Airworthiness Directive

AD No.: 2023-0167

Issued: 30 August 2023

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 or Annex Vb Part ML.A.301, as applicable, 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 Annex Vb Part ML.A.303, as applicable] or agreed with the Authority of the State of Registry [Regulation (EU) 2018/1139, Article 71 exemption].

Design Approval Holder's Name:
AIRBUS S.A.S.

Type/Model designation(s):
A330 and A340 aeroplanes

Effective Date: 13 September 2023
TCDS Number(s): EASA.A.004 and EASA.A.015
Foreign AD: Not applicable
Supersedure: None

ATA 32 – Landing Gear – Main Landing Gear Axles – Inspection

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, A330-323, A330-342, A330-343, A330-743L, A330-841 and A330-941 aeroplanes, all manufacturer serial numbers (MSN).

Airbus A340-312 and A340-313 aeroplanes, all MSN.

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

Affected part: Main landing gear (MLG) axles having Part Number (P/N) 55-2117042-00 and a serial number (s/n) as listed in Appendix 1 of this AD.

Serviceable part: Any MLG axle, eligible for installation, which is not an affected part.

Aeroplane date of manufacture: The date of transfer of title (ownership) at the time of first delivery to an operator, which is referenced in Airbus documentation.

Part entry into service: The date of manufacture of the aeroplane on which the part has been firstly installed. If unknown, the date of first flight of that part can be used instead. Appendix 1 of this AD provides a list by MSN of aeroplanes on which affected parts were installed at time of aeroplane date of manufacture.

Groups: Group 1 aeroplanes are those that have an affected part installed. Group 2 aeroplanes are those that do not have an affected part installed. An aeroplane having an MSN not listed in Appendix 1 of this AD is Group 2, provided that no affected parts has been installed in service on that aeroplane.

The SB: Airbus Service Bulletin (SB) A330-32-3305.

Reason:

Occurrences have been reported of quality non-conformity on MLG axles where the high velocity oxygen-fuel coating on the bearing journal runout areas had excessive coating compared to the drawing limits. This over-thickness could lead to spalling of the protective coating, which could expose the base material and allow corrosion to develop.

This condition, if not detected and corrected, could lead to an MLG axle failure, possibly resulting in MLG collapse, with consequent damage to the aeroplane and injury to occupants.

To address this potential unsafe condition, Airbus issued the SB, providing inspection instructions for the affected parts.

For the reason described above, this AD requires repetitive inspections of the affected parts and, depending on findings, accomplishment of applicable corrective action(s). This AD also requires removal of the affected parts from service.

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

Required as indicated, unless accomplished previously:

Inspection(s):

(1) For Group 1 aeroplanes: Within 24 months after the part entry into service and, thereafter, at intervals not to exceed 24 months, inspect that affected part in accordance with the instructions of the SB.

Credit:

(2) Inspections accomplished on an aeroplane, in accordance with Repair and Design Approval Forms (RDAF) 81107231/004/2022 issue B; RDAF 81130415/003/2022 issue A; RDAF 81138823/003/2022 issue A or RDAF 81159105/003/2022 issue A, are acceptable to comply with the initial requirements of paragraph (1) of this AD for that aeroplane.

Corrective Action(s):

(3) If, during any inspection as required by paragraph (1) of this AD, any discrepancy, as defined in the SB, is detected, before next flight, contact SAFRAN Landing Systems for approved corrective action instructions and, within the compliance time specified therein, accomplish those

instructions accordingly. If no compliance time is identified in those instructions, accomplish the applicable corrective action(s) before next flight.

Part Replacement:

(4) For Group 1 aeroplanes: Within 150 months since the part entry into service, replace that affected part with a serviceable part, as defined in this AD. This can be accomplished in accordance with the instructions of the applicable Aircraft Maintenance Manual (see Note 1 of this AD).

Note 1: Replacing the MLG of an aeroplane with an MLG that does not have an affected part installed is an acceptable method to comply with the requirements of paragraph (4) of this AD for that aeroplane.

Terminating Action:

(5) Accomplishment of corrective action(s) on an affected part of an aeroplane as required by paragraph (3) of this AD does not constitute terminating action for the repetitive inspections of that affected part as required by paragraph (1) of this AD for that aeroplane, unless otherwise specified in those instructions.

(6) Replacement on an aeroplane of each affected part with a serviceable part, as required by paragraph (3) or (4) of this AD, as applicable, constitutes terminating action for the repetitive inspections as required by paragraph (1) of this AD for that aeroplane.

Parts Installation:

(7) For Group 1 and Group 2 aeroplanes: From the effective date of this AD, do not install on any aeroplane an affected part, and do not install on any aeroplane an MLG having an affected part installed (see Note 2 of this AD).

Note 2: Removal of an MLG having an affected part installed from an aeroplane and subsequent reinstallation of that MLG on the same aeroplane, accomplished during a single maintenance visit, is not considered as installation as specified in paragraph (7) of this AD.

Ref. Publications:

Airbus SB A330-32-3305 original issue dated 22 May 2023.

The use of later approved revisions of the above-mentioned document 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 16 June 2023 as PAD 23-068 for consultation until 30 June 2023. 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. This may include reporting on the same or similar components, other than those covered by the design to which this AD 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.

5. For any question concerning the technical content of the requirements in this AD, please contact: AIRBUS – 1IAL (Airworthiness Office), E-mail: airworthiness.A330-A340@airbus.com.

Appendix 1 – List of Affected Parts (see Definition of ‘Affected Part’ and ‘Groups’)

s/n	A/C MSN on which the part was installed at time of a/c date of manufacturing
19ALT440006	1978
19ALT440007	1983
19ALT440008	1983
19ALT440009	1975
19ALT440010	1975
19ALT440011	1975
19ALT440012	1975
19ALT440014	1987
19ALT440015	1981
19ALT440016	1981
19ALT440021	1970
19ALT440022	1970
19ALT440023	1970
19ALT440024	1970
19ALT440025	1981
19ALT440026	1981
19ALT440029	1984
19ALT440030	1984
19ALT440032	1983
19ALT440033	1983
19ALT440034	1994
19ALT440035	1984
19ALT440037	1978
19ALT440038	1987
19ALT440039	1987
19ALT440040	1984
19ALT440043	1978
19ALT440044	1978

s/n	A/C MSN on which the part was installed at time of a/c date of manufacturing
19ALT440045	1986
19ALT440046	1986
19ALT440047	1995
19ALT440048	2004
19ALT440049	1995
19ALT440051	1986
19ALT440052	1987
19ALT440053	1986
19ALT440057	1995
19ALT440058	2004
19ALT440059	1994
19ALT440060	1996
19ALT440061	2003
19ALT440062	2003
19ALT440064	2004
19ALT440065	2013
19ALT440066	2005
19ALT440067	2006
19ALT440068	2005
19ALT440069	1993
19ALT440070	1996
19ALT440071	2006
19ALT440072	1996
19ALT440073	2000
19ALT440076	2000
19ALT440078	1994
19ALT440079	2005
19ALT440080	1993

s/n	A/C MSN on which the part was installed at time of a/c date of manufacturing
19ALT440081	2004
19ALT440082	1990
19ALT440083	2001
20ALT440085	2002
20ALT440086	1990
20ALT440087	1990
20ALT440088	2006
20ALT440089	1995
20ALT440090	2005
20ALT440092	1994
20ALT440093	1996
20ALT440094	2002
20ALT440095	2002
20ALT440096	2002
20ALT440097	2001
20ALT440098	2000
20ALT440099	1992
20ALT440100	2003
20ALT440101	1991
20ALT440102	1992
20ALT440103	1993
20ALT440104	1993
20ALT440105	1992
20ALT440106	2001
20ALT440107	2000
20ALT440108	1991
20ALT440109	1990
20ALT440110	1992
20ALT440111	2001
20ALT440112	2003

s/n	A/C MSN on which the part was installed at time of a/c date of manufacturing
20ALT440113	2013
20ALT440114	2006
20ALT440115	1991
20ALT440116	1991