

Notification of a Proposal to issue an Airworthiness Directive

PAD No.: 24-005

Issued: 18 January 2024

Note: This Proposed Airworthiness Directive (PAD) 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.

In accordance with the EASA Continuing Airworthiness Procedures, the Executive Director is proposing the issuance of an EASA Airworthiness Directive (AD), applicable to the aeronautical product(s) identified below.

All interested persons may send their comments, referencing the PAD Number above, to the e-mail address specified in the 'Remarks' section, prior to the consultation date indicated.

Design Approval Holder's Name:

AIRBUS HELICOPTERS

Type/Model designation(s):

EC 175 B helicopters

Effective Date: [standard: 14 days after AD issue date]

TCDS Number(s): EASA.R.150

Foreign AD: Not applicable

Supersedure: None

ATA 52 – Doors – Cargo Doors Closing Mechanism – Inspection

Manufacturer(s):

Airbus Helicopters (AH).

Applicability: AH EC 175 B helicopters, all manufacturing serial numbers.

Definitions:

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

The ASB: AH Alert Service Bulletin (ASB) EC175-05-00-0004.

Affected door: Left-hand (LH) cargo door, having Part Number (P/N) M008A5232101 or P/N M008A5234101, and right-hand cargo door having P/N M008A5231101 or P/N M008A5233101.

Affected part: The attachment closing (referenced as C4414) of the closing mechanism of an affected cargo door.

Serviceable part: An affected part which is new (never installed before).

Reason:

An occurrence was reported, where on an EC 175 B helicopter a "LH CARGO DOOR" warning lit up during cruise flight. Investigation revealed that the closing handle of the LH cargo door had rotated 60 degrees, due to failure (a broken locking spring) of the affected part, as defined in this AD, but that the door had remained closed. Further investigation revealed that two other cases of corroded, fatigued and/or broken springs of affected parts had been reported, whereby however no warning had been triggered.

Further on, it was determined that the three reported failures concern closing mechanisms of cargo doors, which had incorporated modification (mod) 99A06087 in accordance with the instructions of AH ASB EC175-52A011, as required by EASA AD 2021-0188.

Corrosion and fatigue of the springs of the affected parts, added to the door closing mechanism as part of the required modification, has been determined as the root-cause for all three newly reported occurrences.

This condition, if not detected and corrected, could lead to an in-flight opening of a cargo door and loss of the door and/or baggage, that might impact with the horizontal stabiliser and/or the tail rotor, possibly resulting in damage to, and/or loss of control of, the helicopter.

To address this potential unsafe condition, AH issued the ASB, as defined in this AD, providing instructions for inspection of the affected part for corrosion and accomplishment of a door handle opening-force test, and for replacement of an affected part or the complete closing mechanism, as applicable.

For the reasons described above, this AD requires repetitive inspection of the closing mechanism of each affected door (as defined in this AD) and, depending on findings, replacement of the affected part(s).

This AD does not supersede EASA AD 2021-0188.

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

Required as indicated by this AD, unless the action(s) required by this AD have been already accomplished:

Inspection(s):

- (1) Within 110 flight hours (FH) or 6 months, whichever occurs first after the effective date of this AD, and, thereafter, at intervals not to exceed 110 FH or 6 months, whichever occurs first, inspect the closing mechanism of each affected door 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 discrepancy, as defined in the ASB, is detected on the closing mechanism of any affected door, depending on findings, before next flight, replace the affected part with a serviceable part, as defined in this AD, or



replace the complete closing mechanism, as applicable, in accordance with the instructions of the ASB.

Alternative Method:

- (3) Ensuring, before each flight, that any discrepant affected door of a helicopter is locked with a key in accordance with the instructions of the ASB is an acceptable alternative method to accomplish the corrective action(s) as required by paragraph (2) of this AD, as applicable, for that helicopter.

Terminating Action:

- (4) None.

Part(s) Installation:

- (5) From the effective date of this AD, it is allowed to install on any helicopter an affected part, provided it is a serviceable part, as defined in this AD.
- (6) From the effective date of this AD, it is allowed to install on any helicopter an affected door, provided it is equipped with a serviceable part.

Ref. Publications:

AH ASB EC175-05-00-0004 original issue dated 30 November 2023.

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

Remarks:

1. This Proposed AD will be closed for consultation on 15 February 2024.
2. Enquiries regarding this PAD should be referred to the EASA Safety Information Section, Certification Directorate. E-mail: ADs@easa.europa.eu.
3. Information about any failures, malfunctions, defects or other occurrences, which may be similar to the unsafe condition addressed by this PAD, and which may occur, or have occurred on a product, part or appliance not affected by this PAD, 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 PAD 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.
4. For any question concerning the technical content of the requirements in this PAD, please contact: Airbus Helicopters (Technical Support), Aéroport de Marseille Provence, 13725 Marignane Cedex, France, Telephone +33 (0)4 42 85 97 97, Fax +33 (0)4 42 85 99 66; Web portal: <https://airbusworld.helicopters.airbus.com> / Technical Requests Management, or E-mail: TechnicalSupport.Helicopters@airbus.com, support.technical-airframe.ah@airbus.com, or Telephone +33 (0)4 42 85 97 89.

