

Airworthiness Directive

AD No.: 2019-0314

Issued: 20 December 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):

A330 and A340 aeroplanes

Effective Date: 03 January 2020

TCDS Number(s): EASA.A.004, EASA.A.0015

Foreign AD: Not applicable

Supersedure: None

ATA 29 – Hydraulic Power – Ground Service Manifold Manual Valve Attachment Bolts – Replacement

Manufacturer(s):

Airbus, formerly Airbus Industrie

Applicability:

Airbus A330-201, A330-202, A330-203, A330-223, A330-243, A330-301, A330-302, A330-303, A330-321, A330-322, A330-323, A330-341, A330-342 and A330-343 aeroplanes, all manufacturer serial numbers (MSN), except those on which Airbus modification (mod) 58345 has been embodied in production; and

Airbus A340-211, A340-212, A340-213, A340-311, A340-312 and A340-313 aeroplanes, all MSN.

Definitions:

The AOT: Airbus Alert Operators Transmission (AOT) A29L010-19.

Affected parts: Ground service manifold (GSM) units, having Part Number (P/N) 70902-3 or P/N 70902-4.

Groups: Group 1 aeroplanes are those that have an affected part installed.

Group 2 aeroplanes are those that do not have an affected part installed. An aeroplane that has embodied Airbus modification 56660 in production, or Airbus Service Bulletin (SB) A330-29-3104 or

SB A340-29-4080, as applicable, in service, is a Group 2 aeroplane, provided that the aeroplane remains in that configuration.

Reason:

An occurrence of in-flight turn-back was reported by an A330 operator due to the loss of green and blue hydraulic systems. It was found that a manual valve of the green hydraulic system of an affected GSM had fully detached from the part. The results of the investigations revealed that all four bolts attaching the manual valve were broken. Similar events of failed bolts with single hydraulic system loss were reported by other operators.

This condition, if not detected and corrected, could lead to the loss of one or more hydraulic systems and damage to surrounding structure and components, possibly resulting in reduced control of the aeroplane, or injury to maintenance staff working in the main landing gear bay.

To address this potential unsafe condition, Airbus issued the AOT to provide instructions to replace the manual valve attachment bolts (P/N NAS1101-3H8) of each affected part.

For the reasons described above, this AD requires repetitive replacement of the four bolts attaching the manual valve of each affected part.

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

Required as indicated, unless accomplished previously:

Replacement:

- (1) For Group 1 aeroplanes: Before the aeroplane exceeds 10 000 flight cycles (FC), or within 1 300 flight hours after the effective date of this AD, whichever occurs later, and, thereafter, at intervals not to exceed 10 000 FC, for each hydraulic circuit and FIN position specified in Table 1 of this AD, replace the four bolts P/N NAS1101-3H8 attaching the manual valve of each affected part with new bolts P/N NAS1101-3H8 in accordance with the instructions of the AOT.

Table 1 – GSM Manual Valve Bolts Replacement

Hydraulic Circuit	FIN position
Green	5109JM1
Yellow	5109JM3
Blue	5109JM2

Note 1: For the interval specified in paragraph (1) of this AD, the FC are those accumulated by each bolt attaching the manual valve of each affected part.

Note 2: There are slight differences for the compliance times between the AOT and this AD. The compliance times of this AD prevail.

Terminating Action:

- (2) Modification of an aeroplane in accordance with the instructions of Airbus SB A330-29-3104 or SB A340-29-4080, as applicable, constitutes terminating action for the repetitive bolt replacement as required by paragraph (1) of this AD.



Part Installation:

- (3) For Group 1 aeroplanes: From the effective date of this AD, installation of an affected part on an aeroplane is allowed, provided that each attachment bolt is new (never previously installed on an aeroplane) and that, following installation, the attachment bolts are replaced as required by paragraph (1) of this AD.
- (4) For Group 2 aeroplanes: From the effective date of this AD, do not install an affected part on any aeroplane.

Ref. Publications:

Airbus AOT A29L010-19 original issue dated 18 December 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. Based on the required actions and the compliance time, EASA have decided to issue a Final AD with Request for Comments, postponing the public consultation process until after publication
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 – EIAL (Airworthiness Office), E-mail: airworthiness.A330-A340@airbus.com.

