

MODELS AFFECTED: 407

SUBJECT: DOOR LATCH ASSEMBLIES P/N 20898-401, -402, -405 AND -406, MODIFICATION OF.

HELICOPTERS AFFECTED: 407, Serial Numbers 53000 through 53228.

[Helicopter Serial Numbers 53229 and subsequent will have the intent of this bulletin completed before delivery.]

COMPLIANCE: In the next 100 hours after you get this bulletin, but no later than October 31, 1998.

DESCRIPTION: Bell Helicopter was sent reports that rod assemblies accidentally disengaged from the door handle. The person in the helicopter could then not open the door. This Alert Service Bulletin is sent to make a modification to the attachment of two rod assemblies in each crew and passenger door latch assembly.

APPROVAL: The engineering design aspects of this Service Bulletin are Transport Canada approved.

MANPOWER: Approximately 6.0 man-hours are necessary to make a modification to the two crew doors and the two passenger doors. Man-hours are based on hands-on time and can change because of the personnel and facilities available.

WARRANTY:

Owners/Operators of 407 helicopters who comply with the instructions outlined in this bulletin are eligible for a special 100% warranty credit towards the purchase of the rod assemblies and the attaching hardware listed in the "required material" section of this bulletin.

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 no later than October 31, 1998.
- Send a completed Malfunction Report (MR) to BHT Warranty Administration. A copy of the BHTI invoice referencing the parts used to accomplish this bulletin must be attached to the Malfunction Report.

- NOTE -

Customers who comply with the instructions in this bulletin after October 31, 1998, are not eligible for the special warranty credit provisions listed above.

MATERIAL:

Required Material:

The material that follows is necessary to complete this Alert Service Bulletin and can be obtained through your Bell Helicopter Textron Supply Center:

<u>PART NUMBER</u>	<u>NOMENCLATURE</u>	<u>QUANTITY</u>
3164-217	ROD ASSEMBLY	4
3164-219	ROD ASSEMBLY	1
3164-220	ROD ASSEMBLY	1
3164-221	ROD ASSEMBLY	1
3164-222	ROD ASSEMBLY	1
MS24665-151	COTTER PIN	16
NAS1149D0332J	WASHER	8

SPECIAL TOOLS:

A locally made fixture is recommended so that each changed rod assembly has the same length as the initial assembly. The design of the fixture is optional.

WEIGHT AND BALANCE:

Not affected.

ELECTRICAL LOAD DATA:

Not affected.

REFERENCES:

BHT-407-MM-5, rev. 4-, 16 December 1996

Chapter 52, Doors and Windows.

BHT-407-IPB, rev. 3-, 16 December 1996

Chapter 52, Doors and Windows.

PUBLICATIONS AFFECTED:

BHT-407-MM-5, rev. 4-, 16 December 1996

Chapter 52, Doors and Windows.

BHT-407-IPB, rev. 3-, 16 December 1996

Chapter 52, Doors and Windows.

ACCOMPLISHMENT INSTRUCTIONS:

Do the steps that follow to replace the rod assemblies on all crew and passenger doors:

REPLACEMENT OF THE LOWER ROD ASSEMBLY:

1. Get access to the interior door handle (2, Figure 1).
2. Remove the screws (18) and washers (19) that attach the interior door handle (2) to the door structure (10).
3. Disconnect the rod assembly (4) from the bellcrank (6).
4. Pull out the interior door handle (2) to permit access to the rod assembly (4) that is connected to the interior door handle (2). Remove the tie down strap and the clip (View A) that attach the rod assembly (4) to the handle. Disconnect the rod assembly (4) from the interior door handle (2). Discard the clip.
5. Use a locally made fixture to measure the length of the rod assembly (4).
6. Remove the threaded clevis (5) and the jamnut (3) from the initial rod assembly (4). Discard the rod.
7. Install the jamnut (3) and the threaded clevis (5) to the new rod. Adjust the new rod assembly to the same length as the initial rod assembly and tighten the jamnut (3).
8. Connect the clevis end of the new rod to the bellcrank (6) with the initial hardware, but use a new cotter pin.
9. Connect the bent end of the new rod assembly to the interior door handle (2) with the washer (16) and cotter pin (11). Make sure that the cotter pin (11) is bent so that it cannot catch on adjacent parts of the latch or door.
10. Install the interior door handle (2) on the inner side of the door with two screws (18) and two washers (19).

REPLACEMENT OF THE UPPER ROD ASSEMBLY:

11. Get access to the upper door latch area.
12. Remove the tie down strap and the clip (View A) that attach the rod assembly (9) to the upper latch assembly (7).

- Remove the rod assembly (9) from the upper latch assembly (7).
13. Disconnect the rod assembly (9) from the lower latch assembly (21).
 14. Use the locally made fixture to measure the length of the rod assembly (9).
 15. Remove the threaded clevis (8) and jamnut (20) from the initial rod assembly (9). Discard the rod.
 16. Install jamnut (20) and threaded clevis (8) to the new rod. Adjust the new rod assembly to the same length as the initial rod assembly and tighten the jamnut (20).
 17. Connect the clevis end of the new rod to the lower latch assembly (21) with the initial hardware, but use a new cotter pin.
 18. Connect the bent end of the new rod assembly to the upper latch assembly (7) with the washer (12) and the cotter pin (11). Make sure that the cotter pin (11) is bent so that it cannot catch on adjacent parts of the latch or door.
 19. Make sure that all door handles and latches operate correctly (BHT-407-MM-5, Chapter 52). Adjust the rod assemblies as necessary.
 20. Install the interior door trim panels.
 21. Use screw (17) to install the interior door handle cover (1).
 22. Make an entry in the helicopter historical records to show that you have completed this Alert Service Bulletin.
 23. Make an entry in the Record of Alert Service Bulletins in the Maintenance Manual to show that you have completed this Alert Service Bulletin.

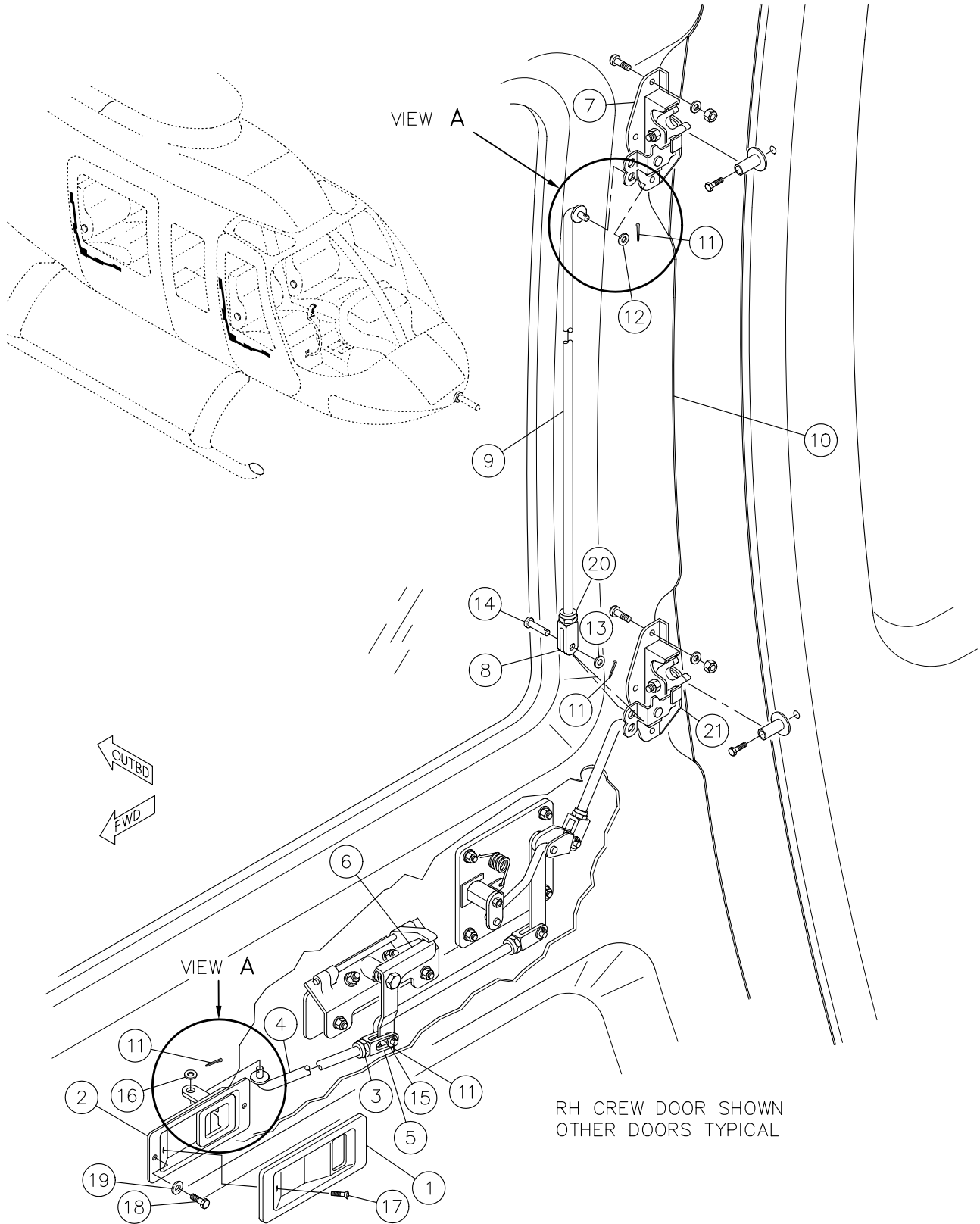
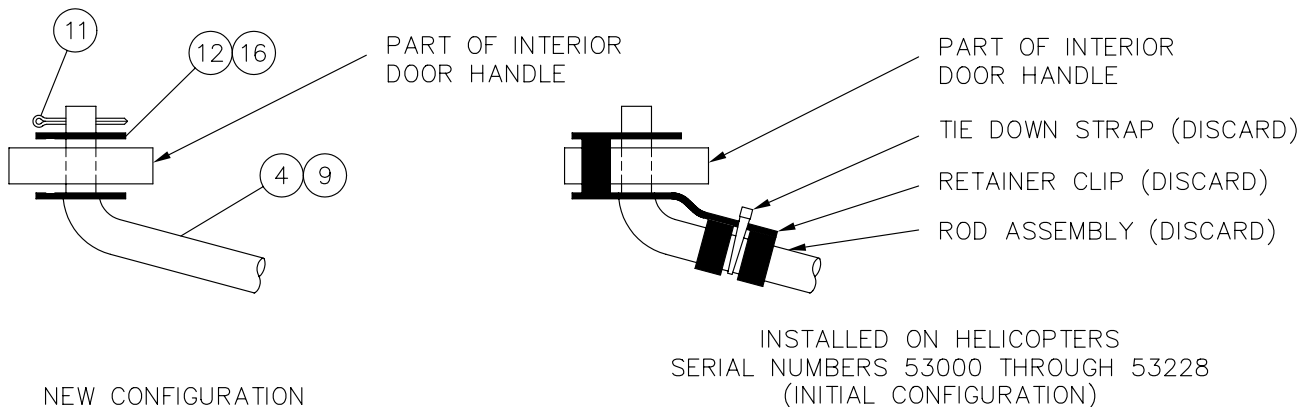


Figure 1. (Sheet 1 of 2)





VIEW A

NEW ROD ASSEMBLY APPLICATION

④	ROD ASSEMBLY	CREW	PASS.
		L.H.	3164-220
	R.H.	3164-219	3164-221

⑨	ROD ASSEMBLY	CREW	PASS.
		L.H.	3164-217
	R.H.	3164-217	3164-217

- | | |
|---|------------------------------------|
| 1. Interior door handle cover | 11. Cotter pin (MS24665-151) (ADD) |
| 2. Interior door handle | 12. Washer (NAS1149D0332J) (ADD) |
| 3. Jamnut | 13. Washer |
| 4. Rod assembly  (ADD) | 14. Clevis pin |
| 5. Clevis | 15. Washer |
| 6. Bellcrank | 16. Washer (NAS1149D0332J) (ADD) |
| 7. Latch assembly rotary | 17. Screw |
| 8. Clevis | 18. Screw |
| 9. Rod assembly  (ADD) | 19. Washer |
| 10. Door | 20. Jamnut |
| | 21. Lower latch assembly rotary |

NOTES:



-  Lower rod assembly, see table for application.
-  Upper rod assembly, see table for application.
3. All parts listed were on the helicopter, other than those indicated by (ADD).

Figure 1. (Sheet 2)