

Sprinkler Head Problems and Causes

Sprinkler head protection and alignment continues to be a problem with most home owners, residential common area irrigation systems, and municipalities. Sprinkler heads are frequently damaged by foot and vehicle traffic specifically lawn mowers and motor vehicles encroaching on lawn turf surfaces and by shifts in the soil resulting from rain or frozen ground conditions. These conditions can result in damaged sprinkler heads requiring replacement, repair, or adjustment. Unfortunately these problems usually go undetected for extended periods of time resulting in wasted water and ineffective watering patterns.

Maintaining an effective watering pattern is in part dependent on proper vertical alignment of the sprinkler head. Sprinkler heads will tend to lean as a result of several factors causing an irregular watering pattern with over and under watered patches on the lawn. Heads will lean as a result of impact by lawn mowers and foot traffic as well as any other heavy equipment that may have traversed the area in the past. Loose soil is also a common contributor to leaning sprinkler heads. Water will collect around the sprinkler head for a variety of reasons. Usually the sprinkler head is slightly depressed into the lawn surface causing a small water trap. Heavy rain alone can cause water to pool around the head causing the soil to loosen and the head to eventually tip.

Another frequent problem is the improper adjustment of sprinkler head nozzles causing a significant amount of water to leak down into the soil around the head. Improper adjustment of the head rotation can also result in water backsplash from fences and other obstacles. Usually after the installation of an irrigation system the soil needs time to settle during which time the heads may lean out of alignment. Unfortunately there will also be the occasional bad installation where the soil was not adequately packed around the head.

One common solution used by many is the concrete donut available at most large home improvement centers and lawn and garden outlets. The donuts do provide some protection against impact by vehicle traffic. The donuts lay on the surface of the lawn around the sprinkler head but have a tendency to become embedded in the turf and the soil and to eventually either fall below the level of the sprinkler head or tip in one

direction. The concrete donuts crack and break overtime requiring replacement. Because the donuts lie on the surface of the soil they do not provide any support to the head preventing it from leaning.

A solution for maintaining proper sprinkler head alignment and for providing head protection is a product that is inserted into the ground down alongside the full length of the head and has the mushroom head similar to the concrete donut for impact protection. Proper installation of a full length protective cylinder around the head provides support against tipping under most circumstances. The high impact plastic material allows enough give so as to not crack or break while being sufficiently strong to protect the top of the head. The installation of this type of solution will require more work than dropping a concrete donut around the sprinkler head but it is well the investment of time. The result is a far more stable sprinkler head that will require less maintenance and provide a consistent watering pattern for years to come.