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## **Service Information Letter**

**Service Information Letter A-140 Rev. 1** 

# **Gear Driven Alternator Shipping Hardware**

#### TRANSMITTAL SHEET

This page transmits the revision of Service Information Letter A-140 Rev. New to Service Information Letter A-140 Rev. 1, dated July 7, 2014.

- Revision SIL A-140 Rev. New, dated March 11/11
- Revision SIL A-140 Rev. 1, dated July 7/14

HET has approved the technical data presented in this publication.

Changes are shown by a change bar in the left or right margins coinciding with the change in the affected page.

Some of these changes that do not affect technical content may not be highlighted in this transmittal sheet.

The Gear Driven Alternator Shipping Hardware shown in a previous revision of this Service Information Letter has changed.

This revision is issued to change the following in the Service Information Letter:

- Revise formatting to remove sections not required.
- Revise to update OE information.
- Revise to clarify the type of shipping hardware now in use.

All pages of this Service Information Letter have been revised.

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**Service Information Letter No. A-140 Rev. 1** 

**Gear Driven Alternator Shipping Hardware** 

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**Service Information Letter A-140 Rev. 1** 

# **Gear Driven Alternator Shipping Hardware**

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

#### 1. Planning Information

#### A. Effectivity

(1) Gear driven alternators, series ALT, ALU, ALV, ALX, ES-4000, and DOFF10300 shipped from Hartzell Engine Technologies LLC (HET) are affected by this Service Information Letter (SIL).

WARNING: DO NOT USE OBSOLETE OR OUTDATED INFORMATION. PERFORM ALL INSPECTIONS OR WORK IN ACCORDANCE WITH THE MOST RECENT REVISION OF THIS SERVICE INFORMATION LETTER (SIL). INFORMATION CONTAINED IN THIS SIL MAY BE SIGNIFICANTLY CHANGED FROM EARLIER REVISIONS. 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 HET WEBSITE FOR THE MOST RECENT REVISION OF THIS SERVICE INFORMATION LETTER.

#### B. Concurrent Requirements

(1) Additional service documents may apply to the gear driven alternators affected by this Service Information Letter. Compliance with additional service documents may be necessary in conjunction with the completion of the Accomplishment Instructions in this SIL.

#### C. Reason

- (1) During installation of gear driven alternators, there have been reports of the shipping washer, the spacer and/or a combination of both being installed and not discarded.
- (2) All gear driven alternators are shipped with a shipping spacer and some with a spacer and washer combination.
- (3) It is imperative that this shipping hardware be discarded when installing the drive coupling.
- (4) Improper installation may lead to the degradation or loss of alternator function and/or damage to the engine.

#### D. Description

- (1) This publication provides Additional Maintenance Information (AMI).
- (2) This Service Information Letter is being issued to advise installers of gear driven alternators procured from HET for aircraft engines, that all shipping hardware must be removed and discarded prior to installation of the alternator drive coupling.
- (3) This Service Information Letter also announces that gear driven alternators are being shipped with a non-metallic shipping spacer and without a shipping washer. This method avoids confusion with alternator hardware. Refer to Figure 3 & 4 example.

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#### **Service Information Letter No. A-140 Rev. 1**

#### **Gear Driven Alternator Shipping Hardware**

- E. Approval
  - (1) This technical publication has been approved by Hartzell Engine Technologies LLC.
- F. References
  - (1) Applicable Engine Maintenance Manual.
  - (2) Continental Motors. Inc. (CMI) Service Information Letter SIL13-2.
  - (3) Continental Motors. Inc. (CMI) Service Bulletins SB11-3 or SB95-3B.
- G. Other Publications Affected
  - (1) Prestolite Service Bulletin ASM-14, dated June 20, 1990, is superseded by SIL A-140 Rev. 1.
- 2. Accomplishment Instructions
  - A. Identify the shipping hardware.
    - (1) Gear driven alternators may or may not have a shipping washer included.
      - (a) Identify the shipping washer. These are all large thin washers with a notch cut in the inside diameter to allow the washer to slip over the woodruff key. Not all alternators will have a shipping washer included. Discard this washer prior to any installation work. (Refer to Figure 2).
      - (b) The ALV-9510R alternator (only) is shipped with an HET P/N ALV-74 washer located at the base of alternator drive shaft. This washer does not have a notch cut into it and must be retained to allow proper fit of the drive coupling. (The HET P/N ALV-74 is not a shipping washer.) Refer to Figure 5.
  - **NOTE:** Alternators are currently shipped with non-metallic tubes as the shipping spacer and will not have a shipping washer. Existing alternator inventory may have a previous shipping hardware configuration.
    - (2) All gear driven alternators are shipped with a shipping spacer.
      - (a) The shipping spacer may be a phenolic or cardboard tube fitted closely over the shaft and woodruff key, or a thin metal barrel formed to fit over the woodruff key with a slot on the opposite side. Discard this shipping spacer. Refer to Figure 2.
      - (b) If the shipping spacers are cardboard as shown in Figure 3 or phenolic type as shown in Figure 4, they may still have a metal shipping washer.
    - CAUTION: HET DOES NOT PROVIDE ALTERNATOR OR ALTERNATOR DRIVE COUPLING INSTALLATION PROCEDURES. TO AVOID DAMAGE OR INJURY, CONSULT THE LATEST REVISION OF THE APPLICABLE ENGINE OR AIRCRAFT SERVICE OR MAINTENANCE INSTRUCTIONS TO COMPLETE THE INSTALLATION OF THE ALTERNATOR DRIVE COUPLING AND ALTERNATOR.
  - B. When installing a coupling onto an HET gear driven alternator, observe the latest revision of Continental Motors, Inc. service bulletins SB11-3 or SB95-3B as applicable for alternator and drive coupling installation on CMI engines.

Service Information Letter No. A-140 Rev. 1

**Gear Driven Alternator Shipping Hardware** 

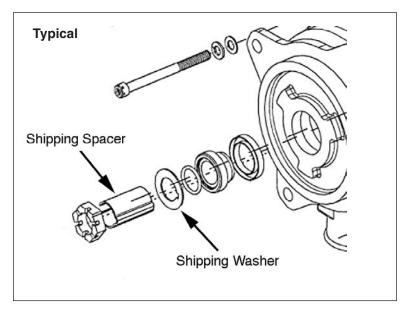


Figure 1 - Previous Shipping Hardware Installation



Figure 2 - Metal Shipping Spacer & Washer

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**Service Information Letter No. A-140 Rev. 1** 

**Gear Driven Alternator Shipping Hardware** 

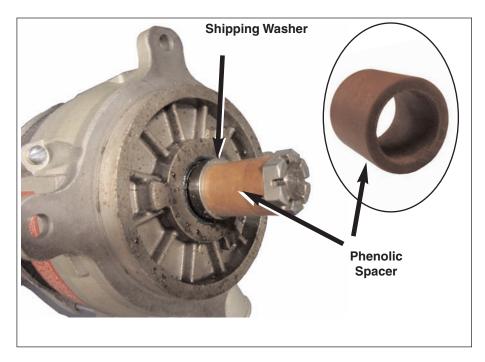


Figure 3 - Phenolic Shipping Spacer & Metal Shipping Washer

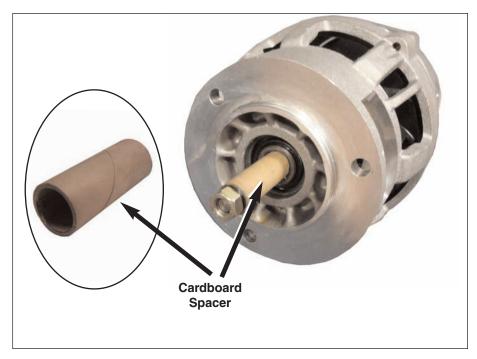


Figure 4 - Shipping Spacer Only (cardboard type)

**Service Information Letter No. A-140 Rev. 1** 

**Gear Driven Alternator Shipping Hardware** 

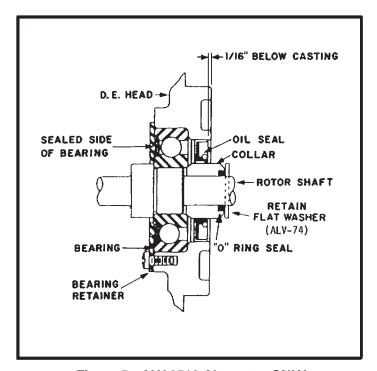


Figure 5 - ALV-9510 Alternator ONLY

#### 3. Contact Information

- A. Contact HET Product Support for all communications regarding the technical content of this Service Information Letter.
  - (1) Phone +1.334.386.5441
  - (2) Fax +1.334.386.5410
  - (3) E-mail at techsupport@HartzellEngineTech.com
  - (4) Address:

Hartzell Engine Technologies LLC 2900 Selma Highway, Montgomery, AL 36108, USA.

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**Service Information Letter No. A-140 Rev. 1** 

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