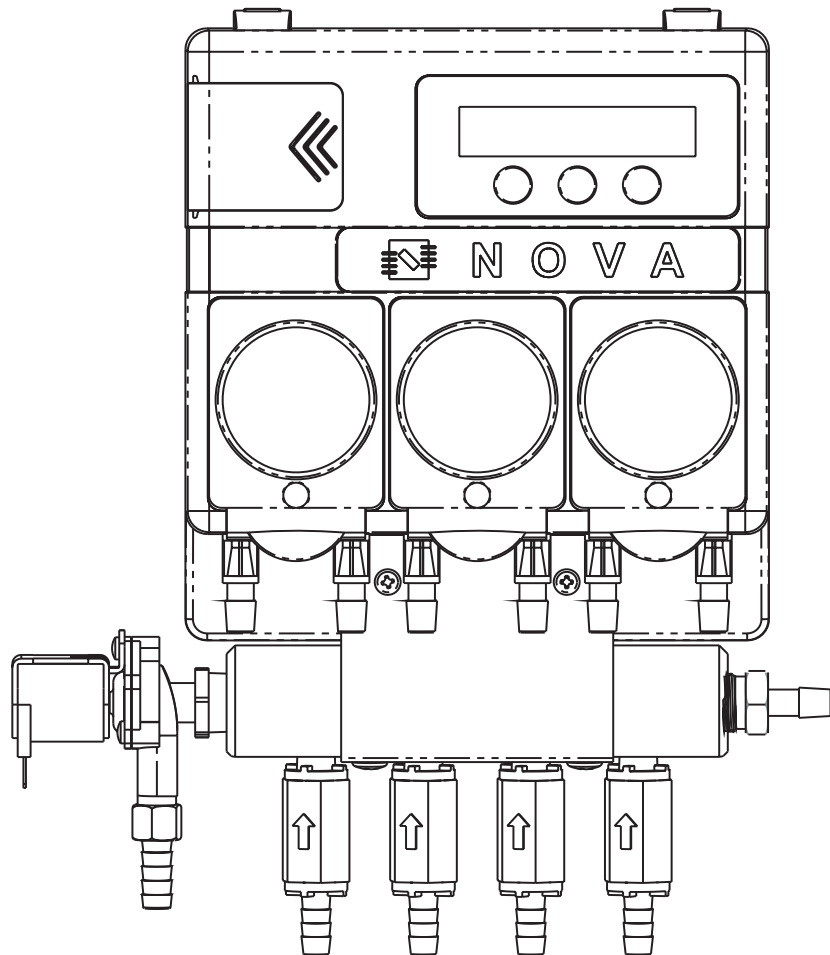


FLUSH MANIFOLD

FOR LIQUID LAUNDRY SUPPLY SYSTEMS



REFERENCE MANUAL

FM-700 Series

1.0 DESCRIPTION

The FM-700 series Flush Manifold is intended for use with our LM-700 series Mercury liquid laundry dispensing systems.

The FM-700 series Flush Manifold is a single unit that includes the water valve and manifold all in one convenient assembly. This unit is designed to provide the easiest and most cost effective means of flushing liquid laundry products when used with a Mercury LM-700 series dispensing system.

A single version of the FM-700 series Flush Manifold is available without the flow switch.

WARNING: Installations without the flow switch should not run bleach and sour into the same manifold. Either feed one of these products directly to the washer or use a separate manifold.

Figure 1.1 Flush Manifold System Diagram

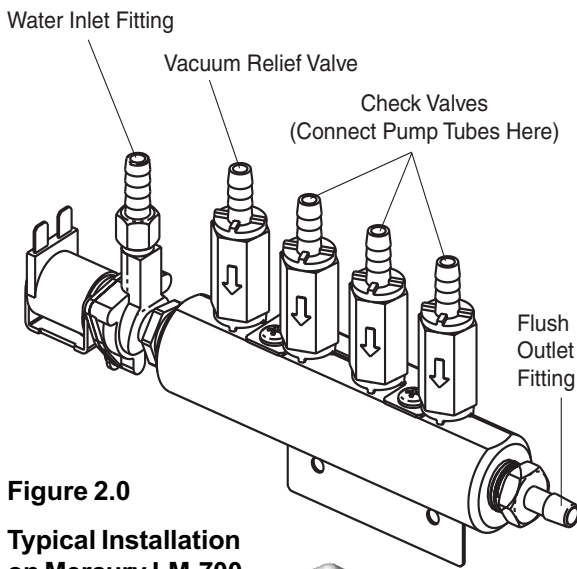
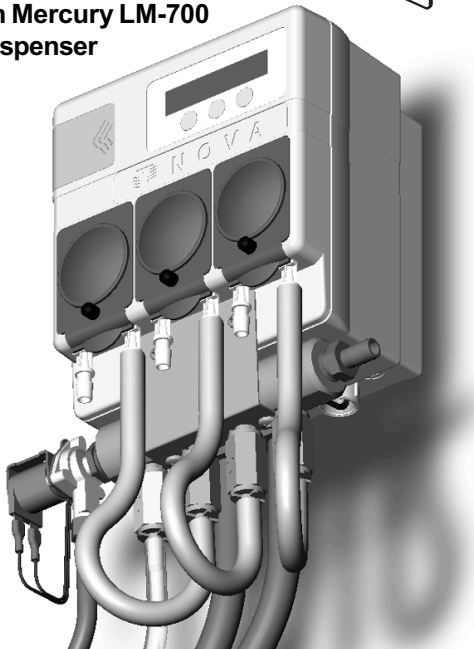


Figure 2.0

Typical Installation on Mercury LM-700 Dispenser



1.1 Theory of Operation

The FM-700 series Flush Manifold transfers liquid laundry chemical products from the dispensing system to the washer using water flow (or flush) via a single discharge tube. The dispenser pumps into the manifold via the check valves. 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 LM-700 series Mercury Dispensers.

Please refer to *Figures 1.1, System Diagram* and *2.0, Typical Installation* to see the Flush Manifold as it is used with the Mercury LM-700 systems.

2.0 INSTALLATION

The FM-700 is designed to be installed directly on the LM-700 Mercury Dispensing system. Electrical installation simply requires connecting a plug connector to the inside of the LM-700 Mercury Dispenser and routing the cable out through the bottom.

CAUTION: A locally approved back-flow prevention device—not provided—is required for safe and legal operation.

A water pressure regulator is required to limit flow pressure in the flush manifold to 10 psi at flow. This regulator may be shared by a number of flush manifolds.

It is important that the flush discharge hose DOES NOT exceed 50'.

2.1 Electro-Mechanical Installation

The FM-700 series flush manifold has a single electrical connector specifically designed to connect to the Mercury LM-700 series Pumpstand.

WARNING: DO NOT connect any voltage other than 24 DC to the solenoid coil!

- 2.1.1 Remove the two cabinet screws from the front enclosure of the Mercury Dispenser. With the screws removed, tilt the front enclosure upward as if it was hinged along the top of the cabinet.
- 2.1.2 Remove the lower partition by tilting it outward, from the top. Pass the LM-700 Flush Harness through the right liquid tight conduit fitting (located in the bottom of the dispenser). Refer to *Figure 2.1.2*.
- 2.1.3 Install the Harness (attach connector to interconnect board). Refer to *Figure 2.1.3*.
- 2.1.4 Replace the lower partition and the front cover of the dispenser.

- 2.1.5 Secure the Manifold assembly to the cabinet using the same screws.
- 2.1.6 Connect the Flush Harness leads to the solenoid.
- 2.1.7 Connect water inlet and flush outlet hoses.

NOTE: Water inlet fitting size is 3/8" (10 mm) hose barb (3/8" [10 mm] ID hose). Flush outlet fitting size is 3/8" (10 mm) hose barb (3/8" [10 mm] ID hose). To connect other size/type water inlet and/or flush outlet hoses, obtain fittings locally.

Figure 2.1.2 Liquid Tight Conduit Fitting

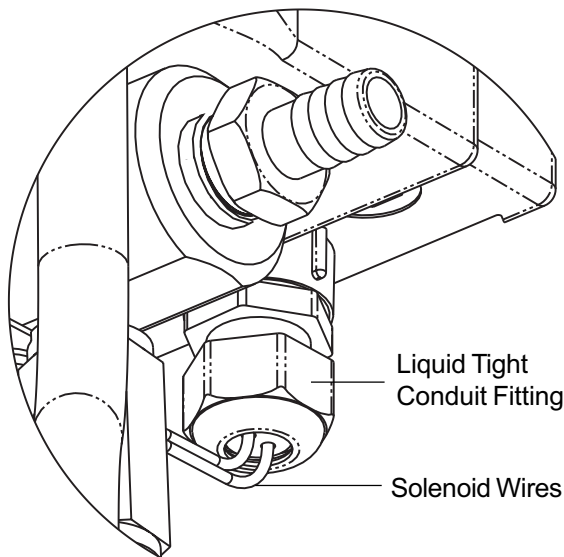
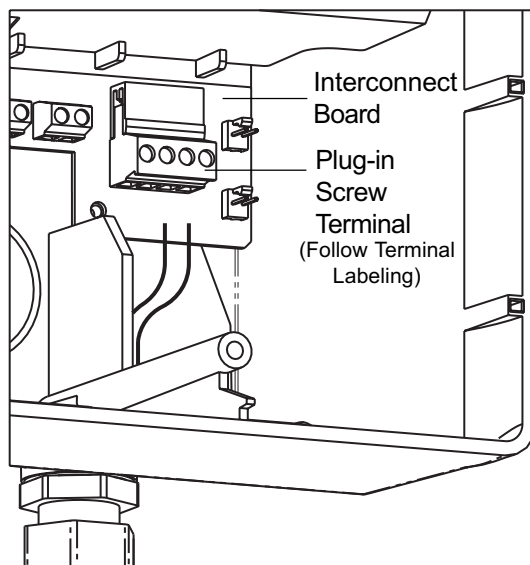


Figure 2.1.3 Harness Installation



2.2 Transport Tube Connection

Install the Transport Tubes (provided in the accessory kit) on the discharge (right) side of the pump. Trim to fit if required, and connect to FM-700 check valve hose barbs. Use tie wraps to secure at check valve.

NOTE: When ordering replacement transport tubes for FM-700 series dispensers with flush manifolds, be sure to specify the tube length:
03-07527-01 for Braided PVC, 1'
03-07527-02 for Braided PVC, 2'.

2.3 Hard Copper Plumbing

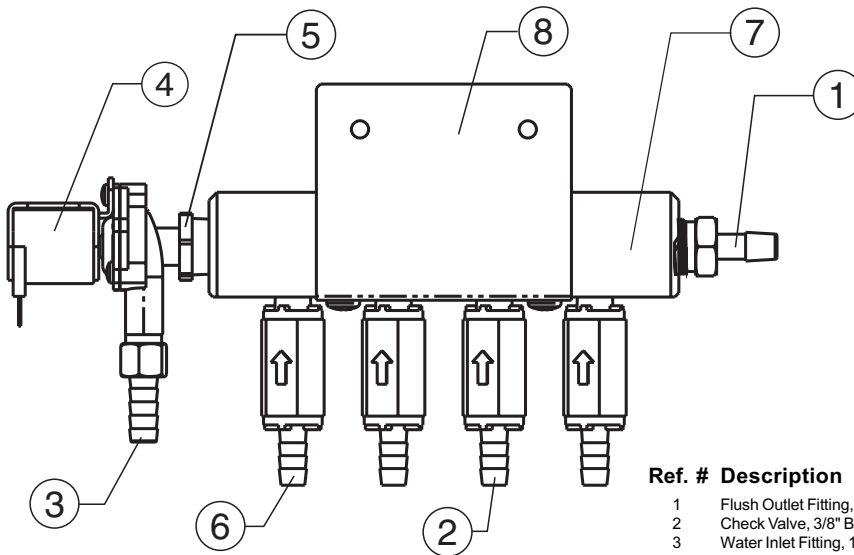
If the water supply connection must be copper tubing, you will be responsible for the correct pipe fittings and connectors to complete the installation. Always use an approved Back Flow Prevention Device and Water Pressure Regulator. Hose barb fittings can be removed and replaced with the appropriate fittings to accommodate copper tubing. Use RTV sealant on the plastic plumbing threads and DO NOT solder to fittings that are threaded into plastic.

3.0 SYSTEM SETUP

- 3.1 Check entire dispensing system for correct electrical and plumbing connections.
- 3.2 After pump calibration and formula programming, test run the system to determine appropriate flush time setting to transfer all product to the washer. Input new flush time in program mode of the Controller.
- 3.3 Reconfirm that the washer calls for product at appropriate times and the dispensing system pumps when it should. Flush system pressures should be measured while flushing, if possible.
- 3.4 Adjust the water pressure regulator for no more than a 10 psi reading while flushing.
- 3.5 Inspect flush system for water leaks, and test run a load of linen.

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

4.0 SPARE PARTS LISTING



Ref. #	Description	Part Number
1	Flush Outlet Fitting, 1/2" MPT x 3/8" Barb	41-07554-00
2	Check Valve, 3/8" Barb x 1/4" MPT	41-04207-46
3	Water Inlet Fitting, 1/4" FPT x 3/8" Barb	41-07528-46
4	Solenoid Valve, 24 VDC	49-06472-00
5	Reducer, 1/2" MPT x 1/4" FPT	41-03965-072
6	Vacuum Release Valve	03-04831-00
7	Manifold, blank, no parts	27-07525-00
8	Mounting Plate, Unit Mount	23-07559-00
*	Hole Plug (for empty Check Valve Positions)	41-04468-00

NOTE: For replacement Transport Tubes, please see Section 2.2, *Transport Tube Connection* to obtain part numbers.

* denotes item(s) not shown.

5.0 LIMITED WARRANTY

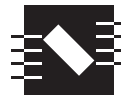
SELLER warrants solely to BUYER the Products will be free from defects in material and workmanship under normal use and service for a period of one year from the date of completion of manufacture. This limited warranty does not apply to (a) hoses; (b) and products that have a normal life shorter than one year; or (c) failure in performance or damage caused by chemicals, abrasive materials, corrosion, lightening, 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 Watsonville, California any Products found to be other than as warranted.

5.1 Limitation of Liability

SELLER'S WARRANTY OBLIGATIONS AND BUYERS REMEDIES ARE SOLELY AND EXCLUSIVELY AS STATED HERE IN. 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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