

How does the valve work?

The valve operates using a float and a control diaphragm chamber. When hooked up to a water source the valve will allow water to flow through it until the water reaches the bottom of the valve. As the water level rises it causes the float inside of the valve to rise allowing the diaphragm chamber to fill and close the valve.

What type of tubing/pipe should I use to install my Hudson Valve?

Make sure that your tubing/pipe is of an adequate size:

- For the ½" Valve – no smaller than ¼" and no bigger than 1"
- For the 1" Valve – no smaller than ½" and no bigger than 2"

How do I install my Hudson Valve?

- Do not use pipe compound.
- Use plumber's Teflon tape on threads of water supply pipe.
- Screw Hudson Valve on to water supply pipe; hand tighten only.
- Turn water source on full volume.
- Make sure valve is mounted stably – the valve will not work if it is not secure.
- The valve cannot be submerged.
- The valve must be mounted vertically.

Where will the valve shut off?

- The valve will shut off about 1 ½"- 2" up from the bottom of the valve depending on pressure (the higher your water pressure the higher up on the valve the water will shut off).
- NOTE: there will be a short delay in shut-off the first time the valve is used while the control chamber fills with water.

Will my valve work in liquids other than water?

- The Hudson Valve is designed to be used in water.
- We only recommend using it in water.
- We will only warranty valves that have been used in water.
- This is not to say that the valve will absolutely not work in other liquids. We have customers that use it in a variety of liquids, but we have not tested it in anything other than water, and thus cannot recommend its usage with any other liquids.
- We do know the valve will not work with salt water as the supply source.

Why won't my valve shut off?

- The valve needs to be cleaned periodically depending on the cleanliness of the water source.
- Wash the valve and valve parts with fresh water. Dirt, rust, sediment and sand can build up on the valve and cause it to malfunction.
- The valve has two very important holes that run through the center of it. If either of these holes becomes clogged, the valve will not shut off.

To check the holes take the valve apart:

- Remove the strainer cap from the stem of the diaphragm.
- Hold the diaphragm up to the light and make sure that the hole that runs through the body of the stem is free and clear.

- Drop the float out of the body of the valve. To do this, remove the retaining screw at the bottom of the valve.
 - Hold the body up to the light and make sure that the hole that runs through the body of the valve is free and clear.
 - If either of these holes is clogged, flush it out with water or use a small needle to help clear the hole. Do not force any object into either hole, as the valve will not work if the size of the hole is altered.
- Check to make sure that you have adequate flow. The valve has to have more than a trickle of water coming to it in order to get it to shut off. If you have less than 10lbs of water pressure, your valve may not be getting enough flow to it to make the valve seal.
 - Make sure that your water source is turned on full volume.
 - Make sure that your tubing/pipe is of an adequate size:
 - For the 1/2" Valve – no smaller than 1/4" and no bigger than 1"
 - For the 1" Valve – no smaller than 1/2" and no bigger than 2"
 - Make sure that all parts are installed correctly.
 - The screen is installed from the top of the cap down.
 - The diaphragm "skirt" sits in the grooves of the body of the valve.
 - The retainer ring sits on top of the diaphragm, with the flat side up.
 - The float has free movement in the body of the valve (using your fingers, gently push the float up and let it drop back down – it should move up and down freely about an 1/8").
 - Do not glue any parts together
 - Use Teflon tape only – do not use other products to install valve.
 - If you are using a 1/2" valve, try removing the screen. Due to the fact that there is less area in the 1/2" valve between the cap and the diaphragm than there is in the 1" valve, the screen on the 1/2" sometimes will restrict the movement of the diaphragm. Not using a screen will not affect the performance of the valve. The screen is only needed to help filter out debris. If your water source is clean, it is not needed.

Why won't my valve open?

- The insert in the body of the valve may be clogged. To check this, remove the cap from the top of the valve. Remove diaphragm and retainer ring. Turn valve over and remove retaining screw at the bottom of valve.
 - Hold the valve up to the light and look through the metal insert in the center of the body. If it is clogged, flush it out with water. If this doesn't clear the insert, use a small needle to gently push the debris out. Then flush with water again to clean.
- There isn't enough water flow coming to the valve. Your water source must be turned on full volume. We recommend having at least 8 lbs of pressure.

How do I repair my Hudson Valve?

• If none of the following suggestions work, a repair kit will be needed.

Hudson Valve and our many of our distributors sell repair kits containing all of the internal parts of the valve. Please refer to our products page to learn more about repair kits.

- First, try taking the valve apart and cleaning all parts and the body of the valve in clean water.
- Check the hole in the body of the valve. The valve has two very important holes that run through the center of it. If either of these holes becomes clogged, the valve will not shut off.
- To check the holes take the valve apart.
 - Remove the strainer cap from the stem of the diaphragm. Hold the diaphragm up to the light and make sure that the hole that runs through the body of the stem is free and clear.
 - Drop the float out of the body of the valve. To do this turn the valve upside down and remove the screw at the bottom of the valve.
 - Hold the body up to the light and make sure that the hole that runs through the body of the valve is free and clear.
 - If either of these holes is clogged, flush it out with water or use a small needle to help clear the hole. Do not force any object into either hole, as the valve will not work if the size of the hole is

altered.

- Check the shut-off pad, which is located on the top of the float (part P07), for any indentations or tears. If it looks dented or torn, try turning it over. You can do this by gently slipping it out of its base using a small needle. Then flip it over and push it gently back in using your finger.
- **Do NOT** glue, hammer or alter the valve or valve parts in any way. Doing any of this will nullify your warranty.

After I install the valve, what do I do if I hear water hammer or other noise in my line?

- The water hammer can be caused by too much pressure build-up behind the valve. Under high-pressure conditions, installing a pressure-reducing valve before the Hudson Valve may alleviate the problem.

When do I use a continuous flow disc?

- The continuous flow disc is designed to be used only during the winter in freezing climates. When installed, it will allow the valve to keep a slow trickle of water moving through it at all times. When installed, the valve will not fully shut off. The purpose of this disc is to prevent freezing of pipes during the winter.
- When using a continuous flow disc, you will need an overflow line to take excess water away as the disc will allow the valve to overflow the tank.