



# INSTALLATION AND OWNER'S MANUAL

For H2ORO400 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. 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 H2ORO400 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 H2ORO400 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. H2ORO400 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?**

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 through 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 H2ORO400 systems use?**

H2ORO400 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. 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.

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

Yes. RO 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.



**H2ORO400 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 H2ORO400 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 than 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 H2ORO400 system be connected to an extra faucet?**

Yes. Many installations may include an optional 1/4" tee and line to connect refrigerator icemakers or additional sink faucets. (Note: Most refrigerator manufacturers require a minimum of 20 psi for their ice maker to work. In high volume and/or low-pressure applications, the use of a booster pump on the treated water may be necessary) See your dealer for advice and parts.

**Q: How much water does the H2ORO400 system produce?**

A H2ORO400 RO system will nominally produce 300-350 US gallons (1130-1325 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 45 to 55 litres of water per hour.

**Q: What is the standard warranty with H2ORO400 systems?**

Every H2ORO400 system comes with a standard one-year limited warranty on all parts and repair labour. Normal filter cartridge replacement is excluded from your warranty.

**Q: What is the cartridge replacement schedule for a H2ORO400 system?**

A good rule of thumb is to replace filter cartridges (green and blue cartridges) every three months. RO membranes have a life usually ranging from one year to as much as five to seven years, dependent upon local water conditions. Slow storage tank refill rates on RO systems are an indicator that the membrane may require replacement.

## Section 2. Unpacking and Installation

Your system includes:

### Carton Contents (Fig 1A)

- ✓ The main 5 stage RO/filter unit assembly;
- ✓ One encapsulated membrane (pre-installed), one sediment filter cartridge, three carbon block filter cartridges;
- ✓ One Sani-Purge Cartridge
- ✓ One drain fitting and clamp with push-on tube fitting;
- ✓ One cold water supply adapter;
- ✓ One ¼" shutoff valve push fit
- ✓ One long reach faucet with 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 Leak-Stop;
- ✓ One Owner's package including owner's manual;
- ✓ One 12 litre (4 gallon) RO holding tank.

### Step 1. Selecting the System Location

1. Your H2ORO400 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.
2. The two mounting holes are 15" centers for a 5 stage. Use the #10x1" lag screws and washers supplied

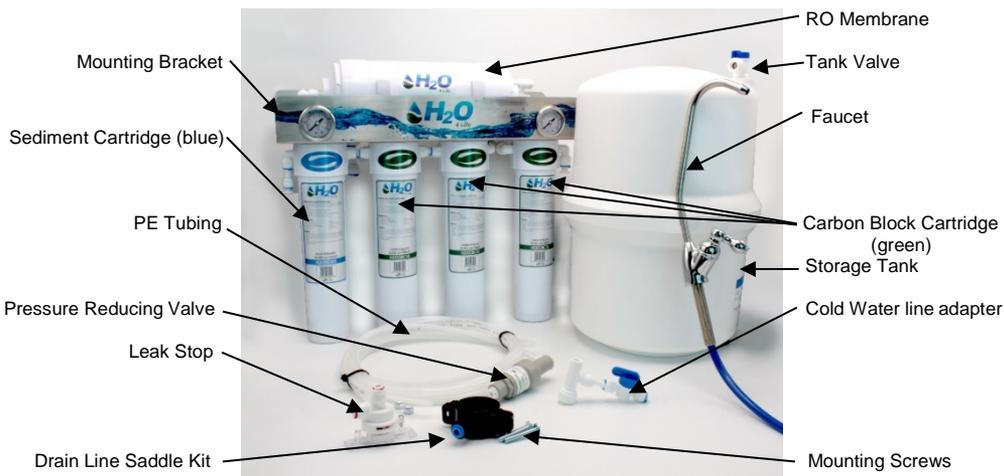


Figure 1a - H2ORO400

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. If you have a polybutylene, polypropylene, iron or a PEX supply line, 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 1/2" 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.  
**Always wear eye protection when using an electric drill.**

## **Step 3. Install the Cold Water Supply 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 the male threads on both cold water supply valve and the cold water supply adapter 4 to 5 times with plumber's (Teflon) tape.
5. Ensuring the gasket is in the female end, 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. Do not over-tighten.
7. If the shut off valve is pre-installed skip to step 3.10
8. If the shut off valve is not installed, cut a piece of clear tubing 1.5-2" long. Connect this tube into the side push fit port of 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. Do NOT connect the other end of the tube to the RO system water inlet at this time.
9. Install the ¼" shutoff valve to the other end of the cut tubing by inserting the tube firmly and pushing until the tube end contacts the stop. Gently tug the tube backwards to assure a secure connection.
10. Keep the COLD water supply valve OFF until the RO system installation has been completed.

11. You may now turn the water supply to your home ON. Check for leaks around the adapter. Tighten, reseal or reinstall if necessary.



Figure 2

#### **Step 4. Install the Sink Faucet**

*Tools required for this step: An electric drill, a 1/2" 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 with 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 1/2" 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 1/8" bit and drill the hole. Use the 1/2" bit to enlarge 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 3.
7. Thread the faucet tube adapter on the faucet shank until snug, but **DO NOT OVERTIGHTEN.** Do not attach the tube at this time.

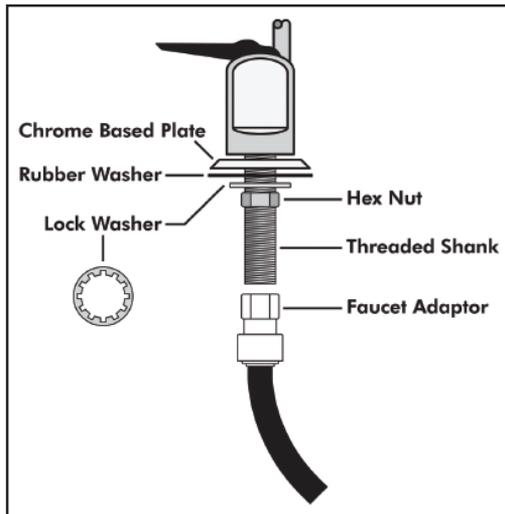


Figure 3

#### 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 OVER TIGHTEN.**
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.

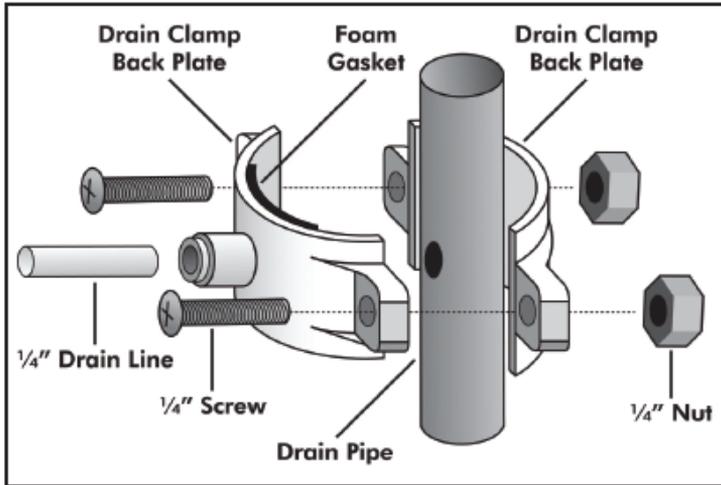


Figure 4

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

Wrap the threaded storage tank nipple with two wraps of Teflon tape. Thread on tank shut-off valve until snug. Using a wrench, turn an additional  $\frac{1}{4}$  turn. **DO NOT OVERTIGHTEN.** 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 RO Unit

1. While holding the RO unit in its mounting position, mark the holes for the wall screws. Using a  $\frac{1}{8}$ " bit, drill the pilot holes for the screws. Screw in the mounting screws leaving  $\frac{1}{4}$ " 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.**

### 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. Insert the ¼" clear tubing into the other end of the ¼" Cold water shut off valve you just installed. Measure and cut the tubing to allow for easy access to the RO unit. Connect the tubing to the first filter housing water inlet push-on fitting on the left side (marked "water inlet")
2. Install the pressure reducing valve on the line between the shutoff valve and the first filter. Make sure the arrow is pointing in the direction of flow. (shutoff valve RO)
3. Connect the black ¼" tube (marked "to drain") to the Drain Saddle push-on connection (your black drain tube is pre-attached to your RO). Please note that the drain line flow restrictor has been installed INSIDE the black drain tube at the waste elbow, on the membrane housing.
4. Place the storage 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.
5. 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.



Rear View

**!**

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

### Step 7. Starting Up the H2ORO400 Filtration System

1. Install all the cartridges as per Section 3:1. (figure 5)
2. Turn on the water supply saddle valve and check all connections for leaks. Do not proceed further until any leaks are fixed.
3. Once all leaks are repaired, install the Leak Stop as per addendum directions (at the end of this manual).
4. With the faucet open, let the system operate for about 10 minutes. Close the tank valve and the faucet. Check for leaks again and fix if necessary.
5. Open the storage tank valve. 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 as much as 30 minutes or more.
6. Once the system shuts off, 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.

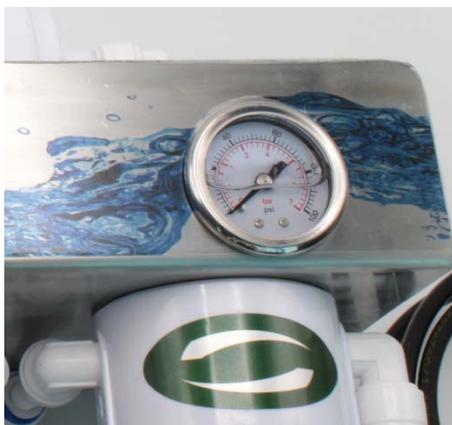
## **Section 3: Operation and Maintenance**

Operation of your H2ORO400 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 green and blue cartridges should be changed, as a rule of thumb, every three months, depending on local raw water conditions. The RO membrane will normally last from a little as one and to as much as seven years. Falling system flow rates at the faucet or slow storage tank refill rates on RO systems are indicators that the membrane requires replacement.

The pressure gauges located on the system bracket are helpful in alerting the user to change cartridges. The left gauge indicates the raw water pressure, and the right gauge indicates the water pressure after the pre-treatment cartridges. The indicated pressure will fall when then the cartridges require changing. When the pressure falls below 40 PSI (2.75 bar), cartridges should be changed. (Note: This applies if the inlet pressure to the RO is 50 PSI or greater).



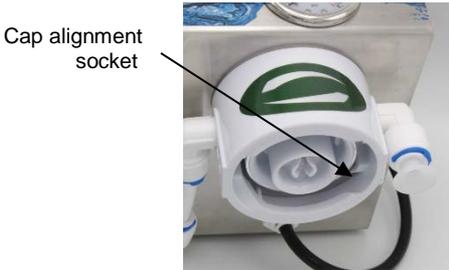
Membrane elements require changing much less frequently than the filter cartridges and only when failure is indicated. This should be done when water production begins to noticeably fall or TDS readings in the product water begin to rise. **T**otal **D**issolved **S**olids may be measured by a water professional or by use of a simple hand-held TDS meter. These are available from your dealer.

Soft water free from iron is ideal for long membrane life. Hardness, iron, chlorine and infrequently changed filter cartridges are the membrane's greatest enemies.

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 saddle valve and close the tank valve. Open the faucet until the flow of water stops, and then close. Grasping the cartridge to be removed, twist  $\frac{1}{4}$  turn COUNTER-CLOCKWISE. The cartridge will disengage and can be easily removed by pulling it out of the socket. Repeat for each cartridge to be changed.

- 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 of the cap alignment socket. Push cartridge straight up into the socket, while turning  $\frac{1}{4}$  turn CLOCKWISE. The cartridge will engage and lock into place. See figure 5.



**Figure 5a**



**Figure 5b**

- Turn the raw water saddle valve ON. Open the faucet and allow the system to run for two to five minutes to flush. For RO membranes, drain the storage tank and allow to refill. You may now resume normal use of the system.

<b>Trouble</b>	<b>Possible Cause</b>	<b>Solution</b>
<b>Low Water or No Water</b>	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).
	Low air charge in tank	Charge to 7-10 psi or replace tank
	Tank full but no water flow	Replace tank – bladder ruptured
	Flow restrictor (DLFC)	Check DLFC and replace if necessary
Raw water TDS high	Consult dealer – may need pre-treatment	
<b>System Runs Continuously</b>	Auto shutoff valve defective	Replace valve
	Flow restrictor (DLFC)	Check DLFC and / or replace
<b>Leaking Joints</b>	Fittings not seated	Disconnect fitting and reseal tube. See S.6.

## 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 H2ORO400 RO System. Your RO system is rated to produce 400 US gallons per day, or approximately 1515 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% in the first year.

**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 400 gallons = 203.8 gallons (771 litres) per day.  
203.8 gallons/24 hours = 8.5 gallons (32.2 litres) per hour production rate

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	0.3728	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	0.8796	0.9685	1.0574	1.1462	1.2351	1.3239	1.4128	1.5017	1.5906	1.6795	1.7684	1.8573	1.9462
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	1.0266	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 to 100 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

## 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

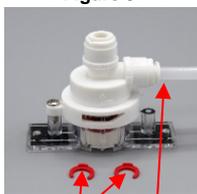


Screw mount holes

Figure 2



Figure 3



locking clips inlet

Figure 4



outlet

#### **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).

## **1.0 Install the Pressure Regulator 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 Pressure Regulator 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.

**PLEASE FILL OUT THE INFORMATION ON THE BACK OF THE CARD AND  
CUT ALONG THE DASHED LINE. MAIL THE WARRANTY REGISTRATION  
CARD TO VALIDATE YOUR WARRANTY.**



**PRODUCT WARRANTY REGISTRATION CENTRE  
UNIT 1 - 652 BISHOP STREET NORTH  
CAMBRIDGE, ON  
CANADA N3H 4V6**



[www.H2O4Life.ca](http://www.H2O4Life.ca)

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## WARRANTY REGISTRATION

**IMPORTANT! THIS CARD MUST BE MAILED TO VALIDATE WARRANTY!**

Name: \_\_\_\_\_

Address 1: \_\_\_\_\_

Address 2: \_\_\_\_\_

City/Town: \_\_\_\_\_ Postal/Zip Code: \_\_\_\_\_

Province/State: \_\_\_\_\_ Country: \_\_\_\_\_

Email Address: \_\_\_\_\_

Where Purchased: \_\_\_\_\_

Date Purchased: \_\_\_\_\_ Date Installed: \_\_\_\_\_

Model Number: **H2ORO400**

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