



Airworthiness Directive

AD No.: 2022-0034

Issued: 04 March 2022

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, 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:

GE AVIATION CZECH s.r.o.

Type/Model designation(s):

M601/H80 engines

Effective Date: 18 March 2022

TCDS Number(s): EASA.E.070

Foreign AD: Not applicable

Supersedure: None

ATA 72 – Engine – Outer Liner Dilution Tube – Inspection

Manufacturer(s):

GE Aviation Czech (GEAC) s.r.o., formerly Walter Engines a.s.

Applicability:

M601D, M601D-1, M601D-2, M601D-11, M601D-11NZ, M601E, M601E-11, M601E-11A, M601E-11AS, M601E-11S, M601E-21, M601F, M601FS, M601Z, H75-100, H75-200, H80, H80-100, H80-200, H85-100 and H85-200 engines, all serial numbers.

These engines are known to be installed on, but not limited to, Air Tractor AT-400 and AT-500 series; Allied Ag Cat Productions Inc. (formerly Grumman) G-164 series; Pacific Aerospace FU-24; PZL "Warszawa-Okęcie" PZL-106 (Kruk) series; RUAG Aerospace Services (formerly Dornier) Do 28 series; Thrush Aircraft (formerly Quality, Ayres, Rockwell) 510G and S-2R series; Viking Air Ltd. (formerly de Havilland Canada) DHC-3 Otter; Zlin Aircraft a.s. Z37 T and Z 137 T; and Aircraft Industries L410-UVP-E20 and L410-NG aeroplanes.

Definitions:

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

The ASB: GEAC Alert Service Bulletin (ASB) ASB-H75-72-40-00-0056, ASB-H80-72-40-00-0099, ASB-M601F-72-40-00-0064, ASB-M601E-72-40-00-0113, ASB-M601D-72-40-00-0081, ASB-M601Z-72-40-00-0063 and ASB-H85-72-40-00-0045 (issued as single document).



Affected part: Outer liner having Part Number (P/N) M601-229.3, P/N M601-229.3A, P/N M601-229.3B, P/N M601-229.31A or P/N M601-229.31B.

Serviceable part: An affected part which is new (not previously installed on an engine); or an affected part that, before installation, has passed an inspection (no defects found) in accordance with the instructions of sections 2.2 and 2.3 of the ASB; or an outer liner, eligible for installation, which is not an affected part.

Groups: Group 1 are engines installed on single engine aircraft, having an affected part installed. Group 2 are all engines which are not Group 1.

Reason:

Occurrences have been reported of cracks in dilution tube weld areas of the affected part.

This condition, if not detected and corrected, could lead to crack propagation, possibly resulting in part separation, loss of engine power and reduced control of the aircraft.

To address this potential unsafe condition, GEAC issued the ASB, as defined in this AD, providing instructions to accomplish a borescope inspection (BSI) on engines installed on single-engine aircraft.

For the reason described above, this AD requires repetitive BSI of affected parts and, depending on findings, accomplishment of corrective actions.

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

Required as indicated, unless accomplished previously:

Repetitive Inspections:

- (1) For Group 1 engines: Concurrently with the next Type 3 engine inspection, or within 25 flight hours (FH), whichever occurs later after the effective date of this AD, and, thereafter, at intervals not exceeding 300 FH, accomplish a BSI of the dilution tube weld areas of the affected part in accordance with the instructions of section 2.1 of the ASB.

Corrective Action(s):

- (2) If, during any BSI as required by paragraph (1) of this AD, any discrepancy is found, as identified in the ASB, accomplish the applicable corrective actions in accordance with the instructions of, and within the compliance time as identified in, the ASB.

Terminating Action:

- (3) Replacing the affected part of an engine with an outer liner, eligible for installation, which is not an affected part, constitutes terminating action for the repetitive inspections as required by paragraph (1) of this AD for that engine.



Part(s) Installation:

- (4) From the effective date of this AD, it is allowed to install an engine, having an affected part installed, on any single engine aircraft provided that, after that installation, the engine is inspected and, depending on findings, corrected as required by this AD for a Group 1 engine.
- (5) From the effective date of this AD, it is allowed to install an affected part on the engine of a single engine aircraft, provided that it is a serviceable part, as defined in this AD and that, after that installation, the engine is inspected and, depending on findings, corrected as required by this AD for that engine.
- (6) For Group 2 engines: From the effective date of this AD, it is allowed to install an affected part on an engine, provided that it is a serviceable part, as defined in this AD.

Ref. Publications:

GEAC ASB ASB-H75-72-40-00-0056, ASB-H80-72-40-00-0099, ASB-M601F-72-40-00-0064, ASB-M601E-72-40-00-0113, ASB-M601D-72-40-00-0081, ASB-M601Z-72-40-00-0063 and ASB-H85-72-40-00-0045 (issued as single document) original issue dated 21 December 2021, and Revision 01 dated 16 February 2022.

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 31 January 2022 as PAD 22-010 for consultation until 28 February 2022. No comments were received during the consultation period.
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: GE Aviation Czech, Beranových 65, 199 02 Praha 9 – Letňany, Czech Republic, Telephone: +420 222 538 999, Website: <https://www.geaviation.cz/customer-support>, E-mail: tp.ops@ge.com.

