

## **FLOOR PROTECTION KIT, AFT W/ BULKHEAD CLOSEOUT INSTALLATION INSTRUCTIONS**

**MODELS: BELL 429**

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## **Table of Contents**

<b><u>Section</u></b>	<b><u>Description</u></b>	<b><u>Page</u></b>
1	Description	2
2	Installation & Removal Instructions	3
	Applicability	3
	Installation Instructions Floor Protection, Kit, AFT	4
	Removal Instructions Floor Protection, Kit, AFT	12
	Installation Instructions Floor Protection, Kit, AFT w/ Aux Tank	13
	Removal Instructions Floor Protection, Kit, AFT w/ Aux Tank	19
	Appendix A: Door Opener Kit modification	20

## **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 installation instructions for the Floor Protection, Kit, Aft w/ Bulkhead Closeout 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.

## **SECTION 2    INSTALLATION & REMOVAL INSTRUCTIONS**

### **Applicability**

The Floor Protection, Kit, AFT, (AAL-412-020-003) is applicable to Bell 429 all serial numbers equipped with OEM interior.


### **Weight & Balance**

<u>Part Number</u>	<u>Description</u>	<u>Weight</u>	<u>Long. Arm</u>	<u>Lat. Arm</u>
AAL-412-020-003	Floor Protection, Kit, AFT	9.27*	262.45 (STA)	1.01 (BL)
		4.20 (Kg)	6.66 (m)	.03 (m)

\* Represents total weight of applicable kit only. Recalculate C of G, as appropriate.


### **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 Manual Supplement located in ICA (AAL-412-025-703) instructions on maintenance for the item(s) referenced within this section.
4. Refer to the Section 9: Illustrated Parts Breakdown located in the Instructions for Airworthiness (AAL-412-025-703) for the part numbers of the item(s) referenced within this section.

 Remove and retain for future use.

 Reinstall existing OEM fastener.

 Remove and discard.

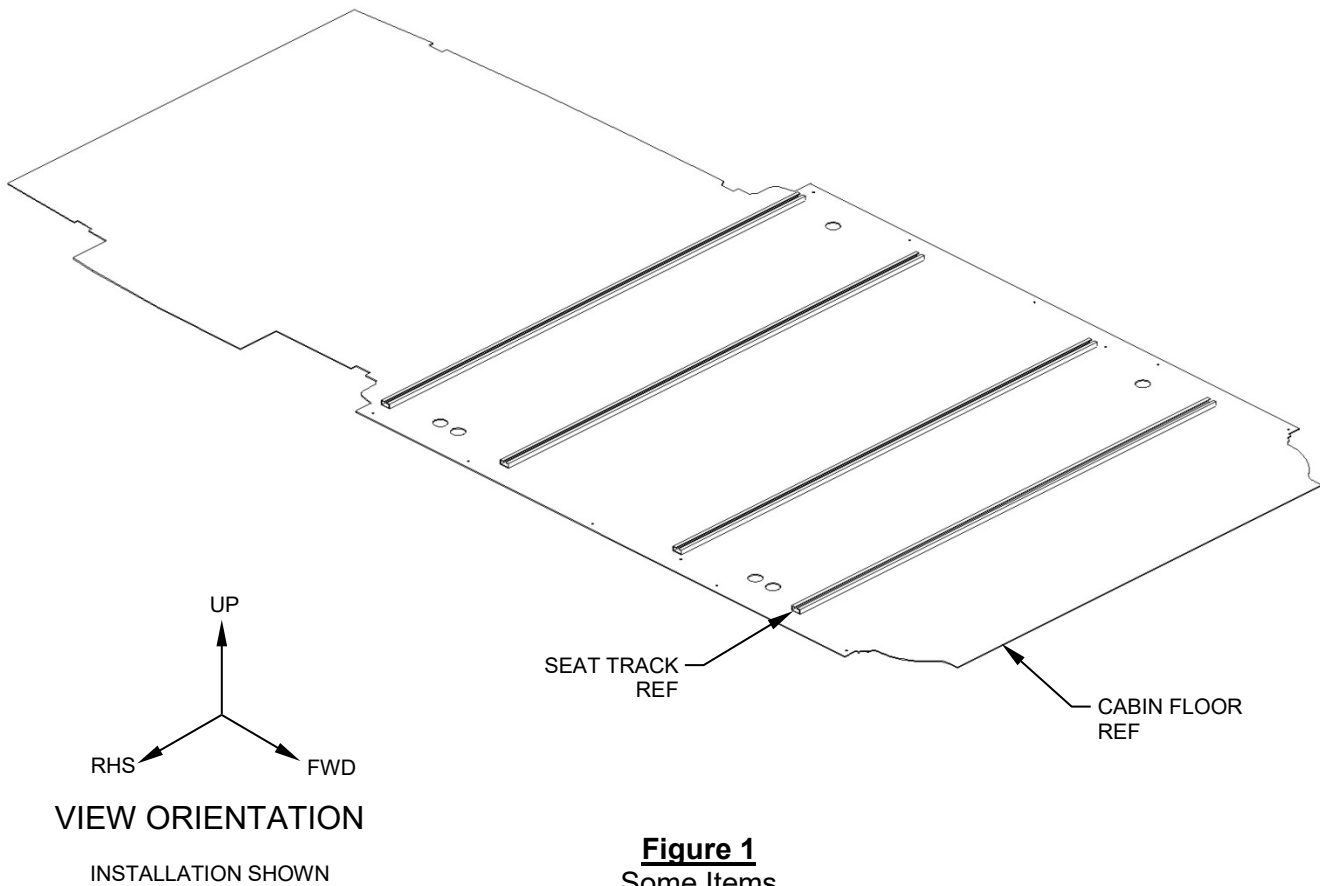
 Triangular tie down strap location

 OEM auxiliary tank and attachment assemblies; rear attachment assemblies are integral to fuel tank. Fuel tank not shown for clarity

### **Installation Instructions**

**Floor Protection, Kit, AFT**

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

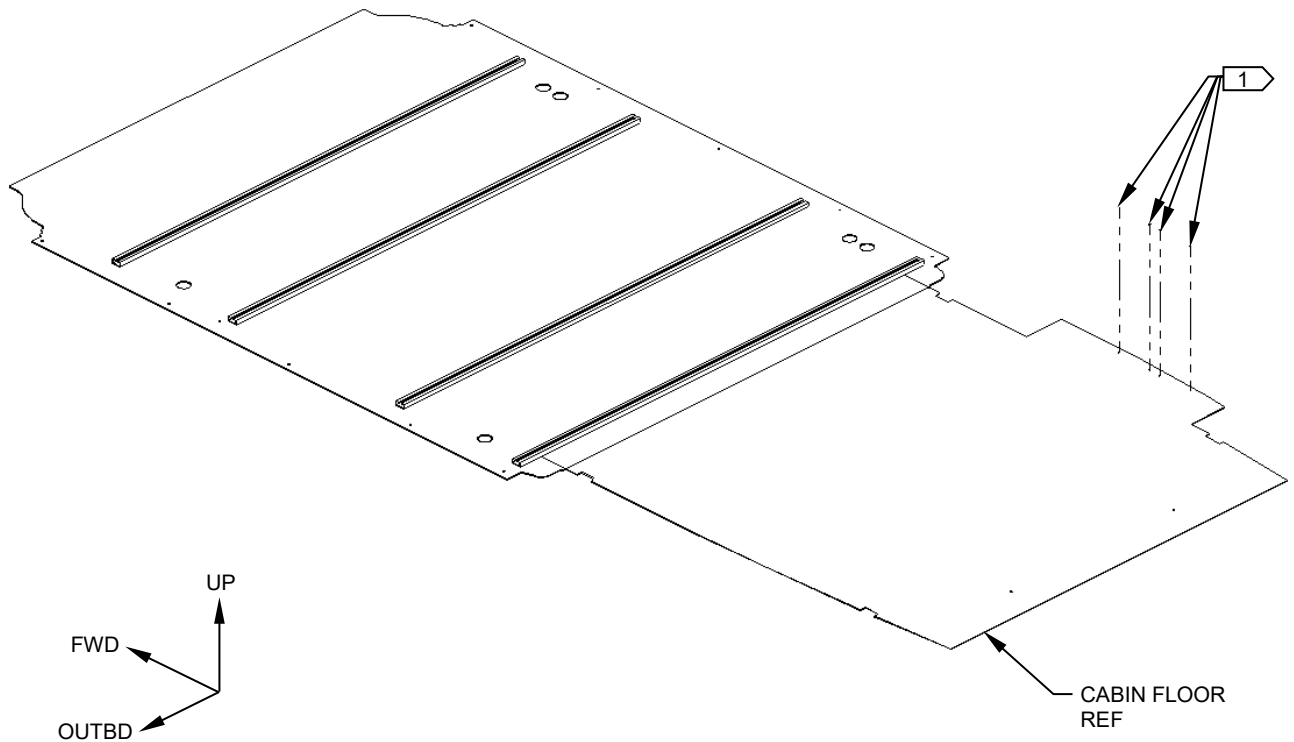


**Figure 1**  
Some Items  
Removed for  
Clarity

**Installation Instructions** (cont.)

**Floor Protection, Kit, AFT**

2. Remove and retain fasteners along cargo door sill. Reference Figure 2.



**VIEW ORIENTATION**

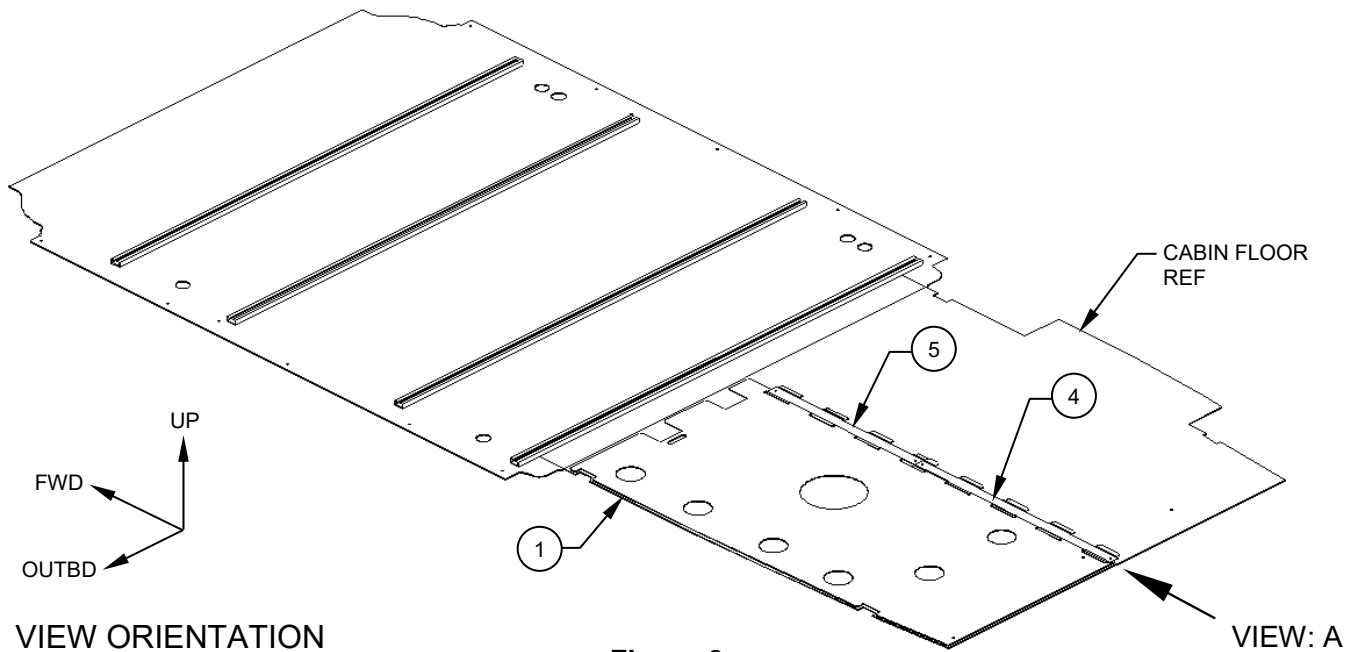
INSTALLATION SHOWN

**Figure 2**  
Some aircraft structure  
Removed for clarity

**Installation Instructions** (cont.)

**Floor Protection, Kit, AFT**

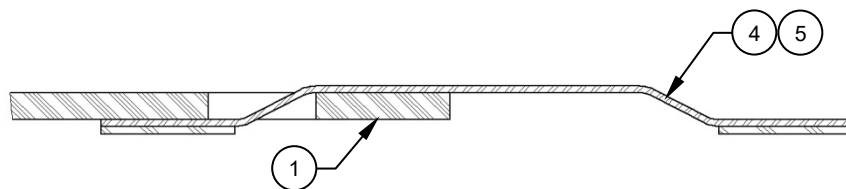
3. Position the LHS Panel Assy (Item 1) on the floor in its approximate position with the Velcro strips facing down as shown. Reference Figure 3.



**VIEW ORIENTATION**  
INSTALLATION SHOWN

**Figure 3**  
Some aircraft structure  
Removed for clarity

4. Install the Retainer Strip, Assy's (Item 4 and 5) by inserting the tabs into the provided slots in the panel as shown. Reference Figures 3 & 4.

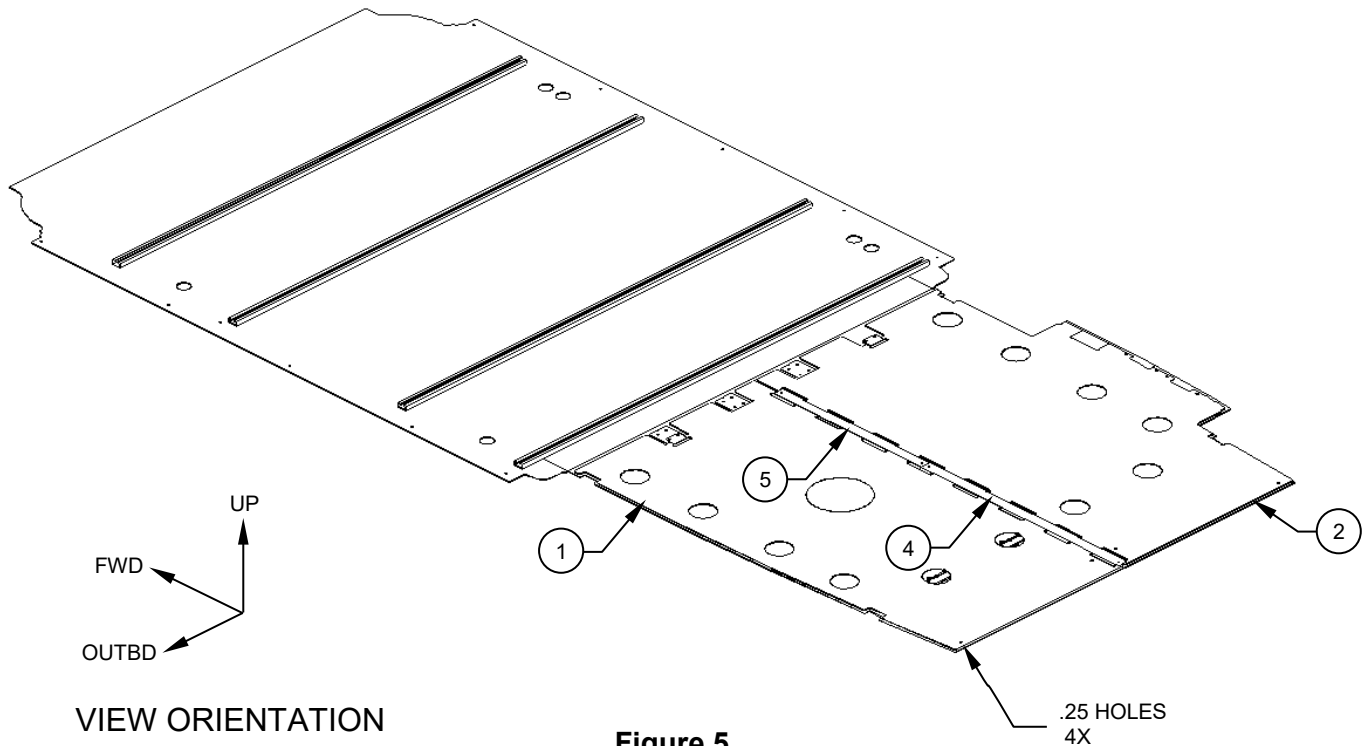


**Figure 4**  
VIEW: A  
Some aircraft structure  
Removed for clarity

**Installation Instructions** (cont.)

**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 4 and 5) tabs into the provided slots in the panel as shown.
6. With the panels lined up use the pre-cut .25 holes and a felt pen to mark out the locations for the Velcro, Detail (Item 12) and carefully remove the panels and retainer strips (Items 1, 2, 4 & 5). Reference Figure 5 & 6.



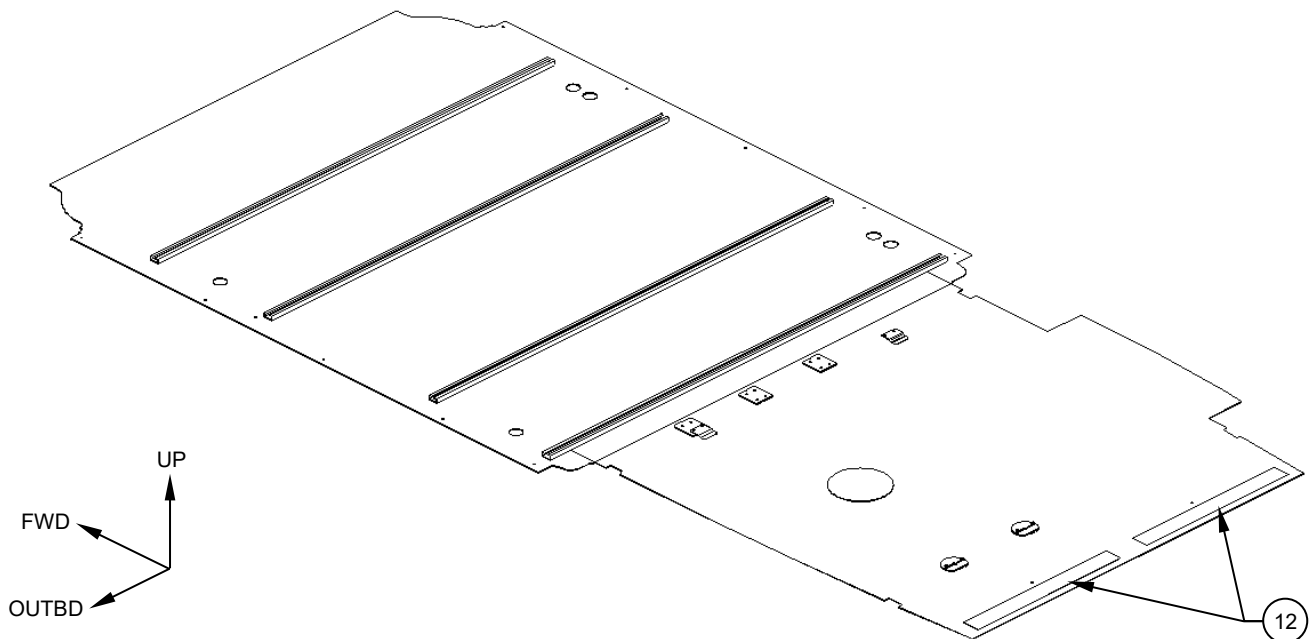
**VIEW ORIENTATION**  
INSTALLATION SHOWN

**Figure 5**  
Some aircraft structure  
Removed for Clarity

**Installation Instructions**

## **Floor Protection, Kit, AFT**

7. Clean the areas between the felt pen marks with alcohol taking care not to wipe away the felt pen marks.
8. Individually separate each Velcro, Detail (Item 12) off of the Floor Panel, Assy (Item 1 & 2) and peel adhesive backing from the Velcro, Detail (Item 12).
9. Using the felt pen marks as reference points, apply the Velcro, Detail (Item 12) to honeycomb panel in their respective locations. Reference Figure 6. Apply adequate pressure to ensure a secure bond.



### **VIEW ORIENTATION**

INSTALLATION SHOWN

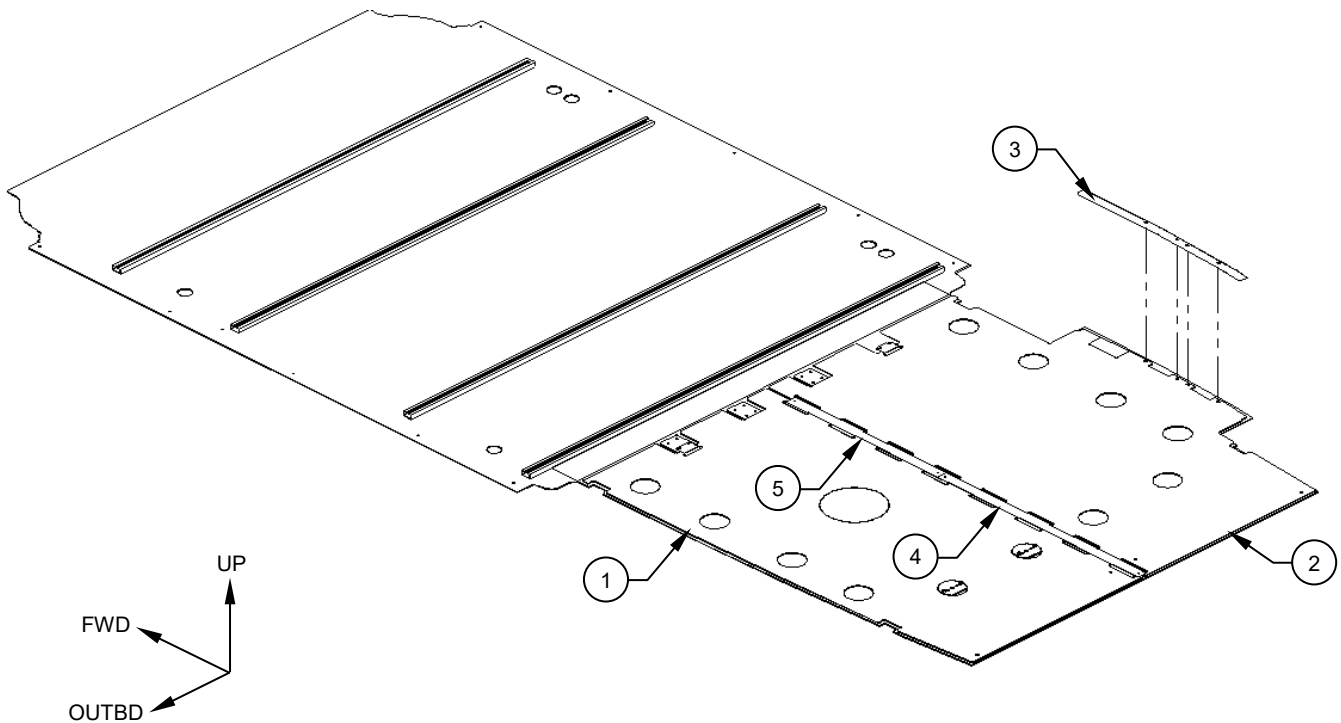
**Figure 6**  
Some Items  
Removed for  
Clarity

## **Installation Instructions**



**Floor Protection, Kit, AFT**

- 10. Re-install the Floor Panels & Retainer Strips, Assy (Item 1, 2, 4 & 5) onto Velcro strips.
- 11. Install cargo door sill (Item 3) using OEM hardware. Reference Figures 2 & 7.



**VIEW ORIENTATION**

INSTALLATION SHOWN

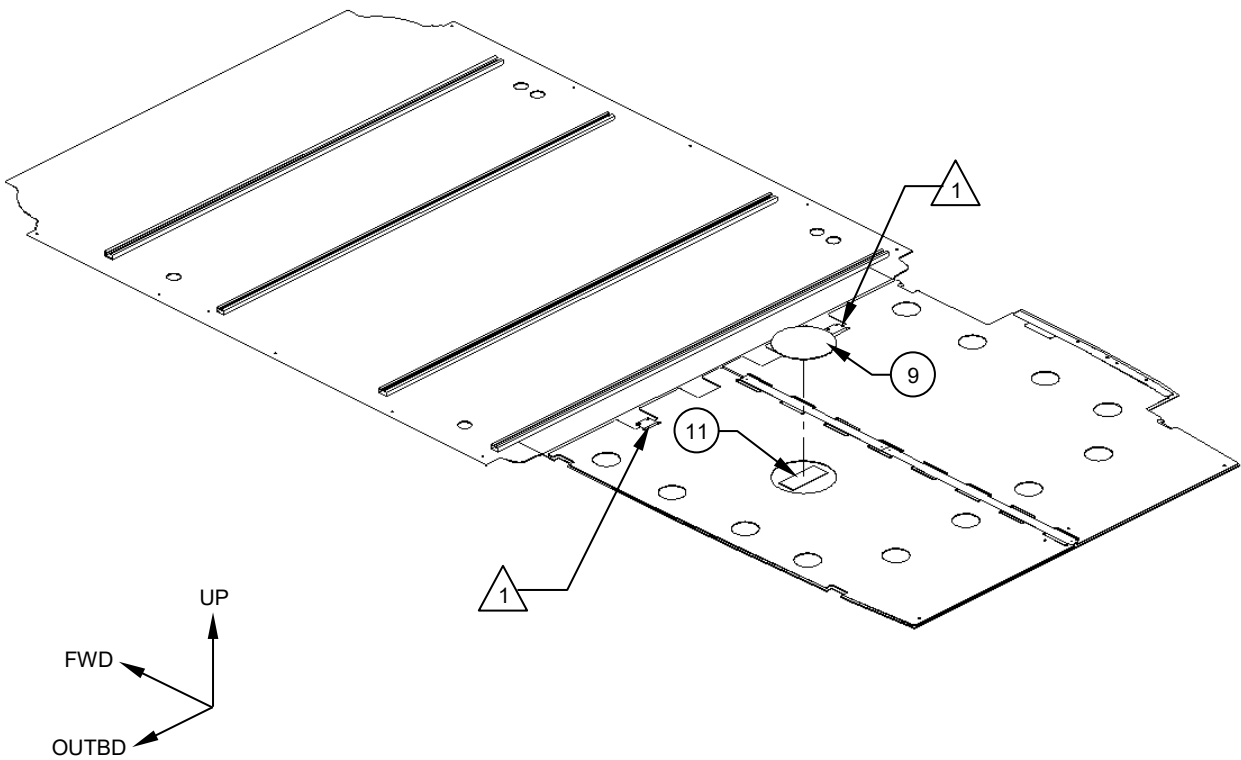
**Figure 7**

Some aircraft structure  
Removed for clarity

**Installation Instructions** (cont.)

**Floor Protection, Kit, AFT**

12. Install the Velcro, Detail (Item 11) 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 8.
13. Install the Blanking Plate, Assy (Item 9) with the provided Velcro, Detail (Item 11) in the proper orientation. Reference Figure 8.



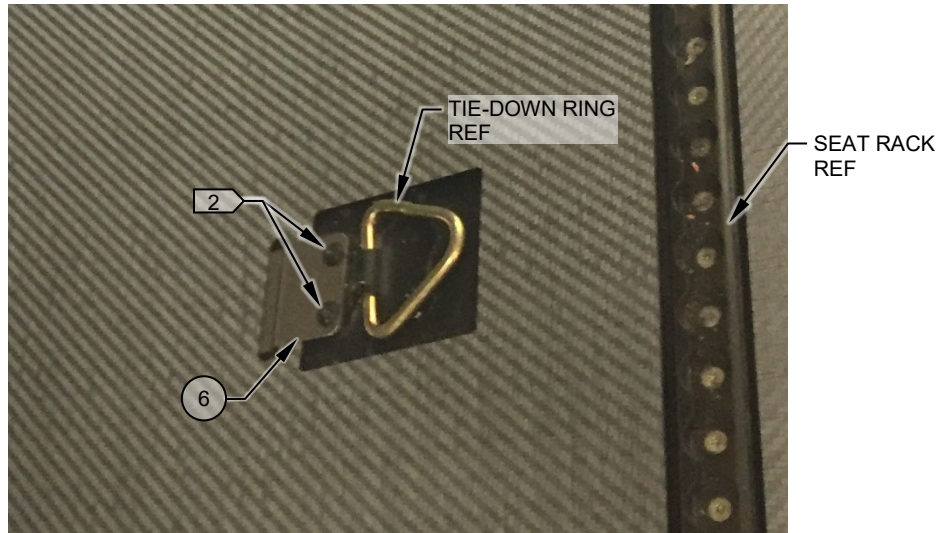
**VIEW ORIENTATION**  
INSTALLATION SHOWN

**Figure 8**  
Some aircraft structure  
Removed for clarity

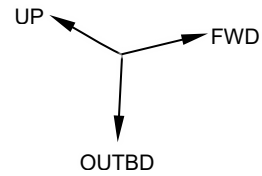
**Installation Instructions** (cont.)

## Floor Protection, Kit, AFT

14. Remove the AFT two screws from the two FWD most triangular tie-down rings in the cargo area (see flag note 1 in Figure 8) and install the Retainer, Assemblies (Item 6) re-using the OE fasteners. Reference Figure 8 and 9.



**Figure 9**  
Installation Shown



VIEW ORIENTATION

INSTALLATION SHOWN

15. Installation complete
16. Perform a General Inspection of all items to ensure proper installation.
17. Update the aircraft logbook for the installation of Floor Protection, Kit AFT.

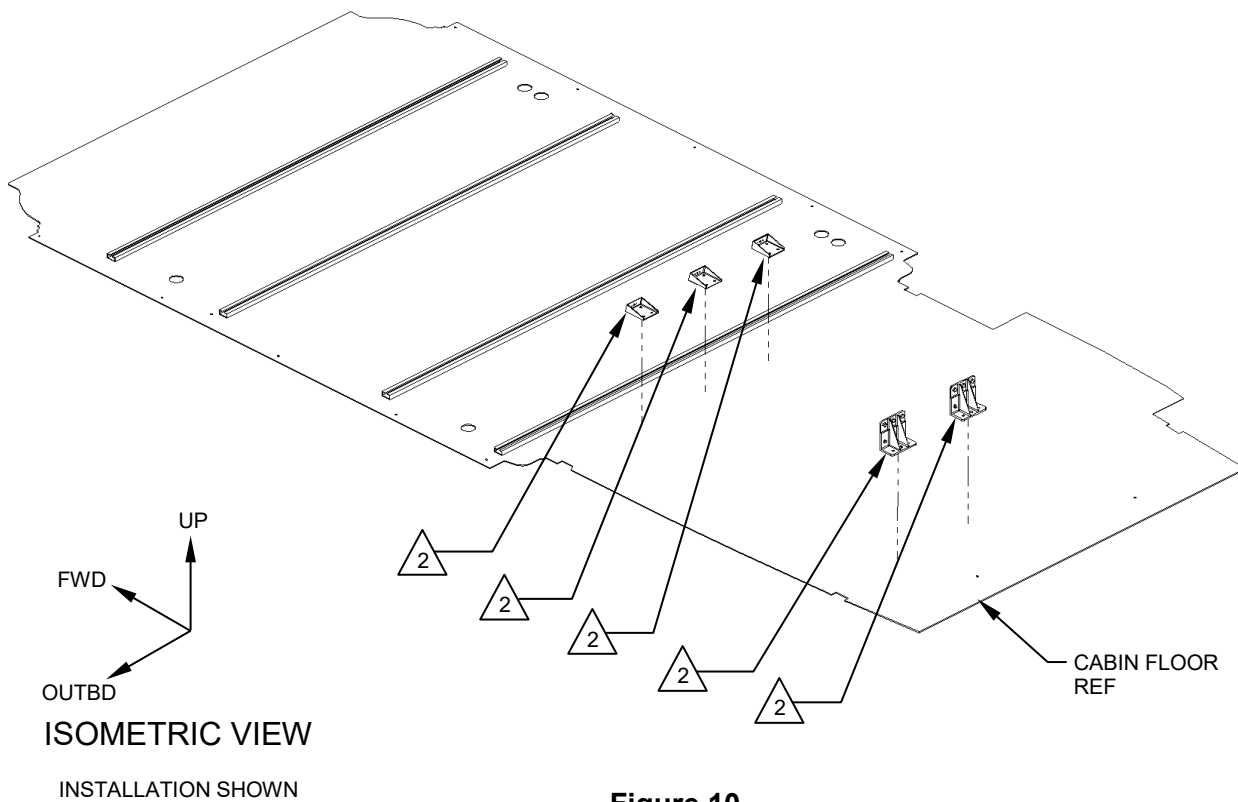
## Removal Instructions

1. Remove all components associated with the Floor Protection, Kit, AFT.
2. Replace Screw, Washer Head (Item 10), with OEM fasteners.
3. For permanent removal, of the Floor Protection, Kit, AFT remove all bonded Velcro, Details. Peel and remove the Velcro®, Detail (Items 11 & 12) and clean off any residual adhesive. It is permitted to leave the Velcro®, Detail (Items 11 & 12) in place if the operator chooses
4. Removal complete.
5. Perform a General Inspection of all items to ensure proper removal.
6. Update the aircraft logbook for the removal of the Floor Protection, Kit, AFT.

## **Installation Instructions**

**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 10.

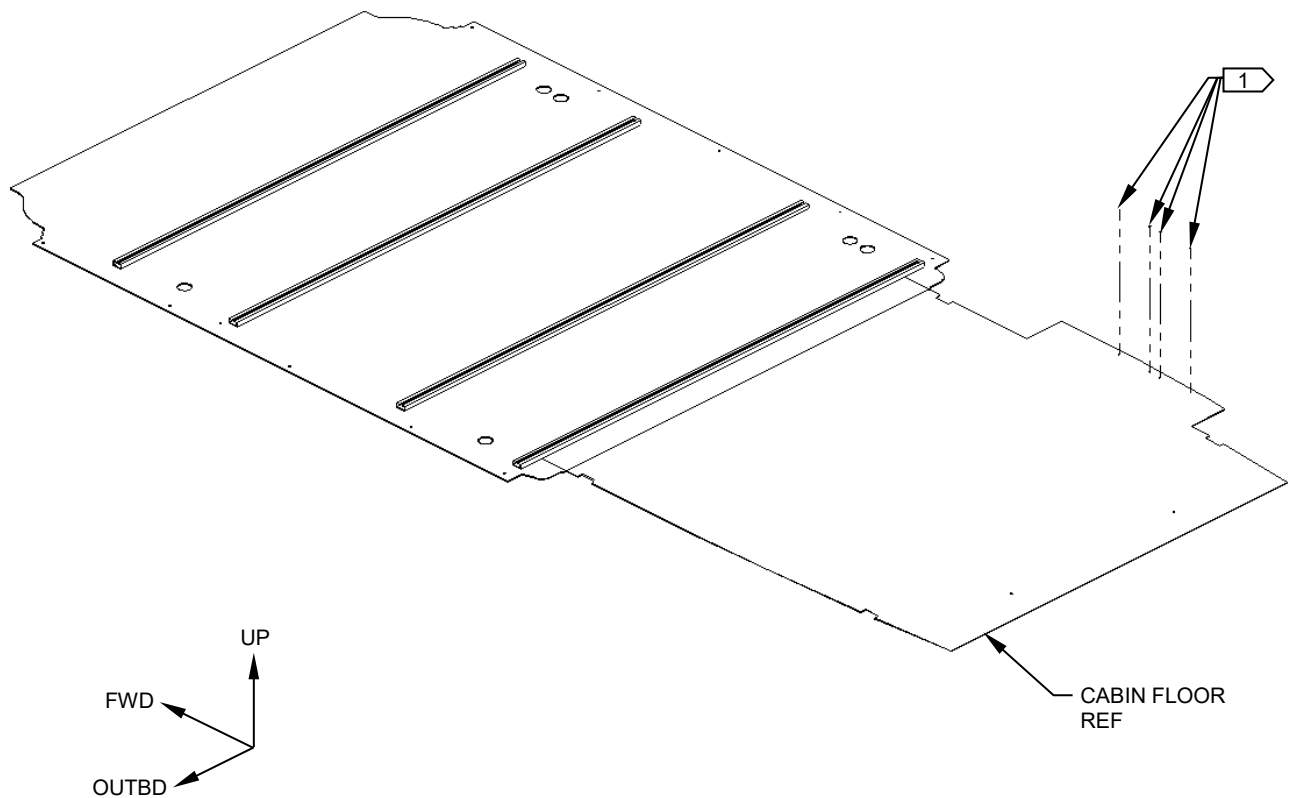


**Figure 10**  
Some Items  
Removed for  
Clarity

**Installation Instructions** (cont.)

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

2. Remove and retain fasteners along cargo door sill. Reference Figure 11



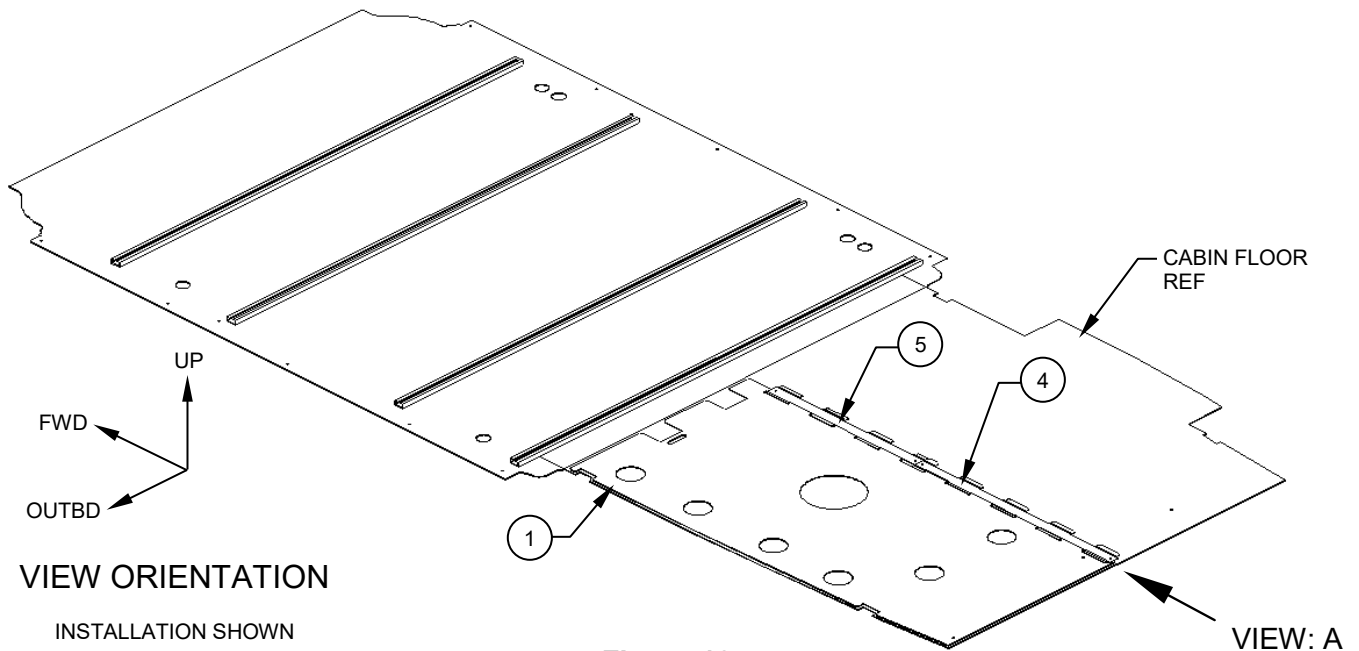
**VIEW ORIENTATION**  
INSTALLATION SHOWN

**Figure 11**  
Some aircraft structure  
Removed for clarity

**Installation Instructions** (cont.)

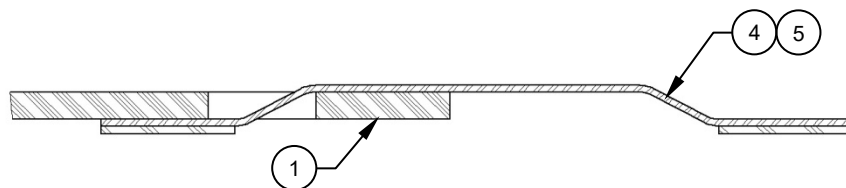
**Floor Protection, Kit, AFT with OEM auxiliary fuel tank kit (429-706-500-101/-109)**

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 12.



**Figure 12**  
Some aircraft structure  
Removed for clarity

4. Install the Retainer Strip, Assy's (Items 4 & 5) by inserting the tabs into the provided slots in the panel as shown. Reference Figures 12 & 13.

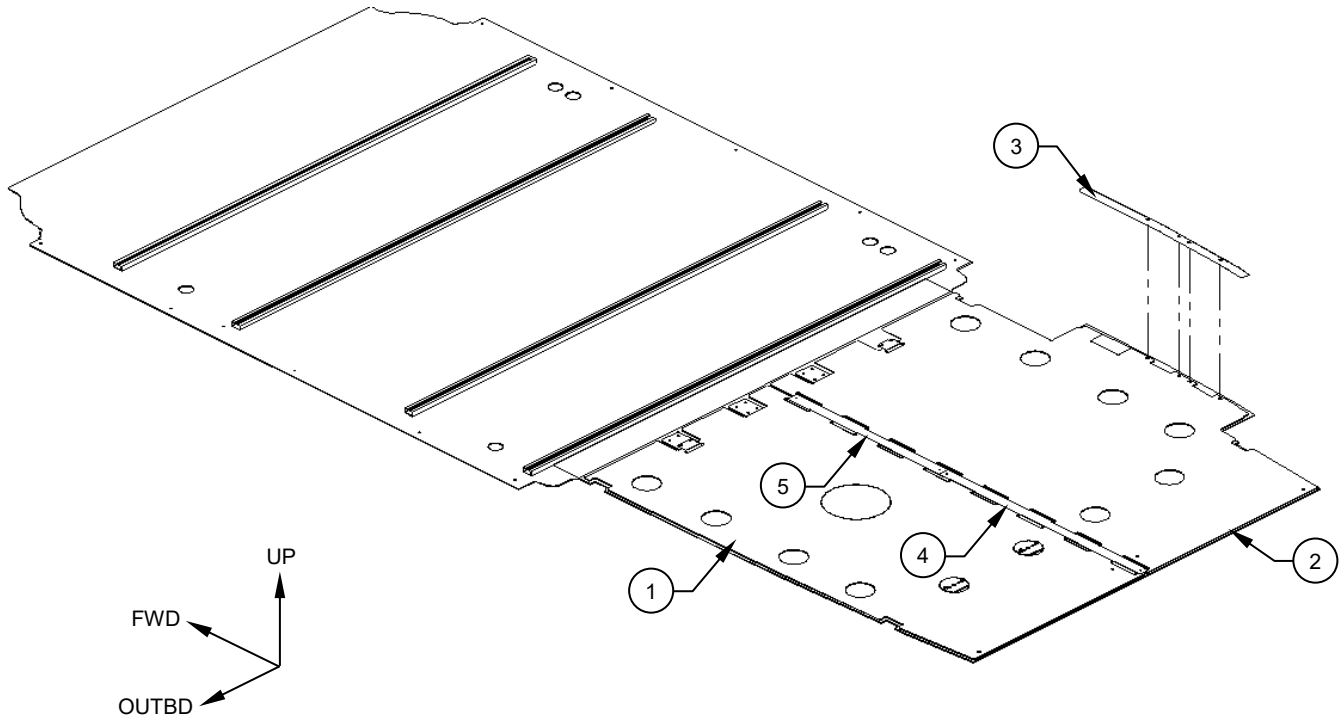


**Figure 13**  
VIEW: A  
Some aircraft structure  
Removed for clarity

**Installation Instructions** (cont.)

**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 4 & 5) tabs into the provided slots in the panel as shown. Install cargo door sill (Item 3) using OEM hardware. Reference Figures 12, 13 & 14.



**VIEW ORIENTATION**

INSTALLATION SHOWN

**Figure 14**  
Some aircraft structure  
Removed for clarity

**Installation Instructions** (cont.)

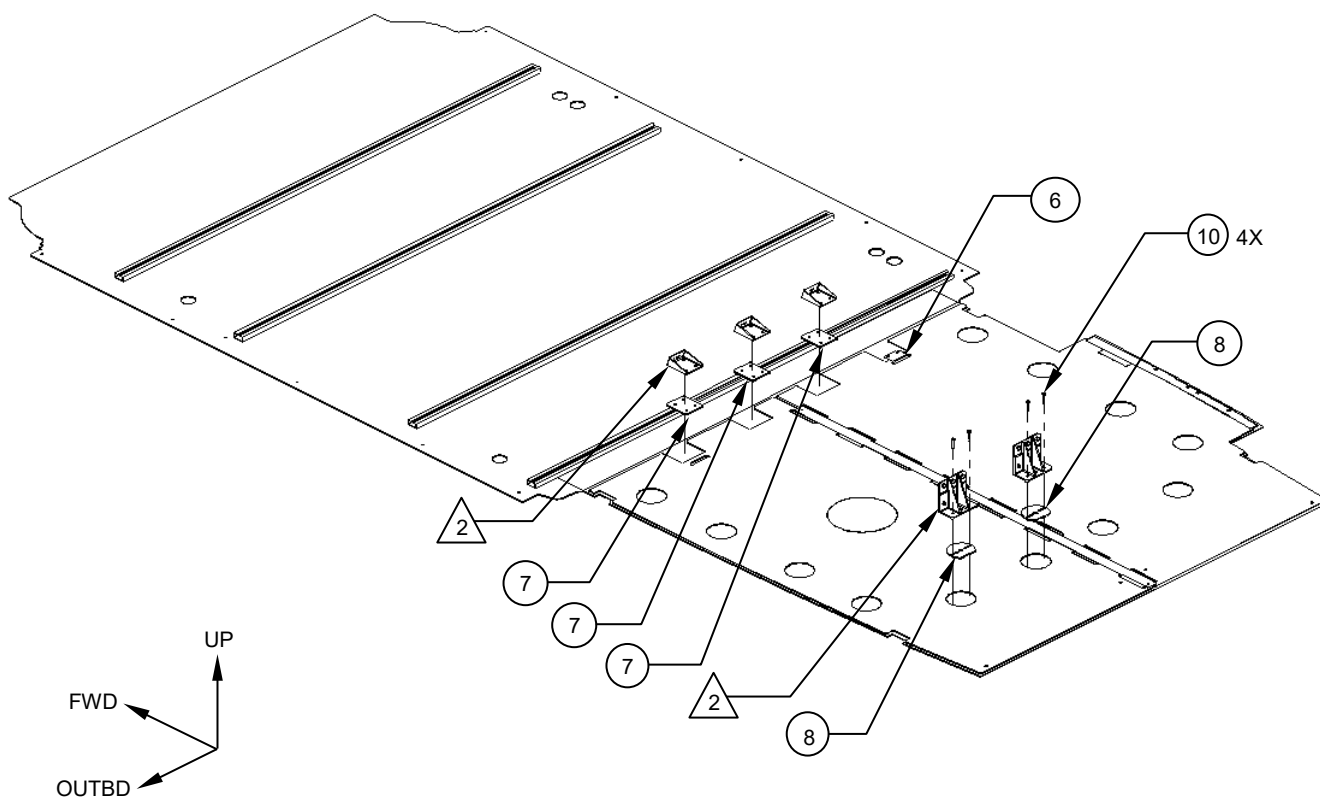
**Floor Protection, Kit, AFT with OEM auxiliary fuel tank kit (429-706-500-101/-109)**



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

NOTE: Spacer, Assy's (Item 8) must be oriented with the small notch facing FWD and the anti-chafe tape down.

7. Place the Spacer Assy's (Item 7) in position under the fuel tank with the flat edge facing AFT and install the provided fasteners (Item 10) 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.



### VIEW ORIENTATION

INSTALLATION SHOWN

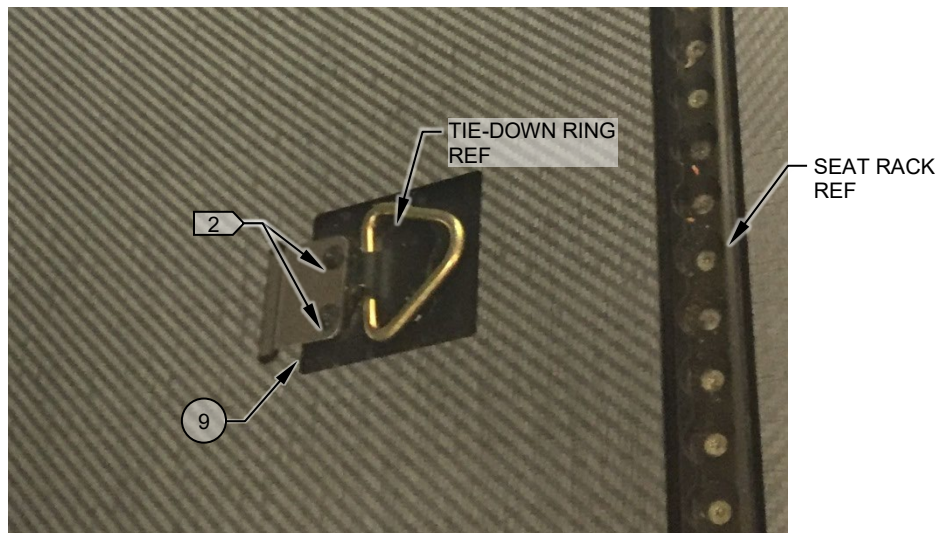
**Figure 15**

Some aircraft structure  
Removed for clarity

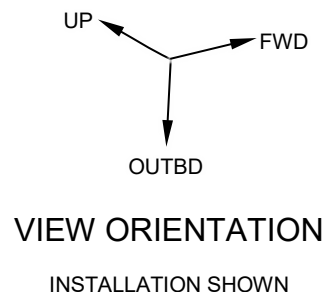
### Installation Instructions (cont.)

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

8. Remove the AFT two screws from the RHS FWD most triangular tie-down ring in the cargo area and install the Retainer, Assemblies (Item 6) re-using the OEM fasteners. Reference Figure 15 and 16.



**Figure 16**  
Installation Shown



9. 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.
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.

### **Removal Instructions**

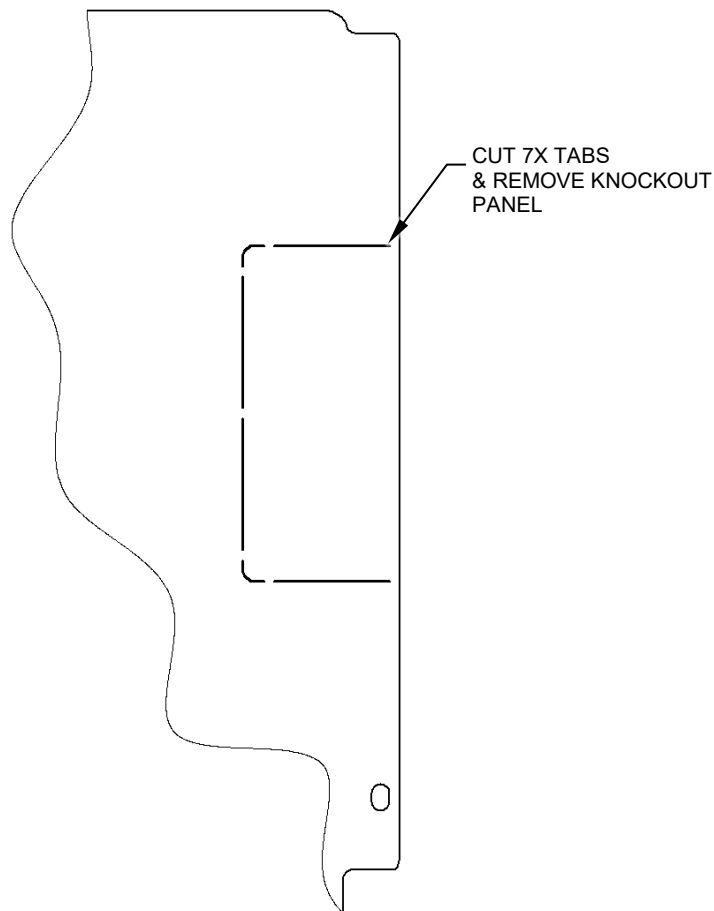
1. Remove all components associated with the Floor Protection, Kit, AFT.

2. Replace Screw, Washer Head (Item 10), with OEM fasteners.
3. For permanent removal, of the Floor Protection, Kit, AFT remove all bonded Velcro, Details. Peel and remove the Velcro®, Detail (Items 11 & 12) and clean off any residual adhesive. It is permitted to leave the Velcro®, Detail (Items 11 & 12) in place if the operator chooses
4. Removal complete.
5. Perform a General Inspection of all items to ensure proper removal.
6. Update the aircraft logbook for the removal of the Floor Protection, Kit, AFT.

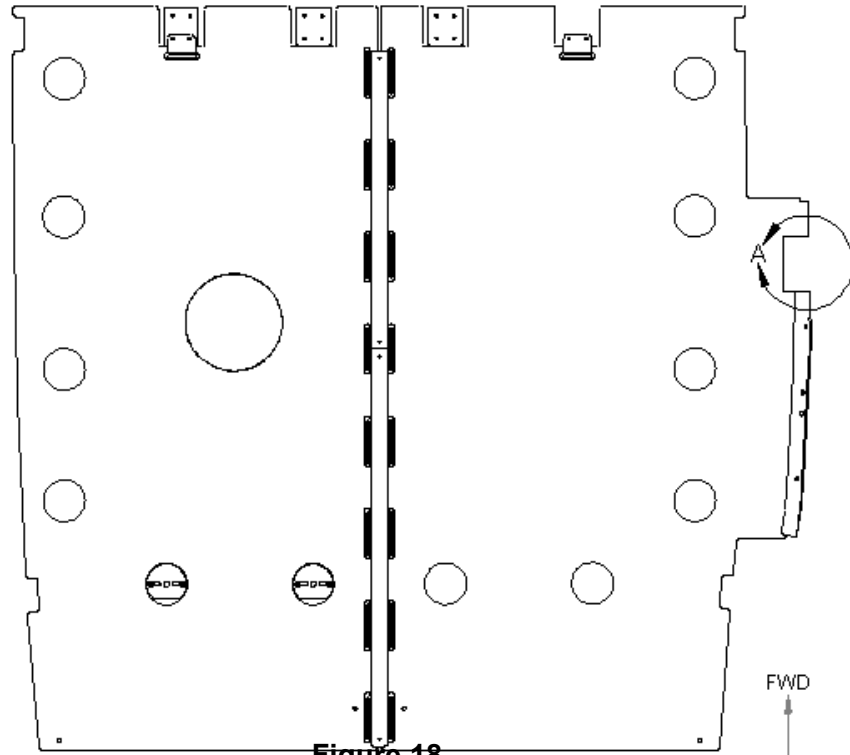
## **Appendix A: Modification to Accommodate Installation with AAI Baggage Door Opener Kit**

This modification allows the use of the Floor Protection, Kit, AFT in conjunction with the Aeronautical Accessories Inc, Door Opener Kit PN 429-516-001.

1. Prior to installation of the installation of the Panel, Assy, RHS, Item 2, cut the tabs retaining the knockout panel and remove. See Figure 17, 18 & 19.
2. Line the Sill, Detail, Item 3, up with its corresponding mounting holes on the Panel, Assy, RHS, Item 2. Trim the Sill, Detail, Item 4, .050" AFT of the edge of the knockout panel, and radius the new corners. See Figure 17, 18 & 19.
3. Continue with the installation as per instructions in this document.

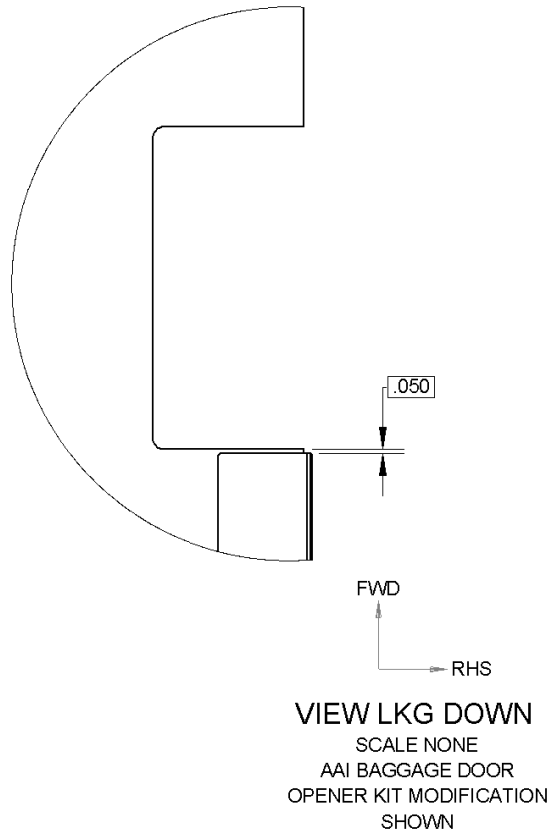


**Figure 17**  
Knockout Panel  
Shown



**Figure 18**  
Knockout panel and  
Sill, Detail trim  
Shown

**VIEW LKG DOWN**  
SCALE NONE  
AAI BAGGAGE DOOR  
OPENER KIT MODIFICATION  
SHOWN



**Figure 19**  
Sill, Detail  
Trim  
Shown