

ALERT SERVICE BULLETIN

Bell Helicopter **TEXTRON**

A Subsidiary of Textron Inc.

NO. 430-02-26

DATE 05-02-02

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DATE

REV

MODEL AFFECTED: 430

SUBJECT: WHEEL GEAR HYDRAULIC TUBE ASSEMBLY
P/N 430-080-459-101 AND WHEEL BRAKE
HYDRAULIC TUBE ASSEMBLY 430-080-460-101
AND 430-080-467-101 REPLACEMENT OF

HELICOPTERS AFFECTED: Model 430 helicopters serial number 49001
through 49090 equipped with wheel gear kit P/N
430-705-001-101, -103, -105, and -107.

[Model 430 helicopters serial numbers 49091 and
subsequent will have the intent of this bulletin
accomplished prior to delivery.]

COMPLIANCE: At the next 600 hour / Annual inspection but no later
than April 30, 2003.

DESCRIPTION:

Bell Helicopter has received several reports concerning the model 430 wheel gear hydraulic tube P/N 430-080-459-101 and wheel brake hydraulic tubes P/N 430-080-460-101 and 430-080-467-101 chaffing against the cover assy P/N 430-031-355-103 attachment screw. In certain cases the nutplate is chaffing with the hydraulic tubes. The screw and / or nutplate are located at STA 169.62 and RBL 2.75.

This bulletin introduces 3 new hydraulic tubes P/N 430-080-468-101, 430-080-469-101 and 430-080-470-101 with improved routing. The new routing will provide adequate clearance for the tubes.

In addition if the cargo hook kit P/N 430-706-905-101 or -105 is installed the mechanical release cable P/N 222-320-925-103 will require additional clamping with the new tubes.

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

APPROVAL:

The engineering design aspects of this bulletin are Transport Canada approved.

MANPOWER:

Approximately 8 man-hours are required to complete this bulletin. Man-hours are based on hands-on time, and may vary with personnel and facilities available.

WARRANTY:

Owners/operators of 430 helicopter's who comply with the instructions outlined in this bulletin will receive a special 100% warranty credit for the replacement parts contained in the "Required Material" section of this bulletin.

To receive this credit:

- Purchase the required parts from an approved BHTI supply source.
- Comply with the instructions contained in this bulletin no later than April 30, 2003.
- Submit a completed malfunction report to BHTI Warranty no later that 30 days after completion of this bulletin.

****NOTE**** Customers who fail to comply with the instruction in this bulletin after than April 30, 2003 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>
430-080-468-101	Tube Assy	1
430-080-469-101	Tube Assy	1
430-080-470-101	Tube Assy	1
MS21919WDG4	Clamp	*2
MS21042L3	Nut	*1
MS27039-1-06	Screw	*1
NAS1149D0332J	Washer	*2

* Required only if cargo hook kit P/N 430-706-905-101 or -105 is installed.

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>Quantity</u>	<u>Reference</u>
MIL-H-5606	Hydraulic fluid	1	C-002

SPECIAL TOOLS:

None required

WEIGHT AND BALANCE:

Not affected

ELECTRICAL LOAD DATA:

Not affected

REFERENCES:

BHT-430-IPB Illustrated Parts Breakdown
BHT-430-MM Maintenance Manual

PUBLICATIONS AFFECTED:

BHT-430-IPB Illustrated Parts Breakdown

ACCOMPLISHMENT INSTRUCTIONS:

1. Insure all power is removed from the aircraft .
2. Release parking brake if applied.
3. For ease of access lift the helicopter on jacks. (Refer to BHT-430-MM-2).

4. Remove cover P/N 430-031-254-105 and P/N 430-031-254-103 and partially unscrew the aft section of cover assembly P/N 430-031-355-103 in the area of the landing light (Refer to BHT-430-MM-4).
5. Locate hydraulic tubes P/N 430-080-459-101, 430-080-460-101 and 430-080-467-101.

-NOTE-

Retain all hardware for later re-installation note the sequence location and size of the clamps, spacers and screws.

6. Remove the clamps that hold the 3 hydraulic tubes to the helicopter (Refer to BHT-430-MM-4).

CAUTION

A small amount of hydraulic fluid will leak out when disconnecting the tubes .

7. Disconnect the hydraulic tubes at the connecting fittings.
8. Seal off the port with caps or plugs to prevent system contamination and excessive lost of fluids.

-NOTE-

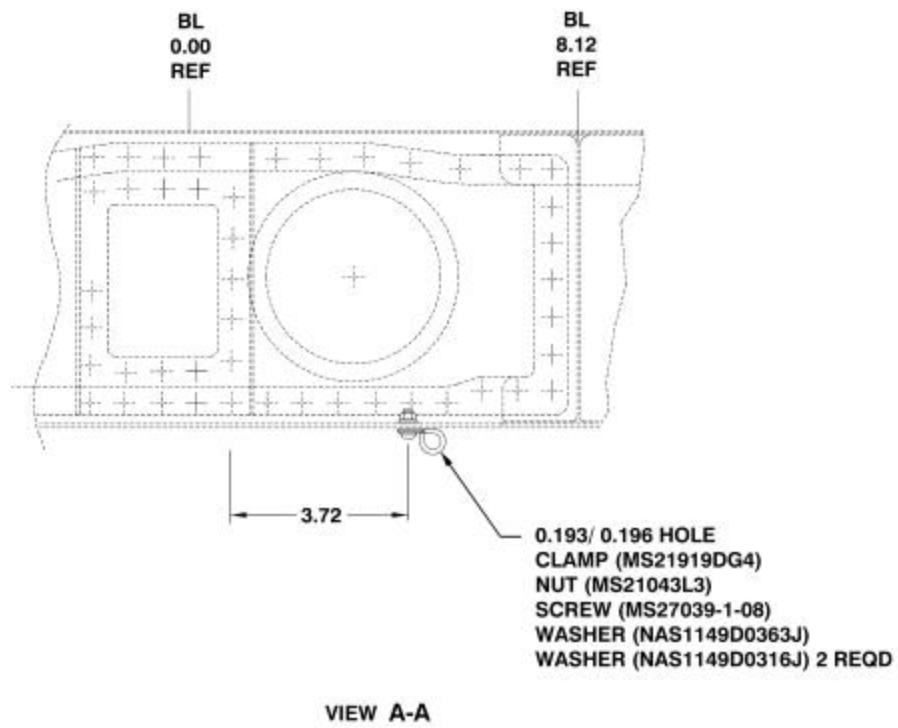
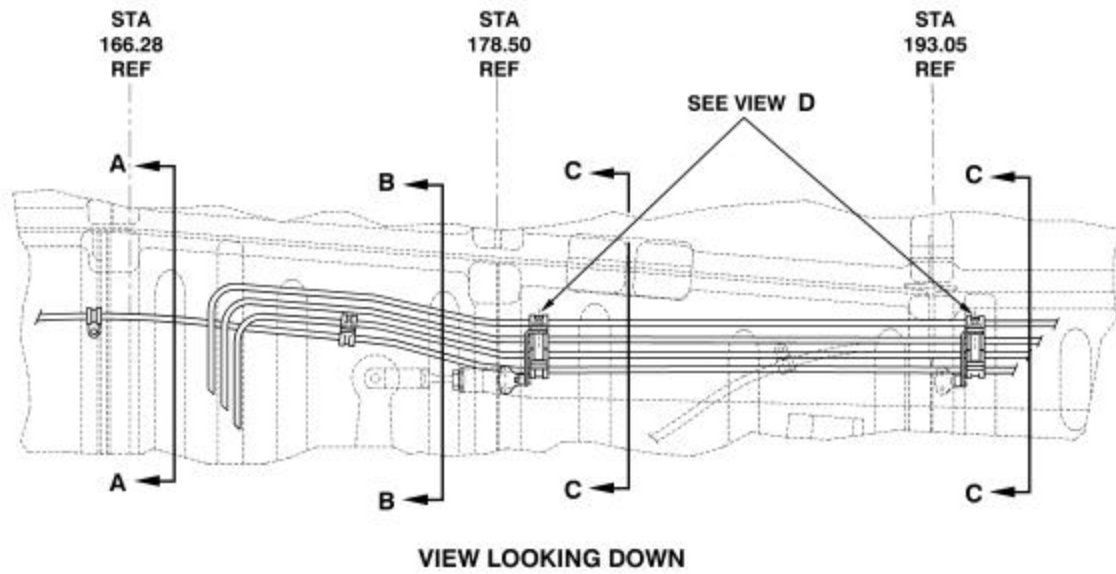
Use a backup wrench on the connecting fitting so that you do not twist the tube when you torque the tube nut.

CAUTION

Make sure that the tubes assemblies do not rub against each other or against other helicopter components.

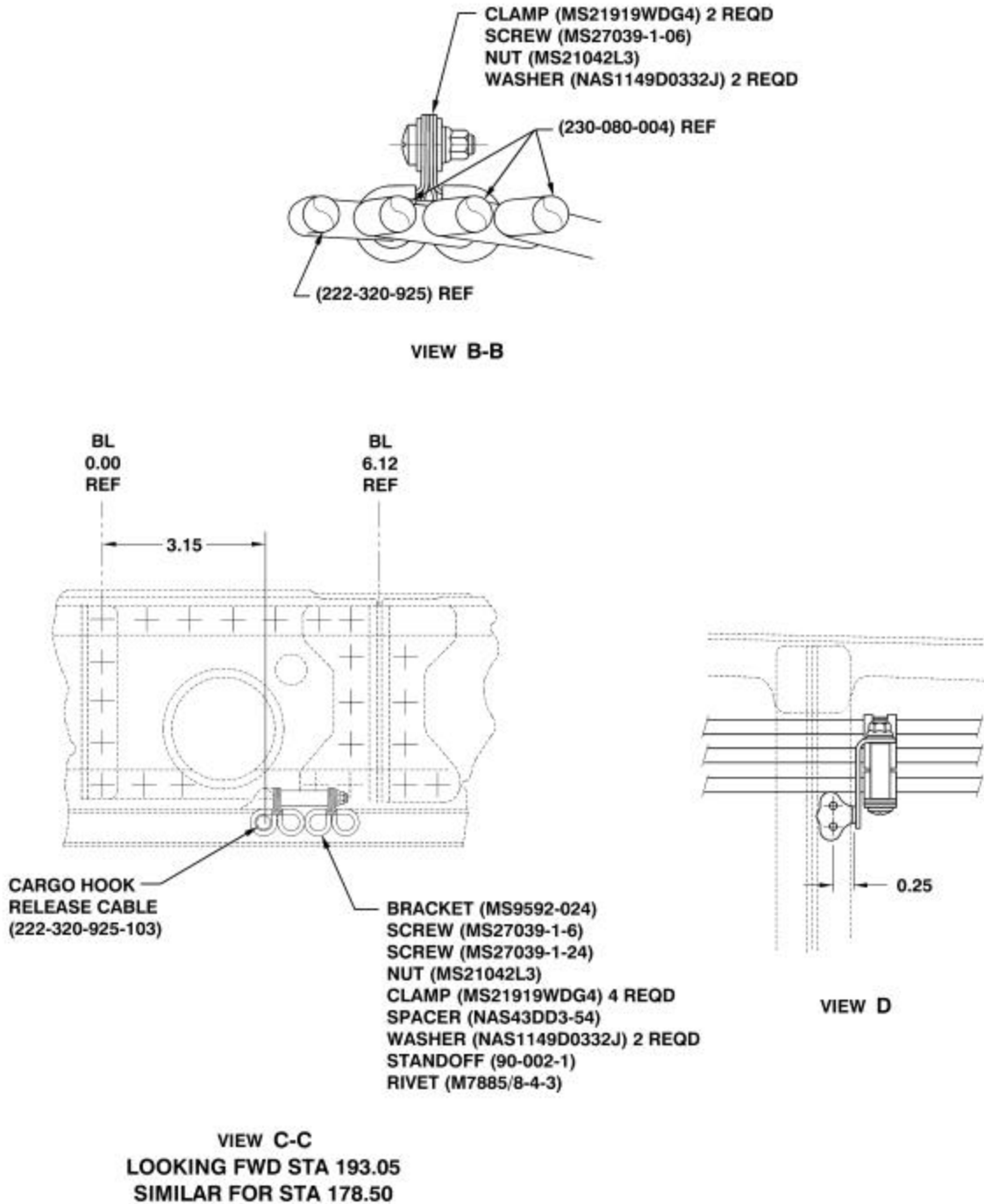
9. Install the new tubes assemblies with the clamps and support in the same location as previously removed (Refer to BHT-430-MM-4).
 - Tube P/N 430-080-468-101 (R/H wheel brake) replaces tube P/N 430-080-467-101.
 - Tube P/N 430-080-469-101 (Hydraulic II down lock return) replaces tube P/N 430-080-459-101.
 - Tube P/N 430-080-470-101(L/H wheel brake) replaces tube P/N 430-080-460-101.

10. If cargo hook kit P/N 430-706-905-101 or -105 is installed you will need to modify the clamping for the cargo hook release cable P/N 222-320-925-103 as per figure 1 and 2.
11. Bleed the hydraulic system (Refer to BHT-430-MM-4).
12. Supply hydraulic pressure to the hydraulic 2 systems (Refer to BHT-430-MM-4).
13. Inspect tube P/N 430-080-469-101 for possible leaks.
14. Move the directional control pedals through the full range of travel and make sure there is sufficient clearance between the control tube and installed parts.
15. Bleed the wheel brake system and check for leaks on tube P/N 430-080-468-101 and P/N 430-080-470-101 (Refer to BHT-430-MM-4, paragraph 32-81, step 11).
16. If required service hydraulic reservoir with hydraulic fluid MIL-H-5606 (Refer to BHT-430-MM-2).
17. Re-install cover assemblies previously removed.
18. Lower aircraft back to the ground.
19. Annotate helicopter records to reflect compliance with this bulletin.
20. Return aircraft to service.



02508001

Figure 1
Cargo hook release cable clamping modifications



02508002

Figure 2
Cargo hook release cable clamping modifications