


EASA	AIRWORTHINESS DIRECTIVE
	AD No: 2006 - 0163 Date: 09 June 2006
No person may operate an aircraft to which an Airworthiness Directive applies, except in accordance with the requirements of that Airworthiness Directive unless otherwise agreed with the Authority of the State of Registry.	
Type Approval Holder's Name: EUROCOPTER	Type/Model designation(s): AS 332 L2 and EC 225 LP
TCDS Number: EASA.R.002	
Foreign AD: None	
Supersedes: None	
ATA 53	Fuselage – Main Gearbox (MGB) Suspension Bar Attaching Fittings
Manufacturer(s):	EUROCOPTER (formerly EUROCOPTER FRANCE)
Applicability:	AS 332 L2 and EC 225 LP helicopters.
Reason:	<p>This Airworthiness Directive (AD) is issued following analysis of the tightening torques, measured once on the helicopter fleet, in compliance with AD F-2005-118, which is now cancelled.</p> <p>The measurements that have been taken only on the bolts that secure the rear MGB bar attaching fittings, have revealed some cases of tightening torque loss and analysis now shows that it is necessary:</p> <ul style="list-style-type: none"> - to carry out the same check on the front fitting, - to introduce a routine check for all these fittings, the front fitting and the rear fittings. <p>In fact, significant loss of the tightening torque of the bolts that secure the MGB bar attaching fittings can lead to a change in the loading mode of frames 3855 and 5295, and can give rise to crack initiation at the MGB bar attaching fittings.</p> <p>Note: This AD supplements instructions already in force by EASA ADs 2006-0103-E (AS332 L2) and 2006-0102-E (EC225 LP) for check of the frame 5295.</p>

Effective Date:	23 June 2006
Compliance:	<p>The following measures are mandatory as from the effective date of this AD:</p> <ol style="list-style-type: none"> 1 – Check the tightening torque of the bolts that secure the front MGB bar attaching fitting, in compliance with the instructions specified in paragraph 2.B.1. of the referenced EUROCOPTER Alert Service Bulletin (ASB), corresponding to the helicopter version: <ol style="list-style-type: none"> 1.1. At the latest at the next 375-hour inspection for EC 225 LP helicopters. 1.2. No later than within 150 flying hours for AS 332 L2 helicopters. 2 – Check the tightening torque of the bolts that secure the front MGB bar attaching fitting and the rear RH and LH MGB bar attaching fittings, in compliance with the instructions specified in paragraph 2.B. of the referenced ASB, corresponding to the helicopter version: <ol style="list-style-type: none"> 2.1. At intervals not exceeding 375 flying hours for EC 225 LP helicopters. 2.2. At intervals not exceeding 825 flying hours for AS 332 L2 helicopters. 3 – Interpretation of the results concerning the bolts that secure the front MGB bar attaching fitting. <ol style="list-style-type: none"> 3.1. If the loss of the tightening torque of the nuts is less than or equal to 20% of the recommended minimum tightening torque, re-adjust the tightening torques, in compliance with the instructions specified in paragraph 2.B.3.a.1. of the referenced ASB, corresponding to the helicopter version. 3.2. If the loss of the tightening torque of at least one of the nuts of the fitting is more than 20% of the recommended minimum tightening torque, before resuming flights, comply with the instructions specified in paragraph 2.B.4. of the referenced ASB, corresponding to the helicopter version, in order to: <ul style="list-style-type: none"> - re-adjust the tightening torques of all the nuts that secure the mounting plate under the MGB bar attaching fitting, - check the four bolts that secure the MGB bar attaching fitting, for absence of cracks, and if there is a crack in at least one of the bolts: Replace the four bolts, - check that there is no crack in frame 3855, in the attachment area of the MGB bar attaching fitting, and if there is a crack: Suspend flights.

	<p>4 – Interpretation of the results concerning the bolts that secure the rear RH and LH MGB bar attaching fittings.</p> <p>4.1. If the loss of the tightening torque of the nuts is less than or equal to 20% of the recommended minimum tightening torque, re-adjust the tightening torques, in compliance with the instructions specified in paragraph 2.B.3.b.1. of the referenced ASB, corresponding to the helicopter version.</p> <p>4.2. If the loss of the tightening torque of at least one of the nuts of the fittings is more than 20% of the recommended minimum tightening torque, before resuming flights, comply with the instructions specified in paragraph 2.B.5. of the referenced ASB, corresponding to the helicopter version, in order to:</p> <ul style="list-style-type: none"> - re-adjust the tightening torques of all the nuts of the mounting plates under the MGB bar attaching fittings, - check the four bolts that secure the MGB bar attaching fittings, for absence of cracks, and if there is a crack in at least one of the bolts: Replace the four bolts, - check that there is no crack in frame 5295, in the attachment areas of the MGB bar attaching fittings, and if there is a crack: Suspend flights.
Ref. Publications:	<p>EUROCOPTER EC 225 Alert Service Bulletin No. 05A002. EUROCOPTER AS 332 Alert Service Bulletin No. 05.00.65. or later approved revisions.</p>
Remarks:	<ol style="list-style-type: none"> 1. If requested and appropriately substantiated the responsible EASA manager for the related product has the authority to accept Alternative Method of Compliance (AMOCs) for this AD. 2. This AD was posted as PAD 06-083 for consultation on 5 April 2006 with a comment period until 19 April 2006. No comment was raised during consultation period. 3. Enquiries regarding this Airworthiness Directive should be referred to Mr. M. Capaccio, Airworthiness Directive Focal Point - Certification Directorate, EASA. E-mail: ADs@easa.europa.eu . 4. For any questions concerning the technical content of the requirements in this AD, please contact: EUROCOPTER (STXI) - Aéroport de Marseille Provence 13725 Marignane Cedex - France. Ph.: + 33 (0) 4 42 85 97 97 - Fax: + 33 (0) 4 42 85 99 66. E-mail: Directive.technical-support@eurocopter.com