

FLOOR PROTECTION KIT, AFT W/ BULKHEAD CLOSEOUT INSTRUCTIONS FOR CONTINUING AIRWORTHINESS

MODELS: BELL 429

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 Floor Protection, Kit as defined in Alpine Aerotech LP authority datasets AAL-412-010-003.

- The Floor Protection, Kit includes rigid pieces of material that are installed atop the existing floor 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 Floor 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.

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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 Bell 429 Maintenance Manual 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.

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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) <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.

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Inspection Procedures

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

Notes

- 1. Refer to the applicable Maintenance Manual, Chapter 4-1 and 4-2, 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 Floor 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.

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Repair Procedures

1. Repairs to the item(s) referenced within this document are <u>not</u> permitted. Contact Alpine Aerotech LP for further information if repairs are required to the item(s) referenced within this document.

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SECTION 3: INSTALLATION & REMOVAL INSTRUCTIONS

Weight & Balance

Part Number	<u>Description</u>	<u>Weight</u>	Long. Arm	<u>Lat. Arm</u>
AAL-412-020-003	Floor Protection, Kit AFT	8.613* 3.91 (Kg)	264.40 6.72(m)	1.07 RBL .03(m) RBL

Total increase in weight to aircraft for installation of associated kit only. Combine weight and balance data of listed kits as applicable.

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 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.
- Remove and retain for future use. 1 Reinstall existing OEM fastener. 2 >
- 3 Remove and discard.
- Triangular tie down strap location
- OEM auxiliary tank and attachment assemblies; rear attachment assemblies are integral to fuel tank. Fuel tank not shown for clarity

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Floor Protection, Kit, AFT

1. Gain access to the AFT section of the cabin floor. Reference Figure 1.

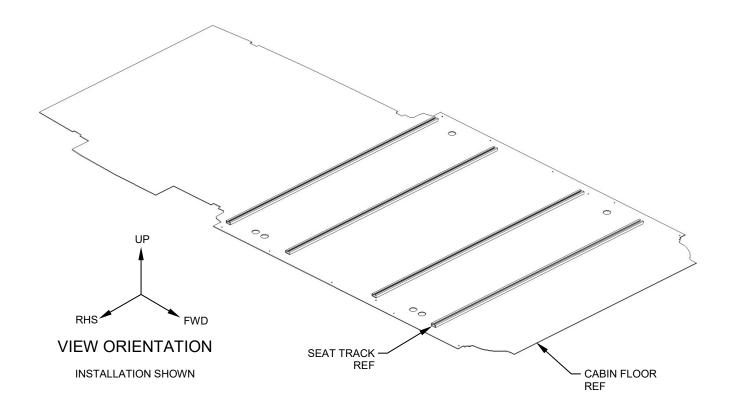


Figure 1
Some Items
Removed for
Clarity

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Floor Protection, Kit, AFT

2. Remove and discard the two most OUTBD fasteners common to the access panels near the AFT end of the cargo area. Remove and retain fasteners along cargo door sill. Reference Figure 2.

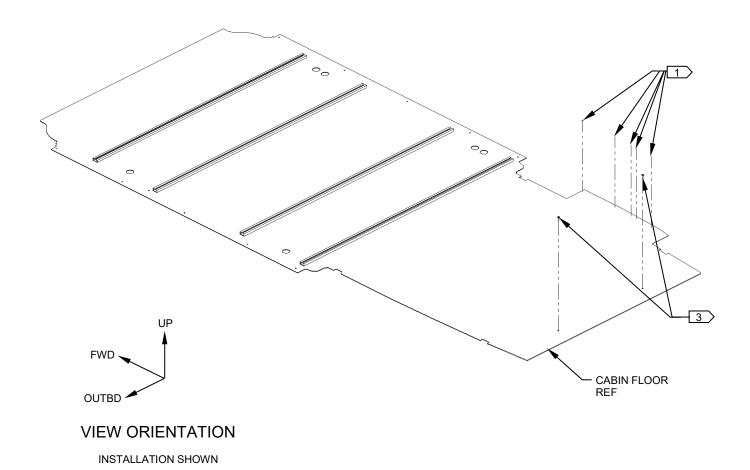


Figure 2
Some aircraft structure
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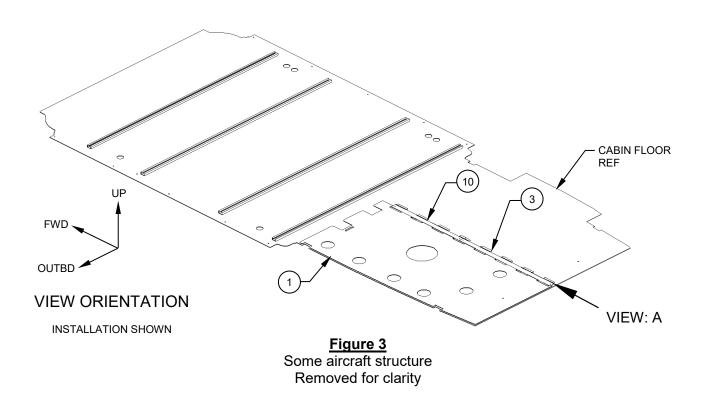
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Floor Protection, Kit, AFT

3. Position the LHS Panel Assy (Item 1) on the floor in its approximate position with the Velcro strips facing down as shown. Reference Figure 3.



4. Install the Retainer Strip, Assys (Item 3 and 10) by inserting the tabs into the provided slots in the panel as shown. Reference Figures 3 & 4.

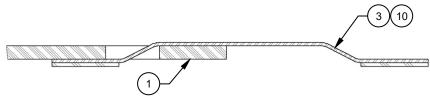


Figure 4
VIEW: A
Some aircraft structure
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Floor Protection, Kit, AFT

- 5. Install the RHS Panel, Assy (Item 2) by tipping the panel on an angle and inserting the Retainer Strip, Assy (Item 3 and 10) tabs into the provided slots in the panel as shown. Install cargo door sill (Item 4) using OEM hardware. Reference Figures 3, 4 & 5.
- 6. Install the provided fasteners (Item 12) as shown. Reference Figures 4 & 5

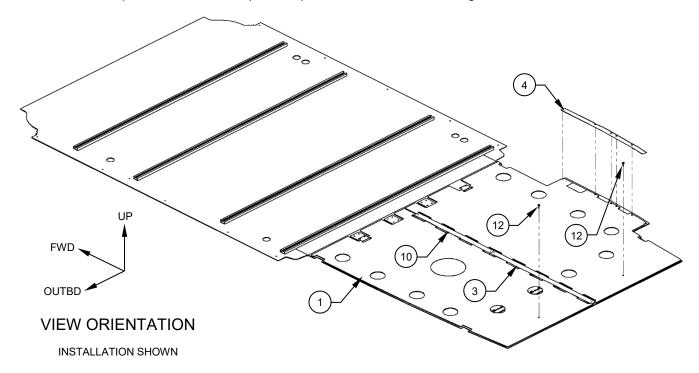


Figure 5
Some aircraft structure
Removed for clarity

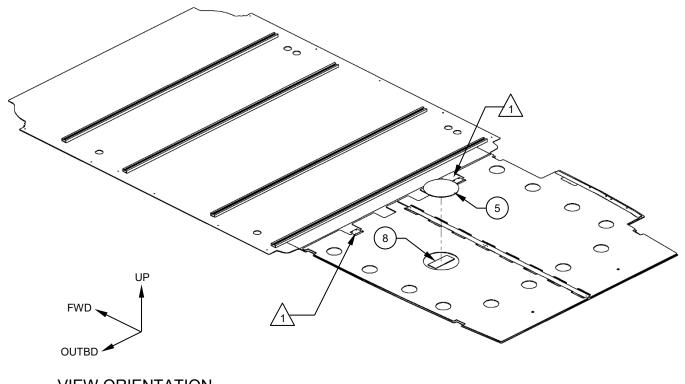
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Floor Protection, Kit, AFT

- 7. Install the Velcro, Detail (Item 8) on the fuel transfer door by removing the backing and placing the Velcro on the door in the proper orientation. Apply adequate pressure to ensure proper adhesion to the fuel transfer door. Reference Figure 6.
- 8. Install the Blanking Plate, Assy (Item 5) with the provided Velcro, Detail (Item 8) in the proper orientation. Reference Figure 6.



VIEW ORIENTATION

INSTALLATION SHOWN

Figure 6
Some aircraft structure
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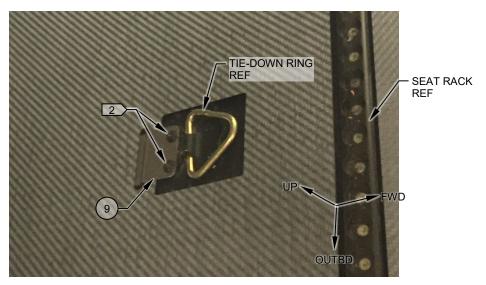
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Floor Protection, Kit, AFT

9. Remove the AFT two screws from the two FWD most triangular tie-down rings in the cargo area and install the Retainer, Assemblies (Item 9) re-using the OEM fasteners. Reference Figure 6 and 7.



VIEW ORIENTATION

INSTALLATION SHOWN

Figure 7
Installation Shown

- 10. Installation complete
- 11. Perform a General Inspection of all items to ensure proper installation.
- 12. Update the aircraft logbook for the installation of Floor Protection, Kit AFT.

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Section 3.2 Removal Instructions

Floor Protection, Kit, AFT

- 1. The removal the Floor Protection, Kit AFT for either inspections, or mission configuration, can be considered the opposite of installation.
- 2. For permanent removal remove Velcro on fuel transfer door (Item 8) and verify all OEM fasteners are correctly reinstalled.
- 3. Perform a General Inspection of all items to ensure proper removal.
- 4. Update the aircraft logbook for the removal of the Floor Protection, Kit AFT.

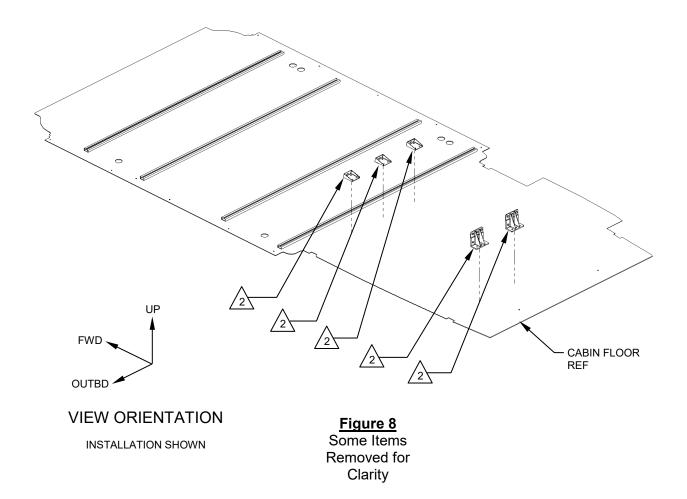
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Floor Protection, Kit, AFT with OEM auxiliary fuel tank kit (429-706-500-101/-109)

1. Gain access to the AFT section of the cabin floor. Remove OEM auxiliary tank and attachment assemblies; rear attachment assemblies are integral to fuel tank. Fuel tank not shown for clarity. Reference Figure 8.



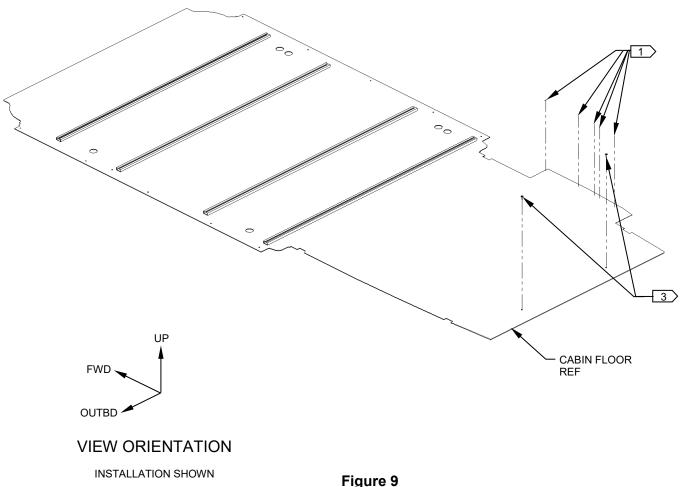
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Floor Protection, Kit, AFT with OEM auxiliary fuel tank kit (429-706-500-101/-109)

2. Remove and discard the two most OUTBD fasteners common to the access panels near the AFT end of the cargo area. Remove and retain fasteners along cargo door sill. Reference Figure 9.



Some aircraft structure
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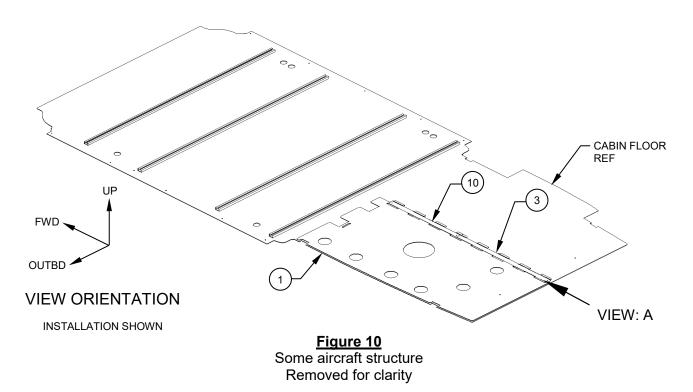
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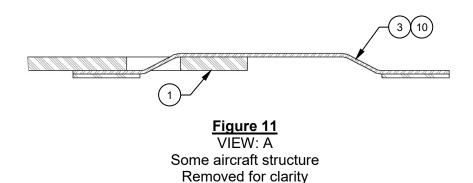


Floor Protection, Kit, AFT with OEM auxiliary fuel tank kit (429-706-500-101/-109)

3. Position the LHS Panel Assy (Item 1) on the floor in its approximate position with the Velcro strips facing down as shown. Reference Figure 10.



4. Install the Retainer Strip, Assys (Item 3 & 10) by inserting the tabs into the provided slots in the panel as shown. Reference Figures 10 & 11.



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Floor Protection, Kit, AFT with OEM auxiliary fuel tank kit (429-706-500-101/-109)

- 5. Install the RHS Panel, Assy (Item 2) by tipping the panel on an angle and inserting the Retainer Strip, Assy (Item 3 and 10) tabs into the provided slots in the panel as shown. Install cargo door sill (Item 4) using OEM hardware. Reference Figures 10, 11 & 12.
- 6. Install the provided fasteners (Item 12) as shown. Reference Figures 9 & 12

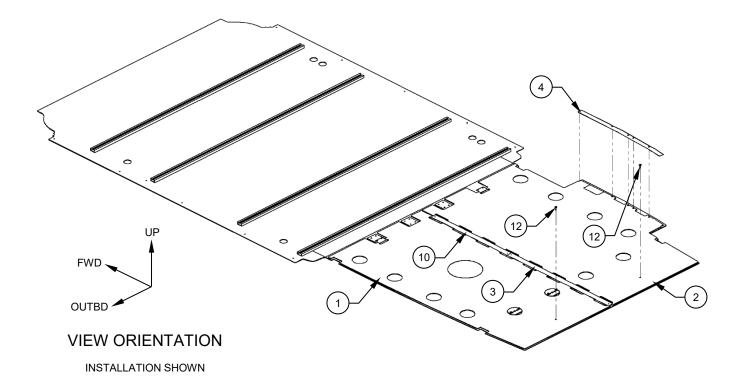


Figure 12
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Floor Protection, Kit, AFT with OEM auxiliary fuel tank kit (429-706-500-101/-109)

7. Install the three Spacer, Assys (Item 6) in the previous tie-down locations prior to installing the Attach, Assys (429-066-512-101) per BHT-429-II-5. Reuse the original fasteners.

NOTE: Spacer, Assys (Item 6) must be oriented with the small notch facing FWD and the anti-chafe tape down.

8. Place the Spacer Assys (Item 7) in position under the fuel tank with the flat edge facing AFT and install the provided fasteners (Item 11) in the slotted holes. Install the fasteners provided with kit (429-706-500-101/-109) in the center hole as per BHT-429-II-5.

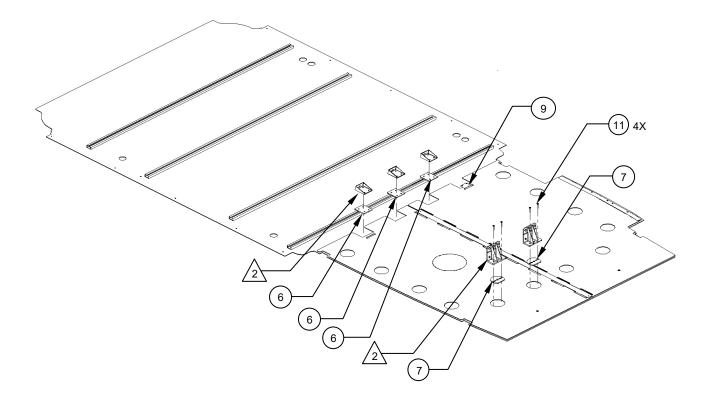


Figure 13
Some aircraft structure
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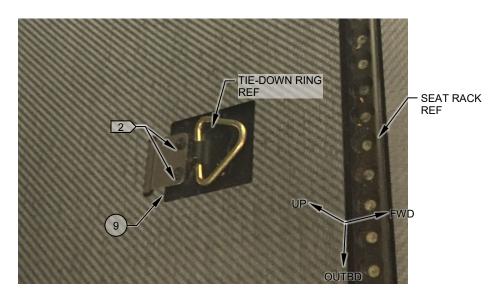
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<u>Section 3.3 Installation Instructions</u> (cont.) <u>Floor Protection, Kit, AFT with OEM auxiliary fuel tank kit (429-706-500-101/-109)</u>

9. Remove the AFT two screws from the RHS FWD most triangular tie-down ring in the cargo area and install the Retainer, Assemblies (Item 9) re-using the OEM fasteners. Reference Figure 13 and 14.



VIEW ORIENTATION

INSTALLATION SHOWN

Figure 14 Installation Shown

- 10. Perform the remainder of the installation of the auxiliary fuel tank, kit (429-706-500-101/-109) per the instructions provided in BHT-429-II-5.
- 11. Installation complete
- 12. Perform a General Inspection of all items to ensure proper installation.
- 13. Update the aircraft logbook for the installation of Floor Protection, Kit AFT.

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Section 3.4 Removal Instructions

Floor Protection, Kit, AFT with OEM auxiliary fuel tank kit (429-706-500-101/-109)

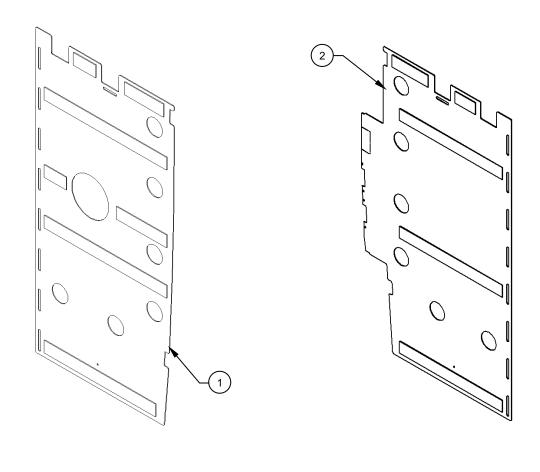
- 1. The removal the Floor Protection, Kit AFT for either inspections, or mission configuration, can be considered the opposite of installation.
- 2. For permanent removal remove Velcro on fuel transfer door (Item 8) and verify all OEM fasteners are correctly reinstalled.
- 3. Perform a General Inspection of all items to ensure proper removal.
- 4. Update the aircraft logbook for the removal of the Floor Protection, Kit AFT.

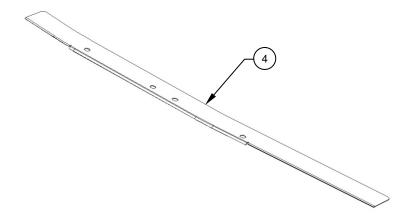
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SECTION 4: ILLUSTRATED PARTS BREAKDOWN



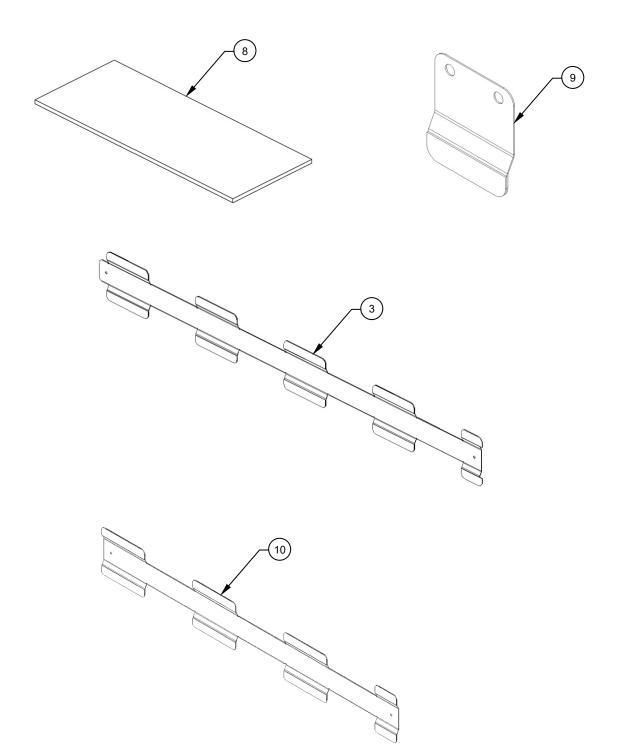


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Illustrated Parts Breakdown (cont.)

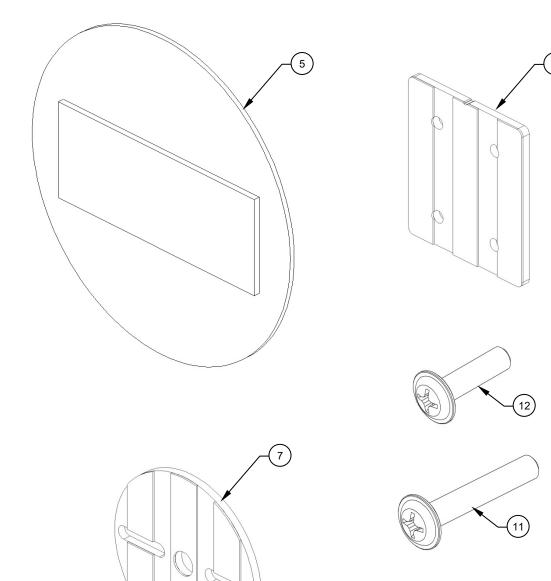


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Illustrated Parts Breakdown (cont.)



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Illustrated Parts Breakdown (cont.)

					REF				
ITEM	QTY	NUMBER	DESCRIPTION	MATERIAL	STOCK SIZE	SPEC	FINISH	MANUFACTURER	NCAGEC
-	-	AAL-412-020-003	FLOOR PROTECTION, KIT, AFT	C/O SHADED ITEMS ONLY					
1	1	AAL-412-021-011	PANEL, ASSY, LHS	NA	NA	NA	NA	ALPINE AEROTECH	L0171
2	1	AAL-412-021-014	PANEL, ASSY, RHS	NA	NA	NA	NA	ALPINE AEROTECH	L0171
3	1	AAL-412-021-008	RETAINER STRIP, ASSY	NA	NA	NA	NA	ALPINE AEROTECH LP	L0171
4	1	AAL-412-022-011	SILL, DETAIL	NA	NA	NA	NA	ALPINE AEROTECH LP	L0171
5	1	AAL-412-021-010	BLANKING PLATE, ASSY	NA	NA	NA	NA	ALPINE AEROTECH LP	L0171
6	3	AAL-412-021-012	SPACER, ASSY	NA	NA	NA	NA	ALPINE AEROTECH	L0171
7	2	AAL-412-021-013	SPACER, ASSY	NA	NA	NA	NA	ALPINE AEROTECH	L0171
8	1	151405 VELCRO	VELCRO, DETAIL	HOOK 88 BLACK 8289 PSA	2.00 X 5.00	SEE MFR	SEE MFR	VELCRO USA INC.	11153
9	2	AAL-412-021-007	RETAINER, ASSY	NA	NA	NA	NA	ALPINE AEROTECH LP	L0171
10	1	AAL-412-021-017	RETAINER STRIP, ASSY	NA	NA	NA	NA	ALPINE AEROTECH	L0171
11	4	AN525-832R16	SCREW, WASHER HEAD	SEE SPEC	SEE SPEC	NASM525	SEE SPEC	SOURCE AS REQUIRED	NA
12	2	AN525-10R10	SCREW, WASHER HEAD	SEE SPEC	SEE SPEC	NASM525	SEE SPEC	SOURCE AS REQUIRED	NA

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