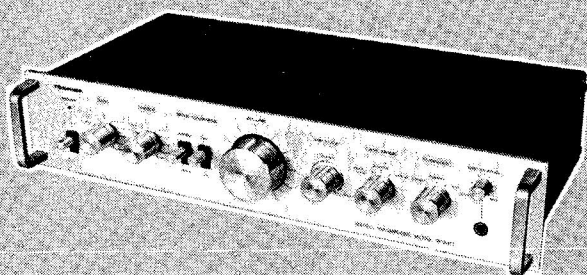


TOSHIBA

STEREO PREAMPLIFIER

SY-330



SPECIFICATIONS

| | | |
|----------------------------------|--|--|
| Pre Amp Section | | |
| 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% | General |
| 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

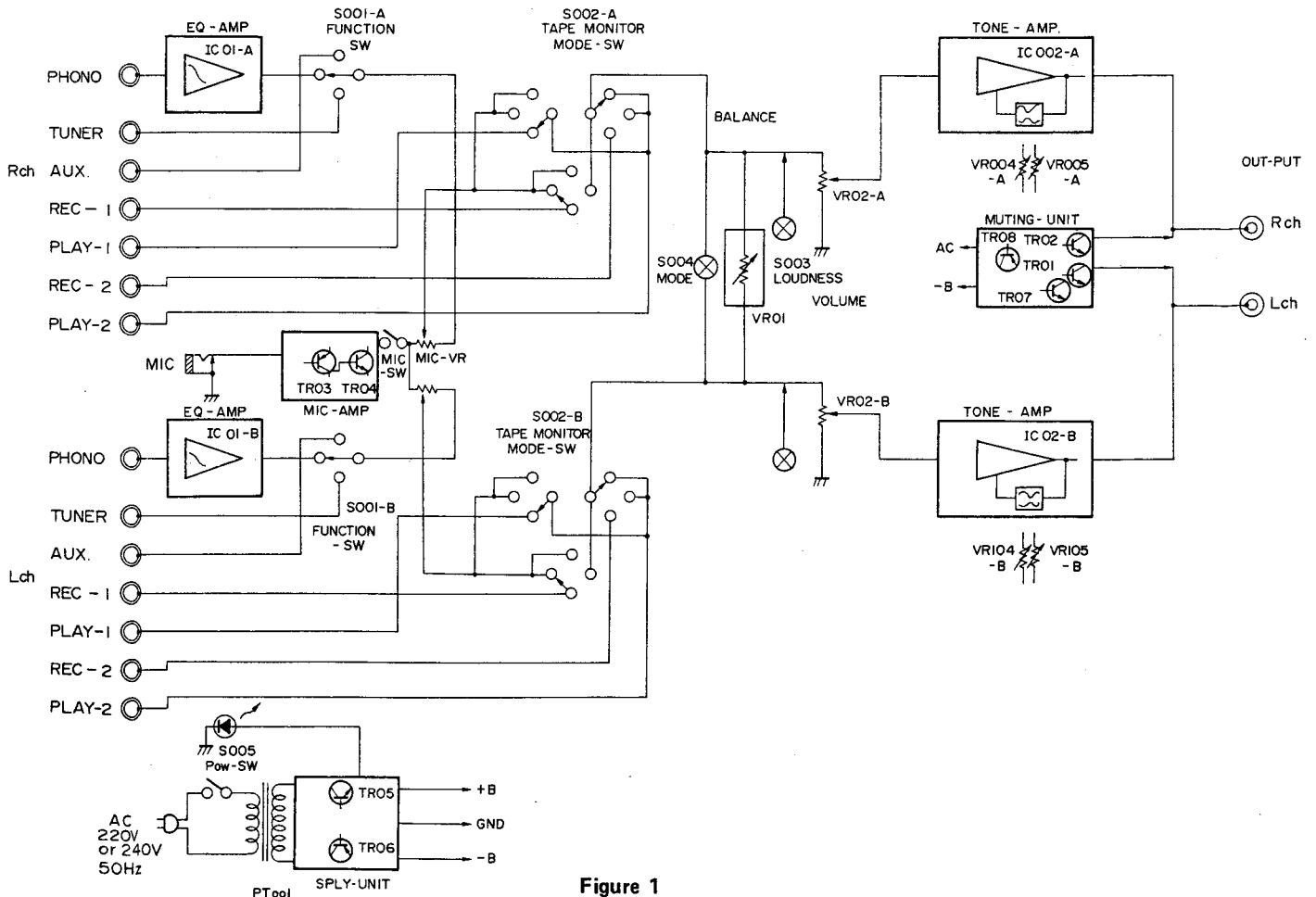


Figure 1

2. OPERATING CONTROLS

FRONT VIEW

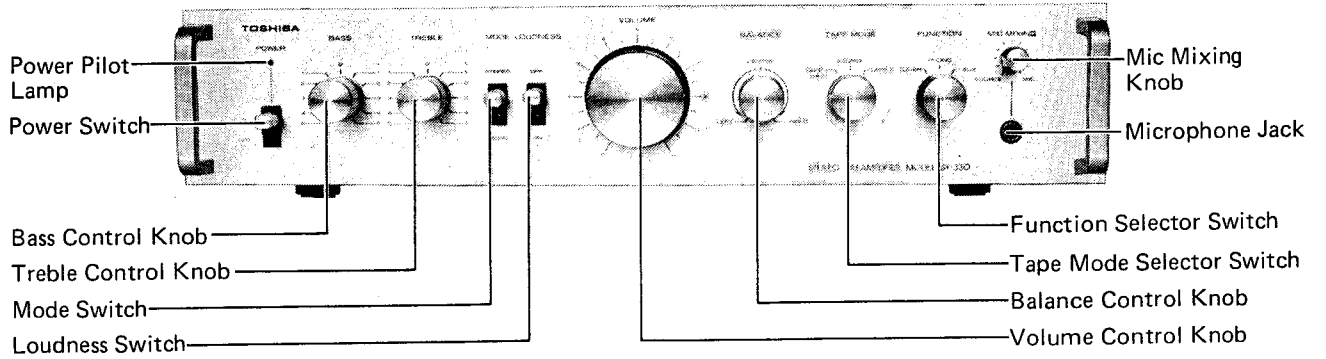


Figure 2

REAR VIEW

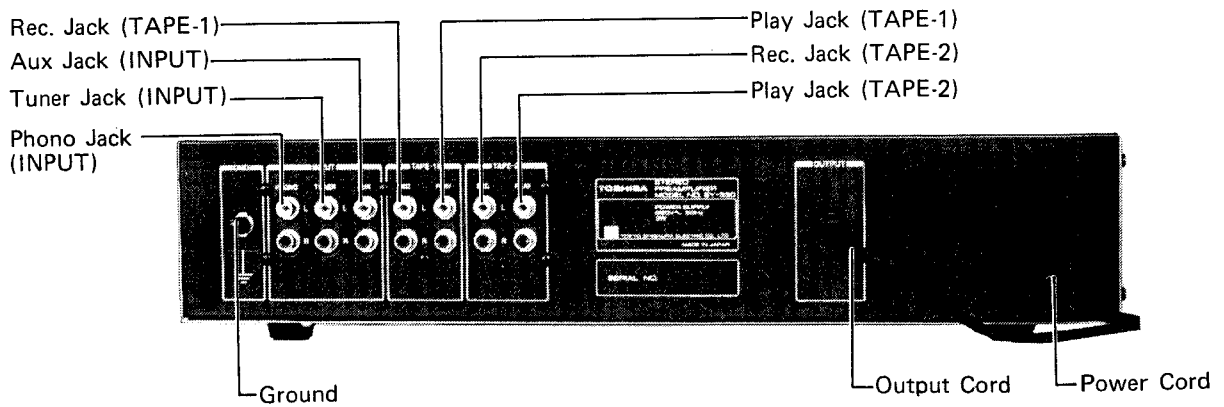


Figure 3

3. DISASSEMBLY INSTRUCTIONS

TOP COVER REMOVAL

Remove four screws ①. See figure 4.

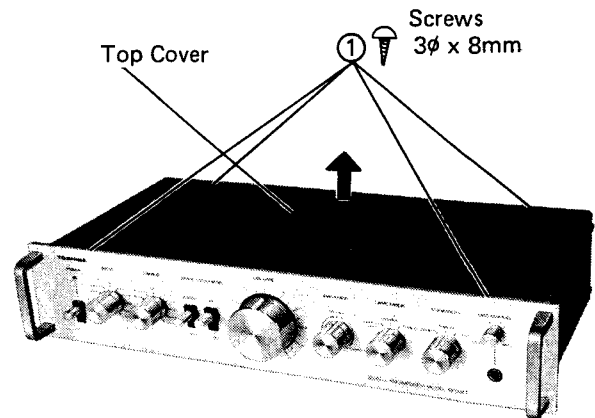


Figure 4

BOTTOM COVER REMOVAL

Remove four screws ②. See figure 5.

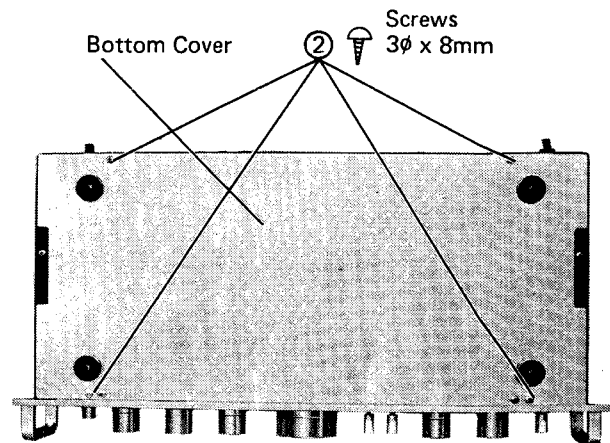


Figure 5

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.

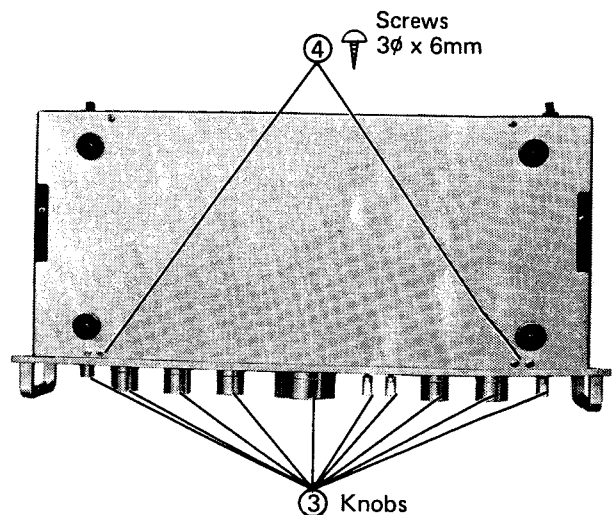


Figure 6

4. SCHEMATIC DIAGRAM

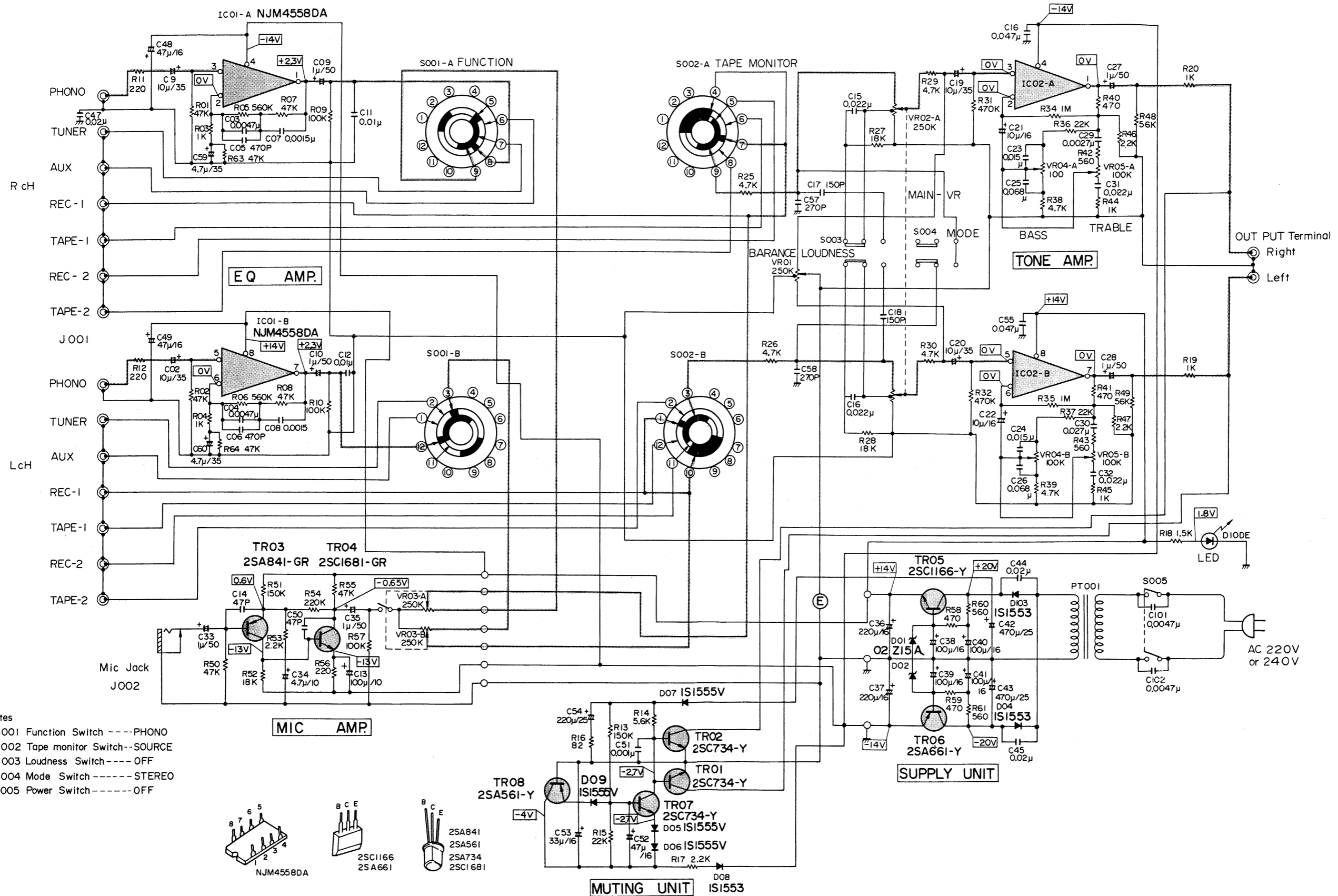


Figure 7.

5. ELECTRICAL PARTS LOCATIONS

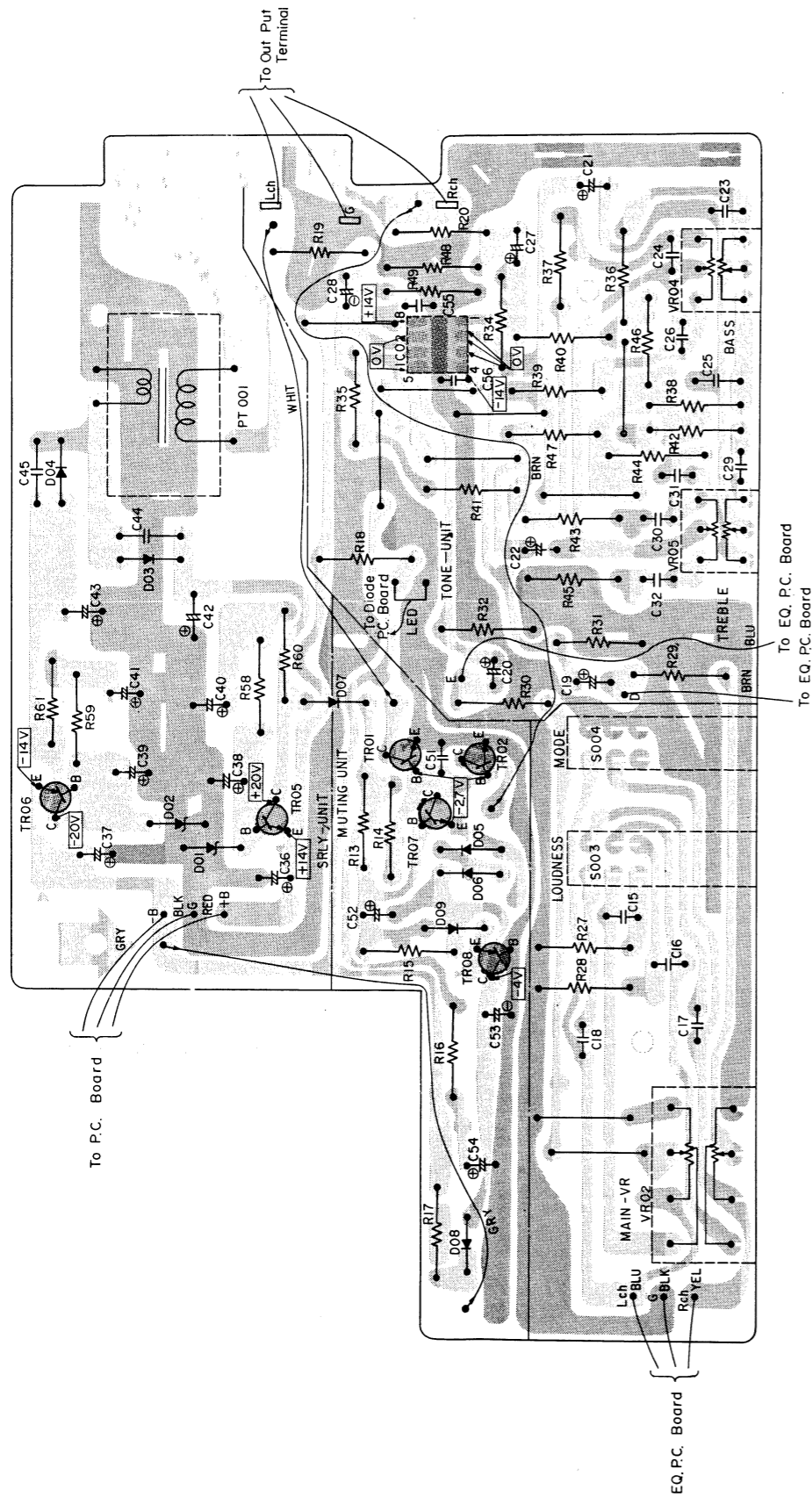


Figure 8. Power Supply P.C. Board

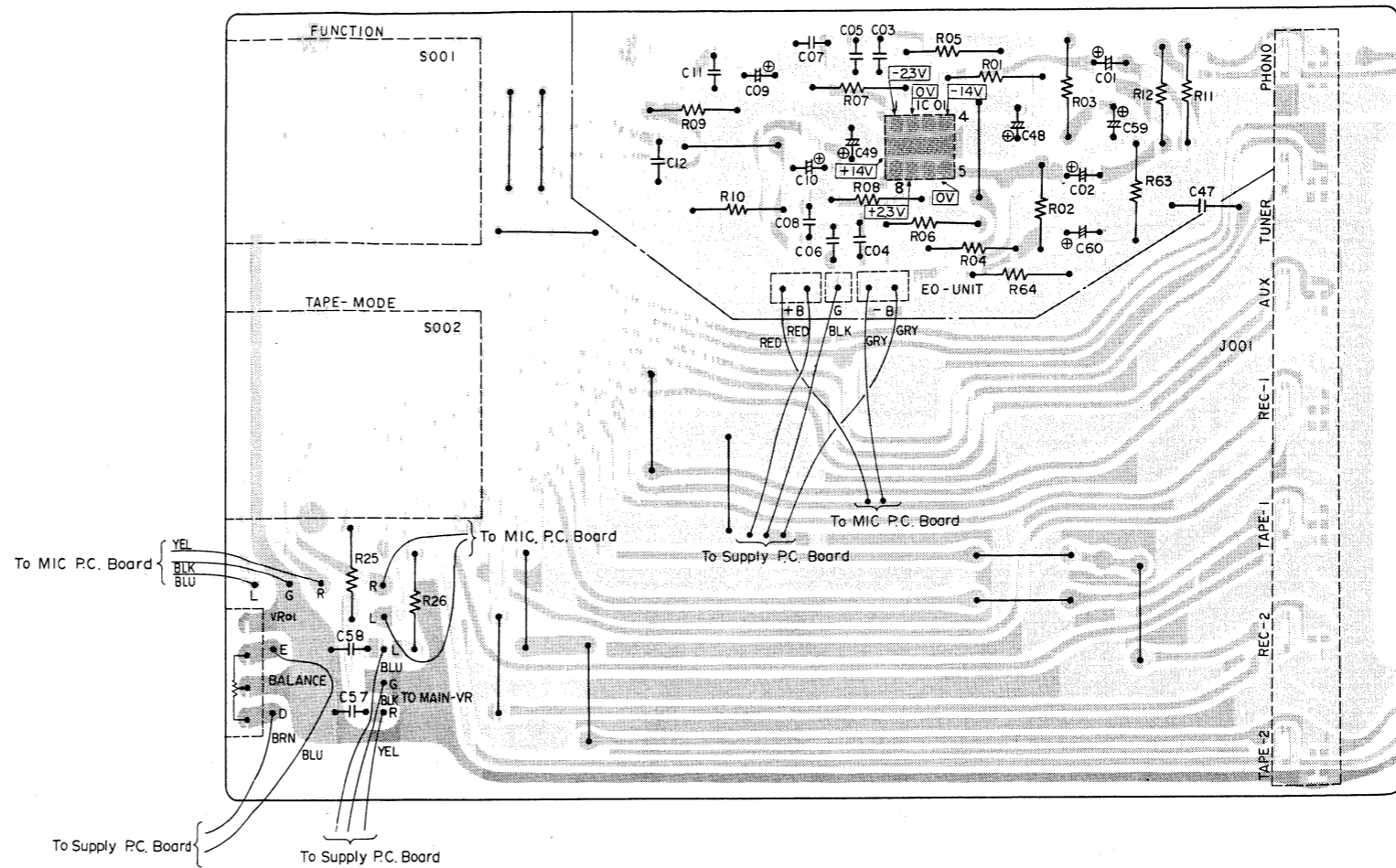


Figure 9. EQ Amplifier P.C. Board

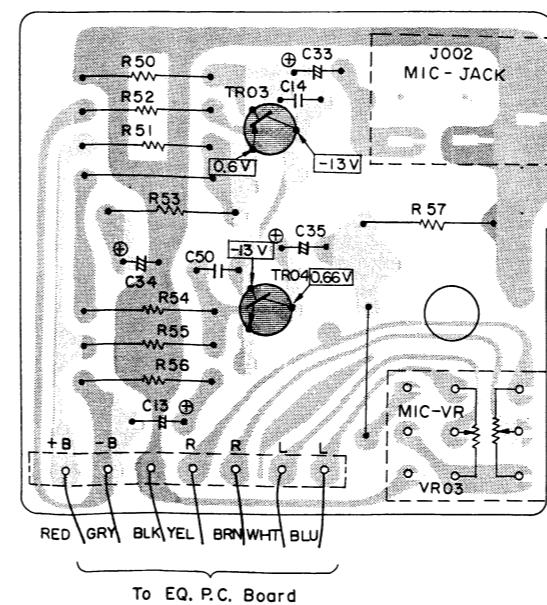
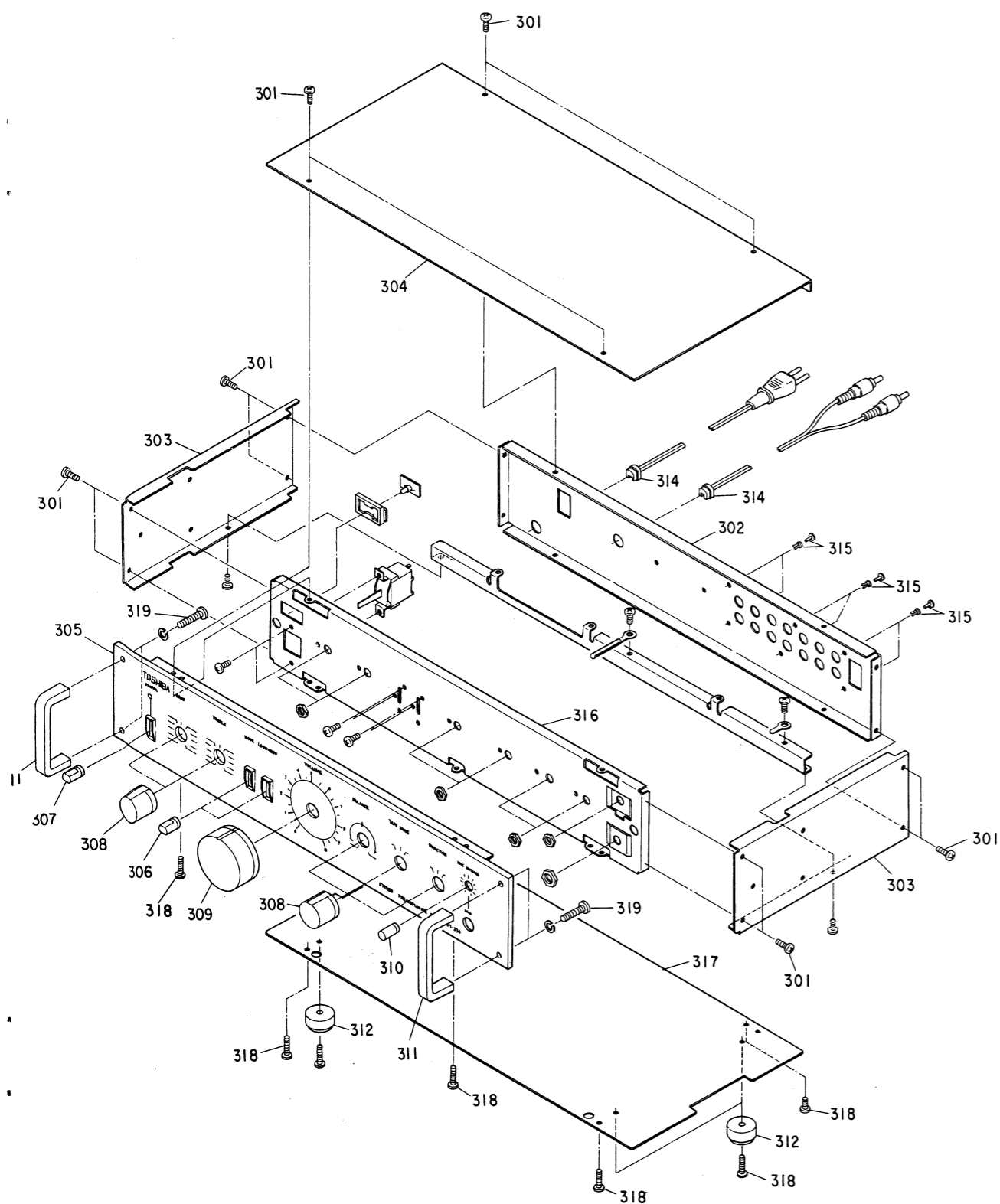


Figure 10. Mic P.C. Board and Diode P.C. Board

6. CABINET EXPLODED VIEW



7. PARTS LIST

| Symbol No. | Part No. | Description |
|--|----------|------------------------------|
| TRANSISTORS, DIODES AND IC'S | | |
| 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 |
| ELECTRICAL PARTS | | |
| 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 |
| CAPACITORS | | |
| 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 |
| RESISTORS | | |
| 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 |
| CABINET PARTS | | |
| 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 |
| ACCESSORY | | |
| | 22954550 | Owner's Manual |



MANUFACTURED BY
TOKYO SHIBAURA ELECTRIC CO., LTD.
 2-1, GINZA 5-CHOME, CHUO-KU, TOKYO 104, JAPAN
 CABLE: TOSHIBAGNZ TOKYO, TELEX NO.: J24681, J24682, J24683