

Airworthiness Directive AD No.: 2024-0116 Issued: 21 June 2024

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.

Type/Model designation(s):

Trent XWB 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:	05 July 2024
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TCDS Number(s): EASA.E.111

Foreign AD: Not applicable

Supersedure: This AD supersedes EASA AD 2021-0217R1 dated 08 March 2024.

ATA 05 – Time Limits / Maintenance Checks – Time Limits Manual / Maintenance

Programme – Amendment

Manufacturer(s):

Rolls-Royce plc

Applicability:

Trent XWB-75, Trent XWB-79, Trent XWB-79B and Trent XWB-84 engines, all serial numbers.

These engines are known to be installed on, but not limited to, Airbus A350 aeroplanes.

Definitions:

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

The TLM: Rolls-Royce Trent XWB Time Limits Manual (TLM) TRENTXWB-K0680-TIME0-01, Revision 57 dated 01 May 2024, Module "Airworthiness Limitations (Mandatory Parts Lives)" TRENTXWB-A-05-10-01-00A01-030A-D, and Module "Airworthiness Limitations (Mandatory Inspections)" TRENTXWB-A-05-20-01-00A01-030A-D.

The AMP: The approved Aircraft Maintenance Programme (AMP) on the basis of which the operator or the owner ensures the continuing airworthiness of each operated engine. For engines installed on aeroplanes operated under EU regulations, compliance with the approved AMP is required by Commission Regulation (EU) <u>1321/2014</u>).



New and/or more restrictive instructions: This includes all instructions that are new and all instructions for which a threshold or interval was reduced, which were introduced into the TLM (as defined in this AD) since the previous TLM revision that is currently incorporated in the AMP.

Reason:

The Airworthiness Limitations Section instructions for Trent XWB engines, which are approved by EASA, are defined and published in TLM TRENTXWB-K0680-TIME0-01. These instructions have been identified as mandatory for continued airworthiness.

Failure to accomplish these instructions could result in an unsafe condition.

Previously, EASA issued AD 2021-0217R1 to require accomplishment of the instructions specified in Rolls-Royce Trent XWB TLM TRENTXWB-K0680-TIME0-01, Revision 49 dated 01 May 2021.

Since that AD was issued, Rolls-Royce issued the TLM, as defined in this AD, which contains new and/or more restrictive instructions, introducing Anti-Rotation Plate and IP Nozzle Guide Vane Heat Shield inspections and updating Direct Accumulation Counting (DAC) Data.

For the reason described above, this AD retains the requirements of EASA AD 2021-0217R1, which is superseded, and requires accomplishment of the instructions specified in the TLM.

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:

- (1) From the effective date of this AD, accomplish the following instructions, as specified in the TLM, as applicable to engine model and depending on engine configuration:
 - (1.1) Replace each component before exceeding the applicable life limit, and
 - (1.2) Within the thresholds and intervals, accomplish each applicable mandatory inspection.
 - (1.3) Ensure that DAC tables shown in the DAC life-usage calculator (LUC) tool match the applicable DAC Data Files as specified in the TLM.

Corrective Action(s):

(2) In case of finding discrepancies (as defined in the TLM) during accomplishment of any action as required by paragraph (1) of this AD, within the compliance time specified in the TLM, accomplish the applicable corrective action(s) in accordance with approved Rolls-Royce instructions for continued airworthiness. If no compliance time is identified in the TLM, accomplish the applicable corrective action(s) before next flight. If a detected discrepancy is not identified in the TLM, before next flight, contact Rolls-Royce for approved instructions and accomplish those instructions accordingly.



AMP Revision:

(3) Within 12 months after the effective date of this AD, revise the approved AMP by incorporating the instructions and associated thresholds and intervals described in the TLM, as applicable to engine model and depending on engine configuration.

Credit:

(4) If, before the effective date of this AD, the AMP has been revised to incorporate the instructions as specified in a previous revision of TLM TRENTXWB K0680-TIME0-01, that AMP revision ensures the continued accomplishment of those instructions.

Consequently, for an aeroplane to which that AMP applies, it is acceptable to accomplish the new and/or more restrictive instructions as specified in the TLM, as applicable to engine model and depending on engine configuration, within the compliance times as specified in the TLM, as defined in this AD, to comply with paragraph (1) of this AD.

For that AMP, it is acceptable to incorporate only the new and/or more restrictive instructions as specified in the TLM, as applicable to engine model and depending on engine configuration, into the AMP to comply with paragraph (3) of this AD.

Recording AD Compliance:

(5) When the AMP of an aeroplane has been revised as required by paragraph (3) or (4) of this AD, as applicable, that revision ensures continued accomplishment of the actions as required by paragraphs (1) and (2) of this AD for the engine(s) installed on that aeroplane. Consequently, after revising the AMP, as required by paragraph (3) or (4) of this AD, as applicable, it is not necessary that accomplishment of individual action is recorded for demonstration of AD compliance on a continued basis.

Ref. Publications:

Rolls-Royce Trent XWB TLM TRENTXWB-K0680-TIME0-01, Revision 57 dated 01 May 2024, Modules "Airworthiness Limitations (Mandatory Parts Lives)" TRENTXWB-A-05-10-01-00A01-030A-D and Modules "Airworthiness Limitations (Mandatory Inspections)" TRENTXWB-A-05-20-01-00A01-030A-D.

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 14 May 2024 as PAD 24-051 for consultation until 11 June 2024. The Comment Response Document can be found in the <u>EASA Safety Publications Tool</u>, in the compressed ('zipped') file, attached to the record for this AD.
- 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>https://www.rolls-royce.com/contact-us/civil-aerospace.aspx</u> identifying the correspondence as being related to **Airworthiness Directives**.

