

#### **ALERT SERVICE BULLETIN**

206L-23-188

25 January 2024 Revision A, 27 March 2024

MODEL AFFECTED: 206L, 206L-1, 206L-3 and 206L-4

SUBJECT: HORIZONTAL STABILIZER AND CARGO HOOK FITTINGS – SELF LOCKING INSERTS, INSPECTION OF

HELICOPTERS AFFECTED: PART I: Serial numbers 45001 through 45790, 46601 through 46617, 51001 through 51612, and 52001 through 52496.

PART II: Serial numbers 52001 through 52496.

COMPLIANCE:PART I: Within 100 flight hours or 3 months, whichever<br/>occurs first, and every 300 flight hours or 12 months,<br/>whichever occurs first thereafter following the release<br/>of this bulletin.

**PART II:** Within 300 hours or 12 months, whichever occurs first, following the release of this bulletin.

### **DESCRIPTION:**

Bell was made aware that some self-locking inserts installed on the horizontal stabilizer and inserts of the cargo hook fitting attachments may potentially have been damaged during assembly. The self-locking feature of the affected inserts could potentially be below the minimum tare torque value.

**PART I** of this bulletin mandates the inspection of the fasteners installed on the horizontal stabilizer to determine if they have loosened. Serial numbers 52462 through 52496 are directly affected by this ASB if fitted with the original tailboom and/or horizontal stabilizer assemblies.

ASB 206L-23-188RA Page 1 of 10 Approved for public release. Tailboom and/or horizontal stabilizer assemblies associated with **PART I** helicopter serial numbers may have potentially been moved to a helicopter outside the above serial number range. These tailbooms and/or horizontal stabilizers are also affected by this ASB.

**NOTE**: This bulletin also applies to <u>all</u> helicopter serial numbers if unable to determine if the tailboom and/or stabilizer were the original assemblies installed.

**PART II** of this bulletin applies <u>only</u> to the aircraft fitted with the cargo hook provisions kit. It mandates an inspection of the fasteners attaching the cargo hook fittings and safetying of the fasteners if required.

Applicability of this bulletin to any spare part shall be determined prior to its installation on an affected helicopter.

**Revision A** of this bulletin corrects the part number of the screws MS20739-1-04 specified in the original release of this bulletin with the NAS1123-1 and NAS1123-3 screws as applicable on the horizontal stabilizer to support attachment as per ASB 206L-99-115.

## **APPROVAL:**

The engineering design aspects of this bulletin are Transport Canada Civil Aviation (TCCA) approved.

## CONTACT INFO:

For any questions regarding this bulletin, please contact:

Bell Product Support Engineering Tel: 1-450-437-2862 / 1-800-363-8023 / productsupport@bellflight.com

### MANPOWER:

Approximately 2.0 man-hours are required to complete **PART I** of this bulletin. Approximately 2.0 man-hours are required to complete **PART II** of this bulletin.

This estimate is based on hands-on time and may vary with personnel and facilities available.

### WARRANTY:

There is no warranty credit applicable for parts or labor associated with this bulletin.

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### MATERIAL:

#### **Required Material:**

The following material is required for the accomplishment of this bulletin and may be obtained through your Bell Supply Center.

Part Number	<u>Nomenclature</u>	<u>Qty (Note)</u>
NAS6603H4	Bolt	16 (1)
NAS1123-1	Screw	28 (1)(3)
NAS1123-3	Screw	A/R (3)(4)
MS27039-1-06	Screw	16 (1)(5)
NAS1149D0332K	Washer	A/R (2)

### NOTES:

- 1. A maximum quantity of 16 or 28 may be required depending on the inspection results.
- 2. Existing washers may be reused if they are serviceable.
- 3. Post ASB 206L-99-115.
- 4. Use NAS1123-3 when installed with radius block 20-042-11-5.
- 5. Slat to horizontal stabilizer attachment.

#### **Consumable Material:**

The following material is required to accomplish this bulletin, but may not require ordering, depending on the operator's consumable material stock levels. This material may be obtained through your Bell Supply Center.

Part Number	<u>Nomenclature</u>	<u>Qty (Note)</u>	<u>Reference</u> *
Commercial	Polyurethane Enamel	(2)(3)	C-233
1650-03296-00	Wire, Safety CRES 0.032"	Roll (5LB) (1)	C-405
2100-00006-00	Cleaning Compound	5 GAL (1)	C-318
2010-10938-00	Loctite 080	50 CC (1)(4)	C-320
2230-10536-00	Torque Seal Lacquer	1OZ (1)(5)	C-049
2010-12763-01	Sealant, Corrosion Inhibitor	1 QT (1)	C-251

\* C-XXX numbers refer to the consumables list in the BHT-ALL-SPM, Standard Practices Manual

## NOTES:

- 1. The quantity indicated is the format the product is delivered in. Actual quantity required to accomplish the instructions in this bulletin may be less.
- 2. It is recommended that customers contact their local Axalta Dealer with their specific color code <u>https://www.axalta.com/corporate/en\_US/contacts/customer-contacts.html</u>.
- 3. Polyurethane Coating (C-245) may be used as a substitute.
- 4. Purple Loctite 222 (C-299) may be used as an alternate.
- 5. 2230-10536 Torque Seal Lacquer (C-049) is color yellow; however, other colors are available, at customer's option as shown in the Consumables List of the Technical Publications.

## SPECIAL TOOLS:

None required.

## WEIGHT AND BALANCE:

Not affected.

## ELECTRICAL LOAD DATA:

Not affected.

## **REFERENCES:**

BHT-206L-SERIES-IPB Illustrated Parts Breakdown Chapter 53 BHT-206L-SERIES-IPB Illustrated Parts Breakdown Chapter 99 BHT-206L4-MM-5 Maintenance Manual Chapter 53 BHT-206L4-MM-1 Maintenance Manual Chapter 5 BHT-ALL-SPM Chapter 2, 8 BHT-206-SI-2012 ASB 206L-99-115 Tailbooms 206-033-004-ALL, Inspection and Modification of.

## PUBLICATIONS AFFECTED:

None affected.

### ACCOMPLISHMENT INSTRUCTIONS:

### PART I: Inspection of the Horizontal Stabilizer

- 1. Prepare the helicopter for maintenance.
- 2. Confirm if the horizontal stabilizer assembly is affected as per the Helicopters Affected and Description blocks of this ASB.

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- 3. If the horizontal stabilizer is not affected by this bulletin, proceed to step 11.
- 4. If the horizontal stabilizer is affected by this bulletin, proceed to step 5.
- 5. Thoroughly clean the areas to be inspected using cleaning compound (C-318) or equivalent (Figure 1).



A gap under the screw head, cracks in the paint around the screw head, loose washer or black fretting dust could indicate fastener looseness.

- 6. Perform a visual inspection of the following horizontal stabilizer fasteners for signs of looseness:
  - a. Fasteners (Qty 28) attaching the horizontal stabilizer to the support (Figure 1, Sheet 1).
  - b. Fasteners (Qty 16) attaching the slats to the horizontal stabilizer (Figure 1, Sheet 2).
- 7. If there are no signs of fastener loosening, proceed to step 11.
- 8. If any sign of fastener loosening is detected at the horizontal stabilizer to support attachment, perform the following for every suspected insert:
  - a. Remove the fastener and measure the tare torque of the insert (BHT-ALL-SPM Chapter 2, Section 2). The minimum tare torque of the inserts shall be 2.0 inchpounds (0.23 Nm).
  - b. If the tare torque of the insert meets the minimum value, re-install the fastener (ASB 206L-99-115, Part III, Step 38).
  - c. If the tare torque of a specific insert is below the minimum value, do the following:
    - (1) Replace the existing fastener with a new one (ASB 206L-99-115, Part III, Step 38).
    - (2) Measure the tare torque as per step 8.a.
    - (3) If the tare torque is sufficient, install the new fastener (ASB 206L-99-115, Part III, Step 38).

- (4) If the tare torque of the horizontal stabilizer to support is not sufficient, apply a drop of low strength threadlocker Loctite 080 (C-320) on the threads of the new fastener and a layer of sealant (C-251) on the shank of the screw (ASB 206L-99-115, Part III, Step 38). Install the fastener and apply a stripe of torque seal lacquer (C-049) on the affected fastener.
- 9. If any sign of fastener loosening is detected at the slats to horizontal stabilizer attachment, perform the following for every suspected insert:
  - a. Remove the fastener and measure the tare torque of the insert (BHT-ALL-SPM Chapter 2, Section 2). The minimum tare torque of the inserts shall be 2.0 inchpounds (0.23 Nm).
  - b. If the tare torque of the insert meets the minimum value, re-install the fastener (BHT-206L-MM, Chapter 53).
  - c. If the tare torque of a specific insert is below the minimum value, do the following:
    - (1) Replace the existing fastener with a new MS27039-1-06 screw.
    - (2) Measure the tare torque as per step 9.a.
    - (3) If the tare torque is sufficient, install the new fastener. (BHT-206L4-MM, Chapter 53)
    - (4) If the tare torque of the fasteners attaching the slats to the horizontal stabilizer is not sufficient, apply a drop of low strength threadlocker Loctite 080 (C-320) on the threads of the new fastener. Install the fastener and apply a stripe of torque seal lacquer (C-049) on the affected fastener (BHT-206L4-MM, Chapter 53).
- 10.If inserts are found with tare torque below the minimum requirement, report the results to Product Support Engineering at <a href="mailto:productsupport@bellflight.com">productsupport@bellflight.com</a>.
- 11. Make an entry in the helicopter logbook and historical service records indicating compliance with **PART I** of this Alert Service Bulletin.

## PART II: Inspection of the cargo hook fittings

- 1. Prepare the helicopter for maintenance.
- 2. Verify if the helicopter is fitted with the cargo hook provisions kit.
- 3. If the helicopter does not have the cargo hook provisions kit, proceed to step 9.
- 4. If the helicopter is fitted with the cargo hook provisions kit, proceed to step 5.

# -NOTE-

Helicopter interior configurations will vary. Refer to applicable Instructions for Continued Airworthiness (ICA) to gain access to the inspection area.

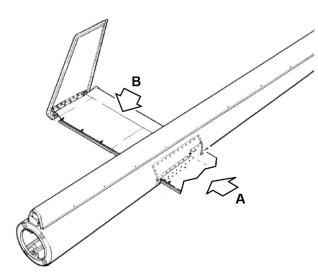
- 5. Verify the tare torque on the attaching fasteners (Qty 16) of the cargo hook fittings on the passenger seat bulkhead (Figure 2) as follow. Verify one fastener at a time. (BHT-206-SI-2012)
  - a. Measure the tare torque of the insert (BHT-ALL-SPM Chapter 2, Section 2).
  - b. The minimum tare torque of the inserts shall be 2.0 inch-pounds. (0.23 Nm).
- 6. If the tare torque of a specific insert does not meet the minimum value, do the following for each discrepant insert:
  - a. Remove and discard the screw installed in the discrepant insert. Retain washer if it is serviceable.
  - b. Remove and discard a screw installed in a vertically adjacent insert. Retain washer if it is serviceable.

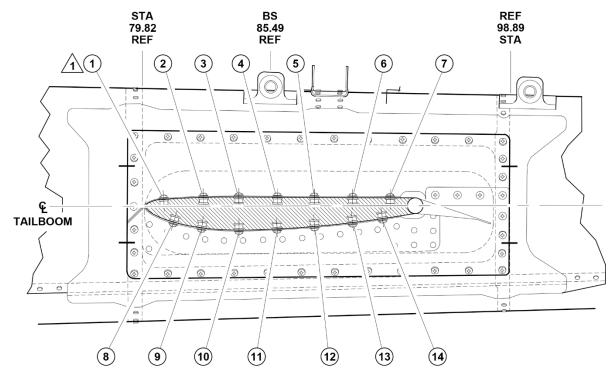
-NOTE-

The replacement of vertically adjacent screw is only to allow safetying of bolt in the discrepant insert.

- c. Install new bolts NAS6603H4 with one washer NAS1149D0332J at the locations where the original screws were discarded.
- d. Torque the bolts to 20-25 inch-pounds (2.3-2.8 Nm) plus tare torque.
- e. Safety the new bolts together using (C-405) safety wire (BHT-ALL-SPM, Chapter 8).
- f. Torque all other disturbed fasteners to 20-25 inch-pounds. (2.3-2.8 Nm) plus tare torque.
- 7. If inserts with tare torque below the minimum requirement are found, report the results to Product Support Engineering at <a href="mailto:productsupport@bellflight.com">productsupport@bellflight.com</a>.
- 8. Make an entry in the helicopter logbook and historical service records indicating compliance with **PART II** of this Alert Service Bulletin.

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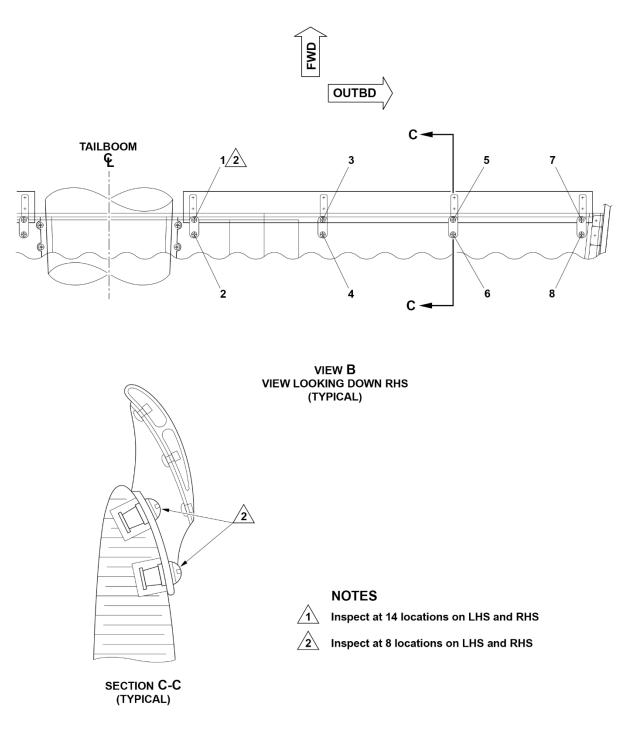


VIEW A LOOKING OUTBOARD LHS (TYPICAL

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Figure 1 (Sheet 1 of 2) – Horizontal Stabilizer Inspection

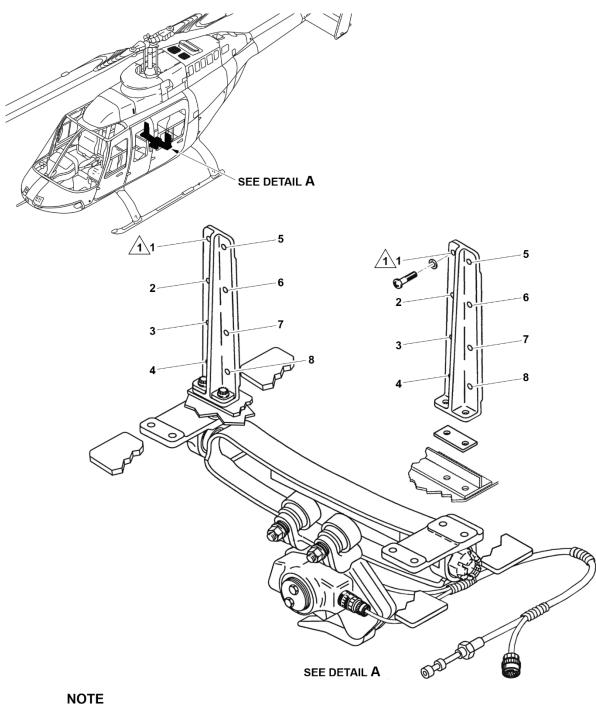
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# Figure 1 (Sheet 2 of 2) – Horizontal Stabilizer Inspection

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# Figure 2 – Cargo Hook Fittings Inspection

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