

## **Part No. 99-9901**

### **Installation Instructions**

1. Disconnect aircraft battery.
2. Install alternator per included drawing. Supply outside ram cooling air to the 1" Connector on the rear of the alternator by the use of 1" scat tube.
3. Refer to appropriate engine service manual for belt tension and bolt torques.
4. Install battery wire with MS25171-2S terminal nipple on 6mm output terminal and torque to 50 in. lb.
5. Install round connector in rear of alternator and wire in accordance with diagram on front of drawing
6. Reconnect aircraft battery.
7. Start engine, enable alternator and check for proper buss voltage.

### **Troubleshooting Instructions**

Alternator is equipped with a built-in crowbar over-voltage protection circuit which will disable alternator if an over-voltage condition is sensed.

If 5-amp enable circuit breaker trips from an over-voltage condition in the alternator:

1. Reset 5-amp enable circuit breaker and continue operation.
2. If 5-amp enable circuit breaker trips again, land as soon as possible and investigate cause.

### **Maintenance Instructions**

Annual Inspection:

1. Remove drive belt and turn alternator rotor to check condition of bearings for abnormal noise or roughness.

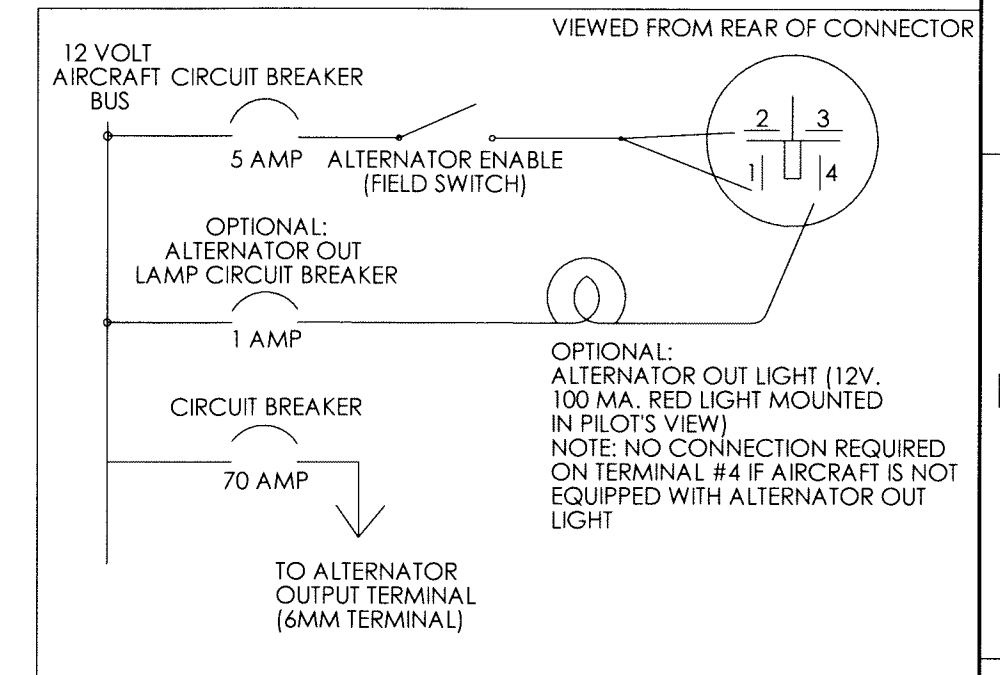
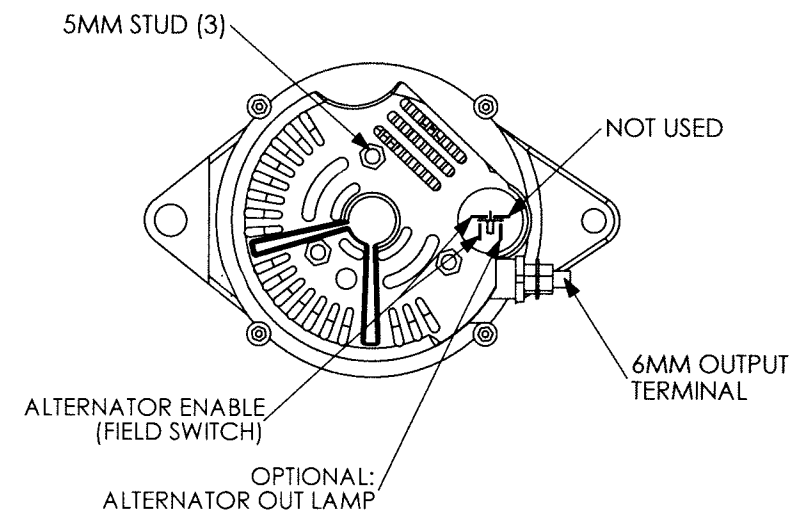
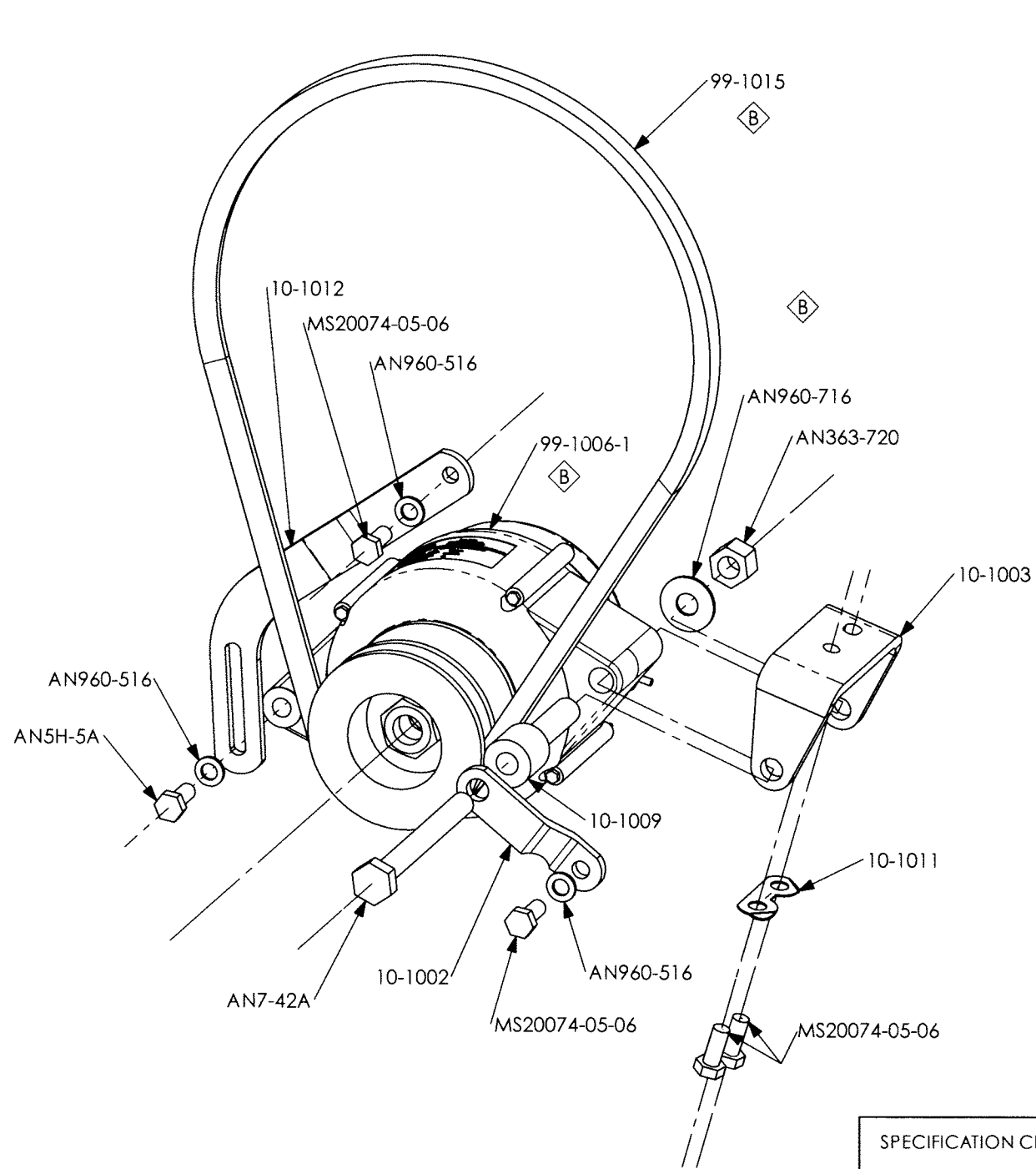
5 year or 1,000 hour intervals:

1. Repeat: Annual Inspection.
2. Remove field brush assembly and inspect brushes for excess wear. Replace brush assembly if brushes extend less than .250" from edge of brush holder case.

# 12 VOLT 70 AMP EXPERIMENTAL ALTERNATOR, W/ INTERNAL VOLTAGE REGULATOR AND OVER-VOLTAGE PROTECTION

NOTES:  
 1. SAFETY WIRE (2) TENSION ARM BOLTS (MS20074-05-06 & AN5H-5A) WITH .032" SAFETY WIRE.

REVISIONS				
EN	REV.	DESCRIPTION	BY	DATE
1412020	A	1) FIRST RELEASE INTO HET DESIGN DATA; 2) HET TITLEBLOCK WAS PLANE POWER LTD.; 3) ON SHEET 2, "MAINTENANCE INSTRUCTIONS" WAS "INSTRUCTIONS FOR CONTINUED AIRWORTHINESS"; 4) ON SHEET 1, REMOVED "INSTALLATION AND..." ANNOTATION; 5) REVISED P/N TO 99-1006	OKQ	12/18/14
1505056	B	1) ADDED "INSTALLTION AND MAINTENANCE..." ANNOTATION; 2) 99-1015 WAS 15375 DAYCO OR...; 3) 99-1006-1 WAS 99-1006; 4) REMOVED 10-3051 GRAPHIC	OKQ	05/18/15



INSTALLATION AND MAINTENANCE INSTRUCTIONS ON REVERSE SIDE

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

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

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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

DRAWN	BJ	02/15/05
CHECKED	<i>CMB</i>	02/27/15
ENG.	<i>CMB</i>	5/27/15
FINISH	N/A	
WEIGHT	N/A	
MATERIAL	SEE INDIVIDUAL COMPONENTS	
SIZE	SH 1 OF 2	CODE ID 65PY1

**HARTZELL**  
ENGINE TECHNOLOGIES  
MONTGOMERY, ALABAMA USA

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AL12-E170/B  
INSTALLATION INSTRUCTIONS

DRAWING NO. 99-9901B	REV. B
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SCALE 1:3