

INSTALLATION & START-UP INSTRUCTIONS FLECK 2510 Econdominder METER WATER SOFTENER



Thank you for your purchase of a new Water Softener with Fleck 2510 Econdominder Meter water softener from Quality Water Treatment! We have put together these instructions as a reference, and they are to be used as a general installation guideline.

Pre-Installation Guide

Before you assembly your new system, be sure that the following conditions have been met for placement of your system:

Level, firm surface, such as concrete, on which to place the softener tank and salt tank AKA Brine Tank

- Nearby floor drain or standpipe to connect to the softener for use during each regeneration
- Standard US plug, 120v 60hz (the softener system includes a 5ft. power cord and plug. Be sure the plug is not connected to a light switch)

Make a list of all the plumbing fittings to completely install the unit
Typical is:

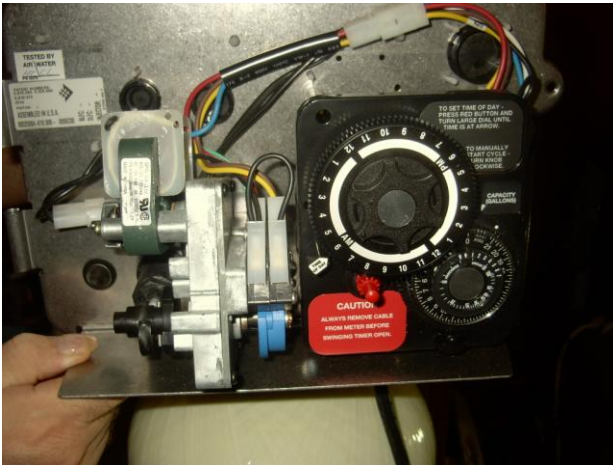
- Two - 3/4" male adaptors
- Eight - 90° elbows
- Amount of pipe you need
- 1/2" drain line and 90° elbows

Pre-Installation Adding the Resin to the Water Softener Tank

- 1. Position your new water softener unit where you want it placed for use.
- 2. Inside the Softener tank you'll find a 3/4" or 1" gray or white Pvc tube (called a distributor tube.) If the tube does not already have a cap on the top use a pvc slip cap or some duct tape to temporarily plug this tube (this is to keep the resin from going down the tube.) If your system came with gravel, add the gravel first, then the resin. Use the included special funnel when adding the resin. This will take about 10 minutes.



After adding the resin, remove the temporary cap, clean the valve threads with water, and screw the valve on. When screwing the valve on the tank the tube will slip into the bottom of the valve hole. Note no silicone or tape is NOT needed, the valve is o'ring fit and only needs to be tightened by hand.



Assemble all tools needed to install the unit. Start your Installation. If copper, you need a copper cutter, propane tank, soldering torch, flux, wire paper and lead free solder. An average cost of \$40.00 NOW THAT YOU HAVE ADDED THE RESIN AND CONNECTED THE CONTROL VALVE TO THE TANK YOU ARE READY TO INSTALL, FOLLOW THESE INSTRUCTIONS:

1. Turn off the main water shutoff valve.
2. Open all plumbing fixtures in the house including all outside faucets in order to drain the lines. Unscrewing the aerator screen from your kitchen and bathroom faucets will help drain the lines faster
3. Cut and remove a 4" section of the water line where the unit is to be installed.

4. Remove the two stainless steel clamps that are connected between the stainless steel bypass valve and the plastic meter assembly, there is one clamp on each side.



Remove the bypass valve shown in photo from the meter assembly by pulling it away from the meter assembly.



5. Leave the meter assembly in place.

6. We do not recommend applying heat from a soldering torch to solder copper pipe to your new valve/meter assembly. To help with this:

Solder a 3" to 5" piece of $\frac{3}{4}$ " OR 1" copper pipe into male adapters that you picked up from the store.

Now that the pieces of $\frac{3}{4}$ " OR 1" copper pipe are soldered into the adapters, wait until they are cool enough to touch. Apply Teflon tape or Pipe joint compound to both male threads, and thread them and tighten them into the By-pass valve before you attach it onto the back of the valve/meter.

Re-attach the stainless bypass valve back onto the valve/meter assembly and secure it with the two small stainless steel clamps.

Position the water softener unit in place for final water line installation, making sure the bypass valve is set in the BYPASS as shown in picture below.

FIRST, measure and cut the lengths of pipe you need to plumb the main hard water line into your softener unit. Then do the same for the soft water line that will exit from the water softener unit, back out into the house.

NOTE: The unit will be marked either on the back of the valve body itself with the word "IN" and "OUT" or the top of the body of the bypass valve assembly with arrows showing the direction of water flow into and out of the valve. "Out: is the water entering your house after it has passed through the water softener. BE VERY CAREFUL TO MAKE SURE YOU PLUMB THE SYSTEM IN THE RIGHT DIRECTION OTHERWISE YOU WILL LOOSE THE RESIN OUT OF THE TANK INTO YOUR HOUSE LINES!

Use teflon tape only and wrap around the threaded end of the drain line adaptor and screw drain adaptor into the compression fitting shown in photo below then snug up with a small wrench. Note: you do not have to tighten real tight doing so well crack the backwash assembly housing.

Remove clip from drain assembly as shown in picture below.



Push drain flow control adaptor into side of control valve and reinsert clip as shown in picture below.



Attaching your drain line: Note: Do not attach the drain line to the elbow on the brine tank it will overflow the brine tank. Running the drain line to a house drain, where your washing machine drain line goes is an excellent choice, if this is not possible then you can drain into multiple areas, make sure you always leave an air gap if going into a pipe. An air gap is an open area where there is no standing water. Your drain line can be elevated up to 5 feet over and above where it comes out of the valve and you can run it up to 100 feet away. Always follow local codes.

□ Slide a 1/2" hose clamp over drain line and then slide drain line over drain hose barb. Slide hose clamp over barb and tube and tighten the hose clamp. Plug your power cord into a nearby outlet. Plug your meter cable into the top side of the black meter dome in the back of the system like photo below shows.



Assembly of Brine tank:

□ The float assembly is a safety float; it only functions if there's a failure in the control valve. This will insure the brine tank won't overflow with water. The safety float does not dictate the water level in your brine tank. Measure from the top of the air check shown as # 1, 10" to bottom of float show as #2 in photo below, you may have to gently push the float rod through the rubber gaskets to achieve this. Cut any existing rod off.



□ Slide the float assembly into the brine well shown in photo below and stick the stud into the side hole on the brine well shown in photo below and secure it with the nut we supplied you.



□ Take the clear brine tubing that we supplied and slide it through the whole in the brine tank and into the brine well.

□ Slip the plastic nut, and the two ferules one black and one white, over brine tubing then push brass insert and screen into brine tubing as shown in photo below.



□ Insert tube into top fitting on float shown in photo below and hand tighten then snug it up with a small wrench. **Note: no tape is required this is a compression fitting.**



□ Take the other end of tube slide the Nut and Farrell over it and insert sleeve in to tube. Push the tube into the side of the control valve show in photo below. Tighten by hand then snug it up with a small wrench.



Programming the Fleck 2510 econdominder water softener control valve:

A few simple steps must be followed to program the Fleck 2510 econdominder Metered water softener valve.

It will be important to know what your water Hardness and Iron content is before doing this programming procedure. If you do not know your water hardness or iron content you should either look up your city water quality report by going to Google and typing in: water quality report enter you water supply company or the city that you are in, or take a 8 oz sample to a pool supply store or send one to us to have it tested.

Your Hardness test results may indicate GPG, PPM, or Mg/L. It is important to note that PPM and Mg/L are the same measure and both figures can be treated interchangeably. If you get a hardness figure in PPM or Mg/L, please divide this number by 17.1 to get Grains Per Gallon " GPG"

Iron results should also be measured in either PPM or Mg/L. Add your level of iron multiplied by 3. Add this number to your hardness level. This figure will be your Total hardness content that you will program into your softener system. **Example if water hardness is 10 GPG and the iron is 1 PPM or Mg/L take the iron content of 1 and $\times 3 = 3$ GPG hardness plus 10 GPG = total compensated hardness 13 GPG**

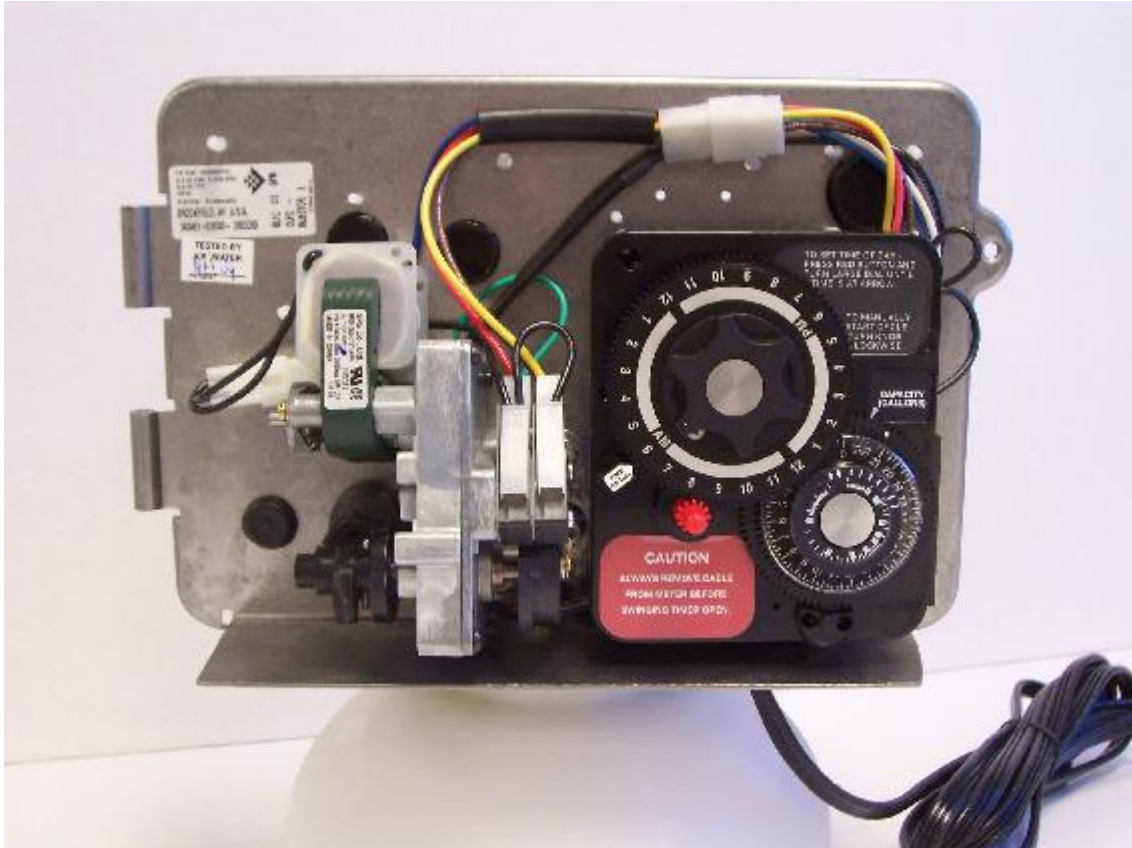
First plug in your 2510 econdominder valve to a nearby outlet.

Set the time of day, by pushing the res button in, while holding it in turn the large gear behind regeneration knob until current time of day is show.

Use the chart below to figure out the amount of gallons to set the meter at.

Figuring the amount of gallons to set your water softener meter at! 4 people \times 75 gallons per person = 300 gallon used per day. 300 gallons \times 15 gpg hardness = 4500 grains being removed per day. 32,000 grain water softener divided by 4500 grains of hardness = 7.11 days. back off one day for reserves so you still have treated water for that day until the system regenerates that night = 6 days. 6 days times water usage of 300 gallons per day = setting meter to regenerate every 1800 gallons of water that you use.

Unplug meter cable from top of dome. Pull center knob out on meter wheel with fingers. Shown as # 1 in photo. As you are holding center knob out use other hand and turn the gear behind the center knob that has numbers 0 thru 21 on it, each number represents 100 gallons. Until you match the desired number with the white dot that is above the numbers. Push center knob back in and plug cable back into dome hole



Filling your softener with water and purging air from softener: Turn all faucets off outside and in home. Slowly open bypass valve and let the mineral tank fill with water. When water stops running go to the nearest treated faucet to the Water Softener, unscrew aerator screen if applicable and turn cold water on slowly, this will bleed the air from the tank, let the water run until it clears. If you sized your water softener using our recommendation then you will go through salt or potassium chloride slowly. Add five gallons of water to brine tank. Add three 40 to 50 pound bags of extra course, pelt salt or potassium chloride to brine tank. The resin is already charged so initial regeneration is not required.

Installation and set up is now complete. Congratulations! Please fill free to email some pictures of you new installation and a letter we will post it on our site for other customers to view. As always we appreciate your business!