

## SERVICE INFORMATION NO. SI D4-153

**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 40 D aircraft with TAE 125-02-99 engine installed

#### 1.2 Subject:

EASA Airworthiness Directive 2012-0024  
ATA-Code: 71-60

#### 1.3 Reason:

EASA has issued Airworthiness Directive 2012-0024 prescribing inspection of the turbocharger hose and if necessary, depending on the quality of the installed SCEET 10 ducting, replacement with a hose that is suitable for the application as a turbocharger hose.


#### 1.4 Information:

For detailed technical information refer to EASA Airworthiness Directive 2012-0024 which is applicable without any further additions or restrictions.

### II. OTHERS

EASA Airworthiness Directive 2012-0024 is attached to this Service Information.

In case of doubt contact Diamond Aircraft Industries GmbH.

<b>EASA</b>	<b>AIRWORTHINESS DIRECTIVE</b>	
	<p><b>AD No.: 2012-0024</b></p> <p><b>Date: 03 February 2012</b></p> <p>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.</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> Diamond Aircraft Industries GmbH</p>	<p><b>Type/Model designation(s) :</b> DA 40 D aeroplanes</p>	
<p>TCDS Number :</p>	<p>EASA.A.022</p>	
<p>Foreign AD :</p>	<p>Not applicable</p>	
<p>Supersedure :</p>	<p>None</p>	
<b>ATA 71</b>	<b>Power Plant – Turbocharger Hose – Inspection/Replacement</b>	
<p>Manufacturer(s):</p>	<p>Diamond Aircraft Industries GmbH (Austria), Shandong Bin Ao Aircraft Industries Company, Ltd (China)</p>	
<p>Applicability:</p>	<p>DA 40 D aeroplanes, all serial numbers, if equipped with a Thielert TAE 125-02-99 engine.</p>	
<p>Reason:</p>	<p>Occurrences have been reported of engine turbocharger hose inner layer separation on Diamond DA 40 D aeroplanes.</p> <p>The technical investigation concluded that different qualities of flexible turbocharger hose, which connects the air alternate valve with the turbocharger air inlet, were used on the affected aeroplanes. Inappropriate quality of some flexible hoses caused the inner layer of the 2-layer ducting to separate, thereby reducing the cross-section of the air intake of the turbocharger.</p> <p>This condition, if not detected and corrected, could lead to engine power loss or in-flight shut-down, possibly resulting in a forced landing and consequent damage to the aeroplane and/or injury to the occupants.</p> <p>Prompted by these findings, Diamond Aircraft Industries (DAI) have developed procedures for identification and replacement of unsuitable turbocharger hoses and installation of the proper hose attachment on the engine mount.</p> <p>For the reasons described above, this AD requires a one-time inspection of the turbocharger hose and, depending on findings, replacement with a serviceable part, and modification of the hose attachment with a P-clamp.</p>	
<p>Effective Date:</p>	<p>10 February 2012</p>	

<p>Required Action(s) and Compliance Time(s):</p>	<p>Required as indicated, unless accomplished previously:</p> <ol style="list-style-type: none"> <li>(1) Within 20 flight hours (FH) or 2 months, whichever occurs first after the effective date of this AD, inspect the flexible hose that connects the air alternate valve with the turbocharger air inlet (hereafter called turbocharger hose) in accordance with the instructions of DIA Mandatory Service Bulletin (MSB) MSB D4-088.</li> <li>(2) If, during the inspection as required by paragraph (1) of this AD, an unsuitable turbocharger hose, not meeting the criteria as specified in DAI MSB D4-088, is found to be installed, before next flight, replace the turbocharger hose with a DAI Part Number (P/N) SG2M-64-920mm hose and modify the hose attachment with a P-clamp in accordance with the instructions of MSB D4-075/1 and associated Working Instruction (WI) WI-MSB D4-075 revision 1.</li> <li>(3) Within 100 FH or 6 months, whichever occurs first after the effective date of this AD, unless already accomplished as required by paragraph (2) of this AD, replace the turbocharger hose with a DAI P/N SG2M-64-920mm hose and modify the hose attachment with a P-clamp in accordance with the instructions of MSB D4-075/1 and associated WI-MSB D4-075 revision 1.</li> <li>(4) Modification of an aeroplane, before the effective date of this AD, in accordance with the instructions of MSB D4-075 and WI-MSB D4-075 at initial issue, constitutes an acceptable method of compliance with the requirements of paragraph (3) of this AD.</li> <li>(5) From the effective date of this AD, do not install any turbocharger hose on an aeroplane, except a hose with DAI P/N SG2M-64-920mm.</li> </ol>
<p>Ref. Publications:</p>	<p>Diamond Aircraft Industries GmbH Mandatory Service Bulletins:  MSB D4-088 dated 30 January 2012  MSB D4-075/1 dated 30 January 2012 with WI MSB D4-075 revision 1  The use of later approved revisions of these documents is acceptable for compliance with the requirements of this AD.</p>
<p>Remarks :</p>	<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 required actions and the risk allowance have granted the issuance of a Final AD with Request for Comments, postponing the public consultation process after publication.</li> <li>3. Enquiries regarding this AD should be referred to the Safety Information Section, Executive 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:  Diamond Aircraft Industries GmbH, Austria.  Telephone +43 2622 26700, Facsimile +43 2622 26780,  E-mail <a href="mailto:office@diamond-air.at">office@diamond-air.at</a>.</li> </ol>