

# TRACTION PAW, KIT INSTALLATION INSTRUCTIONS

**MODELS: BELL 429** 

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 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 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	<u>Description</u>	<u>Weight</u>	Long. Arm	Lat. Arm
AAL-490-020-001	Traction Paw, Kit	27.07*	213.30	.000
		12.27 (Kg	) 5.41 (m)	.00 (m)

 <sup>\*</sup> 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**

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

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

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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.

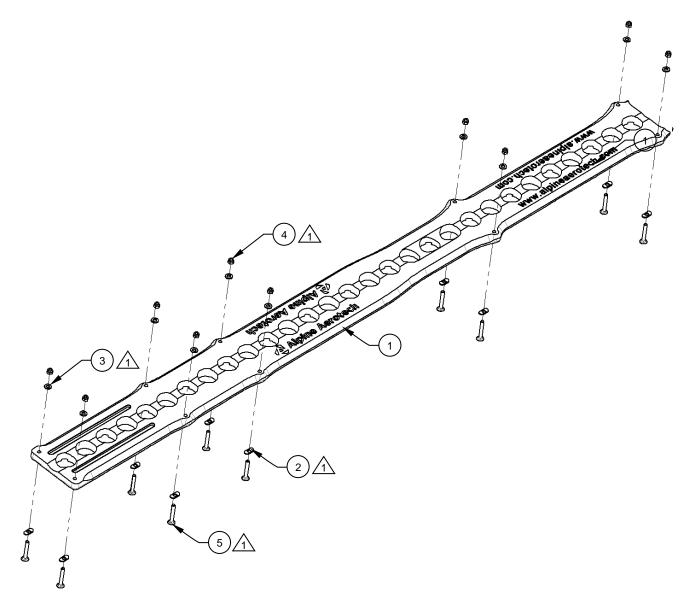


Figure 1
Typical Hardware
Installation

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#### <u>Installation Instructions – Climbing Iron Nylatron Installed</u>

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

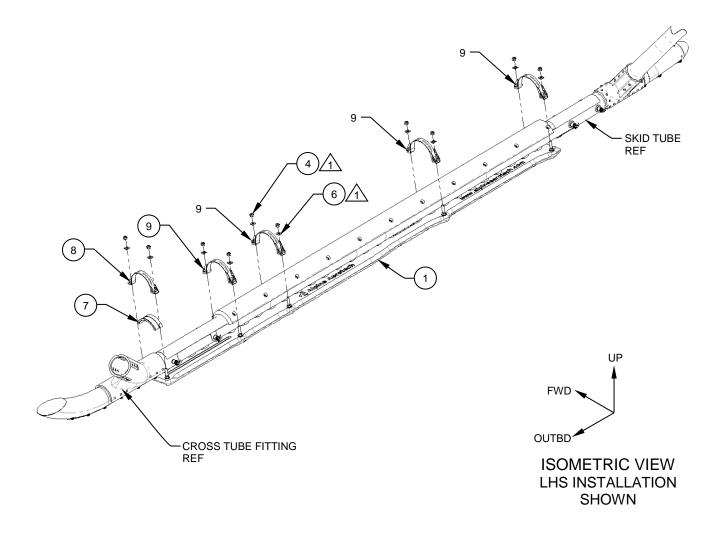


Figure 2 **RHS Shown** LHS Opposite

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## 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).

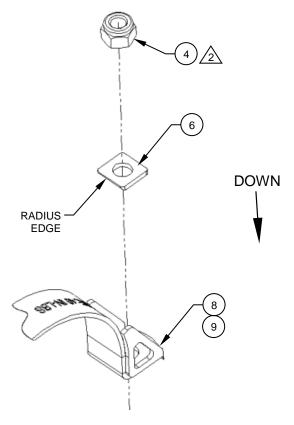


Figure 3

**CAUTION:** Do <u>NOT</u> apply full torque to the fasteners at this stage while the aircraft is raised off the ground. Only apply <u>minimal</u> 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 <u>40</u> 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.

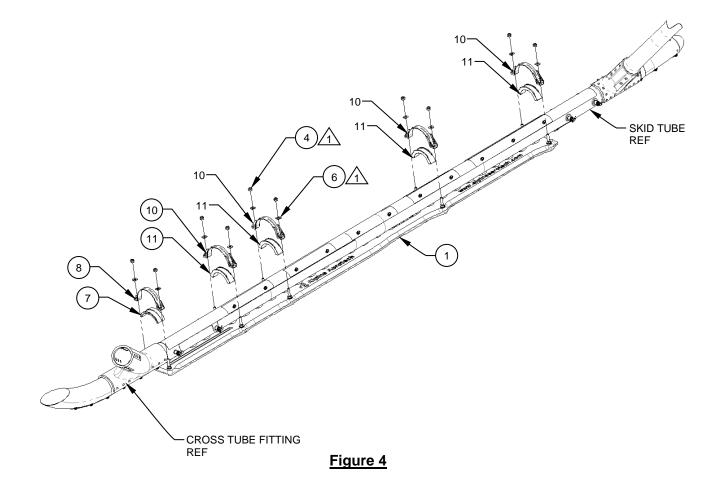
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# <u>Installation Instructions – Climbing Iron Nylatron Installed (Not Installed)</u>

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

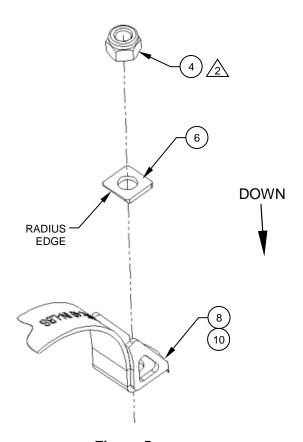


Figure 5

**CAUTION:** Do <u>NOT</u> apply full torque to the fasteners at this stage while the aircraft is raised off the ground. Only apply <u>minimal</u> 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 <u>40</u> 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.

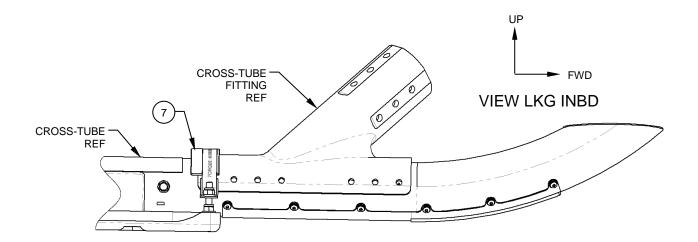


Figure 6

- 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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