



Emergency Airworthiness Directive

AD No.: 2017-0046-E

Issued: 10 March 2017

Note: This Emergency Airworthiness Directive (AD) is issued by EASA, acting in accordance with Regulation (EC) 216/2008 on behalf of the European Union, its Member States and of the European third countries that participate in the activities of EASA under Article 66 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 (EC) 216/2008, Article 14(4) exemption].

Design Approval Holder's Name:

LEONARDO S.p.A.

Type/Model designation(s):

A109 and AW109 helicopters

Effective Date: 14 March 2017

TCDS Number(s): EASA.R.005

Foreign AD: Not Applicable

Supersedure: None

ATA 63 – Main Rotor Drive – Engine and Transmission Oil Cooling System – Inspection / Modification

Manufacturer(s):

Leonardo S.p.A. Helicopters (formerly Finmeccanica S.p.A., AgustaWestland S.p.A., Agusta S.p.A.)

Applicability:

A109E, A109LUH, A109S and AW109SP helicopters, all serial numbers.

Reason:

Degradation of the bearing part number (P/N) 109G6320L01-101 of the pulley assembly P/N 109G6320A26-101, part of the engine and transmission oil cooling system, was detected during inspections on two A109 helicopters.

This condition, if not detected and corrected, could lead to loss of functionality of both oil cooling fan assemblies, possibly resulting in engine power loss, transmission malfunction and consequent reduced control of the helicopter.

To address this potential unsafe condition, as a precautionary measure pending completion of the investigation, Leonardo issued Service Bulletin (SB) 109EP-153, SB 109SP-112, SB 109L-089, and SB 109S-075, as applicable to helicopter model, providing inspection and modification instructions.



For the reason stated above, this AD requires inspection of the pulley assembly and modification of the engine and transmission oil cooling system.

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

Required as indicated, unless accomplished previously:

Note 1: SB 109EP-153, SB 109SP-112, SB 109L-089, and SB 109S-075, as applicable to helicopter model, are collectively referred to as “the applicable SB” in this AD.

Note 2: For the purpose of this AD, Group 1 helicopters are those that, on the effective date of this AD, have an oil cooler fan assembly P/N 109-0455-01-103 installed. Group 2 helicopters are those that, on the effective date of this AD, do not have an oil cooler fan assembly P/N 109-0455-01-103 installed.

Note 3: Engine and transmission oil cooler systems P/N 109-0450-01-109 and P/N 109-0450-01-111, oil cooling fan assembly P/N 109-0455-01-103, and driven pulley assembly P/N 109G6320A26-101, are collectively referred to as “affected part” in this AD.

Inspection:

- (1) For Group 1 helicopters: Within 5 flight hours (FH) after the effective date of this AD, inspect the pulley assembly P/N 109G6320A26-101 in accordance with the instructions of Part I of the applicable SB.

Corrective Action:

- (2) If, during the inspection as required by paragraph (1) of this AD, any defect is found, as defined in the applicable SB, before next flight, modify the helicopter in accordance with the instructions of Part II of the applicable SB.

Modification:

- (3) For Group 1 helicopters: Unless already done as required by paragraph (2) of this AD, within 20 FH after the inspection as required by paragraph (1) of this AD, modify the helicopter in accordance with the instructions of Part II of the applicable SB.

Parts Installation:

- (4) Do not install an affected part (see Note 3 of this AD) on any helicopter, as required by paragraph (4.1) or (4.2) of this AD, as applicable.

(4.1) For a Group 1 helicopter: After modification of that helicopter as required by paragraph (2) or (3) of this AD, as applicable.

(4.2) For Group 2 helicopters: From the effective date of this AD.

Ref. Publications:

Leonardo S.p.A. Helicopters SB 109EP-153 original issue, dated 08 March 2017.

Leonardo S.p.A. Helicopters SB 109SP-112 original issue, dated 08 March 2017.



Leonardo S.p.A. Helicopters SB 109L-089 original issue, dated 08 March 2017.

Leonardo S.p.A. Helicopters SB 109S-075 original issue, dated 08 March 2017.

The use of later approved revisions of these 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. The results of the safety assessment have indicated the need for immediate publication and notification, without the full consultation process.
3. Enquiries regarding this AD should be referred to the EASA Safety Information Section, Certification Directorate. E-mail: ADs@easa.europa.eu.
4. 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 DPT, via Giovanni Agusta 520, 21017 Cascina Costa di Samarate (VA) – Italy Telephone: +39 0331 711439, Fax: +39 0331 225988, E-mail: aw109.mbx.AW@leonardocompany.com.

