
AIRWORTHINESS DIRECTIVE

For the reasons set out in the background section, the CASA delegate whose signature appears below issues the following Airworthiness Directive (AD) under subregulation 39.001(1) of CASR 1998. The AD requires that the action set out in the requirement section (being action that the delegate considers necessary to correct the unsafe condition) be taken in relation to the aircraft or aeronautical product mentioned in the applicability section: (a) in the circumstances mentioned in the requirement section; and (b) in accordance with the instructions set out in the requirement section; and (c) at the time mentioned in the compliance section.

Diamond DA42 Series Aeroplanes**AD/DA42/2 Propeller System Check Valve Bracket 5/2007**

Applicability: Diamond Aircraft Industries DA 42 model aircraft;

DA42 Serial Numbers 42.004 and up including 42.129, and 42.177; and

DA 42, Serial Number 42.AC001.

Requirement: Unless already accomplished, modify the aircraft by installing the additional bracket in accordance with the instructions of Diamond Mandatory Service Bulletin (MSB) 42-024/3 dated 19 September 2006 or later NAA approved revisions.

Note: EASA Airworthiness Directive AD 2006-0277 dated 6 September 2006 refers.

Compliance: Within one month or within the next 50 flight hours after the effective date of this directive, whichever occurs first.

This Airworthiness Directive becomes effective on 10 May 2007.

Background: 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 an in-flight engine shutdown.

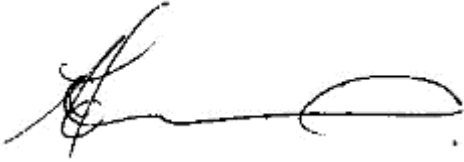
The broken fitting is part of the engine installation and was initially a steel part. It was later modified by the engine manufacturer to an aluminium design. Investigation determined that the area is critical for cracks due to combination of mass, material and installation torque values.

With Design Change MAM 42-184, Diamond Aircraft Industries incorporated an additional bracket into the production airplanes to improve the installations and prevent vibration cracks.

Diamond DA42 Series Aeroplanes

AD/DA42/2 (continued)

This Airworthiness Directive requires installation of this bracket for all airplanes, including the airplanes with steel fittings.

A handwritten signature in black ink, appearing to read 'Charles Lenarcic', with a long horizontal stroke extending to the right.

Charles Lenarcic
Delegate of the Civil Aviation Safety Authority

27 March 2007