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Leak Seeking

A leaking pool or spa can be costly, with devastating consequences. Here's how service technicians can spot them early.

othing causes more anxiety for a pool owner than having a leak in his vessel. Aside from the monthly water bills, which can exceed more than \$800, the leak can cause a lot of property damage. It's especially frustrating if the pool owner uses a weekly service company.

Though leaks are subtle and difficult to notice, a vigilant service professional can follow tests and procedures that will confirm any potential problems. This column offers a closer look at the step-by-step procedures that technicians can perform to determine if a pool has a leak.

Warning signs

There are several indicators that a leak may exist somewhere in the pool – be it in the plumbing, equipment or shell. Remember, a 1-inch water-level drop in an average-size pool equals approximately 500 gallons. If a pool's waterline decreases an inch a day (on average, most are only 96 inches deep), it doesn't take much to see what sort of damage displaced water can do.

Take note if any of the following warning signs occur in a customer's pool:

- The waterline has dropped or stayed stable despite long periods of rain.
- There are wet, soggy areas around the equipment pad and surrounding lawn.

■ Trees and plants in the yard inexplicably start to die. In one case, excessive water from a leaky pool killed a 150-year-old oak tree.

The customer notices a significant increase in their water bill.

- The customer finds a significant increase in their heating or gas bill. If the pool has a heater, a leak will cause a jump in costs because it's forced to warm up cold water over and over again as the vessel is refilled.
- You see that a lot of air is in the system and the pump is having a difficult time staying primed. There could be an underground leak in the suction line from the skimmer or main drain.
- The pool water never seems to balance correctly. You find yourself using more chemicals, such as TA and pH adjusters, than normal. In addition, the water seems to be going through unusually high levels of chlorine despite low bather loads, or the water may appear cloudy.

If any of these red flags appear, perform the following test to confirm your suspicions. Here's how it works:

Sure-fire test

In the pool-leak detection business, there's something known as the standard bucket test. It's simple to perform and a sure-fire way to determine if the problem is a leaky pool.

A drop in the bucket



For a simple bucket test, use a waterproof marker to draw a line inside a clean, 5-gallon bucket.

Fill the 2 water up to the line. It should be the same temperature as the surrounding water, so take it from the pool.





Place the partially filled bucket on the pool steps and note the water level on the outside of the bucket.

Use the marker to indicate the water level on the bucket's exterior. Put the container back on the steps.





5 Return in 24 hours. Based on the lines you drew, if the water level is lower inside the bucket than outside, there may be a leak.