

# Solo I™



REVERSE OSMOSIS  
SYSTEM

USER MANUAL

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The Solo I Reverse Osmosis System is a durable piece of equipment which, with proper care, will last for many years. This User Manual outlines installation, operation, maintenance and troubleshooting details vital to the sustained performance of your system.

If your system is altered at the site of operation, or if the feedwater conditions change, please contact your local dealer or distributor to determine the proper recovery for your application.

**DO NOT UNDER ANY CIRCUMSTANCE REMOVE ANY CAUTION, WARNING, OR OTHER DESCRIPTIVE LABELS FROM THE SYSTEM.**

**PRIOR TO OPERATING OR SERVICING THE REVERSE OSMOSIS SYSTEM, THIS USER'S MANUAL MUST BE READ AND FULLY UNDERSTOOD. KEEP THIS AND OTHER ASSOCIATED INFORMATION NEAR THE SYSTEM FOR FUTURE REFERENCE.**

Defined below are the two safety headings used throughout this User Manual's text.



**WARNING: INDICATES STATEMENTS THAT ARE USED TO IDENTIFY DANGEROUS CONDITIONS OR PRACTICES. FAILURE TO FOLLOW WARNINGS COULD RESULT IN SERIOUS INJURY OR DEATH.**



**CAUTION: INDICATES STATEMENTS THAT ARE USED TO IDENTIFY CONDITIONS OR PRACTICES THAT COULD RESULT IN EQUIPMENT OR OTHER PROPERTY DAMAGE**

**STATEMENTS IN BOLD AND ALL CAPITALS ARE ADVISORY OR INFORMATIONAL STATEMENTS OF PARTICULAR IMPORTANCE TO THE HEADING UNDER WHICH THEY ARE FOUND.**

## PRECAUTIONARY STATEMENTS



**DO NOT USE WHERE THE WATER IS MICROBIOLOGICALLY UNSAFE OR OF UNKNOWN QUALITY WITHOUT ADEQUATE DISINFECTION BEFORE OR AFTER THE SYSTEM.**



**ALWAYS SHUT OFF THE FEEDWATER, AND RELIEVE PRESSURE BEFORE WORKING ON THE UNIT.**



**NEVER ALLOW THE UNIT TO FREEZE OR OPERATE WITH A FEEDWATER TEMPERATURE ABOVE 85°F.**



**DO NOT PERMIT CHLORINE TO BE PRESENT IN THE FEED WATER.**

**DO**

- Change the cartridge filters regularly.
- Monitor the system and keep a daily log.
- Run the system as much as possible on a continuous basis.

**DON'T**

- Permit chlorine to enter or be present in the feed water.
- Shut down the system for extended periods.
- Operate the system with insufficient feed flow or pressure.



Nothing has a greater effect on a reverse osmosis system than the feed water quality. If your feed water conditions change, please contact your local dealer or distributor to determine the proper recovery for your application. Before starting the RO system it is strongly suggested to obtain an up to date water analysis of the water to be treated.



**IT IS VERY IMPORTANT TO MEET THE MINIMUM FEED WATER AND OPERATING REQUIREMENTS OUTLINED IN THIS MANUAL. FAILURE TO DO SO WILL CAUSE DAMAGE OR FAILURE OF THE SYSTEM COMPONENTS AND MEMBRANES. DAMAGE TO THE SYSTEM DUE TO OPERATION OUTSIDE OF THE SPECIFICATIONS OUTLINED IN THIS MANUAL WILL VOID THE MANUFACTURERS WARRANTY.**

## OPERATING LIMITS\*

Design Temperature, °F	77	Maximum SDI Rating	< 5
Maximum Feed Temperature, °F	85	Maximum Turbidity, NTU	< 1
Minimum Feed Temperature, °F	40 <sup>†</sup>	Maximum Free Chlorine, ppm	< 0.1
Maximum Ambient Temperature, °F	120	Maximum TDS, ppm	1000 <sup>†</sup>
Minimum Ambient Temperature, °F	40	Maximum Hardness, gpg	0
Maximum Feed Pressure, PSI	80	Maximum pH (continuous)	8
Minimum Feed Pressure, PSI	40	Minimum pH (continuous)	4

\*If any of the feed water parameters are not within the limits given, consult your local dealer or distributor for assistance.

<sup>†</sup>Low temperatures and feed water quality, such as high TDS levels will significantly affect the systems production capabilities and performance. Computer projections must be run for individual applications which do not meet or exceed minimum and maximum operating limits for such conditions.



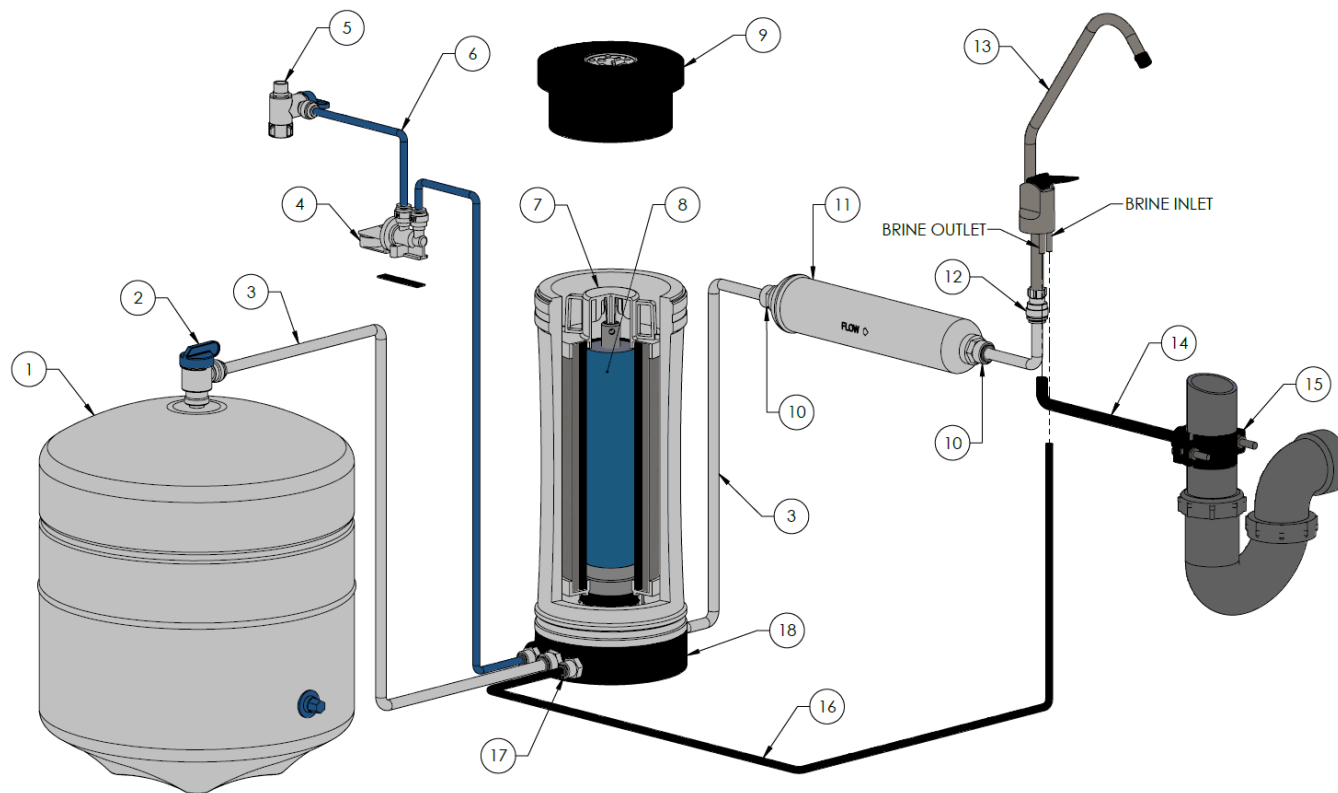
**HIGHER TDS AND/OR LOWER TEMPERATURES WILL REDUCE THE SYSTEM'S PRODUCTION.**

MODELS	SOLO I
<b>Flow Rates <sup>††</sup></b>	
Permeate Flow Rate (gpd / lpd)	50 / 189
Feedwater TDS max (ppm)	1000
Product to Waste Ratio	1:2
<b>Connections</b>	
Feed	1/4" QC
Permeate	3/8" QC
Concentrate	1/4" QC
<b>Membrane</b>	
Membrane Quantity	1
Membrane Size	1812
Nominal TDS Rejection %	96
<b>System Dimensions</b>	
Approximate Dimensions L x W x H (in / cm)	16.5 x 11 x 15 / 41.91 x 27.94 x 38.10
Approximate Weight (lbs / kg).	15 / 7

<sup>††</sup> Product flow and maximum recovery rates are based on feedwater conditions as stated above. Do not exceed recommended permeate flow.

**Warranty Evaluation Test Conditions:** Permeate flow rates and salt rejection based on the following test conditions – 550 ppm, filtered and dechlorinated municipal tap water, 77°F / 25°C, 15% recovery, 7.0 pH and the specified operating pressure for membrane element type. Data taken after 60 minutes of operation.





ITEM NUMBER	PART NUMBER	DESCRIPTION
1	200931	PERMEATE STORAGE TANK
2	211623	PERMEATE STORAGE TANK VALVE
3	201026	PRODUCT WATER LINE TO TANK AND FAUCET (3/8" WHITE TUBING)
4	207797	1/4" QUICK CONNECT LEAK DETECTOR
5	211478	1/4" QUICK CONNECT FEED WATER ADAPTOR (FOR 3/8" WATER SUPPLY LINE)
6	211663	FEED WATER LINE (1/4" BLUE TUBING)
7	211477	5 MICRON SEDIMENT AND SINTERED CARBON BLOCK PRE FILTER
8	211479	SOLO I REVERSE OSMOSIS MEMBRANE ELEMENT
9	211745	SOLO I REVERSE OSMOSIS SYSTEM LID
10	211481	3/8" QUICK CONNECT FITTING (1/4" MNPT THREAD)
11	200654	INLINE GRANULATED ACTIVATED CARBON POST FILTER
12	211482	3/8" QUICK CONNECT FAUCET ADAPTOR
13	207786	CHROME FAUCET WITH AIR GAP CONNECTION
14	201028	AIR GAP DRAIN LINE (3/8" BLACK TUBING)
15	211622	3/8" QUICK CONNECT DRAIN SADDLE
16	201018	SYSTEM DRAIN LINE FROM SYSTEM TO AIR GAP (1/4" BLACK TUBING)
17	200988	CONCENTRATE FLOW RESTRICTOR (INSTALLED INTO END OF TUBING)
18	211456	SOLO I REVERSE OSMOSIS SYSTEM

## PRE-FILTRATION

Solo I systems are supplied with an integrated 5 micron polypropylene sediment and sintered carbon filter (item 7, pg. 9). Change the filtration cartridge every 6 months.



**THE SYSTEM MUST BE OPERATED ON MUNICIPAL TAP WATER ONLY.**

## POST-FILTRATION

Solo I systems are supplied with an in-line granulated activated carbon post filter (item 11, pg. 9). Change the filtration cartridge every 6 - 12 months.



## TUBING AND LOCKING CLIPS KIT

John Guest tubing and locking clips are provided for creating process connections and securing the quick connect collets. Locking clips are only to be used on John Guest branded fittings.



## PERMEATE STORAGE

Solo I systems are supplied with a bladder storage tank (item 1, pg. 9). Tank storage capacity is dependent on feed pressure and tank pressure. Typical usable capacity ranges from 2.4 - 3.2 gallons. Ensure the tank pressure is kept around 7 psi, do not exceed 10 psi.



Solo I reverse osmosis systems come packaged with Solo – Series Residential Membranes. General membrane element performance characteristics are listed on the following membrane specification chart.

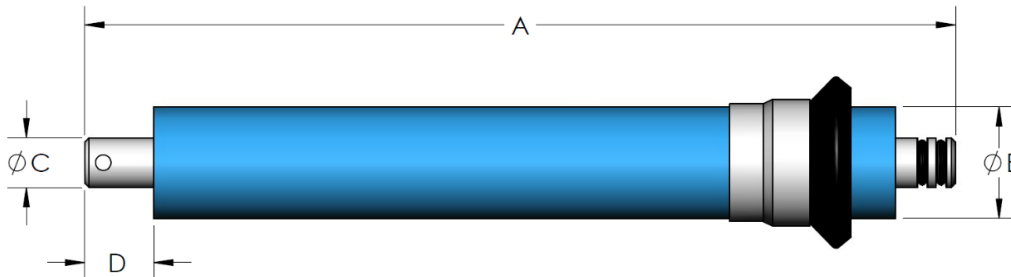
## MEMBRANE ELEMENT SPECIFICATIONS

### Solo – Series Residential Membranes (Standard)

Membrane Type: Polyamide Thin – Film Composite	pH Range, Short Term Cleaning (30 Min.): 2 – 12
Maximum Operating Temperature: 113°F (45°C)	Maximum Feed Silt Density Index (SDI): 5
Maximum Operating Pressure: 85 psi (5.86 bar)	Chlorine Tolerance: 0 ppm
pH Range, Continuous Operation*: 3 – 10	

Product Specifications				Dimension (inch / mm)			
Part Number	Description	Applied Pressure psi / bar	Permeate Flow Rate gpd / lpd	A	B	C	D
211479	SOLO – 1812 – 50	60 / 4.13	50 / 189.30	11.73 / 298.00	1.69 / 43.00	0.67 / 17.00	0.85 / 23.60

**Warranty Evaluation Test Conditions:** Permeate flow and salt rejection based on the following test conditions – 550 ppm, filtered and dechlorinated municipal tap water, 77°F / 25°C, 15% recovery and the specified operating pressure. Minimum salt rejection is 96%. Permeate flows for warranty evaluation may vary +/-20%. Maximum pressure drop at 10 psig / 0.69 bar.



Under certain conditions, the presence of free chlorine, chloramines and other oxidizing agents will cause premature membrane failure. Since oxidation damage is not covered under warranty, the manufacturer recommends removing all oxidizing agents by pretreatment prior to membrane exposure. Please contact the manufacturer or your supplier for more information.

It is recommended that systems using these elements rinse the elements for 24 hours, prior to first use, to meet NSF/ANSI 58 Standard. The first full tank of permeate must be discarded. Do not use this initial permeate for drinking water or food preparation. Keep elements moist at all times after initial wetting. To prevent biological growth during prolonged system shutdowns, it is recommended that membrane elements be immersed in a preservative solution. Rinse out the preservative before use. For membrane warranty details, please contact the manufacturer or your supplier for more information.

If operating limits and guidelines given in this product specification sheet are not strictly followed, the warranty will be null and void. The customer is fully responsible for the effects of incompatible chemicals and lubricants on elements. Use of any such chemicals or lubricants will void the warranty. These membranes may be subject to drinking water application restrictions in some countries: please check the application status before use and these elements have

not been through the French approval process for use in potable water. The use of this product in and of itself does not necessarily guarantee the removal of cysts and pathogens from water.

Effective cyst and pathogen reduction is dependent on the complete system design and on the operation and maintenance of the system.

No freedom from infringement of any patent owned by the manufacturer or others is to be inferred. Because use conditions and applicable laws may differ from one location to another and may change with time, customer is responsible for determining whether products and the information in this document are appropriate for customer's use and for ensuring that customer's workplace and disposal practices are in compliance with applicable laws and other governmental enactments. The claims made may not have been approved for use in all countries. The manufacturer assumes no obligation or liability for the information in this document. AXEON reserves the right to update this information periodically for the purposes of quality and accuracy. NO WARRANTIES ARE GIVEN; ALL IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE ARE EXPRESSLY EXCLUDED

When choosing a location to install the system, select an area with enough room for service to be performed on the system. Do not install system in direct sunlight or subject the system to temperature extremes and/or excess humidity. Use a tube cutter for cutting the supplied tubing. These can be found in your local hardware store.

## TOOLS AND MATERIALS REQUIRED FOR INSTALLATION

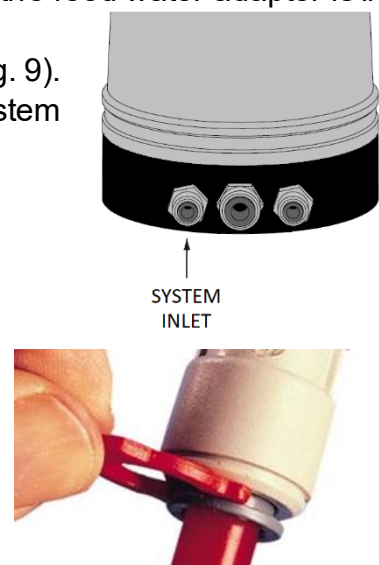
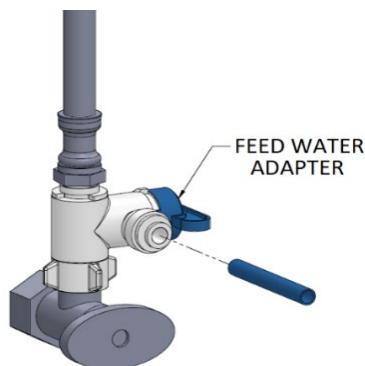
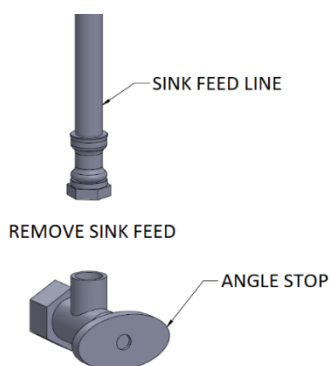
- Variable speed drill
- Carbide grinding burr or file
- 1/4" drill bit (for making pilot holes)
- Tubing cutter
- 3/8" drill bit
- 7/8" hole saw, or porcelain saw
- Adjustable wrench
- Tape measure
- Phillips screwdriver
- Teflon tape
- Protective eyewear

The above tools and materials are available in any local hardware stores. If you are uncomfortable performing the installation please contact a local dealer or distributor for installation services.

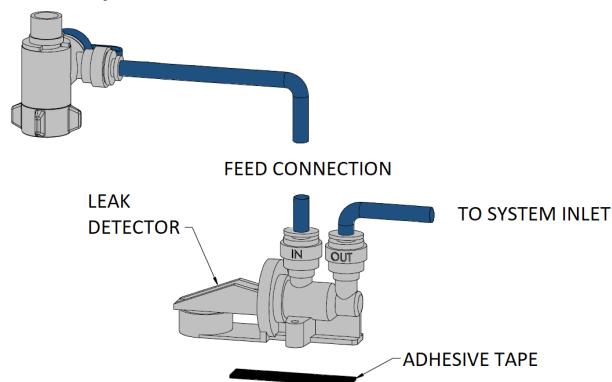
## FEED WATER CONNECTION

**BEFORE BEGINNING THE INSTALLATION, PLAN OUT HOW THE SYSTEM IS TO BE PLACED UNDERNEATH THE SINK OR COUNTERTOP. THIS WILL HELP IN PLANNING WHAT LENGTHS OF TUBING TO USE FOR SYSTEM CONNECTIONS.**

- Locate the cold-water angle stop valve underneath the sink and turn it off.
- Relieve the pressure by opening the cold-water line and disconnect the sink feed line.
- Install the feedwater adapter (item 5, pg. 9) to the angle stop valve.
- Insert the blue feed line tubing (item 6, pg. 9) into quick connect port of feed water adapter.
- Connect the sink feed line to the feed water adapter. Make sure the feed water adapter is in the closed position and turn on the angle stop valve.
- Connect the blue tubing to the inlet of the leak detector (item 4, pg. 9). Connect a section of tubing from the leak detector outlet to the system (item 18, pg. 9) inlet. Install the provided red locking clips.



- Use the provided double sided tape to attach the leak detector near the base of the system. Unwrap the provided compressed cloth and insert into the leak detector. Close the leak detector.

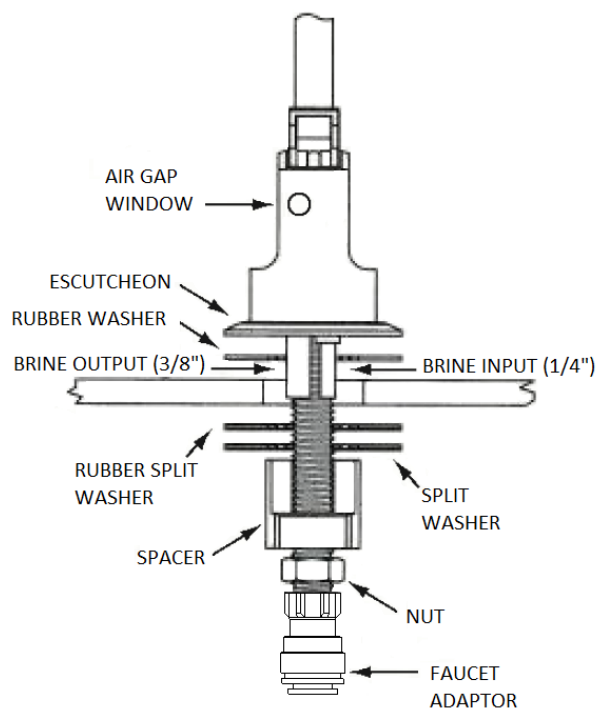


## FAUCET INSTALLATION



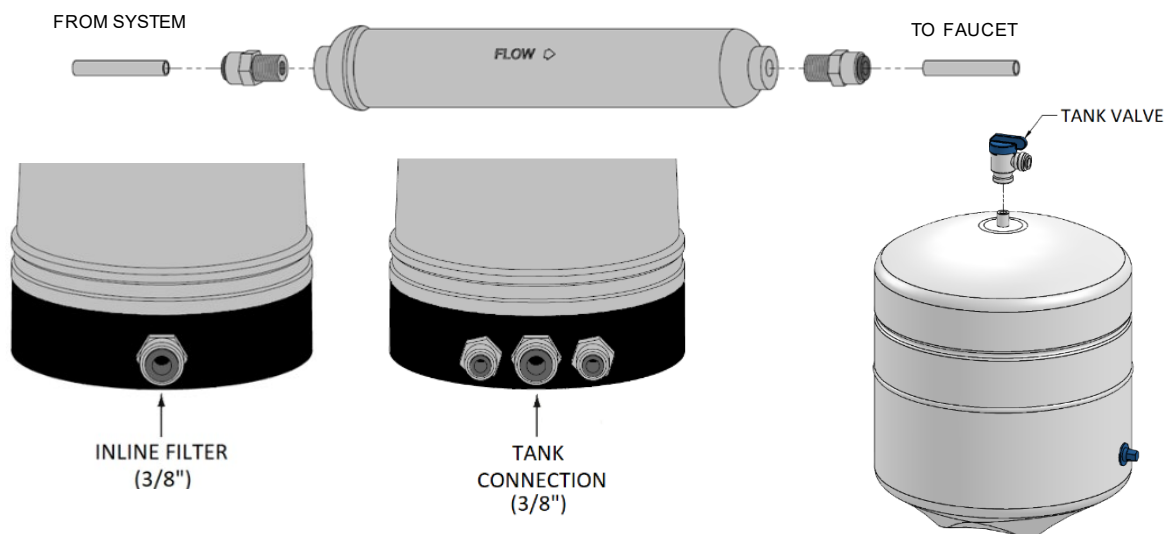
**INSTALLATION OF THIS FAUCET REQUIRES A 7/8" OPENING IN THE SINK OR COUNTERTOP. EXTREME CARE MUST BE TAKEN IN DRILLING THE HOLE FOR THE FAUCET. THE SURFACE OF MOST SINKS IS EXTREMELY HARD AND BRITTLE AND CAN EASILY BE CHIPPED OR CRACKED. IF YOU ARE UNCOMFORTABLE PERFORMING THIS PROCEDURE, PLEASE CONTACT YOUR LOCAL DISTRIBUTOR FOR INSTALLATION ASSISTANCE.**

- Locate the faucet (item 13, pg 9) and remove the contents from the packaging.
- Place the trim plate (escutcheon) over the faucet shank followed by the rubber washer.
- Insert the faucet shank through the provided hole with only the hardware described in the previous steps.
- From underneath the sink, slide the plastic spacer onto the shank of the faucet and start the nut. Tighten until there is still enough room to slide the rubber and metal split washers between the spacer and the underside of the sink. Please note that the spacer has a flat spot in order to clear the barbs for the air gap drain.
- Slide the rubber and metal split washers onto the shank. Ensure the rubber split washer is in contact with the underneath surface of the sink or countertop.
- Tighten the nut.
- Locate the faucet adaptor (item 12, pg. 9) and thread it on to the faucet shank hand tight. Once hand tight, tighten an additional 1/4 turn.



## PERMEATE (PRODUCT WATER) CONNECTION

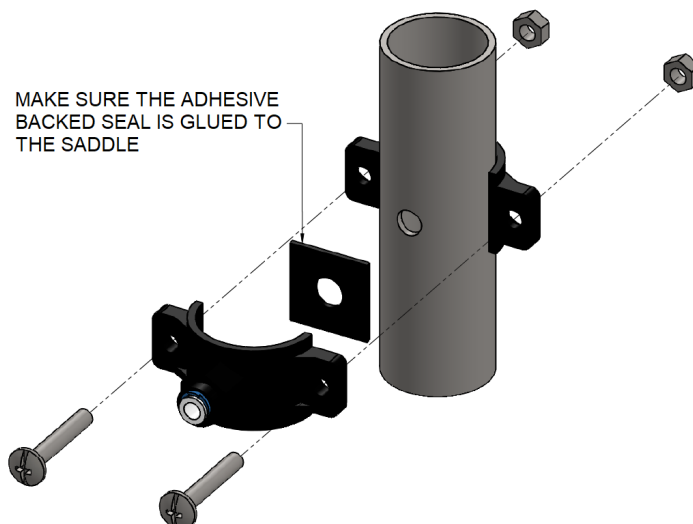
- Apply 3 – 4 wraps of Teflon tape to the threads of both 3/8" fittings (item 10, pg. 9) and install onto the inline filter.
- Cut a section of white 3/8" tubing (item 3, pg. 9) approximately 18 to 36 inches and connect the water filter to the system inline filter connection. Use the remaining 3/8" tubing to connect the inline filter (item 11, pg. 9) to the faucet (item 13, pg. 9) using the faucet adapter (item 12, pg. 9). Install the supplied red locking clips on the fittings.



- Apply 6 – 8 wraps of Teflon tape to the threaded stem on the top of the tank (item 1, pg. 9). Install tank valve (item 2, pg. 9) to the top of the tank. This only needs to be installed hand tight. Connect the tank valve to the system tank connection.
- Using the provided white 3/8" tubing. Install supplied red locking clips on the fittings.

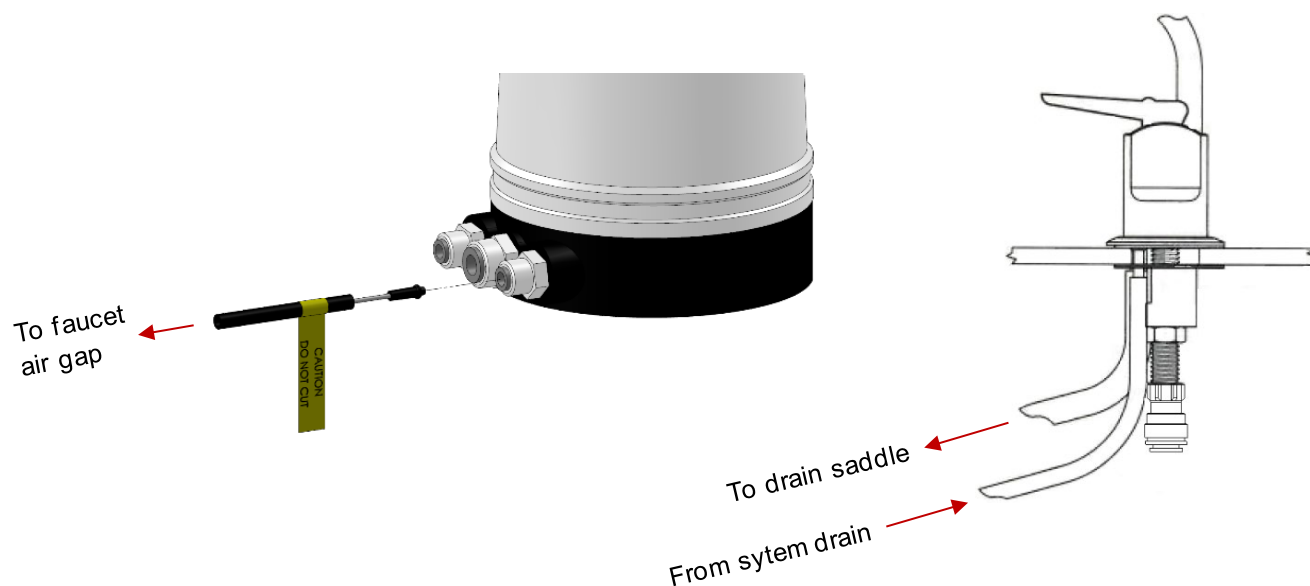
## DRAIN SADDLE INSTALLATION

- Obtain the drain saddle assembly (item 15, pg. 9). Put the adhesive backed foam on the inside of the connection point of the drain saddle. Ensure the holes are aligned. Position the drain saddle on the sink drainpipe between the sink drain and the P trap.
- Once in position, mark where the hole is to be drilled. Remove the drain saddle and drill the 3/8" hole into the drainpipe.
- Align the drain saddle with the hole and secure it with the provided bolts.



## AIR GAP CONNECTION

- Insert the 3/8" drain line (item 14, pg. 9) into the drain saddle and press the other end onto the large (brine outlet) barb on the faucet air gap. Ensure there are no dips or low points in the tubing from the faucet to the drain saddle. Trim accordingly.
- Obtain the black 1/4" tubing (item 16, pg. 9) and measure the length required to connect the system outlet to the brine inlet on the faucet air gap.
- Install the provided capillary flow restrictor (item 17, pg. 9) into the open end of the tubing.
- Firmly press the tubing into the drain port of the system. Press the opposite end onto the brine inlet of the faucet air gap.



**ANY RESTRICTIONS OR BLOCKAGE IN THE DRAIN LINE CAN CAUSE BACKPRESSURE, WHICH WILL INCREASE THE SYSTEM'S OPERATING PRESSURE. THIS CAN RESULT IN DAMAGE TO THE SYSTEM'S MEMBRANES AND COMPONENTS.**

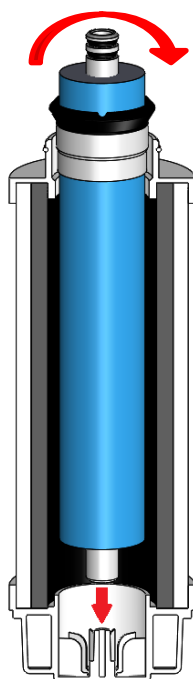




**FEED WATER ADAPTOR VALVE MUST BE IN THE CLOSED POSITION BEFORE REPLACING THE MEMBRANE ELEMENT.**

## MEMBRANE INSTALLATION/ REPLACEMENT

1. Use the provided wrench to remove the black top cap (item 9, pg. 9) to the system. Remove the 2-stage filter (item 7, pg. 9) from the system and remove the plastic film wrap.
2. Obtain the membrane (item 8, pg. 9) and remove it from its packaging. Insert the membrane down into the filter cartridge while twisting (O-rings up as shown). Ensure the membrane is fully inserted into the filter.
3. Place the filter and membrane into the system base.
4. Replace the system cap and tighten with the provided wrench.
5. Once installed, use the calendar wheel on the cap to note the date of installation. This will help to identify when it is time to replace the filter and membrane.
6. To start-up the system, please refer to the System Purging/Initial Start-Up section of this User's Manual.



**MEMBRANE INSERTED  
COMPLETELY**





**CAREFULLY INSPECT YOUR SYSTEM BEFORE INITIAL START UP. CHECK THAT ALL THE PLUMBING CONNECTIONS ARE IN PLACE AND SECURELY FASTENED. ENSURE THAT THERE ARE NO KINKS OR TWISTS IN THE LINES.**

1. Double check that all connections are made and the tubing is in securely.
2. Make sure the tank valve is open.
3. Make sure the lever on the leak detector is in the down position.
4. Flip the faucet lever up to allow for continuous flow.
5. Slowly turn on the feed valve 1/4 turn, observe for any leaks.
6. If no leaks are present, fully open the feed valve.
7. Continue to check for any leaks.
8. Allow the system to drain the permeate for the first hour of operation.
9. Please allow for the tank to fill 3 – 4 times before drinking the product water.
10. After completely draining the tank 3 – 4 times you may begin to use the water for consumption.

## TROUBLE SHOOTING CHART

SYMPTOMS	POSSIBLE CAUSES	CORRECTIVE ACTION
Not Producing Water	Feed valve is closed	Open the feed valve.
	Leak detector has engaged	Inspect for leaks. If a leak is present, determine the location of the leak and repair as needed. Replace the textile in the leak detector with a new one. If no leak is present, close the lever on the leak detector.
	Improper filter cartridge installation	Inspect and re-install filter cartridge.
	Incorrect tubing connections	Confirm the connection points to match the diagram.
	Kinked tubing	Replace the kinked section of tubing.
Low Permeate Flow (From Faucet)	Tank air pressure is low	Ensure pressure is approximately 7 PSI. Do not exceed 10 PSI.
	Tank valve not fully open	Open tank valve fully.
	Line to faucet is kinked	Replace the kinked section of tubing.
Tank Filling Slowly	Low feed pressure	Confirm feed pressure pressure and adjust regulator as needed.
	Feed valve not fully open	Fully open the feed valve.
	Kinked tubing	Replace the kinked section of tubing.
	Exhausted filter and or membrane	Replace filter / membrane as needed.
Poor permeate quality	Insufficient flushing of tank/membrane	Flush tank with 2-3 fills of permeate water.
	Membrane/filter cartridge exhausted	Replace membrane / filter.
Leaking Fittings & Tubing Connections	Tubing not pressed into fitting securely	Remove tubing and re-insert ensuring the tubing bottoms out.
	Insufficient teflon tape	Remove existing teflon tape and reapply with an additional wrap.
	Inproper installation of teflon tape	Remove teflon tape. Ensure to wrap in a clockwise rotation.
	Poorly cut or gouged tubing	Remove tubing from fitting. Check to see that the tubing was cut perpendicular and that there are no scratches on the tubing. If the tubing was not cut properly or scratched, make a new cut approximately 1/2" back.

## TECHNICAL ASSISTANCE

If technical assistance is required:

- Contact your local dealer or distributor
- Prior to making the call, have the following information available:
  - System installation date
  - Serial number
  - Detailed description of the problem

### Warranty Terms

Subject to the terms and conditions set forth hereinafter, the manufacturer (hereafter “Manufacturer”) warrants to the original purchaser (hereafter the “Customer”) that the systems and products manufactured by the Manufacturer are free from defects in material and in workmanship for twelve (12) months from the Warranty Commencement Date (as defined below) only when used strictly in accordance with the applicable operating instructions and within the range of the operating conditions specified by the Manufacturer for each such product.

This Warranty does not extend to systems, equipment, or components manufactured by others, nor to systems, equipment, or components manufactured by others and distributed by the Manufacturer. This Warranty does not extend to equipment or components manufactured by others which have been incorporated into a Manufacturer product but, if allowable the, Manufacturer hereby assigns, without warranty, to the Customer its interest, if any, under any Warranty made by the Manufacturer of such equipment or component. This Warranty does not cover disposable items such as fuses, O-rings, regeneration materials/chemicals, or other such disposable items, which must be replaced periodically under the normal and foreseeable operating conditions of the goods warranted hereby.

### Warranty Commencement Date

The Warranty Commencement Date for each Manufacturer product shall be the later of the date of: (1) receipt by the Customer, or (2) the date of installation at the Customer's premises provided that such installation must occur within three (3) months of shipment from the Manufacturer's manufacturing facility. In no event shall the Warranty Commencement Date exceed three (3) months from the shipment from the Manufacturer's manufacturing facility. The Customer shall provide proof of purchase in order to exercise rights granted under this Warranty. If requested by the Manufacturer, the Customer must also provide proof of the installation date.

### Warranty Service

THE MANUFACTURER'S OBLIGATION UNDER THIS WARRANTY IS LIMITED TO THE REPAIR OR REPLACEMENT (AT MANUFACTURER'S SOLE DISCRETION) OF ANY PRODUCT, OR COMPONENT THEREOF, PROVED TO BE DEFECTIVE IN MATERIAL OR WORKMANSHIP WITHIN THE COVERED WARRANTY PERIOD.

The Customer, at the Customer's risk and expense, shall be responsible for returning such product or component, only after obtaining a Return Goods Authorization (RGA) number from the Manufacturer, arranging for freight prepaid, and in conformance with any special packaging and shipping instructions set forth on the operation documentation or RGA instructions, or as otherwise reasonably required, to the Manufacturer, together with (1) RGA number issued by the Manufacturer at Customer's request; (2) proof of purchase and, if necessary, proof of installation date; (3) a Return Goods Authorization Form; (4) a description of the suspected defects; (5) the serial number of the Manufacturer product alleged to be defective; (6) a description of the type of water and pretreatment equipment which has been utilized in connection with the product, if any. The Manufacturer shall, in the Manufacturer's reasonable discretion, be the sole judge of whether a returned product or component is defective in material or workmanship. Required or replaced products or components shall be returned surface freight. In genuine emergency situations, the Manufacturer will (at the Manufacturer's sole discretion) forward replacement parts to the Customer without waiting for authorized return of the questionable part(s). In such cases, Customer will issue a purchase order or other payment guarantee prior to shipment. If the returned part is found to have been misused or abused, or the defective part is not received by the Manufacturer within thirty (30) days; the Customer will be invoiced for the replacement part(s) provided. This Warranty does not cover or include labor and/or travel to the Customer's premise or location or any other location. Charges of \$1000 per day plus associated travel expenses will be incurred by the Customer in providing the Warranty Service at any location other than the Manufacturer's main headquarters; that is if the Manufacturer deems that the product is not covered by said Warranty. The Manufacturer reserves the right to precondition such travel to Customer's premises upon prepayment of the Manufacturer's anticipated costs of attending such premises.

#### Voidability of Warranty

This Warranty shall be void and unenforceable as to any Manufacturer product which has been damaged by accident, mishandling, abuse or has been repaired, modified, altered, disassembled or otherwise tampered with by anyone other than the Manufacturer or an authorized Manufacturer service representative; or, if any replacement parts are not authorized by the Manufacturer have been used, or, the product has not been installed, operated and maintained in strict accordance and adherence with the operating documentation and manuals for such product. Any expressed Warranty, or similar representation of performance set forth in the operation documentation for media or resin incorporated into the Manufacturer product shall be void and unenforceable unless the feed water requirements set forth in the operating documentation for such product are unequivocally and strictly adhered to.

#### Limitations and Exclusions

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