

# Airworthiness DirectiveAD No.:2022-0157Issued:04 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 ML.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 Annex Vb Part ML.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 S.A.S

Type/Model designation(s): A350 aeroplanes

Effective Date: 18 August 2022

TCDS Number(s): EASA.A.151

Foreign AD: Not applicable

Supersedure: None

## ATA 28 – Fuel – Engine / Auxiliary Power Unit Low Pressure Shut-Off Valves and Auxiliary Power Unit Isolation Valve – Inspection / Replacement

# 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:

The SB: Airbus Service Bulletin (SB) A350-28-P013 Revision 01.

**Affected APU LP SOV**: An Auxiliary Power Unit (APU) low pressure (LP) shut-off valve (SOV) having Part Number (P/N) 2080022-101 or P/N 2080022-102 and having a serial number (s/n) as listed in the SB.

**Affected engine LP SOV**: An engine LP SOV having P/N 2140083-101 and having an s/n as listed in the SB.

**Affected APU ISOV**: An APU isolation shut-off valve (ISOV) having P/N 2080023-102 and having an s/n as listed in the SB.



**Serviceable APU LP SOV**: Any APU LP SOV, eligible for installation, that is not an affected APU LP SOV.

**Serviceable engine LP SOV**: Any engine LP SOV, eligible for installation, that is not an affected engine LP SOV.

Serviceable APU ISOV: Any APU ISOV, eligible for installation, that is not an affected APU ISOV.

#### Reason:

Reports have been received from the manufacturer of the APU, the engine LP SOV and the APU ISOV of potential foreign object debris (FOD) contamination of the Thermal Relief Valve (TRV), which was generated by a quality escape during the manufacturing assembly process. Results of the technical investigation identified that FOD in the TRV may lead to a fuel leakage through the valve.

This condition, if not detected and corrected, could, in case of an APU or engine fire, contribute to an uncontrolled fire, possibly resulting in loss of control of the aeroplane.

To address this potential unsafe condition, Airbus issued the SB to provide instructions for inspection of the engine LP SOV and APU ISOV, and replacement of the APU LP SOV, engine LP SOV and APU ISOV.

For the reasons described above, this AD requires replacement of affected APU LP SOV, a special detailed inspection (SDI) of affected engine LP SOV and APU ISOV to detect fuel leaks through the valve and, depending on findings, replacement with a serviceable engine LP SOV or APU ISOV.

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

Required as indicated, unless accomplished previously:

### **APU LP SOV Replacement:**

(1) Within 78 months after the effective date of this AD, replace each affected APU LP SOV with a serviceable APU LP SOV in accordance with the instructions of the SB.

### Engine LP SOV and APU ISOV Inspection:

(2) Within 78 months after the effective date of this AD, accomplish an SDI of each affected engine LP SOV and each affected APU ISOV in accordance with the instructions of the SB.

#### Corrective Action:

(3) If, during the SDI as required by paragraph (2) of this AD, any discrepancy is detected, as defined in the SB, on an affected engine LP SOV and/or on the affected APU ISOV, as applicable, before next flight, replace that affected engine LP SOV and/or affected APU ISOV, as applicable, with a serviceable engine LP SOV or APU ISOV in accordance with the instructions of the SB.

#### Parts Installation:

(4) From the effective date of this AD, do not install on any aeroplane an affected APU LP SOV, an affected engine LP SOV, or an affected APU ISOV.



#### **Ref. Publications:**

Airbus SB A350-28-P013 Revision 01 dated 22 June 2022.

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.
- This AD was posted on 01 July 2022 as PAD 22-086 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: <u>ADs@easa.europa.eu</u>.
- 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</u> 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 S.A.S. A350 XWB (1IAK), E-mail: <u>continued-airworthiness.a350@airbus.com</u>.

