#### **TRANSMITTAL**

Alert Service Bulletin (ASB) B-308 dated June 1, 2015 has been revised. This page accompanies Revision A, dated August 4, 2015.

ASB B-308A dated August 4, 2015 supersedes the basic issue of ASB B-308, dated June 1, 2015. Text changes are indicated by a vertical line in the outer margin of the page. Illustration changes are indicated by a vertical line next to the figure title.

#### **INSTRUCTIONS TO OPERATORS:**

Operators that have complied with ASB B-308 dated June 1, 2015, no further action is required.

Operators that have not complied with the basic issue, comply with revision A in its entirety.

#### **HIGHLIGHTS OF THIS REVISION:**

#### PLANNING INFORMATION

Revised effectivity to include Serial Numbers.

Revised purpose.

Revised compliance to change from 100 flight hours to 200 flight hours.

Updated publications affected to add Temporary Revision No. 269A-104, 269C-57, 269I-A-4, 269I-A-5, 269I-C-10 and 269I-C-11.

#### **ACCOMPLISHMENT INSTRUCTIONS**

Step A.(3): changed reference to Temporary Revision No. 269A-104 and 269C-57.

Step B.(1): revised to inspect three rivets per location and added references to figure 5, Temporary Revision No. 269I-C1-9, and 269I-A-4, 269I-A-5, 269I-C-10, and 269I-C-11.

Added new step B.(2) to inspect NAS1738B5-5 rivets.

Step B.(3): Change to inspect at least 3 rivets in each of the 5 rows, added NAS1738B-5, and added reference to Figures 5 and 6.

Step B.(4)(b): added NAS1738B5-5 rivet and changed references to Temporary Revision No. 269I-A-4, 269I-A-5, 269I-C-10 and 269I-C-11.

Step B.(8): changed reference to Temporary Revision No. 269A-104 and 269C-57.

Step D.(1): added return E-Mail address, changed ASB No. to B-308A and added NAS1738B5-5 rivet.

Added new Figures 5 and 6.



#### **Sikorsky Aircraft Corporation**

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# 269C™ HELICOPTER ALERT SERVICE BULLETIN



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ASB B-308A

June 1/15

Revision A • August 4/15

SUBJECT: MAIN ROTOR AND CONTROL SYSTEM - Pilot's Collective Pitch Control Stick - One-Time

Inspection of Collective Pitch Control Torque Tube

#### Section 1. PLANNING INFORMATION

A. Effectivity All 269A, 269A-1, TH-55A, 269B, and 269C up to and including serial number S1961 model helicopters.

B. Purpose To perform a one-time inspection of collective pitch control torque tube rivets.

Incorrect "plain", "A" type rivets were found installed on collective pitch control torque tube, which could lead to reduced functionality of the collective pitch torque

tube.

C. Description Helicopter is prepared for inspection. Access is gained to collective pitch control

torque tube. If required, pilot collective pitch control stick is removed. Collective pitch control torque tube is inspected for correct rivet and for signs of tipping, smearing, or elongated dimples consistent with shear failure of rivets. If incorrect rivets or signs of tipping, smearing, or elongated dimples of rivets are found, and no signs of damage to the collective pitch control torque tube are found, rivets are removed and replaced. If tube or fitting are damaged, they are removed from service and replaced. If removed, pilot's collective pitch control stick is installed. Results are recorded on Collective Pitch Control Torque Tube Inspection Data

Sheet (attached). Helicopter is returned to service.

ONE-TIME INSPECTION

Page 1 of 15



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

D. Compliance is essential. The one-time inspection outlined herein shall be accomplished within 200 flight hours or no later than December 2, 2015, whichever comes first.

E. Approval Inspection Item.

F. Manpower (Estimated)

<u>Task</u>	No. of Men	No. of Hours	Man-Hours*
Removal of collective pitch torque tube, if applicable.	1	2.0	2.0
Visual inspection of collective pitch torque tube.	1	0.5	0.5
Chemical stripping of paint from collective pitch torque tube rivets, if applicable.	1	1.0	1.0
Replacement of rivets, if applicable.	1	3.0	3.0
Prime and paint all bare surfaces of collective pitch torque tube rivets, if applicable.	1	1.5	1.5
Installation of collective pitch torque tube, if applicable.	1	3.5	<u>3.5</u>
Total Man-Hours			11.5
*Estimate does not include time required to pr	epare helicopter o	r return it to flight statu	JS.

G. Tooling

None.

H. Weight and Balance

Not affected.

I. Electrical Load Data

Not affected.

J. Software Load Data

Not changed.

K. References

(1) Handbook of Maintenance Instructions (HMI), CSP-C-2.

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

- (2) HMI, CSP-C-10.
- (3) Illustrated Parts Catalog (IPC), CSP-C-7.
- (4) IPC, CSP-C-9.

#### L. Publications Affected

- (1) Temporary Revision No. 269A-104, Removal of Torque Tube Installation, Inspection of Torque Tube Installation, and Installation of Torque Tube Installation, against HMI CSP-C-2, Section 8, is issued concurrently with this ASB.
- (2) Temporary Revision No. 269C-57, Removal of Torque Tube Installation, Inspection of Torque Tube Installation, and Installation of Torque Tube Installation, against HMI CSP-C-10, Section 8, is issued concurrently with this ASB.
- (3) Temporary Revision No. 269I-A-4, Torque Tube Installation, against IPC CSP-C-7, Section 1, is issued concurrently with this ASB.
- (4) Temporary Revision No. 269I-A-5, Torque Tube Installation, against IPC CSP-C-7, Section 1, is issued concurrently with this ASB.
- (5) Temporary Revision No. 269I-C-10, Torque Tube Collective Pitch Control, against IPC, CSP-C-9, Section 4, is issued concurrently with this ASB.
- (6) Temporary Revision No. 269I-C-11, Torque Tube Collective Pitch Control, against IPC, CSP-C-9, Section 4, is issued concurrently with this ASB.

#### M. Attachment

None.

#### Section 2. MATERIAL INFORMATION

A. Basis for Material Data

Per helicopter.

B. Bill of Material

None.



## 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 PEOPLE OR THE MANUFACTURER OF THE CONSUMABLE.

Qty	<u>Nomenclature</u>	Part No.	Source
A/R	Acrylic Plastic Media	MIL-P-85891A, Type V or equivalent	(1)
A/R	Alodine	1132 Touch-N-Prep	(2)
A/R	Epoxy Primer	MIL-PRF-23377, Type I, Class N or equivalent	(1)
A/R	Fine Emery Cloth	Commercially available or equivalent	(1)
A/R	Kimwipes	Commercially available or equivalent	(1)
A/R	Solvent	Methyl-ethyl-ketone or equivalent	(1)
A/R	Paint Stripper	SPC-909N or equivalent	(1)
A/R	Polyurethane Topcoat	Imron® AF3500 <sup>™</sup> or equivalent Alternate: 759267EJ or 22-FM-89101	(1)
A/R	Turco Paint Stripper	EA6930 or equivalent	(1)

- (1) Procure from local supply.
- (2) Available from Aircraft Spruce & Specialty Co. Website: <a href="https://www.aircraftspruce.com">www.aircraftspruce.com</a>

#### Section 3. ACCOMPLISHMENT INSTRUCTIONS

- A. Prepare helicopter for inspection:
  - (1) Turn off all helicopter electrical power.
  - (2) Gain access to collective pitch control torque tube (269A9937).

- (3) If access cannot be gained to perform the inspection with the collective pitch control torque tube installed, remove pilot collective pitch control torque tube. (Refer to Temporary Revision No. 269A-104, Removal of Torque Tube Installation, Inspection of Torque Tube Installation, and Installation of Torque Tube Installation 269C-57, Removal of Torque Tube Installation, Inspection of Torque Tube Installation, and Installation of Torque Tube Installation.)
- B. Perform visual inspection of pitch control torque tube rivets as follows:
  - (1) Inspect at least three of the most accessible rivet heads per row for presence of raised cross on rivets (if MS20470B5), or presence of grip identification on rivets (if CR3212-5). (Refer to Figures 1, 2, 3, 6 (Rows 1, 2, 3, and 5), Temporary Revision No. 269I-A-4, Torque Tube Installation, and Temporary Revision No. 269I-A-5, Torque Tube Installation, or Temporary Revision No. 269I-C-10, Torque Tube Collective Pitch Control, and Temporary Revision No. 269I-C-11, Torque Tube Collective Pitch Control.)
  - (2) Inspect at least three of the most accessible rivet heads in row for presence of grip identification on rivets (if NAS1738B5-5). (Refer to Figures 1, 5, 6 (Row 4), Temporary Revision No. 269I-A-4, Torque Tube Installation, and Temporary Revision No. 269I-A-5, Torque Tube Installation, or Temporary Revision No. 269I-C-10, Torque Tube - Collective Pitch Control, and Temporary Revision No. 269I-C-11, Torque Tube - Collective Pitch Control.)



DO NOT MECHANICALLY REMOVE PAINT FROM RIVET HEAD. SANDING MAY REMOVE THE PRESCENCE OF A RAISED CROSS OR GRIP IDENTIFICATION MARK PREVENTING PROPER IDENTIFICATION.

- NOTE: Paint stripper (SPC-909N or equivalent) or Turco paint stripper (EA6930 or equivalent) will take a few hours to strip the paint but they are environmentally friendly, and will not damage the part. An equivalent chemical stripper may be used as long as it is not acidic, and will not damage the part.
  - If available, a media blast using acrylic plastic media (MIL-P-85891A, Type V or equivalent) is also acceptable. Care should be used to make sure integrity of rivet head is not negatively affected.
- (a) If raised cross or grip identification cannot be seen, chemically remove paint on rivets using paint stripper (SPC-909N or equivalent) or Turco paint stripper (EA6930 or equivalent). If available, acrylic plastic media (MIL-P-85891A, Type V or equivalent) is acceptable.
- (3) If at least 3 rivets in each of the 5 rows are confirmed to be rivets (MS20470B5) with raised cross, or rivets (CR3213-5) with presence of grip identification mark, or rivets (NAS1738B5-5) with presence of grip identification mark inspection is complete. (Refer to Figures 1, 2, 3, 4, 5, and 6.)
  - (a) If paint has been removed, proceed to Step B.(5).





- (b) If paint has not been removed, proceed to Step B.(8).
- (4) If "plain", "A" type, or damaged rivets are found:
  - (a) Record all "plain", "A" type, or damaged rivets on the Collective Pitch Control Torque Tube Inspection Data Sheet (Refer to step D).
  - (b) All "plain", "A" type, or damaged rivets are removed and replaced with rivets (MS20470B5, CR3213-5, or NAS1738B5-5). If tube (269A9937-3) or fitting (269A7205) are damaged, remove from service and replace. (Refer to Temporary Revision No. 269I-A-4, Torque Tube Installation, and Temporary Revision No. 269I-A-5, Torque Tube Installation, or Temporary Revision No. 269I-C-10, Torque Tube -Collective Pitch Control, and Temporary Revision No. 269I-C-11, Torque Tube -Collective Pitch Control.)
- (5) Treat bare surfaces of collective pitch control torque tube with alodine (1132 Touch-N-Prep or equivalent) as follows:
  - NOTE: Wet abrading is allowed as long as surface is completely dry prior to Alodine (1132 Touch-N-Prep) application.
  - (a) Lightly abrade surface with fine emery cloth (commercially available or equivalent) in 2 directions (0° and 90°).
  - (b) Wipe surface clean using solvent (methyl-ethyl-ketone or equivalent) soaked Kimwipes (commercially available or equivalent) until there is no appearance of residue.
    - NOTE: A new pen takes approximately 15 to 30 seconds to wet.
      - Use caution not to over wet the pen tip this may cause puddling.
  - (c) To activate pen hold applicator tip down (applying pressure) on the surface until the tip is wet. Release downward pressure.
  - (d) Apply the pen in firm, smooth, even strokes in one direction (straight lines). Overlap each previous stroke by approximately 50% until desired surface is covered.
    - NOTE: If voids occur this may be an indication of inadequate cleaning. If necessary, repeat cleaning process steps B.(5)(a) and (b).
  - (e) Observe that the solution is wetting the surface. Alodine (1132 Touch-N-Prep) will show a golden color.
    - NOTE: Be careful not to over wet and puddle Alodine (1132 Touch-N-Prep).
  - (f) Use short downward jabs to re-wet pen during application when needed.

- (g) Allow area to air dry thoroughly and within 5 minutes apply a second coat 90° from the first using the same technique, making sure to overlap each stroke by approximately 50%.
- (h) Allow to air dry.
- (i) Rinse surface with water and Kimwipe (commercially available or equivalent) and let dry.
- (6) Apply one coat of epoxy primer (MIL-PRF-23377, Type I, Class N or equivalent).
- (7) Apply up to three coats of polyurethane topcoat (Imron® AF3500<sup>TM</sup>, 75926EJ, 22-FM-8901, or equivalent) so that color of primer is no longer visible.
- (8) If removed, install collective pitch control torque tube. (Refer to Temporary Revision No. 269A-104, Removal of Torque Tube Installation, Inspection of Torque Tube Installation, and Installation of Torque Tube Installation, Inspection of Torque Tube Installation, and Installation of Torque Tube Installation.)
- C. Return helicopter to service.



<ul> <li>D. Collective Pitch Control Torque Tube Inspection Data Shee</li> </ul>	D.	Collective P	itch Control 7	Torque Tube	e Inspection	Data Shee
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(1) Report the following S300ASB@sikorsl		Aircraft Corporation (E-Ma	ail address:
ASB No: <u>B-308A</u>			
Date ASB is Performed	:		
Helicopter Serial Number	er:		
Helicopter Total Time S	ince New:		
Has Collective Pitch Co ever been replaced?	ntrol Torque Tube	Yes	No
Did all inspected rivets raised cross on the rive verified to be rivets (CR NAS1738B5-5) with proidentification?	t head or were 3213-5 or	Yes	No
Was any suspected tipp dimple elongation consifailure present?		Yes	No
If issue is found, record	findings below:		
Type of issue (incorrect rivet installed, tipping, smearing, elongated dimples, other damage)	Location (distance from left hand edge of collective pitch torque tube feature)	Size of Damage (inches)	Total Time on Part

INCORRECT PLAIN "A" TYPE RIVET

## Section 3. ACCOMPLISHMENT INSTRUCTIONS (Continued)



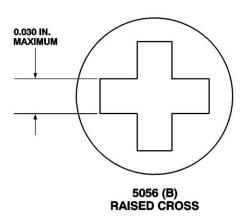
CORRECT "B" TYPE RIVET WITH RAISED CROSS



1D351

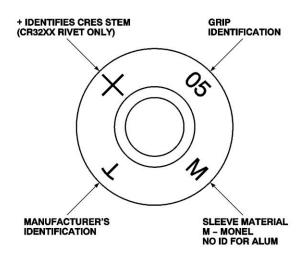
INCORRECT PLAIN "A" TYPE RIVET HEAD (TOP) AND CORRECT "B" TYPE RIVET WITH RAISED CROSS (BOTTOM)
FIGURE 1





TD3512

"B" TYPE RIVET MATERIAL IDENTIFICATION MARK FIGURE 2



TD3513

CHERRYMAX® RIVET MATERIAL IDENTIFICATION MARK FIGURE 3

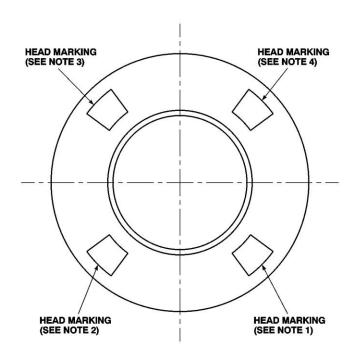






TD3510

# FAILED RIVET SHOWING SMEARING FIGURE 4



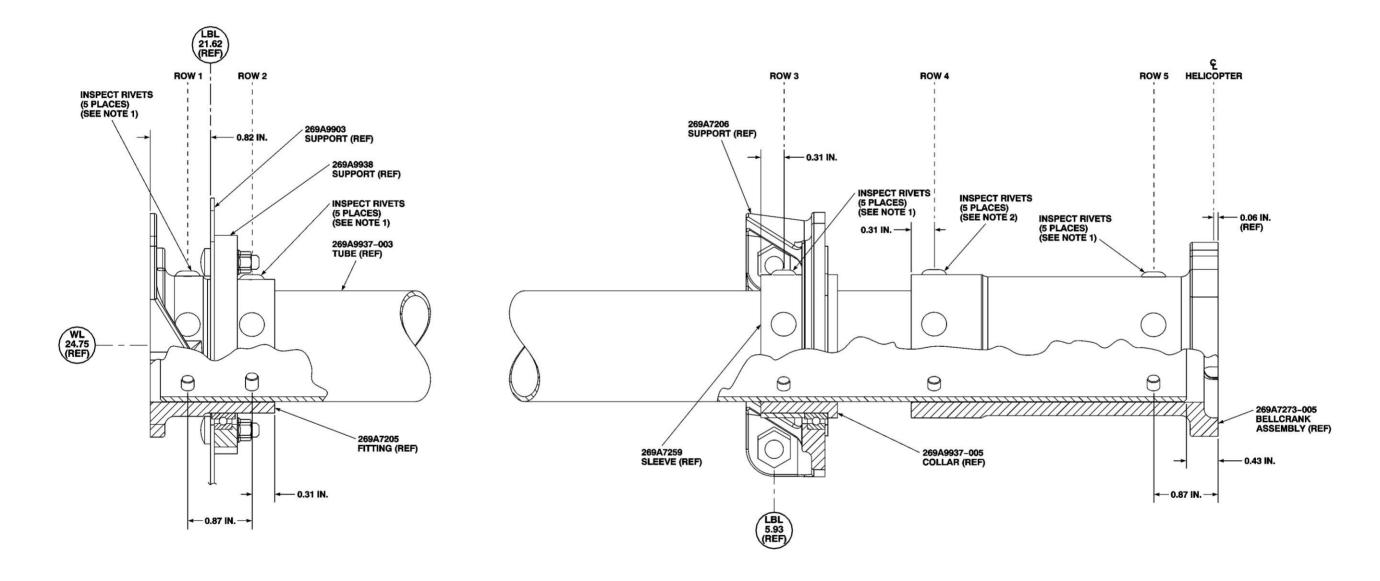
#### **NOTES**

- CODE M FOR NICKEL-COPPER SLEEVE. NO CODE FOR 5056 ALUM SLEEVE. CODE C FOR NICKEL ALLOY SLEEVE. CODE FOR 2219 ALUM SLEEVE.
- 2. GRIP NUMBER.
- 3. CODE + FOR NICKEL ALLOY 600 SPINDLE.
- 4. MANUFACTURER'S IDENTIFICATION.

TD3564

NAS1738 PROPER RIVET MATERIAL IDENTIFICATION MARK FIGURE 5

Section 3. ACCOMPLISHMENT INSTRUCTIONS (Continued)



#### **NOTES**

- 1. INSPECT RIVETS PER FIGURES 2 AND 3.
- 2. INSPECT RIVETS PER FIGURE 5.

TD3547

RIVET INSPECTION LOCATIONS FIGURE 6





- E. 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 ASB Work Sheet and return it to Sikorsky Aircraft Corporation.

## SIKORSKY AIRCRAFT CORPORATION

# **FACSIMILE NUMBER (860) 998-7565**

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_	COMPLIANCE with the attached ASB, Sikorsky requests your cooper ompleting and returning this ENTIRE PAGE by MAIL, FAX, or scan EMAIL.	
proper re	fill in the requested information at the bottom of the page, so we may mai ecords documenting the configuration of your aircraft. This information is a determining configuration and effectivity of issues affecting fielded aircraft.	useful
	quest is in keeping with our policy to assure that our customers receive the information applicable for the maintenance of your aircraft. Thank you.	latest
	MAIN ROTOR AND CONTROL SYSTEM – Pilot's Collective Pitch Control Stick -  One-Time Inspection of Collective Pitch Control Torque Tube	ard 
	/OPERATOR:	
SURMIT	TED BY: DATE: PLLOWING SERIAL NUMBERS ARE <u>NOT</u> AFFECTED BY THIS ASB	 S:





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