### HOW TO LOCATE A LEAK

Finding and fixing leaks can save homeowners money on their water bills and save thousands of gallons of water per year.

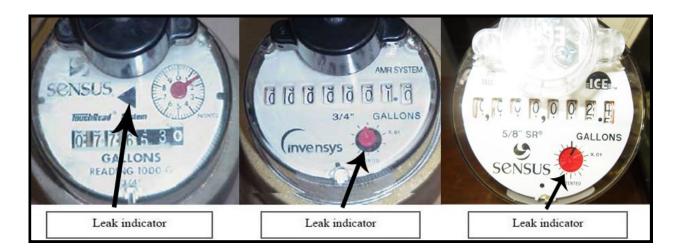
To learn how to track down hidden leaks, first you will need to isolate the leak and determine its source through a process of elimination.





Read on to learn how to isolate leaks that are common indoors and out. You will also find information about how to fix the leaks you find.

#### How to Read your Water Meter



Analog meters have a flow indicator on the face of the meter. These will turn when water is flowing through the meter, even small amounts.



Digital meters have a lid which must be opened to access the face. The reading will only be visible for a short time. It will shut off after a moment to preserve battery strength. If this happens shut the lid securely, wait a moment and open it, the reading should be visible once again.

There are 2 ways a digital meter indicates water flow.

- 1. Below the digits is a circle with a + sign. If this is pulsing, water is flowing through the meter.
- 2. The digit to the far right is 1/1000 of a cubic foot (0.00748 gal.) If that is changing water is flowing through the meter.

If either of these conditions are present when no water is running in the house or irrigation system, it is highly probable that you have a leak.

# MAIN SERVICE LINE

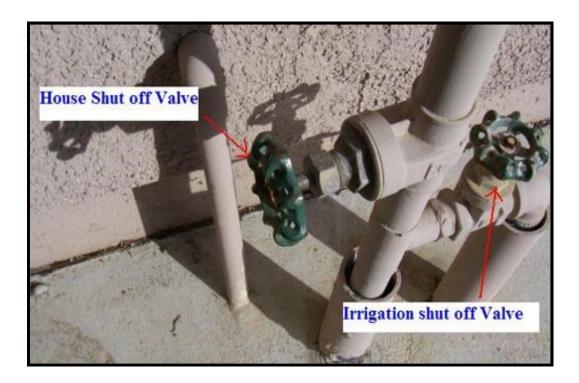
Turn off all water inside and outside your home. Check the flow indicator on your water meter. If it continues to turn you may have a leak.

Locate your water shut-off valve, usually located near your front hose bib. Turn the valve to the right to shut it off.

Return to the meter and check the flow indicator.

If it is moving, the leak is most likely between the shut-off valve and the water meter.

If the leak indicator has stopped moving, the leak may be in the irrigation system, household plumbing or another area of the home.

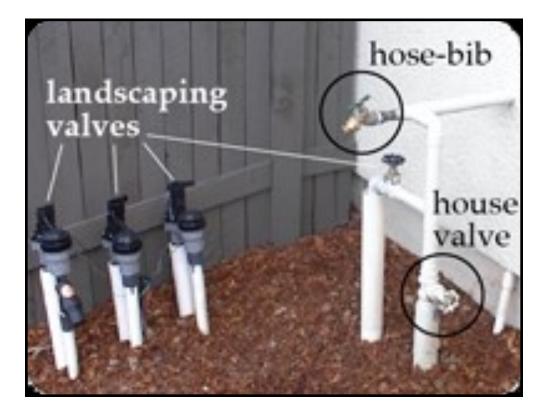


# **IRRIGATION SYSTEM**

If your water meter flow indicator is turning and all known sources of water are off, check to see if there is a leak in your irrigation system. Turn off the irrigation supply valve, generally located near the house shut-off valve and front hose bib.



Check the flow indicator again. If it has stopped turning, you have a leak in your irrigation system.



Inspect areas around the valves or valve manifold for leaks and/or pooling water.

Walk your property to check for muddy, soggy areas or bubbles under the turf. Check to see if water is weeping out of any sprinkler heads or drip emitters.

These can be clues to locate malfunctioning valves or cracked equipment within your irrigation system.

You may want to turn each valve off one at a time, checking the meter after each valve is turned off, to try to determine which valve zone the leak is in.



You will want to promptly repair the irrigation system yourself or hire a landscape professional to help.

#### **POOL OR SPA**

Turn off the automatic fill valve. Place a bucket on a step where the bucket rim is at least a few inches above the water line.





Place a heavy weight in the bucket and add water until the water level inside the bucket is equal with the water in the pool.

Leave the bucket in the pool undisturbed for several warm days, then compare the water level in the bucket to the level in the pool.

If the water level in the bucket is noticeably higher than the water level in the pool, you may have a leak in your pool. Contact a pool leak detection specialist for more help.



### TOILETS

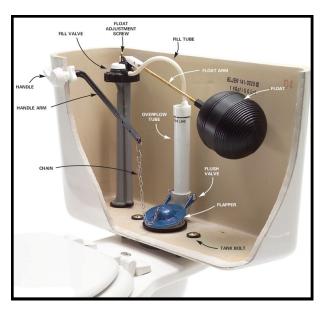
More than twenty percent of toilets have a leak. To determine if your toilet has a problem, start by listening. Does your toilet sound like it is running constantly? Or does it sound like your toilet is periodically refilling? Read on to determine what kind of a problem you may have and how to fix it.



# **CONTINUOUS TRICKLING TOILET**

If you hear your toilet running constantly, the water may be running over the top of the overflow tube inside the tank.

To remedy this problem, remove the toilet tank lid and look inside. Flush the toilet to see how everything functions and look for any obvious problems.



Make sure the water refill level is set properly and does not rise over the top of the overflow tube.

Lower the float to reduce the water level if needed. If you have a bulb-on-arm style toilet, adjust the screw where the float arm attaches to the float valve.

If you have a newer valve and float toilet, adjust the float by moving it downward on the vertical rod. If your toilet continues to run after these steps, you should replace the refill valve.

You may want to contact a professional plumber for help.

# PHANTOM FLUSHING TOILET

If your toilet sounds like it is refilling periodically, you probably have a worn rubber flapper or an improperly adjusted flapper chain allowing water to leak from the tank to the bowl.

To determine if this is your problem, conduct a dye test using leak detection dye tablets or food coloring.

Place the dye tablets or coloring agent in the tank. The water in the tank should change color, but the water in the toilet bowl should remain clear.

Wait five minutes and check to see if any coloration appears in the toilet bowl. If the water in the bowl has changed color, the problem is either a leaking flapper valve or the flapper chain needs to be adjusted.

Flappers are cheap and easy to replace. Be sure you buy the flapper model appropriate for the toilet you have to ensure a proper fit.









Before replacing any parts on your toilet, be sure to follow the part manufacturer's installation instructions and turn off the water supply valve to the tank (usually found on the wall behind the toilet). When turning off the water supply valve to the toilet, simply turn the knob until it is snug but not tight to prevent it from breaking off or coming loose.