

#### **ALERT SERVICE BULLETIN**

**212-21-167** 20 December 2021

MODEL AFFECTED: 212

SUBJECT: MAIN ROTOR SCISSORS & SLEEVE HUB ASSEMBLY COLLECTIVE 204-011-405-013 IDENTIFICATION

HELICOPTERS AFFECTED: Serial numbers 30501 through 30999, 31101 through 31311, 32101 through 32142 and 35001 through 35103.

# **COMPLIANCE: PART I**: Within 100 flight hours or 3 months after the release date of this bulletin.

**PART II**: At the next scheduled removal or no later than 600 flight hours / 12 months after accomplishment of **PART I**.

#### **DESCRIPTION:**

Bell has been made aware that some scissors & sleeve Hub Assembly Collectives 204-011-405-013 were delivered without a serial number or with an ink-stamped serial and part number only. Since the "Hub Assembly" is a life-limited item listed in the Maintenance Manual Chapter 4, a permanently marked part number and serial number shall be assigned to it.

**PART I** of this bulletin mandates the inspection of the Hub Assembly 204-011-405-013 for the presence of a serial and part number as well as proper documentation for accumulated flight time tracking.

**PART II** of this bulletin provides instructions to correctly mark the Hub Assembly part and serial numbers and if non existing, create documentation for component tracking.

ASB 212-21-167 Page 1 of 7 Approved for public release. The 204-011-405-101 is the latest Hub Assembly configuration procurable through Bell Spares as a direct replacement for the Hub Assembly 204-011-405-013.

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

# APPROVAL:

The engineering design aspects of this bulletin are FAA approved for FAA certified helicopters as listed in the applicable Type Certificate Data Sheet. For non FAA certified helicopters, the engineering design aspects of this bulletin are Bell Engineering 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 1.0 man-hour is 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.

# 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>
204-011-405-101	Hub Assembly Collective	1 (1)

**NOTE 1:** Required only if the Hub Assembly 204-011-405-013 has reached the life limit published in the 212 Maintenance Manual (BHT-212-MM), Chapter 4.

### 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	Nomenclature	Qty (Note)	<u>Reference *</u>
2230-00425-00	Primer, Epoxy Polyamide	1PT (1)	C-204

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

**NOTE 1:** The quantity indicated is the format the product is delivered in. Actual quantity required to accomplish the task may be less.

#### SPECIAL TOOLS:

None required.

#### WEIGHT AND BALANCE:

Not affected.

### ELECTRICAL LOAD DATA:

Not affected.

#### **REFERENCES:**

BHT-212-IPB Illustrated Parts Breakdown BHT-212-MM Maintenance Manual BHT-ALL-SPM

#### PUBLICATIONS AFFECTED:

BHT-212-IPB Illustrated Parts Breakdown

#### **ACCOMPLISHMENT INSTRUCTIONS:**

**PART I.** Hub Assembly 204-011-405-013 inspection for proper serial and part number marking and Historical Service Record.

- 1. Prepare the helicopter for maintenance.
- 2. Confirm if there is a Historical Service Record (HSR) for the Hub Assembly (204-011-405-013) and that it contains the serial and part numbers.

- 3. Gain access to the Hub Assembly 204-011-405-013 and inspect for the presence of part number and serial number matching the Historical Service Record (HSR) at the location shown on Figure 1.
- 4. If the Hub Assembly is not correctly marked, as shown in Figure 1, proceed with **PART II**.
- 5. If the Hub Assembly is correctly marked, as shown in Figure 2, make an entry in the helicopter logbook and historical service records indicating findings and compliance with **Part I** of this Alert Service Bulletin.
- If Part II of this ASB is not going to be accomplished immediately, make an entry in the helicopter logbook and historical service records indicating compliance with Part I of this Alert Service Bulletin with an annotation to accomplish Part II within the required compliance time stated in this ASB.

**PART II.** Hub Assembly part and serial number marking.

1. Prepare the helicopter for maintenance and gain access to the Hub Assembly.

# CAUTION

Maximum depth of vibro-etching or dot-peening <u>shall not</u> exceed 0.005-inch (.127 mm). Part and serial numbers shall be marked in the scalloped area of the hub as shown in Figure 2 of this ASB; to a minimum height of 0.062-inch (1.57 mm) and no closer than 0.100-inch (2.54 mm) to any edge.

- 2. If the Hub Assembly has an ink-stamped part and serial number matching the HSR (refer to example shown in Figure 1), permanently mark the part and serial number on the Hub Assembly by vibro-etching or dot-peening (Figure 2).
- 3. If the Hub Assembly <u>does not</u> have a part number and serial number, create a unique serial number for each Hub Assembly. Using one or two prefix letters consistent with the company name of the operator or repair facility accompanied by a dash and 4 or 5 digits is considered as an industry serial number marking standard. Vibro-etch or dot-peen the Hub Assy with the part number and the assigned serial number (Figure 2).

For example, Papa Tango Aviation Inc. could use "204-011-405-013 / PT-01234".

- 4. After marking the part and serial number identification, apply brush cadmium plating solution (C-108) to the affected area (BHT-ALL-SPM). As an alternate and if brush cadmium plating isn't available, apply two coats of polyamide epoxy primer (C-204).
- 5. If no Historical Service Record exists for the Hub Assy, create one as follows:
  - a. Print a blank form from <u>www.bellhelicopter.net</u> under the "GENERAL INFO" tab.

- b. Enter the Hub Assembly part number and the serial number created above.
- c. Add the following note beside the serial number: "Serial number created as per ASB 212-21-XXX"
- d. Enter the actual flight hours or the flight hour value calculated.
- e. Ensure the Hub Assembly information is entered on the HSR.
- 6. The Hub Assembly 204-011-405-013 is a life-limited item that should have been tracked by the operator even if the part was not correctly identified.

Contact Bell Product Support <u>immediately</u> if any hub assemblies are found without installation history and/or unknown accumulated total flight time; these shall be addressed on a case-by-case basis.

7. Make an entry in the helicopter logbook and historical service records indicating findings and compliance with this Alert Service Bulletin.



Figure 1 – Hub Assembly Ink-Stamped Part Number and Serial Number



Figure 2 – Vibro-Etched Part Number and Serial Number Location

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