

CREW BARRIER, KIT INSTALLATION INSTRUCTIONS

MODELS: BELL 205

Read all of the Instructions for Continuing Airworthiness thoroughly prior to performing any activities relating to this product

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Notes

1. If changes to this document are required, Alpine Aerotech LP shall revise all pages and reissue the entire document.
2. Alpine Aerotech LP shall make any subsequent revisions of this document available free of charge upon request. Alpine Aerotech LP also recommends that the end user of this product periodically verify the revision level of this document.

SECTION 1 DESCRIPTION

The following information provides a functional description of the Crew Barrier, Kit as defined in Alpine Aerotech LP authority dataset AAL-212-060-003.

The AAL Crew Barrier, Kit allows for the rapid installation of a non-permeable barrier between the crew and passenger compartments. This provides an added level of protection for the flight crew and passengers against droplet borne transmission of pathogens. The installation can be accomplished in the field with minimal hand tools. Removal takes less than a minute to allow for decontamination protocols outside of the aircraft.

SECTION 2 INSTALLATION & REMOVAL INSTRUCTIONS

Applicability

The Crew Barrier, (AAL-212-060-003) is applicable to all serial numbers of Bell 205 helicopters.

Weight & Balance

<u>Part Number</u>	<u>Description</u>	<u>Weight</u>	<u>Long. Arm</u>	<u>Lat. Arm</u>
AAL-212-060-003	Crew Barrier, Kit	4.30*	64.00	0.00 (BL)
		1.95 (Kg)	1.625 (m)	0.00 (m)

* Represents total weight of applicable kit only. Recalculate C of G as appropriate.

General Notes

1. All Installation Instructions shall be accomplished in accordance with (IAW) standard aircraft practices. Refer to the current revision of the FAA Advisory Circular AC 43.13-1 and AC 43.13-2 for details on standard aircraft practices.
2. All dimensions are in imperial measures (inches/pounds).
3. Refer to ICA document AAL-212-065-703, Section 4: Maintenance Instructions for instructions on maintenance for the item(s) referenced within this section.
4. Refer to ICA document AAL-212-065-703, Section 9: Illustrated Parts Breakdown for the part numbers of the item(s) referenced within this section.

Installation Notes

1. The 3m Scotch-Weld Urethane Adhesive 3549 (Item 3), is not included with the kit. If you do not already have stock please contact your local 3M distributor.
2. If you wish to use an alternate adhesive.
Adhesive must meet or exceed the following characteristics.
Must remain flexible once cured.
Service temperature range: -36°C thru 149°C
Peel Strength: ≥ 52 piw
Shear Strength: ≥ 549 psi

Installation Instructions

1. Gain access to the roll over bulkhead area of the aircraft and make the aircraft ready for maintenance.
2. Assess the surfaces of the roll over bulkhead vertical area and the roof blankets in the same area. Note any installed equipment that may need to be adjusted or temporarily removed to install the Velcro, Detail (Item 2). Try to determine a common station to allow the installation of the Velcro, Detail (Item 2), in as straight a line as possible. See Figure 1, 2 & 3.

NOTE

The method shown in the following instructions should be considered optimal, but variation to accommodate existing aircraft configurations are permissible.



Figure 1

LHS Velcro, Detail (Item 2) Shown

NOTE: 212 roof installation shown.
205 similar except no provision for
Air inlet ducts



Figure 2

RHS Velcro, Detail (Item 2) Shown

NOTE: 212 roof installation shown.
205 similar except no provision for
Air inlet ducts

Installation Instructions

3. Ensure that the sheet metal surfaces of the role-over bulkhead area are thoroughly cleaned and degreased. Using either MEK or isopropyl alcohol.
4. Ensure that the maximum amount of linear area is covered by the Velcro, Detail (Item 2). Some aircraft configurations may require bridging the cutouts of the inbd role-over bulkhead. This is permissible. Trim Velcro, Detail (Item 2) to suit.

NOTE

The PSA (Pressure Sensitive Adhesive), obtains the best adhesion if it has a hard roller or firm pressure applied during the install. 80% maximum adhesion obtained after 1 hour. A 100% cure is achieved after 30 hours.

5. For the optimal roof blanket installation, it is encouraged to temporarily remove the blankets from the aircraft and perform the installation on a flat surface where adequate pressure can be applied.
6. Pre-mark the location of the Velcro, Detail (Item 2) installation on the roof blankets prior to removal, so that it lines up with the Velcro installed on the inbd faces of the role-over bulkhead. See Figure 3.

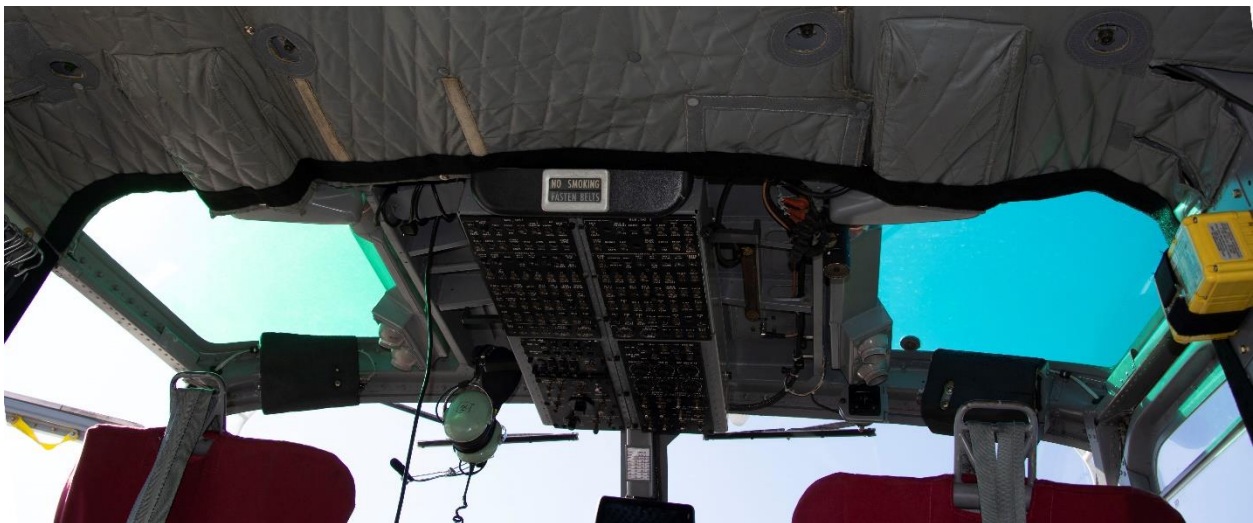


Figure 3

Roof Velcro, Detail (Item 2)
Shown

NOTE: 212 roof installation shown.
205 similar except no provision for
Air inlet ducts

7. With the roof blankets removed and placed on a table. It is permissible to trim the Velcro, Detail (Item 2), into several segments to minimize gaps between it and the blankets.

Installation Instructions

8. Mark out the bond area for the PSA Velcro on the aircraft blankets and clean fabric as in Step 3. Mask the locations where Velcro is to be applied and use 3M Scotch-Weld Urethane Adhesive 3549 (Item 3) as per manufacturer's instructions to bond the Velcro to aircraft blankets.
9. Reinstall the OEM blankets into the aircraft once the Velcro, Detail (Item 2), has bonded.

NOTE

Check that all blanket snaps are present and in good condition. Ensure the OEM interior blanket is securely fastened to the roof.

10. Taking the Crew Barrier, Assy (Item 1), start by lining up the small clear window with the "NO SMOKING/FASTEN BELTS" annunciator. Apply firm pressure to fasten the hook and loop together. Start from BL 0.00" and alternating work in both directions fastening the top of the Crew Barrier, Assy (Item 1) to the Velcro, Detail (Item 2). See Figure 4.



Figure 4

NOTE: 212 installation shown.
205 similar except no provision for
Air inlet ducts

Installation Instructions

11. Once the upper portion is secured, line the vertical wall portions of the Crew Barrier, Assy (Item 1), with the Velcro, Detail (Item 2) on the inbd surface of the role-over bulkhead, and secure it all the way to the bottom on both sides. See Figures 5 & 6.



Figure 5

LHS Crew Barrier, Assy (Item 1) Shown
NOTE: 212 installation shown.
205 similar except no provision for
Air inlet ducts



Figure 6

RHS Crew Barrier, Assy (Item 1) Shown
NOTE: 212 installation shown.
205 similar except no provision for
Air inlet ducts

12. Update the aircraft logbook for the installation of the Crew Barrier, Kit.

13. Installation complete.

Removal Instructions

1. Remove all components associated with the Crew Barrier, Kit.
2. Pull on the red webbing handles marked "PULL IN EMERGENCY", continue separating the Velcro and remove the Crew Barrier, Assy (Item 1).
3. Peel and remove the Velcro, Detail (Item 2) from the inbd surfaces of the role-over bulkhead area and from the OEM blankets. Clean off any leftover adhesive.
4. Perform a General Inspection of all items to ensure proper removal.
5. Update the aircraft logbook for the removal of the Crew Barrier, Kit.