SUBJECT: CARGO PODS INSTALLATION (P/N 130-201024)

Required maintenance for the Cargo Pod Installation (P/N 130-201024).

APPLICABILITY :

Aircraft with the subject modification embodied in accordance with TCCA STC No. SH03-33 or any relevant foreign approvals.

	NAME AND SIGNATURE	DATE	COMPANY DEPARTMENT
PREPARED BY:	D. Kerr D.Kerr	3 April 2013	ECL ENGINEERING
PREPARED BY:			
CHECKED BY:	C. Timmins C. Timmins	3rd April 2013	ECL ENGINEERING
CHECKED BY:	M. Merritt M Merritt	2013-04-03	ECL QUALITY ASSURANCE
~~APP'D~~ / ACCEPTED (Civil A/W Authority)	(As per ICA Compliance Check Sheet) G. David	2013.04.03	TCCA
RELEASED BY:	P. Sharpe	11 Apr. 2013	ECL ENGINEERING

RECORD OF REVISIONS

Revi-sion	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 11	Original Issue (Replaces MMS)	D. Kerr 19 Dec., 2003	C. Timmins 19 Dec., 2004	TCCA E. Cheung 19 Dec., 2004	R. Manson 19 Dec., 2004
1	1 through 15	Changes to pages 1 to 15. General view added, details added to Inspection Schedule and Troubleshooting as per FAA request. Format revised.	D. Kerr 29 July 2004	C. Timmins 29 July 2004	N/A	R. Manson 4 Aug., 2004
2	1 through 16	Changes to pages 1 to 16. Revised General view, Inspection Schedule and Troubleshooting as per TCCA request.	D. Kerr 17 August 2004	C. Timmins 24 August 2004	TCCA E. Cheung 8 September 2004	R. Manson 8 September 2004
3	1 through 27	Template revised. Introduction of PRE/ POST MOD 07-3792 making door warning system compatible. Wiring diagrams re-vised. Addition of placard on EPU door. Placards inside LH cargo door revised. Pages (3 to 27)	D. Kerr 27 October 2011	C. Timmins 27 October 2011	N/A	P. Sharpe 25 March 2013
4	1 through 27	Revised the Airworthiness Limitations statement in Section 2. Increased Inspection time from 100 fh to 150 fh. Margins added to Section 4. (Pages 4, 10 to 14, 19 & 20)	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.

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TABLE OF FIGURES

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TABLES

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1. GENERAL

A. The subject Cargo Pods Installation comprises two large, lightweight pods which provide an increase in cargo bay capacity. The forward opening door allow 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.

This Instruction for Continued Airworthiness is applicable to aircraft with PRE AMS 07-3792 and POST AMS 07-3792, making the door warning system harness compatible with the cargo pod assembly.

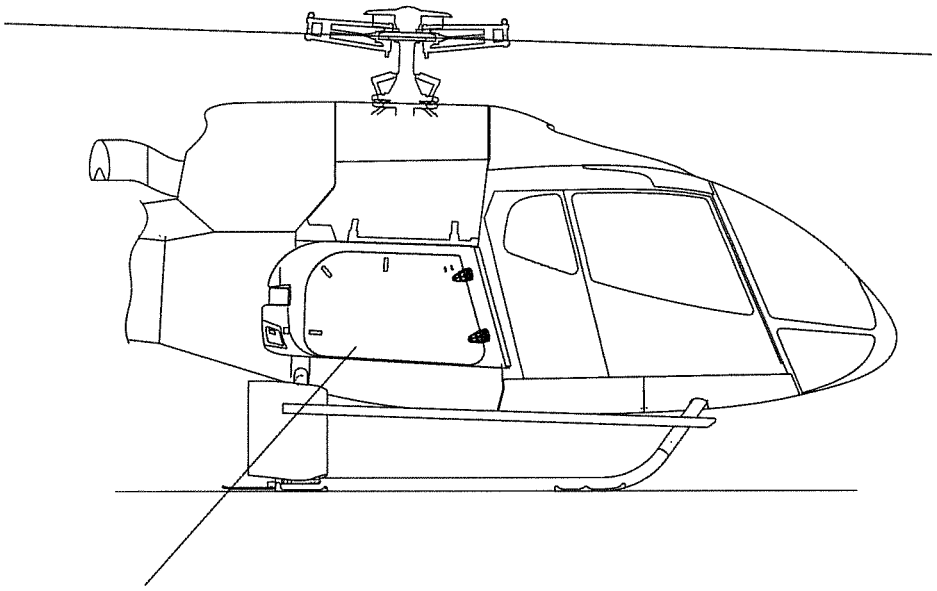
The glass fiber cargo pods installation consists of the following main components:

1) Cargo Pod, RH complete, P/N 130-201044

2) Cargo Pod, LH complete, P/N 130-201034

For instructions on the initial installation, refer to IP-ECL-109.

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



Right Hand Cargo Pod

View showing Right Hand Cargo Pod location
(left hand side pod similar)

Figure 1 General Layout

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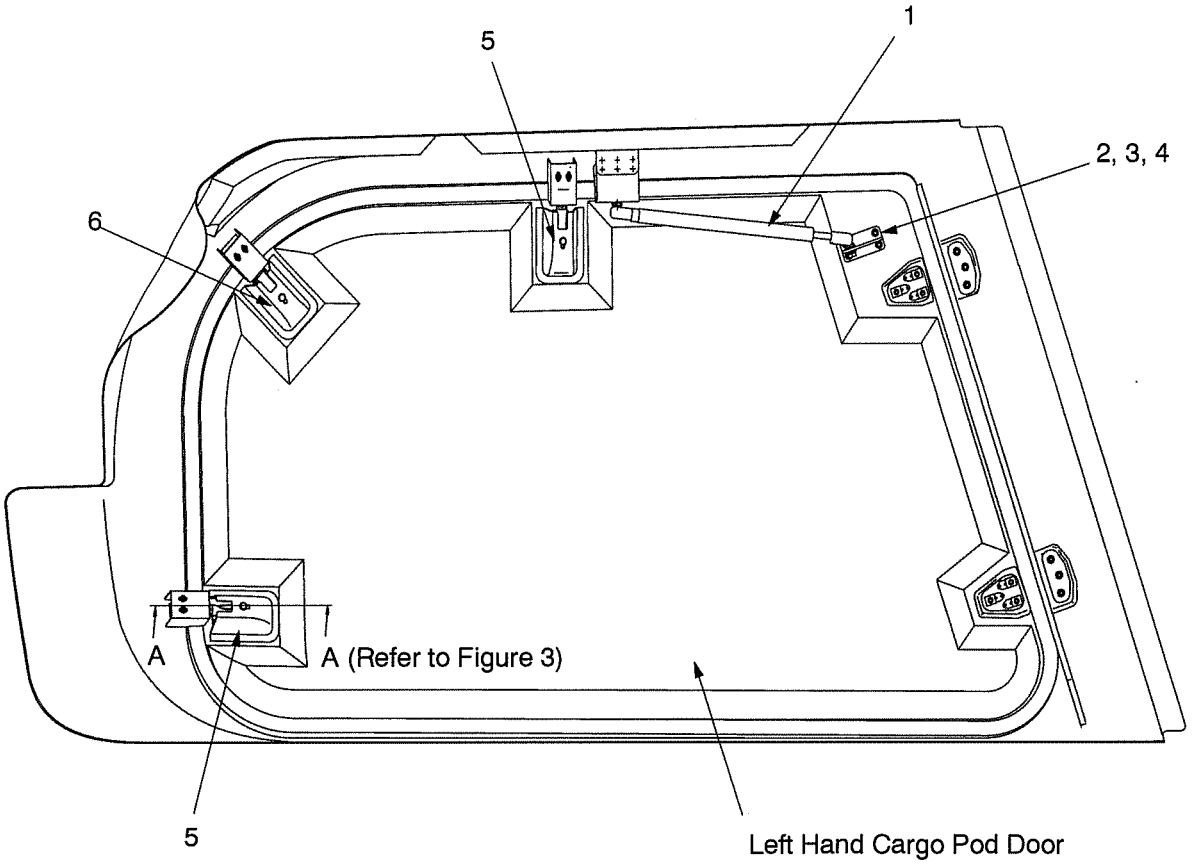
Legend (for Figure 2)

Item Description

1. Strut Assembly
2. Self-Locking Nut
3. Washer
4. Bolt
5. Latch Assembly, Non-locking
6. Latch Assembly, Locking



View looking outboard of Left Hand Cargo Pod
(Right hand cargo pod similar)

Figure 2 Cargo Pod Door Assembly

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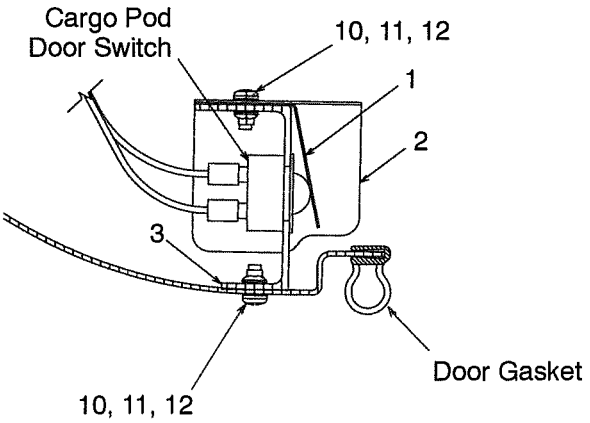
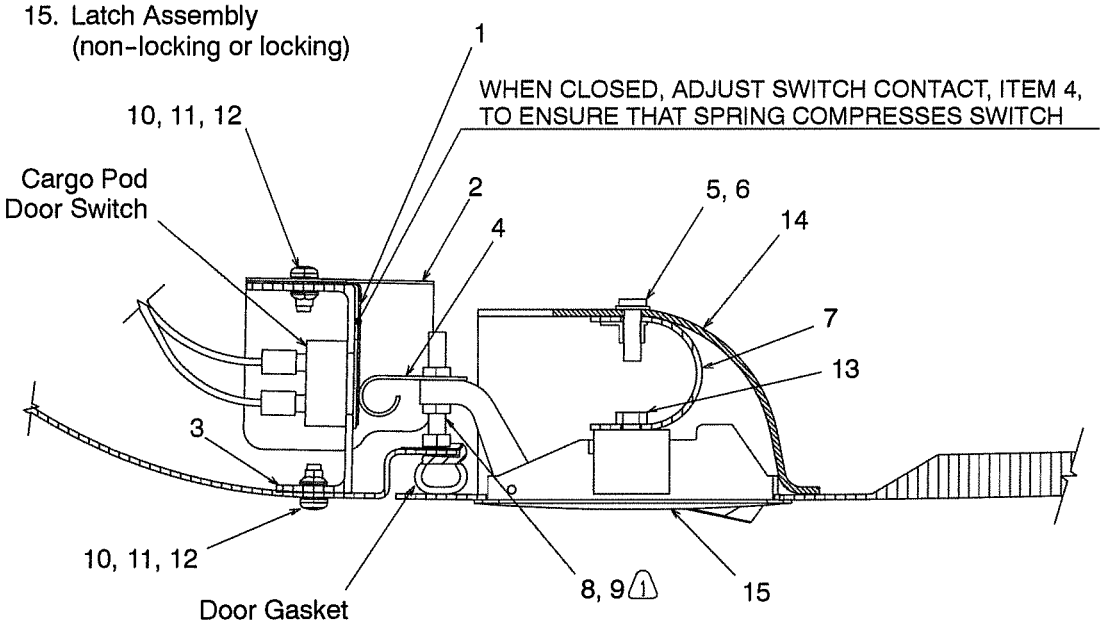
Legend (for Figure 3)

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. Self-Locking Nut
13. Bolt
14. Mobile Cover
15. Latch Assembly
    (non-locking or locking)



SECTION A - A
Cargo Pod Door Switch
Cargo Pod Door shown open



SECTION A - A
Door Latch Assembly, Typical 3 places
Cargo Pod Door shown closed
(Left Hand Cargo Pod Door shown, Right Hand Cargo Pod Door same)

(1) 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

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Legend (for Figure 4)

Item Description

1. Hinge Pin
2. Aft Hinge Half
3. Washer
4. Cotter Pin
5. Forward Hinge Half

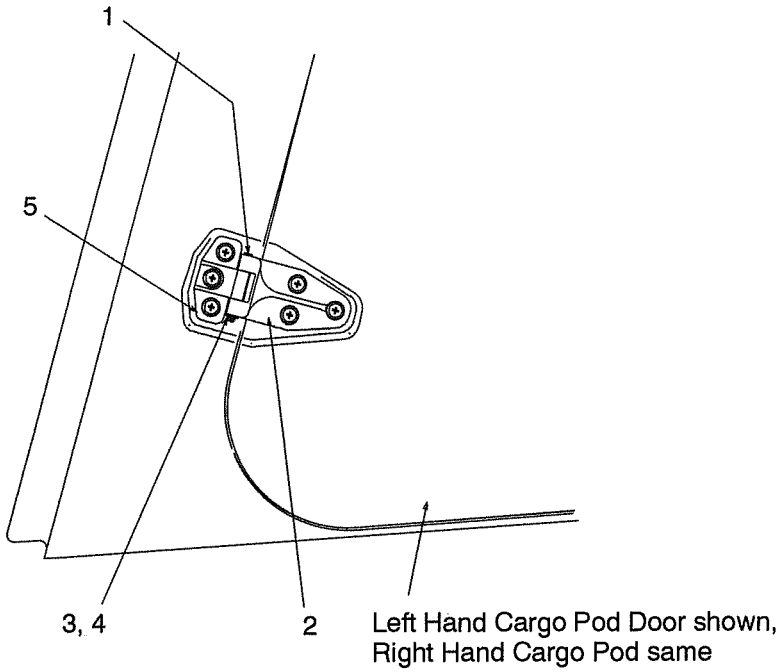

Figure 4 Door Hinge Assembly

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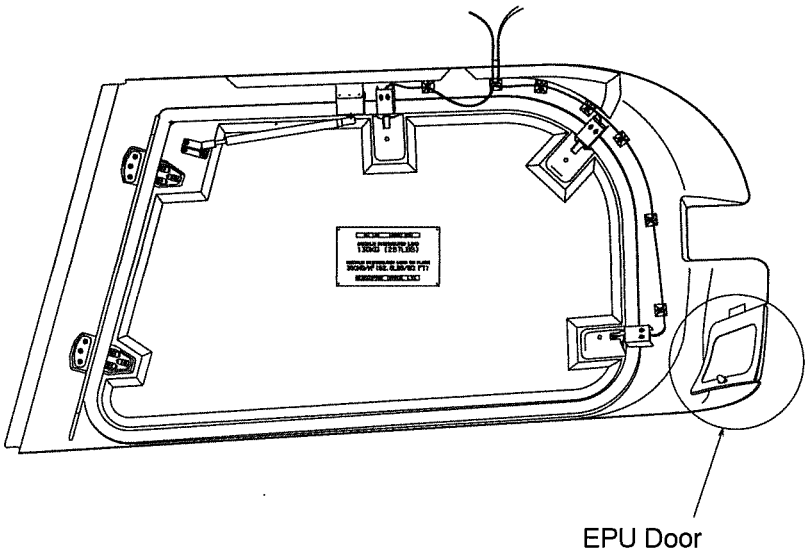
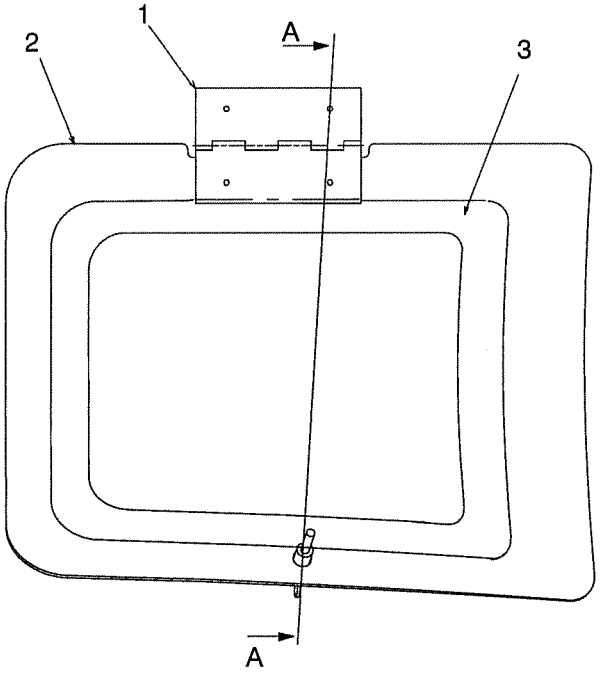
Legend (for Figure 5)

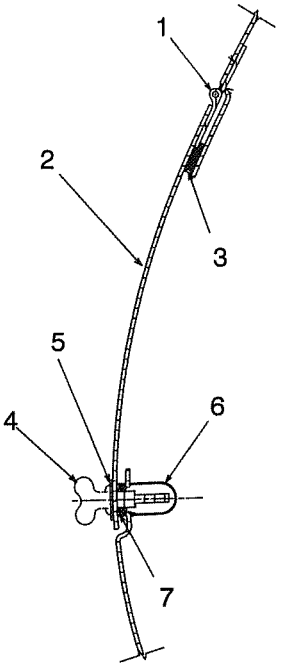
Item Description

1. Structural Hinge
2. EPU Door
3. Seal
4. 1/4 Turn Fastener
5. Retaining Ring
6. Receptacle





VIEW OF EPU DOOR



SECTION A - A

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
AMM	Aircraft Maintenance Manual
AMS 07-3792	Avis de Modification Serie 07-3792 Option of Modification Series 07-3792
IPC	Illustrated Parts Catalog
IP-ECL-109	Installation Procedure, Cargo Pods Installation
MTC	Standard Practices Manual

D. ABBREVIATIONS & DEFINITIONS

ABBREVIATION	DEFINITION
D	Days
DWG	Drawing
EC	Eurocopter (France)
ECL	Eurocopter Canada Limited
ELT	Emergency Locator Transmitter
EPU	External Power Unit
FH	Flight Hours
FT	Feet
IMP	Imperial
KG	Kilogram
LH	Left Hand
M	Months
P/N	Part Number
RH	Right Hand
SCU	System Control Unit
SQ	Square
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. 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.

No airworthiness limitations associated with this installation.

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 ECL.
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 in accordance with MTC, Chapter 20.05.01.219.
C	- Visually inspect left hand and right hand strut assemblies, item 1 shown in Figure 2 for: a. secure installation	 a. Ensure that the door strut is connected correctly by holding the door in open position.
D	- Test left hand and right hand door latches, items 5 and 6, shown in Figure 2 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.
E	- Perform functional test of left hand and right hand door locking mechanisms, item 5, shown in Figure 2 for: a. freedom of movement	 a. Clean and lubricate to restore freedom of movement.

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
F	- Visually inspect door gasket in Figure 3, for: a. condition	 a. If cuts or cracks are evident contact ECL for replacement gasket (P/N 1011-12) in accordance with AMM, Chapter 52-31-01, 4-1.
G	- Visually inspect both cotter pins, item 4, in the door hinges, items 2 and 5, shown in Figure 4 for: a. security b. corrosion	 a. Secure both cotter pins 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
H	- Visually inspect door hinges, items 2 and 5 in Figure 4 for: a. secure installation	 a. Ensure that hinge pins are inserted all the way into hinge half.
I	- Check door hinge, items 2 and 5 in Figure 4 for: a. security	 a. Tighten as required.
J	- Visually inspect seal, item 3, 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 SC41-7222-12).
K	- Visually inspect placards and markings (refer to Section 10) for: a. legibility b. secure mounting	 a. If placards have become illegible, contact Eurocopter Canada Limited 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

No replacement components and repair/overhaul information required for this installation.

6. TROUBLESHOOTING

For electrical system troubleshooting refer to Figures 6, 7, 8 and 9 Cargo Pods Installation, Wiring Diagrams.

No.	Trouble Symptom	Probable Cause	Corrective Action
1	Lamp does not illuminate when cargo door is open	Failure in Warning Panel	Refer to AMM, Chapter 31-51-00, 5-1.
		Faulty switch	Replace switch (P/N 2-5445 or 0544590) and test in accordance with AMM, Chapter 52-31-00, 5-1.

Table 2 Troubleshooting Guide

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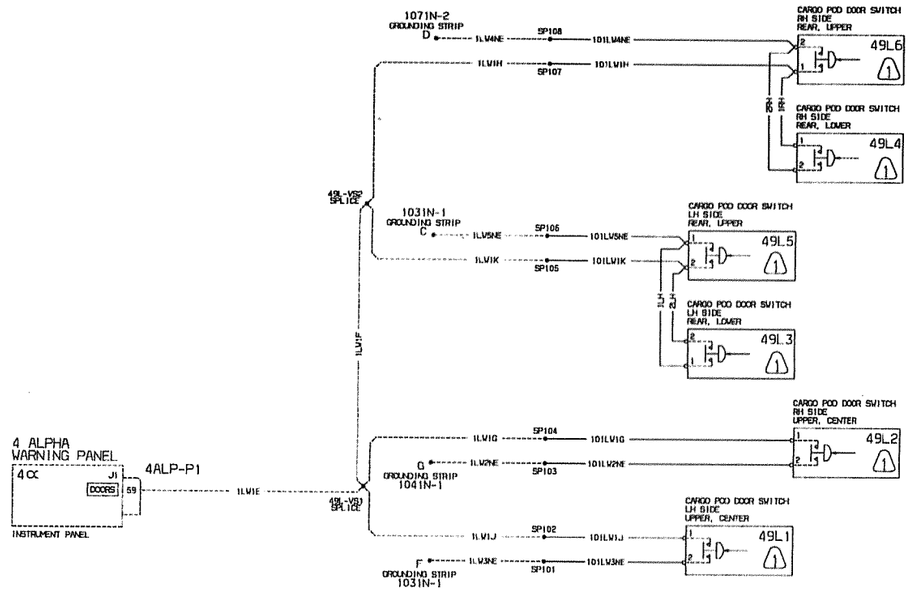
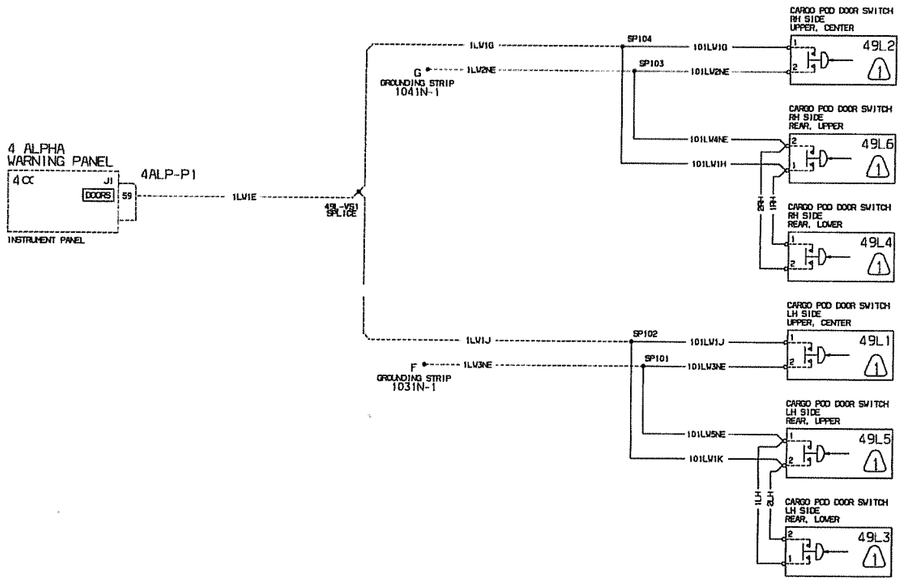
PRE AMS 07-3792

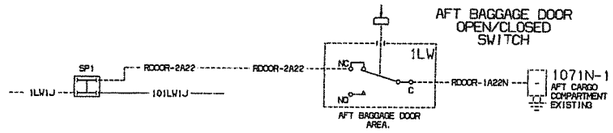


POST AMS 07-3792



AFT BAGGAGE DOOR SWITCH
INSTALLATION
REFERENCE VIEW

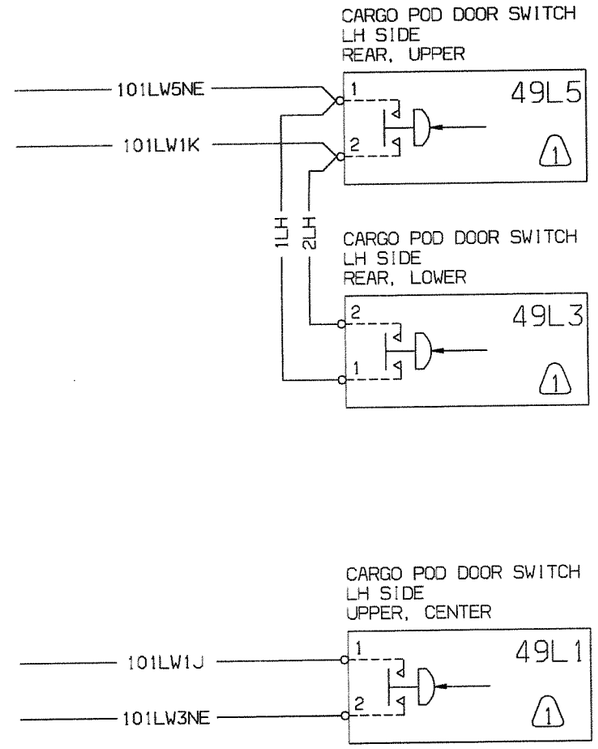
DWG: 130-900104



(1) Switch shown in the door "CLOSED" Position (new installation switches are part of the cargo pod assemblies)

NOTES:

Figure 6 Cargo Pods Installation, Wiring Diagram



1 Switch shown in the door "CLOSED" position.

NOTE:

Figure 7 Left hand side Latch Open Warning, Wiring Diagram

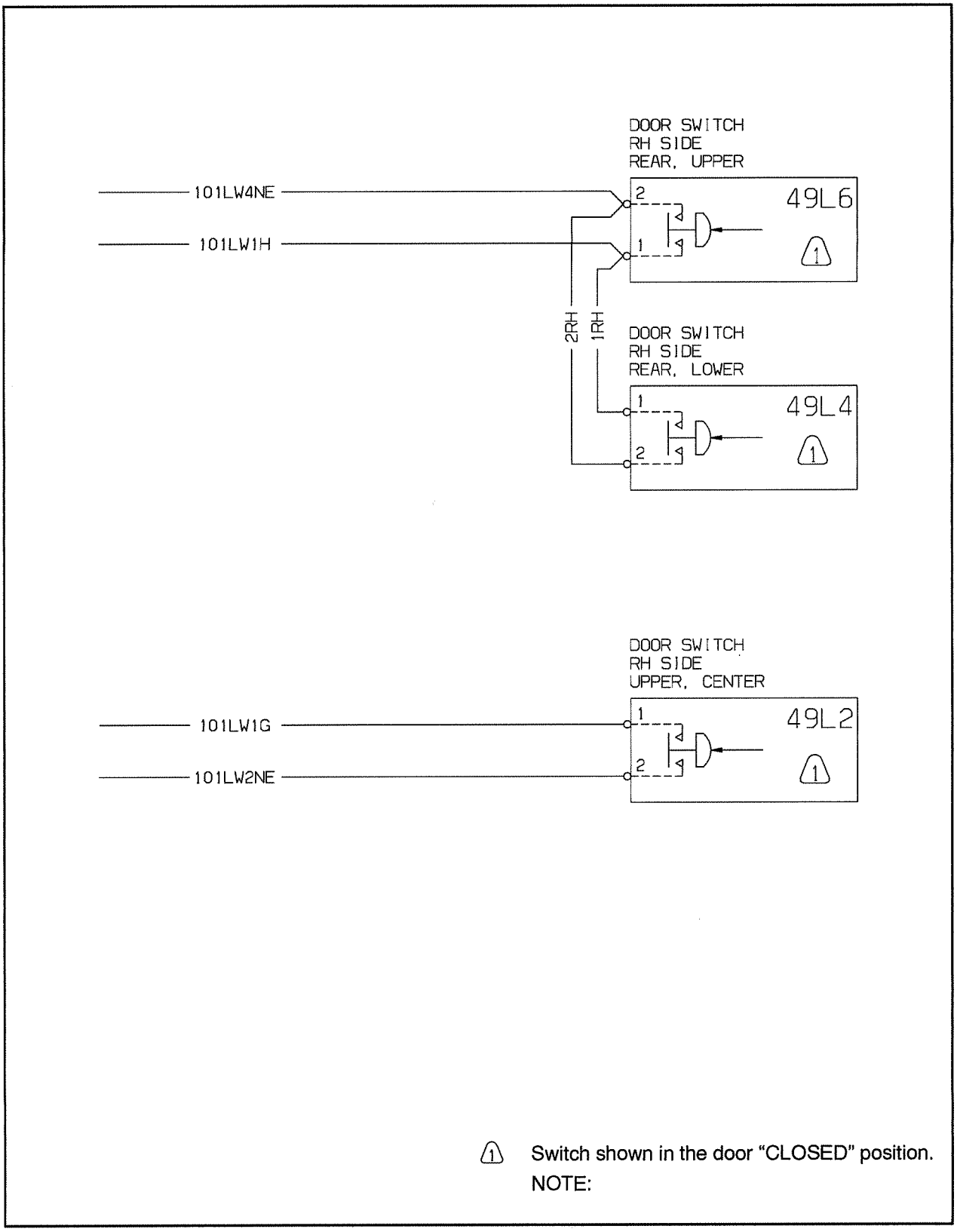


Figure 8 Right hand side Latch Open Warning, Wiring Diagram

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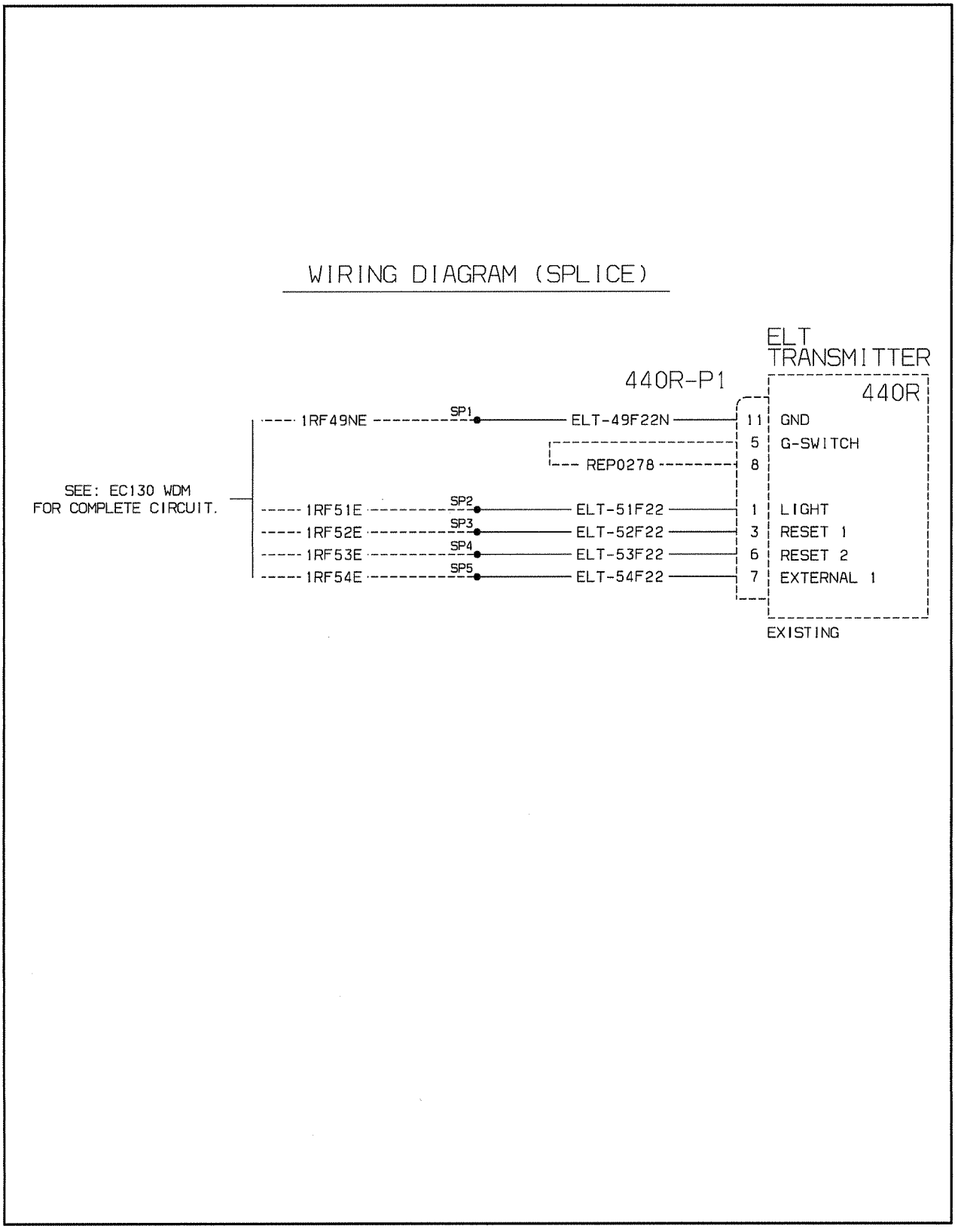

Figure 9 Relocation of ELT Transmitter and Relay, Wiring Diagram (Optional)

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7. SPECIAL TOOLING

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

8. REMOVAL AND REPLACEMENT

Proceed as follows if any of these items need to be removed.

PRELIMINARIES

- Read General Safety Instruction - Electrical Power Supply System (EC 130 B4 AMM, Chapter 24-00-00,3-1)
- set the "D.BAT" pushbutton to "OFF" (refer to Removal/Installation - Battery, EC 130 B4 AMM, Chapter 24.33.00, 4-1)
- set the "EXT PWR BAT" or "BAT EPU" (depending on MOD) pushbutton to "OFF" (refer to Electrical Power Supply on the Ground, EC 130 B4 AMM, Chapter 24-00-00, 2-1)
- disconnect the external battery unit and battery (refer to Removal/Installation - Battery, EC 130 B4 AMM, Chapter 24.33.00, 4-1)
- electrical bonding - (airframe - Servicing refer to EC 130 AMM, Chapter 24-00-00, 3-1)
- open and secure applicable circuit breakers in the RHS of the pedestal before any servicing action.

A. REMOVAL

1. CARGO POD DOOR ASSEMBLY (Refer to Figures 2 and 4)
   a) With the cargo pod door open, disconnect strut assembly (1) from door by removing self-locking nut (2), and washer (3). Refer to Figure 2.
   b) Close and latch the door assembly. Remove the cotter pin (4, 2 places) and washer (3, 2 places) from the bottom of the hinge pin (1, 2 places). Remove the hinge pin (1) (2 places). Refer to Figure 4.
   c). Carefully open door latch assemblies and lift out door.
2. DOOR LATCH ASSEMBLIES (Non-Locking or Locking, Refer to Figure 3)
   a) With the door open and the door latch assemblies (5 and 6) in the unlatched position, remove bolt (5) and washer (6) and remove mobile cover. Refer to SECTION A - A, Door Latch Assembly.
   b) Remove bolt (13) and clamp assembly (7) and remove latch assembly.
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), washers (11, 2 places) and self-locking nuts (12, 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

1. CARGO POD DOOR ASSEMBLY (Refer to Figures 2 and 4)

   a) Position the cargo pod door on aircraft and install hinge pin (1, 2 places) into door hinge. Refer to Figure 4.

   b) Close, latch and align cargo pod door. Install the washer (3, 2 places) and cotter pin (4, 2 places) to secure the cargo pod door assembly. Refer to Figure 4.

   c) Adjust latch screw (8) and jamnut (9) to ensure even seal contact around perimeter of door and 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, position door latch assembly (non-locking) (5, 2 places) and latch assembly (locking) (6, 1 place) in the latch cutouts in cargo pod door assembly. Refer to Figure 2.

   b) When installing a new latch, remove switch contact (4) from old latch and install on new latch. Refer to Figure 3.

   c) Align the latch assembly and tighten bolt (13) to secure the latch assembly in place.

   d) Install mobile cover and secure using bolt (5) and washer (6).

   e) Tighten bolt in accordance with EC, MTC, Volume 2, Chapter 20.02.05.404.

3. CARGO POD DOOR SWITCH (Refer to Figure 3)

   a) Position the cargo pod door switch in switch support (3), and place switch spring (1) and switch cover (2) into position on backside of the switch support (3).

   b) Install 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).

   c) Tighten nut in accordance with EC, MTC, Volume 2, Chapter 20.02.05.404.

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 AMM, Chapter 24-00-00, 2-1).

6. Reconnect the external power unit and battery (refer to Removal/Installation EC 130 AMM, Chapter 24.33.00, 4-1).

7. Perform functional test - DC Power Supply System in accordance with AMM, Chapter 24-30-00, 5-1.

8. Perform operational check of all systems that were serviced in accordance with the EC 130 Aircraft Maintenance Manual procedures and the system's installation/operation manual.

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9. WEIGHT AND BALANCE DATA

A. Removed Items

DESCRIPTION	WEIGHT		ARM		MOMENT	
	kg	lbs	m	in	kg m	lb in
Not applicable	0.00	0.0	0.00	0.0	0.00	0.0
Total	0.00	0.0	0.00	0.0	0.00	0.0

B. Added Items

DESCRIPTION	WEIGHT		ARM		MOMENT	
	kg	lbs	m	in	kg m	lb in
Left Hand Cargo Pod	12.79	28.20	3.55	139.7	45.38	3939.5
Right Hand Cargo Pod	12.79	28.20	3.55	139.8	45.40	3942.4
Hardware	1.29	2.9	3.55	139.8	4.59	405.4
Harness	1.81	0.11	3.55	139.8	6.44	559.2
Total	28.69	63.3	3.55	139.8	101.82	8846.2

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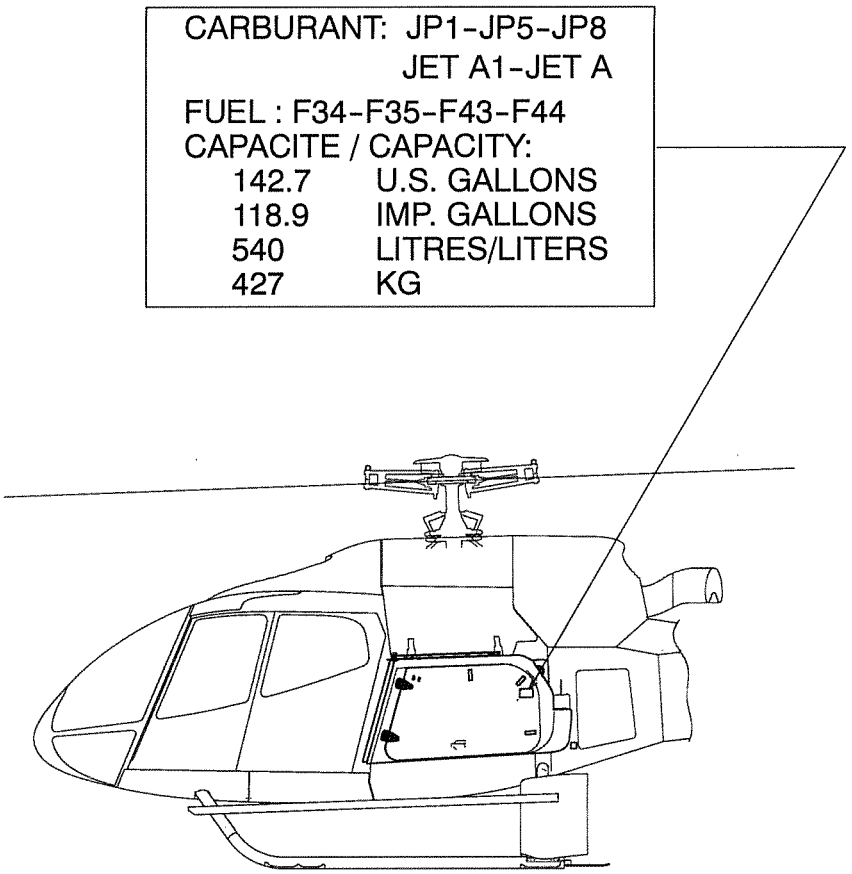
10. PLACARDS AND MARKINGS



View showing Left Hand Side Cargo
Pod Fuel Capacity Label

Figure 10 Marking located on left hand side cargo pod for Fuel Capacity

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10. PLACARDS AND MARKINGS

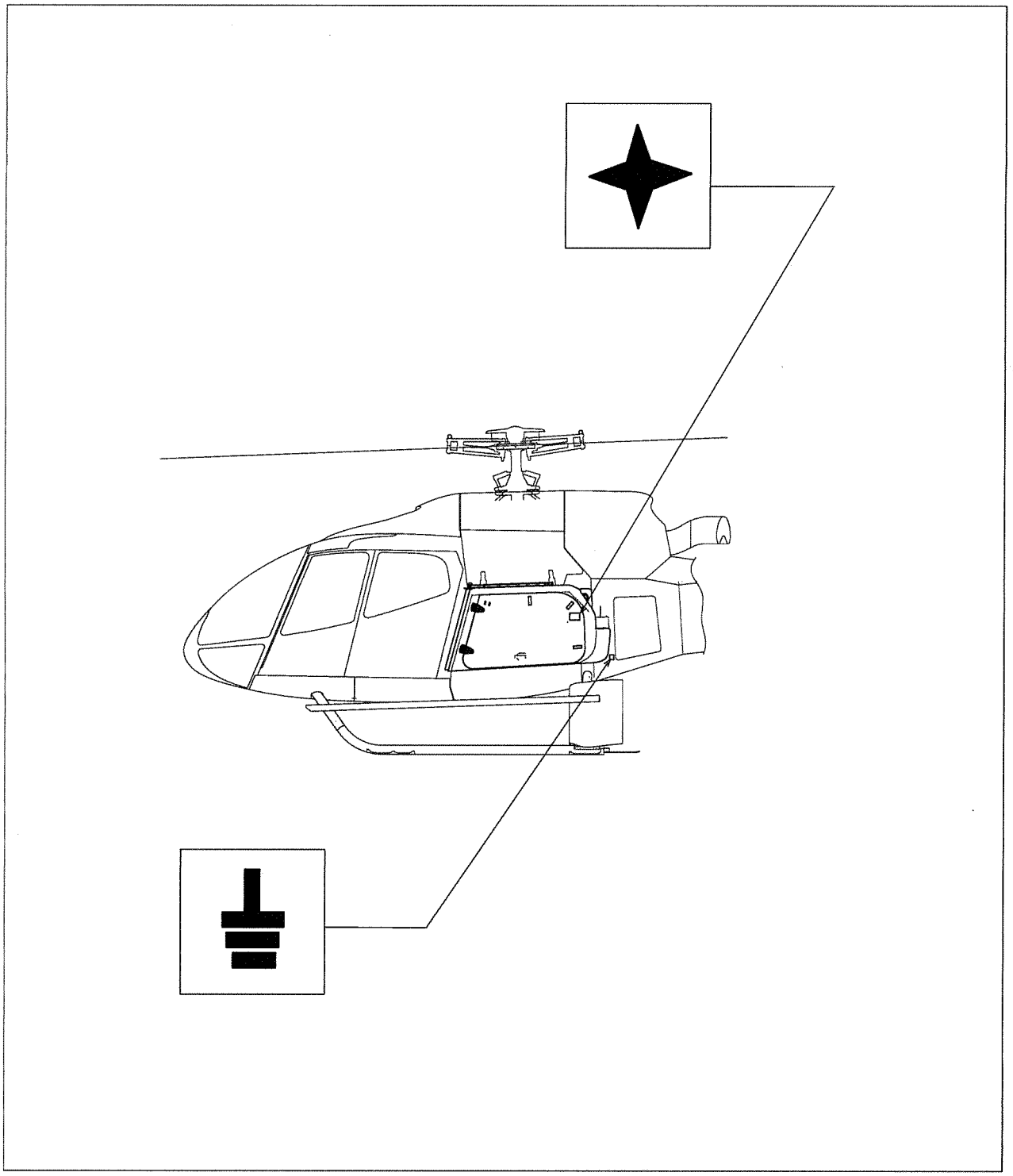

Figure 11 Markings located on left hand side cargo pod

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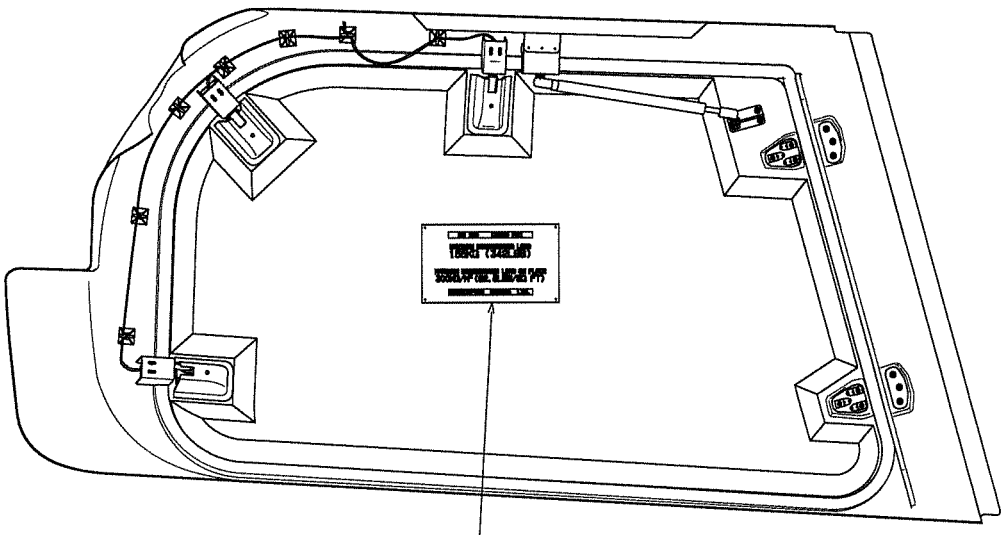
10. **PLACARDS AND MARKINGS** (continued)



EC 130 CARGO POD

MAXIMUM DISTRIBUTED LOAD
155KG (342LBS)

MAXIMUM DISTRIBUTED LOAD ON FLOOR
300KG/M^2 (62.5LBS/SQ FT)

EUROCOPTER CANADA LTD.

View showing maximum load placard
located inside of Left Hand Cargo
Pod

Figure 12 Markings located on inside of left hand side cargo pod

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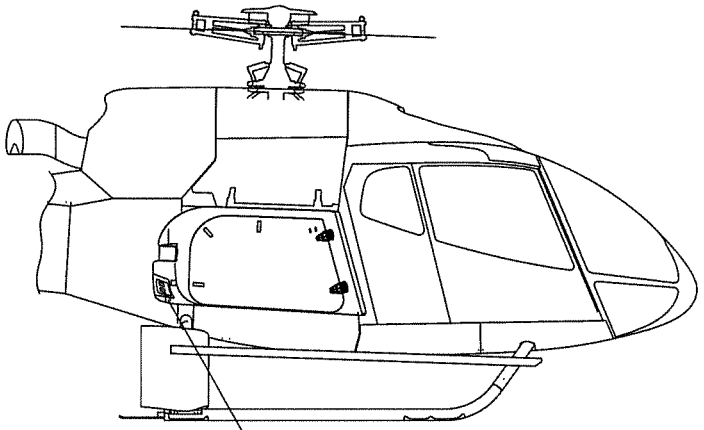
10. **PLACARDS AND MARKINGS** (continued)



BEFORE CONNECTING
GROUND POWER
CONNECTOR PERFORM
SCU TEST (SEE LABEL
ON BATTERY DOOR)

View showing placard located on
inside of EPU door

Figure 13 Placard located on inside of EPU door

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10. **PLACARDS AND MARKINGS** (continued)

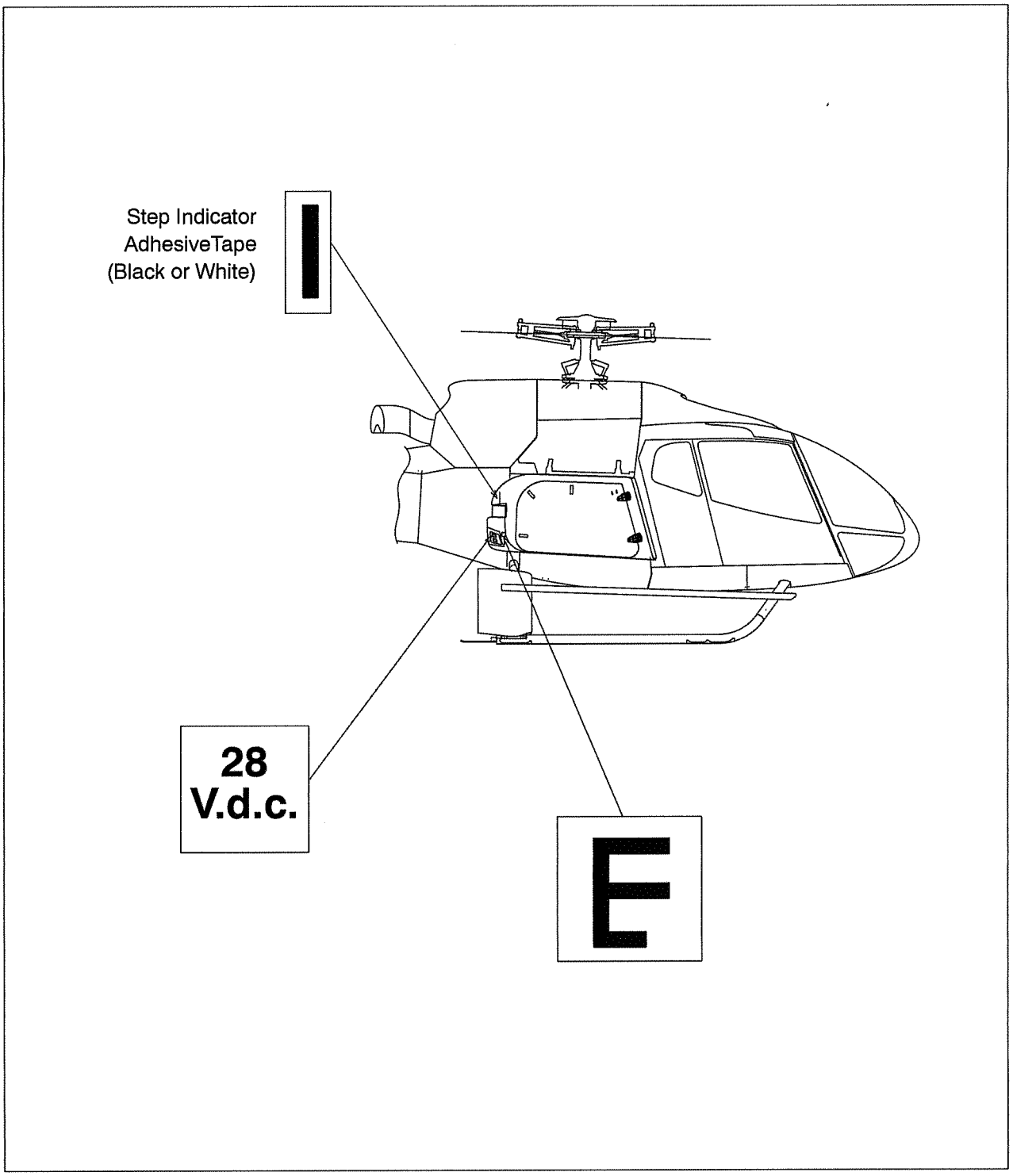

Figure 14 Markings located on right hand side cargo pod

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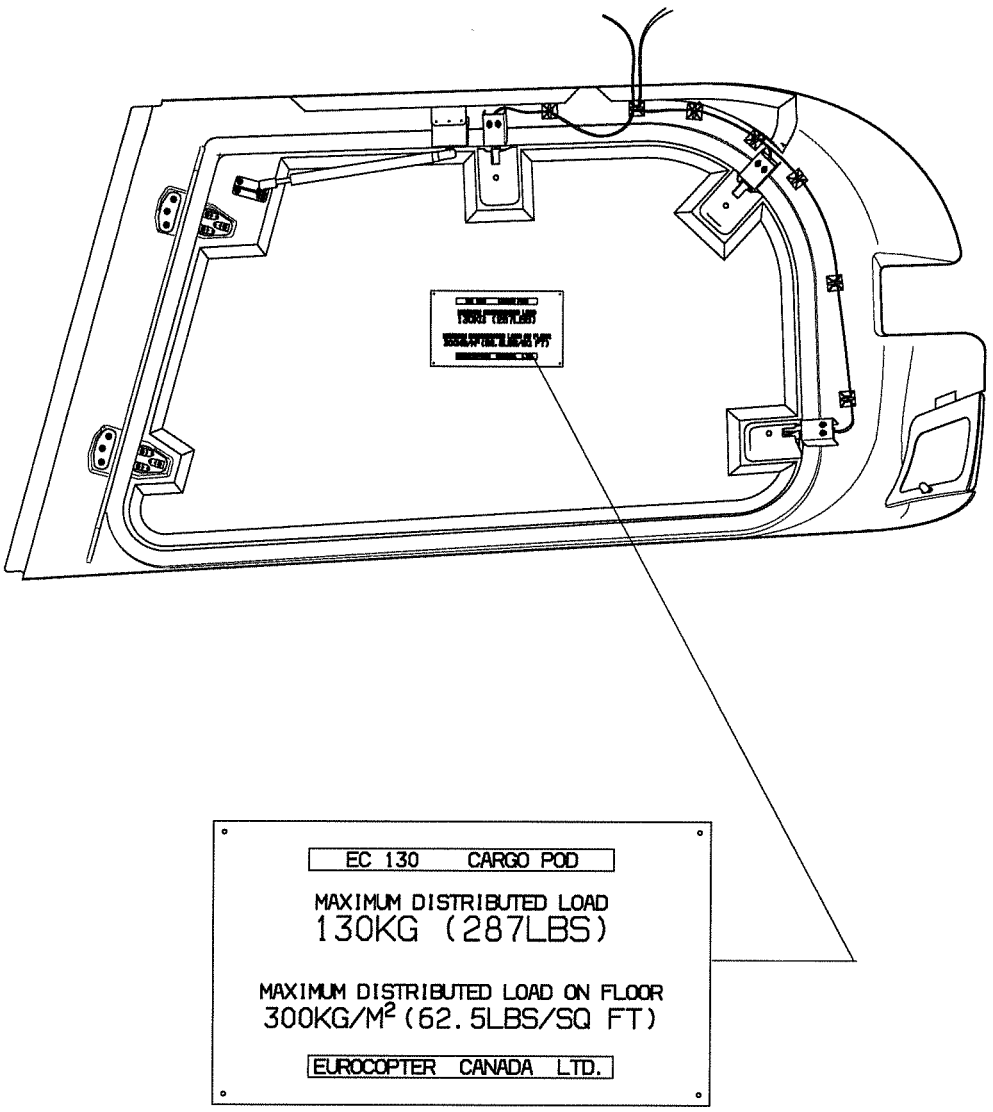
10. **PLACARDS AND MARKINGS** (continued)



View showing maximum load placard
located inside of Right Hand Cargo Pod

Figure 15 Markings located on inside of right hand side cargo pod

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