# **FLUIDMASTER® 400CAR3P5 FILL VALVE & 3" FLAPPER INSTALLATION INSTRUCTIONS**

## WARNING

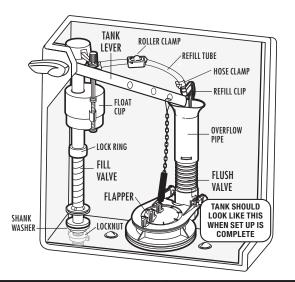
DO NOT USE IN-TANK DROP-IN TOILET BOWL CLEANERS CONTAINING BLEACH OR CHLORINE. Use of such products will: (1) RESULT IN DAMAGE to tank components and MAY CAUSE FLOODING and PROPERTY DAMAGE and (2) VOID FLUIDMASTER WARRANTY Fluidmaster Flush 'n Sparkle Toilet Bowl Cleaning System is recommended for those choosing to use in-tank bowl cleaners and WILL NOT VOID the FLUIDMASTER WARRANTY

because it will not damage the components. **DO NOT** overlighten 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

# LIMITED SEVEN-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 seven years from 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 seven years form the date of purchase. All costs of removal, transportation and reinstallation to obtain warranty service shall be paid by the consumer. During this "Limited Seven Year Express Warranty," Fluidmaster Inc. will provide, subject the "Exclusions" section set forth below, all replacement parts free of charge, necessary to correct such defects. This "Limited Seven Year Warranty," Is mill 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 INICIDENTAL OR CONSEQUENTIAL DAMAGES, INCLUDING COSTS OF INSTALLATION, WATER DAMAGE, PERSONAL INJURY OR FOR ANY DAMAGES RESULTING FROM ABUSE OF MISUSE OF THE PRODUCT, FROM OVERTIGHTENING OR FROM FAILURE TO INSTALL OR MAINTAIN THIS PLUMBING PRODUCT IN ACCORDANCE WITH THE WIRITTEN INSTRUCTIONS, INCLUDING USE OF NON-FLUIDMASTER PARTS. DO NOT USE IN-TANK DROP-IN TOILET BOWL CLEANERS CONTAINING BLEACH OR CHOIRINE USE OF SUCH PRODUCTS WILL EXCLUSIVE ADMAGE TO TANK COMPONENTS AND MAY CAUSE FLOODING AND PROPERTY DAMAGE. USE OF SUCH PRODUCTS WILL VOID THIS WARRANTY.



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# **TOOLS NEEDED**



**EPARATION** 

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# 🔂 Fluidmaster.

30800 Rancho Vieio Road, San Juan Capistrano, CA 92675 www.Fluidmaster.com • 800-631-2011 Contact Fluidmaster for troubleshooting help or visit www.fluidmaster.com M-F 5:30 am - 5:00 pm PST.

# **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) 3" Water-Saving Adjustable Flapper

# 1

SCAN HERE!



For additional details before you begin, watch our installation video: http://opn.to/a/400CAR3

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# **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 toilet and remove

- excess water from tank with sponge.
- B. Disconnect water supply connector. Remove locknut from
- C. Remove fill valve from tank.
- **D.** Unhook flapper chain from tank lever.
- **E.** Remove flapper from overflow pipe on flush valve.





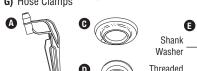
# **Preparing the Fill Valve for Installation**

# **Fill Valve Parts**

A) Refill Clip

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- B) Refill Tube C) Shank Washer
- D) Locknut
- E) Threaded Shank F) Roller Clamp
- G) Hose Clamps



Place Shank washer onto threaded shank of fill valve. Flat side up. FAR



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## Fill Valve Positioning:

A. Position fill valve in tank - DO NOT FULLY INSTALL.

B. Verify top of fill valve is 3" above overflow pipe.

If Necessary - Fill Valve Height Adjustment: A. DO NOT MOVE LOCK RING.

**B.** Increase height – twist lower shank counter

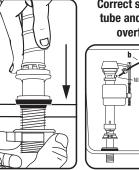
C. Decrease height – twist lower shank clockwise.

D. Critical Level Mark (C.L Mark) MUST be positioned 1" above top of overflow pipe required by Universal Plumbing Code.

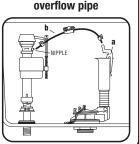
# **Installing New Fill Valve**

A. Place fill valve in tank.

- B. Align fill valve nipple to face overflow pipe.
- C. Press down on shank from inside while tightening locknut
- D. Hand-tighten only DO NOT OVERTIGHTEN! Overtightening may crack fill valve or tank causing flooding.
- E. Attach one end of refill tube (b) to refill clip (a).
- F. Place clip on right side of overflow pipe.
- G. Attach other end of tube to nipple on fill valve Cut tube as necessary with scissors.
- H. Squeeze tube clamps and slide to ends of tube and release. WARNING: Placing refill tube down overflow pipe will cause



Correct set up of refill tube and refill clip to overflow pipe

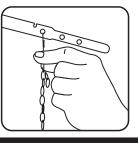


# **Installing New Universal Water-Saving Adjustable Flapper**

A. Snap arms onto flush valve mounting ears (for wider flush valves, push arms out to setting "B" on flapper).

B. Attach chain onto tank lever arm. There should be 1/2" slack when the flapper is closed.





# **Attach Water Supply Connector**

Shank

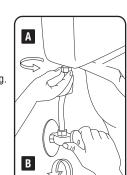
A. Attach water supply coupling nut to fill valve – Turn clockwise by hand until

**WARNING:** Over tightening the nut could damage fill valve or coupling nut resulting in flooding and property damage. Fluidmaster Click Seal® Connector is recommended: a perfect seal every time without over tightening.

**B.** To check for leaks, turn on water supply.

**C.** If leaking occurs – turn nut just enough to stop leaking.

**NOTE:** We recommend replacing the existing water supply connector if it is worn or over 5 vears old - this will protect your home from potential flooding and property damage.



# **Adjusting Tank Water Level**

HINT: When adjusting float cup, flush tank and make adjustment while tank is filling.

A. Turn water on

**B.** Turn water level adjustment screw to set float cup to

C. Turning adjustment screw clockwise raises water level.

**D.** Turning adjustment screw counter clockwise lowers water level

E. Flush toilet to check new

**HINT:** Twisting adjustment screw 4 complete turns moves float by 1/2".



# **Water-Saving Features:** 8A: Roller Clamp

HINT: Flush toilet - if bowl appears full, but continues to fill, valve may be overfilling bowl. Adjust water level as follows:

A. Fill bowl with gallon of water & wait for it to recede and stop.

**B.** Mark water level with pencil and flush toilet. If the water refills above line, water level is too high, if water stops filling below pencil line, water is too low.

C. Adjust water by pushing down and rolling the dial with thumb on roller clamp. "0" means no refill.

A. Adjust the dial to setting number 10 and flush your toilet. 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 he dial up one setting.





# **FLUSHED**

# MORE WATER +

# Flapper Settings Flapper settings to match manufacturers' toilet performance specification.

TOILET MODEL	FLOAT SETTING	CHAIN LENGTH	
AMERICAN STANDARD		inches	mm
Cadet 3	#8	6.22	158
ELJER			
Titan	#0	7.52	191
GERBER			
Avalanche	#6	6.69	170
GLACIER BAY			
2-Piece High Efficiency	#3	9.07	230
KOHLER			
Cimarron	#1	4.49	114
MANSFIELD			
Maverick	#5	5.94	151

TOILET MODEL	FLOAT SETTING	CHAIN LENGTH	
ST. THOMAS		inches	mm
Arlington	#0	6.14	156
Palermo	#6	4.76	121
PEGASUS			
Westminster	#9	4.61	117
тото			
Drake	#6	4.45	113
Clayton	#0	6.46	164
Vespin	#6	3.70	94
VITRA			
Corina	#5	4.88	124
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# **Code Compliance**

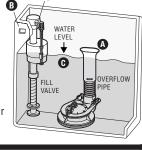
Once fill valve is installed, ensure overflow pipe and water level of tank are correctly set.

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. 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

Code Compliance helps protect your home & drinking water supply



# 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

. This indicates the tank is losing water. The fill valve is refilling lost water. Clean flapper and drain seat. If leak continues change flush valve. Install Fluidmaster 540AKR 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 Step "7"). You may have to lengthen the fill valve in order to increase the water level in tank (See Step "3")
- Flapper may be closing too soon. Give flapper chain approximately 1/2" of slack (See Step "5").

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

# **Removing Valve Cap** Turn off water supply.

Flush Toilet, Twist counter-clockwise to remove cap and disconnect from rod







# **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

SEAL OCATION

If Replacing Seal: Use only a genuine Fluidmaster 242 seal.

# **Replacing Valve Cap**

Connect cap to rod (a). If you have a 400 with a metal rod (c), place adapter (b) into slot at end of cap. Place cap on valve with rod next to refill tube (d). Push down and twist clockwise until it stops.





Please keep a copy of these instructions on the property in which the product was installed.