

SERVICE INFORMATION NO. SID4-024

I. TECHNICAL DETAILS

1.1 Airplanes affected

all DA 40 D

1.2 Subject

Engine.

ATA-Code: 72-00

1.3 Reason

Service Bulletins TM TAE 125-0008, initial issue, from Thielert Aircraft Engines GmbH.

1.4 Information

To ensure a complete supply of Technical Information the Service Bulletin from Thielert Aircraft Engines GmbH released from October 19th, 2004 is provided by Diamond Aircraft to all DA 40 D customers.

Time of compliance within the next maintenance action, but latest until January 31th, 2005 .

CAUTION!

Complement to Item “Measures” of Service Bulletin TM TAE 125-0008:

For the DA 40 D only Item “A)” of Service Bulletin TM TAE 125-0008 is approved!!

II. OTHERS

The Service Bulletin TM TAE 125-0008, initial issue, from Thielert Aircraft Engines GmbH is attached to this Service Information.



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Technische Mitteilung / Service Bulletin

Technische Mitteilung Nr. / Datum: TM TAE 125-0008, Revision 0 / 19.10.2004
Service Bulletin No. / Date TM TAE 125-0008, Revision 0 / October 19th, 2004

Betrifft: Funktion des Alternators 02-7150-55002R2 bei Ausfall des elektrischen Bordnetzes
Subject: *Function of Alternator 02-7150-55002R2 in case of a failure of the electrical aircraft power supply*

Betroffenes Luftfahrtgerät: TAE 125-01
Type affected: TAE 125-01

Betroffene Geräte-Nr.: Alle
Models affected: All

Einstufung: Kategorie 2 – Zuverlässigkeit
Compliance: *Category 2 – reliability*

Dringlichkeit: mit dem nächsten Wartungsereignis, jedoch spätestens bis 31.01.2005.
Accomplishment: *with the next maintenance action, but latest until January the 31st 2005.*

Grund: Bei der Durchführung von Tests am elektrischen System durch den Triebwerkhersteller wurde festgestellt, dass bei Ausfall des Batteriestrangs, des Batterierelays oder der Batterie das Triebwerk ausfallen kann. Als Grund für diesen Ausfall wurde eine elektrische Fehlfunktion des Alternators ermittelt. Die Maßnahmen, welche in dieser Technischen Mitteilung festgelegt wurden, sollen einen Triebwerkausfall im Flug bei Ausfall des elektrischen Bordnetzes verhindern, welcher eine Notlandung oder einen Leistungsverlust des Flugzeugs zur Folge haben könnte.

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 Service Bulletin 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 airplane.*

Maßnahmen: Für die Umsetzung dieser Technischen Mitteilung ist eine der drei folgenden technischen Lösungen durchzuführen:

A) Der Alternator 02-7150-55002R2 ist gegen den Alternator 02-7150-55002R3 auszutauschen. Entsprechende Hinweise des Flugzeugherstellers bzw. Halter der Ergänzenden Musterzulassung sind zu beachten.

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B) Der Alternator 02-7150-55002R2 ist gegen den Alternator 02-7150-55008R1 mit Alternator Regler (ALT REG) auszutauschen. Entsprechende Hinweise des Flugzeugherstellers bzw. Halter der Ergänzenden Musterzulassung sind zu beachten.

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- C) Ein Kondensator ist zu installieren. Entsprechende Hinweise des Flugzeugherstellers bzw. Halter der Ergänzenden Musterzulassung sind zu beachten.

Measures:

To comply with this Service Bulletin, one of the following three technical solutions 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) *The alternator 02-7150-55002R2 has to be replaced by alternator 02-7150-55008R1 with Alternator Regulator ALT REG. 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*

Hinweise:

Weitere Hinweise erhalten Sie beim Hersteller des Triebwerks. Nach Umsetzung dieser Technische Mitteilung informieren Sie bitte den Triebwerkhersteller unter Angabe der Triebwerkseriennummer, ob Teil A); B) oder C) durchgeführt wurde.

Folgende Bauteile werden auf Anforderung durch die TAE GmbH autorisierten Wartungsbetrieben zur Verfügung gestellt.

Remarks:

Further instructions can be received from the engine manufacturer.

After implementation of this Service Bulletin, please advise the engine manufacturer, if part A); B) or C) is accomplished, including the engine serial number.

The following parts are available from TAE GmbH on request by authorised maintenance organisations.

Bauteil / part	P/N	Anzahl / amount
A) Alternator / Alternator	02-7150-55002R3	1
Oder / or		
B) Alternator inkl. ALT REG / Alternator incl. ALT REG	02-7150-55008R1	1
Oder / or		
C) Kondensator Installation (inkl. Einbauanleitung) / Capacitor installation (incl. installation instruction)	02-7150-55008R1	1



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Zulassung: Die technischen Informationen, die in diesem Dokument enthalten sind, wurden durch die EASA am 15.10.2004 mit der Zulassungs-Nr. 2004-10522 genehmigt.

Approval: The technical information contained in this document has been approved by the EASA at October 15th 2004 with approval no. 2004-10522.



Airworthiness Directive

D-2004-457

Luffahrt-Bundesamt

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

Thielert Aircraft Engines

Effective Date: 31 October 2004

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 airplane.

Action:

One of the following actions is required by this Airworthiness Directive:

1. 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
2. The alternator 02-7150-55002R2 has to be replaced by alternator 02-7150-55008R1 with Alternator Regulator ALT REG. Refer to the appropriate instructions of the aircraft manufacturer or holder of the supplemental type certificate respectively or
3. A stabilising capacitor has to be installed. Refer to the appropriate instructions of the aircraft manufacturer or holder of the supplemental type certificate respectively.

All necessary measures must be accomplished in accordance with the mentioned service bulletin of the manufacturer.

Compliance:

The Actions must be done with the next maintenance actions, but not later than January 31, 2005.

Technical publication of the manufacturer:

Thielert Service Bulletin No. TM TAE 125-0008 initial issue dated 19 October 2004. This Service Bulletin becomes herewith part of this AD and may be obtained from:

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EASA-Approval

Approved by EASA under Approval-No. 2004-10522 on October 15, 2004.