

Diamond Aircraft Industries G.m.b.H N.A. Otto-Straße 5 A-2700 Wiener Neustadt Austria

# **SERVICE INFORMATION NO. SI 42-112**

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 airplanes equipped with TAE 125-01 engines

### 1.2 Subject:

EASA AD No. 2008-0145R1 ATA-Code: 61-00

### 1.3 Reason:

EASA has issued Revision 1 of the Airworthiness Directive concerning the replacement of the propeller control valve, P/N NM-0000-0124501. This revision has been issued to reduce the applicability. EASA AD No. 2009-0151 covers the subject for the TAE 125-02-99 engines.

### 1.4 Information:

For detailed technical information see EASA AD No. 2008-0145R1 which is applicable without any further additions or restrictions.

### NOTE:

This Airworthiness Directive supersedes EASA AD No. 2008-0130, dated 15-Jul-2008.

### II. OTHERS

The EASA AD No. 2008-0145R1 is attached to this SI.

In case of doubt contact Thielert Aircraft Engines GmbH.

EASA

### **AIRWORTHINESS DIRECTIVE**

#### AD No.: 2008-0145R1

#### Date: 23 July 2009

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 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].

### Type Approval Holder's Name :

Thielert Aircraft Engines GmbH

### Type/Model designation(s) :

TAE125 engines

TCDS Number : EASA.E.055

Foreign AD : Not applicable

Supersedure : This AD supersedes EASA AD 2008-0130 dated 15 July 2008.

ATA 61	Propellers – Propeller Control Valve – Replacement (Life Limit)	
Manufacturer(s):	Thielert Aircraft Engines GmbH.	
Applicability:	TAE125-01 engines, all serial numbers, if installed on Diamond Aircraft Industries Model DA 42 aircraft.	
Reason:	In-flight engine shutdown incidents have been reported on Diamond Aircraft Industries DA 42 aircraft equipped with TAE125 engines. Preliminary investigations showed that it was mainly the result of failure of the propeller control valve. This condition, if not corrected, could lead to further cases of engine in-flight shutdown, possibly resulting in reduced control of the aircraft.	
	EASA AD 2008-0130 has been published to require implementation of a life limit of 300 flight hours (FH) for the Proportional Pressure Reducing Valve 24V (propeller control valve) Part Number (P/N) NM-0000-0124501 on TAE125-01 engines and replacement of propeller control valves that have exceeded the established life limit. The same P/N valve is also installed on TAE125-02-99 engines.	
	As this problem has only manifested itself on those engines, as installed on Diamond Aircraft Industries DA 42 aircraft, any TAE125-01 and TAE125-02-99 engines installed on other aircraft are not affected.	
	For the reasons stated above, this EASA AD retains the requirements of AD 2008-0130, which is superseded, and expands the applicability to include TAE125-02-99 engines on Diamond DA 42 aircraft that have the affected valve installed.	
	This revision has been issued to reduce the applicability. AD 2009-0151 covers the subject for the TAE 125-02-99 engines.	
Effective Date:	15 August 2008	

<b>.</b>			EASA AD No : 2008-07	145R1	
	<ul> <li>Required as indicated, unless accomplished previously:</li> <li>(1) For TAE125-01 engines, initially replace the propeller control valve P/N NM-0000-0124501 in accordance with the instructions of Thielert Aircraft Engines (TAE) Service Bulletin (SB) TM TAE125-0018 at the time indicated in Table 1 below:</li> </ul>				
Required Action(s) and Compliance Time(s):	(2)	Table 1			
		Gearbox accumulated time since new:	Compliance time:	-	
		More than 400 FH	55 FH or during the next scheduled maintenance, whichever occurs first after 29 July 2008, the effective date of AD 2008-0130.		
		Less than 400 FH	Upon accumulating 300 FH (first scheduled maintenance), or within 110 FH, whichever occurs later after 29 July 2008, the effective date of AD 2008-0130.		
		For TAE125-02-99 engines, initially replace the propeller control valve P/N NM-0000-0124501 in accordance with the instructions of TAE SB TM TAE125-1007 P1 at the time indicated in Table 2 below:		ГМ	
		Table 2			
		Gearbox accumulated time since new:	Compliance time:		
		More than 400 FH	55 FH or during the next scheduled maintenance, whichever occurs first after the effective date of this AD		
		Less than 400 FH	Upon accumulating 300 FH (first scheduled maintenance), or within 110 FH, whichever occurs later after the effective date of this AD		
	(3)	After compliance with paragraph (1) or (2) of this AD, as applicable to engine model, at intervals not to exceed 300 FH, replace the propeller control valve P/N NM-0000-0124501 in accordance with the instructions of TAE SB TM TAE125-0018 or SB TM TAE125-1007 P1, as applicable.			
Ref. Publication:	Thielert Aircraft Engines SB TM TAE125-0018 dated 19 June 2008 and TM TAE125-1007 P1 dated 11 July 2008.				
	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.				
	<ol> <li>The original AD was posted on 16 July 2008 as PAD 08-082 for consultation until 30 July 2008. No comments were received during the consultation period.</li> </ol>				
	<ol> <li>Enquiries regarding this AD should be referred to the Airworthiness Directives, Safety Management &amp; Research Section, Certification Directorate, EASA. E-mail <u>ADs@easa.europa.eu</u>.</li> </ol>				
		For any question concerning th this AD, please contact: <b>Thiele</b> Platanenstraße 14, D-09350 Lio Telephone +49-37204-696-0, F E-mail <u>info@centurion-engines</u>	chtenstein, Germany ax +49-37204-696-55	n	

### **EASA AIRWORTHINESS DIRECTIVE** AD No.: 2008-0130 Date: 15 July 2008 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 EC 1702/2003, Part 21A.3B. In accordance with EC 2042/2003 Annex I, P rt M.A.301 continuing airworthiness of an aircraft shall be ensured by accomplishing any applicable ADs. Consequently, person may erate an aircraft to which an AD applies, except in accordance with the requirements of that AD unless otherwise specific [EC by the Agen 2042/2003 Annex I, Part M.A.303] or agreed with the Authority of the State of Registry [EC 216/2008, A cle 14(4) emption Type Approval Holder's Name : (s) Type/Model designation TAE125-0 Thielert Aircraft Engines GmbH ngines TCDS Number : **EASA E.055** Foreign AD : Not applicable Supersedure : None **ATA 61** ellers Propuler Control Valve – Replacement (Life Limit) Pro Jert Aircraft Engines GmbH. Manufacturer(s): Th E125-01 engines, all serial numbers, if installed on Diamond Aircraft Industries Applicability: Model DA 42 aircraft. In-flight engine shutdown incidents have been reported on Diamond Aircraft Industries DA 42 aircraft equipped with TAE125-01 engines. Preliminary investigations showed that it was mainly the result of failure of the propeller control valve. This condition, if not corrected, could lead to further cases of engine in-flight shutdown, possibly resulting in reduced control of the aircraft. For the reasons stated above, this EASA AD introduces a life limit of 300 flight Reason: hours (FH) for the Proportional Pressure Reducing Valve 24V (propeller control valve) Part Number (P/N) NM-0000-0124501 and requires the replacement of propeller control valves that have exceeded the established life limit. As this problem has only manifested itself on this engine as installed on Diamond Aircraft Industries DA 42 aircraft, TAE125-01 engines installed on other aircraft are not affected. 29 July 2008 Effective Date:

		accordance with the instructions of Thielert Aircraft Engines Service Bullet TM TAE125-0018 at the time indicated in Table 1 below:		
		T	Table 1	
Required Action(s) and Compliance Time(s):		Gearbox accumulated time since new:	Compliance time:	
		More than 400 FH	55 FH or during the next scheduled maintenance, whichever occurs first states the effective date of thir AD	
		Less than 400 FH	Upon accumulating 100 FH (first schedulind maints ance) or within 100 FH, which occurs later after the effective date of this set	
	(2) Thereafter, at intervals not to exceed 0.00 FH, remace the propeller control valve P/N NM-0000-0124501 in accordance with the instructions of Thielert Aircraft Engines Service Bulleting M TA: 125-001.			
Ref. Publication:	Thielert Service Bulletin TM TAE 25-00 s dated 13 June 2008.			
	The use of later approved revisions, this detrament is acceptable for compliance with the requirements of this AD.			
Remarks :	<ol> <li>If requested and appropriately substantiated, EASA can approve Alternativ Methods of Companie for this AD.</li> <li>This ADL as post d on 25 June 2008 as PAD 08-073 for consultation until 09 July 2003. The Comment Response Document can be found at <u>http://adl.eas.supropa.eu</u>.</li> <li>Inquirie regarance this AD should be referred to the Airworthiness Directing of the Management &amp; Research Section, Certification Directorate, EASA. main <u>Ds@ussa.europa.eu</u>.</li> </ol>			
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