



## 適航指令發布單

### Airworthiness Directive Issuance Form

民航局 AD 編號 AD number	CAA-2019-11-001	發布日期 Date issued	2019/11/1
適用之航空產品 Applied to (models, serial numbers or part numbers, as applicable)	Diamond Aircraft Industries Inc. model DA 40, DA 40 D, DA 40 F and DA 40 NG aeroplanes, all serial numbers.		
主旨摘要	Fuel System - Fuel Tank Connection Hose Deterioration		
民航局 CAA <input type="checkbox"/> 本國產品 Native products <input type="checkbox"/> 其他個案 Other	設計國民航主管機構 Original Authorities <div style="display: flex; justify-content: space-between;"> <div style="width: 48%;"> <input type="checkbox"/> FAA  <input type="checkbox"/> EASA  <input type="checkbox"/> Brazil  <input checked="" type="checkbox"/> Transport Canada Civil Aviation  <input type="checkbox"/> DGAC             </div> <div style="width: 48%;"> <input type="checkbox"/> Germany LBA  <input type="checkbox"/> CAA-NL  <input type="checkbox"/> UK CAA  <input type="checkbox"/> Japan CAB  <input type="checkbox"/> CAA of Israel  <input type="checkbox"/> Other _____             </div> </div>		
	設計國 AD 編號 Original AD number	CF-2019-39	
	1. 直接採用原 AD 之內容?(Is the original AD directly adopted?) <input checked="" type="checkbox"/> 是(Yes) <input type="checkbox"/> 否(No) _ a. 生效日期另訂為(Re-specify the effective date as) : _____ b. 執行時限另訂為(Re-specify the compliance time or period as) : _____ 2. 使用人是否需要將 AD 執行結果向民航局提出報告?(Do Users need to report the status of compliance to the CAA?) <input type="checkbox"/> 是(Yes) <input checked="" type="checkbox"/> 否(No)		
備註 Note	None		

註： 1. AD 內容後附。  
 2. 航空器產品使用人得向民航局提出豁免、替代符合方法、執行時限之展延之申請。  
 3. 如有任何問題，請聯絡交通部民用航空局初始適航科。Tel：(02)2349-6331~3, Fax：(02)2545-8464, e-mail：  
[adcaa@mail.caa.gov.tw](mailto:adcaa@mail.caa.gov.tw)

Note： 1. The AD text is enclosed.  
 2. Exemption, an alternative method of compliance or adjustment of the compliance time may be proposed to the CAA for approval.  
 3. For further information, please contact Civil Aeronautics Administration on Tel：(02)2349-6331~3, Fax：(02)2545-8464, e-mail：  
[adcaa@mail.caa.gov.tw](mailto:adcaa@mail.caa.gov.tw)



# AIRWORTHINESS DIRECTIVE

*This Airworthiness Directive (AD) is issued pursuant to Canadian Aviation Regulation (CAR) 521.427. No person shall conduct a take-off or permit a take-off to be conducted in an aircraft that is in their legal custody and control, unless the requirements of CAR 605.84 pertaining to ADs are met. Standard 625 - Aircraft Equipment and Maintenance Standards Appendix H provides information concerning alternative means of compliance (AMOC) to ADs.*

**Number:**

CF-2019-39

**Effective Date:**

14 November 2019

**ATA:**

28

**Type Certificate:**

A-224

**Subject:**

Fuel System – Fuel Tank Connection Hose Deterioration

**Applicability:**

Diamond Aircraft Industries Inc. model DA 40, DA 40 D, DA 40 F and DA 40 NG aeroplanes, all serial numbers.

**Compliance:**

As indicated, unless already accomplished.

**Background:**

Diamond Aircraft Industries (DAI) has received reports of fuel tank connection hose deterioration on the DA 40 aeroplanes. In a number of cases, rubber parts from the hoses were found in the fuel tank and gascolator. Investigation determined that the affected connection hoses originated from two isolated batches. Some of the affected hoses were installed on aeroplanes during production, while others were sold as replacement parts.

Deterioration of fuel tank connection hoses, if not corrected, could result in contamination of the fuel system and restriction of fuel flow, leading to fuel starvation and reduced control of the aeroplane.

To address this unsafe condition, DAI issued Mandatory Service Bulletins (MSBs) to provide instructions for identifying and replacing the affected parts. The MSBs also provide instructions to inspect the fuel tank chambers and remove rubber parts that have detached from the hoses. This AD mandates replacement of the affected parts, associated inspections and corrective actions detailed in the MSBs.

**Corrective Actions:**

A. Installation of Replacement Parts

1. For the purpose of this AD, the applicable MSBs are those listed in Table 1 or later revisions approved by the Chief, Continuing Airworthiness, Transport Canada:

For Aeroplane Model	DAI MSB Number
DA 40	MSB 40-087 Rev. 1 including associated Work Instruction WI-MSB 40-087 Rev. 1
DA 40 D	MSB D4-107 Rev. 1 including associated Work Instruction WI-MSB D4-107 Rev. 1
DA 40 F	MSB F4-037 Rev. 1 including associated Work Instruction WI-MSB F4-037 Rev. 1
DA 40 NG	MSB 40NG-064 Rev. 1 including associated Work Instruction WI-MSB 40NG-064 Rev. 1

**Table 1 List of Applicable MSBs**

2. For the purpose of this AD, an affected part is a fuel tank connection hose having part number:
  - a. D4D-2817-10-70 installed during production on DA 40 NG aeroplanes, serial numbers listed in the applicable MSB; or
  - b. D4D-2817-10-70 or BENOLPRESS from specific service centre purchases listed in the applicable MSBs.
3. From the effective date of this AD, an affected part is not eligible for installation as a replacement part.

**B. Replacement of Installed Affected Parts**

1. Within 100 hours air time or 2 months, whichever occurs first, from the effective date of this AD, replace each affected part in accordance with the applicable MSBs.
2. Within 100 hours air time or 2 months, whichever occurs first, from the effective date of this AD, replace each part that was installed as a replacement part on or after 13 July 2017, if it cannot be ascertained that the part is not an affected part listed in A.2.a. or A.2.b. above.

**C. Inspection of Main Fuel Tank Chambers and Removal of Detached Rubber Parts**

1. Before further flight after replacing a fuel tank connection hose as required by Paragraph B above, inspect the main fuel tank chambers and remove any detached rubber parts in accordance with the applicable MSBs.

**Authorization:**

For the Minister of Transport,

*ORIGINAL SIGNED BY*

Rémy Knoerr  
Chief, Continuing Airworthiness  
Issued on 31 October 2019

**Contact:**

Philip Tang, Continuing Airworthiness, Ottawa, telephone 888-663-3639, facsimile 613-996-9178 or e-mail [AD-CN@tc.gc.ca](mailto:AD-CN@tc.gc.ca) or any Transport Canada Centre.