

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

### **MODELS: BELL 505**

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	3
4	Maintenance Instructions	4
5	Troubleshooting	6
6	Removal/Replacement	7
	6.1 Removal Instructions	8
	6.2 Replacement Instructions	13
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 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.
3. The kit is produced IAW AAL-005-014-006, Specification for Cargo Compartment Protection Panels. This constitutes acceptable data under TCCA regulations standard 571.03(2)(b)

## **SECTION 1: INTRODUCTION**

This document comprises Instructions for Continuing Airworthiness that apply to the AFT Baggage Compartment Protection, Kit, installed on Bell 505 rotorcraft. The information and data contained in this document are supplemental to the information contained in the existing ICA for the Bell 505

### **Applicability**

The AFT Baggage Compartment Protection, Kit (AAL-312-070-901) is applicable to all serial numbers of Bell 505 rotorcraft.

## **SECTION 2: DESCRIPTION**

The following information provides a functional description of the AFT Baggage Compartment Protection, Kit as defined in Alpine Aerotech LP datasets AAL-312-070-901.

- The AFT Baggage Protection, Kit includes rigid pieces of material that are installed atop the existing floor & bulkheads to protect it from dents and punctures associated with typical aircraft usage. This occurs most frequently during loading and unloading operations, but can also occur during small inflight shifts of said cargo.
- The AFT Baggage Protection, Kit when installed, adds additional protection to the floor panels, as it is manufactured from a material specifically designed to spread and attenuate energy.

## **SECTION 3: OPERATION**

1. With the AFT Baggage Compartment Protection, Kit installed no special considerations are 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 revisions of the Bell 505 Maintenance Manual for Instructions for Maintenance/Inspection with respect to the item(s) referenced within this document.
3. Refer to the Section 6: Removal/Replacement Instructions 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 the Repair Procedures specified.
6. Limitations for the item(s) referenced within this document are IAW the Airworthiness Limitations specified.

## Inspection Procedures

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

#### Notes

1. Refer to the applicable Maintenance Manual, Chapter 4, 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 600 Hour/12 Month Inspections every 600 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. 600 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 AFT Baggage Compartment Protection, 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 aircraft floor.

## **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**

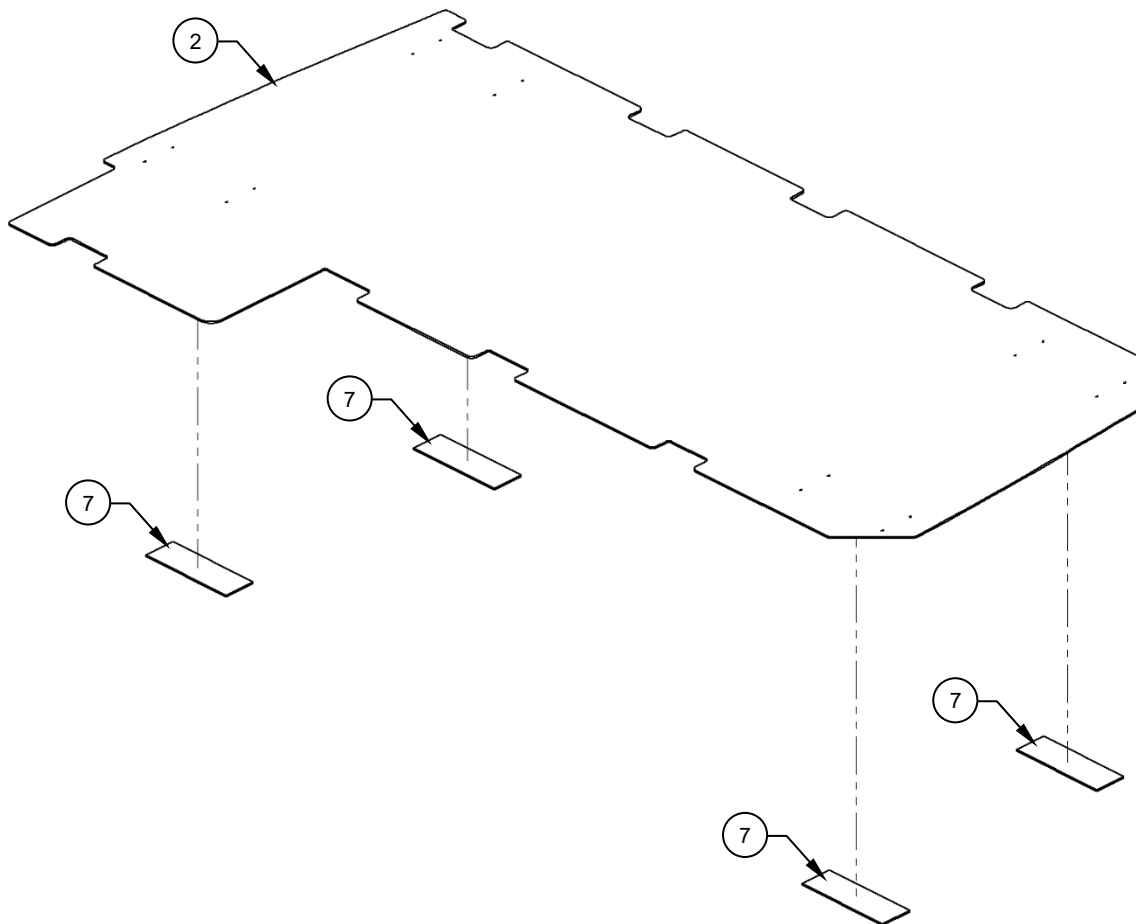
### **General Notes**

1. All Installation Instructions shall be accomplished IAW standard aircraft practices. Refer to the current revision of the FAA publications 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 4: Maintenance Instructions for instructions on maintenance for the item(s) referenced within this section.
4. Refer to the Section 9: Illustrated Parts Breakdown for the part numbers of the item(s) referenced within this section.

## 6.1 REMOVAL INSTRUCTIONS

### Floor Panel, Kit, AAL-312-070-001

1. Gain access to the aircraft and make ready for maintenance.
2. Separate the Floor Panel, Assy, (Item 2), from the 4x Velcro, Details, (Item 7). Bend the Floor Panel, Assy, (Item 2), as required to remove it from the aircraft. Reference Figure 1.



**Figure 1**  
Some Items Removed for Clarity  
Aircraft Structure Not Shown

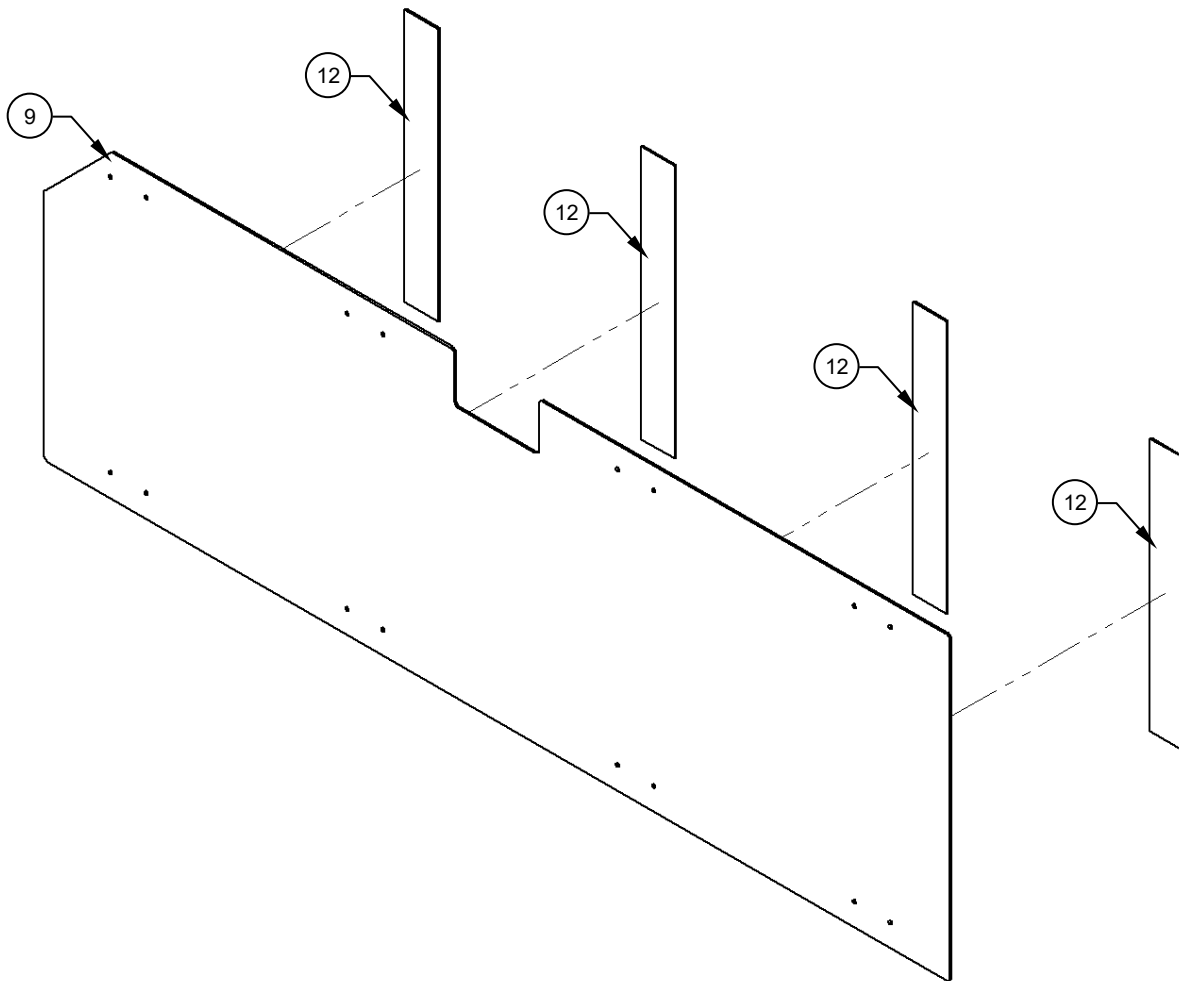
3. Update the aircraft logbook for the removal of the affected components of the Floor Panel, Kit.



**Removal Instructions** (cont.)

**AFT Panel, Kit, AAL-312-070-002**

1. Gain access to the aircraft and make ready for maintenance.
2. Separate the AFT Bulkhead Panel, Assy, (Item 9), from the 4x Velcro, Detail, (Item 12), and remove from aircraft. Reference Figure 2.



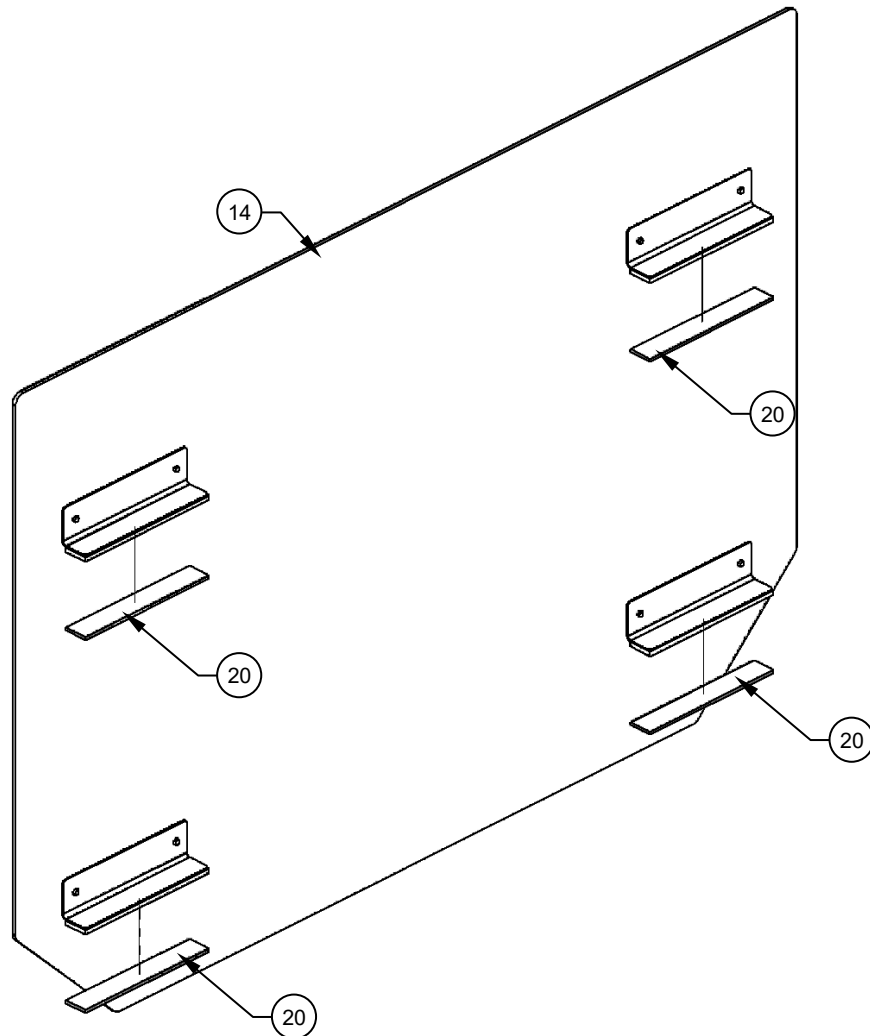
**Figure 2**  
Some Items Removed for Clarity  
Aircraft Structure Not Shown

3. Update the aircraft logbook for the removal of the affected components of the AFT Bulkhead Panel, Kit.

**Removal Instructions** (cont.)

**LHS OUTBD Panel, Kit, AAL-312-070-003**

1. Gain access to the aircraft and make ready for maintenance.
2. Lift and separate the LHS OUTBD Panel, Assy, (Item 14), from the 4x Velcro, Detail, (Item 20), and remove from aircraft. Reference Figure 3.



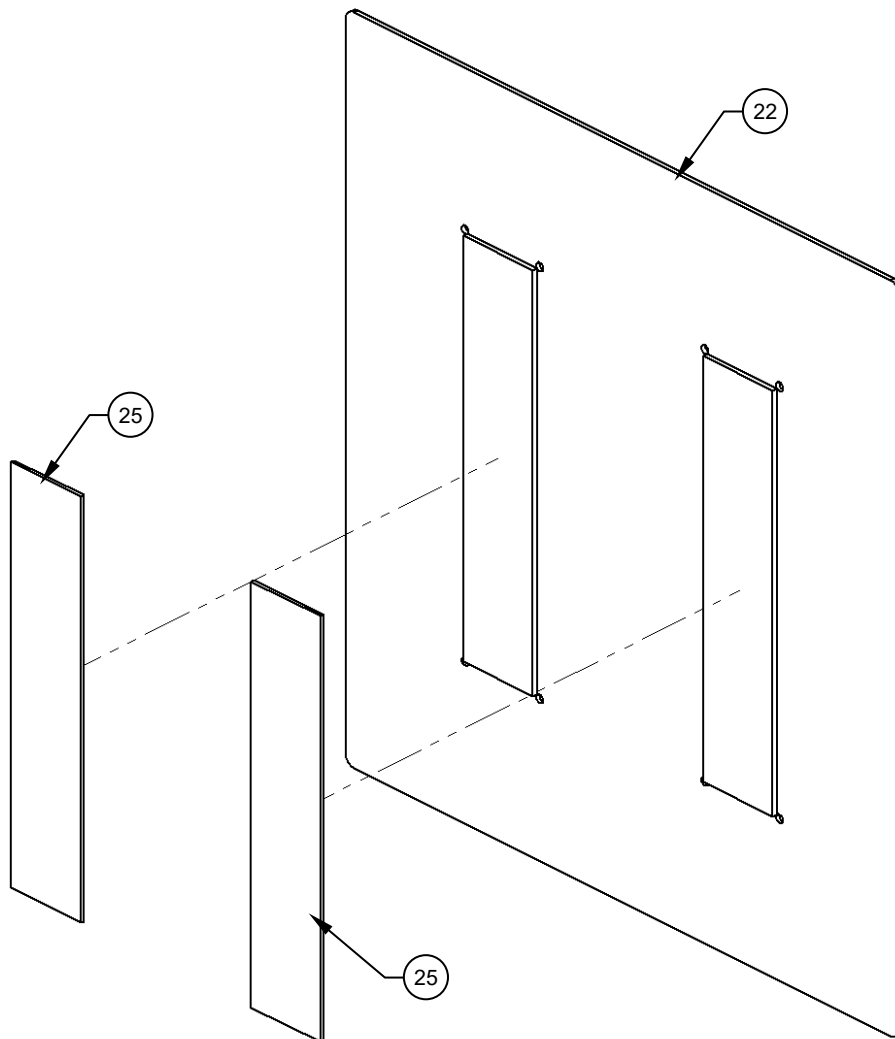
**Figure 3**  
Some Items Removed for Clarity  
Aircraft Structure Not Shown

3. Update the aircraft logbook for the removal of the affected components of the LHS OUTBD Panel, Kit.

**Removal Instructions** (cont.)

**LHS FWD Bulkhead Panel, Kit, AAL-312-070-004**

1. Gain access to the aircraft and make ready for maintenance.
2. Separate the LHS FWD Bulkhead Panel, Assy, (Item 22), from the 2x Velcro, Detail, (Item 25), and remove from aircraft. Reference Figure 4.



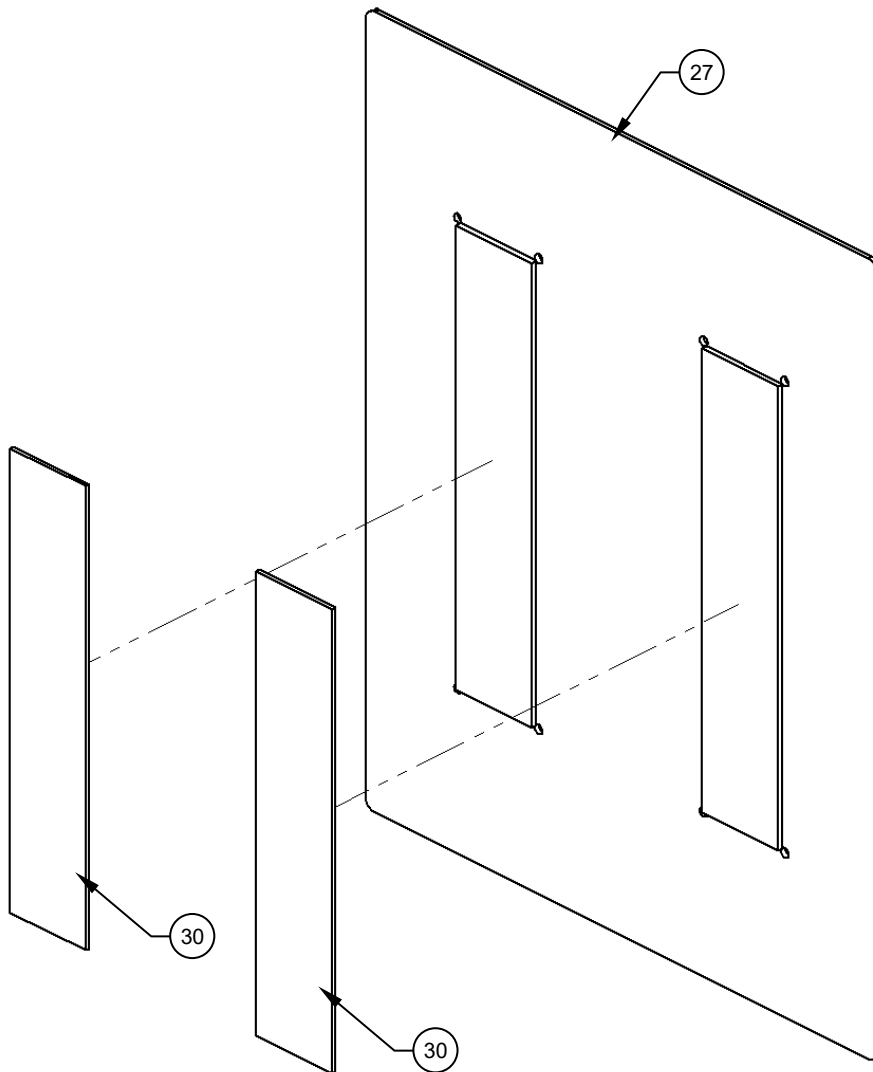
**Figure 4**  
Some Items Removed for Clarity  
Aircraft Structure Not Shown

3. Update the aircraft logbook for the removal of the affected components of the LHS FWD Bulkhead Panel, Kit.

**Removal Instructions** (cont.)

**RHS FWD Bulkhead Panel, Kit, AAL-312-070-005**

1. Gain access to the aircraft and make ready for maintenance.
2. Separate the RHS FWD Bulkhead Panel, Assy, (Item 27), from the 2x Velcro, Detail, (Item 30), and remove from aircraft. Reference Figure 5.



**Figure 5**

Some Items Removed for Clarity  
Aircraft Structure Not Shown

3. Update the aircraft logbook for the removal of the affected components of the RHS FWD Bulkhead Panel, Kit.

## **6.2 REPLACEMENT INSTRUCTIONS**

1. As there are no special considerations, the replacement of the AFT Baggage Compartment Protection, Kit can be considered the opposite of the removal.

## **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**

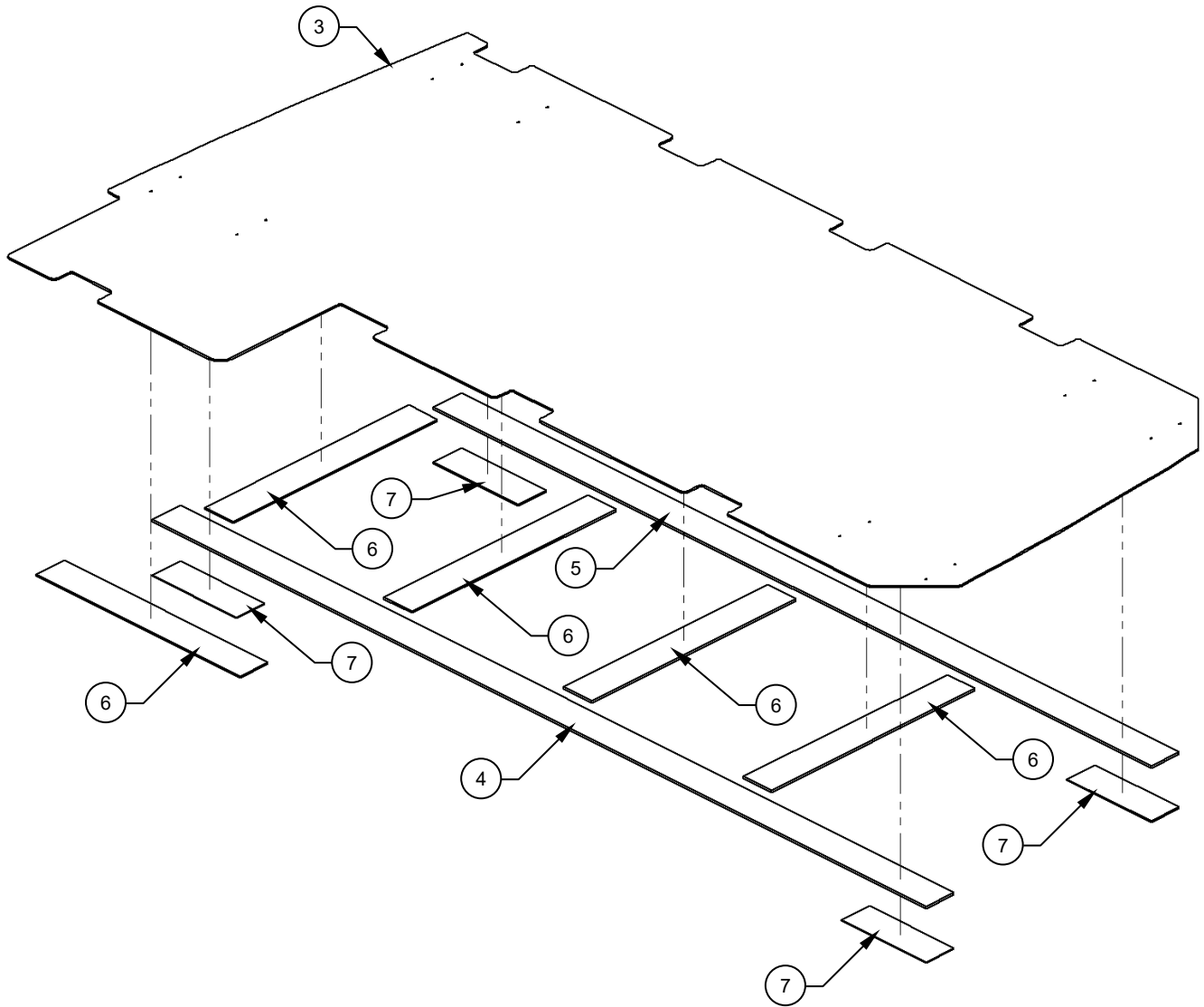
#### **Notes**

1. Refer to the Maintenance Planning Information, 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**

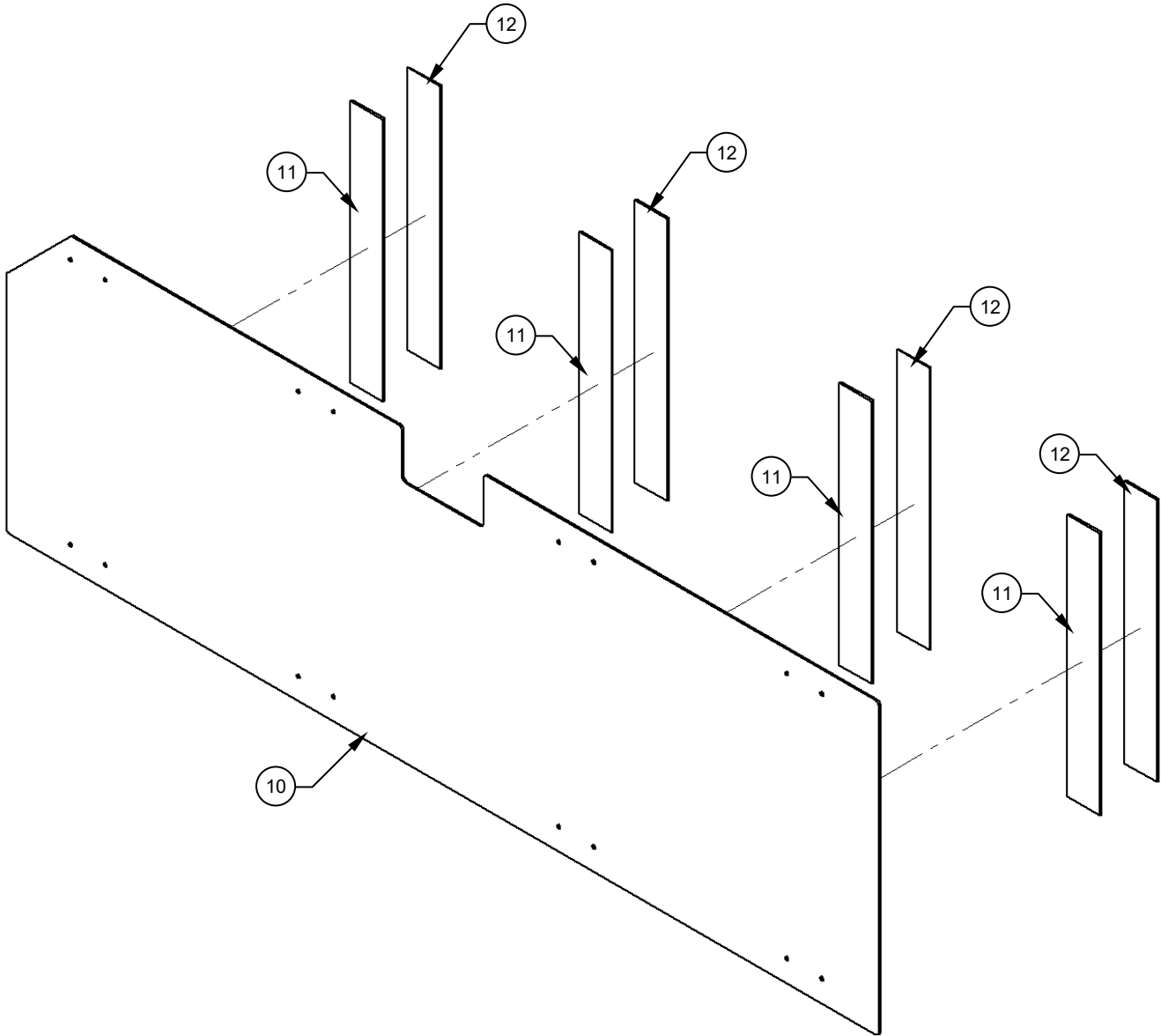
1. There are no airworthiness limitations associated with the item(s) referenced within this document.

**SECTION 9: ILLUSTRATED PARTS BREAKDOWN**



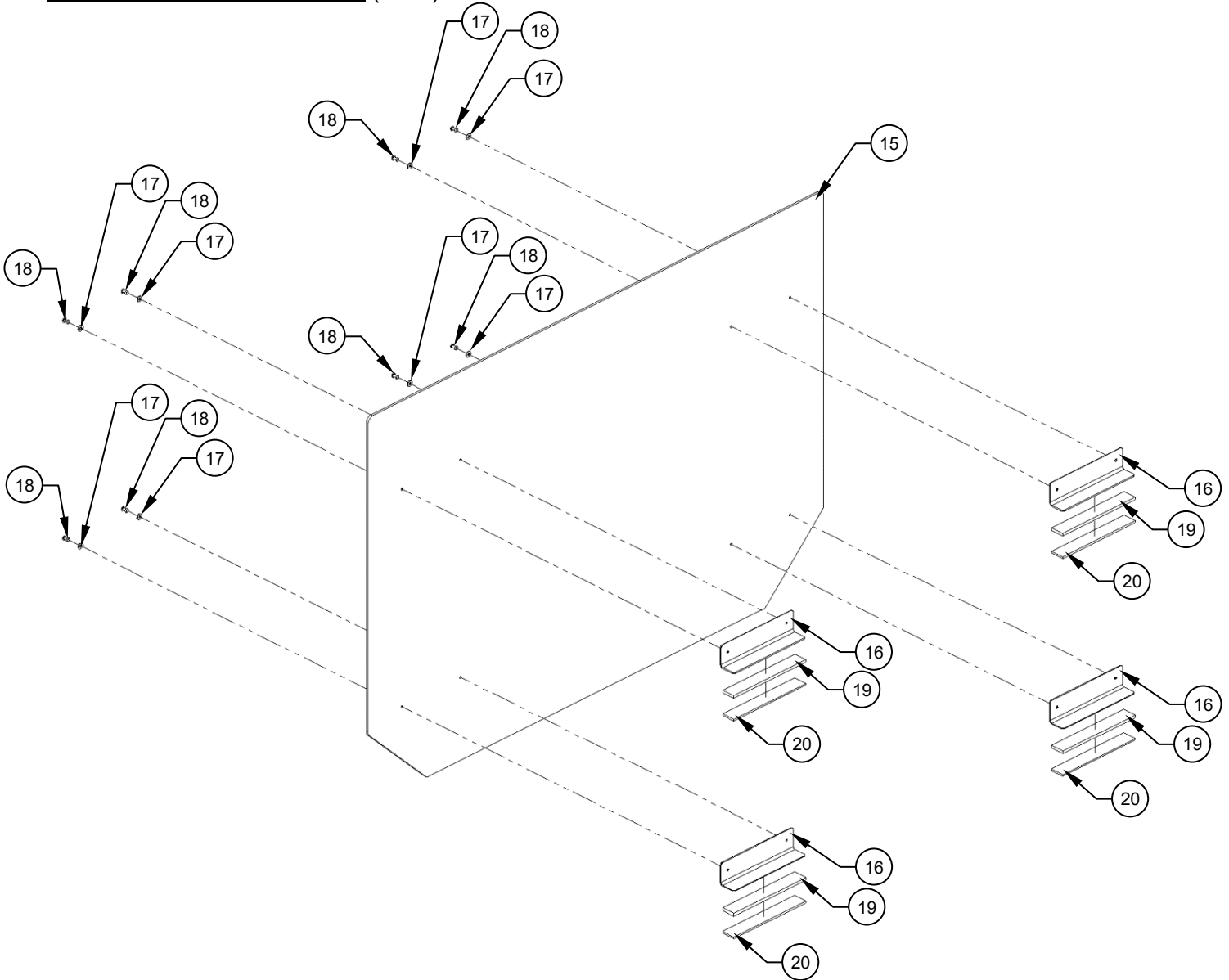
**AAL-312-070-001 (ITEM 1)  
SHOWN**

**Illustrated Parts Breakdown** (cont.)



**AAL-312-070-002 (ITEM 8)  
SHOWN**

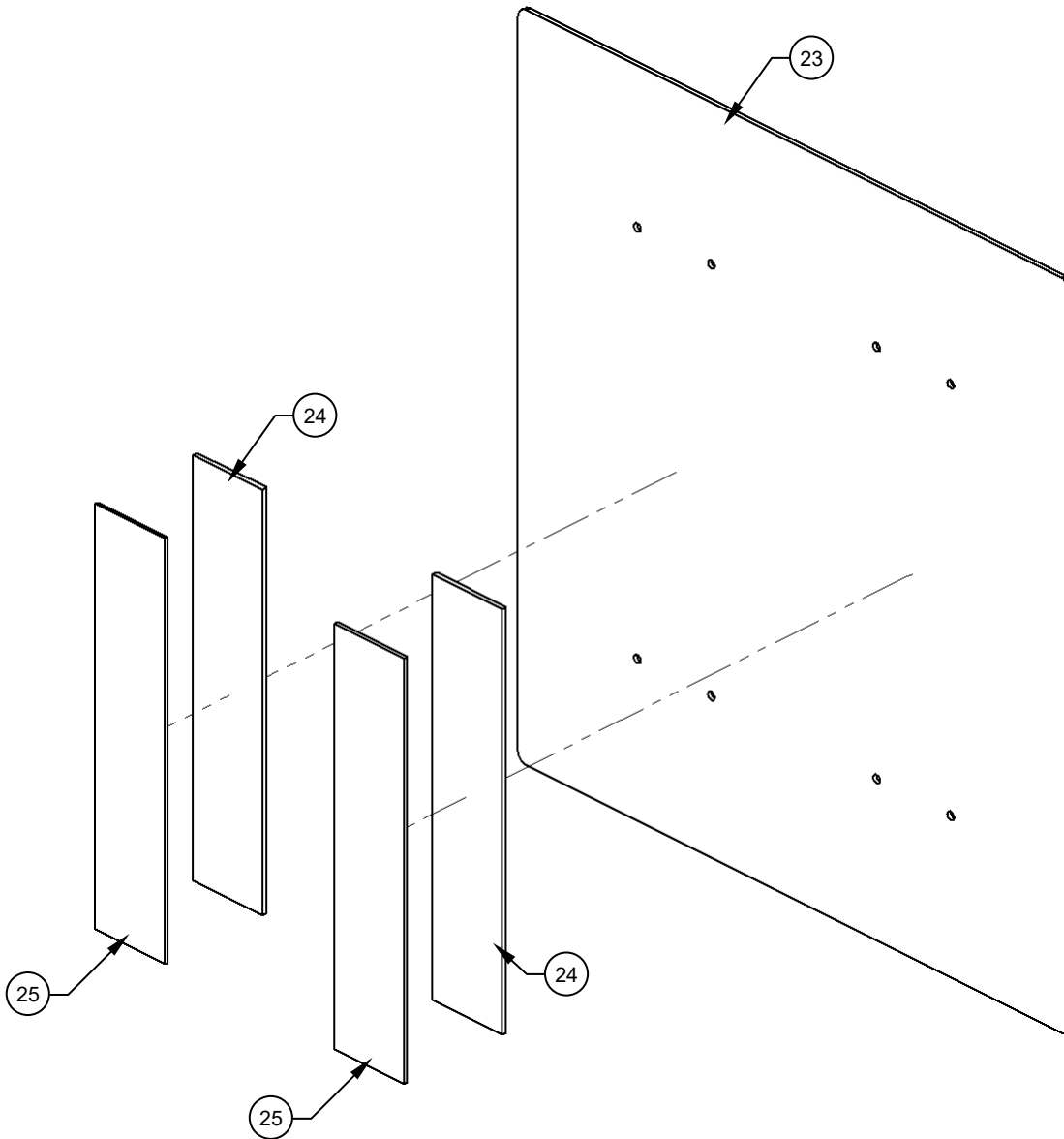
**Illustrated Parts Breakdown** (cont.)



**AAL-312-070-003 (ITEM 13)  
SHOWN**

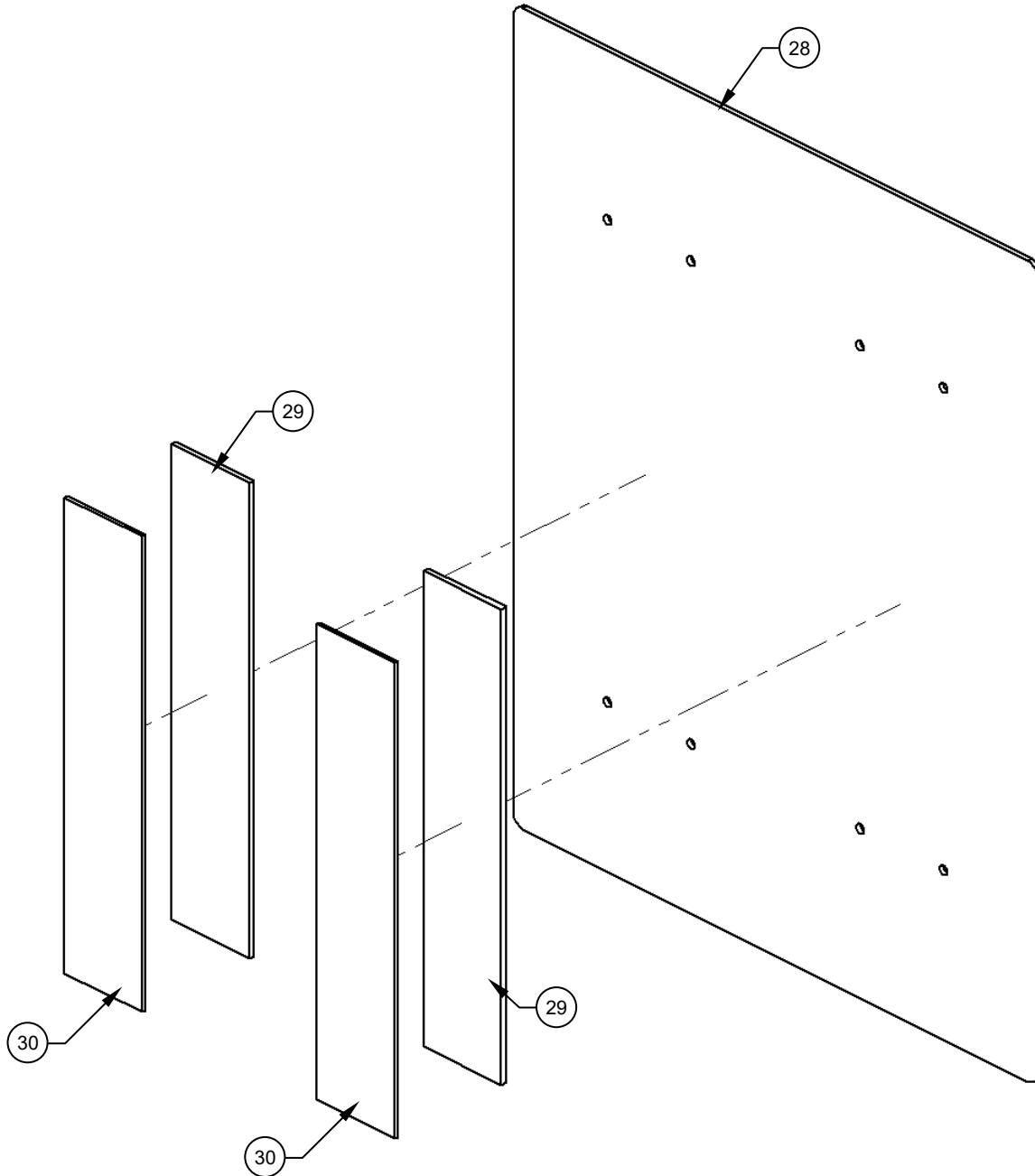


**Illustrated Parts Breakdown** (cont.)



**AAL-312-070-004 (ITEM 21)  
SHOWN**

**Illustrated Parts Breakdown** (cont.)



**AAL-312-061-005 (ITEM 26  
SHOWN**

**Illustrated Parts Breakdown (cont.)**

ITEM	QTY	NUMBER	DESCRIPTION	MATERIAL	REF STOCK	SPEC	FINISH	MANUFACTURER	NCAGEC
-	-	AAL-312-070-901	AFT BAGGAGE COMPARTMENT PROTECTION, KIT	C/O SHADED ITEMS				ALPINE AEROTECH LP	L0171
1	1	AAL-312-070-001	FLOOR PANEL, KIT	NA	NA	NA	NA	ALPINE AEROTECH LP	L0171
2	1	>AAL-312-071-001	FLOOR PANEL, ASSY	NA	NA	NA	NA	ALPINE AEROTECH LP	L0171
3	1	>>AAL-312-072-001	FLOOR PANEL, DETAIL	NA	NA	NA	NA	ALPINE AEROTECH LP	L0171
4	1	>>151394	VELCRO, DETAIL	LOOP 1000, BLACK, 8224 PSA	2 X 55.00	SEE MFR	SEE MFR	VELCRO USA INC.	11153
5	1	>>151394	VELCRO, DETAIL	LOOP 1000, BLACK, 8224 PSA	2 X 51.00	SEE MFR	SEE MFR	VELCRO USA INC.	11153
6	5	>>151394	VELCRO, DETAIL	LOOP 1000, BLACK, 8224 PSA	2 X 14.50	SEE MFR	SEE MFR	VELCRO USA INC.	11153
7	4	>151405	VELCRO, DETAIL	HOOK 88, BLACK 8224 PSA	2 X 6.00	SEE MFR	SEE MFR	VELCRO USA INC.	11153
8	1	AAL-312-070-002	AFT PANEL, KIT	NA	NA	NA	NA	ALPINE AEROTECH LP	L0171
9	1	>AAL-312-071-002	AFT BULKHEAD PANEL, ASSY	NA	NA	NA	NA	ALPINE AEROTECH LP	L0171
10	1	>>AAL-312-072-002	AFT BULKHEAD PANEL, DETAIL	NA	NA	NA	NA	ALPINE AEROTECH LP	L0171
11	4	>>151394	VELCRO, DETAIL	LOOP 1000, BLACK, 8224 PSA	2 X 15.00	SEE MFR	SEE MFR	VELCRO USA INC.	11153
12	4	>151405	VELCRO, DETAIL	HOOK 88, BLACK 8289 PSA	2 X 15.00	SEE MFR	SEE MFR	VELCRO USA INC.	11153
13	1	AAL-312-070-003	LHS OUTBD PANEL, KIT	NA	NA	NA	NA	ALPINE AEROTECH LP	L0171
14	1	>AAL-312-071-003	LHS OUTBD PANEL, ASSY	NA	NA	NA	NA	ALPINE AEROTECH LP	L0171
15	1	>>AAL-312-072-003	LHS OUTBD, PANEL, DETAIL	NA	NA	NA	NA	ALPINE AEROTECH LP	L0171

16	4	>>AAL-312-072-006	ANGLE, DETAIL	NA	NA	NA	NA	ALPINE AEROTECH.LP	L0171
17	8	>>NAS1149DN232J	WASHER, FLAT	SEE SPEC	SEE SPEC	NAS1149	SEE SPEC	SOURCE AS REQUIRED	NA
18	8	>>MS20470AD3-5	RIVET, SOLID, UNIVERSAL HEAD	SEE SPEC	SEE SPEC	NASM20470	SEE SPEC	SOURCE AS REQUIRED	NA
19	4	>>129154	VELCRO, DETAIL	LOOP 1000, BLACK, 8224 PSA	.625 X 4.00	SEE MFR	SEE MFR	VELCRO USA INC.	11153
20	4	>>129437	VELCRO, DETAIL	HOOK 88, BLACK 8289 PSA	.625 X 4.00	SEE MFR	SEE MFR	VELCRO USA INC.	11153
21	1	AAL-312-070-004	LHS FWD BULKHEAD PANEL, KIT	NA	NA	NA	NA	ALPINE AEROTECH LP	L0171
22	1	>AAL-312-071-004	LHS FWD BULKHEAD PANEL, ASSY	NA	NA	NA	NA	ALPINE AEROTECH LP	L0171
23	1	>>AAL-312-072-004	LHS FWD BULKHEAD PANEL, DETAIL	NA	NA	NA	NA	ALPINE AEROTECH LP	L0171
24	2	>>151394	VELCRO, DETAIL	LOOP 1000, BLACK, 8224 PSA	2 x 10.00	SEE MFR	SEE MFR	VELCRO USA INC.	11153
25	2	>151405	VELCRO, DETAIL	HOOK 88, BLACK 8289 PSA	2 X 10.00	SEE MFR	SEE MFR	VELCRO USA INC.	11153
26	1	AAL-312-070-005	RHS FWD BULKHEAD, KIT	NA	NA	NA	NA	ALPINE AEROTECH LP	L0171
27	1	>AAL-312-071-005	RHS FWD BULKHEAD, ASSY	NA	NA	NA	NA	ALPINE AEROTECH LP	L0171
28	1	>>AAL-312-072-005	RHS FWD BULKHEAD PANEL, DETAIL	NA	NA	NA	NA	ALPINE AEROTECH LP	L0171
29	2	>>151394	VELCRO, DETAIL	LOOP 1000, BLACK, 8224 PSA	2 x 10.00	SEE MFR	SEE MFR	VELCRO USA INC.	11153
30	2	>151405	VELCRO, DETAIL	HOOK 88, BLACK 8289 PSA	2 X 10.00	SEE MFR	SEE MFR	VELCRO USA INC.	11153