



Notification of a Proposal to issue an Airworthiness Directive

PAD No.: 20-156

Issued: 05 October 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):

A380 aeroplanes

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

TCDS Number(s): EASA.A.110

Foreign AD: Not applicable

Supersedure: This AD supersedes EASA AD 2018-0116 dated 29 May 2018.

ATA 55 – Stabilizers – Inboard and Outboard Elevator Hinges / Actuator Fittings – 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) A380-55-8002 Revision 03.

Affected part: Elevator hinges and elevator actuator fittings, inboard and outboard, both left-hand (LH) and right-hand (RH) sides.

Reason:

Occurrences were reported where, during scheduled maintenance on Airbus A380 aeroplanes, bushing migration was found on affected parts, as well as improper elevator centring and inappropriate gap dimensions. Subsequent investigation also identified damaged safety tabs on

elevator fittings, axial and radial play of bearings in lateral rod bars, and structural play (wear) of trimmable horizontal stabilizer fittings and bearings.

This condition, if not detected and corrected, could affect the elevator connection structural integrity, possibly resulting in reduced control of the aeroplane.

To address this potential unsafe condition, Airbus issued SB A380-55-8002 original issue (later revised) to provide inspection instructions and EASA issued AD 2015-0136 (later revised) to require a one-time detailed inspection (DET) of the affected parts and, depending on findings, accomplishment of applicable corrective action(s).

After EASA AD 2015-0136R1 was issued, following further investigation, Airbus issued SB A380-55-8002 Revision 2 to introduce repetitive DET in case of finding bushing migration. Consequently, EASA issued AD 2018-0116, retaining the requirements of EASA AD 2015-0136R1, which was superseded, and requiring repetitive DET in case bushing migration is (or was) found during the first DET.

Since that AD was issued, Airbus issued the SB, as defined in this AD, to introduce a lower limit for the inspection threshold and interval, which must be exceeded before the inspection is done.

For the reason described above, this AD retains the requirements of EASA AD 2018-0116, which is superseded, but introduces a lower limit for the inspection threshold and interval. For aeroplanes that have passed an inspection (no findings) prior to this lower limit, this AD requires at least a one-time inspection to ensure any possible bushing migration that may have developed after that too-early inspection does not remain undetected.

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

Required as indicated, unless accomplished previously:

Inspection(s):

- (1) Within the compliance time as defined in Table 1 of this AD, as applicable, accomplish a one-time DET of each affected part in accordance with the instructions of the SB.

Table 1 – One-time DET

Compliance Time (whichever occurs later, A or B)	
A	Before exceeding 3 600 flight cycles (FC) or 26 500 flight hours (FH), whichever occurs first since aeroplane first flight, but not before accumulating 1 200 FC since aeroplane first flight
B	Within 500 FC or 3 680 FH, whichever occurs first after 22 July 2015 [the effective date of the original issue of EASA AD 2015-0136]

- (2) For aeroplanes which, before the effective date of this AD, passed a DET (no findings) in accordance with the instructions of the SB, before having accumulated 1 200 FC since aeroplane first flight, or since last inspection as required by paragraph (3) of this AD, as

applicable, within the compliance times specified in Table 2 of this AD, accomplish a one-time DET of each affected part in accordance with the instructions of the SB.

Table 2 – One-time DET

Compliance Time (whichever occurs later, A , B or C)	
A	Before exceeding 3 600 FC or 26 500 FH, whichever occurs first since aeroplane first flight, but not before accumulating 1 200 FC since aeroplane first flight
B	Before exceeding 3 600 FC or 26 500 FH, whichever occurs first after the last DET as required by paragraph (3) of this AD, but not before accumulating 1 200 FC since that DET
C	Within 500 FC or 3 680 FH, whichever occurs first after the effective date of this AD

- (3) If, during the DET as required by paragraph (1) or (2) of this AD, as applicable, any bushing migration is or was detected, within the compliance time as defined in Table 3 of this AD, as applicable, and, thereafter, at intervals not to exceed 3 600 FC or 26 500 FH, whichever occurs first, but not before exceeding 1 200 FC since last inspection, accomplish a DET of each affected part on which bushing migration was detected, in accordance with the instructions of the SB.

Table 3 – First DET after Migration Detected

Compliance Time (whichever occurs later, A or B)	
A	Before exceeding 3 600 FC or 26 500 FH, whichever occurs first after the DET as required by paragraph (1) of this AD, but not before accumulating 1 200 FC since that DET
B	Within 500 FC or 3 680 FH, whichever occurs first after 12 June 2018 [the effective date of EASA AD 2018-0116]

Corrective Action(s):

- (4) If, during any DET as required by paragraph (1), (2) or (3) of this AD, as applicable, any discrepancy as defined in the SB is detected on an affected part, before next flight, accomplish the applicable corrective action(s) in accordance with the instructions of the SB.

Reporting:

- (5) Within 30 days after any DET as required by this AD, report the inspection results (including no findings) to Airbus.

Credit:

- (6) Inspection and corrective action(s), accomplished on an aeroplane before 22 July 2015 [the effective date of the original issue of EASA AD 2015-0136] in accordance with the instructions of an Airbus Technical Disposition (TD) as specified in Appendix 1 of this AD, as applicable to MSN, are acceptable to comply with the requirements of paragraphs (1) and (4) of this AD for that aeroplane.



- (7) Inspection(s) and corrective action(s), accomplished on an aeroplane before the effective date of this AD in accordance with the instructions of Airbus SB A380-55-8002 at original issue, or Revision 01, or Revision 02, as applicable, are acceptable to comply with the requirements of paragraphs (1), (3) and (4) of this AD for that aeroplane.

Parts Installation:

- (8) From the effective date of this AD, installation of a replacement elevator on an aeroplane is allowed, provided that following installation, the elevator is inspected, and, depending on findings, corrected, before exceeding 3 600 FC or 26 500 FH accumulated by the elevator, whichever occurs first, but not before accumulating 1 200 FC, since its first installation on an aeroplane, in accordance with the instructions of the SB, unless it can be demonstrated that, before installation, the affected parts of the replacement elevator passed an inspection (no discrepancies detected), or have been corrected, as applicable, in accordance with the instructions of the SB.

Terminating Action:

- (9) If, during any DET of an affected part on an aeroplane, as required by paragraph (3) of this AD, as applicable, no bushing migration is detected, that finding constitutes terminating action for the repetitive DET as required by paragraph (3) of this AD for that affected part on that aeroplane.

Ref. Publications:

Airbus SB A380-55-8002 original issue, dated 13 May 2015, or Revision 01 dated 01 December 2016, or Revision 02 dated 20 April 2018, or Revision 03 dated 24 August 2020.

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

Remarks:

1. This Proposed AD will be closed for consultation on 02 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.
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 - EIANA (Airworthiness Office), Telephone: +33 562 110 253; Fax: +33 562 110 307, E-mail: account.airworth-A380@airbus.com.