

# SCHWEIZER SERVICE BULLETIN

B-244.3\* 06 Apr 1998

**MANDATORY** 

MANDATORY •

MANDATORY

SUBJECT: POSSIBLE DETERIORATION OF CERTAIN MAIN TRANSMISSION PINION ASSEMBLY TEETH AND RING GEAR TEETH

MODELS AFFECTED: All Model 269A, TH-55A, A-1, B and C Helicopters incorporating Main Rotor Transmissions, or spare transmissions, containing the following pinion assemblies and ring gears, which are installed individually or as sets:

- 269A5103 -31 or -41 pinion assembly, manufactured by Eastern Gear Corp (EGC) or ACR Industries (ACR) Serial Numbers S251 to S340, S434 to S658, S668 to S779, S900 to S963
- 269A5104-5 ring gear manufactured by Eastern Gear Corp (EGC) or ACR Industries (ACR) Serial Numbers S151 to S337, S347 to S468, S569 to S675, S769 to S868

NOTE

These parts may be identified in several ways. All will have an "S" (for Schweizer) as a prefix in the Serial Number. Disregard any zero (0) that may be in the serial numbers between the "S" and the three digit number listed above. There may be the letters EGC or ACR after the serial number, there may be the Manufacturers Code number inscribed on the part near the serial number 23715 (EGC) or 57152 (ACR), or there may be just the serial number.

FAA Airworthiness Directive Note 97-23-06 applies to the ring gear specified above.

Superseding parts, 269A5103-51, pinion and 269A5104-7, ring gear are not affected by this Bulletin or the AD. ACR is currently a manufacturer of these parts.

#### TIME OF COMPLIANCE:

- Before further flight if unusual noise or vibration is detected, or if metal particles are found on magnetic drain plug during routine maintenance
- Before installation of affected serviceable used spare part or transmission
- At 25 hour intervals, during first 100 hours time in service of affected parts

( )Denotes portion of text added or revised.

\*Supersedes B-244.2, dated 19 Feb 1996 1 of 3

# B-244.3 06 Apr 1998

## TIME OF COMPLIANCE: (cont)

- For affected components with more than 100 hours time in service, within the next 50 hours of operation or at the next Annual Inspection (whichever occurs first) and thereafter at each 50-Hour Inspection in accordance with HMI Appendix B
- Remove affected ring gears from service at the next major transmission overhaul as required by HMI Appendix B, Table B-4.

### REFERENCES:

- Models 269A, TH-55A, A-1, B & C Basic HMI (Reissued: 15 Mar 1982; Revised 06 Apr 1998)
- HMI Appendix B (Reissued: 20 May 1993; Revised 06 Apr 1998)
- HMI Appendix C, PART I (Reissued: 30 Apr 1995; Revised 12 Feb 1997)

#### PREFACE: ●

- There is a possibility that the main transmission pinion assemblies and ring gears listed under MODELS AFFECTED may develop premature tooth surface deterioration. Deterioration of ring gear teeth can lead to tooth breakage. This Service Bulletin specifies inspection intervals and criteria for continued use.
- Pinion assemblies and ring gears listed under MODELS AFFECTED that have prior service are NOT to be assembled and operated with any 269A5103-51 pinion or 269A5104-7 ring gear, or later dash numbers.
- Pinion assemblies and ring gears listed under MODELS AFFECTED that were assembled with 269A5103-51 pinion or 269A5104-7 ring gear prior to 19 Feb 1996 are acceptable for continued service subject to inspection and life limits defined in HMI Appendix B and Appendix C, PART I.
- Ring gears listed under MODELS AFFECTED shall be removed from service at the next major transmission overhaul or when dictated by required inspections.
- Failure to comply with the requirements of this Service Bulletin at the time interval specified under TIME OF COMPLIANCE may result in failure of the main transmission, which could lead to a loss of control of the helicopter and subsequent personal injury or death.

#### PROCEDURE:

- a. Determine by aircraft records (or by disassembly of main transmission, if records are not conclusive) if this Service Bulletin is applicable. If not applicable, enter "Not Applicable" notation in aircraft and main transmission records.
- b. Inspect installed transmission pinion and ring gear teeth in accordance with the criteria specified in Basic HMI, Section 10.
- c. If inspection results (step b. above) are NOT satisfactory, remove main transmission from service. Document installed component time and order spares, or ship main transmission to SAC in accordance with Service Letter 153 (L-153) or subsequent revision.
- d. Record compliance with this Service Bulletin in the aircraft records.

WEIGHT AND BALANCE

Weight and balance are not affected.