Replacing a Print Head

Replacing a Print Head

Caution   **Always wear rubber gloves when performing this procedure.**

Caution   **Always wear an antistatic wrist strap (ground bracelet) when working with electronic components (PCB, print heads, etc.). This device is used to prevent electrostatic discharge by safely grounding a person working on electronic equipment. Its other end should be connected to the ground strip in the machine.**

1   Power off the machine. Make sure that the UV system is powered off.

2   Close all the taps on the secondary tanks on both sides of the bridge (total of 12).

3   Manually open the upper hoods of the printing bridge, as shown in Figure 8-1.

Figure 8-1 Raising the Bridge Upper Hoods

4   Disconnect the fume extraction duct from the extraction pipe, as shown in .

Figure 8-2 Fume Extraction Duct

5 Manually raise the bridge by turning the lifting switch, as shown in Figure 8-3.

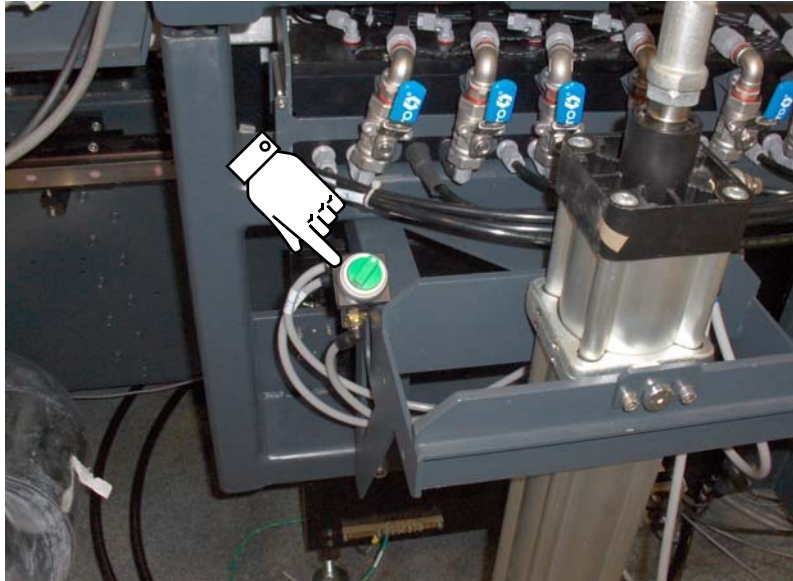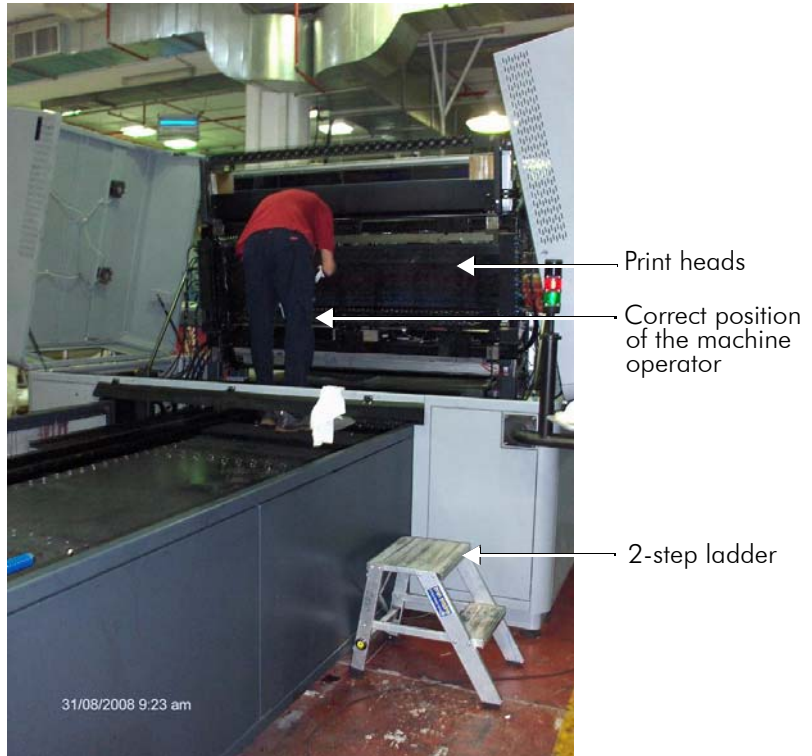**Figure 8-3 Printing Bridge Lifting Switch**

Note   **Use a small 2-step ladder to climb the bridge and access the print heads.**

Print heads

Correct position of the machine operator

2-step ladder

31/08/2008 9:23 am

6 Gently remove the print heads guards using a Torx wrench No. 9.

7 Remove only one head at a time for replacement, using a 2.5 mm Allen key.

8 Verify the existence of two O-rings at the ink inlet to the heads (see Figure 8-4 on page 86). If they are not there, they may stay on the ink bar.

9 With permanent marker, write on the print head surface, indicating its number, color and location on the ink bar. Put it in the box.

Caution **Before performing the next step, make sure that your antistatic wrist strap is connected to the ground.**

10 Take the print head, which is to be installed, out of its package.

11 With a permanent marker, write on the print head surface, indicating its number, color and location on the ink bar.
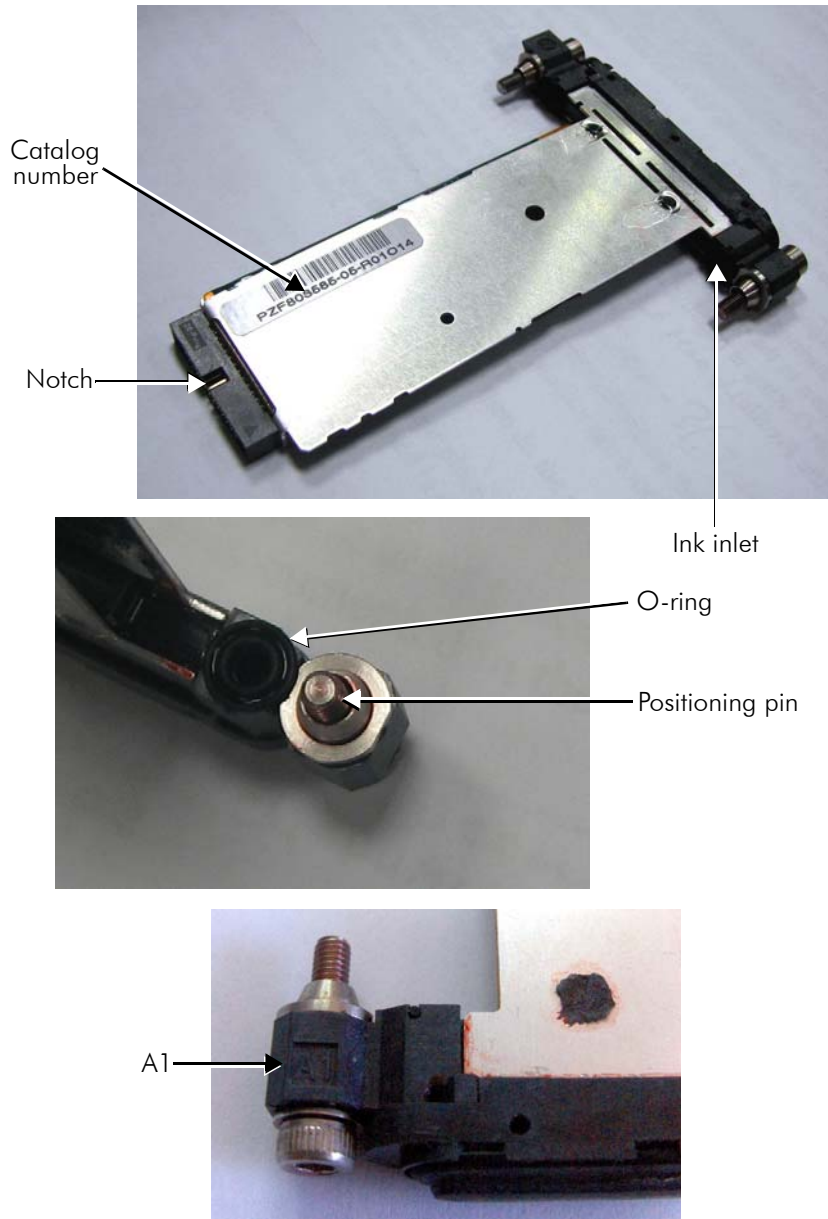
Catalog number

Notch

Ink inlet

O-ring

Positioning pin

A1

Figure 8-4 Print Head Structure

12 Verify that the two O-rings are on the ink inputs.

13 Visually check that the registration pins are clean.
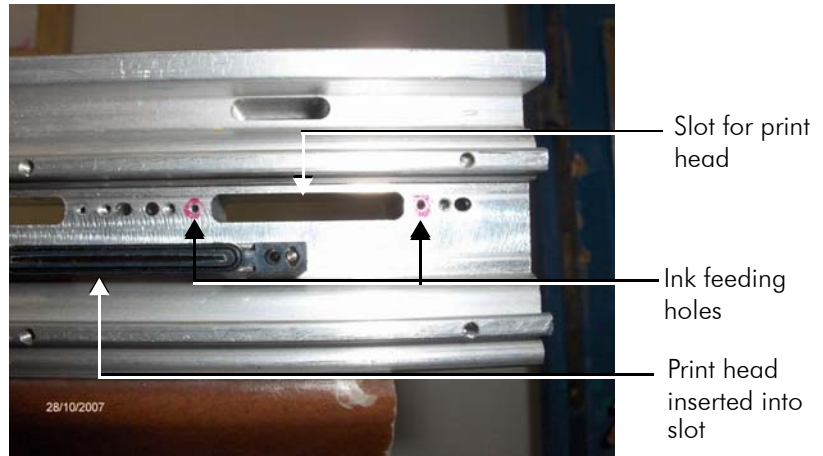
14 Verify that the slot in the ink bar is clean.

Slot for print head

Ink feeding holes

Print head inserted into slot

Figure 8-5 Ink Bar

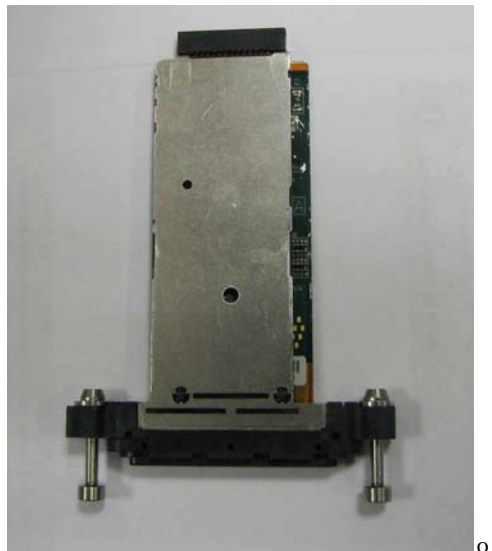15 Screw out the two screws of the print head until they stand out steadily, as shown below.

Figure 8-6 Screws

16 Wrap the print head connector with the protective polyethylene strip, as shown in Figure 8-7 (supplied in the Accessories Kit).

Protective strip is used to protect print head electronic parts from ink contamination whenever performing print head replacement or maintenance.
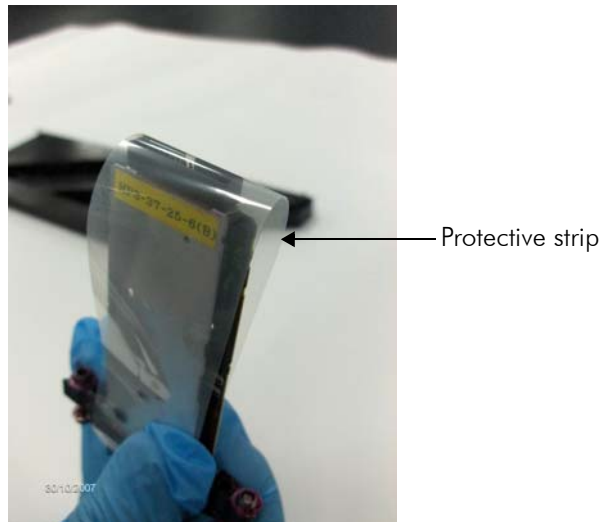

Protective strip

Figure 8-7 Protective Polyethylene Strip

17 Before inserting the print head, verify that it is correctly oriented, as follows:

- Catalog number is facing up on a legible and clear label: PZFXXXXXX-XX-RXXCXX.

- The print head 26-pin connector has a notch. This notch should face upward when inserting it into the slot, otherwise the 26-pin connector will not fit the PIC connector.

- The print head is connected to the ink bar with two screws. These screws look identical, but the left one is marked as "**A1**" (see Figure 8-4 on page 86) and serves for precise positioning of the print head.

18 Hold the print head **parallel** to the ink bar and carefully insert it into its slot (with the protective strip). When the head is almost inside, hold the first screw with one hand and with your other hand pull the strip out. Then hold the second screw with this hand and continue to insert the head until its connector reaches the connector on the PIC board.

19 When you feel that the head's connector is fixed properly to the PIC's connector, turn the first screw 2 turns, then turn the second screw 2 turns.

Note

Do not tighten the first screw leaving the second screw open. This may course bending of the head's connector and damage to the pins.

20 Repeat step 18 until the ink input surface touches the ink bar surface and the print head is perfectly fixed in its place.

21 Turn the **A1** bolt using a Torque meter 0.6 N/m and only then turn the right screw.

22 Repeat steps **10 - 18** for the other print heads to be replaced.

23 Document the Heads Signature printout before removal in the "Heads Dismantling Form" along with the following data:

- Print head catalog number
- Machine number
- Print head location
- Date of installation
- Date of removal
- Reason for replacement
- Ink batch number
- Name of the machine operator

24 Gently return the print heads guards using a Torx wrench No. 9.

25 Lower the printing bridge.

26 Open the taps on the secondary ink tanks.

27 Connect the fume extraction duct to the extraction pipe (see Figure 8-2 on page 83).

28 Power up the machine and start the machine application.

29 Perform the maintenance cycle at least twice.

30 Print the Head Signature file.

If the new print head does not appear on the printout, carefully press on its PIC board to ensure a proper connection between the 26-pin connector of the print head and the connector on the PIC board.

If it also does not help, do the following:

- Gently release the 10 screws on the PIC board, pulled it out and disconnect all the print heads connected to it.
- After that, place the PIC board back.
- Verify that all the print heads are properly connected by gently pressing each connector on the PIC board.
- Turn the screw one by one 2 turns only.

Note **Do not tighten the first screw leaving the other screw open. This may course bending of the PIC board and damage to the pins of the connectors.**

- Repeat this until all the screws are tightened.

31 Perform the Trimming procedure. For detailed instructions refer to ACT User Guide supplied on the ACT DVD in the HP Scitex FB7500 Documentation Kit.