


<b>EASA</b>	<b>EMERGENCY AIRWORTHINESS DIRECTIVE</b>	
	<b>AD No.: 2013-0055-E</b>	
	<b>Date: 06 March 2013</b>	
<p>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.</p>		
<p>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].</p>		
<b>Design Approval Holder's Name:</b>		<b>Type/Model designation(s):</b>
BRP-POWERTRAIN GmbH & Co. KG		Rotax 912 and 914 engines
TCDS Number:	EASA.E.121 and EASA E.122	
Foreign AD:	Not applicable	
Supersedure:	None	
<b>ATA 72</b>	<b>Engine – Cylinder Head Section – Inspection / Replacement</b>	
Manufacturer(s):	BRP-Powertrain GmbH & Co. KG, BRP-Rotax GmbH & Co. KG; Bombardier-Rotax GmbH & Co. KG; Bombardier-Rotax GmbH	
Applicability:	<p>Rotax 912 A1, 912 A2, 912 A3 and 912 A4 engines, serial numbers (s/n) 4,410.965 through 4,410.976 inclusive.</p> <p>Rotax 912 F2, 912 F3 and 912 F4 engines, s/n 4,413.013 through 4,413.017 inclusive.</p> <p>Rotax 912 S2, 912 S3 and 912 S4 engines, s/n 4,924.468 through 4,924.491 inclusive.</p> <p>Rotax 914 F2, 914 F3 and 914 F4 engines, s/n 4,421.156 through 4,421.169 inclusive.</p> <p>These engines are known to be installed on, but not limited to, the following types of aeroplanes: <b>3-i</b> Sky Arrow 650 TC, 650 TCN, 650 TCNS and 710 RG; <b>Aeromot</b> AMT-200 Super Ximango and AMT-300 Turbo Super Ximango; <b>Aircraft Philipp</b> (formerly Alpa-Werke; Nitsche) AVO 68 series Samburo; <b>Aquila</b> AT01; <b>Cessna</b> 150 and A150 series and (<b>Reims</b>) F150 and FA150 series; <b>Diamond</b> (formerly HOAC) H 36 Dimona, HK 36 series Super Dimona, DV 20 Katana and DA20-A1 Katana; <b>Evektor-Aerotechnik</b> EV-97 VLA; <b>Grob</b> G 109; <b>Issoire</b> APM-20 Lionceau; <b>Scheibe</b> SF 36R and SF 25C; <b>Stemme</b> S10-VT; <b>Tecnam</b> P 92-J, P 92-JS, P2002-JR, P2002-JS and P2006T; <b>W.D. Aircraft</b> D4 Fascination.</p> <p><b>Note:</b> The installation of these engines was either done by the respective <b>aeroplane manufacturer</b> or through modification of the aeroplane by Supplemental Type Certificate.</p>	

Reason:	<p>During a production test run, a non-compliance of the installed cylinder head assembly of cylinder no. 2 and 3 (2/3) was detected, which may result in a latent defect on a limited number of engines. The affected cylinder heads may not have been manufactured in accordance with the specification.</p> <p>This condition, if not detected and corrected, could lead to an oil leak in the intake channel in the area of the valve guide. The affected non-conforming cylinder heads may have small machined through holes, which can increase the oil consumption and can lead to oil starvation, possibly resulting in engine stoppage or in-flight engine shutdown and forced landing, with consequent risk of damage to the aeroplane and injury to occupants.</p> <p>For the reasons described above, this AD requires inspection of the affected cylinder head assemblies and, depending on findings, replacement of the cylinder head assembly.</p> <p>This AD also prohibits installation of an affected engine on an aeroplane, unless the affected cylinder head assembly of that engine has passed the inspection as required by this AD.</p>
Effective Date:	08 March 2013
Required Action(s) and Compliance Time(s):	<p>Required as indicated, unless accomplished previously:</p> <ol style="list-style-type: none"> <li>(1) Within 5 flight hours or 20 days, whichever occurs first after the effective date of this AD, inspect the cylinder head assembly of cylinder no. 2 and 3 (2/3) in accordance with the instructions of Section 3 of BRP-Powertrain Alert Service Bulletin (ASB) ASB-912-062 or ASB-914-044 (published as a single document), as applicable to engine type.</li> <li>(2) If, during the inspection as required by paragraph (1) of this AD, excessive deposits (oil or carbon) are found on one of the spark plugs, before next flight, replace the affected cylinder head assembly with a serviceable one in accordance with the instructions of Section 3 of BRP-Powertrain ASB-912-062 or ASB-914-044, as applicable to engine type.</li> <li>(3) From the effective date of this AD, do not install any affected engine (type and s/n as listed in the Applicability section of this AD) on an aeroplane, unless that engine has been inspected and, depending on findings, corrected as required by this AD.</li> </ol>
Ref. Publications:	<p>BRP-Powertrain ASB-912-062 and ASB-914-044 (published as a single document), dated 05 March 2013.</p> <p>The use of later approved revisions of this document is acceptable for compliance with the requirements of this AD.</p>
Remarks:	<ol style="list-style-type: none"> <li>1. If requested and appropriately substantiated, EASA can approve Alternative Methods of Compliance for this AD.</li> <li>2. The results of the safety assessment have indicated the need for immediate publication and notification, without the full public consultation process.</li> <li>3. Enquiries regarding this AD should be referred to the Safety Information Section, Executive Directorate, EASA. E-mail: <a href="mailto:ADs@easa.europa.eu">ADs@easa.europa.eu</a>.</li> <li>4. For any question concerning the technical aspects of the requirements in this AD, please contact: BRP-Powertrain GmbH &amp; Co. KG, Telephone: +43 7246 601 0; Fax: +43 7246 601 9130; E-mail: <a href="mailto:airworthiness@brp.com">airworthiness@brp.com</a>, Website <a href="http://www.rotax-aircraft-engines.com">www.rotax-aircraft-engines.com</a>.</li> </ol>