

Airworthiness Directive

AD No.: 2025-0265

Issued: 28 November 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 Trent 7000 engines

Effective Date: 12 December 2025

TCDS Number(s): EASA.E.036

Foreign AD: Not applicable

Supersedure: This AD supersedes EASA AD 2023-0186 dated 27 October 2023.

ATA 75 - Air - Intermediate / High Pressure Air Tubes - Inspection

Manufacturer(s):

Rolls-Royce plc

Applicability:

Trent 7000-72 and Trent 7000-72C engines, all serial numbers.

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

Definitions:

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

The NMSB: Rolls-Royce Alert Non-Modification Service Bulletin (NMSB) TRENT 1000 75-AK962 Revision 2.

Affected part(s): Intermediate pressure (IP) Stage 8 (IP8) and high pressure (HP) Stage 3 (HP3) air tubes identified in Tables 1 and 2, respectively, of Appendix 1 of the NMSB.

Shop visit: Any engine maintenance shop visit during which the core module flange is separated (including Hospital, Check and Rectify shop visits).



Groups: Group 1 engines are those which have not been subject to a shop visit where a core module flange has been separated (including Hospital and Check and Rectify shop visits). Group 2 engines are those which have passed at least one shop visit where a core module flange has been separated (including Hospital and Check and Rectify shop visits).

Reason:

The Rolls-Royce Trent 7000 engine maintenance instructions contain instructions for visual inspections to determine the integrity of the affected parts, as defined in this AD, at intervals consistent with exposure assumptions used in critical part life assessments. Review of these instructions identified that fracture of an affected part can remain undetected for a longer period than the planned shop visit for the engine.

This potential unsafe condition, if not detected and corrected, could lead to reduced efficiency of internal cooling and sealing flows, possibly resulting in engine critical parts being unable to achieve their approved lives, leading to engine critical part failure, damage to the engine, and reduced control of the aeroplane.

To address this potential unsafe condition, Rolls-Royce issued the original issue of the NMSB TRENT 1000 75-AK962, providing instructions to inspect the affected parts and EASA issued AD 2023-0186. That AD required on-wing and in-shop visual inspections for engines in post-mod 72-K336 configuration, in-shop visual inspections for engines in pre-mod 72-K336 configuration and, depending on findings, accomplishment of applicable corrective action(s).

Since that AD was issued, Rolls-Royce issued Alert NMSB TRENT 1000 72-AK449 Revision 5 allowing to operate engines in pre-mod 72-K336 configuration more than 1 000 flight cycles (FC) between shop visits and issued the NMSB, as defined in this AD, to ensure that on-wing inspections of these engines are performed at 1 000 FC.

For the reasons described above, this AD retains the requirements of EASA AD 2023-0186, which is superseded, and introduces repetitive on-wing visual inspections also for pre-mod 72-K336 engines.

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:

On-Wing Inspection(s):

(1) Within the compliance time as defined in Table 1 of this AD and, thereafter, at intervals not to exceed 1 000 FC, inspect each affected air transfer tube in accordance with the instructions of Section 3A of the NMSB (see Note 1 of this AD).

Table 1 – On-Wing Air Transfer Tube Inspection

Group	Compliance Time
1	Within 1 000 FC accumulated by the engine since new, or since last inspection in accordance with the instructions of the original issue or Revision 1 of the Rolls-Royce Alert NMSB TRENT 1000 75-AK962, as applicable
2	Within 1 000 FC accumulated by the engine since last engine shop visit



In-Shop Inspection(s):

(2) During the next engine shop visit, as defined in this AD, starting on or after the effective date of this AD, and, thereafter, during each engine shop visit(s), inspect each affected air transfer tube and affected air feed tube in accordance with the instructions of Section 3B of the NMSB.

- (3) For an engine that, on the effective date of this AD, is in an engine shop visit, where the re-assembly has not yet started, accomplish the inspection as required by paragraph (2) of this AD before release to service of that engine.
- (4) Within 1 000 FC after the inspection, as required by paragraph (2) or (3) of this AD, as applicable, and thereafter at intervals not to exceed 1 000 FC, inspect each affected part (on-wing or in-shop) in accordance with the instructions of Section 3.A (on-wing) or 3.B (in-shop) of the NMSB, as applicable (see Note 1 of this AD).

Note 1: Where the referenced NMSB prescribes record-keeping requirements (e.g. making a record of the follow-up inspection requirement in the engine logbook), EASA considers it acceptable that such record-keeping be performed in accordance with the locally applicable record-keeping rules and procedures. Compliance with the AD intent is achieved provided that the accomplishment of the required inspection is duly recorded and remains traceable within the operator's approved maintenance records system.

In-Shop Inspection instead of On-Wing:

(5) Accomplishment of an in-shop inspection of an engine as required by paragraph (2), (3) or (4) of this AD, as applicable, is an acceptable method to accomplish the inspections as required by paragraph (1) of this AD for that engine.

Corrective Action(s):

(6) If, during any inspection as required by paragraph (1), (2), (3) or (4) of this AD, damage requiring rejection per Section 3 of the NMSB is found, before next flight or before release to service of the engine, as applicable, replace that affected air transfer tube or air feed tube, as applicable, in accordance with the instructions of Section 3 of the NMSB.

Terminating Action:

(7) None.

Credit:

(8) Inspections and, depending on findings corrective actions accomplished on an engine before the effective date of this AD in accordance with the instructions of the original issue or Revision 1 of the Rolls-Royce Alert NMSB TRENT 1000 75-AK962 are acceptable to comply with the requirements of this AD for that engine. After the effective date of this AD the NMSB shall be used.

Ref. Publications:

Rolls-Royce Alert NMSB TRENT 1000 75-AK962 original issue dated 20 October 2023, or Revision 1 dated 21 August 2025 or Revision 2 dated 15 October 2025.



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 23 October 2025 as PAD 25-164 for consultation until 20 November 2025. 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: 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 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**.

