Airworthiness Directive

AD No.: 2021-0220

Issued: 01 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):

A350 aeroplanes

Effective Date: 15 October 2021

TCDS Number(s): EASA.A.151

Foreign AD: Not applicable

Supersedure: None

ATA 27 – Flight Controls – Drive Struts on Flap Tracks 1 and 2 – Inspection / Replacement

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Manufacturer(s):

Airbus

Applicability:

Airbus A350-941 and A350-1041 aeroplanes, manufacturer serial numbers (MSN) 0042, 0050, 0060, 0064, 0066, 0091, 0141, 0157, 0159, 0164, 0209, 0210, 0213, 0260 and 0265.

Definitions:

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

The SB: Airbus Service Bulletin (SB) A350-27-P053.

Affected LSDS: Load-sensing drive struts (LSDS) located on flap track 1, on the left-hand (LH) and right-hand (RH) sides.

Affected DS: Drive struts (DS) located on flap track 2, on LH and RH sides.

Serviceable part: An LSDS that is new (not previously installed), or an LSDS that has been inspected and repaired in accordance with the applicable Component Maintenance Manual; or a DS that is new (not previously installed).

Reason:

On the A350 final assembly line (FAL), certain LSDS and DS were found not adjusted (nut not torqued) and not locked. The results of investigations revealed that the LSDS and DS had been changed as re-work action due to pre-installation damage, but production operations (adjustment and locking as required according to installation procedure) were not considered after the components' exchange. All aeroplanes in FAL have been cleared before customer delivery but 15 in-service aeroplanes have been identified to be potentially affected by this manufacturing issue.

This condition, if not detected and corrected, could lead to degradation of the load carrying capability of an LSDS or DS, possibly resulting in in-flight detachment of a flap, with consequent damage to, and reduced control of, the aeroplane.

To address this potential unsafe condition, Airbus issued the SB to provide instructions for inspection of the affected LSDS and replacement of the affected DS.

For the reasons described above, this AD requires a one-time detailed inspection (DET) of each affected LSDS and, depending on findings, replacement of the LSDS with a serviceable part. This AD also requires replacement of each affected DS with a serviceable part.

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

Required as indicated, unless accomplished previously:

Inspection:

(1) Within 10 000 flight hours (FH) after the effective date of this AD, accomplish a DET of each affected LSDS in accordance with the instructions of the SB, as applicable to aeroplane MSN.

Corrective Action:

(2) If, during the DET as required by paragraph (1) of this AD, any discrepancy, as defined in the SB, is detected, before next flight, replace the affected LSDS with a serviceable part in accordance with the instructions of the SB.

Replacement:

(3) Within 10 000 FH after the effective date of this AD, replace each affected DS with a serviceable part in accordance with the instructions of the SB, as applicable to aeroplane MSN.

Ref. Publications:

Airbus SB A350-27-P053 original issue dated 21 May 2021.

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 16 July 2021 as PAD 21-101 for consultation until 13 August 2021. 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 A350 XWB, E-mail: continued-airworthiness.a350@airbus.com.