



Clean Water Made Easy

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7500-M Pro-Ox Filter Installation Guide

Thank you for purchasing a Clean Water System! With proper installation and a little routine maintenance your system will be providing iron 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.

The Pro-OX 7500-M Iron Filter media must be activated with a 1 cup of unscented liquid chlorine bleach when first installing it. Read instructions for more information. It is easy to do, but a critical step.

The Pro-OX media produces very small particles (fines) when the system is first installed. Bring the water pressure up VERY slowly during the initial backwash by opening inlet valve slowly to avoid pushing the media up into the control head.

Performing multiple backwashes at start-up is an important step.

You should also not bring any other systems online (i.e. softeners, filters, etc.) until the Pro-Ox system is fully flushed. Depending on the water quality, this may take several backwashes and a week or two of normal water use.

The Pro-OX media contains dust. Use paper mask and ventilate area to avoid breathing dust when first pouring the media into the tank.

**Minimum 30 PSI required. Maximum pressure 90 PSI.
For indoor installation. Protect from sunlight, rain, and freezing.**

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



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Packing Lists

All systems include:

7500-M control valve, qty 3 female NPT to BSP black pipe adapters, power supply, funnel for adding media, top screen, start-up guide, and items included in one of the following options:

Find Your Size System to See What is Included:

Pro-Ox Filter 0.75 cubic foot size

8" x 44" filter tank with distributor tube

9 lbs. filter gravel

56 lbs. of Pro-Ox media

(Note: This unit does not require the Turbidex Media). Do not fill the tank more than 2/3 full.

Pro-Ox Filter 1.0 cubic foot size

9" x 48" filter tank with distributor tube

12 lbs. filter gravel

70 lbs. of Pro-Ox media

10 lbs. Turbidex media

Pro-Ox Filter 1.5 cubic foot size

10" x 54" filter tank with distributor tube

16 lbs. Filter gravel

110 lbs. of Pro-Ox media

15 lbs. Turbidex media

Pro-Ox Filter 2.0 cubic foot size

12" x 52" filter tank with distributor tube

20 lbs. filter gravel

165 lbs. of Pro-Ox media

20 lbs. Turbidex media

Pro-Ox Filter 2.5 cubic foot size

13" x 54" filter tank with distributor tube

35 lbs. filter gravel

214 lbs. of Pro-Ox media

25 lbs. Turbidex media

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

Your filter tank base is not glued to the bottom of your tank. Occasionally tank bases will become tilted 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 tap it on a concrete or solid floor once or twice to level it.

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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 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.

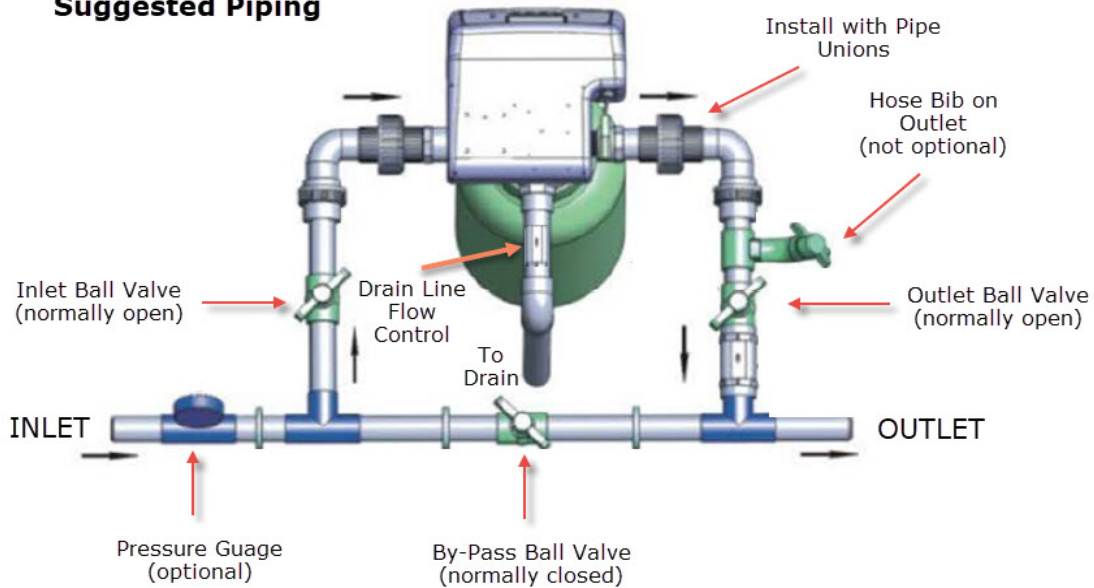
Best Practices for Piping & Drain Installation:

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. You must use the 3 female pipe adapters provided. Assemble all fittings into valve fitting prior to installation 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 Filter System 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.
3. If you will be using copper piping, do not sweat the copper pipe directly on to the 7500-M control valve.
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.



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CWS 7500 Control Valve Suggested Piping



6. 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 (verify correct direction by arrow).
7. Make sure there is a working gate or ball valve before the 7500 Pro-Ox 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 Pro-Ox Filter and before the second ball valve. This makes it easy to rinse your new Pro-Ox Filter on start-up and gives you a place to test the water before it enters the piping going into your home. You should install unions and a bypass around the valve, so that you can remove it and still have water (See Build Your Bypass).
8. If you will be using copper piping, do not sweat the copper pipe directly on to the 7500-M control valve. Avoid heating up the control valve plastic with the torch.
9. 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.

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How Your Pro-Ox Iron Filter Works:

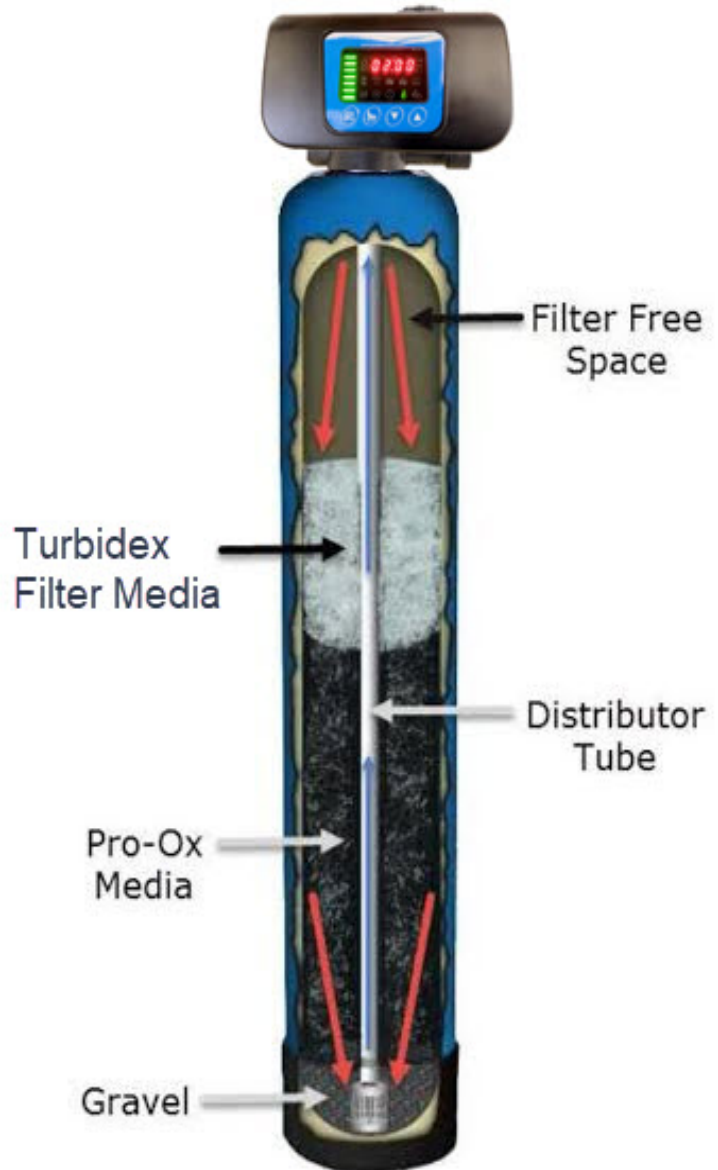
Water enters the top of the tank and flows down through the media and up the distributor tube.

The backwashing Pro-Ox Filter removes sediment and is automatically backwashed.

This cleans and re-classifies the Pro-Ox, 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 Pro-Ox media.

During the backwash the Pro-Ox is cleaned by the action of the water flowing through it.



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Assembly and Installation Instructions:

Note: Verify the distributor tube is seated into the bottom of the tank and the top of the tube is level with the top of the tank prior to adding media.

1. Wrap the top of distributor tube with electrical or duct tape so that no gravel, Pro-Ox, or Turbidex media will go down the distributor tube when adding the media.

Note: The correct amount of each media was shipped with your order depending on the tank size. When all the media is installed, the tank should be approximately 2/3 full.

Please review all boxes shipped prior to starting as the Pro-Ox media may be contained in more than one bag.



2. Add the filter gravel that came with your order. You want the gravel to cover the bottom distributor screen before adding the Pro-Ox media.
3. Next add Pro-Ox media.
4. Next add the Turbidex.
5. Remove funnel and tape from top of distributor tube. Be careful not to pull up distributor tube when removing cap or tape.
6. Fill tank half full of clean water. Add 1 cup unscented bleach. Continue to fill tank completely with clean water. This will activate the Pro-Ox Filter media and help to settle and reduce the need of purging the air out of the tank later. Let sit for an hour minimum.
7. Add a small amount of silicone grease to the inner O-ring, where the distribution tube goes.
8. Lubricate the main tank O-ring and install the top screen Note: Use the food grade silicone lube we shipped with your order. Do not use pipe-joint compound, vegetable oil, Teflon tape, or Vaseline or other petroleum greases to lubricate tank threads.
9. Also note the top screens may differ in color or shape but will provide the same function.

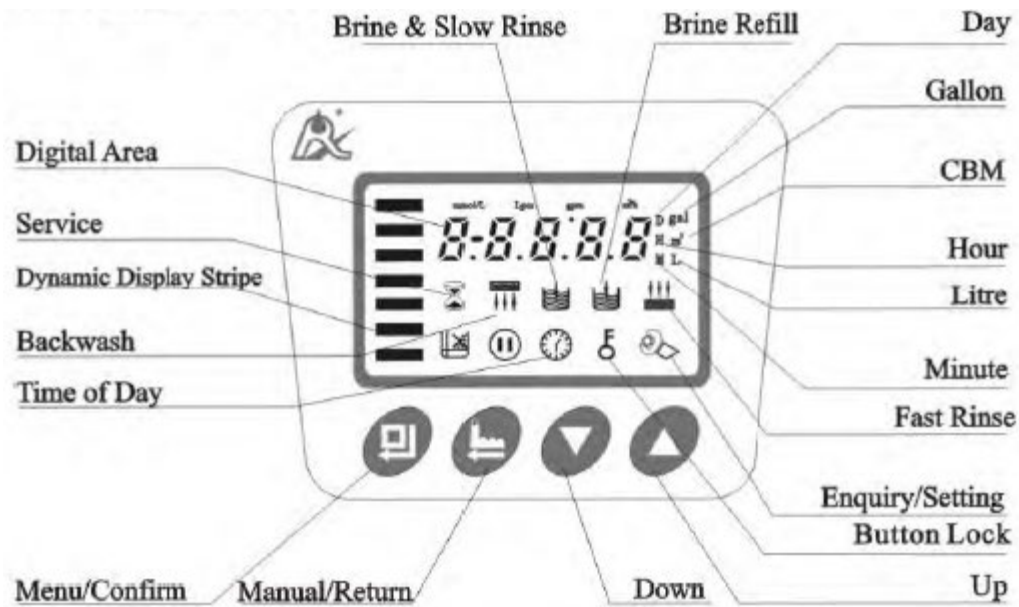


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10. Install the control valve onto the tank and tighten enough to seal the O-ring. Do not overtighten the control valve to the tank as damage may occur.
11. Mate your Inlet, Outlet, and Drain line connections to your plumbing. If using flex lines to your inlet and outlet connections, thread tape or sealant is not required. The fitting seals to the washer inside the flex-line.

Programming Your Valve and Setting Time and Days for Backwash

Next, you will need to program the system to work as a Pro-Ox 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.

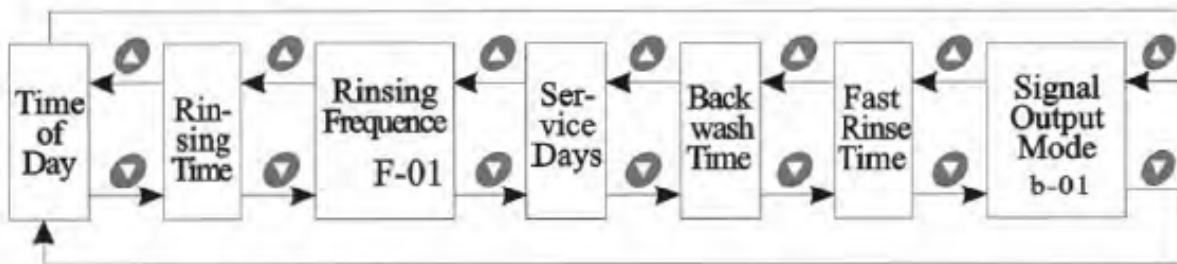


IMPORTANT: Before any operation, the valve menu must be unlocked. If the button lock indicator is displayed, press and hold both the Up and Down buttons for 5 seconds. A sound will indicate the menu is unlocked. The menu will re-lock automatically after 1 minute of inactivity.

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.

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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:

Service days indicates how often the system will operate and backwash/rinse. **The recommended setting for a Pro-Ox filter is 3-4 days.**

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.

5) To change the Backwash Time:

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

For a Pro-Ox iron 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.

6) 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 Pro-Ox iron 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.

7) 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.

NOTE: Your 7500-M Iron filter may be manually adjusted to backwash using the knob on top of the unit. This could be useful during a prolonged power outage. Turn the knob in the clockwise direction to the position required by lining up the indicator. This can also be used with power by turning the knob a couple of clicks and the valve will then advance to the next step cycle.

Initial Backwash

Note: After programming, the system must be run through several initial backwash / Rinse cycles to remove any fine particles from the media. During these initial backwashes you will notice the effluent coming from the drain will be very dark and lighten up after several cycles. You are not flushing away the media so don't be alarmed. You will continue to run the system through the backwash and rapid rinse cycles until the water coming from the drain line is clear during the Rinse cycle. (Usually 2-4 cycles depending on tank size.)

If at any time during the initial backwash you notice a reduced flow coming out of the drain line, it is possible you have clogged the upper top screen. Advance the control head to the rapid rinse cycle to flush out the top screen and then return to the backwash cycle to complete the initial backwash steps.

Also: 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 media and prevent it from clumping together.

0.75 CF	5 GPM
1.0 CF	7 GPM
1.5 CF	10 GPM
2.0 CF	12 GPM

- 1 Close the Inlet, Outlet, and Bypass valves.
- 2 Press the Manual/Return button to enter the backwashing cycle (backwash icon is displayed).
- 3 Unplug the unit to keep the control valve in the backwash cycle.

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Note: It is very important to bring the water pressure into the unit at a slow rate initially. If the initial flow rate is too high, it could result in pushing the media up into the top screen or control valve possibly resulting in the system not functioning properly.

- 4 Slowly open the inlet valve approximately a quarter turn to start the water flow into the tank. You should be able to hear air escaping from the drain line.
- 5 When all the air is out of the drain line and you have a solid flow of water, continue to slowly open the inlet valve until it is fully open.
- 6 Continue to flow water with the inlet valve fully open for a period of 10-15 minutes.
- 7 Plug the unit back in and let the backwash cycle complete as timed. (Note your display will toggle between the time of day and the backwash cycle). When complete, the valve will automatically advance to the rinse cycle.
- 8 Let the rinse cycle complete as timed and your unit will advance back to the service mode. (the green dynamic strip on the left will light up).
- 9 Repeat the complete Regeneration cycle process (i.e. backwash and rapid rinse) until the water coming out of the drain line during the rapid rinse cycle is clear. Note that the water from the drain line during backwash will always be cloudy as you are cleaning the media bed of trapped particles.
- 10 Let the control head advance to the Service mode. Open your hose bib or the outlet valve if you did not install a hose bib, and flush the system until you see the water is clear. You can also run water from the nearest source of entrance in the house such as a utility sink or bathtub.

Congratulations, you are done setting up your valve!

Maintenance:

No weekly or monthly maintenance is required.

Troubleshooting the 7500-M Pro-Ox Filter:

If you notice a decreased flow coming out of the system during normal operation, verify the backwash flow rate is sufficient by closing the outlet valve, advancing the system to backwash, and run the drain line into a bucket and time the effluent to calculate the gallons per minute. If you have the correct flow rate, you can increase the backwashing frequency by programming the valve to regenerate more frequently.