

Overview

This installation guide gives a step by step, start to finish procedure for installing your whole house water conditioner.

Your new system from the Ohio Pure Water Company also comes with a Fleck Service manual, which, along with these instructions, will help explain the necessary details required for successful installation and operation of your system.

Please refer to these instructions and the Fleck service manual supplied with your system during installation and programming.

All steps provided herein are for typical installations only. If you require additional plumbing to install your system, simply contact a friend, relative or plumber who is knowledgeable in residential plumbing or have a local plumbing company help you install, or will install the system for you.

There is a bit of "over-kill" in our instructions, but please bear with us as we want to ensure that you, our customer, fully understand the instructions and are completely satisfied with your installation!

We also recommend that you take a few minutes and look at the Fleck service/parts manual for your particular model valve, to help you better understand your new system.

Take your time and carefully read all instructions.

Get all of your plumbing parts together before you start, and have an assistant available to help you, if possible. Typical installation should take no more than a few hours.

If you are going to turn the water off to your house while installing the system, we recommend that you turn off the electricity to your electric water heater during this installation. After the system is installed with water running through it, turn on a single cold-water faucet, and let it run, which will help expel any trapped air from your plumbing lines, then turn the electricity back on to your water heater.

Our systems can safely handle a pressure range of 20-95 psi. However, as with most residential plumbing and for best operation causing the least wear on critical parts, we recommend an operating range of 40-65psi. All you have to do is basically plumb in the system, plug it in and set the current time of day!

Fleck Bypass Installation Guide

For the 7000 - 1-1/4" Valve

Turn off the main water shutoff valve.

Next, open all plumbing fixtures in the house including all outside faucets in order to drain the lines of all water possible.

Cut and remove a section of the main incoming water line near where the system is to be installed. Allow this line to drain thoroughly. On well applications, this cut will be made in the plumbing line located immediately after the well pressure tank.

Remove the Connector Assembly from the back of the Bypass valve by pulling the two plastic "H" Clips up, and out of the Bypass body. Then simply pull each of the Connectors out of the back of the Bypass Assembly. (Fig. 1A & 1B)



Figure 1A



Figure 1B

Now that you have the Connectors removed, follow the directions below to make them ready to install on the valve.

If you have a **1" Plastic Connector Assembly**, it will have 1" male thread nipples on the end where you will connect your plumbing pipe. You will need to buy two 1" Female thread adapters, to whatever type and size of piping you are plumbing the system to. (**Fig. 2**)

If you have a **1- 1/4" Plastic Connector Assembly**, it will have1- 1/4" male thread nipples on the end where you will connect your plumbing pipe. You will need to buy two 1- 1/4" Female thread adapters, to whatever type and size and type of piping you are plumbing the system to. (**Fig. 2**)



Figure 2

If you have a **1- 1/4" Brass Sweat Connector Assembly**, it will have a 1- 1/4" opening, where you will connect your 1- 1/4" copper plumbing pipe directly into the Brass Connectors (**Fig. 3**)

If you are using the Brass Sweat Connectors, we recommend that you remove them from the Fleck Bypass valve, then remove the "O" Ring located on the end of the connector.

Next, solder a 2 - 3" piece of copper pipe into each of the two Brass Connectors, away from the plastic bypass, and **let the adapters cool off completely** before re-connecting them back onto the Plastic Bypass valve.



Figure 3

This simple step will ensure that you are not applying any excess heat to the plastic bypass, as you solder copper pipe into the connectors, before installing them back onto the plastic bypass assembly.

Once the copper nipples have been soldered into the Brass Connectors, and they are cool to the touch, re-install the “O” Rings onto the end of the Brass Connectors, and then re-install the connectors back into the Plastic Bypass.

Be sure the Brass Connectors are completely pushed into the Plastic Bypass Valve before putting the plastic “H” clips back in place. (Fig. 4)



Figure 4

Sometimes a slight twisting motion combined with firm pressure will insure the Connector assembly is fully seated into the bypass.

NEVER force an “H” clip into the slot where it should be installed.

If you have to apply force the “H” Clip.... the Connector is not fully seated into the bypass....

When you are ready to start soldering the copper fittings onto the other end of the copper nipples you installed earlier into the Brass Connectors, gently wrap a cloth soaked with water around each of the Brass Connector assemblies where the attach to the Plastic Bypass.

These wet cloths will help protect the plastic bypass valve by soaking up the excess heat that will be conducted back towards the plastic bypass valve, from the copper fitting.

Now position your conditioning system in place for the final water line installation.

Remember; if you are using the plastic bypass valve, make certain the bypass valve is set in the "Service" position, while soldering the pipes connecting the unit to the house plumbing.

Return the 7000 Bypass valve to the "Bypass" position before turning your water back on to the house. (Fig. 5)



Figure 5

Measure and cut the lengths of plumbing pipe you need, to plumb the main hard water line into your system. Then do the same for the conditioned water line that will exit from the system, back out into the house.

NOTE As you stand in the back of the valve.....and you look directly into the two holes on the Fleck valve, the hard water line will always enter the hole on the **LEFT SIDE** of the yoke or bypass valve assembly. The rear of the valve body also has arrows stamped into the top area of the inlet and outlet each side, showing the direction of flow. **(Fig 6)**

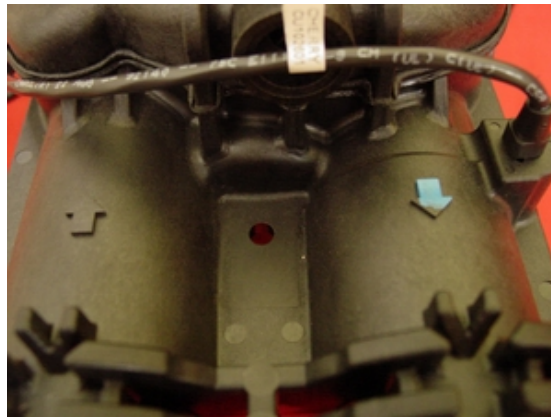


Figure 6

Loading the Media

Loading your whole house conditioner is simple, and interesting! Please follow the step by step loading instructions below. Loading the unit should only take about 15 - 20 minutes.

NOTICE:

All backwash filter type systems will have a small box of gravel. Please put the gravel inside the mineral tank around the riser tube first, and then add the media/resin on top of the gravel.

We recommend using a mask to cover your nose and mouth while loading media, especially with Carbon that will have some dust.

Look inside your media tank, (the tank that is tall and slender with a 2 1/2" hole in the top of it), and there will be a 1" plastic tube inside. This is the "Riser Tube" that delivers conditioned water into your home through the Fleck valve. It should be the same height as the media tank.....and have a plastic plug on the top end of it, so nothing can fall down inside the tube while you are loading the media. **(Fig. 7)**

If there is not a plastic plug in the top of the riser tube, simply put a piece of tape over it, to keep the media from falling inside the tube!



Figure 7

Next, stand back and look at your media tank, and make sure it is standing straight up and not tilted to one side. Sometimes during shipment, the black "Boot" on the bottom of the tank will get knocked out of alignment and you will need to straighten it out before filling the tank with media.

If your tank is a bit tilted, simply pick the tank up 2 - 3 inches off the floor and drop it gently but firmly down, favoring the side of the boot that needs to be adjusted to make the tank stand straight again. The boot will move and be easily adjusted, so the media tank will stand up straight.

Fill the resin tank with about 12" of water first., before adding any gravel or resin to the tank.

This will help protect the basket riser tube from damage while filling the resin tank with gravel or media.

Put the media funnel we supply with every complete order, in the top of the media tank with the riser tube still inside the media tank. Make sure the top of the tube has a plastic plug or some tape over the end of it to keep media out!

As you put the gravel inside the media tank....be sure to keep a finger on top of the riser tube holding it down and in place, as the force of the gravel dropping down inside the tank, can sometimes get under the plastic riser tube, forcing it up and out of the tank.

Next, scoop or slowly pour all of the media into the funnel, allowing it to fall down inside the media tank around the riser tube. **(Fig. 8)**

When you have installed all of the media into the media tank, the tank will be about 1/2 to 3/4 full.



Figure 8

NEXT.....REMOVE THE PLASTIC PLUG OR TAPE, FROM THE TOP OF THE RISER TUBE, BEFORE INSTALLING THE VALVE ON TOP OF THE MEDIA TANK!!

Brush any loose media off the top opening of the tank, and apply a light coat of regular cooking vegetable/olive oil to the top surface of the media tank with your finger. This will help lubricate the large "O" ring on the bottom of the valve. (Fig 9)

DO NOT apply oils or grease that are petroleum based....!

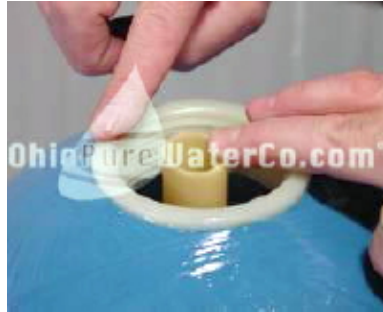


Figure 9

Also, DO NOT apply anything to the threads of the valve or to the inside of the media tank threads!

Fill the media tank with water until it is about 3 –4” from the top opening of the tank. This will make it so there is very little air left in the tank that will be forced out into your home plumbing lines, when you put the unit into service position.

(Note: If you're installing a Carbon Filter or Centaur Carbon Filter system, we recommend letting the tank sit for 4 - 6 hours or overnight), which will allow the water soak into the media, before putting the unit into service position.

Have someone hold the media tank as you install the control valve onto the top opening of the tank, making sure the top end of the riser tube, located inside the tank is inserted into the opening in the bottom of the control valve.

As the control valve screws into the opening of the media tank, it will soon stop turning as it makes contact with the top of the tank opening.

***** IMPORTANT***** Once the control valve makes contact with the top opening of the tank, make a small “Witness Mark” somewhere on the bottom edge of the control valve and the top of the tank.

You need to tighten the control valve at least 90 degrees further ...but no more than 180 degrees past this mark.

Be sure to grasp the body of the valve..... Not the control head, as you tighten it onto the tank.

Your unit is now ready to install!

Installing the Drain Line on the 7000 Valve

The 7000 Fleck valve has a drain hose connection located on the upper, right side of the valve. **(Fig. 10)**

This Male thread will have an Adapter that will screw onto it, so you connect your 1 /2" ID Drain line to your 7000 valve. **(Fig 11)**

DO NOT over tighten the Adapter fitting onto the DLFC Connector Assembly.



Figure 10



Figure 11

***** IMPORTANT***** If your drain line will be more than 15' in length, then we recommend that you use regular 3 /4" or 1" PVC Pipe, for your drain line material.

You would simply connect the PVC pipe directly to the Male Thread Fitting shown in Figure 10 above.

The Drain Line Flow Control (DLFC) Assembly is connected into the drain opening on the valve body, by firmly pushing it into the drain opening and securing it there by the Drain Retainer Clip. **(Fig 12)**



Figure 12

Once the DLFC Assembly is installed properly into the valve body, connect your 1 /2" ID drain line to the barbed adapter, and [run the opposite end of this drain line, to the drain in your home plumbing system.](#)

Remember to leave a small air gap at the end of the drain line going to the house drain. (Follow local plumbing codes), and secure it there.

(To make an "Air Gap" at the end of the drain line, basically means that you don't let the end of the drain line touch any standing water that is in the drain. Simply leave a small air gap space between the end of the drain line and any water standing in the drain you are using.)

When the system is in the regeneration mode, water will flow out of this drain line with a fair amount of pressure, especially during the "rapid rinse phases" of the process, and the line may sometimes "jump" a little when changing cycles, **so it is important to make sure the end of the drain line is secured so the end of the pipe can't accidentally come out of the drain.**

Turning the Water Back On to Your Home

INSTRUCTIONS FOR USING A FLECK 7000 BYPASS VALVE.

If you are using a bypass valve, make sure your new bypass valve is in the "BYPASS" position.

Use a screwdriver if needed to help rotate the bypass knobs located on each side of the bypass, to the "Bypass" position. **(Fig 13)**



Figure 13

Turn your water back on slowly, leaving all your faucets in the house open until water starts coming out of them. After they are all running steady and the air has been expelled out of the water lines, turn them all off one by one.

[The raw water will be bypassing your new conditioner system at this time.](#)

Next, leave one cold water faucet open about half way open, (preferably an outside faucet, a laundry sink or bathtub with no aerator) allowing the water run out of it until you have the new unit turned completely to the "Service" position.

With the one cold water faucet running half open.....First open the Inlet Side of your bypass valve very slowly from bypass position, to full service position.

Secondly, slowly open the Outlet Side of your bypass, until it is in the full service position. (Fig. 14)

Your water will now be running through the new conditioner unit, and out the one cold water faucet you left running open half way.



Figure 14

Sometimes you may experience some air in the lines and some color rinsing off the new media.....

This is normal...and should only last a short while. This is why we suggest running the water through only one faucet, to clear the new unit of this colored water and any small particles from the new resin/media bed.

Once the water is running clear.....turn the faucet off.

Your plumbing system will now pressurize as all faucets are closed. You now have conditioned water on your cold water side throughout the house.

It will take a couple of days for the hot water heater to become filled with conditioned water.

Fleck 7000 Post Installation

Remember.....Even though you now have conditioned water in your cold water lines, your water heater is still full of raw water. Through normal water use, this raw water will be replaced with conditioned water in about 2 to 3 days.

We supply a toll free number (**888-644-6426**), to all of our customers to use, in case they don't understand something contained in our installation instructions, or need help in checking the programming of the control valve.

Please give us a call if you are not sure about anything to do with your new unit!

We are glad to help you get the unit installed right and operating properly!

Be sure to follow your local plumbing, building and safety codes when installing any of our systems.

Also, email us a picture of your installed system!! Let us see how good of a job you did on the installation.

Thanks again, to have the opportunity for your business!!