

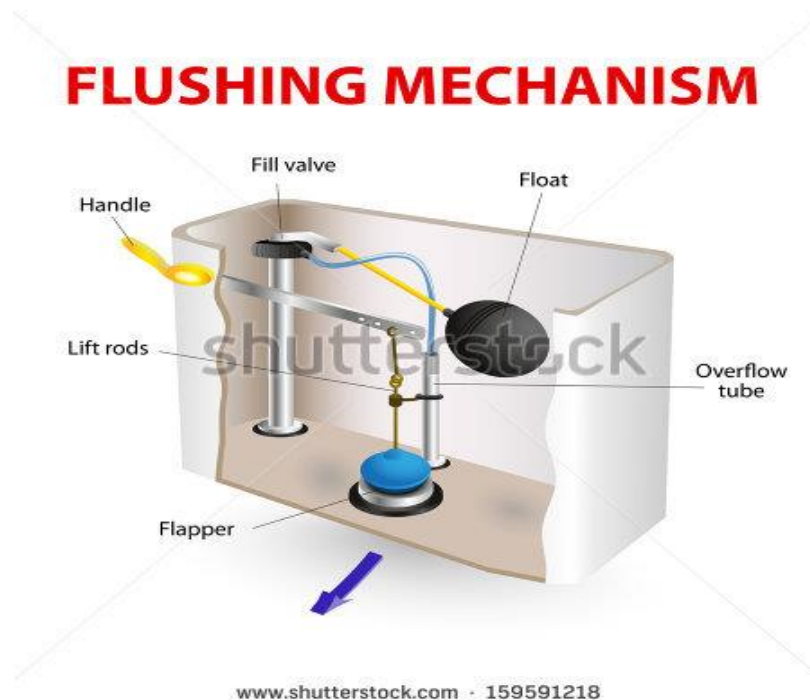
## LEAKY TOILETS - WATER & WASTEWATER

Leaking toilets are the most common cause of high water bills. Most people are more likely to repair leaking faucets because the drips are visible, whereas leaking toilets go unnoticed much of the time. While toilet leaks are often difficult to detect, some signs can help.

### Signs of a leaking toilet:

- You have to wiggle the handle to make a toilet stop running.
- You hear sounds from a toilet not being used.
- You have to hold the handle down to allow the tank to empty.
- You see water running over the top of the overflow. This is a sign that the refill valve is leaking. If you are unsure whether or not water is running over the top of the overflow pipe, sprinkle talcum powder on top of the water in the tank, and you can clearly see whether or not it is.
- You can see water trickling down the sides of the toilet bowl long after it's been flushed.
- Water drips out of the refill tube into the overflow pipe.
- A toilet runs for 15 seconds or so without you touching the handle.

### Diagram of a Toilet



## The Dye Test

Even if your toilet shows none of the symptoms above, it could still have a silent leak. A dye test can indicate whether or not your toilet is leaking. If the test shows the toilet is leaking, a second diagnosis test can pinpoint which part of the tank is affected and in need of repair.

### Dye-test instructions:

- Remove the toilet tank cover and carefully set it aside.
- Remove any 'in-tank' bowl cleaners that colour the water. Begin the test with clear water in the tank and bowl.
- You'll need some dye. Food colouring or instant coffee works well. Place enough dye in the tank's water to obtain a deep colour.
- Wait thirty minutes and make sure nobody uses the toilet. If, in 30 minutes, you find any of the dyed water has made its way into the toilet bowl, your toilet is leaking. A properly operating toilet will store water in the tank indefinitely without any water running into the bowl.

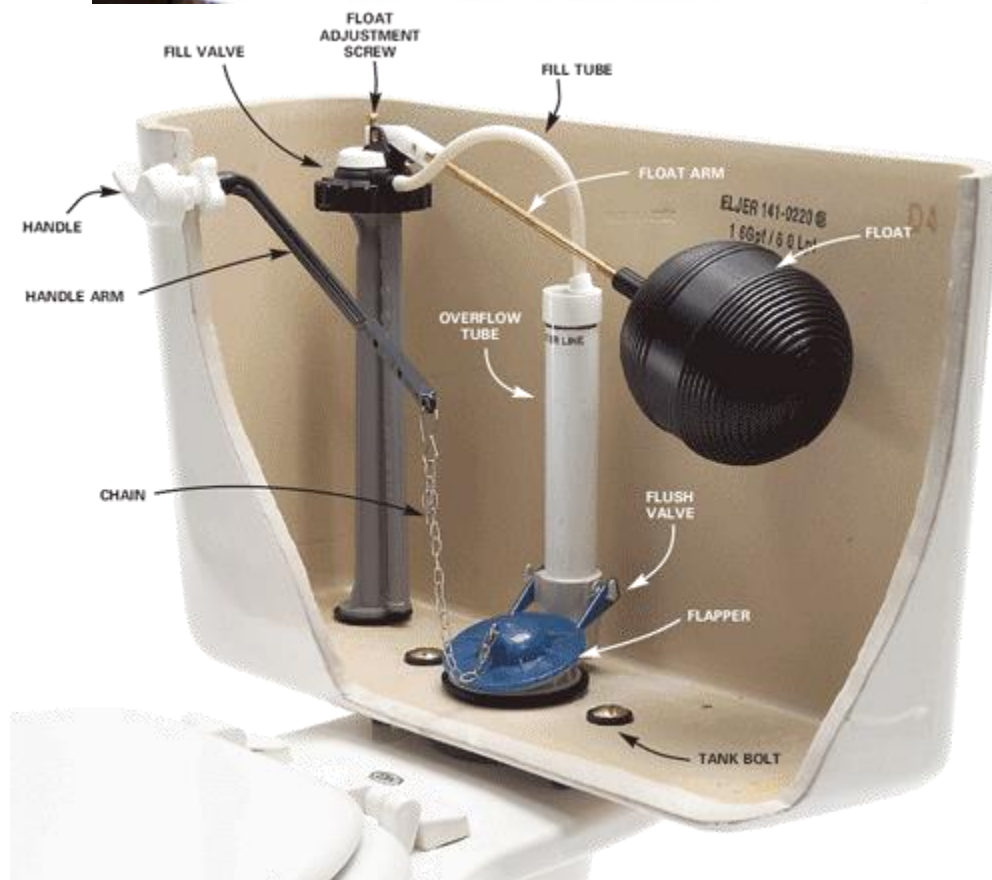
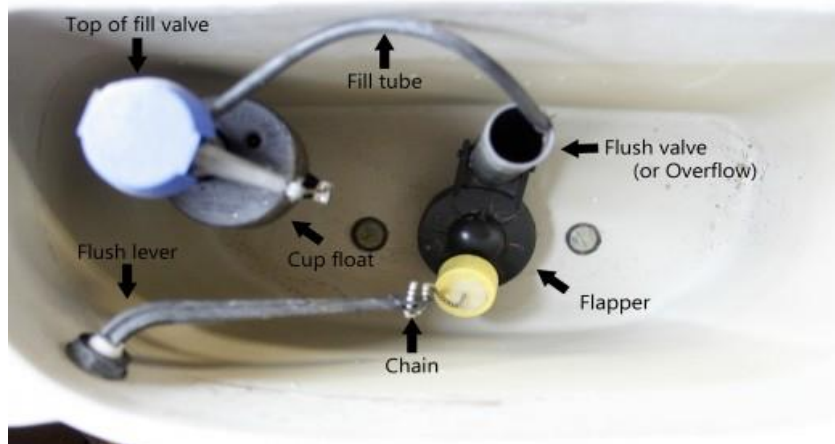
## The Diagnosis Test

If the dye test reveals your toilet is leaking, conduct a diagnosis test to pinpoint exactly where the leak is coming from. In most cases, the flush valve or the refill valve is usually the cause of leaking toilets.

### Diagnosis-test instructions:

- Draw a pencil line on the back wall of the tank on the inside of the tank at the waterline.
- Turn the water supply off, either under the tank or at the main shutoff.
- Wait 20 to 30 minutes. If the water level remains at the pencil mark, the leak is occurring in the **refill valve** (the unit in the left side of the tank). If the water level falls below the pencil mark, the leak is occurring in the **flush valve** (the unit located in the centre of the tank).

## Diagrams of toilet tanks



## The third test

If you've repaired both the refill valve and the flush valve, and your toilet is still leaking, there is one more test that can help you pinpoint the problem.

Instructions: This time, turn the water off to the toilet at night, before going to bed. In the morning, check the water level.

If there's about one inch of water left in the bottom of the tank and the water level is even with the edges of the seat, the leak is either caused by a bad stopper (ball or flapper) or a damaged seat.

If the tank is almost entirely empty, and the water level is below the edges of the seat, the leak is caused by a damaged gasket under the flush valve. This means the tank will have to be separated from the bowl in order to get to the connections.

If you only have one bathroom and must use the toilet during the night, flush the toilet with a bucket of water from the bathtub. Fill a scrub bucket with water and dump the water into the bowl all at one time. It will clear the bowl.

Repair immediately

Have your toilet repaired right away. If your toilet is an older 22-litre model, consider replacing it with a modern 6-litre low-flow toilet. Not only will you save water, you will incur significant savings on your water and sewer bill.

## Other possible problems

If you notice water on the floor near a toilet, the following problems could be present:

- Condensation could be forming on the tank during humid weather
- The wax-sealing ring under the bowl may have disintegrated
- The bowl may be cracked
- The connections under the tank may be leaking

If you are unable to repair your toilet by yourself, call a professional plumber.