



WIRING INSTRUCTIONS

Dodge/Chrysler/Jeep, 180/250 Amp Alternator Upgrade

Need Help, or Questions!

Tech Dept.

(630) 957-4019

Tech@powermasterperformance.com



OE Externally Regulated

Note: Voltage on these units is controlled by the external Regulator

**BATTERY +
Or Starter
Solenoid +**

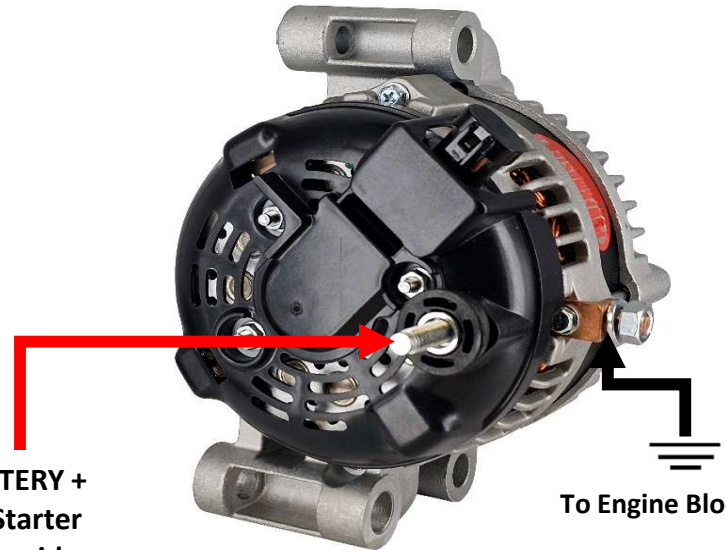
Plug for External
regulator
Connector



M8 X 1.25 Lug for
Ground Strap

1-WIRE Internal regulated

**BATTERY +
Or Starter
Solenoid +**



M8 X 1.25 Lug for
Ground Strap

Disconnect Battery Negative (-)

READ ALL INSTRUCTIONS IN BOX!

Charge Wires:

180 Amp Alt. use minimum 4 gauge up to 6ft.
250 Amp Alt. use minimum 2 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 the 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.**

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**



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