

## Airworthiness Directive

**AD No.:** 2023-0031

**Issued:** 08 February 2023

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):**

A380 aeroplanes

**Effective Date:** 15 February 2023

**TCDS Number(s):** EASA.A.110

**Foreign AD:** Not applicable

**Supersedure:** This AD supersedes EASA AD 2022-0075 dated 28 April 2022.

### ATA 32 – Landing Gear – Body Landing Gear Rear Axle – Replacement

**Manufacturer(s):**

Airbus

**Applicability:**

Airbus A380-841, A380-842 and A380-861 aeroplanes, all manufacturer serial numbers (MSN).

**Definitions:**

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

**Affected part:** Right-hand (RH) and left-hand (LH) body landing gear (BLG) rear axles with a serial number (s/n) identified in Appendix 2 of the AOT, except those which have been overhauled since first installation on an aeroplane, or have passed (no defect found, or defect repaired) an inspection in accordance with the instructions of the AOT. Appendix 2 of the AOT also identifies the MSN of the affected aeroplanes, but that is aeroplane delivery data only, as the BLG may since have been moved to another MSN.

**Serviceable part:** Any RH and LH BLG rear axle with an s/n not listed in Appendix 2 of the AOT, or an affected part which has been overhauled since its first installation on an aeroplane, or an affected part that has passed (no defect found, or defect repaired) an inspection in accordance with the instructions of the AOT.

**The AOT:** Airbus Alert Operators Transmission (AOT) A32R026-22 Revision 1, which includes references to Collins instructions RDA-SCR004-22 and Collins Aerospace Service Information Letter 02121-32-031.

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

**Reason:**

An occurrence was reported where, during a regular walk-around inspection of a stored A380, the LH BLG rear axle was found to have ruptured. The affected aeroplane was delivered (entry into service) in 2012 and had been in storage since March 2020. The initial inspection of the damaged part determined that failure of the axle occurred through the bogie pivot pin bore, where corrosion was identified. In addition, several instances were identified of degradation of the protective coating and subsequent corrosion within the aft axle bore which would require a repair to restore serviceability. Further investigation into the cause(s) of the event is on-going.

This condition, if not detected and corrected, could lead to failure of a BLG rear axle, with consequent detachment of the BLG wheel assembly during take-off, possibly resulting in damage to the aeroplane and injury to occupants.

To address this potential unsafe condition, Airbus and Collins Aerospace, the BLG rear axle manufacturer, developed instructions to identify and replace the affected parts and Airbus issued AOT A32R026-22 (original issue) to provide those instructions. Consequently, EASA issued AD 2022-0075 to require removal from service of all affected parts for the purpose of in-shop inspection, and replacement with serviceable parts. That AD also prohibited (re)installation of an affected part.

Since that AD was issued, further information identified more BLG rear axles affected by this safety issue. In addition, certain compliance times have been extended.

For the reason describe above, this AD retains the requirements of EASA AD 2022-0075, which is superseded, amends some compliance times and introduces additional BLG rear axles (s/n) as affected parts.

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, unless accomplished previously:

**Replacement:**

- (1) For Group 1 aeroplanes: Before Return To Service ("Prior RTS"), or within 6 or 12 months after the effective date of this AD, as applicable to BLG rear axles with an s/n specified in Appendix 2 of the AOT, replace each affected part with a serviceable part.



Where Appendix 2 of the AOT indicates a compliance time 'Prior RTS' for an affected part, this is a reflection of the fact that the BLG rear axle is installed on an aeroplane that is currently out of service (parked/stored).

**Part(s) Installation:**

(2) Do not install an affected part on any aeroplane, as required by paragraph (2.1) or (2.2) of this AD, as applicable.

(2.1) For Group 1 aeroplanes: After removal of each affected part from the aeroplane as required by paragraph (1) of this AD.

(2.2) For Group 2 aeroplanes: From the effective date of this AD.

**Ref. Publications:**

Airbus AOT A32R026-22 Revision 1 dated 06 February 2023.

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: [ADs@easa.europa.eu](mailto: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 S.A.S. - 1IANA (Airworthiness Office), Telephone: +33 562 110 253, Fax: +33 562 110 307, E-mail: [account.airworth-A380@airbus.com](mailto:account.airworth-A380@airbus.com).

