

WIRING

MotorGuide Wiring and Battery Recommendations

Battery Type - The recommended battery(s) for your electric fishing motor is a 12 volt "Deep Cycle battery with at least 105 ampere hour rating or higher.

Circuit Protection - MotorGuide recommends installing a 50 Amp manual reset circuit breaker in the trolling motor leads within 72" of the batteries.

Wire Size - The size of the wire that you use in your boat to operate the trolling motor is a major factor in the performance of your motor. For optimum performance, MotorGuide recommends the use of six (6) gauge wire if extending existing wire more than six feet beyond the standard battery cable supplied with product.

Bow Plugs - MotorGuide recommends the use of a quality marine plug connection for removing power from trolling motor. When connecting power cable to a bow plug refer to boat or plug manufacturer for proper connections. Bow plugs and wire connections will vary from one manufacturer to another.

Establishing Common Ground - If you are running accessories (pumps, the main engine, an auxiliary motor, a power jack plate or mount, etc.) from the same batteries as the trolling motor, a common ground must be established between the trolling motor and these accessories to avoid electrolysis. Electrolysis causes corrosion to the shaft of the motor that looks similar to the chalky buildup on the terminals of your automobile battery. If left unchecked, this problem will cosmetically damage your motor. This situation can be avoided through proper rigging. Common ground simply means the grounds for all accessories and your trolling motor must be connected to the same terminal.

Wire and Cable Routing Recommendations

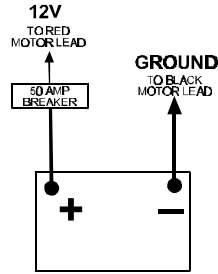
- Make sure trolling motor leads go **separately** from other wiring and **directly** to the trolling motor battery (Route trolling motor wires on opposite sides of the boat from other wiring.)
- Transducer installation should be installed accordance to the manufacturer's specifications, and in particular, **routed separately** from the trolling motor power cables. **IMPORTANT!!! DO NOT ROUTE TRANSDUCER CABLE DOWN TROLLING MOTOR POWER CORD OR FOOT PEDAL ASSEMBLY CABLE.** Route transducer cable down arm of mount then into bow console.
- Sensitive electronics (depth finders in particular) should be connected directly to the cranking battery. If only a one battery system, then connect with **separate** cables.
- Move the depth finder transducer to a location away from the trolling motor lower unit. A shoot thru hull" is very effective on fiberglass boats.

BATTERY CONNECTIONS

WARNING: Be sure all switches are in the “OFF” position before connecting to batteries.

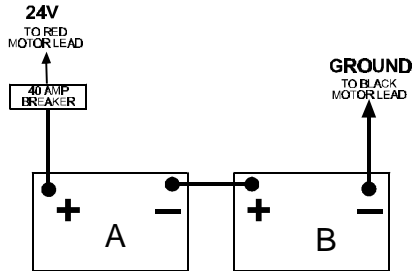
12 VOLT MOTORS ONLY

- Connect the **RED** lead from the trolling motor power cable to the positive (+) battery terminal.
- Connect the **BLACK** lead from the trolling motor power cable to the negative (-) battery terminal.



24 VOLT MOTORS ONLY

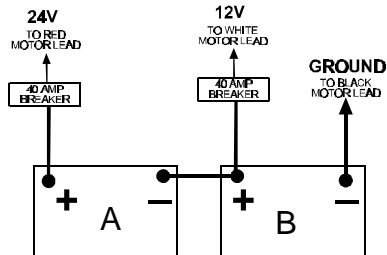
- Connect the black wire from the trolling motor power cable to the negative (-) of one battery (battery B).
 - Connect the red wire from the trolling motor power cable to the positive post of the other battery (battery A).
 - Connect a jumper wire to the positive (+) post of battery B and the negative (-) post of battery A.
- NOTE:** The jumper wire should be the same gauge as the leads to the motor.



12/24 VOLT MOTORS ONLY

For 12/24 volt motors, use two (2) twelve (12) volt deep cycle marine batteries in the following manner:

- Connect the red wire from the trolling motor power cable to the positive (+) post of battery A.
- Connect the black wire from the trolling motor power cable to the negative (-) post of battery B.
- Connect the white wire from the trolling motor power cable to the positive post of battery B. This will be your 12 volt lead.
- Connect a jumper from the negative (-) post of battery A to the positive (+) post of battery B.

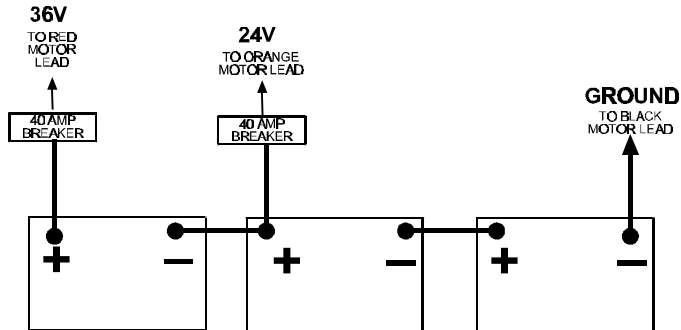


BATTERY CONNECTIONS

24/36 VOLT MOTORS ONLY

For 24/36 volt motors, use three (3) twelve (12) volt deep cycle marine batteries in the following manner:

- Connect the red wire from the trolling motor power cable to the positive (+) post of battery A.
- Connect the black wire from the trolling motor power cable to the negative (-) post of battery C.
- Connect the orange wire from the trolling motor power cable to the positive post of battery B.
- Connect a jumper from the negative (-) post of battery A to the positive (+) post of battery B.
- Connect a jumper from the negative (-) post of battery B to the positive (+) post of battery C.



36 VOLT MOTORS ONLY

For 36 volt motors, use three (3) twelve (12) volt deep cycle marine batteries in the following manner:

- Connect the red wire from the trolling motor power cable to the positive (+) post of battery A.
- Connect the black wire from the trolling motor power cable to the negative (-) post of battery C.
- Connect a jumper from the negative (-) post of battery A to the positive (+) post of battery B.
- Connect a jumper from the negative (-) post of battery B to the positive (+) post of battery C.

