

SERVICE INFORMATION

NO. SI 42-158

NO. SI 42NG-027

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:

DA 42 and DA 42 NG (modified by Diamond Aircraft Industries from DA 42 through DAI OSB 42-068) airplanes, serial numbers:

42.006 through 42.007, 42.010, 42.012 through 42.014, 42.016 through 42.033,
42.035 through 42.043, 42.045, 42.046, 42.048 through 42.051, 42.053,
42.055 through 42.059, 42.061 through 42.081, 42.083 through 42.093,
42.096 through 42.097, 42.099 through 42.120, 42.122 through 42.125,
42.127 through 42.148, 42.150 through 42.156, 42.158 through 42.170,
42.172 through 42.176, 42.178, 42.179, 42.181 through 42.190, 42.192 through 42.200,
42.202 through 42.224, 42.AC001 through 42.AC028, 42.AC030 through 42.AC052,
and

DA 42 M airplanes (both Normal and Restricted Category, modified from DA 42 through DAI OSB 42-056) and DA 42 M-NG airplanes (both Normal and Restricted Category, modified by Diamond Aircraft Industries from DA 42 M through DAI OSB 42-081), serial numbers:

42.008, 42.157 and 42.191.

1.2 Subject:

EASA Airworthiness Directive No. 2011-0100
ATA-Code: 57-10

1.3 Reason:

EASA has issued Airworthiness Directive No. 2011-0100, which prescribes, in reference to Diamond Aircraft Industries Mandatory Service Bulletins MSB 42-092 or MSB 42NG-022, inspection and if necessary the repair of the upper centre wing skin-to-spar adhesive joint. Depending on the results of the inspection which have to be reported to Diamond Aircraft Industries only a single flight to a suitable repair shop may be allowed.


1.4 Information:

For detailed technical information refer to EASA Airworthiness Directive No. 2011-0100 which is applicable without any further additions or restrictions.

II. OTHERS

EASA Airworthiness Directive No. 2011-0100 is attached to this Service Information.

In case of doubt contact Diamond Aircraft Industries GmbH.

EASA	AIRWORTHINESS DIRECTIVE	
	<p>AD No.: 2011-0100</p> <p>Date: 26 May 2011</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 EAD 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>Type Approval Holder's Name :</p> <p>Diamond Aircraft Industries GmbH</p>	<p>Type/Model designation(s) :</p> <p>DA 42 aeroplanes</p>	
<p>TCDS Number : EASA.A.005 and EASA.A.513</p>		
<p>Foreign AD : Not applicable</p>		
<p>Supersedure: None</p>		
<p>ATA 57</p>	<p>Wings – Upper Centre Wing Skin-to-Spar Adhesive Joint – Inspection / Repair</p>	
<p>Manufacturers:</p>	<p>Diamond Aircraft Industries GmbH (Austria), and Diamond Aircraft Industries Inc. (Canada)</p>	
<p>Applicability:</p>	<p>DA 42 and DA 42 NG (modified by DAI from DA 42 through DAI Optional SB 42-068) aeroplanes, serial numbers (s/n) 42.006 through 42.007, 42.010, 42.012 through 42.014, 42.016 through 42.033, 42.035 through 42.043, 42.045, 42.046, 42.048 through 42.051, 42.053, 42.055 through 42.059, 42.061 through 42.081, 42.083 through 42.093, 42.096 through 42.097, 42.099 through 42.120, 42.122 through 42.125, 42.127 through 42.148, 42.150 through 42.156, 42.158 through 42.170, 42.172 through 42.176, 42.178, 42.179, 42.181 through 42.190, 42.192 through 42.200, 42.202 through 42.224, 42.AC001 through 42.AC028 and 42.AC030 through 42.AC052; and</p> <p>DA 42 M (both Normal and Restricted category, modified from DA 42 through DAI Optional SB 42-056) and DA 42 M-NG aeroplanes (both Normal and Restricted category, modified by DAI from DA 42 M through DAI Optional SB 42-081): s/n 42.008, 42.157 and 42.191.</p>	
<p>Reason:</p>	<p>During conversion of a DA 42 to a DA 42 NG, voids were detected in the adhesive joint between the centre wing spars and the upper centre wing skins, between the fuselage wall and the engine nacelle. The available information indicates that wings with voids continue to meet the certification design limits, provided the voids are within established criteria.</p> <p>However, to detect any wings that may have voids exceeding these criteria, Diamond has issued Mandatory Service Bulletin (MSB) 42-092 and MSB 42NG-022 (single document) that describes instructions for inspection of the</p>	

	<p>aeroplanes that had these wings installed during manufacture. Aeroplanes that have voids within the inspection criteria may continue to operate without restriction, pending the outcome of ongoing investigations. Aeroplanes that have voids exceeding the inspection criteria must be repaired.</p> <p>For the reasons described above, this EASA AD requires the inspection of the affected aeroplanes to measure the voids in the adhesive joint between the centre wing spars and the upper centre wing skins, the reporting of all findings to Diamond Aircraft Industries and the repair of any voids exceeding the criteria as specified in the MSB.</p>
Effective Date:	09 June 2011
Required Action(s) and Compliance Time(s):	<p>Required as indicated, unless accomplished previously:</p> <ol style="list-style-type: none"> (1) Within the next 100 flight hours or 3 months, whichever occurs first after the effective date of this AD, inspect the adhesive joint between the centre wing spars and the upper centre wing skin in accordance with the instructions of Diamond Aircraft Industries GmbH MSB 42-092/42NG-022 (the MSB) and the associated Working Instruction (WI) WI-MSB 42-092/42NG-022 (the WI). (2) Within 30 days after the inspection as required by paragraph (1) of this AD, report the results to Diamond Aircraft Industries in accordance with the instructions of the MSB and the WI. (3) If, during the inspection as required by paragraph (1) of this AD, voids are detected that exceed the criteria as specified in the WI, before next flight, repair the aeroplane in accordance with the instructions of Section III.2 of the WI, or contact Diamond Aircraft Industries for approved repair instructions and accomplish the repair accordingly. (4) For the purpose of compliance with paragraph (3) of this AD, a single positioning flight is allowed to a location where the repair can be accomplished, in accordance with the provisions as specified in Section III.1 of the WI.
Ref. Publications:	<p>Diamond Aircraft Industries GmbH MSB 42-092 / MSB 42NG-022 (single document) and the associated WI-MSB 42-092 / 42NG-022 (single document), both dated 20 May 2011.</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. 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. 3. Enquiries regarding this AD should be referred to the Airworthiness Directives, Safety Management & Research 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 26700 1369 E-mail office@diamond-air.at or airworthiness@diamond-air.at