

TECHNICAL BULLETIN
Bell Helicopter **TEXTRON**

A Subsidiary of Textron Inc.

No. 214ST-02-166

Date 01-25-02

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MODEL AFFECTED: 214ST

SUBJECT: TAIL ROTOR HUB ASSEMBLY BLADE PITCH CHANGE BEARING BOLTS, ADDITIONAL MAINTENANCE MANUAL AND COMPONENT REPAIR AND OVERHAUL MANUAL INSPECTION AND ASSEMBLY REQUIREMENTS

HELICOPTERS AFFECTED: ALL Model 214ST Helicopters

COMPLIANCE: Effective upon receipt of this Technical Bulletin

DESCRIPTION:

Service experience indicates that more specific inspection and assembly criteria will assist operators in assuring continued airworthiness of the tail rotor hub assembly blade pitch change bearing bolts, P/N 20-071-8-49H.

The 214ST Maintenance Manual, CHAPTER 5, "D" Inspection requirements are revised to include a specific inspection of the tail rotor hub assembly blade pitch change bearing bolts and to provide an application of corrosion preventive compound to the bolt shanks at reassembly.

In addition, the Component Repair and Overhaul Manual is revised to include the application of corrosion preventive compound to the bolt shanks at reassembly.

APPROVAL:

Not required.

MANPOWER:

Approximately 1.3 additional man-hours will be required when performing the “D” Inspection requirements as a result of this bulletin. 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 the intent of 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>
MIL-C-16173,GR2 6OZ	Corrosion Preventive Compound	1	C-104
MIL-C-16173,GR1 2OZ	Corrosion Preventive Compound	1	C-101

SPECIAL TOOLS:

None required.

WEIGHT AND BALANCE:

Not affected.

ELECTRICAL LOAD DATA:

Not affected.

REFERENCES:

- BHT-214ST-IPB Illustrated Parts Breakdown, Chapter 64
- BHT-214ST-MM Maintenance Manual, Chapter 64
- BHT-214ST-CR&O Component Repair & Overhaul Manual, Chapter 64
- BHT-ALL-SPM Standard Practices Manual, Chapter 3

PUBLICATIONS AFFECTED:

BHT-214ST-MM Maintenance Manual, Chapter 64
BHT-214ST-CR&O Component Repair & Overhaul Manual, Chapter 64

ACCOMPLISHMENT INSTRUCTIONS:

1. Refer to 214ST Maintenance Manual, Chapter 5, Scheduled Inspections, "D" Inspection:

Revise Paragraph 5-10 by adding new sub-heading, TAIL ROTOR, following sub-heading TAILBOOM tasks:

TAILROTOR

1. Inspect and apply corrosion preventative compound to tail rotor blade pitch change bearing bolt shanks per Maintenance Manual paragraph 64-4A.
2. Refer to 214ST Maintenance Manual, Chapter 64 – TAIL ROTOR:

Add sub-paragraph 64-4A, TAIL ROTOR BLADE PITCH CHANGE BEARING BOLTS, as shown below:

64-4A. TAIL ROTOR BLADE PITCH CHANGE BEARING BOLTS

NOTE

Required by "D" Inspection (1000 hours/1 year, Chapter 5)

1. Remove tail rotor blade pitch change bearing bolts per BHT-214ST-CR&O.
2. Visually inspect for mechanical damage and corrosion. If damage or corrosion exists in base metal, replace bolt. If cadmium plating is worn or damaged use brush-cad to touch up.
3. Using a 10X glass, inspect bolt shanks for cracks.

NOTE

During the following steps, apply corrosion preventative compound to bolt shanks only and ensure corrosion preventative compound does not contaminate bolt threads during

assembly.

4. If serviceable, apply corrosion preventive compound (C-104) to bolt shanks and reinstall per BHT-214ST-CR&O.
3. Refer to 214ST Component Repair and Overhaul Manual, Chapter 64 – TAIL ROTOR:

Revise paragraph 64-20, sub-paragraph 3, as noted below (existing sub-paragraphs 3.c & 3.d remain unchanged):

3. Install grip plate set (2) and pitch horn (15) on left side of yoke assembly (30) with pitch horn toward assembler as follows:

NOTE

During the following steps, apply corrosion preventive compound to bolt shanks only and ensure corrosion preventive compound does not contaminate bolt threads during assembly.

- a. Apply corrosion preventive compound (C-104) to shank of inboard bolt (8) and install along with chamfered washer (9), and nut (11).
- b. Apply corrosion preventive compound (C-104) to shank of outboard bolt (8) and install along with chamfered washer (9), dynamic balance bracket (10), and nut (11).

Revise paragraph 64-20, sub-paragraph 4, as noted below:

4. Torque nuts (11 and 14). Apply corrosion preventative compound (C-101) to external surfaces of washers (9) and nuts (11 and 14).

Revise paragraph 64-20, sub-paragraph 5, as noted below:

5. Secure inboard bolt (8) and pitch horn bolts (12) with lockwire (C-405). Apply corrosion preventative compound (C-101) to external surfaces of bolts (8 and 12) and washers (9 and 13).

Revise paragraph 64-21 to add sub-paragraph 3A, as noted below:

- 3A. Apply corrosion preventative compound (C-101) to external surfaces of bolts (3), outboard bolt (8), washers (4 and 9), and nuts (7 and 11).