

# SURE POWER ALTERNATOR MODIFICATION SERIES

## SPECIAL INSTRUCTIONS FOR DELCO CS 130D

This instruction is designed for 1996 and newer GM vehicles equipped with Delco CS 130D alternators which require the addition of a sense wire, **but the connector is not modifiable**. The purpose of this instruction is to add a sense wire to the harness.

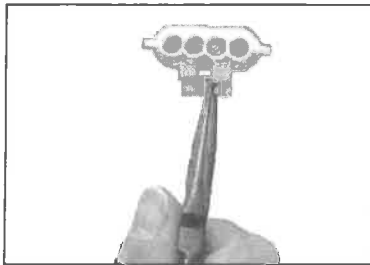


Figure 1

1. Unlatch and remove the OEM connector from the alternator and inspect the connector cavity. Notice the size of the terminals. If there are three small terminals and one larger terminal refer to page 2 of this instruction sheet. If all four terminals are the same size (as pictured in *Figure 1*, approximately 1/8th inch wide) proceed to step 2.

2. Inspect the connector that plugs into the alternator (*Figure 1*). If there is a wire in the "D" (sense) position, this instruction **does not** apply. Proceed to the Group 2 Isolator instructions for General Motors (Instruction #180012 or 180062). If there is not a wire in the "D" (sense) position proceed to step 3.

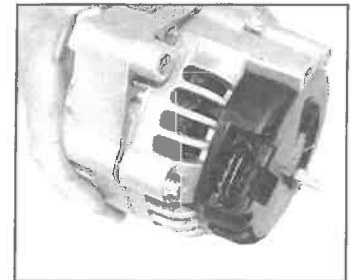


Figure 2



Figure 3

3. Remove the wire lock from the back of the connector by gently prying back the lock from the tab on each side. (*Figure 3*)

4. Remove the existing OEM wire and terminal from the connector (*Note which hole the wire occupies. This wire will need to go back into the same position of the new connector*). Removal of the existing wire can be aided by inserting a small firm wire such as a paper clip into the notched portion of the OEM connector thereby releasing the locking tab. Gently pull the wire and terminal out from the back of the connector. (*Figure 4*)



Figure 4

5. Insert the OEM wire and terminal into the same position of the new connector. Make sure the terminal locks into position (*Note: some alternators may have more than one wire in the OEM connector*). Repeat this step for all the wires in the connector.



Figure 5

6. Insert the new wire and terminal from the kit, into the "D" (sense) position of the new plug (*Figure 5*). Verify by looking at the terminal designators on the alternator connector receptacle. The new sense wire should mate with the "S" position of the alternator receptacle.

7. Any remaining holes should be sealed using rubber plugs provided in the kit (*Figure 6*).

8. Snap lock back into place and insert new connector into the alternator. Connect opposite end of the new sense wire (inserted in step 6) to the #1 or main terminal of the Battery Isolator.



Figure 6

9. Continue with Group 2 Isolator Installation Instructions for General Motors Delco CS series alternators on instruction # 180012 or # 180062.

## Connector Harness Modification For Delco CS General Motors Applications

**This instruction is designed for 1985 and newer GM vehicles equipped with the Delco CS series alternator, which requires the addition of a sense wire**  
**The purpose of this instruction is to add a sense wire to the harness**

**Please Note:** If the vehicle's original equipment plug connector does not have a sense wire in the "S" position of the original GM connector follow these instructions. If a wire is present in the "S" position continue with the Group 2 Installation Instructions for the General Motors Delco CS Alternators on Instructions 180012 or 180062.

1. Remove the connector from the alternator. *Do not cut any wires.*
2. Locate the rubber grommet in the back of the connector (figure 1).



Figure 2

3. Take a small jeweler's screwdriver and gently pry the rubber grommet out of the back of the connector.
4. With the jeweler's screwdriver gently slide the white lock out of the connector (figure 2).

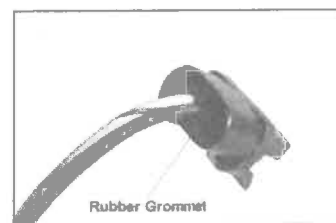


Figure 1

5. Cut a new slot in the rubber grommet above the "S" connection if one does not already exist. Use care when cutting.

6. Insert the red wire and terminal from the kit into the empty "S" position available in the existing connector. Making sure the terminal on the end of the new wire is lined up correctly with the indentation on the connector, push the wire into the connector until the terminal locks into position. Once the new wire is gently

inserted try to pull it out to ensure it is locked securely in place. The wire should not come out of the connector (Figure 3).

7. Slide the white lock back into the connector until it locks in position.

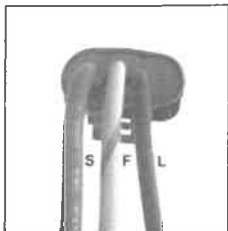


Figure 4

8. Slide the rubber grommet around the wire and push it back into the connector (Figure 4).



Figure 3

9. Insert modified connector back into alternator.

10. Routes the red "S" wire to the #1 terminal of the Battery Isolator.

11. Continue with Group 2 Isolator Instructions for General Motors Delco CS Series Alternators (Instruction # 180012 or 180062).