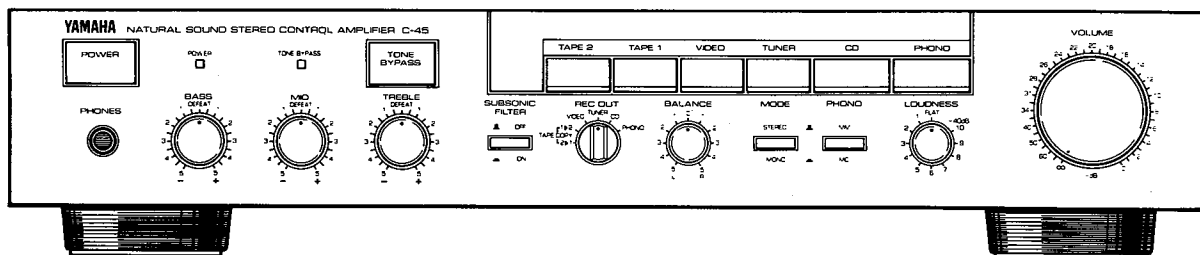


STEREO CONTROL AMPLIFIER

C-45

SERVICE MANUAL

■ FRONT PANEL



IMPORTANT NOTICE

This manual has been provided for the use of authorized Yamaha Retailers and their service personnel. It has been assumed that basic service procedures inherent to the industry, and more specifically Yamaha Products, are already known and understood by the users, and have therefore not been restated.

WARNING: Failure to follow appropriate service and safety procedures when servicing this product may result in personal injury, destruction of expensive components and failure of the product to perform as specified. For these reasons, we advise all Yamaha product owners that all service required should be performed by an authorized Yamaha Retailer or the appointed service representative.

IMPORTANT: The presentation or sale of this manual to any individual or firm does not constitute authorization, certification, recognition of any applicable technical capabilities, or establish a principle-agent relationship of any form.

The data provided is believed to be accurate and applicable to the unit(s) indicated on the cover. The research, engineering, and service departments of Yamaha are continually striving to improve Yamaha products. Modifications are, therefore, inevitable and specifications are subject to change without notice or obligation to retrofit. Should any discrepancy appear to exist, please contact the distributor's Service Division.

WARNING: Static discharges can destroy expensive components. Discharge any static electricity your body may have accumulated by grounding yourself to the ground buss in the unit (heavy gauge black wires connect to this buss).


IMPORTANT: Turn the unit OFF during disassembly and parts replacement. Recheck all work before you apply power to the unit.

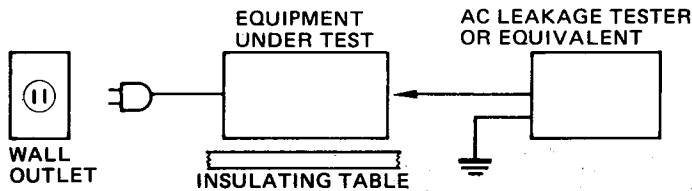
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■ TO SERVICE PERSONNEL

1. Critical Components Information.
Components having special characteristics are marked  and must be replaced with parts having specifications equal to those originally installed.
2. Leakage Current Measurement (For 120V Model Only).
When service has been completed, it is imperative that you verify that all exposed conductive surfaces are properly insulated from supply circuits.
- Meter impedance should be equivalent to 1500 ohm shunted by 0.15μF.
- Leakage current must not exceed 0.5mA.
- Be sure to test for leakage with the AC plug in both polarities.



■ SPECIFICATIONS

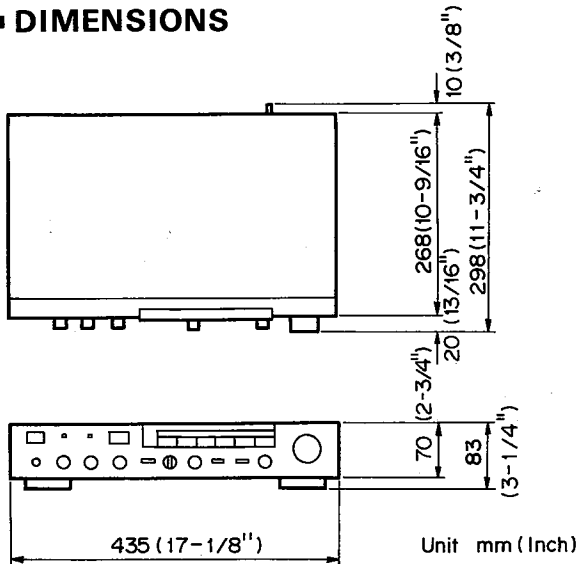
| | |
|--|--|
| Input Sensitivity/Impedance | |
| Phono MC | 100μV/100Ω |
| MM | 2.5mV/47kΩ |
| CD/AUX/TAPE/TUNER | 150mV/47kΩ |
| Input Sensitivity (New IHF) | |
| Phono MC | 33μV |
| MM | 0.83mV |
| CD/AUX/TAPE/TUNER | 50mV |
| Maximum-Input Signal | |
| Phono MC 1kHz 0.03% THD | 7mV |
| MM 0.01% THD | 170mV |
| Output Level/Impedance | |
| Rec Out | 150mV/330Ω (R.U.C.A.) 150mV/770Ω (G.B.) |
| Pre Out | 1.5V/47Ω |
| Maximum Voltage Output | |
| 20Hz~20kHz 0.1% THD | |
| Pre Out | 11V |
| Headphone Jack Rated Output/Output Impedance | |
| 0.1% THD RL = 150Ω | 4.2V/82Ω |
| Frequency Response (Tone Bypass ON) | |
| CD/AUX/TAPE/TUNER 20Hz~20kHz | +0, -0.2dB |
| RIAA Equalization Deviation | |
| 20Hz ~ 20kHz (Phono MM/MC) | ±0.2/±0.3dB |
| 10Hz ~ 100kHz (MM) | ±0.5dB |
| 20Hz ~ 100kHz (MC) | ±0.5dB |
| Total Harmonic Distortion (20Hz~20kHz) | |
| Phono MC to Rec Out | 3V 0.002% |
| MM to Rec Out | 3V 0.002% |
| CD/AUX/TAPE/TUNER to Pre Out | 3V 0.002% |
| Intermodulation Distortion | |
| CD/AUX/TAPE/TUNER | 5V Output 0.002% |
| Signal to Noise Ratio (IHF-A-Network) | |
| Phono MC (S=500μV) | 84dB |
| MM (S=5mV) | 94dB |
| CD/AUX/TAPE/TUNER | 106dB |
| Signal to Noise Ratio (New IHF) | |
| Phono MC | 79dB |
| MM | 80dB |
| CD/AUX/TAPE/TUNER | 92dB |
| Residual Noise (IHF-A-Network) | |
| | 8μV |
| Channel Separation | |
| Phone MC, MM | 1kHz/10kHz, 80dB/70dB |
| CD/AUTX/TAPE/TUNER | 1kHz/10kHz, 68dB/48dB |
| Tone Control Characteristics | |
| BASS boost/cut | ±10dB (20Hz) |
| turnover frequency | 350Hz |
| TREBLE boost/cut | ±10dB (20kHz) |
| turnover frequency | 3.5kHz |
| MID boost/cut | ±10dB (1kHz) |

| | |
|----------------------------------|--|
| Filter Characteristic | |
| Subsonic | 15Hz-12dB/out |
| Continuauus Loudness Control | |
| Attenuation | 40dB (1kHz) |
| Gain Tracking Error (0~60dB) 2dB | |
| Power Supply | |
| AC120V, 60Hz (U.C.) | |
| AC110/120/220/240V, 60/50Hz (R) | |
| AC220~240V, 50Hz (G.B.) | |
| AC240V, 50Hz (A) | |
| Power Consumption | 30W (U.C.R.A.G.B.) |
| AC Outlet | |
| Switched | 200W (max) |
| Unswitched | 200W (max) |
| Dimensions (W x H x D) | |
| | 435 x 83 x 298 mm (17-1/8" x (3-1/4" x (11-3/4" |
| Weight | |
| | 4.2kg (9 lbs 4 oz) |

*Specifications subject to change without notice.

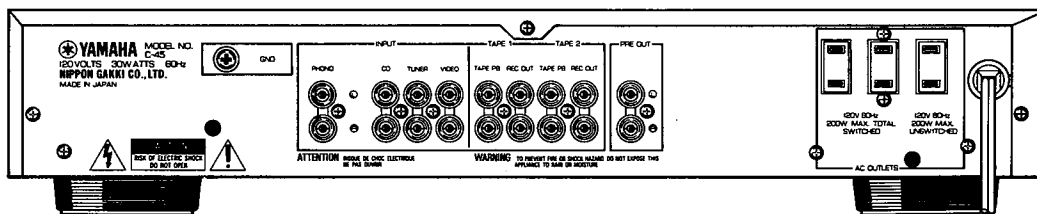
- (U) U.S.A. model
- (C) Canadian model
- (A) Australian model
- (B) British model
- (R) Others model
- (G) European model

■ DIMENSIONS

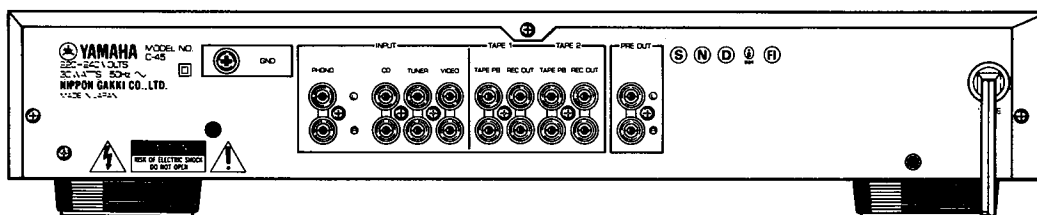


■ REAR PANELS

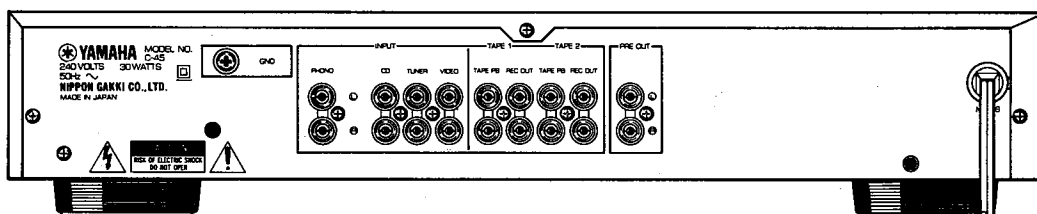
● U.S.A. & Canadian models



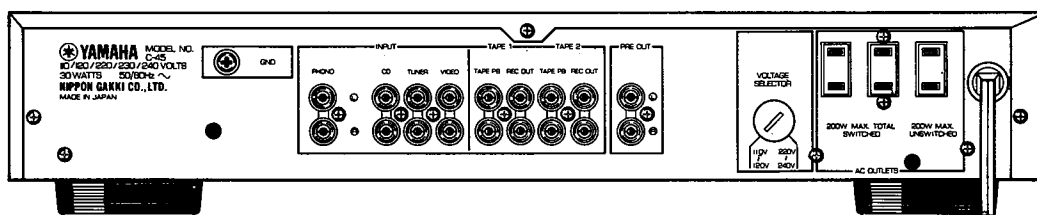
● European model



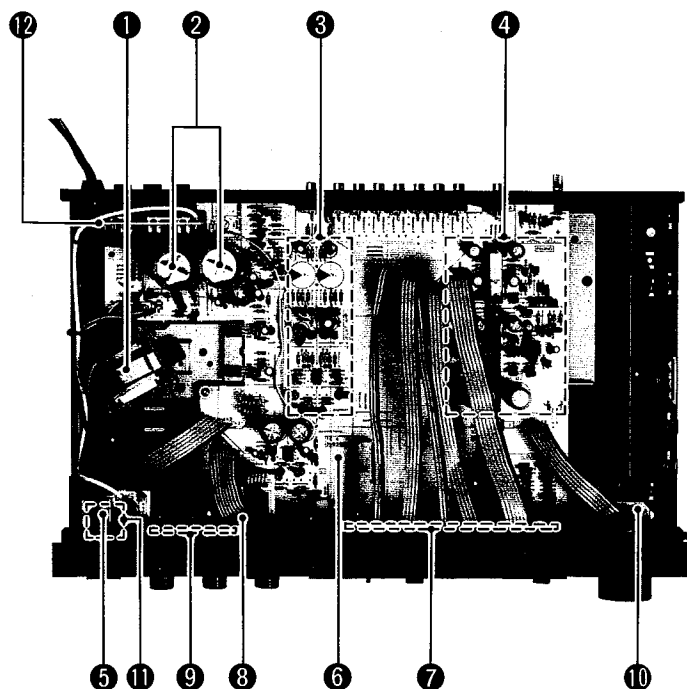
● Australian model



● Others model



INTERNAL VIEW



1 POWER TRANSFORMER

General model: XA648001

U.S.A. & Canadian models: XA649001

Australian, European & British models: XA650001

2 ELECTROLYTIC CAP.

3 FLAT & HEADPHONE AMPLIFIER SECTION

4 EQUALIZER SECTION

5 POWER SWITCH

6 MAIN CIRCUIT BOARD (1)

7 MAIN CIRCUIT BOARD (2)

8 MAIN CIRCUIT BOARD (3)

9 MAIN CIRCUIT BOARD (4)

10 MAIN CIRCUIT BOARD (5)

11 MAIN CIRCUIT BOARD (6)

12 MAIN CIRCUIT BOARD (7)

DISASSEMBLY PROCEDURES

1. Removal of Top Cover.

- a. Remove 6 screws (①) in Fig. 1. and slide the Top Cover back.

2. Removal of Rear Panel.

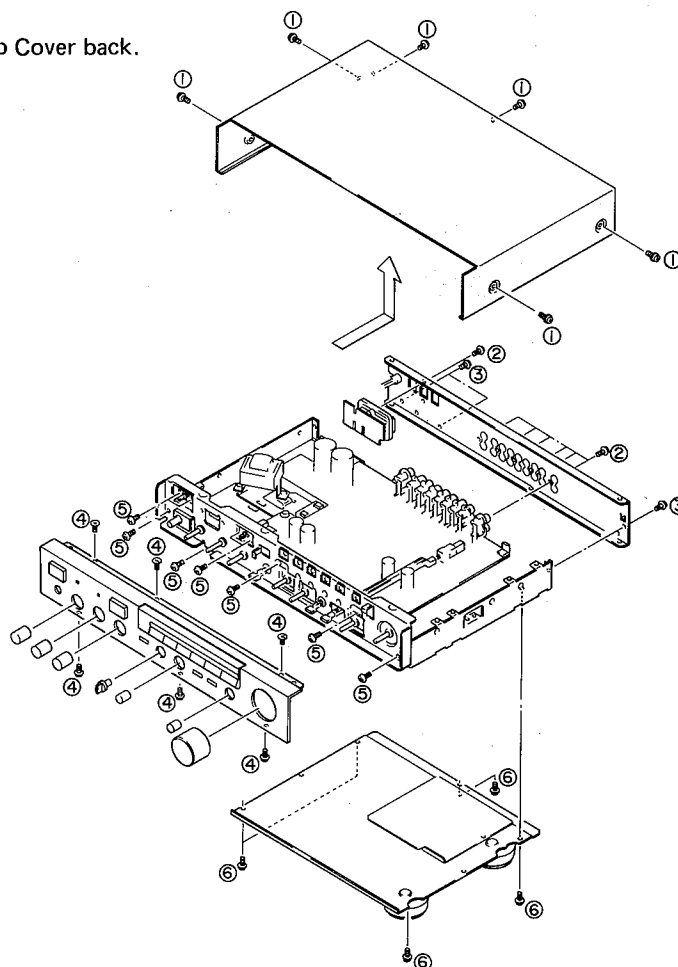
- a. Remove 12 screws (②) in Fig. 1.
- b. Remove 2 screws (③) in Fig. 1 (Side Panel).
- c. Remove of knobs.

3. Removal of Front Panel.

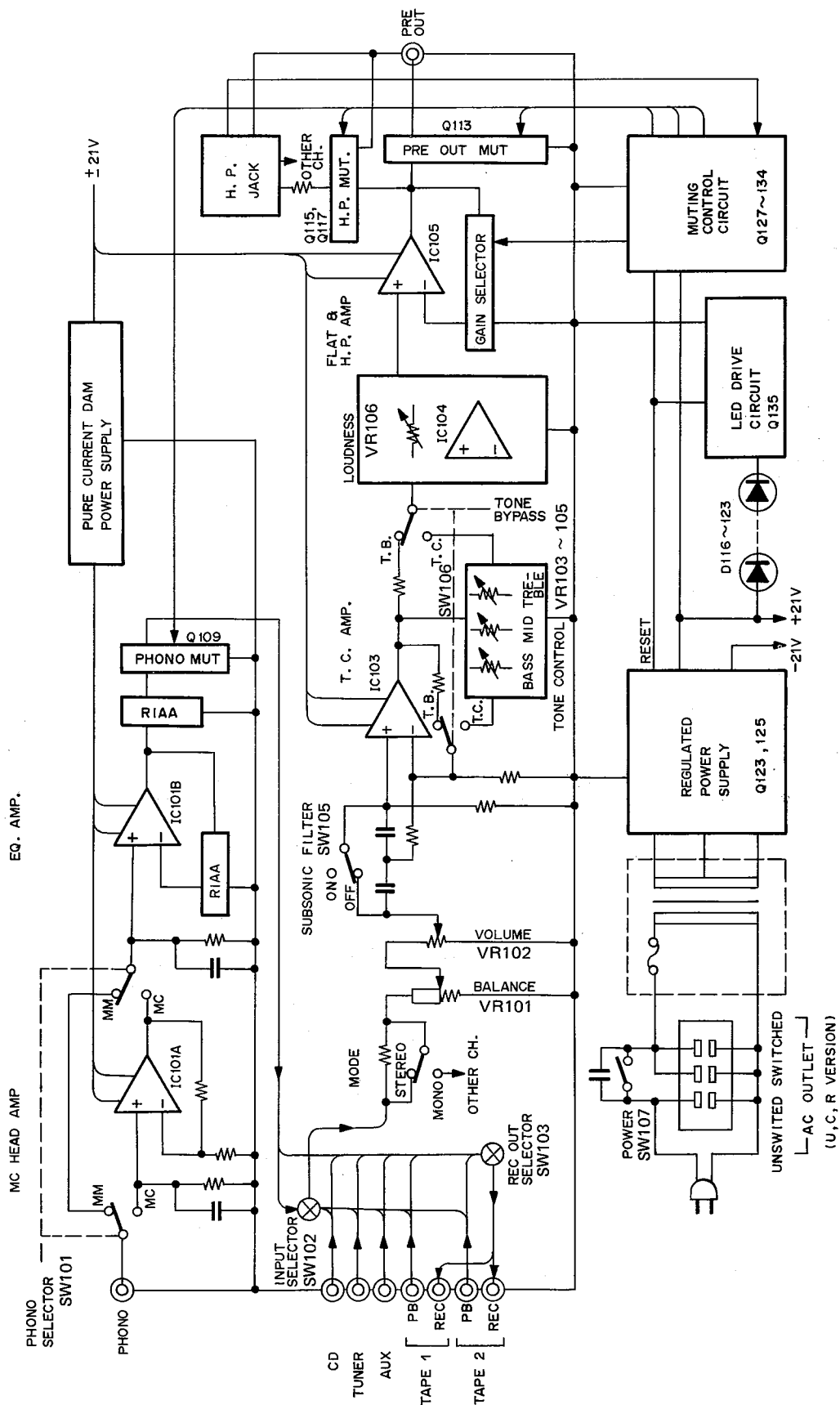
- a. Remove 6 screws (④) in Fig. 1.
- b. Remove 10 screws (⑤) connector of the LED unit.

4. Removal of Bottom cover.

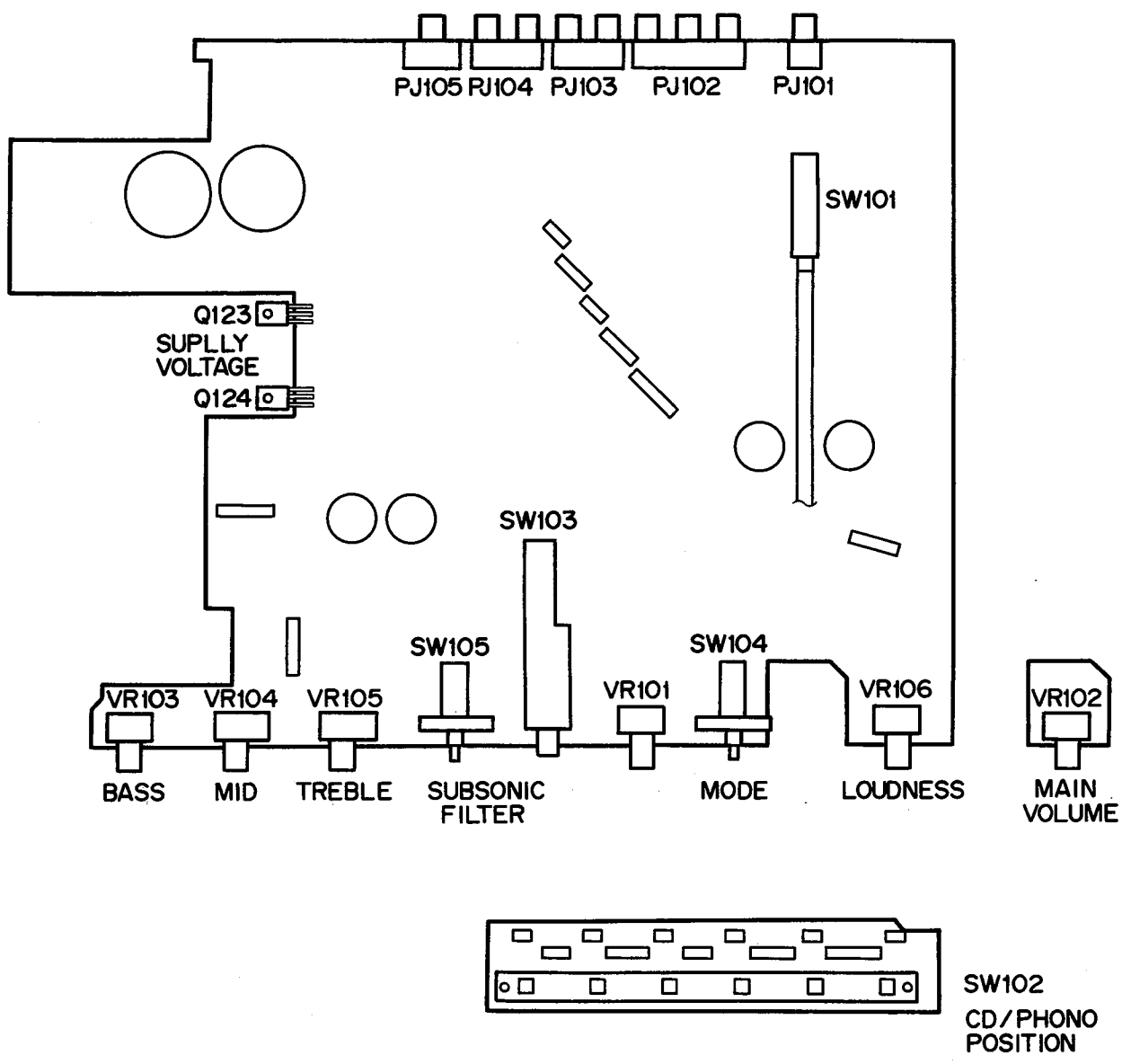
- a. Remove 5 screws (⑥) in Fig. 1.



■ BLOCK DIAGRAM



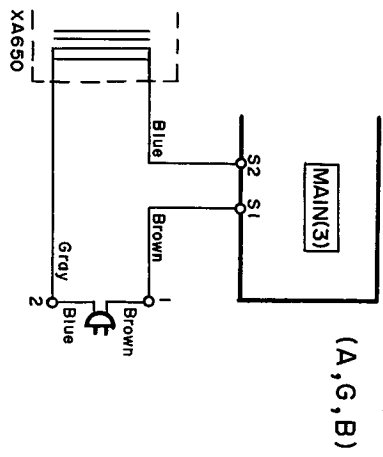
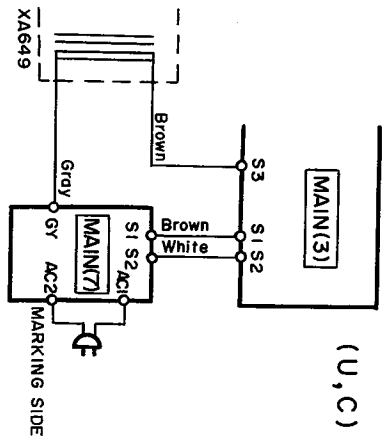
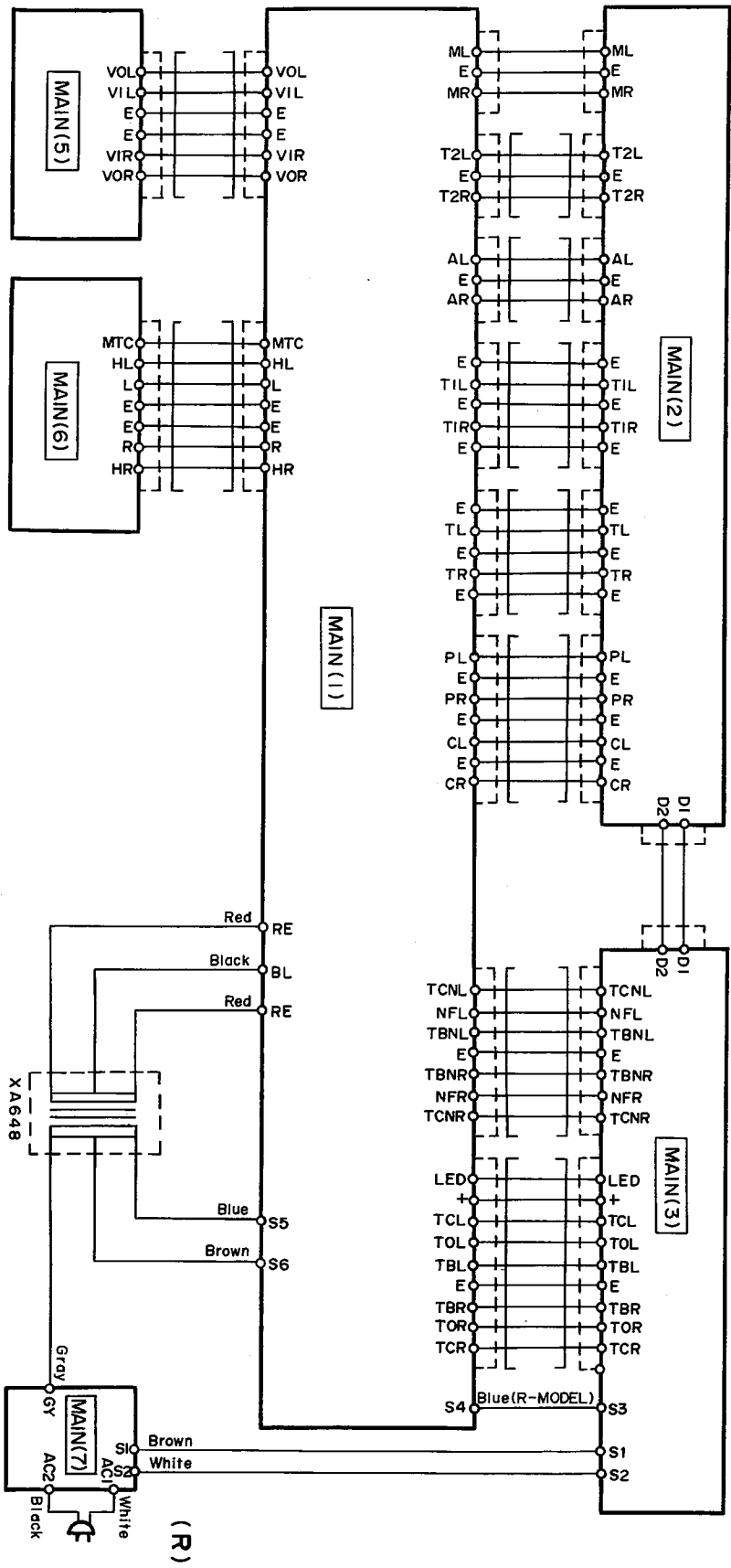
■ ADJUSTMENT POINTS



■ CONFIRMATIONS

| Step | Item | | Condition or procedure | | Check point | Rated value | Measuring device | Reference |
|------|---|--------------|--|-----------------------|------------------------------------|--|------------------|---|
| 1 | Connect the secondary wires, colors of RED, BLACK, and RED, from the Power Transformer to the TERMINALS of each corresponded color. | | | | | | | |
| 2 | Supply Voltage | | Apply $120 \pm 1\text{V}/60\text{Hz}$ AC to the primary of Power Transformer | | Emitter of Q123 Emitter of Q124 | $21 \pm 1\text{V DC}$ $-21 \pm 1\text{V DC}$ | DC VM | |
| 3 | Flat Amp. Output Voltage | | (a) Apply $150 \pm 10\text{mV}$ of 1kHz sine wave to the CD input on PJ102 (b) SW102: CD position (c) All other switches: OFF position (d) VR102 (Main VR) and VR106 (LOUDNESS): Fully clockwise (e) All other controls: Center position | | PJ105 (Pre Out) | $1.5 \pm 0.2\text{V}$ | AC VM | |
| 4 | Loudness (Output voltage) | | Same as STEP-3 except VR106 (LOUDNESS): Fully counterclockwise | | PJ105 (Pre Out) | $15 \pm 2\text{mV}$ | AC VM | |
| 5 | Tone Control | BASS 20Hz | VR103 | Full counterclockwise | PJ105 (Pre Out) | -9dB | AC VM | (a) All other conditions follow to STEP-3 (b) 1kHz 1.5V as 0dB |
| | | | | Full clockwise | | +9dB | | |
| | | MID 1kHz | VR104 | Full counterclockwise | | -11dB | | |
| | | | | Full clockwise | | +9dB | | |
| | | TREBLE 20kHz | VR105 | Full counterclockwise | | -11dB | | |
| | | | | Full clockwise | | +9dB | | |
| 6 | Headphone Amp. Output Level | | Same as STEP-3 except that a Headphone Plug (with 150Ω load) is plugged into the Headphone Jack | | PJ105 (Pre Out) | 0 | AC VM | |
| | | | | | Headphone terminal | $4.2 \pm 0.5\text{V}$ | | |
| 7 | Muting | | With the same conditions to STEP-3, turn off the AC 120V power supply. When turned it on again: | | PJ105 (Pre Out) | The output must be recovered in 5 ± 1 second | AC VM | |
| 8 | Subsonic Filter | | Same as STEP-3 except; (a) 15Hz input signal, and (b) SW105—ON | | PJ105 (Pre Out) | $-3 \pm 2\text{dB}$ | AC VM | Output level with SW105—OFF as 0dB |
| 9 | Mode | | With the same to STEP-3, apply 1kHz 1V test signal to L-ch only | SW104 OFF (Mode) ON | R-ch Output (PJ105) | Under 10mV $0.5 \pm 0.1\text{V}$ | AC VM | The oposit channel should be the same |
| 10 | EQ Amp. | | (a) Apply the test signal to PJ101 | SW101: MM 1kHz 2.5mV | PJ105 (Pre Out) | $1.5 \pm 0.2\text{V}$ | AC VM | All other conditions follow to STEP-3 |
| | | | (b) SW102: Phone position | SW101: MC 1kHz 100μV | | $1.5 \pm 0.2\text{V}$ | | |

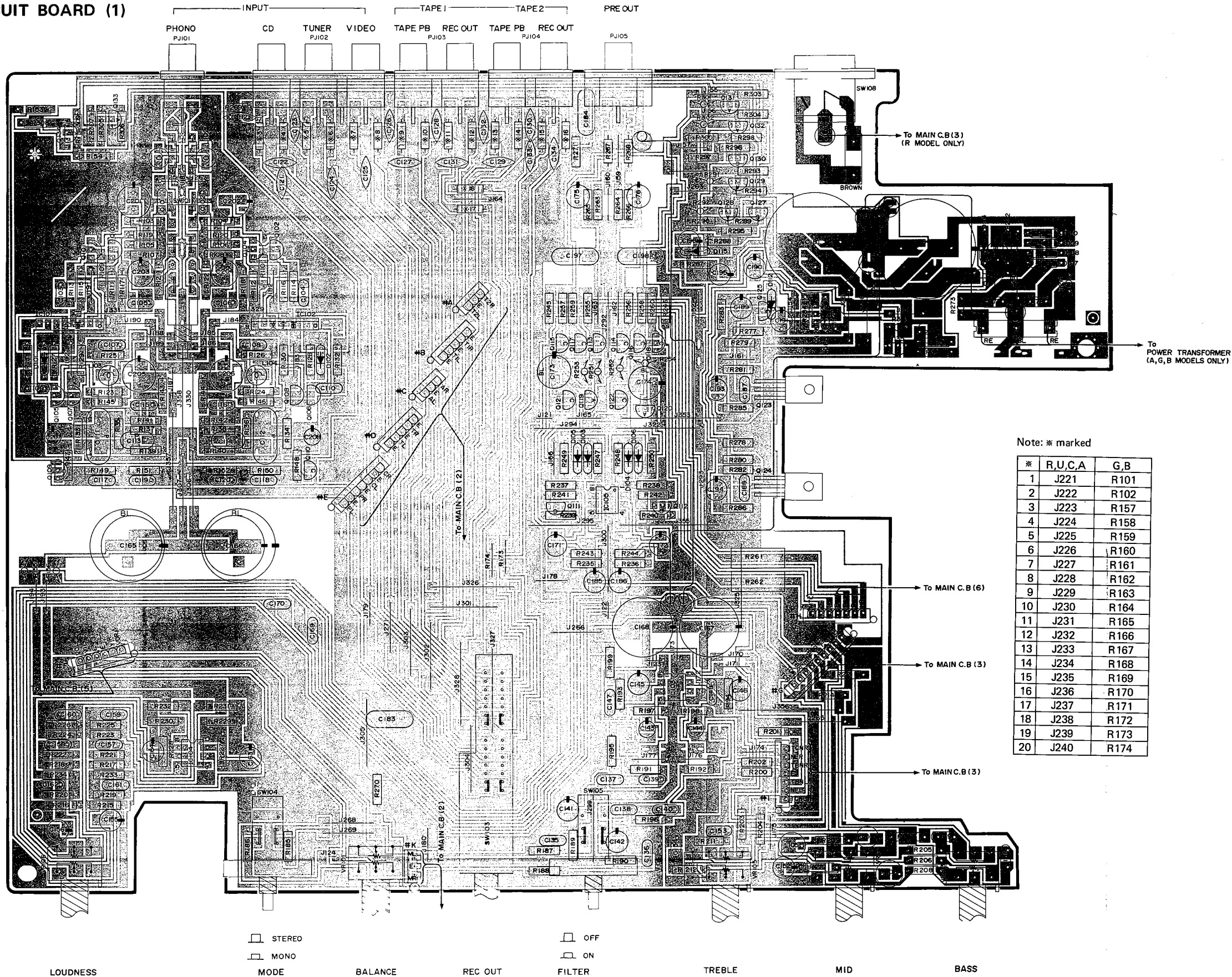
■ WIRING



PRINTED CIRCUIT BOARD (Pattern Side)

Note)
文字面 : Letter side

MAIN CIRCUIT BOARD (1)



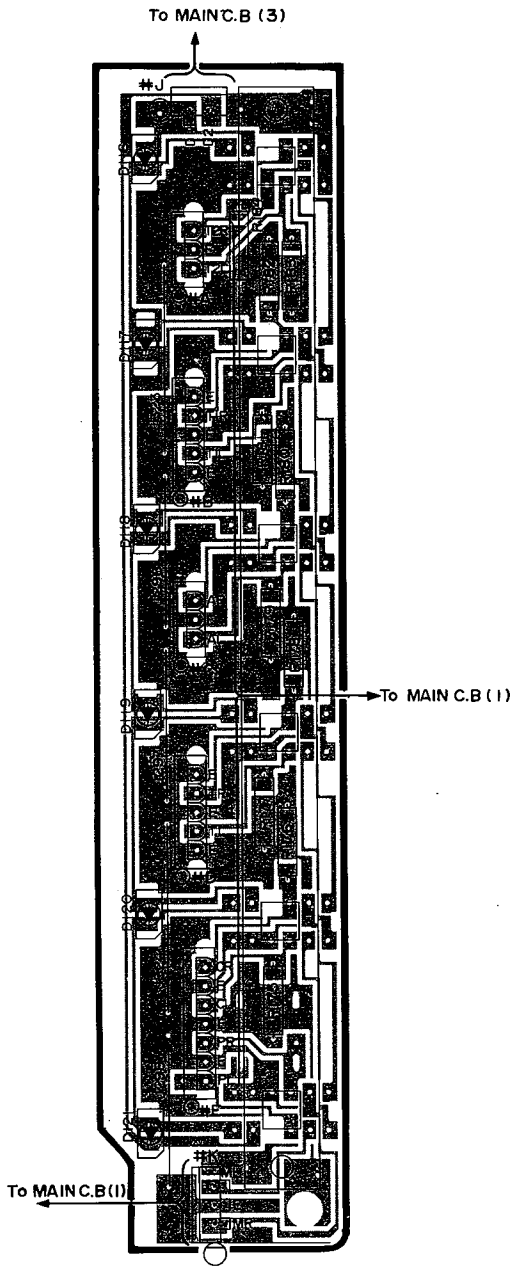
Note: * marked

| * | R,U,C,A | G,B |
|----|---------|------|
| 1 | J221 | R101 |
| 2 | J222 | R102 |
| 3 | J223 | R157 |
| 4 | J224 | R158 |
| 5 | J225 | R159 |
| 6 | J226 | R160 |
| 7 | J227 | R161 |
| 8 | J228 | R162 |
| 9 | J229 | R163 |
| 10 | J230 | R164 |
| 11 | J231 | R165 |
| 12 | J232 | R166 |
| 13 | J233 | R167 |
| 14 | J234 | R168 |
| 15 | J235 | R169 |
| 16 | J236 | R170 |
| 17 | J237 | R171 |
| 18 | J238 | R172 |
| 19 | J239 | R173 |
| 20 | J240 | R174 |

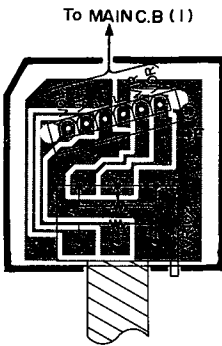
■PRINTED CIRCUIT BOARD (Pattern Side)

Note)
文字面 : Letter side

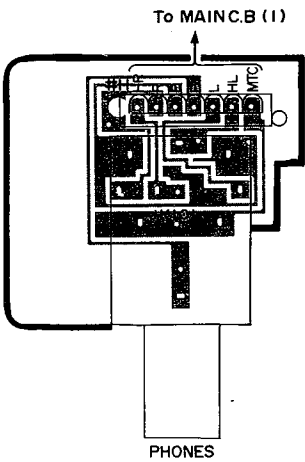
MAIN CIRCUIT BOARD (2)



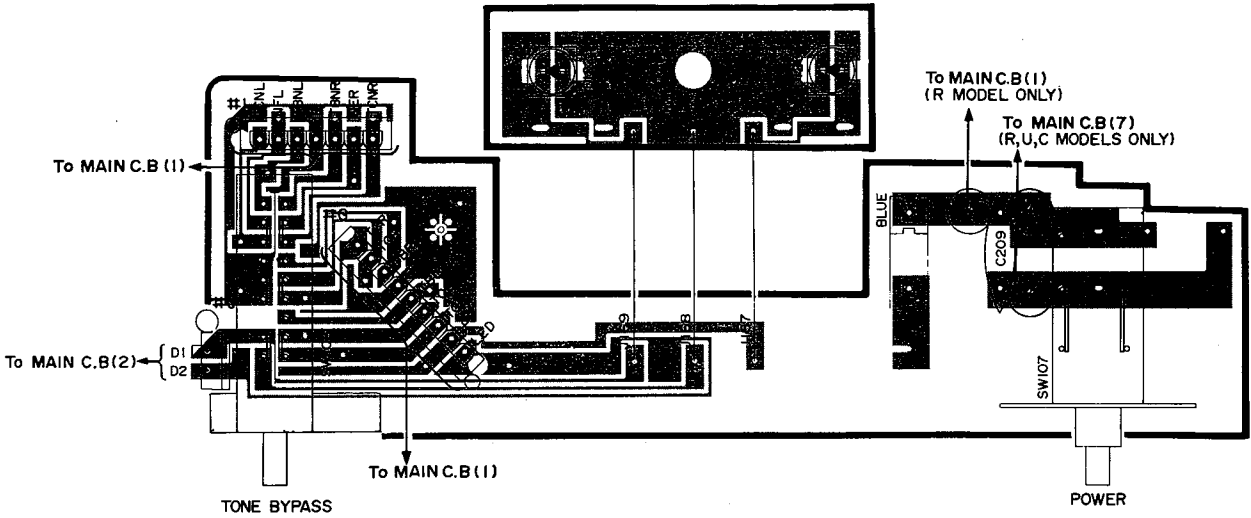
MAIN CIRCUIT BOARD (5)



MAIN CIRCUIT BOARD (6)

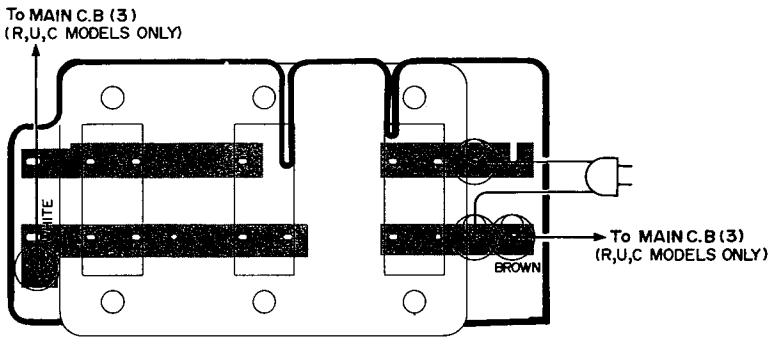


MAIN CIRCUIT BOARD (4)



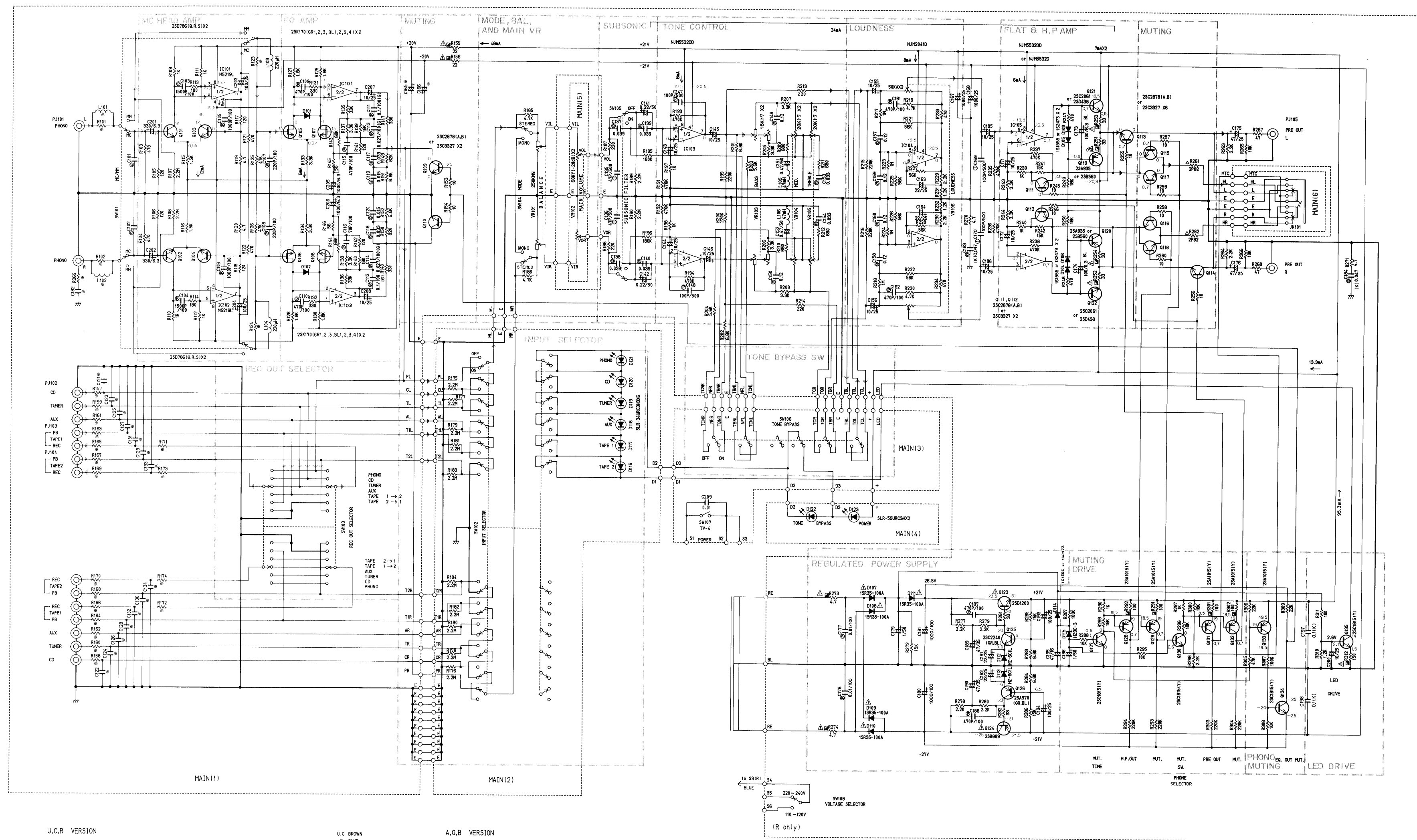
MAIN CIRCUIT BOARD (3)

MAIN CIRCUIT BOARD (7)

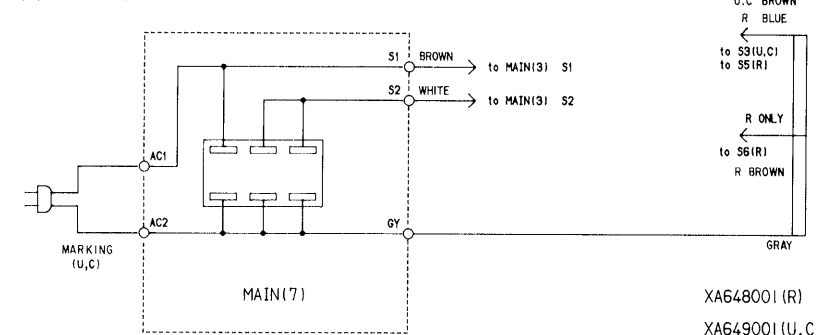


■ SCHEMATIC DIAGRAM

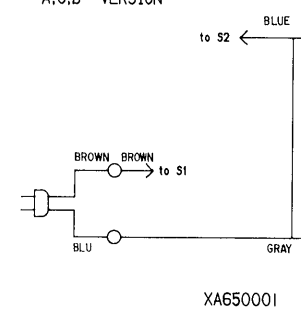
C-45



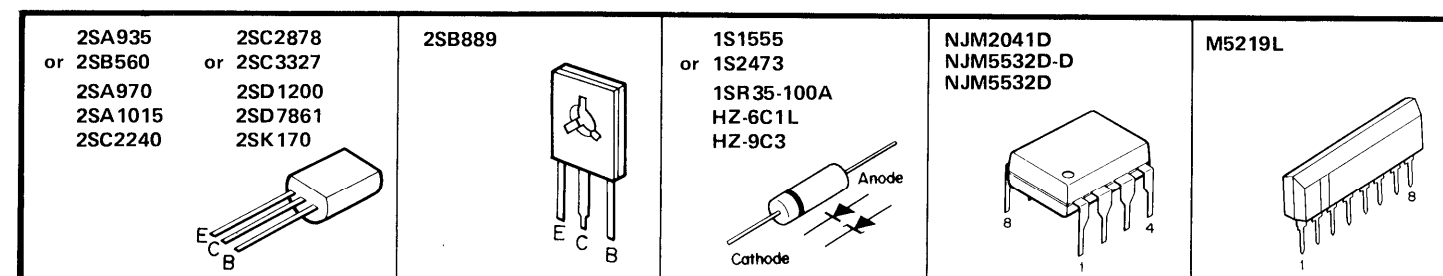
U.C.R. VERSION



A.G.B. VERSION



■ PIN CONNECTION DIAGRAM OF TRANSISTORS, DIODE AND ICS.



| VERSION | R | U.C. | A | G.B. |
|-----------|--------|------|---|----------|
| L101,102 | open | ← | ← | 15μH |
| R101,102 | short | ← | ← | 1KΩ |
| R123,124 | 220Ω | ← | ← | 2.2KΩ |
| R157~174 | short | ← | ← | 220Ω |
| R269 | open | ← | ← | 4.7 |
| C101,102 | 0.01μF | ← | ← | 0.022μF |
| C121~130 | open | ← | ← | 220PF |
| C182 | open | ← | ← | 100PF |
| C131~C134 | open | ← | ← | 100PF |
| C165,166 | P | ← | ← | 1000V/35 |

※ Unless otherwise specified, the diode is 1S1555 or 1S2473

| END | OUT |
|-----|-------------------|
| C | 209 199 |
| R | 312 299, 275, 276 |
| Q | 135 |
| D | 123 |

CAPACITOR

| REMARKS | PARTS NAME |
|---------|----------------------------------|
| NO MARK | ELECTROLYTIC CAPACITOR |
| NO MARK | CERAMIC CAPACITOR |
| ⊙ | POLYESTER FILM CAPACITOR (MYLAR) |
| ○ | POLYSTYRENE FILM CAPACITOR |
| ⊖ | MICA CAPACITOR |
| ⊕ | POLYPROPYLENE FILM CAPACITOR |
| ● | SEMICONDUCTIVE CERAMIC CAPACITOR |

RESISTOR

| REMARKS | PARTS NAME |
|---------|---------------------------------|
| NO MARK | CARBON FILM RESISTOR |
| △ | METAL OXIDE FILM RESISTOR |
| ▲ | METAL FILM RESISTOR |
| ⊠ | METAL PLATE RESISTOR |
| ⊞ | FIRE PROOF CARBON FILM RESISTOR |
| ⊞ | SEMENT MOLDED RESISTOR |
| ⊞ | SEMI VARIABLE RESISTOR |
| ⊞ | 1/6W CARBON FILM RESISTOR |

CAUTION

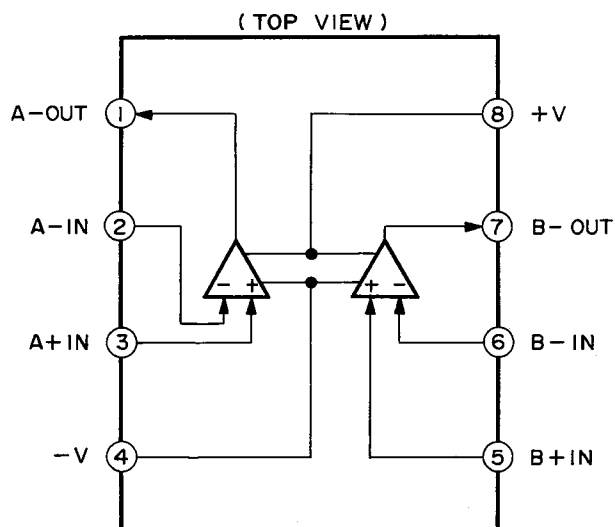
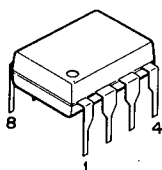
- Components having special characteristics are marked △ and must be replaced with parts having specifications equal to those originally installed.

- All voltages are measured with a 10MΩ/V DC electric volt meter.
- Schematic diagram is subject to change without notice.

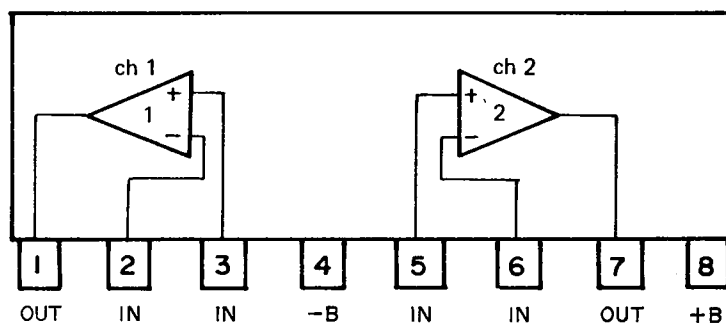
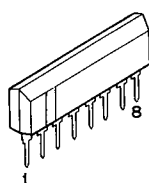
■ IC BLOCK DIAGRAM

IC103
NJM5532D-D

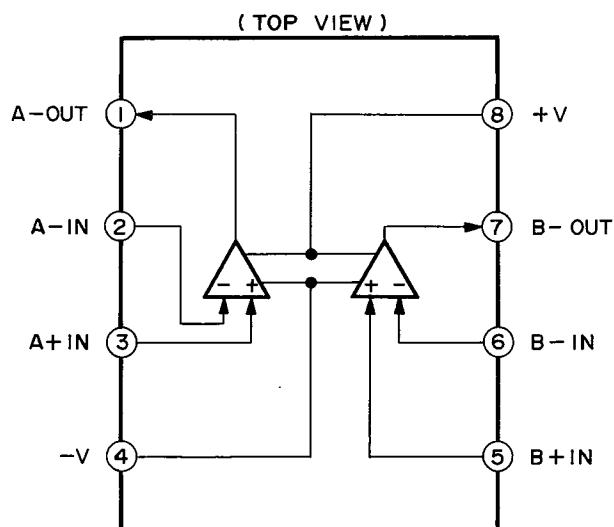
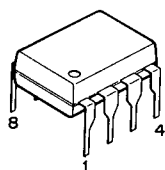
IC105
NJM5532 or NJM5532D-D



IC101, 102
M5219L



IC104
NJM2041D



PARTS LIST

■ ELECTRICAL PARTS

| Ref. No. | Part No. | Description | 部 品 名 | Remarks | Common Model | Markets | ランク |
|----------|-------------|-----------------------------|--------------------|-----------------------|--------------------------------------|---------|-----|
| ※ | NA 08 99 00 | Main Circuit Board Ass'y | メ イ ン シ ー ト | | | R | |
| ※ | NA 08 99 10 | " | " | | | U,C | |
| ※ | NA 08 99 20 | " | " | | | A | |
| ※ | NA 08 99 30 | " | " | | | G,B | |
| | FG 21 21 00 | Ceramic Cap. | 100pF 50V | セ ラ コ ン | C131~134,182 | G,B | |
| | FG 21 22 20 | " | 220pF 50V | " | C121~130 | G,B | |
| | FU 35 14 70 | Mica Cap.FE | 47pF 500V | F E マ イ カ コ ン | C135,136 | | |
| | Fi 38 41 00 | Ceramic Cap. | 0.01 μ F VA-1 | セ ラ コ ン | C209 | A,G,B | |
| | Fi 50 41 00 | " | 0.01 μ F DNS | " | // | A,G,B | |
| | Fi 41 41 00 | " | 0.01 μ F VA-1 | " | // | R,U,C | |
| | FV 44 91 00 | Electrolytic Cap. | 1000 μ F 25V | プ ラ ス チ ャ ッ ク ケ ミ コ ン | C167,168 | | |
| | FV 44 91 00 | " | 1000 μ F 25V | " | C165,166 | R,U,C | |
| | FZ 00 74 50 | " | 1000 μ F 35V | ブ ラ ッ ク ゲ ー ト コ ン (F) | // | A,G,B | |
| | FZ 00 54 10 | " | 100 μ F 6.3V | " | C173,174 | | |
| | FZ 00 55 80 | Mylar Cap. | 0.047 μ F 50V | マ イ ラ ー コ ン | C183,184 | | |
| | FZ 00 49 40 | " | 0.1 μ F 50V | " | C197,198 | | |
| | FZ 00 59 70 | Electrolytic Cap. | 1000 μ F 100V | オー ディ オ ケ ミ コ ン | C180,181 | | |
| | UA 25 41 00 | Mylar Cap. | 0.01 μ F 50V | マ イ ラ ー コ ン | C101,102 | R,U,A,C | |
| | UA 25 42 20 | " | 0.022 μ F 50V | " | // | G,B | |
| | FA 15 41 50 | " | 0.015 μ F 50V | " | C119,120 | | |
| | UA 25 43 30 | " | 0.033 μ F 50V | " | C117,118,153,154 | | |
| | UA 55 43 90 | " | 0.039 μ F 50V | " | C137~140 | | |
| | FA 15 51 20 | " | 0.12 μ F 50V | " | C149,150,157~160 | | |
| ※ | UM 02 83 30 | Electrolytic Cap. | 330 μ F 6.3V | オー ディ オ コ ガ タ ケ ミ コ ン | C201,202 | | |
| ※ | UM 02 91 00 | " | 1000 μ F 6.3V | " | C205,206 | | |
| | UM 05 71 00 | " | 10 μ F 25V | " | C143,144,207,208 | | |
| | UM 05 74 70 | " | 47 μ F 25V | " | C175,176 | | |
| | UM 05 81 00 | " | 100 μ F 25V | " | C203,204 | | |
| | UT 46 42 70 | Polypropylene Film Cap. | 0.027 μ F 100V | ポ リ プ ロ コ ン | C113,114 | | |
| | UT 46 51 00 | " | 0.1 μ F 100V | " | C111,112 | | |
| | UT 45 22 20 | " | 220pF 100V | " | C107,108 | | |
| | UT 45 21 00 | " | 100pF 100V | " | C147,148,169,170 | | |
| | UT 45 24 70 | " | 470pF 100V | " | C109,110,115,116,161,162,187,188 | | |
| | UT 45 31 00 | " | 1000pF 100V | " | C105,106 | | |
| | UT 45 31 50 | " | 1500pF 100V | " | C103,104 | | |
| | UT 45 41 00 | " | 0.01 μ F 100V | " | C177,178 | | |
| ※ | UH 23 74 70 | Electrolytic Cap. | 47 μ F 16V | 超 小 型 ケ ミ コ ン | C195 | | |
| ※ | UH 24 71 00 | " | 10 μ F 25V | " | C145,146,155,156,171,172,185,186,200 | | |
| ※ | UH 24 72 20 | " | 22 μ F 25V | " | C163,164,191,192 | | |
| ※ | UH 24 81 00 | " | 100 μ F 25V | " | C193,194 | | |
| ※ | UH 25 74 70 | " | 47 μ F 35V | " | C189,190 | | |
| ※ | UH 26 52 20 | " | 0.22 μ F 50V | " | C141,142 | | |
| ※ | UH 26 54 70 | " | 0.47 μ F 50V | " | C151,152 | | |
| ※ | UH 26 61 00 | " | 1 μ F 50V | " | C179,196 | | |
| | GE 90 18 60 | Coil | 47mH | 固 定 コ イ ル | L105,106 | | |
| ※ | VA 98 35 00 | " | 15 μ H | コ イ ル | L101,102 | G,B | |
| ※ | VA 98 36 00 | " | 220 μ H | " | L103,104 | | |
| | HL 32 48 20 | Metal Oxide Film Resistor | 82 Ω 2W | 酸 金 抵 抗 | R261,262 | | |
| | HV 45 34 70 | Flame Proof Carbon Resistor | 4.7 Ω 1/4W | 不 燃 可 カ ー ボ ン 抵 抗 | R273,274 | | |
| | HV 45 42 20 | " | 22 Ω 1/4W | " | R155,156 | | |
| | HV 45 43 30 | " | 33 Ω 1/4W | " | R251~254 | | |

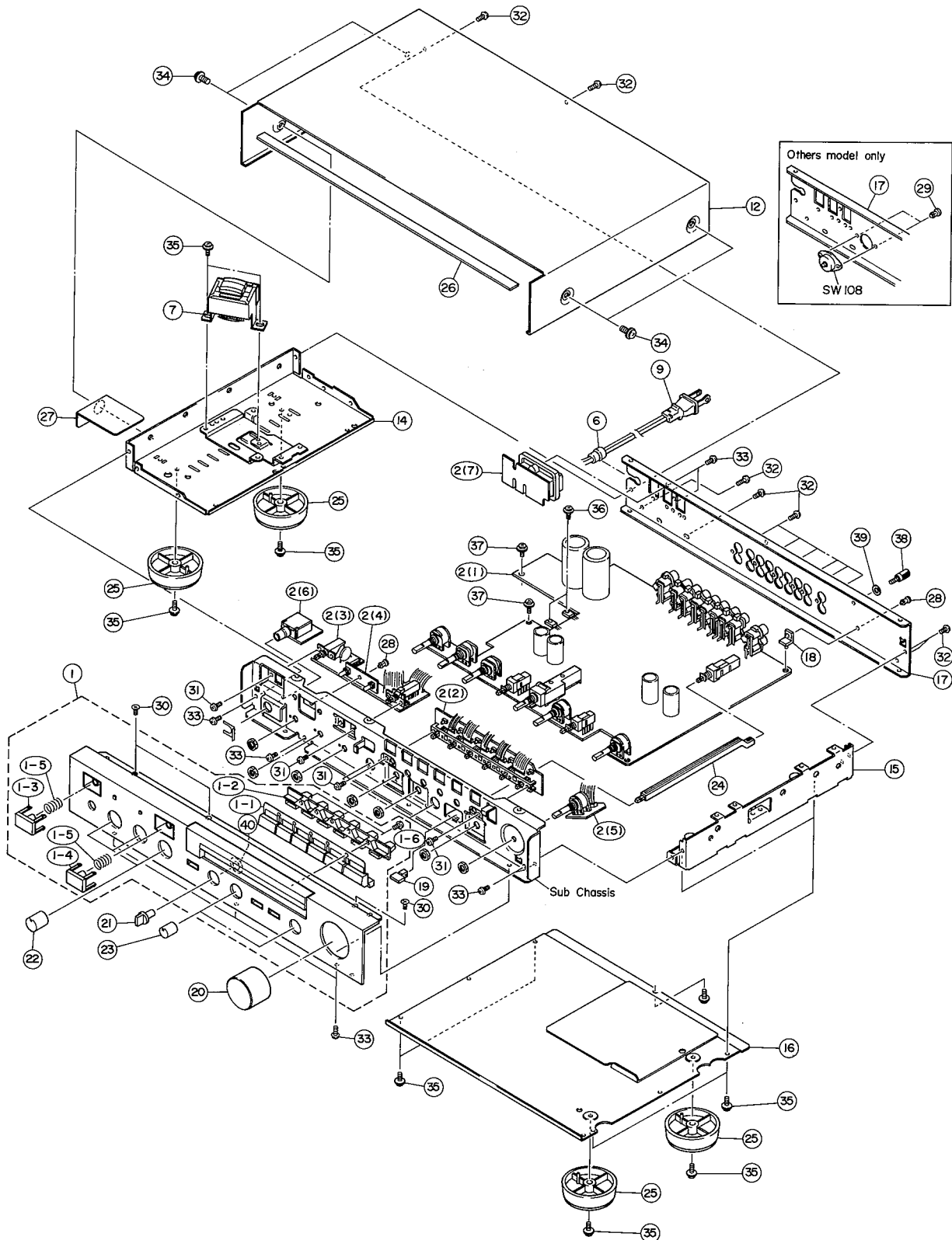
※ New Parts (新規部品)

| Ref. No. | Part No. | Description | 部 品 名 | Remarks | Common Model | Markets | ランク |
|----------|-------------|-----------------------------|-------------------------------------|-----------------|------------------|------------------|-----|
| | HV 45:51:00 | Flame Proof Curbon Resister | 100Ω 1/4W | 不燃可カーボン抵抗 | R291,292,301,302 | | |
| | HV 45:51:50 | // | 150Ω 1/4W | " | R312 | | |
| ※ | VA 98:46:00 | Potentiometer | 50KΩ-A×2 | 可 変 抵 抗 器 | VR106 | | |
| ※ | VA 98:47:00 | // | 250KΩ×2 | " | VR101 | | |
| ※ | VA 98:48:00 | // | 20KΩ×2 | " | VR104,105 | | |
| ※ | VA 98:49:00 | // | 16KΩ×2 | " | VR103 | | |
| ※ | VA 98:50:00 | // | 60KΩ-Y×2 | " | VR102 | | |
| | | | | | | | |
| | iA 09:70:00 | Transistor | 2SA970 (GR,BL) | ト ラ ン ジ ス タ ー | Q126 | | |
| | iA 10:15:21 | // | 2SA1015 (Y) | " | Q128,129,131~133 | | |
| | iX 60:32:80 | // | 2SA935 | " | Q119,120 | Inter-changeable | |
| ※ | iB 05:60:00 | // | 2SB560 | " | // | | |
| ※ | VA 93:31:00 | // | 2SB889 | " | Q124 | | |
| | iC 18:15:20 | // | 2SC1815 (Y) | " | Q127,130,134,135 | | |
| | iC 22:40:00 | // | 2SC2240 (GR,BL) | " | Q125 | | |
| | iX 60:42:00 | // | 2SC2878 (A,B) | " | Q109~118 | Inter-changeable | |
| | iC 33:27:00 | // | 2SC3327 | " | // | | |
| ※ | iC 20:61:00 | // | 2SC2061 | " | Q121,122 | Inter-changeable | |
| ※ | iD 04:38:00 | // | 2SD438 | " | // | | |
| | iD 07:86:00 | // | 2SD786 (Q,R,S) | " | Q101~104 | | |
| ※ | VA 93:30:00 | // | 2SD1200 | " | Q123 | | |
| ※ | iE 10:24:80 | FET | 2SK170 (GR,1,2,3,4) (BL,1,2,3,4) | F E T | Q105~108 | | |
| | | | | | | | |
| | iF 00:07:10 | Diode | 1S2473 | ダ イ オ ー ド | D101~106,114 | Inter-changeable | |
| | iF 00:00:40 | // | 1S1555 | " | // | | |
| | iF 00:41:60 | Zener Diode | HZ6C1L | ツェナーダイオード | D112,113 | | |
| | iF 00:33:20 | // | HZ9C3 | " | D115 | | |
| | iF 00:44:40 | LED(Red) | SLV56URC3H | L E D (赤) | D122,123 | | |
| | iF 00:87:30 | LED | SLR-34URC3H3 | L E D | D116~121 | | |
| | iH 00:14:30 | Diode | 1SR-35-100A | ダ イ オ ー ド | D107~111 | | |
| | iG 09:21:00 | IC | M5219L | I C | IC101,102 | | |
| | iG 12:14:00 | // | NJM2041D | " | IC104 | | |
| | iG 14:28:00 | // | NJM5532D | " | IC105 | Inter-changeable | |
| ※ | XA 67:30:01 | // | NJM5532DD | " | // | | |
| ※ | XA 67:30:01 | // | NJM5532DD | " | IC103 | | |
| | KA 80:51:10 | Push Switch | SUN 2-2NS | ブ ッ シ ュ S W | SW104,105 | | |
| ※ | VA 98:38:00 | // | SUN 4-2NS | " | SW101 | | |
| ※ | VA 98:39:00 | // | SUN 6-2S | " | SW106 | | |
| ※ | VA 98:41:00 | // | | 6 連 ブ ッ シ ュ S W | SW102 | | |
| ※ | VA 98:37:00 | Rotary Switch | SRZ-V | ロ ー タ リ S W | SW103 | | |
| | KA 80:51:50 | Power Switch | ESB-8215V-F | パ ワ ー S W | SW107 | | |
| ※ | LA 00:58:10 | Voltage Selector | | 電 圧 切 換 器 | SW108 | R | |
| | LB 20:26:10 | Pin Jack | 2P | ピンジャック | PJ105 | | |
| ※ | LB 20:29:00 | // | 2P | " | PJ101 | | |
| | LB 40:12:90 | // | 4P | " | PJ103,104 | | |
| ※ | VA 98:43:00 | // | 6P | " | PJ102 | | |
| ※ | VA 98:45:00 | Headphones Jack | | ヘッドホンジャック | JK101 | | |
| | CB 64:46:70 | Cap. Cover | HY-0105 | コンデンサカバー | | A,G,B | |
| | LA 00:21:40 | Wrapping Terminal Type-1 | 2P P=10 | I 型ラッピング端子板 | | | |
| | LA 00:21:50 | // | 3P P=10 | " | | | |
| ※ | VA 72:56:00 | Parallel Holder | 6P | パラレルホルダー | | | |
| ※ | VA 72:59:00 | // | 9P | " | | | |

※ New Parts (新規部品)

※New Parts (新規部品)

■ MECHANISM EXPLODED VIEW



MECHANISM PARTS

| Ref. No. | Part No. | Description | 部 品 名 | Remarks | Common Model | Markets | ランク |
|----------|-------------|----------------------------|-------------------------------|---------|--------------|-------------|-----|
| ※ 1 | NB:63:32:90 | Panel Unit | パ ネ ル ユ ニ ッ ト | | | | |
| ※ 1-1 | NB:63:33:60 | Button Ass'y | ボ タ ン Ass'y | | | | |
| ※ 1-2 | CB:65:13:30 | Reflector | リ フ レ ク タ ー | | | | |
| 1-3 | CB:63:51:30 | Button P | ボ タ ン P | | A-520 | | |
| 1-4 | CB:63:51:50 | Button T | ボ タ ン T | | A-520 | | |
| 1-5 | AA:62:20:80 | Spring | ス プ リ ン グ | | M-80 | | |
| 1-6 | EX:60:02:00 | Cap Screw | 2×6 FCM3-BI 鉄カップスクリューPタイト | | | | |
| ※ 2 | NA:08:99:00 | Main Circuit Board | メ イ ン シ ー ト | | | R | |
| ※ // | NA:08:99:10 | // | // | | | U.C | |
| ※ // | NA:08:99:20 | // | // | | | A | |
| ※ // | NA:08:99:30 | // | // | | | G.B | |
| 5 | LA:00:54:90 | Circuit Board Terminal | 834T-1100 ボ ー ド イ ン 端 子 | | | | |
| 6 | CB:62:01:90 | Cord Stopper | CM-22B コ ー ド ス ト ッ パ | | | R.A.G.B | |
| // | CB:62:02:00 | // | CM-22C // | | | U.C | |
| ※ 7 | XA:64:80:01 | Power Transformer | 電 源 ト ラ ン ス | | | A.G.B | |
| ※ // | XA:64:90:01 | // | // | | | U.C | |
| ※ // | XA:65:00:01 | // | // | | | A.G.B | |
| 8 | LA:00:29:50 | Terminal Board | 2P MA0092A 中 継 端 子 台 | | | | |
| ※ 9 | MG:00:23:10 | Power Cord | 7.5A 250V 2m 電 源 コ ー ド | | | A | |
| // | MG:00:09:20 | // | 7.5A 250V 2.5m // | | | A | |
| // | MG:00:14:90 | // | 7.5A 250V 2.5m // | | | A | |
| // | MG:00:16:20 | // | 2.5A 250V 2m // | | | G.B | |
| // | MG:00:16:30 | // | 6A 250V 2m // | | | R | |
| // | MG:00:22:20 | // | 10A 125V 1.98m // | | | U.C | |
| 10 | CB:06:92:50 | Binding Tie | BK-1 イ ン シ ュ ロ ッ ク タイ | | | | |
| 11 | LB:10:01:80 | | ショ ー ト ビ ン プ ラ グ | | | | |
| ※ 12 | AA:62:93:10 | Top Cover | ト ッ プ カ バ ー | | | | |
| ※ 14 | AA:62:92:80 | Frame L | フ レ ー ム L | | | | |
| ※ 15 | AA:62:93:80 | Side Frame R | サイ ド フ レ ー ム R | | | | |
| ※ 16 | AA:62:92:90 | Bottom Cover | ボ ト ム カ バ ー | | | | |
| ※ 17 | AA:62:92:30 | Rear Panel | リ ヤ パ ネ ル | | | R | |
| ※ // | AA:62:92:40 | // | // | | | U.C | |
| ※ // | AA:62:92:50 | // | // | | | G.B | |
| ※ // | AA:62:92:60 | // | // | | | A | |
| 18 | CB:09:12:90 | Holder Circuit Board | 基 板 ホ ル ダ ー | | | | |
| ※ 19 | CB:65:19:80 | Button F | ボ タ ン F | | | | |
| ※ 20 | BA:09:47:30 | Knob | ノ ブ | | | | |
| 21 | CB:63:42:70 | Switch Knob | ス イ ッ チ ノ ブ | | K-720 | | |
| 22 | BA:08:29:30 | Knob | ツ マ ミ | | K-500 | | |
| 23 | VA:74:02:00 | // | // | | SR-100X | | |
| ※ 24 | CB:65:13:40 | Rod | ロ ッ ド | | | | |
| 25 | NB:62:01:40 | Leg Ass'y | レ ッ グ Ass'y | | C-80 | | |
| ※ 26 | CB:65:19:90 | Damper | ダ ン パ ー | | | | |
| ※ 27 | CB:65:20:00 | Spacer | ス ペ ー サ | | | | |
| 28 | CB:06:88:80 | Plastic Rivet | No.1027 プ ラ ス チ ッ ク リ ヴ ェ ッ ト | | | | |
| 29 | CB:60:92:60 | // | No.6206 // | | | R | |
| 30 | Ei:33:00:66 | Binding Head Tapping Screw | 3×6 FCM3-BI 鉄サラタップタイト (Bタイト) | PACK | | | |
| 31 | ED:33:00:66 | Binding Head Screw | M3×6 FCM3-BI 鉄 バ イ ン ド 小 ネ ジ | PACK | | R.C.A.G.C.B | |
| 32 | EK:35:00:20 | Pan Head Tapping Screw | 3×8 FCM3-BI ナベタップタイトネジ | | | | |
| 33 | Ei:33:00:86 | Binding Head | 3×8 FCM3-BI 鉄 バ イ ン ド B タ イ ト | PACK | | R.C.A.G.C.B | |
| 34 | EK:96:60:70 | BW Head Tapping Screw | 4×8 ZMC2-BI 鉄BWヘッドSタイト | | | | |
| 35 | EK:33:60:20 | // | // | | | | |

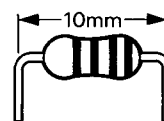
※New Parts (新規部品)

Parts List for Carbon Resistor

| Value | 1/4W Type Part No. | 1/6W Type Part No. | Value | 1/4W Type Part No. | 1/6W Type Part No. |
|---------------|--------------------|--------------------|---------------|--------------------|--------------------|
| 1.0 Ω | HJ353100 | ※ | 12K Ω | HJ357120 | HF857120 |
| 1.8 " | HJ353180 | ※ | 15 " | HJ357150 | HF857150 |
| 2.2 " | HJ353220 | HF853220 | 18 " | HJ357180 | HF857180 |
| 3.3 " | HJ353330 | HF853330 | 22 " | HJ357220 | HF857220 |
| 4.7 " | HJ353470 | HF853470 | 27 " | HJ357270 | HF857270 |
| 5.6 " | HJ353560 | HF853560 | 33 " | HJ357330 | HF857330 |
| 10 " | HJ354100 | HF854100 | 39 " | HJ357390 | HF857390 |
| 15 " | HJ354150 | HF854150 | 47 " | HJ357470 | HF857470 |
| 22 " | HJ354220 | HF854220 | 56 " | HJ357560 | HF857560 |
| 27 " | HJ354270 | HF854270 | 68 " | HJ357680 | HF857680 |
| 33 " | HJ354330 | HF854330 | 82 " | HJ357820 | HF857820 |
| 39 " | HJ354390 | HF854390 | 91 " | HJ357910 | HF857910 |
| 47 " | HJ354470 | HF854470 | 100 " | HJ358100 | HF858100 |
| 56 " | HJ354560 | HF854560 | 120 " | HJ358120 | HF858120 |
| 68 " | HJ354680 | HF854680 | 150 " | HJ358150 | HF858150 |
| 82 " | HJ354820 | HF854820 | 180 " | HJ358180 | HF858180 |
| 100 " | HJ355100 | HF855100 | 220 " | HJ358220 | HF858220 |
| 110 " | HJ355110 | HF855110 | 270 " | HJ358270 | HF858270 |
| 120 " | HJ355120 | HF855120 | 330 " | HJ358330 | HF858330 |
| 150 " | HJ355150 | HF855150 | 390 " | HJ358390 | HF858390 |
| 160 " | HJ355160 | ※ | 470 " | HJ358470 | HF858470 |
| 180 " | HJ355180 | HF855180 | 560 " | HJ358560 | HF858560 |
| 220 " | HJ355220 | HF855220 | 680 " | HJ358680 | HF858680 |
| 270 " | HJ355270 | HF855270 | 820 " | HJ358820 | HF858820 |
| 330 " | HJ355330 | HF855330 | 1.0M Ω | HJ359100 | HF859100 |
| 390 " | HJ355390 | HF855390 | 1.2 " | HJ359120 | ※ |
| 470 " | HJ355470 | HF855470 | 1.5 " | HJ359150 | HF859150 |
| 510 " | ※ | HF855510 | 1.8 " | HJ359180 | HF859180 |
| 560 " | HJ355560 | HF855560 | 2.2 " | HJ359220 | HF859220 |
| 680 " | HJ355680 | HF855680 | 3.3 " | HJ359330 | HF859330 |
| 820 " | HJ355820 | HF855820 | 3.9 " | HJ359390 | ※ |
| 910 " | HJ355910 | HF855910 | 4.7 " | HJ359470 | ※ |
| 1.0K Ω | HJ356100 | HF856100 | | | |
| 1.2 " | HJ356120 | HF856120 | | | |
| 1.5 " | HJ356150 | HF856150 | | | |
| 1.8 " | HJ356180 | HF856180 | | | |
| 2.0 " | HJ356200 | HF856200 | | | |
| 2.2 " | HJ356220 | HF856220 | | | |
| 2.4 " | HJ356240 | HF856240 | | | |
| 2.7 " | HJ356270 | HF856270 | | | |
| 3.0 " | HJ356300 | HF856300 | | | |
| 3.3 " | HJ356330 | HF856330 | | | |
| 3.6 " | HJ356360 | HF856360 | | | |
| 3.9 " | HJ356390 | HF856390 | | | |
| 4.7 " | HJ356470 | HF856470 | | | |
| 5.1 " | HJ356510 | HF856510 | | | |
| 5.6 " | HJ356560 | HF856560 | | | |
| 6.8 " | HJ356680 | HF856680 | | | |
| 8.2 " | HJ356820 | HF856820 | | | |
| 9.1 " | HJ356910 | HF856910 | | | |
| 10 " | HJ357100 | HF857100 | | | |

1/4W Type

HJ35○○○○



1/6W Type

HF85○○○○

