

UNLESS OTHERWISE SPECIFIED		AEROELECTRIC CONNECTION www.aeroelectric.com	
DIMENSIONS ARE IN INCHES			
TOLERANCES ARE:			
DECIMAL 0.XX = ± 0.03			
DECIMAL 0.XXX = ± 0.005			
ANGLES = ± 2 DEGREES			
DRAWN	NUCKOLLS	DATE	REVISION
CHECK	NUCKOLLS	9/14/2	A
PROJECT	NUCKOLLS	9/14/2	
APPROVED			
DRAWING NO. 9021-620		SCALE NOTED	
JOB NO.		PAGE 1 OF 2	

AeroElectric Connection
www.aeroelectric.com

TITLE SCHEMATIC DIAGRAM –
**LOW VOLTAGE WARNING AND
AUX BATT MANAGEMENT MODULE**

DRAWING NO. 9021-620
REVISION A
DATE 10/2/23
PAGE 1 OF 2

BILL OF MATERIALS

REF	P/N	DESCRIPTION	DIGIKEY CATALOG NUMBER
Z101	1N4742A	12V, 1W ZENER DIODE	1N4742AMSCT
C102		10uF, 16V TANTALUM CAP	P2038
Z103	LM285Z-2.5	2.5V REFERENCE DIODE	LM285Z-2.5
R104		4.7K, 1/4W, 5% RESISTOR	4.7KQBK
R105		10.5K, 1/4W, 1% RESISTOR	10.5KXBK
R106		2.49K, 1/4W, 1% RESISTOR	2.49KXBK
U107	LM311N	COMPARATOR, 8-DIP	LM311NNS
R107		470K, 1/4W, 5%	470KQBK
D109	1N4148	SMALL SWITCHING DIODE	1N4148DICT
U110	LM555	TIMER, 8-DIP	LM555CNNS
C111		1.0uF, 16V TANTALUM CAP	P2015
R112		330K, 1/4W, 5% RESISTOR	330KQBK
R113		330 OHM, 1/4W, 5% RESISTOR	330QBK
Q114	IRF510	N-CHANNEL, 100V, 5A PWRMOS	IRF510
R115		4.7K, 1/4W, 5% RESISTOR	4.7KQBK
R116		62 OHM, 1/2W, 5%, RESISTOR	62H
D117		HIGH BRIGHT LED	276-307 (RADIO SHACK)
Z118	1N4742A	12V, 1W, 5% ZENER DIODE	1N4742AMSCT
R119		22 OHM, 1/4W, 5% RESISTOR	22QBK
C120		0.1uF, 50V CERAMIC CAP	P4924
P121		9-PIN, DSUB MALE	A23139
S122	276-1428	9-PIN, DSUB FEMALE	276-1428 (RADIO SHACK)

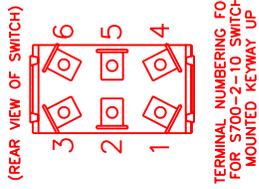
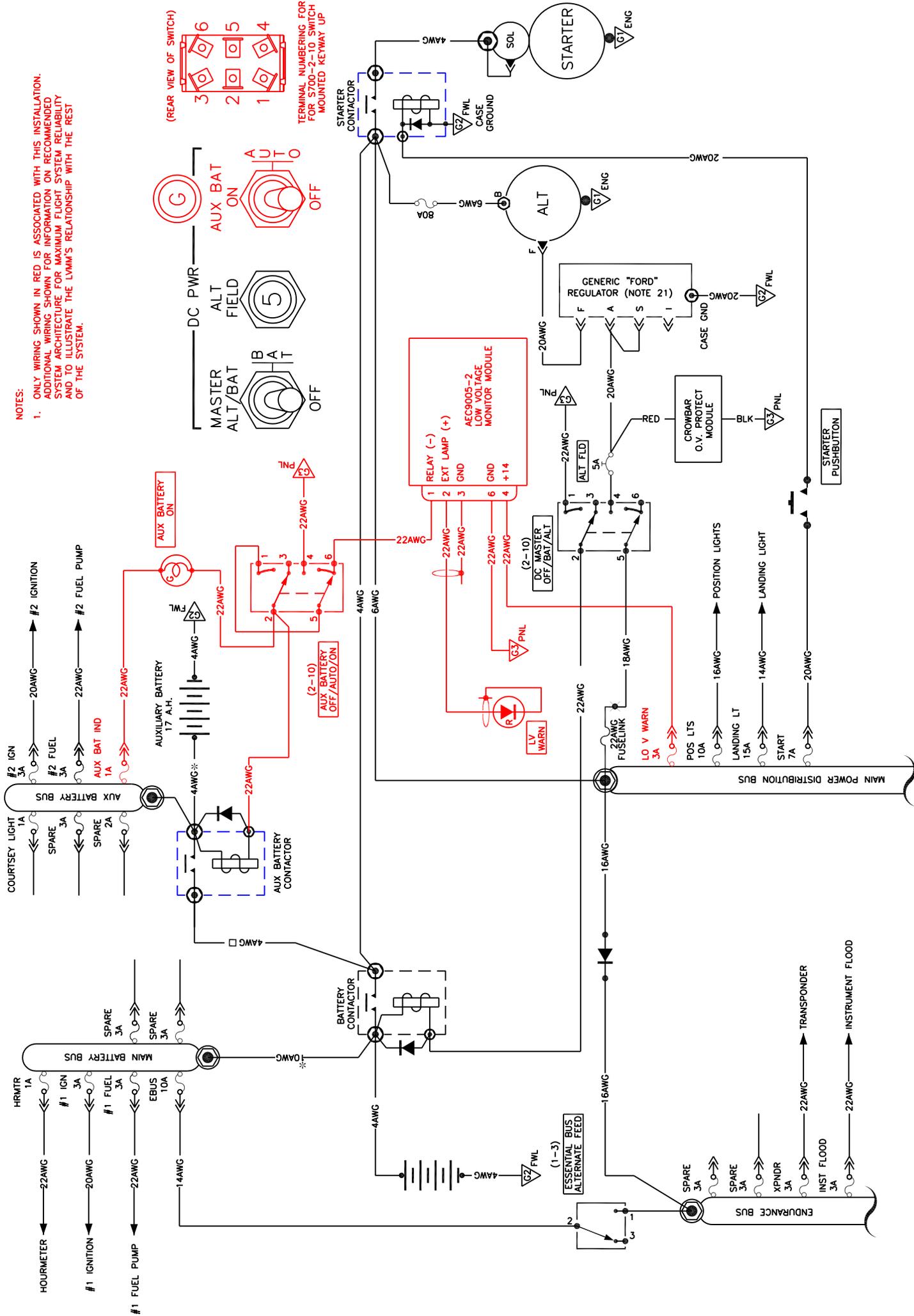
NOTES:

(1) IF YOU DO NOT PLAN TO USE THE AUX BATTERY MANAGEMENT FEATURE, Q114, R119 AND Z118 CAN BE OMITTED FROM THE ASSEMBLY.

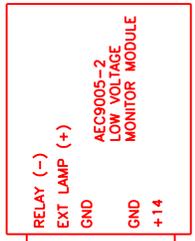
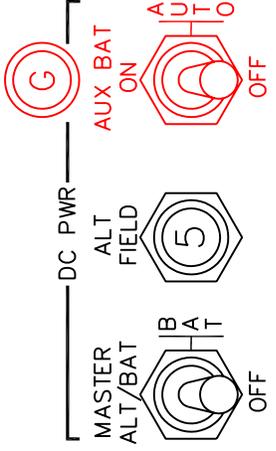
UNLESS OTHERWISE SPECIFIED		AeroElectric Connection www.aeroelectric.com	
DIMENSIONS ARE IN INCHES		TITLE SCHEMATIC DIAGRAM -	
TOLERANCES ARE:		LOW VOLTAGE WARNING AND	
DECIMAL 0.XX = ± 0.03		AUX BATT MANAGEMENT MODULE	
DECIMAL 0.XXX = ± 0.005		DRAWING NO.	9021-620
ANGLES = ± 2 DEGREES		REVISION	A
DRAWN	NAME	DATE	10/2/3
CHECK	NUCKOLLS	9/14/2	
PROJECT	NUCKOLLS		
APPROVED	SCALE	NOTED	JOB NO.
			PAGE 2 OF 2

NOTES:

- ONLY WIRING SHOWN IN RED IS ASSOCIATED WITH THIS INSTALLATION. ADDITIONAL WIRING SHOWN FOR INFORMATION ON RECOMMENDED SYSTEM ARCHITECTURE FOR MAXIMUM FLIGHT SYSTEM RELIABILITY AND TO ILLUSTRATE THE LVMM'S RELATIONSHIP WITH THE REST OF THE SYSTEM.



TERMINAL NUMBERING FOR S700-2-10 SWITCH MOUNTED KEYWAY UP



ESSENTIAL BUS ALTERNATE FEED (1-3)

CROWBAR O.V. PROTECT MODULE

GENERIC "FORD" REGULATOR (NOTE 21)

STARTER

ALT

DC PWR

MASTER ALT/BAT

ALT FIELD

AUX BATT

#2 IGN

#2 FUEL

AUX BATT IND

AUXILIARY BATTERY 17 A.H.

AUX BATTERY ON

AUX BATTERY OFF/AUTO/ON

DC MASTER OFF/BAT/ALT

1 RELAY (-)

2 EXT LAMP (+)

3 GND

6 GND

4 +14

LV WARN

LO V WARN

22AWG FUSELINK

POS LTS

LANDING LT

START

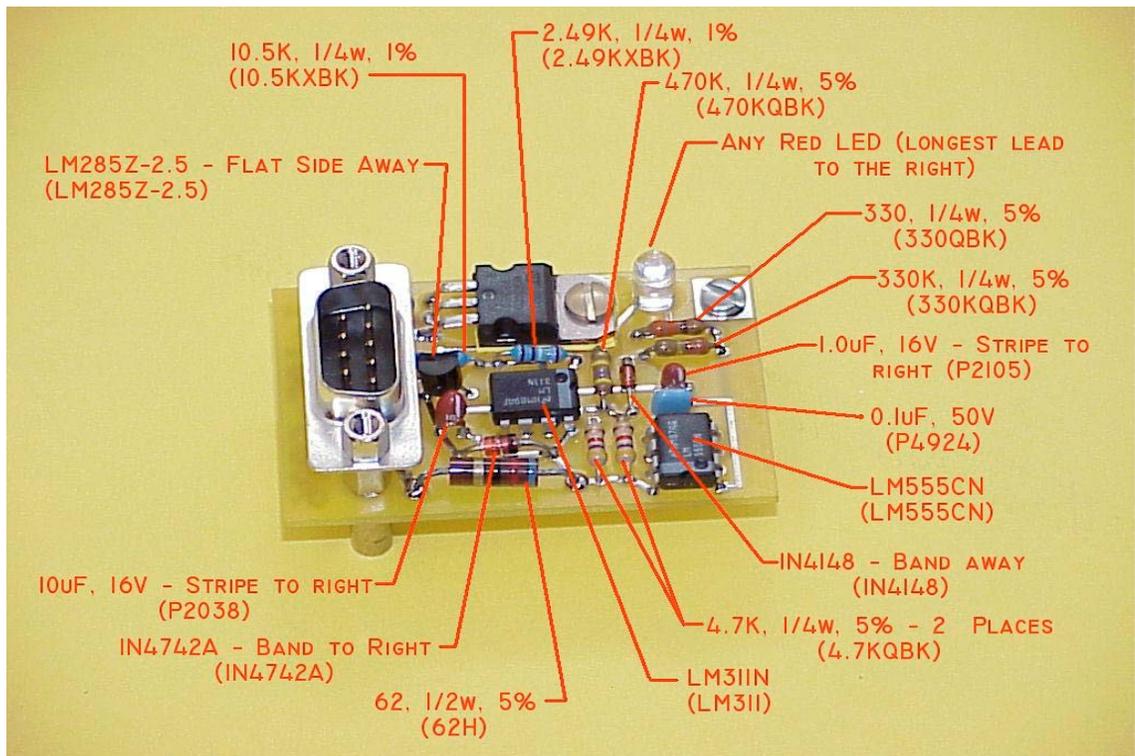
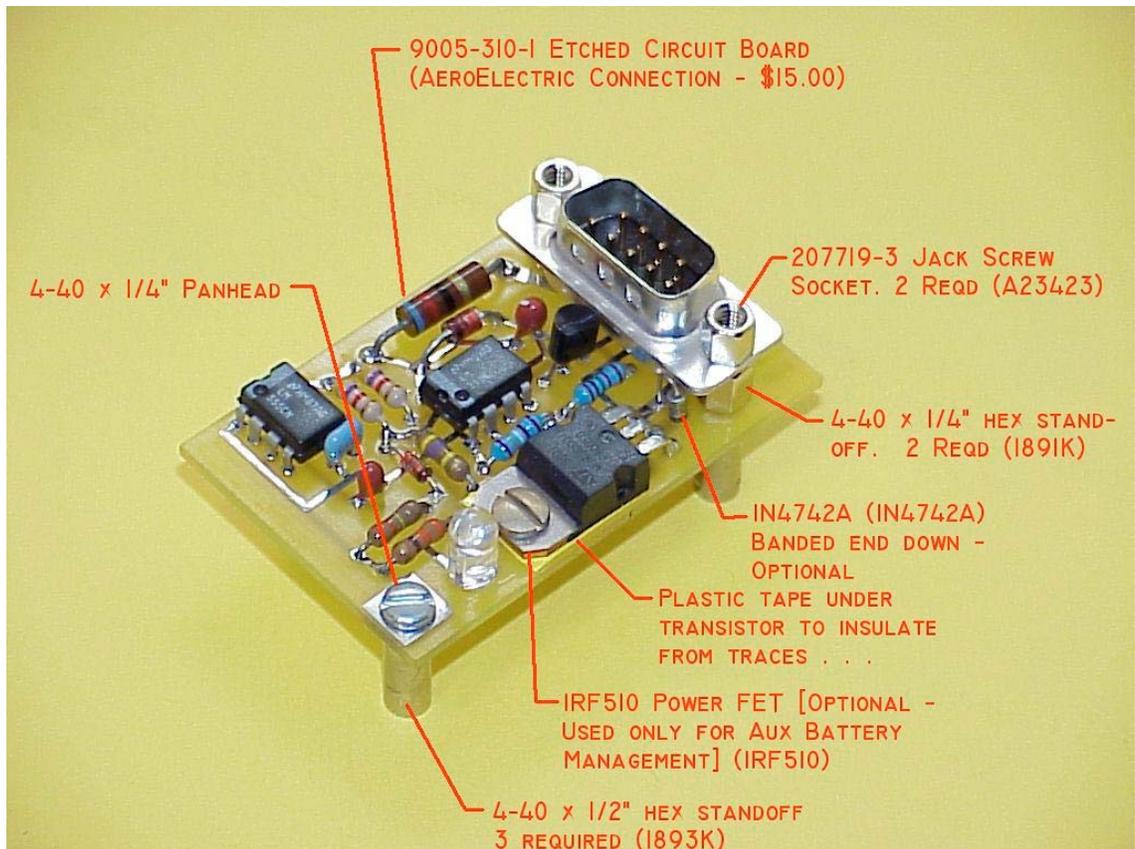
POSITION LIGHTS

LANDING LIGHT

STARTER PUSHBUTTON

ENDURANCE BUS

MAIN POWER DISTRIBUTION BUS



22, 1/4W, 5% - OPTIONAL. USED
ONLY ON AUX BATTERY MANAGEMET
MODULE (22QBK)

4-4.0 x 1/4" PAN HEAD SCREW
4-4.0 x 3/16" HEX NUT - OPTIONAL

