


EASA	AIRWORTHINESS DIRECTIVE	
	<p>AD No.: 2012-0024R1</p> <p>Date: 26 May 2015</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 EU 748/2012, Part 21.A.3B. In accordance with EU 1321/2014 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 [EU 1321/2014 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>Design Approval Holder's Name :</p> <p>DIAMOND AIRCRAFT INDUSTRIES GmbH</p>	<p>Type/Model designation(s) :</p> <p>DA 40 D aeroplanes</p>	
<p>TCDS Number:</p>	<p>EASA.A.022</p>	
<p>Foreign AD:</p>	<p>Not applicable</p>	
<p>Revision:</p>	<p>This AD revises EASA AD 2012-0024 dated 03 February 2012.</p>	
ATA 71	Power Plant – Turbocharger Hose – Inspection/Replacement	
<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 (S/N), 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>Consequently, EASA issued AD 2012-0024 to require 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>Since that AD was issued, an improved installation using K16 turbocharger Part Number (P/N) 05-7241-K0187** has been developed and approved.</p>	

	For the reason described above, this AD is revised to clarify that aeroplanes with engines equipped with the new K16 turbocharger P/N 05-7241-K0187** are not affected by the requirements of this AD.
Effective Date:	Revision 1: 26 May 2015 Original issue: 10 February 2012
Required Action(s) and Compliance Time(s):	<p>Required as indicated, unless accomplished previously:</p> <ol style="list-style-type: none"> (1) Within 20 flight hours (FH) or 2 months, whichever occurs first after 10 February 2012 [the effective date of the original issue 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 DAI Mandatory Service Bulletin (MSB) MSB D4-088. (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. (3) Within 100 FH or 6 months, whichever occurs first after 10 February 2012 [the effective date of the original issue 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. (4) Modification of an aeroplane, before 10 February 2012 [the effective date of the original issue 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. (5) From 10 February 2012 [the effective date of the original issue of this AD], do not install any turbocharger hose on an aeroplane, except a hose with DAI P/N SG2M-64-920mm. (6) Aeroplanes with an engine equipped with a K16 turbocharger P/N 05-7241-K0187** are not affected by the requirements of this AD.
Ref. Publications:	<p>DAI MSB D4-088 dated 30 January 2012.</p> <p>DAI MSB D4-075/1 dated 30 January 2012 with WI MSB D4-075 Revision 1.</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. Based on the required actions and the compliance time, EASA have decided to issue a Final AD with Request for Comments, postponing the public consultation process until after publication. 3. Enquiries regarding this AD should be referred to the Safety Information Section, Certification Directorate, EASA; E-mail: ADs@easa.europa.eu. 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 office@diamond-air.at.