C703 Alternator with Diode Isolator Module

Installation Instructions

**STEPS 1—5 MUST BE PERFORMED WHEN ALTERNATOR IS ON BENCH.**

1. Mount CEN Diode Isolator Module on module bracket before attaching to C703 alternator drive end housing.
   
   a. Module bracket has countersunk holes in face for screws. These holes must face up when module is attached.
   
   b. Apply a layer of heat sink compound such as GC/Waldon HSC#10-8109 zinc oxide-filled silicone or its equivalent on the back of the module before setting in place on the module bracket. See Figure 1. The diagram stamped on the side of the module can face either the drive end or the anti-drive end of C703 alternator.
   
   c. Secure module on bracket with 1/4-20 flat head screws, lock washers, and nuts provided in the kit. See Figure 1. Torque to 5.1 Nm/45 lb. in.

2. Mount module bracket (with module in place) on C703 drive end housing as shown in Figures 1 and 2:
   
   a. Secure bracket with four #10-32 flat head screws. Torque to 6.8 Nm/60 lb. in.
   
   b. Use a suitable adhesive such as Loctite® 222 on screws. Follow manufacturer's instructions.

3. Attach black wires provided in kit to module. See Figure 2. Connect small ring terminal end of wire to module:
   
   a. Shorter black wire should be attached to one outside terminal on module.
   
   b. Longer black wire should be attached to the opposite outside terminal on module.
   
   c. Tighten screws on module to 5.1 Nm/45 lb.in.

4. Attach other end of black wires to diodes. Follow routing shown in Figure 3. Tighten hardware to 3.4 Nm/30 lb. in.

5. Coat phase terminals and module terminals with Dow Corning® 1-2577 Low VOC RTV coating or equivalent. Do not use coating containing acetic acid (vinegar smell) on electrical components.
6. Install C703 alternator and new mounting bracket. See Figure 4. Make sure there is enough clearance between mounting bracket and drive end housing to prevent damage to wires. See Figure 5.

7. Attach cable from 12V Transformer-Rectifier box on vehicle to middle terminal on module. See Figure 6. Tighten screw on module to 5.1 Nm/45 lb. in. Coat module terminal with Dow Corning®1-2577 Low VOC RTV coating or equivalent. Do not use coating containing acetic acid (vinegar smell) on electrical components.

8. Slip cable into wire clamp and attach clamp with bolt and lock washer to anti-drive end housing as shown in Figure 6. Tighten hardware to 5.1 Nm/45 lb. in.

9. Install drive end cover plate on alternator and secure front cover bolts to 2.8 Nm/25 lb. in.