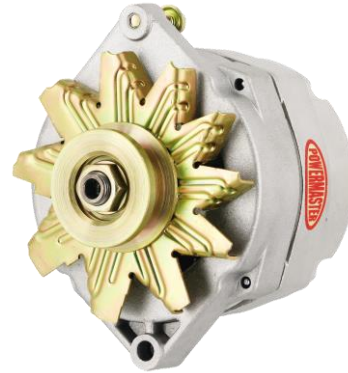




# WIRING INSTRUCTIONS

Motorola Upgrade Alternator (One Wire)



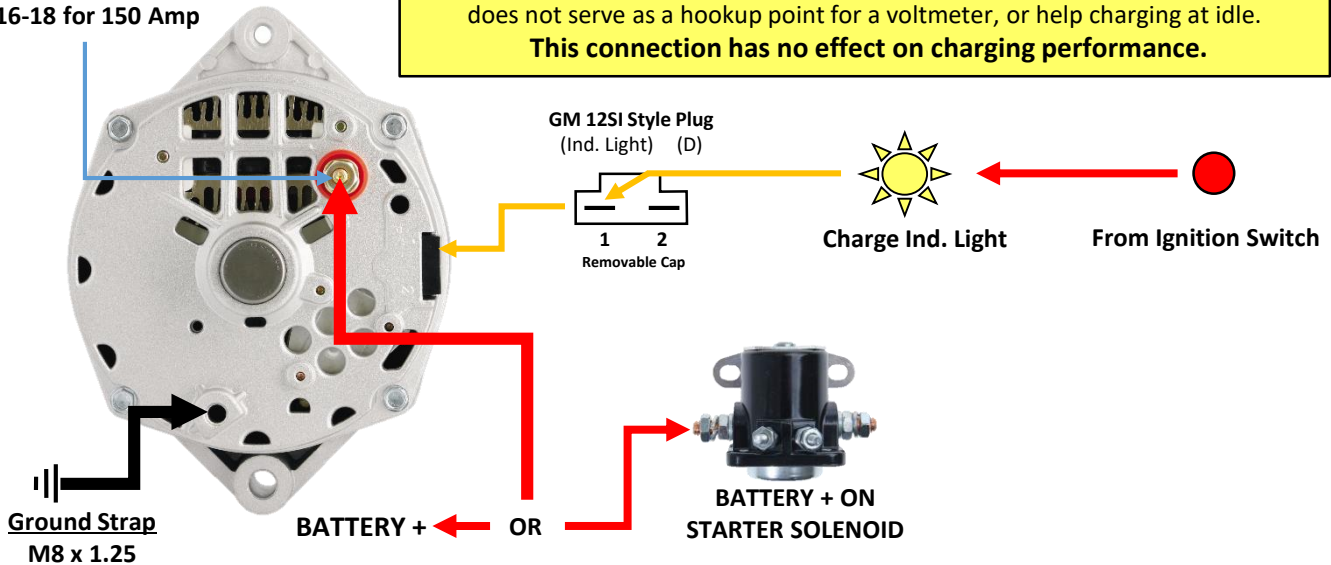
Tech Dept.  
(630) 957-4019

Tech@powermasterperformance.com

## Wiring Instructions for 1 Wire Motorola Replacement (1" Mounting Spool)

**Optional Charge Indicator Light Function:** Your Powermaster Alternator is designed to work as a 1 wire without any connections to the plug in. The function of the plug is to run a charge indicator (Idiot Light) only. This plug also does not serve as a hookup point for a voltmeter, or help charging at idle.  
**This connection has no effect on charging performance.**

**Charge Post Size**  
12-24 for 100/120 Amp  
5/16-18 for 150 Amp



**Disconnect Battery Negative (-)**

### READ ALL INSTRUCTIONS IN BOX!

**Charge Wires:**

100 Amp Alt. use 8 gauge up to 6 ft.

150 Amp Alt. use 6 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	1-5412-130
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	1-5412
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									

AMP LOAD	CHARGE WIRE LENGTH		
	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