

Airworthiness Directive AD No.: 2021-0126 **Issued**: 10 May 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): AB212 and AB412 helicopters

Effective Date:	24 May 2021
TCDS Number(s):	EASA.R.114
Foreign AD:	Not applicable

Supersedure: None

ATA 28 / 79 – Fuel / Oil – Check Valves – Inspection / Replacement

Manufacturer(s):

AgustaWestland S.p.A., formerly Agusta S.p.A., Agusta un'azienda di Finmeccanica S.p.A., Costruzioni Aeronautiche Giovanni Agusta

Applicability:

AB212, AB412 and AB412EP helicopters, all serial numbers (s/n).

Definitions:

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

The applicable ASB: Leonardo Alert Service Bulletin (ASB) 212-211 (fuel check valve), ASB 212-212 (oil check valve), ASB 412-166 (fuel check valve) and ASB 412-167 (oil check valve), as applicable.

Affected part: Oil check valves, having Part Number (P/N) 209-062-520-1, and fuel check valves, having P/N 209-062-607-1, manufactured by Circor Aerospace (marked "Circle Seal"), which exceed the dimensions specified in Part I of the applicable ASB, except those which have a "TQL" marking (identifying the use of the correct torque level).

Serviceable part: Any oil or fuel check valve, eligible for installation, which is not an affected part.



Page 1 of 3

Groups:

Group 1 helicopters are those that have one or more affected part(s) installed. Group 2 helicopters are those that do not have an affected part installed.

Reason:

An occurrence was reported where, due to the application of an incorrect torque level during the assembly process, certain oil and fuel check valves are susceptible to cracking, which may lead to fuel or oil leakage.

This condition, if not detected and corrected, could lead to a lack of engine lubrication and/or loss of fuel supply to the engine, possibly resulting in uncommanded engine in-flight shut-down or fire and subsequent loss of control of the helicopter.

To address this potential unsafe condition, Leonardo published the applicable ASB, as defined in this AD, providing inspection and replacement instructions.

For the reason described above, this AD requires repetitive inspections and removal from service of the affected parts, as defined in this AD. This AD also prohibits (re)installation of affected parts.

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

Required as indicated, unless accomplished previously:

Inspection(s):

- (1) Within 25 flight hours (FH) or 3 months, whichever occurs first after the effective date of this AD, inspect the helicopter in accordance with the instructions of Part I of the applicable ASB to determine if the helicopter is Group 1 or Group 2, as defined in this AD.
- (2) For Group 1 helicopters: Before next flight after the inspection as required by paragraph (1) of this AD, and, thereafter, at intervals not to exceed 25 FH or 3 months, whichever occurs first, inspect each affected part in accordance with the instructions of Part II of the applicable ASB.

Corrective Action(s):

(3) For Group 1 helicopters: If, during any inspection as required by paragraph (2) of this AD, any crack is found on an affected part, as identified in the applicable ASB, before next flight, replace that affected part with a serviceable part in accordance with the instructions of Part III of the applicable ASB.

Replacement:

(4) For Group 1 helicopters: Within 300 FH or 12 months, whichever occurs first after the inspection as required by paragraph (1) of this AD, replace each affected part with a serviceable part in accordance with the instructions of Part III of the applicable ASB.

Terminating Action:

(5) Replacement on a helicopter of each affected part with a serviceable part, as required by paragraph (3) or (4) of this AD, as applicable, constitutes terminating action for the repetitive inspections as required by paragraph (2) of this AD for that helicopter.



Part(s) Installation:

(6) For Group 1 and Group 2 helicopters: From the effective date of this AD, do not install an affected part on any helicopter.

Ref. Publications:

Leonardo S.p.A. ASB 212-211 original issue dated 30 March 2021.

Leonardo S.p.A. ASB 212-212 original issue dated 30 March 2021.

Leonardo S.p.A. ASB 412-166 original issue dated 30 March 2021.

Leonardo S.p.A. ASB 412-167 original issue dated 30 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: <u>ADs@easa.europa.eu</u>.
- 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 <u>EU aviation safety</u> 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.
- 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 & Licenses DPT, Via Giovanni Agusta 520, 21017 Cascina Costa di Samarate (VA) – Italy, Tel.: +39 0331 711429, Fax: +39 0331 915145, E-mail: absereng.AW@leonardocompany.com.

