

ALERT SERVICE BULLETIN

Bell Helicopter **TEXTRON**

A Subsidiary of Textron Inc.

NO. 407-99-29
DATE 05-10-99
PAGE 1 of 8

DATE	
REV	

MODELS AFFECTED: 407

SUBJECT: CREW SEAT BELT, RESTRAINT ASSEMBLIES 407-370-723-101 AND -103, REPLACEMENT OF.

HELICOPTERS AFFECTED: 407, S/N 53000 through 53342 and S/N 53344.
[Helicopters S/N 53343, 53346, and subsequent will have the intent of this bulletin completed before delivery].

COMPLIANCE: At the next 300 hr inspection but no later than 31 October 1999.

DESCRIPTION:

Bell Helicopter has been told by some operators that the lap portion of the crew seat belt will, in some conditions, lose tension because of slippage. The loose lap belts are not comfortable and make it difficult to release the rotary-type buckle with one hand in an emergency.

This Alert Service Bulletin introduces improved crew seat belt and restraint assemblies that do not slip. The rotary buckle is replaced with an automotive-type buckle that is easily released with one hand in all conditions. This new seat belt is similar to those used in the current production 206B3 and 206L4.

APPROVAL:

The Engineering aspects of this Alert Service Bulletin are Transport Canada Approved.

MANPOWER:

Approximately 2.0 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.

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WARRANTY:

Owners/operators of 407 helicopters who comply with the instructions outlined in this bulletin are eligible for 100% warranty credit for the "Required Material" listed in this bulletin. "Consumable Materials" are not covered.

To receive this credit:

1. Customers must order the replacement parts from an approved BHTI spares supply source.
2. Comply with the instructions outlined in this bulletin.
3. Send a complete Malfunction Report (MR) to BHTI Warranty Administration. A copy of the BHTI invoice that refers to the replacement parts used to accomplish this bulletin must be attached to the Malfunction Report.

- NOTE -

Customers who comply with the instructions in this bulletin after 31 October 1999 are **not** eligible for this special warranty credit.

MATERIAL:

Required Material:

<u>PART NUMBER</u>	<u>NOMENCLATURE</u>	<u>QUANTITY</u>
222-320-823-129	CREW SEAT RESTRAINT ASSY, LH	1 (NOTE 1)
222-320-823-130	CREW SEAT RESTRAINT ASSY, RH	1 (NOTE 1)

NOTE:

1: The replacement seat belts are available in black only.

Consumable Material:

SPECIAL TOOLS:

None required.

WEIGHT AND BALANCE:

Not affected.

ELECTRICAL LOAD DATA:

Not affected.

REFERENCES:

BHT-407-MM-3, Rev.6-14 April 1998

Chapter 25, Equipment/Furnishings, Paragraph, 25-11.

PUBLICATIONS AFFECTED:

BHT-407-IPB

Chapter 25, Equipment/Furnishings.

ACCOMPLISHMENT INSTRUCTIONS:

1. Remove the left and the right crew seat restraints that are installed in the helicopter (refer to BHT-407-MM-3). Discard the crew seat restraints but keep the attaching parts for subsequent installation.

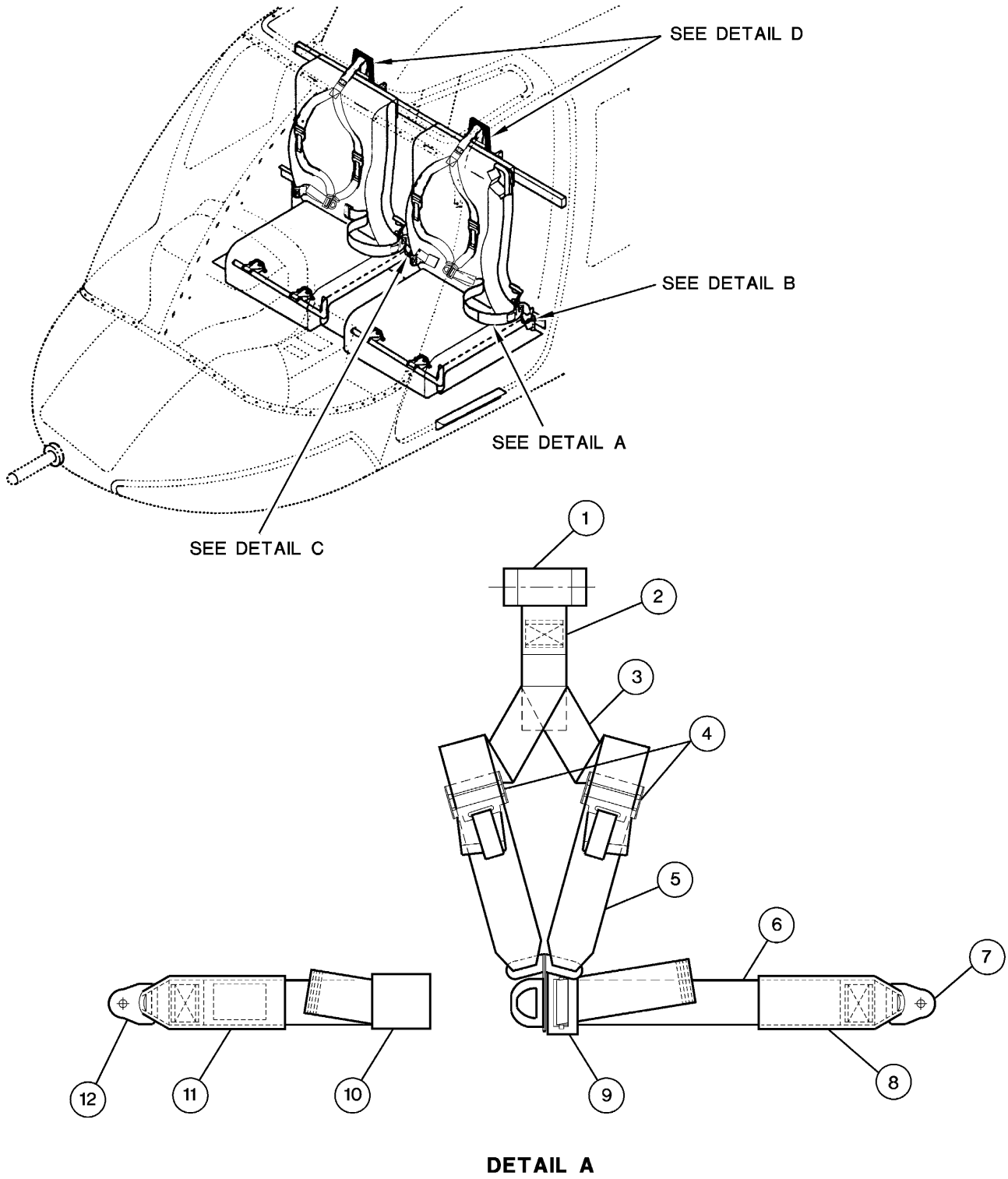
- NOTE -

This procedure is identical for the left and the right crew seat restraint assemblies except for 2 b) and 2 c).

2. Install the inboard and outboard lap belt strap assemblies (6 and 11, Figure 1) as follows:
 - a. Assemble the attachment of the outboard lap belt strap assembly (6, Detail B) as follows:
 - l) Put the washer (18) and spacer (20) on the bolt (19).

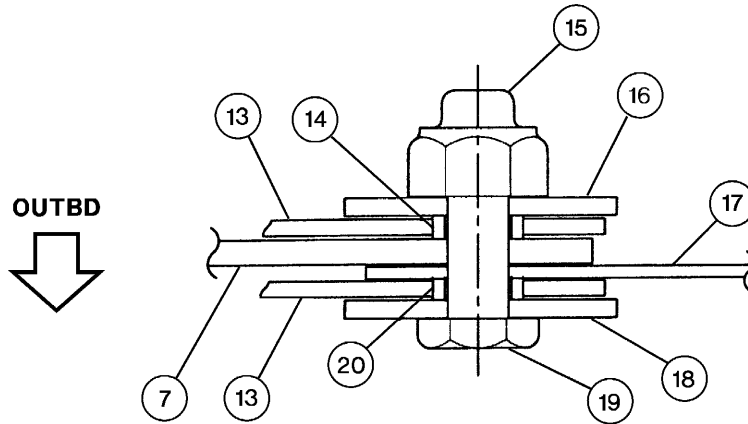
- II) Position the outboard end fitting (7) with the seat belt support fitting (17). Make sure that the plastic sleeve (13) is correctly positioned on the outboard end fitting (7) and the seat belt support fitting (17).
 - III) Insert the bolt (19), with the washer (18) and the spacer (20), through the hole of the outboard end fitting (7) and its plastic sleeve (13), and the seat belt support fitting (17).
 - IV) Install the spacer (14), the washer (16), and the nut (15). Tighten the nut (15).
- b. Assemble the attachment of the inboard lap belt assembly (11) as follows:
- I) Install the inboard end fitting (12) on the seat belt support fitting (23). Install the bolt (29).
 - II) Install the washer (22), and the nut (21) on the bolt (24). Tighten the nut (21).
3. Install the shoulder harness (2) on the headrest support assembly (32) as follows:
- a. Install the two pins at the bottom of the headrest support assembly (32) into the two holes on the bulkhead.
 - b. On the left headrest support assembly, tighten the two fasteners (33) to secure the headrest support assembly (32).
 - c. On the right headrest support assembly, install the two washers (35) and screws (34).
 - d. Install the inertia reel (1) of the shoulder harness (1) with two screws (31).
 - e. Install the spacer (27) under the webbing of the shoulder harness (2). Pass the pin (25) through the two washers (26), the spacer (27) and two washers (28). Secure the pin (25) with the cotter pin (29).
 - f. Install the shoulder harness on the seat. Connect the connector (9) to the buckle (10).
 - g. Install the inertia reel cover on the headrest (30).

4. Install the parts removed in Step 1 above.
5. Make an entry in the helicopter historical records to show that you have completed this Alert Service Bulletin.



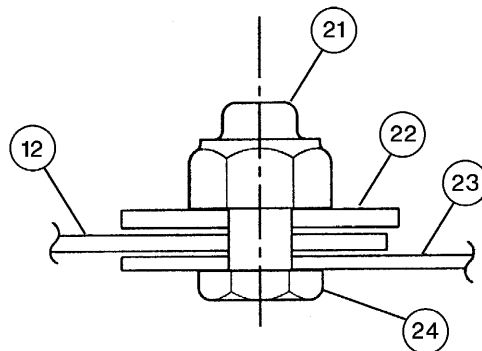
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Figure 1. Crew Seat Restraint Assembly (Sheet 1)



DETAIL B

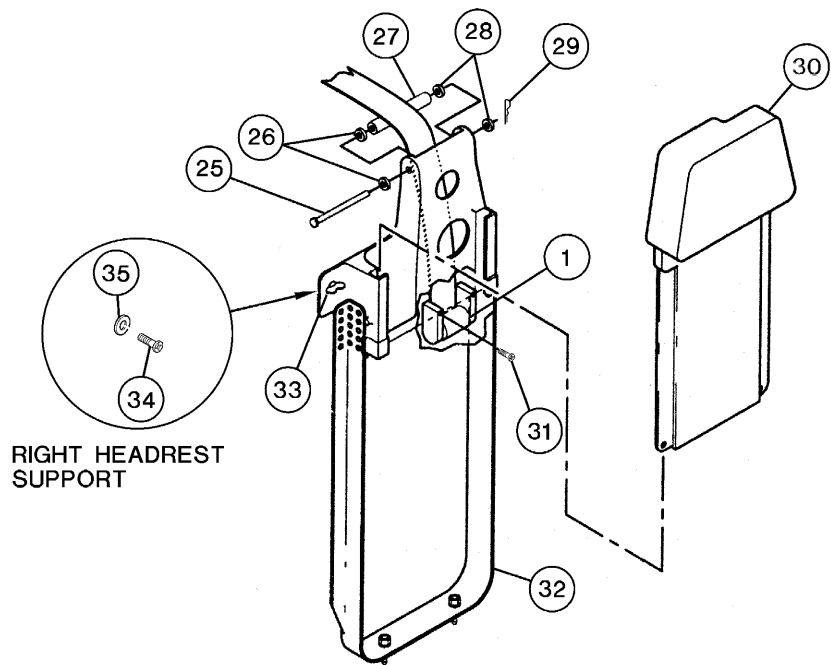
**LH SEAT OUTBOARD LAP BELT ATTACHMENT SHOWN
RH SEAT OUTBOARD LAP BELT ATTACHMENT OPPOSITE**



DETAIL C

**LH SEAT INBOARD LAP BELT ATTACHMENT SHOWN
RH SEAT INBOARD LAP BELT ATTACHMENT OPPOSITE**

Figure 1. Crew Seat Restraint Assembly (Sheet 2)



DETAIL D

LEFT HEADREST SUPPORT ASSEMBLY

LEGEND

- | | |
|------------------------------------|-------------------------------|
| 1. Inertia reel | 21. Nut |
| 2. Shoulder harness webbing | 22. Washer |
| 3. Shoulder harness, shoulder belt | 23. Seat belt support fitting |
| 4. Adjuster | 24. Bolt |
| 5. Strap assembly | 25. Pin |
| 6. Outboard lapbelt strap | 26. Washer |
| 7. Outboard end fitting | 27. Spacer |
| 8. Protection sheath | 28. Washer |
| 9. Connector | 29. Cotter pin |
| 10. Buckle | 30. Headrest |
| 11. Inboard lapbelt strap | 31. Screw |
| 12. Inboard end fitting | 32. Headrest support assembly |
| 13. Plastic sleeve | 33. Fastener |
| 14. Spacer | 34. Screw |
| 15. Nut | 35. Washer |
| 16. Washer | |
| 17. Seat belt support fitting | |
| 18. Washer | |
| 19. Bolt | |
| 20. Spacer | |

Figure 1. Crew Seat Restraint Assembly (Sheet 3)