

Airworthiness Directive

AD No.: 2024-0097**Issued:** 02 May 2024

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 S.A.S.

Type/Model designation(s):

A318, A319, A320 and A321 aeroplanes

Effective Date: 16 May 2024**TCDS Number(s):** EASA.A.064**Foreign AD:** Not applicable**Supersedure:** This AD supersedes EASA AD 2012-0118 dated 04 July 2012.

ATA 53 – Fuselage – Centre Fuselage / Main Landing Gear Door Keel Beam Hinge and Actuator Fittings – Inspection

Manufacturer(s):

Airbus, formerly Airbus Industrie

Applicability:

Airbus A318-111, A318-112, A318-121, A318-122, A319-111, A319-112, A319-113, A319-114, A319-115, A319-131, A319-132, A319-133, A319-151N, A319-153N, A319-171N, A320-211, A320-212, A320-214, A320-215, A320-216, A320-231, A320-232, A320-233, A320-251N, A320-252N, A320-253N, A320-271N, A320-272N, A320-273N, A321-111, A321-112, A321-131, A321-211, A321-212, A321-213, A321-231, A321-232, A321-251N, A321-251NX, A321-252N, A321-252NX, A321-253N, A321-253NX, A321-271N, A321-271NX, A321-272N, A321-272NX aeroplanes, all manufacturer serial numbers, except those aeroplanes on which Airbus modification (mod) 165315 has been embodied in production.

Definitions:

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

Affected part 1: Left-hand (LH) and right-hand (RH) main landing gear (MLG) door actuator fittings on the keel beam.

Affected part 2: LH and RH MLG door hinge fittings on the keel beam.



Inspection SB 1: Airbus Service Bulletin (SB) A320-53-1195 Revision 11 or SB A320-53-1325 Revision 04, as applicable.

Inspection SB 2: Airbus SB A320-53-1196 Revision 10 or SB A320-53-1326 Revision 03, as applicable.

The modification SB 1: Airbus SB A320-53-1502.

The modification SB 2: Airbus SB A320-53-1503.

CEO aeroplanes: Airbus A318-111, A318-112, A318-121, A318-122, A319-111, A319-112, A319-113, A319-114, A319-115, A319-131, A319-132, A319-133, A320-211, A320-212, A320-214, A320-215, A320-216, A320-231, A320-232, A320-233, A321-111, A321-112, A321-131, A321-211, A321-212, A321-213, A321-231 and A321-232 aeroplanes, commercially known as Current Engine Option (CEO).

NEO aeroplanes: Airbus A319-151N, A319-153N, A319-171N, A320-251N, A320-252N, A320-253N, A320-271N, A320-272N, A320-273N, A321-251N, A321-251NX, A321-252N, A321-252NX, A321-253N, A321-253NX, A321-271N, A321-271NX, A321-272N and A321-272NX aeroplanes, commercially known as New Engine Option (NEO).

Reason:

Occurrences were reported of finding cracks on MLG door hinge fittings and on MLG door actuator fittings on the keel beam.

This condition, if not detected and corrected, could lead to in-flight detachment of a MLG door, possibly resulting in damage to the aeroplane.

To address this potential unsafe condition, Airbus issued SB A320-53-1195 and SB A320-53-1196, providing instructions for inspection of the MLG door hinge and actuator fittings, and consequently EASA issued EASA AD 2007-0161, to require a one-time inspection of the affected fittings and accomplishment of applicable corrective action(s).

After that AD was issued, cracks have been found on fittings that had successfully passed the one-time inspection. Analyses of those cracks led to reconsideration of the repetitive inspections of the MLG door hinge and actuator fittings on the keel beam, in accordance with the ALI task 533154-02-1 requirement as defined in Airbus A318/A319/A320/A321 Airworthiness Limitation Items (ALI) Document, by introducing more restrictive inspection thresholds and intervals. Prompted by this development, EASA issued AD 2012-0118, expanded the AD Applicability to all A318/A319/A320/A321 CEO aeroplanes and required repetitive inspections of the MLG door hinge and actuator fittings on the keel beam at a reduced threshold and interval and, depending on findings, the accomplishment of applicable corrective actions.

Since EASA AD 2012-0118 was issued, a new design of the MLG door keel beam hinge and actuator fitting was certified by Airbus through Airbus mod 165315 and Airbus issued the modification SB 1 and the modification SB 2 for in service embodiment for CEO and NEO fleets.



For the reasons described above, this AD retains the requirements of EASA AD 2012-0118, which is superseded, expands the Applicability to the NEO fleet and introduces an additional terminating action.

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

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

Inspection(s):

- (1) Within the compliance time indicated in Table 1 of this AD, as applicable, and, thereafter, at intervals not to exceed 2 250 flight cycles (FC), accomplish Detailed Visual, High Frequency Eddy Current (HFEC) and Ultrasonic inspections of each affected part 1, in accordance with the instructions of the inspection SB 1, as applicable.

Table 1 – Compliance Time

| Aeroplanes | Thresholds (whichever occurs later) |
|------------|---|
| CEO | 3 000 FC since aeroplane first flight or 3 000 FC since replacement of that door actuator fitting as per RI R533-70501 or 2 250 FC since last inspection of that door actuator fitting, accomplished before the effective date of this AD, in accordance with the instructions of Airbus SB A320-53-1195 or 1 500 FC since 18 July 2012 [the effective date of EASA AD 2012-0118] |
| NEO | 3 000 FC since aeroplane first flight or 3 000 FC since replacement of that door actuator fitting as per RI R533-70501 or 2 250 FC since last inspection as per ALI 533154-03-2, or since last inspection in accordance with the instructions of Airbus SB A320-53-1325 (any Revision), whichever occurs later |

- (2) Within the compliance time indicated in Table 2 of this AD, as applicable, and, thereafter, at intervals not to exceed 3 000 FC, accomplish Detailed Visual and HFEC inspections of each affected part 2, in accordance with the instructions of the inspection SB 2, as applicable.



Table 2 – Compliance Time

| Aeroplanes | Thresholds (whichever occurs later) |
|------------|---|
| CEO | 3 000 FC since aeroplane first flight or 3 000 FC since replacement of that hinge fitting as per RI R533-70500 or 3 000 FC since last inspection of that hinge fitting, accomplished before the effective date of this AD, in accordance with the instructions of Airbus SB A320-53-1196 or 1 500 FC since 18 July 2012 [the effective date of EASA AD 2012-0118] |
| NEO | 3 000 FC since aeroplane first flight or 3 000 FC since replacement of that hinge fitting as per RI R533-70500 or 3 000 FC since last inspection as per ALI 533154-04-2 or 533154-10-1, or since last inspection in accordance with the instructions of Airbus SB A320-53-1326 (any Revision), whichever occurs later |

Corrective Action(s):

- (3) If, during any inspection as required by paragraph (1) or (2) of this AD, any discrepancy is found, before next flight, depending on findings, accomplish the applicable corrective actions in accordance with the instructions of the inspection SB 1 or inspection SB 2, as applicable, or contact Airbus for approved repair instructions and, within the compliance time specified therein, accomplish those instructions accordingly.

Terminating Action:

- (4) Accomplishment of corrective action(s) on an aeroplane as required by paragraph (3) of this AD does not constitute terminating action for the repetitive inspections as required by paragraph (1) or (2) of this AD, as applicable, for that aeroplane, unless specified otherwise in the instructions provided by Airbus.
- (5) Modification of an aeroplane, in accordance with the modification SB 1 or modification SB 2, as applicable, constitutes terminating action for the repetitive inspection requirements of this AD for that aeroplane.

Credit:

- (6) For an aeroplane that, before the effective date of this AD, has been inspected per ALI task 533154-03-2, 533154-04-2 or 533154-10-1, or in accordance with the instructions of inspection SB 1 (at any Revision) or inspection SB 2 (at any Revision), and repaired in accordance with Airbus approved repair instructions, accomplish the next due inspections of each repaired affected area in accordance with, and within the compliance time as specified in, Airbus approved repair instructions, as applicable.



- (7) Repair and accomplishment of post-repair instructions, as applicable, as defined by paragraph (6) of this AD, does not constitute terminating action for the repetitive inspections as required by paragraphs (1) and (2) of this AD for that repaired area, unless specified otherwise in the instructions provided by Airbus.
- (8) For NEO aeroplanes: From the effective date of this AD, accomplishment of inspections and corrective actions on an aeroplane as required by paragraphs (1) and (3) of this AD supersedes ALI task 533154-03-2 for that aeroplane.
- (9) For NEO aeroplanes: From the effective date of this AD, accomplishment of inspections and corrective actions on an aeroplane as required by paragraphs (2) and (3) of this AD supersedes ALI tasks 533154-10-1, for that aeroplane.

Ref. Publications:

Airbus SB A320-53-1195 Revision 03 dated 08 November 2011, or Revision 04 dated 22 August 2012, or Revision 05 dated 22 November 2013, or Revision 06 dated 29 August 2014, or Revision 07 dated 28 July 2016, or Revision 08 dated 27 September 2017, or Revision 09 dated 23 October 2018, or Revision 10 dated 11 June 2021, or Revision 11 dated 08 November 2023.

Airbus SB A320-53-1196 Revision 02 dated 08 November 2011, or Revision 03 dated 22 August 2012, or Revision 04 dated 22 November 2013, or Revision 05 dated 29 August 2014, or Revision 06 dated 28 July 2016, or Revision 07 dated 27 September 2017, or Revision 08 dated 23 October 2018, or Revision 09 dated 17 December 2020, or Revision 10 dated 08 November 2023.

Airbus SB A320-53-1325 Revision 04 dated 07 November 2023.

Airbus SB A320-53-1326 Revision 03 dated 07 November 2023.

Airbus SB A320-53-1502 original issue dated 07 November 2023.

Airbus SB A320-53-1503 original issue dated 07 November 2023.

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 19 March 2024 as PAD 24-035 for consultation until 16 April 2024. The Comment Response Document can be found in the [EASA Safety Publications Tool](#), in the compressed ('zipped') file, attached to the record for this AD.
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 – Airworthiness Office – 1IASA; E-mail: account.airworth-eas@airbus.com.

