



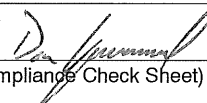

AIRBUS HELICOPTERS CANADA LIMITED
SUBJECT:

Required maintenance for the Cargo Pods 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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REV. 1 ACCEPTED (Civil A/W Authority)	(As per ICA Compliance Check Sheet)		TCCA
REV. 1 RELEASED BY:	P. Sharpe 	JUL 04 2018	AHCA ENGINEERING

RECORD OF REVISIONS

Rev.	Pages with this Issue Number	Description and Reason (& page nos. that have changes)	Prepared (name and date)	Checked (name and date)	App'd/Acc'd (Civil A/W Authority) (name and date)	Released (name and date)
0	1 through 26	Original Issue	D. Kerr 23 June 2014	C. Timmins 23 June 2014	TCCA G. David 27 June 2014	P. Sharpe 27 June 2014
1	1 through 22	Minor changes made to Figures 1, 2, 3, 4 and 5. Pictorial changes to door strut mounting bracket. Minor changes to Inspection Schedule . Functional test revised in Section 8. Troubleshooting chart revised. Minor correction to Wiring Diagrams. (Pages 5 to 8 and 11 to 22)	See page 1.	See page 1.	See page 1.	See page 1.

NOTE: Revisions to this document will be distributed to operators of this equipment by the STC holder.
 NOTE: Revised portions of affected pages are identified by a vertical black line in the margin adjacent to the change.
 NOTE: Minor changes are released in accordance with TCCA - ACCEPTED CAR 521.154 procedures (ref. DAPM- E- 0001).

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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.

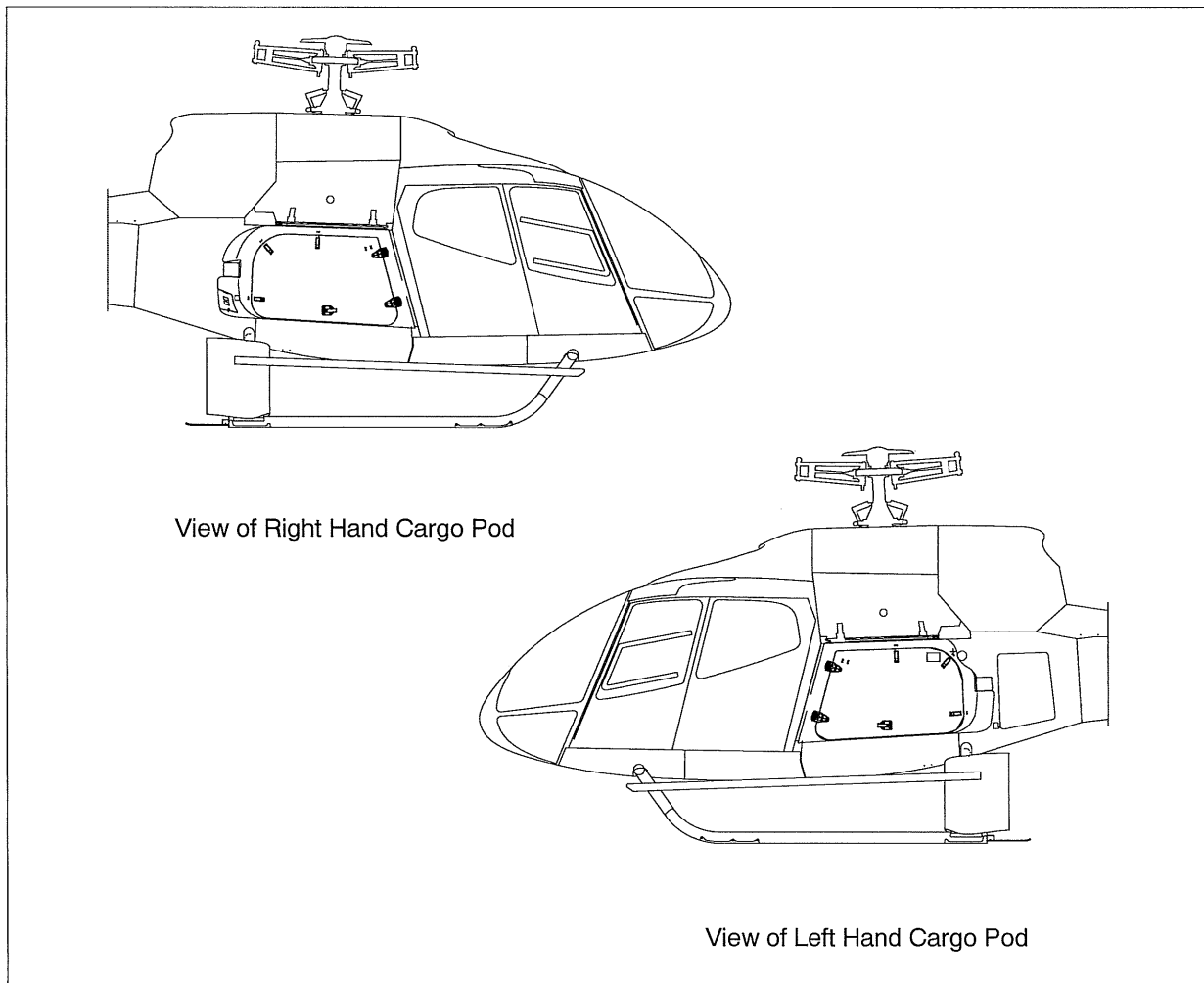


Figure 1 General Layout

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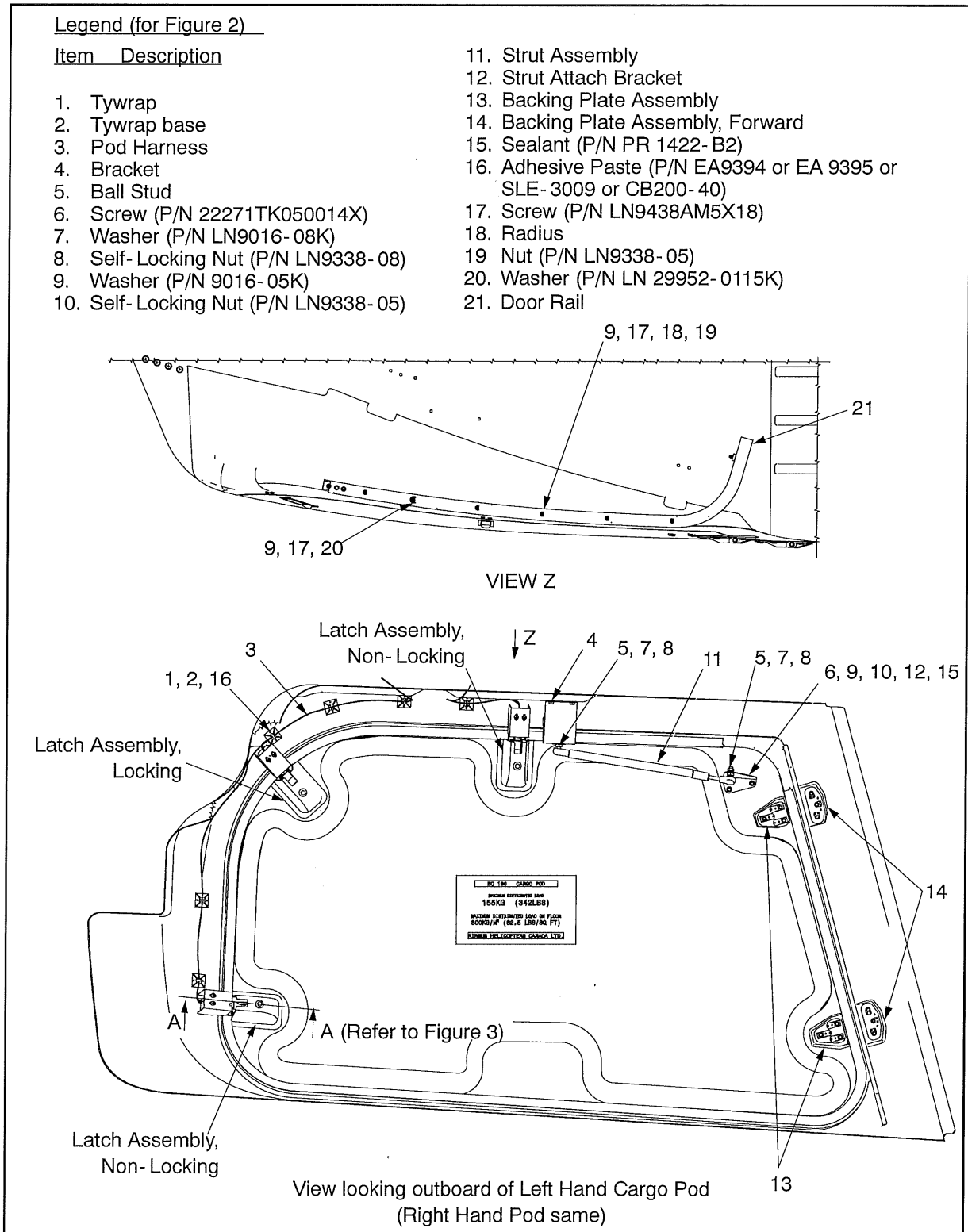


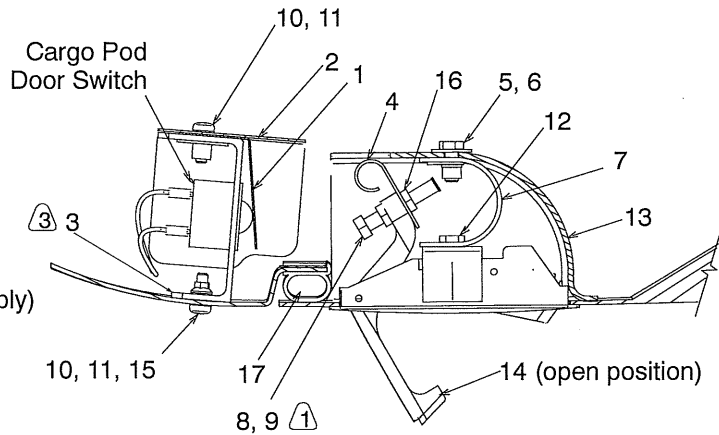
Figure 2 Left Hand Cargo Pod Door Assembly

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Legend (for Figure 3)

Item Description

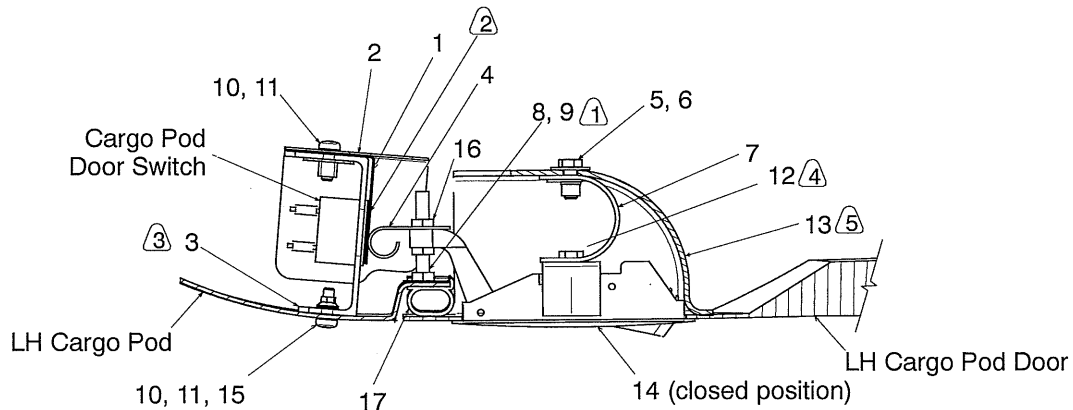
1. Switch Spring
2. Switch Cover
3. Switch Support
4. Switch Contact
5. Bolt (P/N LN9037-05012)
6. Washer (P/N LN29952-0510K)
7. Clamp Assembly
8. Latch Screw (part of latch assembly)
9. Jamnut (part of latch assembly)
10. Screw (P/N LN9439M4X14)
11. Washer (P/N LN9016-04K)
12. Bolt
13. Mobile Cover
14. Latch Assembly (non-locking or locking)
15. Self-Locking Nut (P/N LN9338-04)
16. Self-Locking Nut (P/N LN9338-05)
17. Door Gasket (P/N 1011-12)
18. Sealant (P/N PR1422-B2)
19. Thread Locking Compound (P/N Loctite 242)



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)



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)

- ⑤ Bond mobile cover (13) to cargo pod door using sealant (18).
- ④ Apply thread locking compound (19) during installation.
- ③ Fillet seal around edges with sealant (18) and wet install fasteners.
- ② When latch is closed, adjust the switch contact, item 4, to ensure that the spring, item 1, compresses the cargo pod door switch.
- ① Adjust latch screw, item 8, and jamnut, item 9, to ensure even seal contact around perimeter of door and cargo pod flange.

NOTES:

Figure 3 Cargo Pod Door Switch and Door Latch Assembly

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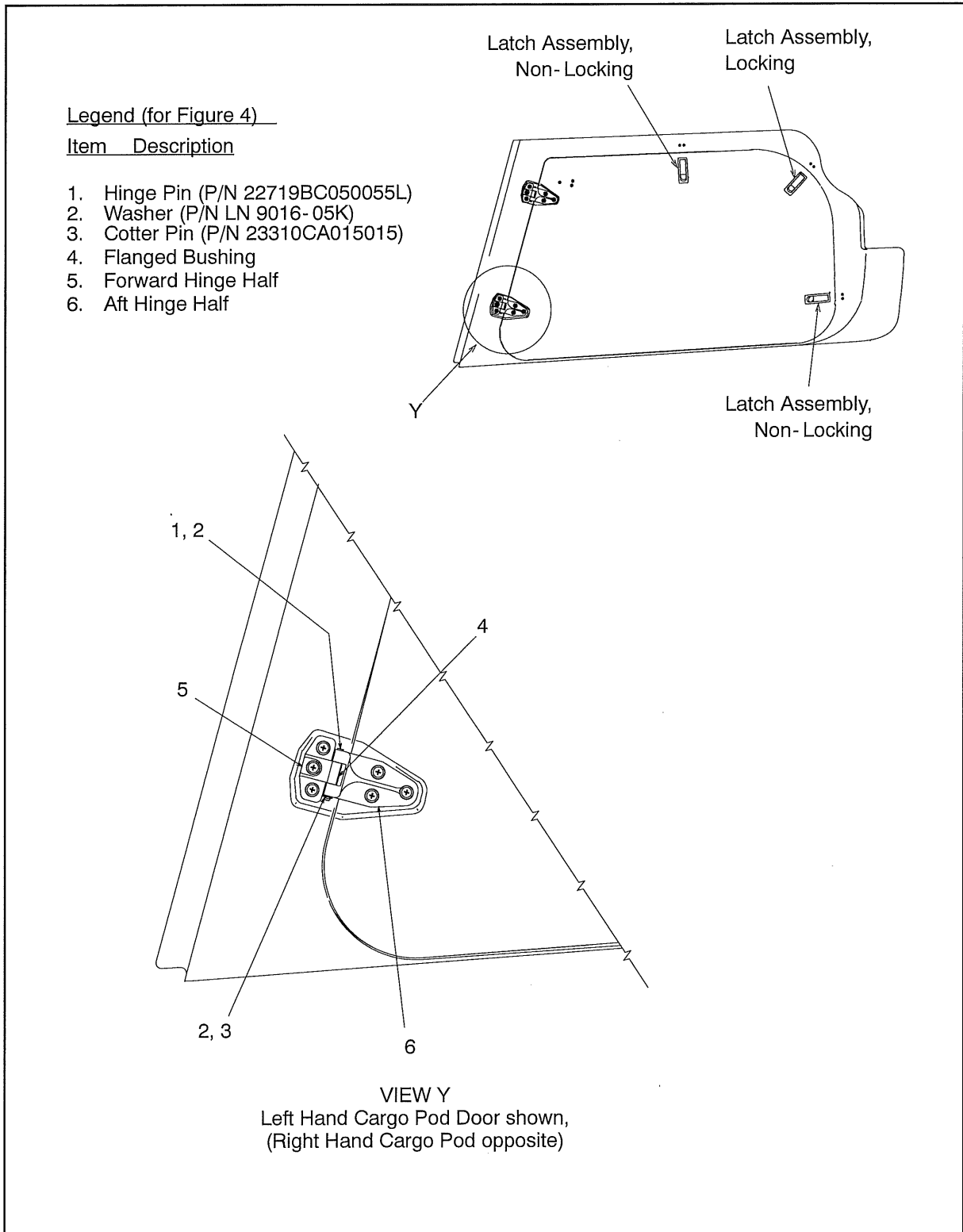
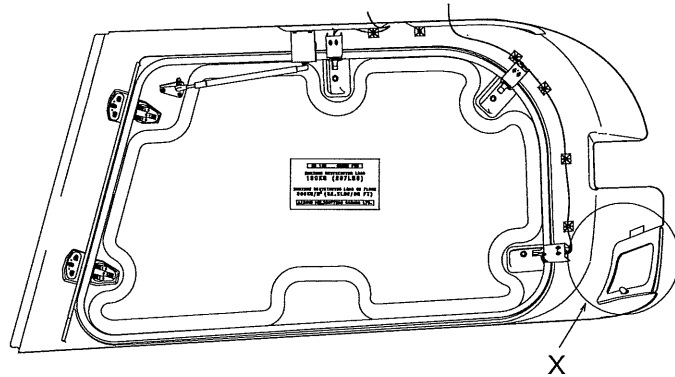


Figure 4 Cargo Pod Door Hinge Assembly

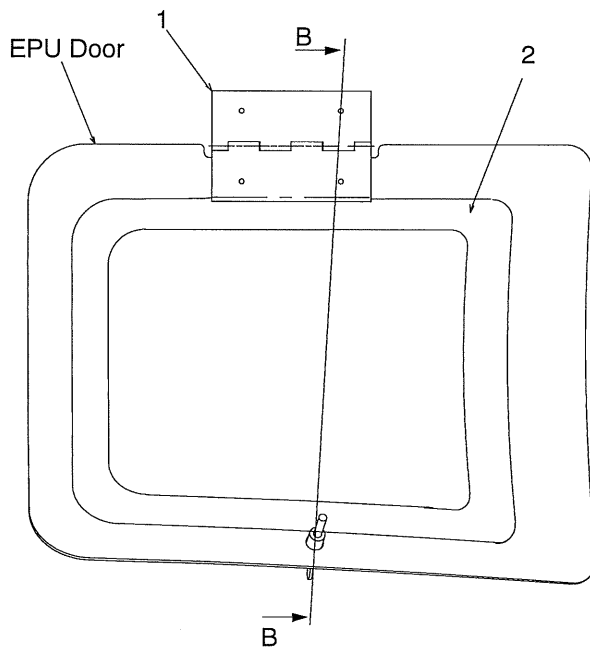
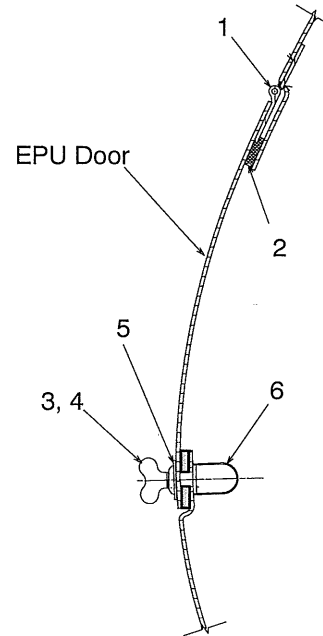
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Legend (for Figure 5)
Item Description

1. Structural Hinge
2. Seal (P/N SC41-722-12 3/16 x 0.5)
3. 1/4 Turn Fastener (P/N 2600-9-SW or NSA55133-009)
4. Retaining Ring (P/N V2600-LW-7)
5. Plastic Washer (P/N 350A231030-20)
6. Receptacle



View looking outboard of Right Hand Cargo Pod


 VIEW X
 EPU door


SECTION B - B

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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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.

The Airworthiness Limitations Section is FAA approved and specifies inspections and other maintenance required under §§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

Refer to Section 8 if removing or replacing and parts.

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	<ul style="list-style-type: none"> - Check operation of the cargo pod door switch, shown in Figure 3: <ul style="list-style-type: none"> a. With power ON, check when both cargo pod doors are closed and latched that "DOOR" annunciator light is OFF. b. Open each cargo pod door latch separately and ensure "DOOR" annunciator light is ON when latch is open. 	<ul style="list-style-type: none"> a. If lamp remains ON, refer to Chapter 6, troubleshooting. b. If lamp fails to come ON, refer to Chapter 6, troubleshooting.
B	<ul style="list-style-type: none"> - Visually inspect LH and RH Cargo Pods Installation for: <ul style="list-style-type: none"> a. general condition 	<ul style="list-style-type: none"> a. If cracking, delamination or debonding is found contact AHCA.
C	<ul style="list-style-type: none"> - Visually inspect sealant between cargo pods and airframe shown in Figure 1 for: <ul style="list-style-type: none"> a. deterioration 	<ul style="list-style-type: none"> a. Clean area and reapply sealant, P/N PR1422- B2 in accordance with MTC, Chapter 20.05.01.206. Ensure the forward lower corner is free of sealant for drainage.
D	<ul style="list-style-type: none"> - Check screws (17) securing the door rail on the left hand and right hand cargo pods, shown in Figure 2 for: <ul style="list-style-type: none"> a. secure installation 	<ul style="list-style-type: none"> a. Tighten screws as required.
E	<ul style="list-style-type: none"> - Check both left hand and right hand sliding doors for: <ul style="list-style-type: none"> a. functionality 	<ul style="list-style-type: none"> a. Make any necessary adjustment to the sliding door in accordance with AMM, Chapter 52- 12- 01, 5- 1.

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

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
F	- Check harness (3) attachment to door switches in Figure 2 for: a. security	a. Secure as required.
G	- Visually inspect left hand and right hand strut assemblies (9) shown in Figure 2 for: a. secure installation b. correct operation	a. Ensure that the door strut is connected correctly to door and cargo pods. b. If door strut does not hold the door in the open position, contact AHCA for replacement part.
H	- Test left hand and right hand door latches (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 (8) and jam nut (9, in Figure 3) as required to ensure adequate seal between the Cargo Pod Door and the door seal. Refer to Flag NOTE 1.
I	- Perform functional test of locking latch assembly shown in Figure 4 for: a. proper locking function	a. Clean and lubricate to restore proper locking function.
J	- Visually inspect door gasket (7) in Figure 3, for: a. debonding, cuts or cracking or loss of elasticity b. security	a. If debonding, cuts or cracks or loss of elasticity are evident contact AHCA for replacement gasket (7). b. Secure 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
 (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
K	- Visually inspect door hinge pins, (1), 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.
L	- Visually inspect both cotter pins, (3), in the door hinges, (6 and 5), shown in Figure 4 for: a. security b. corrosion	a. Secure both cotter pins (3) as required. b. No corrosion is allowed. If corrosion is found replace cotter pin (3) in accordance with AMM, Chapter 52-31-01, 4-1.
M	- Check door hinge, (6 and 5) in Figure 4 for: a. security	a. Tighten as required.
N	- Visually inspect seal (2), between right hand cargo pod and EPU door in Figure 5 for: a. debonding, cuts or loss of elasticity b. security	a. If debonding, cuts or loss of elasticity are evident, contact AHCA for replacement seal (2). Trim as required to seal around EPU door. Bond using adhesive backing. b. Secure as required.
O	- 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

www.airbushelicopters.ca

6. TROUBLESHOOTING

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

No.	Trouble Symptom	Probable Cause	Corrective Action
1	"DOOR" annunciator light remains ON when door is closed and latched.	Re- adjust door switch.	Adjust switch contact (4) to allow the instrument warning light to go out. Refer to Figure 3, Flag NOTE 2.
2	"DOOR" annunciator light fails to come ON when any door latch is open.	Failure with Cargo Pod door indicating system	Adjust the switch contact (4) installation as required. Refer to Figure 3, Flag NOTE 2.
		Failure in Warning/Caution Panel	Perform functional tests - Warning Caution panel, in accordance with AMM, Chapter 31-51-00, 5-1.
		Faulty switch	Replace cargo pod door switch (P/N 2-5445 or 0544590) and make adjustments as per Figure 3, Flag NOTE 2. Verify operation in accordance with Section 8. B. Replacement 9.

Table 2 Troubleshooting Guide

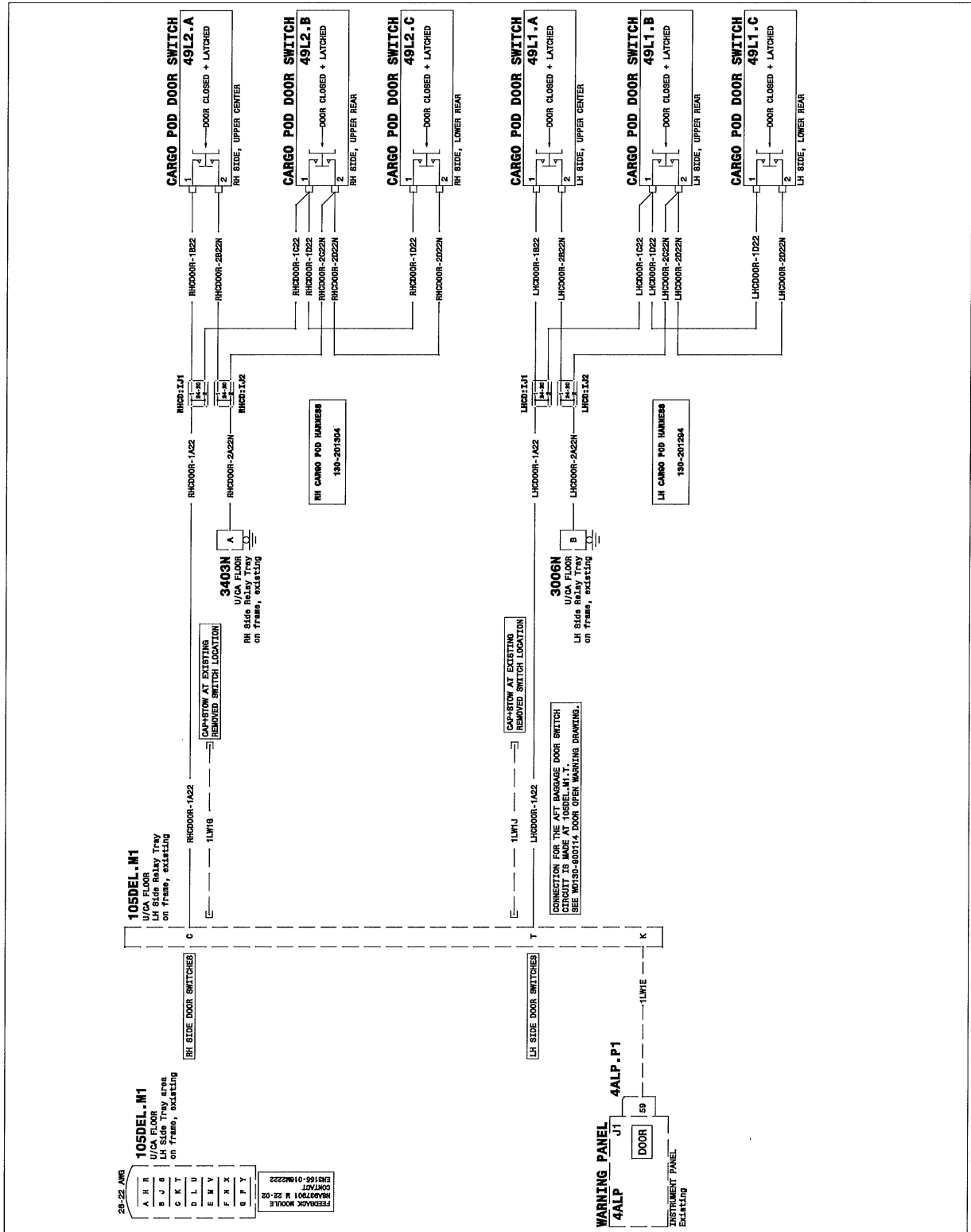


Figure 6 Cargo Pods Installation, Wiring Diagram

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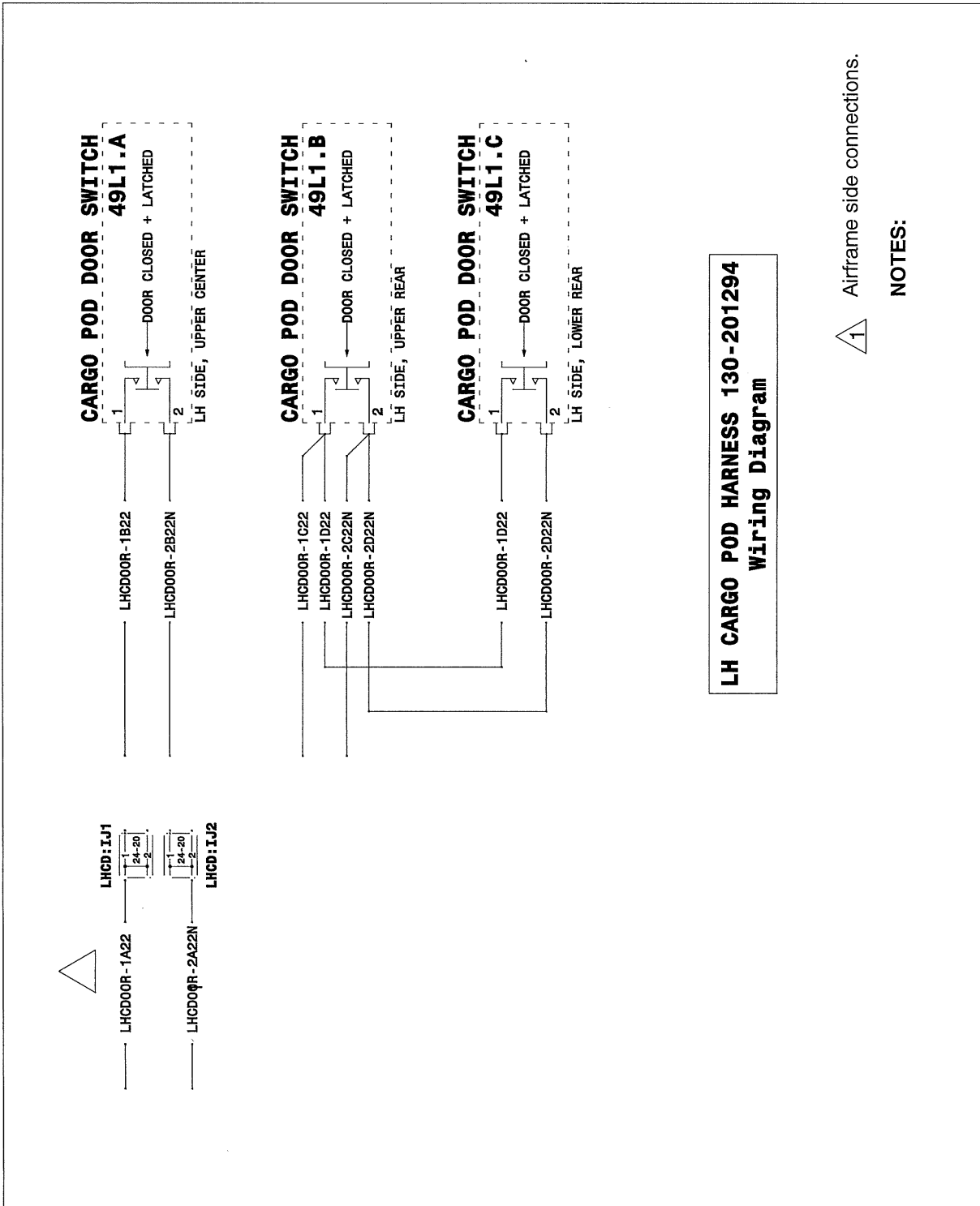


Figure 7 Latch Open Warning, LH side, Wiring Diagram

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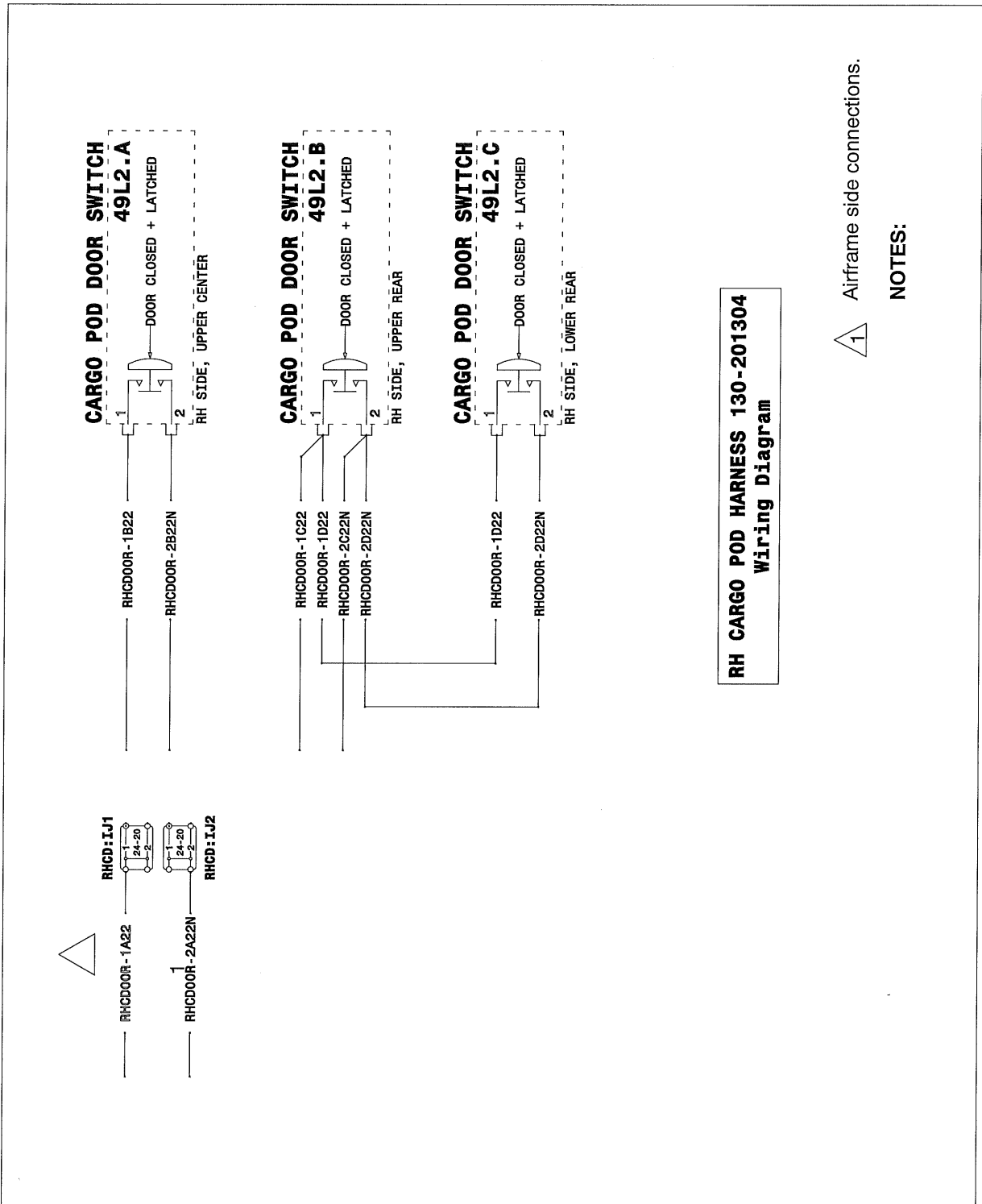


Figure 8 Latch Open Warning, RH side, Wiring Diagram

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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, refer to EC 130 T2 AMM, Chapter 24-00-00, 3-1.
- Comply with General Safety Instructions - Mechanical Assemblies, refer to AMM, Chapter 60-00-00, 3-1.
- Disconnect the external power. Refer to EC 130 T2, AMM, Chapter 24-00-00, 2-1.
- Disconnect the battery. Refer to EC 130 T2, AMM, Chapter 24-33-00, 4-1.
- Open and secure applicable circuit breakers in the RH side of the pedestal before any servicing action.

A. REMOVAL

1. CARGO POD (Refer to Figure 1)
 - a) Cargo Pod Installation is a permanent installation.
2. CARGO POD DOOR (Refer to Figures 2 and 4)
 - a) With the cargo pod door open, disconnect the strut assembly (9) from the door. 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 lift out door.
3. 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 sealant (18) from around latch (14).
 - c) Remove bolt (5) and washer (6) and remove mobile cover (13). Refer to SECTION A - A, Left Hand Door Latch Assembly.
 - d) Remove bolt (12), clamp assembly (7) and remove latch assembly (14). Remove and retain the switch contact (4) for reinstallation on new latch. Remove thread locking compound from mobile cover.
4. 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.

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AIRBUS HELICOPTERS CANADA LIMITED**8. REMOVAL AND REPLACEMENT (continued)**

NOTE: Use torque per MTC, Chapter 20-02-05-404, unless otherwise specified.

B. REPLACEMENT

References:

Comply with general safety instructions for mechanical assemblies - AMM, Chapter 60-00-00, 3-1 ■

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

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

Safetying with cotter pins - MTC, Chapter 20-02-06-404.

Safetying with Loctite - MTC, Chapter 20-02-06-409.

General rules for bonding with adhesives - MTC, Chapter 20-06-01-101

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 (12). 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 flag NOTE 1 in 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.
- c) Align latch assembly (14) and clamp assembly (7) and secure using bolt (12). Apply thread locking compound (19) to bolt (12) during assembly. Refer to flag NOTE 4.
- d) Bond mobile cover (13) to cargo pod using sealant (18) and secure using bolt (5) and washer (6). Refer to flag NOTE 5.
- e) Fillet seal around edge of latch opening with sealant (18). Refer to flag NOTE 3. ■

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.

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8. REMOVAL AND REPLACEMENT (continued)

5. Before energizing the aircraft power supply, read General Safety Instructions. Refer to Electrical Power Supply System, EC 130 T2, AMM, Chapter 24-00-00, 3-1.
6. Reconnect battery. Refer to EC 130 T2 AMM, Chapter 24-33-00, 4-1.
7. Reconnect the external power unit. Refer to EC 130 T2, AMM, Chapter 24-00-00, 2-1.
8. Perform functional test - DC Power Supply System in accordance with EC 130 T2, AMM, Chapter 24-30-00, 5-1.
9. With power ON:
 - Ensure both LH and RH cargo pod doors are closed and latched and verify that the "DOOR" annunciator light is OFF.
 - Open each LH cargo pod door latch separately (RH cargo pod door closed) and ensure the "DOOR" annunciator light is ON when the latch is open.
 - Check when all latches are closed that "DOOR" annunciator light is OFF.
 - Repeat the sequence for the RH cargo pod door.
10. 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. Removed Items

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
Total	-8.40	-18.6	-3.55	-139.9	-29.82	-1300.1

B. Added Items

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
Total	30.46	67.1	3.55	139.8	108.13	9380.6

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10. PLACARDS AND MARKINGS

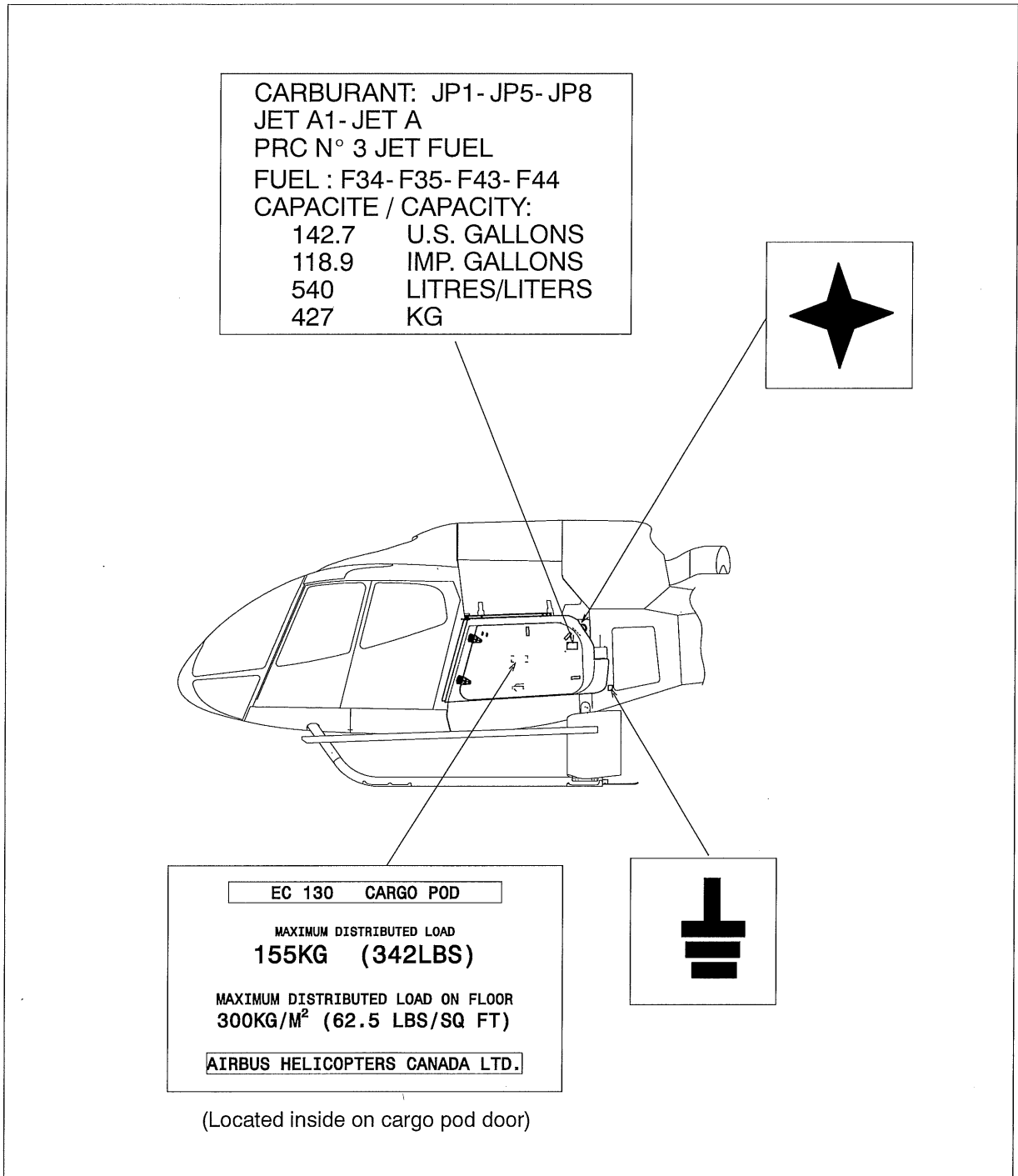


Figure 9 Markings located on LH cargo pod

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10. PLACARDS AND MARKINGS (continued)

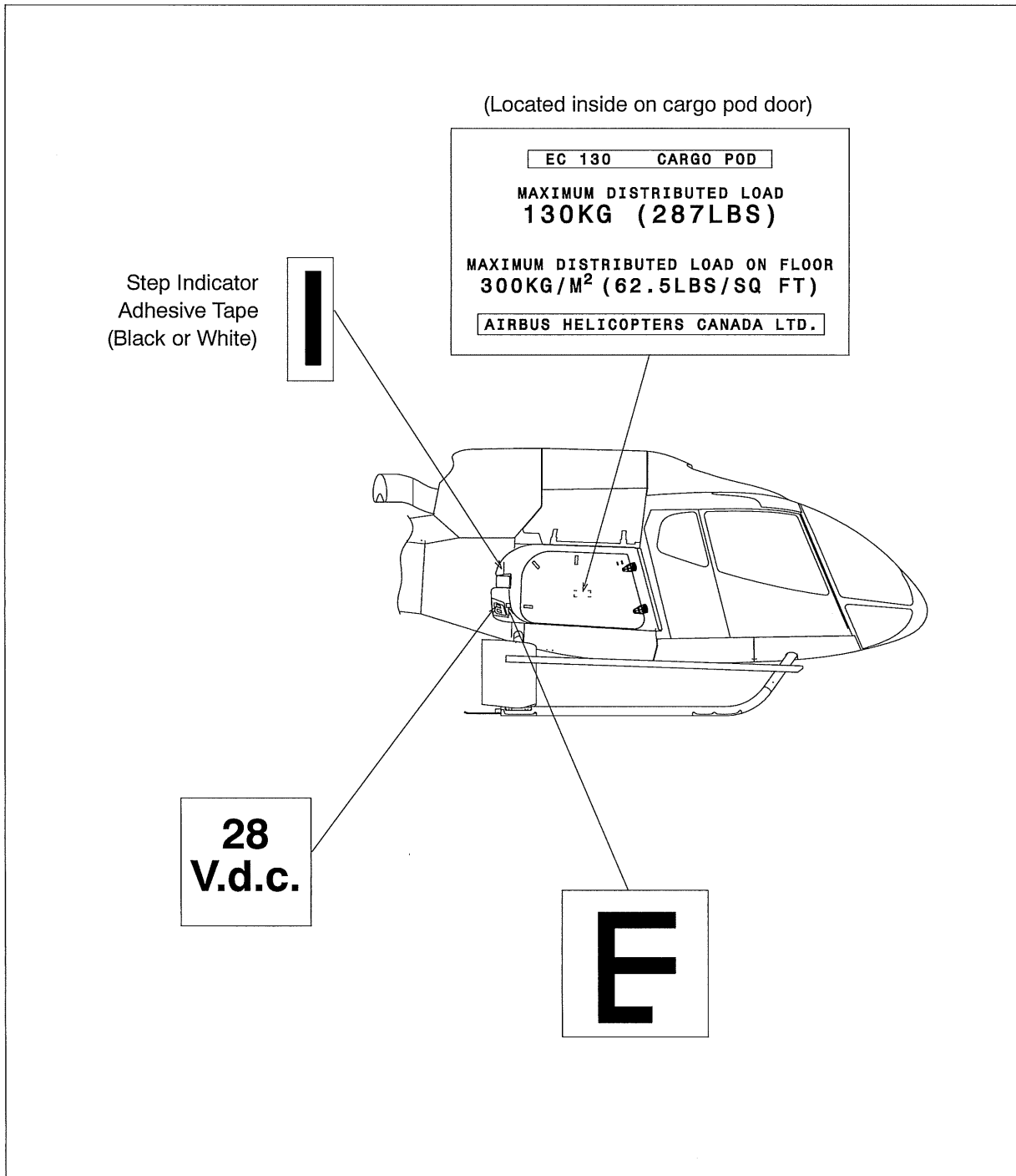


Figure 10 Markings located on RH cargo pod

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