



Tech Dept.  
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# WIRING INSTRUCTIONS

## Ford 3G Alternator (ONE WIRE ONLY)



Replaces these OEM Alternators

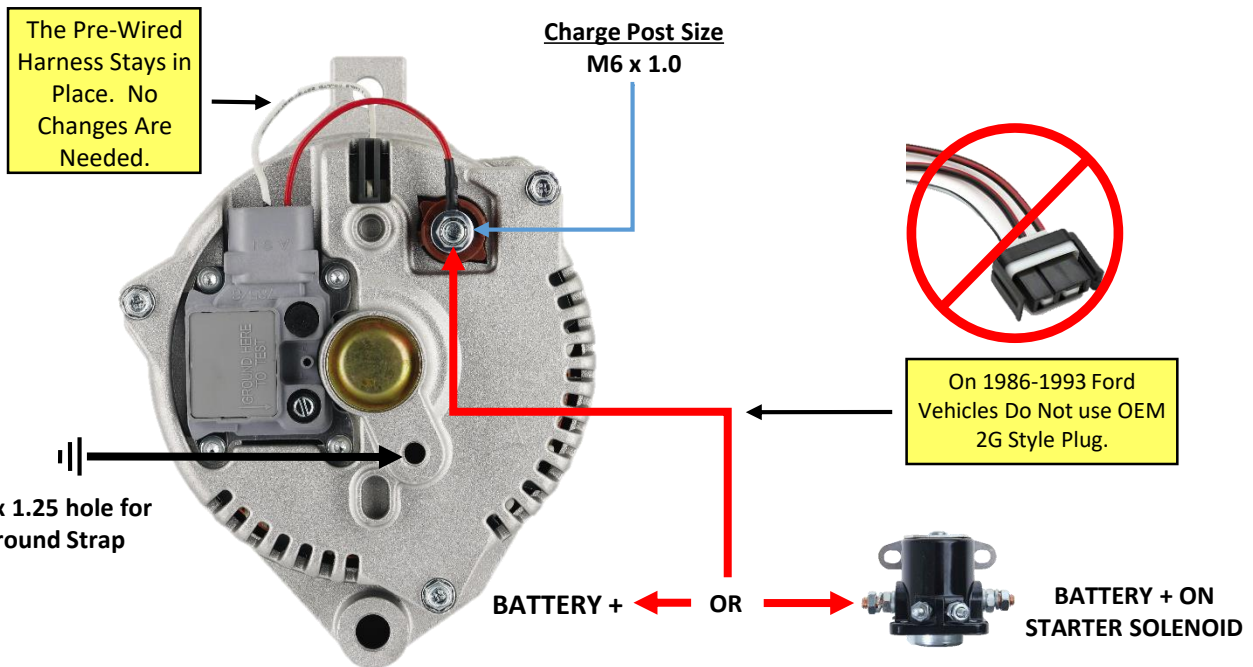


OEM Ford 2G  
Int Regulator  
1987-93



OEM Ford 1G  
External Regulator  
1965-86

### Wiring Instructions for Internal & External Regulator to 3G 1 Wire Upgrade



The Pre-Wired  
Harness Stays in  
Place. No  
Changes Are  
Needed.

Charge Post Size  
M6 x 1.0



On 1986-1993 Ford  
Vehicles Do Not use OEM  
2G Style Plug.

M8 x 1.25 hole for  
Ground Strap

BATTERY +

OR

BATTERY + ON  
STARTER SOLENOID

### Disconnect Battery Negative (-)

### READ ALL INSTRUCTIONS IN BOX!

#### Charge Wires: (DO NOT Use OEM Battery Plug-in)

120/140 Amp Alt. use 6 gauge up to 6 ft.

155/200 Amp Alt. use 4 gauge up to 6 ft.

**Alternator Ground:** Many mounting brackets are powder/clear coated, painted, or plated. The alternator will not ground properly without a ground wire from the Alt. housing to the engine block. (This wire should match charge wire size)

**Battery must have a clean ground to engine block.**

**Wire Connections:** Be sure all terminals are crimped securely, and connections are clean and tight.

**Belt Tension:** Inspect belt for signs of cracking or glazing. Replace if needed. A loose belt will cause intermittent charging and generate excessive heat resulting in premature unit/bearing failure.

For V belt units follow attached pulley tag.

A fully charged battery is at least 12.6V, not 12.0V. A weak/defective battery will cause premature failure. **Never disconnect the battery with engine running!** This causes voltage spikes that will damage the alternator.

**DO NOT EXCEED 18,000 ALTERNATOR SHAFT RPM**

(See Catalog pg.45 for more info)

**FAILURE TO FOLLOW THESE INSTRUCTIONS MAY VOID YOUR WARRANTY**

Warranty void if unit is soaked in Oil or Mud



# WIRE! RIGHT!

The Powermaster Cables are made up of hundreds and even thousands of strands of **pure copper** wire. This ensures that more current can be transferred efficiently with less heat build-up and loss.

The cables meet American Wire Gauge specs and are **made in the USA** and are finished with machine crimped ring lug terminals.

- *Fine strands of pure, oxygen-free copper wire*
- *Extremely flexible for easy routing*
- *Durable sleeve designed for underhood environments*
- *Available in 0-8 gauge diameters from 1-12 feet lengths*
- *Hydraulically terminated eyelet terminals*

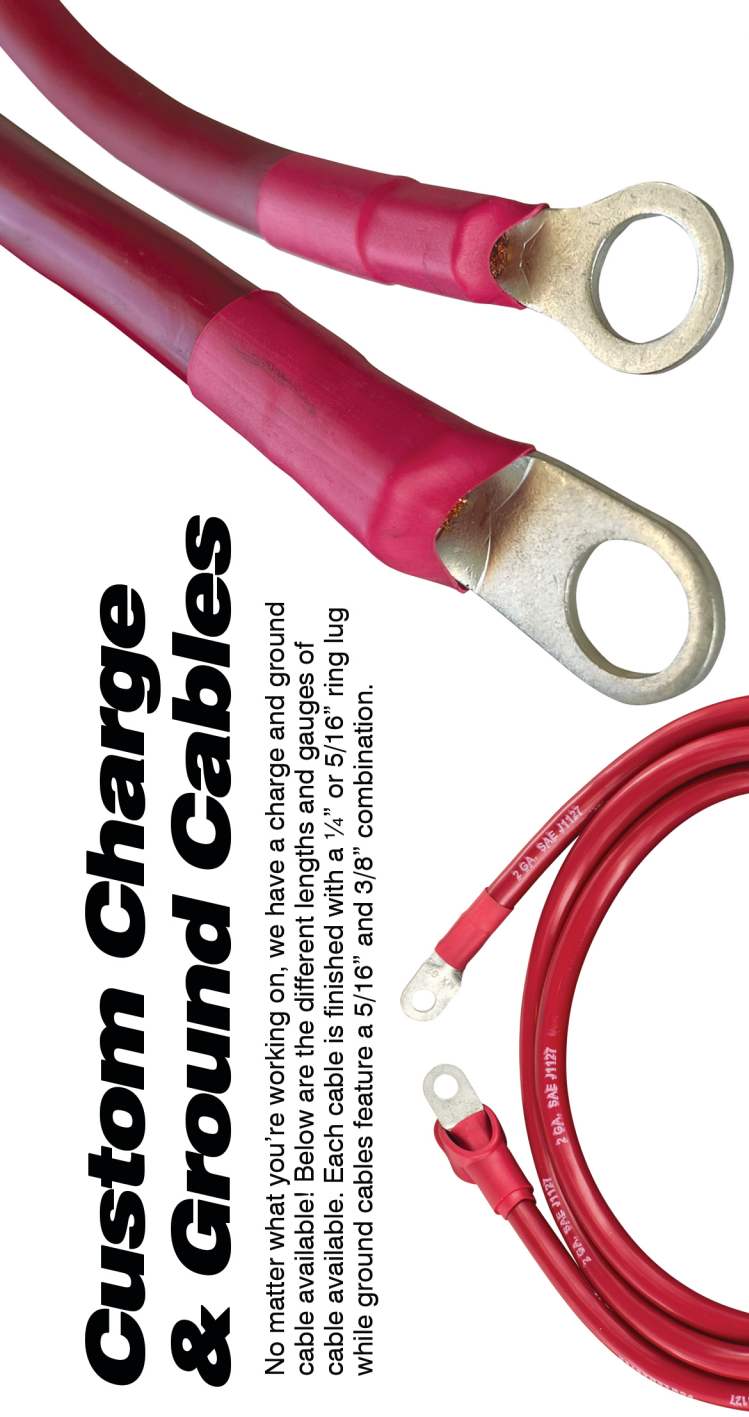
630-957-4019 OR

TECH@POWERMASTERPERFORMANCE.COM



# Custom Charge & Ground Cables

No matter what you're working on, we have a charge and ground cable available! Below are the different lengths and gauges of cable available. Each cable is finished with a 1/4" or 5/16" ring lug while ground cables feature a 5/16" and 3/8" combination.



| Red Charge Wire   | 1'    | 2'                 | 3'        | 4'        | 5'        | 6'        | 7'        | 8'        | 10'        | 12'        |
|---|-------|--------------------|-----------|-----------|-----------|-----------|-----------|-----------|------------|------------|
| 8-Gauge, 1/4" and 5/16" Terminals Installed                       |       | 1-582-130          | 1-583-130 | 1-584-130 | 1-585-130 | 1-586-130 | 1-587-130 | 1-588-130 |            |            |
| 6-Gauge, 1/4" and 5/16" Terminals Installed                       |       | 1-562-130          | 1-563-130 | 1-564-130 | 1-565-130 | 1-566-130 | 1-567-130 | 1-568-130 | 1-5610-130 |            |
| 4-Gauge, 1/4" and 5/16" Terminals Installed                       |       | 1-542-130          | 1-543-130 | 1-544-130 | 1-545-130 | 1-546-130 | 1-547-130 | 1-548-130 | 1-5410-130 | 1-5412-130 |
| 2-Gauge, 1/4" and 5/16" Terminals Installed                       |       | 1-522-130          | 1-523-130 | 1-524-130 | 1-525-130 | 1-526-130 | 1-527-130 | 1-528-130 | 1-5210-130 | 1-5212-130 |
| 0-Gauge, 1/4" and 5/16" Terminals Installed                       |       | 1-502-130          | 1-503-130 | 1-504-130 | 1-505-130 | 1-506-130 | 1-507-130 | 1-508-130 | 1-5010-130 | 1-5012-130 |
| 8-Gauge, 5/16" Terminals on both ends Installed                   |       | 1-582              | 1-583     | 1-584     | 1-585     | 1-586     | 1-587     | 1-588     |            |            |
| 6-Gauge, 5/16" Terminals on both ends Installed                   |       | 1-562              | 1-563     | 1-564     | 1-565     | 1-566     | 1-567     | 1-568     | 1-5610     |            |
| 4-Gauge, 5/16" Terminals on both ends Installed                   |       | 1-542              | 1-543     | 1-544     | 1-545     | 1-546     | 1-547     | 1-548     | 1-5410     | 1-5412     |
| 2-Gauge, 5/16" Terminals on both ends Installed                   |       | 1-522              | 1-523     | 1-524     | 1-525     | 1-526     | 1-527     | 1-528     | 1-5210     | 1-5212     |
| 0-Gauge, 5/16" Terminals on both ends Installed                   |       | 1-502              | 1-503     | 1-504     | 1-505     | 1-506     | 1-507     | 1-508     | 1-5010     | 1-5012     |
| Black Ground Wire   | 1'    | 2'                 | 3'        |           |           |           |           |           |            |            |
| 8-Gauge, 5/16" and 3/8" Terminals Installed                       | 1-781 | 1-782              | 1-783     |           |           |           |           |           |            |            |
| 6-Gauge, 5/16" and 3/8" Terminals Installed                       | 1-761 | 1-762              | 1-763     |           |           |           |           |           |            |            |
| 4-Gauge, 5/16" and 3/8" Terminals Installed                       | 1-741 | 1-742              | 1-743     |           |           |           |           |           |            |            |
| 2-Gauge, 5/16" and 3/8" Terminals Installed                       | 1-721 | 1-722              | 1-723     |           |           |           |           |           |            |            |
| 0-Gauge, 5/16" and 3/8" Terminals Installed                       | 1-701 | 1-702              | 1-703     |           |           |           |           |           |            |            |
| Ground Strap  | 1'    |                    |           |           |           |           |           |           |            |            |
| Ground Strap, 1" wide, 1' long, 5/16" and 3/8" Terminal Installed | 1-711 |                    |           |           |           |           |           |           |            |            |
|   |       | CHARGE WIRE LENGTH |           |           |           |           |           |           |            |            |
| AMP LOAD  | 1'-6" | 7'-13"             | 14'-20"   |           |           |           |           |           |            |            |
| 50-100  | 8g    | 6g                 | 4g        |           |           |           |           |           |            |            |
| 100-150   | 6g    | 4g                 | 2g        |           |           |           |           |           |            |            |
| 150-220   | 4g    | 2g                 | 0g        |           |           |           |           |           |            |            |
| 220+  | 2g    | 0g                 | 1/0g      |           |           |           |           |           |            |            |

WARNING: Cancer or Reproductive Harm  
www.P65warnings.ca.gov