

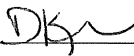

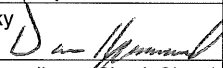

AIRBUS HELICOPTERS CANADA LIMITED
SUBJECT:

 Required maintenance for the Installation of Left Hand and /or Right Hand Cargo Mirrors
 (P/N 350-200254/64).

APPLICABILITY :

 Aircraft with the subject modification embodied in accordance with TCCA STC
 No. SH96-61 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 	MAY 16 2018	AHCA ENGINEERING

AIRBUS HELICOPTERS CANADA LIMITED**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 11	Original Issue	D. Kerr 8 September 2004	C. Timmins 8 September 2004	TCCA E. Chung 8 September 2004	See page 1.
1	1 through 16	Airworthiness Limitations statements revised. Figures and Maintenance Schedule revised. Installation instructions moved to Section 8. Weight and Balance chart incorporated. Template revised. (Pages 4 to 16)	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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CONTENTS

SECTION	TITLE	PAGE
1	GENERAL	4
2	AIRWORTHINESS LIMITATIONS	10
3	CONTROL AND OPERATION	11
4	INSPECTION SCHEDULE AND MAINTENANCE ACTION	11
5	REPLACEMENT COMPONENTS AND REPAIR/OVERHAUL INFORMATION ..	13
6	TROUBLESHOOTING	13
7	SPECIAL TOOLING	13
8	REMOVAL AND REPLACEMENT	14
9	WEIGHT AND BALANCE DATA	16
10	PLACARDS AND MARKINGS	16

FIGURES

FIGURE	TITLE	PAGE
1	General Layout	5
2	Installation Details	6
3	LH and RH Mirror Details	7

TABLES

TABLE	TITLE	PAGE
1	Before the first flight of each day	11
2	Inspection and Maintenance Action Every 150 FH or 12 M (Margins: 15 FH or 36 D)	11

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1. GENERAL

- A. The Installation of the Left Hand and/or Right Hand Cargo Mirrors consists of two mirrors mounted on a support frame that is fixed to the helicopter at three attachment points on the LH side or RH side of the aircraft. One mirror is used to monitor the load while the other is used to monitor the hook. The mirrors must be manually adjusted while on the ground to enable the pilot to watch the external load and monitor hook while monitoring the instrument panel.

The Installation of the Left Hand and/or Right Hand Cargo Mirrors consists of the following main components:

Fixed Provisions, at three fixed attachment points:

- Window frame bracket
- Nose access panel bracket
- LH/RH chin window frame bracket

Detachable Provisions:

- mirror support frame
- convex mirror (quantity 2)

The installation is possible in the following four configurations:

- 01 - used for low position with AHCA mirror configuration
- 02 - used for low position with AH mirror configuration
- 03 - used for standard position with AHCA mirror configuration
- 04 - used for standard position with AH mirror configuration

The cargo mirrors can easily be removed between aerial missions and must be readjusted upon installation.

The Left Hand and/or Right Hand Cargo Mirrors are installed in accordance with drawings specified in Master Drawing List MDL- 96- 005.

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

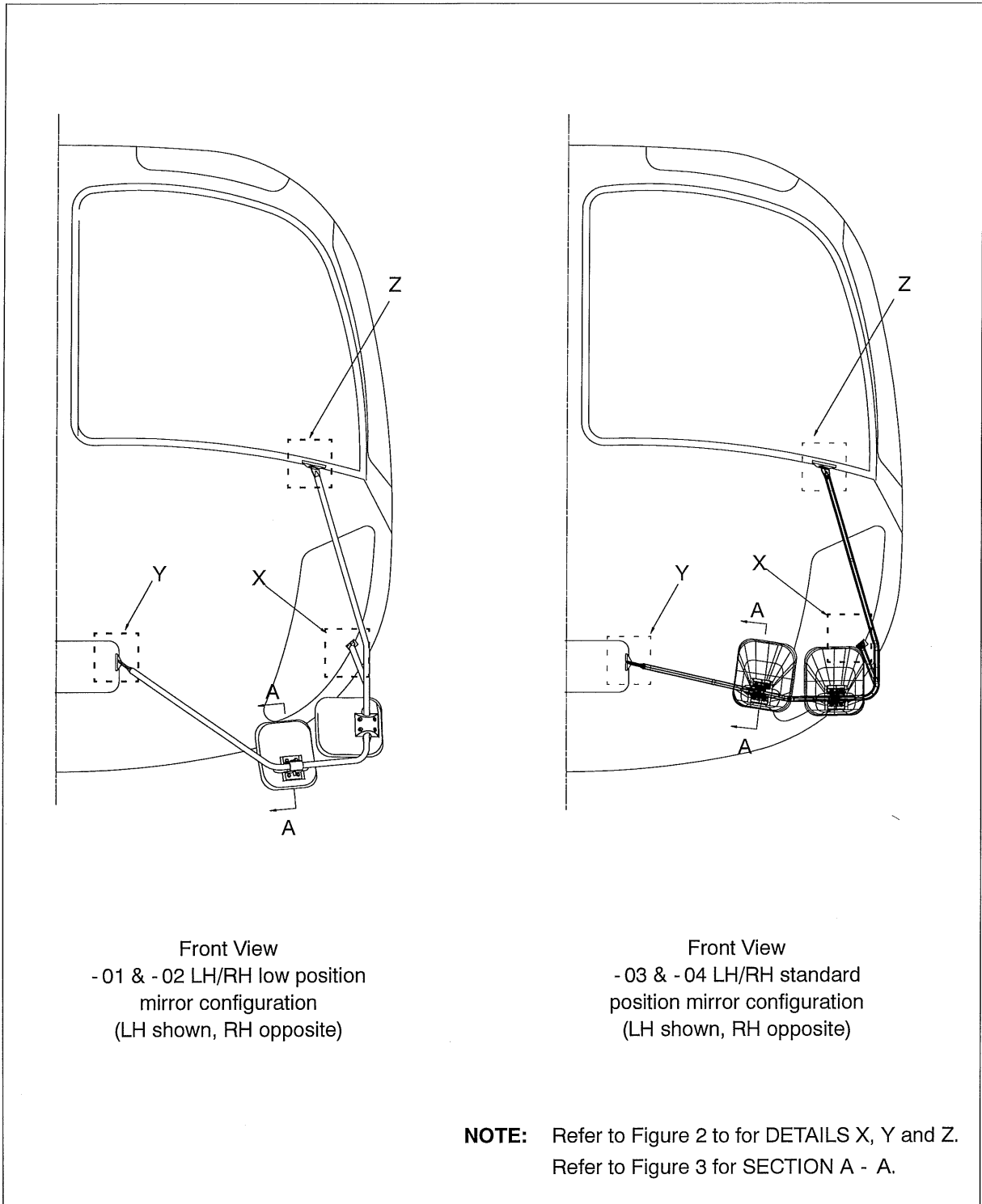


Figure 1 General Layout

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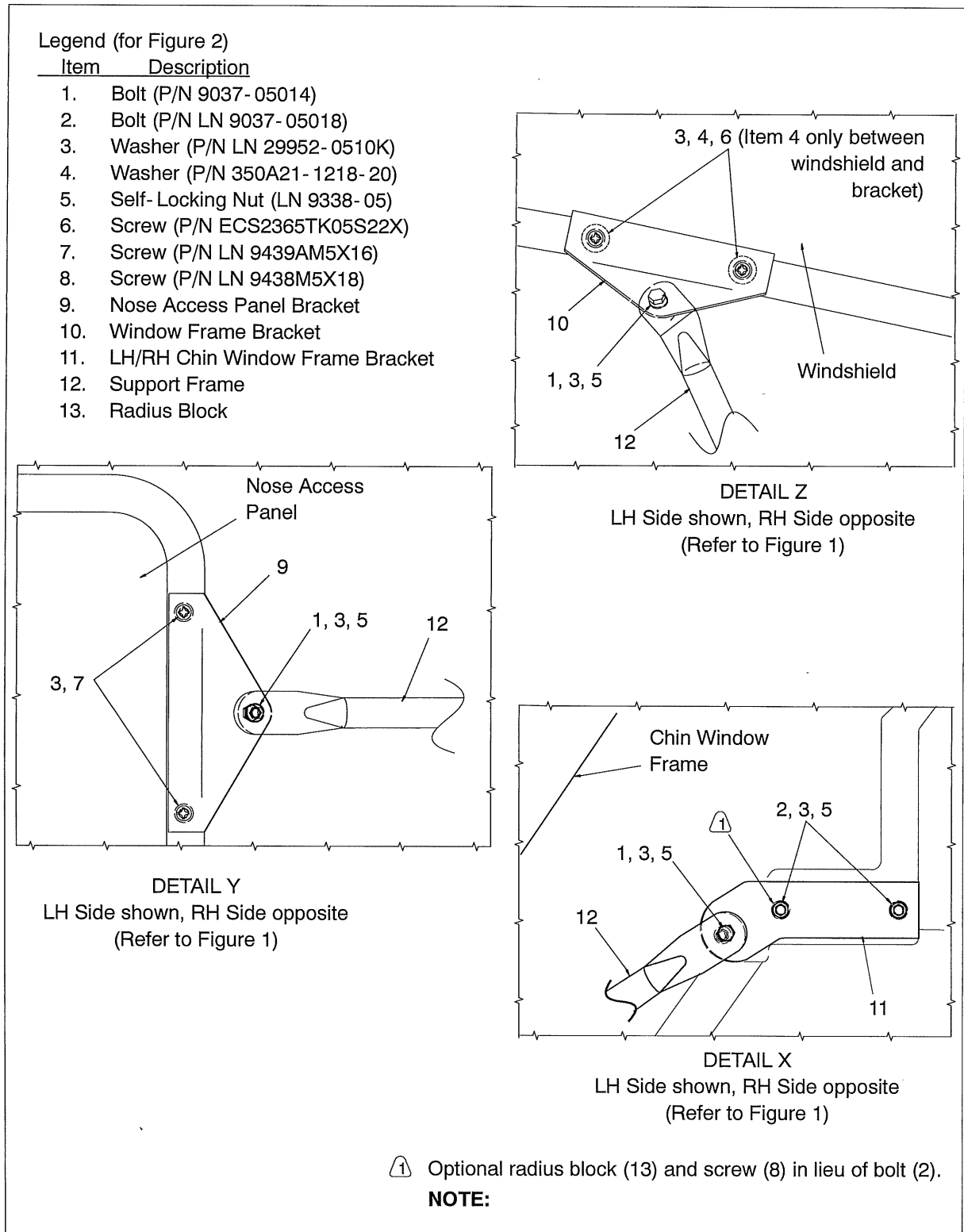
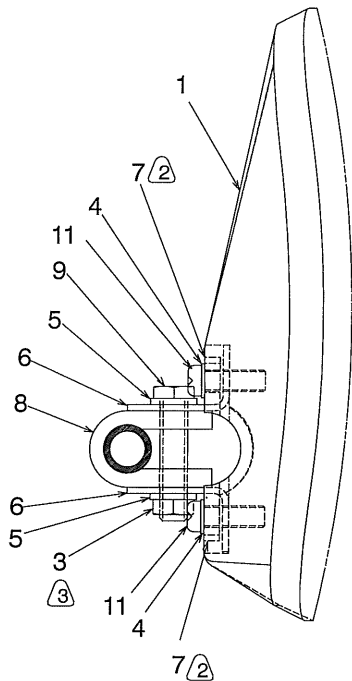
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Figure 2 Installation Details

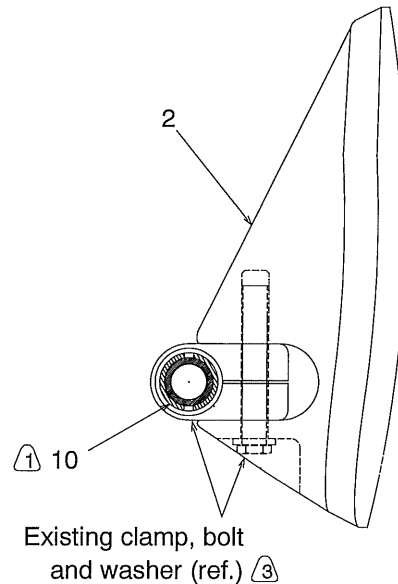
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Legend (for Figure 3)

Item	Description
1.	Convex Mirror MOD
2.	Convex Mirror Assembly (AH)
3.	Self-Locking Nut (P/N LN 9348-08)
4.	Lockwasher (P/N DIN127B6B3C)
5.	Washer (P/N LN 9025-0810K)
6.	Angle Bracket
7.	Profile Washer (P/N 350-200254.16)
8.	Tube Clamp
9.	Bolt (P/N LN 9037-08040)
10.	Tubular Shim (-02 & -04 only)
11.	Screw (P/N LN 9439M6X18)
12.	Sealant (P/N's PS 870B2 or PRC 1422B1/2 or PRC 1422B2)



SECTION A - A
(Refer to Figure 1, AHCA mirror)
-01 or -03 shown



SECTION A - A
(Refer to Figure 1, AH mirror)
-02 or -04 shown

- Ⓒ Adjust for best pilot view. Tighten self-locking nuts (3) or existing bolt, to secure mirrors from rotating on tube.
- Ⓓ Seal around edges of profile washer (7) using sealant (12).
- Ⓐ Ensure that tubular shim (10) is rotated 90° from clamp to allow for correct clamping action.

NOTES:

Figure 3 LH and RH Mirror Details

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C. REFERENCES

DOCUMENT	DOCUMENT TITLE
AMM	Aircraft Maintenance Manual
MET	Maintenance Manual
MTC	Standard Practices Manual
PRE MOD AMS 07-4206	PRE Modification Avis de Modification Series 07-4206 PRE Option of Modification Series 07-4206
POST MOD AMS 07-3439	POST Modification Avis de Modification Series 07-4206 POST Option of Modification Series 07-3439
POST MOD AMS 07-4206	POST Modification Avis de Modification Series 07-3439 POST Option of Modification Series 07-4206

D. ABBREVIATIONS & DEFINITIONS

ABBREVIATION	DEFINITION
Acc'd	Accepted
AH	Airbus Helicopters (France)
AHCA	Airbus Helicopters Canada Limited
App'd	Approved
A/W	Airworthiness
CAR	Canadian Aviation Regulations
DAPM	Design Approval Procedures Manual
FAA	Federal Aviation Administration
ICA	Instructions for Continued Airworthiness
LH	Left Hand
MDL	Master Drawing List
MOD	Modification
No.	Number
P/N	Part Number
P.O.	Post Office
ref.	reference
Rev.	Revision
RH	Right Hand
STC	Supplemental Type Certificate
TCCA	Transport Canada Civil Aviation
VFR	Visual Flight Rules

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E. UNITS OF MEASUREMENT

ABBREVIATION / SYMBOL	UNIT OF MEASUREMENT
D	Days
FH	Flight Hours
in	inch
kg	kilogram
lb	pound
m	meter
M	Months
§§	Sections

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**INSTRUCTIONS FOR CONTINUED AIRWORTHINESS
INSTALLATION OF LEFT HAND AND/OR RIGHT
HAND CARGO MIRRORS
AS 350 / AS 355**

AIRBUS HELICOPTERS CANADA LIMITED

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

4.1. INSPECTION SCHEDULE

4.1.1. Before the first flight of each day:

ITEM	INSPECTION OR MAINTENANCE WORK	CORRECTIVE ACTION
A	- Visually inspect Left Hand and/or Right Hand Cargo Mirrors, shown in Figure 1 for: a. general condition b. secure installation	a. Clean mirrors, replace mirror if cracked or broken. Check mirror casing for cracking. b. Secure as required.

 Table 1 Inspection Schedule and Maintenance Action
 Before the first flight of each day

NOTE: The "Before the first flight of each day" tasks can be carried out by a suitably trained pilot or maintenance personnel.

4.1.2. 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 Cargo Mirror Installation assembly attachment points for: a. cracks or deformation b. corrosion	a. No cracks or deformation are allowed. If cracks or deformation are found, contact AHCA for replacement parts. b. No corrosion is allowed. If corrosion is found, contact AHCA for replacement parts.
B	- Inspect fixed attachment points shown in Figure 2 for: a. security	a. Secure as required.

 Table 2 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)

4.1.2. 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
C	- Visually inspect mounting screws (6, 7 and 8) and bolts (1 and 2) shown in Figure 2 for: a. security	a. Secure as required.
D	- Visually inspect bracket (10) at lower edge of windshield, shown in Figure 2 for: a. security	a. Torque windshield mounting screws in accordance with MET, Chapter 53-00-00-401. For AS 350 B2/B3 refer to AMM, Chapter 56-11-00, 4-1a (PRE MOD AMS 07-4206) or 56-11-00, 4-1b (POST MOD AMS 07-3439 and 07-4206).
E	- Visually inspect windshield in location of bracket (10) shown in Figure 2 for: a. cracking	a. No cracking is allowed. If cracks are found, contact AHCA for replacement parts. Replace window in accordance with MET, Chapter 53-00-00-401. For AS 350 B2/B3 refer to AMM, Chapter 56-11-00, 4-1a (PRE MOD AMS 07-4206 or 56-11-00), 4-1b (POST MOD AMS 07-3439 and 07-4206).
F	- Inspect Left Hand and/or Right Hand Cargo Mirrors shown in Figure 3 for: a. security	a. Secure self-locking nuts (3) as required.
G	- Visually inspect sealant (12) around profile washer (7) on back of mirror, shown in Figure 3 for: a. deterioration	a. Clean area and reseal with sealant (12), (P/N's PS 870B2 or PRC 1422B1/2 or PRC 1422B2) in accordance with manufacturers instructions.
H	- Visually inspect tube clamp (8) shown in Figure 3 for: a. cracking	a. No cracking is allowed. If cracks are found, contact AHCA for replacement parts.

Table 2 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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**INSTRUCTIONS FOR CONTINUED AIRWORTHINESS
INSTALLATION OF LEFT HAND AND/OR RIGHT
HAND CARGO MIRRORS
AS 350 / AS 355**

AIRBUS HELICOPTERS CANADA LIMITED

5. REPLACEMENT COMPONENTS AND REPAIR / OVERHAUL INFORMATION

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

For replacement components:

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

6. TROUBLESHOOTING

There are no unique characteristics which require special troubleshooting techniques.

7. SPECIAL TOOLING

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

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8. REMOVAL AND REPLACEMENT

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

NOTE: Removal is identical for both LH and RH cargo mirrors.

PRELIMINARIES

A. REMOVAL

1) CARGO MIRRORS (Refer to Figures 2 and 3)

(-02 or -04 mirror)

a) Remove existing bolt and washer from the mirrors. Remove mirrors and hardware and store for future use. Refer to Figure 3.

b) Tubular shim (10) and clamp may remain on support frame (12, Figure 2).

(-01 or -03 mirror)

a) Remove self-locking nut (3), bolt (9) and washer (5) from the mirrors. Remove mirrors and hardware and store for future use. Refer to Figure 3.

b) Tube clamp (8) may remain on support frame (12, Figure 2).

2) SUPPORT FRAME (Refer to Figures 2 and 3)

(All variants)

a. Begin loosening hardware at attachment points while supporting support frame (12). Refer to Figure 2.

b. Remove self-locking nuts (5, 3 places), washers (3, 3 places) and bolts (1, 3 places) from attachment points. Retain hardware for reinstallation. Refer to Figure 2.

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

B. REPLACEMENT

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

1) SUPPORT FRAME (Refer to Figure 2)

- a. Position support frame (12) to attachment points and insert bolts (1, 3 places) while supporting support frame (12). Refer to Figure 2.
- b. Continue to support support frame (12) and secure bolts (1, 3 places) to attachment points using washers (3, 3 places) and self-locking nuts (5, 3 places).

2) CARGO MIRRORS (Refer to Figures 2 and 3)

- a) Position mirrors onto support frame (12) in approximate location as shown in Figure 2.

(-02 or -04 mirror)

- b) Secure mirrors to clamp using existing bolt and washer, hand tighten only. Refer to Figure 3.
- c) With the pilot in the pilot's seat, adjust both mirrors for maximum visibility.
- d) Ensure that the tubular shim (10) is rotated 90° from existing clamp to allow for correct clamping action. Once mirrors are correctly adjusted, secure into position. Refer to NOTES 1 and 3 in Figure 3.

(-01 or -03 mirror)

- b) Secure mirrors using bolt (9) and washer (5) and self-locking nut (3), hand tighten only. Refer to Figure 3.
- c) With the pilot in the pilot's seat, adjust both mirrors for maximum visibility.
- d) Once mirrors are correctly adjusted, secure into position. Refer to NOTE 3 in Figure 3.

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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	00.0	- 0.00	- 0.0
Total	- 0.00	- 0.0	0.00	00.0	- 0.00	- 0.0

B. Added Items - LH or RH Cargo Mirrors (one side only)

DESCRIPTION	WEIGHT		ARM		MOMENT	
	kg	lbs	m	in	kg m	lb in
LH or RH Cargo Mirrors	2.72	6.00	0.28	11.00	0.76	66.0
Total	2.72	6.00	0.28	11.00	0.76	66.0

C. Added Items - LH and RH Cargo Mirrors (both sides)

DESCRIPTION	WEIGHT		ARM		MOMENT	
	kg	lbs	m	in	kg m	lb in
LH Cargo Mirrors	2.72	6.00	0.28	11.0	0.76	66.0
RH Cargo Mirrors	2.72	6.00	0.28	11.0	0.76	66.0
Total	5.44	12.00	0.28	11.0	1.52	132.0

10. PLACARDS AND MARKINGS

There are no Placards and Markings with this modification.

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