






FLUIDMASTER® 400LS FILL VALVE WITH LEAK SENTRY® TECHNOLOGY INSTALLATION INSTRUCTIONS

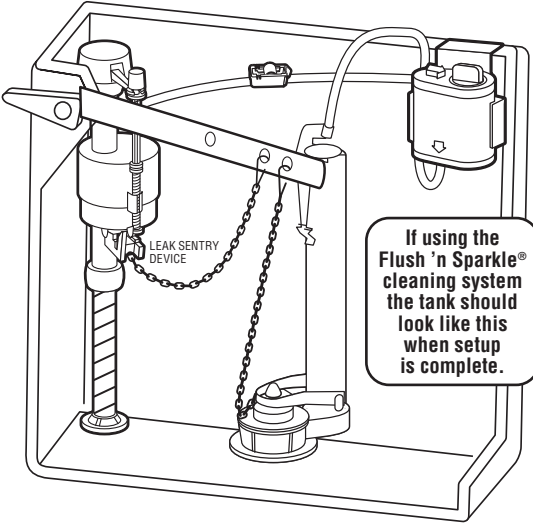
TOOLS NEEDED

 OR  + 

DO NOT USE


IMPORTANT: A flapper with a plastic or metal chain is recommended for the Leak Sentry® to maintain its settings. Flappers with nylon or vinyl straps will stretch and cause Leak Sentry® to work improperly. (Replace with a flapper like the Fluidmaster 501 or 502.)



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. DO NOT overtighten nuts or tank/bowl may crack.
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.

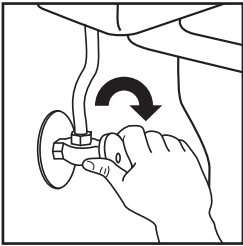
Because drop-in cleaners used in the tank can result in damaged tank parts (see WARNING above), Fluidmaster recommends the use of Flush 'n Sparkle® Toilet Bowl Cleaning System (Models 8100, 8200 or 8300). It cleans the bowl without harming tank parts by isolating the cleaner from the tank water, releasing it only to the bowl where it is needed. Cartridges supply more than 1,000 flushes and are a snap to replace.

400LS WATER-SAVING FEATURES
Prevents wasteful refills in leaky tanks.
The Leak Sentry® device alerts you to a tank leak, typically caused by a faulty flapper. If there is a tank leak, the float cup will not drop to refill the tank until the tank lever is pushed. On the first flush attempt, the valve will simply refill the empty tank; only then will you receive a complete flush. This will continue to occur until the tank leak is fixed. The Adjustable Refill allows you to adjust the amount of water going into the bowl, eliminating water waste due to the bowl being overfilled.

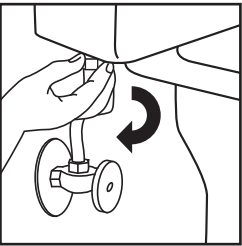


START HERE

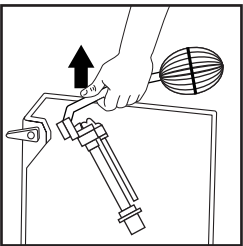
1. Remove Fill Valve from Tank



Turn off water supply. (Clockwise)

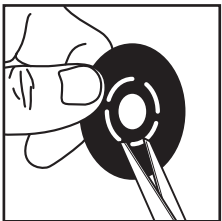
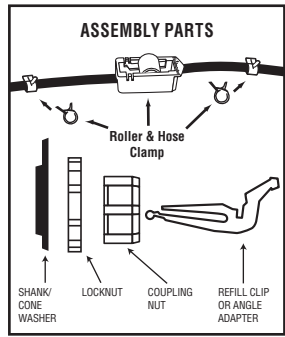


Flush out tank and sponge dry. Remove water supply coupling nut and locknut from under tank.



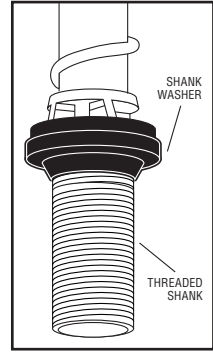
Remove fill valve from tank.

2. Prepare Valve for Installation

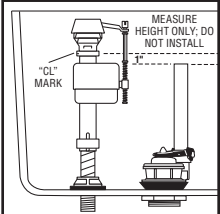


Push the cone washer out with your thumb or with scissors cut the four connections between the shank & cone washers. Set cone washer aside.

2. continued...



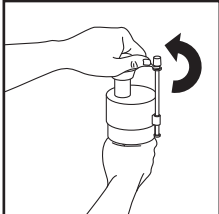
Place shank washer onto threaded shank of fill valve. **Flat side up.** Then place fill valve in tank.



Place valve in tank; do not install. The Critical Level mark – identified on valve – should be 1 inch above the top of the overflow pipe. This is a plumbing code. Remove fill valve from tank to adjust height.

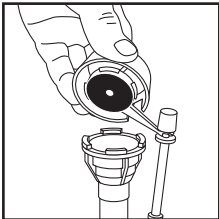


Adjust height of fill valve by turning lower shank in or out of the valve body. **Do not move lock ring.** It holds the valve body and shank together under pressure. Do not interchange body with old shank, as leaking can occur.



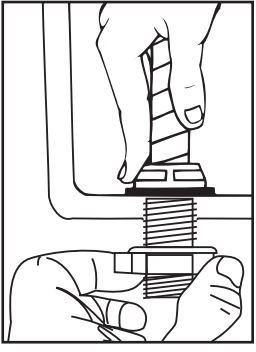
Removing the Valve Cap Assembly

Before installing the valve, remove the valve cap assembly. Push float up with right hand (see picture). Twist cap and lever counterclockwise 1/8th of a turn to unlock. Let cap assembly hang on float cup.

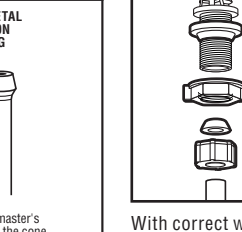
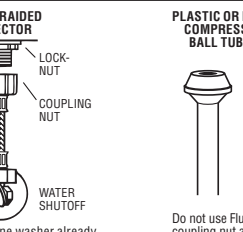
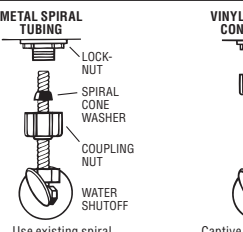
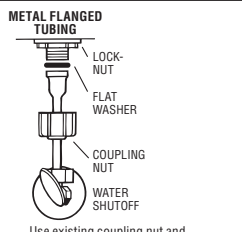
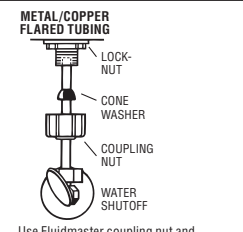


3. Installing Fill Valve

Place fill valve in tank. Align fill valve nipple to face right & parallel with back wall of tank. Press down on shank while tightening locknut. Hand-tighten only.



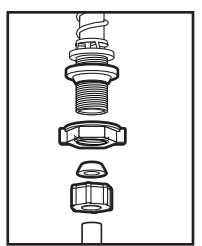
DO NOT use plumber's putty to seal these fittings. These parts must be used as illustrated to insure watertight connections.



CAUTION: DO NOT use CONE WASHER with PLASTIC SUPPLY LINE or METAL SPIRAL TUBING.

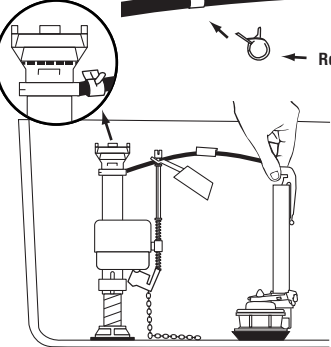
CAUTION: Overtightening LOCKNUT or COUPLING NUT could result in breakage and potential flooding.

Use chart to determine the appropriate assembly parts required to properly reconnect the water supply. Do not use plumber's putty to seal these fittings (Teflon tape optional).



With correct washers in place tighten coupling nut. Hand-tighten only. **CAUTION: Do not use Fluidmaster cone washer with plastic supply line or metal spiral tubing.**

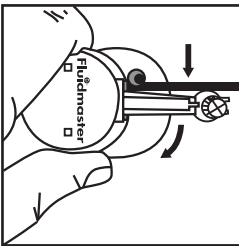
3. continued...



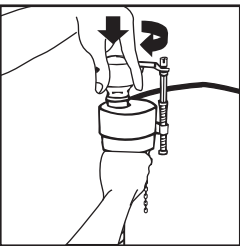
For your convenience, the roller clamp and hose clamps are pre-assembled to the refill hose. Attach one end of hose to refill clip and slide clip to right side of overflow pipe. Attach other end of hose to nipple on fill valve with a slight arching (see picture to the left). Cut tube if necessary. Squeeze tabs of hose clamp and move clamp to end of hose, over the fill valve nipple, then release tabs. Do not shove refill tube down overflow pipe. This will cause water loss.



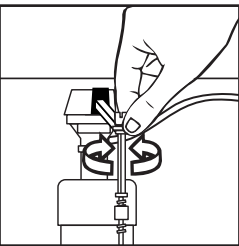
Flushing Out the Debris: Hold a cup over the uncapped valve to prevent splashing. Turn water supply full on and off a few times. Leave water supply off. Check for leaks. Tighten nuts just enough to stop leaking.



Place cap assembly on top of gray valve body by aligning cap arm and adjustment rod next to refill hose.



Press down on top cap rotating top & arm clockwise to locked position.



Turn on water supply. **IMPORTANT: Submerge the float cup under the water for 30 seconds.** Adjust water level by turning water level adjustment screw. To raise—turn clockwise; to lower—counterclockwise.

4. Water-Saving Feature: Hooking Up the Leak Sentry® Chain

FLAPPER CHAIN HOOK-UP

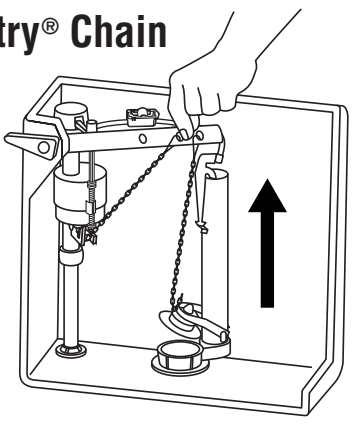
Lift tank lever all the way up inside tank. Hold tank lever there. Pull flapper chain tight so the flapper is lifted as high as it can go and attach chain to hole in lever directly above flapper. Make sure flapper chain is straight.

Make sure flapper is closed on seat. If not, you may need to lengthen the flapper chain by a link or two to allow flapper to close and seal tank.

LEAK SENTRY® CHAIN HOOK-UP

Lift tank lever all the way up inside tank and hold it there. Pull Leak Sentry® chain until it lifts the float cup all the way up the fill valve shaft. Then connect chain & clip with no slack in chain to the tank lever.

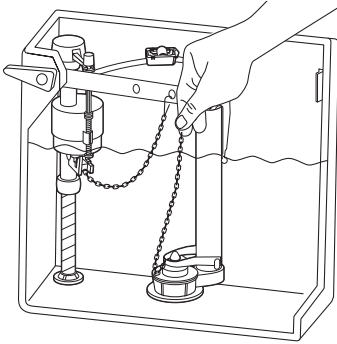
NOTE: Do not cross Leak Sentry® chain and flapper chain. If lever has only one hole, then attach to same hole.



5. Testing Leak Sentry®

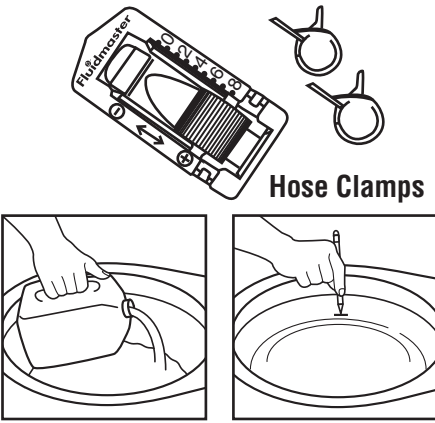
Simulate a leak by slightly lifting flapper chain to allow 3 or 4 inches of water to slowly drain from tank. **Fill valve should not turn on**, but remain locked and stay off.

If test fails go to **Troubleshooting** section. Make sure chain is free, not tangled or caught.



6. Water-Saving Feature: Roller Clamp

Check bowl water level by flushing toilet. If bowl appears to be full but continues to fill, the valve may be overfilling the bowl causing excess water to siphon down the trapway. Adjust amount of water going down into the bowl as follows: Fill the bowl with a gallon of water. Wait 3 minutes until the bowl water level recedes down and stops. With a pencil, draw a line at the top of the water level in bowl. Now flush the toilet. 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 and needs to be adjusted. Adjust the refill by turning the roller clamp with thumb to the next lower number. Flush the toilet; adjust until water level in bowl is at the pencil mark when the fill valve shuts off. 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.



FLUSHING OUT DEBRIS



Remove cap assembly



Flush out valve



Replace cap assembly

FILL VALVE WILL NOT TURN OFF. IMPORTANT: Sand and rust move through water pipes. Always clear debris from water lines. Repeat steps "Removing the Valve Cap Assembly" & "Flushing Out the Debris".

FILL VALVE WILL NOT TURN ON.

• If float cup does not drop when flushing the tank: Tighten Leak Sentry® chain by one link and then try flushing again. Tighten by one link at a time until valve turns on at flush. See "Hooking Up the Leak Sentry® Chain".

WATER LEVEL IN BOWL IS TOO LOW.

• Move roller clamp to higher number.

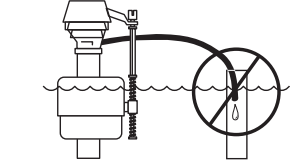
LEAK SENTRY® WILL NOT LOCK FLOAT CUP.

• Make sure valve is set at 5 o'clock in tank.

• Make sure water drops below float cup during flush. Raise the valve higher in tank and reset water level.

• Device chain should be loose except when lever is pushed to flush tank. See "Hooking Up the Leak Sentry® Chain".

• Untangle Leak Sentry® chain from screw adjustment or device area.



CAUTION: Do not shove refill tube down overflow pipe. This will cause loss of water from tank.

Fluidmaster Inc.
30800 Rancho Viejo Road
San Juan Capistrano, CA 92675
www.fluidmaster.com
800-631-2011

WARRANTY
This Fluidmaster® product has a limited warranty for a period of 5 years. For complete warranty details, please visit our website at www.fluidmaster.com