

Airworthiness Directive

AD No.: 2022-0156

Issued: 02 August 2022

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, or Annex Vb Part M.A.301, as applicable, 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 Annex Vb Part M.A.303, as applicable] or agreed with the Authority of the State of Registry [Regulation (EU) 2018/1139, Article 71 exemption].

Design Approval Holder's Name: Type/Model designation(s):

AIRBUS S.A.S. A350 aeroplanes

Effective Date: 16 August 2022

TCDS Number(s): EASA.A.151

Foreign AD: Not applicable

Supersedure: This AD supersedes EASA AD 2020-0169R1 dated 19 August 2020.

ATA 36 – Pneumatic – Bleed Gimbals at Wing to Pylon Interfaces – Modification

Manufacturer(s):

Airbus

Applicability:

Airbus A350-941 and A350-1041 aeroplanes, all manufacturer serial numbers (MSN).

Definitions:

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

Affected part: Bleed duct assemblies, having Part Number (P/N) V3616500000400 or P/N V3616510600400; and bleed gimbals at the wing/pylon interface, having P/N ABS0736E9696S, on left-hand (LH) and right-hand (RH) sides, except those manufactured in week 51 of 2016 or later.

Serviceable part: Any bleed duct assembly or bleed gimbal that is not an affected part.

Groups: Group 1 aeroplanes are those with MSN listed in Airbus Service Bulletin (SB) A350-36-P021 and SB A350-36-P022.

Group 2 aeroplanes are those with MSN listed in Airbus SB A350-36-P029.

An aeroplane on which Airbus modification 114810 has been embodied in production does not have an affected part installed, and is therefore neither Group 1 nor Group 2, provided that the aeroplane remains in that configuration.



The inspection SB: Airbus SB A350-36-P029 Revision 01.

The applicable modification SB: For Group 1 aeroplanes: Airbus SB A350-36-P021 (for LH side) and SB A350-36-P022 (for RH side), as applicable. For Group 2 aeroplanes: SB A350-36-P023 (for LH side) and SB A350-36-P024 (for RH side), as applicable.

Aeroplane date of manufacture: The date of transfer of title (ownership) which is referenced in Airbus documentation at the time of first delivery to an operator.

Reason:

A welding quality issue has been identified in the production process of the gimbal joint belonging to the air bleed duct located at each wing to pylon interface. Further investigation discovered that the inner ring of a gimbal had deformed to an oval shape instead of a circular shape, which could lead to cracking, caused by direct contact between metal parts.

This condition, if not detected and corrected, could lead to hot bleed air leakage in the pylon area, possibly resulting in loss of the pneumatic system and exposure of the wing structure to high temperatures, with consequent reduced structural integrity of the aeroplane.

To address this potential unsafe condition, Airbus issued the applicable modification SB to provide instructions for the in-service replacement of the affected parts. Airbus also issued SB A350-36-P029, providing instructions to determine the presence of affected parts on Group 2 aeroplanes by reviewing aeroplane maintenance records. Consequently, EASA issued AD 2020-0169 (later revised) to require replacement of the affected parts with serviceable parts and to prohibit (re)installation of affected parts.

Since EASA AD 2020-0169R1 was issued, affected bleed gimbals have been found installed on Group 2 aeroplanes without having any maintenance record of affected part replacement. Consequently, Airbus published the inspection SB, as defined in this AD, providing instructions for physical inspection to identify affected parts.

For the reason described above, this AD retains the requirements of EASA AD 2020-0169R1, which is superseded, but requires additional physical inspection for identification of the affected parts.

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

Required as indicated, unless accomplished previously:

New Requirements of this AD:

Identification:

(1) For Group 2 aeroplanes: Before exceeding 5 600 flight cycles (FC) since aeroplane date of manufacture, inspect each bleed gimbal at the wing/pylon interface in accordance with the instructions of the inspection SB.



Re-statement of the Requirements of EASA AD 2020-0169R1: Modification:

- (2) For Group 1 aeroplanes: Before exceeding 5 600 FC since aeroplane date of manufacture, replace each affected part with a serviceable part in accordance with the instructions of the applicable modification SB.
- (3) For Group 2 aeroplanes: If, during the inspection as required by paragraph (1) of this AD, an affected part is found installed on an aeroplane, before exceeding 5 600 FC since aeroplane date of manufacture, replace that affected part with a serviceable part in accordance with the instructions of the inspection SB.
- (4) For Group 2 aeroplanes: Replacement of each affected part on an aeroplane in accordance with the instructions of the applicable modification SB is acceptable to comply with the requirements of paragraph (3) of this AD for that aeroplane.

Credit:

(5) Inspection and replacement of each affected part at the wing/pylon interface of an aeroplane, accomplished before the effective date of this AD in accordance with the instructions of the original issue of the inspection SB, is acceptable to comply with the requirements of paragraphs (1) and (3) of this AD, as applicable, for that aeroplane.

Part Installation:

(6) For all aeroplanes: From 26 August 2020 [the effective date of EASA AD 2020-0169R1], do not install an affected part on any aeroplane.

Ref. Publications:

Airbus SB A350-36-P021 original issue dated 17 January 2020.

Airbus SB A350-36-P022 original issue dated 17 January 2020.

Airbus SB A350-36-P023 original issue dated 09 April 2020.

Airbus SB A350-36-P024 original issue dated 09 April 2020.

Airbus SB A350-36-P029 original issue dated 09 April 2020, or Revision 01 dated 03 February 2022.

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.
- This AD was posted on 01 July 2022 as PAD 22-087 for consultation until 29 July 2022.
 The Comment Response Document can be found in the <u>EASA Safety Publications Tool</u>, 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 <u>EU aviation safety reporting system</u>. 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 (1IAK), E-mail: continued-airworthiness.a350@airbus.com.

