

OptiPure M-Series

Models:
OPM80-10
OPM80-25
OPM80-50

**Installation,
Operation and
Maintenance Manual**

Procam Controls, Inc.
2605 Technology Dr., Bldg. 300
Plano, TX 75074
Ph: 972-422-1212
Fax: 972-422-6262
www.procamcontrols.com

Section 1 - System Requirements

This section provides the water, electrical and space requirements for the systems. Pay special attention to the feedwater chemistry requirements. Operating a system on water supplies outside of these parameters may lead to premature membrane failure.

Operating Parameters:

Operating Pressure	10 - 60 psi*
Feed Temperature	40 - 100° F (4 - 38° C)
Feed Pressure	25 - 85 psi (1.4 - 5.9 bar) at 3 gpm maximum
Production	80 gallons per day, Max. at 70°F feedwater temp. 62 gallons per day, Max. at 55°F feedwater temp.

*The maximum operating pressure of the system is 100 psi.

Feed Water Connection:

An adequate flow of water to the unit is critical for successful operation. Run at least 3/8" pipe to the vicinity of the installation. Install a full-flow ball valve with 3/8" female pipe thread for connection to the installation hardware provided with the OptiPure™ system or use garden hose thread adapter to connect to hose bibb.

Drain:

Drain must allow for a minimum of 3 gallons per minute, and must comply with local plumbing codes. Most plumbing codes require the installation of an approved air gap in the drain line.

Electrical Requirements: 115 VAC, 60 Hz, 2.0A

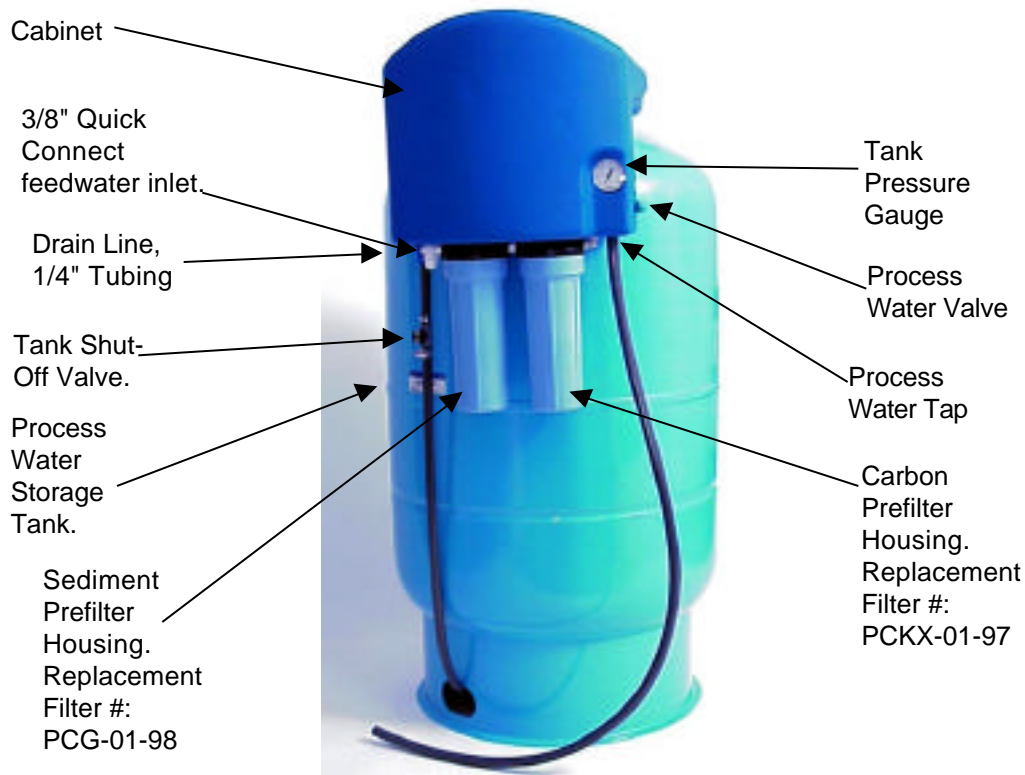
Feedwater Chemistry:

Feed TDS	Up to 2000 ppm	Iron (Fe)	.1 mg/l maximum
Feed pH	5 - 11	Turbidity	<5 NTU
Hardness	20 grains or less	Manganese	.05 mg/l
Free Chlorine	<2 mg/l	Hydrogen sulfide	0.0

A water analysis must be performed before installing the system. The information requested above can be obtained from your local water utility. If your water analysis shows that any of these parameters are not within range, additional pretreatment and/or higher frequency of maintenance may be required. Contact Procam Controls, Inc. for assistance. The presence of silica or flocculants such as alum or cationic polymers in the feedwater may cause membrane fouling and may require chemical pretreatment or periodic membrane replacement. Please note that membrane failure due to fouling is not covered by the warranty.

Getting to know the OptiPure M-Series:

The following gives you a general idea of the components of the system.



Section 2 - Installation

1. Using the 3/8" OD blue tubing, connect from the feedwater valve to the feedwater inlet.
2. Run the 1/4" OD blue tubing drain line to an appropriate drain. Observe local plumbing codes and supply an appropriate air gap.
3. Close the Tank Shutoff Valve.
4. Open the Process Water Tap Valve. Place a container underneath the valve to collect the water.
5. Open the ball valve connected to the Feedwater Inlet.
6. Plug the power supply into a standard 115 VAC outlet. The solenoid valve will open and the pump will begin operating. Water will begin running through the system and out the Process Water Tap. Check the plumbing connections for leaks and repair as necessary.
7. Let the system run in this configuration for a minimum of ten minutes. This is necessary to flush the preservative solution from the system.
8. After the initial system flush is completed, open the Tank Shutoff Valve.
9. Close the Process Water Tap Valve. The system will now begin to fill the storage tank.

Section 3 - Maintenance

The only routine maintenance required on the system is periodic replacement of the sediment and carbon prefilters and the postfilter. The prefilters should be changed quarterly under normal conditions, or more frequently if the system is operated on water with high levels of sediment or other contaminants which cause premature loading. The postfilter should be changed every six months.

Prefilter Change Procedure

1. Turn off the power by unplugging the power supply from the outlet.
2. Close Tank Shutoff Valve.
3. Close the ball valve at the inlet to the prefilter assembly.
4. Open process water tap to relieve system pressure.
5. Using the filter housing wrench, open the first housing on the left. Remove the old filter and pour out any water remaining in the sump. If the sump is dirty, rinse it out. We recommend adding a 1/2 teaspoon of bleach and scrubbing the housing with a brush to sanitize and thoroughly clean the housing.
6. Inspect the O-ring. The O-ring must be free of cuts, nicks, and flat spots. Replace it with a new O-ring if it is misshapen or damaged.
7. Install the new filter, Procam # 200-30320 into the housing and replace the housing into the head. Tighten the housing by hand until it is snug. Be careful not to overtighten the housing. Do not use the filter wrench.
8. Repeat steps 3 through 5 for the filter on the right. Replacement filter is Procam # 300-00500.
9. Close the Process Water Tap.
10. Open the ball valve at the inlet to the prefilter assembly.
11. Open the Tank Shutoff Valve.
12. Plug the power supply into the electrical outlet.
13. When the system starts, check for leaks.

Post-Treatment Cartridge Change Procedure

The Post-Treatment Cartridge is located within the cabinet just above the prefilter housings. Its function is to neutralize the dissolved carbon dioxide and to inhibit biological growth in the tank. The media will not plug up and does not dissolve, replace every 6 months.

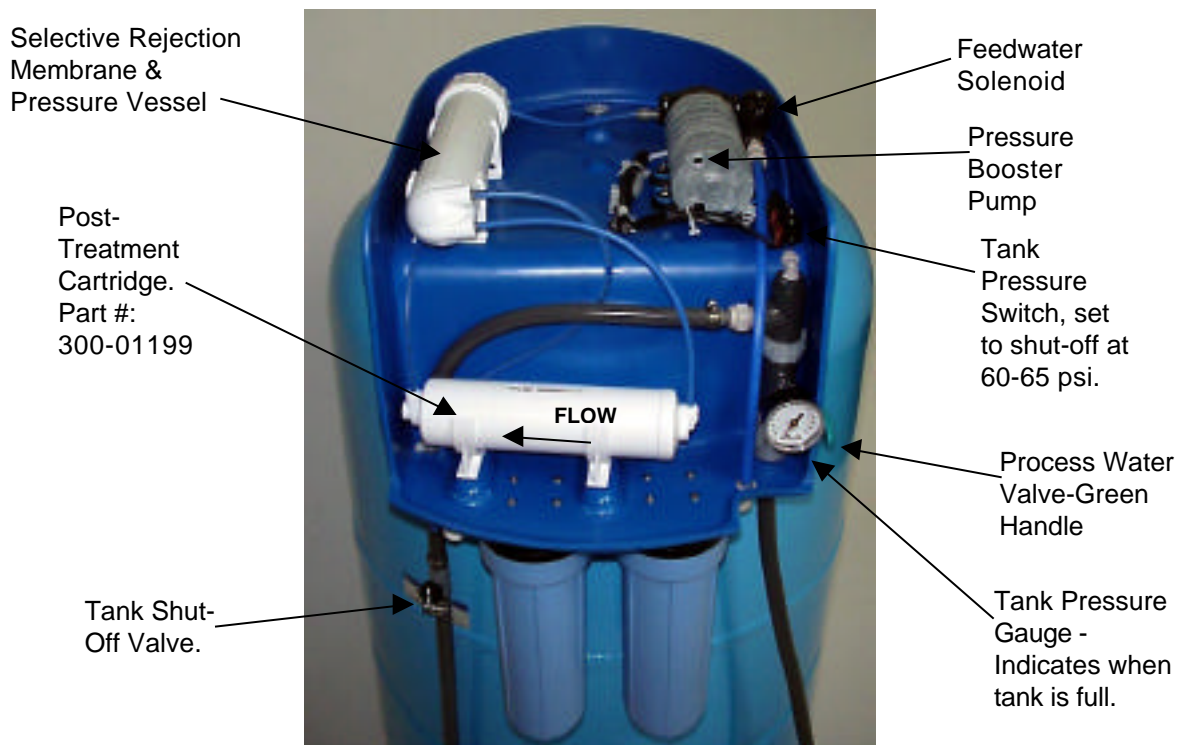
1. Turn off the power by unplugging the power supply from the outlet.
2. Close Tank Shutoff Valve.
3. Close the ball valve at the inlet to the prefilter assembly.
4. Open process water tap to relieve system pressure.
5. Remove cabinet cover by lifting at the back and tilting forward as you step back.

6. Disconnect the tubing from the inlet and outlet of the Post-Treatment Cartridge. See "How to use Quick-Connect Fittings" for instructions on removing and attaching tubing.
7. Pull the old cartridge out of the clips mounted to the cabinet base.
8. Insert the new cartridge. **IMPORTANT: Orient the cartridge according to the FLOW direction arrow to ensure that the water flows through the filter in the proper direction.**
9. Re-install the tubing into the inlet and outlet fittings on the new filter.
10. Close the Process Water Tap.
11. Open the ball valve at the inlet to the prefilter assembly.
12. Open the Tank Shutoff Valve.
13. Plug the power supply into the electrical outlet.
14. When the system starts, check for leaks.
15. Use Procam # 300-01199 for Post-Treatment Cartridge replacement.

For easy filter cartridge replacement scheduling utilize FilterTrak, the automated filter replacement management resource. www.filtertrak.com

Component Identification:

The following section helps identify system components.



Drain Line -
1/4" Tubing

Feedwater
Inlet
connection
& Valve -
3/8" Quik-
connect

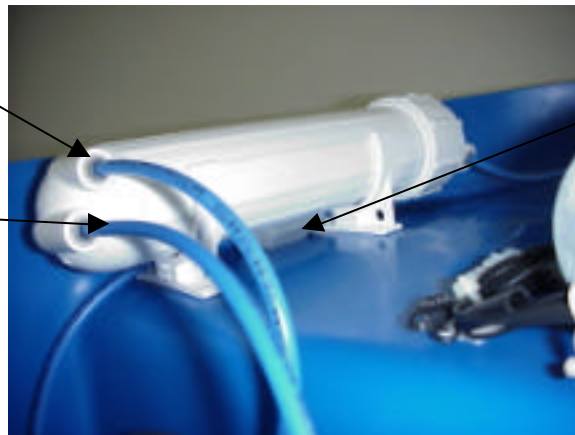
Tank Shut-
Off Valve

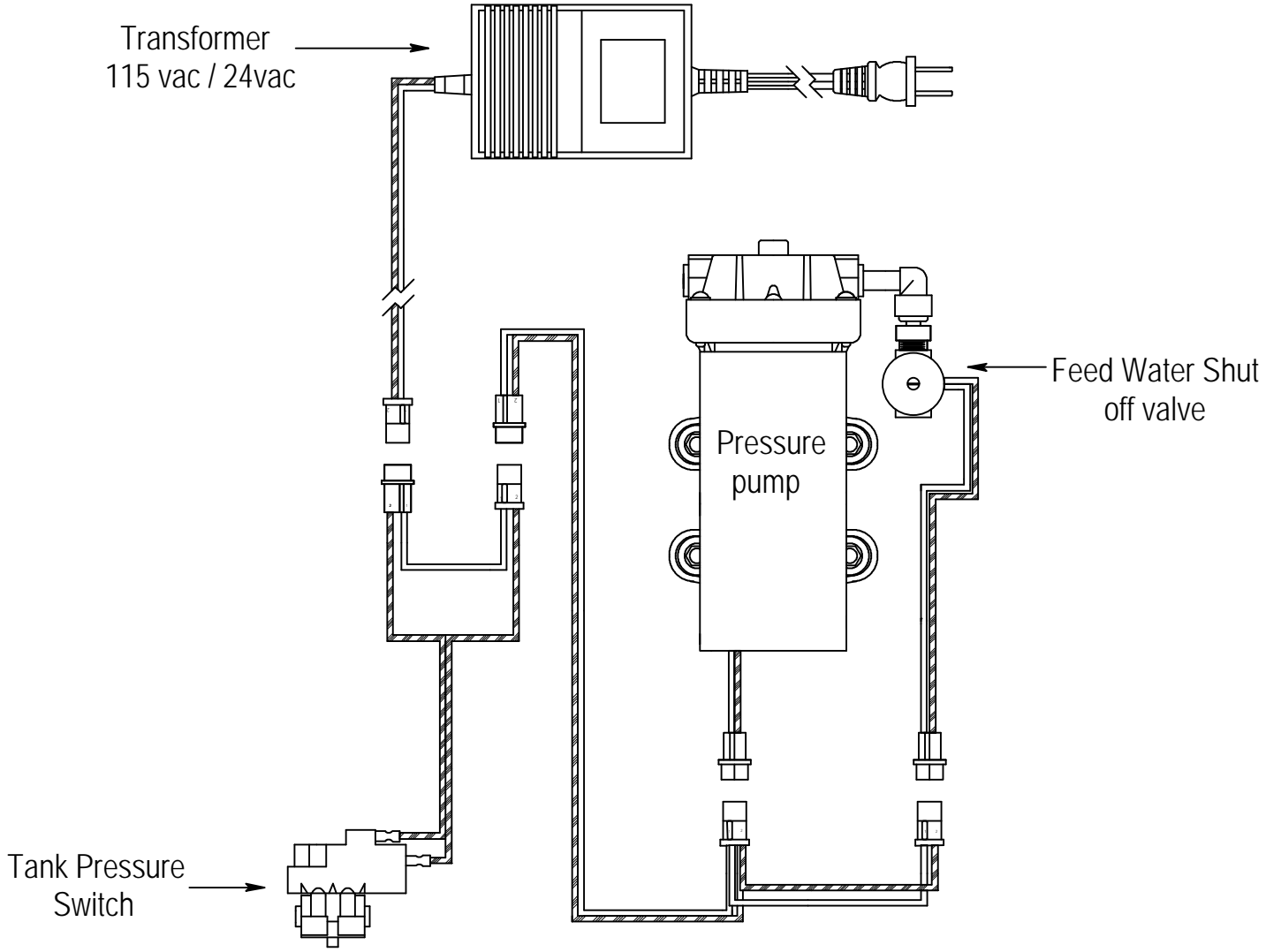


Reject Line with
Flow Restrictor
inserted in end
of tubing.

Process Water
Line.

Process
Water
Check Valve





Wiring

MiniFlo_II
05.20.98

N/A