

AR096 Race Alternator to Small Block Kit



This kit contains the mounting brackets, spacers and bolts necessary to adapt a lightweight Powermaster alternator (model number 8162 or 8172) to any LA series small block equipped with the passenger side inlet water pump. This kit contains aluminum spacers as well as upper and lower mounting brackets and mounting bolts. This kit works with water pump pulley part number 2951836. The lower pulley should be either the single groove (3614375), or the double groove (3614378). A fan belt such as Gates #7450 will work with the stock size pulleys.

Mount the kit with the alternator hanging from one of the 5.50-inch bolts. The other 5.50-inch bolt goes in the bottom hole of the bracket. The 5.25-inch bolt goes in the upper right corner of the bracket. The long spacer mounts behind the alternator. The lower adjuster bracket fits on top of the triangular alternator bracket, not beneath it. The 8162 alternator requires a thin spacer between the alternator and the bracket as well as the 3/8 diameter adjustment bolt. The PWM 8162 alternator does not come with a pulley, but billet aluminum pulley part number AR210 can be purchased from any AR Engineering dealer.

The Powermaster alternator has an internal regulator so you must remove the stock voltage regulator and then run a 12 volt ignition switched supply wire directly to the alternator. For best results, follow the wiring instructions that are included with the Powermaster alternator. More information, if needed, can be found at www.powermastermotorsports.com.

Mopar vehicles typically ran the charging output wire through the firewall to the ammeter and then back through the firewall to the battery. This long charging loop works okay when current flow is low, but a 50 amp alternator will melt the connections at the firewall if full current draw is used for an extended length of time. Therefore, our recommendation is to reinforce the firewall connector by adding an additional charging wire that goes directly from the alternator to the battery stud on the starter relay. Adding this bypass charge wire will significantly reduce the chance of melting the firewall connections, but it will also cause the ammeter to stop working correctly.

Once the ammeter is bypassed it can no longer provide a correct reading since a portion of the current produced by the alternator will flow directly to the battery rather than through the ammeter. The best solution to this problem is to install a voltmeter. A voltmeter will provide an accurate representation of the charging circuit without needing to pass all of the charging current through the firewall connections. For those who wish to learn more about charging systems check out the excellent information posted at www.madelectrical.com.