# Installation, Operation and Maintenance Manual

# Quick-Twist Reverse Osmosis System Model WQT4RO11-50



#### **A WARNING**



THINK SAFETY FIRST Please read carefully before proceeding with installation. Your failure to follow any attached instructions or operating parameters may lead to the product's failure.

Keep this Manual for future reference.

#### **A** WARNING

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

#### IMPORTANT

If you are unsure about installing your WATTS® water filter, contact a WATTS representative or consult a professional plumber.

#### **A** CAUTION

Test the water periodically to verify that the system is performing satisfactorily. Discard small parts remaining after the installation.

#### NOTICE

Failure to install the system correctly voids the warranty. Handle all components of the system with care. Do not drop, drag or turn components upside down.

Be sure the floor under the water filter system is clean, level and strong enough to support the unit.



NOTE: This manual is used for several variations of the same system. Your system may vary slightly from the pictures or descriptions contained in this manual.

It is end users responsibility to ensure that this system is installed according to all local codes and regulations.

Thank you for your purchase of a state of the art Watts Reverse Osmosis (RO) water treatment system. Water quality concerns are becoming more of a focus for the public. This Watts water treatment system has been designed and tested to provide you with high quality water for years to come. The following is a brief overview of the system.

#### **Your Reverse Osmosis System:**

Osmosis is the process of water passing through a <u>semi permeable</u> membrane in order to balance the concentration of contaminants on each side of the membrane. A semi permeable membrane is a barrier that will pass some substances like clean water, but not other substances such as salts and minerals.

Reverse osmosis uses a semi permeable membrane; however, by applying pressure across the membrane, it concentrates contaminants on one side of the membrane, producing clean water on the other. This is why RO systems produce both clean drinking water and waste water that is flushed from the system.

Your system is a Four Stage RO which is based upon four separate treatment segments within one complete water filtration system. These stages are as follows:

#### Stage 1 - Sediment filter, recommended change 6 months.

The first stage of your RO system is a five micron sediment filter that traps sediment and other particulate matter like dirt, silt and rust which affect the taste and appearance of your water.

#### Stage 2 - Pre-Carbon filter, recommended change 6 months.

The second stage contains a carbon block filter. This helps ensure that chlorine and other materials that cause bad taste and odor are greatly reduced.

#### Stage 3- Membrane, recommended change 2-5 years.

Stage three is the heart of the reverse osmosis system, the RO membrane. This semi-permeable membrane will reduce salts, minerals, metals, and much more. Because the process of extracting this high quality drinking water takes time, your RO water treatment system is equipped with a storage tank.

#### Stage 4- Post Carbon Filter, recommend change 12 months.

The post carbon filter is a granular activated carbon (GAC) cartridge using coconut shell carbon. This filter provides final polishing and ensures great tasting drinking water.

#### **System Maintenance**

Just because you can not taste it, does not mean that it is not there. Contaminants such as lead, chromium, VOC's and arsenic are undetectable to the taste. Additionally, over time if you do not replace the filter elements, other bad tastes and odors will be apparent in your drinking water.

This is why it is important to change out your filter at the recommended intervals as indicated in this system manual. Should you have any further questions please contact the dealer that you purchased the unit from.

With proper installation and maintenance, this system will provide you with high quality water for years to come. All of Watts water enhancement products are rigorously tested.

# **Table of Contents**

Operational Parameters	4
Contents of Reverse Osmosis System	4
Installation & Startup	
Tools Recommended For Installation	4
Parts Diagram	5
Drill a Hole for the Reverse Osmosis Faucet	6
How to use Quick Connect Fittings on Your ROS	System 6
Mount the Reverse Osmosis Faucet	7
Adapt-a-Valve Installation	7
Drain Saddle Installation	8
Drain Saddle Tube Connection	8-9
Faucet Tube Connection - RO Water	9
Black Tube Connection - Inlet	10
Tank Valve Installation - Metal Tank	10
Tank Valve Installation - Plastic Tank	10
Yellow Tube Connection - RO Module to Storage	e Tank11
Reverse Osmosis Module Mounting	11
Install the Cartridges	11
Start up Instructions	12
Maintenance & Troubleshooting	
Changing The Filter Cartridges	13
Membrane Replacement	13
Annual Sanitization	14
Check Air Pressure in the Tank	14
Drain Line Flow Restrictor Maintenance	15
Procedure for Extended Non-Use (More than 2 r	nonths)15
Troubleshooting	16
<b>Product Technical &amp; Warranty Information</b>	1
Service Record	17
Limited Warranty	18

Installation must comply with State and local plumbing regulations. Do not use with water that is micro biologically unsafe or of unknown quality without adequate disinfection before or after the system. System is intended to be installed using the cold water supply only.

Operating Temperatures:	Maximum 100°F (37.8°C)	Minimum 40°F (4.4°C)	
Operating Pressure:	Maximum 100 psi (7.0 kg/cm <sup>2</sup> )	Minimum 40 psi (2.80 kg/cm <sup>2</sup> )	
pH Parameters:	Maximum 11	Minimum 2	
Iron:	Maximum 0.2 ppm		
TDS (Total Dissolved Solids)	< 1800 ppm		
Turbidity	< 5 NTU		
Hardness	Maximum 10 Grains Per Gallon *		

**Hardness:** Recommended hardness not to exceed 10 grains per gallon, or 170 parts per million.

**Water Pressure:** The operating water pressure in your home should be tested over a 24 hour period to attain the maximum pressure. If the incoming water pressure is above 100 psi then a water pressure regulator is required. A booster pump is needed for incoming water pressure under 40psi.

**Copper Tube:** Reverse Osmosis water should not be run through copper tube as the purity of the water will leach copper causing an objectional taste in water and pin holes may form in the tube.

## Contents of the Reverse Osmosis (RO) System

1 Module 1 Parts Bag 4 Filters 1 Manual

If any of the items are missing please contact Watts prior to installing.

# **INSTALLATION & STARTUP**

#### **Tools Recommended For Installation**

√ 1 1/4" Diamond Tipped Hole Saw bit for faucet opening (Counter Tops/Porcelain & Stainless Sinks)

 $\sqrt{1}$  1/4" Adjustable Wrench  $\sqrt{1}$  Phillips bit for electric drill

 $\sqrt{1/2}$ " Open End Wrench  $\sqrt{N}$  Needle Nose Pliers  $\sqrt{5/8}$ " Open End Wrench  $\sqrt{A}$  Adjustable Pliers

√ Electric Drill √ Sharp Knife

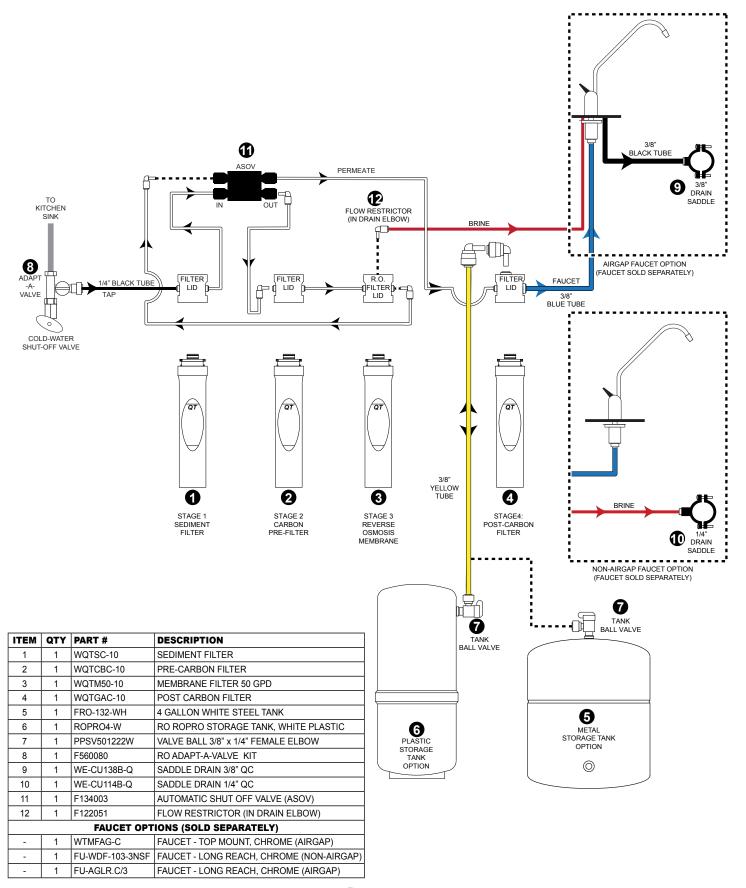
√ 1/8" diamond tip bit, pilot hole √ Phillips Screw Driver

√ 1/4" drain saddle hole



<sup>\*</sup> System will operate with hardness over 10 grains but the membrane life may be shortened. Addition of a water softener may lengthen the membrane life.

## **Parts Diagram**



Page 5

#### **Drill a Hole for the Reverse Osmosis Faucet**

#### **Marble Counter-top**

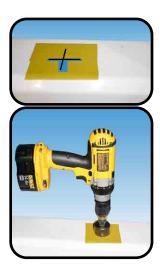
We recommend contacting a qualified contractor for drilling a hole in a marble counter-top.

#### Counter Top / Porcelain & Stainless Steel Sink

Note: Most sinks are pre drilled with 1  $\frac{1}{4}$ " diameter hole that you can use for your RO faucet. (If you are already using it for a sprayer or soap dispenser, see step 1)

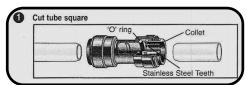
Porcelain sinks are extremely hard and can crack or chip easily. Use extreme caution when drilling. Watts accepts no responsibility for damage resulting from the installation of faucet. Diamond tip bit recommended.

- Step 1. Determine desired location for the RO faucet on your sink and place a piece of masking tape over where the hole is to be drilled. Mark the center of the hole on the tape.
- Step 2. Using a variable speed drill set on the slowest speed, drill a 1/8" pilot hole through both porcelain and metal casing of sink at the marked center of the desired location. Use lubricating oil or liquid soap to keep the drill bit cool (If drill bit gets hot it may cause the porcelain to crack or chip).
- Step 3. Using a 1 ¼" diamond tip hole saw, proceed to drill the large hole. Keep drill speed on the slowest speed and use lubricating oil or liquid soap to keep the hole saw cool during cutting.
- Step 4. After drilling, remove all sharp edges and make sure the surroundings of the sink are cooled before mounting the faucet.

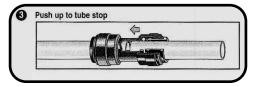


#### **How to use the Quick Connect Fittings**

To make a connection, the tube is simply pushed into the fitting. The unique locking system holds the tube firmly in place without deforming it or restricting flow. Use the steps below in reference to any quick connect tube connections.



It is essential that the outside diameter be free of score marks and that burrs and sharp edges be removed before inserting into fitting.



Push the tube into the fitting, to the tube stop. The collet (gripper) has stainless steel teeth which hold the tube firmly in position while the O-ring provides a permanent leak proof seal.

Disconnecting

Push in collet and remove tube

Pull on the tube to check that it is secure. It is a good practice to test the system prior to leaving site and /or before use.

Fitting grips before it seals. Ensure tube is pushed into

Insert tube

the tube stop.

To disconnect, ensure the system is depressurized before removing the tube. Push in the collect squarely against face of fitting. With the collet held in this position, the tube can be removed. The fitting can then be reused.



#### Mount the Reverse Osmosis Faucet

Refer to installation instructions found on faucet box.

If installing an Air-Gap faucet, connect tubes to the faucet prior to mounting:

1/4" Red Tube - Air Gap Feed - Off Center Fitting3/8" Black Tube - Air Gap Drain - Off Center Fitting3/8" Blue Tube - Drinking Water - Center Connection

If installing a Non Air-Gap faucet connect:

3/8" Blue Tube - Drinking Water - Center Connection

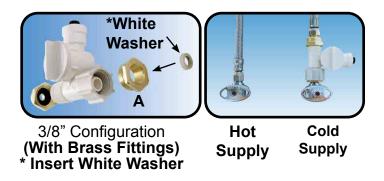
## Adapt-a-Valve Installation

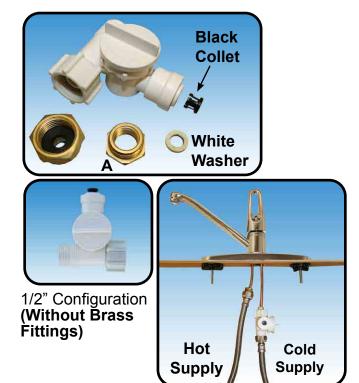
Caution: Water supply line to the system must be from the cold water supply line only.

Hot water will severely damage your system.

#### **Verify contents prior to installation:**

- (1) Plastic Adapt-a-Valve with black collet
- (1) Brass Adapter no washer
- (1) Brass Adapter with black washer
- (1) White rubber washer





WARNING: Do not use Teflon tape with the Adapt-a-Valve.

- Step 5. Turn off the cold water supply to the faucet by turning the angle stop valve completely off. Open cold water sink faucet to relieve pressure.
- Step 6. Choosing the configuration that fits your plumbing, attach the adapt-a-valve as illustrated in the four photos above.

TIPS: Make sure that the black collet is installed in to the 1/4" opening on the Adapt-a-valve.

Don't forget to install the white compression washer with the 3/8" configuration.

Brass adapter (A) does not need to be tightened with a wrench, only finger tight.

#### Drain Saddle Installation - Fits standard 1 1/4" - 1 1/2" drain pipes

Caution: Do not install this drain saddle near a garbage disposal. It must be above the disposal or above the crossbar on a second sink drain. Installing the drain saddle near a garbage disposal may cause it to clog. Please also make sure the drain saddle is mounted at least 1 1/2" above the nut of the p-trap or cross bar from the garbage disposal

#### Notice: Follow all local plumbing codes for your installation.

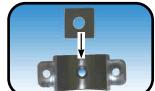
- Step 7. Determine if a 1/4" tube connection or 3/8" tube connection drain saddle should be installed. For air-gap RO faucets (3 tubes) use the larger 3/8" tube connection drain saddle. For non air-gap RO faucets (1 tube) use 1/4" tube connection drain saddle.
- Step 8. Mark the location for the opening on the drain pipe then drill a: 3/8" opening in the drain for 3/8" drain saddles

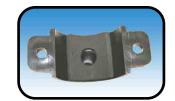
  OR 1/4" opening in the drain for 1/4" drain saddles
- Step 9. Peel and stick the foam gasket onto the drain saddle
- Step 10. Attach the drain saddle to the pipe using the bolts.

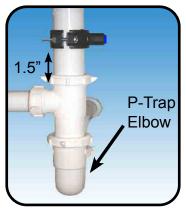
#### Caution: Do not over-tighten bolts. This may crack the drain saddle

Step 11. Check that the opening in the drain saddle is lined up with the opening in the drain pipe by feeding a small screw driver through the opening.









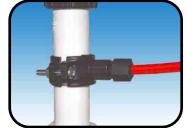
#### **Drain Saddle Tube Connection**

Step 12 Choose your configuration below ( A - 1/4" or B - 3/8"):

## (A) 1/4" Tube Fitting Drain Saddle

- Step 13A-1 In the parts bag, locate the 1/4" red tube. Connect the tube to the open quick connect fitting on the top of the RO Module labeled "Drain" making sure the tube is pushed in all the way to the tube stop.
- Step 13A-2 Push the 1/4" red drain tube open end into the 1/4" quick connect fitting on the drain saddle making sure it is pushed all the way to the tube stop. Continue to step 14 on the next page.





#### (B) 3/8" Tube Fitting Drain Saddle

Step 13B-1 Locate the red 1/4" drain tube attached to the RO faucet. Connect the open end of tube to the quick connect fitting on the top of the RO Module labeled "Drain" making sure the tube is pushed in all the way to the tube stop.



Step 13B-2

Note:

On 3/8" drain saddles, the black 3/8" drain tube must be as SHORT and STRAIGHT as possible. Make sure there is a downward slope with no low spots between this line and the drain. Leaving this line too long or with low spots can lead to water building up and leaking out of the air gap of the faucet.



Locate the 3/8" drain tube attached to the RO faucet. Measure the tube from the faucet to the drain saddle on the drain pipe and make a straight cut to the correct length. Push the open end of the 3/8" black tube into the 3/8" drain saddle. Make sure it is pushed in all the way to the tube stop.

#### **Faucet Tube Connection**

Step 14 Locate the blue 3/8" tube attached to the RO Faucet. Connect the open end of the blue 3/8" tube to the quick connect fitting on the right side of the RO Module labeled "FAUCET" making sure the tube is pushed in all the way to the tube stop. Continue to step 15 on the next page.

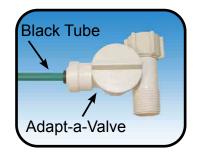


#### Black 1/4" Tube Connection - Inlet Water

Step 15 In the parts bag, locate the 1/4" black tube. Connect the tube to the quick connect fitting on the left side of the RO Module labeled "In" making sure the tube is pushed in all the way to the tube stop.

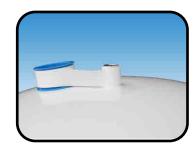


Step 16 Insert the other open end of the black 1/4" tube into the open 1/4" quick connect fitting on the plastic adapt-a-valve making sure the tube is pushed in all the way to the tube stop.



#### Tank Valve Installation - Metal Tank

- Step 17 Teflon tape must be applied in a clockwise direction. Wrap 5 to 7 turns around the male pipe threads (MPT) on the Stainless Steel fitting on top of the tank.
- Step 18 Thread the plastic valve onto the tank fitting. **Do not over tighten** or the valve could crack.



## **Tank Valve Installation - Plastic Tank**

- Step 19 Make sure the O-ring is located at the bottom of the recess for the tank connection.
- Step 20 Thread the plastic valve onto the tank fitting. **Do not over tighten** or the valve could crack.

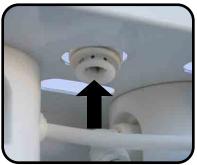




## Yellow Tube Connection - RO Module to Storage Tank

- Step 21 In the parts bag, locate the 3/8" yellow tube. Find the connection elbow labeled "Tank", then connect the tube to the elbow from beneath the metal bracket. Make sure the tube is pushed in all the way to the tube stop.
- Step 22 Connect the open end of the yellow 3/8" tube into the 3/8" quick connect fitting on the tank ball valve making sure the tube is pushed in all the way to the tube stop.





## **Reverse Osmosis Module Mounting**

Step 23 Determine best location for the RO module to be mounted to allow for future system maintenance. The parts bag has 2 self tapping screws. Using an electric drill with a Phillips bit, screw them into the cabinet wall 13.5" apart and 16" from the bottom of the cabinet.



#### **Install the Cartridges**

- Step 24 Identify each cartridge and the proper location on the system by matching the description on the filter head and filter cartridge.
- Step 25 Insert each cartridge with a 1/4 turn in the clock wise direction. The cartridge is installed properly when the label is facing toward the front of the unit.



# Congratulations!

You have completed the installation of your new Reverse Osmosis system.

Please Follow the Startup Instructions.

## **Start up Instructions**

Step 1 Turn on the incoming cold water at the angle stop valve and the Adapt-a-Valve. Check the system for leaks and tighten any fittings as necessary. (Check frequently over the next 24 hours to ensure no leaks are present).



Note:

If you have connected your RO system to a refrigerator / ice maker, make sure the ice maker is off (do not allow water to flow to the ice maker) until flushing (Step 4) is complete and the tank has been allowed to fill completely. Connection from the RO to the ice maker system should have an in-line valve installed before the ice maker so it can easily be closed to prevent water flowing to the ice maker during start up and periodic maintenance. Your storage tank must be allowed to fill up fully in order for the ice maker system to work properly.

- Step 2 Open the RO faucet and leave it open until water begins to trickle out (this may take a few minutes and the water will come out slowly).
- Step 3 Close the RO faucet allowing the storage tank to fill with water. It may take 3 to 6 hours to fill the tank completely depending on the production capability of the membrane, local water temperature and water pressure.

Note: During the fill period you may hear water trickling which is a normal occurrence.

Step 4 After the storage tank has filled (the water trickling to the drain has stopped), open the RO Faucet to flush the tank completely. You will know that the tank is empty when the flow rate from the RO faucet is down to a trickle. Repeat this step two more times. The fourth tank can be used for drinking.

The flushing process should take about a day to complete.

**Note:** Flushing of the tank 3 times is only necessary during the initial startup and after replacing the membrane.

## MAINTENANCE & TROUBLESHOOTING

## **Changing The Filter Cartridges**

Your RO module is equipped with valved heads which will automatically turn off the water supply to each filter when the filter is released, thus you do not need to turn off the incoming water supply at the Adapt-a-Valve. The RO faucet must be off when filters are replaced.

## 6 Month System Maintenance

**Replace:**  $\sqrt{\text{One sediment filter}}$  (P/N: WQTSC-10)

√ One carbon pre-filter (P/N: WQTCBC-10)

#### Annual Maintenance - (Sanitization Recommended See Page 14)

**Replace:**  $\sqrt{\text{One sediment filter}}$  (P/N: WQTSC-10)

√ One carbon pre-filter (P/N: WQTCBC-10) √ One carbon post-filter (P/N: WQTCGAC-10)

Tip: This is a good time to check the air pressure in your storage

tank. For instructions please see page 14.

Note: Flush first tank full after completing the annual maintenance.

**Step 1** Place a towel under the RO module to catch any excess water that may drip out from the filters during the changeover.

Step 2 To remove a filter cartridge: Grasp the cartridge and rotate it

1/4 turn counter clockwise to remove.

**Step 3 To install a filter cartridge:** Remove the seal cap and insert the cartridge into the valved head with the label facing to the left (9 o'clock position) rotating it clockwise 1/4 turn.

This reverse osmosis system contains a replaceable component (the RO membrane) which is critical to the efficiency of the system. Replacement of this reverse osmosis membrane should be with one of identical specifications as defined by Watts Premier to assure the same efficiency and contaminant reduction performance.

## **Membrane Replacement (2 - 5 Years)**

**Replace:** √ One Membrane (P/N: WQTCM50-10)

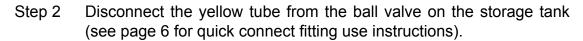
Membranes have a life expectancy between 2 and 5 years, depending on the incoming water conditions and the amount the RO system is used. This reverse osmosis membrane is critical for effective reduction of total dissolved solids (TDS). The product water should be tested periodically to verify that the system is performing satisfactorily.

Normally, a membrane would be replaced during a semiannual or annual filter change. However, if at any time you notice a reduction in water production or an unpleasant taste in the reverse osmosis water, it could be time to replace the membrane. Watts Premier recommends replacing the membrane when TDS reduction falls below 75%.

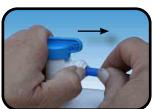
#### **Annual Sanitization**

Note: Sanitization procedure must be performed before a filter change.

Step 1 Turn off the water supply to your RO system at the adapt-a-valve and open the RO faucet to drain the storage tank.



Step 3 Using a clean eye dropper insert ½ teaspoon of hydrogen peroxide or common household bleach into the yellow tube. This will flow into the tank once water is turned back on to unit. Reattach yellow tube to the ball valve. Follow start up procedure and drain two full tanks of water. Replace Post Carbon Filter.





#### **Check Air Pressure in the Tank**

Important: Check air pressure only when tank is empty of water!

Check air pressure in the storage tank when you notice a decrease in available water from the RO system. Air can be added with a bicycle pump using the schrader valve that is located on the lower side of the tank behind the blue plastic cap.

Step 1 Turn off the incoming water supply to the RO.

Step 2 Open the RO Faucet and allow water to drain from the tank until it is completely empty.



Tip: When water from the RO faucet slows to a trickle, with the faucet still in the open position, you may add air to the tank to purge any left over water, this will ensure that the tank is completely empty.

Step 3 Once all water in the tank is purged, check air pressure using an air pressure gauge, it should read between 5 - 7 PSI. (Digital air pressure gauge is recommended)

Step 4 Follow startup procedure on page 12.

#### **Drain Line Flow Restrictor Maintenance**

Please refer to parts list diagram on page 5 (Item 14) for flow restrictor location.

- Step 1 Turn off the incoming water supply at the adapta valve.
- Step 2 Remove the red tubing from the quick connect fitting.
- Step 3 Remove the fitting from the back of the RO unit.
- Step 4 Remove, inspect and clean the orifice in the flow restrictor.
- Step 5 Reinstall the flow restrictor into the end of the fitting.
- Step 6 Reinstall the fitting to the back of the RO unit.
- Step 7 Reinstall the red tubing to the fitting.
- Step 8 Turn on the water supply at the adapt-a-valve.



## **Procedure for Extended Non-Use (More than 2 months)**

Turn off the water supply to your RO system at the adapt-a-valve and open the RO faucet to drain the storage tank. Once the storage tank is empty, remove all filter cartridges (order not important), place them into a sealed plastic bag and store in your refrigerator.

### To Restart System:

- Step 1 Reinstall all filters on to the RO unit. Filters are color coded to match the filter heads they twist in to. Refer to page 13 step three for cartridge installation procedure.
- Step 2 Turn on water supply to the system at the Adapt-a-Valve. (Check frequently over the next 24 hours to ensure no leaks are present).
- Note: If you have connected your RO system to a refrigerator / ice maker, make sure the ice maker is off (do not allow water to flow to the ice maker) until the tank has been allowed to completely fill.
- Step 4 Open the RO faucet and leave it open until water begins to trickle out (it will come out slowly).
- Step 5 Close the RO faucet allowing the storage tank to fill with water. It may take 3 to 6 hours to fill the tank completely depending on the production capability of the membrane, local water temperature and water pressure.
- Step 6 After the Tank has filled, open the RO Faucet to flush the tank completely. You will know that the tank is empty when the flow rate from the RO faucet is down to a trickle. The second tank can be used for drinking.

# **TROUBLE SHOOTING**

Problem	Cause	Solution
1. Low/Slow Production	Low Water Pressure	Ensure a minimum of 40 psi incoming water pressure. Premier sells a booster pump if home water pressure is low. Make sure water supply is turned on and feed water valve is all the way open.
	Crimps in tubing Clogged pre-filters Fouled membrane	Check tubing and straighten or replace as necessary. Replace pre-filters. Replace membrane.
2. Milky colored Water	Air in system	Air in the system is a normal occurrence with initial start up of the RO system. This milky look will disappear during normal use within 1-2 weeks. If condition reoccurs after filter change, drain tank 1 to 2 times.
Water constantly running, unit will not	Low water pressure	See #1 Above
shut off	Crimp in supply tube High water pressure	Check tubing and straighten or repair as necessary.  Check incoming water pressure to make sure it does not exceed 80 psi. A pressure relief valve may be necessary.
	High pressure in Tank	Empty storage tank of water. Set tank air pressure between 5-7 psi. See previous page.
	Low Pressure in Tank	Use a Digital Air Gauge for best results. The empty tank pressure should be 5-7 psi. See page 14.
4. Noise / Water from faucet vent hole or noise from drain.	Crimp or restriction in drain line	Check tubing and straighten or repair as necessary.  Straighten all drain lines. Clear blockage. Cut off any Excess tubing
	Drain tube clogged	Caused from dishwasher or garbage disposal.  Disconnect the 3/8" black line at the drain, clean the 3/8" black line out with a wire, then reconnect. Blowing air through the line will not always remove the clog.
5. Small amount of water in storage tank	System starting up	Normally it takes 4-6 hours to fill tank. Note: low incoming water pressure and/or temperature can drastically reduce production rate.
	Low water pressure	See #1 above.
	Too much air in tank	Tank air pressure should be 5-7 psi when empty of water If below 5 psi add air or bleed if above 7 psi.  Check only when tank is empty of water.  See previous page.
6. Low water flow from faucet	Check air pressure in tank	Use a Digital Air Gauge for best results. The empty tank pressure should be 5-7 psi. See page 14.

# SERVICE RECORD & WARRANTY INFORMATION

Service Record  Date of Purchase:		Serial No			
		Date of Install: Installed by:			
Date	1st stage Sediment (6 months)	2nd stage Carbon (6 months)	4th stage Carbon (1 year)	3rd stage Membrane (2-5 years)	
NOTES:					
					-

## **Limited Warranty**

This Reverse Osmosis System is warranted against defects in material and workmanship for a period of one year from the date of installation, not to exceed 2 years from the date of manufacture. Expendable items such as filter cartridges and membranes are not covered by this warranty.

How to obtain Warranty Service: Contact the dealer that you purchased the system from. Watts will work in conjunction with our dealer to repair or replace at our discretion any unit that is determined to be defective. No returns will be accepted with out the proper return authorization number.

What this warranty does not cover: This warranty does not cover defects resulting from improper installation, from abuse, misuse, misapplication, improper maintenance, neglect, alteration, accidents, casualties, fire, flood, freezing, environmental factors, water pressure spikes or other such acts of God. Return shipping charges are not included in this warranty and are the responsibility of the end user.

This warranty will be void if defects occur due to failure to observe the following conditions:

- 1. The Reverse Osmosis System must be hooked up to a potable municipal or well cold water supply.
- 2. The hardness of the water should not exceed 10 grains per gallon, or 170 ppm.
- 3. Maximum incoming iron must be less than 0.2 ppm.
- 4. The pH of the water must not be lower than 2 or higher than 11
- 5. The incoming water pressure must be between 40 and 100 pounds per square inch.
- 6. Incoming water to the RO cannot exceed 105 degrees F (40 degrees C.)
- 7. Incoming TDS/Total Dissolved Solids not to exceed 1800 ppm.
- 8. Do not use with water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system.

This warranty does not cover any equipment that is relocated from the site of its original installation.

This warranty does not cover any equipment that is installed or used outside the United States of America and Canada.

#### LIMITATIONS AND EXCLUSIONS:

WATTS WILL NOT BE RESPONSIBLE FOR ANY IMPLIED WARRANTIES, INCLUDING THOSE OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. WATTS WILL NOT BE RESPONSIBLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES, INCLUDING WATER DAMAGE, TRAVEL EXPENSE, TELEPHONE CHARGES, LOSS OF REVENUE, LOSS OF TIME, INCONVENIENCE, LOSS OF USE OF THE EQUIPMENT, AND DAMAGE CAUSED BY THIS EQUIPMENT AND ITS FAILURE TO FUNCTION PROPERLY. THIS WARRANTY SETS FORTH ALL OF WATTS RESPONSIBILITIES REGARDING THIS EQUIPMENT.

#### OTHER CONDITIONS:

If Watts chooses to replace the equipment, it may be replace with reconditioned equipment. Parts used in repairing or replacing the equipment will be warranted for 90 days from the date the equipment is returned to you or for the remainder of the original warranty period, whichever is longer. This warranty is not assignable or transferable.

WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. For more information: www.watts.com/prop65