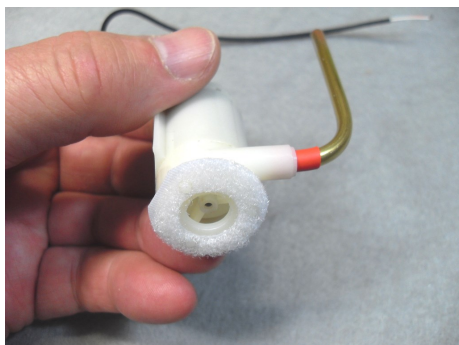
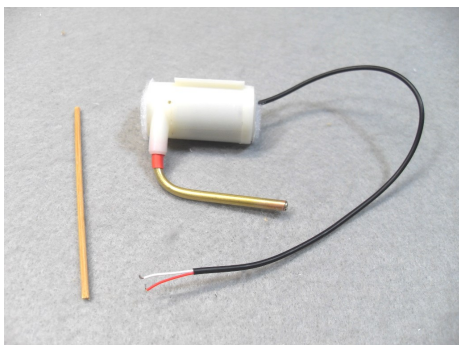
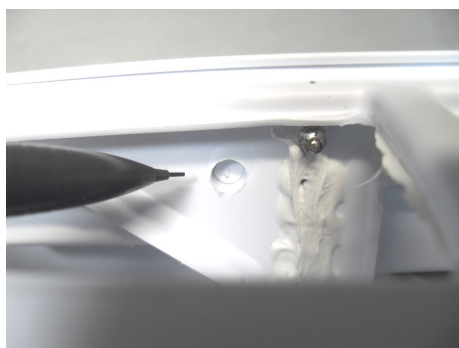


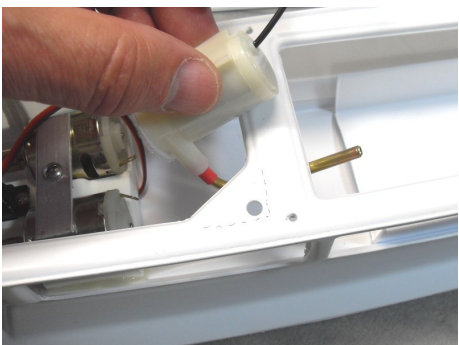
Basic Bilge Pump An economical 1/2 Unit destroyer-sized pump assembly that will get the job done. Ready to solder to your connectors. Works well at 7.2 or 7.4 volts, no higher.



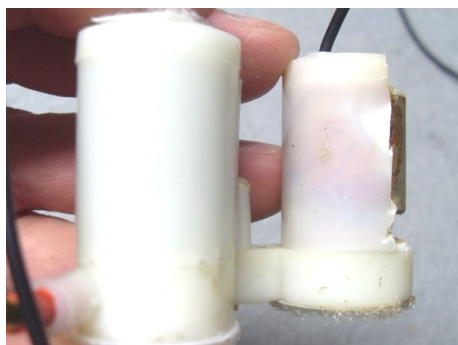
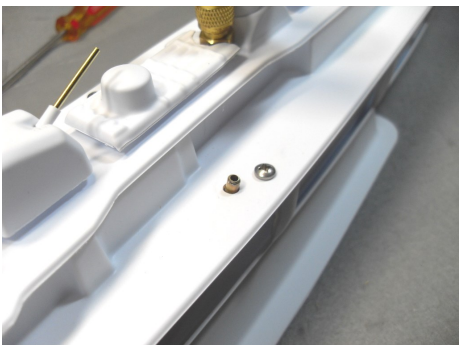
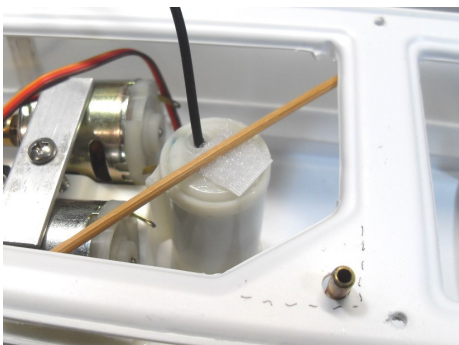
It comes assembled including a bamboo skewer to secure it in the Fletcher or Gearing destroyers. A ring of loop material catches debris. The 1/2 Unit pump has a 3/32" discharge port, removable to clean or service the unit.



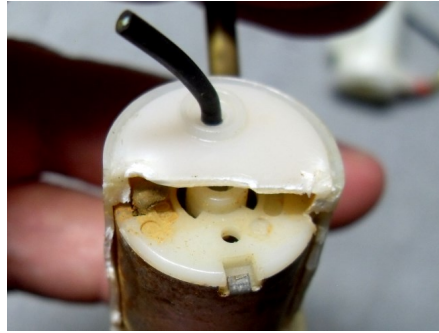
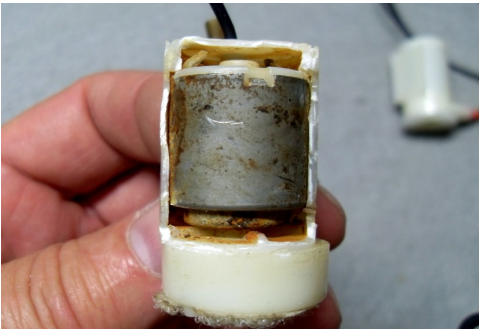
Locate and drill a 3/16 inch hole in the sub-deck as shown. If you haven't glued on the balsa skin yet, install the deck. Trace the hole on the underside of the deck and drill a 3/16 inch hole through the deck.



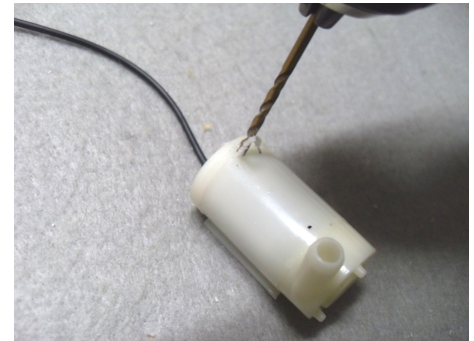
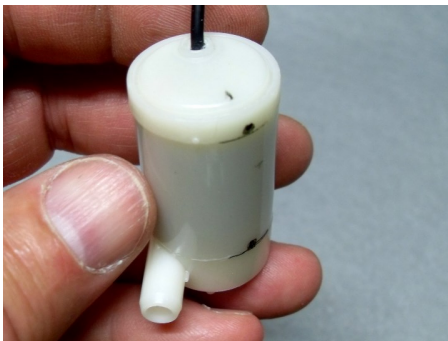
To install, from the motor compartment, hook the discharge port under the cross-member. Set the pump down, then rotate to insert the discharge port through the hole.



Secure the pump to the floor of the ship by wedging the bamboo skewer under the sub-deck and across the top of the pump. Plug the pump into your bilge switch or ESC. When wiring the pump, red is positive + and white is negative -. Although the manufacturer of the pump calls it "submersible" and "water-proof", it is only water resistant due to a bit of grease on the output shaft. If it ever looks discolored like the one of the right, water has entered the unit causing rust & corrosion. You can extend the life of the pump with the following steps:



The water-resistant casing will eventually let water into the motor. On the front, opposite where the wire comes out, there are no connectors or obstructions. There is a gap above and below the motor. Mark two dots about 3/32 inches round, just above and touching the upper and lower case glue seams. (marked by the two lines)



Do this just off-center to the right opposite where the wire comes out. Compare the marks to this photo showing the spaces you are drilling into. Using a 3/32 inch drill, slowly drill with light pressure preventing the drill from going further than the thickness of the white plastic casing.



With the two holes successfully drilled, use compressed air to blow into the top hole, exhausting water out the bottom hole until no more water comes out and the interior is dry. Leave this open to dry further. Before using, cover the holes with pieces of hatch tape or dabs of hot glue. Multiple holes can be drilled at the front third of the casing. After a day of battling, remove the tape and again, blow out any water inside the unit and let it sit until dry.

Inexpensive replacement pumps are available. You can salvage the brass discharge port and bamboo skewer and install it into a new pump.