

# Preventive Maintenance

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## 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 dessicant 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:

**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

**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:**

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

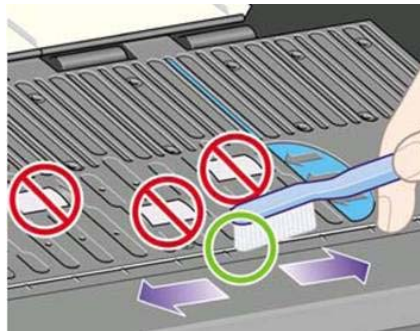
- 1 Perform the Turn Drive Roller Utility (Refer to Page 4-63).
- 2 Open the window and apply any common household cleaning solution (water based only) to a soft, lint-free rag and apply it to the Drive Roller and Overdrive surface while it is rotating. Make sure that you thoroughly clean the Drive Roller 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 Center Platen

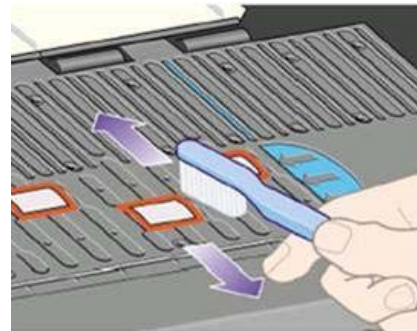
**If wide paper is used to print after narrower paper is used for some time, you may find that the left hand side of the Center Platen has become dirty and will leave marks on the back of the paper if not cleaned.**

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.



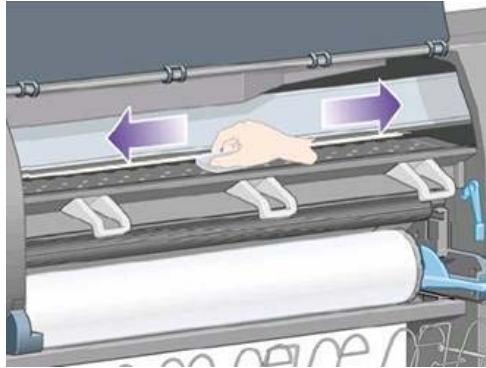
Cutter Groove



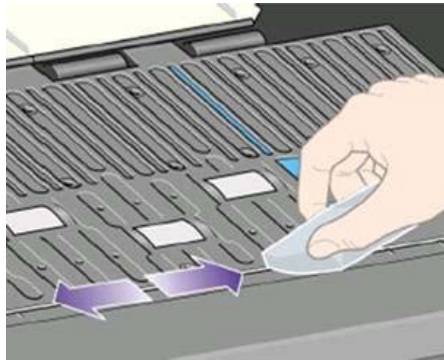
Center Platen Surface

- 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.

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



- 4** Clean the Cutter ramp with the damp cloth.



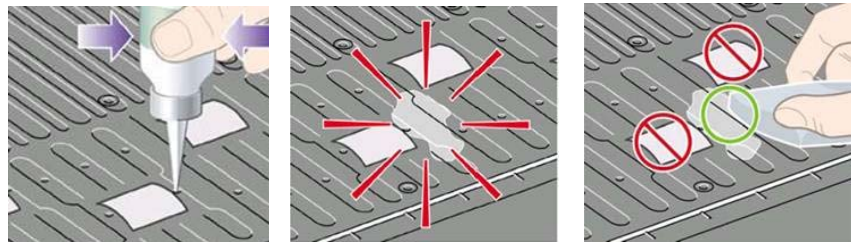
- 5** Clean the exposed part of the wheels with a dry cloth. Ideally, clean the whole circumference of these wheels (you can use Turn Drive Roller Utility on Page 4-63).



## Applying Oil to the Overdrive

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

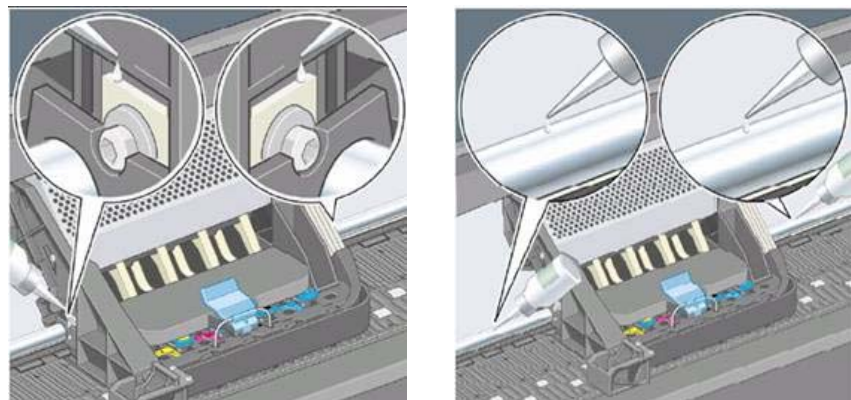
- 1 Open the Window.
- 2 There are small holes in the Center Platen beside some of the rollers.
- 3 A bottle of oil is supplied with the Maintenance Kit. Insert the pointed end of the bottle into each hole in turn, and put three drops into each.
- 4 Be very careful not to spill any oil onto the Center 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.



## 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 - Part Number Q1273-60061

This Preventive Maintenance Kit contains the following components:

- Complete Carriage Assembly (⇒ Page 8-53).
- Ink Supply Tubes and Trailing Cable (⇒ Page 8-33).
- Scan-Axis Motor (⇒ Page 8-59).
- Belt Assembly (⇒ Page 8-58).
- Most Left Spittoons (⇒ Page 8-43).
- Middle Left Spittoons (⇒ Page 8-44).
- Scraper (located on the Service Station).

You must also clean the holes in the Service Station which are located under the Black Printhead Cleaners.