



### 適航指令發布單

### Airworthiness Directive Issuance Form

民航局 AD 編號 AD number	CAA-2022-03-005	發布日期 Date issued	2022/3/8
適用之航空產品 Applied to (models, serial numbers or part numbers, as applicable)	BR700-710A1-10, BR700-710A2-20, BR700-710C4-11 and BR700-710D5-21 engines, all serial numbers.		
主旨摘要 Subject	Time Limits / Maintenance Checks - Time Limits Manual / Maintenance Programme - Amendment		
民航局 CAA <input type="checkbox"/> 本國產品 Native product <input type="checkbox"/> 其他個案 Other	設計國民航主管機構 Original Authority <input type="checkbox"/> FAA <input checked="" type="checkbox"/> EASA <input type="checkbox"/> Brazil <input type="checkbox"/> Transport Canada Civil Aviation <input type="checkbox"/> DGAC <input type="checkbox"/> Germany LBA <input type="checkbox"/> CAA-NL <input type="checkbox"/> UK CAA <input type="checkbox"/> Japan CAB <input type="checkbox"/> CAA of Israel <input type="checkbox"/> Other _____		
	設計國 AD 編號 Original AD number	2022-0033	
	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	This AD supersedes EASA AD 2012-0161R1(CAA-2012-08-007A) dated 19 September 2014.		
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)2349-6330 / 6332, Fax：(02)2545-8464, e-mail： <a href="mailto:adcaa@mail.caa.gov.tw">adcaa@mail.caa.gov.tw</a> 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)2349-6330 / 6332, Fax：(02)2545-8464, e-mail： <a href="mailto:adcaa@mail.caa.gov.tw">adcaa@mail.caa.gov.tw</a>			



## Airworthiness Directive

**AD No.:** 2022-0033

**Issued:** 03 March 2022

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:

ROLLS-ROYCE DEUTSCHLAND Ltd & Co KG

### Type/Model designation(s):

BR700-710 engines

**Effective Date:** 17 March 2022

**TCDS Number(s):** EASA.E.018

**Foreign AD:** Not applicable

**Supersedure:** This AD supersedes EASA AD 2012-0161R1 dated 19 September 2014.

## ATA 05 – Time Limits / Maintenance Checks – Time Limits Manual / Maintenance Programme – Amendment

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### Manufacturer(s):

Rolls-Royce Deutschland Ltd & Co KG (RRD)

### Applicability:

BR700-710A1-10, BR700-710A2-20, BR700-710C4-11 and BR700-710D5-21 engines, all serial numbers.

These engines are known to be installed on, but not limited to, Bombardier BD-700-1A10 and BD-700-1A11 aeroplanes, and Gulfstream GV (commercial designation G500) and GV-SP (commercial designation G550) aeroplanes.

### Definitions:

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

**The TLM:** The five (5) sections designated as 'airworthiness limitations' of RRD Time Limits Manual (TLM) T-710-1BR, Revision 70 (BR700-710A1-10 engines); TLM T-710-2BR, Revision 67 (BR700-710A2-20 engines); TLM T-710-4BR, Revision 40 (BR700-710C4-11 engines); and TLM T-710-8BR, Revision 16 (BR700-710D5-21 engines); as applicable.

**The NMSB:** RRD Alert Non-Modification Service Bulletin (NMSB) BR700-72-A900509.



**The AMP:** The approved Aircraft Maintenance Programme (AMP) on the basis of which the operator or the owner ensures the continuing airworthiness of each operated engine. For BR700-710 engines operated under EU regulations, compliance with the approved AMP is required by Commission Regulation (EU) [1321/2014](#), Part M.A.301, paragraph (c).

**New and/or more restrictive instructions:** This includes all instructions that are new and all instructions for which a threshold or interval was reduced, which were introduced into the TLM (as defined in this AD) since the previous revision of the TLM that is currently incorporated in the AMP.

**Reason:**

The Airworthiness Limitations Section instructions for BR700-710 engines, which are approved by EASA, are defined and published in the TLM. These instructions have been identified as mandatory for continued airworthiness.

Failure to accomplish these instructions could result in an unsafe condition.

EASA previously issued AD 2012-0161 (later revised) to require replacement of the fuel pump splined coupling for certain engines, in accordance with the instructions specified in the NMSB, as defined in this AD.

Since certification of the BR710 engine models, several changes have been made to the Time Limits Manuals. Most recently, RRD published the TLM, as defined in this AD, introducing new and/or more restrictive instructions, including the replacement of the fuel pump splined coupling as specified in the NMSB.

For the reason described above, this AD retains the requirements of EASA AD 2012-0161R1, which is superseded, expands the Applicability to include BR700-710D5-21 engines, and requires accomplishment of the instructions specified and referenced in the TLM.

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

Required as indicated, unless accomplished previously:

**Mandatory Inspections and Replacement of Life Limited Parts:**

(1) From the effective date of this AD, accomplish the following instructions, as specified in the TLM, as applicable to engine model and depending on engine configuration:

(1.1) Replace each component before exceeding the applicable life limit or before exceeding the applicable threshold, or within the special compliance times specified in Table 1 of this AD, whichever occurs later; and

(1.2) Within the thresholds and intervals, accomplish each applicable mandatory inspection.



Table 1 - Special Compliance Time for Fuel Pump Splined Coupling Initial Replacement

Part Number	Engine condition, on the effective date of this AD	Special Compliance Time
BRR52639 and 39504900	Not applicable	Before the engine accumulates 4 000 flight hours (FH) since new or since last accomplishment of the NMSB, as applicable
39504901	No record of fuel pump coupling replacement	Within 500 FH after the effective date of this AD

**Corrective Action(s):**

- (2) In case of finding discrepancies (as referenced in the TLM) during accomplishment of any action as required by paragraph (1.2) of this AD, within the compliance time specified in the TLM, accomplish the applicable corrective action(s) in accordance with approved Rolls-Royce instructions for continued airworthiness. If no compliance time is identified or referenced in the TLM, accomplish the applicable corrective action(s) before next flight. If a detected discrepancy is not identified or referenced in the TLM, before next flight, contact Rolls-Royce for approved instructions and accomplish those instructions accordingly.

**AMP Revision:**

- (3) Within 12 months after the effective date of this AD, revise the approved AMP by incorporating the instructions and associated thresholds and intervals described in the TLM, as applicable to engine model and depending on engine configuration.

**Credit:**

- (4) If, before the effective date of this AD, the AMP has been revised to incorporate the instructions as specified in a previous revision of the TLM, that AMP revision ensures the continued accomplishment of those instructions.

Consequently, for an aeroplane to which that AMP applies, it is acceptable to accomplish the new and/or more restrictive instructions as specified in the TLM, as applicable to engine model and depending on engine configuration, within the compliance times as specified in the TLM, as defined in this AD, to comply with paragraph (1) of this AD.

For that AMP, it is acceptable to incorporate only the new and/or more restrictive instructions as specified in the TLM, as applicable to engine model and depending on engine configuration, into the AMP to comply with paragraph (3) of this AD.

**Recording AD Compliance:**

- (5) When the AMP of an aeroplane has been revised as required by paragraph (3) or (4) of this AD, as applicable, that revision ensures continued accomplishment of the actions as required by paragraphs (1) and (2) of this AD for the engine(s) installed on that aeroplane. Consequently, after revising the AMP, as required by paragraph (3) or (4) of this AD, as applicable, it is not



necessary that accomplishment of individual action is recorded for demonstration of AD compliance on a continued basis.

#### Ref. Publications:

RRD TLM T-710-1BR, Revision 70 dated 13 October 2021.

RRD TLM T-710-2BR, Revision 67 dated 13 October 2021.

RRD TLM T-710-4BR, Revision 40 dated 13 October 2021.

RRD TLM T-710-8BR, Revision 16 dated 13 October 2021.

The use of later approved revisions of the above-mentioned documents are 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 on 26 January 2022 as PAD 22-006 for consultation until 23 February 2022. No comments were received during the consultation period.
3. Enquiries regarding this AD should be referred to the EASA Safety Information Section, Certification Directorate. E-mail: [ADs@easa.europa.eu](mailto: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: Rolls-Royce Deutschland Ltd & Co KG, Eschenweg 11, Dahlewitz, 15827 Blankenfelde-Mahlow, Germany, Telephone: +49 (0) 337086 1200, E-mail: [rrd.techhelp@rolls-royce.com](mailto:rrd.techhelp@rolls-royce.com).

