


<b>EASA</b>	<b>AIRWORTHINESS DIRECTIVE</b>
	<p><b>AD No.: 2009-0016</b></p> <p><b>Date: 22 January 2009</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></p> <p>Diamond Aircraft Industries GmbH</p>	<p><b>Type/Model designation(s) :</b></p> <p>DA 40, DA 40 D and DA 40 F aircraft</p>
<p>TCDS Number : EASA.A.022</p>	
<p>Foreign AD : Not applicable</p>	
<p>Supersedure: This AD supersedes Austro Control GmbH (ACG) AD A-2005-005 dated 15 November 2005, EASA approval number 2005-6407.</p>	
<b>ATA 32</b>	<b>Landing Gear – Nose Landing Gear (NLG) Leg – Inspection / Replacement</b>
<p>Manufacturers:</p>	<p>Diamond Aircraft Industries GmbH (Austria), and Diamond Aircraft Industries Inc. (Canada)</p>
<p>Applicability:</p>	<p>DA 40, DA 40 D and DA 40 F aircraft, all serial numbers, except those on which a nose landing gear leg Part Number (P/N) D41-3223-10-00_1 or higher (_2, _3, etc.) is installed.</p>
<p>Reason:</p>	<p>A case was reported where the NLG leg of a DA 40 aircraft failed in the area of the nose gear leg pivot axle. The affected airplane was mostly operated on grass runways and used for training operations. The investigation showed that the failure was due to a fatigue crack that had developed in the pivot axle. Subsequent material inspections determined that these cracks may also develop on other aircraft, depending on the type of operation.</p> <p>This condition, if not detected and corrected, could lead to further cases of NLG failure, possibly causing damage to the aircraft and injuries to occupants. To address and correct this unsafe condition, ACG issued AD A-2005-005 to require repetitive inspections of the NLG leg and, in case cracks are found, replacement of the NLG leg with a serviceable unit. Since that AD was issued, Diamond Aircraft Industries developed a redesigned NLG leg which is not affected by the cracking phenomenon addressed by AD A-2005-005.</p> <p>For the reasons described above, this EASA AD retains the requirements of ACG AD A-2005-005, which is superseded, and excludes aircraft from the applicability that have the improved NLG leg installed.</p>
<p>Effective Date:</p>	<p>05 February 2009</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) For aircraft that are predominantly (more than 50% of the time) operated from grass runways, within the next 25 flight hours (FH) after 23 November 2005 [the effective date of ACG AD A-2005-005] and thereafter at intervals not to exceed 100 FH, inspect the NLG leg in accordance with the instructions of Diamond Aircraft Industries GmbH MSB40-046 / MSBD4-046.</li> <li>(2) For aircraft that are predominantly (more than 50% of the time) operated from paved runways, within the next 100 FH after 23 November 2005 [the effective date of ACG AD A-2005-005] and thereafter at intervals not to exceed 200 FH, inspect the NLG leg in accordance with the instructions of Diamond Aircraft Industries GmbH MSB40-046 / MSBD4-046.</li> <li>(3) When cracks are detected during any inspection as required by this AD, before next flight, replace the NLG leg with a serviceable unit in accordance with the instructions of Diamond Aircraft Industries GmbH MSB40-046 / MSBD4-046.</li> <li>(4) Inspections and corrective actions accomplished prior to the effective date of this AD in accordance with Diamond Aircraft Industries GmbH MSB40-046/ MSBD4-046 at original issue or issue 2 are acceptable to comply with the initial requirements of paragraphs (1), (2) and (3) of this AD. After the effective date of this AD, repetitive inspections and corrective actions must be accomplished in accordance with Diamond Aircraft Industries GmbH MSB40-046 / MSBD4-046 at issue 3.</li> <li>(5) After installation on an aircraft of a NLG leg P/N D41-3223-10-00_1 or higher (_2, _3, etc.), the repetitive inspections of this AD are no longer required for that aircraft.</li> <li>(6) After the (optional) modification of an aircraft by installing a NLG leg P/N D41-3223-10-00_1 or higher (_2, _3, etc.), no person shall install a NLG P/N D41-3223-10-00 on that aircraft.</li> </ol>
<p>Ref. Publications:</p>	<p>Diamond Aircraft Industries GmbH MSB40-046 / MSBD4-046 dated 11 November 2005, or MSB40-046/2 / MSBD4-046/2 dated 14 November 2008, or MSB-40-046/3 / MSBD4-046/3 dated 17 November 2008.</p> <p>The use of later approved revisions of this document 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. This AD was published on 16 December 2008 as PAD 08-144 for consultation until 13 January 2009. No comments were received during the consultation period.</li> <li>3. Enquiries regarding this AD should be referred to the Airworthiness Directives, Safety Management &amp; Research Section, Certification 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 26700 1369 E-mail <a href="mailto:office@diamond-air.at">office@diamond-air.at</a> or <a href="mailto:airworthiness@diamond-air.at">airworthiness@diamond-air.at</a></li> </ol>