WX =

- 02: Beam detected misprint error

- 06: ITB top detection error

- 07: Paper transportation error

- 08: Optional input source delay

- 09: Sub-thermistor abnormally high temperature

- 18: Scan line inclination adjustment request

- 19: T2 roller HV

- 20: Image drum HV

Y = fuser mode

- 0: Photo paper 1, Photo paper 2, Photo paper 3, Designated paper 2, Designated paper 3, or NA, typed or Autosense

- 1: Autosense (normal): special case distinguished from typed Normal

- 2: Normal, typed (not Autosense)

- 3: Light paper 1, 2, or 3, typed or Autosense

- 4: Heavy paper 1, typed or Autosense

- 5: Heavy paper 2, typed or Autosense

- 6: Heavy paper 3, typed or Autosense

- 7: Glossy paper 1, typed or Autosense

- 8: Glossy paper 2, typed or Autosense

- 9: Glossy paper 3, typed or Autosense

- A: Glossy film, typed or Autosense

- B: Transparency, typed or Autosense

- C: Label

- D: Envelope 1, Envelope 2, Envelope 3

- E: Rough (designated paper 1), typed or Autosense

- F: reserved for future fuser mode

Z = source tray

- 1: Tray 1

- 2: Tray 2

- ◦ 3: Tray 3

- ◦ D: Duplexer

Recommended action

1. To clear message, press the OK button.

2. If the message reappears, turn the product off and then on.

3. If the error persists, replace the DC controller PCA.

47.FC.YZ Printer calibration failed To continue, touch "OK"

Description

The product is unable to access or implement one of the image pattern files.

Y = calibration type, Z = event

- ◦ **47.FC.00** (event code): Color plane registration (CPR) image not found at system initialization

- ◦ **47.FC.01** (event code): CPR store image failure

- ◦ **47.FC.02** (event code): CPR image not found

- ◦ **47.FC.03** (event code): CPR print engine execution failure

- ◦ **47.FC.10** (event code): Consecutive Dmax Dhalf image not found at system initialization

- ◦ **47.FC.11** (event code): Consecutive Dmax Dhalf store image failure

- ◦ **47.FC.12** (event code): Consecutive Dmax Dhalf image not found

- ◦ **47.FC.13** (event code): Consecutive Dmax Dhalf print engine execution failure

- ◦ **47.FC.20** (event code): Error diffusion image not found at system initialization

- ◦ **47.FC.21** (event code): Error diffusion store image failure

- ◦ **47.FC.22** (event code): Error diffusion image not found

- ◦ **47.FC.23** (event code): Error diffusion print engine execution failure

- ◦ **47.FC.30** (event code): Drum speed adjustment Image not found at system initialization

- ◦ **47.FC.31** (event code): Drum speed adjustment store image failure

- ◦ **47.FC.32** (event code): Drum speed adjustment image not found

- ◦ **47.FC.33** (event code): Drum speed adjustment print engine execution failure

- ◦ **47.FC.40** (event code): Pulse width modulation image not found at system initialization

- ◦ **47.FC.41** (event code): Pulse width modulation store image failure

◦ **47.FC.42** (event code): Pulse width modulation image not found

◦ **47.FC.43** (event code): Pulse width modulation print engine execution failure

Recommended action

1. Turn the product off and then on.

2. If the error persists, reload the firmware.

47.WX.YZ Printer calibration failed

Description

The print quality calibration failed. This message is for development and will not be seen by customers.

Recommended action

Turn the product off and then on.

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

Description

A firmware error has occurred. This error can be caused by corrupted print jobs, software applications issues, non-product specific print drivers, poor-quality USB or network cables, bad network connections or incorrect configurations, invalid firmware operations, or unsupported accessories.

Recommended action

1. Turn the product off and then on.

2. 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, such as an invalid print driver, a problem with the software application, or a problem with the file you are printing.

   ● Upgrading the product firmware might help resolve the error. See the product user guide for more information.

50.WX.YZ Fuser error To continue turn off then on

Description

The product experienced a fuser error.

◦ W = fuser error code

◦ X = fuser mode

   ● 0: Photo paper 1, 2, 3, Designated paper 2, 3, or NA, typed or AutoSense

   ● 1: AutoSense (Normal special case distinguished from typed Normal)

- 2: Normal, typed (not AutoSense)

- 3: Light paper 1, 2, or 3, typed or AutoSense

- 4: Heavy paper 1, typed or AutoSense

- 5: Heavy paper 2, typed or AutoSense

- 6: Heavy paper 3, typed or AutoSense

- 7: Glossy paper 1, typed or AutoSense

- 8: Glossy paper 2, typed or AutoSense

- 9: Glossy paper 3, typed or AutoSense

- A: Glossy film, typed or AutoSense

- B: Transparency, typed or AutoSense

- C: Label

- D: Envelope1, Envelope2, or Envelope3

- E: Rough (designated paper 1), typed or AutoSense

- F: Reserved for future fuser mode

- Y = previous product sleep state

- Z = next product sleep state

  - 0: Printing

  - 1: Standby level 1 (no temperature control)

  - 2: Standby level 2 (high temperature control)

  - 3: Standby level 3 (middle temperature control)

  - 4: Standby level 4 (low temperature control)

  - 5: Middle sleep

  - 6: Deep sleep

  - F: Off

Recommended action

W = A: High fuser temperature 2

1. Remove and then reseat the fuser. Make sure there is no residual paper in the fuser. Make sure the product is not located in front of a vent or window where cool air may interfere with the ability of the fuser to heat up.

2. Check the product power source. Make sure the power source meets product requirements. Make sure this is the only device using the circuit.

3. Check the connector (J1) between the fuser and the product. If it is damaged, replace the fuser.

4. If this product was previously serviced, check the connector (J61) on the DC controller PCA.

5. If the error persists, replace the fuser.

W = B: High fuser temperature 3

1. Remove and then reseat the fuser. Remove any residual paper in the product.

2. Check the paper type setting using the product menus and in the print driver. Making sure that they match and are correct for the type of paper being used.

3. If this product was previously serviced, check the connector (J61) on the DC controller PCA.

4. If the error persists, replace the fuser.

W = 1, Low fuser error temperature error

1. Remove and then reseat the fuser.

2. Check the paper type setting using the product menus and in the product driver. Make sure that they match and are correct for the type of paper being used.

3. If this product was previously serviced, check the connector (J61) on the DC controller PCA.

4. If the error persists, replace the fuser.

W = 2, Fuser warm-up failure

1. Reconnect the connector (J61) between the fuser and the DC controller PCA.

2. Turn the product off. Remove the fuser, and then reinstall it.

3. Replace the fuser wire harness.

4. If the error persists, replace the fuser.

W = 3, High fuser temperature 1

1. Remove and then reseat the fuser.

2. Check the paper type setting using the product menus and in the product driver. Make sure that they match and are correct for the type of paper being used.

3. If this product was previously serviced, check the connector (J61) on the DC controller PCA.

4. If the error persists, replace the fuser.

W = 4, Fuser power supply driving circuit error

1. Remove and then reseat the fuser.

2. If this product was previously serviced, check the connector (J61) on the DC controller PCA.

3. If the error persists, replace the fuser.

W = 6, Open fuser, breaking of a heater wire

1. Check the power source. Make sure the power source meets product requirements.

   NOTE: If the power source does not meet the power frequency requirement of 43 to 67Hz, the fuser temperature control does not work properly and causes this error.

2. If this product was previously serviced, check the connector (J61) on the DC controller PCA.

3. If the error persists, replace the low-voltage power supply.

W = 7, Fuser pressure-release mechanism failure

1. Remove and then reseat the fuser. Make sure there is no residual paper in the fuser.

2. Check the fuser pressure-release sensor flag. If it is damaged, replace the fuser.

3. Use the fuser pressure-release drive test in the component test to verify that the fuser motor (M3) is properly functioning. If it is not, replace the fuser motor (M3).

4. If this product was previously serviced, check the connector (J61) on the DC controller PCA.

5. If the error persists, replace the fuser.

W = 8, Low fuser temperature 2

1. Remove and then reseat the fuser. Make sure there is no residual paper in the fuser. Make sure the product is not located in front of a vent or window where cool air may interfere with the ability of the fuser to heat up.

2. Check the product power source. Make sure the power source meets product requirements. Make sure this is the only device using the circuit.

3. Check the connector (J1) between the fuser and the product. If it is damaged, replace the fuser.

4. If this product was previously serviced, check the connector (J61) on the DC controller PCA.

5. If the error persists, replace the fuser.

W = 9, High fuser temperature 2

1. Remove and then reseat the fuser. Make sure there is no residual paper in the fuser. Make sure the product is not located in front of a vent or window where cool air may interfere with the ability of the fuser to heat up.

2. Check the product power source. Make sure the power source meets product requirements. Make sure this is the only device using the circuit.

3. Check the connector (J1) between the fuser and the product. If it is damaged, replace the fuser.

4. If this product was previously serviced, check the connector (J61) on the DC controller PCA.

5. If the error persists, replace the fuser.

51.00.YY Error To continue turn off then on

Description

An error with the laser scanner assembly has occurred in the product.

- ◦ YY = 10: Beam detect error

- ◦ YY = 19: Laser malfunction

- ◦ YY = 20: Black laser scanner error

Recommended action

51.00.10

1. Turn the product off and then on.

2. Check the flat flexible cable (FFC) connection to the laser scanner.

3. Check connector J71 at the DC controller, and check the laser scanner connectors.

4. Replace the laser scanner.

51.00.19

1. Turn the product off and then on.

2. Check the connectors on the laser scanner.

3. Replace the laser scanner.

51.00.20

1. Perform the laser scanner component tests in the **Troubleshooting** menu. Verify that you can hear the motor rotate.

2. If you cannot hear the motor rotate, verify that connector J71 is fully seated on the DC controller PCA.

3. Verify that the connector on the laser scanner assembly is securely attached.

4. If the error persists, replace the laser scanner.

52.00.00 Error To continue turn off then on

Description

A scanner rotation error has occurred.

Recommended action

1. Turn the product off and then on.

2. Perform the laser scanner component tests in the **Troubleshooting** menu.

3. If the component tests showed a failure, reconnect the connectors of the scanner motor (J1900 and J801) and the DC controller PCA (J71).

4. Replace the laser-scanner assembly.

52.00.20 Error To continue turn off then on

Description

A scanner rotation error has occurred.

Recommended action

1. Turn the product off and then on.

2. Perform the laser scanner component tests in the **Troubleshooting** menu.

3. If the component tests showed a startup failure, reconnect the connectors of the scanner motor (J1900 and J801) and the DC controller PCA (J71).

4. Replace the laser-scanner assembly.

52.<XX>.00 Error To continue turn off then on

Description

The laser scanner experienced a startup error.

◦ XX = 04 or 05: Laser scanner motor startup error

◦ XX = 05: Laser scanner rotation error

Recommended action

XX = 04

1. Perform the laser scanner component tests in the **Troubleshooting** menu.

2. Check the connectors (J1900 and J801) on the laser scanner driver PCA and the connector (J71) on the DC controller PCA.

3. If the error persists, replace the laser scanner.

XX = 05

1. Perform the laser scanner component tests in the **Troubleshooting** menu.

2. Check the connectors (J1900 and J801) on the laser scanner driver PCA and the connector (J71) on the DC controller PCA.

3. If the error persists, replace the laser scanner.

54.XX.YY Error

Description

A sensor error has occurred.

Recommended action

54.00.03: Environmental sensor failure

1. Turn the product off and then on.

2. If the environment sensor has been removed or replaced. check the connector on the environment sensor and the connector (J63) on the DC controller PCA.

3. If the error persists, replace the environment sensor assembly.

54.00.04: Engine temperature sensor 1 abnormality warning

1. Turn the product off and then on.

55.XX.YY DC controller error To continue turn off then on

Description

The communication link between the formatter and DC controller was lost.

- ◦ **55.00.00** (event code): Internal communication 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 timeout

Recommended action

1. Turn the product off and then on.

2. Perform an engine test.

3. Verify the connectors on the DC controller.

4. If the error persists, replace the DC controller.

56.00.YY Error To continue turn off then on

Description

The product experienced a communication error with the optional paper tray.

- ◦ **56.00.01** (event code): Illegal input, selected paper input tray is unavailable

- ◦ **56.00.02** (event code): Illegal output, selected paper output bin is unavailable

Recommended action

1. Turn the product off and then on.

2. Reseat the optional paper tray.

3. Check the input connectors for damage. If a connector is damaged, replace the connector.

57.00.0X Error

Description

A fan error has occurred.

Recommended action

57.00.01: Fan motor 1 (rear) malfunction

1. Turn the product off and then on. Listen for fan noise at the rear of the product. If no noise is heard, replace the power supply fan (FM1).

2. If this part has been removed or replaced, check the connector (J33) on the DC controller PCA.

57.00.02: Fan motor 2 (front) malfunction

1. Turn the product off and then on. Listen for fan noise at the front of the product. If no noise is heard, replace the toner cartridge fan (FM2).

2. If this part has been removed or replaced, check the connector (J37) on the DC controller.

57.00.03: Fan motor 3 (fuser) malfunction

1. Turn the product off and then on. Listen for fan noise at the lower back-center of the product. If no noise is heard, replace the fuser fan (FM3).

2. If this part has been removed or replaced, check the connector J37 on the DCC.

58.00.04 Error To continue turn off then on

Description

The low-voltage power supply is defective.

Recommended action

1. Turn the product off and then on.

2. Check the connectors (J31 and J32) on the DC controller PCA.

3. If the error persists, replace the low voltage power supply.

59.00.00 Error To continue turn off then on

Description

A paper path malfunction error has occurred.

Recommended action

Turn the product off then on.

59.00.20 Error To continue turn off then on

Description

A motor rotation error has occurred.

Recommended action

Turn the product off and then on.

59.00.30 Error To continue turn off then on

Description

A fuser motor startup error has occurred.

Recommended action

1. Turn the product off and then on.

2. Perform the fuser motor component test in the **Troubleshooting** menu.

3. Reconnect the connector (J47) on the DC controller PCA.

4. Replace the fuser motor.

59.00.40 Error To continue turn off then on

Description

A fuser motor rotational error has occurred.

Recommended action

1. Turn the product off and then on.

2. Perform the fuser motor component test in the **Troubleshooting** menu.

3. Reconnect the connector (J47) on the DC controller PCA.

4. Replace the fuser motor.

59.05.50 Error To continue turn off then on

Description

The product experienced a drum motor startup error.

Recommended action

1. Perform the drum-motor component test in the **Troubleshooting** menu.

2. Use the disable toner cartridge check and run the drum motor component test with the toner cartridge removed. If the test passes, replace the toner cartridge. If the test fails, replace the drum motor.

3. If the product was previously serviced, check the connector at the drum motor assembly and the DC controller. See the circuit diagram for details.

59.05.60 Error To continue turn off then on

Description

The product experienced a drum motor rotation error.

Recommended action

1. Perform the drum-motor component test in the **Troubleshooting** menu.

2. Use the disable toner cartridge check and run the drum motor component test with the toner cartridge removed. If the test passes, replace the toner cartridge. If the test fails, replace the drum motor.

3. If the product was previously serviced, check the connector at the drum motor assembly and the DC controller. See the circuit diagram for details.

60.00.0Y Tray <Y> lifting error

Description

The indicated tray has not lifted into the paper feed position.

Recommended action

60.00.11: Lifter motor failure (M7)

1. Turn the product off and then on.

2. Check the connector (J51) on the DC controller PCA.

3. Check the connectors on the lifter motors.

4. Use the tray lifter sensor test in the **Tray/ Bin manual sensor test** menu to verify that the sensor is properly functioning. If it is not, replace the lifter drive assembly.

5. If the error persists, replace the lifter drive assembly.

62.00.00 No system To continue turn off then on

Description

The product experienced an internal system failure.

Recommended action

1. Turn the product off and then on.

2. Reload the firmware.

3. Perform a firmware upgrade.

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

69.11.YY Error To continue, touch "OK"

Description

This message displays to indicate an error during a duplex operation.

Recommended action

Turn the product off and then on.

70.00.00 Error To continue turn off then on

Description

The product experienced a DC controller failure.

Recommended action

1. Turn the product off and then on.

2. If the error persists, replace the DC controller.

81.WX.YZ Embedded JetDirect Error To continue turn off then on

Description

The product experienced an embedded HP Jetdirect print server critical error.

- ◦ **81.01.00** (event code): EIO Networking Event <UVWXYZ>

- ◦ **81.02.00** (event code): Wireless Networking Event <UVWXYZ>

- ◦ **81.03.00** (event code): Access Point Wireless Networking Event <UVWXYZ>

- ◦ **81.04.00** (event code): Jetdirect Inside Networking Event <UVWXYZ>

- ◦ **81.06.00** (event code): Internal EIO Networking Event <UVWXYZ>

- ◦ **81.07.00** (event code): Internal Wireless Networking Event <UVWXYZ>

- ◦ **81.08.00** (event code): Internal Access Point Wireless Networking Event <UVWXYZ>

- ◦ **81.09.00** (event code): Internal Jetdirect Inside Networking Event <UVWXYZ>

Recommended action

1. Turn the product off and then on.

2. Turn the product off, reseat the EIO accessory, and then turn the product on.

3. If the error persists, replace the formatter.

81.YY.YY EIO Error To continue turn off then on

Description

An external I/O card has failed on the product.

Recommended action

1. Turn the product off and then on.

2. Turn the product off, reseat the EIO accessory, and then turn the product on.

3. If the error persists, replace the EIO card.

98.00.0X Corrupt data in X volume

Description

Data corruption has occurred in the firmware volume.

- **98.00.01 Corrupt data in firmware volume Reinstall firmware**
- **98.00.02 Corrupt data in solutions volume Re-install accessory solutions**
- **98.00.03 Corrupt data in configuration volume Re-configure the product**
- **98.00.04 Corrupt data in job data volume All job data was erased**

Recommended action

98.00.01 or 98.00.02 or 98.00.03

1. Turn the product off and then on.

2. Use the **1 Clear disk** item in the Preboot menu.

3. Reload the firmware.

98.00.04

1. Turn the product off and then on.

2. Rerun the file erase function.

<Binname> full Remove all paper from bin

Description

The specified output bin is full.

Recommended action

Empty the bin to continue printing.

Bad optional tray connection

Description

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

Recommended action

1. Turn the product off.

2. Remove and reinstall the optional tray.

3. Reconnect connectors for the tray.

4. Turn the product on.

Black Cartridge low

Description

The toner cartridge is at the low condition.

Recommended action

Actual supply life remaining may vary. Consider having a replacement available to install when print quality is no longer acceptable. The supply does not need to be replaced now.

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

Black Cartridge very low

Description

The toner cartridge has reached the very low condition.

Recommended action

Actual supply life remaining may vary. Consider having a replacement available. The supply does not need to be replaced now unless the print quality is no longer acceptable. Once an HP supply has reached the very low condition, HP's warranty on that supply has ended.

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

Black Cartridge very low To continue, touch "OK"

Description

The toner cartridge has reached the very low condition.

Recommended action

Actual supply life remaining may vary. Consider having a replacement available. The supply does not need to be replaced now unless the print quality is no longer acceptable. Once an HP supply has reached the very low condition, HP's warranty on that supply has ended.

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

Card slot device failure To clear touch "Clear"

Description

The specified device has failed.

Recommended action

Press the Clear button to clear the error.

Card slot file operation failed To clear touch "Clear"

Description

A PJL file system command attempted to perform an illogical operation.

Recommended action

Press the Clear button to clear the error.

Card slot file system is full To clear touch "Clear"

Description

A PJL file system command could not store something on the file system because the file system was full.

Recommended action

Press the Clear button to clear the error.

Card slot is write protected To clear touch "Clear"

Description

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

Recommended action

Press the Clear button to clear the error.

Card slot not initialized To clear touch "Clear"

Description

This file-storage component must be initialized before use.

Recommended action

Use the embedded Web server or HP Web Jetadmin to initialize the component.

Cartridge ship mode

Description

Manufacturing use only - should not be seen in field.

Recommended action

Contact HP support for steps to resolve this condition.

Chosen personality not available To continue, touch "OK"

Description

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

Recommended action

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

Cleaning disk <X>% complete Do not power off

Description

A storage device is being sanitized or cleaned.

Recommended action

Do not turn off the product. The product's functions are unavailable. The product will automatically restart when finished.

Close left door

Description

The left door is open.

Recommended action

1. Close the left door.

2. If the error persists, verify the J35 connector is fully seated on the DC controller PCA.

3. Use the manual sensor test to verify the left-door sensor functionality. If necessary, replace the sensor.

Close top cover

Description

The cartridge door is open.

Recommended action

1. Close the cartridge door.

2. Make sure that the connectors are fully seated on the cartridge door switch SW3.

3. Make sure that the tab on the cartridge door that activates the switch is not missing or damaged. Replace the cartridge-door assembly if necessary.

4. Replace the door switch.

Data received

Description

The product is waiting for more data to continue the print job.

Recommended action

Press the OK button to print the last page of the job. To print the existing data, press the Print button.

Disk full Delete stored jobs

Description

The disk is out of storage space and there is not enough space to process any jobs.

Recommended action

○ Press the View Jobs option to view and delete the stored jobs.

○ Press the Print option to print and delete stored jobs. Sign in might be required.

The error will automatically clear when there is enough disk space to process jobs.

Disk low Delete stored jobs

Description

The disk is running out of storage space. If the user does not delete stored jobs, the disk will run out of space and there will not be enough space to process any jobs. If the storage space goes lower, an error condition will occur.

Recommended action

○ Press the View Jobs option to view and delete stored jobs.

○ Press the Print option to print and delete stored jobs. Sign in might be required.

To increase available disk space, go to Job Status to cancel scheduled jobs.

EIO <X> disk not functional

Description

The EIO disk in slot indicated is not working correctly.

Recommended action

1. Turn the product off.

2. Remove the EIO disk from the slot indicated.

3. Install a new EIO disk.

4. Turn the product on.

EIO <X> disk spinning up

Description

The EIO disk product in the indicated slot is spinning up. Jobs that require disk access must wait.

◦ X = 1: Slot 1

◦ X = 2: Slot 2

Recommended action

No action is necessary.

EIO device failure To clear touch "Clear"

Description

The specified device failed.

Recommended action

Press the Clear button to clear the message.

EIO file operation failed To clear touch "Clear"

Description

A PJL file system command attempted to perform an illogical operation.

Recommended action

Press the Clear button to clear the message.

EIO file system is full To clear touch "Clear"

Description

A PJL file system command could not store something on the file system because the file system was full.

Recommended action

Press the Clear button to clear the error.

EIO is write protected To clear touch "Clear"

Description

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

Recommended action

Press the Clear button to clear the message.

EIO not initialized To clear touch "Clear"

Description

This file-storage component must be initialized before use.

Recommended action

Use the HP Embedded Web Server or HP Web Jetadmin to initialize the file system.

Event log is empty

Description

No product events are in the log.

Recommended action

No action is necessary.

Fuser Kit Low

Description

The product indicates when a supply level is low.

Recommended action

Replace the fuser kit.

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

Fuser Kit very low

Description

The product indicates when a supply level 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

Replace the fuser kit.

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

Fuser Kit very low To continue, touch "OK"

Description

The product indicates when a supply level 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

Replace the fuser kit.

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

Incompatible <supply>

Description

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

- ◦ **10.00.35** (event code): Black toner cartridge

- ◦ **10.23.35** (event code): Fuser kit

Recommended action

Replace the incompatible supply.

Incompatible supplies

Description

The toner cartridge or other supply items are installed that were not designed for this product. The product cannot print with these supplies installed.

Event codes are supply specific.

Recommended action

Press the OK button to identify the incompatible supplies.

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

Initializing...

Description

The product is starting.

Recommended action

No action is necessary. Wait until the **Ready** message appears on the display.

Install Black Cartridge

Description

A supply is either not installed or not correctly installed in the product.

Recommended action

Replace or reinstall the toner cartridge correctly to continue printing.

Install Fuser Unit

Description

The fuser is either not installed or not correctly installed in the product.

Recommended action

⚠ **CAUTION:** The fuser can be hot while the product is in use.

Reseat the fuser.

Install supplies

Description

More than one supply is missing or is installed incorrectly.

- ◦ **10.00.15** (event code): Black toner cartridge
- ◦ **10.23.15** (event code): Fuser kit

Recommended action

1. Press the OK button to identify which supplies need to be replaced.

2. Press the OK button a second time for more information about the specific supply.

3. Insert the supply item or make sure the installed supply item is fully seated.

Internal disk device failure To clear touch "Clear"

Description

The specified device has failed.

Recommended action

Press the Clear button to clear the message.

Internal disk file operation failed To clear touch "Clear"

Description

A PJL file system command attempted to perform an illogical operation.

Recommended action

Press the Clear button to clear the message.

Internal disk file system is full To clear touch "Clear"

Description

A PJL file system command could not store something on the file system because the file system was full.

Recommended action

Press the Clear button to clear the error.

Internal disk is write protected To clear touch "Clear"

Description

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

Recommended action

Press the Clear button to clear the message.

Internal disk not found

Description

The product cannot find the hard drive.

Recommended action

Check the hard drive cable connections.

Internal disk not functional

Description

The product internal disk is not working correctly.

Recommended action

1. Turn off the product, and then remove and reinstall the disk. Turn on the product.

2. If the error persists, replace the internal hard drive.

Internal disk not initialized To clear touch "Clear"

Description

This file-storage component must be initialized before use.

Recommended action

Use the HP Embedded Web Server or HP Web Jetadmin to initialize the 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.

Load Tray 1 [Type] [Size]

Description

Tray 1 is not loaded, but there is not another tray available for the user to use instead.

Recommended action

Load the tray with the requested paper.

Load Tray 1 [Type] [Size] To continue, touch "OK"

Description

Tray 1 is empty.

Recommended action

◦ Load Tray 1 with the requested paper. Or, if paper is already in Tray 1, press the OK button to print.

◦ If paper is in another tray, remove the paper and insert it in Tray 1, and then press the OK button.

Load Tray <X>: [Size]

Description

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

Recommended action

1. Load the tray with the requested paper or adjust the paper guides.

2. If the error persists, use the tray paper present sensor test in the **Tray/ Bin manual sensor test** to verify that the sensor is correctly functioning.

3. Make sure that the sensor flag on the paper presence sensor is not damaged and moves freely.

4. Reconnect the corresponding connector:

   ● Tray 1 (multipurpose tray): Connectors (J1) on the Tray 1 paper out sensor and the connector (J41) on the DC controller PCA.

   ● Input trays: Connectors (J15 and J7) on the tray paper out sensor and the connectors (J43, J48) on the DC controller PCA.

   ● 1x500-sheet paper feeder tray: Connector (J752) on the paper feeder tray paper out sensor and the connector (J2003) on the paper feeder controller PCA.

   ● 3x500-sheet paper feeder tray: Connector (J752, J852, J952) on the paper feeder tray paper out sensor and the connector (J2003) on the paper feeder controller PCA.

   ● HCI: Connector (J3201) on the paper feeder tray paper out sensor and the connector (J3005 or J3015) on the HCI controller PCA.

Load Tray <X>: [Size] To continue, touch "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.

Load Tray <X>: [Size] To use another tray, touch "Options"

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.

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

Description

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

Recommended action

1. Load the tray with the requested paper or adjust the paper guides.

2. If the error persists, use the tray paper present sensor test in the **Tray/ Bin manual sensor test** to verify that the sensor is correctly functioning.

3. Make sure that the sensor flag on the paper presence sensor is not damaged and moves freely.

4. Reconnect the corresponding connector:

   - Tray 1 (multipurpose tray): Connector (J1) on the Tray 1 paper out sensor and the connector (J41) on the DC controller PCA.

   - Input trays: Connectors (J15 and J7) on the tray paper out sensor and the connectors (J43, J48) on the DC controller PCA.

   - 1x500-sheet paper feeder tray: Connector (J752) on the paper feeder tray paper out sensor and the connector (J2003) on the paper feeder controller PCA.

   - 3x500-sheet paper feeder tray: Connectors (J752, J852, J952) on the paper feeder tray paper out sensor and the connector (J2003) on the paper feeder controller PCA.

   - HCI: Connector (J3201) on the paper feeder tray paper out sensor and the connector (J3005 or J3015) on the HCI controller PCA.

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

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.

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

Description

The product 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

The even-numbered pages of the two-sided document have printed. Follow the next steps to print the odd-numbered pages.

1. Maintaining the same orientation, remove the document from the output bin. Do not discard blank pages.

2. Flip the document over so the printed side is up.

3. Load document in Tray 1.

4. Press the OK button to print the second side of the job.

Manually feed: [Size]

Description

This message appears when manual feed is selected, Tray 1 is not loaded.

Recommended action

Load tray with requested paper.

Manually feed: [Size] To continue, touch "OK"

Description

This message appears when manual feed is selected, Tray 1 is not 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.

Manually feed: [Size] To use another tray, touch "Options"

Description

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

Recommended action

◦ Load tray with requested paper.

◦ To use another tray, clear paper from Tray 1, press **Options** to select a different tray.

Manually feed: [Type], [Size] To continue, touch "OK"

Description

This message appears when manual feed is selected, Tray 1 is not 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.

Manually feed: [Type], [Size] To use another tray, touch "Options"

Description

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

Recommended action

◦ Load tray with requested paper.

◦ To use another tray, clear paper from Tray 1, press **Options** to select a different tray.

No job to cancel

Description

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

Recommended action

No action necessary.

Output Bin full

Description

The output bin is full and must be emptied for printing to continue.

Recommended action

1. Empty the bin to continue printing.

2. Make sure that the paper full sensor flag is not damaged and can freely move. If the sensor flag is damaged, replace the top-cover assembly.

3. Make sure that the connector is fully seated on the sensor and connector J45 is fully seated on the DC controller.

4. Use the **Manual Sensor Test** menu items to test the sensor functionality. If necessary, replace the sensor (PS1).

Paperless mode

Description

This is a test mode used in manufacturing and should not be seen on a normally operating product.

Recommended action

Contact HP support for steps to resolve this condition.

Printing Engine Test...

Description

The product is printing an engine test page.

Recommended action

No action is necessary.

Printing stopped To continue, touch "OK"

Description

Time has expired on the print/stop test.

Recommended action

Press the OK button to continue.

RAM Disk device failure To clear touch "Clear"

Description

The specified device failed.

Recommended action

Press the Clear button to clear the message.

RAM Disk file operation failed To clear touch "Clear"

Description

A PJL file system command attempted to perform an illogical operation.

Recommended action

Press the Clear button to clear the message.

RAM Disk file system is full To clear touch "Clear"

Description

A PJL file system command could not store something on the file system because the file system was full.

Recommended action

Press the Clear button to clear the error.

RAM Disk is write protected To clear touch "Clear"

Description

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

Recommended action

Press the Clear button to clear the message.

RAM Disk not initialized To clear touch "Clear"

Description

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

Recommended action

Use the HP Embedded Web Server or HP Web Jetadmin to initialize the file system.

Remove cartridge lock

Description

The product has been turned on with a cartridge shipping lock installed on the toner cartridge.

Recommended action

1. Open the top cover and remove the toner cartridge.

2. Pull the orange tab to remove the strip.

3. Remove the paper with the plastic insert.

4. Reinstall cartridge, and then close the top cover.

Remove the toner cartridge

Description

The product is component testing the belt.

Recommended action

◦ To perform the test, remove the toner cartridge.

◦ To cancel the test, press the Stop ⊗ button.

Replace Black Cartridge

Description

The black cartridge has reached the out condition.

Recommended action

Install a new toner cartridge.

Replace Fuser Kit

Description

The product indicates when the fuser kit is at its estimated end of life. The actual life remaining might be different than the estimation. Have a replacement fuser kit available to install when print quality is no longer acceptable.

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

NOTE: After the fuser kit reaches its approximated end of life, the HP Premium Protection Warranty on that fuser kit ends.

Recommended action

Replace the fuser kit.

WARNING! The fuser can be hot while the product is in use.

Replace supplies

Description

This alert appears only if the product is configured to stop when a supplies reach the very low threshold. Two or more supplies have reached the estimated end of life. The product 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 toner cartridge

- **10.23.70** (event code): Fuser kit

- **10.22.70** (event code): Transfer kit

Recommended action

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

◦ Configure the product to continue printing by using the **Manage Supplies** menu.

ROM disk device failed To clear touch "Clear"

Description

The specified device failed.

Recommended action

Press the Clear button to clear the message.

ROM disk file operation failed To clear touch "Clear"

Description

A PJL file system command attempted to perform an illogical operation.

Recommended action

Press the Clear button to clear the message.

ROM disk file system is full To clear touch "Clear"

Description

A PJL file system command could not store something on the file system because the file system was full.

Recommended action

Press the Clear button to clear the error.

ROM disk is write protected To clear touch "Clear"

Description

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

Recommended action

Press the Clear button to clear the message.

ROM disk not initialized To clear touch "Clear"

Description

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

Recommended action

Use the HP Embedded Web Server or HP Web Jetadmin to initialize the file system.

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 that the paper is positioned correctly.

3. Close the tray and verify that the control panel lists the correct paper size and type. Reconfigure the size and type if necessary.

4. If necessary, use the control-panel menus to reconfigure the size and type settings for the specified tray.

5. Make sure that connectors J513, J507, and J501 are fully seated on the high-voltage power supply.

6. Make sure that connector J601 is fully seated on the DC controller PCA.

7. If the error persists, replace the high-voltage power supply.

8. If the error persists, replace the DC controller PCA.

Standard bin full Remove all paper from bin

Description

The specified output bin is full and must be emptied for printing to continue.

Recommended action

Empty the specified output bin.

Supplies low

Description

Multiple supplies on the product have reached the low threshold.

Recommended action

Replace the supply 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.

Supplies very low To continue, touch "OK"

Description

More than one color supply on the product has reached the very low condition.

Recommended action

- ◦ Replace the supply when print quality is no longer acceptable.

- ◦ To continue printing in color, either replace the supply or reconfigure the product by using the **Manage Supplies** menu on the control panel.

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

Supply memory warning

Description

Unable to read cartridge data.

NOTE: Any repair required as a result of using cartridges with unreadable cartridge data is not covered under warranty.

Recommended action

Replace the cartridge with a genuine HP toner cartridge.

Tray <X> empty: [Size]

Description

The specified tray is empty and needs to be loaded.

Recommended action

Refill the tray.

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

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

Description

The specified tray is empty and needs to be loaded, but the current job does not need this tray to print.

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 product does not sense that the paper is loaded. Remove the shipping lock, and then load the tray.

Tray <X> open

Description

The specified tray is open or not closed completely.

Recommended action

1. Close the tray.

2. If this message appears and the lifter-base assembly was removed or replaced, make sure that the connector on the assembly is correctly connected and fully seated.

3. If the error persists, use the paper size switches (SW2,3 - SW82,83 - SW92,93) 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 Remove excess paper

Description

A tray in the product is overfilled with paper. Printing can continue from a different tray.

Recommended action

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

> **NOTE:** If this message appears and the paper-pickup assembly was removed or replaced, make sure that the connector at the back of the assembly is correctly connected and fully seated.

Tray <X> overfilled To use another tray, touch "Options"

Description

Too much paper was loaded into the indicated tray.

Recommended action

Remove enough paper so that the paper stack does not exceed the limit for the tray or press the **Options** button to use another tray.

> **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 <X>

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.

1. Load the correct paper in the specified tray.

2. At the control panel, verify the type configuration.

Unable to cancel firmware update job

Description

The product is processing of downloading a remote firmware upgrade and cannot cancel it.

Recommended action

Firmware updates cannot be canceled once started. The product will restart automatically to complete the firmware update.

Unable to install the firmware

Description

The product displays this message when one of the following conditions occurs during a firmware upgrade.

- A file I/O error occurs when there is an interruption while reading the firmware upgrade file.

- A firmware installation is already in progress, possibly by a remote service application.

- A firmware installation is pending.

- An internal system failure has occurred while doing firmware upgrades.

- An unknown error occurs while doing firmware upgrades.

- The memory is full when the user is doing firmware upgrades.

- The firmware upgrade file does not support this product.

- The upgrade file is invalid or corrupted while doing firmware upgrades.

Recommended action

Refer to the walk-up help for each of these error conditions for specific instructions on resolving the error.

Unsupported drive installed

Description

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

Recommended action

Replace the unsupported drive.

Unsupported supply in use

Description

A non-supported supply has been installed.

Or, the toner cartridge is for a different HP product.

◦ **10.00.41** (event code): Black toner cartridge

Recommended action

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

Unsupported supply installed

Description

The product has one or more HP genuine supplies, designed for a different product, installed. The product will either shut down or slow down unless the user acknowledges the condition.

Recommended action

Press the OK button to continue.

Unsupported supply installed To continue, touch "OK"

Description

One or more genuine HP supplies designed for a different product are installed. These supplies are not supported by the product. The product may either shut down or slow down.

Recommended action

The installed supply was not designed for this product and is not supported. Results may vary when used with this product. To continue printing with the unsupported supply, press the OK button.

Unsupported tray configuration

Description

More than the allowable tray accessories are installed on the product. Printing cannot continue until the extra trays are removed and the product is turned off and then on.

Recommended action

Turn product off and remove the excess tray accessories. Turn the product on.

Unsupported USB accessory detected Remove USB accessory

Description

A non-supported USB accessory has been installed.

Recommended action

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

Upgrade complete To continue turn off then on

Description

The firmware upgrade is complete.

Recommended action

Turn the product off and then on.

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

Description

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

Recommended action

Remove the USB accessory, and then turn the product off and then on.

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

USB accessory not functional

Description

A USB accessory is not working correctly.

Recommended action

1. Turn the product 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 product has available.

Recommended action

Remove the USB hub.

USB is write protected To clear touch "Clear"

Description

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

Recommended action

Press the Clear button to clear the message.

USB not initialized To clear touch "Clear"

Description

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

Recommended action

Use the embedded Web server or HP Web Jetadmin to initialize the component.

USB storage accessory removed Clearing any associated data

Description

This message displays for six seconds after removal of the USB storage accessory.

Recommended action

Press the **Hide** button to remove this message.

USB storage device failure To clear touch "Clear"

Description

The specified device failed.

Recommended action

Press the Clear button to clear the message.

USB storage file operation failed To clear touch "Clear"

Description

A PJL file system command attempted to perform an illogical operation.

Recommended action

Press the Clear button to clear the message.

USB storage file system is full To clear touch "Clear"

Description

A PJL file system command could not store something on the file system because the file system was full.

Recommended action

Press the Clear button to clear the error.

Used supply in use

Description

One or more used supplies have been installed.

Recommended action

◦ Install new supplies.

◦ If you believe you purchased a genuine HP supply, go to www.hp.com/go/anticounterfeit. Any repair required as a result of using used cartridges is not covered under warranty. Supply status and features depending on supply status are not available.

Used supply installed To continue, touch "OK"

Description

The product displays this message when a used supply (a remanufactured or refilled genuine HP or non-HP product) has been installed.

◦ **10.00.34** (event code): Black toner cartridge

Recommended action

◦ Install new supplies.

◦ If you believe you purchased a genuine HP supply, go to www.hp.com/go/anticounterfeit. Any repair required as a result of using used cartridges is not covered under warranty. Supply status and features depending on supply status are not available.

Event log messages

Some messages appear only in the event log. For additional numeric messages, see the control-panel message section of this manual.

Figure 2-63 Sample event log
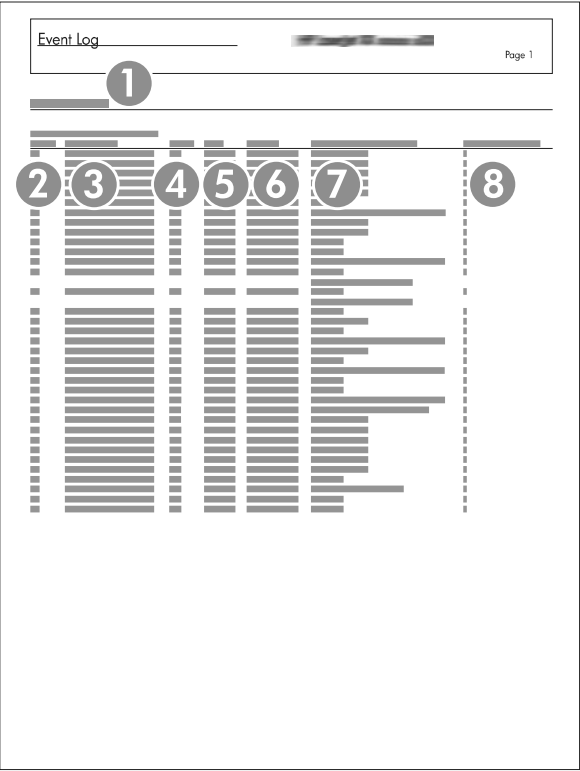
1	Product information
2	Event number
3	Date and time
4	Engine cycles
5	Event log code
6	Firmware version number
7	Description of personality
8	Consecutive Repeats

Print or view an event log

Print or view the event log from the Administration menu

1. At the product control panel, press the Home 🏠 button.

2. Open the following menus:

   - **Administration**

   - **Troubleshooting**

3. Select either **View Event Log** or **Print Event Log**, and then press the OK button.

Print or view the event log from the Service menu

1. At the product control panel, press the Home 🏠 button.

2. Open the following menus:

   - **Device Maintenance**

   - **Service**

3. Select the **Service Access Code** option.

4. Enter the following service access code for this product: **11071212**.

5. Select either **View Event Log** or **Print Event Log**, and then press the OK button.

Clear an event log

1. At the product control panel, press the Home 🏠 button.

2. Open the following menus:

   - **Device Maintenance**

   - **Service**

3. Select the **Service Access Code** option.

4. Enter the following service access code for this product: **11071212**.

5. Select the **Clear Event Log** item, and then press the OK button.

Event log message table

Event log message	Description	Action
30.03.14	Non-fatal error	This is an informational message, and no action is required.

Event log message	Description	Action
99.00.01	Remote firmware upgrade (.bdl) was not performed. The file is corrupt.	The firmware file is corrupt. Download the firmware file and attempt the upgrade again.
99.00.02	Remote firmware upgrade (.bdl) was not performed. Timeout during receipt.	The IO timed out during the firmware download. The most common cause is an issue with the network environment. Ensure a good connection to the product, and attempt the upgrade again or upgrade using the USB walk-up port.
99.00.03	Remote firmware upgrade (.bdl) was not performed. An error occurred when writing to the hard disk.	1. Download the firmware again. 2. If the error persists, perform the clean disk/format disk process. 3. Download the firmware from the Preboot menu. 4. If the error persists, replace the hard disk.
99.00.04 99.00.05	Remote firmware upgrade (.bdl) was not performed. There was a timeout during the download.	The I/O timed out during the firmware download. The most common cause is an issue with the network environment. Ensure there is a good connection to the product, and attempt the firmware upgrade again or upgrade the firmware using the USB walk-up port.
99.00.06 99.00.07 99.00.08	Remote firmware upgrade (.bdl) was not performed. There was an error reading the firmware file.	1. Download the firmware again. 2. If the error persists, perform the clean disk/format disk process. 3. Download the firmware from the Preboot menu. 4. If the error persists, replace the hard disk.
99.00.09 99.00.10	The firmware upgrade was canceled by the user.	Resend the firmware upgrade to the product.
99.00.11	The preboot partition is full.	1. Download the firmware again. 2. If the error persists, perform the clean disk/format disk process. 3. Download the firmware from the Preboot menu.
99.00.12	Remote firmware upgrade (.bdl) was not performed. An invalid file was sent.	The firmware file sent was not the correct file. Download the firmware file again, making sure to download the file for the correct product model. Attempt the upgrade again.

Event log message	Description	Action
99.00.13 99.00.14	Remote firmware upgrade (.bdl) was not performed. An invalid file was sent.	The firmware file sent was not the correct file. Download the firmware file again, making sure to download the file for the correct product model. Attempt the upgrade again.
99.00.20	The bundle is not for this product.	Download the firmware file again, and attempt the upgrade again.
99.00.21	The bundle is not signed with the correct signature, or the signature is invalid.	
99.00.22	The bundle header version is not supported by this firmware.	
99.00.23	The package header version is not supported by this firmware.	
99.00.24 99.00.25 99.00.26	The format of the firmware bundle not correct.	

Clear jams

General paper jam guidelines

For jams of any type, check the following:

- Make sure that the paper guides are correctly positioned against the paper.
- Verify the paper meets the product specifications.
- Use the control panel or the HP Embedded Web Server to make sure that the tray is configured properly.

Jam locations
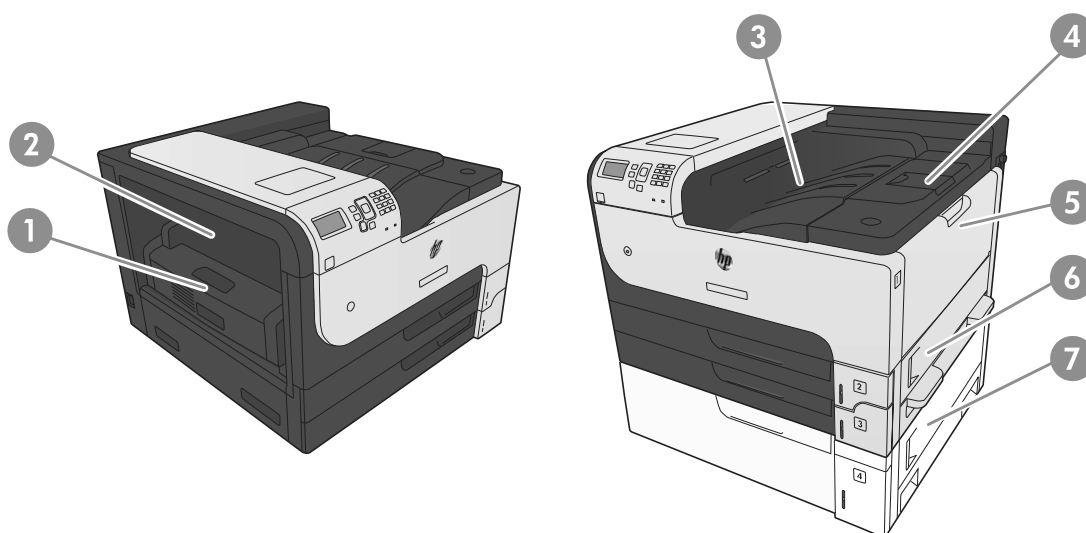
1	Duplexer
2	Fuser jam-access door
3	Output bin
4	Top cover (access to the toner cartridge)
5	Tray 1
6	Tray 2 jam-access door
7	Jam-access for the 500-sheet input tray

Auto-navigation for clearing jams

The auto-navigation feature assists you in clearing jams by providing step-by-step instructions on the control panel. When you complete a step, the product displays instructions for the next step until you have completed all steps in the procedure.

Clear jams in the output-bin area

1. If paper is visible from the output bin, grasp the leading edge and remove it.
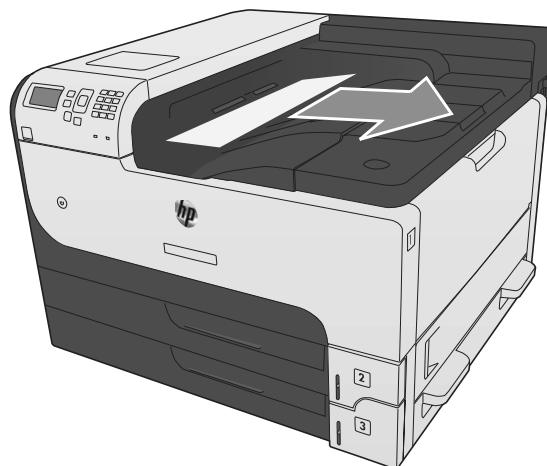
Clear jams in Tray 1

1. Slowly pull the jammed paper out of the product.
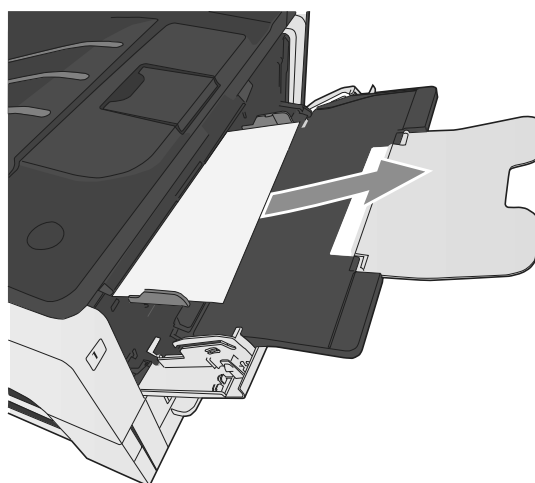
Clear jams in Tray 2 or Tray 3

1. Open the right-side access door. If the jammed page is visible, gently pull it out of the product.
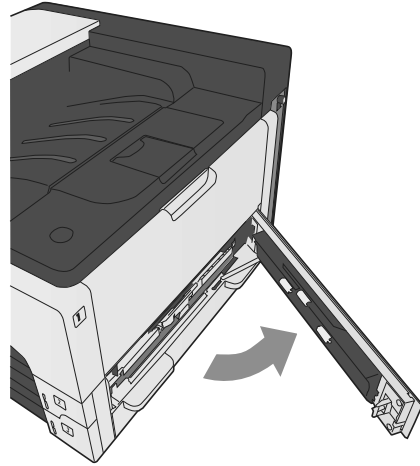
2. If you were not able to clear the jam by using the right-side access door, slide the tray out of the product.
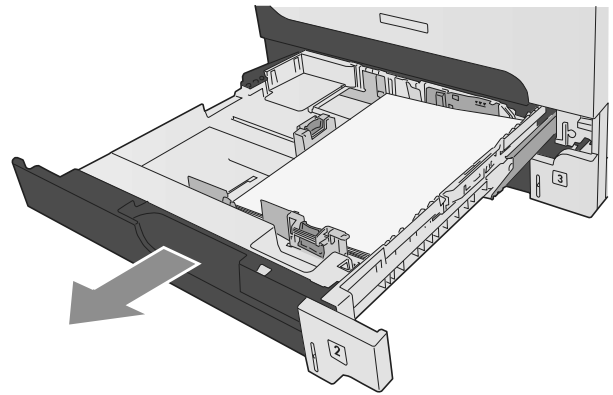
3. Remove any damaged paper from the tray.
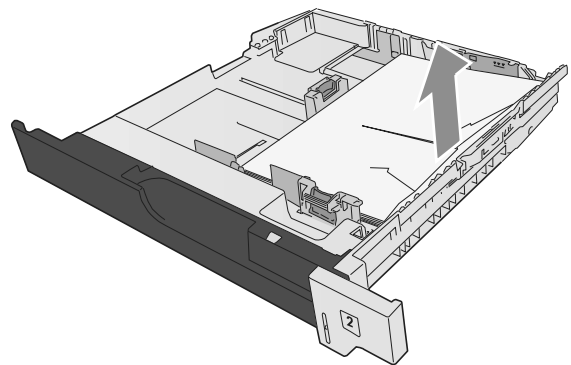
4. If the edge of the paper is visible in the feed area, slowly pull the paper toward the left side and then out of the product.

NOTE: Do not force the paper if it will not move easily. If the paper is stuck in a tray, try removing it through the tray above (if applicable) or through the toner-cartridge area.
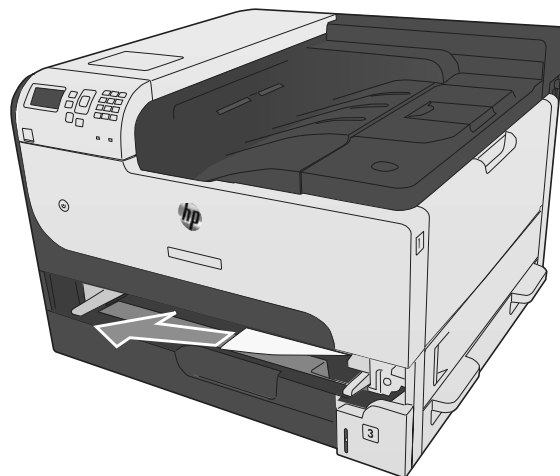
5. Close the tray.

NOTE: Before replacing the tray, make sure the paper is flat in the tray at all four corners and below the tabs on the guides.
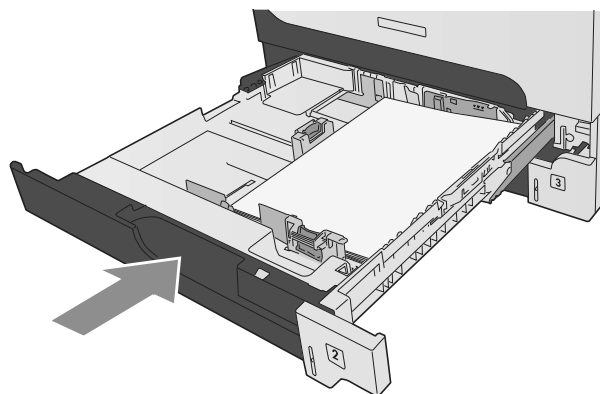
6. Close the right-side access door.
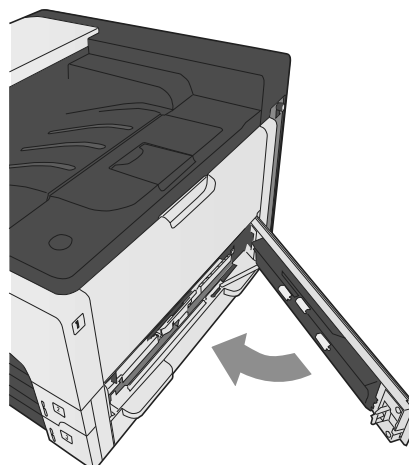
Clear jams in the 500-sheet trays

1. Open the right-side access door and the 500-sheet tray jam-access door.
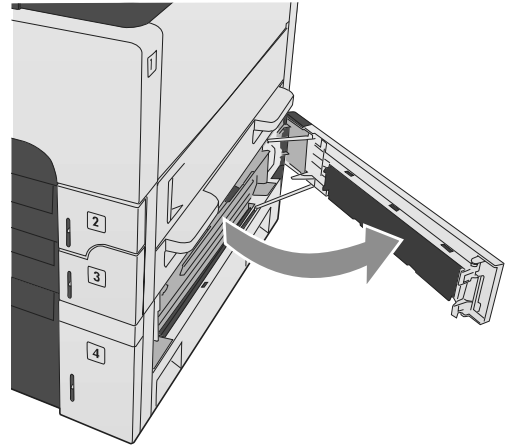
2. Remove the 500-sheet tray.
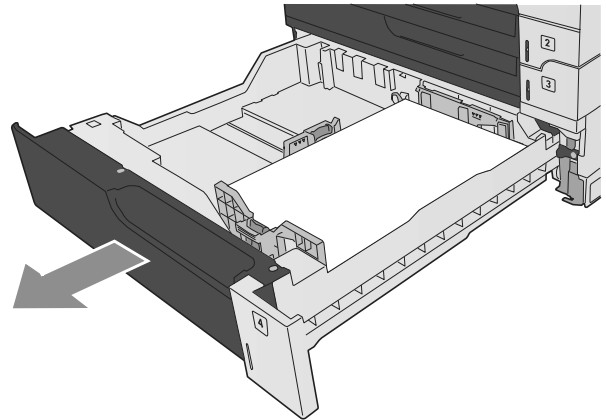
3. If the edge of the paper is visible in the feed area, slowly pull the paper toward the right side and out of the product.

   NOTE: Do not force the paper if it will not move easily. If the paper is stuck in a tray, try removing it through the tray above (if applicable) or through the upper, right door.

4. Close the 500-sheet tray.
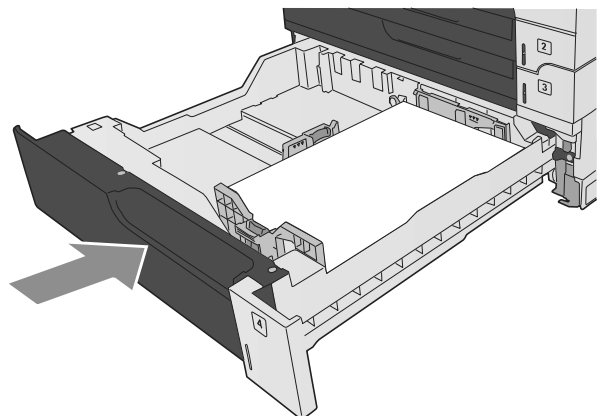
5. Close the right-side access door and the 500-sheet tray jam-access door.
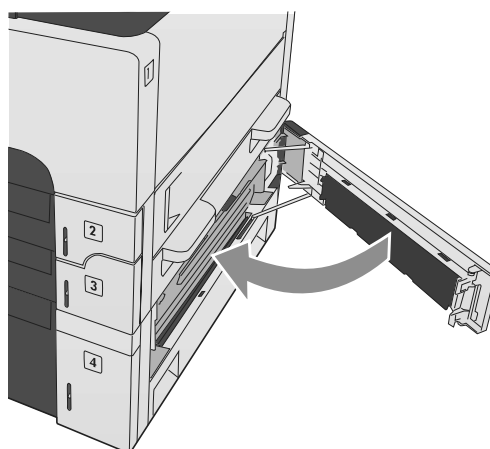
Clear jams in the 3,500-sheet high-capacity tray

1. Open the right and left sides of the tray.
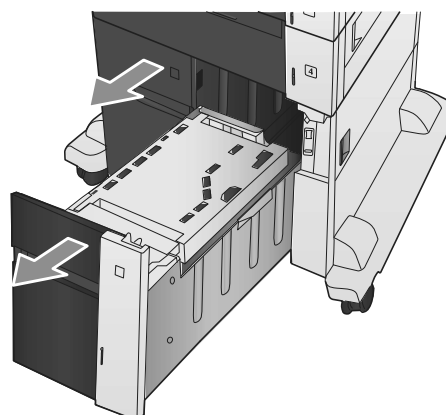
2. Remove any damaged sheets of paper.
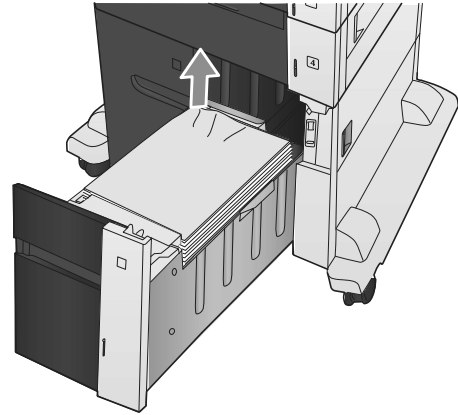
3. Above the right-side tray, press the green button to release the jam-access plate.
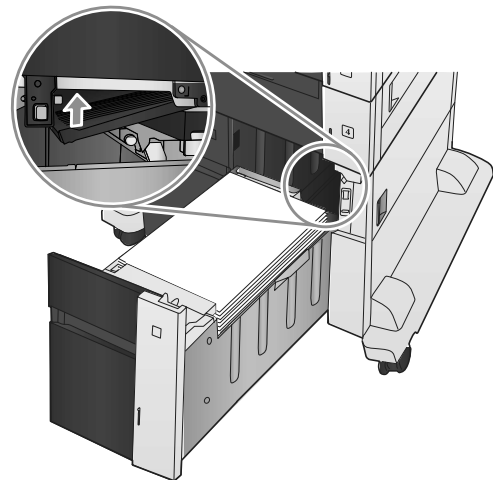
4. If jammed paper is in the feed area, pull it down to remove it.
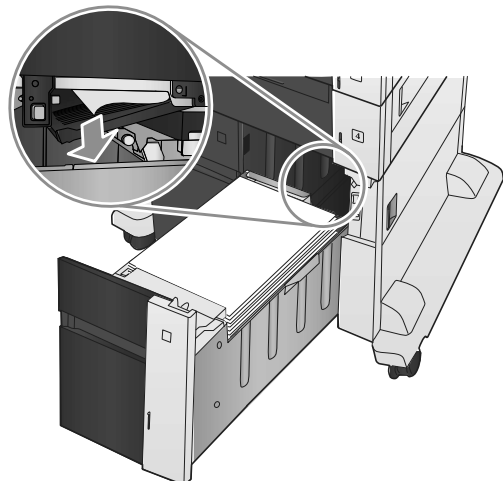
5. Push up on the jam-access plate to close it.
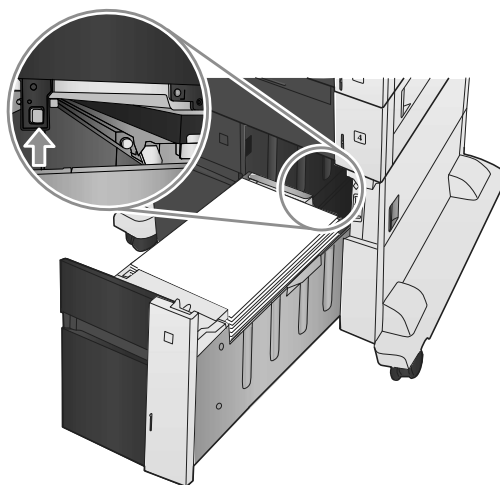
6. Close the right and left sides of the tray.
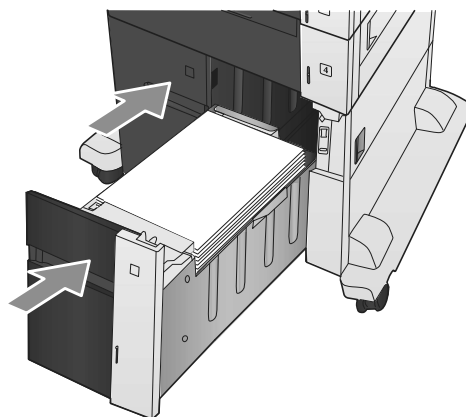
7. Open the jam-access door on the right side of the high-capacity tray cabinet.
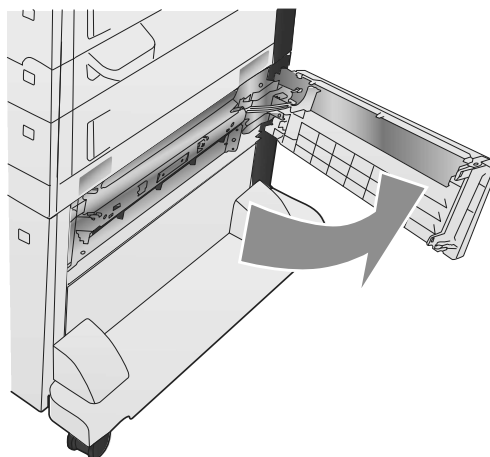
8. Lift up the jam-release plate and remove any jammed paper.
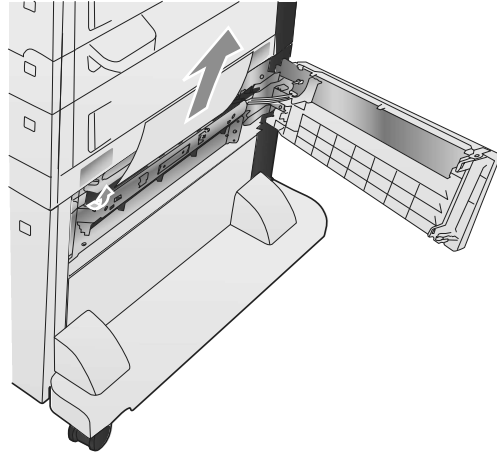
9. Close the jam-access door on the right side of the high-capacity tray cabinet.
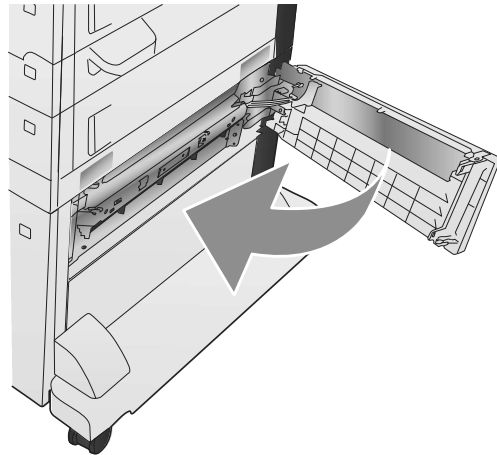
Clear jams from the toner-cartridge area

1. Press the cartridge-door-release button.
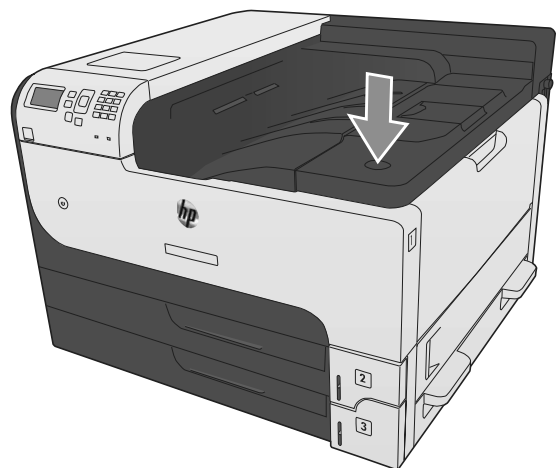
2. Open the cartridge door.
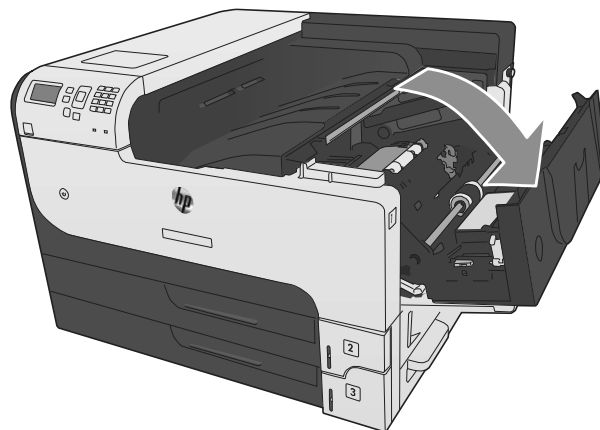
3. Remove the toner cartridge.

CAUTION: To prevent damage to the toner cartridge, do not expose it to light for more than a few minutes.
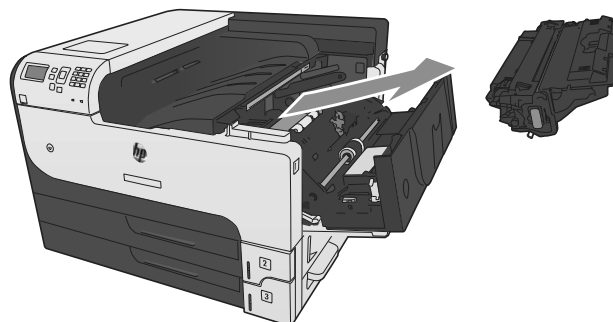
4. Pull the green tab down to open the metal plate inside the product.
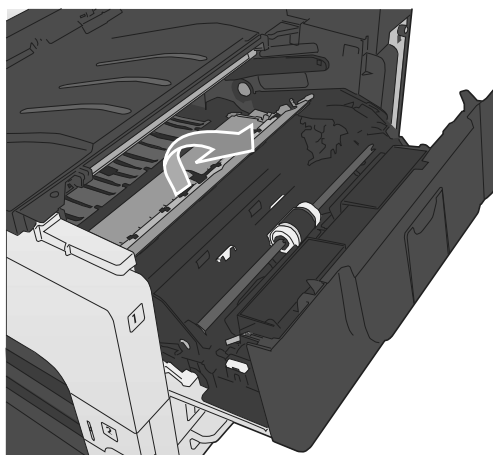
5. Slowly pull the paper out of the product. Be careful to not tear the paper.

   CAUTION: Avoid spilling loose toner. Use a dry, lint-free cloth to clean any toner that might have fallen into the product. If loose toner falls into the product, it might cause temporary problems with print quality. Loose toner should clear from the paper path after a few pages are printed. If toner gets on your clothing, wipe it off with a dry cloth and wash clothing in cold water. (Hot water sets toner into fabric.)
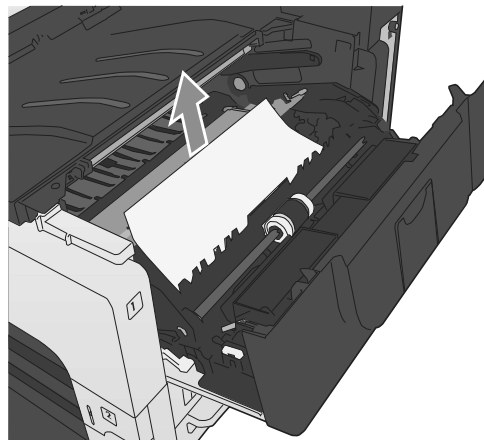
6. Replace the toner cartridge.
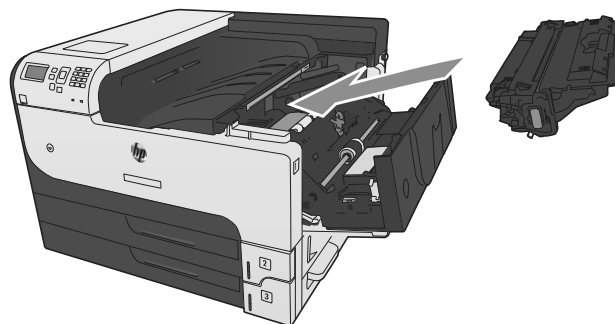
7. Close the cartridge door.
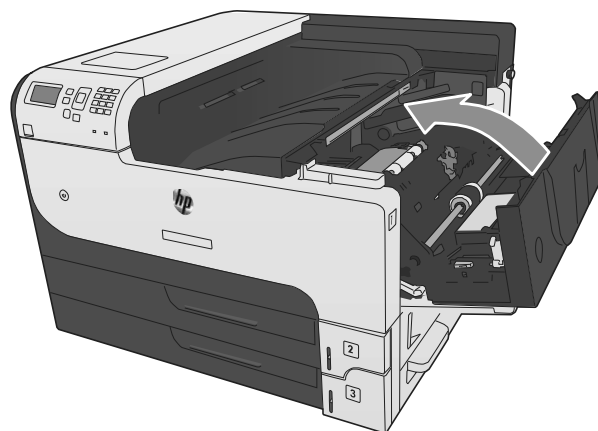
Clear jams in the fuser

1. Open the fuser door on the left side of the product.

    CAUTION: The fuser can be hot while the product is in use.
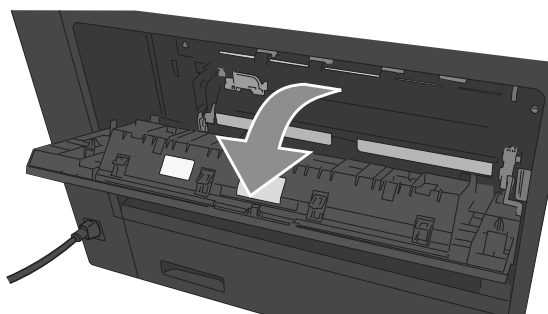
2. Push down on the green tab to open the fuser jam-access cover.
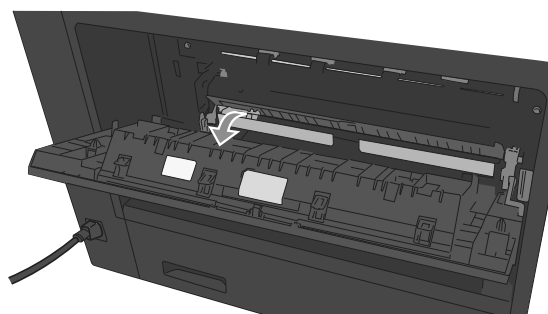
3. Remove any paper from the fuser.
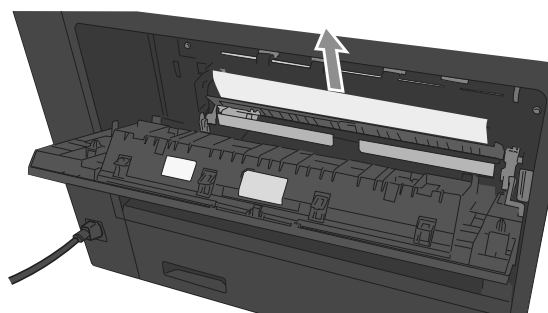
4. Close the fuser jam-access cover.
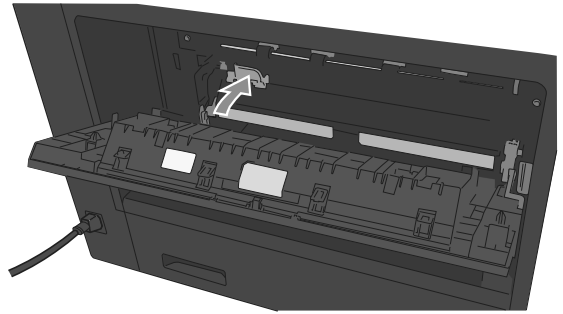
5. Close the fuser door.
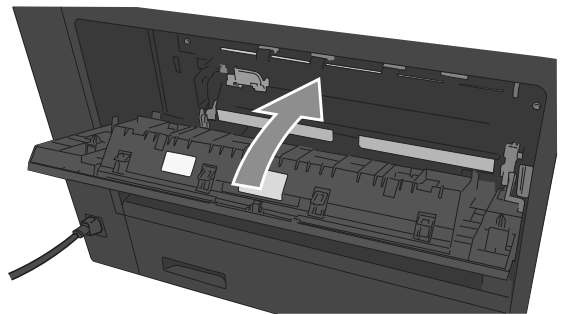
Clear jams from the duplexer

1. Remove the duplexer.
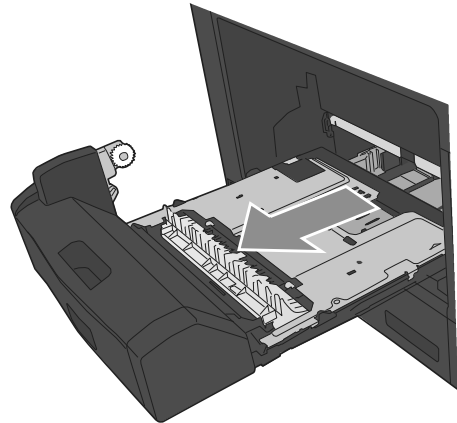
2. Remove any paper from the duplexer.
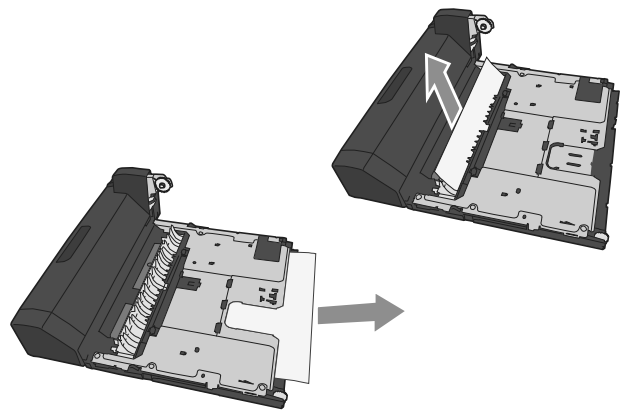
3. Reinstall the duplexer.
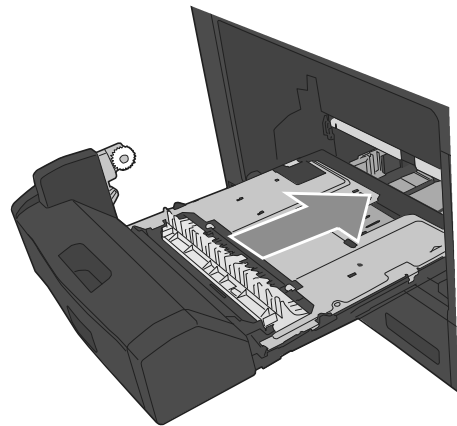
Solve paper-handling problems

- The product picks up multiple sheets of paper
- The product does not pick up paper

The product picks up multiple sheets of paper

If the product picks up multiple sheets of paper from the tray, try these solutions.

1. Remove the stack of paper from the tray and flex it, rotate it 180 degrees, and flip it over. *Do not fan the paper.* Return the stack of paper to the tray.

2. Use only paper that meets HP specifications for this product.

3. Use paper that is not wrinkled, folded, or damaged. If necessary, use paper from a different package.

4. Make sure the tray is not overfilled. If it is, remove the entire stack of paper from the tray, straighten the stack, and then return some of the paper to the tray.

5. Make sure the paper guides in the tray are adjusted correctly for the size of paper. Adjust the guides to the appropriate indentation in the tray.

6. Make sure the printing environment is within recommended specifications.

The product does not pick up paper

If the product does not pick up paper from the tray, try these solutions.

1. Open the product and remove any jammed sheets of paper.

2. Load the tray with the correct size of paper for your job.

3. Make sure the paper size and type are set correctly on the product control panel.

4. Make sure the paper guides in the tray are adjusted correctly for the size of paper. Adjust the guides to the appropriate indentation in the tray.

5. Check the product control panel to see if the product is waiting for you to acknowledge a prompt to feed the paper manually. Load paper, and continue.

6. The rollers above the tray might be contaminated. Clean the rollers with a lint-free cloth dampened with warm water.

Use manual print modes

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

Select a manual print mode

1. At the product control panel, press the Home 🏠 button.

2. Open the following menus:

   - **Administration**

   - **General Settings**

   - **Print Quality**

   - **Adjust Paper Types**

3. Select a paper type, and then select the mode to adjust.

4. Select a value for the mode, and then press the OK button.

Table 2-50 Print modes under the Adjust Paper Types sub menu

Print Mode
• **Normal mode**
• **Heavy Mode**
• **Card Stock Mode**
• **Transparency Mode**
• **Envelope Control**
• **Label Mode**
• **Extra Heavy Mode**
• **Light Mode**
• **Extra Light Mode**
• **Rough Mode**
• **Bond mode**
• **Mid-weight mode**
NOTE: Not all print modes are available for all paper types.

Table 2-50 Print modes under the Adjust Paper Types sub menu (continued)

Resistance Mode	Set to **Up** to resolve print-quality issues caused by poor secondary transfer in low-humidity environments with resistive or rough surface paper.
Humidity Mode	With glossy film, set to **High** when the product is in a high-humidity environment and print-quality defects occur on HP Tough Paper or Opaque film. With transparencies, set to **High** when the product is in a high-humidity environment and print-quality defects occur on color transparencies on the first page of a print job. With all other paper types, set to **High** when the product is in a high-humidity environment and light density occurs on the first page of a print job.

Table 2-51 MP modes under the Optimize submenu

Line Detail	**Normal** **Up** **Off**
Environment	Set to **Low Temp** if the product is operating in a low-temperature environment and you are having problems with print quality such as blisters in the printed image.
Restore Optimize	Use this item to reset the menu defaults.

Print quality troubleshooting tools

Repetitive defects measurements

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 figure below to identify the component that is causing the defect.

Distance between defects	Product components that cause the defect
32 mm	Duplex reverse roller or duplex re-pickup roller
38 mm	Input accessory feed roller
42 mm	Output roller, intermediate output roller
43 mm	Fuser output roller
44 mm	Primary charging roller, cassette separation roller, registration roller, output accessory feed roller 1, re-pickup roller
47 mm	Transfer roller
48 mm	Feed roller
57 mm	Developer roller, output accessory feed roller 2
75 mm	Fuser film
79 mm	
94 mm	Pressure sensitive drum, pressure roller
98 mm	Cassette pickup roller

NOTE: The primary charging roller, photosensitive drum and developing roller cannot be cleaned. If these rollers are indicated, replace the toner cartridge.

Solve image-quality problems

Image defect examples

These examples identify the most common print-quality problems.

Table 2-52 Image defect examples
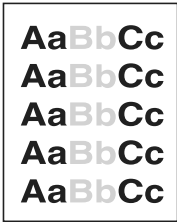
Problem	Image example	Solution
Blank page		1. The shutter on the toner cartridge might be damaged. Replace the toner cartridge. 2. The laser scanner shutter on the laser scanner might be damaged. Replace the laser scanner. 3. The laser scanner might be damaged. Replace the laser scanner. 4. Poor developing bias with the cartridge contacts. Clean the contact on the toner cartridge. 5. The high-voltage power supply might be damaged. Replace the high-voltage power supply.
Light print (partial page)	AaBbCc AaBbCc AaBbCc AaBbCc AaBbCc	1. Make sure that the toner cartridge is fully installed. 2. The toner cartridge might be almost empty. Check the supplies status, and replace the toner cartridge if necessary. 3. The paper might not meet HP specifications (for example, the paper is too moist or too rough).
Light print (entire page)	AaBbCc AaBbCc AaBbCc AaBbCc AaBbCc	1. Make sure that the toner cartridge is fully installed. 2. Make sure that the **Economode** setting is turned off at the control panel and in the print driver. For more information, see the product user guide. 3. Open the **Administration** menu at the product control panel. Open the **General Settings** menu and then open the **Print Quality** menu. Increase the **Toner density** setting. 4. Try using a different type of paper. 5. The toner cartridge might be reaching its estimated end of life. Check the supplies status, and replace the toner cartridge if necessary.

Table 2-52 **Image defect examples (continued)**
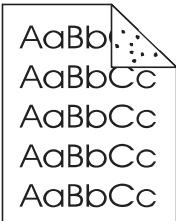
Problem	Image example	Solution
		Perform the following test
		Stop a print job during the print operation before it is complete, then remove the toner cartridge. Open the photosensitive drum shield, and look at the toner image on the drum.
		◦ If the image is not fully transferring to the page, replace the transfer roller.
		◦ If the toner on the drum is faint, replace the laser scanner.
		6. The transfer roller shaft might be dirty. Remove the transfer roller and clean the shaft to ensure good contact.
		7. If the transfer roller is deformed or damaged, replace the roller.
		8. The high-voltage power supply might be damaged. Replace the high-voltage power supply.
		9. The laser scanner might be damaged. Replace the laser scanner.
		If replacing the laser scanner does not resolve the problem and the high-voltage power supply was not replaced (step 8), replace the high-voltage power supply.
Specks (front or back of the page is dirty)	AaBb AaBbCc AaBbCc AaBbCc AaBbCc	Specks might appear on a page after a jam has been cleared.
		1. The paper might be dirty. Use a new package of paper. make sure that the paper is stored correctly. See your product user guide.
		2. Print a few more pages to see if the problem corrects itself.
		3. Clean the inside of the product and run a cleaning page to clean the fuser.
		4. Try using a different type of paper.
		5. Check the toner cartridge for leaks. If the toner cartridge is leaking, replace it.
		6. The cassette pickup roller might be dirty. Clean the roller. If it cannot be cleaned, replace the roller.
		7. Repetitive dirt marks can be caused by the registration roller, transfer roller or pressure roller. Use the repetitive defects ruler to identify the problem, and then replace the appropriate assembly.
		8. The media-feed guide, or the fuser-inlet guide might be dirty. Clean the guide.
		9. The delivery rollers might be dirty. Clean the rollers.

Table 2-52 Image defect examples (continued)
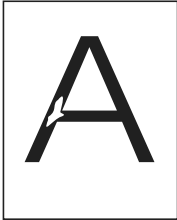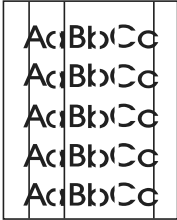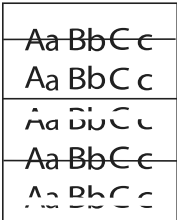
Problem	Image example	Solution
Dropouts		1. Make sure that the environmental specifications for the product are being met.
		2. Try using a smoother paper.
		3. If the transfer roller is deformed or damaged, replace the roller.
		4. The high-voltage contact of the static eliminator with the toner cartridge might be dirty. Clean the contact.
		5. The photosensitive drum, primary charging roller, or developing roller might be damaged. Replace the toner cartridge.
		6. The fuser film might be scratched or dirty. Replace the fuser.
		7. The high-voltage power supply might be damaged. Replace the high-voltage power supply.
Lines		1. Print a few more pages to see if the problem corrects itself.
		2. Clean the inside of the product and run a cleaning page to clean the fuser.
		3. The photosensitive drum might be scratched. Replace the toner cartridge.
		4. The fuser-inlet guide might be dirty. Clean the guide.
		5. The fuser film might be scratched. Replace the fuser.
Horizontal lines		1. The photosensitive drum might be scratched. Replace the toner cartridge.
		2. The fuser film might be dirty or damaged. Replace the fuser.

Table 2-52 Image defect examples (continued)
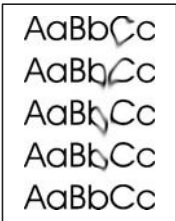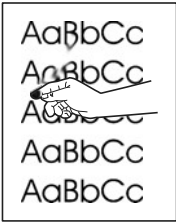
Problem	Image example	Solution
Gray background (image is obviously dark)	AaBbCc AaBbCc AaBbCc AaBbCc AaBbCc	1. Do not use paper that has already been run through the product. 2. Try using a different type of paper. 3. Print a few more pages to see if the problem corrects itself. 4. Turn over the paper in the tray. Also, try rotating the paper 180°. 5. Open the **Administration** menu at the product control panel. Open the **General Settings** menu and then open the **Print Quality** menu. Increase the **Toner density** setting. 6. Make sure that the environmental specifications for the product are being met. 7. The toner cartridge might need to be replaced. 8. The print-cartridge ground or bias contacts might be dirty. Clean the contacts. 9. Stop a print job before it is complete, and then remove the toner cartridge. Open the photosensitive drum shield, and look at the toner image on the drum. ◦ If the image is not fully transferring to the page, replace the transfer roller. ◦ If the toner on the drum is faint, replace the laser scanner. 10. The high-voltage power supply might be damaged. Replace the high-voltage power supply.
Toner smear	AaBbCc AaBbCc AaBbCc AaBbCc AaBbCc	1. Print a few more pages to see if the problem corrects itself. 2. Try using a different type of paper. 3. Make sure that the environmental specifications for the product are being met. 4. Clean the inside of the product and run a cleaning page to clean the fuser. 5. The toner cartridge might need to be replaced.
Loose toner	AaBbCc AaBbCc AaBbCc AaBbCc AaBbCc	Loose toner, in this context, is defined as toner that can be rubbed off the page. 1. If you have observed a rougher texture on one side of your paper, try printing on the smoother side. 2. Make sure that the environmental specifications for the product are being met. 3. Make sure that the type and quality of the paper you are using meet HP specifications. For more information, see the product user guide. 4. The pressure roller is dirty, the fuser film is scratched, or a foreign substance is on the fuser film. Use the **Print Fuser Test Page** option in the **Troubleshooting** menu to test the fuser. If the error persists, replace the fuser.

Table 2-52 Image defect examples (continued)
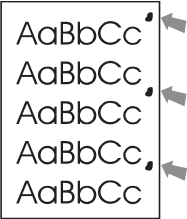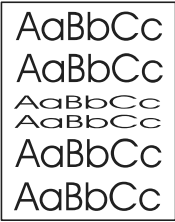
Problem	Image example	Solution

Repeat defects	AaBbCc
	AaBbCc
	AaBbCc
	AaBbCc
	AaBbCc
		1. Print a few more pages to see if the problem corrects itself.
		
		2. Clean the inside of the product and run a cleaning page to clean the fuser.
		
		3. Use the repetitive defect ruler to determine if the defect is caused by the fuser or the toner cartridge.
		
		  ◦ If the toner cartridge is causing the defect, run the print/stop test at the 500 msec setting. If the test shows a defect, replace the toner cartridge.
		
		  ◦ Use the **Print Fuser Test Page** option in the **Troubleshooting** menu to test the fuser. If the error persists, replace the fuser.

Repeat image		This type of defect might occur when using preprinted forms or a large quantity of narrow paper. Verify that the preprinted ink used on forms meet HP specifications for use in laser printers. 1. Print a few more pages to see if the problem corrects itself. 2. Make sure that the type and quality of the paper you are using meet HP specifications. For more information, see the product user guide. 3. Verify that the product is configured for the correct paper type. 4. Use the **Print Fuser Test Page** option in the **Troubleshooting** menu to test the fuser. If the error persists, replace the fuser.
Misformed characters	AaBbCc AaBbCc AaBbCc AaBbCc AaBbCc AaBbCc	1. Print a few more pages to see if the problem corrects itself. 2. Make sure that the environmental specifications for the product are being met. 3. Make sure that the type and quality of the paper you are using meet HP specifications. For more information, see the product user guide. 4. The laser scanner wire connectors might have poor contact. Reconnect the connectors (J1900 and J801). 5. The laser scanner might be damaged. Replace the laser scanner.
Page skew	AaBbCc AaBbCc AaBbCc AaBbCc AaBbCc	1. Print a few more pages to see if the problem corrects itself. 2. Verify that no torn pieces of paper are inside the product. 3. Make sure that paper is loaded correctly and that all adjustments have been made. Make sure that the guides in the tray are not too tight or too loose against the paper. 4. Turn over the paper in the tray. Also, try rotating the paper 180°. 5. Make sure that the type and quality of the paper you are using meet HP specifications. For more information, see the product user guide. 6. Make sure that the environmental specifications for the product are being met.

Table 2-52 **Image defect examples (continued)**
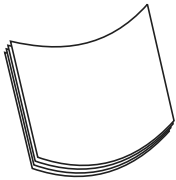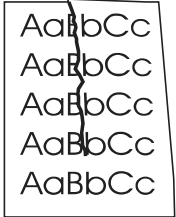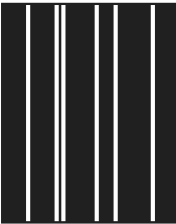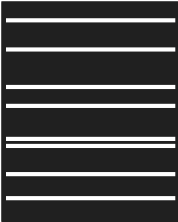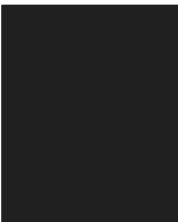
Problem	Image example	Solution
Curl or wave		1. Turn over the paper in the tray. Also, try rotating the paper 180°.
		2. Make sure that the type and quality of the paper you are using meet HP specifications. For more information, see the product user guide.
		3. Make sure that the environmental specifications for the product are being met.
		4. Try printing to a different output bin.
Wrinkles or creases	AaBbCc AaBbCc AaBbCc AaBbCc AaBbCc	1. Print a few more pages to see if the problem corrects itself.
		2. Make sure that the environmental specifications for the product are being met.
		3. Turn over the paper in the tray. Also, try rotating the paper 180°.
		4. Make sure that paper is loaded correctly and all adjustments have been made. For more information, see the product user guide.
		5. Make sure that the type and quality of the paper you are using meet HP specifications. See the product user guide.
		6. If envelopes are creasing, try storing envelopes so that they lie flat.
Vertical white lines		1. Print a few more pages to see if the problem corrects itself.
		2. Make sure that the type and quality of the paper you are using meet HP specifications. For more information, see the product user guide.
		3. The photosensitive drum might be scratched, or the developing roller might be damaged. Replace the toner cartridge.
		4. The laser beam window might be dirty. Clean the laser beam window on the laser scanner.
		5. The fuser inlet guide might be dirty. Clean the guide.
		6. The fuser film might be scratched or dirty. Replace the fuser.
		7. The laser scanner might be damaged. Replace the laser scanner.
Horizontal white lines		1. The photosensitive drum might be scratched, or the developing roller might be damaged. Replace the toner cartridge.
		2. The fuser film might be damaged. Replace the fuser.
Black page		1. The toner-cartridge ground or bias contacts might be dirty. Clean the contacts.
		2. The primary charging roller might be defective. Replace the toner cartridge.
		3. The high-voltage power supply might be damaged. Replace the high-voltage power supply.

Table 2-52 Image defect examples (continued)
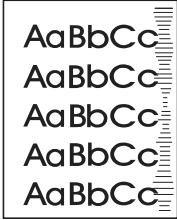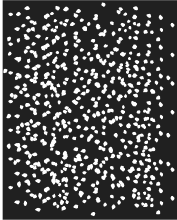
Problem	Image example	Solution
Tire tracks	AaBbCc AaBbCc AaBbCc AaBbCc AaBbCc	This defect typically occurs when the toner cartridge has far exceeded its estimated life. For example, if you are printing a very large quantity of pages with very little toner coverage. 1. The toner cartridge might need to be replaced. 2. Reduce the number of pages that you print with very low toner coverage.
White spots on black or in the image		1. Print a few more pages to see if the problem corrects itself. 2. Make sure that the type and quality of the paper you are using meet HP specifications. For more information, see the product user guide. 3. Make sure that the environmental specifications for the product are being met. 4. The toner cartridge might need to be replaced. 5. If the transfer roller is deformed or damaged, replace the roller. 6. The transfer roller shaft might be dirty (poor contact). Remove the transfer roller and clean the shaft. 7. The high-voltage power supply might be damaged. Replace the high-voltage power supply.
Scattered lines		1. Make sure that the type and quality of the paper you are using meet HP specifications. For more information, see the product user guide. 2. Make sure that the environmental specifications for the product are being met. 3. Turn over the paper in the tray. Also, try rotating the paper 180°. 4. Change the toner density. Open the **Administration** menu at the product control panel. Open the **General Settings** menu and then open the **Print Quality** menu. Change the **Toner density** setting. 5. Open the **Administration** menu at the product control panel. Open the **General Settings** menu and then open the **Print Quality** menu. Open the **Optimize** menu and set the **Line Detail** setting to **Up**.

Table 2-52 **Image defect examples (continued)**

Problem	Image example	Solution
Blurred print		1. Make sure that the type and quality of the paper you are using meet HP specifications. For more information, see the product user guide. 2. Make sure that the environmental specifications for the product are being met. 3. Turn over the paper in the tray. Also, try rotating the paper 180°. 4. Do not use paper that already has been run through the product. 5. Decrease the toner density. Open the **Administration** menu at the product control panel. Open the **General Settings** menu and then open the **Print Quality** menu. Decrease the **Toner density** setting.
Random image repetition		If an image that appears at the top of the page (in solid black) repeats further down the page (in a gray field), the toner might not have been completely erased from the last job. (The repeated image might be lighter or darker than the field it appears in.) ● Change the tone (darkness) of the field that the repeated image appears in. ● Change the order in which the images are printed. For example, have the lighter image at the top of the page, and the darker image farther down the page. ● From your software program, rotate the whole page 180° to print the lighter image first. ● If the defect occurs later in a print job, turn the product off for 10 minutes, and then turn it on to restart the print job.

Clean the product

Over time, particles of toner and paper accumulate inside the product. This can cause print-quality problems during printing. Cleaning the product eliminates or reduces these problems.

Clean the paper path and print-cartridge areas every time that you change the toner cartridge or whenever print-quality problems occur. As much as possible, keep the product free from dust and debris.

To clean the product exterior, use a soft, water-moistened cloth.

Print a cleaning page

Print a cleaning page to remove dust and excess toner from the paper path if you are having any of the following problems:

- Specks of toner are on the printed pages.

- Toner is smearing on the printed pages.

- Repeated marks occur on the printed pages.

Use the following procedure to print a cleaning page.

1. On the product control panel, press the Home 🏠 button.

2. Open the following menus:

    - **Device Maintenance**

    - **Calibration/Cleaning**

    - **Print Cleaning Page**

3. The cleaning process can take several minutes. When it is finished, discard the printed page.

Solve performance problems

Table 2-53 Solve performance problems

Problem	Cause	Solution
Pages print but are totally blank.	The document might contain blank pages.	Check the document that you are printing to see if content displays on all of the pages.
	The product might be malfunctioning.	To check the product, print a configuration page.
Pages print very slowly.	Heavier paper types can slow the print job.	Print on a different type of paper.
	Complex pages can print slowly.	Proper fusing might require a slower print speed to ensure the best print quality.
	Large batches, narrow paper, and special paper such as gloss, transparency, cardstock, and HP Tough Paper can slow the print job.	Print in smaller batches, on a different type of paper, or on a different size of paper.
Pages did not print.	The product might not be pulling paper correctly.	Make sure paper is loaded in the tray correctly.
	The paper is jamming in the product.	Clear the jam.
	The USB cable might be defective or incorrectly connected.	- Disconnect the USB cable at both ends and reconnect it. - Try printing a job that has printed in the past. - Try using a different USB cable.
	Other devices are running on your computer.	The product might not share a USB port. If you have an external hard drive or network switchbox that is connected to the same port as the product, the other device might be interfering. To connect and use the product, you must disconnect the other device or you must use two USB ports on the computer.

Solve connectivity problems

Solve USB connection problems

If you have connected the product directly to a computer, check the cable.

- Verify that the cable is connected to the computer and to the product.

- Verify that the cable is not longer than 2 m (6.65 ft). Try using a shorter cable.

- Verify that the cable is working correctly by connecting it to another product. Replace the cable if necessary.

Solve wired network problems

Check the following items to verify that the product is communicating with the network. Before beginning, print a configuration page from the product control panel and locate the product IP address that is listed on this page.

- The product has a poor physical connection.

- The computer is using the incorrect IP address for the product

- The computer is unable to communicate with the product

- The product is using incorrect link and duplex settings for the network

- New software programs might be causing compatibility problems

- The computer or workstation might be set up incorrectly

- The product is disabled, or other network settings are incorrect

The product has a poor physical connection.

1. Verify that the product is attached to the correct network port using a cable of the correct length.

2. Verify that cable connections are secure.

3. Look at the network port connection on the back of the product, and verify that the amber activity light and the green link-status light are lit.

4. If the problem continues, try a different cable or port on the hub.

The computer is using the incorrect IP address for the product

1. Open the printer properties and click the **Ports** tab. Verify that the current IP address for the product is selected. The product IP address is listed on the product configuration page.

2. If you installed the product using the HP standard TCP/IP port, select the box labeled **Always print to this printer, even if its IP address changes.**

3. If you installed the product using a Microsoft standard TCP/IP port, use the hostname instead of the IP address.

4. If the IP address is correct, delete the product and then add it again.

The computer is unable to communicate with the product

1. Test network communication by pinging the product.

   a. Open a command-line prompt on your computer. For Windows, click **Start**, click **Run**, and then type cmd.

   b. Type ping followed by the IP address for your product.

   c. If the window displays round-trip times, the network is working.

2. If the ping command failed, verify that the network hubs are on, and then verify that the network settings, the product, and the computer are all configured for the same network.

The product is using incorrect link and duplex settings for the network

Hewlett-Packard recommends leaving this setting in automatic mode (the default setting). If you change these settings, you must also change them for your network.

New software programs might be causing compatibility problems

Verify that any new software programs are correctly installed and that they use the correct print driver.

The computer or workstation might be set up incorrectly

1. Check the network drivers, print drivers, and the network redirection.

2. Verify that the operating system is configured correctly.

The product is disabled, or other network settings are incorrect

1. Review the configuration page to check the status of the network protocol. Enable it if necessary.

2. Reconfigure the network settings if necessary.

Service mode functions

Service menu

The **Service** menu is PIN-protected for added security. Only authorized service people have access to the **Service** menu. When you select **Service** from the list of menus, the product prompts you to type an eight-digit personal identification number (PIN).

NOTE: The product automatically exits the **Service** menu after about one minute if no items are selected or changed.

1. At the product control panel, press the Home ⌂ button.

2. Open the **Device Maintenance** button.

3. Open the **Service** menu.

4. Select the **Service Access Code** option.

5. Enter the following service access code for this product: **11071212**, and then press the OK button.

The following menu items appear in the **Service** menu:

First level	Second level	Value	Description
Print Event Log			Allows you to print or view the product event log.
View Event Log			
Clear Event Log			Use this item to clear the product event log.
Cycle Counts	**Total Engine Cycles**		Set the page count that was stored in NVRAM prior to installing a new formatter.
	Refurbish Cycle Count		Use this item to record the page count when the product was refurbished.
	Maintenance Kit Count		
	Maintenance Kit Interval		
Serial Number			Set the serial number.
Service ID			Use this item to show the date that the product was first used on the control panel. This eliminates the need for users to keep paper receipts for proof of warranty.

First level	Second level	Value	Description
Cold Reset Paper			When you perform a cold reset, the paper size that is stored in NVRAM is reset to the default factory setting. If you replace a formatter board in a country/region that uses A4 as the standard paper size, use this menu to reset the default paper size to A4. LETTER and A4 are the only available values.
Test Support	**Continuous Print from USB**		

Product resets

Restore factory-set defaults

1. On the product control panel, press the Home 🏠 button.

2. Open the following menus:

   - **Administration**

   - **General Settings**

   - **Restore Factory Settings**

3. Select the **Reset** option, and then press the OK button.

Restore the service ID

Restore the service ID

If you replace the formatter, the date is lost. Use this menu item to reset the date to the original date that the product was first used. The date format is YYDDD. Use the following formula to calculate the dates:

1. To calculate YY, subtract 1990 from the calendar year. For instance, if the product was first used in 2002, calculate YY as follows: 2002 - 1990 = 12. YY = 12.

2. Subtract 1 from 10 (October is the tenth month of the year): 10 - 1 = 9.

   - Multiply 9 by 30: 9 x 30 = 270 or add 17 to 270: 270 + 17 = 287. Thus, DDD = 287.

Convert the service ID to an actual date

You can use the product Service ID number to determine whether the product is still under warranty. Use the following formula to convert the Service ID into the installation date as follows:

1. Add 1990 to YY to get the actual year that the product was installed.

2. Divide DDD by 30. If there is a remainder, add 1 to the result. This is the month.

3. The remainder from the calculation in step 2 is the date.

Using the Service ID 12287 as an example, the date conversion is as follows:

1. 12 + 1990 = 2002, so the year is 2002.

2. 287 divided by 30 = 9 with a remainder of 17. Because there is a remainder, add 1 to 9 to get 10, which represents October.

3. The remainder in step 2 is 17, so that is the date.

4. The complete date is 17-October-2002.

NOTE: A six-day grace period is built into the date system.

Product cold reset

Cold reset using the Preboot menu

1. Turn the product on.

2. Press the Stop ⊗ button when the Ready, Data, and Attention LEDs are illuminated solid until the **Preboot** menu opens.

NOTE: The window for accessing the Preboot menu, while the Ready, Data, and Attention LEDs are illuminated solid, is around one second. You can press the button repeatedly while the product is starting up to make you sure you gain access to the Preboot menu.

3. Use the down arrow ▼ button to highlight the **3 Administrator** item, and then press the OK button.

4. Use the down arrow ▼ button to highlight the **8 Startup Options** item, and then press the OK button.

5. Use the down arrow ▼ button to highlight the **2 Cold Reset** item, and then press the OK button.

6. Select the **1 Continue** item, and then press the OK button.

NOTE: The product will initialize.

Format Disk and Partial Clean functions

Active and repository firmware locations

The firmware bundle consists of multiple parts. The main components are the Windows CE Operating System and the product/peripheral firmware files.

There are two locations/partitions on the hard drive where the firmware components are stored:

● The Active – where the Operating System and firmware currently are executing

● The Repository – the recovery location

If the Active location is damaged, or a **3 Partial Clean** was performed, the product automatically copies over the OS and firmware files from the Repository location and the product recovers.

If both the Active and Repository locations are damaged, or a **2 Format Disk** was performed, then both locations are gone and the error message **99.09.67** displays on the control-panel display. The user must upload the firmware to the product in order for it to function again.

⚠ **CAUTION:** The **2 Format Disk** option performs a disk initialization for the entire disk. The operating system, firmware files, and third party files (among other files) will be completely lost. HP does not recommend this action with out first contacting support.

Partial Clean

The **3 Partial Clean** option erases all partitions and data on the disk drive, except for the firmware repository where a backup copy of the firmware file is stored. This allows the disk drive to be reformatted without having to download a firmware upgrade file to return the product to a bootable state.

Characteristics of a partial clean

● Customer-defined settings, third-party solutions, firmware files, and the operating system are deleted.

● Rebooting the product restores the firmware files from the Repository location, but does not restore any customer-defined settings.

● For previous HP products, a Hard Disk Initialization is similar to executing the **3 Partial Clean** function for this product.

⚠ **CAUTION:** HP recommends backing-up product configuration data before executing a **3 Partial Clean** if you need to retain customer-defined settings. See the **Backup/Restore** item in the **Device Maintenance** menu.

Reasons for performing partial clean

● The product continually boots up in an error state.

📝 **NOTE:** Try clearing the error prior to executing a **3 Partial Clean**.

● The product will not respond to commands from the control panel.

- Executing the **3 Partial Clean** function is helpful for troubleshooting hard disk problems.

- To reset the product by deleting all solutions and customer-defined settings.

- The product default settings are not properly working.

Execute a 3 Partial Clean

1. Turn the product on.

2. Press the Stop ⊗ button when the Ready, Data, and Attention LEDs are illuminated solid until the **Preboot** menu opens.

    Touch the HP logo that displays in the center of the touchscreen until the **Preboot** menu opens.

3. Use the down arrow ▼ button to highlight the **3 Administrator** item, and then press the OK button.

4. Use the down arrow ▼ button to highlight the **3 Partial Clean** item, and then press the OK button.

5. Press the OK button again.

6. Select the **1 Continue** item, and then press the OK button.

    NOTE: The product initializes.

Format Disk

The **2 Format Disk** option erases the entire disk drive.

CAUTION: After executing a **2 Format Disk** option, the product is *not* bootable.

Characteristics of a format disk

- Customer-defined settings, third-party solutions, firmware files, and the operating system are deleted.

    NOTE: Rebooting the product *does not* restore the firmware files.

- Rebooting the product restores the firmware files from the Repository location, but does not restore any customer-defined settings.

- After executing the **2 Format Disk** function, the message **99.09.67** displays on the control panel.

- After executing the **2 Format Disk** function, the product firmware must be reloaded.

⚠ **CAUTION:**   HP recommends that you do not use the **2 Format Disk** option unless an error occurs and the solution in the product service manual recommends this solution. After executing the **2 Format Disk** function, the product is unusable.

HP recommends backing-up product configuration data before executing a **2 Format Disk** if you need to retain customer-defined settings. See the **Backup/Restore** item in the **Device Maintenance** menu.

Reasons for performing a format disk

●   The product continually boots up in an error state.

📝 **NOTE:**   Try clearing the error prior to executing a **2 Format Disk**.

●   The product will not respond to commands from the control panel.

●   Executing the **2 Format Disk** function is helpful for troubleshooting hard disk problems.

●   To reset the product by deleting all solutions and customer-defined settings.

Execute a 2 Format Disk

1.   Turn the product on.

2.   Touch the HP logo that displays in the center of the touchscreen until the **Preboot** menu opens.

     Press the Stop ⊗ button when the Ready, Data, and Attention LEDs are illuminated solid until the **Preboot** menu opens.

3.   Use the down arrow ▼ button to highlight the **3 Administrator** item, and then press the OK button.

4.   Use the down arrow ▼ button to highlight the **2 Format Disk** item, and then press the OK button.

5.   Press the OK button again.

📝 **NOTE:**   When the **2 Format Disk** operation is complete, you will need to reload the product firmware.

Product firmware upgrades

To download the most recent firmware upgrade for the product, go to www.hp.com/go/lj700M712_firmware.

Determine the installed revision of firmware

Print a configuration page to determine the installed revision of firmware.

On the configuration page, look in the section marked Device Information for the firmware datecode and firmware revision.

Firmware datecode and firmware revision examples

- 20100831 (firmware datecode)

- 103067_104746 (firmware revision)

Perform a firmware upgrade

The firmware bundle is a `xxxxxxx.bdl` file. This file requires an interactive upgrade method. You cannot upgrade the product using the traditional FTP, LPR or Port 9100 methods of upgrading. Use one of the following methods to upgrade the firmware for this product.

Embedded Web Server

1. Open an browser window.

2. Enter the product IP address in the URL line.

3. Select the **Firmware upgrade** link from within the **Troubleshooting** tab.

   NOTE: If you get a warning screen, follow the instructions for setting an administrator password from the **Security** tab.

4. Browse to the location that the firmware upgrade file was downloaded to, and then select the firmware file. Select the Install button to perform the upgrade.

   NOTE: Do not close the browser window until the Embedded Web Server (EWS) displays the confirmation page.

5. Select **Restart Now** from the EWS confirmation page, or turn the product off, and then on again using the power switch.

USB storage device (Preboot menu)

1. Copy the firmware upgrade file to the root directory of a USB flash drive. The firmware upgrade file has a .bdl extension.

2. Insert the USB flash drive into the USB port on the product control panel.

3. Turn the product on.

4. Open the preboot menu.

   a. Turn the product on.

   b. Wait for both the **Ready** and **Attention** LEDs at the bottom right side of the control panel to illuminate and then dim out. The HP logo will appear on the control panel display.

   c. Press the Stop ⊗ button when the Ready, Data, and Attention LEDs are illuminated solid until the **Preboot** menu opens.

   > **NOTE:** The period of time for accessing the preboot menu is around one second. You may need to press the Stop ⊗ button repeatedly while the product is starting up to make you sure you gain access to the preboot menu.

   d. Use the down arrow ▼ arrow button to navigate the preboot menu options.

   e. Press the OK button to select a menu item.

5. Wait for the Preboot menu to appear on the control-panel display, and then press the down arrow ▼ button to scroll to **Administrator**. Press the OK button to select it.

6. Press thedown arrow ▼ button to scroll to **Manage Disk**. Press the OK button to select it.

7. Press the down arrow ▼ button to scroll to **Clear Disk Pwd**. Press the OK button to select it.

8. The message **Proceed with Requested Action** displays. Press the OK button.

9. Press the back arrow ↰ button to return to the Preboot menu home screen.

10. Press the down arrow ▼ button to scroll to **Administrator**. Press the OK button to select it.

11. Press thedown arrow ▼ button to scroll to **Download**. Press the OK button to select it.

12. Press the down arrow ▼ button to scroll to **USB Thumbdrive**. Press the OK button to select it.

13. Several .bdl files might be listed. Press thedown arrow ▼ button to scroll to the firmware upgrade file that you downloaded. Press the OK button to select it.

> **NOTE:** If no .bdl files are listed, try saving the file to a different USB flash drive

14. Wait while the file transfers. When the transfer is complete, the message **Complete** displays on the screen.

15. Turn the product off, remove the USB flash drive, and then turn the product on. Wait for several minutes while the product initializes.

- If the upgrade is unsuccessful, try sending the firmware upgrade file again.

- If the upgrade fails again, contact HP support at www.hp.com/support/lj700M712.

USB storage device (control-panel menu)

1. Copy the `xxxxxxx.bdl` file to a portable USB flash drive.

2. Turn the product on, and then wait until it reaches the Ready state.

3. At the product control panel, press the Home 🏠 button.

4. Open the **Device Maintenance** menu.

5. Select the **USB Firmware Upgrade** item, and then press the OK button.

6. Insert the portable USB storage device with the `xxxxxxx.bdl` file on it into the USB port on the front of the product, and then press the OK button.

7. Select the `xxxxxxx.bdl` file, and then press the OK button.

   ⭑ **TIP:** If there is more than one `xxxxxxx.bdl` file on the storage device, make sure that you select the correct file for this product.

8. When the product prompts you to confirm the upgrade, press the OK button.

   When the upgrade is complete, the product will initialize.

   📝 **NOTE:** The upgrade process can take up to 10 minutes to complete.

9. When the upgrade process is complete, print a configuration page and verify that the upgrade firmware version was installed.

A   Service and support

- [Hewlett-Packard limited warranty statement](#)

- [HP's Premium Protection Warranty: LaserJet toner cartridge limited warranty statement](#)

- [HP policy on non-HP supplies](#)

- [HP anticounterfeit Web site](#)

- [Data stored on the toner cartridge](#)

- [End User License Agreement](#)

- [OpenSSL](#)

- [Customer self-repair warranty service](#)

- [Customer support](#)

Hewlett-Packard limited warranty statement

HP PRODUCT	DURATION OF LIMITED WARRANTY
HP LaserJet Enterprise 700 M712n, M712dn, M712xh	One-year on-site warranty

HP warrants to you, the end-user customer, that HP hardware and accessories will be free from defects in materials and workmanship after the date of purchase, for the period specified above. If HP receives notice of such defects during the warranty period, HP will, at its option, either repair or replace products which prove to be defective. Replacement products may be either new or equivalent in performance to new.

HP warrants to you that HP software will not fail to execute its programming instructions after the date of purchase, for the period specified above, due to defects in material and workmanship when properly installed and used. If HP receives notice of such defects during the warranty period, HP will replace software which does not execute its programming instructions due to such defects.

HP does not warrant that the operation of HP products will be uninterrupted or error free. If HP is unable, within a reasonable time, to repair or replace any product to a condition as warranted, you will be entitled to a refund of the purchase price upon prompt return of the product.

HP products may contain remanufactured parts equivalent to new in performance or may have been subject to incidental use.

Warranty does not apply to defects resulting from (a) improper or inadequate maintenance or calibration, (b) software, interfacing, parts or supplies not supplied by HP, (c) unauthorized modification or misuse, (d) operation outside of the published environmental specifications for the product, or (e) improper site preparation or maintenance.

TO THE EXTENT ALLOWED BY LOCAL LAW, THE ABOVE WARRANTIES ARE EXCLUSIVE AND NO OTHER WARRANTY OR CONDITION, WHETHER WRITTEN OR ORAL, IS EXPRESSED OR IMPLIED AND HP SPECIFICALLY DISCLAIMS ANY IMPLIED WARRANTIES OR CONDITIONS OF MERCHANTABILITY, SATISFACTORY QUALITY, AND FITNESS FOR A PARTICULAR PURPOSE. Some countries/regions, states or provinces do not allow limitations on the duration of an implied warranty, so the above limitation or exclusion might not apply to you. This warranty gives you specific legal rights and you might also have other rights that vary from country/region to country/region, state to state, or province to province.

HP's limited warranty is valid in any country/region or locality where HP has a support presence for this product and where HP has marketed this product. The level of warranty service you receive may vary according to local standards. HP will not alter form, fit or function of the product to make it operate in a country/region for which it was never intended to function for legal or regulatory reasons.

TO THE EXTENT ALLOWED BY LOCAL LAW, THE REMEDIES IN THIS WARRANTY STATEMENT ARE YOUR SOLE AND EXCLUSIVE REMEDIES. EXCEPT AS INDICATED ABOVE, IN NO EVENT WILL HP OR ITS SUPPLIERS BE LIABLE FOR LOSS OF DATA OR FOR DIRECT, SPECIAL, INCIDENTAL, CONSEQUENTIAL (INCLUDING LOST PROFIT OR DATA), OR OTHER DAMAGE, WHETHER BASED IN CONTRACT, TORT, OR OTHERWISE. Some countries/regions, states or provinces do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

THE WARRANTY TERMS CONTAINED IN THIS STATEMENT, EXCEPT TO THE EXTENT LAWFULLY PERMITTED, DO NOT EXCLUDE, RESTRICT OR MODIFY AND ARE IN ADDITION TO THE MANDATORY STATUTORY RIGHTS APPLICABLE TO THE SALE OF THIS PRODUCT TO YOU.

HP's Premium Protection Warranty: LaserJet toner cartridge limited warranty statement

This HP product is warranted to be free from defects in materials and workmanship.

This warranty does not apply to products that (a) have been refilled, refurbished, remanufactured or tampered with in any way, (b) experience problems resulting from misuse, improper storage, or operation outside of the published environmental specifications for the printer product or (c) exhibit wear from ordinary use.

To obtain warranty service, please return the product to place of purchase (with a written description of the problem and print samples) or contact HP customer support. At HP's option, HP will either replace products that prove to be defective or refund your purchase price.

TO THE EXTENT ALLOWED BY LOCAL LAW, THE ABOVE WARRANTY IS EXCLUSIVE AND NO OTHER WARRANTY OR CONDITION, WHETHER WRITTEN OR ORAL, IS EXPRESSED OR IMPLIED AND HP SPECIFICALLY DISCLAIMS ANY IMPLIED WARRANTIES OR CONDITIONS OF MERCHANTABILITY, SATISFACTORY QUALITY, AND FITNESS FOR A PARTICULAR PURPOSE.

TO THE EXTENT ALLOWED BY LOCAL LAW, IN NO EVENT WILL HP OR ITS SUPPLIERS BE LIABLE FOR DIRECT, SPECIAL, INCIDENTAL, CONSEQUENTIAL (INCLUDING LOST PROFIT OR DATA), OR OTHER DAMAGE, WHETHER BASED IN CONTRACT, TORT, OR OTHERWISE.

THE WARRANTY TERMS CONTAINED IN THIS STATEMENT, EXCEPT TO THE EXTENT LAWFULLY PERMITTED, DO NOT EXCLUDE, RESTRICT OR MODIFY AND ARE IN ADDITION TO THE MANDATORY STATUTORY RIGHTS APPLICABLE TO THE SALE OF THIS PRODUCT TO YOU.

HP policy on non-HP supplies

Hewlett-Packard Company cannot recommend the use of non-HP toner cartridges, either new or remanufactured.

NOTE: For HP printer products, the use of a non-HP toner cartridge or a refilled toner cartridge does not affect either the warranty to the customer or any HP support contract with the customer. However, if product failure or damage is attributable to the use of a non-HP toner cartridge or refilled toner cartridge, HP will charge its standard time and materials charges to service the product for the particular failure or damage.

HP anticounterfeit Web site

Go to www.hp.com/go/anticounterfeit when you install an HP toner cartridge and the control-panel message says the cartridge is non-HP. HP will help determine if the cartridge is genuine and take steps to resolve the problem.

Your toner cartridge might not be a genuine HP toner cartridge if you notice the following:

● The supplies status page indicates that a non-HP supply is installed.

● You are experiencing a high number of problems with the cartridge.

● The cartridge does not look like it usually does (for example, the packaging differs from HP packaging).

Data stored on the toner cartridge

The HP toner cartridges used with this product contain a memory chip that assists in the operation of the product.

In addition, this memory chip collects a limited set of information about the usage of the product, which might include the following: the date when the toner cartridge was first installed, the date when the toner cartridge was last used, the number of pages printed using the toner cartridge, the page coverage, the printing modes used, any printing errors that might have occurred, and the product model. This information helps HP design future products to meet our customers' printing needs.

The data collected from the toner cartridge memory chip does not contain information that can be used to identify a customer or user of the toner cartridge or their product.

HP collects a sampling of the memory chips from toner cartridges returned to HP's free return and recycling program (HP Planet Partners: www.hp.com/recycle). The memory chips from this sampling are read and studied in order to improve future HP products. HP partners who assist in recycling this toner cartridge might have access to this data, as well.

Any third party possessing the toner cartridge might have access to the anonymous information on the memory chip.

End User License Agreement

PLEASE READ CAREFULLY BEFORE USING THIS SOFTWARE PRODUCT: This End-User License Agreement ("EULA") is a contract between (a) you (either an individual or the entity you represent) and (b) Hewlett-Packard Company ("HP") that governs your use of the software product ("Software"). This EULA does not apply if there is a separate license agreement between you and HP or its suppliers for the Software, including a license agreement in online documentation. The term "Software" may include (i) associated media, (ii) a user guide and other printed materials, and (iii) "online" or electronic documentation (collectively "User Documentation").

RIGHTS IN THE SOFTWARE ARE OFFERED ONLY ON THE CONDITION THAT YOU AGREE TO ALL TERMS AND CONDITIONS OF THIS EULA. BY INSTALLING, COPYING, DOWNLOADING, OR OTHERWISE USING THE SOFTWARE, YOU AGREE TO BE BOUND BY THIS EULA. IF YOU DO NOT ACCEPT THIS EULA, DO NOT INSTALL, DOWNLOAD, OR OTHERWISE USE THE SOFTWARE. IF YOU PURCHASED THE SOFTWARE BUT DO NOT AGREE TO THIS EULA, PLEASE RETURN THE SOFTWARE TO YOUR PLACE OF PURCHASE WITHIN FOURTEEN DAYS FOR A REFUND OF THE PURCHASE PRICE; IF THE SOFTWARE IS INSTALLED ON OR MADE AVAILABLE WITH ANOTHER HP PRODUCT, YOU MAY RETURN THE ENTIRE UNUSED PRODUCT.

1. THIRD PARTY SOFTWARE. The Software may include, in addition to HP proprietary software ("HP Software"), software under licenses from third parties ("Third Party Software" and "Third Party License"). Any Third Party Software is licensed to you subject to the terms and conditions of the corresponding Third Party License. Generally, the Third Party License is in a file such as "license.txt" or a "readme" file. You should contact HP support if you cannot find a Third Party License. If the Third Party Licenses include licenses that provide for the availability of source code (such as the GNU General Public License) and the corresponding source code is not included with the Software, then check the product support pages of HP's website (hp.com) to learn how to obtain such source code.

2. LICENSE RIGHTS. You will have the following rights provided you comply with all terms and conditions of this EULA:

   a. Use. HP grants you a license to Use one copy of the HP Software. "Use" means installing, copying, storing, loading, executing, displaying, or otherwise using the HP Software. You may not modify the HP Software or disable any licensing or control feature of the HP Software. If this Software is provided by HP for Use with an imaging or printing product (for example, if the Software is a printer driver, firmware, or add-on), the HP Software may only be used with such product ("HP Product"). Additional restrictions on Use may appear in the User Documentation. You may not separate component parts of the HP Software for Use. You do not have the right to distribute the HP Software.

   b. Copying. Your right to copy means you may make archival or back-up copies of the HP Software, provided each copy contains all the original HP Software's proprietary notices and is used only for back-up purposes.

3. UPGRADES. To Use HP Software provided by HP as an upgrade, update, or supplement (collectively "Upgrade"), you must first be licensed for the original HP Software identified by HP as eligible for the Upgrade. To the extent the Upgrade supersedes the original HP Software, you may no longer use such HP Software. This EULA applies to each Upgrade unless HP provides other terms with the Upgrade. In case of a conflict between this EULA and such other terms, the other terms will prevail.

4. TRANSFER.

    a. Third Party Transfer. The initial end user of the HP Software may make a one-time transfer of the HP Software to another end user. Any transfer will include all component parts, media, User Documentation, this EULA, and if applicable, the Certificate of Authenticity. The transfer may not be an indirect transfer, such as a consignment. Prior to the transfer, the end user receiving the transferred Software will agree to this EULA. Upon transfer of the HP Software, your license is automatically terminated.

    b. Restrictions. You may not rent, lease or lend the HP Software or Use the HP Software for commercial timesharing or bureau use. You may not sublicense, assign or otherwise transfer the HP Software except as expressly provided in this EULA.

5. PROPRIETARY RIGHTS. All intellectual property rights in the Software and User Documentation are owned by HP or its suppliers and are protected by law, including applicable copyright, trade secret, patent, and trademark laws. You will not remove any product identification, copyright notice, or proprietary restriction from the Software.

6. LIMITATION ON REVERSE ENGINEERING. You may not reverse engineer, decompile, or disassemble the HP Software, except and only to the extent that the right to do so is allowed under applicable law.

7. CONSENT TO USE OF DATA. HP and its affiliates may collect and use technical information you provide in relation to (i) your Use of the Software or the HP Product, or (ii) the provision of support services related to the Software or the HP Product. All such information will be subject to HP's privacy policy. HP will not use such information in a form that personally identifies you except to the extent necessary to enhance your Use or provide support services.

8. LIMITATION OF LIABILITY. Notwithstanding any damages that you might incur, the entire liability of HP and its suppliers under this EULA and your exclusive remedy under this EULA will be limited to the greater of the amount actually paid by you for the Product or U.S. $5.00. TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, IN NO EVENT WILL HP OR ITS SUPPLIERS BE LIABLE FOR ANY SPECIAL, INCIDENTAL, INDIRECT, OR CONSEQUENTIAL DAMAGES (INCLUDING DAMAGES FOR LOST PROFITS, LOST DATA, BUSINESS INTERRUPTION, PERSONAL INJURY, OR LOSS OF PRIVACY) RELATED IN ANY WAY TO THE USE OF OR INABILITY TO USE THE SOFTWARE, EVEN IF HP OR ANY SUPPLIER HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES AND EVEN IF THE ABOVE REMEDY FAILS OF ITS ESSENTIAL PURPOSE. Some states or other jurisdictions do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

9. U.S. GOVERNMENT CUSTOMERS. Software was developed entirely at private expense. All Software is commercial computer software within the meaning of the applicable acquisition regulations. Accordingly, pursuant to US FAR 48 CFR 12.212 and DFAR 48 CFR 227.7202, use, duplication and disclosure of the Software by or for the U.S. Government or a U.S. Government subcontractor is subject solely to the terms and conditions set forth in this End User License Agreement, except for provisions which are contrary to applicable mandatory federal laws.

10. COMPLIANCE WITH EXPORT LAWS. You will comply with all laws, rules, and regulations (i) applicable to the export or import of the Software, or (ii) restricting the Use of the Software, including any restrictions on nuclear, chemical, or biological weapons proliferation.

11. RESERVATION OF RIGHTS. HP and its suppliers reserve all rights not expressly granted to you in this EULA.

OpenSSL

This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit (http://www.openssl.org/)

THIS SOFTWARE IS PROVIDED BY THE OpenSSL PROJECT ``AS IS'' AND ANY EXPRESSED OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE OpenSSL PROJECT OR ITS CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES;

LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

This product includes cryptographic software written by Eric Young (eay@cryptsoft.com). This product includes software written by Tim Hudson (tjh@cryptsoft.com).

Customer self-repair warranty service

HP products are designed with many Customer Self Repair (CSR) parts to minimize repair time and allow for greater flexibility in performing defective parts replacement. If during the diagnosis period, HP identifies that the repair can be accomplished by the use of a CSR part, HP will ship that part directly to you for replacement. There are two categories of CSR parts: 1) Parts for which customer self repair is mandatory. If you request HP to replace these parts, you will be charged for the travel and labor costs of this service. 2) Parts for which customer self repair is optional. These parts are also designed for Customer Self Repair. If, however, you require that HP replace them for you, this may be done at no additional charge under the type of warranty service designated for your product.

Based on availability and where geography permits, CSR parts will be shipped for next business day delivery. Same-day or four-hour delivery may be offered at an additional charge where geography permits. If assistance is required, you can call the HP Technical Support Center and a technician will help you over the phone. HP specifies in the materials shipped with a replacement CSR part whether a defective part must be returned to HP. In cases where it is required to return the defective part to HP, you must ship the defective part back to HP within a defined period of time, normally five (5) business days. The defective part must be returned with the associated documentation in the provided shipping material. Failure to return the defective part may result in HP billing you for the replacement. With a customer self repair, HP will pay all shipping and part return costs and determine the courier/carrier to be used.

Customer support

Get telephone support for your country/region Have the product name, serial number, date of purchase, and problem description ready.	Country/region phone numbers are on the flyer that was in the box with your product or at www.hp.com/support/.
Get 24-hour Internet support	www.hp.com/support/lj700M712
Download software utilities, drivers, and electronic information	www.hp.com/go/lj700M712_software
Order additional HP service or maintenance agreements	www.hp.com/go/carepack
Register your product	www.register.hp.com

B   Product specifications

- [Physical specifications](#)
- [Power consumption, electrical specifications, and acoustic emissions](#)
- [Environmental specifications](#)

Physical specifications

Product dimensions and weights

Product model	Height	Depth	Width	Weight
M712n	389 mm (15.3 in)	585 mm (23.0 in)	568 mm (22.4 in)	34.7 kg (76.5 lb)[1]
M712dn	389 mm (15.3 in)	585 mm (23.0 in)	568 mm (22.4 in)	38.5 kg (84.8 lb)[1]
M712xh	514 mm (20.2 in)	585 mm (23.0 in)	568 mm (22.4 in)	49.4 kg (109 lb)[1]
Optional 500-sheet feeder	125 mm (4.9 in)	585 mm (23.0 in)	568 mm (22.4 in)	11.3 kg (25 lb)
Optional 1x500-sheet feeder and stand	551 mm (21.7 in)	681 mm (26.8 in)	745 mm (29.3 in)	22.7 kg (50 lb)
Optional 3x500-sheet feeder and stand	551 mm (21.7 in)	681 mm (26.8 in)	745 mm (29.3 in)	29.9 kg (66 lb)
Optional 3,500-sheet high-capacity input feeder and stand	551 mm (21.7 in)	681 mm (26.8 in)	745 mm (29.3 in)	38.6 kg (85 lb)

[1] With toner installed

Product dimensions with all doors and trays fully opened

Product model	Height	Depth	Width
M712n	389 mm (15.3 in)	998 mm (39.3 in)	805 mm (31.7 in)
M712dn	389 mm (15.3 in)	998 mm (39.3 in)	805 mm (31.7 in)
M712xh	514 mm (20.2 in)	998 mm (39.3 in)	805 mm (31.7 in)

Power consumption, electrical specifications, and acoustic emissions

See www.hp.com/go/lj700M712_regulatory-environmental for current information.

⚠ CAUTION: Power requirements are based on the country/region where the product is sold. Do not convert operating voltages. This will damage the product and void the product warranty.

Environmental specifications

Operating-environment specifications

Environment	Recommended	Allowed
Temperature	17° to 25°C (62.6° to 77°F)	15° to 30°C (59° to 86°F)
Relative humidity	30% to 70% relative humidity (RH)	10% to 80% RH
Altitude	Not applicable	0 to 3048 m (0 to 10,000 ft)

C Regulatory information

- [FCC regulations](#)
- [Environmental product stewardship program](#)
- [Declaration of conformity](#)
- [Safety statements](#)

FCC regulations

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy, and if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

NOTE: Any changes or modifications to the printer that are not expressly approved by HP could void the user's authority to operate this equipment.

Use of a shielded interface cable is required to comply with the Class A limits of Part 15 of FCC rules.

Environmental product stewardship program

Protecting the environment

Hewlett-Packard Company is committed to providing quality products in an environmentally sound manner. This product has been designed with several attributes to minimize impacts on our environment.

Ozone production

This product generates no appreciable ozone gas (O_3).

Power consumption

Power usage drops significantly while in Ready or Sleep mode, which saves natural resources and saves money without affecting the high performance of this product. Hewlett-Packard printing and imaging equipment marked with the ENERGY STAR® logo is qualified to the U.S. Environmental Protection Agency's ENERGY STAR specifications for imaging equipment. The following mark will appear on ENERGY STAR qualified imaging products:

Additional ENERGY STAR qualified imaging product model information is listed at:

www.hp.com/go/energystar

Toner consumption

EconoMode uses less toner, which might extend the life of the toner cartridge. HP does not recommend the full-time use of EconoMode. If EconoMode is used full-time, the toner supply might outlast the mechanical parts in the toner cartridge. If print quality begins to degrade and is no longer acceptable, consider replacing the toner cartridge.

Paper use

This product's manual/automatic duplex feature (two-sided printing) and N-up printing (multiple pages printed on one page) capability can reduce paper usage and the resulting demands on natural resources.

Plastics

Plastic parts over 25 grams are marked according to international standards that enhance the ability to identify plastics for recycling purposes at the end of the product's life.

HP LaserJet print supplies

It's easy to return and recycle your HP LaserJet toner cartridges after use—free of charge—with HP Planet Partners. Multilingual program information and instructions are included in every new HP LaserJet toner cartridge and supplies package. You help reduce the toll on the environment further when you return multiple cartridges together rather than separately.

HP is committed to providing inventive, high-quality products and services that are environmentally sound, from product design and manufacturing to distribution, customer use and recycling. When you participate in the HP Planet Partners program, we ensure your HP LaserJet toner cartridges are recycled properly, processing them to recover plastics and metals for new products and diverting millions of tons of waste from landfills. Since this cartridge is being recycled and used in new materials, it will not be returned to you. Thank you for being environmentally responsible!

NOTE: Use the return label to return original HP LaserJet toner cartridges only. Please do not use this label for HP inkjet cartridges, non-HP cartridges, refilled or remanufactured cartridges or warranty returns. For information about recycling your HP inkjet cartridges please go to http://www.hp.com/recycle.

Return and recycling instructions

United States and Puerto Rico

The enclosed label in the HP LaserJet toner cartridge box is for the return and recycling of one or more HP LaserJet toner cartridges after use. Please follow the applicable instructions below.

Multiple returns (more than one cartridge)

1. Package each HP LaserJet toner cartridge in its original box and bag.

2. Tape the boxes together using strapping or packaging tape. The package can weigh up to 31 kg (70 lb).

3. Use a single pre-paid shipping label.

OR

1. Use your own suitable box, or request a free bulk collection box from www.hp.com/recycle or 1-800-340-2445 (holds up to 31 kg (70 lb) of HP LaserJet toner cartridges).

2. Use a single pre-paid shipping label.

Single returns

1. Package the HP LaserJet toner cartridge in its original bag and box.

2. Place the shipping label on the front of the box.

Shipping

For US and Puerto Rico HP LaserJet toner cartridge recycling returns, use the pre-paid, pre-addressed shipping label contained in the box. To use the UPS label, give the package to the UPS driver during

your next delivery or pick-up, or take it to an authorized UPS drop-off center. (Requested UPS Ground pickup will be charged normal pick-up rates) For the location of your local UPS drop-off center, call 1-800-PICKUPS or visit www.ups.com.

If you are returning the package with the FedEx label, give the package to either the U.S. Postal Service carrier or FedEx driver during your next pick-up or delivery. (Requested FedEx Ground pickup will be charged normal pick-up rates). Or, you can drop off your packaged toner cartridge(s) at any U.S. Post Office or any FedEx shipping center or store. For the location of your nearest U.S. Post Office, please call 1-800-ASK-USPS or visit www.usps.com. For the location of your nearest FedEx shipping center/store, please call 1-800-GOFEDEX or visit www.fedex.com.

For more information, or to order additional labels or boxes for bulk returns, visit www.hp.com/recycle or call 1-800-340-2445. Information subject to change without notice.

Residents of Alaska and Hawaii

Do not use the UPS label. Call 1-800-340-2445 for information and instructions. The U.S. Postal Service provides no-cost cartridge return transportation services under an arrangement with HP for Alaska and Hawaii.

Non-U.S. returns

To participate in HP Planet Partners return and recycling program, just follow the simple directions in the recycling guide (found inside the packaging of your new product supply item) or visit www.hp.com/recycle. Select your country/region for information on how to return your HP LaserJet printing supplies.

Paper

This product is capable of using recycled papers when the paper meets the guidelines outlined in the *HP LaserJet Printer Family Print Media Guide*. This product is suitable for the use of recycled paper according to EN12281:2002.

Material restrictions

This HP product does not contain added mercury.

This HP product contains a battery that might require special handling at end-of-life. The batteries contained in or supplied by Hewlett-Packard for this product include the following:

HP LaserJet Enterprise 700 M712	
Type	Carbon monofluoride lithium
Weight	0.8 g
Location	On formatter board
User-removable	No

廢電池請回收

For recycling information, you can go to www.hp.com/recycle, or contact your local authorities or the Electronics Industries Alliance: www.eiae.org.

Disposal of waste equipment by users
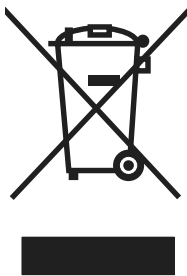
This symbol means do not dispose of your product with your other household waste. Instead, you should protect human health and the environment by handing over your waste equipment to a designated collection point for the recycling of waste electrical and electronic equipment. For more information, please contact your household waste disposal service, or go to: www.hp.com/recycle.

Electronic hardware recycling

HP encourages customers to recycle used electronic hardware. For more information about recycling programs go to: www.hp.com/recycle.

Chemical substances

HP is committed to providing our customers with information about the chemical substances in our products as needed to comply with legal requirements such as REACH (Regulation EC No 1907/2006 of the European Parliament and the Council). A chemical information report for this product can be found at: www.hp.com/go/reach.

Material Safety Data Sheet (MSDS)

Material Safety Data Sheets (MSDS) for supplies containing chemical substances (for example, toner) can be obtained by accessing the HP Web site at www.hp.com/go/msds or www.hp.com/hpinfo/community/environment/productinfo/safety.

For more information

To obtain information about these environmental topics:

- Product environmental profile sheet for this and many related HP products

- HP's commitment to the environment

- HP's environmental management system

- HP's end-of-life product return and recycling program

- Material Safety Data Sheets

Visit www.hp.com/go/environment or www.hp.com/hpinfo/globalcitizenship/environment.

Declaration of conformity

<div align="center">

Declaration of Conformity

according to ISO/IEC 17050-1 and EN 17050-1

</div>

Manufacturer's Name:	Hewlett-Packard Company	DoC#: BOISB-1105-00-Rel.1.0
Manufacturer's Address:	11311 Chinden Boulevard	
	Boise, Idaho 83714-1021, USA	

declares, that the product

Product Name:	HP LaserJet Enterprise 700 M712 series
Regulatory Model Numbers:[2]	BOISB-1105-00
Product Options:	All
Toner Cartridges:	CF214A, CF214X

conforms to the following Product Specifications:

SAFETY:	IEC 60950-1:2005 +A1 / EN60950-1: 2006 +A11:2009 +A1:2010 +A12:2011
	IEC 60825-1:2007 / EN 60825-1:2007 (Class 1 Laser/LED Product)
	IEC 62311:2007 / EN 62311:2008
	GB4943-2001
EMC:	CISPR22:2008/ EN55022:2010 - Class A[1], [3]
	EN 61000-3-2:2006 +A1:2009 +A2:2009
	EN 61000-3-3:2008
	EN 55024:1998 +A1 +A2
	FCC Title 47 CFR, Part 15 Class A[1] / ICES-003, Issue 4
	GB9254-2008, GB17625.1-2003

Supplementary Information:

The product herewith complies with the requirements of the EMC Directive 2004/108/EC, the Low Voltage Directive 2006/95/EC, and **the EuP Directive 2005/32/EC**, and carries the CE-Marking (ϵ accordingly.

This Device complies with Part 15 of the FCC Rules. Operation is subject to the following two Conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

1. The product was tested in a typical configuration with Hewlett-Packard Personal Computer Systems.

2. For regulatory purposes, these products are assigned a Regulatory model number. This number should not be confused with the product name or the product number(s).

3. The product includes LAN (Local Area Network) options. When the interface cable is attached to LAN connectors, the product meets the requirements of EN55022 & CNS13438 Class **A** in which case the following applies: "Warning – This is a class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures."

Boise, Idaho USA

June 2012

For Regulatory Topics only, contact:

European Contact: Your Local Hewlett-Packard Sales and Service Office or Hewlett-Packard Gmbh, Department HQ-TRE / Standards Europe, Herrenberger Straße 140, D-71034 Böblingen, Germany (FAX: +49-7031-14-3143) www.hp.com/go/certificates

USA Contact: Product Regulations Manager, Hewlett-Packard Company, PO Box 15, Mail Stop 160, Boise, Idaho 83707-0015 (Phone: 208-396-6000)

Safety statements

Laser safety

The Center for Devices and Radiological Health (CDRH) of the U.S. Food and Drug Administration has implemented regulations for laser products manufactured since August 1, 1976. Compliance is mandatory for products marketed in the United States. The device is certified as a "Class 1" laser product under the U.S. Department of Health and Human Services (DHHS) Radiation Performance Standard according to the Radiation Control for Health and Safety Act of 1968. Since radiation emitted inside the device is completely confined within protective housings and external covers, the laser beam cannot escape during any phase of normal user operation.

⚠ **WARNING!** Using controls, making adjustments, or performing procedures other than those specified in this user guide may result in exposure to hazardous radiation.

Canadian DOC regulations

Complies with Canadian EMC Class A requirements.

« Conforme à la classe A des normes canadiennes de compatibilité électromagnétiques. « CEM ». »

VCCI statement (Japan)

> この装置は、クラスA情報技術装置です。この装置を家庭
> 環境で使用すると電波妨害を引き起こすことがあります。
> この場合には使用者は適切な対策を講ずるよう要求される
> ことがあります。
>
> VCCI-A

Power cord instructions

Make sure your power source is adequate for the product voltage rating. The voltage rating is on the product label. The product uses either 100-127 Vac or 220-240 Vac and 50/60 Hz.

Connect the power cord between the product and a grounded AC outlet.

⚠ **CAUTION:** To prevent damage to the product, use only the power cord that is provided with the product.

Power cord statement (Japan)

> 製品には、同梱された電源コードをお使い下さい。
> 同梱された電源コードは、他の製品では使用出来ません。

EMC statement (China)

此为 A 级产品，在生活环境中，该产品可能会造成无线电干扰。在这种情况下，可能需要用户对其干扰采取切实可行的措施。

EMC statement (Korea)

A급 기기	이 기기는 업무용(A급)으로 전자파적합등록을 한 기
(업무용 방송통신기기)	기이오니 판매자 또는 사용자는 이점을 주의하시기
	바라며, 가정 외의 지역에서 사용하는 것을 목적으
	로 합니다.

EMI statement (Taiwan)

警告使用者：

這是甲類的資訊產品，在居住的環境中使用時，可能會造成射頻干擾，在這種情況下，使用者會被要求採取某些適當的對策。

Laser statement for Finland

Luokan 1 laserlaite

Klass 1 Laser Apparat

HP LaserJet Enterprise 700 M712n, M712dn, M712xh, laserkirjoitin on käyttäjän kannalta turvallinen luokan 1 laserlaite. Normaalissa käytössä kirjoittimen suojakotelointi estää lasersäteen pääsyn laitteen ulkopuolelle. Laitteen turvallisuusluokka on määritetty standardin EN 60825-1 (2007) mukaisesti.

VAROITUS !

Laitteen käyttäminen muulla kuin käyttöohjeessa mainitulla tavalla saattaa altistaa käyttäjän turvallisuusluokan 1 ylittävälle näkymättömälle lasersäteilylle.

VARNING !

Om apparaten används på annat sätt än i bruksanvisning specificerats, kan användaren utsättas för osynlig laserstrålning, som överskrider gränsen för laserklass 1.

HUOLTO

HP LaserJet Enterprise 700 M712n, M712dn, M712xh - kirjoittimen sisällä ei ole käyttäjän huollettavissa olevia kohteita. Laitteen saa avata ja huoltaa ainoastaan sen huoltamiseen koulutettu henkilö. Tällaiseksi huoltotoimenpiteeksi ei katsota väriainekasetin vaihtamista, paperiradan puhdistusta

tai muita käyttäjän käsikirjassa lueteltuja, käyttäjän tehtäväksi tarkoitettuja ylläpitotoimia, jotka voidaan suorittaa ilman erikoistyökaluja.

VARO !

Mikäli kirjoittimen suojakotelo avataan, olet alttiina näkymättömällelasersäteilylle laitteen ollessa toiminnassa. Älä katso säteeseen.

VARNING !

Om laserprinterns skyddshölje öppnas då apparaten är i funktion, utsättas användaren för osynlig laserstrålning. Betrakta ej strålen.

Tiedot laitteessa käytettävän laserdiodin säteilyominaisuuksista: Aallonpituus 775-795 nm Teho 5 m W Luokan 3B laser.

GS statement (Germany)

Das Gerät ist nicht für die Benutzung im unmittelbaren Gesichtsfeld am Bildschirmarbeitsplatz vorgesehen. Um störende Reflexionen am Bildschirmarbeitsplatz zu vermeiden, darf dieses Produkt nicht im unmittelbaren Gesichtsfeld platziert warden.

Das Gerät ist kein Bildschirmarbeitsplatz gemäß BildscharbV. Bei ungünstigen Lichtverhältnissen (z. B. direkte Sonneneinstrahlung) kann es zu Reflexionen auf dem Display und damit zu Einschränkungen der Lesbarkeit der dargestellten Zeichen kommen.

Substances Table (China)

有毒有害物质表
根据中国电子信息产品污染控制管理办法的要求而出台

部件名称	有毒有害物质和元素					
	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (Cr(VI))	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
打印引擎	X	0	0	0	0	0
复印机组件	X	0	0	0	0	0
控制面板	0	0	0	0	0	0
塑料外壳	0	0	0	0	0	0
格式化板组件	X	0	0	0	0	0
碳粉盒	X	0	0	0	0	0

0614

0：表示在此部件所用的所有同类材料中，所含的此有毒或有害物质均低于 SJ/T11363-2006 的限制要求。
X：表示在此部件所用的所有同类材料中，至少一种所含的此有毒或有害物质高于 SJ/T11363-2006 的限制要求。

注：引用的"环保使用期限"是根据在正常温度和湿度条件下操作使用产品而确定的。

Restriction on Hazardous Substances statement (Turkey)

Türkiye Cumhuriyeti: EEE Yönetmeliğine Uygundur

Restriction on Hazardous Substances statement (Ukraine)

Обладнання відповідає вимогам Технічного регламенту щодо обмеження використання деяких небезпечних речовин в електричному та електронному обладнанні, затвердженого постановою Кабінету Міністрів України від 3 грудня 2008 № 1057

Index

laser scanner
  image-formation operations   22
  operations   20
laser-beam exposure stage, image
  formation operations   25
latent-image formation   24
leading edge detection   47
LEDs. *See* lights
lenses, laser scanner operations
  20
license, software   310
light print
  problem-solving   281
lights
  formatter   101
  troubleshooting with   101
lines horizontal, problem-solving
  283, 286
lines vertical, problem-solving
  286
lines, problem-solving   283, 287
link speed settings   207
log of events
  messages, listed numerically
    260
loop control   44
loose toner, problem-solving   284
low-voltage power supply
  engine control system
    operations   4
low-voltage power-supply PCA   10
LSTR (last rotation) period   3

M
Manage Supplies menu, control
  panel   191
Manage Trays menu, control
  panel   192
manual print modes   278
material restrictions   323
Material Safety Data Sheet
  (MSDS)   324
media jams
  detection operations   47
memory
  information   175
  insufficient   213
memory chip, toner cartridge
  description   309

menus, control panel
  Administration   178
  Backup/Restore   210
  Calibrate/Cleaning   211
  Display Settings   189
  General Settings   179
  Manage Supplies   191
  Manage Trays   192
  Network Settings   194
  Print Options   188
  Print Settings   185
  Reports   178
  Service   212
  Troubleshooting   208
  USB Firmware Upgrade   212
mercury-free product   323
messages
  event log, listed numerically
    260
  numerical list   213
  types of   213
mirrors, laser scanner operations
  20
misformed characters, problem-
  solving   285
model number   176

N
Network Settings menu, control
  panel   194
networks
  diagnostics   202
  HP embedded Jetdirect
    configuration page   176
  link speed settings   207
non-HP supplies   307
notes   iii

O
online support   315
operation sequence   2
operations
  engine control system   4
  image-formation system   22
  laser scanner system   20
  pickup, feed, and delivery
    system   31
output bin
  jams   264

P
pages
  blank   290
  not printing   290
  printing slowly   290
pages count   293
  from product refurbish date
    293
  reset   293
  See also counts
paper
  curled   286
  default size reset   294
  pickup-and-feed system
    operations   31
  skewed   285
  stop in path for testing   144
  wrinkled   286
paper jams
  3,500-sheet high-capacity
    tray   268
  detection operations   47
paper path
  diagnostic test   106
  stop movement for testing   144
paper pickup problems
  solving   277
paper-path
  test, sensors   106
password
  Service menu PIN   293
photosensitive drum
  image-formation operations
    22, 24, 25, 26, 27
  laser scanner operations   20
  toner cartridge components   27
physical specifications   318
pickup, feed, and delivery system
  sensors   31
pickup/feed operation   70
port configuration information
  176
power
  consumption   318
  sequence of operations   4
power supplies
  engine control system
    operations   4
  image-formation operations   22