



Airworthiness Directive

AD No.: 2021-0219

Issued: 28 September 2021

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:

AIRBUS

Type/Model designation(s):

A380 aeroplanes

Effective Date: 12 October 2021

TCDS Number(s): EASA.A.110

Foreign AD: Not applicable

Supersedure: None

ATA 32 – Landing Gear – Wing / Body Landing Gear Retraction Actuators – Modification / Replacement

Manufacturer(s):

Airbus

Applicability:

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

Definitions:

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

The SB: Airbus Service Bulletin (SB) A380-32-8109.

Affected part: Wing landing gear (WLG) and body landing gear (BLG) retraction actuator assemblies, having Part Number (P/N) 2143E4610-10 (WLG) or P/N 2144E4610-11 (BLG), and having a serial number (s/n) as listed in Appendix 1 of this AD, except those modified in accordance with the instructions of UTC Aerospace Systems (Goodrich Aerospace Canada Ltd) SB 2143E4610-32-107 or SB 2144E4610-32-108, as applicable, and re-identified with the letter 'D' engraved on the nameplate (1-570B).

Serviceable part: Any WLG or BLG retraction actuator assembly that is not an affected part.



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:

During laboratory analysis of a returned landing gear retraction actuator unit, some scoring was observed on one of the split ball bearings. The bearing raw material properties were identified as not in accordance with the material requirements. Further investigation results revealed that some of the chemical properties and mechanical characteristics were outside of the specification.

This condition, if not corrected, could lead to WLG or BLG collapse, possibly resulting in damage to the aeroplane and injury to occupants.

To address this potential unsafe condition, Airbus issued the SB to provide modification instructions.

For the reasons described above, this AD requires modification or replacement of the affected parts. This AD also prohibits (re)installation of an affected part on any aeroplane.

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

Required as indicated, unless accomplished previously:

Modification:

- (1) For Group 1 aeroplanes: Before an affected part exceeds 5 000 flight cycles since its first installation on an aeroplane, modify that affected part in accordance with the instructions of the SB, or replace that affected part with a serviceable part.

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 modification of 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 SB A380-32-8109 original issue dated 02 October 2019.

UTC Aerospace Systems SB 2143E4610-32-107 original issue dated 17 April 2019.

UTC Aerospace Systems SB 2144E4610-32-108 original issue dated 17 April 2019.

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 24 August 2021 as PAD 21-129 for consultation until 21 September 2021. 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 [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 SAS - EIANA (Airworthiness Office), Telephone: +33 562 110 253, Fax: +33 562 110 307, E-mail: account.airworth-A380@airbus.com.



Appendix 1 – Affected Parts

P/N	s/n
2143E4610-10 (WLG Retract Actuator Assembly)	SAAW4610335 to SAAW4610388 inclusive, SAAW4610390, SAAW4610391, SAAW4610393 to SAAW4610402 inclusive, SAAW4610404 to SAAW4610416 inclusive, SAAW4610420 to SAAW4610424 inclusive, SAAW4610456 and SAAW4610457
2144E4610-11 (BLG Retract Actuator Assembly)	SAAB4610334 to SAAB4610376 inclusive, SAAB4610378, SAAB4610379, SAAB4610381 to SAAB4610388 inclusive, SAAB4610391 to SAAB4610396 inclusive, SAAB4610398 to SAAB4610403 inclusive, SAAB4610407 to SAAB4610418 inclusive, SAAB4610421 to SAAB4610426 inclusive, SAAB4610429 and SAAB4610434

