



## Airworthiness Directive

**AD No.:** 2019-0294

**Issued:** 04 December 2019

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):**

A109S and AW109SP helicopters

**Effective Date:** 18 December 2019

**TCDS Number(s):** EASA.R.005

**Foreign AD:** Not applicable

**Supersedure:** This AD supersedes EASA AD 2014-0150 dated 18 June 2014.

### ATA 55 – Stabilizers – Vertical Fin Vibration Absorber – Inspection / Removal

**Manufacturer(s):**

Leonardo S.p.A. Helicopters, formerly Finmeccanica S.p.A. Helicopter Division, AgustaWestland S.p.A., Agusta S.p.A.

**Applicability:**

A109S and AW109SP helicopters, all serial numbers (s/n).

**Definitions:**

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

**The applicable BT:** AgustaWestland Bollettino Tecnico (BT) 109S-58 and BT 109SP-074, as applicable.

**Affected part:** Vertical fin vibration absorber, as identified in the applicable BT.

**Groups:** Group 1 are A109S helicopters, s/n 22011, 22016, 22026, 22042, 22044, 22045, 22049, 22051, 22052, 22059, 22060, 22062, 22063, 22064, 22065 and 22068 on which an affected part was installed in production; and A109S and AW109SP helicopters, all s/n on which an affected part was installed in service before 02 July 2014 [the effective date of EASA AD 2014-0150].



Group 2 are A109S and AW109SP helicopters, all s/n on which an affected part was installed in production, except those s/n listed in Group 1 definition; and all s/n on which an affected part was installed in service on or after 02 July 2014 [the effective date of EASA AD 2014-0150].

Group 3 are A109S and AW109SP helicopters that do not have an affected part installed.

#### **Reason:**

During scheduled inspections on A109S and AW109SP helicopters, cracks and damage were detected on the vertical fin vibration absorber installation and the surrounding structure. Investigation results determined that the problem is likely related to the design of the vertical fin vibration absorber and possible incorrect installation thereof.

This condition, if not detected and corrected, could affect the structural integrity of the helicopter.

To address this unsafe condition, AgustaWestland issued the applicable BT, providing inspection and removal instructions, and EASA issued AD 2014-0150 to require, for Group 1 helicopters as defined in this AD, repetitive inspections and removal of the affected part.

Since that AD was issued, it was determined that on certain helicopters, not included in the applicability of EASA AD 2014-0150, an affected part may have been installed in production, thereby potentially becoming subject to the unsafe condition.

For the reason described above, this AD retains the requirements of EASA AD 2014-0150, which is superseded, expanding the Applicability. This AD also prohibits further (re)installation of an affected part on any helicopter.

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

Required as indicated, unless accomplished previously:

#### **Inspections:**

- (1) For Group 2 helicopters: Within 30 flight hours (FH) or 3 months, whichever occurs first after the effective date of this AD, and, thereafter, at intervals not to exceed 100 FH, inspect the affected part in accordance with the instructions of the applicable BT.

#### **Corrective Action(s):**

- (2) If, during any inspection as required by paragraph (1) of this AD, any damage or crack is found on the affected part or on the surrounding structure, before next flight, remove the affected part from the helicopter and repair any damaged or cracked structure in accordance with the instructions of the applicable BT.

#### **Modification:**

- (3) For Group 1 helicopters: Within 12 months after 02 July 2014 [the effective date of EASA AD 2014-0150], remove the affected part in accordance with the instructions of the applicable BT.
- (4) For Group 2 helicopters: Unless already accomplished as required by paragraph (2) of this AD, within 12 months after the effective date of this AD, remove the affected part from the helicopter and repair any damaged or cracked surrounding structure in accordance with the instructions of the applicable BT.



**Terminating Action(s):**

- (5) Accomplishment of corrective action(s) on a helicopter, as required by paragraph (2) of this AD, or modification of a helicopter as required by paragraph (4) of this AD, as applicable, constitutes terminating action for the repetitive inspections as required by paragraph (1) of this AD for that helicopter.

**Part Installation:**

- (6) Do not install on any helicopter an affected part, as required by paragraph (6.1) or (6.2) of this AD, as applicable.

(6.1) For Group 1 helicopters: From 02 July 2014 [the effective date of EASA AD 2014-0150].

(6.2) For Group 2 and Group 3 helicopters: From the effective date of this AD.

**Ref. Publications:**

AgustaWestland BT 109S-58 original issue dated 07 May 2014.

AgustaWestland BT 109SP-074 original issue dated 07 May 2014.

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 Programming and Continued Airworthiness Information Section, Certification Directorate. E-mail: [ADs@easa.europa.eu](mailto: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](#).
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, via Giovanni Agusta 520, 21017 Cascina Costa di Samarate (VA) – Italy  
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