



## Airworthiness Directive

**AD No.:** 2016-0100

**Issued:** 24 May 2016

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):

A300, A300-600 and A310 aeroplanes

**Effective Date:** 07 June 2016

**TCDS Number:** EASA.A.0172

**Foreign AD:** Not applicable

**Supersedure:** None

## ATA 53 – Fuselage – Nose Landing Gear Door Hinge Bolt Assembly – Replacement [Life Limit]

### Manufacturer(s):

Airbus (formerly Airbus Industrie)

### Applicability:

Airbus A300, A310 and A300-600 aeroplanes, all Manufacturer Serial Numbers.

### Reason:

An occurrence has been reported of failure of a nose landing gear (NLG) door aft hinge bolt assembly, Part Number (P/N) A53612600000. The result of laboratory investigations revealed that the aft hinge bolt rupture was initiated by fatigue crack development in the under head radius of the bolt, due to the lack of radius roll over and in combination with a non-optimised design.

This condition, if not detected and corrected, could lead to in-flight loss of an aft NLG door, possibly resulting in damage to the aeroplane and injury to persons on the ground.

Prompted by these findings, Airbus developed a new design aft hinge bolt assembly P/N A53612713000, introduced as Airbus modification (mod) 13741, to replace the existing bolt P/N A53612600000. Since the introduction of that mod, additional stress calculations demonstrated that the new bolt assembly, P/N A53612713000, cannot sustain fatigue loads up to the design Limit of Validity (LOV) of the affected aeroplanes.



To address this potential unsafe condition, Airbus issued Service Bulletin (SB) A300-53-0397, SB A310-53-2144 and SB A300-53-6186, to provide instructions for the repetitive replacement of the affected post-mod 13741 P/N A53612713000 aft hinge bolts.

For the reasons described above, this AD requires the replacement of all P/N A53612600000 aft hinge bolt assemblies, installed on the left hand (LH) and right hand (RH) NLG aft doors, with post-mod 13741 P/N A53612713000 aft hinge bolt assemblies, and, subsequently, the implementation of a life limit for those new bolt assemblies.

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

Required as indicated, unless accomplished previously:

- (1) Before exceeding 10 000 flight cycles (FC) since first flight of the aeroplane, or within 2 000 FC after the effective date of this AD, whichever occurs later, replace each P/N A53612600000 NLG aft door hinge bolt assembly with a new hinge bolt assembly P/N A53612713000 in accordance with the instructions of Airbus SB A300-53-0396, or SB A310-53-2142 or SB A300-53-6182, as applicable.
- (2) Within 10 000 FC after modification of an aeroplane as required by paragraph (1) of this AD, and, thereafter, at intervals not to exceed 10 000 FC, replace each hinge bolt assembly P/N A53612713000 with a new hinge bolt assembly in accordance with the instructions of Airbus SB A300-53-0397, or SB A310-53-2144, or SB A300-53-6186, as applicable.
- (3) After modification of an aeroplane as required by paragraph (1) of this AD, do not install an aft hinge bolt assembly P/N A53612600000 on any aft NLG door of that aeroplane.
- (4) After removal of a NLG aft hinge bolt assembly P/N A53612713000 from an aeroplane, as required by paragraph (2) of this AD, do not install that aft hinge bolt assembly on any aeroplane.

**Ref. Publications:**

Airbus SB A300-53-0396 at original issue dated 25 November 2015.

Airbus SB A300-53-0397 at original issue dated 18 January 2016.

Airbus SB A300-53-6182 at original issue dated 17 November 2015.

Airbus SB A300-53-6186 at original issue dated 18 January 2016.

Airbus SB A310-53-2142 at original issue dated 17 November 2015.

Airbus SB A310-53-2144 at original issue dated 18 January 2016.

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. This AD was posted on 21 March 2016 as PAD 16-046 for consultation until 18 April 2016 and republished on 28 April 2016 for consultation until 12 May 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](mailto:ADs@easa.europa.eu).
4. For any question concerning the technical content of the requirements in this AD, please contact: AIRBUS – EIAW (Airworthiness Office),  
E-mail: E-mail: [continued.airworthiness-wb.external@airbus.com](mailto:continued.airworthiness-wb.external@airbus.com).

