

ALERT SERVICE BULLETIN
Bell Helicopter **TEXTRON**
A Subsidiary of Textron Inc.

NO. 206-04-102
DATE Sep 24, 2004
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MODEL AFFECTED: 206B and TH-67

SUBJECT: INSIDE DOOR HANDLE ASSEMBLY P/N 206-031-620-101, INSPECTION AND REWORK OF

HELICOPTERS AFFECTED: Model 206B helicopters serial number 3567 through 4577.

[Model 206B helicopters serial numbers 4578 and subsequent will have the intent of this bulletin accomplished prior to delivery.]

Model TH-67 helicopters serial numbers 5101 through 5284.

[Model TH-67 helicopters serial numbers 5285 through 5305 are covered by Aeronautical Accessories Inc Technical Bulletin TB AA-04055.]

[Model TH-67 helicopters serial numbers 5306 and subsequent will have the intent of this bulletin accomplished prior to delivery.]

COMPLIANCE: At the next annual inspection, but not later than December 31, 2004.

DESCRIPTION:

Field reports reveal that the spring pin securing the inside "D" handle assembly to the door latching mechanism may be too short. This condition may damage the bore in the "D" handle crossbar and eventually make the handle turn freely. As a result the handle may become disconnected from the latching mechanism.

Part I of this bulletin gives instructions to inspect each of the four inside "D" handle for the proper spring pin length.

Part II of this bulletin gives instructions to rework the handle assembly and to install a longer spring pin as defined on the engineering drawing.

APPROVAL:

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

MANPOWER:

Approximately one (1) man-hour is required to complete Part I of this bulletin. In addition, approximately 7 man-hours are required to accomplish Part II of this bulletin on each door handle assembly, as required. Man-hours are based on hands-on time, and may vary with personnel and facilities available.

WARRANTY:

Owners/Operators of 206B and TH-67 helicopters who comply with the instructions outlined in this bulletin will receive 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 this bulletin no later than December 31, 2004. Submit a completed malfunction report to BHTI Warranty no later than 30 days after the completion of the bulletin.

Note: Customers that fail to comply with this bulletin after December 31, 2004 are not eligible for the special warranty 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>
NAS561C4-8	SPRING PIN	4 (see note 1)

Note 1: Supersedes P/N MS171526 which may be used as an alternate.

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-PRF-81733 2.5 OZ	SEALANT	1	C-251
299-947-100TY2CL2G50	ADHESIVE	1	C-317

SPECIAL TOOLS:

None required

WEIGHT AND BALANCE:

Not affected

ELECTRICAL LOAD DATA:

Not affected

REFERENCES:

BHT-206A/B series-IPB Illustrated Parts Breakdown
BHT-206A/B series-MM Maintenance Manual

PUBLICATIONS AFFECTED:

None affected

ACCOMPLISHMENT INSTRUCTIONS:**Part I : INSPECTION OF THE INSIDE DOOR HANDLES**

Refer to Figure 1.

1. Start with any of the four cabin doors.

-NOTE-

Note the orientation of the "D" handle crossbar (2). The spring pin (3) is installed from the bottom side. The crossbar is installed topside up. It is not necessary to separate crossbar (2) from "D" handle assembly to accomplish either Part I or Part II.

2. Remove and retain the three screws holding the “D” handle escutcheon (1) to the door structure.
3. Turn crossbar (2) bottom side up.
4. Measure the insertion depth of the spring pin (3) into the crossbar bore.

-NOTE-

The appropriate spring pin P/N NAS561C4-8 (*) is $.500 \pm .015$ inch ($12.7 \pm .381$ mm) in length. The next longer and shorter sizes are in increments of $.062$ inch (1.574 mm).

(*) Pin P/N MS171526 is $.500 \pm .015$ inch ($12.7 \pm .381$ mm) in length and may be used as an alternate.

5. If the top of the pin (3) is approximately 0.110 inch (2.794 mm) or more below the surface of the crossbar (2), rework handle assembly (4) in accordance with Part II of this bulletin.
6. If the top of the pin (3) is approximately 0.109 inch (2.768 mm) or less below the surface of the crossbar (2), do the following:
 - a) Prepare a smooth flat surface on top of a bench vise with a layer or two of duct tape for protection.
 - b) Set the bottom side of the crossbar (2) against the protected bench vise surface. Using a $3/32$ inch (2.38 mm) diameter punch and a small hammer, tap the spring pin (3) down until it bottoms into the bore.
7. Measure again the insertion depth of the spring pin (3) into the crossbar bore.
8. If the top of the pin is approximately 0.110 inch (2.794 mm) or more below the surface of the crossbar, rework handle in accordance with Part II of this bulletin.

-NOTE-

Several or all TH-67 helicopters prior to S/N 5285 may have had the “D” handle assemblies modified to a black anodized finish by Premier Aviation of Texas prior to delivery to the US Army. The spring pin installed in the “D” handle crossbar may be a P/N MS171527 having an overall length of $.562 \pm .015$ inch ($14.274 \pm .381$ mm). In such case, when fully inserted, the end of the spring pin will be more or less flush with the bottom side of the crossbar. Moreover, a pilot hole may be visible on the top side of the crossbar. Both of these conditions are acceptable to Bell Helicopter engineering.

9. An insertion depth of .048 to .078 inch (1.219 to 1.981 mm) indicates that the appropriate spring pin length has been used. Therefore, the handle assembly (4) may be reinstalled with retained hardware and returned to service.
10. Repeat the above procedure with the other three "D" handle assemblies.
11. If all handle assemblies are proven to have the proper spring pin installed, make an entry in the helicopter records indicating this bulletin has been complied with.

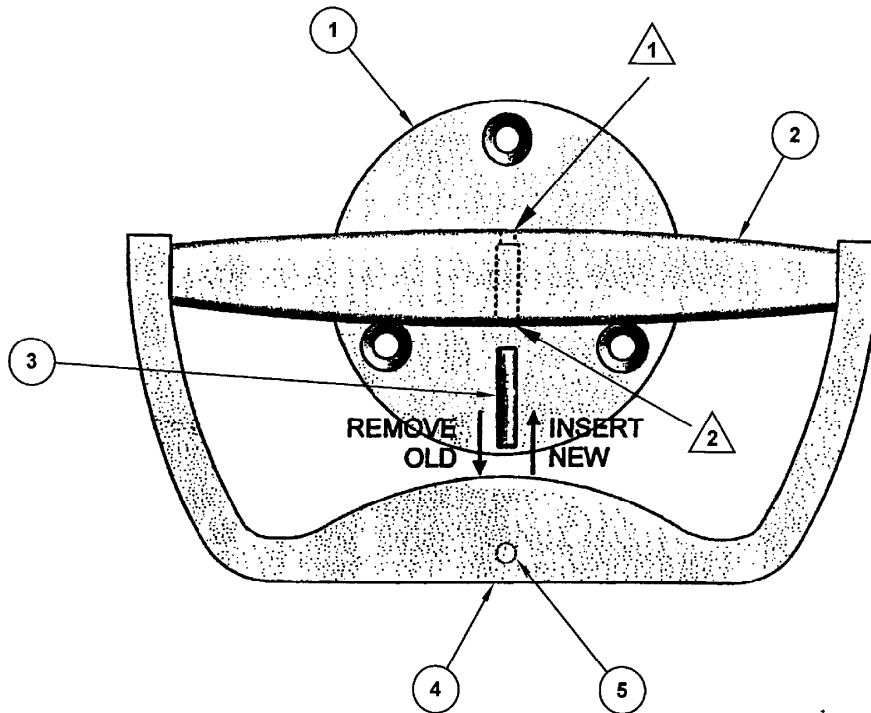
Part II : REWORK OF THE INSIDE DOOR HANDLES

-NOTE-

Place protective barrier material (i.e. cardboard, tape) between vise jaws and "D" handle crossbar (2). Avoid damaging the crossbar by over tightening the vise.

1. Secure "D" handle crossbar (2) in bench vise, bottom side up, exposing the spring pin bore.
2. Using a #52 drill bit and the inside diameter of the spring pin (3) as a guide, drill a .063 inch (1.60 mm) pilot hole through the crossbar (2) wall.
3. Using a #40 drill bit, from the topside, open up the pilot hole drilled in preceding step to .098 inch (2.489 mm). De-burr and slightly chamfer the edges of the hole.
4. Using a 3/32 inch (2.38 mm) diameter straight punch, drive the spring pin (3) out the bottom side of the crossbar.
5. Turn the crossbar (2) upside down in the vise and secure. Take care not to over tighten vise jaws.
6. From the bottom side of the crossbar, drive a spring pin P/N NAS561C4-8 in the crossbar bore until it bottoms out. Spring pin P/N MS171526 may be used as an alternate. The insertion depth should be approximately $.063 \pm .015$ inch ($1.60 \pm .381$ mm).
7. Prepare a small quantity of adhesive C-317 and plug the pilot hole drilled through the top side of the "D" handle crossbar (2). Fair with adjacent surface and allow to cure. Color of cured adhesive should closely match finish of crossbar.
8. Prepare a small quantity of sealant C-251 and plug the pin bore in the bottom surface of the crossbar. Allow sealant to cure.

9. Reinstall the "D" handle assembly (4) on the door oriented as shown in Figure 1. Ensure "D" handle is spring loaded against door with nylon button (5) contacting door surface.
10. Using the three screws retained in step 2 of Part I, attach the escutcheon (1) to the door.
11. Repeat the above procedure on the other three "D" handle assemblies as required.
12. Make an entry in the helicopter records indicating this bulletin has been complied with.



VIEW LOOKING OUTBOARD (TYP 4 PLACES)

- 1. Escutcheon (Ref)
- 2. Crossbar (Ref)
- 3. Spring Pin (NAS561C4-8)
- 4. "D" Handle Assembly (206-031-620-101)
- 5. Nylon Button (Ref) (Far Side Against Door)

NOTES

- 1 Plug hole and fair using adhesive 299-947-100 TY2 CL2 (C-317).
- 2 Plug hole and fair using sealant MIL-PRF-81733 (C-251).

Figure 1. Handle Assy