



# SCHWEIZER SERVICE NOTICE

NOTICE NO. N-227  
DATE: 03 July 1989  
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MANDATORY

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## SUBJECT:

INSPECTION OF MAIN ROTOR PITCH BEARING SNAP RING LOCKWASHER.

## MODELS AFFECTED:

- All 269C Series Helicopters with Serial Numbers 1166 through 1336.

## TIME OF COMPLIANCE:

- Shall be accomplished within the next 50 hours of operation or within 60 days of issue date of this notice, whichever occurs first.

## REFERENCE:

- 269 Series Basic HMI, Reissued 15 March 1982
- Schweizer Notice No. N-189.1, Dated 2 Sep 1986
- Schweizer Letter No. L-144, Dated 29 Sep 1987

## PREFACE:

It is possible the main rotor pitch bearing snap ring lockwasher (SL61W9F) may be missing from the bearing stackup. This condition could allow loosening of the locknut, thus causing damage to the bearings or pitch bearing shaft, and separation of the main rotor pitch bearing housing assembly and rotor blade. This condition could result in loss of helicopter control and subsequent personal injury or death. This service notice lists instructions to inspect the main rotor blade pitch bearing assembly for proper installation of the lockwasher.

## PROCEDURE:

### DISASSEMBLY

1. Remove main rotor blades (Basic HMI, Section 8, Paragraph 8-10).
2. Remove cotter pin, nut, washer, spacer, and bolt (NAS1304-70D) from grease cap and pitch housing. (Basic HMI, Section 8, Figure 8-17.)
3. Remove pitch bearing grease cap from pitch bearing housing case.

### INSPECTION

1. Inspect bearing grease for evidence of metal particles. If metal particles are found, go to step 5. below. If not, continue with step 2.

2. Using clean rags, remove grease from area around the pitch bearing shaft locknut.
3. Inspect pitch bearing shaft locknut for installation of snap ring lockwasher (SL61W9F). If snap ring lockwasher is installed, go to step 1. of reassembly procedure below. If lockwasher is missing, continue with step 4.
4. Check the shaft locknut for proper torque (180 to 220 ft.lbs.) If torque is correct, install snap ring lockwasher and go to step 1. of reassembly procedure below. If torque check is not correct, continue with step 5.
5. Remove pitch housing from aircraft. Disassemble, clean, and inspect pitch bearing housing assembly. (Basic HMI, Section 8, Paragraph 8-37 through 8-40.)
6. Reassemble pitch housing assembly. (Basic HMI, Section 8, Paragraphs 8-42, Notice N-189.1, and Letter L-144 as required.)
7. Install pitch bearing housing in accordance with Basic HMI, Section 8, Paragraph 8-43.
8. Proceed to steps 6. and 7. of reassembly procedure below.

#### REASSEMBLY

1. Ensure that bearing cavity is clear of any dirt or foreign objects. (Basic HMI, Section 8, Figure 8-17.)
2. Install new o-ring on grease cap and install grease cap. Align bolt holes in grease cap lugs with damper attachment holes in pitch bearing case.
3. Install bolt, spacer, washers, and nut. Torque nut to 20-30 in.lbs. Add washers as necessary to stay within torque limit and allow cotter pin hole to align. (Refer to N-189.1.)
4. Install cotter pin.
5. Service pitch bearing case with grease in accordance with Basic HMI, Section 2, Table 2-1.
6. Install main rotor blades. (Basic HMI, Section 8, Paragraph 8-17.)
7. Record compliance with this notice in aircraft log book.

#### WEIGHT and BALANCE DATA

Weight and balance not affected.