

## **BAGGAGE COMPARTMENT, PROTECTION, KIT INSTRUCTIONS FOR CONTINUING AIRWORTHINESS**

**MODELS: BELL 205A-1, 212, 412, 412EP**

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 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**

The following information provides a functional description of the Baggage Compartment, Protector, Kit as defined in Alpine Aerotech Ltd. authority dataset AAL-221-050-001.

- Due to loading and unloading requirements of the tailboom baggage compartment, the honeycomb panels can be damaged beyond acceptable limits.
- The Baggage Compartment, Protector, Kit when installed is designed to absorb and spread any point loading so as to mitigate any potential damage.



## **Section 2: Maintenance Instructions**

### **General Notes**

1. The following information defines the instructions for maintenance, and repair allowances for the item(s) referenced within this document.
2. Refer to the current revisions of the BHT Maintenance Manual BHT-205A1-MM for Instructions for Maintenance/Inspection with respect to the item(s) referenced within this document.
3. Refer to the current revisions of the BHT Maintenance Manual BHT-212-MM for Instructions for Maintenance/Inspection with respect to the item(s) referenced within this document.
4. Refer to the current revisions of the BHT Maintenance Manual BHT-412-MM for Instructions for Maintenance/Inspection with respect to the item(s) referenced within this document.
5. Refer to 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.
6. Scheduled inspection for the item(s) referenced within this document shall be accomplished in accordance with (IAW) the Inspection Procedures specified.
7. Repair allowances for the item(s) referenced within this document shall be accomplished IAW the Repair Procedures specified.



## **Inspection Procedures**

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

#### **Notes**

1. Refer to the applicable Maintenance Manual, Chapters 5, 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 Baggage Compartment, Protector, Kit, Installation for general condition.
- ii. Perform a General Inspection on the Baggage Compartment, Protector, Kit, Installation for proper security.



## Scheduled Inspections

### 2. 100 Hour/12 Month Inspections

Data Reference: Section 2: Installation and Removal Instructions  
Section 3: Illustrated Parts Breakdown

- i. Perform a Detailed Inspection on all materials and finishes in the Baggage Compartment, Protector, Kit, Installation for evidence of corrosion, cracks and damage.
- ii. Perform a Detailed Inspection on all materials and finishes in the Baggage Compartment, Protector, Kit, Installation for proper integrity and condition.
- iii. Perform a Detailed Inspection on the Baggage Compartment, Protector, Kit, Installation for proper security.
- iv. Perform a Detailed Inspection on all hardware and fasteners in the Baggage Compartment, Protector, Kit, Installation for proper security and torque.



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### **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.



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## **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, Chapters, 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 3: Installation & Removal Instructions**

#### **Weight & Balance**


<u>Part Number</u>	<u>Description</u>	<u>Weight</u>	<u>Long. Arm</u>	<u>Lat. Arm</u>
AAL-221-050-001	Baggage Compartment, Protector, Kit	19.42*	310.521	1.758 LBL
		8.80 (Kg)	7.887(m)	.044 LBL (m)

\* Total increase in weight to aircraft.

#### **General Notes**

1. All Installation Instructions shall be accomplished in accordance with (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 Fasteners shall be torqued to standard aircraft specifications, unless otherwise specified. Refer to the current revision of the FAA manuals AC 43.13-1B and AC 43.13-2B for details on standard torque specifications.
3. All Dimensions are in imperial measures (inches/pounds).
4. Refer to Section 2: Maintenance Instructions for instructions on maintenance for the item(s) referenced within this section.
5. Refer to the Section 4: Illustrated Parts Breakdown for the part numbers of the item(s) referenced within this section.
6. Adhesive (Item 10) is not supplied. Procure Locally.

#### **Installation Notes**

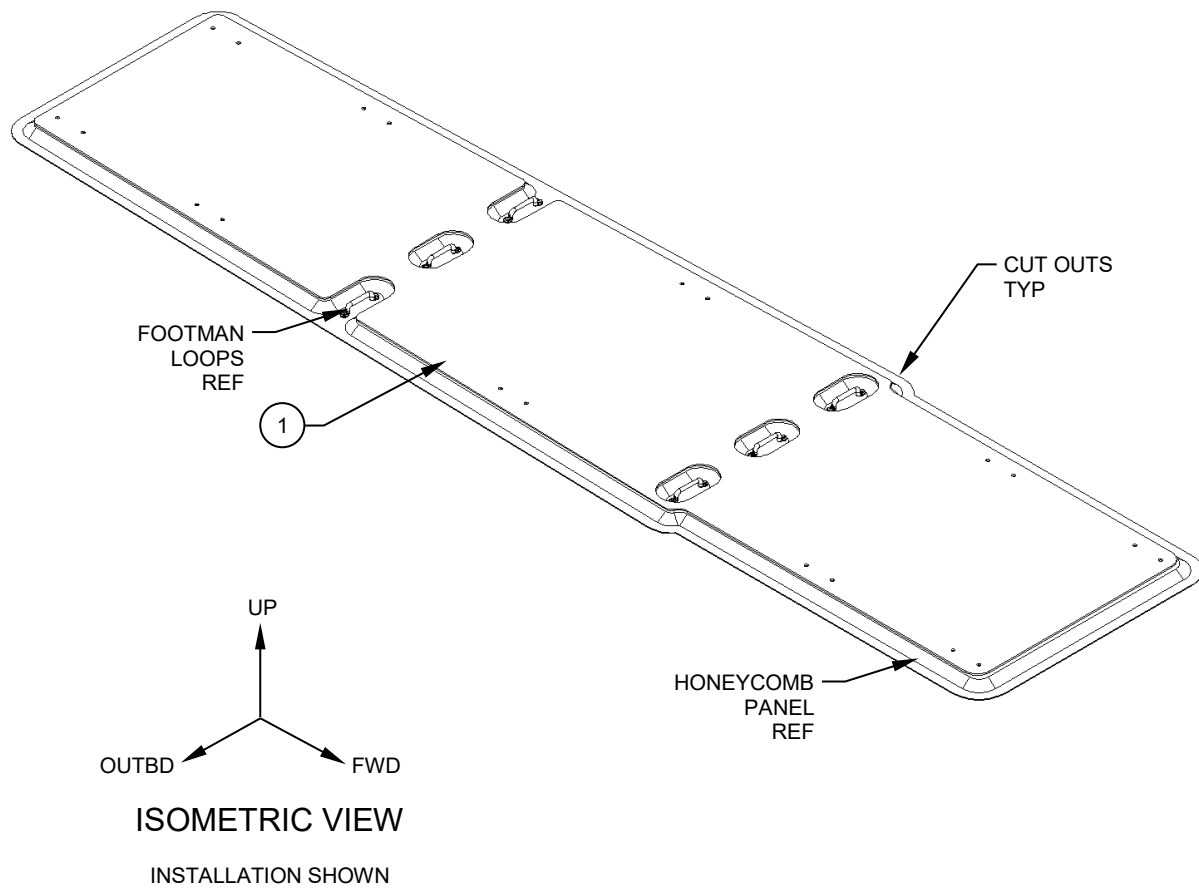
 Typical item number for all like items in this view unless otherwise specified.





## Installation Instructions

1. Pre-fit the Floor Panel, Assy (Item 1) by lining up the oval cut outs with the recesses in the honeycomb panel that contain the footman loops. Reference Figure 1.

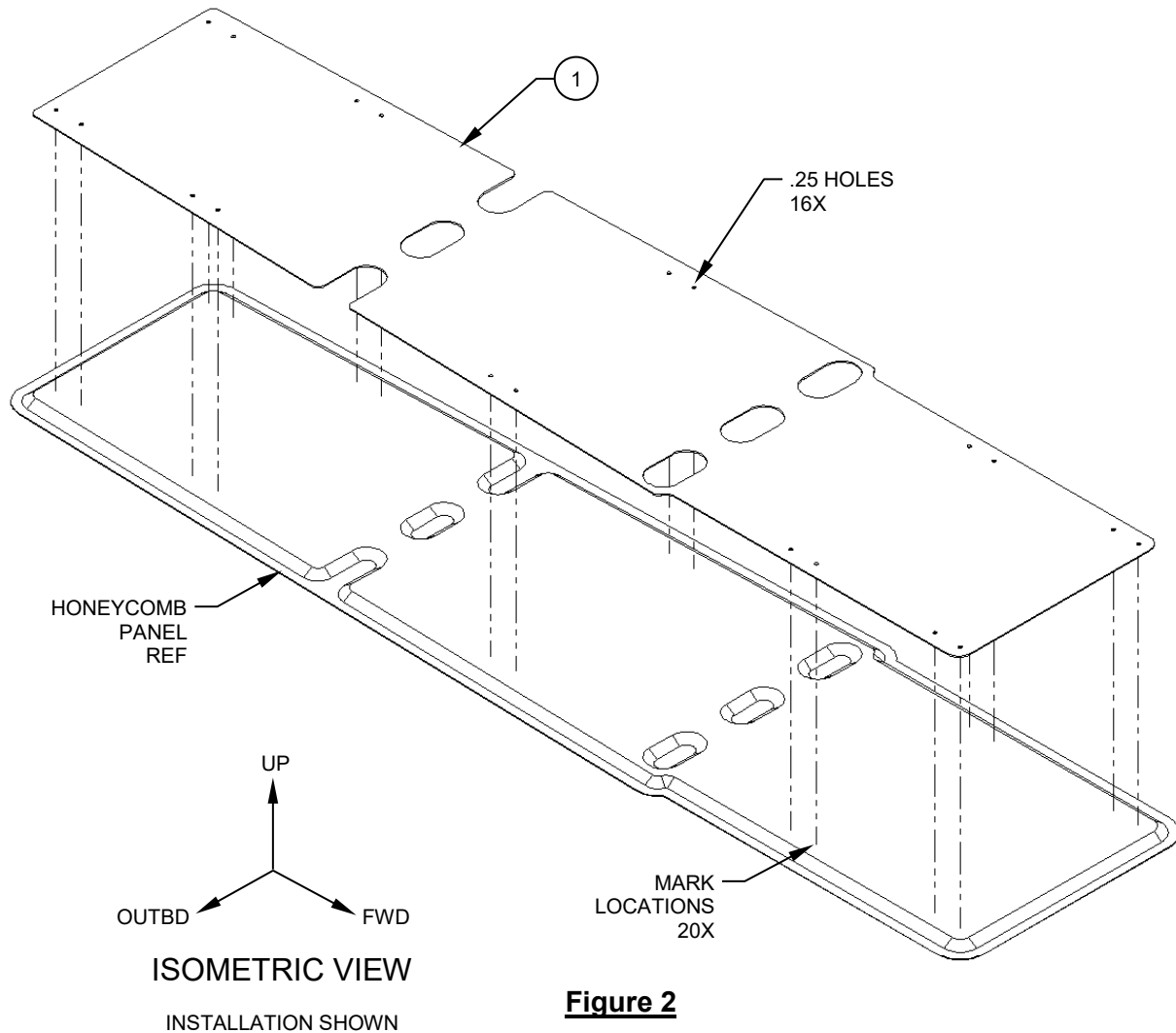


**Figure 1**



**Installation Instructions**

2. With the panel lined up use the pre-cut .25 holes and a felt pen to mark out the locations for the Velcro®, Details (Items 15, 16 & 17) and remove the panel (Item 1). Reference Figure 2.

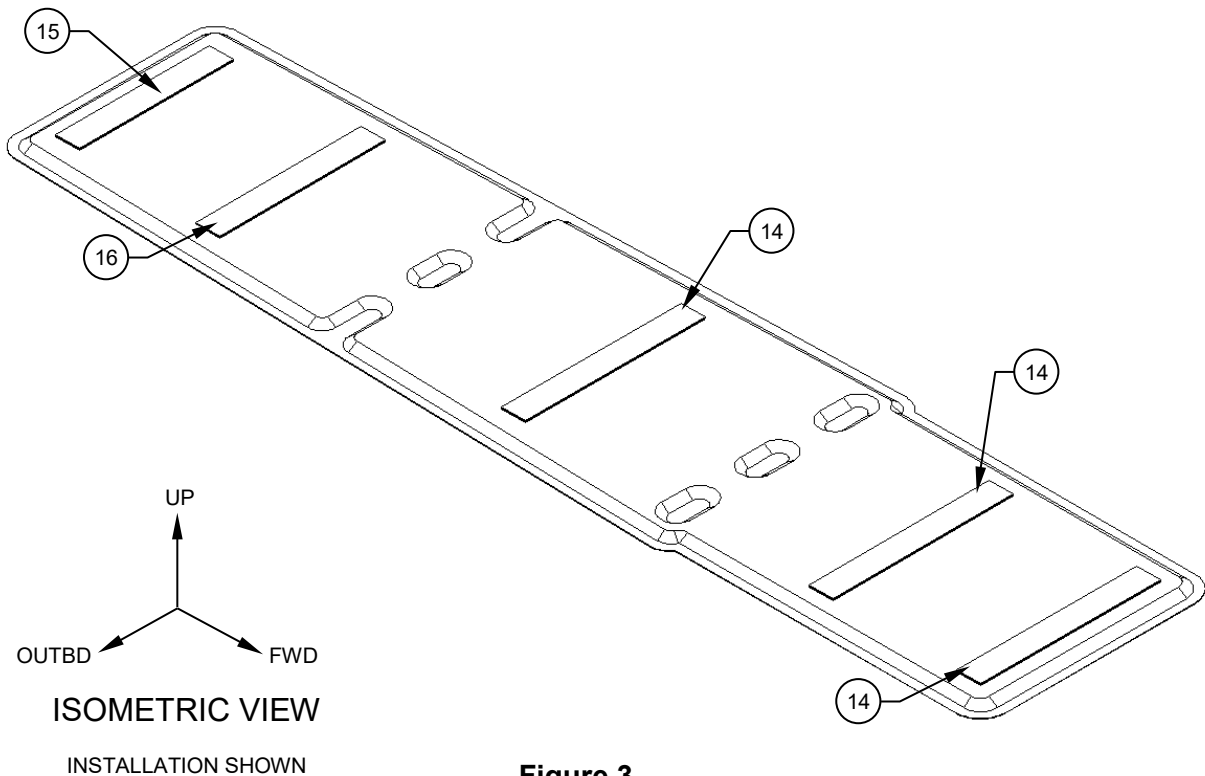


**Figure 2**



## Installation Instructions

3. Clean the areas between the felt pen marks with alcohol taking care not to wipe away the felt pen marks.
4. Individually peel each Velcro®, Detail off of the Floor Panel, Detail (Item 1) and apply adhesive (Item 8) to the non-hook faying surface.
5. Using the felt pen marks as reference points, apply the Velcro®, Details (Items 15, 16 & 17) to the honeycomb panel in their respective locations. Reference Figure 3. Apply adequate pressure to ensure a secure bond.
6. After the adhesive cures, re install the Floor Panel, Assy (Item 1) onto Velcro® strips.

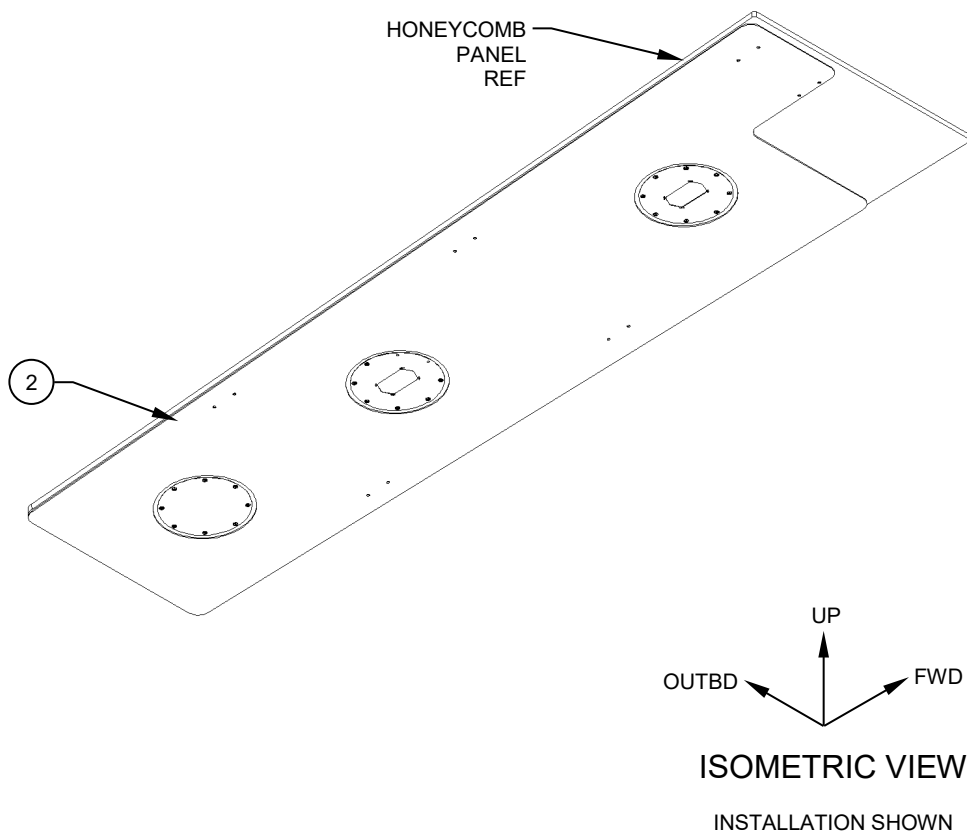


**Figure 3**



**Installation Instructions**

7. Pre-fit the Roof Panel, Detail (Assy 2) by lining up the circular cut outs with the circular light and inspection panel attached to the roof honeycomb panel. Reference Figure 4.

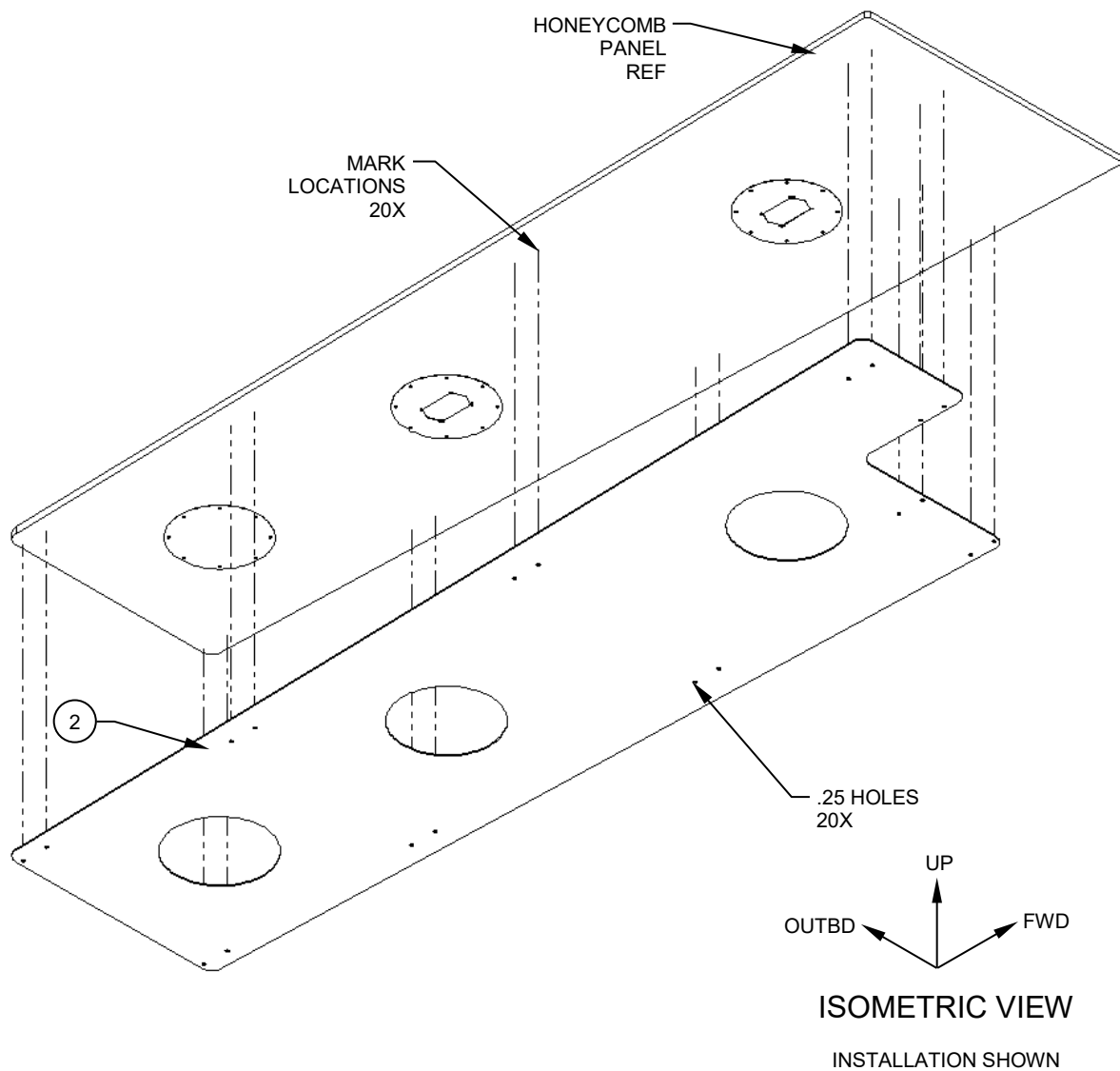


**Figure 4**



**Installation Instructions**

8. With the Roof Panel, Detail (Assy 2) lined up use the pre-cut .25 holes and a felt pen to mark out the locations for the Velcro®, Details (Items 19 & 20), and remove the panel (Item 2). Reference Figure 5.

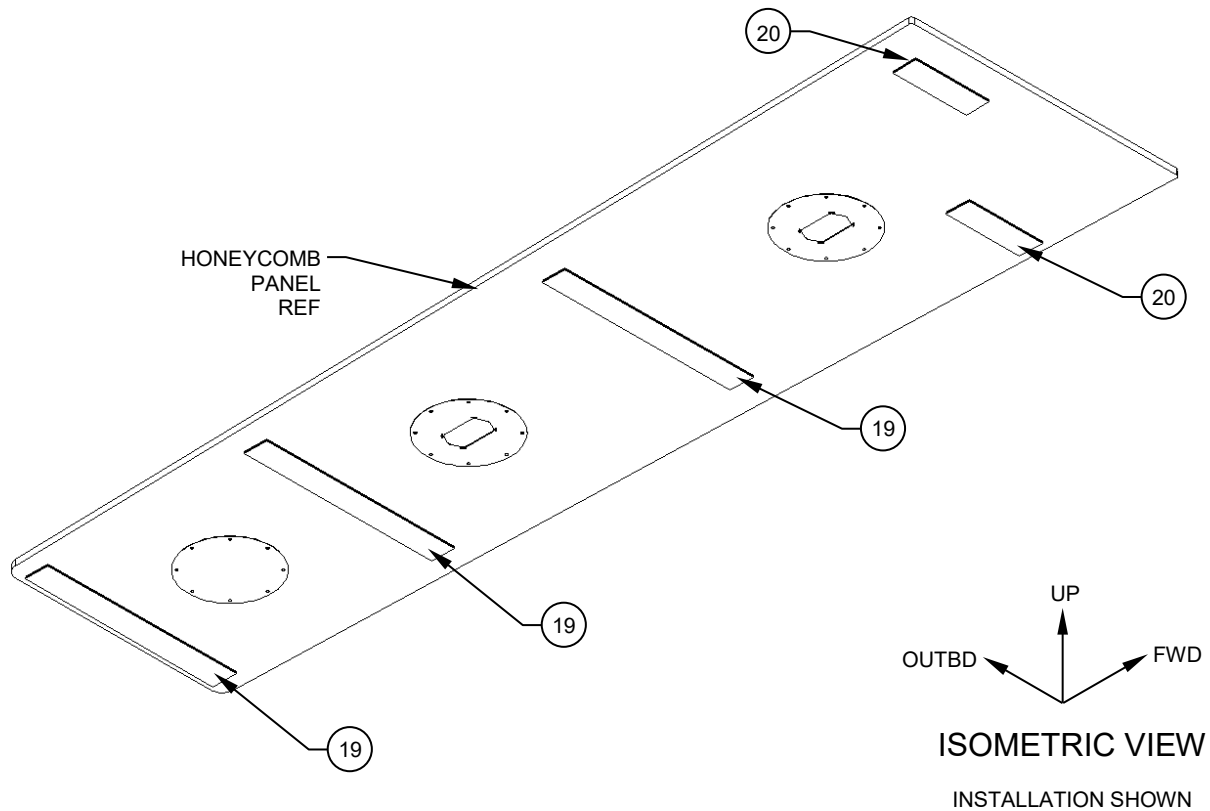


**Figure 5**



## Installation Instructions

9. Clean the areas between the felt pen marks with alcohol taking care not to wipe away the felt pen marks.
10. Individually peel each Velcro®, Detail off of the Roof Panel, Assy (Item 2) and apply adhesive (Item 10) to the non-hook faying surface.
11. Using the felt pen marks as reference points, apply the Velcro®, Details (Items 19 & 20) to the honeycomb panel in their respective locations. Reference Figure 6. Apply adequate pressure to ensure a secure bond.
12. After the adhesive cures, re-install the Roof Panel, Detail (Item 2) onto Velcro® strips.

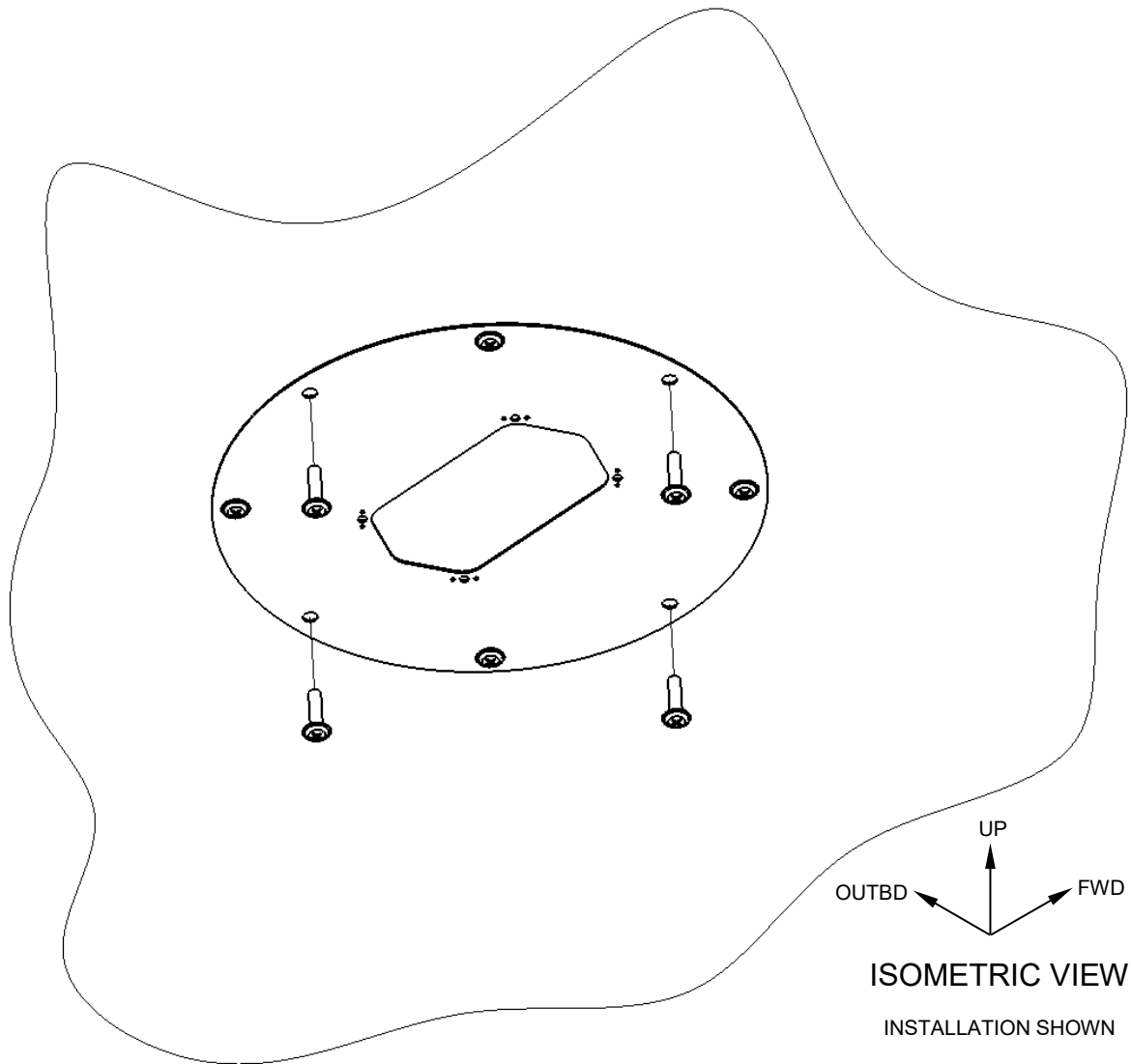


**Figure 6**



**Installation Instructions**

13. Remove every second fastener from the two light panels and one inspection panel that are fastened to the honeycomb panel. Reference Figure 7.

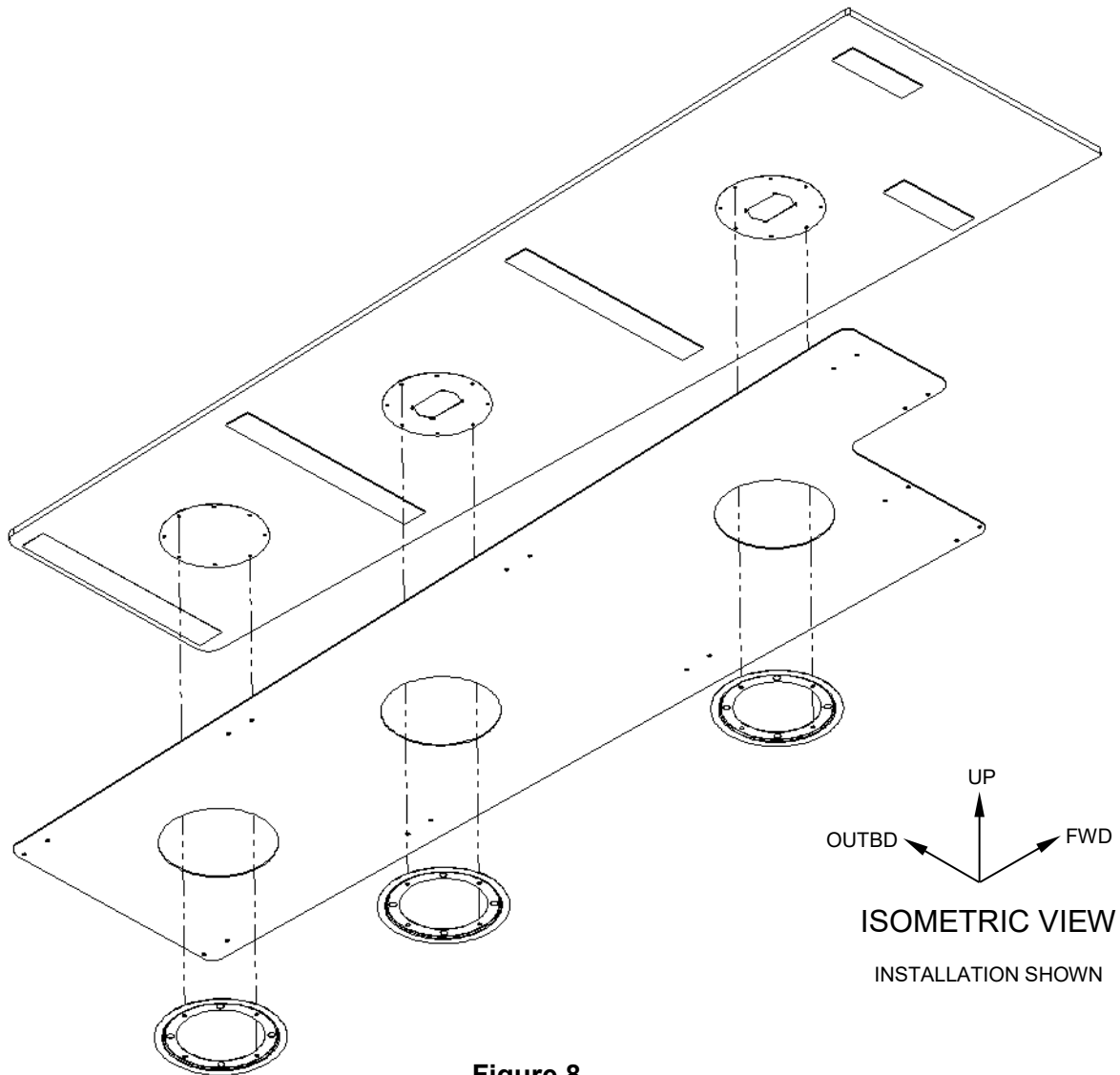


**Figure 7**



**Installation Instructions**

14. Re-install the Roof Panel, Detail (Item 2) centering on the three cut outs. Using the Velcro® to hold the panel in place, install the three Retaining Ring, Details (Item 9) with existing hardware. Reference Figure 8.



**Figure 8**





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## **Installation Instructions**

15. For the remaining six panels (Items 3, 4, 5, 6, 7 & 8), line the protector panel up with the edges of its corresponding honeycomb panel. Using the .25 holes and a felt pen, mark the locations for the corresponding Velcro®, Details.
16. Clean the areas between the felt pen marks with alcohol taking care not to wipe away the felt pen marks.
17. Individually peel each Velcro®, Detail off of the Panel, Details (Items 3, 4, 5, 6, 7 & 8) and apply adhesive (Item 10) to the non-hook facing surface.
18. Using the felt pen marks as reference points, apply the Velcro®, Details to the honeycomb panel in their respective locations. Apply adequate pressure to ensure a secure bond.
19. After the adhesive cures per the adhesive manufacturer's instructions, re-install the Panel, Details (Items 3, 4, 5, 6, 7 & 8) onto Velcro® strips.
20. Installation complete.
21. Perform a General Inspection of all items to ensure proper installation.
22. Update the aircraft logbook for the installation of the Baggage Compartment, Protection, Kit.



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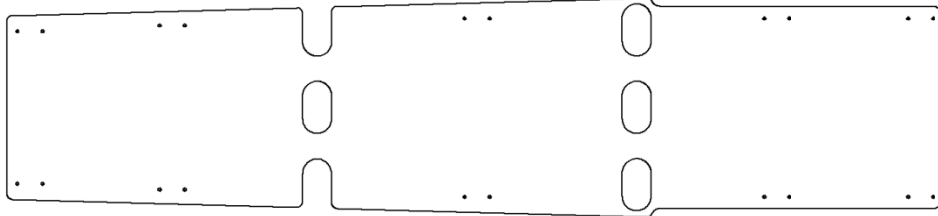
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## **Removal Instructions**

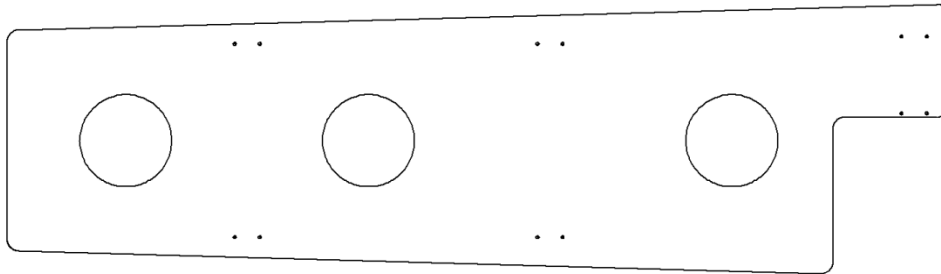
1. For the removal the Baggage Compartment, Protector, Kit for either inspections, or mission configuration, the removal of the Baggage Compartment, Protector, Kit can be considered the opposite of installation for steps 6, 12, 13, 14 & 19. For permanent removal, of the Baggage Compartment, Protector, Kit perform steps 6, 12, 13, 14 & 19 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 Baggage Compartment, Protector, Kit.



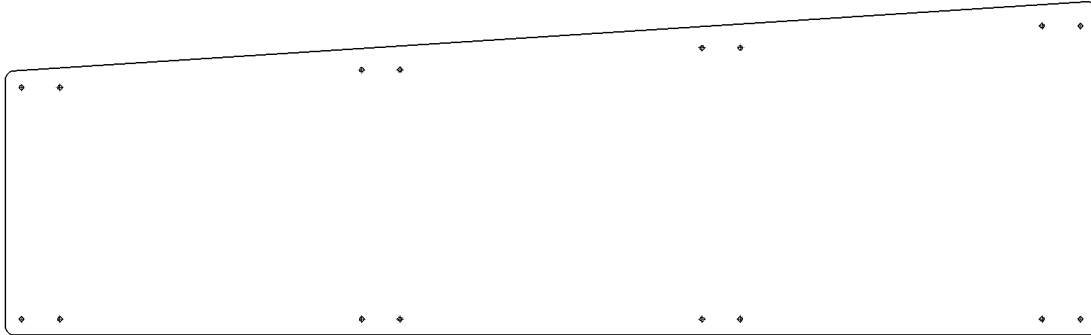
**Section 4: Illustrated Parts Breakdown**



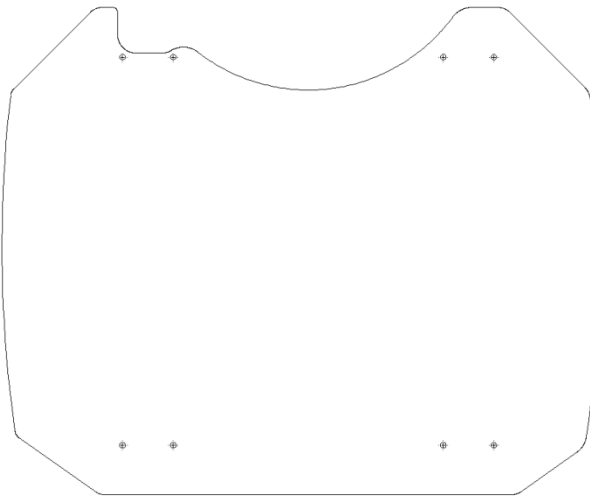
**Item 1**



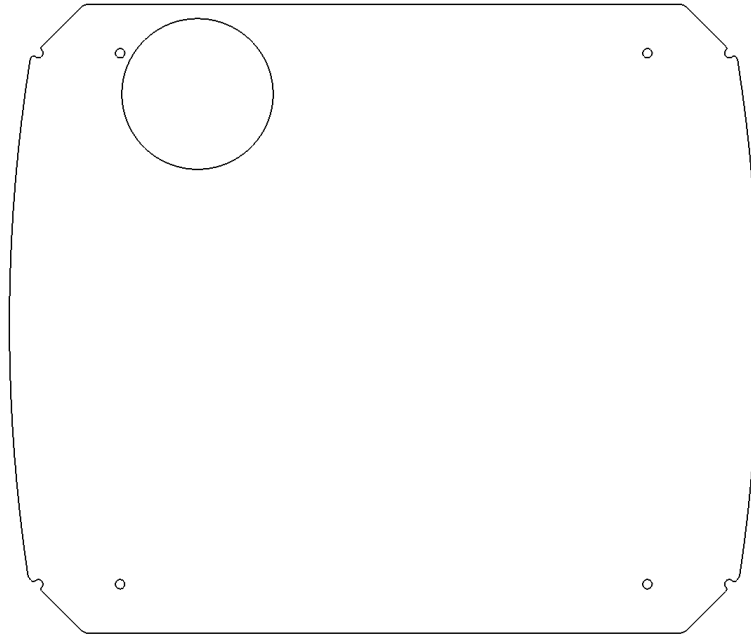
**Item 2**



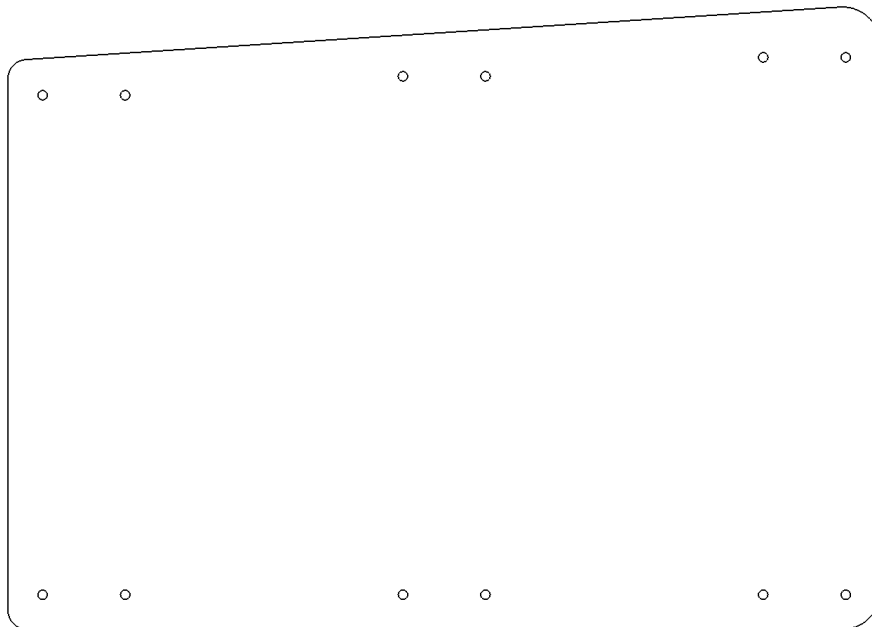
**Item 3**



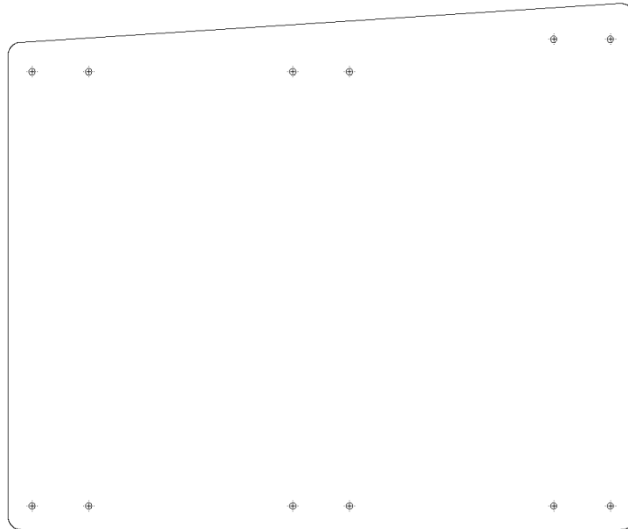
**Item 4**



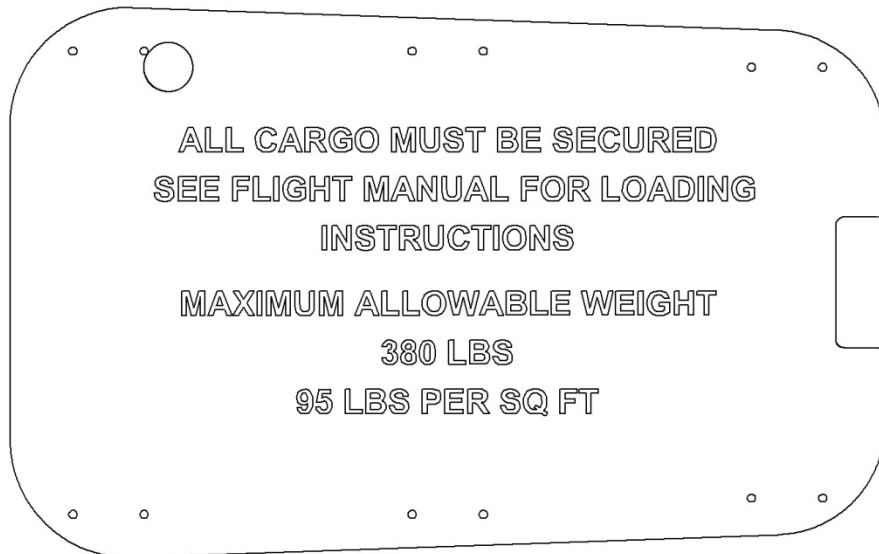
**Item 5**



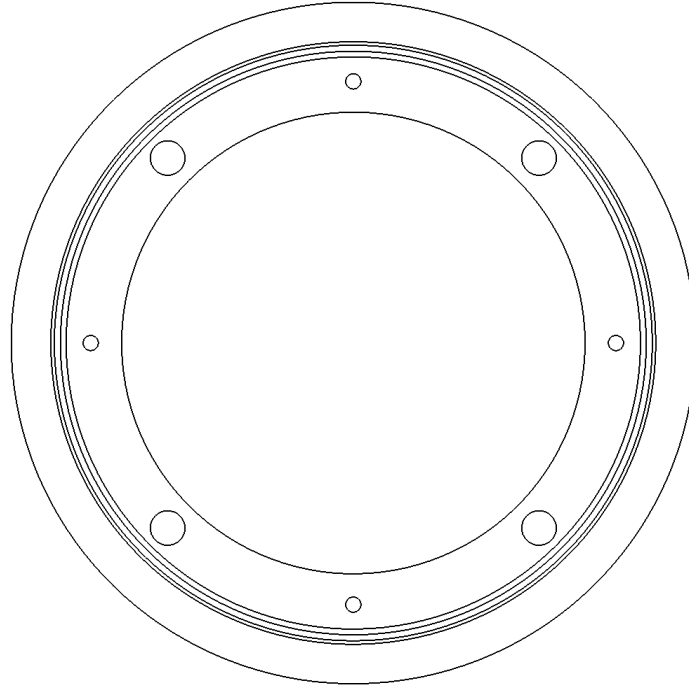
**Item 6**



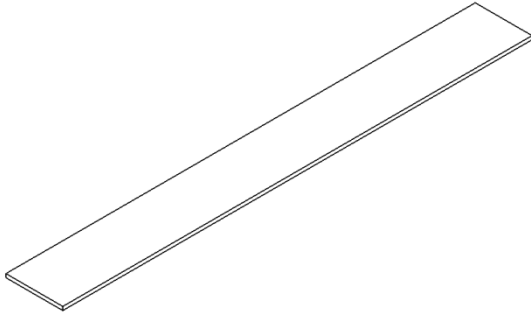
**Item 7**



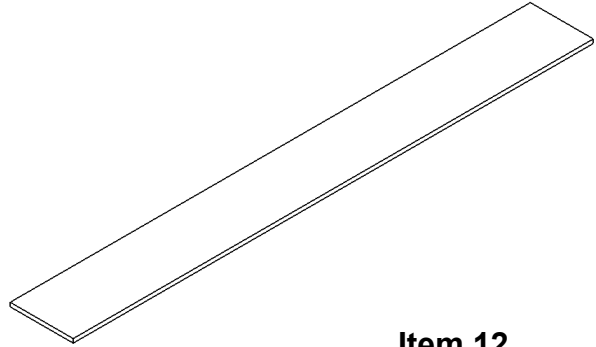
**Item 8**



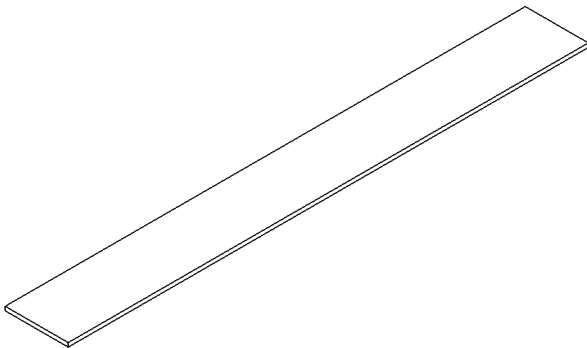
**Item 9**



**Item 11**

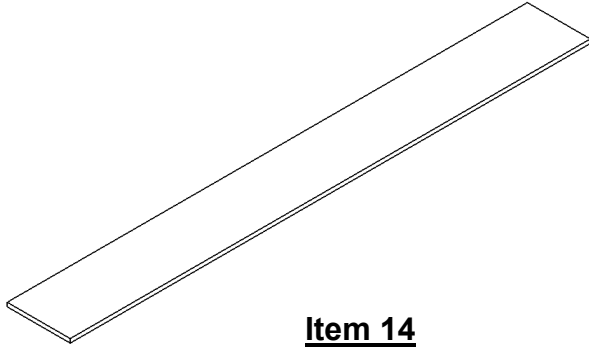


**Item 12**

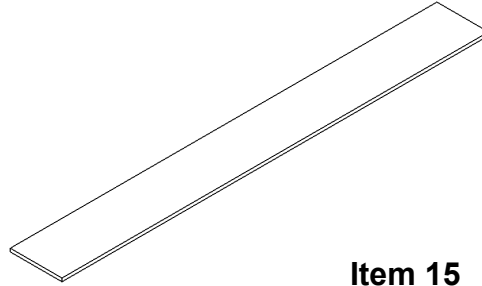


**Item 13**

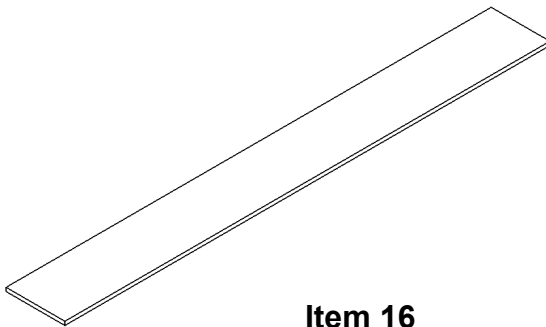




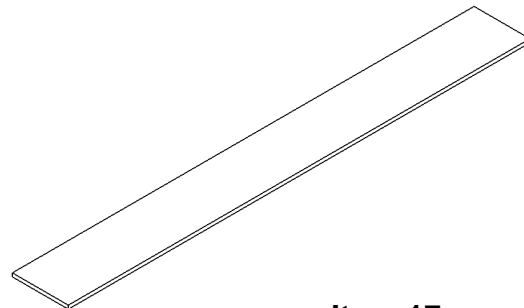
**Item 14**



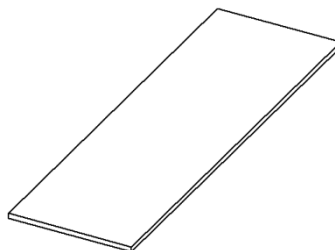
**Item 15**



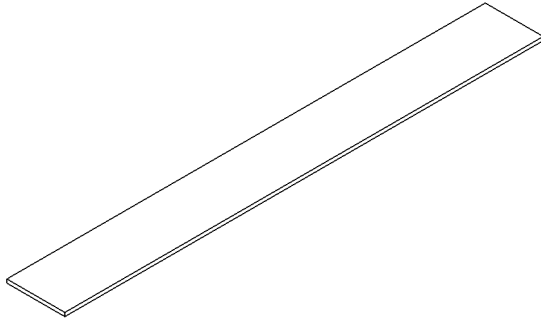
**Item 16**



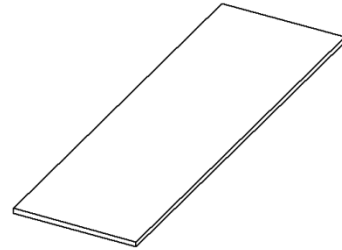
**Item 17**



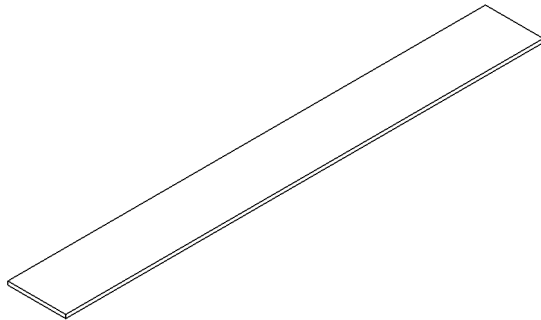
**Item 18**



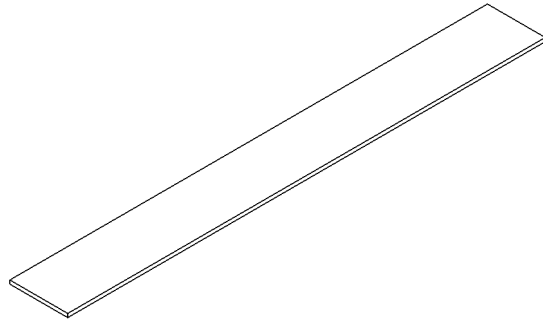
**Item 19**



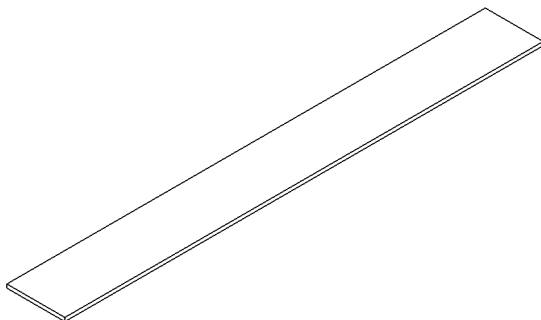
**Item 20**



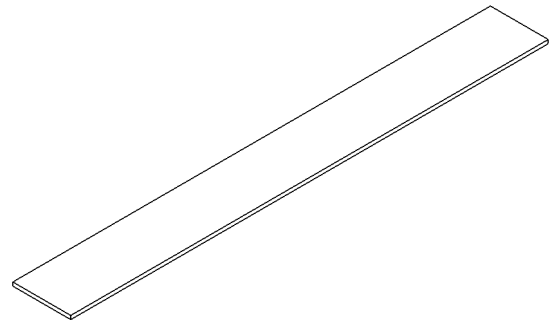
**Item 21**



**Item 22**



**Item 23**



**Item 24**



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ITEM	QTY	NUMBER	DESCRIPTION	MATERIAL	REF STOCK SIZE	SPEC	FINISH	MANUFACTURER	NCAGEC
-	-	AAL-221-050-001	BAGGAGE COMPARTMENT, PROTECTOR, KIT	C/O SHADED ITEMS ONLY					
1	1	AAL-221-052-001	FLOOR PANEL, DETAIL		0.1	SEE MFR	SEE MFR	ALPINE AEROTECH LTD.	L0171
2	1	AAL-221-052-002	ROOF PANEL, DETAIL		0.1	SEE MFR	SEE MFR	ALPINE AEROTECH LTD.	L0171
3	1	AAL-221-052-003	LHS WALL PANEL, DETAIL		0.1	SEE MFR	SEE MFR	ALPINE AEROTECH LTD.	L0171
4	1	AAL-221-052-004	FWD BULKHEAD PANEL, DETAIL		0.1	SEE MFR	SEE MFR	ALPINE AEROTECH LTD.	L0171
5	1	AAL-221-052-005	AFT BULKHEAD PANEL, DETAIL		0.1	SEE MFR	SEE MFR	ALPINE AEROTECH LTD.	L0171
6	1	AAL-221-052-006	RHS AFT WALL PANEL, DETAIL		0.1	SEE MFR	SEE MFR	ALPINE AEROTECH LTD.	L0171
7	1	AAL-221-052-007	WALL PANEL, DETAIL, FWD, RHS		0.1	SEE MFR	SEE MFR	ALPINE AEROTECH LTD	L0171
8	1	AAL-221-052-008	DOOR PANEL, DETAIL		0.1	SEE MFR	SEE MFR	ALPINE AEROTECH LTD	L0171
9	3	AAL-221-052-009	RETAINER, DETAIL	2024-O	0.04	AMS 4040	SEE SPEC	SEE SPEC	L0171
10	8	HYSOL EA 9394	ADHESIVE	EPOXY	AR	SEE MFR	SEE MFR	HENKEL ADHESIVES CORP	1B8U0
11	4	151394	VELCRO, DETAIL	LOOP 1000, BLACK, 8224 PSA	2 x 15.25	SEE MFR	SEE MFR	VELCRO	11153
12	4	151394	VELCRO, DETAIL	LOOP 1000, BLACK, 8224 PSA	2 x 13.00	SEE MFR	SEE MFR	VELCRO USA INC.	11153
13	7	151394	VELCRO, DETAIL	LOOP 1000, BLACK, 8224 PSA	2 x 14.00	SEE MFR	SEE MFR	VELCRO USA INC.	11153
14	4	159797	VELCRO, DETAIL	HOOK 88, BLACK 8289	2 x 15.25	SEE MFR	SEE MFR	VELCRO USA INC.	11153
15	4	159797	VELCRO, DETAIL	HOOK 88, BLACK 8289	2 x 13.00	SEE MFR	SEE MFR	VELCRO USA INC.	11153
16	7	159797	VELCRO, DETAIL	HOOK 88, BLACK 8289	2 x 14.00	SEE MFR	SEE MFR	VELCRO USA INC.	11153
17	8	151394	VELCRO, DETAIL	LOOP 1000, BLACK, 8224 PSA	2 x 16.50	SEE MFR	SEE MFR	VELCRO USA INC.	11153
18	2	151394	VELCRO, DETAIL	LOOP 1000, BLACK, 8224 PSA	2 X 6.439	SEE MFR	SEE MFR	VELCRO USA INC.	11153
19	8	159797	VELCRO, DETAIL	HOOK 88, BLACK 8289	2 x 16.50	SEE MFR	SEE MFR	VELCRO USA INC.	11153
20	2	159797	VELCRO, DETAIL	HOOK 88, BLACK 8289	2 X 6.439	SEE MFR	SEE MFR	VELCRO USA INC.	11153
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24	1	159797	VELCRO, DETAIL	HOOK 88, BLACK 8289	2 x 13.50	SEE MFR	SEE MFR	VELCRO USA INC.	11153