

# Installation Instruction

## XL Flush Manifold



### INTRODUCTION

This instruction sheet covers the XL flush manifold. This manifold is specially designed to work with the higher-pressure output of the 2000 Series pumps that are available with the Summit XL. It has additional safety features not found in the E flush manifolds. The XL flush manifold can be used with Summit, Summit E and Summit XL.

The XL flush manifold comes with 8 ports.

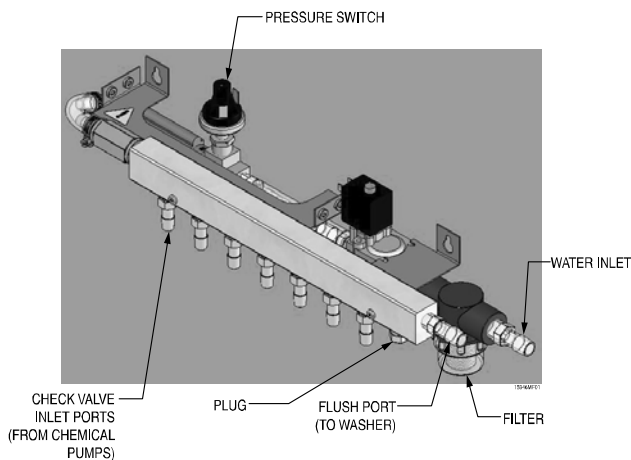


Figure 1. XL flush manifold

### MANIFOLD INSTALLATION

XL flush manifolds come with wall-mount keyholes pre-drilled in the manifold bracket. The manifold should always be mounted with the check valve inlet ports facing down as shown in Figure 1.

1. Before installing the manifold, verify that the dispenser is off by disconnecting the power and turning the switch off (the LED should not be lit).
2. Position the manifold under the XL dispenser allowing adequate space for delivery lines and easy servicing. For best results, center the manifold under the dispenser, about 8 to 10 inches below it. This will allow adequate space for the wiring harness, which limits the allowable distance between manifold and dispenser.
3. Fasten the manifold to the wall using the keyhole slots in the mounting bracket. Use screws that are appropriate for the wall surface.

### Plumbing



- We recommend that you use 1/2" ID inlet tubing and 1/2" ID outlet tubing.

1. Connect the water inlet tubing to the manifold (see Figure 1).

2. Remove check valves that are not being used and replace them with plugs (extra plugs are provided).
3. Connect the chemical lines from the outlet side of the chemical pumps to the check valves on the manifold and fasten them with hose clamps. Be sure to leave sufficient slack in these lines to allow service access.
4. Connect the outlet tubing to the flush port and fasten with a hose clamp.



**IMPORTANT:** Dynamic water pressure should always be within the range of 15 to 60 PSI (1.0-4 bar). For optimal performance, inlet pressure should be set higher than 20 psi (1.4 bar). This will allow for adequate flow, even during pressure/flow fluctuations that occur during normal laundry operation.

If inlet dynamic water pressure falls below the minimum of 15 PSI, the dispenser system assumes that there is not enough water for chemical delivery and the unit will stop pumping and will display a "No Flow" error.

If inlet dynamic water pressure goes above 60 PSI, the dispenser system assumes that the chemical delivery lines are blocked; the dispenser will stop pumping and will display a "No Flow" error.

### Wiring

1. Pass the wire harnesses through one of the available holes in the bottom of the dispenser.

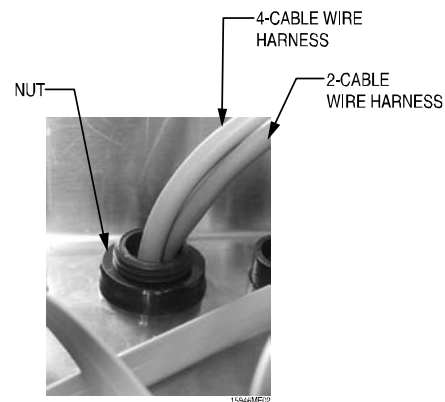


Figure 2. Wire harnesses passing through bottom of dispenser, held in place with nut

2. Place the nut over the wires and gently tighten.
3. Connect the 2-pin and 4-pin Molex connectors to the 2 and 4-pin positions on the PCB harness adapter.
4. Connect PCB harness adapter to the position on the Main PCB labeled **Manifold**.

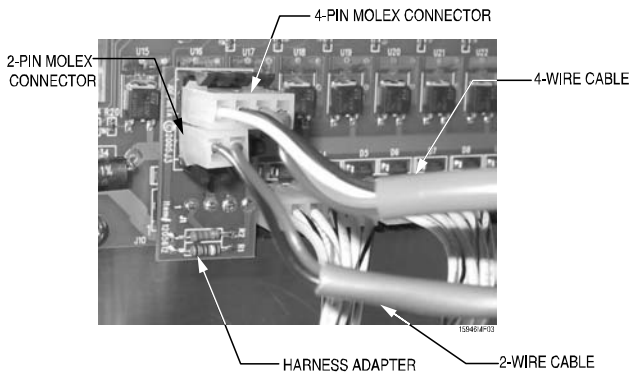


Figure 3. 2 and 4-pin Molex connectors connected to PCB harness adapter, which is connected to MANIFOLD on the main PCB.

5. Use available tie wrap and wrap base to secure the wire inside the dispenser housing and provide additional strain relief.
6. Adjust the length of the cables/wires as needed and tighten the strain relief nut.
7. Once these things have been done, follow the steps for programming in the E and XL Installation and Operation manual.



*Unit comes pre-wired. However, if you ever disconnect the wiring it is important that the specified groups of wires go to the area on the manifold specified below. Polarity of the wires within these parameters is not important.*

1. From harness: black and white wires go to flow switch.
2. Red and green wires go to solenoid.
3. Black and red wires from the 2-wire cable connect to the pressure switch.

## SAFETY



*It is important that incompatible chemicals not be injected into any flush manifold together.*

*To prevent the mixing of any chemicals, the Summit XL, in combination with the XL flush manifold will flush the manifold with water before and after chemicals are pumped. Despite this safeguard, you must not run sour and bleach or other incompatible chemicals together into the manifold. Instead, route one to the manifold and the other downstream via a separate delivery line. A Sour Flush Kit (#069505) is available for this type of installation.*

*Extra plugs are provided with the XL flush manifolds to plug any port that is not in use. Unused ports should always be plugged. The XL flush manifold comes with one port plugged. Additional check valves are included with the XL flush manifold in the event that an eighth, non-reactive chemical is to be injected into the manifold.*



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