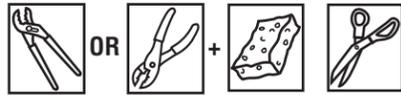


FLUIDMASTER® 400ARHR FILL VALVE INSTALLATION INSTRUCTIONS

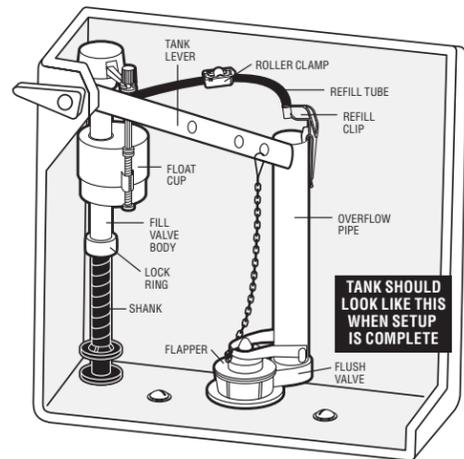
TOOLS NEEDED



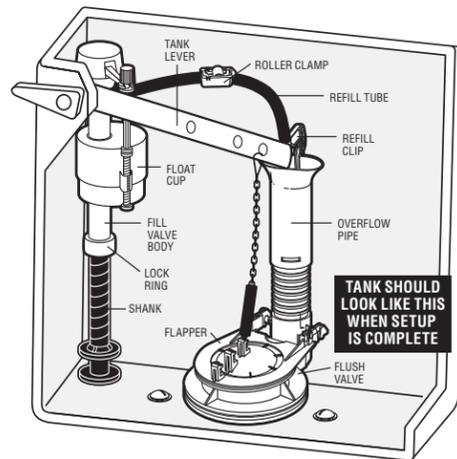
DO NOT USE



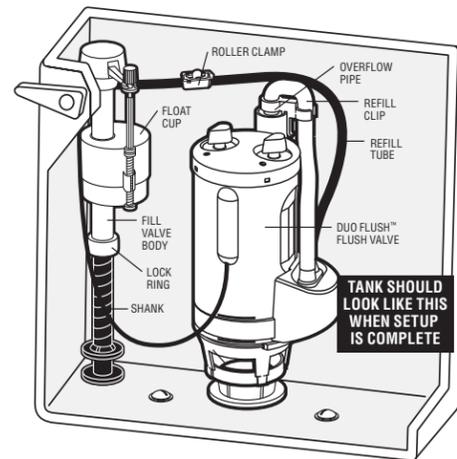
HINT: Pair with the patent-pending DUO Flush™ valve to convert your toilet's existing single flush valve to a dual flush valve and to boost toilet performance when connected with the PerformMAX™ fill valve.



Toilet with 2" Flush Valve



Toilet with 3" Flush Valve



Toilet with DUOFlush™

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.

1. Remove Fill Valve from Tank

Turn off water supply. (Clockwise)

Flush out tank and sponge dry. Place towel or small container under tank (below fill valve threads). Remove water supply coupling nut and locknut from under tank.

Remove fill valve from tank. Let any residual water drain from tank into/onto container or towel.

2. Prepare Valve for Installation

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

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

Place valve in tank, do not install. Set top of fill valve even with or 1/2" above top of tank. 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. Turn lower shank in or out of the valve body. Place valve in tank and check height again. The Critical Level mark - identified by "C.L." on valve - MUST be 1" above the top of the overflow pipe. This is a plumbing code.

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.**

3. continued...

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).

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

METAL/COPPER FLARED TUBING	METAL FLANGED TUBING	METAL SPIRAL TUBING	VINYL/BRAIDED CONNECTOR	PLASTIC OR METAL COMPRESSION BALL TUBING
<p>LOCK-NUT, CONE WASHER, COUPLING NUT, WATER SHUTOFF</p> <p>Use Fluidmaster coupling nut and cone washer to replace existing parts. Water supply tube must extend 1/2 inch inside threaded shank of valve.</p>	<p>LOCK-NUT, FLAT WASHER, COUPLING NUT, WATER SHUTOFF</p> <p>Use existing coupling nut and existing flat washer.</p>	<p>LOCK-NUT, SPIRAL CONE WASHER, COUPLING NUT, WATER SHUTOFF</p> <p>Use existing spiral cone washer.</p>	<p>LOCK-NUT, COUPLING NUT, WATER SHUTOFF</p> <p>Captive cone washer already included. No additional washers required.</p>	<p>Do not use Fluidmaster's coupling nut and the cone washer on plastic or metal tubing as shown.</p>

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.

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.**

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: Roller Clamp

Check bowl water level by flushing toilet. If bowl appears to be full but continues to fill, the valve may be overflowing 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.

TROUBLESHOOTING

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: Replace 242 seal if fill valve has been in use for some time.
- If fill valve is new, check for debris or blockage in system.
- Water supply line is too far inside the shank of fill valve. Insert water supply 1/2" only.

WATER LEVEL IN BOWL IS TOO LOW.

- The refill water may need to be increased. Move roller clamp to a higher number.
- Flapper may be closing too soon. Give flapper chain approximately 1/2" of slack.
- Water level in tank may be too low. Raise water level to 1/2" below top of overflow pipe.

CAUTION

Do not shove refill tube down overflow pipe. This will cause loss of water from tank. Make sure end of refill tube is higher than the water level of the tank.

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WARRANTY

This Fluidmaster® product has a limited warranty for a period of 7 years. For complete warranty details, please visit our website at www.fluidmaster.com