



A Textron Company

ALERT SERVICE BULLETIN

212-24-170

12 December 2024

MODEL AFFECTED: 212

SUBJECT: MAIN DRIVE SHAFT ASSEMBLY INNER COUPLING 212-040-687-001, INSPECTION OF

HELICOPTERS AFFECTED: Serial numbers 30501 through 30999, 31101 through 31311, 32101 through 32142, 35001 through 35108.

PART AFFECTED: Serial number BH008845.

COMPLIANCE: Within the next 600 flight hours or 12 months, whichever comes first after the release date of this bulletin.

DESCRIPTION:

The 212-040-687-001 main drive shaft assembly inner coupling, serial number BH008845, was part of a lot of five inner couplings that may have been produced with a manufacturing defect. This defect, if present, can be detected by Magnetic Particle Inspection (MPI) as surface crack(s) at the tooth roots as shown in Figure 1 of the Accomplishment Instructions. Four of the five affected inner couplings have been retrieved and only one of the four inner couplings was found with the manufacturing defect. The suspected inner couplings were sold through spares in the 2014 timeframe.

This Alert Service Bulletin (ASB) mandates a MPI of inner coupling serial number BH008845. If a MPI has already been accomplished as part of the main drive shaft assembly overhaul, and there was no anomaly, no further action is required.

Applicability of this bulletin to any spare part shall be determined prior to its installation on an affected helicopter.

APPROVAL:

The engineering design aspects of this bulletin are FAA approved for FAA certified helicopters as listed in the applicable Type Certificate Data Sheet. For non FAA certified helicopters, the engineering design aspects of this bulletin are Bell Engineering 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 will be required to accomplish the Magnetic Particle Inspection if accomplished as part of the scheduled 600 hours / 12 months lubrication interval. No additional man hour will be required if accomplished as part of the scheduled overhaul.

WARRANTY:

There is no warranty credit applicable for parts or labor associated with this bulletin.

MATERIAL:

Required Material:

The following material may be required for the accomplishment of this bulletin and may be obtained through your Bell Supply Center.

<u>Part Number</u>	<u>Nomenclature</u>	<u>Qty (Note)</u>
212-040-687-001	Inner Coupling	1 (1)

NOTE 1: Required only if inner coupling serial number BH008845 is found with the manufacturing defect shown in the Figure 1.

Consumable Material:

Refer to the 212 Component Repair and Overhaul Manual (BHT-212-CR&O).

WEIGHT AND BALANCE:

Not Affected.

ELECTRICAL LOAD DATA:

Not affected.

REFERENCES:

BHT-212-CR&O, Component Repair and Overhaul Manual, Chapter 63.

PUBLICATIONS AFFECTED:

None affected.

ACCOMPLISHMENT INSTRUCTIONS:

1. Within the compliance timeframe listed, perform a main drive shaft inner coupling serial number verification.
 - a. If inner coupling serial number BH008845 is not installed, go to step 2.
 - b. If inner coupling serial number BH008845 is installed, perform a MPI of the inner coupling before next flight (BHT-212-CR&O, Chapter 63).
 - (1) If the manufacturing defect shown in Figure 1 is not detected, go to step 2.
 - (2) If the manufacturing defect shown in Figure 1 is detected, contact Product Support Engineering and replace the affected inner coupling before next flight.
2. Make an entry in the helicopter logbook and historical service records indicating findings and compliance with this Alert Service Bulletin.

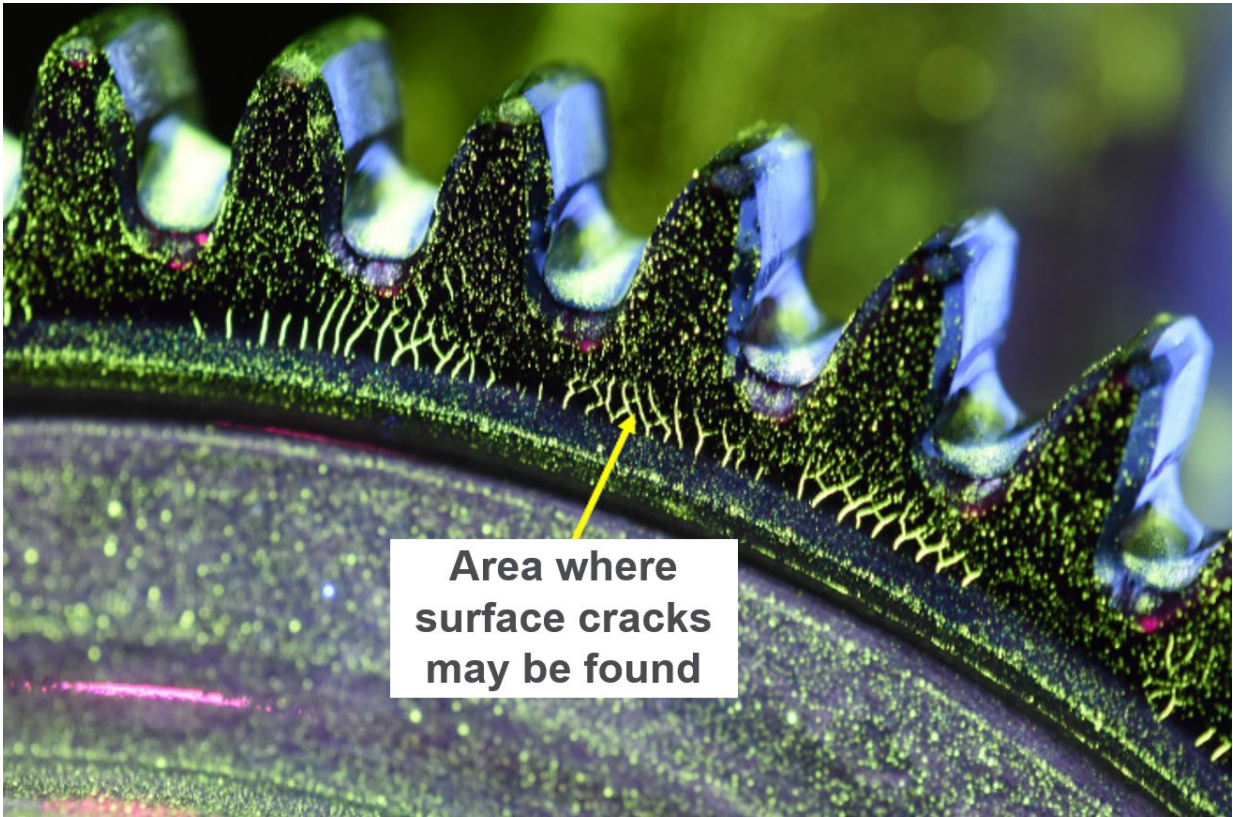


Figure 1. Area where surface cracks may be found.