

INSTALLATION, OPERATION AND MAINTENANCE MANUAL

Warning

Please read carefully before proceeding with installation. Failure to follow attached instructions or operating parameters may lead to the product's failure.

Save manual for future reference.

Model ZRO-4

ZEROWASTE® REVERSE OSMOSIS SYSTEM



Code (UPC®),International Plumbing and IGC 159-2000A

B IAPMO R&T Certified

Premier, Inc. Phone: 800-752-5582 8716 W Ludlow Drive Suite #1 www.PremierH2o.com Peoria, AZ 85381 Fax: 623-866-5666

Thank you for your purchase of a state of the art Premier ZeroWaste® Reverse Osmosis (RO) water treatment system.

Water quality concerns are quickly becoming more of a focus for the public. Lately you may have heard about contaminants in the drinking water, such as arsenic, perchlorate, and chromium. There may also be some local water issues in your area such as high levels of lead, radium and copper. This Premier 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 ZeroWaste[®] 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 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. In an effort to provide high quality drinking water while meeting the water supply challenges across the country, Premier has patented this ZeroWaste[®] RO system. This ZeroWaste[®] RO is 100% effective in providing high quality reverse osmosis drinking water while not wasting any water down the drain.

This ZeroWaste® 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 four stage RO which is based upon separate treatment segments within the one complete water filtration system. These stages are as follows:

<u>Stage 1 – Sediment filter, recommended change 6 months.</u>

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.

<u>Stage 2 – Carbon filters, recommended change 6 months.</u>

The second stage contains a 5 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 three 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. 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- Carbon inline filter, recommend change 6 - 12 months.

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

System Maintenance

Just because you can not 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 elements, other bad tastes and odors will be apparent in your drinking water.

This is why it is important to change out your filters 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 <u>www.PremierH2o.com</u> or call our customer service dept. at **1-800-752-5582.**

** Before installation, please take a moment to fill out the warranty card on page 21-22.

Thank you for your purchase of a Premier ZeroWaste® Reverse Osmosis system. With proper installation and maintenance, this system will provide you with high quality water for years to come. All of Premier 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 1-800-752-5582 (outside USA 480-675-7995).

Table of Contents

Operational Parameters	4
Contents of Reverse Osmosis System	4
Tools Recommended For Installation	4
Important Notice	5
Drill a Hole for the Faucet in a Porcelain Sink	5
Punch a Hole for the Faucet in a Stainless Steel Sink	5
Installation of Faucet	6
Connect Blue Tube from the RO to the Fuacet	6
Adapt-a-Valve Installation	7
Connect the Green and Black Tubing	7
Mounting the RO Module	7
Tank Ball Valve Installation	7
Blue Tube Connection (From the RO Module to TANK)	8
Start up Instructions	8
6 Month System Maintenance	9
Annual Maintenance	10
Membrane Maintenance	.11
Check Air Pressure in the Tank	12
Trouble Shooting	12
Faucet Adjustment	13
Performance Data Sheet	14
Arsenic Fact Sheet	15
Flow Chart	16
Parts List	17
Other Products by Premier	-20
Varranty Registration	-22
Service Record	23
Warranty	24

Operational Parameters

Installation must comply with State and local plumbing regulations. This system is to be installed to treat cold water only.

Operating Temperatures:	Maximum 100°F (37.8°C)	Minimum 40°F (4.4°C)
Operating Pressure:	Maximum 85 psi (6.0 kg/cm ²)	Minimum 40 psi (2.80 kg/cm ²)
pH Parameters:	Maximum 11	Minimum 2
Iron:	Maximum 0.2 ppm	
TDS (Total Dissolved Solids)	< 1800 ppm	
Turbidity	< 5 NTU	

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. 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 85 psi a pressure regulator is recommended and if over 100 psi 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. Premier supplies speciality filters (part number 107008) that can be used if copper tubing follows the Reverse Osmosis unit. Be sure to follow any state or local regulations during installation.

* Note: RO unit must be installed a minimum of 25 Pipe feet from water heater *



System includes:

RO module, 24 volt Pump, 3 gal Storage tank, Long reach faucet, Manual, Warranty Card, Parts Bag (2 Water line fitting valves, 2 Washers, Transformer, 2 Mounting screws, 1 Teflon tape roll, 2 Brass inserts, 2 Plastic sleeves, 1 Ball valve)

If any of the items are missing please contact Premier at 1-800-752-5582 prior to installing

Tools recommended for installation



7/16" Drill bit for faucet Channel lock pliers Phillips Screw Driver 1/2" - 5/8" Open End Wrench Adjustable Wrench Sharp knife Electric Drill

IMPORTANT NOTICE

Not recommended for use on homes equipped with tankless water heaters. Contact Premier for specific details regarding this unit and tankless water heaters.

System was tested in a laboratory setting utilizing a hot water heater of 40 gallons set at 120° F. Performance may vary if your heater is smaller than 40 gallons or set above 120° F, contact the manufacturer for additional details.

System should not be used on homes equipped with a backflow prevention on the hot water heater. This device is 100% efficient, as no water is lost to drain in the production of the RO water.

Drill a Hole for the Faucet in a Porcelain Sink

Note: Most sinks are pre drilled with 1 ½" or 1 ¼" 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. Premier accepts no responsibility for damage resulting from the installation of faucet.

- Step 1 Determine desired location for the RO faucet on your sink and place a piece of masking tape on 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 1/2" 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 Make sure the surroundings of the sink are cooled before mounting the faucet to the sink after drilling and remove all sharp edges.

Punch a Hole for the Faucet in a Stainless Steel Sink

- Note: If mounting faucet to a Stainless Steel Sink you will need a 1/2" minimum hole punch. The faucet opening should be centered between the back splash and the edge of the sink, ideally on the same side as the vertical drain pipe.
- Step 5 Drill a $\frac{1}{2}$ " pilot hole. Use a $\frac{1}{2}$ " Hole Punch and an adjustable wrench to punch the hole in the sink.

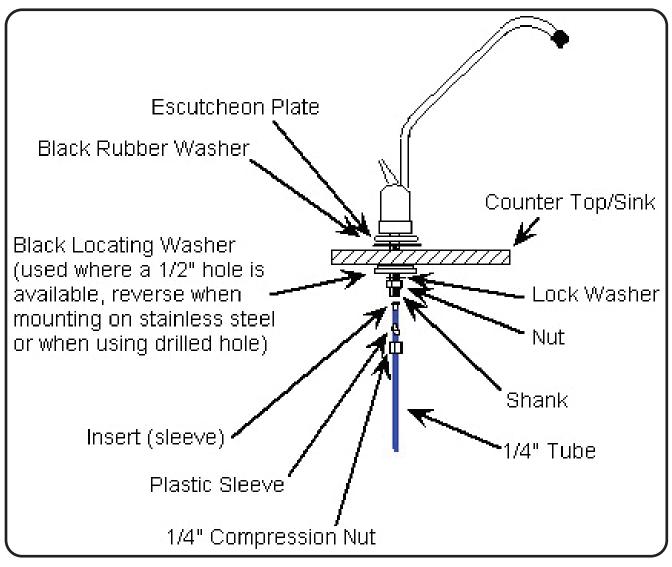
The faucet can now be installed.

5





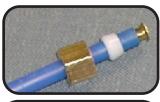
Installation of Faucet



- Step 6 Place the escutcheon chrome plate and the black rubber washer on the faucet shank. (Parts found in faucet parts bag).
- Step 7 Insert the faucet shank through the hole in sink and let it rest on the sink top.
- Step 8 From the underside of the sink, slide on the locating washer, lock washer and brass nut onto the shank. Check orientation of faucet then tighten brass nut securely.

Connect Blue Tube from the RO to the Faucet

- Step 9 Locate the blue 1/4" tube attached to the RO module labeled "Faucet". Remove a brass nut, plastic sleeve and brass insert from the parts bag. To assemble, place the brass nut on the blue tube first, then the sleeve (small tapered end of sleeve must point to the end of tube) and then push the brass insert all the way into the end of the tube. (See Picture)
- Step 10 Insert the blue tube into the end of the faucet shank and use a wrench to tighten the brass nut securely.





Adapt-a-Valve Installation

Water supply line to the system must be from the cold water supply line only. Hot water connection is used for rinse water return and must be connected for system to function correctly.



Configuration for 3/8" (With Brass Fittings) * Insert White Washer



Hot Cold (Return) (Supply)



Configuration for 1/2" (Without Brass Fittings)

- Step 11 Turn off the cold and hot water supply to the faucet by turning the angle stop valve completely off.
- Step 12 Attach the Adapt-a-Valves as illustrated in the three photos above, choosing the configuration that fits your plumbing.
- WARNING: Do not use teflon tape with the Premier Adapt-a-Valve.

Connect the Green and Black Tubing

Step 13 Locate the 1/4" green tubing attached to the RO system. Insert the open end of the green 1/4" tube into the open 1/4" quick connect fitting on the **COLD** water feed adapta-a-valve making sure the tube is pushed in all the way to the tube stop. Repeat the procedure to connect black tubing from the RO module to the hot water, return adapt-a-valve.

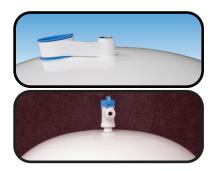
Mounting the RO Module

Step 14 Determine the best location for the RO Module to be mounted and allow for future system maintenance. Use a Phillips screwdriver and secure the screws 5 3/4" apart and 16" from the bottom of the cabinet.



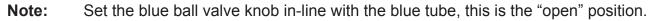
Tank Ball Valve Installation - Part#: 134018

- Step 15 Teflon tape must be applied in a clockwise direction. Wrap (7 to 12 turns) around the male pipe threads (MPT) on the stainless steel fitting on top of the tank.
- Step 16 Thread the quick connect ball valve (supplied in the parts bag) onto the stainless steel connector on the tank.Note: Do not over-tighten plastic connections.



Blue Tube Connection (From The RO Module To TANK)

Step 17 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 to the tank and cut it to length leaving a straight, square edge. 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.



Start up Instructions



Warning: To prevent the possibility of electrical shock, clean up any water on cabinet floor and dry all water from outside of RO unit.

Step 1 Turn on the incoming hot **and** cold water angle stop valves. Turn on the water adapt-a-valves. Check the system for leaks and tighten fittings as necessary.

Note: Check daily over the next week to ensure no leaks are present.

- Step 2 Plug the (24 volt) transformer power cord connector into the RO system wire harness connector (labeled transformer.)
- Step 3 Plug the transformer into the electrical outlet under the sink.
- Step 4 Ensure ball valve on tank is open.
- Step 5 Open the RO faucet and leave it open until water begins to drip. Then close the faucet. The tank will take approximately 4 hours to fill.
- Note: If no water comes out of the RO faucet after a few minutes check the power outlet. It is possible that the power outlet you used for the RO unit is controlled by the garbage disposal switch. To test - Unplug the garbage disposal and flip the garbage disposal switch to "on". If the RO pump turns on and water starts to drip out of the RO faucet you will need to connect the system to a different power outlet socket.
- **Note:** Water may be cloudy or milky due to air in the system and carbon particles flushing out of the final polishing filter. This condition will resolve itself after flushing a couple of tanks of water.
- 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. Repeat this step two more times. The fourth tank can be used for drinking. This process should take approximately 24 hours to complete.

This flushing procedure is only necessary after the initial installation and after replacing the RO membrane.





6 Month System Maintenance - Filter Kit #560038

*Order filters by calling 1-800-752-5582 or buy online at www.PremierH2o.com.

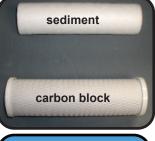
Items needed:

√ Stage 1 - Sediment Filter (part #: 104017)

√ Stage 2 - Carbon Block Filter (part #: 101009-White End Caps)

- *Note:* The filter wrench pictured (Part # 164003) may be purchased from Premier to aid with twisting off filter housings but is not required.
- Step 1 Close the ball valve on the RO storage tank and open the RO Faucet.
- Step 2 Turn off the incoming cold water supply to the RO at the adapt-a-valve and unplug the power transformer from the electrical outlet.
- Step 4 For more leverage you may leave the RO module attached to wall of cabinet. If you are unable to access the module while it is mounted, remove it prior to changing filters. Starting with the closest housing (Stage 1), remove it by turning it clockwise (left), empty water, then discard filter and repeat for the 2nd housing (Stage 2).
- Step 5 Clean the filter housings (bowls) with a mild soap solution and rinse with water. Check O-rings and lubricate with water soluble lubricant. <u>KY Jelly® or other water based lubricants may be used</u>. <u>Petroleum</u> <u>based lubricants (such as Vaseline®)</u> **must not be used**.
- Caution: Before re-installing the filter bowls back on to the system, check O-rings to make sure they are still in place. *
- Step 6 Insert a new sediment filter (cloth like appearance) into the 1st filter housing which is the one on the water inlet side (green tubing from the adapt-a-valve) of the RO system and re-install housing.
- Step 7 Insert the new Carbon Block filter (White end caps & plastic netting) into the second filter bowl and re-install housing.









- Step 8 Plug the power transformer back into the electric outlet and turn cold water supply on to the unit at the adapt-a-valve.
- Step 9 Close the RO faucet and open the ball valve on the RO storage tank. Your system is ready for use.

Annual Maintenance - Filter Kit #560032

 $\sqrt{\text{Stage 1 - Sediment Filter}}$ (PN# 104017) $\sqrt{\text{Stage 2 - Carbon Block Filter}}$ (PN# 101009)

 $\sqrt{1/4}$ Cup of common household bleach.

 $\sqrt{\text{Stage 4} - 10^{\circ}}$ Final Polishing Inline filter (PN 560010)

NOTICE: Sanitizing of unit is recommended - RO storage tank must be drained.

Perform steps 1 through 5 in the Six Month System Maintenance (Page 13). Step 1:

NOTICE: If not sanitizing the system, skip to step 11

- Remove the RO membrane from its housing and rest in a clean sanitary place. (Refer Step 2: to "Membrane Replacement" section on page 11 for directions on removing the membrane). Replace cap onto empty membrane housing and re-connect green tubing.
- Step 3: Leaving the filters out, replace stage 2 empty filter housing (hand tight) onto unit. Measure & pour 1/4 cup of common household bleach into the 1st filter housing (Stage 1) and hand tighten onto unit.

A DANGER



IF BLEACH GETS IN EYES: Hold eye open and rinse slowly and gently with water for 15 - 20 minutes. Remove contact lenses if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

- Step 4: With the RO faucet in the closed position turn on the incoming water supply to the system by turning the adapt-a-valve counter clockwise. Let the unit fill with water (approximately 8 minutes) allowing the bleach to dilute.
- Step 5: Let the system sit idle for 1 minute
- Step 6: Drain the system completely
- Let the system fill again (approximately 8 minutes) and sit idle for 10 minutes before Step 7: draining the system again.
- Step 8: Turn off the incoming water at the adapt-a-valve and open the faucet to make sure all the water has been drained
- Step 9: Open the membrane housing and re-install the RO membrane while making sure not to kink the O-rings. (Refer to "Membrane Replacement" section on page 16 for directions on installing the membrane). Tighten the cap back on the housing and reconnect green tubina.

Step 10: Remove filter housings Stage 1 and 2 and empty water.

NOTICE: Before re-installing the filter bowls back on to the system , check O-rings to make sure they are still in place and lubricate with water soluble lubricant.

- Insert the new sediment filter (cloth like appearance) into the 1st filter housing which is Step 11: the one on the water inlet side (green tubing from the adapt-a-valve) of the RO system and re-install housing.
- Insert the new Carbon Block filter (White End Caps) into the 2nd housing and re-install Step 12: housing.
- Step 13: The final in-line filter is located on the blue tube between the storage tank and the RO faucet. Remove it by loosening the compression fittings on both ends of the filter and replace with new filter. (Discard used final filter after sanitizing)
- NOTICE: The arrow on the final filter must be pointing towards the RO faucet / away from the RO storage tank.

TIP: This is a good time to check the air pressure in your storage tank. For instructions please see page 17.

Step 14: Follow Steps 8 through 10 in the Six Month System Maintenance (Page 14) for startup directions.

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 Premier to assure the same efficiency and contaminant reduction performance.

Membrane Replacement

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

- NOTE: A water sample may be sent to Premier 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". Premier will test the water and mail or call you with the results.
- Step 1: Turn off the incoming water supply to the RO system.
- Step 2: Open the RO Faucet and allow water to drain from the tank until it is completely empty.
- Step 3: Disconnect the green tube from the elbow on the end cap of the membrane housing.

Removing the membrane:

- Step 4: Remove the end cap from the membrane housing by turning it counter clockwise to loosen.
- Step 5: Using a pair of pliers, grip the PVC tube of the RO membrane and pull firmly on the membrane to remove from the housing and discard.

Installing the membrane:

Step 6: Lubricate the O-rings on the new membrane with a water soluble lubricant such as KY Jelly ®. Insert the end with the two black O-rings on the PVC tube first into the housing.





- Step 7: Once membrane has been inserted into the housing you must take your thumbs and give a firm push to properly seat the membrane. Replace membrane housing cap and tighten.
- Step 8: Re-attach the green tube to the elbow fitting on the end cap of the membrane housing.
- Step 9: Follow the Start Up Instructions on page 8.

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 a blue plastic cap.

- Step 1 Turn off the incoming cold water supply to the RO at the adapt-a-valve clockwise until it stops. (Follow the green tube away from the RO system to find the adapt-a-valve.)
- 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)

Trouble shooting

Problem	Cause	Solution		
Low/slow production	Excessive air pressure in tank	Relieve pressure at schrader valve on tank (se to 7 psi with the tank empty)		
	Pump not operating	Wiring connection broken (plug 110 AC wall plug back in at wall and/or reconnect the 24 VAC wire harness connectors) Replace pump if needed		
	Fouled membrane	Replace membrane		
	Plugged pre-filters	Replace filters		
	Crimped tubing	Check tubes to make sure they are not kinked		
	Angle stop or water line valve			
	not fully opened	handle counter clockwise until it stops		
Milky colored water	Air in the 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 changes,		
		drain tank 1 to 2 times.		
Faucet Dripping	Needs adjustment	see page 12		
Pump short cycles	Ball valve on tank closed	Open the ball valve on the top of the tank		
	Blue tube blocked between	Remove kinked/damaged section and replace if		
	the tank and RO system			
Powl looks at the ten after	Faulty pressure switch	Call for technical support		
Bowl leaks at the top after	Damaged/Dry O-ring	Lubricate with water soluble lubricant or replace		
changing the filters		O-ring as necessary (Do not use Vaseline or		
		other petroleum based lubricants)		
Pump constantly running		Call for technical support		
Diversed are filters	Faucet left on	Close faucet and let tank fill for 2 to 3 hours		
Plugged pre-filters		Replace filters		

Adjust Faucet

If the faucet has developed a drip it can be corrected by following the steps outlined below.

Step 1 Remove faucet Spout first. Position both thumbs on the back edge of the lever and push forward.

Step 2 Lever will slide forward and completely off of the faucet base.

Step 3 Small brass tee can be turned 1/2 turn, counterclockwise, to adjust the tension on the black lever. This adjustment may be necessary to stop slow drips from tip of faucet. You may need to repeat process until the faucet does not drip. Brass tee must always end up facing across body of faucet in order to slide black lever on.







Performance Data Sheet ZRO-4 ZeroWaste[®] RO

Watts Premier 8716 W Ludlow Drive Suite #1 Peoria, AZ 85381 480) 675-7995

GENERAL USE CONDITIONS: 1. System to be used with municipal or well water sources treated and tested on regular basis to insure bacteriological safe quality. Do not use with water that is microbiologically unsafe or unknown quality without adequate disinfection before and after the system. Systems certified for cyst reduction may be used on disinfected water that may contain filterable cysts. 2. Operating Temperature: Maximum: 100°F (40.5°C) Minimum: 40° (4.4°) 3. Operating Water Pressure: Maximum: 100 psi (7.0kg/cm2) Minimum: 40 psi (2.8kg/cm2) 4. pH 2 to 11 5. Hardness of more than 10 grains per gallon (170 ppm) may reduce TFM membrane life expectancy. 6. Recommend TDS (Total Dissolved Solids) not to exceed 1800 ppm. RECOMMENDED REPLACEMENT PARTS AND CHANGE INTERVALS: Depending on incoming feed water conditions replacement time frame may vary. Change Time Description Sediment Pre-filter (104017); Carbon Pre-filters (101009) 6 months: 12 months Final Carbon filter (100017) 3 to 5 years R.O. Membrane (110009) This system has been tested according to NSF/ANSI 58 for reduction of the substances below. The concentration of the indicated substances in water entering the system was reduced to a concentration less than or equal to the permissible limit for water leaving the system as specified in NSF/ANSI 58. This system has been tested for the treatment of water containing pentavalent arsenic (also known as As (V), As (+5), or arsenate) at concentrations of 0.30 mg/L or less. This system reduces pentavalent arsenic, but may not remove other forms of arsenic. This system is to be used on water supplies containing a detectable free chlorine residual at the system inlet or on water supplies that have been demonstrated to contain only pentavalent arsenic. Treatment with chloramine (combined chlorine) is not sufficient to ensure complete conversion of trivalent arsenic to pentavalent arsenic. Please see the Arsenic Facts section of the installation manual for further information. Avg. Eff. % Reduction pH Max Eff. Avg. In. Pressure Inf. challenge Max Allowable concentration concentration

							mg/L	mg/L
Arsenic (Pentavalent)	334.615 ug/L	5.0385 ug/L	98.4%		50psi	19 ug/L	0.30±10%	0.010
Barium Reduction	10.2 mg/L	0.207 mg/L	97.9%	7.24	50psi	0.3 mg/L	10.0±10%	2.0
Cadmium Reduction	0.036 mg/L	0.0005 mg/L	98.6%	7.49	50psi	0.0007	0.3±10%	0005
Chromium (Hexavalent) 0.15 mg/L	0.013 mg/L	91.3%	7.24	50psi	0.03	0.3±10%	0.1
Chromium (Trivalent)	0.17 mg/L	.01 mg/L	94.1%	7.24	50psi	0.01	0.03±10%	0.1
Copper Reduction	3.1 mg/L	0.03 mg/L	99.0%	7.64	50psi	0.04	3.0±10%	1.3
Fluoride Reduction	8.0 mg/L	0.5 mg/L	93.9%	7.49	50psi	0.7	8.0±10%	1.5
Lead Reduction	0.15 mg/L	0.002 mg/L	98.6%	7.49	50psi	0.003	0.15±10%	0.010
Radium 226/228	25 pCi/L	5 pCi/L	80.0%	7.24	50psi	5 pCi/L	25pCiL±10%	5 pCi/L
Selenium	0.10	0.008	92.0%		50psi	0.011	0.10±10%	0.05
Turbidity	10.2 mg/L	0.26 mg/L	97.5%			0.83	11±1 NTU	0.5 NTU
RECOVERY - 16.75%			GALLONS	- 24 8 GP	D		EFFICIENCY - 12.0	%

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. 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. There is an average of 4 gallons of reject water for every 1 gallon of product water produced. Testing performed under standard laboratory conditions, actual performance may vary. Refer to owners manual for further maintenance requirements and warranty information.

Phone: (480) 675-7995

Fax: (623) 866-5666

www.PremierH2o.com

Arsenic Fact Sheet

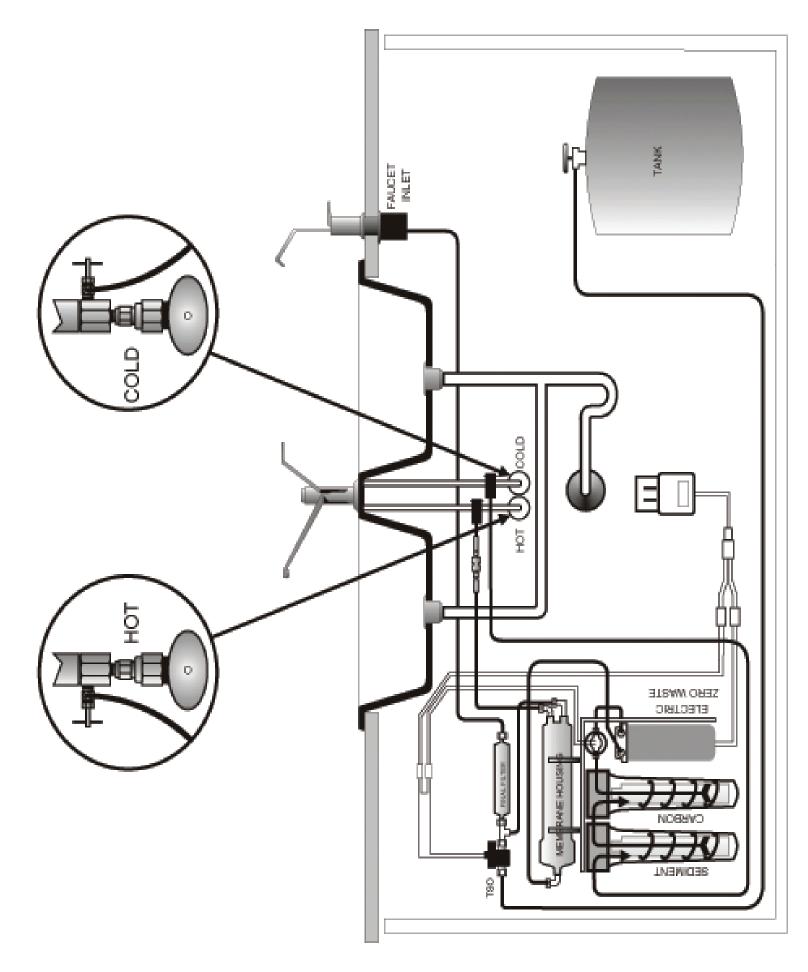
Arsenic (As) is a naturally occurring contaminant found in many ground waters. Arsenic in water has no color, taste or odor. It must be measured by an arsenic test kit or lab test. Public water utilities must have their water tested for arsenic. You can obtain the results from your water utility contained with in 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.

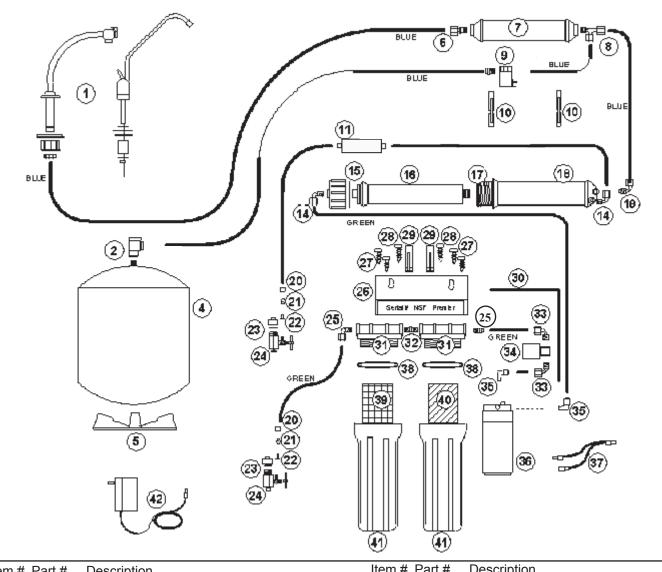
There are two forms of arsenic: pentavalent arsenic (also called As (V), As (+5))and trivalent arsenic (also called As (III), As (+3)). In non chlorinated well water, arsenic may be pentavalent, trivalent, or a combination of both.

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) may not convert all the trivalent 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 Premier reverse osmosis system is designed to remove 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.

The RO component of this Premier reverse osmosis system must be maintained in order to ensure proper contaminant removal from your water. As detailed out on Page 2 of this manual, prefilters should be replaced every six months, the post filter once a year, and the RO element with in two to five years. Specific component identification and ordering information can be found in the installation/operation manual maintenance section, by phone at 1-800-752-5582 or on-line <u>www.PremierH2o.com</u>.





l It	em #	Part #	Description	Item #	Part #	Description
1		116023	FAUCET-AG-CHROME	26	137013	BRACKET-4SV-STEEL WHITE
2			VALVE-BALL-PLAS-ELB	27	146001	SCREW- #10-3/4" PHIL PAN HEAD
4		119007	TANK PRESS 3 GAL WHITE	28	146004	SCREW- #10-1" PHIL PAN HEAD
5	5	119028	TANK STAND	29	164006	CLIP-MTG-MEM-VESSEL
6	;	125017	CON-PL-1/4C X 1/4M	30	337002	BRACKET 16 GAUGE CRS
7	,	100017	GAC-IL-10" 1/4F	31	113007	LID-WHITE 1/4" FPT UNA
8		125064	TEE MALE RUN 1/4 X 1/4 M	32	131021	HEX NIPPLE-BR-1/4 HEAVY DTY
9)	152032	SWITCH PRESSURE 60 PSI TSO	33	125088	ELB-90 - 1/4 X 1/8 M - WHITE
1	0	164010	CLIP-DOUBLE-MEM TO IL	34	152035	SOLENOID VALVE ELEC
1	1	610019	VALVE-CHECK QUICK CON	35	125089	ELB-90- 1/4 X 1/4 INSERT
1	4	125031	ELB-PL-1/4CX1/8M-90	36	152008	PUMP BOOSTER
1	5	125038	O-RING SET FOR VESSEL	37	152044	WIRE HARNESS FOR ESO
1	6	110005	MEM-TFM-25 GPD-DRY	38	113029	O-RING FILTER HOUSING
1	7	113038	O-RING SET FOR VESSEL	39	104017	SED-SPUN 10" CTG
1	8	113032	VESSEL-MEM-HOUSING-RES	40	101009	CARBON BLOCK 10" 5 MIC
1	9	134011	VALVE-CHECK-PLA-ELBOW1/4CX1/8M	41	113024	HOUSING FILTER 10" WHITE
2	0	146032	NUT- 8/32 STEEL	42	252004	TRANSFORMER
2	1	131012	DELRIN SLEEVE - PLASTIC	43	146024	SCREW 8/32 X 1/4 PAN HEAD
2	2	131017	INSERT	44	610115	
2	3	146025	ADAPTA VALVE WASHER	45	610117	BLACK TUBING 1/4 X 4"
2	4	134007	VALVE-ADAPTA VALVE	46	610113	BLUE TUBING 1/4 X 4"
2	:5	125034	ELB-PL-1/4C X 1/4M-90	47	610109	GREEN TUBING 1/4 X 4"

. ..

SERVICE RECORD								
DATE OF PURCHASE		DATE OF INSTAL						
Date of (6 mos.) Maintenance 1st stage Sediment		(6 mos.) 2nd stage Carbon Block	(1 yr.) Final Filter Carbon	(2-5 yrs.) TFM Memb.	OTHER			
NOTES:		· · · ·						



WHAT YOUR WARRANTY COVERS:

If any part of your ZeroWaste[®] Reverse Osmosis System is defective in workmanship (excluding replaceable filters and membranes), return unit after obtaining a return authorization (see below), less tank, within 1 year of original retail purchase, Watts Premier will repair or, at Watts Premier's option, replace the system at no charge.

HOW TO OBTAIN WARRANTY SERVICE:

For warranty service, call 1-800-752-5582 for documentation and a return authorization number. Once the return authorization number has been created, ship your Reverse Osmosis unit (less tank) to our factory, freight and insurance prepaid, with proof of date of original purchase. Include a note stating the problem experienced and include your name, address and your return authorization number. No returns will be accepted without the proper return authorization number. Watts Premier will repair it, or replace it, and ship it back to you prepaid.

WHAT THIS WARRANTY DOES NOT COVER:

This warranty does not cover defects resulting from improper installation, (contrary to Watts Premier's printed instructions), from abuse, misuse, misapplication, improper maintenance, neglect, alteration, accidents, casualties, fire, flood, freezing, environmental factors, water pressure spikes or other such acts of God.

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 7 grains per gallon, or 120 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 85 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 micro biologically unsafe or of unknown quality without
- 9. 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 charges incurred due to professional 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 PREMIER WILL NOT BE RESPONSIBLE FOR ANY IMPLIED WARRANTIES, INCLUDING THOSE OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. WATTS PREMIER WILL NOT BE RESPONSIBLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES, INCLUDING 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 PREMIER'S RESPONSIBILITIES REGARDING THIS EQUIPMENT.

OTHER CONDITIONS:

If Watts Premier chooses to replace the equipment, may replace it 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.

YOUR RIGHTS UNDER STATE LAW:

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

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**