



適航指令發布單

Airworthiness Directive Issuance Form

民航局AD編號 AD number	CAA-2024-09-001	發布日期 Date issued	2024/09/12
適用之航空產品 Applied to (models, serial numbers or part numbers, as applicable)	LEAP-1A32 engines installed on Airbus S.A.S. A321-251NX aeroplanes having any of the following aeroplane manufacturing serial number (MSN) 11200, 11420, 11473, 11609, 11698, 11791, 11815, 12136, 12314 or MSN 12370.		
主旨摘要 Subject	Engine - Fuel Nozzle - Replacement		
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 <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_____		
	設計國AD編號 Original AD number	2024-0175	
	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 72. Ref. Publications: Airbus A318/A319/A320/A321 AMM dated 01 August 2024. CFM ESM LEAP-1A ESM 72-41-00, Disassemble Engine Modular Section, Task LEAP-1A-72-41-00-03A-53AA-C issue 024-00, dated 07 December 2023. and CFM ESM LEAP-1A ESM 72-41-00, Assemble Engine Modular Section, Task LEAP-1A-72-41-00-03A-71AA-C issue 024-00, dated 07 December 2023. and CFM CMM 73-11-30 (CFM-TP.CM.056) at any revision.		

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

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 Aviation Administration on Tel：(02)2349-6330 / 6332,
Fax：(02)2545-8464, adcaa@mail.caa.gov.tw



Airworthiness Directive

AD No.: 2024-0175

Issued: 06 September 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-1A engines

Effective Date: 20 September 2024

TCDS Number(s): EASA.E.110

Foreign AD: Not applicable

Supersedure: None

ATA 72 – Engine – Fuel Nozzle – Replacement

Manufacturer(s):

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

Applicability:

LEAP-1A32 engines installed on Airbus S.A.S. A321-251NX aeroplanes having any of the following aeroplane manufacturing serial number (MSN) 11200, 11420, 11473, 11609, 11698, 11791, 11815, 12136, 12314 or MSN 12370.

Definitions:

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

Affected aeroplanes: Any aeroplane listed in the Applicability section of this AD.

Affected part: Fuel injection nozzle of the combustor chamber having a Part Number (P/N) 2085M31G02, P/N 2085M31G03 or P/N 2085M31G05.

Serviceable part: Fuel injection nozzle of the combustor chamber eligible for installation which is new (never installed), or fuel injection nozzle restored into serviceable condition in accordance with the CFM Component Maintenance Manual (CMM) 73-11-30 (CFM-TP.CM.056), at any revision.



The AMM: Airbus A318/A319/A320/A321 Aircraft Maintenance Manual (AMM) 73-11-30 dated 01 August 2024 (or later).

Reason:

Coking of the pilot secondary orifice of the affected part at an accelerated rate has been reported on certain aircraft. The reported event may potentially lead to activation of the fuel pump relief valve and resulting loss of thrust control (LOTC). The root cause investigation to characterise the coking phenomenon is ongoing.

This condition, if not corrected, could lead in case of dual engine LOTC to reduced control of the aeroplane.

For the reasons described above, this AD requires replacement of each affected parts installed on engines operated on a defined population of aeroplanes.

This AD is considered as an interim action and further AD action may follow.

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:

On-Wing Replacement:

- (1) On either engine installed on the affected aeroplane: Within 600 flight cycles (FC) accumulated by the affected part since new, or since last replacement, or within 10 FC after the effective date of this AD, whichever occurs later, and thereafter, at intervals not to exceed 600 FC, replace each affected part with a serviceable part. Using AMM Removal Task 73-11-30-000-803-A and AMM Installation Task 73-11-30-400-803-A is an acceptable method to comply with this requirement.
- (2) On the other engine installed on the same affected aeroplane: Within 800 FC accumulated by the affected part since new, or since last replacement, or within 10 FC after the effective date of this AD, whichever occurs later, and thereafter, at intervals not to exceed 600 FC, replace each affected part with a serviceable part. Using AMM Removal Task 73-11-30-000-803-A and AMM Installation Task 73-11-30-400-803-A is an acceptable method to comply with this requirement.

Note: The 200 FC allowance in addition to the compliance time required by paragraph (1) of this AD for the first replacement of the affected part on the other affected engine is intended to promote staggered maintenance and configuration of the aircraft.

In-Shop Replacement:

- (3) In-shop replacement of each affected part with a serviceable part may be substituted for an on-wing replacement as required by paragraphs (1) and (2) of this AD, provided that the threshold and intervals required by paragraph (1) of this AD are not exceeded. Using CFM LEAP-1A Engine Shop Manual (ESM) 72-41-00, Disassemble Engine Modular Section, Task LEAP-1A-72-41-00-03A-53AA-C and LEAP-1A ESM 72-41-00, Assemble Engine Modular Section, Task LEAP-1A-72-41-00-03A-71AA-C) is an acceptable method to comply with this requirement.



Terminating Action:

(4) None.

Ref. Publications:

Airbus A318/A319/A320/A321 AMM dated 01 August 2024.

CFM ESM LEAP-1A ESM 72-41-00, Disassemble Engine Modular Section, Task LEAP-1A-72-41-00-03A-53AA-C issue 024-00, dated 07 December 2023.

CFM ESM LEAP-1A ESM 72-41-00, Assemble Engine Modular Section, Task LEAP-1A-72-41-00-03A-71AA-C issue 024-00, dated 07 December 2023.

CFM CMM 73-11-30 (CFM-TP.CM.056) at any revision.

The use of later approved revisions of the above-mentioned documents 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 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 04 October 2024. 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), 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: cfm.csc@safrangroup.com,
or
CFM Inc., GE Aviation Fleet Support, Telephone: +1 513-552-3272 or +1 877-432-3272,
E-mail: aviation.fleetsupport@ge.com.

