

Notification of a Proposal to issue an Airworthiness Directive

PAD No.: 24-060

Issued: 29 May 2024

Note: This Proposed Airworthiness Directive (PAD) 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.

In accordance with the EASA Continuing Airworthiness Procedures, the Executive Director is proposing the issuance of an EASA Airworthiness Directive (AD), applicable to the aeronautical product(s) identified below.

All interested persons may send their comments, referencing the PAD Number above, to the e-mail address specified in the 'Remarks' section, prior to the consultation date indicated.

Design Approval Holder's Name:

AIRBUS S.A.S.

Type/Model designation(s):

A380 aeroplanes

Effective Date: [TBD - standard: 14 days after AD issue date]

TCDS Number(s): EASA.A.110

Foreign AD: Not applicable

Supersedure: None

ATA 57 – Wings – Main Landing Gear Attachment – Inspection

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 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 of SB A380-57-8269 (for the inspection of the condition of the sealant).

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 MLG to the wing, which have a similar design to the 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 issued SB A380-57-8148 and SB A380-57-8269, to provide instructions for inspection of 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 respectively.

For the reasons described above, this AD requires repetitive inspections of the LH and RH wing landing gear (WLG) attachment rib 9 fittings.

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:

Inspection(s):

- (1) Within the compliance times 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, accomplish a detailed inspection (DI) of the areas and parts identified in the inspection instructions, as defined in this AD, in accordance with these instructions.

Table 1 – Inspection Threshold

	Compliance Time (whichever occurs later, A or B)
A	Within 6 months or before exceeding 500 FC, whichever occurs first, after the effective date of this AD
B	Within 18 months or before exceeding 800 FC, whichever occurs first, since entry into service (initial installation) or since last replacement, of the affected gear rib 9, whichever occurs later

Corrective Action(s):

- (2) If, during any inspection as required by paragraph (1) of this AD, any deficiencies are found, before next flight, contact Airbus for approved (repair) instructions and accomplish those instructions accordingly.



Terminating Action:

(3) Accomplishment on an aeroplane of the (repair) instructions, as required by paragraph (2) of this AD, does not constitute terminating action for the repetitive inspections as required by paragraph (1) of this AD for that aeroplane, unless otherwise stated in those instructions.

Ref. Publications:

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

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

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

Remarks:

1. This Proposed AD will be closed for consultation on 26 June 2024.
2. Enquiries regarding this PAD should be referred to the EASA Safety Information Section, Certification Directorate. E-mail: ADs@easa.europa.eu.
3. Information about any failures, malfunctions, defects or other occurrences, which may be similar to the unsafe condition addressed by this PAD, and which may occur, or have occurred on a product, part or appliance not affected by this PAD, 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 PAD 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.
4. For any question concerning the technical content of the requirements in this PAD, 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.

