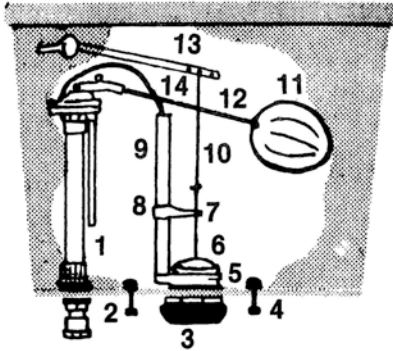


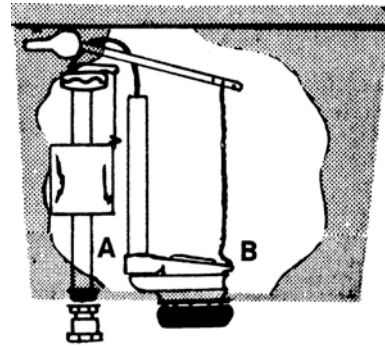


HOW TO REPAIR A TOILET OR INSTALL A NEW ONE

ALWAYS USE CAUTION WHILE WORKING ON OR AROUND A WATER CLOSET
WITH WRENCHES OR OTHER HEAVY TOOLS!



- | | |
|------------------------|-----------------------|
| 1. Ballcock | 8. Tank Ball Guide |
| 2. Tank-To-Bowl Bolt | 9. Overflow Tube |
| 3. Tank-To-Bowl Gasket | 10. Lift Wire |
| 4. Tank-To-Bowl Bolt | 11. Float |
| 5. Flush Valve | 12. Float Rod |
| 6. Tank Ball | 13. Toilet Tank Lever |
| 7. Ball Wire | 14. Refill Tube |



(compared to diagram at left)

FLUIDMASTER "A" REPLACES:
1, 11, 12 & 14

KORKY "B" REPLACES:
6, 7, 8 & 10

TO REPAIR

IF...

Tank fills above overflow tube — water continues to run through refill tube after the tank is filled to its normal level — water runs or sprays out the top of the ballcock —

CHECK ...

Float for proper buoyancy — bend float rod for proper adjustment — *BUT* if the condition appeared suddenly, the ballcock has probably failed.

REPAIR ...

Some ballcocks are repairable if proper parts can be located but these repairs often prove unsuccessful. We recommend installing a new Fluidmaster ballcock. Shut off the supply valve at the wall — flush toilet — mop out remaining water from tank — disconnect supply tube at bottom of ballcock — install new ballcock as per instructions included in package or in reverse order of removing old ballcock. If a 400 series Fluidmaster is installed, do not be alarmed by the dribble of water that comes out around its tip during the fill cycle as it is designed to do so in order to keep the float cup full of water.

IF...

Ballcock continues to run constantly or intermittently after it reaches the correct fill level but does not run over the overflow —

CHECK ...

Tank ball for deterioration — seat of flush valve for excessive pitting — guide for alignment or excessive wear — ball and lift wires for excessive

wear that could prevent the ball from dropping — handle for lowering too far and creating a bind that prevents the ball from dropping — overflow tube (if brass) for a crack just above threads that enter the flush valve.

REPAIR ...

Replace wires, guide, and tank ball with a simple flapper. Leave only enough slack in the chain to allow it to close. Replace handle if it drops so low that when released it allows the chain to get under the edge of the flapper and prevents it from seating properly. If overflow is cracked, it will usually break off during removal and the threaded part must be pried, collapsed inward, and removed with a sharp instrument. A liberal coating of pipe sealant should be applied to the threads of the new tube before reassembly.

To replace a defective flush valve, you must shut off the supply valve, empty and dry the tank, disconnect the supply tube, and remove the tank from the bowl by removing the tank-to-bowl bolts. These are normally badly corroded and hard to remove and should be replaced once removed. Remove tank-to-bowl gasket and flush valve hold down nut and remove old flush valve. Install the new flush valve and connect tank to the bowl in reverse order. Be sure to use a new tank-to-bowl gasket. *Do not draw the bolts down excessively tight as the tank will never become rigid to the bowl.*



IF ...

Water drips to the floor in the vicinity of the tank —

CHECK ...

For sweating tank — for leakage around tank-to-bowl bolts — for leakage from tank-to-bowl gasket during the flush cycle — for a crack in the tank.

REPAIR ...

Inspect tank for cracks. Install a toilet tank liner which insulates the cold water from the warm room air. This problem is most prevalent during the spring and fall seasons. Follow the directions provided with the liner kit. If tank-to-bowl fittings are leaking, replace them as described earlier in replacement of a flush valve.

IF ...

Inadequate flushing occurs —

CHECK ...

Low water level in the tank — tank ball or flapper may be seating too quickly — bowl ports may be clogged — foreign object may be lodged in the trap.

REPAIR ...

Adjust the float rod to allow a higher water level in the tank. Note maximum water level should be approximately 1" below the overflow tube

— replace the tank ball or flapper. Be sure to leave only enough slack in the chain so that the flapper is allowed to close — clean ports with a brush or wire loop — clean bowl trap with a toilet auger if this does not work, removal of the toilet may be required and other means used to remove the foreign object.

IF ...

Water oozes from below the bowl —

CHECK ...

To see if it happens only infrequently for, if so, it may be that no caulk was used to seal the perimeter of the bowl to the floor and mop water runs under the toilet during cleaning and slowly seeps back out — if the condition is regular, it would indicate a bad wax ring seal or a cracked bowl.

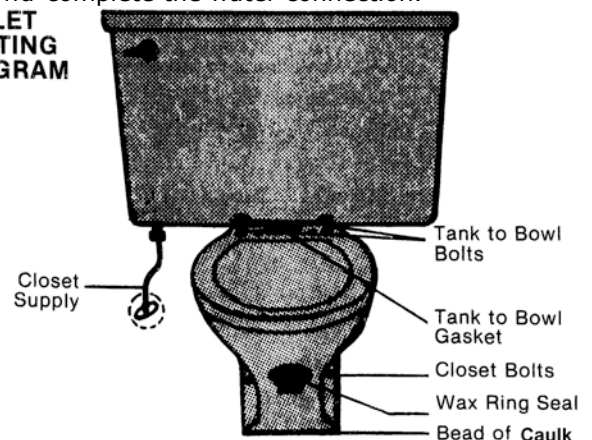
REPAIR ...

Caulk with tub seal between floor and closet to keep water from getting underneath. If the toilet seal is suspect, disconnect the water supply, remove closet hold-down bolts and lift the toilet off the flange. Inspect for cracks in the bowl for evidence of leaking at the seal. *Always* use a new wax ring when setting any closet. Reinstall as per Steps 3 through 6 of Installing a New Toilet.

TO INSTALL

1. Install supply valve to pipe nipple at the wall (use pipe sealant on threads).
2. Measure from center of closet floor flange to the back wall to make sure that you have a correct size toilet to fit the rough-in. Standard sized (12" rough-in) closets require a distance of 11-1/2" - 12-1/2". Other rough-ins of 10" and 14" exist in some instances so this should be checked before the actual placement begins.
3. Put closet bolts into floor flange (or screw lags into floor) and place wax ring gasket (with plastic collar down) onto floor flange.
4. Lift the bowl over the floor flange, center the bolts in the bolt hole openings of the bowl and lower the bowl to the floor. Apply weight to the bowl with a slight rocking motion to seat it into the wax ring.
5. Put washers, then nuts, onto bolts and draw down evenly. Do not apply excessive force while doing this as it is possible to break the bowl.
6. Run a bead of bathtub caulk between the bowl and the floor. This will keep mop water from running under the bowl. Leave a space about 6" wide at the very back of the bowl so in the event of a wax ring failure water will come out on the floor.
7. Put tank-to-bowl gasket, with tapered end down, over flush valve outlet. Slip rubber gaskets onto the tank-to-bowl bolts tightly against the heads as this is where the water seal is made.
8. Set tank onto bowl and drop bolts into place and put nuts and washers on from the bottom and tighten evenly *but not excessively*. *The tank will never become rigid to the bowl. It is likely that it would break first.*
9. Place the ballcock nut onto the supply tube and complete the water connection.

TOILET SETTING DIAGRAM



(the parts indicated are important when seating a toilet)