



Airworthiness Directive

AD No.: 2025-0020

Issued: 15 January 2025

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 ML.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 ML.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:

ROLLS-ROYCE DEUTSCHLAND Ltd & Co KG

Type/Model designation(s):

RB211 Trent 900 engines

Effective Date: 29 January 2025

TCDS Number(s): EASA.E.012

Foreign AD: Not applicable

Supersedure: None

ATA 72 – Engine – Combustion Rear Inner Case Bolt – Replacement / Modification

Manufacturer(s):

Rolls-Royce plc

Applicability:

RB211 Trent 970-84, Trent 970B-84, Trent 972-84, Trent 972B-84, Trent 972E-84, Trent 977-84, Trent 977B-84 and Trent 980-84 engines, all serial numbers.

These engines are known to be installed on, but not limited to, Airbus A380 aeroplanes.

Definitions:

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

Affected part: Combustion rear inner case (CRIC) bolt having Part Number (P/N) FW82729, which is not a serviceable part.

Serviceable part: Any CRIC bolt P/N FW82729 which has never been previously installed and operated.

The NMSB: Rolls-Royce Alert Non-Modification Service Bulletin (NMSB) RB211 72-AJ698 Revision 1. The NMSB has an 'A' (Alert) in the number, but a later revision may not have that 'A'. This kind of change does not effectively alter the publication references.



The modification SB: Rolls-Royce Service Bulletin (SB) RB211 72–K550.

The TLM task: Rolls-Royce Time Limit Manual (TLM) T-TRENT-9RR, maintenance task 72-41-14, 01-453.

Qualified shop visit: Hospital, Check and Repair (Level 2), Refurbishment (Level 3) or Overhaul (Level 4) shop visits, starting after the effective date of this AD, whenever the High-Pressure Turbine rotor is removed.

Reason:

Occurrences of fracture of affected parts were reported. The damaged parts were detected during engine shop visits and stress corrosion was identified to be the root cause of the occurrences.

This condition, if not corrected, could lead to similar fractures of the affected part, damage of adjacent engine critical parts, potentially resulting in uncontained release of parts and damage to the aeroplane.

To address this potential unsafe condition Rolls-Royce issued the NMSB to provide repetitive replacement instructions applicable to the affected part. Rolls-Royce also issued the modification SB installing improved CRIC assembly which is not affected by the unsafe condition addressed by this AD.

For the reason described above, this AD requires repetitive replacements of the affected part and modification of an engine. This AD recognises the modification SB as terminating action for the repetitive replacements of the affected part.

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

Required as indicated by this AD, unless the action(s) required by this AD have been already accomplished:

In-Shop Replacement:

- (1) From the effective date of this AD, during each qualified shop visit (as defined in this AD), replace each affected part with a serviceable part in accordance with the instructions of the NMSB.

Modification:

- (2) Within 155 months after the effective date of this AD, modify the engine in accordance with the instructions of the modification SB.

Terminating Action:

- (3) Modification of an engine as required by paragraph (2) of this AD constitutes terminating action for repetitive replacements of the affected part as required by paragraph (1) of this AD for that engine.

Engine Installation:

- (4) From the effective date of this AD, first installation on an aeroplane of an engine released to service after a qualified shop visit, as defined in this AD, is allowed, provided that no affected



parts are installed on that engine, or that the engine is modified as required by paragraph (2) of this AD.

Alternative Method:

- (5) Replacement of each affected part on an engine, as required by paragraph (1) of this AD, is an acceptable method for the installation of 20 new bolts during High Pressure Nozzle Guide Vane assembly or whenever the High-Pressure Turbine rotor is exposed, as required by the TLM task (as defined in this AD), for that engine.

Ref. Publications:

Rolls-Royce Alert NMSB RB211 72-AJ698 original issue dated 04 July 2017, or Revision 1 dated 21 November 2024.

Rolls-Royce SB RB211 72-K550 original issue dated 15 September 2021, or Revision 1 dated 08 August 2024.

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 on 21 November 2024 as PAD 24-142 for consultation until 12 December 2024. 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 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 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**.

