

BATTERY INFORMATION:

The motors will operate with any deep cycle marine 12 volt battery. For best results, use a deep cycle MinnKota marine battery with at least a 100 ampere hour rating. As a general *on the water* estimate, your 24 volt motor will draw .75 ampere per hour for each pound of thrust produced when the motor is running on high. The actual ampere draw is subject to your particular environmental conditions and operation requirements.

Maintain battery at full charge. Proper care will ensure having battery power when you need it, and will significantly improve the battery life. Failure to recharge lead-acid batteries (within 12-24 hours) is the leading cause of premature battery failure. For best results, use a variable rate MinnKota charger to avoid overcharging. If you are using a crank battery to start a gasoline outboard, we recommend that you use a separate deep cycle marine battery for your trolling motor.

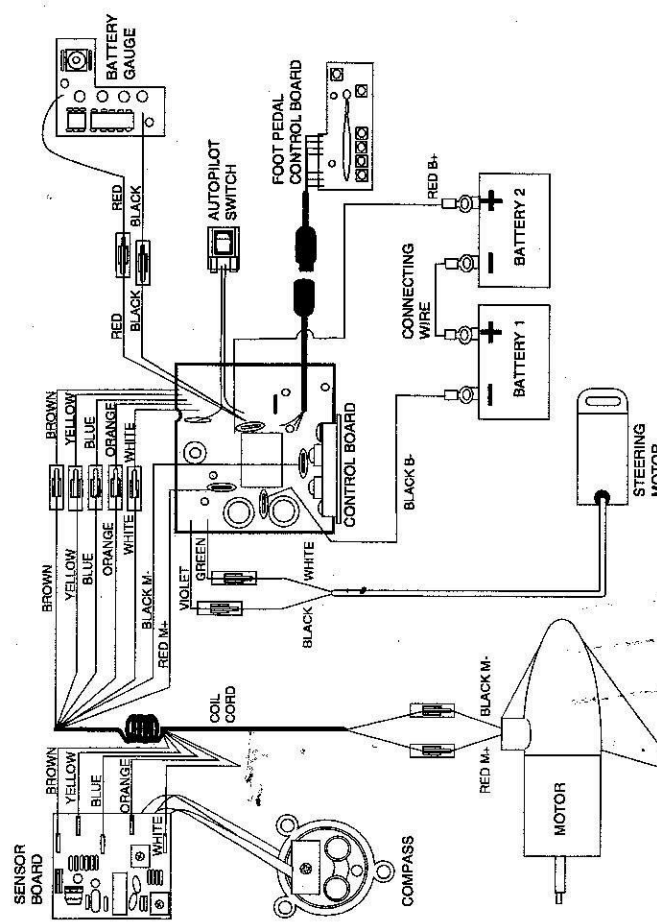
BATTERY CONNECTION:

24 Volt System

1. Two 12 volt batteries are required.
2. The batteries must be wired in series, only as directed in wiring diagram to provide 24 volts:

 - a. Connect the negative (-) black lead to the negative (-) terminal of battery 1.
 - b. Connect the connector cable to the positive (+) terminal of battery 1 and to the negative (-) terminal of battery 2.
 - c. Connect the positive (+) red lead to the positive (+) terminal on battery 2.

3. If installing a leadwire plug, follow instructions in your boat owner's manual.



WARNING: BEFORE CONNECTING BATTERY, MAKE SURE THE TWIST TILLER HANDLE IS IN THE OFF POSITION.

- USE 6 GAUGE WIRE TO EXTEND THE POWER LEAD.
- KEEP LEADWIRE CONNECTION TIGHT AND SOLID TO BATTERY TERMINALS.
- LOCATE THE BATTERY IN A VENTILATED COMPARTMENT.

OPERATION- AUTOPILOT

AUTOPILOT OPERATION:

The MinnKota AutoPilot uses a magnetic compass and a microprocessor chip to keep the trolling motor pointed in the direction you want to go. Each time the wind or water current drifts the boat off course, the AutoPilot senses the change and steers itself back to the original heading. You set the AutoPilot direction every time you steer. Steering is done with the foot pedal. Each time you steer, the microprocessor reads the new direction and the motor holds the boat on that course. To change direction, use the foot pedal to steer right or left until the motor head points to the desired course. The AutoPilot will pull the bow of the boat around and correct automatically until the boat is moving in the direction you chose.

The AutoPilot rocker switch on top of the AutoPilot base turns the automatic steering on or off.

1. This unit has an automatic steering shutdown for safety. In conditions where an obstruction prevents the trolling motor from turning, or in extremely high wind conditions, the automatic steering may stop. Any steering input on the foot pedal will reset the system to normal.
2. When the AutoPilot switch is on and the trolling motor is pulled out of the water to the stow position, the steering motor will continue to run. Turn off the AutoPilot switch to stop the motor. If the switch is left on, the steering motor will shut off automatically after 10 seconds. The motor should not be stored in this condition for long periods as power is still being applied to all electronics. Always turn the AutoPilot switch off and disconnect you motor from the battery when storing your boat.
3. This unit uses a magnetic compass to detect direction of travel. The compass can be adversely affected by magnets or large, ferrous metal objects near (within 12" of) the trolling motor control head.
4. After steering to a new direction, there is a short delay before the direction is locked in to allow the compass to stabilize.
5. Obstructions on the propeller may cause excessive vibration of the motor head. This vibration can cause the compass to wander and erratic steering to occur. Clear the obstruction to return the motor to normal operation.
6. When broad speed changes are made, the motor heading may change slightly. This is normal.

MAXIMIZER:

The built-in Maximizer's solid state electronics create pulse width modulation to provide longer running time and extended battery life. With the Maximizer speed control, you may, in single battery applications, experience some interference in your depth finder display. We recommend that you use a separate deep cycle marine battery for your trolling motor to alleviate this condition. If a separate battery is not an option, a fused grounding wire is available to help you solve the problem. Call our service department at 1-800-227-6433. The fused ground wire will be sent to you at no charge.

The purpose of the wire is to ground the negative post of the trolling motor battery to any metallic object which touches the water. In all boats, connect the fused end with ring terminal to the negative post of the trolling motor battery, or to any connection that leads to the negative post of the battery. The non-fused end of the ground wire can be connected to several locations.

Fiberglass hull boats:

- To the outboard.
- To negative post of crank battery.
- To negative strip on the fuse panel.

Aluminum hull boats:

- To negative post of crank battery.
- To negative strip on the fuse panel.