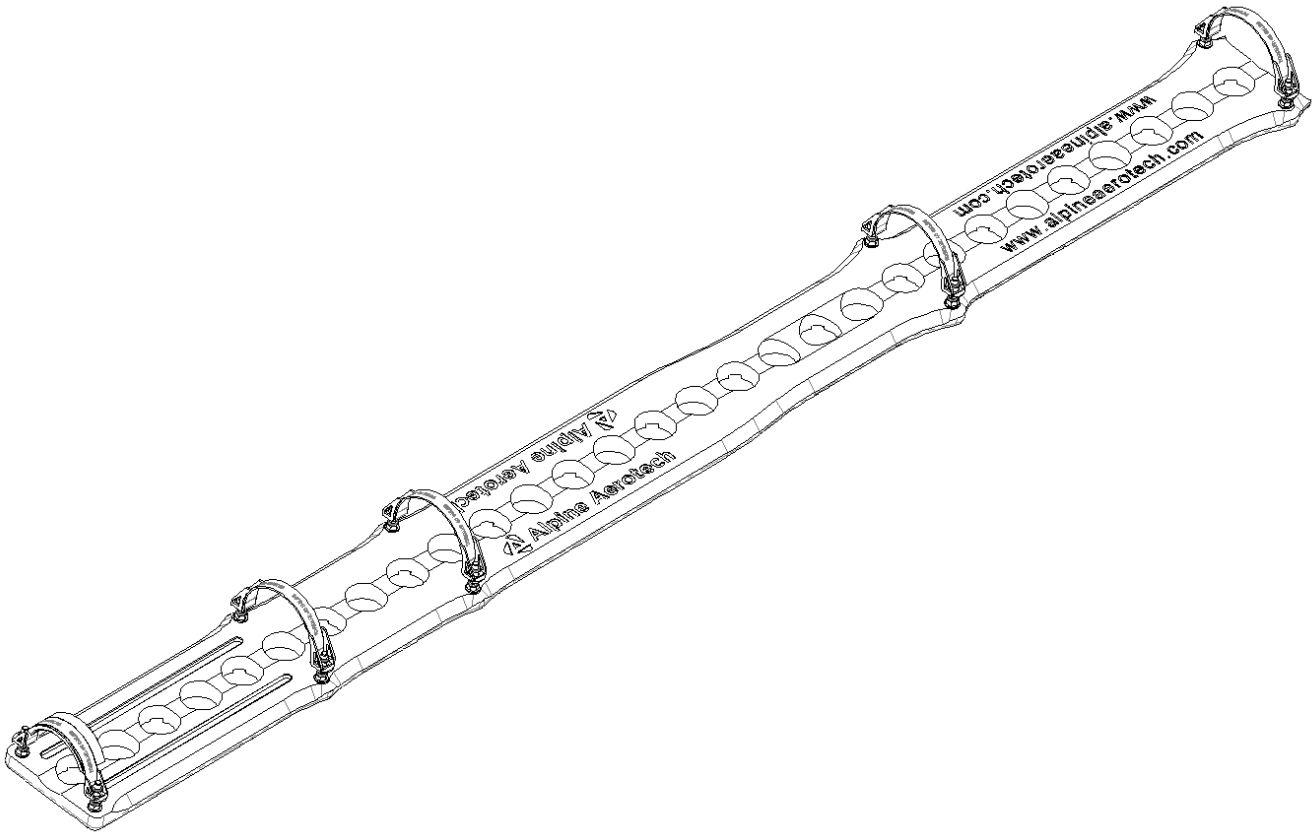
Alpine Aerotech
www.alpineaerotech.com

1260 Industrial Road, West Kelowna, B.C., Canada V1Z 1G5
Phone: (250) 769-6344 Fax: (250) 769-6303
info@alpineaerotech.com



TRACTION PAW, ASSY
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

1260 Industrial Road, West Kelowna, B.C., Canada V1Z 1G5
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info@alpineaerotech.com

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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 Traction Paw, Kit as defined in Alpine Aerotech LP authority dataset AAL-490-020-001.

- In soft terrain landing situations (i.e. tundra, snow and sand) where the skid tubes can sink into the landing area, The Traction Paw, Kit provides increased floatation and damage tolerance.

- When installed, the Traction Paw, Kit provides additional flotation to the skid gear in the center of the aircraft's C of G, therefore increasing stability and flotation.

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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-429-MM, for the chapter(s) and section(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, Chapter 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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Phone: (250) 769-6344 Fax: (250) 769-6303
info@alpineaerotech.com

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 5-14, 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 400 Hour/12 Month Inspections.

5. Perform 400 Hour/12 Month Inspections every 400 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.

1260 Industrial Road, West Kelowna, B.C., Canada V1Z 1G5
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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 all items in the Traction Paw, Kit for general condition.

ii. Perform a General Inspection on all items in the Traction Paw, Kit 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 400 hour/12-month inspection.

2. 400 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, materials and finishes in the Traction Paw, Kit for evidence of corrosion, cracks and damage.

ii. Perform a Detailed Inspection on all items in the Traction Paw, Kit for evidence of excessive wear.

iii. Perform a Detailed Inspection on all items, materials and finishes in the Traction Paw, Kit for proper integrity and condition.

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

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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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info@alpineaerotech.com

Section 3 Installation & Removal Instructions

Applicability

The Traction Paw, Kit (AAL-490-020-001) is applicable to all serial numbers, equipped with standard (low) landing gear only.

Weight & Balance

Part Number	Description	Weight	Long. Arm	Lat. Arm
AAL-490-020-001	Traction Paw, Kit	27.07*	213.30	.000
		12.27 (Kg)	*5.41 (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 Advisory Circular AC 43.13-1 and AC 43.13-2 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 4: Illustrated Parts Breakdown for the part numbers of the item(s) referenced within this section.

Installation Notes

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

△2 Apply Torque Lacquer (Item 12) or equivalent, to Nut, Hex, Self-locking (Item 4) and Bolt, Round Head, Square Neck (Item 5) common to Strap, Assys only (Items 8, 9, & 10) per manufacturer's recommendations.

1260 Industrial Road, West Kelowna, B.C., Canada V1Z 1G5
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Installation Instructions – Common

NOTE: LHS installation shown, RHS opposite.

1. Install the supplied hardware on the Traction Paw, Detail (Item 1) as shown. Reference Figure 1.

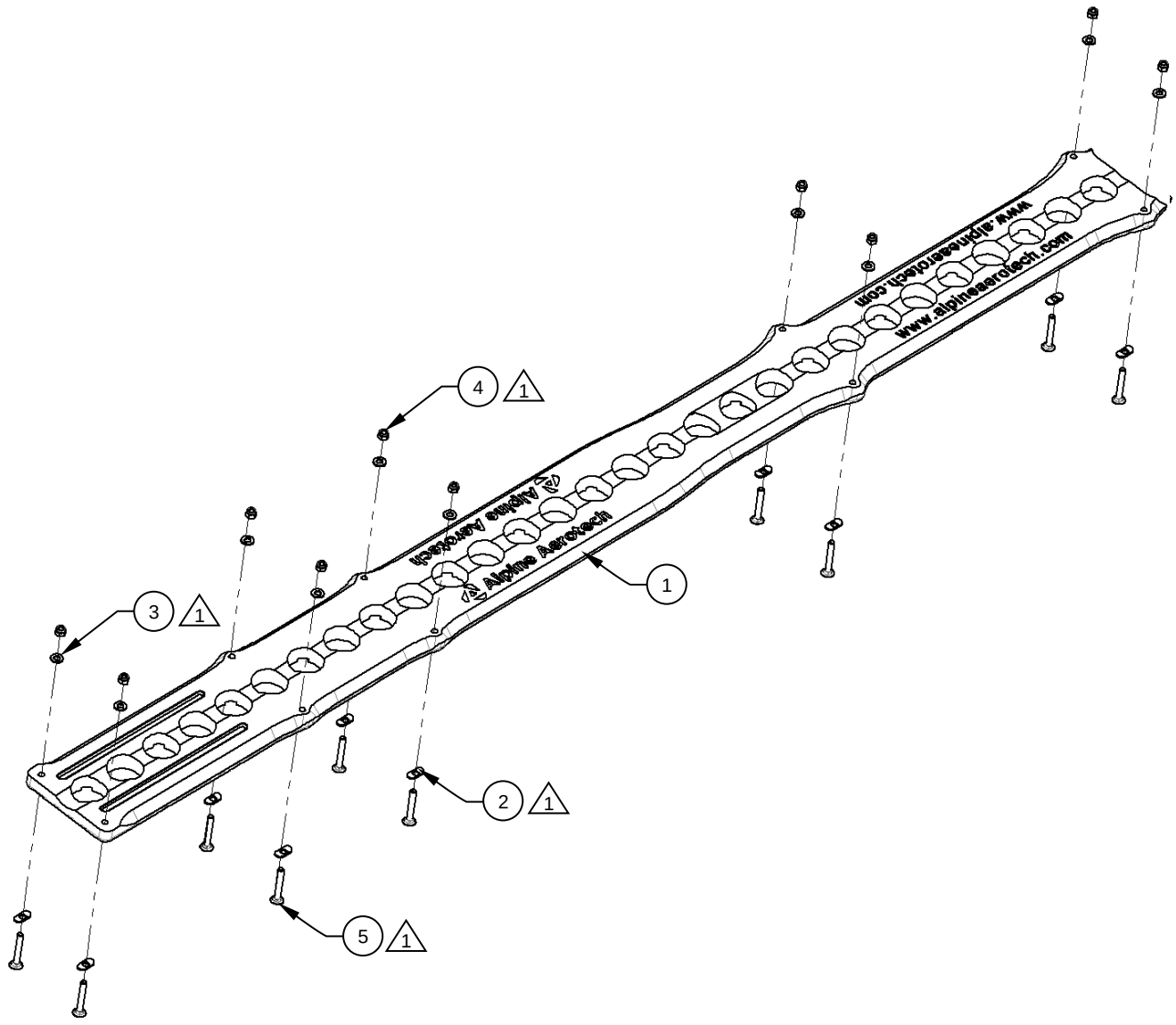

Figure 1
Typical Hardware Installation

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Installation Instructions – Climbing Iron Nylatron Installed

1. Raise the aircraft so the Traction Paw, Detail (Item 1) can be slid under the skid tube. Reference Figure 2.

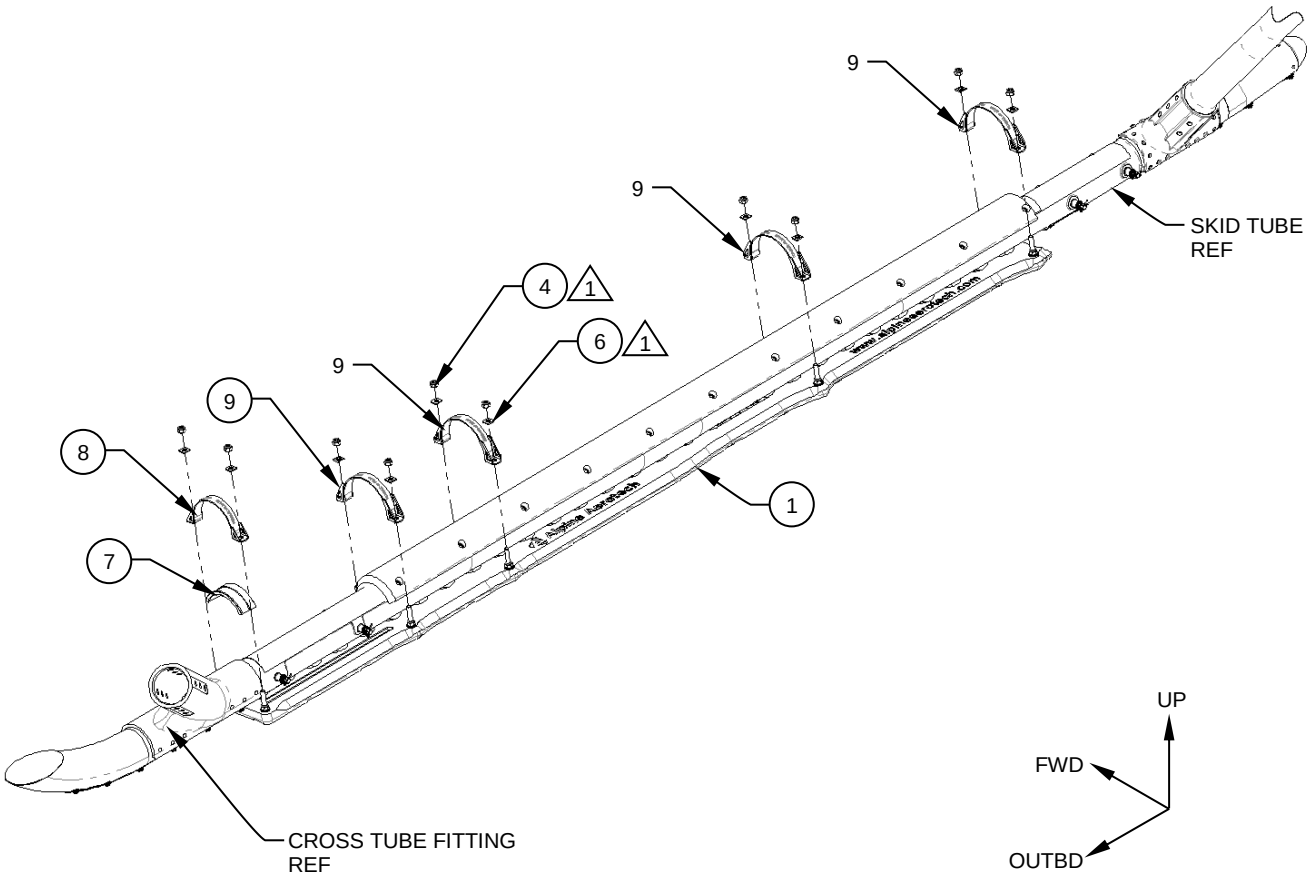

Figure 2
RHS Shown
LHS Opposite

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Phone: (250) 769-6344 Fax: (250) 769-6303
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Installation Instructions - Climbing Iron Nylatron Installed (cont.)

2. Once the Traction Paw, Detail (Item 1) is under the skid tube in its approximate location, place the Cap, Detail (Item 7) & Strap, Assy's (Items 8, 9) on their corresponding bolts. Reference Figure 2.

   NOTE: Ensure the Cap, Detail (Item 7) & Strap, Assy (Items 8) are oriented so that the Cap, Detail sits on both the cross-tube fitting and the skid tube. Reference Figure 6.

3. Install the supplied Washer (Item 6) and Nut (Item 4) on each bolt. Reference Figures 2 & 3.

   NOTE: Ensure the radius edge on the Washer (Item 6) is oriented down and towards the skid tube. Reference Figure 3.

   NOTE: A "thin-wall" socket may be required to adequately engage the Nut (Item 4).

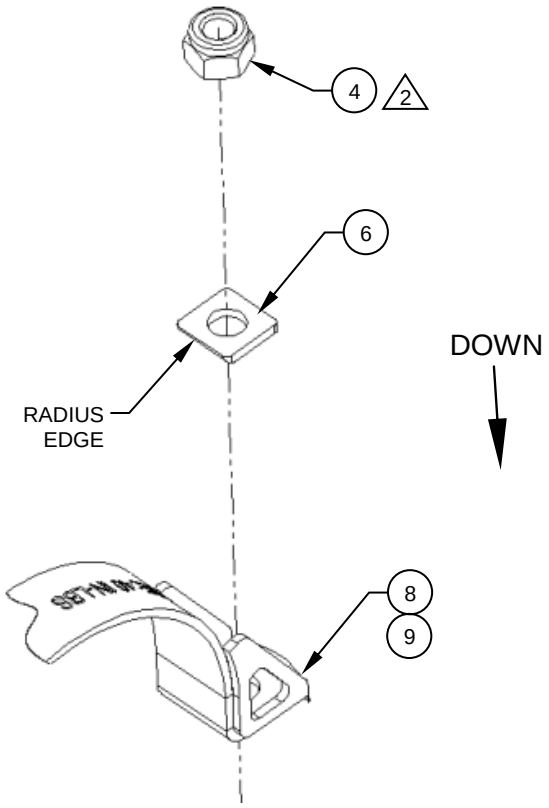

Figure 3

CAUTION: Do **NOT** apply full torque to the fasteners at this stage while the aircraft is raised off the ground. Only apply minimal torque to snug-up the Traction Paw, Detail (Item 1).

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Installation Instructions - Climbing Iron Nylatron Installed (cont.)

4. Lower the aircraft onto the Traction Paw, Details (Item 1) and torque the fasteners equally to 40 in/lbs. (plus tare torque). Reference Figure 3.

   CAUTION: Before applying final torque, ensure the Cap, Detail (Item 7) is oriented so that the Cap, Detail sits on both the cross-tube fitting and the skid tube. Reference Figure 6.

5. Installation complete.

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

7. Update the aircraft logbook for the installation of the Traction Paw, Kit.

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Phone: (250) 769-6344 Fax: (250) 769-6303
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Installation Instructions – Climbing Iron Nylatron Installed (*Not Installed*)

1. Raise the aircraft so the Traction Paw, Detail (Item 1) can be slid under the skid tube. Reference Figure 4.

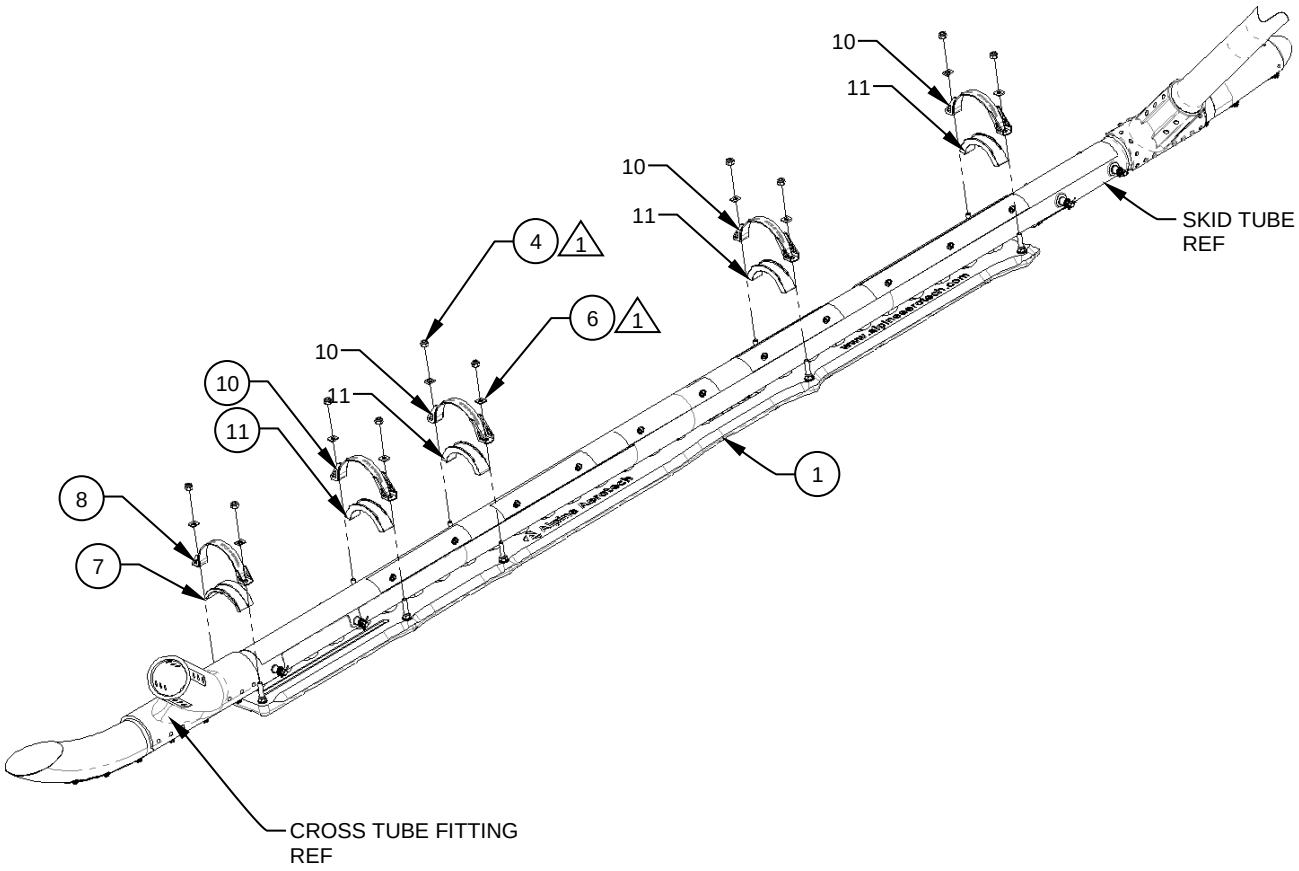

Figure 4

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Installation Instructions – Climbing Iron Nylatron Installed (*Not Installed*) (Cont.)

2. Once the Traction Paw, Detail (Item 1) is under the skid tube in its approximate location, place the Cap, Details (Items 7 & 11) & Strap, Assy's (Items 8, 10) on their corresponding bolts. Reference Figure 5.

   NOTE: Ensure the Cap, Detail (Item 7) & Strap, Assy (Items 8) are oriented so that the Cap, Detail sits on both the cross-tube fitting and the skid tube. Reference Figure 6.

3. Install the supplied Washer (Item 6) and Nut (Item 4) on each bolt. Reference Figures 4 & 5.

   NOTE: Ensure the radius edge on the Washer (Item 6) is oriented down and towards the skid tube. Reference Figure 5.

   NOTE: A "thin-wall" socket may be required to adequately engage the Nut (Item 4).

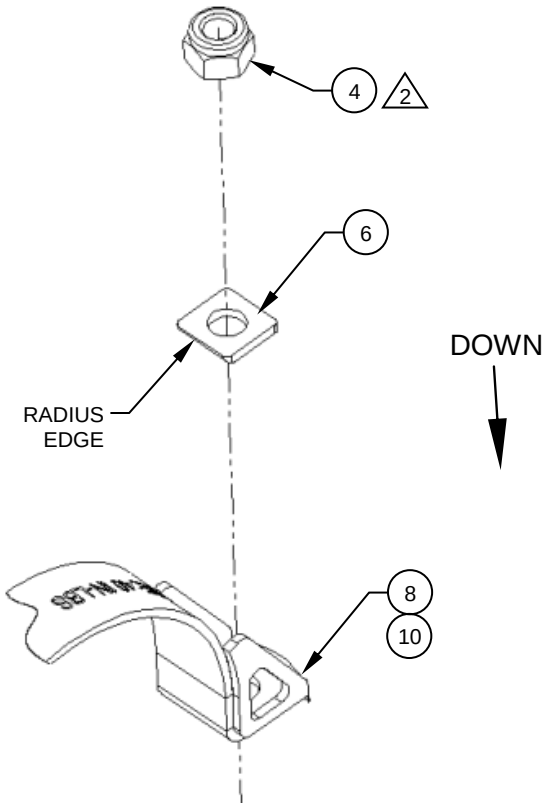

Figure 5

CAUTION: Do **NOT** apply full torque to the fasteners at this stage while the aircraft is raised off the ground. Only apply minimal torque to snug-up the Traction Paw, Detail (Item 1).

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Installation Instructions – Climbing Iron Nylatron Installed (*Not Installed*) (Cont.)

4. Lower the aircraft onto the Traction Paw, Details (Item 1) and torque the fasteners equally to 40 in/lbs. (plus tare torque). Reference Figure 3.

   CAUTION: Before applying final torque, ensure the Cap, Detail (Item 7) is oriented so that the Cap, Detail sits on both the cross-tube fitting and the skid tube. Reference Figure 6.

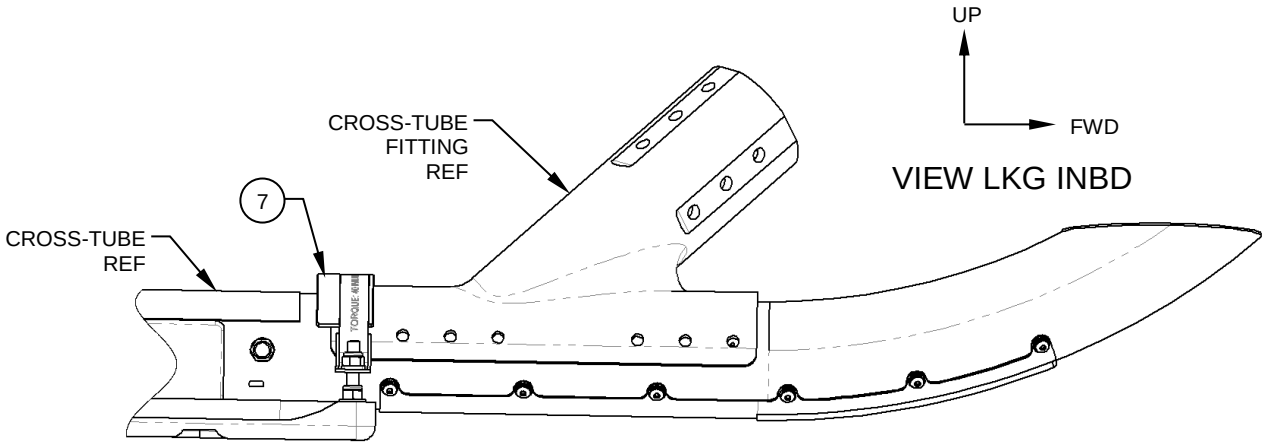

Figure 6

5. Installation complete.

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

7. Update the aircraft logbook for the installation of the Traction Paw, Kit.

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Removal Instructions

1. As there are no special considerations or additional steps to remove the Traction Paw, Kit for either inspections, or mission configuration, the removal of the Traction Paw, 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 Traction Paw, Kit.

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info@alpineaerotech.com

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 Not shown and not supplied. Procure locally.

1260 Industrial Road, West Kelowna, B.C., Canada V1Z 1G5
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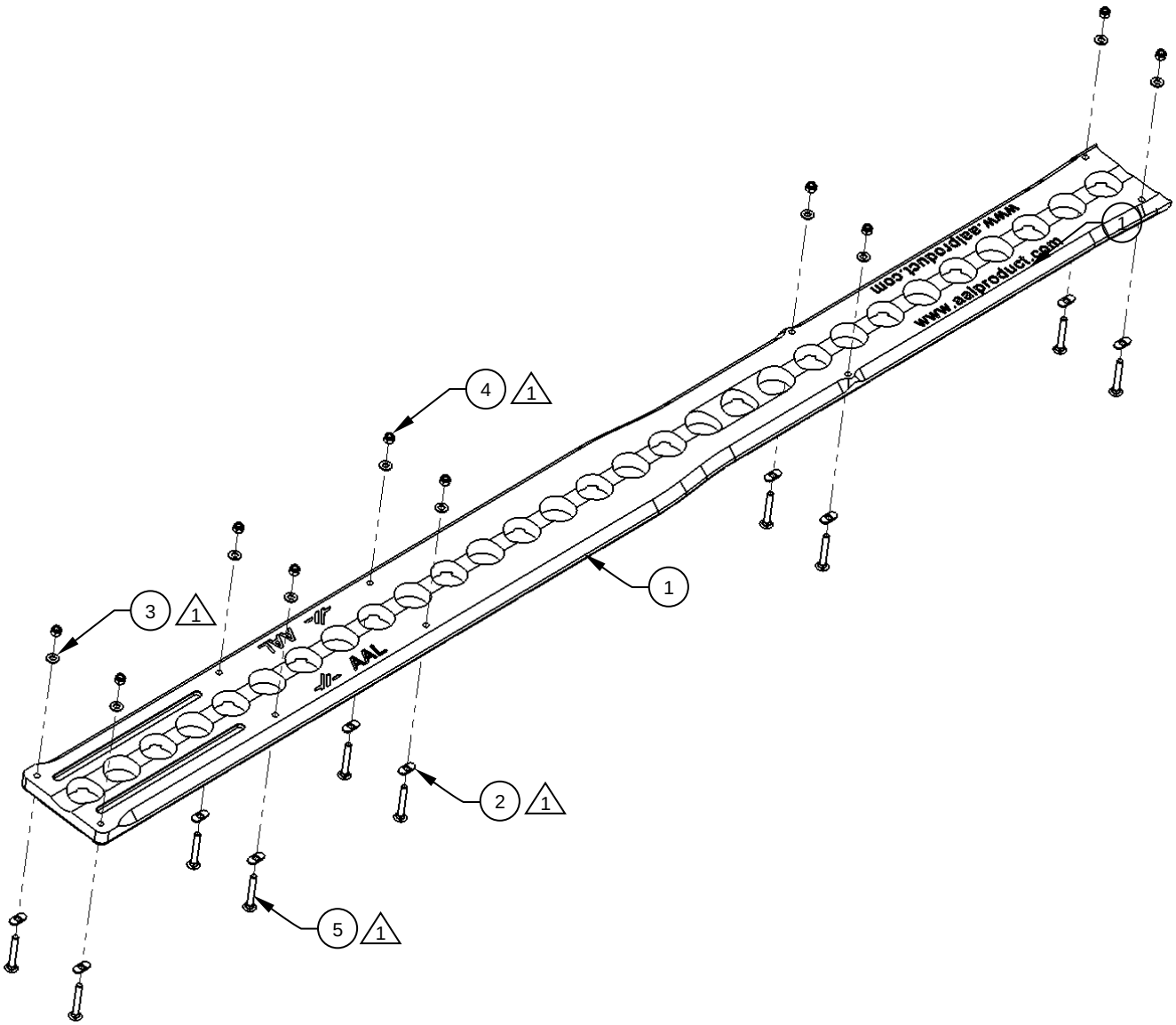
info@alpineaerotech.com

Illustrated Parts Breakdown (cont.)



Traction Paw, Kit
Shown
(LHS only)

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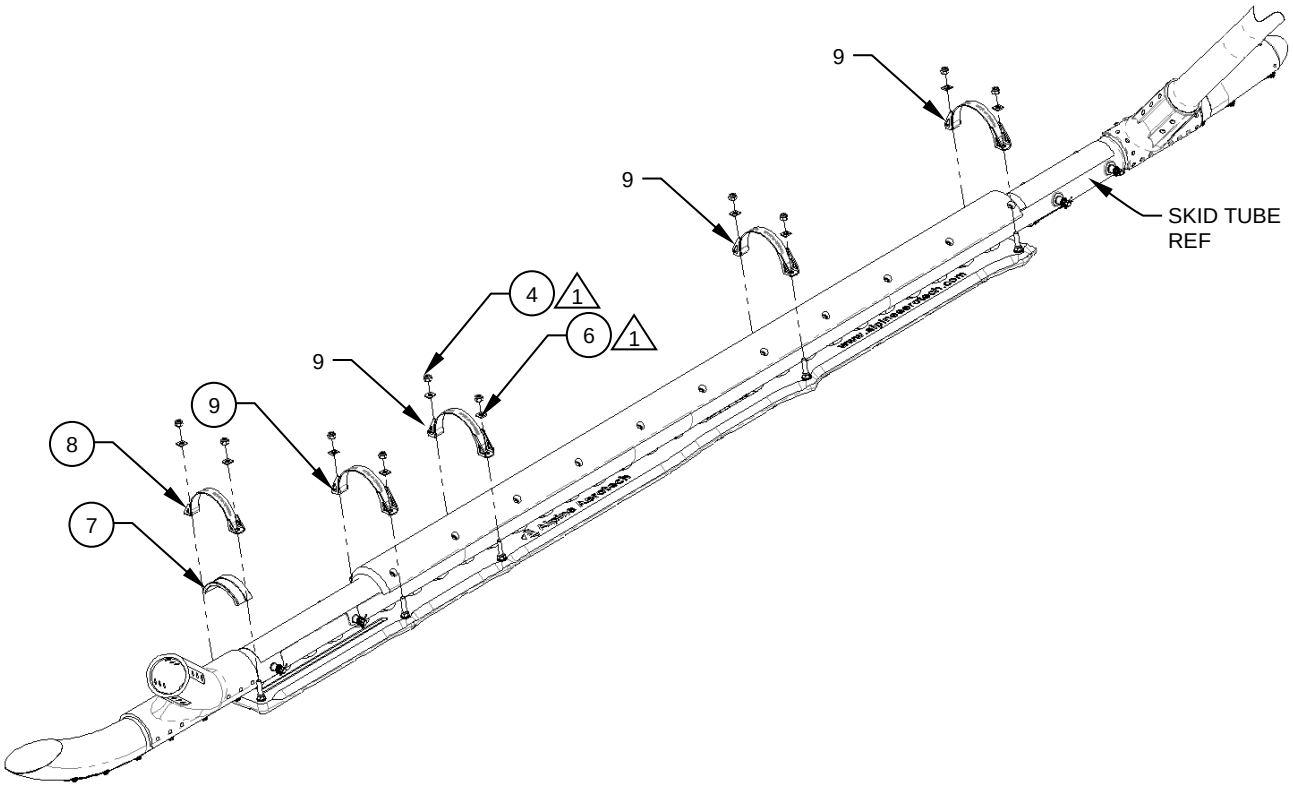
info@alpineaerotech.com

Illustrated Parts Breakdown (cont.)



Traction Paw, Kit
Nylatron Installed
Shown
(RHS only)

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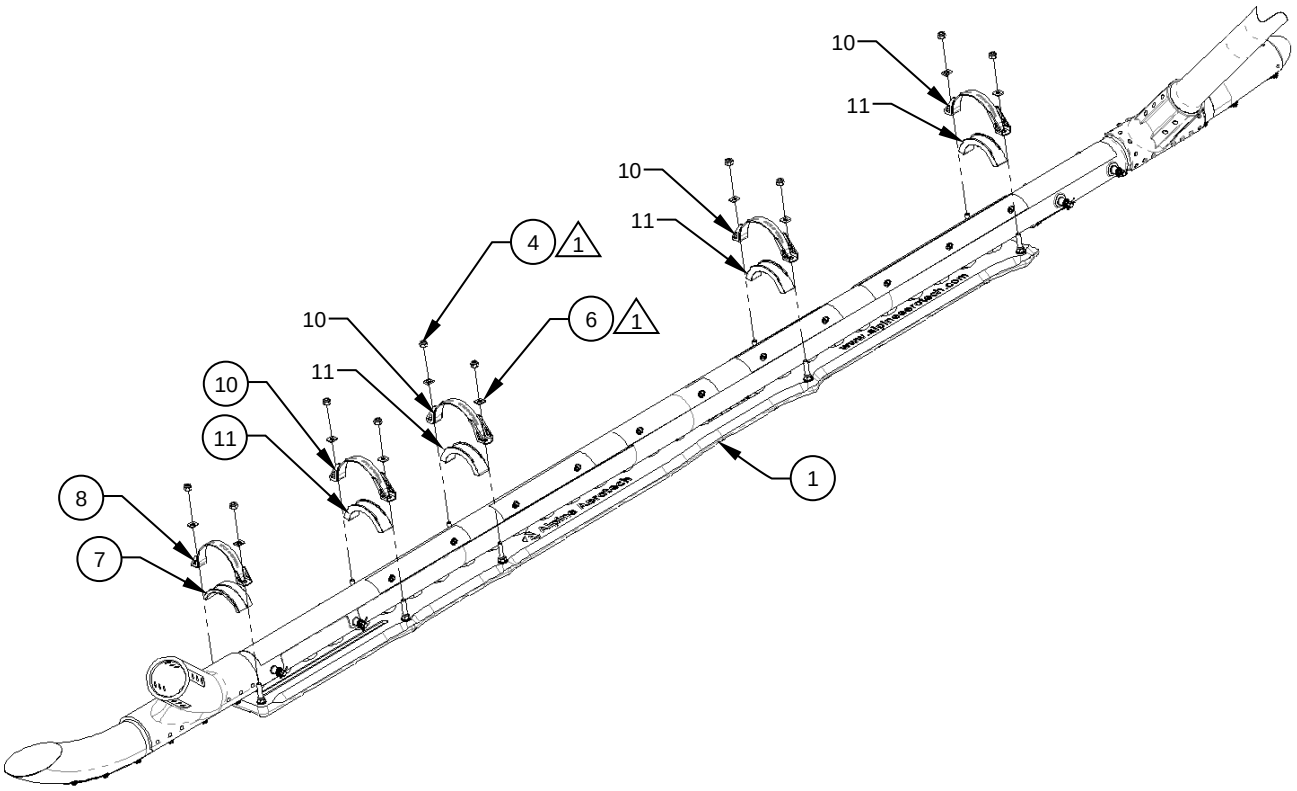
info@alpineaerotech.com

Illustrated Parts Breakdown (cont.)



Traction Paw, Kit
Nylatron **NOT** Installed
Shown
(RHS only)

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Illustrated Parts Breakdown (cont.)

ITEM	QTY	NUMBER	DESCRIPTION	MATERIAL	REF STOCK SIZE	SPEC	FINISH	MANUFACTURER	NCAGEC
-	-	AAL-490-020-001	TRACTION PAW, ASSY						
1	2	AAL-490-022-001	TRACTION PAW, DETAIL	NA	NA	NA	NA	ALPINE AEROTECH LP	L0171
2	20	AAL-290-042-006	TAB, DETAIL	NA	NA	NA	NA	ALPINE AEROTECH LP	L0171
3	20	MS15795-812	WASHER, FLAT	SEE SPEC	SEE SPEC	NASM15795	SEE SPEC	SOURCE AS REQUIRED	NA
4	40	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	20	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
6	20	NAS1401-5C3	WASHER, RADIUS	SEE SPEC	SEE SPEC	NAS1401	SEE SPEC	SOURCE AS REQUIRED	NA
7	2	AAL-490-022-007	CAP, DETAIL	NA	NA	NA	NA	ALPINE AEROTECH LP	L0171
8	2	AAL-490-011-004	STRAP, ASSY	NA	NA	NA	NA	ALPINE AEROTECH LP	L0171
9	8	AAL-490-021-001	STRAP, ASSY	NA	NA	NA	NA	ALPINE AEROTECH LP	L0171
10	8	AAL-490-021-002	STRAP, ASSY	NA	NA	NA	NA	ALPINE AEROTECH LP	L0171
11	8	AAL-490-022-006	CAP, DETAIL	NA	NA	NA	NA	ALPINE AEROTECH LP	L0171
12	AR	C83317	TORQUE LACQUER	DYKEM CROSS CHECK	SEE MFR	SEE MFR	YELLOW	ITW PRO BRANDS	1QZC4