# **TECHNISCHE INFORMATION NR. SI36-048**

HINWEIS: Technische Informationen werden nur verwendet um:

1) Informationen von DAI an unsere Kunden weiterzugeben.

2) Informationen / Dokumente von unseren Zulieferem mit zusätzlichen Informationen an unsere Kunden

weiterzugeben.

Typischerweise unterstehen Technische Informationen keinem Revisionsdienst. Neue Informationen oder

Änderungen derer werden durch eine neue Technische Information weitergegeben.

# **SERVICE INFORMATION NO. SI36-048**

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

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. TECHNISCHE ANGABEN

#### 1.1 Betroffene Flugzeuge:

Alle

HK 36 R

HK 36 TS

HK 36 TC

HK 36 TTS

HK 36 TTC

HK 36 TTC-ECO

## I. TECHNICAL DETAILS

#### 1.1 Airplanes affected:

All

HK 36 R

HK 36 TS

HK 36 TC

HK 36 TTS

HK 36 TTC

HK 36 TTC-ECO

Flugzeuge, die mit BRP-Rotax 912 Serie und BRP-Rotax 914 F Serie Motoren ausgerüstet sind.

aircraft equipped with BRP-Rotax 912 Series and BRP-Rotax 914 F Series engines

### 1.2 Gegenstand

ATA Code: 72

EASA AD No. 2006-0316 R1

#### 1.2 Subject

ATA Code: 72

EASA AD No. 2006-0316 R1



#### Diamond Aircraft Industries G.m.b.H N.A. Otto-Straße 5 A-2700 Wiener Neustadt

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#### 1.3 Anlaß

Die EASA hat die Lufttüchtigkeitsanweisung EASA AD No. 2006-0316 R1 veröffentlicht, welches die Überprüfung der Magnetschraube vorschreibt.

#### 1.4 Information

Für detaillierte technische Informationen siehe das EASA AD 2006-0316 R1 welches ohne weitere Ergänzungen und Einschränkungen anwendbar ist.

### II. SONSTIGES

Bei etwaigen Fragen kontaktieren Sie bitte BRP-Rotax GmbH & Co. KG oder Diamond Aircraft Industries GmbH.

Das EASA AD 2006-0316 R1 liegt dieser TI bei.

#### 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. OTHER INFORMATION**

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

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

## **EASA** AIRWORTHINESS DIRECTIVE AD No: 2006-0316 R1 Date: 13 March 2008 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. Type Approval Holder's Name: Type/Model designation(s): BRP-Rotax GmbH & Co. KG Rotax 912 and 914 series engines TCDS Number: EASA E.121, E.122 Foreign AD: Not applicable Revision: This Airworthiness Directive (AD) revises and replaces EASA Emergency AD 2006-0316-E dated 16 October 2006. **ATA 72** Engine - Magnetic Plug - Inspections BRP-Rotax GmbH & Co. KG; Bombardier-Rotax GmbH & Co. KG; Bombardier-Manufacturer(s): Rotax GmbH Applicability: 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. 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. 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.

aircraft types:

These engines are known to be installed on, but not limited to, the following

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.
		<b>Note:</b> The installation of these engines was either done by the respective aircraft manufacturer or through modification of the aircraft by Supplemental Type Certificate.
		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:
		Rotax 912 A series from s/n 4,410.709 to s/n 4,410.712;
ı		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
1		Rotax 914 F series from s/n 4,420.633 to s/n 4,420.637.
	Reason:	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 & Co. KG issued Alert Service Bulletins ASB-912-051 and ASB-914-034 which describe a special inspection for the affected engines.  EASA issued Emergency AD 2006-0316-E to require the inspection of these engines as described in the referenced ASB's.
		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.
	Effective Date:	17 October 2006
	Compliance:	Required as indicated, unless already accomplished:
		Note: 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.
		(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;
		(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;
		(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;
		(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.
	j	(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.
	Ref.	BRP-Rotax Alert Service Bulletin ASB-912-051 and ASB-914-034 dated 13
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Publications:	October 2006; and
	BRP-Rotax Service Bulletin SB-912-051 and SB-914-034 dated 30 January 2008.
	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 accept Alternative     Method of Compliance for this AD.
	<ol><li>The safety assessment has requested not to implement the full consultation process and an immediate publication and notification.</li></ol>
	<ol> <li>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> </ol>
	<ol> <li>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: <u>airworthiness@brp.com</u> or visit <u>www.rotax-aircraft-engines.com</u>.</li> </ol>