

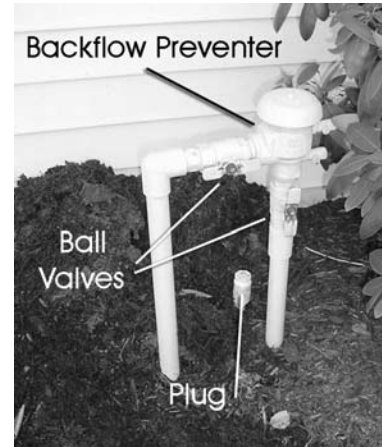
Sprinklers and Valves

Magic Sprinkler seems to do most of the opening of the sprinkler systems in the spring in our neighborhood. If you do it yourself make sure the plug outside that they used to blow the system out in the fall is tight. Put a little Teflon paste on the threads and tighten just enough that it doesn't leak. Make sure both ball valves are open. The handles should line up with the pipe. When opening the water, open the main irrigation inlet valve as fast as you can. This will result in the internal float sealing the vent of the PVB (Pressure Vacuum Breaker).

Opening it slowly may result in the float not sealing the vent

and lots of water purging from the vent area around the top of the PVB. Some water leakage is normal when opening the valve but it should stop in a few seconds.

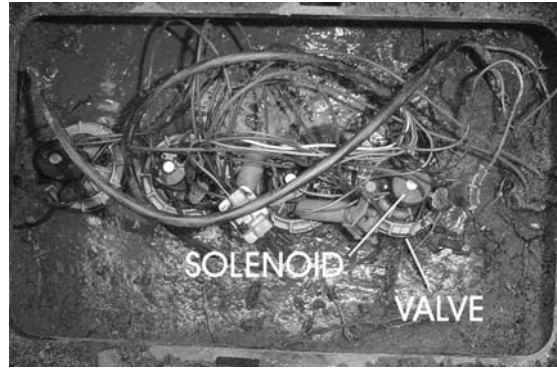
Test the system to make sure all the heads are coming up, watering in the right direction and going back down when that zone shuts off. I have a diagram of mine so if one is covered by grass and/or dirt I can locate it and dig it out. Sometimes the grass has grown so high around a head it has to be raised or a head will not rotate correctly or pop up. When replacing or cleaning a head follow these steps. Dig out a donut of sod about 18 inches in diameter at the head. Dig out the dirt around the head. I put the sod and dirt on an old shower curtain so when I put it back there is minimal mess. Remove the old head. Disassemble the head and flush with water or get a new head ready. Install the body only for the new or cleaned head. Keep the cap, spring, riser etc. off to the side. Turn on the zone for a few seconds to flush the system. Install all the parts for the new or cleaned head. Put the dirt back in the hole. Valves are relatively inexpensive so to prevent doing it over again you may just want to renew it while you have the hole dug out. If the head is low you can either dig back a little to expose more of the funny pipe and pull it up a little, then



put dirt under the fitting and valve to get it to the height you want or add a plastic pipe nipple to increase it's height.

If you have a well feeding your sprinkler system you may occasionally get sand or dirt in the pilot operated solenoid valves. If the diaphragm of the solenoid valve is damaged or dirty, it will leak.

To fix the problem you need to take apart the valve and rinse off the components or replace them. Repairing the solenoid valve itself is not hard but getting down and dirty with the valve box can be tough on your knees and back. The valve can be disassembled in place, but again, be careful of the dirt.



WARNING: TURN OFF IRRIGATION WATER MAIN BEFORE TAKING YOUR VALVE APART!

Clean the dirt or sand from around the valve. Unscrew the valve top, the valve is called a 'jar top' because of the way it screws off. Look for sand or debris under the diaphragm. Rinse off the diaphragm and quickly flush system before putting parts back together. This will clean out debris that may have fallen into the valve or pipe. If the diaphragm is worn or damaged, you will have to replace it. They cost about \$15. If there is debris under the solenoid, then you will have to take it off to clean it. **THE PLUNGER AND SPRING MAY NOT BE ATTACHED TO THE SOLENOID AND CAN EASILY GET LOST.** Rinse parts.

Quickly flush the system and then put the parts back together.

Or, you could make a cocktail, sit in your yard and watch the guy you hired to do all this.

Run the irrigation system early in the morning. This is when water pressure is typically at its best. It is also best for the lawn.

Typical Solenoid Valve



If you water in the evening the blades of grass will stay wet much longer and make it easier for fungus to grow. Early morning also has the least wind. Wind can easily blow a spray pattern several feet off target resulting in dry areas.

This and previous around the house articles can be retrieved on the web at http://www.umc-1.com/fairways_legend_maintenance_arti.htm