EASA	AIRWORTHINESS DIRECTIVE
	AD No.: 2013-0187 **Date: 16 August 2013** 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 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].

Design Approval Holder's Name:	**Type/Model designation(s):**
AgustaWestland S.p.A	AB 412 helicopters

TCDS Number:	ENAC Italy SO/A 375
Foreign AD:	Not applicable
Supersedure:	None

ATA 66	**Power Train – Rotor Brake Pinion – Inspection / Replacement**
Manufacturer(s):	AgustaWestland S.p.A (formerly Agusta S.p.A.).
Applicability:	AB412 and AB412EP helicopters, all serial numbers.
Reason:	One case of a cracked pinion, part number (P/N) 412-040-301-101, installed in the Rotor Brake Quill P/N 412-040-123-103 of an Agusta AB412 helicopter, has been reported. This crack was discovered through a magnetic inspection accomplished during a scheduled overhaul of the rotor brake quill. The results of the investigation revealed that this crack was due to residual stress, generated during the pinion manufacturing process. AgustaWestland is working to identify the cause of stress, with the aim to modify this manufacturing process. This condition, if not detected and corrected, could lead to the failure of the pinion with detachment of parts inside the transmission that could cause its malfunction or jamming, finally resulting in loss of control of the helicopter. To address this potential unsafe condition, AgustaWestland issued Bollettino Tecnico (BT) 412-135 to provide instructions for a one-time inspection of the rotor brake pinion. For the reasons described above, this AD requires a magnetic particle inspection (MPI) of the rotor brake pinion and, depending on findings, replacement with a serviceable part.

Effective Date:	30 August 2013
Required Action(s) and Compliance Time(s):	Required as indicated, unless accomplished previously: (1) Within 100 flight hours or 5 months, whichever occurs first after the effective date of this AD, for a rotor brake quill assembly P/N 412-040-123-103 which has never been overhauled, accomplish a MPI of the rotor brake pinion P/N 412-040-301-101 in accordance with the instructions of AgustaWestland BT 412-135 Rev. A. (2) If, during the inspection as required by paragraph (1) of this AD, a crack is detected, before next flight, replace the rotor brake pinion P/N 412-040-301-101 with a serviceable part in accordance with the instructions of AgustaWestland BT 412-135 Rev. A. (3) From the effective date of this AD, installation on a helicopter of a rotor brake pinion P/N 412-040-301-101 is allowed, provided it is new, or it is overhauled, or it has passed the inspection in accordance with the instructions of AgustaWestland BT 412-135 Rev. A.
Ref. Publications:	AgustaWestland BT 412-135 Rev. A dated 29 July 2013. 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, 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: AgustaWestland S.p.A. Customer Support Via del Gregge, 100 - 21015 Lonate Pozzolo (VA) – Italy Telephone + 39 0331-664873 ; Fax: + 39 0331-664680 E-mail: absereng@agustawestland.com.