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Repairing a Problem Flush Toilet

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simple home repairs

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REPAIRING A PROBLEM FLUSH TOILET

Flush toilets have many parts. And for that reason, they can have several problems. Parts that cause the most problems are the flush valve, the intake float valve, and the float ball. Replacement parts for these and other ordinary assemblies are available in most hardware and plumbing supply stores.

Let's talk about the most common problems one by one to see how they might be solved.

YOUR PROBLEM:

The tank doesn't refill after you flush the toilet, but the water keeps flowing.

POSSIBLE HOW-TO'S:

1. The tank ball should drop directly over the flush valve seat. If it doesn't, loosen the setscrew on the lift wire guide until the tank ball drops correctly. Tighten the screw. (When you're working on the flush valve, you can stop the flow of water by propping the float up with a piece of wood, being careful not to bend the float.)
2. The lift wire guide above the tank ball may be bent or caught on other parts. Adjust the wires so that the tank ball

falls in the proper place and they lift freely. Replace the badly bent or corroded lift wires.

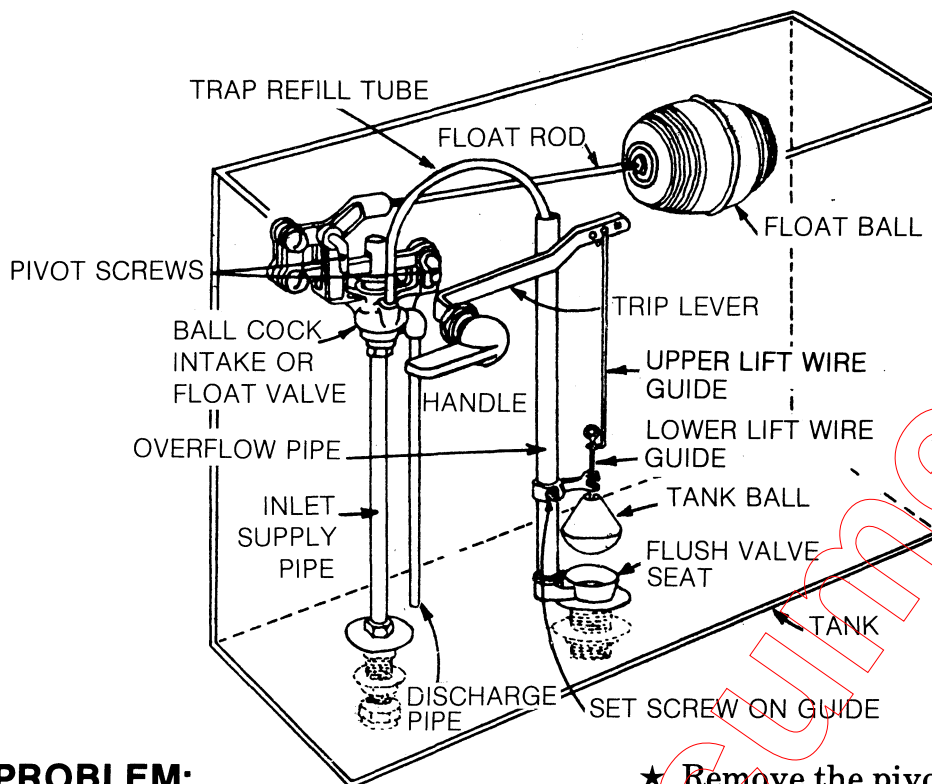
3. The rubber tank ball may be worn or corroded. If so, unscrew the ball from the lift wire guide and install a new ball or an entire new tank ball assembly.
4. Be sure that the tank is free from slime or corrosion. You can scrub the flush valve seat with fine steel wool soap pad and wash out the tank with a brush and strong detergent solution.

YOUR PROBLEM:

Water forms on the outside of the tank.

POSSIBLE HOW-TO'S:

1. Put a terry cloth cover on the tank. It will soak up the moisture, which will evaporate.
2. Line the tank with foam sheets, following the instructions on the package. Kits are available at plumbing supply stores.
3. Install a tempering valve in the cold water line that leads in the toilet tank inlet. This is the most permanent solution.



YOUR PROBLEM:

Water runs out through overflow pipe instead of shutting off.

POSSIBLE HOW-TO'S:

1. Check the float to see if it leaks or is water logged. If it is not in the correct position—about 1 inch below the top of the overflow tube—replace it with a new float ball, following the directions that come with it.
2. The float rod should be aligned so that the float ball floats freely and the valve closes properly. If the rod is bent, bend it downward so the float ball closes the intake valve when the water level is about $\frac{1}{2}$ -inch below the top of the overflow pipe.
3. See if the intake valve leaks. To test it, look at the overflow pipe in your tank. If water is running into the tube, the valve is leaking. To fix the leak, first turn off the water and drain the tank by flushing it. Then:
 - ★ Remove the screw holding the float ball in place and remove the ball and rod.

- ★ Remove the pivot screws that hold the arm of the float onto the intake valve assembly. Slide the float, rod, and attached elbow linkage out of the valve.
 - ★ Lift out the valve plunger. Put in a new rubber disc washer if the old one is worn. If the valve seat is dirty, clean it; if it is corroded, have it reground.
 - ★ Replace the valve, screws, float ball, and rod. Turn on the water, and adjust the float ball for the correct refill level.
4. The leather packing washer in the plunger portion of the intake valve may be worn. If so, water will leak out noisily around the top of the valve plunger while the tank refills. Replace this washer or the entire valve plunger using the disassembly instructions above.
 5. Check the trap refill tube. The tube should be bent so that water flowing from it goes into the top of the overflow pipe. If this isn't the case, bend the copper tubing with your fingers to the necessary shape.
 6. Check the overflow pipe to make sure nothing is clogging it. The pipe is your safeguard against tank overflow.

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