適航指令發布單
Airworthiness Directive Issuance Form

民航局AD編號 AD number	CAA-2026-07-014	發布日期 Date issued	2026/07/24
適用之航空產品 Applied to (models, serial numbers or part numbers, as applicable)	This AD applies to all General Electric Company (GE) engines listed in paragraphs (c)(1) and (2) ofthis AD with a fuel tube hose installed having a part number (P/N) identified in table 1 to paragraph(c) of this AD. (1) GEnx-1B engines: Model GEnx-1B64, GEnx-1B64/P1, GEnx-1B64/P2, GEnx-1B67, GEnx-1B67/P1, GEnx-1B67/P2, GEnx-1B70, GEnx-1B70/75/P1, GEnx-1B70/75/P2, GEnx-1B70/P1,GEnx-1B70/P2, GEnx-1B70C/P1, GEnx-1B70C/P2, GEnx-1B74/75/P1, GEnx-1B74/75/P2, GEnx-1B76/P2, and GEnx-1B76A/P2. (2) GEnx-2B engines: Model GEnx-2B67, GEnx-2B67B, and GEnx-2B67/P.		
主旨摘要 Subject	This AD requires removal of all affected fuel tube hoses from service and replacement with parts eligible for installation.		
民航局 CAA ○本國產品 Native product ○其他個案 Other	設計國民航主管機構 Original Authority ◉ FAA ○ EASA ○ Brazil ○ Transport Canada Civil Aviation ○ DGAC ○ Germany LBA ○ CAA-NL ○ UK CAA ○ Japan CAB ○ CAA of Israel ○ Other____		
	設計國AD編號 Original AD number	2026-14-03	
	1. 直接採用原AD之內容? (Is the original AD directly adopted?) ◉是(Yes) ○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?) ○需要(Yes) ◉不需要(No)		
備註 Note	ATA 73. Ref. GEnx-1B engines, Figure 1 of GE GEnx-1B Service Bulletin (SB) 73-0116 R00, dated November 4, 2025 (GE GEnx-1B SB 73-0116 R00). and GEnx-2B engines, Figure 1 of GE GEnx-2B SB 73-0108 R00, dated November 4, 2025 (GE GEnx-2B SB 73-0108 R00).		

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

[Federal Register, Volume 91 Number 136 (Friday, July 17, 2026)]
[Rules and Regulations]
[Pages 44744-44747]
From the Federal Register Online via the Government Publishing Office [www.gpo.gov]
[FR Doc No: 2026-14478]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2026-2717; Project Identifier AD-2025-01668-E; Amendment 39-23404; AD 2026-14-03]

RIN 2120-AA64

Airworthiness Directives; General Electric Company Engines

AGENCY:

Federal Aviation Administration (FAA), DOT.

ACTION:

Final rule.

SUMMARY:

The FAA is adopting a new airworthiness directive (AD) for certain General Electric Company (GE) Model GEnx-1B64, GEnx-1B64/P1, GEnx-1B64/P2, GEnx-1B67, GEnx-1B67/P1, GEnx-1B67/P2, GEnx-1B70, GEnx-1B70/75/P1, GEnx-1B70/75/P2, GEnx-1B70/P1, GEnx-1B70/P2, GEnx-1B70C/P1, GEnx-1B70C/P2, GEnx-1B74/75/P1, GEnx-1B74/75/P2, GEnx-1B76/P2, GEnx-1B76A/P2, GEnx-2B67, GEnx-2B67B, and GEnx-2B67/P engines. This AD was prompted by a report of a fuel leak caused by a defective fuel tube hose connecting the main fuel-oil heat exchanger. This AD requires removal of all affected fuel tube hoses from service and replacement with parts eligible for installation. The FAA is issuing this AD to address the unsafe condition on these products.

DATES:

This AD is effective August 21, 2026.

The Director of the Federal Register approved the incorporation by reference of certain publications listed in this AD as of August 21, 2026.

ADDRESSES:

AD Docket: You may examine the AD docket at *regulations.gov* under Docket No. FAA-2026-2717; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except

Federal holidays. The AD docket contains this final rule, any comments received, and other information. The address for Docket Operations is U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE, Washington, DC 20590.

Material Incorporated by Reference:

- For GE material identified in this AD, contact GE, 1 Neumann Way, Cincinnati, OH 45215; phone: (513) 552-3272; email:*aviation.fleetsupport@ge.com;* website: *ge.com.*
- You may view this material at the FAA, Airworthiness Products Section, Operational Safety Branch, 1200 District Avenue, Burlington, MA 01803. For information on the availability of this material at the FAA, call (817) 222-5110. It is also available at*regulations.gov* under Docket No. FAA-2026-2717.

FOR FURTHER INFORMATION CONTACT:

Itanza Young, Aviation Safety Engineer, FAA, 2200 South 216th Street, Des Moines, WA 98198; phone: (206) 482-6306; email: *itanza.n.young@faa.gov*.

SUPPLEMENTARY INFORMATION:

Background

The FAA issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to certain GE Model GEnx-1B64, GEnx-1B64/P1, GEnx-1B64/P2, GEnx-1B67, GEnx-1B67/P1, GEnx-1B67/P2, GEnx-1B70, GEnx-1B70/75/P1, GEnx-1B70/75/P2, GEnx-1B70/P1, GEnx-1B70/P2, GEnx-1B70C/P1, GEnx-1B70C/P2, GEnx-1B74/75/P1, GEnx-1B74/75/P2, GEnx-1B76/P2, GEnx-1B76A/P2, GEnx-2B67, GEnx-2B67B, and GEnx-2B67/P engines. The NPRM was published in the **Federal Register** on March 19, 2026 (91 FR 13238). The NPRM was prompted by a report where a Boeing 787-8 Model airplane powered by GE Model GEnx-1B70/P2 engines experienced a fuel imbalance caused by a fuel leak from a fuel tube hose that connects the main fuel-oil heat exchanger. A manufacturer investigation revealed that a suspected manufacturing defect in the hose assembly caused the fuel tube hose to crack and leak, and the defect was associated with certain hose preform manufacturing lot numbers that were used to manufacture multiple fuel tube hose assemblies installed on both GEnx-1B and GEnx-2B engines. As a result, GE published service material with instructions for identifying and removing all affected fuel tube hoses by preform manufacturing lot number. In the NPRM, the FAA proposed to require removal of all affected fuel tube hoses from service and replacement with parts eligible for installation. The FAA is issuing this AD to address the unsafe condition on these products.

Discussion of Final Airworthiness Directive

Comments

The FAA received comments from seven commenters. The commenters were the Air Line Pilots Association, International (ALPA), Air Tahiti Nui, All Nippon Airways (ANA), American Airlines (AAL), The Boeing Company (Boeing), Cargolux (CLX), and United Airlines (United). ALPA, Boeing, and United supported the NPRM without change. The following presents the comments received on the NPRM and the FAA's response to each comment.

Request To Clarify Definition of Engine Shop Visit

AAL, ANA, and CLX requested that the FAA clarify the scope of maintenance that is required to satisfy the definition of an engine shop visit in paragraph (g)(2) of the proposed AD. AAL requested clarification on whether an engine shop visit includes any engine removal and re-installation for maintenance purposes. Both AAL and ANA requested that the FAA revise the definition of engine shop visit to include the applicable level of work/work scope, and ANA specifically requested that the NPRM be revised to adopt the work scope level definitions established in the GE Workscope Planning Guide to ensure industry-wide consistency. CLX questioned whether the "induction of an engine into the shop for maintenance" should be interpreted strictly as a major shop visit involving module splits, or if it also includes other shop entry events such as off-wing preservation, post-lease inspections, or convenience-related activities.

The FAA agrees that clarification is necessary and has updated paragraph (g)(2) of this AD to define an "engine shop visit" as the induction of an engine into the shop for any maintenance. The FAA disagrees with the request to define an engine shop visit based on the GE Workscope Planning Guide because it does not provide a single, standardized definition of an engine shop visit. Instead, the GE Workscope Planning Guide provides multiple types of shop visits and shop visit reasons, which can vary depending on the scope of work performed.

Request To Add a Repetitive Inspection Requirement

AAL requested that the FAA revise the NPRM to require inspection for affected fuel tube hoses at every engine shop visit. AAL stated that the NPRM does not propose to require operators to inspect spare fuel tube hose stock identified in table 1 to paragraph (c) of the proposed AD. AAL also questioned whether newly installed hoses must meet the NPRM's "eligible for installation" definition, and whether using spare stock with lot numbers 684141 or 677536 could inadvertently undo compliance with GE GEnx-1B Service Bulletin 73-0116 R00, dated November 4, 2025.

The FAA disagrees with the request to require repeat inspections at every engine shop visit. The intent of this AD is to require the removal from service of fuel tube hoses identified in Table 1 to paragraph (c) of this AD with preform manufacturing lot numbers 684141 or 677536, as these parts are not airworthy and should not be installed or reinstalled on any engine. Therefore, compliance with this service material would not be inadvertently undone, as it requires the purging of all shelf stock parts with an affected lot number from inventory. In addition, even if a spare part was installed, the AD would then become effective because that part is in the applicability and if an engine shop visit had already occurred after the effective date of the AD, removal would be immediately required in order to not be in violation of 14 CFR 39.7: "Anyone who operates a product that does not meet the requirements of an applicable airworthiness directive is in violation of this section." The FAA did not change this AD as a result of this comment.

Request To Revise Reference to Affected Lot Numbers

Air Tahiti Nui requested that the FAA revise paragraphs (g)(1) and (h)(2) of the proposed AD to reference the affected preform manufacturing lot numbers as "lot number 684141 and/or 677536" rather than "lot number 684141 or 677536" in order to match the GE service material recommendations with the recommendations of the NPRM.

The FAA disagrees with the request because any fuel tube hose bearing either of the identified lot numbers must be removed, regardless of whether both lot numbers are present. The FAA did not change this AD as a result of this comment.

Request To Provide Credit for Accomplishing Previous Actions

AAL requested that the FAA revise the NPRM to provide credit for accomplishing the actions specified in paragraph (h) of the proposed AD if they were done prior to the issuance of the NPRM and in accordance with GE GEnx-1B Service Bulletin 73-0116 R00, dated November 4, 2025. AAL stated that because GE GEnx-1B Service Bulletin 73-0116 R00, dated November 4, 2025, is already released, there will be many engines that have already accomplished the required actions of the NPRM prior to its effective date.

The FAA disagrees with the request because paragraph (f) of this AD states to accomplish the required actions within the compliance times specified, "unless already done." Therefore, if operators have accomplished the actions required for compliance with this AD before the effective date of this AD, no further action is necessary. The FAA did not change this AD as a result of this comment.

Request To Cross-Reference Required Actions With Service Material

ANA requested that the FAA revise paragraph (h) of the proposed AD to identify how each required action in the NPRM corresponds to the accomplishment instructions of the service material. ANA stated that this cross-reference will ensure that the steps taken during compliance with the service material will perfectly align with the legal requirements of the NPRM, thereby ensuring complete and accurate regulatory compliance.

The FAA disagrees with the request because the intent of this AD is to prevent cracking and fuel leakage in affected fuel tube hoses by requiring removal and replacement of the affected parts. The current AD language accomplishes this intent without requiring reference to specific actions within the service material. The FAA did not change this AD as a result of this comment.

Conclusion

The FAA reviewed the relevant data, considered any comments received, and determined that air safety requires adopting this AD as proposed. Accordingly, the FAA is issuing this AD to address the unsafe condition on these products. Except for minor editorial changes, and any other changes described previously, this AD is adopted as proposed in the NPRM. None of the changes will increase the economic burden on any operator.

Material Incorporated by Reference Under 1 CFR Part 51

The FAA reviewed GE GEnx-1B Service Bulletin (SB) 73-0116 R00, dated November 4, 2025 (GE GEnx-1B SB 73-0116 R00); and GE GEnx-2B SB 73-0108 R00, dated November 4, 2025 (GE GEnx-2B SB 73-0108 R00). This material specifies procedures for identification of the preform manufacturing lot numbers of the affected fuel cooled oil cooler (FCOC) fuel return hose manifold, FCOC fuel cooling inlet tube hose, heat exchanger fuel tube hose, and heat exchanger inlet fuel tube hose. This material is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the **ADDRESSES** section.

Costs of Compliance

The FAA estimates that this AD affects 13 engines installed on airplanes of U.S. registry.

The FAA estimates the following costs to comply with this AD:

Estimated Costs

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Replace FCOC fuel return hose manifold (11 GE Model GEnx-1B engines)	8 work-hours × $85 per hour = $680	$1,521	$2,201	$24,211
Replace FCOC fuel cooling inlet tube hose (11 GE Model GEnx-1B engines)	8 work-hours × $85 per hour = $680	1,695	2,375	26,125
Replace heat exchanger fuel tube hose (2 GE Model GEnx-2B engines)	8 work-hours × $85 per hour = $680	1,090	1,770	3,540
Replace heat exchanger inlet fuel tube hose (2 GE Model GEnx-2B engines)	8 work-hours × $85 per hour = $680	1,313	1,993	3,986

Authority for This Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

The FAA is issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: General requirements. Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

This AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

(1) Is not a “significant regulatory action” under Executive Order 12866,

(2) Will not affect intrastate aviation in Alaska, and

(3) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

- Air transportation
- Aircraft

- Aviation safety
- Incorporation by reference
- Safety

The Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

PART 39—AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 **[Amended]**

2. The FAA amends § 39.13 by adding the following new airworthiness directive:

2026-14-03 General Electric Company: Amendment 39-23404; Docket No. FAA-2026-2717; Project Identifier AD-2025-01668-E.

(a) Effective Date

This airworthiness directive (AD) is effective August 21, 2026.

(b) Affected ADs

None.

(c) Applicability

This AD applies to all General Electric Company (GE) engines listed in paragraphs (c)(1) and (2) of this AD with a fuel tube hose installed having a part number (P/N) identified in table 1 to paragraph (c) of this AD.

(1) GEnx-1B engines: Model GEnx-1B64, GEnx-1B64/P1, GEnx-1B64/P2, GEnx-1B67, GEnx-1B67/P1, GEnx-1B67/P2, GEnx-1B70, GEnx-1B70/75/P1, GEnx-1B70/75/P2, GEnx-1B70/P1, GEnx-1B70/P2, GEnx-1B70C/P1, GEnx-1B70C/P2, GEnx-1B74/75/P1, GEnx-1B74/75/P2, GEnx-1B76/P2, and GEnx-1B76A/P2.

(2) GEnx-2B engines: Model GEnx-2B67, GEnx-2B67B, and GEnx-2B67/P.

Table 1 to Paragraph (c)—Affected Fuel Tube Hoses

Engine model	Part name	P/N
GEnx-1B	Fuel cooled oil cooler (FCOC) fuel return hose manifold	2426M07P01
	FCOC fuel cooling inlet tube hose	2426M08P01
GEnx-2B	Heat exchanger fuel tube hose	2477M34P01
	Heat exchanger inlet fuel tube hose	2477M35P01

(d) Subject

Joint Aircraft System Component (JASC) Code 7310, Engine Fuel Distribution.

(e) Unsafe Condition

This AD was prompted by a report of a fuel leak caused by a defective fuel tube hose connecting the main fuel-oil heat exchanger. The FAA is issuing this AD to prevent cracking and fuel leakage in affected fuel tube hoses. The unsafe condition, if not addressed, could result in uncontrolled engine fire and damage to the airplane.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Definitions

For the purpose of this AD:

(1) A “part eligible for installation” is any fuel tube hose that does not have a P/N identified in table 1 to paragraph (c) of this AD with preform manufacturing lot number 684141 or 677536.

(2) An “engine shop visit” is the induction of an engine into the shop for any maintenance.

(h) Required Actions

(1) At the next engine shop visit after the effective date of this AD, identify the preform manufacturing lot number for the FCOC fuel return hose manifold, FCOC fuel cooling inlet tube hose, heat exchanger fuel tube hose, and heat exchanger inlet fuel tube hose in accordance with the following, as applicable:

(i) For GEnx-1B engines, Figure 1 of GE GEnx-1B Service Bulletin (SB) 73-0116 R00, dated November 4, 2025 (GE GEnx-1B SB 73-0116 R00).

(ii) For GEnx-2B engines, Figure 1 of GE GEnx-2B SB 73-0108 R00, dated November 4, 2025 (GE GEnx-2B SB 73-0108 R00).

(2) If the preform manufacturing lot number of the affected fuel tube hose is 684141 or 677536, before further flight, remove the affected fuel tube hose and replace it with a part eligible for installation.

(i) No Reporting Requirement

Where GE GEnx-1B SB 73-0116 R00 and GE GEnx-2B SB 73-0108 R00 require reporting part identification for affected fuel tube hoses, this AD does not require that action.

(j) Alternative Methods of Compliance (AMOCs)

The Manager, AIR-520 Continued Operational Safety Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the AIR-520 Continued Operational Safety Branch, send it to the attention of the person identified in paragraph (k) of this AD and email

to: *AMOC@faa.gov*. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(k) Additional Information

For more information about this AD, contact Itanza Young, Aviation Safety Engineer, FAA, 2200 South 216th Street, Des Moines, WA 98198; phone: (206) 482-6306; email: *itanza.n.young@faa.gov*.

(l) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the material listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this material as applicable to do the actions required by this AD, unless the AD specifies otherwise.

(i) GE GEnx-1B Service Bulletin (SB) 73-0116 R00, dated November 4, 2025.

(ii) GE GEnx-2B SB 73-0108 R00, dated November 4, 2025.

(3) For GE material identified in this AD, contact General Electric Company, 1 Neumann Way, Cincinnati, OH 45215; phone: (513) 552-3272; email: *aviation.fleetsupport@ge.com;* website: *ge.com*.

(4) You may view this material at the FAA, Airworthiness Products Section, Operational Safety Branch, 1200 District Avenue, Burlington, MA 01803. For information on the availability of this material at the FAA, call (817) 222-5110.

(5) You may view this material at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, visit *www.archives.gov/federal-register/cfr/ibr-locations* or email *fr.inspection@nara.gov*.

Issued on July 6, 2026.

Brian Knaup,

Acting Deputy Director, Integrated Certificate Management Division, Aircraft Certification Service.

[FR Doc. 2026-14478 Filed 7-16-26; 8:45 am]

BILLING CODE 4910-13-P