

# **Airworthiness Directive**

## AD No.: 2019-0003

#### Issued: 11 January 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:** AIRBUS HELICOPTERS

Type/Model designation(s): EC 175 B helicopters

Effective Date: 25 January 2019

TCDS Number(s): EASA.R.150

Foreign AD: Not applicable

Supersedure: None

### ATA 63 – Rotor Drive – Main Gearbox Top Sensor – Inspection

#### Manufacturer(s): Airbus Helicopters (AH)

#### **Applicability:**

EC 175 B helicopters equipped with a Main Gearbox (MGB) manufactured before 01 December 2018.

#### **Definitions:**

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

Affected part: Any MGB manufactured before 01 December 2018.

**Serviceable part:** Any MGB which is manufactured on or after 01 December 2018, or an affected part which has passed an inspection before next flight following installation in accordance with the instructions of the ASB.

The ASB: AH EC175 Emergency Alert Service Bulletin (ASB) 05A027.

**Groups**: Group 1 helicopters are those that have an affected part installed. Group 2 helicopters are those that do not have an affected part installed.



#### Reason:

Some uneventful occurrences have been reported of foreign object debris (FOD), generated during the manufacturing and/or overhaul of MGB assemblies. Results of the technical investigation identified that FOD in the MGB may lead to a loss of lubrication of the mast bearing.

This condition, if not detected and corrected, could subsequently lead to mast bearing seizure, possibly resulting in loss of control of the helicopter.

To address this potential unsafe condition, AH published the ASB to provide instructions to visually check the MGB top sensor for presence of oil.

For the reasons described above, this AD requires repetitive inspections of the top sensor installed on the MGB and, depending on findings, accomplishment of applicable corrective action(s).

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

Required as indicated, unless accomplished previously:

#### Inspection:

(1) For Group 1 helicopters: Within 10 flight hours (FH) after the effective date of this AD, and, thereafter, at intervals not to exceed 10 FH, visually check the MGB top sensor of the affected part in accordance with the instructions of the ASB.

#### **Corrective Action**:

(2) If, during any visual check as required by paragraph (1) of this AD, the top sensor does not pass the visual check, before next flight, replace the MGB and the main rotor mast assembly with serviceable part in accordance with the instructions of the ASB.

#### Terminating Action:

(3) None.

#### **Parts Installation:**

(4) For Group 1 and Group 2 helicopters: From the effective date of this AD, it is allowed to install on any helicopter an MGB, provided that it is a serviceable part, as defined in this AD.

#### **Ref. Publications:**

AH EC175 Emergency ASB 05A027 original issue dated 19 December 2018.

The use of later approved revisions of the above-mentioned document 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.
- For any question concerning the technical content of the requirements in this AD, please contact: Airbus Helicopters (Technical Support) at:, Web portal: <u>https://keycopter.airbushelicopters.com</u> Technical Requests Management, or E-mail: <u>support.technical-dyncomp.ah@airbus.com</u>.

