


| EASA  | EMERGENCY AIRWORTHINESS DIRECTIVE  |   |
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|    | <b>AD No.: 2012-0097-E</b>   |   |
|   | <b>Date: 31 May 2012</b><br><br>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 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]. |  |   |
| <b>Type Approval Holder's Name :</b><br><br>BRP-Powertrain GmbH & Co. KG  |  | <b>Type/Model designation(s):</b><br><br>Rotax 912 series engines |
| TCDS Number: EASA.E.121   |  |   |
| Foreign AD: Not applicable  |  |   |
| Supersedure: This AD supersedes EASA Emergency AD 2012-0093-E dated 26 May 2012.  |  |   |
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| <b>ATA 73</b>   | <b>Engine Fuel and Control – Fuel Pump Pressure Side Hose – Replacement</b>  |   |
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| 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, all serial numbers (s/n).<br/>Rotax 912 F2, 912 F3 and 912 F4 engines, all s/n.<br/>Rotax 912 S2, 912 S3 and 912 S4 engines, all s/n.</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; <b>Aircraft Philipp</b> (formerly Alpla-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>Tecnam</b> P 92-J, P 92-JS and P2002-JF; <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>Reports from the field confirmed a non-compliance of pressure side fuel hoses installed on certain P/N 893114 fuel pumps, which may have resulted in a latent defect on a limited number of engines. The affected fuel hoses may not be fuel resistant in accordance with the specification.</p> <p>This condition, if not corrected, could lead to detachment of particles from the</p>  |   |

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|  | <p>fuel hose and irregularities in the carburettor function, possibly resulting in in-flight engine shutdown and forced landing, damage to the aeroplane and injury to occupants.</p> <p>To address this potential unsafe condition, EASA issued Emergency AD 2012-0093-E to require the replacement of the pressure side fuel hose on certain fuel pumps, identified by P/N 893114. That AD also prohibited installation of an affected engine on an aeroplane, unless the fuel pump installation of that engine had been corrected as required by the AD.</p> <p>Since that AD was issued, the relevant BRP-Powertrain Alert Service Bulletin (ASB) ASB-912-061 has been revised (R1) to correct the list of affected P/N 893114 fuel pumps, identified by s/n. As some of these pumps (including potentially defective hoses) have been delivered as spares, they could also be installed on other engines than those specified by s/n in BRP-Powertrain ASB-912-061R1.</p> <p>For the reasons described above, this AD retains the requirements of EASA Emergency AD 2012-0093-E, which is superseded, expands the Applicability to all Rotax 912 series engines and corrects Table 1 - Affected P/N 893114 fuel pumps. In addition, 2 aeroplane types have been removed from the Applicability of this AD: Aeromot AMT 300 Turbo Super Ximango and Stemme S10 VT have a Rotax 914 engine installed, not a Rotax 912.</p>   |                                   |                                   |                                   |                                   |
| Effective Date:                            | 01 June 2012  |                                   |                                   |                                   |                                   |
| Required Action(s) and Compliance Time(s): | <p>Required as indicated, unless accomplished previously:</p> <p>(1) Before next flight after the effective date of this AD, accomplish the following actions concurrently:</p> <p>(1.1) Inspect the P/N 893114 fuel pump installed on the engine to identify the s/n of the pump. In lieu of this inspection, a review of engine installation- or maintenance records is acceptable to identify the s/n of the fuel pump, provided those records can be relied upon for that purpose, and the s/n of the fuel pump can be conclusively identified from that review. Engines that are known to have had an affected fuel pump installed, as delivered by BRP-Powertrain, are also identified by engine s/n in BRP-Powertrain Alert Service Bulletin (ASB) ASB-912-061R1.</p> <p>Table 1 – Affected P/N 893114 fuel pumps, identified by s/n:</p> <table><tr><td>11.3117 through 11.3325 inclusive</td></tr><tr><td>11.4036 through 11.4335 inclusive</td></tr><tr><td>11.4516 through 11.4595 inclusive</td></tr><tr><td>12.0251 through 12.0270 inclusive</td></tr></table> <p>(1.2) If the s/n of the fuel pump, identified as required by paragraph (1.1) of this AD, is listed in Table 1 of this AD, replace the pressure side fuel hose in accordance with the instructions of Section 3) of BRP-Powertrain ASB-912-061R1.</p> <p>(2) From the effective date of this AD, do not install a P/N 893114 fuel pump, identified by s/n in Table 1 of this AD, on an engine, unless the pressure side fuel hose of that pump has been replaced as required by paragraph (1) of this AD.</p> <p>(3) From the effective date of this AD, do not install a Rotax 912 engine on an aeroplane, unless that engine has been inspected and, depending on findings, corrected as required by paragraph (1) of this AD.</p> | 11.3117 through 11.3325 inclusive | 11.4036 through 11.4335 inclusive | 11.4516 through 11.4595 inclusive | 12.0251 through 12.0270 inclusive |
| 11.3117 through 11.3325 inclusive          |   |                                   |                                   |                                   |                                   |
| 11.4036 through 11.4335 inclusive          |   |                                   |                                   |                                   |                                   |
| 11.4516 through 11.4595 inclusive          |   |                                   |                                   |                                   |                                   |
| 12.0251 through 12.0270 inclusive          |   |                                   |                                   |                                   |                                   |

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| Ref. Publications: | <p>BRP-Powertrain ASB-912-061R1, dated 31 May 2012.</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 required actions and the risk allowance have granted the issuance of a Final AD with Request for Comments, postponing the public consultation process after publication.</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.<br/>Telephone: +43 7246 601 0; Fax: +43 7246 601 9130;<br/>E-mail: <a href="mailto:airworthiness@brp.com">airworthiness@brp.com</a>,<br/>Website: <a href="http://www.rotax-aircraft-engines.com">www.rotax-aircraft-engines.com</a>.</li> </ol> |