

## **TYPICAL ALTERNATOR CONNECTIONS**

#### RED - YELLOW //// TRACER

(heavy gauge)

Alternator Power Wire (used on all alternators)

- 1) Connect the end with the BLUE fuse-link wire and ring terminal to the starter "BAT" stud.
- 2) Route the other end to the alternator, install protective boot "A" on the wire, crimp on large gauge ring terminal "B".
- 3) Solder terminal to wire.
- Connect to the BAT stud on alternator.

### ONE WIRE ALTERNATOR

Installation of the alternator power wire above, is the only connection required for a ONE-WIRE alternator.

This type of alternator has a self-exciting regulator which is activated by the rpm of the engine.

**NOTE:** on a self excited regulated alternator, the ALT/DIODE position on the PANEL CONNECTION BLOCK will not be used for the alternator. However, it may be used as an extra FUSED IGNITION feed. This fuse should be rated at no more than 20 amps.

#### RED - YELLOW //// TRACER

Regulator Bat Wire (GM "SI" series internally regulated)

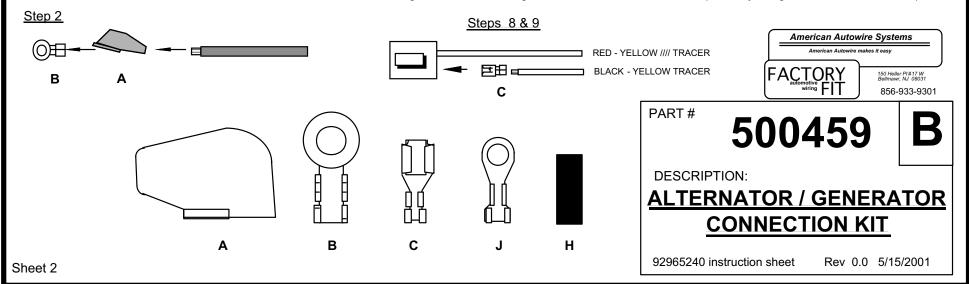
- 6) Route wire through protective boot "A" (lubrication may be necessary)
- 7) Connect to the "BAT" stud on alternator, along with red yellow //// tracer wire noted above.

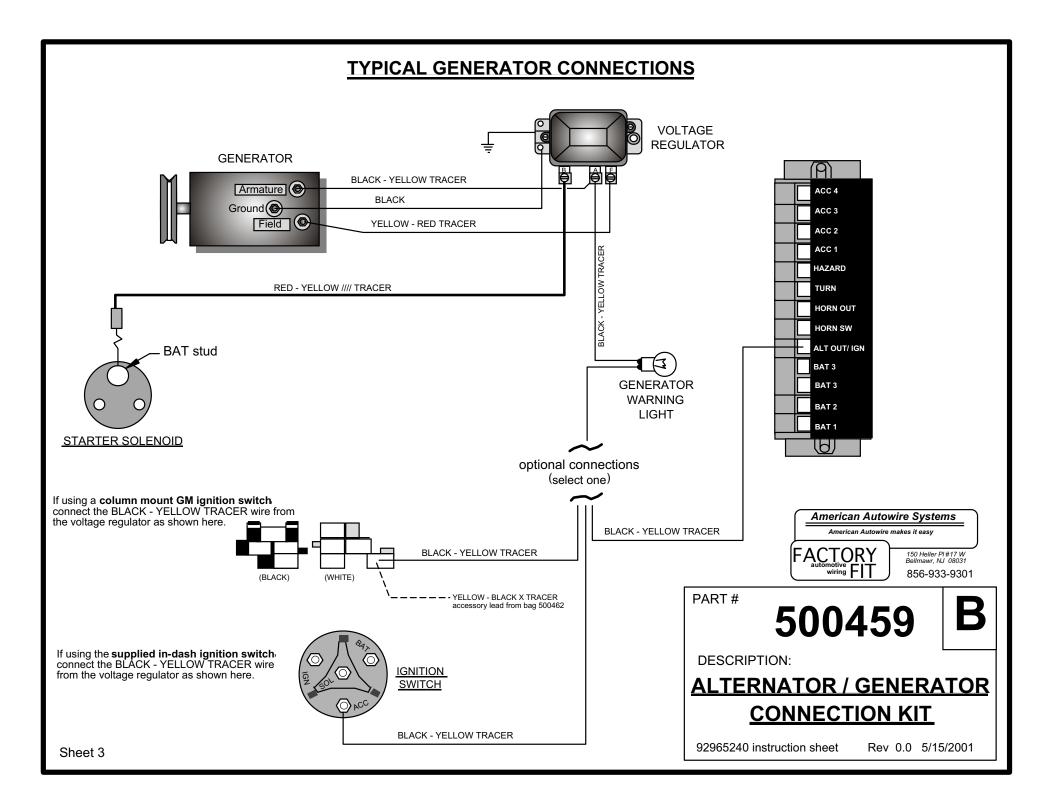
#### **BLACK - YELLOW TRACER**

Regulator Excitor Wire

Depending on your alternator and ignition switch manufacturers, it may be necessary to use a DIODE (GM "SI' series to protect the alternator circuit. If so, replace the mini-fuse located in the "ALT / IGN" location on your internally regulated) panel with a DIODE. (American Autowire part number 500170) Diode orientation is noted on panel.

- 8) Install terminal "C" on one end of wire
- 9) Plug wire into the supplied regulator connector, as shown below.
- 10) Plug the regulator connector into alternator, as shown on sheet 1.
- 11) Route the other end to the fuse panel and connect to the "ALT OUT / IGN" location. (Note: Optionally, this wire may be routed to the ignition switch, and connected to the "ACCESSORY" terminal. See sheet 1. Connection to GM column can be completed by using the terminals and connectors supplied in 500257 bag. Connection to the ignition switch in this kit can be completed by using sleeve H and terminal J.)





## **TYPICAL GENERATOR CONNECTIONS**

RED - YELLOW //// TRACER (heavy gauge)

Alternator Power Wire (used on all alternators

- 1) Connect the end with the BLUE fuse-link wire and ring terminal to the starter solenoid "BAT" stud.
- 2) Route the other end to the voltage regulator, crimp on large spade terminal "F", and solder.
- 3) Connect to the BAT stud on the voltage regulator.

**BLACK - YELLOW TRACER** 

Generator to Voltage Regulator **Armature Connection** 

- 4) Install sleeve "H" and ring "G" and connect the ring terminal end of this wire to the generator "Armature" stud.
- 5) Route the other end to the voltage regulator and cut to length.
- 6) With the cut off portion, crimp on terminal "F" and solder, as shown on sheet 3. Connect terminal "F" to the voltage regulator "Armature" terminal, as shown on sheet 3.
- 7) Route the other end to the generator light as shown on sheet 3. The feed side of generator light can be wired one of three ways shown on sheet 3. (Connection to GM column can be completed by using the terminals and connectors supplied in 500257 bag. Connection to the ignition switch in this kit can be completed by using sleeve H and terminal J.)

**BLACK** 

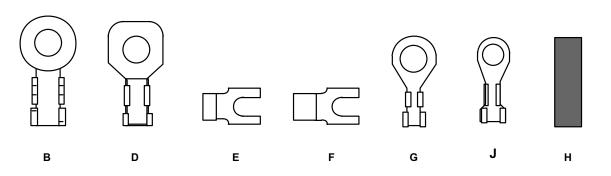
**Ground Connection** 

Voltage Regulator to Regulator 8) Connect the ring terminal end of wire to the "Ground" stud on the generator. Route the other end to the voltage regulator and install ring terminal "D", and connect to regulator housing. Note: The voltage regulator housing **MUST** be properly grounded to the chassis.

YELLOW - RED X TRACER

Field Connection

Generator to Voltage Regulator 9) Connect one end to the "Field" stud on the generator. Route the other end to the voltage regulator and install terminal "E" and solder. Connect this end of the wire to the "Field" terminal on the voltage regulator, as shown on sheet 3.



American Autowire Systems American Autowire makes it easy

150 Heller PI #17 W 856-933-9301

PART#

500459

**DESCRIPTION:** 

# **ALTERNATOR / GENERATOR CONNECTION KIT**

92965240 instruction sheet

Rev 0.0 5/15/2001

Sheet 4