



Airworthiness Directive

AD No.: 2020-0273

Issued: 09 December 2020

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: 23 December 2020

TCDS Number(s): EASA.A.004 and EASA.A.015

Foreign AD: Not applicable

Supersedure: None

ATA 35 – Oxygen – Oxygen Supply Solenoid Valve – Inspection / 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, A330-343, A330-743L, A330-841 and A330-941 aeroplanes, all manufacturer serial numbers (MSN); and

Airbus A340-211, A340-212, A340-213, A340-311, A340-312, A340-313, A340-541, A340-542, A340-642 and A340-643 aeroplanes, all MSN.

Definitions:

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

Affected part: Solenoid valves (SV), having Part Number (P/N) DVE90-06 or P/N DVE90-07, which have a manufacturing year of 2016 or before, or for which the manufacturing year cannot be identified; except those that have been overhauled after 2016 using the instructions of the applicable Component Maintenance Manual; and except those that have been tested and overhauled in accordance with the instructions of the Zodiac SB.

Serviceable part: An SV that is not an affected part.



The applicable SB: Airbus Service Bulletin (SB) A330-35-3056, SB A340-35-4034 and SB A340-35-5026, as applicable.

The Zodiac SB: Zodiac Aerospace Services SB DVE90-35-348 Revision 01 or Revision 02.

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 having MSN 1814 or higher is Group 2, provided no affected part has been installed on that aeroplane since aeroplane first flight.

Reason:

Investigations conducted by the SV manufacturer revealed that certain SV, intended for installation on the crew oxygen system to shut off the oxygen supply, can be a potential source of increased flow resistance within the crew oxygen system.

This condition, if not detected and corrected, could lead to a reduced flow of oxygen supply to cockpit crew oxygen masks, which, in combination with in-flight depressurization, smoke in cockpit or smoke evacuation procedure, may lead to cockpit crew hypoxia and loss of useful consciousness, possibly resulting in loss of control of the aeroplane.

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

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

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

Required as indicated, unless accomplished previously:

Inspection(s):

- (1) For Group 1 aeroplanes: Within the compliance time as defined in Table 1 of this AD, accomplish an SDI (flow test) of the affected part by using the crew oxygen masks, in accordance with the instructions of the applicable SB.

Table 1 – SV / Crew Oxygen Mask SDI

SV year of manufacture, or SV year of last overhaul	Compliance Time
Before 2003, or SV year of manufacture is unknown	Within 6 months after the effective date of this AD
From 2003 to 2007 inclusive	Within 9 months after the effective date of this AD
From 2008 to 2011 inclusive	Within 12 months after the effective date of this AD
From 2012 to 2016 inclusive	Within 24 months after the effective date of this AD



Corrective Action(s):

- (2) If, during the SDI as required by paragraph (1) of this AD, an affected part fails the flow test, before next flight, replace that affected part with a serviceable part in accordance with the instructions of the applicable SB.

Parts Installation:

- (3) For Group 1 and Group 2 aeroplanes: From the effective date of this AD, installation of an affected part on an aeroplane is allowed, provided that, before next flight after installation, it passes a flow test (no defects found) in accordance with the instructions of the applicable SB.

Ref. Publications:

Airbus SB A330-35-3056 original issue dated 01 April 2019.

Airbus SB A340-35-4034 original issue dated 29 March 2019.

Airbus SB A340-35-5026 original issue dated 29 March 2019.

The use of later approved revisions of the above-mentioned documents is acceptable for compliance with the requirements of this AD.

Zodiac Aerospace Services SB DVE90-35-348 Revision 1 dated 04 October 2019, or Revision 2 dated 08 January 2020.

Remarks:

1. If requested and appropriately substantiated, EASA can approve Alternative Methods of Compliance for this AD.
2. This AD was initially posted on 05 June 2019 as PAD 19-102 for consultation until 03 June 2019, republished on 18 May 2020 as PAD 19-102R1 for consultation until 01 June 2020 and finally republished on 09 November 2020 as PAD 19-102R2 for consultation until 23 November 2020. The Comment Response Documents 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](#). 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 – IIAL (Airworthiness Office), E-mail: airworthiness.A330-A340@airbus.com.

