

## SERVICE INFORMATION NO. SI 20-036

**NOTE:** SI's are used **only**:  
1) To distribute information from DAI to our customers.  
2) To distribute applicable information / documents from our suppliers to our customers with additional information.  
Typically there is no revision service for SI's. Each new information or change of that will be send along with a new SI.

### I. TECHNICAL DETAILS

#### 1.1 Airplanes affected:

DV 20            all aircraft equipped with BRP-Rotax 912 Series engines

#### 1.2 Subject:

EASA AD 2006-0316 R1  
ATA-Code:    72

#### 1.3 Reason:

EASA has issued the Airworthiness Directive No. 2006-0316 R1 which mandates checking of magnetic plug.

#### 1.4 Information:

For detailed technical information see EASA AD 2006-0316 R1 which is applicable without any further additions or restrictions.

### II. OTHERS

The EASA AD 2006-0316 R1 is attached to this SI.

In case of doubt contact BRP-Rotax GmbH & Co. KG or Diamond Aircraft Industries GmbH.

## SERVICE INFORMATION NO. SI 22-021

**NOTE:** SI's are used **only**:

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- 2) To distribute applicable information / documents from our suppliers to our customers with additional information.

Typically there is no revision service for SI's. Each new information or change of that will be send along with a new SI.

### I. TECHNICAL DETAILS

#### 1.1 Airplanes affected:

DV 22          all aircraft equipped with BRP-Rotax 914 F Series engines

#### 1.2 Subject:

EASA AD 2006-0316 R1  
ATA-Code:    72

#### 1.3 Reason:

EASA has issued the Airworthiness Directive No. 2006-0316 R1 which mandates checking of magnetic plug.


#### 1.4 Information:

For detailed technical information see EASA AD 2006-0316 R1 which is applicable without any further additions or restrictions.

### II. OTHERS

The EASA AD 2006-0316 R1 is attached to this SI.

In case of doubt contact BRP-Rotax GmbH & Co. KG or Diamond Aircraft Industries GmbH.

EASA	AIRWORTHINESS DIRECTIVE	
	<p><b>AD No : 2006-0316 R1</b></p> <p><b>Date: 13 March 2008</b></p>	
<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.</p>		
<p><b>Type Approval Holder's Name :</b></p> <p>BRP-Rotax GmbH &amp; Co. KG</p>	<p><b>Type/Model designation(s) :</b></p> <p>Rotax 912 and 914 series engines</p>	
<p>TCDS Number: EASA E.121, E.122</p>		
<p>Foreign AD: Not applicable</p>		
<p>Revision: This Airworthiness Directive (AD) revises and replaces EASA Emergency AD 2006-0316-E dated 16 October 2006.</p>		
<p><b>ATA 72</b></p>	<p><b>Engine – Magnetic Plug – Inspections</b></p>	
<p><b>Manufacturer(s):</b></p>	<p>BRP-Rotax GmbH &amp; Co. KG; Bombardier-Rotax GmbH &amp; Co. KG; Bombardier-Rotax GmbH</p>	
<p><b>Applicability:</b></p>	<p>Rotax 912 A series engines from serial number (s/n) 4,410.681 to 4,410.712;  Rotax 912 F series engines from s/n 4,412.912 to s/n 4,412.921;  Rotax 912 S series engines from s/n 4,923.263 to s/n 4,923.380;  Rotax 914 F series engines from s/n 4,420.595 to s/n 4,420.637; and  any s/n engine on which the camshaft and/or the hydraulic valve tappets have been replaced (e.g. during engine repair or general overhaul) after January 1, 2006 up to and including December 1, 2007.</p> <p>Engines which have hydraulic valve tappets Part Number (P/N) 854.095 installed during production and engines which have (e.g. during engine repair or general overhaul) P/N 881.831 spare part kit installed, which includes hydraulic valve tappet P/N 854.095, are not affected by the requirements of this revised AD.</p> <p>Engines with P/N 854.095 hydraulic valve tappets installed prior to delivery by BRP-Rotax can be identified by (minor) modification number references for each specific engine design: 85-05 for 912 A; F50-05 for 912 F; S34-04 for 912 S; and F45-04 for 914 F engines. These reference numbers are documented in each individual engine Release Certificate.</p> <p>These engines are known to be installed on, but not limited to, the following aircraft types:</p> <p><b>3-i Sky Arrow 650 TC, 650 TCN, 650 TCNS and 710 RG; Aeromot AMT-200</b></p>	

	<p>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 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>aircraft manufacturer</b> or through modification of the aircraft by Supplemental Type Certificate.</p> <p>The following s/n engines have already been inspected before first installation or first engine start up according section 1.5 Compliance (a) of BRP-Rotax SB-912-051 and SB-914-034 respectively:</p> <p>Rotax 912 A series from s/n 4,410.709 to s/n 4,410.712;  Rotax 912 F series from s/n 4,412.920 to s/n 4,412.921;  Rotax 912 S series from s/n 4,923.381 onwards; and  Rotax 914 F series from s/n 4,420.633 to s/n 4,420.637.</p>
Reason:	<p>In limited cases, increased wear of camshaft/hydraulic valve tappet can occur. This may lead to improper engine operation, power loss or in-flight engine failure. To address and correct this problem, BRP-Rotax GmbH &amp; Co. KG issued Alert Service Bulletins ASB-912-051 and ASB-914-034 which describe a special inspection for the affected engines.</p> <p>EASA issued Emergency AD 2006-0316-E to require the inspection of these engines as described in the referenced ASB's.</p> <p>Since then, BRP-Rotax has introduced hydraulic valve tappet P/N 854.095 on production engines and P/N 881.831 as spare part, eliminating the need for these repetitive inspections. Consequently, this AD has been revised to limit the applicability to those engines that do not have this new hydraulic valve tappet installed.</p>
Effective Date:	17 October 2006
Compliance:	<p>Required as indicated, unless already accomplished:</p> <p><b>Note:</b> Previous accomplishment of the actions in accordance with BRP-Rotax ASB-912-051 or ASB-914-034 as required by the original issue of this AD is considered acceptable to comply with the requirements of this AD.</p> <ol style="list-style-type: none"> <li>(1) Before the next engine start up from the effective date of this directive, inspect the magnetic plug in accordance with the instructions of BRP-Rotax SB-912-051 or SB-914-034, as applicable;</li> <li>(2) Within 5 hours of operation after the effective date of this directive, but not later than 01 March 2007 and thereafter at every specified oil change, repeat the inspection as required by paragraph (1) of this directive;</li> <li>(3) If, during any of the inspections as required by this directive, a greater quantity of metal parts than 3 mm is detected, the engine must not be taken into operation until the cause has been identified and eliminated;</li> <li>(4) After the effective date of this directive, no person shall install one of the affected engines on any aircraft unless the magnetic plug has been inspected in accordance with the requirements of this directive.</li> <li>(5) Modification of the engine by installing P/N 881.831 spare part kit, which includes hydraulic valve tappet P/N 854.095, constitutes terminating action for the requirements of this AD.</li> </ol>
Ref.	BRP-Rotax Alert Service Bulletin ASB-912-051 and ASB-914-034 dated 13

Publications:	<p>October 2006; and</p> <p>BRP-Rotax Service Bulletin SB-912-051 and SB-914-034 dated 30 January 2008.</p> <p>The use of later approved revisions of these documents 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 accept Alternative Method of Compliance for this AD.</li><li>2. The safety assessment has requested not to implement the full consultation process and an immediate publication and notification.</li><li>3. Enquiries regarding this AD should be addressed to the AD Focal Point, Certification 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 content of the requirements in this AD, please contact BRP-Rotax GmbH &amp; Co.KG Telephone: +43 7246 601 0; Fax: +43 7246 601 760; e-mail: <a href="mailto:airworthiness@brp.com">airworthiness@brp.com</a> or visit <a href="http://www.rotax-aircraft-engines.com">www.rotax-aircraft-engines.com</a>.</li></ol>