



# Notification of a Proposal to issue an Airworthiness Directive

**PAD No.: 19-102R2**

**Issued: 09 November 2020**

Note: This Proposed Airworthiness Directive (PAD) 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.

In accordance with the EASA Continuing Airworthiness Procedures, the Executive Director is proposing the issuance of an EASA Airworthiness Directive (AD), applicable to the aeronautical product(s) identified below.

All interested persons may send their comments, referencing the PAD Number above, to the e-mail address specified in the 'Remarks' section, prior to the consultation date indicated.

**Design Approval Holder's Name:**

AIRBUS

**Type/Model designation(s):**

A330 and A340 aeroplanes

**Effective Date:** [TBD - standard: 14 days after AD issue date]

**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 has 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 applicable CMM; and except those that passed an inspection (no defects found) 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.

Since issuance of EASA PAD 19-102R1, it was determined that the Applicability needed to be expanded to include A330-841 aeroplanes. It was also determined that the definition of Affected part needed to be amended. This PAD has been revised accordingly and is re-published for additional consultation.

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

Required as indicated, unless accomplished previously:

#### Inspection(s):

- (1) 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) 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. This Proposed AD will be closed for consultation on 23 November 2020.
2. Enquiries regarding this PAD should be referred to the EASA Programming and Continued Airworthiness Information Section, Certification Directorate. E-mail: [ADs@easa.europa.eu](mailto:ADs@easa.europa.eu).
3. Information about any failures, malfunctions, defects or other occurrences, which may be similar to the unsafe condition addressed by this PAD, and which may occur, or have occurred on a product, part or appliance not affected by this PAD, 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 PAD 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.

4. For any question concerning the technical content of the requirements in this PAD, please contact: AIRBUS – IIAL (Airworthiness Office), E-mail: [airworthiness.A330-A340@airbus.com](mailto:airworthiness.A330-A340@airbus.com).

