

EASA	AIRWORTHINESS DIRECTIVE
	AD No.: 2015-0054
	Date: 27 March 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): A109 and AW109 helicopters
TCDS Number: EASA.R.005	
Foreign AD: Not applicable	
Supersedure: None	
ATA 65	Tail Rotor Drive – Drive Shaft Assembly – Inspection / Replacement
Manufacturer(s):	AgustaWestland S.p.A (formerly Agusta S.p.A.)
Applicability:	A109A helicopters, all serial numbers (S/N) if modified in service by installation of retrofit kit 109-0820-27-101 (AgustaWestland Bolletino Tecnico (BT) 109-045), A109AII, A109C, A109E, A109K2, A109LUH, A109S and AW109SP helicopters, all S/N.
Reason:	During a scheduled servicing of an A109S helicopter, three cracks were found on the tail rotor (TR) drive shaft assembly. Subsequent technical investigation determined that fatigue failure of the shaft could not have caused this cracking. The actual cause has not yet been identified. This condition, if not detected and corrected, could lead to failure of the TR, possibly resulting in loss of control of the helicopter. To address this unsafe condition, AgustaWestland issued instructions for an inspection of the TR drive shaft assembly. For the reason described above, this AD requires a one-time inspection of the TR drive shaft assembly and, if cracks are found, replacement of each affected assembly with a serviceable unit.
Effective Date:	10 April 2015

Required Action(s) and Compliance Time(s):	Required as indicated, unless accomplished previously: (1) Within 50 flight hours or 3 months, whichever occurs first after the effective date of this AD, accomplish a one-time inspection of the TR drive shaft assembly Part Number (P/N) 109-8412-02-1 or P/N 109-8412-02-3, as applicable, in accordance with the instructions of AgustaWestland BT 109-147, BT 109EP-143, BT 109K-68, BT 109L-81, BT 109S-067 or BT 109SP-094, as applicable to helicopter model. (2) If, during the inspection as required by paragraph (1) of this AD, any crack is found, before next flight, replace the affected TR drive shaft assembly with a serviceable unit in accordance with the instructions of AgustaWestland BT 109-147, BT 109EP-143, BT 109K-68, BT 109L-81, BT 109S-067 or BT 109SP-094, as applicable to helicopter model.
Ref. Publications:	AgustaWestland BT 109-147 original issue dated 25 March 2015. AgustaWestland BT 109EP-143 original issue dated 25 March 2015. AgustaWestland BT 109K-68 original issue dated 25 March 2015. AgustaWestland BT 109L-81 original issue dated 25 March 2015. AgustaWestland BT 109S-067 original issue dated 25 March 2015. AgustaWestland BT 109SP-094 original issue dated 25 March 2015. The use of later approved revisions of these 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 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: AW109.mbx@agustawestland.com.