European Union Aviation Safety Agency

Airworthiness Directive

AD No.: 2023-0147R2

Issued: 15 December 2025

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, or Annex Vb Part ML.A.301, as applicable, 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 Annex Vb Part ML.A.303, as applicable] 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):

AS 332 L2 and EC 225 LP helicopters

Effective Date: Revision 2: 22 December 2025
Revision 1: 19 March 2025
Original Issue: 02 August 2023

TCDS Number(s): EASA.R.002

Foreign AD: Not applicable

Revision: This AD revises EASA AD 2023-0147R1 dated 12 March 2025, which original issue superseded EASA AD 2022-0021 dated 01 February 2022.

ATA 05 – Time Limits / Maintenance Checks – Main Gearbox Suspension Bar Pins / Fittings – Re-calculation of Life Limits

ATA 53 – Fuselage – Main Gearbox Suspension Bar Pins / Fittings – Replacement / Modification

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Manufacturer(s):

Airbus Helicopters (AH), formerly Eurocopter, Eurocopter France, Aerospatiale

Applicability:

AS 332 L2 and EC 225 LP helicopters, all manufacturer serial numbers.

Definitions:

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

Affected pin(s): Front attachment fitting pin(s) of main gearbox (MGB) suspension bars, having Part Number (P/N) 332A22-1613-20 (for AS 332 L2 only) or P/N 332A22-1613-21, and rear attachment fitting pin(s) of MGB suspension bars, having P/N 332A22-1614-20.

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Affected fitting(s):
For AS 332 L2 helicopters: Front attachment fitting(s) of MGB suspension bars, having P/N 332A22-1623-01, left rear attachment fitting(s) of MGB suspension bars, having P/N 332A22-1624-02 or P/N 332A22-1624-04, and right rear attachment fitting(s) of MGB suspension bars, having P/N 332A22-1624-03 or P/N 332A22-1624-05.

Serviceable pre-modification ASB pin(s): An affected pin that has not exceeded the applicable service life limit (SLL) as defined in the AS 332 L2 or EC 225 LP Airworthiness Limitations Section (ALS).

Serviceable fitting(s): For AS 332 L2 helicopters: An affected fitting that has not exceeded the applicable SLL as defined in the AS 332 L2 ALS.

The ASB: AH AS332 Emergency Alert Service Bulletin (ASB) 01.00.86 Revision 1 or EC225 Emergency ASB 04A013, as applicable.

The modification ASB: AH ASB AS332-53.02.03 Revision 2 or ASB EC225-53A065 Revision 3, as applicable.

Groups: Group 1 helicopters are those in pre-modification ASB configuration.
Group 2 helicopters are those in post-modification ASB configuration. Helicopters having AH modification (mod) 0728521, mod 0728904, mod 0728496 and mod 0729044 concurrently embodied in production are Group 2 helicopters provided that they remain in that configuration.

Reason:
Following the review of data reported after accomplishing actions as required by EASA Emergency AD 2016-0089-E, applicable to EC 225 LP helicopters, it was determined that the installation of MGB upper deck fittings of the three MGB suspension bars could lead to tightening torque loss on the affected pin(s) and fitting(s), as defined in this AD. Due to design similarity, AS 332 L2 helicopters could also be affected by the same installation condition. Investigation identified that the current SLL values for the affected pin(s) and/or fitting(s), as published in the applicable ALS, are still valid provided that an add-on penalty factor is applied to the life accumulated by the affected pin(s) and fitting(s) in service.

This condition, if not corrected, could lead to structural failure of the affected pin(s) and fitting(s).

To address this potential unsafe condition, AH published the original issue of AS332 Emergency ASB 01.00.86 and EC225 Emergency ASB 04A013 to provide life re-calculation methods and replacement instructions. Consequently, EASA issued AD 2017-0133 to require implementation of an add-on penalty factor to the flight hours (FH) accumulated by the affected pin(s) and fitting(s) and, before exceeding the applicable SLL, replacement. Subsequently, it was discovered that the original issue of AS332 Emergency ASB 01.00.86 contained an error, possibly resulting in installation of pins or fittings using incorrect tightening torque values. Prompted by that finding, AH issued AS332 Emergency ASB 01.00.86 Revision 1 and EASA issued AD 2017-0189, retaining the requirements of EASA AD 2017-0133, which was superseded, but requiring use of that revised ASB for AS 332 L2 helicopters. That AD also required, for AS 332 L2 helicopters, replacement of any affected pin(s) where incorrect tightening torque values were applied and reporting the details to the design

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approval holder. Concurrently, AH published EC225 Emergency ASB 04A013 Revision 1, providing accomplishment instructions improvement, which did not affect the requirements of the EASA AD 2017-0189.

After that AD was issued, AH issued Revision 2, Revision 3, and Revision 4 of AS332 Emergency ASB 01.00.86 and Revision 2, Revision 3 and Revision 4 of EC225 Emergency ASB 04A013. AH also developed a design improvement, installing new links on the attachment fittings of the MGB suspension bars through mod 0728521, 0728904, 0728496 and 0729044, and issued Service Bulletin (SB) AS332-53.02.03 and SB EC225-53-065 providing in-service modification instructions. Prompted by additional review, AH issued the ASB AS332-53.02.03 Revision 1 and ASB EC 225-53A65 Revision 1, which introduced new SLL and mandatory tightening torque check for some post-modification ASB parts. Prompted by this development, EASA issued AD 2022-0021 retaining the requirements of EASA AD 2017-0189, which was superseded, and additionally required modification.

After that AD was issued, it was determined that for helicopters already modified in accordance with the earlier issues of the AH ASB AS332-53.02.03 or ASB EC225-53A065, installation of shims on the rear sliding cooling rails of the MGB compartment is necessary, as applicable to the helicopter configuration. Prompted by this development, AH issued the modification ASB, as defined in this AD, providing additional work instructions. Additionally, the modification ASB removed appendices of the documents where post-modification ASB SLL and mandatory tightening torque checks were previously provided, and which data were consequently integrated into the AS 332 L2 and EC 225 LP ALS. Consequently, EASA issued AD 2023-0147 partially retaining the requirements of EASA AD 2022-0021, which was superseded, updating the definitions of affected and serviceable parts, requiring accomplishment of the modification in accordance with revised accomplishment instructions and extending the compliance time expressed in FH for modification of EC 225 LP helicopters.

After that AD was published, a difficulty has been identified with the installation of modification kits for EC 225 LP and delivery of that solution has been suspended. In parallel, new risk assessment showed that previously required compliance time for EC 225 LP can be relaxed, by removing the FH limit and extending the calendar compliance time. Consequently, EASA AD 2023-0147 was revised accordingly.

Since that AD was published, further risk assessment showed that previously required compliance time for AS 332 L2 helicopters can be relaxed, by removing the FH limit and extending the calendar compliance time.

This AD is therefore revised to reflect the updated compliance time.

This AD is still considered to be an interim action and further AD action may follow.

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

Required as indicated by this AD, unless the actions required by this AD have been already accomplished:

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Service Life Re-calculation(s):

(1) For Group 1 helicopters: Within 30 FH after 03 August 2017 [the effective date of EASA AD 2017-0133], and, thereafter, after each flight, re-calculate the life accumulated by each affected pin (for AS 332 L2 and EC 225 LP) and each affected fitting (for AS 332 L2 only) by applying the add-on factor, as applicable, in accordance with instructions of the ASB.

Corrective Action(s):

(2) For Group 1 helicopters: Before the re-calculated life of an affected pin, determined as required by paragraph (1) of this AD, exceeds the applicable SLL as defined in the AS 332 L2 or EC 225 LP ALS, as applicable, replace that affected pin with a serviceable pre-modification ASB pin in accordance with the instructions of the ASB.

(3) For AS 332 L2 Group 1 helicopters: Before the re-calculated life of an affected fitting, determined as required by paragraph (1) of this AD, exceeds the applicable SLL as defined in the AS 332 L2 ALS, replace that affected fitting with a serviceable fitting in accordance with the instructions of the ASB.

(4) As an alternative to the replacement as required by paragraph (3) of this AD, inspect the affected fitting in accordance with the instructions of the ASB.

(5) If, during the inspection as specified in paragraph (4) of this AD, no crack is detected, within 150 FH after that inspection, replace the affected fitting with a serviceable fitting in accordance with the instructions of the ASB. No further accumulated life re-calculations (see paragraph (1) of this AD) are required, until the fitting is replaced.

(6) If, during the inspection as specified in paragraph (4) of this AD, any crack is detected, before next flight, replace the affected fitting with a serviceable fitting in accordance with the instructions of the ASB.

MGB Suspension Bar Fitting Pin Replacement:

(7) For AS 332 L2 Group 1 helicopters on which, before 06 October 2017 [the effective date of EASA AD 2017-0189], a replacement pin was installed and an incorrect tightening torque value was applied: Within 150 FH (without applying an add-on factor) after that pin was installed, replace the affected pin with a serviceable pre-modification ASB pin in accordance with the instructions of Revision 1 of AH AS332 Emergency ASB 01.00.86.

Modification:

(8) For Group 1 helicopters: Within the compliance time defined in Table 1 of this AD, modify the helicopter in accordance with the instructions of the modification ASB.
Following modification, the helicopter effectively becomes a Group 2 helicopter.

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Table 1 – Modification

Helicopter Model	**Compliance Time** (whichever occurs first)
AS 332 L2	52 months after 15 February 2022 [the effective date of EASA AD 2022-0021]
EC 225 LP	52 months after 15 February 2022 [the effective date of EASA AD 2022-0021]

Additional Work:

(9) For helicopters which, before 02 August 2023 [the effective date of the original issue of this AD], were modified in accordance with the instructions of the original issue or Revision 1 of AH AS332-53.02.03 (for AS 332 L2 helicopters) or in accordance with the instructions of the original issue, Revision 1 or Revision 2 of AH ASB EC225-53A065 (for EC 225 LP helicopters): During the next scheduled maintenance visit, but not to exceed the compliance time defined in Table 2 of this AD, after 02 August 2023 [the effective date of the original issue of this AD], accomplish the additional work in accordance with the instructions of sections 3.B.2.c.1.b. or 3.B.2.c.2.b., as applicable to the helicopter configuration, of the modification ASB.

Table 2 – Additional Work Compliance Time

Helicopter Model	**Compliance Time**
AS 332 L2	40 months
EC 225 LP	40 months

Part(s) Installation:

(10) For Group 1 helicopters: From 06 October 2017 [the effective date of EASA AD 2017-0189], it is allowed to install an affected pin or an affected fitting on a helicopter, provided the part is a serviceable pre-modification ASB pin or serviceable fitting, as applicable and as defined in this AD, and that, following installation, the life of the part is re-calculated as required by paragraph (1) of this AD.

(11) For Group 2 helicopters: From 15 February 2022 [the effective date of EASA AD 2022-0021], do not install on a helicopter any pre-modification ASB pin.

Terminating Action:

(12) For Group 1 helicopters: Replacement of an affected fitting or an affected pin on a helicopter, as required by paragraph (2), (3), (5) or (6) of this AD, as applicable, does not constitute terminating action for the repetitive service life re-calculation(s) as required by paragraph (1) of this AD for that helicopter.

(13) Modification of a helicopter as required by paragraph (8) of this AD constitutes terminating action for repetitive service life re-calculation(s) as required paragraph (1) of this AD for that helicopter.

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Credit:

(14) For AS 332 L2 Group 1 helicopters: Re-calculation(s) and inspection(s) of affected pin(s) or fitting(s) and replacement of affected fitting(s), accomplished before 06 October 2017 [the effective date of EASA AD 2017-0189] in accordance with the instructions of the original issue of AH AS332 Emergency ASB 01.00.86, are acceptable to comply with the initial requirements of this AD for that helicopter.

(15) For AS 332 L2 Group 1 helicopters: Replacement of an affected pin, accomplished before 06 October 2017 [the effective date of EASA AD 2017-0189] in accordance with the instructions of the original issue of AH AS332 Emergency ASB 01.00.86, is acceptable to comply with the initial requirements of this AD for that helicopter, provided that the tightening torque values applied to the affected pin(s) of the MGB suspension bar fittings were those referenced in the AH AS332 Emergency ASB 01.00.86 Revision 1 or later approved revisions.

Reporting:

(16) For AS 332 L2 helicopters affected by paragraph (7) of this AD, within 30 days after 06 October 2017 [the effective date of EASA AD 2017-0189], report all information related to the affected pin(s) to AH in accordance with the instructions of Revision 1 of AH AS332 Emergency ASB 01.00.86.

Ref. Publications:

AH AS332 Emergency ASB 01.00.86 original issue dated 27 July 2017, or Revision 1 dated 25 August 2017, or Revision 2 dated 02 March 2020, or Revision 3 dated 19 August 2021, or Revision 4 dated 06 January 2022.

AH EC225 Emergency ASB 04A013 original issue dated 27 July 2017, or Revision 1 dated 25 August 2017, or Revision 2 dated 02 March 2020, or Revision 3 dated 19 August 2021, or Revision 4 dated 06 January 2022.

AH SB AS332-53.02.03 original issue dated 19 August 2021, or AH ASB AS332-53.02.03 Revision 1 dated 06 January 2022, or Revision 2 dated 15 June 2023, or Revision 3 dated 11 December 2025.

AH SB EC225-53-065 original issue dated 19 August 2021, or AH ASB EC225-53A065 Revision 1 dated 06 January 2022, or Revision 2 dated 05 May 2022, or Revision 3 dated 15 June 2023, or Revision 4 dated 26 May 2024, or Revision 5 dated 05 December 2024, or Revision 6 dated 11 December 2025.

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. The original issue of this AD was posted on 16 June 2023 as PAD 23-077 for consultation until 14 July 2023. No comments were received during the consultation period.

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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 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 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.

5. For any question concerning the technical content of the requirements in this AD, 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, Airbus World: Technical Request Management: https://airbusworld.helicopters.airbus.com, E-mail: support.technical-dyncomp.ah@airbus.com, and TechnicalSupport.Helicopters@airbus.com.

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