EASA

EMERGENCY AIRWORTHINESS DIRECTIVE

AD No.: 2012-0019-E

Date: 26 January 2012

Note: This Emergency 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 EC 1702/2003, Part 21A.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].

Type Approval Holder's Name:		Type/Model designation(s):	
BRP-Powertrain GmbH & Co. KG		Rotax 912 S2, 912 S3 and 914 F2 engines	
TCDS Numbers :	EASA.E.121, EASA.E.122		
Foreign AD :	Not applicable		
Supersedure :	None		
ATA 78	Engine Oil – Oil Pump and Attachment Bolts – Inspection		
Manufacturer(s):	BRP-Powertrain GmbH & Co. KG, BRP-Rotax GmbH & Co. KG; Bombardier- Rotax GmbH & Co. KG; Bombardier-Rotax GmbH		
Applicability:	 Rotax 912 S2 and 912 S3 engines, serial numbers (s/n) 4,924.287 to 4,924.295 inclusive, 4,924.300 to 4,924.304 inclusive, 4,924.342 to 4,924.350 inclusive, 4,924.352 and 4,924.353. Rotax 914 F2 engines, s/n 4,421.079, 4,421.080 and 4,421.081. These engines are known to be installed on, but not limited to, the following types of aeroplanes: 3-i Sky Arrow 650 TC, 650 TCN, 650 TCNS and 710 RG; Aeromot AMT-200 Super Ximango and AMT-300 Turbo Super Ximango; Aircraft Philipp (formerly Alpla-Werke; Nitsche) AVO 68 series Samburo; Aquila AT01; Cessna 150 and A150 series; and (Reims) F150 and FA150 series; Diamond (formerly HOAC) H 36 Dimona, HK 36 series Super Dimona, DV 20 Katana and DA20-A1 Katana; Evektor-Aerotechnik EV-97 VLA; Grob G 109; Issoire APM-20 Lionceau; Scheibe SF 36R and SF 25C; Stemme S10-VT; Tecnam P 92-J, P 92-JS and P2002-JF; W.D. Aircraft D4 Fascination. 		
	Note: The installation of these engines was either done by the respective aeroplane manufacturer or through modification of the aeroplane by Supplemental Type Certificate.		
Reason:	During a production quality review, a deviation in the assembly process of the oil pump attachment bolts has been detected, which may have resulted in a latent defect on a limited number of engines. The affected bolts may not have been tightened to the correct torque value, i.e. not in accordance with the specification.		

	 This condition, if not corrected, could lead to oil leaks and irregularities in the oil supply, possibly resulting in uncommanded in-flight engine shutdown and forced landing, damage to the aeroplane and injury to occupants. For the reasons described above, this AD requires a one-time inspection of the oil pump installation and a torque check of the oil pump attachment bolts and, depending on findings, corrective action(s). This AD also prohibits installation of an affected engine on an aeroplane, unless the oil pump installation and the attachment bolts of that engine have passed the inspection and torque check as required by this AD. 	
Effective Date:	27 January 2012	
Required Action(s) and Compliance Time(s)	 Required as indicated, unless accomplished previously: (1) Within 4 flight hours or 30 days, whichever occurs first after the effective date of this AD, accomplish an engine oil system inspection and a torque check of the oil pump attachment bolts, in accordance with the instructions of Section 3 of BRP-Powertrain Alert Service Bulletin (ASB) ASB-912-060 or ASB-914-043, as applicable to engine type. (2) If, during the inspection as required by paragraph (1) of this AD, discrepancies are detected, before next flight, accomplish all applicable (depending on findings) follow-on inspections and corrective actions in accordance with the instructions of Section 3 of BRP-Powertrain ASB-912-060 or ASB-914-043, as applicable to engine type. (3) From the effective date of this AD, do not install an engine, identified by s/n in the Applicability of this AD, on an aeroplane, unless that engine has been inspected as required by paragraph (1) of this AD and, depending on findings, corrected as required by paragraph (2) of this AD. 	
Ref. Publications:	BRP-Powertrain ASB-912-060 and ASB-914-043 (same document), dated 26 January 2012. The use of later approved revisions of this document 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. The safety assessment has requested not to implement the full consultation process and an immediate publication and notification. Enquiries regarding this AD should be referred to the Safety Information Section, Executive Directorate, EASA. E-mail <u>ADs@easa.europa.eu</u>. For any question concerning the technical aspects of the requirements in this AD, please contact: BRP-Powertrain GmbH & Co. KG Telephone: +43 7246 601 0; Fax: +43 7246 601 9130; E-mail: <u>airworthiness@brp.com</u>, Website <u>www.rotax-aircraft-engines.com.</u> 	