Replace Your Toilet

- ✧ Changing your broken or outdated toilet is easier than you may think.
- ✧ There are two main types of toilets that look very similar, but have some different operations.
- ✧ Both meet the federal law that states that new toilets can only use 1.6 gallons of water per flush.

1. **Gravity-operated toilet.** This is the most commonly used toilet today. It regulates the inflow of water. They're best used in houses that have low water pressure.
2. **Pressure-tank toilet.** This kind of toilet pressurizes the water when it is filling, and rapidly releases the pressure when flushed. This action causes the water to be forcefully pushed from the toilet. A possible drawback for this kind of toilet would be the loud noise made when flushing. This is a good toilet for places where the sewer is far away, like in the country, or if your toilet often clogs. The greater amount of pressure helps to break up debris in the pipe.

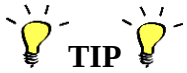
- ✧ Prices can range from relatively cheap to ridiculously expensive. Simply choose the model, type, color, and shape that you want in your home.

Measure first. Before you go out and spend all that money, make sure the toilet will fit. Be sure to measure the distance from the wall to the pipe that is in the floor. Measure from the wall, not the baseboard, to the center of the bolt that holds the toilet to the floor. Measure to the closest bolt if there are two. The typical distance is 12 inches, but yours could be more or less.

Checklist:

- ❑ Sponges and rags
- ❑ Plunger
- ❑ 8-inch adjustable wrench
- ❑ 8-inch flat head screwdriver
- ❑ Hacksaw
- ❑ Pan
- ❑ Putty knife
- ❑ Wax or rubber closet seal
- ❑ Toilet
- ❑ Parts for inside the tank: ballcock, flush valve, handle, handle lever, rubber flapper, chain flapper (These parts come with a new toilet pre-assembled)
- ❑ Brass closet and tank bolts (some toilets may come with these, but they're probably plated steel. You want brass.)
- ❑ Level
- ❑ Spud wrench or 10-inch channel-type pliers
- ❑ Flexible supply tube (if the old one won't reach the new tank)
- ❑ Tubing bender (only if using a new supply tube)
- ❑ Tubing cutter (only if using a new supply tube)
- ❑ Brass compression fittings
- ❑ Pipe joint compound

- Adjustable wrench



There are different kinds of ballcocks you can purchase. The longer lasting and more water efficient one is the float cup ballcock. It regulates water better and is made from plastic, which protects it from rust and warping. Avoid the ballcock made from brass, which can bend and warp.

Removing Old Toilet

One: Empty toilet.

- Turn off the angle stop, which is located at the lower left of the toilet. This will shut off the water to the toilet.
  - If you don't have an angle stop shutoff valve by your toilet, shut off the water at the main shutoff valve in the basement.
- Get rid of the remaining water in the tank by flushing, and then use a plunger to force the rest of the water into the bowl.
- Then soak it up with sponges.

Two: Take off the supply tube.

- Disconnect the tube that attaches from the angle stop to the toilet tank. This is called the *supply lead tube.*
  - Unscrew from the tank.

Three: Remove tank.

- If you have a one-piece toilet, skip this step and proceed to step four.
- If you do not, remove the tank cover, and mop up the inside.
- Reach inside the tank and unscrew the bolts that attach it to the toilet.
- Use your 8-inch wrench to hold the nut that is under the tank, and use the screwdriver to turn the bolt.
- Lift the tank off.

Four: Detach bowl from floor.

- Be ready to get water on your floor.
- Take off the caps that are over the bolts in the floor.
  - Unscrew these nuts using the 8-inch wrench. (You might need a hacksaw to remove these nuts if they are corroded.)

- ❑ Tilt the bowl forward, and rock it from side to side.
- ❑ Pick the bowl up from the floor.
  - There is often less spilt if the bowl is titled forward.
- ❑ Put a rag into the pipe leading from the floor, keeping sewer gases from coming into the bathroom.
- ❑ Pry up the old wax seal around the pipe on the floor with a putty knife.
- ❑ Remove the old bolts from the floor, even if you didn't have to cut them with the hacksaw.
- ❑ Replace these with the new bolts that you bought, or that came with your new toilet.

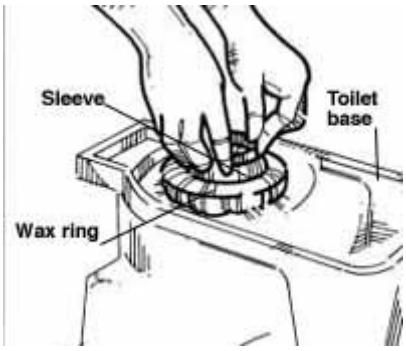
TIP

To reduce the amount of spillage, put a pan next to the toilet. When you remove the owl, dump the excess water into it. A manual siphon pump can be purchased for about $4 and can easily remove water from the tank and toilet bowl.

Installing your new toilet:

Five: Attach wax seal.

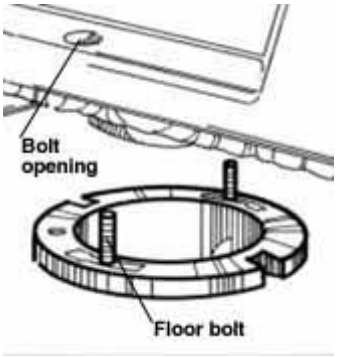
- ❑ Turn the new bowl over, and place the wax or rubber seal around the hole.
- ❑ Put the new wax ring over the drain horn.
  - If the ring has a rubber or plastic sleeve, the sleeve should face away from the toilet.
- ❑ Apply tub and tile caulk to the bottom edge of the toilet base to seal the toilet to the floor.



Six: Install new bowl.

- ❑ Turn the bowl back over, and position it so the bolts fit through the holes.

- ❑ Twist the bowl a little to make sure it's in the right place.
- ❑ Press the bowl down onto the floor to compress the seal.
  - The best way to do this is to sit on it.
- ❑ Tighten the nuts on the bolts while sitting on it.



CAUTION

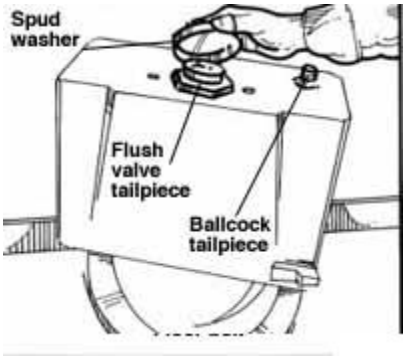
Don't tighten the bolts too much, or you're running the risk of cracking the porcelain. Make sure the toilet is level. Do this by using little plants of wood to shore up the toilet. Over the next couple of days, the toilet is going to settle. Come back on occasion to tighten the nuts so that they remain snug.

TIP

Dump some water into the bowl in order to make sure the water won't leak out of the bottom. If it does, try compressing the wax seal more. If that doesn't work, you're going to have to start over with a new wax seal.

Seven: Replace tank parts inside and reattach tank.

- ❑ Before you continue, put on the handle, flush valve, and float cup ballcock. (Usually pre-assembled on new toilets)
- ❑ After all of these parts are in place, attach the tank to the bowl.
- ❑ If you have a one-piece tank, proceed to step 8.
- ❑ If not, turn the tank over and attach the spud washer over the tailpiece of pipe.
- ❑ Turn the tank back over, and position it so that the spud washer fits into the hole that's on the seat.
- ❑ Attach the tank to the toilet using the washers and bolts.
  - Make sure they're tight by holding onto the washer with a wrench and using the screwdriver to turn the bolt.



CAUTION

Don't over tighten the bolts because it can crack the base. Attach the chain on the rubber stopper inside the tank to the handle lever, making sure it's somewhat tight.

Eight: Attach supply tube and turn on water.

- ❑ Reconnect the supply tube to the new tank.
  - If it doesn't reach, then you're going to need to use your new supply tube.
- ❑ Bend the tube using the tubing bender so that it reaches from the tank to the angle stop.
- ❑ Hold the tube so that it's in place under the tank. The flared end is the end that attaches to the tank.
  - ❑ Mark it so that the cutting line is under the threads on the angle stop.
  - ❑ Put the pipe in the tube cutter so that the cutting wheel is on the line that you marked.
  - ❑ Tighten the handle so that the pipe is held on the rollers.
  - ❑ Turn the cutter once to score the tube, then turn the cutter in the opposite direction making sure to tighten the handle every two rotations.
  - ❑ When the pipe is cut, use the "reaming end" of the cutter in order to smooth out the insides of the pipe.
- ❑ Put the compression nut and then the compression ring on the supply tube. (The threads of the nut should face down toward the valve.)
- ❑ Put joint compound onto the compression ring, and place the tube into the supply valve.
- ❑ Slide the ring and nut to the threads, and tighten the nut.
- ❑ Use the wrench to tighten the nut, but be cautious as to not tighten it too much.

- ❑ Connect the tube to the tank using a compression nut.
- ❑ Open the angle stop, and let the tank fill with water.

Nine: Ensure toilet works.

- ❑ Test the toilet. Do this by flushing it numerous times.
- ❑ If the toilet works, put on the toilet seat and clean up.
    - Congratulations! You just installed your own toilet.

For this information and more refer to www.truevalue.com