

Conserving Drip by Drip

By Bill Teeter

Of all the minor maintenance problems we face in our homes and businesses, one of the more persistent and irritating is leaks from faulty toilet tank mechanisms.

Normally, the tipoff for this leak is the hissing noise coming from the tank as it automatically refills after slowly draining stored water from the tank into the bowl. As with those other mundane household tasks which many people try to avoid, you may be tempted to close the bathroom door to deaden the noise and put it off until later.

However, this problem merits quick action. By some measures, what is happening in your commode's tank may qualify as a slow leak, but if not stopped, the slow-but-steady cycle of draining and refilling could mean water losses exceeding 3,000 gallons over a month. By stopping the leak promptly, you can dodge unneeded water charges and conserve water.

The most common cause of slow leaks is a leaky flapper that allows water to trickle into the bowl. After so many uses, the chains, hinges and flapper comprising the flush mechanism become worn or entangled, and the leak begins.

When you find yourself with this problem, first check the flapper chain to see if it is pinned under the flapper or catching on something that is holding the flapper slightly open. Check to see if the flapper is stuck barely open by mineral build-up on the flapper or the seal below it. If mineral build up is the problem, try removing any uneven build-up by rubbing it off with a sponge or steel wool.

Also, see if the flapper hinge has worn or if the flapper is not aligned with the opening.

If the condition of the parts warrants replacement, hardware stores carry replacements.

To add a little historical context, this kind of leak is an old problem. Flush toilets have been common at least since the late 19th Century. Although toilet manufacturers have employed different mechanisms over the flush toilet's history, most people know best the flapper flush device, which has been around for decades. For instance, American-Standard, one of the country's largest toilet makers, states they started using flappers in the early 1950s.

So, when it comes to toilet flapper leaks, you're dealing with a problem that your grandparents faced way back when. However, there is a whole community of companies intent on finally finding a solution to this problem.

One firm has designed a replacement flush device to stop continuous refilling and leaking from the toilet tank. Aqua Miser, the company that makes the device, says it uses more resilient materials in its flapper so it will wear out much more slowly.

Additionally, the flapper's design allows for a higher velocity flush with less water. Some parts usually made from metal are of plastic, instead. Plastic parts have an advantage in that they do not attract scale or corrode, as metal parts do.

Importantly, the Aqua Miser has a fill valve which keeps the tank from automatically refilling if a slow leak occurs past the flapper, or if another leak occurs that also empties the tank.

The point is that your toilet, depending on its age and model, may take more than 2 gallons to refill. This device could prevent the drain-and-refill cycle from continuing for hours while you are at work, or worse: for days while you are away on a trip.

The City began a test of the Aqua Miser devices about six months ago and initial results are promising. Any Horseshoe Bay residents who would like to try one for free should contact City Hall to let us know. We have a limited supply on hand, and we'll let our residents have them for free (as long as the supply lasts) in exchange for their opinions of how well they work.

One more point about toilet tank leaks: It is vital to check your toilet for leaks periodically even if you do not hear the refilling noise. Often, a leak is so slight it may not cause the tank to recycle before the commode is used and flushed. This silent leak is insidious, because while it wastes water more slowly, it happens over an indefinite period, again possibly losing thousands of gallons.

To help you find such leaks, free leak detectors are available at the City Hall lobby at #1 Community Drive. The kits contain blue dye tablets. Simply drop a tablet in your toilet tank, wait 15 minutes, and see if the color has seeped into the bowl. If you see color in the bowl, you know a leak exists.

If you have questions about toilet tank leak detection or need other water conservation information you can call the City at 830-598-9973. You can also look at the City's Water Conservation web page at horseshoe-bay-tx.gov/website/WaterConservation.

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