



Airworthiness Directive

AD No.: 2024-0029

Issued: 29 January 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.

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 7000 engines

Effective Date: 12 February 2024

TCDS Number(s): EASA.E.036

Foreign AD: Not applicable

Supersedure: None

ATA 79 – Engine Oil – Lubrication / Scavenge Oil Pumps – Installation Criteria

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 79-AK868 Revision 3. The NMSB has an 'A' (Alert) in the number, but an earlier or later revision may not have that 'A'. This kind of change does not effectively alter the publication references.

Affected part(s): Lubrication / scavenge oil pumps having Part Number (P/N) 31-75110-4013-5, P/N 31-75110-4016-5 or P/N 31-75110-1001-2.



Reason:

Occurrences have been reported of commanded engine in-flight shut-down (IFSD), prompted by low oil pressure indications. Investigation results showed that these events were due to early-life failure of the affected part internal eccentric ring / gerotor.

This condition, if not corrected, could lead to failure of an affected part, possibly resulting in engine IFSD or dual IFSD, with consequent reduced, or loss of, control of the aeroplane.

To address this potential unsafe condition, Rolls-Royce issued the NMSB to provide installation criteria for the affected parts.

For the reasons described above, this AD requires implementation of installation criteria as specified in the NMSB, to be accomplished each time an affected part is installed or reinstalled.

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

Required as indicated, unless accomplished previously:

Part(s) Installation:

- (1) From the effective date of this AD, it is allowed to install an affected part on any engine, or an engine equipped with an affected part on any aeroplane, provided that, prior to installation, it is determined that the installation criteria defined in the NMSB are met.

Note: The requirements of paragraph (1) of this AD do not apply to the installation of an affected part on any engine, nor to the installation of an engine equipped with an affected part on any aeroplane, accomplished before the first delivery of an aeroplane to an operator after manufacture, which is referenced in Airbus documentation.

- (2) Reserved.

Ref. Publications:

Rolls-Royce Alert NMSB TRENT 1000 79-AK868 Revision 3 dated 11 December 2023.

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 December 2023 as PAD 23-144 for consultation until 11 January 2024. The Comment Response Document can be found in the [EASA Safety Publications Tool](#), 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 [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.
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**.

