Emergency Airworthiness Directive

AD No.: 2024-0174-E

Issued: 05 September 2024

Note: This Emergency 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 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

Type/Model designation(s):
Trent XWB engines

Effective Date: 09 September 2024

TCDS Number(s): EASA.E.111

Foreign AD: Not applicable

Supersedure: None

ATA 72 – Engine – Main Fuel Hose Assembly / Fuel Hoses – Inspection

Manufacturer(s):
Rolls-Royce plc

Applicability:
Trent XWB-97 engines, all engine serial numbers (s/n), except engines having s/n 26023, 26024, 26025, 26026, 26029, 26033, 26035, 26036, 26039, 26040, 26041, 26042, 26043, 26047, 26048, 26052, 26053, 26058, 26059, 26061, 26062, 26069, 26070, 26104, 26114, 26132, 26133, 26142, 26156, 26206, 26207, 26212, 26213 and s/n 26250.

These engines are known to be installed on, but not limited to, Airbus A350-1041 aeroplanes.

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

The NMSB: Rolls-Royce Non-Modification Service Bulletin (NMSB) 72-AL165.

Affected part: Fuel manifold main fuel hoses having Part Number (P/N) PH11181-2CLS, P/N PH11179-2CLS, P/N PH11180-2CLS, P/N PH11182-2CLS, P/N PH11176-2CLS, P/N PH11177-2CLS, P/N PH11178-2CLS and P/N PH11183-2CLS.

Superseded

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Serviceable part: An affected part which is new (never installed) or that has passed an inspection in accordance with the instructions of the NMSB.

Reason:

Damage of a fuel manifold flexible tube was reported, leading to a controlled, temporary engine fire and heat damage to the exterior and interior of the engine nacelle (thrust reverser C-ducts). The occurrence resulted in a commanded in-flight shut down. The investigation is ongoing to identify the root cause of the event.

This condition, if not detected and corrected could, in combination with additional failures, lead to a more severe engine fire and resulting damage to an aeroplane.

To address this potential unsafe condition Rolls-Royce issued the NMSB to provide inspection and corrective action instructions.

For the reason described above this AD requires a one-time visual and dimensional inspection of the fuel manifold main fuel hoses.

This AD is considered an interim action and further AD action may follow.

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:

Inspection(s):

(1) Within the compliance times as defined in Table 1 of this AD, inspect each affected part in accordance with the instructions of the NMSB.

Table 1 – Compliance Time

Groups	Accumulated Service Life and number of Shop Visits	Compliance Time (after the effective date of this AD)
1	Engines having accumulated 18 500 engine hours or more since new and that have had 2 or more previous shop visits (Hospital, Check & Repair, Refurbishment or Overhaul) or Engines having accumulated 2 300 engine cycles or more since new and that have had 2 or more previous shop visits (Hospital, Check & Repair, Refurbishment or Overhaul)	3 days
2	Engines which are not in Group 1, which have had a previous shop visit (Hospital, Check & Repair, Refurbishment or Overhaul)	7 days
3	Engines which are not in Group 1 or Group 2	30 days

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Note 1: Unless indicated otherwise, the engine hours and engine cycles specified in Table 1 of this AD are those accumulated by the engine on the effective date of this AD.

Corrective Action(s):

(2) If, during the inspection as required by paragraph (1) of this AD, any discrepancy or damaged affected part is detected, as defined in the NMSB, within the compliance times defined in paragraph '3. Accomplishment Instructions' of the NMSB, as applicable, replace the affected part with a serviceable part in accordance with the instructions of the NMSB.

Parts Installation:

(3) From the effective date of this AD, it is allowed to install an affected part on an engine, provided that the part is a serviceable part.

Engine Installation:

(4) From the effective date of this AD, installation of an engine on an aeroplane is allowed, provided the engine passed an inspection (no finding detected or finding corrected) in accordance with the instructions of the NMSB.

Reporting:

(5) Within 2 days after accomplishment of the inspection, as required by paragraph (1) or (4) of this AD report the inspection result to Rolls-Royce. Using the 'Feedback Sheet NMSB 72-AL165' (Appendix 1 of the NMSB) is an acceptable method to comply with this requirement.

Ref. Publications:

Rolls-Royce NMSB 72-AL165 original issue dated 05 September 2024.

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. The results of the safety assessment have indicated the need for immediate publication and notification, without the full consultation process.

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 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 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.

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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**.

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