

GB -  
GOOD SUPPLIER

LOW - NON-LINEARITY  
FREQUENCY IN CORE SATURATES  
HIGH LOSSES  
LESS 80°C RISE

INPUT & OUTPUT DIFF  
 $\Delta V_{small}$  - TAKES  
TO RAMP CURRENT  
→ ~~SHOULD~~  
TAKES LONGER TO

8

6

5

POWER SUPPLY

BATTERY TEMP SENSE

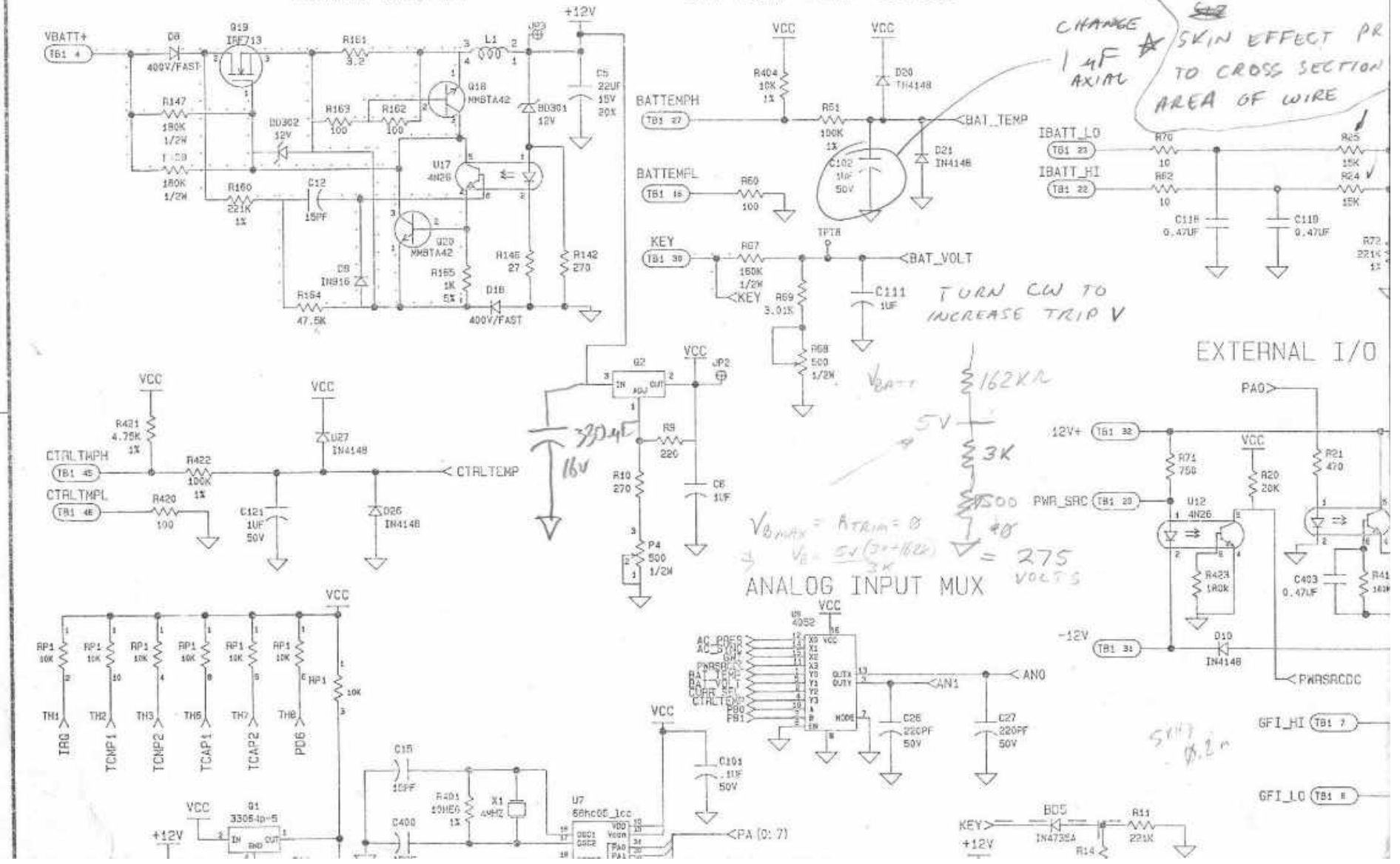
→ SHOULD RUN C

CHANGE  
1.4F AXIAL  
★ SKIN EFFECT PR  
TO CROSS SECTION  
AREA OF WIRE

TURN CW TO  
INCREASE TRIP V

EXTERNAL I/O

$V_{batt} = A_{trim} = 0$   
 $V_b = 5V(3+162K) / 3K = 275$   
VOLTS  
ANALOG INPUT MUX



ONBER

P4 & R68  
SHOULD BE  
MULTI-TURN

BILL  
PETERSON  
607-770-3387  
a 8-255 350 VDC

LATEST AS OF JUN 1 65-MS-001  
350-230  
= 120V  
 $L \frac{di}{dt} = V$   
 $t = L \frac{di}{V}$  ISA  
RIPPLE

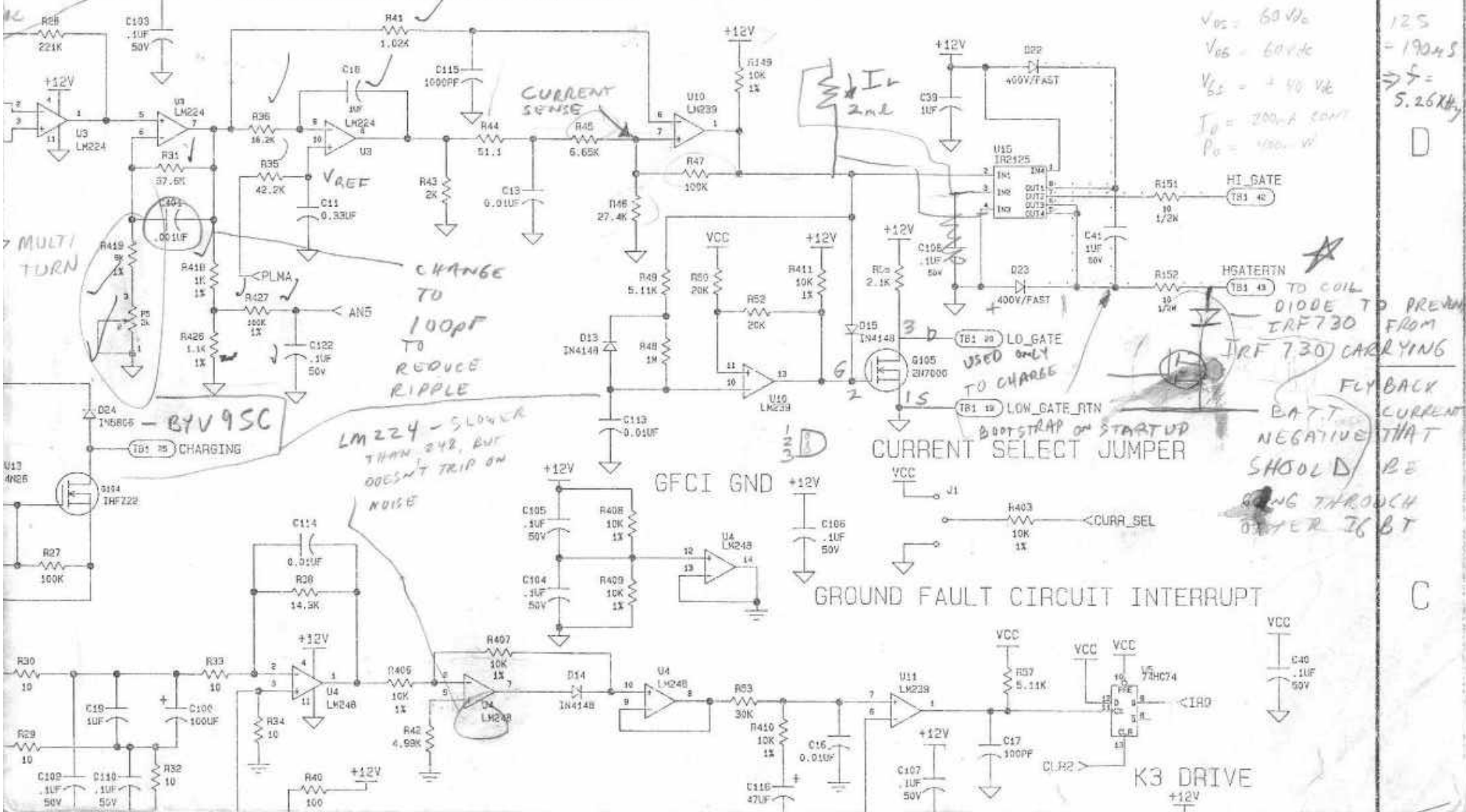
RAMP UP CURRENT

230 OUT →

OLER (NEW ONE)

PROPORTIONAL

### HYSTERETIC CURRENT CONTROL



MULTI-TURN

BYV 95C CHARGING

IRF730

100K

10

10

10

10

10

THESE ARE ALL STANDARD 1% RESISTORS ↓

CHANGE TO 100pF TO REDUCE RIPPLE

LM224 - SLOWER THAN 242, BUT DOESN'T TRIP ON NOISE

GFCI GND

### GROUND FAULT CIRCUIT INTERRUPT

6S  
125  
= 19045  
⇒ f = 5.26 kHz

TO COIL  
DIODE TO PREVENT IRF730 FROM CARRYING FLYBACK CURRENT THAT SHOULD BE GOING THROUGH OTHER IGBT

DWG. NO.	REV.	REV.		
ZONE	REV.	DESCRIPTION	DATE	APPROVED

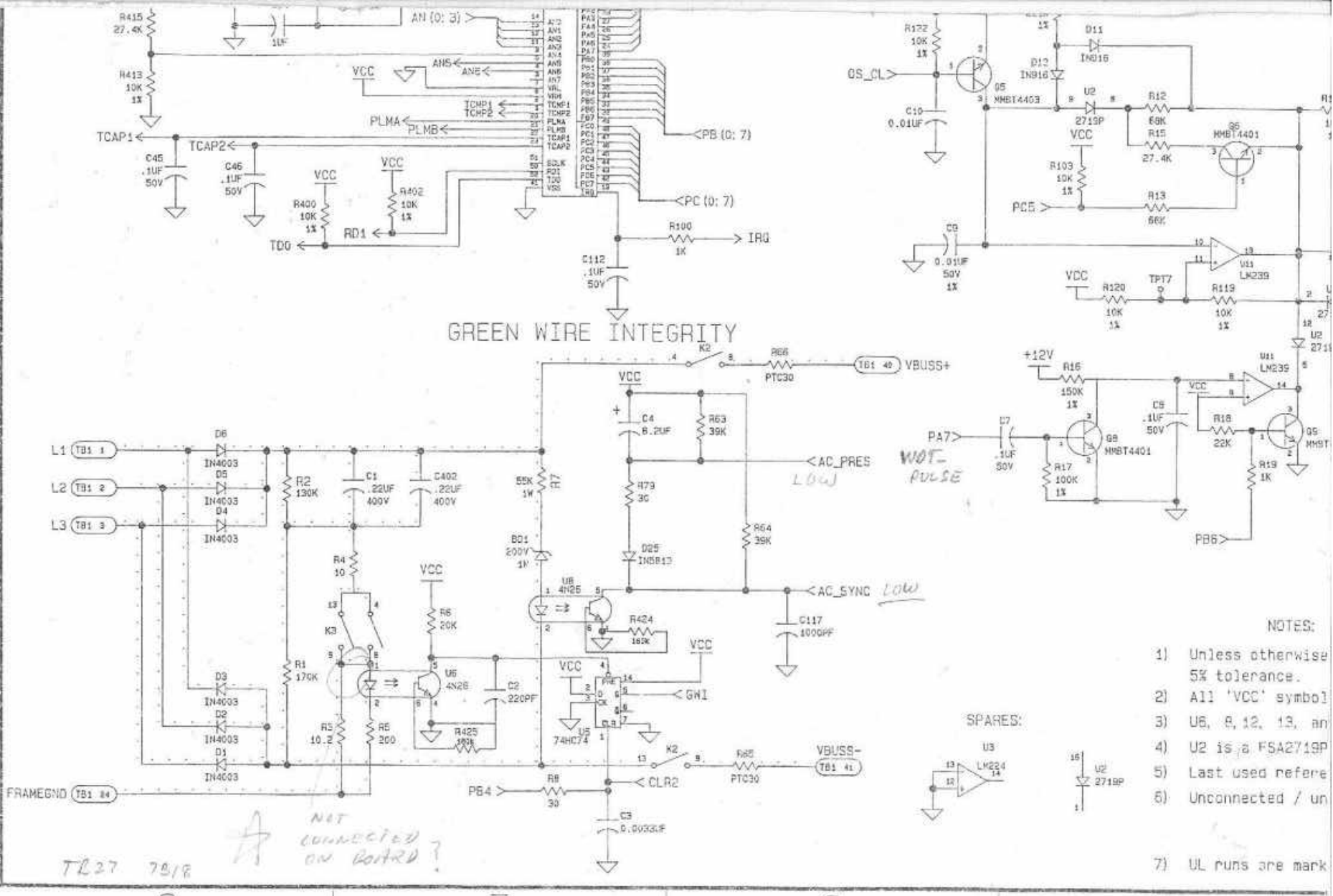
L=1mH

BOOTSTRAP ON STARTUP

C

B

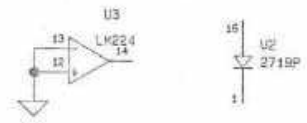
A



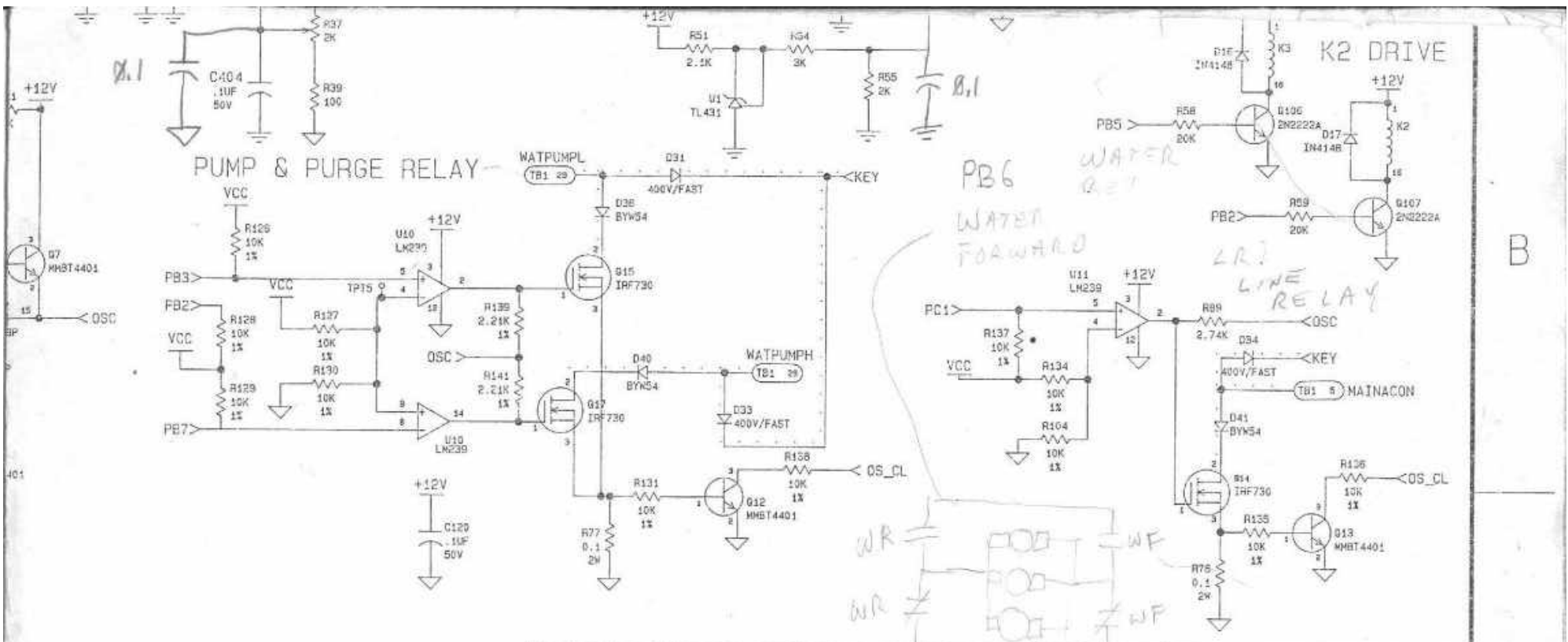
NOTES:

- 1) Unless otherwise 5% tolerance.
- 2) All 'VCC' symbol
- 3) U6, 8, 12, 13, an
- 4) U2 is a FSA2719P
- 5) Last used refere
- 6) Unconnected / un
- 7) UL runs are mark

SPARES:



1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46



specified, all resistors are 1/8 watt,  
 represent a +5 volt source.  
 17 are 6 pin DIP optocouplers.  
 16 pin DIP diode array.  
 ces: B05, C404, D41, K3, Q107, P5, R427, U17, and X1.  
 used pins include:

QTY REQD	FSCM NO.	PART OR IDENTIFYING NO.	SYMBOLIC OR DESCRIPTION	MATERIAL SPECIFICATION
<b>PARTS LIST</b>				
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE : FRACTIONS DECIMALS ANGLES XX XXX			CONTRACT NO.	
MATERIAL			APPROVALS	
FINISH			DATE	
DO NOT SCALE DRAWING			GENERAL ELECTRIC	
			EVBC1 (BATTERY CHARGER)	
			Schematic Reference Drawing	
SIZE		FSCM NO.	DWG. NO.	REV.
D			44D750208	
			SHEET 1 OF 1	

indicated by a dotted (----) line.

4

3

2

1

863  
1733

$$V_c = V_s (1 - e^{-t/RC})$$

$$V_c = V_s + [V_0 - V_s] e^{-t/RC}$$

$$-RC \left[ \ln \left( \frac{V_c - V_s}{V_0 - V_s} \right) \right] = t$$

$V_c @ 10ms$   
 $V_0 = 2V \quad V_s = 4V \quad V_c = 3V \quad t = ?$