



## WATER OPERATIONS DIVISION

### *Did You Know.....*

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 of a leaking toilet can help.

#### Signs of a Leaking Toilet:

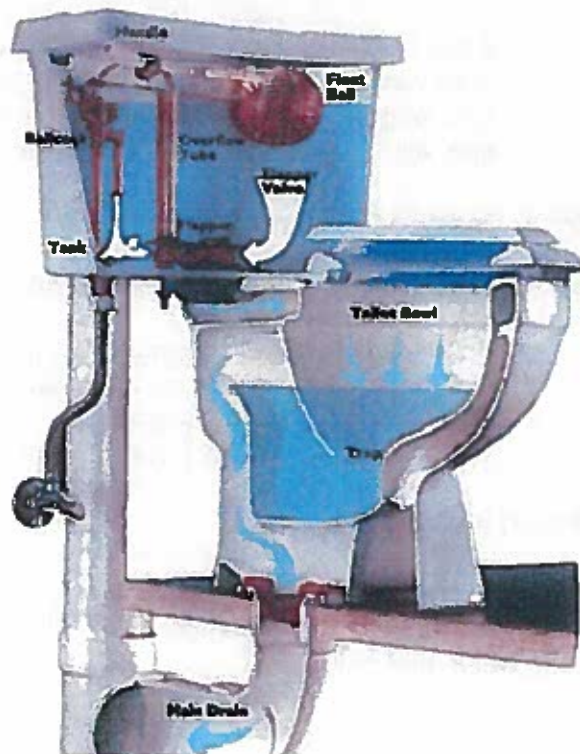
- You have to wiggle the handle to make a toilet stop running;
- You hear sounds from a toilet that is not being used;
- You have to hold the handle down to allow the tank to empty;
- You see water running over the top of the overflow (inside the tank cover). *This is a sign that the refill valve is leaking or needs adjustment. If you are unsure whether or not water is running over the top of the overflow pipe, sprinkle a little 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 (inside) long after it's been flushed;
- Water drips out of the refill tube into the overflow pipe;
- A toilet runs or refills without you touching the handle.

Even if your toilet shows none of the symptoms above, it could still have a silent leak which will cause a high water bill. There are three kinds of tests that can determine if your toilet is, or is not leaking:

#### The Dye Test:

1. Remove the toilet tank cover and carefully set it aside.
2. Remove any 'in-tank' bowl cleaners that colour the water.
3. Begin the test with clear water in the tank and bowl.
4. Using food colouring or instant coffee, place enough dye in the tank's water to obtain a deep colour.
5. Wait 30 minutes:
  - if you find that 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.

If the dye test shows the toilet is leaking, a second diagnostic test can pinpoint which part of the tank is affected and requires repairing.



### **The Diagnostic Test:**

1. Draw a pencil line on the back wall of the toilet tank on the inside of the toilet tank at the waterline;
2. Turn the water supply off, either under the toilet tank or at the main shutoff;
3. Wait 20 to 30 minutes:
  - If the water level remains at the pencil mark, the leak is likely occurring at the FILL VALVE or BALLCOCK (the unit on the left side of the tank with the float attached).
  - If the water level falls below the pencil mark, the leak is likely occurring in the FLAPPER VALVE (the unit located in the bottom centre of the tank).

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

### **The Third Test:**

1. Turn the water off to the toilet at night, before going to bed. *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 bucket with water and dump the water into the toilet bowl all at one time. It will clear the toilet bowl.*
2. In the morning, check the water level:
  - If the level of water is lower or the level of water is even with the edges of the tank flapper, the leak is caused by a bad flapper valve or a damaged toilet flapper valve seat.
  - If the tank is almost entirely empty and the level of water is below the edges of the toilet valve seat, the leak may be caused by a damaged gasket under the flapper valve. This leak can appear on the floor around the base of the toilet. This means the toilet tank will have to be separated from the toilet bowl in order to change the gasket.

### **Other Possible Problems with the Toilet**

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

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

### **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 savings on your water and sewer bill.