

EASA	EMERGENCY AIRWORTHINESS DIRECTIVE	
	<p>AD No.: 2011-0152-E</p> <p>Date: 18 August 2011</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>Type Approval Holder's Name : Thielert Aircraft Engines GmbH</p>	<p>Type/Model designation(s) : TAE 125 engines</p>	
<p>TCDS Number:</p>	<p>EASA.E.055</p>	
<p>Foreign AD:</p>	<p>Not applicable</p>	
<p>Supersedure:</p>	<p>This AD supersedes EASA Emergency AD 2010-0111-E dated 10 June 2010, including its Correction dated 11 June 2010.</p>	
<p>ATA 72</p>	<p>Engine – Clutch Assembly – Identification / Replacement</p>	
<p>Manufacturer(s):</p>	<p>Thielert Aircraft Engines (TAE)</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) 02-7210-11001R13 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"> - 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. 	
<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>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.</p> <p>Since that AD was issued, TAE have identified further affected clutch</p>	

	<p>assemblies. The two Service Bulletins (SB/TM) have been revised accordingly, adding the serial numbers of those units to the lists.</p> <p>For the reasons described above, this AD retains the requirements of EASA AD 2010-0111-E, which is superseded, and makes reference to the revised TAE SB/TM publications for identification and replacement of the affected clutch assemblies.</p>																
Effective Date:	22 August 2011																
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 02-7210-11001R13, 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 TAE SB TM TAE 125-0021 Revision 1 (for TAE 125-01 engines) or in TAE SB TM TAE 125-1011 P1 Revision 1 (for TAE 125-02-99 engines), 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="558 862 1455 1176"> <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 1288 1455 1780"> <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>Note: 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) An engine that is already compliant with EASA AD 2011-0111-E is considered to be compliant with the requirements of paragraph (1) this AD, 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 Revision 1 (for TAE 125-01</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
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																

	<p>engines) or in TAE SB TM TAE 125-1011 P1 Revision 1 (for TAE 125-02-99 engines), both dated 17 August 2011, is installed on that engine.</p> <p>(3) From the effective date of this AD, do not install on any aeroplane a TAE 125 engine with a P/N 02-7210-11001R13, P/N 05-7211-K006001 or P/N 05-7211-K006002 clutch assembly installed, and do not install on any TAE 125 engine a P/N 02-7210-11001R13, P/N 05-7211-K006001 or P/N 05-7211-K006002 clutch assembly, unless 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.1 or TAE SB TM TAE 125-1011 P1 Rev.1, as applicable to engine model.</p>
Ref. Publications:	<p>TAE SB TM TAE 125-0021 Rev.1 dated 17 August 2011.</p> <p>TAE SB TM TAE 125-1011 P1 Rev.1 dated 17 August 2011.</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"> 1. If requested and appropriately substantiated, EASA can approve Alternative Methods of Compliance for this AD. 2. The safety assessment has requested not to implement the full consultation process and an immediate publication and notification. 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 Thielert Aircraft Engines, Platanenstraße 14, D-09350 Lichtenstein, Federal Republic Germany Telephone +49-37204-696-0, Fax +49-37204-696- 2912, E-mail info@centurion-engines.com.