

CONTROLLER / MOTOR TROUBLE SHOOTING

0. **Green light; Motor & Controller functioning normally.**

1. **Red Light;** flashes 1 time; buzzer sounds 1 time.
 - a. **Cause:** Electric current error.
 - b. **Solution:** Disconnect power at fuse breaker. Turn motor switch on for a few seconds to clear electrical static. Reconnect power and try again.

2. **Red Light;** flashes 2 times; buzzer sounds 2 times.
 - a. **Cause:** Peak current /overcurrent detected.
 - b. **Solution:** Disconnect power at fuse breaker. Turn motor switch on for a few seconds to clear electrical static. Reconnect power and try again.

3. **Red Light;** flashes 3 times; buzzer sounds 3 times.
 - a. **Cause:** Average current overcurrent detected.
 - b. **Solution:** Disconnect power at fuse breaker. Turn motor switch on for a few seconds to clear electrical static. Reconnect power and try again.

4. **Red Light;** flashes 4 times; buzzer sounds 4 times.
 - a. **Cause:** Stall/ Motor blocked or fan blade jam , does not turn.
 - b. **Solution: VERY IMPORTANT: Disconnect Power First!** Check if something has been sucked or lodged and may be blocking the fan blade, remove/clean as necessary. Reconnect power then try again.

5. **Red Light;** flashes 5 times; buzzer sounds 5 times.
 - a. **Cause:** Under/Low voltage detected.
 - b. **Solution:** Disconnect the power first, check the voltage on the battery/batteries. Both batteries should provide 24-26 volts, or 12-13 volts if measured individually. NOTE: a bad battery may show good voltage but may not pass a LOAD TEST. If one battery can't pass a load test the voltage will drop dramatically when the motor is on.

6. **Red Light;** flashes 6 times; buzzer sounds 6 times.
 - a. **Cause:** Overvoltage detected.
 - b. **Solution:** Disconnect the power first, check if the voltage on the battery is normal.

7. **Red Light;** flashes 7 times; buzzer sounds 7 times.
 - a. **Cause:** Over temperature detected / Controller is too hot.
 - b. **Solution:** Disconnect the power first, wait 10-30 minutes for the controller to completely cool, reconnect power and try again. Do not operate the boat lift motor more than 5 minutes at a time. **NOTE: ONLY OPERATE THE MOTOR WHEN CONNECTED TO THE BOAT LIFT TANKS/HOSES. Never operate the motor when disconnected from the boat lift.**

8. **Red Light;** flashes 8 times; buzzer sounds 8 times.
 - a. **Cause:** Motor phase detection failure.
 - b. **Solution:** Disconnect the power first. Check all three wires between the motor and controller and ensure there are no loose connections. Check for broken wires or poor connection points.

9. **Red Light;** flashes 9 times; buzzer sounds 9 times.
 - a. **Cause:** Communication error.
 - b. **Solution:** Disconnect power at fuse breaker. Turn motor switch on for a few seconds to clear electrical static. Reconnect power and try again.