


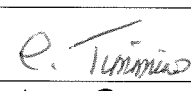
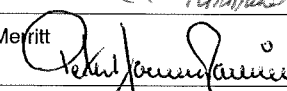


**AIRBUS HELICOPTERS CANADA LIMITED**
**SUBJECT: CARGO PODS INSTALLATION (P/N 130-201214)**

Required maintenance for the Cargo Pod Installation (P/N 130-201214).

**APPLICABILITY :**

 Aircraft with the subject modification embodied in accordance with TCCA STC No. SH14- 31  
 or any relevant foreign approvals.

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INSTRUCTIONS FOR CONTINUED  
AIRWORTHINESS  
CARGO PODS INSTALLATION  
EC 130 T2

TABLES

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**1. GENERAL**

- A. The subject Cargo Pods Installation comprises two pods which provide an increase in cargo bay capacity. The forward opening door allows for easy cargo handling. The Cargo Pods also have a non-slip surface on the top and can support the weight of a person. Refer to Figure 1 for General Layout.

The cargo pods installation consists of the following main components:

- 1) Cargo Pod, RH complete, P/N 130-201244
- 2) Cargo Pod, LH complete, P/N 130-201234

For instructions on the initial installation, refer to IP-AHCA-137.

- B. These Instructions for Continued Airworthiness are applicable to aircraft with the subject modification embodied.

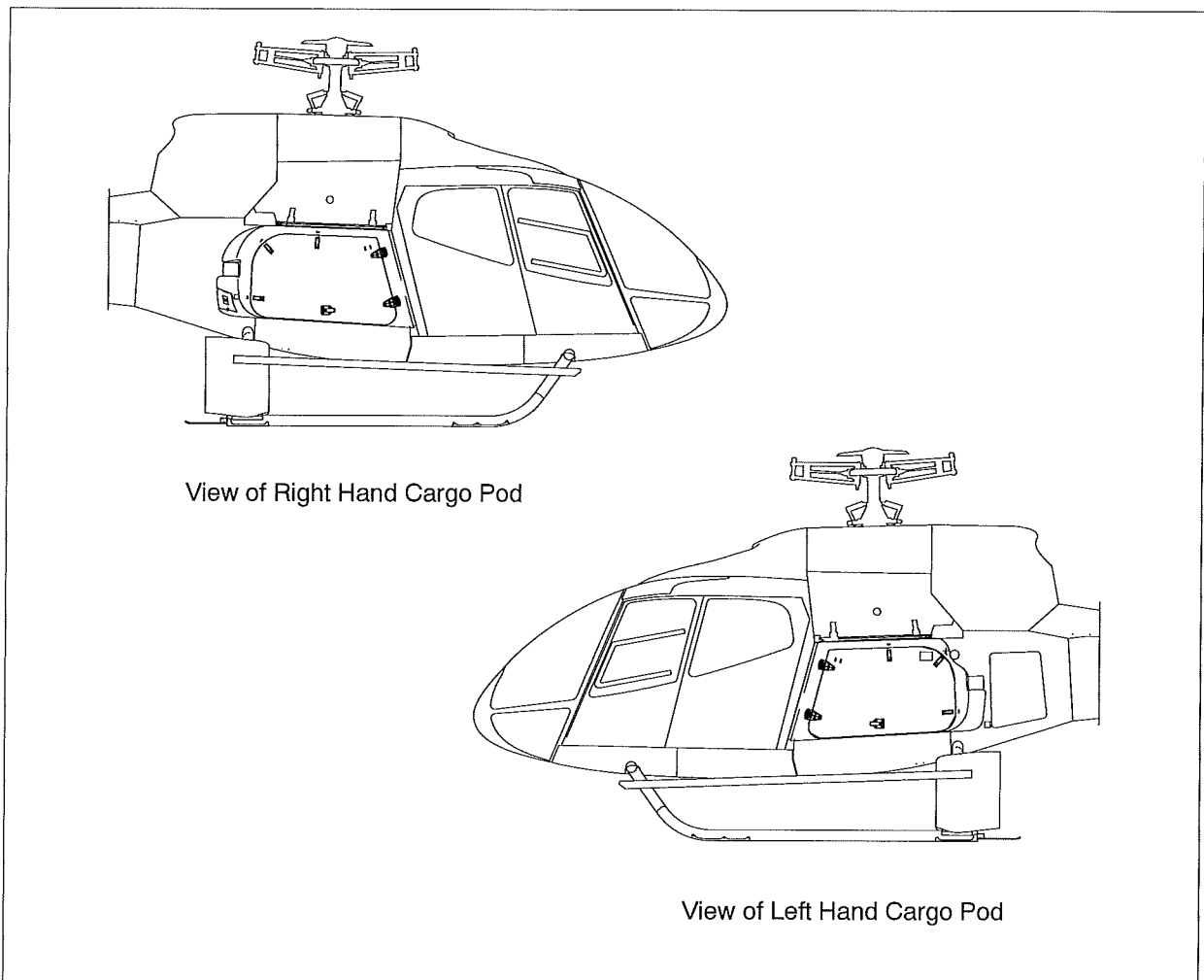
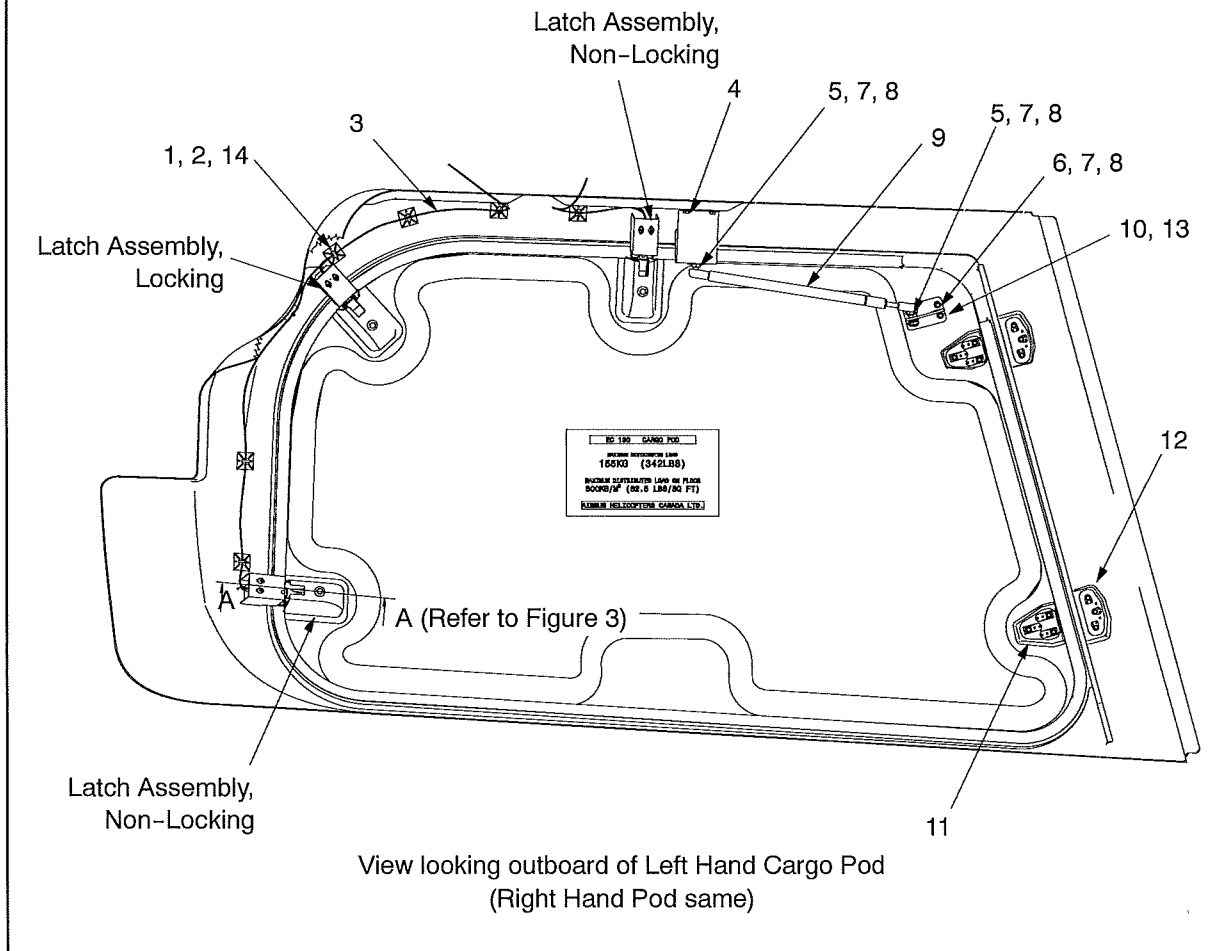


Figure 1 General Layout

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Legend (for Figure 2)
Item Description

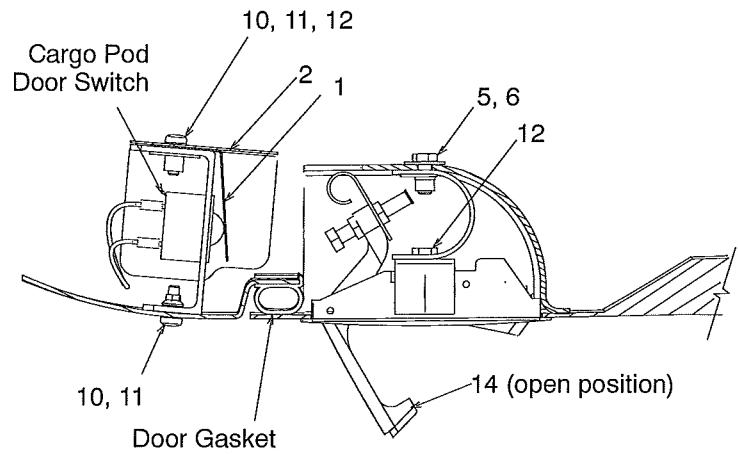
1. Tywrap
2. Tywrap base
3. Pod Harness
4. Bracket
5. Ball Stud
6. Screw
7. Washer
8. Self-Locking Nut
9. Strut Assembly
10. Strut Attach Bracket
11. Backing Plate Assembly
12. Backing Plate Assembly, Forward
13. Sealant (P/N PR 1422-B2)
14. Adhesive Paste (P/N EA9394 or EA 9395 or ALE-3009)


**Figure 2 Left Hand Cargo Pod Door Assembly**

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Legend (for Figure 3)
Item Description

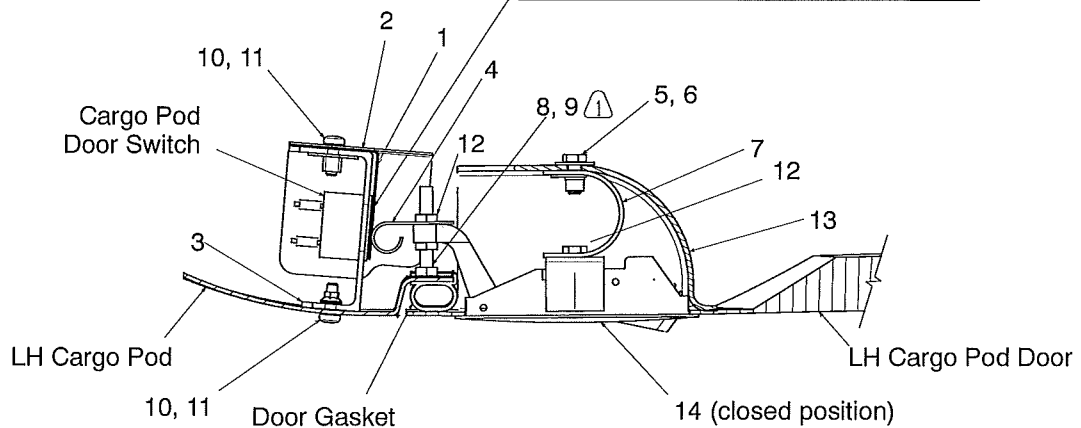
1. Switch Spring
2. Switch Cover
3. Switch Support
4. Switch Contact
5. Bolt
6. Washer
7. Clamp Assembly
8. Latch Screw
9. Jamnut
10. Screw
11. Washer
12. Bolt
13. Mobile Cover
14. Latch Assembly  
(non-locking or locking)


**SECTION A - A**

Left Hand Latch Assembly shown, Typical 3 places


 Cargo Pod Door latch shown in open position  
 (Right Hand door latch assembly same)

When latch is closed, adjust the switch contact, item 4, to ensure that the spring, item 1, compresses the cargo pod door switch


**SECTION A - A**

Left Hand Door Latch Assembly shown, Typical 3 places

 Cargo Pod Door latch shown in closed position  
 (Right Hand door latch assembly same)

 Adjust latch screw, item 8, and jamnut, item 9, to ensure even seal contact around perimeter of door and cargo pod flange.

**NOTE:**
**Figure 3 Cargo Pod Door Switch and Door Latch Assembly**

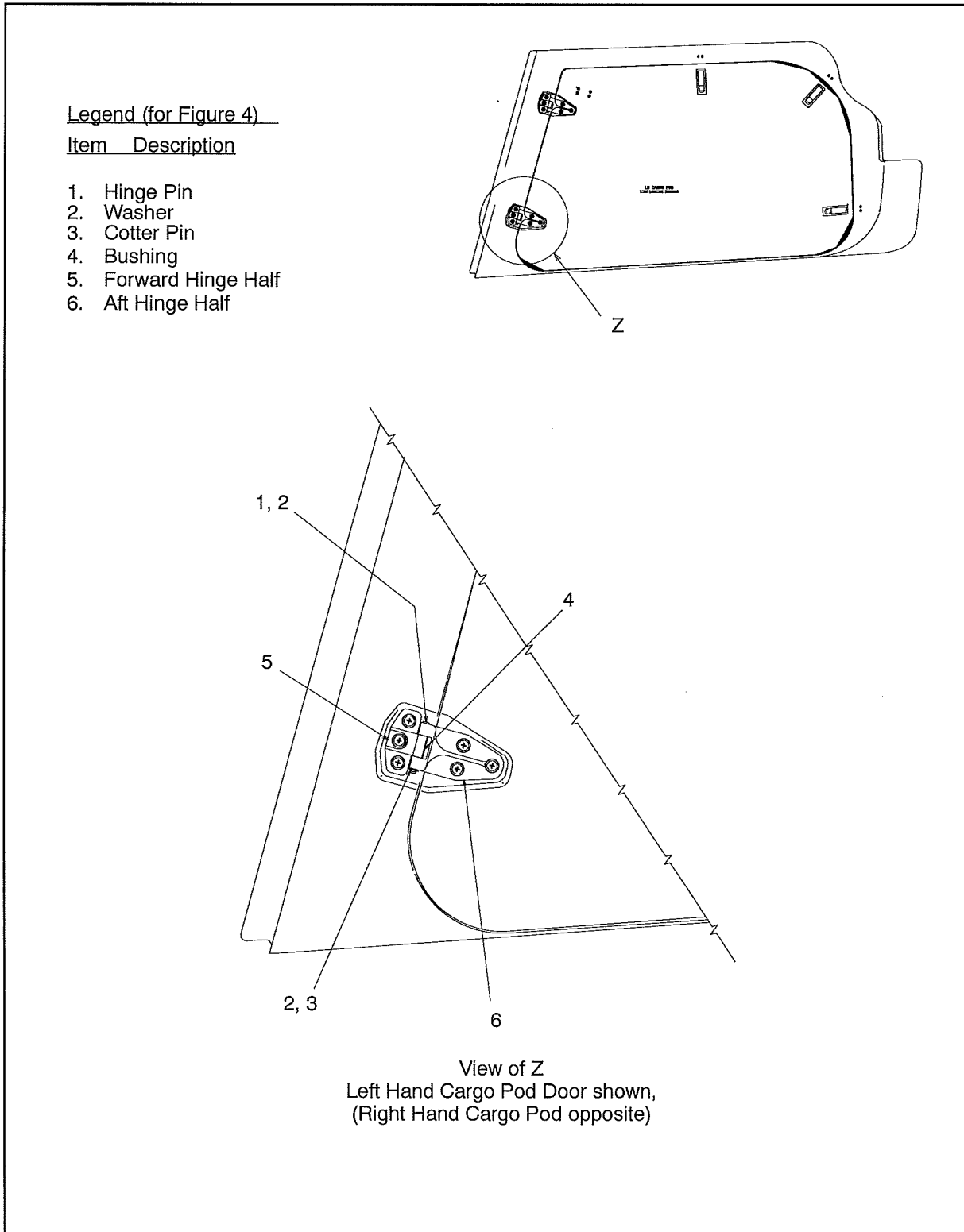


Figure 4 Cargo Pod Door Hinge Assembly

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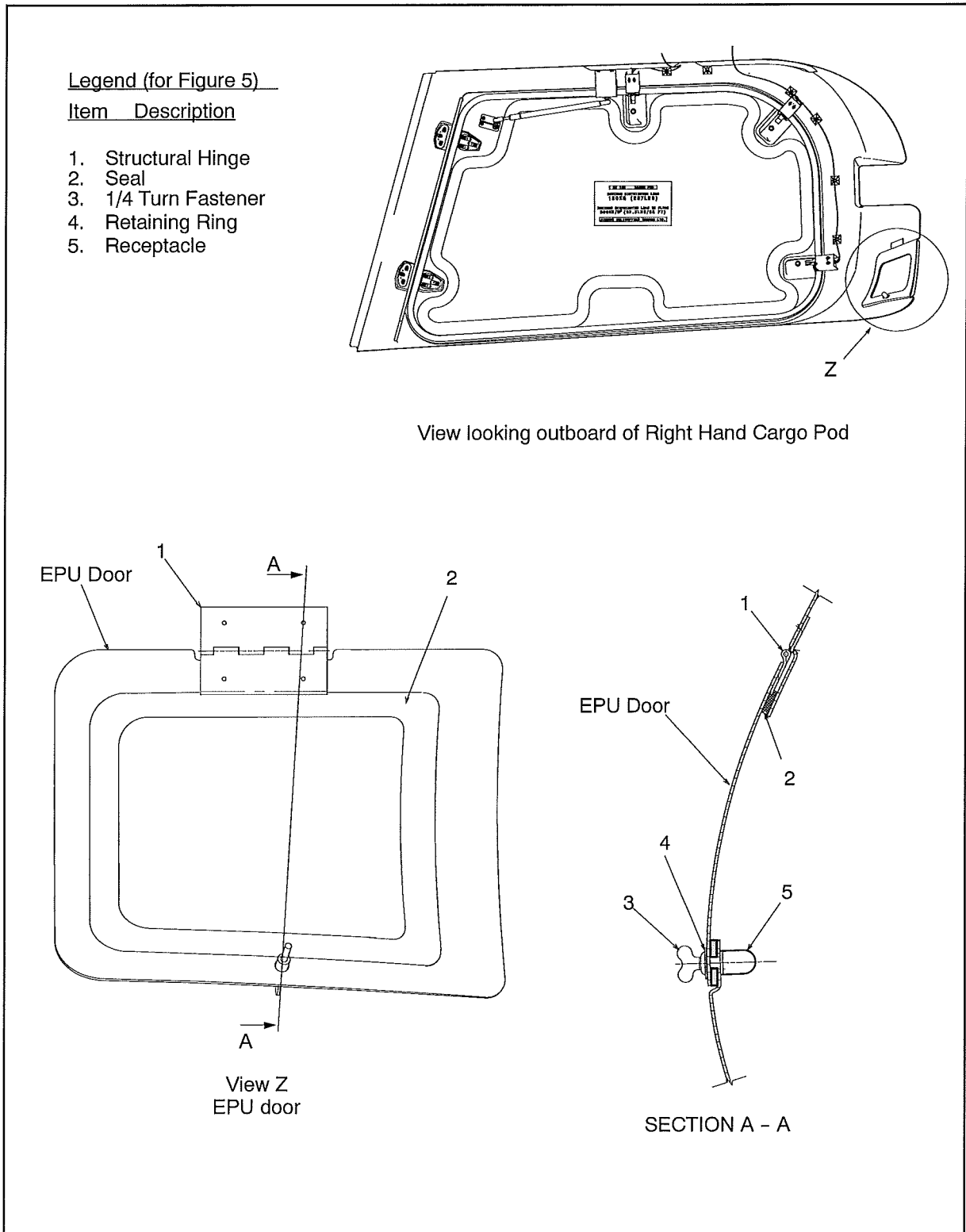
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Figure 5 Right Hand Cargo Pod EPU Door

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**C. REFERENCES**

DOCUMENT	DOCUMENT TITLE
AC 43.13	Advisory Circular No. 43.13-1B
IP-AHCA-137	Installation Procedure, Cargo Pods Installation
AMM	Aircraft Maintenance Manual
IPC	Illustrated Parts Catalog
MTC	Standard Practices Manual

**D. ABBREVIATIONS & DEFINITIONS**

ABBREVIATION	DEFINITION
Acc'd	Accepted
AH	Airbus Helicopters (France)
AHCA	Airbus Helicopters Canada Limited
App'd	Approved
A/W	Airworthiness
D	Days
DWG	Drawing
ELT	Emergency Locator Transmitter
EPU	External Power Unit
FAA	Federal Aviation Authority
FH	Flight Hours
FT	Feet
IMP	Imperial
KG	Kilogram
LH	Left Hand
M	Months
No.	Number
P/N	Part Number
RH	Right Hand
SQ	Square
STC	Supplemental Type Certificate
TCCA	Transport Canada Civil Authority
V.d.c.	Volts direct current

**E. UNITS OF MEASUREMENT**

ABBREVIATION / SYMBOL	UNIT OF MEASUREMENT
kg	kilogram
lb	pound
m	meter
mm	millimeters
in	inch

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**INSTRUCTIONS FOR CONTINUED  
AIRWORTHINESS  
CARGO PODS INSTALLATION  
EC 130 T2**

**2. 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. Variations must also be approved.

The Airworthiness Limitations section is FAA approved and specifies inspections and other maintenance required under Sections 43.16 and 91.403 of the Federal Aviation Regulations unless an alternative program has been FAA approved.

The airworthiness limitations section is approved and variations must also be approved.

No airworthiness limitations associated with this installation.

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**3. CONTROL AND OPERATION**

Control and operation of the aircraft remains unchanged.

**4. INSPECTION SCHEDULE AND MAINTENANCE ACTION**
**NOTE:** Use torque per MTC, Chapter 20.02.05.404, unless otherwise specified.

**4.1. INSPECTION SCHEDULE**

4.1.1. Every 150 FH or 12 M (Margins: 15 FH or 36 D) to coincide with the 150 FH or 12 M helicopter inspection), whichever occurs first:

ITEM	INSPECTION OR MAINTENANCE WORK	CORRECTIVE ACTION
A	- Visually inspect LH and RH Cargo Pods Installation for: a. general condition	a. If cracking, delamination or debonding is found contact AHCA.
B	- Visually inspect sealant between left hand and right hand cargo pods and airframe for: a. deterioration	a. Clean area and reapply sealant, P/N PR1422-B2 in accordance with MTC, Chapter 20.05.01.206.
C	- Check screws securing the door rail on the left hand and right hand cargo pods, shown in Figure 1 for: a. secure installation	a. Tighten screws as required.
D	- Check both left hand and right hand sliding doors for: a. functionality	a. Make any necessary adjustment to the sliding door in accordance with AMM, Chapter 52-12-01, 5-1.
E	- Visually inspect left hand and right hand strut assemblies, item 9 shown in Figure 2 for: a. secure installation	a. Ensure that the door strut is connected correctly by holding the door in open position.
F	- Test left hand and right hand door latches, item 14, shown in Figure 3 for: a. freedom of movement b. proper latching	a. Clean and lubricate to restore freedom of movement. b. Adjust latch screw (item 8) and jam nut (item 9, in Figure 3) as required to ensure adequate seal between the Cargo Pod Door and the door seal.

Table 1 Inspection Schedule and Maintenance Action  
 Every 150 FH or 12 M to coincide with the 150 FH or 12 M helicopter inspection, whichever occurs first  
 (continued on following page)

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**4. INSPECTION SCHEDULE AND MAINTENANCE ACTION (continued)**
**4.1. INSPECTION SCHEDULE (continued)**

4.1.1. Every 150 FH or 12 M (Margins: 15 FH or 36 D) to coincide with the 150 FH or 12 M helicopter inspection), whichever occurs first:

ITEM	INSPECTION OR MAINTENANCE WORK	CORRECTIVE ACTION
G	- Visually inspect door gasket in Figure 3, for: a. condition	a. If cuts or cracks are evident contact AHCA for replacement gasket
H	- Visually inspect door hinge pins, item 3, in Figure 4 for: a. secure installation	a. Ensure that hinge pins are inserted all the way into hinge half. (P/N 1011-12) in accordance with AMM, Chapter 52-31-01, 4-1.
I	- Visually inspect both cotter pins, item 3, in the door hinges, items 6 and 5, shown in Figure 4 for: a. security b. corrosion	a. Secure both cotter pins (item 3) as required. b. No corrosion is allowed. If corrosion is found replace cotter pin (P/N 23310CA020015) in accordance with AMM, Chapter 52-31-01, 4-1
J	- Check door hinge, items 6 and 5 in Figure 4 for: a. security	a. Tighten as required.
K	- Visually inspect seal, item 2, between right hand cargo pod and EPU door in Figure 5 for: a. condition	a. If cuts and cracks are evident, replace seal (P/N SC41-722-12).
L	- Visually inspect placards and markings (refer to Section 10) for: a. legibility b. secure mounting	a. If placards have become illegible, contact AHCA for replacement parts. b. Secure, reattach placards as required.

Table 1 Inspection Schedule and Maintenance Action  
 Every 150 FH or 12 M to coincide with the 150 FH or 12 M helicopter inspection, whichever occurs first

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**5. REPLACEMENT COMPONENTS AND REPAIR / OVERHAUL INFORMATION**

Contact AHCA for replacement parts. No overhaul information required for this installation.

For replacement components or repair information contact:

Airbus Helicopters Canada Limited  
 1100 Gilmore Road, P.O. Box 250  
 Fort Erie, Ontario L2A 5M9 Canada  
 Telephone: (905) 871-7772  
 Telefax: (905) 871-3320  
 www.airbushelicopters.ca

**6. TROUBLESHOOTING**

For electrical system troubleshooting refer to Figures 6 Cargo Pods Installation, Wiring Diagram, Figure 7 Latch Open Warning, LHS, Wiring Diagram and Figure 8 Latch Open Warning, RHS, Wiring Diagram.

No.	Trouble Symptom	Probable Cause	Corrective Action
1	Lamp does not illuminate when cargo door is open.	Failure with Cargo Pod door indicating system	Perform functional tests - Lateral Cargo Hold Door indicating System in accordance with AMM, Chapter 52-31-01, 5-1.
		Failure in Warning/ Caution Panel	Perform functional tests - Warning Caution panel, in accordance with AMM, Chapter 31-51-00, 5-1.
		Faulty switch	Replace switch (P/N 2-5445 or 0544590) and test in accordance with AMM, Chapter 52-31-01,5-1.

Table 2 Troubleshooting Guide

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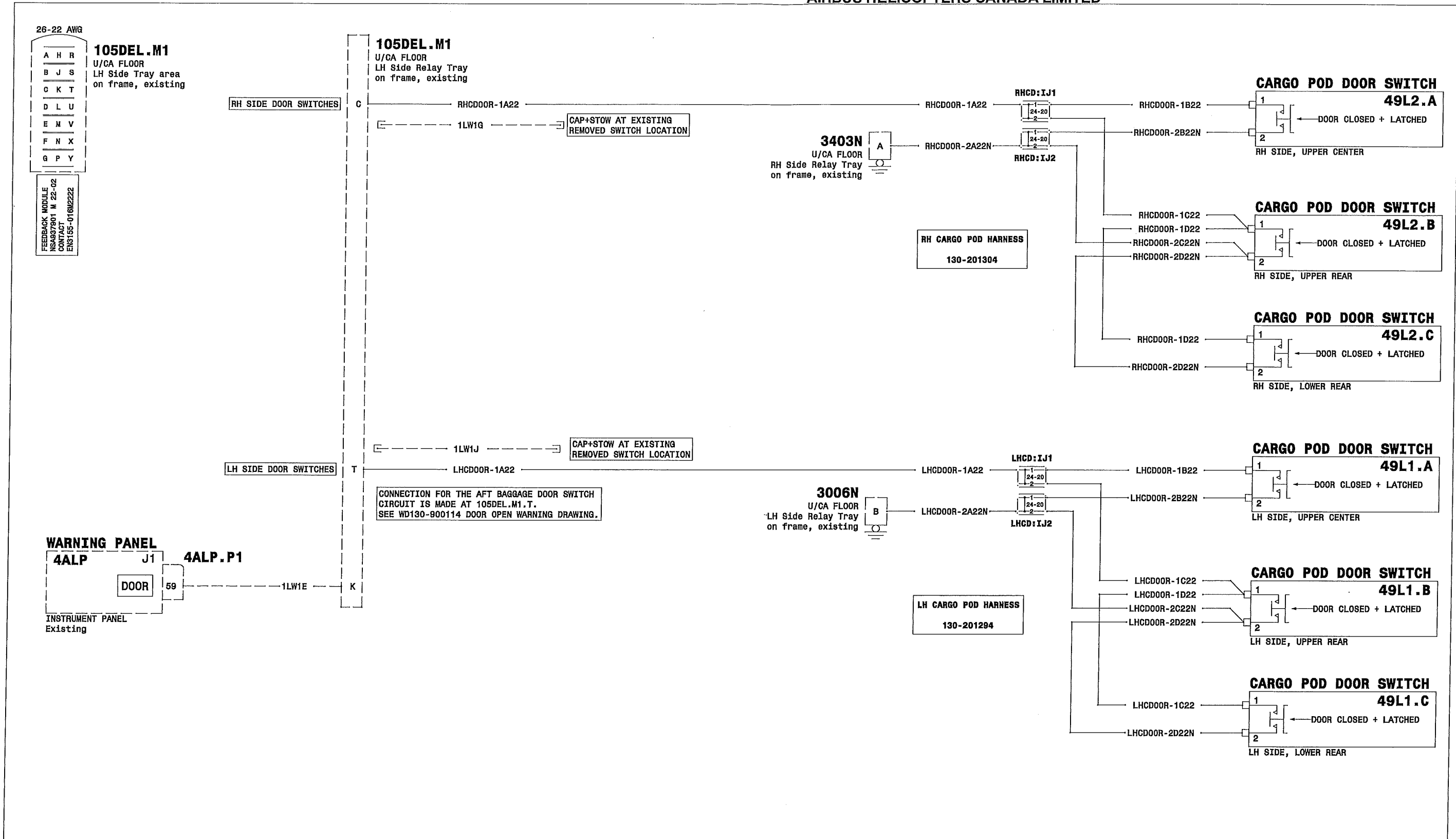


Figure 6 Cargo Pods Installation, Wiring Diagram

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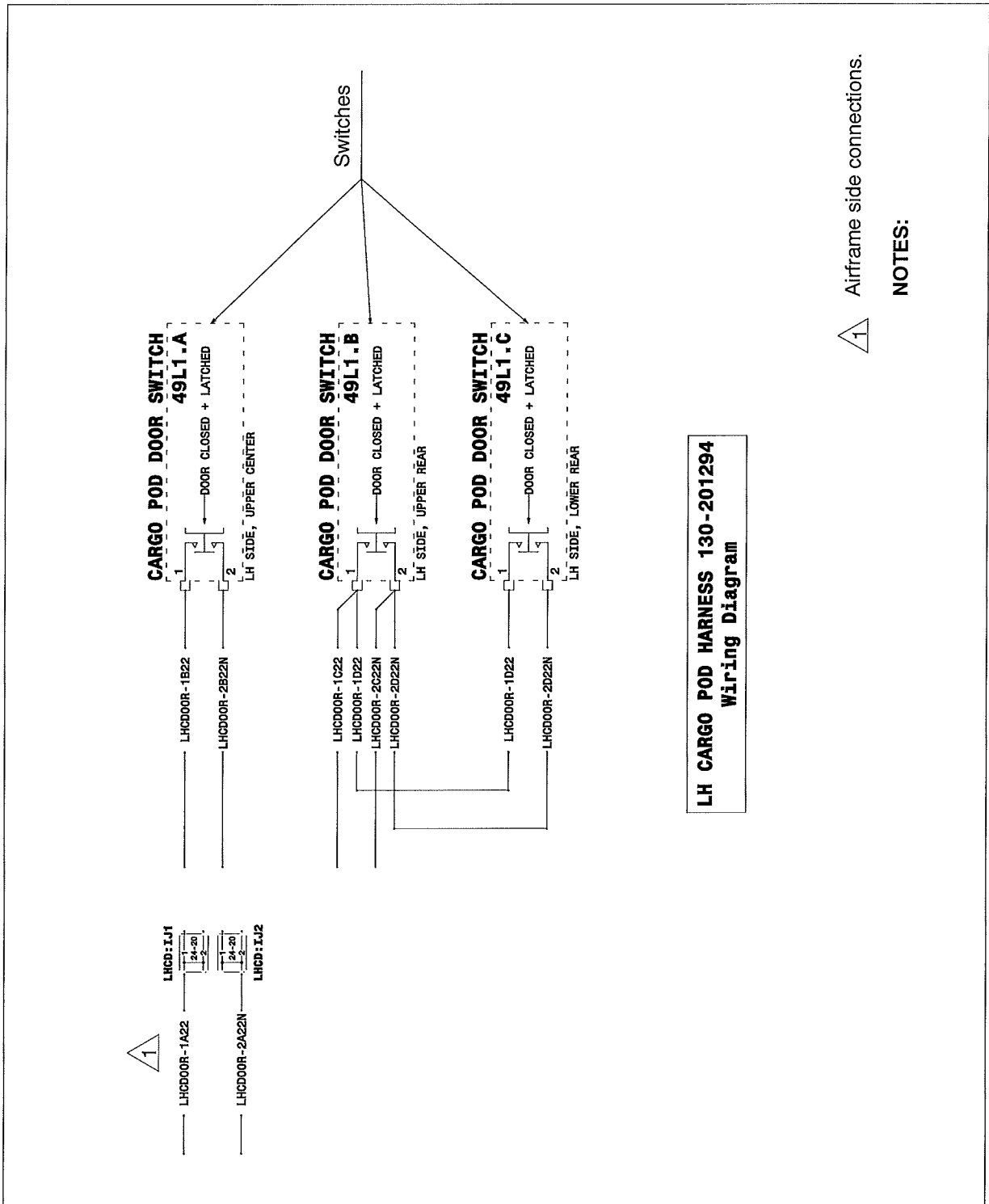


Figure 7 Latch Open Warning, LHS, Wiring Diagram

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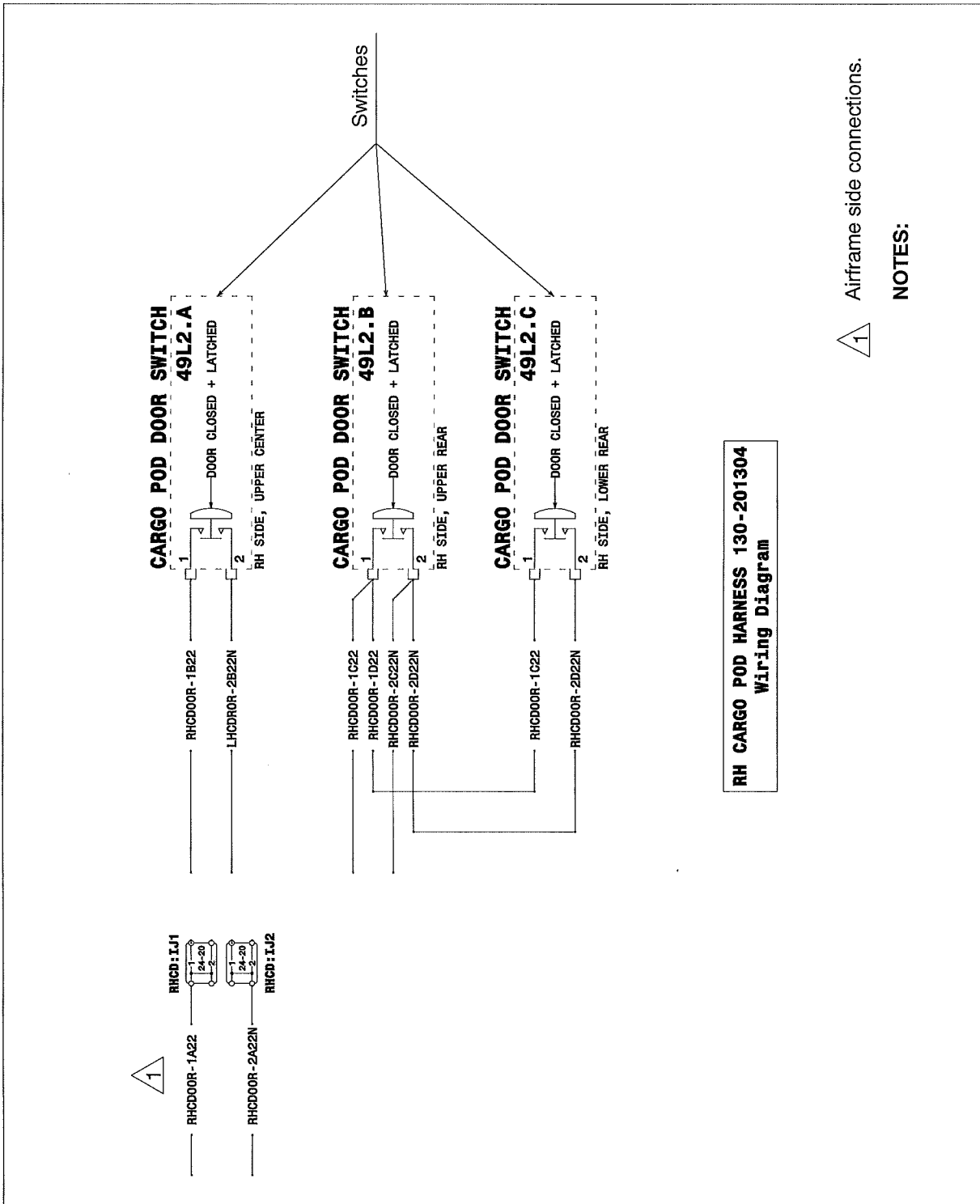


Figure 8 Latch Open Warning, RHS, Wiring Diagram

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**7. SPECIAL TOOLING**

No special test equipment or tools are required. Standard tools are adequate.

**8. REMOVAL AND REPLACEMENT**

## PRELIMINARIES

- Read General Safety Instruction – Electrical Power Supply System (EC 130 T2 AMM, Chapter 24-00-00, 2-1)
- Comply with General Safety Instructions – Mechanical Assemblies, refer to AMM, Chapter 60-00-00, 3-1.
- Disconnect the external power unit and battery (refer to Electrical Power Supply on the Ground, EC 130 T2, AMM, Chapter 24-00-00, 2-1).
- Open and secure applicable circuit breakers in the RHS of the pedestal before any servicing action.

## A. REMOVAL

1. CARGO POD DOOR (Refer to Figures 2 and 4)
  - a) With the cargo pod door open, disconnect the strut assembly (9) from the door by removing the ball stud (5), self-locking nut (8) and washer (7) from bracket (10). Refer to Figure 2.
  - b) Support the open door and remove the cotter pin (3) and washer (2) from the bottom of both hinge pins (1). Remove the hinge pin (1) and washer (2). Refer to Figure 4.
  - c) Carefully open the door latches and lift out door.
2. DOOR LATCH ASSEMBLIES (Non-Locking or Locking, Refer to Figure 3)
  - a) With the cargo pod door open (or on a work bench) position the door latch assemblies (14) in the unlatched position.
  - b) Remove bolt (5) and washer (6) and remove mobile cover (13). Refer to SECTION A – A, Left Hand Door Latch Assembly.
  - c) Remove bolt (12), clamp assembly (7) and remove latch assembly (14). Remove and retain the switch contact (4) for reinstallation on new latch.
3. CARGO POD DOOR SWITCH (Refer to Figure 3)
  - a) The cargo pod door must be in the open position.
  - b) Remove screws (10, 2 places) and washers (11, 2 places) that secure the switch cover (2), switch spring (1) and switch support (3).
  - c) Remove the cargo pod door switch.
4. CARGO POD (Refer to Figure 1)
  - a) Cargo Pod installation is a permanent installation.

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**8. REMOVAL AND REPLACEMENT (continued)**

**NOTE:** Use torque per MTC, Chapter 20.02.05.404, unless otherwise specified.

**B. REPLACEMENT**

## References:

General Methods of Applying Sealing Compounds, refer to MTC, Chapter 20-05-01-102.

Application of PR 1422 Class B sealant, refer to MTC, Chapter 20-05-01-206.

1. CARGO POD DOOR (Refer to Figures 2, 3 and 4)
    - a) Position the cargo pod door into the pod. Once correctly aligned install both hinge pins (1) and washers (2) into both door hinges. Refer to Figure 4.
    - b) Close and latch cargo pod door. Install washers (2) and cotter pins (3) into the bottom of both hinge pins (1) to secure the cargo pod door. Refer to Figure 4.
    - c) Open door and secure strut assembly (9) to bracket (10) using ball stud (5), washer (7) and self-locking nut (8). Refer to Figure 2.
    - d) Adjust latch screw (8) and jamnut (9) to ensure even seal contact around the perimeter of the door and the cargo pod flange. Refer to Figure 3.
  2. DOOR LATCH ASSEMBLIES (Non-Locking and Locking, Refer to Figures 2 and 3)
    - a) With the cargo pod door open (or on a work bench), position door latch assemblies (14) (non-locking, 2 places and locking, 1 place) in the latch cutouts in cargo pod door assembly. Refer to Figure 2 for the locking latch assembly location.
    - b) When installing the new latch assembly, install switch contact (4) from the old latch onto the new latch. Refer to Figure 3.
- NOTE:** Fillet seal around edge of latch opening with sealant (P/N 1422 B2) in accordance with General Application of sealing Compounds, refer to MTC, Chapter 20-05-01-102.
- c) Align latch assembly (14) and clamp assembly (7) and tighten bolt (13) to secure the latch assembly in place.
  - d) Install mobile cover (13) and secure using bolt (5) and washer (6).
3. CARGO POD DOOR SWITCH (Refer to Figure 3)
    - a) Reposition the switch, the switch support (3), the switch cover (2) and the switch spring (1). Secure using screws (10, 2 places), washers (11, 2 places) and nutplates (12, 2 places).

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**8. REMOVAL AND REPLACEMENT (continued)**

3. CARGO POD DOOR SWITCH (Refer to Figure 3)
  - a) Position the cargo pod door switch into switch support (3), and place switch spring (1) and switch cover (2) into position on backside of the switch support (3).
  - b) Reinstall screws (10, 2 places), washers (11, 2 places) and self-locking nuts (12, 2 places) that secure the switch support (3), switch spring (1) and switch cover (2).
4. Close all areas opened for service in the PRELIMINARIES paragraph of this section.
5. Before energizing the aircraft power supply, read safety instructions. Refer to Electrical Power Supply on the Ground, EC 130 T2, AMM, Chapter 24-00-00, 2-1).
6. Reconnect the external power unit and battery. Refer to Electrical Power Supply on the Ground, EC 130 T2, AMM, Chapter 24-00-00, 2-1).
7. Perform functional tests for the EC 130 T2 in accordance with EC 130 T2, AMM, Chapters 24-30-00, 1-1 and 24-30-00, 5-1.
8. With the power on, open each latch in turn and ensure the "DOORS" annunciator light is on when the latch is open. Refer to Functional Tests - Lateral Cargo Hold Door Indicating System, EC 130 T2, AMM Chapter 52-31-01, 5-1.
9. Perform operational check of all systems that were serviced in accordance with the EC 130 T2 Aircraft Maintenance Manual procedures and the system's installation/operation manual.

**9. WEIGHT AND BALANCE DATA**

A. <u>Removed Items</u>						
DESCRIPTION	WEIGHT		ARM		MOMENT	
	kg	lbs	m	in	kg m	lb in
OEM LH Cargo Door	-4.20	-9.3	-3.55	-139.8	-14.91	-1300.1
OEM RH Cargo Door	-4.20	-9.3	-3.55	-139.8	-14.91	-1300.1
<b>Total</b>	<b>-8.40</b>	<b>-18.6</b>	<b>-3.55</b>	<b>-139.9</b>	<b>-29.82</b>	<b>-1300.1</b>

B. <u>Added Items</u>						
DESCRIPTION	WEIGHT		ARM		MOMENT	
	kg	lbs	m	in	kg m	lb in
Left Hand Cargo Pod and Door Rail	14.03	30.9	3.55	139.8	49.81	4319.8
Right Hand Cargo Pod and Door Rail	14.62	32.2	3.55	139.8	51.90	4501.6
Harness	1.81	4.0	3.55	139.8	6.44	559.2
<b>Total</b>	<b>30.46</b>	<b>67.1</b>	<b>3.55</b>	<b>139.8</b>	<b>108.13</b>	<b>9380.6</b>

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10. PLACARDS AND MARKINGS

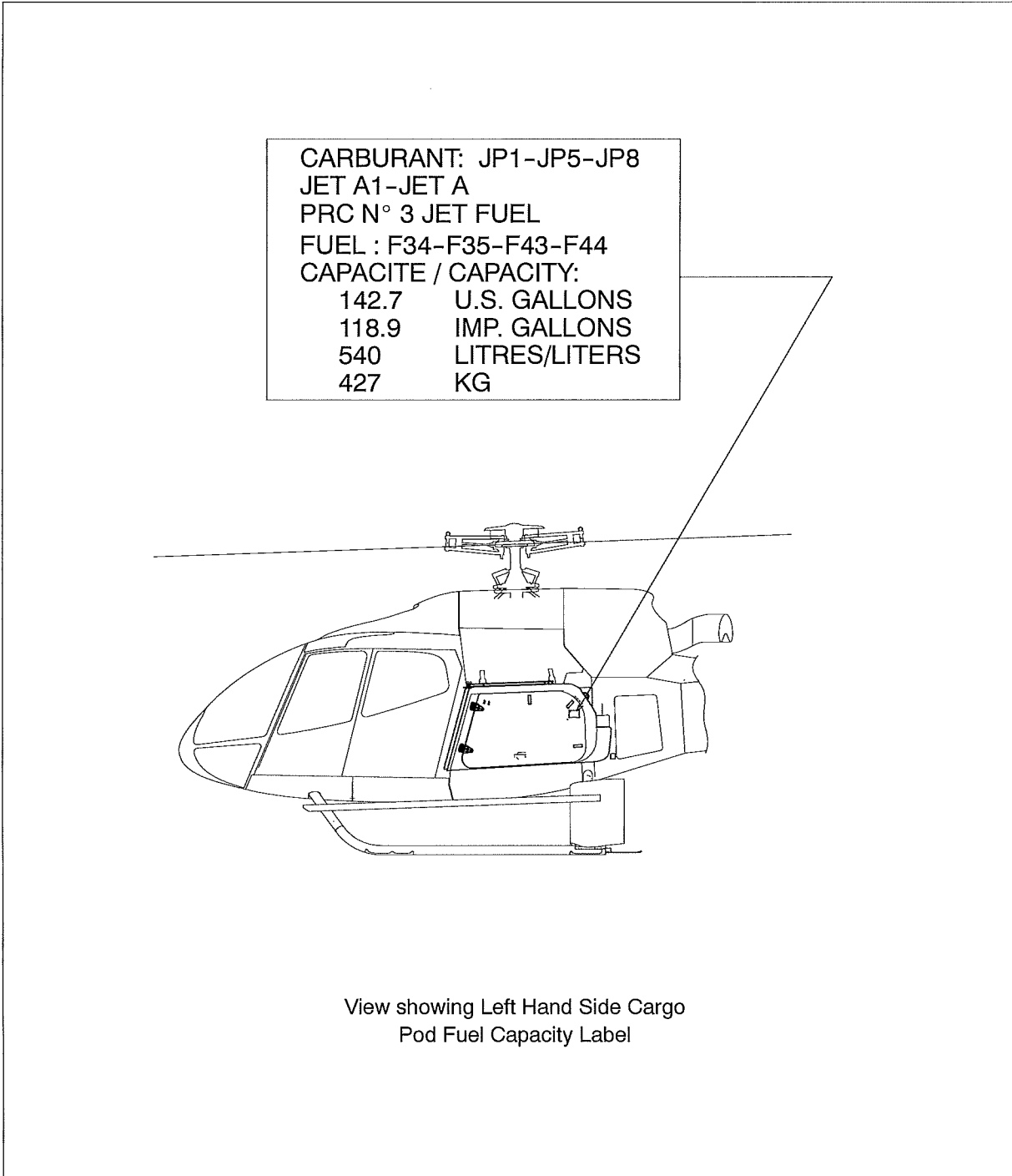


Figure 9 Placard located on left hand side cargo pod for Fuel Capacity

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10. PLACARDS AND MARKINGS

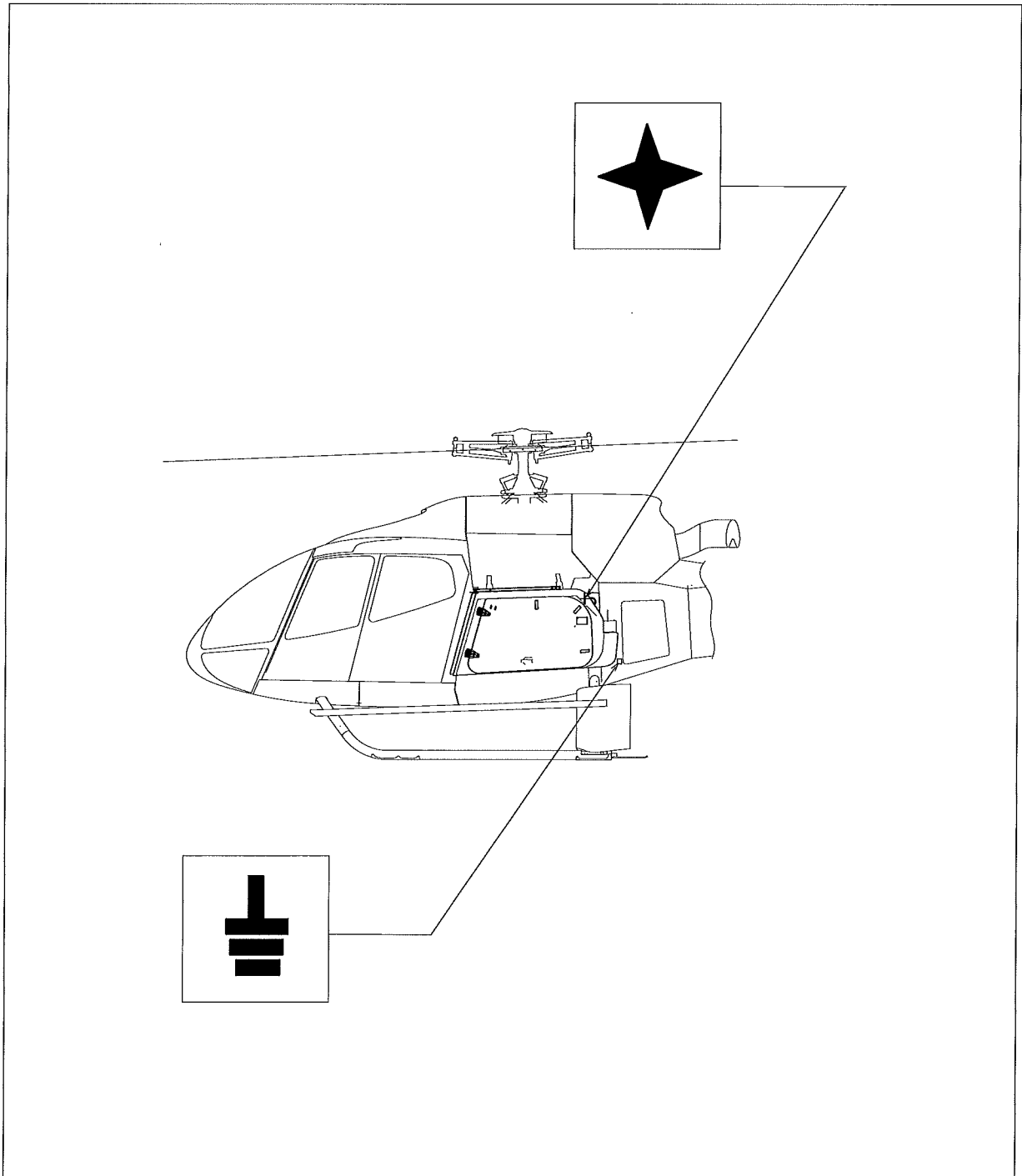


Figure 10 Markings located on left hand side cargo pod

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10. PLACARDS AND MARKINGS (continued)

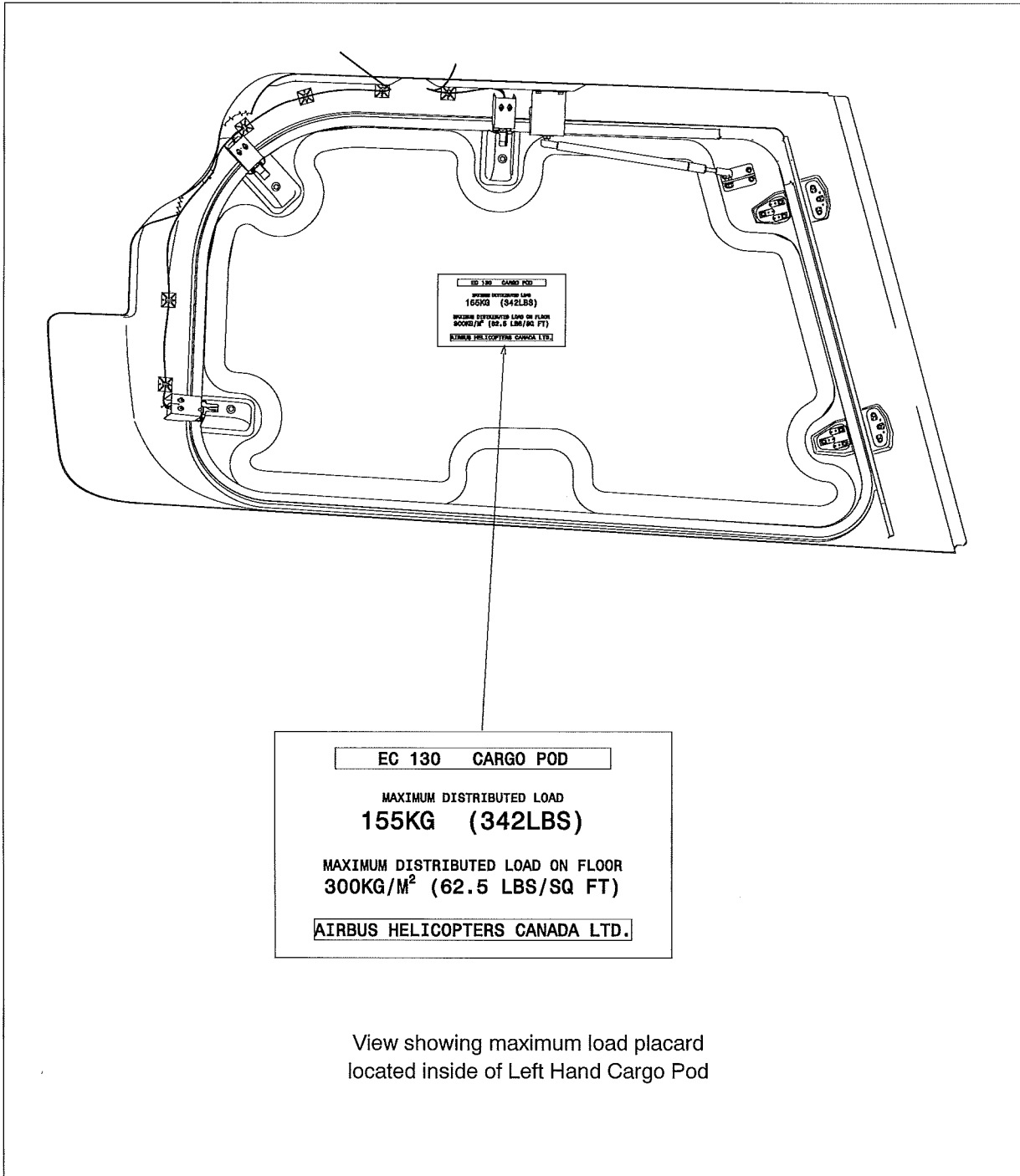


Figure 11 Marking located on inside of left hand side cargo pod

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10. PLACARDS AND MARKINGS (continued)

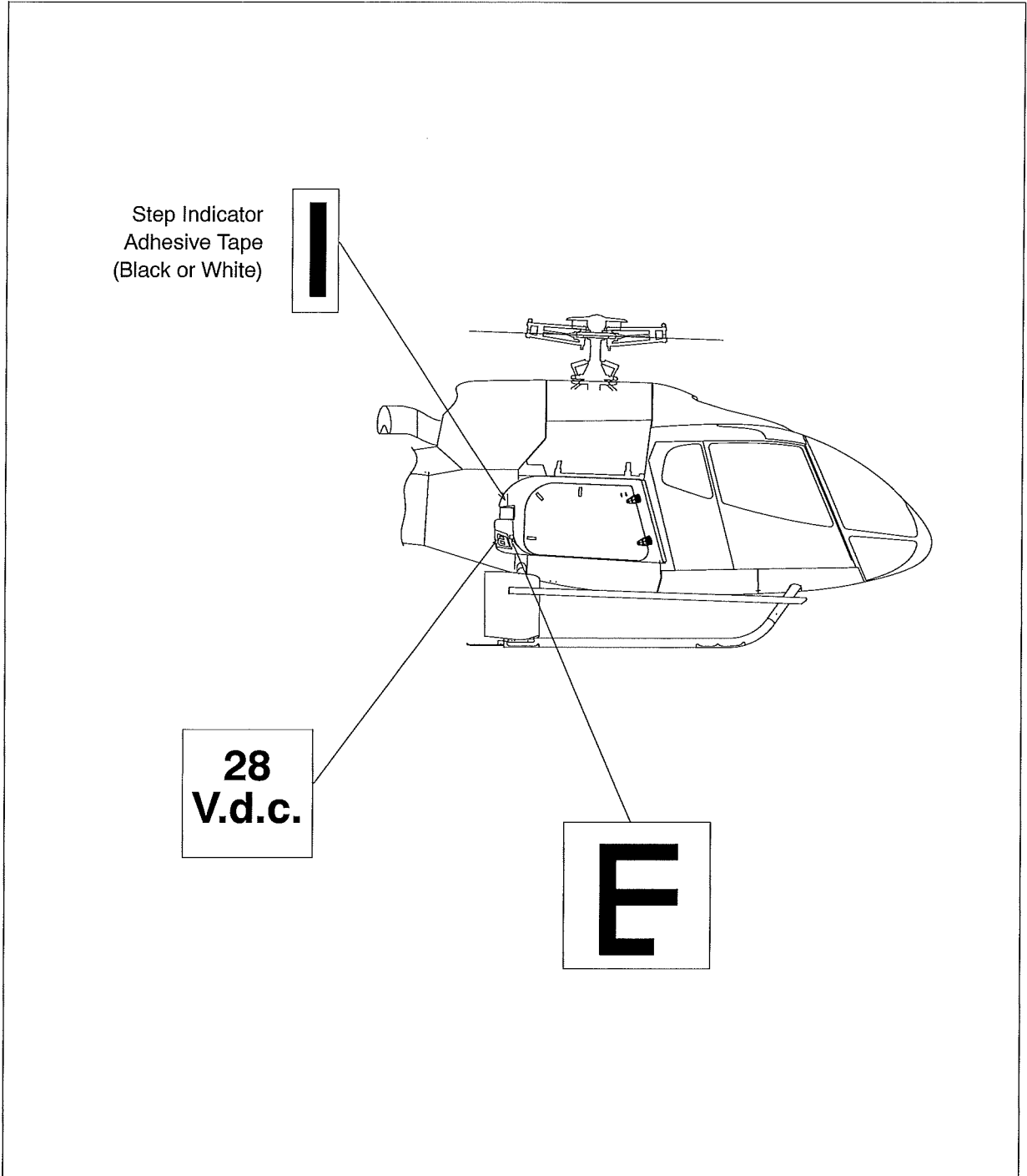


Figure 12 Markings located on right hand side cargo pod

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10. PLACARDS AND MARKINGS (continued)

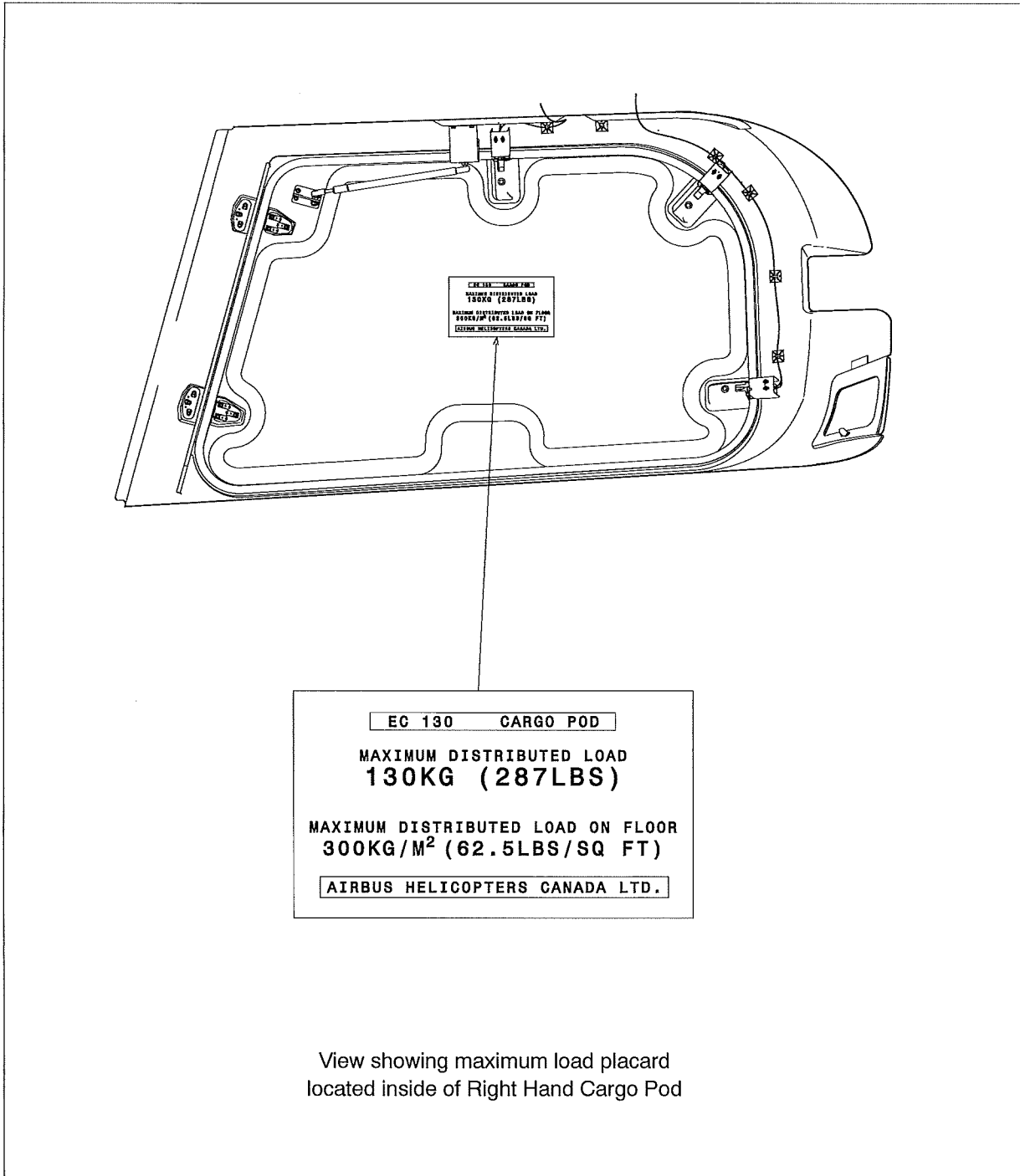


Figure 13 Marking located on inside of right hand side cargo pod

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