



TOTALBOAT METERING PUMPS - INSTRUCTIONS

1. Assembly

- TotalBoat Metering Pumps come pre-calibrated to the proper mix ratio, and require very little assembly to be ready for use. Thread the spouts onto the front of the pump assembly. A wrench can be used to snug up the spouts to the desired angle ($\frac{1}{2}$ " for smaller spouts, $\frac{5}{8}$ " for larger spouts).
- For TotalBoat High Performance 2:1 Metering Pumps, the smaller spout goes to the hardener, and the larger spout goes to the resin.

2. Filling

- Fill the appropriately marked reservoirs with the epoxy resin and hardener components.
- Maximum capacity for TotalBoat High Performance Epoxy (regardless of hardener speed)
 - i. Resin: Roughly 1 Gallon
 - ii. Hardener: Just under 1/2 gallon
- Maximum capacity for TotalBoat MakerPoxy
 - i. Resin: Roughly 1 Gallon
 - ii. Hardener: Roughly 1 Gallon

3. Priming

- TotalBoat Metering Pumps need to be primed for proper function. Epoxy from the pumps should not be used until both components are dispensing at full capacity.
- Prime by depressing the pump lever and holding it down for 5-10 seconds before allowing it to go back up. In cooler conditions, it may require a longer hold time to compensate for the slower flow of the material. This allows the epoxy components to flow into the pump, displacing any air, creating a good prime. Continue to do this until both sides of the pump are flowing consistently.
- Thicker resins, such as MakerPoxy, may require some extra effort to prime. The small check valve/plunger (small screw with a spring in the bottom of the resin-side reservoir) may need to be manually actuated with a dowel/rod or similar tool once or twice to prime the pump. Once primed, this is a non-issue.

4. Pump Output:

- TotalBoat High Performance Metering Pump (2:1 ratio) = 18cc per pump
- TotalBoat MakerPoxy Metering Pump (1:1 ratio) = 10cc per pump

5. Other Notes:

- IMPORTANT! With the 1:1 TotalBoat MakerPoxy Metering pump, it is crucial to refill the RESIN in the RESIN reservoir, and the HARDENER in the HARDENER reservoir, as labeled on the front of each reservoir. Both components will appear very similar in color, so do not base refilling on material appearance. If the two components are incorrectly filled, areas of epoxy will cure in the reservoir or in the pump (which will render the pump useless).
- It is recommended that you refill the reservoirs when they get below $\frac{1}{8}$ capacity, to prevent having to fill, then reprime.
- After pumping, there will be a tendency for residual epoxy in the top of the spouts to drip. A cup or tray under the spouts can be very helpful in preventing a mess.
- Rebuild and replace parts, as necessary. Rebuild kits for these pumps are available from TotalBoat. Routine cleaning of the entire pump is also recommended, as any settled material or contaminants may be on the bottom of the reservoir, or around the pump intake. The interval for this deep cleaning is dependent on usage.
- Only use the specified epoxy system for which the pump is labeled. Other TotalBoat High Performance 2:1 hardeners can be used in the hardener reservoir for the High Performance Metering Pump.

6. Heaters

- TotalBoat MakerPoxy Metering Pumps come complete with electric heaters, which are designed to help promote better flow for the more viscous components under cooler conditions, generally below 70°F. Adjust the heater setting to the desired level before dispensing, and allow it to warm up the components. Use of the heater is not required, and it should only be turned on just prior to, and during, pump use.