

Airworthiness Directive

AD No.: 2024-0188

Issued: 27 September 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 M.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 M.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: Type/Model designation(s):

AIRBUS S.A.S. A350 aeroplanes

Effective Date: 04 October 2024

TCDS Number(s): EASA.A.151

Foreign AD: Not applicable

Supersedure: None

ATA 32 – Landing Gear – Nose Landing Gear Shock Absorber – Functional Check

Manufacturer(s):

Airbus

Applicability:

Airbus A350-941 and A350-1041 aeroplanes, all manufacturer serial numbers.

Definitions:

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

Affected part: Nose landing gear (NLG) shock absorber fitted on an NLG having Part Number (P/N) 6406Axxxx (common standard) or P/N 4816Axxxx (EIS Standard); where 'xxxx' represents any numerical sequence value.

The AOT: Airbus Alert Operators Transmission (AOT) A32P031-24 Revision 03.

Aeroplane date of manufacture: The date of transfer of title (ownership) of the aeroplane upon delivery by Airbus to the first operator, which is referenced in Airbus documentation.

Reason:

Mechanical noises, originating from the NLG shock absorber during ground manoeuvres, were reported. These noises have been attributed to an increased friction between the lower bearing



carrier (LBC) and the main fitting of the sliding tube. This increased friction may result in deformation of the anti-rotation tabs located on the LBC and consequently, relative movement may occur between the LBC and the main fitting. That might cause wear of the corrosion protection coating on the main fitting due to subsequent movement of the retainer ring positioned between the two components, which could gradually lead to corrosion of the NLG main fitting itself.

This condition, if not detected and corrected, could lead to structural failure of the NLG and consequent collapse, possibly resulting in damage to the aeroplane and injury to occupants.

To address this potential unsafe condition, Airbus issued the AOT, as defined in this AD, to provide instructions for a steering check of the affected parts, as defined in this AD.

For the reasons described above, this AD requires a steering check of the affected parts and depending on findings, accomplishment of applicable corrective action(s).

During the consultation period comments were raised prompting the improvement of the instructions in the AOT, therefore the final AD refers to the recently published AOT revision 03.

This AD is 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 action(s) required by this AD have been already accomplished:

Repetitive Functional Check(s):

(1) Before exceeding the threshold and, thereafter, at intervals not to exceed the value as specified in Table 1 of this AD, as applicable, accomplish a steering check of the affected part, in accordance with the instructions of the AOT (see Note 1 of this AD).

Table 1 –	Threshold	and	Interval	tor	Steering	Check
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NLG P/N	Initial Steering Check Threshold (whichever occurs later)	Repetitive Steering Check Interval
6406Axxxx	Before exceeding 250 flight cycles (FC) since aeroplane date of manufacture, or within 2 months after the effective date of this AD	250 FC
4816Axxxx	Before exceeding 1 000 FC since aeroplane date of manufacture, or within 17 months after the effective date of this AD	1 000 FC

Note 1: The scope of repetitive inspections is limited to the section 5.6, points f. and following of the procedure of the AOT.

(2) If, during any steering check as required by paragraph (1) of this AD, any discrepancies as identified in the AOT are detected, before next flight, accomplish the applicable corrective action(s) in accordance with the instructions of the AOT, or contact Airbus to obtain approved



instructions and, within the compliance time(s) specified therein, accomplish those instructions accordingly.

Part Installation:

(3) From the effective date of this AD, it is allowed to install on an aeroplane a NLG with an affected part, provided that, following installation and before next flight, the affected part installed on this NLG is checked in accordance with the steering check instructions of the AOT referred to in paragraph (1), and, depending on findings, corrected as applicable in accordance with the instructions of the AOT and, thereafter, repetitively checked as required by this AD.

Reporting:

(4) Within 30 days after completion of each steering check as required by paragraph (1) of this AD, as applicable, report the inspection results (including no findings) to Airbus. Using the Reporting Form attached to the AOT is an acceptable method to comply with this requirement.

Terminating Action:

(5) None.

Credit:

(6) Steering checks and corrective action(s) accomplished on an aeroplane before the effective date of this AD in accordance with the instructions of AOT A32P031-24 at original issue, Revision 1 or Revision 2 are acceptable to comply with the initial requirements of the paragraphs (1) and (2) of this AD, as applicable, for that aeroplane.

Ref. Publications:

Airbus AOT A32P031-24 original issue dated 18 April 2024, Revision 01 dated 29 July 2024, or Revision 2 dated 28 August 2024, Revision 03 dated 26 September 2024.

The use of later approved revisions of the above-mentioned document is acceptable for compliance with the requirements of this AD.

Remarks:

- If requested and appropriately substantiated, EASA can approve Alternative Methods of Compliance for this AD.
- This AD was posted on 29 August 2024 as PAD 24-107 for consultation until 12 September 2024. The Comment Response Document can be found in the <u>EASA Safety Publications Tool</u>, in the compressed ('zipped') file, attached to the record for this AD.
- 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 A350 XWB (1IAK), E-mail: continued-airworthiness.a350@airbus.com.

