

Airworthiness Directive AD No.: 2019-0206 Issued: 20 August 2019

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: 03 September 2019

TCDS Number(s): EASA.A.151

Foreign AD: Not applicable

Supersedure: This AD supersedes EASA AD 2018-0037 dated 07 February 2018.

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, mod 113102, 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.

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



Reason:

During in-service lubrication of the trimmable horizontal stabilizer (THS) upper and lower frame attachment bearings at Frame (FR) 102, evidence was found on some aeroplanes 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 caused 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 loss of the attachment of THS to the fuselage, possibly resulting in loss of control of the aeroplane and injury to persons on the ground.

To address this potential unsafe condition, Airbus issued SB A350-53-P032 to provide 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, prompted by an operator feedback, Airbus issued the inspection SB, 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 is 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 the inspection SB, as defined in this AD, Airbus published SBIT 19-0014 to confirm that no concurrent requirements exist. It is expected that the inspection SB will be revised accordingly.

For the reasons described above, this AD retains the requirements of EASA AD 2018-0037, which is superseded, amends the repetitive inspections, adds pre-mod A350-1041 aeroplanes to the Applicability, excludes post-mod aeroplanes from the Applicability and introduces an optional terminating action.

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

Required as indicated, unless accomplished previously:

Repetitive Inspections:

- (1) 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:

(4) 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 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 paragraph (1) of this AD for that aeroplane, unless specified otherwise in the instructions provided by Airbus.
- (6) 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.

Ref. Publications:

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

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

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. This AD was posted on 11 July 2019 as PAD 19-123 for consultation until 08 August 2019. No comments were received during the consultation period.
- 3. Enquiries regarding this AD should be referred to the EASA Programming and Continued Airworthiness Information Section, Certification Directorate. E-mail: <u>ADs@easa.europa.eu</u>.
- 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 <u>EU aviation safety</u> <u>reporting system</u>.
- For any question concerning the technical content of the requirements in this AD, please contact: Airbus XWB (Airworthiness Office), E-mail: <u>continued-airworthiness.a350@airbus.com</u>.

