
9 Preventive Maintenance

• Moisture on the Printer	434
• Noisy Carriage Bushing	434
• Belt Swelling	434
• Cleaning the Printer	434
• General Cleaning	434
• Cleaning the Drive Roller and Overdrive	434
• Cleaning the Platen	435
• Applying Oil to the Overdrive	436
• Lubricating the Carriage Assembly	437
• Scheduled Maintenance	439
• Level of Printer Usage	439

Preventive Maintenance

Moisture on the Printer

Users should use the Printer in an environment between 20% and 80% relative humidity. To recover from moisture condensation, turn the Printer Off, and, using the main roller as a reference, wait until the Printer is completely dry before using it again.

Noisy Carriage Bushing

To prevent noisy movement of the carriage, remove aluminum or dust particles from the bushing at the back of the carriage, and from the slider path along which the bushing moves.

Belt Swelling

To prevent new belts from swelling incorrectly, keep them in their bags with desiccant until you need to install them.

Cleaning the Printer

To maintain the Printer in good operating condition, keep it free of dust accumulation, ink, and other contamination. Cleaning intervals are determined by the Printer environment and by the types of Printer supplies used.

General Cleaning

Proper general cleaning should include the following:



WARNING!: To prevent an electric shock, make sure that the Printer is switched OFF and unplugged before any cleaning is performed. Do NOT let any water get inside the Printer.

1. Blow away dust accumulation with compressed air if available.
2. Clean the outer surface of the Printer with a damp sponge or cloth. Use a mild soap and water solution if necessary. Do not use abrasive cleaners.
3. Wipe the Printer dry with a soft lint-free cloth.

Cleaning the Drive Roller and Overdrive



CAUTION: If ink is spilled on the Overdrive, remove the ink immediately. Due to the ink's reflectance, ink on the Overdrive can disrupt the Printer's edge-sensing function. To remove any ink from the Overdrive, perform the following procedure.

CAUTION: Prevent water or other liquids from running onto electrical components or circuits, or through openings in the Electronics Module.

1. Perform the Turn Drive Roller Utility (Refer to page 130).
2. Open the window and apply any common household cleaning solution (water based only) to a soft, lint-free rag and apply it to the Drive Roller and Overdrive surface while it is rotating. Make sure that you thoroughly clean the Drive Roller and Overdrive surface.
3. Press **Enter** when you have completed the cleaning procedure.
4. Allow the Drive Roller to dry before loading media in to the Printer.

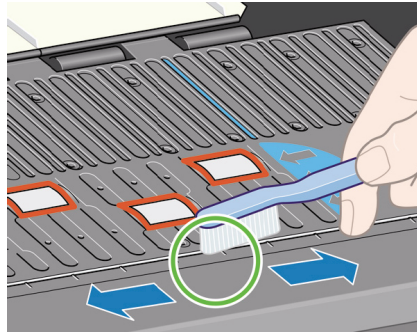
Cleaning the Platen



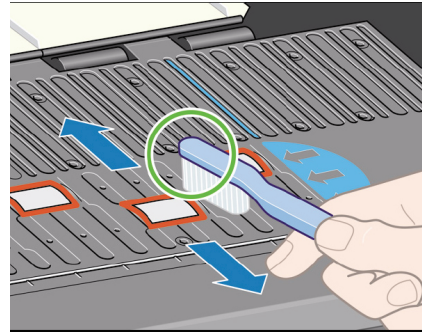
CAUTION: If wide paper is used to print after narrower paper is used for some time, you may find that the left hand side of the Center Platen has become dirty and will leave marks on the back of the paper if not cleaned.

It is recommended to clean the Center Platen on a regular basis (at least every few months or when required) as follows:

1. Unload any media loaded from the Printer.
2. Open the Window and with a dry brush remove ink deposits from the Cutter Groove and the Center Platen surface.



Cutter Groove



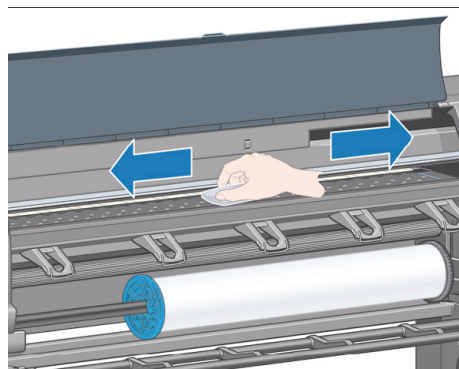
Center Platen Surface

3. Use a clean, absorbent lint-free cloth, dampened with Isopropyl Alcohol (not supplied in the Maintenance Kit), to wipe loosened ink deposits from the Center Platen.

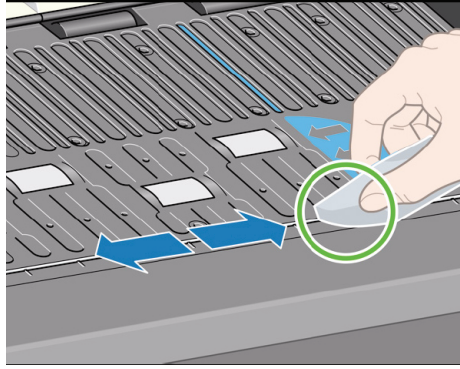


CAUTION: Do NOT:

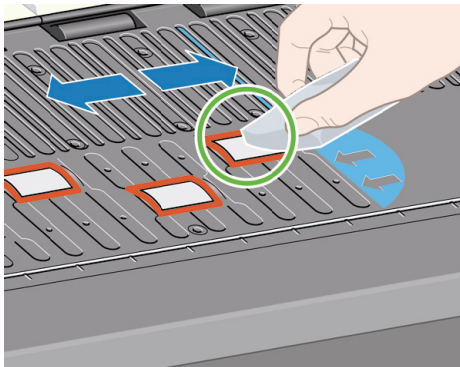
- Use commercial cleaners or abrasive cleaners.
- Wet the Center Platen directly because you will leave too much moisture behind.
- Wet the rubber wheels at all (not even with the cloth).



4. Clean the Cutter ramp with the damp cloth.



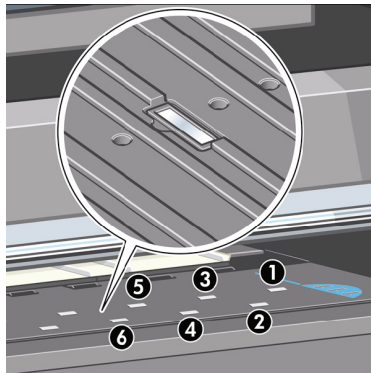
5. Clean the exposed part of the wheels with a dry cloth. Ideally, clean the whole circumference of these wheels (you can use Turn Drive Roller Utility on page 130).



Clean the paper-advance sensor window

The paper advance sensor is the very small rectangular window (less than 1 square centimeter in size and shown in the following graphic) near the sixth platen roller from the right.

Use a clean, absorbent, lint-free cloth that you have slightly dampened with isopropyl alcohol to very gently wipe any dust and loosened ink deposits from the sensor window.

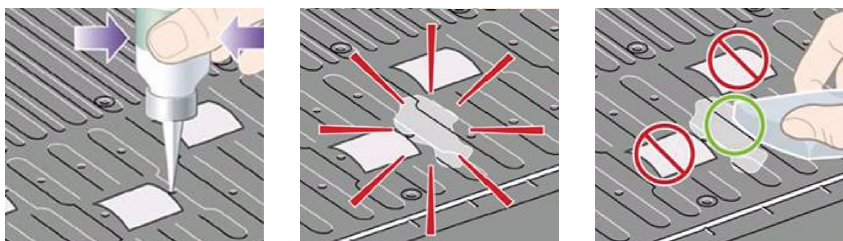


Applying Oil to the Overdrive

Occasionally, it may be necessary to oil the Overdrive in order to stop the rollers from squeaking:

1. Open the Window.
2. There are small holes in the Center Platen beside some of the rollers.
3. A bottle of oil is supplied with the Maintenance Kit. Insert the pointed end of the bottle into each hole in turn, and put three drops into each.

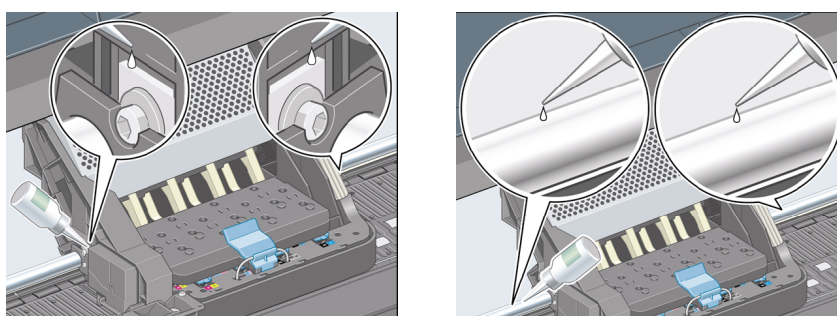
4. Be very careful not to spill any oil onto the Center Platen.
5. If there is oil on the Center Platen, wipe it away with the cloth supplied with the Maintenance Kit.
6. Close the Window.



Lubricating the Carriage Assembly

The Carriage Assembly needs to be lubricated occasionally (at least once a year) so that it can slide easily along the Slider Rod.

1. Using the Front Panel, in the Printheads menu, select “Replace printheads now”. The Carriage Assembly will move to the center of the Printer.
2. Open the Window and apply a few drops of oil (bottle of oil can be found in the Maintenance Kit) to the pads on either side of the Carriage Assembly.
3. Apply a few drops of oil directly to the Slider Rod on either side of the Carriage Assembly.



Change the maintenance absorber

An alert appears on the printer front panel when the maintenance absorber is reaching its maximum saturation and again when the absorber should be changed.



CAUTION: The absorber can become excessively dry and fail to function correctly in climates where the relative humidity is consistently below 25%.

CAUTION: A saturated or excessively dry maintenance absorber can cause severe damage to the printheads and other parts of the printer. HP strongly recommends that you promptly change the maintenance absorber when alerted.

Remove the maintenance absorber

1. Find the maintenance absorber and disposable plastic gloves that are included in the maintenance kit that came packaged with your printer.
2. On the printer's front panel, select the icon, and then select the option to replace the maintenance absorber.
3. Open the printer window.

4. Identify the left spittoon.



5. Locate the maintenance absorber.



6. Lift the tab that extends from the front edge of the absorber.

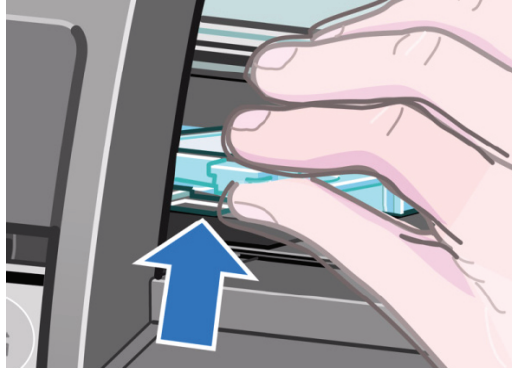


NOTE: Use the disposable plastic gloves to avoid getting ink on your hands.

7. Lift the tab on the absorber until it is clear of the spittoon and you can easily grip the tab.



8. Lift and remove the absorber from the spittoon.



9. Dispose of the soiled maintenance absorber according to your local regulations.

Insert the maintenance absorber

1. Grip the new maintenance absorber as shown.
2. Insert the back edge of the absorber into the fitting in the spittoon.
3. Use your thumb to slide the absorber to the back of the fitting in the spittoon.
4. Push down on the tabbed edge until you hear the absorber click into place. Make sure that the top of the maintenance absorber is seated flatly and that none of the corners are higher than the plane of the platen.
5. Press the OK button on the front panel. The printer verifies that the maintenance absorber is correctly seated. If the front panel shows a message that it is not seated correctly, remove the maintenance absorber, insert it again, and then press the OK button.

Scheduled Maintenance

In some segments of the printer market, the customer tends to print more than the maximum number of prints that the throughput allows, exceeding by far the limit of the design. When this happens the customer runs into print quality problems and continuous Printer failures.

The purpose of scheduled preventive maintenance is to avoid these failures - ensuring a good performance during all the product life.

Level of Printer Usage

Normal printer use means 6,000,000 Carriage Cycles (which corresponds to approximately 100,000 A0 prints on average). Under normal usage conditions, it will be approximately 5 years before the printer needs maintenance. If the printer is used more than the normal usage conditions, then it will need maintenance service much more frequently.

One of the EEROM counters is assigned to counting the number of carriage cycles. When certain components of the Printer exceed this amount, the front panel displays the following message:

"Maintenance #1 required"

The following message is triggered depending on the total quantity of ink spitted in each Spittoon.

"Maintenance #2 required"

Once one of the maintenance advised messages is displayed, the preventive maintenance kit must be used to replace the most worn parts of the printer. Use the Removal and Installation Chapter of this Service Manual as a guide to replace the necessary parts.

The following PM Kit covers both Maintenance advised messages:

Preventive Maintenance Kit #1

This Preventive Maintenance Kit #1 contains the following components:

- Encoder Strip ⇒ page 315
- Carriage Assembly - without PCA, Cutter, and Color Sensor ⇒ page 323.
- Ink Supply Tubes and Trailing Cable ⇒ page 296.
- Scan-Axis Motor ⇒ page 330.
- Belt Assembly ⇒ page 329.

You must also clean the holes in the Service Station which are located under the Maintenance Cartridge.

Preventive Maintenance Kit #2

This Preventive Maintenance Kit #2 contains the following components:

- Aerosol Filter ⇒ page 284.
- SVS aerosol assembly ROHS ⇒ page 284.
- Ink Absorber ⇒ See User's Guide
- Left spittoon ⇒ page 312.
- Color Sensor ⇒ page 374.
- Line Sensor ⇒ page 372.
- Encoder Strip ⇒ page 315