

## **407 CREW BARRIER, KIT INSTRUCTIONS FOR CONTINUING AIRWORTHINESS**

### **MODELS: BELL 407**

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

## **Table of Contents**

<u>SECTION</u>	<u>DESCRIPTION</u>	<u>PAGE</u>
1	Introduction	2
	Applicability	2
2	Description	3
3	Operation	4
4	Maintenance Instructions	5
5	Troubleshooting	8
6	Removal/Replacement	9
	Removal Instructions	10
	Replacement Instructions	11
7	General	13
8	Airworthiness Limitations	13
9	Illustrated Parts Breakdown	14

## **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 publish any subsequent revisions of this document to be made freely available. Alpine Aerotech LP also recommends that the end user of this product periodically verify the revision level of this document.

## **SECTION 1 Introduction**

This document comprises Instructions for Continuing Airworthiness that apply to the 407 Crew Barrier, Kit, installed on Bell 407 rotorcraft. The information and data contained in this document are supplemental to the information contained in the existing ICA for the Bell 407.

### **Applicability**

The 407 Crew Barrier, Kit (AAL-391-010-001) is applicable to all serial numbers of Bell 407 rotorcraft.

**SECTION 2** Description

The following information provides a functional description of the 407 Crew Barrier, Kit as defined in Alpine Aerotech LP authority dataset AAL-391-010-001.

The AAL 407 Crew Barrier, Kit allows for the rapid installation of a non-permeable barrier between the crew and passenger compartments. This provides 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 3 Operation**

1. With the 407 Crew Barrier, Kit installed no special considerations required for operation.

## **SECTION 4 Maintenance Instructions**

### **General Notes**

1. The following information defines the instructions for continuing airworthiness, repair allowances and airworthiness limitations for the item(s) referenced within this document.
2. Refer to the current revision of the BHT Maintenance Manual, BHT-407-MM, for the chapter(s) and section(s) referenced within this document.
3. Refer to the Section 6: Removal/Replacement and Section 9: Illustrated Parts Breakdown for the replacement and/or installation of the item(s) referenced within this section.
4. Scheduled inspection for the item(s) referenced within this document shall be accomplished in accordance with (IAW) the Inspection Procedures specified.
5. Repair allowances for the item(s) referenced within this document shall be accomplished IAW Section 5, Troubleshooting.
6. Limitations for the item(s) referenced within this document are IAW Section 8, Airworthiness Limitations.
7. In the event that the 407 Crew Barrier, Kit needs to be sterilized. Remove the kit from the aircraft and either lay the assemblies on a flat surface or hang to expose maximum surface area. Spray all surfaces with a solution of 60-70% isopropyl alcohol or suitable/approved alternate disinfecting solution. Allow the disinfecting solution to evaporate, do not wipe down. Repeat for any surfaces not sprayed in the first application. Allow to evaporate completely then reinstall in the aircraft. Alternately, disinfection can be performed in-situ by wiping all exposed surfaces with a cloth saturated with a suitable disinfecting solution.

## Inspection Procedures

### **Supplement to applicable Maintenance Manual, Chapter 5, Inspection and Component Overhaul Schedule**

#### Notes

8. Refer to the applicable Maintenance Manual, Chapter 5, for general information on inspections, inspection definitions, inspection intervals, inspection methods and inspection schedules.
9. General Inspections, as indicated within this document, are defined as visual, non-thorough checks.
10. Detailed Inspections, as indicated within this document, are defined as visual and thorough, searching checks.
11. Perform Daily Inspections every day, prior to flight operation. If damage is detected, perform the 300 Hour/12 Month Inspections.
12. Perform 300 Hour/12 Month Inspections every 300 hours or every 12 months, whichever occurs first, prior to flight operation. If damage is detected, refer to the Repair Procedures section within this document.

### Scheduled Inspections

1. Daily Inspections

Data Reference: Section 6: Removal/Replacement  
Section 9: Illustrated Parts Breakdown

- i. Perform a General Inspection on all items in the 407 Crew Barrier, Kit for general condition.
- ii. Perform a General Inspection on all items in the 407 Crew Barrier, Kit for proper security.

2. 300 Hour/12 Month Inspections

Data Reference: Section 6: Removal/Replacement  
Section 9: Illustrated Parts Breakdown

- i. Perform a Detailed Inspection on all materials and finishes in the 407 Crew Barrier, Kit for evidence of wear and damage.
- ii. Perform a Detailed Inspection on all fabrics and materials, paying attention to the integrity of the stitching. Ensure that the Velcro installed on the aircraft has maintained a proper bond.
- iii. Perform a Detailed Inspection on all items, materials and finishes in the 407 Crew Barrier, Kit for proper integrity and condition.

## **SECTION 5 Troubleshooting**

1. Repairs to all other item(s) referenced within this document are **not** permitted. Contact Alpine Aerotech LP for further information if repairs are required to all other item(s) referenced within this document.

## **SECTION 6 Removal/ Replacement**

### **General Notes**

1. All Removal/Replacement 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 Section 4: Maintenance Instructions for instructions on maintenance for the item(s) referenced within this section.
4. Refer to Section 9: Illustrated Parts Breakdown for the part numbers of the item(s) referenced within this section.

## Removal Instructions

1. Gain access to the aircraft and make the aircraft ready for maintenance.
2. Gently push fingers in between the Crew Barrier and the Velcro where it is attached to the roof and pull down. Continue separating the Velcro using care not to damage the stitching and remove the Barrier, Assy LHS (Item 1) and Barrier, Assy RHS (Item 6). This operation is best performed from the passenger area but can be performed from either the crew or the passenger areas.



**Figure 1**  
Barrier, Assy LHS (Item 1) shown,  
RHS opposite.

3. Continue to separate the Barrier, Assy (Item 1 or 6 as applicable) until it is free from the aircraft and remove.

**Replacement Instructions**

1. Starting at the lower inboard side of the seatback, begin fastening the Barrier, Assy, LHS (Item 1) to the Velcro®, Loop (Item 11) and working up the center pillar to the roof. Apply firm pressure to fasten the hook and loop together. Reference Figures 2 through 5.

**NOTE**

Ensure the Barrier, Assy Item, LHS (Item 1) is installed above the passenger seat retainer clip and does not interfere with installation of the passenger seat. Reference Figures 2 & 3.



**Figure 2**  
LHS LKG FWD  
Barrier Assy, LHS (Item 1)  
Installation Shown.



**Figure 3**  
LHS LKG FWD  
Barrier Assy, LHS (Item 1)  
Installation Shown.

**Replacement Instructions** (cont.)

2. Once the vertical inboard portion is attached to the center pillar, fasten the roof portion of the Barrier, Assy, LHS (Item 1), with the Velcro®, Loop (Item 11) and continue securing it all the way down the outboard door pillar. Reference Figures 4 & 5.



**Figure 4**  
RHS LKG AFT  
Barrier, Assy, RHS (Item 6) Installation Shown,  
LHS opposite.



**Figure 5**  
RHS LKG FWD  
Barrier, Assy, RHS (Item 6) Installation Shown,  
LHS opposite.

3. Secure the Barrier, Assy, LHS (Item 1) to the Velcro®, Loop (Item 11) along the seatback. Reference Figure 5.
4. Perform Steps 1 through 3 again on the RHS of the aircraft with Barrier, Assy LHS (Item 6).
5. Update the aircraft logbook for the replacement of the affected components of the 407 Crew Barrier, Kit.

---

## **SECTION 7 General**

There are no general considerations for this kit.

## **SECTION 8 Airworthiness Limitations**

The Airworthiness Limitations section is approved by the Minister and specifies maintenance required by any applicable airworthiness or operating rule unless an alternative program has been approved by the Minister.

The Airworthiness Limitations section is FAA approved and specifies maintenance required under Sections 43.16 and 91.403 of the Federal Aviation Regulations unless an alternative program has been FAA approved.

### **Supplement to applicable Maintenance Manual, Chapter 4, Airworthiness Limitations Schedule**

#### Notes

1. Refer to the BHT-407-MM, Chapter 4, for general information on airworthiness limitations and airworthiness limitation schedules.
2. Item(s) **not** listed in the Scheduled Airworthiness Limitations section within this document have an unlimited airworthiness life.

#### Scheduled Airworthiness Limitations

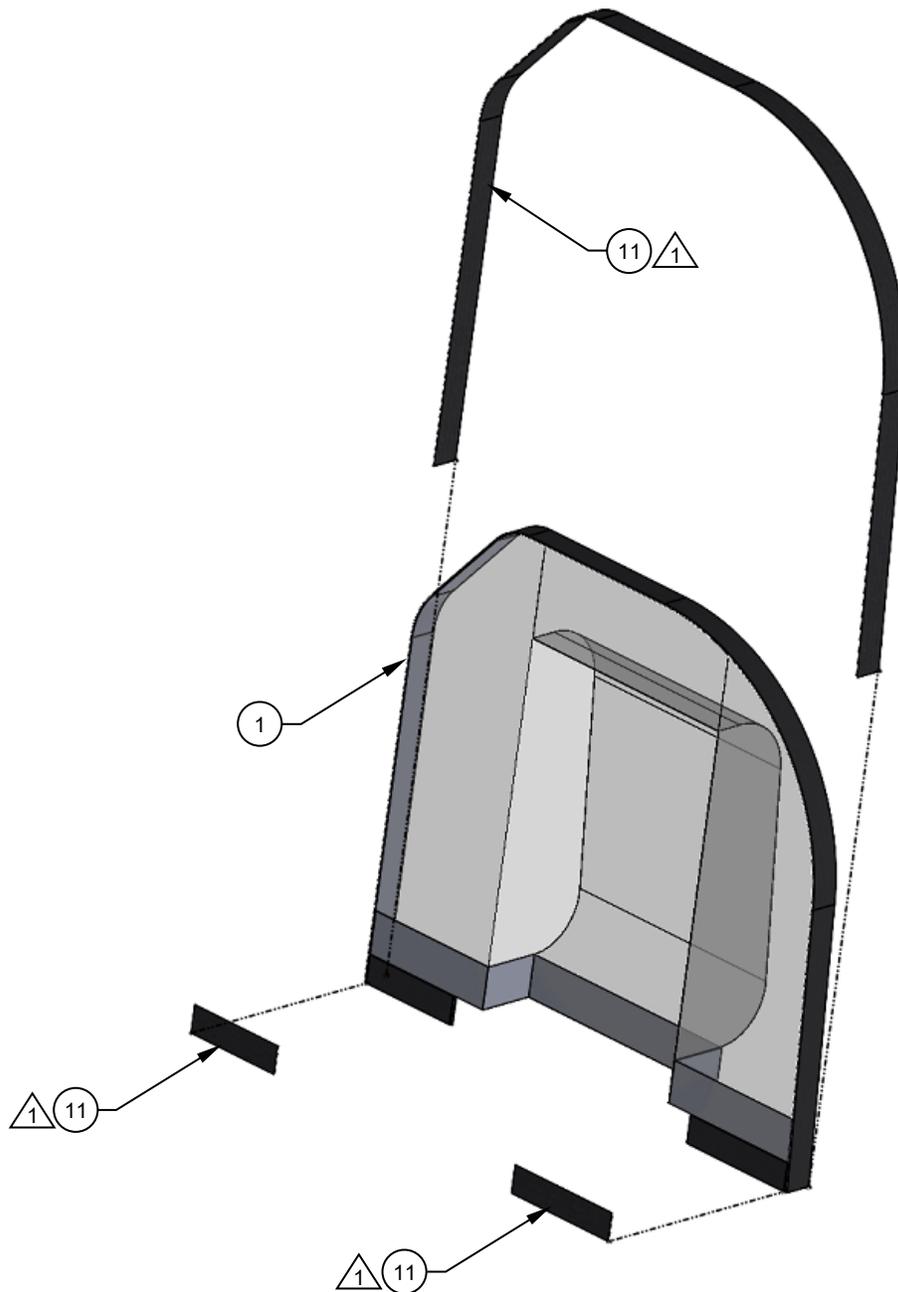
1. There are no airworthiness limitations associated with the item(s) referenced within this document.

**SECTION 9 Illustrated Parts Breakdown**

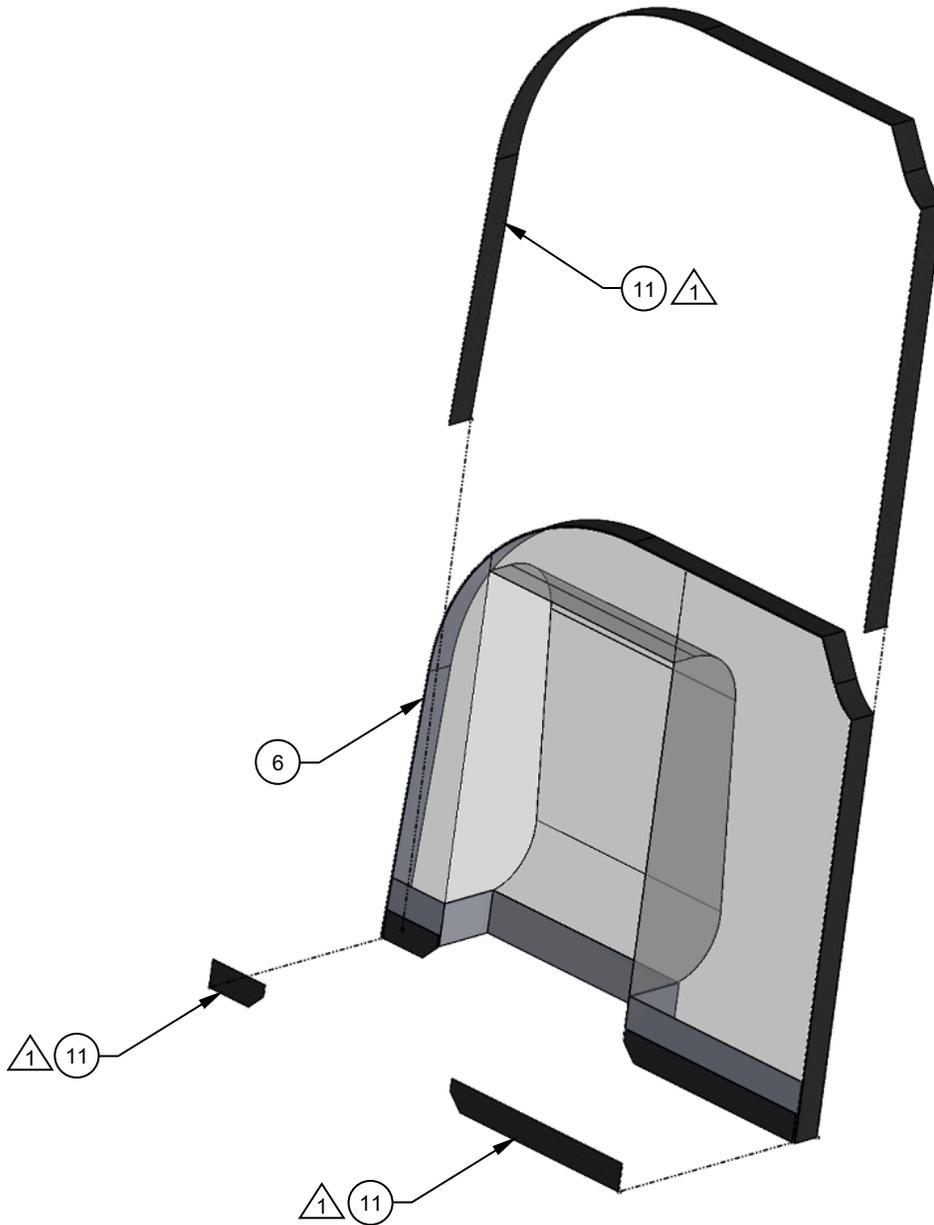
**General Notes**

△<sub>1</sub> Velcro®, Detail supplied as one length. Cut individual pieces to length as required.

Illustrated Parts Breakdown



407 Crew Barrier, Kit  
Shown (LHS)



407 Crew Barrier, Kit  
Shown (RHS)

## Illustrated Parts Breakdown (cont.)

ITEM	QTY	NUMBER	DESCRIPTION	MATERIAL	REF STOCK	SPEC	FINISH	MANUFACTURER	NCAGEC
-	-	AAL-391-010-001	407 CREW BARRIER, KIT	C/O SHADED ITEMS				ALPINE AEROTECH LP	L0171
1	1	AAL-391-011-001	BARRIER, ASSY, LHS	NA	NA	NA	NA	ALPINE AEROTECH LP	L0171
2	AR	>ULTRA20CLEAR30WP	PLASTIC, ULTRA CLEAR 20GGE 30 WP CLEAR	PVC	20 MILS	NA	CLEAR	ENNIS FABRICS	L3583
3	AR	>MIL-C-22787 TYPE I, BLACK	CLOTH, COATED, FUEL AND FLAME RESISTANT	SEE SPEC	5.1 OZ/SQ YD	MIL-C-22787	SEE SPEC	SOURCE AS REQUIRED	NA
4	AR	>V-T-295 TYPE II CBB69 GREY 6823	THREAD, NYLON	SEE SPEC	SEE SPEC	V-T-295	GREY	SOURCE AS REQUIRED	NA
5	AR	>V-T-295 TYPE II CBB69 BLACK	THREAD, NYLON	SEE SPEC	SEE SPEC	V-T-295	BLACK	SOURCE AS REQUIRED	NA
6	1	AAL-391-011-002	BARRIER ASSY, RHS	NA	NA	NA	NA	ALPINE AEROTECH LP	L0171
7	AR	>ULTRA20CLEAR30WP	PLASTIC, ULTRA CLEAR 20GGE 30 WP CLEAR	PVC	20 MILS	NA	CLEAR	ENNIS FABRICS	L3583
8	AR	>MIL-C-22787 TYPE I, BLACK	CLOTH, COATED, FUEL AND FLAME RESISTANT	SEE SPEC	5.1 OZ/SQ YD	MIL-C-22787	SEE SPEC	SOURCE AS REQUIRED	NA
8	AR	>V-T-295 TYPE I CBB69 GREY 6823	THREAD, NYLON	SEE SPEC	SEE SPEC	V-T-295	GREY	SOURCE AS REQUIRED	NA
10	AR	>V-T-295 TYPE II CBB69 BLACK	THREAD, NYLON	SEE SPEC	SEE SPEC	V-T-295	BLACK	SOURCE AS REQUIRED	NA
11	1	LOOP 1000, BLACK, 8224 PSA	VELCRO, LOOP	LOOP 1000, BLACK, 8224 PSA	1.00" X 114"	SEE MFG	SEE MFG	VELCRO USA INC.	11153

1