



**SUBJECT:**

Required maintenance for the Rear Cargo Door Hinge and Latch Modification  
(P/N 350-201064).

**APPLICABILITY :**

Aircraft with the subject modification embodied in accordance with TCCA STC. No. SH97-33  
or any relevant foreign approvals.

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	NAME AND SIGNATURE	DATE	COMPANY DEPARTMENT
PREPARED BY:	D. Kerr <i>DKerr</i>	16 May 2013	ECL ENGINEERING
PREPARED BY:			
CHECKED BY:	C. Timmins <i>C. Timmins</i>	15 <sup>th</sup> May 2013	ECL ENGINEERING
CHECKED BY:	M. Merritt <i>M. Merritt</i>	2013-05-16	ECL QUALITY ASSURANCE
APP'D / ACCEPTED (Civil A/W Authority)	(As per ICA Compliance Check Sheet) <i>C. Timmins</i>	10 <sup>th</sup> October 13	TCCA
RELEASED BY:	P. Sharpe <i>P. Sharpe</i>	15 Oct 2013	ECL ENGINEERING



**RECORD OF REVISIONS**

Rev.	Pages at this Revision	Description, Reason Changed Pages	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 18	Original Issue	D. Kerr 3 August 2011	C. Timmins 3 August 2011	N/A	R. Manson 21 June 2012
1	1 through 20	Addition of 150 flight hour inspection. Section 8, Removal and Replacement revised. (Pages 3, 7, 11, 13 to 18)	D. Kerr 20 August 2012	C. Timmins 27 August 2012	N/A	P. Sharpe 26 February 2013
2	1 through 20	Revised the Airworthiness Limitations statement in Section 2. Additional information to Sec. 4. (Pages 11 to 13, 17 & 18)	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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**1. GENERAL**

- A. The AS 350 rear cargo door is attached to the rear cargo compartment by two hinges on the bottom edge and is secured by a single latch on the top of the door.

The Eurocopter Canada Limited Rear Cargo Door Hinge and Latch Modification is a modification of the standard installation that moves the hinges from the bottom edge of the door to the forward edge, allowing for easier access. Refer to Figure 1.

The AS 350 / AS 355 Rear Cargo Door Hinge and Latch Modification is available in four variants:

Helicopter type	Installation Drawing number	Variant
AS 350	350-201064-01	- 01 variant - Standard rear cargo hinge and latch conversion kit for 350A21-0023-00 door. Refer to Figure 2.
Hinge Repair/Rework on existing kits	350-201064-02	- 02 variant - Hinge repair/rework for existing kit D350-588. Refer to Figure 2.
AS 355 N	350-201064-03	- 03 variant - Rear cargo hinge and latch conversion kit for 350A21-0023-06 for the AS 355 N. Refer to Figure 3.
AS 355 NP	350-201064-04	- 04 variant - Rear cargo hinge and latch conversion kit for 350A21-0023-08 for the AS 355 NP. Refer to Figure 3.

The Rear Cargo Door Hinge and Latch Modification consists of the following main components:

**Fixed Provisions**

- Hinge Mounts
- Upper and Lower Hinges
- Latch Assemblies
- Strut Mount Backing Plate
- Lower Hinge Backing Plate

**Detachable Provisions**

- Standard Rear Door Mod
- Door Strut
- Bonding Jumper (-01, -03 and -04 variants when installed on an AS 355 N or AS 355 NP)

For instructions on the initial installation refer to IP-ECL-125.

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

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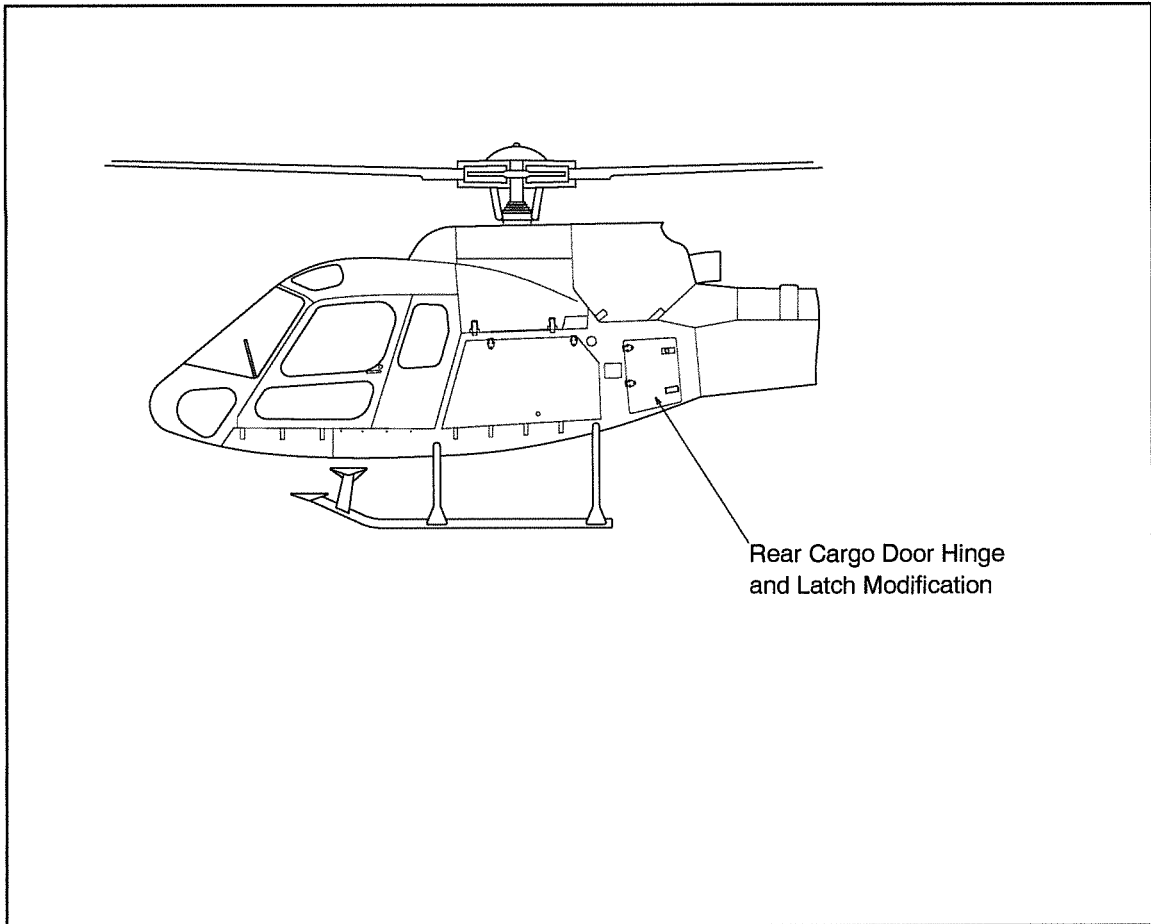


Figure 1 General Layout

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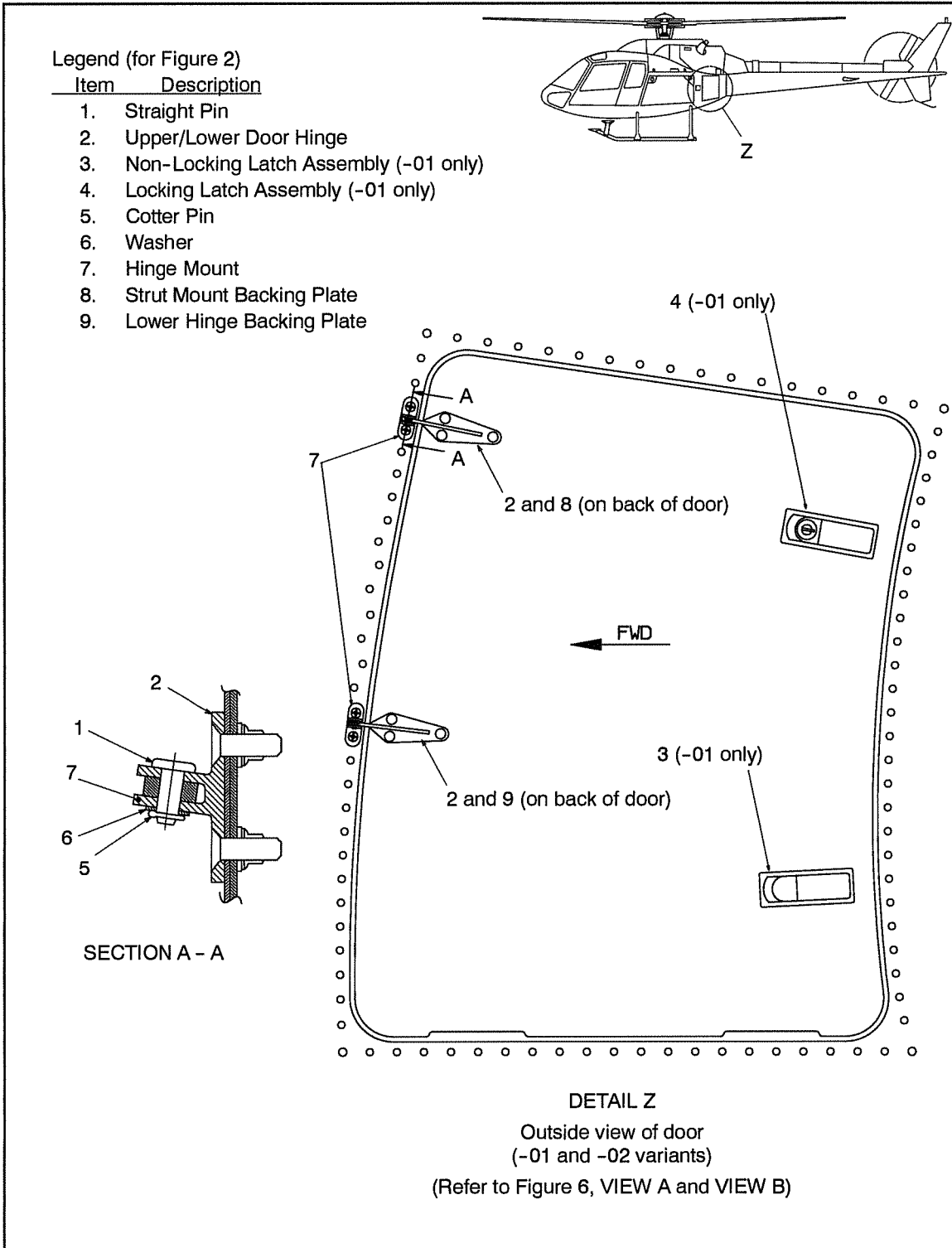


Figure 2 Standard Rear Cargo Hinge and Latch conversion

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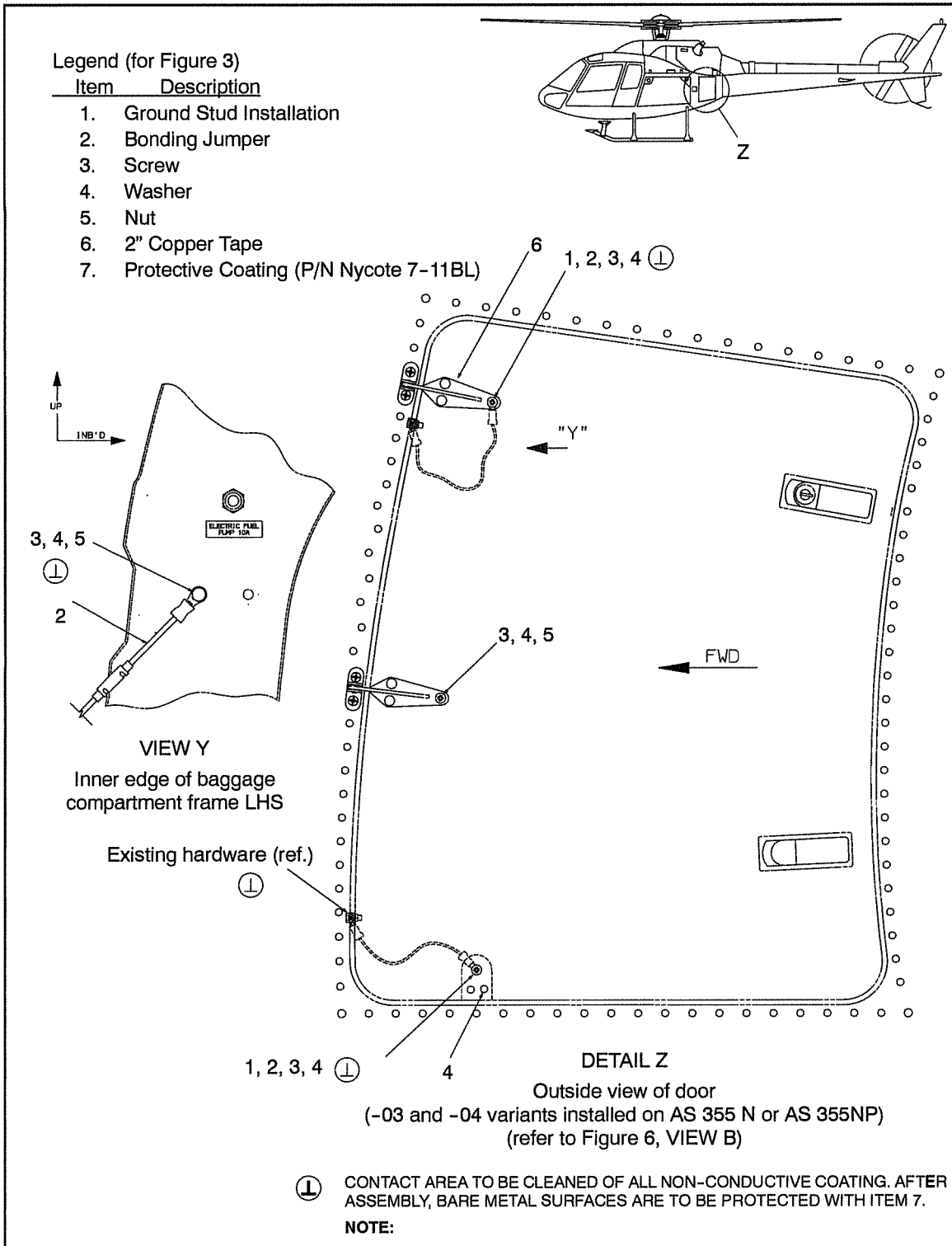


Figure 3 Rear Cargo Door Bonding Modification (-03 and -04 variant)

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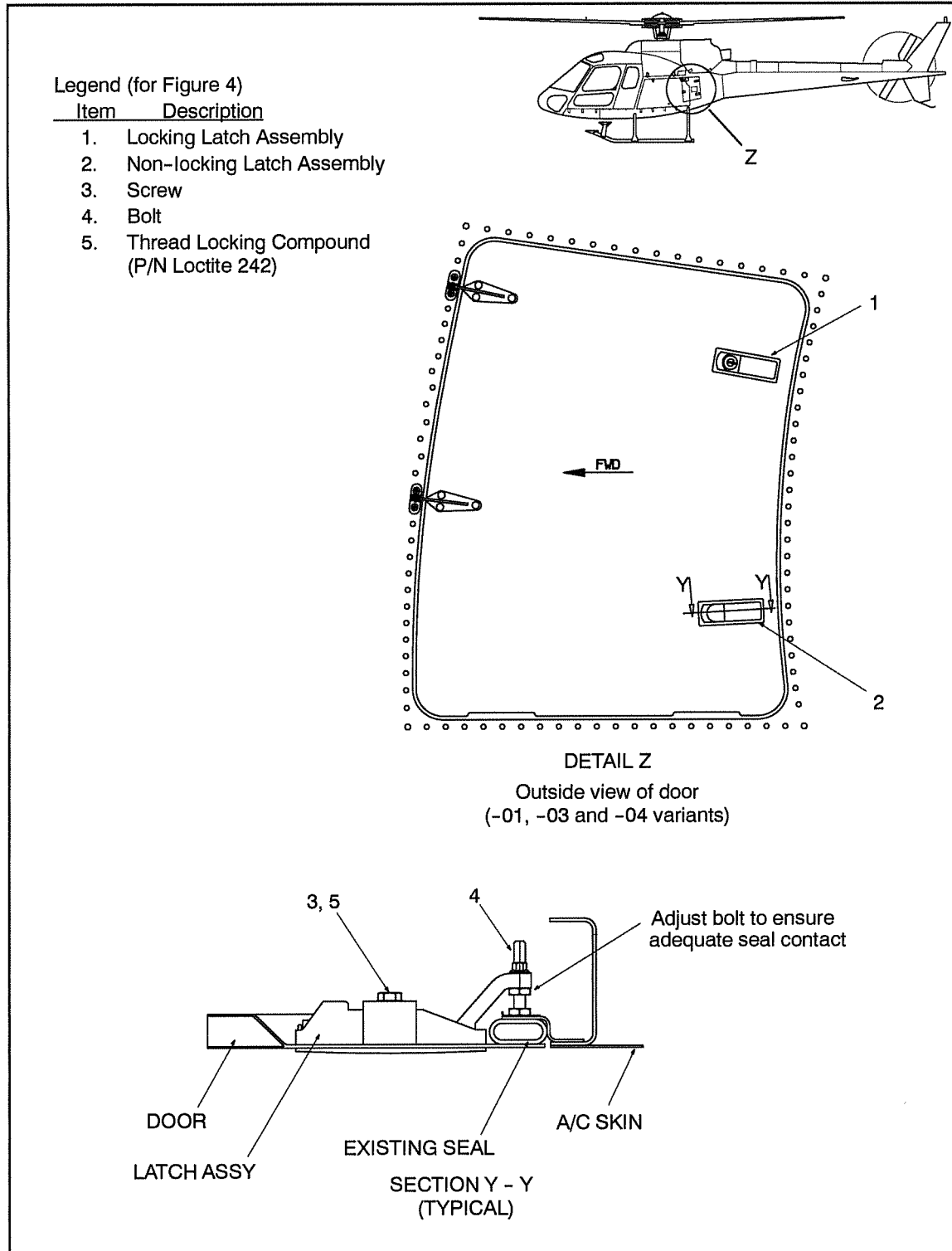


Figure 4 Door Latch Assembly

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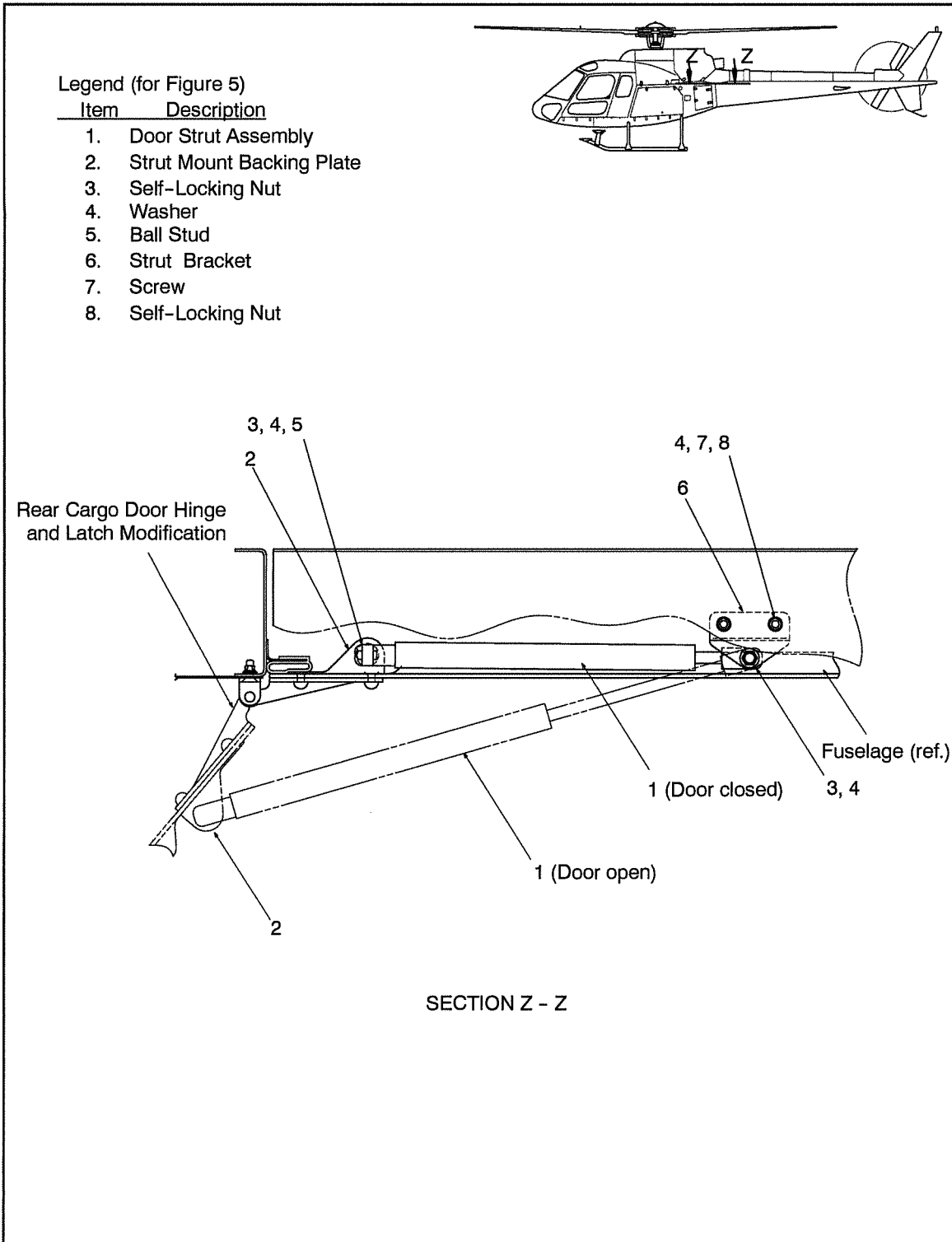


Figure 5 Strut Mount Backing Plate and Strut Assembly

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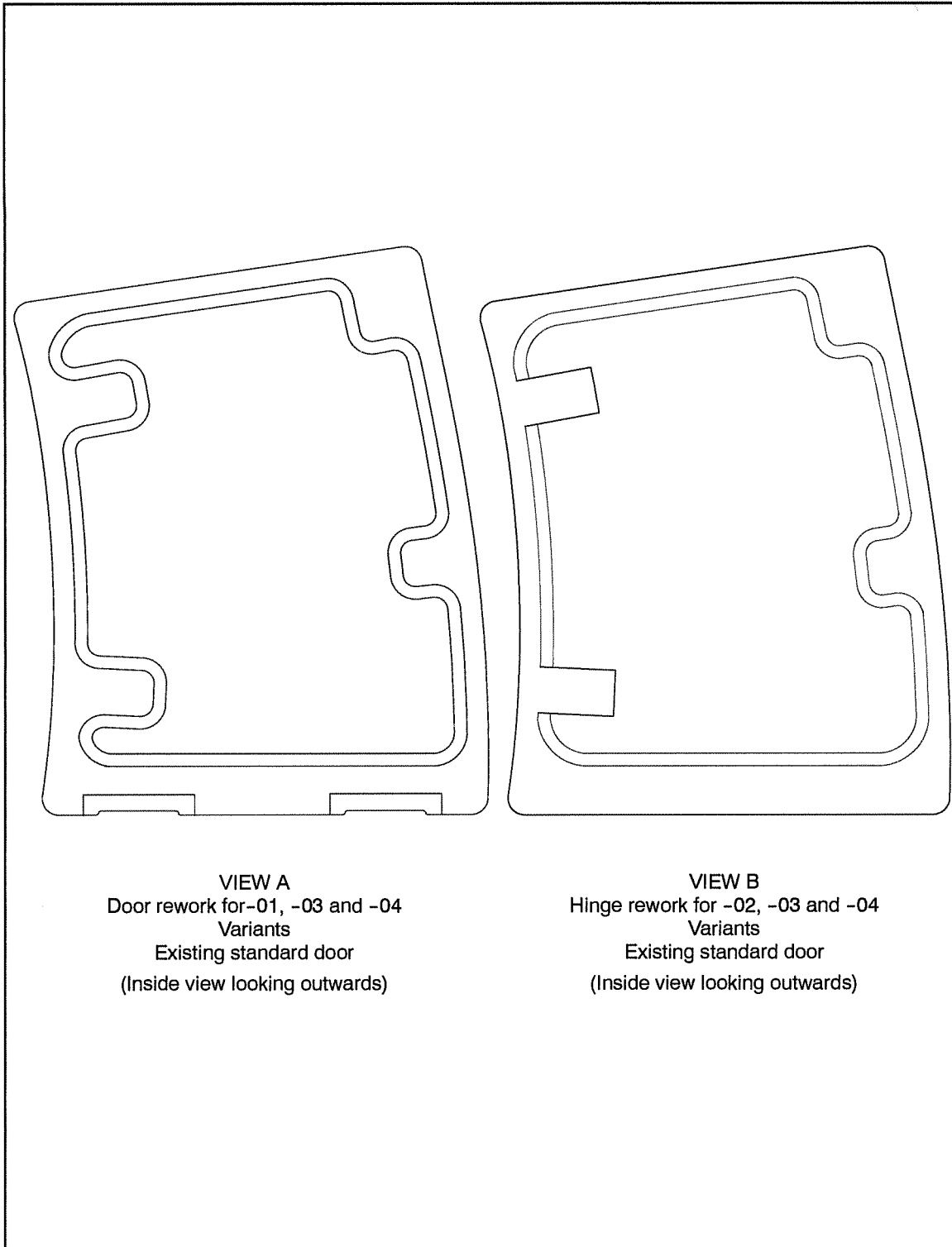


Figure 6 Rear door rework for all variants

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**C. REFERENCES**

DOCUMENT	DOCUMENT TITLE
AMM (AS 350 B2/B3)	Aircraft Maintenance Manual
text deleted	text deleted
IP-ECL-125	Installation Procedure
MET (AS 350 / AS 355)	Maintenance Manual
MRM (AS 350 / AS 355)	Mechanical Repair Manual
MTC (all aircraft)	Standard Practices Manual

**D. ABBREVIATIONS & DEFINITIONS**

ABBREVIATION	DEFINITION
A/C	Aircraft
D	Days
EC	Eurocopter (France)
ECL	Eurocopter Canada Limited
FH	Flight Hours
FWD	Forward
hrs	hours
LHS	Left-Hand Side
M	Months

**E. UNITS OF MEASUREMENT**

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

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**INSTRUCTIONS FOR CONTINUED  
AIRWORTHINESS  
REAR CARGO DOOR HINGE  
AND LATCH MODIFICATION  
AS 350 / AS 355**

**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.

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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 (Margin: 15 H 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"> <li>- Visually inspect the forward opening rear cargo door for:               <ul style="list-style-type: none"> <li>a. general condition, visible damage</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>a. Minor repairs may be accomplished in accordance with MTC, Chapter 20.03.07.101. For major repairs, contact ECL.</li> </ul>
B	<ul style="list-style-type: none"> <li>- Visually inspect the forward opening rear cargo door for:               <ul style="list-style-type: none"> <li>a. delamination or irregularity</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>a. For the AS 355 determine extent of the damage in accordance with MTC, Chapter 20-03-06-601, Sections B (1) and (2). Repair all models in accordance with MTC, Chapters 20-03-06-401 Section 401, C and 20-03-07-101.</li> </ul>
C	<ul style="list-style-type: none"> <li>- Visually inspect both straight pins, item 1, in the door hinges, item 2 in Figure 2 for:               <ul style="list-style-type: none"> <li>a. security</li> <li>b. corrosion</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>a. Secure both straight pins as required.</li> <li>b. No corrosion is allowed. If corrosion is found, contact ECL for replacement parts.</li> </ul>
D	<ul style="list-style-type: none"> <li>- Visually inspect upper and lower door hinge, item 2, in Figure 2 for:               <ul style="list-style-type: none"> <li>a. security</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>a. Secure as required.</li> </ul>
E	<ul style="list-style-type: none"> <li>- Visually inspect bonding jumper (-02 variant only), item 2, in Figure 3, for:               <ul style="list-style-type: none"> <li>a. security</li> <li>b. corrosion</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>a. Secure as required.</li> <li>b. No corrosion is allowed. If corrosion is found, contact ECL for replacement parts.</li> </ul>

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**

**4.1. INSPECTION SCHEDULE (continued)**

4.1.2. Every 150 FH or 12 M (Margin: 15 H 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 2" copper tape (-03 and -04 variant only), item 6, in Figure 3, for: a. security	a. Secure as required.
G	- Perform functional test of locking latch assembly, item 1, in Figure 4, for: a. proper locking function	a. Clean and lubricate to restore proper locking function.
H	- Test both door latch assemblies, items 1 and 2, in Figure 4, for: a. freedom of movement b. proper latching	a. Clean and lubricate to restore freedom of movement. b. Adjust striker bolt (item 4, Figure 4) as required to ensure adequate seal between the door and door seal.
I	- Visually inspect existing door seal, in Figure 4 for: a. cuts and cracking b. debonding or loss of elasticity	a. If cuts or cracks are evident replace door seal in accordance with MRM, Chapter 52.10.16.701 for the AS 350/AS 355, or IPC, Chapter 52-31-10-02 for the AS 350 B2/B3. b. If debonding or loss of elasticity is evident, replace door seal in accordance with MRM, Chapter 52.10.16.701 for the AS 350/AS 355, or IPC, Chapter 52-31-10-02 for the AS 350 B2/B3.
J	- Visually inspect door strut assembly, item 1, in Figure 5, for: a. secure installation b. correct operation	a. Ensure that the door strut is connected correctly to door and fuselage attachments. b. If door strut does not hold the door in the open position, contact ECL for replacement part.
K	- Check placards and markings (refer to Section 10) for: a. legibility b. secure mounting	a. If placards have become illegible, contact ECL for replacement parts. b. Secure or reattach placards and markings 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 ECL for replacement parts. No overhaul information required for this installation.

**6. TROUBLESHOOTING**

There are no unique characteristics which require special troubleshooting techniques; standard techniques are adequate.

**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.

If modifying an AS 350 (excluding AS 350 B2 & B3):

- Read the General Electrical Instructions (refer to AS 350 MET, Chapter 24.00.00.301).
- set the "D.BAT" push button to "OFF"
- set the "EXT PWR BAT" or "BAT EPU" (depending on MOD) pushbutton to "OFF" (refer to Electrical Power AS 350 MET, Chapter 24.00.00.301)
- disconnect the external power unit and battery (refer to Removal/ Installation AS 350 MET, Chapter 24.30.00.401)

If modifying an AS 350 B2 or B3:

- Read General Safety Instructions - Electrical Power Supply System (refer to AS 350 B2, B3, AMM, Chapter 24-00-00, 3-1).
- Read Electrical Power Supply on the Ground (refer to AS 350 B2, B3, AMM, Chapter 24-00-00, 2-1)
- disconnect the external power unit and battery (refer to Removal/Installation , AS 350 B2, B3, AMM, Chapter 24-33-00, 4-1)

If modifying an AS 355:

- Read the General Electrical Instructions (refer to AS 355 MET, Chapter 24.00.00.301).
- set the "D.BAT" push button to "OFF"
- set the "PARC-BATT", "BAT EPU 1" and "BAT EPU 2" (depending on MOD) pushbutton to "OFF" (refer to Electrical Power AS 355 MET, Chapter 24.00.00.301)
- disconnect the external power unit and battery (refer to Electrical Power Generating System, AS 355 MET, Chapter 24.30.00.401)

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

**A. REMOVAL**

**1) REAR CARGO DOOR (Refer to Figures 2, 3 and 5)**

- a) With door in the open position, disconnect strut (1) from the ball stud (5) located on the strut mount backing plate (2) by lifting the locking tab on the strut (1). Refer to Figure 5.
- b) Disconnect strut (1) from the strut bracket (6) by lifting the locking tab on the strut (1). Remove strut (1) from aircraft. Refer to Figure 5.

**NOTE:** For -03 and -04 variant only: disconnect the upper bonding jumper (2) from inside the LHS of the baggage compartment. Remove screw (3), washer (4) and nut (5). Refer to Figure 3, VIEW Y. Disconnect lower bonding jumper (2) by removing the existing hardware. Refer to Figure 3, DETAIL Z.

Remove remove existing ground stud installation (1) hardware securing bonding jumper (2) to the LHS of the baggage compartment.

- c) Remove cotter pins (5) (2 places) washers (6) (2 places) and remove straight pins (1) (2 places) from hinge mounts (7) (2 places) and remove door. Refer to Figure 2, Section A - A.

**2) LOCKING AND NON-LOCKING LATCH ASSEMBLIES (Refer to Figure 4)**

- a) With door open, position door latch assemblies (1 and 2) in the latched position. Refer to Figure 4.
- b) Remove latch assembly mounting screw (3) from each door latch assembly (1 and 2). Remove both door latch assemblies (1 and 2) from door. Refer to Figure 4.

**3) STRAIGHT PIN (Refer to Figure 2)**

- a) Unlatch rear cargo door and disconnect strut (1).
- b) Remove cotter pins (5) washers (6) and straight pins (1) from hinge mount (7). Discard cotter pins. Refer to Figure 2, Section A - A.

**4) BONDING JUMPER For -03 and -04 variant only (Refer to Figure 3)**

**NOTE:** If removing the upper bonding jumper follow a) and b), for lower bonding jumper: c) and d).

- a) With door in open position, disconnect the upper bonding jumper (2) from inside the LHS of the baggage compartment. Remove screw (3), washer (4) and nut (5). Refer to Figure 3, VIEW Y.
- b) Remove remove screw (3), and existing ground stud installation (1) hardware securing bonding jumper (2) to the upper hinge.
- c) With door in open position, disconnect lower bonding jumper (2) by removing the existing hardware. Refer to Figure 3, DETAIL Z.
- d) Remove screw (3), washer (4) and existing ground stud installation (1) hardware securing bonding jumper (2) to the original door provision.

**5) DOOR STRUT (Refer to Figure 5)**

- a) With door in the open position, disconnect strut (1) from the ball stud (5) located on the strut mount backing plate (2) by lifting the locking tab on the strut (1).
- b) Disconnect strut (1) from the strut bracket (6) by lifting the locking tab on the strut (1). Remove strut (1) from aircraft.

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

B. REPLACEMENT

**NOTE:** Use torque per EC, MTC, Volume 2, Chapter 20.02.05.404, unless otherwise specified.

Safelying with Loctite 242 - refer to Safelying with Loctite Compounds - MTC, Chapter 20-02-06-409.

Safelying with cotter pins - refer to Safelying with cotter pins - MTC, Chapter 20-02-06-404.

Sealing compound Nycote 7-11BL - refer to General Sealing Procedures - MTC, Chapter 20.05.01.102.

Electrical Bonding - refer to Electrical Bonding - General, MTC, Chapter 20.02.07.101.

1) **REAR CARGO DOOR** (Refer to Figures 2, 3 and 5)

- a) Position Door on aircraft aligning upper and lower hinges (2) in hinge mounts (1) (2 places). Refer to Figure 2.
- b) Insert straight pins (9) (2 places) into hinge mounts (1) (2 places) and secure using washers (10) (2 places) and new cotter pins (11) (2 places). Refer to Safelying with cotter pins - MTC, Chapter 20-02-06-404.
- c) Secure strut (1) to strut bracket (6). Reconnect strut (1) to ball stud (5) located on the strut mount backing plate (2). Refer to Figure 5.

For -03 and -04 variant only:

Secure upper bonding jumper (2) to LHS of baggage compartment using screw (3), washer (4) and nut (5). Refer to Figure 3, VIEW Y. Secure the lower bonding jumper (2) using existing hardware. Refer to Figure 3, DETAIL Z.

**NOTE:** Contact area to be cleaned of all non-conductive coating. After assembly, bare metal surfaces to be protected with Nycote 7-11BL. Refer to General Sealing Procedures - MTC, Chapter 20.05.01.102.

Check electrical bonding in accordance with Electrical Bonding - MTC, Chapter 20.02.07.101. ■

2) **LOCKING AND NON-LOCKING LATCH ASSEMBLIES** (Refer to Figure 4)

- a) Position both door latch assemblies (1 and 2) into door in the latched position. Refer to Figure 4.
- b) Secure using the latch assembly mounting screws (3) (2 places). Refer to Figure 4.

**NOTE:** Apply thread locking compound (6) to latch assembly mounting screws (3) upon installation. Refer to Safelying with Loctite Compounds - MTC, Chapter 20-02-06-409.

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

B. REPLACEMENT

3) STRAIGHT PIN (Refer to Figure 2)

- a) Replace new straight pin (9) into hinge mount (1). Secure using washers (10) (2 places) and new cotter pins (11). Refer to Safelying with cotter pins - MTC, Chapter 20-02-06-404.
- b) Reconnect strut (1).

4) BONDING JUMPER For -03 and -04 variant only (Refer to Figure 3)

**NOTE:** If replacing the upper bonding jumper follow a) and b), for lower bonding jumper: c) and d).

- a) With door in open position, secure upper bonding jumper (2) to LHS of baggage compartment using screw (3), washer (4) and nuts (5). Refer to Figure 3, VIEW Y.
- b) Secure upper bonding jumper (2) to the upper hinge using screw (3), and existing ground stud installation (1) hardware.
- c) Secure the lower bonding jumper (2) using existing hardware. Refer to Figure 3, DETAIL Z.
- d) Secure lower bonding jumper (2) to the original door provision using screw (3), washer (4) and existing ground stud installation (1) hardware .

**NOTE:** Contact area to be cleaned of all non-conductive coating. After assembly, bare metal surfaces to be protected with Nycote 7-11BL. Refer to Electrical Bonding - General, Standard Practices Manual, Chapter 20.02.07.101 and .General Sealing Procedures - MTC, Chapter 20.05.01.102.

- e) Check electrical bonding in accordance with Electrical Bonding - MTC, Chapter 20.02.07.101. ■

5) DOOR STRUT (Refer to Figure 5)

- a) With door in open position, secure strut (1) to strut bracket (6). Reconnect strut (1) to ball stud (5) located on the strut mount backing plate (2).

6) Close all areas opened for service in the PRELIMINARIES paragraph of this section.

For AS 350 / AS 355 (excluding AS 350 B2 and B3):

- Apply external power unit and battery. Refer to AS 350/AS 355 MET, Chapter 24.30.00.401.
- Perform functional test in accordance with AS 350/AS 355 MET, Chapter 24.30.00.501.

For AS 350 B2 and B3

- Before energizing the aircraft power supply system, read safety instructions (refer to General Safety Instruction - Electrical Power Supply System, AS 350 B2, B3, AMM, Chapter 24-00-00, 3-1).
- Reconnect the external power unit and battery (refer to Removal/Installation As 350 B2, B3, AMM, Chapter 24-33-00, 4-1).
- Perform function test - DC Power Supply System in accordance with AS 350 B2, B3 AMM, Chapter 24-30-00-5-1. ■

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9. **WEIGHT AND BALANCE DATA**

**A. Removed Items**

DESCRIPTION	WEIGHT		ARM		MOMENT	
	kg	lbs	m	in	kg m	lb in
Basic aircraft Rear Door and hardware	- 1.15	- 2.5	4.61	181.5	- 5.30	- 453.8

**B. Added Items**

DESCRIPTION	WEIGHT		ARM		MOMENT	
	kg	lbs	m	in	kg m	lb in
Rear Cargo Door Hinge and Latch Modification	1.78	3.9	4.61	181.5	8.21	707.9

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**10. PLACARDS AND MARKINGS**

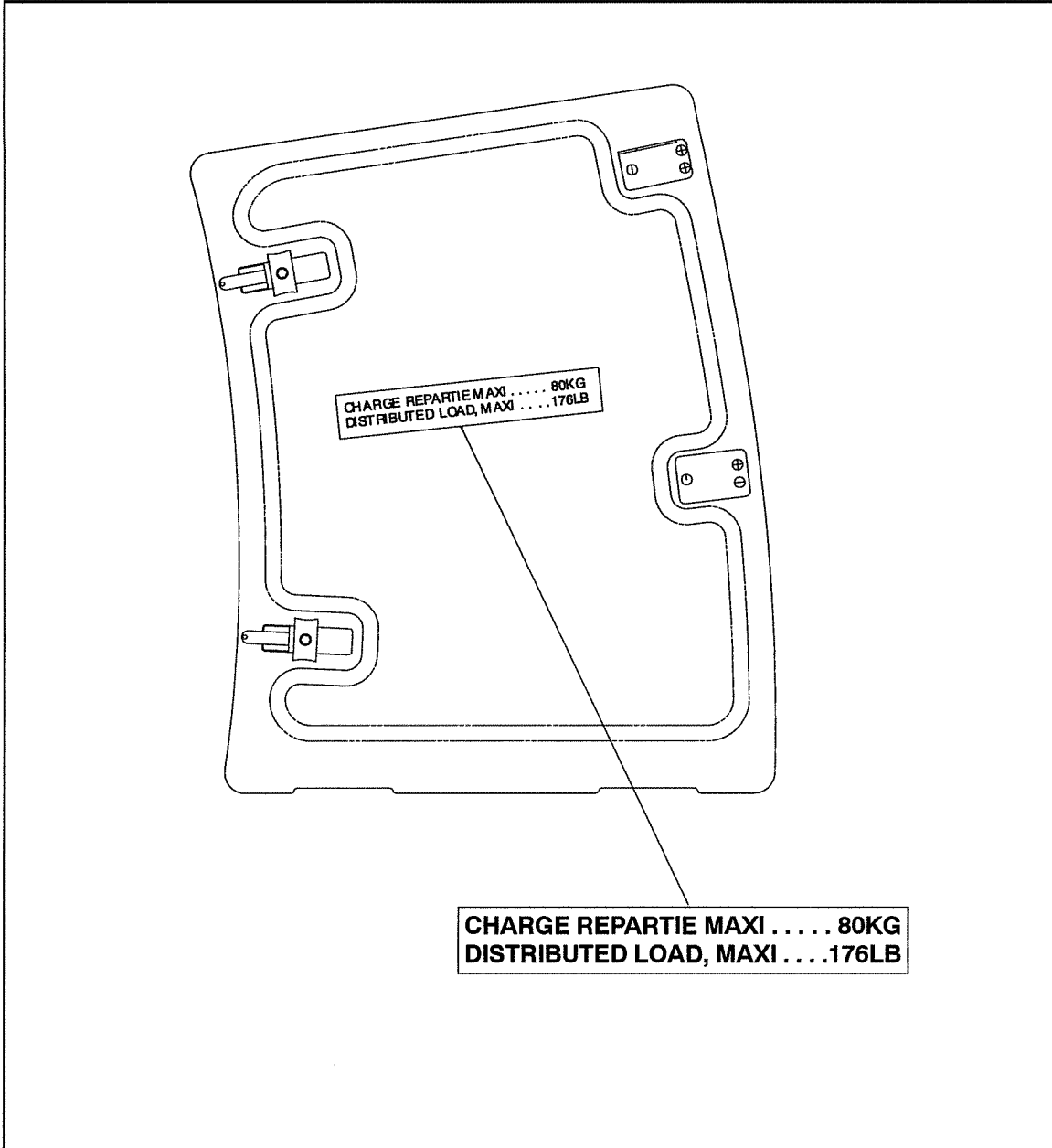


Figure 7 Identification label on inside of door

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