



Notification of a Proposal to issue an Airworthiness Directive

PAD No.: 20-118

Issued: 10 August 2020

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:

ROLLS-ROYCE DEUTSCHLAND Ltd & Co KG

Type/Model designation(s):

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 – High Pressure / Intermediate Pressure Bearing Support Assemblies – Removal from Service

Manufacturer(s):

Rolls-Royce plc

Applicability:

RB211 Trent 970-84, Trent 972-84 and Trent 972E-84 engines, all serial numbers (s/n).

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:

The NMSB: Rolls-Royce Trent 900 Alert Non-Modification Service Bulletin (NMSB) RB.211-72-AK586. 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.

Affected part: High pressure / intermediate pressure (HP/IP) bearing support assemblies, having Part Number (P/N) KH13661, P/N KH13811, P/N KH57620, P/N KH57797, KH66347 or KH76404, and



an s/n as identified in Appendix 1 of the NMSB. The NMSB also identifies the engine s/n on which each HP/IP bearing support assembly was known to be installed at the time of NMSB issuance.

Groups: Group 1 engines are those that have an affected part installed. Group 2 engines are those that do not have an affected part installed.

Reason:

On certain HP/IP bearing support assemblies, during the manufacturing process, salvage welding was applied to the struts without adequate heat treatment.

This condition, if not corrected, could lead to crack initiation, possibly resulting in strut failure, overheating of the intermediate pressure turbine and high-energy debris release, with consequent damage to, and reduced control of, the aeroplane.

To address this potential unsafe condition, Rolls-Royce published the NMSB to provide replacement instructions.

For the reason described above, this AD requires removal from service of the affected parts. This AD also prohibits (re)installation of affected parts.

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

Required as indicated, unless accomplished previously:

Replacement:

- (1) For Group 1 engines: During the next shop visit after the effective date of this AD, before release to service of the engine, replace the affected part with a serviceable part in accordance with the instructions of the NMSB.

For an engine that, on the effective date of this AD, is in a shop visit, before release to service of that engine, replace the affected part with a serviceable part in accordance with the instructions of the NMSB.

Part Installation:

- (2) For Group 1 and Group 2 engines: From the effective date of this AD, do not install an affected part on any engine.

Ref. Publications:

Rolls-Royce Trent 900 Alert NMSB RB.211-72-AK586 original issue dated 06 August 2020.

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 07 September 2020.
2. Enquiries regarding this PAD should be referred to the EASA Programming and Continued Airworthiness 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**.

