



**SCHWEIZER
SERVICE INFORMATION
LETTER**

LETTER NO. L-36
DATE Dec. 28, 1967
PAGE 1 OF 2

TO—All owners and operators of Hughes Helicopters

SUBJECT: LYCOMING SERVICE INSTRUCTION NO. 1141, DATED
20 OCTOBER 1967 -SUBJECT: REPLACEMENT OF WORN
STARTER RING GEARS

MODELS AFFECTED: All 269 Series Helicopters

Your attention is directed to the subject Lycoming Service Instruction No. 1141 reprinted as part of this Service Information Letter.

This Service Instruction lists a field procedure for replacement of worn or damaged starter ring gears. The manufacturer recommends that all owners and operators utilize the information whenever replacement is necessary.

AVCO **Service Instruction**
LYCOMING DIVISION
 WILLIAMSPORT, PA. 17701



DATE: October 20, 1967 Service Instruction No. 1141
 Approved by FAA

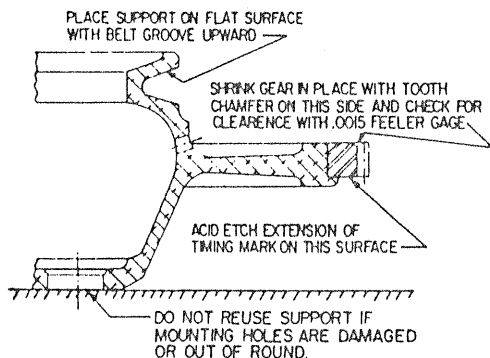
SUBJECT: Replacement of Worn Starter Ring Gears

MODELS AFFECTED: All Avco Lycoming direct drive engines

TIME OF COMPLIANCE: Whenever starter ring gear replacement is necessary

This service instruction describes a field procedure for replacing worn or damaged starter ring gears without replacing the support assembly.

1. Check propeller bolt holes in support assembly. If any are worn out-of-round, the entire starter ring gear and support assembly must be replaced with a new one.
2. If the propeller bolt holes are satisfactory, grind through ring gear leaving only thin ring of ring gear metal. Do not grind into support assembly.
3. Place the assembly on a flat metal surface and break thin metal ring remaining from grinding



Section Through Ring Gear Support

operation. Ring gear will spring open and is easily removed.

4. Examine ring gear support face. Do not reuse the ring gear support if found to be damaged.
5. Place support on a flat surface with generator belt groove upward. See figure.
6. Select a new ring gear No. 60882, 10/12 pitch or a No. 72566, 12/14 pitch. See table for correct pitch ring gear for each support assembly.
7. Heat the ring gear in an oven or by local application of heat by a torch. Temperature should be approximately 450° F.
8. Assemble heated gear, with tooth chamfer upward, on support.
9. Using a .0015 inch feeler gage, check for clearance between ring gear and support, around entire circumference. Clearance at any location is indication of incomplete assembly or warpage and must be corrected.
10. Gear will shrink to support as it cools.
11. Find timing mark on the ring gear support and extend it across the ring gear. Acid etch the timing mark extension on the ring gear.
12. Identify the newly overhauled ring gear assembly by adding the suffix "-85" to the part number by vibro-peening or by light impression stamp.

Ring Gear and Support Assembly Part No.	Gear Tooth Pitch	Ring Gear and Support Assembly Part No.	Gear Tooth Pitch	Ring Gear and Support Assembly Part No.	Gear Tooth Pitch
69340	10/12	71328	10/12	74329	12/14
68942	10/12	72287	10/12	74977	12/14
76124	10/12	72245	12/14	74321	10/12
75312	12/14	72565	12/14	74460	10/12
68867	10/12	75221	12/14	75550	10/12
74414	12/14	75030	12/14	76173	10/12
72287	12/14	72899	12/14		