

# 4900 Maintenance Instruction

## Draining the Ink System

LINX

### Equipment Required

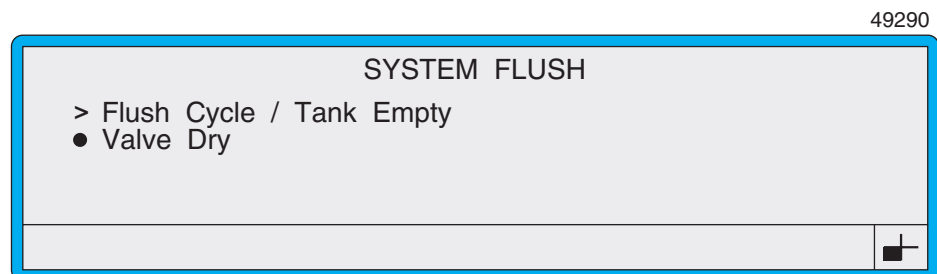
FA74005	Damper Drain Tube	
FA16005	4900 Cover Removal Tool	
FA999045	Gloves Latex Medical (large)	)
FA999046	Gloves Latex Medical (medium)	) as required
FA999047	Gloves Latex Medical (small)	)
FA999076	Safety Spectacles Blue	
	Waste ink container (at least 5 litres capacity)	
	Absorbent, lint-free paper 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.**

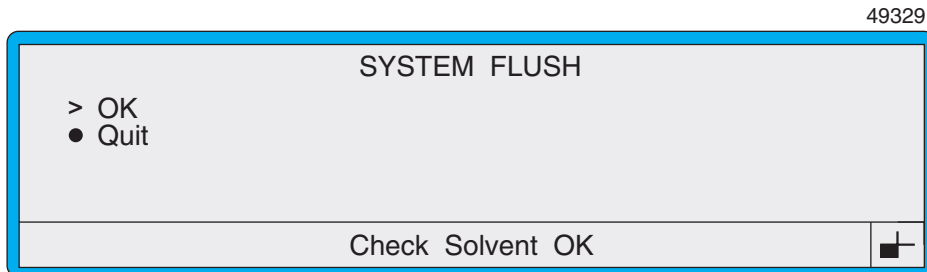
- 1 Shut down and switch off the printer. Ensure that it is switched off at the mains supply.
- 2 Remove the ink and solvent filler caps.
- 3 Unlock the security latch on the front of the top cover and remove the cover. Position the cover so that the keyboard and display can be accessed.
- 4 Temporarily refit the solvent filler cap to reduce evaporation of the solvent.
- 5 Switch on the printer and access the SYSTEM FLUSH menu (Setup menu > Diagnostics menu):



**Figure 1. System Flush Menu: Process Options**

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 Flush Cycle / Tank Empty option. The following menu is displayed with the instruction “Check Solvent OK” in the status line:



**Figure 2. System Flush Menu: “Check Solvent OK” Instruction**

- 7 To continue with the System Flush procedure (and therefore the Empty Tank sequence) it is necessary to perform a number of actions on the printer before the flushing cycles can begin. These required actions are displayed in the status line, and should be performed in accordance with the following expanded explanations for each instruction. Once each action has been completed, select the OK option by pressing the [enter] key, which displays the next instruction.

NOTE: To return to the initial SYSTEM FLUSH menu, select the Quit option and press the [enter] key. To return to the DIAGNOSTICS menu (System Flush option), press the [esc] key.

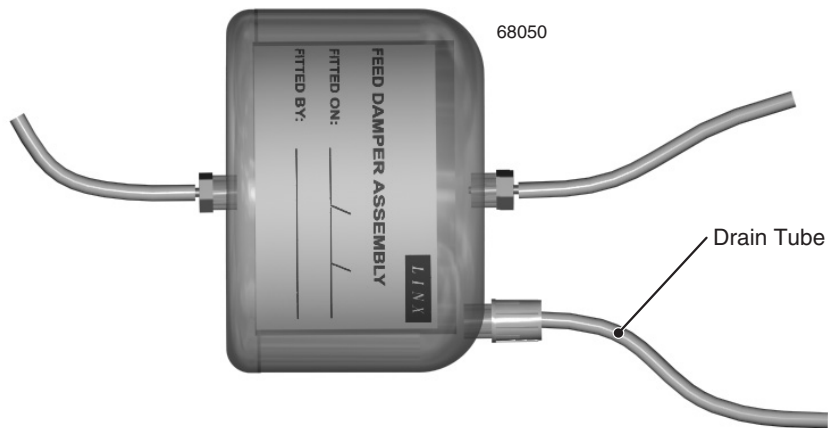
- 8 **Check Solvent OK.** This action is not applicable when only draining the ink system. Press the [enter] key to proceed to the next instruction.
- 9 **Prop Up Printer.** Before commencing the ink draining procedure, the printer must be raised by approximately 50 mm at the front left-hand side to aid drainage of the ink, as the ink dip tube is situated at the rear right-hand side of the tank.



**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.**

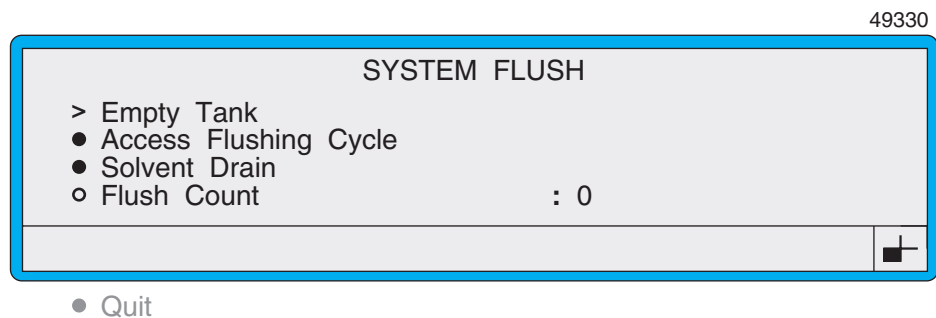
- 10 **Orientate Filter and Damper.** Ignore the instruction regarding the filter. Carefully lift the feed damper clear of the ink system enclosure. Hold the feed damper in the vertical position with the drain cap uppermost.

- 11 Connect Bleed Line To Damper.** Remove the damper 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 3. Feed Damper Orientation with Drain Tube Connected**

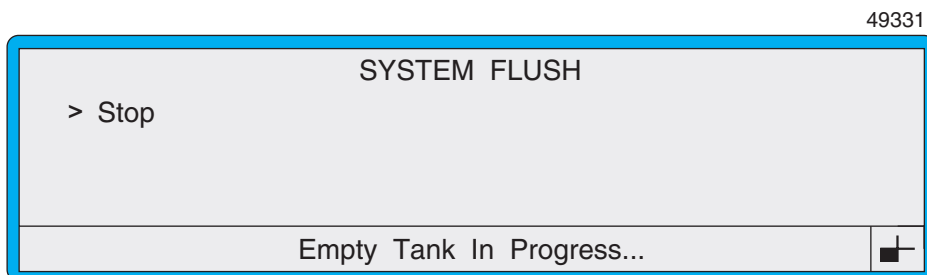
- 12 Turn On Tap On Bleed Line.** The bleed line tap is used in the Linx manufacturing process only. There is no bleed line in the service engineer's Damper Drain Tube kit, therefore, any action referring to the bleed line tap should be ignored. Simply press the [enter] key to continue the procedure.
- 13** When all the required actions have been completed, the following menu is displayed:



**Figure 4. System Flush Menu: Sequence Options**

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

- 14 Select the Empty Tank option, which starts the pump and displays the following screen with the “Empty Tank In Progress...” message displayed in the status line. The pump will run at maximum pressure for approximately 1 minute and 40 seconds, and then automatically stop on completion of the Empty Tank sequence. Select the Stop option if the audible pitch of the pump changes indicating that the ink tank is empty:



**Figure 5. System Flush Menu: “Empty Tank In Progress...”**

- 15 At some point towards the end of the Empty Tank sequence the ‘ink low’ condition should be reached. Ensure that the System Warning message “3.03 Ink Low” is displayed in the status line.
- 16 On completion of the Empty Tank sequence, the display reverts to the sequence options menu (Figure 4).
- 17 If the tank is not empty after a single Empty Tank sequence, select the Empty Tank option again to repeat the sequence. Select the Stop option when the audible pitch of the pump changes indicating that the ink tank is empty.
- 18 Disconnect the drain tube from the damper and refit the drain cap.
- 19 Reposition the damper back in its original location in the ink system enclosure.
- 20 The ‘Draining the Ink System’ maintenance instruction is now complete.