ME806 Series
TURBO-FLO LE
Low Emission Transfer System
Instruction Manual

WARNING: Failure to follow these instructions or to properly install and maintain this equipment could result in an explosion and/or fire causing property damage and personal injury or death. Marshall Excelsior Co. equipment must be installed, operated, and maintained in accordance with federal, state, and local codes and Marshall Excelsior Co. instructions. The installation in most states must also comply with NFPA No. 54 and 58 standards. Only personnel trained in the proper procedures, codes, standards, and regulations of the LP-Gas industry should install and service this equipment.

Installation

1. Apply a suitable thread sealing compound, such as Loctite 565 PST, to male NPT threads of hose end connector.

2. Tighten connection by placing a suitable wrench on the wrench flats of the ME806 **TURBO-FLO LE** Transfer Valve as well as on the connector. **Note:** If the hose end connector does not include a swivel, continue tightening the connector until the valve is upright (operating lever facing upward) when installed.

3. Connect the assembly inlet to a pressure source of at least 150 PSI and check for leaks (as evidenced by bubbles) at all joints and sealing surfaces by submersing the unit in water or by applying Marshall Excelsior "Leak Detector" solution to all joints.

Preventative Maintenance and Safety Checks

The ME806 **TURBO-FLO LE** Transfer Valve is designed to provide a long and trouble free service life when properly installed and maintained. Like all mechanical devices, however, it is subject to wear and requires preventative maintenance to maintain safe and efficient operation. Perform the inspections and service as follows:

Before each use:

1. Inspect the safety latch to ensure that it is in the locked position (both sides of the latch engaged in notches on body) prior to and after each use. If it is not fully latched, move the handle grip away from the ACME nut until latch is fully engaged.

2. Inspect the ACME nut for worn threads. Replace nut assembly, if required. See "Periodic Checks" for important safety instructions regarding the ACME nut.

Periodic Checks

The following checks should be performed weekly on valves exposed to severe service conditions such as frequent use (over 100 connections per week) or when exposed to contaminants, corrosive agents or extreme weather conditions. The checks should be performed at least monthly on all other valves.

1. **Nut Assembly** - Inspect the hardened steel bearing races for wear by checking the gap between the ACME nut race and the nut adapter race. A gap greater than 0.135 inch (2 US quarters stacked together) indicates excessive wear and the valve MUST be removed from service immediately. The ball bearings are not user serviceable. When service is required, have the nut assembly replaced by qualified service personnel using the service instructions provided with the replacement parts. **Note:** The hardened steel bearing races and ball bearings that retain the ACME nut are intentionally designed to have "free play" to allow the nut to easily align with the mating connector. **WARNING:** Never attempt to remove, replace or service the ball bearings in the bearing race. Remove valve from service immediately if any ball bearings come out of the race.

2. **Handle Assembly** - Inspect the valve handle, latch and springs for proper operation. If service is required, have handle assembly replaced by qualified service personnel using the service instructions provided with the replacement parts. **WARNING:** Remove valve from service immediately if the safety latch does not function properly.

3. **Seals** - Inspect the valve seals for leaks (as evidenced by bubbles) at all joints and sealing surfaces by submersing the unit in water or by applying Marshall Excelsior "Leak Detector" solution to all joints. If service is required, have leak repaired by qualified service personnel using the service instructions provided with the replacement parts. **WARNING:** Remove valve from service immediately if valve seals or joints leak

Operating Instructions

WARNING: To avoid risk of serious injury or death, never attempt to open the **TURBO-FLO LE** Transfer Valve when it is under pressure and not properly connected to system.

1. **Connect the Valve** - With pump off, connect **TURBO-FLO LE** Transfer Valve to **TURBO-FLO LE** ACME adapter or other standard 3-1/4" male ACME connector of storage, transport or delivery system and tighten with appropriate wrench.

2. **Open the Valve** – With inlet valve closed, lift the center of the safety latch on the **TURBO-FLO LE** Transfer Valve toward the handle grip and move the valve handle all the way forward (toward the ACME fitting). **Note:** A slight forward motion of the handle opens a small pilot orifice that equalizes the pressure on both sides of the valve. Once equalized, the valve will open fully with continued forward pressure on the handle. In most cases, the pressures equalizes so quickly that equalization may not be noticeable. Once opened, the valve will remain open until the handle is moved to the closed position (away from the ACME fitting).

   If the valve does not open fully with reasonable forward pressure on the handle, check to make sure the latch is pulled all the way out of the locking notches in the valve casting and the inlet valve is fully closed.

3. **Transfer Product** – Open inlet valve, turn pump on and follow safe filling / transfer practices as outlined in the NFPA 58, National Fuel Gas Code. **Note:** In case of emergency, the **TURBO-FLO LE** Transfer Valve can be closed instantly by snapping the spring loaded handle to the closed position (Away from the ACME nut.)

4. **End Transfer** – Turn off pump, close **TURBO-FLO LE** Transfer Valve by pushing handle away from the ACME nut, close inlet valve and disconnect transfer valve.

WARNING: NEVER disconnect the **TURBO-FLO LE** Transfer Valve with the valve open. Make sure the safety latch is in the locked position (both sides of the latch engaged in notches on body) before disconnecting valve **Note:** This valve system is designed for minimum product loss at disconnect. To achieve the intended low emission feature of this transfer system, you may need to adjust your standard operating procedure for the filling process. When using the ME868 **TURBO-FLO LE** ACME Adapter in conjunction with the ME806 **TURBO-FLO LE** Transfer valve, Do not vent the product trapped between the container service valve and the adapter.

WARNING

- To avoid risk of serious injury or death, never attempt to open the **TURBO-FLO LE** Transfer valve when it is under pressure and not properly connected to system.
- Never disconnect the **TURBO-FLO LE** Transfer Valve with the valve open
- Make sure the safety latch is in the locked position (both sides of the latch engaged in notches on body) before disconnecting valve
- Point hydrostatic relief valve discharge away from people at all times
- Never attempt to remove, replace or service the ball bearings in the bearing race
- Remove valve from service immediately if any ball bearings come out of the race
- Remove valve from service immediately if the safety latch does not function properly
- Remove valve from service immediately if valve seals or joints leak

Safety Features

- Patented design prevents valve from being opened under normal operating conditions when not connected to system
- Fast acting emergency shut-off
- Double-acting safety latch prevents unintentional product discharge
- Non-sparking brass nut
- Hydrostatic relief valve prevents dangerous pressure buildup due to trapped product

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