



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) with ADs.

Number:

CF-2019-39R1

Effective Date:

4 June 2025

ATA:

28

Type Certificate:

A-224

Subject:

Fuel System – Fuel Tank Connection Hose Deterioration

Revision:

Supersedes AD CF-2019-39, issued 31 October 2019.

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 below, unless already accomplished.

Background:

Diamond Aircraft Industries Inc. (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. AD CF-2019-39 mandated replacement of the affected parts, associated inspections and corrective actions detailed in the MSBs.

Since the issuance of AD CF-2019-39, Transport Canada has received new reports of fuel tank connection hose deterioration on DA 40 NG aeroplanes outside the serial number range defined in the MSB. DAI revised its DA 40 NG MSB to update the aeroplanes affected section.

This AD revision, CF-2019-39R1, revises Table 1 while giving credit for aeroplanes that had complied with an earlier MSB revision and otherwise maintains the requirements of AD CF-2019-39.

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:

Table 1 – List of Applicable MSBs

For Aeroplane Model	DAI MSB Number
DA 40	MSB 40-087 Rev. 1 dated 29 July 2019, including associated Work Instruction WI-MSB 40-087 Rev. 0 dated 1 July 2019.
DA 40 D	MSB D4-107 Rev. 1 dated 29 July 2019, including associated Work Instruction WI-MSB D4-107 Rev. 0 dated 1 July 2019.
DA 40 F	MSB F4-037 Rev. 1 dated 29 July 2019, including associated Work Instruction WI-MSB F4-037 Rev. 0 dated 1 July 2019.
DA 40 NG	MSB 40NG-064 Rev. 3 dated 23 January 2025, including associated Work Instruction WI-MSB 40NG-064 Rev. 0 dated 1 July 2019.

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 AD CF-2019-39 (31 October 2019), 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.

Accomplishment of Paragraphs B and C of this AD in accordance with an earlier revision of DAI MSB, prior to the effective date of this AD, also meets the intent of this AD.

Authorization:

For the Minister of Transport,

ORIGINAL SIGNED BY

Jenny Young
Chief, Continuing Airworthiness
Issued on 21 May 2025

Contact:

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