## **Diode/Heat Sink Assembly**

## 🚱 C.E. Niehoff & Co.

## To replace any of three diode module/ heat sink assemblies:

- 1. Remove drive end cover plate and save hardware for reassembly.
- 2. Remove and save the hardware attaching the defective diode module/heat sink assembly.
- 3. Disconnect only enough wiring attached to defective diode/heat sink assembly to facilitate replacement.
- 4. Remove defective Diode/heat sink assembly. Clean away debris or corrosion from housing surfaces before installing new assembly.
- 5. Install new diode/heat sink assembly in proper location. See Figure 1. Torque heat sink mounting screws to 11.3–13.5 Nm/100–120 lb. in.
- 6. Reconnect wiring removed in step 2:
  - a. Phase lead to each diode module as shown in Figure 1. Torque to 4 Nm/35 lb. in.

## **Replacement Instructions**

- b. To B+ stud and torque screw to 28-29 Nm/ 21-22 lb. ft. From B+ wire assembly to diode module and torque screws to 4 Nm/35 lb. in.
- c. From regulator harness to module screws and torque screws to 4 Nm/35 lb. in.
- d. From green ground wire to heat sink and torque screw to 11.3–13.5 Nm/100–120 lb. in.
- 7. Coat electrical terminals with Dow Corning® 1–2577 Low VOC RTV coating or equivalent. Do not use coating containing acetic acid (vinegar smell) on electrical components.
- Using DMM (digital multimeter) set on diode test, connect red lead to B+ teminal on alternator and connect black lead to B- terminal on alternator. Meter should read OL (blocking). Reverse leads, meter should read less than 0.8 V (flow). If meter reads zero in either direction, recheck wiring connections and diode orientation.
- 9. Reattach drive end cover plate and torque hardware to 5.1 Nm/45 lb. in.



