



Airworthiness Directive

AD No.: 2021-0067

Issued: 09 March 2021

Note: This Airworthiness Directive (AD) is issued by EASA, acting in accordance with Regulation (EU) 2018/1139 on behalf of the European Union, its Member States and of the European third countries that participate in the activities of EASA under Article 129 of that Regulation.

This AD is issued in accordance with Regulation (EU) 748/2012, Part 21.A.3B. In accordance with Regulation (EU) 1321/2014 Annex I, Part M.A.301, the continuing airworthiness of an aircraft shall be ensured by accomplishing any applicable ADs. Consequently, no person may operate an aircraft to which an AD applies, except in accordance with the requirements of that AD, unless otherwise specified by the Agency [Regulation (EU) 1321/2014 Annex I, Part M.A.303] or agreed with the Authority of the State of Registry [Regulation (EU) 2018/1139, Article 71 exemption].

Design Approval Holder's Name:

LEONARDO S.p.A.

Type/Model designation(s):

A109 and AW109 helicopters

Effective Date: 23 March 2021

TCDS Number(s): EASA.R.005

Foreign AD: Not applicable

Supersedure: None

ATA 63 – Main Rotor Drive – Rotor Brake Control Cable – Inspection

Manufacturer(s):

Leonardo S.p.A. Helicopters, formerly Finmeccanica S.p.A., AgustaWestland S.p.A., Agusta S.p.A., Costruzioni Aeronautiche Giovanni Agusta

Applicability:

A109A, A109All, A109C, A109K2, A109E and AW109SP helicopters, all serial numbers (s/n) having a rotor brake kit installed, as identified in Table 1 of this AD;

A109S helicopters, all s/n up to 22199 inclusive, having a rotor brake kit Part Number (P/N) 109-0810-63-111 installed.

Definitions:

For the purpose of this AD, the following definitions apply:

The ASB: Leonardo Alert Service Bulletin (ASB) 109-157, ASB 109K-075, ASB 109EP-176, ASB 109S-103 or ASB 109SP-146, as applicable.

Affected part: Rotor brake control cables, having P/N 109-0506-17-1, P/N 109-0506-17-5, P/N 109-0506-17-113 or P/N 109-0506-17-115. Affected parts are part of rotor brake kits, as identified in Table 1 of this AD.



Table 1 – Affected Part

Helicopter model	Rotor brake kit P/N	Control cable P/N
A109A	109-0810-63-1	109-0506-17-1
A109All		109-0506-17-5
A109C	109-0810-63-103	109-0506-17-113
A109K2	109-0810-63-105	109-0506-17-113
A109E	109-0810-63-109	109-0506-17-113
A109S	109-0810-63-111	109-0506-17-113
AW109SP	109-0810-63-123	109-0506-17-115

Reason:

An occurrence was reported of uncommanded activation of the rotor brake system before take-off. Subsequent inspections and investigations determined that the rotor brake control cable was jammed, leading to a partially open brake control valve. This resulted in hydraulic pressure delivered to the rotor brake, even with the rotor brake lever in the OFF position.

This condition, if not detected and corrected, could lead to failure of the rotor brake system, with consequent damage to surrounding critical equipment, possibly resulting in reduced control of the helicopter.

To address this potential unsafe condition, Leonardo published the ASB, providing inspection instructions.

For the reason described above, this AD requires repetitive inspections of the rotor brake control cable and, depending on findings, replacement. This AD also requires reporting of findings.

Required Action(s) and Compliance Time(s):

Required as indicated, unless accomplished previously:

Inspection:

- (1) Within 50 flight hours (FH) after the effective date of this AD, and, thereafter, at intervals not exceeding 100 FH, inspect the affected part in accordance with the instructions of the ASB.

Corrective Action(s):

- (2) If, during any inspection as required by paragraph (1) of this AD, any defect is found, as identified in the ASB, before next flight, replace the affected part in accordance with the instructions of the ASB.

Terminating Action:

- (3) None.



Part(s) Installation:

- (4) From the effective date of this AD, it is allowed to install on any helicopter an affected part, provided, before next flight after installation, it passes an inspection in accordance with the instructions of the ASB.

Reporting:

- (5) If, during any inspection as required by paragraph (1) of this AD, any defect is found, as identified in the ASB, within 30 days after that inspection, or within 30 days after the effective date of this AD, whichever occurs later, report the inspection results to Leonardo. Using the inspection report attached to the ASB is an acceptable method to comply with this requirement.

Ref. Publications:

Leonardo S.p.A. Helicopters ASB 109-157 original issue dated 08 March 2021.

Leonardo S.p.A. Helicopters ASB 109K-075 original issue dated 08 March 2021.

Leonardo S.p.A. Helicopters ASB 109EP-176 original issue dated 08 March 2021.

Leonardo S.p.A. Helicopters ASB 109S-103 original issue dated 08 March 2021.

Leonardo S.p.A. Helicopters ASB 109SP-146 original issue dated 08 March 2021.

The use of later approved revisions of the above-mentioned documents is acceptable for compliance with the requirements of this AD.

Remarks:

1. If requested and appropriately substantiated, EASA can approve Alternative Methods of Compliance for this AD.
2. Based on the required actions and the compliance time, EASA have decided to issue a Final AD with Request for Comments, postponing the public consultation process until after publication.
3. Enquiries regarding this AD should be referred to the EASA Safety Information Section, Certification Directorate. E-mail: ADs@easa.europa.eu.
4. Information about any failures, malfunctions, defects or other occurrences, which may be similar to the unsafe condition addressed by this AD, and which may occur, or have occurred on a product, part or appliance not affected by this AD, can be reported to the [EU aviation safety reporting system](#). This may include reporting on the same or similar components, other than those covered by the design to which this AD applies, if the same unsafe condition can exist or may develop on an aircraft with those components installed. Such components may be installed under an FAA Parts Manufacturer Approval (PMA), Supplemental Type Certificate (STC) or other modification.



5. For any question concerning the technical content of the requirements in this AD, please contact: Leonardo S.p.A. Helicopters, Customer Support & Services, Product Support Engineering, E-mail: aw109.mbx.aw@leonardocompany.com.

