

Alert Service Bulletin

Alert Service Bulletin No. 221

Alternator Replacement: Continental O-300 Series Engines Only

2900 Selma Highway
Montgomery, AL 36108 USA
Tel: 334-386-5400 Fax: 334-386-5450

1. Planning Information

A. Effectivity

- (1) Plane Power 15-1010 and 15-1014 series alternators when installed on aircraft utilizing Continental Aerospace Technologies' O-300 series engines between 01/01/2019 and 12/15/2024 are affected by this Alert Service Bulletin (ASB).
- (2) All alternators installed on aircraft utilizing Continental Aerospace Technologies' O-300 series engines using the ER14-50 STC conversion kit, and the C14-50, C14-50A, and EX14-50 alternator installation kits are affected by this ASB.

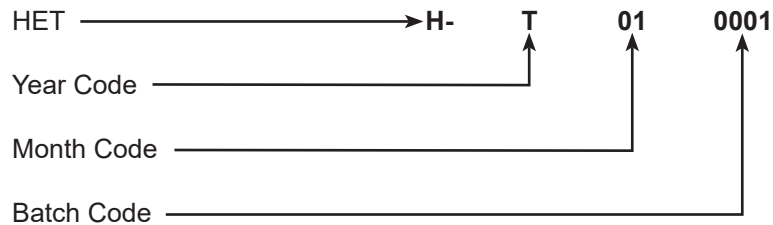
(a) Refer to Table-1 for aircraft effectivity.

NOTE: Table-1 is for reference only and is not an all-inclusive list of aircraft affected by this ASB. It is the responsibility of the owner/operator to verify whether an affected alternator may be installed.

(b) Serial numbers affected:

1) Serial numbers H-T010001 thru H-Y100835 are affected by this ASB.

a) Serial Number Identification for H-T thru H-X:



Example above: T=2019, 01=January, 0001=first unit of the month (batch). The year code advances one letter in alphabetical order for each succeeding year. X012176: X=2023, 01=January.

2) Serial Numbers H-1010001 thru H-1019999 are affected by this ASB.

Serial numbers represented by the H-1 numbering scheme are parts manufactured in January of 2021.

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| Aircraft Make | Aircraft Model Series |
|----------------------------------|--|
| Burl A. Rogers | 15AC, S15AC with STC SA10921SC installed |
| Textron Aviation Inc. | 172, A, B, C, D, E, F, G, H, R172F, R172G, R172H with STC SA10921SC installed |
| Swift Museum Foundation, Inc. | GC-1A, -1B with STC SA10921SC installed |
| Maule Aerospace Technology, Inc. | Bee Dee M-4, M-4, M-4C, M-4S, M-4T, M-4-210, M-4-210C, M-4-210S, M-4-210T with STC SA10921SC installed |
| DAHER | Rallye MS 885 |

Table-1 - Aircraft Effectivity

WARNING: DO NOT USE OBSOLETE OR OUTDATED INFORMATION. PERFORM ALL INSPECTIONS OR WORK IN ACCORDANCE WITH THE MOST RECENT REVISION OF THIS ALERT SERVICE BULLETIN. INFORMATION CONTAINED HEREIN MAY BE SIGNIFICANTLY CHANGED FROM EARLIER REVISIONS. FAILURE TO COMPLY WITH THIS ALERT SERVICE BULLETIN OR THE USE OF OBSOLETE INFORMATION MAY CREATE AN UNSAFE CONDITION THAT MAY RESULT IN DEATH, SERIOUS BODILY INJURY, AND/OR SUBSTANTIAL PROPERTY DAMAGE. REFER TO WWW.PLANEPOWER.AERO FOR THE MOST RECENT REVISION LEVEL OF THIS ALERT SERVICE BULLETIN.

B. Concurrent Requirements

- (1) None

C. Reason

- (1) Hartzell Engine Tech has discovered that alternator P/Ns referenced in 1.A. may experience a reduction in clamping force at the joint between the alternator drive-end (DE) housing and mounting flange.
 - (a) Loss of alternator mounting flange clamping force may result in loss of engine oil and/or unexpected loss of engine power.
- (2) Aircraft with installed Continental Aerospace Technologies' O-300 Series engines are affected only, regardless of findings while performing referenced ASB-097.
- (3) This ASB is to advise the field of a potential condition and to supply inspection criteria to identify affected alternators.

D. Description

- (1) This Alert Service Bulletin provides Instructions for Continued Airworthiness (ICA).

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E. Compliance

(1) **Prior to Next Flight:**

- (a) Perform Section 3, Accomplishment Instructions, of this document.
- (2) For affected alternators in inventory, return within 30 days from the original issue date of this Alert Service Bulletin or prior to installation, whichever occurs first.
- (3) Replacement of an affected alternator in accordance with the Section 3, Accomplishment Instructions, is the terminating action for this Alert Service Bulletin.

F. Approval

- (1) FAA acceptance has been obtained on technical data in this publication that affects type design.

G. Manpower

- (1) Labor is negligible for identification and inspection when performed in conjunction with regularly scheduled maintenance required by the engine/aircraft manufacturer.
- (2) Up to one and a half (1.5) hours labor required for removal and installation of the alternator.

H. References

- (1) HET ASB-097, *Alternator Mounting Flange Inspection*.
- (2) Applicable aircraft POH or AFM.
- (3) Aircraft maintenance manual (as applicable).
- (4) Engine Service Instructions or maintenance manual (as applicable).
- (5) Continental Aerospace Technologies' M-0 manual, *Standard Practice Maintenance Manual for Spark Ignited Engines*.

I. Other Publications Affected

- (1) None

J. Weight and Balance

- (1) No Change

2. Material Required

A. For alternator replacement:

- (1) One new alternator of part number removed not affected by this ASB.

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3. Accomplishment Instructions

WARNING: THIS PROCEDURE MUST BE PERFORMED BY COMPETENT AND QUALIFIED PERSONNEL WHO ARE FAMILIAR WITH ENGINE AND AIRFRAME MAINTENANCE THAT IS SPECIFIC TO THE ENGINE FUEL SYSTEM. FAILURE TO DO SO MAY RESULT IN ECONOMIC LOSS, EQUIPMENT DAMAGE, AND/OR PHYSICAL INJURY.

CAUTION 1: DO NOT USE OBSOLETE OR OUTDATED INFORMATION. PERFORM ALL INSPECTIONS OR WORK IN ACCORDANCE WITH THE MOST RECENT REVISION OF THIS ALERT SERVICE BULLETIN AND THE APPLICABLE AIRCRAFT ENGINE MAINTENANCE MANUAL. INFORMATION CONTAINED IN THESE MANUALS OR THIS ALERT SERVICE BULLETIN MAY BE SIGNIFICANTLY CHANGED FROM EARLIER REVISIONS. FAILURE TO COMPLY WITH THE ALERT SERVICE BULLETIN OR THE USE OF OBSOLETE INFORMATION MAY CREATE AN UNSAFE CONDITION THAT MAY RESULT IN DEATH, SERIOUS BODILY INJURY, AND/OR SUBSTANTIAL PROPERTY DAMAGE. REFER TO THE PLANE POWER WEBSITE (WWW.PLANEPOWER.AERO) FOR THE MOST RECENT REVISION LEVEL OF THIS ALERT SERVICE BULLETIN.

CAUTION 2: DO NOT DEPEND ON THIS ALERT SERVICE BULLETIN FOR GAINING ACCESS TO THE ENGINE OR ALTERNATOR. ACCESS REQUIRES THE USE OF THE APPLICABLE MANUFACTURER'S MAINTENANCE MANUALS OR SERVICE INSTRUCTIONS. IN ADDITION, ANY PREFLIGHT OR IN FLIGHT OPERATIONAL CHECKS REQUIRE USE OF THE APPROPRIATE AFM OR POH.

A. Alternator Identification

- (1) If positive identification of the alternator model and serial number can be made through the engine or aircraft documentation, and the alternator **is** affected per 1.A, continue to 3.B., Corrective Action. If the alternator is **not** affected, continue to 3.D.(1), Maintenance Record.
- (2) If positive identification cannot be made through engine or aircraft documentation, gain access and locate the data tag on the alternator to verify the alternator effectivity.
 - (a) If the unit **is** affected, continue to section 3.B., Corrective Action.
 - (b) If the unit is **not** affected, install any components that were removed to gain access in accordance with the latest engine/airframe service instructions or maintenance manual. Continue to 3.D.(1), Maintenance Record.

B. Corrective Action

- (1) Alternator Replacement
 - (a) Remove the affected alternator in accordance with applicable aircraft engine and airframe service instructions or maintenance manual.
 - (b) Install a new alternator of the same part number not affected by this ASB in accordance with applicable aircraft engine and airframe service instructions or maintenance manual.

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C. Return to Service

- (1) Perform the recommended alternator system set up and functional tests in accordance with the appropriate aircraft maintenance manual, engine service instructions, and operational tests in the AFM or POH.

D. Maintenance Record

- (1) For terminating action, make an engine logbook entry to indicate compliance with this Alert Service Bulletin.

4. Contact Information

A. Contact HET Product Support for all communications regarding the technical content of this Alert Service Bulletin.

- (1) Phone +1.334.386.5400 (Option 2)
- (2) Fax +1.334.386.5450.
- (3) E-mail at techsupport@HartzellEngineTech.com.
- (4) Address

Hartzell Engine Tech LLC
2900 Selma Highway,
Montgomery, AL 36108
USA

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ALERT SERVICE BULLETIN APPENDIX

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Alternator Replacement: Continental O-300 Series Engines Only

1. Eligibility:

- A. Plane Power 15-1010 and 15-1014 series alternators when installed on aircraft utilizing Continental Aerospace Technologies' O-300 series engines between 01/01/2019 and 12/15/2024 are affected by Alert Service Bulletin (ASB) No. 221.
- B. All alternators installed on aircraft utilizing Continental Aerospace Technologies' O-300 series engines using the ER14-50 STC conversion kit, and the C14-50, C14-50A, and EX14-50 alternator installation kits are affected by ASB No. 221.
 - (a) Refer to Table-1 of ASB 221 for aircraft effectivity.

2. Commercial Assistance Program:

The following will be provided with the submission of a completed ASB 221 Claim Form, copies of invoices showing breakdown of material and labor charges, and log book entries. **Any commercial assistance or other consideration shall expire twelve (12) calendar months from the original published date of ASB No. 221.**

- A. Required material listed in Section 2 of ASB 221.
- B. Labor for inspection, removal, & installation of an affected aircraft alternator will be paid at a shop rate of \$85 per hour, not to exceed US \$85 per affected alternator.
 - (1) Up to one and one-half (1.5) man hours of labor are needed for removal and installation of an affected alternator assembly.

3. Commercial Assistance ADMINISTRATION:

- A. Complete the ASB 221 Claim Form attached to this appendix.
 - (1) Mail, e-mail, or fax the ASB 221 Claim Form to the attention of Product Support as indicated on the ASB Claim Form.
- B. Upon receipt of the ASB Claim Form, Hartzell Engine Tech LLC will:
 - (1) Ship the required material in accordance with Section 2 of ASB 221 to the service provider indicated.
 - (2) The service provider must return proof of service within thirty (30) days or the service provider shall be invoiced for the HET supplied materials.
- C. For labor and parts listed in section 2:
 - (1) Aircraft/engine service facility or owner must submit an invoice up to the amount specified in Section 2, copies of logbook entries, and a completed ASB 221 Claim Form for reimbursement (*May be a copy of the original form provided*).

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4. WARRANTY STATEMENT:

- A. The sole warranty for the actions of ASB 221 are contained in the HET Limited Warranty Policy issued with the purchase of each new/overhauled alternator (see terms and conditions therein).
- B. Commercial assistance may apply as stated in this Appendix.
- C. Issuance of ASB 221 in no way constitutes an implied or expressed warranty of any kind.
- D. This publication does not imply or state any responsibility for the workmanship of any person or entity performing work or maintenance on the engine or aircraft electrical system.

5. CONTACT INFORMATION:

- A. Contact HET Product Support for all communications regarding the technical content of this Service Bulletin.

- (1) Phone +1.334.386.5400 (Option 2)
- (2) Fax +1.334.386.5410
- (3) E-mail at techsupport@Hartzell.aero
- (4) Address

Hartzell Engine Tech LLC
2900 Selma Highway,
Montgomery, AL 36108
USA

ALERT SERVICE BULLETIN APPENDIX

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SB 221 CLAIM FORM

Owner information

Name: _____ Date: _____ Tel: _____ Fax: _____

Company Name: _____ E-mail: _____

Address: _____

City: _____ State: _____ Postal Code: _____

Country: _____

Aircraft/Engine Service Facility information

Name: _____ Date: _____ Tel: _____ Fax: _____

Company Name: _____ E-mail: _____

Address: _____

City: _____ State: _____ Postal Code: _____

Country: _____

Aircraft Mfg: _____ Model: _____ Time in Service: _____ S/N: _____

Engine: _____ Model: _____ Time in Service: _____ S/N: _____

Component Information

Nomenclature: Alternator Assembly _____ Part Number: _____

Serial Number: _____ (Alternator) Date Removed: _____

Part Time in Service: _____ (Alternator) Original Date Installed: _____

For RMA Number

Send this SB 221 Claim Form to:

Hartzell Engine Tech Product Support

Fax: +1.334.386.5410

E-mail: techsupport@hartzell.aero

RMA Number:

(write in HET assigned RMA number)

Hartzell Use Only - do not write below this line.

Warranty No: _____ Authorized by: _____