IMPORTANT: Mark must be centered to prevent off-center drilling of rotor shaft if tapping is later required. (See step 3 below.)

 Carefully center punch and drill a 2 mm (1/16 in.) hole (A) in the center of the rear housing. This will allow air into the bearing bore as bearing is removed.

Again try to remove rotor and bearing. If rotor and bearing still cannot be removed, go to step 2. If bearing remains in end frame, do the following:

- a. Install a pin (A) to hold brushes fully retracted.
- b. Fill cavity behind bearing with grease through bearing bore. Place end frame on a hard, flat surface. Place a 12 mm (0.47 in.) screw or rod into bearing bore.
- c. Strike end of screw or rod sharply with a hammer to hydraulically remove the bearing. Filling the cavity four to six times may be required to completely remove the bearing. Continue repairing alternator as detailed under <u>INSPECT REAR BEARING</u> later in this group.
- Enlarge drilled hole with a 1/4 in. drill, 13 mm (1/2 in.) deep.



Remove Rotor and Bearing

A-Pin

B-Alternator

 Measure length of a 1/16-27 NPT tap (JDG417, or equivalent). Turn tap in hole until exposed end is 10—11 mm (0.390—0.430 in.) less than total length of tap.

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- Install a 1/16-27 NPT grease zerk (A) firmly in tapped hole.
- Attach a grease gun to zerk and fill bearing cavity with grease. Extend handle of grease gun and apply several quick, pumping strokes until alternator frame and stator separate approximately 3—6 mm (1/8—1/4 in.)

IMPORTANT: Inserting screwdriver blade farther than 1.6 mm (1/16 in.) may damage stator windings.

- Using two screwdrivers, complete alternator separation by prying between stator and front end frame.
- 7. Set alternator on rear housing and lift front housing.



1/16-27 NPT Greate Zerk

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Judd E. Hollander

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