1 of 3

AD Number: CF-2025-30

### 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:Effective Date:CF-2025-307 July 2025

ATA: Type Certificate:

52 A-224

Subject:

Doors - Passenger Door Separation

Applicability:

Diamond Aircraft Industries Inc (DAI) Models DA40 NG, DA40, DA40 F and DA40 D, All Serial Numbers

Compliance:

As indicated below, unless already accomplished.

#### Background:

Several occurrences of passenger door separation have been reported to DAI. Although, in some cases, the root cause could be attributed to improper latching of the passenger door and subsequent attempts to latch the passenger door in flight, the root cause of the remaining occurrences could not yet be identified.

Passenger door separation could result in damage to the aircraft structure, possibly leading to loss of control of the aircraft, and/or injuries to persons on the ground.

To address this unsafe condition, DAI has issued:

- an Aircraft Flight Manual Temporary Revision (AFM-TR) introducing amended procedures and limitations, and
- a Service Bulletin (SB) providing instructions to install placards in the cabin to prevent misuse of the passenger door, and to inspect the passenger door latching mechanism and safety hook mechanisms in support of the continuing investigation into the root cause of the door separation.

The corrective actions in this AD are an interim action and further AD action may follow.

#### **Corrective Actions:**

For the purposes of this AD, the following definitions apply:

**The SB**: DAI Mandatory SB MSB 40-103/ MSB F4-042/ MSB D4-114/ MSB 40NG-084 (published as a single document) Revision 2 dated 5 June 2025, which refers to WI-MSB 40-103/ WI-MSB F4-042/ WI-MSB D4-114/ WI-MSB 40NG-084.

**The WI**: Work Instruction (WI) WI-MSB 40-103/ WI-MSB F4-042/ WI-MSB D4-114/ WI-MSB 40NG-084 (published as a single document) revision 2, or later revisions approved by Chief, Continuing Airworthiness, Transport Canada.

#### The AFM TR:

#### For DAI aircraft models DA 40 and DA 40F

Aircraft Flight Manual (AFM) Temporary Revision (TR) MÄM-40-1203.



#### For DAI aircraft models DA 40 D and DA 40 NG

Aircraft Flight Manual (AFM) Temporary Revision (TR) MÄM-40-1203a

#### Flight Manual Amendment

1. Within 100 hours air time or 100 days, whichever occurs first, after the effective date of this AD, incorporate the AFM TR, or later Transport Canada (TC) approved AFM revision which includes the AFM TR as required by this AD, into the applicable AFM for all affected aircraft. Note: The AFM amendment as required by paragraph 1 of this AD can be accomplished before the inspection and modification as required by paragraph 2 and 3 of this AD.

#### Inspection and Modification

# For DAI aircraft models DA 40, DA 40 D, DA 40 F, DA 40 NG with less than 100 total hours air time on the effective date of this AD,

2. Within 100 hours air time or 100 days, whichever occurs first, after the effective date of this AD, accomplish the inspections and modification of the aircraft in accordance with the accomplishment instructions of section III of the WI, except for paragraphs 2-4, 6-18, 25, 27, 29 and 32.

Note: Accomplishment of corrective action 2 above using DAI Mandatory SB MSB 40-103/ MSB F4-042/ MSB D4-114/ MSB 40NG-084 (published as a single document) Revision 0 dated 20 March 2025 or Revision 1 dated 16 May 2025, which refers to WI-MSB 40-103/ WI-MSB F4-042/ WI-MSB D4-114/ WI-MSB 40NG-084, satisfies the intent of this AD.

# For DAI aircraft models DA 40, DA 40 D, DA 40 F, DA 40 NG with 100 total hours or more air time on the effective date of this AD.

- 3. Within 100 hours air time or 100 days, whichever occurs first, after the effective date of this AD, accomplish the inspections and modification of the aircraft in accordance with the accomplishment instructions of section III of the WI. Note: Accomplishment of corrective action 3 above using DAI Mandatory SB MSB 40-103/ MSB F4-042/ MSB D4-114/ MSB 40NG-084 (published as a single document) Revision 0 dated 20 March 2025 or Revision 1 dated 16 May 2025, which refers to WI-MSB 40-103/ WI-MSB F4-042/ WI-MSB D4-114/ WI-MSB 40NG-084, satisfies the intent of this AD.
- 4. If, during accomplishment of inspection paragraph 20 (f) of section III of the WI, the force is less than 1.8kg (18N) and,

WI Section III Inspection step 20 (c) passed	i. ii.	Repeat inspection paragraph 20 (c) every 100 air time hours in accordance with the accomplishment instructions of the WI until replacement of the gas spring per 4 (ii) below, Within 12 months from the effective date of this AD, replace the gas spring in accordance with the accomplishment instructions of the WI
WI Section III Inspection step 20 (c) failed	iii.	Before further flight, replace the gas spring in accordance with the accomplishment instructions of the WI.

5. If, during any inspection performed in accordance with paragraph 2 or 3 of this AD, any discrepancy, as defined in the SB, is identified, contact DAI for instructions and accomplish the applicable corrective action(s) in accordance with the approved instructions before further flight.

### **Authorization:**

For the Minister of Transport,

ORIGINAL SIGNED BY

Jenny Young Chief, Continuing Airworthiness Issued on 23 June 2025

### Contact:

Grant Walker, Continuing Airworthiness, Ottawa, telephone 888-663-3639 or e-mail <a href="mailto:TC.AirworthinessDirectives-Consignesdenavigabilite.TC@tc.gc.ca">TC.AirworthinessDirectives-Consignesdenavigabilite.TC@tc.gc.ca</a> or any Transport Canada Centre.