Initializing Scanner Error Message

HP 4345MFP/M4345MFP

Issue

The LaserJet M4345 MFP or 4345 MFP is unable to copy or scan because either the message "Initializing Scanner" is displayed or the LED below the START button is illuminated amber. Normal printing may work just fine. These errors indicate that data from the scanner's Optical Unit is not being sent to the Formatter PCA.

Possible Behavior/Symptoms:

- The unit may boot-up to Ready and can print normally
- There may be an amber LED illuminated under the START key
- When you open the ADF lid the "Scanner Initializing, please wait" message will appear
- Copies can be made from flatbed, but display hangs at "Scanning" when copying from ADF. It may hang in "Scanning" for a couple of minutes, then make the copy, or hang indefinitely
- When you hit the START key (Green Key) to make a copy from the ADF or flatbed, you will not get a response or a "Scanner Initializing, please wait" message will be displayed

Cause:

During a scan operation, data is read by the Optical Unit (either during an Automatic Document Feeder scan operation or from a Flatbed scan operation). This data is carried from the Optical Unit through a ribbon cable to the connector CN104 of the Scanner/Controller PCA. The data leaves the Scanner Controller PCA via connector CN101 and goes to the upper connector on the Formatter Cage Assembly. Any break along this communication path could result in an error.

Differences Between Formatters - LJ 4345 MFP and LJ M4345 MFP

Component Description	LaserJet 4345 MFP	LaserJet M4345 MFP
Copy-board LED	YES	NO
Formatter-board LED	YES	YES
Firmware	Compact Flash Card	Embedded on the Formatter

Component Description	LaserJet 4345 MFP	LaserJet M4345 MFP
Memory	Memory DIMM	Embedded on the Formatter
Hard Drive Cables (type)	IDE	SATA

Solution

Prior to troubleshooting, it is always advisable to observe if the Copy-board and Formatter-board LEDs are blinking On/Off. The Copy-board LED is the upper circle and the Formatter-board LED (referred to as the 'Heartbeat') is in the lower circle <see Figure 1>. If the system is functioning normally, the LEDs should blink On/Off.

NOTE: The M4345 MFP only has one LED, shown in <Figure 1, callout #2>.

Figure 1: Example of Formatter LED locations

Copy-board LED (LJ 4345 MFP ONLY)

Formatter-board or "Heartbeat" LED
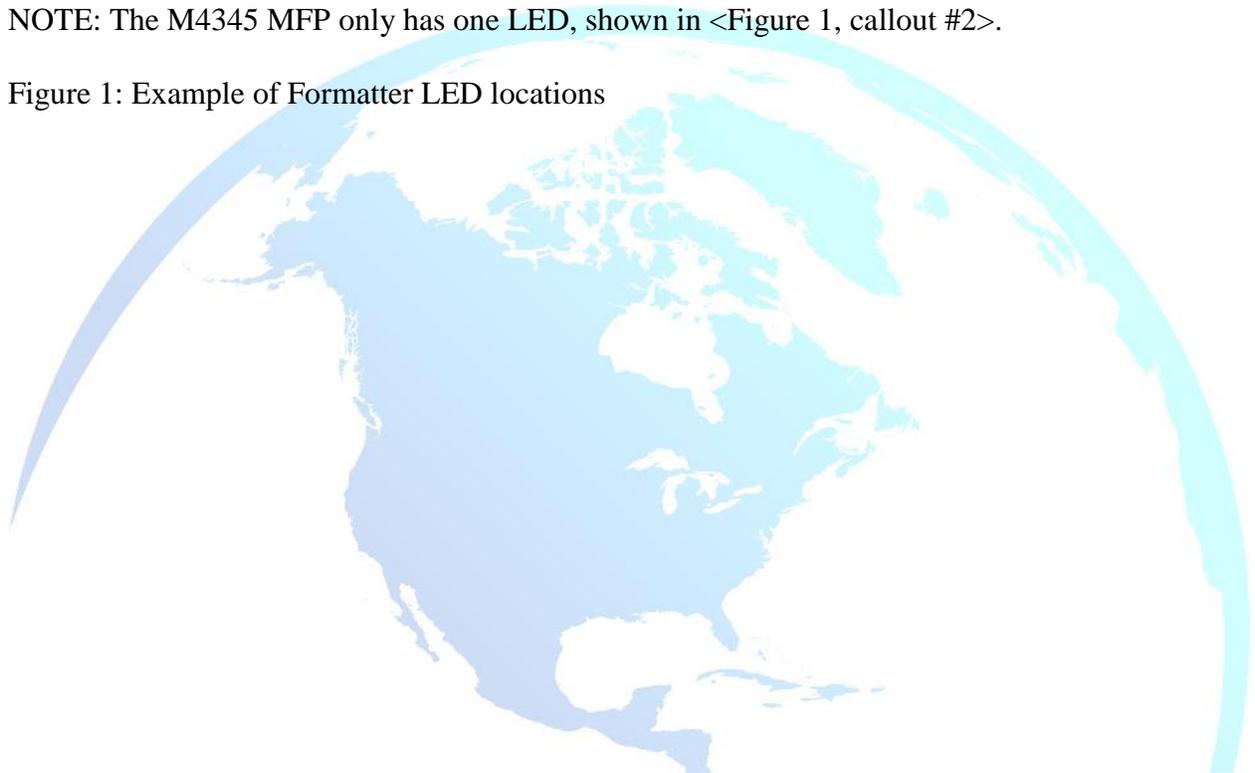
1. Turn the printer off.
2. If the customer is able and willing, have them reseat the formatter cage and re-test.
3. Otherwise, or if the issue persists, a technician will need to be sent on-site for further troubleshooting.

On-site Technician Troubleshooting

1. Turn the printer off.
2. Remove the back panel and sheet metal shroud.
3. **LJ 4345** - Inside the Formatter Cage are two PCAs. The top PCA is the Copy Processor PCA; the bottom PCA is Formatter PCA. Connecting the two PCAs is a Daughter Card. See <Figure 2, callout #1>

LJ M4345 – Inside the Formatter cage is one large PCA that contains both Formatter and Copy board functionality. The Daughter Card is only used to connect to an optional EIO card.

4. Ensure the Daughter Card is securely seated on both the Formatter and Copy Processor PCAs (LJ 4345 only).
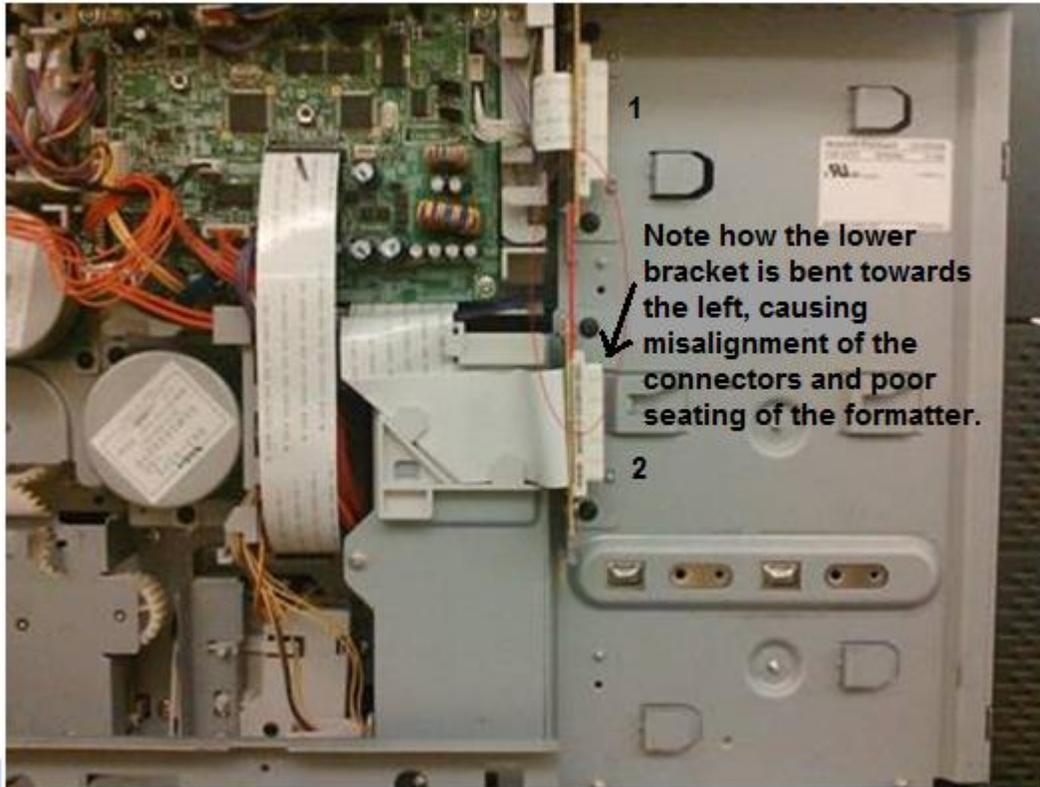
Figure 2: Location of Daughter Card (LJ 4345 shown)
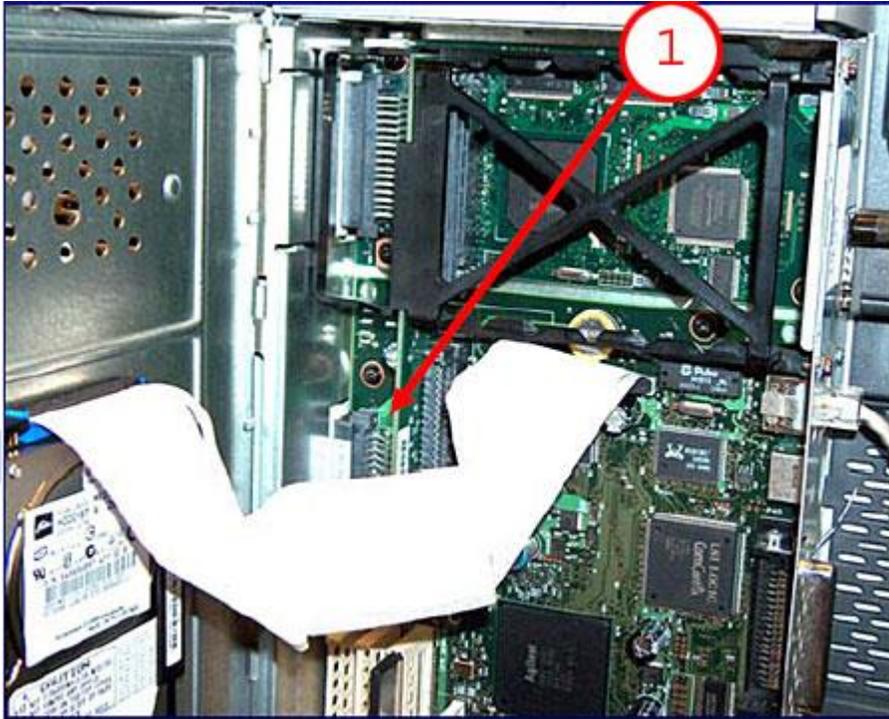
5. Confirm the connector brackets are aligned correctly to allow the formatter cage to be seated properly. If the brackets are out of alignment (see Figure 3), remove the formatter cage and gently bend the connectors back into alignment.
6. Reseat the formatter cage and re-test.

NOTE: When you install the Formatter Cage in to the MFP, the two connectors on the Formatter cage match up with the two connectors shown in <Figure 3>. The top connector is for the Copy Processor Board inside the Formatter Cage. A ribbon cable from this top connector goes to CN101 of the Scanner Controller PCA. The Scanner's Optical Unit is connected by a ribbon cable to CN104 on the Scanner Controller PCA.

Figure 3: The formatter cage plugs into connectors 1 and 2 on the chassis

Note how the lower bracket is bent towards the left, causing misalignment of the connectors and poor seating of the formatter.
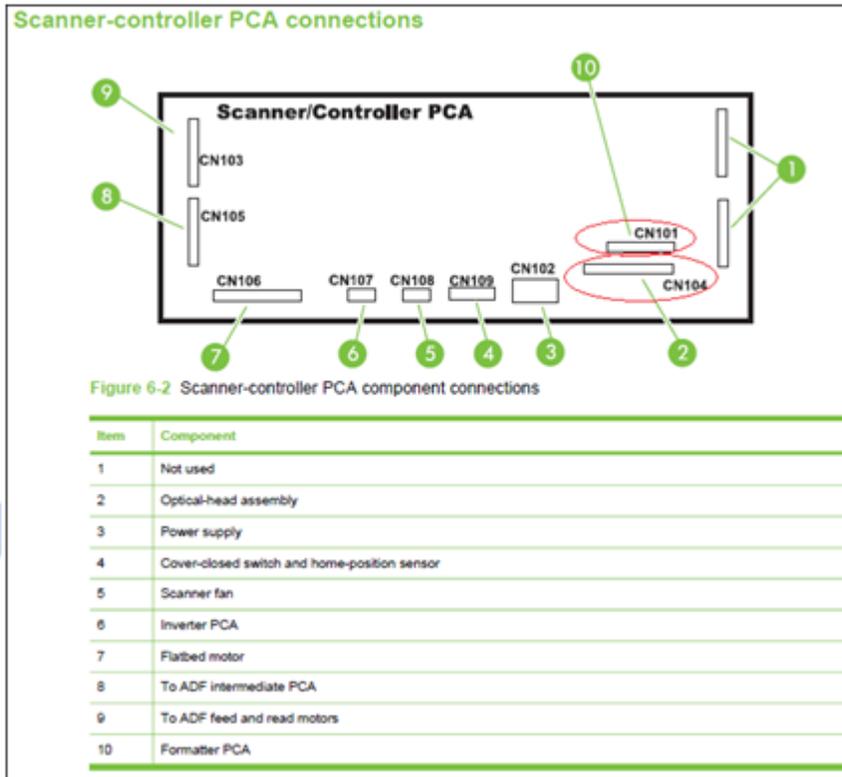
7. Remove two screws <Figure 4, callout #1>, and then remove the scanner-controller cover <Figure 4, callout #2>

Figure 4: Removing the scanner-controller cover
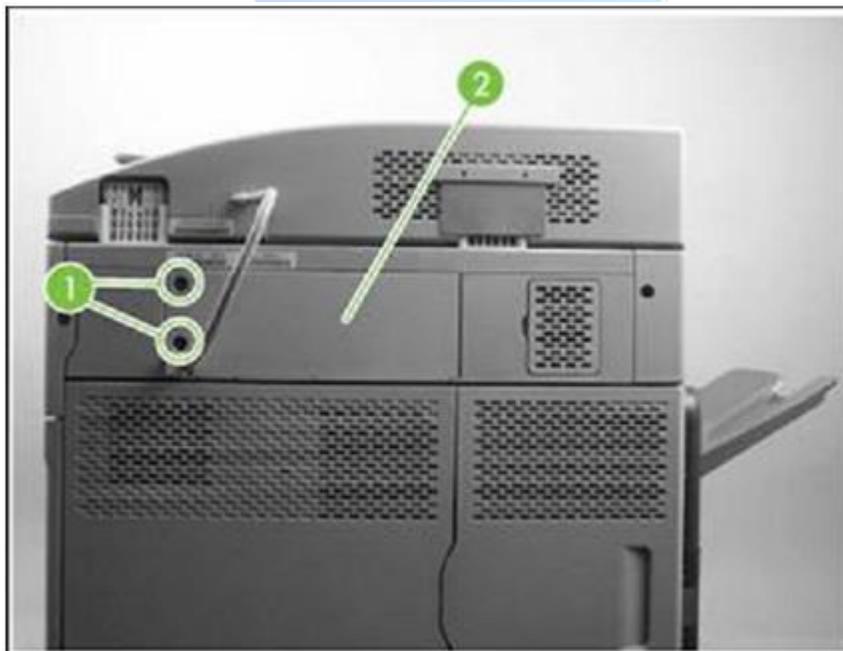
8. Ensure the FFC (Flat Flexible Cable) ribbon cables are securely connected to CN101 and CN104 of the Scanner Controller PCA <see Figure 5>. Be extremely careful when unplugging and plugging in these cables as they can be easily damaged. If the upper FFC cable (for CN101) is damaged, it can be replaced using part number RM1-1357-000CN.

Figure 5: Location of CN101 and CN104 on Scanner Controller PCA

Figure 6-2 Scanner-controller PCA component connections

Item	Component
1	Not used
2	Optical-head assembly
3	Power supply
4	Cover-closed switch and home-position sensor
5	Scanner fan
6	Inverter PCA
7	Flatbed motor
8	To ADF intermediate PCA
9	To ADF feed and read motors
10	Formatter PCA

9. If the problem persists after all the connections have been verified, replace components in this order:

NOTE: Part Numbers can change without notice. Always verify part numbers in HP PartSurfer.

1. Replace the formatter and re-test.

   NOTE: The below part #'s includes the entire sheet metal cage that the formatter is installed in. For the 4345 this will include the Formatter PCA, Copy-board PCA, and 'daughter card' connecting them both. For the M4345 the cage will include the Formatter/Copy PCA and the 'daughter card' which only connects to an optional EIO card. In both cases, swap over any additional memory, fax cards, EIO cards, disk drives, etc.

Formatter - LJ M4345 MFP	CB425-67911

| Formatter - LJ 4345 MFP | Q3942-69011 |

2. If the issue persists, replace the Scanner Controller Board (SCB) and re-test.

| Scanner Controller Board (SCB) - LJ M4345 MFP | IR4041K512NR |
| Scanner Controller Board (SCB) - LJ 4345 MFP | IR4041K512NR |

3. If the issue persists, replace the entire Scanner Assembly and re-test.

| Scanner Assembly - LJ M4345 MFP | IR4041-SVPNR |
| Scanner Assembly - LJ 4345 MFP | IR4041-SVPNR |