

# **Bell Helicopter** **TEXTRON**

A Subsidiary of Textron, Inc.

June 26, 2006

**TO: All Owners/Operators of Bell 214ST Helicopters**

**SUBJECT: REVISION "A" TO TECHNICAL BULLETIN 214ST-04-174:  
SCISSORS AND SLEEVE ASSEMBLY, SLEEVE UPPER NUT,  
P/N 214-010-418-001, ADDITIONAL MAINTENANCE MANUAL  
INSPECTION REQUIREMENTS.**

Revision "A" to this bulletin adds a note concerning upper nut thread direction on page 3 and in Figure 1.

**TECHNICAL BULLETIN**  
**Bell Helicopter** **TEXTRON**

A Subsidiary of Textron Inc.

No. 214ST-04-174

Date 03-08-04

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DATE Jun 26, 2006
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REV A
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**MODEL AFFECTED:** 214ST

**SUBJECT:** **SCISSORS AND SLEEVE ASSEMBLY, SLEEVE UPPER NUT, P/N 214-010-418-001, ADDITIONAL MAINTENANCE MANUAL INSPECTION REQUIREMENTS.**

**HELICOPTERS AFFECTED:** All Model 214ST helicopters.

**COMPLIANCE:** Effective upon receipt of this Technical Bulletin.

**DESCRIPTION:**

Several instances of lost torque to the Scissors and Sleeve Assembly Sleeve Upper Nut, P/N 214-010-418-001, have been reported. A loose upper nut will allow the collective hub bearing to spin and can result in damage to the bearing, sleeve, hub assembly, upper nut, and/or upper seal. As a result, BHTI has determined that additional inspection tasks are necessary.

The 214ST Maintenance Manual Chapter 5 "B" Inspection (250 hours) requirements, Pylon Compartment, are revised to add a torque check of the sleeve upper nut with the detailed procedure added to the appropriate section of Chapter 62.

Additionally, a torque check of the sleeve upper nut is added to the "Between 5 to 25 Hours Flight Operation After Installation" portion of the Special Inspections section of Chapter 5.

**APPROVAL:**

Not required.

**MANPOWER:**

Approximately 1.0 additional man-hour will be required to complete this bulletin in conjunction with the “B” Inspection. Man-hours are based on hands-on time, and may vary with personnel and facilities available.

**MATERIALS:**

**Consumable Material:**

The following material is required to accomplish this bulletin, however this material is considered consumable (bench stock) material and may not require ordering depending on the operators consumable material stock levels. This material may be obtained through your Bell Helicopter Textron Supply Center.

<u>Part Number</u>	<u>Nomenclature</u>	<u>Quantity</u>	<u>Reference</u>
MS20995C32 (AS100028)	Lockwire	A/R	C-405

**SPECIAL TOOLS:**

T101709 Wrench Set

**WEIGHT AND BALANCE:**

Not affected.

**ELECTRICAL LOAD DATA:**

Not affected

**REFERENCES:**

BHT-214ST-IPC Illustrated Parts Breakdown, Chapter 62  
BHT-214ST-MM Maintenance Manual, Chapters 5 and 62  
BHT-214ST-CR&O Component Repair and Overhaul, Chapter 62

**PUBLICATIONS AFFECTED:**

BHT-214ST-MM Maintenance Manual, Chapters 5 and 62

**ACCOMPLISHMENT INSTRUCTIONS:**

1. Revision to Maintenance Manual, Chapter 5, Scheduled Inspections, paragraph 5-8, B Inspection (250 Hours).

Revise Paragraph 5-8, **PYLON COMPARTMENT**, by revising sub-paragraph 11. as noted below:

11. Inspect scissors and sleeve drive plate spline and torque check sleeve upper nut.

2. Revision to Maintenance Manual, Chapter 62, paragraph 62-50.

Revise paragraph 62-50, **Inspection – required by “B-Inspection (250 hours)” per chapter 5.**, to add the following after subparagraph 8.c.:

- 8A. Torque check the sleeve upper nut.

- a. Cut and remove lockwire from the upper nut locking pin and remove the locking pin (refer to BHT-214ST-CR&O Chapter 62)

**NOTE**

The upper nut has left hand threads.

- b. Using the wrench assembly portion of the T101709 Wrench set, verify torque on hub upper nut is between 350 to 450 foot-pounds.

- c. If nut torque is between the specified range and loss of torque is not evident, proceed to d. If torque is below minimum specified, or a loss of torque is evident, proceed to e.

- d. Install locking pin into the upper hub nut and secure with lockwire (refer to BHT-214ST-CR&O Chapter 62).

- e. Remove scissors and sleeve assembly, disassemble, and inspect for damage (Paragraph 62-46 and BHT-214ST-CR&O, Chapter 62).

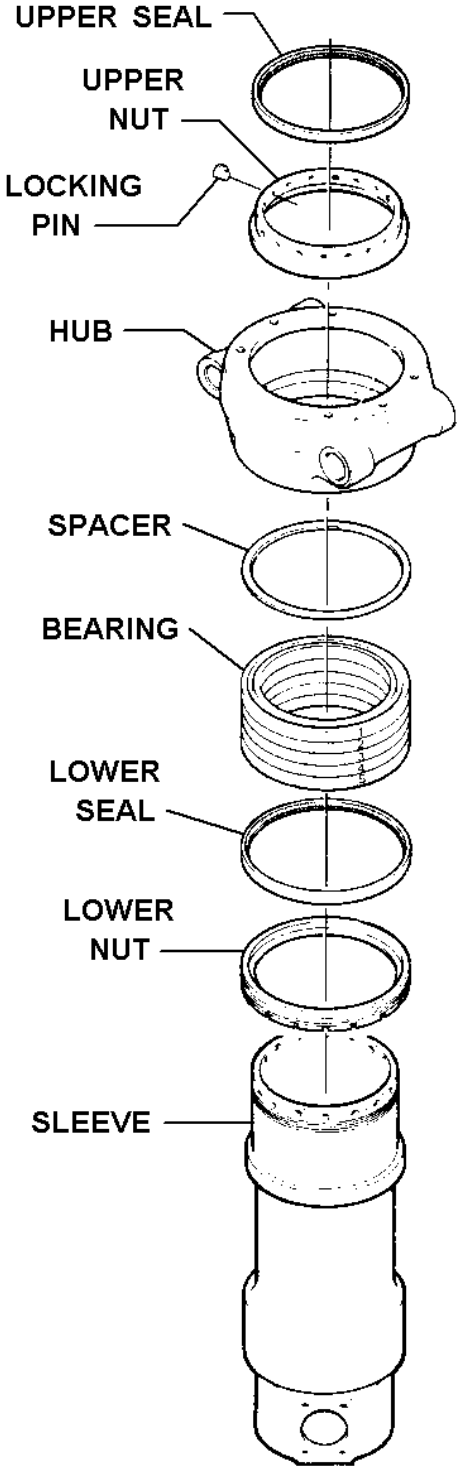
3. Revision to Maintenance Manual, Chapter 5, Special Inspections, paragraph 5-22, **Between 5 to 25 Hours Flight Operation After Installation.**

Revise Paragraph 5-22 by adding the following as noted below:

**SCISSORS AND SLEEVE UPPER HUB NUT.**

A

After Installation of a new, repaired, or overhauled scissors and sleeve assembly, and each 25 hours thereafter until no further torque loss is experienced, torque check the sleeve upper nut per BHT-214ST-MM, Chapter 62, paragraph 62-50.



TORQUE CHECK UPPER NUT PER TEXT

- NOTE -

UPPER NUT HAS LEFT HAND THREADS

A

FIGURE 1

COLLECTIVE SLEEVE AND HUB  
ASSEMBLY STACK-UP