

EASA	AIRWORTHINESS DIRECTIVE
	AD No.: 2013-0145 Date: 15 July 2013 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 EU 748/2012, Part 21.A.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].	
Design Approval Holder's Name: DIAMOND AIRCRAFT INDUSTRIES GmbH	Type/Model designation(s): DA 40 aeroplanes
TCDS Number:	EASA.A.022
Foreign AD:	Not applicable
Supersedure:	None
ATA 57	Wings – Aft Main Spar / Cabin Area – Modification
Manufacturer(s):	Diamond Aircraft Industries GmbH (Austria), Diamond Aircraft Industries Inc. (Canada), Shandong Bin Ao Aircraft Industries Company Ltd. (China)
Applicability:	DA 40 aeroplanes, serial numbers (S/N) 40.006 through 40.009 inclusive, 40.011 through 40.1071 inclusive and 40.1073 through 40.1077 inclusive, DA 40 D aeroplanes S/N D4.001 through D4.382 inclusive and 40.DS001 through 40.DS030 inclusive, and DA 40 F aeroplanes S/N 40.FC001 through 40.FC029 inclusive.
Reason:	Structural fatigue testing of the DA 40 aeroplane carried out for an extension of the Major Structural Inspection (MSI) interval has shown that the fatigue strength of the aft main spar in the cabin area does not ensure unlimited lifetime. This condition, if not corrected, could adversely affect the structural integrity of the aeroplane. Diamond Aircraft Industries (DAI) issued Mandatory Service Bulletin (MSB) 40-074 / MSB D4-094 / MSB F4-028, including Work Instruction (WI) WI-MSB 40-074 / WI-MSB D4-094 / WI-MSB F4-028 (published as a single document), providing instructions to reinforce the aft main spar in the cabin area. For the reasons described above, this AD requires modification of the aft main spar in the cabin area. Note: Aeroplanes with modified aft main spar are eligible for an increased MSI threshold of 6 000 flight hours (FH) since first flight of the aeroplane and increased MSI intervals not to exceed 4 000 FH thereafter.

Effective Date:	29 July 2013
Required Action(s) and Compliance Time(s):	Required as indicated, unless accomplished previously: Within 2 000 FH since aeroplane first flight or since the last MSI, as applicable, or within 114 months after the effective date of this AD, whichever occurs first, modify the aft main spar in the cabin area in accordance with the instructions of DAI MSB 40-074 / MSB D4-094 / MSB F4-028.
Ref. Publications:	DAI MSB 40-074 / MSB D4-094 / MSB F4-028 dated 10 May 2013. DAI WI-MSB 40-074 / WI-MSB D4-094 / WI-MSB F4-028 dated 10 May 2013. 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. 2. This AD was posted on 11 June 2013 as PAD 13-073 for consultation until 09 July 2013. No comments were received during the consultation period. 3. Enquiries regarding this AD should be referred to the Safety Information Section, Executive 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, Fax: +43 2622 26700 1369, E-mail: airworthiness@diamond-air.at.