

Repairing Common Irrigation Leaks

What is an irrigation leak?

Irrigation leaks come in all shapes and sizes but have one thing in common: they all waste water. Even small irrigation leaks are wasteful over time. Symptoms of common irrigation leaks can range from 'geysering' sprinkler heads to pooling water. These issues arise from damage associated with mowing, freezing, and normal wear and tear. Your system is susceptible to leaks no matter its age. Maintaining a leak-free irrigation system will save water and improve the appearance of your landscape.

How do I know if I have a leak?

Irrigation leaks may be quite noticeable once you know what to look for. Turn on each zone and closely inspect each sprinkler head. You may notice 'geysering' sprinkler heads, pooling water at the base of a head, pressure loss in all or part of a zone, or even soggy soil. If you observe any of these issues, you may have a leak!

How do I fix a leak?

First, identify the source of the leak. This may require you to dig to expose the leak's origin. Once you've identified the part of your system that is leaking, you will want to repair it. Many minor leaks can be easily repaired with a few good tools and simple replacement parts. Others, such as mainline leaks, may require professional assistance.



Excavation of the sprinkler head is often required to identify the source of the leak.

Learn to Identify and Repair Common Irrigation Leaks:

Pooling Water at the Base of a Sprinkler Head

Several issues could lead to pooling water at the base of a sprinkler head:

- There could be underground damage to the body of the sprinkler head. Refer to the Geysering Heads section on the reverse of this page to learn more.
- If water is seeping between the base of the riser and top of the body, refer to the Damaged Wiper Seals section on the reverse of this page to learn more.
- If water is sputtering from the nozzle, refer to our [How to Flush Clogged Sprinkler Nozzles](#) guide.
- If all sprinkler heads connected to the zone are struggling to emit water and begin to pool at the base, this may be a sign of low system pressure. This often requires professional assistance to resolve. Learn more by reading our [Difficult Irrigation Repairs](#) guide.



Pooling water at the base of the head often indicates a leak.



Some leaks result in pressure loss, which may prevent the head from popping up.

Did you know? Leaks cause pressure loss from the affected head. When the leak is significant, a sprinkler head may not have enough pressure to pop up above the ground while your irrigation is running. While these heads can be hard to identify, inspecting hardscapes for wet spots can lead you right to them. Oftentimes if you trace the path of seeping water, it will lead you to a damaged head hiding in your lawn.

Damaged Wiper Seals

The wiper seal sits between the riser and body of the sprinkler. If you notice water seeping from this area or the riser is stuck in the 'up' position, it may be time to replace the wiper seal.

Step 1: Unscrew the cap on the sprinkler body by twisting it counterclockwise

Step 2: Remove the internal assembly.

Step 3: Using two hands, push down on the spring and unscrew the nozzle counterclockwise. The spring is now under tension, so be careful not to let go

Step 4: Remove the riser's existing seal and replace it with a newly purchased one. Hold down the spring to reinstall the nozzle. Release the spring.

Step 5: Place the internal assembly back inside the body and screw on the cap.

Note: If replacing the seal while the sprinkler body is underground, ensure debris is not permitted to enter the lateral line.



Geysering Heads

A geysering head is a term that describes the manner in which water spews from a sprinkler head. This type of leak is commonly caused by impact from a lawn mower, snow plow, or even a rogue soccer ball! Repairing this type of leak depends on the damage to different parts of the sprinkler head.

Missing or Damaged Nozzle

Step 1: Attempt to locate the missing/damaged nozzle. If you cannot locate it, identify an adjacent sprinkler head on the same zone. Take note of the nozzle model and desired throw distance and arc.

Step 2: Purchase your replacement nozzle according to your needed model, throw distance, and arc.

Step 3: Turn the zone ON and place sprinkler pliers on the base of the affected sprinkler head's riser. Then, turn the zone OFF and install the replacement nozzle by threading it clockwise.

Step 4: Turn the zone ON and adjust arc and/or throw distance on the new nozzle, if needed.

Missing or Damaged Riser or Body

Step 1: If the riser or body is damaged, it is recommended that you replace the entire head. Begin by digging a 6-8" deep hole around the affected sprinkler head. This will expose the sprinkler body connection to the irrigation system.

Step 2: Unscrew the existing body from the lateral line. You may need a nipple extractor to remove any broken parts from the lateral line.

Step 3: Purchase a replacement body of the same model and install on the lateral line. If the existing nozzle is in working condition, remove it from the sprinkler head and install it on the new head. Turn the zone ON and inspect your work before refilling the hole to ensure the leak is repaired.

Don't see your sprinkler issue? Check out our other resources to learn more about water seepage:

- [How to Fix Low Head Drainage](#)
- [How to Flush Clogged Sprinkler Nozzles](#)
- [Repairing Dripline Leaks](#)

Pro Tips:

- Be sure to prevent debris from entering your lateral lines
- Use plumber's tape to secure a seal between the body and lateral line.