



Airworthiness Directive

AD No.: 2012-0053R1

Issued: 27 November 2018

Note: This Airworthiness Directive (AD) 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..

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 (EU) 2018/1139, Article 71 exemption].

Design Approval Holder's Name:

AIRBUS

Type/Model designation(s):

A330 and A340 aeroplanes

Effective Date: Revision 1: 04 December 2018
Original issue: 13 April 2012

TCDS Numbers: EASA.A.004, EASA.A.015

Foreign AD: Not applicable

Revision: This AD revises EASA AD 2012-0053 dated 30 March 2012. The original issue of this AD superseded EASA AD 2011-0040 dated 08 March 2011.

ATA 32 – Landing Gear – Main and Center Landing Gear Bogie Pivot Pins – Inspection / Modification

Manufacturer(s):

Airbus (formerly Airbus Industrie)

Applicability:

Airbus A330-201, A330-202, A330-203, A330-223, A330-223F, A330-243, A330-243F, A330-301, A330-302, A330-303, A330-321, A330-322, A330-323, A330-341, A330-342 and A330-343 aeroplanes, all manufacturer serial numbers (MSN), except those that have embodied Airbus modification (mod) 207165 or mod 207649 in production, or have been modified in service through the applicable modification SB; and

Airbus A340-211, A340-212, A340-213, A340-311, A340-312, A340-313, A340-541, A340-542, A340-642 and A340-643 aeroplanes, all MSN, except those that have been modified in service through the applicable modification SB.



Definitions:

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

The applicable inspection SB: Airbus Service Bulletin (SB) A330-32-3240 Revision 02, or SB A340-32-4281 Revision 01, or SB A340-32-5096 Revision 01, as applicable.

The applicable modification SB: Airbus SB A330-32-3290, or SB A330-32-3291, or SB A340-32-4315, or SB A340-32-4316, as applicable.

Reason:

During removals of A330/340 main landing gear (MLG) Bogie Beams and A340-500/600 centre landing gear (CLG) bogie beams, cracks in the bogie pivot pin were found. Investigations indicated that these findings were the result of material heating, caused by friction between bogie pivot pin and bush, leading to chrome detachment and stress corrosion cracking.

This condition, if not detected and corrected, could lead to collapse of the MLG or CLG, possibly resulting in damage to the aeroplane and/or injury to occupants.

As a precautionary measure, EASA published AD 2011-0040 to require a one-time inspection of the MLG (all types of A330 and A340 aeroplanes) and CLG (A340-500/600 aeroplanes only) to detect degradation or cracking of the bogie pivot pin, as applicable to aeroplane model, accomplishment of applicable corrective action(s) and the reporting of inspections results.

After that AD was issued, several operators reported finding chrome detachment or chrome dragging on bogie pivot pins. New cases of cracks were also reported. It was confirmed as well that, due to similar design, the enhanced MLG bogie pivot pin (introduced by Airbus mod 54500) could also be affected by this condition.

Prompted by these findings, Airbus developed an inspection programme for A340-500 and -600 aeroplanes, and published the applicable inspection SB. Consequently, EASA issued AD 2012-0053, retaining the requirements of EASA AD 2011-0040, which was superseded, to require repetitive inspections of the MLG and CLG bogie pivot pins and bushes, and, depending on findings, accomplishment of applicable corrective action(s).

Since that AD was issued, Airbus developed mod 207165 and mod 207649, introducing a new bogie pivot pin for certain MLG. Aeroplanes equipped with this new bogie pivot pin, are not subject to the repetitive inspections of this AD. Airbus published the applicable modification SB, providing instructions.

For the reason described above, this AD is revised accordingly by reducing the Applicability, and introduces reference to that modification as optional terminating action. In addition, this revised AD deletes the reporting requirements. Finally, this AD also contains some editorial changes to meet the current AD writing standards, without affecting the technical content or requirements.



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

Required as indicated, unless accomplished previously:

Inspection:

- (1) Initially within the threshold indicated in Table 1 of this AD and, thereafter, at intervals not to exceed 26 months, accomplish a detailed visual inspection of the bogie pivot pins on the MLG and CLG (for A340 aeroplanes only) and pivot pin bushes in accordance with the instructions of the applicable inspection SB.

Table 1 – Initial Inspection

Bogie pivot pin condition	Compliance Time
Bogie pivot pin fitted on MLG installed on A330, A340-200 and A340-300 aeroplanes not having embodied: Airbus modification 54500 in production or, Airbus SB A330-32-3212 in service or, Airbus SB A340-32-4256 in service	Within 26 months after 22 March 2011 [the effective date of EASA AD 2011-0040] or since the aeroplane first flight, whichever occurs later, but not before the accumulation of 12 months after the aeroplane first flight.
Bogie pivot pin fitted on MLG and CLG installed on A340-500 and A340-600 aeroplanes	
Bogie pivot pin fitted on MLG on aeroplanes having embodied: Airbus modification 54500 in production or, Airbus SB A330-32-3212 in service or, Airbus SB A340-32-4256 in service	Within 26 months after 13 April 2012 [the effective date of EASA AD 2012-0053 original issue] or since the aeroplane first flight, whichever occurs later, but not before the accumulation of 12 months after the aeroplane first flight.

Note: Accomplishment of an overhaul of the MLG or CLG does not substitute the accomplishment of an inspection as required by paragraph (1) of this AD.

Corrective Action(s):

- (2) If, during any inspection as required by paragraph (1) of this AD, any bush is found cracked or damaged, before next flight, accomplish the applicable corrective action(s) in accordance with the instructions of the applicable inspection SB.
- (3) If, during any inspection as required by paragraph (1) of this AD, degraded chrome plating on a bogie pivot pin is found, before next flight, accomplish a Non-Destructive Test (NDT) inspection of the affected bogie pivot pin in accordance with the instructions of the applicable inspection SB.
- (4) If, during any NDT inspection as required by paragraph (3) of this AD, the bogie pivot pin base metal is found corroded, before next flight, accomplish the applicable corrective action(s) in accordance with the instructions of the applicable inspection SB.



Terminating Action:

- (5) Accomplishment of corrective actions on an aeroplane, as required by paragraph (2) or (4) of this AD, as applicable, does not constitute terminating action for the repetitive inspection requirements of paragraph (1) of this AD for that aeroplane.

Modification of an aeroplane in accordance with the instructions of the applicable modification SB constitutes terminating action for the repetitive inspections as required by paragraph (1) of this AD for that aeroplane.

Credit:

- (6) Inspections and corrective actions on an aeroplane, accomplished before the effective date of this AD in accordance with the instructions of Airbus SB A330-32-3240 at original issue or Revision 01, or SB A340-32-4281 at original issue, or SB A340-32-5096 at original issue, as applicable, are acceptable for compliance with the initial requirements of paragraphs (1), (2), (3) and (4) of this AD, as applicable, for that aeroplane.

Reporting:

- (7) DELETED.

Ref. Publications:

Airbus SB A330-32-3240 Revision 02 dated 02 December 2011.

Airbus SB A340-32-4281 Revision 01 dated 02 December 2011.

Airbus SB A340-32-5096 Revision 01 dated 02 December 2011.

Airbus SB A330-32-3290 original issue dated 26 December 2017.

Airbus SB A330-32-3291 original issue dated 28 September 2018.

Airbus SB A340-32-4315 original issue dated 26 December 2017.

Airbus SB A340-32-4316 original issue dated 28 September 2018.

The use of later approved revisions of the above-mentioned 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 16 February 2012 as PAD 12-016 for consultation until 15 March 2012. 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 – EIAL (Airworthiness Office), E-mail: airworthiness.A330-A340@airbus.com.

