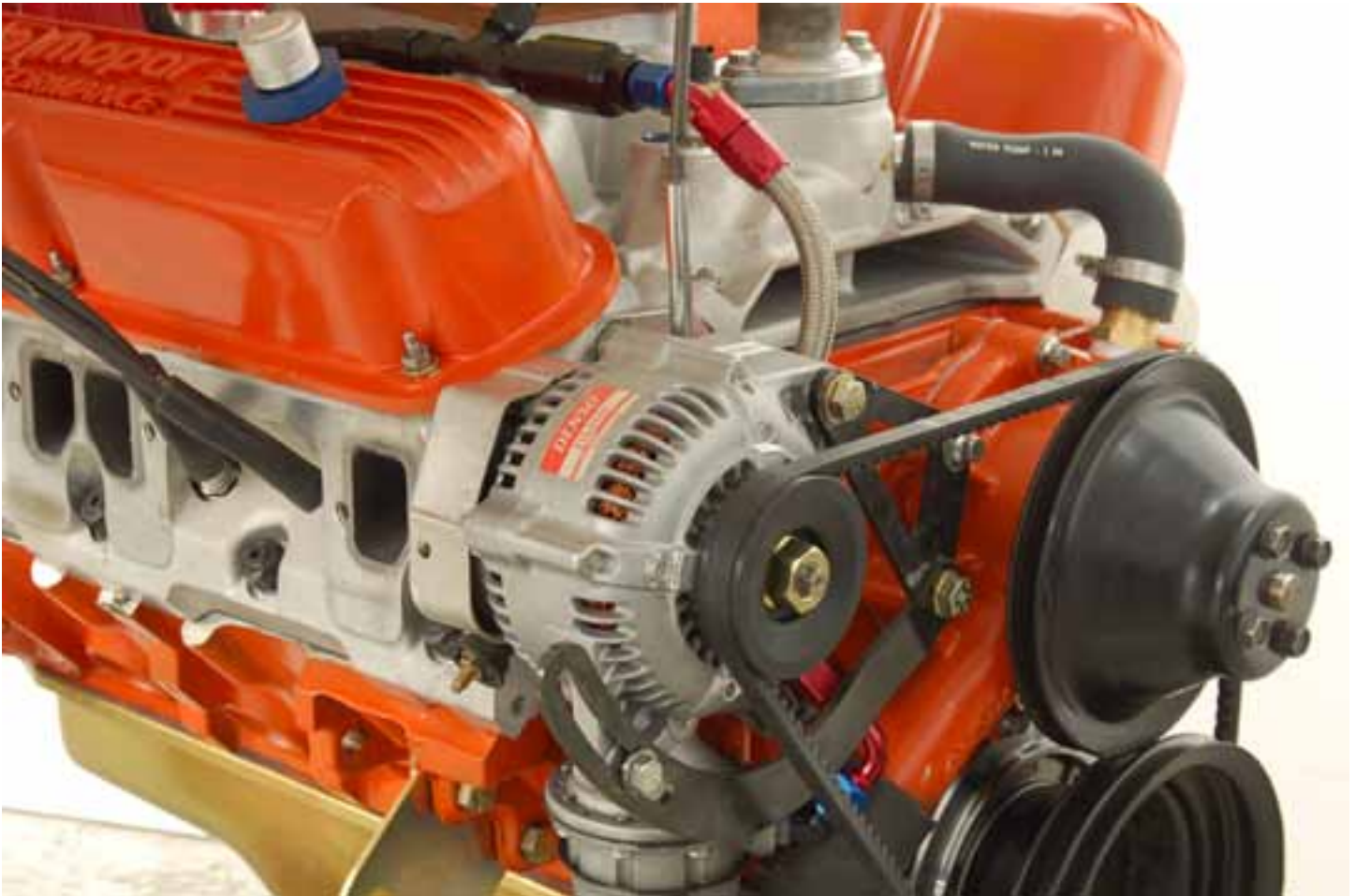


AR022 Denso Alternator to Small Block Kit



This kit contains the mounting brackets, spacer and bolts necessary to adapt a lightweight Denso alternator from a Toyota 4Runner (1985 to 1991 with L4 engine) to any LA block Chrysler motor using the 1970 or later water pump. The kit contains an aluminum spacer, as well as the upper and lower mounting brackets and three mounting bolts. This kit works with any pulley set that has the deep water pump pulley (2951836) shown in the picture. The lower pulley should be either the single groove (3614375) or the double groove (3614378) if you have power steering. A fan belt such as Gates #7460 will work with stock size pulleys.

Mount the kit with the alternator hanging from one 5.25-inch bolt. The 5.50-inch bolt goes through the alternator brackets and into the water pump housing. The remaining 5.25-inch bolt goes through the upper hole of the alternator bracket and into the water pump housing. The long spacer mounts behind the alternator. The lower adjuster fits on top of the alternator bracket, not beneath it.

The Toyota alternator that fits this application can be purchased as Bosch remanufactured part number AL218X. This number cross references over to Denso 210-0106 and 210-0107 as well as original Toyota number 27060-35060 and 27060-35061. Wiring harness AR016 from AR Engineering can be helpful when attaching this alternator to a factory Mopar harness. A billet aluminum alternator pulley is also available from AR Engineering as part number AR211.

The Toyota alternator is internally regulated so you must remove the original external voltage regulator. Connect an ignition switched 12 volt wire directly to the terminal marked IG on the back of the alternator. The terminal marked S for sense needs to be connected to a good 12 volt reference source such as the stud on the starter relay. The third terminal marked L for lamp is for the dash indicator light. This lamp connection typically isn't used on a Mopar.

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 60 amp alternator can melt the connections at the firewall if full current draw is used for an extended length of time. One option is to shunt 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 will 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

