



A Textron Company

## ALERT SERVICE BULLETIN

**206-24-144**

25 July 2024

**MODEL AFFECTED:** 206A/B and TH-67

**SUBJECT:** SWASHPLATE OUTER RING AND COLLECTIVE LEVER, CLEARANCE CHECK OF

**HELICOPTERS AFFECTED:** Serial numbers 4 through 4690 and 5101 through 5313

**COMPLIANCE:**

**PART I:** Within the next 100 flight hours or 180 days whichever occurs first, after the release date of this bulletin.

**PART II:** After accomplishment of main rotor flight controls rigging.

### DESCRIPTION:

Bell has received reports of swashplate drive collar set fracture due to contact between the swashplate outer ring and collective lever assembly. Incorrect rigging and lack of clearance check between the swashplate outer ring and the collective lever are the suspected root causes. **PART I** of this ASB mandates a one-time clearance check for proper clearance between the swashplate outer ring and the collective lever. **PART II** introduces a new requirement to ensure proper clearance is achieved between the swashplate outer ring and the collective lever after accomplishment of main rotor flight controls rigging. All applicable Maintenance Manuals (MM) will be revised to incorporate the new clearance check requirement.

### 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 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:**

None required.

**SPECIAL TOOLS:**

Hydraulic Test Stand, specifications according to BHT-206A/B-SERIES-MM Maintenance Manual, Chapter 29 (Available commercially).

**WEIGHT AND BALANCE:**

Not affected

**ELECTRICAL LOAD DATA:**

Not affected.

**REFERENCES:**

BHT-206A/B-SERIES-MM Maintenance Manual, Chapter 29  
BHT-206A/B-SERIES-MM Maintenance Manual, Chapter 67  
BHT-206A/B-SERIES-MM Maintenance Manual, Chapter 71

**PUBLICATIONS AFFECTED:**

BHT-206A/B-SERIES-MM Maintenance Manual, Chapter 67

## **ACCOMPLISHMENT INSTRUCTIONS:**

### **PART I: Main rotor flight controls One-Time clearance check.**

1. Prepare the helicopter for maintenance.
2. Remove forward fairing 206-061-801 (BHT-206A/B-SERIES-MM, Chapter 71).

#### **WARNING**

Make sure that there are no personnel and/or equipment on or near the flight controls. Operation of the flight controls can cause injury and/or damage to the equipment.

#### **CAUTION**

Make sure that all the parts from the collective control system and the cyclic control system are installed in their correct position and that all the support equipment used for the rigging are removed before accomplishing this procedure.

#### **CAUTION**

Clearance check must be performed with hydraulic boost applied to the system. Failure to do so will lead to erroneous measurements.

3. Inspect the swashplate outer ring and the collective lever for evidence of contact. If there is evidence of contact, contact Product Support Engineering for disposition.
4. Connect hydraulic test stand (BHT-206A/B-SERIES-MM, Chapter 29).
5. Position the collective control stick against the down stop. Tighten the friction knob to hold the collective control stick in position.
6. Position the cyclic control stick fully forward and centered laterally. Tighten the friction knob to hold the cyclic control stick in position.

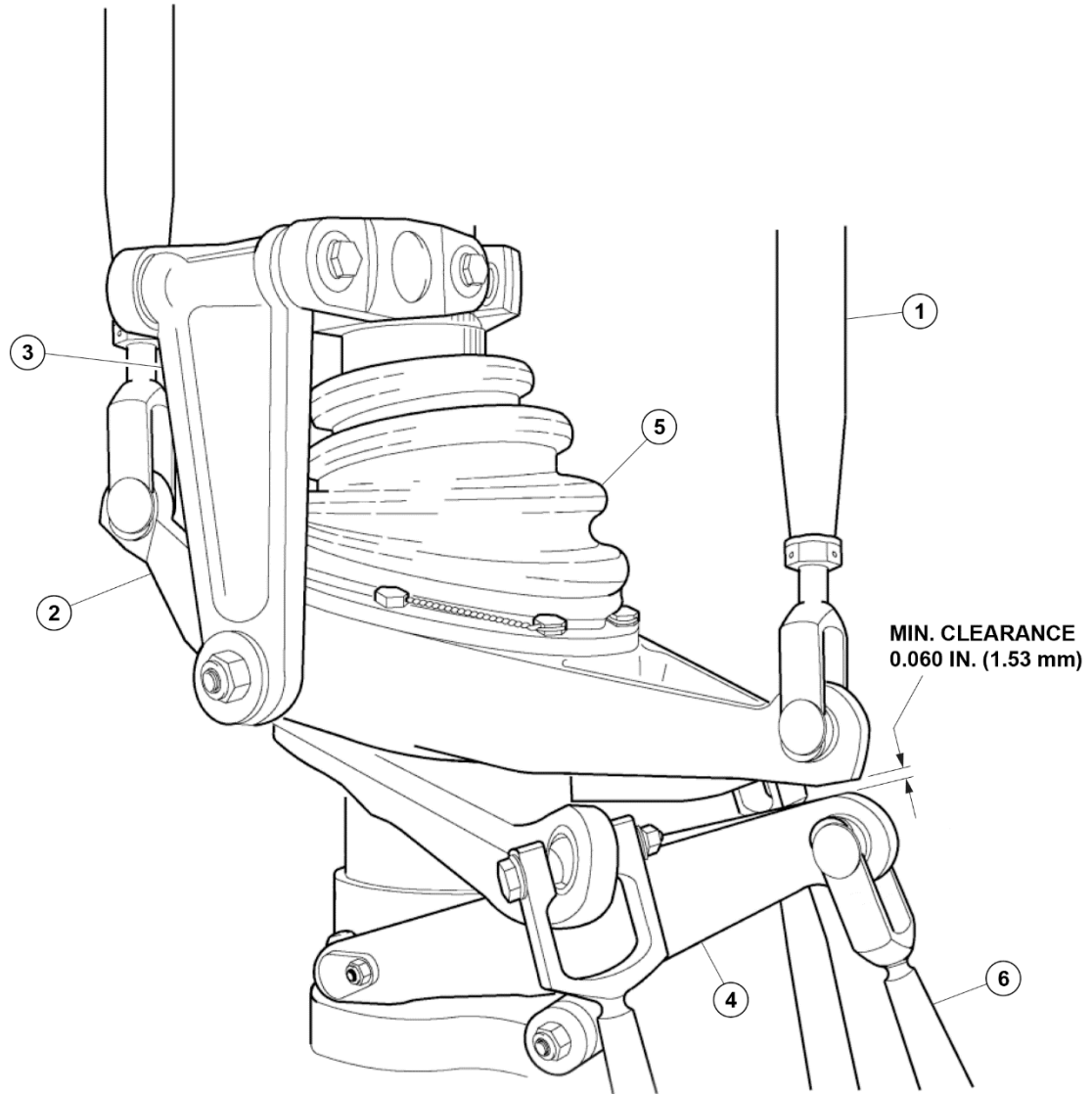
**CAUTION**

When rotating the swashplate outer ring, make sure it does not contact the collective lever assembly. If contact is made, damage to the outer ring and collective lever can occur.

7. Slowly rotate the swashplate outer ring (2, Figure 1) until one of the pitch link attachment points is directly over the collective lever assembly (4).
8. Measure and record the clearance between the collective lever assembly (4) and the swashplate outer ring (2).
9. Repeat steps 7 and 8 for the second pitch link attachment point.
10. If clearance is 0.060 inch (1.53mm) or more at both pitch link attachment points, go to step 12.
11. If clearance is less than 0.060 inch (1.53 mm) at one or both pitch link attachment points, rigging of the collective and cyclic flight controls (BHT-206A/B-SERIES-MM, Chapter 67) is required prior to next flight.
  - a. If minimum clearance of 0.060 inch (1.53mm) cannot be achieved at both pitch link attachment points after collective and cyclic controls rigging, it is acceptable to adjust the length of collective link 206-001-024 or 206-001-189 (6). Tolerance for rigging dimensions of the collective lever must be maintained (BHT-206A/B-SERIES-MM, Chapter 67 and Figure 2).
  - b. If minimum clearance of 0.060 inch (1.53mm) cannot be obtained at both pitch link attachment points without exceeding collective lever dimensions tolerances, contact Product Support Engineering.
12. Disconnect hydraulic test stand (BHT-206A/B-SERIES-MM, Chapter 29).
13. Install forward fairing 206-061-801 (BHT-206A/B-SERIES-MM, Chapter 71)
14. Make an entry in the helicopter logbook and historical service records indicating findings and compliance with **PART I** of this Alert Service Bulletin.

**PART II: Clearance check after main rotor flight controls rigging.**

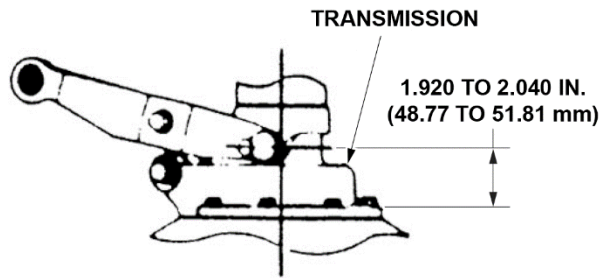
1. After main rotor flight controls rigging, accomplish steps 1 through 13 in accordance with **PART I** of this bulletin.
2. Make an entry in the helicopter logbook and historical service records indicating findings and compliance with **PART II** of this Alert Service Bulletin.



- 1. Pitch link
- 2. Swashplate outer ring
- 3. Idler link
- 4. Collective lever assembly
- 5. Boot
- 6. Collective link

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**Figure 1 - Collective lever assembly - clearance check**



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**Figure 2 - Collective lever rigging dimensions**