Airworthiness Directive

AD No.: 2024-0235

Issued: 06 December 2024

Note: This Airworthiness Directive (AD) is issued by EASA, acting in accordance with Regulation (EU) 2018/1139 on behalf of the European Union, its Member States and of the European third countries that participate in the activities of EASA under Article 129 of that Regulation.

This AD is issued in accordance with Regulation (EU) 748/2012, Part 21.A.3B. In accordance with Regulation (EU) 1321/2014 Annex I Part M.A.301, or Annex Vb Part ML.A.301, as applicable, the continuing airworthiness of an aircraft shall be ensured by accomplishing any applicable ADs. Consequently, no person may operate an aircraft to which an AD applies, except in accordance with the requirements of that AD, unless otherwise specified by the Agency [Regulation (EU) 1321/2014 Annex I Part M.A.303, or Annex Vb Part ML.A.303, as applicable] or agreed with the Authority of the State of Registry [Regulation (EU) 2018/1139, Article 71 exemption].

Design Approval Holder's Name:

Diamond Aircraft Industries GmbH

Type/Model designation(s):

DA 42, DA 42 M, DA 42 NG, DA 42 M-NG aeroplanes

Effective Date:	13 December 2024
TCDS Number(s):	EASA.A.005 and EASA A.513
Foreign AD:	Not applicable
Supersedure:	None

ATA 52 – Doors – Rear Passenger Door Latching Mechanism – Inspection / Modification

Airplane Flight Manual – Amendment

Manufacturer(s):

Diamond Aircraft Industries GmbH (DAI)

Applicability:

DA 42, DA 42 M, DA 42 NG, DA 42 M-NG aeroplanes, all serial numbers.

Definitions:

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

The SB: DAI Mandatory Service Bulletin (SB) MSB 42-149 / MSB 42NG-095 (published as a single document), which refers to WI-MSB 42-149 / WI-MSB 42NG-095.

The WI: Work Instruction (WI) WI-MSB 42-149 / WI-MSB 42NG-095 (published as a single document).

AFM-TR: Airplane Flight Manual (AFM) Temporary Revision (TR) TR-MÄM 42-1333.

Reason:

Several occurrences of passenger door separation have been reported to DAI. Although, in some cases, the root cause could be attributed to forgotten 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 aeroplane structure, possibly leading to loss of control of the aeroplane, and/or injuries to persons on ground.

To address this potential unsafe condition, DAI issued the AFM-TR, introducing amended procedures and limitations, and issued the SB providing instructions to install placards in the cabin to prevent misuse of the passenger door, to inspect the passenger door latching and safety hook mechanisms, and to collect and report data and findings to DAI.

For the reason described above, this AD requires AFM update, aeroplane modification, repetitive inspections of the door latching and safety hook mechanisms, and reporting to DAI.

This AD is considered to be an interim action and further AD action may follow.

Required Action(s) and Compliance Time(s):

Required as indicated by this AD, unless the action(s) required by this AD have been already accomplished:

AFM Amendment:

(1) Within 50 flight hours (FH) or 50 days, whichever occurs first after the effective date of this AD, implement the AFM TR, inform all flight crews and, thereafter, operate the aeroplane accordingly (see Note 1 of this AD).

Note 1: The AFM amendment as required by paragraph (1) of this AD for an aeroplane can be accomplished before the initial inspection and modification as required by paragraph (3) of this AD for that aeroplane.

(2) Amending the AFM of an aeroplane by inserting the AFM-TR, or a later AFM revision, which includes the AFM amendment as required in this AD, is acceptable to comply with the requirements of paragraph (1) of this AD for that aeroplane.

Initial Inspection and Modification:

(3) Within 50 flight hours (FH) or 50 days, whichever occurs first after the effective date of this AD, accomplish the inspections and the modification of the aeroplane in accordance with the instructions of section III of the WI.

Repetitive Inspection(s):

(4) Within 200 FH or 12 months, whichever occurs first after the initial inspection as required by paragraph (3) of this AD, and thereafter, at intervals not to exceed 200 FH or 12 months, whichever occurs first, accomplish the inspections of the aeroplane in accordance with the instructions of section IV of the WI (see Note 2 of this AD).

Note 2: A non-cumulative tolerance not exceeding 10 FH and 30 days may be applied to the interval for the repetitive inspection specified in paragraph (4) of this AD to allow synchronization of the required inspections with other maintenance tasks, for which a non-cumulative tolerance is already granted in the applicable Maintenance Manual.

Corrective Action(s):

(5) If, during any inspection as required by paragraph (3) or (4) of this AD, any discrepancy, as defined in the SB, is identified, before next flight, accomplish the applicable corrective action(s) in accordance with the instructions of the WI. Where the WI provides instructions to contact DAI, this AD requires to contact DAI before next flight for approved instructions and, within the compliance time specified therein, to accomplish those instructions accordingly (see Note 3 of this AD).

Note 3: The WI identifies certain steps as 'Data Collection'. Accomplishment of those actions is required by this AD, but no corrective action is envisaged.

Terminating Action:

(6) None.

Reporting:

(7) Within 7 days after the accomplishment of any inspection as required by paragraph (3) and (4) of this AD, or after the effective date of this AD, whichever occurs later, report the inspection results, including no findings, to DAI (see Note 3 of this AD). Using the SB execution report (Appendix B of the WI) is an acceptable method to comply with this requirement.

Ref. Publications:

DAI MSB 42-149 / MSB 42NG-095 (published as a single document) original issue dated 02 December 2024.

DAI WI-MSB 42-149 / WI-MSB 42NG-095 (published as a single document), original issue dated 02 December 2024, or Revision 1 dated 05 December 2024.

The use of later approved revisions of the above-mentioned documents is acceptable for compliance with the requirements of this AD.

Remarks:

1. If requested and appropriately substantiated, EASA can approve Alternative Methods of Compliance for this AD.

2. Based on the required actions and the compliance time, EASA have decided to issue a Final AD with Request for Comments, postponing the public consultation process until after publication. All interested persons may send their comments, referencing the AD Number, to the E-mail address specified in below Remark 3, prior to 03 January 2025. Only if any comment is received during the consultation period, a Comment Response Document will be published in the EASA Safety Publications Tool, in a compressed ('zipped') file, attached to the record for this AD.

3. Enquiries regarding this AD should be referred to the EASA Safety Information Section, Certification Directorate. E-mail: ADs@easa.europa.eu.

4. Information about any failures, malfunctions, defects or other occurrences, which may be similar to the unsafe condition addressed by this AD, and which may occur, or have occurred on a product, part or appliance not affected by this AD, can be reported to the EU aviation safety reporting system. This may include reporting on the same or similar components, other than those covered by the design to which this AD applies, if the same unsafe condition can exist or may develop on an aircraft with those components installed. Such components may be installed under an FAA Parts Manufacturer Approval (PMA), Supplemental Type Certificate (STC) or other modification.

5. For any question concerning the technical content of the requirements in this AD, please contact: Diamond Aircraft Industries GmbH, Nikolaus-August-Otto-Straße 5, 2700 Wiener Neustadt, Austria. E-Mail: airworthiness@diamondaircraft.com