

2010-06-12 Thielert Aircraft Engines GmbH: Amendment 39-16236. Docket No. FAA-2009-0948; Directorate Identifier 2009-NE-30-AD.

Effective Date

(a) This airworthiness directive (AD) becomes effective April 20, 2010.

Affected ADs

(b) None.

Applicability

(c) This AD applies to Thielert Aircraft Engines GmbH (TAE) models TAE 125-01 and TAE 125-02-99 reciprocating engines installed in, but not limited to, Cessna 172 and (Reims-built) F172 series (EASA STC No. EASA.A.S.01527); Piper PA-28 series (EASA STC No. EASA.A.S. 01632); APEX (Robin) DR 400 series (EASA STC No. A.S.01380); and Diamond Aircraft Industries Models DA40 and DA42 airplanes.

Reason

(d) As a consequence of occurrences and service experience, Thielert Aircraft Engines GmbH has introduced a new rail pressure control valve part number (P/N) 05-7320-E000702 and P/N 02-7320-04100R3 and has amended the Airworthiness Limitation Section (ALS) of the Operation & Maintenance Manual OM-02-02 to include a replacement of the rail pressure control valve. Failure of this part could result in in-flight shutdowns of the engine(s).

This AD results from mandatory continuing airworthiness information (MCAIs) issued by an aviation authority of another country to identify and correct an unsafe condition on an aviation product. We are issuing this AD to prevent engine in-flight shutdown, possibly resulting in reduced control of the aircraft.

Actions and Compliance

(e) Unless already done, do the following actions.

TAE 125-02-99 Reciprocating Engines

(1) For TAE 125-02-99 reciprocating engines, within 100 flight hours after the effective date of this AD, replace the existing rail pressure control valve with a rail pressure control valve P/N 05- 7320-E000702, and modify the Vrail plug to make it compatible with the replacement rail pressure control valve.

(2) Guidance on the valve replacement and rail modification specified in paragraph (e)(1) of this AD can be found in Thielert Repair Manual RM-02-02, Chapter 73-10.08, and Chapter 39-40.08, respectively.

TAE 125-01 Reciprocating Engines

(3) For TAE 125-01 reciprocating engines, within 100 flight hours after the effective date of this AD, replace the existing rail pressure control valve with a rail pressure control valve, P/N 02- 7320-04100R3.

(4) Guidance on the valve replacement specified in paragraph (e)(3) of this AD can be found in Thielert Repair Manual RM-02-01, Chapter 29.0.

TAE 125-02-99 and TAE 125-01 Engines, Repetitive Replacements of Rail Pressure Control Valves

(5) Thereafter, for affected TAE 125-02-99 and TAE 125-01 engines, replace the rail pressure control valve with the same P/N valve within every 600 flight hours.

FAA AD Differences

(f) This AD differs from the Mandatory Continuing Airworthiness Information (MCAI) and/or service information as follows:

(1) For the TAE 125-02-99 reciprocating engines, we reduced the initial compliance time from within 110 flight hours to within 100 flight hours after the effective date of this AD.

(2) For the TAE 125-01 reciprocating engines, we changed initial compliance time from within the next 3 months to within 100 flight hours after the effective date of this AD.

(3) The MCAIs instruct the operators to follow Thielert Maintenance Manual, Chapter 5, Airworthiness Limitations, for the repetitive replacement compliance time for the rail pressure control valve, which, in the manual, is 600 flight hours. We found it necessary to specify the repetitive replacement compliance time in this AD, of within every 600 flight hours.

Alternative Methods of Compliance (AMOCs)

(g) The Manager, Engine Certification Office, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19.

Related Information

(h) Refer to MCAI European Aviation Safety Agency (EASA) AD 2008-0128, dated July 9, 2008, EASA AD 2008-0215, dated December 5, 2008, Thielert Service Bulletin No. TAE 125-1008 P1, Revision 1, dated September 29, 2008, and Thielert Repair Manual RM-02-02, for related information. Contact Thielert Aircraft Engines GmbH, Platanenstrasse 14 D-09350, Lichtenstein, Germany, telephone: +49- 37204-696-0; fax: +49-37204-696-55; e-mail: info@centurion- engines.com, for a copy of this service information.

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