



Notification of a Proposal to issue an Airworthiness Directive

PAD No.: 21-087

Issued: 16 June 2021

Note: This Proposed Airworthiness Directive (PAD) 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.

In accordance with the EASA Continuing Airworthiness Procedures, the Executive Director is proposing the issuance of an EASA Airworthiness Directive (AD), applicable to the aeronautical product(s) identified below.

All interested persons may send their comments, referencing the PAD Number above, to the e-mail address specified in the 'Remarks' section, prior to the consultation date indicated.

Design Approval Holder's Name: **Type/Model designation(s):**

ROLLS-ROYCE DEUTSCHLAND Ltd & Co KG RB211 Trent 900 engines

Effective Date: [TBD - standard: 14 days after AD issue date]

TCDS Number(s): EASA.E.012

Foreign AD: Not applicable

Supersedure: None

ATA 72 – Engine – Critical Parts – Removal from Service

Manufacturer(s):

Rolls-Royce plc

Applicability:

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

Definitions:

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

Affected part: Critical engine components as identified by part name, Part Number (P/N) and serial number (s/n) in Appendix 1 of this AD.

The TLM Tasks: Rolls-Royce RB211 Trent 900 Time Limits Manual (TLM) T-TRENT-9RR, Revision dated 16 April 2021 (or later), Task 05-10-01-800-801-A00 and Task 05-10-01-800-801-C00.

Reason:

Recently, it was determined that incorrect part usage declarations have been made for a limited number of life limited parts (LLP) regarding their cyclic life consumption during flight test. For a



number of these LLP, the actual life usage records could not be determined. Following investigation, some of these components could not be located, nor confirmation obtained of the destruction of these parts, which should have been removed from engines during their initial upgrade from flight test to in-service standard.

This condition, if not corrected, could lead to LLP failure, possibly resulting in high-energy debris release, with consequent damage to, and reduced control of, the aeroplane.

To address this potential unsafe condition, Rolls-Royce issued the TLM Tasks to identify the affected parts and to prohibit (re)installation. These tasks do not change any declared mandatory life for any component listed within the TLM.

For the reason described above, this PAD proposes to require removal from service of all affected parts. This PAD also proposes to prohibit (re)installation of affected parts on any engine.

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

Required as indicated, unless accomplished previously:

Removal from Service:

- (1) Within 30 days after the effective date of this AD, remove each affected part from the engine. This can be accomplished by using the applicable replacement instructions as provided in the applicable Engine Manual.

Parts Installation:

- (2) From the effective date of this AD, do not install an affected part on any engine.

Ref. Publications:

Rolls-Royce RB211 Trent 900 TLM T-TRENT-9RR, Task 05-20-01-800-801 (Mandatory Inspections and Declared Safe Cyclic Lives), Revision dated 16 April 2021.

The use of later approved revisions of the above-mentioned document is acceptable for compliance with the requirements of this AD.

Remarks:

1. This Proposed AD will be closed for consultation on 14 July 2021.
2. Enquiries regarding this PAD should be referred to the EASA Safety Information Section, Certification Directorate. E-mail: ADs@easa.europa.eu.
3. Information about any failures, malfunctions, defects or other occurrences, which may be similar to the unsafe condition addressed by this PAD, and which may occur, or have occurred on a product, part or appliance not affected by this PAD, 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 PAD 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.



4. For any question concerning the technical content of the requirements in this PAD, 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**.



Appendix 1 – Critical Parts to be Removed from Service

Part Name	P/N	s/n
Intermediate Pressure (IP) Compressor Stage 1-8 Rotor Shaft	FW20677	MW0267729
IP Turbine Disc	FW43058	LDRQA00271
High Pressure (HP) Compressor Shaft Stage 1-4 Rotor Disc	FW20087	MW0276943 and MW0276945
HP Compressor Stage 5 Disc	FW21500	MW0265615 and MW0265616
HP Compressor Stage 6 Disc and Cone	FW22427	MW0267924 and MW0267996
HP Turbine Rotor Disc	FW37983	LDRPP00019, LDRPP00030 and LDRPP00035
HP Turbine Front Coverplate	FW29069	TEREC0473, TEREC0591, TEREC0641 and TEREC0645

