



SCHWEIZER SERVICE BULLETIN

DB-027.2*
01 Sep 2009

MANDATORY

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SUBJECT: INSPECTION OF ENGINE/TRANSMISSION OIL COOLER IMPELLER

MODELS AFFECTED: All 269D Series Helicopters

TIME OF COMPLIANCE: Prior to next flight and before the first flight of each day perform visual inspection.

At 25 hours of operation from the last detailed inspection, remove impeller, clean and inspect with 10X glass.

REFERENCE: 269D Basic HMI, Revised: 03 Apr 2009, 269D Config. "A" Basic HMI, Revised: 17 Apr 2009.

PREFACE: • Reports have been received of cracking and separation of the air vanes (blades) of the oil cooler impeller. A recent incident involved separation of all vanes resulting in damage to the oil cooler and loss of engine oil pressure. Inspection of the subject impellers determined that the separations were due to fatigue cracks at the root ends of the vanes.

WARNING

FAILURE TO COMPLY WITH THIS SERVICE BULLETIN MAY RESULT IN LOSS OF CONTROL, INJURY TO, OR DEATH OF THE CREW AND OCCUPANTS, AND/OR PROPERTY DAMAGE.

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

PROCEDURE:

NOTE

The cooling impeller is balanced as a set with the KAflex® driveshaft and lower pulley assembly. The lower pulley and KAflex® shaft must be returned to Schweizer Aircraft Corp. for the installation of a replacement impeller. Contact Customer Support at (607) 739-3821 for shipping instructions.

- a. Prior to next flight and thereafter before first flight of each day:
 - (1) Gain access to engine/transmission oil cooler impeller and remove the aft cover from the cooling scroll.
 - (2) Clean impeller in accordance with Basic HMI Section 6.
 - (3) Perform the daily inspection using a mirror and bright light.

(█) Denotes portion of text added or revised

*Supersedes DB-027.1, dated 27 Jun 2009

- (4) Replace impeller if cracks are detected. The lower pulley and KAflex® shaft must be returned to Schweizer Aircraft Corp. for the installation of a replacement impeller.
- b. At 25 hours of operation from last 25 hour inspection perform a detailed inspection:
 - (1) Remove impeller and KAflex® assembly from the lower pulley in accordance with HMI Section 6 (make sure alignment marks are present on all parts).
 - (2) Clean impeller in accordance with Basic HMI Section 6.
 - (3) Inspect impeller for cracks at the root ends of vanes using a bright light and a magnifying glass (10X), inspect for deformation of vanes.
 - (4) Replace impeller if cracks are detected. The lower pulley and KAflex® shaft must be returned to Schweizer Aircraft Corp. for the installation of a replacement impeller.
- c. If impeller is serviceable, reinstall impeller and KAflex® or aft cover in accordance with HMI Section 6. Use match marks to maintain original alignment.
- d. Record compliance with this Service Bulletin in the aircraft records.
- e. Notify Schweizer Customer Support of any cracked or separated vanes.

WEIGHT AND BALANCE

Weight and Balance are not affected.