

EASA	AIRWORTHINESS DIRECTIVE
	<p>AD No.: 2011-0069R1</p> <p>Date: 11 April 2012</p> <p>Note: This Airworthiness Directive (AD) is issued by EASA, acting in accordance with Regulation (EC) No 216/2008 on behalf of the European Community, its Member States and of the European third countries that participate in the activities of EASA under Article 66 of that Regulation.</p>
<p>This AD is issued in accordance with EC 1702/2003, Part 21A.3B. In accordance with EC 2042/2003 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 [EC 2042/2003 Annex I, Part M.A.303] or agreed with the Authority of the State of Registry [EC 216/2008, Article 14(4) exemption].</p>	
<p>Type Approval Holder's Name :</p> <p>AIRBUS</p>	<p>Type/Model designation(s) :</p> <p>A318, A319, A320 and A321 aeroplanes</p>
TCDS Number :	EASA.A.064
Foreign AD :	Not applicable
Revision:	This AD revises EASA AD 2011-0069 dated 18 April 2011, which superseded EASA AD 2006-0112R1 dated 17 October 2008.
ATA 32	Landing Gear – Main Landing Gear (MLG) Door Actuator – Monitoring / 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, A320-111, A320-211, A320-212, A320-214, A320-215, A320-216, A320-231, A320-232, A320-233, A321-111, A321-112, A321-131, A321-211, A321-212, A321-213, A321-231 and A321-232 aeroplanes, all manufacturer serial numbers, if equipped with MLG door actuators having Part Number (P/N) 114122006, P/N 114122007, P/N 114122009, P/N 114122010, P/N 114122011 or P/N 114122012.
Reason:	<p>Some operators reported slow operation of the MLG door opening/closing sequence, leading to the generation of ECAM warnings during the landing gear retraction or extension sequence.</p> <p>Investigations showed that the damping ring and associated retaining ring of the MLG door actuator deteriorate. The resultant debris increases the friction inside the actuator which can be sufficiently high to restrict opening of the MLG door by gravity, during operation of the landing gear alternate (free-fall) extension system.</p> <p>This condition, if not corrected, could prevent the full extension and/or downlocking of the MLG, possibly resulting in MLG collapse during landing or rollout and consequent damage to the aeroplane and injury to occupants.</p> <p>EASA AD 2006-0112R1 was issued to require repetitive inspections of the opening sequence of the MLG door in order to identify the defective actuators,</p>

	<p>and to introduce as an optional terminating action Airbus production Modification 38274 and associated Service Bulletin (SB) A320-32-1338, which incorporate an improved retaining ring, located on the piston rod's extension end, and a new piston rod with machined shoulder to accommodate the thicker section of the modified retaining ring.</p> <p>After in-service introduction of the new MLG door actuator, P/N 114122012, several operators reported failures of internal parts of the MLG door actuator. Investigations confirmed that these failures could result in slow extension of the actuator rod, delaying the MLG Door operation, or possibly stopping just before the end of the stroke, preventing the door to reach the fully open position.</p> <p>To address this potential unsafe condition, EASA issued AD 2011-0069, which superseded EASA AD 2006-0112R1, to require an amendment of the applicable Airplane Flight Manual (AFM), repetitive checks of specific Centralized Fault Display System (CFDS) messages, repetitive inspections of the opening sequence of the MLG door actuator and, depending on findings, corrective action(s).</p> <p>This AD is revised to recognise that accomplishment of repetitive inspections and corrective actions in accordance with the instructions of Airbus SB A320-32-1390 Revision 01 is an acceptable alternative method to comply with certain actions required by this AD.</p>
Effective Date:	<p>Revision 1: 25 April 2012</p> <p>Original Issue: 02 May 2011</p>
Required Action(s) and Compliance Time(s):	<p>Required as indicated, unless already accomplished:</p> <p><u>Operational procedure</u></p> <p>Note: This operational procedure has been introduced in the global AFM revision approved by EASA on 04 April 2011.</p> <p>(1) Within 14 days after 02 May 2011 [the effective date of the original issue of this AD], amend the applicable AFM to incorporate the following operational procedure, and operate the aeroplane accordingly :</p> <ul style="list-style-type: none"> • If ECAM triggers the "L/G GEAR NOT DOWNLOCKED" warning, apply the following procedure: <i>Recycle landing gear.</i> • If unsuccessful after 2 min: <i>Extend landing gear by gravity. Refer to ABN-32 L/G GRAVITY EXTENSION.</i> <p>Inserting a copy of this AD into the AFM is an acceptable method to comply with the requirement of paragraph (1) of this AD.</p> <p><u>Post Flight Report (PFR) Monitoring</u></p> <p>(2) Within 14 days after 02 May 2011 [the effective date of the original issue of this AD], or before the accumulation of 800 flight cycles (FC) since the aeroplane first flight, whichever occurs later, monitor the Post Flight Report (PFR) to check the CFDS messages triggered during the last 8 calendar days, in accordance with the instructions of paragraph 4.2.1 of Airbus All Operator Telex (AOT) A320-32A1390.</p> <p>(3) Thereafter, at intervals not to exceed 8 calendar days or 5 FC, whichever occurs later, check the CFDS messages recorded during each interval, in accordance with the instructions of paragraph 4.2.1 of Airbus AOT A320-32A1390.</p> <p>(4) If, during any of the PFR monitoring checks as required by paragraphs (2) and (3) of this AD, a pair of the specific CFDS messages as listed in paragraph 4.2.1 of Airbus AOT A320-32A1390 has been triggered by</p>

	<p>both Landing Gear Control and Indication Units (LGCIU) for the same flight, before next flight, inspect the door opening sequence of the affected doors of the MLG in accordance with the instructions of paragraph 4.2.2 of Airbus AOT A320-32A1390.</p> <p>(5) The use of an alternative method to check the list of CFDS messages (such as AIRMAN) is acceptable in lieu of the PFR monitoring required by paragraphs (2) and (3) of this AD, provided that this alternative method has been approved by the National Authority of the State of Registry of the aeroplane and that the list of the CFDS messages can be conclusively identified from that check.</p> <p><u>MLG Door Actuators Opening Sequence Inspection</u></p> <p>(6) Within 800 FC after 02 May 2011 [the effective date of the original issue of this AD] and thereafter at intervals not to exceed 425 FC, inspect the door opening sequence of the LH and RH doors of the MLG in accordance with the instructions of paragraph 4.2.2 of Airbus AOT A320-32A1390.</p> <p>(7) If, during any inspection as required by paragraphs (4) or (6) of this AD, as applicable, any discrepancy is found, before next flight, replace the affected MLG door actuator in accordance with the instructions of Airbus AOT A320-32A1390.</p> <p>(8) Replacement of the MLG door actuator as required by paragraph (7) of this AD, or corrective actions as specified in paragraph (9) of this AD, as applicable, does not constitute terminating action for the repetitive PFR monitoring as required by paragraph (3) of this AD, nor for the repetitive inspections as required by paragraph (6) of this AD, or as specified in paragraph (9) of this AD, as applicable.</p> <p>(9) Accomplishment of the MLG door opening sequence inspections and corrective actions in accordance with the instructions of Airbus SB A320-32-1390 at Revision 01 constitutes an acceptable alternative method to comply with the requirements of paragraphs (4), (6) and (7) of this AD, as applicable.</p>
Ref. Publications:	<p>Airbus AOT A320-32A1390 original issue dated 10 February 2011.</p> <p>Airbus SB A320-32-1390 Revision 01 dated 21 September 2011.</p> <p>The use of later approved revisions of these documents is acceptable for compliance with the requirements of this AD.</p>
Remarks :	<ol style="list-style-type: none"> 1. If requested and appropriately substantiated, EASA can approve Alternative Methods of Compliance for this AD. 2. The required actions and the risk allowance have granted the issuance of a Final AD with Request for Comments, postponing the public consultation process after publication. 3. Enquiries regarding this AD should be referred to the Safety Information Section, Executive Directorate, EASA. E-mail ADs@easa.europa.eu. 4. For any question concerning the technical content of the requirements in this AD, please contact: AIRBUS – Airworthiness Office – EIAS, Fax +33 5 61 93 44 51, E-mail: account.airworth-eas@airbus.com.