

DEPENDENT ON SIZE OF ENGINE AND LOCATION OF BATTERIES - ALL WIRES MARKED 2AWG MAY BE DOWNSIZED TO 4AWG.

- = ENGINE CRANKCASE GROUND
- = FIREWALL
- = INSTRUMENT PANEL GROUND BUS
- = 2AWG EQUAL STRAP
- = BRAIDED BOND STRAP
- = 6 INCHES OR LESS
- = REDUNDANT GROUNDS

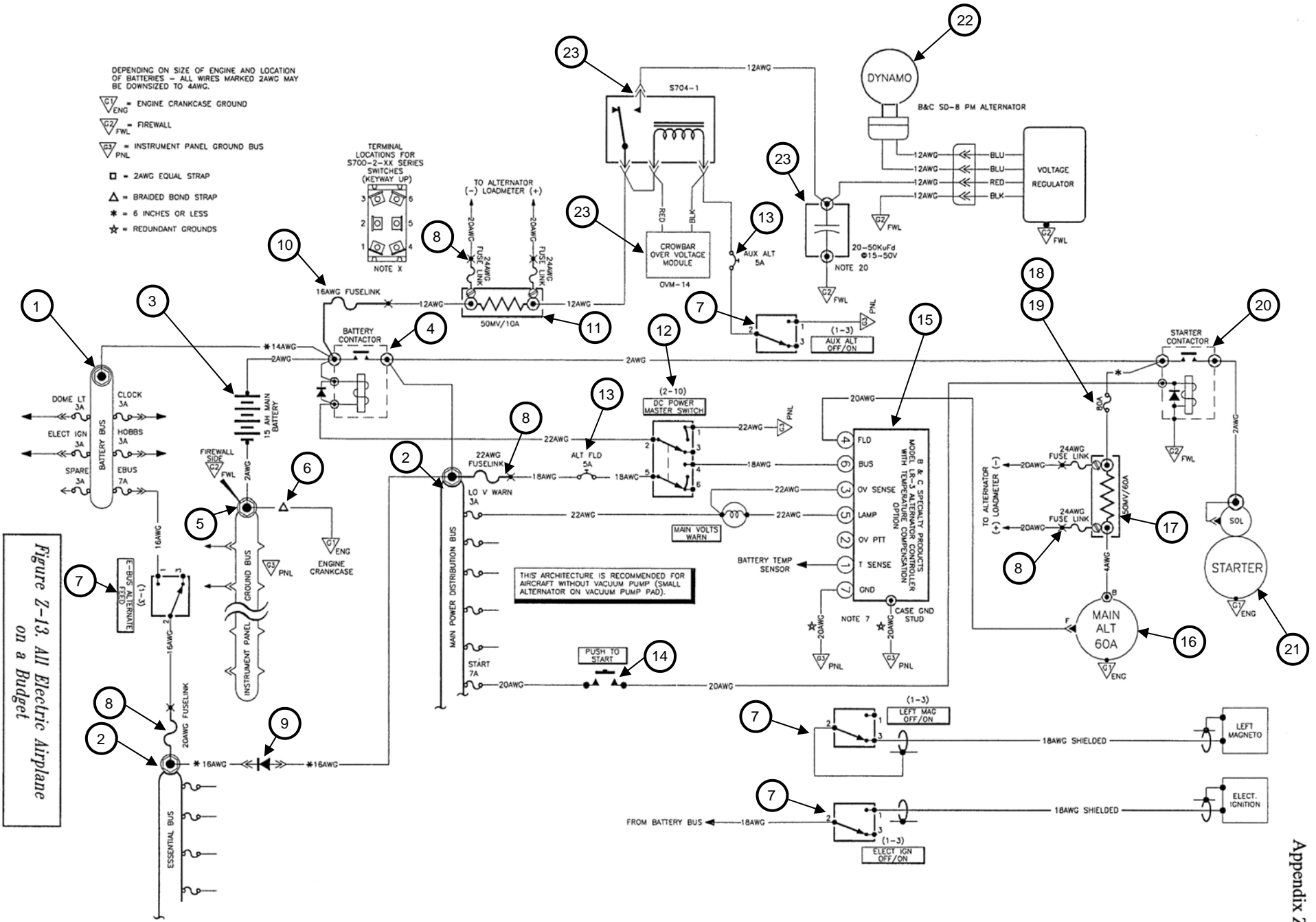


Figure Z-13: All Electric Airplane on a Budget

Bill of Materials

Z-13 Diagram (Rev. 11/01)

<u>REF</u>	<u>NOTES</u>	<u>PART NUMBER</u>	<u>QTY</u>	<u>DESCRIPTION</u>
1	*	FH-6	1	Fuse Holder, 6-position
2	*	FH-10	2	Fuse Holder, 10-position
3	**	BC116-1	1	Battery, 16AH
4		S701-1	1	Contactor, Continuous Duty (w/ IN5400 Diode)
5		GB24	1	Ground Block, 24 position
6	***	BBS	1	Braided Bonding Strap (length & terminals per order)
7		S700-1-3	4	Switch, Toggle, 2-position, ON-ON
8		FLK-1	2	Fusible Link Kit (makes 4 links, 24-20 AWG)
9		221-201	1	Essential Bus Diode w/ Heatsink (15 Watt)
10		FLK-2	1	Fusible Link Kit (makes 4 links, 20-16 AWG)
11		S870-10	1	Shunt, 10A, 50mv
12		S700-2-10	1	Switch, Toggle, 3-position, ON-ON-ON
13		CB5	2	Circuit Breaker, 5A
14		S895	1	Push-to-Start Switch (w/ Button Guard)
15		LR3C-14	1	Regulator/Alternator Controller
16		L-60 Boss	1	Alternator, 60A, Boss Mount
17		S870-60	1	Shunt, 60A, 50mv
18	#	C903-1	1	Current Limiter, Base
19	#	C905-60	1	Current Limiter, 60A
20		S702-1	1	Contactor, Intermittent Duty (Starter)
21		BCS206-xxx-12	1	Starter, 12v, 122 or 149 Tooth Ring per xxx
22		SD-8	1	Alternator, 8A, Vacuum Pump Pad (w/ Regulator)
23	##	504-1	1	PM Over-Voltage Protection Kit, 14v

NOTES

* Fuse holders accept ATC-type fuses, with a maximum recommended load of 60A per holder. Fuses are individually sized per the device being protected, and may be ordered in packages of 5 using P/N: S889-xx (specify fuse size).

** The 15AH battery originally noted in Z-13 is not a stock item. A similarly-sized 16AH battery (P/N: BC116-1) is available, however; this should be a suitable replacement in most day/VFR aircraft.

*** Braided Bonding Straps are built on a made-to-order basis. Please specify length (from center-to-center of ring terminals) and ring terminal sizes needed for your installation when ordering.

The more robust ANL Current Limiter (P/N: C905-60) and Base (P/N: C903-1) are recommended to protect B-lead wiring and associated components on the L-60 Alternator, rather than the 80A fuse originally listed in Z-13.

The PM Over-Voltage Protection Kit (P/N: 504-1) includes the 20A relay and crowbar over-voltage module specified, along with a clear-yellow warning light; in-line fuse holder; 15A fuse; 10,000uF/50 VDC filter capacitor; adel clamp; and appropriate wire terminals.