- Print internal pages from all trays to verify that this error only occurs when printing from the PC. 5.
- 6. Verify that the Toner cartridge and the transfer roller are seated properly.
- 7. Check the rollers and make sure they are not worn smooth, or coated with paper dust or other debris. If the rollers are causing the issue, send the customer a roller kit.
- Use the Tray/Bin manual sensor test to verify that the cassette media switch is correctly functioning. 8.
- Check paper path sensors for proper operation and that they do not stick at all. If issue persists, levate 9. issue for printer replacement.
- 10. Reconnect the connectors for the media sensor, intermediate-transfer belt, and the DC controller PCA.
- 11. Test registration assembly motor and clutch. If not function properly replace the registration assembly. If the error persists, elevate issue for printer replacement.

41.04.YZ Printer Error

Description

An unknown misprint error occurred on the printer.

- Y = 0: Photo Media (1, 2, or 3)
- Y = 1: Auto Sense (Normal)
- Y = 2: Normal (typed not from Auto Sense)
- Y = 3: Light media 1, 2, or 3 mode
- Y = 4: Heavy media 1
- Y = 5: Heavy media 2
- Y = 6: Heavy media 3
- Y = 7: Glossy media 1
- Y = 8: Glossy media 2
- Y = 9: Glossy media 3
- Y = A: Glossy film
- Y = B: OHT
- Y = C: Label
- Y = D: Envelope 1, 2, or 3 mode
- Y = E: Rough
- Y = F: Other mode
- Z = D Source is the duplexer.
- Z = 0 Source is the envelope feeder.
- Z = 1 Source is Tray 1.

- Z = 2 Source is Tray 2.
- Z = 3 Source is Tray 3.
- Z = 4 Source is Tray 4.
- Z = 5 Source is Tray 5.

- **1.** Touch OK to clear the error.
- 2. If error does not clear, turn the printer off, and then on again.
- **3.** Swap out or re-seat the toner cartridge to test it.
- **4.** Check the toner cartridges before replacing any other parts (HP original?, connectors, etc.).
- **5.** Re-seat the connections to the laser/scanner and the DC controller.
- **6.** If the error persists, replace the laser/scanner.
- **7.** Replace the DC controller.

41.05.YZ Unexpected type in tray <X>

Description

The printer can detect the type of paper in the paper path, and it adjusts the print mode accordingly.

Tray X is loaded with a media type (transparencies, envelopes, etc.) that is different than what they tray is configured to use.

Y = Expected type, Z = Detected type

- Y = 0: Photo Media (1, 2, or 3)
- Y = 1: Auto Sense (Normal)
- Y = 2: Normal (typed not from Auto Sense)
- Y = 3: Light media 1, 2, or 3 mode
- Y = 4: Heavy media 1
- Y = 5: Heavy media 2
- Y = 6: Heavy media 3
- Y = 7: Glossy media 1
- Y = 8: Glossy media 2
- Y = 9: Glossy media 3
- Y = A: Glossy film
- Y = B: OHT
- Y = C: Label
- Y = D: Envelope 1, 2, or 3 mode

- Y = E: Rough
- Y = F: Other mode
- Z = 0: Photo Media (1, 2, or 3)
- Z = 1: Auto Sense (Normal)
- Z = 2: Normal (typed not from Auto Sense)
- Z = 3: Light media 1, 2, or 3 mode
- Z = 4: Heavy media 1
- Z = 5: Heavy media 2
- Z = 6: Heavy media 3
- Z = 7: Glossy media 1
- Z = 8: Glossy media 2
- Z = 9: Glossy media 3
- Z = A: Glossy film
- Z = B: OHT
- Z = C: Label
- Z = D: Envelope 1, 2, or 3 mode
- Z = E: Rough
- Z = F: Other mode

- 1. Load the tray with the size and type of paper indicated, or use another tray if available.
- If this message displays and the tray is loaded with the correct paper type, check the print driver settings to make sure they match the tray type settings.
- 3. Check all application and printer settings to make sure that the **Type** setting is correct.
- 4. Clean the Media sensor.
- 5. If the error persists, elevate issue for printer replacement.

41.XX.YZ Error To continue, touch "OK"

Description

This section covers all other errors of the form 41.XX.YZ not covered in the previous sections.

A printer error has occurred.

XX = error type

Y = fuser mode

Z = input tray

- XX = 02 Beam detect misprint
- XX = 09 Sub thermistor abnormally high
- XX = 10 Pickup failure.
- XX = 11 Illegal Duplex.
- XX = 18 Scan line inclination adjustment
- XX = 20 Image drum HV
- Y = 0: Photo Media (1, 2, or 3)
- Y = 1: Auto Sense (Normal)
- Y = 2: Normal (typed not from Auto Sense)
- Y = 3: Light media 1, 2, or 3 mode
- Y = 4: Heavy media 1
- Y = 5: Heavy media 2
- Y = 6: Heavy media 3
- Y = 7: Glossy media 1
- Y = 8: Glossy media 2
- Y = 9: Glossy media 3
- Y = A: Glossy film
- Y = B: OHT
- Y = C: Label
- Y = D: Envelope 1, 2, or 3 mode
- Y = E: Rough
- Y = F: Other mode
- Z = 0 Envelope feeder
- Z = 1 Tray 1
- Z = 2 Tray 2
- Z = 3 Tray 3
- Z = 4 Tray 4
- Z = 5 Tray 5
- Z = 6 Tray 6
- D Duplexer

- 1. To clear the message, touch the OK button.
- 2. If the message displays again, turn the printer off, and then on again.
- If the error persists, replace the DC Controller PCA. 3.

42.XX.YZ Error Messages

42.XX.YZ

Description

Internal system failure.

Recommended action

- Turn the printer off then on, and retry.
- 2. If the error persists, clear the firmware image from the active partition by using the Partial Clean item in the Preboot menu.

44.XX.XX Error Messages

44.01.XX Error Event log message

Description

A digital send error has occurred.

Recommended action

No action necessary. This error message should automatically clear.

Try to send the job again.

If error does not clear or returns:

- Use optimal resolution and image quality settings.
- wait till all the digital send jobs have been processed.
- Reboot and retry job.
- Verify if there is an attachment limit on the email.
- Verify network connectivity, SMTP gateways, access to folder share.

44.03.XX Error Event log message

Description

A digital send error has occurred.

Recommended action

Try to send the job again.

If error does not clear or returns:

- Use optimal resolution and image quality settings.
- wait till all the digital send jobs have been processed.
- Reboot and retry job.
- Verify if there is an attachment limit on the email.
- Verify network connectivity, SMTP gateways, access to folder share.

44.10.XX Error Event log message

Description

A send to e-mail error has occurred.

Recommended action

No action necessary.

44.34.XX Error Event log message

Description

A fax error has occurred.

Recommended action

- 1. Try to send the job again.
- **2.** Check the fax settings to make sure they are set to the proper settings for the environment.
- **3.** If the issue persists, see document "Solve fax problems", for additional fax troubleshooting information.

44.92.XX Error Event log message

Description

A fax error has occurred.

Recommended action

- **1.** Try to send the job again.
- **2.** Check the fax settings to make sure they are set to the proper settings for the environment.
- 3. If the issue persists, see document "Solve fax problem" for additional fax troubleshooting information.

47.XX.XX Error Messages

47.00.XX

Description

Back channel internal error.

- 1. Turn the printer off, and then on again.
- 2. Resend the print job.
- 3. If the error persists, clear the active partition by using the Partial Clean item in the Preboot menu.

47.01.XX

Description

Image transformer internal error.

Recommended action

- 1. Turn the printer off, and then on again.
- 2. Resend the print job.
- 3. If the error persists, clear the active partition by using the Partial Clean item in the Preboot menu.

47.02.XX

Description

Job parser internal error.

Recommended action

- 1. Turn the printer off, and then on again.
- 2. Resend the print job.
- If the error persists, clear the active partition by using the Partial Clean item in the Preboot menu.

47.03.XX

Description

Print job internal error.

Recommended action

- Turn the printer off, and then on again. 1.
- 2. Resend the print job.
- 3. If the error persists, clear the active partition by using the Partial Clean item in the Preboot menu.

47.04.XX

Description

Print spooler 9100 internal error.

- **1.** Turn the printer off, and then on again.
- **2.** Resend the print job.
- 3. If the error persists, clear the active partition by using the Partial Clean item in the Preboot menu.

47.05.00

Description

Print spooler framework internal error.

Recommended action

- 1. Turn the printer off, and then on again.
- 2. Resend the print job.
- 3. If the error persists, clear the active partition by using the Partial Clean item in the Preboot menu.

47.06.XX

Description

Print application internal error.

Recommended action

- **1.** Turn the printer off, and then on again.
- **2.** Resend the print job.
- 3. If the error persists, clear the active partition by using the Partial Clean item in the Preboot menu.

48.XX.YY Error Messages

48.XX.YY

Description

A job framework internal error has occurred.

Recommended action

- 1. No action should be necessary.
- **2.** If the error persists, upgrade the product firmware.
- 3. If the issue persists, continue troubleshooting with the flowcharts for either Intermittent or Persistent 49 error troubleshooting (whichever is appropriate) in document c03122817, "HP LaserJet FutureSmart Devices 49 Error Troubleshooting (Persistent and Intermittent)".

49.XX.YY Error To continue turn off then on

Description

A firmware error occurred. Corrupted print jobs, software application issues, non-product specific print drivers, poor quality USB or network cables, bad network connections or incorrect configurations, invalid firmware operations, or unsupported accessories can cause this error.

Recommended action

- Turn the product off, and then on. 1.
- If the error persists, check the following:
 - The error might be caused by a network connectivity problem, such as a bad interface cable, a bad USB port, or an invalid network configuration setting.
 - The error might be caused by the print job, due to an invalid print driver, a problem with the software application, or a problem with the file being printed.
 - Upgrading the product firmware might help resolve the error. See the product user guide for more information.

When a 49 error occurs, the user sees a 49.XXXX message on the control panel (where XXXX is replaced by a combination of letters and numbers). A 49 error might happen at any time for multiple reasons. Although some types of 49 errors can be caused by hardware failures, it is more common for 49 errors to be caused by printing a specific document or performing some task on the product.

49 errors most often occur when a product is asked to perform an action that the product firmware is not capable of and might not have been designed to comply with, such as:

- Printing files with unsupported programming commands
- A unique combination of user environment and user interactions with the product
- Interfacing with a third-party solution that was not designed to work with the product
- Specific timing, network traffic, or concurrent processing of jobs

Each of these interactions could cause the product firmware to initiate an action that the product cannot accomplish. In situations like this, the product might present the error if it has no other option. When these errors occur, the only way to recover is to turn the product's power off and back on.

NOTE: LaserJet formatter PCAs are rarely the root cause of 49 service errors. Please do not replace the formatter or flash unless troubleshooting has identified the formatter as the root cause.

If the error persists, continue troubleshooting with the flowcharts for either Intermittent or Persistent 49 error troubleshooting (whichever is appropriate) in document c03122817, "HP LaserJet FutureSmart Devices - 49 Error Troubleshooting (Persistent and Intermittent)".

50.WX.YZ Error Messages

50.1X.YZ Fuser Error

Description

Low fuser temperature.

Y = previous printer sleep state, Z = next printer sleep state

Recommended action

⚠ CAUTION: Be careful the fuser is HOT, allow it cool if you need to before removing to check the assembly.

- Turn the printer off. 1.
- 2. Remove the fuser. Check the connector (J290–291) between the fuser and the printer. If it is damaged, replace the fuser.
- Reconnect the connector (J132 and J152) on the DC Controller PCA. 3.
- 4. If the error persists, replace the fuser power supply assembly.
- If issue persists, elevate the issue for possible printer replacement.

50.2X.YZ Fuser Error

Description

Fuser warm up failure.

X = fuser mode, Y = previous printer sleep state, Z = next printer sleep state

Recommended action

A CAUTION: Be careful the fuser is HOT, allow it cool if you need to before removing to check the assembly.

- Turn printer power off and then back on again. 1.
- If the error returns, unplug the device from any power-strips or uninterrupted power supplies and plug directly in to a wall socket.
- If error returns, power off the unit and wait till fuser has cooled. 3.
- 4. Remove the fuser and check fuser for damage or obstructions. Reinstall or replace fuser as needed.
- Check the connector (J132 and J152) between the fuser and the DC controller PCA.
- If the error persists, replace the fuser and then replace the fuser power supply assmebly if needed or if the fuser has already been replaced.
- 7. If issue persists, elevate the issue for possible printer replacement.

50.3X.YZ Fuser Error

Description

High Fuser temperature.

X = fuser mode, Y = previous printer sleep state, Z = next printer sleep state

Recommended action

CAUTION: Be careful the fuser is HOT, allow it cool if you need to before removing to check the assembly.

- Reinstall the fuser. Check the connector (J128) between the fuser and the printer. If it is damaged, replace the fuser.
- 2. Check the connector (J132 and J152) on the DC controller PCA.
- 3. Replace the fuser.
- 4. If the error persists, replace the fuser power supply assembly.
- 5. If issue persists, elevate the issue for possible printer replacement.

50.4X.YZ Fuser Error

Description

Drive circuit fault.

X = fuser mode, Y = previous printer sleep state, Z = next printer sleep state

Recommended action

AN CAUTION: Be careful the fuser is HOT, allow it cool if you need to before removing to check the assembly.

- Check the power source. Make sure the power source meets printer requirements.
- NOTE: If the power source does not meet the power frequency requirement of 40 to 70Hz, the fuser temperature control does not work properly and causes this error.
- 2. Reconnect connectors (J132 and J152) on the DC controller PCA.
- 3. If the error persists, replace the fuser power supply assembly.
- 4. If issue persists, elevate the issue for possible printer replacement.

50.6X.YZ Fuser Error

Description

Fuser error.

Fuser open error.

X = fuser mode, Y = previous printer sleep state, Z = next printer sleep state

Recommended action

CAUTION: Be careful the fuser is HOT, allow it cool if you need to before removing to check the assembly.

- 1. Ensure the media type and fuser mode are correctly set for the paper being used.
- turn the printer off. remove the fuser. Check the connector (J128) between the fuser and the printer. If it 2. is damaged, replace the fuser.
- 3. Reinstall the fuser and turn the printer back on.
- 4. Reconnect connectors (J132 and J152) on the DC controller PCA.
- 5. Replace the fuser.
- 6. If the error persists, replace the power supply unit.

50.7X.YZ Fuser Error

Description

Fuser Pressure release failure.

X = fuser mode, Y = previous printer sleep state, Z = next printer sleep state

Recommended action

CAUTION: Be careful the fuser is HOT, allow it cool if you need to before removing to check the assembly.

- **1.** Turn printer power off and then back on again.
- **2.** Resend job.
- **3.** If error returns, power off the unit and wait till fuser cooled.
- **4.** Remove fuser and check fuser for damage or obstructions.
- 5. Re-Install fuser and test.
- **6.** If the error persists, replace the fuser assembly.

50.9X.YZ Fuser Error

Description

Low fuser temp error.

X = fuser mode, Y = previous printer sleep state, Z = next printer sleep state

Recommended action

- **1.** Turn printer power off and then back on again.
- **2.** Ensure media type and fuser mode are correct for media being used.
- **3.** If error returns, power off the unit and wait till fuser cooled.
- **4.** Remove fuser and check fuser for damage or obstructions.
- 5. Re-Install fuser and test.
- **6.** If the error persists, replace the fuser assembly.
- **7.** If error returns, replace the power supply unit.
- **8.** If error returns, replace the DC controller PC board assembly.

51.XX.YZ, 52.XX.YZ Error Messages

51.00.10

Description

Laser/scanner error.

Laser Scanner beam detect error.

- Reconnect connector (J811/J851) on the laser/scanner. 1.
- 2. Reconnect connectors (J161) on the DC controller.
- If the error persists, replace the laser/scanner. 3.

52.XX.00

Description

Laser/scanner error.

XX = 00

laser/scanner motor startup error.

XX = 20

Laser/scanner rotation error.

Recommended action

- 1. Reconnect connector (J802) on the laser/scanner.
- 2. Reconnect connectors (J162) on the DC controller.
- 3. Use the scanner motor (M3) drive test in the Component Test to verify that the scanner motor is properly functioning. If it is not, replace the laser/scanner.
- **NOTE:** Listen for a high pitched whine from the motor.
- If the error persists, replace the laser/scanner.

54.XX.YZ Error Messages

54.06.21 error

Description

A sensor error has occurred.

Primary laser/scanner beam detect abnormality.

Recommended action

- 1. Turn the printer off, and then on.
- 2. If the printer has had parts removed or replace, check the connector (J161 and J162) on the DC controller PCA.
- If the error persists, replace the laser/scanner assembly.

55.XX.YZ, 56.XX.YZ Error Messages

55.00.yy To continue turn off then on

Description

DC controller PCA error.

55.00.01 (event code)

DC controller memory error.

• **55.00.03** (event code

DC controller no engine response.

• **55.00.04** (event code

DC controller communications time-out.

Recommended action

Turn the printer off, and then on.

If the error persists, replace the DC controller PCA.

55.0x.yy to.continue.off.on

Description

DC controller PCA error.

• **55.01.06** (event code)

NVRAM memory data error warning.

• **55.02.06** (event code)

NVRAM memory access error warning.

Recommended action

Turn the printer off, and then on.

If the error persists, replace the DC controller PCA.

56.00.yy to.continue.off.on

Description

Optional paper trays communication error.

Recommended action

- **1.** Turn the printer off, and then on.
- **2.** If the error persists, reseat the optional paper trays (1 x 500-sheet feeder and/or 3 x 500-sheet feeder).

- Check the input connectors for damage. If the connector is damaged on the printer side, replace the fuser power supply assembly, (contains the connector to the paper tray assembly).
- If connector is damaged on the option sheet feeder tray, replace the optional sheet feeder.

57.XX.YZ Error Messages

NOTE: Use the wiring diagram to trace back where the fan gets its supply voltage.

The connectors are supplied in the troubleshooting steps. If after following the steps provided the issue is not resolved it may be a voltage source issue from the DC Controller or Power Supply. Depending which FAN is failing one of these parts may need to be replaced as a following step.

57.00.01 to.continue.off.on

Description

Main fan (FM1) failure.

Recommended action

- Turn the printer off, and then on. Listen for fan noise on the right side of the printer. If no noise is heard, replace the main fan (FM1).
- If the fan has been removed or replaced, check the connector (J372 and J341) on the High voltage PCA and (J133) on the DC controller PCA.
- If the error persists, replace the main fan (FN101).

57.00.02 to.continue.off.on

Description

Sub fan (FM2) failure.

Recommended action

- Turn the printer off, and then back on. Listen for fan noise coming from the left side of the printer. The fan should turn on approximately 1.5 minutes after power on.
- 2. If no noise is heard, replace fan FM2.
- If the fan has been removed or replaced, check connector J661 on the sub fan and J147 on the DC 3. Controller.

58.XX.YZ Error Messages

58.00.03 Error

Description

DC controller CPU failure.

- 1. Turn the printer off and then back on.
- 2. Check all of the connectors on the DC controller PCA.
- 3. If the error persists, replace the DC controller PCA.

58.00.04 Error

Description

The printer experienced a low voltage power supply unit malfunction.

Recommended action

Turn the printer off and then back on.



NOTE: This error might be caused by source power related issues.

Determine if the area where the printer is located has experienced brown outs or is subject to power quality issues.

- Ensure printer is plug into dedicated power outlet. 2.
- 3. If error persists, replace the power supply unit.

58.01.04 Error

Description

24V power supply error during operation.

During regular printing operation the 24V power supply experienced an error.

Recommended action

Turn the printer off and then back on.



NOTE: This error might be caused by source power related issues.

Determine if the area where the printer is located has experienced brown outs or is subject to power quality issues.

- 2. Ensure printer is plug into dedicated power outlet.
- 3. If error persists, replace the power supply unit.

58.02.04 Error

Description

24V power supply error during boot or wake.

During printer power on or when waking from sleep mode, the printer experienced an error with the 24V power supply.

Recommended action

Turn the printer off and then back on.

NOTE: This error might be caused by source power related issues.

Determine if the area where the printer is located has experienced brown outs or is subject to power quality issues.

- Ensure printer is plug into dedicated power outlet.
- 3. If error persists, replace the power supply unit.

59.XX.YZ Error Messages

59.00.YY Error — To.continue.off.on

Description

A motor error has occurred.

YY = Motor

Recommended action

59.00.20

Feed motor (M2) failure).

- Reconnect the connector (J711) on the feed motor and the connector (J171) on the DC controller PCA. 1.
- Use the feed motor (M2) drive test in the Component test to verify that the motor is properly functioning. If is not, replace the feed motor (M2).

59.00.30

Fuser motor (M1) failure.

- Use the fuser motor (M1) drive test in the Component test to verify that the motor is properly functioning. If test fails, replace the fuser.
- If the motor has been removed or replaced, check connector J712 on the fuser motor M1 and connector J146 on the DC Controller.
- If the error persists, replace the fuser motor M1.

59.00.40

Fuser motor (M1) failure.

- Use the fuser motor (M1) drive test in the Component test to verify that the motor is properly functioning. If test fails, replace the fuser.
- 2. If the motor has been removed or replaced, check connector J712 on the fuser motor M1 and connector J146 on the DC Controller.
- If the error persists, replace the fuser motor M1.

59.A2.YY Error

Description

A printer error has occurred.

59.A2.02

Tray 2 lifter driver assembly failure.

- 1. Use the Tray/Bin manual sensor test to verify that the Tray 2 paper surface sensors are properly functioning.
- 2. If this part has been removed or replace, check the connector (J144) on the on the DC controller PCA.
- **3.** If the error persists, elevate the issue for possible printer replacement.

59.A2.0X

Tray 3 to 6 lifter driver assembly motor failure.

X = Tray number

59.A2.03 — Tray 3

59.A2.04 — Tray 4

59.A2.05 — Tray 5

- 1. Reconnect the connectors (J622) on the paper feeder drive PCA.
- **2.** If the error persists, replace the optional input tray.

60.00.0Y, 62.00.00 Error Messages

60.00.0X Tray X lifting error

Description

A tray lift motor error has occurred.

Recommended action

60.00.03 to 60.00.05

Tray lifter driver assembly failure.

60.00.03: Tray 3

60.00.04: Tray 4

60.00.05: Tray 5

- **1.** Use the Tray/Bin manual sensor test to verify that the Tray 3 paper (PS460 and PS461) surface sensors are properly functioning.
- 2. If this part has been removed or replace, check all the connectors on the on the paper feeder controller PCA.
- **3.** Reconnect the connectors (J620, J621 and J622) on the sheet feeder PCA.
- **4.** Replace the option input tray assembly.

62.00.00 To continue turn off the on.

Description

Internal system failure.

Recommended action

Turn the printer off, and then on.

If the error persists, reload the firmware. If the error still persists, perform a firmware upgrade.

If the firmware upgrade does not resolve the problem, replace the hard disk.

65.X0.AZ Error Messages

65.80.A0, 65.80.A1: Output accessory Failure

Description

Output accessory disconnected.

An external paper handling accessory connection has been interrupted.

Recommended action

- Turn the product off.
- 2. Make sure that the communication cable from the finisher to the engine is installed correctly.
- 3. Make sure that all packing materials have been removed from the paper handling accessory.
- 4. Check the paper path for obstructions, or jammed paper.
- 5. Turn the product on. If the error persists, replace the accessory.

66.WX.YZ Error Messages

66.00.20

Description

Over Current Error.

This is an output device failure related message.

Recommended action

- Turn the product off, and then on.
- 2. Make sure that the finisher is connected correctly.
- 3. If the error persists, replace the Stapler/Stacker Unit.

66.00.40

Description

NVRAM Error.

This is a finisher control board NVRAM error. The checksum for the finisher stacker controller PCA has an error when the power is turned on.

Recommended action

- 1. Turn the product off, and then on.
- **2.** Make sure that the finisher is connected correctly.
- **3.** If the error persists, replace the Stapler/Stacker Unit.

66.00.50

Description

This is a CAN-CPU sequence error.

Recommended action

- 1. Turn the product off, and then on.
- 2. Make sure that the finisher is connected correctly.
- **3.** If the error persists, replace the Stapler/Stacker Unit.

66.00.77

Description

This is a device communication error.

The communication between the print engine and the finisher has been interrupted or lost.

Recommended action

- 1. Turn the product off, and then on.
- 2. Make sure that the finisher is connected correctly.
- **3.** If the error persists, replace the Stapler/Stacker Unit.

66.00.79

Description

This is a JetLink communication error.

The product has lost JetLink communication with the output device.

Recommended action

- **1.** Turn off the product, and then disconnect the finisher.
- 2. Inspect and reconnect the JetLink cable (power and communication cable) from the finisher to the product.
- **3.** Reconnect the finisher to the product.
- **4.** Turn the product on.
- 5. If the error persists, replace the stacker controller PCA or the Stapler/Stacker Unit.

66.80.YY Stapler/Stacker failure

Description

An external paper handling accessory error has occurred.

66.80.01 (event code)

Y-align malfunction

66.80.02 (event code)

Jogger malfunction

66.80.03 (event code)

Stapler malfunction

66.80.21 (event code)

Lift up malfunction

66.80.22 (event code)

Lift down malfunction

66.80.23 (event code)

Lift sensor malfunction

66.80.33 (event code)

Output roller malfunction

66.80.35 (event code)

Self priming malfunction

66.80.51 (event code)

System error (FW error)

66.80.55 (event code)

System error 5 (FW error)

66.80.56 (event code)

System error 6 (FW error)

66.80.57 (event code)

System error 7 (FW error)

66.80.58 (event code)

System error 8 (FW error)

66.80.59 (event code)

System error 9 (FW error)

• **66.80.60** (event code)

System error 10 (FW error)

• **66.80.61** (event code)

System error 11 (FW error)

• **66.80.62** (event code)

System error 12 (FW error)

• **66.80.63** (event code)

System error 13 (FW error)

• **66.80.64** (event code)

System error 14 (FW error)

• **66.80.65** (event code)

System error 15 (FW error)

• **66.80.70** (event code)

Page-info in flush

• **66.80.71** (event code)

Flush request in PDLV

• **66.80.72** (event code)

Delivery notice error

• **66.80.73** (event code)

Flush request in checking paper path

• **66.80.74** (event code)

Checking paper path start in PDLV

• **66.80.75** (event code)

Flush request in flush

• **66.80.76** (event code)

Non-flush complete

Recommended action

- **1.** Turn off the product, and then disconnect the finisher.
- 2. Inspect and reconnect the JetLink cable (power and communication cable) from the finisher to the product.
- **3.** Inspect the finisher for paper jams.
- **4.** Reconnect the finisher to the product.

- Turn the product on. 5.
- 6. If the error persists, replace the Stapler/Stacker Unit.

70.XX.YY Error Messages

70.00.00 Error To continue turn off then on

Description

DC controller failure.

Recommended action

- Turn the printer off, and then on.
- 2. If the error persists, replace the DC controller.

80.XX.YY, 82.XX.YY Error Messages

80.0X.YY Embedded Jetdirect Error

Description

An Embedded HP JetDirect print server critical error has occurred.

- 80.01.80: (event log) No heartbeat
- **80.01.81**: (event log) Reclaim timeout
- 80.01.82: (event log) Invalid data length
- 80.01.8B: (event log) Invalid max outstanding packet header field
- **80.01.8C**: (event log) Invalid channel mapping response
- 80.03.01: (event log) No PGP buffers
- 80.03.02: (event log) Channel table full
- **80.03.03**: (event log) Producer index not reset
- **80.03.04**: (event log) Consumer index not reset
- **80.03.05**: (event log) Queue position size too small
- 80.03.06: (event log) Transport overflow
- 80.03.07: (event log) No overflow packets
- **80.03.08**: (event log) Invalid identify response
- **80.03.09**: (event log) Invalid channel map return status
- **80.03.10**: (event log) Invalid reclaim return status
- **80.03.12**: (event log) Datagram invalid buffer
- **80.03.13**: (event log) Max stream channels
- 80.03.14: (event log) Max datagram channels

- 80.03.15: (event log) Card reset failed
- 80.03.16: (event log) Self-test failure
- 80.03.17: (event log) Unknown PGP packet
- **80.03.18**: (event log) Duplicate I/O channel

- **1.** Turn the printer off, and then on.
- 2. Remove the RJ45 cable.
- **3.** Turn the printer off, and then on.
- 4. Reconnect the RJ45 cable.
- **5.** If the error persists, replace the formatter.

82.73.46, 82.73.47

Description

A hard disk or compact flash disk cleaning failed. This error is usually caused by a failure of the disk hardware.

Recommended action

- **1.** Turn the printer off, and then on.
- 2. Use the Clean Disk item in the Preboot menu.
- 3. Reload the firmware.

98.0X.0Y Error Messages

98.00.01 or 98.01.00 Corrupt data in firmware volume

Description

Data corrupt has occurred in the firmware volume.

Recommended action

- 1. Turn the printer off, and then on.
- 2. Use the Clean Disk item in the Preboot menu.
- **3.** Reload the firmware.

98.00.02 Corrupt data in the solutions volume

Description

Data corrupt has occurred in the solutions volume.

- 1. Turn the printer off, and then on.
- 2. Use the Clean Disk item in the Preboot menu.
- 3. Reload the firmware.

98.00.03 Corrupt data in the configuration volume

Description

Data corrupt has occurred in the configuration volume.

Recommended action

- 1. Turn the printer off, and then on.
- 2. Download the firmware again, and then attempt the upgrade again.
- 3. Use the Clean Disk item in the Preboot menu.
- 4. Reload the firmware.

98.00.04 Corrupt data in the job data volume

Description

Data corrupt has occurred in the job data volume.

Recommended action

- Turn the printer off, and then on. 1.
- Rerun the file erase function. 2.

99.XX.YY Error Messages

99.00.01 Upgrade not performed file is corrupt

Description

A remote firmware upgrade (RFU) was not performed.

This is a CRC error in the firmware image (bad image).

Recommended action

Download the RFU file, and then attempt the upgrade again.

99.00.02 Upgrade not performed time-out during receive

Description

A remote firmware upgrade (RFU) was not performed.

The issue is an I/O time-out when reading the header number and size. It indicates a problem with the network environment, not the printer.

The most common cause is an issue with the network environment.

Make sure that there is a good network connection to the printer, and then attempt the firmware upgrade again, or upgrade using the USB walk-up port.

99.00.03 Upgrade not performed error writing to disk

Description

A remote firmware upgrade (RFU) was not performed.

This is a disk error. It might indicate a problem or a hard disk failure. It might be necessary to check the connection to the hard disk or replace the hard disk.

Recommended action

- 1. Download the RFU file, and then attempt the upgrade again.
- 2. If the error persists, run the **Clean Disk** process from the **Preboot** menu.

You will need to download the firmware from the **Preboot** menu.

3. If the error persists, replace the hard disk.

99.00.04 Upgrade not performed time-out during receive

Description

A remote firmware upgrade (RFU) was not performed.

The issue is an I/O time-out when reading the header.

Recommended action

The most common cause is an issue with the network environment.

Make sure that there is a good network connection to the printer, and then attempt the firmware upgrade again, or upgrade using the USB walk-up port.

99.00.05 Upgrade not performed time-out during receive

Description

A remote firmware upgrade (RFU) was not performed.

The issue is an I/O time-out when reading image data.

Recommended action

The most common cause is an issue with the network environment.

Make sure that there is a good network connection to the printer, and then attempt the firmware upgrade again, or upgrade using the USB walk-up port.

99.00.06 Upgrade not performed error reading upgrade

Description

A remote firmware upgrade (RFU) was not performed.

The issue is an unexpected read error when reading the header number and size.

Recommended action

- Download the RFU file, and then attempt the upgrade again. 1.
- 2. If the error persists, replace the hard disk.

99.00.07 Upgrade not performed error reading upgrade

Description

A remote firmware upgrade (RFU) was not performed.

The issue is an unexpected read error when reading the rest of the header.

Recommended action

- 1. Download the RFU file, and then attempt the upgrade again.
- 2. If the error persists, replace the hard disk.

99.00.08 Upgrade not performed error reading upgrade

Description

A remote firmware upgrade (RFU) was not performed.

The issue is an unexpected read error when reading image data.

Recommended action

- 1. Download the RFU file, and then attempt the upgrade again.
- 2. If the error persists, replace the hard disk.

99.00.09 Upgrade canceled by user

Description

A remote firmware upgrade (RFU) was not performed.

The RFU was canceled by the user.

Recommended action

Resend the RFU.

99.00.10 Upgrade canceled by user

Description

A remote firmware upgrade (RFU) was not performed.

The RFU was canceled by the user when reading the header number and size.

Recommended action

Resend the RFU.

99.00.11 Upgrade canceled by user

Description

A remote firmware upgrade (RFU) was not performed.

The RFU was canceled by the user when reading the rest of the header.

Recommended action

Resend the RFU.

99.00.12 Upgrade not performed the file is invalid

Description

A remote firmware upgrade (RFU) was not performed.

The header number is 1, but the header size does not match version 1 size.

Recommended action

Download the RFU file again.

Make sure that you download the file for the correct printer model, and then resend the RFU.

99.00.13 Upgrade not performed the file is invalid

Description

A remote firmware upgrade (RFU) was not performed.

The header number is 2, but the header size does not match version 2 size.

Recommended action

Download the RFU file again.

Make sure that you download the file for the correct printer model, and then resend the RFU.

99.00.14 Upgrade not performed the file is invalid

Description

A remote firmware upgrade (RFU) was not performed.

The file is invalid.

Recommended action

Download the RFU file again.

Make sure that you download the file for the correct printer model, and then resend the RFU.

99.00.2X

Description

There is a compatibility issue with the firmware. The specific message varies depending on the cause, but the solution for each message is the same.

99.00.20 (event log)

The bundle is not for this printer.

99.00.21 (event log)

The bundle is not signed with the correct signature, or the signature is invalid.

99.00.22 (event log)

The bundle header version is not supported by this firmware.

99.00.23 (event log)

The package header version is not supported by this firmware.

99.00.24 (event log)

The format of the bundle is invalid.

99.00.25 (event log)

The format of the package is invalid.

99.00.26 (event log)

A CRC32 check did not pass.

99.00.27 (event log)

An I/O error occurred while downloading the bundle.

Recommended action

Download the correct firmware file from www.hp.com, and then resend the firmware upgrade.

99.00.27 only:

- **1.** Turn the printer off, and then on.
- 2. Resend the firmware upgrade.
- 3. If the error persists, try installing the upgrade by another method (USB or Embedded Web Server).

99.01.XX

Description

A firmware install error has occurred. The specific message varies depending on the cause, but the solution for each message is the same.

- 99.01.00
- 99.01.10
- 99.01.20
- 99.01.21

Recommended action

Reload the firmware.

99.02.01

Description

Firmware installation was successful.

Recommended action

No action necessary.

99.02.09

Description

Firmware upgrade cancelled by user.

Recommended action

No action necessary.

99.09.60 Unsupported disk

Description

This is a **Preboot** menu error.

The hard disk currently installed is not recognized or supported by the printer.

Recommended action

Install the correct hard disk for this printer.

99.09.61 Unsupported disk

Description

This is a **Preboot** menu error.

The installed disk is installed in a printer configured for an encrypted hard disk..

Recommended action

Access the **Preboot** menu, and then select **Lock Disk** to lock the disk.

99.09.62 Unknown disk

Description

This error indicates that there is an encryption mismatch between the Hard drive and the formatter. This typically happens because an Hard drive was swapped into a device from another device.

Recommended action

Install a new disk or use the **Preboot** menu unlock the disk.

If a disk is to be reused in a different printer, execute the **Clean Disk** procedure from the **Preboot**, and then reload the firmware and lock the disk.

99.09.63 Incorrect disk

Description

This error indicates that the expected encrypted Hard drive is not present.

This is expected behavior when installing a new Hard drive in a device where the previous Hard drive was encrypted.

Recommended action

Follow the procedure to load firmware on a new hard disk, and then lock the disk to this printer.

99.09.64 Disk Nonfunctional

Description

A fatal hard disk failure has occurred.

Recommended action

- 1. Determine if the Hard Disk needs to be replaced.
- 2. Ask if customer is using eMMC as a temporary mass storage solution (eMMC must be present).
- 3. Instruct the customer to enable eMMC from the preboot menus.
- 4. Power down the printer.
- Inform customer that the broken Hard drive must be removed to continue. 5.
- 6. Power printer on, boot is expected to stop at 99.39.67 eMMC Not Bootable.
- Provide Instructions to download firmware (This will automatically download to eMMC). 7.
- 8. During download to eMMC, F/W clear data migration bit.
- 9. Ship new Hard drive.

Replace the hard disk.

99.09.65 Disk data error

Description

Disk data corruption has occurred.

Recommended action

Use the **Clean Disk** procedure from the **Preboot** menu, and then resend the RFU.

99.09.66 No boot device.

Description

A disk drive is not installed in the printer.

- **1.** Determine the customer's intended boot device (Hard drive or eMMC).
- **2.** Install a compatible hard disk drive or eMMC.
- **3.** If a compatible hard disk or eMMC is installed, reseat the hard disk or eMMC to make sure that it is connected correctly.
- **4.** If the error persists, replace the Hard drive or eMMC.
- NOTE: Device is unusable until a new boot device is installed.

99.09.67 Disk is not bootable please download firmware

Description

This is an error indicating that there is no firmware installed on the disk. This is usually the result of installing a new disk or performing a **Clean Disk** operation from the **Preboot** menu.

Recommended action

- 1. Press any button to continue to the main Preboot menu.
- **2.** Press the Help button to see the help text for the error.
- 3. Select the **Administration** menu.
 - NOTE: If there is a password assigned to the Administrator, a prompt to enter the printer displays. Enter the password to proceed.
- 4. Select the **Download** item, and then download the latest firmware.

The user can now download a new firmware bundle to the printer.

If download fails to Hard drive, follow instructions listed in 99.09.64 error

99.39.64 eMMC Nonfunctional

Description

The eMMC is not functioning.

Recommended action

Replace the eMMC.

NOTE: Device is unusable until a new eMMC is installed.

99.39.67 eMMC Not Bootable

Description

Data on the eMMC cannot secured or encrypted.

When the Hard drive is installed all data on the eMMC is automatically migrated to the Hard drive and erased from the eMMC. As long as the Hard drive is installed the eMMC is non-functional.

The customer by passed data migration and put eMMC back in.

- 1. Download firmware to the eMMC.
- 2. If download fails to eMMC, Replace the eMMC.



NOTE: Device is unusable until a new eMMC is installed.

99.XX.YY

Description

A message of this form indicates a firmware installation error.

Recommended action

Reload the firmware.

Alpha Error Messages

ROM disk device failed To clear press "OK"

Description

The specified device failed.

Recommended action

Touch the OK button to clear the error.

<Binname> Full Remove all paper from bin X

Description

The specified output bin is full.

Recommended action

Empty the bin to continue printing.

Accept bad signature

Description

The printer is performing a remote firmware upgrade, and the code signature is invalid.

Recommended action

Download the correct firmware upgrade file for this printer, and then reinstall the upgrade. See the printer user guide for more information.

Bad optional tray connection

Description

The optional tray is not connected, not connected correctly, or a connection is not working correctly.

- **1.** Turn the printer off.
- 2. Remove and then reinstall the optional tray.
- **3.** Reconnect connectors for the tray.
- **4.** If the problem continues, replace the connector for the tray.

Cancelling

Description

The printer is canceling the current job.

Recommended action

No action is necessary.

Cancelling < JobName>

Description

The printer is canceling the current job <jobname>.

Recommended action

No action is necessary.

Cartridge Low

Description

This message appears even though the print cartridge is new.

Recommended action

- 1. Remove, and then reinstall the print cartridge.
- **2.** Make sure a genuine HP supply is used.
- 3. If the error persists, replace the print cartridge.

Cartridge memory abnormal

Description

This message appears even though the print cartridge is new.

Recommended action

- 1. Remove, and then reinstall the print cartridge.
- 2. Reconnect connector (J376) on the high voltage power supply PCA.
- **3.** If the error persists, replace the print cartridge.

Cartridge out

Description

This message appears even though the print cartridge is new.

Recommended action

- 1. Remove, and then reinstall the print cartridge.
- 2. Make sure a genuine HP supply is used.
- 3. If the error persists, replace the print cartridge.

Check Engine

Description

The printer is conducting an internal test.

Recommended action

No action is necessary.

Checking Paper Path

Description

The printer is checking for possible paper jams.

Recommended action

No action is necessary.

Chosen personality not available To continue touch "OK"

Description

A print job requested a printer language (personality) that is not available for this printer. The job will not print and will be cleared from memory.

Recommended action

Print the job by using a print driver for a different language, or add the requested language to the printer (if possible). To see a list of available personalities, print a configuration page.

Cleaning

Description

The printer is performing an automatic cleaning cycle. Printing will continue after the cleaning is complete.

Recommended action

No action is necessary.

Cleaning do not grab paper

Description

The printer is performing an automatic cleaning cycle. Printing will continue after the cleaning is complete.

No action is necessary.

Clearing event log

Description

This message is displayed while the event log is cleared. The printer exits the menus when the event log has been cleared.

Recommended action

No action is necessary.

Clearing paper path

Description

The printer is attempting to eject jammed paper.

Recommended action

Check progress at the bottom of the display.

Close top cover

Description

This message appears even though the top cover is closed.

Recommended action

- 1. Verify that the switch (SW2) is properly functioning (open and close the top cover). If the switch fails the test, replace the switch.
- **2.** Make sure that the switch flag—at the right-side of the top cover assembly, behind the control-panel display— is not damaged or missing. If the flag is damaged or missing, replace the top cover assembly.
- **3.** If the problem persists, replace the top cover switch.

Cooling device

Description

The printer is cooling.

Recommended action

No action is necessary.

Creating cleaning page...

Description

A cleaning page is being generated.

Recommended action

No action is necessary.

Data received To print last page press "OK"

Description

The printer is waiting for the command to print the last page.

Recommended action

Touch the "OK" button to print the last page of the job.

Event log is empty

Description

No printer events are in the log.

Recommended action

No action is necessary.

Expected drive missing

Description

The printer cannot find the encrypted hard drive.

Recommended action

Install the encrypted hard drive.

External device initializing

Description

An external device is initializing.

Recommended action

No action necessary.

Face Down Tray Full

Description

This message is displaying even though the tray is not full.

Recommended action

- Check the face down tray media full sensor flag and place it in the correct position to move smoothly. Replace sensor flag if damaged.
- 2. If flag of the output bin media-full sensor does not work smoothly, set it so that it works smoothly. If it is damaged, replace the fuser.
- NOTE: Reconnect the connector (J405) for the fuser and the connector (J152) for the DC controller.
- **3.** If error remains, replace the DC controller.

FIM Load Error Send full FIM on <X> port

Description

The printer displays this message before the firmware is loaded at startup if an error has occurred during a firmware upgrade.

Recommended action

Resend the firmware upgrade.

Fuser Kit low

Description

10.23.60 (event code)

The printer indicates when a supply is low.

Recommended action

Replace the fuser.



NOTE: After replacing the fuser, reset the fuser page counter by selecting New fuser kit in the Reset Supplies sub-menu.

Fuser Kit very low To continue, touch "OK"

Description

10.23.70 (event code)

The printer indicates when a supply is very low.



NOTE: After an HP supply has reached the very low threshold, the HP premium protection warranty for that supply has ended.

Recommended action

If print quality is no longer acceptable, the customer must order and pay for a replacement fuser assembly (fuser kit).



NOTE: After replacing the fuser, reset the fuser page counter by selecting New fuser kit in the Reset Supplies sub-menu.

Genuine HP cartridge installed

Description

A new HP print cartridge has been installed. The message appears for about 6 seconds before the printer returns to the READY state.

Recommended action

No action necessary.

Genuine HP supply installed

Description

10.XX.40 (event code)

A new genuine HP print cartridge has been installed.

Recommended action

Touch the Hide button to remove this message.

HP Secure hard drive disabled

Description

The drive has been encrypted for another printer.

Recommended action

Remove the drive or use the Embedded Web Server for more information.

Incompatible <supply>

Description

The indicated supply <supply>is not compatible with this printer.

10.00.35 (event code)

Black print cartridge

Fuser kit

10.23.35 (event code)

Recommended action

Replace the supply with one that is designed for this printer.

Incompatible supplies

Description

Print cartridges or other supply items are installed that were not designed for this printer. The printer cannot print with these supplies installed.

Event codes are supply specific.

Recommended action

Touch the OK button to identify the incompatible supplies.

Replace the supplies with those that are designed for this printer.

Initializing...

Description

The printer is starting.

Recommended action

No action necessary.

Install Black Cartridge

Description

A supply item is either not installed or installed incorrectly.

Black cartridge

10.00.15 (event code)

Recommended action

Install the supply item or make sure that the installed supply item is fully seated.

Install Fuser

Description

The fuser has been removed or installed incorrectly.

Recommended action

CAUTION: The fuser can be hot while the printer is in use. Turn the printer off, and then wait for the fuser to cool before handling it.

- **1.** Remove the output bin or stapler/stacker.
- **2.** Remove the fuser entrance guide.
- 3. Remove the fuser.

Install supplies

Description

More than one supply is missing or is installed incorrectly.

Recommended action

- **1.** Touch the OK button to identify the supplies that need to be replaced.
- **2.** Touch the OK button a second time for more information about the specific supply.
- **3.** Insert the supply or make sure it is correctly installed and fully seated.

Internal disk device failure To clear press "OK"

Description

The internal disk failed.

Recommended action

Touch the OK button to clear the error.

Internal disk file operation failed

Description

A PJL system command attempted to perform an illogical operation, such as downloading a file to a nonexistent directory.

Recommended action

Touch the OK button to clear the error.

Internal disk file system is full

Description

A PJL system command attempted to write data to the internal disk but was unsuccessful because the disk is

Recommended action

Touch the OK button to clear the error.

Internal disk is write protected

Description

The internal disk is write protected and no new files can be written to it.

Recommended action

Touch the OK button to clear the error.

Internal disk not found

Description

The internal disk was not found at start up.

Recommended action

Turn the printer off, and then on again.

Internal disk not functional

Description

82.0X.YY (event code)

The internal hard drive is not correctly functioning.

Recommended action

Turn the printer off, remove and then reinstall the hard drive.

If the error persists, replace the internal hard drive.

Internal disk not initialized

Description

The internal disk file system must be initialized before it can be used.

Recommended action

Initialize the internal disk file system.

Internal disk spinning up

Description

Internal disk device is spinning up its platter. Jobs that require disk access must wait.

Recommended action

No action is necessary.

Job not stapled due to mixed sizes

Description

This message is displayed when the job to staple has more than one paper size (paper width).

Recommended action

Paper with different widths cannot be stapled. Use the same width paper for the entire print job.

Load Tray <X>: [Type], [Size]

Description

Load paper in Tray X as specified.

Recommended action

Load paper in specified Tray.

If this message appears even though there is media loaded in the tray, perform the following.

- 1. Use the sensor tests to verify that the sensor is correctly functioning.
- 2. Make sure that the sensor flag on the media presence sensor is not damaged and moves freely.
- **3.** Reconnect the corresponding connector for the paper tray having the issue.

Load Tray <X>: [Type], [Size] To use another tray, press "OK"

Description

This message appears when the indicated tray is selected but is not loaded, and other paper trays are available for use. It also appears when the tray is configured for a different paper type or size than the print job requires.

Recommended action

- **1.** Load the correct paper in the tray.
- **2.** If prompted, confirm the size and type of paper loaded.
- **3.** Otherwise, press the OK button to select another tray.

Loading program <XX> Do not power off

Description

Programs and fonts can be stored on the printer's file system and are loaded into RAM when the printer is turned on. The number <XX> specifies a sequence number indicating the current program being loaded.

Recommended action

No action necessary.



NOTE: Do not turn the printer off.

Manually feed output stack Then touch "OK" to print second side

Description

The printer has printed the first side of a manual duplex job and is waiting for the user to insert the output stack to print the second side.

Recommended action

- 1. Maintaining the same orientation, remove pages from the output bin.
- 2. Flip document printed side up.
- 3. Load document in Tray 1.
- Touch the OK button to print the second side of the job.

Manually feed: <Type><Size>

Description

This message appears when manual feed is selected, Tray 1 is not loaded, and other trays are empty.

Recommended action

- Load tray with requested paper. 1.
- 2. If paper is already in tray, press the Help button to exit the message and then press the OK button to print.
- To use another tray, clear paper from Tray 1, press the Help button to exit the message and then press the OK button.

Manually feed: <Type><Size> To use another tray, press "OK"

Description

This message appears when manual feed is selected, Tray 1 is loaded, and other trays are available.

Recommended action

Load tray with requested paper.

If paper is already in tray, press the Help button to exit the message and then press the OK button to print.

To use another tray, clear paper from Tray 1, press the Help button to exit the message and then press the OK button.

Moving solenoid

Description

The solenoid is moving as part of a component test.

Recommended action

To exit press X.

Moving solenoid and motor

Description

The solenoid and a motor are moving as part of a component test.

Recommended action

To exit press X.

No job to cancel

Description

You have pressed the stop button but the printer is not actively processing any jobs.

Recommended action

No action necessary.

NON HP Supply Installed

Description

10.99.31 (event code)

This message is displayed for about 6 seconds when a new non HP supply is installed.

Recommended action

If you believe you purchased a genuine HP supply, go to www.hp.com/go/anticounterfeit.

Output Bin Full

Description

This message appears even though the output bin is not full.

Recommended action

- **1.** Make sure that the output bin sensor flag is not damaged and can move freely. If the flag is damaged, replace the flag.
- 2. Use the output bin full sensor test in the Manual sensor test to test the sensor.
- 3. Reconnect the connector (J405) for the fuser and the connector (J152) for the DC controller.
- **4.** If issue remains, elevate the issue for possible printer replacement.

Paused...

Description

The printer is paused, and there are no error messages pending at the display. The I/O continues receiving data until memory is full.

Recommended action

Press the Stop button.

Performing Paper Path Test...

Description

A paper-path test is being performed.

Recommended action

No action necessary.

Please Wait...

Description

The printer is in the process of clearing data.

Recommended action

No action necessary.

Printing Configuration...

Description

The printer is printing the Configuration page.

Recommended action

No action necessary.

Printing engine test...

Description

The printer is printing an engine test page.

Recommended action

No action necessary.

Printing Event Log...

Description

The printer is printing the Event Log page.

Recommended action

No action necessary.

Printing File Directory...

Description

The printer is printing the File Directory pages.

Recommended action

No action necessary.

Printing Font List...

Description

The printer is printing the Font List pages.

Recommended action

No action necessary.

Printing Fuser Test Page...

Description

The printer is printing the Fuser Test page.

Recommended action

No action necessary.

Printing Help Page...

Description

The printer is printing the Help page.

Recommended action

No action necessary.

Printing Menu Map...

Description

The printer is printing the Menu Map pages.

Recommended action

No action necessary.

Printing Registration Page...

Description

The printer is printing the Registration pages.

Recommended action

No action necessary.

Printing stopped...

Description

Time has expired on the Print/Stop test.

Recommended action

Touch the OK button to continue.

Printing Supplies Status Page...

Description

The printer is printing the Supplies Status page.

Recommended action

No action necessary.

Printing Usage Page...

Description

The printer is printing the Usage page.

Recommended action

No action necessary.

Processing duplex job Do not grab paper until job completes

Description

Paper temporarily comes into the output bin while printing a duplex job.

job is finished.

Recommended action

No action necessary.

Processing job from tray <X>... Do not grab paper until job completes

Description

The printer is actively processing a job from the designated tray.

Recommended action

No action necessary.

Processing...

Description

The printer is currently processing a job but is not yet picking pages. When paper motion begins, this message is replaced by a message that indicates the tray the job is using.

CAUTION: Do not grab paper as it temporarily comes into the output bin. The message disappears when the

Recommended action

No action necessary.

Processing... copy <X> of <Y>

Description

The printer is currently processing or printing collated copies. The message indicates that copy number <X> of total copies <Y> is currently being processed.

Recommended action

No action necessary.

RAM disk device failure To clear press "OK"

Description

The specified device failed.

Recommended action

Touch the OK button to remove the message.

RAM disk file operation failed To clear press "OK"

Description

A PJL command was received that attempted to perform an illegal operation, such as downloading a file to a nonexistent directory.

Recommended action

Touch the OK button to clear the error.

RAM disk file system is full To clear press "OK"

Description

The hard disk is full.

Recommended action

Touch the OK button to clear the error.

RAM disk is write protected To clear press "OK"

Description

The device is protected and no new files can be written to it.

Recommended action

Touch the OK button to clear the error.

RAM disk not initialized

Description

The RAM disk file system must be initialized before it can be used.

Recommended action

Initialize the RAM disk file system.

Ready

Description

The printer is online and ready for data. No status or printer attendance messages are pending at the display.

Recommended action

No action necessary.

Ready <IP Address>

Description

The printer is online and ready for data. No status or printer attendance messages are pending at the display. The printer IP address displays.

Recommended action

No action necessary.

Receiving Upgrade

Description

The printer is receiving a firmware upgrade.

Recommended action

Do not turn the printer off until it reaches the Ready state.

Remove USB accessory

Description

This message displays when an unsupported USB device is inserted into a host USB port on the printer.

Recommended action

Remove the unsupported USB device.

Replace <supply>

Description

This alert appears only if the printer is configured to stop when a supply reaches the very low threshold. The printer indicates when a supply level is at its estimated end of life. The actual life remaining might be different than estimated.

The supply does not need to be replaced now unless the print quality is no longer acceptable.

HP recommends that the customer have a replacement supply available to install when print quality is no longer acceptable.

The printer can be configured to stop when the supply level is very low. The supply might still be able to produce acceptable print quality.

NOTE: When an HP supply has reached its approximated end of life, the HP Premium Protection Warranty on that supply ends.

10.00.70 (event code)

Black print cartridge

10.23.70 (event code)

Fuser Kit

Recommended action

Replace the specified supply.

Or, configure the printer to continue printing by using the Manage Supplies menu.

Replace supplies

Description

This alert appears only if the printer is configured to stop when a supply reaches the very low threshold. The printer indicates when a supply level is at its estimated end of life. The actual life remaining might be different than estimated.

The supply does not need to be replaced now unless the print quality is no longer acceptable.

HP recommends that the customer have a replacement supply available to install when print quality is no longer acceptable.



NOTE: When an HP supply has reached its approximated end of life, the HP Premium Protection Warranty on that supply ends.

Recorded event codes depend on which supplies are at the end of life.

10.00.70 (event code)

Black print cartridge

10.23.70 (event code)

Fuser Kit

Recommended action

Touch the OK button to find out which supplies need to be replaced.

Or, configure the printer to continue printing by using the Manage Supplies menu.

Resend external accessory firmware

Description

An external accessory requires a firmware upgrade. Printing can continue, but jams might occur if the job uses the external accessory.

Recommended action

Perform a firmware upgrade.

Resend Upgrade

Description

A firmware upgrade did not complete successfully.

Recommended action

Upgrade the firmware again.

Restore Factory Settings

Description

The printer is restoring factory settings.

Recommended action

No action necessary.

ROM disk file operation failed To clear press "OK"

Description

A PJL command was received that attempted to perform an illegal operation, such as downloading a file to a nonexistent directory.

Recommended action

Touch the OK button to clear the error.

ROM disk file system is full To clear press "OK"

Description

The hard disk is full.

Recommended action

Touch the OK button to clear the error.

ROM disk is write protected To clear press "OK"

Description

The device is protected and no new files can be written to it.

Recommended action

Touch the OK button to clear the error.

ROM disk not initialized To clear press "OK"

Description

The ROM disk file system must be initialized before it can be used.

Recommended action

Initialize the ROM disk file system.

Rotating Motor

Description

The printer is executing a component test and the component selected is a motor.

Recommended action

Press the STOP button when ready to stop this test.

To exit press X.

Size Mismatch

Description

This message appears even though the correct size paper is loaded in the correct paper tray.

Recommended action

- 1. Use the Tray 2 size switch test in the Tray/Bin manual sensor test to test the switch. If it does not respond, elevate the issue for printer replacement.
- **2.** Reconnect connector on the Tray 2 media size switch, and then reconnect connector on the DC controller.
- **3.** If the error persists, elevate the issue for possible printer replacement.

Size mismatch in Tray <X>

Description

The paper in the listed tray does not match the size specified for that tray.

Recommended action

- **1.** Load the correct paper.
- **2.** Verify the paper is positioned correctly.
- **3.** Close the tray, and then verify that the control panel lists the correct size and type for the specified tray.
- **4.** If necessary, use the control-panel menus to re-configure the size and type settings for the specified tray.

Sleep mode on

Description

The printer is in sleep mode. Pressing a control-panel button, receiving of a print job, or an error condition clears this message.

Recommended action

No action necessary.

Supplies low

Description

Multiple supplies on the printer have reached the low threshold.

Recommended action

Replace the supply when print quality is no longer acceptable.

Supply low

Description

The printer indicates when a supply level, or more than one supply, is low. Actual print cartridge life might vary. You do not need to replace the print cartridge at this time unless print quality is no longer acceptable.

When multiple supplies are low, more than one event code is recorded.

10.00.60 (event code)

Black print cartridge

10.23.60 (event code)

Fuser Kit

Recommended action

If print quality is no longer acceptable, replace the supply.

HP recommends that the customer have a replacement supply available to install when print quality is no longer acceptable.



NOTE: When an HP supply has reached its approximated end of life, the HP Premium Protection Warranty ends.

SUPPLY MEMORY WARNING

Description

The printer cannot read or write to the e-label or the e-label is missing.

Recommended action

No action necessary.

Supply very low OR Supplies very low

Description

The printer indicates when a supply level, or more than one supply, is very low. Actual print cartridge life might vary. You do not need to replace the print cartridge at this time unless print quality is no longer acceptable.

When multiple supplies are low, more than one event code is recorded.

10.00.70 (event code)

Black print cartridge

10.23.70 (event code)

Fuser Kit

Recommended action

If print quality is no longer acceptable, the customer must purchase and replace the supply.

HP recommends that the customer have a replacement supply available to install when print quality is no longer acceptable.

NOTE: When an HP supply has reached its approximated end of life, the HP Premium Protection Warranty ends.

The unit has corrupt data

Description

98.00.0X (event code)

Data corruption has occurred in the firmware volume.

98.00.01

Corrupt data in the firmware volume.

98.00.02

Corrupt data in the solutions volume.

98.00.03

Corrupt data in the configuration volume.

98.00.04

Corrupt data in the job data volume.

Recommended action

- 98.00.01 or 98.00.02 or 98.00.03
 - 1. Turn the printer off, and then on again.
 - 2. Use the Clean Disk item in the Preboot menu.
 - 3. Reload the firmware.
- 98.00.04
 - 1. Turn the printer off, and then on again.
 - 2. Run the file erase function.

Description

The specified tray is empty and the current job does not need this tray to print.

- X = 1
 - Tray 1
- X = 2
 - Tray 2
- X = 3
 - Tray 3
- X = 4
 - Tray 4
- X = 5
 - Tray 5

Recommended action

Refill the tray at a convenient time.



NOTE: This could be a false message. If the tray is loaded without removing the shipping lock, the printer does not sense that the paper is loaded. Remove the shipping lock and then load the tray.

If the message continues when the paper tray is properly loaded perform the following.

- Swap tray cassette with another from the printer that is the same size and check whether the error follows the cassette. Replace cassette tray as needed.
- Try actuating the Tray paper present sensor flag (See Service manual) and check for any damage of the part. If it is damaged, Replace the pickup and feed assembly.
- 3. If the sensor actuates fine and the error still persists, perform Manual sensor test to test the paper presence sensor.
- If it fails replace the tray or option input paper feeder.

Tray <X> lifting

Description

The printer is in the process of lifting paper in the indicated tray.

- X = 2
 - Tray 2
- X = 3
 - Tray 3
- X = 4

Tray 4

X = 5

Tray 5

Recommended action

No action necessary.

Tray <X> open

Description

The specified tray is open or not closed completely.

X = 2

Tray 2

X = 3

Tray 3

X = 4

Tray 4

X = 5

Tray 5

Recommended action

Close the tray.



 $oxed{\mathbb{E}}$ **NOTE:** If this message appears after lifter drive assembly was removed or replaced, make sure that the connector on the assembly is correctly connected and fully seated.

If the error persists, use the Media size switches test in the Tray/Bin manual sensor test to test the switches. If they do not respond, replace associated the lifter drive assembly.

Tray <X> overfilled

Description

The tray is filled above the stack-height mark.

X = 2

Tray 2

X = 3

Tray 3

X = 4

Trav 4

X = 5

Tray 5

Recommended action

Remove enough paper so that the paper stack does not exceed the limit for the tray.

 $oxed{\mathbb{E}}'$ NOTE: If this message appears after lifter drive assembly was removed or replaced, make sure that the connector on the assembly is correctly connected and fully seated.

Type mismatch Tray

Description

The specified tray contains a paper type that does not match the configured type.

Recommended action

The specified tray will not be used until this condition is addressed. Printing can continue from other trays.

- Load the correct paper in the specified tray.
- 2. At the control panel, verify the type configuration.

Unsupported drive installed To continue, touch "OK"

Description

A non-supported hard drive has been installed. The drive is unusable by this printer.

Recommended action

- Turn the printer off. 1.
- 2. Remove the hard drive.
- 3. Turn the printer on.

Unsupported supply in use OR Unsupported supply installed To continue, touch "OK"

Description

A non-supported supply has been installed.

OR

The print cartridge is for a different HP printer.

XX = 00

Black print cartridge

Recommended action

Install the correct supplies for this printer. See the parts chapter in the service manual for supply part numbers.

Unsupported tray configuration

Description

The printer has too many optional trays installed.

Recommended action

Turn the printer off, remove the unsupported trays, and then turn the printer on.

Unsupported USB accessory detected Remove USB accessory

Description

A non-supported USB accessory has been installed.

Recommended action

Turn the printer off, remove the USB accessory, and then turn the printer on.

Upgrade Error

Description

30.01.36 (event code)

Scanner Control Board (SCB) upgrade error.

Recommended action

- **1.** Turn the printer off, and then on.
- **2.** Resend the upgrade.
- **3.** If the error persists, replace the SCB.

USB accessory not functional

Description

A parameter in the USB accessory is not correctly functioning.

Recommended action

- **1.** Turn the printer off.
- 2. Remove the USB accessory.
- **3.** Insert a replacement USB accessory.

USB hubs are not fully supported Some operations may not work properly

Description

Some USB hubs require more power than the printer has available.

Recommended action

Remove the USB hub.

USB is write protected To clear press "OK"

Description

The device is protected and no new files can be written to it.

Recommended action

Touch the OK button to clear the error.

USB needs too much power Remove USB and then turn off and on

Description

A USB accessory is drawing too much electrical current. Printing cannot continue.

Recommended action

Turn the printer off, remove the USB accessory, and then turn the printer on.

Use a USB accessory that uses less power or that contains its own power supply.

USB not initialized

Description

The USB device file system must be initialized before it can be used.

Recommended action

Use the EWS or HP Web Jetadmin to initialize the component.

USB storage accessory removed Clearing any associated data

Description

This message displays for about 6 seconds after a USB device is removed.

Recommended action

Touch the OK button to remove this message.

USB storage device failure To clear press "OK"

Description

The specified device failed.

Recommended action

Touch the OK button to clear this error.

USB storage file operation failed To clear press "OK"

Description

A PJL file system command was received that attempted to perform an illegal operation, such as downloading a file to a nonexistent directory.

Recommended action

Touch the OK button to clear this error.

USB storage file system is full To clear press "OK"

Description

The file system on the installed USB device is full.

Recommended action

Touch the OK button to clear this error.

Used supply installed To continue, touch "OK" OR Used supply in use

Description

The toner cartridge has been previously used.

XX = 00

Black print cartridge

Recommended action

If you believe you purchased a genuine HP supply, go to www.hp.com/go/anticounterfeit.

Waiting for tray <X> to lift

Description

The specified tray is in the process of lifting paper to the top of the tray (so it can properly feed).

Recommended action

No action necessary.

Windows Login Required to Use this Feature

Description

Windows login required.

Recommended action

Enter your windows login.

Tools for troubleshooting: Event log messages (M506/M527)

See the control-panel message document (CPMD) and event-log entries section of the printer troubleshooting manual for event-log entry descriptions and solutions. The event log shows the last 50 events in descending order.

Figure 2-89 Sample event log (M506/M527)

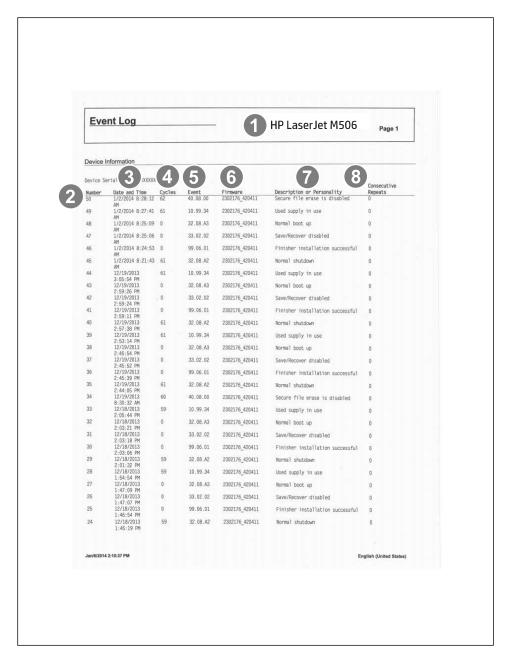


Table 2-61 Sample event log page

Item	Description	ltem	Description	ltem	Description	Item	Description
1	Product information	3	Date and time	5	Event log code	7	Description of personality
2	Event number	4	Engine cycles	6	Firmware version number	8	Consecutive Repeats

Print or view an event log (M506/M527)

NOTE: The event log in using the Administration menu shows only a subset of events. For a complete event log, use the Service menu.

Print the event log from the Administration menu (touchscreen control panel)

- 1. From the Home screen on the printer control panel, scroll to and touch the Administration button.
- 2. Open the following menus:
 - Troubleshooting
 - Event Log
- **3.** The event log displays on the screen. To print it, touch the Print button.

Print the event log from the Administration menu (LCD control panel)

- 1. From the Home screen on the printer control panel, use the down arrow ▼ button to scroll to Administration, and then press the OK button.
- 2. Use the down arrow ▼ button to scroll to Troubleshooting, and then press the OK button to select it.
- 3. With Print Event Log highlighted, press the OK button to print the page.

Print the event log from the Service menu (touchscreen control panel)

- From the Home screen on the printer control panel, scroll to and touch the Device Maintenance button.
- 2. Open the Service menu.
- 3. On the sign-in screen, select the Service Access Code option from the drop-down list.
- **4.** Enter the following service access code for the printer:
 - 10050615 (M506)
 - 11052715 (M527)
- **5.** The event log displays on the screen. To print it, touch the Print button.

Print the event log from the Service menu (LCD control panel)

- 1. From the Home screen on the printer control panel, use the down arrow ▼ button to scroll to Device Maintenance, and then press the OK button.
- 2. Use the down arrow ▼ button to scroll to Service, and then press the OK button to select it.
- 3. Use the down arrow ▼ button to scroll to Service Access Code, and then press the OK button to select it.
- **4.** Enter the following service access code for the printer:
- NOTE: After entering the PIN, press the OK button.
 - 10050615 (M506)
 - 11052715 (M527)
- 5. With Print Event Log highlighted, press the OK button to print the page.

Clear the event log (M506/M527)

Clear the event log from the Service menu (touchscreen control panel)

- From the Home screen on the printer control panel, scroll to and touch the Device Maintenance button.
- 2. Open the Service menu.
- 3. On the sign-in screen, select the Service Access Code option from the drop-down list.
- Enter the following service access code for the printer:
 - 10050615 (M506)
 - 11052715 (M527)
- Select the Clear Event Log item, and then touch the OK button.

Clear the event log from the Service menu (LCD control panel)

- From the Home screen on the printer control panel, use the down arrow ▼ button to scroll to Device Maintenance, and then press the OK button.
- Use the down arrow ▼ button to scroll to Service, and then press the OK button to select it. 2.
- 3. Use the down arrow ▼ button to scroll to Service Access Code, and then press the OK button to select it.
- Enter the following service access code for the printer:
- **NOTE:** After entering the PIN, press the OK button.
 - 10050615 (M506)
 - 11052715 (M527)
- Use the down arrow ▼ button to scroll to Clear Event Log, and then press the OK button.

Improve print quality

- Print-quality troubleshooting pages (M506/M527)
- Print from a different software program
- Check the paper-type setting for the print job
- Check toner-cartridge status
- Visually inspect the toner cartridge or cartridges
- Print a cleaning page
- Check paper and the printing environment
- Use manual print modes (M506/M527)
- Try a different print driver
- Check Economode settings (M501)

Print-quality troubleshooting pages (M506/M527)

Use the print quality troubleshooting pages to help diagnose and solve print-quality problems.

NOTE: To get further assistance in print quality troubleshooting, go to www.hp.com/support/ljM501, www.hp.com/support/liM506, www.hp.com/support/liM527MFP and select PQ Troubleshooting Tools.

Print the print-quality troubleshooting pages from a touchscreen control panel

- From the Home screen on the printer control panel, scroll to and touch the Administration button.
- 2. Open the following menus:
 - Troubleshooting
 - **Print Quality Pages**
 - Print PO Troubleshooting Page
- Touch the Print button. The printer prints a print-quality troubleshooting procedure page and a black print-quality troubleshooting page.

Print the print-quality troubleshooting pages from a LCD control panel

- From the Home screen on the printer control panel, use the down arrow ▼ button to scroll to Administration, and then press the OK button.
- Use the down arrow ▼ button to scroll to Troubleshooting, and then press the OK button.
- 3. Use the down arrow ▼ button to scroll to Print Quality Pages, and then press the OK button to print the
- Use the down arrow ▼ button to scroll to Print PQ Troubleshooting Page, and then press the OK button to print the page.
- NOTE: The printer returns to the **Ready** state after printing the print-quality-troubleshooting pages. Follow the instructions on the pages that print out.

Figure 2-90 Print-quality troubleshooting procedure page (M506/M527)

Print Quality Troubleshooting Procedure

HP LaserJet M506

Page 1

1. Check the Control Panel

Check the control panel to see if it displays any messages that indicate Replace supply item or indicate Very Low supply. If it does, replace the supply item. (Part name and numbers as well as ordering information are listed at the bottom of Section 2.)

2. Troubleshoot Your Print Quality Issue

Print a Cleaning Page by going to Device Maintenance -> Calibration/Cleaning -> Cleaning Page. Wait for this page to print, then reprint the PQTroubleshooting procedure.

If a print quality defect appears on the page, then replace the black toner cartridge.

Black Cartridge CF281X

To order supplies, please visit: www.hp.com/ghp/buyonline.html

3. Further Assistance

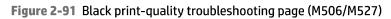
If this troubleshooting procedure did not produce clear results or if your print quality defect is unresolved, please go to the web site below for further assistance. www.hp.com/support/ljM605 www.hp.com/go/hpsc

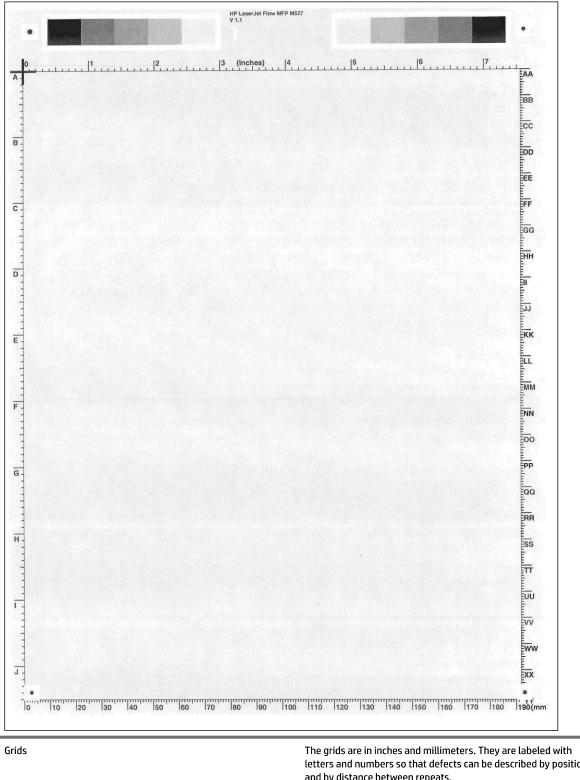
May/1/2000 8:52:45 PM



English (United States)

ENWW Improve print quality 395





Grids	The grids are in inches and millimeters. They are labeled with letters and numbers so that defects can be described by position and by distance between repeats.
Grey scale ramp patches	Used to detect offset for the OPC or developer in the toner cartridge or offset in the fuser.

Print from a different software program

Try printing from a different software program. If the page prints correctly, the problem is with the original software program.

Check the paper-type setting for the print job

Check the paper type setting when printing from a software program and the printed pages have smears, fuzzy or dark print, curled paper, scattered dots of toner, loose toner, or small areas of missing toner.

Check the paper type setting (Windows)

- 1. From the software program, select the **Print** option.
- **2.** Select the printer, and then click the **Properties** or **Preferences** button.
- 3. Click the Paper/Quality tab.
- 4. From the **Paper Type** drop-down list, click the **More...** option.
- 5. Expand the list of **Type is:** options.
- **6.** Expand the category of paper types that best describes your paper.
- **7.** Select the option for the type of paper you are using, and click the **OK** button.
- 8. Click the OK button to close the Document Properties dialog box. In the Print dialog box, click the OK button to print the job.

Check the paper type setting (Mac OS X)

- 1. Click the **File** menu, and then click the **Print** option.
- 2. In the **Printer** menu, select the printer.
- **3.** By default, the print driver displays the **Copies & Pages** menu. Open the menus drop-down list, and then click the **Finishing** menu.
- **4.** Select a type from the **Media Type** drop-down list.
- 5. Click the **Print** button.

Check toner-cartridge status

Print the supplies status page from a touchscreen control panel

- 1. From the Home screen on the printer control panel, scroll to and touch the Administration button.
- **2.** Open the following menus:
 - Reports
 - Configuration/Status Pages
- **3.** Touch Supplies Status Page, and then press the Print button to print the page.

ENWW Improve print quality 397

Print the supplies status page from a LCD control panel

- From the Home screen on the printer control panel, use the down arrow ▼ button to scroll to Administration, and then press the OK button.
- 2. Open the following menus:
 - Reports
 - Configuration/Status Pages
- Use the down arrow ▼ button to scroll to Supplies Status, and then press the OK button to select it. 3.
- Use the up arrow ▲ button to scroll to Print, and then press the OK button to print the page.

Check the supplies status page for the following information:

- Estimated percentage of cartridge or cartridges life remaining
- Approximate pages remaining
- Part number or numbers for HP toner cartridge or cartridges
- Number of pages printed

Visually inspect the toner cartridge or cartridges

- Remove the toner cartridge or cartridges from the printer, and verify that the sealing tape has been removed.
- 2. Check the memory chip for damage.
- 3. Examine the surface of the imaging drum on the cartridge.
 - **CAUTION:** Do not touch the roller (imaging drum). Fingerprints on the imaging drum can cause printquality problems.
- If you see any scratches, fingerprints, or other damage on an imaging drum, replace the toner cartridge or cartridges.
- If the imaging drum does not appear to be damaged, rock the toner cartridge or cartridges gently several times and reinstall it. Print a few pages to see if the problem has resolved.

Print a cleaning page

Print the cleaning page from a LCD control panel (M501)

- From the printer control panel, press the OK button.
- 2. Open the **Service** menu.
- Use the arrow keys to select the **Cleaning mode** option, and then press the OK button.

The printer prints the first side and then prompts you to remove the page from the output bin and reload it in Tray 1, keeping the same orientation. Wait until the process is complete. Discard the page that prints.

NOTE: The cleaning page will be blank.

Print the cleaning page from a LCD control panel (M506)

- 1. From the Home screen on the printer control panel, use the down arrow ▼ button to scroll to Device Maintenance, and then press the OK button.
- 2. Use the down arrow ▼ button to scroll to Calibration/Cleaning, and then press the OK button.
- **3.** If necessary, use the down arrow ▼ button to scroll to Cleaning, and then press the OK button to print the page.
- 4. Follow the instruction on the printed cleaning page to finish the cleaning page process.

Print the cleaning from a touchscreen control panel (M527)

- 1. From the Home screen on the printer control panel, scroll to and touch the Device Maintenance button.
- **2.** Open the following menus:
 - Calibration/Cleaning
- 3. Touch Cleaning Page, and then press the OK button to print the page.
- The cleaning process can take several minutes. When it is finished, discard the printed page.

Check paper and the printing environment

Step one: Use paper that meets HP specifications

- Always use a paper type and weight that this printer supports.
- Use paper that is of good quality and free of cuts, nicks, tears, spots, loose particles, dust, wrinkles, voids, staples, and curled or bent edges.
- Use paper that has not been previously printed on.
- Use paper that does not contain metallic material, such as glitter.
- Use paper that is designed for use in laser printers. Do not use paper that is designed only for use in Inkjet printers.
- Use paper that is not too rough. Using smoother paper generally results in better print quality

Step two: Check the environment

The environment can directly affect print quality and is a common cause for print-quality or paper-feeding issues. Try the following solutions:

- Move the printer away from drafty locations, such as open windows or doors, or air-conditioning vents.
- Make sure the printer is not exposed to temperatures or humidity outside of printer specifications.
- Do not place the printer in a confined space, such as a cabinet.
- Place the printer on a sturdy, level surface.
- Remove anything that is blocking the vents on the printer. The printer requires good air flow on all sides, including the top.
- Protect the printer from airborne debris, dust, steam, grease, or other elements that can leave residue inside the printer.

ENWW Improve print quality 399

Use manual print modes (M506/M527)

Try the following manual print modes to see if they solve the image-quality problems.

NOTE: Tray 1 and Tray 2 are optimal for paper pickup when using special paper or media other than 20lb plain paper. For Tray 1 and Tray 2 the printer increases the number of attempts to pickup a page, which increases the reliability of successfully picking the page from the tray and decreases the possibility of a mispick jam.

HP recommends using Tray 1 or Tray 2 if the printer is experiencing excessive or reoccurring jams from trays other than Tray 1 and Tray 2, or for print jobs that require media other than 20lb plain paper.

Select a manual print mode from a touch screen control panel

- 1. From the Home screen on the printer control panel, scroll to and touch the Administration button.
- 2. Open the following menus:
 - General Settings
 - Print Quality
 - Adjust Paper Types or Optimize
- **3.** Select a paper type, and then select the mode to adjust.
- 4. Select a value for the mode, and then touch the Save button.

Select a manual print mode from a LCD control panel

- 1. From the Home screen on the printer control panel, use the down arrow ▼ button to scroll to Administration, and then press the OK button.
- 2. Use the down arrow ▼ button to scroll to General Settings, and then press the OK button.
- 3. Use the down arrow ▼ button to scroll to Print Quality, and then press the OK button.
- 4. Use the down arrow ▼ button to scroll to Adjust Paper Types or Optimize, and then press the OK button.

Table 2-62 Print modes under the Adjust Paper Types submenu (M506/M527)

Print Mode		Dieie
	•	Plain
	•	HP EcoSMART Lite
	•	Light 60-74g
	•	Intermediate 85–90g
	•	Mid Weight 96–110g
	•	Heavy 111-130g
	•	Extra Heavy 131-175g
	•	Cardstock 176–220
	•	Mono Transparency
	•	Labels
	•	Shelf Edge Labels
	•	Letterhead
	•	Envelope
	•	Preprinted
	•	Prepunched
	•	Colored
	•	Bond
	•	Recycled
	•	Rough
	•	Restore Modes

Table 2-63 Print modes under the Optimize submenu (M506/M527)

Moisture Control	Normal
	Alternate
	Use this item to optimize various print modes to address print-quality issues.
Line Detail	Use this item when a toner explosion image defect occurs. The default setting is Normal.
	Use the Alternate setting if the defect occurs because of poor quality paper, or the printer is installed in a high humidity environment.
Restore Optimize	Use Restore Optimize to reset the menu defaults.

ENWW Improve print quality 401

Try a different print driver

Try a different print driver when printing from a software program and the printed pages have unexpected lines in graphics, missing text, missing graphics, incorrect formatting, or substituted fonts.

Download any of the following drivers from the HP Web site: www.hp.com/support/liM501, <a href="https://www.hp.com/support/ support/ljM506, www.hp.com/support/ljM527MFP.

HP PCL.6 driver	 Provided as the default driver on the printer CD. This driver is automatically installed unless you select a different one.
HP PCL 6 driver	Recommended for all Windows environments
HP PCL-6 driver	 Provides the overall best speed, print quality, and printer-feature support for most
	 Developed to align with the Windows Graphic Device Interface (GDI) for the best speed in Windows environments
	 Might not be fully compatible with third-party and custom software programs that are based on PCL 5
HP UPD PS driver	 Recommended for printing with Adobe® software programs or with other highly graphics-intensive software programs
	 Provides support for printing from postscript emulation needs, or for postscript flash font support
HP UPD PCL 5	 Recommended for general office printing in Windows environments
	 Compatible with previous PCL versions and older HP LaserJet printers
	The best choice for printing from third-party or custom software programs
	 The best choice when operating with mixed environments, which require the printe to be set to PCL 5 (UNIX, Linux, mainframe)
	 Designed for use in corporate Windows environments to provide a single driver for use with multiple printer models
	 Preferred when printing to multiple printer models from a mobile Windows computer
HP UPD PCL 6	Recommended for printing in all Windows environments
	 Provides the overall best speed, print quality, and printer feature support for most users
	 Developed to align with Windows Graphic Device Interface (GDI) for best speed in Windows environments
	 Might not be fully compatible with third-party and custom software programs that are based on PCL 5

Check Economode settings (M501)

Use the following procedure to control the print density on the page.

- 1. From the printer control panel, open the following menus:
 - Setup menu
 - System Setup
- 2. Scroll to, and then select the Print Density item.
- **3.** Select the desired print density setting, and then press the OK button.
 - 1 lightest
 - 2 light
 - 3 default
 - 4 dark
 - 5 darkest

ENWW Improve print quality 403

Print quality troubleshooting guide

- Image defects table
- Product specific image defects

Image defects table

Image defects, no matter what their cause, can often be resolved using the same steps. Use the following steps as a starting point for solving image defect issues.

- Reprint the document. Print quality defects can be intermittent in nature or can go away completely 1. with continued printing.
- Check the condition of your cartridge(s). If it is in a **Very Low** state (it has passed the rated life), replace your cartridge(s).
- Check that the driver/tray print mode settings match the media that is loaded in a given tray. Try using a different ream of media or a different tray. Try using a different print mode.
- Verify that your printer is in within its supported operating temperature/humidity range. 4.
- 5. Verify the paper type, size and weight are supported by the printer. See the printer support page at www.hp.com/support for a list of the supported paper sizes and types for your printer.



NOTE: The term "fusing" refers to the part of the printing process where toner is affixed to paper.

The following examples depict letter-size paper that has passed through the printer short-edge first.

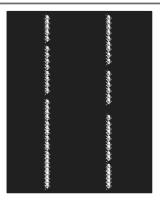
Description	Sample	Possible solutions
Banding		
Repetitive wide-pitch banding and Impulse bands: Dark or light lines which repeat down the length of the page. They might be sharp or soft in nature. The defect displays only in areas of fill, not in text or sections with no printed content.		 Reprint the document. Try printing from another tray.
		3. Replace the cartridge.
		 Use a different paper type. Enterprise models only: From the Home screen on the printer control panel, go to the Adjust Paper Types menu, and then choose a print mode that is designed for a slightly heavier media than what you are using. This slows the print speed and might improve the print quality.
		If the problem persists, go to www.hp.com/support.

Description

Sample

Possible solutions

Light vertical streaks: Light streaks that usually span the length of the page. The defect displays only in areas of fill, not in text or sections with no printed content.

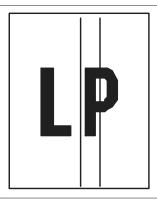


Reprint the document.

- Remove the cartridge, and then shake it to redistribute the toner.
- If the problem persists, go to www.hp.com/support.

NOTE: Both light and dark vertical streaks can occur when the printing environment is outside the specified range for temperature or humidity. Refer to your printer's environmental specifications for allowable temperature and humidity levels.

Dark vertical streaks and ITB cleaning streaks (color models only): Dark lines which occur down the length of the page. The defect might occur anywhere on the page, in areas of fill or in sections with no printed content.

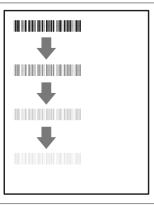


Reprint the document. 1.

- Remove the cartridge, and then shake it to redistribute the toner.
- Print a cleaning page.
- Check the toner level in the toner cartridge(s).
- If the problem persists, go to www.hp.com/support.

Fixing/fuser

Hot fuser offset (shadow): Slight shadows, or offsets, of the image repeated down the page. The repeated image might fade with each recurrence.



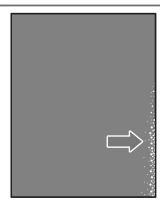
- Reprint the document.
- Check the paper type in the paper tray and adjust the printer settings to match. If necessary, select a lighter paper type.
- If the problem persists, go to www.hp.com/support.

Description

Sample

Possible solutions

Poor fusing: Toner rubs off along either edge of page. This defect is more common at the edges of high-coverage jobs and on light media types but can occur anywhere on the page.



- 1. Reprint the document.
- Check the paper type in the paper tray and adjust the printer settings to match. If necessary, select a heavier paper type.
- Enterprise models only: From the printer control panel, go to the Edgeto-Edge menu and then select Normal. Reprint the document.
- Enterprise models only: From the printer control panel, select Auto Include Margins and then reprint the document.
- If the problem persists, go to www.hp.com/support.

Image placement

Margins and skew

The image is not centered, or is skewed on the page. The defect occurs when the paper is not positioned properly as it is pulled from the tray and moves through the paper path.



- . Reprint the document.
- Remove the paper and then reload the tray. Make sure that all the paper edges are even on all sides.
- Make sure that the top of the paper stack is below the tray full indicator. Do not overfill the tray.
- Make sure that the paper guides are adjusted to the correct size for the paper. Do not adjust the paper guides tightly against the paper stack. Adjust them to the indentations or markings in the tray.
- If the problem persists, go to www.hp.com/support.

Color plane registrations

Color plane registrations (color models only)

One or more color of the planes is not aligned with the other color planes. The primary error will typically occur with yellow.



- Reprint the document.
- From the printer control panel, calibrate the printer.
- If a cartridge has reached a Very Low state or the printed output is severely faded, replace the cartridge.
- From the printer control panel use the Restore Calibration feature to reset the printer's calibration settings to the factory defaults.
- If the problem persists, go to www.hp.com/support.

Output

Description

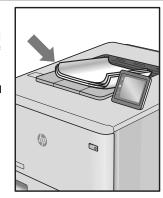
Sample

Possible solutions

Output curl

Printed paper has curled edges. The curled edge can be along the short or long side of the paper. Two types of curl are possible:

- Positive curl: The paper curls toward the printed side. The defect occurs in dry environments or when printing high coverage pages.
- **Negative curl:** The paper curls away from the printed side. The defect occurs in high-humidity environments or when printing low coverage pages.



Reprint the document.

Positive curl: From the printer control panel, select a heavier paper type. The heavier paper type creates a higher temperature for printing.

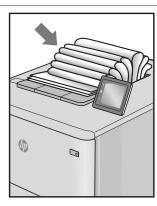
> Negative curl: From the printer control panel, select a lighter paper type. The lighter paper type creates a lower temperature for printing. Try storing the paper in a dry environment prior or use freshly opened paper.

- Print in duplex mode.
- If the problem persists, go to www.hp.com/support.

Output stacking

The paper does not stack well in the output tray. The stack might be uneven, skewed, or the pages might be pushed out of the tray and onto the floor. Any of the following conditions can cause this defect:

- Extreme paper curl
- The paper in the tray is wrinkled or deformed
- The paper is a non-standard paper type, such as envelopes
- The output tray is too full



- Reprint the document.
- Flip out the output bin extension.
- If the defect is caused by extreme paper curl, complete the troubleshooting steps for Output curl.
- Use a different paper type.
- 5. Use freshly opened paper.
- Remove the paper from the output tray before the tray gets too full.
- If the problem persists, go to www.hp.com/support.

Product specific image defects

- Repetitive image defect ruler
- Print-quality troubleshooting

Repetitive image defect ruler

When troubleshooting the source of some print image defects, one solution is to identify if it is a repetitive defect (does the print quality defect appear multiple times on the printed page?). If this is the case, use a ruler to measure occurrences of repetitive image defects to help solve image-quality problems. For more information, see Use a ruler to measure between repetitive defects on page 410.

Use a ruler to measure occurrences of repetitive image defects to help solve image-quality problems. Place the ruler next to the first occurrence of the defect on the page. Find the distance between identical defects and use the table below to identify the component that is causing the defect.

- IMPORTANT: Do not use solvents or oils to clean rollers. Instead, rub the roller with a lint-free cloth. If dirt is difficult to remove, rub the roller with a lint-free cloth that has been dampened with water.
- NOTE: Defects on the tray pickup rollers or the Tray 1 pickup roller do not cause a repetitive defect. Defects on these rollers cause a defect to appear only on the leading edge of the image.
- TIP: To make a printer specific repetitive defect ruler, use a metric ruler to transfer the measurements in Table 2-64 Repetitive defects on page 409 to a transparency or the edge of a piece of paper—clearly label each ruler mark with the associated defective assembly.

Table 2-64 Repetitive defects

Assembly	Distance between defects	
Developer roller (toner cartridge) ¹	27.8 mm (1.09 in)	
Charge roller (toner cartridge) ¹	28.3 mm (1.11 in)	
Face down roller	36.9 mm (1.45 in)	
Transfer roller	39 mm (1.53 in)	
Duplex feed roller	40.3 mm (1.58 in)	
Registration roller	43.3 mm (1.70 in)	
Middle feed roller (cassette)		
Middle feed roller (optional input feeder)		
Switchback roller	43.4 mm (1.70 in)	
Feed roller cassette)	47.4 mm (1.87 in)	
Feed roller (optional input feeder)		
Pick roller (cassette)	49.7 mm (1.95 in)	
Pickup roller (optional input feeder)		
Pressure roller ² (fuser)	63.5 mm (2.50 in)	
Photosensitive drum¹ (OPC drum; toner cartridge)	75.4 mm (2.96 in)	
Fuser sleeve ² (fuser)		
Pick roller (Tray 1)	78.7 mm (3.09 in)	

The primary charging roller and photosensitive drum cannot be cleaned because they are internal assemblies in the toner cartridge. If one of these assemblies is causing the defect, replace the toner cartridge.

The primary fuser sleeve unit or pressure roller cannot be cleaned because they are internal assemblies in the fuser. If one of these assemblies is causing the defect, replace the fuser.

Use a ruler to measure between repetitive defects

The figures in this section shows color repetitive defect pages. However, the process for measuring repetitive defects is valid for mono pages.

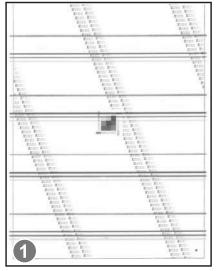
1. Identify a repetitive defect on the page.

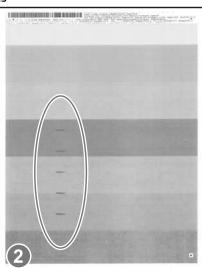
☆ TIP: Print a cleaning page to see if that resolves the defect.

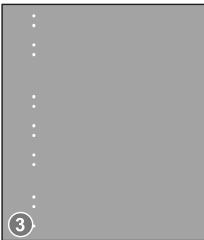
The example pages below show the following types of repetitive defects.

- **NOTE:** These are examples only, other types of repetitive defects might appear on a page.
 - Lines (callout 1)
 - Smudges (callout 2)
 - Dots or spots (callout 3)

Figure 2-92 Examples of repetitive defects

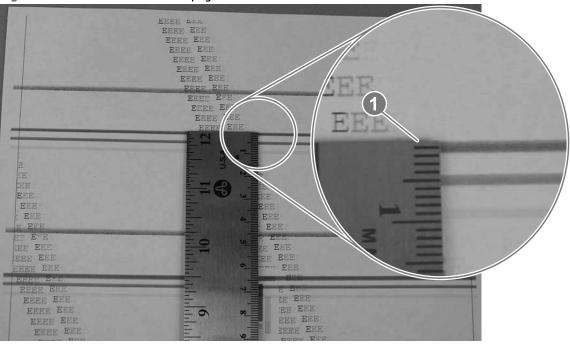






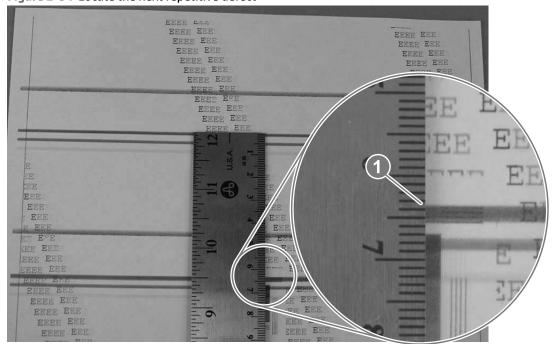
Position a metric ruler on the page with the "zero" ruler mark at one occurrence of the defect (callout 1).

Figure 2-93 Place the ruler on the page



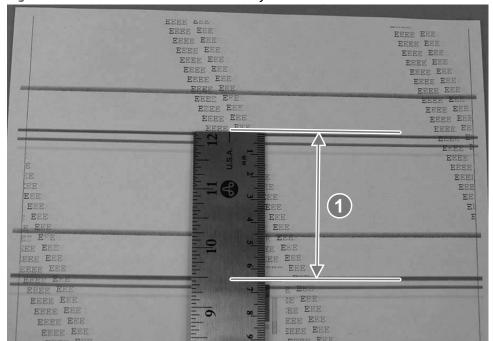
Locate the next occurrence of the defect (callout 1). 3.

Figure 2-94 Locate the next repetitive defect



- **4.** Measure the distance (in millimeters) between the two occurrences (callout 1), and then use <u>Table 2-64</u> Repetitive defects on page 409 to determine the defective assembly.
 - TIP: Always measure from and to the same point on the defects. For example, if the ruler is "zeroed" at the top edge of a defect, measure to the top edge of the next occurrence of that defect.

Figure 2-95 Determine the defective assembly



Print-quality troubleshooting

- NOTE: The image defects described in this section are printer-specific image defects.
 - **Image defect events**
 - Image defect (developmental) events
 - Other events

Image defect events

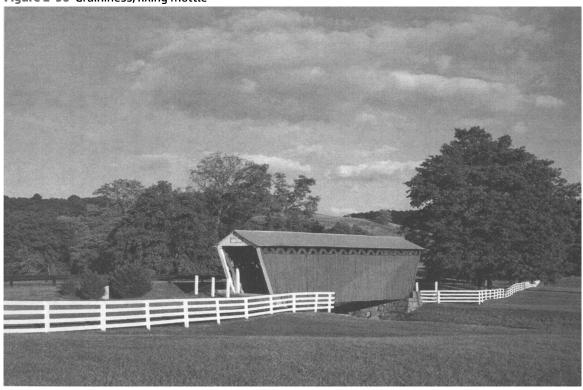
- NOTE: The image defects described in this section are defects that occurred during development and that could not be fully eliminated. Customers might observe these defects.
 - **Graininess**
 - **Streaks**
 - **Banding**

Graininess

Graininess/fixing mottle

Graininess/fixing mottle

Figure 2-96 Graininess/fixing mottle



Description of the defect

This defect is large areas of fill that appear blotchy, grainy, non-uniform, or mottled (marked with spots or smears of color). The graininess/fixing mottle defect is caused by how the toner (dot) is pressed or melted and the severity of the defect depends on the paper roughness. This leads to the density variance or uneven gloss. Graininess/fixing mottle is caused by inconsistently melted toner.

Conditions that can cause the defect

The defect appears in large areas of fill and is more severe in low temperature and humidity environments.

Solutions for the defect

- **M501**: From the printer control panel, change the print mode from plain to intermediate (this slows the print speed).
 - Open the following menus:
 - Setup
 - System Setup
 - Paper Setup
 - Tray < X >