

Emergency Airworthiness Directive AD No.: 2024-0069-E Issued: 12 March 2024

Note: This Emergency 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.

Type/Model designation(s):

RB211-524 engines

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

Effective Date: 14 March 2024

TCDS Number(s): EASA.E.062

Foreign AD: Not applicable

Supersedure: None

ATA 72 – Engine – High Pressure Compressor / Stage 1 and 2 Rotor Path Liners – Inspection

Manufacturer(s):

Rolls-Royce plc (Rolls-Royce)

Applicability:

RB211-524H-36 and RB211-524H-T-36 engines, all manufacturer serial numbers.

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

Definitions:

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

Affected part: High pressure (HP) compressor stage 1 and 2 rotor path liners.

The NMSB: Rolls-Royce Non-Modification Service Bulletin (NMSB) RB211-72-AL102.

Reason:

High rate of surges, including dual engine surge on climb, were reported on a sub-fleet of engines. Subsequent investigation determined that significant loss of affected part could be the contributing factor of the reported occurrences.



This condition, if not detected and corrected, could lead to dual engine shutdown and, consequently, reduced control of an aeroplane.

To address this potential unsafe condition, Rolls-Royce issued the NMSB providing inspection instructions.

For the reasons described above, this AD requires inspections of the affected part and, depending on findings, contacting Rolls-Royce Deutschland Ltd & Co KG.

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:

Inspection(s):

(1) For engines which, on the effective date of this AD, are installed on an aeroplane: Within the compliance time as defined in Table 1 of this AD, as applicable, accomplish a borescope inspection of each affected part in accordance with the instructions of section 3.A of the NMSB.

Engine	Compliance Time
One engine of those installed on an aeroplane	Within 18 days after the effective date of this AD
Remaining engines installed on an aeroplane	Within 50 days after the effective date of this AD

(2) For engines which, on the effective date of this AD are installed on an aeroplane and accumulated 50 flight cycles (FC) or less since last installation (see Note 1 of this AD): Within 150 FC after the initial inspection, as required by paragraph (1) of this AD, accomplish a borescope inspection of each affected part in accordance with the instructions of section 3.A of the NMSB.

Note 1: Removal of an engine from an aeroplane and subsequent reinstallation of that engine on the same aeroplane, at the same position, accomplished during a single maintenance visit, is not considered as 'installation' as specified in paragraphs (2) and (4) of this AD.

Parts Installation:

- (3) From the effective date of this AD, it is allowed to install an engine on an aeroplane, provided that, thereafter, that engine is inspected as required by paragraphs (3.1) and (3.2) of this AD:
 - (3.1) Before next flight after the first installation on an aeroplane the engine is inspected in accordance with the instructions of the section 3.B of the NMSB.
 - (3.2) Within the windows of inspection as specified in Table 2 of this AD, the engine is inspected in accordance with the instructions of the section 3.A of the NMSB.



Inspection	Not before than:	Not later than:
#1	5 FC	7 FC
#2	45 FC	50 FC
#3	145 FC	150 FC

Table 2 - Windows of Inspection (see Note 2 of this AD)

Note 2: The FC as specified in Table 2 of this AD are those accumulated by the engine after the inspection as required by paragraph (3.1) of this AD.

Corrective Action(s):

(4) If, during any inspection as required by paragraph (1), (2) or (3) of this AD, discrepancies are detected as defined in the NMSB, before next flight, contact Rolls-Royce Deutschland Ltd & Co KG for corrective action instructions and, within the compliance time specified therein, accomplish those instructions accordingly.

Ref. Publications:

Rolls-Royce Non-Modification Service Bulletin RB211-72-AL102 original issue dated 11 March 2024.

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. The results of the safety assessment have indicated the need for immediate publication and notification, without the full consultation process.
- 3. 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 <u>EU aviation safety</u> 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 <u>http://www.rolls-royce.com/contact/civil_team.jsp</u> identifying the correspondence as being related to **Airworthiness Directives**.

