECTOR A2 TO DRIVE CONTROL  
CARD. SEE MIM PARA A3.10.1.

RESISTANCE SHOULD MEASURE 66 TO 74 OHMS AT  
NORMAL ROOM TEMPERATURE. IF SOLENOID HAS  
BEEN ACTIVATED AND CASE IS HOT, RESISTANCE  
CAN MEASURE UP TO 140 OHMS.

\*CE RESPONSE NECESSARY.\*  
IS SOLENOID RESISTANCE CORRECT?  
MDI=\$QUES  
Y N

020  
GO TO SOLENOID TERMINAL BLOCK. SEE FIGURE  
ASSOCIATED WITH MIM PARA A3.10.4. MEASURE  
RESISTANCE OF SOLENOID AGAIN.

\*CE RESPONSE NECESSARY.\*  
IS SOLENOID RESISTANCE STILL WRONG?  
MDI=\$QUES  
Y N

021  
EXCHANGE SOLENOID CABLES AS NEEDED.  
VERIFY THE REPAIR.  
MDI=\$FIXT

022  
EXCHANGE HEAD SOLENOID.  
VERIFY THE REPAIR.  
MDI=\$FIXT

023  
REMOVE DISKETTE DRIVE COVER ASSEMBLY. SEE  
MIM PARA. A3.4.1.  
OPERATE BAIL BY HAND.  
CHECK TO SEE THAT SOLENOID AND BAIL ARE FREE  
OF BINDS.  
CHECK TO SEE THAT BAIL RETURN SPRING WILL  
RETURN BAIL TO IT'S BACKSTOP.

\*CE RESPONSE NECESSARY.\*  
ANY BINDING FOUND?  
MDI=\$QUES  
Y N

024  
EXCHANGE DISKETTE DRIVE CONTROL CARD.  
SEE MIM PARA A3.14.  
VERIFY THE REPAIR.  
MDI=\$FIXT

025  
REPAIR OR EXCHANGE THE BINDING PART.

SEE MIM PARA A3.10.  
VERIFY THE REPAIR.  
MDI=\$FIXT

026  
PROBE ' FILE DATA DEGATE ' (D07) ON THE CABLE  
TERMINATION CARD. SEE MIM PARA. A2.10.

\*CE RESPONSE NECESSARY.\*

IS IT DOWN?  
MDI=\$QUES  
Y N

027  
CHECK ATTACH CABLE FOR CONTINUITY. IF OK  
EXCHANGE DISKETTE UNIT ATTACHMENT CARD.  
VERIFY THE REPAIR.  
MDI=\$FIXT

VOLTAGE FOR THE GENERAL LOGIC PROBE CAN BE  
FOUND ON THE DRIVE CONTROL CARD. THE  
MINUS (BLACK WIRE) IS CONNECTED TO GROUND. THE  
PLUS (RED WIRE) IS CONNECTED TO +5V. SEE MLD  
VOL. 1 SF140.

3

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PAGE 4 OF 7

028

\*CE RESPONSE NECESSARY.\*  
BACK ON STEP 6 OF THIS MAP WAS 'HEAD ENGAGE'  
LINE UP OR PULSING?  
MDI=\$QUES

Y N

029

CHECK ATTACH CABLE FOR CONTINUITY. IF OK  
EXCHANGE DISKETTE UNIT ATTACHMENT CARD.  
VERIFY THE REPAIR.  
MDI=\$FIXT

030

CHECK THE 'HEAD ENGAGE' LINE ON BOTH THE  
ATTACH CABLE (D05) AND DRIVE CABLE ASSEMBLY FOR  
CONTINUITY. SEE MLD VOL.1 SF136.

\*CE RESPONSE NECESSARY.\*

ARE THEY O.K.?

MDI=\$QUES

Y N

031

EXCHANGE THE BAD CABLE.  
VERIFY THE REPAIR.  
MDI=\$FIXT

032

DO HEAD LOAD SCLENCID SERVICE CHECK.

SEE MIM PARA A3.10.

\*CE RESPONSE NECESSARY.\*

IS SERVICE CHECK OK?

MDI=\$QUES

Y N

033

ADJUST OR EXCHANGE AS NEEDED.  
VERIFY THE REPAIR.  
MDI=\$FIXT

034

CHECK ADJUSTMENT OF HEAD/CARRIAGE ASSEMBLY.

SEE MIM PARA A3.9.1.

\*CE RESPONSE NECESSARY.\*

IS ADJUSTMENT CORRECT?

MDI=\$QUES

Y N

035

ADJUST HEAD/CARRIAGE ASSEMBLY.  
SEE MIM PARA A3.9.2  
VERIFY THE REPAIR.  
MDI=\$FIXT

036

(ENTRY POINT C)

CHECK THE 'FILE DATA' LINE ON THE CABLE  
ASSEMBLY BETWEEN THE DRIVE CONTROL (B07) AND  
VARIABLE FREQUENCY OSCILLATOR (B12) CARDS FOR  
CONTINUITY. SEE MLD VOL.1 SF136 AND MIM PARA.  
A2.7.

\*CE RESPONSE NECESSARY.\*

WAS THE CABLE ASSEMBLY GOOD?

MDI=\$QUES

Y N

037

EXCHANGE THE CABLE ASSEMBLY.  
VERIFY THE REPAIR.  
MDI=\$FIXT

5  
G

11JAN80 PN1635174

EC877041 PEC578757

MAP 4820-4

A G  
1 4

DISKETTE UNIT READ ERROR MAP

MAP 4820-5

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038  
EXCHANGE DISKETTE DRIVE CONTROL CARD IF YOU  
HAVE NOT DONE SO ALREADY. SEE MIM PARA  
A3.14.

\*CE RESPONSE NECESSARY.\*  
HAVE YOU BEEN AT THIS POINT IN THE MAP ONCE  
BEFORE?  
MDI=\$QUES  
Y N

039  
GO TO MAP 4800, ENTRY POINT A.  
TO  
VERIFY THE REPAIR.  
MDI=\$FIXT

040  
EXCHANGE ATTACHMENT CARD AND VARIABLE  
FREQUENCY OSCILLATOR CARD IF YOU HAVE NOT  
DONE SO ALREADY. SEE MIM PARA A3.7.

\*CE RESPONSE NECESSARY.\*  
HAVE YOU BEEN AT THIS POINT IN THE MAP ONCE  
BEFORE?  
MDI=\$QUES  
Y N

041  
TO  
VERIFY THE REPAIR.  
EXECUTE MAP 4800  
GO TO MAP 4800, ENTRY POINT A.  
MDI=\$GOTO,TYPE=XTRNL,MAP=4800,EP=A

042  
EXCHANGE HEAD CARTRIDGE ASSEMBLY IF YOU HAVE  
NOT DONE SO ALREADY. SEE MIM PARA A3.9.4  
AND A3.9.5.  
IF NO REPAIR  
GO TO MAP C070, ENTRY POINT A.  
MDI=\$FIXT

043  
SEEK TO TRACK 76.  
GO TO NEXT STEP.  
MDI=\$TUXX,T4852,01,00,EC,PLNG=2,PARM=4C  
Y N

044  
NO IS NOT VALID, GO TO NEXT STEP.  
MDI=\$NVLD

045  
(ENTRY POINT B)

PROBE 'HEAD C CT' AND '+SELECT HEAD 1' ON  
DRIVE CONTROL CARD WHILE EXECUTING A READ  
COMMAND ON HEAD 0. SEE MLD VOL.1 SF140.  
'HEAD 0 CT' SHOULD BE AT AN UP LEVEL WHILE  
'+SELECT HEAD 1' SHOULD BE AT A DOWN LEVEL.

\*CE RESPONSE NECESSARY.\*  
ARE BOTH LINES AT THE CORRECT LEVEL?  
MDI=\$QUXX,T4856,PLNG=5,PARM=00/00  
Y N

046  
\*CE RESPONSE NECESSARY.\*  
WAS '+SELECT HEAD 1' AT THE CORRECT LEVEL?  
MDI=\$QUES  
Y N

047  
PROBE '+ SELECT HEAD 1' (B04) AT THE CABLE  
TERMINATION CARD. SEE MIM PARA A2.10.

\*CE RESPONSE NECESSARY.\*  
WAS IT AT THE CORRECT LEVEL?  
MDI=\$QUES  
Y N

IF THE PROGRAMMER CONSOLE IS THE ACTIVE  
CONSOLE:  
ENTER '6' TO START THE LOOP, (B),6,(I),(I).  
THE LOOP MAY BE DIFFICULT TO 'INTEPRUPT' WHEN  
YOU ENTER YOUR ANSWER.  
(SEE DIAGNOSTIC SERVICE GUIDE, 07.01.00.)

6 6 6 6  
H J K L

11JAN80 PN1635174  
EC877041 PEC578757  
MAP 4820-5

048  
CHECK ATTACHMENT CABLE FOR AN OPEN OR  
SHORT CIRCUIT.

\*CE RESEPCNSE NECESSARY.\*  
WERE THERE ANY?  
MDI=\$QUES  
Y N

049  
EXCHANGE THE ATTACHMENT CARD.  
VERIFY THE REPAIR.  
MDI=\$FIXT

050  
EXCHANGE THE ATTACHMENT CABLE.  
VERIFY THE REPAIR.  
MDI=\$FIXT

051  
EXCHANGE THE DISKETTE UNIT DEVICE CABLE  
ASSEMBLY.  
VERIFY THE REPAIR.  
MDI=\$FIXT

052  
EXCHANGE DISKETTE DRIVE CCNTROL CARD.  
SEE MIM PARA A3.14.  
VERIFY THE REPAIR.  
MDI=\$FIXT

053  
PROBE 'HEAD 1 CT' AND '+SELECT HEAD 1' WHILE  
EXECUTING A READ COMMAND ON HEAD 1. SEE MLD  
VOL.1 SF140. 'HEAD 1 CT' SHOULD BE AT AN UP  
LEVEL WHILE '+SELECT HEAD 1' SHOULD BE AT AN  
UP LEVEL.

\*CE RESPONSE NECESSARY.\*  
ARE BOTH LINES CORRECT?  
MDI=\$QUXX,T4856,PLNG=5,PARM=11/00  
Y N

054  
\*CE RESPONSE NECESSARY.\*  
WAS '+SELECT HEAD 1' AT THE CORRECT LEVEL?  
MDI=\$QUES  
Y N

055  
PROBE '+SELECT HEAD 1' (B04) AT THE CABLE  
TERMINATION CARD. SEE MIM PARA A2.10.

\*CE RESPCNSE NECESSARY.\*

WAS IT AT THE CORRECT LEVEL?  
MDI=\$QUXX,T4856,PLNG=5,PARM=00/00  
Y N

056  
CHECK ATTACHMENT CABLE FOR AN OPEN OR  
SHORT CIRCUIT.

\*CE RESPCNSE NECESSARY.\*  
WAS IT OK?  
MDI=\$QUES  
Y N

057  
EXCHANGE THE ATTACH. CABLE.  
VERIFY THE REPAIR.  
MDI=\$FIXT

058  
EXCHANGE THE ATTACH. CARD.  
VERIFY THE REPAIR.  
MDI=\$FIXT

059  
EXCHANGE THE DISKETTE UNIT CABLE ASSEMBLY.  
VERIFY THE REPAIR.  
MDI=\$FIXT

IF THE PROGRAMMER CCNSOLE IS THE ACTIVE  
CONSOLE:  
ENTER '6' TO START THE LOOP, (B),6,(I),(I).  
THE LOOP MAY BE DIFFICULT TO 'INTERRUPT' WHEN  
YOU ENTER YOUR ANSWER.  
(SEE DIAGNOSTIC SERVICE GUIDE, 07.01.00.)

IF THE PROGRAMMER CONSOLE IS THE ACTIVE  
CONSOLE:  
ENTER '6' TO START THE LOOP, (B),6,(I),(I).  
THE LOOP MAY BE DIFFICULT TO 'INTERRUPT' WHEN  
YOU ENTER YOUR ANSWER.  
(SEE DIAGNOSTIC SERVICE GUIDE, 07.01.00.)

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060  
EXCHANGE DISKETTE DRIVE CONTRCL CARD.  
SEE MIM PARA A3.14.  
VERIFY THE REPAIR.  
MDI=\$FIXT

061  
DO HEAD LOAD SCLENCID SERVICE CHECK.  
SEE MIM PARA A3.10.1.  
\*CE RESPONSE NECESSARY.\*  
IS SERVICE CHECK OK?  
MDI=\$QUES  
Y N

062  
ADJUST OR EXCHANGE AS NEEDED.  
VERIFY THE REPAIR.  
MDI=\$FIXT

063  
EXCHANGE HEAD CARRIAGE ASSEMBLY IF YOU HAVE  
NOT DONE SO ALREADY.  
SEE MIM PARA A3.9.3 AND A3.9.4.  
\*CE RESPONSE NECESSARY.\*  
HAVE YOU BEEN AT THIS POINT IN THE MAP ONCE  
BEFORE?  
MDI=\$QUES  
Y N

064  
BAD HEAD.  
MDI=\$FIXT

065  
EXCHANGE THE DRIVE CCNTROL CARL. SEE MIM  
PARA. A3.14. IF NO REPAIR  
GO TO MAP 0070, ENTRY POINT A.  
MDI=\$FIXT