

Installing Your Fleck 2510SE Water Softener



The systems require that a 120 volt standard outlet be available for powering the system. The 2510SE valve has a 5' cord with a special low voltage transformer that will plug into a standard 120 volt outlet.

Pre-Installation Adding the Resin to the Water Softener Tank

1. Position your new softener unit in place, where you want it to set.

2. Inside your Softener tank is a 3/4" or 1" gray Pvc tube " called a pilot tube" Use a pvc slip cap or some duck 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 special funnel we supplied you, to add the resin to the tank, this will take about 10

minutes to do. After adding the resin, remove the cap, clean the threads on the tank with water were the valve screws onto, and screw the valve on, the tube will slip into the bottom of the valve hole as you are screwing that valve onto the tank.



Adding resin to the tank.



Screwing valve onto tank.

Make a list of all the plumbing fittings you will need to completely install the unit to make it ready for operation.

Typical is:

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

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 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 of all the water you can. We have found by unscrewing the aerator screen from your kitchen and bathroom faucets help create more of a vacuum to drain the water out of the lines faster
3. Cut and remove a 4" section of water line where the unit is to be installed if you have a typical straight in and out connection.



4. Remove the two stainless steel clamps that are connected between the stainless steel bypass valve and the plastic meter assembly shown photo as # 3. Remove bypass valve shown in photo as # 2 from meter assembly shown in photo as # 5 by pulling it away from the meter assembly.

5. Leave the meter assembly in place shown as # 5 in photo

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

- Purchase two common $\frac{3}{4}$ " OR 1" male thread to $\frac{3}{4}$ " OR 1" sweat, copper adapters.
- Solder a 3" to 5" piece of $\frac{3}{4}$ " OR 1" copper pipe into each adapter.
- Once you have the pieces of $\frac{3}{4}$ " OR 1" copper pipe soldered into these adapters, wait until they are cool enough to touch. Then apply Teflon tape or Pipe joint compound to the male threads of each one, and thread them into By-pass valve before you attach it onto the back of the 5600 valve/meter.
- DO NOT thread the copper adapters into the stainless steel bypass valve while the bypass valve is connected to the 5600, 2510 or 9000 Valve/Meter assembly. You might apply too much pressure on the meter while securing the copper adapters, causing damage to the valve/meter housing!
- Again, after securely threading the $\frac{3}{4}$ " adapter into either the $\frac{3}{4}$ " stainless bypass valve assembly, re-attach the stainless bypass valve back onto the valve/meter assembly and secure it there with the two small stainless steel clamps.

7. Now position your water softener unit in place for final water line installation, making sure the bypass valve is set in the "BYPASS" position as shown in picture

8. 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 softening unit, back out into the house.

9. NOTE: The unit will be marked either on the back of the valve body itself with the word "IN" and "OUT" and/or on 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 that is now 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! NOTE: IF YOU HAVE THE AUTOTROL WATER SOFTENER THE INLET IS ON THE LEFT AS YOU ARE FACING THE TIMER.

Brine Tank Float assembly:



The float assembly is a safety float; it only comes into play if there are failures in the control valve to keep the brine tank from overflowing with water it does not dictate the water level in your brine tank.

Measure from the top of the air check shown as # 6 in photo 10" to bottom of float shown at # 3 in photo, you may have to gently push the float rod thru the rubber gaskets to achieve this. Cut any existing rod off.

Installing Float assembly in Brine well.



Slide the float assembly into the brine well shown as # 1 in photo and stick stud into side hole on brine well show as # 2 in photo and secure with the nut we have supplied you

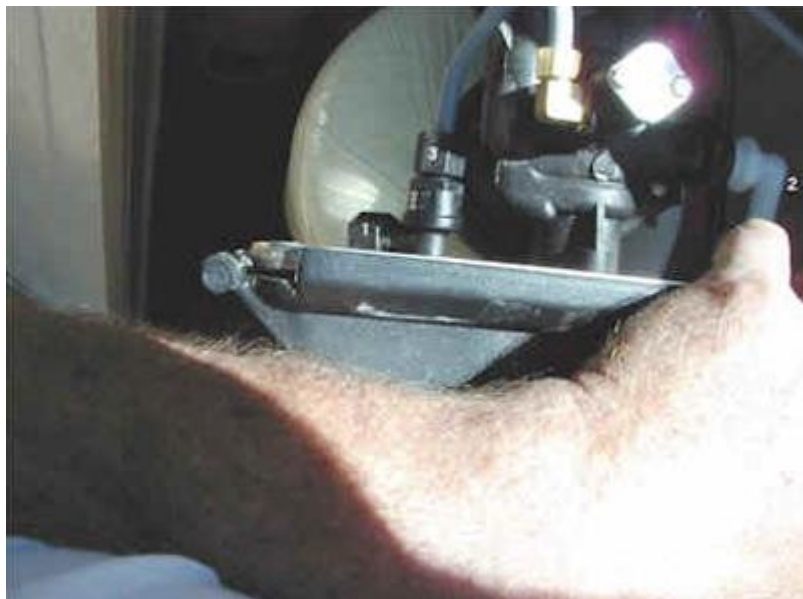
Take the clear tubing that we have supplied and slide it thru the whole in the brine tank and brine well shown as # 3 in photo. Slip the plastic nut from the float assembly over the tube and insert the sleeve into the tube. Now insert tube

into top fitting on float shown as # 4 in photo and hand tighten then snug it up with a small wrench. Note: no tape is required this is a compression fitting.

Take other end of tube slide nut over tube then Farrell which looks like a small round doughnut over tube then insert sleeve into tube. Push tube into side of 2510SE valve and had tighten then snug up with a small wrench.

Attaching your drain line:

Note: Do not attach the drain line to the elbow on the brine tank it will overflow the brine tank. Run 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' 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 the metering cable coming out the back of the 2510SE valve into the slot on the outlet side on top of the plastic turbine assembly. As shown as number 1 in photo below.



Programming your 2510SE valve



Figuring the amount of gallons to set your water softener meter at!

4 people x 75 gallons per person = 300 gallon used per day. 300 gallons x 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.

Note: Your water treatment equipment will only come with a service manual, showing you the valve details. Please do not follow the information in that manual, it is written with the Water Treatment expert in mind, for the purpose of programming the backwash lengths and salt pound settings etc... We have already set everything on the valve for you except for two simple things.

- 1) The amount of gallons you can go before regeneration.
- 2) The time of day
- 3) If a SE unit, you would set the calendar override to A-14, this will insure that the system will not go more than 14 days before it regenerates.

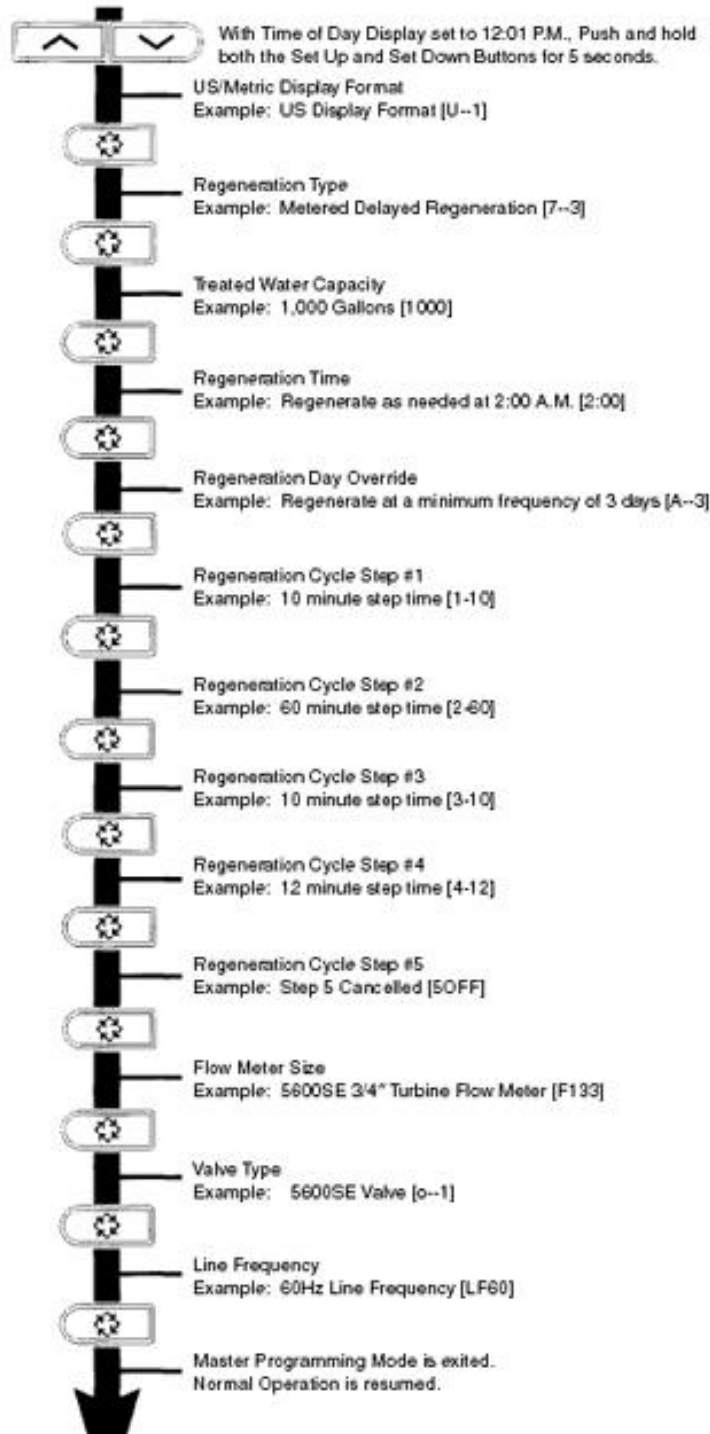
Programming the SE valves:

The chart below is your master programming guide. Remember that all the examples in this guide are exactly as your valve should read, except for three things that you will change.

- 1) Time of day
- 2) Gallons you will go before regenerating
- 3) Set calendar override to .A-14, this will insure that the system will not go more than 14 days before it regenerates.

IMPORTANT: In order to get into master programming you need to temporarily set the time of day to 12:01 PM

Master Programming Mode Flow Chart



Note:

1. Set Time of Day Display to 12:01 P.M.
2. Push and hold both the Set Up and Down Buttons for 5 Seconds.
3. Push Extra Cycle Button once per display until all displays are viewed and normal operation is resumed.
4. Option setting displays may be changed as required by pushing either the Set Up or Down Button.
5. Depending on current valve programming certain displays will not be able to be viewed or set.

Filling your softener with water and purging air from softener:

Turn all faucets off outside and in home. Slowly open bypass valve on 2510SE 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.

You are finished.

Congratulations!

Please feel free to email some pictures of your new installation and a letter; we will post it on our site for other customers to view.

As always we appreciate your business!