

Equipment Required

FA74005	Damper Drain Tube	
FA65318	6800 Cover Removal Tool	
FA940052	Tube Cutter Plastic 4 mm–14 mm	
FA79021	Tube PTFE 6 mm OD x 4 mm ID, Natural, 5 metres	
FA65339	Mandrel Extraction Tool	
FA999045	Gloves Latex Medical (large))
FA999046	Gloves Latex Medical (medium)) as required
FA999047	Gloves Latex Medical (small))
FA999076	Safety Spectacles Blue	
	Waste ink container (at least 5 litre capacity)	
	Absorbent, lint-free paper towel	

Procedure



WARNING: HAZARDOUS INKS AND SOLVENTS. SAFETY GLASSES AND SOLVENT RESISTANT PROTECTIVE GLOVES MUST BE WORN THROUGHOUT THE FOLLOWING PROCEDURE. FAILURE TO COMPLY WITH THIS SAFETY WARNING COULD RESULT IN IRRITATION AND REVERSIBLE LOCAL DAMAGE TO THE EYES, AND NON-ALLERGIC CONTACT DERMATITIS.

- 1 Shut down and switch off the printer. Ensure that it is switched off at the mains supply.
- 2 Remove the ink and solvent filler caps.
- 3 Unlock the security latch on the front of the top cover and remove the cover. Position the cover so that the keyboard and display can be accessed.
- 4 Switch the printer on and access the Flush Wizard (Setup menu > Service sub-menu):



Figure 1. Flush Wizard in the Service Sub-Menu

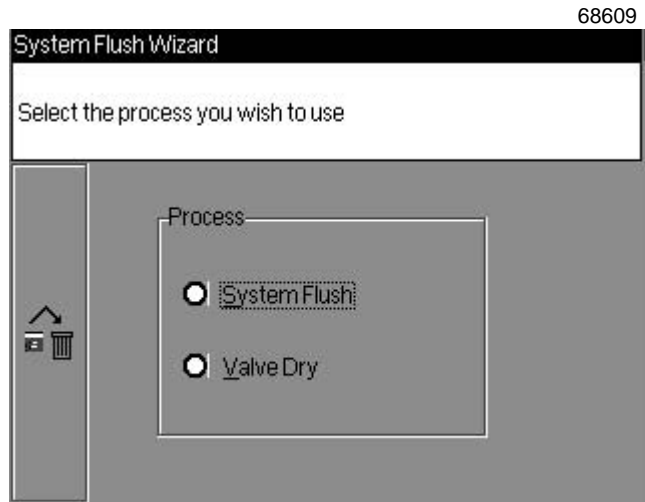


Figure 2. Flush Process Options

- 5 Select the System Flush option. The Next (➔) icon is displayed only after one or other of the option radio buttons is selected:

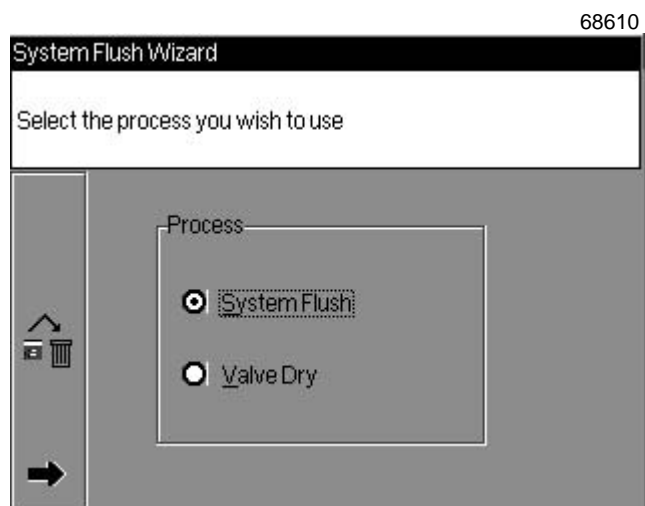


Figure 3. Selecting the System Flush Option



NOTE: The Valve Dry option is for use only by Linx during the manufacturing process and is NOT to be used by service personnel.

- 6 Select the Next (➡) icon using Hot key 6, which displays the following dialog box. On entry to the System Flush it is necessary to perform a number of actions on the printer before the flushing cycles can begin. At this point it is possible to return to the previous dialog box by selecting the Previous icon using Hot key 5:

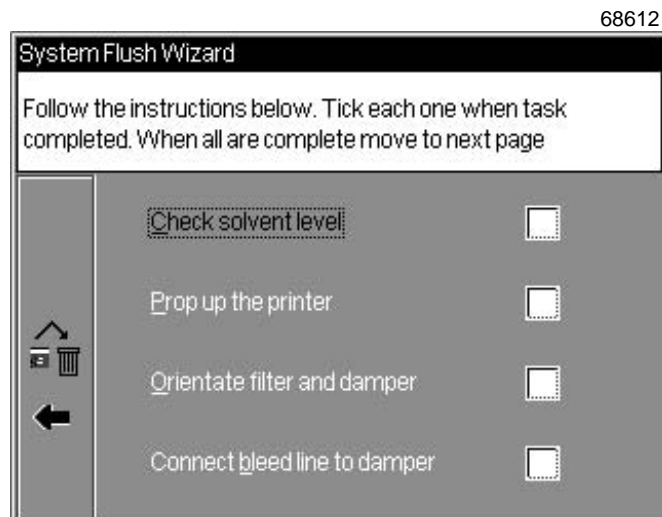


Figure 4. Pre-Flush Required Actions

- 7 Carry out the actions listed in the following dialog box, expanded details of which are given below. Once each of the required actions has been completed, tick the appropriate item check box. Each item is enabled only after the previous one has been ticked:

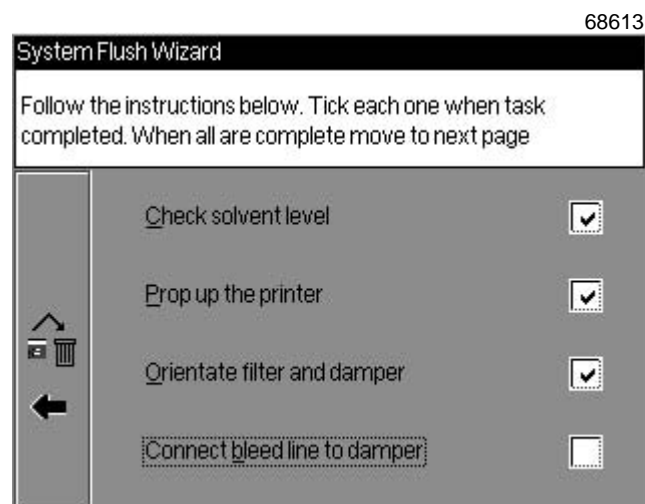


Figure 5. Selecting the Pre-Flush Required Actions

- (a) Check the solvent level. This action is not applicable for draining the ink system; it is only necessary to tick the check box to proceed.
- (b) Prop up the printer (not applicable to the 6800 Spectrum printer—see NOTE below). Before commencing the ink draining procedure, the printer must be raised by approximately 50 mm at the front left-hand side to aid drainage of the ink, as the ink dip tube is situated at the rear right-hand side of the tank.

NOTE: The 6800 Spectrum printer does not require propping up, but the item check box must be ticked in order to continue with the procedure.



WARNING: LETHAL VOLTAGE. DANGEROUS VOLTAGES ARE PRESENT IN THIS EQUIPMENT WHEN ELECTRICAL POWER IS APPLIED. EXTREME CARE MUST BE TAKEN WHEN WORKING ON THE PRINTER WHILE POWER IS APPLIED TO IT AND THE TOP COVER IS REMOVED. THE CORRECT, STANDARD ELECTRICAL SAFETY PRECAUTIONS MUST BE TAKEN. THERE IS A DANGER OF DEATH OR INJURY FROM ELECTRIC SHOCK IF THE CORRECT ELECTRICAL SAFETY PRECAUTIONS ARE NOT TAKEN.

- (c) Orientate the damper. Carefully lift the feed damper clear of the ink system enclosure. Hold the feed damper in the vertical position with the drain cap uppermost.
- (d) Connect bleed line to damper. Remove the drain cap and connect the Damper Drain Tube Luer fitting (included in the Damper Drain Tube kit) to the damper drain. Insert the other end of the drain tube into a waste container of at least 5 litres capacity. Orientate the damper so that the drain is at the bottom, i.e. at its lowest position, as shown in the following illustration:

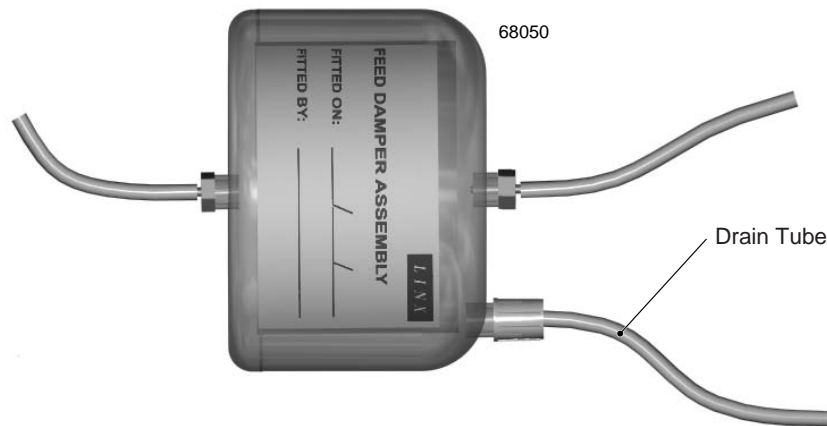


Figure 6. Feed Damper Orientation with Drain Tube Connected

- 8 When all the item check boxes have been ticked the Next (➡) icon is displayed:

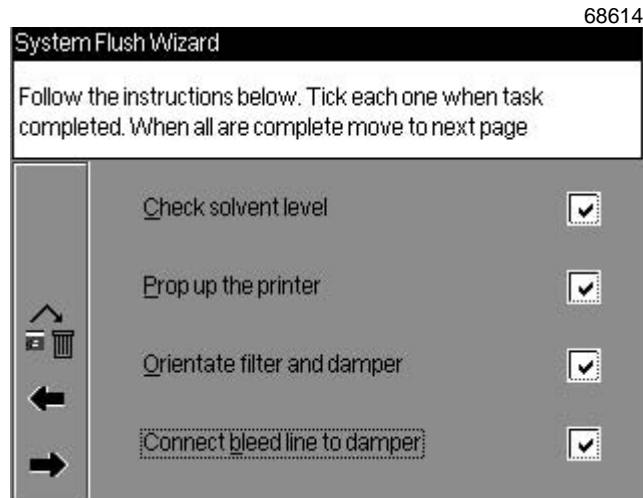


Figure 7. All Pre-Flush Required Actions Selected

- 9 Select the Next (➡) icon using Hot key 6, which displays the following dialog box:

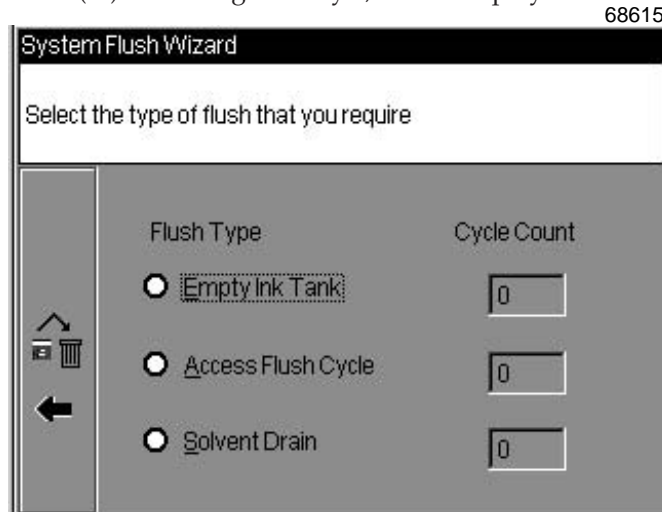


Figure 8. Flush Type Selection Dialog Box

- 10 Select the Empty Ink Tank option:

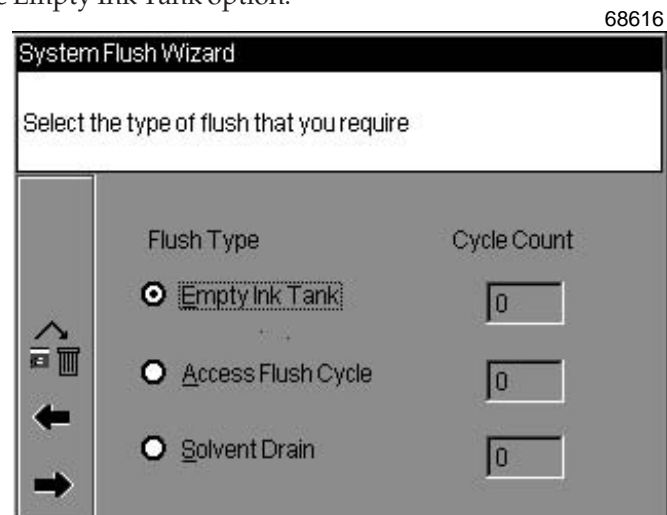


Figure 9. Selecting the Empty Ink Tank Option

- 11 Select the Next (➡) icon using Hot key 6, which displays the following dialog box:



Figure 10. Pre-Empty Ink Tank Required Action



NOTE: The bleed line tap is used in the Linx manufacturing process only; there is no bleed line in the service engineer's Damper Drain Tube kit. Therefore, any action referring to the bleed line tap should be ignored, but the item check box must be ticked in order to continue the sequence.

- 12 Tick the "Turn on tap to bleed line" check box, which enables the Start button. (For the Empty Ink Tank sequence it is only necessary to tick the first check box to proceed.):

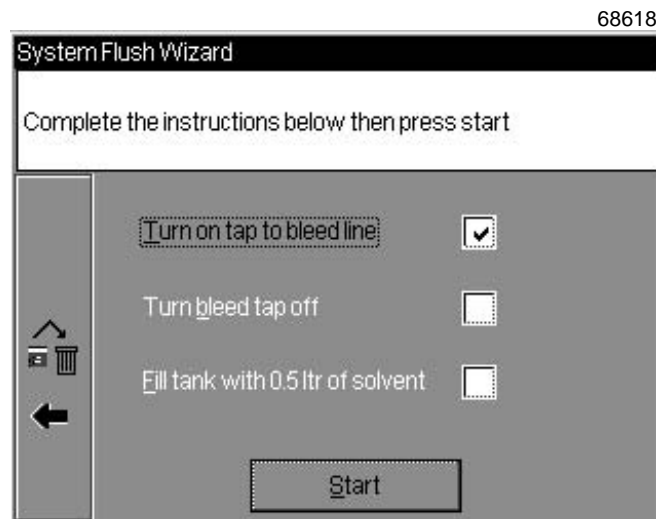


Figure 11. Selecting the Pre-Empty Ink Tank Required Action

NOTE: 6800 Spectrum printer only. Due to the unique design of the 6800 Spectrum ink tank, it is not possible to drain all of the ink. Therefore, to enable all of the ink to be removed proceed with the following item 12 sub-items:

- 12a** Disconnect and remove the ink pick-up pipe, which is connected between the ink tank lid (Festo connection) and the pump/PRV (pressure relief valve) T-piece. Discard the pipe but retain the Festo nut.
- 12b** Connect a new 360 mm length of 6 mm OD tube to the pump/PRV T-piece.

- 12c Remove the mandrel and filter assembly from the ink filler tube using the Mandrel Extraction Tool.
- 12d Insert the free end of the new length of pipe into the tank and push it down until it reaches the base of the tank. Hold the pipe in place for the duration of the Empty Ink Tank sequence to ensure that all the ink is removed.

CAUTION: Pump damage. Do not allow the ink system pump to run dry. Initiate the Empty Ink Tank sequence only the number of times required to empty the system of ink. The pump should not be run for longer than 30 seconds after it becomes noisy through ink starvation (cavitation). Damage to the pump will result if it is allowed to run continuously in a dry condition.

- 13 Select the Start button. A “Tank now emptying” progress dialog box is displayed, with the estimated time to completion (in seconds) shown below the progress bar. The pump will run at maximum flow for approximately 1 minute and 40 seconds, and then automatically stop on completion of the Empty Ink Tank sequence. The sequence can be terminated by selecting the Abort button, in which case the Cycle Count in the Flush Type selection dialog box is not incremented:



Figure 12. “Tank now emptying” Progress Dialog Box

- 14 On completion of the Empty Ink Tank sequence the Done button is enabled and the Abort button is disabled:

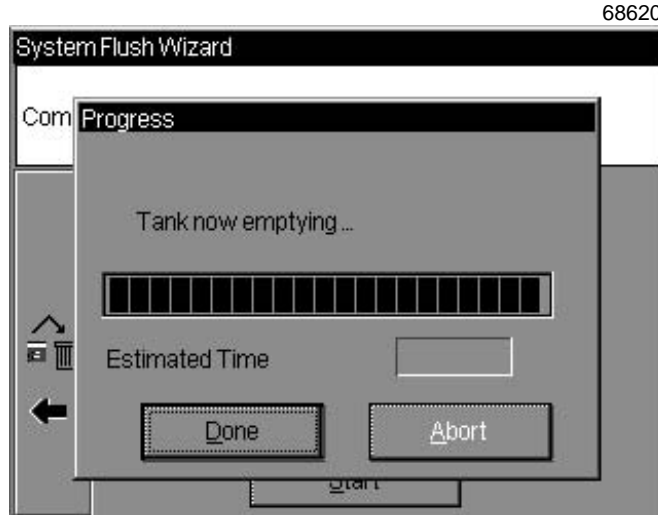


Figure 13. “Tank now emptying” Progress Completed

- 15 Select the Done button, which returns control to the Flush Type selection dialog box where the Empty Ink Tank Cycle Count has now incremented to 1:

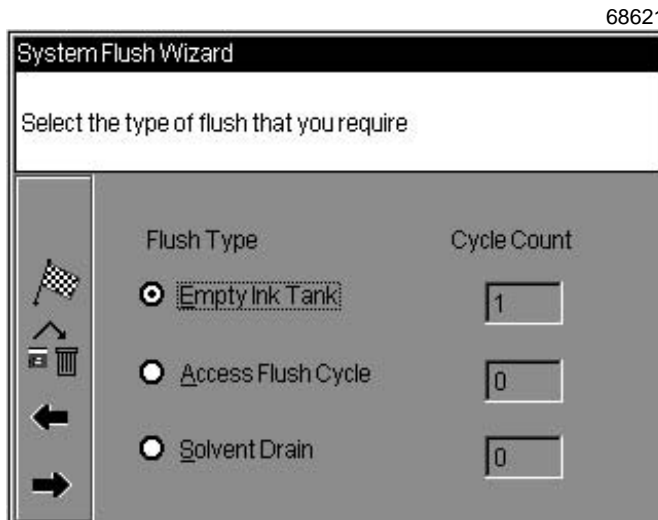


Figure 14. Flush Type Selection Dialog Box

- 16 If the tank is not empty after a single Empty Ink Tank sequence, repeat Items 11 to 15. Select the Abort button when the audible pitch of the pump changes indicating that the ink tank is empty.
- 17 At some point towards the end of the Empty Ink Tank sequence(s) the ‘ink low’ condition will be reached. Ensure that the System Event dialog box is displayed with the warning message “3.03 Ink Low”. Accept the warning by pressing the [✓]key.

- 18 To conclude the Empty Ink Tank part of the System Flush Wizard select the Finish icon (chequered flag) using Hot key 3, which displays the Wizard Summary dialog box:

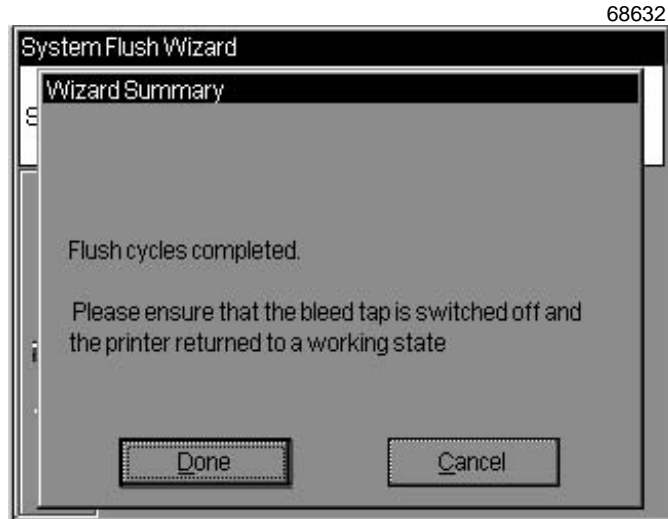


Figure 15. Wizard Summary Dialog Box

- 19 Ensure that the instructions in the Wizard Summary dialog box are carried out by continuing with the final items in this procedure.

- 20 Select the Done button and switch the printer off.

NOTE: The following items 21 to 25 are only applicable to the 6800 Spectrum printer.

- 21 Withdraw the drain pipe from the ink tank and wipe off any surplus ink from the end.
- 22 Cut the pipe to a length of 55 mm using the Tube Cutter.
- 23 Fit the Festo nut (retained earlier) over the end of the newly cut pipe.
- 24 Insert the end of the pipe into the ink pick-up connection on the tank lid, and fit and tighten the Festo nut.
- 25 Refit the mandrel and filter assembly to the ink filler tube using the Mandrel Extraction Tool.
- 26 Disconnect the drain tube from the damper and refit the drain cap.
- 27 Reposition the damper back in its original location in the ink system enclosure.
- 28 The 'Draining the Ink System' maintenance instruction is now complete.