DelcoRemy

10SI, 12SI & 15SI ALTERNATOR INSTALLATION INSTRUCTIONS

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 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.

DANGERIII 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 to the tools and surrounding parts.

FOLLOW ENGINE OR VEHICLE MANUFACTURER'S INSTRUCTIONS FOR REMOVING THE OLD ALTERNATOR FROM THE ENGINE AND INSTALLING THE NEW ALTERNATOR.

<u>PULLEY and FAN INSTRUCTIONS</u>: Use pulley and/or fan from old alternator if this alternator does not have one of them or they are different from the ones on alternator being replaced. **NOTICE!** When changing the pulley, keep the alternator in the horizontal position and do not apply any pressure to end of the shaft. **Internal damage will occur if the shaft is pushed back and turned.** If there were spacers, when the fan and/or pulley were removed, make sure all spacers are replaced when installing the fan and pulley on this alternator. **Tighten the pulley nut to 54-82 Nm (40-60 lb ft**).

ROTATE END FRAME: If necessary to rotate the end frame to match the unit being replaced, remove the thru-bolts, separate frames just far enough to rotate to desired position, replace thru-bolts and torque to **5.5 Nm (48 lb in)**. CAUTION: Separating the end frame too far causes the brushes to drop onto the greased shaft. If this happens, remove end frame completely, clean brushes with a clean cloth, reassemble springs and brushes, retaining them in position with a pin or tooth pick. Remove pin after frames are reassembled. DO NOT OPERATE THE ALTERNATOR WITHOUT FIRST REMOVING ANY METAL PIN, BECAUSE IT WILL SHORT ACROSS THE BRUSHES.

BELT TENSIONING INSTRUCTIONS: Improper belt tension can damage the alternator or cause the bearings to fail later. If the belt must be tightened manually, pry only against the drive end (DE) frame. If that is not possible, use a wood block between the pry bar and alternator. Use a torque wrench to tighten the mounting bolts to specified torque. Follow engine or vehicle manufacturer's specifications carefully for belt tension and mounting bolts torque. **DO NOT OVER TIGHTEN BELT! TERMINAL DESCRIPTIONS:**

"BAT" Terminal - Output (+) terminal connects to the Positive (+) Battery terminal for charging the battery.

"R" Terminal - Relay terminal carries half systems voltage and may be used for certain types of control relays, charge indicators, tachometers or similar devices. This may be the third terminal in the voltage regulator opening or a threaded stud or pin on the case near the output terminal.

"1" Terminal - Indicator lamp/Ignition terminal carries full system voltage and connects to an indicator light or ignition terminal.

"2" Terminal - Voltage Sensing terminal monitors batteries system voltage at the Batteries or a common distribution point.

Ground Screw/Stabilizing Boss - Ground lead ensures alternator is grounded and is strongly recommended for optimum performance.

INSTALLATION INSTRUCTIONS (See illustration):

• Disconnect the negative (-) cable at the batteries.

• Identify and tag all leads when removing the old Alternator and install them on the same terminals of the new Alternator.

♦ If this Alternator has a sleeve(s) inserted in the mounting lug(s), use the existing mounting bolt(s). If mounting bolt(s) will not go into the sleeve(s), remove sleeve(s) from alternator and discard.

Ensure all leads are hooked back up or contained where they can not ground.

• Torque all fasteners to values labeled on the illustration.

• This Alternator may have more terminals than the alternator it is replacing had or used. It will function properly by only hooking up the leads that were used on the alternator being replaced.



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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