Repairing a Toilet

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The toilet tank gives trouble more often than any other part of a home plumbing system. Usually, any trouble with the tank results in wasted water, creating an extra expense. Practically every part of the toilet tank (Figure 1) can cause it to fail to operate properly.

Materials You May Need
- An adjustable wrench
- Pliers
- Screwdriver
- The replacement parts

PROBLEM 1: Tank Fills, Water Still Runs

The float or the intake valve may cause a running toilet.
- The float ball must ride high enough on the water to shut off the intake valve. The water level in most tanks should be ⅜ inch below the top of the overflow pipe. If the water level is too high, raise the float position by gently bending the float ball arm slightly downward (Figure 2).
- If lifting upward on the float ball arm doesn't shut off the water, washers inside the intake valve are probably worn. It is simpler, but costs more, to replace the valve unit than to replace the washers. This job may require a plumber.

PROBLEM 2: Water Runs, Tank Doesn’t Fill

A defect in the rod system, the flush ball, or the flush valve may cause a running toilet.
- The rod system may be corroded or bent. Smooth rough, corroded wires with steel wool or buy replacements. A guide that is out of alignment will prevent the flush ball from dropping di-
rectly over the flush valve. To realign, loosen the setscrew (Figure 3) and move the guide back and forth until the ball drops directly over the valve. Retighten the screw.

- The trouble may be a worn flush ball. If the rubber has hardened or if the ball is out of shape, buy a replacement ball and screw it into the end of the lift wire.

A new stopper must be positioned so it drops straight down when released, and the wires must be straight for correct seating.

- Often the flush valve becomes rough and uneven from corrosion, preventing the flush ball from sealing the opening completely. To smooth and clean the flush valve opening, drain the tank and smooth the metal opening with steel wool (Figure 4).

A rubber flaplike stopper attached to the overflow pipe is sometimes used to replace the old flush valve and guide. This type may be somewhat easier to use and can be substituted when a new overflow pipe is installed.

PROBLEM 3: Inadequate Flush

Sometimes the flush handle must be held down to complete the flushing action.

- The lift wire may not be raising the flush ball high enough to prevent it from being pulled back down too quickly by the force of the out-rushing water. Straighten and rebend the upper lift wire to shorten it so it will hold the flush ball well out of the way of the rushing water.

- If the float ball is adjusted too low to allow a full tank of water, this can also cause an inadequate flush. To adjust the water level, bend the float ball arm upward.

PROBLEM 4: Leaks Under The Toilet Tank

- Call a plumber.

PROBLEM 5: Clogged Toilet Bowl

- Paper, soap, or other matter may soften, so wait about a half hour to see if it will wash down.

- If waiting doesn’t help, use a plunger. Fill the bowl with water to just below the rim. Place the suction cup over the opening and move the plunger up and down until the water drains.

- For more serious clogs, use a toilet auger. Fill the bowl to the rim. Push the curved end of the auger into the opening as far as it will go. Always turn the steel crank in the same direction. While turning the handle, push the auger into the trap. The water should run out.

- If several feet of toilet paper will not flush through, even though the water runs out, the problem is likely to be a clog in the main line. You will need to call a plumber.