

FILL-RITE®

SERIES 800C METER

Owner's Operation & Safety Manual Models 806C, 807C

SAFETY INSTRUCTIONS

To ensure safe and efficient operation, it is essential to read each of these warnings and precautions, and to follow all instructions listed in this manual.

1. **Improper use or installation of this product can cause serious bodily injury or death.**
2. DO NOT smoke near meter or use meter near an open flame when dispensing flammable fluids. Fire could result.
3. Do not exceed 50 PSI / 3.5 BARS line pressure.
4. **CAUTION: Do not install additional foot valve or check valve during installation without pressure relief valve. Cracking may result.**
5. This product should not be used for fluid transfer into aircraft.
6. This product is not suited for use with fluids for human consumption, including potable water.

INSTALLATION

Meters are furnished for horizontal piping, left to right flow, unless otherwise specified. Use oil and gasoline resistant pipe compound on all threaded joints. Flow ports can be located in any of four positions for horizontal or vertical piping.

1. If fluid flow is left to right, install meter.
2. If fluid flow is other than left to right, determine direction of fluid flow.
3. Lay meter dial face down on a clean flat surface.
4. Arrow mark on meter housing indicates fluid flow direction.
5. Remove four screws (item 20).
6. Lift meter housing (item 19) and chamber assembly (item 26) and rotate together to desired flow direction.

CAUTION: Chamber opening must face towards inlet port of meter.

7. Replace four screws (item 20).
8. Install meter.

CALIBRATION

The Fill-Rite Series 800C meters can be calibrated for either U.S. gallons or liters. Calibration is required after disassembly, when metering a different fluid, or after significant wear. Depending on the model, Series 800C meters are factory calibrated in either U.S. gallons or liters using mineral spirits.

Meter calibration can be easily changed by using the calibration procedure noted. A container of KNOWN volume will be needed for the calibration procedure. It is recommended that the container's volume be at least five gallons or larger.

Procedure for Calibration

1. For the most accurate calibration, install the meter in the application. Fill a container to a known volume with the liquid to be measured.
2. If indicated amount does not match known volume, insure pump is off and pressure relieved, then remove seal screw (item 23) and turn calibration screw (item 21) counterclockwise to reduce indicated amount or clockwise to increase the amount. A full turn will change the indicated amount by approximately 0.1 Gal. (0.4L). Reinstall seal screw.
3. Repeat step 1 and 2 until calibration is acceptable.

OPERATING INSTRUCTIONS

For accurate measurement, meter and piping must always be filled with liquid and free of air. Meter should be calibrated per instructions in this manual prior to its use.

1. Stop flow of liquid.
2. Reset meter to "0".
3. Meter is ready for use. Start flow of liquid. Do not exceed 50 PSI line pressure.

MAINTENANCE

Meter should operate maintenance free. However, certain liquids can dry out while in the meter housing, causing the meter to stop. If this happens, meter should be thoroughly cleaned (see instructions below).

Cleaning Instructions:

Run a flushing fluid through meter. For a more thorough cleaning, disassemble meter per "ASSEMBLY / DISASSEMBLY" section, "Meter Chamber Assembly" subsection. Rinse all meter components. Recalibrate meter following calibration instructions above.

Storage:

If meter is to be stored for a period of time, clean thoroughly. This will help protect meter from damage.

TROUBLESHOOTING GUIDE

Counter is reading high or low:

Check calibration and recalibrate if necessary. Check for air in product and repair air leaks. Measuring chamber or gears could be sticking. Correct by cleaning or replacing internal metering components.

Shaft seal leakage:

Possible causes are dirty or damaged seals. Correct by cleaning o-ring and seat area or replacing seal.

Gasket leakage:

Correct loose gasket by tightening joints. Clean dirty gaskets and seat area. Replace damaged gaskets.

Low flow capacity:

Clean clogged meter chamber; clean or replace screens and filters in piping.

Meter body cracks:

Install pressure relief valve to allow high pressure to bleed back to tank.

Nutating disc breaks:

Avoid flow surge by putting shut-off valve on outlet of meter; place meter as close as possible to pump; keep piping full of liquid.

