

#### Sikorsky helicopter Corporation

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# **269D™ HELICOPTER**

## ALERT SERVICE



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**ASB DB-072** 

Basic Issue • October 3/17

SUBJECT: POWER TRAIN SYSTEM - Kaflex® Drive Shaft - One-Time Inspection for the Correct Bolt that Attaches the Drive Adapter to KAflex® Assembly

#### Section 1. PLANNING INFORMATION

All 269D and 269D configuration "A" helicopters equipped with the new KAflex® Α. Effectivity assembly (SKCP2738-9 and SKCP2738-101). Helicopters equipped with Kaflex® assembly (SKCP2738-7) are not affected by this Alert Service Bulletin (ASB).

В. Purpose To provide instructions to inspect for the correct bolt that attaches the drive adapter to forward KAflex® assembly (SKCP2738-9).

C. Kaflex® assembly (SKCP2738-9) is designed to be attached to the drive adapter Background (269D5120) with bolt (NAS565-39). The use of an incorrect bolt can result in a loss of main rotor drive. An inspection procedure was developed to make sure the correct bolt is installed.

Description Helicopter is prepared for inspection. Access is gained to the drive adapter and KAflex® assembly (SKCP2738-9) and inspected for correct bolt. If bolt (NAS565-39) is not installed, it is replaced. Bolt (NAS565-39), lockwasher and washer are installed. Helicopter is returned to service.

Compliance Compliance is essential. The instructions outlined herein shall be accomplished no later than 10 flight hours or 30 days whichever occurs first, from the issue date of this ASB.

Approval Inspection item.

ONE-TIME **INSPECTION** 

#### Section 1. PLANNING INFORMATION (Continued)

### G. Manpower (Estimated)

<u>Task</u>	No. of Men	No. of Hours	Man-Hours*
Inspection of drive adapter to KAflex® assembly and hardware configuration	1	0.6	0.6
Installation of plate-cover drive adapter.	1	0.4	<u>0.4</u>
Total Man-Hours			1.0
*Estimate does not include time required to n	renare heliconter o	r return it to flight stat	IIS

#### H. Tooling

Qty	Nomenclature	Part No.	<u>Source</u>
1	Torque Wrench (0 – 150 inch- pounds)	Commercially available or equivalent	(1)

- (1) Available through normal supply channels.
- I. Weight and Balance

Not affected.

J. Electrical Load Data

Not affected.

K. Software Load Data

Not changed.

L. References

None.

M. Publications Affected

Temporary revisions will be released at a later date.

N. Attachment

None.

ONE-TIME INSPECTION

#### Section 2. MATERIAL INFORMATION

A. Basis for Material Data

Per helicopter.

B. Bill of Material

New Part No.	<u>Qty</u>	Key Word	Old Part No.	Instructions/ Disposition
NAS565-39	1	Bolt	NASXXX-XX	(1)
AN936A516	1	Lockwasher	AN936A516	(1)
NAS1149C0532R Alternate: AN960C516	1	Washer	NAS1149C0532R Alternate: AN960C516	(1)
No. STOPPERNO3SBR40DUR or equivalent	1	No. 3 Rubber Stopper	No. STOPPERNO3SBR40DUR or equivalent	(1)(2)
23053995	1	Gasket	23053995	(1)(2)

- (1) Available through normal supply channels.
- (2) Can be reused if not deteriorated. Replace if damaged.

#### C. Consumable Material



OBSERVE ALL CAUTIONS AND WARNINGS ON CONTAINERS WHEN USING CONSUMABLES. WHEN APPLICABLE, WEAR NECESSARY PROTECTIVE GEAR DURING HANDLING AND USE. IF A CONSUMABLE IS FLAMMABLE OR EXPLOSIVE, MAKE CERTAIN CONSUMABLE AND ITS VAPORS ARE KEPT AWAY FROM HEAT, SPARK AND FLAME. MAKE CERTAIN FIREFIGHTING EQUIPMENT IS READILY AVAILABLE PRIOR TO USE. FOR ADDITIONAL INFORMATION ON TOXICITY, FLASHPOINT AND FLAMMABILITY OF CHEMICALS, CONSULT YOUR MEDICAL DEPARTMENT OR THE MANUFACTURER OF THE CONSUMABLE.

<u>Qty</u>	<u>Nomenclature</u>	Part No.	<u>Source</u>
A/R	Sealant	890 B-2 Proseal or equivalent	(1)

(1) Available through normal supply channels.

#### Section 3. ACCOMPLISHMENT INSTRUCTIONS

A. Prepare helicopter for inspection:



TO PREVENT ELECTRICAL SHOCK OF PERSONNEL OR POSSIBLE DAMAGE TO HELICOPTER COMPONENTS, MAKE SURE TO TURN OFF ALL ELECTRICAL POWER.

- (1) Turn off all helicopter electrical power.
- (2) Remove engine cowling and access panels as required.
- (3) Remove nuts securing plate-cover drive adapter to engine, located adjacent to the starter generator.

NOTE: If gasket (23053995) has deteriorated, discard.

- (4) Remove gasket (23053995) and plate-cover drive adapter from engine.
- (5) Remove No. 3 rubber stopper from end of drive adapter and clean off any residual sealant.

NOTE: Bolt securing drive adapter to KAflex® assembly varies in length depending upon what production KAflex® assembly is installed. For helicopters equipped with legacy KAflex® assembly (SKCP2738-7), bolt (NAS1305-4) is used. For helicopters equipped with new KAflex® assembly (SKCP2738-9), bolt (NAS565-39) is used.

- B. Inspect drive adapter to KAflex® assembly attachment bolt as follows (Refer to Figures 1 and 2):
  - (1) Remove bolt, lockwasher and washer from drive adapter.
  - (2) Inspect bolt for part number "NAS565-39".
    - (a) If bolt part number is not "NAS565-39", discard bolt (NASXXX-XX) and replace with correct bolt (NAS565-39).
    - (b) If bolt part number is "NAS565-39" proceed to next step.



LOCKWASHER AN936A516 SHALL BE REPLACED ANYTIME BOLT TORQUE IS LOOSENED.

NOTE: Lockwasher (AN936A516) shall be installed between head of bolt (NAS565-39) and flat washer (NAS1149C0532R).

- (3) Install bolt (NAS565-39), new lockwasher (AN936A516) and flat washer (NAS1149C0532R).
- (4) Torque bolt to 100-140 in-lbs.

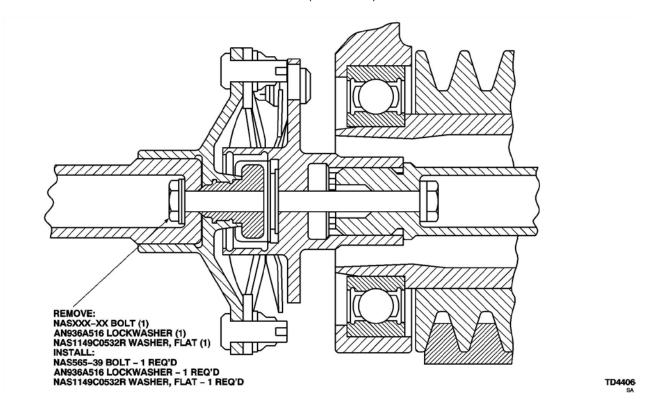
ONE-TIME INSPECTION

#### Section 3. ACCOMPLISHMENT INSTRUCTIONS (Continued)

NO. 3 rubber stopper (No. STOPPERNO3SBR40DUR or equivalent) shall be replaced if damaged.

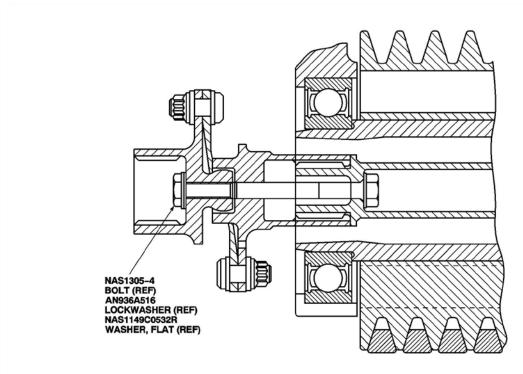
- (5) Apply sealant (890 B-2 Proseal or equivalent) to No. 3 rubber stopper (No. STOPPERNO3SBR40DUR or equivalent) and insert into drive adapter.
- (6) Apply sealant (890 B-2 Proseal or equivalent) to gasket (23053995).
- (7) Install gasket (23053995) and plate-cover drive adapter onto engine, located adjacent to the starter generator, and secure with nuts. Torque nuts to 35 in-lbs.
- (8) Install engine cowling and access panels as required.
- C. Return helicopter to service.

Section 3. ACCOMPLISHMENT INSTRUCTIONS (Continued)



KAFLEX® ASSEMBLY (SKCP2738-9) WITH BOLT (NAS565-39) FIGURE 1

Section 3. ACCOMPLISHMENT INSTRUCTIONS (Continued)



LEGACY KAFLEX® ASSEMBLY (SKCP2738-7) WITH BOLT (NAS1305-4) (SHOWN FOR COMPARISON) FIGURE 2

TD4407



#### Section 3. ACCOMPLISHMENT INSTRUCTIONS (Continued)

- D. Record of compliance:
  - (1) Make an appropriate helicopter logbook entry to show compliance with this ASB.
  - (2) Upon compliance with the ASB, complete attached ALERT SERVICE BULLETIN COMPLIANCE RECORD CARD and return it to Sikorsky Helicopter Corporation.

ONE-TIME INSPECTION

### SIKORSKY AIRCRAFT CORPORATION

### **FACSIMILE NUMBER (817) 762-6715**

EMAIL ADDRESS: product\_safety.gr-sik@lmco.com

ATTENTION: Gr-SIK, Product\_Safety SIKORSKY AIRCRAFT CORPORATION

-	COMPLIANCE with the attached ASB, Sikorsky requests your cooperation ompleting and returning this ENTIRE PAGE by MAIL, FAX, or scan & EMAIL.
proper i	fill in the requested information at the bottom of the page, so we may maintain ecords documenting the configuration of your aircraft. This information is useful determining configuration and effectivity of issues affecting fielded aircraft.
This re	quest is in keeping with our policy to assure that our customers receive the latest information applicable for the maintenance of your aircraft. Thank you.
ALERT	SERVICE BULLETIN: No. DB-072 Compliance Record Card
TITLE:	POWER TRAIN SYSTEM – Kaflex® Drive Shaft – One-Time Inspection for the
	Correct Bolt that Attaches the Drive Adapter to KAflex® Assembly
OWNER	/OPERATOR:
SUBMIT	TED BY: DATE:
	LLOWING SERIAL NUMBERS ARE <u>NOT</u> AFFECTED BY THIS ASB B <u>HAS BEEN COMPLIED</u> WITH ON HELICOPTER SERIAL NUMBERS:





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