AC VOLTAGE REGULATOR
BASIC 12V AC WIRING

OPTION 1: SYSTEMS WITH TWO LIGHTING LEADS:

1. Bolt the negative light leads and the brown regulator lead to the frame.
2. The switch is optional. If no switch is used, the lights turn on and off with the engine. Two switches can be used to control the lights individually.

Notes on wiring with the Stock Stator:
1. Bolt the negative light leads and the brown regulator lead to the frame.
2. The switch is optional. If no switch is used, the lights turn on and off with the engine. Two switches can be used to control the lights individually.

OPTION 2: SYSTEMS WITH ONLY ONE LIGHTING LEAD:

1. This setup does not require a frame ground.
2. The switch is optional. If no switch is used, the lights turn on and off with the engine. Two switches can be used to control the lights individually.
NOTES:
- Improved AC Regulator with Adjustable Output.
- Limits voltage to 12.0-16.0 volts AC (adjustable.)
- Conditions circuit to eliminate electrical spikes, protects from lamp blow-outs, and reduces flicker and dimming.
- “Dial-a-Brightness” for halogen and quartz lights:
  1. At 14.0 VAC setting, the lamps will approach HID lumens (~70%) but lamp life is short (good for racing.)
  2. At minimum setting, the lamps are not as bright as HID (~30%), but last over 1,000 hours.
- Included in Trail Tech plug-and-play high-output AC electrical systems with model-specific connectors; no cutting or splicing required. See model-specific wiring instructions in those kits.

CRIMP KIT:
Use a crimp kit for professional, water-tight connections like those in the photographs.
P/N: HT230C
Solder and shrink wrap will also provide excellent quality electrical connections.

DIAL-A-BRIGHTNESS

LONG LIFE
~1,000 HOUR LAMP LIFE

STANDARD
~500 HOUR LAMP LIFE

HIGH OUTPUT
~25 HOUR LAMP LIFE

-1/4 TURNS
12.0 VAC

AS SHIPPED
13.8 VAC

+1/4 TURNS
14+ VAC*

IMPORTANT:
There is water sealant on the potentiometer. It will not interfere with a screw-driver adjusting the regulator. Be sure to re-seal after adjustment to prevent water entering the regulator and causing damage. Use silicone, nail polish, or similar to re-seal.

*IMPORTANT:
It is possible to turn the regulator up so far that the lamp may burn out immediately (voiding lamp warranty.) Use of a multimeter when calibrating the regulator is strongly recommended.