



Airworthiness Directive

AD No.: 2020-0109

Issued: 15 May 2020

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):

A350 aeroplanes

Effective Date: 29 May 2020

TCDS Number(s): EASA.A.151

Foreign AD: Not applicable

Supersedure: None

ATA 53 – Fuselage – Frame 98 Flange Feet between Stringers 15 and 17 – Inspection / Modification

Manufacturer(s):

Airbus

Applicability:

Airbus A350-941 aeroplanes, all manufacturer serial numbers (MSN), except those on which Airbus modification (mod) 114295 has been embodied in production.

Definitions:

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

The SB: Airbus Service Bulletin (SB) A350-53-P057.

Affected area: Rear cone of the fuselage at frame (FR) 98 flange feet between stringers (STR) 15 and STR17, on left-hand (LH) and right-hand (RH) sides.

Aeroplane date of manufacture: The date of transfer of title (ownership) at the time of first delivery to an operator, which is referenced in Airbus documentation.



Reason:

During the assembly of the section 19 skin to FR98 joint of the fuselage on the production line, it was identified that the gaps at nuts located at the affected area are out of tolerance for eight fasteners. The results of the investigation revealed that the areas to be riveted present higher inclination than the inclination which can be accepted by the fasteners, as defined in the engineering drawings. Following a structural analysis on this issue, it was determined that the gaps were out of tolerance at these positions and could reduce the fatigue and damage tolerance of the affected area.

This condition, if not detected and corrected, could affect the structural integrity of the rear cone of the fuselage.

To address this potential unsafe condition, Airbus issued the SB to provide inspection instructions, and instructions to replace all fasteners installed in the affected area with new bolts and self-aligning nuts.

For the reasons described above, this AD requires a one-time non-destructive test (NDT) (rotating probe test and high-frequency eddy-current) inspection of all fastener holes located in the affected area, a one-time detailed visual inspection (DET) of the flange feet of fuselage FR97 to FR99, and, depending on findings, accomplishment of applicable corrective action(s).

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

Required as indicated, unless accomplished previously:

Inspection:

- (1) Before exceeding the applicable thresholds as specified in Table 1 of this AD, accomplish NDT inspections of all fastener holes located in the affected area and a DET of FR97 to FR99 in accordance with the instructions of the SB.

Table 1 – NDT and DET Inspection Thresholds

Aeroplane Configuration (Conf) (pre- or post- Airbus mod)	Compliance Time (Flight hours (FH) or flight cycles (FC), whichever occurs first since aeroplane date of manufacture)
Conf 1 - post 109496 and pre 110254	24 085 FH or 4 817 FC
Conf 2 - pre 109496 and pre 110254	27 155 FH or 5 431 FC
Conf 3 - pre 109496 and post 110254	36 515 FH or 7 303 FC

Corrective Action(s):

- (2) If, during the NDT or DET inspection as required by paragraph (1) of this AD, any discrepancy is detected, as defined in the SB, before next flight, contact Airbus for approved instructions and accomplish those instructions accordingly.



- (3) If, during the NDT and DET inspections as required by paragraph (1) of this AD, no discrepancies are detected, before next flight, replace all fasteners located in the affected area with new bolts and self-aligning nuts in accordance with the instructions of the SB.

Ref. Publications:

Airbus SB A350-53-P057 original issue dated 21 February 2020.

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 26 March 2020 as PAD 20-058 for consultation until 23 April 2020. The Comment Response Document can be found in the [EASA Safety Publications Tool](#), in the compressed (zipped) file attached to the record for this AD.
3. Enquiries regarding this AD should be referred to the EASA Programming and Continued Airworthiness 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](#).
5. For any question concerning the technical content of the requirements in this AD, please contact Airbus, E-mail: continued-airworthiness.a350@airbus.com.

