



SERVICE INFORMATION LETTER

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Date: February 13, 1980

Subject: Starter Ring Gear Clearance

Models: All

Effectivity: As Noted Below

It has been determined that some starter failures which Enstrom owners have experienced have been caused by improper tooth clearance between the gear of the bendix and the ring gear. The specified clearance is from .010 to .030 inch. This clearance may be altered by installing a shim between the starter and the mounting pad of the engine. The following sequence may be used for checking for sufficient clearance:

1. Remove wrap-around cowl.
2. Remove the four lower spark plugs.
3. Engage starter momentarily to bring bendix gear in contact with ring gear.
4. Check for a backlash clearance between the gears at a minimum of four locations on the ring gear (90° apart) by rocking the fan back and forth. If a tight spot is felt or a place of zero backlash is encountered, reshimming of the starter is required.

It is possible to check this clearance with gauge wire or safety wire at the point where the timing holes in the fan dish align with the starter. The clearance check will be between the tip of the bendix gear tooth and the bottom of the ring gear groove (.010 to .030 inch).

It is recommended that this check be conducted at the earliest possible convenience, especially if the starter has been replaced or if starter failures have been encountered on this aircraft. The starter and the ring gear must be securely mounted before this check can be completed.

For lubrication and care of starter drive assembly, refer to Lycoming Service Instruction No. 1278.

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Shims may be obtained from any Lycoming distributor (P/N LW16152), available in one thickness only (.013tt). This spacer may be fabricated in the field and may be made to the required thickness. The use of one or more shims may be used if necessary. Reference drawing below. Stainless steel shim stock is acceptable material for shims.

Lycoming Service Instruction No. 1371 also covers this subject.

