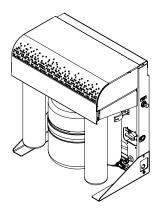
### **ORIGINAL INSTRUCTIONS**



### **EVERPURE**° CONSERV° 75E HIGH EFFICIENCY REVERSE OSMOSIS (RO) SYSTEM



Conserv 75E EV9977-00 (US Market) EV9977-01 (European Market) EV9977-02 (British Market) EV9977-03 (Australian Market)

### INTRODUCTION

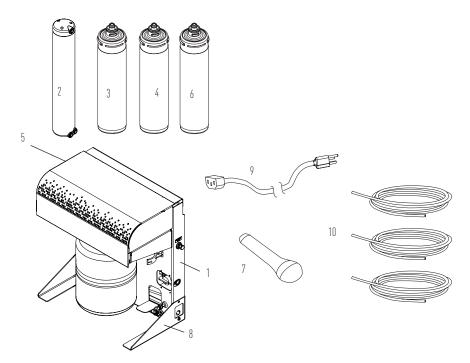
The Everpure Conserv 75E System is a pre-engineered, pre-assembled solution designed to provide high purity water for non-steam applications. It combines a number of water treatment technologies into one easy-to-install package. The system provides reduction of sediment. It also limits corrosion\* and scale\* by reducing TDS, chlorine\* and chloramines\*.

### **INSPECTION**

Before mounting the Conserv 75E System, inspect the parts. Use the table and illustration provided to verify the parts and quantities provided. If any parts are missing, contact Customer Service at 800.942.1153 (US only)/630.307.3000 or by email at CSeverpure@pentair.com.

### Parts

- 1. Back Panel Assembly
- 2. GRO-75EN RO Membrane Cartridge
- 3. 4CC Mineral Cartridge
- 4. 4FC5-S Filter Cartridge
- 5. Cover
- 6. 4CB5 Filter Cartridge
- 7. TDS Meter
- 8. Support Leg
- 9. Power Cord
- 10. Blue, White and Red Tubing



<sup>\*</sup> Not performance tested or certified by NSF®

#### **Tools Required**

- Hand or Electric Drill
- Air Pressure Gauge
- Pencil
- Tape Measure
- Utility Knife or Tube Cutter (for plastic tubing)
- Phillips Screwdriver
- Towel
- Safety Glasses
- Drill Bits: 1/8", 1/4" and 3/8"

NOTE: Not all tools listed may be necessary for installation.

Read installation procedures before starting to
determine required tools.

### **SELECTING A MOUNTING LOCATION**

- 1. Give consideration to the weight of the unit when operating, i.e. when filled with water. Operating weight of the Everpure® Conserv® 75E System is approx.:
  - 58 lbs (26 kgs)
- 2. The location should allow for:
  - The Conserv 75E RO System may be wall mounted or set on its base.
  - Adequate space for "in" and "out" water line connections.
  - Be near a drain for flushing.
  - · Accessible to a wall plug.
- 3. The inlet water supply must meet the requirements listed in the section "Operating Specifications".

### **DIMENSIONS**

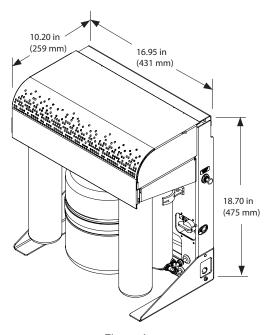


Figure 1

#### **OPERATING SPECIFICATIONS**

WARNING: Before installing the system, make certain your water supply complies with the following operating specifications. Failure to do so may reduce the effectiveness of the system and will void the warranty. Consult your local water treatment utility or a certified water testing lab to determine the quality of your water.

Temperature: 32 - 100°F (0 - 37.7°C)

Dynamic Operating 40 - 85 psi (2.7 - 5.8 bar, 0.27 - 0.58

Pressure: MPa), non-shock

Maximum Static 125 psi (8.6 bar, 0.86 MPa)

Pressure

Total Dissolved Solids: 1,000 ppm maximum

Sulfide, Iron and

Manganese: Less than 0.1 ppm

Water Supply pH Limits: 4 to 11

Turbidity: 1.0 NTU maximum

For cold water use only.

### **SAFETY INSTRUCTIONS**

NOTE: This appliance can be used by children aged from eight (8) years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved.

NOTE: The appliance is only to be installed in locations where its use, maintenance and cleaning is restricted to trained adult personnel. No one should play with the appliance.

NOTE: Children should be supervised to ensure that they do not play with the appliance.

NOTE: Cleaning and user maintenance shall not be made by children without supervision.

NOTE: The appliance is not suitable for installation in an area where a water jet could be used.

NOTE: If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard.

WARNING: Installation shall comply with applicable local, state, and national plumbing and electrical regulations.

WARNING: This appliance must be grounded. This appliance is equipped with a cord having an appliance-grounding conductor and a grounding plug. The plug must be plugged into an appropriate outlet that is installed and grounded in accordance with all local codes and ordinances. If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard.

WARNING: Improper connection of the appliancegrounding conductor can result in a risk of electric shock. Check with a qualified electrician or service representative if you are in doubt whether the appliance is properly grounded. Do not modify the plug provided with the appliance; if it will not fit in the outlet, have a proper outlet installed by a qualified technician.

WARNING: The appliance is intended to be permanently connected to the water mains and not connected by a hoseset. The appliance is not suitable for installation in an area where a water jet could be used and must not be cleaned by a water jet.

WARNING: Before installing the system, make certain your water supply complies with the following operating specifications. Failure to do so may reduce the effectiveness of the system and will void the warranty.

Consult your local water treatment utility or a certified water testing lab to determine the quality of your water.

WARNING: Do not use with water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system. The Everpure® Conserv® 75E System will not protect against disease-causing bacteria or remove harmless, naturally-occurring bacteria.

WARNING: The Conserv 75E System contains replaceable components that are critical to the efficiency of the system. Replacement of the reverse osmosis component should be with one of identical specifications, as defined by the manufacturer, to assure the same efficiency and contaminant reduction performance.

WARNING: The Conserv 75E System contains filter cartridges and an RO membrane cartridge included with the system that have limited service lives. critical for the effective reduction of total dissolved solids. Product water should be tested periodically to verify that the system is working properly.

WARNING: The Conserv 75E System shall only be used for arsenic reduction on chlorinated water supplies containing detectable residual free chlorine at the system inlet. Water systems using an in-line chlorinator should provide one (1) minute of chlorine contact time before the unit.

CAUTION: The Conserv 75E System must be protected against freezing which can cause the filter housing to crack, resulting in water leakage. Do not use electrical heating tape or propane torch on this unit.

CAUTION: Make certain the unit is firmly attached to wall to prevent it from falling and possibly becoming damaged.

NOTE: Substances listed as reduced are not necessarily in your water. System must be maintained according to manufacturer's instructions, including replacement of filter cartridges.

NOTE: Your water must be within required limits for satisfactory operation. If not, the RO membrane cartridge's life may be shortened and your warranty will be voided (see Operating Specifications).

NOTE: Install on cold water line only.

NOTE: Do not install where system will be exposed to direct sunlight.

NOTE: Make certain that installation complies with all state and local laws and regulations.

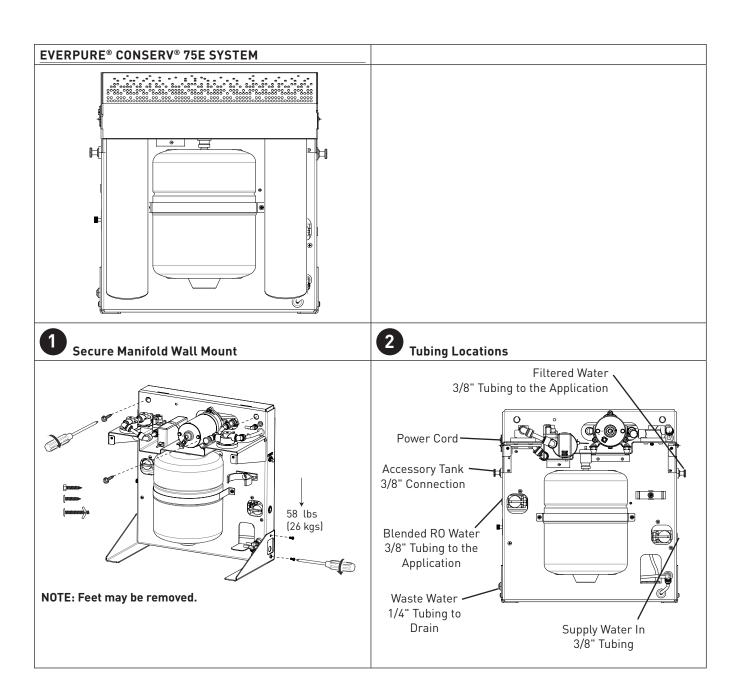
NOTE: Use only plumbers tape without adhesive backing to seal joints. Do not use pipe compound ("pipe dope"), sticks, or similar compounds with this unit; they contain petroleum derivatives which can cause crazing and cracking of the plastic in the filter housing.

NOTE: Use only soap and water to clean components.

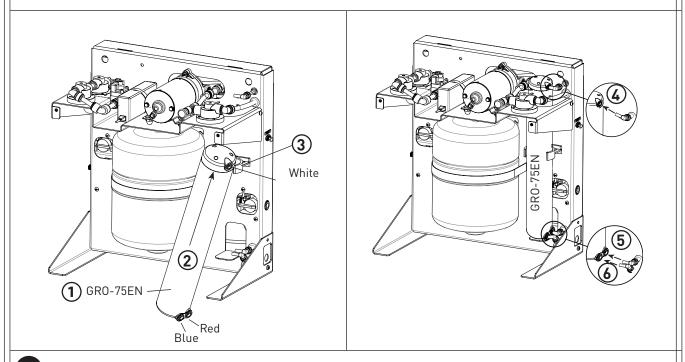
NOTE: Do not use aerosol sprays (bug spray, cleaning fluids, etc.) near the Conserv 75E System.

They contain organic solvents which can cause crazing and cracking of the plastic in the filter housing.

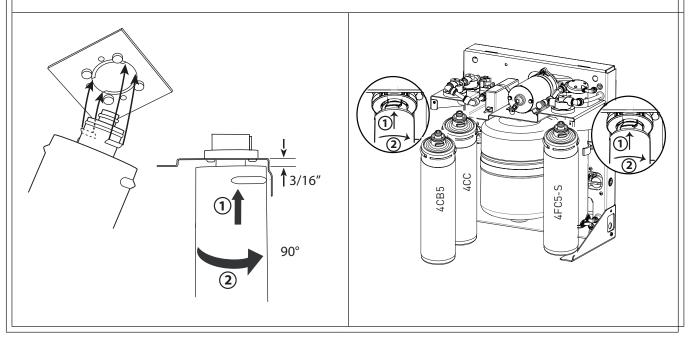
During extended periods of non-use, turn OFF the water supply to the unit and remove the cartridges. Place the cartridges in a sealed plastic bag. Store them in a refrigerator for future use. When restarting the unit, the cartridges are reinstalled and flushed per instructions.

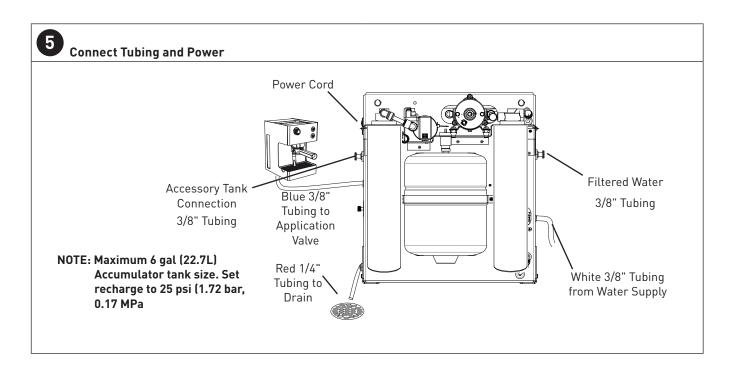


### Install Pentair® GRO-75EN RO Membrane Cartridge

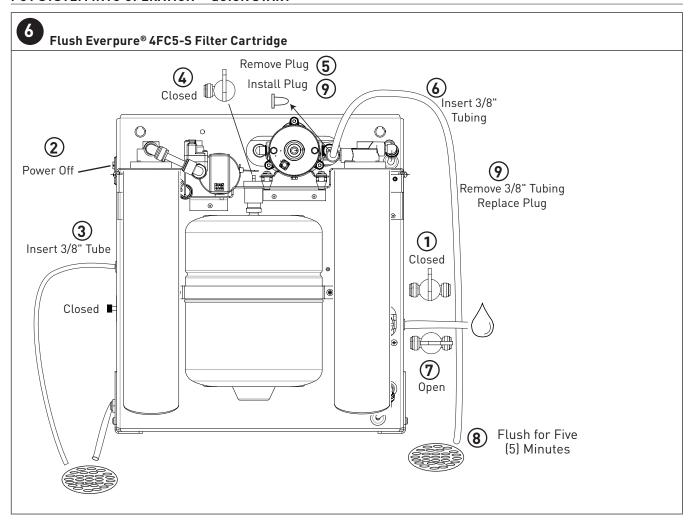


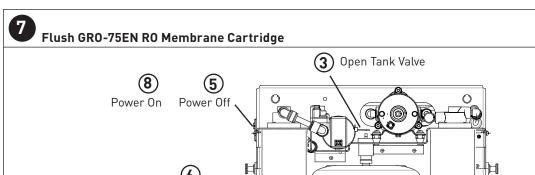
# Install Everpure 4CC Mineral Filter, 4CB5 Filter and 4FC5-S Filter Cartridges

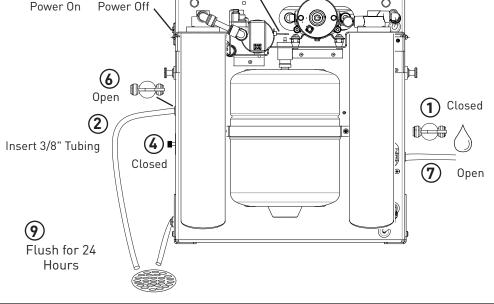




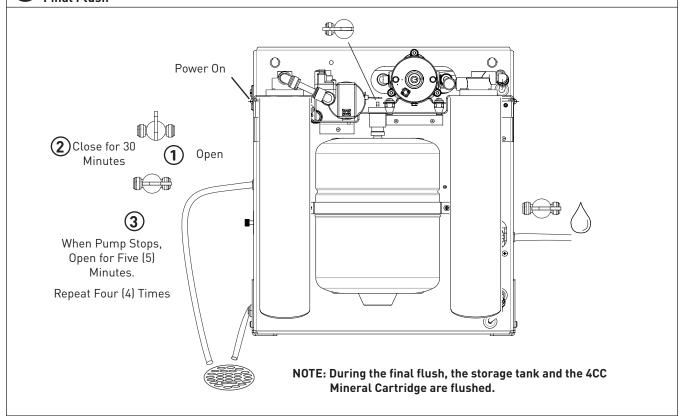
### **PUT SYSTEM INTO OPERATION - QUICK START**

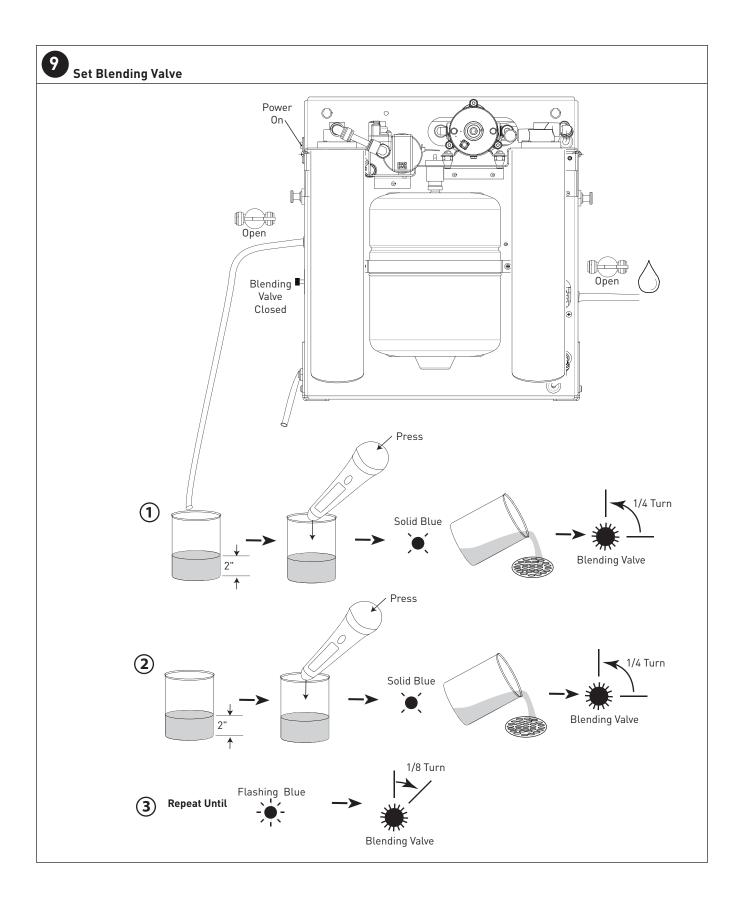






### 8 Final Flush





### **HOW REVERSE OSMOSIS (RO) WORKS**

The Everpure Conserv 75E System uses a semi-permeable membrane to reduce scale and corrosion. The RO membrane cartridge contains multiple layers of micron-thin film wound around a hollow center core. Water molecules can pass through the cartridge, while dissolved salts are rejected.

Your water supply is prefiltered to reduce dirt and chlorine that may foul the membrane. The RO membrane cartridge separates this prefiltered water into RO WATER and REJECT WATER. Water pressure forces water through the membrane within the RO membrane cartridge, and into the storage tank. This is the RO water. Dissolved salts cannot pass through the membrane and are sent to the drain as reject water. When the application valve is opened, RO water (permeate) is drawn from the storage tank through a post-system filter. The post system filter adds minerals for pH balance.

The Conserv 75E RO System also features an auto shut-off valve which shuts off the system once the pressure in the storage tank reaches 2/3 of the incoming water pressure (your water pressure). When you use water from the storage tank, the pressure inside the tank drops and the auto shut-off valve opens. The system then begins to operate, replenishing the water you took from the storage tank. The storage tank can hold up to 3.2 gals (12.1 L) of water at a time.

NOTE: When used under operating conditions specified in this manual, the RO membrane cartridge of the Conserv 75E System should last 12 to 24 months. The precise life span of the Pentair® GRO-75EN RO Membrane Cartridge will depend on the quality of the water entering the system and the frequency with which you use it. Frequent use prevents the dissolved salts from building up on the membrane as scale. The more water the system is required to produce, the longer the membrane will last.

### **INSTALLATION**

NOTE: Please read all instructions, specifications, and precautions before installing and using your Conserv 75E System.

NOTE: The Conserv 75E System may be installed hanging on a wall, under a sink, or sitting on a counter.

NOTE: The Conserv 75E System must be installed vertically.

### **Grounding Instructions**

This appliance must be grounded. This appliance is equipped with a cord having an appliance-grounding conductor and a grounding plug. The plug must be plugged into an appropriate outlet that is installed and grounded in accordance with all local codes and ordinances. If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard.

WARNING: Improper connection of the appliancegrounding conductor can result in a risk of electric shock. Check with a qualified electrician or service representative if you are in doubt whether the appliance is properly grounded. Do not modify the plug provided with the appliance; if it will not fit in the outlet, have a proper outlet installed by a qualified technician.



The Conserv 75E System weighs approx. 58 lbs (26 kgs).

CAUTION: The Conserv 75E System should be mounted on a stud or firm surface. The mounting bracket will support the weight of the system and help prevent strain on the water lines.

- 1. Select location where unit is to be mounted. The unit must be mounted in a vertical position.
- 2. When mounting the Conserv 75E System on a wall, two (2) screws are required to mount the unit. The two (2) screws will be 14" (35.6 cm) apart and level. Screw the two (2) screws into the wall. Leave a gap between the screw head and the wall of 1/8". The backside of the unit has two (2) slots that will fit over the screw heads and slide down to lock (Figure 2).
- Tighten both screws from the front with the cover removed.

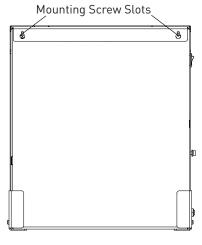


Figure 2

### 2 Tubing Connections

- 1. Refer to Figure 3 (cover removed) for a general description of connection points.
- 2. Prepare the plumbing to accept the RO system.

NOTE: The blended water tubing/piping and associated fittings connecting the RO blended water outlet to the equipment being serviced should be food-grade material that meets NSF® Standard 51, 61, or similar, with a minimum pressure rating of 125 psi (8.6 bar, 0.86 MPa). The blended water may react with metal piping, creating a corrosive condition. Plastic pipe or reinforced beverage tubing are generally very good material choices for RO water distribution piping. The size of the blended water tubing/piping should be 3/8" (9.5 mm) ID minimum. Distances of 25 feet (7.6 m) or greater from the RO system to the equipment being serviced should be 1/2" (12.7 mm) ID minimum.

- 3. Locate an appropriate point in the hard water plumbing to tie in a new section of tubing/piping that can be routed to the RO system. CLOSE the nearest shut-off valve that is upstream from the tie-in point and relieve the pressure in the line. Install the 3/8" (9.5 mm) tubing/piping section and connect it to the INLET Supply Water fitting. See Figure 3.
- 4. Connect the appropriate size and type of tubing/piping and associated fittings to the Everpure Conserv 75E System outlet connection. Route the line(s) to the equipment being serviced. CLOSE the inlet and outlet valves on the RO system. Reapply pressure to the plumbing by slowly OPENING the shut-off valve that was closed in the previous step.
- 5. Connect a 1/4" (7.14 mm) OD tube to the reject connector (labeled DRAIN) located in the lower left corner of the unit. Route the other end of the tubing to a drain nearby, securing it properly. Allow an air gap at the drain, following any applicable local and national codes.

NOTE: The accessory tank connection allows for the use of an external storage tank for RO blended water. The use of an accessory storage tank will affect fill/flush times and sanitization.

NOTE: The maximum size for an accessory accumulator tank is 6 gals (22.7 L).

NOTE: The filtered water outlet connection provides water that has been filtered only by the first (front right) cartridge.

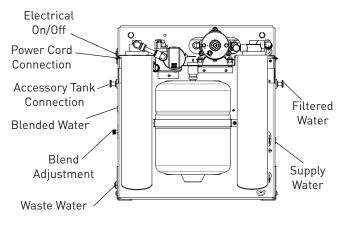


Figure 3

### **INSTALLING THE CARTRIDGES**

The cartridges are identified on the label using the model number.

Pentair® GRO-75EN RO Membrane Cartridge

Everpure 4FC5-S Filter Cartridge

Everpure 4CC Mineral Cartridge

Everpure 4CB5 Filter Cartridge

Install the cartridges in the correct locations. If the cartridges are installed improperly, the system will not operate correctly.

The cover is removed for the installation of the cartridges and flushing of the Conserv 75E System. Remove the two (2) screws (Figure 4) and lift the cover off.

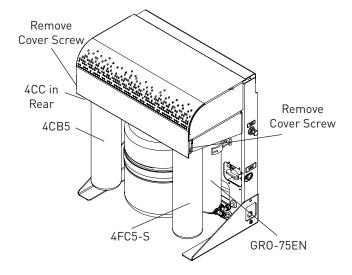


Figure 4

## Install the Pentair GRO-75EN RO Membrane Cartridge

The GRO-75EN RO Membrane Cartridge is installed in the vertical position. There are three (3) quick-connect ports that are labeled:

- Inlet White
- Permeate (RO blended water) Blue
- Drain Red

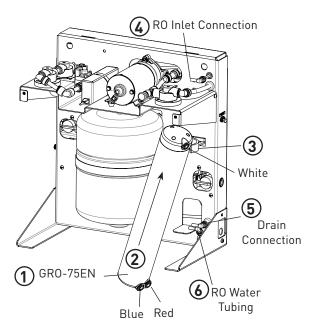


Figure 5

The numbers in Figure 5 refer to the Steps below.

# CAUTION: DO NOT remove the quick-connect elbow fitting from the red tubing. This assembly contains a flow control that may become damaged if removed. The efficiency of the Everpure Conserv 75E System may be affected.

1. Remove the GRO-75EN RO Membrane Cartridge from its packaging and position it with the single white port at the top.

### NOTE: The top cover of the Everpure Conserv 75E System must be removed.

- 2. Slide the cartridge into position through the back of the top support.
- 3. Press the cartridge into the clip on the back plate. The cartridge may be moved up or down to line up with the tubing connections.
- 4. Insert RO inlet connection into the white quick-connect port of the RO filter.
- 5. Insert drain water connection into the red quick-connect port of the RO filter.
- 6. Insert RO water connection into the blue quick-connect port of the RO filter.

### Install the Everpure 4FC5-S Filter Cartridge

Locate the 4FC5-S Filter Cartridge and inspect the o-rings. They should be clean and lightly lubricated with silicone grease.

- 1. Line up the tabs with the slots in the opening on the front right side of the head assembly. See Figure 6 and Figure 7.
- 2. Insert the cartridge to full depth.
- 3. Rotate the cartridge 90° to the right (clockwise) to lock it in place.

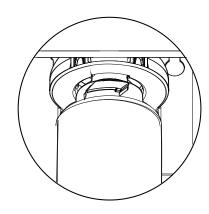


Figure 6

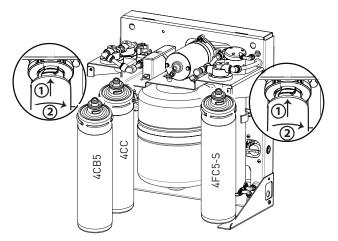


Figure 7

### 5 Install the Everpure 4CB5 Filter Cartridge

Locate the 4CB5 Filter Cartridge and inspect the o-rings. They should be clean and lightly lubricated with silicone grease.

- Line up the tabs with the slots in the opening on the front right side of the head assembly. See Figure 6 and Figure 7.
- 2. Insert the cartridge to full depth.
- 3. Rotate the cartridge  $90^{\circ}$  to the right (clockwise) to lock it in place.

### Install the Everpure 4CC Mineral Cartridge

Locate the 4CC Cartridge and inspect the o-rings. They should be clean and lightly lubricated with silicone grease.

- Line up the tabs with the slots in the opening on the left front side of the head assembly. See Figure 6 and Figure 7.
- 2. Insert the cartridge to full depth.
- 3. Rotate the cartridge 90° to the right (clockwise) to lock it in place.

### Storage Tank

The storage tank will hold approximately 1 gallon (3.8 L) of product water. The tank air pressure is preset to 24 psi (1.65 bar, 0.16 Mpa) when shipped via ground transportation. For air shipments the precharge is completely removed. Check the tank air pressure. Ensure that the tank has 24 psi (1.65 bar, 0.16 Mpa) of precharge upon installation. Add air if needed. Tank pressure may be checked using an air pressure gauge on the air valve at the bottom of the tank.

Locate the valve at the top of the tank and turn OFF until instructed to open it.

### **PUTTING THE SYSTEM INTO OPERATION**

CAUTION: If wall mounted, make certain the unit is firmly attached to wall to prevent it from falling and possibly becoming damaged.

NOTE: The Everpure Conserv 75E System does not produce a high volume of water on-demand as an ordinary filter does. Water is produced at a slow, drop-by-drop rate. The system requires about 30 minutes to fill the storage tank. As water is taken from the tank, the system automatically starts the cycle of replacing the water and then stops water production when the tank is full.

There are several steps that must be followed to properly place the Conserv 75E System into operation before the supply water is turned ON.

### 6 Flush the Everpure 4FC5-S Filter Cartridge

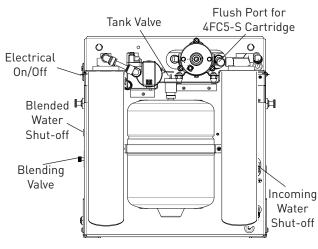


Figure 8

- The incoming water shut-off valve should be in the closed position.
- 2. The electrical switch must be in the off position
- Locate the quick-connect tee fitting on the 4FC5-S Filter Cartridge head. Remove the plug by pressing in on the collar and pulling out on the plug. Save the plug to be reinstalled later.
- 4. Cut a length of 3/8" (9.5 mm) long enough to connect the flush port to a drain. Push one end of the tubing, 5/8" (16 mm), into the quick-connect fitting. The other end is secured at a drain.
- 5. The power to the Conserv 75E RO System must remain off. Turn the incoming water shut-off to OPEN. Water will flush through the 4FC5-S Cartridge to the drain.
- 6. Flush the cartridge for five (5) minutes. Then CLOSE the incoming water shut-off valve.
- 7. Remove the temporary tubing from the flush port. Reinsert the plug that was removed in Step 3.

# Flush the Pentair® GRO-75EN RO Membrane Cartridge

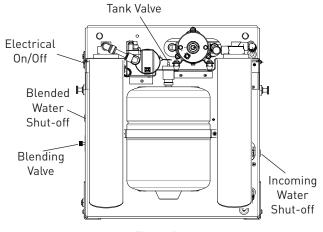


Figure 9

- 1. Turn the incoming shut-off valve to the CLOSED position.
- 2. Remove tubing on the blended water shut-off valve and connect the port with tubing to a drain.
- 3. Turn tank valve to the OPEN position.
- 4. Fully CLOSE the blend adjustment valve.
- 5. The electrical switch must be in the OFF position.
- 6. OPEN the blended water shut-off valve.
- 7. OPEN the incoming water valve.
- 8. Turn ON the power switch.

# NOTE: The pump will run and waste water will flow to the drain. Check the system for leaks. RO water will drip out of the blended water valve.

9. For best system performance, flush for 24 hours. CLOSE the outlet water shut-off valve.

### 8 Final Flush

After the Pentair® GRO-75EN RO Membrane Cartridge has been flushed the storage tank should be filled and emptied five (5) times. When the blended water shut-off valve is closed at the end of the GRO-75EN RO Membrane Cartridge flushing process, the storage tank will fill. It will take approximately 30 minutes for the tank to fill.

- When the storage tank is full, the pump will stop running. OPEN the blended water outlet valve to empty the storage tank.
- 2. When pressure drops in the storage tank, the pump will turn on. Water exiting the tubing from the blended water shut-off valve will slow to a drip. CLOSE the blended water shut-off valve. The tank will refill with RO water. When it is full the pump will turn off.
- 3. Repeat Steps 1 and 2 four (4) more times.

### Flush the Everpure 4CC and 4CB5 Filter Cartridges:

The 4CC Mineral Cartridge and 4CB5 Filter Cartridge will be flushed when the storage tank is flushed. No further flushing is required.

CAUTION: Visually check the entire system for leaks. If a leak is present, see Troubleshooting.

NOTE: Initially, the water may appear cloudy. This is a result of air trapped in the postfilter cartridge. It is not harmful and will disappear in a matter of minutes. It may take up to a week after installing a new postfilter cartridge for the trapped air to dissipate.

### Replace the Cover

Place the cover in position. Reuse the original screws to secure it in place.

### USING THE TDS METER TO TEST FOR TOTAL DISSOLVED SOLIDS

After the system has been flushed, it is still necessary to test and set the Total Dissolved Solids (TDS) to an acceptable level. A TDS meter is included for testing purposes.

The included TDS Meter is designed for limited use. After six (6) tests, the meter may not be accurate and should be discarded.



### NOTE: For better accuracy and frequent testing for TDS, use a standard pocket TDS meter.

### 9 Set Blending Valve

The water exiting the Everpure Conserv 75E ystem should have a TDS reading of 75 ppm.

- Collect 1" to 2" of RO blended water in a clean glass container.
- 2. Insert probe end of meter no more than 1" into water, and depress blue cap. Do not submerge entire unit.
- 3. One (1) or two (2) lights will light immediately. Match light(s) to chart to get approximate range of Total Dissolved Solids (TDS). Release the blue cap, and write down the TDS range.

# NOTE: The blend adjustment valve should be closed at this time. The TDS reading in Step 3 will be for unblended RO blended water.

- 0-75 ppm (solid blue)
- 76-150 ppm (flashing blue)
- 100-250 ppm (flashing blue + solid green)
  - 251-300 ppm (solid green)
  - 301-400 ppm (flashing green)
- 401-500 ppm (solid green + flashing green)
- 501-600 ppm (flashing green + solid red)
  - 601-750 ppm (flashing red)
  - 751-900 ppm (solid red)

The Conserv 75E System includes a blend system that can combine or "blend" water sources. OPENING the blend adjustment valve will add untreated water with higher TDS to the water.

To achieve the target TDS of 75 ppm, it is likely that the blend valve will need to be opened.

The desired reading of 75 ppm is at the high end of the solid blue range. To be certain the blended water is at or near 75 ppm, use the following procedure:

- CLOSE the mixing valve. Allow RO water to run for two (2) minutes.
- 2. OPEN the mixing valve 1/4 turn, and run blended water for two (2) minutes. Discard this water.
- 3. Run blended water into a glass and collect 1" to 2" of water.
- 4. Test this water for a TDS level. Based on the result, the mixing valve will be opened or closed.
  - If the meter showed a solid blue light, then the mixing valve will be OPENED more.
  - If the meter showed any other indicator, then the mixing valve will be CLOSED more.
- 5. Adjust the mixing valve if needed and run blended water for two (2) minutes. Discard this water.
- 6. Repeat Steps 3, 4 & 5 until the light indicators change between solid blue and flashing blue. The blended water TDS should now be at 75 ppm.

#### **TESTING YOUR REVERSE OSMOSIS SYSTEM**

#### Total Dissolved Solids (TDS) Test

Under NSF/ANSI Standard 58, it is highly recommended that the blended water be tested at least every six (6) months to verify that the system is performing satisfactorily.

#### WHEN TO CHANGE THE CARTRIDGES

The life of the cartridges depend on the water volume used and the substances in the water. Normally, cartridges should be changed at intervals of 12 months. Replace the cartridges sooner if the water pressure at the application equipment begins to drop noticeably or if you notice changes in the flow of the blended water.

#### **CHANGING THE CARTRIDGES**

### Replacement Cartridges:

Everpure 4FC5-S Filter Cartridge - EV9693-31

Everpure 4CC Mineral Cartridge - EV9627-45

Pentair® GRO-75EN RO Membrane Cartridge - 4002575

Everpure 4CB5 Filter Cartridge - EV9617-11

The 4FC5-S and 4CC Cartridges need to be changed when the water pressure at the application equipment valve begins to drop noticeably or if there are changes in the flow of the blended water. All cartridges should be changed at the same time.

# NOTE: Only the replacement cartridges listed can be used with this system. Failure to use the recommended replacement cartridges will void your warranty.

- Place a small pan or towel under the Everpure Conserv 75E System to catch any water that may drip. Turn OFF incoming water.
- OPEN the application equipment valve to drain the storage tank and relieve pressure.
- 3. Remove the two (2) front cartridges by twisting each cartridge a 1/4-turn to the left (counterclockwise). Then pull down to release.
- 4. Remove the GRO-75EN RO Membrane Cartridge by removing the tubing from all three (3) connections. Then pull the cartridge out of the clip.
- 5. Replace the flow controller (Figure 10) in the red tubing at the bottom of the cartridge. Remove the quick-connect elbow from the red tubing to gain access to the flow controller and the attached capillary tube.
- Remove the old flow controller (Figure 10) with the tube and discard.
- 7. Insert a new flow controller (Figure 10) with capillary tube into the tubing. Replace the quick-connect elbow.

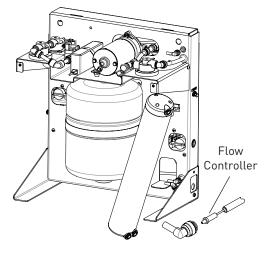


Figure 10

- 8. Insert the new GRO-75EN RO Membrane Cartridge into position in the clip. Rotate the cartridge so the quick-connect ports line up with the tubing.
- 9. Push the red and blue tubing into the quick-connect ports at the bottom. Push the top tubing into the connector at the top of the cartridge.

### NOTE: The bottom of the GRO-75EN RO Membrane Cartridge will be supported by the lower bracket.

- Position the 4CC Filter Cartridge under the left side front head. Line up the tabs on the cartridge with the slots in the head.
- 11. Push the new cartridge into the head until it can go no further.
- 12. Twist the cartridge a 1/4-turn to the right (clockwise) until it locks in place. Pull gently down to ensure the cartridge is locked in place.
- 13. Position the 4CB5 Cartridge under the left side rear head. Line up the tabs on the cartridge with the slots in the head.
- 14. Push the new cartridge into the head until it can go no further.
- 15. Twist the cartridge a 1/4-turn to the right (clockwise) until it locks in place. Pull gently down to ensure the cartridge is locked in place.
- 16. Repeat Steps 6, 7 and 8 for the 4FC5-S Cartridge in the right side head.

CAUTION: The 4FC5-S Cartridge may contain carbon fines that will be removed during the initial flushing.
Follow the proper flushing procedure to prevent damage to the GRO-75EN RO Membrane Cartridge.

#### **INITIAL FLUSHING OF CARTRIDGES**

The installation of new cartridges requires that a preliminary flushing of the cartridges be performed. This initial flushing is required to prevent damage to the RO cartridge.

Refer to the Installation section, "Putting the System into Operation" for the complete flushing procedure.

### EVERPURE CONSERV 75E SANITIZING PROCEDURE - CONTAMINATED WATER SUPPLY/BOIL ALERTS

When the water system has been contaminated or a boil water advisory has been discontinued, the Everpure Conserv 75E System must be sanitized. **If a boil water advisory has just been discontinued:** Flush the water lines according to your water supplier's instructions. OPEN the delivery faucet and flush the system for about 10 minutes, then follow the filter cartridge replacement instructions below.

- 1. Turn OFF the water supply and OPEN the application valve to relieve pressure.
- 2. Remove the filter cartridges and discard in trash. Wash hands with soap and warm water.

NOTE: If a drip pan is used, clean with dish soap and warm water.

NOTE: The following steps require placing bleach into the Conserv 75E System. Pentair® offers a hollow cartridge, Everpure® 2JT Flushing/Sanitizing Cartridge (EV9608-10), that is designed for this application. The following steps describe how to use the Pentair Everpure 2JT Cartridge (EV9608-10).

CAUTION: DO NOT install the Pentair GRO-75EN RO

Membrane Cartridge for the sanitization
procedure. The solution will severely damage the
membrane.

### Sanitization Procedure with the Pentair Everpure 2JT Cartridge (EV9608-10)

3. Grasp the tip of the outlet tower center, top of the cartridge and pull out gently. The entire central plug with the long tube attached will come out, leaving a hole.

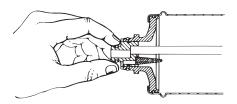


Figure 11

- 4. Add about a teaspoon of laundry bleach (5.25% sodium hypochlorite solution) to the empty flushing cartridge through the hole in the top.
- 5. Lubricate o-ring with a high quality silicone lubricant. Replace the central plug assembly and insert the flushing cartridge into the right side head location for the Everpure 4FC5-S Cartridge. Refer to Figure 12.

### NOTE: Do not use petroleum jelly to lubricate the o-rings. It will degrade the o-rings.

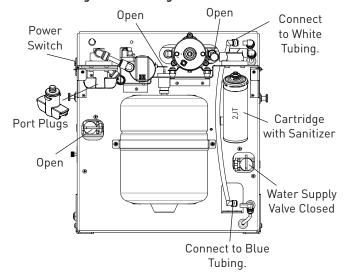


Figure 12

6. Install a plug into the ports for the 4CC and 4CB5 Filter Cartridges.

### NOTE: Plugs were not included with the Conserv 75E System.

- 7. The tubing for the removed GRO-75EN Cartridge must be connected together. Make a length of tubing with angle quick-connectors. Use the length of tubing with two right-angled quick-connectors to connect the white tubing at the top to the blue tubing at the bottom. The red tubing at the bottom is waste water and does not need to be sanitized.
- 8. The tank valve should be open.
- 9. The application valve should be open.
- 10. The power switch should be on.
- 11. Slowly OPEN the water supply valve. Monitor the water flowing out of the Conserv 75E System at the application valve. When the smell of chlorine is present, CLOSE the application valve. The storage tank will fill with chlorinated water.
- 12. Wait for a period of at least 30 minutes to allow adequate disinfection time.
- 13. Turn OFF the water supply valve.
- 14. OPEN the application valve. The storage tank will drain out.
- 15. When the storage tank is emptied, CLOSE the application valve and remove the 2JT Cartridge.
- 16. Install a new 4FC5-S Cartridge in the first (right side) head.
- 17. OPEN the application valve and slowly OPEN the water supply valve. Allow water to run for five (5) minutes. This will flush carbon fines out of the new cartridge.
- 18. CLOSE the application valve allowing the tank to fill three (3) to five (5) minutes.
- 19. Turn OFF the water supply valve.
- 20. OPEN the application valve to allow the tank to empty.
- 21. When the water flow has stopped, CLOSE the application valve and OPEN the water supply valve to refill the tank for three (3) to five (5) minutes.
- 22. Repeat Steps 18, 19 and 20 three (3) times.
- 23. Turn OFF the water supply valve and OPEN the application valve to remove pressure.
- 24. Remove the plugs from the left side ports. Install new Everpure® 4CC and 4CB5 Filter Cartridges.
- 25. The power switch should be in the on position. OPEN the water supply valve. Flush water out of the application valve for five (5) minutes.
- 26. CLOSE the water supply valve and OPEN the application valve to remove pressure.
- 27. Remove the tubing that connects the Pentair® GRO-75EN RO Membrane Cartridge white (top) and blue (bottom) system tubing.
- 28. Install a new GRO-75EN RO Cartridge. Connect the three (3) tubes to the proper ports. The tubing and the ports are color coded.
- 29. OPEN the water supply valve and the application valve.

- 30. With the power switch in the on position, allow the application valve to drip for 12 hours.
- 31. CLOSE the application valve. The storage tank will fill. Check for leaks during this time.

The Conserv 75E System is ready for operation.

### **TROUBLESHOOTING**

NOTE: If leaks persist, or if there are other leaks in the system, turn OFF water supply and call Technical Support 800.942.1153 (US only)/630.307.3000.

#### Leaks Between Cartridge and Filter Housing

- 1. Turn OFF cold water supply to system. CLOSE tank valve. OPEN the application valve to relieve water pressure.
- 2. Remove the cartridge, inspecting it for damage. Inspect o-rings to make sure they are seated and clean.
- 3. Insert and twist the cartridge back into the filter housing.
- 4. Turn ON water supply. OPEN tank valve. CLOSE the application valve after water begins to flow. If leaks persist, call Technical Support.

#### Leak Between Tank Valve and Storage Tank

- 1. Turn OFF water supply to system. OPEN the application valve to drain storage tank. Run for three (3) to five (5) minutes until water drips.
- Remove tubing from tank valve by pressing the collar around the fitting while pulling the tubing with your other hand.
- 3. Unscrew the tank valve from the storage tank.
- 4. Inspect the rubber seal inside the threaded area. Repair or replace the valve as needed.
- 5. Thread the tank valve onto the top of the tank opening by turning it clockwise until snug.
- Wet the tubing and insert it 3/4" (1.9 cm) into the quickconnect fitting.
- 7. Turn water supply ON and CLOSE the application valve.
- 8. Allow system to pressurize for several hours and check for leaks.
- 9. Check for leaks after tank is fully pressurized [one (1) to three (3) hours]. If leak persists, call Technical Support .

### Leaks at Quick-Connect Fittings

CAUTION: The 1/4" red tubing connected to the bottom drain connection of the RO cartridge has a flow restrictor installed. The system will not operate correctly if the restrictor is removed.

- 1. CLOSE tank valve, turn OFF cold water supply to the system, and OPEN the application valve.
- 2. Press collar around the leaking quick-connect fitting while pulling the tubing with your other hand.

- 3. Tubing should be cut squarely. Internal and external burrs should be removed. Place a mark on tubing 5/8" (1.6 cm) from end on 1/4" tubing or 3/4" (1.0 cm) from end on 3/8" tubing.
- 4. Wet the end and insert tubing until the mark is flush with the quick-connect fitting.
- OPEN the cold water supply until it comes to a stop.
   OPEN the tank valve and CLOSE the application valve. If leaks persist, call Technical Support.

### No Flow or Slow Flow from the Brine (Reject) Line (Less than 6 fl. oz. or 180 mL per minute)

NOTE: Before checking brine (or reject) flow, make sure the unit is producing water by turning the valve on the storage tank OFF and OPENING the application valve. Water should drip from valve.

- Replace the prefilter cartridge according to the "Changing the Cartridge Instructions" and recheck the brine (or reject) flow rate.
- If the prefilter cartridge is not at fault, the brine (or reject) flow controller could be clogged. Call Technical Support.

### **High TDS in Product Water**

- 1. If high TDS (Total Dissolved Solids) is detected in the blended water, the RO cartridge may need to be replaced or the reject flow control tubing may be clogged. If this is a new installation, call Technical Support.
- Otherwise, draw 1 gal (3.8 L) of water from the unit. After 10 minutes, run water from the blended water port and test the water again.
- 3. Determine when you last changed the RO cartridge and call Technical Support.

### Limited Flow at the Application Equipment Valve

- 1. Turn OFF water supply to system.
- 2. OPEN the application valve to turn on flow.
- 3. Unscrew the black cap at the base of the storage tank to expose air valve. Use a small air compressor or bicycle pump to slowly add air to the storage tank. This will force the water out of the storage tank through the valve. Continue to slowly add air until water stops coming out of the valve.
- 4. Turn OFF the application equipment valve.
- 5. Using an air pressure gauge, adjust the pressure in the storage tank to 25 psi (1.72 bar, 0.17 MPa).
- 6. Replace the black cap.
- 7. OPEN the incoming water valve until it comes to a stop. Let the system run one (1) to three (3) hours to fill the tank. A full tank weighs approximately 29.4 lbs (10.2 kgs) pounds. If performance has not improved, call Technical Support.

#### Sudden Return of Taste and Odor

If shortly after complete servicing, noticeable taste and odors return, contact Technical Support.

If you are experiencing a problem not listed in this manual, shut OFF the water supply and CLOSE the tank valve. Call Technical Support.

### **NOTES**

Check for compliance with state and local laws and regulations.

Do not use with water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system.

For installations in Massachusetts, the Commonwealth of Massachusetts Plumbing Code 248 CMR shall be adhered to. Consult your licensed plumber for installation of the system. This system and its installation must comply with state and local regulations.

Systems certified for cyst reduction may be used on disinfected waters that may contain filterable cysts.

Substances that may be reduced are not necessarily in your water. Filter must be maintained according to manufacturer's instructions, including replacement of filter cartridges.

The tested efficiency rating for this system is 37.63%. Efficiency rating means the percentage of the influent water to the system that is available to the user as reverse osmosis treated water under operating conditions that approximate typical daily usage.

The tested recovery rating is 53.94%. Recovery rating means the percentage of the influent water to the membrane portion of the system that is available to the user as reverse osmosis treated water when the system is operated without a storage tank or when the storage tank is bypassed.

Daily Production Rate: 50.51 gpd (191.20 Lpd)

This reverse osmosis system contains a replaceable component critical to the efficiency of the system. Replacement of the reverse osmosis component should be with one of identical specifications, as defined by the manufacturer, to ensure the same efficiency and contaminant reduction performance.

### **REPLACEMENT PARTS**

Contact your local Pentair® Everpure Dealer for filter cartridges or system replacement parts.

Description	Part Number
GRO-75EN RO Membrane Cartridge	4002575
4FC5-S Filter Cartridge	EV9693-31
4CC Mineral Cartridge	EV9627-45
4CB5 Filter Cartridge	EV9617-11
Storage Tank	EV3146-55
TDS Meter	EV3125-98
Plug, 3/8-inch Quick-Connect	EV3144-87
Port Plug	EV3108-76
Waste Water Restrictor	EV3128-31
Conserv 75E Cartridge Kit	EV9977-25



Conserv 75E Tested and Certified by NSF International against NSF/ANSI 58 for the reduction of claims specified on the Performance Data Sheet and at NSF.org.





Water Treatment Appliance - E359339

### LIMITED WARRANTY

#### COMMERCIAL WATER TREATMENT EQUIPMENT

You have just purchased one of the finest water treatment units made. As an expression of confidence in this product, Pentair Filtration You have just purchased one of the finest water treatment units made. As an expression of confidence in this product, Pentair Filtration Solutions, LLC ("PFS") offers the following product warranty. This product is warranted against material defects in materials and workmanship to the original end-user when installed in accordance with the PFS specifications. The warranty period commences on the date of purchase and is administered as follows:

For a period of ONE YEAR Replaceable elements (i.e., filter & water treatment cartridges)\*
For a period of ONE YEAR The entire system (excluding replaceable elements)

The unit must be used in operating conditions that conform to PFS's recommended guidelines. This warranty will not apply if the unit has been modified, repaired or altered by someone not authorized by PFS.

If a part described above is found to have a material defect in materials or workmanship within the specified warranty period, you should notify Pentair® Everpure technical service at the phone number listed below. Any part found materially defective within the terms of this warranty will be repaired or replaced (at PFS's discretion) by your local dealer or Pentair Everpure technical service. You pay only freight from our factory and local dealer charges. Any item repaired or replaced pursuant to this warranty will be covered under the original warranty terms of the system.

PFS is not responsible for damage caused by accident, fire, flood, freezing, Act of God, misuse, misapplication, neglect, oxidizing agents (such as chlorine, ozone, chloramines and other related components), alteration, installation or operation contrary to our printed instructions, or by the use of accessories or components which do not meet PFS's specifications. Refer to the specifications section in the Installation and Operating manual for approved application parameters.

Our product performance specifications are furnished with each water treatment unit. TO THE EXTENT PERMITTED BY LAW, EVERPURE DISCLAIMS ALL IMPLIED WARRANTIES, INCLUDING WITHOUT LIMITATION WARRANTIES OF MERCHANTABILITY AND FITNESS FOR PARTICULAR PURPOSE; TO THE EXTENT REQUIRED BY LAW, ANY SUCH IMPLIED WARRANTIES ARE LIMITED IN DURATION TO THE PERIOD SPECIFIED ABOVE FOR THE ENTIRE WATER TREATMENT UNIT.

As a manufacturer, we do not know the characteristics of your water supply or the purpose for which you are purchasing this product. The quality of water supplies may vary seasonally or over a period of time, and your water usage rate may vary as well. Water characteristics can also differ considerably if this product is moved to a new location. For these reasons, we assume no liability for the determination of the proper equipment necessary to meet your requirements, and we do not authorize others to assume such obligations for us. Further, we assume no liability and extend no warranties, express or implied, for the use of this product with a non-potable water source or a water source which does not meet the conditions for use described in the owner's guide or performance data sheet for this product.

OUR OBLIGATIONS UNDER THIS WARRANTY ARE LIMITED TO THE REPAIR OR REPLACEMENT (AT PFS'S DISCRETION) OF THE FAILED PARTS OF THE WATER TREATMENT UNIT, AND WE ASSUME NO LIABILITY WHATSOEVER FOR DIRECT, INDIRECT, INCIDENTAL, CONSEQUENTIAL, SPECIAL, GENERAL OR OTHER DAMAGES.

Some states do not allow the exclusion of implied warranties or limitations on how long an implied warranty lasts, so the above limitation may not apply to you. Similarly, some states do not allow the exclusion of incidental or consequential damages, so the above limitation or exclusion may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

\*Warranty applies to material defects in materials & workmanship only.



#### WATER FILTRATION

EVERPURE-SHURFLO WORLD HEADQUARTERS, 1040 MUIRFIELD DRIVE, HANOVER PARK, IL 60133 USA • FOODSERVICE.PENTAIR.COM 800.942.1153 (US ONLY) • 630.307.3000 MAIN • 630.307.3030 FAX • CSEVERPURE@PENTAIR.COM EMAIL

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