



## Airworthiness Directive

**AD No.:** 2018-0157

**Issued:** 24 July 2018

Note: This Airworthiness Directive (AD) is issued by EASA, acting in accordance with Regulation (EC) 216/2008 on behalf of the European Union, its Member States and of the European third countries that participate in the activities of EASA under Article 66 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 (EC) 216/2008, Article 14(4) exemption].

### Design Approval Holder's Name:

ROLLS-ROYCE plc

### Type/Model designation(s):

RB211-524G and -524H engines

**Effective Date:** 07 August 2018

**TCDS Number(s):** EASA.E.062

**Foreign AD:** Not applicable

**Supersedure:** None

## ATA 72 – Engine – Low Pressure Compressor Shafts – Life Reduction

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### Manufacturer(s):

Rolls-Royce plc (RR)

### 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 (s/n).

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 NMSB:** RR Alert Non-Modification Service Bulletin (NMSB) RB.211-72-AJ985.

**Affected parts:** LP compressor shafts, Part Number (P/N) UL24833, having a s/n as listed in Table 1 of this AD.

### Reason:

It was reported that a number of low pressure (LP) compressor shafts have undergone unauthorised repairs, which were found to be detrimental to the approved shaft life.



This condition, if not corrected, could lead to fracture of the LP compressor shaft and release of high energy debris, possibly resulting in damage to, and reduced control of, the aeroplane.

To address this potentially unsafe condition, it has been decided that a life reduction must be imposed for those LP compressor shafts known to have been repaired. However, the history of some shafts has not been determined and the unauthorised repairs may not have been confirmed. To address all the shafts that have possibly been subject to the unauthorised repairs, RR issued the NMSB to provide instructions to reduce the life of the affected shafts.

For the reasons described above, this AD requires removal from service of the affected parts.

### Required Action and Compliance Time:

Required as indicated, unless accomplished previously:

Table 1 – Affected Parts

LP Compressor Shafts P/N UL24833, s/n:				
PATH3113	PATH3121	PAVN1765	PAVN1853	PAVN2152
PAVN2157	PAVN2259	PAVN2636	PAVN2991	PAVN2992

### Removal from Service:

- (1) Before exceeding 10 500 flight cycles (FC) since first installation on an engine, or within 30 days after the effective date of this AD, whichever occurs later, remove each affected part from service in accordance with the instructions of the NMSB.

### Parts Installation:

- (2) From the effective date of this AD, it is allowed to install on any engine an affected part, provided it has not exceeded 10 500 FC since its first installation on an engine.

### Ref. Publications:

Rolls-Royce Alert NMSB RB.211-72-AJ985 original issue dated 17 April 2018.

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 09 May 2018 as PAD 18-068 for consultation until 06 June 2018, and republished on 06 July 2018 as PAD 18-068R1 for additional consultation until 20 July 2018. 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](#).
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 <http://www.rolls-royce.com/contact-us.aspx> identifying the correspondence as being related to **Airworthiness Directives**.

