

EASA	AIRWORTHINESS DIRECTIVE
	AD No.: 2014-0143 Date: 04 June 2014 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: AIRBUS HELICOPTERS	Type/Model designation(s): AS 332 L2 helicopters
TCDS Number:	EASA.R.002
Foreign AD:	Not applicable
Supersedure:	None
ATA 63	Rotor Drive(s) – Main Gear Box / Emergency Lubrication Pump – Replacement
Manufacturer(s):	Airbus Helicopters (formerly Eurocopter, Eurocopter France, Aerospatiale).
Applicability:	AS 332 L2 helicopters, all serial numbers, if equipped with Parker emergency lubrication pump part number (P/N) 31-75103-4035-5 (704A44313030), all serial number, in the Main Gearbox (MGB).
Reason:	Following replacement of original double threshold pressure switch P/N MA161-00 of the MGB emergency lubrication system with Thales pressure transmitter P/N 4279-508-2, several in-flight failures of this new Thales sensor were reported. The investigation identified that the root cause of Thales pressure transmitter failures was associated with MGB Parker emergency lubrication pump P/N 31-75103-4035-5 (704A44313030), with which all the affected helicopters were equipped. Oil pressures delivered by that pump exhibit unexpected variations leading to some dynamic fluctuations in the MGB emergency lubrication circuit that eventually damaged the Thales pressure transmitter. The investigation also determined that there was no such detrimental pressure variations with the Test-Fuchs MGB emergency lubrication pump that is an alternative replacement part to the Parker emergency lubrication pump P/N 31-75103-4035-5 (704A44313030). Moreover, it was confirmed that pressure variations of the Parker pump are uneventful with the former MGB double threshold pressure switch. This condition, if not corrected, could lead to MGB oil leakage and subsequent total loss of MGB lubrication resulting in immediate emergency landing or

	ditching of the helicopter. To address the potential unsafe condition, Airbus Helicopters developed modification MOD 0753037 for the Parker pump and issued Alert Service Bulletin (ASB) AS332-01.00.84 to provide instructions for in-service replacement of the pump. For the reasons described above, this AD requires replacement of the Parker emergency lubrication pump with either modified Parker pump or Test-Fuchs pump.						
Effective Date:	11 June 2014						
Required Action(s) and Compliance Time(s):	Required as indicated, unless accomplished previously: (1) Within the compliance time as indicated in Table 1 of this AD, replace the installed Parker emergency lubrication pump P/N 31-75103-4035-5 (704A44313030) with a modified Parker emergency lubrication pump P/N 31-75103-4051-5 (704A44313034) or with a Test-Fuchs emergency lubrication pump P/N 177590 (704A44313032) in accordance with the instructions of Airbus Helicopters ASB AS332-01.00.84. Note 1: Thales pressure transmitter P/N 64279-508-2 are installed on helicopters modified in accordance with Airbus Helicopters MOD 0752521 or SB AS332-63.00.69. Note 2: Parker emergency lubrication pump P/N 31-75103-4035-5 (704A44313030) may be modified and re-identified as P/N 31-75103-4051-5 (704A44313034) in accordance with the instructions of Airbus Helicopters SB AS332-63.00.75. Table 1 Compliance Time <table border="1"> <thead> <tr> <th>Helicopter configuration</th><th>Compliance time after the effective date of this AD</th></tr> </thead> <tbody> <tr> <td>Helicopter equipped with Thales pressure transmitter P/N 64279-508-2</td><td>Within 110 flight hours</td></tr> <tr> <td>Helicopter equipped with double threshold pressure switch P/N MA161-00</td><td>Within 12 month</td></tr> </tbody> </table> (2) From the effective date of this AD, do not install Parker emergency lubrication pump P/N 31-75103-4035-5 (704A44313030) on a helicopter, unless in compliance with the requirements of this AD.	Helicopter configuration	Compliance time after the effective date of this AD	Helicopter equipped with Thales pressure transmitter P/N 64279-508-2	Within 110 flight hours	Helicopter equipped with double threshold pressure switch P/N MA161-00	Within 12 month
Helicopter configuration	Compliance time after the effective date of this AD						
Helicopter equipped with Thales pressure transmitter P/N 64279-508-2	Within 110 flight hours						
Helicopter equipped with double threshold pressure switch P/N MA161-00	Within 12 month						
Ref. Publications:	Airbus Helicopters ASB AS332-01.00.84 original issue, dated 28 May 2014. Airbus Helicopters SB AS332-63.00.75 original issue, dated 28 May 2014. The use of later approved revisions of these documents is acceptable for compliance with the requirements of this AD.						
Remarks:	- If requested and appropriately substantiated, EASA can approve Alternative Methods of Compliance for this AD. - 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. - Enquiries regarding this AD should be referred to the Safety Information Section, Executive Directorate, EASA. E-mail: ADs@easa.europa.eu. - For any question concerning the technical content of the requirements in						

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