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AgustaWestland Products

SERVICE BULLETIN

N° 109EP-176

ALERT

DATE: March 8, 2021

REV. : /

TITLE

ATA 63 - INSPECTION OF ROTOR BRAKE CONTROL CABLE P/N 109-0506-17-113

REVISION LOG

New Issue

An appropriate entry should be made in the aircraft log book upon accomplishment.
If ownership of aircraft has changed, please, forward to new owner.

1. PLANNING INFORMATION

A. EFFECTIVITY

All the Leonardo S.p.A. A109E helicopters equipped with rotor brake kit P/N 109-0810-63-(all dashes).

B. COMPLIANCE

Within and not later than 50 flight hours after the issue of this Service Bulletin, and subsequently each 100 flight hours.

C. CONCURRENT REQUIREMENTS

N.A.

D. REASON

This Service Bulletin is issued in order to provide the necessary instruction on how to perform an inspection of the control cable P/N 109-0506-17-113, part of the rotor brake kit 109-0810-63.

E. DESCRIPTION

An inspection after an in-service event occurred to an A109S model helicopter revealed that the terminating section (cockpit side) on the control cable P/N 109-0506-17-113 of the rotor brake system was damaged. In order to prevent possible malfunction of the rotor brake system, Leonardo Helicopter decided to issue this Service Bulletin to inspect the control cable in proximity of the control quadrant to verify its integrity.

F. APPROVAL

The technical content of this Service Bulletin is approved under the authority of DOA nr. EASA.21.J.005. For helicopters registered under other Aviation Authorities, before applying the Service Bulletin, applicable Aviation Authority approval must be checked within Leonardo Helicopters customer portal.

EASA states mandatory compliance with inspections, modifications or technical directives and related time of compliance by means of relevant Airworthiness Directives.

If an aircraft listed in the effectivity embodies a modification or repair not LHD certified and affecting the content of this Service Bulletin, it is responsibility of the Owner/Operator to obtain a formal approval by Aviation Authority having jurisdiction on

the aircraft, for any adaptation necessary before incorporation of the present Service Bulletin.

G. MANPOWER

To comply with this Service Bulletin 1 (one) MMH is deemed necessary.

MMH are based on hands-on time and can change with personnel and facilities available.

H. WEIGHT AND BALANCE

N.A.

I. REFERENCES

1) PUBLICATIONS

SECTION/PARAGRAPH		DESCRIPTION	PART
DM01	00-20-1	Helicopter safety	-
DM02	63-24-25	Control cable - Removal/Installation	-

2) ACRONYMS

AMDI	Aircraft Material Data Information
AR	As Required
DOA	Design Organization Approval
EASA	European Aviation Safety Agency
IPC	Illustrated Parts Catalog
LHD	Leonardo Helicopters Division
MM	Maintenance Manual
MMH	Maintenance Man Hours
MPM	Maintenance Planning Manual
P/N	Part Number
S/N	Serial Number

3) ANNEX

N.A.

J. PUBLICATIONS AFFECTED

A109E MPM - Maintenance Planning Manual.

A109E MM - Maintenance Manual.

K. SOFTWARE ACCOMPLISHMENT SUMMARY

N.A.

2. MATERIAL INFORMATION

A. REQUIRED MATERIALS

1) PARTS

Refer to IPC for the spares materials required to comply with the MM Paragraphs referenced in the accomplishment instructions.

2) CONSUMABLES

The following consumable materials, or equivalent, are necessary to accomplish this Service Bulletin:

#	SPEC./LHD CODE NUMBER	DESCRIPTION	Q.TY	NOTE	PART
1	MIL-PRF-81322	AeroShell Grease 22 (C009)	AR	(1)	-

Refer to AMDI for the consumable materials required to comply with the MM Paragraphs referenced in the accomplishment instructions.

3) LOGISTIC MATRIX

N.A.

NOTE

(1) Item to procured as local supply.

B. SPECIAL TOOLS

N.A.

C. INDUSTRY SUPPORT INFORMATION

Owners/Operators who comply with the instructions of this Service Bulletin no later than the applicable date in the “Compliance” section will be eligible to receive REQUIRED MATERIALS on free of charge basis, except for Consumable Materials and Special Tools.

NOTE: Customers who fail to comply with the instructions in this Service Bulletin before the compliance date are not eligible for the aforementioned special policy.

Please Issue relevant MMIR form to your Warranty Administration Dpt.

3. ACCOMPLISHMENT INSTRUCTIONS

GENERAL NOTES

a) Place an identification tag on all components that are re-usable, including the attaching hardware that has been removed to gain access to the inspection area and adequately protect them until their later re-use.

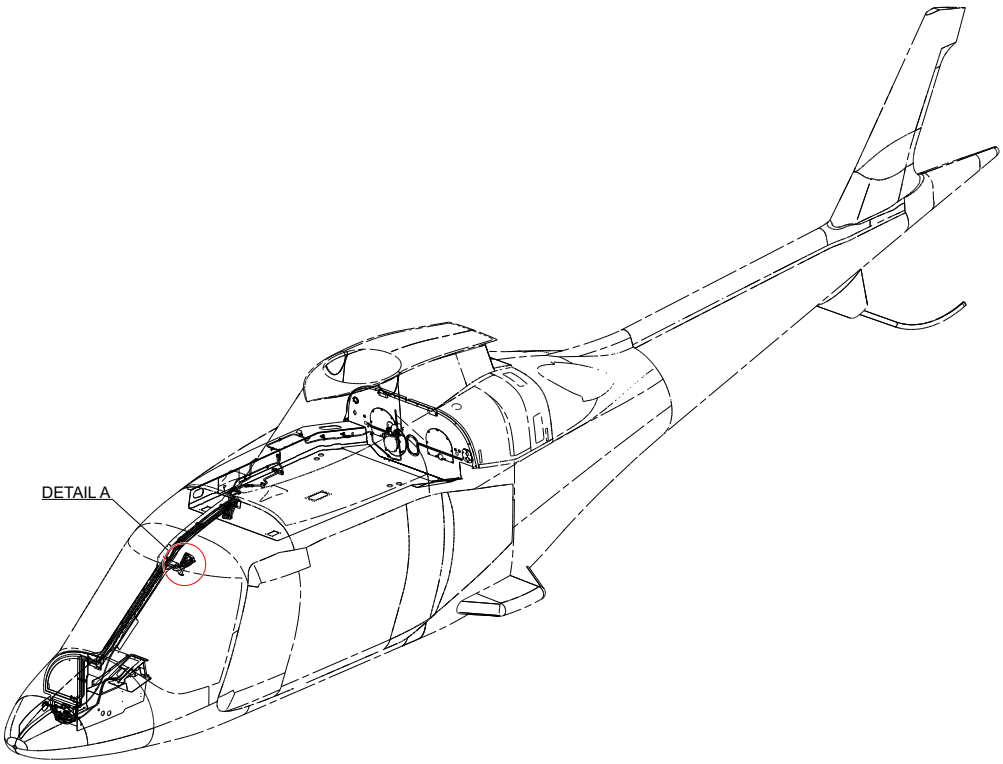
b) All lengths are in mm.

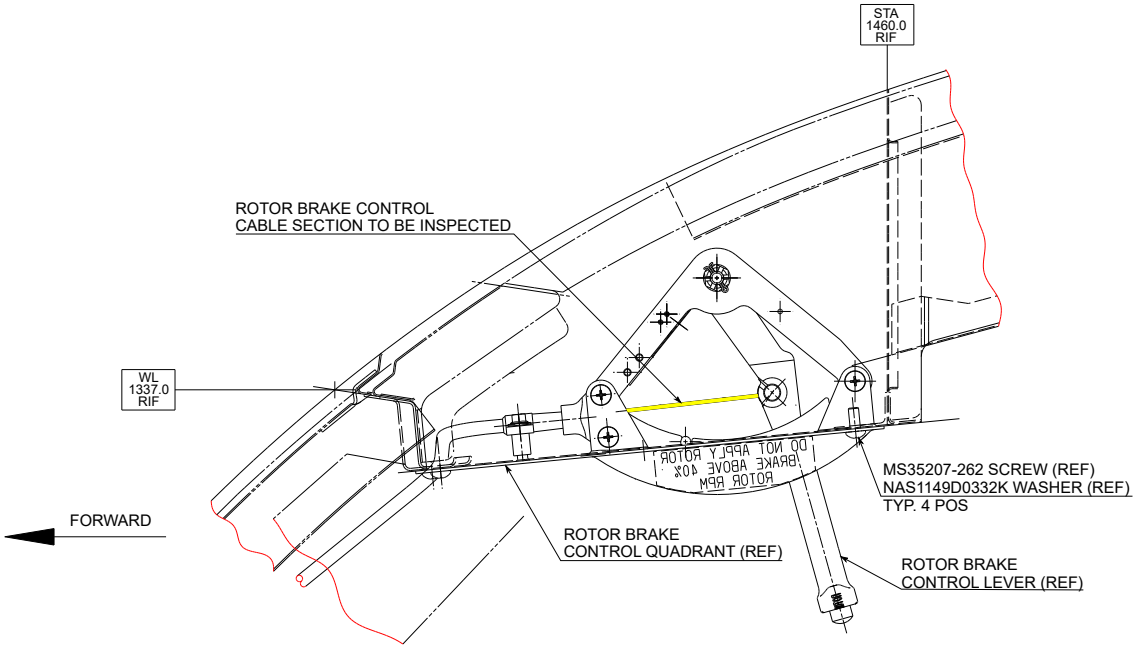
1. In accordance with MM Paragraph 00-20-1, prepare the helicopter on ground for a safe maintenance. Disconnect the battery, all electrical power sources and/or the external power supply.
2. With reference to Figure 1, gain access to the cockpit and move the rotor brake control lever fully aft (rotor brake applied).
3. With reference to Figure 1 Detail A, remove n.4 screws P/N MS35207-262 and n.4 washers P/N NAS1149D0332K that attach the rotor brake control quadrant to the structure and lower the control quadrant as far as the electrical wires will permit. Retain all the hardware for later reuse.
4. Perform the rotor brake control cable P/N 109-0506-17-113 inspection as follow:
   - 4.1 With reference to Figure 1 Detail A, carefully inspect the highlighted section of the rotor brake control cable with particular attention to the interface between the cable and the cyclindrical nipple.
   - 4.2 Verify that the cyclindrical nipple is free to rotate.
   - 4.3 Holding firmly the rotor brake control quadrant with one hand, move the rotor brake lever forward and backward. Verify that the control cable runs inside the sheath without jamming.
   - 4.4 In case of any damage, wear, or jamming, in accordance with MM Paragraph 63-24-25, replace the control cable and proceed with next step.
5. Apply a small amount of grease Aeroshell 22 on the interface between cyclindrical nipple and rotor brake lever. Move the rotor brake lever forward and backward 5 times to allow the distribution of grease. Remove the excess with a clean cloth.
6. With reference to Figure 1 Detail A, reinstall the rotor brake control quadrant on the structure using the hardware previously removed.
7. Return the helicopter to a ready to flight condition and record for compliance with this Service Bulletin on the helicopter logbook.
8. Send the attached compliance form to the following mail box reporting any anomaly

retrieved during the inspection:

engineering.support.lhd@leonardocompany.com

As an alternative, gain access to My Communications section on Leonardo WebPortal and compile the “Service Bulletin Application Communication”.





DETAIL A
(VIEW LOOKING RIGHT)
(STRUCTURE AND SYSTEMS ARE PARTIALLY OMITTED
FOR BETTER CLARITY PURPOSE)

Figure 1

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HELICOPTERS

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Please send to the following address: **LEONARDO S.p.A.** **CUSTOMER SUPPORT & SERVICES - ITALY** **PRODUCT SUPPORT ENGINEERING & LICENSES DEPT.** Via Giovanni Agusta, 520 21017 Cascina Costa di Samarate (VA) - ITALY Tel.: +39 0331 225036 Fax: +39 0331 225988	**SERVICE BULLETIN COMPLIANCE FORM**	Date:
	Number:	
	Revision:	

Customer Name and Address:	Telephone:
	Fax:
	B.T. Compliance Date:

Helicopter Model	S/N	Total Number	Total Hours	T.S.O.

Remarks:

Information:

We request your cooperation in filling this form, in order to keep out statistical data relevant to aircraft configuration up-to-date. The form should be filled in all its parts and sent to the above address or you can communicate the application also via Technical Bulletin Application Communication Section placed in Leonardo AW Customer Portal - MyCommunications Area. We thank you beforehand for the information given.