**FLUIDMASTER® FILL VALVE & FLAPPER INSTALLATION INSTRUCTIONS**

**PREPARATION**

1. **Remove Old Fill Valve & Flapper**
   - Remove tank lid. Use pencil to mark water level of tank. Then follow steps A-E.
   - A. Turn off water supply (Clockwise). Flush tank and remove excess water from tank with sponge.
   - B. Remove water supply coupling nut. Remove locknut from under tank.
   - C. Remove fill valve from tank.
   - D. Unhook flapper chain from tank lever. Flapper may be closing too soon. Give flapper chain approximately 1/2” slack.
   - E. Do not move lock ring. It holds the valve body and shank together under pressure. Do not interchange body with old shank washer. Fluidmaster Click Seal® connector is recommended: A perfect seal every time without over tightening.

**INSTALLATION**

2. **Preparing the Fill Valve for Installation**
   - Place Shank Washer, which is already threaded, down to fill valve. Flat side up.
   - 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. M欥 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. It holds the valve body and shank together under pressure. Do not interchange body with old shank washer as leaking can occur.

3. **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 top & arm clockwise to locked position. Hand-tighten only. DO NOT OVER TIGHTEN. Over tightening may crack the fill valve or tank causing flooding. Make sure the float cups do 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.

**TOOLS NEEDED**

- 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 refill valve is 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”).

**TROUBLESHOOTING**

- IF FILL VALVE TURNS ON AND OFF BY ITSELF
  - This indicates the tank is losing water. The fill valve is refilling lost water. Clean flapper and drain seal. If tank continues change flush valve. Install Fluidmaster 507AKR, 540AKR or 555C kit.
- 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” slack.

**PARTS IN THIS KIT:**

- (1) Fill Valve
- (1) Flapper
- (1) Shank Washer
- (1) Locknut
- (1) Refill Tube
- (1) Refill Clip

**EXCLUSIONS:**

- 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. promises to the consumer to repair, or at the option of Fluidmaster Inc. to replace any part, which in Fluidmaster Inc.’s opinion, is defective. Fluidmaster Inc. will not pay for any costs of removal, transportation and reinstallation to obtain warranty service.

**LIMITED-TYE YEAR EXPRESS WARRANTY**

Fluidmaster, Inc. warrants this product to be free from defects in material and workmanship, under normal and proper use and maintenance, for five years after the date of purchase. This limited warranty does not cover damages resulting from accident, misuse, abuse, improper installation, or ordinary wear and tear. Fluidmaster, Inc. will not be liable for any incidental or consequential damages造成的 by any defect in material or workmanship of this product. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. This warranty gives you specific legal rights, and you may also have other rights, which vary from state to state.

**WARNING:**

- Do not over tighten the nut as it could damage fill valve or coupling nut, resulting in flooding. Make sure the float cups do not touch the tank walls or tank lever and flush valve.
- Turn off water supply (Clockwise). Flush toilet and remove excess water from tank with sponge.

**FLapper CLIPS**

- A. Refill Clip
- B. Refill Tube
- C. Shank Washer
- D. Locknut
- E. Threaded Shank

**DO NOT**

- Use pencil to mark water level of tank. Then follow steps A-E.
- A. Turn off water supply (Clockwise). Flush tank and remove excess water from tank with sponge.
- B. Remove water supply coupling nut. Remove locknut from under tank.
- C. Remove fill valve from tank.
- D. Unhook flapper chain from tank lever.
- E. Do not move lock ring. It holds the valve body and shank together under pressure. Do not interchange body with old shank washer.

**TOOLs**

- Refill Tube
- Shank Washer
- Flapper

**Code Compliance**

1. THE TOP OF OVERFLOW PIPE (A) must be minimum of 1” below TANK LEVER HOLE (B).
2. WATER LEVEL (C) is set below top of Overflow Pipe (Fluidmaster recommends 1/2”).
3. THE CRITICAL LEVEL MARK/C.L. M欥 1” above top of overflow pipe. This is a requirement of the Universal Plumbing Code.

**Prepping the Fill Valve for Installation**

- [Diagram of Preparing the Fill Valve for Installation]

**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 level, 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.

**Remove Valve Cap Assembly, Flushing Out Debris, Replacing Seal, & Replace Valve Cap Assembly**

- [Diagram of Removing Valve Cap Assembly, Flushing Out Debris, Replacing Seal, & Replacing Valve Cap Assembly]

**Installing New Fill Valve**

- [Diagram of Installing New Fill Valve]

**Replacing Valve Cap**

- A. Place cap assembly on top of gray valve body by aligning cap arm and adjusting rod next to refill tube.
- B. Press down on top cap while rotating top & arm clockwise to locked position.

**Removing Valve Cap Assembly**

- Turn off water supply (Clockwise). Flush tank and remove excess water from tank with sponge. Install Fluidmaster 507AKR, 540AKR or 555C kit.
- Hold cup upside down over uncapped refill valve to prevent splashing. Turn water supply on and off a few times. Turn water supply off when putting cap back on valve.

**Flushing Out Debris**

- [Diagram of Flushing Out Debris]

**Replacing Seal**

- Use only a genuine Fluidmaster 242 seal.