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269D™ HELICOPTER

ALERT SERVICE

BULLETIN



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ASB DB-070

Basic Issue ▪ March 16/17

SUBJECT: POWER TRAIN SYSTEM – KAflex® Driveshaft – One-Time Inspection of KAflex® Assemblies for Axial Play and Installation of Bolt (NAS6605-25)

Section 1. PLANNING INFORMATION

- A. Effectivity All 269D and 269D Configuration “A” model helicopters with Serial Numbers (S/N) up to and including S/N 0073 with SKCP2738-9 and SKCP2738-101 KAflex assemblies installed.
- B. Purpose To provide instructions for a one-time inspection of the KAflex assemblies for axial play, spline wear, and replacement of bolt (NAS1305-28) with bolt (NAS6605-25).
- C. Background During an inspection, abnormal axial movement was found in the forward and aft KAflex assemblies when hand force was applied. It was discovered that the new KAflex installation obtained the bolt (NAS1305-28) from the legacy KAflex installation which is too long. When the bolt (NAS1305-28) is installed on the new KAflex installation, the bolt shank bottoms out. A KAflex installation was created to replace the NAS1305-28 bolt with a NAS6605-25 bolt.
- D. Description Helicopter is prepared for maintenance. KAflex assemblies are inspected for axial play. If axial play is present, bolt, washer, and lockwasher are removed and the KAflex shaft male splines are inspected. If bolt (NAS1305-28) is present, it is replaced with bolt (NAS6605-25). Helicopter is returned to service.

ONE-TIME
INSPECTION

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Section 1. PLANNING INFORMATION (Continued)

- E. Compliance Compliance is essential. The instructions outlined herein shall be accomplished no later than the next 25 flight hour KAflex inspection, not to exceed 30 days from the issue date of this Alert Service Bulletin (ASB).
- F. Approval Inspection Item.
- G. Manpower (Estimated)

<u>Task</u>	<u>No. of Men</u>	<u>No. of Hours</u>	<u>Man-Hours*</u>
Inspection of KAflex assembly.	1	0.10	0.10
Installation of bolt, washer, and lockwasher.	1	0.20	<u>0.20</u>
Total Man-Hours			0.30

*Estimate does not include time required to prepare helicopter or return it to flight status.

H. Tooling

<u>Qty</u>	<u>Nomenclature</u>	<u>Part No.</u>	<u>Source</u>
1	Inspection mirror	Commercially available or equivalent	(1)
1	Bright, white, non-LED flashlight	Commercially available or equivalent	(1)
1	Torque wrench (0 – 150 inch-pounds)	Commercially available or equivalent	(1)

I. Weight and Balance

Not affected.

J. Electrical Load Data

Not affected.

K. Software Load Data

Not changed.

L. References

- (1) Handbook of Maintenance Instructions (HMI) CSP-D-2, Section 10, Paragraph 10-57.
- (2) HMI CSP-D-9, Section 10, Paragraph 10-57.

Section 1. PLANNING INFORMATION (Continued)

M. Publications Affected

- (1) Temporary Revision No. 269D-131 against HMI CSP-D-2, Section 10, Figure 10-19A is released concurrently with this ASB.
- (2) Temporary Revision No. 269D-132 against HMI CSP-D-2, Appendix B, Section 2 is released concurrently with this ASB.
- (3) Temporary Revision No. 269DA-135 against HMI CSP-D-9, Section 10, Figure 10-19A is released concurrently with this ASB.
- (4) Temporary Revision No. 269DA-136 against HMI CSP-D-9, Appendix B, Section 2 is released concurrently with this ASB.
- (5) Temporary Revision No. 269I-D-12 against Illustrated Parts Catalog (IPC) CSP-D-6, Section 3, Figure 3-11 is released concurrently with this ASB.
- (6) Temporary Revision No. 269I-D-13 against Illustrated Parts Catalog (IPC) CSP-D-6, Section 3, Figure 3-11A is released concurrently with this ASB.

N. Attachment

None.

Section 2. MATERIAL INFORMATION

A. Basis for Material Data

Per helicopter.

B. Bill of Material

<u>New Part No.</u>	<u>Qty</u>	<u>Nomenclature</u>	<u>Old Part No.</u>	<u>Instructions/ Disposition</u>
NAS6605-25	1	Bolt	NAS1306-28	(1)
AN936A516	1	Lockwasher	AN936A516	(1)
AN960C516	1	Washer	AN960C516	(1)
Alternate: NAS1149C0563R			Alternate: NAS1149C0563R	

- (1) Available through normal supply channels.



Section 2. MATERIAL INFORMATION (Continued)

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>	<u>Part No.</u>	<u>Source</u>
A/R	Grease	MIL-PRF-81322 or equivalent	(1)
A/R	Sealing compound	CA 1000 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.

NOTE: This ASB is applicable to 269D and 269D Configuration "A" helicopters that have been modified with the new KAflex assemblies SKCP2738-9 and SKCP2738-101.

B. Inspect forward (engine side) KAflex assembly and aft (pulley side) KAflex assembly as follows:

(1) Grasp forward and aft assemblies and push forward and aft using hand force to inspect for axial movement. If there is no axial movement, proceed to B(1)(a). If axial movement is found, proceed to B(1)(b).

NOTE: The bolt retaining the forward (engine side) KAflex assembly SKCP2738-9 and aft (pulley side) KAflex assembly SKCP2738-101 varies in length depending upon what production KAflex is installed on helicopter. For helicopters incorporating legacy forward (engine side) KAflex assembly SKCP2738-7 and aft (pulley side) KAflex assembly SKCP2738-5, bolt NAS1305-28 is required. For helicopters incorporating new forward (engine side) KAflex assembly SKCP2738-9 and aft (pulley side) KAflex assembly SKCP2738-101, bolt NAS6605-25 is required.

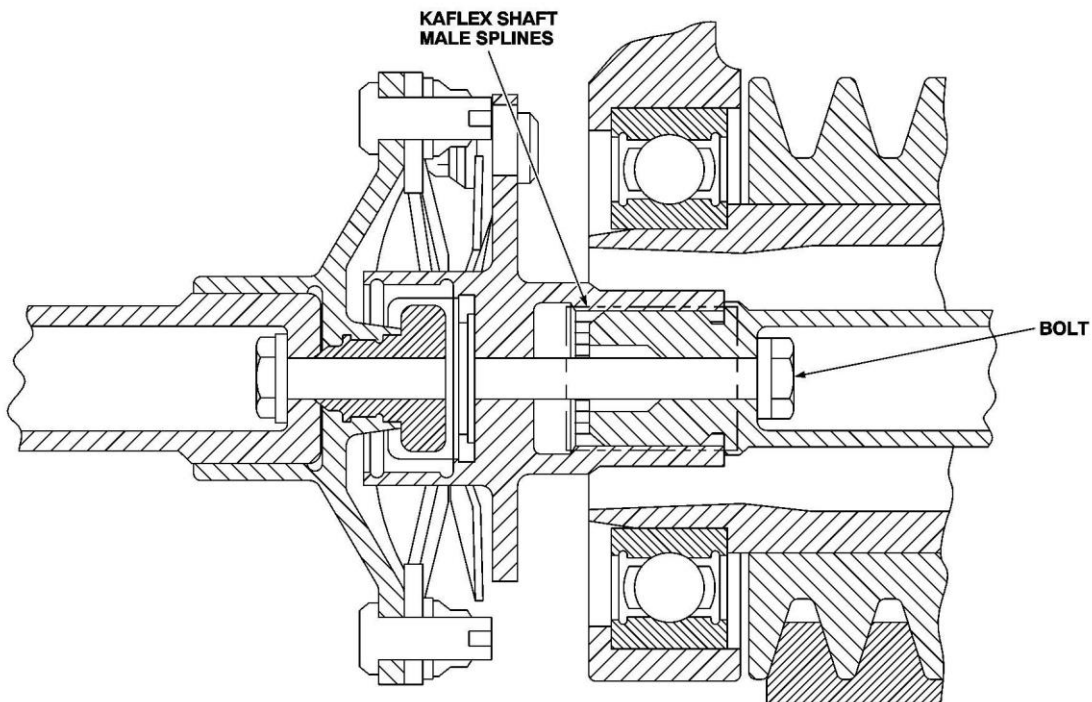
(a) Remove bolt, washer and lockwasher and inspect bolt to determine if bolt P/N is NAS1305-28.



Section 3. ACCOMPLISHMENT INSTRUCTIONS (Continued)

1. If bolt P/N is NAS1305-28, remove and discard bolt (NAS1305-28) and replace with bolt (NAS6605-25) by proceeding to step (2).
 2. If bolt P/N is NAS6605-25, proceed to step (2).
- (b) Remove bolt, washer, and lockwasher and push the forward (engine side) KAflex assembly toward engine.
1. Using an inspection mirror (commercially available or equivalent) and bright, white, non-LED flashlight (commercially available or equivalent), inspect KAflex shaft male splines for wear, discoloration, and debris particles. (Refer to Figure 1).
 - a If spline wear, discoloration, and/or debris particles are present, remove forward and aft KAflex assemblies and inspect splines. (Refer to HMI CSP-D-2, Section 10, Paragraph 10-57 or HMI CSP-D-9, Section 10, Paragraph 10-57).
 - b If no spline wear, discoloration, and/or debris particles are present, clean and apply grease (MIL-PRF-81322 or equivalent) and push the forward (engine side) KAflex assembly aft, using hand force, for full engagement with aft KAflex shaft splines.
 - (2) Apply light coat of sealing compound (CA 1000 or equivalent) around shank of bolt (NAS6605-25).
- NOTE:
- Lockwasher (AN936A516) is replaced anytime bolt is loosened.
 - Washer (AN960C516 or NAS1149C0563R) is replaced if worn, corroded or damaged.
 - Lockwasher (AN936A516) is positioned under the bolt head, followed by washer (AN960C516 or NAS1149C0563R).
- (3) Install bolt (NAS6605-25), washer (AN960C516 or NAS1149C0563R), and lockwasher (AN936A516).
 - (4) Torque bolt (NAS6605-25) to 100 – 140 inch-pounds.
- C. Return helicopter to service.

Section 3. ACCOMPLISHMENT INSTRUCTIONS (Continued)



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KAFLEX INSTALLATION BOLT AND MALE SPLINES
FIGURE 1

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 Aircraft Corporation.

(Fold over and tape closed)

SIKORSKY AIRCRAFT CORPORATION

FACSIMILE NUMBER (817) 762-9715

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ATTENTION: Gr-SIK, Product_Safety
SIKORSKY AIRCRAFT CORPORATION



IMPORTANT NOTICE

Upon **COMPLIANCE** with the attached ASB, Sikorsky requests your cooperation in completing and returning this **ENTIRE PAGE** by **MAIL, FAX, or scan & EMAIL**.

Please fill in the requested information at the bottom of the page, so we may maintain proper records documenting the configuration of your aircraft. This information is useful when determining configuration and effectivity of issues affecting fielded aircraft.

This request 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-070 **Compliance Record Card**

TITLE: POWER TRAIN SYSTEM – KAflex® Driveshaft – One-Time Inspection of KAflex®
Assemblies for Axial Play and Installation of Bolt (NAS6605-25)

OWNER/OPERATOR: _____

SUBMITTED BY: _____ **DATE:** _____

FOLLOWING SERIAL NUMBERS ARE NOT AFFECTED BY THIS ASB

ASB HAS BEEN COMPLIED WITH ON HELICOPTER SERIAL NUMBERS:

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