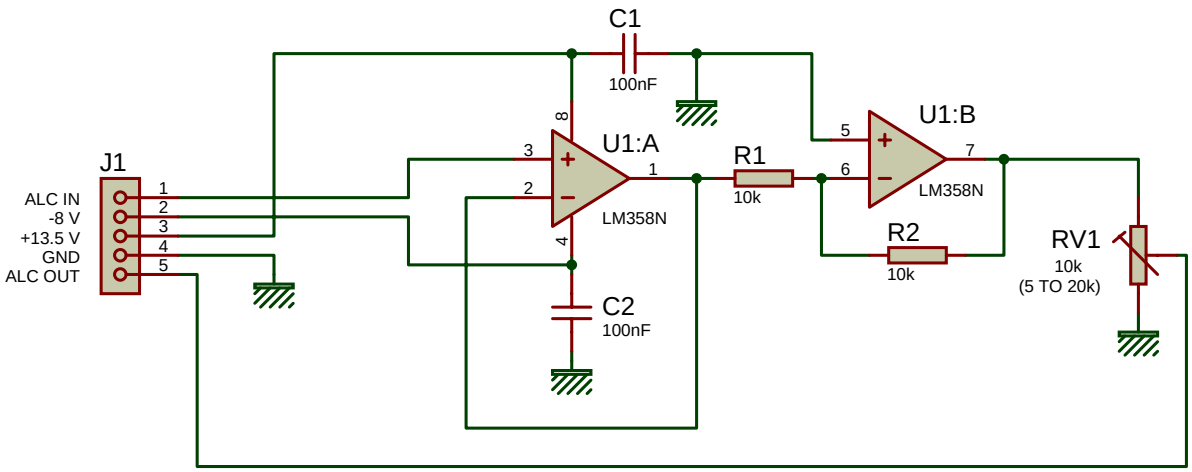
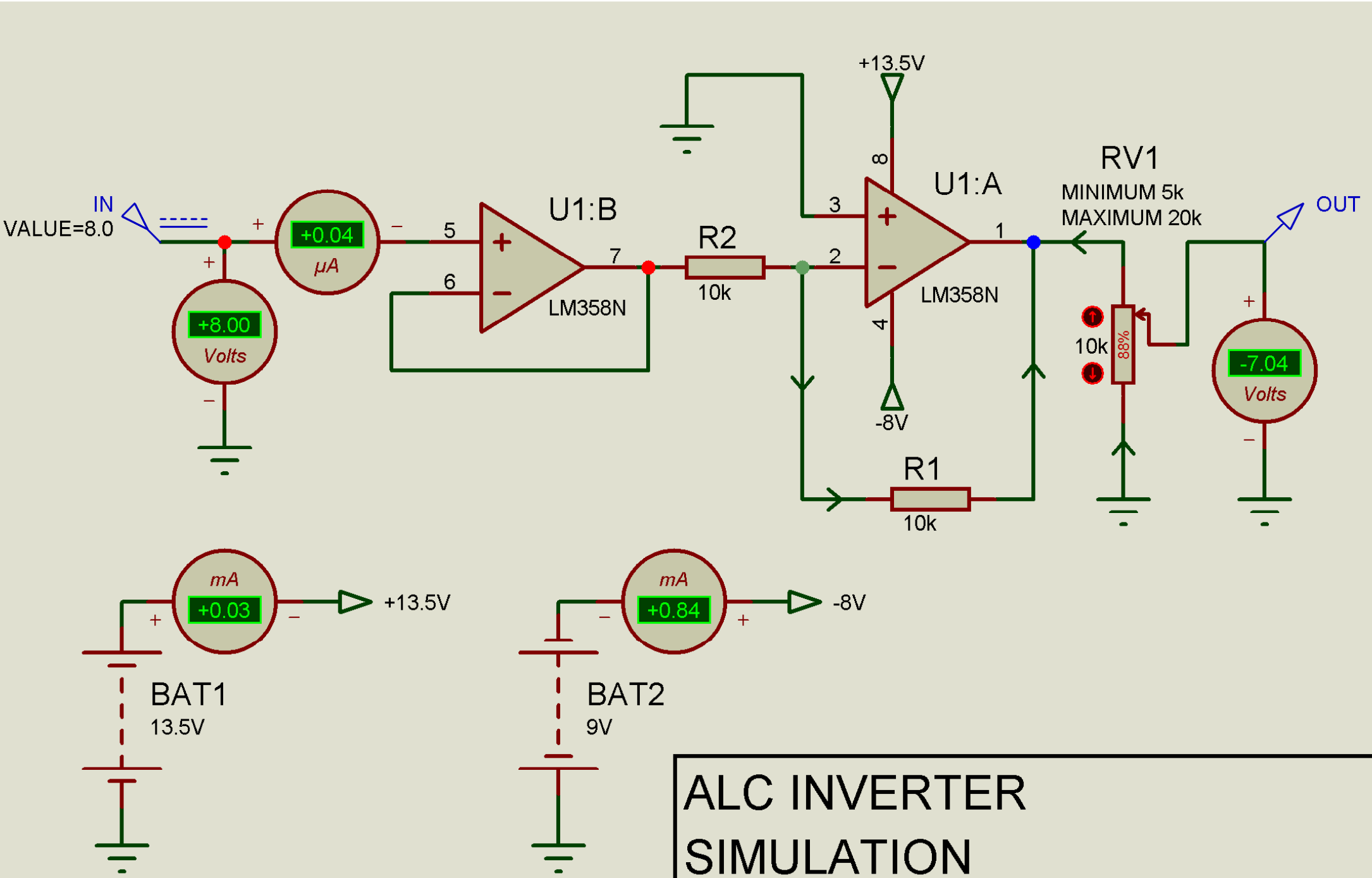
HARRIS HF AMPS RF-353 / RF-355 ALC VOLTAGE INVERTER	DATE: 25/02/13 REV: 2 PAGE: 1/1 BY: f1frv@sfr.fr DOC N°: AMATEUR RADIO

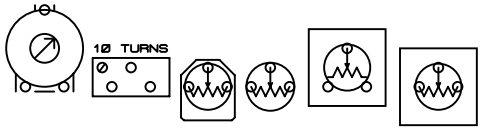
ALC VOLTAGE INVERTER
TO CONVERT 0 TO +8 V INTO
STANDARD 0 TO -7 V

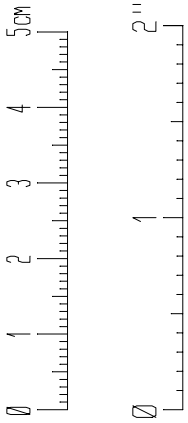



IN
VALUE=8.0
+0.04
μA
+8.00
Volts
U1:B
LM358N
5
6
7
R2
10k
+13.5V
8
U1:A
3
2
1
4
LM358N
-8V
R1
10k
RV1
MINIMUM 5k
MAXIMUM 20k
10k
88%
OUT
-7.04
Volts
mA
+0.03
+13.5V
BAT1
13.5V
mA
+0.84
-8V
BAT2
9V
ALC INVERTER
SIMULATION

HARRIS AMPLIFIERS RF-353 & RF-355 ALC VOLTAGE INVERTER	DATE:02/2013 REV:2 BY:f1frv@sfr.fr DOC Nr:AMATEUR RADIO

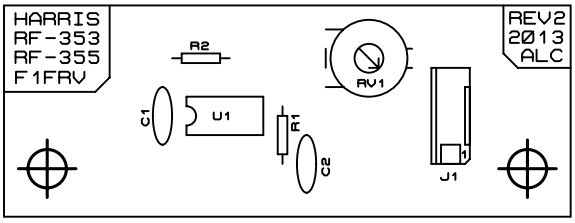
ALL THESE TYPES OF VARIABLE
RESISTORS CAN BE USED



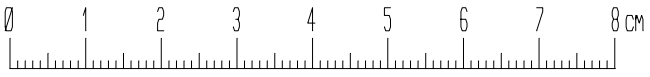


PCB 1.1'' x 2.95'' (28 x 75 mm) 29 HOLES

2.5'' BETWEEN 4 mm HOLES FOR RF-355



J1 PIN5 AGC OUT
J1 PIN4 GND
J1 PIN3 +13.5 V
J1 PIN2 -8 V
J1 PIN1 AGC IN



0 1 2 3 4 5 6 7 8cm
0 1 2 3"
0 1 2 3 4 5 6cm
0 1 2"
HARRIS
RF-393
RF-355
F1FRV
REV2
2013
ALC

WELL DEBURRED HOLE
DIA 5 TO 6 mm FOR 2 WIRES
(AGC IN AND + 8V DC)
CONNECTED TO BOARD A5
M4 TRHEAD IN THE
2 EXISTING HOLES
U2
TC5516APL
8436NBK
LM140K-5.0

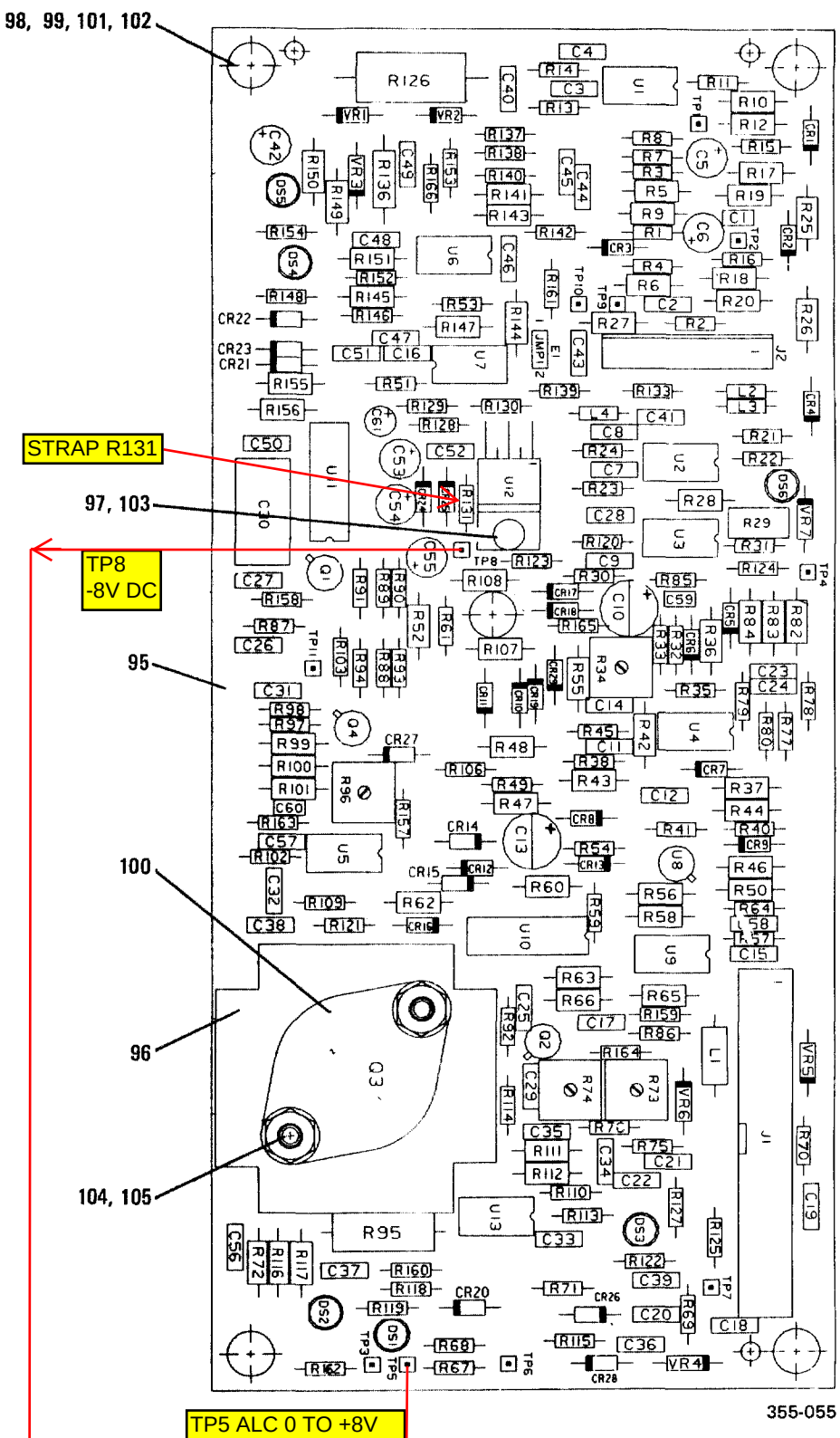


Figure 7-17. Power Control PWB Assy, A5

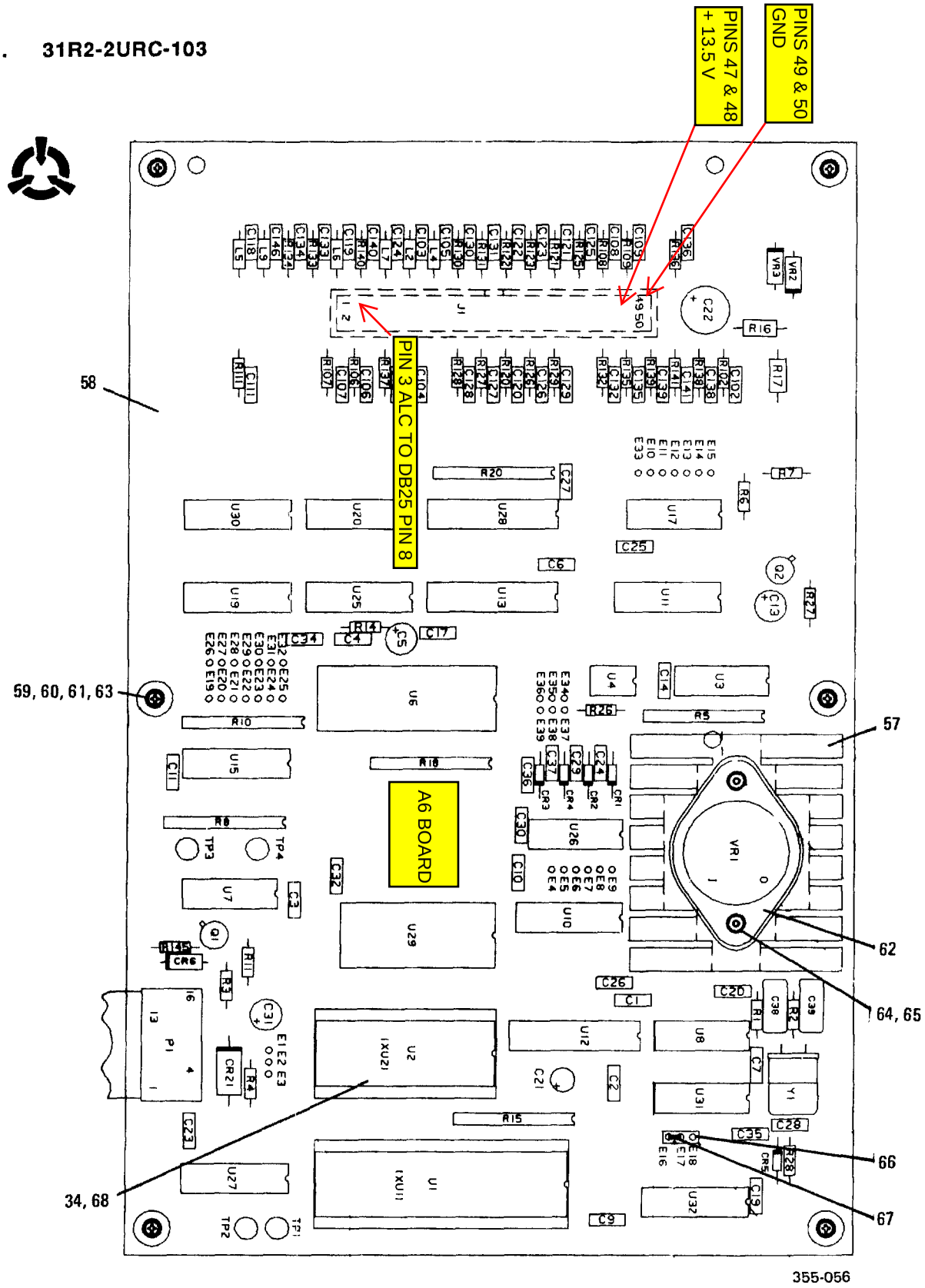


Figure 7-14. Micro Control PWB Assy, A6

P/O A5
POWER CONTROL
PWB ASSY
10086-7100

A10 TEMPERATURE
SENSOR PWB ASSY
10086-7200

-8 V (NOMINAL)
-9 V MEASURED

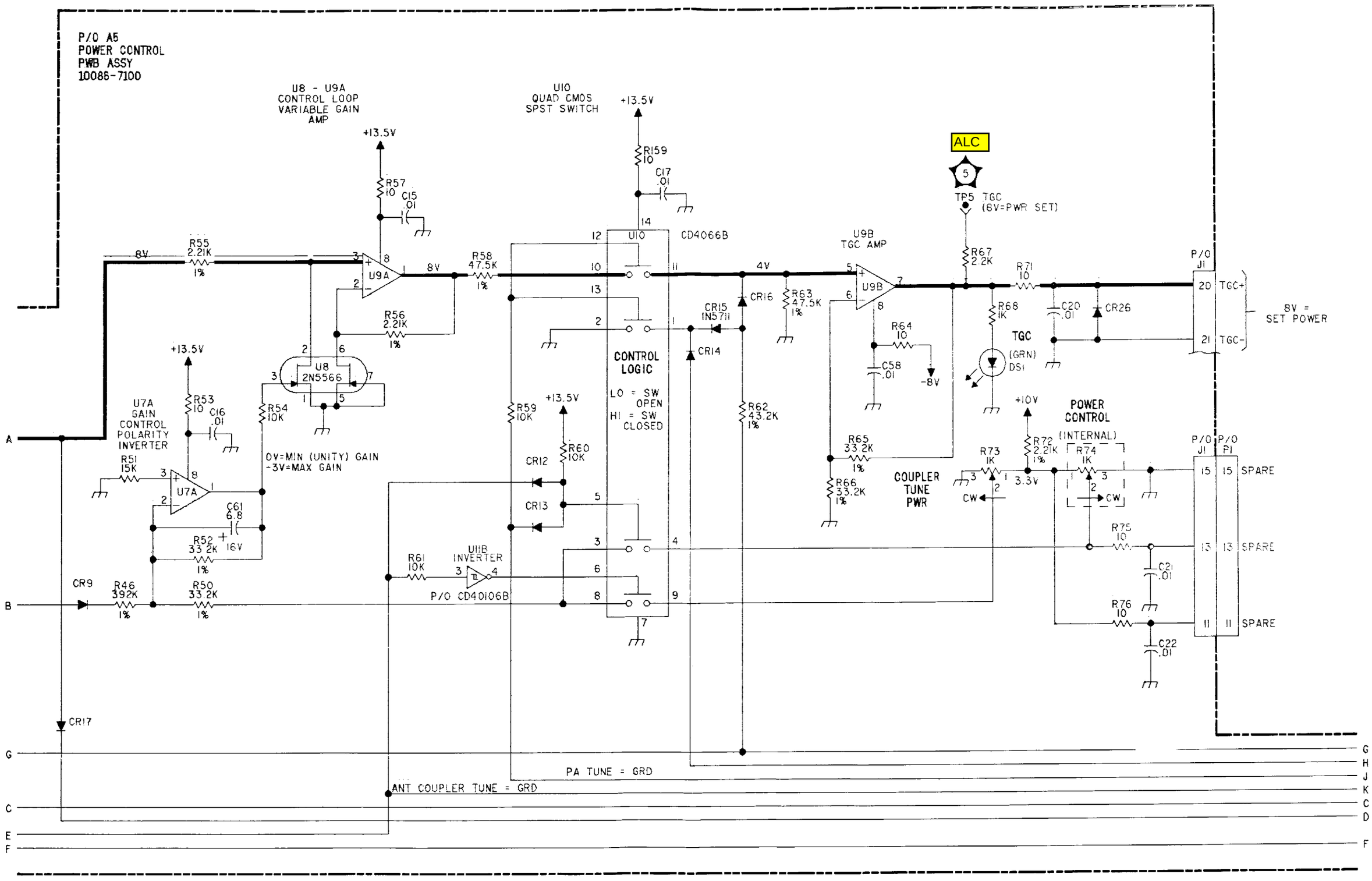
STRAP R131

AT 21°C (70°F) AMBIENT, "FAULT" AT +18°C ±3°. (180MV ±30MV) GREATER THAN TP10.

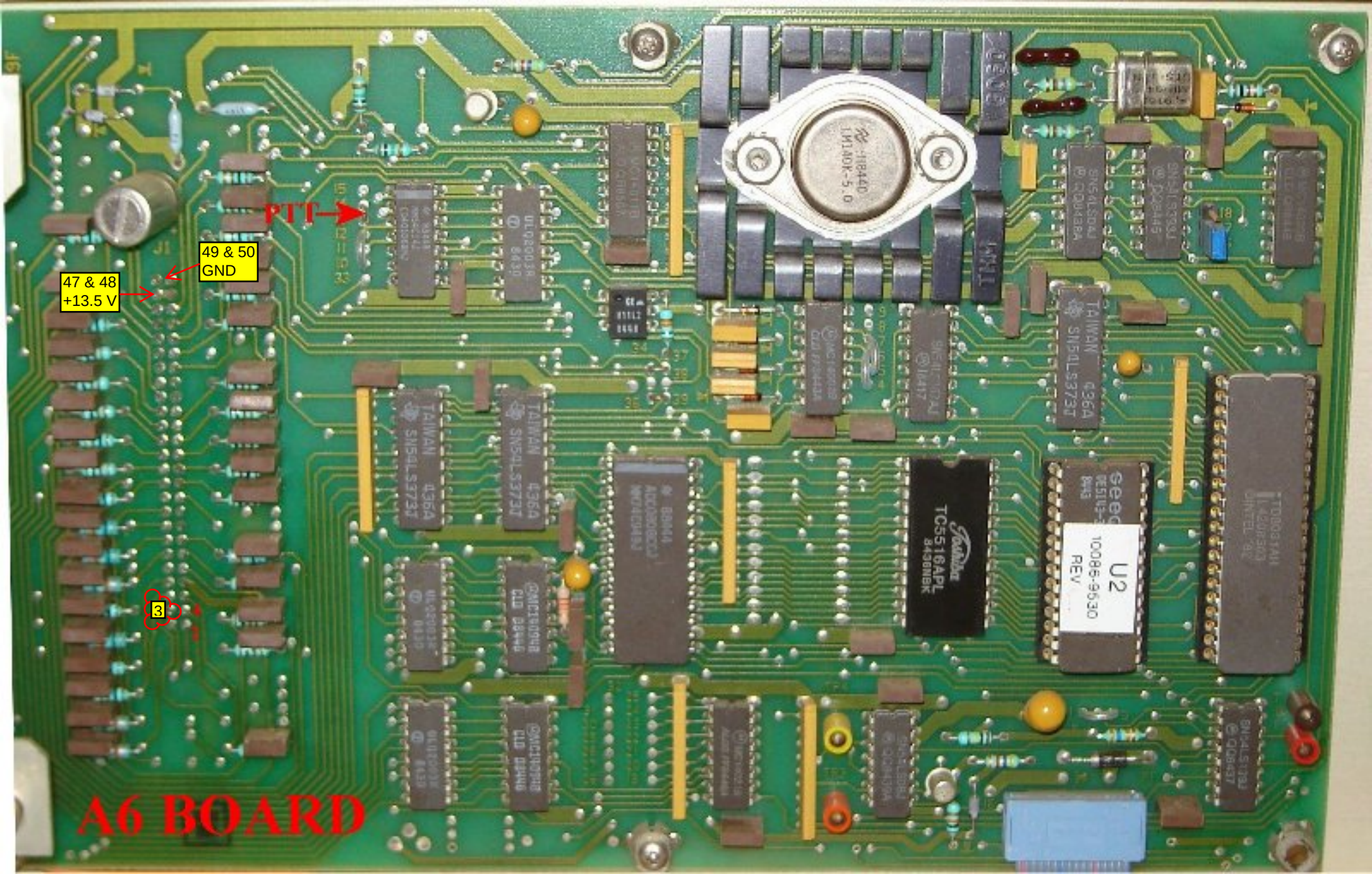
TP9, TP10 VOLTAGE= 10MV/DEGREE KELVIN
0°C=273°KELVIN=2.73VDC
100°C=373°KELVIN=3.73VDC
150°C=423°KELVIN=4.23VDC

+5V=NORMAL.
LO (GRD) IF:
1) LO AIR FLOW
2) OVER 150° AMBIENT TEMP. (PLENUM)
3) JMPI NOT IN PLACE

FO-8. Power Control PWB Assy, A5 (Sheet 4 of 4)



FO-8. Power Control PWB Assy, A5 (Sheet 2 of 4)


PTT
49 & 50
GND
47 & 48
+13.5 V
3
A6 BOARD