Clean Water Made Easy

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Pro-OX 2510 Manual Backwash Iron Filter

Installation & Start-Up Guide

Thank you for purchasing a Clean Water System! With proper installation and a little routine maintenance your system will be providing iron 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 2510 Iron Filter must be activated with 1/2 cup of liquid pool chlorine when first installing it. See Page 8 and read instructions for more information. It is easy to do, but a critical step that must be done.**
- **The iron filter must be backwashed and rinsed 3 -4 times to clear out dust and fines when starting up the first time**.

PRO-OX MEDIA CONTAINS DUST.
USE PAPER MASK AND VENTILATE AREA TO AVOID BREATHING DUST DURING INSTALLATION

Questions?

Call us toll-free: 1-888-600-5426 or 1-831-462-8500

Email us: support@cleanwaterstore. com

Table of Contents

Packing List

1.0 Cubic Foot System

Quantity	Description
1	Fleck 2510 manual backwash control valve and bypass valve
1	Pipe connector kit (1” or 3/4”)
1	948 filter tank with distributor tube and bottom basket
1	Media funnel
1	12 lbs. gravel
1	69 lbs. of Pro-OX filter media
1	10 lbs. Chemsorb media

1.5 Cubic Foot System

Quantity	Description
1	Fleck 2510 manual backwash control valve and bypass valve
1	Pipe connector kit (1” or 3/4”)
1	1054 filter tank with distributor tube and bottom basket
1	Media funnel
1	16 lbs. gravel
1	110 lbs. of Pro-OX filter media
1	20 lbs. of Chemsorb media

2.0 Cubic Foot System

Quantity	Description
1	Fleck 2510 manual backwash control valve and bypass valve
1	Pipe connector kit (1” or 3/4”)
1	1252 filter tank with distributor tube and bottom basket
1	Media funnel
1	165 lbs. of Pro-OX media
1	20 lbs. of Chemsorb media
1	20 lbs. filter gravel

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. Installation typically takes 3 to 5 hours. You will need to manually wash and rinse the media prior to placing in service.
5. After the system is installed and running, your water may be discolored, or full of sediment or rust, particularly if this is older piping that has been exposed to iron or manganese for some time. Typically, this clears up over a day or two, but can persist for weeks if the pipe is old, galvanized iron pipe that has been corroded.

Best Practices for Piping & Drain Installation

1. See typical installation (see Fig. 2, page 6). The iron filter is installed after the pressure tank.
2. Make sure to connect the inlet pipe to the Fleck 2510 control valve inlet and the outlet to the outlet (see Fig. 3, page 7). Water enters on the right and exits on the left when facing the control valve from the front. From the back (Fig. 3) the water enters on the left. The inlet and outlet are attached to the bypass valve which is marked with arrows as well.
3. Make sure there is a working gate or ball valve before the filter and also one after as shown in Fig. 2 on page 6. The pressure gauges are optional and not necessary but a hose bib (which is a faucet that you can attach a garden hose to) is strongly recommended after the filter before the second ball valve. This makes it easy to rinse your new filter on start-up and gives you a place to test the water before it enters your household plumbing.
4. If you will be using copper piping, do not sweat the copper pipe directly on to the control valve. Avoid heating up the control valve plastic with the torch.
5. You do not need unions to install your Fleck 2510control valve. If you need to remove it, the valve has quick-release couplings that make it easy to put the filter on bypass and remove it from your piping.
6. The drain line tubing (not supplied) is connected to a drain from the rain outlet using flexible 1/2" ID tubing. Note that the drain line can run up above the control valve and into a drain—it does not need to drain down, as the filter backwashes under line pressure from your well pump. Most plumbing codes require an air-gap connection, so that if your sewer or septic tank backs up it cannot cross-connect with the drain tubing.

How Your Iron Filter Works:

See Fig. 1. Water enters the top of your Pro-OX iron filter tank and flows down through the media and up the distributor tube. Iron and manganese in the water turns to an oxidized particle upon contact with the media and is trapped in the media. During backwash, the water flow is reversed and water flows down the distributor tube and up through the media, lifting and expanding the Pro-OX filter media, and removing all the iron and rust trapped in the filter.

Fig. 1—Pro-OX Iron Filter Flow Diagram

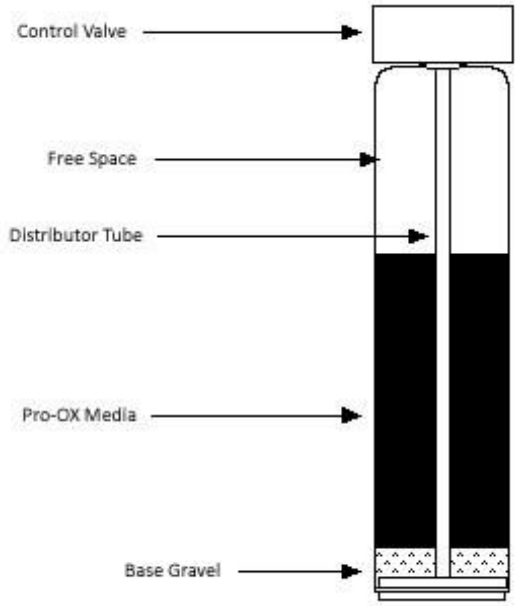


Fig. 2—Typical Pro-OX Iron Filter Installation

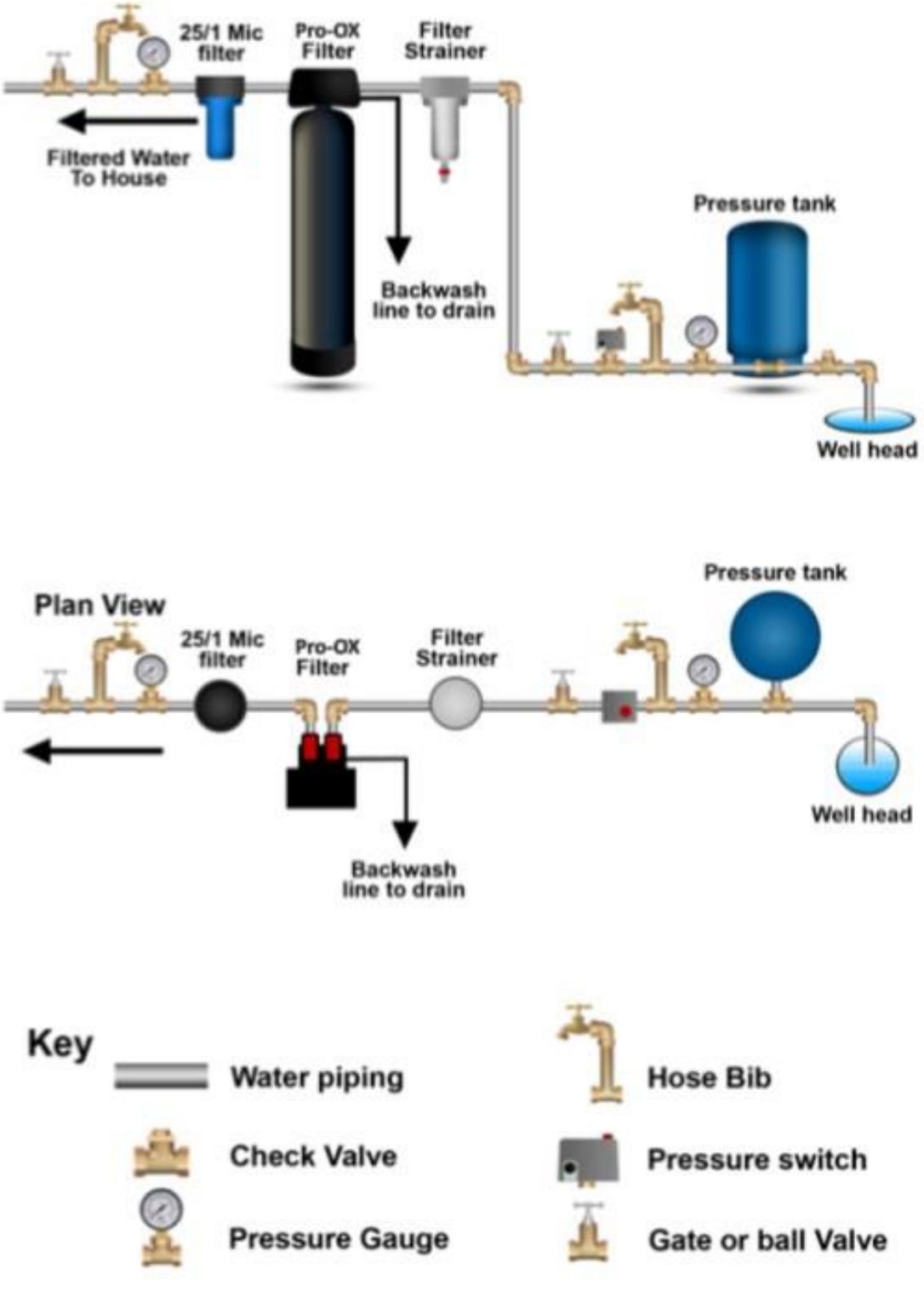


Fig. 3—Fleck 2510 control valve and bypass valve rear view

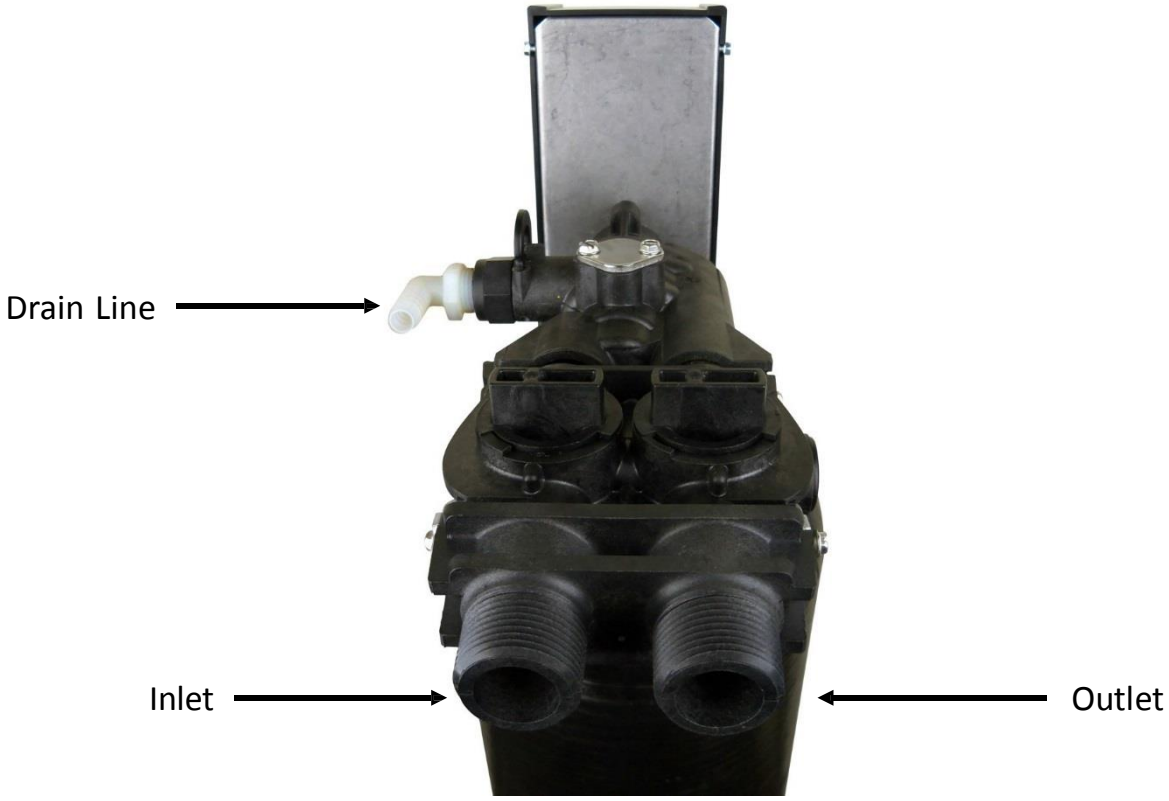
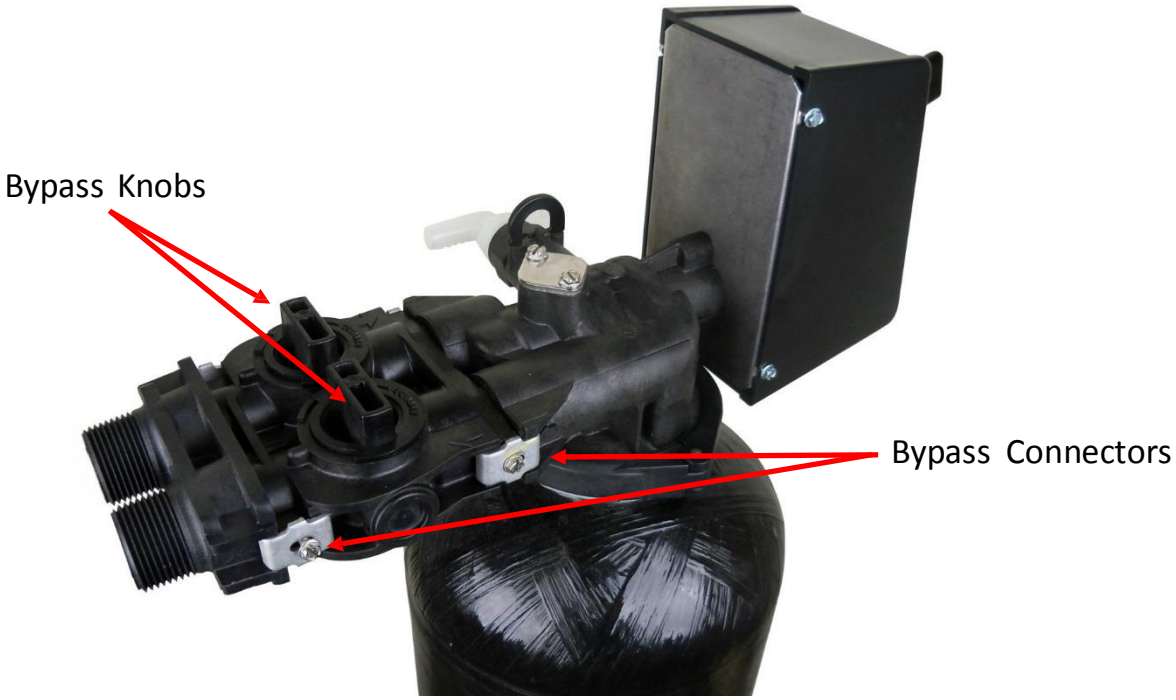


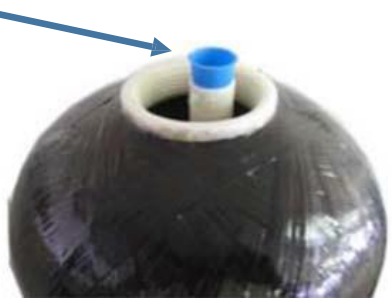
Fig. 4—Fleck 2510 control valve and bypass valve rear side view



Assembly and Installation Instructions

1. Unscrew the Fleck 2510 control valve from the top of the tank if it came screwed on. Place distributor tube inside tank if it is not already. Make sure the tube is capped with something to prevent filter media from entering the tube, blue or white masking tape is best.
2. Next add Gravel, Pro-OX filter media and Chemsorb/ Calcite (depending on your system) until the tank is not more than 2/3 full of media.

Plug or tape top of distributor tube to prevent media from entering. Remove when finished.



Use included funnel to add media.

3. Remove tape from top of the distributor tube. **Be careful not to pull up on distributor tube when removing tape.**
4. **Fill tank with water, and add one cup of liquid pool chlorine.** It is critical to activate the media. Follow the next step and screw on the head, and let the bleach sit for at least an hour before doing the initial backwashes. Do not run any water in the service direct through the filter until after you have backwashed the media several times, to rinse out the fines and stain on the new media.
5. Carefully screw on the 2510 control valve. Do not use pipe-joint compound, Teflon tape, Vaseline, or other petroleum greases to lubricate tank threads.
6. See how the bypass valve is connected in Fig. 4 (page 7). Lubricate bypass valve O-rings with some vegetable oil or silicone grease and connect the bypass assembly to the Fleck 2510 control valve by sliding the bypass valve firmly into its body. Once it is in far enough, you will be able to tighten the metal connecting clamps.
7. Next lubricate the end-connectors (labeled “inlet” and “outlet” in Fig. 3) and insert them into the bypass valve.
8. Make sure your valve is in bypass position. You will know when it is in bypass because the two knobs will be parallel to each other; when the valve is in service position the valves will form one continuous horizontal line.
9. Now install your water pipes to the 2510 bypass end connectors. Make sure inlet is installed to the IN pipe connector and the outlet to the OUT connector. The bypass valve should be marked with arrows to

help you easily identify the inlet/outlet.

Connect some flexible drain tubing from the drain connection on the control valve (pictured in Fig. 3 on page 7) to a suitable drain such as a septic tank or sewer. It is ok to run the drain line up and over the filter, up to 4 feet above the tank. If the drain line will be longer than 20 feet, use larger tubing such as 3/4" or 1". Note that it is desirable to be able to run the drain line into a bucket in order to test the back-wash flow rate in the future. This is why hard piping the drain line is discouraged. However, you may use hard PVC piping for the drain line if you are able to remove it and attach flexible tubing should you ever desire for testing purposes. Make sure the drain tubing is firmly clamped to the barbed fitting with a hose clamp to prevent leaks

2.0 and 2.5 cubic foot systems have an external stainless steel flow control that comes with the system. This must be installed. If you have a 1.0 or 1.5 cu. ft. system, the flow control is internal and requires no installation.

Now you must run a manual backwash and rinse cycle before using your filter system. Move lever on the face of your control valve into "Backwash" position and let the water run through the drain line until it appears clear. This can take about 10—20 minutes. Then, move the lever to the "Rapid Rinse" position for about 5 minutes. Once this rinse cycle is complete, your iron filter is ready for operation! Remember this process, as you'll have to repeat it whenever you add more media in the future.

Troubleshooting the Pro-OX 2510 Iron Filter

Low Water Pressure

Measure the backwash flow rate by putting the system into a backwash mode and putting the drain tube into a 5-gallon bucket and timing the flow rate. A 0.75 cubic foot system should flow at 5 gallons in one minute, so the 5-gallon bucket should fill in one minute. The 1.0 cubic foot system should flow at 7 GPM during back-wash.

Filter Tank Does Not Sit Level on the Floor

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 rapping it on a concrete or solid floor once or twice in order to level it.

Initial Backwash Media Lifted Into Control Head

Sometimes, when doing the Initial Backwash, the media gets lifted up into the control head. You can tell this happened because you will have little or no flow, either going out to drain while in the backwash positon, or when in the service positon.

To remove media from a control head, do the following:

1) Put the Inlet Bypass in the Closed position.
2) From the Service Mode, place the unit in Rinse position

3) With the valve in the RR position, open and close the Inlet Bypass valve several times. After the third or fourth time, leave it in the open position and check the drain line- do you have a good solid flow? 90% of the time, the answer is yes, but sometimes, even after opening and closing the valve many times, you still don't have good flow… But, in either case (good or no flow), continue…
4) With the Inlet Valve OFF, put the unit in the Backwash position.
5) Open the Inlet valve just enough so you can hear the water passing thru the valve- you should notice a corresponding slow flow out of the drain line. After a minute, if there are no air bubbles present, open the valve about another quarter inch- again, you should see a corresponding increase in the flow… And you will continue until the valve is full open.

IMPORTANT:
What you are trying to accomplish, after you have pushed the media back in to the tank in the Rapid Rinse position, is to get the Inlet valve all the way open in the Backwash position, without it jamming media back in the head, and this is the part where you have to go slow, open up the Inlet valve a little bit at a time and let it run for a few minutes and then keep opening the inlet valve until it is full open.