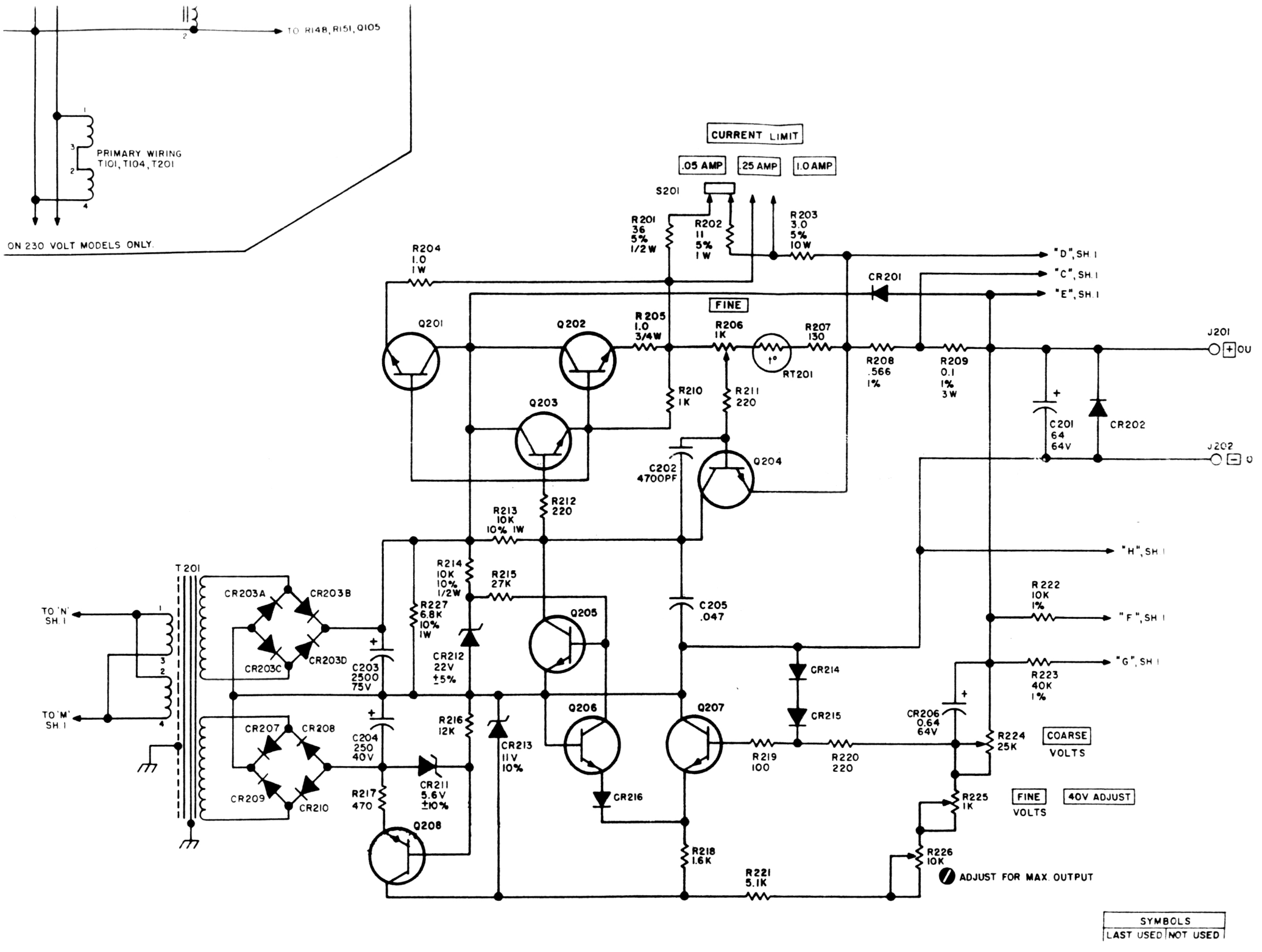
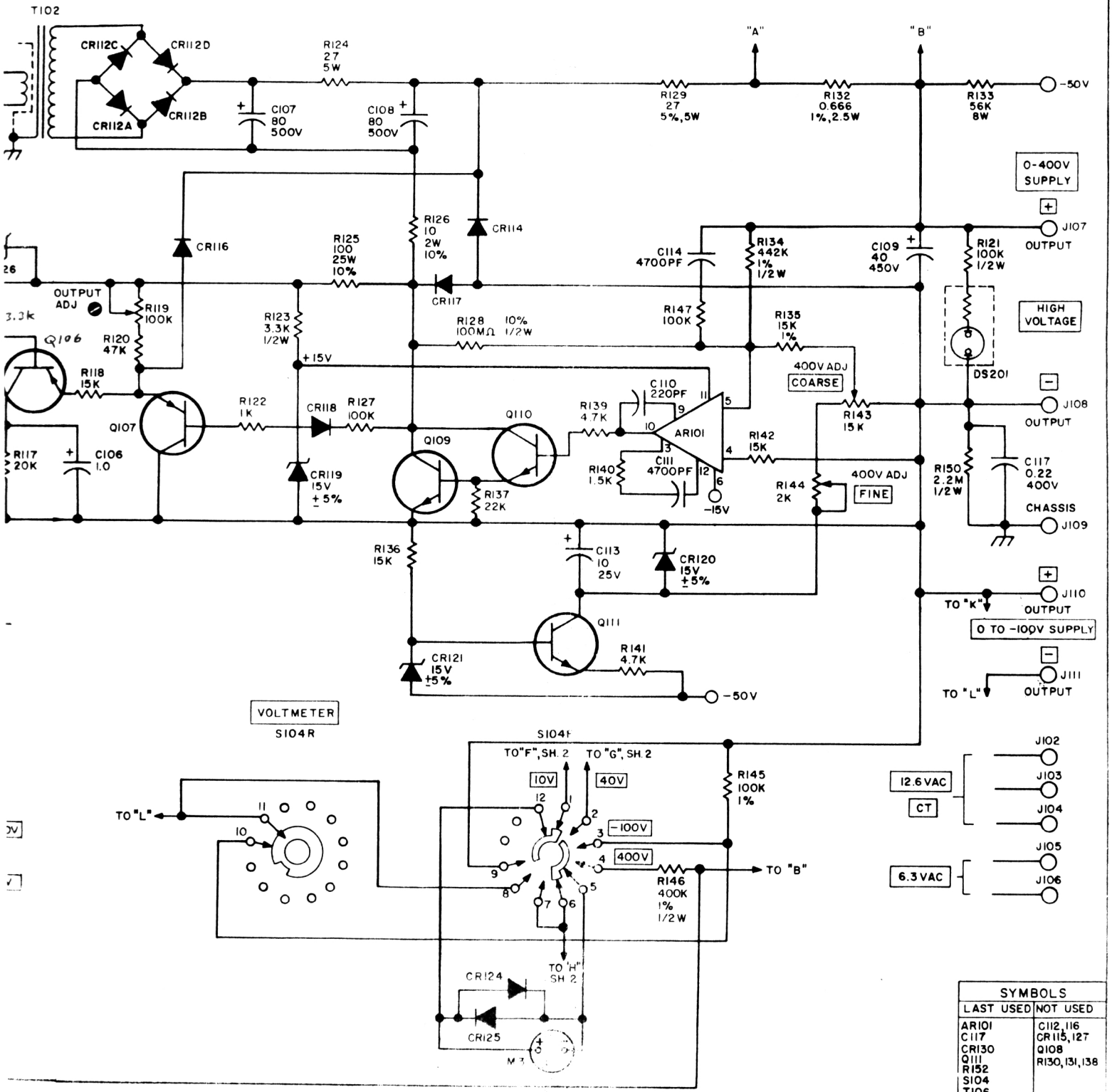

TO R148, R151, Q105
PRIMARY WIRING T101, T104, T201
ON 230 VOLT MODELS ONLY.
CURRENT LIMIT
.05 AMP
.25 AMP
1.0 AMP
S201
R201 36 5% 1/2W
R202 11 5% 1W
R203 3.0 5% 10W
R204 1.0 1W
CR201
"D", SH 1
"C", SH 1
"E", SH 1
FINE
Q201
Q202
R205 1.0 3/4W
R206 1K
R207 130
RT201
R208 .566 1%
R209 0.1 1% 3W
J201
J202
C201 64 64V
CR202
Q203
R210 1K
R211 220
C202 4700PF
Q204
R212 220
R213 10K 10% 1W
"H", SH 1
T201
TO 'N' SH 1
TO 'M' SH 1
CR203A
CR203B
CR203C
CR203D
R214 10K 10% 1/2W
R215 27K
R227 6.8K 10% 1W
C205 .047
R222 10K 1%
"F", SH 1
Q205
CR212 22V ±5%
C203 2500 75V
CR214
CR215
"G", SH 1
R223 40K 1%
CR206 0.64 64V
CR207
CR208
CR209
CR210
C204 250 40V
R216 12K
CR213 11V 10%
Q206
Q207
R224 25K
COARSE VOLTS
R219 100
R220 220
CR211 5.6V ±10%
R217 470
CR216
R225 1K
FINE VOLTS
40V ADJUST
Q208
R218 1.6K
R226 10K
ADJUST FOR MAX OUTPUT
R221 5.1K
SYMBOLS
LAST USED
NOT USED

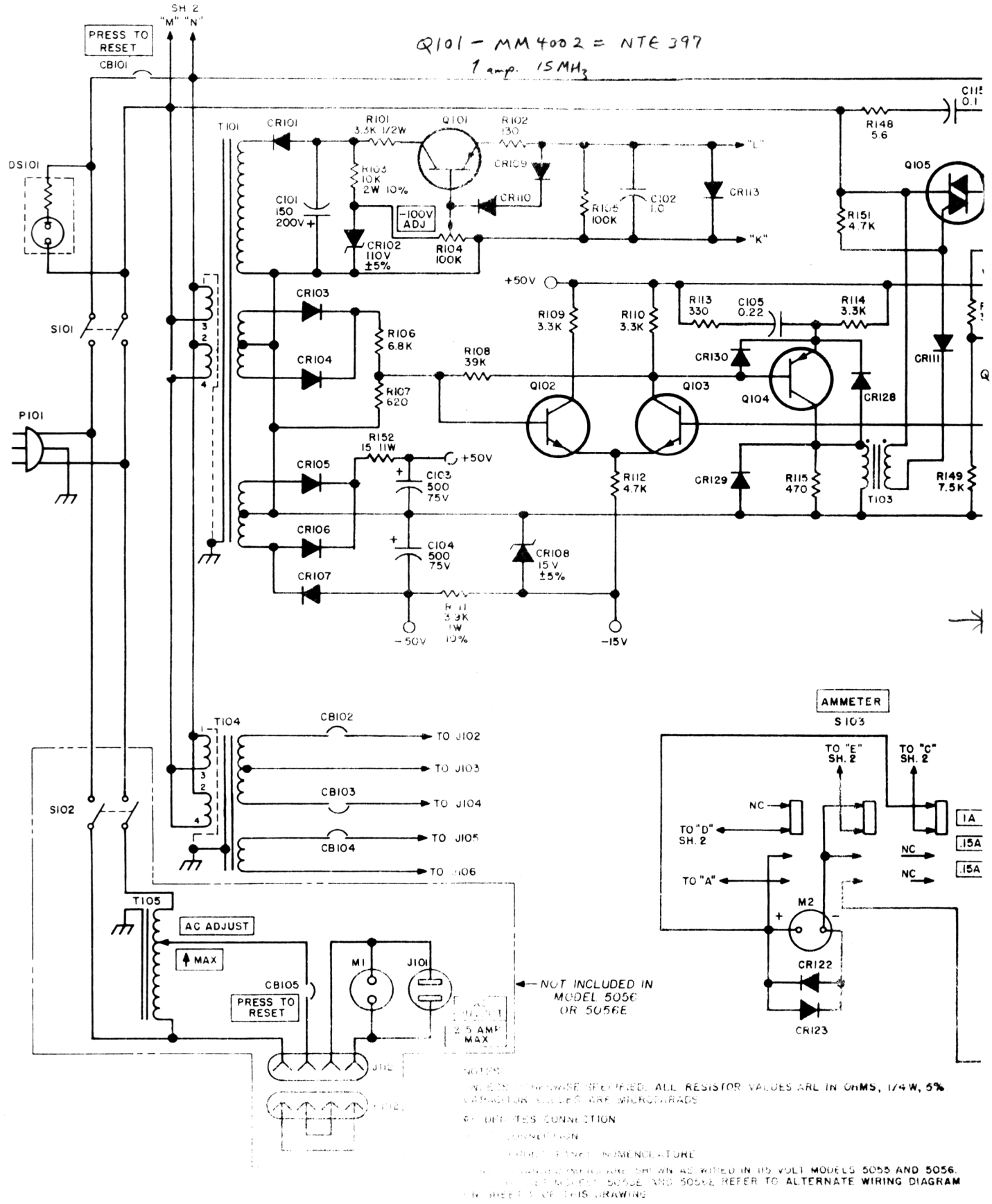


MODEL	STYLE NO.	AC LINE VOLTAGE
5055	905-068	115V RMS (NOMINAL)
5056	905-071	
5055E	905-077	230V RMS (NOMINAL)
5056E	905-078	

SYMBOLS	
LAST USED	NOT USED
AR101	C112,116
C117	CR115,127
CR130	Q108
Q111	R130,131,138
R152	
S104	
T106	
J112	
DS102	
CB105	
M3	
P102	

SH. 1 OF 2

SCHEMATIC WIRING DIAG. MODEL 5055 & 5056
POWER SUPPLY (400V)



NOTES

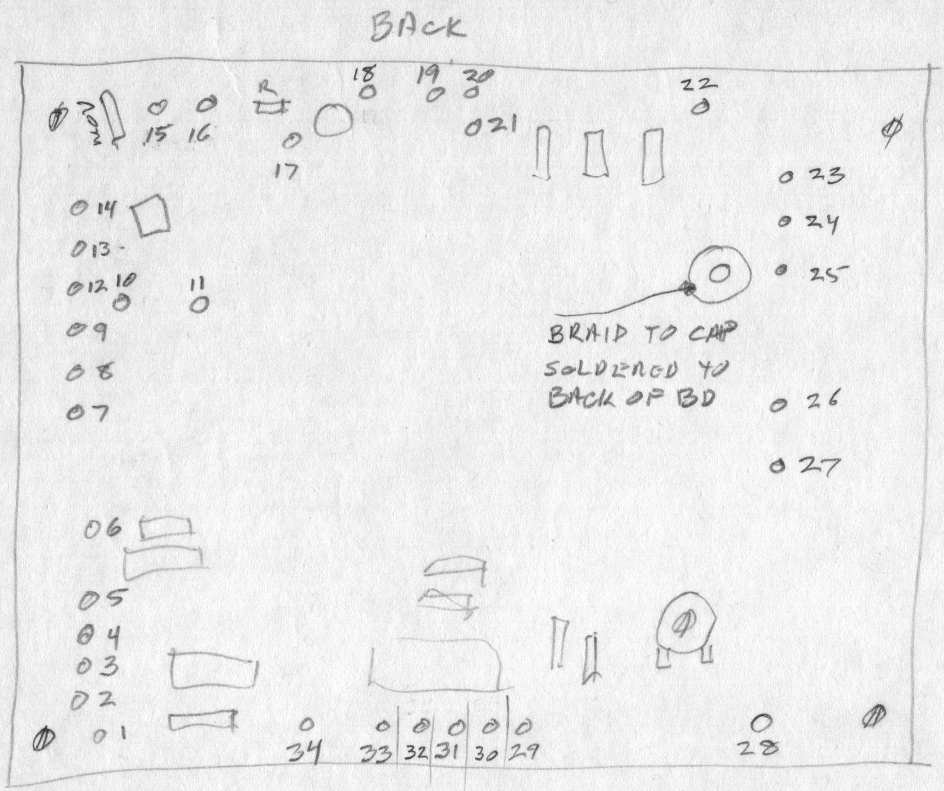
UNLESS OTHERWISE SPECIFIED, ALL RESISTOR VALUES ARE IN OHMS, 1/4 W, 5%
CAPACITOR VALUES ARE MICROFARADS

DENOTES CONNECTION

CONNECTION

FOR PANEL NOMENCLATURE

SWITCH CONTACTS ARE SHOWN AS WIRED IN 115 VOLT MODELS 5055 AND 5056.
FOR MODELS 5055E AND 5056E REFER TO ALTERNATE WIRING DIAGRAM
ON SHEET 3 OF THIS DRAWING



1	WHT/BLU	#1	13	WHT/BRN	#7
2	PINK	#2	14	WHT	#8
3	WHT/GRY	#3	15	WHT/YEL	#1
4	GRY	#4	16	WHT/ORG	#2
5	WHT/GRN	#5	17	GRN	#3
6	YEL	#1	18	WHT/BLU	#4
7	WHT/BLK	#2	19	ORG	#5
8	WHT/YEL	#3	20	WHT	#6
9	GRN	#4	21	WHT/GRN	#7
10	YEL	—	22	BRN	#1
11	VIO	—	23	BRN	#2
12	WHT/ORG	#6	24	BLK TO BACK	

25	BLK TO FRONT BLK CONN	
26	BLU	#2
27	BLU	#1
28	WHT/VIO	TO HV POT #1
29	WHT/VIO	TO BACK #2
30	WHT/RED	
31	N/C	
32	BLK SILVER CONN	
33	N/C	
34	RED	

LEFT BOARD TOP CONNS
HICKOK PS-5055 POWER SUPPLY
11/30/2017 LW

RANGE	MIN	MAX	NOM POS	CLUTCH
.05	.088	.022	10K	.028
.25	.270	.060	8K	.110
1.0	1.550	.250	8K	.450

INCREASED OUTPUT VOLTAGE
SLIGHTLY DECREASES LIMIT VALUE

AMPS FS = 98.6 mV = 135 ma = 1.0A
VOLTS FS = 99.5 mV = 40.7V = 10.29V
10V = 9.7 Reading, 40V = 9.7 reading 3% Low

MOUNTED BACKWARDS

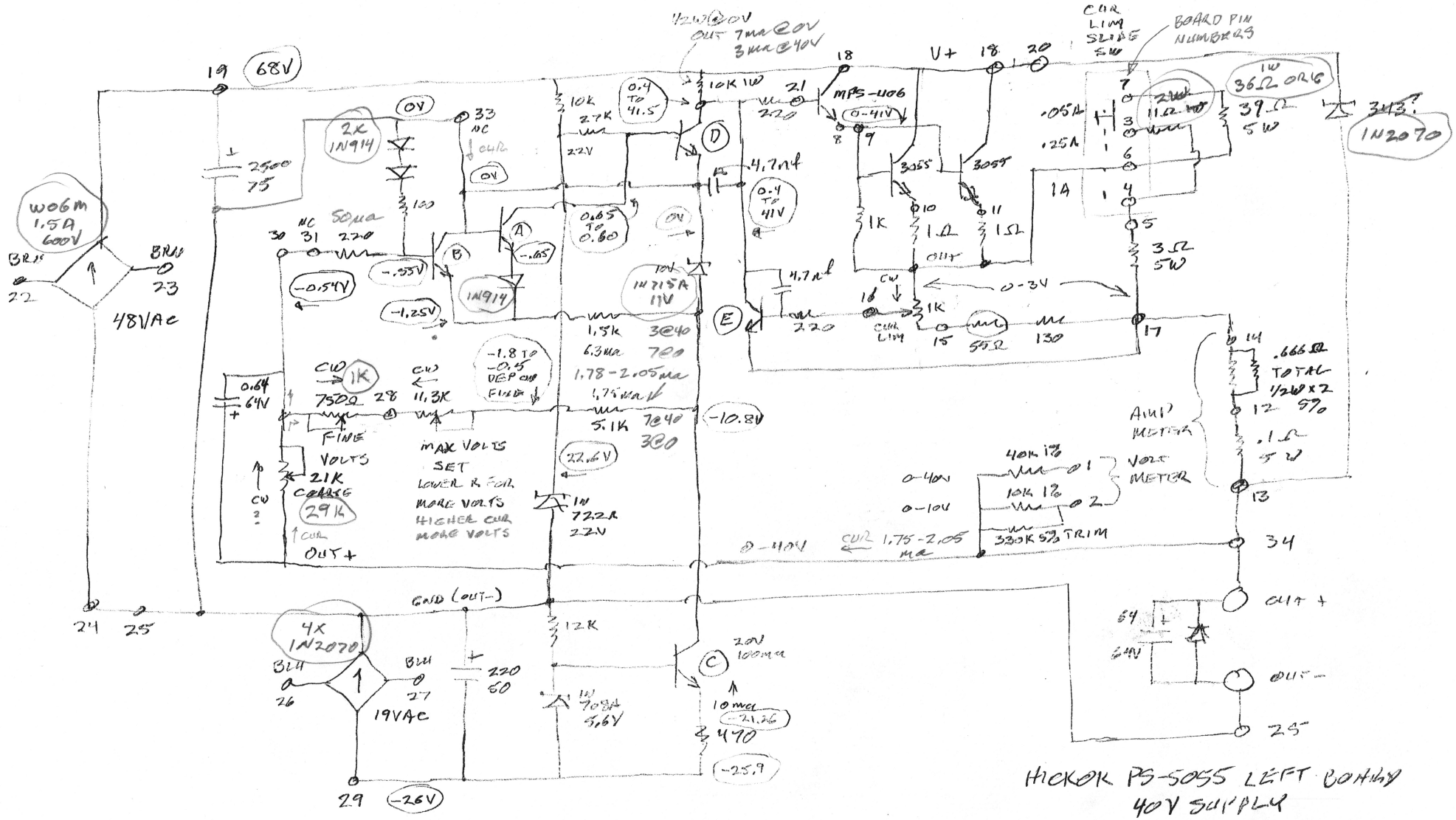
MPS-U06
"323"

C B E

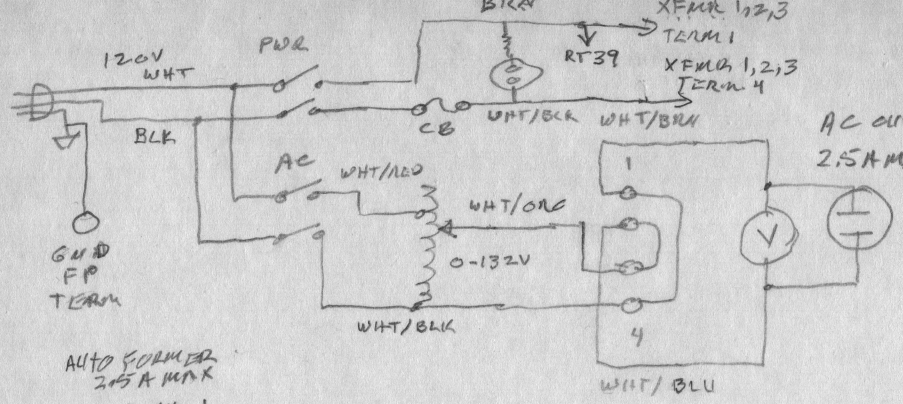
WHT/BLU
60V
2A
HFE = 100
WHT/GRN
WHT/YEL

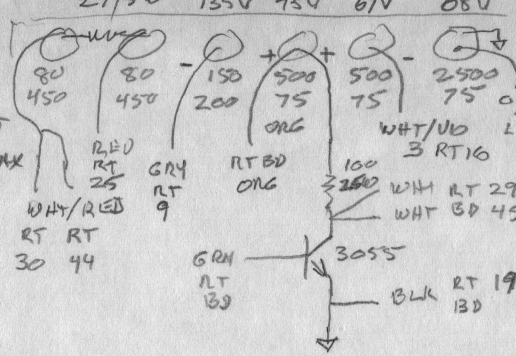
BETTER VALUES:
3@5W, 9.1@1W, 47@1/2W 5% or BETTER

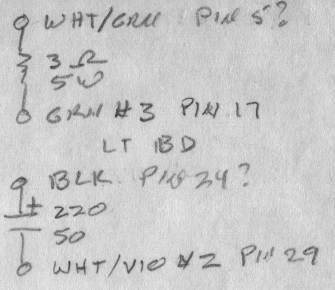
3W	3Ω	1A	3V
7/8W	14Ω	.25A	3.1V .214A
1/8W	53Ω	.05A	2.65 .057A



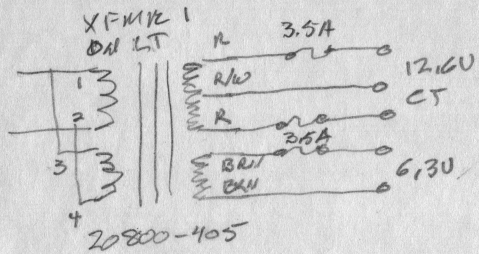
HICKOK PS-5055 LEFT BOARD
40V SUPPLY
11/11/2017
LW

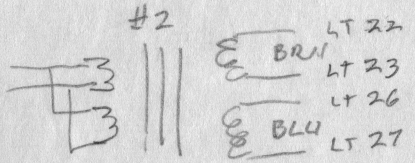


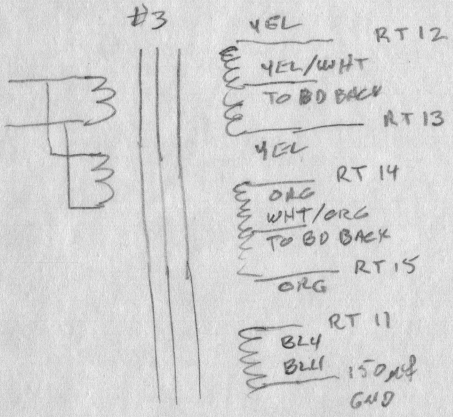


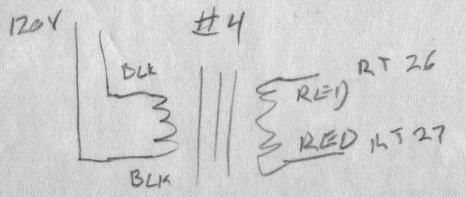


AUTO FORMER 2.5A MAX

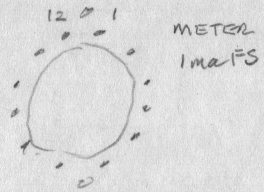








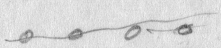
VOLTMETER SW



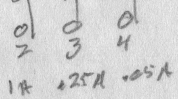
1 ORG TO METER +
2 GRN TO 5
3 GRN TO 10/WHT/BLU TO RT #6
4 BLK TO 40V BLK OUT
5 WHT TO -150 BLU OUT/GRN TO 2
6 JMP TO 7
7 JMP TO 6/BLK TO
8 GRY TO METER -
9 WHT/BLK TO RT #
10 GRN TO 3
11 WHT/BLU LT #1
12 GRY TO LT #2

#2 TO #3 EXCEPT -100 POS

1A .25 .05
BACK
CUR LIM SW

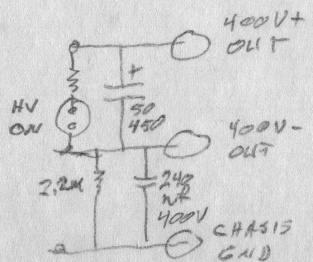


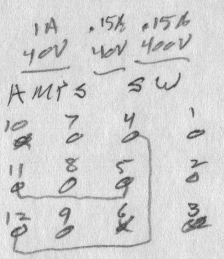
1 WHT/BLK TO LT 7
2 WHT/GRN TO LT 3
3 YEL TO LT 6
YEL TO CUR LIM POT TOP
4 GRY TO LT #4



7-3 1A
3-6 .25A
6-4 .05A
CUR LIM POT = 1K

CUR METER 1MA FS

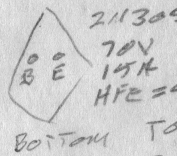


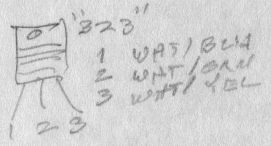


1 WHT/VIO
2 GRY
3 NC
400V 150MA

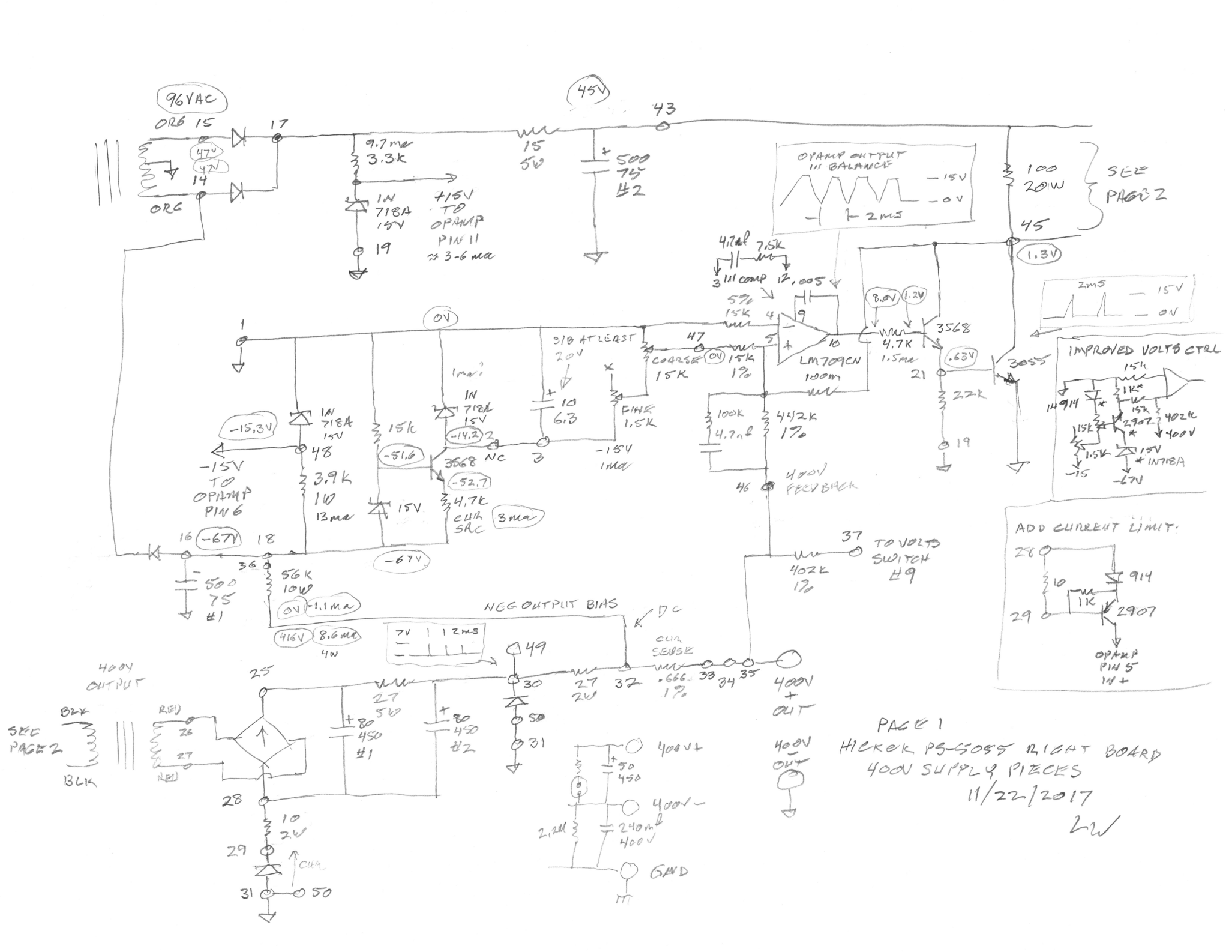
4 GRN TO 12
5 JMP TO 11/BLK TO AMMETER -
6 NC
7 WHT TO LT #14
8 WHT/BRN TO LT #13
9 WHT/ORG TO LT #12
10 NC
11 JMP TO 5
12 GRN TO 4
RED TO AMMETER +

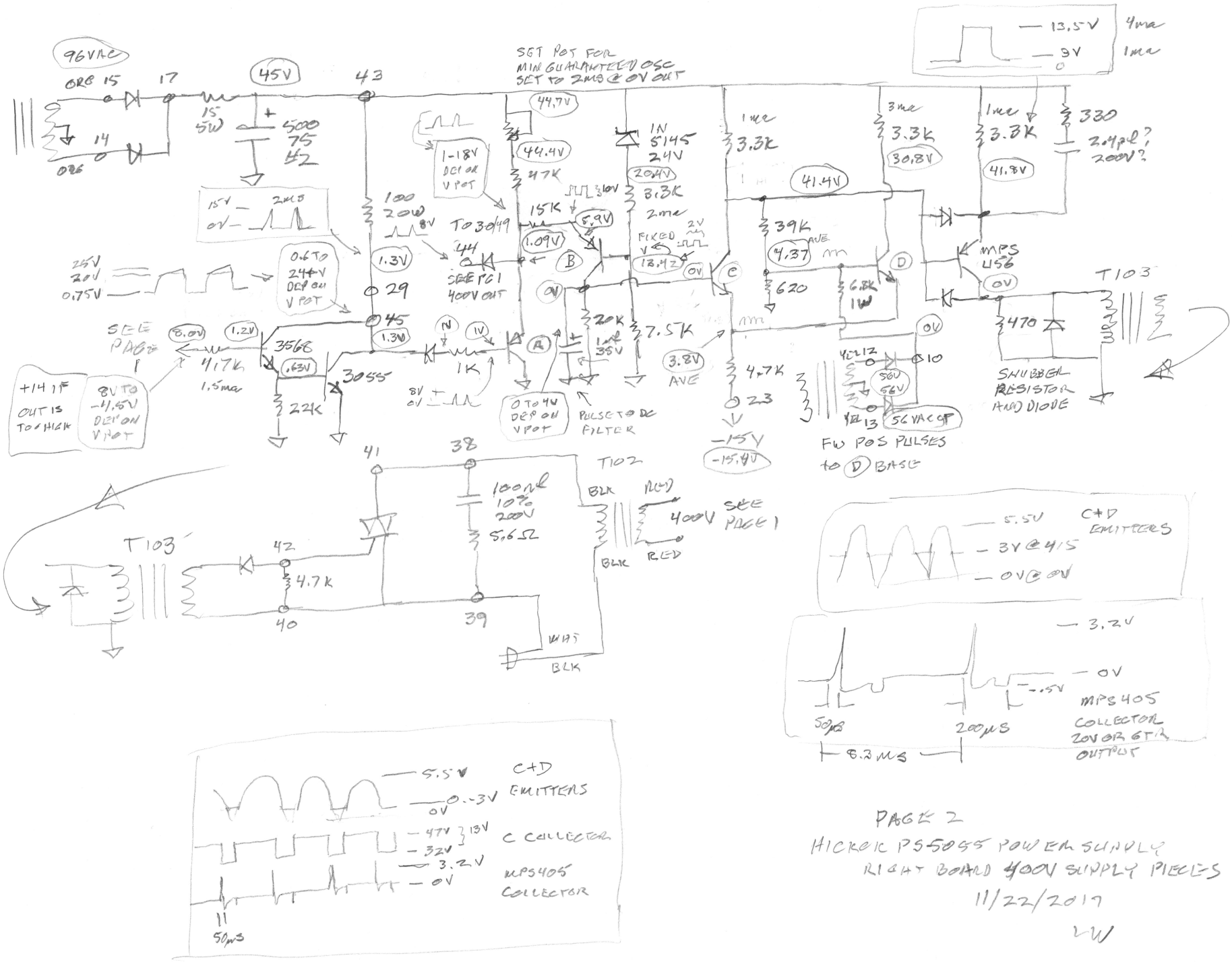
40V 150MA
40V COMM
40V 1A





HICKOK PS-5055T POWER SUPPLY CHASSIS WIRING BITS


96VAC
ORG 15
17
47V
47V
14
ORG
9.7ma
3.3k
1N 718A 15V
19
+15V TO OPAMP PIN 11 ≈ 3-6 ma
45V
43
15 5W
500 75 #2
OPAMP OUTPUT IN BALANCE
-15V
-0V
2MS
100 20W
45
SEE PAGE 2
1.3V
4.7uf
7.5K
3 111 COMP
12,005
5% 15K
4
9
5
10
LM709CN
100ma
8.0V
1.2V
3568
4.7K 1.5ma
21
.63V
3055
22K
19
2MS
15V
0V
IMPROVED VOLTS CTRL
15K
1K
15K
2907
402K
400V
1.5K
1.5K
1N718A
-15
-67V
1
0V
3/8 AT LEAST 20V
47
COARSE 15K
0V
15K 1%
10 6.3
FINE 1.5K
-15V 1ma
1ma
1N 718A 15V
-14.2
2
3
3568 NC
-51.6
-52.7
4.7K CUR SRC
3ma
15K
15V
-67V
-15,3V
-15V TO OPAMP PIN 6
48
3.9K 1W 13ma
16
-67V
18
36
500 75 #1
56K 10W
0V
-1.1ma
416V
8.6ma
4W
100K
4.7mf
44.2K 1%
400V FEEDBACK
46
37
TO VOLTS SWITCH #9
402K 1%
ADD CURRENT LIMIT
26
10
914
1K
2907
29
OPAMP PIN 5 IN +
NCG OUTPUT BIAS
DC
7V
1 1 2MS
49
CUR SENSE
.666
1%
38
34
35
400V + OUT
400V - OUT
400V OUTPUT
25
27 5W
30
27 2W
32
80 450 #1
80 450 #2
50
31
BLK
SEE PAGE 2
RED
26
27
RED
BLK
28
10 2W
29
CUR
31
50
400V+
50 450
400V-
2.2M
240mf 400V
GND
PAGE 1
HICKOK PS-5055 RIGHT BOARD
400V SUPPLY PIECES
11/22/2017
LW



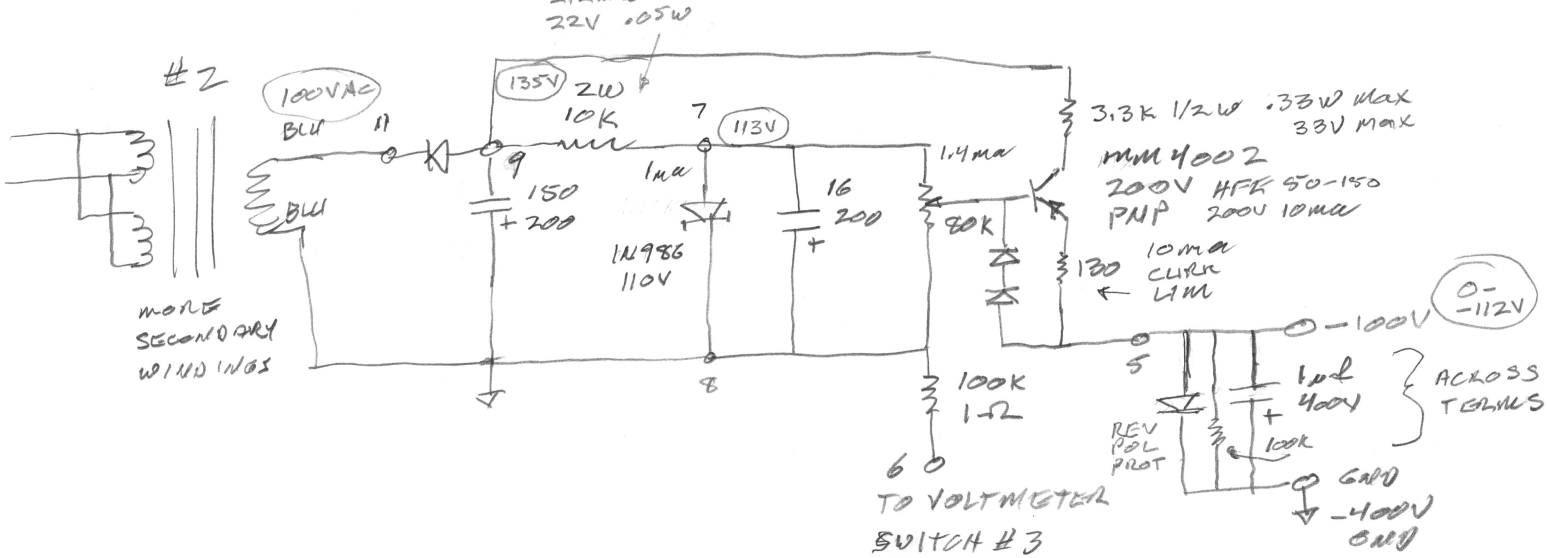
PAGE 2

HICKOK PS5055 POWER SUPPLY

RIGHT BOARD 400V SUPPLY PIECES

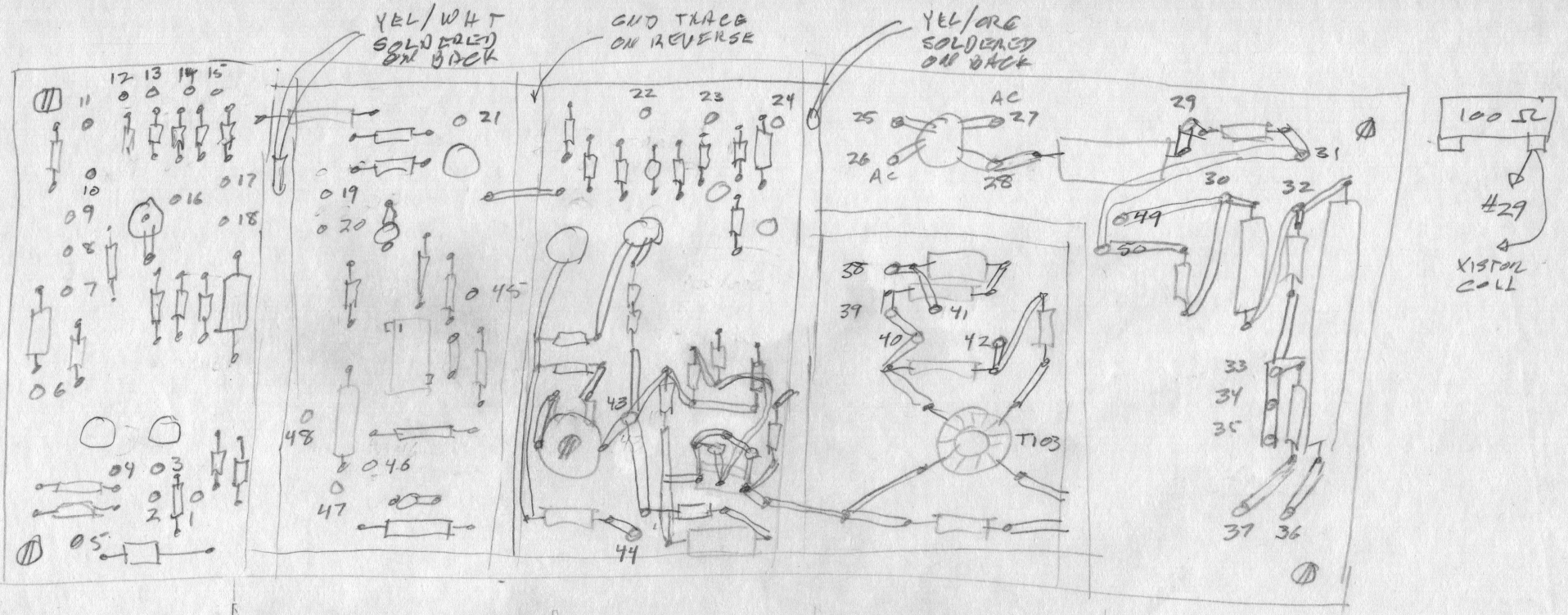
11/22/2017

LW



MM4002 IS TO-39 CAN, NO HEAT SINK.
ASSUME 1W MAX @ 25C
IF OUTPUT SHORTED, WILL HAVE 90V @ 10ma,
= 900mW. IN SPEC, BARELY

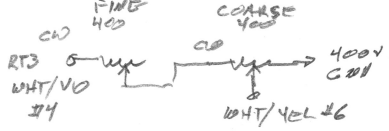
HICKOK PS-5055
RIGHT BOARD
-100V SUPPLY
11/20/2017
LW



1	BLK	—	13	YEL #2	25	RED —	37	WHT/BLK #2
2	N/C	—	14	ORG #3	26	RED #2	38	BLK BLK CONN
3	WHT/VIO	#4	15	ORG #4	27	RED #1	39	WHT TO PWR SW #1
4	WHT/GRN	#3	16	WHT/VIO #3	28	BLK SILVER CONN	40	GRY #2
5	WHT	#2	17	ORG #5	29	WHT TO 100Ω R	41	GRN #3
6	WHT/BLU	#1	18	WHT/VIO #4	30	WHT/RED	42	YEL #4
7	WHT/ORG	—	19	BLK TO XISTOR	31	BLK TO FRONT	43	ORG —
8	BLK	—	20	BLK TO F.P. SWITCH	32	WHT/VIO	44	WHT/RED —
9	GRY	#1	21	GRN TO XISTOR	33	GRY #1	45	WHT TO XISTOR COIL. & #29
10	WHT	#2	22	BLK	34	GRY #2	46	GRY —
11	BLU	—	23	WHT/VIO TO #48	35	GRY #3	47	WHT/MED #6
12	YEL	#1	24	WHT TO #10	36	WHT/VIO #1	48	WHT/VIO #5
					UPPER RIGHT →		49	N/C
							50	N/C

HICKOK
2421-149

HICKOK PS-5055 POWER SUPPLY
RIGHT BOARD TOP CONNS
11/31/2017
LW



Right Board

Pin	Wire Color	Marker	To
1	BLK	-	FP TO #31 400V- STAR GND
2	n/c	—	N/C
3	WHT/VIO	4	TO 400V FINE POT CW
4	WHT/GRN	3	FP -100V POT ARM
5	WHT	2	FP -100 - OUT
6	WHT/BLU	1	FP VOLTMETER SW #3 W/ FERRITE BEAD ON BOARD END
7	WHT/ORG	-	FP -100 POT CW TOP
8	BLK	-	FP 400V - STAR GND
9	GRY	1	BP 150@200V CAP - ONLY
10	WHT	2	TO #24
11	BLU 100 VAC	-	PROB -100V WINDING NO CT / TO XFMR WINDING OTHER END TO 150@200+ & 400V STAR -
12	YEL 112 VAC	1	XFMR PROB 400V WINDING
13	YEL	2	CT IS YEL/WHT TO GND TRACE ON BOARD BACK
14	ORG 96 VAC	3	XFMR, PROB LV BIAS WINDING
15	ORG	4	CT IS WHT/ORG TO GND TRACE ON BOARD ISBACK
16	WHT/VIO	3	BP 500@75 #1 CAP + ONLY, CAP - TO 400V STAR GND
17	ORG	5	15Ω 5W RESISTOR LT ON TERM STRIP / RT TO 400V STAR GND
18	WHT/VIO	4	TO WHT/VIO #1, #36
19	BLK	-	to xistor 400V-STAR GND
20	BLK	-	to f.p. switch 400V STAR GND
21	GRN	-	to xistor 3055
22	BLK		400V STAR GND
23	WHT/VIO	-	to #48
24	WHT	-	to #10
25	RED	-	80@450 #1+
26	RED	2	XFMR WINDING, NO CT
27	RED	1	ONLY WINDING ON XFMR, NO DUAL PRIMARY
28	BLK	silver conn	80@450 #1+2 -, NOT TO COMM GND!
29	WHT	-	to 100 ohm resistor & xistor coll & #45 / LEFT TO #43
30	WHT/RED	-	80@450 #2 +, also #44
31	BLK	-	to front TO #1 400V - STAR GND
32	WHT/VIO	-	TO AMMETER SWITCH #1 4 3 2 1
33	GRY	1	TO AMMETER SWITCH #5 8 7 6 5
34	GRY	2	TO 400V + OUTPUT
35	GRY	3	TO #46
36	WHT/VIO	1	TO #18
37	WHT/BLK	2	TO VOLTMETER SW #9
38	BLK	black conn	TO XFMR PRIMARY, OTHER END TO WHT/BLK TO MAIN CB OUTPUT
39	WHT	1	to pwr switch
40	GRY	2	Q105 LT
41	GRN	3	Q105 COLLECTOR } MAC10-6, MAYBE REPLACED
42	YEL	4	Q105 RT
43	ORG	-	500@75 #2+, ALSO 100Ω 20W LEFT / RT TO #29
44	WHT/RED	-	80@450 #2+, ALSO #38
45	WHT	-	to xixtor collector & #29 100 ohm R
46	GRY	-	TO #35
47	WHT/YEL	6	FP 400V COARSE POT ARM
48	WHT/VIO	5	TO #23
49	n/c		
50	n/c		