

snake through the blockage.

Step 3: When all else fails, the toilet may have to be removed from the floor and turned upside down so you can get a blockage. This is not what anyone would call an easy job, so you should give the simpler methods as good a try as you can before you remove the toilet. But removing the toilet is not beyond the capabilities of the average do-it-yourselfer, and this procedure is explained in the forthcoming section.

The closet auger has a long sleeve to guide the snake and auger hook into the trap. A crank enables you to turn the hook and dislodge the blockage.

Solving Common Toilet Problems

What can you do if too little water comes from the tank to flush the toilet bowl clean?

Step 1: Check the water level in the tank. It's probably too low. If the water level doesn't reach within 1 ½ inches of the top of the overflow tube, bend the float arm up slightly to let more water enter the tank.

Step 2: If the water level is correct but there's still not enough water coming from the tank to clean the bowl properly, the problem may be the tank ball on the flush valve seat the bottom of the tank. The ball is probably dropping too soon because the guide is set too low. Raise the guide, but make sure it stays in line with the lift wire. If the guide and the wire are out of alignment, the tank ball will not drop straight into the valve seat opening, and the toilet will run continuously.

Step 3: Look for other cause of inadequate flushing. The small ports around the underside of the toilet bowl's rim can get clogged with residue from chemicals in the water and prevent a sufficient amount of tank water from running out into the bowl. A small mirror can help you examine the holes, and a piece of wire coat hanger or an offset Phillips screwdriver—if one is available—can ream out any clogged debris.

Here's another common problem among toilets. Toilet tanks can sweat and drip onto your floors just as the pipes can. There are jackets designed

specifically to fit over the tank and absorb the moisture. There are also drip pans that fit under the tank to catch the dripping condensation so that it doesn't damage your bathroom floor. A device called a temperator valve is another way to combat tank sweating. The valve provides a regulated mixture of hot and cold water, which lessens the difference between the temperature inside the tank and the temperature of the surrounding air. It is this difference in temperature that causes condensation, or sweating. Consider installing a temperator valve if the water in the tank is usually below 50 degrees Fahrenheit.

The temperator valve, which requires both hot-water and cold-water supply connections, can reduce toilet tank sweating.

A temperator valve requires you to hook up a hot-water line to the valve, which may be quite inconvenient if there is no such line relatively close to the toilet. Moreover, the temperator valve does not prevent the water inside the tank from cooling between flushings: thus, condensation can still occur even on a temperator-equipped toilet. A leak may be due to loose connections or defective washers on the spud pipe or where the water inlet pipe and ballcock assembly are attached to the tank. Replace any worn gaskets or washers and tighten all of the nuts, then test with bluing in the water.

It is also possible that water is seeping out from under the toilet bowl. The wax ring seal that joins the bowl to the drain outlet may be defective. If this is the case, the bowl must be removed, and a new gasket installed. If the leak is due to a crack in the tank or bowl, the whole toilet must be replaced.

Replacing a Toilet Seat

The easiest toilet repair task is replacing the lid and seat. There are so many styles of replacement seats available that you should have no trouble finding one to match any bathroom color scheme or motif. Most modern toilets are manufactured in two standard sizes, and replacement seats are made to fit them.

Once you have the right size seat, remove the old one. Remove the two nuts on the hinge and lift your old toilet seat up and out. A common problem is

that the nuts securing the toilet seat may be rusted or corroded. The nuts on some toilet seats are recessed and practically inaccessible, making the job even more difficult.

A new toilet seat can be installed by inserting the two bolts, slipping on the washers, and tightening the nuts. Be careful not to over-tighten the nuts or the seat might be hard to remove later.

What’s the solution? If you can get to the fasteners relatively easily, apply some penetrating oil to help loosen them. Give the oil plenty of time to soak in. Use a wrench, or, if you can’t reach the nuts with a regular wrench, a deep socket wrench. Be sure you don’t use too much force; if the wrench slips off a stubborn nut, it could strike and crack the tank of the bowl or anything else it happens to hit.

Sink, Tub and Drain Troubleshooting Guide		
Problem	Possible Cause	Solution
Water in tank runs constantly	Float ball or rod is misaligned.	Bend float rod carefully to move ball so it will not rub against side of tank.
	Float ball contains water.	Empty or replace float ball.
	Float ball not rising high enough.	Carefully bend float rod down, but only slightly.
	Tank ball not sealing properly at bottom of tank.	Remove any corrosion from lip of valve seat. Replace tank ball if worn. Adjust lift wire and guide.
	Ballcock valve does not shut off water.	Replace washers in ballcock assembly or, if necessary, replace entire assembly.
Toilet does not flush or flushes inadequately	Drain is clogged.	Remove blockage in drain.
	Not enough water in tank.	Raise water in tank by bending float rod up slightly.
	Tank ball falls back before	Move guide up so tank ball

	enough water leaves tank.	can rise higher.
	Leak where tank joins toilet bowl.	Tighten nuts on spud pipe; replace spud washers, if necessary.
	Ports around bowl rim clogged.	Ream out residue from ports.
Tank whines while filling	Ballcock valve not operating properly.	Replace washers or install new ballcock assembly
	Waster supply is restricted.	Check shutoff to make sure it's completely open. Check for scale or corrosion at entry into tank on valve.
Moisture around fixture	Condensation.	Install foam liner, tank cover, drip catcher or temperature valve.
	Leak at flange wax seal.	Remove toilet and install new wax ring seal.
	Leak at bowl-tank connection.	Tighten spud pipe nuts; replace worn spud washers, if necessary.
	Leak at water inlet connection.	Tighten locknut and coupling nut; replace washers and gasket, if necessary.
	Crack in bowl or tank.	Replace bowl, tank, or entire fixture.

If all else fails, you'll have to cut off the bolts with a hacksaw. To protect the bowl's finish, apply tape to the bowl at the spots the hacksaw blade is likely to rub against. Then insert the blade under the hinge, and saw through the bolts. Be extremely cautious in using the saw—a careless slip with a hacksaw can crack the fixture just as easily as a blow with a wrench.

With the nuts removed or the bolts cut, you can remove the old seat without

further difficulty. Clean the area before installing the new seat. The new one can be installed by inserting the bolts and tightening the nuts. Be careful not to over-tighten the nuts, as you may want to replace this seat someday as well. If you live in a rented apartment and install a new seat that you paid for yourself, be sure to keep the old one. When you're ready to leave, you can replace the new one with the original and take the new seat with you.

If the toilet lid and seat are still in good condition, but the small rubber bumpers on the bottom are in bad shape, you can buy replacement bumpers at the hardware store. Some bumpers screw in; others must be nailed or glued into place. Whichever type you have, try to install the new ones in holes that are close enough to conceal the original holes.