



Vaporless Manufacturing, Inc.  
Quality Petroleum Equipment  
Solutions for Over 20 Years

MODEL OFP-3\1 OVERFILL PROTECTION VALVE  
INSTALLATION INSTRUCTIONS

March 1st, 2007

**COMPONENTS**

- (1) Shutdown Valve (Inlet is 3" male pipe thread and Discharge is 3" female pipe thread)
- (1) 6" male pipe thread x 3" female x 1/4" x 1/4" x 1/4" Tank Bushing
- (1) Pilot Valve
- (1) Float & Float Arm
- (2) 1/4" Compression x 1/8" Male Adaptor Elbow
- (3) 1/4" Compression x 1/4" Male Adaptor Straight
- (1) 1/4" Compression x 1/4" Male Adaptor Elbow
- (2) 22" x 3/8" Gauge Tubing (High Pressure Steel Tubing - .049" wall thickness)
- (4) 3/8" Bite Fitting (Compression) x 1/4" Male Adaptor
- (1) 4 1/2" x 1/4" Copper Tubing

SUPPLY PUMP MUST BE CAPABLE OF MAINTAINING 7 psi FLOWING PRESSURE AND HAVE A FUNCTIONING BYPASS RELIEF VALVE SET AT 50 psi MAXIMUM.

**INSTALLATION**

1. Screw the Float and Float Arm into the Pilot Valve.
  2. Screw 3/8" Bite fittings into the Pilot Valve without pipe sealant.
  3. Screw 3/8" Bite fittings into the bottom edge of the Tank Bushing without pipe sealant, the side that will be inside the tank after the bushing is installed in the tank bung.
  4. Cut the Gauge Tubing to the appropriate length. The two lengths of tubing must be within 1/64 of an inch of each other for proper installation. Due to the many tank configurations, it is the installer's responsibility to calculate the actual tubing length for the specific installation. The actual shut-off level of this valve is at the poppet of the Pilot Valve.
  5. Matching Blue-to-Blue and Red-to-Red, install the Gauge Tubing from the bottom of the Tank Bushing to the Pilot Valve.
  6. Test Tank Bushing/ Pilot Valve Assembly.
    - A. Apply air pressure (30-50 psi) to RED port on top of the Tank Bushing while the Float is in the down position. Air should flow through the tubing, Pilot Valve, and back out the BLUE port on top of the Tank Bushing.
    - B. While air pressure is being applied, squeeze the Float Arm Clevis upward to compress the poppet. Air should stop flowing out the BLUE port.
    - C. Apply air to the BLUE port while the Float is in the down position. It should flow through the RED port. Squeeze the Float Arm Clevis upward. The air should stop flowing through the RED port and flow through the clearance around the poppet.
  7. IF OFP CONFIGURATION INCLUDES OPTIONAL FUNCTIONAL TEST KIT, INSTALL FTK AT THIS POINT.
  8. Slip the Tank Bushing/ Pilot Valve/ Float Assembly into the 6" bung of the tank and tighten the Tank Bushing. (See Important Notes Below)
  9. Screw a 3" nipple into the top of the Tank Bushing. If a drop tube is required, it may be installed through the 3" nipple before attaching the Shutdown Valve.
  10. Install the discharge side of the Shutdown Valve on the 3" nipple. Align the inlet for the supply pipe.
  11. Install the three (3) 1/4" Compression x 1/4" Male Adapter Straights into the top of the Tank Bushing. Install two (2) 1/4" Compression x 1/8" Male Adapter Elbows into the side of the Shutdown Valve. Install one (1) 1/4" Compression x 1/4" Male Adapter Elbow into the vent on the top of the Valve.
  12. Install refrigeration grade 1/4" OD tubing, following color coding for the Vent and Pressure Tubing connections between the Shutdown Valve and the top of the bushing.
  13. Install pipe from the inlet side of the Shutdown Valve to the appropriate connections terminating with a Dry Disconnect.
- Care should be taken to properly align Float in tank to stay clear of all obstructions. (The Float runs parallel with the RED and BLUE marks on the top of the Bushing and faces in the direction of the RED marking.)
  - All threads should be doped using a suitable UL approved pipe sealant.

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