## Installation Instructions for 10140 1-Wire Alternator Conversion Kit

For GM Delcotron 10 S1 Alternators 61-63 amp 1971-86

Our conversion kit will allow you to change your Delcotron alternator to a 1-wire style configuration. During the installation, you will be replacing the following items: Internal regulator, brush holder and brushes, diodes and insulators. An added feature of our kit is that it also includes new bearings for your alternator, aimed toward providing you with trouble-free service for years to come.

- **1.** Disconnect the negative (-) cable at the battery, then disconnect the positive (+) cable.
- **2.** Remove the alternator from its mounting brackets.
- **3.** On the sides of the case where the front and rear sections meet, scribe a line or mark in a fashion that will aid you in aligning the case halves in the reassembly process.
- **4.** Remove the four #10 fasteners that secure the front and rear case sections together. Carefully pry the sections apart with a screwdriver. The stator (windings) must stay with the rear section during this step! With the housings separated remove and discard the brushes.
- 5. Remove the three #8 nuts that fasten the stator to the rear housing. The stator must be removed by prying evenly from the case. For extra precaution, this is a good time to have a helper hold the housing if a vice is not available. Once the stator is removed, handle it carefully as the wires are delicate to the touch.
- **6.** Remove the three #8 screws holding the diodes, brush holder and voltage regulator in place. Two of the screws have plastic sleeves for insulating purposes while the third is for a ground. Make note of the exact placement of each screw. If the screws are not reassembled in the proper sequence your alternator will not function!
- **7.** The bearings can be replaced at this time if needed. It may be necessary to have the bearings removed and replaced by a shop with the proper equipment.
- **8.** Place the new voltage regulator and the new brush holder assembly using one of the #8 screws with the plastic sleeve and the #8 ground screw (as noted in step #6). The brush holder has a pin for an assembly aid holding the brush in place under spring tension. DO NOT REMOVE THE PIN. The pin must protrude through the hole in the rear of the housing. Position the diodes over the brush holder unit and rectifier bridge with the last #8 insulated screw.
- **9.** Replace the stator in the rear housing by aligning the relief notches on the stator with the bolt holes in the housing. Be careful that the terminals and leads do not come in contact with the housing and reattach the terminals with the three #8 nuts from step #5.
- **10.** Replace the rotor and reassemble the front and rear housings using the scribe marks to align the sections. Secure with the four #10 housing fasteners. Now you can remove the pin from the rear of the housing holding the brushes in place.
- **11.** The alternator can be secured to its mounting brackets on the engine. Complete the 1-wire hook-up by running a 10-gauge wire from the alternator terminal assembly to the positive (+) terminal on the battery.

