

Airworthiness Directive

AD No.: 2018-0191R1

Issued: 26 August 2021

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: Type/Model designation(s):

AIRBUS A380 aeroplanes

Effective Date: Revision 1: 02 September 2021

Original issue: 17 September 2018

TCDS Number(s): EASA.A.110

Foreign AD: Not applicable

Supersedure: This AD revises EASA AD 2018-0191 dated 03 September 2018, which superseded

EASA AD 2017-0182 dated 19 September 2017.

ATA 28 - Fuel - Fuel Pumps / Outboard Collector Cell Jet Pump - Inspection

Manufacturer(s):

Airbus

Applicability:

Airbus A380-841, A380-842 and A380-861 aeroplanes, all manufacturer serial numbers.

Definitions:

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

The SB: Airbus Service Bulletin (SB) A380-28-8069.

Affected part: Outboard collector cell jet pumps, having Part Number (P/N) 38-0008, and manufactured before week 33, year 2015, except those that are marked with amendment (AMDT) "A". The first four digits of the serial number (s/n) of an affected part indicates the date of manufacture: e.g. s/n 3215XXXX was manufactured in week 32, year 2015.

Serviceable part: Any outboard collector cell jet pump, not being an affected part.

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.



Reason:

Occurrences were reported where, during tank entry, the glue joint of the outboard collector cell jet pump (between the jet pump body and the outlet pipe) was found to have failed and the two sections of the jet pump were no longer mechanically linked. Investigation results indicated that this failure was due to improper preparation of the bonding surfaces during assembly, resulting in a decreased strength of the joint. The review also identified the batch of jet pumps affected by this manufacturing deficiency.

This condition, if not detected and corrected, could create, in case of lightning strike, an ignition source inside the fuel tank vapour space, possibly resulting in a fuel tank explosion and consequent loss of the aeroplane.

To address this potential unsafe condition, Airbus issued Alert Operators Transmission (AOT) A28R005-17 to provide a test procedure to verify the integrity of the collector cell jet pumps. Consequently, EASA issued AD 2017-0182 to require a one-time functional check of the affected outboard collector cell jet pumps and, depending on findings, accomplishment of applicable corrective action(s).

Since that AD was issued, Airbus issued the SB at original issue to provide instructions for repetitive special detailed inspections (SDI) of the affected parts. Consequently, EASA issued AD 2018-0191, superseding EASA AD 2017-0182, to require repetitive SDI of the affected parts and, depending on findings, accomplishment of further inspection(s) and applicable corrective action(s).

Since that AD was issued, Airbus issued the SB at Revision 02 to clarify that reworked outboard collector cell jet pumps, repaired to the correct process and marked with AMDT "A", are no longer subject to inspection.

This AD is revised accordingly, amending the definion of 'affected part' by excluding those pumps marked with AMDT "A".

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

Required as indicated, unless accomplished previously:

Inspection(s):

- (1) For Group 1 aeroplanes: Within 6 months after 17 September 2018 [the effective date of the original issue of this AD], and, thereafter, at intervals not to exceed 6 months, accomplish an SDI of each affected part in accordance with the instructions of the SB.
- (2) If, during any SDI as required by paragraph (1) of this AD, any discrepancy is detected, within 3 months after that SDI, accomplish a general visual inspection (GVI) of the affected part in accordance with the instructions of the SB.

Corrective Action(s):

(3) If, during any GVI as required by paragraph (2) of this AD, the affected part is not found detached, within 6 months after that GVI, continue the repetitive SDI as required by paragraph (1) of this AD, or before next flight, replace the affected part with a serviceable part in accordance with the instructions of the SB.



(4) If, during any GVI as required by paragraph (2) of this AD, detachment of an affected part is found, but no damage of the surrounding tank structure, before next flight, replace the detached affected part with a serviceable part in accordance with the instructions of the SB.

- (5) If, during any GVI as required by paragraph (2) of this AD, detachment of an affected part is found, including damage of the surrounding tank structure, before next flight, accomplish concurrently the actions as required by paragraphs (5.1) and (5.2) of this AD, in accordance with the instructions of the SB.
 - (5.1) Replace the detached affected part with a serviceable part.
 - (5.2) Contact Airbus for approved corrective action instructions and, within the compliance time specified therein, accomplish those instructions accordingly.

Part(s) Installation:

- (6) Do not install on any aeroplane an affected part, as required by paragraph (6.1) or (6.2) of this AD, as applicable.
 - (6.1) For Group 1 aeroplanes: After replacement of all affected parts in accordance with the instructions of the SB.
 - (6.2) For Group 2 aeroplanes: From 17 September 2018 [the effective date of the original issue of this AD].

Terminating Action:

(7) Replacement of all affected parts on an aeroplane, as required by paragraph (3), (4), or (5) of this AD, as applicable, constitutes terminating action for the repetitive SDI as required by paragraph (1) of this AD for that aeroplane.

Reporting:

(8) Within 30 days after accomplishment of any GVI as required by paragraph (2) of this AD, report the inspection results (including no findings) to Airbus. Using the instructions of the SB is an acceptable method to comply with this reporting requirement.

Ref. Publications:

Airbus SB A380-28-8069 original issue dated 04 July 2018, or Revision 01 dated 15 January 2019, or Revision 02 dated 09 August 2021.

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. The original issue of this AD was posted on 24 July 2018 as PAD 18-105 for consultation until 21 August 2018. No comments were received during the consultation period.



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.
- For any question concerning the technical content of the requirements in this AD, please contact: AIRBUS - EIANA (Airworthiness Office), Telephone: +33 562 110 253;
 Fax: +33 562 110 307, E-mail: account.airworth-A380@airbus.com.

