

Installation, Operation and Maintenance Manual

Kwik-Change™ Reverse Osmosis System

Model PWSYS-RO-KC4

PURE WATER

Important

Please read the entire manual before proceeding with the installation and startup. Your failure to follow any attached instructions or operating parameters may lead to the product's failure.

Save manual for future reference.



PWSYS-RO-KC4

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Note: Do not use with water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system. Systems certified for cyst reduction may be used on disinfected waters that may contain filterable cysts.

Introduction

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. You may have heard about contaminants in the drinking water, such as Arsenic, Chromium, Cryptosporidium or Giardia. There may also be some local water issues such as high levels of Lead and Copper. This Watts water treatment system has been designed and tested to provide you with high quality drinking 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 semi-permeable 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 particles like clean drinking water, but not other particles like arsenic and lead.

Reverse osmosis uses a semi-permeable membrane; however, by applying pressure across the membrane, it concentrates contaminants (like a strainer) on one side of the membrane, producing crystal clear water on the other. This is why RO systems produce both clean drinking water and waste water that is flushed from the system. This reverse osmosis system also utilizes carbon block filtration technology and can, therefore, provide a higher quality drinking water than carbon filtration systems alone.

Your system is a 4-Stage RO which is based upon separate treatment segments within the one complete water filtration system. These stages are as follows:

Stage 1 – Sediment filter, recommended change 6 months.

(See Page 8).

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 – Carbon filter, recommended change 6 months.

(See Page 8).

The second stage contains a five-micron 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 3 is the heart of the reverse osmosis system, the RO membrane. This semi-permeable membrane will effectively take out TDS, Sodium and heavy metals such as arsenic, copper, and lead, as well as Cysts, such as Giardia and cryptosporidium. Because the process of making this high quality drinking water takes time, your RO water treatment system is equipped with a storage tank.

Stage 4 - GAC filter, recommend change 6 - 12 months.

The final stage is a granular activated carbon (GAC) filter. This filter is used after the water storage tank and is used as a final polishing filter.

Note: Filter & Membrane life may vary based upon local water conditions and/or use patterns.

System Maintenance

Just because you cannot taste it, does not mean that it is not there. Contaminants such as lead, chromium and arsenic (to name a few) are undetectable to the taste. Additionally, over time if you do not replace the filter element, 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. When replacing the filter elements, pay special attention to any cleaning instructions. Should you have any further questions please refer to our website at www.watts.com or call our customer service department at 1-800-244-1299.

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 by independent laboratories for safety and reliability. If you have any questions or concerns, please contact our Customer Service department at 1-800-244-1299 or refer to our on-line troubleshooting at www.watts.com.

Replacement Filter Pack

MODEL	FREQUENCY	DESCRIPTION
PWFIL-2PACK-KC-KC4	6 Months	Includes sediment and pre-carbon filters only
PWFIL-4PACK-KC-KC4	Annual	Includes all filters and membrane
PWFIL-MEM-KC-60GPD	2 - 5 years	60 gallon per day membrane
PWFIL-GAC-KC-13	Annually	GAC final filter

Note: Water conditions may require more frequent cartridge replacement.

Operational Parameters

Do not use with water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system. System is intended to be installed on the cold water line only.

Operating Temperatures	Maximum 100°F (38°C)	Minimum 40°F (4°C)
Operating Pressure	Maximum 85psi (6.0 kg/cm ²)	Minimum 40psi (2.80 kg/cm ²)
pH Parameters	Maximum 11	Minimum 2
Iron	Maximum 0.2 ppm	
TDS (Total Dissolved Solids)	< 1800 ppm	
Turbidity	< 5NTU	

Hardness: Recommended hardness not to exceed 10 grains per gallon or 170ppm. System will operate with hardness over 10 grains, but the membrane life may be shortened. The addition of a water softener may lengthen the membrane life.

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 85psi, a pressure regulator is recommended and if over 100psi, then a pressure regulator is required.

Copper Tubing: Reverse Osmosis water should not be run through copper tubing as the purity of the water will leach copper causing an objectional taste in water and pin holes may form in the tubing. Watts supplies speciality filters that can be used if copper tubing follows the Reverse Osmosis unit. Be sure to follow any state, province or local regulations during installation.

Contents of Reverse Osmosis (RO) System

- 1 Tank
- 1 RO Module
- 1 Parts Bag
- 1 Faucet Bag
- 1 Manual

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

Tools Recommended for Installation

- 1½" Hole Saw Bit for Faucet opening
- Round Knockout Punch for Stainless Sinks 1¼"
- Adjustable Wrench
- Sharp Knife
- ½" & ⅝" Open End Wrenches
- Phillips Screw Driver
- Needle Nose Pliers – Adjustable Pliers
- Electric Drill
- ⅛" Drill Bit
- ¼" Drill Bit
- ⅜" Drill Bit



STEP 1

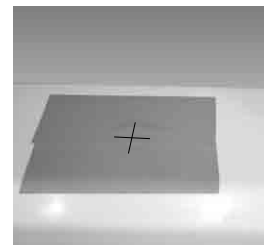
Drill a Hole for the Faucet in a Porcelain Sink

Note: Most sinks are predrilled with 1½" or 1¼" diameter hole that you can use for your RO faucet. (If you are already using it for a sprayer or soap dispenser, see Step 2).

Caution: 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.

Step A – 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.

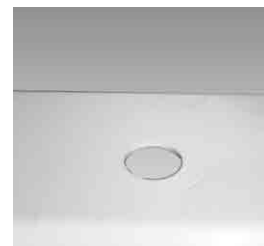


Step B – Using a variable speed drill set on the slowest speed, drill a ⅛" pilot hole through both porcelain and metal casing of sink at the marked center of the desired location. Use lubricating oil or liquid soap to keep the drill bit cool (If drill bit gets hot, it may cause the porcelain to crack or chip).



Step C – Using a 1¼" 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 D – Make sure the surroundings of the sink are cooled before mounting the faucet to the sink after drilling and remove all sharp edges.



OR

Punch a Hole for the Faucet in a Stainless Steel Sink

Note: If mounting faucet to a Stainless Steel Sink, you will need a 1¼" Hole Punch. The faucet opening should be centered between the backsplash and the edge of the sink, ideally on the same side as the vertical drain pipe.



Step A – Drill a ¼" pilot hole. Use a ½" Hole Punch and an adjustable wrench to punch the hole in the sink. Change to the 1¼" Hole Punch to enlarge the hole.

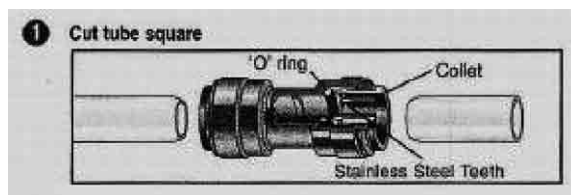


The faucet can now be installed.

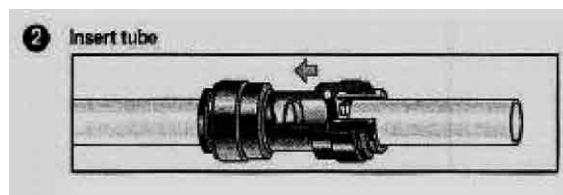
How to use the Quick-Connect fittings on the RO Module

To make a connection, the tube is simply pushed into the fitting. Place a piece of tape 1/2" from end of tube to indicate how far the tube should be inserted. The unique Watts Quick-Connect locking

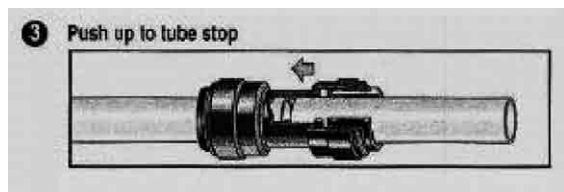
system holds the tube firmly in place without deforming it or restricting flow.



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



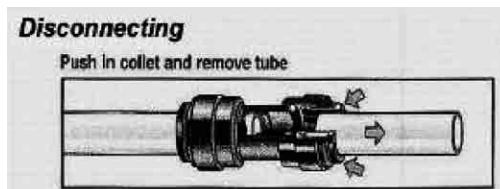
Fitting grips before it seals. Ensure tube is pushed into the tube stop.



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.



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.



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

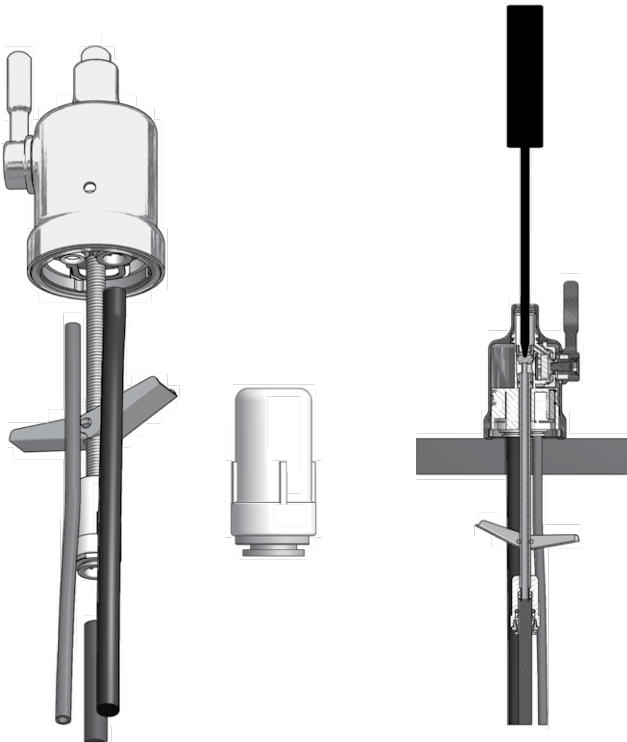
STEP 2

Watts Chrome Top Mount Faucet Installation

	MINIMUM	MAXIMUM
Mounting Hole Size	1"	1 1/4"
Torque on Toggle Bolt	5 lb.in. (max)	

Gather and identify the faucet pieces.

- Step A** - Remove faucet base and faucet spout from their respective plastic bags. From above the sink, feed the faucet tubing and toggle bolt down through the 1 1/4" mounting hole in the sink. Ensure that the soft rubber gasket is uniformly positioned in between the base of the faucet and the top of the sink.
- Step B** - Align the faucet base so that the handle is on the right side and the base is sitting flush on the sink top. Turn the handle down (towards you) to the "ON" position to reveal the tightening screw (located where the spout will be inserted). Using a Phillips head screwdriver, turn the screw clockwise until the toggle bolt secures the faucet base snug onto the sink top.
- Step C** - Once the faucet base is securely fastened to the sink top, insert the faucet spout into the faucet base until it is fully seated. Turn the handle up (away from you) to the "OFF" position.
- Step D** - Connect the loose end of the 3/8" blue plastic tubing from the faucet to the 1/4" x 3/8" plastic reducing union. Connect the 1/4" blue tubing from the OUTLET SIDE of the filtration unit to the 1/4" side of the union.



STEP 3

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.

Configuration for 1/2 inch valve
(using no brass fittings)

Figure 1



Figure 1

Configuration for 3/8 inch valve
(using brass fittings)

Figure 2

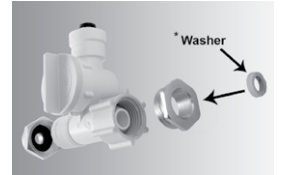


Figure: 2

Placement diagram for Adapt-A-Valve™

Figure 3



Hot Supply **Cold Supply**

Figure: 3

Step A – Turn off the cold water supply to the faucet by turning the angle stop valve completely off.

Step B – Attach the Adapt-A-Valve™ as illustrated in Figure 2 and Figure 3, choosing the configuration that fits your plumbing needs.

Step C – Completed Valve installation Figure: 3.

STEP 4

Drain Saddle Installation

Drain Saddle fits standard 1¼" – 1½" drain pipes

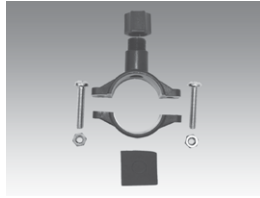
Note: The drain saddle must be mounted at least 1½" above the nut of the P-trap or crossbar from the garbage disposal to ensure proper drainage. If a second sink drain is available, install it above the crossbar on the second drain. Using Phillips screwdriver, tighten screws evenly and securely on both sides of the drain saddle. Keep the plastic compression nut off at this time.

Caution: Do not overtighten the screws, it may crack the drain saddle.



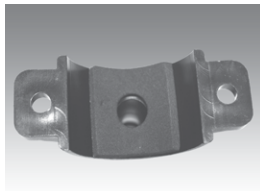
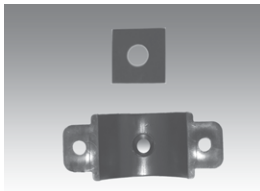
Gather the pieces of the drain saddle

- 1 Black compression nut
- 1 Semicircle bracket with opening
- 2 Screws
- 1 Foam gasket
- 2 Nuts for screws
- 1 Semicircle bracket



The small square black foam gasket with a circle cut out of the middle must be applied to the inside of the drain saddle.

Remove sticky tape backing and stick to the drain saddle as shown.



STEP 5

Drill Hole and Connect ¾" Black Tube from Faucet to the Drain Saddle

IMPORTANT: The black ¾" drain tube must be as SHORT and STRAIGHT as possible to the drain saddle, making a downward slope from faucet to drain saddle to allow for proper drainage. This is a gravity fed line and if there is any bend or dip in the tube, the rinse water will not flow into the drain properly. Water may back up and come out the air gap hole in the back of the faucet.

Step A – With the drain saddle secured onto the drain pipe, using a ¼" drill bit installed in your electric drill, insert the drill bit through the opening in the drain saddle and drill through the drain pipe.



Caution: It is very important to keep the drill centered to prevent damage of the drain saddle while drilling.

Step B – Measure the ¾" black tube from faucet to the drain saddle on the drain pipe and make a straight cut to the correct length.

Step C – Slip black tube through black compression nut. Insert black tube into the opening in the drain saddle and hand tighten the black nut, and add ¼ turn with a wrench.



STEP 6

Green Tube Connection

Step A – Locate green tube attached to the RO Module. Insert the open end of the green ¼" tube into the open ¼" Quick-Connect fitting on the Adapt-A-Valve™ making sure the tube is pushed in all the way to the tube stop.



Step B – Connect the green tube from the RO module to the Adapt-A-Valve™ that is connected to the angle stop valve. Leave enough tube so it is not kinked and cut the tube to the desired length.

STEP 7

Reverse Osmosis Module Mounting

Step A – 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 6" apart and 16" from the bottom of the cabinet.



Note: Do not cut any RO system tubes at this time.

STEP 8

Red ¼" Tube Connection (from Faucet to RO Module)

Step A – Determine where the ¼" red tubing from the faucet and the open end of the ¼" quick connect fitting (located on the left side of the RO module) would join together comfortably. Cut the red tube to length, making sure the cut is straight and square. Insert the red tube into the open end of the ¼" quick connect fitting making sure the tube is pushed in all the way to the tube stop.



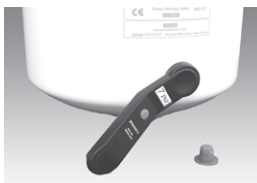
STEP 9

Check Air Pressure in the Tank

Note: Check air pressure 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 A – Turn off the incoming water supply to the RO by turning the knob on the Adapt-A-Valve™ clockwise until it stops. (Follow the green tube away from the RO system to find the Adapt-A-Valve™.)



Step B – 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.

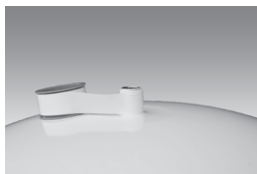
Step C – Once all water in the tank is purged, check air pressure using an air pressure gauge. It should read between 5 - 7psi. (Digital air pressure gauge is recommended)

Step D – Follow Startup Instructions on Page 7.

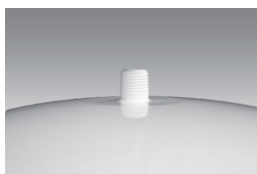
STEP 10

Tank Ball Valve Installation

Step A – Use supplied Teflon® tape to wrap the tank nipple with 4 to 8 layers of Teflon tape.



Step B – Install supplied ball valve elbow fitting. (Do not over tighten)



STEP 11

Blue Tube Connection (From The RO Module To Tank)

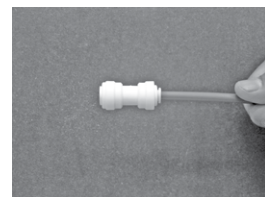
Step A – Position tank in desired location. Stand it upright or lay it on its side (using the black plastic stand). Measure the blue tube (marked “TANK”) from the RO module over to the tank, and cut it to length leaving a straight edge on the end of the tube. Then insert the tube into the Quick-Connect fitting on the tank ball valve. Make sure the tube is pushed in all the way to the tube stop (see Page 4 for Quick-Connect fitting use directions).



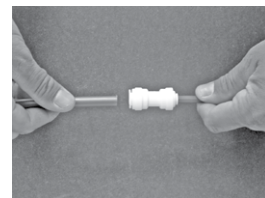
STEP 12

Blue Tube Connection (From The RO Module To Faucet)

Step A – Determine where the 3/8" blue tubing from the faucet and the 1/4" blue tubing (marked “FAUCET”) from the RO Module would join together comfortably. Cut the tubes leaving a straight cut on both tubes. Insert the 1/4" blue tube (marked “FAUCET”) from the RO module into the 1/4" end of the 1/4" x 3/8" Quick-Connect union supplied in the parts bag. Make sure the tube is pushed in all the way to the tube stop.



Step B – Insert the 3/8" blue tube from the faucet into the remaining 3/8" open end of the 1/4" x 3/8" Quick-Connect union. Make sure the tube is pushed in all the way to the tube stop.



Startup Instructions

Step A– Turn on the incoming cold water at the angle stop valve. Turn the knob on the Adapt-A-Valve™ by turning counterclockwise. 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 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 RO tank must be allowed to fill up fully in order for the ice maker system to work properly.

Step B – Open the RO faucet, and leave it open until water begins to trickle out. (It will come out slowly).

Step C – After water trickles out of the faucet, close the RO faucet allowing the storage tank to fill with water. It may take 4 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 due to the Reverse Osmosis Process.

Step D – After the Tank has filled, open the RO Faucet to flush the tank completely to remove carbon particles from Final Filter. 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.

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

Important: Your reverse osmosis system contains replaceable treatment components that are critical for effective containment reduction. Periodic inspection and following proper system maintenance is critical for continued performance.

Teflon® is a registered trademark of E.I. DuPont de Nemours & Company.

6-Month System Maintenance

Order filter by calling Watts at 1-800-224-1299

Item Needed: EDP# 7100116

Includes:

- (1) Sediment Filter
- (1) Carbon Block Filter

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 to assure the same efficiency and contaminant reduction performance.

Note: 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 faucet must be off when filters are replaced.

Step A – Place a towel under the RO module to catch any excess water that drips out from the filters during the changeover.

Step B – To make the removal of the filter housings easier, the heads and housings may be lifted up to 90° as shown in the pictures to the right. Starting with the sediment filter, lift the cartridge up to 90°. Rotate the cartridge a ¼ turn counterclockwise, remove and dispose of used cartridge.



Step C – Make sure to remove the cap off of the new replacement filter. Insert the new filter cartridge into the head and rotate it clockwise ¼ turn until it stops. Return cartridge to the vertical position.



Step D – Repeat this procedure for the 2nd filter cartridges. When finished, flush your tank completely once to remove any natural carbon fines from the RO system. Check over the next 24 hours to ensure no leaks are present.



Annual Maintenance

Order filter by calling Watts at 1-800-224-1299

Item Needed: # 7100117

Includes:

- (1) Sediment Filter
- (1) Membrane
- (1) Carbon Block Filter
- (1) Final In-Line Filter

Note: 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 faucet must be off when filters are replaced.

Step A – Place a towel under the RO module to catch any excess water that drips out from the filters during the changeover.

Step B – To make the removal of the filter housings easier, the heads and housings may be lifted up to 90° as shown in the pictures to the right. Starting with the sediment filter, lift the cartridge up to 90°. Rotate the cartridge a ¼ turn counterclockwise, remove and dispose of used cartridge.



Step C – Make sure to remove the cap off of the new replacement filter. Insert the new filter cartridge into the head and rotate it clockwise ¼ turn until it stops. Return cartridge to the vertical position.



Step D – Repeat this procedure for the 2nd, 3rd and 4th filter cartridges. When finished, flush your tank completely once to remove any natural carbon fines from the RO system. Check over the next 24 hours to ensure no leaks are present.



Membrane Replacement

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 to assure the same efficiency and contaminant reduction performance.

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 recommends replacing the membrane when TDS reduction falls below 75%.

Note: A water sample may be sent to Watts for a free diagnosis of your membrane performance. To send a water sample, use two (2) clean containers and fill ½ cup of tap water in one container and ½ cup of reverse osmosis water in 2nd container. Clearly label each sample. Send the samples to the address listed on the cover of this manual attention "Water Samples". Watts will test the water and mail or call you with the results.

Refer to Page 8 Annual Maintenance

Step A – To change your membrane, follow the instructions for the Annual Maintenance (previous section). The procedure to remove and change the membrane cartridge is the same as all the other filter cartridges on the RO module.

Step B – Check over the next 24 hours to ensure no leaks are present.

Arsenic Facts

Arsenic (As) is a naturally occurring contaminant found in many ground waters. Arsenic in water has no color, taste or odor. It must be measured by an arsenic test kit or lab test.

Public water utilities must have their water tested for arsenic. You can obtain the results from your water utility contained within your consumer confidence report. If you have your own well, you will need to have the water evaluated. The local health department or the state environmental health agency can provide a list of test kits or certified labs.

There are two forms of arsenic: pentavalent arsenic (also called As (V), As (+5)) and trivalent arsenic (also called As (III), As (+3)). In well water, arsenic may be pentavalent, trivalent, or a combination of both. Although both forms of arsenic are potentially hazardous to your health, trivalent arsenic is considered more harmful than pentavalent arsenic.

RO systems are very effective at removing pentavalent arsenic. A free chlorine residual will rapidly convert trivalent arsenic to pentavalent arsenic. Other water treatment chemicals such as ozone and potassium permanganate will also change trivalent arsenic to pentavalent arsenic. A combined chlorine residual (also called chloramine) where it does convert trivalent arsenic to pentavalent arsenic, may not convert all the trivalent arsenic in to pentavalent arsenic. If you get your water from a public water utility, contact the utility to find out if free chlorine or combined chlorine is used in the water system.

This Watts reverse osmosis system is designed to remove up to 98% of pentavalent arsenic. It will not convert trivalent arsenic to pentavalent arsenic. Under laboratory standard testing conditions, this system reduced 0.30 mg/L (ppm) pentavalent arsenic to under 0.010 mg/L (ppm) (the USEPA standard for drinking water). Actual performance of the system may vary depending on specific water quality conditions at the consumer's installation. In addition to the independent laboratory standard testing conditions Watts has conducted additional field testing on our reverse osmosis units to determine trivalent arsenic reduction capabilities. Based upon Watts field testing, it has been determined that the RO units are capable of reducing up to 67% of trivalent arsenic from the drinking water.

The RO membrane component of this Watts reverse osmosis system must be maintained according to its recommended maintenance cycle. Specific component identification and ordering information can be found in the installation/operation manual maintenance section, by phone at 1-800-224-1299 or online www.watts.com

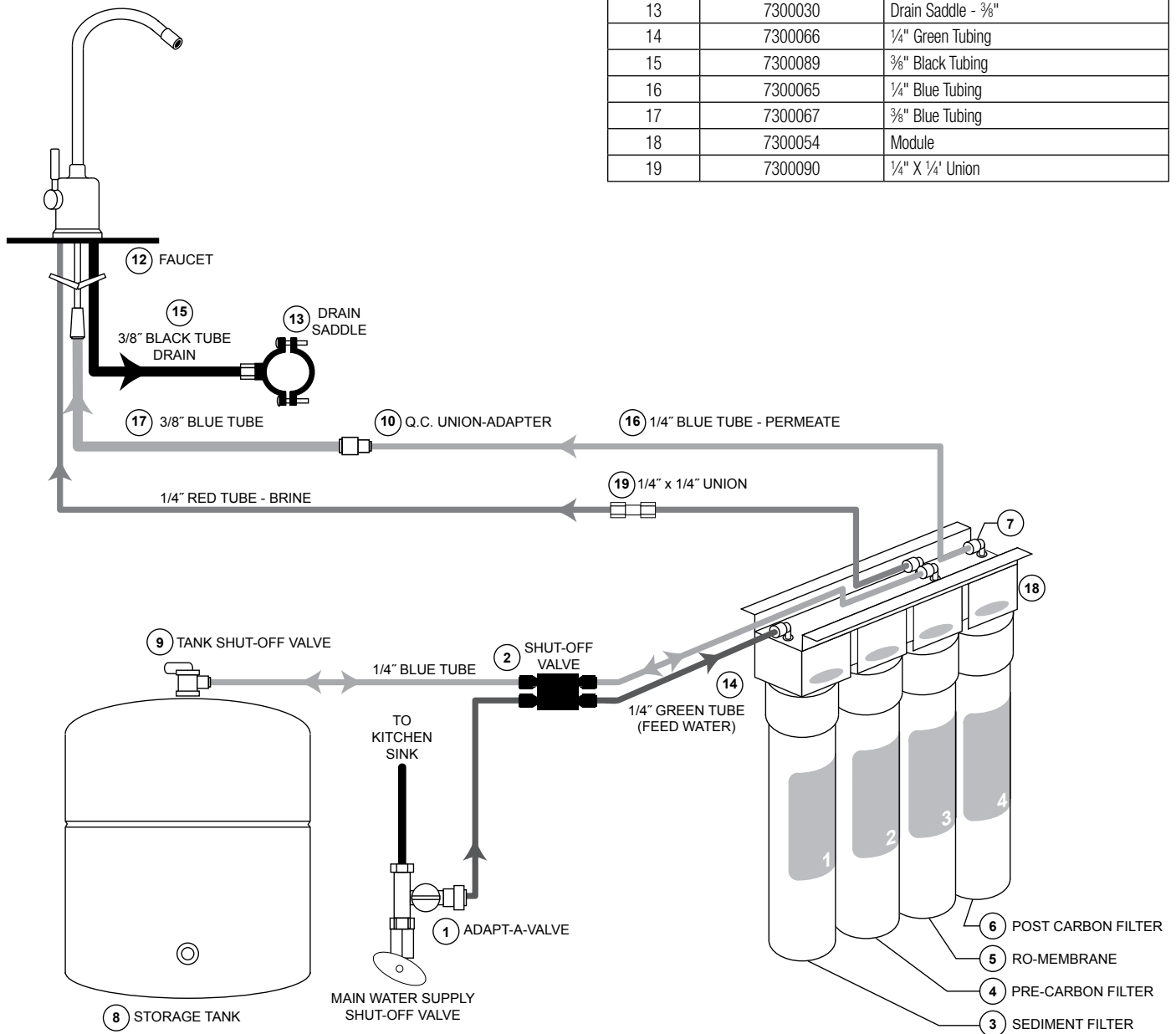
Troubleshooting

PROBLEM	CAUSE	SOLUTION
1. Low/Slow Production	Low Water Pressure	Assure a minimum of 40psi incoming water pressure. Watts sells a booster pump if home water pressure is low. Make sure water supply is turned on and Adapt-A-Valve™ is all the way open.
	Crimps in tubing	Check tubing and straighten or replace as necessary.
	Clogged pre-filters	Replace pre-filters.
	Fouled membrane	Replace membrane and flow restrictor.
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.
3. Water constantly running, unit will not shut off	Low water pressure	See #1 above
	Crimp in supply tube	Check tubing and straighten or repair as necessary.
	High water pressure	Check incoming water pressure to make sure it does not exceed 80psi. A pressure relief valve may be necessary.
	High pressure in Tank	Empty storage tank of water. Set tank air pressure between 5-7psi. See page 7.
	Low Pressure in Tank	Use a Digital Air Gauge for best results. The empty tank pressure should be 5-7psi. See Page 7.
4. Noise / Water from faucet vent hole or noise from in drain line drain.	Crimp or restriction	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.
	To much air in tank	Tank air pressure should be 5-7psi when empty of water. If below 5psi add air or bleed if above 7psi. Check only when tank is empty of water. See Page 7.
6. Water leaks from the blue or white filter housing	Not properly tightened	Tighten the bowl.
	Kinked O-ring	Turn off the water supply and release the pressure. Replace the O-ring if necessary. Then lubricate it and make sure the O-ring is seated in the filter bowl properly before reinstalling the filter bowl.
7. Low water flow from faucet		Check air pressure in tank Use a Digital Air Gauge for best results. The empty tank pressure should be 5-7psi. See Page 7.

Parts List

The reverse osmosis system contains a replaceable treatment component, critical for the effective reduction of total dissolved solids and the product water shall be tested periodically to verify that the system is performing properly

ITEM #	EDP#	DESCRIPTION
1	7300068	Adapt-A-Valve™
2	7300070	Automatic Shut-Off-Valve - 1/4" QC
3	7100469	Sediment Filter
4	7100109	Carbon Filter
5	7100125	Reverse Osmosis Membrane
6	7100462	Post Carbon Filter
7	7300034	Elbow - 1/4" QC X 1/4" Stem
8	7100174	Storage Tank-3 Gal White
9	7300073	Tank Shut-Off Valve
10	7300041	Union Adapter - 1/4" QC X 3/8" QC
11	7300022	Flow Restrictor (not shown)
12	7100203	Airgap Faucet - Chrome
13	7300030	Drain Saddle - 3/8"
14	7300066	1/4" Green Tubing
15	7300089	3/8" Black Tubing
16	7300065	1/4" Blue Tubing
17	7300067	3/8" Blue Tubing
18	7300054	Module
19	7300090	1/4" X 1/4" Union



CALIFORNIA PROPOSITION 65 WARNING

WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. (California law requires this warning to be given to customers in the State of California.)

For more information: www.watts.com/prop65

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