## SLIP RING END ROTOR BEARING REPLACEMENT INSTRUCTIONS FOR 18SI<sup>™</sup> and 28SI<sup>™</sup> ALTERNATORS

WARNINGIII 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<sup>®</sup> 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**

**NOTICE:** Removing the slip ring end **(SRE)** bearing without damaging the rotor assembly is very difficult, without specialized tooling developed for that purpose. Follow instructions carefully and use bearing removal tool provided.

- 1. Disconnect negative battery terminal.
- 2. Remove vehicle leads connected to the alternator, noting their positions for reinstallation of the alternator.
- 3. Remove alternator from vehicle.
- 4. Remove the alternator pulley nut, pulley, drive end slinger and external drive end (DE) spacer.
- 5. Remove the slip ring end (SRE) cover.
- 6. Remove through bolts and drive end (DE) frame assembly and internal spacer.
- 7. Pull the rotor out carefully.
- 8. Push the brushes back into the brush box and use a 17mm pin or a socket as a holder.
- 9. Place bearing removal tool over SRE bearing so that it rests against plastic fan.
- 10. Use two screwdrivers to pry old bearing and slinger from rotor shaft and dispose of both.

## IF BLACK PLASTIC SRE BEARING RETAINER IN SRE FRAME IS DAMAGED, unit is not repairable by user.

### **INSTALLATION INSTRUCTIONS**

- 1. Install new SRE bearing onto rotor shaft with a press. Being careful to not to use excessive force, push only on inside bearing race until bearing is just seated against the fan.
- 2. Install new slinger onto rotor assembly, using a press.
- 3. Insert the rotor assembly into slip ring end frame, sliding bearing outer race into bearing retainer and pushing brush holder pin out.
- 4. Reinstall the internal DE spacer on the rotor shaft.
- 5. Reinstall drive end frame assembly. Using a crossing pattern, torque the four (4) thru-bolts to **7.8-9.2 N-m** (90-120 lb in). Be careful not to rest the alternator on the electronics.
- 6. Install SRE cover and torque the mounting screws to 2.2-2.8 N-m (19-25 lb in).
- 7. Reinstall outer spacer, DE Slinger and pulley. Torque pulley nut to  $90 \pm 10$  N\*m.

**NOTICE** - Only licensed Remy International, Inc. product and component parts should be used, and the use of other parts or modifications not approved by Remy International, Inc. will void all applicable warranties. The failure to carefully follow these Installation Instructions, set forth above, will void all applicable warranties. DELCO REMY is a registered trademark of General Motors Corporation, licensed to Remy International, Inc. Pendleton, IN 46064.

#### **INSTALLATION INSTRUCTIONS (cont'd):**

- 8. Reinstall alternator according to engine or vehicle manufacturer's instructions.
- 9. Reattach the battery (+) terminal lead to alternator battery terminal and torque nut to 9.0-13.0 N-m (80-120 lb in).
- 10. 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

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