

Airworthiness DirectiveAD No.:2024-0227Issued:27 November 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:

CFM INTERNATIONAL S.A.

Type/Model designation(s): LEAP-1B engines

Effective Date: 11 December 2024

TCDS Number(s): EASA.E.115

Foreign AD: Not applicable

Supersedure: None

ATA 72 – Engine – High-Pressure Stage 2 Compressor Stator Seal and Rotor Seal Teeth – In-Shop Inspection

Manufacturer(s):

SAFRAN Aircraft Engines, formerly SNECMA (France); General Electric Aviation (United States)

Applicability:

LEAP-1B21, LEAP-1B23, LEAP-1B25, LEAP-1B27, LEAP-1B28, LEAP-1B28B1, LEAP-1B28B2, LEAP-1B28B3, LEAP-1B28B3, LEAP-1B28B3, and LEAP-1B28B3, engines, serial numbers 60A635, 60A639, 60A642, 60A643, 60A644, 60A645, 60A646, 60A647, 60A650, 60A653, 60A655, 60A656, 60A660, 60A661, 60A662, 60A663, 60A670, 60A671, 60A673, 60A678, 60A679, 60A682, 60A686, 60A687, 60A689, 60A690, 60A691, 60A696 and 60A702.

These engines are known to be installed on, but not limited to, Boeing 737-8, 737-8200 and 737-9 aeroplanes.

Definitions:

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

The SB: CFM International (CFM) Service Bulletin (SB) LEAP-1B-72-00-0394-01A-930A-D issue 002.



Reason:

It has been determined that certain high-pressure stage 2 compressor stator seals, installed into the forward stator assembly, may have been manufactured without detailed finish machining.

This condition, if not corrected, could lead to stage 3-4 blisk seal teeth coating damage, possibly resulting in high-energy debris release, with consequent damage to, and reduced control of, the aeroplane.

To address this potential unsafe condition, CFM published the SB to provide instructions for inspection of the honeycomb structure and rotating seal teeth interface. Following these inspections, it has been determined that additional in-shop inspections are required on certain engines.

For the reason described above, this AD requires an in-shop inspection and, depending on findings, replacement, of the high-pressure stage 2 compressor stator seals and the stage 3-4 blisk.

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:

In-shop Inspection:

- (1) Before exceeding 2 900 engine cycles since new (CSN), or within 10 engine flight cycles (EFC) after the effective date of this AD, whichever occurs later, accomplish the "In-Shop Corrective Action Work-Shop Instructions" in accordance with the instructions of sections 5.B.(2) to 5.B.(7) inclusive of the SB.
- (2) [Reserved]

Ref. Publications:

CFM SB LEAP-1B-72-00-0394-01A-930A-D issue 002 dated 23 January 2024.

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.
- This AD was posted on 04 September 2024 as PAD 24-108 for consultation until 18 September 2024. The Comment Response Document can be found in the <u>EASA Safety Publications Tool</u>, 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: <u>ADs@easa.europa.eu</u>.
- 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 <u>EU aviation safety</u> <u>reporting system</u>. 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: CFM International S.A., Customer Support Centre, Telephone: +33 1 64 14 88 66, Fax: +33 1 64 14 87 65, E-mail: <u>cfm.csc@safrangroup.com</u>,

or

CFM Inc., GE Aviation Fleet Support, Telephone: +1 513-552-3272 or +1 877-432-3272, E-mail: <u>aviation.fleetsupport@ge.com</u>.

