

## SERVICE INFORMATION NO. SI 42NG-016

**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:

All DA 42 NG and DA 42 M-NG airplanes

#### 1.2 Subject:

EASA Emergency Airworthiness Directive 2010-0206-E  
ATA-Code: 73-20

#### 1.3 Reason:

EASA has issued an Emergency Airworthiness Directive mandating accomplishment with Austro Engine Mandatory Service Bulletin MSB-E4-009, which prescribes an analysis of the fuel pressure supply quality to the engine high pressure pump and possible exchange of the pump.


#### 1.4 Information:

For detailed technical information refer to EASA EAD 2010-0206-E which is applicable without any further additions or restrictions.

### II. OTHERS

The EASA EAD 2010-0206-E is attached to this SI.

In case of doubt contact Austro Engine GmbH.

<b>EASA</b>	<b>EMERGENCY AIRWORTHINESS DIRECTIVE</b>
	<p><b>AD No.: 2010-0206-E</b></p> <p><b>Date: 08 October 2010</b></p> <p>Note: This Emergency 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>Austro Engine GmbH</p>	<p><b>Type/Model designation(s) :</b></p> <p>E4 engines</p>
TCDS Number :	EASA.E.200
Foreign AD :	Not applicable.
Supersedure :	None
<b>ATA 73</b>	<b>Engine Fuel &amp; Control – High Pressure Fuel Pump – Inspection / Replacement</b>
Manufacturer(s):	Austro Engine GmbH
Applicability:	<p>Model E4 engines, all serial numbers.</p> <p>These engines are known to be installed on, but not limited to, Diamond Aircraft Industries DA 40 NG and DA 42 NG aeroplanes.</p>
Reason:	<p>Several power loss events have been reported, due to rail pressure control failures. Analyses have shown that high pressure (HP) fuel pumps failed as a result of pressure oscillations in the fuel supply line.</p> <p>This condition, if not detected and corrected, could lead to further cases of power loss or even in-flight engine shutdown, possibly resulting in loss of control of the aeroplane.</p> <p>To address this situation, Austro Engine have introduced an additional inspection of the affected HP fuel pumps. A final correction that will eliminate the damaging fuel pressure oscillations is currently being developed.</p> <p>For the reasons described above, this AD requires repetitive inspections of the HP fuel pump supply line(s) to detect fuel pressure oscillations and, if this exceeds a certain value, replacement of the affected HP fuel pump.</p> <p>This AD is considered to be an interim measure, pending the availability of a final solution.</p>
Effective Date:	12 October 2010

<p>Required Action(s) and Compliance Time(s):</p>	<p>Required as indicated, unless accomplished previously:</p> <p>(1) Initially at the time indicated in Table 1 of this AD, as applicable, and thereafter at each scheduled 50 flight hours (FH) maintenance inspection, inspect the high pressure fuel pump in accordance with the instructions of Austro Engine Mandatory Service Bulletin (MSB) MSB-E4-009 and the associated Austro Engine Work Instruction (WI) WI-MSB-E4-009.</p> <p style="text-align: center;">Table 1</p> <table border="1" data-bbox="576 479 1428 730"> <thead> <tr> <th data-bbox="576 479 1010 573">Accumulated (on the effective date of this AD) time since new:</th> <th data-bbox="1013 479 1428 573">Compliance time after the effective date of this AD:</th> </tr> </thead> <tbody> <tr> <td data-bbox="576 577 1010 636">45 FH or more</td> <td data-bbox="1013 577 1428 636">Within 10 FH</td> </tr> <tr> <td data-bbox="576 640 1010 730">Less than 45 FH</td> <td data-bbox="1013 640 1428 730">At the next scheduled 50 FH inspection</td> </tr> </tbody> </table> <p>(2) If, during any inspection as required by paragraph (1) of this AD, the fuel pressure oscillation exceeds the value as specified in Austro Engine MSB-E4-009, before next flight, replace the HP fuel pump with a new unit in accordance with the instructions of Austro Engine MSB-E4-009.</p> <p>(3) Replacement of a fuel pump as required by paragraph (2) of this AD does not constitute terminating action for the repetitive inspection requirements of paragraph (1) of this AD.</p>	Accumulated (on the effective date of this AD) time since new:	Compliance time after the effective date of this AD:	45 FH or more	Within 10 FH	Less than 45 FH	At the next scheduled 50 FH inspection
Accumulated (on the effective date of this AD) time since new:	Compliance time after the effective date of this AD:						
45 FH or more	Within 10 FH						
Less than 45 FH	At the next scheduled 50 FH inspection						
<p>Ref. Publications:</p>	<p>Austro Engine GmbH MSB-E4-009 and WI-MSB-E4-009, both at original issue dated 07 October 2010.</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"> <li>1. If requested and appropriately substantiated, EASA can approve Alternative Methods of Compliance for this AD.</li> <li>2. The safety assessment has requested not to implement the full consultation process and an immediate publication and notification.</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: Austro Engine GmbH, Rudolf-Diesel-Straße 11, A-2700 Wiener Neustadt, Austria Telephone: +43 2622 23000 2525 Fax: +43 2622 23000-2711 E-mail: <a href="mailto:service@austroengine.at">service@austroengine.at</a></li> </ol> <p>The referenced publications can be downloaded directly from the Austro Engine GmbH <a href="#">Service Bulletin webpage</a>.</p>						