



AIRBUS HELICOPTERS CANADA LIMITED

INSTRUCTIONS FOR CONTINUED AIRWORTHINESS OPTIMIZED INSTRUMENT PANEL INSTALLATION AS 350 B3

SUBJECT:

Required maintenance for Optimized Instrument Panel Installation.

APPLICABILITY :

Aircraft with the subject modification embodied in accordance with TCCA STC No. SH23- 27 or any relevant foreign approvals.

The information and data contained in this document supersede or supplement that contained in the basic AS 350 Maintenance documentation in those areas listed herein. For procedures not contained in this document refer to the Approved Maintenance Manual or any other accepted supplemental Maintenance Manual Supplemental.

This MMS is to be used in conjunction with the Approved AS 350 Maintenance Manual for the aircraft with the subject design change incorporated.

The information and data contained in this document supersede or supplement that contained in the basic AS 350 Maintenance documentation in those areas listed herein. For procedures not contained in this document refer to the Approved Maintenance Manual or any other Supplemental Instructions for Continued Airworthiness. The Supplemental ICA is to be used in conjunction with the Approved AS 350 Maintenance Manual for the aircraft with the subject design change incorporated.

The Airworthiness Limitations section is FAA approved and specifies maintenance required under 14 CFR Secs. 43.16 and 91.403 unless an alternative program has been FAA approved.

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**AIRBUS HELICOPTERS CANADA LIMITED**

**INSTRUCTIONS FOR CONTINUED  
AIRWORTHINESS  
OPTIMIZED INSTRUMENT PANEL  
INSTALLATION  
AS 350 B3**

**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 16	Original issue.	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 Optimized Instrument Panel Installation is designed to replace the standard OEM I- Panel for aircraft POST MOD AMS 07- 4723 having G500H or later. The Instrument layout remains as per OEM layout and is cut out to match at installation. The open space obtained from installing the Optimized Instrument Panel is filled with a new, larger glove box. Refer to Figure 1.

**NOTE:** Any deviations from OEM panel layout requires approval and is the responsibility of the installer.

For aircraft POST MOD AMS 07- 20112 (Avionic Step 2), the existing LH side wACS Antenna is relocated under the Instrument Panel and secured to the LH side of the pedestal cover using upper and lower brackets. Refer to Figure 5.

The Optimized Instrument Panel Installation is installed in accordance with Master Drawing List H310I0153605.

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

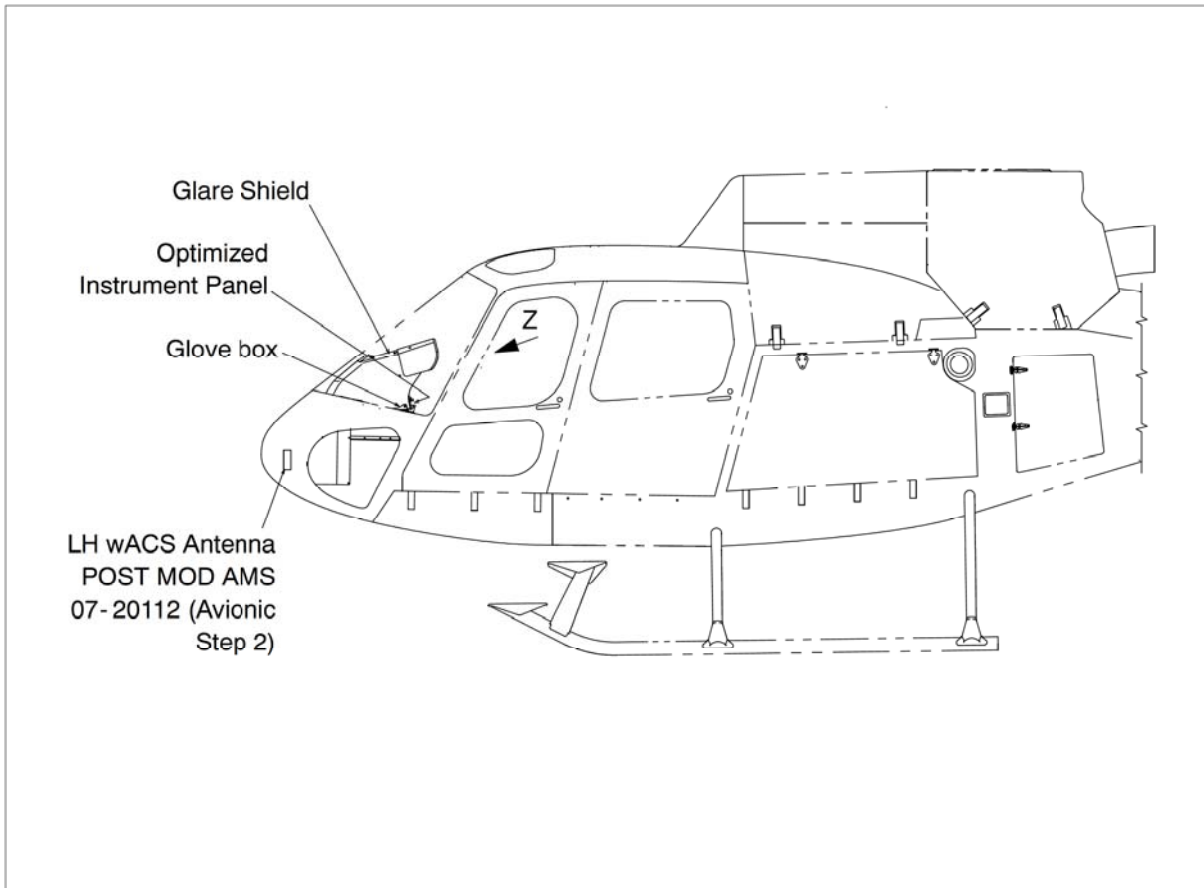


Figure 1 General Layout

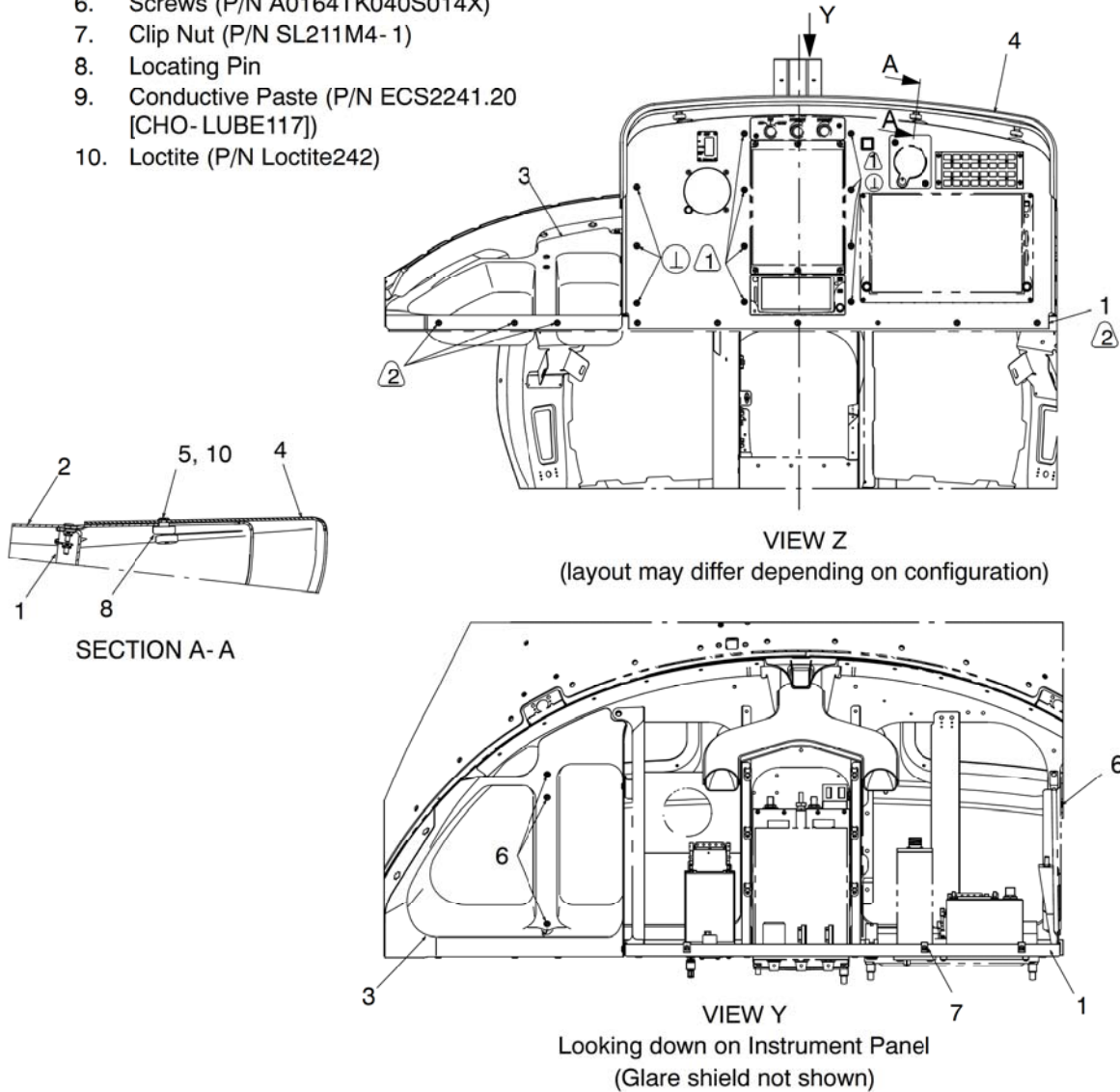
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Legend (for Figure 2)

Item	Description
1.	Instrument Panel
2.	Glare Shield Assembly
3.	Glove Box
4.	Visor
5.	Screws (P/N A0164TK040S010X)
6.	Screws (P/N A0164TK040S014X)
7.	Clip Nut (P/N SL211M4-1)
8.	Locating Pin
9.	Conductive Paste (P/N ECS2241.20 [CHO-LUBE117])
10.	Loctite (P/N Loctite242)



- ② Re-use existing hardware.
- ①① For electrical bonding, remove non-conductive coating on mating components surfaces to  $\varnothing 12\text{mm}$  around attachment holes. Before installation apply conductive paste (9) to bared area. Install fasteners and torque as required.
- NOTES:**

Figure 2 Optimized Instrument Panel

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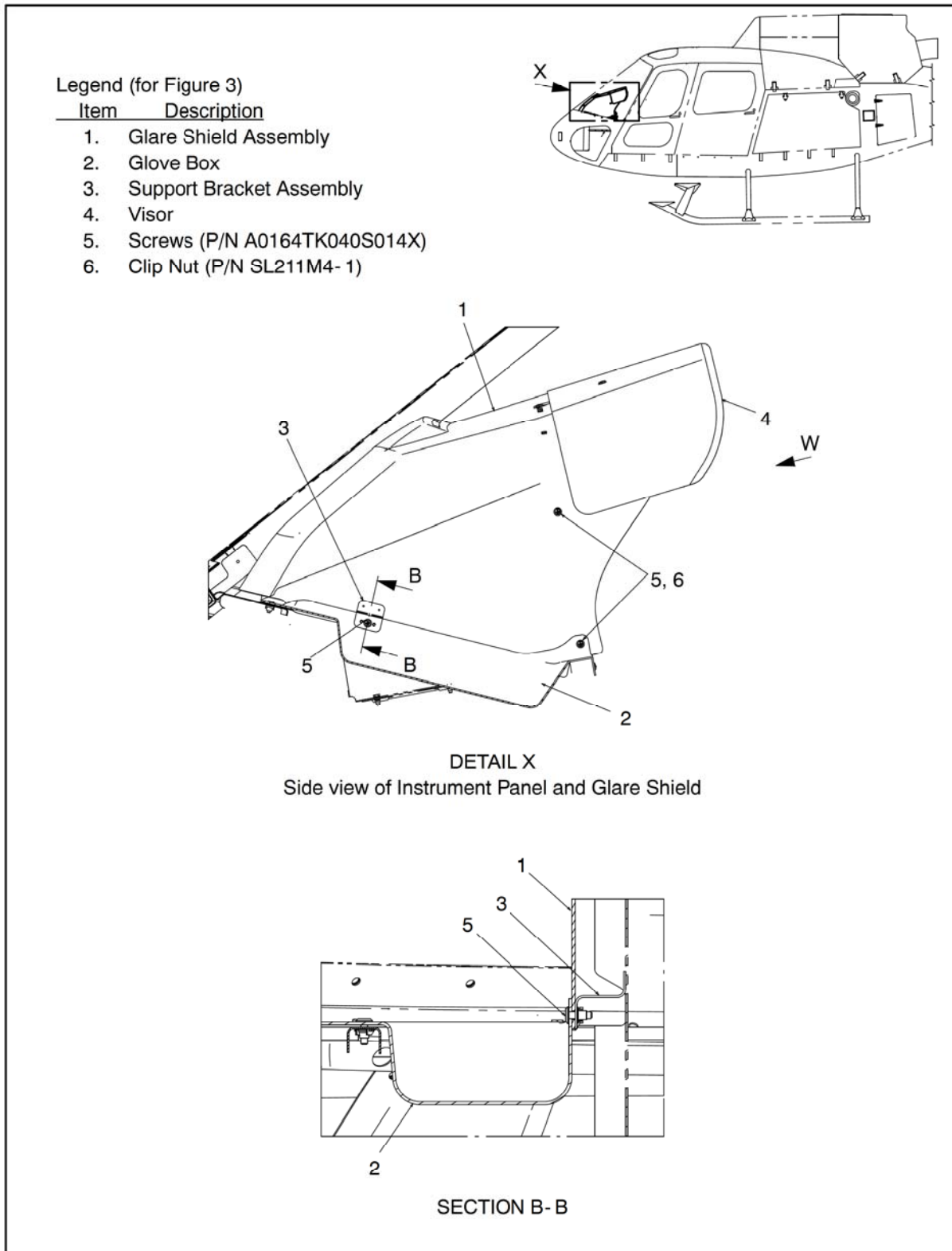


Figure 3 Adjustable Glare Shield Assembly

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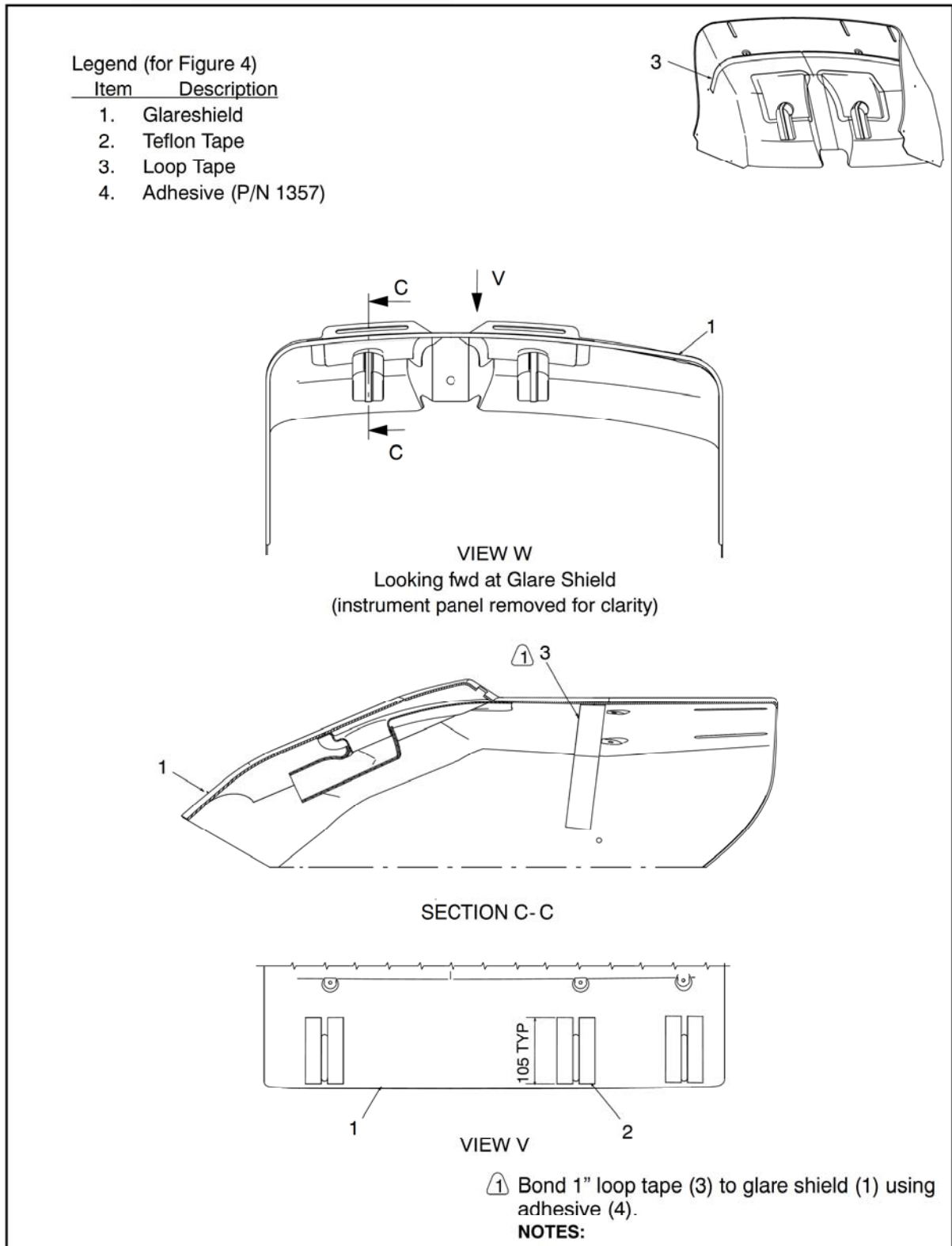


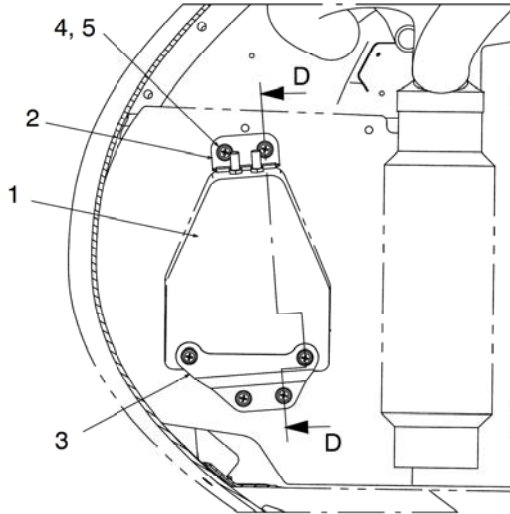
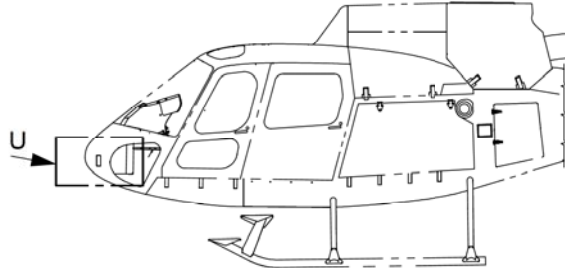
Figure 4 Glare Shield Assembly section details

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Legend (for Figure 5)

Item	Description
1.	LH wACS Antenna Relocation
2.	wACS Support Bracket, Upper
3.	wACS Support Bracket, Lower
4.	Screw (P/N A0164TK040S014X)
5.	Washer (P/N LN29952-0410K)



DETAIL U

Showing LH side of Instrument Panel Pedestal



SECTION D-D

Figure 5 POST MOD AMS 07-20112 (Avionic Step 2) LH wACS Antenna Relocation

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1. **GENERAL** (continued)

**C. REFERENCES**

DOCUMENT	DOCUMENT TITLE
AMM	Aircraft Maintenance Manual
MTC	Standard Practices Manual
MOD AMS 07- 4723	Modification Avis de Modification 07- 4723
MOD AMS 07- 20112	Modification Avis de Modification 07- 20112

**D. ABBREVIATIONS & DEFINITIONS**

ABBREVIATION	DEFINITION
Acc'd	Accepted
AHCA	Airbus Helicopters Canada Limited
AMS	Avis de Modification
App'd	Approved
A/W	Airworthiness
CAR	Canadian Aviation Regulations
DAPM	Design Approval Procedures Manual
EASA	European Aviation Safety Agency
FAA	Federal Aviation Administration
ICA	Instructions for Continued Airworthiness
I- Panel	Instrument Panel
LH	Left Hand
OEM	Original Equipment Manufacturer
P/N	Part Number
ref.	reference
Secs.	Sections
STC	Supplemental Type Certificate
TCCA	Transport Canada Civil Aviation
wACS	Wireless Airborne Communication System

**E. UNITS OF MEASUREMENT**

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

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## 2. AIRWORTHINESS LIMITATIONS

### Canadian Approval

The Airworthiness Limitations section is approved by the Minister of Transport and specifies maintenance required by any applicable airworthiness or operating rule unless an alternative program has been approved by the Minister.

### FAA Approval

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

### EASA Approval

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 any parts.

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

**4.1. INSPECTION SCHEDULE**

4.1.1 Every 750 FH or 24 M (Margin: 75 FH or 73 D) to coincide with the 750 FH or 24 M helicopter inspection, whichever occurs first:

ITEM	INSPECTION OR MAINTENANCE WORK	CORRECTIVE ACTION
A	- Visually inspect instrument panel (1), shown in Figure 2, for: a. damage to surface finish of panel  b. cracking	a. Repair surface finish of instrument panel (4) in accordance with MTC Chapter 20- 04- 05- 435.  b. No cracking is allowed. If cracking is found contact AHCA for replacement part.
B	- Check mounting hardware securing instrument panel (1) shown in Figure 2, for: a. security	a. Secure as required.
C	- Check mounting hardware securing glove box (3) shown in Figure 2, for: a. security	a. Secure as required.
D	- Check mounting hardware (5, 6) securing glare shield assembly (1), shown in Figure 3, for: a. security	a. Secure as required.
E	- Visually inspect glare shield assembly (1), shown in Figure 3 for: a. damage to paint on surface of glare shield (1)  b. cracking	a. Repair surface finish of glare shield assembly (1) in accordance with MTC Chapter 20- 04- 05- 103. Finish paint in accordance with MTC Chapter 20- 04- 05- 431.  b. If cracking is found, repair cracking in accordance with MTC Chapter 20- 03- 06- 436 and 20- 03- 07- 101.

Table 1 Inspection Schedule and Maintenance Action  
Every 750 FH or 24 M (Margin: 75 FH or 73 D) to coincide with the 750 FH or 24 M helicopter inspection, whichever occurs first  
(continued on following page)

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

4.1.1 Every 750 FH or 24 M (Margin: 75 FH or 73 D) to coincide with the 750 FH or 24 M helicopter inspection, whichever occurs first:

ITEM	INSPECTION OR MAINTENANCE WORK	CORRECTIVE ACTION
F	<ul style="list-style-type: none"> <li>- Visually inspect visor (4), shown in Figure 3, for:                             <ul style="list-style-type: none"> <li>a. security</li> <li>b. damage to paint on surface of visor (4)</li> <li>c. cracking</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>a. Secure as required.</li> <li>b. Repair surface finish of visor (4) in accordance with MTC Chapter 20-04-05-103. Finish paint in accordance with MTC Chapter 20-04-05-431.</li> <li>c. If cracking is found, repair cracking in accordance with MTC Chapter 20-03-06-436 and 20-03-07-101.</li> </ul>
G	<ul style="list-style-type: none"> <li>- Visually inspect glove box (3), shown in Figure 2, for:                             <ul style="list-style-type: none"> <li>a. security</li> <li>b. damage to paint on surface of glove box (3)</li> <li>c. cracking</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>a. Secure as required.</li> <li>b. Repair surface finish of glove box (3) in accordance with MTC Chapter 20-04-05-103. Finish paint in accordance with MTC Chapter 20-04-05-431.</li> <li>c. If cracking is found, repair cracking in accordance with MTC Chapter 20-03-06-436 and 20-03-07-101.</li> </ul>
H	<ul style="list-style-type: none"> <li>- Visually inspect teflon tape (2), shown in Figure 4, for:                             <ul style="list-style-type: none"> <li>a. wear (check for free movement of visor [4, shown in Figure 3])</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>a. Ensure free movement of visor (4). If visor is not moving freely replace teflon tape as required in accordance with MTC Chapter 20-03-04-406.</li> </ul>
I	<ul style="list-style-type: none"> <li>- Visually inspect loop tape (3), shown in Figure 4, for:                             <ul style="list-style-type: none"> <li>a. security</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>a. If loop tape (3) has come away from glare shield (1), re secure using adhesive (3) in accordance with MTC Chapter 20-06-01-101.</li> </ul>
J	<p>POST MOD AMS 07-20112 only:</p> <ul style="list-style-type: none"> <li>- Check mounting hardware (4, 5) securing LH wACS antenna to support bracket, lower (3), shown in Figure 5, 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>

Table 1 Inspection Schedule and Maintenance Action  
Every 750 FH or 24 M (Margin: 75 FH or 73 D) to coincide with the 750 FH or 24 M helicopter inspection, whichever occurs first  
(continued on following page)

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

4.1.1 Every 750 FH or 24 M (Margin: 75 FH or 73 D) to coincide with the 750 FH or 24 M helicopter inspection, whichever occurs first:

ITEM	INSPECTION OR MAINTENANCE WORK	CORRECTIVE ACTION
K	POST MOD AMS 07- 20112 only: - Check mounting hardware (4, 5) securing support bracket, upper (2) and support bracket, lower (3) to LH side pedestal, shown in Figure 5, for: a. security	a. Secure as required.

Table 1 Inspection Schedule and Maintenance Action  
Every 750 FH or 24 M (Margin: 75 FH or 73 D) to coincide with the 750 FH or 24 M helicopter inspection, whichever occurs first

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

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

For information contact Airbus Helicopter Customer Support Representatives:

Email: [hcaresupport.canada@airbus.com](mailto:hcaresupport.canada@airbus.com)

After Hours AOG Support: 1- 800- 267- 4999

Visit our website at [www.airbushelicopters.ca](http://www.airbushelicopters.ca)

6. **TROUBLESHOOTING**

There are no unique characteristics which require troubleshooting techniques.

7. **SPECIAL TOOLING**

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



## 8. REMOVAL AND REPLACEMENT

### PRELIMINARIES

- Comply with Instructions Applicable during Maintenance, refer to MTC, Chapter 20-07-03-401.
- Disconnect the external power in accordance with AS 350 AMM, Chapter 24-00-00, 2-1a PRE MOD AMS 07-4280 or 24-00-00,2-1b POST MOD AMS 07-4280 (if applicable).
- Disconnect the battery in accordance with AS 350 AMM, Chapter 24-33-00,4-1.
- Open and secure applicable circuit breakers before any servicing action.

### A. REMOVAL

- 1) OPTIMIZED INSTRUMENT PANEL INSTALLATION (Refer to Figure 2)
  - a) Optimized Instrument Panel Installation is a permanent installation.
- 2) VISOR (Refer to Figure 2)
  - a) Remove screws (5, 3 places) and locating pins (8, 3 places) securing visor (4) to glare shield assembly (2). Refer to VIEW Z and SECTION A-A.
- 3) GLARE SHIELD (Refer to Figures 2 and 3)
  - a) Remove screws (5, 7 places) securing glare shield assembly (1) to instrument panel. Refer to DETAIL X in Figure 3.
  - b) Remove screw (6) from RH side securing glare shield. Refer to VIEW Y in Figure 2.
  - c) Remove screw (5) securing glove box (2) and glare shield assembly (1) to support bracket assembly (3). Refer to DETAIL X and SECTION B-B in Figure 3.
  - d) Remove glare shield assembly (1). Carefully place glare shield assembly (1) on workbench. Remove glove box (2) if necessary.
- 4) GLOVE BOX (Refer to Figures 2 and 3)
  - a) Remove screws (6, 3 places) securing glove box (3) to aircraft frame. Refer to VIEW Y in Figure 2.
  - b) Remove existing screws (3 places) securing glove box (3) to aircraft frame. Refer to VIEW Z and NOTE 2.
  - c) Remove screws (5, 2 places) securing glove box (3) to glare shield assembly (1). Refer to DETAIL X in Figure 3.
  - d) Carefully place glove box (3) on workbench.
- 5) WACS ANTENNA (Refer to Figure 5)

For aircraft POST MOD AMS 07-20112 (Avionic Step 2):

  - a) Disconnect coax cable.
  - b) Loosen screws (4, 2 places) on wACS support bracket, upper (2).
  - c) Remove screws (4, 2 places) and washers (5, 2 places) from wACS support bracket, lower (3) and remove wACS antenna (1).

## 8. REMOVAL AND REPLACEMENT (continued)

### B. REPLACEMENT

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

Refer to Assembly by screws and nuts - MTC, Chapter 20-02-05-404

Refer to Installation of electrical cable bundles and optical fibres - MTC, Chapter 20-80-20-441

- 1) GLOVE BOX (Refer to Figures 2 and 3)
  - a) Locate glove box (3) and secure to aircraft frame using screws (6, 3 places). Refer to VIEW Y in Figure 2.
  - b) Secure existing screws (3 places) into aircraft frame. Refer to VIEW Z and NOTE 2 in Figure 2.
  - c) If glare shield assembly (1) is installed, secure glove box to glare shield assembly (1) using screws (5, 2 places). Refer to DETAIL X in Figure 3.
- 2) GLARE SHIELD (Refer to Figures 2 and 3)
  - a) Locate glare shield and ensure ducts on glare shield are properly positioned within airframe duct work.
  - b) Secure into place using screws (5, 7 places). Refer to DETAIL X in Figure 3.
  - c) Secure screw (6) on RH side. Refer to VIEW Y in Figure 2.
  - d) Secure glove box (2) to support bracket assembly (3) location using screw (5). Refer to SECTION B-B in Figure 3.
- 3) VISOR (Refer to Figure 2)
  - a) Locate visor (4) on glare shield assembly (2).
  - b) Secure visor (4) to glare shield assembly (2) using locating pins (8, 3 places) and screws (5, 3 places). Apply loctite (10) to screws (5, 3 places). Refer to VIEW Z and SECTION A-A.
- 4) WACS ANTENNA (Refer to Figure 5)

For aircraft POST MOD AMS 07-20112 (Avionic Step 2):

  - a) Locate wACS antenna (1) in wACS support bracket, upper (2).
  - b) Secure screws (4, 4 places) and washers (5, 2 places).
  - c) Reconnect coax cable.
- 5) Close all circuit breakers opened in the PRELIMINARIES paragraph of this section.
- 6) Reconnect battery, AS 350 B2/B3 AMM, Chapter 24-33-00, 4-1.
- 7) Reconnect external power unit, AS 350 B2/B3 AMM, Chapter 24-00-00, 2-1 (if required).
- 8) Reference functional test - DC Power Supply System in accordance with AS 350 B2/B3, AMM, Chapter 24-30-00, 5-1.
- 9) Perform a functional test - wACS System i.a.w. AS 350 B2/B3 AMM, Chapter 31-71-00, 5-1.
- 10) Perform operational check of all systems that were serviced in accordance with the AS 350 Maintenance Manual or Aircraft Maintenance Manual procedures and the system's installation/operation manual.

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**9. WEIGHT AND BALANCE DATA**

<u>A. Removed Items</u>						
DESCRIPTION	WEIGHT		ARM		MOMENT	
	kg	lbs	m	in	kg m	lb in
OEM Instrument Panel	- 1.16	- 2.56	0.93	36.61	- 1.08	- 93.72
OEM Glare Shield	- 2.40	- 5.29	0.78	30.71	- 1.87	- 162.46
OEM Visor	- 0.78	- 1.72	1.02	40.16	- 0.80	- 69.08
OEM Glove Box	- 0.22	- 0.49	0.79	31.10	- 0.17	- 15.24
OEM Support Strut	- 0.03	- 0.07	0.79	31.10	- 0.02	- 2.18
Total	- 4.59	- 10.13	0.86	33.83	- 3.94	- 342.68

<u>B. Added Items</u>						
DESCRIPTION	WEIGHT		ARM		MOMENT	
	kg	lbs	m	in	kg m	lb in
Instrument Panel, Machined	0.96	2.12	0.93	36.61	0.89	77.61
Glare Shield Assembly	2.94	6.48	0.78	30.71	2.29	199.00
Visor Layup	0.90	1.98	1.02	40.16	0.92	79.52
Glove Box Layup	0.88	1.94	0.79	31.10	0.70	60.33
Support Bracket Assembly	0.01	0.02	0.67	26.38	0.01	0.53
Total	5.69	12.54	0.85	33.25	4.81	416.99

Table 2 Weight and Balance Chart, POST MOD AMS 07- 4723 (G500H or later)

<u>A. Removed Items</u>						
DESCRIPTION	WEIGHT		ARM		MOMENT	
	kg	lbs	m	in	kg m	lb in
OEM LH wACS Antenna	- 0.08	- 0.18	0.87	34.25	- 0.07	- 6.17
Total	- 0.08	- 0.18	0.87	34.25	- 0.07	- 6.17

<u>B. Added Items</u>						
DESCRIPTION	WEIGHT		ARM		MOMENT	
	kg	lbs	m	in	kg m	lb in
LH wACS Antenna and brackets	0.12	0.26	0.27	10.63	0.03	2.76
Total	0.12	0.26	0.27	10.63	0.03	2.76

Table 3 Weight and Balance Chart, POST MOD AMS 07- 20112 (Avionic Step 2)  
LH wACS Antenna Relocation

**10. PLACARDS AND MARKINGS**

There are no placards or markings associated with this modification.

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