

## How to Replace a Leaking Toilet Fill Valve



### Toilet Fill Valve

To replace a leaking toilet fill valve, you'll need a new replacement valve and some common household tools. The toilet fill valve, also called a float valve, controls the level of water in the toilet tank, refilling it after each flush. When it wears out, it runs constantly, filling the tank until water drains down the overflow tube. Here's how to fix the problem.

#### Instructions

##### Things You'll Need:

- New toilet fill valve
- Pliers
- [Scissors](#)
- Tape measure or ruler
- Bucket, bowl, etc. to catch water drips
- Sponge
- Old towels for clean-up, etc.

#### 1. Step 1

Remove the lid from the tank, and find the overflow tube. If the water level is below the top of the tube, then the fill valve is probably NOT the problem; it's more likely a leaky flapper valve, at the bottom of the tank. This will make the toilet start and stop running, over and over, while a bad fill valve will run more or less continuously. If the flapper is leaking, see the article in Resources "How to Fix a Toilet Flush Valve".

#### 2. Step 2

Shut off the water supply to the toilet, either at the valve behind it or at the main shut-off to the house. Shown is a 1/4 turn valve; yours may be a multi-turn type. Turn clockwise to close the valve.

#### 3. Step 3

Check for scale or rust in the valve: Remove the top of the valve, by grasping the float arm and turning counter-clockwise. Inside, check for crumbs of sand or scale preventing the gasket from sealing. If there is, flush it out by turning on the water briefly. Put the top back on securely, turn on the water, and see if the problem is solved. If not, or if you couldn't get the valve apart, go to the next step.

4. Step 4

Flush the toilet, and hold the lever to empty as much water out of the tank as you can. Use a sponge or towel to mop out the rest.

5. Step 5

Disconnect the supply hose from the bottom of the tank, turning counter-clockwise. Keep a bucket, etc., under it as you remove it. Then, loosen the nut holding the old valve, again turning toward the left. Use pliers if necessary (for loosening only!). Remove the old fill valve from the tank.

6. Step 6

Following the instructions for the new valve, adjust it to the proper height, either by matching the old unit, or using a tape measure. All code-approved valves have a "critical level", or "C.L." line marked on them. This must wind up being 1" above the top of the overflow tube, once installed.

7. Step 7

Wipe away any scale or crud from around the hole in the tank. Install the shank washer on the threaded end of the new valve, and install the valve in the tank with a plastic nut. Turning clockwise, tighten by hand only; using pliers could break the tank. Make sure the float and arm are free to move up and down.

8. Step 8

Reconnect the supply hose to the bottom of the valve, using the included fittings as needed. Tighten clockwise by hand. Connect the new refill tube to the attaching clip, and clip it to the top of the overflow tube. Then cut the refill tube to length, using scissors, and connect to the nipple on the valve.

9. Step 9

Turn on the water, and check for leaks under the tank. Re-tighten fittings if needed. The tank should fill to a level about an inch below the top of the overflow tube. Adjust the float height according to instructions, and replace the tank lid.