HP Designjet 8000s Printer series

Printer Maintenance Guide

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Table of contents

1 Introduction

2 Regular maintenance guide

Daily maintenance 4
Capping unit cleaning 5
Wiper liquid bottle replacement 10
Wiper sponge replacement 15
Wiper blade replacement 21
When returning to the printer after being switched off for an extended period (less than two weeks) 26
Clean ink system 26
Prepare for extended power down (two to four weeks) 27
Ink system storage 28
Charge the ink system 29
Clean the exterior of the printer 30
Clean the carriage base 30
Clean the front cover and media feed 32
Clean the platen 32
Waste ink bottle replacement 33
Normal printhead recovery 36
Print the nozzle print pattern 38

1 Introduction

This Printer Maintenance Guide describes the regular inspection and maintenance procedures to be performed by users. The maintenance procedures described in this maintenance guide are also available in your printer's User's Guide. Failure to perform daily maintenance procedures may result in damage to your printer printheads and will invalidate your warranty. For further user information about the HP Designjet 8000s Printer series, please refer to the User's Guide and warranty information that came with your printer.

Before starting the maintenance procedures, spend some time reading the safety precautions and notes which are contained in the User's Guide.

WARNING! Never switch off the printer without following the correct procedures. Even with the storage liquid installed, never leave the printer off for more than four weeks. Leaving your printer off for more than four weeks can cause permanent damage that cannot be repaired. In all other cases make sure you observe the appropriate maintenance guidelines.

CAUTION The printer has an internal clock which allows it to wash the printheads automatically, flushing some ink through the printheads, which keeps the printheads in good condition. The printer automatically washes the printheads regularly after the last printing process. If the printer is switched off or media is not loaded, this process does not happen. If the ink does not flow through the printheads from time to time, the ink will dry inside the nozzles, reaching a point where it is impossible to recover them and the printheads will fail. If the printer must be switched off for a long period of time, the customer must use either the optional HP Ink System Cleaning Kit or HP 780 Ink System Storage Kit to recover or protect the printheads.

Automatic maintenance and cleaning will **ONLY** be performed when the printer is switched on and powered up with media loaded. If you switch it off on the front panel or with the power switch on the rear of the printer this maintenance will **NOT** be performed.

2 Regular maintenance guide

The printer requires regular inspection and maintenance. The table below lists all regular inspection and maintenance procedures. For details on each procedure, see the reference to the procedure.

Maintenance checklist

Category	Inspection/Maintenance	See
Daily	Capping unit cleaning	Capping unit cleaning
	Checking wiper liquid level	Wiper liquid bottle replacement
	Checking waste ink bottle level	Waste ink bottle replacement
	Printhead cleaning	Normal printhead recovery
	Nozzle print	Print the nozzle print pattern
Monthly	Wiper Liquid bottle replacement	Wiper liquid bottle replacement
	Printhead cleaning	Normal printhead recovery
Depending on printer usage, approximately every three months	Wiper Blade replacement	Wiper blade replacement
Every six months	Wiper sponge replacement	Wiper sponge replacement
To leave the printer for an extended period in the power off state (more than two weeks but less then four weeks)	Clean ink system	Clean ink system
	Ink system storage	Ink system storage after cleaning the ink system
When returning the printer from an extended period in the power off state (more than two weeks but less then four weeks)	Clean ink system	Clean ink system
	Ink charge after cleaning	Charge the ink system after cleaning the ink system
When returning to the printer after being switched off for an extended period (less than two weeks)	Clean ink system	Clean ink system
	Ink charge after cleaning	Charge the ink system
To leave the printer in or return it from a power off state of more than four weeks	Contact HP Support.	
Other	A service call error message will be displayed on the front panel. Contact HP Support.	

CAUTION The use of safety glasses and gloves is recommended when performing cleaning and maintenance operations.

Always use genuine HP cleaning kits. These have been designed for maintaining high-quality imaging performance and reliable printer operation. Using non-HP supplies may cause poor print quality, printer malfunction, printer failure, or a safety hazard.

Daily maintenance

WARNING! Failure to perform daily maintenance procedures may result in damage to your printheads and will invalidate your warranty.

CAUTION If you need to leave the printer unattended for any reason, ensure that the **printer is on**, the **ink cartridges are full**, the **waste ink bottle is empty**, and **media is loaded** so that automatic maintenance (performed regularly after the last printing process) can be completed successfully for the time you are not present. If needed, install new ink cartridges. The ink cartridges that you replace can be reused when you return to your printer, if they still contain ink. The ink cartridges must be stored properly and should not be used again if 3 months passed the install by date (on the product label).

Daily printhead maintenance will ensure optimal print quality and the life of your printheads. The ink in your HP Designjet 8000s Printer dries very quickly, so maintenance procedures ensure that the ink does not dry in the capping unit, the wiper blades, the ink tubes and printheads.

When the following message is displayed, immediately perform daily maintenance procedures:

- Clean the capping unit.
- Check the wiper liquid level.
- Check the waste ink bottle level
- Perform Normal printhead cleaning
- Print the NOZZLE PRINT pattern

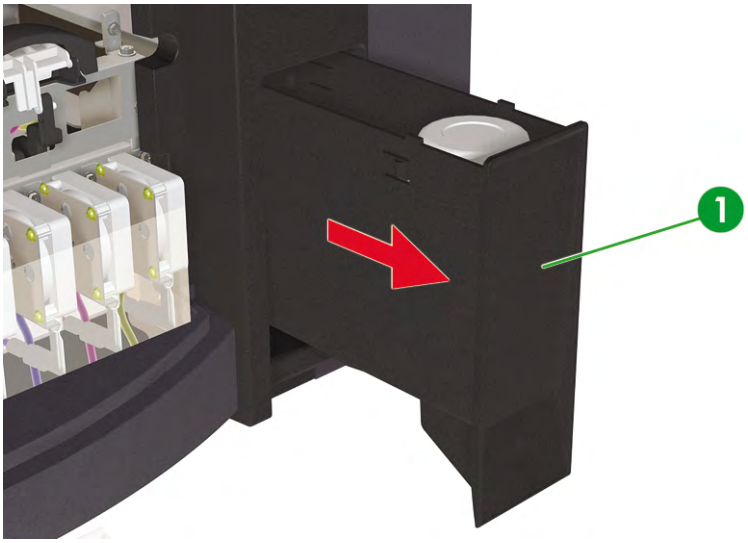
NOTE Perform the above every day before printing.

Always use the specified cleaning liquid and cleaning equipment.

Capping unit cleaning

This cleaning procedure will remove any dried ink and particles from the capping unit.

1. Open the cleaning kit drawer (1).



2. Remove the HP 780 Cap Cleaning Kit from the drawer.

NOTE The HP 790 Cap Cleaning Kit can also be used. The HP 790 Cap Cleaning Kit comes with swabs only (no rollers).

1. Cap cleaning liquid.
2. Cap cleaning handle.
3. Cap cleaning roller.
4. Cleaning swab.
5. Disposable latex or Nitrile(R) safety gloves.

3. Put on disposable latex or Nitrile(R) safety gloves.
4. Clip a new cap cleaning roller onto the cap cleaning handle.

5. Dip the cap cleaning roller (1) into the cap cleaning liquid (2).

CAUTION Make sure that you use the cap cleaning liquid and **not** the wiper cleaning liquid to clean the capping unit, otherwise you could cause damage to the printheads.

6. Press the ONLINE key to set the printer offline.

7. Press the SHIFT key to display the **PH. MAIN** menu.

8. Press the ▶key to select the **PH. MAIN** menu.
9. Scroll to the **CAP CLEANING** option using the ▼ key and press OK to select.

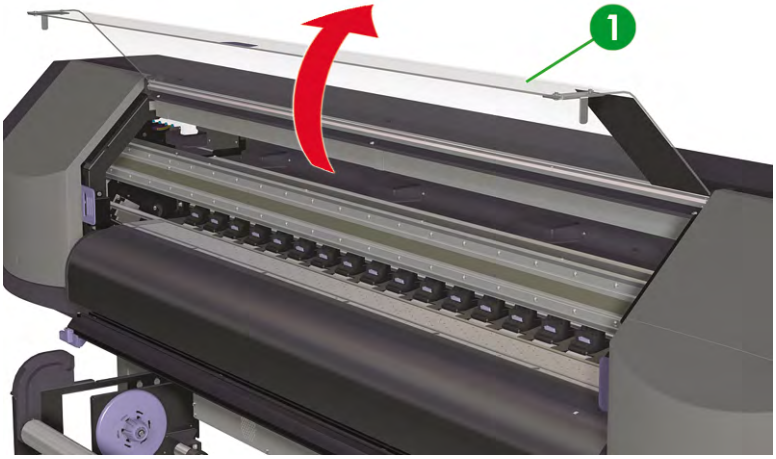
10. Press OK again to confirm your selection.

The carriage will automatically move to the left side of the printer so that the capping unit can easily be accessed. The front panel displays **CARRIAGE MOVING — PLEASE WAIT** .

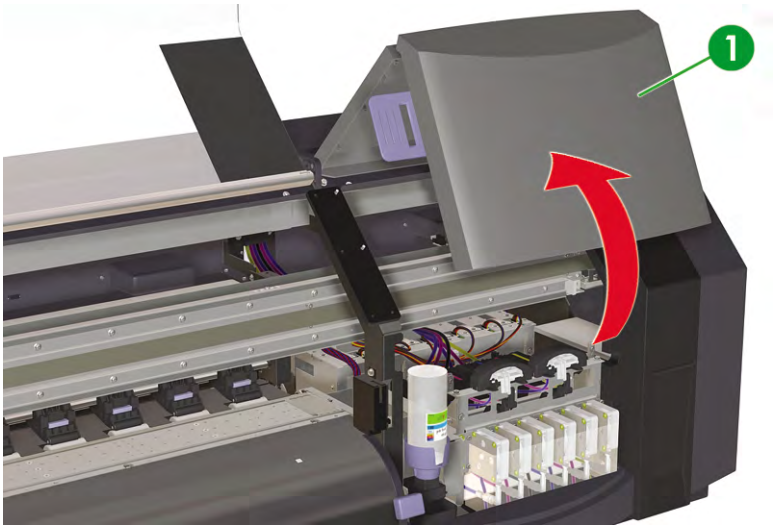
CAUTION Some types of media are prone to cockling in the area adjacent to the heaters if left stationary for any length of time. Consequently it is good practice to feed approximately 20 cm of media through the printer before starting the cap cleaning to avoid any possible damage to the printheads that could be caused by them touching any raised areas of the media.

Once the carriage is out of the capping unit, the cleaning procedure must be done as quickly as possible so as not to permanently damage the printheads. The printer issues an audio warning beep throughout the procedure.

11. When the following message is displayed, open the front cover (1).



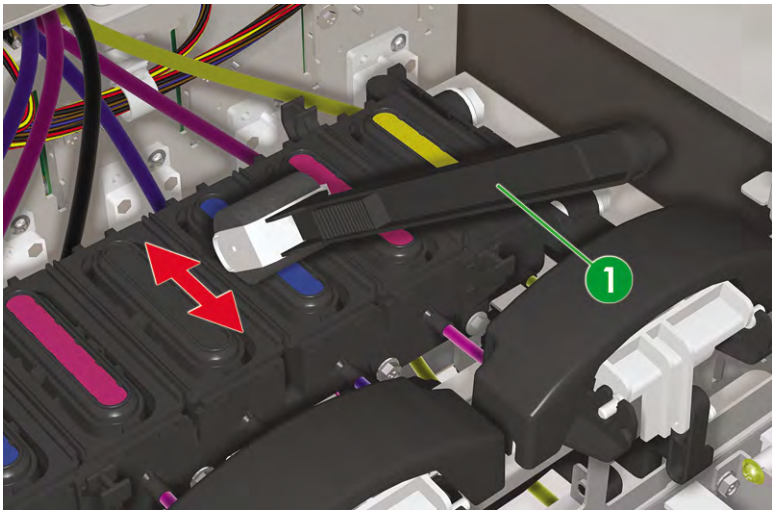
12. Open the right maintenance cover (1).



13. Clean the top surfaces of all six caps as follows:

    a. Moisten each cap by rolling over the cap once backwards and forwards, and then;

b. Clean each cap (1) by rolling over the cap ten times each.

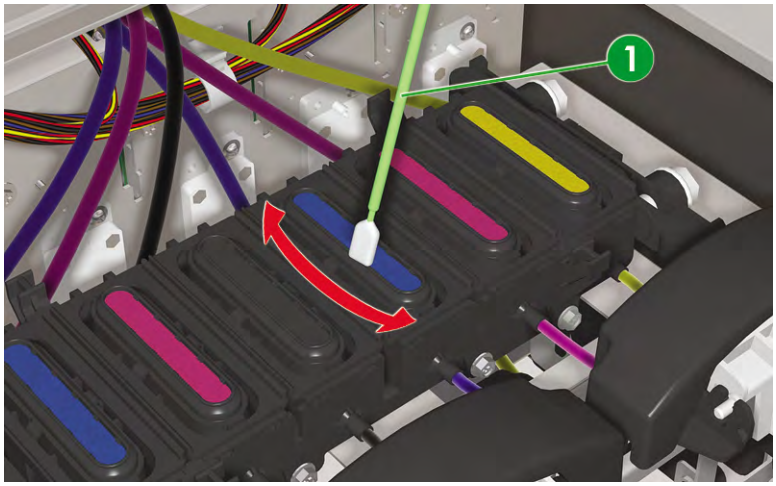


14. If the caps are still not clean, or there are particles around the edges, then clean as follows:

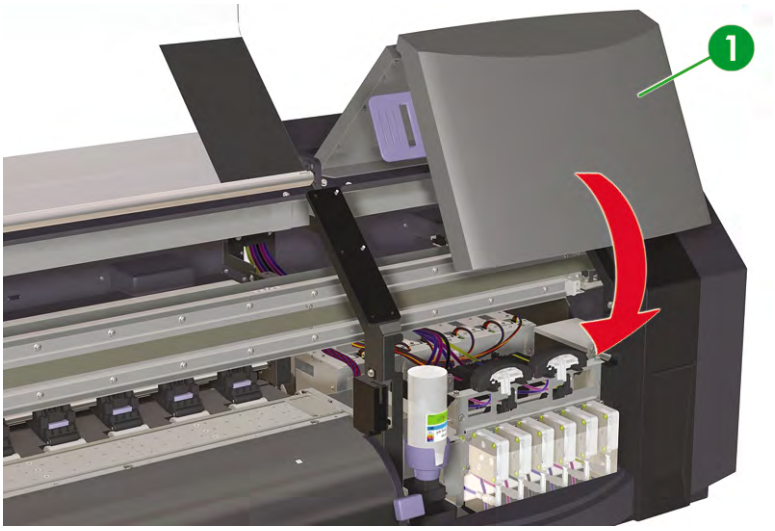
a. Dip a new cleaning swab (1) into the cap cleaning liquid (2).

CAUTION Make sure that you use the cap cleaning liquid and **not** the wiper cleaning liquid to clean the capping unit, otherwise you could cause damage to the printheads.

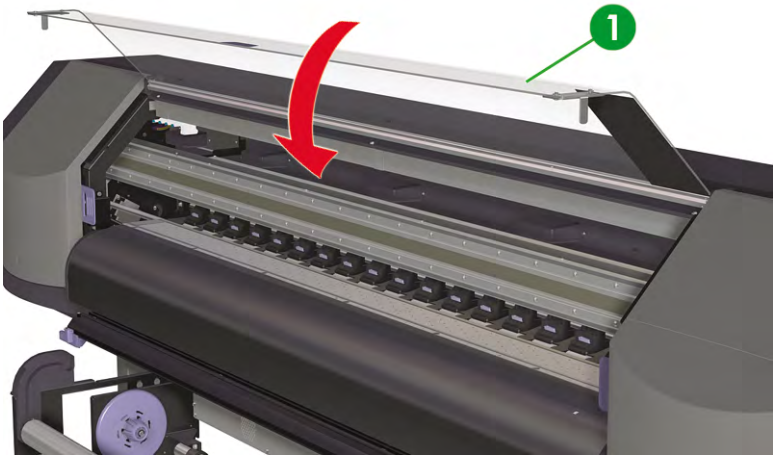
b. Clean the top outside edges and the upper surfaces of **all** six caps.



15. Close the right maintenance cover (1).



16. Close the front cover (1).



The printhead carriage will return to the right maintenance area (home position) automatically.

NOTE Use the **NOZZLE PRINT** to check that there are no printhead nozzles out after cap cleaning.

Wiper liquid bottle replacement

NOTE When the wiper liquid has been installed for some time the liquid will no longer be clear. This is quite normal because the liquid becomes tinted as it is used to clean the wiper blade.

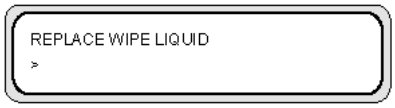
Wiper liquid ensures that the wiper blade can correctly clean the printheads. The wiper liquid level should be checked every month or when the following message is displayed:

WARNING! Make sure that the wiper liquid does **not** drip onto other parts of the printer.

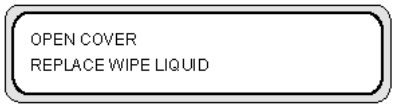
1. Press the ONLINE key.

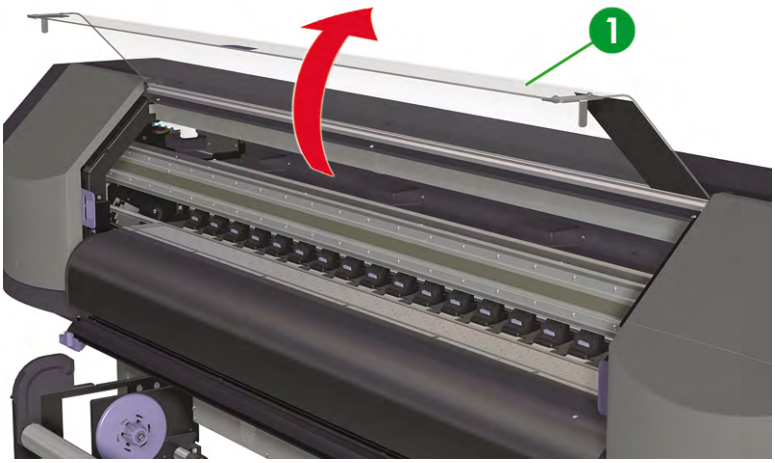
2. Press the SHIFT key to display the **PH. MAIN** menu.

3. Press the ► key to select the **PH. MAIN** menu.
4. Scroll to the **REPLACE WIPE LIQUID** option using the ▼ key and press OK to select.



5. Press OK again to confirm your selection.
6. When the following message is displayed, open the front cover (1).



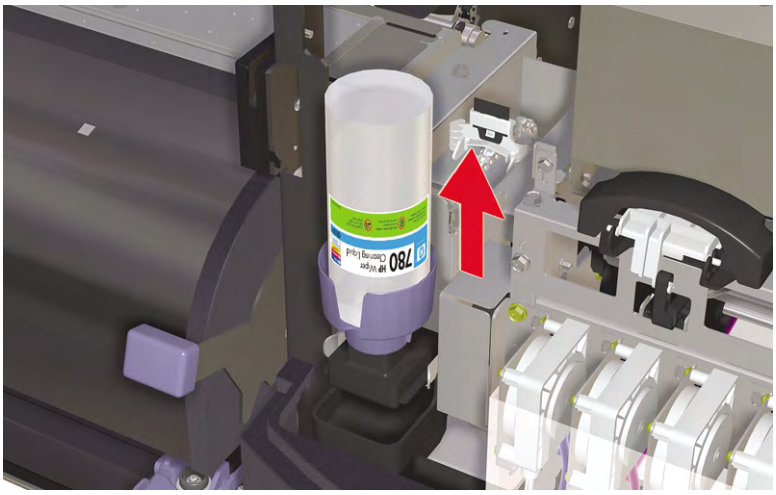


7. Open the right maintenance cover (1).

8. Carefully lift the empty wiper liquid bottle from the wiper liquid holder enough to make sure any remaining liquid drains into the printer.

NOTE It is recommended that you put on the gloves that came with the HP Wiper Cleaning Kit.

WARNING! Make sure that the wiper liquid does **not** drip onto other parts of the printer.



9. Remove and discard the wiper liquid bottle from the wiper liquid holder.

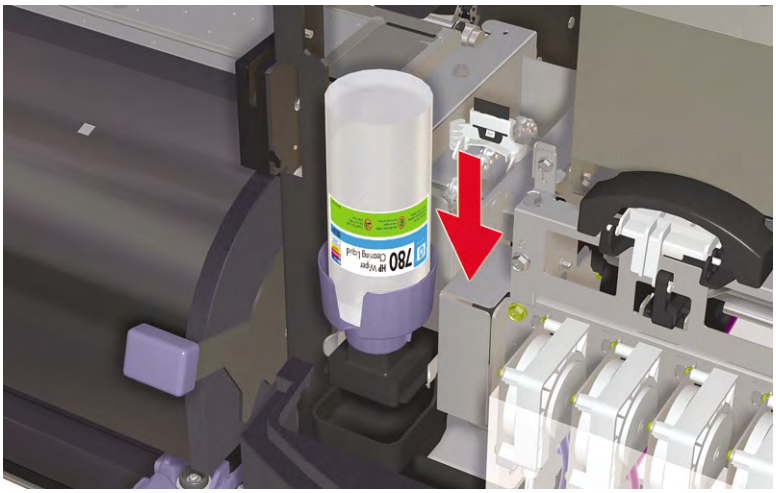
10. Remove the replacement wiper liquid bottle (1) from the maintenance drawer.

11. Remove the wiper liquid bottle cap (1).

12. Make sure that the plastic seal (1) is well positioned in the hole of the wiper liquid dispenser cap.

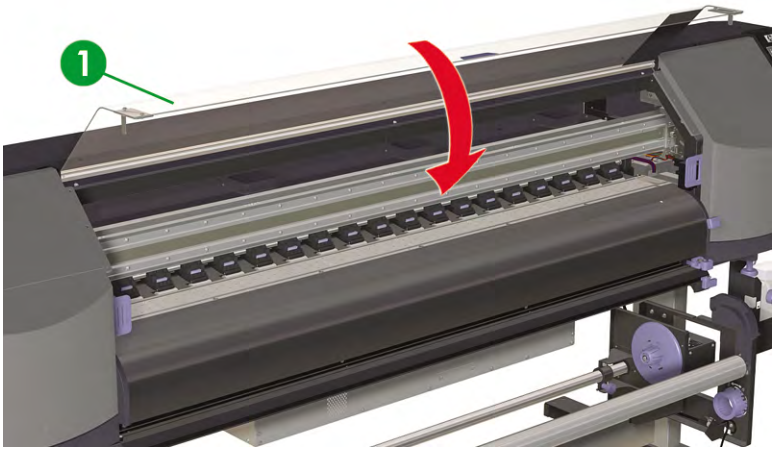
13. Insert the wiper liquid dispenser cap (1).

14. Place the wiper liquid bottle in the wiper liquid holder and push it firmly down to ensure it is fully engaged.



15. Close the right maintenance cover (1).

16. Close the front cover (1).



The following message is displayed on the front panel:

17. Select **YES** and press the OK key to confirm replacement.

Wiper sponge replacement

The wiper sponge ensures that the wiper blade can correctly clean the printheads. The wiper sponge should be replaced approximately every six months or when the following message is displayed:

NOTE Please contact HP Support to obtain the Wiper Sponge Replacement Kit containing the new wiper sponge and wiper liquid bottle.

CAUTION The use of safety glasses and gloves is recommended when performing cleaning and maintenance operations.

Always use genuine HP cleaning kits. These have been designed for maintaining high-quality imaging performance and reliable printer operation. Using non-HP supplies may cause poor print quality, printer malfunction, printer failure, or a safety hazard.

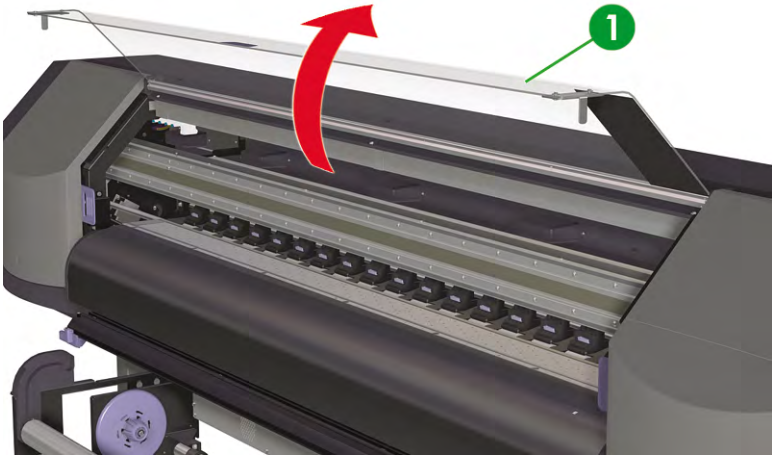
1. Press the ONLINE key.

2. Press the SHIFT key to display the **PH. MAIN** menu.

3. Press the ▶ key to select the **PH. MAIN** menu.
4. Scroll to the **REPLACE WIPE SPONGE** option using the ▼ key and press OK to select.

5. Press OK again to confirm your selection.

6. When the following message is displayed, open the front cover (1).

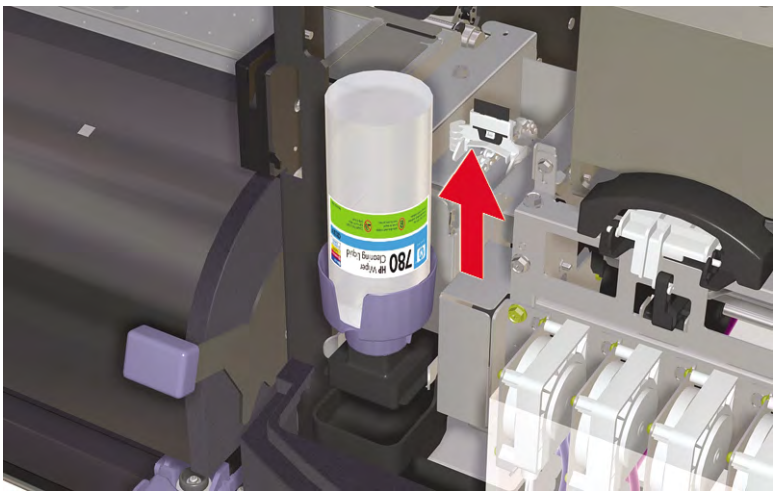


7. Open the right maintenance cover (1).

8. Carefully lift the empty wiper liquid bottle from the wiper liquid holder enough to make sure any remaining liquid drains into the printer.

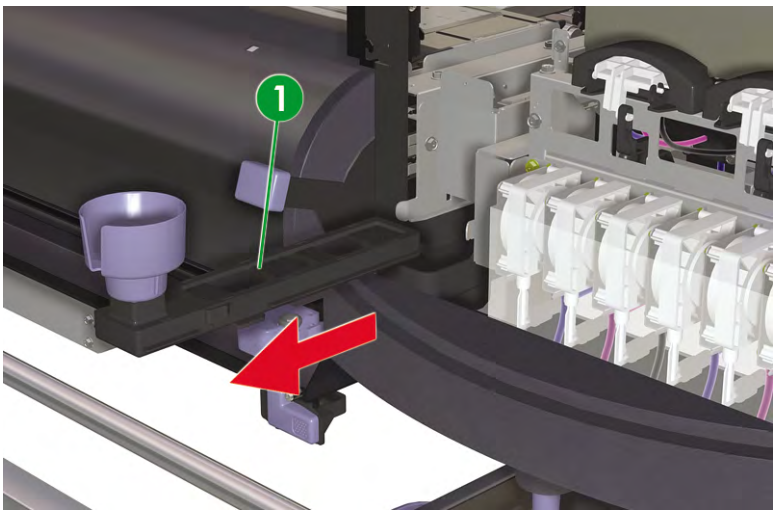
NOTE It is recommended that you put on the gloves that came with the HP Wiper Cleaning Kit.

WARNING! Make sure that the wiper liquid does **not** drip onto other parts of the printer.

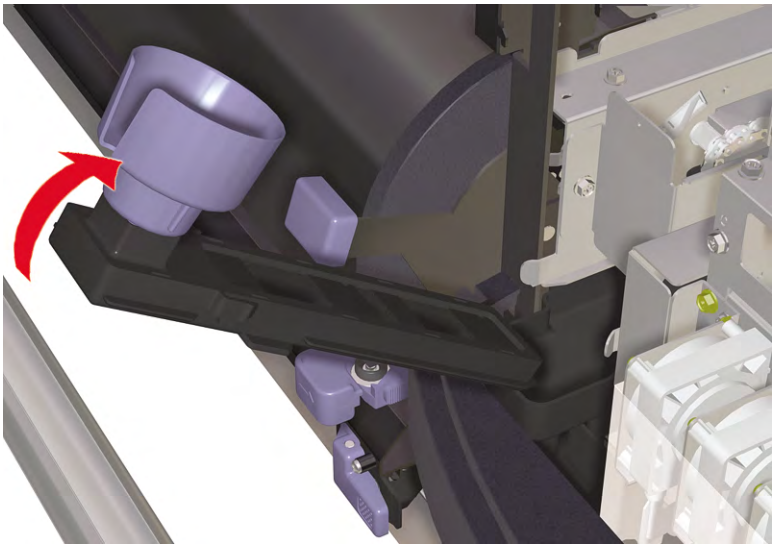


9. Remove and discard the wiper liquid bottle from the wiper liquid holder.

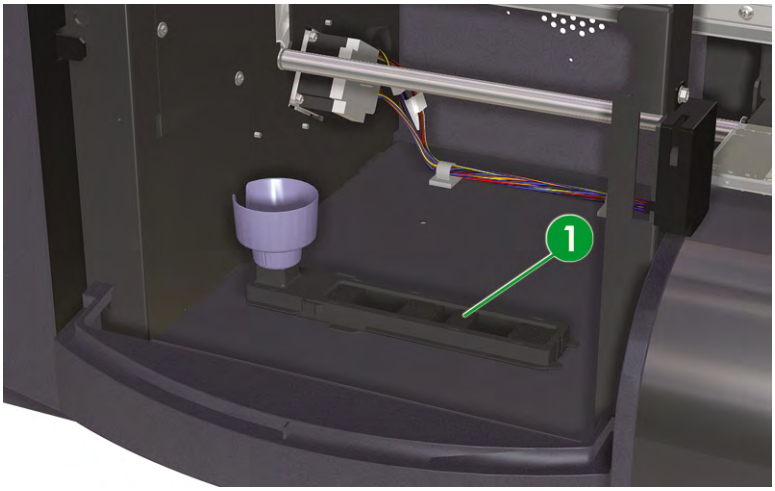
10. Remove the wiper sponge by pulling out the tray (1). Do not remove the tray completely.



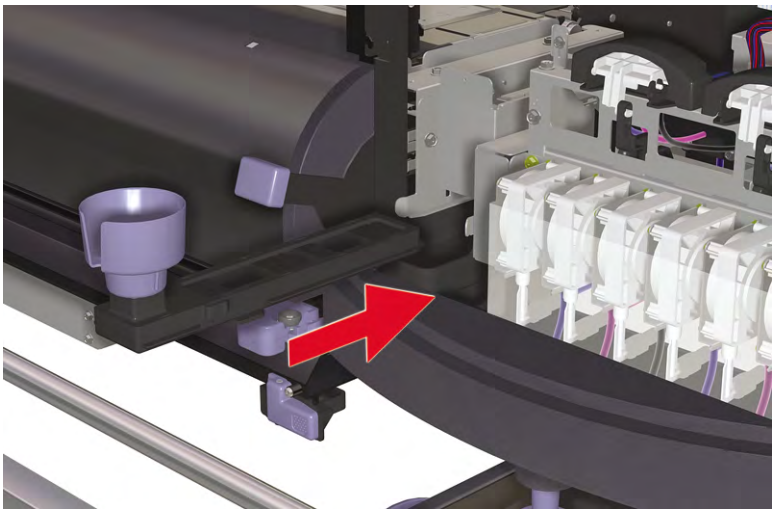
11. Tilt the wiper sponge tray to empty any excess liquid into the drainage tray.



12. Open the carriage maintenance cover, remove the wiper sponge (1) and close the cover.



13. Insert a new wiper sponge.

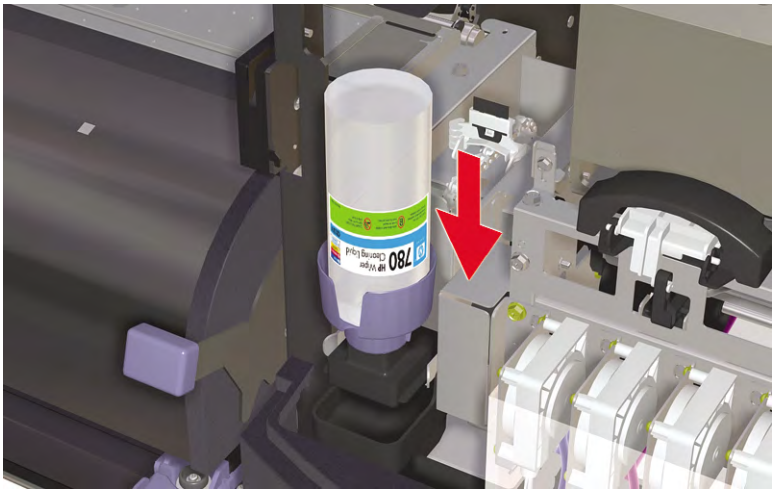


14. Remove the wiper liquid bottle cap (1) from the new bottle supplied in the Wiper Sponge Replacement Kit.

15. Make sure that the plastic seal (1) is well positioned in the hole of the wiper liquid dispenser cap.

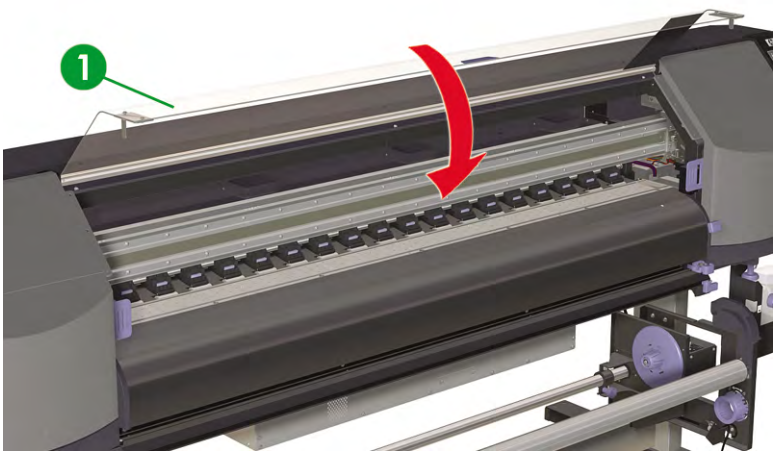
16. Insert the wiper liquid dispenser cap (1).

17. Place the wiper liquid bottle in the wiper liquid holder and push it firmly down to ensure it is fully engaged.



18. Close the right maintenance cover (1).

19. Close the front cover (1).



The following message is displayed on the front panel:

20. Select **YES** and press the OK key to confirm replacement.

Wiper blade replacement

The wiper blade cleans the printheads. Replace the wiper blade every three months or when the following message is displayed:

CAUTION The use of safety glasses and gloves is recommended when performing cleaning and maintenance operations.

Always use Genuine HP Cleaning and Maintenance Kits. These have been designed for maintaining high-quality imaging performance and reliable printer operation. Using non-HP supplies may cause poor print quality, printer malfunction, printer failure, or a safety hazard.

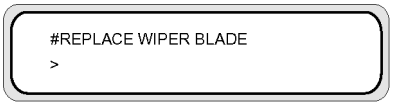
When the **PRINTER READY** message appears on the front panel, press the ONLINE key to take the printer offline.

1. Press the ONLINE key.

2. Press the SHIFT key to display the **PH. MAIN** menu.

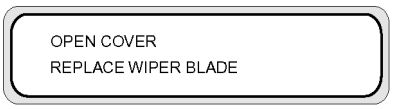
3. Press the ► key to select the **PH. MAIN** menu.

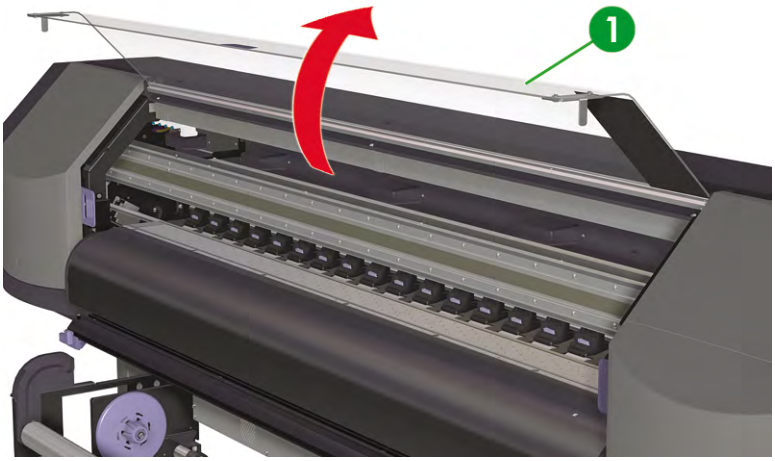
4. Scroll to the **REPLACE WIPER BLADE** option using the ▼ key and press OK to select.



5. Press OK again to confirm your selection.

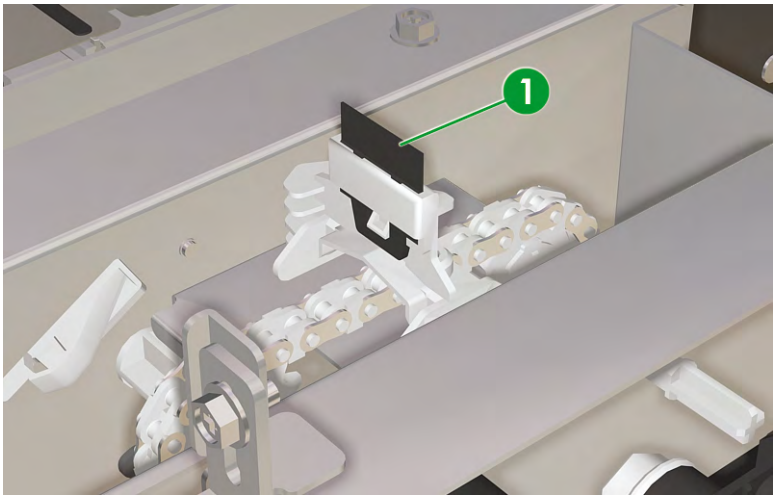
6. When the following message is displayed, open the front cover (1).





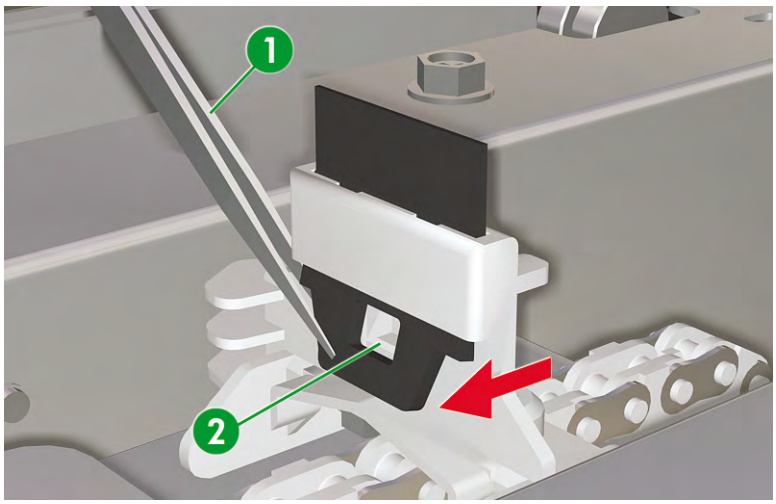
7. Open the right maintenance cover (1).

8. The wiper blade (1) is located on the left in the maintenance area.

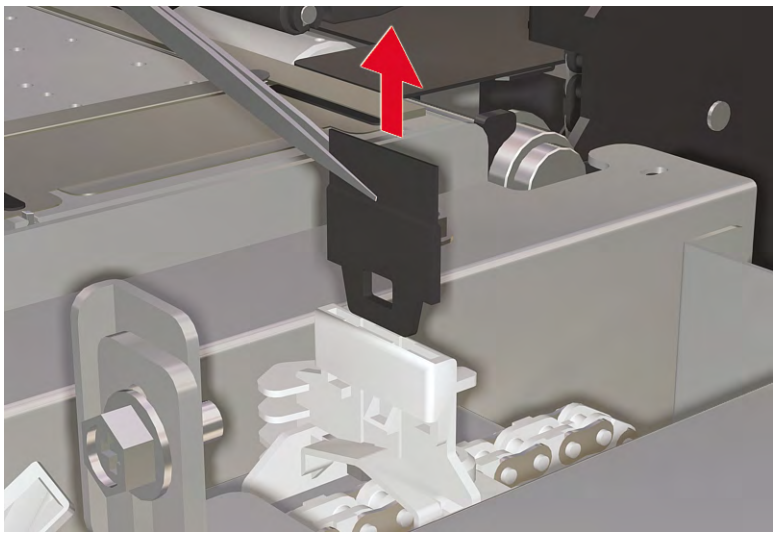


9. Using the tweezers (1), remove the wiper blade as follows:

   a. Pull the bottom of the wiper blade (2) to release.

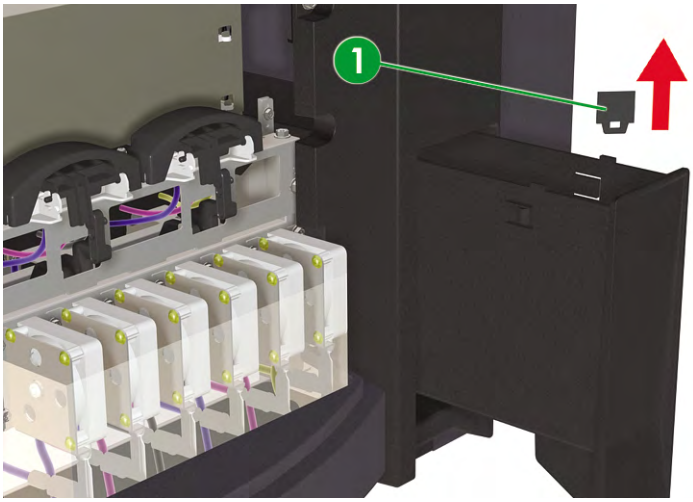


   b. Pull the wiper blade out from its slot from the top.



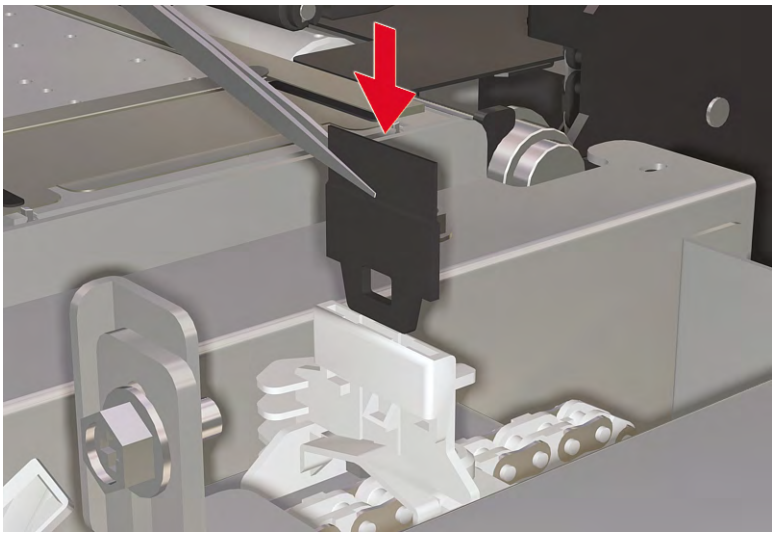
10. Take a new wiper blade from the cleaning kit drawer.

> **CAUTION** Hold the wiper blade (1) from the bottom rubber edge. Do not touch the top edge (the blade).

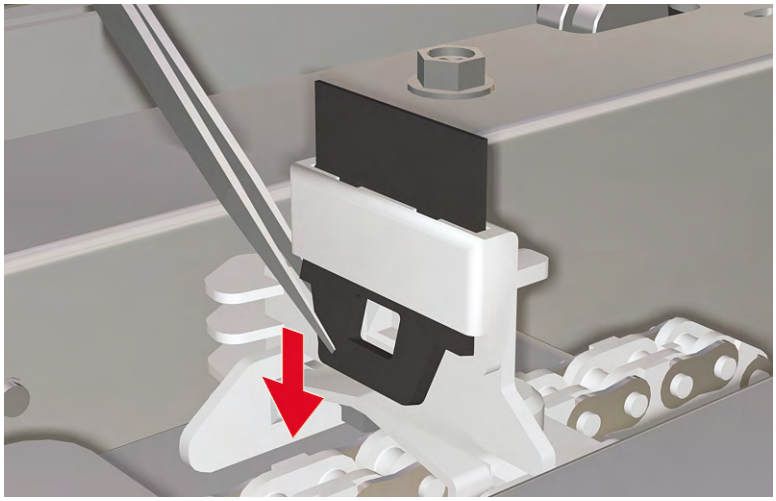


11. Using the tweezers, insert the wiper blade as follows:

    a. Insert the wiper blade into its slot so that the bottom edge can be taken by the tweezers from below the slot.

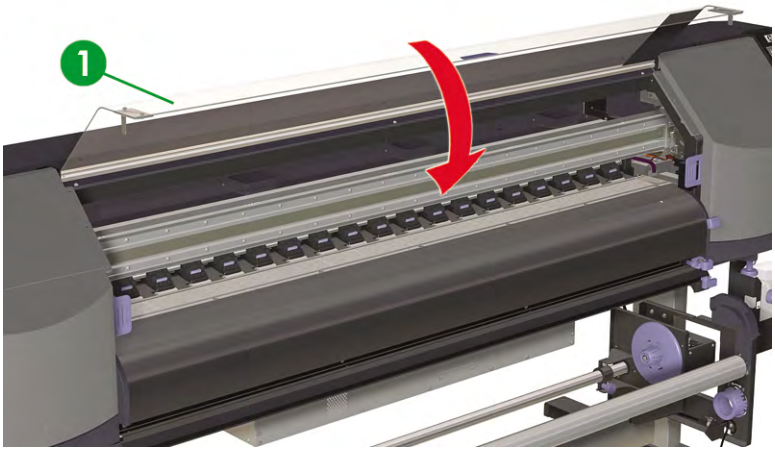


b. From below the slot, pull the wiper blade down so that it is fully inserted.



12. Close the right maintenance cover (1).

13. Close the front cover (1).



The following message is displayed on the front panel:

14. Select **YES** and press the OK key to confirm replacement.

When returning to the printer after being switched off for an extended period (less than two weeks)

WARNING! Never switch off the printer without following the correct procedures. Even with the storage liquid installed, never leave the printer off for more than 4 weeks. Leaving your printer off for more than 4 weeks can cause permanent damage that cannot be repaired. In all other cases make sure you observe the appropriate maintenance guidelines.

CAUTION If you need to leave the printer unattended for any reason, ensure that the **printer is on**, the **ink cartridges are full**, **media is loaded** and the **waste ink bottle is empty**, so that automatic maintenance can be completed successfully for the time you are not present. If needed, install new ink cartridges. The ink cartridges that you replace can be reused when you return to your printer, if they still contain ink.

To clean the ink system, you will need the HP 780 Ink System Cleaning Kit (part number CB303A).

Clean ink system

This option allows you to clean dry ink from the ink system with cleaning liquid after the printer is powered on after being stored for less than two weeks.

CAUTION Do not open or close the front covers or change the position of levers while the cleaning process is being performed or the operation may have to be restarted from the beginning. This will result in the waste of the cleaning liquid. If the cleaning process has to be restarted, **new** cleaning liquid cartridges will be needed.

1. Press the ONLINE key.

2. Press the SHIFT key to display the **PH. MAIN** menu.

3. Press the ▶ key to select the **PH. MAIN** menu.
4. Scroll to the **INK SYSTEM OPT** option and press OK.
5. Scroll to the **CLEAN INK SYS** option and press OK.

6. Press OK to confirm your selection.
7. When the front panel displays the waste ink bottle warning message, check whether the waste ink bottle is present and make sure it is empty.

CAUTION Your waste ink bottle should be empty. Have available an empty waste ink bottle.

8. Press the OK key once the waste ink bottle has been checked and follow the instructions on the front panel.

   Install the Cleaning Liquid cartridges when prompted by the front panel.

After cleaning the ink system, the ink charge process must be performed (see How do I… Charge the ink system).

Prepare for extended power down (two to four weeks)

CAUTION If you physically need to relocate the printer to a new location, please contact HP because this must only be done by a trained professional.

CAUTION Never switch off the printer without following the correct procedures. Even with the storage liquid installed, never leave the printer off for more than 4 weeks. Leaving your printer off for more than 4 weeks can cause permanent damage that cannot be repaired. In all other cases make sure you observe the appropriate maintenance guidelines.

CAUTION The printer has an internal clock which allows it to automatically wash the printheads and flush some ink through the printheads, which keeps the printheads in good condition. The printer automatically washes the printheads regularly after the last printing process. If the printer is switched off for a long period, this process does not happen. If the ink does not flow through the printheads from time to time, the ink will dry inside the nozzles reaching a point where it is impossible to recover them and the printheads will fail. If the printer must be switched off for a long period of time, the customer must use either the optional HP Ink System Storage or Cleaning Kit to recover or protect the printheads.

Automatic maintenance and cleaning will not be performed if you turn off the printer on the front panel. The printer power switch on the rear of the printer should only be used when the printer is turned off to move it, to connect it to a computer, or to install or maintain printer parts.

Before starting the ink system storage procedure, make sure you have available the HP 780 Ink System Storage Kit and an empty waste ink bottle.

Ink system storage

This procedure allows you to empty the ink system of ink and fills it with storage liquid that will preserve the ink system if you do not intend to use the printer for a period of time (between two weeks and a month).

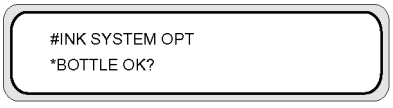
CAUTION Do not open or close the covers or change the position of levers while the ink system storage process is being performed or the operation may have to be restarted from the beginning. This will result in the waste of the storage liquid. If ink system storage has to be restarted, **new** storage liquid cartridges will be needed.

1. Clean the ink system (see How do I… Clean ink system).
2. Press the ONLINE key.
3. Press the SHIFT key to display the **PH. MAIN** menu.

4. Press the ▶ key to select the **PH. MAIN** menu and press OK.
5. Scroll to the **INK SYSTEM OPT** option and press OK.
6. Scroll to the **STORE INK SYS** option and press OK.

7. Press OK to confirm your selection.
8. When the front panel displays the waste ink bottle warning message, check whether the waste ink bottle is present and make sure it is empty.

CAUTION Your waste ink bottle should be empty. Have available an empty waste ink bottle.



9. Press the OK key once the waste ink bottle has been checked and follow the instructions on the front panel.

   Install the Storage Liquid cartridges when prompted by the front panel.

When you turn on the printer again, you will have to clean the ink system (see How do I… Clean ink system).

Charge the ink system

After the ink system has been cleaned, then you will need to charge the ink system with ink. You will need ink cartridges with more than 100 cc of ink available.

If any of the ink cartridges contain less than 100 cc of ink, a warning message is displayed on the front panel. Install a correct ink cartridge that contains more than 100 cc of ink in the indicated slot in order to continue.

To charge the ink system:

1. Press the ONLINE key.
2. Press the SHIFT key to display the **PH. MAIN** menu.

3. Press the ▶ key to select the **PH. MAIN** menu.
4. Scroll to the **INK SYSTEM OPT** option and press OK.
5. Scroll to the **CHARGE INK SYS** option and press OK.

6. Press OK to confirm your selection.
7. When the front panel displays the waste ink bottle warning message, check whether the waste ink bottle is present and is **not** full. Check the waste ink bottle and press the OK key.

8. The Ink Charge process starts. Check whether the waste ink bottle is present and is **not** full. Check the waste ink bottle and press the OK key.

   When the ink charge process is complete, the front panel displays the **CHARGE INK SYS** option.

NOTE Do not use the printer for at least one hour after charging with ink. Check that the wiper sponge is moist.

Clean the exterior of the printer

CAUTION Turn off the printer before starting to clean the exterior.

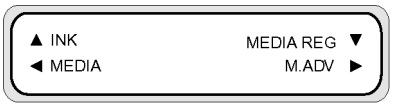
CAUTION Wipe the printer clean with a soft cloth. A cloth moistened with a neutral detergent may be used. Do not allow liquid to enter the printer. This may create risk of fire and electrical shock and cause a malfunction. Do not clean the printer with benzene or paint thinner. This may damage the paint.

Clean the outside of the printer and all other parts of the printer that you regularly touch as part of normal operation as required with a damp sponge or a soft cloth and a mild household cleaner such as non-abrasive liquid soap.

Clean the carriage base

If there is banding on the print caused by smeared ink on the carriage base you will need to clean the carriage base.

1. Press the ONLINE key to set the printer offline.



2. Press the SHIFT key to display the **PH. MAIN** menu.

3. Press the ▶key to select the **PH. MAIN** menu.
4. Scroll to the **CAP CLEANING** option using the ▼ key and press OK to select.

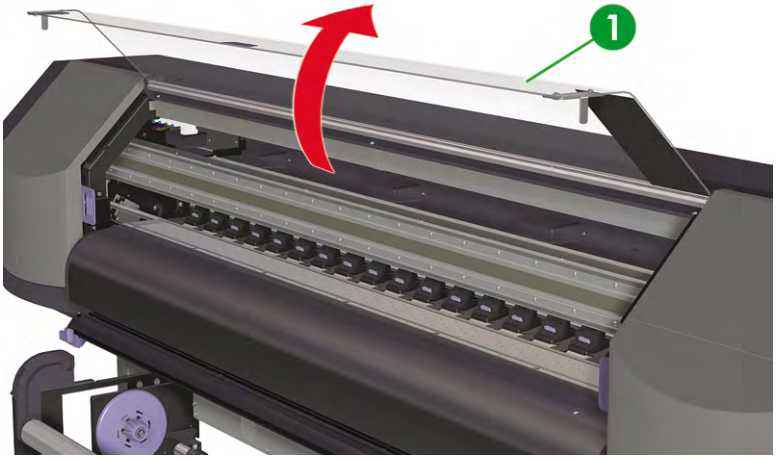
5. Press OK again to confirm your selection.

The carriage will automatically move to the left side of the printer so that the capping unit can easily be accessed. The front panel displays **CARRIAGE MOVING — PLEASE WAIT** .

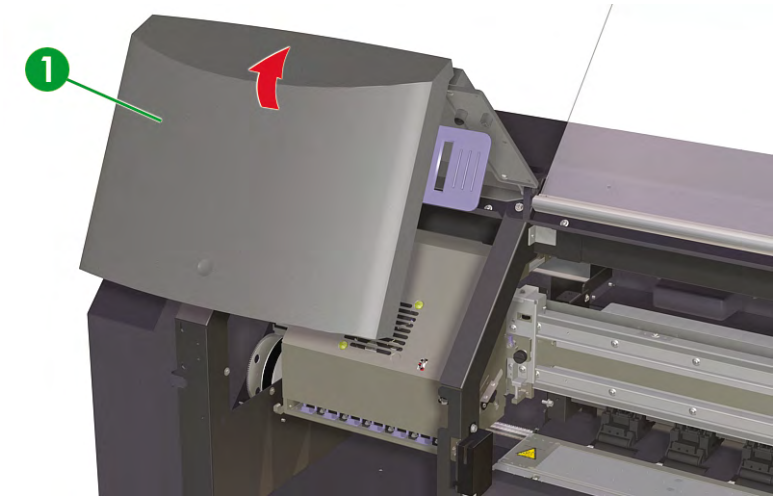
CAUTION Some types of media are prone to cockling in the area adjacent to the heaters if left stationary for any length of time. Consequently it is good practice to feed approximately 20 cm of media through the printer before starting the cap cleaning to avoid any possible damage to the printheads that could be caused by them touching any raised areas of the media.

Once the carriage is out of the capping unit, the cleaning procedure must be done as quickly as possible so as not to permanently damage the printheads. The printer issues an audio warning beep throughout the procedure.

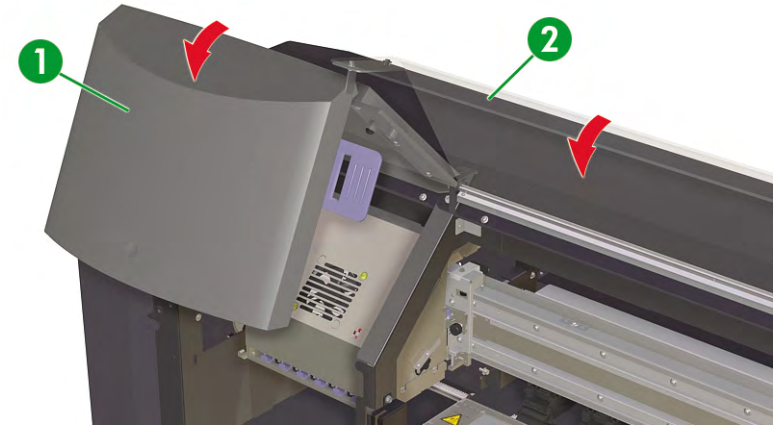
6. When the following message is displayed, open the front cover (1).



7. Open the carriage maintenance cover (1).



8. Clean the carriage base with a soft cloth.
9. Close the carriage maintenance cover (1) and close the front cover (2).



The printhead carriage will return to the right maintenance area (home position) automatically.

NOTE Use the **NOZZLE PRINT** to check that there are no printhead nozzles out after cleaning the carriage base.

Clean the front cover and media feed

NOTE Do not attempt to remove dust from media by blowing it off. This may affect print quality.

CAUTION Wipe the printer clean with a soft cloth. A cloth moistened with a neutral detergent may be used. Do not allow liquid to enter the printer. This may create risk of fire and electrical shock and cause a malfunction. Do not clean the printer with benzene or paint thinner. This may damage the paint.

CAUTION Turn off the printer before starting to clean the front cover and media feed.

1. Unload media from the printer.
2. Open the front cover.
3. Using a damp cloth, clean the front cover.
4. Using a damp cloth, absorb ink deposits on the media feed.
5. Remove dust using a vacuum cleaner.

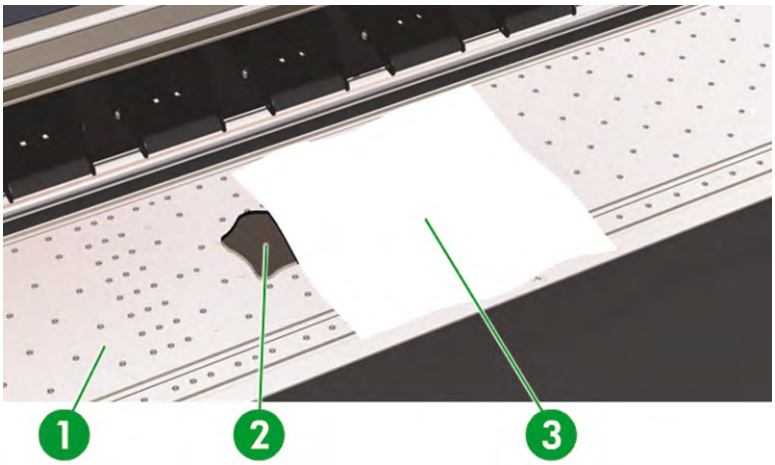
Clean the platen

You should plan to clean your printer's platen on a regular basis, every few months or when needed. When glue adheres to the platen or there are ink marks on the platen, clean the platen according to the following procedures:

NOTE If you print on wide media after using narrower media for some time, you may find that the left side of the platen has become dirty and will leave marks on the back of the media if not cleaned.

To clean the platen:

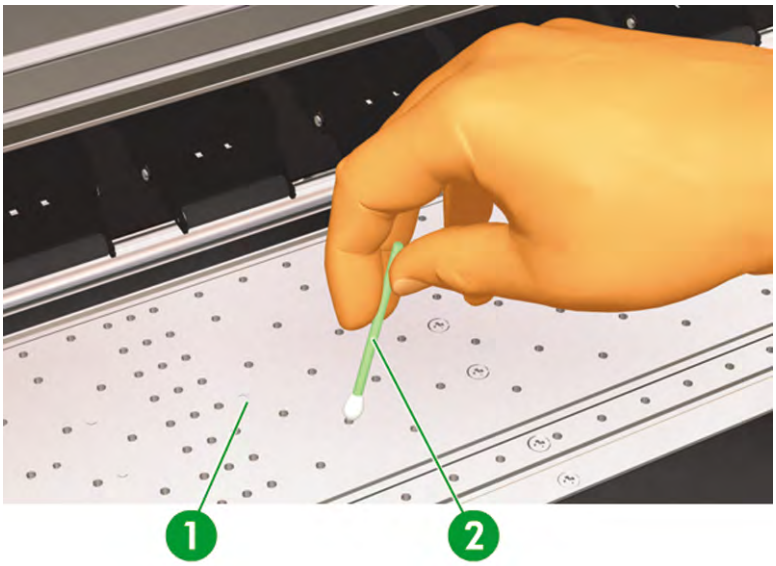
1. Unload all media from the printer.
2. Open the front cover.
3. Using a soft cloth, absorb ink deposits.



4. Use a soft cloth (3) slightly dampened with alcohol to wipe off loosened ink deposits (2) from the platen (1).

CAUTION Do not use commercial cleaners or abrasive cleaners. Do not wet the platen directly because you will leave too much moisture behind.

5. If there are ink deposits in the vacuum holes on the platen (1), clean them using commercially-available 3 mm mini-cotton swabs (2) and then wipe off loosened ink deposits with a mini-cotton swab slightly dampened with alcohol.



Waste ink bottle replacement

WARNING! The HP Waste Ink Bottle has been specifically designed to contain waste ink from the printer. It is designed to work with the printer's waste ink quantity tracking system to alert the user when the bottle is full. It provides safe handling and disposal of waste ink when sealed with its attached cap.

Use only an HP Waste Ink Bottle. The bottle must be installed according to instructions or waste ink may overflow.

An HP Waste Ink Bottle must always be installed before turning the printer ON. Automatic and manual service cycles produce waste ink that must be contained in an HP Waste Ink Bottle.

CAUTION Do not remove the cap from its tether to the HP Waste Ink Bottle. The cap is needed to properly seal the HP Waste Ink Bottle for disposal.

WARNING! Always use both hands to remove and carry an HP Waste Ink Bottle.

Keep the HP Waste Ink Bottle upright. Do not place on tables or shelves where it could fall.

Waste ink is combustible. Keep an HP Waste Ink Bottle containing waste ink away from open flames, sparks, or other sources of ignition.

Never store waste ink in a glass container.

Never pour waste ink into a container filled with other chemicals.

CAUTION The level in the HP Waste Ink Bottle must be checked by visual inspection to prevent overflow. If the waste ink level is above the indication line, the bottle must be replaced with an empty HP Waste Ink Bottle.

NOTE Place a sheet of media under the HP Waste Ink Bottle on the floor when removing a bottle containing waste ink. This will help clean up any ink spills. If soaked with ink, treat the media as a combustible material and dispose of properly.

HP recommends that you always keep a spare empty HP Waste Ink Bottle available. Some maintenance procedures require installation of an empty HP Waste Ink Bottle to prevent ink overflow.

The HP Waste Ink Bottle contains organic solvents and must be disposed of in compliance with all local, state, and federal regulations. Always securely replace the cap on a full or partially-full HP Waste Ink Bottle after removing it from the printer to prevent ink spills.

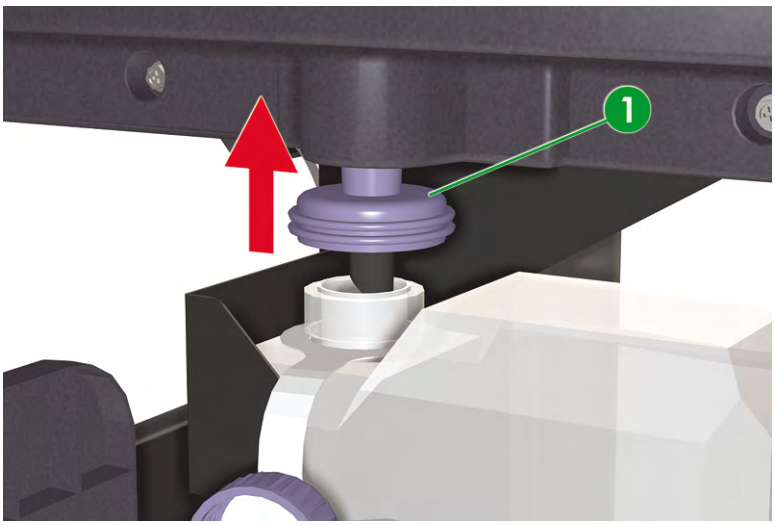
Be sure all operators are trained in the use of emergency equipment such as eye wash stations and fire extinguishers and know where they are located.

NOTE Do not replace the waste ink bottle during printing.

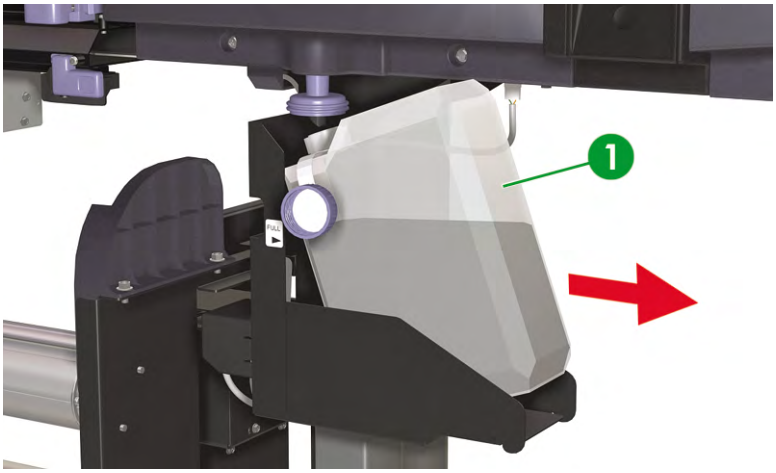
The waste ink bottle must be checked on a daily basis to make sure that it is not full.

The waste ink bottle should be replaced as follows:

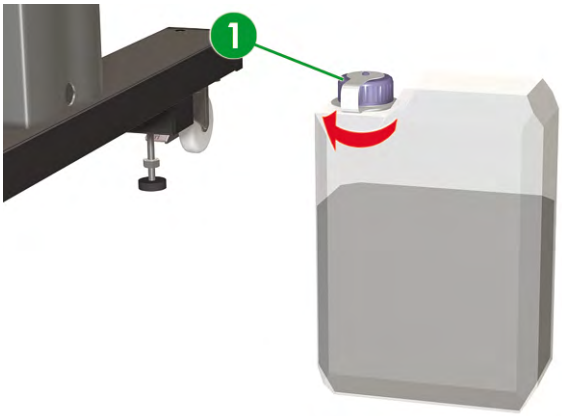
1. Lift the splash guard (1) sufficiently to remove the waste ink bottle. .



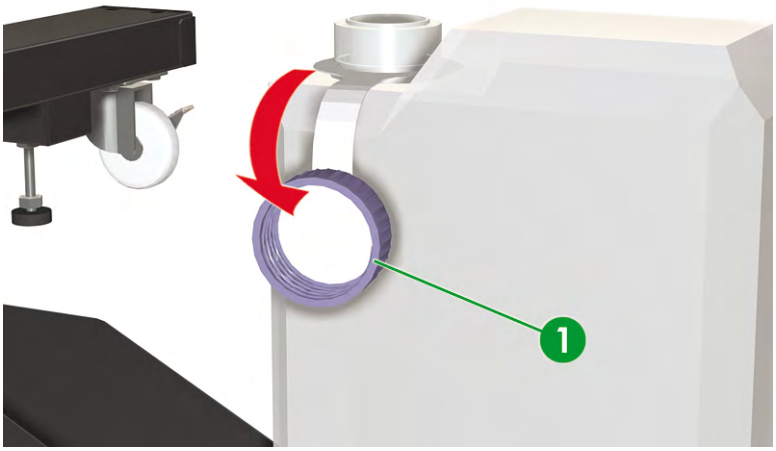
2. Carefully pull out the waste ink bottle (1), taking care not to spill any on the printer or on the floor.



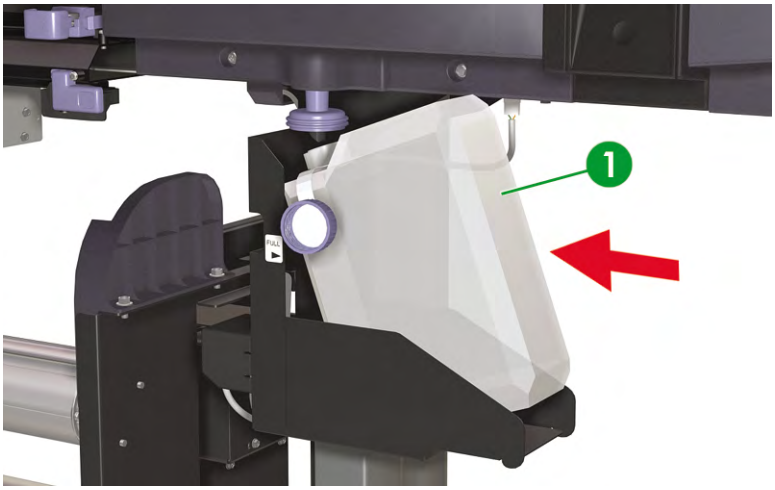
3. Securely close the cap (1) on the waste ink bottle.



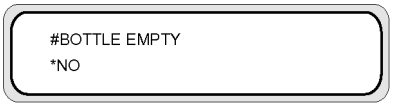
4. Take an empty waste ink bottle and undo the cap (1).



5. Install the empty waste ink bottle (1) making sure that the drainage tube is fully inserted in the bottle and the splash guard lowered.



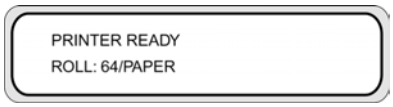
6. The front panel will request you to reset the waste ink counter.



7. Select **YES** and press the OK key to reset the Waste Counter.

Normal printhead recovery

Tip With the printer in ONLINE state, you can press the OK key to access the **PH RECOVERY** option.



To perform printhead recovery:

1. Press the ONLINE key.

2. Press the SHIFT key to display the **PH. REC** menu.

3. Press the ◄ key to enter the **PH. REC** menu.

4. Press the OK key to select the **PH RECOVERY** option.
5. Press the ▲ or ▼ keys to select **NORMAL ALL**.

NOTE If **NORMAL ALL** is not sufficient to clean the nozzles, then try the **STRONG ALL** option.

6. Press the OK key.

7. Make sure that the waste ink bottle is not full, and then press the OK key again.

NOTE Cleaning may take several minutes.

8. When cleaning is completed, the **PH RECOVERY** option is displayed.

9. Press the ◄ key to return to the offline mode.

Print the nozzle print pattern

Use the nozzle print pattern to check that all printhead nozzles are working correctly. Perform the NOZZLE PRINT every day before using your printer.

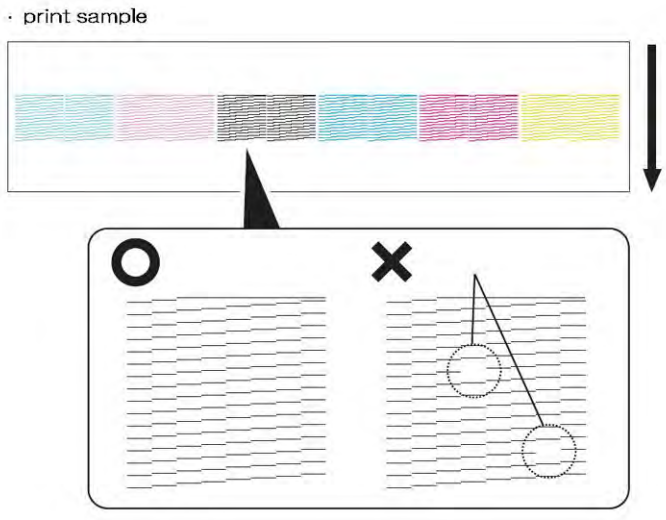
NOTE Use the nozzle print pattern to check that all printhead nozzles are working correctly after cap cleaning or any major servicing task.

To print the nozzle print:

1. Press the ONLINE key and press the SHIFT key twice.
2. Select the **ADJUST** menu using the ◄ key.

3. In the **ADJUST** submenu, scroll to **TEST PRINTS** and press the OK key.

4. In the **TEST PRINTS** menu scroll to the **NOZZLE PRINT**option and press the OK key.

NOTE If you have already verified that printhead nozzles are not printing correctly, then select the **NOZZLE PRINT/RECOVER** option. The printer will print three sets of printhead nozzle patterns, performing a printhead recovery between each pattern so that you can verify if the problem has been solved and the printhead nozzles are printing correctly.

5. Press the OK key to start printing.
6. Once the NOZZLE PRINT has finished, verify that it does not contain any missing patterns indicating printhead nozzles that are not working correctly.