CLEAN WATER STORE

Clean Water Made Easy

www.cleanwaterstore.com

7500-REV2.5 Sediment Backwash Filter

Installation Guide

Thank you for purchasing a Clean Water System!

Please review this start up guide entirely before beginning to install your system, and follow the steps outlined for best results.

Minimum pressure of 30 PSI recommended.
Maximum pressure recommended 80 PSI.
For indoor installation only.
Protect from sunlight, rain, and freezing.

TURBIDEX MEDIA CONTAINS DUST.
USE MASK TO AVOID BREATHING DUST.
OK to wet down media with spray bottle

Questions?

- **Call us toll-free:** 1-888-600-5426 or 1-831-462-8500
- **Email us:** support@cleanwaterstore.com
- **See more information on our website:** www.cleanwaterstore.com/resources

Table of Contents

Packing Lists

All systems include:

7500-REV2.5 control valve, bypass valve, power supply, funnel for adding media, start-up guide, and items included in one of the following options:

Find Your Size System to See What is Included:

Sediment Backwash Filter 0. 5 cubic foot size
8" x 44" filter tank with distributor tube
8 lbs. filter gravel
0.5 cubic foot of Turbidex

Sediment Backwash Filter 0.75 cubic foot size
8" x 44" filter tank with distributor tube
9 lbs. filter gravel
0.75 cubic foot of Turbidex.

Sediment Backwash Filter 1.5 cubic foot size
10" x 54" filter tank with distributor tube
16 lbs. Filter gravel
1.5 cubic foot of activated Turbidex

Sediment Backwash Filter 2.0 cubic foot size
12" x 52" filter tank with distributor tube
20 lbs. filter gravel
2.0 cubic foot of activated Turbidex

What to Do if Your Tank is Not Level Out of the Box:

Your black filter tank base is not glued to the bottom of your tank. Occasionally tank bases will become crooked during shipment. If you find that that your tank does not sit level on the floor, you can easily adjust it by holding the empty tank and knocking it on a concrete or solid floor once or twice to level it.

Pre-Installation

1. Review your packing list and make sure you have received all the parts before installation.
2. If you are going to be turning off the water to the house and you have an electric water heater, shut off the power to the water heater before beginning installation in case water heater is accidentally drained.
3. Pick a suitable location for your filter system on a dry level spot where it won't be exposed to freezing temperatures. A minimum of 30 PSI is required. Maximum pressure is 90 PSI.
4. Get all of your plumbing parts together before beginning installation, and make sure you have received all of your packages before beginning or scheduling an installation. Installation typically takes 3 to 5 hours. However, after installation the Turbidex Backwash Filter must be allowed to run through a complete backwash and rinse cycle.
5. After the system is installed and running, your water may be discolored, or full of sediment or rust, particularly if this is older or corroded piping. This typically clears up over a day or two.

Best Practices for Piping & Drain Installation

1. Make sure to connect the Inlet from your water source and outlet, following arrows on control valve.
2. Make sure there is a gate or ball valve before and after the filter system.
3. A hose bib (which is a faucet to which you can attach a garden hose) is strongly recommended after the Sediment Backwash Filter and before the second ball valve. This makes it easy to rinse your new Sediment Backwash Filter on start-up and gives you a place to test the water.
4. If you will be using copper piping, do not sweat the copper pipe directly on to the 7500-REV2.5 control valve.
5. To connect drain line to drain, use an air-gap connection, so that if your sewer or septic tank backs up, it cannot cross connect with the drain tubing.
6. The pipe connectors are 1' male pipe thread but you can add a reducer to reduce to ¾" pipe with common pipe fittings if needed.

How the Bypass Valve Works

Turn knob so the valve is bypassed when installing.

By-Passed | In Service

Installation of Your System with Copper or Metal Piping Systems

If your new filter system is to be installed in a metal (conductive) plumbing system, i.e., copper, or galvanized steel pipe, the plastic components of the system will interrupt the electrical continuity of the plumbing system.

As a result, any stray currents from improperly grounded appliances downstream or potential galvanic activity in the plumbing system can no longer ground through the contiguous metal plumbing.

Some homes may have been built in accordance with building codes, which encouraged the grounding of electrical appliances through the plumbing system.

Consequently, the installation of a bypass consisting of the same material as the existing plumbing, or a grounded “jumper wire” bridging the equipment and reestablishing the contiguous conductive nature of the plumbing system must be installed prior to your systems use.

This is simple and easy step to take if you are installing your water treatment system into copper piping.

A simple ground jumper wire with a pipe clamp can be purchased at any Home Center, or hardware store etc. for a few dollars.

How Your Sediment Backwash Filter Works

Water enters the top of the tank and flows down through the media and up the distributor tube.

The backwashing Sediment Backwash Filter removes sediment and is automatically backwashed.

This cleans and re-classifies the Turbidex filter media, preventing channeling.

During backwash the flow of water is reversed and water flows down the distributor tube and up through the media, lifting and expanding the Turbidex media.

During the backwash the Turbidex is cleaned by the action of the water flowing through the media and rinsing out sediment to drain.

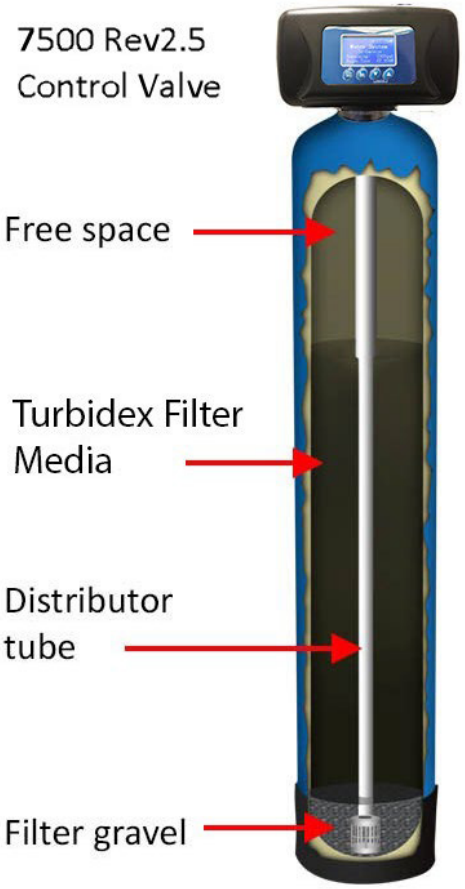
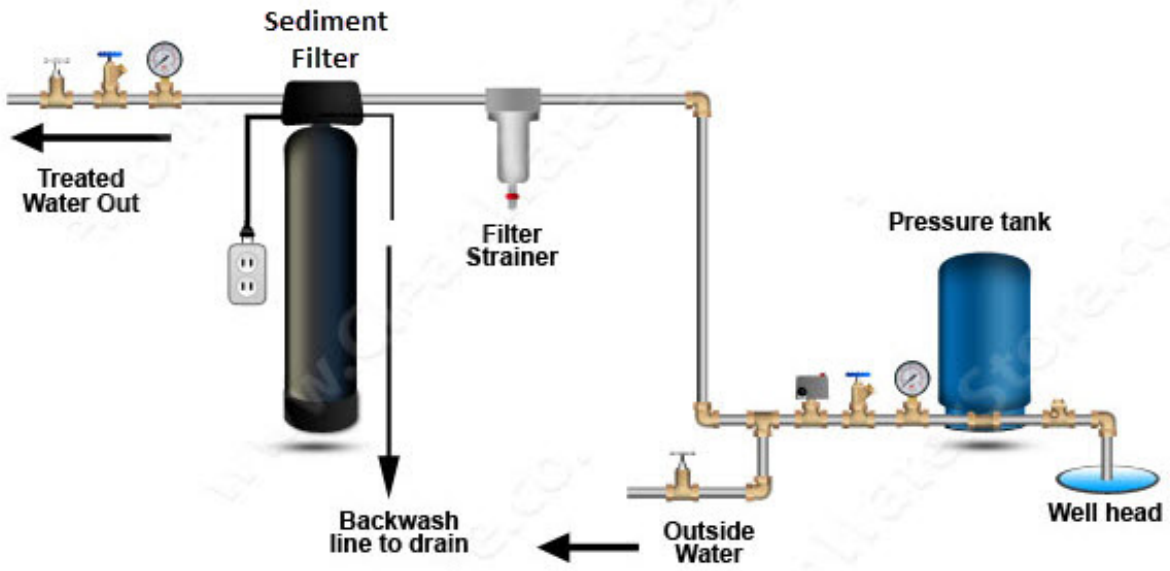
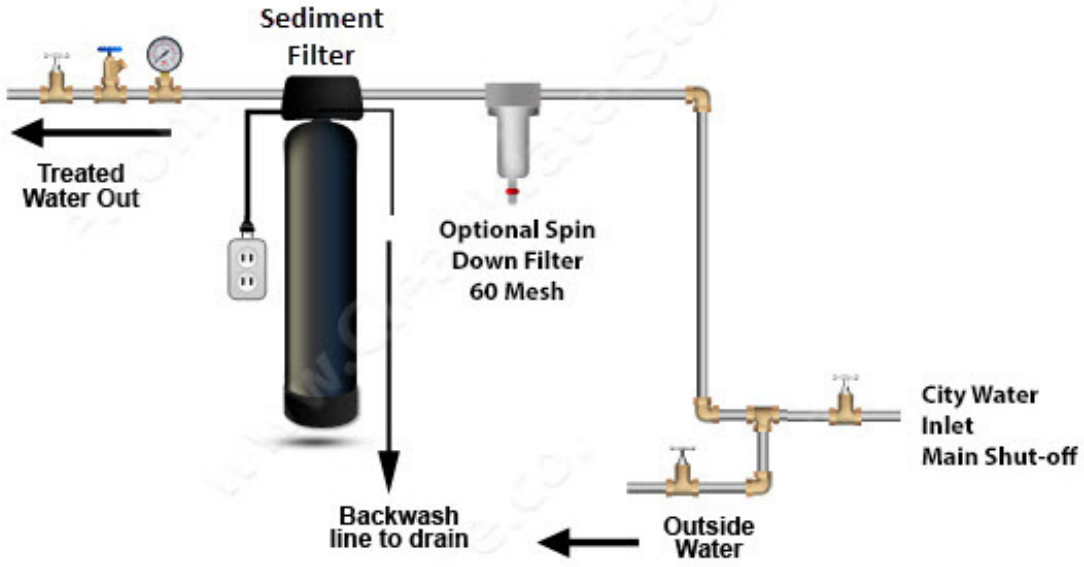


Diagram of Typical Installation Well Water

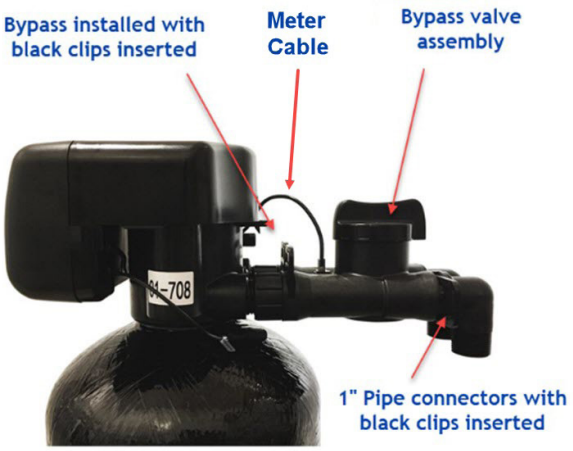


Diagrams of Typical Installation City Water



Tank Assembly and Installation Instructions

1. Make sure no media enter distributor tube by covering the top of distributor tube with tape. If are you using a black funnel with distributor tube cap built-in to the funnel, no need to use tape.
2. Make sure you “test fit” distributor tube, find divot that keeps tube centered, before adding gravel so distributor tube does not extend past top of tank.
3. Add all the filter gravel that came with your order.
4. Next add Turbidex media. The tank should be about 2/3rds full of media, do not fill more than 2/3rds, even if there is some media left over.
5. Remove tape from top of distributor tube. Be careful not to pull up distributor tube.
6. Add ¼ cup of household bleach (optional) and fill tank completely with water. This will allow the Sediment Backwash Filter media to settle and reduce the need of purging the air out of the tank later. Allow Turbidex to soak for at least 1 hour but 24 hours or more is OK. Turbidex contains trapped air will help clear this out and prevent dry media from entering the control valve during the initial backwash.
7. Add a small amount of silicone grease (sent with your order) to the inner O-ring, where distributor tube goes.
8. NOTE: Your Sediment Backwash filter does not use a top screen. If you are looking for a top screen, there isn’t one provided, it is not needed or recommended.
9. Lubricate the main tank O-ring with silicone grease and screw on the 7500-REV2.5 control valve carefully. Do not use pipe-joint compound, vegetable oil, Teflon tape, or Vaseline or other petroleum greases to lubricate tank threads.
10. Connect bypass assembly with 1” pipe connectors to control valve, making sure Inlet and Outlet is correct.
11. Insert meter cable into meter cable port on bypass.
12. Install inlet and outlet piping and hook up drain line tubing to drain.



13. If you are in earthquake zone, strap your backwash filter tank to wall with metal strapping.
14. Proceed to programming your 7500-REV2.5 control valve timer and backwash frequency.

IMPORTANT: you must program the time and then start a backwash and rinse. The filter system must be backwashed and rinsed several times before using. See following pages for instructions.

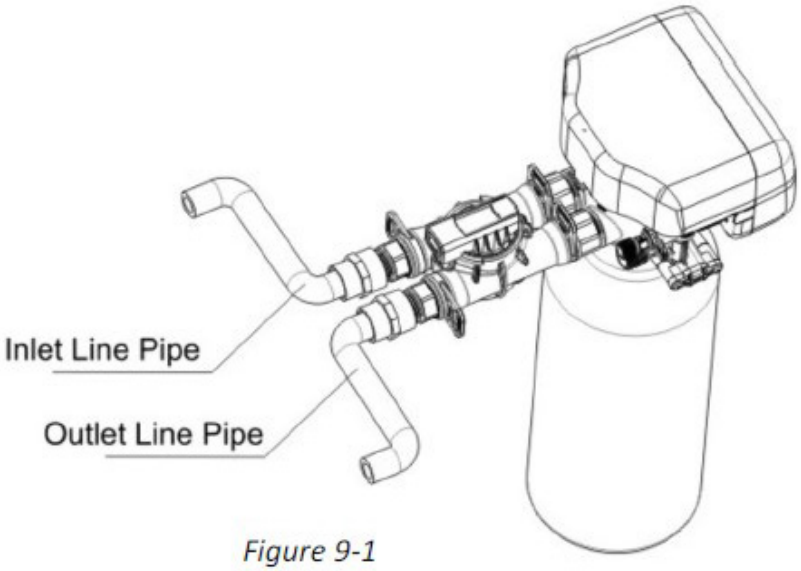
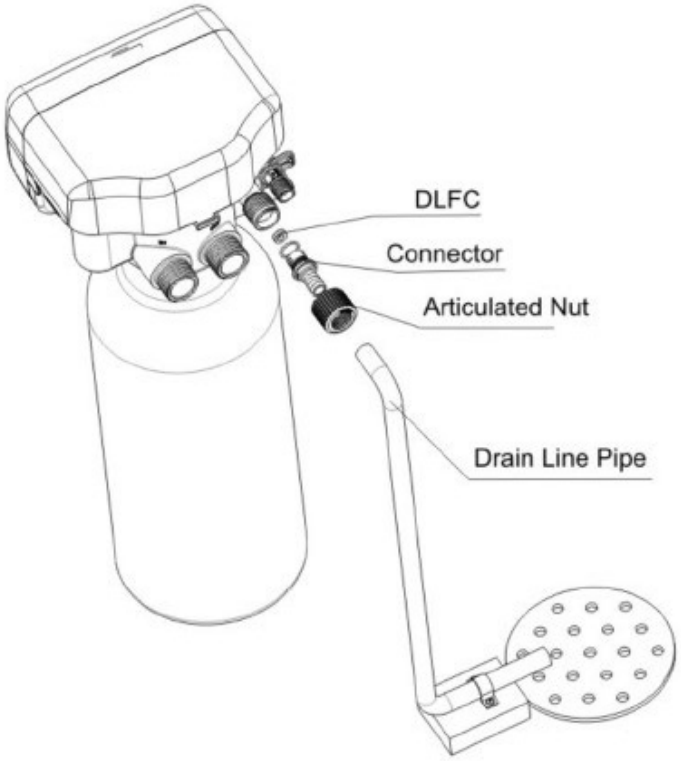


Figure 9-1



Programming Your Valve and Setting Time and Days for Backwash

How to Start a Manual Backwash: Press the Back / Regen button

Pressing **"Back Regen"** at any time results in an immediate manual regeneration.

Pressing and holding for 3 seconds, when system is locked, results in a delayed regeneration at the preselected time.

Extended Power Outage Indicator

If power outage exceeds 3 days, the time-of-day indicator "_" will flash 12:12. The current time of day needs to be re-set. All other set parameters remain stored in memory. The valve will resume to operate from the point of the power outage.

Lockout Function

Keypad will lock after 5 minutes without use. To access the parameter changes, press and hold "Up" and "Down" buttons simultaneously for 3 seconds to unlock.

NOTE: To start all you need to do is set current time and date. All other parameters have been preset for you.

Set the Current Time of Day

1. If LOCK icon is lit, press, and hold both **UP and DOWN** buttons for 3 seconds to unlock keypad.
2. Then press the **MENU/CONFIRM** button to enter the main menu.
3. Press DOWN button to scroll down to and select **"Set Time of Day"**
4. Press the **MENU/CONFIRM** button again to change time of day (Hour will flash)
5. Adjust hour by using DOWN or UP buttons.
6. Press the **MENU/CONFIRM** button again to change minutes (Minutes will flash)
7. Adjust minutes by using DOWN or UP buttons.
8. Press Back/Regen

Set the Date

1. If LOCK icon is lit, press, and hold both **UP and DOWN** buttons for 3 seconds to unlock keypad.
2. Then press the **MENU/CONFIRM** button to enter the main menu.
3. Press DOWN button to select "Set Date"
4. Month: Press the **MENU/CONFIRM** button again to change time of day (Month will flash) and adjust to current Month date by using DOWN or UP buttons.
5. Day: Press the **MENU/CONFIRM** button again to change Day date (Day date will flash) and adjust to current day date by using DOWN or UP buttons.
6. Year: Press the **MENU/CONFIRM** button again to change Year date (Year date will flash) and adjust to current Year by using DOWN or UP buttons.
7. Press **BACK/REGEN** button to save current date and go back to menu.

Continue to use this same procedure for changing remaining settings.

Set Service Days This is the number of days between backwash. Set for every 1 to 7 days depending on water quality. For example, the default setting is to backwash every 7 days. If you notice pressure loss in the house after 4 days, then change setting to every 3 or 4 days.

Set Regen Time This is the time your system will backwash. Default is 2:00 AM

Set Backwash Time Set for 10 minutes.

Set B.S.R. Time Not used. Keep or change to 0 minutes.

Set Fast Rinse Time Set for 8 minutes.

Set B.R. Time Not used. Keep or change to 0 minutes.

Review Regen Times This is number of times the system has backwashed. Just for reviewing.

Review Software Version Version 5.0

Start the First Backwash

1. After programming, the system must be run through 2 or 3 backwash/rinse regeneration cycles to clean the new filter media.
2. Start with bypass valve in the closed or bypass position.
3. Press the BACK/REGEN button once to enter the backwashing cycle.
4. When the display shows the valve in backwash position, open the bypass knob until you hear the water going through. Now, wait for the water to start coming out the drain line- it will come out slowly, and may have some air in it.
5. Wait 2 minutes, and open to a quarter turn, note the increase in flow. Wait two minutes, go to Half open, wait two minutes and go to Full open (there will be a bit less than 2 minutes left on the ten-minute cycle). If the water continues to flow out the drain, then let the cycle finish and do the rinse and then return to service.
6. **If you see the Turbidex media itself coming out of the drain line in a slurry during the startup back wash, CLOSE THE BYPASS KNOB IMMEDIATELY. Make sure that the proper Drain Line Flow Control button is installed.**
7. Now, open the hose bib after the filter and run for a minute, or until any air has finished coming out. Next, starting with the bypass full open, start and run 2-3 more backwashes, running some water out the tap after the filter in between each backwash.

8. The backwash is now counting down from 10 minutes- you want to keep it in backwash for a while, so unplug the power supply from the wall, and the valve will stay in backwash.
9. Open the bypass a bit more, and confirm you have a bit more flow out the drain line. Wait five minutes. Open the valve a bit more, let it run for ten minutes. Do that a couple more times, until the valve is full open.
10. Each time you open the bypass valve more, the flow out the drain line should increase. Immediately close the bypass if you see media coming out the drain line.
11. If possible, verify that the backwash flow corresponds with the size of your system below.
12. You can easily run the drain hose to a bucket and using a watch verify the approximate flow rate in gallons per minute. An adequate backwash is critical to properly clean the Turbidex media. For example, if the backwash water fills a 5-gallon bucket in 1 minute, you have 5 gallons per minute (GPM).

Approximate Drain Flow Rates	
0.5 CF	**4 GPM**
0.75 CF	**6.5 GPM**
1.0 CF	**8 GPM**
1.5 CF	**8 GPM**
2.0 CF	**10 GPM**

13. After the backwash, the system will automatically go into the fast rinse stage. The control valve will return to service status (indicated by the up flowing meter on the left) after the backwash and rinse are complete.
14. Repeat the Regeneration (backwash and rapid rinse cycle) step 2 to 3 more times until you see clear water through the drain line or your hose bib.
15. Finally open the closed ball valve after the system to allow water to flow to house. Water may be discolored at first if pipes had some scale or sediment. Run water to rinse pipes.

CONGRATULATIONS,
YOU ARE DONE SETTING UP YOUR VALVE!

Advanced Programming Mode

Can be skipped. The Advanced Programming Mode allows you to set the Regen Cycle and Regen Mode. Skip this for most applications as your filter system has already been set to correct mode.

1. Plug the **RevV2.5** valve in and immediately press in sequence **MENU/CONFIRM** then press **BACK/REGEN** button then press the **DOWN** button in sequence to enter the Advanced Programming Mode.
2. Press **UP or DOWN** buttons or to select the menu item to be changed (Press **MENU/ CONFIRM** to return to the previous menu).
3. Note: If valve locks while programming, unplug power supply and repeat step above.
4. Press **MENU/CONFIRM** to enter the main menu
5. Press the **UP or DOWN** buttons to highlight each option.
6. Press **MENU/CONFIRM** to enter highlighted option.
7. Press the **UP or DOWN** buttons to adjust the value.
8. Press the **MENU/CONFIRM** to accept the changes.
9. Press **BACK/REGEN** button to advance to service status

Advanced Program Recommended Settings

Review Company Info	CWS 831-462-8500
Set Valve Model	62605
Set Language	English
Set Company Info	CWS 831-462-8500
Set Hour Mode	12 HR
Set Time of Day	Current time of day
Set Date	Current date
Set Program Type	Interlock
Set Regen Cycles	No. 1
Set Set Clear Data	Close
Set Regen Mode	A-06
Set Capacity	1400 Gal.
Set Regen Time	2:00 AM
Set Backwash Time	10 Minutes
Set B.S.R. Time	0
Set Fast Rinse Time	8 Minutes
Set B.R. Time	0
Max Days for Regen.	7
Signal Output Mode	b-01
Set Service Alarm	Disabled
Review Regen Times	NA
Review Software Version	Ver. 5.0

Maintenance

Every 4 to 6 years (in some cases it can last longer) remove control valve and empty filter media and replace with new media.

There is no routine maintenance required for the control valve or filter media, other than making sure the system is set to backwash frequently enough to keep the filter media clean.

If you notice a pressure loss you might consider changing the backwash to every 2 or 3 or in some cases every day if there is a lot of sediment (also depends on amount of water you are using).

Troubleshooting the 7500-REV2.5 Sediment Backwash Filter

Backwash Flow Rate

One problem that may occur is if you do not have enough backwash flow rate to properly clean the Sediment Backwash Filter.

You can verify the backwash flow rate by running the drain line into a bucket and timing it when the 7500-REV2.5 is in Cycle 1 or backwash

7500-REV2.5 Water Filters Limited Warranty

We warrant this water filter when installed according to factory recommendations, to be free from defects in materials and workmanship as follows:

Limited Warranty

This water conditioner unit is comprised of the finest industry components available. Each individual component used in the assembly of our equipment is covered by the original equipment manufacturer's warranty. All components, except those specifically listed below, are warranted for a period of one (1) year from date of installation to the original purchaser to be free of defects in materials and workmanship subject to the manufacturer's conditions and/or the conditions shown below.

Mineral Tanks

The fiberglass, polyglass or composite mineral tanks used in the assembly of this unit are warranted to be free of defects in materials and workmanship for a period of ten (10) years on 6" – 13" size tanks, and five (5) years on 14" and larger size tanks used for softener/filtration applications, subject to the manufacture's conditions and/or the conditions shown below. Warranty does not cover exposure to weather, freezing, fractures caused by external impact, or exposure to vacuum.

Control Valves

The CWS control valve is warranted to be free of defects in materials and workmanship for a period or five (5) years.

Conditions

1. This warranty only covers water conditioners installed for residential use. Water conditioners installed for commercial or industrial applications are guaranteed for one (1) year from the date of installation.
2. Installation must be made in accordance with legal or local codes and manufacturer's recommendations.
3. Failure must not result from exposure to weather, rodents, misuse, alteration, fire, lightning, power surges or neglect.
4. Water pressure must not exceed 100 PSI and water temperature must not exceed 100 degrees.
5. Subject to the above terms and conditions we will replace and/or repair, at our option, any parts of the water conditioner found defective in materials and workmanship. Defective parts must be returned, freight pre-paid for repair or replacement.
6. This warranty does not cover labor, shipping charges, damages caused by delays of consequential damages or other causes beyond our control. Warranty does not cover pipes, fixtures or appliances. Warranty extends to the actual water conditioner components only.
7. This warranty is to the original purchaser and is not transferable to any subsequent owner(s).
8. No other guarantees or warranty, expressed or implied, is applicable to our product. No repair or replacement made under the terms of the warranty shall extend this warranty.
9. Any product returned to Clean Water Store without a valid return authorization number will be rejected. Any product found to be defective will, at the sole discretion of Clean Water Store be repaired or replaced. Clean Water Store is not responsible for shipping cost to the repair facility.