

DRAIN MASTER Marine INSTALLATION INSTRUCTIONS

PLEASE, BEFORE YOU TRY IT YOUR WAY – TRY IT OUR WAY

WHAT YOU WILL NEED TO DO THIS INSTALLATION:

- Basic mechanical/ electrical knowledge
- 7/16" wrench/socket
- Drain Master Part # 5197, includes:
Valve, seals, nuts, bolts, Dow 111 lubricant & Instructions.
- 12 VDC power source (for switch connection)
- Electrical connectors are provided on the valve wires

SPECIAL NOTES:

- Do not place fingers in running area of valve.
- Installation is simple and can be accomplished in a short time.
- Never install the Drain Master with the motor/gear/gate housing down. Must be installed vertically (see how to install picture below)
- PLEASE DO NOT OPERATE the Drain Master prior to installation on your boat. The gate has a sharp edge and the motor is powerful and very fast. YOU COULD GET HURT. You assume liability for your actions.
- Valve comes supplied with 1/8" Allen wrench to operate manual override – located on back of valve
- Do not use any other lubricant than the DOW 111 we have provided.
- Please follow installation instructions carefully.

VALVE INSTALL INSTRUCTIONS

Step 1: Remove the four bolts holding the existing valve to plumbing.

Step 2: Separate plumbing enough to remove existing valve.

Step 3: Remove the 2 seals from pipe flanges or from existing valve.

Step 4: Clean pipe flanges, check for cracks, replace flange if necessary. Remove caution card from gate area on new valve.

Step 5: Make sure valve is in the closed position before proceeding to next steps. (Valve is shipped with the gate closed)

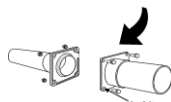
Step 6: Now you are ready to install the new valve. **IMPORTANT! Use the seals that came with your new valve.**

Note: Place the seals over the flange lip which is located on existing plumbing, DO NOT PUT SEALS ON VALVE *****
VERY IMPORTANT STEP*****

Step 7: Apply supplied lubricant (Dow 111) to both sides of gate.



Step 8: Separate pipe flanges and insert Drain Master **with gates closed** making sure the seals are in their correct position **on the flanges**. See Step 7. Rotate the valve to align the four bolt holes with the flange holes and insert the four new bolts and nuts. See picture below:



Step 9: Install the four bolts and hand tighten. Use a 7/16" wrench and in a crisscross pattern, snug the nuts down ¼ turn at a time. Tighten the four bolts evenly, being careful not to over tighten. The components are plastic and can crack. The tightening spec is 20 inch pounds.

Rule of thumb: finger tight and no more than 1.5 turns to tighten bolts to 20 inch pounds.

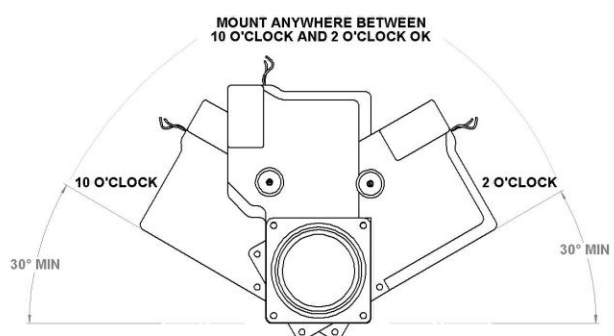
Step 10: Cycle valve to insure valve is opening and closing properly. At first opportunity with boat in the water, open valves to flood the ballast, close and check for leaks around the valves.

NOTE: HOW TO INSTALL

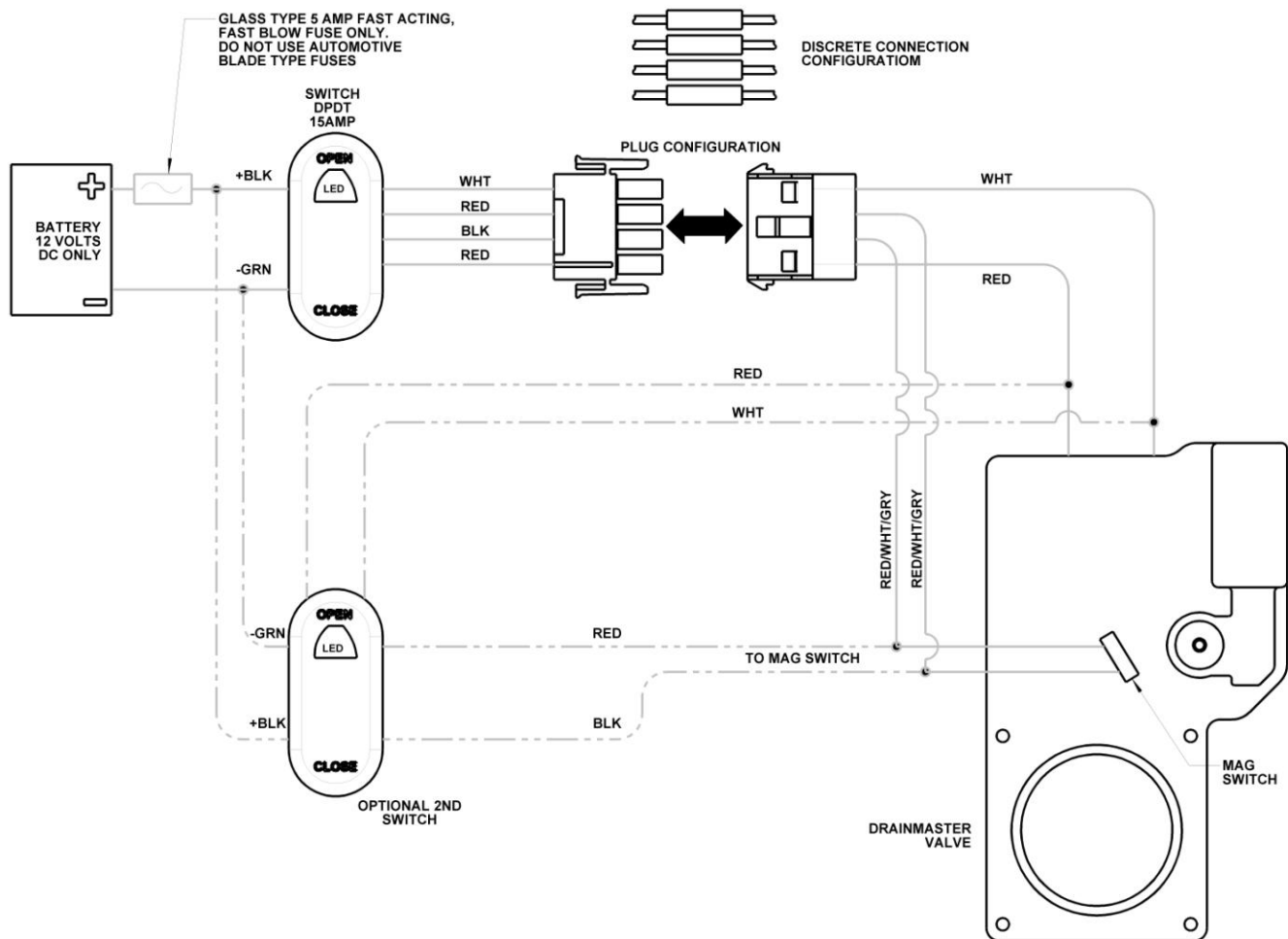
If you have questions or need help with an install, please call us toll free.

DRAIN MASTER
877-787-8833

www.drainmastermarine.com



ACCEPTABLE VALVE MOUNTING ORIENTATION



DRAIN MASTER WARRANTY

What is covered and for how long

Congratulations on your purchase of a quality product from Drain Master. We are confident that our product will perform and therefore warrant to you, as the original purchaser, for a period of 1 year from the date of original purchase, that your new product will be free of mechanical and electrical defects in material and workmanship.

What Drain Master Will Do & How to Get Service

If your product is covered during the warranty period, we will replace your new product (you pay shipping costs), which will be your exclusive remedy under this warranty. **Proof of purchase is required.**

Drain Master Shall not be liable for any special, incidental, indirect or consequential damages whatsoever (including, without limitation, labor or installation charges, damages for loss of business profits, business interruption or any other pecuniary loss) arising out of the use of or inability to use the product. You may return the product to your retailer or directly to Drain Master. If the retailer is unable to authorize an exchange of the product, please call us toll free for a return authorization number and shipping instructions. Items returned without RMA # will be refused at the point of delivery.

Send To: Drain Master, 400 Park Center Drive Ste 6, Hollister, CA 95023

Please be aware that use of the product on improper voltage or current, use contrary to operating instructions, or disassembly, repair, or alterations by any person other than a reputable RV service station may render your product warranty void.

How Your State's Law May Apply

Some states do not allow limitations on how long an implied warranty lasts or the exclusion or limitation of incidental or consequential damages, so the above limitation may not apply to you. This warranty gives you specific legal rights, and you may also have other rights, which vary from state to state or province to province.

DRAIN MASTER OPERATING INFORMATION

Note: Do not hold the switch down longer than 2 seconds

Congratulations on your purchase of a quality product from Drain Master. Your new Drain Master valve is extremely easy to use but may require maintenance. After installation has been completed according to the installation instructions you are ready to open the Drain Master for the first time.

Push the switch up toward the word "open" and listen for the Drain Master to make a sound. The Drain Master will open in approx. 1-2 seconds which means you do not have to hold the switch in the open position for more than 2 seconds.

NOTE: If the valve does not open, check to be sure you have 12VDC to the black wire and that the green wire is ground (if hard wired). Check to see that the unit does not open when you push the switch toward the "close" position. If this happens your switch is upside down. Be sure you have not over tightened the four bolts holding the Drain Master to the couplings and that the seals were installed correctly.