



Airworthiness Directive

AD No.: 2020-0099

Issued: 05 May 2020

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:

AIRBUS HELICOPTERS DEUTSCHLAND GmbH

Type/Model designation(s):

EC135 and EC635 helicopters

Effective Date: 16 May 2020

TCDS Number(s): EASA.R.009

Foreign AD: Not applicable

Supersedure: None

ATA 65 – Tail Rotor Drive – Titanium Bolts – Identification / Replacement

Manufacturer(s):

Airbus Helicopters Deutschland GmbH (AHD), formerly Eurocopter Deutschland GmbH, Eurocopter España S.A.

Applicability:

EC135 P1, EC135 P2, EC135 P2+, EC135 P3, EC135 T1, EC135 T2, EC135 T2+, EC135 T3, EC635 P2+, EC635 P3, EC635 T1, EC635 T2+ and EC635 T3 helicopters, all variants, all serial numbers (s/n).

Definitions:

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

The applicable ASB: Airbus Helicopters (AH) Alert Service Bulletin (ASB) EC135-00A-003 and ASB EC135H-00A-002, as applicable.

Affected part: Titanium (Ti) bolts, having Part Number (P/N) L535M3001201, if marked with manufacturer monogram "D"; and Ti-bolts where the manufacturer monogram cannot be identified.

Serviceable part: Any Ti-bolt, having P/N L535M3001201, which is not an affected part.



Reason:

An occurrence has been reported of a broken Ti-bolt on a helicopter. Subsequent investigation results determined that an improper heat treatment process was accomplished on a certain batch of Ti-bolts, which can lead to hydrogen embrittlement of the affected parts, and identified the critical locations where these parts are installed on affected helicopters.

This condition, if not detected and corrected, could lead to rupture of an affected part installed in a critical location, possibly resulting in reduced control of the helicopter.

To address this potential unsafe condition, AH issued the applicable ASB, providing inspection instructions, and also issued Safety Information Notice (SIN) 3365-S-00 to provide additional information.

For the reason described above, this AD requires a one-time inspection of Ti-bolts installed on the forward tail rotor drive shaft to identify whether these are affected parts, as defined in this AD, and, depending on findings, replacement. 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 50 flight hours or 2 months, whichever occurs first after the effective date of the AD, inspect (see Note 1 of this AD) each Ti-bolt having P/N L535M3001201 installed on the forward and aft drive shafts (24 in total) in accordance with the instructions of sections 3.B.2 and 3.B.3, as applicable, of the applicable ASB.

Note 1: Helicopters having s/n 2121, and s/n 2123 and up have been delivered with serviceable parts installed. For these helicopters, a review of the maintenance records to determine that no affected part has been installed in service is an acceptable method in lieu of the inspection required by paragraph (1) of this AD.

Part Replacement:

- (2) If, during the inspection as required by paragraph (1) of this AD, an affected part is found installed, before next flight, replace that affected part with a serviceable part, as defined in this AD, in accordance with the instructions of sections 3.B.2 or 3.B.3, as applicable, of the applicable ASB.

Parts Installation:

- (3) From the effective date of this AD, it is allowed to install (see Note 2 of this AD) on any helicopter a Ti-bolt having P/N L535M3001201, provided it is a serviceable part, as defined in this AD.

Note 2: Removing a Ti-bolt from a helicopter and, during the same maintenance visit, re-installing that part on the same location of the same helicopter, is not considered "install" as specified in paragraph (3) of this AD.



Ref. Publications:

AH ASB EC135-00A-003 original issue dated 04 May 2020.

AH ASB EC135H-00A-002 original issue dated 04 May 2020.

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.
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: Airbus Helicopters Deutschland GmbH, Industriestrasse 4, 86609 Donauwörth, Federal Republic of Germany, Telephone: + 33 (0)4 42 85 97 97;
Web portal: <https://keycopter.airbushelicopters.com> > Technical Request Management
E-mail: customersupport.helicopters@airbus.com.

