EASA	AIRWORTHINESS DIRECTIVE
	AD No.: 2014-0232 **[Correction: 04 November 2014]** **Date: 22 October 2014** 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 engines

TCDS Number:	EASA.E.055
Foreign AD:	Not applicable
Supersedure:	This AD supersedes EASA AD 2011-0152-E dated 18 August 2011.

ATA 72	**Engine – Clutch Assembly – Identification / Replacement**
Manufacturer(s):	Technify Motors GmbH (TMG), formerly Thielert Aircraft Engines (TAE).
Applicability:	TAE 125-01 (commercial designation Centurion 1.7), all serial numbers, if a clutch assembly with Part Number (P/N) 02-7210-11001R11 or P/N 02-7210-11001R11-AT or P/N 02-7210-11001R13 is installed, and TAE 125-02-99 (commercial designation CD-135, formerly Centurion 2.0), all serial numbers, if a clutch assembly with P/N 05-7211-K006001 or P/N 05-7211-K006002 is installed. 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.A.S.01527), - Piper PA-28 series (STC EASA.A.S.01632), - CEAPR (APEX, Robin) DR 400 series (STC EASA.A.S.01380), and - Diamond DA 40 and DA 42 series.
Reason:	In-flight engine shutdown incidents have been reported on aeroplanes equipped with TAE 125 engines. Preliminary investigations showed that it was mainly the result of nonconforming disc springs (improper heat treatment) used in a certain production batch of the clutch. This condition, if not corrected, could result in further cases of engine in-flight shutdown and consequent loss of control of the aeroplane.

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To address this unsafe condition, EASA issued Emergency AD 2010-0111-E to require identification of the affected P/N clutch assemblies on TAE 125-01 and TAE 125-02-99 engines and replacement with new clutch assemblies.

Thereafter, TAE identified further affected clutch assemblies and EASA issued AD 2011-0152-E, which superseded AD 2010-0111-E, to extend the applicability to those clutch assemblies.

Since that AD was issued, Technify Motors (formerly TAE) has found some additional disk springs in clutches that did not get proper heat treatment. The disk springs do not provide sufficient strength over the anticipated life, and the clutch can slip (interrupting power supply from the core engine to the propeller).

For the reasons described above, this AD retains the requirements of EASA AD 2011-0152-E, which is superseded, and extends the applicability to include other affected clutch assemblies.

This AD is re-published to correct typos in the clutch assembly P/N in Table 1.

Effective Date: 05 November 2014

Required Action(s) and Compliance Time(s):

Required as indicated, unless accomplished previously:

(1) Identify, as follows, the serial number (s/n) of each clutch assembly P/N 02-7210-11001R11, P/N 02-7210-11001R11-AT, P/N 02-7210-11001R13, P/N 05-7211-K006001 and P/N 05-7211-K006002 installed on the engine and, if the s/n of a clutch matches one of those listed in TAE SB TM TAE 125-0021 Rev. 2 (for TAE 125-01 engines) or in TAE SB TM TAE 125-1011 P1 Rev. 2 (for TAE 125-02-99 engines), as applicable to engine model, within the compliance time specified in Table 1 of this AD, as applicable, replace the clutch assembly with a serviceable part in accordance with the instructions of TAE SB TM TAE 125-0021 Rev. 2 or TAE SB TM TAE 125-1011 P1 Rev. 2.

(1.1) For P/N 02-7210-11001R13, P/N 05-7211-K006001 and P/N 05-7211-K006002 clutch assemblies: Before next flight after 22 August 2011 [the effective date of EASA AD 2011-0152-E].

(1.2) For P/N 02-7210-11001R11and P/N 02-7210-11001R11-AT clutch assemblies: Within 30 days after the effective date of this AD.

Table 1 – Replacement of clutch assemblies

Clutch assembly P/N	Time accumulated by the clutch	Compliance time
02-7210-11001R13, 05-7211-K006001, 05-7211-K006002	100 flight hours (FH) or more	Before next flight after 22 August 2011 [the effective date of EASA AD 2011-0152-E] (see Note 2 below)
	Less than 100 FH	Upon accumulating 100 FH or within the next 10 FH after 22 August 2011 [the effective date of EASA AD 2011-0152-E], whichever occurs later
02-7210-11001R11, 02-7210-11001R11-AT	100 FH or more	Within 30 days after the effective date of this AD
	Less than 100 FH	Upon accumulating 100 FH or within the next 10 FH after the effective date of this AD, whichever occurs later

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	Note 1: For twin-engine aeroplanes with only one engine affected, irrespective of the time accumulated by the clutch, a grace period of 50 FH may be applied to the compliance time for replacement defined in Table 1 of this AD. Note 2: A single ferry flight (maximum of 2 FH, under VFR conditions only) is allowed to a maintenance facility to accomplish the required clutch assembly replacement. (2) Replacement of a clutch assembly on an engine, accomplished before the effective date of this AD in accordance with the instructions of TAE SB TM TAE 125-0021 Rev. 1 or TAE SB TM TAE 125-1011 P1 Rev. 1, as applicable, is acceptable to comply with the requirements of paragraph (1) of this AD for that engine, provided it can be positively determined that no clutch assembly having a P/N and s/n listed in TAE SB TM TAE 125-0021 Rev. 2 or TAE SB TM TAE 125-1011 P1 Rev. 2 is currently installed on that engine. (3) From the effective date of this AD, it is allowed to install on an aeroplane a TAE 125 engine with a P/N 02-7210-11001R11, P/N 02-7210-11001R11-AT, P/N 02-7210-11001R13, P/N 05-7211-K006001 or P/N 05-7211-K006002 clutch assembly installed, and to install on a TAE 125 engine a P/N 02-7210-11001R11, P/N 02-7210-11001R11-AT, P/N 02-7210-11001R13, P/N 05-7211-K006001 or P/N 05-7211-K006002 clutch assembly, provided it has been verified that the s/n of the clutch assembly (to be) installed on the engine is not listed in TAE SB TM TAE125-0021 Rev.2 or TAE SB TM TAE 125-1011 P1 Rev.2, as applicable to engine model.
Ref. Publications:	TAE SB TM TAE 125-0021 Rev.1 dated 17 August 2011 or Rev. 2 dated 13 October 2014. TAE SB TM TAE 125-1011 P1 Rev.1 dated 17 August 2011 or Rev. 2 dated 31 August 2011. 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. Based on the required actions and the compliance time, EASA have decided to issue a Final AD with Request for Comments, postponing the public consultation process until after publication. 3. Enquiries regarding this AD should be referred to the Safety Information Section, Certification 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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