Clean Water Made Easy

http://www.cleanwaterstore.com

Pro-OX 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 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

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

Email us: support@cleanwaterstore. com

Table of Contents

Packing List

Pro-Ox Manual Valve 844

Pro-Ox Manual Control Valve with 1" pipe connectors
8" x 44" standard filter tank with distributor tube and bottom basket
Plastic media funnel for adding Pro-OX media
55 lbs. of Pro-OX or MangOX brand media; 10 lbs. of Turbidex media; 9 lbs. of filter gravel

Pro-Ox Manual Valve 948

Pro-Ox Manual Control Valve with 1" pipe connectors
9" x 48" standard filter tank with distributor tube and bottom basket
Plastic media funnel for adding Pro-OX media
69 lbs. of Pro-OX or MangOX brand media; 10 lbs. of Turbidex media; 12 lbs. of filter gravel

Pro-Ox Manual Valve 1054

Pro-Ox Manual Control Valve with 1" pipe connectors
10" x 54" standard filter tank with distributor tube and bottom basket
Plastic media funnel for adding Pro-OX media
110 lbs. of Pro-OX or MangOX brand media; 16 lbs. of Turbidex media; 16 lbs. of filter gravel

Pro-Ox Manual Valve 1252

Pro-Ox Manual Control Valve with 1" pipe connectors
12" x 52" standard filter tank with distributor tube and bottom basket
Plastic media funnel for adding Pro-OX media
165 lbs. of Pro-OX or MangOX brand media; 20 lbs. of Turbidex media; 20 lbs. of filter gravel

What to Do if Your Tank Does Not Sit Level on Floor 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 rapping 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 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 CWS 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. 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 re- quire an air-gap connection, so that if your sewer or septic tank backs up it cannot cross-connect with the drain tubing.

FILTER POSITION: During normal use the water flows down through Pro-OX media to bottom of tank and up through the distributor and in to the home or business.

BACKWASH POSITION: When the handle is moved to the backwash position, water flows down distributor tube and lifts up Pro-OX media and water flows to drain, cleaning Pro-OX media.

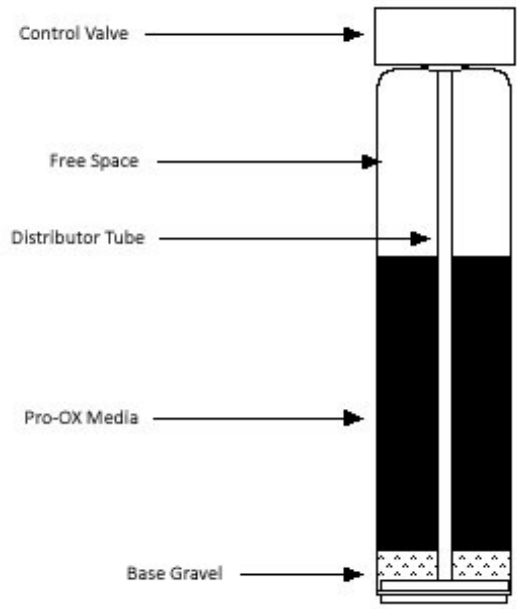
FAST RINSE: When the handle is advanced to the fast rinse position water flows down through the Pro-OX media up the distributor tube and out to drain, rinse the Pro-OX after it has been backwashed.

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.

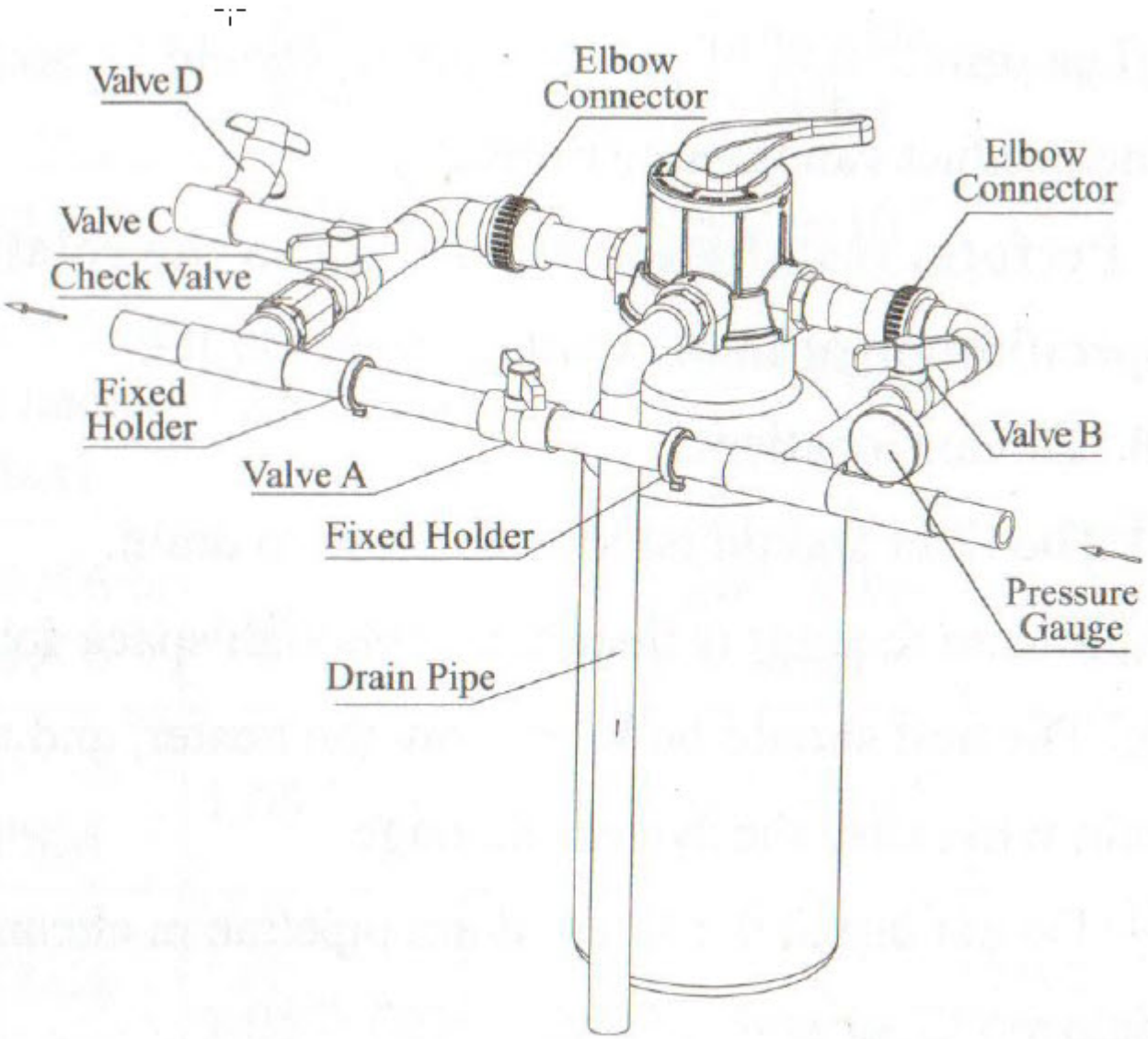
During backwash, the water flow is reversed, and water flows down the distributor tube and up through the media, lifting and expanding the Pro-OX filter media, and removing all the iron and rust trapped in the filter.

Fig. 1—Pro-OX Iron Filter Flow Diagram



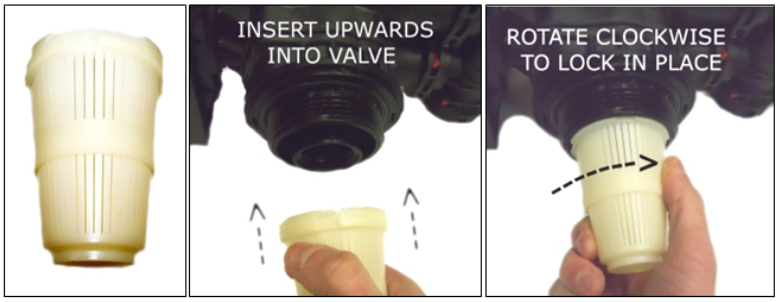
Typical Pro-OX Iron Filter Piping With 3 Valve Bypass

Install AFTER well pressure tank.



Assembly and Installation Instructions

1. Wrap the top of distributor tube with black electrical tape or blue painter's masking tape so that no gravel or Pro-OX media will go down the distributor tube when adding the media. Also, leaving a folded tab of tape that you will be able to grab onto to gently pull off the tape after filling the tank.
2. When you are ready to screw the valve head on, apply silicone lubricant to the outside of the distribution tube, and the O-ring on the control valve where the tube goes in.
3. 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.
4. Next add Pro-OX media. The tank will be about 2/3rds full of media. Do not overfill past the two-thirds mark, or the system will not backwash properly.
5. **Fill tank with water and add one cup of liquid pool chlorine. It is critical to activate the media.**
6. Follow the next step and screw on the head, and let the bleach sit for at least an hour before doing
7. the initial backwashes. Do not run any water in the service direct through the filter until after you
8. have backwashed the media several times, to rinse out the fines and stain on the new media.
9. Remove tape from top of distributor tube. Be careful not to pull up distributor tube when removing tape.
10. At this point, fill tank completely with water. This will allow the Pro-OX Filter media to settle and reduce the need of purging the air out of the tank later.
11. Attach plastic top screen to the under-side of the CWS F56 control valve. It is a funnel-shaped plastic screen that snaps on to the control valve and prevents media from being backwashed out to drain during the regeneration cycles.



12. Now install your water pipes to the CWS F56 valve using the pipe fitting connectors on each valve.

13. Each pipe fitting connector connects to the Manual Backwash Valve with a washer seal. Do not use pipe thread compound or Teflon tape on these connectors between the connector and the valve body.

14. Do use some Teflon tape or Teflon pipe joint compound to connect your piping the to the fitting. Do not overtighten or use excess Teflon tape.

15. Make sure inlet is installed to the 'In" pipe connector on the bypass valve and the outlet is on the “Out” connector.

16. Connect the Drain Line Flow Control to the Drain port and then connect some flexible tubing from the drain connection on the CWS F56 control valve to a suitable drain such as a septic tank or drain to a sewer.

17. It is OK to run the drain line up and over the Pro-OX 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”.

18. Note that it is desirable to be able to run the drain line into a bucket to test the backwash flow rate in the future.

19. Make sure to backwash the Pro-OX and rinse the media thoroughly before using for at least 20 – 30 minutes.

Backwashing and Rinsing

Your control valve has 3 positions:

1. BACKWASH
2. FAST RINSE
3. FILTER

BACKWASH: Advance the handle to backwash position and allow Pro-OX media to backwash to drain for 15 to 20 minutes.

FAST RINSE: Advance the handle to the fast rinse position and rrinse the Pro-OX after it has been backwashed.

FILTER POSITION: When rinsing is complete turn handle to filter position and run water in the home until water is clear.

Troubleshooting the Pro-OX 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 backwash.

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.

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.

Limited Warranty

We warrant this water filter/ softener/ conditioner, 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 seven (7) years, subject to the manufacturer's conditions and/or the conditions shown below. Fleck & other brand control valves have 5-year warranty.

----------**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 after the third year 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.