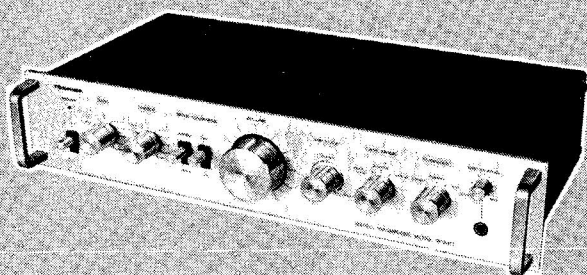


# TOSHIBA

## STEREO PREAMPLIFIER

# SY-330



### SPECIFICATIONS

<b>Pre Amp Section</b>		
Input Sensitivity/ Impedance:	PHONO 2.5mV/47K ohm TUNER 150mV/47K ohm AUX/TAPE 150mV/47K ohm MIC 2mV/47KΩ	Frequency Response: TREBLE (at 10 kHz) ±10 dB AUX 20 Hz to 40 kHz ±1 dB PHONO 30 Hz 15 kHz ±0.5 dB (RIAA equalization)
Output Level:	TAPE REC 150mV PRE OUT 1V	Phono Overload Level: 150mV (0.1%)
Total Harmonic Distortion:	0.1%	<b>General</b>
S/N (IHF A Network):	PHONO 70 dB AUX 90 dB	Power Supply: AC 220V or AC 240V 50 Hz
Tone Control:	BASS (at 100 Hz) ±10 dB	Power Consumption: 3W
		Weight: 2.7 kg
		Dimensions (W x H x D): 450 x 97 x 245 (m/m)

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## 1. BLOCK DIAGRAM

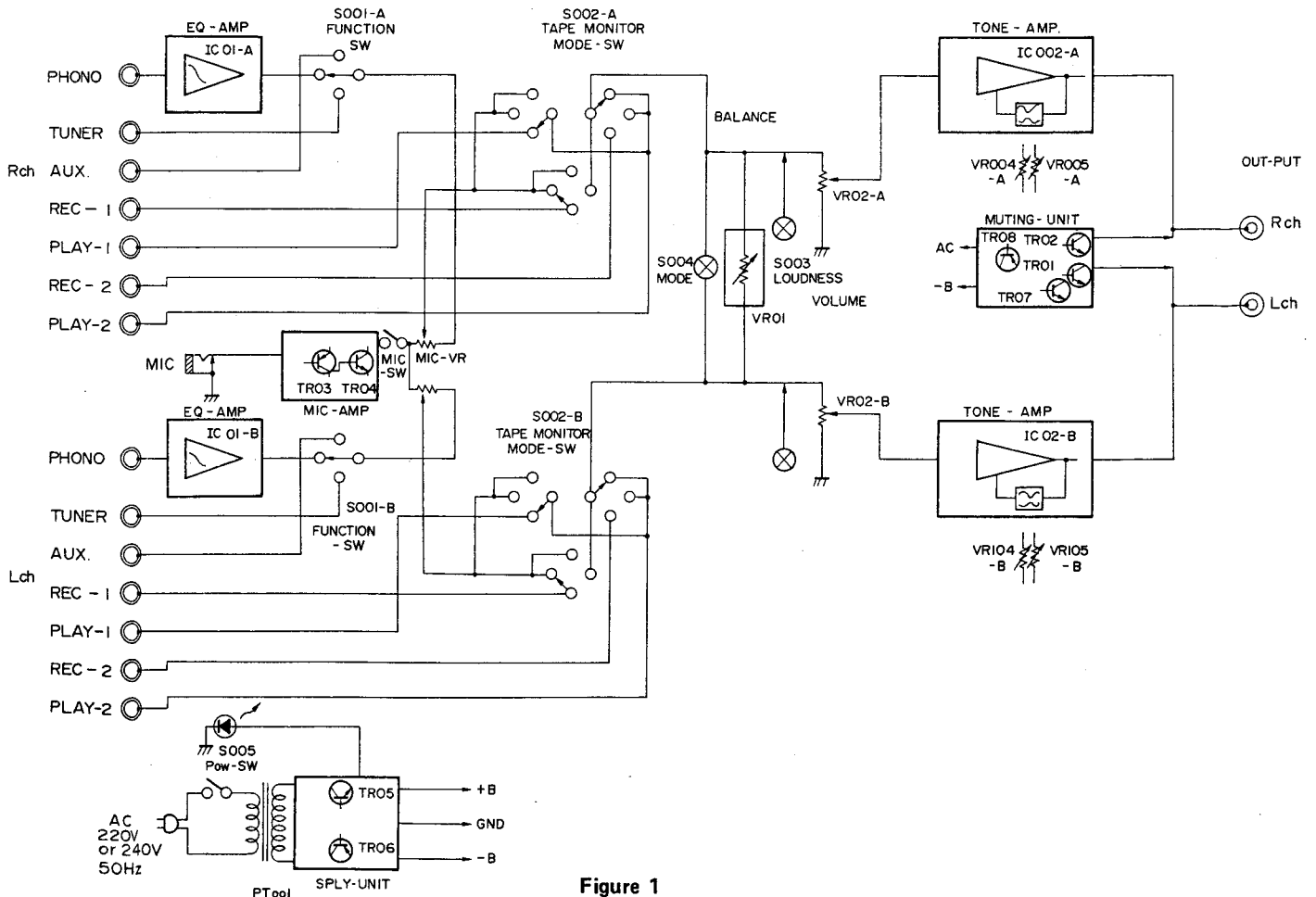


Figure 1

## 2. OPERATING CONTROLS

### FRONT VIEW

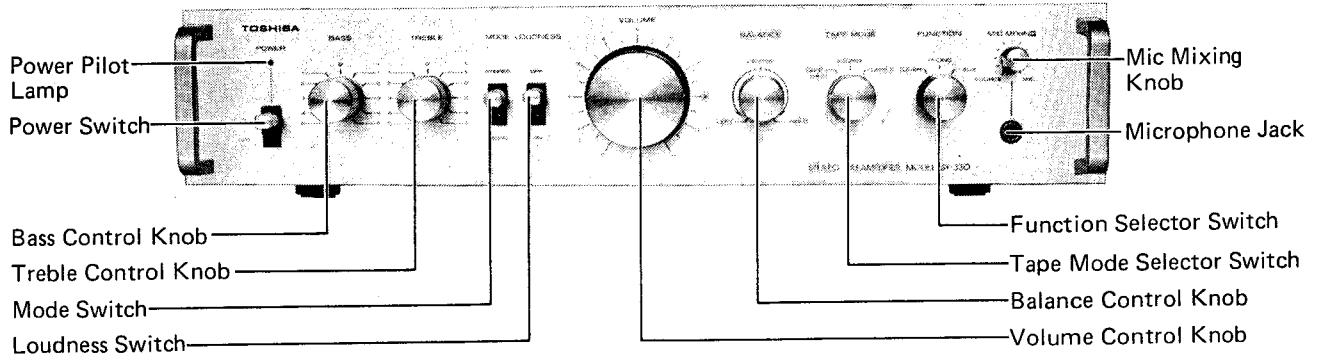


Figure 2

### REAR VIEW

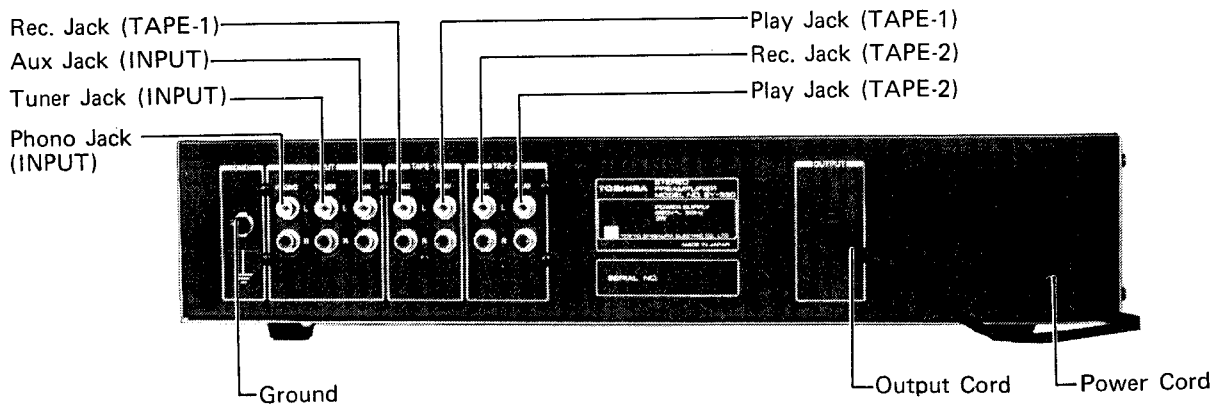


Figure 3

### 3. DISASSEMBLY INSTRUCTIONS

#### TOP COVER REMOVAL

Remove four screws ①. See figure 4.

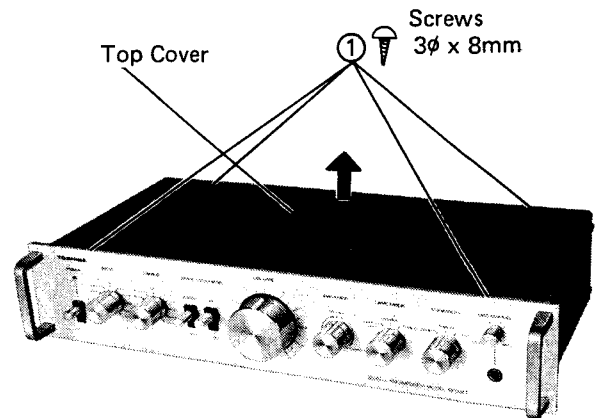


Figure 4

#### BOTTOM COVER REMOVAL

Remove four screws ②. See figure 5.

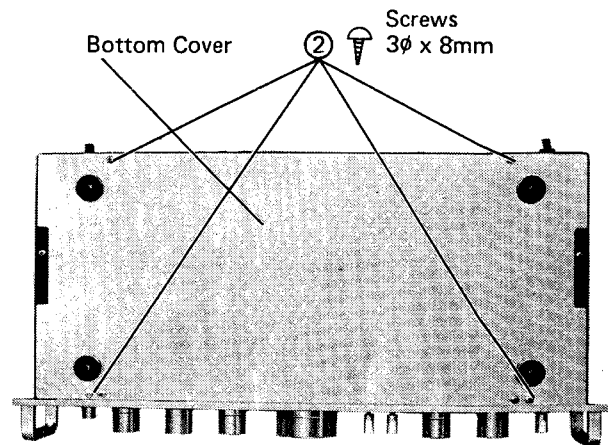


Figure 5

#### FRONT PANEL REMOVAL

1. Remove the Top Cover and Bottom cover. See figures 4 and 5.
2. Remove the ten Knobs ③. See figure 6.
3. Remove the two Screws ④. See figure 6.

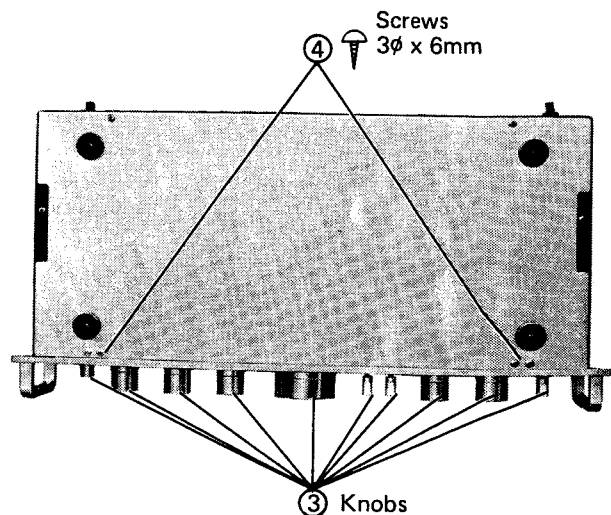


Figure 6

### 4. SCHEMATIC DIAGRAM

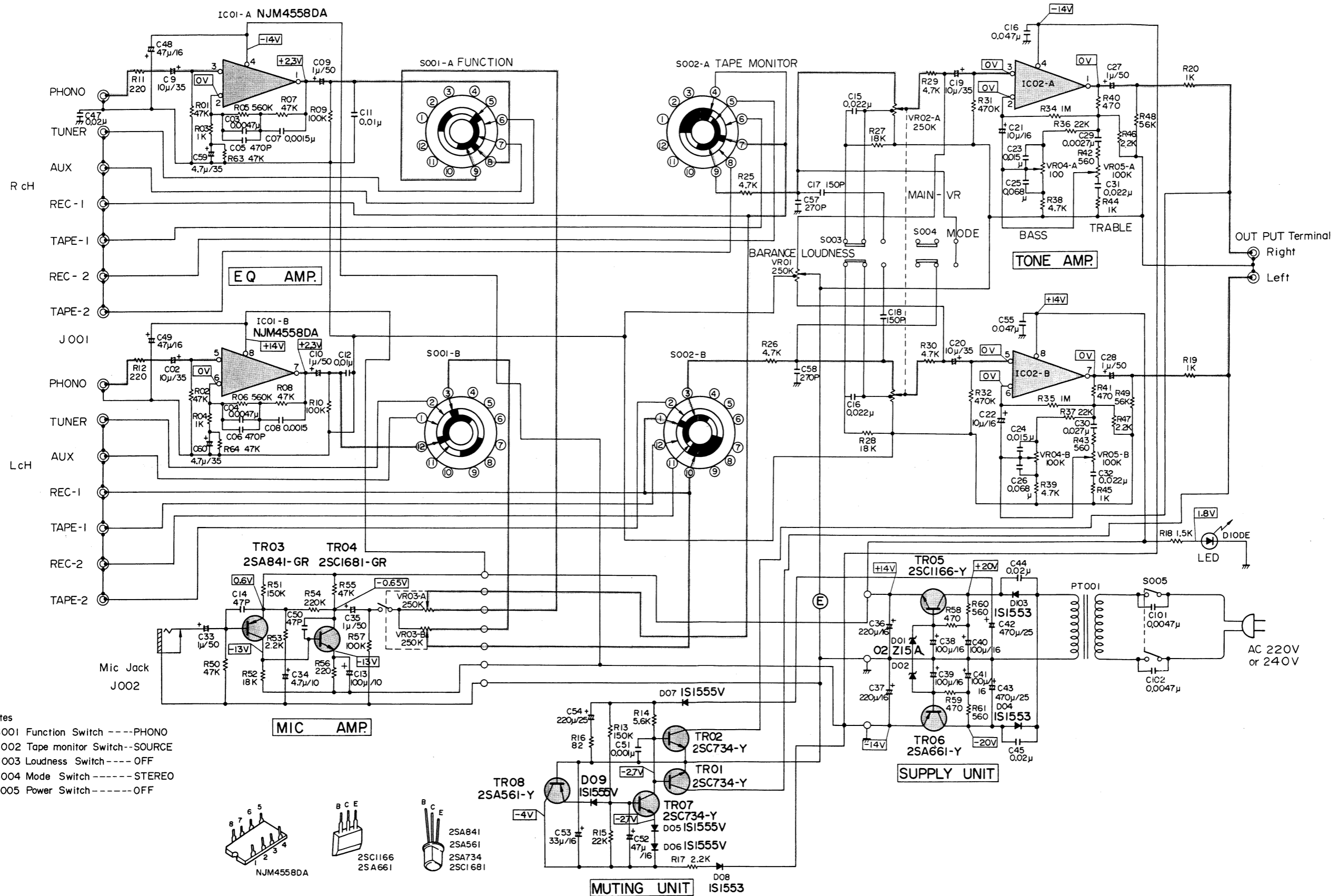


Figure 7.

### 5. ELECTRICAL PARTS LOCATIONS

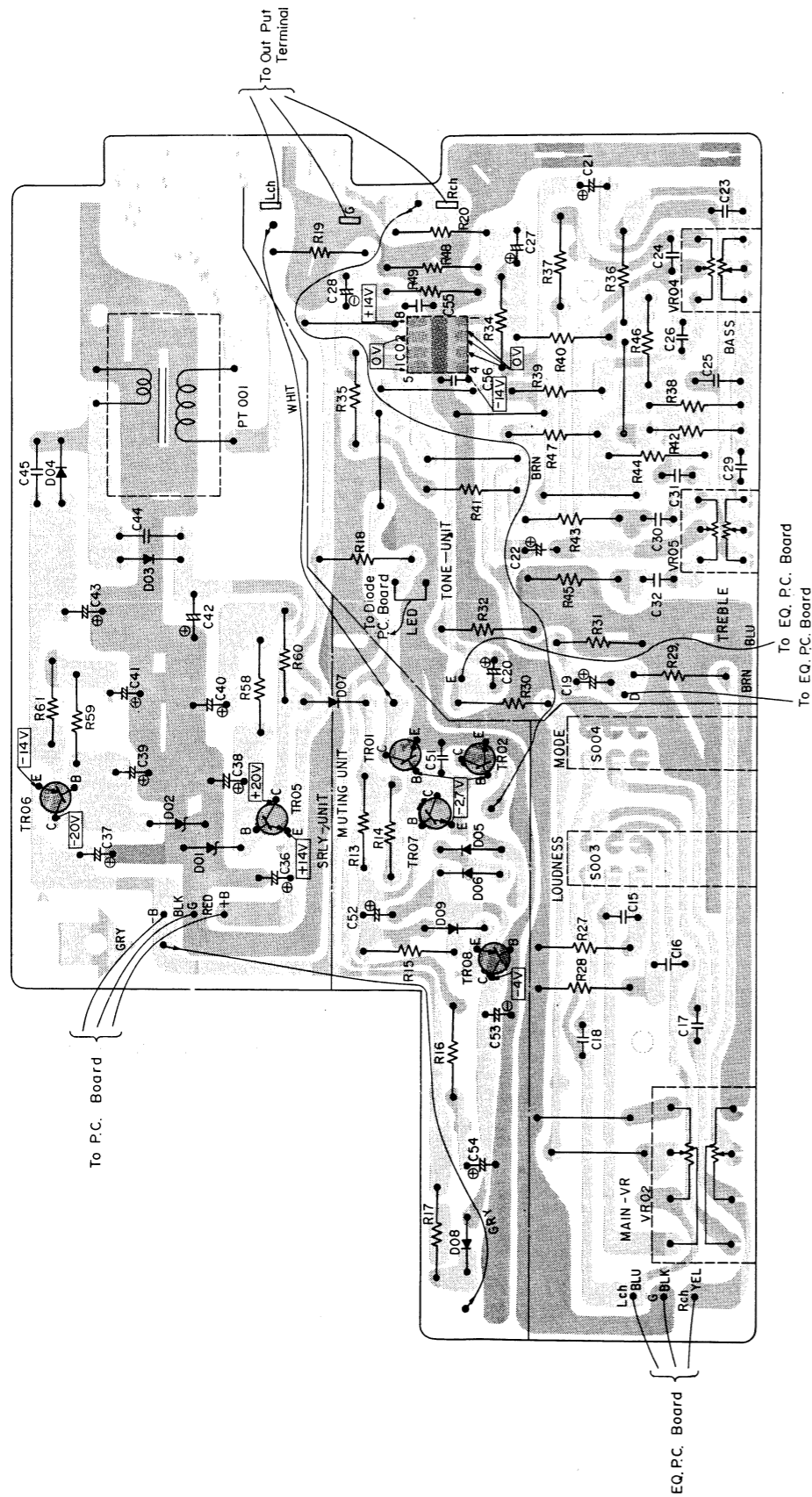


Figure 8. Power Supply P.C. Board

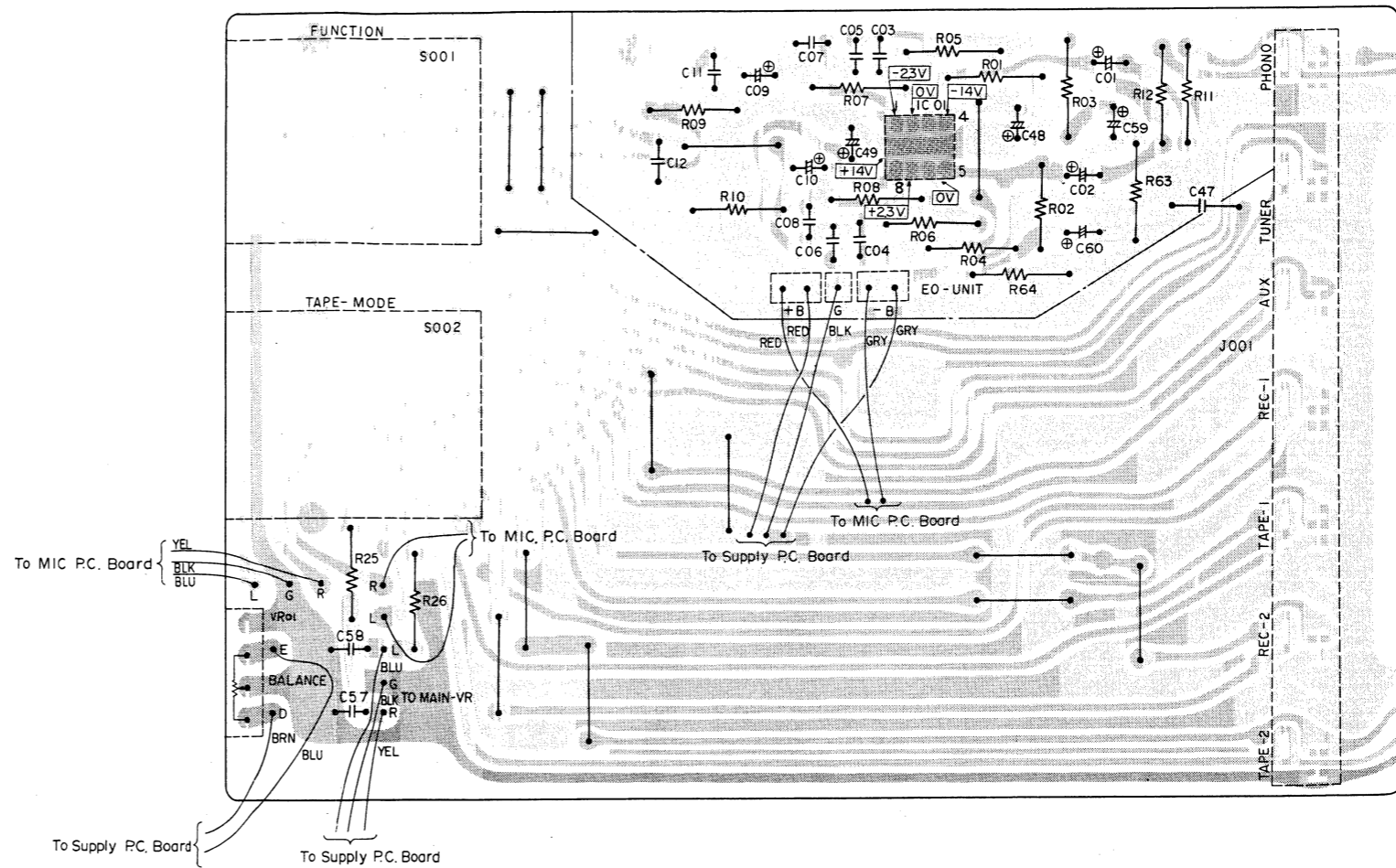


Figure 9. EQ Amplifier P.C. Board

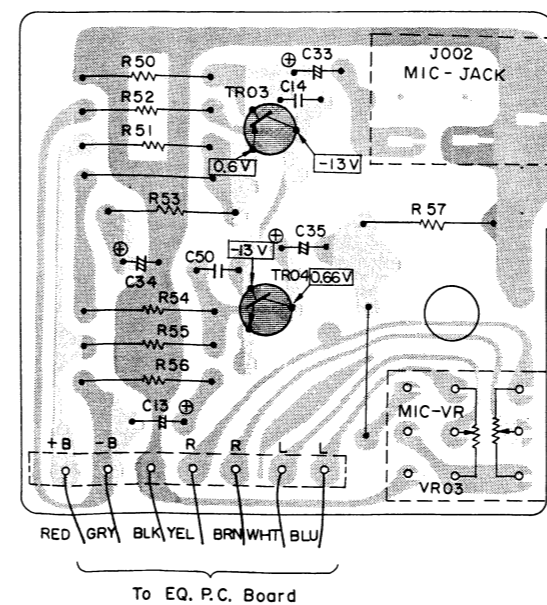
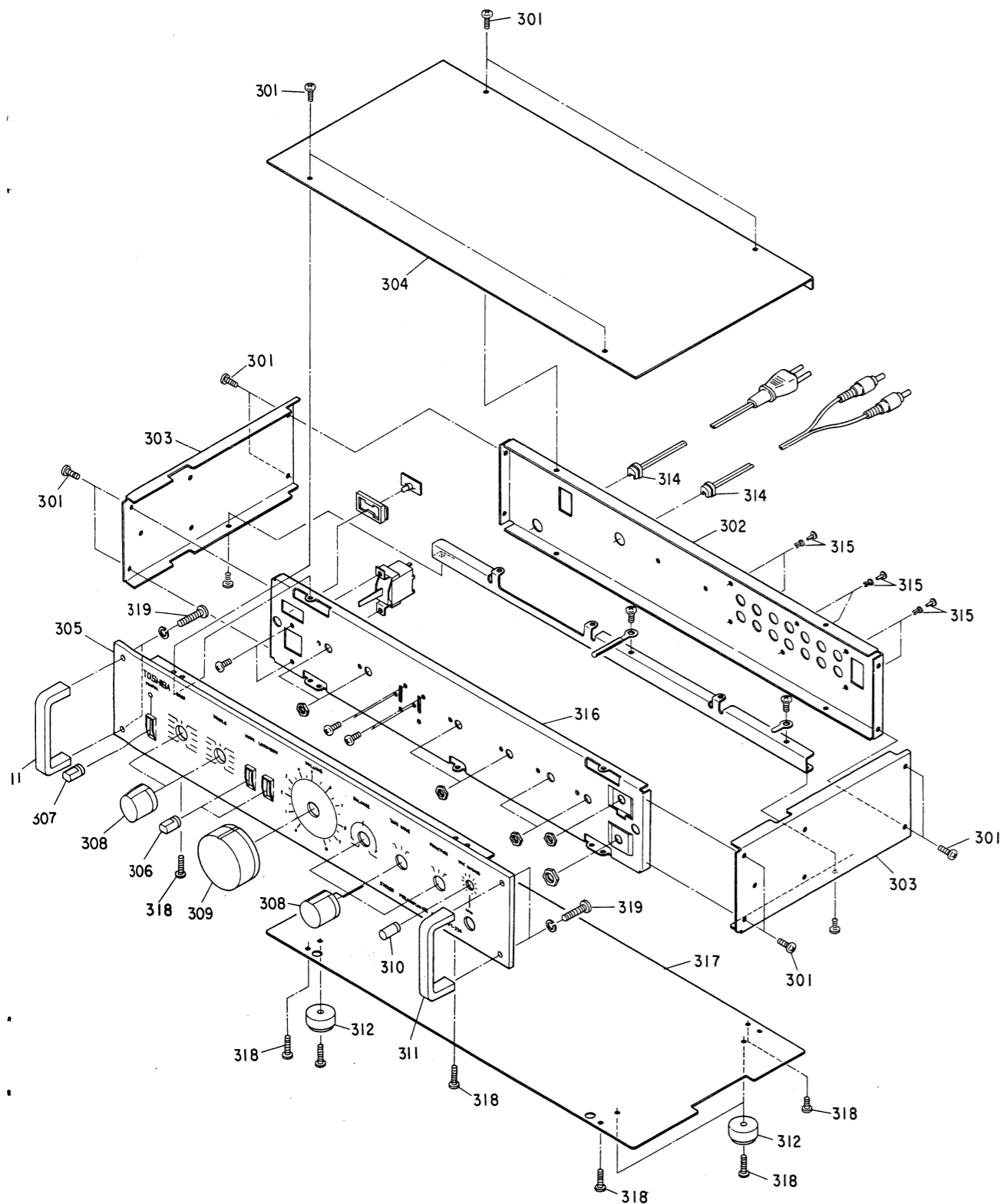


Figure 10. Mic P.C. Board and Diode P.C. Board

## 6. CABINET EXPLODED VIEW



## 7. PARTS LIST

Symbol No.	Part No.	Description
<b>TRANSISTORS, DIODES AND IC'S</b>		
TR01, 02		Transistor, 2SC734-Y
TR03		Transistor, 2SA841-GR
TR04		Transistor, 2SC1681-BL
TR05		Transistor, 2SC1166-Y
TR06		Transistor, 2SA661-Y
TR07		Transistor, 2SC734-Y
TR08		Transistor, 2SA561-Y
D01, 02		Diode, 02Z15A
D03, 04		Diode, 1S1553V
08		
D05, 06		Diode, 1S1555V
07, 09		
DIODE	22115383	Diode, SEL103S
IC01, 02	22114470	IC, NJM4558D-A
<b>ELECTRICAL PARTS</b>		
S001	22146253	Switch, Rotary, Function
S002	22146208	Switch, Rotary, Tape Mode
S003	22146201	Switch, Lever, Loudness
S004	22146201	Switch, Lever, Mode
S005	22195049	Switch, Lever, Power
J001	22163606	Jack, US14P
J002	22163616	Jack, Mic
PT001	22223111	Transformer, Power
	22176286	Cord, Power
	22170352	Cord, US PIN
<b>CAPACITORS</b>		
J = ±5%, K = ±10%, M = ±20%, Z = -20 to +80%		
C01, 02	22440053	Electrolytic, 10mfd, 35V
C03, 04	22371472	Mylar, 0.0047mfd, 50V, J
C05, 06	22321053	Polypropylene, 470pF, 50V, J
C07, 08	22371152	Mylar, 0.0015mfd, 50V, J
C09, 10	22440060	Electrolytic, 1mfd, 50V
C11, 12	22373103	Mylar, 0.01mfd, 50V, M
C13	22443101	Electrolytic, 100mfd, 10V
C14	22362470	Ceramic, 47pF, 50V, K
C15, 16	22372223	Mylar, 0.022mfd, 50V, K
C17, 18	22362151	Ceramic, 150pF, 50V, K
C19, 20	22440053	Electrolytic, 10mfd, 35V
C21, 22	22445100	Electrolytic, 10mfd, 16V
C23, 24	22372153	Mylar, 0.015mfd, 50V, K
C25, 26	22372683	Mylar, 0.068mfd, 50V, K
C27, 28	22440060	Electrolytic, 1mfd, 50V
C29, 30	22372272	Mylar, 0.0027mfd, 50V, K
C31, 32	22372223	Mylar, 0.022mfd, 50V, K
C33	22440060	Electrolytic, 1mfd, 50V
C34	22443470	Electrolytic, 47mfd, 10V
C35	22440060	Electrolytic, 1mfd, 50V
C36, 37	22445221	Electrolytic, 220mfd, 16V
C38, 39	22445101	Electrolytic, 100mfd, 16V

Symbol No.	Part No.	Description
C40, 41	22445101	Electrolytic, 100mfd, 16V
C42, 43	22445471	Electrolytic, 470mfd, 25V
C44, 45	22340032	Ceramic, 0.02mfd, 500V, Z
C47	22340032	Ceramic, 0.02mfd, 500V, Z
C48, 49	22445470	Electrolytic, 47mfd, 16V
C50	22362470	Ceramic, 47pF, 50V, K
C51	22373102	Mylar, 0.001mfd, 50V, M
C52	22445470	Electrolytic, 47mfd, 16V
C53	22445330	Electrolytic, 33mfd, 16V
C54	22446221	Electrolytic, 220 mfd, 25V
C55, 56	22342473	Ceramic, 0.047mfd, 50V, Z
C57, 58	22343271	Ceramic, 270pF, 50V, M
C59, 60	22440052	Electrolytic, 4.7mfd, 35V
C101, 102	22340090	Ceramic, 0.0047mfd, 250V, Z
<b>RESISTORS</b>		
All resistors are ¼W, ±5%, carbon film resistor unless otherwise noted.		
R01, 02	22545473	47K ohm
R03, 04	22545102	1K ohm
R05, 06	22545564	560K ohm
R07, 08	22545473	47K ohm
R09, 10	22545104	100K ohm
R11, 12	22545221	220 ohm
R13	22545154	150K ohm
R14	22545562	5.6K ohm
R15	22545223	22K ohm
R16	22545820	82 ohm
R17	22545222	2.2K ohm
R18	22545152	1.5K ohm
R19, 20	22545102	1K ohm
R25, 26	22545472	4.7K ohm
R27, 28	22545183	18K ohm
R29, 30	22545472	4.7K ohm
R31, 32	22545474	470K ohm
R34, 35	22545105	1M ohm
R36, 37	22545223	22K ohm
R38, 39	22545472	4.7K ohm
R40, 41	22545471	470 ohm
R42, 43	22545561	560 ohm
R44, 45	22545102	1K ohm
R46, 47	22545222	2.2K ohm
R48, 49	22545563	56K ohm
R50	22545473	47K ohm
R51	22545154	150K ohm
R52	22545183	18K ohm
R53	22545222	2.2K ohm
R54	22545224	220K ohm
R55	22545472	4.7K ohm
R56	22545221	220 ohm
R57	22545104	100K ohm
R58, 59	22545471	470 ohm
R60, 61	22545561	560 ohm

Symbol No.	Part No.	Description
R63, 64	22545473	47K ohm
VR01	22620401	250K ohm, Variable Resistor
VR02	22650438	250K ohm, Variable Resistor
VR03	22651454	250K ohm, Variable Resistor
VR04, 05	22651451	100K ohm, Variable Resistor
<b>CABINET PARTS</b>		
301	22701326	Screw, 3φ x 8mm
302	22711528	Jack Plate
303	22711448	Plate, Side
304	22711451	Cover, Top
305	22821351	Panel Ass'y
306	22824196	Knob, Mode, Loudness
307	22824215	Knob, Power
308	22826134	Knob, Bass, Treble, Balance, Tape Mode, Function
309	22826150	Knob, Volume
310	22826152	Knob, Mic
311	22839086	Handle
312	22874033	Foot
314	25845120	Cord, Bush
315	22705022	Rivet, Plastic, 3φ x 5.5mm
<b>ACCESSORY</b>		
	22954550	Owner's Manual



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