

DJ130 poster printer preventive maintenance

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Replace the filter

Change the filter annually. It is located to the right of the service station

Vacuum and clean

Perform this procedure during every scheduled service visit.

Materials needed:

- 3M toner vacuum with nozzles and round brush attachments
- Texwipe, preferably texwipe blend, not cloth texwipe
- Flat foam-head Q-tips
- Compressed air canister
- Distilled water
- Pen light
- Optional: 2.5 cm (1 inch) hook-and-loop tape strap to prevent paper from unrolling

Clean the outside of the printer

Optional step: Place velcro strap on paper roll to prevent it from unrolling.

1. Use a round brush attachment to vacuum the outside surfaces on and around the printer.
2. Remove paper from the upper and lower paper trays.
 - a. Remove the upper and lower paper trays.
 - b. Vacuum the upper and lower paper trays.
 - c. Set the trays aside.
3. Press the unload paper button on the back of the plotter.
4. Dust the paper as it is unloaded.
5. Remove the paper roll.
6. Unplug the printer (it is easiest to unplug at the back of the printer).
7. Using a lint-free cloth, wipe away any dust still on the paper roll.
8. Store the roll on a clean, flat surface.
9. Remove the paper roll cleanout plate.
 - a. Vacuum off the cleanout plate and any exposed printer surfaces.
 - b. Remove the paper tray and vacuum it inside and out.
 - c. Vacuum the exposed printer surfaces.
 - d. Use the air canister to blow off any dust that was not removed by the vacuum.
 - e. Vacuum any dislodged dust.

WARNING! Do not put hands or any other part of your body inside the printer while it is plugged in.

Clean the inside of the printer

1. Open the center cover of the printer.
2. Using a flashlight, inspect the interior for dust.
3. Use a small-diameter nozzle to vacuum all dust from the inside of the plotter.

CAUTION: Do not vacuum any surfaces that appear to be wet with ink.

- a. Vacuum as far into the left side of the printer as possible.

- b. Clean out the grooves in the cleanout assembly located on the back of the printer.
- c. Use the air canister to blow off any dust that was not removed by the vacuum.
- d. Vacuum any dislodged dust still in the printer.
- e. After vacuuming, wipe the end of the nozzle to remove any wet ink that it might have picked up.
- f. Clean the “switch” on the cleanout assembly.

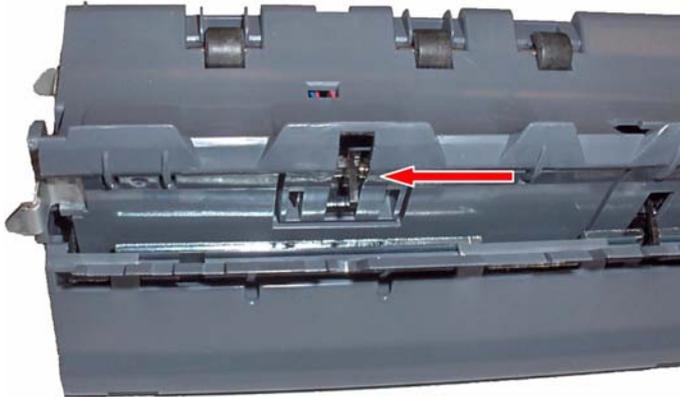


Figure 1-17 Paper detection switch

WARNING! The encoder strip is very delicate and should not be touched by the vacuum nozzles.

WARNING! The encoder disk on the far left of the printer is delicate and should not be touched by the vacuum nozzles.

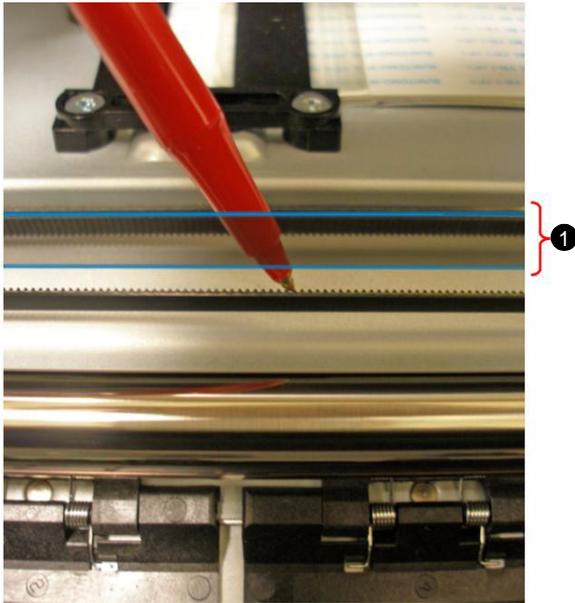
WARNING! The filter cannot be cleaned. Trying to do so will result in increasing the amount of dust in the printer.

4. Study each component to be cleaned with a damp texwipe and with the aide of the pen light. If you do not see ink or dust, skip the step.
 5. Dampen a texwipe with deionized water.
 - a. Placing the cloth over your hand, lightly pinch the encoder strip between two cloth-covered fingers.
 - b. Slide the cloth back and forth over the length of the encoder strip.
 6. Wipe the rollers with a texwipe dampened with deionized water.
 7. Examine the rollers for build-up. If they are dirty, rub the rollers with emery cloth (pickup paper).
-

CAUTION: When cleaning the rear plastic strip: Be careful not to cut yourself on the sheet metal rail above the strip. Move the carriage manually towards the left side to access the right end of the strip in order to clean it.

8. Using a clean texwipe dampened with deionized water, wipe the rear plastic strip.
-

WARNING! Be careful not to insert too much of the cloth inside the printer in order to prevent potential damage to delicate parts. Use a clean cloth when wiping the encoder strip.



- 1 The encoder strip is between blue lines. Note: the pen is behind the encoder strip, and pointing at the carriage belt.

Figure 1-18 Encoder strip

9. Select a clean portion of the cloth, or a fresh cloth.
 - a. Dampen the cloth with deionized water.
 - b. Gently wipe the carriage rod. Be careful not to damage the encoder strip. Move the carriage in order to clean the whole length of the rod.
 - c. Be sure to remove any dust at the ends of the rod.

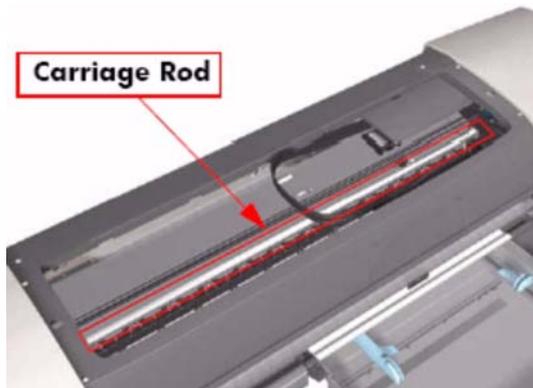


Figure 1-19 Carriage rod

- d. Ensure there is no remaining ink by examining the length of the carriage rod, moving the carriage manually to access all areas.
10. Apply a small amount of sewing machine oil to a dry texwipe.
 - Lightly wipe all accessible surfaces of the carriage rod with the oiled cloth.

IMPORTANT: Do not get oil on the encoder strip.

- Examine the encoder strip and surrounding areas for oil. If any is present, carefully remove it.
11. Move the carriage back to the service station.
 - a. Using the damp cloth, remove ink accumulated on any other surfaces. (The service station is cleaned last, as it will have the most ink accumulation.)
 - b. Move the carriage out of the service station.
 - c. Using the damp cloth, clean all exposed surfaces.
 12. Reinstall the cleanout plate.
 13. Reinstall the paper tray.
-

WARNING! Do not put hands or any other part of your body inside the printer while it is plugged in.

14. Plug in the power cord and turn on the printer.

Clean the printhead access area

This procedure requires an object to be inserted into the interlock door sensor hole to block the sensor beam. You will need to obtain or create an object for this purpose. One method is to take a 7.5 x 7.5 cm (3 x 3 inch) Post-it note and fold it to fit.

Form an interlock deflector

1. Fold the paper over about 1 cm (3/8 inch).
2. Repeat until the paper is forming one strip 1 cm (3/8 inch) wide.
3. Fold down the top 2.5 cm (1 inch) of the strip, forming an "L" shape.

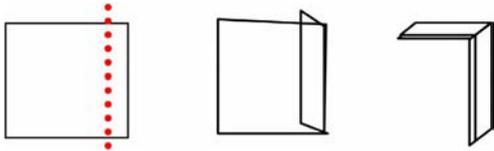


Figure 1-20 Folding a deflector from a Post-it note

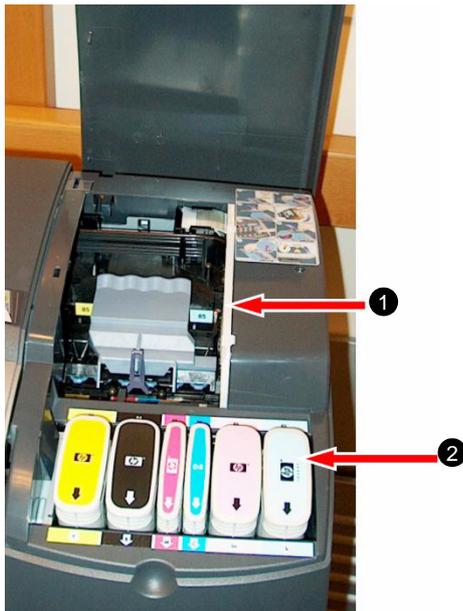
Clean the service station

There might be ink on the outside of the cartridges. Do not set them on anything that might be damaged by ink.

Please note that you cannot leave the carriage out of the service station or leave cartridges out of the carriage for more than one hour or the printheads might be damaged.

Perform all the cleaning procedures immediately. If you cannot complete the cleaning procedure, return the ink cartridges to the carriage, lower the printer covers, reconnect the power cable, and turn the printer back on so that the carriage moves back into the service station.

1. Open the ink cartridge access door



- 1 Printhead carriage
- 2 Ink cartridges

Figure 1-21 Ink cartridge access

- a. Remove the six ink cartridges.
 - b. Vacuum the cartridge area.
2. Open the printhead access cover on the right side of the printer.
 - a. Wait until the carriage moves to the printhead replacement position.
 - b. Unplug the printer without turning it off.

WARNING! When removing the printheads pull them straight up. This will prevent getting ink on the contacts.

- c. Remove all six printheads and set them on their sides on a clean dry cloth.
3. Insert a deflector into the interlock door sensor hole to block the sensor beam.



Figure 1-22 Interlock deflector

- Ensure the deflector makes contact with the service area door sensor. Be sure the print area door is closed.

This will enable printer operation while the service area door is open.

4. Plug in the power cord and press the POWER button.
 - a. Unplug the power cord when the spit platform is centered in the service area.
 - b. Clean the spit platform with a damp texwipe.
 - c. Clean the wiper scrapers using foam Q-tips.

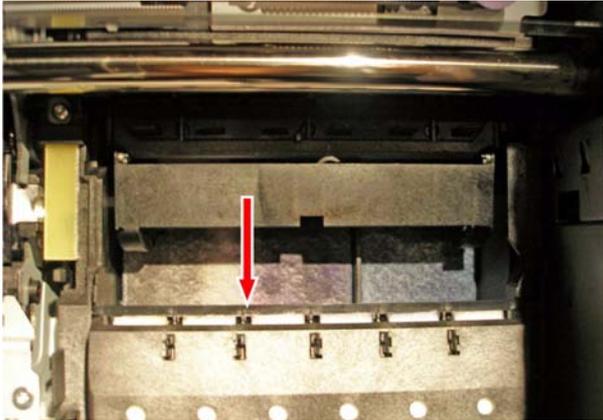


Figure 1-23 Wiper scraper

5. Plug in the power cord.
 - a. Turn on the printer.
 - b. Unplug the power cord when the wiper station is centered in the service area.
6. Clean the wipers with a damp texwipe. Use swabs if necessary.



Figure 1-24 Wipers

7. Plug in the power cord.
 - a. Turn on the printer.

- b. Unplug the power cord when the capping station is centered in the service area.

WARNING! Clean the entire service station prior to reinserting the printheads. Failure to do this will result in the printheads becoming recontaminated.

- c. Clean the capping station with a damp, lint-free cloth. Use swabs if necessary.

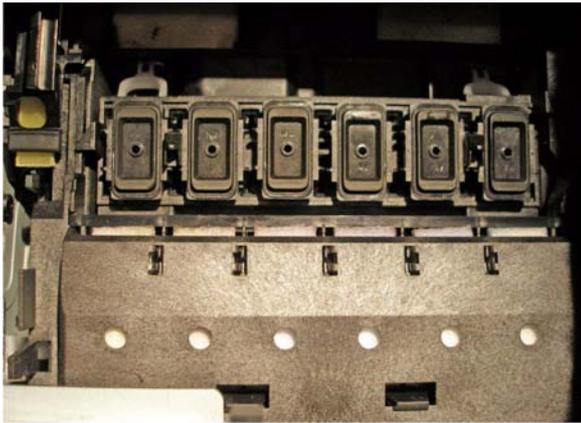


Figure 1-25 Capping station

- d. Remove the service area sensor deflector and close compartment lid.
8. Plug in the power cord.
 9. Press the POWER button and allow the homing sequence to center the printhead carriage.
 10. Clean the printhead carriage with a damp texwipe.

Clean the printheads

To obtain the best results for this procedure it is important to use texwipes, not an alternative cloth.

1. Clean each printhead:
 - a. Place 4 texwipe sheets onto a flat surface and soak with D.I. water.
 - b. Gently press the printhead orifice plate onto the texwipe surface. Pull the printhead across the texwipe in one motion, until you get an even pattern of ink.



Figure 1-26 Pulling a printhead across a texwipe

- c. Using a prepared texwipe, rub the surface of the contact points.

IMPORTANT: Be careful not to touch the contact points. Skin oils can cause faulty contact with printer signals.

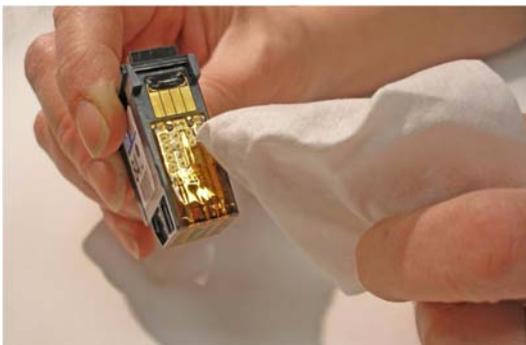


Figure 1-27 Wiping the contact points

- d. Wipe all four corners around the orifice plate.
2. Install the printheads in the carriage.
3. Close the lid.
4. Reinstall the paper roll.
5. Wipe the external printer body thoroughly with a damp texwipe.

As soon as you have finished the cleaning procedure:

1. Reconnect the printer and turn it on so that the carriage moves back into the service station.
2. Perform the printhead alignment routine. This will ensure printheads are installed properly and aligned. If a printhead is not detected:
 - a. Remove it and re-clean the contacts with a clean, damp texwipe.
 - b. Gently re-clean the contacts in the carriage with a damp Q-tip. Do not press too hard.
 - c. Reinstall the printhead and perform a print diagnostic.

Align the printheads

When the printheads have been removed they must be realigned.

To align the printheads, run the HP Designjet system maintenance utility.

1. Click **Start > Printers and Faxes**.
2. Right-click the Designjet 130.
3. Click **Maintain Printheads**.
4. Click **Align Printheads** from the options presented.
5. The printer will print a printhead alignment sheet. Check that the sheet has a printed checkmark on the lower right corner. If a printhead is not functioning correctly, remove the printhead.
6. Clean the flex on the cartridge and the carriage with a damp texwipe.
7. Reinsert the printhead.

NOTE: Do not push too hard on the carriage contacts—the dimples can be collapsed. If the cartridge still doesn't work, replace it.

Perform color calibration

1. Verify that a roll of paper is loaded.
2. Click **Start > Printers and Faxes**.
3. Right-click on the HP DesignJet 130nr icon and select **Printing Preferences**.
4. Click the **Services** tab, and then click **Calibrate Color**.