AO Smith Motors

115 VAC wiring procedure for 3/4 hp A.O. Smith motor #C56AC08E56 and 1 hp A.O. Smith C56AC09E56. The following procedure is for wiring the already wired drum switch* to the motor using 14/5 control cable supplied by Fix Marine Supply.

- 1. Remove motor connection box cover.
- 2. Connect motor white to motor terminal 1.
- 3. Connect motor blue to motor terminal 3.
- 4. Connect switch black to motor red.
- 5. Connect switch orange to motor black.
- 6. Connect switch white to motor L2.
- 7. Connect switch red to motor L1.
- 8. Connect switch green to ground in motor.

230 VAC wiring procedure for 3/4 hp A.O. Smith motor #C56AC08E56 and 1 hp A.O. Smith C56AC09E56. The following procedure is for wiring the already wired drum switch* to the motor using 14/5 control cable supplied by Fix Marine Supply.

- 1. Remove motor connection box cover
- 2. Connect motor white to motor terminal 3.
- 3. Connect motor blue to motor terminal 5.
- 4. Connect switch black to motor red
- 5. Connect motor black to 4.
- 6. Cap switch orange with a wire nut (not used).
- 7. Connect switch white to motor L2.
- 8. Connect switch red to motor L1.
- 9. Connect switch green to ground in motor.

Overhead Lift Reference

The rule of thumb of an overhead lift system is that the rating of the hoist may not be what your lift can actually pick up. The installation of the rigging hardware in your lift system can have dramatic effects on what your hoist can actually lift. Unfortunately, it is very easy to install a lift system incorrectly. If you are experiencing trouble with your hoist not being able to pick up a boat weighing less than the hoist rating, and you have determined the issue is not voltage related, look at the installation of the lift. Boat Hoist USA hoists WILL Lift their rating but that does not necessarily mean *your* lift will. Below is a quick reference to overhead lifts to help you identify potential problems.

- Check the weight of your load versus the lift capacity of the hoist. When calculating the load, don't forget the weight of the boat, fuel, boating gear, cradle, etc.
- Make sure you have enough voltage to lift your boat.
- Never weld a hoist or ANY components to the structure.
- . Mount the hoist at the end of the pipe NOT the center.
- Only use two bolts to mount the hoist to the joist.
- Always grease the hoist before use and at least twice a vear.
- The drive pipe needs to be perpendicular to the hoist and should slide easily within the hoist sleeve.
- Always support the pipe on each side of the lifting point and every ten feet with pipe supports.
- Always use the proper size of 7x19 Aircraft Cable to lift your boat. Using anything over 1/4" could effect lifting capacity.
- Proper cable attachment to the pipe is important, do not use hose clamps.
- Cables need to be perpendicular to pipe (See Figure 2).

- Make sure cable is winding off opposite sides of the pipe (See Figure 1).
- Make sure cable clamps are attached to the cable correctly with the saddle side of the clamp on the un-cut side of the cable.
- Always hang strap hangers at a 45 degree angle to the boat (See Figure 2).
- Cable winders are optional. They increase the life of the cable, but decrease the lifting capacity of the hoist.
- Permanently mount the switch with the cable coming out of the bottom of the switch. This will eliminate water penetration.
- Never use more than four lifting points.
- Boat cradles need to be two separate I beams and not connected to form any type of frame. Custom made boat cradles resembling Boat Trailers will cause problems with your lift.
- Only use boat slings or a proper cradle. Do not attempt to use a boat's three lifting eyes.

A word to the end user:

While there are many notable and qualified professional lift installers, there are also many nonqualified installers. There is no governing or licensing agency that regulates the installation of lifts. Please take a moment to familiarize yourself with the basics of a lift and its design, and then check the installation of your lift.