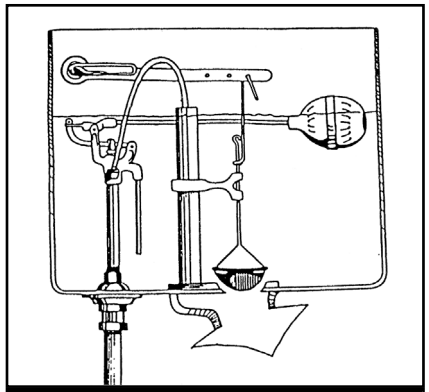
Leaky Toilets

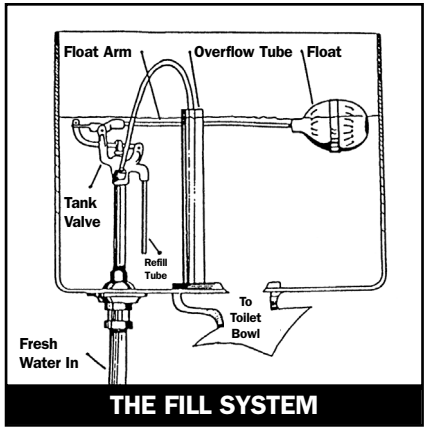
Leaky toilets cause the greatest water loss in the home, yet such leaks continue unnoticed and are often hard to detect. Here are some ways to find leaks in toilets and an explanation of how toilets work. There is much more information available on the Internet and from professional licensed plumbers.



INSIDE THE TANK

How to Find Leaks

1. **Raise tank level**
   Take the cover off the toilet tank. Press down on the float until the water level rises about ½ inch. With a pencil, mark the inside of the tank at this higher water level. If the water level drops after several minutes, there is a leak in the toilet tank.
2. **Look and Listen**
   Take the cover off the toilet tank and see if the water is running into the overflow tube. Carefully listen for running water. In some cases, only extreme leaks can be seen or heard.
3. **Watch for water meter movement**
   Test your entire building for leaks. Check all faucets to see they are turned off tightly. Next, find the water meter located at the point the water enters the building, usually in the basement. Open the lid and check the number on the counter. Wait 15 minutes and check the meter counter again. If the number has changed, there is a water leak in the building, and most likely, it is a leaky toilet.



THE FILL SYSTEM

Parts of a Toilet

Tank Valve (Ballcock)

The tank valve controls the water that fills the tank through the refill tube and the bowl through the overflow tube. Check for a defect in the tank valve by removing the tank cover and, without flushing, see if water is flowing into the overflow tube. The correct water level in the tank is approximately one inch below the top of the overflow tube. Like most valves, this one has a washer in it that can become worn and cause leaking. If the valve is sticking, apply oil to its lever joints or the valve plunger.

Float Arm

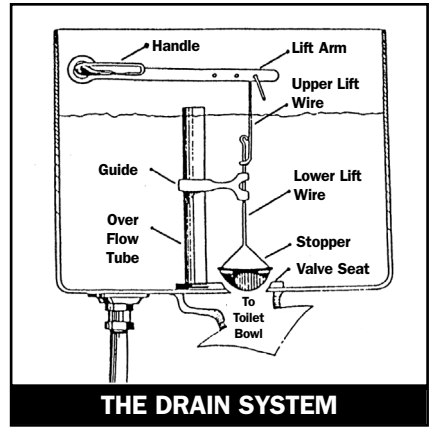
The float arm connects the float to the tank valve. A float arm that is improperly bent upwards may prevent the float from reaching its full height. If water is continuously running into the overflow tube, try this test. Lift the float arm. If the water flow stops, the trouble is probably with the float or float arm. Carefully straighten the arm or bend the arm downward to lower the water to the proper level.

Float

The float senses the water level and in turn controls the water flow through the tank valve. If the float contains water, replace it. Adjust the float arm so the float does not rub on the tank wall.

Handle and Lift Arm

The handle operates the lift arm to begin the flushing cycle. If the arm is bent, straighten it. A bent arm can rub or catch on the inside wall of the tank. Check to make sure any decorative toilet tank coverings are not caught between the handle and the tank to jam the mechanism. Bricks or toilet cleaner and deodorizer containers placed in the tank may also cause problems.



THE DRAIN SYSTEM

Lift Wires and Guide

The lift wires transfer movement of the arm through the guide to the stopper. Check to make sure the stopper freely drops into the exact center of the valve seat. If not, align the guide or straighten the lift wires.

Stopper and Valve Seat

The stopper and valve seat combination controls water leaving the tank through the discharge opening to the bowl. A stopper that has improper fit, is old and hardened, or fails to drop tightly into the valve seat must be checked or replaced. Sometimes the stopper or valve seat is covered with a slimy coating. Wipe this off with a paper towel — the coating will stain hands and cloth.

Overflow Tube

The overflow tube drains excess water directly into the toilet bowl and also allows water to fill the bowl. The correct water level in the tank is approximately one inch below the top of the overflow tube.

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