

# INSTALLATION INSTRUCTIONS

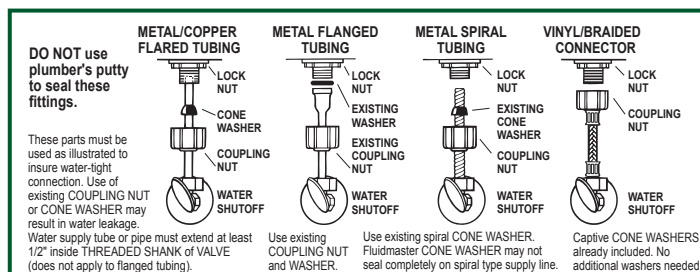
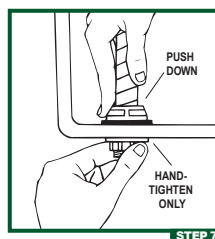
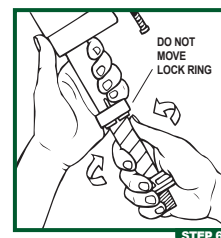
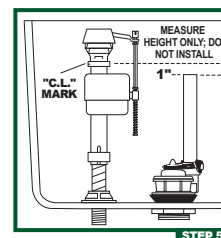
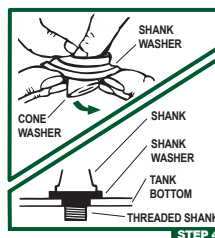
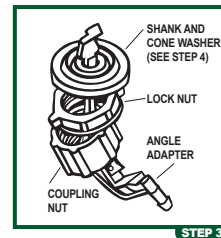
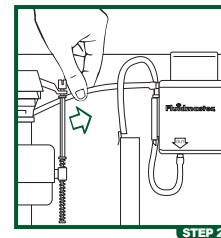
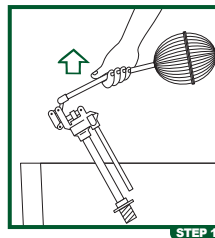
## TOOLS NEEDED:



### DO NOT USE:



1. Shut off water supply to tank. Flush tank and sponge out remaining water. Remove old fill valve assembly, tank ball, and wire guide unit (or flapper), using pliers if necessary.
2. **If you have a Fluidmaster bowl cleaning system**, carefully disconnect the tube from the FILL VALVE. Do not disconnect the tube from the dispenser (if you don't have a cleaning system, continue to Step 3).
3. Disassemble small parts – LOCK NUT, SHANK WASHER and ANGLE ADAPTER for VALVE installation (required); CONE WASHER and COUPLING NUT for water supply connection (optional—see Step 8).
4. Carefully remove CONE WASHER from center of SHANK WASHER. Place SHANK WASHER on THREADED SHANK of new VALVE. Place flat surface against VALVE.
5. When installed, the **CRITICAL LEVEL MARK** on the FILL VALVE (identified by a C.L. mark on the Fluidmaster FILL VALVE) should be at least 1" above the top of the OVERFLOW PIPE. This is a plumbing code.
6. To adjust the height of the FILL VALVE, twist the THREADED SHANK in or out of VALVE body. The height of the VALVE adjusts from 9 to 14 inches. On some models, a clicking noise will be heard when adjusting the height. This is normal.
7. Position VALVE inside tank. Push down on the VALVE SHANK (not the TOP) while tightening LOCK NUT. Hand-tighten only. **DO NOT OVERTIGHTEN** or tank may crack. Make sure FLOAT CUP does not touch toilet tank walls, trip mechanism or FLUSH VALVE.
8. Before continuing, determine the type of water supply connection you have from the chart on the left and use the appropriate assembly parts required to properly reconnect the water supply. **DO NOT use plumber's putty to seal these fittings.**



**CAUTION: DO NOT USE CONE WASHER WITH PLASTIC SUPPLY LINE.**

**CAUTION: Overtightening of LOCK NUT or COUPLING NUT could result in breakage and potential flooding.**

# INSTALLATION INSTRUCTIONS (continued)

9. With correct WASHERS in place (see Step 8), tighten COUPLING NUT. Hand-tighten only. **DO NOT OVERTIGHTEN. CAUTION: DO NOT USE CONE WASHER WITH PLASTIC SUPPLY LINE.**

10. Clean drain with a soft cloth. Snap ADAPTER RING away from FLAPPER. Align FLAPPER over mounting ears located on base of OVERFLOW PIPE. Center FLAPPER over drain opening. Snap to mounting ears by pushing down on the rigid frame near mounting ears. FLAPPER should open and close without binding.

11. **ADAPTER RING FOR 1" OVERFLOW PIPES WITHOUT MOUNTING EARS.** If there are no mounting ears on base of OVERFLOW PIPE, install ADAPTER RING: 1) Position ADAPTER over top of OVERFLOW PIPE and press down until it expands and slips over the outside of the OVERFLOW PIPE. If the ADAPTER will not slide down OVERFLOW PIPE, remove spring, slip ADAPTER around the PIPE and replace spring; 2) Slide ADAPTER down until it contacts base of OVERFLOW PIPE. Position spring clip opposite the drain seat. **NOTE:** If OVERFLOW PIPE is brass, use steel wool or wet/dry sandpaper to remove excess scale from PIPE prior to installation. If OVERFLOW PIPE is larger than 1", Model 555C can be used.

12. If you have a Fluidmaster bowl cleaning system, re-attach tube ("IN") to FILL VALVE NIPPLE (see Diagram 1). Be sure toilet tank flushing components move freely (if you don't have a cleaning system, continue to Step 13).

13. Remove and discard overflow pipe cap if present. Attach one end of black REFILL TUBE to ANGLE ADAPTER and the other end to NIPPLE located near top of VALVE. Attach ANGLE ADAPTER to OVERFLOW PIPE. Trim REFILL TUBE as necessary to prevent kinking. **NOTE: Flow from REFILL TUBE must be positioned just above the OVERFLOW PIPE. Do not insert REFILL TUBE down into OVERFLOW PIPE below water level. This will siphon water down the OVERFLOW PIPE, which causes the VALVE to turn on and off as it tries to keep the tank full. If the ANGLE ADAPTER cannot be used, you may need the Model 599 Refill Clamp (not included).**

14. Connect FLAPPER CHAIN to hole in TANK LEVER arm that provides the best lift. CHAIN should have slight slack when FLAPPER is in closed position. Replace lid. Check lift action for proper flush.

15. **IMPORTANT: Always clear sand and rust from system.** Make sure water supply is shut off. Remove VALVE TOP by lifting arm and rotating TOP and ARM 1/8 turn counterclockwise, pressing down slightly on cap.

16. While holding a container over the uncapped VALVE to prevent splashing, turn water supply on and off a few times. Leave water supply off.

17. Replace TOP by engaging lugs and rotating 1/8 turn clockwise. **MAKE CERTAIN TOP IS TURNED TO THE LOCKED POSITION.** VALVE may not turn on if TOP is not fully to the locked position.

18. Turn on water supply. Submerge the FLOAT CUP under the water for 30 seconds. Adjust the water to desired level by turning WATER LEVEL ADJUSTMENT ROD and moving FLOAT CUP up or down. Water should end up 1/2" to 1" below top of OVERFLOW PIPE.

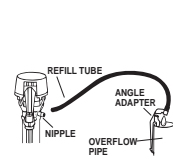
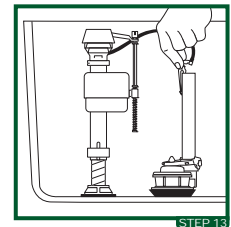
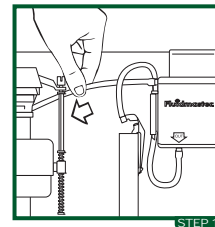
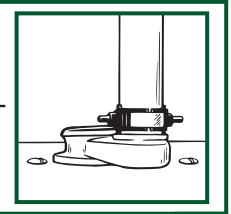
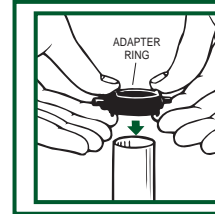
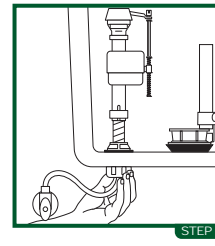
## TROUBLESHOOTING

### IF FILL VALVE WON'T TURN OFF,

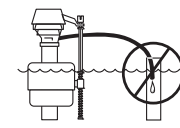
- There may be debris at seal – repeat Steps 15-17.
- The seal inside the VALVE TOP may be damaged – replace with genuine Fluidmaster 242 seal.

### IF FILL VALVE TURNS OFF AND ON DURING PERIODS OF NON-USE,

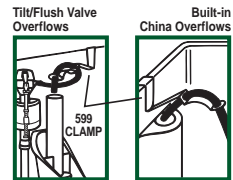
- There may be a leak at the FLAPPER.
- The FLAPPER is misaligned – repeat Step 10.
- The seat is corroded or damaged – replace with Flusher Fixer Kit, Model 555C.
- The end of the REFILL TUBE is inserted into OVERFLOW PIPE below water level in tank (See Step 13).



NOTE: Flow from REFILL TUBE must be positioned just above the OVERFLOW PIPE.



Do not insert REFILL TUBE down into OVERFLOW PIPE below water level. This will siphon water down the OVERFLOW PIPE, which causes the valve to turn on and off as it tries to keep the tank full.



If the ANGLE ADAPTER cannot be used, you may need the Model 599 Refill Clamp (not included).

