EASA AD No.: 2013-0119-E

## **EASA**

## **EMERGENCY AIRWORTHINESS DIRECTIVE**



AD No.: 2013-0119-E

Date: 04 June 2013

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 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].

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].		
Design Approval Holder's Name:		Type/Model designation(s):
EVEKTOR, spol. s r.o.		SportStar RTC, and
CZECH SPORT AIRCRAFT a.s.		PS-28 Cruiser aeroplanes
TCDS Numbers:	EASA.A.592 and EASA.A.546	
Foreign AD:	Not applicable	
Supersedure:	This AD supersedes EASA Emergency AD 2013-0064-E dated 12 March 2013.	
ATA 72	Engine – Cylinder Head Section – Inspection / Replacement	
Manufacturer(s):	Evektor, spol. s r.o., Czech Sport Aircraft a.s.	
Applicability:	SportStar RTC and PS-28 Cruiser aeroplanes, all serial numbers.	
Reason:	During a production test run with a Rotax engine, 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.	
	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.	
	To address this unsafe condition on the certified Rotax 912 and 914 engines, EASA issued Emergency AD 2013-0055-E. However, the same defects may also exist on the 'UL' versions of the Rotax 912 and 914 engines, which are certified as part of the type design of some Light Sport Aeroplanes.	
		ued Emergency AD 2013-0064-E to require inspection ead assemblies and, depending on findings, er head assembly.
	Since that AD was issued, it was found that more engines are likely to have an	

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affected cylinder head assembly installed than initially determined. In addition, it has been found that some affected cylinder head assemblies, identified by Part Number (P/N) 623682 and P/N 623687, have inadvertently been supplied as spares, between 31 January 2013 and 28 May 2013. BRP-Powertrain issued Alert Service Bulletin (ASB) ASB-912-062UL and ASB-914-044UL at Revision 2 (single document, hereafter referred to in this AD as 'the ASB') for these engines and cylinder head assemblies. For the reasons described above, this AD retains the requirements of EASA AD 2013-0064-E, which is superseded, but expands the required actions to all engines, as it cannot be determined in which s/n engines the affected spare cylinder head assemblies are installed This AD also prohibits installation of an affected cylinder head assembly on an engine, or a replacement engine on an aeroplane, unless the affected cylinder head assembly of that engine has passed the inspection as required by this 06 June 2013 Effective Date: Required Action(s) Required as indicated, unless accomplished previously: and Compliance (1) Within 5 flight hours or 20 days, whichever occurs first after the effective Time(s): date of this AD, accomplish the following actions: (1.1) Identify the serial number (s/n) of the engine installed on the aeroplane and, if the s/n is listed in the ASB, inspect the cylinder head assembly of cylinder no. 2 and 3 (2/3) in accordance with the instructions of Section 3 of the ASB. (1.2) For all engines, determine whether a cylinder head assembly P/N 623682 or P/N 623687, supplied by BRP-Powertrain between 31 January 2013 and 28 May 2013, is installed on the engine as replacement part. A review of engine maintenance records is acceptable to make the determination as specified in this paragraph, provided those records can be relied upon for that purpose, and the supply date and P/N of the cylinder head assembly can be conclusively identified from that review. (2) If, during the determination as required by paragraph (1.2) of this AD, an affected cylinder head assembly is found to be installed, before next flight, inspect the cylinder head assembly in accordance with the instructions of Section 3 of the ASB. If, during an inspection as required by paragraph (1.1) or (2) 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 the ASB. (4) From the effective date of this AD, do not install any affected engine (s/n as listed in the ASB) on an aeroplane, unless that engine has been inspected and, depending on findings, corrected as required by this AD. (5) From the effective date of this AD, installation on an engine of an affected spare cylinder head assembly P/N 623682 or P/N 623687, supplied between 31 January 2013 and 28 May 2013, is allowed, provided that, within 5 FH after installation, the engine (cylinder head assembly) is inspected and, depending on findings, corrected as required by this AD. BRP-Powertrain ASB-912-062UL/ASB-914-044UL Revision 2 (single Ref. Publications: document), dated 29 May 2013. The use of later approved revisions of this document is acceptable for compliance with the requirements of this AD.

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## Remarks:

- If requested and appropriately substantiated, EASA can approve Alternative Methods of Compliance for this AD.
- The results of the safety assessment have indicated the need for immediate publication and notification, without the full public consultation process.
- 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>.
- 4. For any question concerning the technical aspects of the requirements in this AD, please contact:

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or

Czech Sport Aircraft a.s., Josef Vlachynský, Airworthiness Manager Na Záhonech 1177/212, 686 04 Kunovice, Czech Republic Telephone: +420 725 277 517, Fax: +420 576 519 394 E-mail: josef.vlachynsky@czechsportaircraft.com.