



A Textron Company

TECHNICAL BULLETIN

206L-15-251

17 September 2015

MODEL AFFECTED: 206L4

SUBJECT: CARBON FIBER INLET COWLING 407-064-004-101 / - 103, NUTPLATES 90-104CXX-X, REWORK OR REPLACEMENT OF.

HELICOPTERS AFFECTED: 206L-4 S/N 52454 through 52482.

[S/N 52477 through 52482 will have the intent of **PART I** accomplished prior to delivery. S/N 52483 and subsequent will have the intent of **PART II** accomplished prior to delivery.]

COMPLIANCE: At customer's option.

DESCRIPTION:

Bell Helicopter has recently introduced carbon fiber inlet cowling 407-064-004-101 / - 103 on production helicopters (206L-4, S/N 52454 and subsequent).

The cowlings are configured with **90-104Cxx-x** nutplates that are bonded on the inner surface. This type of nutplate is designed with a replaceable nut element that is held in place by a retaining clip.

PART I of this bulletin provides instructions to apply sealant to the nutplates to prevent a broken retaining clip migrating out of the nutplate.

PART II of this bulletin provides instructions to replace the 90-104C nutplates with CB2009 nutplates (click bond).

APPROVAL:

The engineering design aspects of this bulletin are Transport Canada Civil Aviation (TCCA) approved.

CONTACT INFO:

For any questions regarding this bulletin, please contact:

Bell Helicopter Product Support Engineering - Light Helicopters
Tel: 450-437-2862 / 1-800-363-8023 / pselight@bh.com

MANPOWER:

Approximately 1 man-hour is required to complete **PART I** and approximately 4 man-hours are required to complete **PART II** of this bulletin. This estimate is based on hands-on time, and may vary with personnel and facilities available.

WARRANTY:

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

MATERIAL:

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.

<u>Part Number</u>	<u>Nomenclature</u>	<u>Qty</u>	<u>Reference *</u>
2010-05988-00	Sealant-TY I-2,CL1,GR A - MIL-PRF-81733	1	C-251
CB2009CRA08CRAP	Nutplate	16	
CB2009CRA3CRAP	Nutplate	8	
CB2009CRA3CRA2P	Nutplate	2	
CB2009CRA3CRA3P	Nutplate	8	

* C-XXX numbers refer to the consumables list in the BHT-ALL-SPM, Standard Practices Manual

SPECIAL TOOLS:

Thermal barrier (a 1/8 inch (3.18 mm) thick silicone blanket with a 1.45 inch (36.8 mm) diameter hole).

WEIGHT AND BALANCE:

Not affected.

ELECTRICAL LOAD DATA:

Not affected.

REFERENCES:

BHT-206L-SERIES-IPB, Illustrated Parts Breakdown
BHT-206L4-MM-9, Maintenance Manual
BHT-ALL-SRM, Structural Repair Manual
BHT-ALL-SPM, Standard Practices Manual

PUBLICATIONS AFFECTED:

BHT-206L-SERIES-IPB, Illustrated Parts Breakdown

ACCOMPLISHMENT INSTRUCTIONS:

PART I

1. Prepare the helicopter for maintenance.
 - a. Remove the air inlet cowl assembly (BHT-206L4-MM, Chapter 71).
2. If the nutplates (Figure 1, Detail B) are to be replaced, go to **PART II**.
 - a. Apply sealant to the nutplate basket and retaining clips (Figure 2).
 - b. Let sealant cure (BHT-ALL-SRM, Appendix A).
3. Install the inlet cowl assembly (BHT-206L4-MM, Chapter 71).
4. Make an entry in the helicopter logbook and historical service records indicating compliance with **PART I** of this Technical Bulletin.

PART II

-NOTE-

The two following nutplate removal procedures are acceptable alternates for the carbon fiber composite inlet cowling.

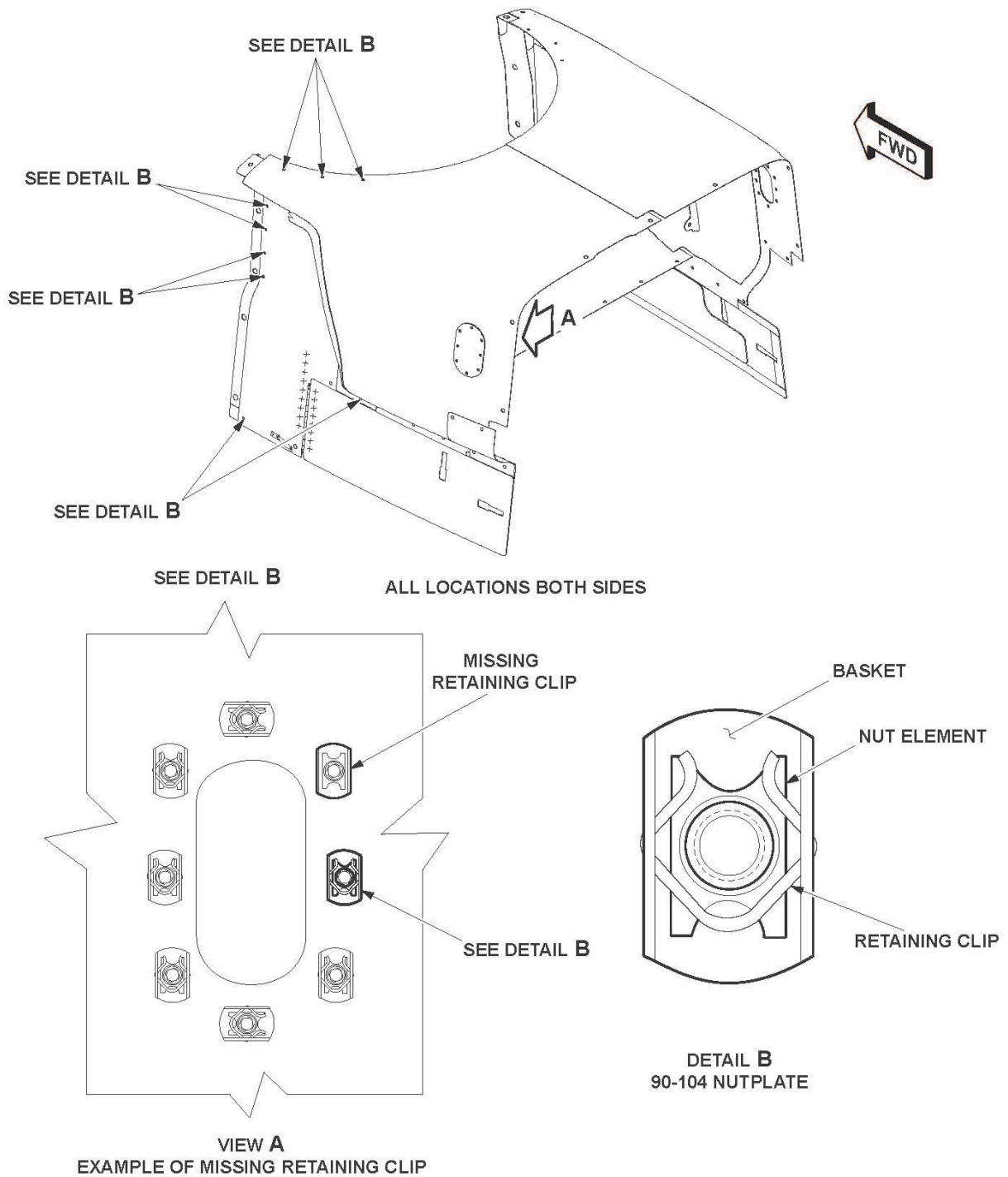
1. Remove nutplates in accordance with either procedure step a or step b below.
 - a. Go to the BHT-ALL-SRM, Chapter 3, Removal of Click Bonds, Application D: Removal of Bonded Nutplates (dry ice method), then go to step 2.

- b. Go to the BHT-ALL-SRM, Chapter 3, Removal of Click Bonds, Application A: Removal of click stud/standoff with metallic base from bonded panels, composite material structures, or thin/damaged metallic structures (heat method).

-NOTE-

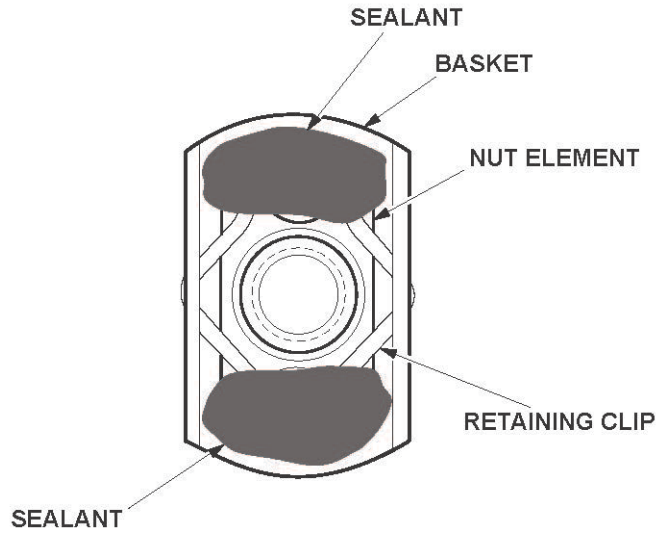
Follow the SRM application Removal of Click Bonds instructions except for the specified differences below.

- (1) The support plate from the SRM application is not required. Use the thermal barrier (Figure 3) to protect surrounding surfaces from the heat application.
 - (2) Heat the nutplate/adhesive up to 180 to 200° F (82 to 93° C) for 1 to 2 minutes.
2. Install replacement nutplates in accordance with the BHT-ALL-SRM, Chapter 3, Installation of Click Bonds, Application B: Reinstallation of bonded nutplates with flexible pressure application fixture.
 4. Make an entry in the helicopter logbook and historical service records indicating compliance with **PART II** of this Technical Bulletin.



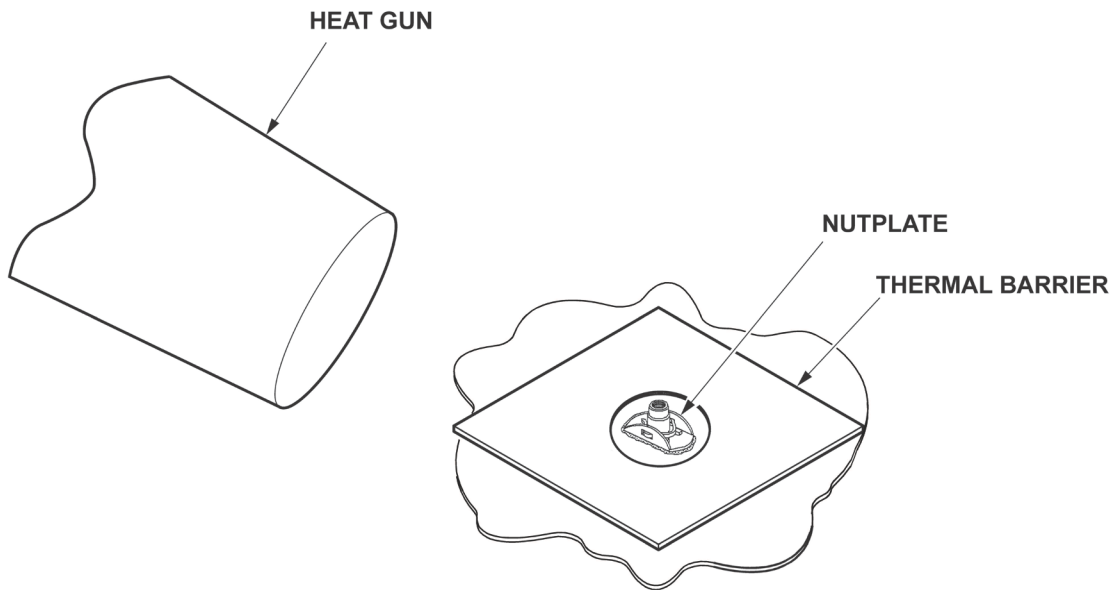
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Figure 1 - Nutplate Locations and Retaining Clip Detail



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Figure 2 - Sealant application.



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Figure 3 – Heat Shield