Airworthiness Directive

AD No.: 2025-0074

Issued: 07 April 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 S.A.S.

Type/Model designation(s):
A380 aeroplanes

Effective Date: 14 April 2025

TCDS Number(s): EASA.A.110

Foreign AD: Not applicable

Supersedure: This AD supersedes EASA AD 2024-0141 dated 16 July 2024.

ATA 57 – Wings – Wing Landing Gear Attachment – Inspection / Repair / 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:

The inspection instructions: The inspection instructions in section 3.C of Airbus Service Bulletin (SB) A380-57-8148 Revision 01 (for the inspection of the gear rib 9 lugs for cracks) and SB A380-57-8269 (for the inspection of the condition of the sealant).

The repair or replacement: Removal and replacement of the bushings of and, as applicable, repair of the gear rib 9 fitting, in accordance with the instructions of Airbus repair instruction (RI) R575-40267 or R575-42389, as applicable, or an approved Airbus Repair Design Approval Form (RDAF) issued before the effective date of this AD; or replacement of the complete gear rib 9 fitting in accordance with Airbus instruction R575-58442 or an approved Airbus RDAF issued before the effective date of this AD.

The sealant repair: Removal and replacement of the sealant to the aft pintle forward (fwd) lug, in accordance with Airbus instruction R575-42397 or the instructions of an approved Airbus RDAF issued before the effective date of this AD, and application of 'torque stripes' to identify possible future rotation of the bushings.

Affected area 1: The aft pintle fwd lug of the landing gear attachment rib 9 fitting(s), as identified in the inspection instructions, as defined in this AD, of the aeroplanes having MSN 015 (on the left-hand side [LH] and the right-hand side [RH]), MSN 107 (LH and RH), MSN 174 (LH and RH), MSN 183 (RH), MSN 209 (LH and RH), MSN 227 (LH) and MSN 244 (LH and RH).

Affected area 2: The affected areas and parts as identified in the inspection instructions, of those aeroplanes on which, before the effective date of this AD, (only) cracked sealant was found, without any corrosion of, migration of any bushing(s) of, or cracks on, any lug(s) of the affected rib 9 gear attachment fitting(s), and which are not an affected area 1, as defined in this AD.

Groups: Group 1 aeroplanes are those having an affected area 1, as defined in this AD; (MSN 015, 107, 174, 183, 209, 227 and MSN 244). Group 2 aeroplanes are those having an affected area 2, as defined in this AD.
Depending on its configuration, an aeroplane can be Group 1 and Group 2.

Reason:

During scheduled lubrication activities on Airbus A330 main landing gears (MLG) a trend of increasing numbers of unexpected damage (corrosion and cracking) of the lugs of the landing gear attachment rib 6, on the left-hand (LH) and right-hand (RH) wing, was observed. Analysis of the findings revealed that the root cause for these cracks is a complex combination of intergranular attack, corrosion and fretting of the installed bushings.

This condition, if not detected and corrected, could reduce the structural integrity of the primary structure of the aeroplane.

Later, during maintenance checks of A380 aeroplanes, cracked sealant was found on the bushings of gear rib 9 fittings, attaching the LH and RH wing landing gear (WLG) to the wing, which have a similar design to the above-mentioned MLG fittings installed on A330 aeroplanes. Although cracked sealant, on its own, does not immediately indicate an unsafe condition, such defects on the sealant could allow moisture ingress between the lug and bushings, which, over time, could significantly increase the risk of corrosion in the lug bore and, if left untreated, could ultimately lead to cracking of rib lugs.

Airbus determined that timely detection of cracks on the A380 gear rib 9 fitting lugs is necessary and therefore, issued SB A380-57-8148 and SB A380-57-8269 to provide instructions for inspection of respectively, the lugs of the LH and RH rib 9 landing gear attachments for cracking, and the condition of the sealant of the installed bushings on these gear ribs.

Consequently, EASA issued AD 2024-0141, to require repetitive inspections of the LH and RH WLG attachment rib 9 fittings of all A380 aeroplanes and to contact Airbus for approved (repair) instructions if any deficiency was found.

Since this AD was issued, reported inspection results indicate the need for further actions.

For the reason described above, this AD retains the requirements of EASA AD 2024-0141, which is superseded, introducing in addition several RIs, defining compliance times for the repair or replacement, as applicable, of all ever-found discrepant gear rib fittings, and amending the inspection thresholds and intervals for aeroplanes on which any discrepancy is found. This AD also requires reporting of the results (including no findings) of each accomplished inspection.

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

Inspection(s):

(1) For all aeroplanes: Within the compliance time specified in Table 1 of this AD, as applicable, and, thereafter, at intervals not to exceed 6 months or 500 flight cycles (FC), whichever occurs first since the last inspection, accomplish a detailed inspection (DI) of the areas and parts identified in the inspection instructions in accordance with these instructions.

Table 1 – Inspection Threshold

	Compliance Time (for Initial Inspection), whichever occurs later, **A** or **B**
A	Within 6 months or before exceeding 500 FC, whichever occurs first after 30 July 2024 [the effective date of EASA AD 2024-0141]
B	Within 18 months or before exceeding 800 FC, whichever occurs first, since replacement of the affected gear rib 9 fitting

(2) For Group 1 aeroplanes: Within the threshold and, thereafter, at intervals not to exceed the value specified in Table 2 of this AD, as applicable, accomplish a DI of each affected area 1 in accordance with the inspection instructions.

Table 2 – Inspection Threshold and Interval

Maximum Take-Off Weight (MTOW)	**Threshold** (after the effective date of this AD)	**Interval**
MTOW ≤ 510 tons	10 FC	10 FC
MTOW > 510 tons	5 FC	5 FC

(3) For Group 2 aeroplanes: Within the threshold and, thereafter, at intervals not to exceed the values specified in Table 3 of this AD, as applicable, accomplish a DI of each affected area 2 in accordance with the inspection instructions.

Table 3 – Inspection Threshold and Interval

Time since First Finding of Cracked Sealant	**Threshold**, (whichever occurs first since first finding of cracked sealant)	**Interval**, (whichever occurs first)
Less than 38 months	300 FC or 6 months	300 FC or 6 months
38 months or more, but less than 48 months	150 FC or 3 months	150 FC or 3 months

Credit:

(4) Inspections of the areas and parts identified in the inspection instructions and of an affected area 1 and/or 2 of an aeroplane, as required by paragraph (1), (2) or (3) of this AD, as applicable, accomplished on an aeroplane before the effective date of this AD in accordance with the instructions of an Airbus RDAF, are acceptable to comply with the initial inspection requirement of paragraph (1), (2) or (3) of this AD, for those area(s) and/or parts of that aeroplane, as applicable.

Corrective Action(s):

(5) If, during any inspection as required by paragraph (1), (2) or (3) of this AD, only cracked sealant is found at the aft pintle fwd lug(s) of any inspected rib 9 gear attachment fitting(s), without any corrosion of, migration of any bushing of, or cracks on, the lug(s), before next flight, accomplish the sealant repair, as defined in this AD, on that aft pintle fwd lug(s) only; or if (only) cracked sealant is found on any other lug(s), contact Airbus for instructions and accomplish those instructions accordingly.

Except for an affected area 1, after accomplishment of a sealant repair, as required by this paragraph, that area becomes an affected area 2, that, thereafter, must be inspected as required by paragraph (3) of this AD.

Note: The requirements of this AD supersede the instructions defined in any approved Airbus RDAF for sealant repair issued before the effective date of this AD.

(6) If, during any inspection as required by paragraph (1), (2) or (3) of this AD, any corrosion, or migration of any bushing, is found at any lug, or any crack is detected, on any lug of any affected rib 9 gear attachment fitting(s), before next flight, contact Airbus for repair or replacement instructions and accomplish those instructions accordingly.

Repair or Replacement:

(7) For Group 1 and Group 2 aeroplanes: Unless already accomplished as required by paragraph (6) of this AD, within the compliance time as specified in Table 4 of this AD, as applicable, accomplish on each affected area 1 and/or 2, as applicable, the repair or replacement, as defined in this AD.

Table 4 – Compliance Time

	Compliance Time (for Repair or Replacement)
Affected area 1	Within 12 months after the effective date of this AD
Affected area 2	Within 48 months after first finding of cracked sealant

Note: Instructions for accomplishment of the repair or replacement, as required by this AD, as defined in any approved Airbus RDAF, issued before or after the effective date of this AD, are considered or remain valid.

Reporting:

(8) Within 30 days after accomplishment of any inspection as required by this AD or since the effective date of this AD, whichever occurs later, report the inspection results (including no findings) to Airbus. Using the 'Reporting sheet' as attached to the inspection instructions is an acceptable method to comply with this reporting requirement.

Terminating Action:

(9) Accomplishment on an aeroplane of any repair or replacement as required by this AD in accordance with approved Airbus instructions, as applicable, does not constitute terminating action for the repetitive inspections as required by paragraph (1) of this AD for that aeroplane.

(10) Following the accomplishment of the repair or replacement on an affected area 1 and/or 2 of an aeroplane, as required by the paragraphs (6) and (7) of this AD, as applicable, that area is no longer considered an affected area 1 or 2, as applicable, and the requirements of paragraph (2) or (3) of this AD, as applicable, are no longer applicable. The requirements of paragraph (1) of this AD, for repetitive inspection of the areas and parts identified in the inspection instructions, remain however applicable for that aeroplane.

Ref. Publications:

Airbus SB A380-57-8148 Revision 01 dated 06 February 2020.

Airbus SB A380-57-8269 original issue dated 06 February 2020.

Airbus RI R575-40267 original Issue (Issue A) dated 11 December 2017, or Issue B dated 28 November 2024.

Airbus RI R575-42389 original Issue (Issue A) dated 20 February 2025, or Issue B dated 04 March 2025.

Airbus RI R575-42397 original Issue (Issue A) dated 18 March 2025.

Airbus RI R575-58442 original Issue (Issue A) dated June 2016, or Issue B dated August 2017, or Issue C dated December 2017, or Issue D dated 26 November 2024.

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. 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. All interested persons may send their comments, referencing the AD Number, to the E-mail address specified in below Remark 3, prior to 05 May 2025. Only if any comment is received during the consultation period, a Comment Response Document will be published in the EASA Safety Publications Tool, in a 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 SAS - EIANA (Airworthiness Office), Telephone: +33 562 110 253, Fax: +33 562 110 307, or E-mail: account.airworth-A380@airbus.com.