

FLUIDMASTER® PERFORMAX® NO TANK REMOVAL KIT INSTALLATION INSTRUCTIONS

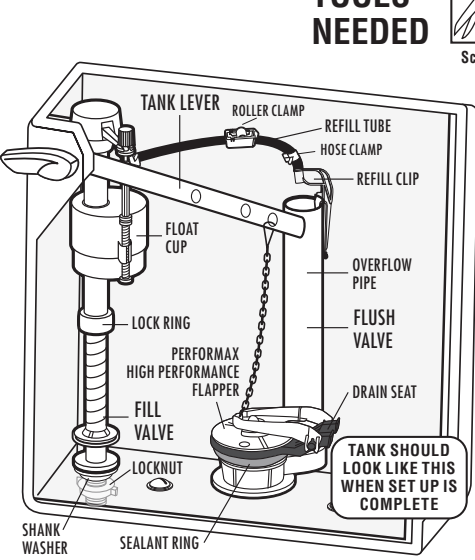
WARNING

DO NOT USE IN-TANK DROP-IN TOILET BOWL CLEANERS CONTAINING BLEACH OR CHLORINE. Use of such products will: (1) RESULT IN DAMAGE to tank components and MAY CAUSE FLOODING and PROPERTY DAMAGE and (2) VOID FLUIDMASTER WARRANTY. Fluidmaster Flush 'n Sparkle Toilet Bowl Cleaning System is recommended for those choosing to use in-tank bowl cleaners and WILL NOT VOID the FLUIDMASTER WARRANTY because it will not damage the components. DO NOT over-tighten nuts or tank/bowl may crack. Always use quality Fluidmaster parts when installing or repairing. Fluidmaster will not be responsible or liable for use of non-Fluidmaster parts during installation or repair.

LIMITED FIVE-YEAR EXPRESS WARRANTY

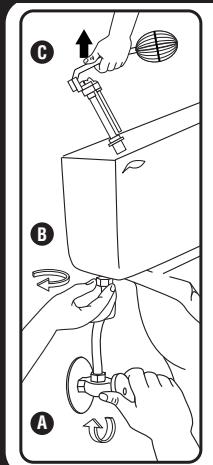
Subject to the "Exclusions" set forth below, Fluidmaster Inc. promises to the consumer to repair, or at the option of Fluidmaster Inc. to replace any part of this plumbing product which proves to be defective in workmanship or materials under normal use for five years from the date of purchase. All costs of removal, transportation and reinstallation to obtain warranty service shall be paid by the consumer. During this "Limited Five Year Express Warranty," Fluidmaster Inc. will provide, subject to the "Exclusions" section set forth below, all replacement parts free of charge, necessary to correct such defects. This "Limited Five Year Warranty" is null and void if this plumbing product has not been installed and maintained in accordance with all written instructions accompanying the product, and if non-Fluidmaster Inc. parts are used in installation.

EXCLUSIONS: FLUIDMASTER INC. SHALL NOT BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES, INCLUDING COSTS OF INSTALLATION, WATER DAMAGE, PERSONAL INJURY OR FOR ANY DAMAGES RESULTING FROM ABUSE OR MISUSE OF THE PRODUCT, FROM OVERTIGHTENING OR FROM FAILURE TO INSTALL OR MAINTAIN THIS PLUMBING PRODUCT IN ACCORDANCE WITH THE WRITTEN INSTRUCTIONS, INCLUDING USE OF NON-FLUIDMASTER PARTS. DO NOT USE IN-TANK DROP-IN TOILET BOWL CLEANERS CONTAINING BLEACH OR CHLORINE. USE OF SUCH PRODUCTS WILL RESULT IN DAMAGE TO TANK COMPONENTS AND MAY CAUSE FLOODING AND PROPERTY DAMAGE. USE OF SUCH PRODUCTS WILL VOID THIS WARRANTY.



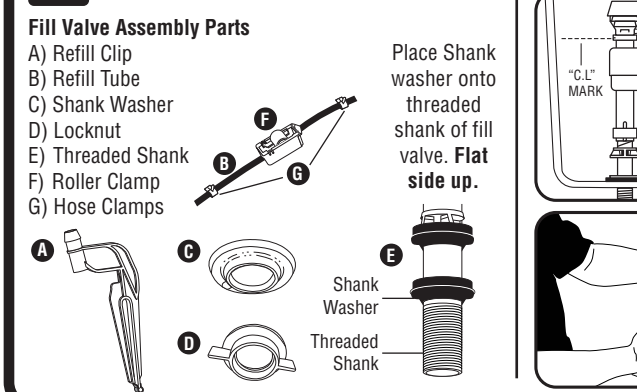
- PARTS IN THIS KIT:**
- (1) PerforMAX™ Fill Valve
 - (1) Shank Washer
 - (1) Locknut
 - (1) Refill Tube
 - (1) Refill Clip
 - (1) Roller Clamp
 - (2) Hose Clamps
 - (1) PerforMAX™ High Performance Flapper
 - (1) New Drain Seat
 - (1) Pre-applied Sealant Ring

PREPARATION



- 1 Remove Old Fill Valve & Flapper**
- Remove tank lid. Use pencil to mark water level of tank. Then follow steps A-E.
- Turn off water supply (Clockwise). Flush toilet and remove excess water from tank with sponge.
 - Remove water supply coupling nut. Remove locknut from under tank.
 - Remove fill valve from tank.
 - Unhook flapper chain from tank lever.
 - Remove flapper from overflow pipe on flush valve.

2 Preparing the Fill Valve for Installation



Position fill valve in tank, but do not fully install yet. Top of fill valve MUST be set 3" above overflow pipe. This will automatically place **CRITICAL LEVEL MARK / C.L. Mark, 1"** above the top of overflow pipe. Remove fill valve from tank to adjust height.

Adjust height of fill valve by holding lower shank with right hand and top of valve with left hand. Twist the lower shank counter clockwise to increase valve height and clockwise to decrease valve height. You should hear several "clicks". Place valve in tank and check height again. **THE CRITICAL LEVEL MARK**, identified by C.L. on valve, MUST be positioned 1" above top of overflow pipe. This is a requirement of the **Universal Plumbing Code**.

DO NOT MOVE LOCK RING.

3 Preparing the Flush Valve Repair Kit for Installation

IF YOUR FLUSH VALVE ONLY HAS A FLAPPER:

Remove flapper or tank ball. Use scrub brush with warm soapy water to thoroughly clean old seat surface. Rinse and dry seat with clean towel.

IF YOU ARE REMOVING AN OLDER FLUIDMASTER FLUSH VALVE REPAIR KIT:

Pull the edge of seat off firmly and slowly with fingers. **DO NOT** pry with a tool. Pull off by hand any large sections of sealant that remain. Use mineral oil with a cloth to remove remaining sealant from old seat. Use scrub brush and warm soapy water to thoroughly clean old seat surface. Rinse and dry seat with clean towel. Repeat.

IF YOU HAVE A BRASS FLUSH VALVE:

Use sand paper, steel wool or emery cloth to thoroughly clean seat.

IF YOU ARE SEALING THE FLUSH VALVE REPAIR KIT TO PORCELAIN TANK:

- Use scrub brush with warm soapy water to thoroughly clean around porcelain opening. Rinse with water. Repeat.
- Dry seat with clean towel. Once porcelain is dried, pour rubbing alcohol on surface and let dry. Proceed to Step 3A and then 3B.

INSTALLATION

- 4 Installing Flush Valve Repair Kit on a slanted or horizontal seat**
- Place the flush valve repair kit, with sealant paper attached, on your flush valve so the chain is closest to the tank lever.
 - The center line should be positioned ABOVE 3 o'clock or 9 o'clock (using overflow pipe at 12 o'clock.) when installed on an existing flush valve seat. Use the center line of the new seat for positioning. Position hinge section of seat in "OK" zone above 3 or 9 o'clock, located in areas marked "OK."
 - Once the desired position has been determined, lift flush valve repair kit, peel paper, and stick back in desired location. Apply firm pressure.

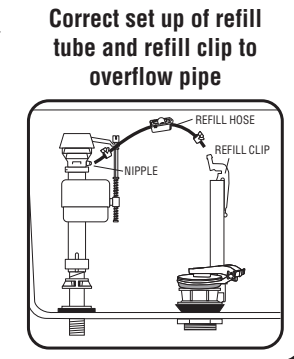
5 Installing New Fill Valve

Place fill valve in tank. Make sure lid will sit on top of tank without touching valve. Align fill valve nipple to face center of tank. Press down on shank from inside tank while tightening locknut.

Hand-tighten only. DO NOT OVER TIGHTEN. Over tightening may crack the fill valve or tank causing flooding. Make sure the float cup does not touch the tank walls or tank lever and flush valve.

Attach one end of refill tube to refill clip. Place clip on right side of overflow pipe. Attach other end of tube to nipple on fill valve with a slight arch (See drawing to the right). Cut tube as necessary.

WARNING: Do not shove refill tube down overflow pipe. This may cause significant water waste. Squeeze hose clamp. Slide to end of hose and release.



6 Connecting the Chain from Flapper to Tank Lever

With flapper in closed position and toilet tank lever in down position, connect chain clip to the hole of tank lever directly above where chain connects to flapper. Leave about 1/2" of slack in the chain.

7 Attach Water Supply Connector

Inspect water supply connector. Replace it if it is worn or over 5 years old to help prevent flooding and property damage.

- Attach water supply coupling nut to fill valve. Turn coupling nut clockwise by hand until tight.

WARNING: Do not over tighten the nut as it could damage fill valve or coupling nut, resulting in flooding and property damage. Fluidmaster Click Seal® connector is recommended for a perfect seal every time without over tightening.

- Turn on water supply and check for leaks. If you find leaking at bottom of tank, turn nut by hand just enough to stop leaking. Then flush toilet to check.

8 Adjusting Tank Water Level

With water turned on, set float cup to desired level, by turning water level adjustment screw. When adjusting float cup, flush tank first. Then make adjustment while tank is filling.

To adjust tank water, turn adjustment screw clockwise to raise water level or counter clockwise to lower water level.

Once adjusted, flush toilet and check new level. Repeat if necessary.

HINT: When you twist adjustment screw 8 times - float moves 1/2".

9 Water-Saving Feature: Roller Clamp

Save water by adjusting the amount of water going into the bowl as follows: Fill the bowl with a gallon of water. Wait 1 minute until the bowl water level recedes and stops. With a pencil, draw a line at the top of the water level in bowl. Now flush the toilet. How to adjust water in bowl: **Water level in bowl should be at the pencil mark when fill valve shuts off.** If the valve is still filling and the water is up to the line in the bowl, then the amount of water going into the bowl is too high. Adjust the refill by turning the roller clamp with thumb to the next lower number. Flush the toilet. If valve shuts off and bowl is not full, adjust by turning the roller clamp to a higher number. Repeat until water in bowl is up to line. "0" on roller clamp equals no refill to bowl.

10 Set to Optimize the PerforMAX™ High Performance Flapper

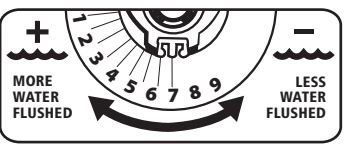
The default setting for the PerforMAX™ flapper is preset at (9) for larger tanks.

Start with the dial in the default setting and flush your toilet.

If your toilet is able to flush, adjust the dial down to the next setting, number (8) and flush again.

Continue to adjust dial down one setting until your toilet is unable to flush properly. When the flapper dial is on a setting that does not allow for a proper flush, adjust the dial back up one setting.

HINT: The higher the number set in front of the chain connection, the longer the flapper will stay open. Turn clockwise for greater flush volume. Turn counterclockwise for lower flush volume.

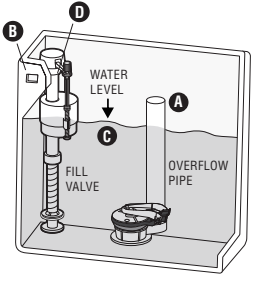


11 Code Compliance

Once fill valve is installed, ensure overflow pipe and water level of tank are correctly set.

- THE TOP OF OVERFLOW PIPE (A)** must be minimum of 1" below **TANK LEVER HOLE (B)**.
- WATER LEVEL (C)** is set below top of Overflow Pipe (Fluidmaster recommends 1/2").
- THE CRITICAL LEVEL MARK / C.L. Mark (D)** identified by C.L. on fill valve must be positioned 1" above top of overflow pipe. This is a requirement of the **Universal Plumbing Code**.

Code Compliance helps protect your home & drinking water supply.



TROUBLESHOOTING

- IF FILL VALVE DOES NOT TURN ON, WILL NOT TURN OFF, OR WILL NOT REFILL THE TANK AFTER THE FLUSH**
- Remove top cap and check for debris. If you find debris, or flow is weak: Inspect lower section of fill valve for partial blockage. Partial blockage may be at shut off valve or in water supply line (See "REMOVING THE VALVE CAP ASSEMBLY & FLUSHING OUT DEBRIS").
 - If fill valve has been in use for some time and/or float cup does not drop when flushing tank, replace seal with a genuine Fluidmaster 242 seal (See "IF REPLACING SEAL").
- IF FILL VALVE TURNS ON AND OFF BY ITSELF, OR IS RUNNING WHEN NO FLUSH HAS TAKEN PLACE**
- This indicates the tank is losing water. The fill valve is refilling lost water. Clean flapper and drain seat. Please ensure all steps were followed in "CONNECTING THE CHAIN FROM FLAPPER TO TANK LEVER" section. Flapper needs to be clipped in to fall evenly on flush valve drain seat.
- IF WATER LEVEL IN BOWL IS TOO LOW**
- Make sure the refill tube is supplying water down overflow pipe.
 - Water level in tank may be too low. Raise water level to 1/2" below top of overflow pipe (See "ADJUSTING TANK WATER LEVEL"). You may have to lengthen the fill valve in order to increase the water level in tank (See "PREPARING THE FILL VALVE FOR INSTALLATION").
 - Flapper may be closing too soon. Give flapper chain approximately 1/2" of slack (See "CONNECTING THE CHAIN FROM FLAPPER TO TANK LEVER").
- FLAPPER CLOSES TOO SOON**
- The chain length should be about 1/2 in. slack. Lengthen or shorten chain until flapper stays open on its own.
- WHEN TOILET IS FLUSHED THE SEALANT RING SEPARATES FROM THE SEAT**
- The surface is either not clean enough or wet. Purchase a new SEALANT RING # 2602.
 - The replacement flapper for this kit is the 502 PerforMAX™ High Performance Flapper available at local hardware stores.

Removing Valve Cap Assembly, Flushing Out Debris, Replacing Seal, & Replacing Valve Cap Assembly

- Removing Valve Cap Assembly**
- Turn off water supply & flush out tank. Push float up with right hand (see picture). Grip and hold shaft under float with right hand. With left hand, twist cap and lever counter clockwise 1/8th of a turn to unlock the top cap. Pressing down on top may be helpful with older valves. Let cap assembly hang on float cup.
- Flushing Out Debris**
- Hold cup upside down over uncapped valve to prevent splashing. Turn water supply on and off a few times. Turn water supply off when putting cap back on valve.
- If Replacing Seal**
- Use only a genuine Fluidmaster 242 seal.
- Replacing Valve Cap**
- Place cap assembly on top of gray valve body by aligning cap arm and adjustment rod next to refill tube.
 - Press down on top cap while rotating top & arm clockwise to locked position.