



適航指令發布單

Airworthiness Directive Issuance Form

民航局 AD 編號 AD number	CAA-2019-12-010	發布日期 Date issued	2019/12/18												
適用之航空產品 Applied to (models, serial numbers or part numbers, as applicable)	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).														
主旨摘要	Flight Controls - Rudder T-Yoke Axle Self-Locking Nut - Inspection														
<div style="text-align: center;">民航局 CAA</div> <input type="checkbox"/> 本國產品 Native products <input type="checkbox"/> 其他個案 Other	<div style="text-align: center;">設計國民航主管機構 Original Authorities</div> <table style="width: 100%;"> <tr> <td><input type="checkbox"/> FAA</td> <td><input type="checkbox"/> Germany LBA</td> </tr> <tr> <td><input checked="" type="checkbox"/> EASA</td> <td><input type="checkbox"/> CAA-NL</td> </tr> <tr> <td><input type="checkbox"/> Brazil</td> <td><input type="checkbox"/> UK CAA</td> </tr> <tr> <td><input type="checkbox"/> Transport Canada Civil Aviation</td> <td><input type="checkbox"/> Japan CAB</td> </tr> <tr> <td><input type="checkbox"/> DGAC</td> <td><input type="checkbox"/> CAA of Israel</td> </tr> <tr> <td></td> <td><input type="checkbox"/> Other _____</td> </tr> </table>			<input type="checkbox"/> FAA	<input type="checkbox"/> Germany LBA	<input checked="" type="checkbox"/> EASA	<input type="checkbox"/> CAA-NL	<input type="checkbox"/> Brazil	<input type="checkbox"/> UK CAA	<input type="checkbox"/> Transport Canada Civil Aviation	<input type="checkbox"/> Japan CAB	<input type="checkbox"/> DGAC	<input type="checkbox"/> CAA of Israel		<input type="checkbox"/> Other _____
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	設計國 AD 編號 Original AD number	2019-0302													
	1. 直接採用原 AD 之內容?(Is the original AD directly adopted?) <input checked="" type="checkbox"/> 是(Yes) <input type="checkbox"/> 否(No) _ a. 生效日期另訂為(Re-specify the effective date as) : _____ b. 執行時限另訂為(Re-specify the compliance time or period as) : _____ 2. 使用人是否需要將 AD 執行結果向民航局提出報告?(Do Users need to report the status of compliance to the CAA?) <input type="checkbox"/> 是(Yes) <input checked="" type="checkbox"/> 否(No)														
備註 Note	ATA 27. Ref. Publications: DAI MSB 42-137 and MSB 42NG-079 (published as a single document) original issue dated 21 October 2019, or Revision 1 (MSB 42-137/1 and MSB 42NG-079/1, respectively) dated 11 December 2019. and DAI RSB 42-139 and RSB 42NG-081 (published as a single document) original issue dated 21 October 2019.														
註： 1. AD 內容後附。 2. 航空器產品使用人得向民航局提出豁免、替代符合方法、執行時限之展延之申請。 3. 如有任何問題，請聯絡交通部民用航空局初始適航科。Tel：(02)2349-6331~3, Fax：(02)2545-8464, e-mail： adcaa@mail.caa.gov.tw Note： 1. The AD text is enclosed. 2. Exemption, an alternative method of compliance or adjustment of the compliance time may be proposed to the CAA for approval. 3. For further information, please contact Civil Aeronautics Administration on Tel：(02)2349-6331~3, Fax：(02)2545-8464, e-mail： adcaa@mail.caa.gov.tw															



Airworthiness Directive

AD No.: 2019-0302

Issued: 13 December 2019

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, 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 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 aeroplanes

Effective Date: 27 December 2019

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 or 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.

Note 1: A non-cumulative tolerance of 10 FH or 30 days may be applied to the compliance times specified in paragraph (1) of this AD to allow synchronization of the required inspections, e.g. with a scheduled 200-FH maintenance visit, for which a non-cumulative tolerance is already granted in the applicable Maintenance Manual.

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, or Revision 1 (MSB 42-137/1 and MSB 42NG-079/1, respectively) dated 11 December 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. If requested and appropriately substantiated, EASA can approve Alternative Methods of Compliance for this AD.
2. This AD was posted as PAD 19-199 on 07 November 2019 for consultation until 05 December 2019. The Comment Response Document can be found in the [EASA Safety Publications Tool](#), in the compressed (zipped) file attached to the record for this AD.
3. Enquiries regarding this AD should be referred to the EASA Programming and Continued Airworthiness 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](#).
5. For any question concerning the technical content of the requirements in this AD, please contact: Diamond Aircraft Industries GmbH, Austria, Telephone: +43 2622 26700, Fax: +43 2622 26780, E-mail: airworthiness@diamond-air.at.

