

Emergency Airworthiness Directive

AD No.: 2021-0143-E

Issued: 16 June 2021

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, 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 agreed with the Authority of the State of Registry [Regulation (EU) 2018/1139, Article 71 exemption].

Design Approval Holder's Name:

AUSTRO ENGINE GmbH

Type/Model designation(s):

E4 and E4P engines

Effective Date: 18 June 2021

TCDS Number(s): EASA.E.200

Foreign AD: Not applicable

Supersedure: None

ATA 72 – Engine – Oil Pump – Replacement

Manufacturer(s):

Austro Engine GmbH

Applicability:

Model E4 and E4P engines, all serial numbers (s/n).

These engines are known to be installed on, but not limited to, Diamond Aircraft Industries DA 40 NG, DA 42 NG, DA 42 M-NG and DA 62 aeroplanes.

Definitions:

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

The SB: Austro Engine Service Bulletin (SB) MSB-E4-031.

Affected part: Oil pumps having Part Number E4A-50-000-BHY and having a s/n as listed in Table 2 and Table 3 of the SB, as defined in this AD.

Serviceable part: Any oil pump, eligible for installation, which is not an affected part.

Groups: Group 1 are Model E4 engines in configuration “-A”, installed on single engine aeroplanes, which have an affected part installed.

Group 2 are Model E4 engines in configuration “-B” or “-C” and Model E4P engines, installed on twin-engine aeroplanes, which have an affected part installed.

Group 3 engines are those that do not have an affected part installed (any Model/configuration)

Reason:

An occurrence was reported of oil pressure loss on an E4 engine. Subsequent investigation determined that a certain batch of oil pumps was produced with a dimensional deviation on the inner gear/shaft. The inner gear/shaft of those pumps may come into contact with the pump housing, which might create debris and cause jamming of the oil pump.

This condition, if not corrected, could lead to engine in-flight shut-down with consequent forced landing, possibly resulting in damage to the aeroplane and injury to occupants.

To address this potential unsafe condition, Austro Engine published the SB to provide instructions to replace the affected oil pumps.

For the reason described above, this AD requires replacement of affected parts with serviceable parts, as defined in this AD. This AD also prohibits (re)installation of affected parts on all engines.

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

Required as indicated, unless accomplished previously:

Replacement:

- (1) For Group 1 and Group 2 engines: Before next flight after the effective date of this AD, replace each affected part with a serviceable part in accordance with the instructions of the SB.

Ferry Flight:

- (2) For a twin-engine aeroplane that has one or two Group 2 engine(s) installed, a single ferry flight is allowed to position that aeroplane to a location where the actions required by this AD can be accomplished on the affected engine(s).

Part(s) Installation:

- (3) For Group 1, 2 and 3 engines: From the effective date of this AD, do not install an affected part on any engine.

Ref. Publications:

Austro Engine SB MSB-E4-031 original issue dated 14 June 2021.

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.
5. For any question concerning the technical content of the requirements in this AD, please contact: Austro Engine GmbH, Rudolf-Diesel-Str. 11, 2700 Wiener Neustadt, Austria, Telephone +43-2622-23000-2525, E-mail service@austroengine.at.

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