

FLOOR PROTECTION, KIT, AFT INSTALLATION INSTRUCTIONS

MODELS: BELL 429

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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 installation instructions for the Floor Protection, Kit, Aft as defined in Alpine Aerotech LP dataset AAL-412-020-002.

- 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-412-020-002) is applicable to Bell 429 all serial numbers equipped with an OEM interior, and **without** the STA 249.429 Mid Canted BLKHD.

Weight & Balance

<u>Part Number</u>	<u>Description</u>	<u>Weight</u>	<u>Long. Arm</u>	<u>Lat. Arm</u>
AAL-412-020-002	Floor Protection, Kit, AFT	9.27*	262.45	1.01 RBL
		4.20 (Kg)	6.66(m)	.03(m) RBL


* 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-412-025-702) 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 Continuing Airworthiness (AAL-412-025-702) for the part numbers of the item(s) referenced within this section.

 Remove and retain for future use.

 Reinstall existing OEM fastener.

 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.

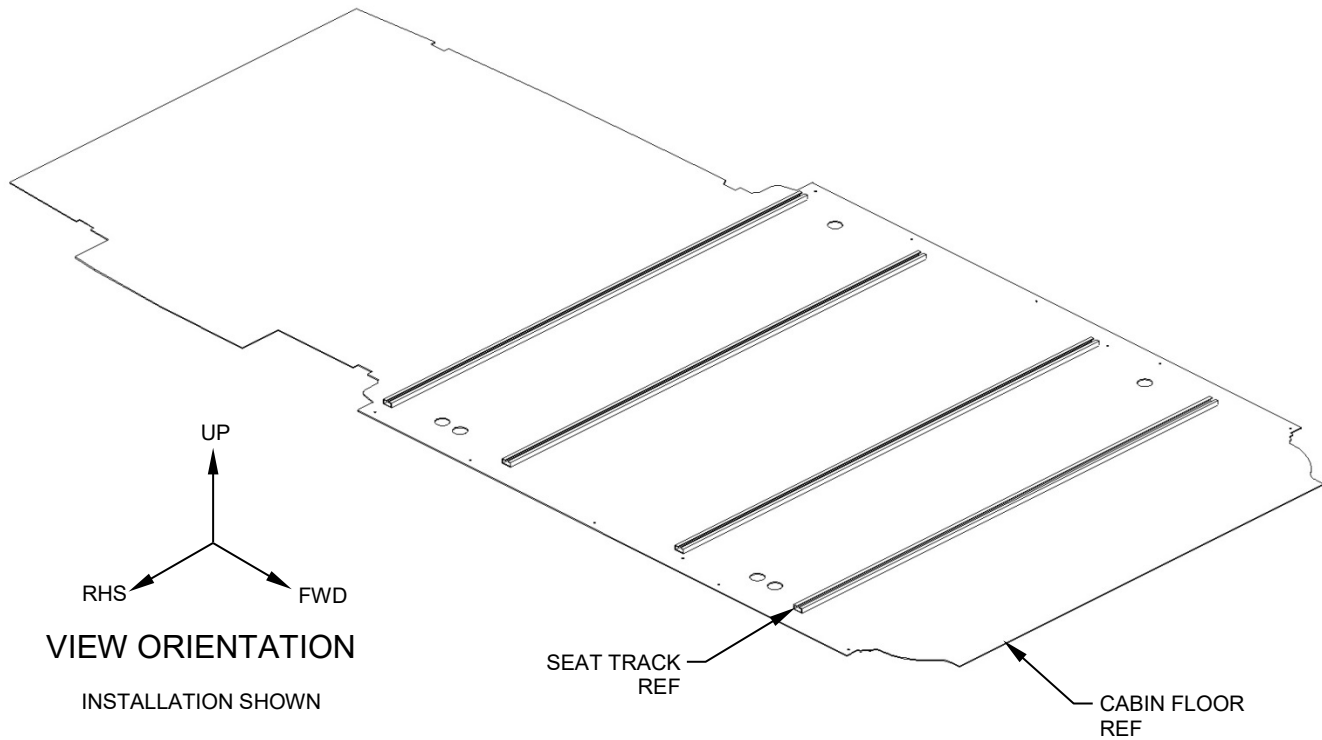
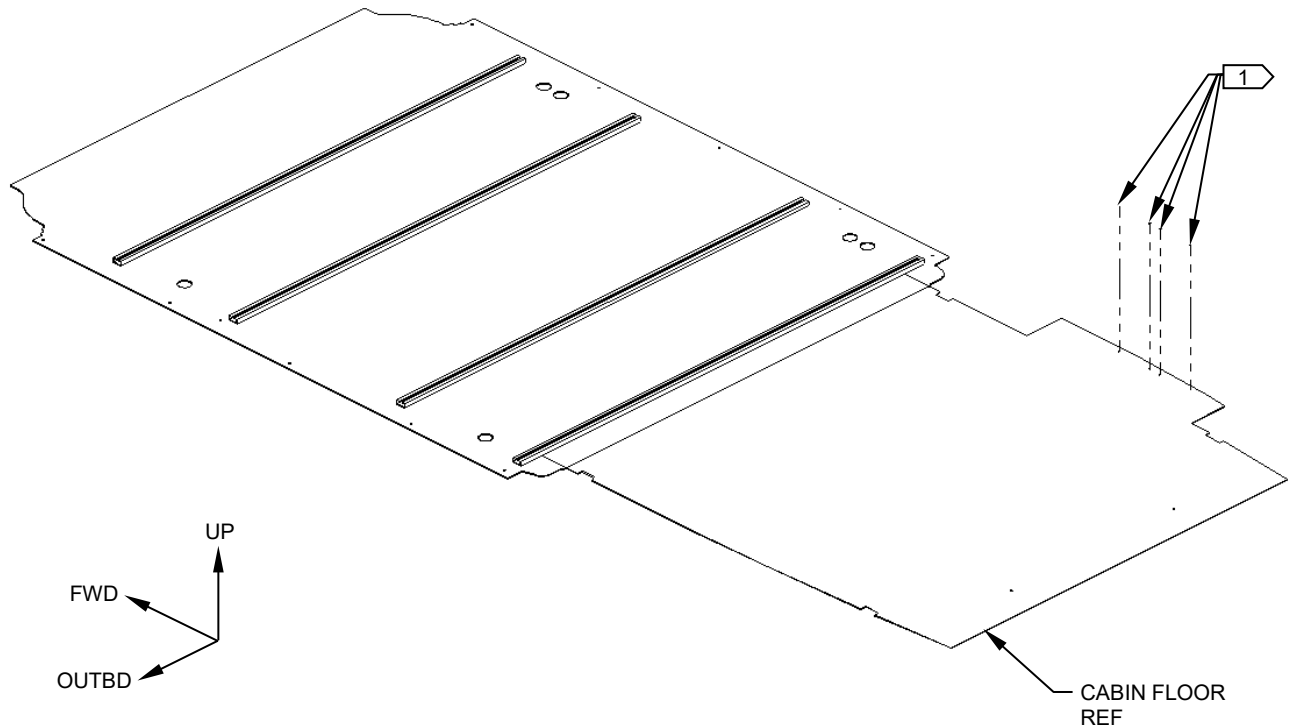


Figure 1
Some Items
Removed for
Clarity

Installation Instructions (cont.)

Floor Protection, Kit, AFT

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



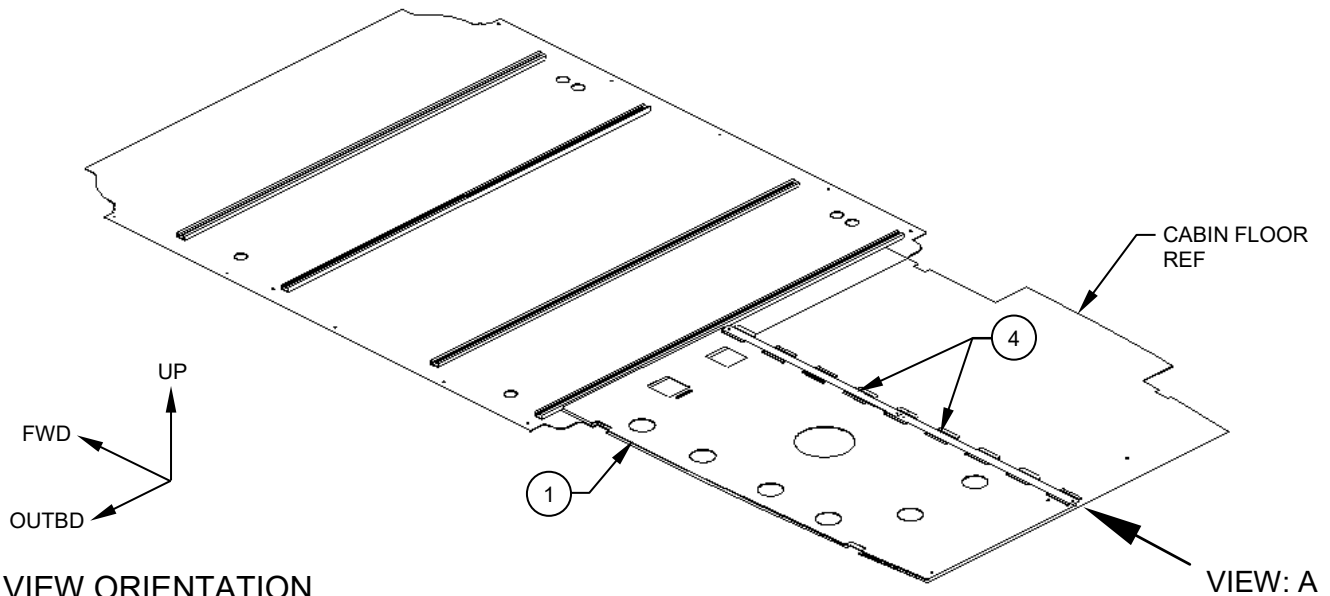
VIEW ORIENTATION
INSTALLATION SHOWN

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) by inserting the tabs into the provided slots in the panel as shown. Reference Figures 3 & 4.

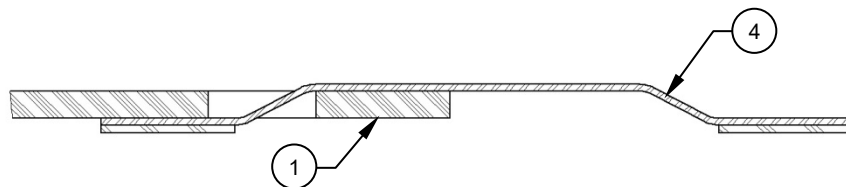
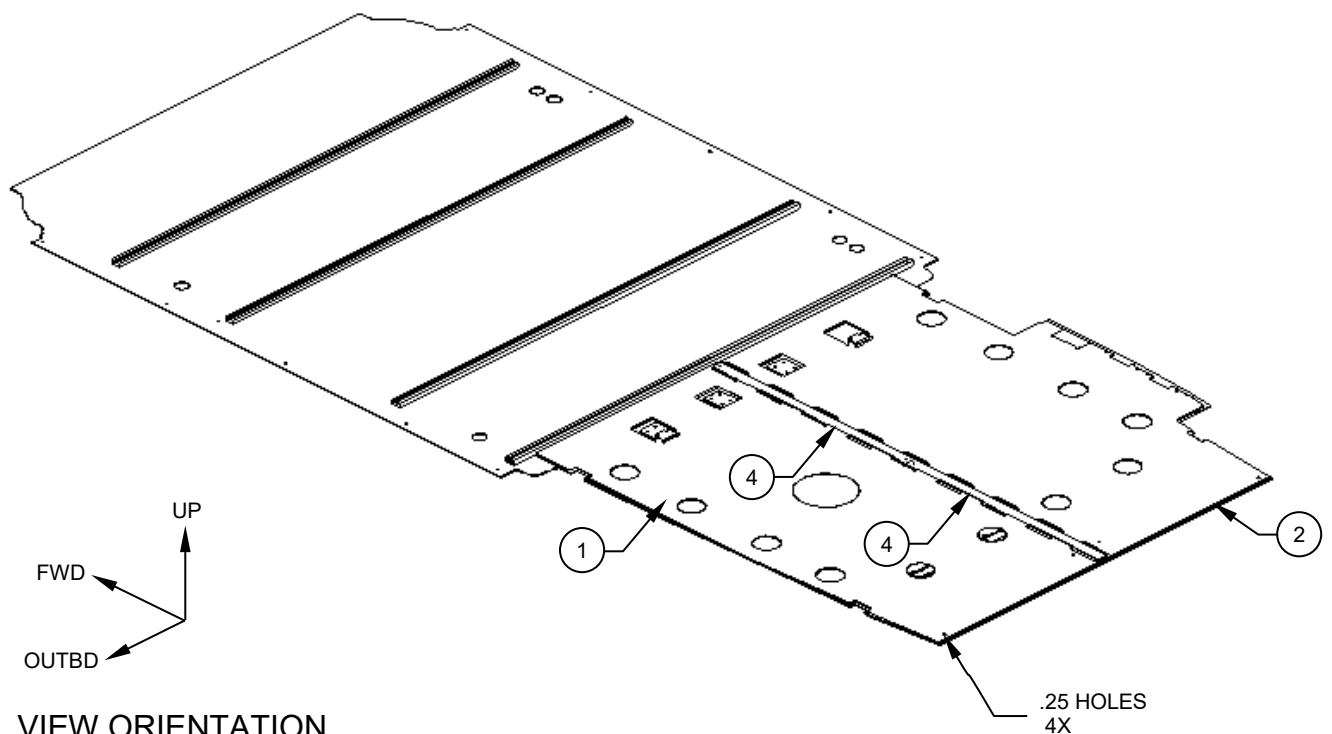


Figure 4
VIEW: A
Some aircraft structure
Removed for Clarity

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) 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 11) and carefully remove the panels and retainer strips (Items 1, 2 & 4). Reference Figure 5 & 6.



VIEW ORIENTATION

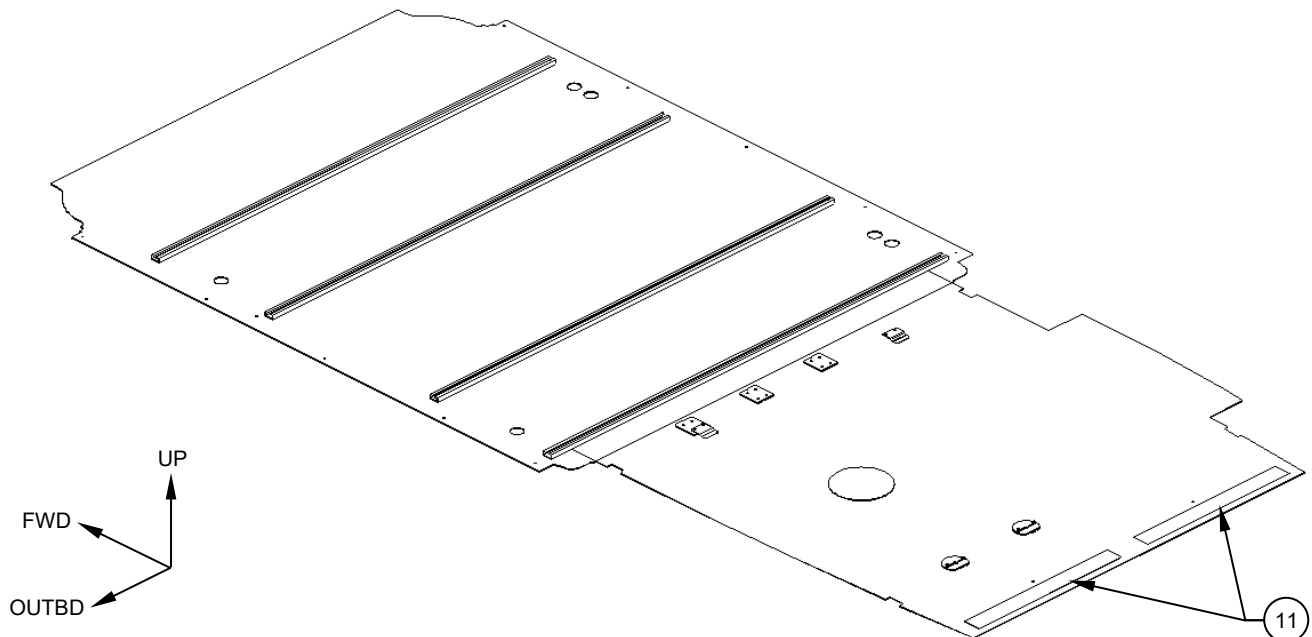
INSTALLATION SHOWN

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 11) off of the Floor Panel, Assy (Item 1 & 2) and peel adhesive backing from the Velcro, Detail (Item 11)
9. Using the felt pen marks as reference points, apply the Velcro, Detail (Item 11) to the honeycomb panel in their respective locations. Reference Figure 6. Apply adequate pressure to ensure a secure bond



VIEW ORIENTATION

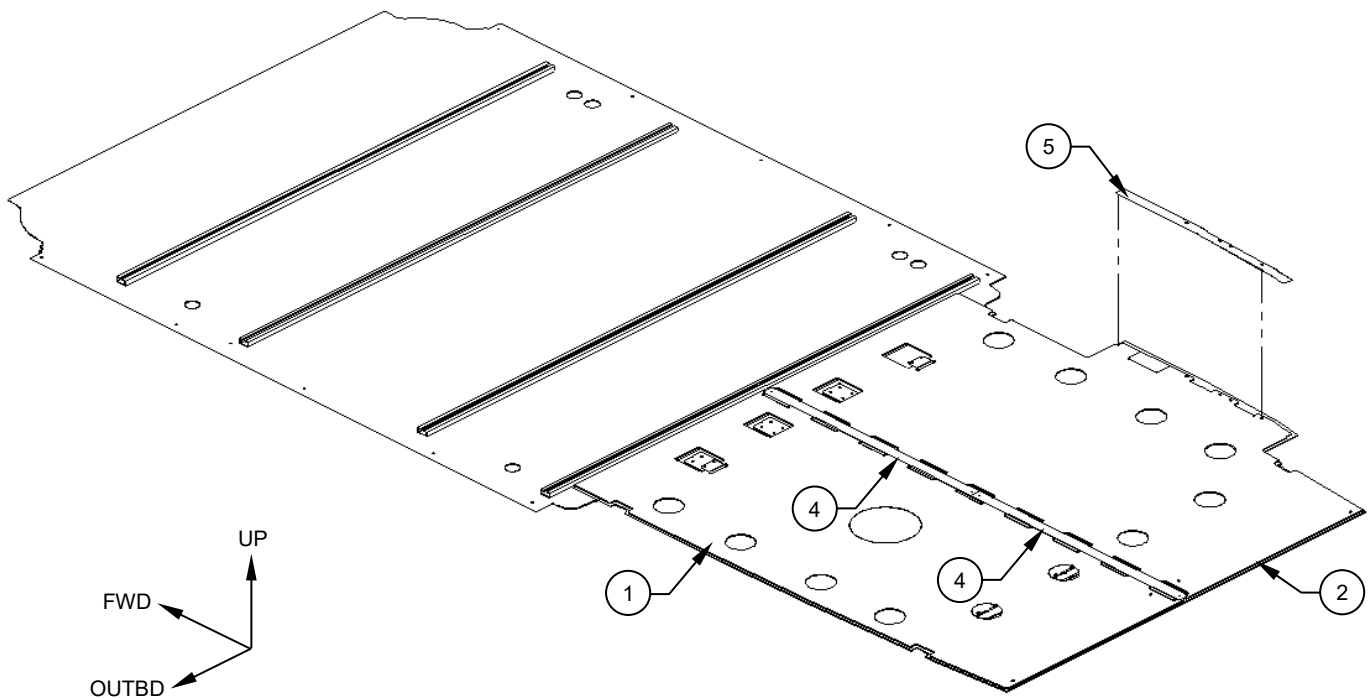
INSTALLATION SHOWN

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) onto Velcro strips.
11. Install cargo door sill (Item 5) using OEM hardware. Reference Figures 2 & 7.



VIEW ORIENTATION

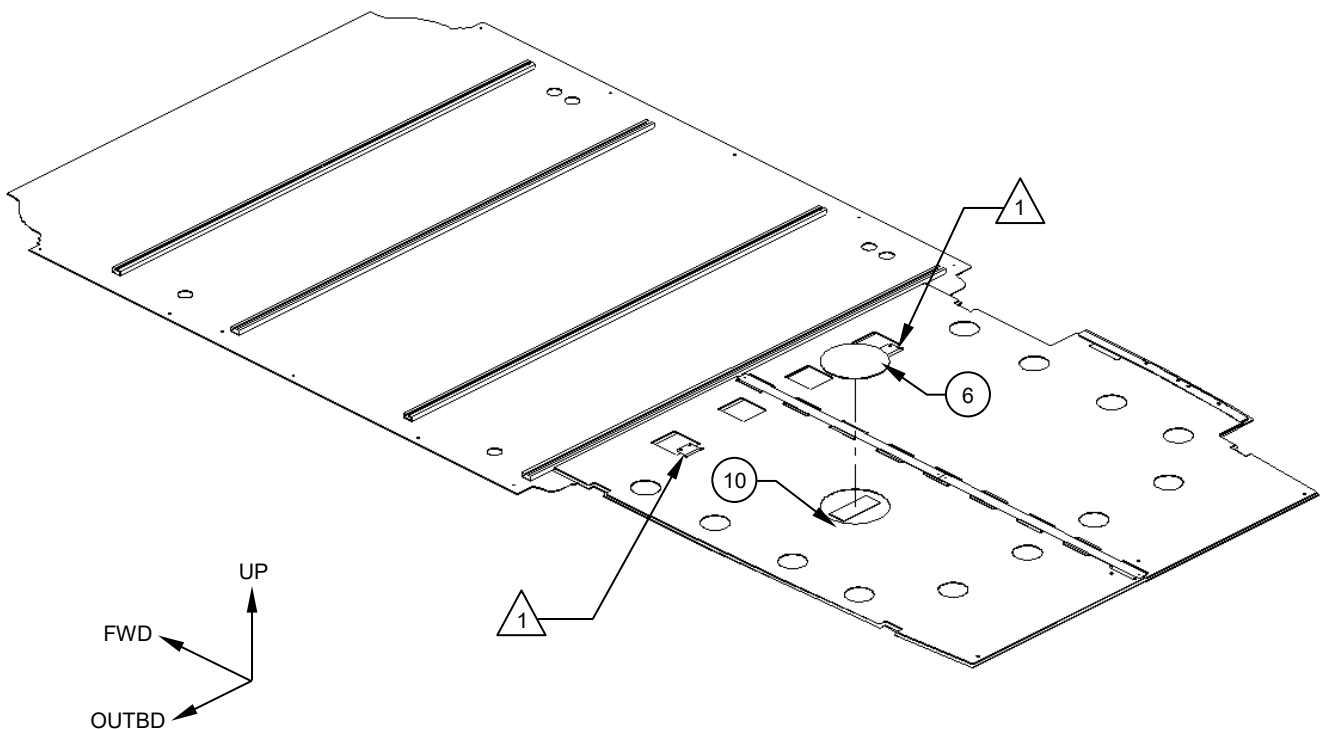
INSTALLATION SHOWN

Figure 7
Some aircraft structure
Removed for clarity

Installation Instructions (cont.)

Floor Protection, Kit, AFT

12. Install the Velcro, Detail (Item 10) 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 6) with the provided Velcro, Detail (Item 10) in the 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 3) re-using the OEM fasteners. Reference Figure 8 and 9.

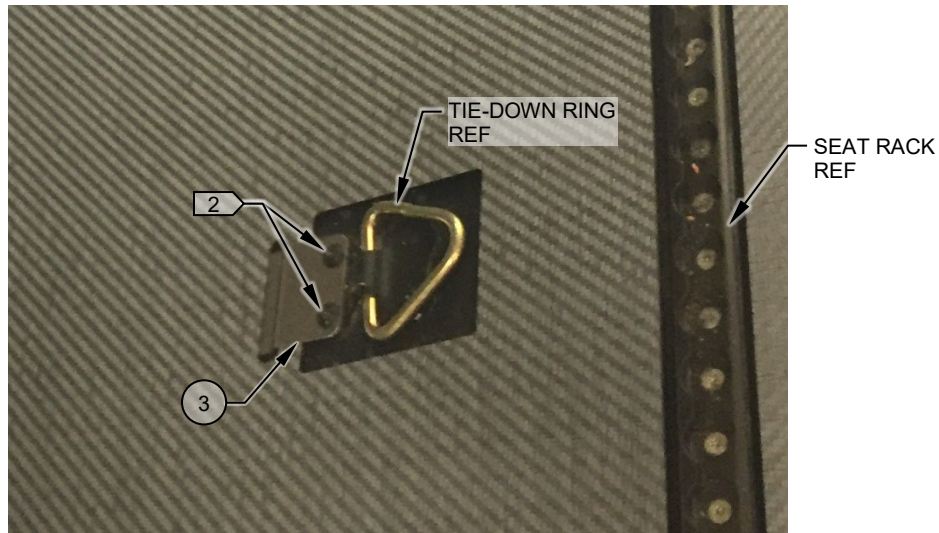
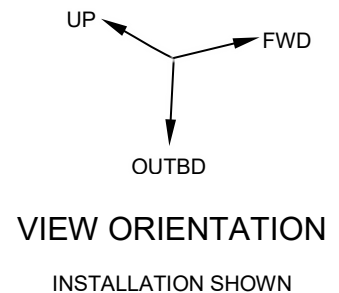


Figure 9
Installation Shown



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 9), 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 10 & 11) and clean off any residual adhesive. It is permitted to leave the Velcro®, Detail (Items 10 & 11) in place if the operator chooses
4. Removal complete.
5. Perform a General Inspection of all items to ensure proper installation.
6. Update the aircraft logbook for the removal of 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.

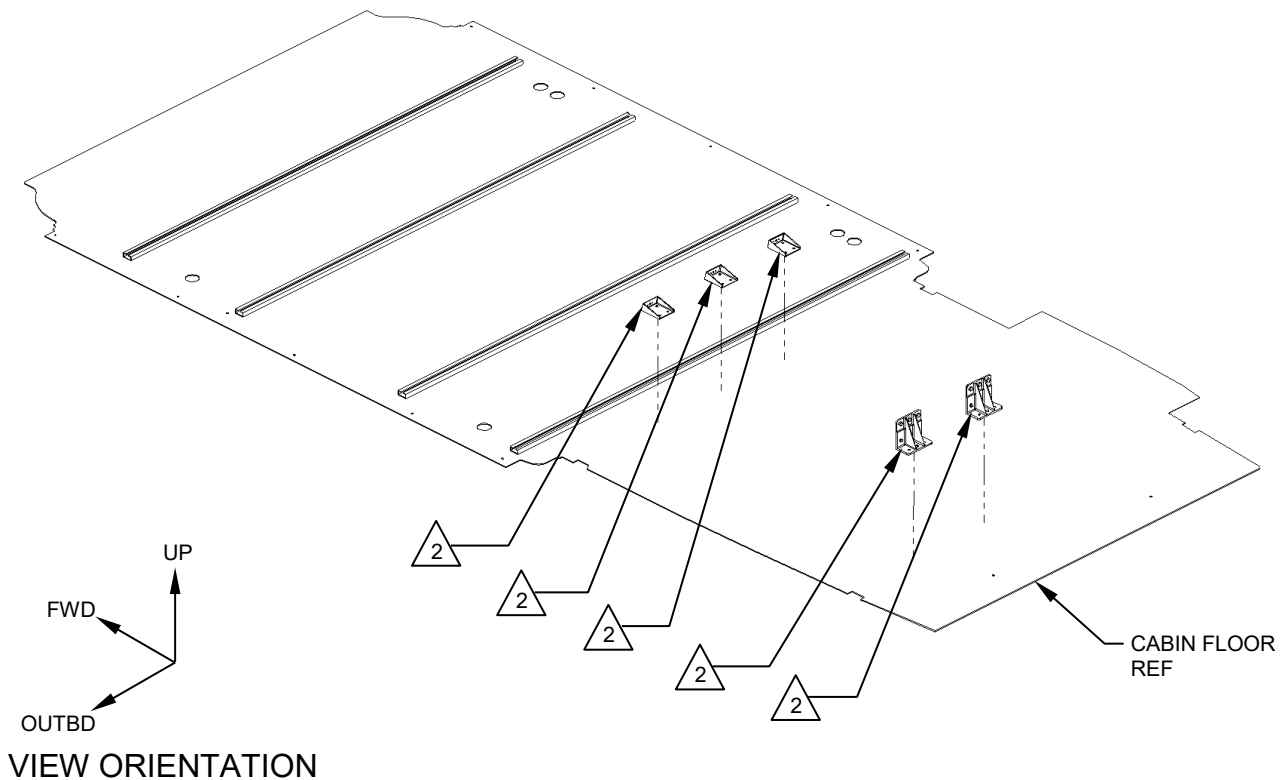
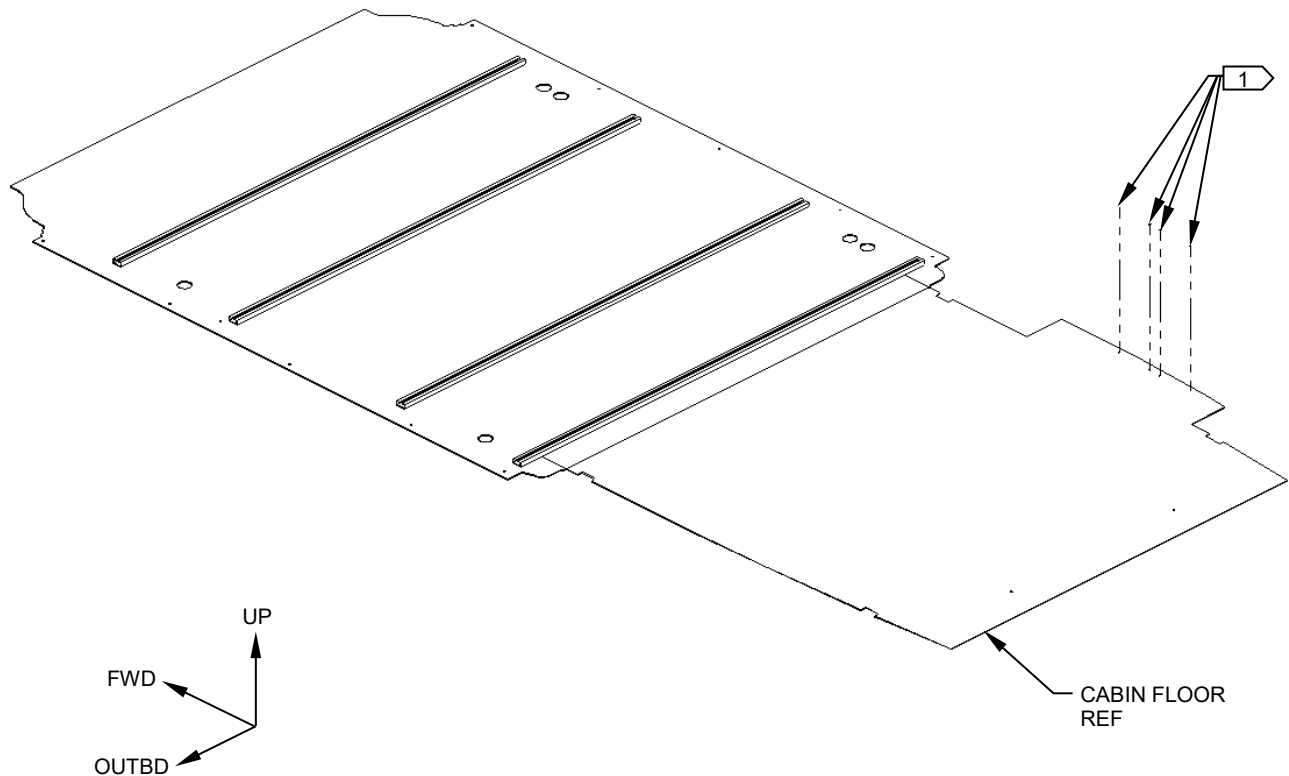


Figure 10
Some Items
Removed for
Clarity

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.

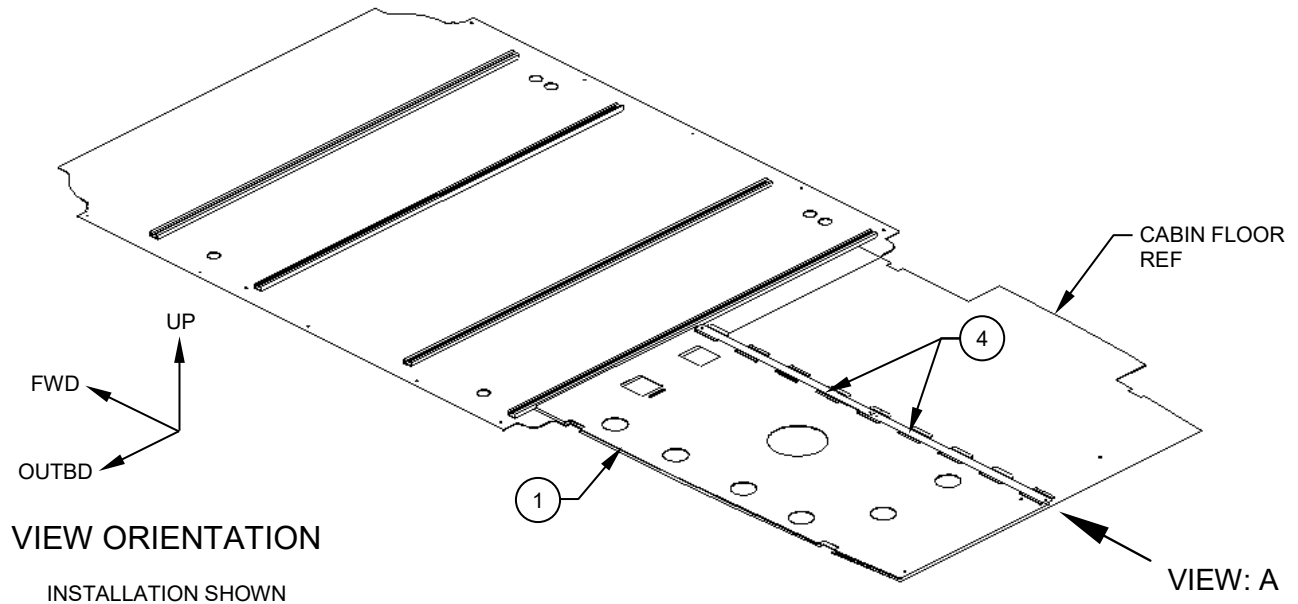


Figure 12
Some aircraft structure
Removed for clarity

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

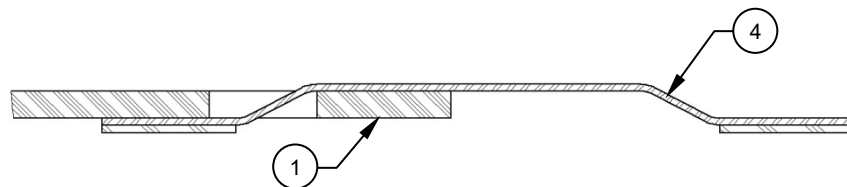
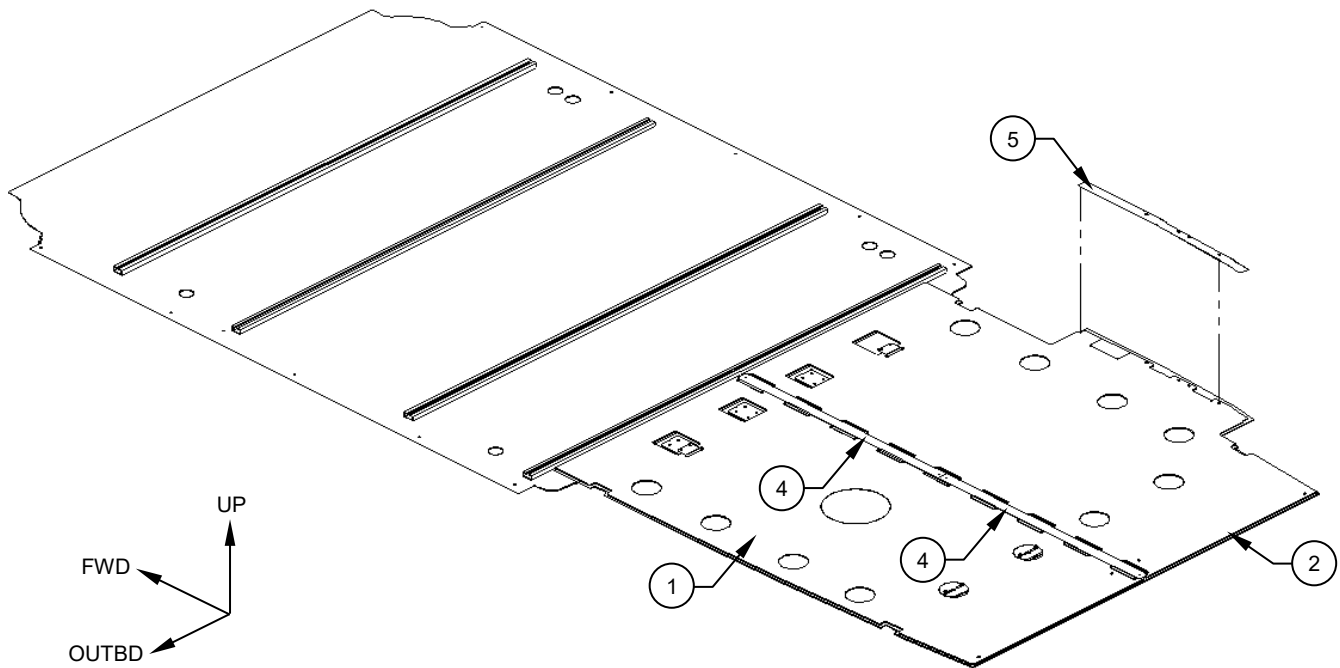


Figure 13
VIEW: A
Some aircraft structure
Removed for clarity

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) tabs into the provided slots in the panel as shown. Install cargo door sill (Item 5) 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 AF and install the provided fasteners (Item 9) 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.

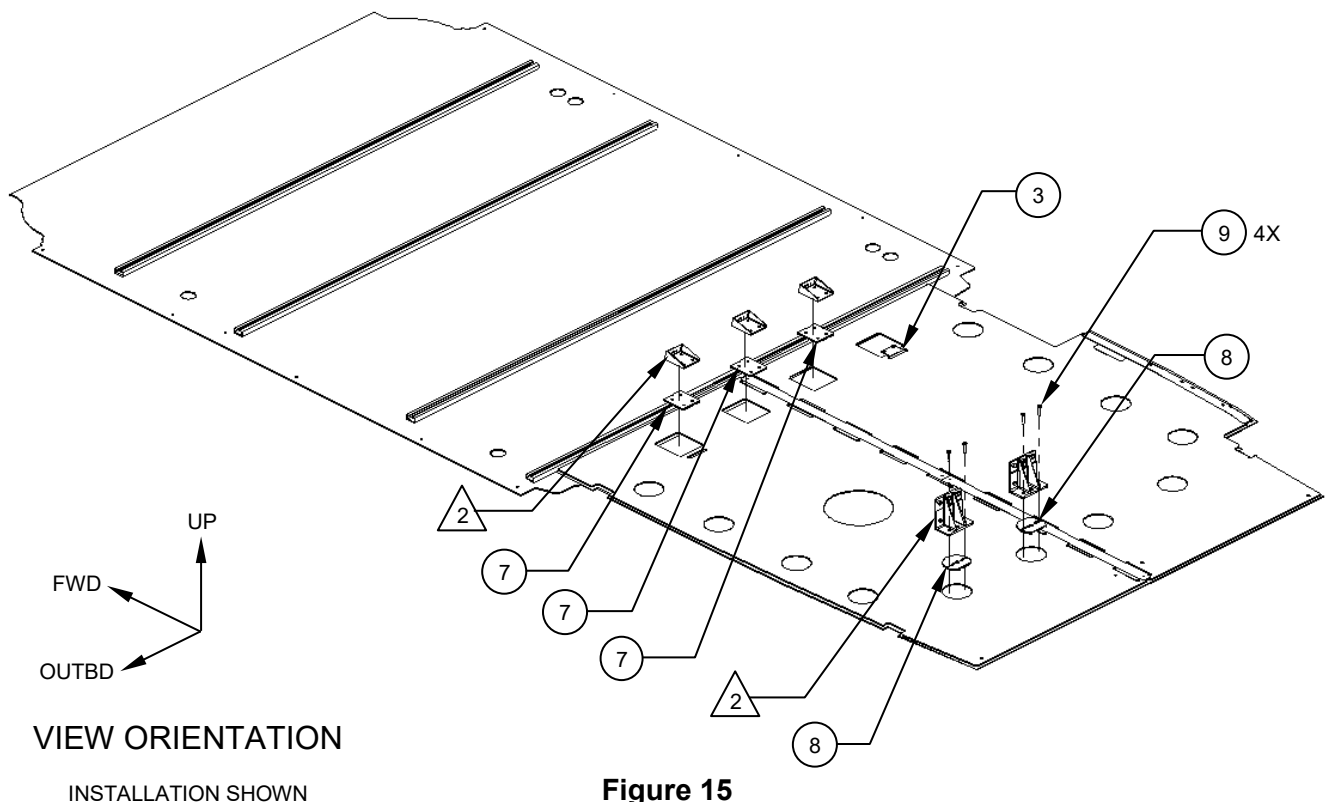


Figure 15
Some aircraft structure
Removed for clarity

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 3) re-using the OEM fasteners. Reference Figure 1 and 16.

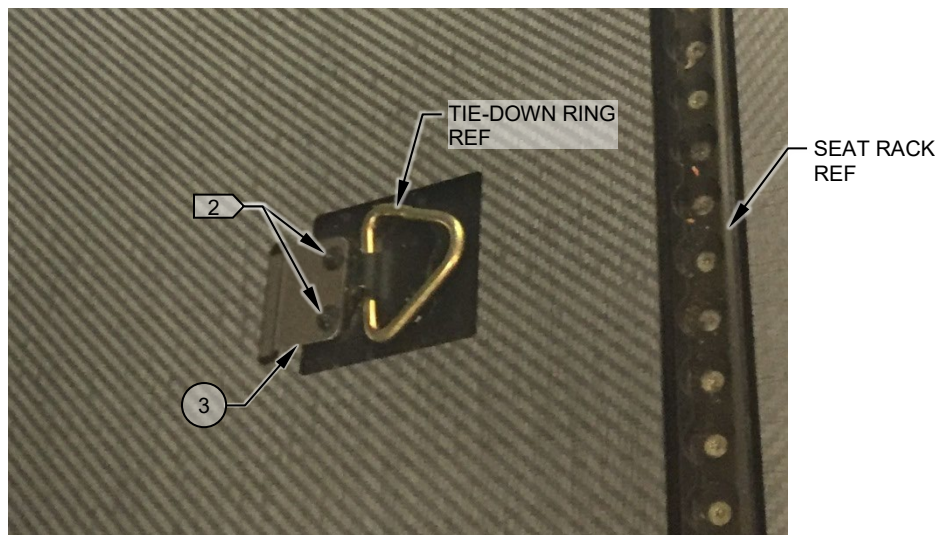
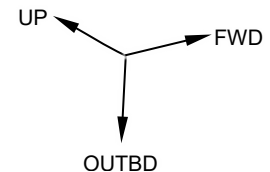


Figure 16
Installation Shown



VIEW ORIENTATION
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 9), 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 10 & 11) and clean off any residual adhesive. It is permitted to leave the Velcro®, Detail (Items 10 & 11) in place if the operator chooses
4. Removal complete.
5. Perform a General Inspection of all items to ensure proper installation.
6. Update the aircraft logbook for the removal of 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 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 5, 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.

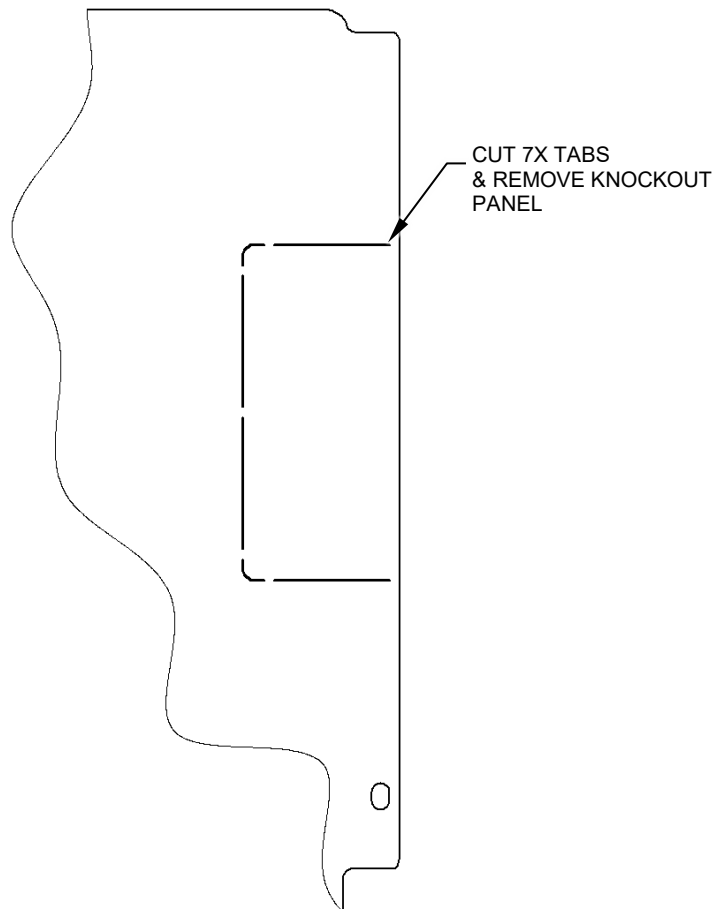


Figure 17
Knockout Panel
Shown

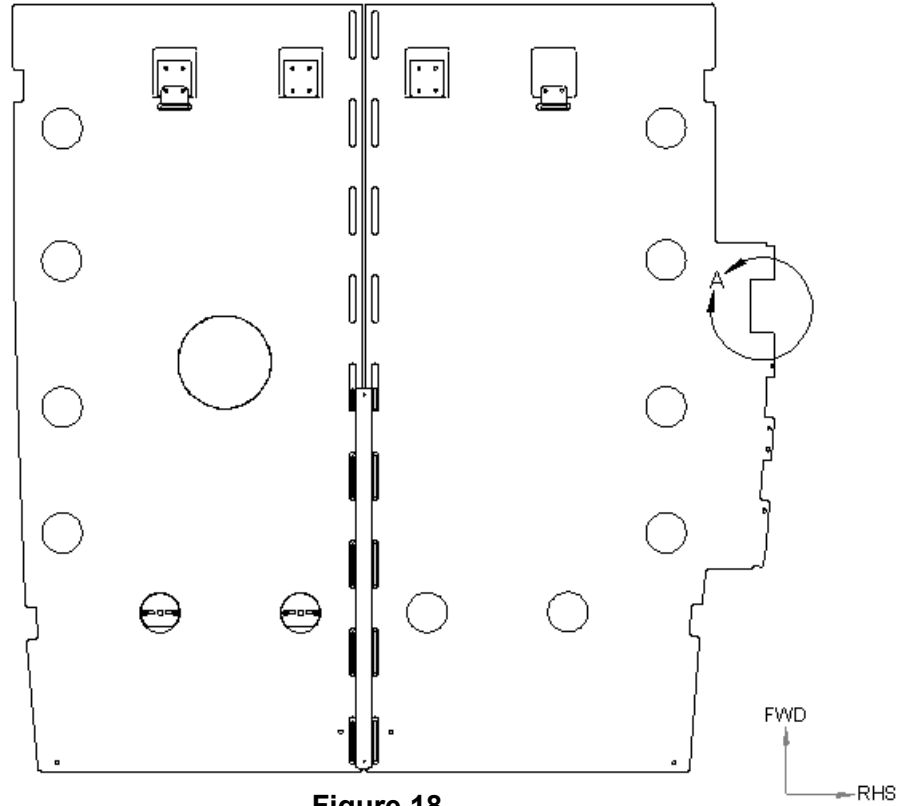


Figure 18
Knockout panel and
Sill, Detail trim
Shown

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

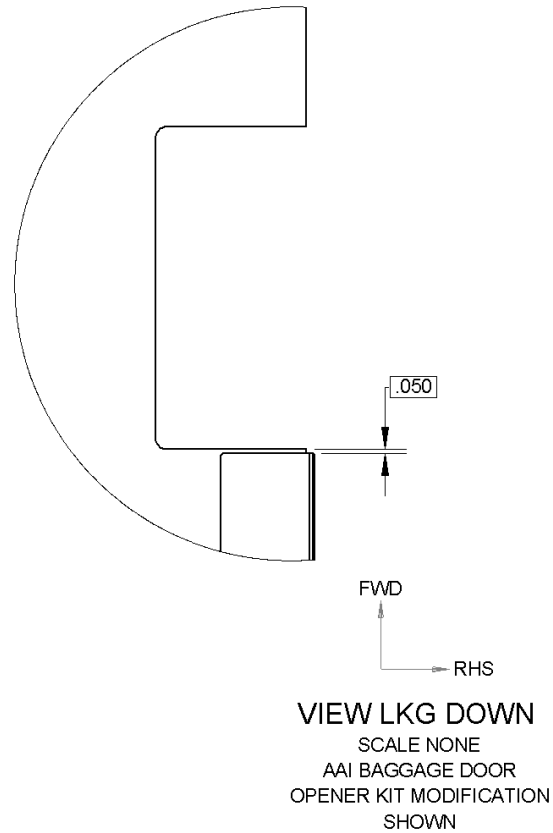


Figure 19
Sill, Detail
Trim
Shown