

FLECK 9100 WATER SOFTENER INSTALLATION

Discount Water Softeners recommends using a licensed plumber to install your water softener. The following installation instructions are for use with the water softener system you now own. Discount Water Softeners assumes no responsibility for improper installation or injury.

Additional instructions are also in your water softener manual. Please print these instructions and use them in conjunction with your manual for installing and programming your system.

Step 1:

Location of your softener is important. It should be in a protected dry, level and non-freezing area (34-120 degrees F). The 2 softener tanks and salt tank should be set close to each other. The square tank is your salt (brine) tank (for softener salt or potassium chloride) and it is the tank that you will have to refill with salt from time to time, so make it the more accessible of all the tanks. Do not put salt in this tank until you have put the softener into service and have tested the cycles.

Step 2:

You will need a standard outlet that is not controlled by a switch. You should also have a floor drain located nearby.

Step 3:

The distributor tubes or turbulators should be placed in the softener tanks with the distributor basket end down. The softener tank (fiberglass construction) are the taller two tanks and shown in the following picture. Turn the tube a couple times to make sure that the bottom basket seats properly in the bottom of the tanks. **Make sure the distributor tubes or turbulators are in the tanks BEFORE YOU ADD THE RESIN!**

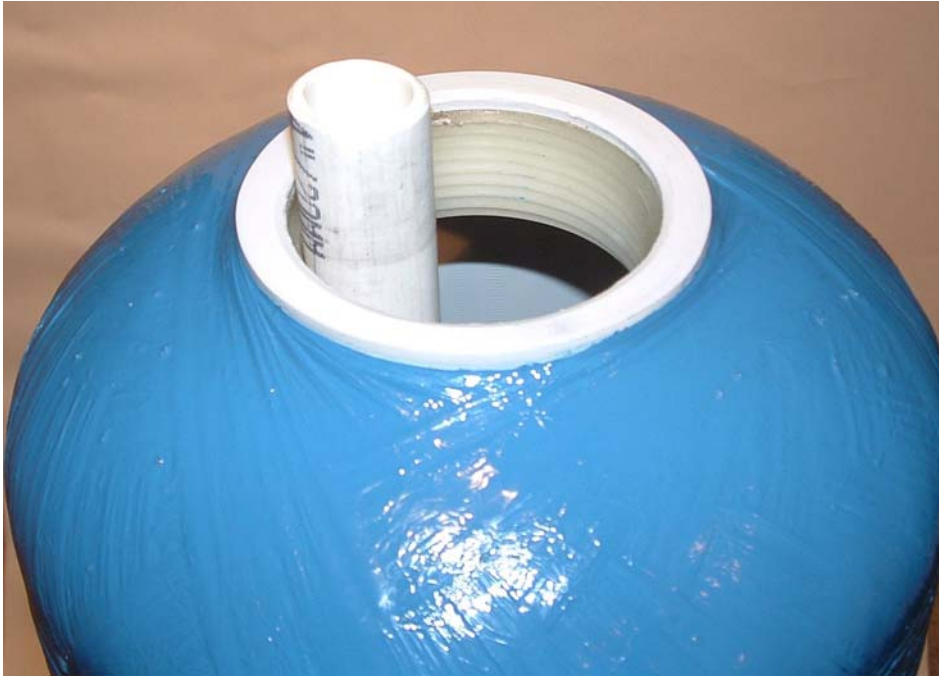


Step 4:

Be sure to place the softener tanks shown above where you want to connect it to your water line because they will be heavy a difficult to move after the resin is added. Make sure you install your softener in line before your hot water heater to insure that you have full benefit of the softener system.

Step 5:

Be sure to cover the open upper end of the distributor tubes or turbulators with tape or cap as shown below to keep any resin from falling into the distributor tubes or turbulator tubes while pouring the resin into the softener tanks. Remove the tape or cap after filling the tanks with resin.



Step 6:

Place the funnel into the softener tanks as shown below, and slowly pour the resin into the softener tank. **Caution: If you purchased a water softener that came with a bag containing gravel, you must add the gravel first before the resin.**



Step 7:

Be careful to keep the distributors tube or turbulators centered as best you can, while filling.

Once the filling of the softener tank is completed, **carefully remove the tape or cap from the distributor tubes or turbulator tubes. Do not pull upwards on the tubes.**

Step 8:

The control valve heads and piping manifold can now be screwed onto the softener tanks. Be sure the large O-ring is in place, and lubricated on both tanks. As you start to screw the control valve onto the tank, make sure the hole in the center of the control valve and manifold fits over the distributor tubes or turbulator. The control valve and manifolds should be hand tightened, snug and tight to eliminate a possible leak, clockwise.



Step 9:

On the Fleck 9100 system you will need to install the piping connections between the two identical mineral tanks at this time. Please refer to your operator manual for these additional instructions.

Step 10:

You are now ready to install the bypass valve or yoke to the control valve with the 2 metal tabs on each side of the back of the valve. Be sure to not overtighten these screws as they can strip out the plastic. Turn off main water valve. Water connections to and from softener should now be connected. For Fleck 9100 systems you will need to install your bypass along with either your plastic male threaded connections or stainless steel female fittings. The plastic or stainless steel fittings will

need to be screwed on to your existing piping. **CAUTION: YOU MUST PAY ATTENTION TO THE IN AND OUT ARROWS ON THE VALVE TO BE SURE THE SOFTENER IS PIPED PROPERLY.**

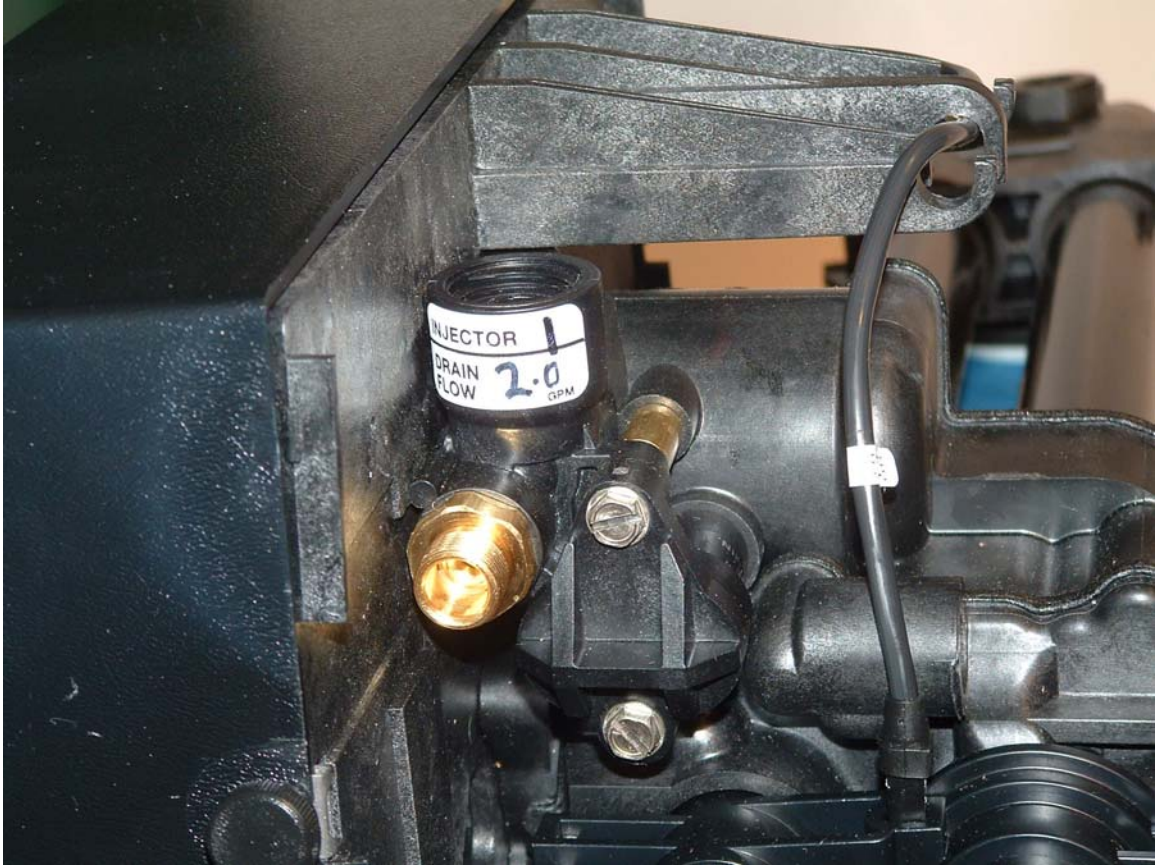


Step 11:

You will need a drain for the backwashing cycles. This should be no longer than 20 feet from the water softener. You will need to purchase this flexible 1/2 i.d. plastic pipe (can be vinyl, polyethylene etc. and same size will be used for the brine tank overflow) and a small clamp to hold the tubing over the fitting. This backwashing drain line will be under high pressure when the backwash cycle is working. Make sure the drain line is secured. The drain line will need to drain into a drain, which should be a minimum of 1 1/2" size, and ideally be below the top of the head of your softener. Local codes should be adhered to. (be sure to use teflon tape on this step).

Step 12:

You will now need to connect the brine tank line to the water softener valve. Attach the clear tubing provided from the brine tank to the connection fitting on the valve. First screw on the connection fitting to the valve (be sure to use some Teflon tape to prevent leaking) then attach the tubing to the valve. On the other end, attach the tubing to the brine tank as shown below.



On the Fleck 9100 there is a side connection where you will connect this drain line. A hose barb fitting is supplied for this connection.



Note: Never connect the drain line directly into a drain. Allow an air-gap between the drain line and waste line to prevent possibility of back-siphoning.

Step 13:
INITIAL POWER UP

ATTENTION: You should only need to use the section called “SE Timer Control Start Up” in the Mfg. Manual to program your softener.

1. Add salt to the salt tank after moving it to the desired spot that is accessible for refill. With a bucket or hose, add approximately 4 to 6 gallons of water to the salt tank.
2. Set your bypass in bypass mode and **slowly** turn on the main water valve to your home until all pipes are pressurized. Now open the bypass valve **SLOWLY**. You do not want to be surprised by leaks. Let the resin tank fill completely, then open the bypass valves the rest of the way. **CAUTION** If opened too rapidly or too far, resin may be lost out of the tank into the valve or the plumbing. In the 1/4 open position, you should hear air slowly escaping from the valve drain line.
3. Plug the power supply transformer into a socket that is not controlled by a switch or timer.

IMPORTANT NOTES BEFORE PROGRAMMING:

Make sure you set up your treated water capacity (refer to your manual here) for 90% of your total capacity for reserve water in case you have excessive water uses from time to time. Ex: 32,000 grains x 90% = 29,000 grains.

Now take 29,000 and divide it by your actual water hardness to get your treated water capacity Ex: 29,000/20GPG = 1450 gallons of water between regenerations

- 4. Program your water softener. Set the time of day, hardness and capacity if necessary. Here is where you will need to refer your owner's manual for your particular water softener settings and programming.**
- 5. Once your softener is programmed advance your controller to manual regeneration. The regeneration process can take a while.**
- 6. Check for any leaks during this initial regeneration. Also make sure that there is water in the salt tank after the regeneration is complete.**
- 7. After the initial regeneration it is always a good idea to put your water softener into a second manual regeneration to ensure that the salt has dissolved making a full brine solution.**
- 8. Your softener should now be providing you with softened water.**