

## SERVICE INFORMATION NO. SI 42-031

**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            S/N 42.004 through 42.129,  
                  S/N 42.177 and  
                  S/N 42.AC001

#### 1.2 Subject:

EASA AD No.: 2006 – 0277 for  
Engine – Propeller System Check Valve Bracket-Installation  
ATA-Code: 72-00

#### 1.3 Reason:

EASA has issued an Airworthiness Directive requiring the installation of an additional bracket for the propeller oil system check valve line and the CSU attachment fitting made of aluminium to be exchanged by a fitting made of steel in compliance with the MSB mentioned in the AD.


#### 1.4 Information:

For detailed technical information see EASA Airworthiness Directive No.: 2006 – 0277 which is applicable without any further additions or restrictions.

### II. OTHERS

The EASA Airworthiness Directive AD No.: 2006 – 0277 is attached to this SI.

In case of doubt contact Diamond Aircraft Industries.

EASA	AIRWORTHINESS DIRECTIVE	
	<p><b>AD No : 2006 - 0277</b></p> <p><b>Date: 06 September 2006</b></p>	
<p>No person may operate an aircraft to which an Airworthiness Directive applies, except in accordance with the requirements of that Airworthiness Directive unless otherwise agreed with the Authority of the State of Registry.</p>		
<p><b>Type Approval Holder's Name :</b> Diamond Aircraft Industries</p>	<p><b>Type/Model designation(s) :</b> DA42</p>	
<p>TCDS Number : EASA A.005</p>		
<p>Foreign AD : Not applicable.</p>		
<p>Supersedure : Not applicable.</p>		
<p><b>ATA 72</b></p>	<p><b>Engine - Propeller System Check Valve Bracket - Installation</b></p>	
<p>Manufacturers:</p>	<p>Diamond Aircraft Industries GmbH, Austria Diamond Aircraft Industries Inc., Canada</p>	
<p>Applicability:</p>	<p>DA 42, Serial Numbers 42.004 and up including 42.129, and 42.177 DA 42, Serial Number 42.AC001</p>	
<p>Reason:</p>	<p>Shortly after an engine change, the aluminium fitting attached to the engine gearbox holding lines and fittings of the propeller control system was found to be cracked. This led to a pressure loss in the propeller control system following a control system malfunction and led to a in-flight engine shutdown.</p> <p>The broken fitting is part of the engine installation and was initially a steel part. It was later modified by the engine manufacturer to an aluminium design.</p> <p>Investigation determined that the area is critical for cracks due to combination of mass, material and installation torque values.</p> <p>With Design Change MÄM 42-184, Diamond Aircraft Industries incorporated an additional bracket into production airplanes to improve the installations and prevent vibration cracks.</p>	

	This airworthiness directive requires the retroactive installation of this bracket for all airplanes, including the airplanes with steel fittings.
Effective Date:	16 September 2006
Compliance:	Within the next 50 flight hours after the effective date of this directive, but not later than 30 September 2006, modify the aircraft by installing the additional bracket in accordance with the instructions of Diamond Mandatory Service Bulletin (MSB) 42-024/2 dated August 31, 2006.
Ref. Publications:	Diamond Aircraft Industries MSB 42-024/2 dated August 31, 2006 or later approved revisions.
Remarks :	<ol style="list-style-type: none"> <li>1. If requested and appropriately substantiated the responsible EASA manager for the related product has the authority to accept Alternative Methods of Compliance (AMOCs) for this AD.</li> <li>2. This AD was posted as PAD 06-211 for consultation on 09 August 2006 with a comment period until 23 August 2006. No comments were received during the consultation period.</li> <li>3. Enquiries regarding this AD should be addressed to the AD Focal Point, 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 Telephone +43 2622 26700; Facsimile +43 2622 26780; E-mail: <a href="mailto:office@diamond-air.at">office@diamond-air.at</a></li> </ol>