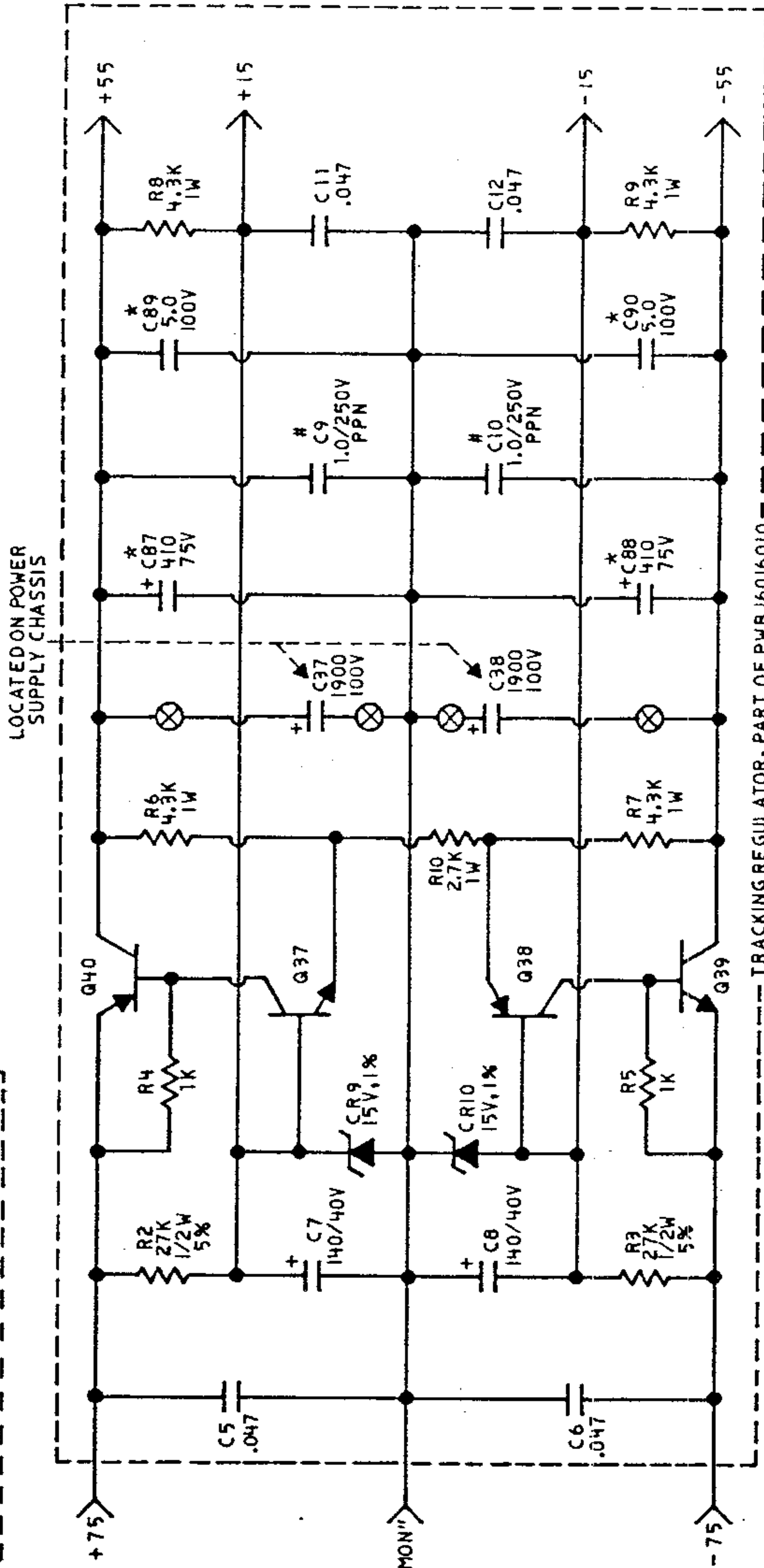
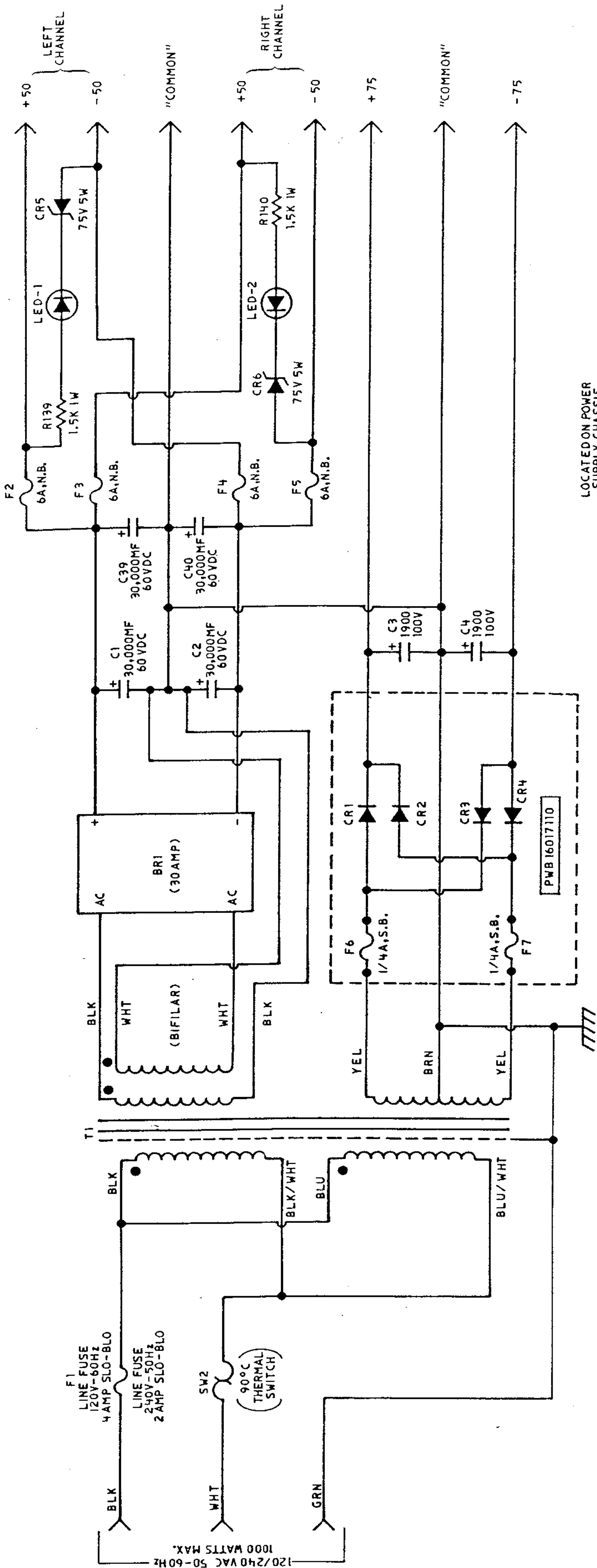


MODEL D-120 POWER AMPLIFIER
SCHEMATIC & PARTS LIST

Rev. B
3/25/81

audio research corporation

6801 SHINGLE CREEK PARKWAY
MINNEAPOLIS, MINNESOTA 55430



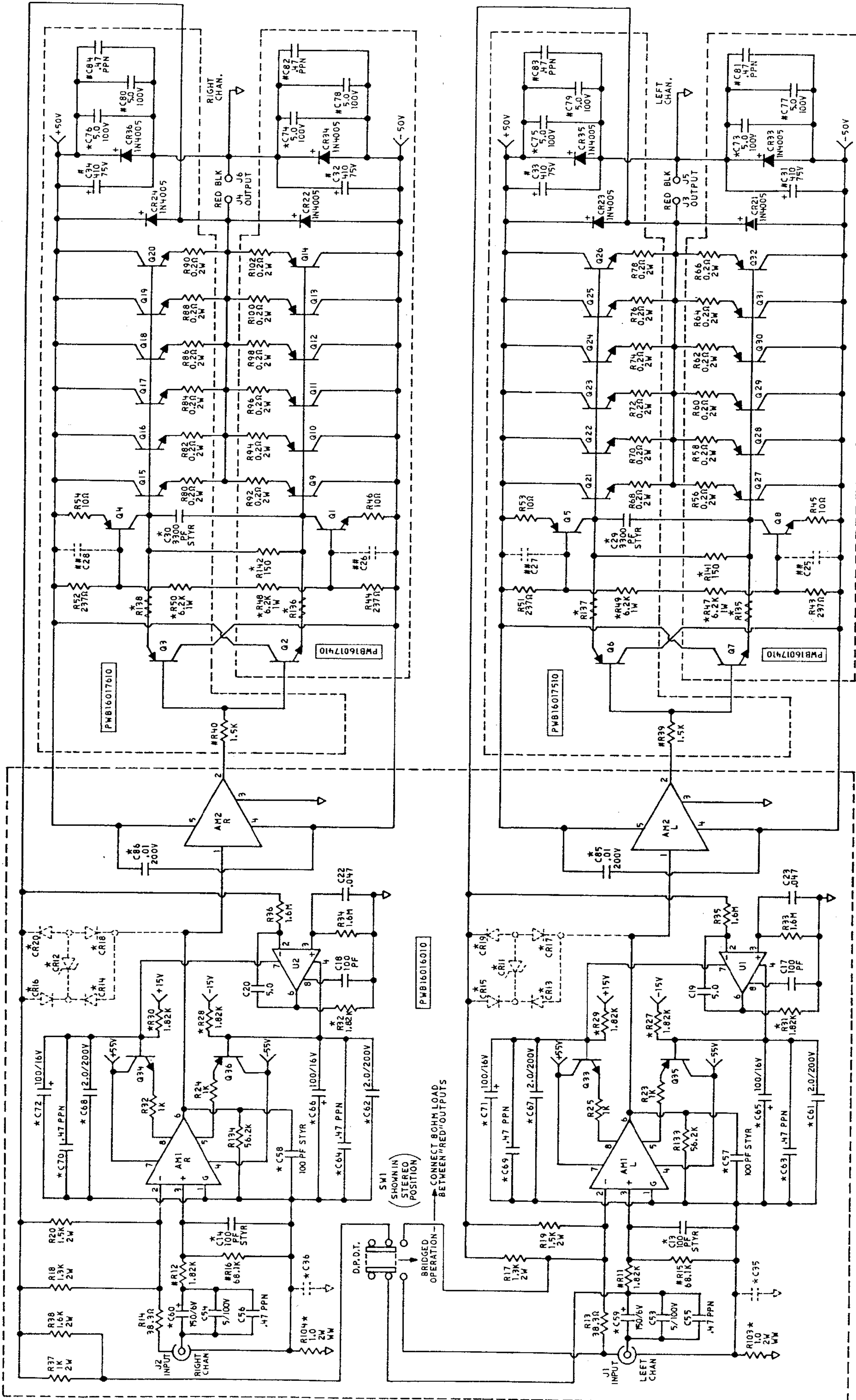
TRANSFORMER PRIMARY WIRING
(120 VAC WIRING SHOWN)

VOLTAGE	LEAD CONNECTIONS
120 VAC	BLU TO BLK, BLK/WHT TO BLU/WHT
240 VAC	BLK/WHT TO BLU

- NOTES:
1. - CR1 - CR4 ARE IN4005
 2. - BR1 = VARO VR248
 3. - SW2 MOUNTED ON HEAT SINK ASSEMBLY
 4. - ALL CAP. IN μ F & RES. $1/4$ W UNLESS NOTED
 5. - Q37, 38 ARE M.P., OUR NO. 30001100 & 30002100
 6. - Q39, 40 ARE M.P., OUR NO. 30002400 & 30002500
- * EFFECTIVE MARCH '81; C87-90 ADDED.
EFFECTIVE SEPT. '80; C9-10 POLYPROPYLENE (WAS MYLAR).

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TOLERANCES (EXCEPT AS NOTED):	SCALE	DRAWN BY	S. C.
.XXX			
.XX		TITLE	SCHEMATIC
ANGULAR		DATE	D-120 POWER SUPPLY
		DRAWING NUMBER	910070-10 B



- NOTES:
1. BOTH CHANNELS SHOWN.
 2. ALL CAP. IN J.F. & RES. 1/4W UNLESS NOTED.
 3. U1 & U2 ARE L'H308N.
 4. AM1'S ARE TYPE 1 ANALOG MODULES.
 5. AM2'S ARE TYPE 2 ANALOG MODULES.
 6. Q33 & Q34 ARE OUR NO. 30001100.
 7. Q35 & Q36 ARE OUR NO. 30002100.
 8. Q1, 2, 7, 8, 15, 21, 26 ARE OUR NO. 30004800.
 9. Q3, 4, 5, 6, 9, 14, 27-32 ARE OUR NO. 30004800. SET

* EFFECTIVE MARCH '81: C59-76, C85-86, R141-142 ADDED. CR11-20, C35-36, R195-198 DELETED.
 C29-30 WAS 1.0uF; C19, 14, 57, 58 WAS MICAI; R27-32 WAS 1.0K; R47-50 WAS 6.9K; R103-104 WAS 2.7K; R14 CARBON.
 # EFFECTIVE SEPT. '80: R11, 12, 15, 16, 39, 40 METAL FILM (WAS CARBON).
 ADDED C77-C84. C31-34 WAS 300uF.
 ## EFFECTIVE DEC. '80: C25-28 DELETED.

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 PURPOSES ONLY.

TOLERANCES	UNLESS OTHERWISE SPECIFIED
1	.XXX
2	.XX
3	.X
4	ANNUAL
5	DATE
6	3-25-81
7	REVISED NUMBER
8	910071-10 B
9	SCHEMATIC
10	0-120 AMPLIFIER
11	TITLE
12	SCALE
13	MINNEAPOLIS, MINNESOTA
14	AUDIO RESEARCH CORPORATION
15	DRAWN BY S.C.
16	APPROVED BY

D-120 PARTS LIST

COMPONENT	QUAN.	DESCRIPTION	VALUE	RATING	TOL.	ARC PART NO.
AM1	2	Type AM1, Analog Module				AM-1
AM2	2	Type AM2, Analog Module				AM-2
U1, U2	2	LM308N Op-Amp				31000300
Q1, 2, 7, 8, 15-20, 21-26	16	NPN Power Transistor				300047XX
Q3, 4, 5, 6, 9-14, 27-32	16	PNP Power Transistor				300048XX
Q39	1	NPN Power Transistor				300024XX
Q40	1	PNP Power Transistor				300025XX
Q33, 34, 37	3	NPN Transistor				30001100
Q35, 36, 38	3	PNP Transistor				30002100
BR1	1	VK248 Bridge Rectifier				30501900
R2, R3	2	Carbon Comp	27K	1/2W	10%	40270403
R4, 5, 23-26	6	Metal Film	1K	1/4W	1%	42100302
R6-9	4	Metal Film	4.3K	1W	2%	46430301
R10	1	Metal Film	2.7K	1W	2%	46270301
R11, 12, 27-32	8	Metal Film	1.82K	1/4W	1%	42182302
		Carbon Comp.	1K	1/4W	5%	41100302
		Carbon Comp.	1.8K	1/4W	5%	41180302
R13, R14	2	Metal Film	38.3Ω	1/4W	1%	42383102
R15, R16	2	Metal Film	68.1K	1/4W	1%	42681402
		Carbon Comp.	68K	1/4W	5%	41680402
R17, R18	2	Metal Film	1.3K	2W	2%	46130301
R19, R20	2	Metal Film	1.5K	2W	2%	46150301
R33-36	4	Carbon Comp.	1.6M	1/4W	5%	41160602
R37	1	Metal Film	1K	2W	2%	46100301
R38	1	Metal Film	1.6K	2W	2%	46160301
R39, R40	2	Metal Film	1.5K	1/4W	1%	42150302
R43, 44, 51, 52	4	Metal Film	237Ω	1/4W	1%	42237202
R45, 46, 53, 54	4	Metal Film	10Ω	1/4W	1%	42100102
R47-50	4	Metal Film	6.2K	1W	2%	46620301
		Metal Film	6.98K	1W	2%	46698301
R56-66, 68-78, 80-90, 92-102	24	Wire Wound	0.2Ω	2W	5%	43200001
R103, R104	2	Wire Wound	1.0Ω	2W	5%	43100002
		Carbon Comp.	2.7Ω	1W	5%	41270004
R133, R134	2	Metal Film	56.2K	1/4W	1%	42562402
R135-138		Wire Wound	0.1Ω	2W	5%	43100003
R139, R140	2	Carbon Comp.	1.5K	1W	5%	41150304
R141, R142	2	Metal Film	150Ω	1/2W	1%	42150203
CR1-4, 21-24, 33-36	12	1N4005 Diode	600V	1A		30500400
CR5, CR6	2	1N5374 Zener	75V	5W	10%	30502900
CR9, CR10	2	0.5M15ZS1 Zener	15V	500MW	1%	30501800
CR11, CR12		1N5234B Zener	6.2V	500MW	5%	30502100
CR13-20		1N914 Diode				30500900
C1, 2, 39, 40	4	Electrolytic	30,000μF	60V	-10/+75%	50301000
C3, 4, 37, 38	4	Electrolytic	1900μF	100V	-10/+75%	50190900
C5, 6, 11, 12, 21, 22	6	Metalized Mylar	.047μF	200V	10%	53470401
C7, C8	2	Electrolytic	140μF	40V	-10/+75%	50140801
C9, 10	2	Polypropylene	1.0μF	250V	20%	53100606
		Metalized Mylar	1.0μF	100V	10%	53100600
C13, 14, 57, 58	4	Polystyrene	100pF	160V	2%	53100200
C17, 18	2	Dipped Silver Mica	100pF	500V	5%	57100201
C19, 20, 53, 54, 73-80, 89, 90	14	Metalized Mylar	5.0μF	100V	10%	53500603
C25-28, 35, 36		Metalized Mylar	.1μF	200V	10%	53100503
C29, C30	2	Polystyrene	3300pF	160V	2%	53330301
		Polypropylene	1.0μF	250V	20%	53100606
C31-34, 87, 88	6	Electrolytic Was 300μF	410μF	75V		50300802
C55, 56, 63, 64, 69, 70, 81-84	10	Polypropylene	.47μF	200V	20%	53470507
C59, C60	2	Tantalum	150μF	6V		51150801
C61, 62, 67, 68	4	Metalized Mylar	2.0μF	200V		53200601
C65, 66, 71, 72	4	Electrolytic	100μF	16V		50100801
C85, C86	2	Ceramic Monolythic	.01μF	200V		52100400
F1	1	Slo-Blo Fuse	4A	125V		34500701
F1	1	Slo-Blo Fuse	2A	250V		34501301
F2-5	4	Normal Blow Fuse	6A	250V		34500600
F6, F7	2	Slo-Blo Pigtail Fuse	1/4A	250V		34500101
T1	1	Transformer				60003101
SW1	1	Stereo-Mono Switch				24100500
SW2	1	Thermostat				24300100
LED1, 2	2	Green LED				34300100
J1, J2	2	Phono Jack				23201000
J3, J4	2	Binding Post-Red				23102500
J5, J6	2	Binding Post-Black				23102600