



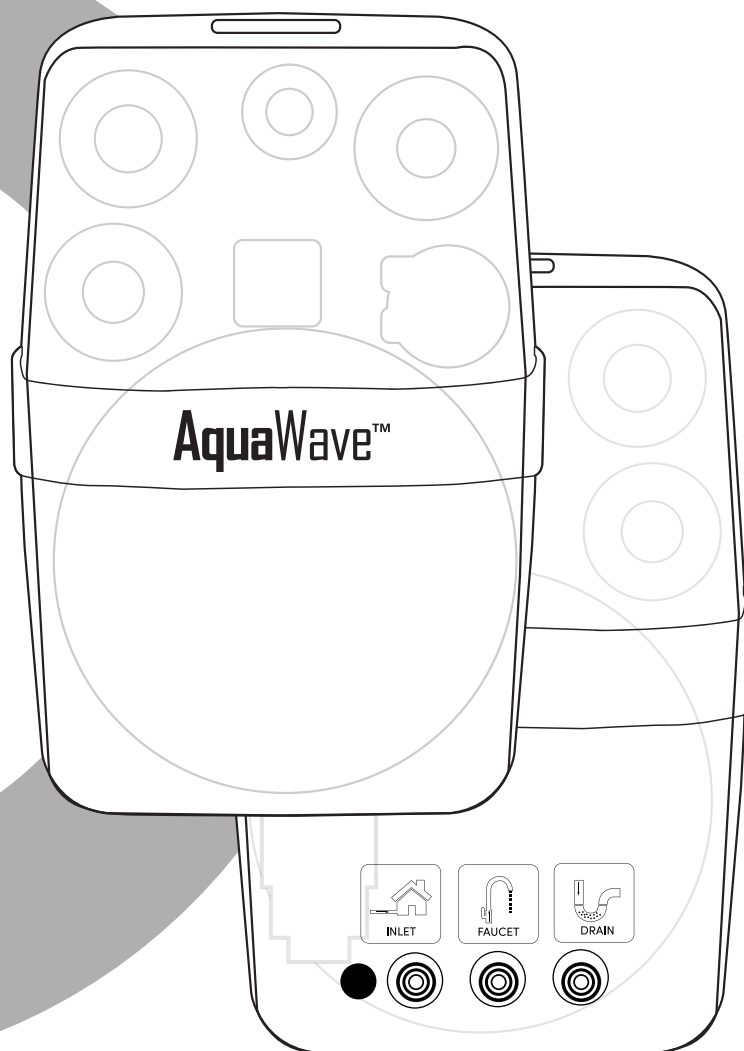
AquaWave™

Premium

Installation, Operation & Maintenance Manual



Reverse Osmosis
(RO) System



AW-PRM-75-38-Q; AQ-PRM-75-38-Q-AGF
All systems are equipped with Purefer® series filters



INTRODUCTION AND WARNINGS

AquaWave™ Premium Reverse Osmosis System

INTRODUCTION

Congratulations on your purchase of the AquaWave™ Premium Reverse Osmosis System.

The AquaWave Premium Reverse Osmosis System is designed with advanced filtration technology and utilizes a 5-stage filtration process to purify and deliver fresh-tasting water. This system is designed exclusively for municipal water systems and will remove volatile organic chemicals, chlorine, odor, sediment, suspended impurities, metals, and other harmful contaminants from your water.

This instruction manual illustrates the AquaWave Premium Reverse Osmosis System installation and operation. Please be sure to read the contents of this manual before installation.

The system should be installed by a qualified professional installer or licensed plumber. Installation must be in accordance with local and state plumbing codes.

⚠ WARNINGS & PRECAUTIONS

- **WARNING:** Do not use water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system.
- **WARNING:** The system may at no point be exposed to pressures above the rated pressure, as this may cause system damage!
- **WARNING:** A qualified installer shall install protective devices if the system pressure may at any time exceed the rated maximum pressure due to pressure surges or water hammer, or other excessive pressure events to ensure that the maximum operating pressure of the system will not be exceeded!
- **CAUTION:** Water pressure must not exceed 4 bar | 60 psi. Minimum water pressure should not be lower than 1.4 bar | 20 psi.
- **CAUTION:** Protect the system against freezing. Freezing can cause system damage and result in water leakage!
- **CAUTION:** Install the system in a sheltered or covered location and protect it from excessive heat!
- **CAUTION:** Do not install where the system will be exposed to direct sunlight!
- **CAUTION:** The system is intended for use with tap water and should not be installed for use with other water sources, such as mountain spring water or groundwater.
- **CAUTION:** System must be installed on the cold-water piping line. Do not install on hot water piping. Inlet water temperature should not exceed 100°F | 38°C.
- **CAUTION:** Avoid ambient temperatures over 100°F | 38°C
- **CAUTION:** System contains replaceable sediment and activated carbon filters, as well as a replaceable reverse osmosis membrane which is critical for the effective reduction of TDS (Total Dissolved Solids). Water purified by this system should be tested periodically to confirm the system is operating properly.
- **CAUTION:** Filters must be installed according to labeling and with the designated inlet water flow direction.
- **CAUTION:** Pay attention to safety when drilling close to the wires and plumbing parts of the installation.

OTHER IMPORTANT INFORMATION

- Please note that the lifetime of the filters, as well as their replacement interval strongly depends on the inlet water quality, the amount of water consumed, the sediment and chlorine content, etc.

System should be isolated from water supply if not used for more than 1 week. If not used for a period of 1 month or more RO water storage tank should be emptied.

REPLACEMENT FILTERS AND PARTS

- Filters are consumables and are not covered by the warranty.
- Only use GWS approved replacement filters. Product warranty is void if non-GWS approved replacement filters are used.
- Only use GWS approved spare parts. In the case of any replaceable part of the system, the replacement product must be approved by Global Water Solutions or an authorized GWS distributor. Product warranty is void if non-GWS approved spare parts are used.

SPECIFICATIONS

Model	AW-PRM-75-38-Q
Daily Capacity	75GPD / 280 LPD
Purification Rate	up to 96%
Max. Working Pressure	21 - 70psi /1.5 - 5.0bar
Inlet Water Temperature	41° - 100°F / 5° - 38°C
Dimensions and Weight	38 x 38 x 25 cm; 9,1 kg
Pre- and Post-Filters	NSF certified for all models
RO Membrane	NSF certified 75GPD
Maximum TDS	1000 ppm
Maximum Chlorine	1.0 ppm
PH	6.0~8.5
RO Water Storage Tank	NSF certified, 3.2gl /12lt, 6-7psi/ 0.4 bar pre-charge

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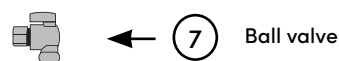
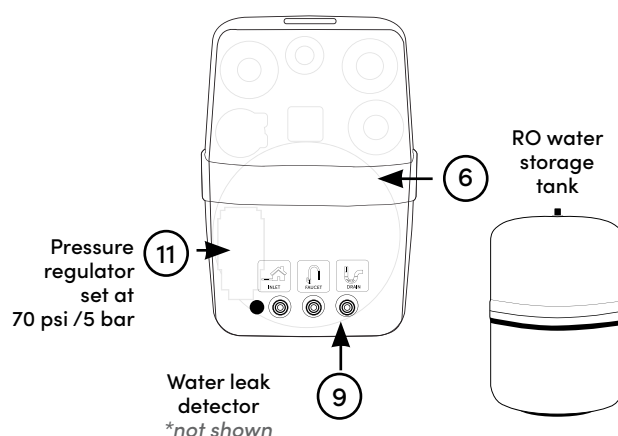
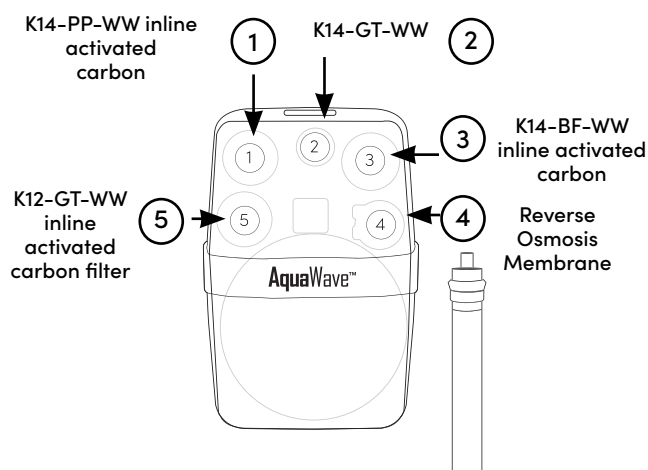
INSTALLATION & DIAGRAM

AquaWave™ Premium Reverse Osmosis System

COMPONENTS

- #1 1st stage filter - K14-PP-WW
- #2 2nd stage filter - K14-GT-WW
- #3 3rd stage filter - K14-BF-WW
- #4 Reverse Osmosis Membrane
- #5 5th stage filter - K12-GT-WW
- #6 RO water storage tank
- #7 Ball Valve
- #8 RO faucet

- #9 Water leak detector
- #10 Water leak detector replacement pellet
- #11 Pressure regulator set to 70psi/5bar
- #12 Cold supply water valve/3-way water mains adaptor
- #13 Waste water clip
- #14 White 1/4" connection hose



7 Ball valve



12 Cold supply water valve / 3-way water mains adaptor



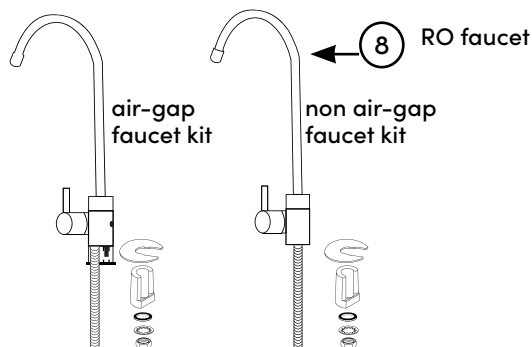
13 Waste water clip



14 White 1/4" connection hose, 3 meters



15 Blue 3/8" drain line, 1.5 meters (supplied with AGF kits only)



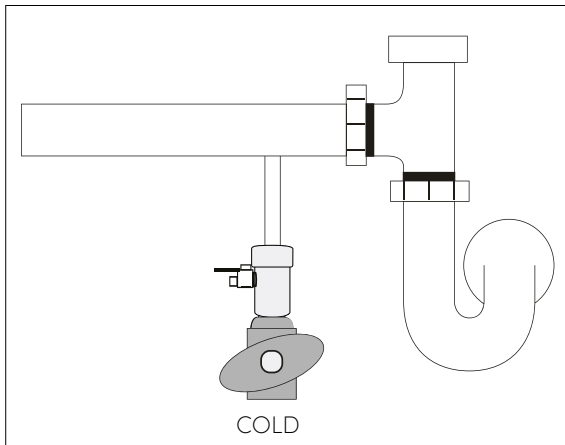
10 Water leak detector replacement pellet

INSTALLATION INSTRUCTIONS

If inlet water pressure is 60 psi / 4 bar, a pressure regulator must be installed and set at 60 psi / 4 bar. You must check and comply with all local plumbing codes.

1. Install water supply valve

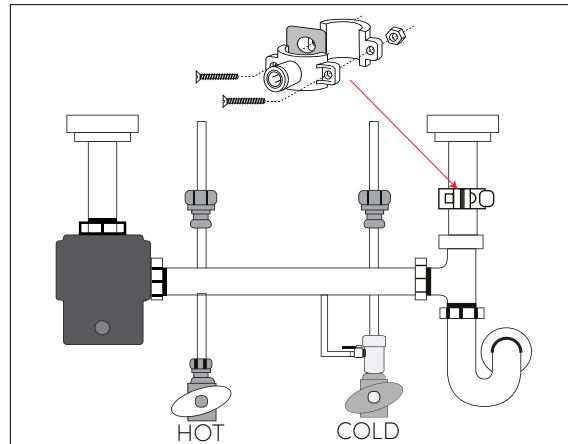
Fig. 1



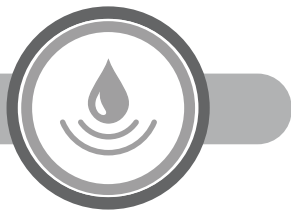
- Identify the cold water supply line under the sink cabinet. Shut the cold-water supply valve.
- Turn on the cold-water tap to release pressure from the lines until water flow stops.
- Disconnect the cold-water line from the angle stop valve and identify if it is a 1/2" or 3/8" connection and select appropriate water supply adaptor.
- Assemble the 1/4" water supply valve into the appropriate diameter water supply adaptor using Teflon tape on male threads before insertion.
- Wrap threads of water supply adaptor and angle stop valve 2-3 times with Teflon tape.
- Screw the water supply adaptor to angle stop valve and tighten with adjustable wrench.
- Screw the cold-water supply line to threads of water supply adaptor and tighten with adjustable wrench.

2. Install waste water clip

Fig. 2



- Identify the drain outlet location. Make sure that it is away from the garbage disposal See Fig.2.
- Knock out center hole on foam seal.
- Use the hole in foam seal as a template to locate your drilling position above the drain trap, mark exact location with a pencil.
- At the marked location, drill 1/4" (6.35mm) hole through the wall of the drain-pipe. Be sure not to penetrate opposite side of the pipe.
- Remove protective cover from the back of foam seal and attach it to the front plate drain connector in alignment with drain tube hole.
- Begin to position the drain connector on sink drain- pipe with screws and nuts, using your pencil in the drain connector tube hole to guide your location over your drilled hole as you securely tighten nuts and screws.



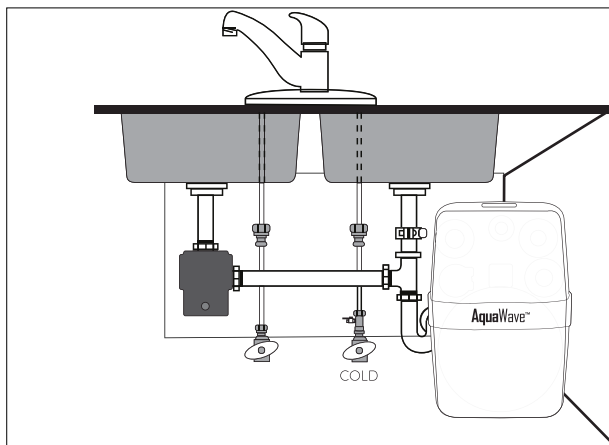
INSTALLATION MANUAL

AquaWave™ Classic Reverse Osmosis System

INSTALLATION INSTRUCTIONS

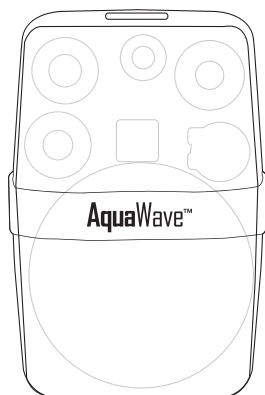
3. Prepare RO system for installation

Fig. 3

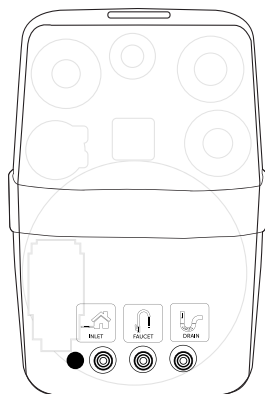


- Locate the position to place the RO system

Fig. 3



FRONT



BACK

4. Install RO faucet

Fig. 4

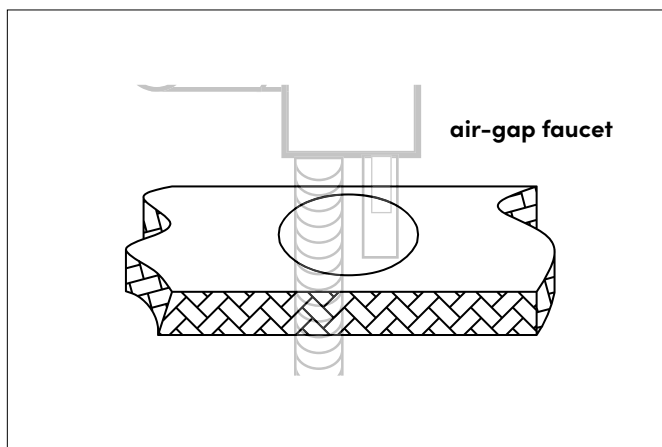
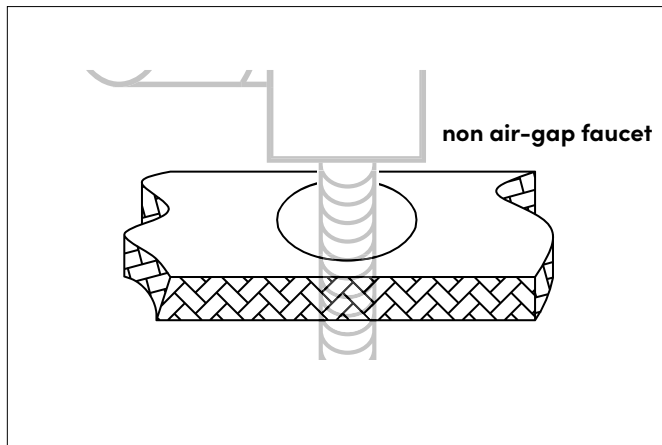


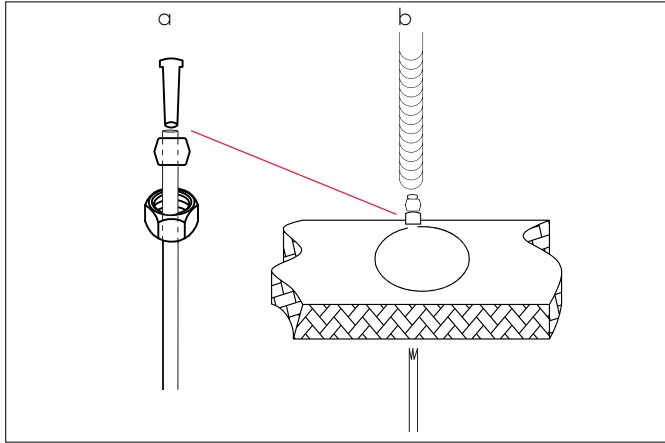
Fig. 4.1



- Remove the faucet base from the package and ensure it can mount flat against the surface before drilling an 7/8" (22mm) hole to house the faucet.
- NOTE: Drilling holes into solid surfaces or surfaces made of stone should only be performed by a qualified installer.
- Assemble the faucet by inserting the spigot into the top threaded hole of the handle section and tighten the nut to lock it in place.
- NOTE: Make sure all tubing cuts are done squarely and evenly to ensure proper sealing.

INSTALLATION INSTRUCTIONS

Fig. 4.2



- Connect this 1/4" white tube to compression filter components as shown in Fig. 4.2 (a)
- Insert compression filter assembly into base of threaded stem of faucet as shown in Fig. 4.2 (b)
- Take the faucet base and snake it over the tubing and threaded stem until it sits against the bottom of the faucet handle section. See Fig. 4.3 (**air-gap** faucet)- 4.4 (**non air-gap**) Insert tubing and threaded stem through drilled hole until the faucet base is flush against the countertop
- Assemble remaining faucet components below the countertop. Tighten completely once faucet is in correct position over the sink. See Fig. 4.5 (**air-gap** faucet) and Fig. 4.6 (**non air-gap** faucet)

Fig. 4.3

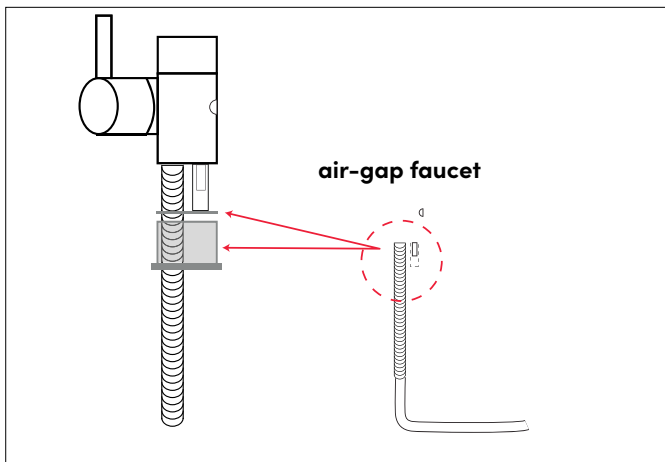


Fig. 4.4

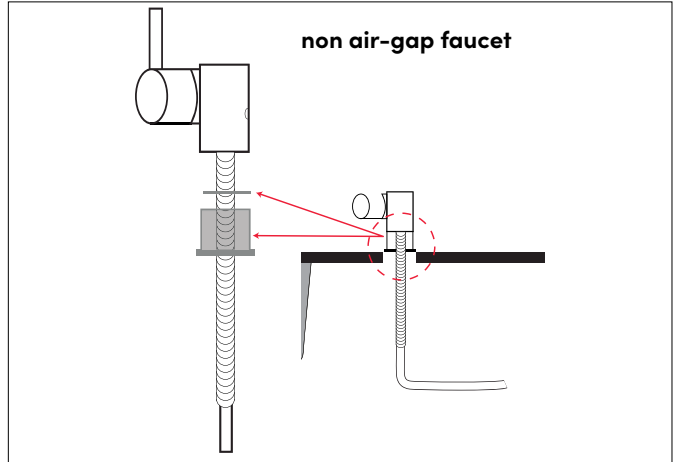


Fig. 4.5

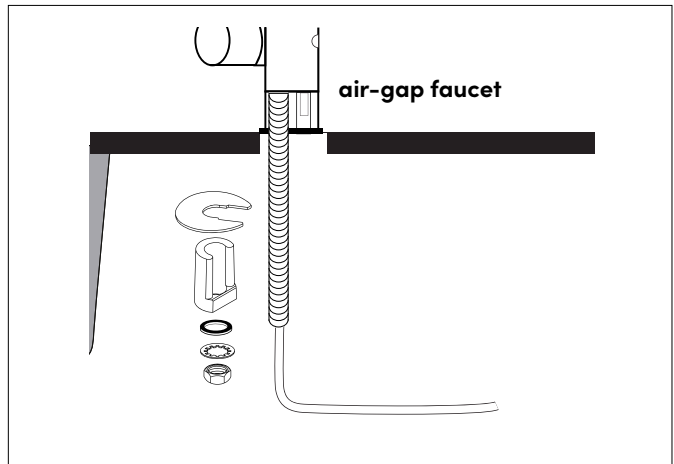
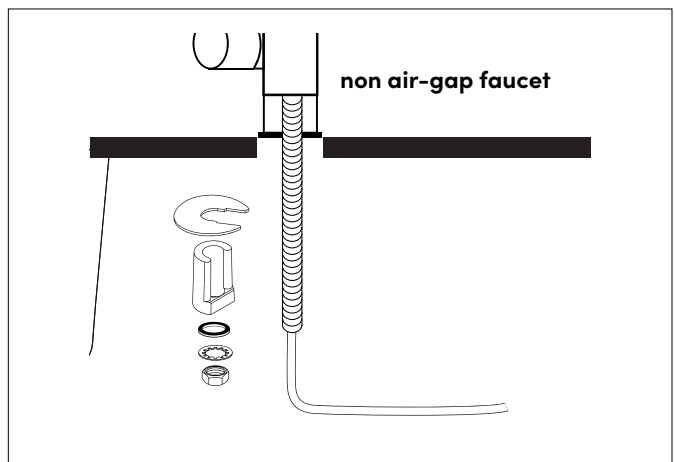


Fig. 4.6





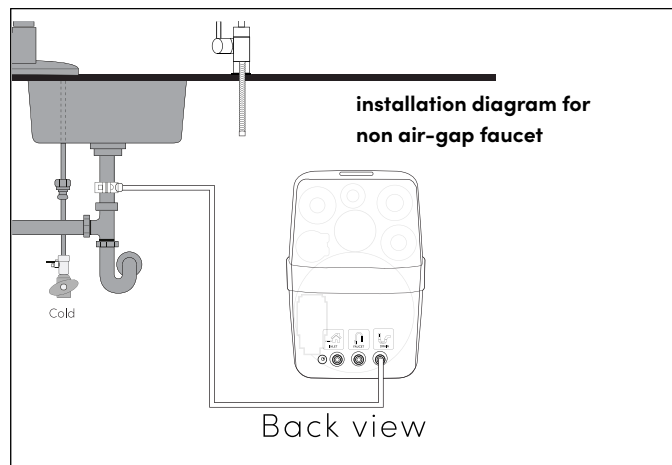
INSTALLATION MANUAL

AquaWave™ Premium Reverse Osmosis System

INSTALLATION INSTRUCTIONS

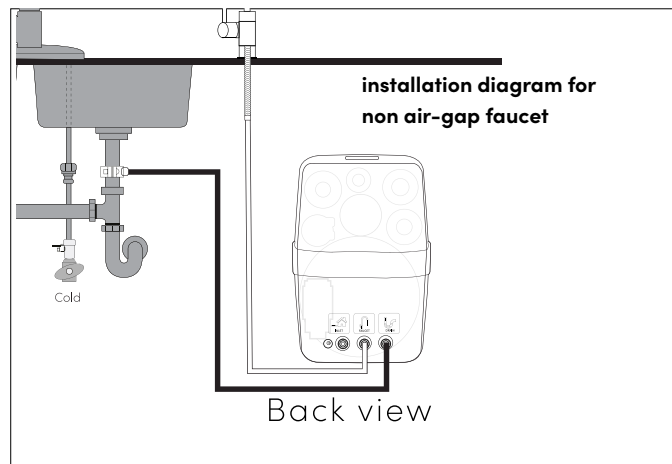
5. Prepare RO system for installation - continued

Fig. 5



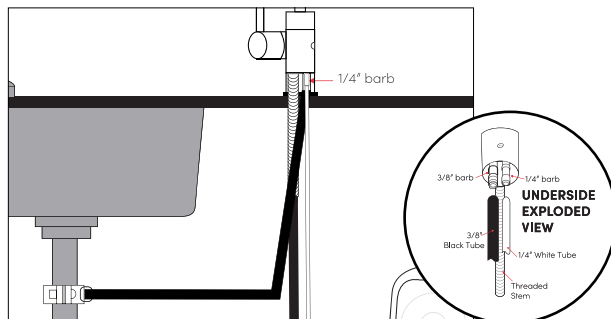
- Measure length of 1/4" white tubing required to connect RO system drain outlet to the wastewater adapter, as shown in Fig. 5
- Cut tubing length accordingly. Insert end of 1/4" tube onto 1/4" faucet barb, making sure it covers the barb to the top.
- Measure length of 1/4" white tubing required to connect base of threaded stem of faucet to the purified water outlet and cut tube accordingly. See Fig 5.1

Fig. 5.1



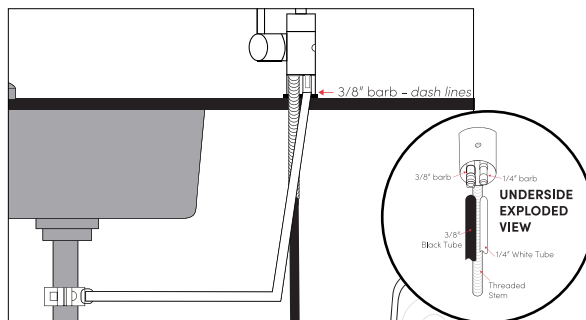
6. Prepare RO system for installation - AIR-GAP FAUCET

Fig. 6.1



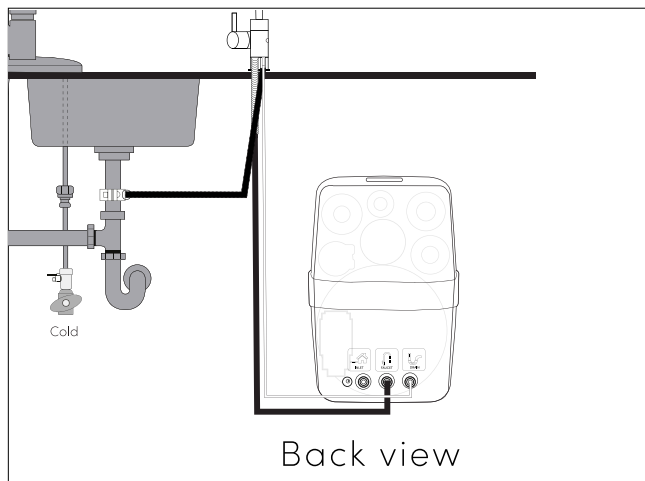
- Connect the 1/4" drain line to the smaller input barb on the air gap faucet.

Fig. 6.2

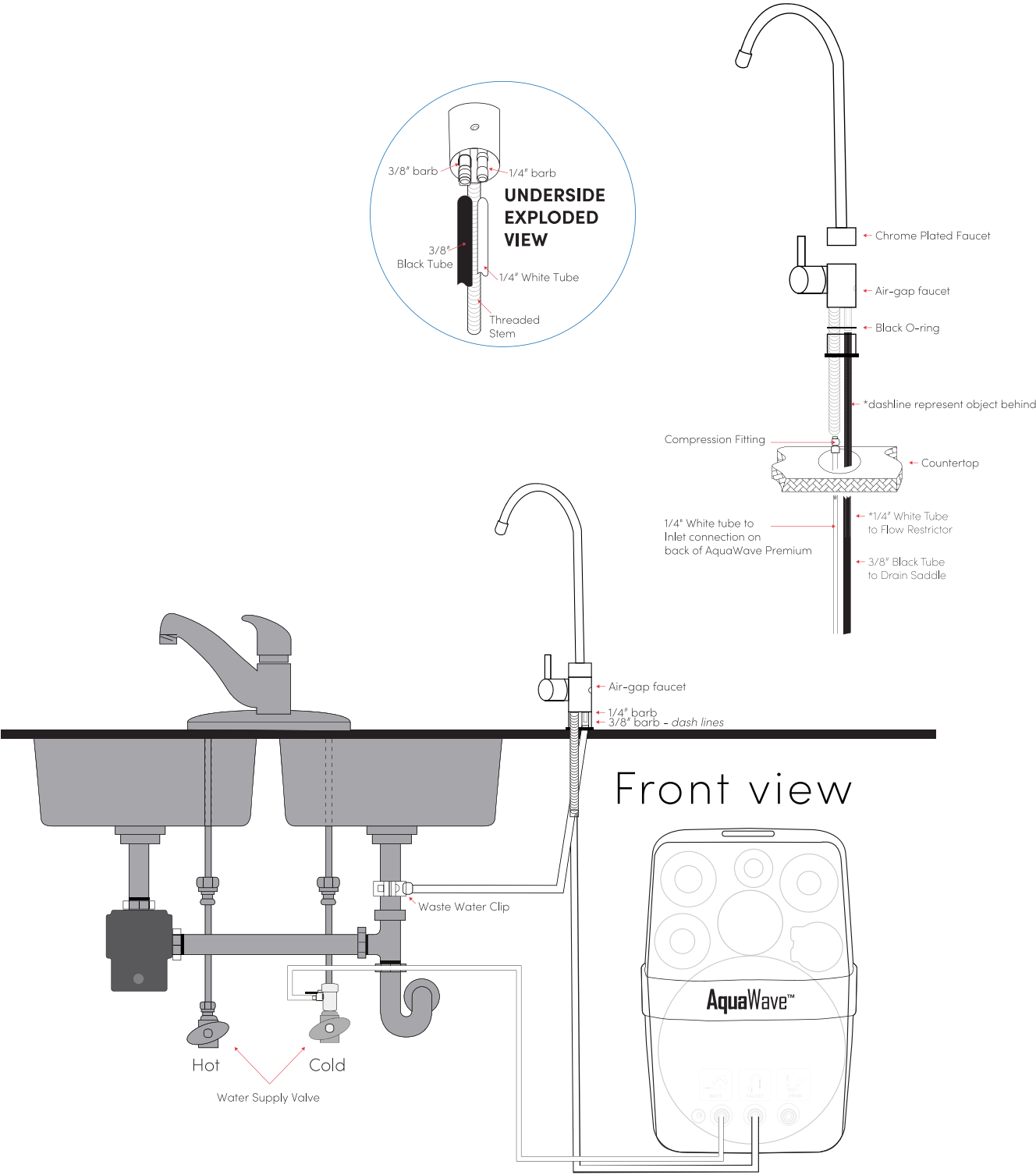


- Connect the 3/8" drain line coming from the drain saddle to the larger barb on the air gap faucet.

Fig. 6.3



THE RO SYSTEM FULL CONFIGURATION WITH AIR-GAP FAUCET





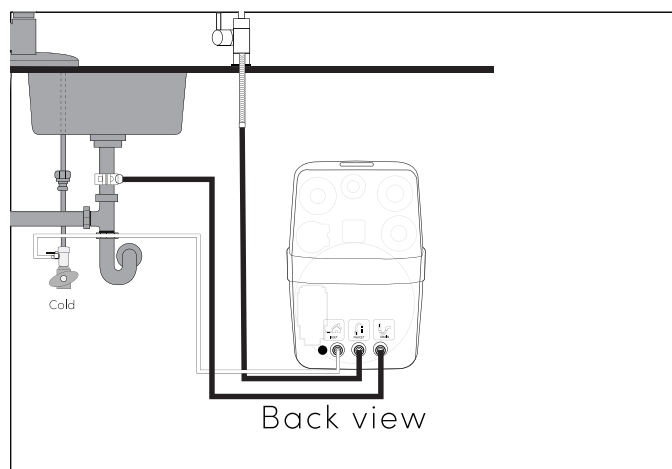
INSTALLATION MANUAL

AquaWave™ Premium Reverse Osmosis System

INSTALLATION INSTRUCTIONS

7. Prepare RO system for installation – continued

Fig. 7

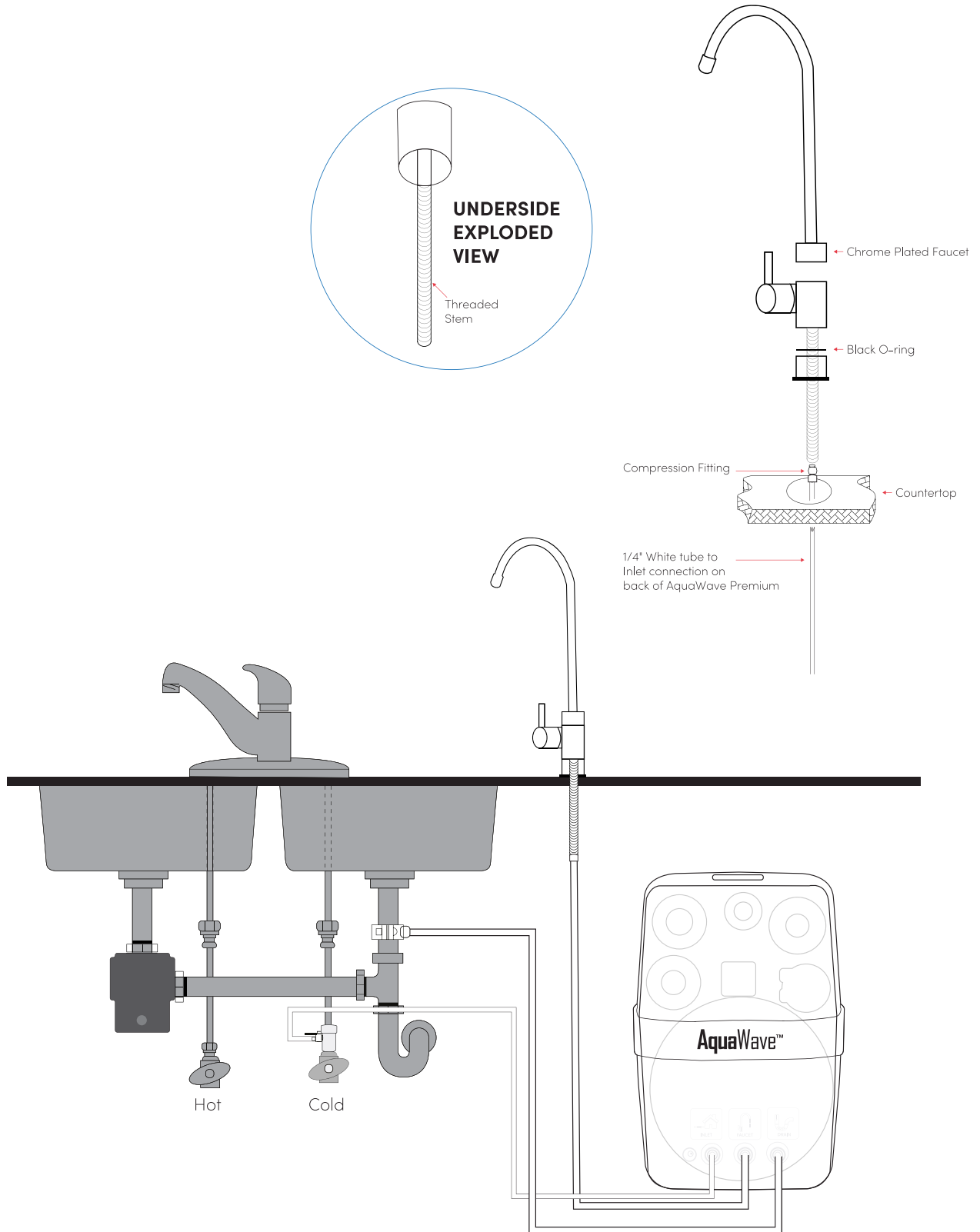


- Measure length of 1/4" white tubing required to connect RO system inlet to the main water supply, as shown in Fig. 7.

8. System start-up

- Ensure RO faucet is turned off/closed.
- Turn on main cold water supply valve and ensure that the 1/4" water supply valve to the RO system is in open position.
- Ensure ball valve on top of tank is in open position.
- Purge air from the system by slowly opening up faucet until water runs smoothly and then turn off.
- Over two hours, the pressure in the RO system will build as water flows through the system. During this time, monitor the system for any leaks at connections or fittings.
- If leaks are present, fix by ensuring all tubing is cut squarely, fully inserted and/or by adding more wraps of Teflon™ tape. Confirm there are no notches, scratches, or dents in any of the tubing. If found, replace tubing, or cut approximately 1" off from damaged area and re-assemble as length permits.
- If the system exhibits no leaks, then allow the system to fill the tank.
- DO NOT USE OR DRINK THE FIRST TANK OF RO WATER
- Turn off the 1/4" water supply valve.
- Empty first tank of water by turning on the RO faucet, letting it run until the water stops flowing.
- Turn on the 1/4" water supply valve.
- Allow the tank to fill a second time (approximately 1-2 hours) and then enjoy clean, great tasting water from your new RO system!

THE RO SYSTEM FULL CONFIGURATION





TECHNICAL DATA AND COMPONENTS

AquaWave™ Premium Reverse Osmosis System

BEFORE CHANGING THE FILTERS OF YOUR RO SYSTEM

- Turn off the 1/4" water supply valve.
- Close the RO tank ball valve..
- Turn the RO faucet on so the water runs out of the system. Wait until there is no more water running.
- Water may spill during the filter changing process. Therefore, we suggest performing the filter changes over a towel or bucket to catch the spilling water.

FILTER REPLACEMENT INSTRUCTIONS

Stage 1 – Inline PP Filter – K14-PP-WW

- Remove the used inline PP filter cartridge by unplugging the quick-connect on each side of the cartridge. Dispose of the used cartridge.
- Install your new inline PP filter cartridge by connecting the tubing to the in and out quick-connections. Make sure to check the Flow Direction arrow on the filter cartridge and install it in the correct direction (same direction as old cartridge).

Stage 2 – Inline GAC Filter – K14-GT-WW

- Same as Stage 1

Stage 3 – Inline GAC 2-in-1 Filter – K14-BF-WW

- Same as Stage 1

Stage 4 – zReplacement RO Membrane

- Open the RO membrane housing by unscrewing the membrane housing and remove the RO membrane using pincers. Dispose of the RO membrane.
- Unpack the new replacement RO membrane from its packaging and insert the membrane end with the two O-rings into the housing until it clicks into place. Do not force the membrane to seat.
- Replace the RO membrane housing cap and hand tighten.

Stage 5 GAC Post-Filter – K12-GT-WW

- Same as Stage 1

AFTER CHANGING THE FILTERS OF YOUR RO SYSTEM

- Turn on the 1/4" water supply valve.
- Put the 1/4" water supply valve in "ON" position.
- If the RO faucet was turned off, turn it back on. Water should begin to trickle out of the RO faucet.
- Let the RO water run like this for about 1 hour. It is now flushed and ready for use.
- Turn off the RO faucet and open the RO tank ball valve so that RO water can enter the tank.

FILTER CHANGE INTERVAL

The suggested filter change interval is a non-binding recommendation based on years of experience. It represents the use of the RO system with an average inlet water quality and hence does not necessarily reflect the optimal filter change interval plan based on your water quality. For more information, please visit our website at www.globalwatersolutions.com , send us an email to watertreatment@globalwatersolutions.com , contact our authorized responsible local distributor or the company from which you bought your system.

Filtration stage	Filter type	Change interval
Stage 1	K14-PP-WW - 5-micron PP (polypropylene)	every 3 months
Stage 2	K14-GT-WW - Granular Activated Carbon (GAC)	every 3 to 6 months
Stage 3	K14-BF-WW - GAC + 5-micron PP	every 3 to 6 months
Stage 4	Replacement RO Membrane	every 12 months
Stage 5	K12-GT-WW - Post-RO GAC	every 3 to 6 months

CHANGING LEAK DETECTOR INSERT (only when used)

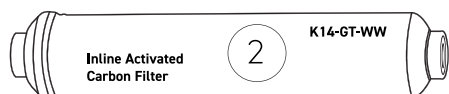
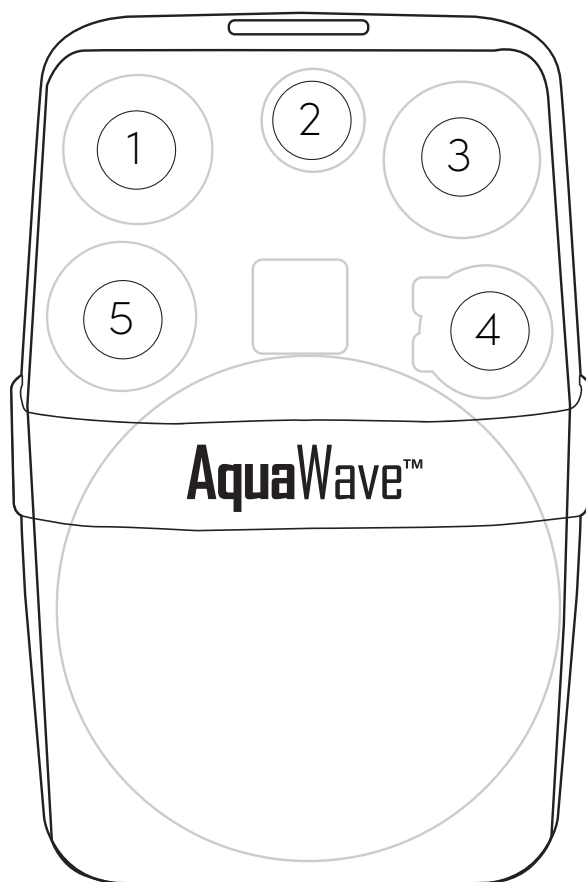
- Open the leak detector switch.
- Discard the used insert.
- Replace with a new insert and put the cap on.
- Close the switch and the leak detector is ready to use again.



INSTALLATION MANUAL

AquaWave™ Premium Reverse Osmosis System

FILTER IDENTIFIERS & TYPE



- #1 K14-PP-WW: Inline PP Filter
- #2 K14-GT-WW: Inline Activated Carbon Filter
- #3 K14-BF-WW: Inline Activated Carbon Filter
- #4 MTW-1812-75: Replacement RO membrane
- #5 K12-GT-WW: Inline Activated Carbon Filter

TROUBLESHOOTING

Problem RO water looks "foamy" or "milky white"	
Possible Cause	There is air in the system
Possible Solution	Air intake in the system is normal after the first installation. From time to time air might enter the systems through network. This condition will return to normal after a while. There is no harm in using this water.
Problem The RO unit is giving only little water	
Possible Cause	The white 1/4" connection hose might be twisted somewhere along the line
Possible Solution	Find and fix the twisted connection hose piece
Possible Cause	One or more of the pre-filters (Stage 1-3) is clogged and blocks the water
Possible Solution	Change clogged filter or all pre-filters (Stage 1-3)
Problem Although the storage tank is full (heavy), no water comes from the RO faucet	
Possible Cause	The air pre-charge of the RO water storage tank is too low or completely gone
Possible Solution	Empty the tank and recharge it to 6-7 psi/0.4bar through the air valve using a suitable air pump/compressor and pressure gauge
Problem The RO unit makes loud noise	
Possible Cause	The wastewater connection hose may be blocked or twisted
Possible Solution	Find and fix the twisted connection hose piece



INSTALLATION MANUAL

AquaWave™ Premium Reverse Osmosis System

WARRANTY

Global Water Solutions ("GWS") warrants the product will be free of defects in material and workmanship under normal usage conditions beginning on the date of manufacture and continuing for a warranty coverage period of 1 year.

Warranty applies only when the product is used for its intended purpose and does not apply if a defect is due to improper use of the product, result of accident, misuse, or abuse. If the product was improperly installed or altered in any way, not specifically authorized in writing by the factory, the warranty is void.

The warranty set forth in this paragraph is made expressly in lieu of all other warranties expressed, or implied, including but not limited to merchantability or fitness for a particular purpose.

In no event shall GWS be liable for cost of processing, lost profits, goodwill or any other consequential or incidental damage of any kind resulting from the order or use of the product whether arriving from breach of warranty, nonconformity to ordered specifications, delay in delivery, or any loss sustained by the buyer nor will GWS be liable for labor and expenses necessary to remove and reinstall replacement product.

To obtain service under this warranty, the consumer must deliver alleged defective product, freight prepaid, to an authorized GWS distributor or OEM partner. GWS will either issue credit or at its option, repair or replace defective product freight prepaid to the distributor. GWS reserves the right to make changes in construction, which, in its judgment, constitutes a product improvement. All warranty is subject to verifiable proper installation, operation and maintenance as recommended in this installation manual.





Have questions or need assistance?
www.gwsusa.com