



DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2024-0234; Project Identifier MCAI-2023-01215-A]

RIN 2120-AA64

Airworthiness Directives; GA8 Airvan (Pty) Ltd Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: The FAA proposes to adopt a new airworthiness directive (AD) for certain GA8 Airvan (Pty) Ltd Model GA8 and GA8-TC320 airplanes. This proposed AD was prompted by reports of insufficient electrical bonding of the solenoid (relay) box assembly that could result in degraded performance, errors, or intermittent failures of equipment connected to electrical Bus 1, Bus 2, associated electrical control, and protective devices fitted within or attached to the solenoid box. This proposed AD would require inspecting for an existing wire connecting the relay box earth point to the ground power socket, and if one is not present, installing a mechanical connection. The FAA is proposing this AD to address the unsafe condition on these products.

DATES: The FAA must receive comments on this NPRM by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

- Federal eRulemaking Portal: Go to [regulations.gov](https://www.regulations.gov). Follow the instructions for submitting comments.
- Fax: (202) 493-2251.

- Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE, Washington, DC 20590.

- Hand Delivery: Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

AD Docket: You may examine the AD docket at [regulations.gov](https://www.regulations.gov) under Docket No. FAA-2024-0234; 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 NPRM, the mandatory continuing airworthiness information (MCAI), any comments received, and other information. The street address for Docket Operations is listed above.

Material Incorporated by Reference:

- For service information identified in this NPRM, contact GA8 Airvan (Pty) Ltd, PO Box 881, Morwell, Victoria 3840, Australia; phone: +61 (0)3 5172 1200; email: TECHPUBS@gippsaero.com.au; website: [gippsaero.com.au](https://www.gippsaero.com.au).

- You may view this service information at the FAA, Airworthiness Products Section, Operational Safety Branch, 901 Locust, Kansas City, MO 64106. For information on the availability of this material at the FAA, call (817) 222-5110.

FOR FURTHER INFORMATION CONTACT: Doug Rudolph, Aviation Safety Engineer, FAA, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; phone: (816) 329-4059; email: doug.rudolph@faa.gov.

SUPPLEMENTARY INFORMATION:

Comments Invited

The FAA invites you to send any written relevant data, views, or arguments about this proposal. Send your comments to an address listed under ADDRESSES. Include “Docket No. FAA-2024-0234; Project Identifier MCAI-2023-01215-A” at the beginning of your comments. The most helpful comments reference a specific portion of the

proposal, explain the reason for any recommended change, and include supporting data. The FAA will consider all comments received by the closing date and may amend this proposal because of those comments.

Except for Confidential Business Information (CBI) as described in the following paragraph, and other information as described in 14 CFR 11.35, the FAA will post all comments received, without change, to regulations.gov, including any personal information you provide. The agency will also post a report summarizing each substantive verbal contact received about this NPRM.

Confidential Business Information

CBI is commercial or financial information that is both customarily and actually treated as private by its owner. Under the Freedom of Information Act (FOIA) (5 U.S.C. 552), CBI is exempt from public disclosure. If your comments responsive to this NPRM contain commercial or financial information that is customarily treated as private, that you actually treat as private, and that is relevant or responsive to this NPRM, it is important that you clearly designate the submitted comments as CBI. Please mark each page of your submission containing CBI as “PROPIN.” The FAA will treat such marked submissions as confidential under the FOIA, and they will not be placed in the public docket of this NPRM. Submissions containing CBI should be sent to Doug Rudolph, Aviation Safety Engineer, FAA, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590. Any commentary that the FAA receives which is not specifically designated as CBI will be placed in the public docket for this rulemaking.

Background

The Civil Aviation Safety Authority (CASA), which is the aviation authority for Australia, has issued CASA Australia AD GA8/11, dated November 21, 2023 (CASA Australia AD GA8/11) (also referred to as the MCAI), to correct an unsafe condition on all GA8 Airvan (Pty) Ltd Model GA8 and GA8-TC320 airplanes. The MCAI states that

operators made two reports and a few anecdotal reports of intermittent system discrepancies attributed to insufficient electrical bonding of the solenoid (relay) box assembly. Without a dedicated solenoid box electrical bonding connection, these airplanes may suffer degraded performance, errors, or intermittent failures of equipment connected to electrical Bus 1, Bus 2, associated electrical control, and protective devices fitted within or attached to the solenoid box. The majority of Model GA8 and GA8-TC320 airplanes were produced with the relay box electrically bonded to the airframe via the relay box lid and the hardware (screws) holding it in place. The relay box did not have a dedicated bonding point or mechanical connection.

The MCAI requires doing the actions specified in GippsAero Service Bulletin SB-GA8-2023-216, Issue 1, dated February 24, 2023 (GippsAero SB-GA8-2023-216, Issue 1). These actions include inspecting for an existing wire connecting the relay box earth point to the ground power socket, and if one is not present, installing a mechanical connection.

The FAA is proposing this AD to address this unsafe condition. Not having a dedicated solenoid box electrical bonding connection, if not addressed, could result in degraded electrical equipment performance, errors, or intermittent failures of equipment connected to electrical Bus 1, Bus 2, associated electrical control, and protective devices fitted within or attached to the solenoid box, which could lead to loss of equipment essential for safe flight.

You may examine the MCAI in the AD docket at [regulations.gov](https://www.regulations.gov) under Docket No. FAA-2024-0234.

Related Service Information under 1 CFR Part 51

The FAA reviewed GippsAero SB-GA8-2023-216, Issue 1. This service information specifies procedures for inspecting for an existing wire connecting the relay

box earth point to the ground power socket, and if one is not present, installing a mechanical connection.

This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in ADDRESSES.

FAA's Determination

These products have been approved by the aviation authority of another country and are approved for operation in the United States. Pursuant to the FAA's bilateral agreement with this State of Design Authority, it has notified the FAA of the unsafe condition described in the MCAI and service information referenced above. The FAA is issuing this NPRM after determining that the unsafe condition described previously is likely to exist or develop on other products of the same type design.

Proposed AD Requirements in this NPRM

This proposed AD would require accomplishing the actions specified in the MCAI, except as discussed under "Differences Between This Proposed AD and the MCAI."

Differences Between this Proposed AD and the MCAI

The MCAI applicability is Gippsland Aeronautics Model GA8 Series airplanes. The applicability in this proposed AD would be GA8 Airvan (Pty) Ltd Model GA8 and GA8-TC320 airplanes because that is what is on the FAA type certificate.

Part A, step 4. of the Accomplishment Instructions in GippsAero Service Bulletin SB-GA8-2023-216, Issue 1, specifies to proceed to the Documentation section to update the airplane logbook, but that action would not be specifically required by this proposed AD as current FAA regulations already require a logbook entry for compliance with AD actions.

Costs of Compliance

The FAA estimates that this AD, if adopted as proposed, would affect 62 airplanes of U.S. registry.

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

Estimated costs

Action	Labor Cost	Parts Cost	Cost per product	Cost on U.S. operators
Inspect for mechanical connection	1 work-hour x \$85 per hour = \$85	\$0	\$85	\$5,270

The FAA estimates the following costs to do any necessary actions that would be required based on the results of the proposed inspection. The agency has no way of determining the number of airplanes that might need these actions:

On-condition costs

Action	Labor Cost	Parts Cost	Cost per product
Install mechanical connection	1 work-hour x \$85 per hour = \$85	\$170	\$255

The FAA has included all known costs in its cost estimate. According to the manufacturer, however, some of the costs of this proposed AD may be covered under warranty, thereby reducing the cost impact on affected operators.

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

The FAA determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would 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 this proposed regulation:

- (1) Is not a “significant regulatory action” under Executive Order 12866,
- (2) Would not affect intrastate aviation in Alaska, and
- (3) Would 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 Proposed Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 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:

GA8 Airvan (Pty) Ltd: Docket No. FAA-2024-0234; Project Identifier MCAI-2023-01215-A.

(a) Comments Due Date

The FAA must receive comments on this airworthiness directive (AD) by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

None.

(c) Applicability

This AD applies to GA8 Airvan (Pty) Ltd Model GA8 airplanes, all serial numbers up to and including GA8-20-262; and Model GA8-TC320 airplanes, all serial numbers up to and including GA8-TC 320-20-261; certificated in any category.

(d) Subject

Joint Aircraft System Component (JASC) Code 2497, Electrical Power System Wiring.

(e) Unsafe Condition

This AD was prompted by reports of insufficient electrical bonding of the solenoid (relay) box assembly. The FAA is issuing this AD to address possible missing mechanical connections. The unsafe condition, if not addressed, could result in degraded electrical equipment performance, errors, or intermittent failures of equipment connected to electrical Bus 1, Bus 2, associated electrical control and protective devices fitted within or attached to the solenoid box, which could lead to loss of equipment essential for safe flight.

(f) Compliance

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

(g) Required Actions

(1) Within 100 hours time-in-service (TIS) after the effective date of this AD, inspect for a mechanical connection between the relay box earth point to the ground power socket in accordance with Part A, steps 1. through 4. of the Accomplishment Instructions in GippsAero Service Bulletin SB-GA8-2023-216, Issue 1, dated February 24, 2023 (GippsAero SB-GA8-2023-216, Issue 1), except where step 4. specifies to proceed to the Documentation section to update the airplane logbook, that action is not specifically required by this AD.

(2) If no mechanical connection between the relay box earth point to the ground power socket is found during the inspection required by paragraph (g)(1) of this AD, before further flight, install a mechanical connection in accordance with Part B, steps 1. through 3. of the Accomplishment Instructions in GippsAero SB-GA8-2023-216, Issue 1.

(h) Alternative Methods of Compliance (AMOCs)

The Manager, International Validation 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 International Validation Branch, mail it to the address identified in paragraph (i)(2) of this AD or email to: 9-AVS-AIR-730-AMOC@faa.gov. If mailing information, also submit information by email. 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.

(i) Additional Information

(1) Refer to Civil Aviation Safety Authority (CASA) Australia AD GA8/11, dated November 21, 2023, for related information. This CASA Australia AD may be found in the AD docket at [regulations.gov](https://www.regulations.gov) under Docket No. FAA-2024-0234.

(2) For more information about this AD, contact Doug Rudolph, Aviation Safety Engineer, FAA, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; phone: (816) 329-4059; email: doug.rudolph@faa.gov.

(j) Material Incorporated by Reference

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

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

(i) GippsAero Service Bulletin SB-GA8-2023-216, Issue 1, dated February 24, 2023.

(ii) [Reserved]

(3) For service information identified in this AD, contact GA8 Airvan (Pty) Ltd, PO Box 881, Morwell, Victoria 3840, Australia; phone: +61 (0)3 5172 1200; email: TECHPUBS@gippsaero.com.au; website: [gippsaero.com.au](https://www.gippsaero.com.au).

(4) You may view this service information at the FAA, Airworthiness Products Section, Operational Safety Branch, 901 Locust, Kansas City, MO 64106. 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 February 16, 2024.

Victor Wicklund,
Deputy Director, Compliance & Airworthiness Division,
Aircraft Certification Service.

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