

# Installation Requirements

## LOCATION REQUIREMENTS

Consider the following when selecting an installation location for the Central Water Filtration System.

- Do not operate the Central Water Filtration System where freezing temperatures occur. Do not attempt to treat water over 100°F (38°C). Freezing temperatures or hot water damage voids the warranty.
- To condition all water in the home, install the Central Water Filtration System close to the water supply inlet, and before all other plumbing connections, except outside water pipes.
- For a home with municipal water supply, install the Central Water Filtration System between the home's incoming water supply and the water softener, if one is being used (See Figure 3A). If the home has well water, reverse the order of the Central Water Filtration System and the water softener (See Figure 3B).
- A nearby drain is needed to carry away Clean Rinse discharge water. Use a floor drain, laundry tub, sump, standpipe, or other options (check your local codes). See "Air Gap Requirements" and "Valve Drain Requirements" sections. If a drain is not available, it is still possible to operate the Central Water Filtration System in a manual Clean Rinse mode. See "Operating in Manual Clean Rinse Mode." The automatic Clean Rinse must be disabled if the Central Water Filtration System will not be connected to a drain (See Page 7).
- The Central Water Filtration System works on 24 V DC electrical power, supplied by a direct plug-in power supply (included). Provide a 120 V, 60 Hz electrical outlet in accordance with NEC and local codes.
- Do not install the Central Water Filtration System on a hot water line (See Figures 3A & 3B, below).
- Avoid installing in direct sunlight. Excessive sun heat may cause distortion or other damage to non-metallic parts.

## THE PROPER ORDER TO INSTALL WATER TREATMENT EQUIPMENT

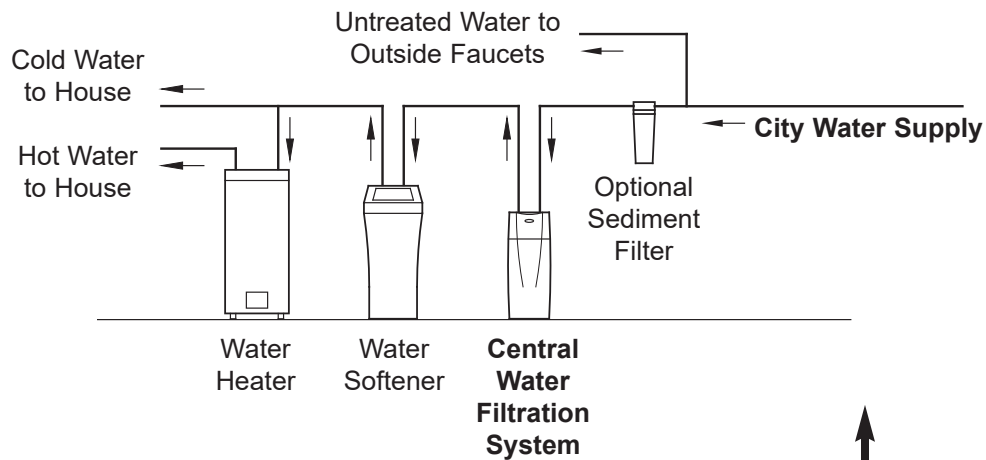


FIG. 3A

↑  
OR  
↓

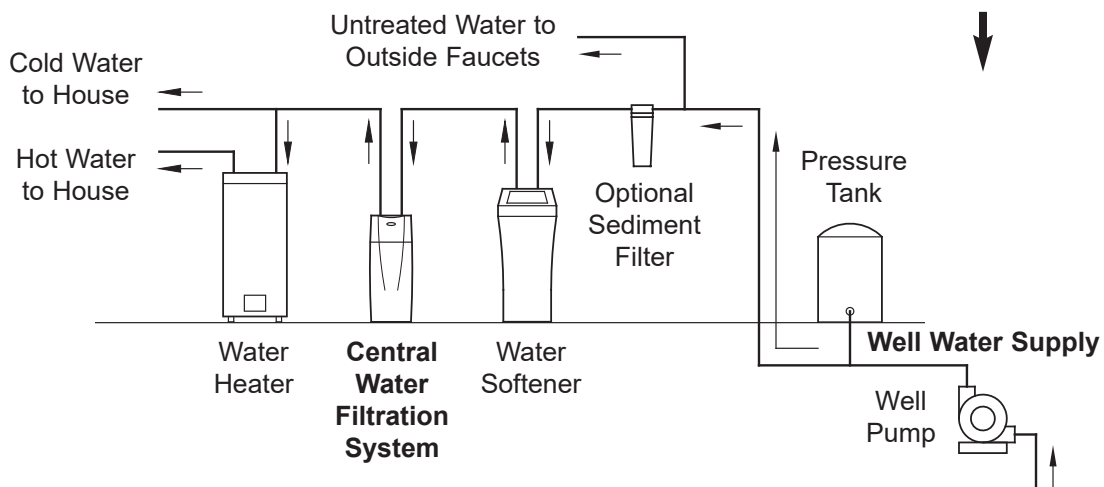


FIG. 3B

# Installation Requirements

## PLUMBING CODES

All plumbing must be completed in accordance with national, state, and local plumbing codes.

In the state of Massachusetts: The Commonwealth of Massachusetts plumbing code 248-CMR shall be adhered to. A licensed plumber shall be used for this installation.

## AIR GAP REQUIREMENTS

A drain is needed for Clean Rinse discharge water. A floor drain, close to the Central Water Filtration System, is preferred. A laundry tub, standpipe, etc. are other drain options. Secure valve drain hose in place. Leave an air gap of 1-1/2" between the end of the hose and the drain. This gap is needed to prevent backflow of sewer water into the Central Water Filtration System. Do not put the end of the drain hose into the drain.

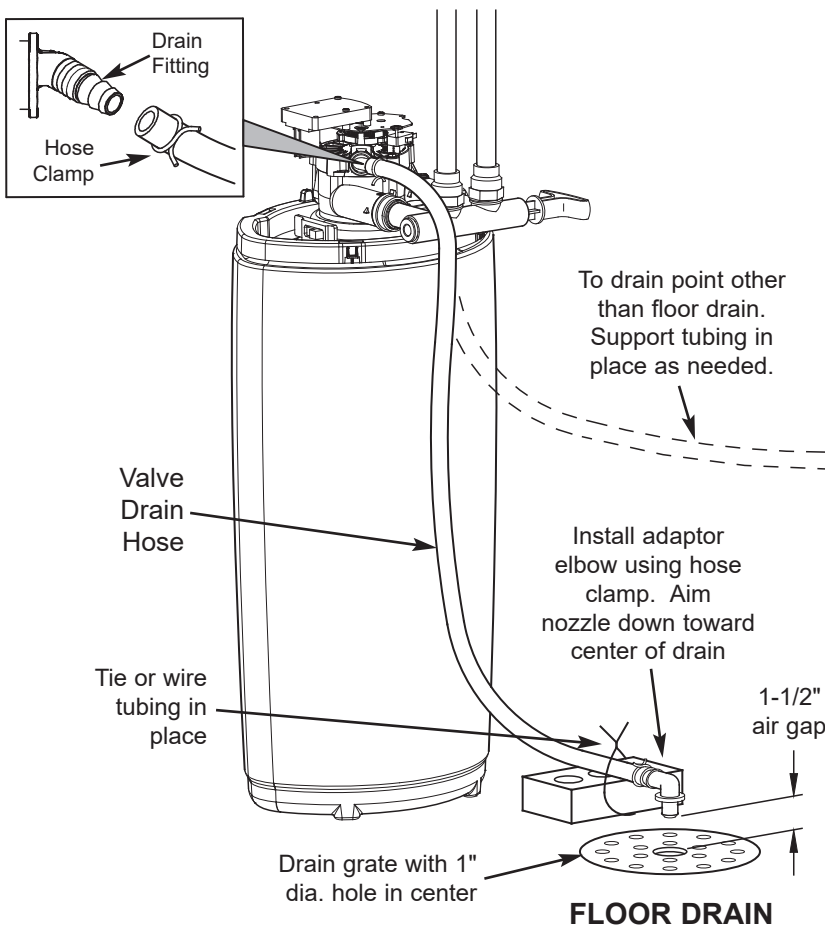
## VALVE DRAIN REQUIREMENTS

Using the flexible drain hose (included), measure and cut to the length needed. Flexible drain hose is not allowed in all localities (check your plumbing codes). If local codes do not allow the use of a flexible drain hose, a rigid valve drain run must be used. Purchase a compression fitting (1/4 NPT x 1/2 in. minimum tube) and 1/2" tubing from your local hardware store. Plumb a rigid drain as needed (see Figure 4, below).

**NOTE:** Avoid drain hose runs longer than 30 feet.  
Make the valve drain line as short and direct as possible.

It is recommended that the Central Water Filtration System be installed near a drain. However, if a drain is not available, it is still possible to operate the Central Water Filtration System in a manual Clean Rinse mode. See "Operating in Manual Clean Rinse Mode" section. The automatic Clean Rinse function must be disabled if the Central Water Filtration System will not be connected to a drain.

## CONNECTING VALVE TO DRAIN



## SUBSTITUTING RIGID DRAIN LINE

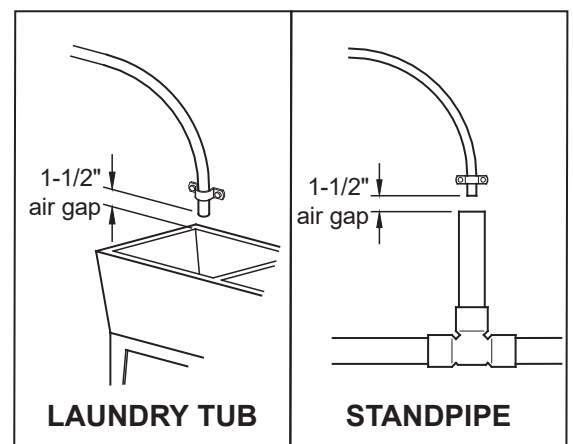
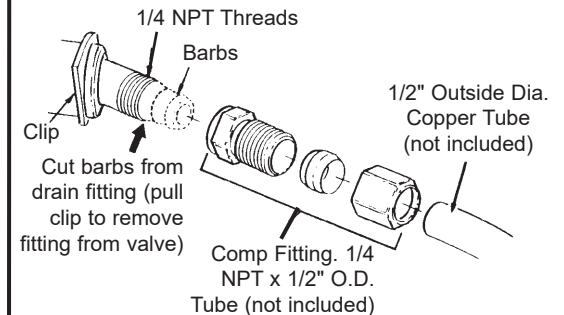


FIG. 4

# Installation Requirements

## INLET - OUTLET PLUMBING OPTIONS

Always install either a single bypass valve (provided) to the contractor/plumber-supplied plumbing, as shown in Figure 7 OR if desired, a 3 valve bypass system (parts not included) can be installed, as shown in Figure 6. Bypass valves allow you to turn off the water to the Central Water Filtration System for maintenance if needed, but still have water in house pipes.

Use either:

- Copper pipe
- Threaded pipe
- PEX (Crosslinked Polyethylene) pipe
- CPVC plastic pipe
- Other pipe approved for use with potable water

**IMPORTANT:** Do not solder with plumbing attached to the single bypass valve. Soldering heat will damage the plastic valve.

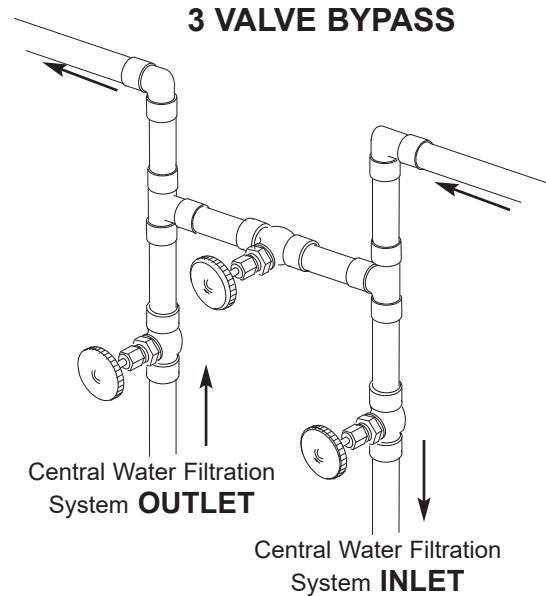
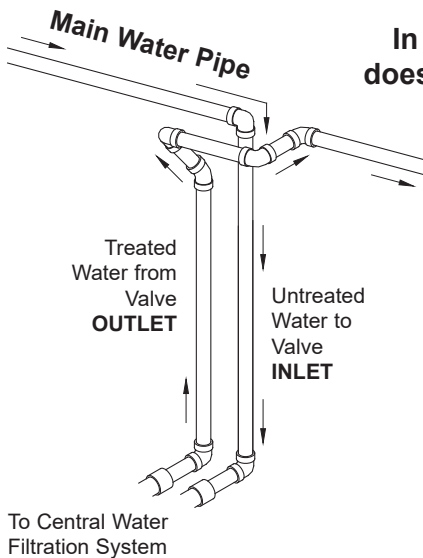


FIG. 6

## CROSS OVER



In what direction does the water flow?

Be sure to plan piping so water flow is to the Central Water Filtration System valve INLET. Plan a crossover if the flow is from left to right.

FIG. 5

## CONNECTING PLUMBING TO VALVE

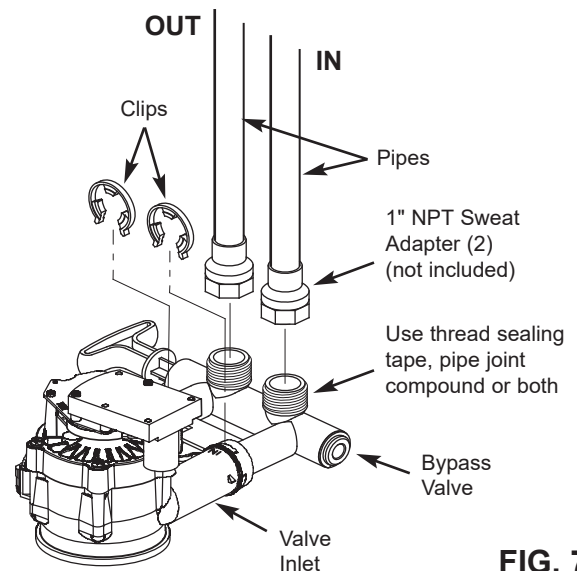


FIG. 7

# Installation Instructions

## TURN OFF WATER SUPPLY

1. Close the main water supply valve, near the well pump or water meter.
2. Open all faucets to drain water from the house pipes.

**NOTE:** Be sure not to drain water from the water heater, as damage to the water heater elements could result.

## MOVE THE CENTRAL WATER FILTRATION SYSTEM INTO PLACE

### **⚠ WARNING**

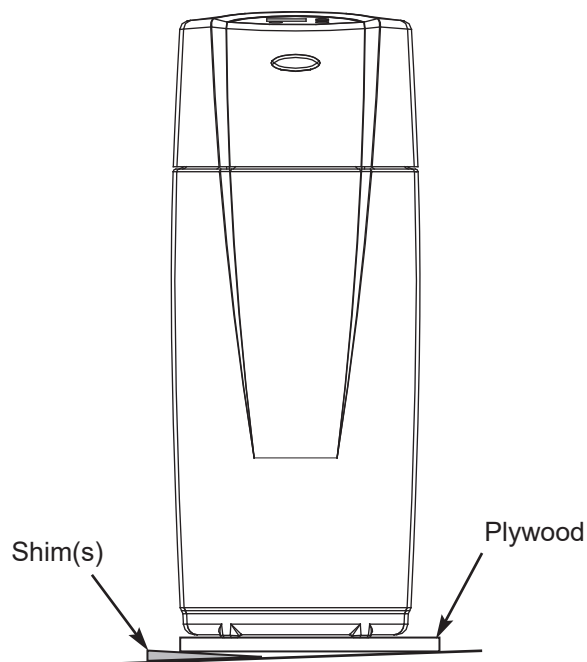
#### **Excessive Weight Hazard**

**Use two or more people to move and install Central Water Filtration System.**

**Failure to do so can result in back or other injury.**

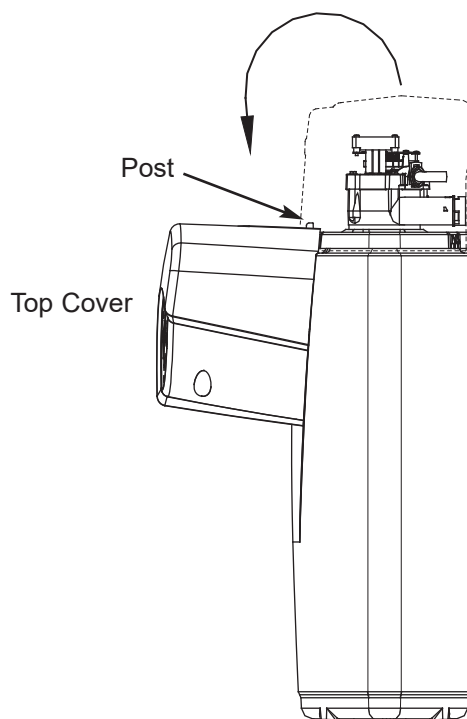
1. Move the Central Water Filtration System into installation position. Set it on a level surface. If needed, place the unit on a section of plywood, a minimum of 5/8" thick. Then place shims under the plywood to level the Central Water Filtration System (see Figure 8).
2. Remove top cover.
3. Hang cover from post on front of rim, as shown in Figure 9. Avoid allowing the cover to hang from wires.

## LEVEL IF NECESSARY



**FIG. 8**

## REMOVE TOP COVER AND HANG IT FROM POST ON FRONT OF RIM



**FIG. 9**

# Installation Instructions

## ⚠ WARNING



### Electrical Shock Hazard

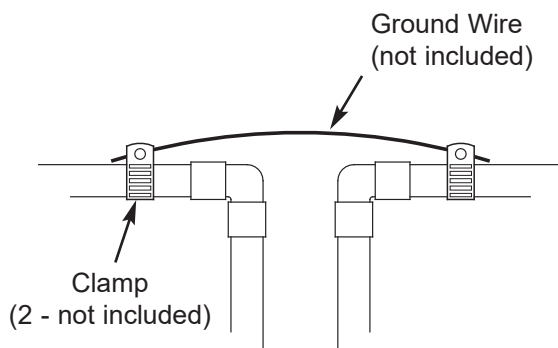
**Prior to installation on metallic plumbing, securely install two grounding clamps and a #4 copper wire per installation instructions.**

**Failure to follow these instructions can result in death or electrical shock.**

## GROUNDING INFORMATION (for Installations on Metal Pipe)

The house main incoming water pipe is often used to ground electrical outlets in the home. Grounding protects you from electrical shock. Installing the central water filtration system with a plastic bypass valve will break this ground. Before beginning installation, purchase and securely install two grounding clamps and a #4 copper wire across the location where the central water filtration system will be, tightly clamping it at both ends, as shown in Figure 10.

**NOTE:** Check local plumbing and electrical codes for proper installation of the ground wire. The installation must conform to them. In Massachusetts, plumbing codes of Massachusetts shall be conformed to. Consult with your licensed plumber.



**FIG. 10**

## COMPLETE INLET AND OUTLET PLUMBING

1. Loosely assemble any pipe and fittings needed from the main water supply to the inlet and outlet ports of the Central Water Filtration System valve.

### IMPORTANT:

- Be sure to fit, align and support all plumbing to prevent putting stress on the Central Water Filtration System valve inlet and outlet. Undue stress from misaligned or unsupported plumbing may cause damage to the valve.
  - Be sure to keep fittings fully together, and pipes squared and straight.
  - Be sure incoming water supply pipe goes to the Central Water Filtration System valve INLET side. Inlet and outlet are marked on the valve. Trace the water flow direction to be sure.
2. Complete the inlet and outlet plumbing for the type of pipe as described below:

### Soldered Copper

1. Thoroughly clean and apply solder flux to all joints.
2. Make all solder connections.

**IMPORTANT:** Do not solder with plumbing attached to installation Adapters and single valve bypass. Soldering heat will damage the Adapters and valve.

### Threaded Pipe

1. Apply pipe joint compound or thread sealing tape to all male pipe threads.
2. Tighten all threaded joints and make all solder connections.

### CPVC Plastic Pipe

1. Clean, prime, and cement all joints, following the manufacturer's instructions supplied with the plastic pipe and fittings.

### Other, including PEX (Crosslinked Polyethylene)

1. Follow the piping system manufacturer's instructions when using other pipe approved for potable water.

# Installation Instructions

## INSTALL VALVE DRAIN HOSE

1. Measure, cut to needed length, and connect the 3/8" drain line (provided) to the Central Water Filtration System valve drain fitting (See Figure 11). Use a hose clamp to hold the hose in place.

**NOTE:** If codes require a rigid drain line see "Valve Drain requirements" section.

2. Run the drain hose or copper tubing to the floor drain. Secure drain hose. This will prevent the drain line from "whipping" during Clean Rinse cycles. See "Air Gap Requirements" section.

## TEST FOR LEAKS

1. Make sure the single bypass valve (or 3 valve bypass, if installed) is in the bypass position, with the handle pushed in (See Figure 11).
2. Fully open the main water supply valve.
3. Briefly open a faucet in the house to refill the plumbing with water.
4. Slowly move the bypass valve(s) to the normal operation position, pausing several times to allow the unit to pressurize slowly (See Figure 11).
5. Check for leaks at all the plumbing connections you made.

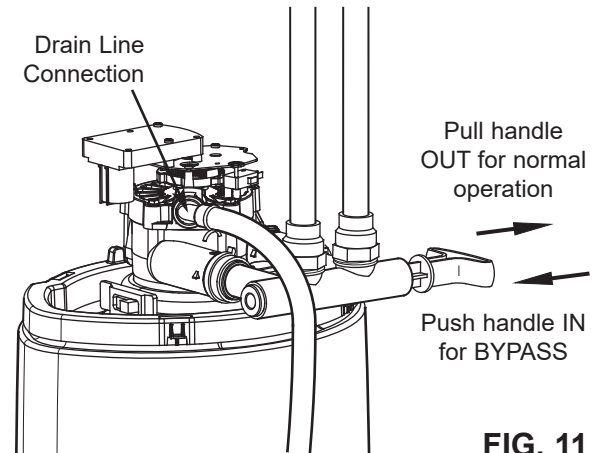
**IMPORTANT:** Start up procedure must be run prior to using any filtered water. Follow the instructions below and on Page 13.

## TURN ON THE CENTRAL WATER FILTRATION SYSTEM

During installation, the Central Water Filtration System wiring may be moved or jostled from place. Check to be sure all lead wire connectors are secure on the back of the electronic board and be sure all wiring is away from the valve gear and motor area, which rotates during Clean Rinse cycles.

1. Plug the Central Water Filtration System's power supply into an electrical outlet that is not controlled by a switch.
2. In the display, the words "PRESENT TIME" appear and 12:00 PM begins to flash. Set the clock according to the "Set Time of Day" section on Page 12.
3. Run the start up procedure, as detailed on Page 13.

## SINGLE BYPASS VALVE



**FIG. 11**

# Programming the Central Water Filtration System

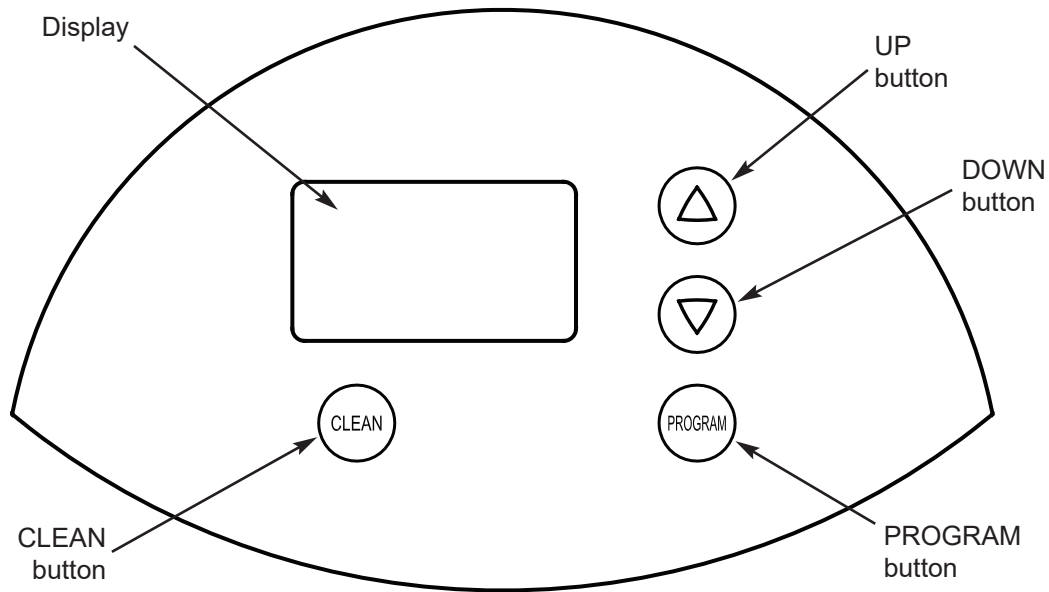


FIG. 12

When the power supply is plugged into the electrical outlet, a model code, and a test number (example: J2.0), begin to flash in the faceplate display. Then, 12:00 PM and the words "PRESENT TIME" begin to flash.

**NOTE:** If " - - - " shows in the display, press the  $\triangle$  UP or  $\nabla$  DOWN button until the model code "CF 8" shows in the display. Then, press the PROGRAM button to set, and change to the flashing "PRESENT TIME" display.

## SET TIME OF DAY

If the words "PRESENT TIME" do not show in the display, press the PROGRAM button until they do.

1. Press the  $\triangle$  UP or  $\nabla$  DOWN buttons to set the present time. Up moves the display ahead; down sets the time back. Be sure AM or PM is correct.

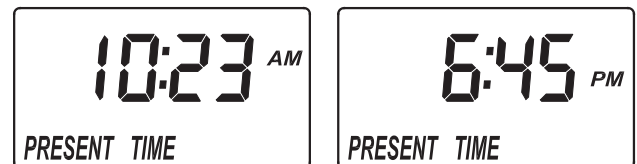


FIG. 13

**NOTE:** Press buttons and quickly release to slowly advance the display. Hold the buttons down for fast advance.

2. Press the PROGRAM button a few times, until the time appears on the display, but is not flashing.

**Questions? Call Toll Free 1-866-986-3223 or visit [whirlpoolwatersolutions.com](http://whirlpoolwatersolutions.com)**

When you call, please be prepared to provide the model and serial number, located on the rating decal on back of the cover.