

>>> Service Letter

Technical Aspects are FAA Approved

Number: L01-14 A

Replaces ServL101-014

Date: 07/12/2004

Subject: Overhaul and repair of Superior Idler Gear

Application:

GEAR ASSEMBLY	ENGINE APPLICATIONS
SL74996	See Superior Service Letter No. L01-13, latest
SL75072	revision

Compliance: At any time the above gear is removed for overhaul and repair.

Gear Assembly:

The Superior Idler gear assemblies are machined from aircraft quality SAE 8600 series alloy steel, carburized and precision ground to finished dimensions. The assemblies are comprised of the gears and bushings, which are permanently pressed into the gear shaft.

Inspection:

The gear assemblies should be visually inspected for abnormal wear or damage, paying close attention to the gear teeth and on the SL75072, the fuel pump eccentric lobe. The gear assemblies are to be magnetic particle inspected per ASTM E1444 and accepted per MIL-STD-1907, grade B (or other FAA approved repair station procedures). The allowable bushing inside diameter, clearances, pump lobe dimension, and gear backlash are shown in Figure 1.

Bushing Replacement:

If the bushing inside diameter is worn beyond allowable clearance limits, it may be replaced. Press out the old bushing and inspect the gear inside diameter to insure it is within the limits shown in Figure 1. Lubricated the new bushing and press it in using a suitable installation tool and arbor press. Do not drive the bushing in with a hammer. The bushing must then be burnished to the .6250/.6255 dimension. This procedure is not recommended unless the proper tools are available.



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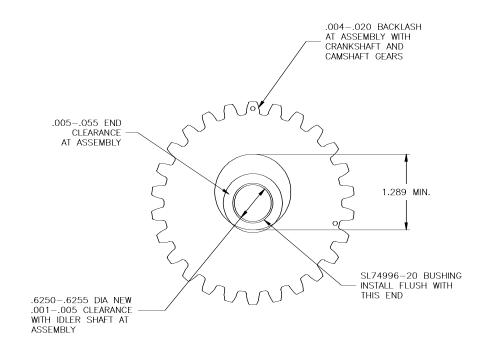


FIGURE 1
IDLER GEAR
(SL75072 SHOWN, SL74996
IDENTICAL EXCEPT IT DOES
NOT HAVE A FUEL PUMP
CAM LOBE)