

# **Airworthiness Directive**

AD No.: 2025-0288

Issued: 17 December 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 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 Trent 700 engines

Effective Date: 31 December 2025

TCDS Number(s): EASA.E.042

Foreign AD: Not applicable

Supersedure: This AD supersedes EASA AD 2024-0130 dated 08 July 2024.

# ATA 72 – Engine – Low Pressure Compressor Blades – Removal from Service

### Manufacturer(s):

Rolls-Royce plc (RR)

#### **Applicability:**

RB211 Trent 768-60, 772-60, 772B-60 and 772C-60 engines, all serial numbers (s/n).

These engines are known to be installed on, but not limited to, Airbus A330 aeroplanes.

#### **Definitions:**

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

The NMSB: RR Alert Non-Modification Service Bulletin (NMSB) RB.211-72-AL053 Revision 1.

Where in this AD, reference is made to an RR modification (mod), Service Bulletin (SB) or NMSB with an 'A' (Alert) in the number, it should be recognised that an earlier or later revision may not have that 'A'. This kind of change does not effectively alter the publication references for the purpose of this AD.

**Group A affected parts:** Low pressure (LP) compressor blades, having Part Number (P/N) FW23741, FW23643, FW23744, KH23403, KH23404, and an s/n listed in Appendix 1 of the NMSB, except those



which passed the inspection in accordance with the instructions of RR NMSB RB.211–72–L104; and except those listed in Table 1 of this AD.

**Group B affected parts:** LP compressor blades, having P/N FW23741, FW23643, FW23744, KH23403, KH23404, and an s/n listed in Table 1 of this AD, except those which passed the inspection in accordance with the instructions of RR NMSB RB.211–72–L104.

**The applicable ARC date:** Issue date of the Authorised Release Certificate (ARC) after the maintenance intervention, during which the non-conforming repair was accomplished, as defined in Appendix 1 of the NMSB or in Table 1 of this AD, as applicable.

Cycles to removal from date of Fan blade s/n Date of applicable ARC applicable ARC 12/04/2022 RGF18971 8270 8516 RGF19040 12/04/2022 RGF19059 9673 12/04/2022 RGF19089 5409 12/04/2022 07/09/2020 RGF27871 5219 RGF30661 7429 07/09/2020 RGF31002 8871 07/09/2020 5100 RGF32499 20/06/2017 RGF45899 5650 27/02/2017

Table 1 – Fan Blades

**Serviceable part:** LP compressor blades eligible for installation in accordance with RR instructions, which are not an affected part.

**The CRDAA:** 'Cycles to Removal from Date of Applicable ARC' as defined in Appendix 1 of the NMSB or in Table 1 of this AD, as applicable.

**Groups:** Group 1 engines are those having an affected part (either Group A or Group B affected parts) installed. Group 2 engines are those which do not have an affected part installed.

#### Reason:

A batch of LP compressor blades have been exposed in service to erroneous repair interventions, resulting in blade configuration deviating from the approved design. These LP compressor blades, non-conforming to the approved design, are prone to blade cracking.

This condition, if not corrected, could lead to multiple structural failures of the affected parts, potentially resulting in increased risk of in-flight shut down (IFSD), uncontrolled fire or uncontained high energy debris release and consequent potential unsafe condition at aeroplane level.



To address this potential unsafe condition, RR issued the original issue of NMSB RB.211–72–AL053, identifying in the Appendix 1 of that NMSB the batch of affected parts and providing instructions to remove these parts from service. RR also issued NMSB RB.211–72–L104 providing in-shop (re)inspection instructions allowing release back to service of the affected parts passing the inspection criteria. Consequently, EASA issued AD 2024-0130 requiring removal from service of parts identified in the original issue of NMSB RB.211–72–AL053.

Since that AD was issued, RR issued the NMSB, as defined in this AD, expanding the list of affected parts by adding 9 new s/n (listed in this AD in Table 1 of this AD).

For the reasons described above, this AD retains the requirements of EASA AD 2024-0130, which is superseded and, additionally, requires removing from service also the additional batch of 9 affected parts.

#### **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-Service / Removal from Service:

(1) For Group 1 engines having Group A affected parts installed: Before exceeding the CRDAA limit accumulated since the applicable ARC date, as defined in Appendix 1 of the NMSB, or within the compliance time as defined in Table 2 of this AD, whichever occurs later, remove each affected part from service in accordance with the instructions of the NMSB.

Table 2 – Compliance Time for Removal of Group A Affected Parts

A or B, whichever occurs first after 22 July 2024 [the effective date of EASA AD 2024-0130]		
Α	Within 30 flight cycles (FC)	
В	30 days	

(2) For Group 1 engines having Group B affected parts installed: Before exceeding the CRDAA limit accumulated since the applicable ARC date, as defined in Table 1 of this AD, or within the compliance time as defined in Table 3 of this AD, whichever occurs later, remove each affected part from service in accordance with the instructions of the NMSB.

Table 3 – Compliance Time for Removal of Group B Affected Parts

A or B, whichever occurs first after the effective date of this AD		
Α	Within 30 FC	
В	30 days	

### **In-Shop Replacement:**

(3) From the effective date of this AD, before release to service of a Group 1 engine after a shop visit, where the remaining CRDAA life of an affected part is 100 FC or less, replace each affected part with a serviceable part in accordance with the instructions of the NMSB (see Note 1 of this AD).



Note 1: After replacing each affected part on a Group 1 engine with serviceable parts, that engine is considered to be a Group 2 engine.

#### **Parts Installation:**

(4) For Group 1 and Group 2 engines: From the reference date as defined in Table 4 of this AD, do not install an affected part (Group A or Group B) on any engine (see Note 2 of this AD).

Note 2: Removal of an affected part from an engine and subsequent reinstallation of that affected part on the same position on the same engine, accomplished during a single on-wing maintenance activity, is not considered as 'installation' as specified in paragraph (4) of this AD.

Table 4 – Reference Dates for Installation Prohibition

Affected parts	Reference date
Group A	From 22 July 2024 [the effective date of EASA AD 2024-0130]
Group B	From the effective date of this AD

#### **Ref. Publications:**

RR NMSB RB.211-72-AL053 original issue dated 01 May 2024, or Revision 1 dated 31 July 2025.

RR NMSB RB.211-72-L104 original issue dated 01 May 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 20 October 2025 as PAD 25-160 for consultation until 17 November 2025. 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 <u>EU aviation safety reporting system</u>. 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 <a href="https://customers.rolls-royce.com">https://customers.rolls-royce.com</a>.
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 <a href="http://www.rolls-royce.com/contact/civil">http://www.rolls-royce.com/contact/civil</a> team.jsp identifying the correspondence as being related to **Airworthiness Directives**.