

EC 826380			PN 2597106
27MAY83			

5360 Systems Unit

ENTRY POINTS

FROM	ENTER THIS MAP		
MAP NUMBER	ENTRY POINT	PAGE NUMBER	STEP NUMBER
D202	A	1	001

001

(Entry Point A)

- Disconnect the carriage bed stepper motor cable plug J4 from the driver board (see figure 93-250).
- Check that the carriage bed does not bind.

MAP DESCRIPTION:

This MAP isolates the carriage bed failures (72MD).

START CONDITIONS:

MAP entry should be the result of diskette MDI direction.

FRUs PARTIALLY TESTED:

The drive control card.

Is the carriage bed free to move?

Y N



002

- Find the bind or the obstruction.
- Perform bed to drive bezel adjustment(93-331).
- Perform picker/cam bezel to carriage bed service check(93-343).

003

- Reconnect plug J4.

If the carriage bed movement is unstable or if the carriage bed fails to reach the orient switch (see figure 93-230) while moving to the right during an orient operation, the carriage bed stepper motor or its control circuits may be failing.

- Select mode 1.
- Press The Reset switch (control panel) to orient the carriage bed.
- Observe the carriage bed movement.

Is the carriage bed movement smooth?

Y N



During an orient operation, the carriage bed will move to the right until the carriage bed orient switch is activated. Then there is movement to the left until the switch is de-activated and I/O slot 1 aligns with the diskette guide.

A B
1 1

Bed Errors

5360 Systems Unit

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004

The stepper motor control is failing.
Go to Step 009, Entry Point B.

005

While moving to the right during an orient operation, the carriage bed must activate the orient switch.

Does the bed carriage move to the switch?

Y N

006

The stepper motor control is failing.
Go to Step 009, Entry Point B.

007

- Perform the orient switch service check(93-321).
- If no adjustment or replacement is necessary, perform the bed orient service check(93-326) and the bed stop service check(93-310).

Is the carriage bed oriented?

Y N

008

- Perform the bed orient adjustment(93-322).
If the carriage bed will not orient after making the adjustment, the stepper motor or its control circuits are failing.

Go to Step 009, Entry Point B.

009

(Entry Point B)

- Test the signals from the drive control card to the driver board (93-370).

Are the levels correct?

Y N

010

The driver board or the drive control card is failing.

C

MAP 9300-2

011

- Test the voltage levels from the driver board to the bed motor(93-381).

Are the levels correct?

Y N

012

- Disconnect the bed motor cable from the driver board.
- Measure the resistance of each stepper coil (93-314).

Are the coils OK?

Y N

013

The stepper motor is bad (93-315).

014

- Check the +5 Vdc and the +24 Vdc at the drive control card test points(93-245).

- If there is a power problem, go to MAP 0599, Entry Point E.

If the voltages are OK, the driver board or the cable from the control card is failing.

015

- Disconnect the bed motor cable from the driver board.

- Measure the resistance of each stepper coil (93-314).

Are the coils OK?

Y N

016

The stepper motor is bad (93-315).

017

- Check that the stepper motor pulley is tightly attached to the motor shaft and that the motor and nut plate are tight.

Are the parts tight?

Y N

018

- Adjust and tighten (see figure 93-316).

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MAP 9300-2

C

3
D

D
2

Bed Errors

MAP 9300-3

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019

- Check the carriage bed belt.
- If the belt is off, install it.
- If the belt is broken or damaged exchange it with a good one (93-319).

If the belt is OK, the drive control card is bad.

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MAP 9300-3

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ENTRY POINTS

FROM	ENTER THIS MAP		
MAP NUMBER	ENTRY POINT	PAGE NUMBER	STEP NUMBER
D202	A	1	001

001

(Entry Point A)

- Disconnect the picker stepper motor cable plug J3 from the driver board (see figure 93-250). Check that the picker/cam assembly does not bind.

MAP DESCRIPTION:

This MAP isolates the picker failures (72MD).

START CONDITIONS:

MAP entry should be the result of diskette MDI direction (72MD).

FRUs PARTIALLY TESTED:

The drive control card.

Is the picker free to move?

Y N

002

- Find the bind or the obstruction.
- Adjust or exchange if necessary. See 93-341 or 93-342.

003

- Reconnect the J3 plug.
- Ensure that the collar on the picker/cam stepper motor shaft is tight (See figure 93-348).
- Perform the picker finger assembly service check (93-353).
- Perform the picker rest sensor service check (93-356).
- Perform the picker extend service check (93-359).
- If no adjustment or replacement is necessary, check the +5 Vdc and the +24 Vdc test pins (see figure 93-245).

Are the voltages OK?

Y N

2 2
A B

A B
1 1

Picker Error
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PAGE 2 OF 2

004

The failure is in the DC distribution. Go to MAP 0599, Entry Point E.

005

- Test the signals from the control card (93-371).

Are the voltage levels correct?

Y N

006

The driver board or the drive control card is failing.

007

- Test the voltages from the driver board to the motor (93-380).

Are the voltage levels correct?

Y N

008

- Disconnect the picker motor cable from the driver board.

- Measure the resistance of each stepper motor coil (93-346).

Are the coils OK?

Y N

009

The stepper motor is bad.

010

The driver board is failing or the cable from the drive control card is bad.

011

- Disconnect the picker motor cable from the driver board.

- Measure the resistance of each stepper motor coil (93-346)

Are the coils OK?

Y N

012

The stepper motor is bad.

C

MAP 9301-2

013

- Perform the picker/cam timing service check(93-340).

If no problem is found, the drive control card is bad.

C

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MAP 9301-2

A C H K L
1 3 4 4 4

Cable Wrap

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017

The cable that is now looped to the system is good. The other tape interface cable is bad.

- Replace the interface cable.

018

Go to Page 4, Step 010, Entry Point D.

019

Seating the cables corrected the problem.

- Reconnect the tape interface cables in the tape drive cable tower.
- Run the tape MDI to verify the fix.

020

Bad card:
A2L2.

021

You will continue to use the Cable Wrap test for the following step.

- Probe the following pins one at a time while observing the probe when the Enter key is pressed (Running Cable Wrap test):

A-A2U5B02
 U5B03
 U5D02
 U5D03
 U5D04.

Does the Up light flash each time the Enter key is pressed for all pins?

Y N

022

- Record the failing pin(s).

Go to Page 2, Step 002, Entry Point B.

M

MAP 9910-5

023

The cable wrap verified the interface cables to the tape drive. The problem is probably in the 8809 tape drive.

- Reconnect the two interface cables in the system cable tower to their original positions.
- Reconnect the interface cables to the tape drive.
- Power on tape drive(s).

Go to 8809 Tape Drive MIM, Start section.

M

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PN 2596244

EC 842375

PEC 826487

MAP 9910-5