



**Clean Water Made Easy**

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## **Pro-OX 2510 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 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.

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

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## **Table of Contents**

Packing List .....	3
Pre-Installation .....	4
Best Practices for Piping & Drain Installation.....	4
How Your Pro-OX Iron Filter Works .....	5
Fig. 1—Pro-OX Iron Filter Water Flow Diagram .....	5
Fig. 2—Typical Pro-OX Iron Filter Installation .....	6
Assembly and Installation Instructions .....	7
Maintaining Your 2510 Pro-OX Iron Filter System .....	9
Troubleshooting Your 2510 Pro-OX Iron Filter System .....	9
What to Do If Your Filter Tank Does Not Sit Level on the Floor.....	9
Program Settings .....	9

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# Pro-OX 2510 Iron Filter Installation & Startup Guide

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## Packing List

Each system comes with the following:

- |   |  |
|---|--|
| 1 | Fleck 2510 control valve with pipe connector kit (either 1" or ¾") |
| 1 | Fleck 2510 bypass valve  |
| 1 | Enpress filter tank with distributor tube installed                |
| 1 | Media funnel   |

In addition, each system comes with the following, depending on the model ordered:

### 1.0 Cubic Foot Pro-OX:

Quantity	Description
1	12 lbs Gravel
2	½ cubic foot boxes of Pro-OX filter media

### 1.5 Cubic Foot Pro-OX:

Quantity	Description
1	16 lbs Gravel
3	½ cubic foot boxes of Pro-OX filter media

### 2.0 Cubic Foot Pro-OX:

Quantity	Description
1	16 lbs Gravel
4	½ cubic foot boxes of Pro-OX filter media

### 2.5 Cubic Foot Pro-OX:

Quantity	Description
1	20 lbs Gravel
5	½ cubic foot boxes of Pro-OX filter media

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# *Pro-OX 2510 Iron Filter Installation & Startup Guide*

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## **Pre-Installation**

Review your packing list and make sure you have received all the parts before beginning installation.

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.

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.

Get all of your plumbing parts together before beginning installation. Installation typically takes 3 to 5 hours. However after installation the Pro-OX Filter must be allowed to run through a complete backwash and rinse cycle.

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. Typically this clears up over a day or two.

## **Best Practices for Piping & Drain Installation**

See typical installation (see Fig. 2 on page 6). The Pro-OX filter is installed after the pressure tank.

Make sure to follow to connect the in pipe to the Fleck 2510 inlet and the outlet to the outlet (see Fig. 2). As you face the Fleck 2510 control from the front, the water enters on the right and exits on the left. From the back (see Fig. 2) the water enters on the left. The inlet and outlet are attached to the bypass valve which is marked with arrows as well.

Make sure there is a working gate or ball valve before the Fleck 2510 Pro-OX filter and also one after as shown in the diagram Fig. 2. The pressure gauges are optional and perhaps not necessary but a hose bib (which is a faucet that you can attach a garden hose to) is strongly recommended after the Pro-OX filter 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 your household plumbing.

If you will be using copper piping, do not sweat the copper pipe directly on to the Fleck 2510 control valve. Avoid heating up the Fleck 2510 control valve plastic with the torch.

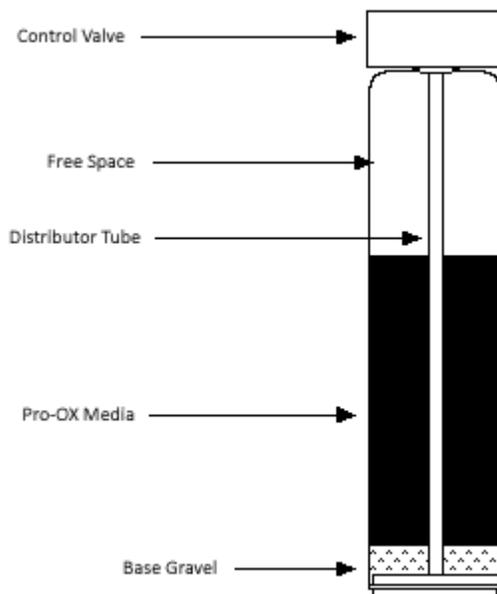
You do not need unions to install your Fleck 2510 control. If you need to remove it, the Fleck 2510 has quick-release couplings that make it easy to put the Pro-OX filter on by-pass and remove the filter system from the piping.

The drain line tubing (not supplied) is connected to a drain from the drain outlet using flexible ½" ID tubing. Note that the drain can run up above the Fleck 2510 control and into a drain, it does not have 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 Pro-OX Iron Filter Works

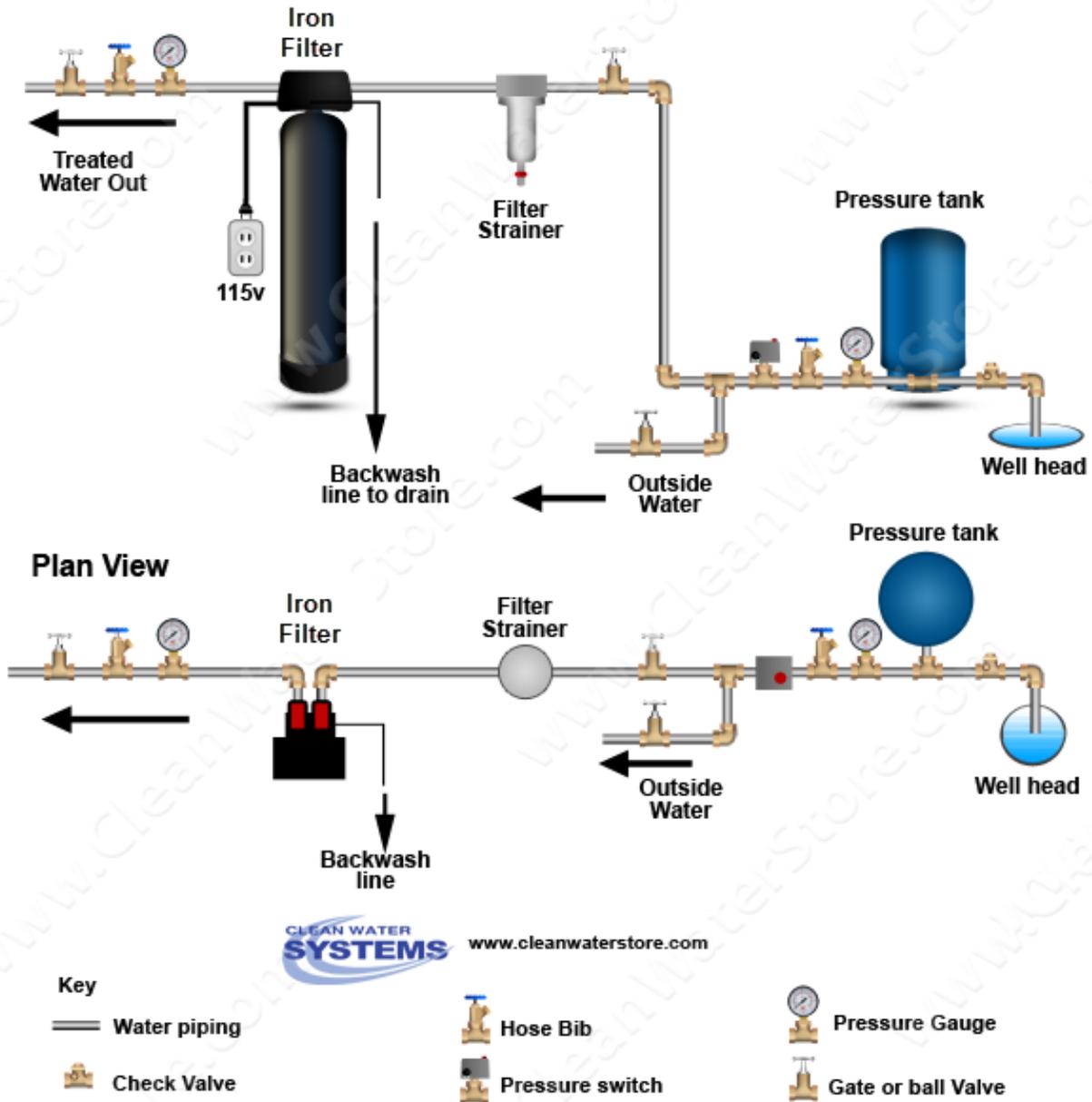
See Fig. 1. Water enters the top of the filter tank and flows down through the media and up the distributor tube. During backwash, the water flow is reversed and water flows down the distributor tube and up through the media, lifting and expanding the Pro-OX media and washing out rust and sediment to drain. During the backwash the Pro-OX is cleaned by the action of the water flowing through it, so untreated well water can be used for backwashing. As a final cycle, the Pro-OX is rinsed to drain by water flowing down through the media, up the distributor tube and to the drain.

**Fig. 1—Pro-OX Iron Filter Water Flow Diagram**



# Pro-OX 2510 Iron Filter Installation & Startup Guide

Fig. 2—Typical Pro-OX Iron Filter Installation



# Pro-OX 2510 Iron Filter Installation & Startup Guide

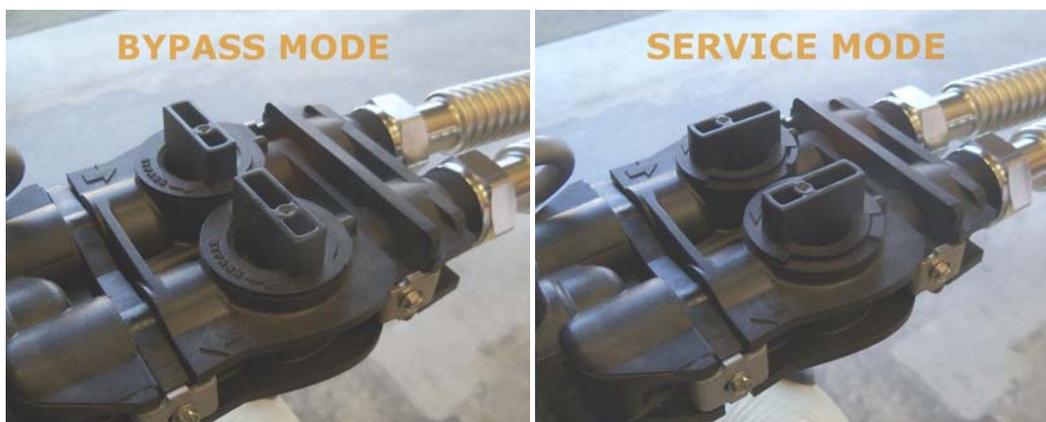
## Assembly and Installation Instructions

1. Unscrew by hand the entire Fleck 2510 control valve from top of tank if it was shipped screwed on. Place distributor tube in tank if not already inside tank. If not already done, make sure blue cap is on top of distributor tube, or wrap the top of distributor tube with electrical or duct tape. You do not want gravel or Pro-OX media to go down the distributor tube.
2. Add filter gravel supplied first, using the funnel sent with the Pro-OX filter.
3. Next add Pro-OX. Tank should not be more than about 2/3 or at most 3/4 full.
4. Remove cap or tape from top of distributor tube. Be careful not to pull up distributor tube when removing cap or tape.
5. If possible at this point, fill tank completely with water. This will allow the Pro-OX media to settle and eliminate the need of “purging” the air out of the tank later.
6. Add a small amount of silicone grease or vegetable cooking oil to the tank threads and screw on Fleck 2510 control valve carefully. Do not use pipe-joint compound, Teflon tape, or Vaseline or other petroleum greases to lubricate tank threads.
7. If red valve handle is in-line with pipe the control valve is in service, not bypass. Move the bypass valve to the BYPASS position if not already in bypass.
8. Now install your water pipes to the Fleck 2510 bypass end connectors. Make sure inlet is installed to the 'In" pipe connector on the bypass valve and outlet is on the “Out” connector.
9. Connect some flexible tubing from the drain connection on the Fleck 2510 control valve to a suitable drain such as a septic tank or drain to a sewer. It is OK to run the drain line up and over the Fleck 2510 Neutralizer filter up to 4 feet above the top of the tank. If the drain line will be more than 20 feet, use larger diameter tubing such as ¾” or 1”. Note that it is desirable to be able to run the drain line into a bucket in order to test the backwash flow rate in the future. Make sure the drain tubing is firmly clamped to the barbed fitting with a hose clamp.
10. **For 1.5, 2.0, and 2.5 cubic foot systems only:** use external drain backwash flow control. If you have a 1.0 cubic foot system, the flow control is internal and there is no external flow control. Wrap some Teflon tape on the black drain fitting, and screw on the flow control as shown below.



# Pro-OX 2510 Iron Filter Installation & Startup Guide

11. Plug in your Fleck 2510 control valve to an outlet. Your Fleck 2510 control valve is already pre-programmed. Adjust the days of the week to backwash every 2 to 3 days for best results.
12. Set the time of day to real time. It will then backwash on that day it is set to backwash, at 2 AM.
13. Now you are ready to turn on the water. Turn on the water and leave the Pro-OX filter on bypass and check for leaks. Leave the ball valve after the Pro-OX filter closed, so water is still off to the house, but connect a garden hose and open up the hose bib after the Pro-OX filter and allow the water to run. This will help to clear out any foreign material that may be in the pipes from the piping installation. If you do not have a valve installed after the Pro-OX filter and you do not have a hose bib, you will need to turn the water on inside the house to let the water run. Use a bathtub or laundry sink or other fixture that does not have aerator screen.
14. Leave the water running out of the garden hose at a slow rate.
15. Turn the manual regeneration knob to start a manual backwash and rinse cycle.
16. Now you can slowly turn the bypass valve to the service position which will allow water to enter the Pro-OX filter.
17. The system must be backwashed once upon startup. First, put the system into service mode. Normally the system ships in the bypass position. Once the system is properly plumbed in, make sure to turn both of the bypass valve knobs 90 degrees into service mode.



18. There should be no Pro-OX media coming out of the drain line, but the water will be gray or dirty looking. At this point the Pro-OX will be in a backwash mode, which is the first of two cycles it goes through during backwash (also called regeneration"). The backwash takes 14 minutes. The next cycle is the rinse which takes 8 minutes.
19. After the backwash and rinse cycles are complete, repeat the process by turning the manual regeneration knob to start up another manual backwash.
20. Note it is normal for some small amount of Pro-OX dust and fines to come out during the backwash,

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# Pro-OX 2510 Iron Filter Installation & Startup Guide

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although you do not want to see a large amount of media coming out, which would mean you have very high water pressure, or the drain flow for the Fleck 2510 is missing.

21. If possible verify that the backwash flow is 10 gallons per minute, which is the recommended backwash flow rate for 1.0 and 1.5 cubic foot models. If you have a 2.5 cubic foot Pro-OX it should be backwashing at 15 gallons per minute. 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 Pro-OX media and prevent it from cementing together.
22. Refer to your Fleck 2510 service manual for more information about how your control valve is programmed if desired.

## Maintaining Your 2510 Pro-OX Iron Filter System:

There is little or no maintenance required. Every 6 – 10 years the Pro-OX media can be replaced for best results.

## Troubleshooting Your 2510 Pro-OX Iron Filter System:

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 backwash.

## Program Settings

Check to make sure the control valve has been set correctly. In some cases a nightly backwash is required for best results. Adjust backwash frequency to every 1 to 2 nights if necessary.

## What to Do If Your 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.

**WARNING: Don't Over-Tighten 2510 Control When Installing on Tank**

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# *Pro-OX 2510 Iron Filter Installation & Startup Guide*

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Tighten with hands, there is no need for a pipe wrench or other wrench.

The control valve is sealed with the o-ring on the base of the control valve. Once you hand-tighten it so the o-ring has sealed against the top of the tank, continue to tighten for approximately another  $\frac{1}{4}$  turn until tight.

If the control valve is over-tightened and leaks, the black slip ring (see control valve manual, it is #26, part 19197 in the exploded view of the control valve) will need to be replaced.