

TO: ALL ACOUSTIC PROTECTION CENTERS
SUBJECT: MODEL 320 UNDER BIAS

Concerning the Model 320 Amplifiers, Serial Numbers 1001-1121, there may be a problem with low frequency distortion due to under bias. To cure the problem, simply tack a 1K ohm 1/2 watt resistor in parallel with the 680 ohm resistor, which is located across the base and emitter of the bias transistor (Q6), inserted into the heatsink from the power amp board (170079)

UNITS AFFECTED BEFORE SERIAL #	MODELS AFFECTED	BULLETIN #	APPROVED	DATE
320001122	320	1011	<i>[Signature]</i>	12-19

*CENTER VOLTAGE-measurement taken at positive side of output cap, should approximately half of supply voltage as indicated on sche

- **BIAS ADJUSTMENT-
1. turn bias control(R19) counter clockwise all the way
 2. connect to a 2 ohm load and 120 volts ac line.
 3. in the combined input (preamp) connect a 1khz 10 mil RMS sine wave. output from power amp should be approx 1 volt RMS with a crossover notch present on scope display.
 4. slowly turn bias control (R19) clockwise until crossover notch just disappears. IDLE CURRENT SHOULD BE 45-50 WATTS.
(caution: if misadjusted unit can overheat and fail.)

The following specification and trouble shooting guides are for Acoustic Models 320, 330. Used in conjunction with schematic # 1603, it should help you locate and make the repairs necessary to the above power amps.

SPECIFICATIONS

MODEL-320

POWER OUTPUT. a) 160 watts RMS @ 4 ohms
b) 300 watts RMS @ 2 ohms

INPUT..... a) 20mv into 0db jack to achieve max output
b) 80mv into -10db jack to achieve max output
c) 230mv into power amp input jack for max output

PREAMP OUT... a) 400mv out @ 1K ohms

MODEL-330

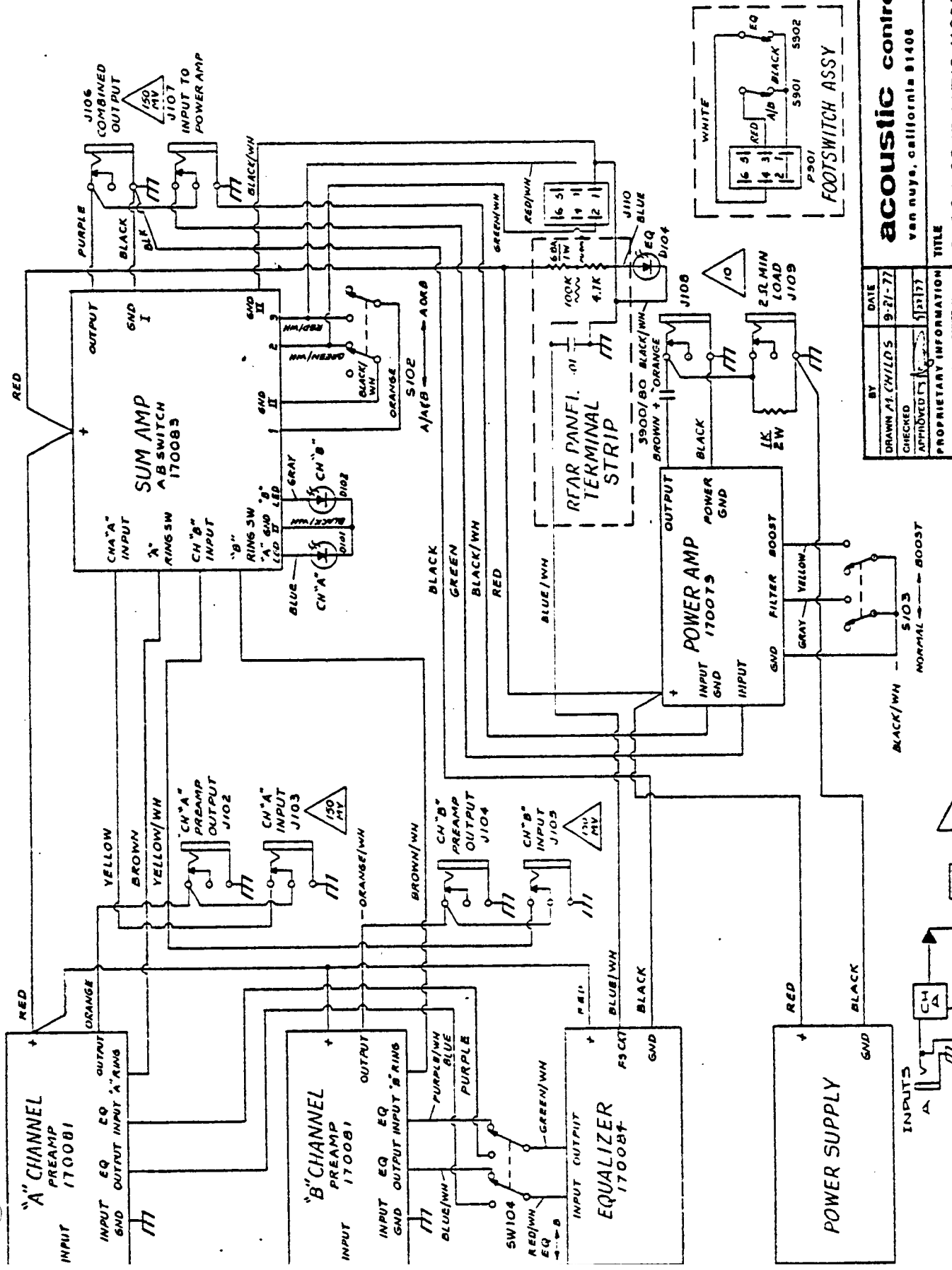
POWER OUTPUT. a) 160 watts RMS @ 4 ohms
b) 300 watts RMS @ 2 ohms

INPUT..... a) 20mv into 0db jack to achieve max output
b) 80mv into -10db jack to achieve max output
c) 230mv into power amp input jack for max output

PREAMP OUT... a) 400mv out @ 1K ohms

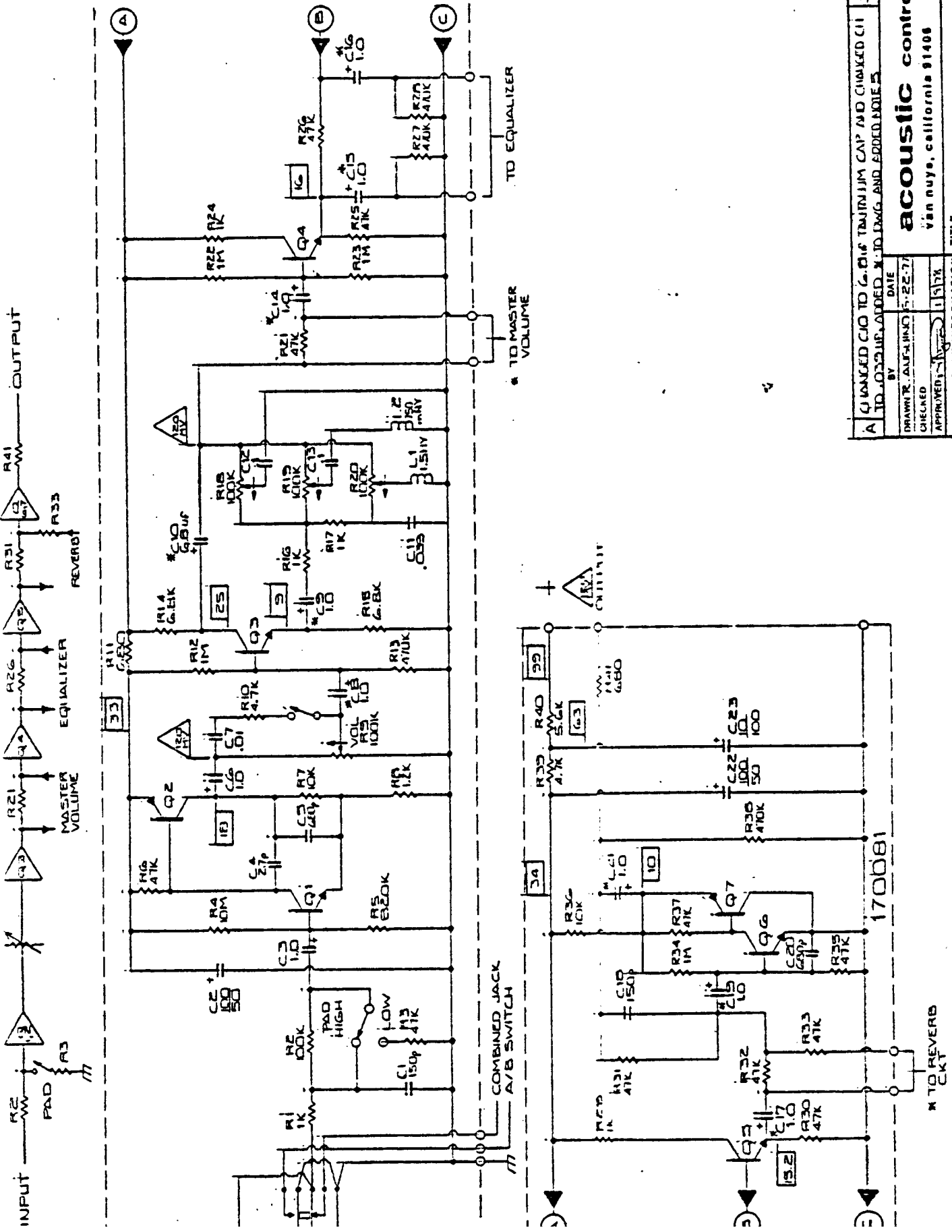
TROUBLE SHOOTING GUIDES

PROBLEM	SYMPTOM	CHECK POINTS
NO OUTPUT	FUSE BLOWN	SHORTED POWER TRANSISTORS Q12-19. SHORTED
	DRAWS EXCESS CURRENT	Q6 DEFECTIVE, R19 MISADJUSTED** Q8-10 LEAK
	LOW CENTER VOLTAGE*	Q5,7,10, DEFECTIVE.
	CENTER VOLTAGE* NEAR NORMAL	Q8 or 10 DEFECTIVE, D3 SHORTED
	HIGH CENTER VOLTAGE*	Q5,10 DEFECTIVE, Q3 OPEN.
LOW OUTPUT	EARLY NEGITIVE CLIPPING	Q9 DEFECTIVE, D5 LEAKY, R35 INCREASED IN
	EARLY POSITIVE CLIPPING	Q7 DEFECTIVE C8, D6 LEAKY, R29 INCREASED
	DECREASE OF INPUT SIGNAL BETWEEN R1 AND BASE OF Q3	Q1,2,11 DEFECTIVE, R36 INCREASED IN VALUE
	AGC CLAMPING SIGNAL EARLY	D8 LEAKY, R36 INCREASED IN VALUE.
	LOW VOLTAGE SUPPLY	CHECK 120-240 VOLTAGE SWITCH.
	SIGNAL SLOWLY DECREASES	USE OF SHIELDED SPEAKER CABLE
DISTORTED OUTPUT AT LOW LEVELS	CROSSOVER DISTORTION, LOW IDLE CURRENT	CHECK LINE VOLTAGE SWITCH. Q6 LEAKY, R19 MISADJUSTED**
RUNS HOT	HIGH IDLE CURRENT	Q6 DEFECTIVE, R19(BIAS) MISADJUSTED**.



acoustic control corp	
van nuys, california 91406	
BY	DATE
DRAWN AT: CHILDS	9-21-77
CHECKED	
APPROVED	10/1/77
PROPRIETARY INFORMATION	
TITLE	





A CHANGED C10 TO 6.0UF TANTANUM CAP AND CHANGED C11 TO 0.033UF, ADDED R10, DIMG, AND ADDED NOTE 2		3-16-78 JIC
BY	DATE	
DRAWN: ALF-JHND	5-22-77	
CHECKED		
APPROVED: [Signature]		

ACOUSTIC control corp
 Van Nuys, California 91406

170081

* TO REVERB CKT

* TO MASTER VOLUME

TO EQUALIZER

OUTPUT

INPUT

MASTER VOLUME

EQUALIZER

REVERB

(A)

(B)

(C)

(34)

(33)

(32)

(31)

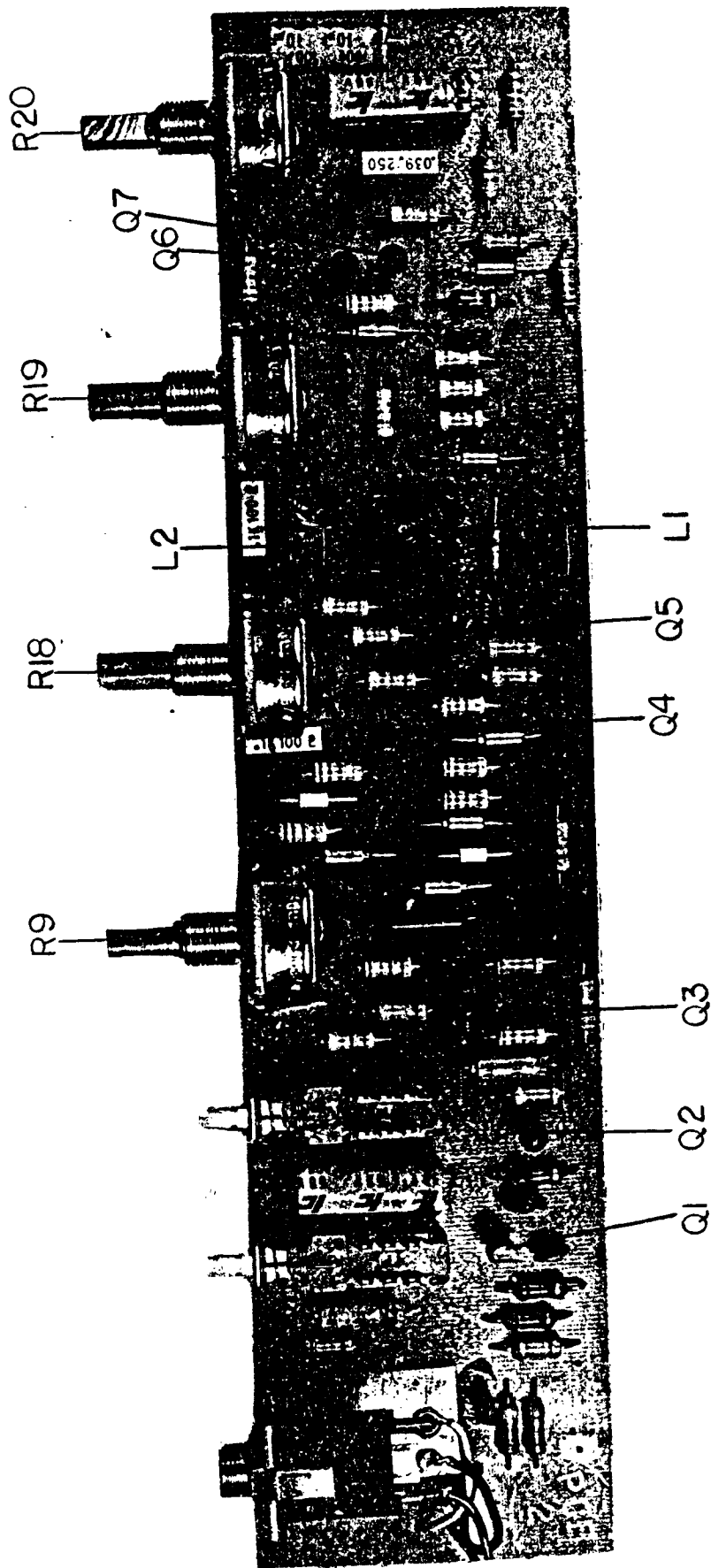
(30)

(29)

INITIAL

* TO REVERB CKT

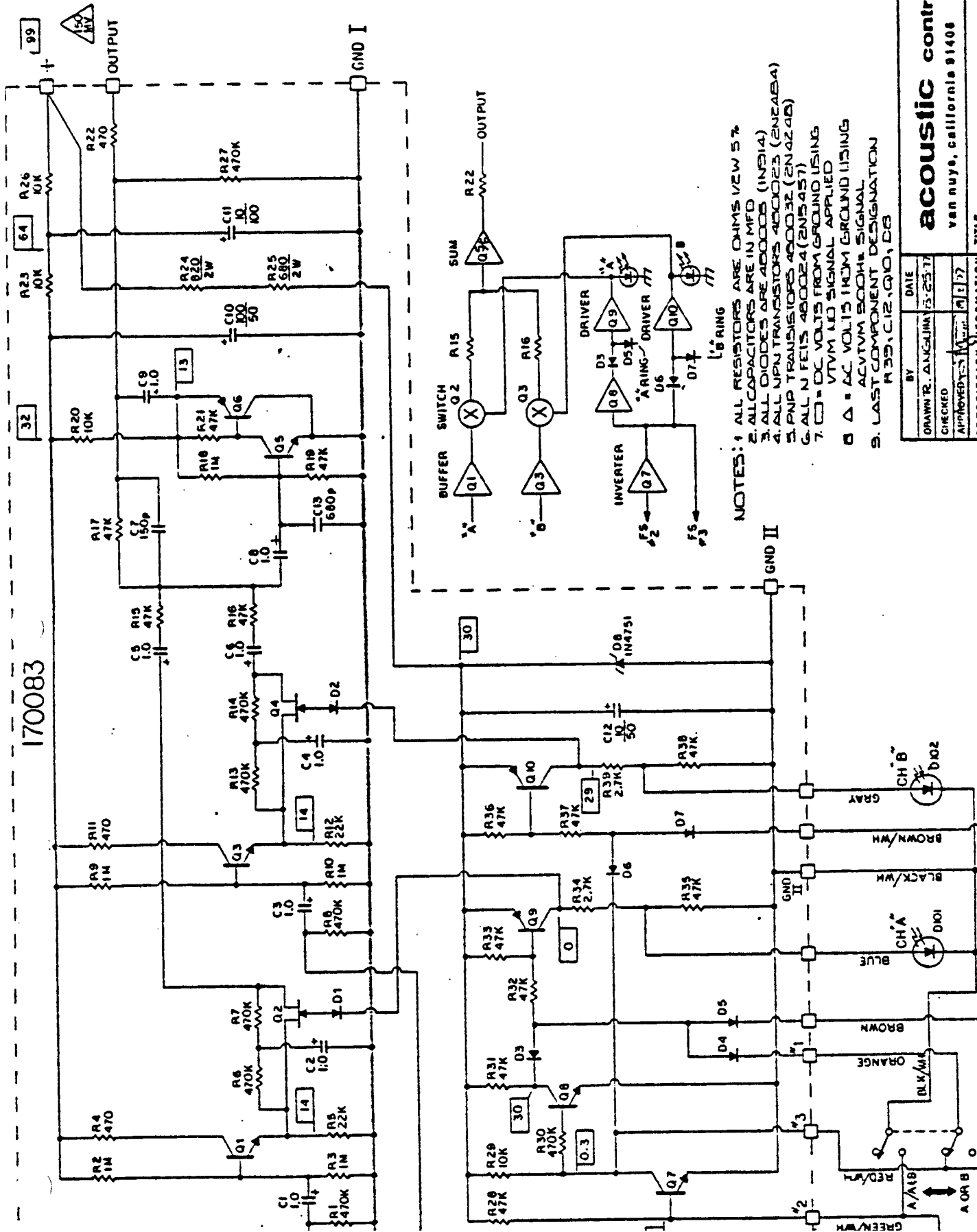
PICTORIAL
MODEL 320 - PRE-AMP ASSEMBLY 830058
SCHEMATIC CI611



PARTS LIST
 MODEL 320 PRE-AMP ASSEMBLY 830058
 SCHEMATIC C1611

Schematic Reference	DESCRIPTION	Acoustic Part No.
1	Printed Circuit Board, Pre-Amp	170081
2	Capacitor, Discs, 150pf	157007
3	Capacitor, Electrolytic, 100uf 50V	159007
4	Capacitor, Electrolytic, 1uf 50V	159001
5	Capacitor, Disc, 27pf	157003
6	Capacitor, 680pf	157010
7	Capacitor, Electrolytic, 1uf 50V	159001
8	Capacitor, Disc, .01	157016
9	Capacitor, 1uf 35V	154004
10	Capacitor, 1uf 35V	154004
11	Capacitor, 6.7uf 35V	154006
12	Capacitor, MM .039	158003
13	Capacitor, MM .1uf	158005
14	Capacitor, 1uf 35V	154004
15	Capacitor, 1uf 35V	154004
16	Capacitor, 1uf 35V	154004
17	Capacitor, 1uf 35V	154004
18	Capacitor, Disc, 150pf	157007
19	Capacitor, 1uf 35V	154004
20	Capacitor, Disc, 680pf	157010
21	Capacitor, 1uf 35V	154004
22	Capacitor, Electrolytic, 100uf 50V	159007
23	Capacitor, Electrolytic, 10uf 100V	140134
L 1	Input Jack Bracket	180002
L 2	Inductor 1.5Hy	180005
R 1	Inductor, 750MHY	476210
R 2	Resistor, 1K 1/2W	476410
R 3	Resistor, 100K 1/2W	476347
R 4	Resistor, 47K 1/2W	476610
R 5	Resistor, 10M 1/2W	476482
R 6	Resistor, 820K 1/2W	476347
R 7	Resistor, 47K 1/2W	476310
R 8	Resistor, 10K 1/2W	476212
R 9	Resistor, 1.2K 1/2W	475056
R 10	Rotary Pot 100K ohm	476247
R 11	Resistor, 4.7K 1/2W	476168
R 12	Resistor, 1M 1/2W	476510
R 13	Resistor, 470K 1/2W	476447
R 14	Resistor, 6.8K 1/2W	476268
R 15	Resistor, 6.8 K 1/2W	476268
R 16	Resistor, 1K	476210
R 17	Resistor, 1K	476210
R 18	Rotary Pot 100K ohm	475056
R 19	Rotary Pot 100K ohm	475056
R 21	Resistor, 47K 1/2W	476347
R 22	Resistor, 1M 1/2W	476510
R 27	Resistor, 470K 1/2W	476447
R 28	Resistor, 470K 1/2W	476447
R 29	Resistor, 1K 1/2W	476210
R 30	Resistor, 47K 1/2W	476347
R 31	Resistor, 47K 1/2W	476347
R 32	Resistor, 47K 1/2W	476347
R 33	Resistor, 47K 1/2W	476347
R 34	Resistor, 1M 1/2W	476510
R 35	Resistor, 47K 1/2W	476347
R 36	Resistor, 10K 1/2W	476310
R 37	Resistor, 47K 1/2W	476347
R 38	Resistor, 470K 1/2W	476447
R 39	Resistor, 4.7K 1/2W	476247
R 40	Resistor, 5.6K 1/2W	476256
R 41	Resistor, 680 1/2W	476168
Q 1	Transistor, NPN	480023
Q 2	Transistor, PNP 2N4248	480032
Q 3	Transistor, NPN	480023
Q 4	Transistor, NPN	480023
Q 5	Transistor, NPN	480023
Q 6	Transistor, NPN	480023
Q 7	Transistor, PNP 2N4248	480032

170083

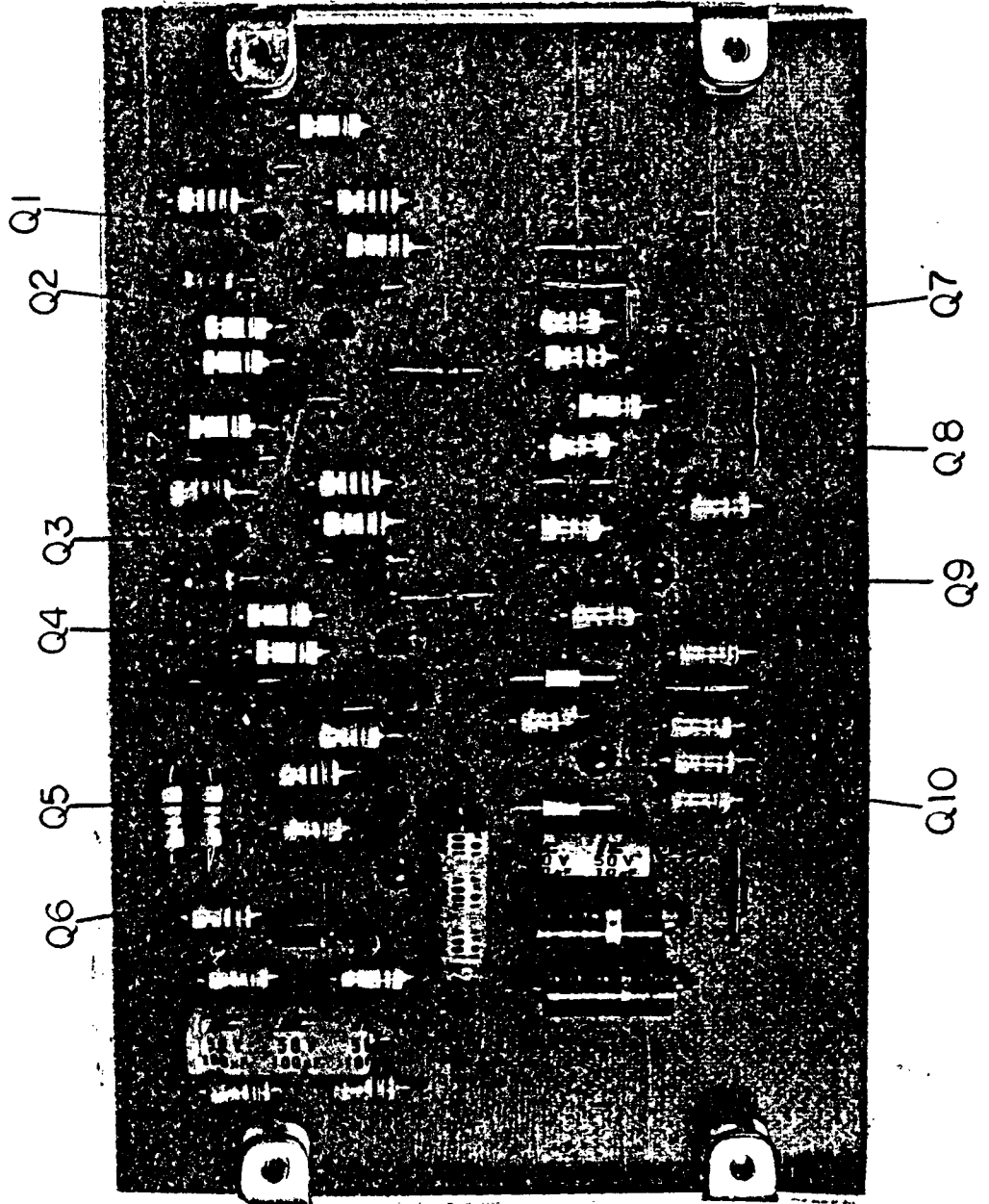


- NOTES: 1 ALL RESISTORS ARE OHMS UNLESS OTHERWISE SPECIFIED
 2 ALL CAPACITORS ARE IN MFD
 3 ALL DIODES ARE 1N914
 4 ALL PNP TRANSISTORS ARE 2N2904 (2N2904A)
 5 ALL NPN TRANSISTORS ARE 2N424 (2N424A)
 6 ALL NPN TRANSISTORS ARE 2N5457
 7 □ = DC VOLTS FROM GROUND USING VTVM 1.0 SIGNAL APPLIED
 □ Δ = AC VOLTS FROM GROUND USING ACVTVM 500Hz SIGNAL
 8. LAST COMPONENT DESIGNATION R 29, C 12, Q 10, D 8

BY	DATE
DRAWN R. ALKALINA	5-25-71
CHECKED	
APPROVED	10/2/77

ACOUSTIC control corp
 van nuys, california 91406

PICTORIAL
MODEL 320 - SUM-AMP ASSEMBLY 830059
SCHEMATIC C1624



MODEL 320 SUM AM ASSEMBLY 830059
SCHEMATIC C1624

Schematic Reference	DESCRIPTION	Acoustic Part No.
R 38	Resistor, 47K ohm, 5%, 1/2W	476347
R 39	Resistor, 2.7K ohm, 5%, 1/2W	476227
D 1	Diode, IN914	480005
D 2	Diode, IN914	480005
D 3	Diode, IN914	480005
D 4	Diode, IN914	480005
D 5	Diode, IN914	480005
D 6	Diode, IN914	480005
D 7	Diode, IN914	480005
D 8	Diode Zener, IN4751	480027
Q 1	Transistor, NPN	480023
Q 2	Transistor, 2N5457 N FET	480024
Q 3	Transistor, NPN	480023
Q 4	Transistor, NPN	480024
Q 5	Transistor, NPN	480023
Q 6	Transistor, PNP 2N4248	480032
Q 7	Transistor, NPN	480023
Q 8	Transistor, NPN	480023
Q 9	Transistor, PNP 2N4248	480032
Q 10	Transistor, PNP 2N4248	480032

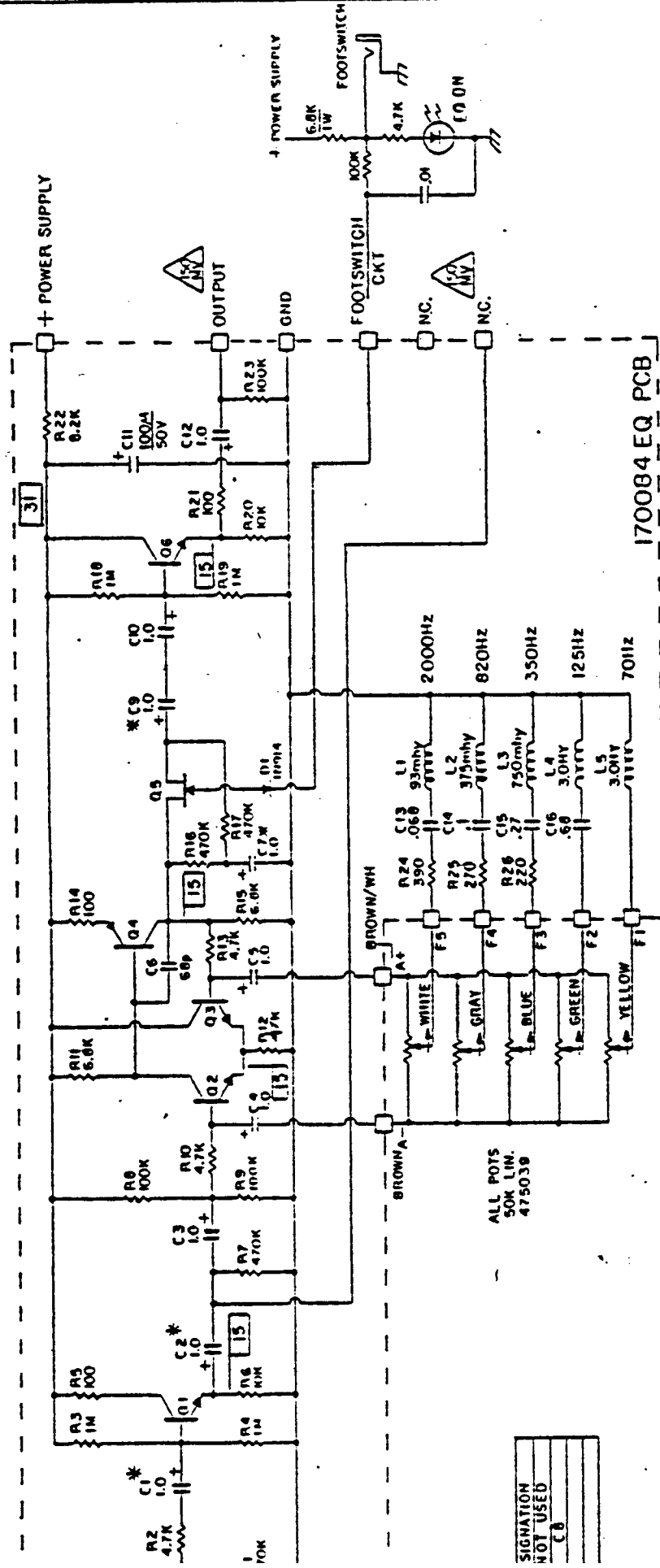
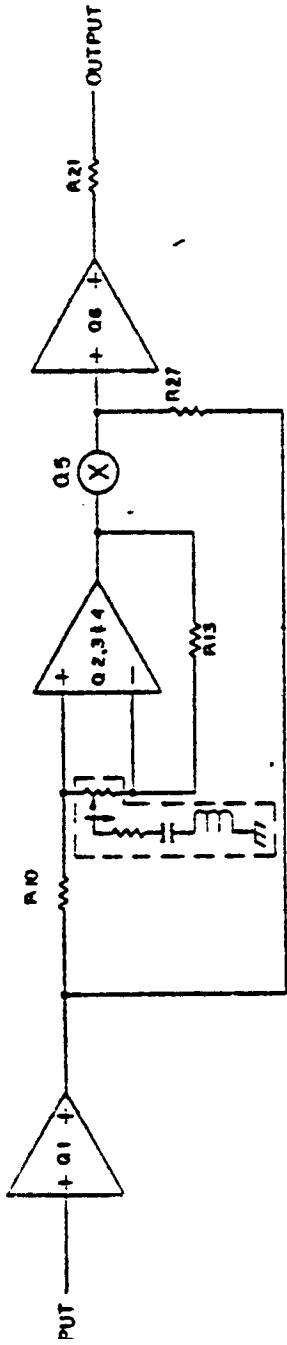
Schematic Reference	DESCRIPTION	Acoustic Part No.
1	Printed Circuit Board, Sum-Amp A/B Switch	170083
2	Capacitor, 1uf 35V	154004
3	Capacitor, 1uf 35V	154004
4	Capacitor, 1uf 35V	154004
5	Capacitor, 1uf 35V	154004
6	Capacitor, 1uf 35V	154004
7	Capacitor, Disc, 150pf	154007
8	Capacitor, 1uf 35V	154004
9	Capacitor, 1uf 35V	154004
10	Capacitor, Electrolytic, 100uf 50V	159007
11	Capacitor, Electrolytic, 10uf 100V	159008
12	Capacitor, Electrolytic, 10uf 50V	159004
13	Capacitor, Disc, 680pf	151010
1	Resistor, 470K ohm, 5%, 1/2W	476447
2	Resistor, 1M ohm, 5%, 1/2W	476510
3	Resistor, 1M ohm, 5%, 1/2W	476510
4	Resistor, 470 ohm, 5%, 1/2W	476147
5	Resistor, 22K ohm, 5%, 1/2W	476322
6	Resistor, 470K ohm, 5%, 1/2W	476447
7	Resistor, 470K ohm, 5%, 1/2W	476447
8	Resistor, 470K ohm, 5%, 1/2W	476347
9	Resistor, 1M ohm, 5%, 1/2W	476347
10	Resistor, 1M ohm, 5%, 1/2W	476510
11	Resistor, 470 ohm, 5%, 1/2W	476510
12	Resistor, 22K ohm, 5%, 1/2W	476147
13	Resistor, 470K ohm, 5%, 1/2W	476322
14	Resistor, 470K ohm, 5%, 1/2W	476447
15	Resistor, 47K ohm, 5%, 1/2W	476347
16	Resistor, 47K ohm, 5%, 1/2W	476347
17	Resistor, 47K ohm, 5%, 1/2W	476347
18	Resistor, 1M ohm, 5%, 1/2W	476510
19	Resistor, 47K ohm, 5%, 1/2W	476347
20	Resistor, 10K ohm, 5%, 1/2W	476310
21	Resistor, 47K ohm, 5%, 1/2W	476347
22	Resistor, 470 ohm, 5%, 1/2W	476147
23	Resistor, 10K ohm, 5%, 1/2W	476310
24	Resistor, 820 ohm, 5%, 2W	472182
25	Resistor, 680 ohm, 5%, 2W	472168
26	Resistor, 10K ohm, 5%, 1/2W	476310
27	Resistor, 470K ohm, 5%, 1/2W	476447
28	Resistor, 47K ohm, 5%, 1/2W	476347
29	Resistor, 10K ohm, 5%, 1/2W	476310
30	Resistor, 470K ohm, 5%, 1/2W	476447
31	Resistor, 47K ohm, 5%, 1/2W	476347
32	Resistor, 47K ohm, 5%, 1/2W	476347
33	Resistor, 47K ohm, 5%, 1/2W	476347
34	Resistor, 2.7K ohm, 5%, 1/2W	476227
35	Resistor, 47K ohm, 5%, 1/2W	476347

INPUT BUFFER

EQ AMP

SWITCH

OUTPUT BUFFER



SIGNATURE
NOT USED
CB

ALL POTS
50K LIN.
47503B

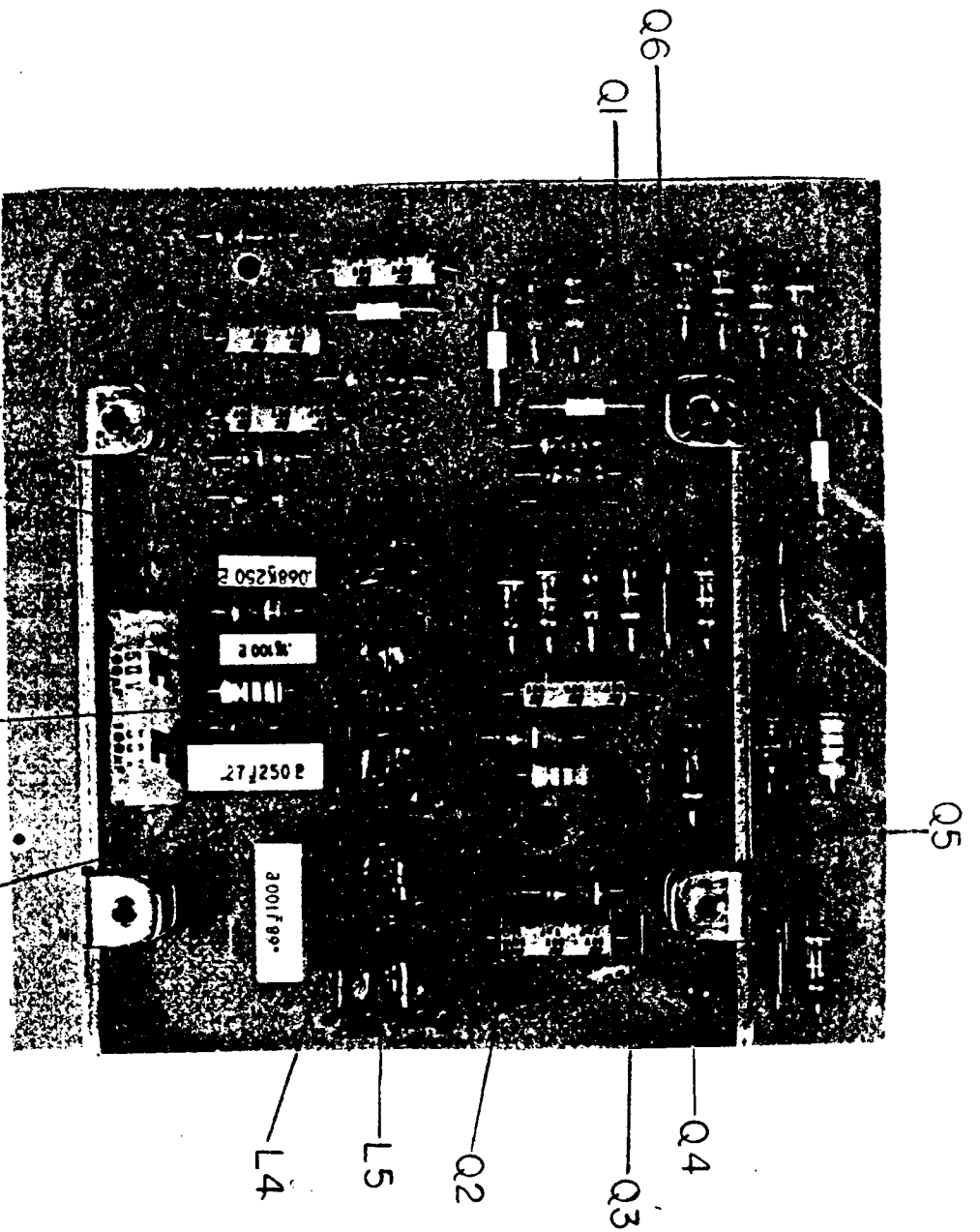
B REVISED PER ECN 1644 2-15-78/10
A CIRCULATED FOR R27 ADD'D WIRE GAUGES 11/11/77 2-3-77/17

BY	DATE	TITLE
DRAWN R. A. KESLING	1-25-77	acoustic control corp
CHECKED		van nuys, california 91406
APPROVED	2/15/77	
PROPRIETARY INFORMATION		

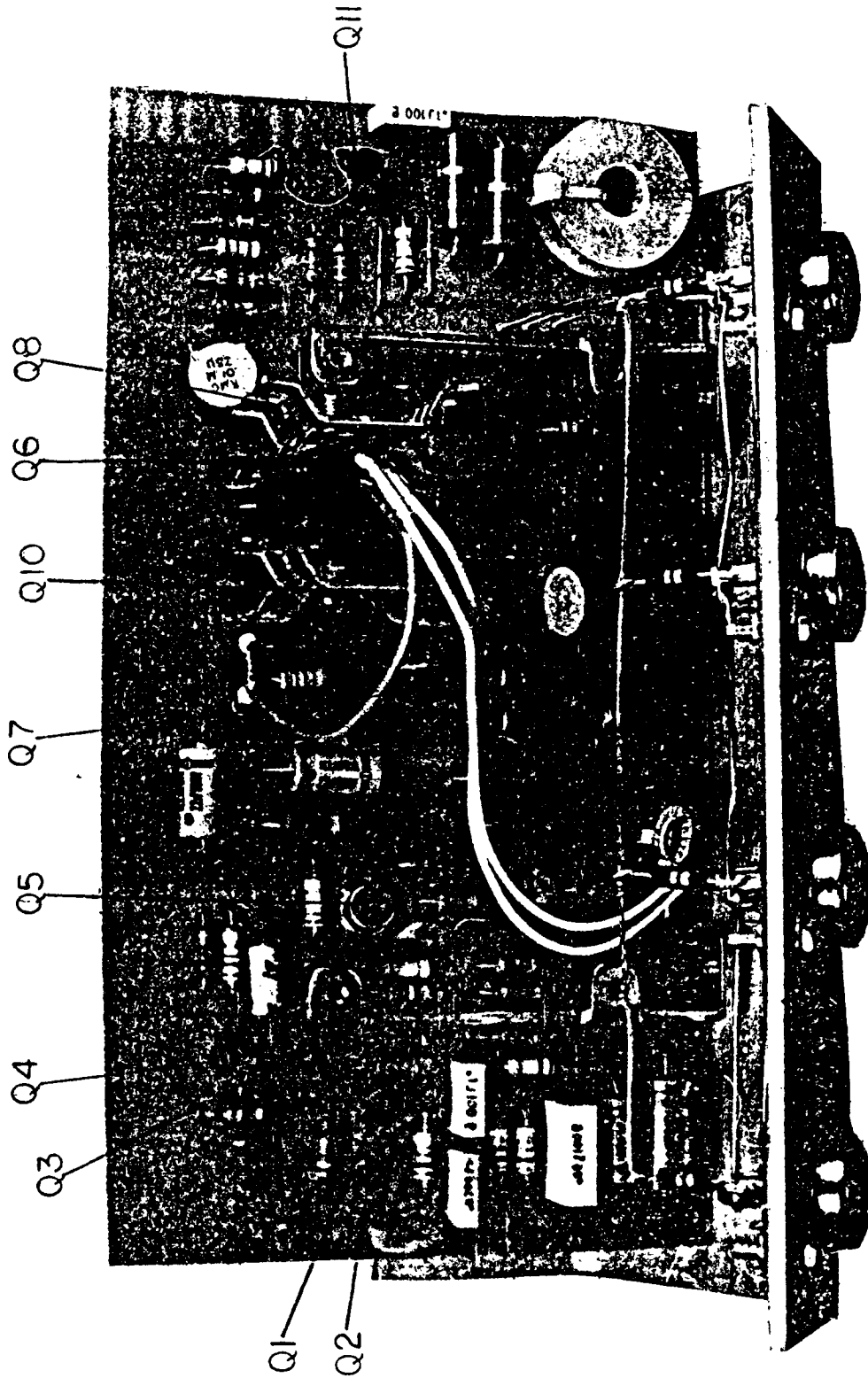
TORS ARE IN OHMS 1/2W 5%
TORS ARE IN MFD
6-480023-2N2404
2032-2N2408
2024-2N2457

PARTS LIST
MODEL 320 EQUALIZER ASSEMBLY 830060
SCHEMATIC C1623

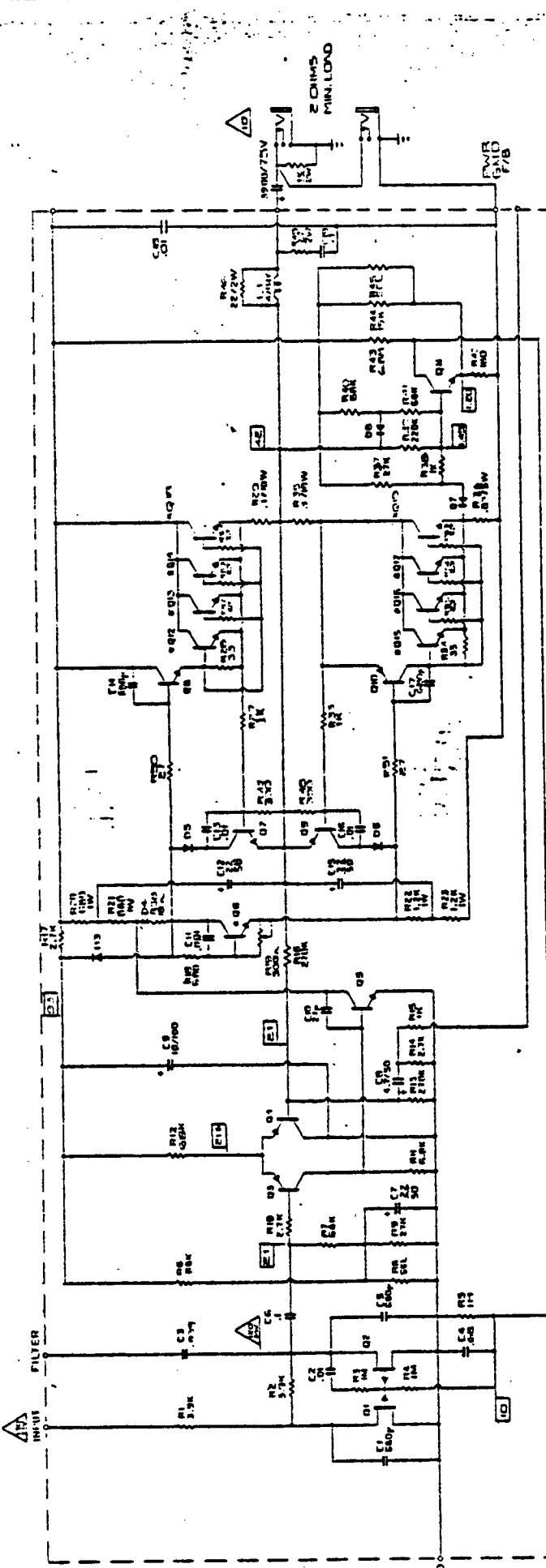
Schematic Reference	DESCRIPTION	Acoustic Part No.	Schematic Reference	DESCRIPTION	Acoustic Part No.
PCB	Printed Circuit Board	170084	D 1	Diode IN914	480005
C 1	Capacitor, Electrolytic, 1uf, 50V	159001	Q 1	Transistor, NPN, 2N2484	480023
C 2	Capacitor, Electrolytic, 1uf, 50V	159001	Q 2	Transistor, NPN, 2N2484	480023
C 3	Capacitor, Electrolytic, 1uf, 50V	159001	Q 3	Transistor, NPN, 2N2484	480023
C 4	Capacitor, Electrolytic, 1uf, 50V	159001	Q 4	Transistor, PNP, 2N4248	480032
C 5	Capacitor, Electrolytic, 1uf, 50V	159001	Q 5	Transistor, N FET, 2N5457	480024
C 6	Capacitor, Disc, 68pf	157005	Q 6	Transistor, NPN, 2N2484	480023
C 7	Capacitor, Tantulum, 1uf, 35V	154004			
C 8	Capacitor, Disc, 27pf	157003			
C 9	Capacitor, Tantulum, 1uf, 35V	154004			
C 10	Capacitor, Electrolytic, 1uf, 50V	159001			
C 11	Capacitor, Electrolytic, 100uf, 50V	159007			
C 12	Capacitor, Electrolytic, 1uf, 50V	159001			
C 13	Capacitor, MM, .068uf	158004			
C 14	Capacitor, MM, .1uf	158005			
C 15	Capacitor, MM, .27	158007			
C 16	Capacitor, MM, .68	158009			
L 1	Inductor, 93MHY	180012			
L 2	Inductor, 375MHY	180004			
L 3	Inductor, 750MHY	180005			
L 4	Inductor, 3.00HY	180006			
L 5	Inductor, 3.00HY	180006			
R 1	Resistor, 470K ohm, 5%, 1/2watt	476447			
R 2	Resistor, 4.7K ohm, 5%, 1/2watt	476247			
R 3	Resistor, 1M ohm, 5%, 1/2watt	476510			
R 4	Resistor, 1M ohm, 5%, 1/2watt	476510			
R 5	Resistor, 100 ohm, 5%, 1/2watt	476110			
R 6	Resistor, 10K ohm, 5%, 1/2watt	476310			
R 7	Resistor, 470K ohm, 5%, 1/2watt	476447			
R 8	Resistor, 100K ohm, 5%, 1/2watt	476410			
R 9	Resistor, 270K ohm, 5%, 1/2watt	476427			
R 10	Resistor, 4.7K ohm, 5%, 1/2watt	476247			
R 11	Resistor, 6.8K ohm, 5%, 1/2watt	476268			
R 12	Resistor, 100K ohm, 5%, 1/2watt	476410			
R 13	Resistor, 4.7K ohm, 5%, 1/2watt	476247			
R 14	Resistor, 100 ohm, 5%, 1/2watt	476110			
R 15	Resistor, 6.8 ohm, 5%, 1/2watt	476268			
R 16	Resistor, 470K ohm, 5%, 1/2watt	476447			
R 17	Resistor, 470K ohm, 5%, 1/2watt	476447			
R 18	Resistor, 1M ohm, 5%, 1/2watt	476510			
R 19	Resistor, 1M ohm, 5%, 1/2watt	476510			
R 20	Resistor, 10K ohm, 5%, 1/2watt	476310			
R 21	Resistor, 100 ohm, 5%, 1/2watt	476110			
R 22	Resistor, 8.2K ohm, 5%, 1/2watt	476282			
R 23	Resistor, 100K ohm, 5%, 1/2watt	476410			
R 24	Resistor, 390 ohm, 5%, 1/2watt	476139			



PICTORIAL
 MODEL 320 EQUALIZER ASSEMBLY 830060
 SCHEMATIC C 1623



PICTORIAL
MODEL 320 POWER AMP ASSEMBLY 830057
SCHEMATIC D 1603



170079 FOMER AMP PCB
MODELS 1600 & 1300*

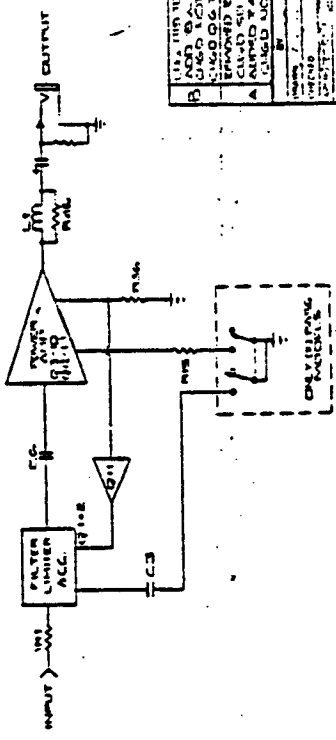
* TRANSISTORS MOUNTED ON HEATSINK

C1	ALUMINUM	10	100K	50V
C2	ALUMINUM	10	100K	50V
C3	ALUMINUM	10	100K	50V
C4	ALUMINUM	10	100K	50V
C5	ALUMINUM	10	100K	50V
C6	ALUMINUM	10	100K	50V
C7	ALUMINUM	10	100K	50V
C8	ALUMINUM	10	100K	50V
C9	ALUMINUM	10	100K	50V
C10	ALUMINUM	10	100K	50V

5 UNLESS NOTED OTHERWISE
RESISTORS ARE IN OHMS UNLESS NOTED OTHERWISE
CAPACITORS ARE IN MICROFARADS UNLESS NOTED OTHERWISE
DIODES ARE IN VOLTS UNLESS NOTED OTHERWISE
* DC VOLTS (VDC) FROM POWER SUPPLY
* TO SIGNAL (V) FROM POWER SUPPLY
* ALTERNATE SIGNAL USING
LAST COMPONENT DESIGNATIONS
PCB - C1 - U17 - DB - L1
PCB - C1 - U17 - DB - L1
* 2N4341 PNP
* 2N4351 PNP
* 2N2351 PNP
* 2N2907 NPN
* 2N1501 PNP
* 2N1502 PNP
* 2N1503 PNP
* 2N1504 PNP
* 2N1505 PNP
* 2N1506 PNP
* 2N1507 PNP
* 2N1508 PNP
* 2N1509 PNP
* 2N1510 PNP
* 2N1511 PNP
* 2N1512 PNP
* 2N1513 PNP
* 2N1514 PNP
* 2N1515 PNP
* 2N1516 PNP
* 2N1517 PNP
* 2N1518 PNP
* 2N1519 PNP
* 2N1520 PNP
* 2N1521 PNP
* 2N1522 PNP
* 2N1523 PNP
* 2N1524 PNP
* 2N1525 PNP
* 2N1526 PNP
* 2N1527 PNP
* 2N1528 PNP
* 2N1529 PNP
* 2N1530 PNP
* 2N1531 PNP
* 2N1532 PNP
* 2N1533 PNP
* 2N1534 PNP
* 2N1535 PNP
* 2N1536 PNP
* 2N1537 PNP
* 2N1538 PNP
* 2N1539 PNP
* 2N1540 PNP

TRANS	2N4341	PNP	100K	50V
TRANS	2N4351	PNP	100K	50V
TRANS	2N2351	PNP	100K	50V
TRANS	2N2907	NPN	100K	50V
TRANS	2N1501	PNP	100K	50V
TRANS	2N1502	PNP	100K	50V
TRANS	2N1503	PNP	100K	50V
TRANS	2N1504	PNP	100K	50V
TRANS	2N1505	PNP	100K	50V
TRANS	2N1506	PNP	100K	50V
TRANS	2N1507	PNP	100K	50V
TRANS	2N1508	PNP	100K	50V
TRANS	2N1509	PNP	100K	50V
TRANS	2N1510	PNP	100K	50V
TRANS	2N1511	PNP	100K	50V
TRANS	2N1512	PNP	100K	50V
TRANS	2N1513	PNP	100K	50V
TRANS	2N1514	PNP	100K	50V
TRANS	2N1515	PNP	100K	50V
TRANS	2N1516	PNP	100K	50V
TRANS	2N1517	PNP	100K	50V
TRANS	2N1518	PNP	100K	50V
TRANS	2N1519	PNP	100K	50V
TRANS	2N1520	PNP	100K	50V
TRANS	2N1521	PNP	100K	50V
TRANS	2N1522	PNP	100K	50V
TRANS	2N1523	PNP	100K	50V
TRANS	2N1524	PNP	100K	50V
TRANS	2N1525	PNP	100K	50V
TRANS	2N1526	PNP	100K	50V
TRANS	2N1527	PNP	100K	50V
TRANS	2N1528	PNP	100K	50V
TRANS	2N1529	PNP	100K	50V
TRANS	2N1530	PNP	100K	50V
TRANS	2N1531	PNP	100K	50V
TRANS	2N1532	PNP	100K	50V
TRANS	2N1533	PNP	100K	50V
TRANS	2N1534	PNP	100K	50V
TRANS	2N1535	PNP	100K	50V
TRANS	2N1536	PNP	100K	50V
TRANS	2N1537	PNP	100K	50V
TRANS	2N1538	PNP	100K	50V
TRANS	2N1539	PNP	100K	50V
TRANS	2N1540	PNP	100K	50V

SELECTED PARTS
TRANSISTORS 2N4341 100K 50V
TRANSISTORS 2N4351 100K 50V
TRANSISTORS 2N2351 100K 50V
TRANSISTORS 2N2907 100K 50V
TRANSISTORS 2N1501 100K 50V
TRANSISTORS 2N1502 100K 50V
TRANSISTORS 2N1503 100K 50V
TRANSISTORS 2N1504 100K 50V
TRANSISTORS 2N1505 100K 50V
TRANSISTORS 2N1506 100K 50V
TRANSISTORS 2N1507 100K 50V
TRANSISTORS 2N1508 100K 50V
TRANSISTORS 2N1509 100K 50V
TRANSISTORS 2N1510 100K 50V
TRANSISTORS 2N1511 100K 50V
TRANSISTORS 2N1512 100K 50V
TRANSISTORS 2N1513 100K 50V
TRANSISTORS 2N1514 100K 50V
TRANSISTORS 2N1515 100K 50V
TRANSISTORS 2N1516 100K 50V
TRANSISTORS 2N1517 100K 50V
TRANSISTORS 2N1518 100K 50V
TRANSISTORS 2N1519 100K 50V
TRANSISTORS 2N1520 100K 50V
TRANSISTORS 2N1521 100K 50V
TRANSISTORS 2N1522 100K 50V
TRANSISTORS 2N1523 100K 50V
TRANSISTORS 2N1524 100K 50V
TRANSISTORS 2N1525 100K 50V
TRANSISTORS 2N1526 100K 50V
TRANSISTORS 2N1527 100K 50V
TRANSISTORS 2N1528 100K 50V
TRANSISTORS 2N1529 100K 50V
TRANSISTORS 2N1530 100K 50V
TRANSISTORS 2N1531 100K 50V
TRANSISTORS 2N1532 100K 50V
TRANSISTORS 2N1533 100K 50V
TRANSISTORS 2N1534 100K 50V
TRANSISTORS 2N1535 100K 50V
TRANSISTORS 2N1536 100K 50V
TRANSISTORS 2N1537 100K 50V
TRANSISTORS 2N1538 100K 50V
TRANSISTORS 2N1539 100K 50V
TRANSISTORS 2N1540 100K 50V

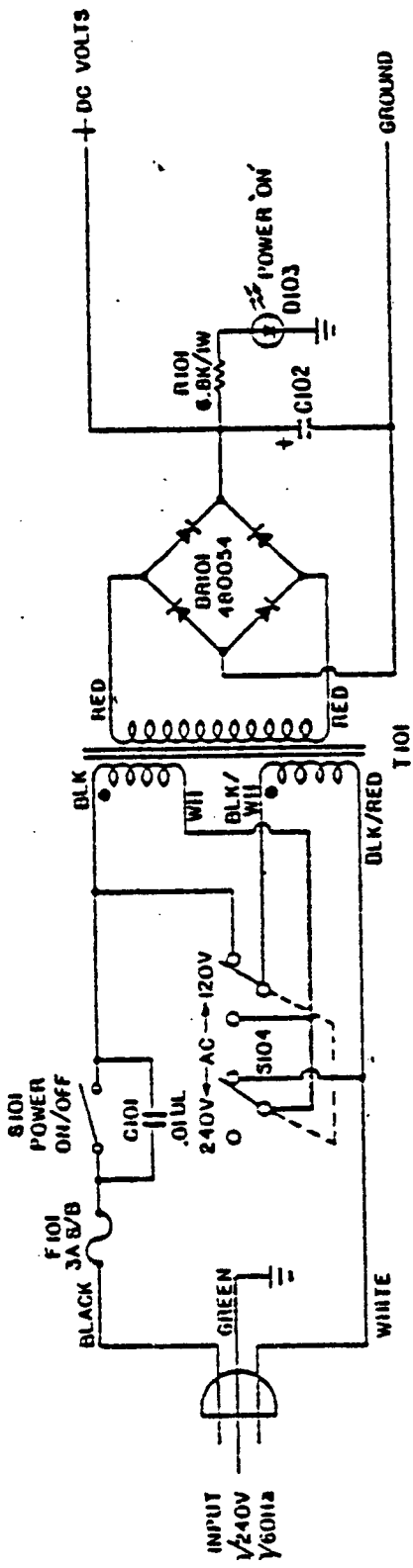


170079 FOMER AMP PCB	DATE	REV	REV
SCHEMATIC	170079	1	1
PWR AMP PCB	1603	1	1
ACCUSSIC control corp			

ACCUSSIC control corp
170079
PWR AMP PCB
SCHEMATIC
1603

PARTS LIST
 MODEL 320 POWER AMP ASSEMBLY 830057
 SCHEMATIC DI603

Schematic Reference	DESCRIPTION	Acoustic Part No.
C 1	PC Board	170079
C 2	Capacitor Disc 680 PF	157010
C 3	Capacitor Disc .01 UF	157016
C 4	Capacitor MM .039	158003
C 5	Capacitor MM .68 UF	158009
C 6	Capacitor Disc 680 PF	157010
C 7	Capacitor MM .1 UF	158005
C 8	Capacitor Electrolytic 22 UF 50 V	159003
C 9	Capacitor Electrolytic 4.7 UF 50 V	159008
C 10	Capacitor Electrolytic 10 UF 100 V	157003
C 11	Capacitor Disc 27 PF	157011
C 12	Capacitor Electrolytic 22 UF 50 V	159005
C 13	Capacitor Disc .01 UF	157016
C 14	Capacitor Disc 680 PF	159005
C 15	Capacitor Electrolytic 22 UF 50 V	157016
C 16	Capacitor Disc .01 UF	157010
C 17	Capacitor Disc 680 PF	157010
C 18	Capacitor Disc .01 UF	158005
C 19	Capacitor MM .1 UF	476239
R 1	Resistor 3.9 K 1/2 Watt	476239
R 2	Resistor 3.9 K 1/2 Watt	476510
R 3	Resistor 1 M 1/2 Watt	476510
R 4	Resistor 1 M 1/2 Watt	476510
R 5	Resistor 1 M 1/2 Watt	476368
R 6	Resistor 68 K 1/2 Watt	476368
R 7	Resistor 68 K 1/2 Watt	476000
R 8	Resistor Factory Select	476327
R 9	Resistor 27 K 1/2 Watt	476227
R 10	Resistor 2.7 K 1/2 Watt	476268
R 11	Resistor 6.8 K 1/2 Watt	476368
R 12	Resistor 68 K 1/2 Watt	476427
R 13	Resistor 270 K 1/2 Watt	476227
R 14	Resistor 2.7 K 1/2 Watt	476210
R 15	Resistor 1 K 1/2 Watt	476427
R 16	Resistor 270 K 1/2 Watt	476227
R 17	Resistor 2.7 K 1/2 Watt	476168
R 18	Resistor 680 1/2 Watt	475058
R 19	POC Trim 500 Ohm	474168
R 20	Resistor 680 CC 1 W	474168
R 21	Resistor 680 CC 1 W	474212
R 22	Resistor 1.2 K CC 1 W	474212
R 23	Resistor 1.2 K CC 1 W	476210
R 27	Resistor 1 K 1/2 Watt	478002
R 28	Resistor 33 1/2 Watt CC	468810
R 29	Resistor 1.1 1/2 Watt	476210
R 39	Resistor 220 K 1/2 Watt	476422
R 40	Resistor 68 K 1/2 Watt	476368
R 41	Resistor 68 K 1/2 Watt	476118
R 42	Resistor 180 1/2 Watt	476568
R 43	Resistor 6.8 M 1/2 Watt	476315
R 44	Resistor 15 K 1/2 Watt	476000
R 45	Resistor Factory Select	472022
R 46	Resistor 22 2 Watt	476139
R 47	Resistor 390 1/2 Watt	476139
R 48	Resistor 390 1/2 Watt	472022
R 49	Resistor 22 2 Watt	476027
R 50	Resistor 27 1/2 Watt	476027
R 51	Resistor 27 1/2 Watt	478005
R 52	Resistor 2.7 1/2 Watt CC	478005
R 53	Resistor 2.7 1/2 Watt CC	478005
R 54	Resistor 2.7 1/2 Watt CC	478005
R 55	Resistor 2.7 1/2 Watt CC	478005
R 56	Resistor 2.7 1/2 Watt CC	478005
R 57	Resistor 2.7 1/2 Watt CC	476018
R 58	Resistor 18 1/2 Watt	480005
D 1	Diode In 914	480005
D 2	Diode In 914	480005
D 3	Diode In 914	480005
D 4	Diode In 914	480005
D 5	Diode In 914	480005
D 6	Diode In 914	480005
D 7	Diode In 914	480005
D 8	Diode In 914	480033
Q 1	Transistor 2N4360 Pfet	480033
Q 2	Transistor 2N4360 Pfet	480032
Q 3	Transistor PNP 2N4248	480032
Q 4	Transistor PNP 2N4248	480059
Q 5	Transistor TO-39 105 V NPN	480056
Q 6	Transistor 2N6474 120 V NPN	480023
Q 7	Transistor NPN 2N2484	480056
Q 8	Transistor 2N6474 120 V NPN	480032
Q 9	Transistor PNP 2N4248	480057
Q 10	Transistor 2N6476 120 V PNP	480023
Q 11	Transistor NPN 2N2484	480060
Q 12	Transistor NPN TO3 110 Volts	480060
Q 13	Transistor NPN TO3 110 Volts	480060
Q 14	Transistor NPN TO3 110 Volts	480060
Q 15	Transistor NPN TO3 110 Volts	480060
Q 16	Transistor NPN TO3 110 Volts	480060
Q 17	Transistor NPN TO3 110 Volts	480060
Q 18	Transistor NPN TO3 110 Volts	480060



	T101	C102	DC VOLTS	F101 @ 120V 125V FUSE	F101 @ 240V 250V FUSE
3	560013 OR 560026	3900 80	76	3ASD	1.5ASD
25	560013 OR 560026	7800 100	76	3ASB	1.5ASD
D	560014	7800 100	87	5ASB	2.5ASD
0	560027	7800 100	88	6.25ASB	3ASB

BY DRAWN H. ALGAMMO CHECKED APPROVED BY	DATE 1-1-61	TITLE AC POWERED SLIDDIY GUITAR
ACOUSLIC control corp van nuys, california 91406		
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PARTS LIST
 MODEL 320 POWER SUPPLY
 SCHEMATIC C1613

Schematic Reference	DESCRIPTION	Acoustic Part No.
F 101	6.25 Amp Slow Blow Fuse @ 125 Volts	510053
C 101	Capacitor, .01 UL AC Line	151015
C 102	Capacitor, 7800 UF, 100 Volts	153013
R 101	Resistor, 6.8 K ohm, 1 watt	474269
S 101	On/Off Power Switch	510055
S 104	AC 120-240 Voltage Switch	510032
BR 101	Bridge Rectifier	480054
D 103	LED Power Indicator	610012
T 101	Power Transformer	560027