

audio research

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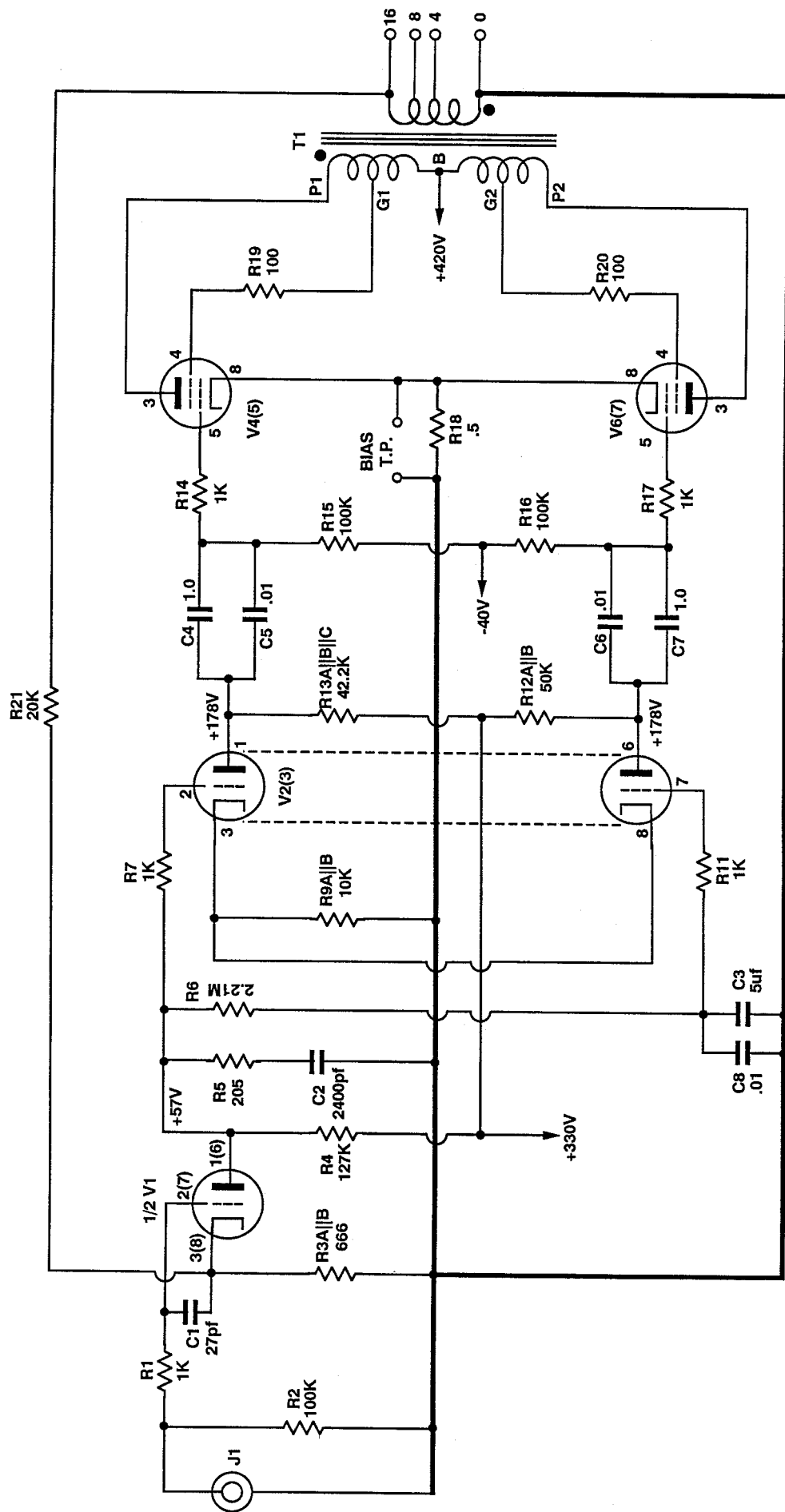
5740 GREEN CIRCLE DRIVE / MINNETONKA, MINNESOTA 55343-4424 / PHONE 612/939-0600 FAX 612/939-0604

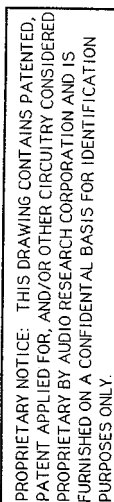
VT60 AMPLIFIER

SCHEMATIC

AND PARTS LIST

6/3/94 Schematic
1/27/95 Parts List





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PARTS LIST

As of JAN 27 95

PRODUCT: VT60

NOTES:

Schematic Symbol	Quantity	ARC Part #	Description
C CAPACITORS			
C1	2	53270101	CAP. 27 PF +/-1PF 630V PNP
C2	2	53240305	CAP. .0024 PF 2% 630V
C3	2	53500606	CAP. 5 UF +/-20% 250V
C4,7	4	53100800	CAP. 1 UF 450V
C5,6,8,17,18,22,26	10	53100406	CAP. .01 UF +/-10% 630V
C9-12	4	50470807	CAP. 470UF 450V
C13,14	2	50100508	CAP. 100 UF 450V
C16,16,23	3	53200602	CAP. 2 UF +/-10% 450V
C19,20,21,27-30,31B	8	53220507	CAP. .22 UF 10% 160V
C24	1	50470803	CAP. 470 UF 100V.
C25	1	53470511	CAP. .47 UF +/-20% 250V
C31A	1	50100908	CAP. 1000 UF 63V
D DIODES			
D1-4	4	30503310	EDAL #M4G5
D5,6	2	30500910	1N916B
D7-14	8	30500400	IN4005 GENERAL INSTRUMENT
F FUSES			
F1	1	34500705	FUSE, MDQ-4
J CONNECTORS			
J1	1	23201509	CHASSIS JACK,RED
J2	1	23201510	CHASSIS JACK,WHITE
L INDUCTORS			
L1	1	61000160	CHOKE, 2.7 UH +/- 10%
LE PANEL INDICATOR			
LE1	1	34300102	L.E.D. COLLAR & RETAINING RING
Q TRANSISTORS			
Q1	1	30006836	FET, GREEN BLUE
Q2,3	2	30010001	2SA1306B, TESTED (BROWN)
R RESISTORS			
R1	2	42100314	RES. 1K 1% MK-5 50PPM
R2,15,16	6	42100503	RES. 100K +/-1% MK-3 50PPM
R3A,7,11,14,17	10	42100303	RES. 1K 1% MK-3 50PPM
R3B	2	42200303	RES. 2K MK-3 1% 50PPM
R4	2	42127505	RES. 127K 1% MK-8 50PPM
R5	2	42205203	RES. 205 OHM 1% MK-3 50PPM
R6	2	42221603	RES. 2.21 MEG 1% MK-3 50PPM
R9A,9B,21	6	42200414	RES. 20K 1% MK-5 50PPM
R12A,12B,13A,25,26	8	42100505	RES. 100K 1% MK-8 50PPM
R13B	2	42750405	RES. 75K 1% MK-8 50PPM

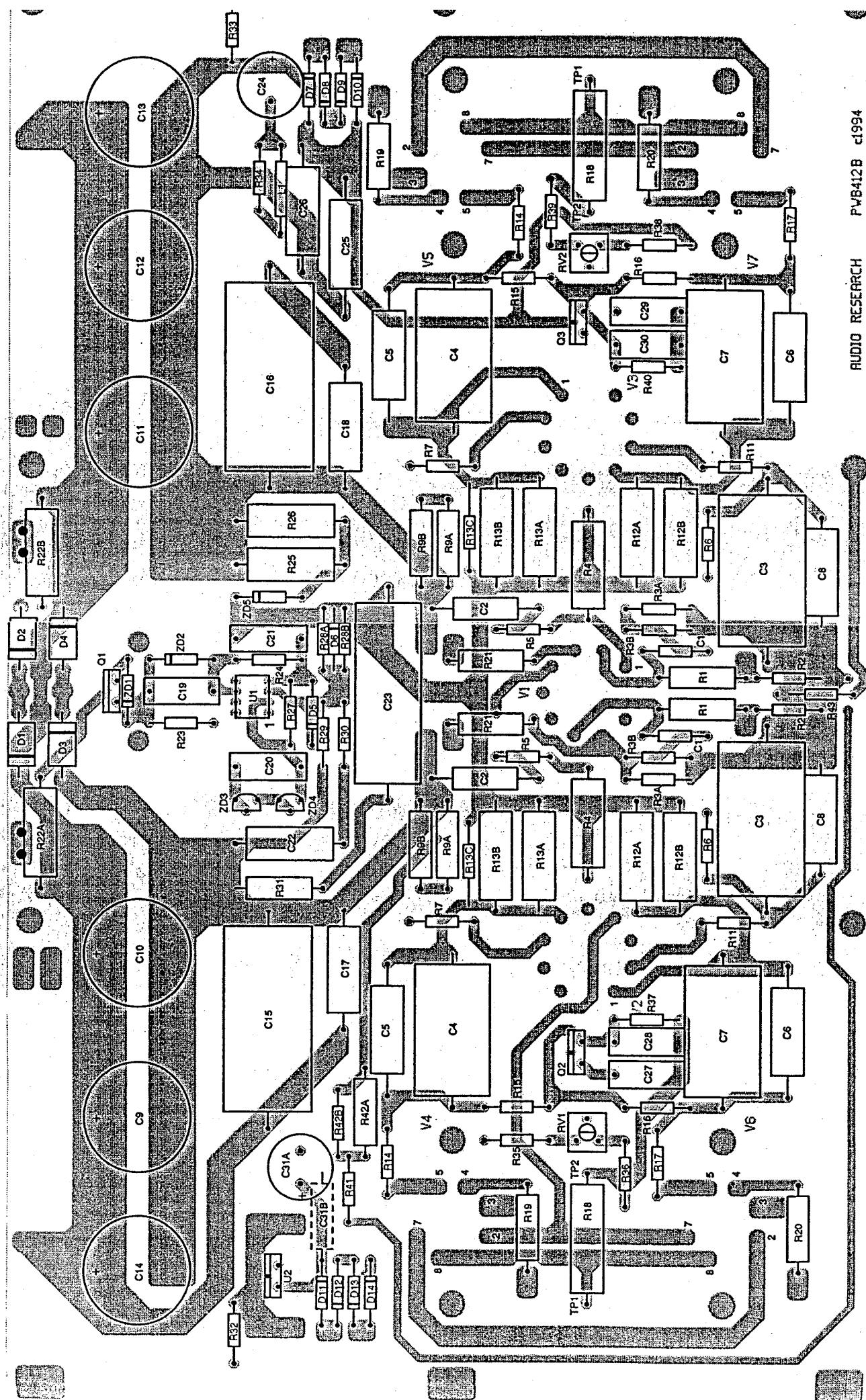
PARTS LIST

As of JAN 27 95

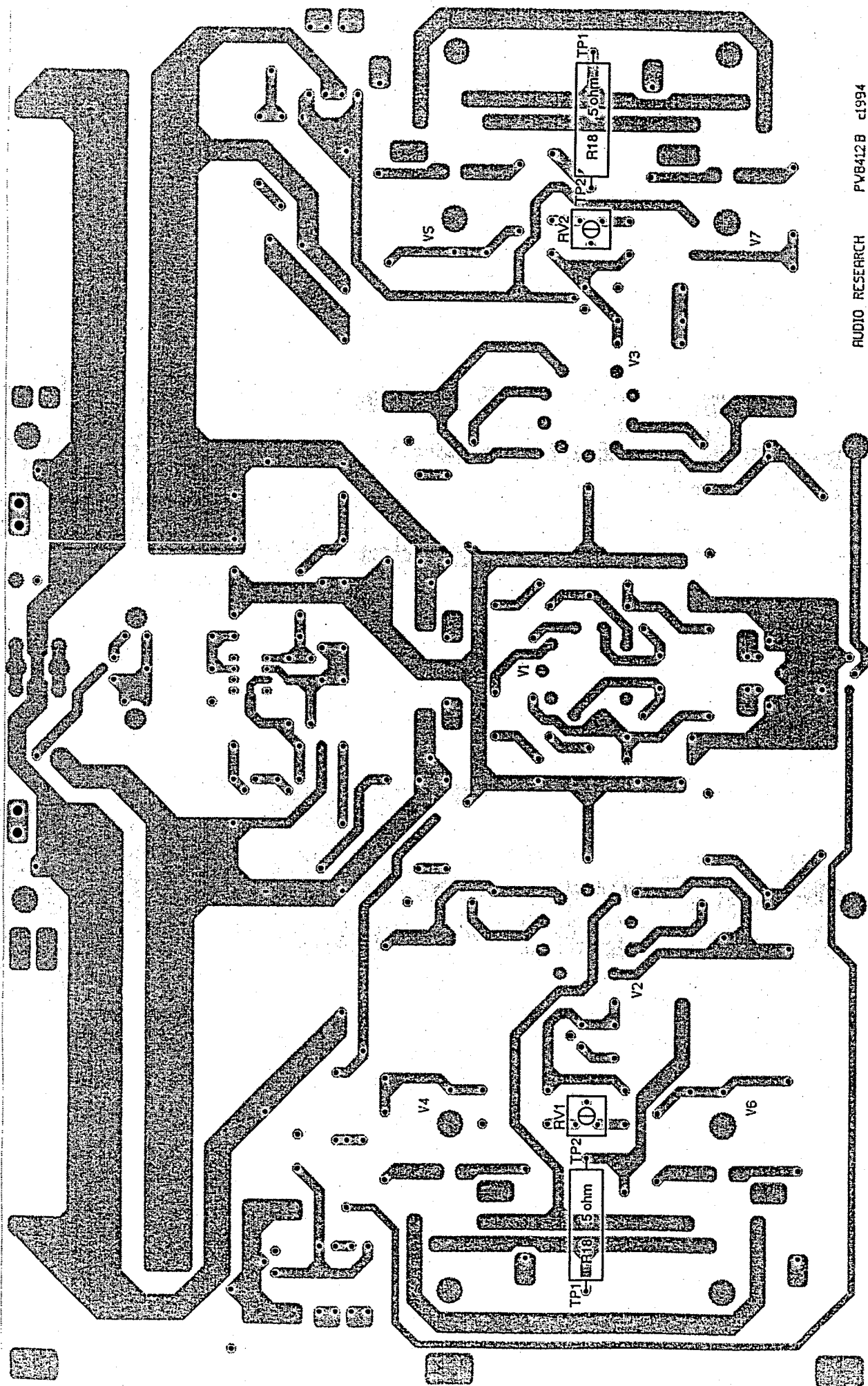
PRODUCT: VT60

NOTES:

Schematic Symbol	Quantity	ARC Part #	Description
R13C	2	42301603	RES. 3.01 MEG 1% MK-3 50PPM
R18	2	43050004	RES. 0.5 OHM+/-2% 3W W.W.
R19,20	4	43100200	RES. 100 OHM 5% 2W
R22A,22B	2	42200205	RES. 200 OHM+/-1% MK8 50PPM
R23	1	42158513	RES. 158K 1% MK-4 50PPM
R24,37,40	3	42196403	RES. 19.6K 1% MK-3 50PPM
R27	1	42499303	RES. 4.99K 1% MK-3 50PPM
R28A	1	42121403	RES. 12.1K 1% MK-350PPM
R28B	1	42768403	RES. 76.8K 1%MK-3 50PPM
R29	1	42243503	RES. 243K 1% MK3 50PPM
R30	1	42332203	RES. 332 OHM 1% MK-3 50PPM
R31	1	43100002	RES. 1 OHM 2W 5% W.W.
R32,33	2	42100203	RES. 100 OHM 1% MK-3 50PPM
R34	1	42549103	RES. 54.9 OHM 1% MK-3 50PPM
R35,38	2	42130403	RES. 13K 1% MK-3 50PPM
R36,39	2	42511403	RES. 51.1K 1% MK-3 50PPM
R41	1	42750203	RES. 750 OHM 1% MK-3 50PPM
R42A	1	43680000	RES. 6.8 OHM 2W 5% SPH
R42B	1	42274103	RES. 27.4 OHM1% MK-3 50PPM
R43	1	42100103	RES. 10 OHM 1% MK-3 50PPM
RV CONTROLS			
RV1,2	2	45200412	TRIM POT 20K
SW SWITCHES			
SW1	1	24102200	ROCKER SWITCH
T TRANSFORMERS			
T1	2	60011900	XFR. VT60 OUTPUT
T2	1	60012000	XFR. VT60 120V.
U INTEGRATED CIRCUITS			
U1	1	31002210	OP176GP
U2	1	31002930	MC7808 REG
V VACUUM TUBES			
V1,2,3	3	32001150	VAC.TUBE 6922 RUSSIAN
V4,5,6,7	4	32000551	VAC TUBE SOVTEK 6550-TESTED
ZD ZENER DIODES			
ZD1	1	30500300	IN4740A
ZD2	1	30504210	IN5535A (KNOX ONLY)
ZD3,4	2	31000705	LM329DZ GREEN
ZD5	1	30503500	IN5359 B



VT60 COMPONENT LAYOUT



AUDIO RESEARCH PVB412B c1994

BIAS ADJUSTMENT - Connect voltmeter probes across TP-1 and TP-2 in each channel. (Either end of R18)
Adjust trimpot to a meter reading of 65mVDC after amplifier is fully warmed. (About 20 minutes)

