

Airworthiness Directive

AD No.: 2024-0032**Issued:** 31 January 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 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 February 2024**TCDS Number(s):** EASA.A.110**Foreign AD:** Not applicable**Supersedure:** None

ATA 53 – Fuselage – Centre Fuselage Shims on Frames 47 to 53 – Inspection

Manufacturer(s):

Airbus

Applicability:

Airbus A380-841, A380-842 and A380-861 aeroplanes, having manufacturer serial number (MSN) 0055 to 0059 inclusive, 0061, 0062, 0063, 0065 to 0076 inclusive, 0078 to 0082 inclusive, 0084, 0085, 0088, 0093, 0094, 0096, 0098, 0105 to 0112 inclusive, 0114, 0120 and 0122.

Definitions:

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

The SB: Airbus Service Bulletin (SB) A380-53-8201.

Affected areas: The splicing areas of the upper and lower frames (FR) 47 to FR53 inclusive, between stringers (STGR) 38 and STGR39, on the left-hand (LH) and right-hand (RH) sides of the centre fuselage.

Airbus 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:

It has been determined that, during the assembly process of the centre fuselage of several A380 aeroplanes, the splicing installation on the affected areas had not been performed in accordance with the drawing definition. Necessary shims, to reduce the misalignment of the upper and lower frames, have not been installed or are mislocated, which means, that at certain frames, a possible gap might not have been filled or that shims have been wrongly installed between the lower frame and the splice.

This condition, if not detected and corrected, could lead to built-stress in the junction of affected frames, increasing fatigue potential, possibly resulting in reduced structural integrity of the centre fuselage.

To address this potential unsafe condition, Airbus issued the SB, as defined in this AD, to provide inspection and rework instructions.

For the reason described above, this AD requires inspection of the affected areas for missing or mislocated shims and, depending on findings, accomplishment of rework and/or repair.

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

Required as indicated, unless accomplished previously:

Inspection(s):

- (1) Before exceeding 75 900 flight hours (FH) or 10 300 flight cycles (FC), whichever occurs first since Airbus date of manufacture, as defined in this AD, accomplish a general visual inspection (GVI) of the affected areas, as defined in this AD, in accordance with the instruction of the SB.
- (2) If, during any GVI as required by paragraph (1) of this AD, no shim is found to be installed on any upper frame, before next flight, accomplish a detailed visual inspection (DVI) on each affected frame in the affected area in accordance with the instruction of the SB.

Corrective Action(s):

- (3) If, during any DVI as required by paragraph (2) of this AD, discrepancies are found, before next flight, accomplish a rototest of each affected fastener bore hole and a high frequency eddy current (HFEC) inspection of each frame radius in accordance with the instructions of the SB.
- (4) If, during any rototest or HFEC inspection as required by paragraph (3) of this AD, any crack is found, before next flight, contact Airbus for approved instructions and accomplish these instructions accordingly, or repair the cracked frame(s) in accordance with the repair instructions of the SB as applicable, depending on the number of frames on which any crack is found and on the size of the crack(s).
- (5) Following positive conclusion of all actions as required by paragraphs (3) and (4) of this AD, before next flight, (re)install the removed, repaired or new assembly parts, as applicable, in accordance with the instructions of the SB.



Ref. Publications:

Airbus SB A380-53-8201 original issue dated 31 October 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. This AD was posted on 20 December 2023 as PAD 23-149 for consultation until 17 January 2024. 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 – IANA (Airworthiness Office), Telephone: +33 562 110 253, Fax: +33 562 110 307, E-mail: account.airworth-A380@airbus.com.

