



SCHWEIZER SERVICE NOTICE

NOTICE NO. N-184.1*

DATE 21 November 1983

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*Supersedes Service Information
Notice N-184, dated
18 October 1982.

MANDATORY

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SUBJECT: PERIODIC CHECK AND INITIAL REPLACEMENT - BELT DRIVE PULLEY
H-FRAME TIE BAR BRACKET ASSEMBLY, PN 269A5517-7

MODELS AFFECTED: The following helicopters equipped with H-Frame Assembly
PN 269A5593-3, 269A5573-11 or 269A5573-903:

**All Model 269A, 269A-1, 269B and TH-55A Helicopters

**Model 269C Helicopter Serial No. 0004 through 1149

TIME OF COMPLIANCE: Part I - Daily Check shall be accomplished at each Preflight
Check (Pilot's Walkaround) until compliance with Part II
of this Notice is accomplished.

Part II - Installation shall be accomplished as required per
Part I of this Notice; or sooner, at operator discretion,
to lift requirement of Part I.

PREFACE: Part I of this Notice lists a procedure for a periodic daily check of the
subject PN 269A5517-7 H-frame tie bar bracket assembly, to ensure
that the aluminum bracket assembly is not cracked or damaged. The
requirement for the daily check is lifted upon compliance with Part II of
this Notice. Part I does not apply to 269A, 269A-1 and 269B series
helicopters having 269A5516 H-frame assembly installed.

Part II of this Notice provides instructions for replacement of the
PN 269A5517-7 aluminum bracket assembly with a PN 269A5517-13 steel
bracket assembly. Shimming instructions, to provide proper clearance
between the belts and bracket when the 269A5517-13 bracket is installed
on 269A, 269A-1, 269B, and 269C (S/N 0004 through 0589 only) heli-
copters are also included.

**It is to be noted that the PN 269A5593-3 H-frame assembly is factory-
installed on Model 269C helicopter Serial No. 0850 thru 1149; and the
PN 269A5573-11 (or PN 269A5573-903 spares) H-frame assembly is
installed on Model 269C helicopter Serial No. 0590 thru 0849. Earlier
Model 269C helicopters and all Model 269A/A-1/B and TH 55A helicopters
may have PN 269A5593-3 H-frame assembly installed as field replacement
at owners and operators discretion.

(|) Denotes portion of text added or revised.

Reference

- 269 Series - Basic HMI, Reissued 15 March 1982
- 269 Series - HMI Appendix B, Reissued 15 August 1982
- Hughes Service Information Notice No. N-175, dated 6 March 1981
- Hughes Service Letter No. L-114.2, dated 15 February 1983
- ! Hughes Service Information Notice No. N-164, dated 7 December 1979

PART I - DAILY CHECK (PILOT'S WALKAROUND)

NOTE

A daily preflight check of the aluminum PN 269A5517-7 H-frame bracket assembly is to be accomplished, until a PN 269A5517-13 steel bracket assembly is installed per Part II of this Notice.

- a. With belt drive cover installed, visually check the FORWARD attach flange of the H-frame tie bar bracket assembly for cracks or damage. (See Figure 1.) Also check AFT attach flange of bracket, if PN 269A5471-13 fiber-glass belt drive cover is installed; use slot in cover for visual check.

CAUTION

Replace aluminum bracket assembly with Pn 269A5517-13 steel bracket assembly, per Part II of this Notice, if cracking or damage to aluminum bracket is noted.

- b. Check strut for looseness. (See Figure 1.) If any looseness is noted, perform the following:

1. Remove belt drive cover (Section 10, Basic HMI).
2. Check PN 269A5517-7 aluminum bracket assembly for cracks or damage; pay particular attention to area of forward and aft attach flanges of bracket.

CAUTION

Replace aluminum bracket assembly with PN 269A5517-13 steel bracket assembly, per Part II of this Notice, if cracking or damage to aluminum bracket is noted.

3. Reinstall belt drive cover and other removed components.

PART II - INSTALLATION OF 269A5517-13 BRACKET ASSEMBLY

PARTS LIST

<u>Nomenclature</u>	<u>Part No.</u>	<u>Qty</u>	<u>Mfr</u>
Bracket assembly - belt drive pulley frame tie bar	269A5517-13	1	HHI
+Washers, Corrosion resistant	HS306-227H	A/R	HHI
+Bolt	NAS1304-20	2	Commercial

TOOLS AND EQUIPMENT

Drill motor, portable
Drill bit - No. E

MATERIALS

Primer, wet zinc chromate TT-P-1757 Commercial

NOTE

Installation of steel 269A5516-13 tie bar bracket assembly lifts daily check requirement specified in Part I of this Notice.

- a. Remove V-belt drive cover shell and hat, per Section 10, Basic HMI.
- b. Remove hardware securing existing 269A5517-7 aluminum bracket assembly to H-frame lower bearing caps. (See Figure 1.) Remove and discard bracket assembly.

NOTE

For 269, 269A-1, 269B, and 269C (S/N 0004-0589 only), continue with step c. For 269C helicopters S/N 0590 and subsequent, continue with step d.

- c. Install 269A5517-13 on 269A, 269A-1, 269B, and 269C (S/N 0004-0589 only) as follows and as shown in Figure 2:
 1. Discard AN4-11A bolts removed in step b.
 2. Ensure shimming between 269A5463 strap, and flange of H-frame as specified in step r of Hughes Notice N-164 has been accomplished.

+Required for installation on 269A, 269A-1, 269B, and 269C (S/N 0004-0589 only). A spacer (0.80-0.85 inch outer diameter, 0.256-0.270 inch inner diameter) may be fabricated from 300 Series or 17-4PH stainless steel plate or rod for use instead of the HS306-227H washers.

3. Determine number of HS306-227H washers required, or fabricate a spacer (0.80-0.85 inch outer diameter, 0.256-0.270 inch inner diameter) from 300 Series or 17-4PH stainless steel plate or rod, to establish 0.050 ± 0.030 inch distance between facing surfaces of H-frame flange and 269A5463 strap. (See Figure 2.)
 4. Install 269A5517-13 bracket using NAS1304-20 bolt, shims between strap and H-frame flange, shims or spacer between bracket and strap, and remaining hardware removed in step b. Torque bolt to 50 to 70 inch-pounds.
 5. Repeat steps c.1 through c.4 for opposite end of bracket.
 6. Continue with step e.
- d. Install new 269A5517-13 steel bracket assembly to H-frame bearing caps, using existing hardware. Torque nuts (2 places) to 50 to 70 inch-pounds.
 - e. Install strut to center frame fitting using existing hardware.
 - f. Align strut with attach clip on new 269A5517-13 bracket assembly. (See Figure 1.) Using holes in strut as template, mark and drill two 0.250 - 0.254-inch diameter holes in bracket as shown. Use No. E drill. Remove burrs as required and apply zinc chromate primer.
 - g. Remove strut from bracket and frame fitting.
 - h. Reinstall V-belt lower cover, strut assembly, clutch spring assembly, and cover hat.
 - i. Perform alignment / check of lower coupling drive shaft, per Section 10, Basic HMI.
 - j. Record compliance with Part II of this Notice in Compliance Record of helicopter Log Book.

WEIGHT AND BALANCE DATA

Weight and balance not affected.

The resultant alteration to the affected helicopters described by Part II of this Notice has been shown to comply with Federal Aviation Regulations and is FAA Approved.

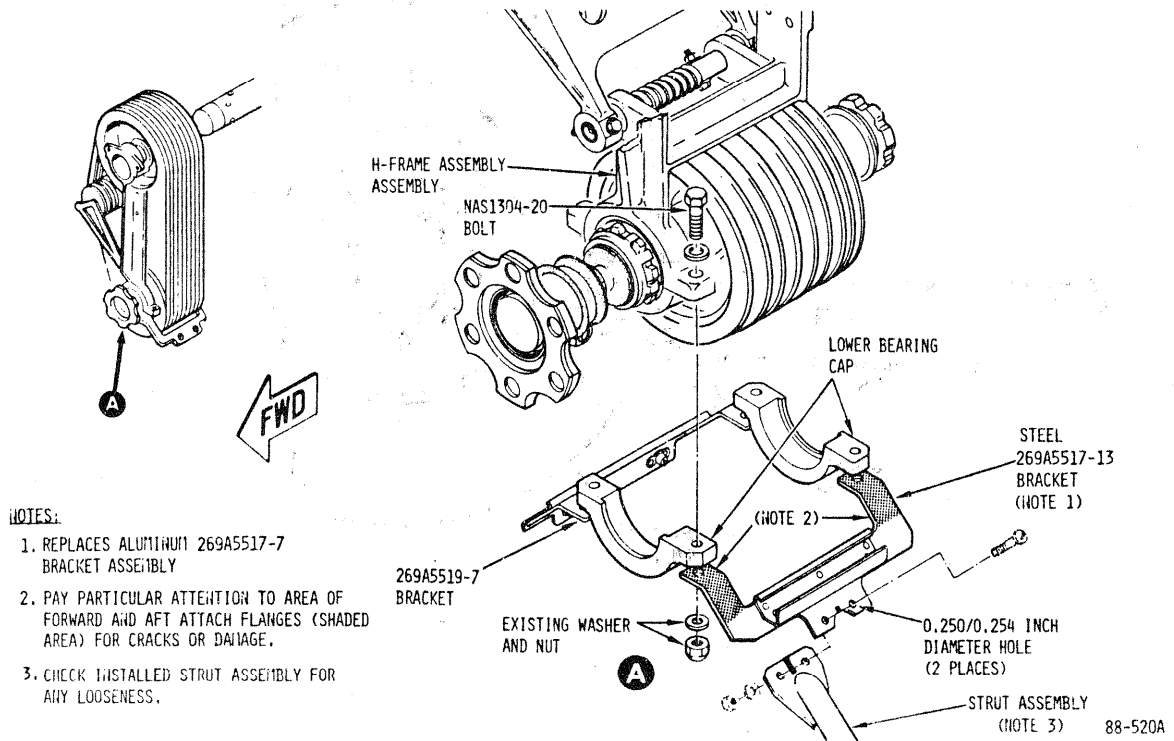
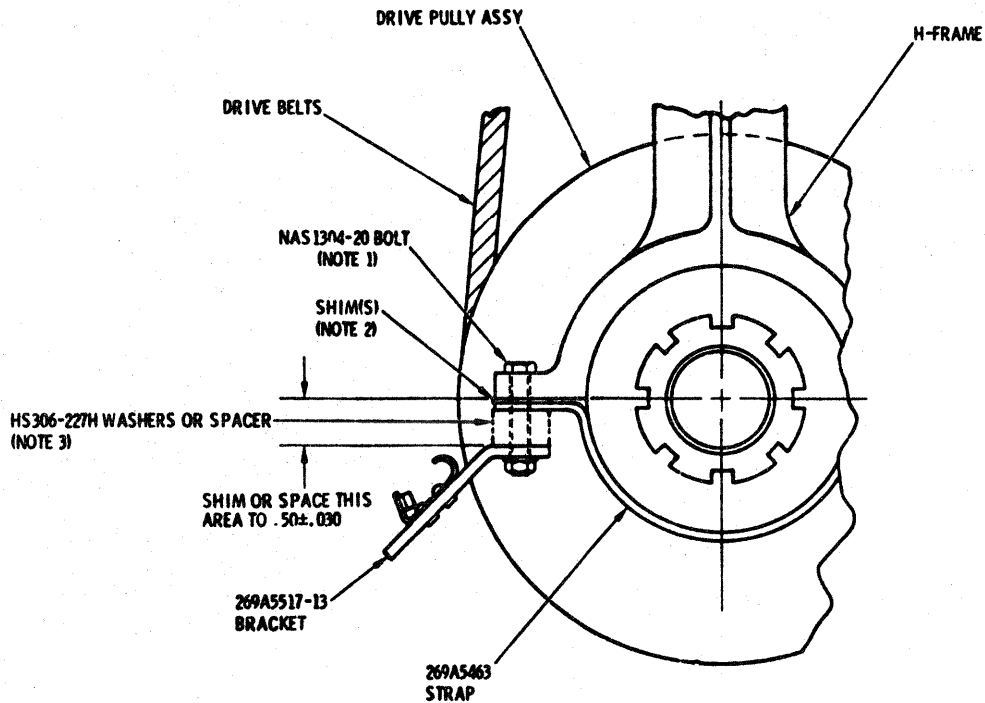


Figure 1. Installation of 269A5517-13 H-frame tie bar bracket assembly



NOTES:

1. REPLACE EXISTING AN4-11A BOLT WITH NAS 13/16-20 BOLT.
2. ENSURE SHIMMING PER STEP r, HUGHES NOTICE N-164 PRIOR TO DETERMINING NO. HS306-227H WASHERS OR LENGTH OF SPACER REQUIRED.
3. FABRICATE SPACER (0.80 - 0.85 INCH OD, 0.256 - 0.270 INCH ID) FROM 300 SERIES OR 17-4PH STAINLESS STEEL IF DESIRED.
4. BOLT REPLACEMENT AND SHIMMING REQUIRED AT EACH END OF 269A5517-13 BRACKET.

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Figure 2. Shimming Requirements PN 269A5517-13 Bracket Installation, 269A, 269A-1, 269B and 269C (S/N 0004 - 0589 only) Helicopters.