



[4910-13-P]

**DEPARTMENT OF TRANSPORTATION**

**Federal Aviation Administration**

**14 CFR Part 39**

**[Docket No. FAA-2011-1299; Directorate Identifier 2011-NE-40-AD; Amendment 39-16878; AD 2011-25-02]**

**RIN 2120-AA64**

**Airworthiness Directives; BRP-Powertrain GmbH & Co. KG Reciprocating Engines**

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Final rule; request for comments.

**SUMMARY:** We are adopting a new airworthiness directive (AD) for BRP-Powertrain GmbH & Co. KG Rotax 912 F2, 912 F3, 912 F4, 912 S2, 912 S3, 912 S4, 914 F2, 914 F3, and 914 F4 reciprocating engines. This AD results from mandatory continuing airworthiness information (MCAI) issued by an aviation authority of another country to identify and correct an unsafe condition on an aviation product. The MCAI describes the unsafe condition as:

During a production process review, a deviation in the manufacturing process of certain part number (P/N) 888164 crankshafts has been detected, which may have resulted in a latent defect. This condition, if not corrected, could lead to crack formation on the power takeoff side of the crankshaft journal, possibly resulting in failure of the crankshaft support bearing, in-flight engine shutdown and forced landing, damage to the aeroplane and injury to the occupants.

We are issuing this AD to prevent in-flight failure of the engine and forced landing.

**DATES:** This AD becomes effective [Insert date 15 days after date of publication in the FEDERAL REGISTER].

We must receive comments on this AD by [Insert date 30 days after date of publication in the FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of BRP-Powertrain GmbH & Co. KG, Rotax Aircraft Engines, Mandatory Alert Service Bulletins (ASB) Nos. ASB-912-059 and ASB 914-042 (combined in one document), dated November 15, 2011, listed in the AD as of [Insert date 15 days after date of publication in the FEDERAL REGISTER].

**ADDRESSES:** You may send comments by any of the following methods:

- Federal eRulemaking Portal: Go to <http://www.regulations.gov> and follow the instructions for sending your comments electronically.
- Mail: U.S. Department of Transportation, 1200 New Jersey Avenue SE., West Building Ground Floor, Room W12-140, Washington, DC 20590-0001.
- Hand Delivery: Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.
- Fax: (202) 493-2251.

For service information identified in this AD, contact BRP-Powertrain GmbH & Co. KG, Welser Strasse 32, A-4623 Gunskirchen, Austria, or go to: <http://www.rotax-aircraft-engines.com>. You may review copies of the referenced service information at the FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA. For information on the availability of this material at the FAA, call 781-238-7125.

## **Examining the AD Docket**

You may examine the AD docket on the Internet at <http://www.regulations.gov>; or in person at the Docket Operations office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Operations office (phone: 800-647-5527) is the same as the Mail address provided in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

**FOR FURTHER INFORMATION CONTACT:** Alan Strom, Aerospace Engineer, Engine Certification Office, FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803; e-mail: [alan.strom@faa.gov](mailto:alan.strom@faa.gov); phone: 781-238-7143; fax: 781-238-7199.

## **SUPPLEMENTARY INFORMATION:**

### **Discussion**

The European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Community, has issued EASA AD 2011-0222-E, dated November 15, 2011 (referred to after this as “the MCAI”), to correct an unsafe condition for the specified products. The MCAI states:

During a production process review, a deviation in the manufacturing process of certain part number (P/N) 888164 crankshafts has been detected, which may have resulted in a latent defect. This condition, if not corrected, could lead to crack formation on the power takeoff side of the crankshaft journal, possibly resulting in failure of the crankshaft support bearing, in-flight engine shutdown and forced landing, damage to the aeroplane and injury to the occupants.

You may obtain further information by examining the MCAI in the AD docket.

**Relevant Service Information**

We reviewed BRP-Powertrain GmbH & Co. KG, Rotax Aircraft Engines, Mandatory ASB Nos. ASB-912-059 and ASB 914-042 (combined in one document), dated November 15, 2011. The actions described in this service information are intended to correct the unsafe condition identified in the MCAI.

**FAA's Determination and Requirements of this AD**

This product has been approved by the aviation authority of Austria, and is approved for operation in the United States. Pursuant to our bilateral agreement with the European Community, EASA has notified us of the unsafe condition described in the MCAI and service information referenced above. We are issuing this AD because we evaluated all information provided by EASA and determined the unsafe condition exists and is likely to exist or develop on other products of the same type design.

**Differences Between the AD and the MCAI or Service Information**

None.

**FAA's Determination of the Effective Date**

An unsafe condition exists that requires the immediate adoption of this AD. The FAA has found that the risk to the flying public justifies waiving notice and comment prior to adoption of this rule because of the short compliance time of 4 operating hours, and the risk to single-engine airplanes affected. Therefore, we determined that notice and opportunity for public comment before issuing this AD are impracticable and that good cause exists for making this amendment effective in fewer than 30 days.

## **Comments Invited**

This AD is a final rule that involves requirements affecting flight safety, and we did not precede it by notice and opportunity for public comment. We invite you to send any written relevant data, views, or arguments about this AD. Send your comments to an address listed under the ADDRESSES section. Include “Docket No. FAA-2011-1299; Directorate Identifier 2011-NE-40-AD” at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this AD. We will consider all comments received by the closing date and may amend this AD because of those comments.

We will post all comments we receive, without change, to <http://www.regulations.gov>, including any personal information you provide. We will also post a report summarizing each substantive verbal contact with FAA personnel concerning this AD. Using the search function of the Web site, anyone can find and read the comments in any of our dockets, including, if provided, the name of the individual who sent the comment (or signed the comment on behalf of an association, business, labor union, etc.). You may review the DOT's complete Privacy Act Statement in the Federal Register published on April 11, 2000 (65 FR 19477-78).

## **Authority for This Rulemaking**

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. “Subtitle VII: Aviation Programs,” describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in “Subtitle VII, Part A, Subpart III, Section 44701: General requirements.” Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

### **Regulatory Findings**

We determined that this AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify this AD:

1. Is not a “significant regulatory action” under Executive Order 12866;
2. Is not a “significant rule” under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979); and
3. Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

We prepared a regulatory evaluation of the estimated costs to comply with this AD and placed it in the AD docket.

### **List of Subjects in 14 CFR Part 39**

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

## **Adoption of the Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

### **PART 39 - AIRWORTHINESS DIRECTIVES**

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

#### **§ 39.13 [Amended]**

2. The FAA amends § 39.13 by adding the following new AD:

**2011-25-02 BRP-Powertrain GmbH & Co. KG (formerly BRP-Rotax GmbH & Co KG, Bombardier-Rotax GmbH & Co. KG, and Bombardier-Rotax GmbH):**

Amendment 39-16878; Docket No. FAA-2011-1299; Directorate Identifier 2011-NE-40-AD.

#### **(a) Effective Date**

This airworthiness directive (AD) becomes effective [Insert date 15 days after date of publication in the FEDERAL REGISTER].

#### **(b) Affected ADs**

None.

#### **(c) Applicability**

This AD applies to BRP-Powertrain GmbH & Co. KG Rotax 912 F2, 912 F3, 912 F4, 912 S2, 912 S3, 912 S4, 914 F2, 914 F3, and 914 F4 reciprocating engines, with the following part number (P/N) 888164 crankshafts installed.

**Table 1 – Affected P/N 888164 Crankshaft Serial Numbers (S/Ns)**

S/Ns 40232 through 40267 inclusive
S/Ns 40293 through 40374 inclusive
S/Ns 40408 through 40433 inclusive
S/Ns 40435 through 40507 inclusive

**(d) Reason**

This AD results from mandatory continuing airworthiness information (MCAI) issued by an aviation authority of another country to identify and correct an unsafe condition on an aviation product. The MCAI describes the unsafe condition as:

During a production process review, a deviation in the manufacturing process of certain part number (P/N) 888164 crankshafts has been detected, which may have resulted in a latent defect. This condition, if not corrected, could lead to crack formation on the power takeoff side of the crankshaft journal, possibly resulting in failure of the crankshaft support bearing, in-flight engine shutdown and forced landing, damage to the aeroplane and injury to the occupants.

We are issuing this AD to prevent in-flight failure of the engine and forced landing.

**(e) Actions and Compliance**

Unless already done, do the following actions.

(1) Within 4 flight hours after the effective date of this AD, clean and fluorescent-penetrant-inspect the crankshaft for cracks, in accordance with the Accomplishment Instructions paragraphs 3.1)4., 3.1)6., and Figure 1 of BRP-Powertrain GmbH & Co. KG, Rotax Aircraft Engines, Mandatory Alert Service Bulletins (ASB) Nos. ASB-912-059 and ASB 914-042 (combined in one document), dated November 15, 2011.

(2) If any crack is found, remove the crankshaft from service.

**(f) Installation Prohibition**

(1) After the effective date of this AD, do not install an engine having an affected P/N 888164 crankshaft installed, listed in Table 1 of this AD, on any airplane, unless the crankshaft has passed the inspection specified in paragraph (e)(1) of this AD.

(2) After the effective date of this AD, do not install an affected P/N 888164 crankshaft listed in Table 1 of this AD, in any engine, unless the crankshaft has passed the inspection specified in paragraph (e)(1) of this AD.

**(g) FAA AD Differences**

None.

**(h) Alternative Methods of Compliance (AMOCs)**

The Manager, Engine Certification Office, may approve AMOCs for this AD. Use the procedures found in 14 CFR 39.19 to make your request.

**(i) Related Information**

(1) Refer to MCAI European Aviation Safety Agency AD 2011-0222-E, dated November 15, 2011, for related information.

(2) Contact Alan Strom, Aerospace Engineer, Engine Certification Office, FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803; e-mail: alan.strom@faa.gov; phone: 781-238-7143; fax: 781-238-7199, for more information about this AD.

**(j) Material Incorporated by Reference**

You must use BRP-Powertrain GmbH & Co. KG, Rotax Aircraft Engines, Mandatory Alert Service Bulletins Nos. ASB 912-059 and ASB 914-042 (combined in

one document), dated November 15, 2011, to do the actions required by this AD, unless the AD specifies otherwise.

(1) The Director of the Federal Register approved the incorporation by reference of this service information under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) For service information identified in this AD, contact BRP-Powertrain GmbH & Co. KG, Welser Strasse 32, A-4623 Gunskirchen, Austria, or go to: <http://www.rotax-aircraft-engines.com>.

(3) You may review copies of the service information at the FAA, New England Region, 12 New England Executive Park, Burlington, MA. For information on the availability of this material at the FAA, call 781-238-7125.

(4) You may also review copies of the service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at an NARA facility, call 202-741-6030, or go to <http://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued in Burlington, Massachusetts, on November 29, 2011.

Peter A. White,  
Manager, Engine & Propeller Directorate,  
Aircraft Certification Service.

[FR Doc. 2011-31501 Filed 12/06/2011 at 8:45 am; Publication Date: 12/07/2011]