

EASA	AIRWORTHINESS DIRECTIVE
	AD No.: 2015-0186
	Date: 09 September 2015 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.
This AD is issued in accordance with EU 748/2012, Part 21.A.3B. In accordance with 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 [EU 1321/2014 Annex I, Part M.A.303] or agreed with the Authority of the State of Registry [EC 216/2008, Article 14(4) exemption].	
Design Approval Holder's Name: AGUSTAWESTLAND S.p.A.	Type/Model designation(s): AB212 and AB412 helicopters
TCDS Number: EASA.R.114	
Foreign AD: Not applicable	
Supersedure: None	
ATA 62	Main Rotor – Swashplate and Support Assembly Nuts – Inspection / Replacement
Manufacturer(s):	AgustaWestland S.p.A. (formerly Agusta S.p.A., Costruzioni Aeronautiche Giovanni Agusta)
Applicability:	AB412 and AB412EP helicopters, all serial numbers (S/N).
Reason:	During scheduled inspections on AB 412 helicopters, nuts P/N MS21042L4 installed on the swashplate and support assembly P/N 412-010-402-111 were found cracked. Subsequent technical investigation determined that the root cause for the crack was a production deficiency (causing hydrogen embrittlement) at the nut supplier. This condition, if not detected and corrected, could reduce the structural integrity of the swashplate and support assembly installation. To address this unsafe condition, AgustaWestland issued Bollettino Tecnico (BT) 412-143 providing instructions for inspection and nut replacement. Due to similarity in the design, nuts installed on support assemblies P/N 412-010-402-XXX (where “-XXX” can be any number) are potentially affected. For the reason described above, this AD requires repetitive inspections of all P/N MS21042L4 nuts installed on the swashplate and support assembly, and replacement of each nut with a serviceable part having a different P/N.
Effective Date:	15 September 2015

Required Action(s) and Compliance Time(s):	Required as indicated, unless accomplished previously: (1) Within 25 flight hours (FH) after the effective date of this AD and, thereafter, at intervals not to exceed 25 FH, inspect each nut P/N MS21042L4 installed on the swashplate and support assembly P/N 412-010-402-XXX in accordance with the instructions of AgustaWestland BT 412-143. (2) If, during any inspection as required by paragraph (1) of this AD, any nut P/N MS21042L4 is found cracked, before next flight, replace all nuts installed on the swashplate and support assembly with serviceable nuts P/N NAS1805-4, in accordance with the instructions of AgustaWestland BT 412-143. (3) Unless already accomplished as required by paragraph (2) of this AD, within 3 months after the effective date of this AD, replace all nuts P/N MS21042L4 installed on the swashplate and support assembly P/N 412-010-402-XXX with serviceable nuts P/N NAS1805-4, in accordance with the instructions of AgustaWestland BT 412-143. (4) Replacement of all swashplate and support assembly nuts on a helicopter as required by paragraph (2) or (3) of this AD, as applicable, constitutes terminating action for the repetitive inspections required by paragraph (1) of this AD for that helicopter. (5) Do not install a nut having a P/N MS21042L4 on the swashplate and support assembly P/N 412-010-402-XXX of any helicopter as required by paragraph (5.1) or (5.2) of this AD, as applicable. (5.1) For helicopters that, on the effective date of this AD, have nuts P/N MS21042L4 installed on the swashplate and support assembly: after nut replacement, as required by paragraph (2) or (3) of this AD, as applicable. (5.2) For helicopters that, on the effective date of this AD, do not have nuts P/N MS21042L4 installed on the swashplate and support assembly: from the effective date of this AD.
Ref. Publications:	AgustaWestland BT 412-143 original issue, dated 07 September 2015. The use of later approved revisions of this 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. 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 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: AgustaWestland S.p.A., Customer Support & Services – Italy Product Support Engineering DPT, via Giovanni Agusta 520, 21017 Cascina Costa di Samarate (VA) – Italy Tel.: +39 0331 711439, Fax: +39 0331 225988, E-mail: absereng@agustawestland.com.