



VECTAPURE II™

Residential Reverse Osmosis Water System

INSTALLATION AND OWNER'S MANUAL

For Vectapure II™ models RO-4042H, RO-4052H, RO-4152H and
all
WR2 series reverse osmosis systems

THIS MANUAL IS TO BE LEFT WITH THE OWNER OF THE EQUIPMENT FOR REFERENCE PURPOSES AND TECHNICAL GUIDANCE. IT IS STRONGLY RECOMMENDED THAT QUALIFIED DEALER SERVICE PERSONNEL BE CONTACTED IN THE EVENT OF AN UNKNOWN INTERRUPTION OF SERVICE OR APPARENT PRODUCT MALFUNCTION. AN ANNUAL PREVENTATIVE MAINTENANCE INSPECTION BY A WATER PROFESSIONAL IS RECOMMENDED TO ENSURE TROUBLE-FREE AND CONTINUOUS OPERATION.



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Congratulations!

You have purchased the finest residential reverse osmosis water system available for your home. It will provide you years of reliable service if properly installed, operated and maintained. Please read this entire manual before attempting installation and operation.

Section 1. Frequently Asked Questions

Before getting started, take the time to familiarize yourself with your new Waterite system by reading some FAQs listed below. Call us or ask your dealer if you have any other questions about your system's operation.

Q: How does the Vectapure II™ Residential Reverse Osmosis System differ from an ordinary water filter?

Ordinary water filters use a screen to separate only particles of dirt and sediment from the raw water source. Reverse osmosis employs a semi-permeable membrane that removes not only particles but also a very high percentage of dissolved contaminants, molecule by molecule, from your raw tap water. Your system will deliver pure, bottled water quality water to a faucet conveniently located at your kitchen sink or any other designated area.

Q: What is the membrane and how does it work?

The membrane element consists of several thin layers or sheets of film that are bonded together and rolled in a spiral configuration around a plastic tube. As the raw water passes across the surface of the membrane, only pure water molecules are allowed to pass through and collect in the tube, while all other mineral and contaminant molecules are rejected and washed from the surface of the membrane to the drain.

Q: What processes does the Vectapure II™ RO system use?

Vectapure™ systems use either 4 stages or 5 stages of treatment to produce your drinking water. The raw tap water first flows through a combo carbon and 5-micron particle filter to remove chlorine, chemicals, dirt, rust and other sediment. The third stage is a 1-micron sediment filter that is used to reduce very fine suspended particles (this stage is omitted in a 4 stage system). The fourth stage is the reverse osmosis membrane that separates most dissolved contaminants from the water molecules. The final stage is a block carbon filter that eliminates all remaining traces of taste and odour that the water may have absorbed from the holding tank or the plumbing system. Vectapure II models and WR2 models both use a 10" filter housing for this last filtration stage. Your system also includes a holding tank for the purified water, a faucet and the hardware and tube needed to complete the installation.

Q: Will reverse osmosis remove sodium and salts from the water?

Yes. Reverse osmosis was originally developed to make drinking water from seawater. Your system is equipped with a membrane that will be very effective in reducing sodium levels normally found in ground water or softened water. This is particularly important for those with restricted sodium diets. Vectapure II and WR2 Series systems are not designed for use on seawater.

Q: Does reverse osmosis remove bacteria? Cryptosporidium? Viruses?

Reverse osmosis membranes will virtually eliminate most chemicals, bacteria, viruses and parasites such as Cryptosporidium from the water. Where these conditions exist, pre-filters and other system components located before the membrane will become contaminated from exposure to them. Cross contamination of the entire system may occur when the membrane or filters are changed or disturbed. Vectapure II and WR2 RO models have incorporated the ability to flood the RO system, right up to the kitchen sink faucet, with chlorinated water to allow a periodic disinfection of the unit, usually at the time that the prefilter cartridges are changed. **Make sure that you carefully follow the maintenance and sani-purging instructions provided.**



THIS REVERSE OSMOSIS WATER SYSTEM IS DESIGNED ONLY TO IMPROVE AESTHETIC PROPERTIES AND IS NOT DESIGNED TO ACT AS A PRIMARY BARRIER TO WATERBORNE MICROBIOLOGICAL OR TOXIC CHEMICAL CONTAMINATION. WHERE THESE CONDITIONS MAY EXIST CONSULT A WATER PROFESSIONAL TO ENSURE SUFFICIENT RAW WATER PRE-TREATMENT AND DISINFECTION.



WATERITE RO SYSTEMS ARE TO BE OPERATED ONLY WITH A SAFE, CHLORINATED RAW WATER SOURCE. THIS IS NECESSARY TO PERIODICALLY PURGE AND FLUSH THE SYSTEM WITH WATER THAT HAS A CHLORINE RESIDUAL TO SANITIZE PARTS OF THE SYSTEM THAT NORMALLY ARE EXPOSED TO WATER THAT HAS BEEN DECHLORINATED AND MAY BE SUSCEPTIBLE TO BACTERIAL CONTAMINATION. FOLLOW SANI-PURGE AND FLUSH INSTRUCTIONS AND CHANGE FILTER CARTRIDGES AT RECOMMENDED INTERVALS.

Q: What other contaminants does reverse osmosis remove?

The combined filtering and RO processes in your system will remove more than 98% of many organic compounds, including THMs (chloroforms), DBCP, lindane, TCE (trichloroethylene), PCE (tetrachloroethylene), carbon tetrachloride and chlorine. Conservatively, Vectapure™ TFC membranes will remove the following percentages of contaminants: Barium 97%, Potassium 92%, Bicarbonate 94%, Radium 97%, Cadmium 97%, Selenium 97%, Calcium 97%, Silicates 96%, Chromium 92%, Silver 85%, Copper 97%, Sodium 92%, Detergents 97%, Strontium 97%, Fluoride 90%, Sulphates 97%, Lead 97%, PCBs 97%, Magnesium 97%, Insecticides 97%, Nickel 97%, Herbicides 97%, Nitrates 80%, Total Dissolved Solids 97%.

Q: What does RO treated drinking water taste like?

As most of the chemicals, organics and minerals are removed, your water will taste similar to distilled water or low-mineral bottled water. Most people enjoy the natural flavour and the soft texture. You will immediately notice that brewed coffee and juices from concentrate have a greatly enhanced taste and aroma.

Q: Where is the system installed?

Typically, the system is installed under the kitchen sink. Some homeowners or installers prefer the basement or crawlspace, as this conserves storage in the kitchen and may allow for easier access to the system for maintenance purposes.

If you install the system more than 20' from your faucet, you may need a product water booster pump to ensure adequate pressure at the faucet. Your dealer can provide you with this optional equipment.

Q: Can the Vectapure II™ system be connected to an extra faucet?

Yes. Many installations will include an optional ¼" line to refrigerator icemakers or additional sink faucets. See your dealer for advice and parts.

Q: What factors affect the quantity and the quality of the water produced?

1. Pressure: The greater the water system pressure, the greater the water quantity that will be produced. 60PSI is optimal, but it should never exceed 90PSI. Where water pressures are low (<40PSI), a booster pump on the raw water line can be added to increase production. The RO-4152H comes equipped with a booster pump as standard equipment.
2. Temperature: Production increases with temperature, the optimal being 76F. Never operate the system from the hot water line or with water exceeding 85F, as this will damage the membrane.
3. Membrane type: Vectapure II systems use premium quality TFC (Thin Film Composite) membranes, specially chosen for household applications.
4. TDS: The higher the Total Dissolved Solids in the raw water, the lower the output of product water. Booster pumps are used to increase system pressure and overcome lower output caused by higher TDS. System pressure may not however, exceed 90PSI.

Q: How much water does the Vectapure II™ system produce?

All Vectapure™ systems use membranes nominally rated for 75GPD. Actual output will be dependent upon the factors explained above. In optimal applications (with a booster pump) you may expect 60-70 gallons to be available over 24 hours.

Q: Can the amount of water produced be increased?

Filling a water pitcher for the refrigerator will allow more production overnight. A larger holding tank (available from your dealer) will allow for more water to be on hand. Booster pumps will also increase daily production.

Q: What is the standard warranty with the Vectapure II™ system?

Every Vectapure II™ system comes with a standard one-year limited warranty on all parts and repair labour. A detailed warranty card is included with the unit. **You may purchase and extended warranty if you wish - see the enclosed Extended Warranty Program information sheet and enrolment form included in your package. Call your dealer if you wish to have one sent to you.** Normal filter cartridge replacement is excluded from your warranty.

Q: What is the maintenance schedule for the Vectapure II™ system?

A good rule of thumb is to replace all pre-filters every three months. This is critical to ensure that chlorine does not attack the membrane film. The carbon post-filter should be changed every three to six months. When the old cartridges have been removed, the system should be purged and flooded with chlorinated water before the new cartridges are installed. Dependent upon local water conditions, your membrane should have a life expectancy of 1-5 years. More severe water conditions (iron, hardness) may shorten this significantly; soft water sources may allow a membrane life of up to 8 years.

Q: When should the membrane be changed?

If you notice gradually decreasing production from your system, differing taste to your drinking water or a white scale forming on pans or dishes, it probably means that your membrane is deteriorating and is losing its effectiveness. You may purchase a pocket TDS meter from your dealer - this is the best way to assure your system is operating efficiently.

Section 2. Unpacking and Installation

Your system includes:

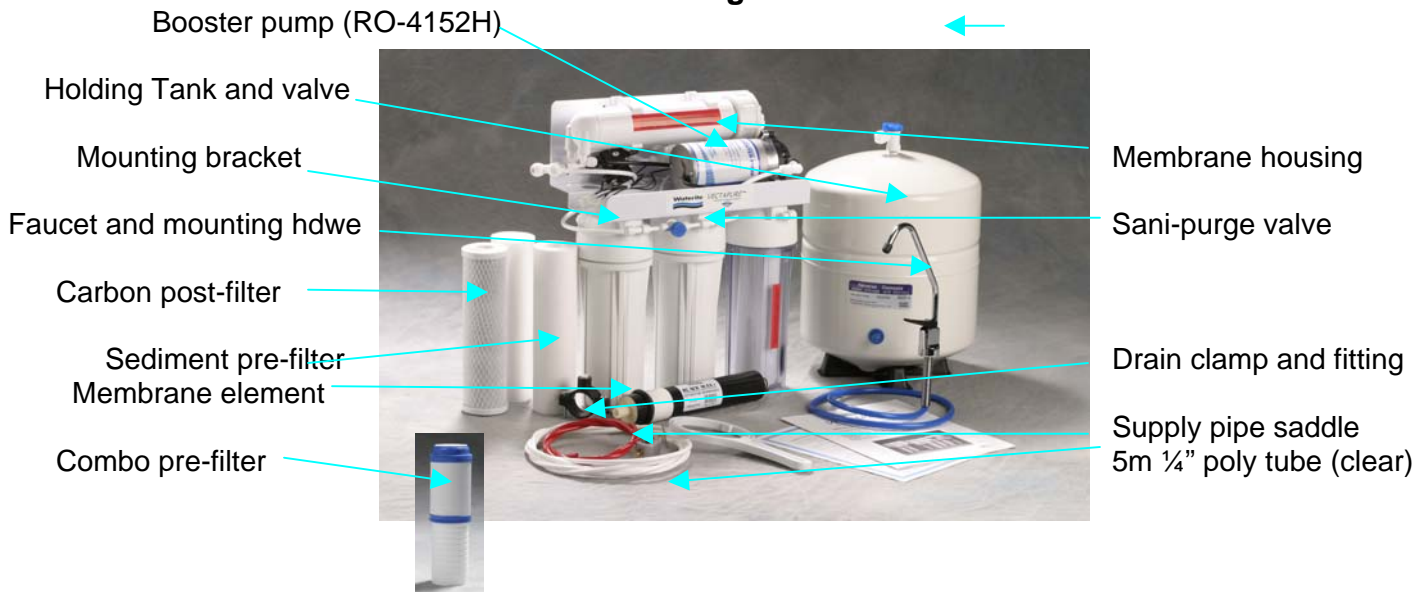
Carton Contents

- ✓ The main RO/filter unit assembly with 4 or 5 stages. The RO-4152H model will include a booster pump mounted on the main bracket;
- ✓ One membrane (in a sealed plastic bag), one combo carbon/sediment filter cartridge, one block carbon filter cartridge and one polypropylene sediment cartridge (no white sediment cartridge with RO-4042H);
- ✓ One drain fitting and clamp with push-on tube fitting;
- ✓ One self-piercing cold water supply pipe saddle and valve;
- ✓ One low-lead (stainless is optional) long reach Quick Faucet and mounting hardware;
- ✓ Two #10 X1" Wall mounting screws;
- ✓ 5 m (15') - white ¼" Poly tubing for water connections;
- ✓ 3m (10') – black ¼" Poly tubing for drain connections;
- ✓ One plastic tank shut-off valve;
- ✓ One filter housing wrench;
- ✓ One Owner's package including owner's manual, warranty certificate, Extended Warranty Plan enrolment form, Waterite Parts Program enrolment form;
- ✓ One 12 litre (4 gallon) RO holding tank.

Step 1. Selecting the System Location

1. This reverse osmosis system is designed for installation under a sink. It can however, be mounted anywhere within 20 feet of the faucet, such as the basement or adjoining utility room. Keep in mind that filter housings will need periodic replacement and that easy access must be maintained. Do not install in a location with high humidity, direct sun or a direct source of heat. Both the RO system and the tank may be installed horizontally or vertically. If you are installing a RO 4152H model, you will need a standard 110V plug nearby.

Figure 1.



Keep in mind that you may install a tube tee on the line to the faucet to connect icemakers or other faucets to the system. If you locate your system farther than 20 feet from the faucet, you will need to use 3/8" tubing or install a pressure booster pump to your line. See your dealer for parts and details.

Step 2. Getting Ready

1. Clear working area. Unpack all components and check for visual damage. Ensure all listed components are included.
2. Inspect the cold water supply line and the condition of the pipe. The SV-6 saddle included is intended for standard 1/2" copper plumbing pipe. If you have a polybutylene, polypropylene, iron or PVC supply line, you will need to consult your plumber or plumbing supply store to purchase an appropriate cold water connection.
3. Check the air pressure in the RO storage tank with an ordinary tire gauge. It should be pre-charged to 7-10 PSI. Adjust if necessary. **DO NOT EXCEED RECOMMENDED TANK INFLATION PRESSURE – UNIT WILL FAIL TO OPERATE CORRECTLY.**
4. You will need the following tools: An electric drill, a 1/2" carbide bit, a 1/4" carbide bit, a 1/8" carbide bit, a pencil, a small adjustable (crescent) wrench, a sharp knife (X-Acto type knife is best), Teflon plumbing tape, adjustable pliers, a rat-tail file, a center punch, a medium flat head screwdriver, a small household funnel. **Always wear eye protection when using an electric drill.**

Step 3. Install the Cold Water Supply Pipe Saddle

1. Turn the water supply line valve to your home OFF.
2. Place the saddle on the COLD water supply line in a place that will not interfere with normal access to the installation area but within easy reach of the RO unit. Thread the brass mounting screw through the threaded hole opposite the valve and insert the pipe holding bar, matching the bar contour with your supply pipe size. Snug firmly but **DO NOT OVERTIGHTEN.** Turn the 'T' valve stem on the saddle clockwise until the supply pipe is pierced and the valve is fully closed. Your pipe saddle valve may have the poly tube factory pre-attached. If the poly tube is not pre-attached, connect the white 1/4" tube to the saddle valve using the compression nut, plastic sleeve (ferule) and tube insert. Snug the compression nut by hand then turn 1/4 turn with the adjustable wrench. **DO NOT OVERTIGHTEN.** Keep the valve closed for now.
3. You may now turn the water supply to your home ON. Check for leaks around the saddle. Tighten, reseal or reinstall if necessary.

Step 4. Install the Sink Faucet

A. Quick Faucet Installation (Quick Faucets are standard equipment with Waterite Vectapure RO systems. Dealers may substitute standard faucets in your kit – see Step 4B below for standard-mount faucet installation instructions.)

Tools required for this step: An electric drill, a 1/8" carbide bit, a 5/8" carbide bit, a Phillips-head screwdriver, a center punch, a pencil and a rat-tail file.

1. Examine the sink. If it has an existing hole for mounting a faucet, skip to Step 4A. (5).

2. Locate and mark the spot you wish to install the faucet. Make sure it does not interfere with operation of the main faucet and that there is clearance for plumbing and mounting hardware directly below it under the sink or countertop. If you have a stainless sink, go to Step 4A. (4)
3. If you have a concrete, porcelain enamel or ceramic sink, it is **strongly** recommended that a professional install the faucet to avoid chipping and damaging the sink finish.
4. Place the Quick Faucet base in the desired location with the inside flat (with the small notch) facing the direction you wish the faucet to face when installation is complete. Mark the centres of the mounting screw holes and the center faucet shank hole with the pencil and set the faucet mounting base aside. Use the center punch to slightly indent the hole centres. Use the 5/8" bit and drill the center faucet shank hole. Use the rat-tail file to smooth any burrs or rough edges on the faucet shank hole. Next, use the 1/8" bit and drill the mounting screw pilot holes.
5. Align the faucet mounting base with the drilled holes in the countertop. Using the Phillips head screws provided, fasten the mounting base to the countertop., using the 1/8" holes as pilots. Insert the faucet supply tube in the faucet shank hole and feed it through completely. Align the locking flat on the faucet base with the mounting base and insert. Turn the faucet ¼ turn to the desired direction. With the Allen key provided in the faucet kit, tighten the locking screw on the side of the mounting base. It is recommended that you retain the Allen key for use in the future by taping it to the faucet supply tube under the sink or retaining it in a safe place.

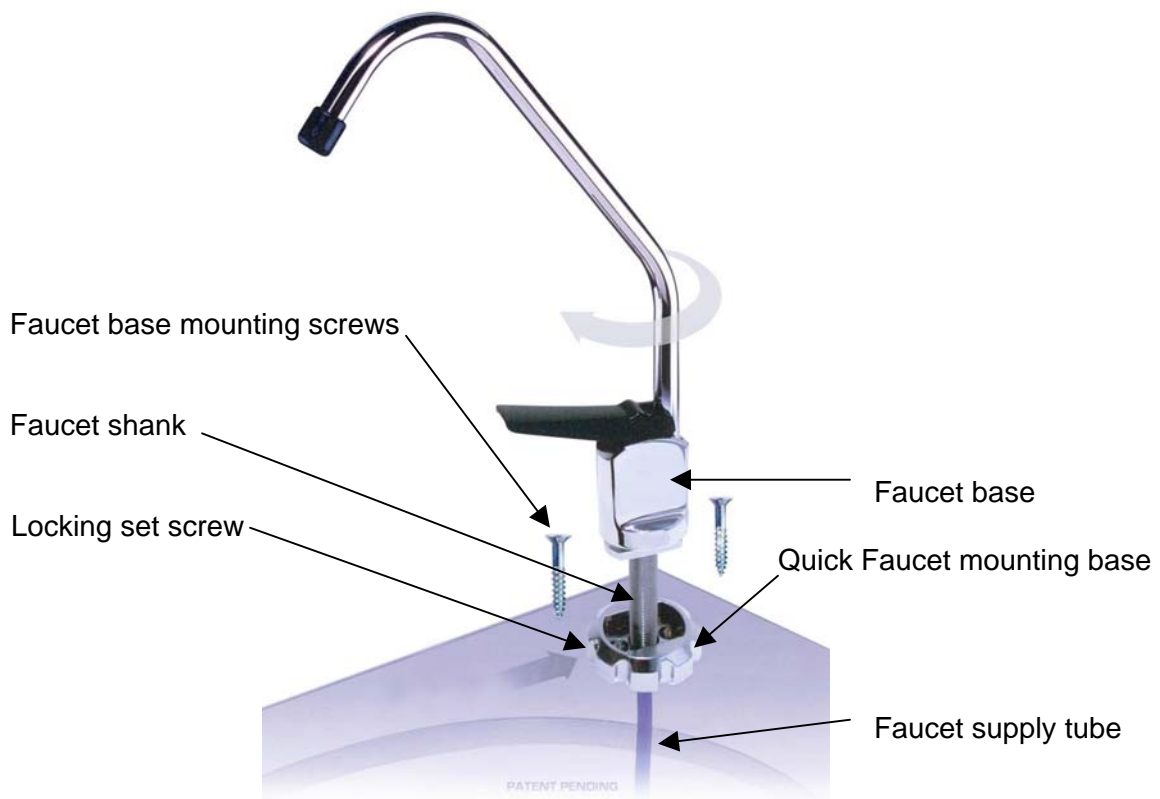


Figure 2.

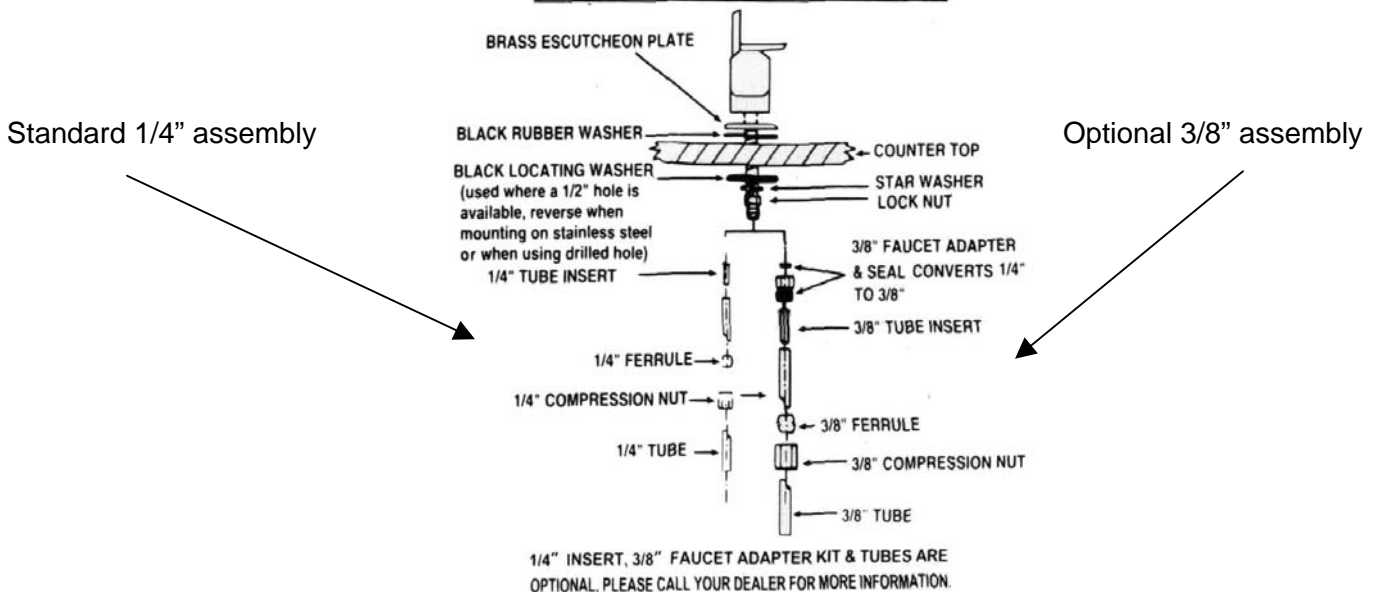
A. Standard Faucet Installation (At the request of your dealer, a standard-mount faucet may have been included in your RO system, instead of the top-mount Quick Faucet. In this case, use the directions below.)

Tools required for this step: An electric drill, a 5/8" carbide bit, a small adjustable wrench, a center punch, a pencil, a rat-tail file.

6. Examine the sink. If it has an existing hole for mounting a faucet, skip to Step 4. (6).
7. Locate and mark the spot you wish to install the faucet. Make sure it does not interfere with operation of the main faucet and that there is clearance for plumbing and mounting hardware directly below it under the sink or countertop. If you have a stainless sink, go to Step 4. (5)
8. If you have a concrete sink with a thickness of less than 1", the faucet can be mounted directly to sink. If the thickness exceeds 1", the faucet must be mounted directly on the countertop or a faucet with an extended shank must be used. *Tool substitution: Use a 5/8" masonry bit to drill the concrete sink.*
9. If you have a porcelain enamel or ceramic sink, it is **strongly** recommended that a professional install the faucet to avoid chipping and damaging the sink finish.
10. Mark the spot chosen for the faucet hole with the pencil. Use the center punch to slightly indent the spot (the center punch is unnecessary for concrete sinks). Use the 5/8" bit and drill the hole. Use the rat-tail file to smooth any burrs or rough edges on the hole.
11. The sink faucet may now be assembled to the sink or countertop using the assembly procedure shown in Figure 2. Your faucet may have the poly tube factory pre-attached. If so, do not connect the tube to anything at this time. If the tube is not pre-attached, do not attach the poly tube to faucet at this time.

Figure 3.

Installation of Standard Faucet



Step 5. Install the Drain Saddle Assembly

1. Select the location to install the drain saddle assembly. This is usually on the sink drainpipe and needs to always be located above the "S" trap.
2. Position the drain saddle assembly in the selected location and mark the spot through the threaded outlet with a pencil or marker
3. Drill a ¼" hole at the marked spot. Strip the backing paper from the adhesive side of the saddle gasket and position on the inside of the drain saddle, aligning the hole with the threaded outlet. Attach the drain saddle to the drainpipe, aligning the push-on port with the drilled hole. Tighten the clamp snugly. **DO NOT OVERTIGHTEN.**
4. The black drain tube may be inserted directly into the push-on drain port, using instructions in Step 8. below. Do not attach poly tube at this time.

Step 6. Install the Tank Valve, Preparing the Storage Tank

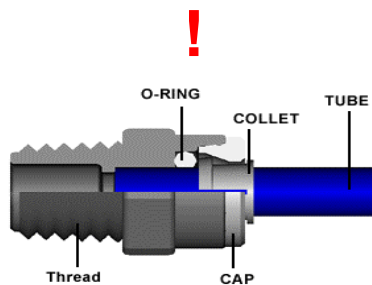
1. Wrap the threaded storage tank nipple with two wraps of Teflon tape. Thread on tank shut-off valve until snug. Using the wrench, turn an additional ¼ turn. **DO NOT OVERTIGHTEN.** Open tank valve to the fully open position.

Step 7. Mounting the RO Unit

1. While holding the RO unit in its mounting position, mark the holes for the wall screws. Using a 1/8" bit, drill the pilot holes for the screws. Screw in the mounting screws leaving ¼" protruding. Hang the RO mounting bracket on the screws and tighten.
2. If the unit is to be mounted on wallboard, use plastic screw anchors, available at any builder's supply and follow the manufacturer's directions.
3. **DO NOT INSTALL FILTER CARTRIDGES OR THE RO MEMBRANE AT THIS TIME.** Spin the filter housing sumps on to the RO unit and hand-tighten. On Vectapure II units the clear housing always is installed on the right-hand side. WR-2 Series use only white opaque housings. Use the wrench provided to turn an additional ¼ turn.

Step 8. Connect the System Tubing

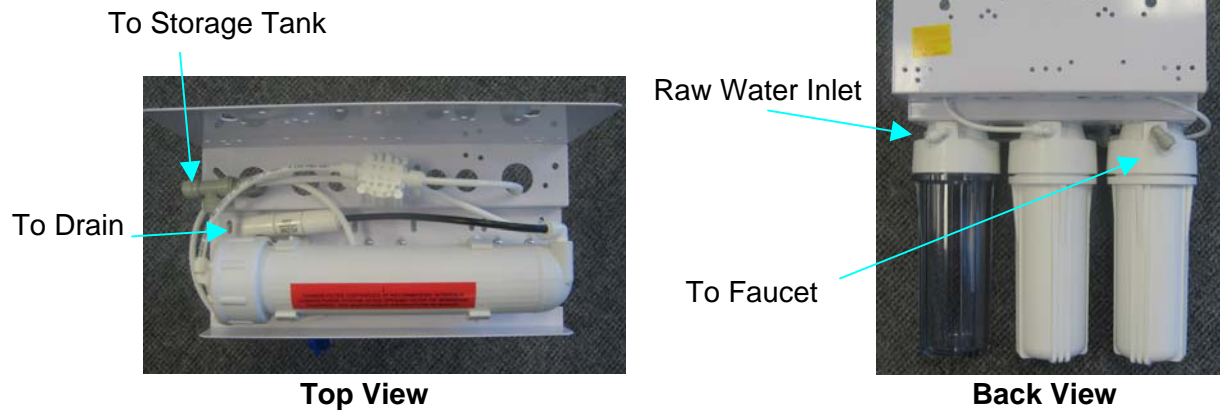
Making and securing a push on tubing should be cut square and removed. Insert the tube firmly contacts the stop. Gently tug secure connection. To pushing in the collet ring. The again, if necessary.



connection is simple. First, the any burrs or rough edges and push until the tube end the tube backwards to assure a disconnect, pull the tube while joint may be used over and over

1. Connect the cold water supply valve to the first filter housing water inlet push-on fitting (marked "water inlet"), after cutting the ¼" clear tube to the length required.

2. Connect the black ¼" tube from the end of the flow restrictor (marked "to drain") to the Drain Saddle push-on connection (your black drain tube may be pre-attached to your RO). Place the tank in the location you have chosen for it. Using the clear 3/8" tube connect the system fitting marked "to tank" to the tank valve. Connect the 3/8" tube attached to the faucet to the system fitting marked "to faucet". If the tubing is not pre-attached to the faucet, cut the 3/8" clear tubing to the desired length and attach the tube to the fitting at the base of the faucet shank to the fitting marked "to faucet" on the RO unit.
3. You may find that your unit does not have labels attached to indicate the water line and drain line connections. The photos below are labelled with the correct locations for the water and drain connections.



Step 9. Filling and Sani-Flushing the System

1. Turn on the feed water adapter valve and check all connections for leaks. Do not proceed further until any leaks are fixed.
2. Let the RO system and the storage tank fill with water. Open the faucet at the sink and let the water run free for 10 minutes. Turn the saddle valve OFF. Leave the faucet open and drain all the water from the tank until water flow stops.

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THOROUGHLY WASH HANDS BEFORE LOADING CARTRIDGES AND MEMBRANE ELEMENTS.

3. a) Vectapure II Models: Remove the clear prefilter housing by turning counter clockwise with the housing wrench supplied. Remove all protective wrapping from the filter cartridges. Insert the 5-micron combo carbon/sediment filter cartridge in the clear housing and reassemble housing. The housings are seated with o-rings – DO NOT OVERTIGHTEN – 1/4 turn after hand tight is usually sufficient. Repeat with the white 1-micron sediment cartridge in the middle housing (RO-4052H and RO-4152H only). Install carbon block cartridge in the remaining white filter housing and reassemble.
4. b) WR2 Models: Remove the left housing by turning clockwise with the housing wrench supplied. Remove all protective wrapping from the filter cartridges. Insert the 5-micron white



sediment cartridge (carbon cartridge in two-housing WR2 units) in the housing and reassemble. The housings are seated with o-rings – DO NOT OVERTIGHTEN – 1/4 turn after hand tight is usually sufficient. Repeat with one of the carbon block cartridges in the middle housing (three-housing WR2 units only) and with the other carbon block cartridge in the right hand housing.

5. Remove the membrane element from its wrapping. Disconnect the ¼” tube attached to the membrane housing end cap. Unscrew the end cap from the membrane housing. The membrane housing is mounted horizontally on the system’s mounting bracket. See Figure 1. Insert the membrane element into the housing, o-ring spigot first. Gently push until the membrane seats snugly inside the housing. Re-install housing cap and poly tube.

Step 10. Starting Up the System

1. **Make sure that the Sani-purge valve (see figure 4.) is CLOSED.** Open water supply saddle valve and let RO system fill with water. Check for leaks and tighten any joints if necessary
2. Model RO-4152H only: Insert the plug into a standard wall receptacle. System pump will switch on and begin to operate.
3. Let the system operate for about 10 minutes. Close the storage tank valve and open the faucet until product water drips out. Check for leaks again and fix if necessary.



DO NOT USE ANY WATER FROM THE SYSTEM UNTIL THE NEXT STEP IS COMPLETE.

4. Open the storage tank valve and close the faucet. The system is now operating and filling the storage tank. Allow the tank to fill completely and the system to automatically shut itself off. This step may take 1-3 hours or more. Open the faucet and let the entire tank drain completely. You will see dark carbon dust briefly flush from the carbon filter cartridge – this is harmless and normal for the first flow of water through the cartridge. Allow the system to re-fill the tank. Once completed, your system is ready for use.

Section 3: Operation and Maintenance

Operation of your Reverse Osmosis System is simple and easy. This appliance is fully automatic and can be enjoyed without complicated operating procedures. Be sure to follow the cartridge replacement schedule to ensure peak performance and long membrane element life.

Changing Filter Cartridges and Sani-Purge Procedure

The filter cartridges should be changed, as a rule of thumb, every three months. It is critical that this be done, to ensure that chlorine is not allowed to attack the membrane film. Always Sani-purge the complete system at the same time that the cartridges are changed.



THOROUGHLY WASH HANDS BEFORE LOADING CARTRIDGES AND MEMBRANE ELEMENTS.

1. Close the cold water supply saddle valve. Open the faucet and completely drain until the flow of water stops. Remove the filter housings with the housing wrench and discard the old filter cartridges. Thoroughly clean the inside of the housing bowls with soap and water. Rinse completely. If the RO has been installed with a water supply that does not contain chlorine, put 2 fluid ounces (60 ml) of common household chlorine bleach such as Javex in the clear housing. Reassemble filter housings **WITHOUT** cartridges.
2. **Sani-Purge Procedure:** Turn the RO faucet off. Turn the blue-handled Sani-purge valve (Figure 3.) to the **ON** position. Open the raw water supply saddle valve. The RO unit and tank will now fill with raw, chlorinated water. Allow the system to stand for 1 hour.

Figure 4.



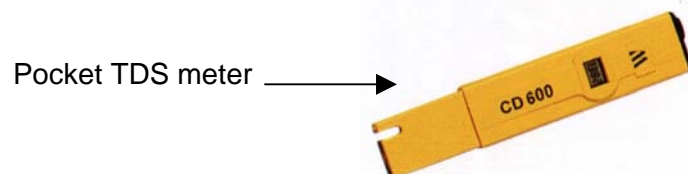
Sani-purge valve (shown in closed position)

3. Turn the raw water saddle valve **OFF**. Open the faucet and allow the system to completely drain. Turn the blue Sani-purge valve **OFF**. The system has now been Sani-purged and is ready to load the new cartridges.
4. To load the cartridges, repeat Step 9 (3) or (4) from the installation instructions above. Turn the raw water supply valve **ON**. Allow the storage tank to fill and then drain it completely and refill again before resuming use of the water system.

NOTE: The Sani-purge procedure does not expose the membrane element to chlorinated water long enough to cause deterioration of the thin film and may be done safely with the membrane element in place.

Changing the Reverse Osmosis Membrane

The membrane element will require changing much less frequently than the filter cartridges and only when failure is indicated. This should be done when water production begins to noticeably fall, or TDS readings in the product water begin to rise. **T**otal **D**issolved **S**olids may be measured by a professional or by use of a simple hand-held TDS monitor. These are available from your dealer or from Waterite's Online Store at www.waterite.com.



The membrane element life will range from 1 to 5 years, depending on the quality of the raw water. Soft water free from iron is ideal. Hardness, iron, chlorine and infrequently changed filter cartridges are the membrane's greatest enemies.

To change the membrane element, start by closing the cold water supply saddle valve. Make sure that your hands are washed and your tools are clean. Repeat Step 9 (5.) above. If the old membrane element does not pull out easily by hand, use a pair of pliers to gently pull the element by the product tube until it slides out of the housing. Use warm water, a mild soap solution and a bottlebrush to clean the interior of the housing before installing the new element.

Your Warranty

Keep your bill of sale and your warranty certificate, included in this kit. This is needed to claim any parts or repair service during the warranty period. Read the document completely for warranty claim instructions.



BE SURE TO RETURN THE VECTAPURE WARRANTY CARD LOCATED IN YOUR LITERATURE KIT. THIS IS NECESSARY TO VALIDATE YOUR PRODUCT WARRANTY.

Section 4: Troubleshooting Guide

Trouble Shooting Guide

Low Water or No Water

Possible Cause

Water supply valve closed
or tank valve closed.

Low water pressure

Crimped poly tube

Raw water TDS high

Filters or membranes plugged

Combo filter(s) upside down

Tubes installed to wrong fitting

Solution

Open valves

Install booster
pump

Repair or replace
tube

Consult dealer –
may need pre-
treatment

Replace filters

Install with
rubber gasket up
Install tubes per
S.8 (1), (2) and
(3).

Leaking Joints

Fittings not seated

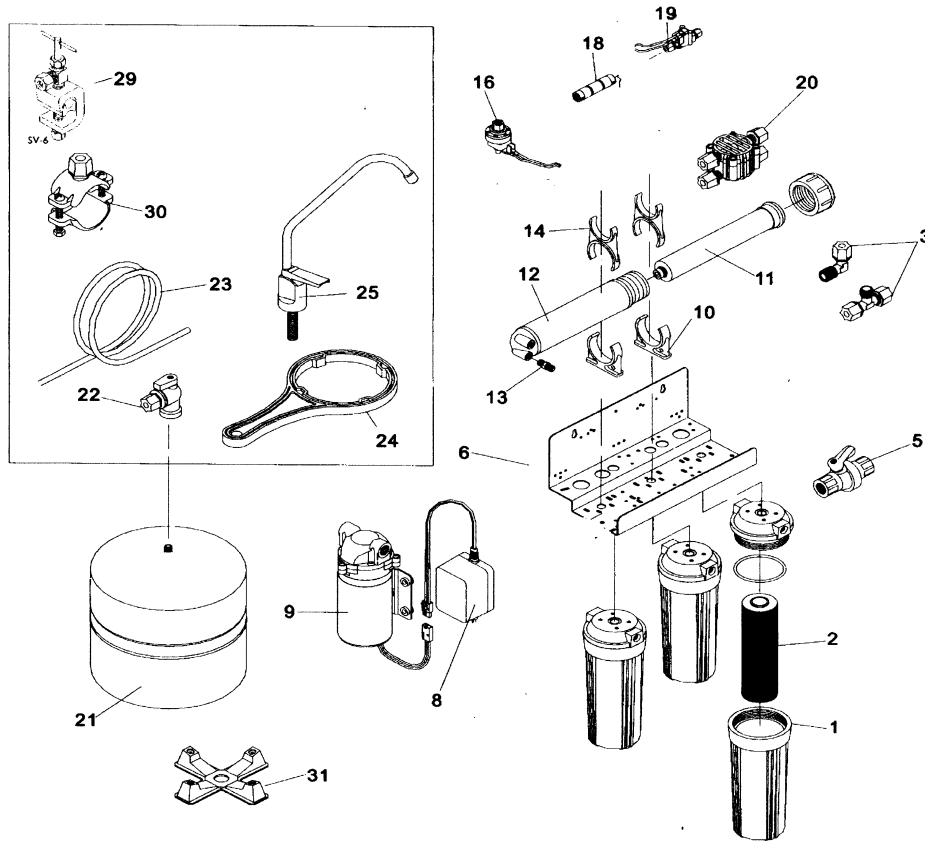
Filter housing leaking

Disconnect fitting
and reseal tube

Tighten with
housing wrench

Inspect o-rings
for cuts or crimps

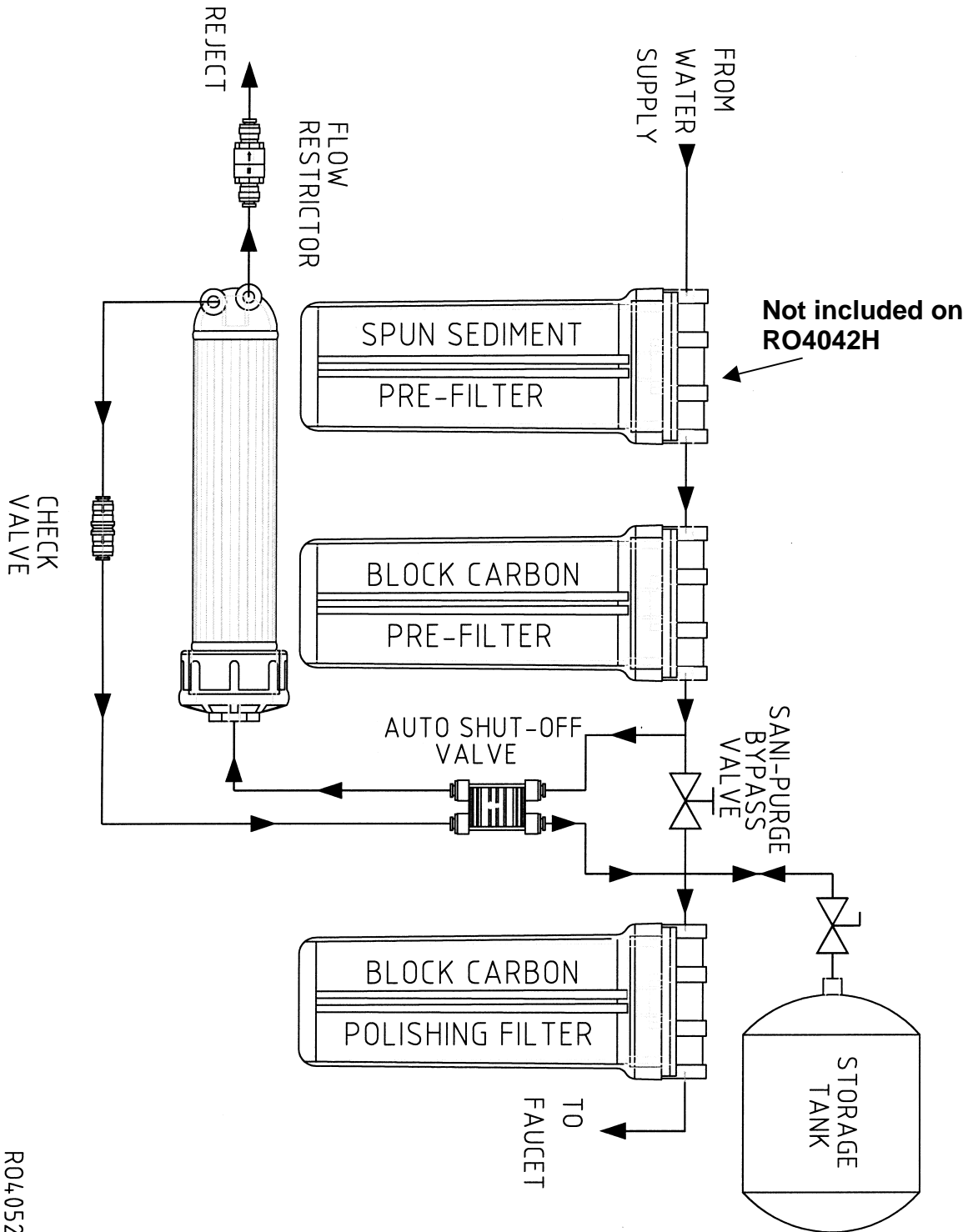
VECTAPURE II™ and WR2 SERIES RESIDENTIAL REVERSE OSMOSIS SYSTEMS PARTS LIST



KEY	DESCRIPTION	PART NUMBER	COMMENT	KEY	DESCRIPTION	PART NUMBER	COMMENT
1	Filter housing - clear	HE1014CW-U		14	Mounting clips	WP-225	
	Filter housing - white	HE1014WW-U					
2	Cartridge, combo	PPCC10-05	All models	16	Low pressure switch	RO-SWI-L	RO4152H only
	Cartridge 1 mic. sediment	PP1001	RO4052H, RO4152H	18	Flow restrictor	069D	069E (Pump model)
	Cartridge, Carbon	CBC-5CTO	All models	19	High pressure switch	RO-SWI-H	RO4152H only
3	Male elbow, push-on, 1/4"	A4ME4		20	4-way shutoff valve	ROS002	
	Tee, push-on, 1/4"	A4TU4		21	RO storage tank	ROT-4	
5	Sani-purge valve	A6HVUC6		22	Tank valve, push-on, 1/4"	EA3931	
6	Mounting bracket	BK3R-3MW			Tank valve, push-on, 3/8"	EA3931	
8	Transformer	LSA5436ADT	RO4152H only	23	PE tube - 1/4"	3634100	clear
9	Booster pump	PUMPAC-110T	RO4152H only		PE tube - 3/8"	3636100	clear
10	Mounting clips	WP-25		24	Plastic wrench	HAN-06W	
11	Membrane	BME1812R75		25	Faucet	WDF103LBTAQ	
12	Membrane housing	HM251EZ		29	Saddle valve	SV-6	
13	Check valve	CV1414EZ		30	Drain saddle	WP-14EZ	
N/S	Membrane housing o-ring	RO-0202		N/S	Filter housing o-ring	RKE001 RKE020HE	Dual O-ring style

VECTAPURE II™

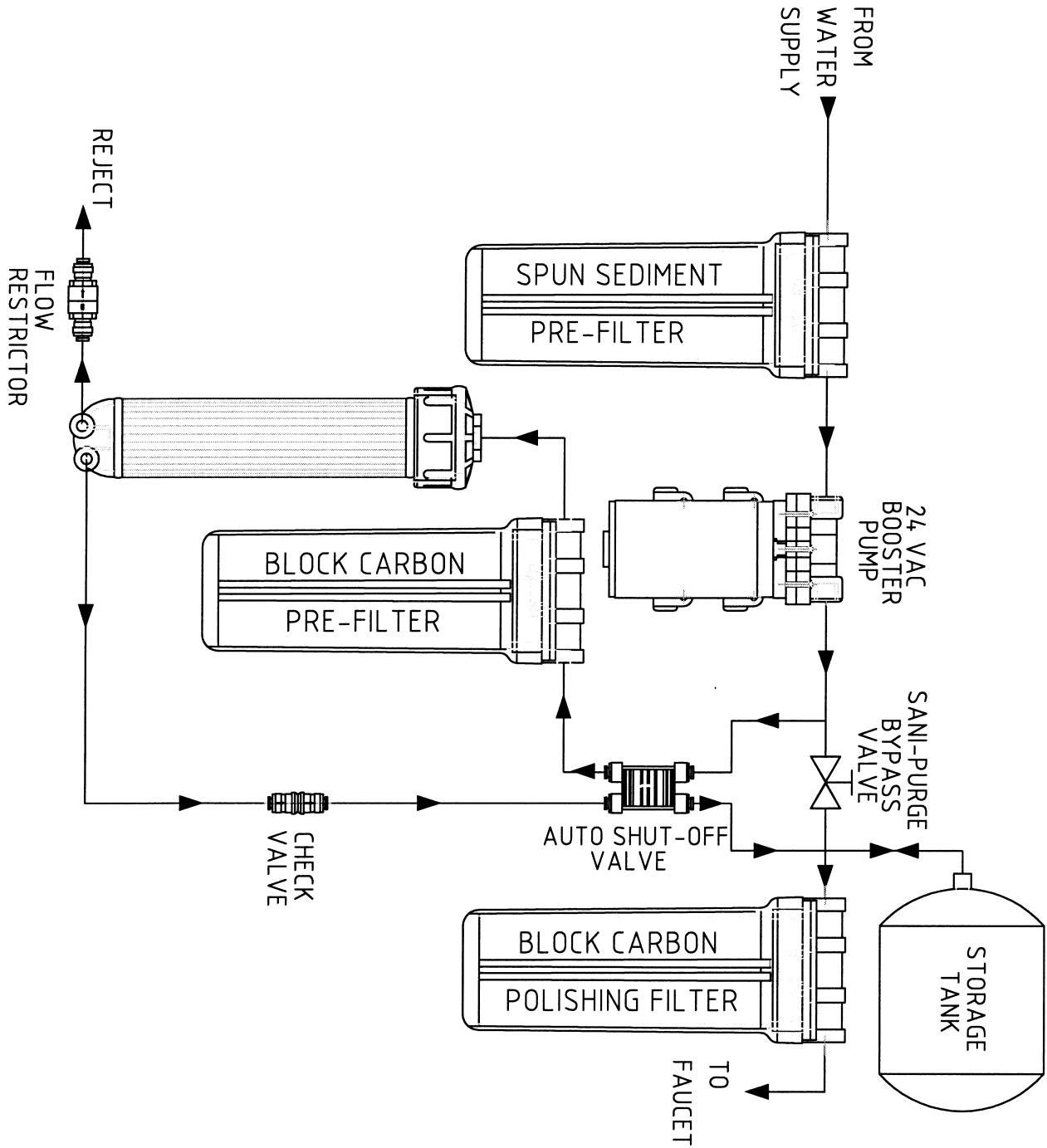
RESIDENTIAL REVERSE OSMOSIS SYSTEM FLOW LAYOUT RO4042H / RO4052H



RO4052H

VECTAPURE II™

RESIDENTIAL REVERSE OSMOSIS SYSTEM FLOW LAYOUT



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