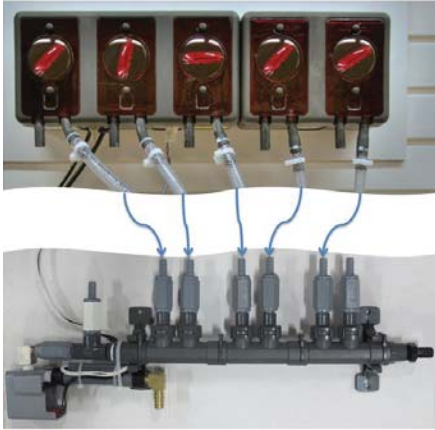


**⚠ WARNING!** ALWAYS WEAR PERSONAL PROTECTIVE EQUIPMENT (PPE) WHEN WORKING WITH LAUNDRY CHEMICALS AND EQUIPMENT!

**⚠ WARNING!** Water pressure in the flush manifold must not exceed 30 psi dynamic pressure when flowing. Installing an approved pressure regulation device on the water inlet side of the flush manifold is recommended when outlet restriction is less than 1/4" size barb at the connection point. Operating outside of these parameters will decrease pump life and void manufacturer's warranty.

# Flush Manifold For Liquid Laundry Supply Systems

## FM-700 Modular Flush Manifold Reference Manual



Eclipse™ Liquid Laundry System Install recommended

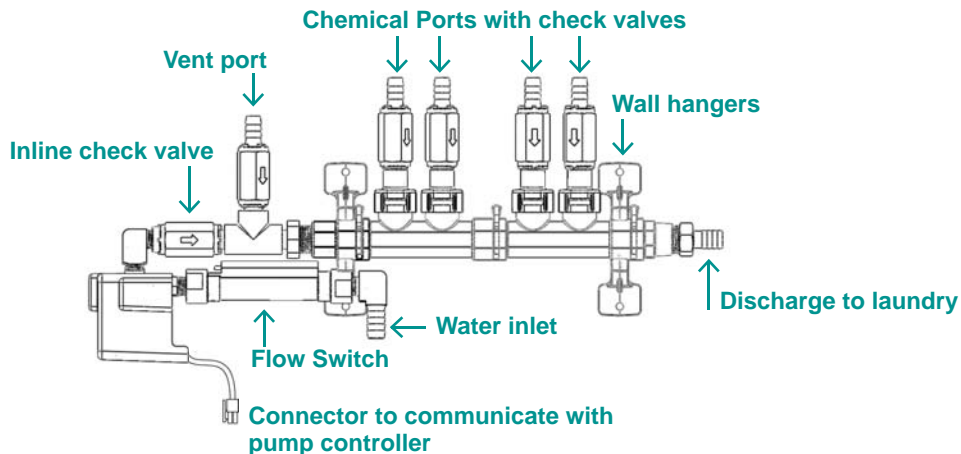
Online and downloadable Product Manuals and Quick Start Guides are available at [www.hydrosystemsco.com](http://www.hydrosystemsco.com)

Please check online for the latest version of this Reference Manual.

### Overview

The FM-700 Modular Flush Manifold is intended for use with our LM-200 and LL-6000 liquid laundry dispensing systems.

This flush manifold is a single unit that includes the water valve, manifold, and integrated flow switch all in one convenient assembly. The Modular Flush Manifold is designed to provide the easiest and most cost-effective means of flushing liquid laundry products when used with an LM-200, and LL-6000 series dispensing system.



**FIGURE 1: Side view of FM-700 Flush Manifold System Diagram**

The FM-700 Modular Flush Manifold aids in safe delivery of liquid laundry chemical products from the dispensing system to the washer using water flow (or flush) via a single discharge tube. The dispenser pumps chemical products into the manifold via integrated check valves that keep unwanted liquids from entering the chemical line and also keep unwanted chemical from dripping into the water flow. The flush valve controls water flow through the manifold, which in turn transfers product to the washer. The flush valve may be controlled by our Total Eclipse Controller.

# Installation and Setup

The FM-700 Modular Flush Manifold is designed to be installed near the LM-200, LL-6000, or infinity™ laundry dispensing system. Electrical installation simply requires plugging a connector to the underside of the LM-200, LL-6000 pumpstand.

## STEP ①: Mounting the Flush Manifold

1. Position the FM-700 Modular Flush Manifold on the wall near the dispenser pumpstand with the water inlet and flush discharge fittings on the desired end.
2. Using a pencil, mark the location of all holes on the mounting brackets.
3. Drill the outlined holes with a 1/4" masonry bit and place a wall anchor, supplied, into each hole.
4. Secure the manifold assembly to the wall anchors with supplied screws.
5. Connect the water supply hose to the water inlet of the FM-700.
6. Connect hose between the FM-700 discharge and the washing machine.
7. Avoid kinks and other restrictions in discharge tube. Dynamic manifold pressure that exceeds 30 PSI can severely reduce pump and squeeze tube life. This condition may also cause excessive back pressure in the squeeze tubes resulting in potential dispensing equipment damage and/or personal safety risks.

**IMPORTANT NOTE:** Water inlet fitting size is 1/2" hose barb (1/2" ID hose). Flush outlet fitting size is 1/2" hose barb (1/2" ID hose). To connect other size/type water inlet and/or flush outlet hoses, obtain fittings locally.

## STEP ②: Connecting the Pump Tube

1. Connect one end of the 3/8" ID tubing supplied with the FM-700 to the pump tube barbed fitting with hose clamps or tie wraps to ensure a leak-free assembly.
2. Trim the 3/8" ID tubes to fit—do not connect to the check valves yet.
3. Calibrate each pump using the calibration step in the NOVA controller, capturing product at the open ends of the braided tubing.
4. Connect 3/8" ID tubing to the hose barbs on the check valves. Secure with hose clamps or tie wraps to ensure a leak-free assembly.
5. **Do Not Connect Any Chemical Line To The White Vent Check Valve!**



### WARNING!

A locally approved back-flow prevention device—not provided—may be required for safe and legal operation.

### Maximum/Minimum Operating Parameters

Maximum Static Water Pressure: 60 PSI  
Maximum Dynamic Water Pressure: 30 PSI  
Maximum Water Temperature: 140° F  
Note: Operating outside of these parameters will void manufacturer's warranty.

# Installation and Setup

## STEP 3: Installing Hard Copper Plumbing

Always use an approved back-flow prevention device and water pressure regulator. Hose barb fittings can be removed and replaced with the appropriate fittings to accommodate copper tubing. Use RTV sealant on the plastic plumbing threads and DO NOT solder to fittings that are threaded into plastic.

## STEP 4: Connecting the Electric

The FM-700 series flush manifold has an electrical connector designed to connect to any traditional NOVA Pumpstand.

**IMPORTANT NOTE:** To manually open the flush valve, to purge or clean water lines and manifold, use the Prime Pumps function of the controller. If no product delivery is required, use an unused pump position or temporarily remove the pump tube.

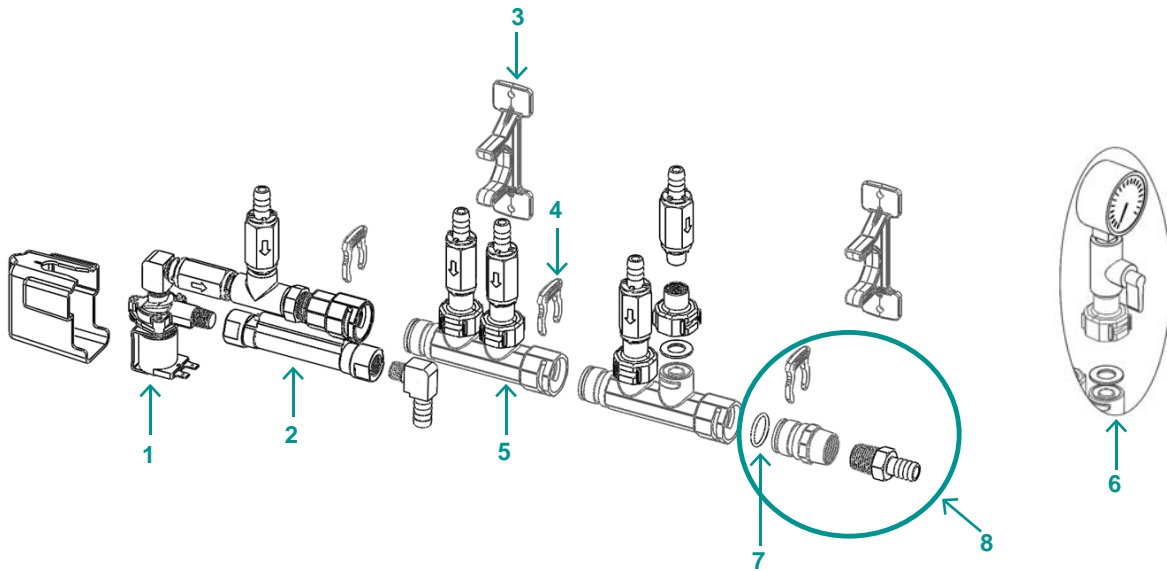


### WARNING:

DO NOT connect any voltage other than 24 VAC to the solenoid coil!



**FIGURE 2: Pumpstand Flush Connector**



**FIGURE 3: Flush Manifold FM-700 Series**

Reference #	Description	Part Number
1	Solenoid Valve Kit	TBD
2	Switch Kit (with Instruction Sheet)	TBD
3	Wall Hanger (includes 2 hangers, 4 anchors, and 4 screws)	10096115
4	Clips (kit of 5)	10096116
5	2 Port Main Manifold	TBD
6	Pressure Gauge Kit (0-60 PSI)	10096117
7	O-Ring	10096121
8	Outlet Barb Kit (includes o-ring, clip, etc.)	10096122

## Limited Warranty

**Seller** warrants solely to **Buyer** the Products will be free from defects in material and workmanship under normal use and service for a period of one year from the date of completion of manufacture. This limited warranty does not apply to (a) hoses; (b) and products that have a normal life shorter than one year; or (c) failure in performance or damage caused by chemicals, abrasive materials, corrosion, lightning, improper voltage supply, physical abuse, mishandling or misapplication. In the event the Products are altered or repaired by **Buyer** without **Seller's** prior written approval, all warranties will be void. **No other warranty, oral, express or implied, including any warranty of merchantability or fitness for any particular purpose, is made for these products, and all other warranties are hereby expressly excluded.**

**Seller's** sole obligation under this warranty will be, at Seller's option, to repair or replace F.O.B. **Seller's** facility in Cincinnati, Ohio any Products found to be other than as warranted.

## Limitation of Liability

**Seller's** warranty obligations and **Buyer's** remedies are solely and exclusively as stated herein. **Seller** shall have no other liability, direct or indirect, of any kind, including liability for special, incidental, or consequential damages or for any other claims for damage or loss resulting from any cause whatsoever, whether based on negligence, strict liability, breach of contract or breach of warranty.



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