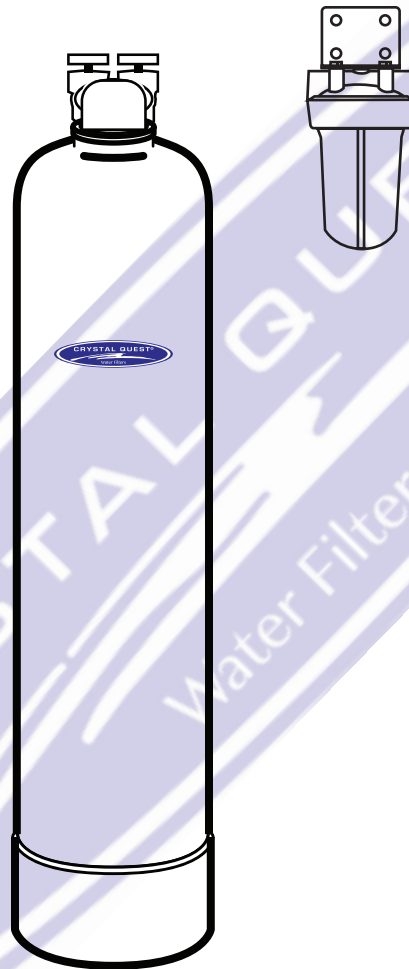




GUARDIAN WHOLE HOUSE WATER FILTER



INSTALLATION AND OPERATION GUIDE



Important Information

Installation must be made within an area protected from the elements and freezing. The unit must be protected from rain, dust, flooding, snow, freezing, and direct sunlight (the system's exposure to direct sunlight may cause algae growth). Failure to comply will void the warranty.

- A pressure regulator, such as a slow-flow regulator, must be installed in front of the unit's water inlet if the water pressure (including any possible pressure spikes) could exceed 60 psi. The most common operating water pressure range is 35-65 psi. Failure to comply will void the warranty. **Crystal Quest® assumes no liability for damage caused by excessive water pressure.**
- Check all the connections (i.e., water hose/tubing, connectors, fittings) to ensure proper connection and to avoid leaks.
- The filter cartridges used with this system have a limited service life. Changes in taste, odor, color, and/or flow of the water indicate that the cartridge should be replaced. Change cartridges routinely.
- After prolonged periods of non-use (such as during a vacation), it is recommended that the system be flushed thoroughly. Let water run for 10-20 minutes before using.
- Check plumbing inlet and outlet to ensure the proper flow of water through the system.
- Place the system near a cold water supply line. Do not set the system farther than 15 ft. from the cold water line.
- Do not use the system on a cold water supply line with less than 20 psi.
- Do not use the system where water is microbiologically unsafe or with water of unknown quality.
- All water treatment installations must conform to local plumbing, electrical and sanitation codes. These codes are established for your protection. Check with your local public works department for current plumbing codes.
- Installation errors can cause property damage. ***Crystal Quest® assumes no liability whatsoever for systems improperly installed or those installed by someone other than a licensed plumber or qualified contractor. A leak detector valve is recommended to avoid accidental property damage. See page 13.**
- The contaminants or other substances removed or reduced by the selected cartridge(s) are not necessarily in your water. Ask your local water municipality for a copy of their water analysis, or have your water tested by a reputable water lab.
- Do not use non-Crystal Quest® replacement cartridges.
- Do not use non-Crystal Quest® parts or modify/tamper with unit.



Safety precaution

Read all instructions, specifications, cautions, and warnings before installing and using your water filter system. Learn the specific details regarding installation and use. Failure to follow them could result in serious property damage.

Installation errors can cause property damage. All equipment needs to be plumbed into the water system by a licensed plumber.

These guidelines must be followed during system installation:

- Use the system on a potable, safe-to-drink, COLD water supply only. Do not use on hot water line.
- The system is for indoor use only.
- Turn the cold water line off while installing the system.
- When installation is completed, re-check the system to ensure there are no leaks or drips.
- The outlet must be within reach of the power cord.
- Do not use an extension cord. Extension cords that are too long or too light do not deliver sufficient voltage to the unit and could present a safety hazard.
- The rubber O-ring provides a watertight seal between the cap and the bottom of the housing. Ensure the O-ring is properly seated in the groove below the threads of the housing, or a water leak could occur.
- Do not cross-thread fittings or housings. If cross-threaded, place the unit out of service.



Water testing by an independent third-party lab will attest to contamination removal and validity of toxicology testing. California residents are advised to have their water tested to ensure the water filter system is in compliance with Proposition 65.



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Specifications

Guardian and Salt-Free		
Home Water Usage	1 - 3 Bathrooms	2 - 4 Bathrooms
Filter Media Volume	1.5 Cubic Feet	2.0 Cubic Feet
Capacity (gallons)	1,000,000	1,500,000
Service Flow (GPM)	9-11	10-13
Tank Dimensions	10" x 54"	12" x 52"
Material	Fiberglass	Fiberglass
Flow	Upflow	Upflow

Carbon Block Cartridge	
Type	Replaceable Cartridge
Dimensions	4-5/8" x 9-3/4"
Flow	No Flow



Arrival, Unpacking, and Inspection

- Inspect the package/crate and water filter for possible evidence of rough handling and concealed damages. If contents appear damaged, ask driver or contact the carrier for a damage claim form to fill out. Notify shipper immediately.
- Remove components from the shipping carton. Check that all installation parts are present, which includes the unit and installation hardware.

Make a complete inspection of the system to ensure that:

1. There is no physical damage to the system.
2. All accessories are present.
3. The system is clean and dust free.

**Pipe, shut-off valves, and fittings are not provided by Crystal Quest®*



System Location

Select the location of your water filter system with care. For correct installation, refer to the appropriate diagram.





Proper locations are as follows:

- Do not locate the system where the environment would offer any risk of water contamination.
- Do not put any liquid other than water into the system.
- Position the water filter near main water supply line, drain and electrical outlet.
- Position so that main water supply shut-off valve is between water filter and main water source.
- Turn off the water flow to the house while installing system.
- Select a location where floor is level. If the floor is rough and/or uneven, you can level the system by placing the tanks on 3/4" plywood, and shim to the level needed.
- Install the water filter positioned BEFORE the water heater.
- Water temperatures above 100°F (38°C) will damage the water filter. Use on the cold water line only.
- Allow sufficient space around the system for easy servicing.

**Read all instructions carefully to learn the details for installing and using your Guardian Series water filter system. Failure to follow the Installation and Operation Guide could cause injury and/or property damage.*



Product Operation and Specifications

Part	Description	Qty.
	Bypass Valve: Pre-installed with O-rings and quick-connect nuts	1
	Sediment Filter System: Housing, filter, mounting bracket, O-rings	1
	Guardian Tank: Pre-filled with filtration media	1-2 * Depending on configuration
	Fittings: Various connectors to fit different plumbing systems	1

*Note: Drawings are not to scale.

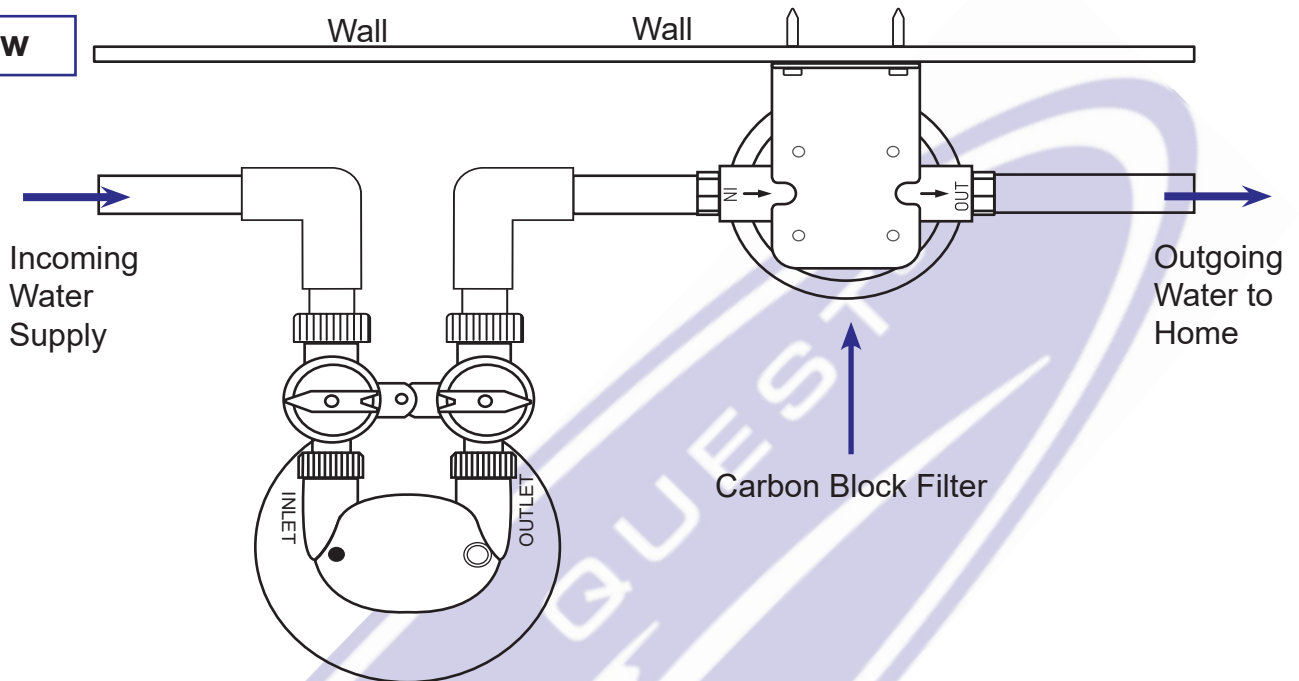
Specifications	Description
Max Flow Rate	9 - 13 GPM (Depending on Model)
Min Working Pressure	30 PSI
Max Working Pressure	60 PSI
Max Vacuum	5 inches Hg
Operating Temperature	36°F - 120°F
pH Range	7 - 11
Max Hardness	75 Grains per Gallon (GPG)

**For optimal results, remove iron, manganese, sulfur, and tannins before installing this system.*

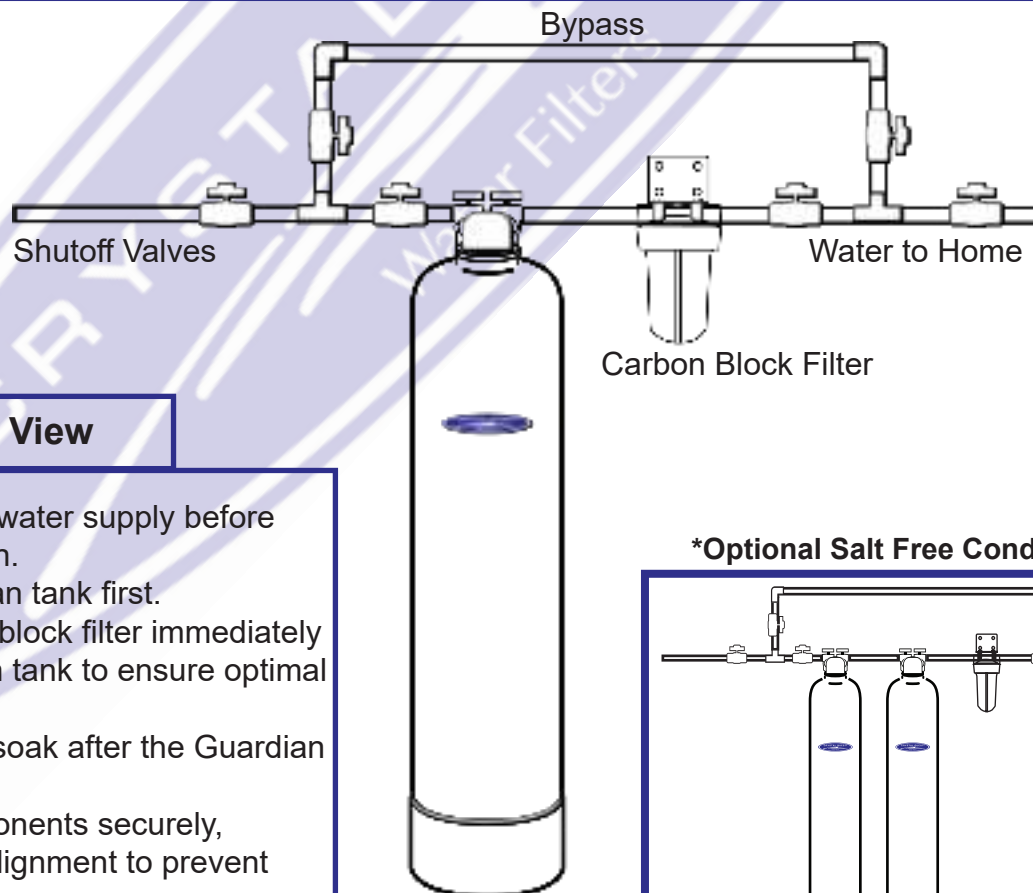


Quickview Of Installation

Top View



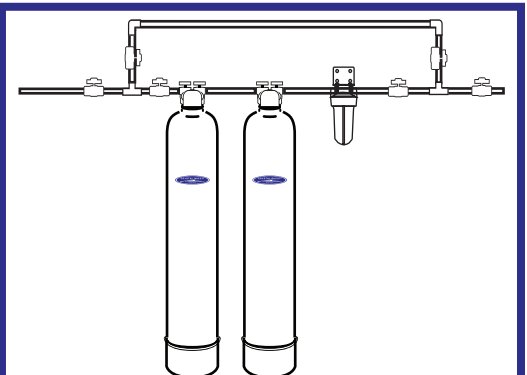
Front View



Quick View

1. Shut off the main water supply before starting installation.
2. Install the Guardian tank first.
3. Install the carbon block filter immediately after the Guardian tank to ensure optimal filtration.
4. Perform a media soak after the Guardian tank is installed.
5. Connect all components securely, ensuring proper alignment to prevent leaks.

***Optional Salt Free Conditioner**





Installation Guide

Installing the Guardian tank correctly is essential to ensure your system functions efficiently and provides high-quality filtered water. Follow these steps carefully:

Choose the Right Location:

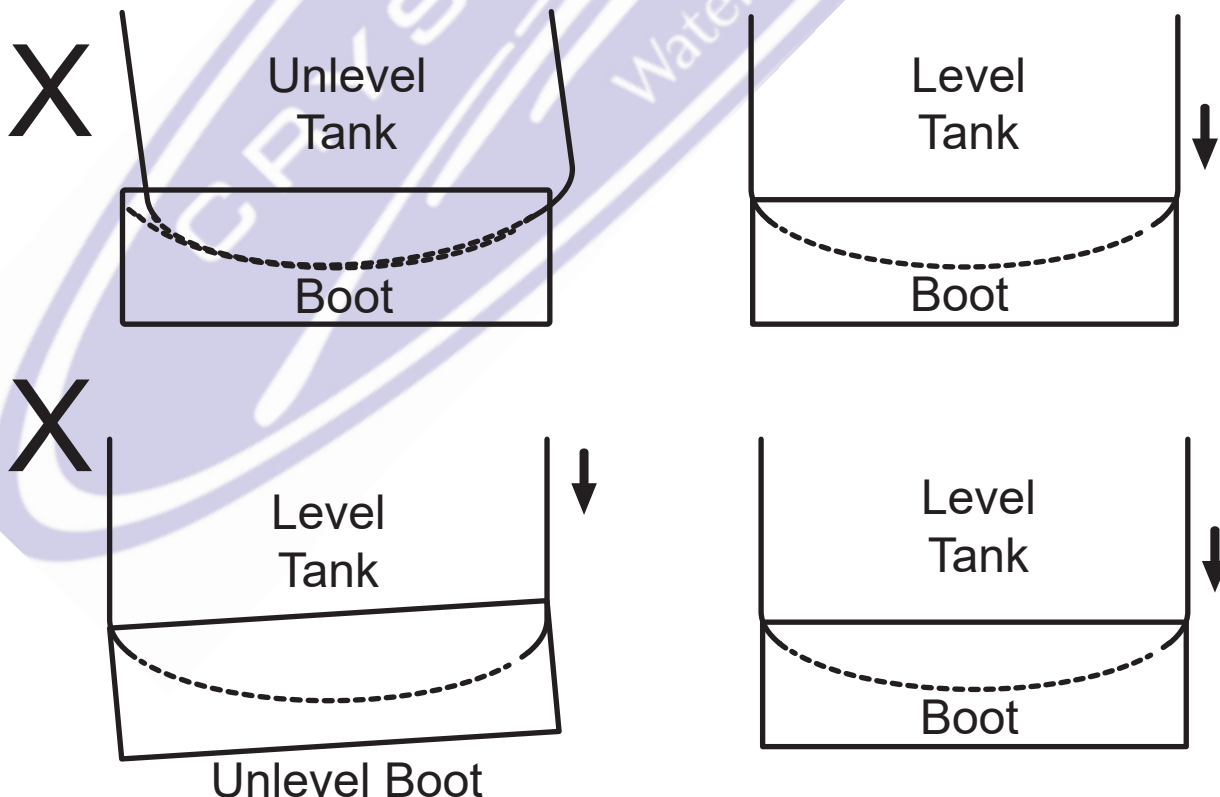
- Select a level and stable surface near the main water inlet.
- Ensure the area is dry and well-ventilated.
- Keep the tank accessible for future maintenance and servicing.

Prepare the Connections:

- Identify the inlet and outlet ports on the Guardian tank.
- Wrap all threaded connections with plumber's tape to prevent leaks.
- Ensure you have the necessary fittings based on your home's plumbing size.

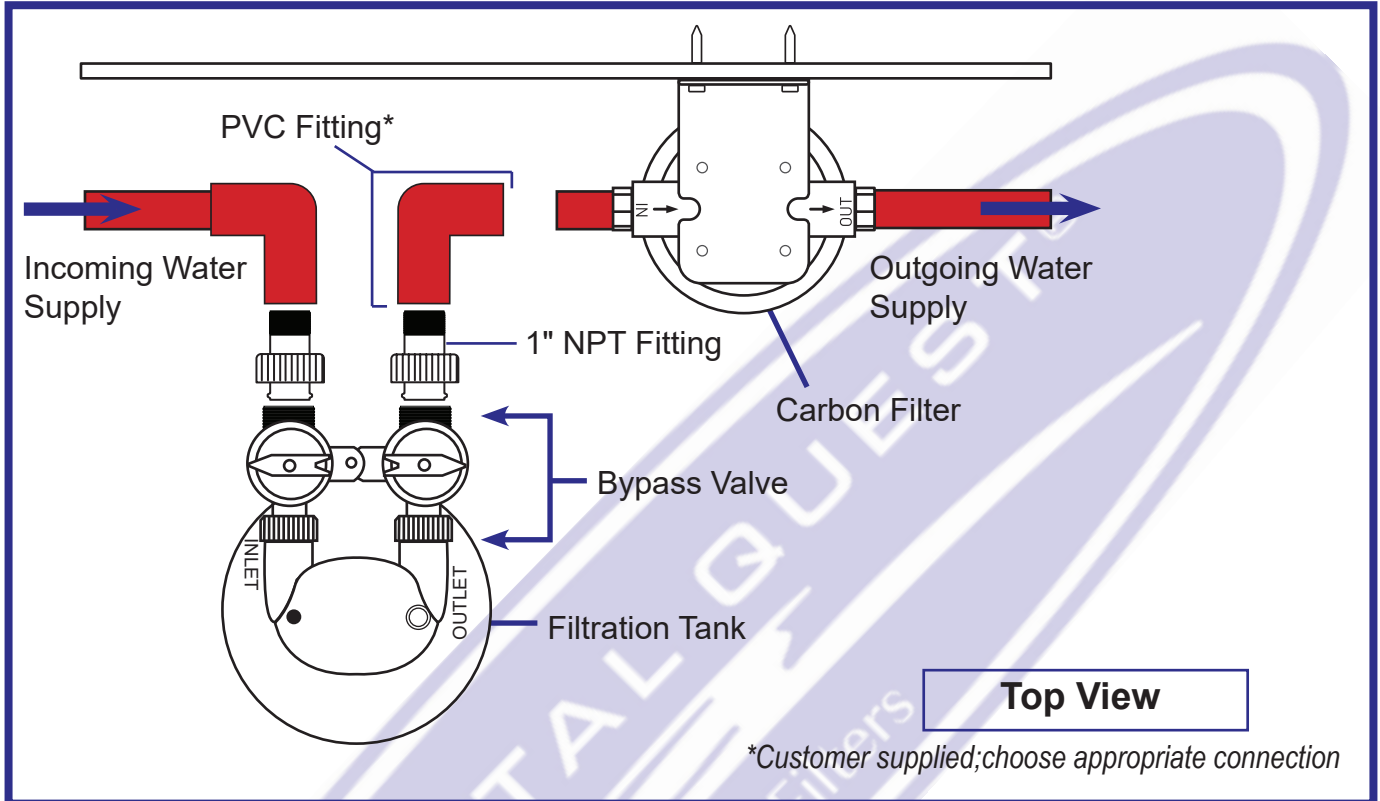
Level the Tank:

- If the tank is not level, lift the tank straight up 6 inches and tap it on the ground until the tank stands vertical. The bottom of the tank is round and the boot allows the tank to stand upright.





Installation Guide



Determine Line Size:

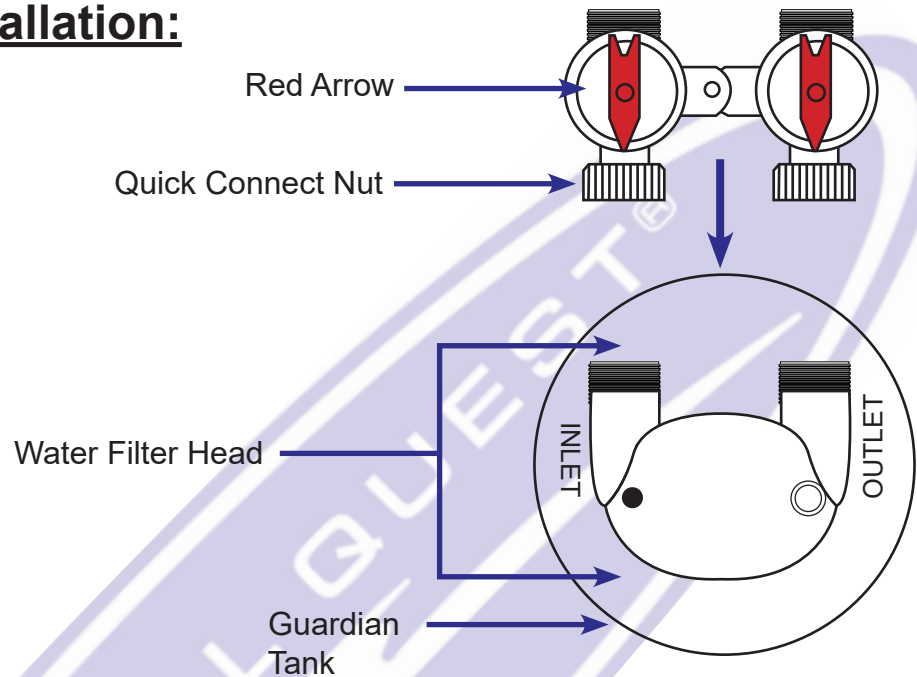
- Determine the size and material of your incoming water supply line and choose the appropriate plumbing required to adapt to the 1" male NPT assembly.
- Install the fittings into the INLET and OUTLET sides of the bypass valve. Follow the diagram supplied with the fitting.



Installation Guide

Bypass Valve Installation:

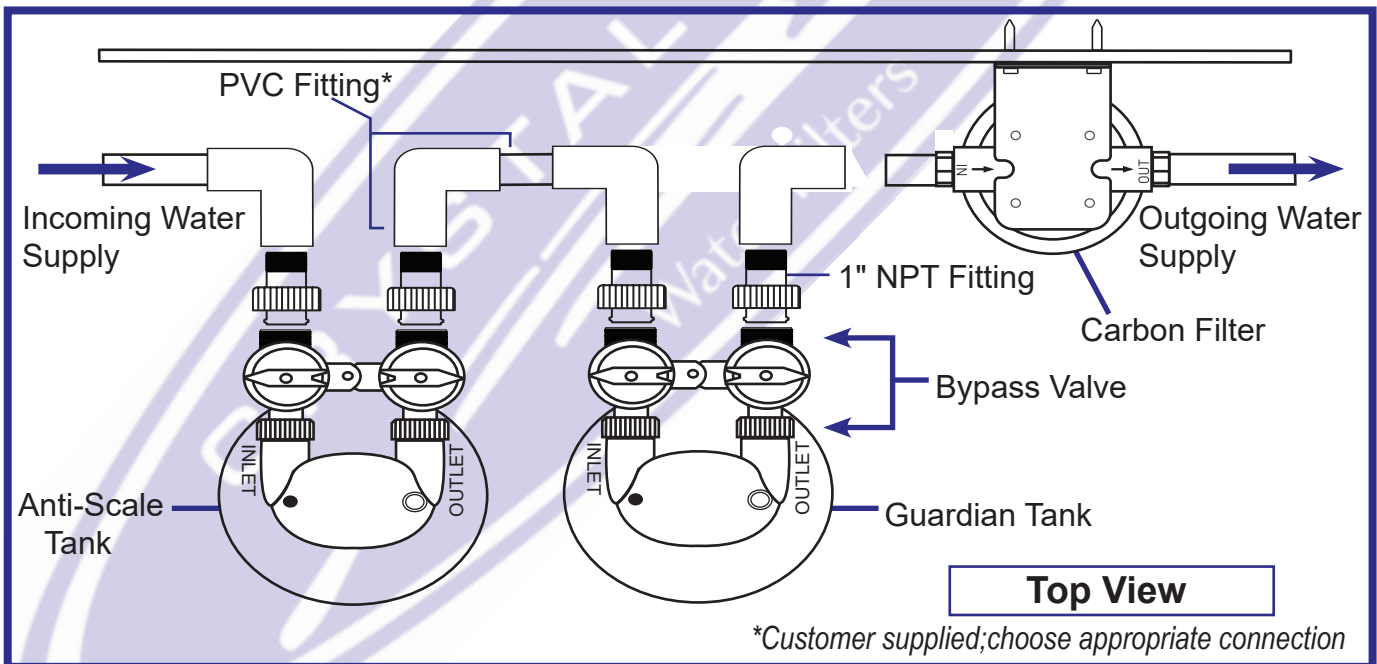
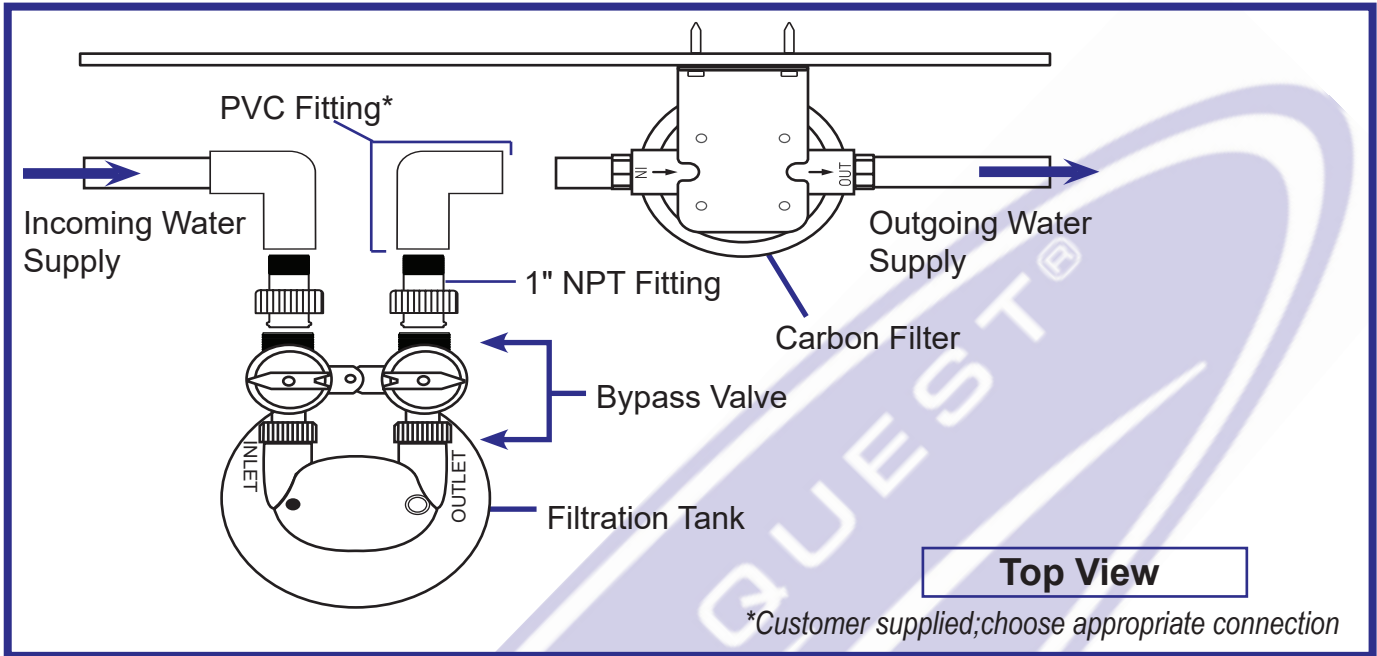
Top View



- Secure the bypass valve to the inlet and outlet connections of the tank.
- Hand-tighten the connections and then give them an additional quarter-turn with a wrench.
- The bypass valve will allow you to turn off the system without disrupting your home's water supply.



Installation Guide



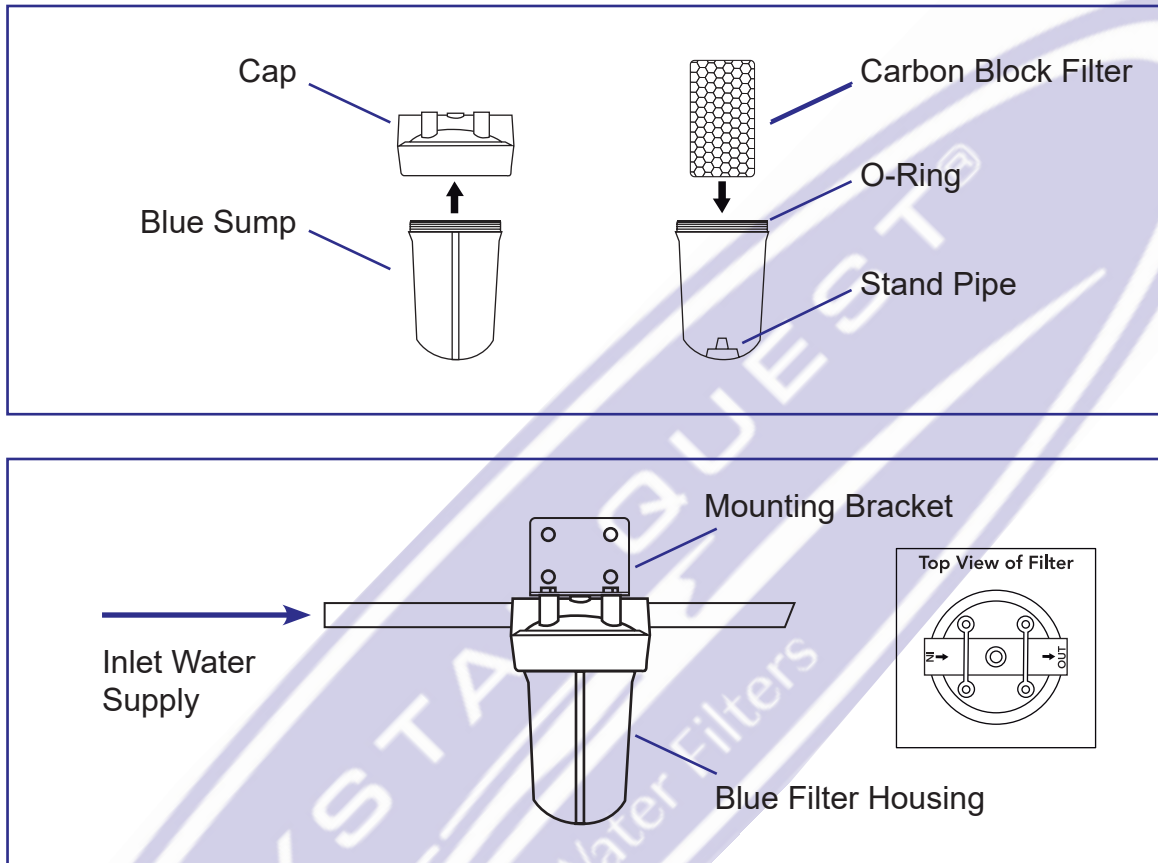
Connect the Water Supply:

- Attach the incoming cold water line to the inlet port of the Guardian tank.
- Connect the outlet port to the home's plumbing system.
- Use compression fittings or threaded adapters to ensure a secure connection.



Installation Guide

Carbon Filter Installation:

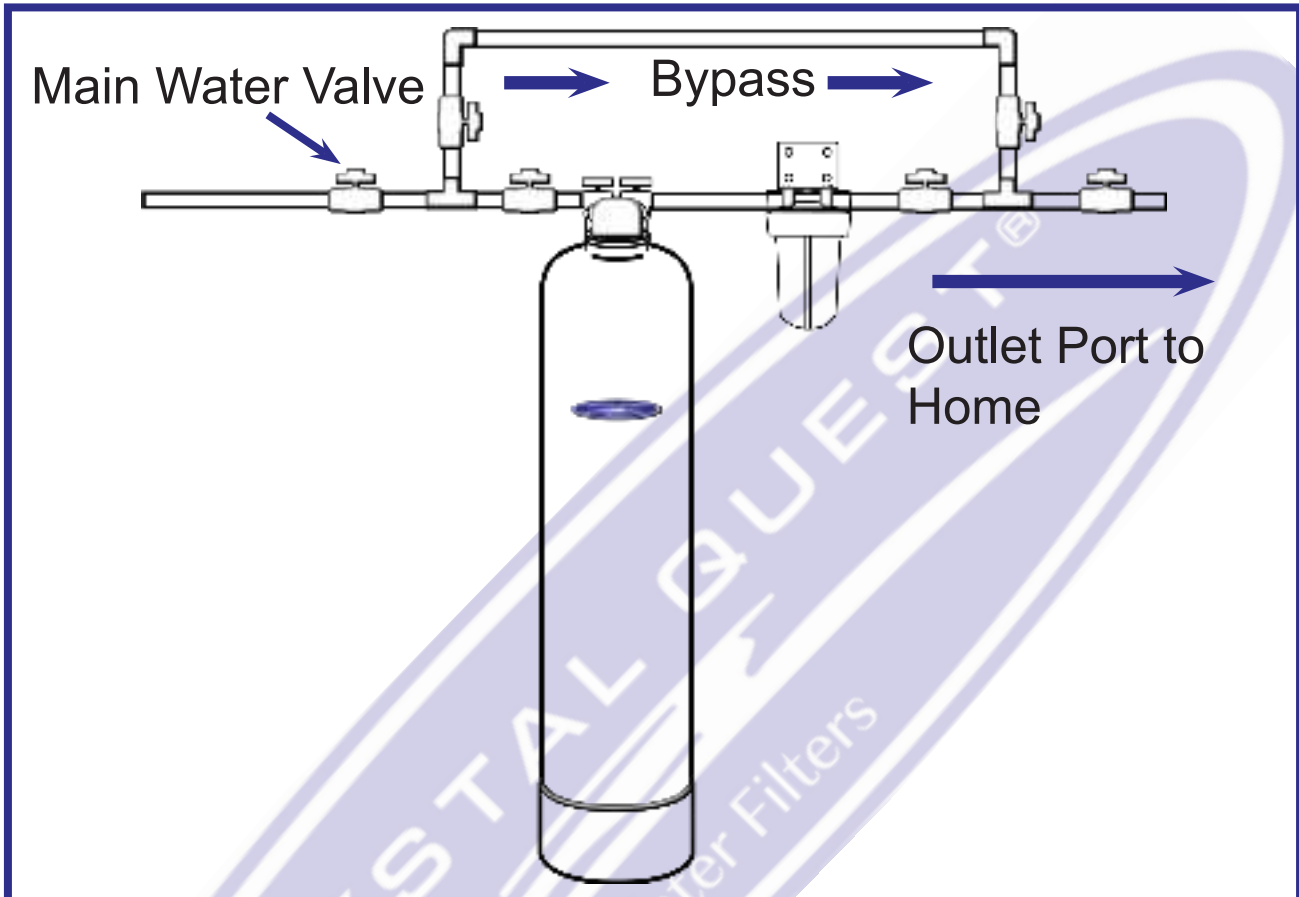


1. Position the carbon block filter immediately downstream of the tank.
2. Connect the outlet of the tank to the inlet of the carbon block filter using appropriate fittings.
3. Ensure all connections are secure, using plumber's tape where necessary.
4. Regularly check the carbon block filter for maintenance and replace it every 12 to 18 months, depending on water quality and usage. If water flow slows or there is a noticeable change in taste or odor, replace it sooner.

**Follow the instructions on the maintenance section to replace carbon filter cartridge.*



Installation Guide



Slowly Turn on Water Supply and Flush:

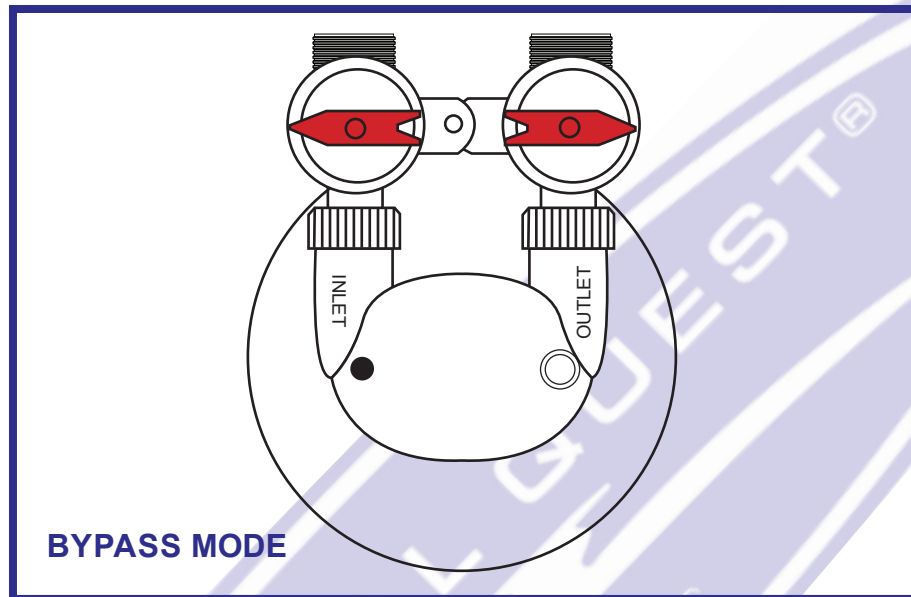
- Gradually open the main water valve to fill the system.
- Check for leaks around all connections and tighten if necessary.
- Allow water to flow through the system for a few minutes to remove any trapped air and debris.
- Leave all faucets turned off inside the house, and open a single faucet (such as an outside faucet), letting the water run for 5-10 minutes. This rinses the new media inside the tank, and any particles or color will rinse out through the one open faucet, and not throughout your home plumbing system.
- Observe the initial water output—cloudiness or fine particles may be present, which is normal and will clear as flushing progresses.

**Following this process ensures the filtration media is properly conditioned and ready for regular use.*

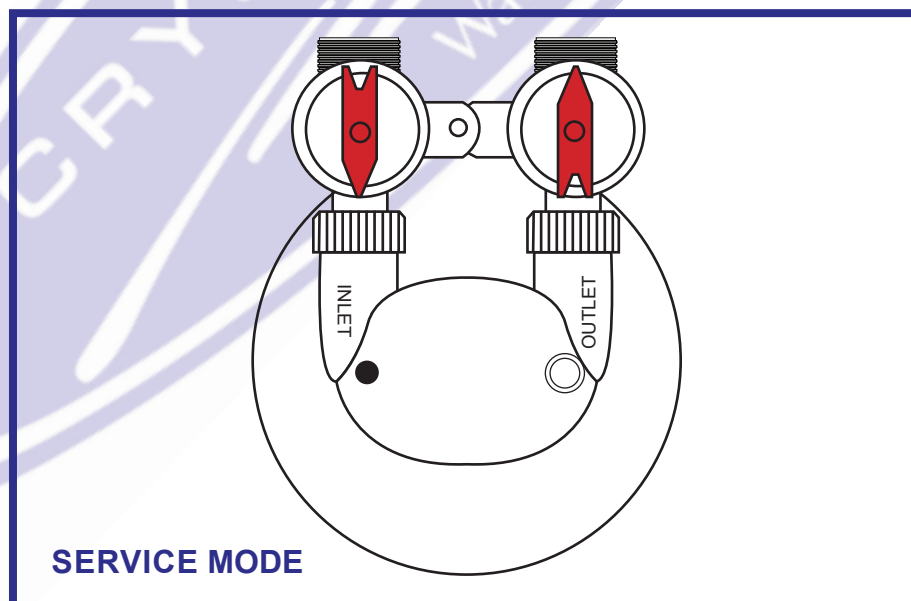


Installation Guide

Bypass Valve Operation:



- Bypass Mode: Water bypasses the system, allowing maintenance without disrupting water flow to the home.



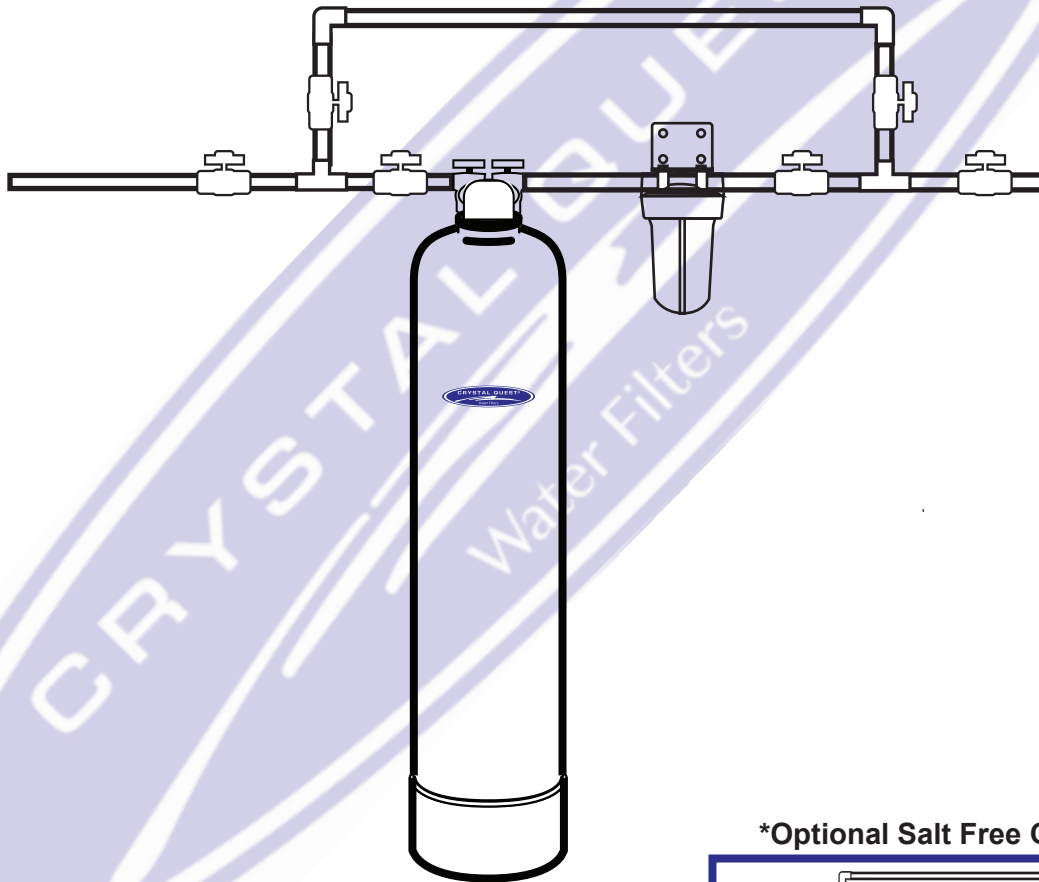
- Service Mode: Water flows through the system as intended.



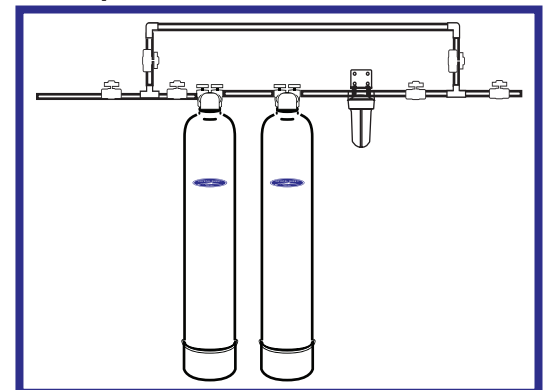
Completing the Installation

FINAL CHECKS!

- Conduct a final check for any leaks or loose fittings.
- Remove any protective wrap from the tank and components.
- Perform an initial water quality test to ensure the system is functioning properly.



***Optional Salt Free Conditioner**

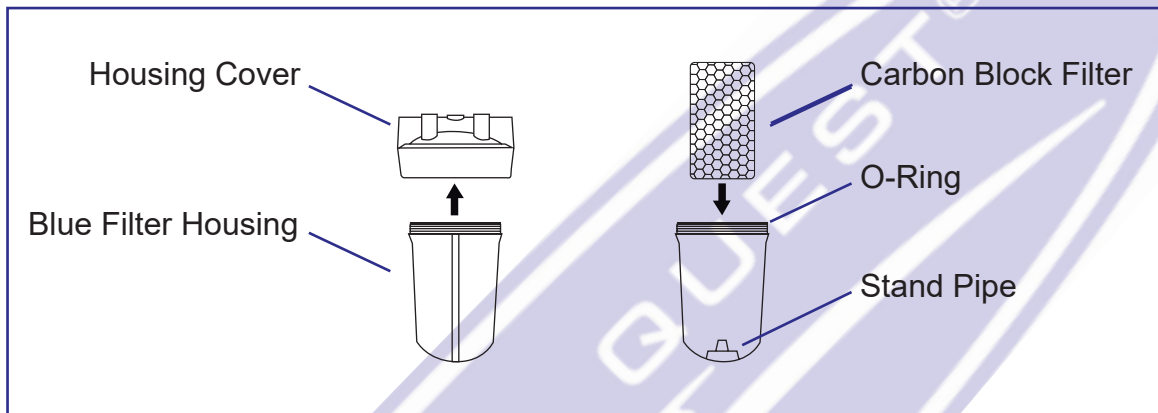




Maintenance

Replacing Your Carbon Filter:

Replace the carbon block filter every 12 to 18 months, depending on your water quality and usage. If water flow slows significantly or the taste/odor of water changes, replace the filter sooner.



Steps to Replace the Carbon Block Filter:

1. Shut off the water supply to the system.
2. Relieve pressure by opening a nearby faucet and allow the water to drain.
3. Unscrew the housing that contains the carbon block filter using the provided filter wrench.
4. Dispose of the used filter.
5. Clean the inside of the filter housing using warm water and mild soap. Rinse thoroughly.
6. Insert a new carbon block filter into the housing, ensuring proper alignment.
7. Securely screw the housing back onto the system.
8. Turn on the water supply slowly while checking for leaks.
9. Run water through the system for a few minutes to flush out any residual carbon fines before use.

Cleaning the System: Periodically check for debris or sediment buildup in the system. Wipe the exterior of the unit with a damp cloth to prevent dust accumulation.

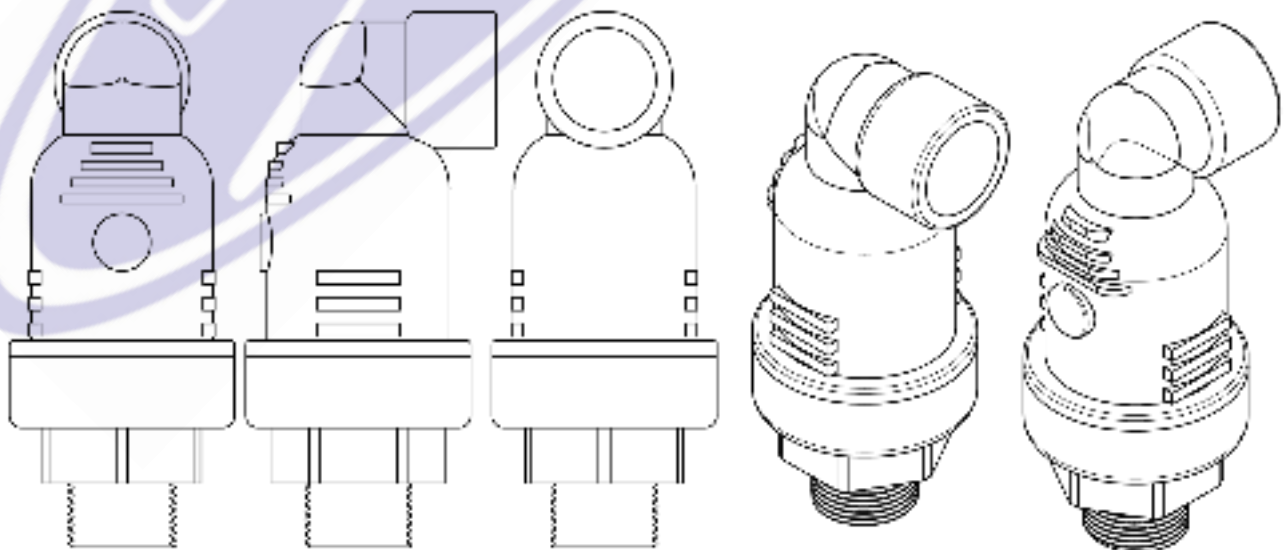
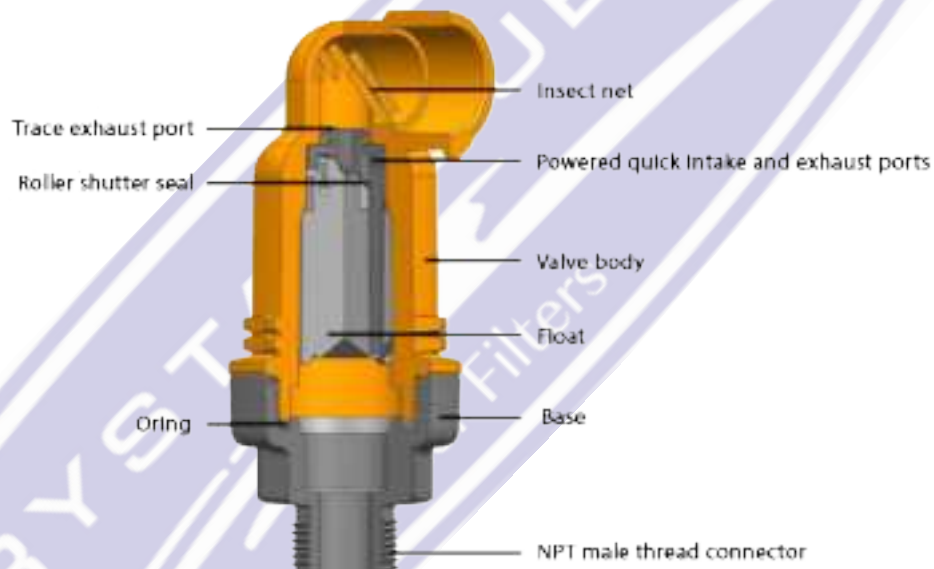
Inspecting Connections: Check for leaks around fittings and tighten if necessary. Ensure the bypass valve is in the correct position for optimal water flow.



VACUUM BREAKER

When gas escapes from the system, the gas will move up the pipe and eventually collect at the highest point of the system. The automatic exhaust valve is generally installed at the highest point of the system. When gas enters the exhaust valve, as the gas in the valve increases, the pressure will rise. When the gas pressure is greater than the system pressure, the float will drop with the water level to exhaust; gas after exhaustion, the water level and the float will also rise and automatically block the trace exhaust port, thereby stopping the exhaust.

- Automatic exhaust valves need to be installed vertically, and vertical pipes need to be installed at the highest point; for horizontal pipes, one should be installed on every horizontal pipe where there is a potential for a vacuum to form, and one should be installed at the end.
- It is recommended to install a valve at the front of the system to facilitate easy maintenance and repair.





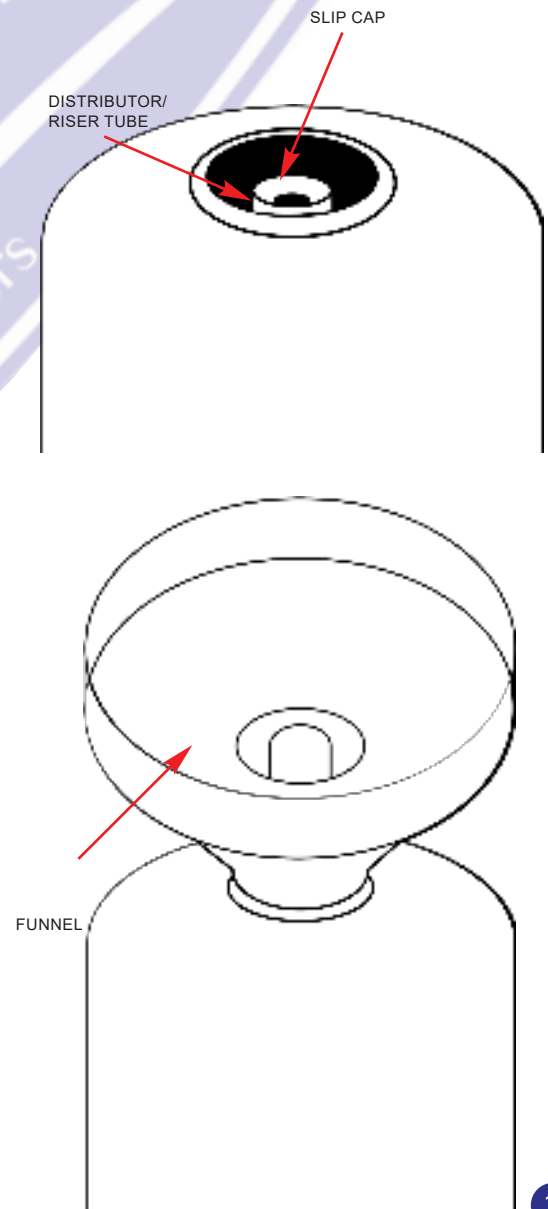
Maintenance (Replacing the Media)

1. Turn off the water to the unit and unplug from the power source.
2. Disconnect the unit from your plumbing.
3. Carefully unscrew the control valve off of the top of the tank.
4. Remove the riser tube from inside the media tank.
5. Lay the tank on its side or lay over a trash can to remove media.
6. Rinse the inside of the tank clean with a garden hose.
7. Discard old resin.
8. Save the old gravel.
9. Stand media tank upright.
10. Plug a slip cap or put a piece of tape over the top of the distributor/riser tube to prevent media from entering the tube while loading the media.
11. Place the media funnel in the top of the media tank with the riser tube still inside and centered.
12. Begin replacing media by putting gravel into the tank first. Make sure the riser tube is firmly on the bottom of the tank. If the riser tube is pulled out of the gravel once the media is added, it is impossible to put it back in without removing the other media from the tank.
13. Pour resin/media into the funnel, slowly letting it fall down inside the media tank around the riser tube. If you have a twin alternating system, divide the resin/media equally between the two tanks. The media tank should be approximately $\frac{3}{4}$ full, but this can vary based on the media for your specific system.
14. Remove the funnel and the slip plug or tape from the top of the riser tube.
15. Brush any loose resin/media off the top opening of the tank.
16. Clean the top edge with a cloth so the O-ring can seal securely to the valve base.
17. Lubricate o-ring with clean food grade silicon grease.
18. Look at the bottom of your control valve and locate the upper basket. Inside the basket, the control valve has O-rings that will seal on the riser tube. Install the valve on top of the media tank, making sure the top of the riser tube inserts inside the opening of the upper basket. Guide the riser into the O-ring seal and tighten gently. Be careful not to over-torque the valve as the threads are plastic.
19. Screw the control valve back onto the top of the tank. Be sure to hold the control valve where there will be no damage to the valve from the pressure you exert from tightening the valve back onto the tank.
20. Reconnect your plumbing to your unit and plug the control valve back in, making sure to set the correct time of day.
21. Turn on the water to the unit and check for leaks.
22. Leave all faucets turned off inside the house, and open a single faucet (such as an outside faucet), letting the water run for 5-10 minutes. This rinses the new media inside the tank, and any particles or color will rinse out through the one open faucet, and not throughout your home plumbing system.

Media should be changed depending on influent water conditions and consumption.

On average:

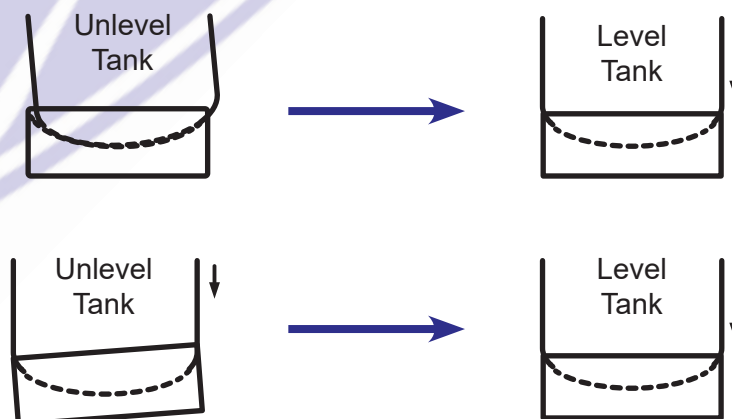
- 6-8 years for 2.0 cu. ft
- 5-7 years for 1.5 cu. ft





Troubleshooting

PROBLEM	SOLUTION
No water flow	<ul style="list-style-type: none"> • Re-read the instructions to install the system properly. • Check the in and out arrows on the bypass valve to ensure the system is not piped backwards. • Make sure the bypass valve is in the "Service" position.
Media discharging during backwash/regeneration	Make sure top distributor has been installed properly.
Poor performance (filtration ability)	<ul style="list-style-type: none"> • Check the media level in the tank. System should be 2/3 full. • Check media exhaustion
Iron build up in water conditioner and loss of water pressure	<ul style="list-style-type: none"> • Clean control and add resin cleaner. • Check the post-filters for timely replacement.
Leaks around the tank	<ul style="list-style-type: none"> • Ensure all connections are properly tightened but not over-tightened. • Check O-rings for wear or misalignment and replace if necessary.
Low water pressure	<ul style="list-style-type: none"> • Check if the carbon block filter needs replacing. • Inspect for clogs in plumbing or mineral buildup. • Ensure the bypass valve is in the correct position.
The tank leans to one side or is not level	If the tank is not level, lift the tank straight up 6 inches and tap it on the ground until the tank stands vertical. The bottom of the tank is round and the boot allows the tank to stand upright.





FREQUENTLY ASKED QUESTIONS

What is shocking a well, is it necessary, and how do I do it?

- 'Shocking a well' refers to disinfection by means of chlorine to rid bacteria and other contaminants from a well. It is definitely suggested if there is iron or sulfur in the well, if it is a newly constructed well or an old well that hasn't been disinfected in a while. There are 3 techniques that can be used to shock a well depending on your preference.
1. Shocking a well with bleach: This is the cheapest and quickest way to shock a well. For shallow wells (40 ft. or less) add a ½ gallon of bleach. For deep wells (40 ft. and over) add a gallon of bleach.
 2. Using chlorination tablets: Similar to adding bleach, only specifically made to put into wells. Sold through Crystal Quest®. Please call 1-800-934-0051.
 3. Chlorine Injection Systems: A separate device to be tied straight into the line and set to automatically pump a certain amount of chlorine into the water each day. Sold through Crystal Quest®. Please call 1-800-934-0051.

When is the ideal time to change the post filter?

- Between 12-18 months. Please visit CrystalQuest.com for replacement cartridges.

Will my whole house system affect water pressure?

- As long as the appropriate sized system was installed for the house-size and water demand, there should be very little change, or none at all. If you think you may have purchased the wrong sized system, please contact us at 1-800-934-0051.

Can I change my valve head?

- A new valve head can always be purchased if you find yourself wanting a different functioning head. Please call us 1-800-934-0051.

I'm having issues with my media working properly, what should I do?

- The answer most likely is too high of water pressure, resulting in ineffective media as there is not enough contact time. The prime fix is to slow down incoming water by installing a pressure regulator, which allows the water to have more contact time with the media, allowing the media to do its job more effectively. The same fix is for customers with very high native pressure that need to bring it down to a constant 50-60 psi (recommended) in order to use our systems. Pressure Regulators are available in 1" & ¾" for purchase through Crystal Quest®. Please call 1-800-934-0051 to order. If water pressure is not the issue and your media is failing due to old age (older than 5-10 years and/or depending on influent water conditions and consumption), please visit CrystalQuest.com or call to buy new replacement media.

If you still did not find your solution here, please contact our Service Department at Service@crystalquest.com or 1-800-934-0051.

For any specific chemistry related questions about your water and/or the media used, please call one of our water specialists at 1-800-934-0051.



Ordering Media Or Replacement Cartridges

Media

MEDIA	PART NUMBER	LIFE EXPECTANCY
GUARDIAN MULTI MEDIA	CQE-RM-05041	4 - 6 YEARS
EAGLESORB ANTI SCALE	CQE-RM-05013	4 - 6 YEARS

Cartridges

CARTRIDGE	PART NUMBER	LIFE EXPECTANCY
CARBON BLOCK 4 - 5/8" x 9 - 3/4"	CQE-RC-04035	12 - 18 MONTHS

** Estimate only and is dependant on influent water conditions and filter usage.*



ONE-YEAR LIMITED WARRANTY

CRYSTAL QUEST® warrants your CRYSTAL QUEST® Point of Entry Guardian Series Whole House Water Filter System* for one year from the date of purchase against all defects in materials and workmanship when used in compliance with the manual. This warranty does not include replacement cartridges unless defective upon receipt. CRYSTAL QUEST® disclaims all implied warranties including, without limitation, warranties of merchantability and fitness for a particular purpose. If for any reason the product proves to be defective within one year from the date of purchase, please call for assistance. This warranty gives you specific legal rights and you may have other legal rights which vary from state to state. CRYSTAL QUEST® assumes no responsibility for incidental or consequential damages, for damages arising out of misuse of the product, or the use of any unauthorized attachment. Some states do not allow the exclusion or limitation of implied warranties or incidental or consequential damages; therefore, the above limitations or exclusions may not apply to you. Should service be required during or after the warranty period or should you have any questions regarding how to use your CRYSTAL QUEST® Point of Entry Guardian Series Whole House Water Filter System, please contact our Technical Support Department at help@crystalquest.com, Monday through Friday, 9 AM to 5 PM Eastern Time.

YOUR PURCHASE INFORMATION

Please record the information below for your future reference

PLUMBER'S NAME	PLUMBER'S ADDRESS	PLUMBER'S PHONE

KEEP THIS MANUAL FOR FUTURE REFERENCE AND UNIT MAINTENANCE

Online warranty information
<http://crystalquest.com/warranty.htm>

For further assistance, contact your Crystal Quest dealer or visit us at www.crystalquest.com

To view the latest edition of the Point of Entry Guardian Series Whole House Water Filter System, visit CrystalQuest.com

Please note all drawings, pictures, colors and sizes are approximate for illustrative purposes only and may not exactly resemble the end product.

To order replacement cartridges or replacement media, contact your Crystal Quest® Dealer or visit us online at crystalquest.com



**KEEP THIS MANUAL FOR
FUTURE REFERENCE AND
UNIT MAINTENANCE**

*Product design is subject to change without notice.

For further assistance contact your
Crystal Quest® Dealer
or visit us at www.crystalquest.com