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Preventive Maintenance

Moisture on the Printer

Users should use the Printer in an environment between 5% and 95% 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 dissicant 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.

W A R N I N G   **Disconnect the Printer from the power source prior to performing any cleaning. DO NOT allow liquid to run on to electrical components or circuits, or through openings in the enclosure, as this can create a shock hazard leading to death or injury.**

General Cleaning

Proper general cleaning should include the following:

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

W A R N I N G	**The drive roller cleaning procedure should be performed only by HP trained personnel: otherwise personal injury may occur.**

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

1 Make sure the printer is switched OFF from the power switch on the back of the printer and **not** from the standby button on the front of the printer.

2 Hold the UP and ENTER keys down and switch the printer **O**N. Wait until the message "Status/Initializing" is displayed on the front-panel before releasing the UP and ENTER keys.

3 Once the message "Status/Ready" is displayed on the front-panel, press the **Enter** key.

4 Use the **Arrow** keys to scroll to the "Utilities" menu display and press the **Enter** button. Make sure that you are in the Full menu mode because otherwise you will not be able to access the "Service Tests" submenu.

5 Use the **Arrow** keys to scroll to the "Service Tests" menu display and press the **Enter** button.

6 Use the **Arrow** keys to scroll to the "Diagnostics" menu display and press the **Enter** button.

7 Using the **Up Arrow** button, scroll to reach the following display and press **Enter**:

> Diagnostics
> D15 Clean Roller

8 The "Unload Media" message is displayed on the front-panel. Remove the media (if loaded).

9 The "Move Roller" message is displayed on the front-panel. Use the **Up Arrow** to rotate the drive roller clockwise and the **Down Arrow** to rotate the drive roller counter-clockwise.

10 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 surface while it is rotating. Thoroughly clean the roller surface. Also make sure that you clean the mark encoder on the left side of the driver roller.

11 Press **Previous** when you have completed the cleaning procedure. The "D1500 Done" message is displayed on the front-panel.

12 Switch the Printer OFF and then ON again after a few seconds.

13 Allow the drive roller to dry before inserting media in the Printer.

Cleaning the Electrical Contacts?

The problem.

The printer fires drops by sending electrical signals from the printhead carriage to the printhead through the electrical contacts present on the carriage and on the printheads. The problem is that when you load the printheads into their stalls, sometimes some ink goes over the carriage electrical contacts, and when the printhead is installed over the printhead electrical contacts. When the printer prints, some ink goes to the bottom of the electrical contacts. This causes electrical continuity problems that can be fixed very easily.

The solution.

A new tool has been created especially to clean the electrical contacts and is called the Ink Cleaner (Part Number C6247A - includes the instructions).

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 an average of 15 image prints with an area of 0.76 m^2/print (8 ft.^{2}/print) per day. If the prints are smaller than this, the number of pages per day can be higher.

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 swaths. When the printer exceeds 7,000,000 passes (HP DesignJets 2500CP/2000CP) or 6,000,000 passes (HP DesignJets 3500CP/300CP), the front panel displays the following message:

"Maintenance Advised"

The Service Print also conveys the usage information, and it is accessible by the user.

Once the maintenance advised message 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.

After the preventive maintenance is done the Customer Engineer must reset the maintenance counter by entering the Service Calibrations Menu and performing the Maintenance Calibration ◗ page 5-18. All other internal counters must also be reset by entering the Service Tests Menu and performing the Reset Counters test ◗ page 4-30.

Preventive Maintenance Kit - Part Number C4704-60284 (Only Applicable to HP DesignJets 2500CP/2000CP)

Preventive Maintenance Kit - Part Number C4723-60141 (Only Applicable to HP DesignJets 3500CP/3000CP)

Y-axis Maintenance Parts

In addition to the wearing of the Y-axis motor, the friction in this area can increase due to the accumulation of ink particles and dust from the media or the atmosphere in the vicinity of the slider rods.

The Y-axis maintenance parts include the items necessary to clean the slider rods properly, and a lubricant to apply onto the rods.

The most important parts to keep clean are the upper and internal sides of the rods.

NOTES