


EASA	EMERGENCY AIRWORTHINESS DIRECTIVE	
	AD No.: 2014-0238-E	
	Date: 31 October 2014	
<p>Note: This Emergency 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 EU 748/2012, Part 21.A.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>		
Design Approval Holder's Name:		Type/Model designation(s):
AGUSTAWESTLAND S.p.A.		A109, AW109, A119 and AW119 helicopters
TCDS Number:	EASA.R.005	
Foreign AD:	Not applicable	
Supersedure:	None	
ATA 63	Main Rotor Drive – Main Gear Box Support Assembly Nuts – Inspection / Replacement	
Manufacturer(s):	AgustaWestland S.p.A (formerly Agusta S.p.A.), AgustaWestland Philadelphia Corporation (formerly Agusta Aerospace Corporation).	
Applicability:	A109A, A109All, A109C, A109E, A109K2, A109LUH, A109S, AW109SP, A119 and AW119MKII helicopters.	
Reason:	<p>During scheduled maintenance on two AW109SP helicopters, cracks were found on one nut Part Number (P/N) MS21042L4 installed on the support assembly P/N 109-0110-53-1 of the Main Gear Box (MGB).</p> <p>Subsequent investigations showed that the cracks are the result of a production deficiency (causing hydrogen embrittlement) at the nut supplier. The affected nuts are installed on A109, AW109, A119 and AW119 helicopter models.</p> <p>This condition, if not detected and corrected, could lead to detachment of the support assembly from the MGB, possibly resulting in reduced control of the helicopter.</p> <p>To address this unsafe condition, AgustaWestland issued Bolletino Tecnico (BT) 109-138 rev. A, BT 109K-62 rev. A, BT 109L-075 rev. A, BT 109EP-135 rev. A, BT 109S-60 rev. A, BT 109SP-080 rev. A and BT 119-068 rev. A, to provide instructions for inspection and replacement of nuts on helicopters which are potentially affected.</p> <p>For the reasons described above, this AD requires a one-time inspection of the four nuts installed on the support assembly of the MGB and replacement of the nuts with serviceable parts.</p>	
Effective Date:	04 November 2014	

<p>Required Action(s) and Compliance Time(s):</p>	<p>Required as indicated, unless accomplished previously:</p> <ol style="list-style-type: none"> (1) Within 5 flight hours (FH) after the effective date of this AD, inspect the four nuts connecting the support assembly P/N 109-0110-53-1 with the MGB for cracks and, if any crack is found, before next flight, replace all four nuts P/N MS21042L4 with serviceable parts having P/N MS21043-4 in accordance with the instructions of AgustaWestland BT 109-138 rev. A, BT 109K-62 rev. A, BT 109L-075 rev. A, BT 109EP-135 rev. A, BT 109S-60 rev. A, BT 109SP-080 rev. A or BT 119-068 rev. A, as applicable to helicopter model. (2) Unless already accomplished as required by paragraph (1) of this AD, within 10 FH or 30 days, whichever occurs first after the effective date of this AD, replace each nut P/N MS21042L4 connecting the support assembly P/N 109-0110-53-1 with the MGB with a serviceable part having P/N MS21043-4 in accordance with the instructions of AgustaWestland BT 109-138 rev. A, BT 109K-62 rev. A, BT 109L-075 rev. A, BT 109EP-135 rev. A, BT 109S-60 rev. A, BT 109SP-080 rev. A or BT 119-068 rev. A, as applicable. (3) Inspection and nut replacement, accomplished before the effective date of this AD in accordance with the instructions of AgustaWestland BT 109-138, BT 109EP-135, BT 109K-62, BT 109L-075, BT 109S-60, BT 109SP-080 or BT 119-068 at original issue, as applicable, is acceptable to comply with the requirements of paragraph (1) or (2) of this AD, as applicable. (4) From the effective date of this AD, do not install a nut P/N MS21042L4 on the MGB support assembly on any helicopter.
<p>Ref. Publications:</p>	<p>AgustaWestland BT 109-138, original issue dated 28 October 2014 or rev. A dated 30 October 2014 (for A109 A, A109 All and A109 C helicopters).</p> <p>AgustaWestland BT 109EP-135, original issue dated 28 October 2014 or rev. A dated 30 October 2014 (for A109 E helicopters).</p> <p>AgustaWestland BT 109K-62, original issue dated 28 October 2014 or rev. A dated 30 October 2014 (for A109 K2 helicopters).</p> <p>AgustaWestland BT 109L-075, original issue dated 28 October 2014 or rev. A dated 30 October 2014 (for A109 LUH helicopters).</p> <p>AgustaWestland BT 109S-60, original issue dated 28 October 2014 or rev. A dated 30 October 2014 (for A109 S helicopters).</p> <p>AgustaWestland BT 109SP-080, original issue dated 28 October 2014 or rev. A dated 30 October 2014 (for AW109SP helicopters).</p> <p>AgustaWestland BT 119-068, original issue dated 28 October 2014 or rev. A dated 30 October 2014 (for A119 and AW119 MKII helicopters).</p> <p>The use of later approved revisions of these documents is acceptable for compliance with the requirements of this AD.</p>
<p>Remarks:</p>	<ol style="list-style-type: none"> 1. If requested and appropriately substantiated, EASA can approve Alternative Methods of Compliance for this AD. 2. The results of the safety assessment have indicated the need for immediate publication and notification, without the full public consultation process. 3. Enquiries regarding this AD should be referred to the Safety Information Section, Certification Directorate, EASA. E-mail: ADs@easa.europa.eu. 4. For any question concerning the technical content of the requirements in this AD, please contact: Agusta S.p.A. Customer Support, Via del Gregge, 100 - 21015 Lonate Pozzolo (VA) – Italy Telephone: + 39 0331 664600; Fax: + 39 0331 664684 E-mail: custserv@agustawestland.com.