

Airworthiness Directive

AD No.: 2019-0030

Issued: 13 February 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:

Type/Model designation(s):

AIRBUS HELICOPTERS DEUTSCHLAND GmbH

MBB-BK117 D-2 helicopters

Effective Date: 27 February 2019

TCDS Number(s): EASA.R.010

Foreign AD: Not applicable

Supersedure: This AD supersedes EASA AD 2015-0198 dated 30 September 2015.

ATA 71 – Power Plant – Engine Mount Bushings – Inspection / Replacement

Manufacturer(s):

Airbus Helicopters Deutschland GmbH (AHD), formerly Eurocopter Deutschland GmbH

Applicability:

MBB-BK117 D-2 helicopters, all serial numbers (s/n).

Definitions:

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

The ASB: Airbus Helicopters (AH) Alert Service Bulletin (ASB) MBB-BK117 D-2-71A-002 Revision 1.

Affected part: Engine mount bushing Part Number (P/N) 105-60386.

Serviceable part: Engine mount bushing P/N B712M10X1001.

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. A helicopter having s/n 20261 or higher is Group 2, provided no engine mount bushing has been replaced on that helicopter since its manufacturing date.



Reason:

During a pre-flight check of an MBB-BK 117 D-2 helicopter, an engine mount bushing of one engine was found delaminated. During additional investigation, further cases of delaminated affected parts were detected.

This condition, if not detected and corrected, may lead to cracks and, eventually, failure of the engine mount front support pins, possibly resulting in loss of control of the helicopter.

To address this potential unsafe condition, AHD issued ASB MBB-BK117 D-2-71A-002 to provide instructions to inspect the engine mounts bushing, and EASA issued AD 2015-0198 to require repetitive inspections of affected parts and, depending on findings, accomplishment of applicable corrective action(s).

Since that AD was issued, AH designed an improved engine mount bushing, and issued the ASB to provide instructions to replace affected parts with serviceable parts.

For the reason stated above, this AD retains the requirements of EASA AD 2015-0198, which is superseded, and requires replacement of affected parts. This AD also prohibits (re)installation of affected parts.

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

Required as indicated, unless accomplished previously:

Re-statement of the Requirements of EASA AD 2015-0198: Repetitive Inspection:

(1) For Group 1 helicopters: Within 50 flight hours (FH) after 14 October 2015 [the effective date of EASA AD 2015-0198], and, thereafter, at intervals not to exceed 50 FH (see Note 1 of this AD), inspect the bushings of the inner and outer forward trusses of both engines, in accordance with the instructions of paragraph 3.B.2 of the ASB.

Note 1: A non-cumulative tolerance of 10 FH may be applied to the compliance times specified in paragraph (1) of this AD to allow synchronization of the required inspections with other maintenance tasks, for which a noncumulative tolerance is already granted in the applicable Maintenance Manual.

Corrective action:

(2) If, during any inspection as required by paragraph (1) of this AD, any defective bushing is found, before next flight, accomplish the applicable corrective action(s) in accordance with the instructions of section 3.B.2 of the ASB.

New Requirements of this AD:

Modification:

(3) For Group 1 helicopters: Within 12 months after the effective date of this AD, replace each affected part with a serviceable part in accordance with the instructions of section 3.B.4 of the ASB.



Terminating action:

(4) Accomplishment of corrective action(s) on a helicopter, as required by paragraph (2) of this AD, does not constitute terminating action for the repetitive inspections as required by paragraph (1) of this AD for that helicopter.

(5) Modification of a helicopter as required by paragraph (3) of this AD constitutes terminating action for the repetitive inspections as required by paragraph (1) of this AD for that helicopter.

Credit:

(6) Inspection and corrective action(s), accomplished on a helicopter before the effective date of this AD in accordance with the instructions of AHD ASB MBB-BK117 D-2-71A-002 original issue, are acceptable to comply with the initial requirements of paragraphs (1) and (2) of this AD for that helicopter.

Parts Installation:

- (7) Do not install on any helicopter an affected part, as required by paragraph (7.1) or (7.2) of this AD, as applicable.
 - (7.1) For a Group 1 helicopter: After modification of that helicopter as required by paragraph (3) of this AD, as applicable.
 - (7.2) For a Group 2 helicopter: From the effective date of this AD.

Ref. Publications:

AHD ASB MBB-BK117 D-2-71A-002 original issue dated 28 September 2015, or AH ASB MBB-BK117 D-2-71A-002 Revision 01 dated 14 December 2018.

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. This AD was posted on 14 January 2019 as PAD 19-006 for consultation until 11 February 2019. No comments were received during the consultation period.
- 3. Enquiries regarding this AD should be referred to the EASA Safety 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 <u>EU aviation safety reporting system</u>.
- 5. For any question concerning the technical content of the requirements in this AD, please contact: Airbus Helicopters Deutschland GmbH, Industriestrasse 4,



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