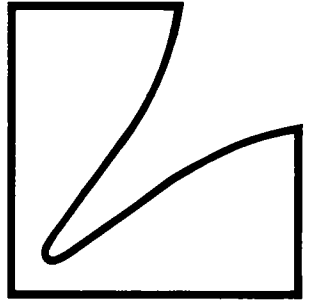
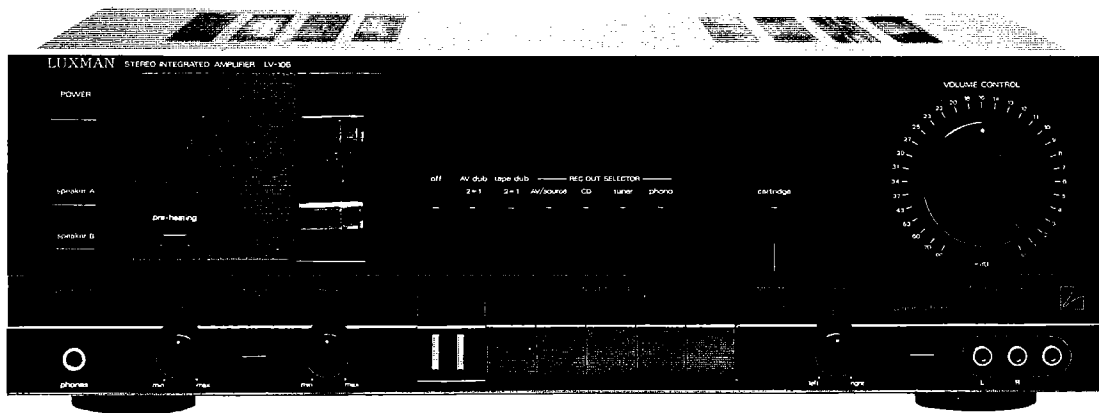


SERVICE MANUAL



Stereo Integrated Amplifier

LV-105



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Specifications

Power-Output	70W (0.25% THD at 20 ~ 20 kHz)
Head-phones Output	(80W/8 ohm - 1 kHz) 425mV ±10%
Input Sensitivity (1 kHz)	TUNER: 150mV ±10%, CD: 150mV ±10%, TAPE-1, -2: 150mV ±10%, AV-1, -2: 150mV ±10%, PHONO (MM): 2.3mV ±10%, PHONO (MC): 53.5 dBf ±10%
Input Impedance (1 kHz)	TUNER: 45K ohm ±10%, CD: 45K ohm ±10%, TAPE-1, -2: 45K ohm ±10%, AV-1, -2: 45K ohm ±10%, PHONO (MM): 47K ohm ±10%, PHONO (MC): 100 ohm ±10%
Frequency Response	TUNER: 10 - 100 kHz +0.6 -2 dB, CD: 10 - 100 kHz +0.6 -2 dB, TAPE-1, -2: 10 - 100 kHz +0.6 -2 dB, PHONO (MM): 100 Hz ±0.5 dB, PHONO (MC): 10 kHz ±0.5 dB
Signal to Noise Ratio (Input Terminal Shorted)	TUNER: 86 dB, CD: 86 dB, TAPE-1, -2: 86 dB, AV-1, -2: 86 dB, PHONO (MM): 70 dB, PHONO (MC): 46 dB
Power Supply	120V, 60 Hz
Power Consumption	250W
Semiconductors	3 ICs, 39 Transistors, 10 FETs, 10 Zener Diodes, 32 Diodes, 2 Vacuum Tubes
Dimension	438(W) x 148(H) x 353(D) mm
Weight	10.2 kg

NOTE: Due to continuing product improvement, specifications and design are subject to change without notice.

Parts Locations and Disassembly Instructions

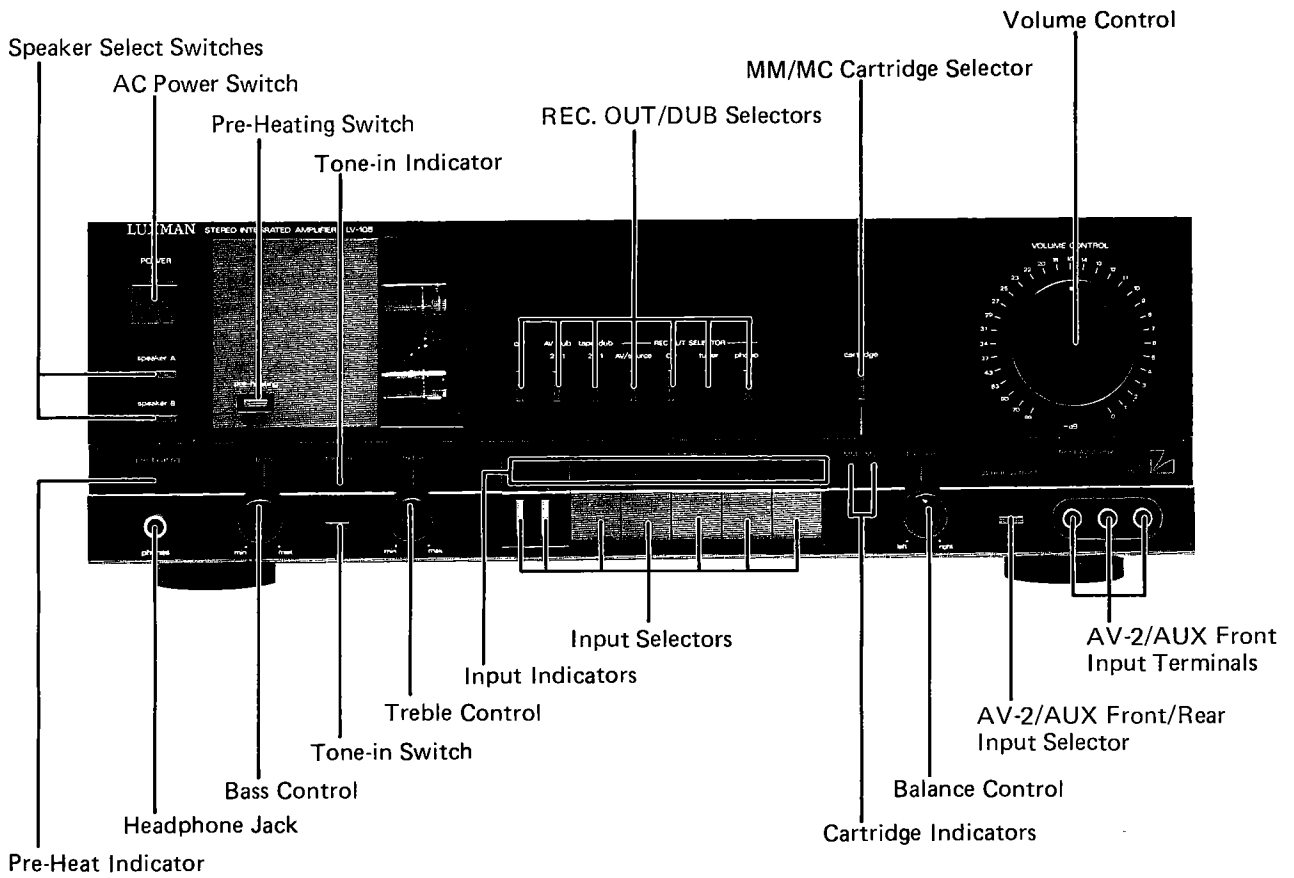


Figure 1

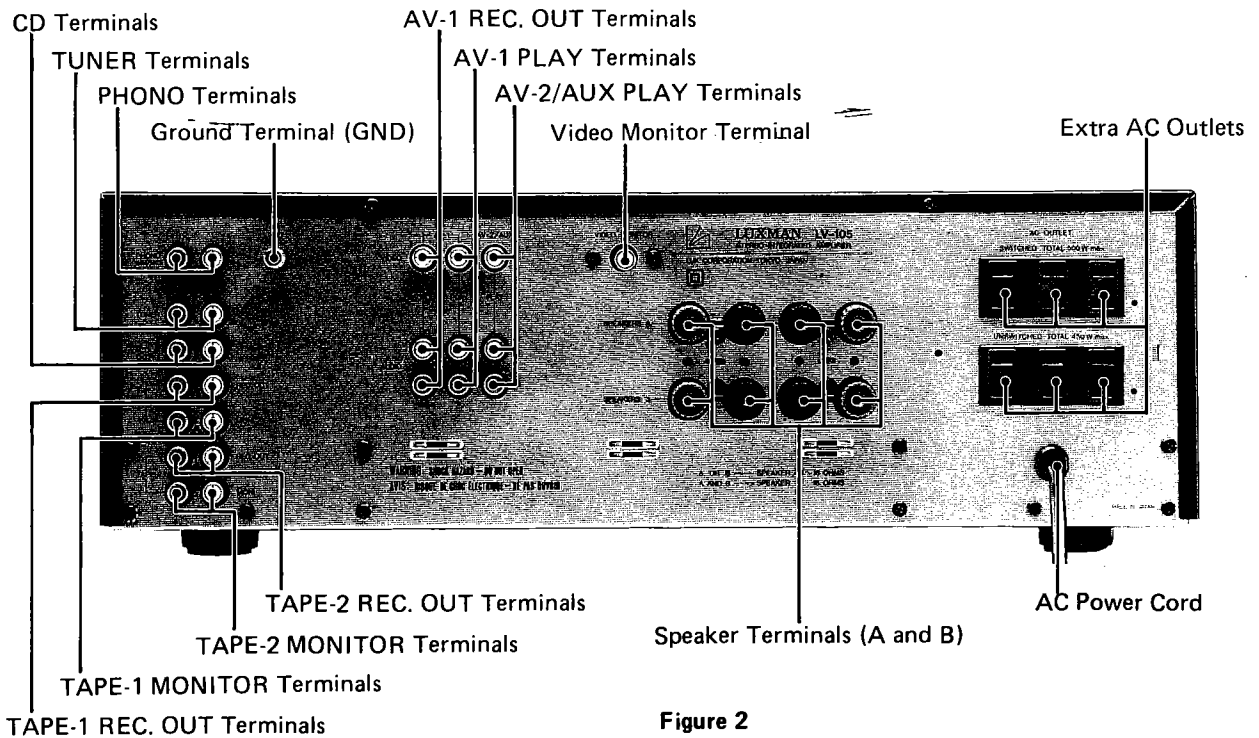


Figure 2

1. Removal of Top Cover

- (1) Remove six screws marked "○" as shown in Figure 3 and 4.
- (2) Pull out the Top cover in the direction of the arrow as shown in Figure 3.

2. Removal of Front Panel

- (1) Remove the volume control knob as shown in Figure 3.
- (2) Remove three screws marked "△" as shown in Figure 5.
- (3) Front panel can be removed by pulling it forward. But when the panel is engaged tightly, pull the panel end little by little, and the panel will be removed easily.

3. Removal of Front Escutcheon

- (1) After removal of Front Panel, remove three control knobs (bass, treble, balance), remove two hooks (a), and remove six screws marked "※" as shown in Figure 3, 4 and 6.
- (2) Disconnect all wires from the Front Escutcheon.
- (3) The Front Escutcheon with Function, Tone and Headphone P.C. Boards can be removed completely.

4. Removal of Function/LED P.C. Board

- (1) After removal of Front Escutcheon, remove four hooks (b) as shown in Figure 7.

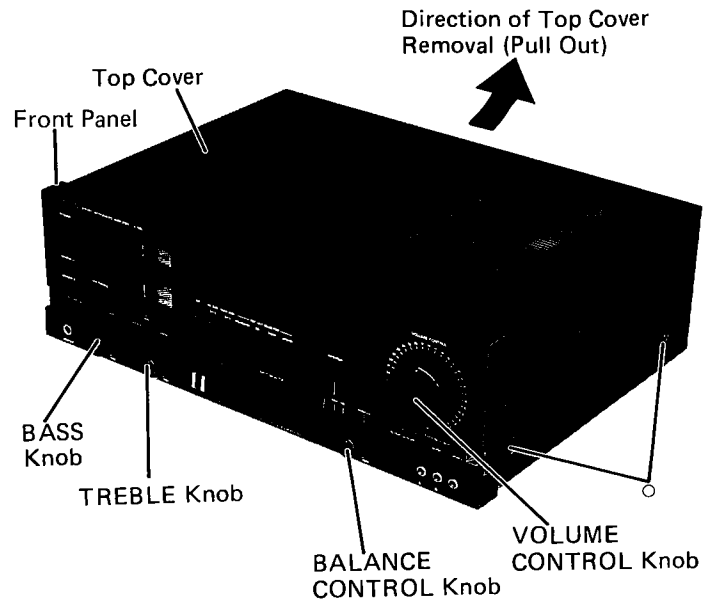


Figure 3

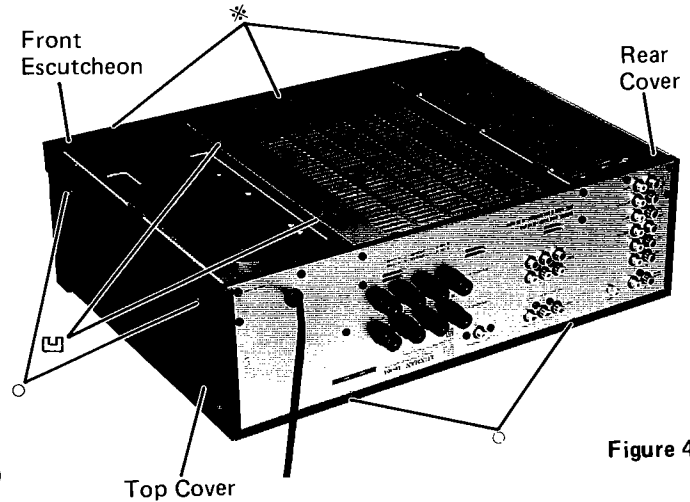


Figure 4

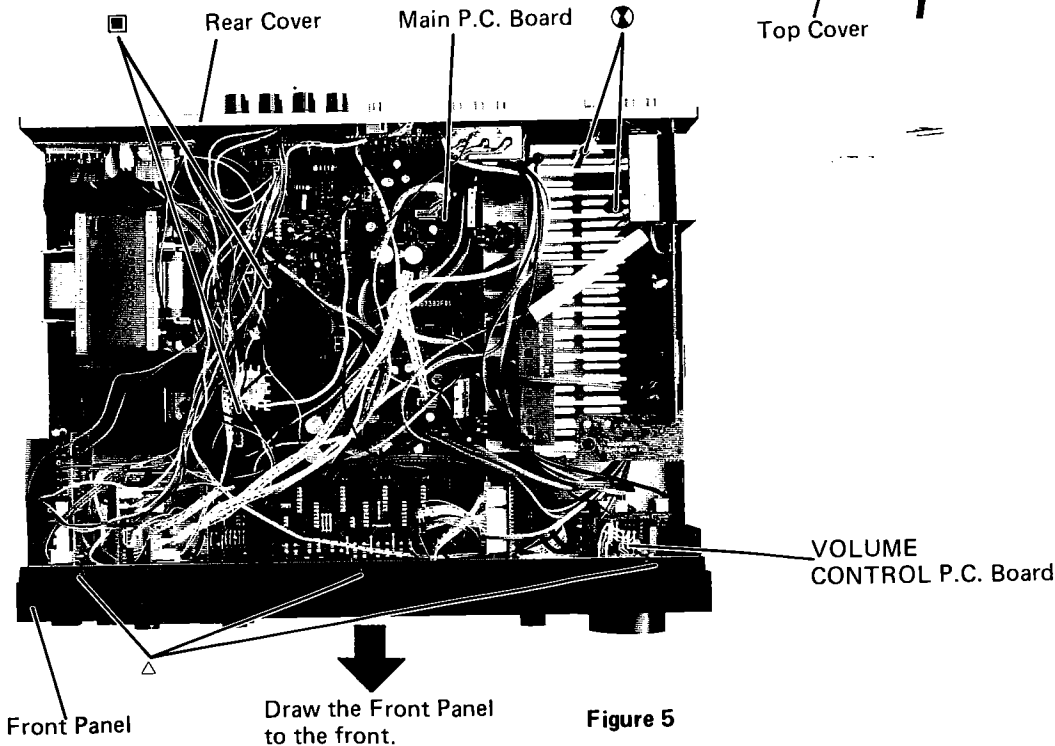


Figure 5

5. Removal of Tone P.C. Board

- (1) After removal of Front Escutcheon, remove two hooks (c) as shown in Figure 7.

6. Removal of Headphone P.C. Board

- (1) After removal of Front Escutcheon, remove two screws marked "◎" as shown in Figure 7.

7. Removal of Front Chassis

- (1) After removal of Front Escutcheon, remove seven screws marked "☆" as shown in Figure 8.
- (2) Remove Front Chassis upward and then proceed to items 7-1 ~ 7-9.

7-1. Removal of Speaker Switch P.C. Board

- (1) Remove three knobs (A) and remove four screws marked "▲" as shown in Figure 6.
- (2) Disconnect all wires from the Speaker Switch P.C. Board.

7-2. Removal of Heat-UP Switch P.C. Board

- (1) Remove one knob (B) and remove two screws marked "▽" as shown in Figure 6.
- (2) Disconnect all wires from the Heat up Switch P.C. Board.

7-3. Removal of Tube P.C. Board

- (1) Remove two screws marked "■" as shown in Figure 9.
- (2) Remove one hook (d) as shown in Figure 6.
- (3) Disconnect all wires from the Tube P.C. Board.

7-4. Removal of Rec Selector P.C. Board

- (1) Remove two screws marked "■" and remove seven knobs (c) as shown in Figure 6.
- (2) Disconnect all wires from the Rec Selector P.C. Board.

7-5. Removal of MM/MC P.C. Board

- (1) Remove one knob (D) and remove two screws marked "□" as shown in Figure 6.
- (2) Disconnect all wires from the MM/MC P.C. Board.

7-6. Removal of Volume Control P.C. Board

- (1) Remove one nut (A) and one washer (A) as shown in Figure 8.
- (2) Disconnect all wires from the Volume Control P.C. Board.

7-7. Removal of Tone Control P.C. Board

- (1) Remove one knob (E) and six screws marked "●" as shown in Figure 8.
- (2) Remove two nuts (B) as shown in Figure 8.
- (3) Disconnect all wires from the Tone Control P.C. Board.

7-8. Removal of Function P.C. Board

- (1) Remove seven knobs (F) and remove four screws marked "●" as shown in Figure 8.
- (2) Remove one nut (c) as shown in Figure 8.
- (3) Disconnect all wires from the Function P.C. Board.

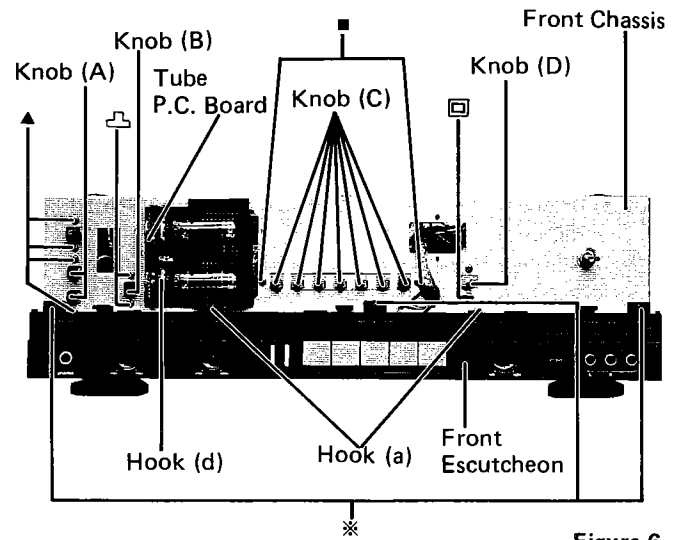


Figure 6

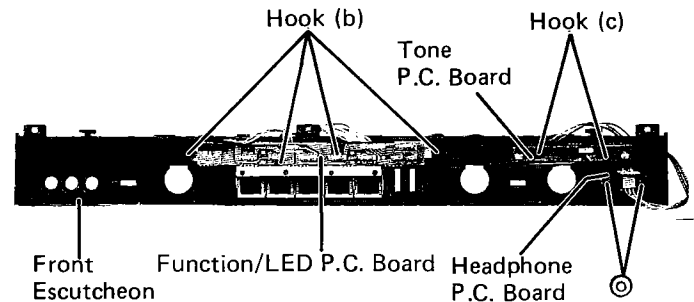


Figure 7

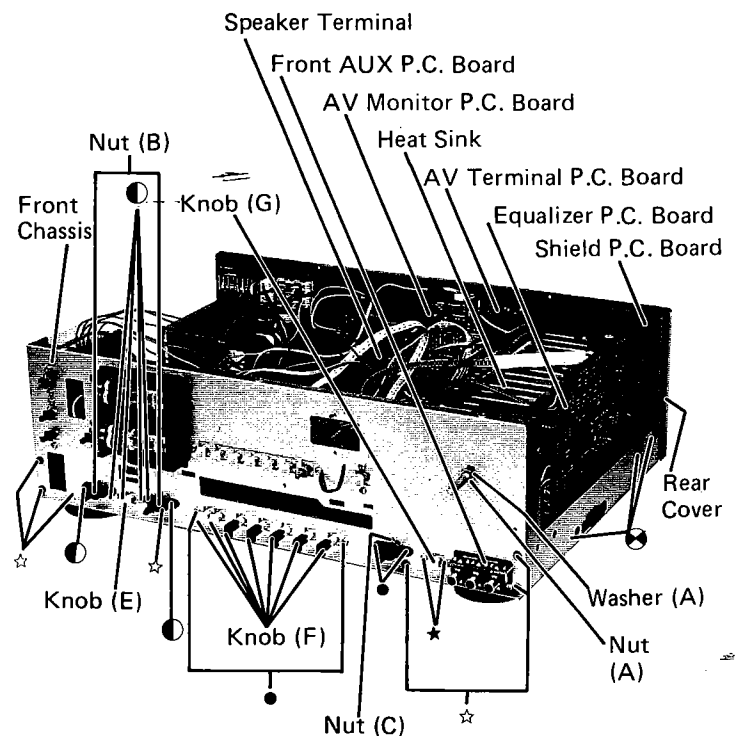


Figure 8

7-9. Removal of Front AUX P.C. Board

- (1) Remove one knob (G) and remove two screws marked "★" as shown in Figure 8.
- (2) Disconnect all wires from the Front AUX P.C. Board.

8. Removal of AV Terminal P.C. Board and AV Monitor P.C. Board

- (1) Remove six screws marked "▽" as shown in Figure 10.
- (2) Disconnect all wires from there P.C. Board.

9. Removal of Equalizer P.C. Board

- (1) Remove ten screws marked "⊗" as shown in Figure 5, 8 and 10.
- (2) Disconnect all wires from the Equalizer P.C. Board.

10. Removal of Speaker Terminal P.C. Board

- (1) Remove four screws marked "⊗" as shown in Figure 10.
- (2) Disconnect all wires from the Speaker Terminal P.C. Board.

11. Removal of Rear Cover

- (1) After removal of Equalizer P.C. Board remove ten screws marked "△" as shown in Figure 10.
- (2) Remove two screws marked "☐" as shown in Figure 4.
- (3) Disconnect all wires from the AC outlet.

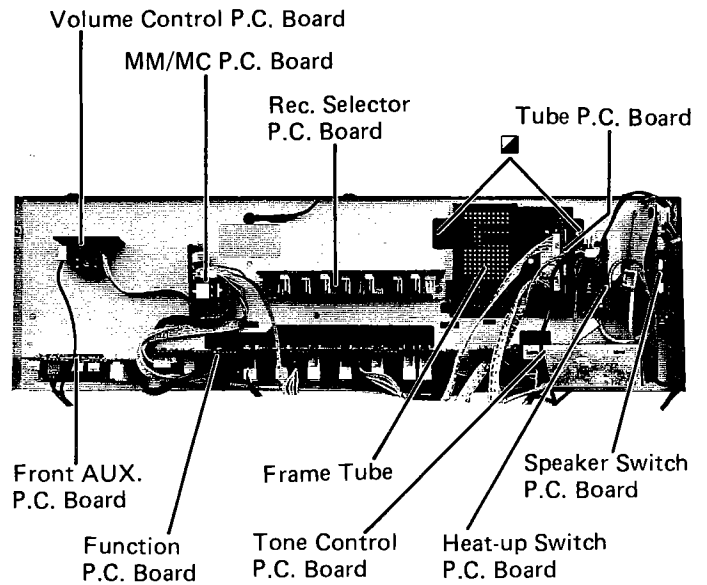


Figure 9

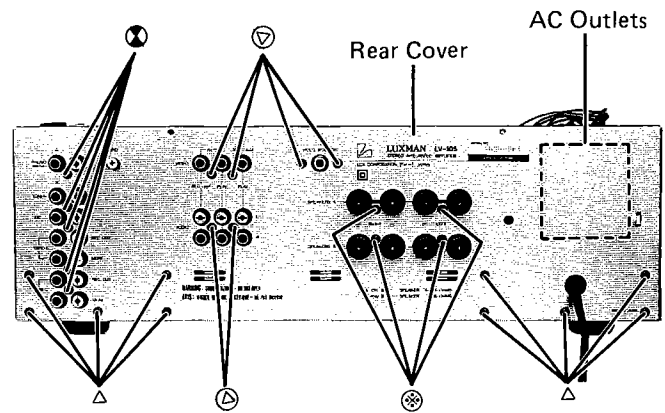


Figure 10

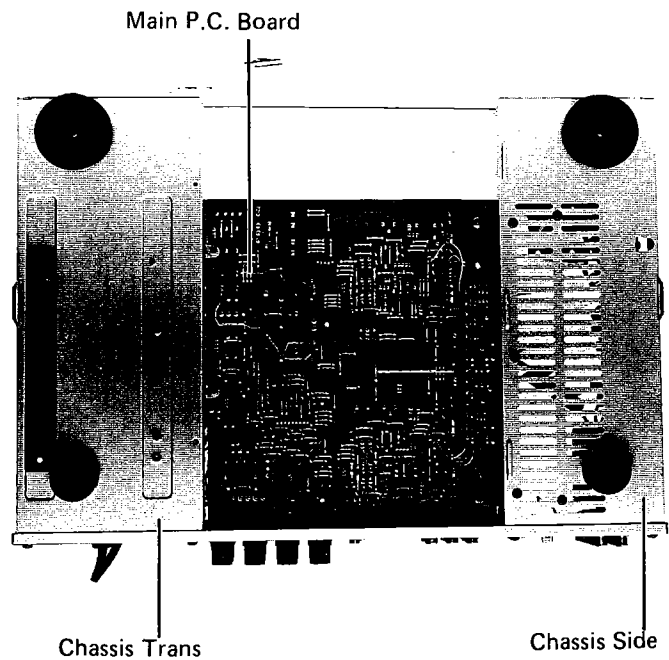


Figure 11

12. Removal of Main P.C. Board

- (1) After removal of Equalizer P.C. Board and Rear Cover, remove four screws marked "■" as shown in Figure 5 and 13.
- (2) Disconnect all wires from the Main P.C. Board.

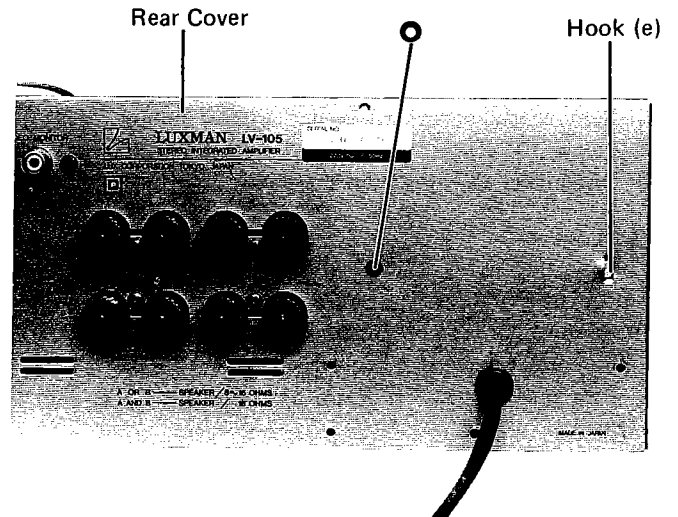


Figure 12

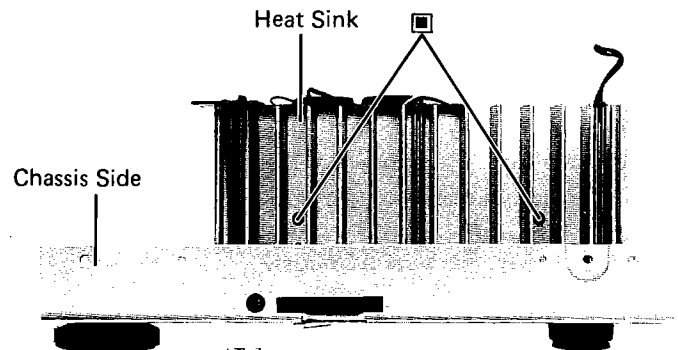
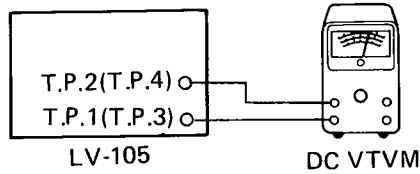


Figure 13

Adjustment Procedures

1. Connection



2. Control Settings

Power Switch	ON	Bass Control	Center Position
Volume Control	Minimum (fully counterclockwise)	Balance Control	Center Position
Treble Control	Center Position	Pre-Heater Switch	ON
		Others	OFF

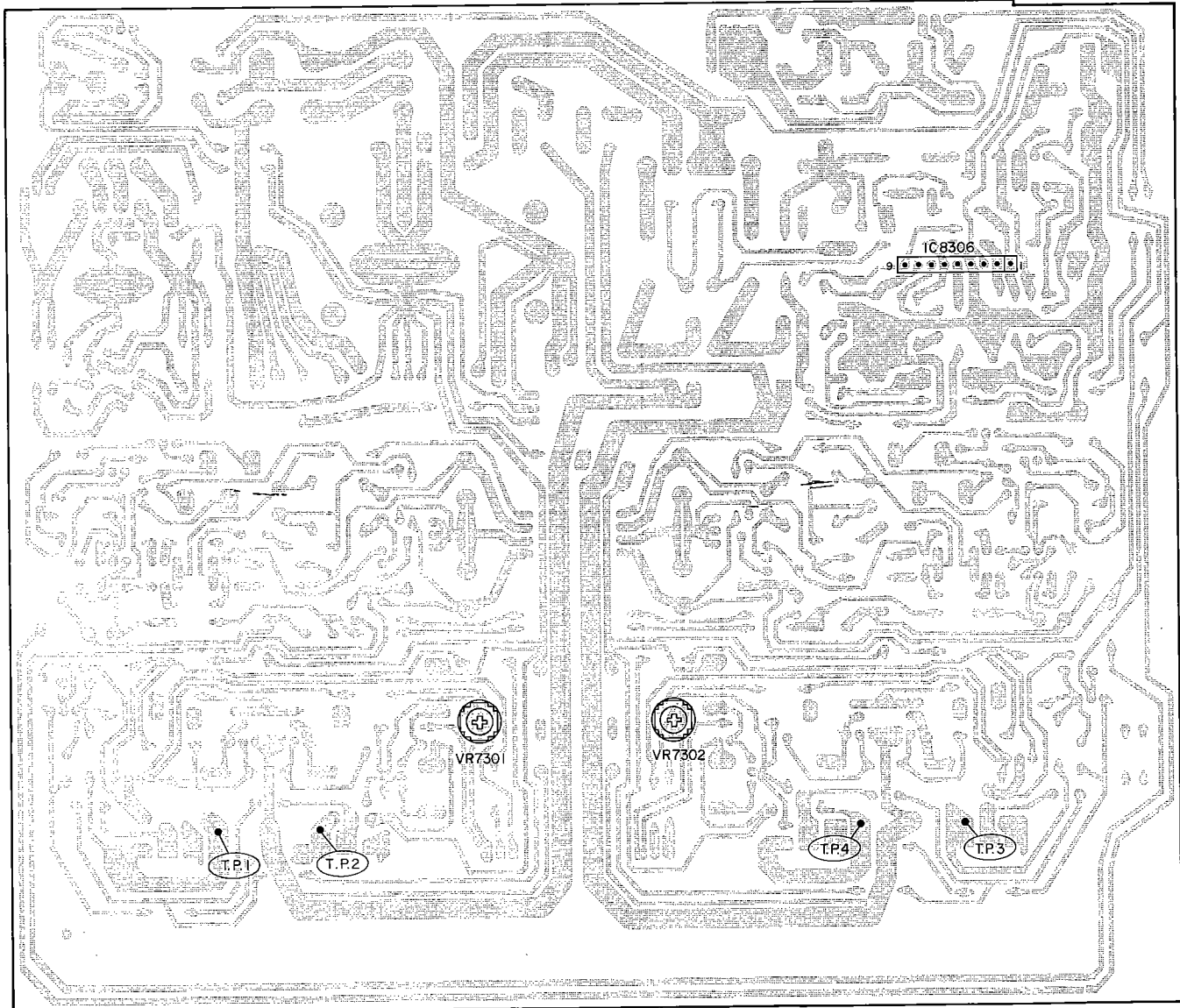
3. Adjustment Procedure

(1) Idling Adjustment

Adjust VR7301 (VR7302) until 55mV is obtained between T.P.1 (T.P.3) and T.P.2 (T.P.4).

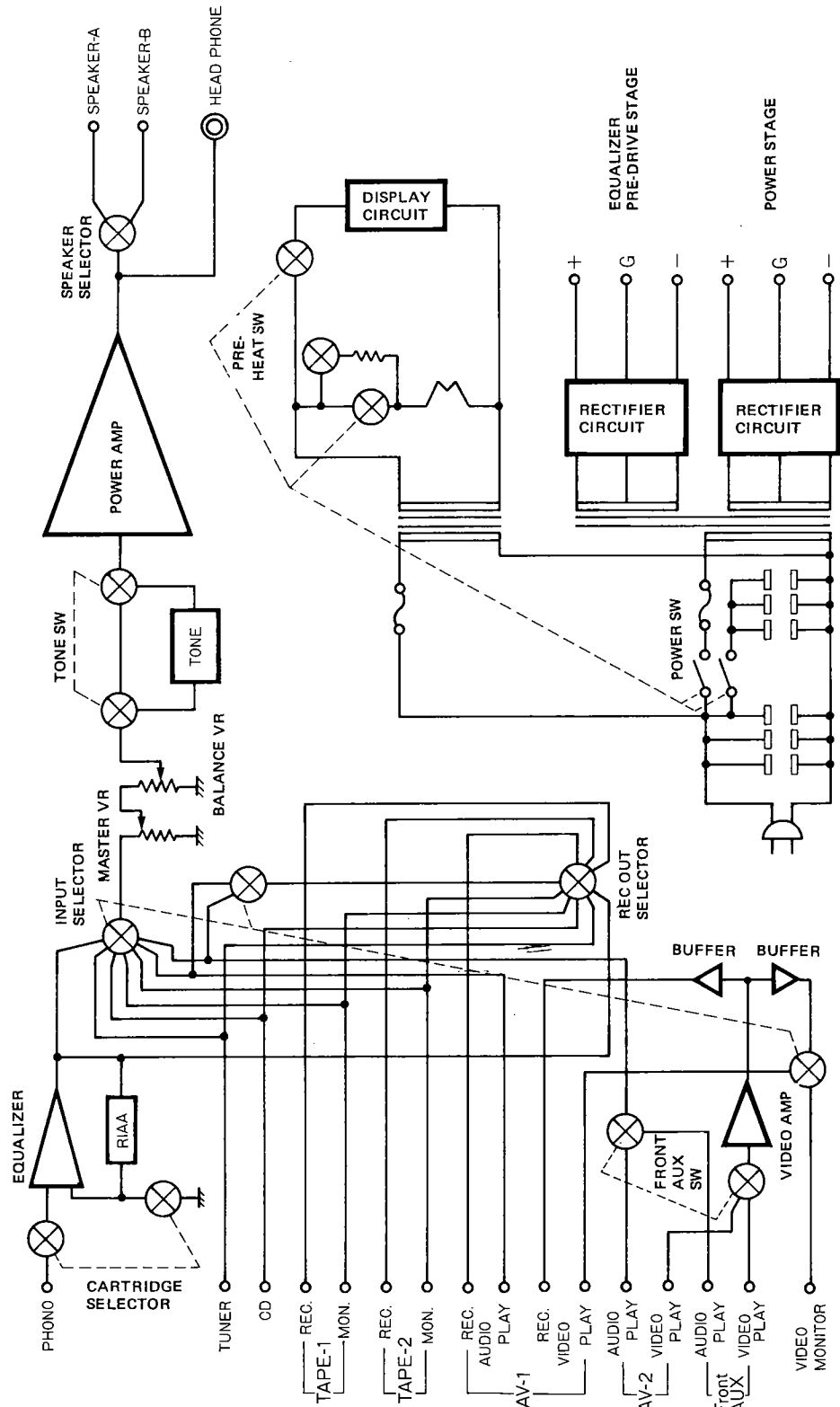
Note: This adjustment should be made approx. 30 minutes after the power on or voltage becomes sufficiently steady state.

Adjustment Locations

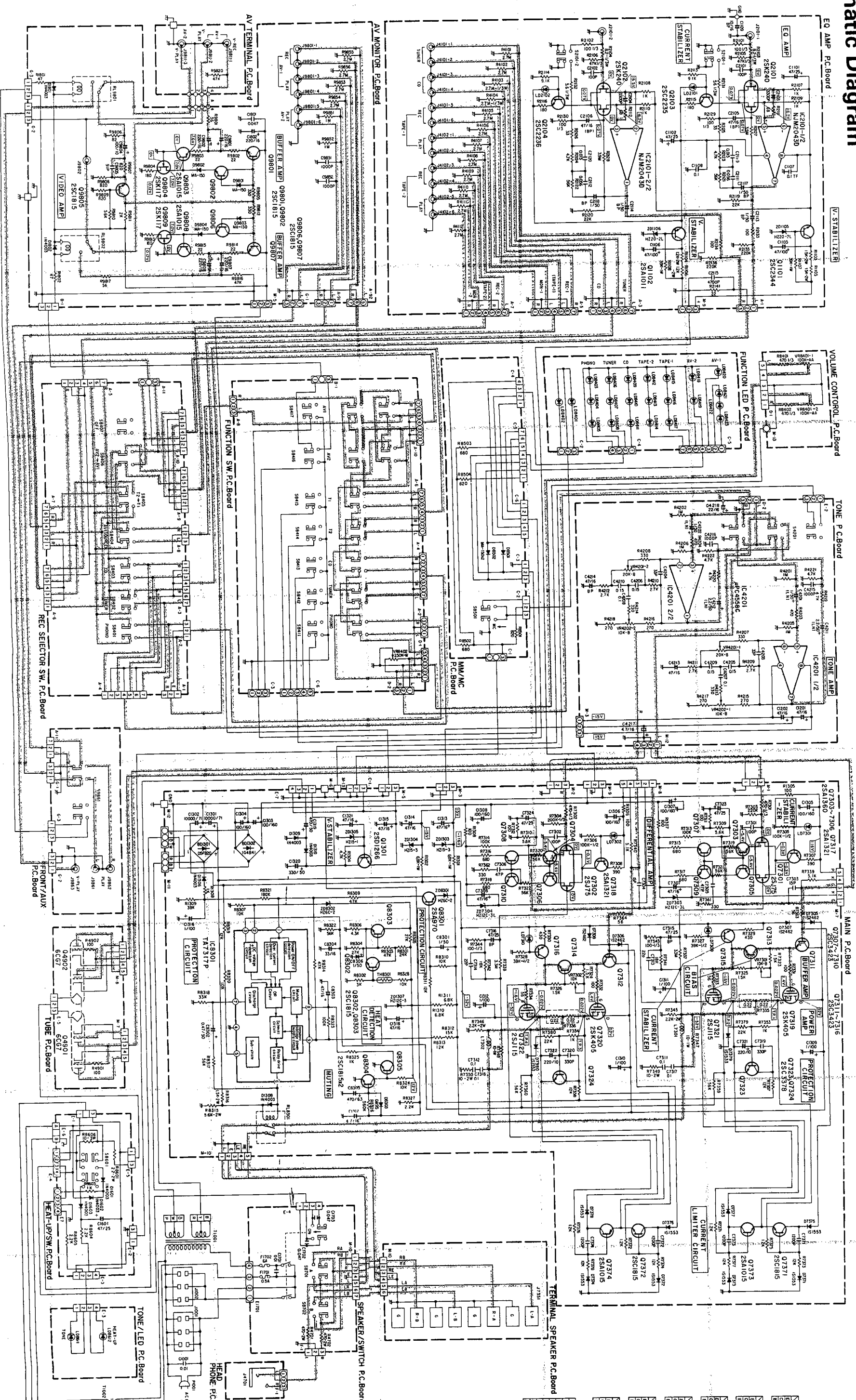


Main P.C. Board

Block Diagram



Schematic Diagram



IC2101	1	2	3	4	5	6	7	8
Q9806	1	2	3	4	5	6	7	8
Q9807	1	2	3	4	5	6	7	8
Q9808	1	2	3	4	5	6	7	8
Q9809	1	2	3	4	5	6	7	8
Q9801	1	2	3	4	5	6	7	8
Q9802	1	2	3	4	5	6	7	8
Q9803	1	2	3	4	5	6	7	8
Q9804	1	2	3	4	5	6	7	8
Q9805	1	2	3	4	5	6	7	8
Q9810	1	2	3	4	5	6	7	8
Q9811	1	2	3	4	5	6	7	8
Q9812	1	2	3	4	5	6	7	8
Q9813	1	2	3	4	5	6	7	8
Q9814	1	2	3	4	5	6	7	8
Q9815	1	2	3	4	5	6	7	8
Q9816	1	2	3	4	5	6	7	8
Q9817	1	2	3	4	5	6	7	8
Q9818	1	2	3	4	5	6	7	8
Q9819	1	2	3	4	5	6	7	8
Q9820	1	2	3	4	5	6	7	8
Q9821	1	2	3	4	5	6	7	8
Q9822	1	2	3	4	5	6	7	8
Q9823	1	2	3	4	5	6	7	8
Q9824	1	2	3	4	5	6	7	8
Q9825	1	2	3	4	5	6	7	8
Q9826	1	2	3	4	5	6	7	8
Q9827	1	2	3	4	5	6	7	8
Q9828	1	2	3	4	5	6	7	8
Q9829	1	2	3	4	5	6	7	8
Q9830	1	2	3	4	5	6	7	8
Q9831	1	2	3	4	5	6	7	8
Q9832	1	2	3	4	5	6	7	8
Q9833	1	2	3	4	5	6	7	8
Q9834	1	2	3	4	5	6	7	8
Q9835	1	2	3	4	5	6	7	8
Q9836	1	2	3	4	5	6	7	8
Q9837	1	2	3	4	5	6	7	8
Q9838	1	2	3	4	5	6	7	8
Q9839	1	2	3	4	5	6	7	8
Q9840	1	2	3	4	5	6	7	8
Q9841	1	2	3	4	5	6	7	8
Q9842	1	2	3	4	5	6	7	8
Q9843	1	2	3	4	5	6	7	8
Q9844	1	2	3	4	5	6	7	8
Q9845	1	2	3	4	5	6	7	8
Q9846	1	2	3	4	5	6	7	8
Q9847	1	2	3	4	5	6	7	8
Q9848	1	2	3	4	5	6	7	8
Q9849	1	2	3	4	5	6	7	8
Q9850	1	2	3	4	5	6	7	8
Q9851	1	2	3	4	5	6	7	8
Q9852	1	2	3	4	5	6	7	8
Q9853	1	2	3	4	5	6	7	8
Q9854	1	2	3	4	5	6	7	8
Q9855	1	2	3	4	5	6	7	8
Q9856	1	2	3	4	5	6	7	8
Q9857	1	2	3	4	5	6	7	8
Q9858	1	2	3	4	5	6	7	8
Q9859	1	2	3	4	5	6	7	8
Q9860	1	2	3	4	5	6	7	8
Q9861	1	2	3	4	5	6	7	8
Q9862	1	2	3	4	5	6	7	8
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Q9870	1	2	3	4	5	6	7	8
Q9871	1	2	3	4	5	6	7	8
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Q9876	1	2	3	4	5	6	7	8
Q9877	1	2	3	4	5	6	7	8
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Q9879	1	2	3	4	5	6	7	8
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Q9895	1	2	3	4	5	6	7	8
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Q9897	1	2	3	4	5	6	7	8
Q9898	1	2	3	4	5	6	7	8
Q9899	1	2	3	4	5	6	7	8
Q9900	1	2	3	4	5	6	7	8

Measuring Condi
 (1) Power Supply
 AC 120V
 (2) Measuring W
 Digital M.
 (3) Speakers
 (4) Measuring C
 No Signal
 Power SW

NOTES:
 1. All re:
 2. All ca

