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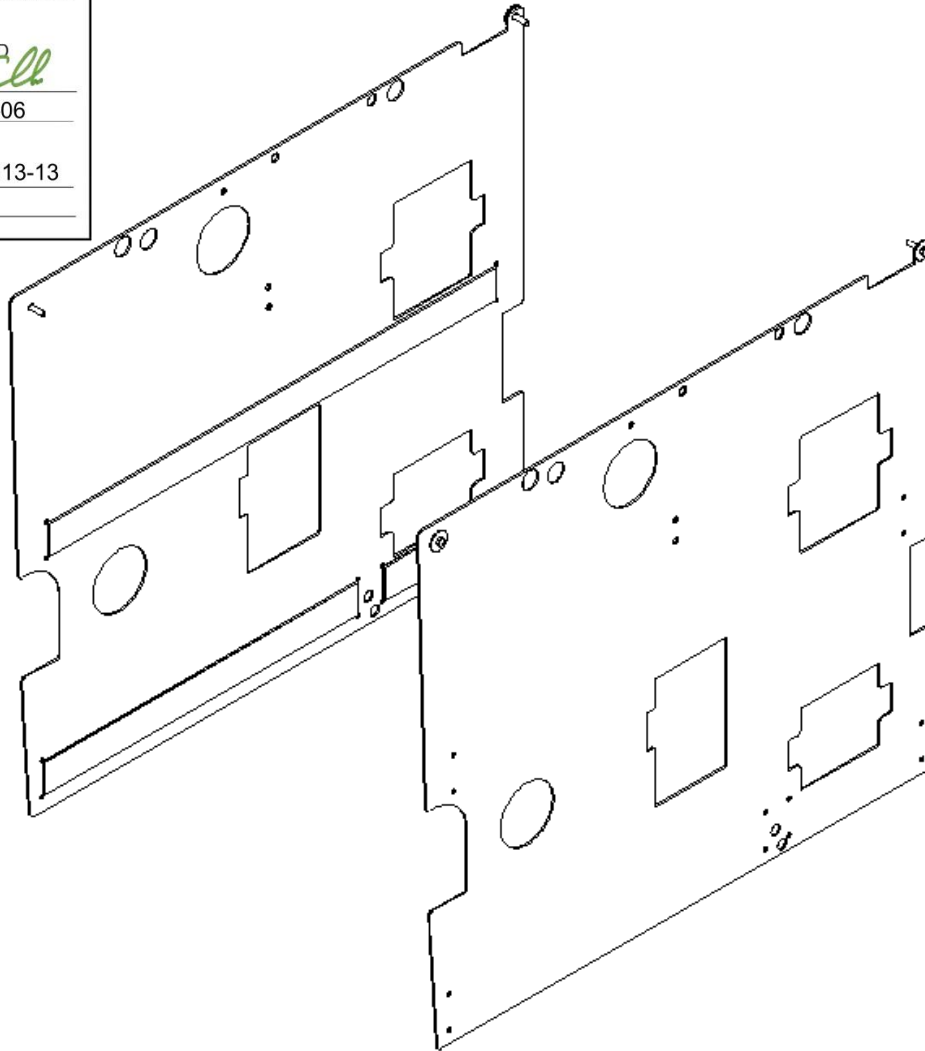


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	Transport Canada
Design Approval Representative No. 326	
APPROVED	
By	
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For	
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Issue No.	1
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PYLON PANEL PROTECTOR, KIT INSTRUCTIONS FOR CONTINUING AIRWORTHINESS

MODELS: BELL 212, 412, 412EP, 412CF

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

Description

The following information provides a functional description of the Pylon Panel Protector, Kit as defined in Alpine Aerotech Ltd. authority dataset AAL-212-040-901.

- Due to the fact that the Bell medium series of aircraft is used as often for cargo transportation as it is for passenger transportation, there is a potential for cargo to damage expensive composite panels. This occurs most frequently during loading and unloading operations, but can also occur during small inflight shifts of said cargo.
- The Aft Cabin Bulkhead Protector, Kit is comprised of individual LHS & RHS kits. Each kit can be installed separately, or together.
- The Pylon Panel Protector, Kit when installed adds additional protection to the panel, 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 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 the current revision of the DND Maintenance Manual, C-12-146-000/MF-001, for the chapter(s) and section(s) referenced within this document.
6. 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.
7. Scheduled inspection for the item(s) referenced within this document shall be accomplished in accordance with (IAW) the Inspection Procedures specified.
8. Repair allowances for the item(s) referenced within this document shall be accomplished IAW the Repair Procedures specified.
9. 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, Chapter 4-3, 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.



Inspection Procedures

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

Notes

1. Refer to the applicable Maintenance Manual, Chapters 5-1, 5-2 & 5-3, 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 Pylon Panel Protector, Kit, Installation for general condition.
- ii. Perform a General Inspection on the Pylon Panel Protector, Kit, Installation for proper security.



Scheduled Inspections

2. 100 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 fasteners/hardware to ensure proper security/torque.
- III. Perform a Detailed Inspection on all items/materials to ensure proper integrity.
- IV. Perform a Detailed Inspection on the Pylon Panel Protector Assy to ensure that it is not delaminating.
- V. Perform a Detailed Inspection on all surfaces in locations with anti-fretting Velcro applied to ensure no damage has occurred to the honeycomb panel.



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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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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-212-040-901	Pylon Panel Protector, Kit	5.850*	146.813	.00
		2.653 (Kg)	3.729 (m)	.00 (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 Manual Supplement 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.

Installation Notes

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



Installation Instructions

NOTE: LHS installation shown, RHS opposite.

1. Gain access to the pylon panel, assy. Reference Figure 1.

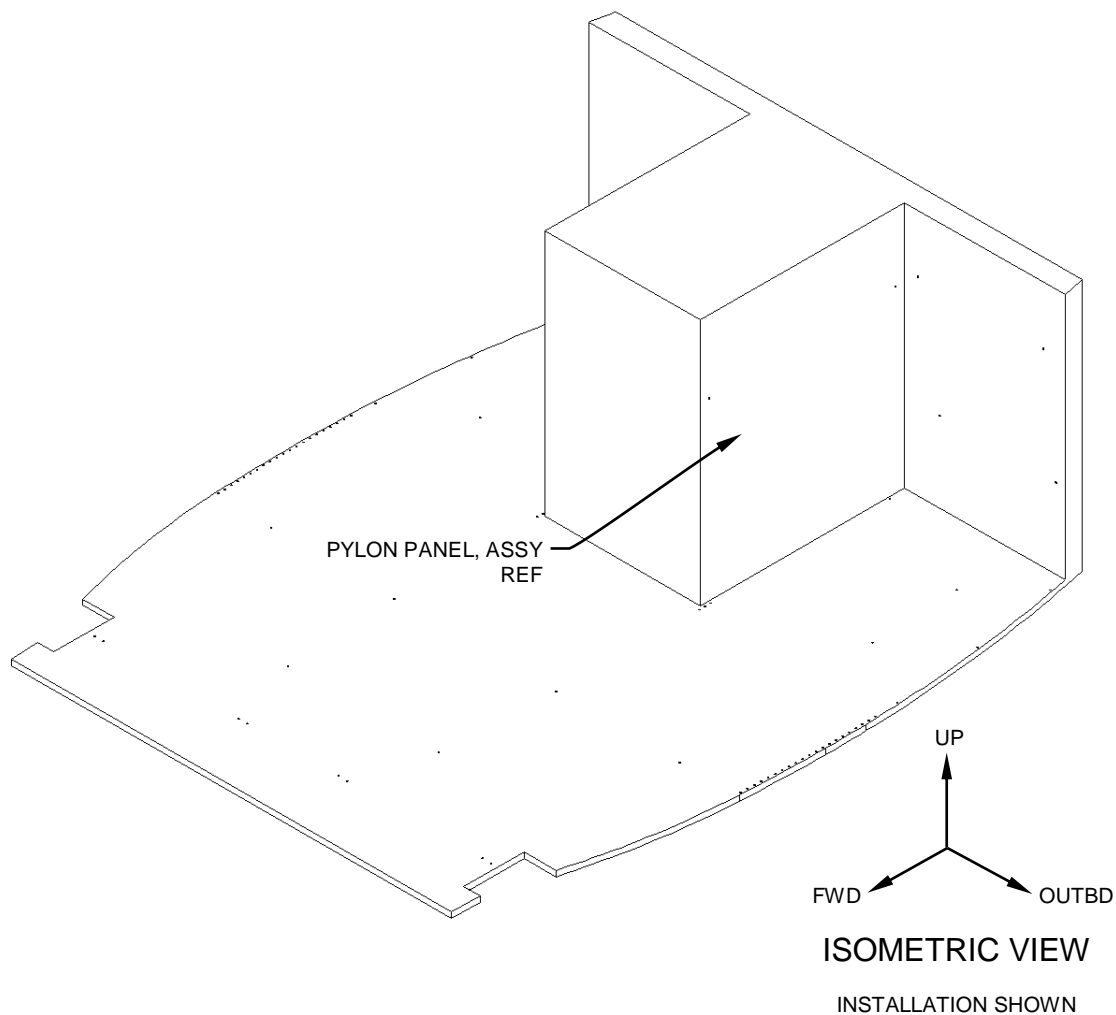


Figure 1
LHS Shown
RHS Opposite



Installation Instructions

2. Remove any existing fasteners from coordinating inserts. Reference Figure 2.
3. Pre-fit the LHS Pylon Panel Protector, Assy (Item 2), with respect to the coordinating inserts. Temporarily install using supplied hardware, (Items 7 & 8). Reference Figure 2.

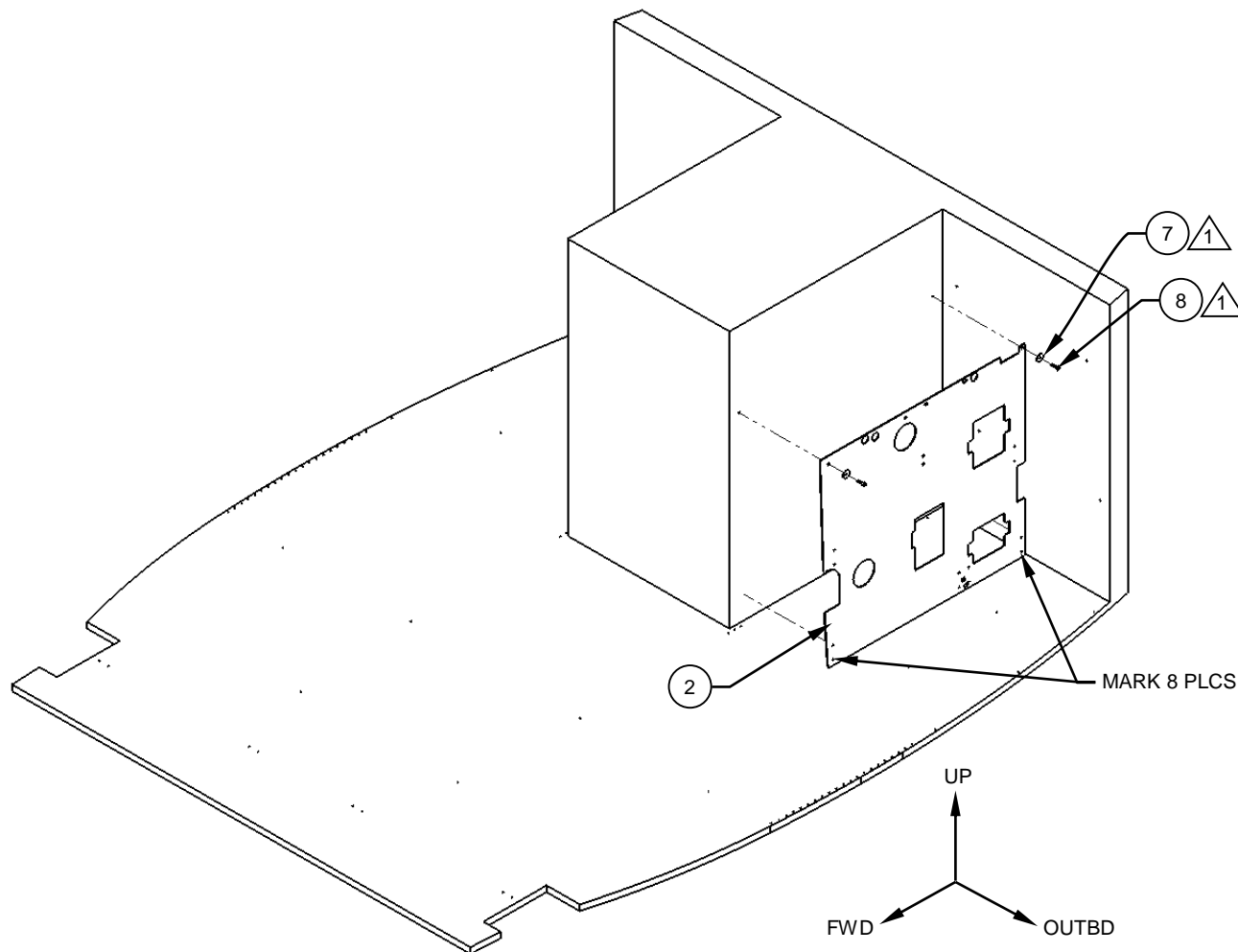


Figure 2
LHS Shown
RHS Opposite

ISOMETRIC VIEW
INSTALLATION SHOWN

4. With the Pylon Panel Protector, Assy (Item 2) lined up use the pre-cut .25 holes and a felt pen to mark out the locations for the Velcro®, Details (Items 9 & 10) and remove the Pylon Panel Protector, Assy (Item 2). Reference Figure 2.



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Installation Instructions

5. Clean the areas between the felt pen marks with alcohol taking care not to wipe away the felt pen marks.
6. Individually peel each Velcro®, Detail (Items 9 & 10) off of the LHS Pylon Panel Protector, Assy (Item 2) and peel the paper off the adhesive backing.
7. Using the felt pen marks as reference points, apply the Velcro®, Details (Items 9 & 10) to the pylon panel assy in their respective locations. Reference Figure 3. Apply adequate pressure to ensure a secure bond.

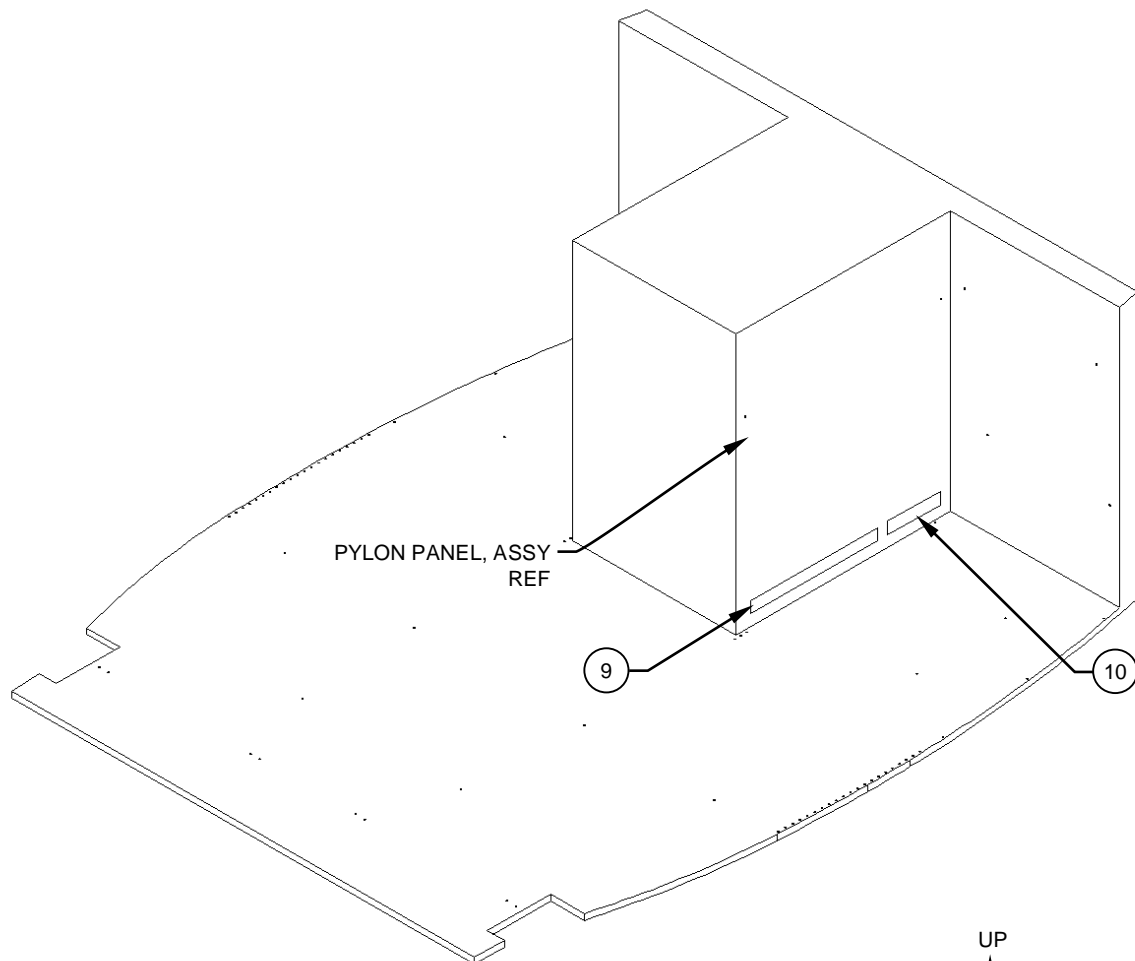


Figure 3
LHS Shown
RHS Opposite

UP
FWD OUTBD
ISOMETRIC VIEW
INSTALLATION SHOWN



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Installation Instructions

8. Re-install the LHS Pylon Panel Protector, Assy (Item 2), using supplied hardware, (Items 7 & 8). Reference Figure 2.
9. Installation complete.
10. Perform a General Inspection of all items to ensure proper installation.
11. Update the aircraft logbook for the installation of the Aft Cabin Bulkhead Protector, Kit.



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Removal Instructions

1. As there are no special considerations or additional steps to remove the Pylon Panel Protector, Kit for either inspections, or mission configuration, the removal of the Pylon Panel Protector, Kit can be considered the opposite of installation.
2. Perform a General Inspection of all items to ensure proper removal.
3. Update the aircraft logbook for the removal of the Pylon Panel Protector, Kit.



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
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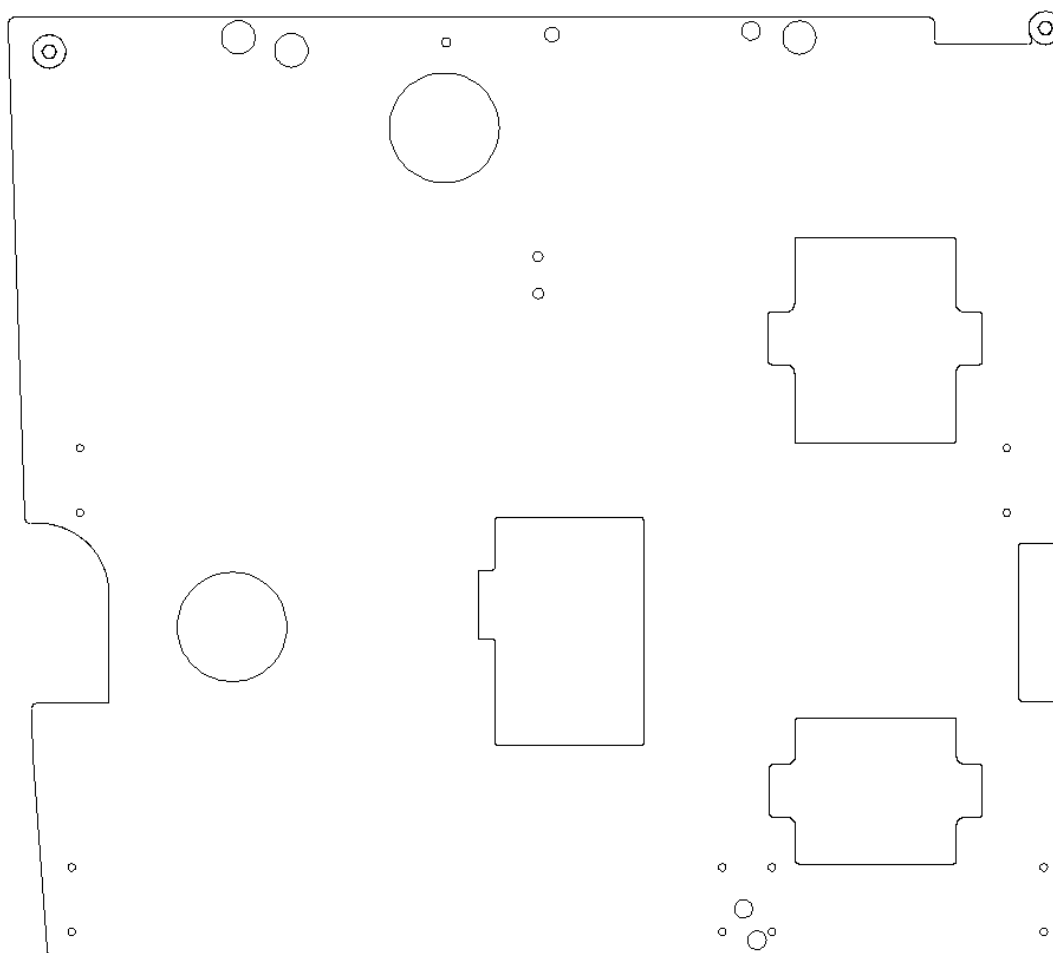
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Section 4: Illustrated Parts Breakdown

General Notes

1. Alternate items listed.

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



LHS Pylon Panel Protector, Assy Shown
Item 1



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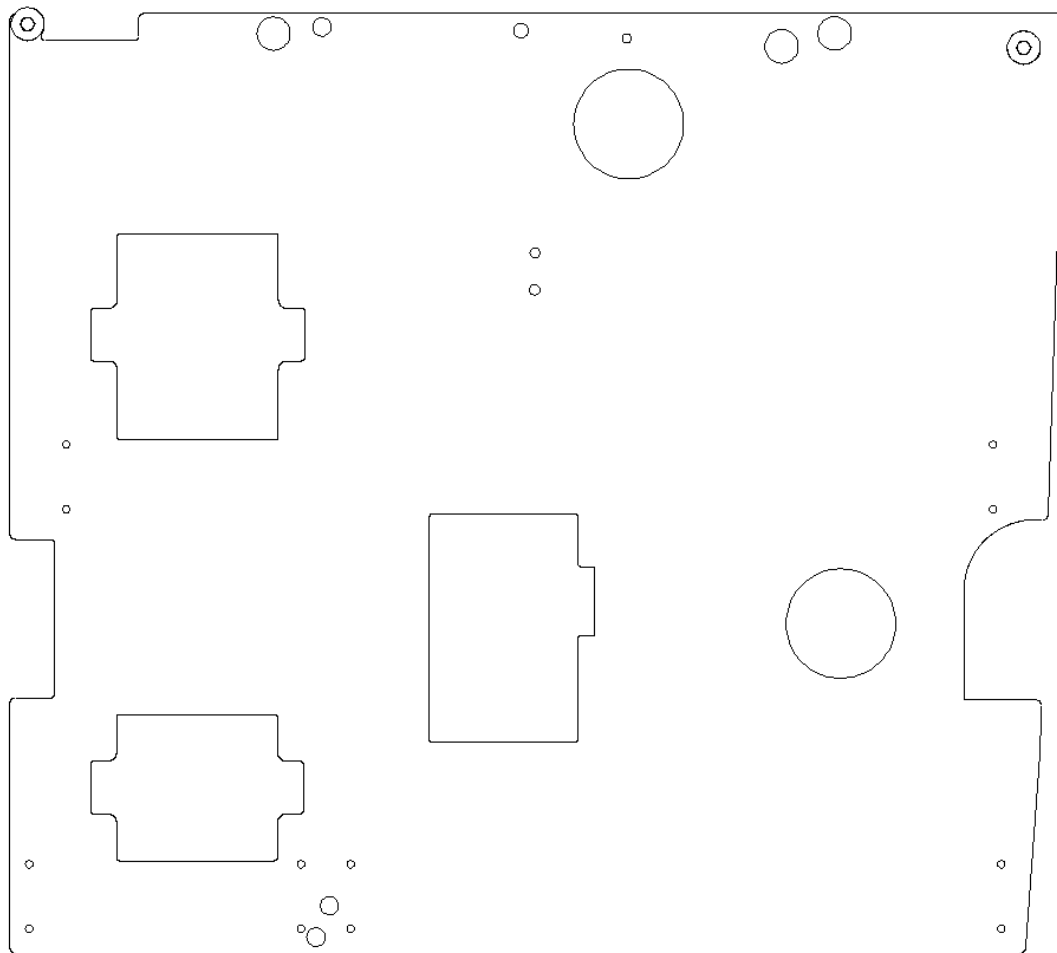
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RHS Pylon Panel Protector, Assy Shown
Item 11



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					REF				
ITEM	QTY	NUMBER	DESCRIPTION	MATERIAL	STOCK SIZE	SPEC	FINISH	MANUFACTURER	NCAGEC
-	-	AAL-212-040-901	PYLON PANEL PROTECTOR, KIT	C/O SHADED ITEMS ONLY					
1	1	AAL-212-040-001	LHS PYLON PANEL PROTECTOR, KIT	NA	NA	NA	NA	ALPINE AEROTECH LTD.	L0171
2	1	AAL-212-041-001	LHS PYLON PANEL PROTECTOR, ASSY	NA	NA	NA	NA	ALPINE AEROTECH LTD.	L0171
3	1	AAL-212-042-001	PYLON PANEL PROTECTOR, DETAIL	TEGRIS	0.1	SEE MFR	SEE MFR	ALPINE AEROTECH LTD.	L0171
4	1	151394	VELCRO, DETAIL	LOOP 1000, BLACK, 8224 PSA	2 X 9.00	SEE MFR	SEE MFR	VELCRO USA INC.	11153
5	1	151394	VELCRO, DETAIL	LOOP 1000, BLACK, 8224 PSA	2 X 21.75	SEE MFR	SEE MFR	VELCRO USA INC.	11153
6	1	151394	VELCRO, DETAIL	LOOP 1000, BLACK, 8224 PSA	2 X 31.066	SEE MFR	SEE MFR	VELCRO USA INC.	11153
7	2	AN970-5	WASHER, FLAT	SEE SPEC	SEE SPEC	AN970	SEE SPEC	SOURCE A S REQUIRED	NA
8	2	AN5-5A	BOLT, MACHINE	SEE SPEC	SEE SPEC	NA SM3THRU20	SEE SPEC	SOURCE A S REQUIRED	NA
9	1	159797	VELCRO, DETAIL	HOOK 88, BLACK 8289	2 X 21.75	SEE MFR	SEE MFR	VELCRO USA INC.	11153
10	1	159797	VELCRO, DETAIL	HOOK 88, BLACK 8289	2 X 9.00	SEE MFR	SEE MFR	VELCRO USA INC.	11153
11	1	AAL-212-040-002	RHS PYLON PANEL PROTECTOR, KIT	NA	NA	NA	NA	ALPINE AEROTECH LTD.	L0171
12	1	AAL-212-041-002	RHS PYLON PANEL PROTECTOR, ASSY	NA	NA	NA	NA	ALPINE AEROTECH LTD.	L0171
13	1	AAL-212-042-001	PYLON PANEL PROTECTOR, DETAIL	TEGRIS	0.1	SEE MFR	SEE MFR	ALPINE AEROTECH LTD.	L0171
14	1	151394	VELCRO, DETAIL	LOOP 1000, BLACK, 8224 PSA	2 X 31.066	SEE MFR	SEE MFR	VELCRO USA INC.	11153
15	1	151394	VELCRO, DETAIL	LOOP 1000, BLACK, 8224 PSA	2 X 21.75	SEE MFR	SEE MFR	VELCRO USA INC.	11153
16	1	151394	VELCRO, DETAIL	LOOP 1000, BLACK, 8224 PSA	2 X 9.00	SEE MFR	SEE MFR	VELCRO USA INC.	11153
17	2	AN970-5	WASHER, FLAT	SEE SPEC	SEE SPEC	AN970	SEE SPEC	SOURCE A S REQUIRED	NA
18	2	AN5-5A	BOLT, MACHINE	SEE SPEC	SEE SPEC	NA SM3THRU20	SEE SPEC	SOURCE A S REQUIRED	NA
19	1	151405	VELCRO, DETAIL	HOOK 88, BLACK 8224	2 X 21.75	SEE MFR	SEE MFR	VELCRO USA INC.	11153
20	1	151405	VELCRO, DETAIL	HOOK 88, BLACK 8224	2 X 9.00	SEE MFR	SEE MFR	VELCRO USA INC.	11153