

## RAYPAK SERVICE INSTRUCTIONS

**PROTÉGÉ SERIES SAND FILTERS RPSF, RPSFP  
KIT 018214F, 6-WAY MULTIPOINT VALVE  
KIT 080344F, 6-WAY MULTIPOINT VALVE NPT  
KIT 018252F, UNION AND PRESSURE GAUGE  
KIT 080345F, UNION AND PRESSURE GAUGE NPT**

**IMPORTANT NOTICE:** These instructions are for the use of qualified individuals specially trained and experienced in the installation and maintenance of this type of equipment and related system components. Installation and service personnel are required by some states to be licensed. Persons not qualified shall not attempt to install, service, or maintain this equipment.

**DANGER – SHOCK HAZARD:** Make sure electrical power to attached pump and heater is disconnected to avoid damage to components, potential serious personal injury or death.

**WARNING:** Make sure water & power have been turned OFF before making any repairs or service to the unit.

### Scope

The instructions provide the information required to install either a replacement 6-way Multiport Valve kit or a Union and Pressure gauge kit, as used on the Protégé Line of pumps and filters.

### Kit, Multiport Valve

Component and Description	
018214F	6-Way Multiport Valve 1-1/2"
080344F	6-Way Multiport Valve 1-1/2", NPT

### Kit, Union and Pressure Gauge

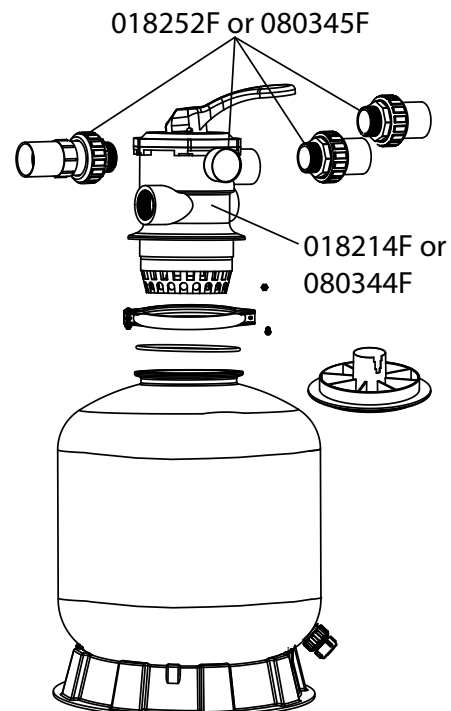
Component and Description	
018252F	Pressure Gauge, Inlet Fitting & Outlet Fitting w/sight glass
080345F	Pressure Gauge, Inlet Fitting & Outlet Fitting w/sight glass, NPT

### Required Tools

- Phillips screwdriver
- Channel lock type pliers or medium pipe wrench

### Recommended Materials:

- Any quality generic brand of appropriate lubricant for application onto O-rings and threads of plastic parts such as "water lube".



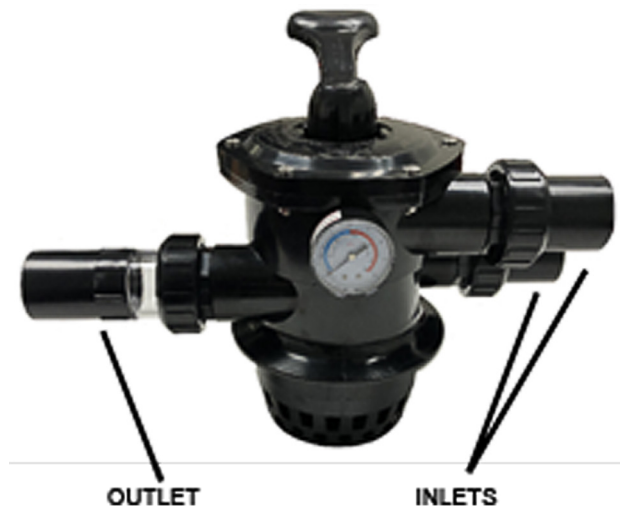
## Replacing the 6-Way Multiport Valve

1. Turn off the electrical power at the Pump's power switch and/or unplug it at the receptacle.
2. Relieve the pressure on the filter by loosening the drain valve, see **Figure 1**.



**Figure 1. Drain Valve**

3. Disconnect the water piping at the bulkhead fittings as shown in **Figure 2**.



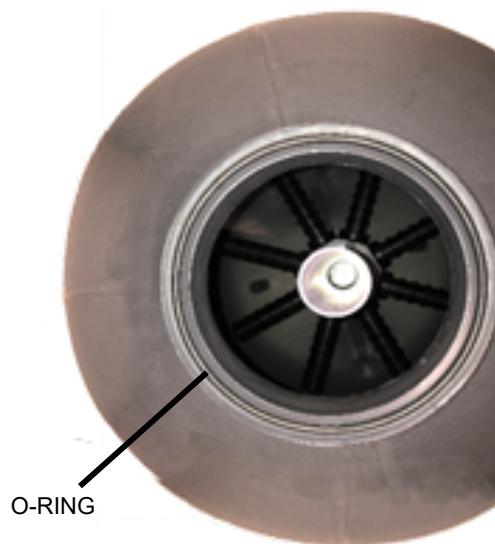
**Figure 2. Piping Connection Points**

4. With a Phillip head screwdriver, loosen the clamp that fastens the 6-way multiport valve to the filter as shown in **Figure 1**.
5. Separate the two halves of the clamp and set it aside. See **Figure 3**.



**Figure 3. Clamp Assembly**

6. Lift the old 6-way multiport valve off the filter. Remove the O-ring, clean it, and set it aside. See **Figure 4**.



**Figure 4. O-Ring Removal**

7. Inspect the new 6-way multiport valve. The bottom connection that plugs into the filter's stand pipe should be clear as shown in **Figure 5**.



**Figure 5. Clear Bottom Connection**

8. Remove the plug fitting on the side of the 6-way multiport valve as shown in **Figure 6** and **Figure 7**.



**Figure 6. Plug Fitting Closed**



**Figure 7. Plug Fitting Open**

9. Install the pressure gauge. Apply a water lube to the O-ring. Do not over-tighten. See **Figure 8**.



**Figure 8. Pressure Gauge**

10. Apply water lube to the O-ring and re-install it into the filter's O-ring groove as shown in **Figure 4**.
11. Place the new 6-way multiport valve onto the filter. Guide the 6-way multiport valve onto the stand pipe carefully. If the sand was installed correctly, the stand pipe should be right on center.
12. Re-install the split clamp and tighten.
13. Apply water lube to the O-rings on the bulkhead unions and install those fittings onto the 6-way multiport valve.
14. Rotate handle to the FILTER position and turn on the pump. Check for leaks.

## Replacing the Union Couplings and Pressure Gauge

1. Disconnect the water piping at both the inlet and outlet as shown in **Figure 2**.
2. Install the replacement inlet and outlet couplings. The outlet union is identifiable by the section of clear plastic tube it has on it as shown in **Figure 2**.
3. Locate the pressure gauge as shown in **Figure 8** and unscrew the old one.
4. Apply water lube to the O-ring and then install the new pressure gauge. Do not over-tighten.
5. Turn on the pump and check for leaks.