



U.S. Department
of Transportation

Federal Aviation
Administration

Airworthiness Concern Sheet

Date: 10/18/2024

Reply to: Name: Dan McCully Title: Program Manager Office: AIR-722 attn: Highwoods Bldg. Street Address: 1701 Columbia Avenue City, State, ZIP: College Park, GA 30337 Telephone: 404-474-5548 Electronic Mail: william.mccully@faa.gov Subject Line: DA 40, DA 42 - ACS	Make: Diamond Aircraft Industries Inc. Model / Series: DA 40, DA 40 F, DA 40 NG, DA 42, DA 42 NG, DA 42 M-NG Serial Numbers: All Serial Numbers Reason for Airworthiness Concern: In-flight Passenger Door Separations
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Federal Aviation Administration (FAA) Description of Airworthiness Concern

In 2011, the FAA issued Airworthiness Directives (ADs) 2010-25-01 and 2011-10-13 on the DA 40 and 42 fleets, respectively. These ADs required replacing the passenger door retaining bracket with an improved design and changing the emergency open doors airplane flight manual procedure. However, since the time after the AD effectivity, the FAA has received at least 20 reports of passenger door separations from the aircraft while in flight and over 30 reports of aborted flights due to door malfunctions on the DA 40 and DA 42 fleets. In August of 2024, Diamond Aircraft issued Service Information Letters (SILs) SI40NG-094 / SI40-171 / SIF4-008 / SID4-200 and SI 42-252 / SI 42NG-145 to increase the awareness of pilots, operators, and maintenance organizations on the importance of correct latching procedures.

The SILs are located at the following links:

[SI40NG-094-Closing-and-Latching-the-Passenger-Door.pdf \(diamond-air.at\)](#)

[SI42NG-145-Closing-and-Latching-the-Passenger-Door.pdf \(diamond-air.at\)](#)

The FAA reminds owners and operators that they should not try to close the passenger door in flight, as the safety latch may disengage, causing the door to open and result in possible separation of the door from the airplane. When the passenger door is found unlatched, land as soon as practicable.

The FAA is currently working with Transport Canada and EASA to investigate this concern.

Request for Information

The FAA is interested in receiving any information on circumstances surrounding DA 40 and DA 42 passenger door malfunctions which may lead to, or may have resulted in, total separation of the door. This includes unreported events, evidence of wear or damage on the door assembly or components of the latching mechanisms, observations regarding procedures and mechanical operations which may affect securement of the door, problems with mechanical or electronic door indications, and any other information that may be helpful for us to consider as part of the evaluation. When citing door departure events, state whether door was confirmed latched/closed prior to flight.

This Airworthiness Concern Sheet (ACS) is intended as a means for FAA Aviation Safety Engineers to coordinate airworthiness concerns with aircraft owners/operators through associations and type clubs. At this time, the FAA has not made a determination on what type of corrective action (if any) should be taken. The resolution of this airworthiness concern could involve Airworthiness Directive (AD) action or a Special Airworthiness Information Bulletin (SAIB), or the FAA could determine that no action is needed at this time. The FAA's final determination will depend in part on the information received in response to this ACS.

The FAA endorses dissemination of this technical information to all manufacturers and requests association and type club comments.

Attachments: <input type="checkbox"/> Service Difficulty Report <input type="checkbox"/> Accident/Incident Data System <input type="checkbox"/> Service Letter / Bulletin <input type="checkbox"/> Special Airworthiness Information Bulletin <input type="checkbox"/> Federal Aviation Administration or National Transportation Safety Board Safety Recommendation <input type="checkbox"/> Airworthiness Directive <input type="checkbox"/> Alternate Means of Compliance <input type="checkbox"/> Risk Analysis	Transmittal: <input checked="" type="checkbox"/> Federal Aviation Administration <input checked="" type="checkbox"/> Airplane Owners and Pilots Association <input checked="" type="checkbox"/> Experimental Aircraft Association <input checked="" type="checkbox"/> Type Club <input checked="" type="checkbox"/> Type Certificate Holder <input checked="" type="checkbox"/> Other: Diamond Pilots Association	Response Requested By: <input type="checkbox"/> Emergency (10 days) <input type="checkbox"/> Alert (30 days) <input checked="" type="checkbox"/> Information (90 days)
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