Bell Helicopter
A Textron Company

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ALERT SERVICE BULLETIN UH-1H-11-06
11 May 2011
Revision A, 2 August 2011

MODEL AFFECTED: **UH-1H**

SUBJECT: **MAIN ROTOR HEAD INBOARD FITTING 204-012-102-005, INSPECTION OF SPECIFIC SERIAL NUMBERS.**

HELICOPTERS AFFECTED: **ALL UH-1H HELICOPTERS**

COMPLIANCE: Within the next 25 flight hours, but no later than 30 September 2011

DESCRIPTION:

Bell Helicopter has discovered that a certain serial number batch of 204-012-102-005 main rotor inboard fittings may have been manufactured with an incorrect thread depth. These threads mate with the worm gear for TT strap adjustment and may not be sufficiently engaged. This ASB is issued to inspect only specific serial number inboard strap fittings for correct thread engagement. Applicability of this bulletin to any spare part shall be determined prior to its installation on an affected aircraft. Any fitting that fails the engagement check is to be removed from service.

Revision A to this Alert Service Bulletin revises the torque verification portion of the inspection, adds an illustration, and extends the compliance date**.**

APPROVAL:

The engineering design aspects of this bulletin are Bell Helicopter Engineering approved.

CONTACT INFO:

For any questions regarding this bulletin, please contact:

Bell Helicopter Military Technical Support Product Support Engineering, Medium Helicopters. MTS-Medium@Bellhelicopter.textron.com 817-280-3548.

MANPOWER:

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

WARRANTY:

Owners / Operators of Bell Helicopters UH-1H who comply with the instructions in this Bulletin will be eligible to receive a credit for the replacement parts that fail the inspection requirements in the Accomplishment Instructions outlined in this Bulletin.

To receive this credit:

- Comply with the instructions contained in this Bulletin no later than the applicable date in the "compliance section" of this ASB.
- Purchase replacement parts as required in the materials section of this bulletin from a Bell approved source.
- Submit an MMIR to the Bell Warranty Department.

Customers who fail to comply with the instructions in this Bulletin before the 31 October 2011 are not eligible for the special warranty credit listed above. There is no 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.

Part Number	Nomenclature	Qty
204-012-102-005	Inboard Strap Fitting	*

* Only required if fitting is found discrepant.

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.

Part Number	Nomenclature	Qty	Reference *
None required.			

SPECIAL TOOLS:

None required.

WEIGHT AND BALANCE:

Not affected

ELECTRICAL LOAD DATA:

Not affected.

REFERENCES:

TM 55-1520-210-23P Illustrated Parts Breakdown
TM 55-1520-210-23 Maintenance Manual
DMWR 55-1560-196 Depot Maintenance Work Requirement

PUBLICATIONS AFFECTED:

None affected.

ACCOMPLISHMENT INSTRUCTIONS:

-NOTE-

Only the following 204-012-102-005 inboard strap fittings are suspected of having an insufficient thread depth. Inspect inboard strap fittings **Serial Number A-FS 7372 through A-FS 7444** as follows. A-FS 7371 and prior and A-FS 7445 and subsequent do not require inspection.

1. Prepare helicopter for maintenance.

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. Refer to Figure 1. Inboard fittings with incorrect thread depth will not fully engage the worm gear. Using an inspection mirror, visually inspect fitting and verify full engagement of the worm gear with the inboard fitting. Full engagement means contact of both flanks of the worm gear with both flanks of the inboard fitting teeth 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 0.009 inch.

CAUTION

If, as a result of the original issue of this ASB, the torque check described in the following paragraph was previously performed using 60 inch pounds of torque and the bolt did not move, and fitting engagement was correct, recheck at the lower torque is not necessary and no further action is required

If, as a result of the original issue of this ASB, the torque check described in the following paragraph was previously performed using 60 inch pounds of torque and the bolt moved at or prior to reaching 60 inch pounds, recheck bolt torque only using the 10 to 15 inch pounds noted in the following paragraph to ensure the bolt will not rotate.

If bolt does not rotate, the fitting is acceptable and no further inspection is required, proceed to step 9. If bolt rotates, but the fitting engagement is correct, inspect worm gear and fitting teeth for possible damage. If no damage is found proceed to step 9.

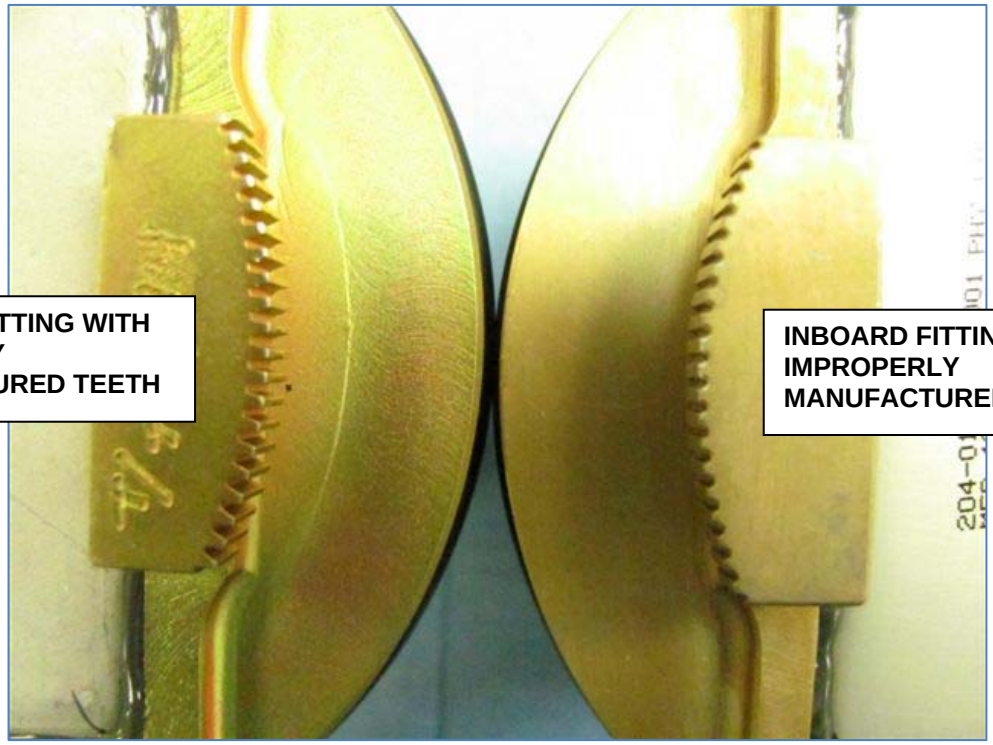
5. If visual inspection determines the fitting gear is not defective and engages the worm gear per paragraph 4, verify that the worm gear does not turn by placing a torque wrench on the worm gear bolt and apply 10 to 15 inch pounds of torque. The bolt should not turn under the applied torque.

6. Repeat this procedure for the opposite side of the main rotor head.

7. If either the worm gear is not fully engaged or the worm gear turns under the applied torque then the inboard strap fitting is suspect of being dimensionally discrepant in the thread area. All discrepant strap fittings are non-airworthy and are to be removed from service.

8. Replace all discrepant strap fittings with new or serviceable fittings in accordance with DMWR 55-1560-196.

9. Make an entry in helicopter historical service records indicating compliance with this Alert Service Bulletin.



INBOARD FITTING WITH CORRECTLY MANUFACTURED TEETH

INBOARD FITTING WITH IMPROPERLY MANUFACTURED TEETH

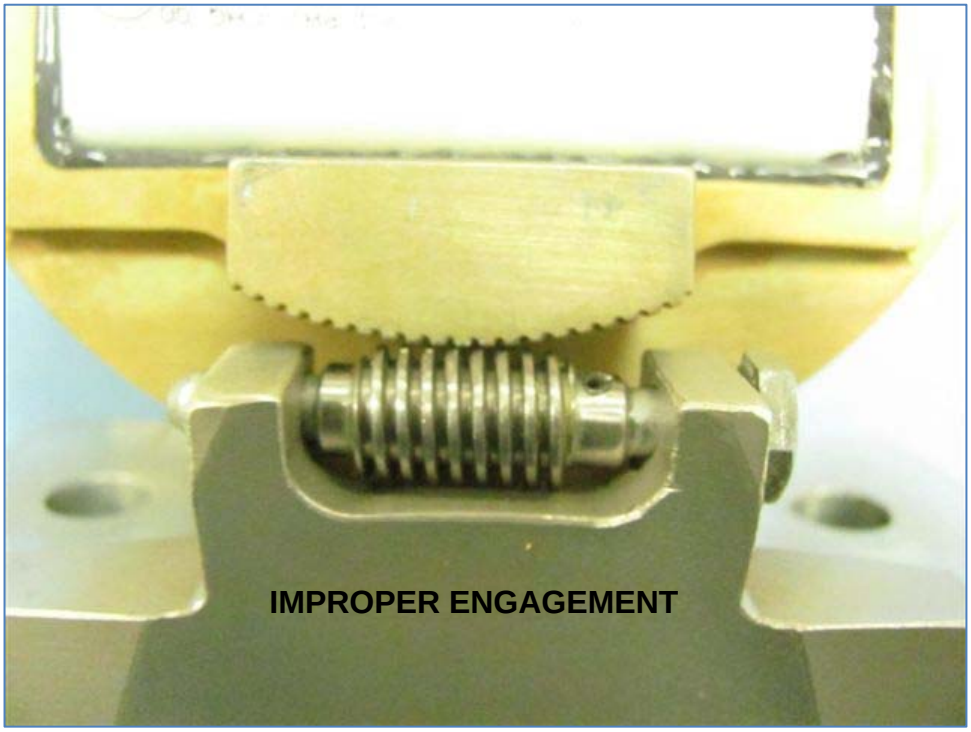


FIGURE 1