

INSTRUCTION

The wave Electric Motor Mount Kit may be looked at as 3 separate systems installations. They are the Motor Mount, the Battery Box and Wiring.

Motor Mount - Wave Special Edition Model

1. The motor mount can be installed with any of the 4 trampoline tension straps at the rear cross bar. Generally a strap near the center of the boat is preferred to a strap near either hull.
2. Completely undo the chosen strap (it should remain engaged with the rear cross bar.)
3. Place the motor mount on the rear cross bar with the 2 ears engaged in the slot in the rear cross bar and straddling the strap.
4. Reconnect the strap to the rear cross bar as it was originally installed. It will now hold the motor mount in place.

Motor Mount - Club Wave

1. Saw off the 2 ears that slide into the cross bar. See step 3 above.
2. Drill 4 each 3/16" holes in the motor mount using the drill template provided herein.
3. Place the motor mount on the cross bar in the chosen location. Drill the cross bar through any one of the holes in the motor mount and insert one of the 4 included rivets. Repeat for the other 3 holes and then set the rivets.

Battery Box

1. The battery box may be installed in either hull. Generally, it is best to mount the batter box on the opposite side from the motor mount.
2. The battery box is installed in back of the rear cross bar. Referring to the end of the deck no-skid surface at the back of the hull measure forward 2" and mark.
3. Remove the battery box cover to use as a marking template for cutting the hole in the deck for the battery box flange. The cover is 3/16" smaller than the opening required for the flange.
4. Place the cover on the deck 3/16" forward of the mark made in step 2. Draw a line all of the way around the cover to use as a sawing guide.
5. Using a key hole saw or a sabre saw cut out the deck. Be sure to add the extra 3/16" all the way around the line drawn in step 4.
6. Place the battery box flange in the hole cut in step 5 to be sure that it has adequate clearance. Use a file increase the cut area as required.
7. Once the flange fits properly mark and drill the fastener holes with a 1/4" drill. Prior to installing the screws wrap the seal gasket around the flange. Trim the gasket as necessary to provide a snug butt joint. Tighten the screws only as much as is necessary to make the gasket conform the curved deck shape. Over tightening as is necessary to make the gasket conform the curved deck shape. Over tightening warps the flange resulting in difficulties in maintaining a tight cover seal.
8. Drop the battery box into the opening in the flange. There are 4 protrusions in the box that will engage in holes in the flange to hold it in place.



Wiring System

1. A water tight connector is included in the kit so that the battery box door may be completely shut while the motor is connected to the battery.
2. The motor is usually supplied by the manufacturer with alligator clips for attachment to the battery. The alligator clips should be removed and the ends of the wire attached to the black plastic portion of the water tight connector.
3. Next, a $\frac{3}{4}$ " hole must be drilled in the battery box access cover, The location of the hole is not critical. Placing the connector about 1 $\frac{1}{2}$ " off center of the cover works well. Place the metal portion of the water tight connector into the hole and drill 3 each $\frac{4}{32}$ " holes. Secure the water tight connector with the provided #6 screws and nuts.
4. Attaching wires to water tight connector and battery terminals:
 - a. The water tight connector is polarized so it is necessary to match the red and black wires from the motor through the connector such that the black wire goes to the negative battery post and the red to the positive battery post.
 - b. Connect the larger of the 2 Ring Terminals to the red wire and the smaller to the black wire. Then connect the red and black wires to the water tight connector (cover portion) to the same receptacle as the red wire from the motor to the black plastic portion of the water tight connector. Repeat the same for the black wire.
 - c. Attach the battery terminal lugs to the battery post and attach the ring terminals to the battery lugs.

The Wave with Electric Motor we use at Hobie Cat has a 24 pound thrust motor. The motor mount is sturdy enough to handle a 42 or even a 54 pound thrust motor as long as it is basic motor with a steering handle that incorporates a twist thrust control. Motors with remote speed controls, tilt and other accessories make it such that the motor is difficult to tilt and retract when sailing. A basic motor will do a very respectable job of driving the Wave, even into head winds with the sail up. GOOD SAILING!!