



AERONAUTICAL ACCESSORIES

P.O. BOX 3689 BRISTOL, TENNESSEE 37625-3689 USA
TELEPHONE: 423-538-5151 TOLL FREE: 800-251-7094
TELEFAX: 423-538-8469 E-MAIL: sales@aero-access.com
techsupport@aero-access.com

INSTALLATION INSTRUCTIONS

PASSENGER SHOULDER HARNESS RESTRAINT SYSTEM

KIT 206-936-700

CONSISTING OF KIT 206-931-100 AND 206-935-165

KIT 206-936-701

CONSISTING OF KIT 206-931-200 AND 206-935-165

KIT 206-936-702

CONSISTING OF KIT 206-931-300 AND 206-935-165

FOR

BELL HELICOPTER TEXTRON MODEL 206L, L-1, L-3, AND L-4 HELICOPTERS

ECCN
9E991

Report Number AA-89009

Revision O

October 13, 2011

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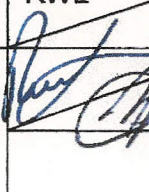
Rev.	Date	Description	Pages	Prepared By Approved by
-	8/22/89	Original Release	All	N/A
H	1/23/97	Various Technical Updates	All	N/A
I	8/26/99	Added Log of Revisions Revised Parts List	2 15,16 17	N/A
J	5/9/00	Revised Washer Callout Revised Model Effectivity	5,11,15 16,17 All	N/A
K	6/2/00	Revised Sleeve and Rivet P/N'S	6,11 16,17	N/A
L	4/30/04	Added Comfort Clip to Parts List	16	N/A
M	05/05/10	Added L-4 to PModel Effectivity Reformatted Document	All All	R.W.L. R.L.
N	09/09/10	Revised MS34694-S49 Screw to MS24694-S63 In P/L	10	RWL BL
O	10/13/11	Reformatted document to current AA standards And revised all references from AAI to AA. Deleted 206-930-285 qty 1 from 206-931-101/-102/-110 Deleted 206-930-287 qty 1 from 206-931-101/-102/-110 Deleted 206-930-288 qty 1 from 206-931-101/-102/-110 Added 206-919-285 qty 1 to 206-931-101/-102/-110 Added 206-919-287 qty 1 to 206-931-101/-102/-110 Added 206-919-288 qty 1 to 206-931-101/-102/-110 Deleted 90-004-4 Trim Nut qty 4 from 206-935-177 Deleted 90-004-4 Trim Nut qty 4 from 206-935-178 Added 90-003-4 Trim Nut qty 4 to 206-935-165 Added 90-003-4 Trim Nut qty 4 to 206-935-167	All 18 18 18 18 18 18 18 18 19 19 19 19	 This data has been approved by BHTI ODA-710621-SW, IAW the FAA-approved ODA Procedures Manual 11-8-11 Authorized Signature/Date

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1.0 INTRODUCTION

These instructions provide the information necessary to install the **AERONAUTICAL ACCESSORIES PASSENGER SHOULDER HARNESS RESTRAINT SYSTEM** on Bell Helicopter Textron model 206L, L-1, L-3, and L-4 helicopters. The Forward Passenger Shoulder Harness, Left Hand and Right Hand kits are the "quick-release, H-frame" type and are compatible with all standard and litter provisioned aircraft. All Engineering aspects of these instructions are FAA approved under STC No. SH2751SO

NOTE

Refer to Bell Helicopter Model 206 Maintenance Manual and all applicable maintenance manuals and/or ICAs for disassembly/reassembly instructions not specifically addressed in this document. Read ALL instructions thoroughly and have a clear understanding BEFORE beginning.

2.0 GENERAL NOTES

- 2.1. READ ALL INSTRUCTIONS COMPLETELY prior to beginning installation.
- 2.2. Tag all parts, including attaching hardware (unless otherwise noted), removed to gain access to work areas. Protect parts from damage until re-installed.
- 2.3. Following any drilling or cutting operation, remove burrs and particles. Apply a thin coat of primer per MIL-PRF-23377 to bare metal surfaces, except when used for grounding.
- 2.4. Seal (by capping or plugging) all openings and/or ports in components, hoses and/or tubes disconnected or removed to facilitate the installation.
- 2.5. Whenever possible, use existing holes in the structure to locate holes in the modification parts. Use a hole finder or back drill when match drilling holes. Where an oversized or elongated hole exists, drill new holes using 1-1/2 times diameter minimum edge distance and four times diameter minimum rivet spacing. If covered by a part of the kit, leave "bad" holes open; otherwise, fill holes using CR3243 type rivets.
- 2.6. Due to the complexity and critical interfacing of the kit parts, most parts should be temporarily installed or secured in place using Cleco fasteners until all surrounding parts have been fitted and installed temporarily or permanently. After all applicable parts have been properly fitted; refer to the corresponding section for the appropriate fastener hardware.

3.0 PREPARATION

- 3.1. Ground the aircraft, disconnect battery and ensure that the battery Master Switch is **OFF**.
- 3.2. Prepare the aircraft for safe ground maintenance in accordance with applicable maintenance procedures.

- 3.3. Remove aircraft crew and passenger doors from the appropriate side(s) of the aircraft and store in a safe place.
- 3.4. If equipped, remove the copilot cyclic and collective sticks.
- 3.5. Remove all existing equipment installed (riveted or screwed) on either upper crew seat back bulkhead.
- 3.6. Remove crew and passenger seats and seatback cushions. Remove ALL installed interior trim panels and other items in the immediate work area (crew seatback, crew rollover bulkhead, vertical tunnel, ash trays, hatbin, etc.). Retain all hardware for reinstallation.
- 3.7. Remove left hand and right hand access panels from rollover structure in the Hat Bin area. Disconnect and remove oil cooler lines from inside the right hand rollover structure to improve access to the work area.

4.0 INSTALLATION OF THE LEFT AND RIGHT SHOULDER HARNESS ASSEMBLIES

- 4.1. Place left hand Doubler (206-930-113), provided, and right hand Doubler (206-930-114), provided, into appropriate position per Drawing Number 206-931, Sheets 5 and 6. Mark all existing rivets that interfere with the placement of the Doublers. Remove Doublers and drill out all marked rivets.
- 4.2. Place Doublers back into position. Match drill Doublers to existing rivet holes in bulkhead. Cleco after drilling.
- 4.3. Match drill bulkhead to all existing holes in doublers. Cleco each hole after drilling.

NOTE

Trim stiffener located on the forward bulkhead which interferes with the placement of the Angle Mounts.

- 4.4. Place left hand Angle Mount (206-930-121), provided, right hand Angle Mount (206-930-122), provided, and Spacers (206-930-123), provided, into the proper location per Drawing Number 206-931, Sheets 4, 8 and 9. Mark all rivets that interfere with the placement of the Angle Mounts. Remove Angle Mounts and drill out marked rivets.
- 4.5. Place Angle Mounts, Spacers, Spacer Assemblies (206-930-125), provided, left hand Shim (206-930-127), provided, and right hand Shim (206-930-128), provided, into place and temporarily install appropriate hardware per Drawing Number 206-931, Sheet 7. Match drill Angle Mounts and Shims to existing rivet holes in bulkhead. Cleco each hole after drilling. Match drill existing structure through existing holes in Angle mounts. Cleco each hole after drilling.
- 4.6. Remove all parts from work area. Deburr all holes, clean work area.
- 4.7. Secure all parts back into position with clecos. Once positioned, replace clecos with appropriate hardware per Drawing Number 206-931, Sheets 5, 7 and 8.

- 4.8. Install the Shoulder Harness Assemblies with the appropriate hardware per Drawing Number 206-931, Sheet 7.

5.0 INSTALLATION OF CENTER SHOULDER HARNESS ASSEMBLY

CAUTION

When drilling through the upper tunnel, use a drill stop to keep from damaging flight controls.

- 5.1. Place Center Mount Assembly (206-930-111), provided, into appropriate position per Drawing Number 206-931, Sheet 10. Mark all existing rivets in upper tunnel that interfere with the placement of the Center Mount Assembly. Remove Center Mount Assembly and drill out and/or remove all marked rivets and Hi-Lok bolts.
- 5.2. Place Center Mount Assembly and Spacer (206-930-131), provided, into position and match drill to existing rivet holes through Center Mount Assembly and Spacer. Cleco each hole after drilling.
- 5.3. Match drill upper tunnel to existing holes in Center Mount Assembly. Cleco each hole after drilling.
- 5.4. Remove Center Mount Assembly and Spacer from work area. Deburr all holes. Clean work area.
- 5.5. Install Center Mount Assembly and Spacer with appropriate hardware per Drawing Number 206-931, Sheet 10.
- 5.6. Install the Shoulder Harness Assembly with the appropriate hardware per Drawing Number 206-931, Sheet 11.

6.0 REPLACEMENT OF THE LAP BELT ASSEMBLIES

NOTE

The lap belt assembly may be oriented as desired (buckle side inboard, as recommended, or outboard) depending on operator preference. The recommended orientation will limit the effects of "seatbelt rash" if the seatbelt is inadvertently left outside the aircraft.

- 6.1. Gain access to the lap belt attachment points. Remove existing lap belt assemblies and attaching hardware and discard.
- 6.2. Slip one Plastic Sleeve (206-919-121), provided, over each of the outboard seatbelt assemblies to be installed in the next step.
- 6.3. Install the new seatbelt assemblies using the bolts (AN174-7A), washers (NAS1149C0432R); (one washer under bolt head and one under nut), and nuts 90-003-4, provided. Install hardware, per Figure 1.

7.0 MODIFICATION AND REINSTALLATION OF CENTER OVERHEAD CASEY HEATER DUCT, P/N 206-931-300 KIT ONLY

- 7.1. See Report No. AA-97001.

8.0 MODIFICATION AND REINSTALLATION OF HAT BIN, P/N 206-931-100 KIT AND 206-931-300 KIT

- 8.1. Using the existing Hat Bin, cut three holes per Drawing Number 206-931, Sheet 12.
- 8.2. Place Hat Bin into place while feeding Shoulder Harness straps through holes in Hat Bin.
- 8.3. Place Adapters against the Hat Bin (ensure Shoulder Harness straps have freedom of movement), per Drawing Number 206-931, Sheet 13. Match drill with a #16 drill existing holes in Adapter through Hat Bin.
- 8.4. Install the rivnuts (MS27130A-7), provided, into each hole in the Hat Bin. Install screws (120-079-6-12), provided, with washers (601-6), provided, through Adapters into rivnuts and tighten.

9.0 MODIFICATION AND REINSTALLATION OF HAT BIN, P/N 206-931-200 KIT ONLY**NOTE**

For aircraft equipped with the small return duct Garrett ECS, the ECS screen and duct must be relocated downward in the Hat Bin to accommodate the dual shoulder harness installation (See steps 9.1 thru 9.4).

- 9.1. Center ECS screen in Hat Bin. Trim top of ECS screen as required (approximately .250 inches) to facilitate installation of screen in conjunction with the 206-932-015 adapter installed.
- 9.2. Place Hat Bin into place while feeding Shoulder Harness straps through holes in Hat Bin.
- 9.3. Place Adapters against the Hat Bin (ensure Shoulder Harness straps have freedom of movement), per Drawing Number 206-931, Sheet 13. Install screws (120-079-6-12), provided, with washers (601-6), provided, through Adapters into rivnuts and tighten.
- 9.4. Trim the return duct to match the pattern in the screen assembly to ensure that the center inertia reel will operate properly, secure the Return Duct Adapter, 206-937-152, to the trimmed return duct using CCR264SS3-4 rivets, and seal with Proseal.

NOTE

For aircraft equipped with the large return duct Garrett ECS, the ECS screen and duct must be replaced with 206-937-103 to accommodate the dual shoulder harness installation (See steps 9.5 thru 9.8).

- 9.5. Place Hat Bin into place while feeding Shoulder Harness straps through holes in Hat Bin.

- 9.6. Place Adapters against the Hat Bin (ensure Shoulder Harness straps have freedom of movement), per Drawing Number 206-933, Sheet 11. Install screws (120-079-6-12), provided, with washers (601-6), provided, through Adapters into rivnuts and tighten.
- 9.7. Install Screen Assembly, 206-937-103, so that the upper edge of screen assembly fits around the three adapters using the existing hardware
- 9.8. Trim the return duct to match the pattern in the screen assembly to ensure that the center inertia reel will operate properly. Secure the Return Duct Adapter, 206-937-005, to the trimmed return duct using CCR264SS3-4 rivets, and seal with Proseal.

10.0 INSTALLATION OF THE ROLLOVER BULKHEAD DOUBLER

NOTE

If Crew Shoulder Harness Kit P/N 206-911-165 or equivalent has been previously installed proceed to section 13.2.

CAUTION

The following steps are critical to ensure proper fit of the Shoulder Harness Assembly in the aircraft. Any deviations from these procedures or the locations specified in the Installation Drawing will cause incorrect mounting of the shoulder harness frame with a resulting loss of structural integrity.

- 10.1. Lock the left hand Shoulder Harness Frame Assembly (206-934-181), provided, or right hand Shoulder Harness Frame Assembly (206-934-182), provided, into the left hand Rollover Bulkhead Doubler (206-916-209), provided, or right hand Rollover Bulkhead Doubler (206-916-210), provided, by inserting the two studs into the keyhole slots and locking the assembly together with the attached release hinges. Position the complete assembly as shown in the applicable view of Drawing Number 206-935, Sheet 2 & 3.

NOTE

The frame and doubler may be shifted only within the specified limits to ensure the maximum number of existing rivets are used when installing the doubler.

- 10.2. Insure that the vertical support posts remain parallel and are both perpendicular to the seatback box. For the right hand installation only, match the doubler to the upper rollover bulkhead contour with the aft edge of the doubler flush with the edge of the rollover bulkhead.
- 10.3. Holding the frame/doubler assembly firmly in place, outline the doubler on the rollover bulkhead. Remove the assembly and separate the doubler from the frame assembly.

- 10.4. Reposition the doubler on the rollover bulkhead and note and mark which of the existing rivet locations can be used to install the doubler; ensure adequate edge distance is maintained. Note that the doubler is oversized and may be later trimmed to fit as required.
- 10.5. Locate and mark the rivets near the raised sections of the doubler which require countersinking to avoid interference. Also mark the existing rivets directly under the raised sections which will not interfere with the installation of the doubler and do not require removal.
- 10.6. Using a #27 (.144) bit, drill out all existing rivets on the upper rollover bulkhead marked for removal in the previous steps. Deburr all holes and remove debris from surface.
- 10.7. Reinstall the doubler on the frame assembly and lock into place. Reposition the entire assembly in the aircraft per the Installation Drawing to confirm proper fit and placement. Adjust assembly as required and note changes on the aircraft structure. Remove the doubler/frame assembly and, if required, mark and drill out any additional rivets.
- 10.8. Holding the doubler firmly in position, use a hole finder and a #27 (.144) bit to match drill the doubler to the existing holes in the rollover bulkhead. Ensure adequate edge distance is maintained. Cleco the doubler into position as drilling progresses.
- 10.9. Using the Installation Drawing as a guide (Drawing Number 206-935, Sheet 4, View A-A left hand or Sheet 5 View B - B right hand) lay out the new rivet locations (typically 10 places) in the center of the doubler. Using a #27 (.144) bit, drill thru the doubler and bulkhead where marked. Remove the doubler.
- 10.10. Hold the doubler in place and note which existing rivet holes in the bulkhead fall below the sloped areas or under the four slots/holes of the doublers and require countersink rivets. Countersink the appropriate holes and cleco the doubler in place.

CAUTION

Do not rivet the doubler to the rollover bulkhead at this time.

- 10.11. Orient the Forward Overhead Angle (206-914-250), provided, over the lower and forward surfaces of the rollover bulkhead between the two raised sections of the doubler as shown in Drawing Number 206-935, Sheet 4, View A - A left hand, or Sheet 5 View B - B, right hand. Position the angle to ensure adequate edge distance; trim the angle as required to ensure proper fit. Lay out a new row of three rivets equally spaced on the angle's forward face.
- 10.12. Using a hole finder and a #27 (.144) bit, match drill the angle to the existing rivet locations in the doubler and bulkhead. Drill thru the forward face of the angle and bulkhead where marked. Cleco the angle in place as drilling progresses.

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- 10.13. Orient the AFT Overhead Angle (206-914-262), provided, over the lower and aft surfaces of the rollover bulkhead between the two raised sections of the doubler as shown in Drawing Number 206-935, Sheet 4 View A - A, left hand, or Sheet 5 View B - B, right hand. Position the angle to ensure adequate edge distance; trim the angle as required to ensure proper fit. Lay out a new row of three equally spaced rivets on the angle's aft face.
- 10.14. Using a hole finder and a #27 (.144) bit, match drill the angle to the existing rivet locations in the doubler and bulkhead. Drill thru the forward face of the angle and bulkhead where marked. Cleco the angle in place as drilling progresses.
- 10.15. Remove the doubler and the two angles. Deburr all holes and apply a thin coat of primer (zinc chromate or equivalent) to the bare metal. Replace the doubler and the two angles and securely Cleco them into place.
- 10.16. If applicable, repeat for the other side.

11.0 INSTALLATION OF THE SEATBACK CLIPS

- 11.1. Lock the left hand Shoulder Harness Frame Assembly, (206-934-181) provided, or right hand Shoulder Harness Frame Assembly (-182), provided; into the Clecoed overhead doubler by inserting the two studs into the keyhole slots and locking the assembly together with the attached release hinges. Insure that the vertical support posts remain parallel and are both perpendicular to the seatback structure in accordance with Drawing Number 206-935, Sheet 2 & 3.
- 11.2. Slip one Seatback Clip (206-914-273), provided, over each of the lower frame studs.

NOTE

The next steps are critical to the correct installation and operation of the "Quick Mount" Shoulder Harness provisions. The clips must be installed so that the frame assembly does not bind when it is unlocked and being removed.

- 11.3. Letting the frame assembly hang straight down, carefully push it straight forward until the clips are parallel to the seatback with a nominal 1/8" gap between the upper crew seatback structure (the box frame or the square bar) and the "inside" of the clip (Ref: Drawing 206-935, Sheet 7, View D - D or View E - E).
- 11.4. Holding the frame assembly and clips securely in place, outline the clips and mark the general locations of four clip mounting holes (two per clip). Remove the frame assembly and the clips. Reposition the clips on the seatback and locate any existing rivet holes which might be used to install the clips. Ensure adequate edge distance. If existing rivets cannot be used and/or interfere with either the fit or function of the clips or frame assembly lower studs, remove and replace with countersink rivets.

NOTE

Ensure the center to center distance of the two clip slots remains 5.25 inches (Ref: Drawing 206-935, Sheet 6, View "C").

- 11.5. Using a #27 (.144) bit, drill thru the seatback clips and then match drill bulkhead to the clip mounting holes. Cleco the clip in place after the first hole is drilled and confirm proper alignment of the clip prior to drilling the second hole.
- 11.6. Determine if any interference still exists between the installed clip(s) and any existing rivets. If required, countersink (100%) the seatback box frame to avoid interference with the installation and operation of the clip(s).
- 11.7. Remove the two clips from the aircraft. Deburr all holes and apply a thin coat of primer (zinc chromate or equivalent) to the bare metal.
- 11.8. Reposition the clips on the seatback structure and Cleco all items securely in place. Install the frame assembly and lock the frame in place. Ensure all parts fit and are aligned per the Installation Drawing. Ensure that the frame assembly is easily installed and removed. If the frame tends to bind upon removal, confirm that the seatback clips are correctly installed and that the clips hang parallel to the installed frame support posts. If required, remove and gently bend the clips to the proper angle. Reinstall clips and frame and again check the operation; repeat as required.
- 11.9. If applicable, repeat for the other side.

12.0 INSTALLATION OF PROVISIONS:**NOTE**

Using the Installation Drawing as a guide, rivet all structural parts together as follows:

12.1. CREW SEATBACK:

- 12.1.1. Secure the seatback clips to the seatback structure using four rivets (CR3243-4-3) (-4 for aircraft with Litter kit), provided.
- 12.1.2. If applicable, secure the outboard corner angle(s) to the seatback structure using two rivets (CR3243-4-3) (-4 for aircraft with Litter kit), provided, and one rivet (MS20470AD4-4), provided. Secure the angle to the rollover bulkhead structure using three rivets (CR3243-4-4), provided.

12.2. ROLLOVER BULKHEAD DOUBLER:

- 12.2.1. Remove doubler and confirm that all rivets under the raised sections of the doubler have been installed. Reposition doubler and securely Cleco in place.
- 12.2.2. Using Drawing Number 206-935, Sheet 4, View A - A or Sheet 5, View B - B install the applicable rivets (CR3243-4-2 or -3), provided, through the doubler and the rollover bulkhead.

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- 12.2.3. Secure the two Overhead Doubler Angles to the rollover bulkhead using six rivets (CR3243-4-4) (lower surface) and six rivets (CR3243-4-2) (Forward and aft surfaces), provided.
- 12.2.4. If applicable, repeat for the other side.
- 12.2.5. Paint all exposed items (doubblers, angles, clips and rivet heads) as desired to match existing interior.

12.3. REPLACEMENT OF THE LAP BELT ASSEMBLIES**NOTE**

The lap belt assembly may be oriented as desired (buckle side inboard, as recommended, or outboard) depending on operator preference. The recommended orientation will limit the effects of "seatbelt rash" if the seatbelt is inadvertently left outside the aircraft.

- 12.3.1. Gain access to the lap belt attachment points. Remove existing lap belt assemblies and attaching hardware and discard.
- 12.3.2. Slip one Plastic Sleeve (206-919-121), provided, over each of the outboard seatbelt assemblies to be installed in the next step.
- 12.3.3. Install the new seatbelt assemblies using the bolts, (AN174-5A) washers (NAS1149C0432R) (one washer under bolt head and one under nut) and nuts (90-003-4), provided. Install hardware, per Figure1.

13.0 INSTALLATION OF THE SHOULDER HARNESS ASSEMBLY:

- 13.1. If the Crew Shoulder Harness H-Frame has not been installed, proceed to step 13.3.
- 13.2. Remove previously installed Crew Shoulder Harness H-Frame Assy.
- 13.3. Orient the Shoulder Harness Assembly behind the crew seatback and insert the two lower studs into the installed clips. Lift the frame assembly up and insert the two upper studs into the rollover bulkhead doubler keyhole slots. Push the frame forward into the doubler and ensure that the two release hinges securely lock in position.
- 13.4. Route the shoulder harnesses to the crew and passenger seats, slide the shoulder harness adapters over the tang and secure in the buckle.
- 13.5. Adjust headrest heights as desired.

14.0 RETURN AIRCRAFT TO SERVICE:

- 14.1. Clean all areas of debris. Inspect all opened spaces to ensure equipment, tools, etc. are removed.

- 14.2. Install the upper rollover trim panels (Some slight trimming of the rollover trim panel may be required). Orient and position the appropriate Upper Cover Assembly; 206-922-235, left hand or 206-922-236, right hand; over the top of the frame assembly. Reinstall the frame assembly. Remove the two backing strips from the adhesive side of the attached Velcro and press the Upper Cover Assembly into place.
- 14.3. Reposition the rear-facing passenger seatbacks and determine if interference exists between the frame assembly support posts and the seatbacks. If so, use the provided screws, MS27039-1-16, and the large area washers, AN970-3, provided, as required as spacers.
- 14.4. Replace all interior trim panels and items previously removed using the existing hardware for reinstallation.
- 14.5. Replace the crew and passenger seats and seatback cushions.
- 14.6. If so equipped, replace the copilot cyclic and collective sticks.
- 14.7. Replace the aircraft crew and passenger doors.

15.0 COMPLETION

- 15.1. Revise aircraft equipment list and make a Log Book entry. Insert attached STC in aircraft records. Complete and submit FAA form 337, or equivalent, as applicable.
- 15.2. Installation complete.

16.0 MAINTENANCE PROCEDURES:

16.1. INSPECTION (Every 100 flight hours)

- 16.1.1. Visually inspect the frame assembly for signs of damage. Ensure proper operation of inertia reel(s).
- 16.1.2. Remove cover and visually inspect inertia reels for internal rust and corrosion. Spray accessible parts of inertia reels with lubricant (MIL-L-25681 or equivalent). Check tightness of attaching hardware. Replace cover.
- 16.1.3. Visually inspect lap belt and shoulder harness straps for wear, fraying, or damage.

16.2. REPLACEMENT

- 16.2.1. Replace defective inertia reels and perform operational check.
- 16.2.2. Replace all worn, frayed, or damaged lap belt(s) and shoulder harness straps.

16.3. ADJUSTMENTS

- 16.3.1. Inertia reel assemblies are factory adjusted to the proper G setting and are not field adjustable.

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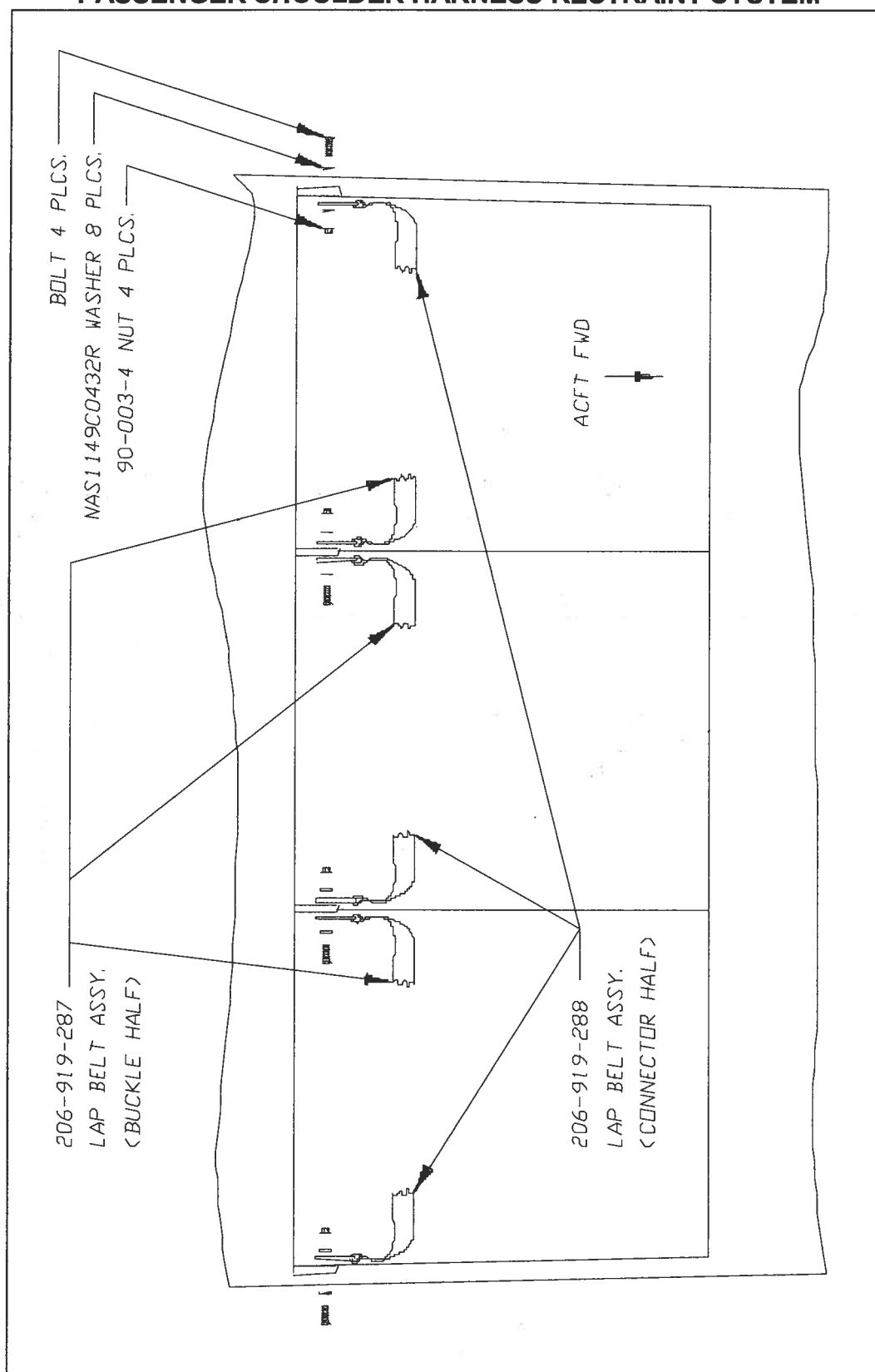
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17.0 WEIGHT AND BALANCE

AFT PASSENGER SHOULDER HARNESSES ONLY		
Weight	Station	Lateral Arm
8.5 lbs (3.8 kg)	146.0 in (3708.4 mm)	0.0 (0.0 mm)

FORWARD PASSENGER SHOULDER HARNESSES ONLY		
Weight	Station	Lateral Arm
16.2 lbs (7.3 kg)	80.1 in (2034.5 mm)	+0.45 (11.43 mm)

BOTH AFT AND FORWARD PASSENGER SHOULDER HARNESSES INSTALLED		
Weight	Station	Lateral Arm
24.7 lbs (11.2 kg)	102.8 in (2611.12 mm)	+0.29 (7.36 mm)

**FIGURE 1 – VIEW LOOKING DOWN AT PASS. SEAT AREA**

INSTALLATION INSTRUCTIONS **PASSENGER SHOULDER HARNESS RESTRAINT SYSTEM** **PARTS LIST**

206-931-100 STANDARD KIT **206-931-200 WITH GARRETT E.C.S. PROVISIONS** **206-931-300 WITH CASEY HEATER PROVISIONS**

<u>Qty</u> <u>-100</u>	<u>Qty</u> <u>-200</u>	<u>Qty</u> <u>-300</u>	<u>Part Number</u>	<u>Description</u>
	1	1	206-931-100	Pass. Shoulder Harness Instl.
			206-931-200	Pass. Shoulder Harness Instl.
			206-931-300	Pass. Shoulder Harness Instl.
1			206-931-101	Pass. Shoulder Harness L/H Instl.
1			206-931-102	Pass. Shoulder Harness R/H Instl.
1			206-931-110	Pass. Shoulder Harness Center Instl.
		1	206-937-150	Casey Adapter Kit
	1		206-937-152	Garrett Adapter Kit
6			120-079-6-12	Screw
6			601-6	Washer
6			MS27130A-7	Rivnut
4			AN174-7A	Bolt
8			NAS1149C0432R ALT.: AN960C416L	Washer
4			90-003-4	Trim Nut
1			206-931	Installation Drawing
		1	AA-97001	Installation Instructions - Casey Heater Duct Adapter Kit

INSTALLATION INSTRUCTIONS **PASSENGER SHOULDER HARNESS RESTRAINT SYSTEM**

206-931-101 PASS. SHOULDER HARNESS L/H INSTL.
206-931-102 PASS. SHOULDER HARNESS R/H INSTL.
206-931-110 PASS. SHOULDER HARNESS CENTER INSTL.

<u>Qty</u> <u>-101</u>	<u>Qty</u> <u>-102</u>	<u>Qty</u> <u>-110</u>	<u>Part Number</u>	<u>Description</u>
		1	206-932-017	Adapter Center
		1	206-930-111	Center Mount Assy.
1			206-930-113	Doubler L/H
	1		206-930-114	Doubler R/H
1			206-930-121	Angle Mount L/H
	1		206-930-122	Angle Mount R/H
1	1		206-930-123	Spacer
1	1		206-930-125	Spacer Assy.
1			206-930-127	Shim
	1		206-930-128	Shim
		1	206-930-131	Spacer
1			206-930-135	Adapter L/H
	1		206-930-136	Adapter R/H
1	1	1	206-919-288	LAP Belt Assy. (Connector Half)
1	1	1	206-919-287	LAP Belt Assy. (Buckle Half)
1	1	1	206-919-285	Shoulder Harness Assy.
1	1		206-919-121	Plastic Sleeve
		4	MS24694-S49	Screw
4	4		MS24694-S63	Screw
32			CR3243-4-3	Rivet
20	28		CR3243-4-4	Rivet
7	4		CR3243-4-6	Rivet
		10	CR3243-5-3	Rivet
		4	CR3243-5-4	Rivet
2	2		CR3243-5-5	Rivet
		4	HL20PB6-8	Hi-Lok Bolt
		2	HL20PB6-9	Hi-Lok Bolt
		6	HL70-6	Hi-Lok Nut
		16	NAS1149F0363P	Washer
			ALT.: AN960-10	
2	2	2	D7LZ-6560286-B	Comfort Clip

INSTALLATION INSTRUCTIONS **PASSENGER SHOULDER HARNESS RESTRAINT SYSTEM**

206-935-165 SHOULDER HARNESS KIT (2 PLACES) **206-935-167 SHOULDER HARNESS KIT (2 PLACES CREW REPLACEMENT)** **206-935-177 SHOULDER HARNESS KIT L/H** **206-935-178 SHOULDER HARNESS KIT R/H**

<u>Qty</u> <u>-165</u>	<u>Qty</u> <u>-167</u>	<u>Qty</u> <u>-177</u>	<u>Qty</u> <u>-178</u>	<u>Part Number</u>	<u>Description</u>
1				206-935-177	Shoulder Harness Kit L/H
1				206-935-178	Shoulder Harness Kit R/H
	1	1		206-934-181	Shoulder Harness Assy L/H
	1		1	206-934-182	Shoulder Harness Assy R/H
		2	2	206-914-273	Seatback Clip
		1	1	206-914-250	FWD Overhead Angle
		1	1	206-914-262	AFT Overhead Angle
		1		206-916-209	Overhead Doubler L/H
			1	206-916-210	Overhead Doubler R/H
		1		206-922-235	Upper Cover Assy. L/H
			1	206-922-236	Upper Cover Assy. R/H
3	3			206-919-121	Plastic Sleeve
		10	10	CR3242-4-2	Rivet (CSK)
		3	3	CR3242-4-3	Rivet (CSK)
		18	18	CR3243-4-2	Rivet
		15	15	CR3243-4-3	Rivet
		15	15	CR3243-4-4	Rivet
		2	2	MS20470AD4-4	Rivet
		2	2	MS27039-1-16	Screw
		4	4	AN970-3	Washer
2	2			AN174-5A	Bolt
2	2			AN174-7A	Bolt
8	8			NAS1149C0432R ALT.: AN960C416L	Washer
4	4			90-003-4	Trim Nut
1	1			206-935	Installation Drawing

Confirm inventory prior to installation.

Packed by: _____ / /

United States of America
Department of Transportation -- Federal Aviation Administration
Supplemental Type Certificate

Number SH2751SO

This certificate issued to Aeronautical Accessories, Inc.
P.O. Box 3689
Bristol, TN 37625

certifies that the change in the type design for the following product with the limitations and conditions therefor as specified herein meets the airworthiness requirements of Part 6 of the Civil Air Regulations.

Original Product -- Type Certificate Number: H2SW
Make: Bell Helicopter Textron Canada
Model: 206L; 206L-1; 206L-3; 206L-4

Description of Type Design Change: Installation of a Passenger Shoulder Harness Restraint System in accordance with Aeronautical Accessories, Inc. Drawing List, Report No. AA-89010, Rev. M, dated 5-18-10, or later FAA approved revision. Instructions for Continued Airworthiness, Report Number AA-10013, Revision NR, dated 4-17-10, or later FAA accepted revisions are required for this installation.

Limitations and Conditions: Compatibility of this design change with previously approved modifications must be determined by the installer. If the holder agrees to permit another person to use this certificate to alter the product, the holder shall give the other person written evidence of that permission.

This certificate and the supporting data which is the basis for approval shall remain in effect until surrendered, suspended, revoked or a termination date is otherwise established by the Administrator of the Federal Aviation Administration.

Date of application: October 13, 1989

Date reissued:

Date of issuance: April 20, 1990

Date amended: July 23, 2010



By direction of the Administrator


(Signature)

Lance T. Gant, Manager
Rotorcraft Certification Office
Southwest Region

(Title)

INSTRUCTIONS: The transfer endorsement below may be used to notify the appropriate FAA Regional Office of the transfer of this Supplemental Type Certificate.

The FAA will reissue the certificate in the name of the transferee and forward it to him.

TRANSFER ENDORSEMENT

Transfer the ownership of Supplemental Type Certificate Number _____

to *(Name of transferee)* _____

(Address of transferee) _____
(Number and street)

(City, State, and ZIP code)

from *(Name of grantor)* *(Print or type)* _____

(Address of grantor) _____
(Number and street)

(City, State, and ZIP code)

Extent of Authority (if licensing agreement): _____

Date of Transfer: _____

Signature of grantor *(In ink)*: _____

GPO Box 367 Canberra ACT 2601
Australia
Telephone (06) 268 4111
Telex 62221
Fax (06) 268 5683

Ref: F94/1572

DEC 30 1994

Manager
Aeronautical Accessories, Inc.
P.O. Box 3689
Bristol, TN 37625
U.S.A.

Dear Sir.

Re: FAA STC SH2751SO - Bell Helicopter 206 L/L-1/L-3

We have received an application from:-

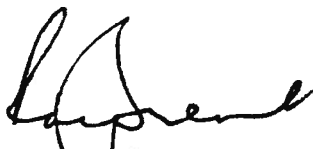
Quality Manager
Helitech Pty Ltd
P.O. Box 138
Hamilton Central Qld 4007
Australia,

- for validation of the subject STC.

This is to advise that the STC has been validated to the revision dated April 20 1990 and entered in the "Register Of Foreign STCs Acceptable in Australia".

Please advise this office of any subsequent revisions to this STC.

Yours faithfully, .



Ray Brent
Manager
Structures and Certification

15 December 1994





REPÚBLICA FEDERATIVA DO BRASIL
Ministério da Aeronáutica
CENTRO TÉCNICO AERONÁUTICO

CERTIFICADO DE HOMOLOGAÇÃO SUPLEMENTAR DE TIPO

NÚMERO 9511-04

CATEGORIA NORMAL

Este documento, emitido com base na Portaria nº 453/GM3, de 02 de agosto de 1991, em nome de: **AERONAUTICAL ACCESSORIES, INC.**

P.O. BOX 3689

Bristol, TENNESSEE 37623

U.S.A.

atesta que a modificação ao projeto de tipo do produto citado abaixo, observadas as limitações e condições especificadas, satisfaz aos requisitos de aeronavegabilidade aplicáveis ao:

PRODUTO ORIGINAL:

Marca de nacionalidade e de matrícula: - X - X -

Fabricante: **BELL HELICOPTER TEXTRON**

Modelo(s): **206L, L-1 & L-3**

Nº de série: - X - X -

Nº do Certificado de Tipo: **H2SW (FAA)**

DESCRIÇÃO DA MODIFICAÇÃO AO PROJETO DE TIPO:

Instalação de "PASSENGER SHOULDER HARNESS RESTRAINT SYSTEM" da Aeronautical Accessories Inc, de acordo com o "Report Nº AA-89010 Drawing List", Rev. B, de 26/10/90, ou em revisões posteriores aprovadas pelo CTA.

LIMITAÇÕES E CONDIÇÕES:

- I.** Os dados referentes a esta modificação são considerados adequados para reprodução em aeronaves do mesmo tipo e modelo.
- II.** A aprovação desta modificação não é estendida para outras aeronaves do mesmo tipo e modelo que tenham recebido anteriormente outra modificação aprovada; e não ser que a oficina instaladora verifique se não há incompatibilidade desta modificação com as anteriormente instaladas e que não haverá nenhum efeito adverso na aeronavegabilidade da aeronave.
- III.** Uma cópia deste Certificado e do "Report Number AA-89009 Installation Instructions", Rev. C, de 04/01/91, devem ser mantidos como parte integrante dos documentos da aeronave modificada.
- IV.** Permanecem válidas as limitações e condições estabelecidas na especificação da aeronave Nº H2SW, emitida pela FAA (U.S.A.)

DATAS:

Do requerimento: **18 MAR 1993**

Da emissão: **24 NOV 1993**

Da reemissão:

APROVAÇÃO:

No imp. SILOMAR CAVALCANTE GODINHO - Ten.-Cel.-Av.
Chefe da Divisão de Homologação Aeronáutica
GERALDO ANTONIO DINIZ BRANCO - Maj.-Eng.

By: J. A. 4/10 de 5/0
Brig.-Ar REGINALDO DOS SANTOS
Director Interino do Centro Técnico Aeroespacial

NOTAS:

- a) Este Certificado e os dados técnicos com base nos quais ele foi emitido são válidos até que sejam cancelados, suspensos, revogados ou um prazo limite seja estabelecido pelo Centro Técnico Aeroespacial.
- b) Se for necessário espaço adicional para descrever a modificação ao projeto de tipo ou as limitações e condições, use o Formulário FDI-200-05 "Adendo ao Certificado de Homologação Suplementar de Tipo".
- c) O proprietário deste Certificado deve:
- mantê-lo junto ao dossiê do respectivo processo de homologação;
 - manter cópia do Certificado a bordo da aeronave junto aos documentos de mesma.

ENDOSSO DE TRANSFERÊNCIA *

Transfiro a propriedade deste Certificado de Homologação Suplementar de Tipo para:

ADQUIRENTE	Nome:
	Logradouro:
	CEP: Cidade: Estado:
TRANSFERENTE	Nome:
	Logradouro:
	CEP: Cidade: Estado:

Data da Transferência:

Assinatura do Transferente:

- * No caso de transferência da propriedade deste Certificado, o transferente deve preencher o quadro "Endosso de Transferência", e o adquirente deve enviar este Certificado à Divisão de Homologação Aeronáutica para que seja reemitido em nome do adquirente.

OBSERVAÇÕES:

Este CBST representa a validação brasileira para o STC nº 3H2751SO, emitido pela FAA.