

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

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.
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.

