



# SCHWEIZER SERVICE NOTICE

NOTICE NO. N-211

DATE: 3 NOV 1987

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MANDATORY

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SUBJECT: PERIODIC INSPECTIONS OF ENGINE LOWER COUPLING DRIVE SHAFT BOOT  
(PN 269A5473).

MODELS AFFECTED: All 269 Series Helicopters

TIME OF COMPLIANCE: PART I- Shall be accomplished at each pilot's pre-flight inspection.

PART II - Shall be accomplished at each 50 hours of helicopter operation.

REFERENCE: 269 Series - Basic HMI, Reissued 15 March 1982  
269 Series - HMI Appendix B, Reissued 15 August 1982

PREFACE: Reports indicate a possibility of cracking and deterioration of the engine lower coupling drive shaft boot (located at fwd end of lower coupling drive shaft). Part I of this Service Information Notice provides instructions for a pilot's preflight inspection of the lower coupling drive shaft boot. Part II provides instructions for a detailed periodic inspection of the boot and relubrication of the lower coupling drive shaft. The information provided in this Service Information Notice is to be considered as part of the HMI and will be incorporated at the next scheduled revision.

PART I - PILOT'S PREFLIGHT INSPECTION.

## TOOLS AND EQUIPMENT

Flashlight

## PROCEDURE

- a. Using a flashlight (or equivalent), inspect exterior of boot (Figure 1) for cracking, fraying, chips, and deterioration.
- b. If any damage is observed, replace boot prior to next flight.
- c. Audibly inspect lower coupling drive shaft for adequate lubrication as follows:
  - (1) Grasp lower pulley AFT Spacer (shown in Figure 1) and rotate coupling shaft back and forth to take up backlash in both directions (CW and CCW). Listen for hard metal-to-metal contact noise between gear teeth.

- (2) If any metal-to-metal contact noise is heard, remove lower coupling drive shaft (Basic HMI, Section 10) and inspect shaft gear teeth for excessive damage in accordance with Basic HMI, paragraph 10-39, Step j. Inspect engine adapter internal splines for cracking, discoloration, deformation, pitting, and other damage. Replace lower coupling drive shaft and/or engine adapter as required.
- (3) Relubricate lower coupling drive shaft in accordance with Basic HMI, Section 2.

## PART II - DETAILED PERIODIC INSPECTION OF LOWER COUPLING DRIVE SHAFT BOOT.

## PARTS LIST

| <u>NOMENCLATURE</u>              | <u>PART NUMBER</u> | <u>QTY</u> | <u>SOURCE</u> |
|----------------------------------|--------------------|------------|---------------|
| Boot, lower coupling drive shaft | 269A5473           | 1 (A/R)    | SAC           |

## TOOLS AND EQUIPMENT

Flashlight

## MATERIALS

| <u>Nomenclature</u>  | <u>Source</u> |
|--|---------------|
| Grease -<br>Shell Alvania EP #1<br>Marfak HD EP #1,<br>Anderol 786,<br>Syn-Tech 3913G1, or<br>Multifak EP #1 | Commercial    |

## PROCEDURE

- Using a flashlight, visually inspect exterior of boot (Figure 1) for cracking, fraying, chips, and deterioration.
- Remove clamp securing boot to engine adapter.
- Turn boot inside out by rolling it back off from engine adapter. Remove grease from inside surface of boot by wiping with a clean rag.

- d. Using a flashlight, inspect interior of boot as follows:
  - (1) Visually inspect entire interior of boot for cracking, fraying, chips, and deterioration.
  - (2) Pinch interior surface of boot together along boot mold seam line (shown in Figure 2) and visually inspect seam for indications of splitting. Any indication of splitting is cause for removal of boot from service.
- e. If any damage is observed, replace boot (PN 269A5473) prior to next flight.
- f. Clean and repack lower coupling drive shaft with grease in accordance with Basic HMI, Section 2.
- g. Reinstall boot on engine adapter and secure with clamp. (Ensure that boot is secured to drive shaft with spiral ring or 0.042 safety wire.)
- h. Record compliance with Part II of this Service Information Notice in Compliance Record of Helicopter Log Book

#### WEIGHT AND BALANCE DATA

Weight and Balance not affected.

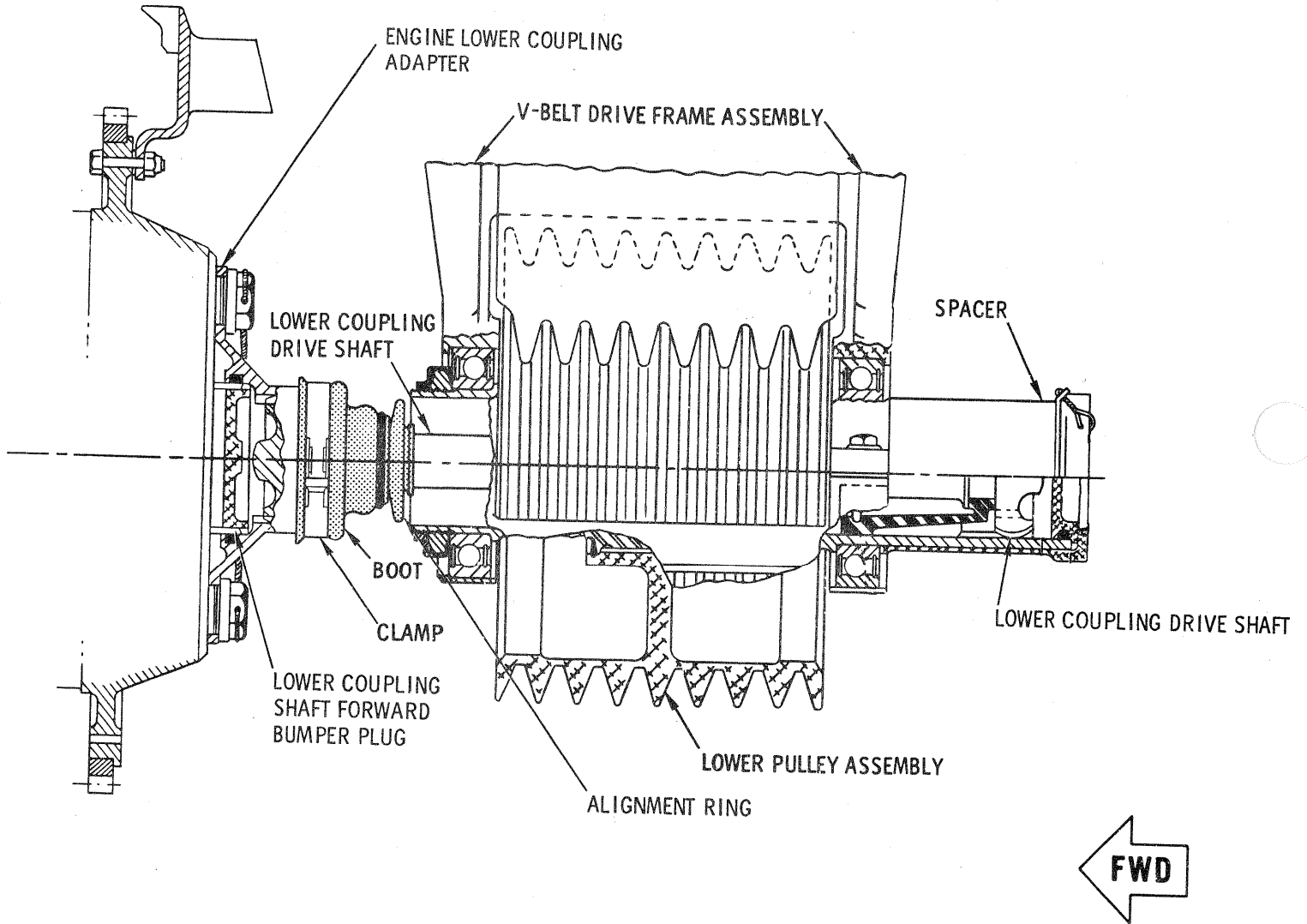
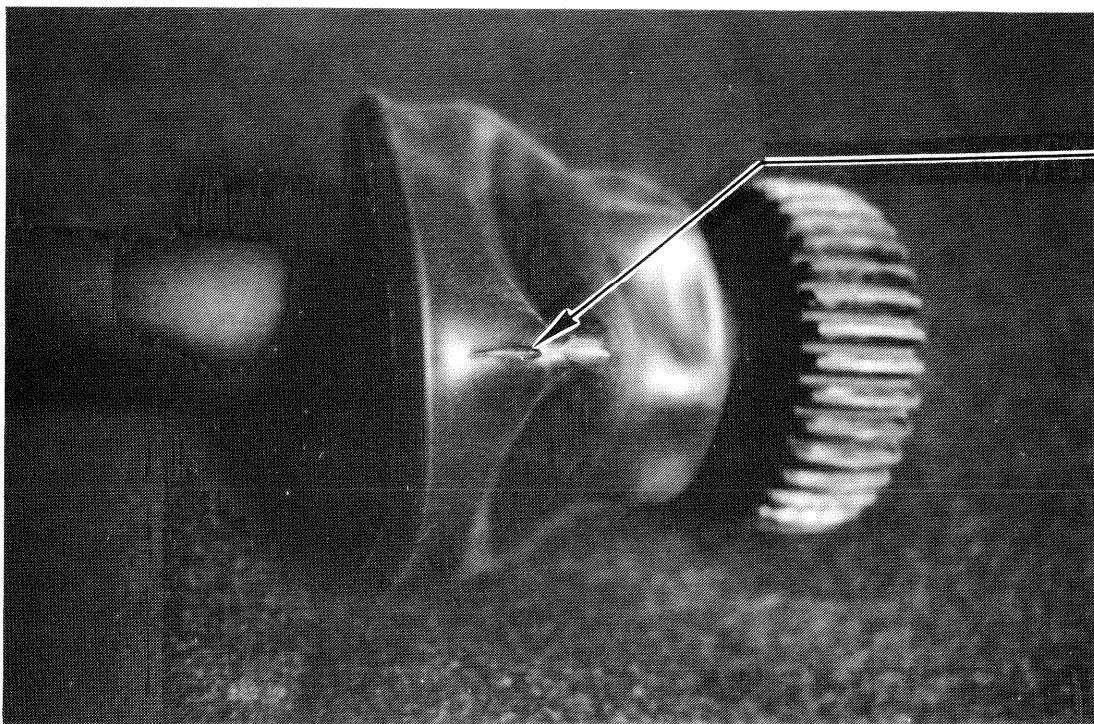
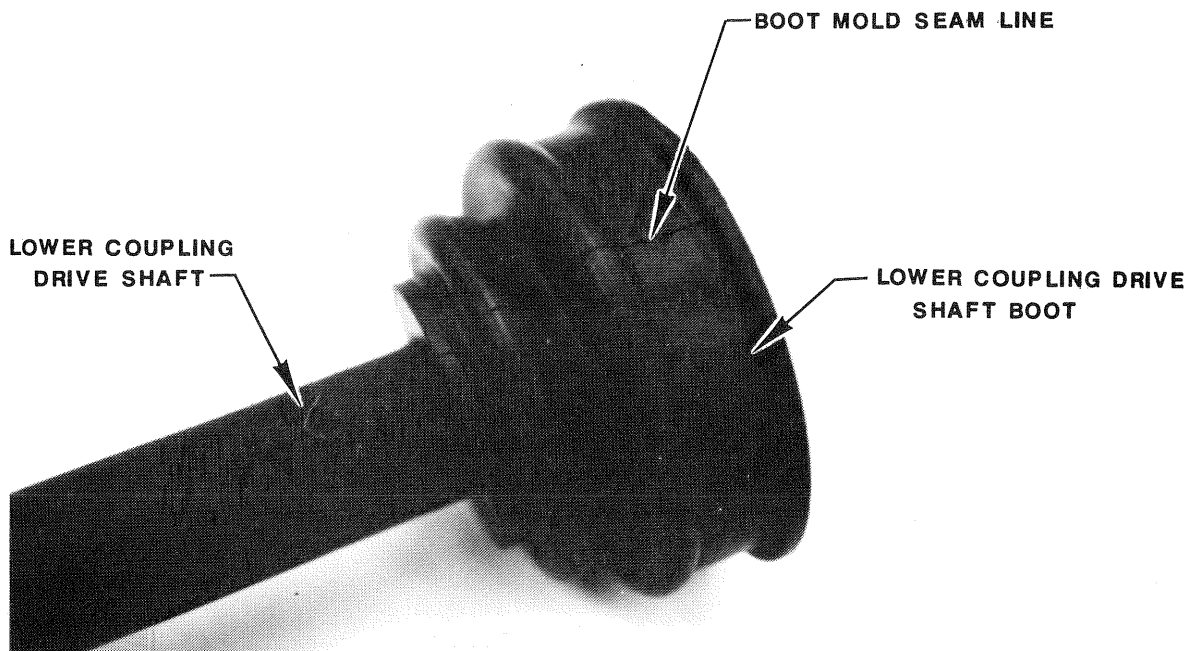


FIGURE 1. LOWER COUPLING SHAFT INSTALLATION



**INTERIOR OF BOOT**

**1** INDICATION OF SPLITTING



**FIGURE 2. DETAILED INSPECTION OF LOWER COUPLING DRIVE SHAFT BOOT**