

PROJECT 15

# REPLACE A TOILET FILL VALVE



## Replace a Toilet Fill Valve

**TIME:** 1½ hours

**EFFORT LEVEL:** Basic to intermediate

**TOOLS AND MATERIALS:**

- New fill valve kit
- Wrench or adjustable pliers
- Screwdriver
- Sponge
- Bucket

**INSTALLATION TIPS:**

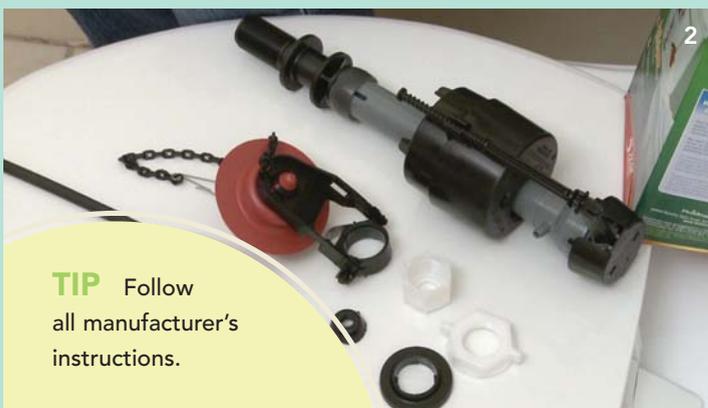
- If the water level in your tank is too low, it will prevent the bowl from adequately flushing.
- The coupling nut is not put on using the old “righty-tighty” adage. Remember it goes on counter-clockwise.

OKAY, SO YOU ARE AT PLAN B. Honestly, replacing a fill valve is no biggie. Of course, you can make a big deal and brag to your friends how you saved the day by laboring and sweating to fix that darn toilet...we won't tell.

Fill valve replacement kits are fairly standard. Pick up a quality kit from your favorite hardware store. Familiarize yourself with the unit and read the instructions that come with it.



**TIP** Be gentle with older valves—they can become brittle and break!



**TIP** Follow all manufacturer's instructions.

**1** Shut off the water at the toilet's shut-off valve. Now if your valve is old or corroded, you might have to use a pair of pliers to turn it. Using a little WD-40 might help, too.

**2** Now open up that kit and make sure yours has all the parts that the box says are supposed to be in there. Lay them out on the sink or on the closed toilet lid so they are easy to reach as you are working.

**3** Take off the tank's lid.  
**4** Flush the toilet several times, to minimize the amount of water in the tank.

**4** Absorb the rest of the water with a sponge. This last step is important because when you remove the fill valve there will be an opening in the bottom of the tank—whatever water remains will drain out and create a mess.

**5** From underneath the tank, disconnect the water supply line at the tank. Using your pliers, remove the nut underneath the tank that is holding the fill valve in place. If it is an old toilet with rusted nuts you may need some lubricating spray.

**6** Disconnect the chain on the flushing arm from the rubber flapper at the bottom of the tank.





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**7** You will notice that the plastic tube from the old fill valve is clipped to the overflow tube. Unclip this tube to release the old valve.



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**8** Inside the tank, your fill valve will also have a nut and washer at the base of the tube. Loosen the nut and lift the old fill valve out.



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**9** Unclip the flapper ...



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**10** Attach the refill tube to the side of the valve body. It is a very tight fit, so don't give up!





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**11** Look on the side of the fill valve body.

There is a line that shows you the “critical level” mark. It is very important that this mark is 1" above the top of the overflow pipe. It is a standard plumbing code to ensure proper installation.



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**12** Put the fill valve down in the tank and measure across from the overflow pipe. If the critical level mark isn't 1" above the pipe you may have to cut the overflow pipe.



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**13** Our model actually is adjustable, so after measuring the difference in height, twist the bottom of the fill valve to achieve the necessary 1".



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**14** Set the fill valve into place down in the tank. Make sure the shank washer is firmly seated. Then, from underneath the tank, tighten down the locking nut on the valve shank securing it to the tank. Just don't over-tighten this nut as it may crack and cause your tank to leak! Yikes! Reattach the water supply line to the shank.

**15** Back inside the tank, attach the refill tube to the overflow pipe using the angled clip. You can trim this tube if it is too long. We kept our original overflow pipe in place because it was working correctly.

**16** We attached the new flapper to the overflow pipe. Make sure that your new one will seal the flush valve opening at the base of the overflow pipe if you are not replacing it. If it doesn't, you will have a leak causing your toilet to constantly run.

**17** Take the chain that is connected to the flapper and attach it to the lever arm. You will have to tweak where to position the chain until you can raise the lever when flushing the toilet and the flapper is fully seated on the flush valve.

**18** Make sure all your connections are tightened and then reach underneath to turn the shut-off valve back on to start



PROJECT

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## REPLACE A TOILET HANDLE

