

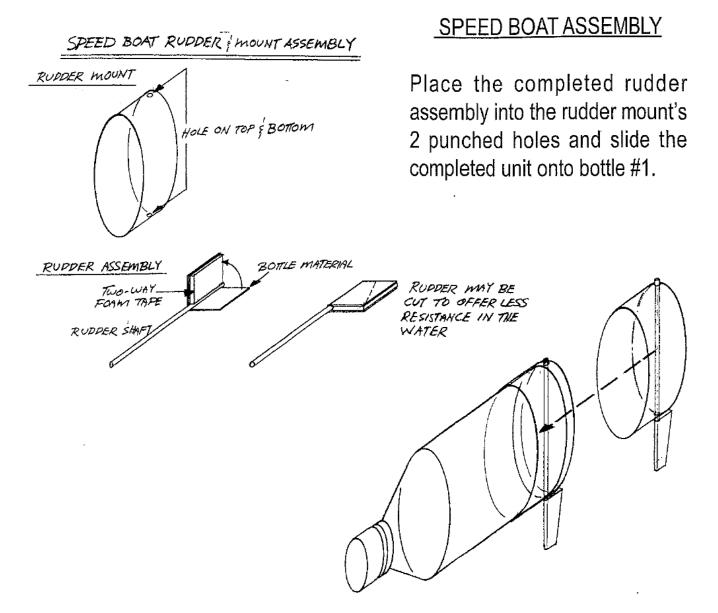
SPEED BOAT ASSEMBLY

The speed boat requires 2 of the same size and shape bottles. Bottle #1 needs to be kept air tight. Keep the cap on and fasten securely. There are to be <u>no</u> holes in this bottle. Bottle #2 is used to make the rudder, rudder mount and the motor mount.

Material List: 2 same size & shape bottles

- 1. Bottle #1 needs to be kept air tight. Keep the cap on and fasten securely. There are NO holes in this bottle
- 2. Bottle #2 is used to make the rudder, rudder mount and the motor mount.

Rudder Mount: Refer to diagram below: Figure 2



- 1. Cut the bottom portion of Bottle #2 off. Make sure it is long enough to fit over the end of Bottle #1.
- 2. Punch 2 holes into this portion of the bottle. Keep these holes centered and as close to the bottom of the bottle as possible.

Rudder: Figure 2

- 1. Cut a piece of plastic approximately 2" x 2" square from Bottle #2.
- 2. Fold this piece in half and place a piece of mounting tape onto one side.
- 3. Make sure that it is placed close to the fold line, but not on the fold line because you will need room for the shaft.
- 4. Insert the rubber shaft keeping it flush to the bottom of the rudder.

Rudder/Rudder Mount Installation: Figure 2

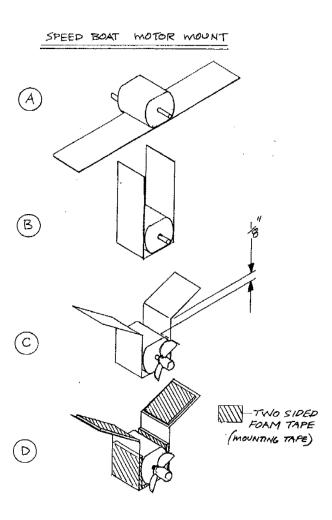
- 1. Place the completed rudder assembly into the rudder mount's 2 punched holes.
- 2. Slide the completed unit onto Bottle #1.

Motor Mount: Figure 3

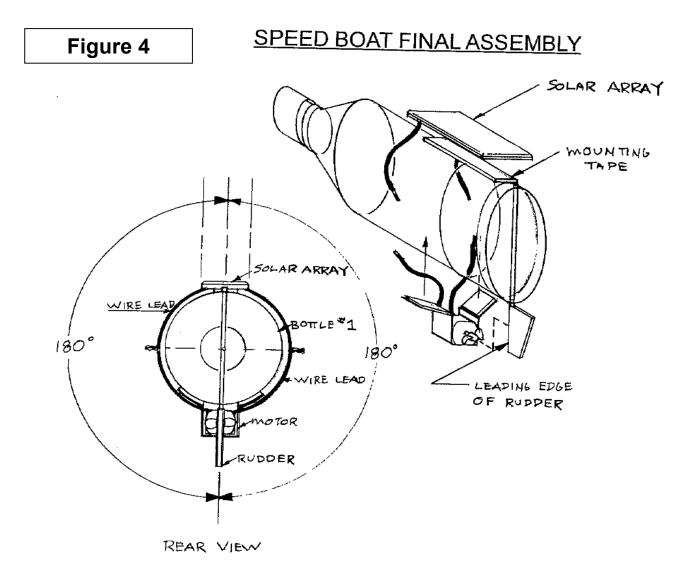
- 1. Cut a strip of plastic approximately 5" x 1" from Bottle #2.
- Place the motor on the center of this strip. (Figure A)
- 3. Bend and slightly fold the sides up and around the motor. (Figure B)
- 4. Place the propeller onto the motor shaft to determine the clearance from the top of the propeller to the bottom of Bottle #1.
- 5. Bend and slightly fold the plastic on both sides of the mount. You don't want the prop to hit the bottom of Bottle #1.(Figure C)
- 6. Cut the mounting tape, peel and place around the 3 sides of the motor.
- Cut the mounting tape and place on the 2 surfaces of the mount. These 2 surfaces will attach to Bottle #1. (Figure D)

Speed Boat Assembly: Final Assembly:

- 1. See Figure 4 for an illustration of installation.
- Take the completed motor mount assembly and place onto the bottom of Bottle #1 making sure to line up the center of the prop to the leading edge of the rudder as illustrated in rear view.
- 3. After proper alignment of the motor and rudder, the solar array can be mounted.
- 4. Using the mounting tape, place a strip along the underside of the solar array and carefully center it on the top of Bottle #1 as shown.
- 5. Use the 1 gray wire nut to connect the blue wire from the solar array to the red wire of the motor.
- 6. Next, use the 1 gray wire nut to connect the red wire of the solar array to the blue wire of the motor.



- 7. Tape these wire leads to the side of Bottle #1.
- 8. The speed boat is now ready for the water!



Reference: www.SolarMade.com

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