



# 適航指令發布單

## Airworthiness Directive Issuance Form

民航局AD編號 AD number	CAA-2024-01-014	發布日期 Date issued	2024/02/02												
適用之航空產品 Applied to (models, serial numbers or part numbers, as applicable)	Trent 7000-72 and Trent 7000-72C engines, all serial numbers.														
主旨摘要 Subject	Engine Oil - Lubrication / Scavenge Oil Pumps - Installation Criteria														
民航局 CAA  <input type="radio"/> 本國產品 Native product  <input type="radio"/> 其他個案 Other	設計國民航主管機構 Original Authority  <table><tr><td><input type="radio"/> FAA</td><td><input type="radio"/> Germany LBA</td></tr><tr><td><input checked="" type="radio"/> EASA</td><td><input type="radio"/> CAA-NL</td></tr><tr><td><input type="radio"/> Brazil</td><td><input type="radio"/> UK CAA</td></tr><tr><td><input type="radio"/> Transport Canada Civil Aviation</td><td><input type="radio"/> Japan CAB</td></tr><tr><td><input type="radio"/> DGAC</td><td><input type="radio"/> CAA of Israel</td></tr><tr><td></td><td><input type="radio"/> Other_____</td></tr></table>			<input type="radio"/> FAA	<input type="radio"/> Germany LBA	<input checked="" type="radio"/> EASA	<input type="radio"/> CAA-NL	<input type="radio"/> Brazil	<input type="radio"/> UK CAA	<input type="radio"/> Transport Canada Civil Aviation	<input type="radio"/> Japan CAB	<input type="radio"/> DGAC	<input type="radio"/> CAA of Israel		<input type="radio"/> Other_____
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<input type="radio"/> Transport Canada Civil Aviation	<input type="radio"/> Japan CAB														
<input type="radio"/> DGAC	<input type="radio"/> CAA of Israel														
	<input type="radio"/> Other_____														
	設計國AD編號 Original AD number	2024-0029													
	1. 直接採用原AD之內容? (Is the original AD directly adopted?) <input checked="" type="radio"/> 是(Yes) <input type="radio"/> 否(No)_ a. 生效日期另訂為(Re-specify the effective date as): b. 執行時限另訂為(Re-specify the compliance time or period as): 2. 使用人是否需要將AD執行結果向民航局提出報告? (Do users need to report the status of compliance to the CAA?) <input type="radio"/> 需要(Yes) <input checked="" type="radio"/> 不需要(No)														
備註 Note	ATA 79. Ref. Publications: Rolls-Royce Alert NMSB TRENT 1000 79-AK868 Revision 3 dated 11 December 2023.														

註： 1. AD內容後附。

2. 航空器產品使用人得向民航局提出豁免、替代符合方法、執行時限之展延之申請。

3. 如有任何問題，請聯絡交通部民用航空局初始適航科。Tel：(02)2349-6330 / 6332, Fax：(02)2545-8464, [adcaa@mail.caa.gov.tw](mailto:adcaa@mail.caa.gov.tw)

Note： 1. The AD text is enclosed.

2. Exemption, an alternative method of compliance or adjustment of the compliance time may be proposed to the CAA for approval.

3. For further information, please contact Civil Aeronautics Administration on Tel：(02)2349-6330 / 6332, Fax：(02)2545-8464, [adcaa@mail.caa.gov.tw](mailto:adcaa@mail.caa.gov.tw)



## 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

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**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](mailto: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**.

