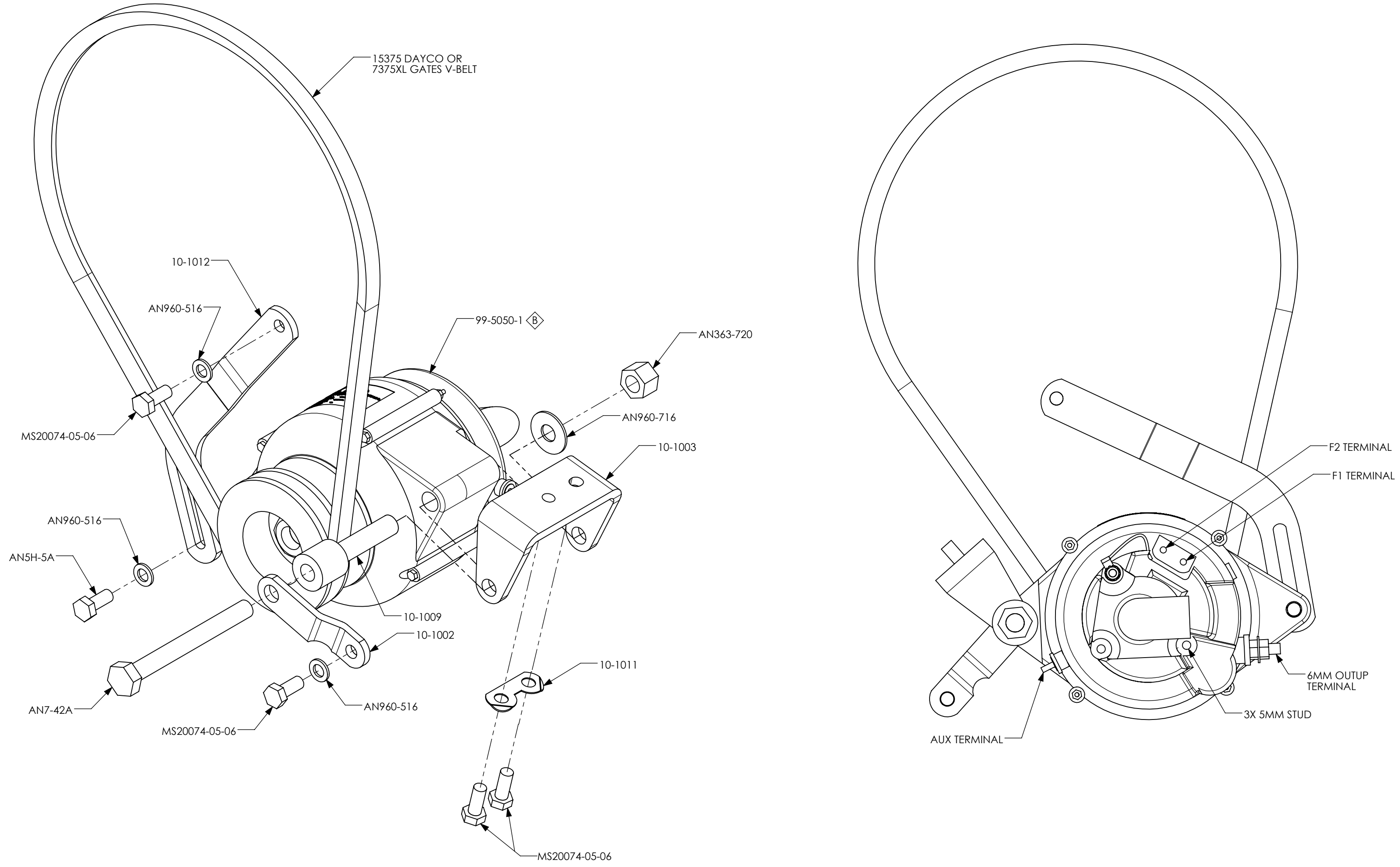


24 VOLT 70 AMP EXPERIMENTAL ALTERNATOR EXTERNALLY REGULATED

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

REVISIONS				
ECO	REV.	DESCRIPTION	BY	DATE
EN-1412023	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) REMOVED "INSTALLATION AND..." ANNOTATION	OKQ	12/16/14
126008	B	1) REPLACE 10-5050 WITH 99-5050-1	AWB	07/30/18



USER IS RESPONSIBLE FOR VERIFICATION OF CURRENT REVISION BEFORE USING THIS DOCUMENT. DOCUMENT CONSIDERED "REFERENCE ONLY" IF NOT THE CURRENT REVISION.


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
.XXX = ±.005
ANGLES ±1°
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	05/15/05
ENGINEER	C. BROUSSARD	
APPRVD.	126008	
FINISH	N/A	
WEIGHT	N/A	
MATERIAL	SEE INDIVIDUAL COMPONENTS	
SIZE	SH 1 OF 2	CODE ID 65PY1

 2900 Selma Highway Montgomery, AL 36108		AL24-EE70/B INSTALLATION INSTRUCTIONS	
99-9903B		B	

Part No. 99-9903

Installation Instructions

1. Disconnect aircraft battery.
2. Install alternator per included drawing. Supply outside ram cooling air to the connector on the rear of the alternator by the use of 1" scat tube.
3. Refer to appropriate engine 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-lbs.
5. Install field wire with MS25171-1S terminal nipple to F1 terminal on rear of alternator and torque to 20 in-lbs.
6. Note: F2 terminal to remain grounded with ground strap **UNLESS** aircraft voltage regulator is a type "A" regulator using a 2-wire field circuit, in this case remove and discard ground strap from F2 terminal and connect wiring from voltage regulator to F1 and F2 terminals, torque to 20 in-lbs.
7. If aircraft is equipped with an "alternator out light" circuit, connect that wire to the AUX terminal and torque to 20 in-lbs. Otherwise leave AUX terminal open.
8. Reconnect aircraft battery.
9. 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 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 Inspections:

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.