

Luftfartstilsynet
Postboks 8050 Dep., 0031 Oslo
Besøksadresse:
Rådhusgata 2, Oslo
Telefon : 23 31 78 00
Telefax : 23 31 79 95
e-post: postmottak@caa.dep.no

LUFTDYKTIGHETSPÅBUD (LDP)

MOTORER

THIELERT - 1

Med hjemmel i lov av 11. juni 1993 nr. 101 om luftfart, § 15-4 jf. § 4-1 og det vedtak om delegering av myndighet til Luftfartstilsynet av 10. desember 1999 nr. 1273.

2005-025 "ENGINE FAILURE IN CASE OF A FAILURE OF THE AIRCRAFT ELECTRICAL POWER SUPPLY"

Påbudet gjelder:

Thielert Aircraft Engines GMBH, Modell TAE 125-01, alle serienummer, som beskrevet i vedlagte kopi av LBA AD D-2004-457R2.

Påbudet omfatter:

Utfør tiltak som beskrevet i vedlagte kopi av LBA AD D-2004-457R2.

Tid for utførelse:

Til de tider som beskrevet i vedlagte kopi av LBA AD D-2004-457R2.

Referanse:

LBA AD D-2004-457R2.

Gyldighetsdato:

2005-04-25.



**Airworthiness
Directive**
D-2004-457R2

Luftfahrt-Bundesamt
Airworthiness Directive Section
Hermann-Blenk-Str. 26
38108 Braunschweig
GERMANY

This Airworthiness Directive supersedes the Airworthiness Directives 2004-457R1 of 31 January 2005

Thielert Aircraft Engines

Effective Date: 31 March 2005

Affected:

Kind of aeronautical product:	Aircraft Engine
Manufacturer:	Thielert Aircraft Engines GmbH, Platanenstrasse, Lichtenstein, Germany
Type:	TAE125
Models affected:	TAE125-01
Serial Numbers affected:	All
German Type Certificate No.:	4631

Subject:

In-flight engine failure in case of a failure of the electrical aircraft power supply.

Reason:

In the scope of tests of the electrical system conducted by the engine manufacturer it was found that in case of a failure of the battery line, of the battery relay or of the battery the engine may fail. It has been established that the reason for this failure was an electrical malfunction of the alternator.

The actions specified in this Airworthiness Directive are intended to prevent an in-flight engine failure in case of a failure of the electrical aircraft power supply, which could result in an emergency landing or loss of power of the aircraft.

Action:

The following actions are required by this airworthiness directive:

1. One of the following modifications of the electrical power supply has to be performed:
 - a) The alternator 02-7150-55002R2 has to be replaced by alternator 02-7150-55002R3. Refer to the appropriate instructions of the aircraft manufacturer or holder of the supplemental type certificate respectively or
 - b) In existing installations the alternator 02-7150-55002R2 has to be replaced by alternator set 02-7150-55008R1 "Set Alternator 14V DAI with ALTREG FF" for Diamond installations and by alternator set 02-7150-55016R1 "Set Alternator 14V with ALTREG FFL" for all other installations.
For new aircrafts the following alternator sets must be used:
02-7150-55800R1 "Set Alternator 14V DAI with ALTREG" for new Diamond installations and 02-7150-55018R1 "Set Alternator 14V with ALTREG" for all other installations.
Refer to the appropriate instructions of the aircraft manufacturer or holder of the supplemental type certificate respectively.
or
 - c) A stabilising capacitor has to be installed. Refer to the appropriate instructions of the aircraft manufacturer or holder of the supplemental type certificate respectively.
2. The actual capacity of the aircraft battery has to be checked according to Gill manual „Aircraft battery service manual“ (Gill Document Number: Q01-1120) Chapter 7.7 continued airworthiness determination for GILL aircraft batteries.

All mentioned actions must be accomplished in accordance with the referenced manufacturer service bulletin.

Compliance:

All compliance times of the mentioned actions have to be in compliance with the referenced manufacturer service bulletin.

Technical publication of the manufacturer:

Thielert Service Bulletin No. TM TAE 125-0008, Revision 2, of 04 February 2005. This Service Bulletin becomes herewith part of this AD and may be obtained from:

Thielert Aircraft Engines GmbH
Platanenstrasse 14
09350 Lichtenstein, GERMANY
Tel: +49-37204-6960, Fax: +49-37204-69650
info@centurion-engines.com
www.centurion-engines.com,

EASA-Approval

Approved by EASA under Approval-No. 2005-1968 on 24 February 2005

BLANK

Luffartstilsynet
Postboks 8050 Dep., 0031Oslo
Besøksadresse:
Rådhusgata 2, Oslo
Telefon : 23 31 78 00
Telefax : 23 31 79 95
e-post: postmottak@caa.dep.no

LUFTDYKTIGHETSPÅBUD (LDP)

MOTORER

THIELERT - 2

Med hjemmel i lov av 11. juni 1993 nr. 101 om luftfart, § 15-4 jf. § 4-1 og det vedtak om delegering av myndighet til Luffartstilsynet av 10. desember 1999 nr. 1273.

2005-026 "SOFTWARE UPDATE OF FADEC UNIT"

Påbudet gjelder:

Thielert Aircraft Engines GMBH, Modell TAE 125-01, alle serienummer, som beskrevet i vedlagte kopi av LBA AD D-2005-145.

Påbudet omfatter:

Utfør tiltak som beskrevet i vedlagte kopi av LBA AD D-2005-145.

Tid for utførelse:

Til de tider som beskrevet i vedlagte kopi av LBA AD D-2005-145 med virkning fra denne LDP's gyldighetstidspunkt.

Referanse:

LBA AD D-2005-145.

Gyldighetsdato:

2005-04-25.



Airworthiness Directive

D-2005-145

Luffahrt-Bundesamt

Airworthiness Directive Section
Hermann-Blenk-Str. 26
38108 Braunschweig
GERMANY

Thielert Aircraft Engines

Effective Date: 30 April 2005

Affected:

Kind of aeronautical product: Aircraft Engine
Manufacturer: Thielert Aircraft Engines GmbH, Platanenstrasse, Lichtenstein, Germany
Type: TAE125
Models affected: TAE125-01
Serial Numbers affected: All
German Type Certificate No.: 4631

Subject:

Software update of the Full Authority Digital Engine Control Unit (FADEC) due to a software error.

Reason:

Due to a software error in the Full Authority Digital Engine Control Unit (FADEC) loss of power incidents after prolonged descent at idle power setting at low outside air temperatures have been determined during operation. The actions specified in this airworthiness directive are intended to prevent loss of power incidents after prolonged descent at idle power setting, which could result in an emergency landing.

Action:

The following actions are required by this airworthiness directive:

1. Unless the software update of the Full Authority Digital Engine Control Unit (FADEC) has been carried out, the power setting for prolonged descents above 5000ft must not fall below 30%.
2. Software update of the Full Authority Digital Engine Control Unit (FADEC) in compliance with the Operation and Maintenance Handbook No. OM 02-01.

All mentioned actions must be accomplished in accordance with the referenced manufacturer service bulletin.

Compliance:

For the necessary actions mentioned above the following compliance times have been laid down:

1. Immediately after the effective date of this airworthiness directive.
2. Within the next 100 flight hours or before 01 October 2005, whichever occurs first.

Technical publication of the manufacturer:

Thielert Service Bulletin No. TM TAE 125-0004, Revision 4, of 01 April 2005. This service bulletin becomes here-with part of this AD and may be obtained from:

Thielert Aircraft Engines GmbH
Platanenstrasse 14
09350 Lichtenstein, GERMANY
Tel: +49-37204-6960, Fax: +49-37204-69650
info@centurion-engines.com
www.centurion-engines.com

EASA-Approval

Approved by EASA under approval-No. 2005-2921 on 01 April 2005.

Luftfartstilsynet
Postboks 8050 Dep., 0031 Oslo
Besøksadresse:
Rådhusgata 2, Oslo
Telefon : 23 31 78 00
Telefax : 23 31 79 95
e-post: postmottak@caa.dep.no

LUFTDYKTIGHETSPÅBUD (LDP)

MOTORER

THIELERT - 4

Med hjemmel i lov av 11. juni 1993 nr. 101 om luftfart, § 15-4 jf. § 4-1 og det vedtak om delegering av myndighet til Luftfartstilsynet av 10. desember 1999 nr. 1273.

2005-064 UTSKIFTING AV CLUTCHENHET ELLER AV CLUTCHENS FRIKSJONS PLATE

Påbudet gjelder:

Thielert Aircraft Engines GMBH, Modell TAE 125-01, som beskrevet i vedlagte kopi av LBA AD D 2005-229.

Påbudet omfatter:

Utfør tiltak som beskrevet i vedlagte kopi av LBA AD D-2005-229

Tid for utførelse:

Som angitt i vedlagte kopi av LBA AD D-2005-229 med virkning fra denne LDP's gyldighetstidspunkt.

Referanse:

LBA AD D-2005-229

Gyldighetsdato:

2005-11-01.



**Airworthiness
Directive**

D-2005-229

Luftfahrt-Bundesamt

Airworthiness Directive Section
Hermann-Blenk-Str. 26
38108 Braunschweig
GERMANY

Thielert Aircraft Engines

Effective Date: 25 June 2005

Affected:

Kind of aeronautical product: Aircraft Engine
Manufacturer: Thielert Aircraft Engines GmbH, Platanenstrasse, Lichtenstein, Germany
Type: TAE125
Models affected: TAE125-01
Serial Numbers affected: All Engines of the a.m. model on which a clutch is installed, which has been delivered with a "Form One" number listed in the referenced manufacturer service bulletin
German Type Certificate No.: 4631

Subject:

Loss of power in flight due to a failure of the clutch friction plate.

Reason:

An incident with a TAE125 powered aircraft due to significant loss of power in flight has been reported to the Luftfahrt-Bundesamt. An investigation performed by the manufacturer revealed a failure of the clutch friction plate. The actions specified by this Airworthiness Directive are intended to prevent loss of power in flight which could result in reduced controllability of the aircraft and possible forced landing.

Action:

This airworthiness directive requires an exchange of the clutch assembly in compliance with the manufacturer repair manual, RM-02-01, chapter 5 or an exchange of the clutch friction plate in compliance with the manufacturer repair manual, RM-02-01, chapter 56.

All necessary actions must be performed on the basis of the referenced manufacturer Service Bulletin.

Compliance:

All necessary actions must be performed before the next flight or June 30, 2005; whichever occurs first.

Technical publication of the manufacturer:

Thielert Service Bulletin No. TM TAE 125-0011 Revision 3 of 13 June 2005. This service bulletin becomes herewith part of this AD and may be obtained from:

Thielert Aircraft Engines GmbH
Platanenstrasse 14
09350 Lichtenstein, GERMANY
Tel: +49-37204-6960, Fax: +49-37204-69650
info@centurion-engines.com
www.centurion-engines.com

EASA-Approval

The Luftfahrt-Bundesamt has issued this Airworthiness Directive in accordance with Article 10.1 of European Union Regulation 1592/2002.

Luftfartstilsynet
Postboks 8050 Dep., 0031 Oslo
Besøksadresse:
Rådhusgata 2, Oslo
Telefon : 23 31 78 00
Telefax : 23 31 79 95
e-post: postmottak@caa.dep.no

LUFTDYKTIGHETSPÅBUD (LDP)

MOTORER

THIELERT - 5

Med hjemmel i lov av 11. juni 1993 nr. 101 om luftfart, § 15-4 jf. § 4-1 og det vedtak om delegering av myndighet til Luftfartstilsynet av 10. desember 1999 nr. 1273.

2006-015 REVISJON AV KAPITTEL 5 TIL THIELERT TAE 125-01 "OPERATIONS & MAINTENANCE MANUAL NO. OM 02-01"

Påbudet gjelder:

Thielert Aircraft Engines GMBH, Modell TAE 125-01, alle serienummer, som beskrevet i vedlagte kopi av EASA AD.: 2006-0044.

Påbudet omfatter:

Utfør tiltak som beskrevet i vedlagte kopi av EASA AD.: 2006-0044.

Anm.: Denne LDP erstatter og opphever LDP 2005-042.

Tid for utførelse:


Som angitt i vedlagte kopi av EASA AD.: 2006-0044, med virkning fra denne LDP's gyldighetsdato.

Referanse:

EASA AD.: 2006-0044.

Gyldighetsdato:

2006-03-31.

EASA	AIRWORTHINESS DIRECTIVE	
	<p style="text-align: center;">AD No : 2006-0044</p> <p style="text-align: center;">Date: 15 February 2006</p>	
<p>No person may operate an aircraft to which an Airworthiness Directive applies, except in accordance with the requirements of that Airworthiness Directive unless otherwise agreed with the Authority of the State of Registry.</p>		
<p>Type Approval Holder's Name : Thielert Aircraft Engines</p>	<p>Type/Model designation(s) : TAE 125-01</p>	
<p>TCDS Number : LBA Germany TCDS 4631</p>		
<p>Foreign AD : not applicable</p>		
<p>Supersedure : LBA Germany D-2005-152</p>		
<p>ATA 05</p>	<p>Time Limits/Maintenance Checks - Revision of Chapter 5 (Airworthiness Limitation Section) of Thielert TAE 125-01 Operation & Maintenance Manual OM 02-01</p>	
<p>Manufacturer(s):</p>	<p>Thielert Aircraft Engines</p>	
<p>Applicability:</p>	<p>TAE 125-01 – All serial numbers – Installed on, but not limited to, Part 23 aeroplanes</p>	
<p>Reason:</p>	<p>This AD is issued in conjunction with the revision of Chapter 5 of the Thielert TAE 125-01 Operation & Maintenance Manual OM 02-01. The revised Chapter 5 now incorporates an additional exchange interval of 300 h for the low pressure fuel pump due to an engine in flight shut-down caused by a pump failure as a result of pinion wear.</p>	
<p>Effective Date:</p>	<p>28 February 2006</p>	
<p>Compliance:</p>	<p>Accomplish the following immediately after the effective date of this airworthiness directive:</p> <p>1. Revise the Thielert TAE125-01 Operation & Maintenance Manual No. OM 02-01 by replacing of revision 0, 1 or 2 of the "Airworthiness Limitations Section" (Chapter 5) with revision 3 issue 3 and Perform the necessary maintenance actions as required in Chapter 5 revision 3 issue 3.</p>	

	<p>2. For all fuel pumps having accumulated less than 300 flight hours the initial fuel feed pump inspection has to be performed according Chapter 5, Rev. 3 Iss. 3.</p> <p>For all fuel pumps having accumulated between 300 and 400 flight hours the initial fuel feed pump inspection has to be performed within 14 days after the Effective Date of this airworthiness directive.</p> <p>For all fuel pumps having accumulated more than 400 flight hours the initial fuel feed pump inspection has to be performed within 3 days after the Effective Date of this airworthiness directive.</p>
Ref. Publications:	<p>Thielert TAE125-01 Operation & Maintenance Manual No. OM 02-01, Chapter 5, Rev. 3 Iss. 3, dated 15 February 2006.</p> <p>Thielert Service Bulletin TM TAE 125-0010.</p>
Remarks :	<ol style="list-style-type: none"> 1. If requested and appropriately substantiated the responsible EASA manager for the related product has the authority to accept Alternative Method of Compliance (AMOCs) for this AD. 2. This AD was posted as PAD 06-011 for consultation on 16 January 2006 with a comment period until 01 February 2006. The Comment Response Document can be found at http://www.easa.eu.int/home/aw_dir_en.html. 3. Enquiries regarding this AD should be addressed to Mr. M. Capaccio, AD Focal Point, Certification Directorate, EASA. E-mail ADs@easa.eu.int. 4. For any question concerning the technical content of the requirements in this AD, please contact Thielert Aircraft Engines (Ph.: +49 37204 6960; Fax +49 37204 69650)

BLANK

Luftfartstilsynet
Postboks 243, NO-8001 Bodø
Besøksadresse:
Bodø Lufthavn, Bodø
Telefon : 75585000
Telefax : 75585005
e-post: postmottak@caa.no

LUFTDYKTIGHETSPÅBUD (LDP)

MOTORER

THIELERT - 6

Med hjemmel i lov av 11. juni 1993 nr. 101 om luftfart, § 15-4 jf. § 4-1 og det vedtak om delegering av myndighet til Luftfartstilsynet av 10. desember 1999 nr. 1273.

**2007-052 "ENGINE OIL SYSTEM - CATCHTANK (SUMP) FILTER ADAPTOR -
INSTALLATION"**

Påbudet gjelder:

Thielert Aircraft Engines GMBH, Modell TAE 125-01, med serienummer som beskrevet i vedlagte kopi av EASA AD 2007-0232.

Påbudet omfatter:

Utfør tiltak som beskrevet i vedlagte kopi av EASA AD 2007-0232.

Tid for utførelse:


Som angitt i vedlagte kopi av EASA AD 2007-0232 med virkning fra denne LDP's gyldighetsdato, men ikke senere enn 15. desember 2007.

Referanse:

EASA AD 2007-0232.

Gyldighetsdato:

2007-10-24.

EASA	AIRWORTHINESS DIRECTIVE
	<p style="text-align: center;">AD No.: 2007-0232</p> <p style="text-align: center;">Date: 23 August 2007</p>
Type Approval Holder's Name:	Type/Model designation(s):
Thielert Aircraft Engines	TAE125-01 engines
TCDS Numbers: EASA E.055	
Foreign AD: Not applicable	
Supersedure: None	
ATA 79	Engine Oil System - Catchtank (Sump) Filter Adaptor - Installation
Manufacturer:	Thielert Aircraft Engines
Applicability:	<p>TAE125-01 engines, all serial numbers (s/n), up to and including s/n 02-01-1018.</p> <p>These engines are known to be installed on, but not limited to, Cessna 172 and (Reims-built) F172 series (EASA STC Nr. EASA.A.S.01527); Piper PA-28 series (EASA STC Nr. EASA.A.S.01632), APEX (Robin) DR 400 series (EASA STC Nr. EASA.A.S.01380); and Diamond DA40 and DA42 series aircraft.</p>
Reason:	<p>An in-flight engine shutdown incident was reported on an aircraft equipped with a TAE125-01 engine. This was found to be mainly the result of a blockage of the scavenge oil gear pump due to a broken axial bearing of the turbocharger. The broken parts were sucked into the oil pump and caused a seizure. With the pump inoperative, the oil separator overfilled, causing the engine oil to escape via the breather vent line. This caused a loss of oil that resulted in the engine overheating and subsequent shutdown. Thielert, the engine TC holder, has developed a filter adaptor for the Oil Catchtank (Sump) that is designed to prevent foreign objects from entering into the scavenge pump, minimising the chance of such an incident recurring.</p> <p>For the reasons stated above, this Airworthiness Directive (AD) requires the modification of all affected TAE125-01 engines by installing filter adaptor between the Oil Catchtank and the hose leading to the dual stage oil pump.</p>
Effective Date:	06 September 2007

Compliance	<p>Required as indicated, unless accomplished previously:</p> <p>Within the next 50 flight hours after the effective date of this directive, but not later than 31 October 2007, whichever occurs first, modify the engine oil system in accordance with the instructions of Thielert Aircraft Engines TM/SB TAE 125-0016, initial issue dated 19 September 2006 or Revision 1 dated 15 June 2007.</p>
Ref. Publications:	Thielert Service Bulletin TM TAE 125-0016, Initial Issue or Revision 1 or later approved revisions.
Remarks:	<ol style="list-style-type: none"> 1. If requested and appropriately substantiated the responsible EASA manager for the related product has the authority to accept Alternative Methods of Compliance (AMOCs) for this AD. 2. This AD was posted on 08 August 2007 as PAD 07-137 for consultation until 22 August 2007. No comments were received during the consultation period. 3. Enquiries regarding this AD should be referred to the AD Focal Point - Certification Directorate, EASA. E-mail: ADs@easa.europa.eu 4. For any questions concerning the content of this AD, please contact: Thielert Aircraft Engines Platanenstraße 14 D-09350 Lichtenstein, Germany Telephone +49-37204-696-0; Fax +49-37204-696-55; E-mail info@centurion-engines.com

BLANK