

## SERVICE INFORMATION NO. SI 42-135

**NOTE:** SI's are used only:  
1) To distribute information from DAI to our customers.  
2) To distribute applicable information/documents from our suppliers to our customers with additional information.  
Typically there is no revision service for SI's. Each new information or change of that will be sent along with a new SI.

### I. TECHNICAL DETAILS

#### 1.1 Airplanes affected:

All DA 42 and DA 42 M airplanes

#### 1.2 Subject:

EASA Emergency Airworthiness Directive 2010-0111-E  
ATA-Code: 72-10

#### 1.3 Reason:

TAE has identified a batch of spring discs in clutches which received a non-conforming heat treatment process. This could result in engine in-flight shutdown and consequent loss of control of the aeroplane.

For the reason described above EASA AD 2010-0111-E requires the identification of the affected P/N clutch assemblies on TAE engines and replacement with new clutch assemblies.


#### 1.4 Information:

For detailed technical information see EASA AD 2010-0111-E, which is applicable without any further additions or restrictions.

### II. OTHERS

EASA Emergency Airworthiness Directive 2010-0111-E is attached to this Service Information.

In case of doubt contact Thielert Aircraft Engines GmbH.

<b>EASA</b>	<b>EMERGENCY AIRWORTHINESS DIRECTIVE</b>
	<p><b>AD No.: 2010-0111-E</b></p> <p><b>Date: 10 June 2010</b></p> <p>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</p>
<p>This AD is issued in accordance with EC 1702/2003, Part 21A.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].</p>	
<p><b>Type Approval Holder's Name :</b> Thielert Aircraft Engines GmbH</p>	<p><b>Type/Model designation(s) :</b> TAE 125 engines</p>
<p>TCDS Number : EASA.E.055</p>	
<p>Foreign AD : Not applicable</p>	
<p>Supersedure : None</p>	
<b>ATA 72</b>	<b>Engine – Clutch Assembly – Identification / Replacement</b>
<p>Manufacturer(s):</p>	<p>Thielert Aircraft Engines GmbH</p>
<p>Applicability:</p>	<p>TAE 125-01 (commercial designation Centurion 1.7), all serial numbers, if a clutch assembly with Part Number (P/N) 01-7210-11001R13 is installed, and TAE 125-02-99 (commercial designation Centurion 2.0), all serial numbers, if a clutch assembly with P/N 05-7211-K006001 or P/N 05-7211-K006002 is installed.</p> <p>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):</p> <ul style="list-style-type: none"> <li>- Cessna 172 and (Reims-built) F172 series (STC EASA.A.S.01527),</li> <li>- Piper PA-28 series (STC EASA.A.S.01632),</li> <li>- CEAPR (APEX, Robin) DR 400 series (STC EASA.A.S.01380), and</li> <li>- Diamond DA 40 and DA 42 series.</li> </ul>
<p>Reason:</p>	<p>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.</p> <p>This condition, if not corrected, could result in further cases of engine in-flight shutdown and consequent loss of control of the aeroplane.</p> <p>For the reason described above, this AD requires the identification of the affected P/N clutch assemblies on TAE 125-01 and TAE 125-02-99 engines and replacement with new clutch assemblies.</p>
<p>Effective Date:</p>	<p>14 June 2010</p>

Required Action(s) and Compliance Time(s):	<p>Required as indicated, unless accomplished previously:</p> <p>(1) Before next flight after the effective date of this AD, identify the serial number (s/n) of each P/N 01-7210-11001R13, P/N 05-7211-K006001 and P/N 05-7211-K006002 clutch assembly installed on the aeroplane. If the s/n of a clutch matches one of those listed in Thielert Aircraft Engines (TAE) Service Bulletin (SB) TM TAE 125-0021 (for TAE 125-01) or in TAE SB TM TAE 125-1011 P1 (for TAE 125-02-99), as applicable to engine model, within the compliance time specified in Table 1 or Table 2 of this AD, as applicable, replace the clutch assembly with a serviceable part.</p> <p style="text-align: center;">Table 1 – Single engine aeroplanes</p> <table border="1" data-bbox="558 571 1455 884"> <thead> <tr> <th>Time accumulated by the clutch</th> <th>Compliance time</th> </tr> </thead> <tbody> <tr> <td>100 flight hours (FH) or more</td> <td>Before next flight after the effective date of this AD (see note below)</td> </tr> <tr> <td>Less than 100 FH</td> <td>Upon accumulating 100 FH or within the next 10 FH after the effective date of this AD, whichever occurs later</td> </tr> </tbody> </table> <p style="text-align: center;">Table 2 – Twin engine aeroplanes</p> <table border="1" data-bbox="558 996 1455 1496"> <thead> <tr> <th>Installation and time accumulated by the clutch</th> <th>Compliance time</th> </tr> </thead> <tbody> <tr> <td>Only a single clutch affected, irrespective of time accumulated</td> <td>Upon accumulating 100 FH or within the next 50 FH after the effective date of this AD, whichever occurs later</td> </tr> <tr> <td colspan="2" style="text-align: center;">Both clutches affected, identify time accumulated for each clutch:</td> </tr> <tr> <td>Clutch with 100 FH or more</td> <td>Before next flight after the effective date of this AD (see note below)</td> </tr> <tr> <td>Clutch with less than 100 FH</td> <td>Upon accumulating 100 FH or within the next 10 FH after the effective date of this AD, whichever occurs later</td> </tr> </tbody> </table> <p><b>Note:</b> 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.</p> <p>(2) From the effective date of this AD, do not install on any aeroplane a TAE 125 engine with a P/N 01-7210-11001R13 clutch assembly installed, or a P/N 01-7210-11001R13 clutch assembly, unless it has been verified that the s/n of the clutch assembly is not listed in TAE SB TM TAE125-0021 or TAE SB TM TAE 125-1011 P1, as applicable to engine model.</p>	Time accumulated by the clutch	Compliance time	100 flight hours (FH) or more	Before next flight after the effective date of this AD (see note below)	Less than 100 FH	Upon accumulating 100 FH or within the next 10 FH after the effective date of this AD, whichever occurs later	Installation and time accumulated by the clutch	Compliance time	Only a single clutch affected, irrespective of time accumulated	Upon accumulating 100 FH or within the next 50 FH after the effective date of this AD, whichever occurs later	Both clutches affected, identify time accumulated for each clutch:		Clutch with 100 FH or more	Before next flight after the effective date of this AD (see note below)	Clutch with 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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Ref. Publications:	<p>TAE SB TM TAE 125-0021 dated 09 June 2010.</p> <p>TAE SB TM TAE 125-1011 P1 dated 09 June 2010.</p> <p>The use of later approved revisions of these documents is acceptable for compliance with the requirements of this AD.</p>																

Remarks :	<ol style="list-style-type: none"><li>1. If requested and appropriately substantiated, EASA can approve Alternative Methods of Compliance for this AD.</li><li>2. The safety assessment has requested not to implement the full consultation process and an immediate publication and notification.</li><li>3. Enquiries regarding this AD should be referred to the Airworthiness Directives, Safety Management &amp; Research Section, Certification Directorate, EASA. E-mail: <a href="mailto:ADs@easa.europa.eu">ADs@easa.europa.eu</a>.</li><li>4. For any question concerning the technical content of the requirements in this AD, please contact: Thielert Aircraft Engines, Platanenstraße 14, D-09350 Lichtenstein, Federal Republic Germany; telephone +49-37204-696-0; fax +49-37204-696- 2912; E-mail <a href="mailto:info@centurion-engines.com">info@centurion-engines.com</a></li></ol>
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