



# SCHWEIZER SERVICE BULLETIN

C1B-021.1\*  
24 Aug 2010

MANDATORY

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**SUBJECT:** MAIN TRANSMISSION INPUT PINION CORROSION PROTECTION

**MODELS AFFECTED:** • All 269C-1 Model Helicopters serial numbers 0001 through 0294 and 0297.

**TIME OF COMPLIANCE:** At next pulley removal or six months whichever occurs first.

**REFERENCE:** 269C-1 Basic HMI, Revised 16 Jul 2010

**PREFACE:** • This Service Bulletin requires all helicopters be checked for the presence of corrosion on the pinion and the application of primer to all bare metal pinions. Transmissions that are equipped with epoxy primed pinions are in compliance with this bulletin and require no further action. Transmissions equipped with pinions that have a dark brown to black appearance have Parco Lubrite surface protection and require no further action as a result of this bulletin. However, the epoxy prime protection can be applied to Parco Lubrite protected pinions at the operators discretion.

- Failure to comply with this Service Bulletin may lead to the development of un-repairable corrosion that will require replacement of the pinion.

**FAA APPROVAL:** The technical aspects of this Service Bulletin are FAA approved.

**PARTS REQUIRED:**

Methyl-Ethyl-Ketone	ASTM D740
or	
Solvent, Dry Cleaning	MIL-PRF-680, Type I
Masking Tape	ASTM-D6123
Epoxy Primer	MIL-PRF-23377, Type I
Mobile 28 Grease,	MIL-PRF-81322
or	
Syn-Tech Grease	Fed. Stock No. 915-00-506-8497
or	
Anderol 786	

**PROCEDURE:**

- Remove belt drive transmission upper pulley assembly from helicopter in accordance with Basic HMI Section 10 and inspect main transmission input pinion for corrosion in accordance with HMI Appendix C, Part I.
- Inspect pinion for presence of Parco Lubrite or epoxy primer paint. If pinion is Parco Lubrite protected or prime painted, no further action is required. Clean pinion and interior of hub with MEK. Reinstall upper pulley assembly using grease on main transmission input pinion in accordance with the Basic HMI Section 10.

(█) Denotes portion of text added or revised

\*Supersedes C1B-021, dated 07 Mar 2008

- c. If primer or Parco Lubrite is not present, inspect pinion for corrosion and repair as required in accordance with Basic HMI Appendix C, Part I.

NOTE

If Parco Lubrite was removed during any pinion repair, the repaired area must be primed.

- d. After inspection if primer or Parco Lubrite is not present, apply epoxy prime paint to exposed portions of serviceable pinions as follows:
1. Saturate a soft lint free cloth with cleaning solvent (MEK or dry cleaning fluid) and thoroughly clean pinion of grease, oil and other contaminants. Continuously clean pinion surfaces until no contaminants are transferred to cloth. Allow 30 minutes for pinion to thoroughly dry before priming pinion.

NOTE

The design of the upper pulley assembly affects the application of the primer paint. The current upper pulley design has the forward and aft upper H-frame bearings installed on an "Extended Hub" in the upper pulley assembly. All prior designs have the forward upper H-frame bearing installed on the input pinion with Loctite. When the bearing is installed on the pinion, no primer can be applied to the bearing journal of the pinion. With the extended hub, the forward end of the hub rests on the bearing journal and with this configuration the journal should be primed.

The pinion is a life limited component and the data field contains the serial number. This data must be available to assure proper identification of the pinion and since epoxy primer is difficult to remove, it should not cover the data field. Grease is used to protect the data area because it can be removed with MEK or similar solvents.

2. Mask data field, threads for aft pinion nut, oil seal collar, and if required, forward upper H-frame bearing journal with tape.
  3. If helicopter is configured with extended hub (forward upper H-frame bearing installed on hub, not on pinion), measure diameter of journal area just behind oil seal collar and record.
  4. Mix epoxy primer in accordance with manufacturer's instructions. Apply approximately 0.0003 to 0.0005 inch thick coat of primer to pinion and allow primer to cure 6 hours.
  5. Remove masking tape from data field, aft pinion nut threads and as required from bearing journal; shave down any paint ridge caused by the edge of the masking tape.
  6. As required for extended hub, measure diameter of painted journal area behind oil seal collar. Diameter should be no greater than 0.001 inch larger than unpainted diameter. If diameter exceeds 0.001 inch limit, using Scotch Bright, uniformly remove excess paint.
  7. Apply a coat of grease to data field.
- e. Clean interior of hub with MEK and install belt drive transmission upper pulley assembly using grease on main transmission input pinion in accordance with Basic HMI Section 10.

- f. Record compliance with this Service Bulletin in the aircraft records.

**WEIGHT AND BALANCE**

Weight and Balance are not affected