

23G SOLENOID REPLACEMENT PROCEDURE

This Tech Note contains the information needed to replace any of the panel mounted solenoid valves in the 23G RO. There are three solenoids mounted within the panel; the permeate solenoid, the divert solenoid, and the inlet solenoid. This Tech Note details how to assemble, install, and wire each of these solenoids. The ports on the solenoid are labeled by etched numbers.

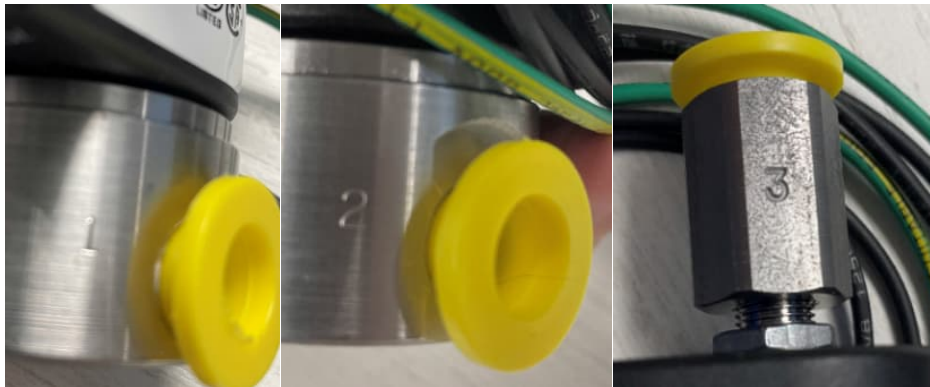
Kit Contains:

- 1 Solenoid Valve (P/N W3T573760)
- 1 Male Threaded Straight under Connector (P/N W2T914258)
- 2 Male Threaded Tee (P/N W2T911034)
- 2 Male Threaded Elbow (P/N W2T240359)

Tools Needed:

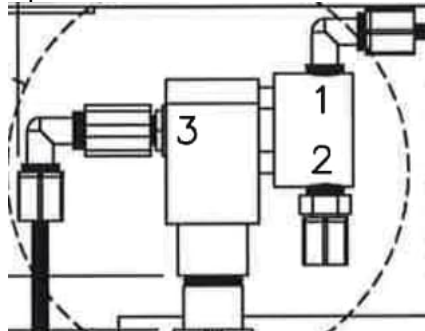
- PTFE Thread Tape
- 9/16" Socket Wrench

These images show the etched numbers for each port.



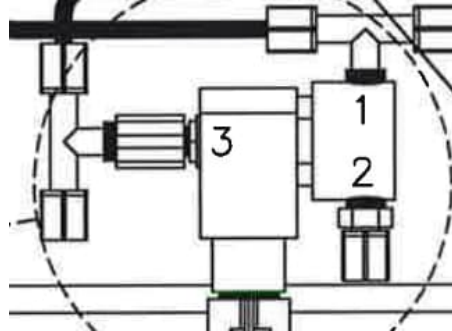
Permeate Solenoid

The permeate solenoid requires two elbows and one connector. Tape the threads for each of the fittings. Install the connector in the number 2 port. Install one elbow in the number 1 port and orient away from the solenoid. Install the other elbow in the number 3 port and orient towards the electrical connection. The proper orientation is shown below.



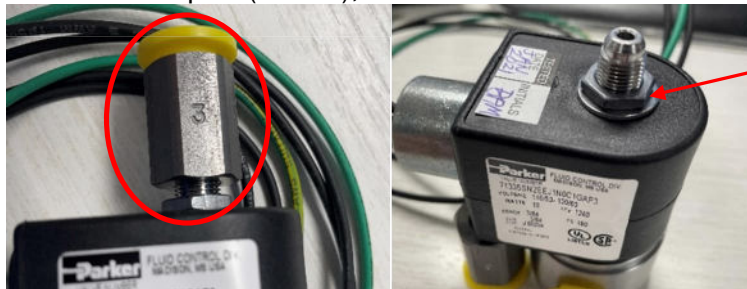
Divert Solenoid

The divert solenoid requires two tees and one connector. Tape the threads for each of the fittings. Install the connector into the number 2 port. Install one tee in the number 1 port and orient coplanar with the valve. Install the other tee in the number 3 port and orient coplanar with the valve. The proper orientation is shown below.

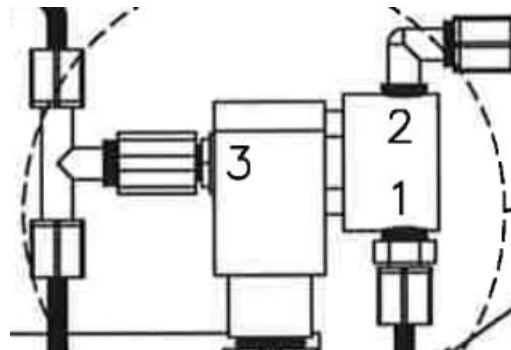


Inlet Solenoid

The inlet solenoid requires rotating the valve end to assemble and install correctly. To rotate the valve end, remove the number 3 port (circled), and loosen the nut with a 9/16" wrench.



Once the nut is loosened, the valve end will be able to be rotated. Orient the number 2 port away from the power cord end and the number 1 port on the power cord end. Tighten the nut once the valve end is properly oriented. Do not overtighten. Tape the threads on one elbow, one tee, and one connector. Install the elbow in the number 2 port. Install the connector in the number 1 port. Reinstall port number 3. Install the tee in the number 3 port. The proper orientation is shown below.



Wiring Instructions

The image below shows the wiring for the solenoids with all other components removed for clarity. The permeate and divert solenoid cables are fed through the hole labeled A. The inlet solenoid cable is fed through the hole labeled B.

One of the black wires from the permeate and divert solenoids are inserted into terminal 20, while the other is connected to one of the top 3 spots of the barrier strip. The ground is connected to one of the bottom 3 spots of the barrier strip.

One of the black wires from the inlet solenoid is inserted into terminal 14, while the other is connected to one of the top 3 spots of the barrier strip. The ground is connected to one of the bottom 3 spots of the barrier strip.

