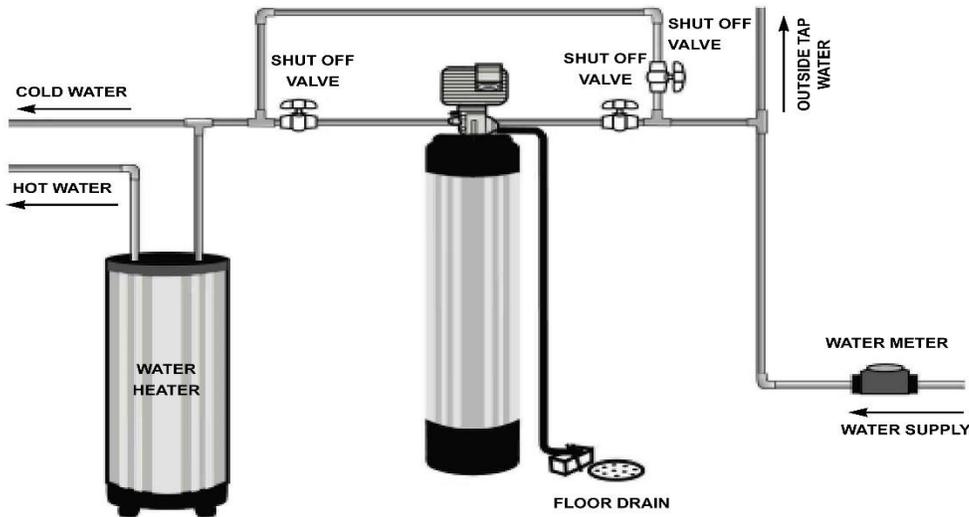


## TYPICAL INSTALLATION AND SYSTEM LOCATION

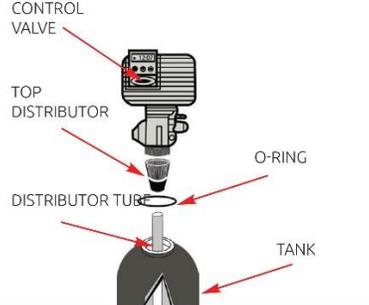


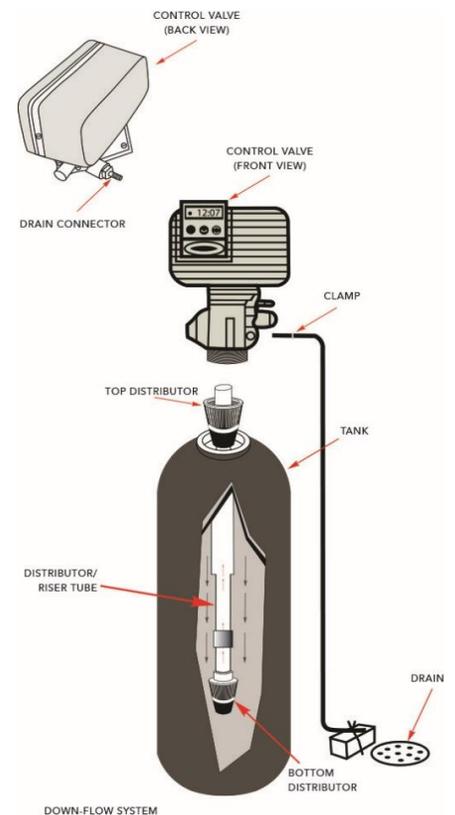
## Whole House Water Filter System Installation

The system needs to be installed by a licensed plumber in your area.

## DOWNFLOW WITH BACKWASH WATER FILTER SYSTEMS

Unpack the control valve from the shipping box. It is recommended that you keep the original boxes and packing materials

1	2	3	4
<p>Unscrew and remove the top cap from unit.</p> 	<p>Unplug slip cap from the distributor/riser tube (also referred to as a PVC tube).</p> 	<p>To prevent leaks, lubricate the inner and outer O-rings on the bottom of control valve with food grade silicone lubricant.</p> 	<p>Twist and lock top distributor to the bottom of control valve. Ensure it is fully locked in place.</p> 
<p>Attach control valve to the tank by sliding distributor tube into top distributor. Turn control valve clockwise to tighten. Distributor tube needs to be equal to the top of the resin tank (not more than 1/4" above). Lubricate the inner O-ring prior to attaching the control valve to the tank.</p> 	<p>Attach bypass valve to the back ports of the control valve by sliding the bypass over the O-rings and tighten (it is held in place by two metal clips and two screws).</p> 	<p>To prevent leaks, wrap threads of hose barb and compression nut with thread seal tape clockwise, approximately 3 times around.</p> 	



# MUNICIPAL SYSTEM AUTOMATIC CONTROL VALVE PROGRAMMING

Programming to Backwash and Regenerate  
using an Automatic Valve  
(Refer to instructions for programming Automatic Control Valve)

A1



A2



**Clock MUST be set to 12:01 PM to get into programming mode.**

**Step 1:** Press and hold one of the up or down arrows until the clock moves. Set the time to 12:01 PM. Push the Recycle button to set.



**Step 2:** Press and hold the up and down buttons at the same time to get into the Master Programming Mode. A pencil icon lets you know you are in programming mode.

The code in the upper left shows the portion of the program being changed.  
The up and down buttons change the value on the right.

**Step 3:** Screen upper left reads DF. Set to GAL



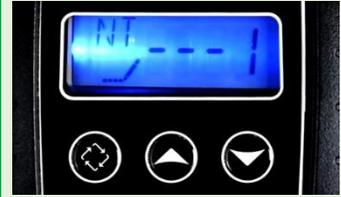
**Step 4:** Push Recycle. Set VT to FL tr



**Step 5:** Push Recycle. Set CT to tc



**Step 6:** Push Recycle. Set NT to ---1



**Step 7:** Push Recycle. Set DO to 6



**Step 8:** Push Recycle. Set RT to 2:00am



**Step 9:** Push Recycle. Set BW to 10



**Step 10:** Push Recycle. Set RR to 10



**Step 11:** Push Recycle. Wait for time to display...



**Step 12:** Press and hold up or down arrow,



this gets time moving. Set TD to correct time. Push Recycle to complete the setup.

# WELL SYSTEM AUTOMATIC CONTROL VALVE PROGRAMMING

Programming to Backwash and Regenerate  
using an Automatic Valve  
(Refer to instructions for programming Automatic Control Valve)

A1



A2



**Clock MUST be set to 12:01 PM to get into programming mode.**

**Step 1:** Press and hold one of the up or down arrows until the clock moves. Set the time to 12:01 PM. Push the Recycle button to set.



**Step 2:** Press and hold the up and down buttons at the same time to get into the Master Programming Mode. A pencil icon lets you know you are in programming mode.

The code in the upper left shows the portion of the program being changed.  
The up and down buttons change the value on the right.

**Step 3:** Screen upper left reads DF. Set to GAL.



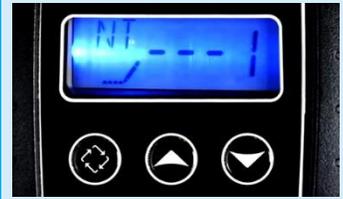
**Step 4:** Push Recycle. Set VT to dF 1b.



**Step 5:** Push Recycle. Set CT to tc.



**Step 6:** Push Recycle. Set NT to ---1.



**Step 7:** Push Recycle. Set DO to 1



**Step 8:** Push Recycle. Set RT to 2:00am



**Step 9:** Push Recycle. Set BW to 14



**Step 10:** Push Recycle. Set BD to 40



**Step 11:** Push Recycle. Set RR to 10



**Step 12:** Push Recycle. Set BF to OFF



**Step 13:** Wait for time to display...



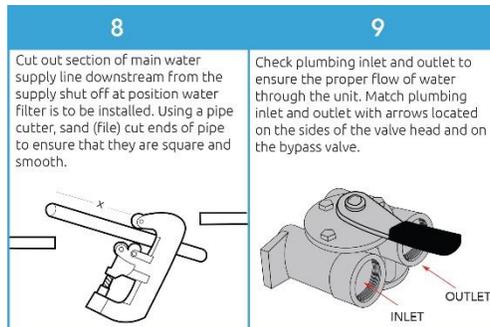
**Step 14:** Press and hold up or down arrow,



this gets time moving. Set TD to correct time. Push Recycle to complete the setup.

## CONNECTING WATER FILTRATION SYSTEM TO WATER SUPPLY

- Turn off the main water shutoff valve.
- Open all plumbing fixtures in the house including all outside faucets in order to drain the lines of all water.
- 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 (Fig 8).
- If copper piping is used and soldered, remove the bypass from the valve assembly and attach your plumbing adapters to the bypass away from the valve. This simple step will ensure that you are not applying heat as you solder, or pressure as you tighten the adapters onto the bypass while they are mounted on the valve body itself.
- Solder a 3" to 5" piece of copper pipe into Each of the two pipe adapters then let them cool before threading each one onto the yoke or bypass valve (Fig 9).
- Apply thread seal tape onto the male adapters for the brass bypass valve when cool, and securely tighten them to the bypass valve. This is done before reattaching them onto the rear of the valve/meter body assembly.
- Close main water supply shutoff valve.
- Open nearest faucet to relieve pressure and drain plumbing lines.



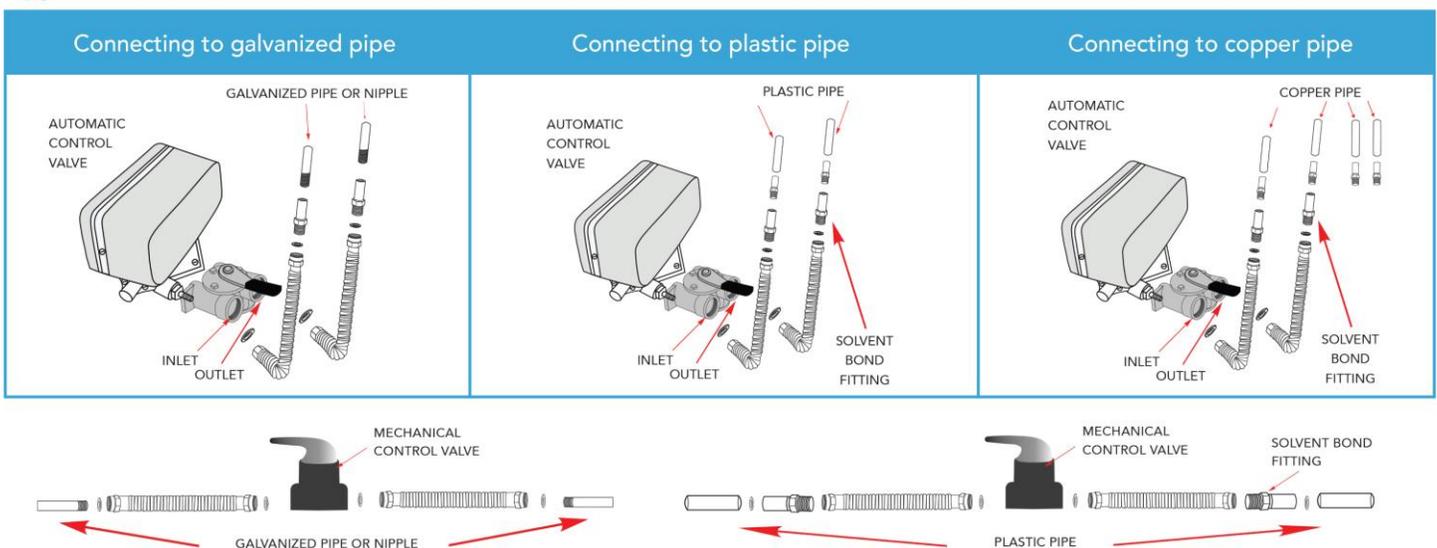
### MINIMUM MATERIALS NEEDED

- $\frac{3}{4}$ " or 1" male thread adapters to plumb the system
- Wrenches, either open end or adjustable jaw, sized to fit compression adapters
- Pipe cutter
- Thread seal tape
- Sandpaper or emery cloth
- Before installing  $\frac{3}{4}$ " or 1" fittings to the inlet and outlet of the bypass valve or manifold, wrap the threads 3 times around with thread seal tape. Install  $\frac{3}{4}$ " or 1" fittings.
- Soldering is no longer required to plumb with copper pipe. Instead, use  $\frac{3}{4}$ " or 1" compression fittings. Connect plumbing as shown below (Fig 10), choosing appropriate connection for mechanical/ automatic control valve.

**CAUTION: Do not overtighten or cross-thread.**

**CAUTION: Install water filter in direction of arrows.**

### 10 (Choose appropriate connection below)



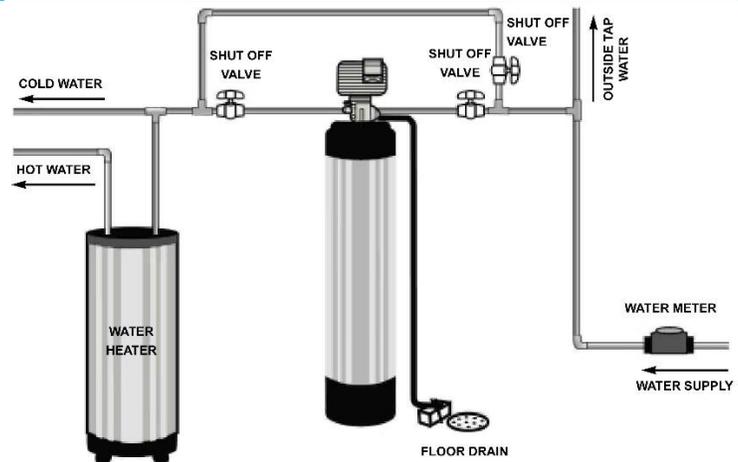
## TIPS TO AVOID ACCIDENTAL PROPERTY DAMAGE

Wayde King Water Filtration Whole Home Filtration and Conditioning Systems use the latest technologies available to ensure and prevent water rupture. However, if manufacturing guidelines are not followed, water damage can occur. Causes of flooding include excessive water pressure, spikes in water pressure, human tampering, and negligent installation.

To eliminate possible water and property damage, use the following preventative steps and devices:

- A licensed plumber should install this unit, reading and following the Installation and Operation Guide as well as all notices.
- Install a water pressure regulator/control valve inline to keep the water inflow pressure at 60 psi or less.
- Keep the water supply line from the extreme heat or freezing. Temperature at unit location should be maintained between 35° F and 120° F.
- Install an inline flood prevention valve/leak control – instructions at right.
- In addition to having all other safety devices, use a ball valve to bypass the inflow of water to the system during vacation.

## INSTALLING A LEAK DETECTOR VALVE



Leak Controllers are specialized water alarm and shut-off systems that use sensors to detect a water leak. The sensor sounds an alarm and then shuts off your water. The alarm continues to sound until the valve is manually reset. By preventing continuous water flow, mold and property damage are restricted.

### Features

- 1" full port ball valve with auto shut-off
  - Programmable service reminder indicator
  - Water detection sensitivity down to 2ppm TDS (total dissolved solids)
  - 4 AA alkaline batteries
  - Automatic daily valve management
  - Available port sizes (inlet/outlet) ¾", 1", 1-¼" and 1-½"
1. Install leak detector valve into an inlet water line.
  2. Move sensor as close to filter as possible. Upon sensing moisture, controller will engage the shutoff valve and sound an alarm.
  3. Secure controller module to the wall.

## GUIDE FOR REPLACING MEDIA

1. Turn off the water to the unit and unplug from the power source.
2. Disconnect the unit from your plumbing.
3. Carefully unscrew the control valve off the top of the tank.
4. Remove the riser tube from inside the mineral tank.
5. Lay the tank on its side or lay over a trash can to remove media.
6. Rinse the inside of the tank clean with a garden hose, discard old resin, and save the old gravel.
7. Stand media tank upright. Plug a slip cap or put a piece of tape over the top of the distributor/riser tube to prevent media from entering the tube while loading the media.
8. Place the media funnel in the top of the media tank with the riser tube still inside and centered.
9. Begin replacing media by putting gravel into the tank first. Make sure the riser tube is firmly on the bottom of the tank. If the riser tube is pulled out of the gravel once the media is added, it is impossible to put it back in without removing the other media from the tank.
10. Pour resin/media into the funnel, slowly letting it fall down inside the media tank around the riser tube. If you have a twin alternating system, divide the resin/media equally between the two tanks. The media tank should be approximately 3/4 full. The media tank should be approximately 3/4 full but this can vary based on the media for your specific system.
11. Remove the funnel and the slip plug or tape from the top of the riser tube.
12. Brush any loose resin/media off the top opening of the tank. Clean the top edge with a cloth so the O-ring can seal securely to the valve base. Lubricate o-ring with clean food grade silicon grease.
13. Look at the bottom of your control valve and locate the upper basket. Inside the basket, the control valve has O-rings that will seal on the riser tube. Install the valve on top of the media tank, making sure the top of the riser tube inserts inside the opening of the upper basket. Guide the riser into the O-ring seal and tighten gently. Be careful not to over-torque the valve as the threads are plastic.
14. Screw the control valve back onto the top of the tank. Be sure to hold the control valve where there will be no damage to the valve from the pressure you exert from tightening the valve back onto the tank.
15. Reconnect your plumbing to your unit and plug the control valve back in, making sure to set the correct time of day. Turn on the water to the unit and check for leaks.
16. Leave all faucets turned off inside the house and open a single faucet (such as an outside faucet), letting the water run for 3-5 minutes. This rinses the new resin/media inside the tank, and any particles or color will rinse out through the one open faucet, and not throughout your home plumbing system.
17. Manually turn your regeneration/backwash control knob slowly through a complete cycle, allowing the water to run through the unit for a minute or so in each position.
18. Once the regeneration/backwash knob is back in the service position, your unit is in service and ready to operate!

