

# RO400

## Reverse Osmosis Drinking Water System Installation Insutruction & Service Guide



Please read this manual carefully before attempting installation

# INTRODUCTION

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*Please read this entire service guide prior to beginning installation.*

The PUREPRO reverse osmosis drinking water system has been designed for quick and simple installation and maintenance. You will insure a successful installation and reliable operation by carefully reading this instruction manual and following the operational guidelines. If however you prefer, you can contact your local plumber or handyman and they can install these systems for you rather quickly. Routine maintenance is essential to the longevity and performance of the system. Filters should be changed every six to twelve months depending on the quality of the feed water supply.

## CONDITIONS FOR OPERATION

### TFC- THIN FILM COMPOSITE SOURCE WATER SUPPLY

Community / Private : Non-chlorinated  
System Pressure : 10-100 psi  
Temperature : 4° -38°C (40°-100°F )  
pH Range : 3.0 to 11.0  
Maximum Supply TDS Level : 2000 mg/L  
Turbidity : < 1.0 Net Turbidity (NTU)  
Hardness : < 350mg/L  
Iron (Fe) : < 0.1mg/L  
Manganese (Mn) : < 0.05 mg/L  
Hydrogen Sulfide (H<sub>2</sub>S) : 0.00mg/L  
Chlorine : 0.00mg/L

### **CAUTION**

**DO NOT USE THIS SYSTEM WHERE THE WATER IS MICROBIOLOGICALLY UNSAFE OR OF UNKNOWN QUALITY. THIS SYSTEM IS FOR USE ON POTABLE WATER ONLY. SOURCE WATER EXCEEDING CHEMICAL PARAMETERS REQUIRES PRETREATMENT.**

# PREPARATION FOR INSTALLATION

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Check the following list of components to ensure that all parts are packed with your system.

- RO system



- Membrane :



- Water Level Switch



- Installation Kits - tubing, feed water valve, deliver water valve, drain saddle valve, housing wrench.



Determine the location for the installation of the RO system. Avoid Locations where the system might come in contact with hot water pipes or other hazards.  
Determine the location for the faucet.  
Determine the location for the storage tank. A maximum distance from the tank to faucet of 15 feet is possible.  
The system will produce a faster flow at the faucet with the shortest tubing run from tank to faucet.

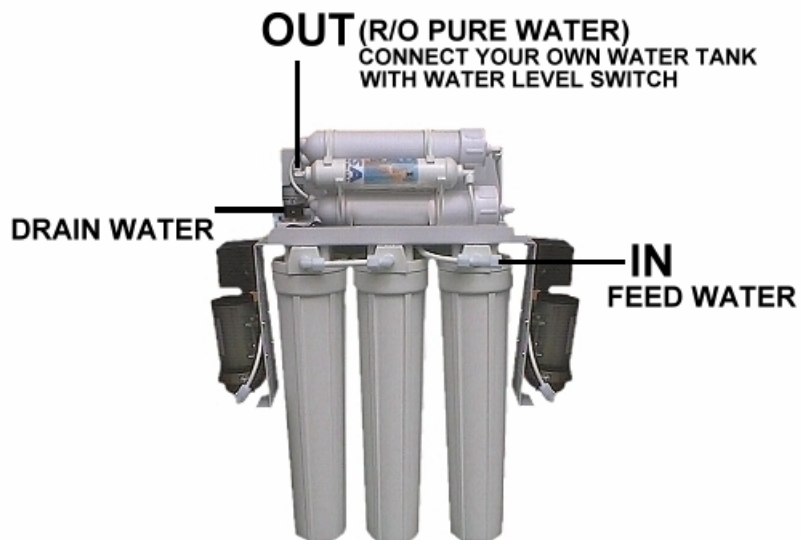
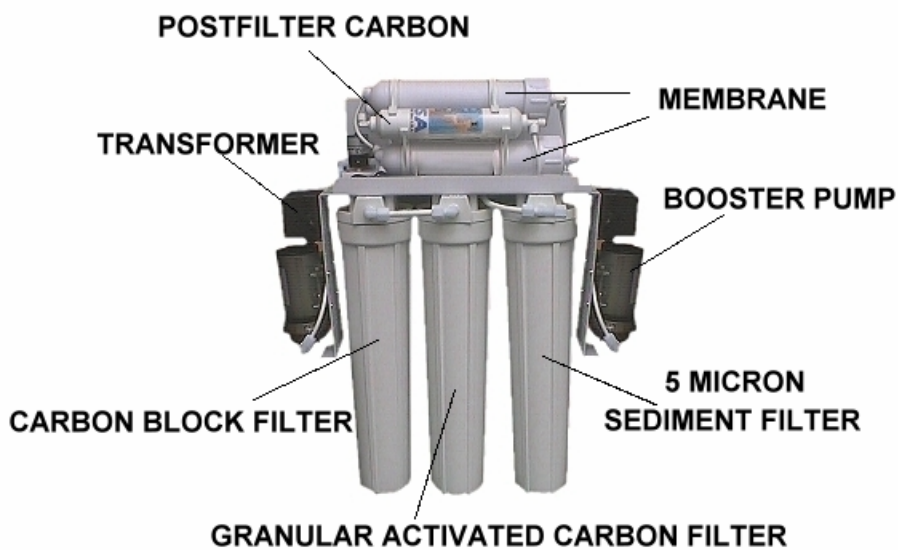
## PREPARATION FOR INSTALLATION(2)

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**RO400 SYSTEM CONTAIN THE BELOW FILTERS:  
(prefilters have been installed into 20" prefilter housing)**

- 1 MICRON SEDIMENT FILTER
- 2 GRANULAR ACTIVATED CARBON FILTER
- 3 CARBON BROCK CARBON FILTER
- 4 MEMEBRNE (RO400= 4PCS)
- 5 INLINE POST CARBON FILTER

NOTE: MEMBRANE (not installed !!) but **MUST BE INSTALLED BEFORE USING: (PAGE 06)**



# **INSTALLATION OF WATER SUPPLY CONNECTOR:**

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## **SHUT OFF THE WATER**

Locate the water shut-off valve for the cold water feed line you choose to use for the supply. Accidentally hooking up the system to the hot supply line will permanently damage the membrane ( See Conditions for operation) . To assure you are using the cold water line, turn on both the hot and cold faucet. After the water is warm to the touch, fee the pipes under the sink. It will be easy to identify the hot and cold pipes.

## **THE WATER SUPPLY CONNECTOR THAT COMES WITH THE UNIT IS MADE UP OF TWO PARTS:**

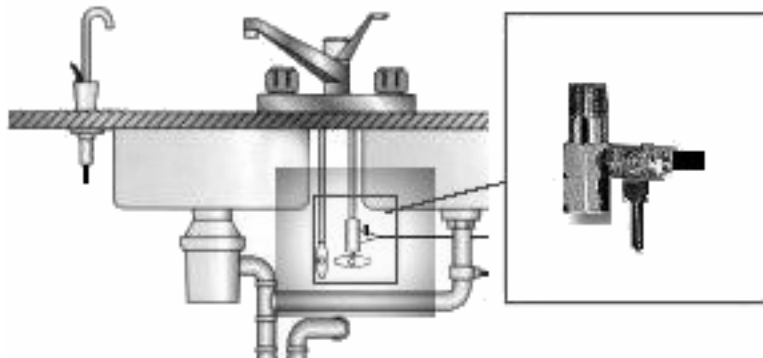
- Water Supply Connector, Deliver-valve



- Simply disconnect cold water line from angle stop bottom or from faucet stud on top.

## **INSTALL THE 2 PARTS OF WATER SUPPLY CONNECTOR:**

1. Assemble the water supply connector by inserting the Deliver-valve. Screw the deliver-valve into the side of the water supply connector using 3 to 4 wraps of Teflon tape.
2. Disconnect water supply line from cold water faucet underneath sink. Attach and tighten water supply connector assembly being careful not to pinch or crimp any tubing or water line supply line while tightening.



Installation of water supply connector

Note:

MAKE SURE YOU ARE HOOKED UP TO THE COLD WATER & TURNED OFF THE WATER SUPPLY.

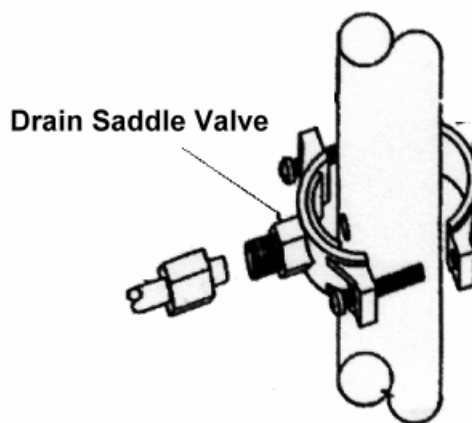
# INSTALLATION THE DRAIN SADDLE VALVE

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## INSTALLING THE DRAIN SADDLE VALVE



- Select a location for the drain hold based on the design of the plumbing.
- Position the drain outlet saddle on the drain pipe.
- Allow adequate space for drilling.
- Tighten the bolts evenly on both sides. (note: Avoid overtightening)
- Using the opening in the drain outlet saddle as a guide, drilling a 1/4" hole in the drain pipe. Clean debris from the saddle and threads.



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## WATER LEVEL SWITCH / RO MEMBRANE

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### INSTALLING THE WATER LEVEL SWITCH INTO YOUR OWN WATER STORAGE TANK

RO400 PRODUCE 400GALLONS PER DAY. INSTALL THE BELOW SWITCH IN YOUR WATER TANK. IT WILL AUTO SHUT-OFF THE RO400 SYSTEM WHEN THE TANK WAS FULL.



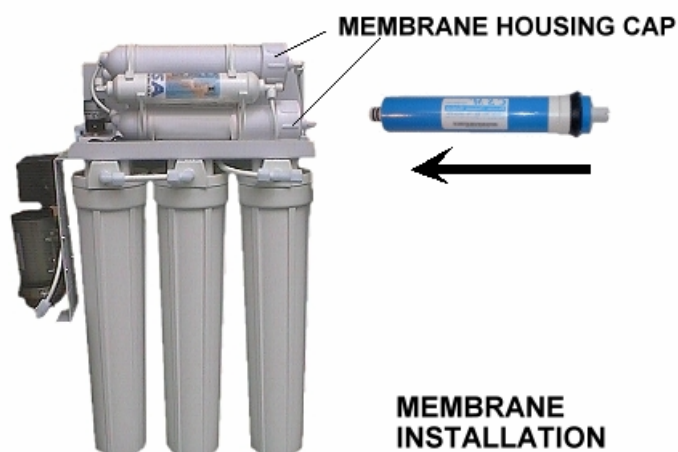
### INSTALLING RO MEMBRANE INTO MEMBRANE HOUSING

Remove the membrane housing cap.

Install the membrane by carefully pushing the spigot end into the socket at the far end of the housing until completely in.

Replace housing cap.

**Watch for the black "O" ring inside the filter housing (DON'T LOSE IT!).**

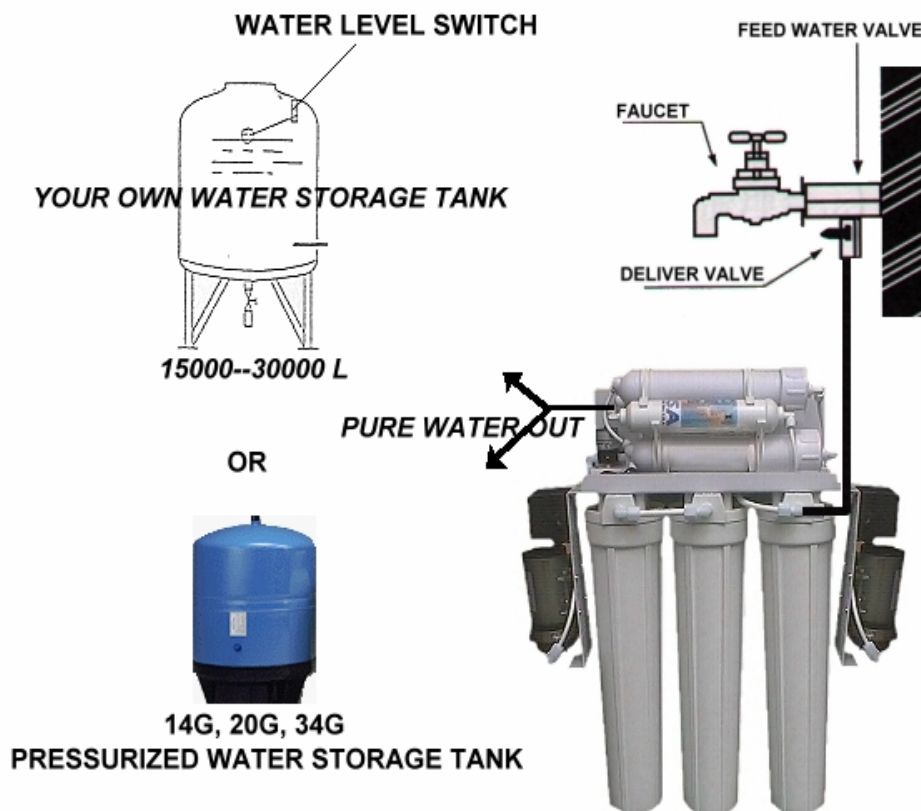


# CONNECTING THE TUBING

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## INSTALLATION GUIDE LINE

- A. CONNECT THE TUBING TO THE FEED WATER CONNECTOR.
- B. CONNECT THE TUBING TO YOUR OWN WATER TANK OR PRESSURIZED TANK.
- C. CONNECT THE TUBING TO THE DRAIN SADDLE VALVE



### FAST CONNECTOR / FITTING:

If this unit was using the fast connect fitting (similar to john guest fitting. be sure the end of the tubing is cut square, then push in until you feel the tube hit bottom. Should you need to remove the the tube, push in on the collet with your fingernail and pull the tube out simultaneously.



# START UP

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## ACTIVATING THE SYSTEM FOR THE FIRST TIME

- Make sure all water supply / drain lines are secure and free from leakage.
- Open the feed water valve and let the water flow until all the air has been expelled from the system.
- Within a few minutes the water will start to run. (into your own water storage tank)
- Let the water run for at least 30 minutes. After initial flushing, open the faucet from your own tank and flow out all the water.
- Repeat the first step.
- System is now ready for use

## CAUTION FOR YOUR SAFETY

- Make sure all water supply / drain lines are secure and free from leakage.
- Do not use the first tank of water.
- Change filters regularly every 6 to 12 months and have the membrane checked annually. (We offer the TDS meter to check your membrane).
- Automatic Ice Makers require water in the line to work properly. If you are draining the storage tank or have no water during initial start up turn off the ice maker until sink-top faucet has a steady flow.
- To connect the Ice Markers or refrigerator, you need to use “T” type connector.