



Notification of a Proposal to issue an Airworthiness Directive

PAD No.: 21-060

Issued: 29 April 2021

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

Type/Model designation(s):

A350 aeroplanes

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

TCDS Number(s): EASA.A.151

Foreign AD: Not applicable

Supersedure: This AD supersedes EASA AD 2019-0206 dated 20 August 2019.

ATA 53 – Fuselage – Trimmable Horizontal Stabilizer Fittings and Bearing Assembly Attachment Interface – Inspection

Manufacturer(s):

Airbus

Applicability:

Airbus A350-941 and A350-1041 aeroplanes, all manufacturer serial numbers, except those on which Airbus modification (mod) 112721, mod 112722, or mod 113501 has been embodied in production.

Definitions:

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

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.

The inspection SB: Airbus Service Bulletin (SB) A350-53-P032 Revision 01 (including additional information provided by Airbus SB Information Transmission (SBIT) 19-0014), or Revision 02.

The modification SB: Airbus SB A350-53-P037.



Groups: Group 1 aeroplanes are those on which Airbus mod 113102 has not been embodied in production. Group 2 aeroplanes are those on which Airbus mod 113102 has been embodied in production.

Reason:

Occurrences were reported of some aeroplanes where, during in-service lubrication of the trimmable horizontal stabilizer (THS) upper and lower frame attachment bearings at fuselage frame (FR) 102, evidence was found of rotation of an attachment fitting bearing assembly, left-hand (LH) and/or right-hand (RH) side. Rotation itself is not detrimental in terms of structural strength capabilities or THS functionality. However, rotation of the bearing assembly causes damage to the sealant bead, in which case water ingress may occur, thereby creating the risk of corrosion in the aluminium corner fitting.

This condition, if not detected and corrected, could lead to detachment of the THS from the fuselage, possibly resulting in loss of control of the aeroplane and injury to persons on the ground.

To address this unsafe condition, Airbus issued SB A350-53-P032 (original issue), providing inspection instructions to ensure that any visible damage and corrosion in the area around the THS lower corner fittings, bushing and bearing interface at FR102, LH and RH sides, are detected in time and repaired appropriately. Consequently, EASA issued AD 2018-0037 to require repetitive detailed inspections (DET) and, depending on findings, accomplishment of applicable corrective action(s).

After that AD was issued, and prompted by operator feedback, Airbus issued the inspection SB (Revision 01), as defined in this AD, to include instructions and tooling references to avoid removing section 19.1. Airbus also developed production mod 112721, 112722, 113102 and 113501 to remove the existing sealant beads previously applied to the bearing body and nut perimeter and to apply a new protection scheme with corrosion preventive compound and grease. Airbus mod 113501 was made available for in-service aeroplanes through the modification SB. In addition, the Effectivity of the inspection SB was expanded to include A350-1041 aeroplanes. Following issuance of Revision 01 of the inspection SB, as defined in this AD, Airbus published SBIT 19-0014 to confirm that no concurrent requirements exist, and Airbus issued Revision 02 of the inspection SB to include the information provided by SBIT 19-0014. Consequently, EASA issued AD 2019-0206, retaining the requirements of EASA AD 2018-0037, which was superseded, amending the repetitive inspections, adding pre-mod A350-1041 aeroplanes to the Applicability, excluding post-mod aeroplanes from the Applicability and introducing an optional terminating action given by the modification SB, as defined in this AD.

Since that AD was issued, it was identified that Airbus production mod 113102 had not been correctly applied. For retrofit purposes, Airbus issued SB A350-53-P067 (for Group 2 aeroplanes) to provide instructions for a one-time DET, and additional work instructions to ensure correct embodiment of Airbus mod 113102.

For the reasons described above, this AD retains the requirements of EASA AD 2019-0206, which is superseded, and adds post-mod 113102 aeroplanes to the Applicability to require a one-time DET and, depending on findings, accomplishment of associated corrective action(s).



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

Required as indicated, unless accomplished previously:

Re-statement of the Requirements of EASA AD 2019-0206:**Repetitive Inspections:**

- (1) For Group 1 aeroplanes: Before exceeding 36 months since the aeroplane date of manufacture, or within 3 months after 21 February 2018 [the effective date of EASA AD 2018-0037], whichever occurs later, and, thereafter, at intervals not to exceed 36 months, accomplish a DET of the fillet sealant in the lower and upper corner fittings and bearing assembly attachment interface at FR102, LH and RH sides, in accordance with the instructions of the inspection SB.
- (2) If, during any DET as required by paragraph (1) of this AD, any damage is found, before next flight, accomplish a DET of accessible area all around at lower and upper corner fittings, bushing and bearing interface at FR102, LH and/or RH sides, as applicable, in accordance with the instructions of the inspection SB.

Corrective Action(s):

- (3) If, during any DET as required by paragraph (2) of this AD, corrosion is found, before next flight, contact Airbus for approved repair instructions and, within the compliance time(s) specified in those instructions, accomplish those instructions accordingly.

Credit for Previous Action(s):

- (4) For Group 1 aeroplanes: Inspections and corrective actions on an aeroplane, accomplished before the effective date of this AD in accordance with the instructions of Airbus SB A350-53-P032 at original issue, are acceptable to comply with the initial DET requirements of this AD for that aeroplane.

Terminating Action:

- (5) Repair of an aeroplane as required by paragraph (3) of this AD does not constitute terminating action for the repetitive DET as required by paragraphs (1) or (2) of this AD for that aeroplane, unless specified otherwise in the approved repair instructions provided by Airbus.
- (6) For Group 1 aeroplanes: Modification of an aeroplane in accordance with the instructions of the modification SB constitutes terminating action for the repetitive DET as required by paragraph (1) of this AD for that aeroplane.

New Requirements of this AD:**Inspection:**

- (7) For Group 2 aeroplanes: Before exceeding 36 months since the aeroplane date of manufacture, or within 3 months after the effective date of this AD, whichever occurs later, accomplish a DET of the fillet sealant in the THS lower and upper corner fittings and bearing assembly attachment interface at fuselage FR102, LH and RH sides, in accordance with the instructions of Airbus SB A350-53-P067.



Corrective Action(s):

- (8) If, during the DET as required by paragraph (7) of this AD, any discrepancy is identified as described in Airbus SB A350-53-P067, before next flight, accomplish the associated corrective action(s) in accordance with the instructions of Airbus SB A350-53-P067.

Ref. Publications:

Airbus SB A350-53-P032 original issue dated 22 December 2017, or Revision 01 dated 12 November 2018, or Revision 02 dated 03 September 2020.

Airbus SB A350-53-P037 original issue dated 12 November 2018.

Airbus SB A350-53-P067 original issue dated 09 April 2021.

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 27 May 2021.
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 A350 XWB, E-mail: continued-airworthiness.a350@airbus.com.

