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MATERIAL TABLE

ITEM	DESCRIPTION
1.	COTTER PIN .0938"DX1.00"L
2.	THRUST WASHER
3.	SLOTTED HEX NUT
4.	GASKET
5.	WOODRUFF KEY
6.	REMOVED

SOURCES

MS24665-302
TCM 630691
TCM 642589 OR HET 15-5060
TCM 653981 OR HET 15-5040
TCM 632437 OR HET X-0260
REMOVED

FOR REFERENCE ONLY  
 REFER TO ENGINE MANUFACTURER'S  
 INSTRUCTIONS FOR INSTALLING DRIVE  
 COUPLING AND ALTERNATOR.

REVISIONS				
EN	REV.	DESCRIPTION	BY	DATE
1408031	E	FIRST RELEASED INTO HET DESIGN DATA	CMB	8/15/14
1408037	F	1)UPDATED TITLE BLOCK TO HET; 2)CHANGED LABEL "HARTZELL ENGINE TECHNOLOGIES LLC" WAS "PLANE POWER LTD", REMOVED PHONE NUMBER	CMB	8/15/2014
1411037	G	1) ON SHEET 3, CHANGED "INSTRUCTIONS FOR CONTINUED AIRWORTHINESS" TO "MAINTENANCE INSTRUCTIONS"	OKQ	11/18/14
125300	H	1) REMOVED 15-5065 AND ITEM 6 FROM PAGE 1; 2) REMOVED LABEL TABLE; 3) UPDATED INSTRUCTIONS; 4) REVISED "SOURCES" IN MATERIAL TABLE	JCH	10/25/2017

C28-150, C14-100

5MM AUX TERM.

3 NUTS SECURING COVER (GND) (SEE NOTE 7 PG. 2)

SHIELD

SHIELD ATTACH SCREWS

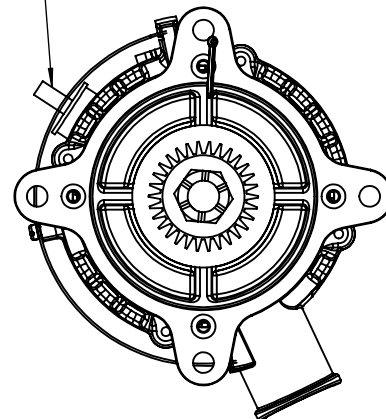
DRIVE COUPLING

8MM OUTPUT

1

2 INSTALL STEEL SIDE TO NUT

3



C28-150S, C14-100S

5MM AUX TERM.

3 NUTS SECURING COVER (GND) (SEE NOTE 7 PG. 2)

SHIELD

SHIELD ATTACH SCREWS

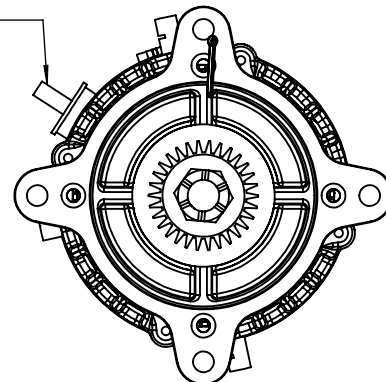
DRIVE COUPLING

8MM OUTPUT

1

2 INSTALL STEEL SIDE TO NUT

3



PMA LABEL

**Plane Power** FAA PMA HARTZELL ENGINE TECHNOLOGIES, LLC  
 For eligibility see www.plane-power.com/catalog

MODEL NO.	MODEL
SERIAL NO.	SERIAL
VOLTAGE	VOLTAGE



UNLESS OTHERWISE SPECIFIED

DIMENSIONS ARE IN INCHES AND APPLY AFTER HEAT TREAT AND PLATING  
 .X = ±.015  
 .XX = ±.010 ANGLES ±1°  
 .XXX = ±.005  
 BREAK ALL EDGES AND MACHINE ALL INSIDE CORNER FILLETS .015 MAX. SURFACE FINISH

SPECIFICATION CLASSIFICATION		
CLASSIFICATION	DIMENSION CONVENTION	NOTE NO. CONVENTION
CRITICAL	<XX.XX>	<#>
MAJOR	[XX.XX]	[#]
MINOR	XX.XX	#
REFERENCE	(XX.XX)	(#)

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GEOMETRIC SYMBOLS PER ANSI Y14.5

- FLATNESS
- STRAIGHTNESS
- ROUNDNESS
- CYLINDRICITY
- PROFILE
- PERPENDICULARITY
- POSITION
- CONCENTRICITY
- SYMMETRY
- ANGULARITY
- PARALLELISM
- CIRCULAR RUNOUT
- TOTAL RUNOUT

SCALE 1:5

DRAWN	CMB	08/15/14
ENGINEER	C. BROUSSARD	
APPRVD.	125300	
FINISH	N/A	
WEIGHT	N/A	
MATERIAL SEE INDIVIDUAL COMPONENTS		
SIZE	SH 1 OF 3	CODE ID 65PY1

**HARTZELL ENGINE TECHNOLOGIES** 2900 Selma Highway Montgomery, AL 36108


C28-150, CD14-100, C28-150S, C14-100S	
DRAWING NO. 15-1000	REV H

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	NUMBER 15-1000	REVISION H	PAGE 2 of 3
	TITLE Installation Instructions		

2900 Selma Highway  
Montgomery, AL 36108

## **C28-150, C14-100, C28-150S, C14-100S**


### **Installation Instructions**

#### ⊕ NOTE:

Reference applicable aircraft/engine maintenance manual and FAA AC43-13-1B for guidance on stand and methods and practices for electrical, mechanical, and structural work on the aircraft. Following all WARNINGS and CAUTIONS noted in the aircraft documentation related to the work being accomplished.

- ⊕ 1. Gain access to the location where the work is being accomplished.
- ∅ 2. Label then remove wiring from the existing alternator. Remove the alternator.
- ∅ 3. Remove drive coupling and install it on the Plane Power alternator or install a new coupling of approved type per engine manufacturer's instructions.
- ∅ 4. Install the alternator on the engine per engine manufacturer's instructions.
- ∅ 5. Cut the ring lug off of the wire removed from the F or F1 terminal (Field) of the original alternator or generator. Connect the wire to EITHER white wire from the supplied 15-5050 Wire Harness/Plug using an M7928/5-4 environmental splice.
- ∅ 6. If a second Field wire (F2) was removed, connect it to the other white wire from the supplied 15-5050 Wire Harness/Plug using M7928/5-4 environmental splice.
- ∅ 7. If no separate Field wire (F2) was removed, connect the remaining white wire from the supplied 15-5050 Wire Harness/Plug to the elevated post (ground) on the rear of the alternator using an appropriate ring lug. If a separate Ground wire (- or GND) was removed from the original alternator, re-connect it to the elevated post (ground) on the rear of the alternator using an M7928/1-42 lug and torque 20-35 in-lbs.
- ⊗ 8. Removed
- ∅ 9. If an Aux wire was removed from the original alternator (generators will not have one), connect it to Aux terminal of the alternator with an M7928/1-43 ring lug. Hold Aux post with a wrench and torque nut 20-35 in-lbs.

Legend: ∅ Revised ⊕ Added ⊗ Deleted this revision
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 <p><b>HARTZELL</b> ENGINE TECHNOLOGIES MONTGOMERY, ALABAMA USA</p>	<b>NUMBER</b> 15-1000	<b>REVISION</b> H	<b>PAGE</b> 2 of 3
	<b>TITLE</b> Installation Instructions		

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Montgomery, AL 36108

Ø 10. Place the ring lug of the “+” wire (large alternator output wire), and any other wire removed from the output (+) terminal of the original alternator on the M8 output bolt of the alternator. Torque the M8 nut to 45-50 in-lbs. If currently installed ring lug is not sized for M8 stud, remove existing lug and replace with an M7928/1-44 lug. Similarly modify all other existing wire attached to the “+” post of the original alternator or generator.

⊗ 11. Removed

Ø 12. Start aircraft and check the alternator output for proper operation.

⊕ 13. Recheck and inspect the entire installation. Complete FAA form 337, make appropriate log book entry, update the aircraft equipment list and revise weight and balance if necessary.

⊕ NOTE:

Electrical lug and splice sizes are given as a reference. Confirm on aircraft actual wire gauge and associated lug or splice before terminating wires.

## **Ø Instructions for Continued Airworthiness**

Annual / 100 hour inspections:

1. Inspect area between Engine Adapter and Front Housing for oil leaks. If leak is evident, return to manufacturer for repair.

Ø Five year or 1,000 hour intervals:

1. Inspect area between Engine Adapter and Front Housing for oil leaks. If leak is evident, return to manufacturer for repair.
2. Remove alternator. Check bearings for abnormal roughness. Remove Brush Assembly and inspect brushes for excess wear. Replace Brush Assembly if brushes extend less than .250” from brush holder case.

**Legend: Ø Revised ⊕ Added ⊗ Deleted this revision**