



## Notification of a Proposal to issue an Airworthiness Directive

**PAD No.: 19-199**

**Issued: 07 November 2019**

Note: This Proposed Airworthiness Directive (PAD) 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.

In accordance with the EASA Continuing Airworthiness Procedures, the Executive Director is proposing the issuance of an EASA Airworthiness Directive (AD), applicable to the aeronautical product(s) identified below.

All interested persons may send their comments, referencing the PAD Number above, to the e-mail address specified in the 'Remarks' section, prior to the consultation date indicated.

### Design Approval Holder's Name:

DIAMOND AIRCRAFT INDUSTRIES GmbH

### Type/Model designation(s):

DA 42 aeroplanes

**Effective Date:** [TBD - standard: 14 days after AD issue date]

**TCDS Number(s):** EASA.A.005 and EASA.A.513

**Foreign AD:** Not applicable

**Supersedure:** None

## ATA 27 – Flight Controls – Rudder T-Yoke Axle Self-Locking Nut – Inspection

### Manufacturer(s):

Diamond Aircraft Industries GmbH (Austria), Diamond Aircraft Industries Inc. (Canada), CETC Wuhu Diamond Aircraft Manufacture Co. (China)

### Applicability:

DA 42, DA 42 M, DA 42 NG and DA 42 M-NG aeroplanes (including those certified in the Restricted category), all manufacturer serial numbers (MSN).

### Definitions:

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

**The applicable MSB:** Diamond Aircraft Industries (DAI) Mandatory Service Bulletin (MSB) 42-137 and MSB 42NG-079 (published as a single document), which includes Work Instruction WI-MSB 42-137 and WI-MSB 42NG-079.

**Affected part:** Rudder T-yoke axle, standard bolt LN 9037 with dimensions M6x90.

**Groups:** Group 1 aeroplanes are those listed by MSN in the applicable MSB. Group 2 aeroplanes are all other MSN.



**Reason:**

Occurrences were reported of finding a loose rudder T-yoke axle nut on DA 42 aeroplanes.

This condition, if not detected and corrected, could lead to vertical movement of the axle, possibly resulting in reduced rudder control of the aeroplane.

To address this potential unsafe condition, DAI issued the applicable MSB, providing instructions to inspect for correct installation of the self-locking nut to the affected part.

For the reason described above, this AD requires repetitive inspections for correct installation of the self-locking nut to the affected part and, depending on findings, accomplishment of applicable corrective action(s) and replacement of the self-locking nut. This AD also provides an optional terminating action for the repetitive inspections.

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

Required as indicated, unless accomplished previously:

**Inspection(s):**

- (1) For Group 1 aeroplanes: Within 100 flight hours (FH) or 12 months, whichever occurs first after the effective date of this AD, and, thereafter, at intervals not to exceed 200 FH of 12 months, whichever occurs first, inspect the self-locking nut for correct installation to the affected part in accordance with the instructions of the applicable MSB.

**Corrective Action(s):**

- (2) If, during any inspection as required by paragraph (1) of this AD, any looseness of the self-locking nut is detected, before next flight, accomplish the applicable corrective action(s) and replace the self-locking nut with a new (not previously installed) self-locking nut in accordance with the instructions of the applicable MSB.

**Terminating Action:**

- (3) Corrective action(s) or replacement of a self-locking nut on an aeroplane, as required by paragraph (2) of this AD, does not constitute terminating action for the repetitive inspections as required by paragraph (1) of this AD for that aeroplane.
- (4) Modification of an aeroplane in accordance with the instructions of DAI Recommended SB (RSB) 42-139 or RSB 42NG-081 (published as a single document), installing an improved T-yoke axle Part Number D60-5320-00-32, constitutes terminating action for the repetitive inspections as required by paragraph (1) of this AD for that aeroplane.

**Parts Installation:**

- (5) Do not install on any aeroplane an affected part, as required by paragraph (5.1) or (5.2) of this AD, as applicable.

(5.1) For Group 1 aeroplanes: After modification of an aeroplane as specified in paragraph (4) of this AD.

(5.2) For Group 2 aeroplanes: From the effective date of this AD.



**Ref. Publications:**

DAI MSB 42-137 and MSB 42NG-079 (published as a single document) original issue dated 21 October 2019.

DAI RSB 42-139 and RSB 42NG-081 (published as a single document) original issue dated 21 October 2019.

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

**Remarks:**

1. This Proposed AD will be closed for consultation on 05 December 2019.
2. Enquiries regarding this PAD should be referred to the EASA Programming and Continued Airworthiness Information Section, Certification Directorate. E-mail: [ADs@easa.europa.eu](mailto:ADs@easa.europa.eu).
3. Information about any failures, malfunctions, defects or other occurrences, which may be similar to the unsafe condition addressed by this PAD, and which may occur, or have occurred on a product, part or appliance not affected by this PAD, can be reported to the [EU aviation safety reporting system](#).
4. For any question concerning the technical content of the requirements in this PAD, please contact: Diamond Aircraft Industries GmbH, Austria, Telephone: +43 2622 26700, Fax: +43 2622 26780, E-mail: [airworthiness@diamond-air.at](mailto:airworthiness@diamond-air.at).

