Airworthiness Directive

AD No.: 2019-0265

Issued: 25 October 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: 08 November 2019

TCDS Number(s): EASA.A.151

Foreign AD: Not applicable

Supersedure: None

ATA 57 – Wings – Main Landing Gear Forward Pintle Bearing Lock Washer Tabs and Nuts – Inspection

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Manufacturer(s):

Airbus

Applicability:

Airbus A350-941 and A350-1041 aeroplanes, all manufacturer serial numbers (MSN) as identified in the AOT.

Definitions:

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

The AOT: Airbus Alert Operators Transmission (AOT) A57P013-19.

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

Reason:

On the A350 production line, during assembly of the main landing gear (MLG) forward pintle trunnion block, incorrect installations were identified at the MLG forward pintle bearing (FPB), where the lock washer tab was not correctly engaged. The FPB, installed in the trunnion block assembly of the wing, provides the connection between the MLG and the wing rear spar. The bearing nut is locked by

bending one of the lock washer tabs into a slot around the nut circumference. The absence of an engaged lock washer tab at the bearing nut could cause an unexpected rotation of the nut and loss of the torque, which could progressively allow an axial movement of the bearing housing.

This condition, if not detected and corrected, could lead to collapse of an MLG, possibly resulting in damage to the aeroplane and/or injury to occupants.

To address this potential unsafe condition, Airbus issued the AOT to provide inspection instructions.

For the reasons described above, this AD requires detailed inspections (DET) of MLG FPB nuts and lock washer tabs, left-hand (LH) and right-hand (RH) sides, and, depending on findings, accomplishment of applicable repetitive DET or corrective action(s).

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

Required as indicated, unless accomplished previously:

Inspection:

(1) Within 500 flight cycles (FC) or 5 months, whichever occurs first after the effective date of this AD, accomplish a DET of the MLG FPB nut and lock washer at the forward face of the Trunnion block, LH and RH sides, in accordance with the instructions of the AOT.

Marking(s) or Corrective Action(s):

(2) If, during the inspection as required by paragraph (1) of this AD, any MLG FPB nut, LH and/or RH side, is not found correctly locked by the lock washer tab, and without further discrepancy found (as defined in the AOT), before next flight, accomplish one of the actions as specified in paragraph (2.1) or (2.2) of this AD in accordance with the instructions of the AOT.

(2.1) Apply a witness mark on the affected bearing nut(s).

(2.2) Accomplish the applicable corrective action(s) in accordance with the instructions of the AOT.

Repetitive Inspections:

(3) Following accomplishment of any marking action as required by paragraph (2.1) of this AD on LH and/or RH side, within 500 FC or 5 months, whichever occurs first after that action, and, thereafter, at intervals not to exceed 500 FC or 5 months, whichever occurs first, accomplish a DET to MLG FPB nut, LH and/or RH side, as applicable, to detect nut rotation and, gap or damage to bearing sealant bead.

Corrective Action(s):

(4) If, during the inspection as required by paragraph (1) of this AD, any bearing nut, LH or RH side, is not found correctly locked by the lock washer tab, and any visible sign of any FPB nut rotation or bearing migration finding, before next flight, contact Airbus for approved repair instructions and, within the compliance time(s) as specified in those instructions, accomplish those instructions accordingly.

(5) If, during any inspection as required by paragraph (3) of this AD, any visible sign of any FPB nut rotation or of any FPB axial migration, LH and/or RH side, before next flight, contact Airbus for approved corrective action instructions and, within the compliance time(s) specified therein, accomplish those instructions accordingly.

(6) Following accomplishment of any marking action as required by paragraph (2.1) of this AD on LH and/or RH side, before exceeding 72 months since Airbus date of manufacture, accomplish the applicable corrective action(s) in accordance with the instructions of the AOT.

Terminating Action:

(7) Accomplishment of corrective action(s) on one or both MLG FPB on an aeroplane, as required by paragraph (5) or (6) of this AD, as applicable, constitutes terminating action for the repetitive inspections as required by paragraph (3) of this AD for the affected MLG FPB (LH and/or RH side) on that aeroplane.

Ref. Publications:

Airbus AOT A57P013-19 original issue dated 04 April 2019.

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 09 July 2019 as PAD 19-119 for consultation until 23 July 2019. 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 XWB, E-mail: continued-airworthiness.a350@airbus.com.