



Airworthiness Directive

AD No.: 2016-0105R2

Issued: 08 October 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):

A321 aeroplanes

Effective Date: Revision 2: 17 October 2021
Revision 1: 28 September 2018
Original issue: 13 June 2016

TCDS Number(s): EASA.A.064

Foreign AD: Not applicable

Revision: This AD revises EASA AD 2016-0105R1 dated 21 September 2018.

ATA 53 – Fuselage – Cabin Floor Beam Junction – Inspection

Manufacturer(s):

Airbus, formerly Airbus Industrie

Applicability:

Airbus A321-111, A321-112, A321-131, A321-211, A321-212, A321-213, A321-231 and A321-232 aeroplanes, all manufacturer serial numbers.

Definitions:

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

The applicable inspection SB: Airbus Service Bulletin (SB) A320-53-1317, SB A320-53-1318, SB A320-53-1319 and SB A320-53-1320, as applicable to location.

The applicable pre-mod 155607 SB: Airbus SB A320-53-1351, SB A320-53-1352, SB A320-53-1353 and SB A320-53-1354, as applicable to location.

The applicable post-mod 155607 SB: Airbus SB A320-53-1433, SB A320-53-1434, SB A320-53-1435 and SB A320-53-1436, as applicable to location.



Airbus date of manufacture: The date of transfer of title (ownership) of the aeroplane upon delivery by Airbus to the first operator.

Reason:

Following the results of a new full scale fatigue test campaign on the A321 airframe in the context of the A321 extended service goal, it was identified that cracks could develop in the cabin floor beam junctions at fuselage frame (FR) 35.1 and FR 35.2, on both left-hand (LH) and right-hand (RH) sides, also on aeroplanes operated in the context of design service goal.

This condition, if not detected and corrected, could reduce the structural integrity of the fuselage.

Prompted by these findings, Airbus published the applicable inspection SB, as defined in this AD, where each SB contains instructions for a specific location. Consequently, EASA issued AD 2016-0105, requiring repetitive detailed inspections (DET) of the affected cabin floor beam junctions and, depending on findings, accomplishment of a repair.

After that AD was issued, Airbus published the applicable pre-mod 155607 SB, as defined in this AD, providing instructions for modifications which restore the fatigue potential at each location by performing cold working at the cabin floor beam and fitting junction holes. EASA issued AD 2016-0105R1 to introduce this mod for pre-mod 155607 aeroplanes.

Since that AD was issued, Airbus published the applicable post-mod 155607 SB, as defined in this AD, providing modification instructions.

For the reasons described above, this AD is revised to add the (optional) modification of post-mod 155607 aeroplanes. This revised AD also introduces editorial changes, not affecting the requirements, to update the AD to current writing standards.

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

Required as indicated, unless accomplished previously:

Inspection(s):

- (1) Before exceeding 36 900 flight cycles (FC) since aeroplane date of manufacture, or within 2 100 FC after 13 June 2016 [the effective date of the original issue of this AD], whichever occurs later, and, thereafter, at intervals not to exceed 15 300 FC, accomplish a DET of the affected cabin floor beam junctions at the frames and locations as specified in Table 1 of this AD, and in accordance with the applicable inspection SB, as defined in Table 1 of this AD.

Table 1 – Locations and Applicable Inspection SB

Location	SB
FR 35.1 RH side	A320-53-1317
FR 35.1 LH side	A320-53-1318
FR 35.2 RH side	A320-53-1319
FR 35.2 LH side	A320-53-1320



Corrective Action(s):

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

Terminating Action:

- (3) Repair of an aeroplane as required by paragraph (2) of this AD does not constitute terminating action for the repetitive DET as required by paragraph (1) of this AD for that aeroplane, unless specified otherwise in the instructions provided by Airbus.

Modification:

- (4) After modification of an aeroplane at a location as defined in Table 2 of this AD, in accordance with the instructions of the applicable pre-mod 155607 or post-mod 155607 SB, as applicable, it is allowed to defer the next DET, as required by paragraph (1) of this AD for that location, until 36 900 FC after that modification.

Table 2 – Locations and Applicable Modification SB

Location	Modification SB	
	Pre-mod 155607	Post-mod 155607
FR 35.1 RH side	A320-53-1351	A320-53-1433
FR 35.1 LH side	A320-53-1353	A320-53-1435
FR 35.2 RH side	A320-53-1352	A320-53-1434
FR 35.2 LH side	A320-53-1354	A320-53-1436

Ref. Publications:

Airbus SB A320-53-1317 original issue dated 15 December 2015, or Revision 01 dated 19 June 2018.

Airbus SB A320-53-1318 original issue dated 09 October 2015, or Revision 01 dated 18 June 2018.

Airbus SB A320-53-1319 original issue dated 09 October 2015, or Revision 01 dated 18 June 2018.

Airbus SB A320-53-1320 original issue dated 09 October 2015, or Revision 01 dated 18 June 2018.

Airbus SB A320-53-1351 original issue dated 20 December 2017.

Airbus SB A320-53-1352 original issue dated 20 December 2017.

Airbus SB A320-53-1353 original issue dated 20 December 2017.

Airbus SB A320-53-1354 original issue dated 20 December 2017.

Airbus SB A320-53-1433 original issue dated 28 June 2019.

Airbus SB A320-53-1434 original issue dated 28 June 2019.

Airbus SB A320-53-1435 original issue dated 28 June 2019.



Airbus SB A320-53-1436 original issue dated 28 June 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. The original issue of this AD was posted on 05 April 2016 as PAD 16-048 for consultation until 19 April 2016. 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 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 – Airworthiness Office – IIASA; E-mail: account.airworth-eas@airbus.com.

