ALPINE AEROTECH LP
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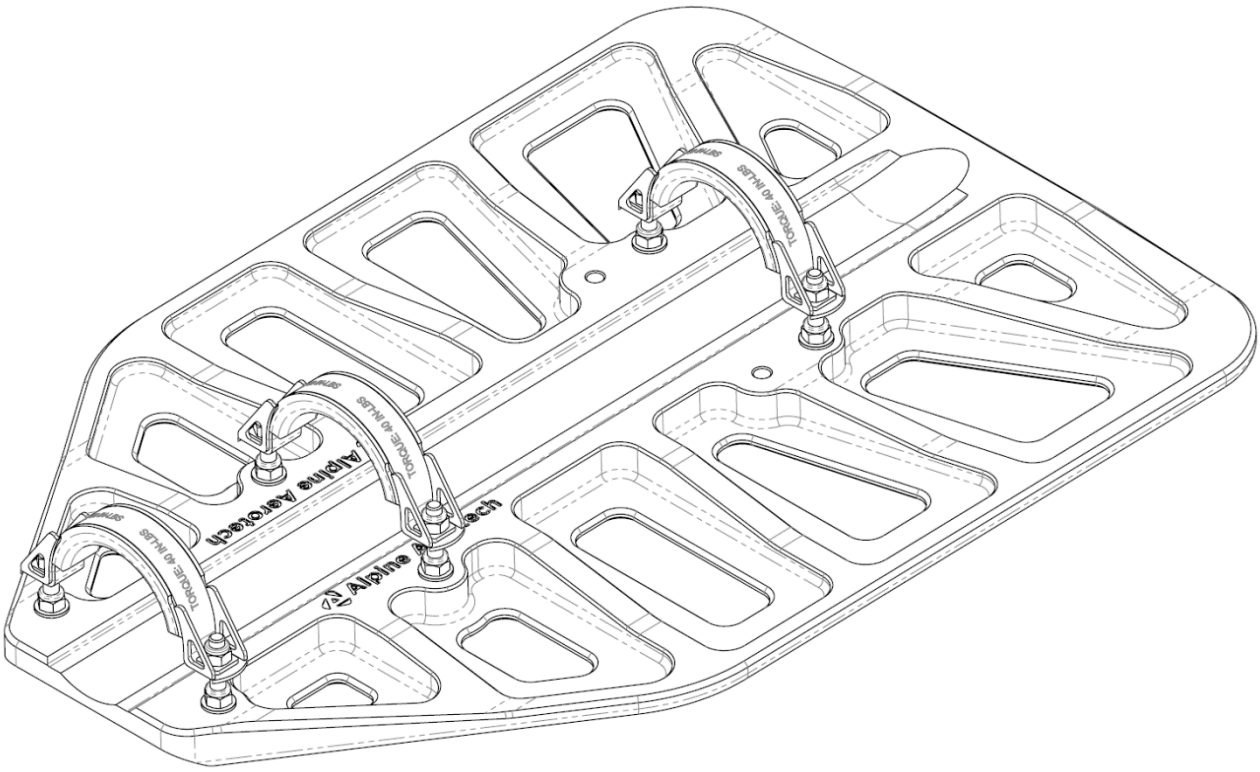

BEAR PAW, KIT
INSTRUCTIONS FOR CONTINUING AIRWORTHINESS

MODELS: BELL 206L SERIES, 407

Read all of the Instructions for Continuing Airworthiness
thoroughly prior to performing any activities relating to this product

AAL M 046 93-00

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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 Bear Paw, Kit as defined in Alpine Aerotech LP authority dataset AAL-390-010-001.

- In soft terrain landing situations where the skid tubes can sink into the landing area, e.g., tundra, snow and sand, balancing issues can occur and in rare cases the tail rotor can strike the ground.
- The Bear Paw, Kit when installed adds additional flotation to the skid gear aft of the C of G, thus keeping the balance point forward of the C of G.

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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 revision of the BHT Maintenance Manual, BHT-206L-MM, for the chapter(s) and section(s) referenced within this document.

3. Refer to the current revision of the BHT Maintenance Manual, BHT-206L1-MM, for the chapter(s) and section(s) referenced within this document.

4. Refer to the current revision of the BHT Maintenance Manual, BHT-206L3-MM, for the chapter(s) and section(s) referenced within this document.

5. Refer to the current revision of the BHT Maintenance Manual, BHT-206L4-MM, for the chapter(s) and section(s) referenced within this document.

6. Refer to the current revision of the BHT Maintenance Manual, BHT-407-MM, for the chapter(s) and section(s) referenced within this document.

7. 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.

8. Scheduled inspection for the item(s) referenced within this document shall be accomplished in accordance with (IAW) the Inspection Procedures specified.

9. Repair allowances for the item(s) referenced within this document shall be accomplished IAW the Repair Procedures specified.

10. 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 4-1 and Tables 4-1 and 4-2, 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.

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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, Chapters 5-1, thru 5-15 as applicable, 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 300 Hour/12 Month Inspections.

5. Perform 300 Hour/12 Month Inspections every 300 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/ Pre-Flight Inspections

   Data Reference: Section 3: Installation and Removal Instructions
   Section 4: Illustrated Parts Breakdown

   i. Perform a General Inspection on the Bear Paw, Kit, Installation for general condition.

   ii. Perform a General Inspection on the Bear Paw, Kit, Installation for proper security.

   iii. Visually confirm the condition of the torque lacquer on the nuts securing the Bear Paw to the skid-tube. If the torque lacquer is broken, perform the 300 hour/12-month inspection.

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Scheduled Inspections

2. 300 Hour/12 Month Inspections

Data Reference: Section 3: Installation and Removal Instructions
Section 4: Illustrated Parts Breakdown

i. Perform a Detailed Inspection on all materials and finishes in the Bear Paw, Kit, Installation for evidence of corrosion, cracks and damage.

ii. Perform a Detailed Inspection on all materials and finishes in the Bear Paw, Kit, Installation for proper integrity and condition.

iii. Perform a Detailed Inspection on the Bear Paw, Kit, Installation for proper security.

iv. Perform a Detailed Inspection on all hardware and fasteners in the Bear Paw, Kit, Installation for proper security and torque.

v. In the shaded regions , , of Figure 1 the Bear Paw may be worn to a maximum depth of 0.100 from the nominal dimensions shown.

vi. In the shaded region of Figure 1, it is acceptable to have damaged areas up to a maximum depth of 0.100 over a maximum area of 2 sq. in. Damage includes but not limited to deep scratches, gouges and deformed areas. Superficial surface scratches are permitted on all surfaces.

vii. The edge of a damaged region must be a minimum of 2 in. away from the edge of the next nearest damaged region.

viii. Cracks are acceptable in the shaded portion of Figure 1 as long as they are restricted to the pockets of the bear paws, and do not exceed 0.50 long. Cracks that penetrate the stiffening ribs of the same area are unacceptable. Stop drill all cracks up to 0.50 long with ⌀0.188 drill.

ix. Inspect item 7 Strap, Assy for damage to its respective components:

a. Inspect item 7, Strap, Assy for cracks and hole elongation. If cracks are detected, or holes are elongated more than 0.025, replace the Strap, Assy (Item 8) immediately.

b. Inspect Cap, Details (Item 5 or 6) for wear and damage and replace as required.

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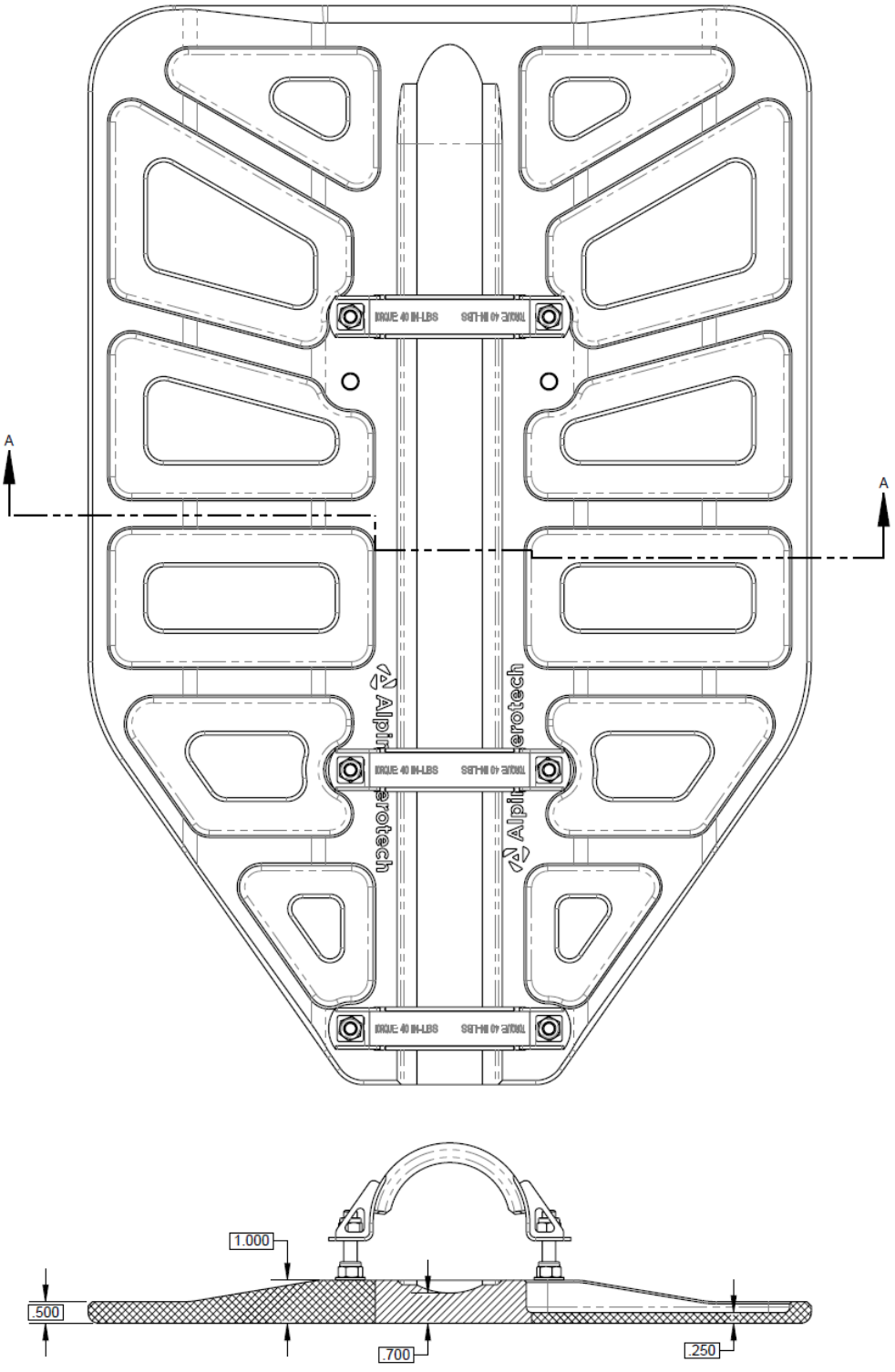

Figure 1
Nominal dimensions shown.

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Repair Procedures

1. Repairs to the item(s) referenced within this document are **not** 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	Description	Weight	Long. Arm	Lat. Arm
AAL-390-010-001	Bear Paw, Kit	14.70*	153.33	.00
		6.67 (Kg)	*3.89 (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. Torque fasteners IAW the tension type torque limits indicated in the current revision of the FAA Advisory Circular AC 43.13-1, Table 7-1 plus tare torque, unless otherwise specified. Tare torque is defined as the amount of torque required to overcome the resistance of self-locking nuts against mating bolts or studs.

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 Section 3.1 for installation instructions applicable to installation on OEM skid tubes.

6. Refer to Section 3.2 for installation instructions applicable to installation on DART skid tubes.

7. Refer to the Section 4: Illustrated Parts Breakdown for the part numbers of the item(s) referenced within this section.

Installation Notes

△1 Hardware orientation is mandatory.

△2 Item 5 to be used for installation on aircraft equipped with OEM skid gear.

△3 Item 6 to be used for installation on aircraft equipped with DART skid tubes.

△4 Apply Torque Lacquer (Item 11) or equivalent, to Nut, Hex, Self-locking (Item 4) and Bolt, Round Head, Square Neck (Items 3 & 10) common to Strap, Assys only (Item 7) per manufacturer's recommendations.

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Section 3.1: Installation on OEM Skid Tube

NOTE: LHS installation shown, RHS opposite.

1. Pre-install the supplied hardware as shown. Reference Figure 2. Torque fasteners to 40 in-lbs. (plus tare torque).

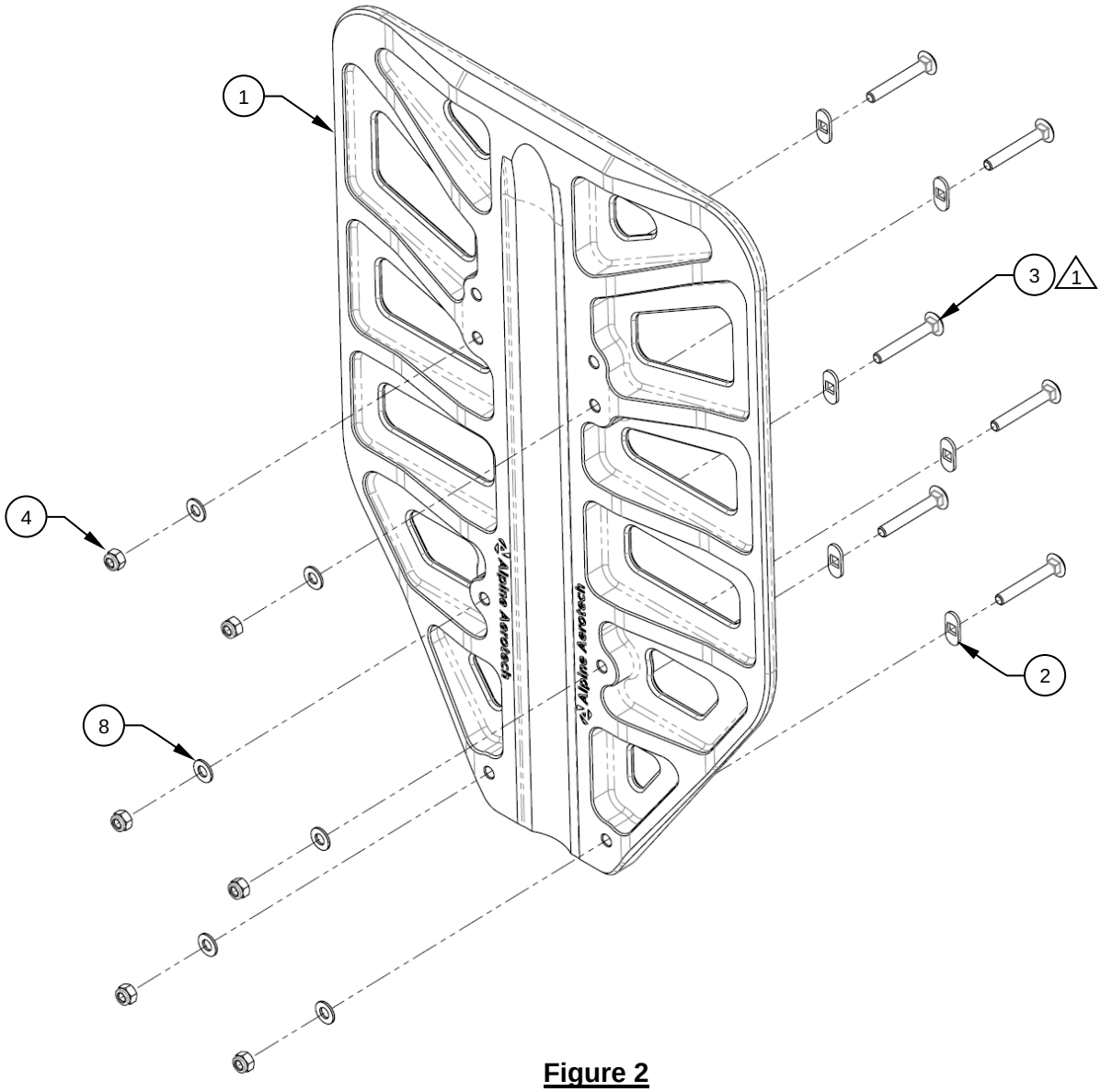

Figure 2

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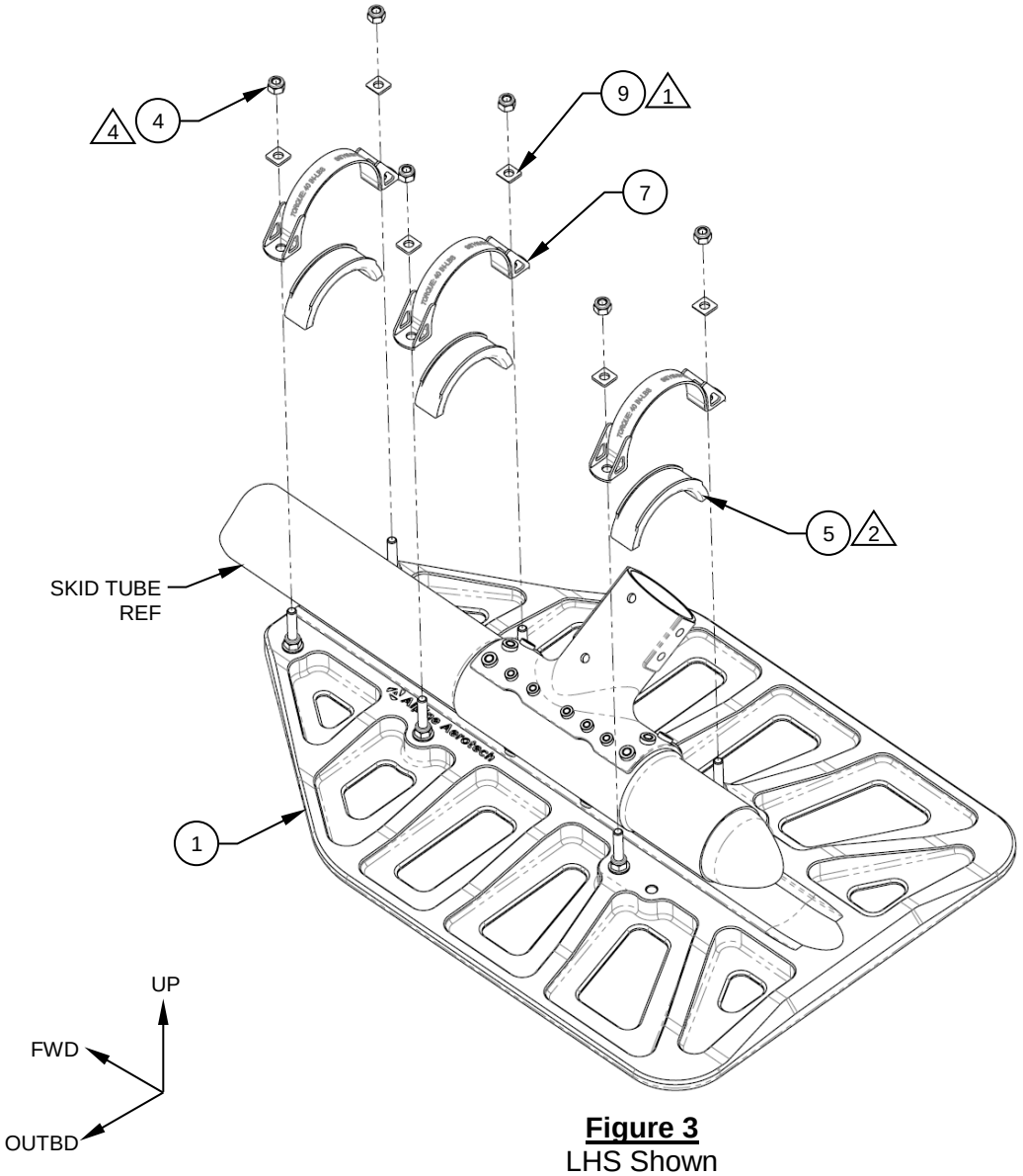
Installation on OEM Skid Tube (cont.)

2. Place Cap, Details (Item 5) into Strap, Assys (Item 7) center the cap to the strap. Reference Figures 3 & 4.

3. Raise the aircraft, so that the Bear Paw, Detail (Item 1) can slide under the skid tube.



ISOMETRIC VIEW
LHS INSTALLATION
SHOWN

Figure 3
LHS Shown
RHS Opposite

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Installation on OEM Skid Tube (cont.)

4. Once the Bear Paw, Detail (Item 1) is under the skid tube in its approximate location, place the Strap, Assy's (Item 7) Cap, Details (Item 5) and associated hardware (Items 4 & 9) on their corresponding studs and capture the stud with its respective self-locking nut (Item 4) and washer (Item 9). Reference Figures 3 & 4.

5. Lower the aircraft onto the Bear Paw, Detail (Item 1) and torque fasteners equally to 40 in-lbs. (plus tare torque). Ensure that the relieved edge of the Washer, Radius (Item 9) is oriented towards the skid tube. Reference Figures 3 & 4.

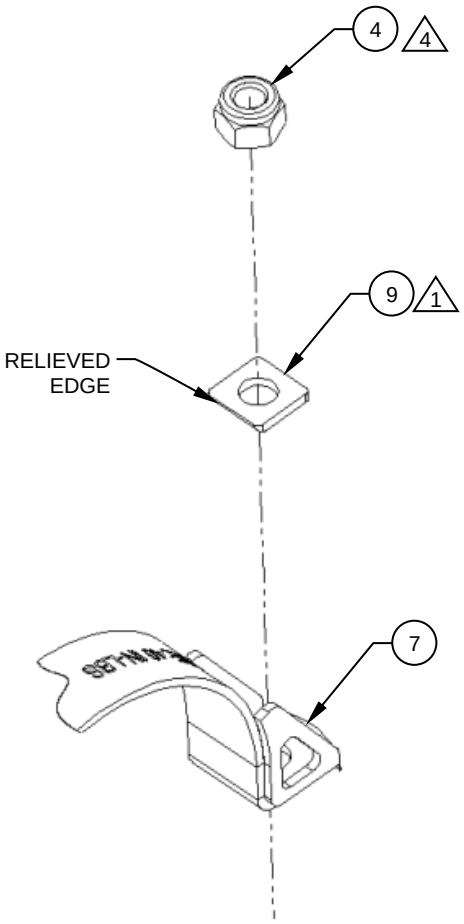

Figure 4

6. Installation complete.

7. Perform a General Inspection of all items to ensure proper installation.

8. Update the aircraft logbook for the installation of the Bear Paw, Kit.

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Section 3.2: Installation on DART Skid Tube

NOTE: LHS installation shown, RHS opposite.

1. Pre-install the supplied hardware as shown. Reference Figure 5. Torque fasteners to 40 in-lbs. (plus tare torque).

NOTE: If installation is for use with Dart **Run-On Landing wear strips** use Item 10, in all locations.

NOTE: Regardless of standard, or Run-On Landing wear strips, the length of the skid shoe varies. Depending on where the skid shoe cross bolt is located, the aft set of Carriage Bolts (Items 3 or 10) will have to be located in either the AFT or FWD set of holes, a trial fit will be required to determine the best location. See Figure 5.

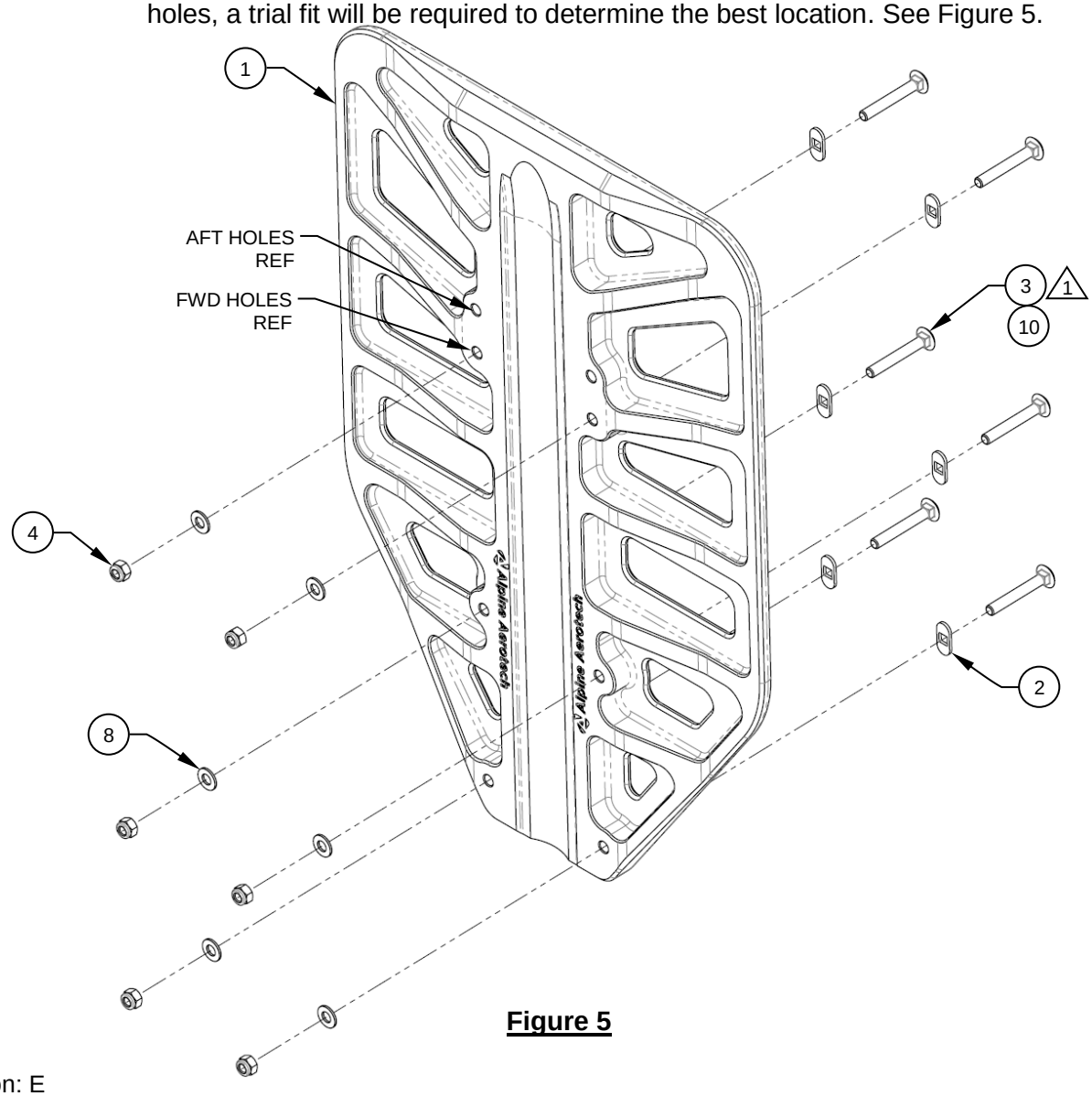

Figure 5

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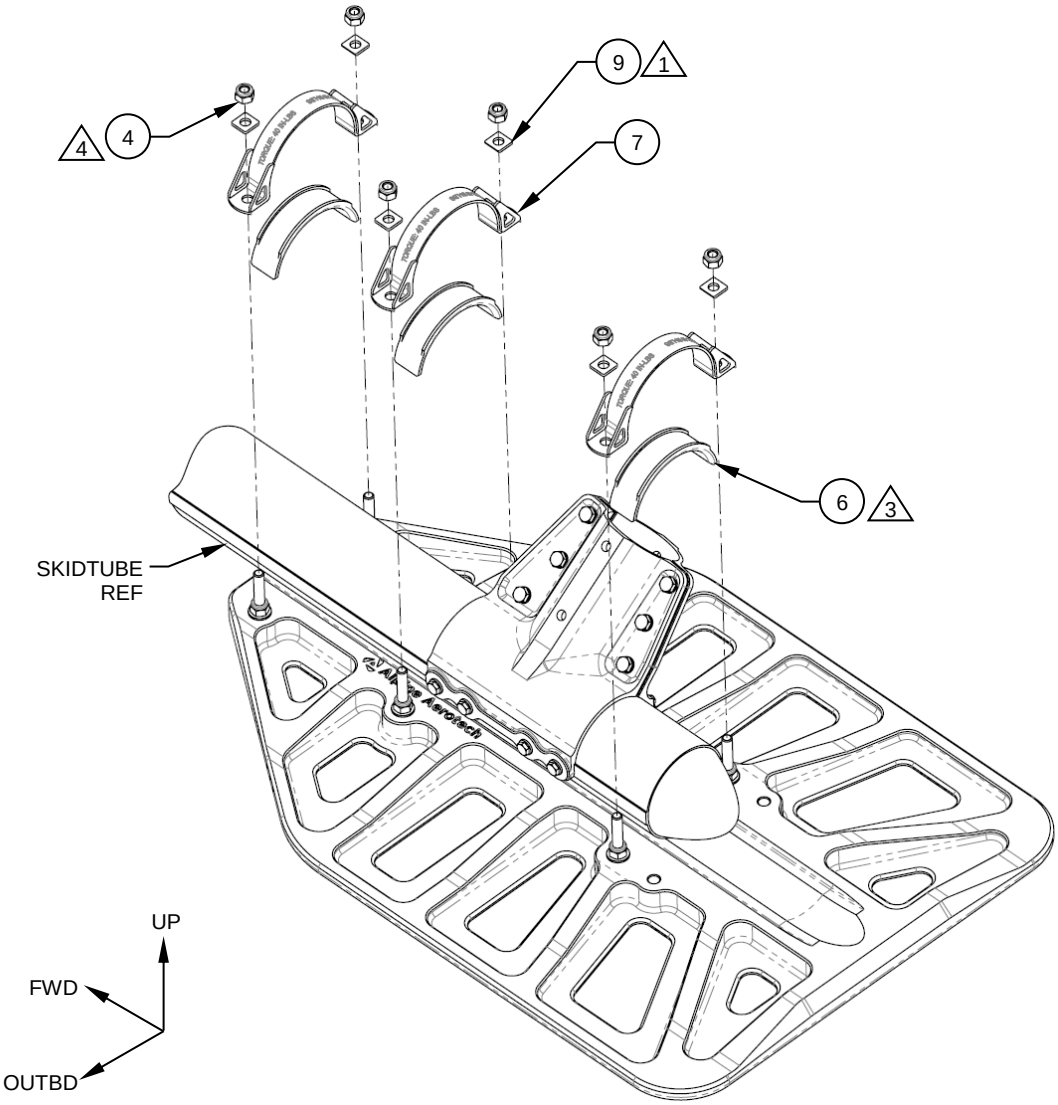
Installation on DART Skid Tube (cont.)

2. Place Cap, Details (Item 6) into Strap, Assys (Item 7) center the cap to the strap. Reference Figures 6 & 7.

3. Raise the aircraft, so that the Bear Paw, Detail (Item 1) can slide under the skid tube.



ISOMETRIC VIEW
LHS INSTALLATION
SHOWN

Figure 6

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Installation on DART Skid Tube (cont.)

4. Once the Bear Paw, Detail (Item 1) is under the skid tube in its approximate location, place the Strap, Assy's (Item 7) Cap, Details (Item 6) and associated hardware (Items 4 & 9) on their corresponding studs and capture the stud with its respective self-locking nut (Item 4) and washer (Item 9). Reference Figures 6 & 7.

5. Lower the aircraft onto the Bear Paw, Detail (Item 1) and torque fasteners equally to 40 in-lbs. (plus tare torque). Ensure that the relieved edge of the Washer, Radius (Item 9) is oriented towards the skid tube. Reference Figures 6 & 7.

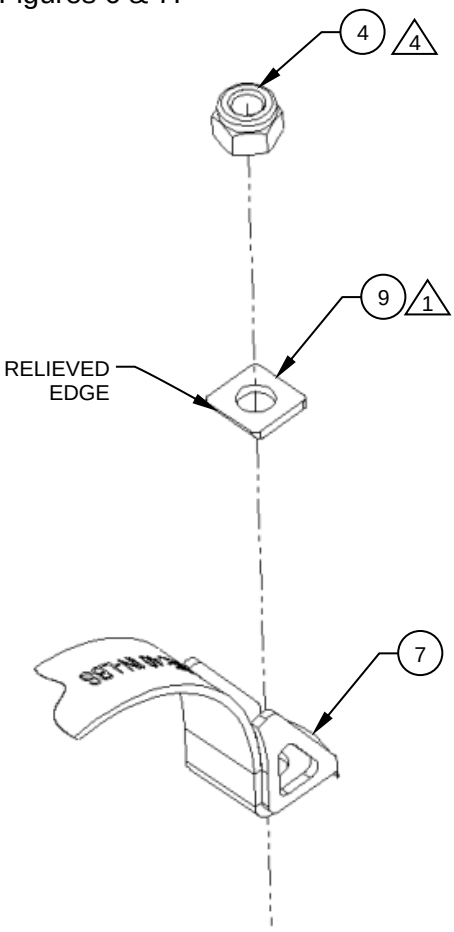

Figure 7

6. Installation complete.

7. Perform a General Inspection of all items to ensure proper installation.

8. Update the aircraft logbook for the installation of the Bear Paw, Kit.

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Section 3.3: Removal Instructions

1. As there are no special considerations or additional steps to remove the Bear Paw, Kit for either inspections, or mission configuration, the removal of the Bear Paw, Kit can be considered the opposite of installation for both OEM and DART skid gear applications.

2. Perform a General Inspection of all items to ensure proper removal.

3. Update the aircraft logbook for the removal of the Bear Paw, Kit.

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Section 4: Illustrated Parts Breakdown

General Notes

1. Alternate items listed where applicable.

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

△2 Only used for installation on DART skid tubes.

△3 Not shown and not supplied. Procure locally.

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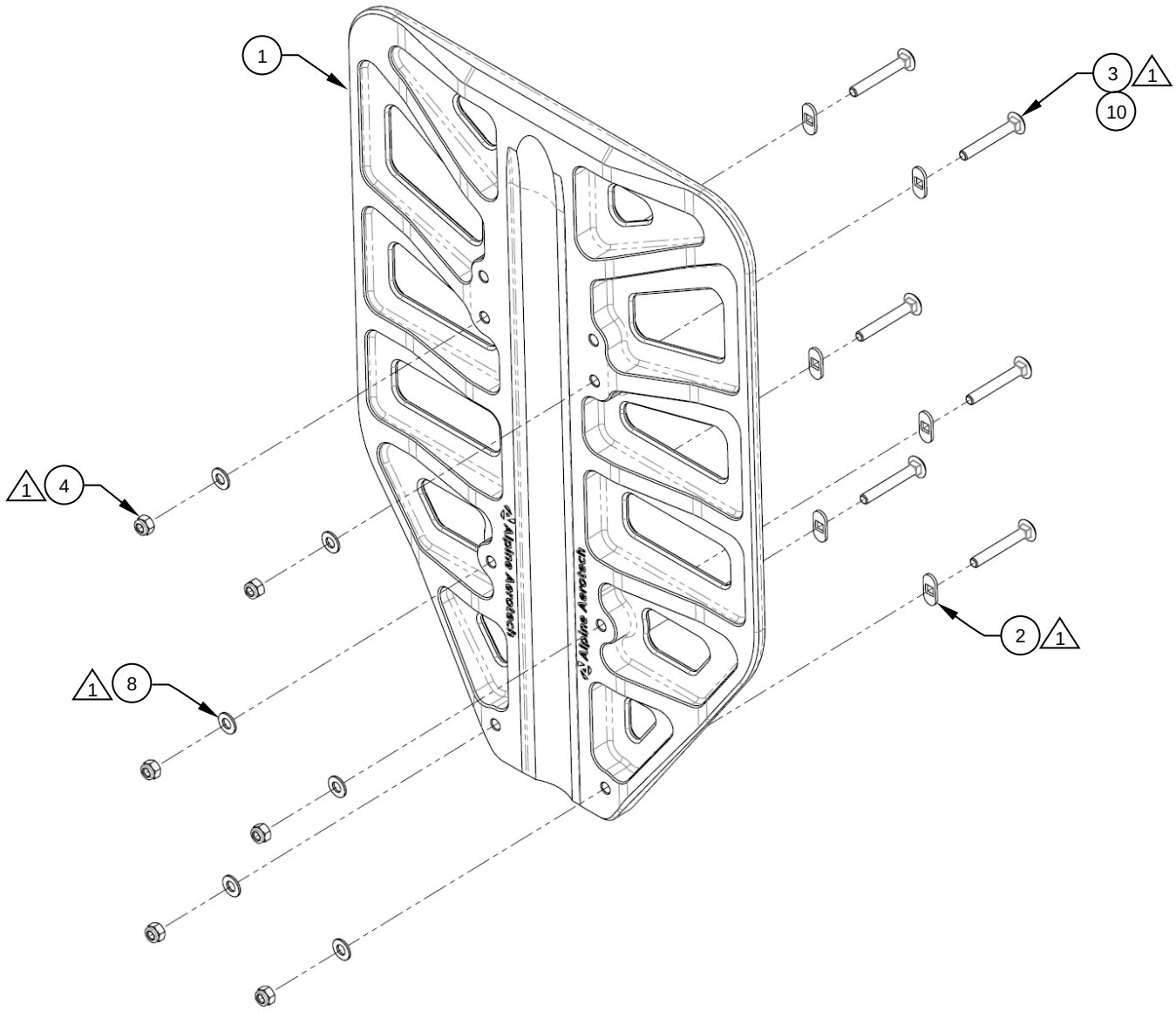
Illustrated Parts Breakdown (cont.)



Bear Paw, Kit
Shown (LHS only)

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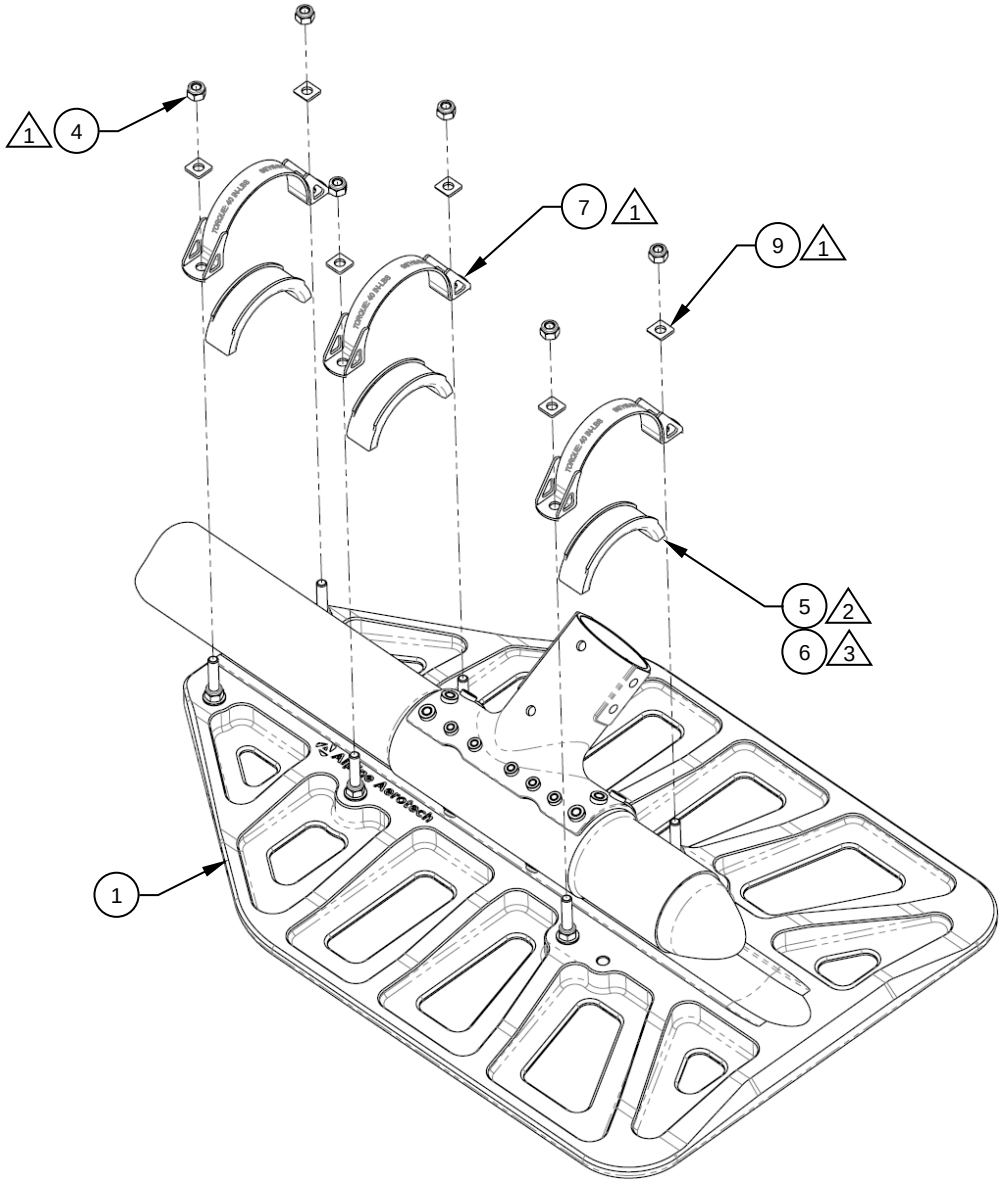
Illustrated Parts Breakdown (cont.)



Bear Paw, Kit
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Illustrated Parts Breakdown

ITEM	QTY	NUMBER	DESCRIPTION	MATERIAL	REF STOCK SIZE	SPEC	FINISH	MANUFACTURER	NCAGEC
-	-	AAL-390-010-001	BEAR PAW, KIT	C/O SHADED ITEMS ONLY					
1	2	AAL-390-012-001	BEARPAW, DETAIL	NA	NA	NA	SEE SPEC	SEE NOTES	L0171
2	12	AAL-290-042-006	TAB, DETAIL	NA	NA	NA	SEE SPEC	ALPINE AEROTECH LP	L0171
3	12	Ø.3125-18 x 2.250 x 2.250	BOLT, ROUND HEAD, SQUARE NECK	ASTM A307 GRADE A	SEE SPEC	ASME B18.5	ZINC PLATED	SOURCE AS REQUIRED	NA
4	24	Ø.3125-18, STYLE NE	NUT, HEX, SELF LOCKING	ASME B18.16.6 GRADE N2	SEE SPEC	ASME B18.16.6	ZINC PLATED	SOURCE AS REQUIRED	NA
5	6	AAL-390-012-002	CAP, DETAIL	NA	NA	NA	SEE SPEC	SEE NOTES	L0171
6	6	AAL-390-012-003	CAP, DETAIL	NA	NA	NA	SEE SPEC	SEE NOTES	L0171
7	6	AAL-390-011-001	STRAP, ASSY	NA	NA	NA	NA	ALPINE AEROTECH LP	L0171
8	12	MS15795-812	WASHER, FLAT	SEE SPEC	SEE SPEC	MS15795	SEE SPEC	SOURCE AS REQUIRED	NA
9	12	NAS1401-5C3	WASHER, RADIUS	SEE SPEC	SEE SPEC	NAS1401	SEE SPEC	SOURCE AS REQUIRED	NA
10	12	Ø.3125-18 x 2.500 x 2.500	BOLT, ROUND HEAD, SQUARE NECK	ASTM A307 GRADE A	SEE SPEC	ASME B18.5	ZINC PLATED	SOURCE AS REQUIRED	NA
3	11	AR	C83317	TORQUE LACQUER	DYKEM CROSS CHECK	SEE MFR	SEE MFR	YELLOW	ITW PRO BRANDS	1QZC4