

Airworthiness Directive

AD No.: 2018-0205

Issued: 14 September 2018

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 A119 helicopters

Effective Date: 21 September 2018

TCDS Number(s): EASA.R.005

Foreign AD: Not applicable

Supersedure: None

ATA 62 – Main Rotor – Floating Ring Assembly – Inspection / Replacement

Manufacturer(s):

Leonardo S.p.A. Helicopters, formerly Finmeccanica S.p.A., AgustaWestland S.p.A., Agusta S.p.A.; and AgustaWestland Philadelphia Corporation, formerly Agusta Aerospace Corporation

Applicability:

A109E, A109S, A119, A109LUH, helicopters, all serial numbers (s/n), and AW109SP, AW119MKII helicopters, all s/n.

Definitions:

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

The applicable SB: Leonardo Service Bulletin (SB) 109EP-163 Revision (Rev.) A, SB 109L-100 Rev. A, SB 109S-084 Rev. A, SB 109SP-125 Rev. A and SB 119-092 Rev. A, as applicable.

Affected Part: Main rotor (M/R) floating ring assemblies, having Part Number (P/N) 109-0111-09-101 or P/N 109-0111-09-103, and having s/n DA53295148-1, F86782, G130924, J31213, L99, L104, L107, L117, L127, L130, M215, P411, R687, R735, R769, R772 or V71.

Serviceable part: M/R floating ring assemblies which are not an affected part.



Reason:

An occurrence was reported on an A109E of a washer, P/N 109-0111-23-101, which was found debonded from the M/R floating ring assembly. Investigation results determined that an improper repair had been accomplished on that part, and the batch of parts which could also be affected has been identified. Further analysis indicated that, due to similarity of design, some of those parts may be installed on other A109/A119 helicopter models.

This condition, if not detected and corrected, could lead to failure of an affected part and significant increase of the pilot workload, possibly resulting in reduced control of the helicopter.

Prompted by this occurrence, Leonardo issued the applicable SB, providing applicable instructions.

For the reason stated above, this AD requires an inspection of the M/R floating ring assembly and, depending on findings, replacement of affected parts. This AD also prohibits replacing washers on M/R floating ring assemblies.

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

Required as indicated, unless accomplished previously:

Inspection / Records Review:

- (1) Within 25 flight hours (FH) after the effective date of this AD, inspect the M/R floating ring assembly in accordance with the instructions of Part I of the applicable SB.
- (2) A review of helicopter delivery or maintenance records is acceptable in lieu of the inspection, as required by paragraph (1) of this AD, provided those records can be relied upon for this purpose, and the P/N and s/n of the M/R floating ring assembly can be conclusively identified from that review.

Corrective Action:

(3) If, during the inspection as required by paragraph (1) of this AD, or during the review as specified in paragraph (2) of this AD, as applicable, an affected part is found installed, within 25 FH after the effective date of this AD, replace the affected part with a serviceable part in accordance with the instructions of Part II of the applicable SB.

Part Installation:

- (4) From the effective date of this AD, do not install an affected part on any helicopter.
- (5) From the effective date of this AD, do not replace any washer having P/N 109-0111-23-101 on a M/R floating ring assembly installed on a helicopter.

Ref. Publications:

Leonardo S.p.A. Helicopters SB 109EP-163 Rev. A dated 13 September 2018.

Leonardo S.p.A. Helicopters SB 109L-100 Rev. A dated 13 September 2018.

Leonardo S.p.A. Helicopters SB 109S-084 Rev. A dated 13 September 2018.



Leonardo S.p.A. Helicopters SB 109SP-125 Rev. A dated 13 September 2018.

Leonardo S.p.A. Helicopters SB 119-092 Rev. A dated 13 September 2018.

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: <u>ADs@easa.europa.eu</u>.
- 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 <u>EU aviation safety</u> <u>reporting system</u>.
- 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 DPT, E-mail: aw109.mbx.aw@leonardocompany.com.

