Airworthiness Directive

AD No.: 2020-0258

Issued: 18 November 2020

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):
A318, A319 and A320 aeroplanes

Effective Date: 02 December 2020

TCDS Number(s): EASA.A.064

Foreign AD: Not applicable

Supersedure: This AD supersedes EASA AD 2018-0136 dated 26 June 2018.

ATA 32 – Landing Gear – Main Landing Gear Sliding Tubes – Inspection

---

Manufacturer(s):
Airbus, formerly Airbus Industrie.

Applicability:
Airbus A318-111, A318-112, A318-121, A318-122, A319-111, A319-112, A319-113, A319-114, A319-115, A319-131, A319-132, A319-133, A320-211, A320-212, A320-214, A320-215, A320-216, A320-231, A320-232 and A320-233 aeroplanes, all manufacturer serial numbers.

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

The SB: Airbus Service Bulletin (SB) A320-32-1461.

The AOT: Airbus Alert Operators Transmission (AOT) A32N022-20.

Affected parts (first batch): Main landing gear (MLG) sliding tubes, having a part number (P/N) and serial number (s/n) as listed in Appendix 1 of this AD, that have been last overhauled between 27 October 2003 and 21 September 2009 inclusive.

Affected parts (second batch): MLG sliding tubes, having a P/N and s/n as listed in Appendix 2 of this AD, except those that have been overhauled after 05 January 2015.

Groups: Group 1 aeroplanes are those that have an affected part (first batch) installed.
Group 2 aeroplanes are those that have an affected part (second batch) installed.
Group 3 aeroplanes are those that do not have an affected part installed.

Note 1: Depending on aeroplane configuration, an aeroplane can be in Group 1 and Group 2.

Reason:

During a walk-around inspection, prior to aeroplane dispatch, an A320 MLG was found collapsed. Investigation revealed that, following a magnetic particle inspection of the MLG sliding tube, performed improperly during overhaul, cracks were initiated, eventually leading to fatigue fracture. A limited number of MLG sliding tubes were identified that may have been subject to the same improper inspection during the last overhaul.

This condition, if not detected and corrected, could lead to MLG sliding tube fracture, possibly resulting in MLG collapse, damage to the aeroplane, and injury to occupants.

To address this potential unsafe condition, Airbus issued the SB, providing instructions for repetitive general visual inspections (GVI) of the affected parts (first batch) until next overhaul, and EASA issued AD 2018-0136 to require those inspections and, depending on findings, replacement.

Since that AD was issued, additional parts have been identified, that may also have been subject to the same improper overhaul, and Airbus published the AOT, identifing the list of affected parts (second batch).

For the reasons described above, this AD retains the requirements of EASA AD 2018-0136, which is superseded, and additionally requires those actions on affected parts (second batch), as defined in this AD and, depending on findings, replacement.

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

Required as indicated, unless accomplished previously:

Inspection(s):

(1) For Group 1 and Group 2 aeroplanes: Within the compliance time specified in Table 1 of this AD, as applicable, and, thereafter, at intervals not to exceed 500 flight cycles (FC), accomplish a GVI of each affected part (first batch and second batch) in accordance with the instructions of the SB or the AOT, as applicable.

Table 1 – Initial GVI of Affected Parts

Group	Compliance Time
1	Within 500 FC after 10 July 2018 [the effective date of EASA AD 2018-0136]
2	Within 500 FC after the inspection in accordance with the instructions of Airbus AOT A32N020-20, or within 100 FC after the effective date of this AD, whichever occurs later (see Note 2 of this AD)

Note 2: For certain MLG sliding tubes, EASA AD 2020-0193 requires accomplishment of one-time inspection in accordance with the instructions of Airbus AOT A32N020-20.

Corrective Action(s):

(2) If, during any inspection as required by paragraph (1) of this AD, any crack is detected, before next flight, replace the affected part in accordance with the instructions of the SB or the AOT, as applicable.

Terminating Action:

(3) For Group 1 aeroplanes: Overhaul of an affected part (first batch) after 21 September 2009 constitutes terminating action for the repetitive GVI as required by paragraph (1) of this AD for that affected part.

(4) For Group 2 aeroplanes: Overhaul of an affected part (second batch) after 05 January 2015 constitutes terminating action for the repetitive GVI as required by paragraph (1) of this AD for that affected part.

(5) For Group 1 and Group 2 aeroplanes: Replacing each affected part (first and second batch) on an aeroplane with MLG sliding tubes that are not affected parts, as defined in this AD, constitutes terminating action for the repetitive GVI as required by paragraph (1) of this AD for that aeroplane, provided that, following replacement, no affected part is (re)installed on that aeroplane.

Credit:

(6) An aeroplane on which Airbus modification 161202 (EV MLG) has been embodied in production is not affected by the requirements of paragraphs (1) to (5) of this AD, provided it is determined that no affected parts (first or second batch) are installed on that aeroplane.

A review of aeroplane delivery and/or maintenance records is acceptable to make this determination, provided those records can be relied upon for that purpose and the P/N and s/n of the MLG sliding tube can be positively identified from that review.

Parts Installation:

(7) For Group 1 and Group 2 aeroplanes: From the effective date of this AD, it is allowed to install on any aeroplane an affected part, or an MLG equipped with an affected part (first or second batch), provided that, within the last 500 FC before installation, the part passed an inspection in accordance with the instructions of the SB or the AOT, as applicable, and that, following installation, the part is inspected as required by this AD.

(8) For Group 3 aeroplanes: From the effective date of this AD, do not install on any aeroplane an affected part (first or second batch).

Ref. Publications:

Airbus SB A320-32-1461 original issue dated 11 April 2018.

Airbus AOT A32N22-20-00 original issue dated 15 October 2020, or Revision 01 dated 16 November 2020.

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. Based on the required actions and the compliance time, EASA have decided to issue a Final AD with Request for Comments, postponing the public consultation process until after publication.

3. Enquiries regarding this AD should be referred to the EASA Programming and Continued Airworthiness 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 – Airworthiness Office – IIASA; E-mail: account.airworth-eas@airbus.com.

Appendix 1
Affected parts (first batch): P/N and s/n (see Note 3 of this AD)

Part number	Serial number	Part number	Serial number	Part number	Serial number
201160302	1071	201371302	B198-4649	201371304	B0544888
201160302	1116B	201371302	B274-4849	201371304	B0751922
201160302	73B	201371302	B225-4715	201371304	B1392028
201160302	1309B	201371302	B228-4755	201371304	B1655066
201160302	1024B	201371302	1801B	201371304	B1025007
201160302	64B	201371302	4441B	201371304	B994937
201160324	B2414670	201371302	B197-4656	201371304	B019-05
201160324	B013-4846	201371302	B210-4687	201371304	B1261991
201160324	B235-4749	201371302	B227-4697	201371304	B123-4994
201160324	1321B	201371302	SS4353B	201371304	B0334860
201160324	MAL1161	201371302	SS4375	201371304	B0234843
201160324	1057	201371304	B168-1948	201371304	B0364875
201160324	MAL-1315	201371304	B951935	201371304	B042-1899
201160324	12088	201371304	B003-4830	201371304	B554896
201160324	1693B	201371304	B005-4815	201371304	B0474885
201371302	B2584800	201371304	B006-4819	201371304	B0494851
201371302	B210-4684	201371304	B0181916	201371304	B0924936
201371302	B196-1879	201371304	B0211889	201371304	B1064967
201371302	B241-4668	201371304	B0311902	201371304	B1054968
201371302	B264-4787	201371304	B026-1895	201371304	B1081962
201371302	B265-4808	201371304	B029-1904	201371304	B013-4845
201371302	B2564777	201371304	B006-4829	201371304	B0374865
201371302	B2704816	201371304	B0281900	201371304	B1194983
201371302	B196-1880	201371304	B0254853	201371304	B4675255
201371302	B2714811	201371304	B0271893	201371304	B1111974
201371302	B229-4729	201371304	B0321906		
201371302	B261-4810	201371304	B003-4821		
201371302	B2724797	201371304	B009-4818		

Note 3: serial numbers starting with ‘B’ may, or may not include a dash ‘-‘. This dash does not effectively alter the s/n reference in this AD.

Appendix 2
Affected parts (second batch): P/N and s/n (see Note 3 of this AD)

Part number	Serial number
201160302	MAL1367
201160302	1752B
201160302	4446B
201160324	1269B
201160324	MAL1461
201160324	1717B
201371304	B3505136 or B350-5136 (*)
201371304	B6302347 or B630-2347 (*)
201371304	B5995328 or B599-5328 (*)
201371304	B5915314 or B591-5314 (*)
201371304	B3805234 or B380-5234 (*)
201371304	B7292426 or B729-2426 (*)
201371304	B8435400 or B843-5400 (*)
201371304	B8962511 or B896-2511 (*)
201371304	B8942512 or B894-2512 (*)
201371304	B9852613 or B985-2613 (*)
201371304	B21633412 or B2163-3412 (*)
201371304	B21543372 or B2154-3372 (*)
201371304	B1044964 or B104-4964 (*)
201371304	B904947 or B90-4947 (*)
201371304	B302514151 or B3025-14151 (*)
201371304	B15162900 or B1516-2900 (*)
201371304	B3112075 or B311-2075 (*)
201371304	B22128152 or B2212-8152 (*)
201371304	B22313425 or B2231-3425 (*)
201371304	B18898063 or B1889-8063 (*)
201371304	B20693352 or B2069-3352 (*)

(*) Parts could have been identified with or without a dash in the s/n.