EASA	AIRWORTHINESS DIRECTIVE
	AD No.: 2013-0279 **Date: 26 November 2013** Note: This 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].

Design Approval Holder's Name:	**Type/Model designation(s):**
TECHNIFY MOTORS GmbH	TAE 125-02 engines

TCDS Number:	EASA.E.055
Foreign AD:	Not applicable
Supersedure:	None

ATA 73	**Engine Fuel & Control – High Pressure Fuel Pump – Replacement**
Manufacturer(s):	Technify Motors GmbH (TMG), formerly Thielert Aircraft Engines (TAE).
Applicability:	TAE 125-02-99 (commercial designation Centurion 2.0) and TAE 125-02-114 (commercial designation Centurion 2.0S) engines, all serial numbers. These engines are known to be installed on, but not limited to, the following aeroplane types, mostly through application of a Supplemental Type Certificate (STC): Cessna 172 and (Reims-built) F172 series (STC EASA.10014287); Piper PA-28 series (STC EASA.10014364); CEAPR (APEX, Robin) DR 400 series (STC EASA.10014219); and Diamond DA 40 and DA 42 series.
Reason:	In-flight shut down occurrences have been reported on aeroplanes equipped with TAE 125-02 engines. The initial results of the investigations showed that abnormal high wear of the high pressure fuel pump was the probable cause of the engine failure. This condition, if not corrected, could result in further cases of engine power loss events and consequent potential loss of control of the aeroplane. To address this potential unsafe condition, TMG developed an improved design high pressure fuel pump, which is available as in-service modification through Service Bulletin (SB) TM TAE 125-1017 P1. For the reason described above, this AD requires replacement of high pressure fuel pumps with improved units.
Effective Date:	10 December 2013

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Required Action(s) and Compliance Time(s):	Required as indicated, unless accomplished previously: (1) **For engines operated on TS-1 jet fuel**, each high pressure fuel pump must be replaced, at intervals not to exceed 300 flight hours (FH), in accordance with the instructions of TMG/TAE Operation & Maintenance Manual OM-02-02. (2) Within the compliance time indicated in Table 1 or Table 2 of this AD, as applicable, depending on aeroplane and engine configuration, replace each high pressure fuel pump Part Number (P/N) 05-7312-K005301 and P/N 05-7312-K005302 with an improved pump in accordance with the instructions of TMG (TAE) SB TM TAE 125-1017 P1. Note: The 'accumulated' FH specified in Tables 1 and 2 are hours accumulated since first installation of the pump on an engine/aeroplane.

Table 1 – Single-engine Aeroplanes

FH accumulated by the pump on the effective date of this AD	**Compliance time**
300 FH or more	Within 55 FH, or during the next scheduled engine maintenance, whichever occurs first after the effective date of this AD
less than 300 FH	During the next scheduled engine maintenance after exceeding 170 FH

Table 2 – Twin-engine Aeroplanes

FH accumulated by the pump(s) on the effective date of this AD	**Compliance time**
Only one of the 2 pumps affected, irrespective of FH accumulated	Before exceeding 630 FH accumulated by the affected pump
Both pumps are affected:	
Both pumps have accumulated 300 FH or more	During the next scheduled engine maintenance after the effective date of this AD for 1 pump, and before exceeding 630 FH accumulated by the other pump
Only 1 pump has accumulated 300 FH or more	During the next scheduled engine maintenance after exceeding 170 FH, or within 55 FH, whichever occurs later after the effective date of this AD, for the pump that has accumulated less than 300 FH, and before exceeding 630 FH accumulated by the other pump
Both pumps have accumulated less than 300 FH	During the next scheduled engine maintenance after exceeding 170 FH, or within 55 FH, whichever occurs later after the effective date of this AD

(3) After modification of an engine as required by paragraph (2) of this AD, do not install a high pressure fuel pump P/N 05-7312-K005301 or P/N 05-7312-K005302 on that engine.

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	(4) From the effective date of this AD, do not install a TAE 125-02-99 or TAE 125-02-114 engine on an aeroplane, unless it has been verified that the high pressure fuel pump installed on the engine has P/N 05-7312-K005303 or higher.
Ref. Publications:	Thielert Aircraft Engines SB TM TAE 125-1017 P1 (initial issue), dated 10 April 2013, or Technify Motors SB TM TAE 125-1017 P1 Revision 1, dated 20 September 2013. Thielert Aircraft Engines Operation & Maintenance Manual OM-02-02, version 3/0, dated 26 September 2013. The use of later approved revisions of these documents is acceptable for compliance with the requirements of this AD.
Remarks:	1. If requested and appropriately substantiated, EASA can approve Alternative Methods of Compliance for this AD. 2. This AD was posted on 27 September 2013 as PAD 13-149 for consultation until 25 October 2013. The Comment Response Document can be found at http://ad.easa.europa.eu. 3. Enquiries regarding this AD should be referred to the Safety Information Section, Executive Directorate, EASA. E-mail: ADs@easa.europa.eu. 4. For any question concerning the technical content of the requirements in this AD, please contact: Technify Motors GmbH, Platanenstraße 14 D-09356 Sankt Egidien, Germany Telephone +49-37204-696-0; Fax +49-37204-696-55; E-mail info@centurion.aero.

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