

# AUX TANK PROTECTOR, 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

Revision: A

Date: 2013-10-31 Doc. No.: AAL-313-025-703 Page 1 of 15





# **Table of Contents**

<u>Section</u>	<u>Description</u>	<u>Page</u>
1	Description	2
2	Maintenance Manual Supplement	3
3	Installation & Removal Instructions Installation Instructions	8 9
	Removal Instructions	11
4	Illustrated Parts Breakdown	14

# **Notes**

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

# **Section 1: Description**

#### **Description**

The following information provides a functional description of the Aux Tank Protector, Kit as defined in Alpine Aerotech Ltd. authority dataset AAL-313-020-003.

- Due to the fact that the Bell 407 is used as often for seismic, logging, and other industrial uses, there is a potential for cargo to damage expensive composite panels located in the baggage compartment. This occurs most frequently during loading and unloading operations, but can also occur during small inflight shifts of said cargo.
- The Floor Panel Protector, Kit when installed adds additional protection to the panel, as it is manufactured from a material specifically designed to spread and attenuate energy.

Revision: A

Date: 2013-10-31 Doc. No.: AAL-313-025-703 Page 2 of 15





# **Section 2: Maintenance Manual Supplement**

# **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 revisions of the BHT Maintenance Manual BHT-407-MM for Instructions for Maintenance/Inspection with respect to the item(s) referenced within this document.
- 3. Refer to the Section 3: Installation & Removal Instructions and Section 4: 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 the Repair Procedures specified.
- 6. Limitations for the item(s) referenced within this document are IAW the Airworthiness Limitations specified.

Revision: A

Date: 2013-10-31 Doc. No.: AAL-313-025-703 Page 3 of 15





# 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 applicable Maintenance Manual, Chapter 4-1, for general information on airworthiness limitations and airworthiness limitation schedules.
- 2. Item(s) <u>not</u> 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.

Revision: A
Date: 2013-10-31
Doc. No.: AAL-313-025-703
Page 4 of 15





# **Inspection Procedures**

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

### **Notes**

- 1. Refer to the applicable Maintenance Manual, Chapters 4-1, for general information on inspections, inspection definitions, inspection intervals, inspection methods and inspection schedules.
- 2. General Inspections, as indicated within this document, are defined as visual, non-thorough checks.
- 3. Detailed Inspections, as indicated within this document, are defined as visual and thorough, searching checks.
- 4. Perform Daily Inspections every day, prior to flight operation. If damage is detected, perform the 100 Hour/12 Month Inspections.
- 5. Perform 100 Hour/12 Month Inspections every 100 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 3: Installation and Removal Instructions

Section 4: Illustrated Parts Breakdown

- i. Perform a General Inspection on the Aux Tank Protector, Kit, Installation for general condition.
- ii. Perform a General Inspection on the Aux Tank Protector, Kit, Installation for proper security.

Revision: A

Date: 2013-10-31 Doc. No.: AAL-313-025-703 Page 5 of 15





# **Scheduled Inspections**

2. 100 Hour/12 Month Inspections

Data Reference: Section 3: Installation and Removal Instructions

Section 4: Illustrated Parts Breakdown

I. Perform a Detailed Inspection on all items to ensure proper security.

II. Perform a Detailed Inspection on all items/materials to ensure proper integrity.

III. Perform a Detailed Inspection on the Aux Tank Protector, Kit to ensure that it is not delaminating.

IV. Perform a Detailed Inspection on all surfaces & locations with Velcro applied to ensure no damage has occurred to the honeycomb panel.

Revision: A

Date: 2013-10-31 Doc. No.: AAL-313-025-703 Page 6 of 15





# **Repair Procedures**

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

Revision: A

Date: 2013-10-31

Doc. No.: AAL-313-025-703

Page 7 of 15





# Section 3: Installation & Removal Instructions

# Weight & Balance

Part Number	<u>Description</u>	<u>Weight</u>	Long. Arm	Lat. Arm
AAL-313-020-003	Aux Tank Protector, Kit	2.13*	162.868	0.000 BL
		0.966 <i>(Ka</i>	a) 4.137 (m)	.000(m)

<sup>\*</sup> Total increase in weight to aircraft.

## **General Notes**

- 1. All Installation Instructions shall be accomplished IAW standard aircraft practices. Refer to the current revision of the FAA manuals AC 43.13-1B and AC 43.13-2B for details on standard aircraft practices.
- 2. All Dimensions are in imperial measures (inches/pounds).
- 3. Refer to Section 2: Maintenance Manual Supplement for instructions on maintenance for the item(s) referenced within this section.
- 4. Refer to the Section 4: Illustrated Parts Breakdown for the part numbers of the item(s) referenced within this section.

## **Installation Notes**

Typical item number for all like items in this view unless otherwise specified.

Revision: A

Date: 2013-10-31

Doc. No.: AAL-313-025-703

Page 8 of 15





# **Installation Instructions**

1. Gain access to the aux tank. Reference Figure 1.

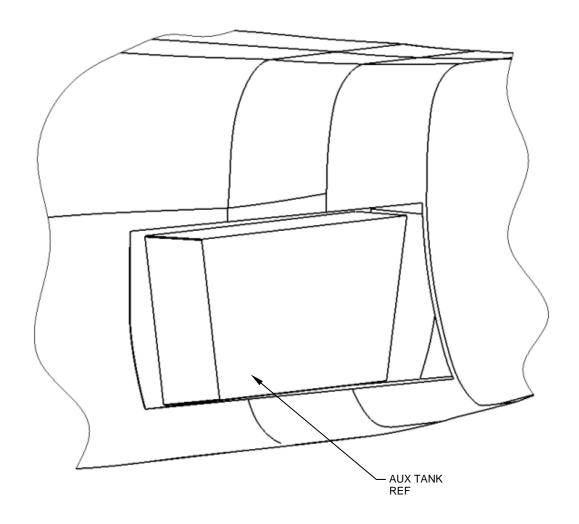


Figure 1 Some Items Removed for Clarity

Revision: A

Date: 2013-10-31 Doc. No.: AAL-313-025-703 Page 9 of 15





# **Installation Instructions**

- 2. Pre-fit the Panel, Assy (Item 1) by lining up the exterior profile of the Panel, Assy (Item1), with the aux tank aft panel. Reference Figures 2.
- 3. With the panel lined up use the pre-cut .25 holes and a felt pen to mark out the locations for the Velcro, Detail (Items 4) and remove the Panel, Assy (Item 1). Reference Figure 2.

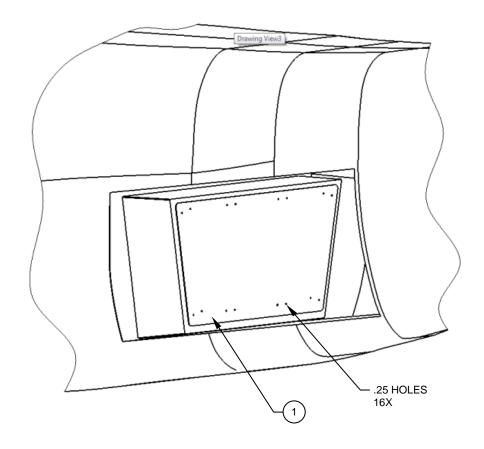


Figure 2 Some Items Removed for Clarity

Revision: A

Date: 2013-10-31 Doc. No.: AAL-313-025-703 Page 10 of 15





# **Installation Instructions**

- 4. Clean the areas between the felt pen marks with alcohol taking care not to wipe away the felt pen marks.
- 5. Individually separate each Velcro, Detail (Item 4) off of the Floor Panel, Assy (Item 1) and peel adhesive backing from the Velcro, Detail (Items 4).
- 6. Using the felt pen marks as reference points, apply the Velcro, Detail (Item 4) to the honeycomb panel in their respective locations. Reference Figure 3. Apply adequate pressure to ensure a secure bond.

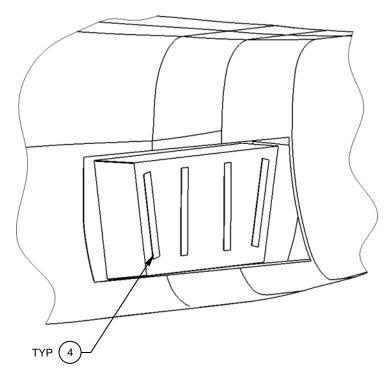


Figure 3
Some Items
Removed for
Clarity

- 7. Re install the Floor Panel, Assy (Item 1) onto Velcro strips.
- 8. Installation complete.
- 9. Perform a General Inspection of all items to ensure proper installation.
- 10. Update the aircraft logbook for the installation of the Aux Tank Protector, Kit.

Revision: A

Date: 2013-10-31 Doc. No.: AAL-313-025-703 Page 11 of 15





# **Removal Instructions**

- 1. For the removal the Aux Tank Protector, Kit for either inspections, or mission configuration, the removal of the Baggage Compartment, Protector, Kit can be considered the opposite of installation for step 7. For permanent removal, of the Baggage Compartment, Protector, Kit perform step 7 opposite of installation and remove all bonded Velcro, Details.
- 2. Perform a General Inspection of all items to ensure proper removal.
- 3. Update the aircraft logbook for the removal of the Aux Tank Protector, Kit.

Revision: A

Date: 2013-10-31 Doc. No.: AAL-313-025-703 Page 12 of 15





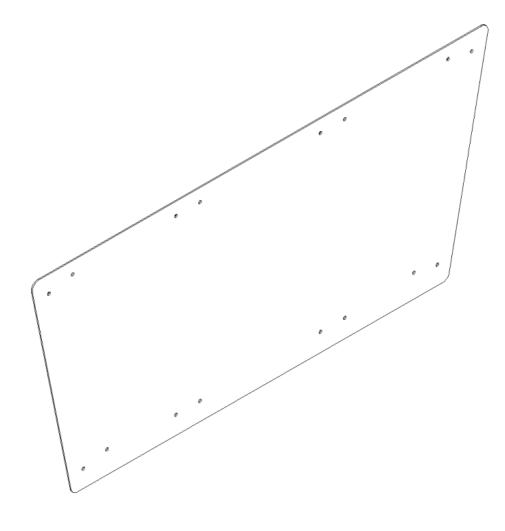
# **Section 4: Illustrated Parts Breakdown**

# **General Notes**

1. Alternate items listed.

 $\Lambda$ 

Typical item number for all like items in this view unless otherwise specified.



Panel, Assy Shown Item 1

Revision: A

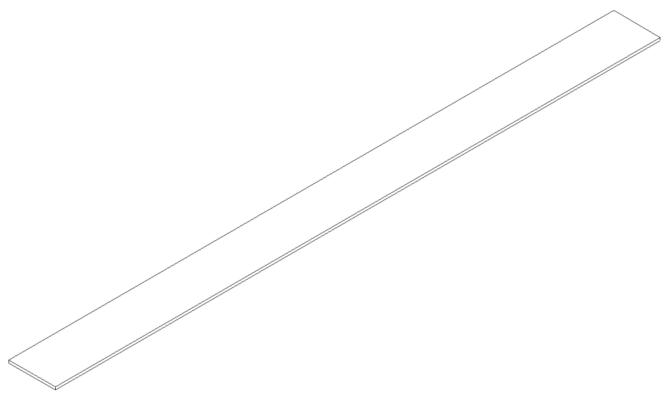
Date: 2013-10-31 Doc. No.: AAL-313-025-703 Page 13 of 15





Page 14 of 15

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Velcro, Detail Shown Item 4

Revision: A
Date: 2013-10-31
Doc. No.: AAL-313-025-703





					REF				
ITEM	QTY	NUM BER	DESCRIPTION	MATERIAL	STOCK SIZE	SPEC	FINISH	MANUFACTURER	NCAGEC
-	-	AAL-313-020-003	AUX TANK PROTECTOR, KIT	C/O SHA DED ITEMS					
				ONLY					
1	1	AAL-313-021-003	PANEL, ASSY	NA	NA	NA	NA	ALPINE A EROTECH LTD.	L0171
2	1	AAL-313-022-003	PANEL, DETAIL					ALPINE AEROTECH LTD.	L0171
3	4	151394	VELCRO, DETAIL	LOOP 1000, BLACK, 8224 PSA	2 x 15.25	SEE MFR	SEE MFR	VELCRO USA INC.	11153
4	4	151405	VELCRO, DETAIL	HOOK 88, BLACK 8224 PSA	2 x 15.25	SEE MFR	SEE MFR	VELCRO USA INC.	11153

Revision: A

Date: 2013-10-31 Doc. No.: AAL-313-025-703 Page 15 of 15