Waterite

VECTAPURE 360

360FILTRATION SYSTEM

INSTALLATION AND OWNER'S MANUAL

For *VECTAPURE 360*™ Drinking Water 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.

Congratulations!

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

Section 1. <u>Frequently Asked Questions</u>

Before getting started, take the time to familiarize yourself with your new Waterite *VECTAPURE 360* 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 your *VECTAPURE 360* ™ Drinking Water System differ from an ordinary water filter?

Ordinary water filters use a cartridge or membrane contained in a sump or housing to filter your drinking water. Cartridge or membrane changes require housing wrenches and manual insertion of the cartridges into the housings. *VECTAPURE 360* systems use a convenient quarter-turn bayonet style cartridge that may be easily changed without any system disassembly. 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 a membrane and how does it work?

An ultrafiltration (UF) membrane element consists of hollow capillaries or filaments, bundled together and packed in a plastic tube. Each capillary has tiny pores that will allow water to pass to its interior. As the raw water passes across the surface of the filaments, only clean water is allowed to pass through and collect in the filaments and continue on in the system, while sediment and other contaminants are rejected and retained by the cartridge. A reverse osmosis (RO) membrane is a semi-permanent synthetic film that is spiral wound and separates raw water from product water (permeate). Water containing dissolved contaminants and salts is forced though the membrane by water pressure, with pure water being collected in the storage tank and rejected contaminants flushed to waste.

Q: What processes does the *VECTAPURE 360* systems use?

VECTAPURE 360™ systems use combinations of 5 types of treatment to produce your drinking water. 5-micron polypropylene (PP) particle filters remove dirt, rust and other sediment. Activated carbon cartridges (granular carbon in GAC and moulded briquettes in CBC) remove chlorine, colour, taste, odours and other contaminants. UF membranes are used to reduce very fine suspended particles, bacteria, cysts and viruses, in combination with PP and CBC cartridges. RO membranes will reduce concentrations of dissolved ions in the water by up to 99.9%.

Q: Will membranes remove minerals and salts from the water?

Reverse Osmosis (RO) membranes will remove up to 99.9% of common salts in solution. UF does not remove minerals from the product water, leaving calcium and other naturally occurring minerals normally found in spring water to remain in your drinking water.

Q: Does membrane filtration remove bacteria? Cryptosporidium? Viruses?

Yes. RO and UF membranes will eliminate most bacteria, viruses and parasites such as Cryptosporidium from the water. However, 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.

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***VECTAPURE 360*™ DRINKING WATER SYSTEMS ARE 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.**

Q: Where is the system installed?

Typically, the system is installed under the kitchen sink. This will be handy for most homeowners, for *VECTAPURE 360*™ systems are compact and take up very little space. 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 that 20' from your faucet, you may need a booster pump to ensure adequate pressure at the faucet. Your dealer can provide you with this optional equipment.

Q: Can the *VECTAPURE 360*™ system be connected to an extra faucet?

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

Q: How much water does the *VECTAPURE 360*™ system produce?

A *VECTAPURE 360* RO system will nominally produce 75 US gallons (285 litres) of product water per day. This output will be affected by system pressure, concentration of dissolved salts in the raw water, raw water temperature and other localized factors. Normally, you can expect the system to produce 7 or 8 litres of water per hour. *VECTAPURE 360*™ UF systems and inline filtration systems operate continuously and will produce about 3 to 5 litres of drinking water per minute. No storage tank is required.

Q: What is the standard warranty with *VECTAPURE 360*™ systems?

Every *VECTAPURE 360*™ 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 an extended consumer warranty if you wish - see the enclosed Extended Warranty Program information sheet and enrolment form included in your package. Call your dealer or go to www.waterite.com to apply**. Normal filter cartridge replacement is excluded from your warranty.

Q: What is the cartridge replacement schedule for a *VECTAPURE 360*™ system?

A good rule of thumb is to replace filter cartridges (red, green and blue cartridges) every three to six months. Dependent upon local water conditions, your UF membrane (violet cartridge) should have a life expectancy of 6 months to a year. More severe water conditions (iron, hardness or the presence of polyphosphate additives to municipal water) may shorten this life significantly. RO membranes (yellow cartridge) have a life usually ranging from one year to as much as five to seven years, dependent upon local water conditions. Falling UF system flow rates or slow storage tank refill rates on RO systems are indicators that the membrane requires replacement.

Section 2. Unpacking and Installation

Your system includes:

- ✓ The V360 filtration unit assembly with colour-coded cartridge(s). Depending on the model, you will have a single, dual or triple UF filtration unit or a four-stage RO unit. The cartridge(s) have been pre-inserted into the filter body.

Also included with Dual Filter and Triple Filter UF systems and 4 -Stage RO systems:

- ✓ One cold water supply adapter;
- ✓ One low-lead (stainless is optional), long reach faucet and related mounting hardware including threaded push-on tube adapter and tube stiffener insert;
- ✓ Three (3) #10 X1" wall mounting screws;
- ✓ One only 1-meter length (clear) of tube for connecting the filtration system to the faucet;
- ✓ One Owner's package including owner's manual, warranty certificate, Extended Warranty Plan enrolment form.

Also included with 4-Stage RO System:

- ✓ An RO water storage tank;
- ✓ One storage tank valve (included in RO hardware kit);
- ✓ One only 1-meter length (clear) of tube for connecting RO system to the storage tank;
- ✓ One drain pipe saddle (included in RO hardware kit);
- ✓ The waste water drain tube has been factory attached to the RO membrane.
- ✓ One preassembled blue coded 90˚elbow with Drain Line Flow Control (DLFC) built in a the base of the yellow (RO membrane) cartridge.

Step 1. Selecting the System Location

1. Your V360 filtration 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 cartridges will need periodic replacement and that easy access must be maintained. Do not install in a location with high humidity, heat or direct sun.

Figure 1A.

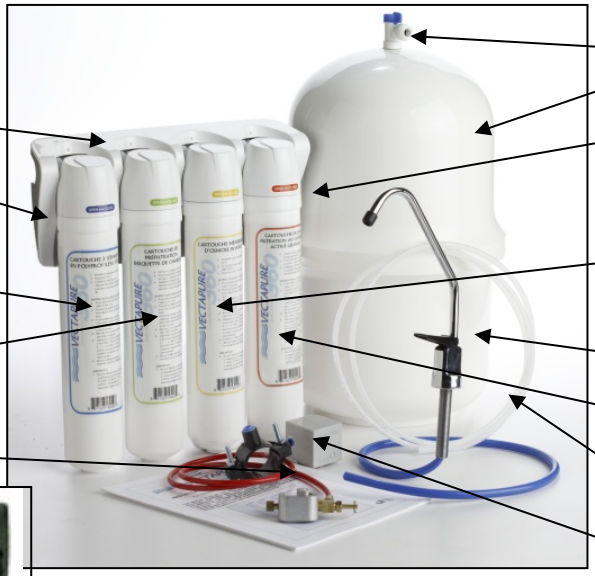
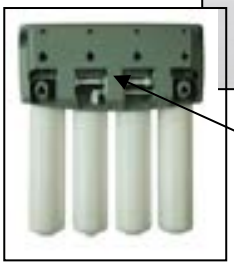


Figure 1B.



Push-on storage tank connection *(RO system only)*

V360 four-stage RO shown above

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 add a pressure booster pump to your system. 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 water supply adapter included is intended to be installed between the supply valve and the faucet connector, under the kitchen sink. If the cold water supply valve is not available at the installation location, you will need to consult your plumber or plumbing supply store to purchase an appropriate cold water connection.

3. You will need the following tools: An electric drill, a 5/8" drill bit, a 1/8" drill bit, a pencil, a small adjustable (crescent) wrench, a sharp knife (X-Acto type knife is best), adjustable pliers, a Phillips-head screwdriver, a rat-tail file, a center punch. V360 RO installers will also need a ¼" drill bit. **Always wear eye protection when using an electric drill.**

Step 3. Install the Cold Water Supply Faucet Adapter

1. Turn OFF the COLD water supply valve to your kitchen faucet.

2. Turn ON the COLD water on your kitchen faucet to release all the pressure, and completely drain the cold water until the water flow stops.

3. Place some towels underneath the cold water supply valve and then disconnect the faucet supply tube from the cold water supply valve.

4. Wrap male threads on both cold water supply valve and the water supply adapter 4 to 5 times with plumber's (Teflon) tape.

5. Install the water supply adapter on the cold water supply valve. Do not over-tighten.

6. Install the faucet supply tube to the water supply adapter.

7. Connect the white ¼" tube to the water supply adapter by inserting the tube firmly and pushing until the tube end contacts the stop. Gently tug the tube backwards to assure a secure connection. In the same way, connect the other end of the tube to the RO system water inlet.

8. Keep the COLD water supply valve OFF until the RO system installation has been completed; turn the COLD water supply valve ON and check for leaks around the water supply adapter. Tighten, reseal or reinstall if necessary.

Step 4. Install the Sink Faucet

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.

Your dealer will be able to supply a variety of designer faucets and finishes to suit your particular installation, if you wish. Included in your system is a premier quality chrome faucet that is compatible to most kitchen installations.

1. Examine the sink. If it has an existing hole for mounting a faucet, skip to Step 4. (6).

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 4. (5)

3. 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.*

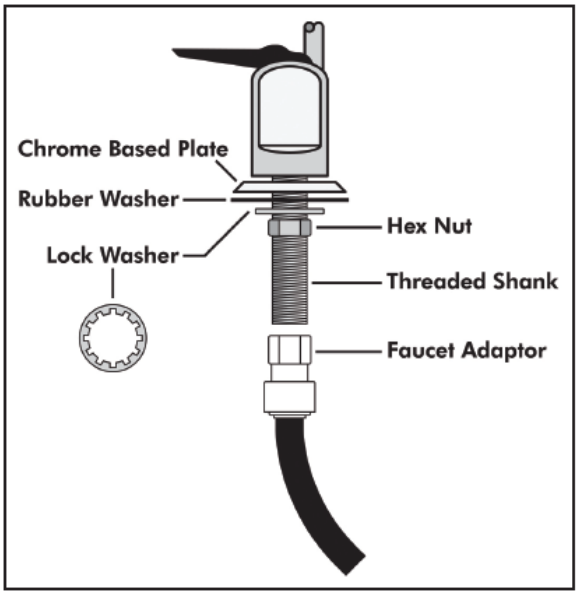
4. If you have a porcelain enamel or ceramic sink, it is **strongly** recommended that a professional install the faucet to avoid chipping and damaging the sink finish.

5. 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.

6. The sink faucet may now be assembled to the sink or countertop using the assembly procedure shown in Figure 2.

7. Thread the faucet tube adapter on the faucet shank until snug, but **DO NOT OVER TIGHTEN.** Do not attach the tube at this time.

Figure 2.



If you have a V360 RO system, proceed to step 5. For all other V360 systems, proceed to step 7.

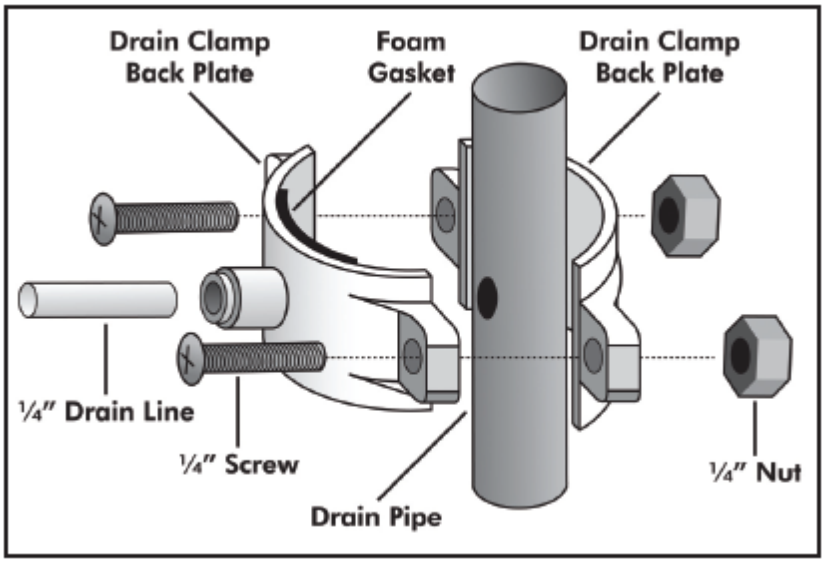
1. Select the location to install the drain saddle assembly. This is usually on the sink drainpipe and needs to always be located above the "S" trap.

2. Position the drain saddle assembly in the selected location and mark the spot through the 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 foam gasket and position on the inside of the drain clamp back plate, aligning the gasket hole with the outlet. Attach the drain clamp back plates to the drainpipe, aligning the push-on fitting with the drilled hole. Using the screws provided, tighten the clamp snugly. DO NOT OVER TIGHTEN. See Figure 3 below.

4. You will find the drain tube is connected to the bottom of your RO membrane cartridge (yellow) by a blue coded 90° elbow which has the built-in Drain Line Flow Control (DLFC). The drain tube may be inserted directly into the push-on drain clamp fitting, using instructions in Step 8 below. Do not attach drain tube at this time.

Figure 3.



Step 6. Install the Tank Valve, Preparing the Storage Tank *(V360 RO System only)*

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 OVER TIGHTEN. Place tank in its intended position and open the tank valve to the fully open position. Connect one length of the clear PE tube to the tank valve by inserting the tube into the push-on fitting all the way. Gently tug to assure a secure connection.

Step 7. Mounting the Filtration Unit

1. While holding the V360 system in its intended mounting position, mark the holes for the wall screws with the pencil. Using a 1/8" bit, drill the pilot holes for the screws.

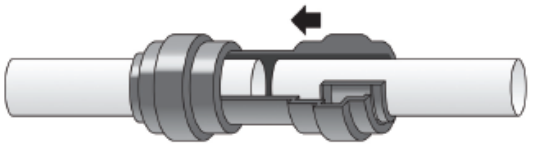
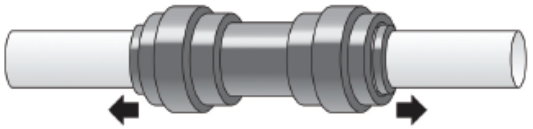
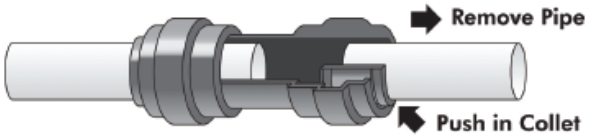
2. ***(For V360 Single Filter systems)*** Position the bracket and screw in the mounting screws until snug.

3. ***(For V360 Dual Filter or Triple Filter UF systems only)*** Screw in the mounting screws leaving ¼" protruding. Hang the system mounting bracket on the screws and tighten until snug. If the unit is to be mounted on wallboard, use the plastic screw anchors supplied.

4. ***(For V360 RO systems only)*** Screw in the mounting screws leaving ¼" protruding. Cut the ¼" tube from the storage tank to the desired length by following the directions in Step 6. Connect the tank tube to the 'to storage tank' fitting at the rear of the RO system. See Figure 1B if you are unsure of its location. Make sure that the tube is inserted all the way into the fitting and the connection is secure. Hang the system mounting bracket on the screws and tighten until snug. If the unit is to be mounted on wallboard, use the plastic screw anchors supplied.

Step 6. Connect the System Tubing

QUICK-CONNECT FITTINGS — HOW TO MAKE A CONNECTION

Connecting standard quick-connect fittings Push up to pipe stop.	
Push the pipe into the fitting, to the pipe stop. The collet (gripper) has stainless steel teeth which hold the pipe firmly in position while the 'O' Ring provides a permanent leak proof seal. Pull on the pipe to check it is secure. It is good practice to test the system prior to leaving site and/or before use.	
Disconnecting standard Quick-connect fittings Ensure system is depressurized before removing fittings. Push in the collet against the face of the fitting. With the collet held in this position the pipe can be removed. The fitting can then be re-used.	

1. Connect the red tube from the water supply adapter with the system push-on 'water inlet' fitting, after cutting the ¼" red supply tube to the length required. Make sure tube cuts are clean and square and the tube is fully inserted into the inlet fitting.

2. Connect the clear ¼" tube to the faucet tube adapter. Connect the other end to the 'to faucet' system outlet fitting after cutting the faucet tubing to the desired length. Make sure tube cuts are clean and square and the tube is fully inserted into the fitting.

You may find that your unit does not have labels attached to indicate the water inlet and faucet connections. Refer to Figure 1A to verify their location.

3. ***(For V360 RO systems only)*** Connect the drain tube from the bottom of the RO membrane to the drain saddle, by first cutting to the desired length and then inserting the tube into the push-on drain fitting. Make sure tube cuts are clean and square and the tube is fully inserted into the fitting.

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

Step 7. Starting Up the *VECTAPURE 360* Filtration System

1. ***(For V360 Single, Dual or Triple Filter systems only)*** Turn on the cold water supply valve and check all connections for leaks. Do not proceed further until any leaks are fixed. Open the system faucet and let the system run for two minutes. Carbon cartridges may release carbon dust momentarily at initial start-up, but this is harmless and will clear immediately. Close the faucet and check all connections for leaks and fix if necessary. Your system is now ready for use.

2. ***(For V360 RO systems only)*** Open water supply saddle valve and let RO system fill with water. Check for leaks and tighten any joints if necessary.
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.
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 may see dark carbon dust briefly flush from the carbon 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 V360 Filtration 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

The red, green and blue cartridges should be changed, as a rule of thumb, every three to six months, depending on local raw water conditions. The UF membrane (violet) should be changed dependent upon the raw water conditions, but normally between every three and six months to one year. The RO membrane (yellow) will normally last from a little as one and to as much as seven years. Falling UF system flow rates at the faucet or slow storage tank refill rates on RO systems are indicators that the membrane requires replacement.

Membrane elements 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, for RO membranes, TDS readings in the product water begin to rise. **T**otal **D**issolved **S**olids may be measured by a water professional or by use of a simple hand-held TDS meter. These are available from your dealer or from Waterite's Online Store at www.waterite.com.

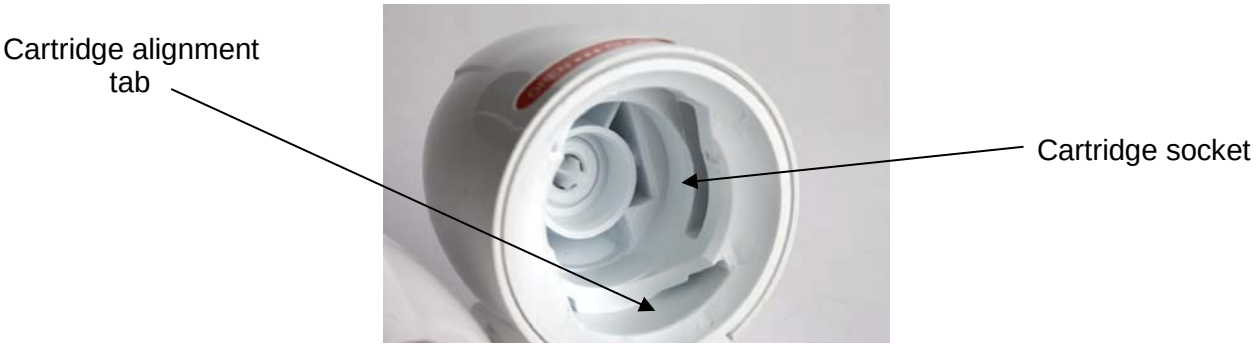
Soft water free from iron is idea for long membrane life. Hardness, iron, chlorine and infrequently changed filter cartridges are the membrane's greatest enemies. UF membrane life is significantly reduced if local water authorities inject a polyphosphate additive to municipal water to inhibit water main corrosion.

Filter cartridges may be changed with the saddle valve ON. However, a small amount of water may seep from the cartridge socket momentarily upon removal. To avoid this leakage, simply turn the saddle valve OFF when changing cartridges.

1. Close the cold water supply valve. On RO systems, close the tank valve. Open the faucet until the flow of water stops, and then close. Grasp the cartridge to be removed, swing it outwards and twist ¼ turn to the LEFT. The cartridge will disengage and can be easily removed by pulling it out of the socket. Repeat for each cartridge to be changed.

2. Wash hands thoroughly. Remove the replacement cartridge from its box and its sani-sealed protective sleeve. Remove the protective cap. Make sure the correct cartridge is installed in its socket according to its colour. Locate the alignment tab on the top of the cartridge (there are two at 180 degrees from each other) and align with the center front of the cartridge socket. Push cartridge straight up into the socket, while turning ¼ turn to the RIGHT. The cartridge will engage and lock into place. See figure 5.

Figure 5.



3. Turn the cold water supply valve ON. Open the faucet and allow the system to run for two minutes to flush. For RO systems, drain the storage tank and allow to refill. You may now resume normal use of the system.

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.

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BE SURE TO RETURN THE *VECTAPURE 360 WARRANTY CARD* LOCATED IN YOUR LITERATURE KIT. THIS IS NECESSARY TO VALIDATE YOUR PRODUCT WARRANTY.

Section 4: Troubleshooting Guide

Trouble Shooting Guide	Possible Cause	Solution
Low Water or No Water	Water supply valve closed or RO tank valve closed.	Open valves
	Low home water pressure	Must exceed 40 PSI. If lower, install booster pump – see dealer
	Crimped poly tube	Repair or replace tube
	Filters or membrane plugged	Replace membrane or cartridges
	Tubes installed to wrong fitting	Install tubes per S.6 (1), (2) and (3).
	(RO) Low air charge in tank	Charge to 7-10 psi or replace tank
	*(RO)*Tank full but no water flow	Replace tank – bladder ruptured
	(RO) Flow restrictor (DLFC)	Check DLFC and replace if necessary
	(RO) Raw water TDS high	Consult dealer – may need pre-treatment
	(UF) UF Membrane plugged	Polyphosphate added to water? Check with water authority and replace UF membrane
System Runs Continuously	*(RO)* Auto shutoff valve defective	Replace valve
Leaking Joints	Fittings not seated	Disconnect fitting and reseat tube. See S.6.

VECTAPURE 360™

DRINKING WATER SYSTEM COMMON PARTS LIST

DESCRIPTION	PART NUMBER
Auto shut-off valve (RO)	ROS002
Pre-filter PP Sediment Cartridge (Blue)	V360112PP-05
Pre-filter CBC Carbon Cartridge (Green)	V360212CC-05
UF Membrane Cartridge (Violet)	V360312UF-00
Post-filter GAC Carbon Cartridge (Red)	V360412GC-20
75 GPD RO Membrane (Yellow)	V360312RO-00
Water supply adapter	H0630426
Faucet	F9-C
¼" push-on tee (used for refrigerator hook-up)	A4TU4

Calculating your RO System's Daily Output

The Pressure and temperature chart below will help you determine what daily output you can expect from your V360 RO System. Your RO system is rated to produce 75 US gallons per day, or approximately 285 litres per day. Membranes are nominally rated at about 77°F (23°C) and 65 PSI (4.5 bar). By measuring your household pressure and inlet water temperature, you may calculate the expected production of your RO system in your home. Keep in mind that RO membrane output normally decreases with age, up to about 10% after 3 years.

Example: 58°F (13°C) and 50 PSI (3.4 bar) measured in your home at the RO inlet.
(From the chart below) .5094 X 75 gallons = 38.2 gallons (145 litres) per day.
38.2 gallons/24 hours = 1.6 gallons (6.0 litres) per hour production rate

VISIT THE WATERITE WEBSITE FOR INFORMATION, CONSUMER ONLINE REPLACEMENT PARTS AND PRODUCT UPDATES AT:
www.waterite.com

PRESSURE TEMPERATURE CHART

Temp °F	35 PSI	40 PSI	45 PSI	50 PSI	55 PSI	60 PSI	65 PSI	70 PSI	75 PSI	80 PSI	85 PSI	90 PSI	95 PSI	100 PSI	105 PSI	110 PSI
45	0.2321	0.2653	0.2985	0.3316	0.3648	0.3979	0.4311	0.4643	0.4974	0.5306	0.5638	0.5969	0.6301	0.6632	0.6964	0.7296
46	0.2417	0.2762	0.3108	0.3453	0.3798	0.4144	0.4489	0.4834	0.5179	0.5525	0.5870	0.6215	0.6561	0.6906	0.7251	0.7597
47	0.2513	0.2872	0.3231	0.3590	0.3949	0.4308	0.4667	0.5026	0.5385	0.5744	0.6103	0.6462	0.6821	0.7179	0.7538	0.7897
48	0.2609	0.2981	0.3354	0.3726	0.4099	0.4472	0.4844	0.5217	0.5590	0.5962	0.6335	0.6708	0.7080	0.7453	0.7826	0.8198
49	0.2704	0.3091	0.3477	0.3863	0.4250	0.4636	0.5022	0.5409	0.5795	0.6181	0.6568	0.6954	0.7340	0.7726	0.8113	0.8499
50	0.2800	0.3200	0.3600	0.4000	0.4400	0.4800	0.5200	0.5600	0.6000	0.6400	0.6800	0.7200	0.7600	0.8000	0.8400	0.8800
51	0.2896	0.3309	0.3723	0.4137	0.4550	0.4964	0.5378	0.5791	0.6205	0.6619	0.7032	0.7446	0.7860	0.8274	0.8687	0.9101
52	0.2991	0.3419	0.3846	0.4274	0.4701	0.5128	0.5556	0.5983	0.6410	0.6838	0.7265	0.7692	0.8120	0.8547	0.8974	0.9402
53	0.3087	0.3528	0.3969	0.4410	0.4851	0.5292	0.5733	0.6174	0.6615	0.7056	0.7497	0.7938	0.8379	0.8821	0.9262	0.9703
54	0.3183	0.3638	0.4092	0.4547	0.5002	0.5456	0.5911	0.6366	0.6821	0.7275	0.7730	0.8185	0.8639	0.9094	0.9549	1.0003
55	0.3279	0.3747	0.4215	0.4684	0.5152	0.5621	0.6089	0.6557	0.7026	0.7494	0.7962	0.8431	0.8899	0.9368	0.9836	1.0304
56	0.3374	0.3856	0.4338	0.4821	0.5303	0.5785	0.6267	0.6749	0.7231	0.7713	0.8195	0.8677	0.9159	0.9641	1.0123	1.0605
57	0.3470	0.3966	0.4462	0.4957	0.5453	0.5949	0.6444	0.6940	0.7436	0.7932	0.8427	0.8923	0.9419	0.9915	1.0410	1.0906
58	0.3566	0.4075	0.4585	0.5094	0.5603	0.6113	0.6622	0.7132	0.7641	0.8150	0.8660	0.9169	0.9679	1.0188	1.0697	1.1207
59	0.3662	0.4185	0.4708	0.5231	0.5754	0.6277	0.6800	0.7323	0.7846	0.8369	0.8892	0.9415	0.9938	1.0462	1.0985	1.1508
60	0.3757	0.4294	0.4831	0.5368	0.5904	0.6441	0.6978	0.7515	0.8051	0.8588	0.9125	0.9662	1.0198	1.0735	1.1272	1.1809
61	0.3853	0.4403	0.4954	0.5504	0.6055	0.6605	0.7156	0.7706	0.8256	0.8807	0.9357	0.9908	1.0458	1.1009	1.1559	1.2109
62	0.3949	0.4513	0.5077	0.5641	0.6205	0.6769	0.7333	0.7897	0.8462	0.9026	0.9590	1.0154	1.0718	1.1282	1.1846	1.2410
63	0.4044	0.4622	0.5200	0.5778	0.6356	0.6933	0.7511	0.8089	0.8667	0.9244	0.9822	1.0400	1.0978	1.1556	1.2133	1.2711
64	0.4140	0.4732	0.5323	0.5915	0.6506	0.7097	0.7689	0.8280	0.8872	0.9463	1.0055	1.0646	1.1238	1.1829	1.2421	1.3012
65	0.4236	0.4841	0.5446	0.6051	0.6656	0.7262	0.7867	0.8472	0.9077	0.9682	1.0287	1.0892	1.1497	1.2103	1.2708	1.3313
66	0.4332	0.4950	0.5569	0.6188	0.6807	0.7426	0.8044	0.8663	0.9282	0.9901	1.0520	1.1138	1.1757	1.2376	1.2995	1.3614
67	0.4427	0.5060	0.5692	0.6325	0.6957	0.7590	0.8222	0.8855	0.9487	1.0120	1.0752	1.1385	1.2017	1.2650	1.3282	1.3915
68	0.4523	0.5169	0.5815	0.6462	0.7108	0.7754	0.8400	0.9046	0.9692	1.0338	1.0985	1.1631	1.2277	1.2923	1.3569	1.4215
69	0.4619	0.5279	0.5938	0.6598	0.7258	0.7918	0.8578	0.9238	0.9897	1.0557	1.1217	1.1877	1.2537	1.3197	1.3856	1.4516
70	0.4715	0.5388	0.6062	0.6735	0.7409	0.8082	0.8756	0.9429	1.0103	1.0776	1.1450	1.2123	1.2797	1.3470	1.4144	1.4817
71	0.4810	0.5497	0.6185	0.6872	0.7559	0.8246	0.8933	0.9621	1.0308	1.0995	1.1682	1.2369	1.3056	1.3744	1.4431	1.5118
72	0.4906	0.5607	0.6308	0.7009	0.7709	0.8410	0.9111	0.9812	1.0513	1.1214	1.1915	1.2615	1.3316	1.4017	1.4718	1.5419
73	0.5002	0.5716	0.6431	0.7145	0.7860	0.8574	0.9289	1.0003	1.0718	1.1432	1.2147	1.2862	1.3576	1.4291	1.5005	1.5720
74	0.5097	0.5826	0.6554	0.7282	0.8010	0.8738	0.9467	1.0195	1.0923	1.1651	1.2379	1.3108	1.3836	1.4564	1.5292	1.6021
75	0.5193	0.5935	0.6677	0.7419	0.8161	0.8903	0.9644	1.0386	1.1128	1.1870	1.2612	1.3354	1.4096	1.4838	1.5579	1.6321
76	0.5289	0.6044	0.6800	0.7556	0.8311	0.9067	0.9822	1.0578	1.1333	1.2089	1.2844	1.3600	1.4356	1.5111	1.5867	1.6622
77	0.5385	0.6154	0.6923	0.7692	0.8462	0.9231	**1.0000**	1.0769	1.1538	1.2308	1.3077	1.3846	1.4615	1.5385	1.6154	1.6923
78	0.5480	0.6263	0.7046	0.7829	0.8612	0.9395	1.0178	1.0961	1.1744	1.2526	1.3309	1.4092	1.4875	1.5658	1.6441	1.7224
79	0.5576	0.6373	0.7169	0.7966	0.8762	0.9559	1.0356	1.1152	1.1949	1.2745	1.3542	1.4338	1.5135	1.5932	1.6728	1.7525
80	0.5672	0.6482	0.7292	0.8103	0.8913	0.9723	1.0533	1.1344	1.2154	1.2964	1.3774	1.4585	1.5395	1.6205	1.7015	1.7826
81	0.5768	0.6591	0.7415	0.8239	0.9063	0.9887	1.0711	1.1535	1.2359	1.3183	1.4007	1.4831	1.5655	1.6479	1.7303	1.8126
82	0.5863	0.6701	0.7538	0.8376	0.9214	1.0051	1.0889	1.1726	1.2564	1.3402	1.4239	1.5077	1.5915	1.6752	1.7590	1.8427
83	0.5959	0.6810	0.7662	0.8513	0.9364	1.0215	1.1067	1.1918	1.2769	1.3621	1.4472	1.5323	1.6174	1.7026	1.7877	1.8728
84	0.6055	0.6920	0.7785	0.8650	0.9515	1.0379	1.1244	1.2109	1.2974	1.3839	1.4704	1.5569	1.6434	1.7299	1.8164	1.9029
85	0.6150	0.7029	0.7908	0.8786	0.9665	1.0544	1.1422	1.2301	1.3179	1.4058	1.4937	1.5815	1.6694	1.7573	1.8451	1.9330
86	0.6246	0.7138	0.8031	0.8923	0.9815	1.0708	1.1600	1.2492	1.3385	1.4277	1.5169	1.6062	1.6954	1.7846	1.8738	1.9631
87	0.6342	0.7248	0.8154	0.9060	0.9966	1.0872	1.1778	1.2684	1.3590	1.4496	1.5402	1.6308	1.7214	1.8120	1.9026	1.9932
88	0.6438	0.7357	0.8277	0.9197	1.0116	1.1036	1.1956	1.2875	1.3795	1.4715	1.5634	1.6554	1.7474	1.8393	1.9313	2.0232
89	0.6533	0.7467	0.8400	0.9333	1.0267	1.1200	1.2133	1.3067	1.4000	1.4933	1.5867	1.6800	1.7733	1.8667	1.9600	2.0533
90	0.6629	0.7576	0.8523	0.9470	1.0417	1.1364	1.2311	1.3258	1.4205	1.5152	1.6099	1.7046	1.7993	1.8940	1.9887	2.0834
91	0.6725	0.7685	0.8646	0.9607	1.0568	1.1528	1.2489	1.3450	1.4410	1.5371	1.6332	1.7292	1.8253	1.9214	2.0174	2.1135
92	0.6821	0.7795	0.8769	0.9744	1.0718	1.1692	1.2667	1.3641	1.4615	1.5590	1.6564	1.7538	1.8513	1.9487	2.0462	2.1436
93	0.6916	0.7904	0.8892	0.9880	1.0868	1.1856	1.2844	1.3832	1.4821	1.5809	1.6797	1.7785	1.8773	1.9761	2.0749	2.1737
94	0.7012	0.8014	0.9015	1.0017	1.1019	1.2021	1.3022	1.4024	1.5026	1.6027	1.7029	1.8031	1.9032	2.0034	2.1036	2.2038
95	0.7108	0.8123	0.9138	1.0154	1.1169	1.2185	1.3200	1.4215	1.5231	1.6246	1.7262	1.8277	1.9292	2.0308	2.1323	2.2338

ADDENDUM 1

INSTALLATION INSTRUCTIONS FOR WATERITE P/N *REGP1414E PRESSURE REDUCING VALVE*

Residential drinking water RO systems are designed to operate at normal household water pressure levels, about 50 to 65 PSI. While systems and components are factory tested to 125 PSI, this is to only check for leaks and component integrity. On occasion, some household line pressures may exceed this normal range and range up to100 PSI. Constant high pressures exposure may, over time, weaken critical components and lead to leaks or component failure. Similarly, many households have fast-acting valves in such places as washing machines, dishwashers or other appliances. This may cause sudden hydraulic shock or water hammer conditions throughout the plumbing system (pipes 'banging') that could cause components or tube to break or rupture.

A well-designed plumbing system usually incorporates shock arrestors (see figure 1) to soften the effects of water hammer. Also, most areas where high line pressure exists will require every home to be equipped with a pressure reducing valve that lowers the household pressure to a normal range. However, some household plumbing may not have such safeguards.

Figure 1

!

It is highly recommended that residential RO system installations be made only in homes where line pressures are at a maximum of 65 PSI and water hammer arrestors are present.

As additional protection for the RO from over-pressure and water hammer, your kit has been equipped with a combination water pressure reducer and water hammer arresting device, Waterite p/n REGP1414E. This device is installed on the cold water inlet tube that feeds the RO system. See figure 2.

Figure 2

1.0 Install the REGP1414E device

1.1 Turn off the water supply to the cold water supply adapter.

1.2 Using a sharp knife or tube cutter, cut the ¼" tube between the Leak Stop device and the cold water inlet to the RO system. Make sure the cut is straight and without burrs.

1.3 Insert the tube from the cold water supply adapter into the inlet of the REGP1414E device. Check the arrow on the device to make sure the flow direction is correct. See figure 2. Make sure the tube is pushed all the way into the fitting and bottoms out. Tug on the connection to make sure that it is secure.

1.4 Connect the outlet of the device to the tube leading to the RO. Make sure the tube is pushed all the way into the fitting and bottoms out. Tug on the connection to make sure that it is secure.

1.5 Turn on cold water supply and check for leaks. Reinstall tube connections if necessary. Installation is now complete.

ADDENDUM 2

INSTALLATION INSTRUCTIONS FOR LEAK STOP FLOW INTERRUPTOR

Waterite now includes a non-electric leak detection device, with all residential RO systems. This **LEAK STOP** is easy to install and will automatically shut off the incoming water being supplied to the RO unit if any water comes in contact with it.

Simply mount on the floor of the cabinet directly under your RO unit is installed. If a leak occurs on the RO system, the sensor is triggered and an internal valve closes, preventing water from running to the RO system and causing water damage.

The **LEAK STOP** is supplied with a mounting bracket, two-sided tape to make installation easy.

INSTALLATION INSTRUCTIONS *(see Figure 1 below)*
For new system installations, installing the **LEAK STOP** should be your **LAST** step.

1. Turn inlet water valve off.
2. Using the 2-sided tape provided, place the **LEAK STOP** in a convenient location under the RO system, in a place most likely to get wet in the event of a system leak. Make sure the area is COMPLETELY free of moisture. Remove the tape film and push down firmly so that tape adheres to surface. (Fig. 1 & 2)
3. Remove the red locking rings from the ports on the **LEAK STOP** device. (Fig. 3)
4. If desired you can also fasten the bracket directly to the base of the cabinet by using the screw holes provided on the base of the **LEAK STOP**. (Fig. 1)
5. From the shut off valve on the main feed line, attach the ¼" (10mm) tube to the inlet side (IN) of the **LEAK STOP** device. (Fig 3)
6. From the outlet (OUT) side of the **LEAK STOP**, connect a ¼" (10mm) tube to the cold-water inlet of the RO system. (Fig. 4)
7. Make sure all connections are tight and that the tube has been inserted all the way into the **LEAK STOP** fittings. Secure the tubing with the locking rings supplied with the **LEAK STOP**. (Fig. 4)
8. Turn inlet water valve on. Make sure there are no leaks around the fittings.

Figure 1

Figure 2

Figure 3

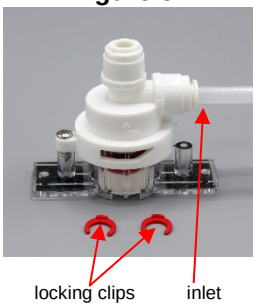
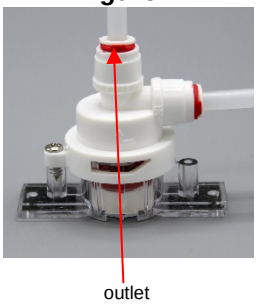


Figure 4



WARNING!

The LEAK STOP should be wrapped with a dry towel or cloth before changing cartridges. This will help avoid it coming into contact with water that may be accidentally spilled in the process. *Should the* LEAK STOP *device come into contact with any water, the device will be triggered and the tablet will need changing* (LEAK STOP refill tablet part number HDJMF01T).

Waterite, Inc. always used external capillary (Figure 1) as the drain line flow restrictor for our V360 Reverse Osmosis System. Due to product improvements which offer better serviceability, the present external flow restrictor has become obsolete.

As for May 9th, 2011, we have been assembling all V360 RO systems using blue color-coded 90° elbows which already have capillary flow restrictors built in (Figure 2). This improvement eliminates any accidental lost, damage of the flow restrictor due to its small size during unit installation and system servicing.

When installing or replacing the new flow restrictor elbows, the installer must make sure the presence of the built-In flow restrictor by observing a white insert in the tube end of the elbow (Figure 3). If you have any questions concerning this change, feel free to discuss your concerns with us.

Figure 1

Figure 2

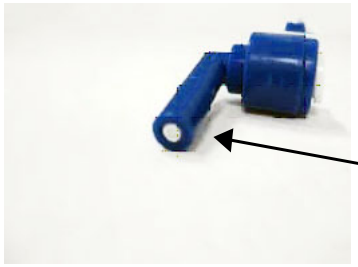


Figure 3

REGISTER YOUR PRODUCT ONLINE AT WATERITE.COM OR FILL OUT THE INCLUDED PRE-PAID, SELF ADDRESSED POSTCARD.

REGISTER YOUR PRODUCT ONLINE AT WATERITE.COM OR FILL OUT THE INCLUDED PRE-PAID, SELF ADDRESSED POSTCARD.

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