Clean Water Made Easy

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7500-C Commercial Sediment Filter Installation Guide

Thank you for purchasing a Clean Water System! With proper installation and a little routine maintenance your system will be providing Sediment free water for many years.

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.

SEDIMENT 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

REV121520

Table of Contents

Packing Lists

All systems include:
2" 7500-C control valve; power supply; 3ea. fitting unions with seals for inlet, outlet and drain; distributor tube with bottom screen; funnel for adding media through the top; and items included in one of the following options:

Find Your Size System to See What is Included:

Sediment Filter 3.0 cubic foot size
14" x 65" filter tank with distributor tube
50 lbs. 1/8" x ¼" filter gravel (1 box 50 lbs.)
3.0 cubic foot of Turbidex Media (3 boxes 50 lbs.)

Sediment Filter 4.0 cubic foot size
16" x 65" filter tank with distributor tube
50 lbs. 1/8" x ¼" filter gravel (1 box 50 lbs.)
4.0 cubic foot of Turbidex Media (4 boxes 50 lbs.)

Sediment Filter 5.0 cubic foot size
18" x 65" filter tank with distributor tube
75 lbs. 1/8" x ¼" Filter gravel (1 box 50 lbs. 1 box 25 lbs.)
5.0 cubic foot of Turbidex Media (5 boxes 50 lbs.)

Sediment Filter 7.0 cubic foot size
21" x 65" filter tank with distributor tube
100 lbs. 1/8" x ¼" filter gravel (2 boxes 50 lbs.)
7.0 cubic foot of Turbidex Media (7 boxes 50 lbs.)

Sediment Filter 10.0 cubic foot size
24" x 72" filter tank with distributor tube
100 lbs. 1/8" x ¼" filter gravel (2 boxes 50 lbs.)
100 lbs. ¼" x ½" filter gravel (2 boxes 50 lbs.)
10.0 cubic foot of Turbidex Media (10 boxes 50 lbs.)

Pre-Installation:

1. Review your packing list and make sure you have received all the parts before beginning 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 20 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 Sediment 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:

NOTE: YOU MUST USE THE UNION ADAPTORS TO CONNECT THE PLUMBING TO THIS UNIT. THESE UNIONS ARE SPECIFICALLY DESIGNED FOR THIS PURPOSE. WARRANTY WILL BE VOIDED IF DAMAGE OR CRACKING TO THE CONTROL HEAD IS CAUSED BY NOT FOLLOWING THESE INSTRUCTIONS. DO NOT USE ANY THREAD TAPE OR COMPOUND ON VALVE TO FITTING INTERFACE. THE SEALS ARE ALL THAT IS NEEDED. ONLY HAND TIGHTEN THESE FITTINGS TO THE VALVE AS WELL. THE OTHER END OF THE UNION IS A STANDARD 2” MNPT AND YOU CAN FOLLOW STATNDARD PLUMBING PRACTICES FOR THIS CONNECTION USING FLEX-LINES WITH WASHERS, THREAD TAPE, OR COMPOUND.

1. Make sure to connect the Inlet **from** your water source and outlet, following arrows on control valve. Connect the External Flow Control fitting onto the Drain line. Assemble all fittings into the 3 provided valve fitting prior to installion to the head. These seal with the blue seals and if overtightened can damage the valve body.

2. Make sure there is a working gate or ball valve before the 7500 Carbon Filter and also one after as well as a bypass valve. A hose bib (which is a faucet to which you can attach a garden hose) is strongly recommended after the Sediment Filter and before the second ball valve. This makes it easy to rinse your new Sediment Filter on start-up and gives you a place to test the water before it enters your piping.

3. If you will be using copper piping, do not sweat the copper pipe directly on to the 7500-C control valve. Avoid heating up the control valve plastic with the torch.

4. You should install unions and a bypass around the valve, so that you can remove it and still have water (See Build Your Bypass).

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.

Installation of Your System in 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 Filter Works:

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

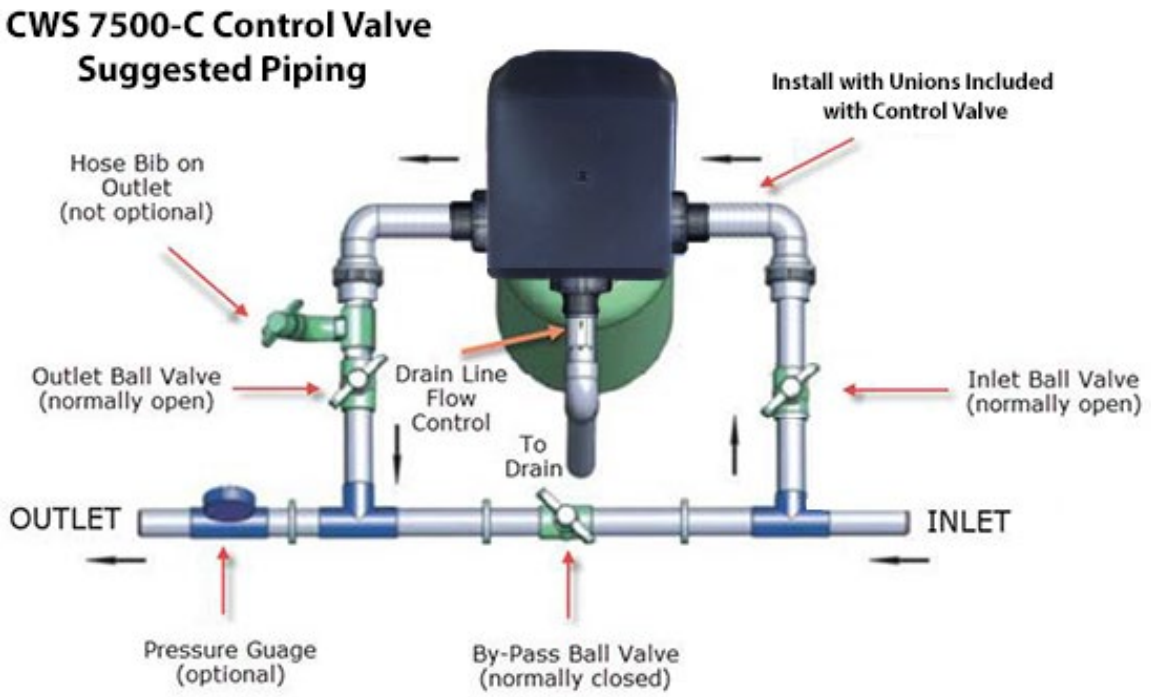
The backwashing Sediment Filter removes sediment and is automatically backwashed.

This cleans and re-classifies the Sediment, 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 Sediment media.

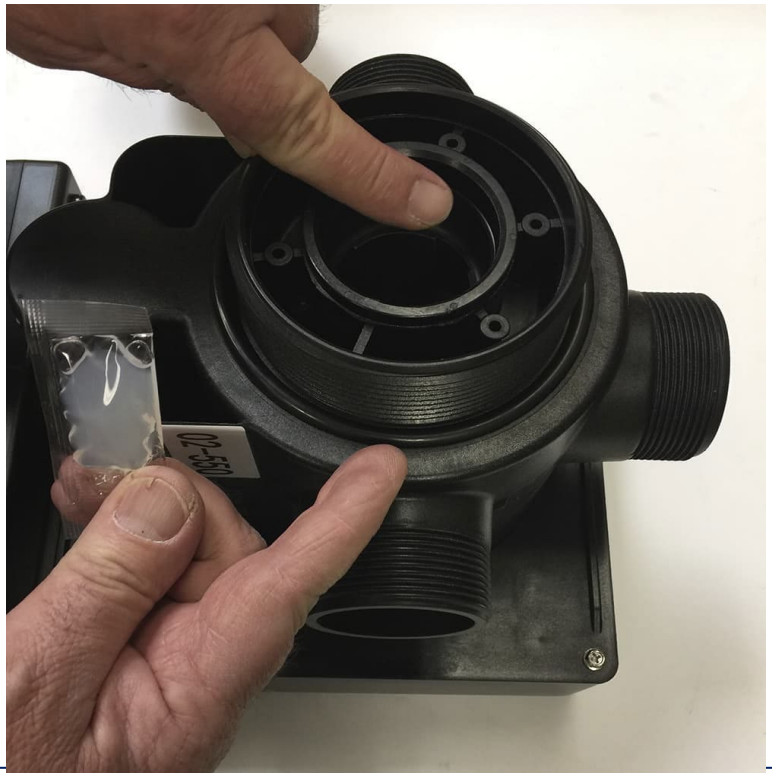
During the backwash the Sediment is cleaned by the action of the water flowing through it.

NOTE: Make sure the DLFC is installed in the correct flow direction per the arrow on the unit. You will need to provide fittings going from the 2" MNPT drain connection to your required DLFC. We recommmend a minumum 1" drain line be installed so the flow is not resitricted effecting a sufficient backwash.



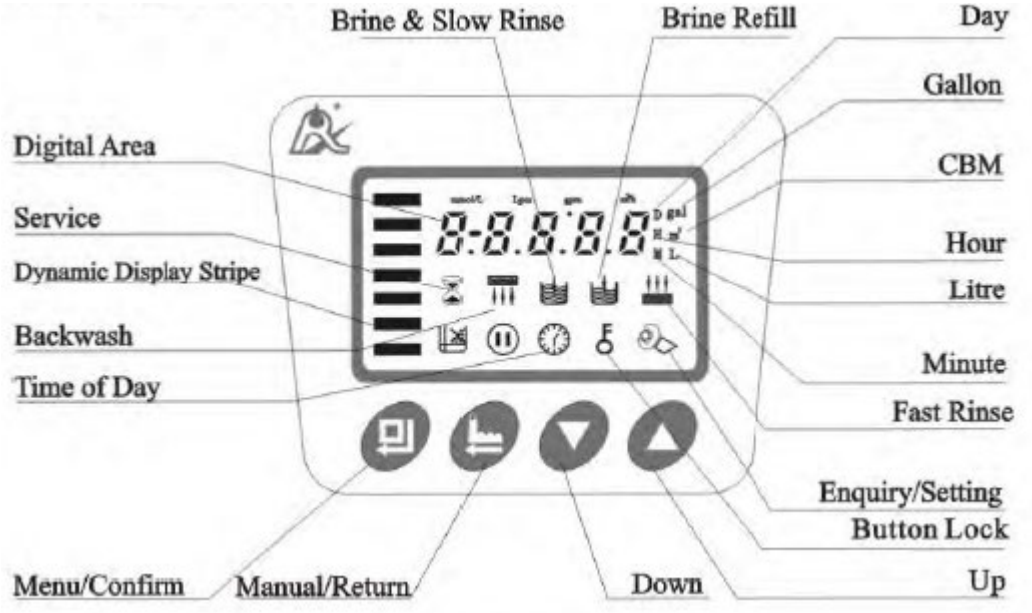
Assembly and Installation Instructions:

1. Wrap the top of distributor tube with electrical or duct tape so that no gravel or Sediment media will go down the distributor tube when adding the media.
2. Add the filter gravel that came with your order. You want the gravel to cover the bottom distributor screen before adding the Sediment media.
3. Next add Sediment 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.
4. Remove cap or tape from top of distributor tube. Be careful not to pull up distributor tube when removing cap or tape.
5. Fill tank completely with water. This will allow the Sediment Filter media to settle and reduce the need of purging the air out of the tank later.
6. Add a small amount of food grade silicone grease to the inner O-ring, where the distribution tube goes. Lubricate the main tank O-ring and screw on 7500 control valve carefully. Do not use pipe-joint compound, vegetable oil, Teflon tape, or Vaseline or other petroleum greases to lubricate tank threads.



Programming Your Valve and Setting Time and Days for Backwash

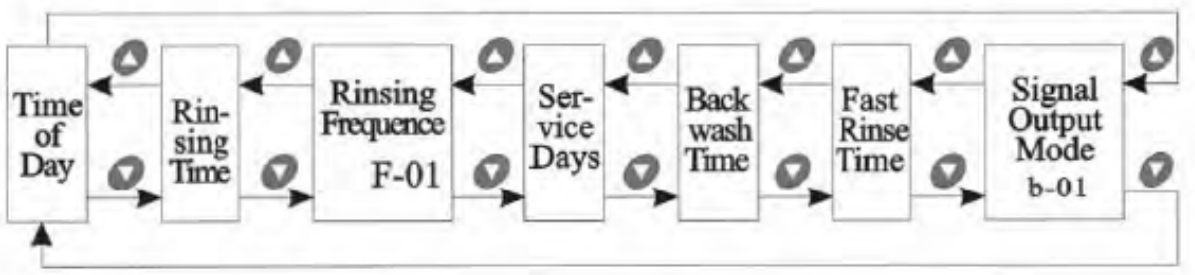
Next, you will need to program the system to work as a Sediment Filter. There are a few settings that must be changed before the system can be put into service. Plug in the control valve and begin the programming instructions.



***IMPORTANT*:** Before any operation, the valve menu must be unlocked. If the button lock indicator is displayed, press and hold both the Up and Down buttons for 5 seconds. A sound will indicate the menu is unlocked. The menu will re-lock automatically after 1 minute of inactivity.

1. To begin programming your valve, unlock the menu and press the Menu/Confirm button. This puts the valve into program display mode, indicated by the Enquiry/Setting icon being displayed. The Enquiry/Setting icon is displayed whenever you are changing the parameter of a programming mode.

2. The sequence of programming modes is shown in the diagram below. To switch between modes, press the up or down button according to which direction your mode is. The modes can only be changed when the Enquiry/Setting button is displayed and you are not currently modifying any other parameter.



1) To change the Time of Day:

Change programming mode to Time of Day ([00:00] and time of day icon displayed). The hour and Enquiry/Setting icon will be flashing. Change the hour value with the Up/Down buttons, then press Menu/Confirm to move onto the minute value. Change this value with Up/Down, and press Menu/Confirm again to confirm the time.

2) To change the Rinsing Time:

The rinsing time is the hour of day that the system will turn on to perform its function. **We recommend setting the system to backwash at 2 AM [02:00]**, or any time that it is unlikely any water will be used. Note the valve uses the 24-hour clock.

The default setting is [02:00]. The max setting is [23:59]. To change, set the programming mode to Rinsing Time ([00:00]). Press the Menu/Confirm button and use the Up/Down buttons to change the hour value. Press the Menu/Confirm button again and change the minute value using the Up/Down buttons. Finally, press Menu/Confirm to confirm your rinse time.

3) To change the Rinsing Frequency:

The rinsing frequency is how many times the system will backwash and rinse per service.

This should be left at its **default, [F-00].** This will have the system only backwash and rinse once per service.

4) To change the Service Days:

5) **The recommended initial backwash frequency setting for the Sediment Backwash Filter is every 3 to 4 days** for families or heavy use and every 7 days for 1 to 2 persons in the home. If you experience pressure loss in between backwashes, increase frequency of backwash up to once per day.

To set this, change the programming mode to Service Days ([1-03D]). Press the Menu/Confirm button and use the Up/Down buttons to set it to your desired amount. Press Menu/Confirm to confirm your input.

6) To change the Backwash Time:

The backwash time is the amount of time (in minutes) that the system will backwash for.

For a neutralizer filter, **set the backwash time to 10 minutes [2-10:00].** To change this, set the programming mode to Backwash Time ([2-10:00] and backwash icon displayed). Press the

Menu/Confirm button and use the Up/Down buttons to set it to **[2-10:00].** Press Menu/Confirm to confirm the backwash time.

7) To change the Fast Rinse Time:

The fast rinse time is the amount of time (in minutes) that the system will rinse for.

For a Sediment filter, **set the fast rinse time to 6 minutes [3-06:00].** To change this, set the programming mode to Fast Rinse Time ([3-10:00] and fast rinse icon displayed). Press the Menu/Confirm button and use the Up/Down buttons to set it to **[3-06:00].** Press Menu/Confirm to confirm the fast rinse time.

8) To change the Signal Output Mode

The signal output mode refers to when the system receives external function.

Leave this at its default, [b-01].

After configuring, press the Manual/Return button to exit programming mode.

Initial Backwash

1 After programming, the system must be run through an initial backwash.

2 Close inlet ball valve and outlet ball valve and open the bypass valve.

3 Press the Manual/Return button to enter the backwashing cycle. When the backwash icon is displayed, slowly open the inlet valve B to a quarter position to make the water flow into the resin tank; you should be able to hear air escaping from the drain pipeline.

4 After all the air is out of the pipeline, open inlet valve B and clean the foreign materials in the tank until the water is clean.

5 If possible, verify that the backwash flow corresponds with the size of your system below. You can easily run the drain hose to a bucket and using a watch verify the flow rate in gallons per minute. An adequate backwash is critical to properly clean the Sediment media and prevent it from cementing together.

3.0 CF	15 GPM
4.0 CF	20 GPM
5.0 CF	25 GPM
7.0 CF	30 GPM
10.0 CF	35 GPM

6 After the backwash, the system will automatically go into the fast rinse stage. Both stages will last if you have programmed the valve for. The control valve will return to service status (indicated by the up flowing meter on the left) after the backwash and rinse are complete.

7 Repeat the Regeneration (backwash and rapid rinse cycle) step 3-4 more times until you see clear water through the drain line or your hose bib.

Congratulations, you are done setting up your valve!