

# Addendum for Model 1200

This manual is applicable to units bearing serial numbers above 3500 and is the same as the manual for units below that serial number except for the following:

Throughout the original manual, replace "A", "B", "Channel A" and "Channel B" with "L", "R", "L Channel" and "R Channel", respectively.

- Page 1** — Column 2, 3rd paragraph — Replace last sentence with: "This switch applies L, R, STEREO, STEREO REVERSE, or L+R signals to the BALANCE CONTROL through the GAIN SWITCH which selects HIGH or LOW overall preamplifier gain.
- Page 4** — Column 1, 2nd paragraph — Replace entire paragraph with: "With the TONE CONTROL switch set to IN, the output of the tone amplifier is applied to the PREAMP OUT jacks."
- Page 4** — Column 2, 2nd paragraph — Replace entire paragraph with: "With the TONE CONTROL switch set to OUT, the output of the X10 amplifier bypasses the tone amplifier and is applied directly to the PREAMP OUT jacks.
- Pages 6 and 7** — Replace Figure 5 (Amplifier Simplified Schematic) with Figure 5 contained herein.
- Page 11** — TECHNICAL SPECIFICATIONS — For "Input Sensitivity and Impedance, High Level", replace "135mV, 100K ohms" with "135mV, 25K ohms".
- In "PERFORMANCE VERIFICATION TEST PROCEDURE", replace as indicated:
- Page 13** — In paragraph C (Bias Adjustment Tests), sub-paragraph 4 — replace "10 watts" with "7 watts".
- Page 14** — In paragraph C (Bias Adjustment Tests), sub-paragraph 5 — replace "10 watts" with "7 watts".
- Page 14** — In paragraph E (Total Hum and Noise Test), sub-paragraph 4 — replace "36 millivolts" with "25 millivolts".
- Page 14** — In paragraph G (Relay Operation), sub-paragraph 1 — Replace "two minutes." with "thirty seconds".
- Page 14** — In paragraph G (Relay Operation), sub-paragraph 4 — Replace "10 Hz" with "5 Hz".
- In "TROUBLE ANALYSIS", replace as indicated:
- Page 18** — In SYMPTOM 1, PROCEDURE b. — Replace "Check for open control R526, 215-1005-1 bias assy." with "Check for open 215-1006 bias assy."
- Page 18** — In SYMPTOM 5 — Add PROCEDURE c. "Check C502 for leakage."
- Page 19** — In SYMPTOM 7 — Replace PROCEDURE a. with: "Check for defective C505, C506, C508, C509, C510, C516, C519, and C520."
- Page 19** — In SYMPTOM 9 — Replace PROCEDURE b. with: "Check output for proper clipping into 4 ohm load with 25.5 volts AC output (positive and negative levels must not vary more than 1 volt at 2 KHz)".
- Page 19** — Add SYMPTOM 10: "No Output". and add PROCEDURE a. "Check R529, Q510, Q511, Q802, Q803, Q804, and Q805.
- Pages 20 thru 25** — PARTS LIST — Parts list contained herein identifies all parts which differ from those used in units prior to serial number 3501.
- Pages 26 and 27** — Replace Figure 13.(Interconnect Board — A1 Component Assembly Diagram) with Figure 13.contained herein.
- Page 28** — Replace Figure 14.(Phono Amplifier Board — A2 Component Assembly Diagram) with Figure 14. contained herein.
- Page 31** — Replace Figure 17. (Power Amplifier Board — A5/A6 Component Assembly Diagram) with Figure 17. contained herein.
- Page 32** — Replace Figure 18. (Power Supply Board — A7 Component Assembly Diagram) with Figure 18. contained herein.
- Pages 34 and 35** — Replace Figure 20. (Model 1200 Schematic, A) with Figure 20. contained herein.
- Pages 36 and 37** — Replace Figure 21. (Model 1200 Schematic, B) with figure 21. contained herein.

# PARTS LIST

Reference Designation	Description and/or Remarks	Marantz Part Number
	INTERCONNECT BOARD COMPONENT ASSEMBLY	
C101	Cap., 520pf, $\pm 10\%$ , 100V	385-1069
C102	Cap., 0.15 $\mu$ f, $\pm 20\%$ , 250V	386-1022
C103	Cap., 520pf, $\pm 10\%$ , 100V	385-1069
C104	Cap., 0.15 $\mu$ f, $\pm 20\%$ , 250V	386-1022
R101	Res., C/F, 1K, $\pm 5\%$ , 1/4W	434-4102
R102	Res., C/F, 1K, $\pm 5\%$ , 1/4W	434-4102
R103	Res., Variable, Tandem, 25K	420-1023
R104	Res., Variable, Tandem, 50K	420-1022-3
R105	Res., C/F, 12K, $\pm 5\%$ , 1/4W	434-5122
R106	Res., C/F, 2.7K, $\pm 5\%$ , 1/2W	433-4272
R107	Res., C/F, 12K, $\pm 5\%$ , 1/4W	434-5122
R108	Res., C/F, 2.7K, $\pm 5\%$ , 1/2W	433-4272
R113	Res., C/F, 33K, $\pm 5\%$ , 1/4W	434-5332
R114	Res., C/F, 33K, $\pm 5\%$ , 1/4W	434-5332
	PHONO AMP BOARD COMPONENT ASSEMBLY	
R214	Res., Variable, 25K, 1/4W	420-1024
R222	Res., C/F, 2.2Meg, $\pm 10\%$ , 1/4W	434-7223
R235	Res., Variable, 25K 1/4W	420-1024
Q201	Transistor, NPN	462-1038-1
Q202	Transistor, NPN	462-1038-1
Q205	Transistor, NPN	462-1038-1
Q206	Transistor, NPN	462-1038-1

Reference Designation	Description and/or Remarks	Marantz Part Number
	X10 AMP BOARD COMPONENT ASSEMBLY	
C403	Cap., Elect., 1 $\mu$ f, $\pm 10\%$ , 35V	381-1055
C407	Cap., Elect., 1 $\mu$ f, $\pm 10\%$ , 35V	381-1055
C414	Cap., Elect., 1 $\mu$ f, $\pm 10\%$ , 35V	381-1055
C417	Cap., Elect., 1 $\mu$ f, $\pm 10\%$ , 35V	381-1055
Q401	Transistor, NPN	462-1038-2
Q402	Transistor, NPN	462-1038-2
Q404	Transistor, NPN	462-1038-2
Q405	Transistor, NPN	462-1038-2
	TONE AMP BOARD COMPONENT ASSEMBLY	
R307	(Not Used)	
R322	(Not Used)	
Q301	Transistor, NPN	462-1038-2
Q302	Transistor, NPN	462-1038-2
Q304	Transistor, NPN	462-1038-2
Q305	Transistor, NPN	462-1038-2
	POWER AMPLIFIER BOARD COMPONENT ASSEMBLY	
C505	Cap., 36pf, $\pm 5\%$ , 100V	385-1064
C508	Cap., 47pf, $\pm 10\%$ , 100V	385-1040
C512	Cap., 1000pf, $\pm 10\%$ , 100V	385-1068
C518	(Not Used)	
C519	Cap., 0.1 $\mu$ f, $\pm 10\%$ , 250V	386-1000
C520	Cap., 6800pf, $\pm 10\%$ , 400V	386-1026
CR503	Diode	460-1011
R501	Res., C/F, 4.7K, $\pm 5\%$ , 1/2W	433-4472
R508	Res., C/F, 91K, $\pm 5\%$ , 1/4W	434-5912

Reference Designation	Description and/or Remarks	Marantz Part Number
R524	Res., C/F, 24K, $\pm 5\%$ , 1/4W	434-5242
R525	Res., C/F, 24K, $\pm$ , 1/4W	434-5242
R526	Res., Variable, 250 ohm, 2W	420-1025
R529	Res., C/C, 39 ohm, $\pm 5\%$ , 1W	423-2392
R530	Res., C/C, 39 ohm, $\pm 5\%$ , 1W	423-2392
R552	Res., C/C, 5.6 ohm $\pm 5\%$ , 1W	423-1562
R553	Res., C/C, 5.6 ohm, $\pm 5\%$ , 1W	423-1562
R554	Res., C/F, 10K, $\pm 5\%$ , 1/4W	434-5102
R555	Res., C/F, 470 ohm, $\pm 5\%$ , 1/4W	434-3472
R556	Res., C/F, 56 ohm, $\pm 5\%$ , 1/4W	434-2562
R557	Res., C/F, 10 ohm, $\pm 5\%$ , 1/2W	433-2102
Q501	Transistor, NPN	462-1038-2
Q502	Transistor, NPN	462-1038-2
Q507	Transistor, PNP	461-1047-*
Q508	Transistor, NPN	462-1053-*
Q510	Transistor, NPN	462-1054-*
Q511	Transistor, PNP	461-1046-*
Q516	Transistor, NPN	462-1035-*
Q517	Transistor, PNP	461-1030-*
Q520	Transistor, NPN	462-1009
CR801	(Not Used)	
Q802	Transistor, PNP	461-1031-*
Q803	Transistor, NPN	462-1036-*
Q804	Transistor, PNP	461-1031-*
Q805	Transistor, NPN	462-1036-*

Reference Designation	Description and/or Remarks	Marantz Part Number
Q601	POWER SUPPLY BOARD COMPONENT ASSEMBLY	462-1055
Q602	Transistor, NPN	461-1048
	Transistor, PNP	
	CHASSIS ASSEMBLY	
C8	Cap., Elect., 100 $\mu$ f, 3V	381-1018
C9	Cap., 0.01 $\mu$ f, $\pm 20\%$ , 100V	383-1000
C10	Cap., 0.01 $\mu$ f, $\pm 20\%$ , 100V	383-1000
R1	Res., C/F, 130K, $\pm 5\%$ , 1/2W	433-6132
R2	Res., C/F, 130K, $\pm 5\%$ , 1/2W	433-6132
R3	Res., C/F, 130K, $\pm 5\%$ , 1/2W	433-6132
R4	Res., C/F, 130K, $\pm 5\%$ , 1/2W	433-6132
R5	Res., C/F, 10 ohm, $\pm 5\%$ , 1/2W	433-2102
R6	(Not Used)	
R7	(Not Used)	
R8	(Not Used)	
R9	Res., C/F, 27 ohm, $\pm 5\%$ , 1/2W	433-2272
R10	Res., C/F, 10 ohm, $\pm 5\%$ , 1/2W	433-2102
R12	Res., C/F, 10 ohm, $\pm 5\%$ , 1/2W	433-2102
Q1	Triac	465-1000
S1	Switch, Selector	453-1018
T1	Transformer, Power	440-1011

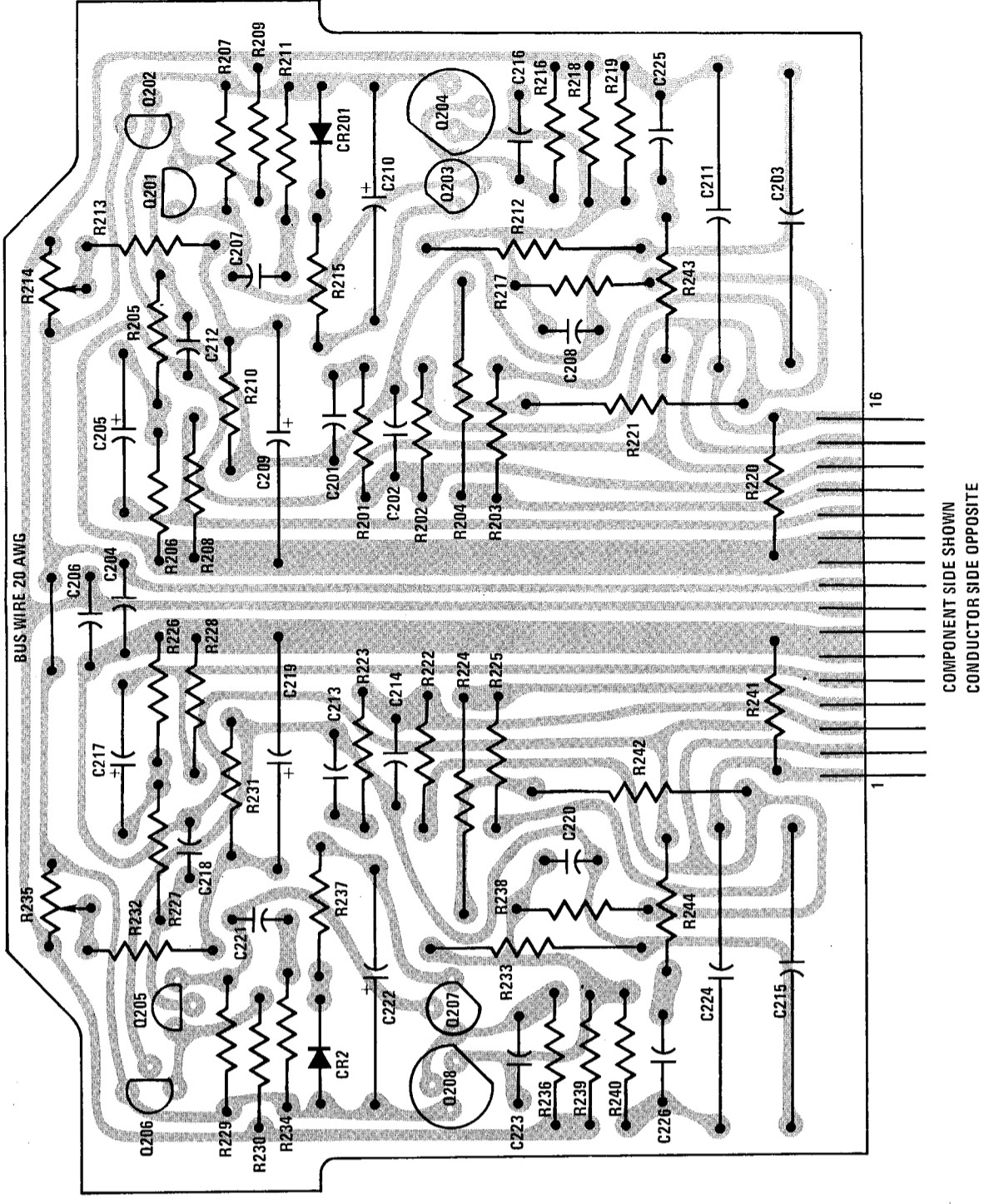


FIGURE 14. Phono Amplifier Board - A2 Component Assembly Diagram

\*FOR APPLICABLE DASH NO., SEE TRANSISTOR SPECIFICATION CHART AND ASSOCIATED NOTES ON SHEET 2 OF UNIT SCHEMATIC (Figure 21)

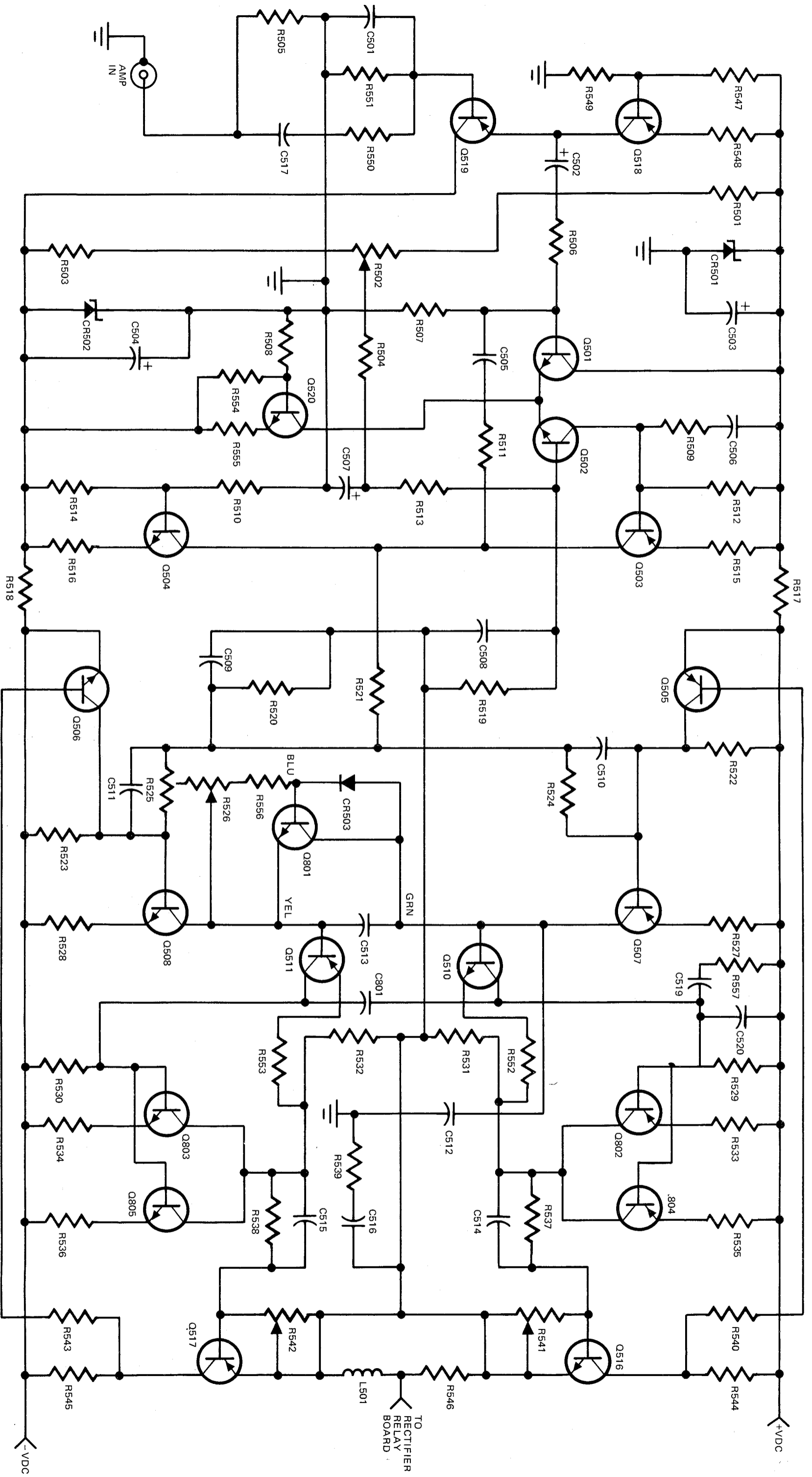


FIGURE 5. Amplifier Simplified Schematic

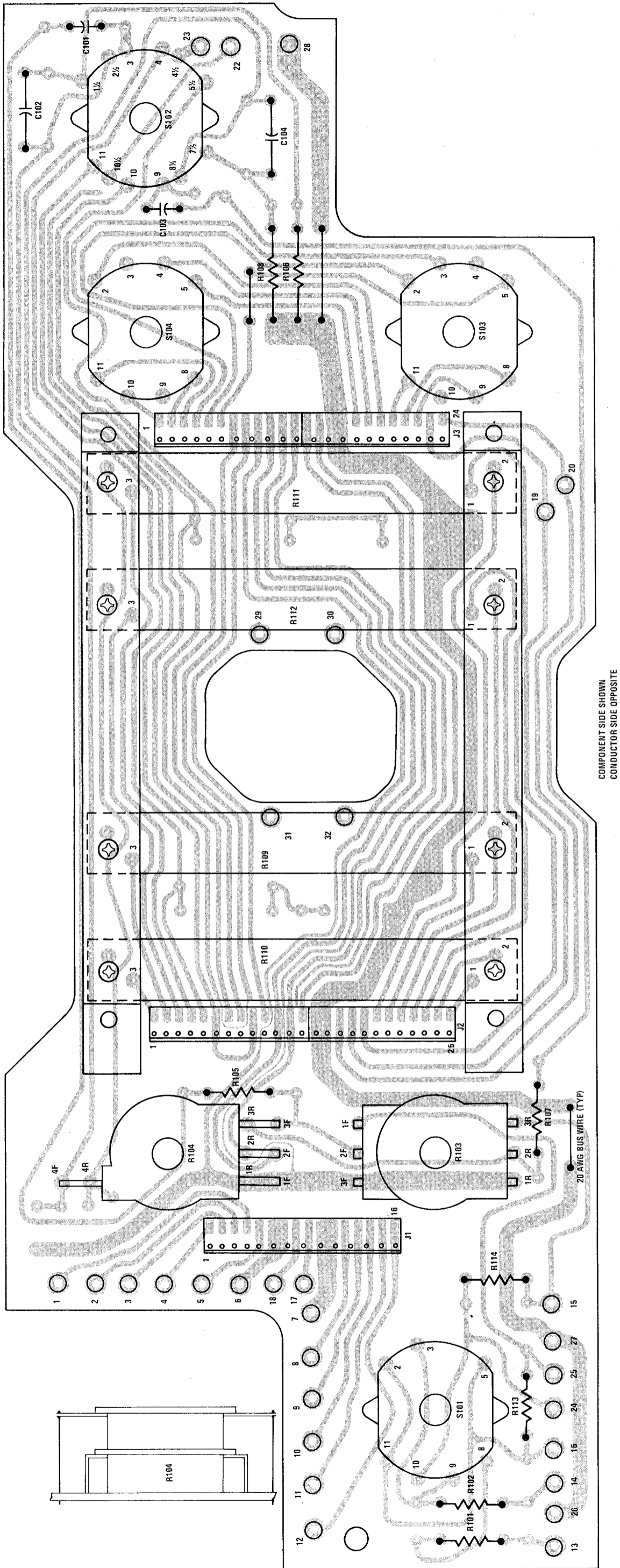
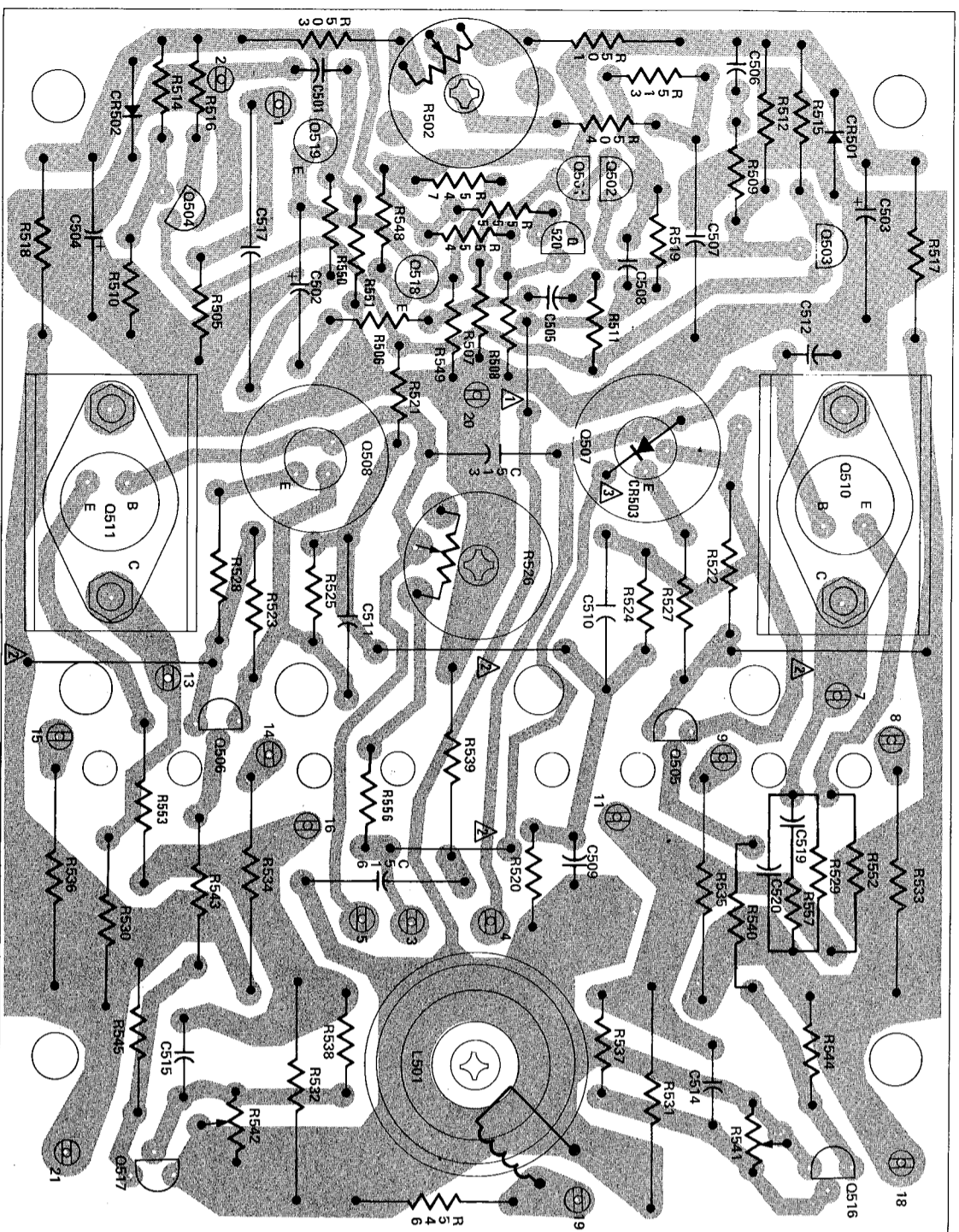


FIGURE 13. Interconnect Board — A1 Component Assembly Diagram

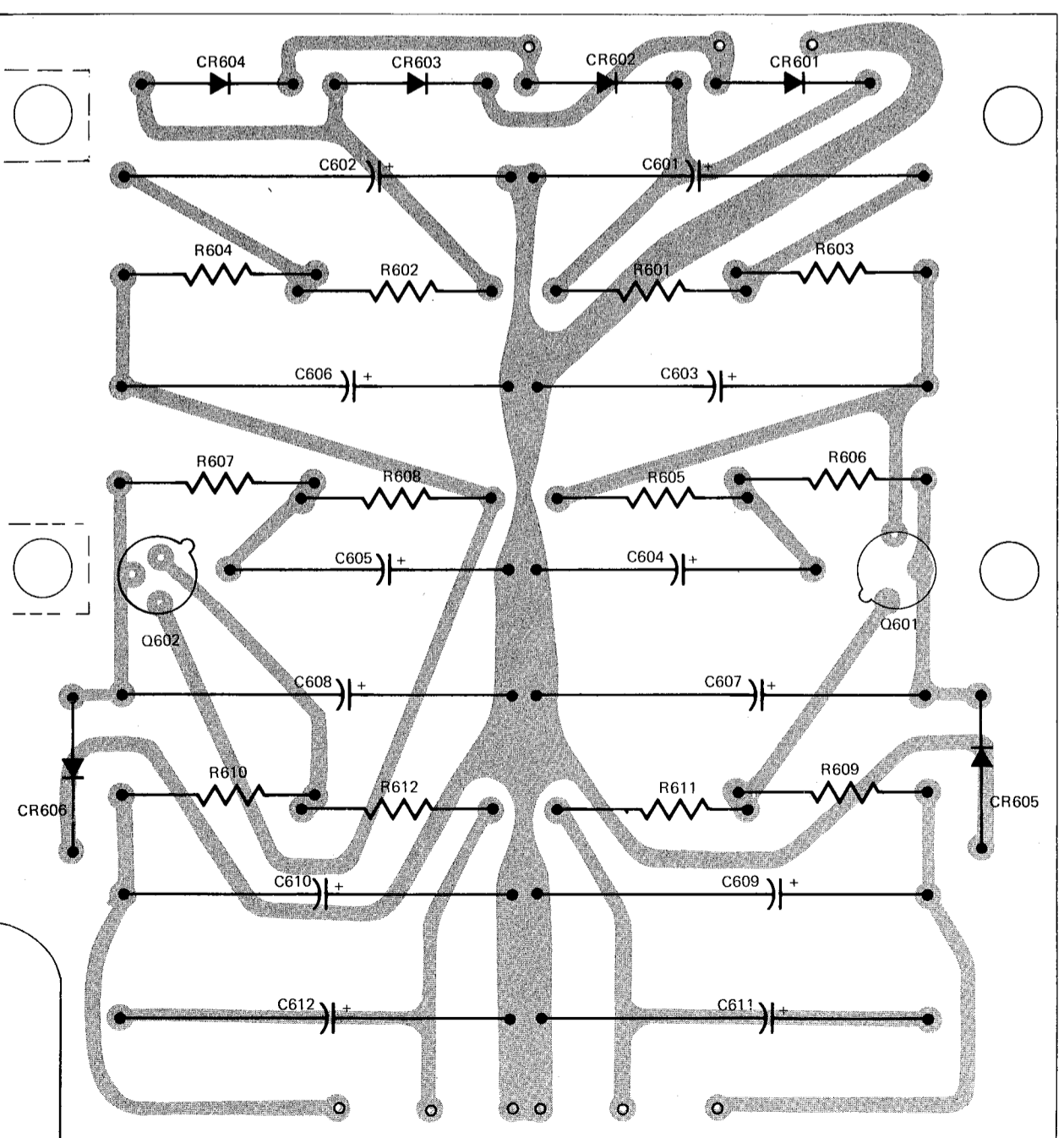




NOTES:  
 ▲ 20 AWG BARE BUS WIRE JUMPER  
 △ 20 AWG INSULATED WIRE JUMPER  
 ▽ CR503 IS INSTALLED UNDER Q507, IN INTIMATE CONTACT WITH Q507 CASE

COMPONENT SIDE SHOWN  
 CONDUCTOR SIDE OPPOSITE

FIGURE 17. Power Amplifier Board - A5/A6 Component Assembly Diagram



COMPONENT SIDE SHOWN  
 CONDUCTOR SIDE OPPOSITE

FIGURE 18. Power Supply Board - A7 Component Assembly Diagram

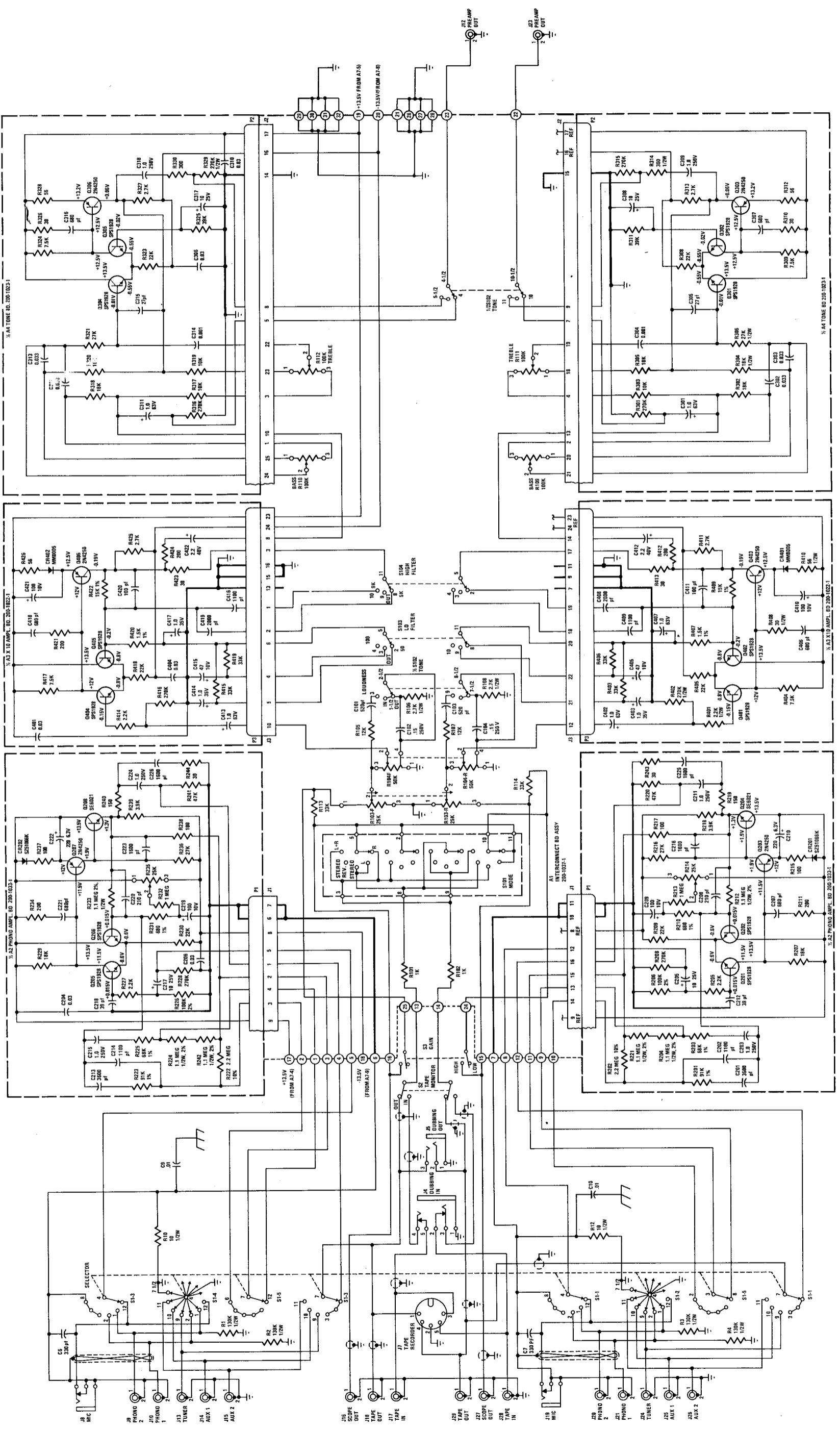


FIGURE 20. Model 1200 Schematic, A

REF	VAL	BETA RANGE	MIN. BETA	MAX. BETA
Q101	2N3055	100	50	200
Q102	2N3055	100	50	200
Q103	2N3055	100	50	200
Q104	2N3055	100	50	200
Q105	2N3055	100	50	200
Q106	2N3055	100	50	200
Q107	2N3055	100	50	200
Q108	2N3055	100	50	200
Q109	2N3055	100	50	200
Q110	2N3055	100	50	200
Q111	2N3055	100	50	200
Q112	2N3055	100	50	200
Q113	2N3055	100	50	200
Q114	2N3055	100	50	200
Q115	2N3055	100	50	200
Q116	2N3055	100	50	200
Q117	2N3055	100	50	200
Q118	2N3055	100	50	200
Q119	2N3055	100	50	200
Q120	2N3055	100	50	200

NOTES: UNLESS OTHERWISE SPECIFIED  
 1. ALL CAPACITOR VALUES ARE IN MICROFARADS (1000)  
 2. ALL RESISTOR VALUES ARE IN OHMS UNLESS OTHERWISE SPECIFIED  
 3. FOR COMPONENTS IN PARALLEL, THE VALUES ARE IN OHMS UNLESS OTHERWISE SPECIFIED  
 4. TRANSISTOR PARTS Q101-Q120 TO BE MATCHED IN SAME BETA RANGE  
 5. Q101 TO BE SAME BETA RANGE AS Q102  
 6. Q103 TO BE SAME BETA RANGE AS Q104  
 7. Q105 TO BE SAME BETA RANGE AS Q106  
 8. Q107 TO BE SAME BETA RANGE AS Q108  
 9. Q109 TO BE SAME BETA RANGE AS Q110  
 10. Q111 TO BE SAME BETA RANGE AS Q112  
 11. Q113 TO BE SAME BETA RANGE AS Q114  
 12. Q115 TO BE SAME BETA RANGE AS Q116  
 13. Q117 TO BE SAME BETA RANGE AS Q118  
 14. Q119 TO BE SAME BETA RANGE AS Q120

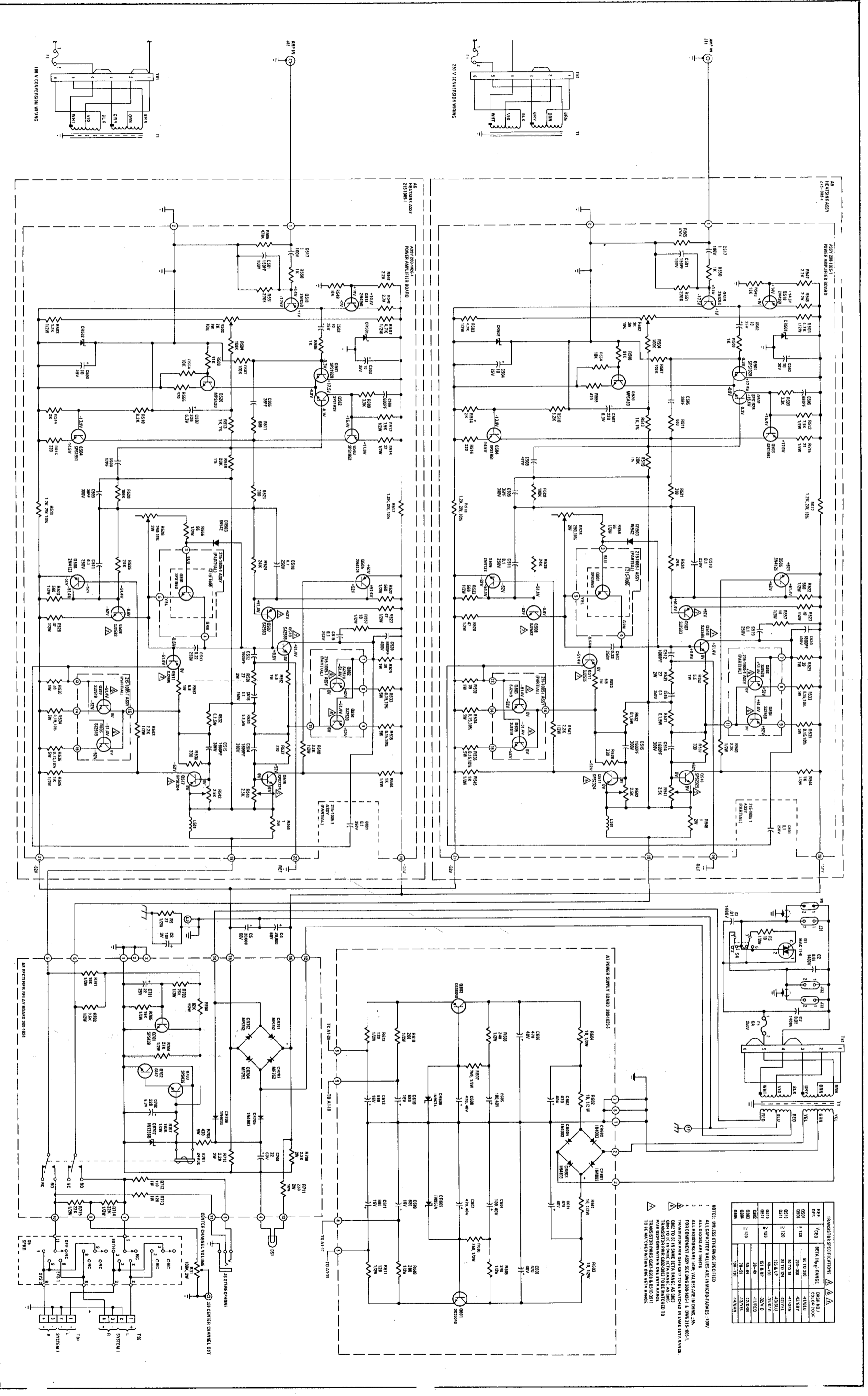


FIGURE 21. Model 1200 Schematic, B



# SERVICE BULLETIN

model number 1200	bulletin number M1200-1	date June 18, 1971
for serial numbers 1001	to 1100	
subject Ground Modification at Input Jacks		

Engineering Approval: *[Signature]*

Date: 6-22-71.

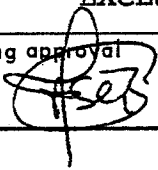
On Model 1200's between serial numbers 1001 through 1100, you may experience hum problems when using the preamplifier section to drive a separate power amplifier. To prevent this possibility, please perform the following modification.

In the unmodified units, the signal ground connection for the "Preamp Out" and "Amp In" jacks, is made internally with a bus wire joining the shield terminals. As part of the modification, remove this connection, as well as the bus running between the common terminals of the "Tape In" and "Phono 2" jacks. Make sure that you repeat this procedure in both channels. Do not alter any remaining bus wires on other terminals.

Next, remove and discard the external molded jumpers between the "Preamp Out" and "Amp In" jacks. Replace these with part number: 360-1027, (two required). When ordering, always specify the above bulletin number as the Parts Department will send the jumpers at no charge.

Please note that externally, the old and new jumpers are identical in appearance. The difference is internal as the new types have a ground or shield connection as compared to the old ones which do not. Of course, you can easily identify kinds with the use of an ohmmeter.

M1-043

<b>marantz</b>  <b>SERVICE BULLETIN</b>	model number	1200	bulletin number	<b>M-1200-2</b>
	for serial numbers	3501 and up		
	subject	<b>EXCESSIVE CROSS-TALK</b>		
	engineering approval			date

You may receive customer complaints regarding excessive cross-talk in the Marantz Model 1200 (S/N 3501 and up).


The cross-talk may exist when source is applied to the high level inputs (Tuner, Aux 1, Aux 2) and the unit is used in phono mode.

The following modification is recommended and should be performed only if the symptom fits specifically the case above.

Perform the modification in the numbered sequence listed below: This modification consists of removing jumpers at six (6) locations on the Selector switch. The six locations are:

- 1) Between pin 9 of deck 1 and pin 9 of deck 2.
- 2) Between pin 10 of deck 1 and pin 10 of deck 2.
- 3) Between pin 11 of deck 1 and pin 11 of deck 2.
- 4) Between pin 9 of deck 3 and pin 9 of deck 4.
- 5) Between pin 10 of deck 3 and pin 10 of deck 4.
- 6) Between pin 11 of deck 3 and pin 11 of deck 4.

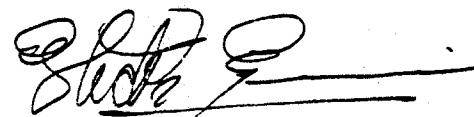
M2-090

  
 Hector E. Gervasio  
 National Technical Advisor

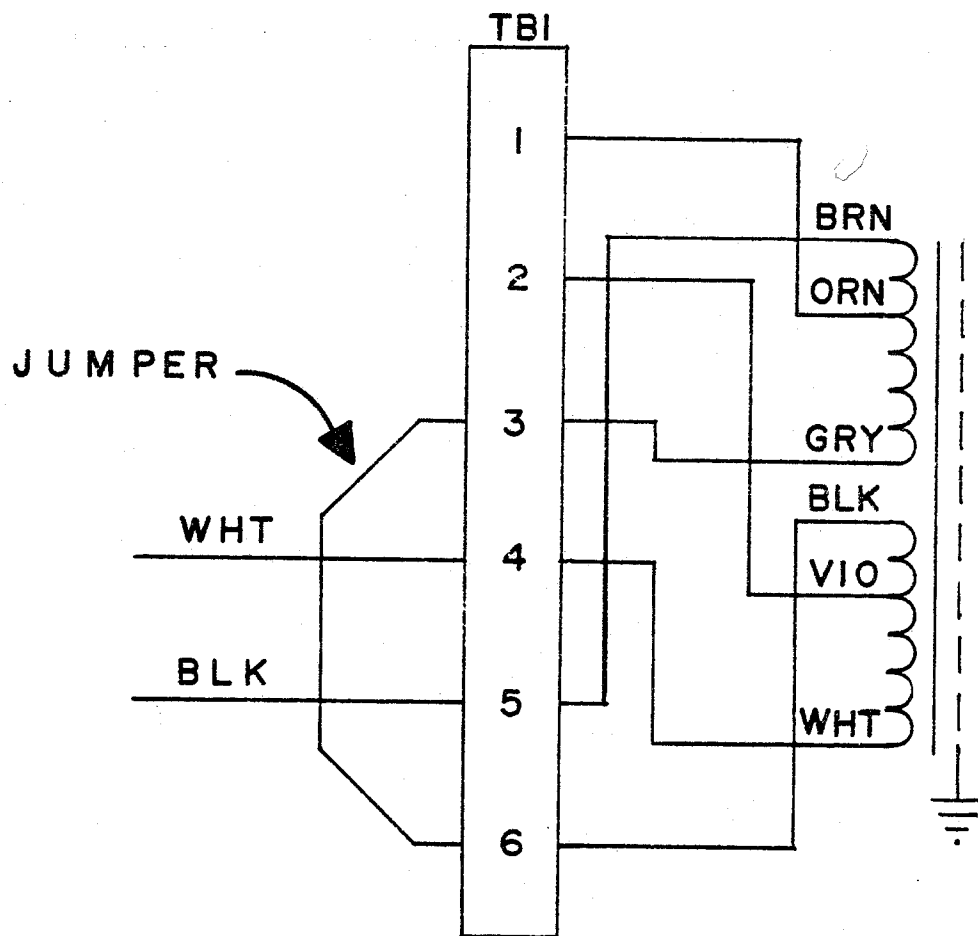
<b>marantz</b>  <b>SERVICE BULLETIN</b>	model number 1200	bulletin number  <b>M-1200-3</b>
	for serial numbers ALL	
	subject  240 VOLT CONVERSION	
	engineering approval  N/A	date  12/13/72

To convert the Model 1200 to 240 volt operation, perform the following steps:

- 1) Remove top cover.
- 2) Orient the Model 1200 so that the rear panel is facing towards the viewer.
- 3) Locate TBl, the strip located on the power transformer half shell facing the rear panel, which terminates the power transformer primary wires.
- 4) Unsolder the black and the white power lead-in wires and all jumpers from TBl.
- 5) Solder a jumper on TBl connecting the grey and black transformer wires.
- 6) Solder the black and the white power lead-in wires to the brown and the white transformer wires, respectively, on TBl.
- 7) Replace the top cover.
- 8) Replace the 6 amp. 250V fuse in the unit with a 4 amp. 250V fuse, part number 451-1003.
- 9) Verify that unit operates properly.



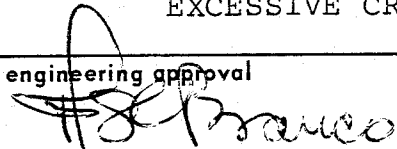
Hector E. Gervasio  
Technical Services Manager



MODEL 1200 240V CONVERSION

**marantz**®

**SERVICE BULLETIN**

model number	1200	bulletin number	M-1200-4
for serial numbers	3501 and UP		
subject	EXCESSIVE CROSS-TALK		
engineering approval			date
			8-14-73

THIS BULLETIN SUPERSEDES PREVIOUS SERVICE BULLETIN M-1200-2, DATED NOVEMBER 16, 1973 ON THIS SUBJECT.

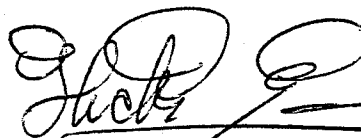
You may receive customer complaints regarding excessive cross-talk in the Marantz Model 1200 (S/N 3501 and up.)

The cross-talk may exist when the unit is used in the phono mode, while source is applied to the high inputs (Tuner, Aux 1, Aux 2.)

The following modification is recommended and should only be performed if the specific symptom fits the above case.

Perform the modification of the selector-switch in the numbered sequence listed below:


- 1) Remove jump between pin 9 of deck 1 and pin 9 of deck 2.
- 2) Remove jump between pin 10 of deck 1 and pin 10 of deck 2.
- 3) Remove jump between pin 11 of deck 1 and pin 11 of deck 2.
- 4) Remove jump between pin 9 of deck 3 and pin 9 of deck 4.
- 5) Remove jump between pin 10 of deck 3 and pin 10 of deck 4.
- 6) Remove jump between pin 11 of deck 3 and pin 11 of deck 4.
- 7) Install and solder jump between pin 8 of deck 1 and pin 8 of deck 3.
- 8) Install ground connection by soldering a piece of flexible wire from pin 8 of deck 3 to terminal 26 on the interconnecting board as shown in figure #1.



Hector E. Gervasio, Manager  
Technical Services





<b>marantz</b> <sup>®</sup>	model number	1200	bulletin number	<b>M-1200-5</b>
	for serial numbers	3501 and up to 5900		
	subject			CROSS-TALK
<b>SERVICE BULLETIN</b>	engineering approval		date	10-19-73

THIS BULLETIN SUPERSEDES PREVIOUS SERVICE BULLETIN M-1200-4, DATED AUGUST 14, 1973 ON THIS SUBJECT.

You may receive customer complaints regarding cross-talk in the Marantz Model 1200 (S/N 3501 and up to 5900).

The cross-talk may exist when the unit is used in the phono mode, while source is applied to the high inputs (Tuner, Aux 1, Aux 2).

The following modification is recommended and should only be performed if the specific symptom fits the above case.

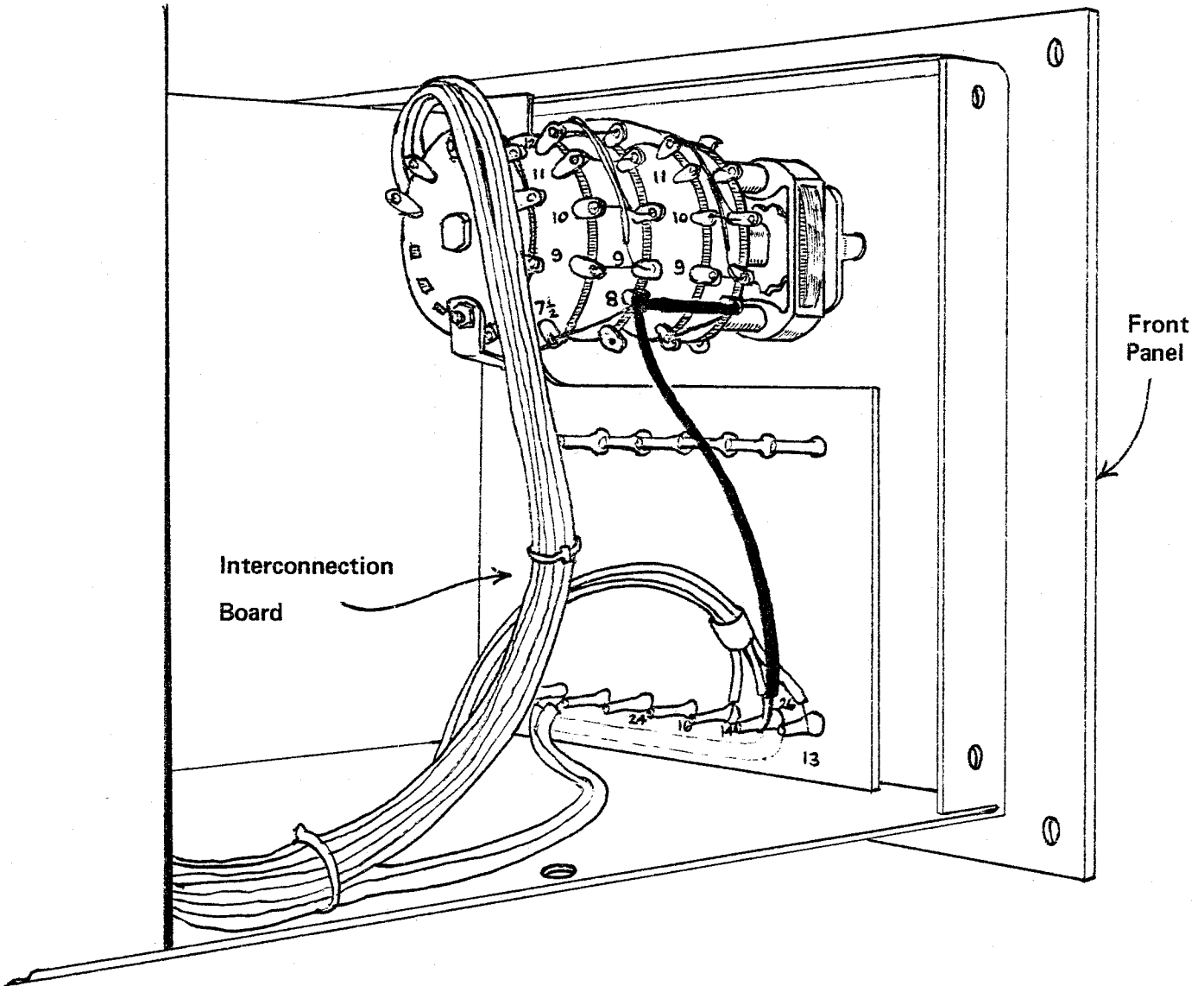
Perform the modification of the selector-switch in the numbered sequence listed below:

- 1) Install and solder jumper between pin 8 of deck 1 and pin 8 of deck 3.
- 2) Install ground connection by soldering a piece of flexible wire from pin 8 of deck 3 to terminal 26 on the interconnecting board as shown in figure #1.



Hector E. Gervasio, Manager  
Technical Services

FIGURE 1  
SELECTOR SWITCH, LEFT SIDE VIEW



Note: Some wires have been omitted from this drawing for purposes of clarity.

<b>marantz</b>  <b>SERVICE BULLETIN</b> <small>SS-MAR0234</small>	model number 1200	bulletin number <b>M-1200-8</b>
	for serial numbers SEE BELOW	
	subject  SERVICE MANUAL SUPPLEMENT	
	engineering approval <i>[Signature]</i>	date 9-24-75

This Supplement supercedes Marantz Service Bulletin M-1200-7 "Service Manual Supplement", and should be incorporated into the Model 1200 Service Manual as soon as possible to ensure proper reference information.

I. Information applicable to all units below serial number 5900.

<u>REF. DESIG.</u>	<u>PART NUMBER</u>	<u>DESCRIPTION</u>
	174-1001-000	Knob, Large
	174-1002-000	Knob, Medium
	174-1004-000	Knob, Small
	174-1005-000	Knob, Power Switch
	159-1001-000	Dust Mask
	136-1022-000	Shield, Front Panel
	132-1005-000	Bracket, Heatsink Extension
	136-1017-000	Cover, Power Transistor
	371-1006-000	Transistor Insulator (TO-3)
	371-1007-000	Transistor Insulator (TO-66)
	132-1024-000	Heatsink (TO-66 Bracket Type)
	132-1020-100	Circuit Board Keeper
	360-1025-000	Male Connector Pin "F" Post
	360-1008-000	Phono Plug, Self Shorting
J31, 32, 33	360-1001-000	AC Outlet, Accessory
J7	360-1016-000	Connector Receptacle (DIN)
P4	361-1001-000	Line Cord
XF1	367-1001-000	Fuse Holder
	249-1015-100	Accessory Kit
	199-1069-000	Owners Manual

September 24, 1975

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II. Information applicable only to units bearing serial numbers indicated by check (✓) mark.

REF. DESIG.	PART NUMBER	DESCRIPTION	FOR SERIAL NUMBERS		
			BELOW 3500	3500 TO 5900 (See Note 1)	ABOVE 5900 (See Note 2)
A2	200-1021-100	Phono Amp. PCB Assy.	✓		
A2	200-1033-100	Phono Amp. PCB Assy.		✓	✓
A3	200-1022-100	X10 Amp. PCB Assy.	✓	✓	✓
A4	200-1023-100	Tone PCB Assy.	✓	✓	✓
A5 - A6	215-1005-100	Heatsink	✓	✓	
A5 - A6	215-1012-200	Heatsink			✓
	200-1026-100	Power Amp. PCB Assy.	✓	✓	
	200-1071-200	Power Amp. PCB Assy.			✓
A7	200-1025-100	Power Supply PCB Assy.	✓		
A7	200-1025-500	Power Supply PCB Assy.		✓	✓
A8	200-1024-100	Rectifier Relay PCB Assy.	✓	✓	
A8	200-1075-100	Rectifier Relay PCB Assy.			✓

NOTES: 1. For additional information on units bearing serial numbers 3500 to 5900 refer to Model 1200 Addendum, Part Number 199-1073-000.

2. For additional information on units bearing serial numbers above 5900 refer to Model 1200B Addendum, Part Number 199-1146-000.



Albert Almeida, Manager  
Technical Services