



# Installing Water Softener Autotrol 255

Presented by  
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GLASS WATER SYSTEMS 255  
INSTALLATION

# Purchasing Installation Materials

This can be done before the unit arrives. This list is broken down for either a customer using copper or pvc pipe. Therefore, the list will vary depending on your plumbing material that you use for the connection. Also, this list may be added to and is based on installing the unit on 1" plumbing or with the 255 use ¾" plumbing. If you are installing on ¾" plumbing just substitute this for 1". The same applies for if you are using CPVC, Sch 80 , or PVC. This is strictly a guide and you can purchase less or more of the supplies depending on your situation. Always feel free to call us with any questions about installation at **1-877-345-2770**

## **PVC installation:**

1. 20' – 40' 1" PVC pipe
2. 20' – 60' ½" PVC pipe or 5/8" Poly Tubing
3. 10 - 1" 90s PVC
4. 4 - 1" 45s PVC
5. 5- 1" Couplings PVC
6. 2 – 1" Tees (Optional for Hard Water Faucet)
7. 2- 1" x ¾" Slip x Thr Bushing
8. 1- ¾" Hose Bibb
9. 1-1" Ball Valve (Optional for shut-off on entire system)
10. 2- ½" PVC Female Adapter
11. 10 – ½" 90s PVC
12. 5 – ½" Couplings PVC
13. Rain & Shine Glue / CPVC Glue
14. Pipe Cleaner
15. Teflon Tape

**If you have additional items you would recommend please call us – improvement and customer satisfaction is our goal.**

## **Copper installation:**

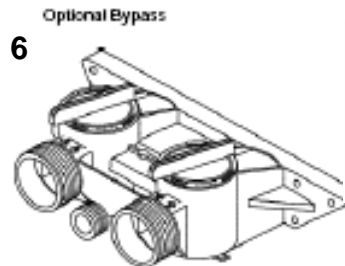
1. 10' – 20' 1" L hard copper pipe
2. 20' – 60' ½" PVC pipe or 5/8" Poly Tubing
3. 6 - 1" 90s Copper
4. 2 - 1" 45s Copper
5. 5- 1" Couplings Copper
6. 2 – 1" Tees (Optional for Hard Water Faucet)
7. 2- 1" x ¾" Slip x Thr Bushing
8. 1- ¾" Hose Bibb
9. 1-1" Ball Valve (Optional for shut-off on entire system)
10. 2- ½" PVC Female Adapter
11. 10 – ½" 90s PVC
12. 5 – ½" Couplings PVC
13. Lead Free Soder
14. Flux and Brush
15. Sand Cloth

**If you have additional items you would recommend please call us – improvement and customer satisfaction is our goal.**

# Inventory Contents

It is probably the most important thing to do the day your receive your package. This unit will either be drop shipped from our main supply warehouse in Florida or from our numerous nation wide suppliers. We use this method to keep the cost of shipping low for the customers. The unit may come in numerous packages. The Glass Water Systems representative will inform you of the number of packages. Also, you need to keep all packages if the unit is damaged in shipping and call us immediately. We need this to file a claim with the shipping company.

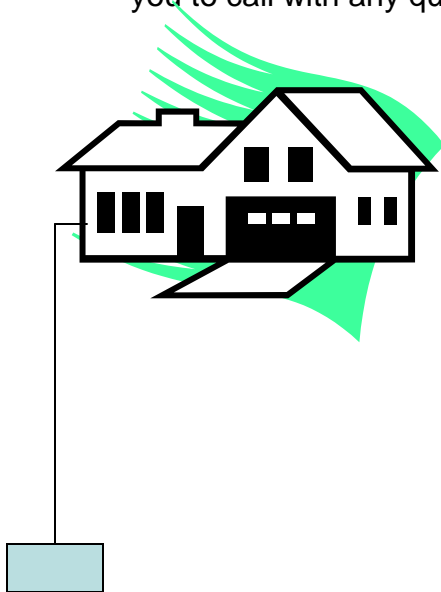
1. 1- Fiberglass Media Tank (8x44, 9x48, 10x47,12x52)  
depends on the system you order
2. Distributor Tube and Basket
3. High Capacity Resin-
  1. 24K Unit =  $\frac{3}{4}$  Cu Ft Bag
  2. 32K Unit = 1 Cu Ft Bag
  3. 40K Unit = 1-1/4 Cu Ft Bag
  4. 48K Unit = 1-1/2 Cu Ft Bag
  5. 64K Unit = 2 Cu Ft Bag
4. Gravel (Optional)
5. 255 / 760i Control Valve
6. Bypass
7. Installation Fitting Assemblies
8. Brine Tank
9. 3/8" Brine Line



**NOT ALL ITEMS ARE SHOWN**  
GLASS WATER SYSTEMS 255  
INSTALLATION

# Determining where to install the unit

This is the portion where you decide where to install your water softener. You need to make sure that you follow your local plumbing codes. This information will serve as a guide to help you with this process. We encourage you to call with any questions about placement **1-877-345-2770**.



You need to first find the main coming into your home.

1. Locate your water meter
2. This is usually the side of the house it comes in on
3. Most Homes have a L shaped pipe going into the side of the home.
4. Once you have found this you need to dig down and locate the pipe to tie into.

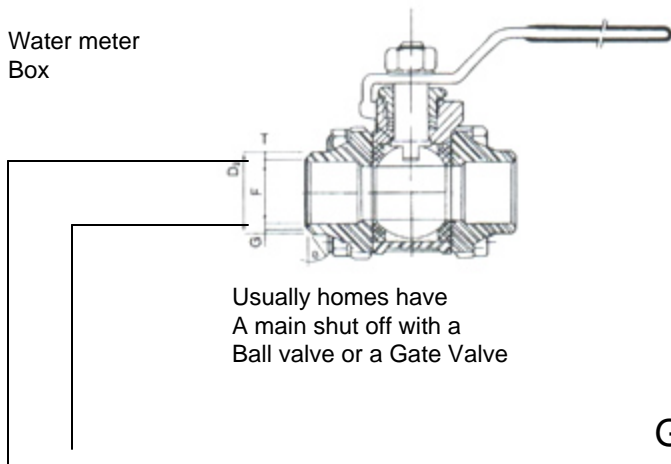
1. Electric

1. Try and find an outside socket.
2. If you have to run a further distance than you have cord – you can slice in and extend the line.
3. You can also drill a hole through the wall and fish it through.

2. Drain

1. You can either use a sink, an outside drain, or dig a hole approximately 24-36" and fill with rock. The hole needs to be about 12-18" in diameter

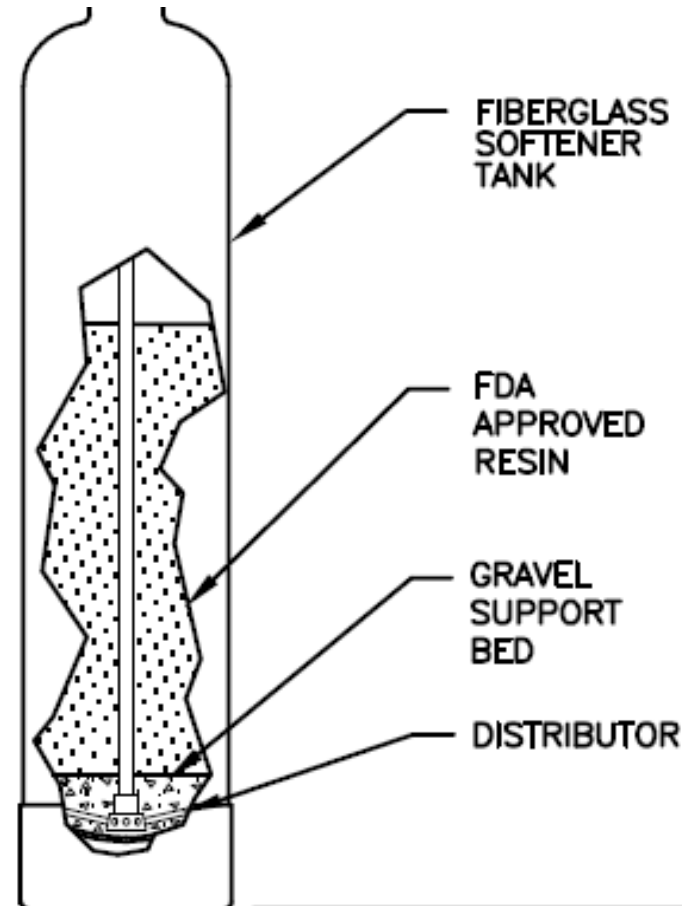
Water meter  
Box



Usually homes have  
A main shut off with a  
Ball valve or a Gate Valve

# BEDDING THE UNIT AND PREPARING FOR INSTALLATION

1. Put the Distributor Tube into the tank and tape the opening of the pipe. You cannot get resin or gravel inside the distributor tube.
2. Get a bucket 5 gallon type and cut a hole that will fit over the tank – Tape the Sides. Or use the funnel provided with the package (optional)
3. Fill the tank with the large gravel first and then the fine gravel. You may have no gravel or just one bag of gravel. If you do not have gravel do not worry about it.
4. Put the  $\frac{3}{4}$ , 1, 1.25, 1.5, or 2 Cu Ft of Resin in the tank
5. Remove the tape
6. Clean the threads of any resin etc. This will possibly make the valve not seat correctly
7. Take the Valve and screw back on the tank – be careful not to cross-thread the tank. We usually go backwards until it locks in and then tighten it down.
8. After you have the valve on take it and place it where you want it.



# Location Selection

- 1. The distance between the unit and a drain should be as short as possible.
- 2. If it is likely that supplementary water treating equipment will be required, make certain adequate additional space is available.
- 3. Since salt must be added periodically to the brine tank, the location should be easily accessible.
- 4. Do not install any unit closer to a water heater than a total run of 10 feet (3 m) of piping between the outlet of the conditioner and the inlet to the heater. Water heaters can sometimes overheat to the extent they will transmit heat back down the cold pipe into the unit control valve.

# Installation Selection Cont

- Hot water can severely damage the conditioner. A 10-foot (3-m) total pipe run, including bends, elbows, etc., is a reasonable distance to help prevent this possibility. A positive way to prevent hot water from flowing from heat source to the conditioner, in the event of a negative pressure situation, is to install a check valve in the soft water piping from the conditioner. If a check valve is installed, make certain the water heating unit is equipped with a properly rated temperature and pressure safety relief valve. Also, be certain that local codes are not violated.
- 5. Do not locate unit where it or its connections (including the drain and overflow lines) will ever be subjected to room temperatures under 34oF (1oC) or over 120oF (49oC).
- 6. Do not install unit near acid or acid fumes.

# Water Line Connection

- A bypass valve system must be installed since there will be occasions when the water conditioner must be bypassed for hard water or for servicing.
- The most common bypass systems are the Autotrol® Series 256 bypass valve (Figure3) and plumbed-in globe valves (Figure4). Though both are similar in function, the 256 Autotrol bypass offers simplicity and ease of operation.



# Water Line Connection Cont.

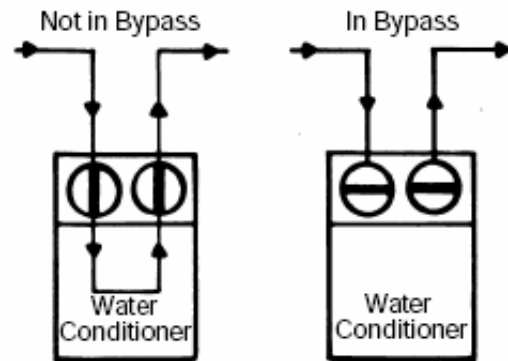


Figure 3 – Autotrol Series 256 Bypass Valve

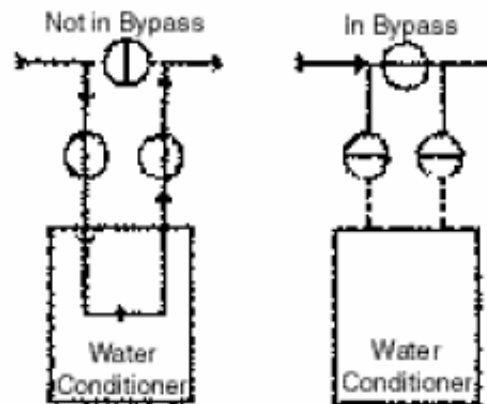


Figure 4 – Typical Globe Valve Bypass System

# Water Line Connection Cont.

- **Important:** Never connect drain line into a drain, sewer line or trap. Always allow an air gap between the drain line and the wastewater to prevent the possibility of sewage being back-siphoned into conditioner.

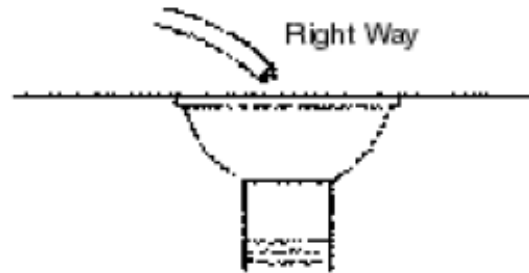
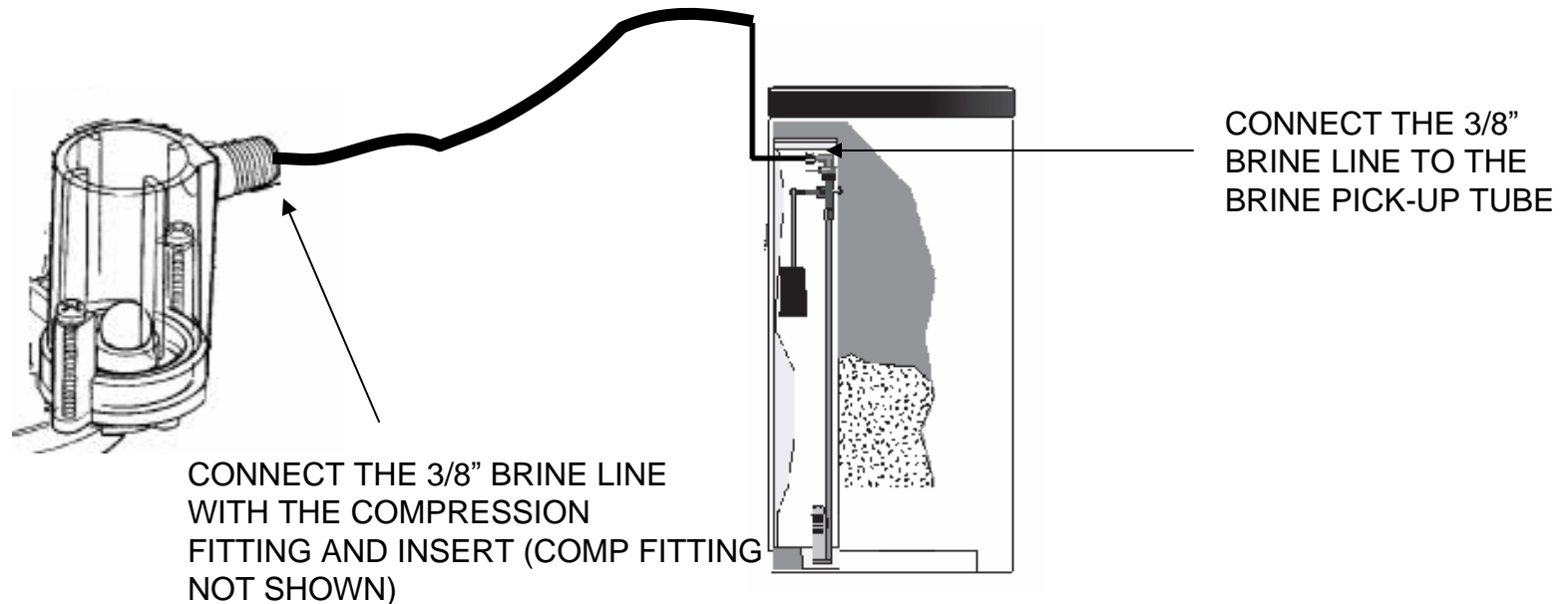


Figure 5

**Note:** Standard commercial practices have been expressed here. Local codes may require changes to these suggestions.

# Brine Line Connection

- It will be necessary to install the brine tube and connect the line to a fitting installed on the air check. Be sure all fittings and connections are tight so that premature checking does not take place. Premature checking is when the ball in the air check falls to the bottom before all brine is drawn out of the brine tank. See **Placing Conditioner into Service** section.



# Overflow Line Connection

- To connect overflow, locate the hole on the side of the brine tank. Insert overflow fitting (not supplied) into tank and tighten with plastic thumb nut and gasket as shown (Figure 6). Attach length of 1/2-inch (1.3-cm) I.D. tubing (not supplied) to fitting and run to drain. Do not elevate overflow line higher than 3 inches (7.6 cm) below bottom of overflow fitting.



Figure 6

# Splicing Low Voltage Transformer Cord

- If it is necessary to extend the length of the transformer cord, an optional 15-foot (4.6-m) extension cord is available (P/N 1000907), or the cord may be spliced as follows:
- 1. Strip insulation from wire 5/16 inch (.8 cm) from wire end.
- 2. Insert stripped wire into barrel of connector and crimp. For best results, crimp twice per wire as shown in Figure 7. Splice connectors or extension wire is not supplied. They are available at hardware or electrical stores.

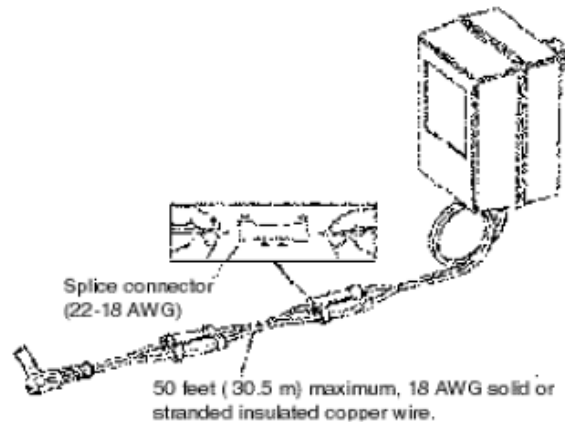
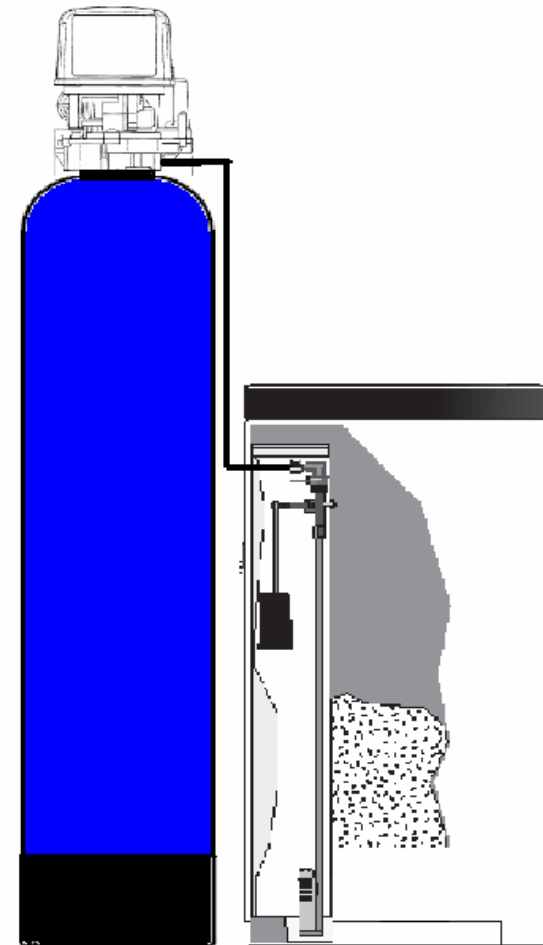


Figure 7

# Starting up the system

1. Once all this is installed – let the glue dry
2. **CHECK FOR LEAKS**
3. Open the inlet side valve and slowly let water in
4. Once pressurized open the outlet valve
5. Go inside and start running your hot water – this will let you have immediate soft water-RUN UNTIL WATER GETS COLD OR IF YOU HAVE A GAS HEATER @ 15 – 30 MINUTES –USE BATHTUB
6. Follow the instruction on programming the control valve – INCLUDED WITH THE WATER SOFTENER
7. After doing the instructions go ahead and hit regenerate and let the water softener completely go through all the cycles.
8. Please call us with any questions 1-877-345-2770



# FINAL INSTRUCTIONS

- READ THE ACCOMPANYING MANUALS
- CALL US WITH ANY QUESTIONS AT 1-877-345-2770
- WE APPRECIATE YOUR BUSINESS AND TELL A FRIEND, FAMILY MEMBER, OR CO-WORKER ABOUT OUR SERVICE