

FLUSHMATE 503
Series Replacement
Tank and Handle Kit



FLUSHMATE 503 Series Replacement Tank and Handle Kit Installation Guide

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FLUSHMATE®

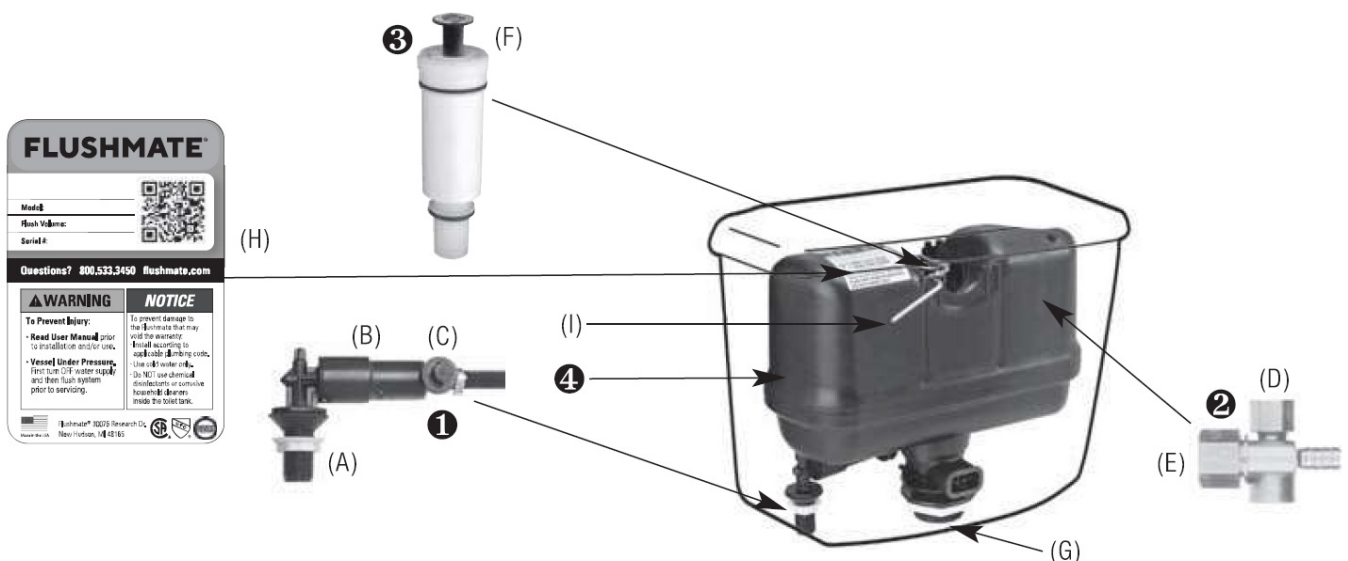
FLUSHMATE 503 Series Replacement Tank and Handle Kit



Important: Do not return to store where purchased. Please read the entire manual before attempting to make any adjustments or repairs.

Flushmate Limited Warranty Summary

Flushmate, LLC, ("Flushmate"), warrants each Flushmate Pressure Assisted System against defects in materials and workmanship. Flushmate's limited warranty does not cover abuse, misuse, vandalism, or damage caused by Acts of God or other matters beyond Flushmate's control, such as use of harmful chemicals, modifications to or faulty installation of the system, or improper or deficient plumbing. You can file a claim by email, telephone or regular mail by following the instructions found in the Limited Warranty which can be obtained at www.flushmate.com or by requesting a free copy by telephone at (800)-533-3460. If you submit a valid claim, Flushmate at its discretion, will repair or replace your defective product, or provide a refund, as your exclusive remedy. This is only a general summary of F/ushmate's limited warranty so it is important to note that the specific terms, conditions, restrictions, limitations and exclusions, including the duration of the warranty, are contained in the actual Flushmate Limited Warranty. In case of a conflict with the above summary, the complete warranty terms will prevail.



Minimum Operating Pressure By Series

| | | | |
|---------|---------|---------|---------|
| 503 | 503H | 503UH | 504 |
| 20 psi• | 20 psi• | 25 psi• | 25 psi• |

Minimum operating pressure by series for FLUSHMATE unit criy. Max 80 psi

List of Components for 503, 503H, 503UH, and 504 Series

1. Lower Supply Group w/Hose
 - (A) Supply Shank w/inlet screen
 - (B) Pressure Regulator w/Back Check
 - (C) Relief Valve
2. Upper Supply Group
 - (D) Air Inducer Cap w/duckbill
 - (E) Vacuum Breaker
3. Flush Valve Cartridge Assembly
 - (F) Actuator w/set screw
4. FLUSHMATE® Tank
 - (G) Discharge Extension w/Drain
 - (H) Name Plate w/Serial Number
 - (I) Flush Rod

WARNING To Prevent Injury:

Read entire manual before performing any tasks.

Safety Precautions

Care should be taken when working on the Flushmate System. Surfaces can become wet, which may create a slip/fall hazard. Exposed tank bolts have sharp threads and may cause injury- avoid contact. Lifting the toilet tank (up to 45 lbs./20.4 kgs) is required. If you are unable to lift the toilet tank contact Flushmate: 1.800.533.3460

Vessel Under Pressure

Prior to servicing the Flushmate System, first completely CLOSE water supply stop and then flush toilet to release pressure from the Flushmate vessel. Failure to do so can result in injury or damage to the toilet tank and bowl.

NOTICE Use of petroleum based lubricants or cleaning products containing chlorine (household bleach, drop-in blocks or tablets, disinfectants) that are applied or inserted into the toilet tank and/or Flushmate vessel will void your Flushmate Limited Warranty. When cleaning the exterior of the toilet, follow manufacturer's recommendations.

Install according to applicable plumbing code.

Use cold, potable water only.

Installation

Please follow the toilet manufacturer's installation instruction for installing the fixture. Note that the toilet requires a minimum water supply line pressure. See or refer to manufacturers' specifications for minimum operating pressure for the fixture. Before attaching, you should always flush the water supply lines.

After completing the installation, you are required to adjust the Cartridge Actuator (F). To adjust, make sure the water is turned on and the vessel is completely charged. The Actuator needs to be set at the proper clearance, 1/8" from either the Flush Rod or push button. To make this adjustment, hold the Actuator while loosening the Phillips setscrew in the center of the Actuator, and rotate the Actuator up (counterclockwise) or down (clockwise) until the proper clearance is obtained. See Figure 4 for clearance required for flush-handle fixture. Tighten setscrew after adjusting the Actuator.

Additional notes:

- Water supply requirement: cold water, potable water system.
- You may be required to initially flush the toilet a few times to properly charge the system.
- Should a two piece fixture develop a leak between the tank and bowl, please refer to the fixture manufacturer's installation instructions.
- Steps for Run-On Condition:
 - Recheck the actuator adjustment described above
 - Clean the Shank Inlet Screen e(A) and check your water supply pressure – See Step 6
 - Remove/Rinse/Reinstall the Flush Cartridge CD – See Step 2 for Cartridge Removal/Installation.

Operation

All pressure-assist toilets get their energy from the water supply line. It is important to have sufficient pressure at the supply. Refer to the toilet manufacturers' specifications for minimum operating pressure for the fixture.

Step 1. Check Flush Cartridge

- Turn off water supply and flush toilet.
- Pour water onto top of cartridge (Fig. 1) and turn on water.
- Watch for air bubbles. Consistent flow of bubbles indicates cartridge needs to be replaced. No bubbles visible, move on to Step 4.

Step 2. Flush Cartridge 3 Installation

- Turn off water and flush the toilet.
- Use the handle end of pliers (Fig. 2) to unscrew the cartridge from the vessel.
- Drop in new cartridge and screw in until one female thread (Fig. 3) of vessel is showing.
- Turn on water. Continue to screw in cartridge slowly, 1/8 to 1/4 turn increments until water stops running into the bowl and tank pressurizes.

Step 3. Actuator 3 (F) Adjustment

Start by loosening the setscrew in the center of the actuator. Adjust the height of the actuator by screwing it up or down. There should be a gap (Fig. 4) (about the thickness of a penny) between the rod and actuator when gently lifting the rod. When accomplished tighten the setscrew in the center of the actuator.





Fig. 1



Fig. 2

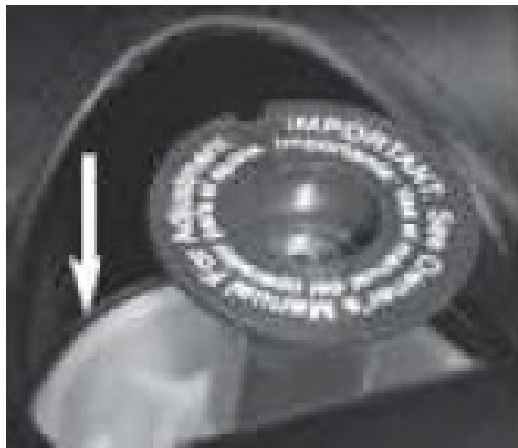


Fig. 3



Fig. 4

Place several drops of water over hole on top of air inducer and flush toilet (Fig. 5). If drop is vacuumed in, move onto step 6. If not, air inducer needs to be cleaned.

Step 5. Clean Air Inducer 2 D

- Turn off water and flush toilet. Unscrew the cap of the air inducer (the smaller of the two caps) (Fig. 6).
- Pull the duckbill out from the cap and clean it by gently squeezing it (Fig. 7) between your fingers under a flow of water. Inspect the lips of the duckbill. If they are deformed, the duckbill needs to be replaced.
- Reassemble, insert the duckbill into the housing (Fig. 8) body and reinstall the cap finger tight.



Fig. 5



Fig. 6



Fig. 7

Step 6. Clean Inlet Screen 1 (A)

- Clean the inlet screen by turning off the water supply, disconnecting the water supply line from the supply shank and removing the screen with a paper clip (Fig. 9).
- Clean screen (Fig. 10) and replace.

Other Points to Remember

1. Pressure-assist toilets get their energy from the water supply.
2. Refer to the toilet manufacturers' specifications for minimum operating pressure for the fixture.
3. A blocked bowl or drain will affect the fixture's performance. To check for this, pour 2 to 3 gallons of water into the bowl. If the bowl accumulates water in it, this would indicate that something is blocking the bowl/drain. If you need additional help, please contact the manufacturer of the flushing system, or do a word search on "pressure-assist toilets" on the web.



Fig. 8



Fig. 9



Fig. 10

Winterizing

1. Turn off the water supply valve and flush the toilet to relieve the pressure.

2. Place a bucket under the lower Supply Shank (A) and disconnect the water supply line, allowing the water to drain into the bucket.
3. Push down on the Actuator and pull it up momentarily to allow air into the vessel.
4. Follow the fixture manufacturer's instructions for winterizing the bowl.
5. Do not put antifreeze or any other chemical agents in the china holding tank or in the FLUSHMATE® Tank.

Points to Remember

When replacing components on the FLUSHMATE® Flushometer-Tank System, make certain that the water supply valve is turned off and the toilet has been flushed to relieve pressure in the FLUSHMATE® tank.

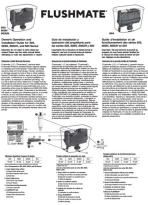
WARNING: USE OF PETROLEUM-BASED LUBRICANTS OR CORROSIVE CLEANING PRODUCTS CONTAINING CHLORINE, SUCH AS HOUSEHOLD BLEACH, DROP-IN BLOCKS OR TABLETS, OR DISINFECTANTS THAT ARE APPLIED INSIDE THE CHINA HOLDING TANK WILL VOID YOUR FLUSHMATE® WARRANTY.

- Water supply requirement: cold water, potable water system.
- The Flush Valve Cartridge can be removed by inserting the handles of a pair of pliers into the top of the Flush Valve Cartridge and turning counterclockwise.
- With each flush, a small amount of water may be emitted from the upper supply group. A drain at the base of the FLUSH MATE® system will eliminate most of this water. Depending on usage, you may see some residual water (less than 1 ") in the china holding tank. This is a normal occurrence.
- Your water pressure is adequate if your water supply line will yield one or more gallons of water within thirty (30) seconds.
- Replacement parts are readily available by contacting Consumer Services at [800-533-3460](tel:800-533-3460) or by visiting the "Where to Buy" section of our website, flushmate.com, or purchase online at eflushmate.com

If you would like additional information or require technical assistance, please contact FLUSHMATE® Consumer Services at [800-533-3460](tel:800-533-3460), or visit our website, www.flushmate.com. For faster service, please be prepared to provide the serial number and date of installation of your FLUSHMATE® system. For support outside the United States, visit our local contact website at flushmate.com

If you have any further questions, please feel free to contact Consumer Services at [800-533-3460](tel:800-533-3460) or email info@flushmate.com





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503, 503H, 503UH, 504, 503 Series Replacement Tank and Handle Kit, 503 Series, Replacement Tank and Handle Kit, Tank and Handle Kit, and Handle Kit, Handle Kit, Kit

References

- [User Manual](#)

[Manuals+](#), [Privacy Policy](#)

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