


EASA	AIRWORTHINESS DIRECTIVE
	<p>AD No.: 2011-0020</p> <p>Date: 07 February 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 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>Type Approval Holder's Name :</p> <p>Diamond Aircraft Industries GmbH</p>	<p>Type/Model designation(s) :</p> <p>DA 42 and DA 42 M aeroplanes</p>
TCDS Number :	EASA.A.005, EASA.A.513
Foreign AD :	Not applicable
Supersedure :	This AD supersedes EASA AD 2010-0155R1 dated 08 September 2010.
ATA 32	Landing Gear – Main Landing Gear Damper-to-Trailing Arm Joints – Inspection / Replacement
Manufacturer(s):	Diamond Aircraft Industries GmbH (DAI), Diamond Aircraft Industries Inc. (Canada)
Applicability:	DA 42 and DA 42 M aeroplanes, all serial numbers.
Reason:	<p>Cracks have been reportedly found on DA 42 Main Landing Gear (MLG) Damper-to-Trailing Arm joints during standard maintenance. Depending on environmental-, operating- and runway conditions, the affected MLG joint, Part Number (P/N) D60-3217-23-5x (4 different lengths are available), which is made of aluminium, is susceptible to cracking.</p> <p>This condition, if not detected and corrected, may lead to failure of the joint and subsequent damage or malfunction of the MLG, possibly resulting in damage to the aeroplane during landing and injury to occupants.</p> <p>To address this unsafe condition, EASA issued AD 2010-0155 to require repetitive inspections of the MLG joint and, depending on findings, replacement with a serviceable part. Since that AD was issued, DAI developed an improved design MLG joint, P/N D64-3217-23-0x (also 4 different lengths available), which is made of steel and less susceptible to cracking.</p> <p>For the reasons described above, this new AD retains the requirements of EASA AD 2010-0155R1, which is superseded, and adds the terminating action requirement to modify the aeroplane by installing the improved steel part. This new AD also prohibits re-installation of the aluminium part.</p>
Effective Date:	21 February 2011

<p>Required Action(s) and Compliance Time(s):</p>	<p>Required as indicated, unless accomplished previously:</p> <ol style="list-style-type: none"> (1) Within 20 flight hours (FH) after 12 August 2010 [the effective date of EASA AD 2010-0155] and thereafter at each scheduled 100 FH inspection, perform the inspection of the MLG joint P/N D60-3217-23-5x in accordance with the instructions of DAI MSB-42-088 and the associated Work Instruction WI-MSB-42-088. (2) If, during any inspection as required by paragraph (1) of this AD, cracks are detected, before next flight, replace the affected MLG joint P/N D60-3217-23-5x in accordance with the instructions of DAI MSB-42-088 and the associated Work Instruction WI-MSB-42-088. (3) Inspections and corrective actions accomplished prior to the effective date of this AD, in accordance with DAI MSB-42-088 at original issue or Revision 1, are acceptable to comply with the initial requirements of paragraphs (1) and (2) of this AD. After the effective date of this AD, repetitive inspections and corrective actions must be accomplished in accordance with DAI MSB-42-088 at Revision 2. (4) Unless already accomplished as required by paragraph (2) of this AD, within 12 months after the effective date of this AD, replace each MLG joint P/N D60-3217-23-5x with a MLG joint P/N D64-3217-23-0x in accordance with the instructions of DAI MSB-42-088 Revision 2 and the associated Work Instruction WI-MSB-42-088. (5) Modification of an aeroplane as required by paragraph (4) of this AD constitutes terminating action for the repetitive inspections as required by paragraph (1) of this AD. (6) After modification of an aeroplane as required by paragraph (4) of this AD, or, for an aeroplane that already has MLG joints P/N D64-3217-23-0x installed, from the effective date of this AD, do not install a MLG joint P/N D60-3217-23-5x on that aeroplane.
<p>Ref. Publications:</p>	<p>Diamond Aircraft Industries GmbH Mandatory Service Bulletin MSB-42-088/2 (Revision 2) dated 03 February 2011 and the associated Work Instruction WI-MSB-42-088 Revision 1 dated 03 February 2011.</p> <p>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"> 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 26780, E-mail office@diamond-air.at