## Manual and Automatic In-Ground Sprinkler Systems

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Manual sprinkler systems operate with manual control valves – so that water must be turned on and off by hand. Automatic sprinklers systems use an electronic controller and solenoid operated valves to turn water on and off.

Today, most homeowners installing a new sprinkler system choose automatic systems. Not only are the costs practically the same, but automatic systems are far more convenient. However, many older homes have older manual sprinklers which may need to be replaced or updated.

## **Replace or Retrofit?**

There are several problems that occur with older manual sprinkler systems. Many were installed before the use of plastic piping became popular, and are constructed of galvanized steel piping that can corrode and reduce water flow. Also, most lack a state required backflow prevention assembly – a plumbing device that prevents fertilizers and other chemicals from entering our drinking water supply.

The sprinkler heads of the past did not offer the uniform coverage of modern heads – which makes them less efficient. And the manual valves in these older systems tend to wear out and leak, and need to be replaced.

If you want to upgrade your older manual system by installing automatic valves and a timer, you should plan on replacing the steel piping with plastic – metal piping tends to flake and can cause electric valves to fail. Also, installing new sprinkler heads can be a cost-effective way to improve your system. However, if the project also includes installing a backflow prevention assembly and converting to automatic valves, it may make more sense to simply install a new, complete sprinkler system.

To make whichever kind of system you have the most water efficient, regularly check your irrigation system for leaks, and adjust and replace worn or broken heads.