

EASA	AIRWORTHINESS DIRECTIVE	
	<p>AD No: 2006-0163 R1</p> <p>Date: 13 December 2007</p>	
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:		Type/Model designation(s):
EUROCOPTER		AS 332 L2 and EC 225 LP helicopters
TCDS Number: EASA R.002		
Foreign AD: Not applicable		
Revision: This Airworthiness Directive (AD) revises and replaces EASA AD 2006-0163 dated 09 June 2006.		
ATA 53	Fuselage – Main Gearbox (MGB) Suspension Bar Attachment Fittings – Checks	
Manufacturer(s):	EUROCOPTER (formerly EUROCOPTER FRANCE)	
Applicability:	AS 332 L2 and EC 225 LP helicopters, all serial numbers.	
Reason:	<p>EASA Airworthiness Directive (AD) 2006-0163 was issued following analysis of the tightening torques, measured once on the helicopter fleet as required by DGAC France AD F-2005-118, now no longer valid. The measurements that were taken only on the bolts that secure the rear MGB bar attaching fittings revealed some cases of tightening torque loss and further analysis showed that it is necessary to carry out the same check on the front fitting and introduce a routine check for all these fittings, the front fitting and the rear fittings. 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>Following tests and calculations, the interval for checking/tightening the torque of front and rear MGB bar attaching fitting attachment bolts has been extended for EC 225 LP helicopters. Consequently, AD 2006-0163 has been revised to allow these checks to be made at intervals not exceeding 825 Flight Hours (FH) instead of 375 FH.</p> <p>Note: This AD supplements instructions required by EASA ADs 2006-0103 R1 (AS 332 L2) and 2006-0102 R1 (EC 225 LP).</p>	
Effective Date:	23 June 2006	

<p>Compliance:</p>	<p>Required as indicated, unless accomplished previously:</p> <ol style="list-style-type: none"> 1 – Check the tightening torque of the bolts that secure the front MGB bar attaching fitting in accordance with the instructions specified in paragraph 2.B of the referenced EUROCOPTER Alert Service Bulletin (ASB), corresponding to the helicopter version: <ol style="list-style-type: none"> 1.1. For EC 225 LP helicopters: At the next scheduled 750-hour inspection after the effective date of this AD, not exceeding 825 FH. 1.2. For AS 332 L2 helicopters: Within 150 FH after the effective date of this AD. 2 – Thereafter, at intervals not to exceed 825 FH, 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 accordance with the instructions specified in paragraph 2.B of the referenced ASB, corresponding to the helicopter version. 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 accordance 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 next flight, accomplish 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>Note: Contact EUROCOPTER for determining how to manage flights resumption depending on observed crack conditions. Any subsequent approved corrective action (e.g. repair or replacement of the frame) does not terminate the repetitive inspection requirements of § 2 of this AD.</p> 4 – Interpretation of the results concerning the bolts that secure the rear RH and LH MGB bar attaching fittings. <ol style="list-style-type: none"> 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 accordance with the instructions specified in paragraph 2.B.3.b.1 of the referenced ASB, corresponding to the helicopter version. 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 next flight, accomplish the instructions specified in paragraph 2.B.5 of the referenced ASB, corresponding to the
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	<p>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. <p>Note: Contact EUROCOPTER for determining how to manage flights resumption depending on observed crack conditions. Any subsequent approved corrective action (e.g. repair or replacement of the frame) does not terminate the repetitive inspection requirements of § 2 of this AD.</p>
<p>Ref. Publications:</p>	<p>EUROCOPTER EC 225 Alert Service Bulletin No. 05A002 Revision 1; and EUROCOPTER AS 332 Alert Service Bulletin No. 05.00.65, as applicable.</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 accept Alternative Method of Compliance for this AD. 2. The original issue of this AD was posted as PAD 06-083 on 5 April 2006 for consultation until 19 April 2006. No comments were received during the consultation period. 3. Enquiries regarding this AD should be referred to the AD 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; Telephone: + 33 (0) 4 42 85 97 97 - Fax: + 33 (0) 4 42 85 99 66; E-mail: Directive.technical-support@eurocopter.com