

Installation and Operating Instructions for ME806 Series TURBO-FLO LE Low Emission Transfer System

!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, personal injury or death.

MEC equipment must be installed, operated, and maintained in accordance with federal, state, local codes and manufacturer's instructions. The installation in most states must also comply with NFPA No. 58, and ANSI/CGA G-2.1.

For installation in the European Union, the equipment must also comply with PED/TPED and EN ISO standards. Periodic inspections, intermediate inspections and exceptional checks of transportable pressure equipment should be carried out in accordance with the Annexes of Directive 2008/68/EC and with 2010/35/EU Directive (TPED) to ensure continued compliance with their safety requirements.

Only personnel trained in the proper procedures, codes, standards, and regulations of the LP-Gas or NH₃ should install and service this equipment.



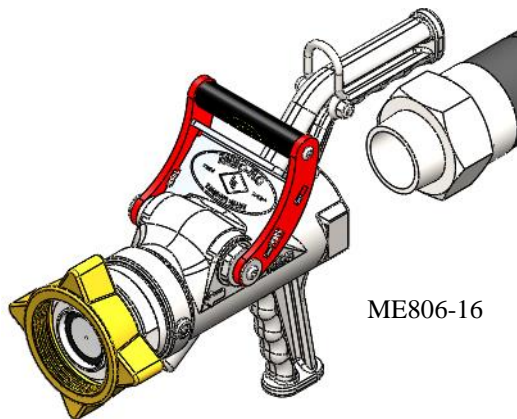
WARNING: These products contain a chemical known to the State of California to cause cancer and birth defects or other reproductive harm.

Installation

!CAUTION!

Make sure all pressure is released from upstream piping before proceeding with installation.

1. Apply Loctite #565 or suitable thread sealing compound to male NPT threads of mating fitting or hose end connector.
2. Tighten connection by placing a suitable wrench on the wrench hex of the ME806-16 Turbo-Flo LE Transfer Valve. If the hose end connector does not include a swivel, continue tightening the valve onto the pipe or fitting until the valve is upright (operating lever facing upward) when installed in final position.



ME806-16

3. Connect a pressure source of a least 150 psi (1034 kPa) and check for leaks (as evidenced by bubbles) at all joints and sealing surfaces, using a suitable leak detector solution at all joints. Ensure all connection joints are free of leaks before putting the ME806 LE valve into service.

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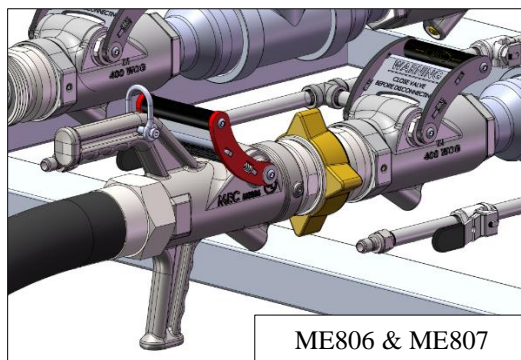
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Operation

!WARNING!

To avoid risk of serious injury or death, never attempt to open the ME806 Valve when it is under pressure and not properly connected to transfer system. The ME806 Transfer valve is equipped with a pilot equalization feature that will discharge a small amount of product if attempting to open when not properly connected to a transfer system.

1. **Connect the Valve** – With pump off, connect the ME806 TURBO-FLO LE Transfer Valve to an ME868 TURBO-FLO ACME Adapter, ME807/ME808 TURBO-FLO LE Shut-off valve or other shut-off valve with standard 3-1/4" female ACME connector; tighten with appropriate wrench.



ME806 & ME807

2. **Open the Valve(s)**

- a. Ensure the pump is off and the connected Shut-Off valve or other connection is closed; open the ME806 Transfer valve by releasing the locking latch and moving the handle toward the ACME connection.

***Note:** A slight motion of the handle opens a pilot orifice that equalizes pressure on both sides of the valve. Once equalized, the valve will open fully with continued pressure on the handle. Once opened, the valve will remain open until the handle is moved to the closed position (away from the ACME connection). If the valve does not open fully with reasonable 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 that the hose-end valve is fully closed.

- b. Open the connected inlet shut-off valve or other connection.

3. **Transfer Product** – 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 ME806 valve can be closed instantly by snapping the spring loaded handle to the closed position (away from the ACME connection).

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ME806-16 Series

!CAUTION!

The ME806 valve series is rated for a maximum pressure of 400 psi and an operating temperature range of -40°F to 212°F (-40°C to 100°C). DO NOT exceed these parameters during valve operation or use.

4. **End Transfer** – Turn off pump, then close the ME806 Transfer valve by pushing the handle away from the ACME adapter until the handle safety latch locks in the closed position. Close the inlet Shut-Off valve or other connection next. Disconnect Transfer valve.

!WARNING!

NEVER disconnect the ME806 Transfer with the valve open. Ensure 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 ACME Adapter in conjunction with ME806 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 ME806 Transfer Valve when it is under pressure and not properly connected to the system with an appropriate transfer hose.
- Never attempt to remove, replace or service the ball bearings in the bearing race.
- Ensure hydrostatic relief valve is aimed away from people at all times.
- Remove valve from service immediately if any ball bearings come out of bearing 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.

ACME Nut Service and Replacement Instructions

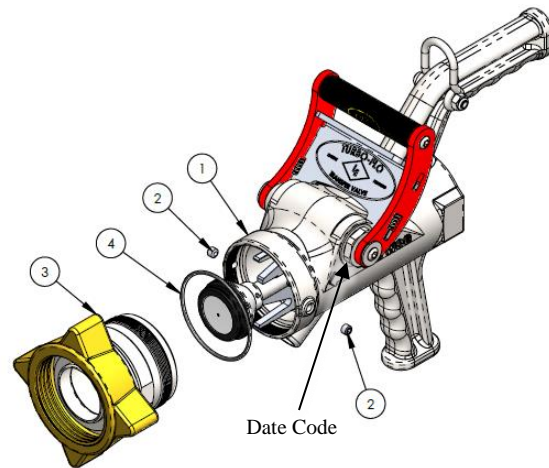
!WARNING!

Failure to follow the adapter service and replacement instructions could cause risk of serious injury or death. Adapter Nut replacement must be performed by qualified service personnel.

1. Release all system pressure before attempting to service the nut.
2. Remove the (2) Set Screws [2] from Body [1] that retain the Adapter Nut [3] and discard.
3. Remove the Adapter Nut [3] from the Body [1] casting using the appropriate wrench on the wrench flats provided.
4. Remove Seal [4] from the Body [1] and discard.
5. Clean all threads and sealing surfaces and install new Seal [4] into Body [1] casting.
6. Apply Loctite #242 (blue) or equivalent thread locker to new Adapter Nut [3] and torque to 160 to 180 Ft-lbs (217-244 Nm).
***Note:** If using an ACME Cap to install, leave Cap in place until after set screws are installed in step 7.
7. Install new Set Screws [2] and torque to 80 in-lbs (9 Nm)
***Note:** Use only the (2) Set Screws [2] provided with service kit.
8. Connect a pressure source of a least 150 psi (1034 kPa) and check for leaks (as evidenced by bubbles) at all joints and sealing surfaces by applying a suitable leak detector solution to all joints.

Component List

1. Valve Body
2. Set Screw, Qty: 2
3. Adapter Nut
 - ME806 Brass
 - ME806S Steel
4. Adapter O-Ring



Preventative Maintenance and Safety Checks

The ME806 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. The valve contains a date of manufacture code, see above.

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

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. **Adapter 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" (3.4mm, 2 stacked US quarters) indicates excessive wear and MUST be removed from service immediately, see Service and Replacement
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. **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 apply 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. **Remove valve from service immediately if valve seals or joints leak.**