

Dijit 5000 Series Printers
FLUSH KIT INSTRUCTIONS

Flush Kit 0177491

FCC Compliance Statement

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at his own expense.

Note: Good quality, shielded (braided shielded) cables must be used for the RS-232-C and Centronics interfaces.

Canadian EMI Compliance Statement

Le présent appareil numérique n'émet pas de bruits radioélectriques dépassant les limites applicables aux appareils numériques de la classe A prescrites dans le Règlement sur le brouillage radioélectrique édicté par le ministère des Communications du Canada.

This digital apparatus does not exceed the Class A limits for radio noise emissions from digital apparatus set out in the Radio Interference Regulations of the Canadian Department of Communications.

EMI-CISPR 22/EN 55 022/CE Marking

Warning: This is a Class A product. In a domestic environment, this product may cause radio interference in which case the user may be required to take adequate measures.

Dijit 5000 Series Printers *Flush Kit Instructions*

Part Number	Revision	Date	Description	ECN
0113921-002	001	07/2001	PDF document revision for 5122	PKG1017
Previous Releases				
Part Number	Revision	Date	Description	ECN
0113921	002	07/2001	Revision for 5122	PKG1017
0113921	001	02/1998	Revised for current 5240	TES271
0113921	00	01/1998	Part of FLUSH KIT 5120/5240 (0177491)	09513

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0113921 7/2001 Printed in U.S.A.



Scope

These instructions describe how to flush ink from the fluid system and printhead of a Dijit® 5000 Series printer using kit 0177491. The ink flush procedure is required when changing ink types or ink colors. This procedure should be performed only by a Scitex field engineer or a service technician who has been trained by Scitex Digital Printing, Inc.

Text Notations

This manual uses the following typographical conventions.

This style	Refers to
Ready	Text displayed by the software.
go	Anything you type, exactly as it appears, whether referenced in text or at a prompt.
ENTER	Special keys on the keyboard, such as enter, alt, and spacebar.
[NEXT]	Buttons and lights on the printer operator panel.
Save	Software command buttons and sections of dialog boxes, such as group boxes, text boxes, and text fields.
File → Open	A menu and a specific menu command.
ALT+F1	Pressing more than one key at the same time.
ALT, TAB	Pressing more than one key in sequence.
xx,yy	Variable in error messages and text.
jobfile.dat	File names.

Safety Notations

The following definitions indicate safety precautions to the operator.

Note: Information that needs to be brought to the reader's attention.

Caution: A situation where a mistake could result in the destruction of data or system-type damage.



WARNING

A potential hazard that could result in serious injury or death.



DANGER

An imminent hazard that will result in serious injury or death.

Service and Support

Technical equipment support is available 24 hours a day, 7 days a week.

Software and applications support is available 8:00 a.m. to 5:00 p.m. EST/EDT, Monday through Friday.

	Phone	Fax
U.S.A. and Canada Field/Telephone support	1-800-4SCITEX (1-800-472-4839)	+1-937-259-3808
Europe Field/Telephone support	+4121-806-0404	+4121-806-1920
Asia/Pacific Rim Field/Telephone support	+65-744-6400	+65-744-6700
Japan Field/Telephone support	+81-3-3256-2613	+81-3-3256-2616
Worldwide Technical support, order placement, documentation, and product information requests	+1-937-259-3739	+1-937-259-3808
Worldwide Automated FaxBack™ Information Line	+1-937-259-3520	
Internet Updated service information	http://www.scitexdpi.com	

The above telephone number listing is accurate as of the publication date. On the Internet, go to <http://www.scitexdpi.com/support> for updated telephone numbers.

Flush Procedure

Use the following procedure to flush any of the following 5000 series printers:

- 5120
- Early 5240
- Current 5240 (see note below)
- 5122.

Apply the following general guidelines to the flush procedure:

- Visually inspect the printer lines for residual ink before refilling the system with new ink.
- For high-contrast color changes, such as black to yellow, repeat the procedure until the system lines are completely clear. Even very small amounts of residual dark ink will discolor the lighter ink.
- The ink draining and purge procedures are repeated several times during the flush procedure. This repetition is deliberate and ensures proper flushing of the fluid lines. Perform all steps of the procedure as described.
- Take precautions against ink spills and have materials on hand to clean up spilled ink.

Caution: Prevent garments and exposed skin from having prolonged contact with ink. Clean up spilled ink promptly.

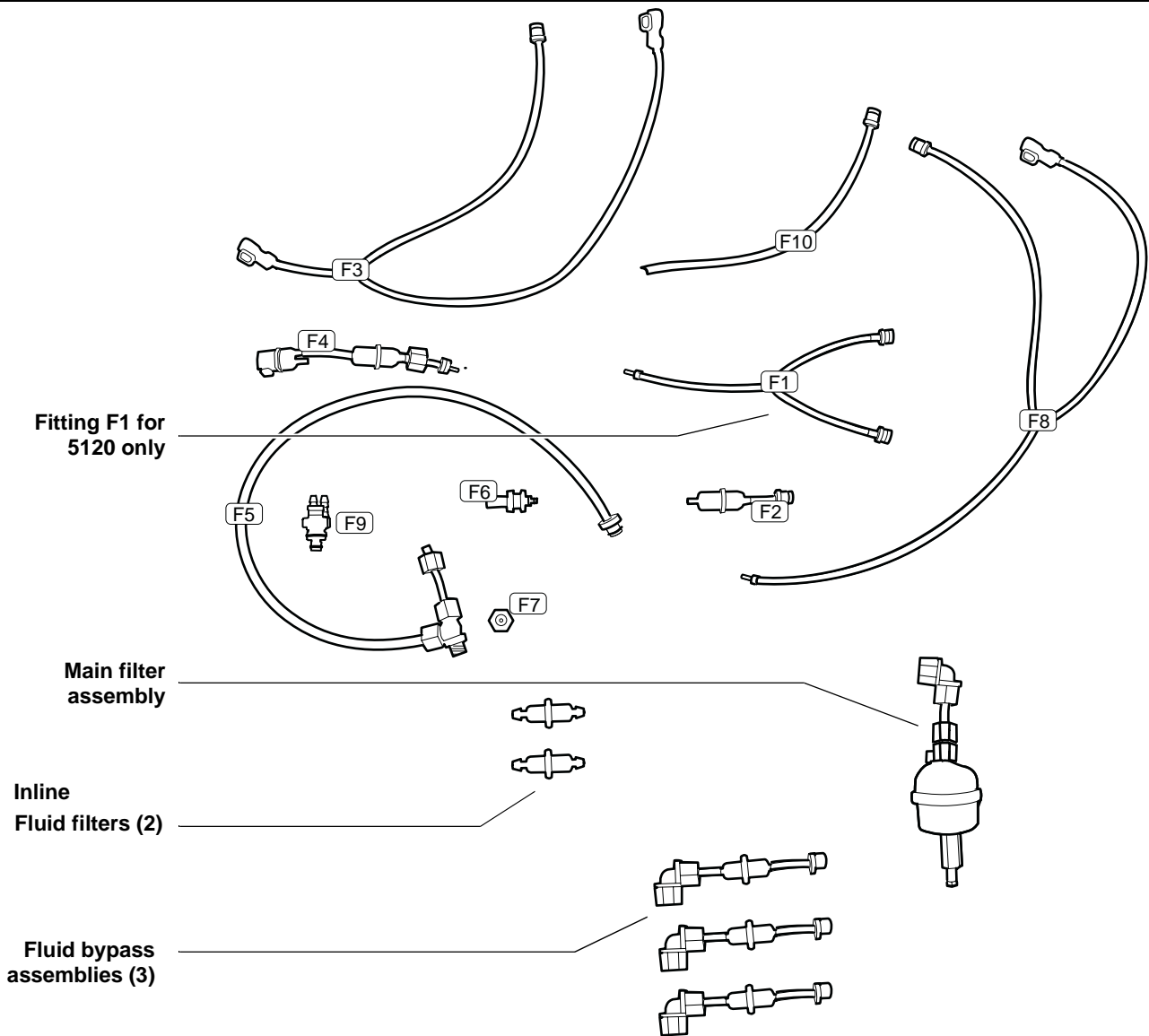
- Read through the entire procedure completely before starting.
- If you have problems with the procedures, contact technical support (see “Scope”).

Note: The current model of 5240 is also called the 5240N.

Kit Inventory

1. Inventory kit 0177491. It should contain all the items shown in Figure 1.

Figure 1. Fittings and connectors, flush kit 0177491



2. If any items are missing, contact technical support.
3. Set aside any items not required for the type of printer you are flushing.

Extra bypass filters are provided for the different printer models only one is required. Fitting F1 is used only when flushing a 5120 printer.

4. Continue with “Printer Setup”.

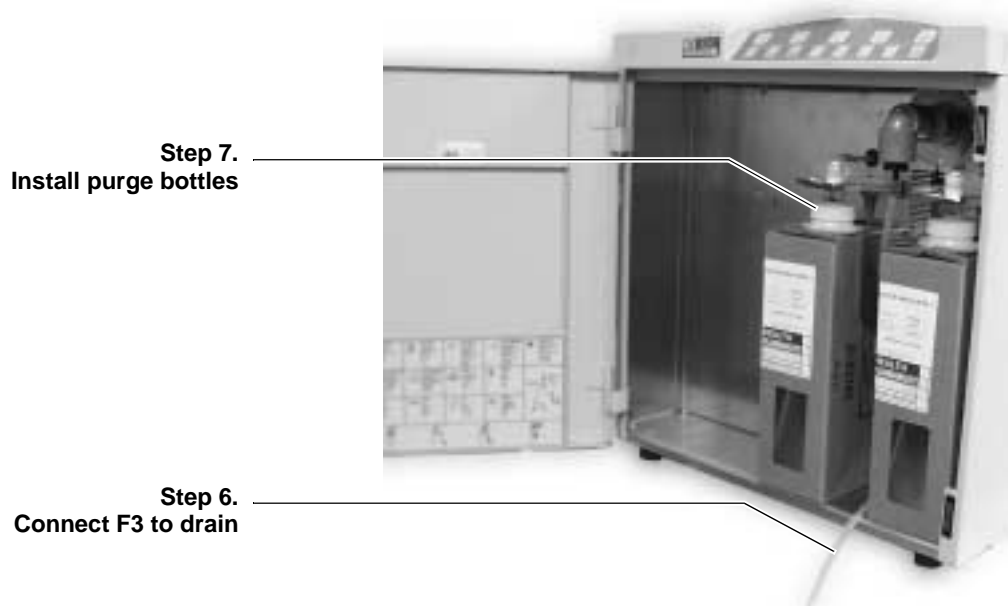
Printer Setup

1. Turn on the printer with the POC test bypassed.

Press and hold OPEN EYELID while pressing PRINTER ON. When the operator panel lights come on, release OPEN EYELID. The printer on button indicator light stays lit.

2. Press STANDBY to deactivate the fluid system (or power up the printer with the fluid system bypassed).
3. Turn the system controller (host).
4. Start Diagnostics by typing GO DIAG at the DOS prompt.
5. Remove the replenisher bottle and the ink bottle.
6. Connect one end of F3 to the system drain quick disconnect on the back of the fluid compartment behind and between the bottle location.
See Figure 2..
7. Place and connect purge bottles in place of the removed replenisher and ink bottles.

Figure 2. Drain line and purge bottles - Steps 6 and 7



8. Remove the printhead front and rear covers.
9. Pull the printer out and remove the printer cover. See the *Service Guide* for detailed procedures.

Note: Use the correct printhead procedure for the type or printer being flushed.

5120 Printhead Emptying

10. To empty a 5120 printhead use the following procedure. (To empty a 5240 or 5122 printhead, go to step 12.)

Note: To open a quick disconnect fitting, press the release button and gently separate the two parts of the fitting. Be careful to avoid jamming the release button, or ink will leak.

- a. Select **Fluid System** → **Select State Table Type** → **Purge** → **Save**.
- b. Select **Fluid System** → **Printhead To State # 3** → **Start**.
- c. Disconnect the printhead filter from its clip.
- d. Disconnect the catcher quick disconnect.
- e. Disconnect the twist connector on the inlet tube.
- f. Wait a few minutes to allow the printhead ink to drain into the ink supply.

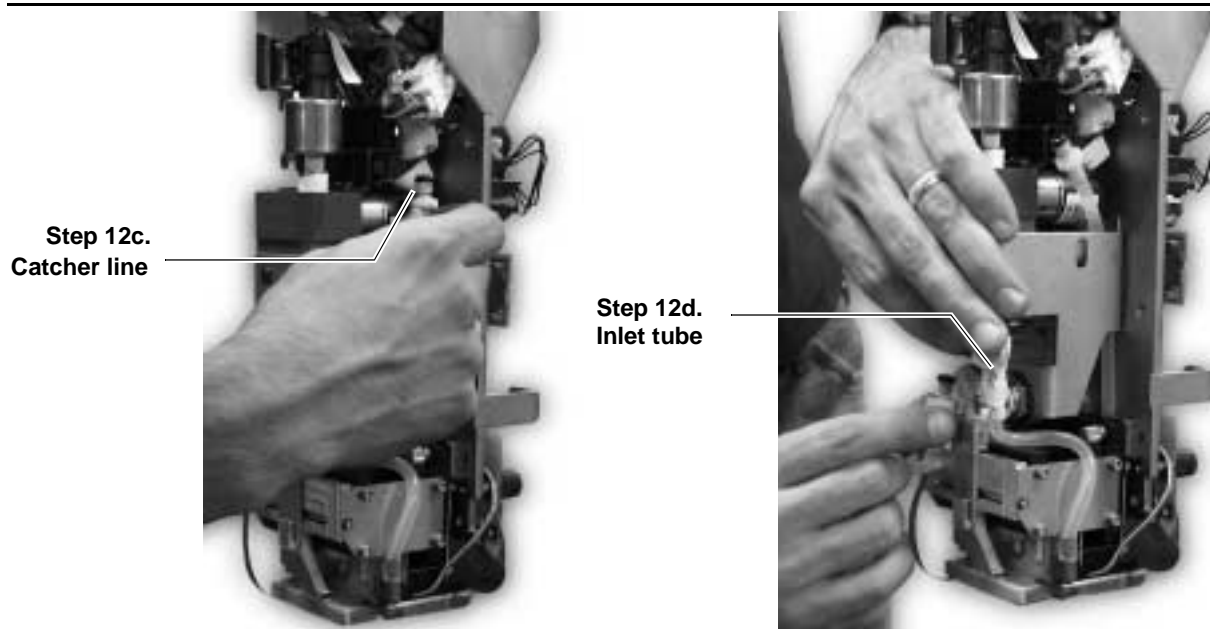
5120 Printhead Isolation

11. To isolate the 5120 printhead use the following procedure.

- a. Reconnect the catcher quick disconnect.
- b. Disconnect the twist connector on the outlet tube.
- c. Connect the manifold sides of the ink inlet tube and the ink outlet tube to bypass tube F1.
- d. Connect the open end of bypass tube F1 to the catcher tube.
- e. Connect the printhead sides of the ink inlet tube and ink outlet tube together. For the 5120 go to Step 14.

5240 and 5122 Printhead Emptying

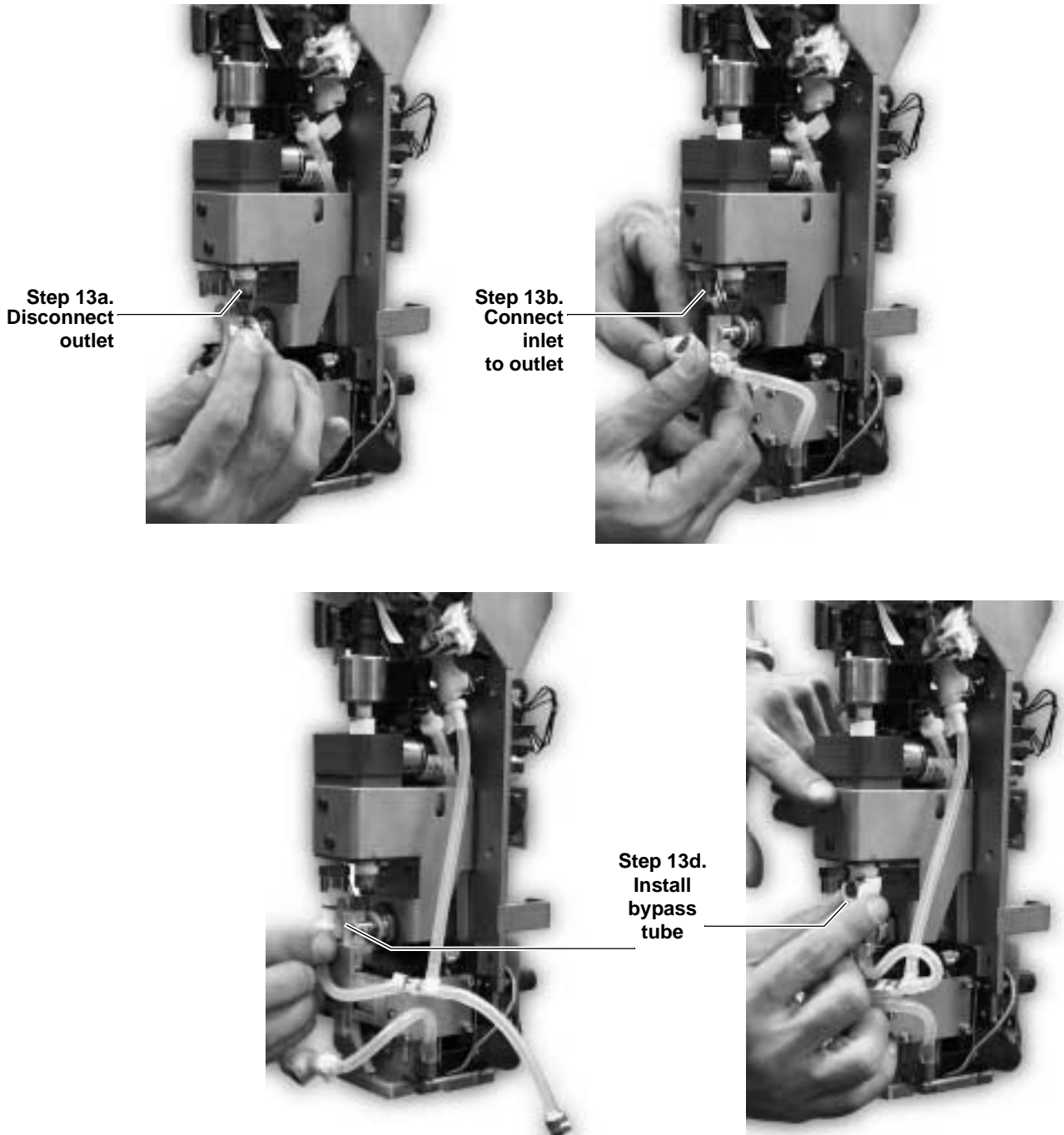
12. To empty a 5240 or 5122 printhead use the following procedure.
 - a. Select **Fluid System** → **Select State Table Type** → **Purge** → **Save**.
 - b. Select **Fluid System** → **Printhead To State# 3** → **Start**.
 - c. Disconnect the catcher quick disconnect.
 - d. Disconnect the quick disconnect on the inlet tube.
 - e. Wait a few minutes to allow the printhead ink to drain into the ink supply. (Observe no ink flow in the outlet line.)

Figure 3. Printhead emptying setup

5240 and 5122 Printhead Isolation

13. To isolate a 5240 or 5122 printhead use the following procedure.
 - a. Disconnect the quick disconnect on the outlet tube.
 - b. Connect the printhead sides of the ink inlet and ink outlet tubes together.
 - c. Connect the longest end of bypass tube F8 to the catcher quick disconnect.
 - d. Install the two connector ends of the printhead bypass tube (F8) to the manifold quick disconnects.

Figure 4. Printhead isolation setup



Note: The 5240 and 5122 printheads must remain connected to the printhead nest (NVRAM board must be installed) during the flush procedure.

14. With the printhead in state # 3, disconnect the quick disconnect fittings from the ink pump inlet line.

Note: Figure 5. shows the ink supply manifold line disconnected, but it should still be connected.

Figure 5. Disconnect ink pump inlet

**Step 14.
Disconnect
ink pump
inlet line**



***Draining the Ink Supply
Manifold***

15. Connect F2 to the ink pump inlet quick disconnect; allow the ink supply manifold to drain for 2 minutes. Disconnect F2 from the ink pump inlet quick disconnect.

16. Select **Fluid System** → **Printhead to State # 4** → **Start**.

Note: Record any errors that are displayed.

Draining the Ink Tank

17. Pull F3 (connected in step 6) to the printer side of the cabinet and continue connecting to the fluid system using the following procedure.
 - a. Insert the end of F10 with no fitting into the opening in one of the empty bottles supplied with the flush kit.
 - b. Connect F10 to F3.
 - c. Connect the other end of F3 to the quick disconnect on the ink supply line connected to the bottom of the ink tank.
 - d. Wait until the ink tank is empty before continuing.

Figure 6. Draining the ink tank

Step 17.
Draining the ink
tank with
F10 and F3



Hint: To prevent leakage during the following step, keep the bypass line elevated.

Note: The purge containers are omitted for clarity in Figure 6.

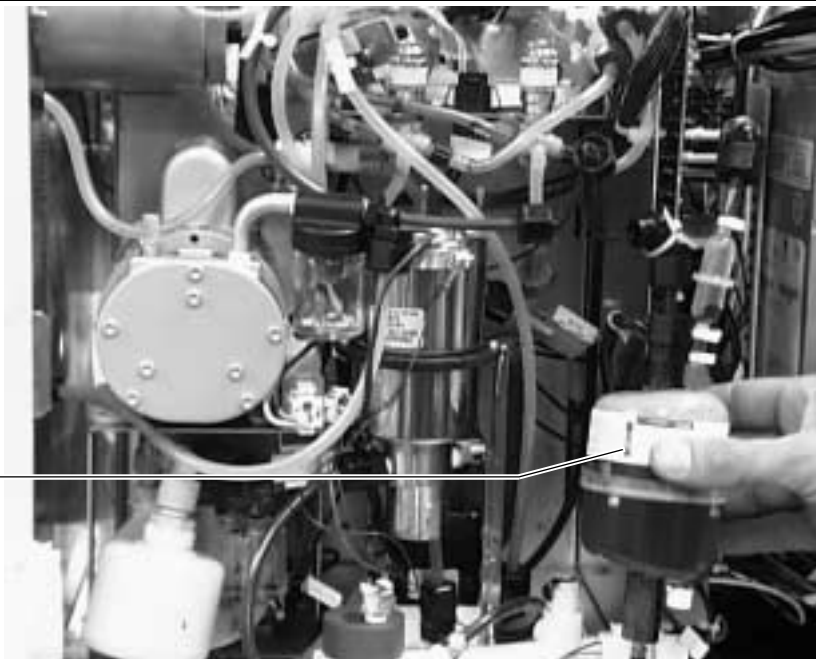
Removing the Main Filter Assembly

18. Remove the main filter assembly and the fluid bypass filter assembly from the fluid supply assembly.
19. Connect F7 to the bypass line from the ink tank.

Note: Unclip the vacuum regulator filter (but leave connected) from its bracket to help with the next step.

Figure 7. Main and bypass filter assembly removal

**Step 18.
Main and
bypass filter
removal**



Flush Line Connection

- 20. Disconnect line #2 from the 'T' on top of the ink tank.
- 21. Connect one end of F5 to the top fitting of the ink supply manifold and one end to line #2. Plug the other side of F5 to the 'T' at the top of the ink tank (towards the back of the printer).

Figure 8. F5 on T fitting and Line 2

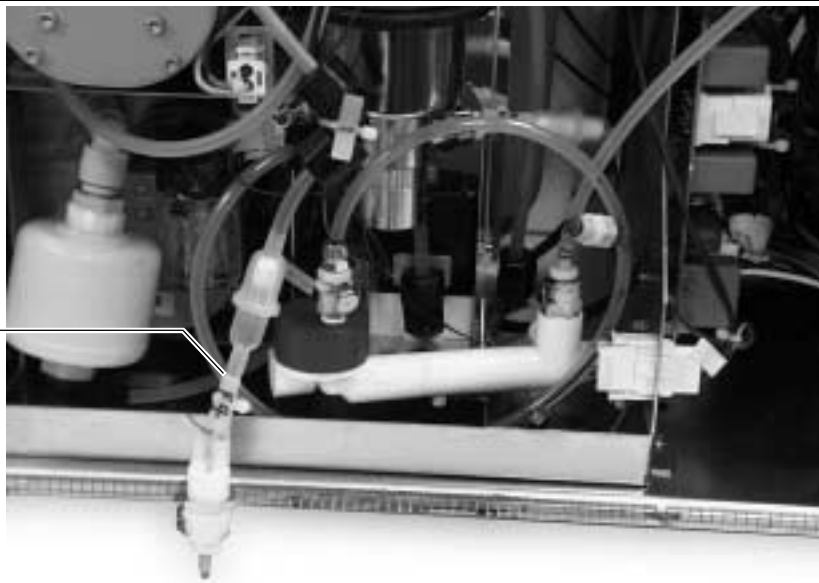
Step 21.
F5 on Line #2
and the "T"



- 22. Attach F4 to the open end of line #1 from the umbilical. Attach the other end of F4 to the twin tube fitting connected to the fluid bottles.

Figure 9. F4 connected to Line 1

Step 22.
F4 connected
to Line 1



- 23. Replace the twin tube fitting attached to the fluid bottles with F6.
- 24. Disconnect F3 from the bottom of the ink tank and disconnect F10 from F3 and from the ink tank supply line.

25. Reconnect the ink pump inlet quick disconnect.
26. Select **Fluid System** → **State Table Type** → **Purge**, then select **Printhead to State # 10** → **Start**.
27. When the printhead reaches state 10, connect F2 to the ink pump inlet quick disconnect. Allow the ink supply manifold to drain. Wait until F5 has little or no flow. Then disconnect F2 from the ink pump inlet quick disconnect.
28. Select **Fluid System** → **Printhead to State # 11** → **Start**.

Caution: A vacuum system not working error may occur at this point.

29. Connect F3 to the fluid system using the following procedure:
 - a. Confirm that one end of F3 is connected to the system drain quick disconnect in fluid compartment wall between the purge bottles.
 - b. Insert the end of F10 with no fitting into the opening in one of the empty bottles supplied with the flush kit.
 - c. Connect F10 to F3.
 - d. Connect the other long end of F3 to the quick disconnect on the ink supply line connected to the bottom of the ink tank.
 - e. Wait until the ink tank is empty before continuing.
30. Disconnect F3 from the system drain and ink supply quick disconnects and disconnect F10 from F3.

Note: If lines are clear go to step 33. If lines are not clear go to step 31 and repeat one more time. At this point whether repeating steps or not, check the content of the replenisher bottles and replace if necessary.

31. Select **Fluid System** → **Printhead to State # 4** → **Start**.
32. Repeat steps 25 through 30, then go to step 33.
33. Reconnect the ink pump inlet quick disconnect.
34. Disconnect F6.

35. Connect fitting F9 to F4.

Figure 10. Fitting F9 on F4



36. Reconnect F9.

Caution: Make the sure Replen line goes to the side of the F9 fitting marked with the CPC logo.

37. Select **Fluid System** → **Printhead to State # 15** → **Start**.

38. Remove F7 on the bypass line for 3 seconds. After the tube has drained into the tank, return F7 to the bypass line.

39. After state 15 is reached, disconnect the quick disconnect fitting from the ink pump inlet line.

40. Connect F2 to the ink pump quick disconnect; allow the ink supply manifold to drain for 1 minute. After there is no flow detected, disconnect F2 from the ink pump inlet quick disconnect.

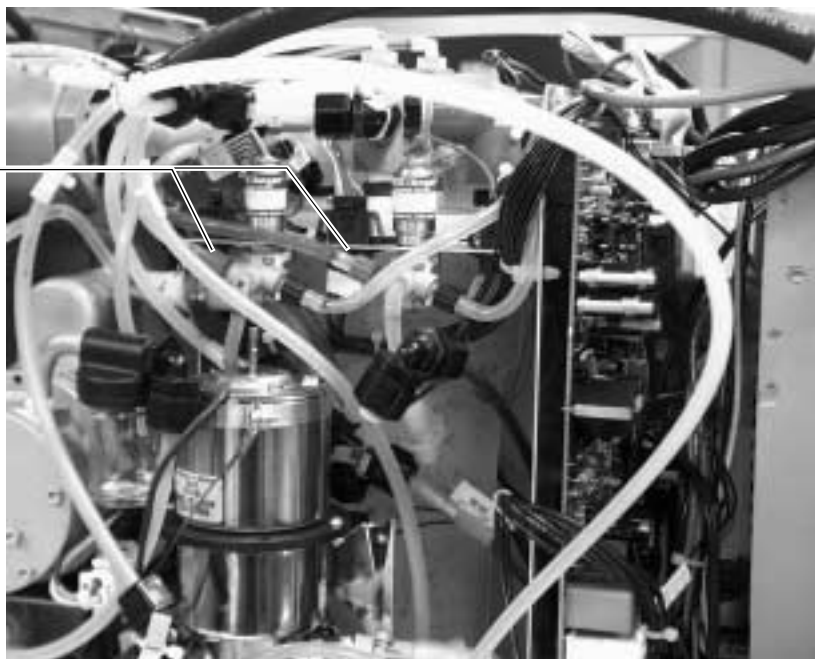
41. Disconnect F5 from the ink supply manifold; allow the tube to drain for 2 seconds.

42. Reconnect F5 to the ink supply manifold.

43. Remove two red-capped tubes, one at a time, from the fill valves for 2 second each. Allow the tubes to drain. Reconnect the tubes to the fill valves.

Figure 11. Red-capped fill valves

Step 43.
Red caps
on fill valves



44. If no errors are reported during steps 17 through 25, **Fluid System** → **Printhead to State # 17** → Start. If errors are reported, select **Fluid System** → **Printhead To State# 11** → **Start**.
45. Connect F3 to the fluid system using the following procedure:
 - a. Confirm that one end of F3 is connected to the system drain quick disconnect in the wall of the fluid compartment between the purge bottles.
 - b. Insert the end of F10 with no fitting into the opening in one of the empty bottles supplied with the flush kit.
 - c. Connect F10 to F3.
 - d. Connect the other long end of F3 to the quick disconnect on the ink supply line that is connected to the bottom of the ink tank.
 - e. Wait until the ink tank is empty before continuing.
46. Remove F5 from the ink supply manifold and from the ink tank.
47. Reconnect tube #2 to the "T" fitting on the ink tank.
48. Remove F4 and disconnect the F9 filter fitting from F4.
49. Remove F1 (the 5120) or F8 (the 5240 and 5122) from the printhead.
50. Reconnect the catcher tube quick disconnect.
51. Reconnect the ink supply fittings on the printhead (inlet and outlet tubes to manifold).

52. Disconnect F10 from F3 and disconnect F3 from the bottom of the ink tank and from the system drain quick disconnect in the wall of the fluid compartment between the purge bottles.
53. Reconnect the ink pump inlet quick disconnect.
54. Remove F7 from the bypass line.
55. Install the front and rear printhead covers.
56. Replace the vacuum regulator back in its bracket.
57. Install a new ink filter, ink supply filter, replenish filter, and bypass filter as described in the *Service Guide*.

Table 1. Bypass filter color codes, 5000 series printers

Printer ¹	Filter Color	Cap Color
5120 / 5240	Black	Black
5240 / 5120	Red	Red
5122	Orange	Brown

1. Filter is determined by pump rating. Replace filter and cap with like color
58. Install printer cover and slide printer back into the printer cabinet as described in the *Service Guide*.
59. Discard the waste ink in accordance with local, state, and federal (or national) regulations for hazardous waste disposal.
60. Install a new ink bottle and a new replenisher bottle.
61. Select CANCEL and press F4 to bring the printhead to down state.
62. From the fluid system menu select **Fluid System** → **State table type**.
63. Select **Circulate** → **Save**.
64. Select **Fluid System** → **Printhead to state # 2** → **Start**.
65. After state # 2 is reached, select state 6; select Start.
66. After state 6 is reached wait approximately 10 minutes.
67. Select CANCEL.
68. Press F4 to bring the printhead to down.
69. From the fluid system menu select state table type.
70. Select NORMAL.
71. Run POC test by turning the printer off and then back on, or by selecting POC test from fluid tests.

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