

TECHNICAL BULLETIN

NO. 407-97-4

Bell Helicopter **TEXTRON**

A Division of Textron Canada Ltd.

DATE 2/5/97

DATE

REV.

12, 800 Rue de l'Avenir, Mirabel, Quebec J7J 1R4

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MODELS AFFECTED: 407

SUBJECT: **AFT ENGINE FIREWALL COVER**
206-064-902-137, REPLACEMENT OF.

HELICOPTERS AFFECTED: 407, Serial Numbers 53000 through 53009, 53011 through 53013, 53015, 53017 through 53022, and 53029.

[Helicopters Serial Numbers 53010, 53014, 53016, 53023 through 53028, and 53030 and subsequent will have the intent of this bulletin completed before delivery.]

[This Technical Bulletin does not apply to aircraft with Air-Conditioning Kit 407EC-200-1 or 407EC-201-1 installed.]

COMPLIANCE: At the decision of the operator, but recommended at the next scheduled inspection.

DESCRIPTION: Bell Helicopter has found that the original configuration cover half P/N 206-064-902-137, installed on the aft firewall of the engine compartment, can permit contact between the cover flanges and the oil cooler blower shaft.

A new design cover half P/N 206-064-902-145, has been made and includes a lower profile flange which gives the necessary clearance (Figure 1).

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APPROVAL:

The engineering design aspects of this Technical Bulletin are Transport Canada approved.

MANPOWER:

Approximately 0.5 man-hours are necessary to complete this Bulletin. The man-hours are based on hands-on time and can change due to the personnel and facilities available.

WARRANTY:

Owners/operators who comply with the instructions outlined in this bulletin are eligible for a special 100% warranty credit toward the purchase of the cover halves and the attaching hardware.

To receive this credit:

- Customers must order the replacement parts from an approved BHTI spares supply source.
- Comply with the instructions outlined in this bulletin by installing the listed parts no later than 31 December 1997.
- Submit a completed Malfunction Report to BHT Warranty Administration within 30 days after accomplishing the instructions in this bulletin. A copy of the BHTI invoice referencing the parts purchased to accomplish this bulletin must be attached to the Malfunction Report.

- NOTE -

Customers who comply with the instructions of this bulletin after the 31 December 1997 are not eligible for the special warranty credit provisions listed above.

MATERIAL:

Required Material:

The material that follows is necessary to complete this Bulletin and can be procured through your Bell Helicopter Textron Supply Center.

<u>PART NUMBER</u>	<u>NOMENCLATURE</u>	<u>QUANTITY</u>
206-064-902-145	COVER HALF	2
MS27039C1-05	SCREW	4

Consumable Material:

The material that follows is necessary to complete the Bulletin, however this material is consumable (bench stock) material and does not require ordering depending on the operators consumable material stock levels. This material can be obtained through your Bell Helicopter Textron Supply Center.

<u>PART NUMBER</u>	<u>NOMENCLATURE</u>	<u>REFERENCE NO.</u>
LHE SELECTRON SPS507	CADMIUM PLATING SOLUTION	C-108

- NOTE -

The "C" REFERENCE NO. above is a cross reference to the consumable list found in the Standard Practices Manual.

SPECIAL TOOLS:

None required.

WEIGHT AND BALANCE:

Not affected.

ELECTRICAL LOAD DATA:

Not affected.

REFERENCES:

BHT-407-MM-5, rev.2- 1 June 1996:

Chapter 53, Engine cowl assembly,
Chapter 53, Aft fairing assembly, and
Chapter 53, T/R driveshaft fireseal cover.

BHT-407-MM-7, rev.2- 1 June 1996:

Chapter 65, Oil cooler blower.

BHT-407-IPB, rev.2- 1 April 1996:

Chapter 53, Fuselage, and
Chapter 65, Tail rotor drive.

PUBLICATIONS AFFECTED:

BHT-407-IPB, 1 April 1996, Chapter 53.

ACCOMPLISHMENT INSTRUCTIONS:

1. Get access to the engine compartment. Remove the aft fairing assembly (Refer to BHT-407-MM-5, Chapter 53).
2. Remove the nuts, washers, and screws that attach the cover to the forward side of the aft firewall and remove the cover halves. Discard the screws and the cover halves (Refer to BHT-407-MM-5, Chapter 53).
3. Examine the oil cooler blower shaft for damage. Use a bright light and a mirror to examine the area indicated on Figure 2.
4. If the damage to the oil cooler blower shaft is more than the limits shown in BHT-407-MM-7, Chapter 65, Oil cooler blower shaft - Inspection, contact Product Support Engineering for instructions.
5. If the damage found on the shaft is less than the limits shown in BHT-407-MM-7, Chapter 65, Oil cooler blower shaft- Inspection, blend the damage. Treat the reworked area with Brush Cadmium Plating (Refer to Standard Practices Manual, Chapter 3).

6. Put the new cover P/N 206-064-902-145 in position on the aft firewall. Install the new screws P/N MS27039C1-05, washers, and nuts.
7. Install the aft fairing assembly and secure the engine compartment cowlings (Refer to BHT-407-MM-5, Chapter 53).
8. Make an entry in the helicopter historical record to show that this Technical Bulletin is completed.
9. Make an entry in the Record of Technical Bulletins in the Illustrated Parts Breakdown.

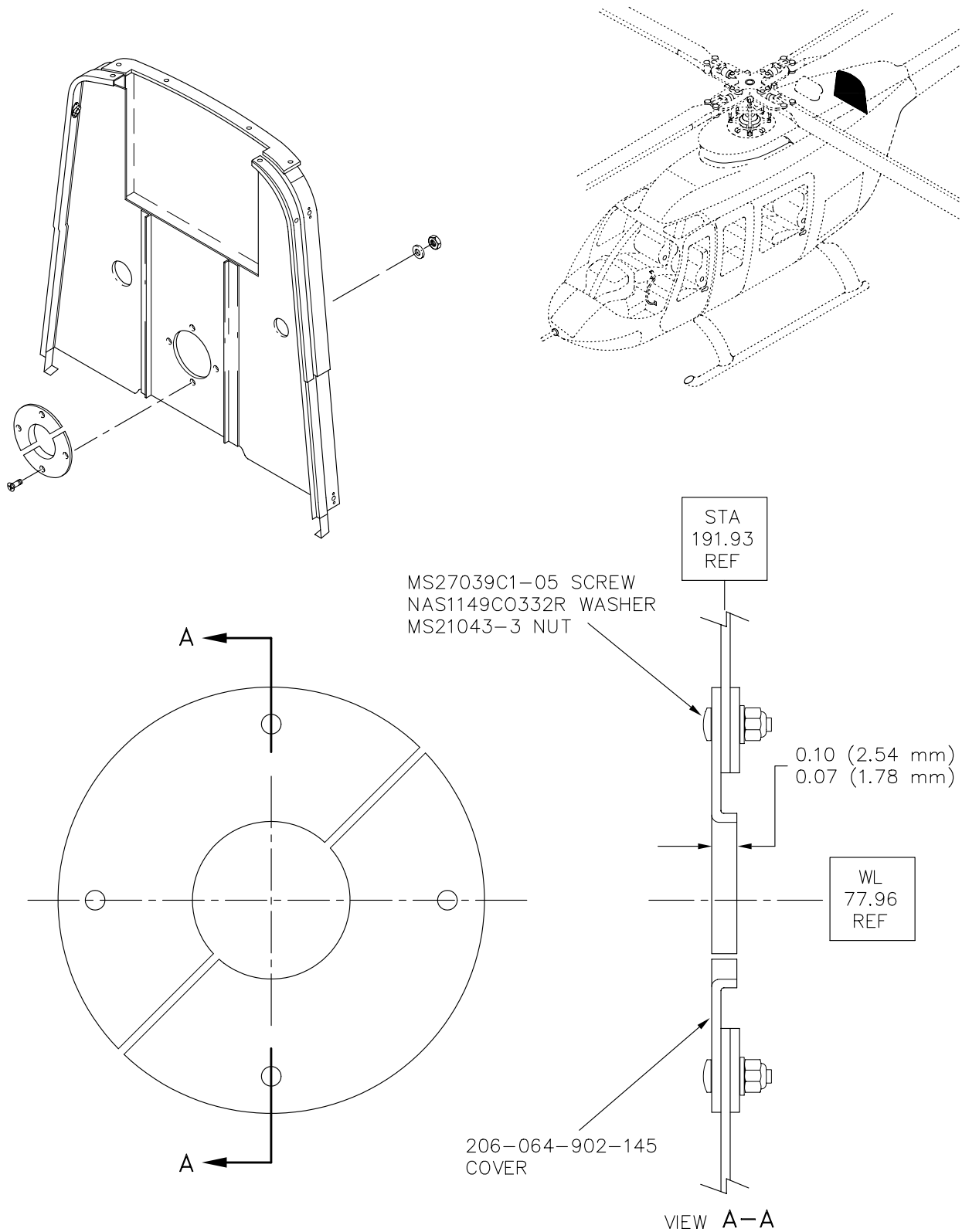
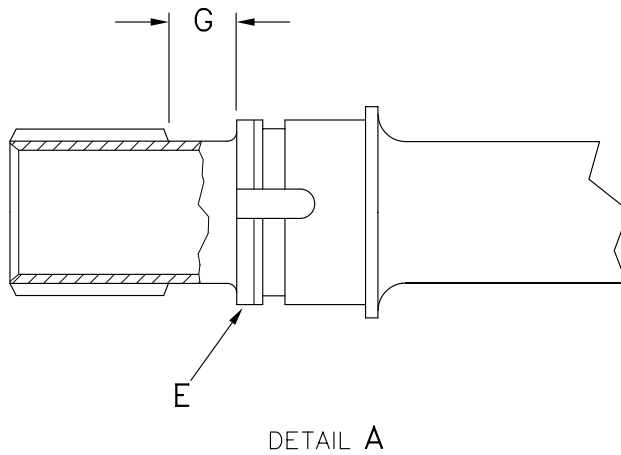
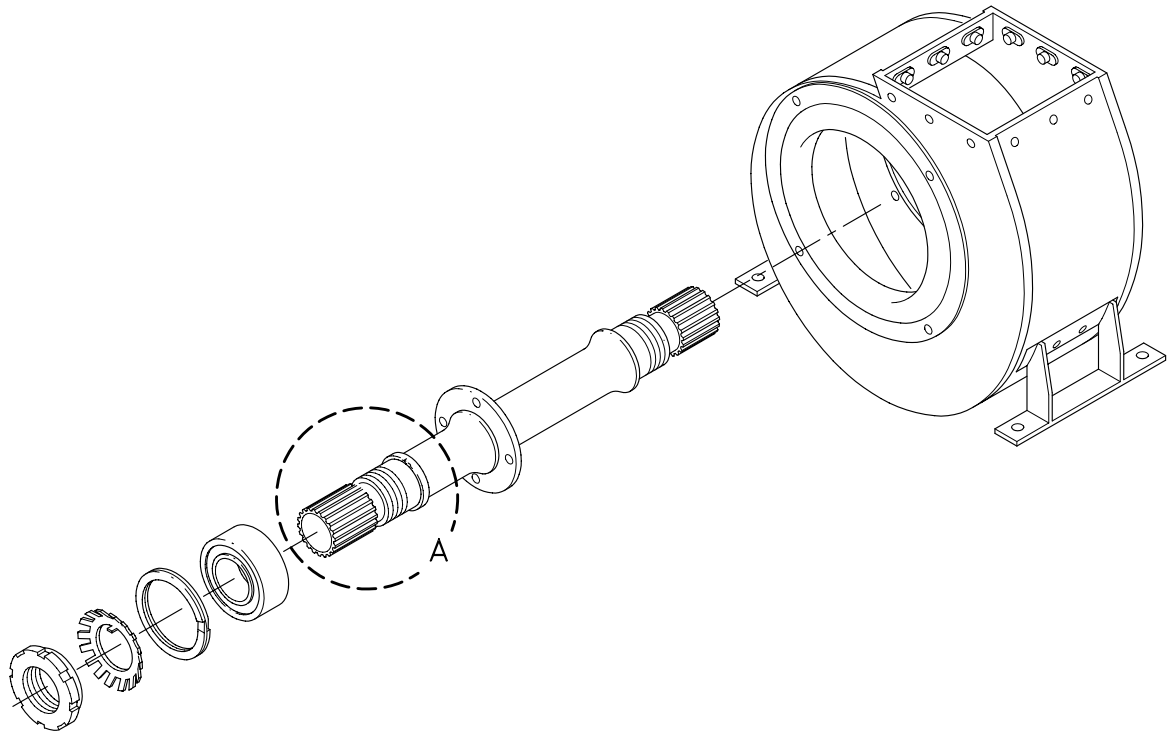


Figure 1. Replacement of cover.



NOTE

Inspect shaft body outside diameter area G and E
(Refer to BHT-407-MM, Chapter 65, Oil cooler
blower shaft - inspection).

Figure 2. Oil cooler blower shaft - Inspection