

Airworthiness Directive

AD No.: 2022-0232

Issued: 28 November 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, or Annex Vb Part M.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 M.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:

Type/Model designation(s):

ROLLS-ROYCE DEUTSCHLAND Ltd & Co KG

RB211-524G and RB211-524H engines

Effective Date: 12 December 2022

TCDS Number(s): EASA.E.062

Foreign AD: Not applicable

Supersedure: This AD supersedes EASA AD 2013-0246 dated 10 October 2013.

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

Manufacturer(s):

Rolls-Royce plc

Applicability:

RB211-524G2-19, RB211-524G2-T-19, RB211-524G3-19, RB211-524G3-T-19, RB211-524H2-19, RB211-524H2-T-19, RB211-524H-36 and RB211-524H-T-36 engines, all serial numbers.

These engines are known to be installed on, but not limited to, Boeing 747 and Boeing 767 aeroplanes.

Definitions:

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

The TLM: Rolls-Royce RB211-524G/H Time Limits Manual (TLM) T-211 (524)-7RR revision 63 dated 20 July 2022, Chapters 05-10-01 and 05-20-01.

The AMP: The Aircraft Maintenance Programme (AMP) contains the tasks on the basis of which the scheduled maintenance is conducted to ensure the continuing airworthiness of each operated



engine. For an engine installed on an aeroplane operated under EU regulations, the operator or the owner ensures compliance with the AMP as stipulated in Commission Regulation (EU) <u>1321/2014</u>.

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 TLM revision that is currently incorporated in the AMP.

Reason:

The Airworthiness Limitations Section instructions for RB211-524G/H engines, which are approved by EASA, are defined and published in Rolls-Royce TLM T-211(524)-7RR. These instructions have been identified as mandatory for continued airworthiness.

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

Since the original issue of the TLM, life limits and maintenance tasks for newly designed parts have been introduced. Previously, EASA issued AD 2013-0246 to require implementation of the reduced cyclic life limit for high-pressure compressor rotor Stage 1 and 2 discs, and their replacement before the reduced life limit is exceeded.

Since that AD was issued, Rolls-Royce published the TLM, including the requirements addressed by that AD, and introducing new and/or more restrictive instructions.

For the reason described above, this AD retains the requirements of EASA AD 2013-0246, which is superseded, and requires accomplishment of the instructions specified in the TLM.

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

Required as indicated, unless accomplished previously:

Maintenance Tasks 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, and
 - (1.2) Within the thresholds and intervals, accomplish each applicable maintenance task.

Corrective Action(s):

(2) In case of finding discrepancies (as defined in the TLM) during accomplishment of any action as required by paragraph (1) 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 in the TLM, accomplish the applicable corrective action(s) before next flight. If a detected discrepancy is not identified 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 TLM T-211(524)-7RR, 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:

Rolls-Royce RB211-524G/H TLM T-211(524)-7RR revision 63 dated 20 July 2022.

The use of later approved revisions of the above-mentioned document 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 on 24 October 2022 as PAD 22-139 for consultation until 21 November 2022. No comments were received during the consultation period.
- Enquiries regarding this AD should be referred to the EASA Safety Information Section, Certification Directorate. E-mail: <u>ADs@easa.europa.eu</u>.
- 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 your designated Rolls-Royce representative, or download the publication from your Rolls-Royce Care account at https://customers.rolls-royce.com.

If you do not have a designated representative or Rolls-Royce Care account, please contact **Corporate Communications** at **Rolls-Royce plc**, P.O. Box 31, Derby, DE24 8BJ, United Kingdom Telephone +44 (0)1332 242424,

or send an email through https://www.rolls-royce.com/contact-us/civil-aerospace.aspx identifying the correspondence as being related to **Airworthiness Directives**.