

ALERT SERVICE BULLETIN

205B-15-65

8 September 2015

MODEL AFFECTED: 205B

SUBJECT: TAIL ROTOR FLIGHT CONTROL TUBE 212-001-055-101 AND BEARING DAS4-14A1-512, INSPECTION OF.

HELICOPTERS AFFECTED: All helicopter serial numbers with a total accumulated flight time greater than 300 flight hours.

COMPLIANCE: Within the next 100 flight hours or 90 days, whichever comes first, after the date of issuance as indicated on this bulletin and every 300 flight hours or 12 months thereafter, whichever comes first.

DESCRIPTION:

Bell Helicopter received a report of a tail rotor control tube 212-001-055-101 found cracked (Ref. OSN 205B-15-18). The investigation revealed that the bearing DAS4-14A1-512 where the lower end of the control tube connects did not rotate freely due to excessive wear damage. This condition resulted in excessive bending loads in the control tube causing fatigue cracking. This Alert Service Bulletin mandates an initial inspection of the tube and the bearings that the control tube connects to. In addition, a recurring 300 hours/12 months Special Inspection of the tube and the affected bearings will be added to Chapter 5 of the Maintenance Manual. 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.

CONTACT INFO:

For any questions regarding this bulletin, please contact:

Bell Helicopter Product Support Engineering - Medium Helicopters
Tel: 450-437-6201 / 1-800-363-8028 / psemedium@bh.com

MANPOWER:

Approximately 3 man-hours are required to complete 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 Helicopter Textron Supply Center.

<u>Part Number</u>	<u>Nomenclature</u>	<u>Qty*</u>
DAS4-14A1-512	Bearing	A/R
120-013-4A	Sleeve	A/R

* Will require ordering only if bearings require replacement.

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 Helicopter Textron Supply Center.

<u>Part Number</u>	<u>Nomenclature</u>	<u>Qty</u>	<u>Reference *</u>
2230-00425-00	Epoxy Polyamide Primer	A/R	C-204

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

SPECIAL TOOLS:

<u>Part Number</u>	<u>Nomenclature</u>
T101873-13	Staking tool

WEIGHT AND BALANCE:

Not affected.

ELECTRICAL LOAD DATA:

Not affected.

REFERENCES:

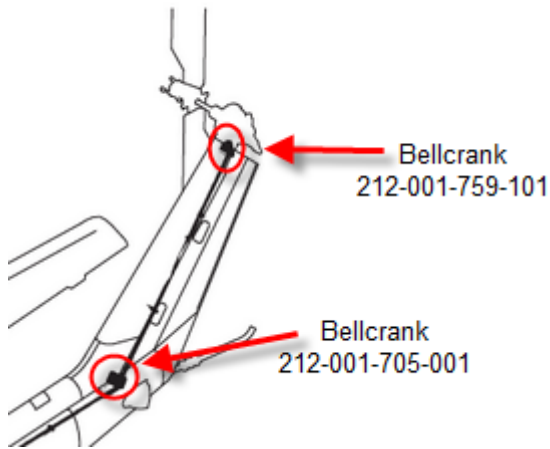
BHT-212-MM, Maintenance Manual
BHT-ALL-SPM, Standard Practices Manual

PUBLICATIONS AFFECTED:

BHT-212-MM, Maintenance Manual

ACCOMPLISHMENT INSTRUCTIONS:

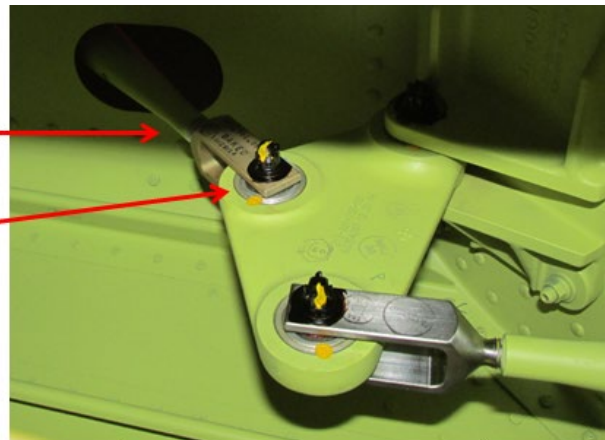
1. Prepare the helicopter for maintenance.
2. Gain access to the tail rotor control tube 212-001-055-101 and bellcranks 212-001-705-001 and 212-001-759-101.
3. Disconnect both ends of the tail rotor control tube 212-001-055-101 from the corresponding bellcranks (Figure 1).
4. Without removing the tail rotor control tube, visually inspect the flight control tube 212-001-055-101 for cracks. If a crack is found, remove the tube from service.
5. Inspect both bearings DAS4-14A1-512 for freedom of movement. Bearings shall be free to move in all directions and rotate freely. If a defective bearing is found, replace the defective bearing in accordance with the BHT-ALL-SPM.
6. Re-connect the tail rotor control tube in accordance with the 212 Maintenance Manual, Chapter 67.
7. Make an entry in the helicopter logbook and historical service records indicating compliance with this Alert Service Bulletin.
8. Until the Special Inspection is incorporated into the applicable Maintenance Manual, Chapter 5, accomplish the inspection in accordance with this Alert Service Bulletin every 300 flight hours or 12 months, whichever occurs first.



Upper Bellcrank 212-001-759-101

Ref. tube p/n 212-001-055-101

1. Disconnect at this location
2. Bearing to be inspected



Lower Bellcrank 212-001-705-001

Figure 1