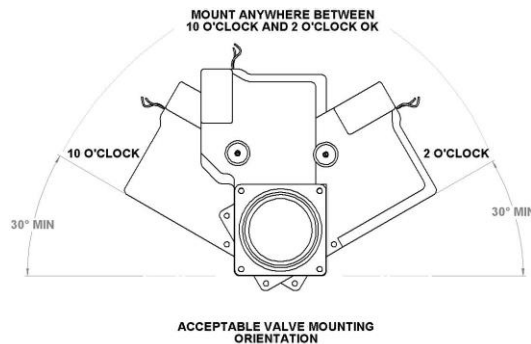




Valve Cleaning and Maintenance Procedure

Your Drain Master waste valve is designed to give you years of trouble-free service. The length of time between service intervals will vary depending on usage, tank maintenance and installation position. If the valve was installed in the 10 o'clock to 2 o'clock position over the piping (with little stress on the piping) and you use your RV seasonally, you may never need to do any valve maintenance. If on the other hand, the valve was positioned at the side of the drain pipe and or you are full time RVer you may need to include the valve cleaning procedure in your annual maintenance schedule.



If you notice a change in the valves opening speed or a change in the sound when opening or closing, i.e. the valve seems to be laboring, it is time to perform the following maintenance. Note: Please call us 831 636-9775 and order a Drain Master valve maintenance kit (Part Number 5582) Please do not remove your valve until you have received your kit. No sense getting off on the wrong foot. After all, this will not be the most pleasant thing you have done in a while.

1. Premium valves:

- a. At the end of the wires that come out of the valve, you will have a 4 pin plug. Simply disconnect this plug by squeezing the tabs on the sides of it.
- b. If you have an older valve it may only have 2 wires and no electrical plug. Disconnect the Red and White wires from the valve. (if your valve is equipped with the LED light on the operator switch you will also have two additional wires; either both white or both red/white/gray, depending on the version of valve you have)

2. Pro-Series Valves:

- a. With valve powered up press the Operator switch to move the valve to the open Position - the status light on the operator switch will be RED
- b. Disconnect the 2 pin 12 v DC Power plug (with green and black wires)
- c. Disconnect the IP 66 4 pin plug connecting to each controller port on the valve; if only 1 port was being used the 2nd port will have been capped off with a port cover - leave it place.

3. Remove the 4 bolts holding the Drain Master valve in the piping.
4. Separate the flanges holding the valve until the valve can be removed.
5. Remove the 2 seals from the valve or the flanges and dispose of them.
6. Clean the area around the two flanges and check for cracks or cuts in the flanges. If necessary replace the defective flange. Easier said than done! You may want to call an RV repair technician to do this job.
7. The gate area of the valve needs to be soaked in the Sensor Power solution. You will need a small bucket or container to soak it in the Sensor Power.
8. **IMPORTANT** Do not fully submerge the valve. The goal is to clean the debris and build up in the gate area so **don't submerge the valve past the bolt holes**.
9. Precautions during submersion:
 - a. **Premium valves:** You will see a white magnetic switch on the back of the valve, this should not be submerged. The valve is water-resistant, not waterproof so fully submerging the valve could destroy the motor.
 - b. **Pro-series valves:** You will have dual port controller on the valve. Each port has an IP 66, 4 Pin black plug. **These plugs are IP 66 when mated, not when uncapped and absolutely must NOT be submersed. Keep them away well away from the soak solution.**
10. Begin with the gate is in the **OPEN position**.
11. After putting the valve in the container as directed in step 8, add ½ bottle of Sensor Power.
12. Fill the container with warm water so the gate area of the valve is completely submerged. Half way through the soaking time, close the valve and let it sit in the solution for the remainder of time.
13. LET THE VALVE SOAK UP TO 24 HOURS.
14. Remove valve.
15. **Moving the valve gate**
 - a. **Premium valves:** Using a 12vdc battery touch the Red wire to the positive terminal (post) and the White wire to the negative post. The valve will open (or close depending on the gate position). Being careful not to get your fingers in the hole where the gate is, reverse the wires on the battery and the gate will again move open or closed.
 - b. **Pro-series valves:** Reconnect one of the IP66 4 Pin plugs. Then reconnect 12 V Power 2 pin plug – the valve will automatically go the closed position. Move the valve back and forth using the Operator switch - the status light on the operator switch will cycle between Red (open) and Green (close).
16. Blow moisture out of valve body and when dry, recycle the valve.
17. If the valve still sounds sluggish, redo steps 7 through 13.
18. If the valve sounds like it is moving the gate back and forth without effort, the valve body inside is clean of any residual waste.
19. It is now time to reinstall the valve on your RV. **Leave the valve in the closed position.**
20. Apply a thin coat of the supplied special grease (Dow111) to the gate and seals. You don't need much and you should have lots left over. A thin coat is all that is required. It helps hold the seals in place while reinstalling the valve.
21. Place the seals on the flanges (**this is an important step – do not place seals on the valve itself**).
22. Separate the flanges far enough to slide the valve into position between the flanges without disturbing the seals.
23. Line up the four bolt holes and using the new bolts supplied; slip them through holes. Hand tighten the 4 bolts with the supplied lock nuts.

24. Using a 7/16th wrench, tighten the 4 bolts in a criss cross fashion, (i.e. upper left first, lower right next, upper right, then lower left) This is plastic, so don't over tighten. The valve should be snug and not in stress because the bolts are too tight. **The torque spec is 10 in lbs. As a generic guideline one turn beyond finger tight equates to approximately 10 in lbs. and 1 ½ turns 15 in lbs.** Tightening beyond that, risks stressing and or cracking.
25. Depending on the type of valve Premium or Pro-Series simply reconnect all plugs as before removal.
If required, view or download wiring instructions from Manuals page on our website.
26. Cycle the valve to make sure it is working properly.
27. Add water to the holding tank and check to be sure you have no leaks.

If you have any question during this process, please don't hesitate to give us a call 831 636-9775