



Airworthiness Directive

AD No.: 2016-0251R1

Issued: 02 November 2017

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: Revision 1: 02 November 2017
Original Issue: 29 December 2016

TCDS Number(s): EASA.A.110

Foreign AD: Not applicable

Revision: This AD revises EASA AD 2016-0251 dated 15 December 2016.

ATA 52 – Doors – Auxiliary Wing Landing Gear Door – Inspection / Reinforcement

Manufacturer(s):

Airbus

Applicability:

Airbus A380-841, A380-842 and A380-861 aeroplanes, all manufacturer serial numbers, except those that have embodied Airbus modification (mod) 76693 in production.

Reason:

In 2015, EASA issued AD 2015-0208 (which superseded AD 2014-0171R1) to address an unsafe condition affecting the forward (FWD) hinge fittings of A380 centre body landing gear doors (BLGD). Within the framework of the investigation, it was also determined that hinge fittings attached to auxiliary wing landing gear doors (WLGD) have geometrical features, similar to those of the centre BLGD hinge fittings, and are therefore also subject to reduced fatigue life.

This condition, if not detected and corrected, could lead to reduced structural integrity of the auxiliary WLGD hinge fittings, possibly resulting in in-flight loss of an auxiliary WLGD, and consequent injury to persons on the ground.

To address this unsafe condition, Airbus developed production mod 76693 to reinforce the auxiliary WLGD hinge fittings, and issued Service Bulletin (SB) A380-52-8165 to provide inspection instructions for in-service pre-mod aeroplanes.



Consequently, EASA issued AD 2016-0251, requiring repetitive special detailed inspections (SDI) using a High Frequency Eddy Current (HFEC) testing method, and detailed inspections (DET) of the right hand (RH) and left hand (LH) auxiliary WLGD hinge fittings and, depending on findings, accomplishment of applicable corrective action(s).

Since EASA AD 2016-0251 was issued, Airbus published SB A380-52-8170 to provide instructions for in-service embodiment of Airbus mod 76693.

For the reason described above, this AD is revised to introduce in-service reinforcement of the auxiliary WLGD hinge fittings as an optional terminating action for the repetitive inspections required by this AD.

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

Required as indicated, unless accomplished previously:

Inspection(s):

- (1) Within the threshold and, thereafter, at intervals not to exceed the values defined in Table 1 of this AD, as applicable to aeroplane configuration, accomplish concurrently an SDI and DET of the RH and LH auxiliary WLGD inboard hinge fittings and their corresponding counter-fittings in accordance with the instructions of Airbus SB A380-52-8165.

Table 1: Auxiliary WLGD Inspection

Aeroplane configuration	Threshold	Interval
Pre-mod 69807	Before exceeding 4 800 flight cycles (FC) since aeroplane first flight, or within 380 FC after 29 December 2016 [the effective date of the original issue of this AD], whichever occurs later	2 000 FC
Post-mod 69807	Before exceeding 4 800 FC since aeroplane first flight, or within 250 FC after 29 December 2016 [the effective date of the original issue of this AD], whichever occurs later	2 800 FC

Corrective Action(s):

- (2) If, during any inspection (SDI or DET) as required by paragraph (1) of this AD, any crack is detected, before next flight, replace the affected auxiliary WLGD hinge fitting with a serviceable part in accordance with the instructions of Airbus SB A380-52-8165.
- (3) Replacement of an auxiliary WLGD hinge fitting on an aeroplane, as required by paragraph (2) of this AD, does not constitute terminating action for the repetitive inspections (SDI or DET), as required by paragraph (1) of this AD for that aeroplane.
- (4) Within 30 days after accomplishment of each inspection (SDI or DET) as required by paragraph (1) of this AD, report the inspection results (including no findings) to Airbus in accordance with the instructions of Airbus SB A380-52-8165.



Terminating Action (optional):

- (5) Modification of an aeroplane by reinforcement of the inboard and outboard hinge fittings on auxiliary WLGD LH and RH side, in accordance with the instructions of Airbus SB A380-52-8170, constitutes (optional) terminating action for the repetitive inspections as required by paragraph (1) of this AD for that aeroplane.

Ref. Publications:

Airbus SB A380-52-8165 original issue dated 26 October 2016, or Revision 01 dated 01 June 2017.

Airbus SB A380-52-8170 original issue dated 11 October 2017.

The use of later approved revisions of these documents 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 07 November 2016 as PAD 16-156 for consultation until 05 December 2016. 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. 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.

