



Installation Manual

170 Amp 1-Wire Billet Alternator

PFEPM8106BK



Included Items	QTY
PFEPM8106BK 170 Amp Alternator	1
PFEPM8106BK 6-Groove Serpentine Pulley	1
PFEPM8106BK Holden Conversion Spacer Kit	1

WARNING: PLEASE READ ALL INSTRUCTIONS BEFORE PROCEEDING. PROFLOW WILL NOT BE RESPONSIBLE FOR ANY DAMAGE AS A RESULT OF THE INCORRECT INSTALLATION OF THIS PRODUCT. IT IS RECOMMENDED THAT A QUALIFIED AUTOMOTIVE TECHNICIAN PERFORMS THIS INSTALLATION.

Description

The Proflow Performance 170 Amp Powerspark alternator is designed as a 1-wire, self exciting alternator. This means there is only one connection necessary, from the positive terminal of the battery to the charging terminal on the back of the alternator housing. The turn on speed of this alternator is estimated at 1600 RPM. This figure may vary for each individual alternator due to manufacturing tolerances. Please see the performance result of your individual alternator enclosed in the box.

Please see the below table for recommended wire gauges relative to alternator amperage. Using the incorrect size wire can result in alternator damage which may void warranty.

Amps	Recommended Charging Cable Gauge Size and Length							
	0 - 4"	4 - 7"	7 - 10"	10 - 13"	13 - 16"	16 - 19"	19 - 22"	22 - 28"
105 - 125	6	6	4	4	2	2	2	0
125 - 150	6	6	4	2	2	2	2	0
150 - 175	4	4	4	2	2	0	0	0

Figure 1: Charging wire recommendation chart.

Regulator

This alternator does not require an external regulator. It can be completely removed from the vehicle or left in place with the wiring disconnected. If not, the indicator lamp on the dash will remain on which will no longer be operative.

Pulley Size and Ratio

This alternator is supplied with a single groove V-Belt pulley and 6-Groove serpentine belt pulley. These pulleys have a diameter of 2.80" and 2.40" respectively. A 3:1 pulley ratio is recommended for street use (as an example, when your engine is running at 1500 RPM, the alternator should be operating at 4500 RPM).

Typical Installation

1. This Powerspark alternator is designed for use in applications that require straight mounts from the top to bottom, with a 180° orientation. This is a common configuration for GM vehicles. A Holden conversion spacer kit is also included which converts the pulley spacing to the correct configuration when mounted to Holden engines (larger spacer for the pulley, smaller one for the bracket). After mounting the alternator, please check the alignment of the pulleys and ensure there are no components which may interfere with the drive belt.
2. Route the charging wire from the battery positive terminal to the alternator charging stud on the rear. Make sure to route this wire away from any heat sources and moving components. Install ring lug terminals to the ends of this wire and connect it to the positive battery terminal and the charging post on the alternator.

NOTE: As an extra safety precaution, it is recommended to connect a ground wire from the alternator housing to the engine block to avoid accidental shortages with the anodised housing.

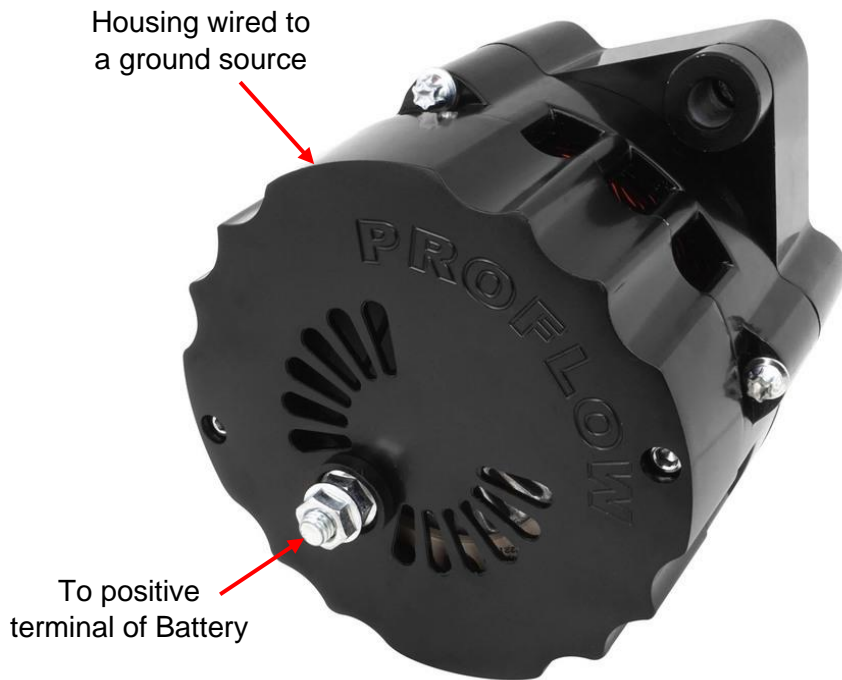


Figure 2: Alternator Diagram.

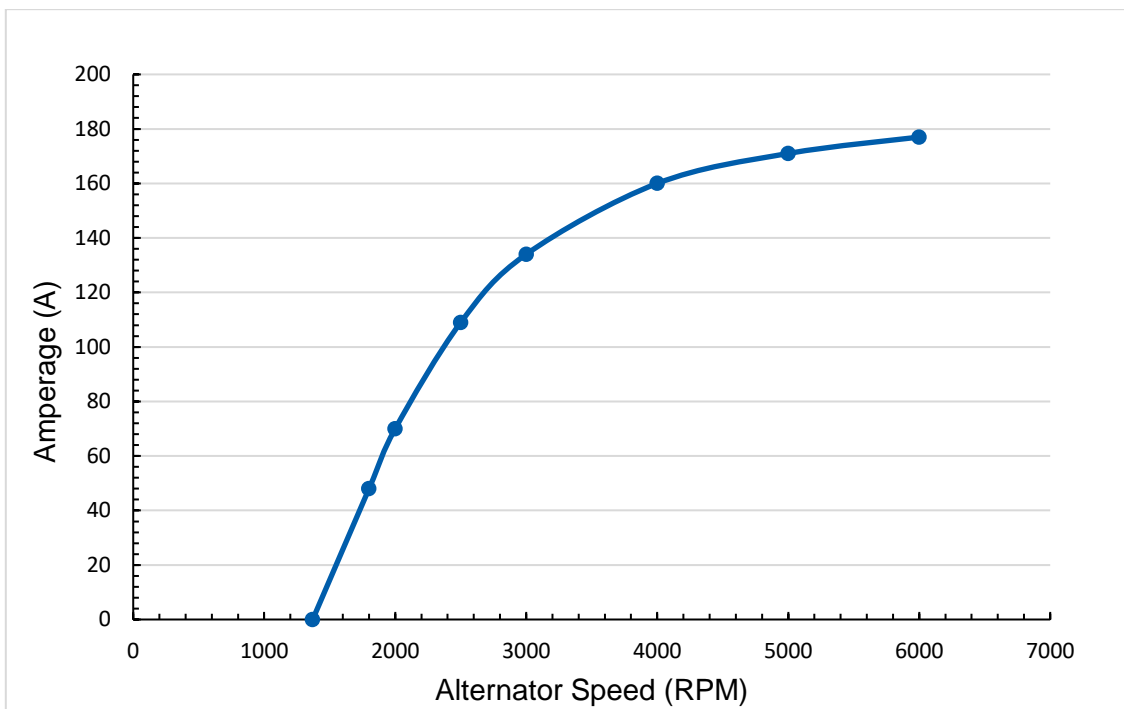


Figure 3: Performance Curve - Speed vs Amperage.

PROFLOW LIMITED WARRANTY

This Proflow product is warranted to be free from defects in materials and workmanship for a period of one year from the original date of purchase. No warranty claim will be valid without authentic, dated proof of purchase. This warranty is to the original retail purchaser and none other and is available directly from Proflow and not through any point of distribution or purchase.

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