Airworthiness Directive

AD No.: 2026-0077

Issued: 14 April 2026

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:	**Type/Model designation(s):**
CONTINENTAL AEROSPACE TECHNOLOGIES GmbH	TAE 125-02-125 engines

Effective Date:	28 April 2026
TCDS Number(s):	EASA.E.055
Foreign AD:	Not applicable
Supersedure:	This AD supersedes EASA AD 2024-0236 dated 10 December 2024.

ATA 72 – Engine – Engine Coolant Contamination – Inspection

Manufacturer(s):

Continental Aerospace Technologies GmbH (CG), formerly Technify Motors GmbH, Thielert Aircraft Engines GmbH (TAE)

Applicability:

TAE 125-02-125 engines, all serial numbers.

These engines are known to be installed on, but not limited to, Tecnam P2010 series aeroplanes.

The installation of these engines was done by either the aeroplane manufacturer or through modification of the aeroplane by a Supplemental Type Certificate (STC).

Definitions:

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

The SB: CG Service Bulletin (SB) CG 125-1030 P1 Revision 8.

Serviceable part(s): Cylinder heads, having Part Number (P/N) 05-7231-K0243xx (see Note 1 of this AD); or a cylinder head having P/N 05-7231-K0202xx (see Note 1 of this AD) that has last been removed from an engine that has passed (no discrepancies found after sampling and analysing the engine coolant) the inspection in accordance with the instructions of CG SB CG 125-1030 P1 at

Revision 2, 3, 4, 5, 6, 7 or 8; or any cylinder head, eligible for installation in accordance with CG instructions, which is new (was never operational).

Note 1: Where 'xx' is used in a P/N, this 'xx' represents a 2 digits numerical value.

Groups:
Group 1 engines are those on which a cylinder head having P/N 05-7231-K0202xx is installed and which had been serviced with (which contained) coolant type G48 when the inspection required by paragraph (1) of this AD is accomplished.

Group 2 engines are those on which a cylinder head having P/N 05-7231-K0202xx is installed and which had been serviced with (which contained) coolant type G40 when the inspection required by paragraph (1) of this AD is accomplished.

Reason:
Several cases of cracks in cylinder heads of TAE 125-02-125 engines were reported. Such cracks may cause leakage of engine coolant into the combustion chamber(s), causing loss of coolant, which could lead to engine overheat and eventually to engine failure or seizure.

It was determined that certain contamination of the engine coolant triggers certain critical types of chemical corrosion, depending on the nature of such contamination.

This condition, if not detected and corrected, could lead to an uncommanded in-flight shutdown of the engine and a forced landing, possibly resulting in damage to the aeroplane and injury to occupants.

To address this potential unsafe condition, CG published SB CG 125-1030 P1 (original issue, later revised), to provide instructions for accomplishment of a read-out of the FADEC (full authority digital engine control) data and a one-time inspection (sampling and analysis) of the engine coolant.

For the reason described above, EASA issued AD 2024-0236, requiring a one-time inspection (sampling and analysis) of the engine coolant and, depending on findings, applicable corrective action(s). That AD also regulated the (re)installation of affected parts.

Since that AD was issued, further analyses have shown that G40 coolant has, compared to G48 coolant, a better corrosion protection, which consequently allows less restrictive inspections and corrective action(s) on engines serviced with this G40 coolant type. Therefore, CG published Revision 4 (later revised) of SB CG 125-1030 P1, introducing diverting contamination limits for engines serviced with G40 coolant type. Further on, CG designed a new cylinder head, having P/N 05-7231-K0243xx, which does withstand the determined engine coolant contamination, that led to cracking of the old (initially designed) cylinder heads.

Therefore, CG published the SB, as defined in this AD, introducing the modified (improved) cylinder head, and defining amended inspection and corrective action(s) instructions, including amended compliance times, depending on the type (P/N) of the installed cylinder head and the type of coolant (G40 or G48) with which the engine had been serviced.

For the reasons described above, this AD supersedes EASA AD 2024-0236, introducing the modified (improved) cylinder head, requiring a refill with (new) coolant type G40 in case any sampled and analysed coolant exceeds the acceptable range as specified in the SB (a decision tree has been added to the SB as Appendix D), amending the inspection and corrective action(s) requirement, including amended compliance times, and finally, allowing further operation pending the results of the coolant analysis (only) for those engines which had been served with (which contained) coolant type G40 when the required inspection was accomplished.

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 time as specified in Table 1 of this AD, accomplish a one-time inspection (sampling and analysis) of the engine coolant in accordance with the instructions of the SB.

Table 1 – Compliance Time

For engines that, on the effective date of this AD, accumulated 50 flight hours (FH) or more since last engine coolant exchange or since new, as applicable	Within 5 FH after the effective date of this AD
For engines that, on the effective date of this AD, accumulated less than 50 FH since last engine coolant exchange or since new, as applicable	Within 55 FH since that last engine coolant exchange or since new, but not before having accumulated 50 FH since that last engine coolant exchange or since new, as applicable

(2) Following accomplishment of the inspection as required by paragraph (1) of this AD, further operation is not permitted for engines which had been serviced with (which contained) coolant type G48, pending the results of the analysis of the sampled coolant and accomplishment of the corrective actions as required by paragraph (4) or (5) of this AD, as applicable.

Credit:

(3) If, before the effective date of this AD, a sample and analysis of the engine coolant of an engine has been accomplished in accordance with the instructions of CG SB CG 125-1030 P1 at Revision 2, 3, 4, 5, 6 or 7, assessing the results of that sampling against the limits as specified in Appendix A of that SB is acceptable to comply with the requirements of paragraph (1) of this AD for that engine, provided that the sampling has been accomplished when the coolant has been in use for 50 FH or more.

Corrective Action(s):

(4) For Group 1 engines: If, following the inspection as required by paragraph (1) of this AD, or as specified in paragraph (3) of this AD, as applicable, the analysis shows that the Aluminium (Al)

and/or Fluoride concentration in the sampled coolant exceeds the acceptable limit as specified in Appendix A of the SB, before next flight, replace the cylinder head with a serviceable part and, thereafter, flush the engine cooling system and refill it with new coolant of type G40, in accordance with the instructions of the SB.

(5) For Group 1 engines: Unless required otherwise by paragraph (4) of this AD, if, following the inspection as required by paragraph (1) of this AD, or as specified in paragraph (3) of this AD, as applicable, the analysis shows that any parameter, except the Aluminium (Al) and Fluoride concentration, in the sampled coolant exceeds the acceptable range as specified in Appendix A of the SB, before next flight, drain and flush the engine cooling system and refill it with new coolant of type G40 in accordance with the instructions of the SB.

(6) For Group 2 engines and for engines on which a cylinder head having P/N 05-7231-K0243xx is installed: If, following the inspection as required by paragraph (1) of this AD, or as specified in paragraph (3) of this AD, as applicable, the analysis shows that any parameter in the sampled coolant exceeds the acceptable range as specified in Appendix A of the SB, before next flight, drain and flush the engine cooling system and refill it with new coolant of type G40 in accordance with the instructions of the SB.

(7) For Group 1 and Group 2 engines: Replacement of the installed cylinder head, having P/N 05-7231-K0202xx, with a modified (improved) cylinder heads, having P/N 05-7231-K0243xx, and, thereafter, draining, flushing and refilling of the coolant system with new coolant of type G40 in accordance with the instructions of the SB or of OM-02-02B, within the compliance time mentioned in this Operations & Maintenance Manual, is an acceptable method to comply with the requirements of paragraph (1) and (4), (5) or (6) of this AD, as applicable, for that engine.

(8) For Group 1 and Group 2 engines: Following any corrective action as required by paragraph (4), (5) or (6) of this AD, as applicable, within an interval between 50 and 55 FH since last inspection, accomplish repetitive inspections (sample and analyse) of the engine coolant as required by paragraph (1) of this AD, until the coolant analysis results passed (none of the applicable parameters in the sampled coolant exceeds the acceptable range, as specified in Appendix A of the SB).

Note 2: After accomplishment of this AD, periodical coolant sampling and analyses remains required in accordance with the instructions of OM-02-02B, within the compliance times stated in this Operations & Maintenance Manual.

Credit:

(9) Accomplishment on an engine of corrective actions as specified in paragraph (4), (5) or (6) of this AD, as applicable, before the effective date of this AD, and in accordance with the instructions of CG SB CG 125-1030 P1 at Revision 2, 3, 4, 5, 6 or 7, are acceptable to comply with the requirements of paragraph (4), (5) or (6) of this AD, as applicable, for that engine.

Parts Installation:

(9) From the effective date of this AD, it is only allowed to install on an engine a cylinder head that is a serviceable part, as defined in this AD.

Ref. Publications:

CG SB CG 125-1030 P1 Revision 2 dated 20 August 2024, or Revision 3 dated 16 September 2024, or Revision 4 dated 10 January 2025, or Revision 5 dated 21 March 2025, or Revision 6 dated 08 October 2025, or Revision 7 dated 06 February 2026, or Revision 8 dated 30 March 2026.

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. Based on the required actions and the amended compliance time, EASA have decided to issue a Final AD with Request for Comments, postponing the public consultation process until after publication. All interested persons may send their comments, referencing the AD Number, to the E-mail address specified in below Remark 3, prior to 12 May 2026. Only if any comment is received during the consultation period, a Comment Response Document will be published in the EASA Safety Publications Tool, in a 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), STC or other modification.

5. For any question concerning the technical content of the requirements in this AD, please contact: Continental Aerospace Technologies GmbH, Platanenstrasse 14, 09356 Sankt Egidien, Germany; Telephone: +49 37204 696 0; Fax: +49 37204 696 2912;
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