

ALERT SERVICE BULLETIN

Bell Helicopter **TEXTRON**
A Subsidiary of Textron Inc.

NO. 205-01-85
DATE 10-18-01
PAGE 1 of 4

DATE
REV

MODEL AFFECTED: 205A/ A1

SUBJECT: MAIN ROTOR HEAD INBOARD FITTING 204-012-102-009, INSPECTION OF SPECIFIC SERIAL NUMBERS

HELICOPTERS AFFECTED: Model 205 helicopters serial number 30001 through 30187 and serial numbers 30189 through 30332.

COMPLIANCE: Within the next 25 hours, but no later than December 31, 2001.

DESCRIPTION:

Bell Helicopter has investigated the possibility that a certain serial number batch of 204-012-102-009 main rotor inboard fittings may have been manufactured with an incorrect thread depth. This thread mates with the worm gear for TT strap adjustment and may not be sufficiently engaged. This ASB is issued to inspect only specific serial number strap fittings for correct thread engagement. Any strap fitting that fails the engagement check is to be returned to Bell Helicopter.

APPROVAL:

The engineering design aspects of this bulletin are FAA/DER approved.

MANPOWER:

Approximately 1.0 man-hour is required to complete the inspection portion of this bulletin. Man-hours are based on hands-on time, and may vary with personnel and facilities available.

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AN APPROPRIATE ENTRY SHOULD BE MADE IN THE AIRCRAFT LOG BOOK UPON ACCOMPLISHMENT
IF OWNERSHIP OF AIRCRAFT HAS CHANGED PLEASE FORWARD TO NEW OWNER

WARRANTY:

Owners/operators of 204/205 helicopters who comply with the instructions outlined in this bulletin are eligible for a special 100% credit for the replacement Inboard Strap Fitting.

To receive this credit:

- Customers must order the replacement parts from an approved BHTI supply source.
- Comply with the instructions outlined in this bulletin no later than December 31, 2001.
- Send a completed malfunction Report (MR) to BHT warranty Administration. A copy of the invoice referencing parts used to accomplish this bulletin must be attached to the Malfunction Report.

****NOTE**** Customers who fail to comply with the instruction in this bulletin after December 31, 2001 are not eligible for the special warranty credit provisions listed above.

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>Quantity</u>
204-012-102-109	Inboard Strap Fitting	*

*** Only required if fitting is found discrepant.**

SPECIAL TOOLS:

None required

WEIGHT AND BALANCE:

Not Affected

ELECTRICAL LOAD DATA:

Not affected

REFERENCES:

BHT-205-IPB Illustrated Parts Breakdown
BHT-205-M.M. Maintenance Manual
BHT-205-CR&O Component Repair and Overhaul Manual

PUBLICATIONS AFFECTED:

None affected

ACCOMPLISHMENT INSTRUCTIONS:

-NOTE-

Only the following 204-012-102-009 inboard fittings are affected by this bulletin. Other part number and serial number inboard fittings are not required to be inspected.

1. The following 204-012-102-009 inboard fittings are suspected of having an insufficient thread depth where they match with the 204-012-109-001 worm gear. Inspect inboard strap fittings **Serial Number A-05873 through A-05928** as follows. Serial numbers A-05872 and prior and A-05929 subsequent do not require inspection.
2. Flap the main rotor to obtain clearance between the static stop and the mast. Secure the blade as required to prevent movement.
3. Clean worm gear 204-012-109-001 and the inboard strap fitting as required to visually inspect the engagement of the worm gear with the inboard strap fitting.
4. Using an inspection mirror, visually verify full engagement of the worm gear teeth with the teeth of the inboard fitting. Full engagement means contact of both flanks of the worm gear with both flanks of the inboard fitting for the most fully engaged mesh. The flank of the gear can also be described as the contact face that contacts the opposing face of the inboard fitting thread. There may be a gap between the top (Major Diameter) of the worm gear and the base (Minor Diameter) of the strap fitting of up to .009 inch.
5. Place a torque wrench on the worm bolt and apply 60 inch lbs. of torque. The bolt should not turn under the applied torque.

6. Repeat procedure for opposite side of the M/R head.
7. If either, the worm gear is not fully engaged or the worm gear turns under the applied torque then the inboard strap fittings are suspected of being dimensionally discrepant in the thread area. All discrepant strap fittings are to be returned to:

Bell Helicopter Textron CPR Monitor
3000 South Norwood & Trinity Blvd.
Hurst, Texas, 76053
Attn. Quality Assurance

8. Replace all discrepant strap fittings with new or serviceable fittings, in accordance with 205 Component Repair and Overhaul Manual.
9. Annotate historical records for compliance with this bulletin.