PARTS OVERVIEW

PART

Α

PART

PART

С

PART

D

PART

Е

There are 5 main components included in this box. Each of these components are contained within color-coded bags with a corresponding letter.

To identify a part within the box, look for the letter and color on each bag that corresponds with the parts listed to the right.

DUO FLUSH[™] Valve

The DUO FLUSH[™] Valve saves water by allowing you to choose between half and full flushes.

Angled Seat Adapter

The ANGLED SEAT ADAPTER is only necessary if you have a plastic ANGLED FLUSH VALVE SEAT.

Brass Seat Adapter

The BRASS SEAT ADAPTER is only necessary if you have a BRASS FLUSH VALVE SEAT.

Dual Action Handle (Handle)

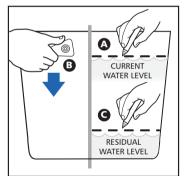
The DUAL ACTION HANDLE will allow you to flush UP for a half flush and DOWN for a full flush.

PerforMAX™ Fill Valve The PerforMAX[™] Fill Valve maximizes system performance. It replaces the fill valve currently in your tank.

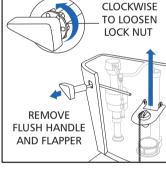
DUO FLUSH™ VALVE OVERVIEW & PREPARATION



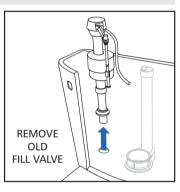
SECTION 1: MARKING WATER LEVELS & REMOVING OLD PARTS



Step 2: A Remove the tank lid. B Mark the current water level in your tank.
Flush your toilet once.
Make a mark at the residual water level left inside the tank. Flush your toilet a second time to drain the water from the toilet tank. If necessary, sponge out any remaining water.



Step 3: Remove the existing flapper, chain and flush handle assembly from your tank. When removing the FLUSH HANDLE, note that the LOCK NUT may be reverse-threaded, so you need to turn it clockwise to loosen it.



Step 4: Remove the old fill valve assembly.

Fluidmaster.

DUO FLUSH[™]

System

INSTALLATION GUIDE

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SHUT OFF WATER

CLOCKWISE

Step 1: Shut off the

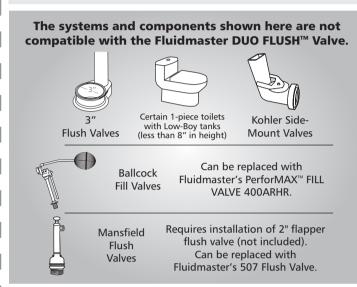
water supply beneath

valve clockwise.

your toilet by turning the

Visit **www.duoflush.com** for easy-to-follow installation videos and additional troubleshooting tips.

INCOMPATIBILITIES / SPECIAL NOTES



This device is not intended to be used as a retrofit device for 1.28 gpf water closet.

Performance may vary since product was not tested on all models of water closets.

IDENTIFYING YOUR FLUSH VALVE SEAT



Step 5A: Identify the type of FLUSH VALVE SEAT you have in your tank. If your plastic OVERFLOW PIPE has a FLAT SEAT as pictured above, proceed to Section 4 on the back side of this instruction guide.



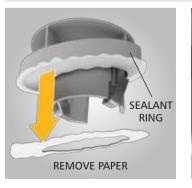
Step 5B: If your plastic OVERFLOW PIPE has an ANGLED SEAT, locate and remove the ANGLED SEAT ADAPTER from the yellow bag labeled "B." Follow the installation instructions below for SECTION 2.

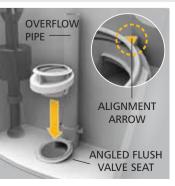


Step 5C: If your OVERFLOW PIPE is brass, locate and remove the BRASS SEAT ADAPTER from the orange bag labeled "C." Follow the installation instructions below for SECTION 3.

SECTION 2: INSTALLING THE ANGLED SEAT ADAPTER

SECTION 3: INSTALLING THE BRASS SEAT ADAPTER





Step 6: Prior to installing the ANGELED SEAT ADAPTER make sure the bottom of the tank and flush valve seat are dry.

Step 7: Remove paper from sealant ring located on the bottom of the ANGLED SEAT ADAPTER. Do not remove SEALANT RING. **Step 8**: Locate yellow arrow on the back of the ANGLED SEAT ADAPTER.

Step 9: Align yellow arrow on ANGLED SEAT ADAPTER directly toward the plastic OVERFLOW PIPE.



ALIGNMENT ARROW

Step 10: Firmly press the ANGLED SEAT ADAPTER onto the flush valve seat as shown above.

Proceed to Section 4.



Step 11: Check for flat surface on seat. Any damage to seat will require replacement of the entire brass seat with Fluidmaster's 507 Flush Valve.



Step 12: Wipe down the BRASS FLUSH VALVE SEAT before installing to check for mineral build-up. If the OVERFLOW PIPE is threaded on (some are, some aren't) make sure it's tight by twisting clockwise before installing the BRASS SEAT ADAPTER.

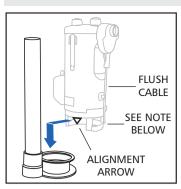


Step 13: Slide the BRASS SEAT ADAPTER down the pipe and snap it to the FLUSH VALVE SEAT as shown.

Proceed to Section 4.

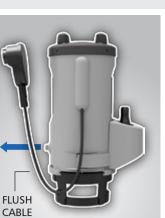
PROCEED TO INSIDE PAGES FOR NEXT STEPS

SECTION 4: INSTALLING THE DUO FLUSH™ VALVE



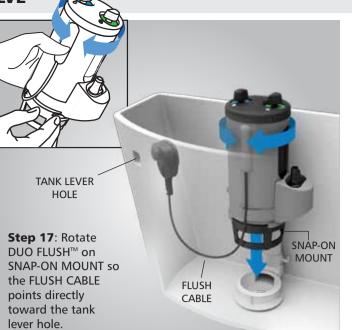
Step 14: Remove foam around ADJUSTMENT DIALS.

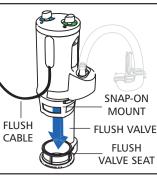
Step 15: Locate white arrow on SNAP-ON MOUNT and align it facing the OVERFLOW PIPE. Do not install yet.



Step 16: Unsnap FLUSH CABLE from DUO FLUSH[™].

Note: Make sure not to sharply bend or kink the FLUSH CABLE.





Step 18: Press DUO FLUSH onto seat.

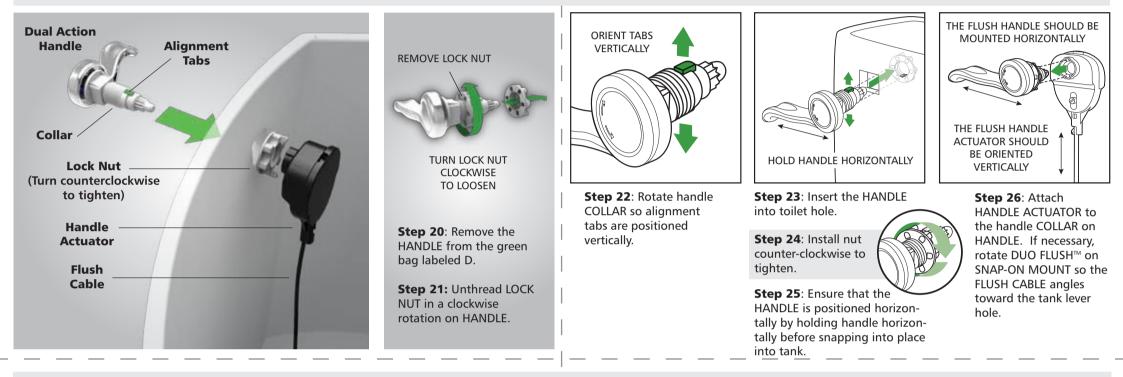
Note: Be sure the FLUSH CABLE is not caught between the SNAP-ON MOUNT and the FLUSH VALVE SEAT when installing.



Step 19: Attach the OVERFLOW HOSE to the top of the OVERFLOW PIPE via the black plastic OVERFLOW HOSE CLIP. Ensure that the opening of the OVERFLOW HOSE is directly aligned with the opening of the OVERFLOW PIPE.

Note: Keep end of hose above overflow pipe. If hose is positioned down into overflow pipe, it will siphon water to bowl

SECTION 5: INSTALLING THE DUAL ACTION HANDLE

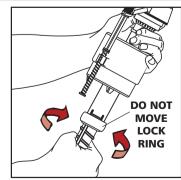


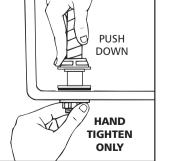
SECTION 6: INSTALLING THE PerforMAX[™] FILL VALVE

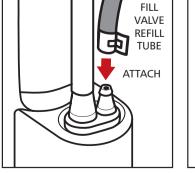


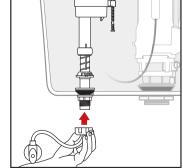
SECTION 7: ADJUSTING THE HEIGHT OF THE PerforMAX[™] FILL VALVE

SHANK WASHER









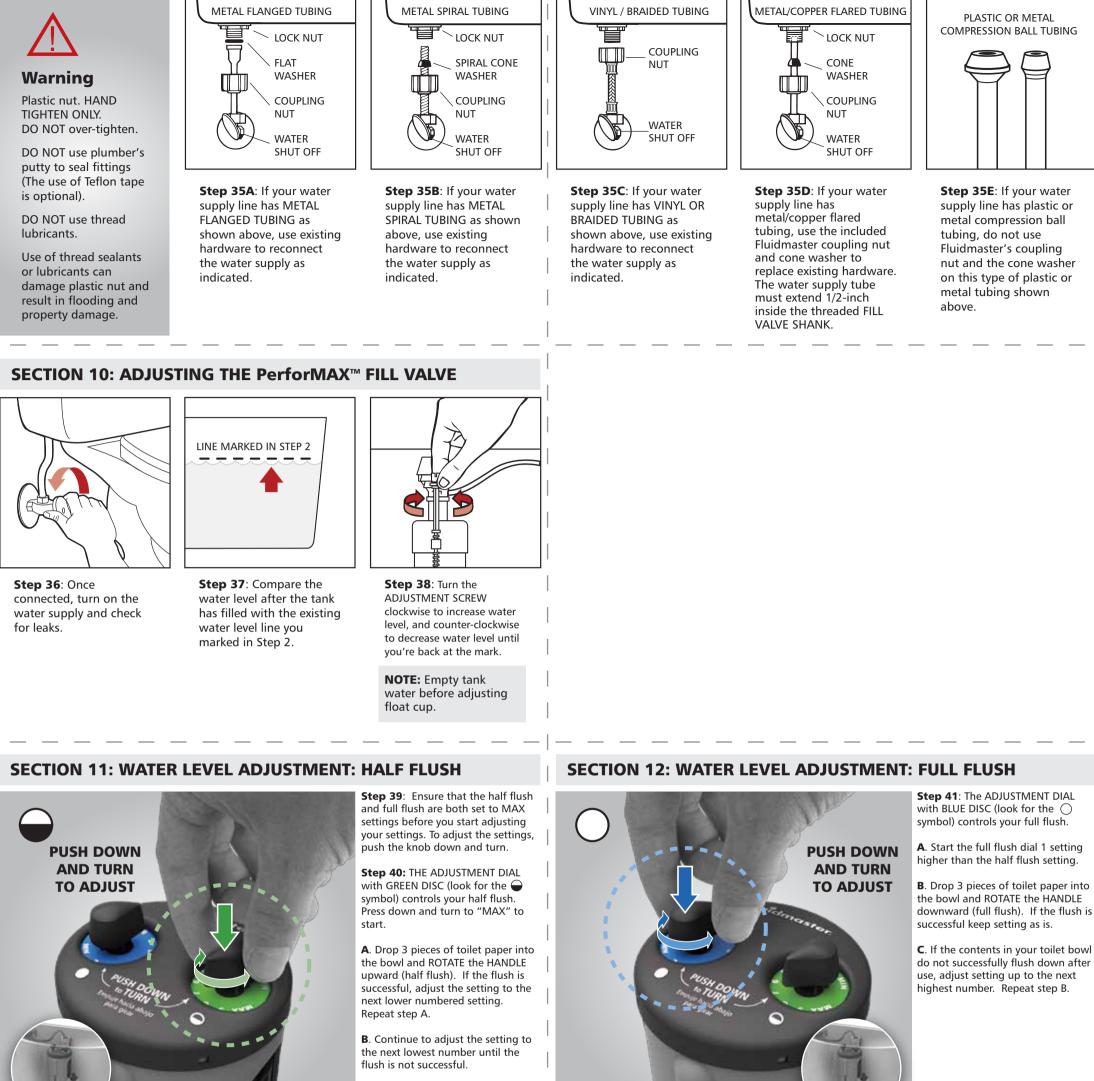
Step 29: Place the FILL VALVE in the tank to check height. Do not attach yet.

Step 30: Check the height of the PerforMAX[™] FILL VALVE. It must be 3" higher than the OVERFLOW TUBE. **Step 31**: Adjust height of FILL VALVE by turning lower shank in or out of valve body. **DO NOT MOVE LOCK RING.** Step 32: Place the PerforMAX[™] FILL VALVE in the tank. Fasten the LOCK NUT to the FILL VALVE THREADED SHANK. Hand tighten. (Do not overtighten.) **Step 33**: Attach the free end of the black FILL VALVE REFILL TUBE from the PerforMAX[™] FILL VALVE to the small nipple on the WATER SAVING REFILL MODULE. Ensure the HOSE CLAMP is secure. **Step 34**: Identify your water supply line by using steps 36A - 36E to determine the assembly parts required to properly reconnect the water supply line.

PROCEED TO FOLLOWING PAGE FOR NEXT STEPS

SECTION 8: INSTALLING AND CONNECTING THE PerforMAX[™] FILL VALVE

SECTION 9: RECONNECTING THE WATER SUPPLY: CONNECTION TYPES

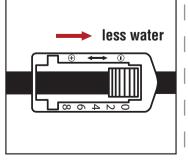


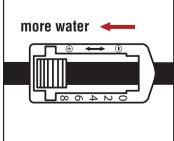
 ${\bf C}.$ Adjust your setting back to the last successful flush setting that provided you with a successful flush.

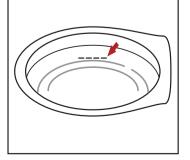
SECTION 13: CHECK WATER LEVEL IN THE BOWL











Step 42: Start by adding a gallon of water to the existing bowl water.

Step 43: Wait 3 minutes, allowing the water to settle and mark the water level.

Step 44: Flush the toilet. If the water reaches your mark in the bowl and the FILL VALVE is still running, push down on the roller and adjust it to the next lowest number.

Step 45: If the FILL VALVE shuts off before the water has reached your mark in the bowl, push down on the roller and adjust it to the next highest number.

Step 46: Repeat steps in SECTION 11 and SECTION 12 until the water reaches your mark at the same time the FILL VALVE stops running.

> PROCEED TO BACK PAGE FOR NEXT STEPS

DUO FLUSH™ TROUBLESHOOTING

1. Tank Lid Interference on Half (Upward) Flush

Problem: Tank lever hits tank lid forcing the user to hold the handle

Solution: Remove handle actuator by holding the top end of actuator and pull away from dual action handle collar. DO NOT pull on FLUSH CABLE when removing the handle actuator.



Rotate handle downward 15° and reinsert actuator into handle.

If tank lever does not fit properly on your toilet tank, for further help visit <u>www.duoflush.com</u> or call Fluidmaster Technical Support at (800) 631-2011) M-F 7:30 am – 4:30 pm PST.

2. Seal Leaking

Problem: The tank continues to leak water causing water loss in the tank.

Solution: First remove the handle actuator by holding the top end of the actuator and pull away from dual action handle collar. Grab the top of the DUO FLUSH[™] and gently rock (away from fill valve) and pull up on DUO FLUSH[™].



Once released clean seat and inspect piston seal at bottom ensuring the seal is centered oh piston. Reattach DUO FLUSH[™] and handle actuator. Turn on water and recheck water level for leaking.

3. Water Level in Bowl is Low

Problem: Toilet bowl water level is not filling up high enough even after adjusting both adjustment dials on DUO FLUSH[™].

Solution: If adjustments made per Sections 11 & 12 still do not allow for adequate water levels in your bowl (even after several attempts), follow steps A through G below:

A. Unclip OVERFLOW HOSE CLIP from OVERFLOW PIPE

B. Remove OVERFLOW HOSE from WATER SAVING REFILL MODULE nipple.

C. Locate FILL VALVE REFILL CLIP from fill valve assembly parts in RED BAG labeled E

D. Attach FILL VALVE REFILL CLIP to end of FILL VALVE REFILL TUBE

E. Connect FILL VALVE REFILL TUBE with clip directly to top of the OVERFLOW PIPE.

F. Slide HOSE CLAMP to end of FILL VALVE REFILL TUBE to hold in place.

G. Retry flush.

DUO FLUSH™ TROUBLESHOOTING (continued)

4. Unused Parts

Problem: Why do I have parts left over from my kit?

Solution: Depending on the type of flush valve you have identified, you may have additional parts left which may include an angled seat adaptor, brass seat adaptor, and extra fill valve assembly parts.

5. Half flush will not adequately remove waste

Move the HALF FLUSH ADJUSTMENT DIAL (Green) to a higher number to allow more water to be flushed.

6. Full flush will not adequately remove waste

Move the FULL FLUSH ADJUSTMENT DIAL (Blue) to a higher number to allow more water to be flushed.

7. Angled Seat Adapter Removal

If you need to remove the ANGLED SEAT ADAPTER from your system, pull the adapter upward firmly to release it from the FLUSH VALVE SEAT. For further assistance, call Fluidmaster Technical Support at (800) 631-2011 M-F 7:30 am -4:30 pm PST.

More Information

Please visit our website at <u>www.fluidmaster.com</u> for more solutions to common toilet problems.

Do not return to the store.

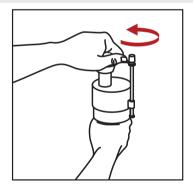
Call technical support first if you have an installation problem.

For further help visit <u>www.duoflush.com</u> or call Fluidmaster Technical Support at (800) 631-2011 M-F 7:30 am – 4:30 pm PST.

PerforMAX[™] FILL VALVE TROUBLESHOOTING: FLUSHING OUT DEBRIS

Problem: The PerforMAX[™] Fill Valve will not turn off.

Solution: Sand and rust move through water pipes. Always clear debris from water lines. Refer to the following steps for "Flushing Out Debris."



Step 1: Turn off water and flush toilet.

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. Let cap assembly hang on float cup



Step 2: FLUSHING OUT 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.



Step 3: REPLACING
VALVE CAP ASSEMBLY
A.) Place cap assembly on top of valve body by aligning cap arm and adjustment rod next to refill hose).
B.) Press down on top cap rotating top & arm clockwise to locked position.

5 YEAR LIMITED 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.