



To create your own coat hanger ROV

Specific materials we used for the coat hanger project are listed below. Please contact us at (608) 262 3069 or via email at askwater@aqu.wisc.edu if we can assist you.



MOTOR

RadioShack Super Speed 9-18 VDC Hobby Motor

Model: 271-256

Available online at www.radioshack.com

Note: Radio Shack is going through bankruptcy at the present time. These parts may or may not be available.

Alternative Motor replacement if Radio Shacks parts not available...

MegaHobby.com or equivalent.

Model: SVM360

<https://www.megahobby.com/search.php?search={q=svm360}>

May be found cheaper by web search.

9V SNAP CONNECTORS

Radio Shack Heavy Duty 9V Snap Connectors

Model: 270-324

Available online at www.radioshack.com

Note: Radio Shack is going through bankruptcy at the present time. These parts may or may not be available.

Alternative 9V Snap Connector replacement if Radio Shacks parts not available.

9V Battery Snap Holder with 4 Inch Wires

Jameco Electronics

https://www.jameco.com/z/BAT-SNAP-4-9V-Battery-Snap-Holder-with-4-Inch-Wires_1949488.html

These connectors maybe found doing Google search also for better pricing.

PROPELLER

Dumas Products Propeller

Prop# 3003 for 0.19 to 0.35 size engine, 1/8" hole.

Purchased from Dumas Products @ www.dumasproducts.com

The hole in the propeller (1/8" or 0.125") is a little too big for the shaft on the motor (0.090). We purchased aluminum tubing to make up the difference. Push the 1/8" tubing into the propeller opening from the slotted side until it is flush with the smooth side. Then trim to size with side cutters or Dremel tool on the propeller slotted side. Glue the

propeller to the shaft with a small amount of epoxy, making sure that no epoxy remains between the propeller and the motor casing (that would prevent the propeller from spinning). It is best to use some metal sand paper or Dremel tool, to rough up the motor shaft to help the epoxy glue adhere better (coarser the better). Also, make sure all parts are free of any debris or oils by wiping off with alcohol if possible before gluing.

Optional Assembly Instructions

If you have a small file or Dremel tool, try to make some shallow grooves in the motor shaft at opposing angles and flatten an edge. This will help the glues adhere to the metal tubing and motor shaft.

ALUMINUM TUBING

K&S Precision Materials

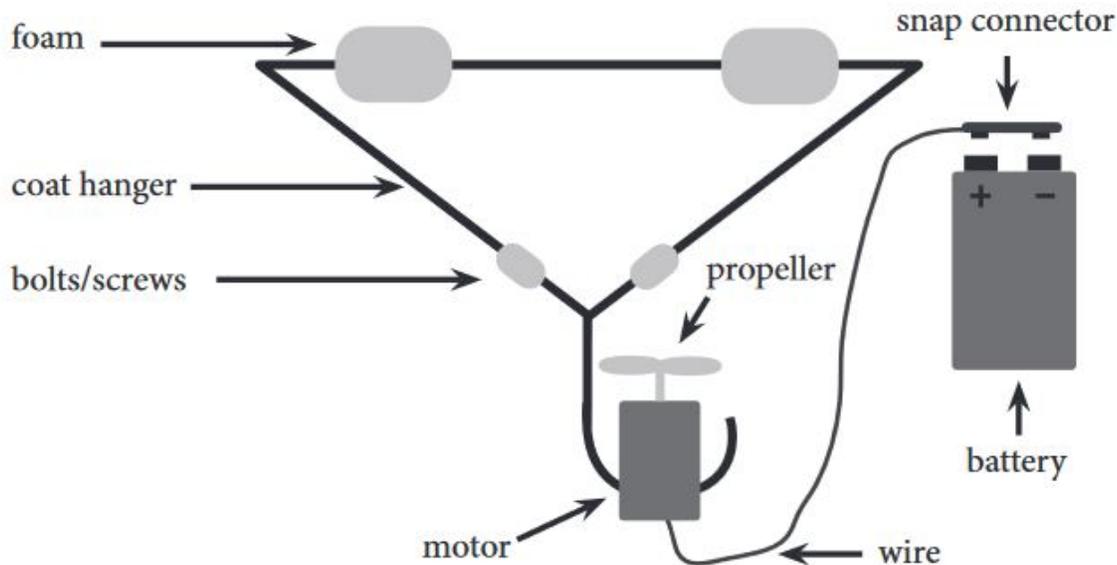
1/8" (0.125) x 0.014 wall thickness.

Stock# 8102 (maybe Stock#5102 at other venues).

Can be purchased at Wisconsin Craft Market or other craft and hobby stores.

Wire

We used 10 ft. of telephone wire for its flexibility. You could use any type of wire.



The coat hanger ROV design was first developed by Harry Bohm at the Marine Advance Technology Education Center and Wisconsin Sea Grant Education Specialist Kathy Kline used it to develop a neutral buoyance activity for outreach events.