DelcoRemy

## INSTALLING PACKAGE ON 50DN OIL-COOLED GENERATORS

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 GENERATOR. 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 generator. The generator 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 cause skin burn or damage to the tool and surrounding parts.

The parts in this package when properly installed will upgrade the durability and service life of the 50DN alternator. Proceed as follows:

- 1. Remove generator from engine, and discard elbow that connected oil feed line to generator.
- 2. Remove drive end frame and rotor assembly from stator frame.
- 3. Remove and discard the single row and double row ball bearings.
- 4. Referring to Figures 1 & 2, drill and tap hole in drive end frame for elbow, 1/8-27 pipe tap. Cut templet from heavy paper as shown actual size.
- 5. Remove all metal shavings, install elbow from package.
- 6. Install single row ball bearing into drive end frame with seal toward rotor. Seat bearing into housing bore by pressing on **outer race only.** Assemble retainer plate and stake screws using center punch on edge of screw head.



7. Insert spacer; use hollow cylinder, 2.75"-2.62" Outside Diameter, 1.25"-1.50" Inside Diameter, and 2" long, to press roller bearing outer race about halfway into housing. Start roller bearing inner race by moving and rotating part until it enters and seats against the spacer. Finish pressing outer race with cylinder until it seats flush with inner race.

**NOTICE:** Do not exert excessive force on roller bearing inner race because this will cause the ball bearing races to become brinelled, thus reducing the bearing life.

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- 8. Support inside of rotor with bar stock 2" dia. x 5" long on arbor press. With rotor shaft upright, press on inner race with cylinder used in Step 7 to press bearing and housing assembly onto shaft.
- 9. If alternator uses an 18-tooth gear, install new gear from kit. Torque to 145-155 lb ft (Figure 3). Reassemble generator.
- Referring to Figure 1, assemble SPECIAL TEE provided in kit into rectifier end frame where elbow was removed. The 1/8-27 pipe thread fits the thread in the rectifier housing.
  SPECIAL TEE MUST BE USED. It HAS INTERNAL ORIFICE TO REGULATE OIL FLOW. WITHOUT SPECIAL TEE,
- STATOR WILL OVERHEAT, CAUSING SHORT LIFE AND ENGINE DAMAGE MAY OCCUR. 11. Assemble oil line between tee in rectifier housing and elbow (from kit) in drive end housing.
- Locate clamp and drill two .146-.150" diameter holes .40" deep in stator frame and attach using two thread forming screws. NOTICE: do not drill thru frame, which would result in oil leak.
- 13. Assemble onto engine and attach oil line (1/2-20 thread). If coach oil line thread is not 11/2-20, add a fitting between tee and oil line.



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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