

**BRUSH ASSEMBLY REPLACEMENT INSTRUCTIONS FOR 24SI™ ALTERNATORS**

**NOTICE!** It may be necessary to obtain **Miscellaneous Hardware Kit** to replace parts that may be damaged during disassembly. **The Rectifier Positive Heat Sink Insulator should always be replaced.**

**WARNING!!!** ALWAYS USE PROPER EYE PROTECTION WHEN PERFORMING ANY MECHANICAL REPAIRS TO A VEHICLE – INCLUDING, BUT NOT LIMITED TO, ANY INSTALLATION AND OR REPAIRS TO THE DELCO REMY® ALTERNATORS. FAILURE TO USE PROPER EYE PROTECTION CAN LEAD TO SERIOUS AND PERMANENT EYE DAMAGE.

Only perform the mechanical functions that you are properly qualified to perform. Mechanical repairs that are beyond your technical capabilities should be handled by a professional installation specialist.

**DANGER!!!** To avoid injury or damage, always disconnect the negative cable at the battery before removing or replacing the alternator. The alternator output terminal is always live (“hot”). If the battery is not disconnected, a tool accidentally touching this terminal and ground can quickly get hot enough to burn skin or damage tools and surrounding parts.

**FOLLOW ENGINE OR VEHICLE MANUFACTURER’S INSTRUCTIONS CAREFULLY WHEN REMOVING AND REINSTALLING THE ALTERNATOR.**

**REMOVAL INSTRUCTIONS**

1. Remove vehicle leads connected to the alternator, noting their positions for reinstallation of the alternator.
2. Remove the slip ring end (**SRE**) cover.  
**NOTICE!** Avoid excessive heat when melting or soldering connections. Excessive heat may damage the terminals or leads, causing premature alternator failures.
3. Separate rectifier assembly from stator by applying enough heat to melt solder at the stator lead connections and carefully prying the wire crimps open, three (3) places.
4. Remove the voltage regulator and rectifier assemblies as a unit, carefully noting location of all screw assemblies. **WARNING!!!** Failure to install the insulated screws, as removed, will cause the alternator to be inoperative and/or will damage the alternator and potentially surrounding parts.
5. Remove the heat sink insulator. Be extremely careful not to damage the surface of SRE casting.
6. Remove and dispose of the old brush assembly.

**INSTALLATION INSTRUCTIONS**

1. Install the new brush assembly.  
**WARNING!!!** Inspect SRE frame, in positive heat sink (insulated diodes) area, for any surface damage, such as nicks or burrs, capable of penetrating the insulator. A ground will damage the alternator and potentially surrounding parts. Remove any surface damage before installing the rectifier assembly.
2. Place new **heat sink insulator**, if necessary, on the positive heat sink of new rectifier assembly.
3. Cover negative diodes with a heat sink compound compatible with semiconductor materials. Use a compound that can withstand a temperature range of **-40C to 180C (- 104F to 356F)**.
4. Reinstall the voltage regulator and rectifier assemblies as a unit.
5. Reinstall five (5) mounting screws into the rectifier assembly, **ensuring the one (1) insulated screw is installed in the hole on the rounded end of the positive heat sink, as removed.** Torque all Screws to **2.2-2.8 N-m (19-25 lb in)**.
6. Reinstall two (2) bushings and three (3) mounting screws into the voltage regulator, **ensuring the one (1) insulated screw is used in terminal that connects to brush holder.** Torque all Screws to **2.2-2.8 N-m (19-25 lb in)**.
7. Crimp and solder terminals of rectifier assembly to leads of stator assembly, three (3) places.
8. Install slip ring end cover and torque the mounting screw assemblies to **2.2-2.8 N-m (19-25 lb in)**.
9. Reinstall alternator according to engine or vehicle manufacturer’s instructions.
10. Reattach the battery (+) terminal lead to alternator battery terminal and torque nut to **9.0-13.0 N-m (80-120 lb in)**.
11. Reconnect the negative (-) cable at the battery.

Technical support: USA 800 854 0076, Mexico 01 800 000 7378, Brazil 0800 703 3526, South America 55 11 2106 6510 or visit [delcoremy.com](http://delcoremy.com)

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