Airworthiness Directive

AD No.: 2018-0117R1

Issued: 08 June 2018

Note: This Airworthiness Directive (AD) is issued by EASA, acting in accordance with Regulation (EC) 216/2008 on behalf of the European Union, its Member States and of the European third countries that participate in the activities of EASA under Article 66 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 (EC) 216/2008, Article 14(4) exemption].

Design Approval Holder's Name:
AIRBUS

Type/Model designation(s):
A380 aeroplanes

Effective Date: 12 June 2018 (same as original issue)

TCDS Number(s): EASA.A.110

Foreign AD: Not applicable

Revision: This AD revises EASA AD 2018-0117 dated 29 May 2018.

ATA 78 – Exhaust – Inner J-Ring and V-Groove Interface – Inspection

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Manufacturer(s):
Airbus

Applicability:
Airbus A380-861 aeroplanes, all manufacturer serial numbers.

Definitions:
For the purpose of this AD, the following definition applies:

The SB: Airbus Service Bulletin (SB) A380-78-8012 original issue, dated 13 December 2017.

Reason:
On an A380 aeroplane powered with GP7200 engines, unusual interface wear damage was found on the Thrust Reverser Unit (TRU)/Fan Exhaust Cowl (FEC) inner J-ring. This damage was observed all around the inner J-ring, but mainly around the 3 and 9 o'clock positions. The function of the TRU/FEC inner J-ring (nacelle side) and inner V-groove (engine fan case side) assembly is to transfer both radial and axial loads from the nacelle structure to the engine fan case structure in some load cases. Current in-service experience indicates that, due to normal vibrations, the J-ring and the V-groove experience sliding contacts and associated fretting wear.

This condition, if not detected and corrected, could lead to loss of the axial load path of the TRU and Fixed Fan duct, possibly reducing the structural integrity of the engine.

To address this potential unsafe condition, ensuring that any damage of the inner J-ring is detected in time and repaired appropriately, Airbus developed an inspection programme based on repetitive detailed inspections (DET) and published the SB accordingly.

For the reasons described above, EASA issued AD 2018-0117 to require repetitive DET of each inner J-Ring and, depending on findings, accomplishment of applicable corrective action(s).

Prompted by operator comments, EASA has decided to amend paragraph (5) for the purpose of clarifying the intent and avoiding possible confusion. This AD is revised accordingly.

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

Required as indicated, unless accomplished previously:

Repetitive Inspections:

(1) Within the compliance time, and, thereafter, at intervals not to exceed the value(s), as defined in Table 1 of this AD, as applicable, accomplish a DET of each inner J-ring in accordance with the instructions of the SB.

Table 1 – Inner J-Ring Inspection Threshold and Intervals (see Note 1 of this AD)

Configuration	Compliance Time	Inspection Interval
Pre-SB EAGP7-72-338 (pre-mod 77228)	(whichever occurs later, **A** or **B**)	1 250 FC or 24 months, whichever occurs first
	A: Before exceeding 3 750 flight cycles (FC) or 72 months, whichever occurs first	
	B: Within 1 250 FC or 24 months, whichever occurs first after the effective date of this AD	
Post-SB EAGP7-72-338 (post-mod 77228)	Within 4 000 FC, or after embodiment of Engine Alliance SB EAGP7-72-338, as applicable	4 000 FC

Note 1: The configuration specified in Table 1 is that of the engine installation. Unless indicated otherwise, the FC specified in Table 1 of this AD are those accumulated by the inner J-ring since first installation on an aeroplane. The calendar time is only relevant for inner J-ring installed on an aeroplane.

Corrective Action(s):

(2) If, during any inspection as required by paragraph (1) of this AD, any damage is detected on an inner J-ring, before next flight, accomplish the applicable corrective action(s) in accordance with the instructions of the SB.

Optional Modification:

(3) Modification of an engine (at any position) in accordance with the instructions of Engine Alliance SB No. EAGP7-72-338 allows the DET interval for that engine to be extended to 4 000 FC, as specified in Table 1 of this AD, provided the engine at that position remains in that configuration. Later installation of a pre-mod engine at that position requires reducing the interval to 1 250 FC.

Terminating Action:

(4) None.

Parts Installation:

(5) From the effective date of this revised AD, it is allowed to install on any aeroplane an engine or TRU assembly with a TRU/FEC inner J-ring installed, or to install a TRU/FEC inner J-ring, provided that the affected inner J-ring meets the criteria as specified in paragraph (5.1) or (5.2) of this AD, as applicable, and that, following installation, the affected inner J-ring is inspected as required by paragraph (1) of this AD.

(5.1) The inner J-ring has passed a DET (no defects detected) in accordance with the instructions of SB, no longer ago than the applicable inspection interval as specified in Table 1 of this AD, depending on the mod-status of the engine on which the inner J-ring is (or was, in case of installation of replacement TRU assembly or inner J-ring) installed.

(5.2) The inner J-ring has accumulated less than 3 750 FC or 72 months, whichever occurs first since first installation on an aeroplane (see Note 1 of this AD).

Ref. Publications:

Airbus SB A380-78-8012 original issue, dated 13 December 2017.

SAFRAN Nacelles SB L70DR78-043 original issue, dated 30 June 2015, and Revision 02, dated 13 December 2017.

SAFRAN Nacelles SB L70DR78-049 original issue, dated 08 December 2017.

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

Engine Alliance SB No. EAGP7-72-338 dated 18 August 2017.

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 27 March 2018 as PAD 18-046 for consultation until 24 April 2018. The Comment Response Document 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 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 EU aviation safety reporting system.

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