

# **Airworthiness Directive**

AD No.: 2018-0116

**Issued: 29 May 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: Type/Model designation(s):

AIRBUS A380 aeroplanes

Effective Date: 12 June 2018
TCDS Number(s): EASA.A.110

Foreign AD: Not applicable

Supersedure: This AD supersedes EASA AD 2015-0136R1 dated 16 September 2015.

# 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 (MSN).

### **Definitions:**

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

The SB: Airbus Service Bulletin (SB) A380-55-8002 (any revision).

## Reason:

Occurrences were reported by A380 operators where, during scheduled maintenance, bushing migration on inboard and outboard elevator hinge and actuator fittings, as well as improper elevator centering and inappropriate gap dimensions were found. 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 the SB to provide inspection instructions and EASA issued AD 2015-0136 (later revised) to require a one-time detailed inspection (DET) of the left-hand (LH) and right-hand (RH) inboard and outboard elevator hinges and actuator fittings and, depending on findings, accomplishment of applicable corrective action(s).

Since EASA AD 2015-0136R1 was issued, following further investigation, Airbus issued Revision 02 of the SB to repeat the DET in case of finding bushing migration.

For the reasons described above, this AD retains the requirements of EASA AD 2015-0136R1, which is superseded, and requires repetitive DET in case bushing migration is (or was) found during the first DET.

# 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 the LH and RH inboard and outboard elevator hinges and actuator fittings 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	
В	Within 500 FC or 3 680 FH, whichever occurs first after 22 July 2015 [the effective date of the original issue of AD 2015-0136]	

(2) If, during the DET as required by paragraph (1) of this AD, any bushing migration is or was detected, within the compliance time as defined in Table 2 of this AD, as applicable, and, thereafter, at intervals not to exceed 3 600 FC or 26 500 FH, whichever occurs first, accomplish a DET of each LH and RH inboard and outboard elevator hinge and actuator fitting on which bushing migration was detected, in accordance with the instructions of the SB at Revision 02.

Table 2 – First DET after Migration Detected

Compliance Time (whichever occurs later, A or B)			
Α	Before exceeding 3 600 FC or 26 500 FH, whichever occurs first after the DET as required by paragraph (1) of this AD		
В	Within 500 FC or 3 680 FH, whichever occurs first after the effective date of this AD		



## Corrective Action(s):

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

## Reporting:

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

#### Credit:

(5) 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 (3) of this AD for that aeroplane.

#### Parts Installation:

(6) From 16 September 2015 [the effective date of EASA AD 2015-0136R1], 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 since its first installation on an aeroplane, in accordance with the instructions of the SB, unless it can be demonstrated that the hinges and actuator fittings of the replacement elevator were already inspected and, depending on findings, corrected, in accordance with the instructions of the SB.

### **Terminating Action:**

(7) If, during any DET of an affected (LH or RH, inboard or outboard) elevator hinge or actuator fitting on an aeroplane, as required by paragraph (2) of this AD, no bushing migration is detected, that finding constitutes terminating action for the repetitive DET as required by paragraph (2) of this AD for that affected elevator hinge or actuator fitting 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.

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

#### **Remarks:**

- If requested and appropriately substantiated, EASA can approve Alternative Methods of Compliance for this AD.
- This AD was posted on 26 April 2018 as PAD 18-060 for consultation until 24 May 2018. 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: <a href="mailto:ADs@easa.europa.eu">ADs@easa.europa.eu</a>.

- 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 <a href="EU aviation safety reporting system">EU aviation safety reporting system</a>.
- 5. 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: <a href="mailto:account.airworth-A380@airbus.com">account.airworth-A380@airbus.com</a>.



# Appendix 1 – Airbus TD vs. MSN

Airbus TD	MSN
D_G1_S4_05612_2013 issue A dated 26 November 2013	0005
	0090
TD_G15_S4_00195_2014 issue A dated 12 December 2014	0012
TD_G15_S4_00237_2015 issue A dated 16 January 2015	0017
TD_G15_S4_00225_2015 issue A dated 08 January 2015	0020
TD_G15_S4_00213_2014 issue A dated 12 December 2014	0021
TD_G15_S4_00297_2015 issue A dated 30 March 2015	0026
TD_G15_S4_00207_2014 issue A dated 07 January 2015	0034
TD_G15_S4_00214_2014 issue A dated 12 December 2014	0045
TD_G1_S4_06050_2014 issue B dated 10 February 2014	0070
TD_G1_S4_04696_2013 issue A dated 16 July 2013	0077
TD_G1_S4_04619_2013 issue A dated 16 July 2013	
C1 C4 OC020 2014 issue A dated 14 May 2014	0079
TD_G1_S4_06829_2014 issue A dated 14 May 2014	0082
D_G1_S4_05613_2013 issue A dated 11 December 2013	0080
	0083
	0086