Troubleshooting procedures for Drain Master Valves

The Valve Itself

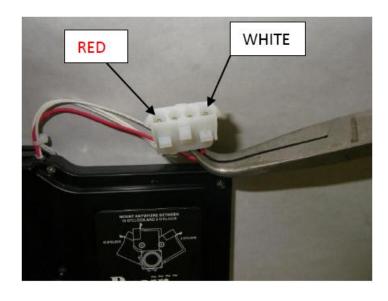
The first thing most people think when their Drain Master valve doesn't work as it always does, is to blame the valve itself. In our experience 95 + percent of the time it is not the valve!

The most effective method to trouble shoot any valve issue, is to disconnect the valve wiring from the rest of the wiring. This is done by disconnecting the 4 pin Mate N Loc electrical plug located about 8" away from the back of the valve.



Mate N Loc Plug

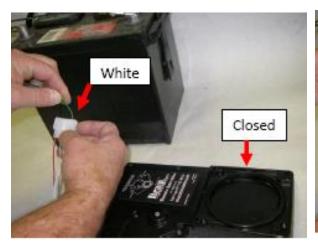
The 2 outer pins are the motor wires, a Red and a White wire, they come directly out of the back of the valve itself.

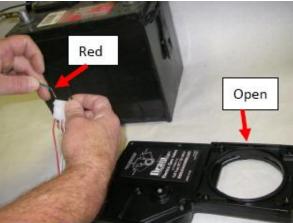


Using a 12 V DC battery or battery charger set on 12 V DC, put the White wire on the Positive terminal and the Red wire on the Negative terminal.



The valve should OPEN in about 1 second! Now reverse the wires by putting the Red wire on the Positive terminal and the White wire on the Negative. The valve should close. If this works do it a few times just to make sure. The problem is in the wiring, the switch, the 12 V DC power source, or maybe a blown fuse.





In the event the valve does not OPEN or CLOSE with the above procedure chances are good the valve has failed and needs to be replaced. If the valve works but is very sluggish (opens and closes but very slowly) the valve may need to be removed and cleaned. See Cleaning Procedure link Pg. 3

The LED Light

The LED light, if your valve is equipped with it, it located either on the right side of the small operator switch or it is integrated in the top (open) part of the switch paddle. The LED indicates when the valve is no longer full closed and it will remain on until the operator closes the valve





The way this works is that there is a small micro switch located on the back of the valve itself.



On the inside of the valve, a magnet is glued to the slide gate. When the valve is closed, the magnet lines up under the switch, and the light goes out. The micro switch itself is a NC or Normally Closed style and the magnet holds the contacts apart. When the magnet leaves its position under the micro switch the contacts close and the light goes on. It will remain ON until the magnet returns to its home place under the micro switch.

Light will not go out

Take a household or shop magnet and place it over the micro switch, the light should go out. If it does the circuit is working fine, the gate is not closing all the way, lining up the magnet glued to the gate. Remove valve and check for debris stuck in the gate area preventing the gate from completely closing. Clean valve and re install. Click here to see the Cleaning Procedure.