



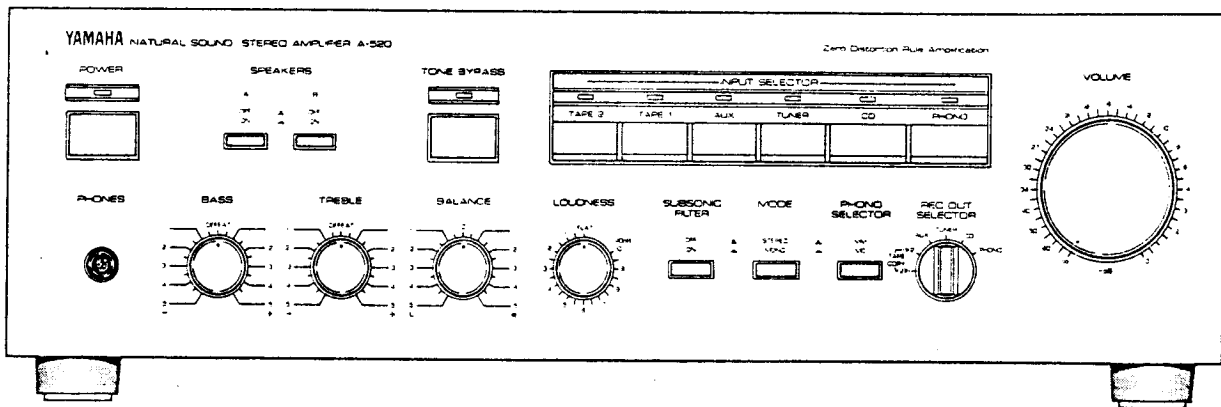
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THE QUALITY OF
THIS MANUAL IS
THE BEST THAT
IS AVAILABLE

STEREO INTEGRATED AMPLIFIER A-520

SERVICE MANUAL

FRONT PANEL



For Service Manuals Contact
MAURITRON TECHNICAL SERVICES
8 Cherry Tree Rd, Chinnor
Oxon OX9 4QY
Tel: 01844-351694 Fax: 01844-352554
Email: enquiries@mauritron.co.uk

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 changes in specification 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.

A-520

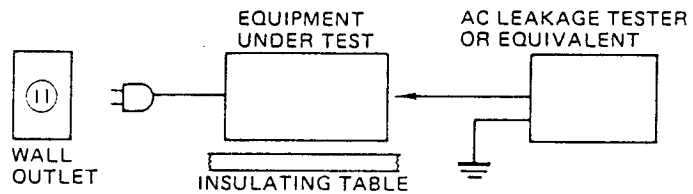
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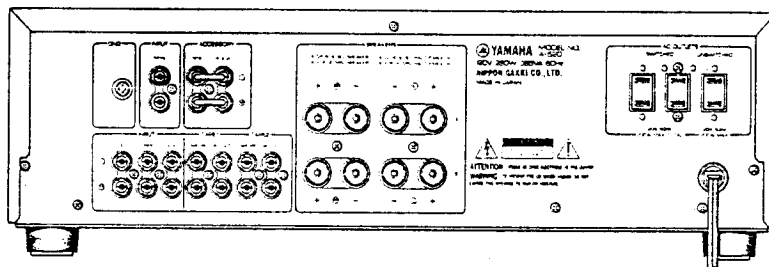
■ TO SERVICE PERSONNEL

1. Critical Components Information.
Components having special characteristics are marked Δ 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 0.15 μ F.
 - Leakage current must not exceed 0.5mA.
 - Be sure to test for leakage with the AC plug in both polarities.

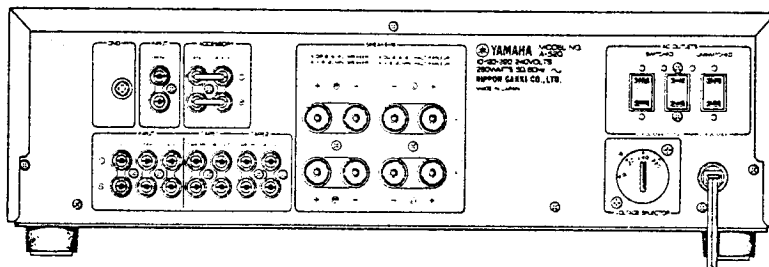


■ REAR PANELS

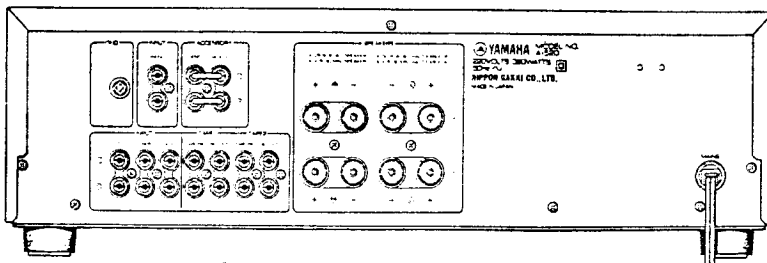
▼ U.S.A. and Canadian models



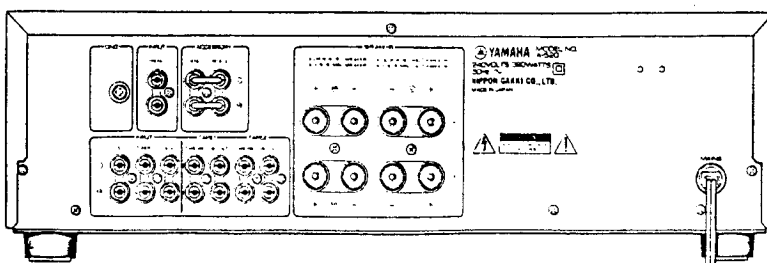
▼ General model



▼ European model

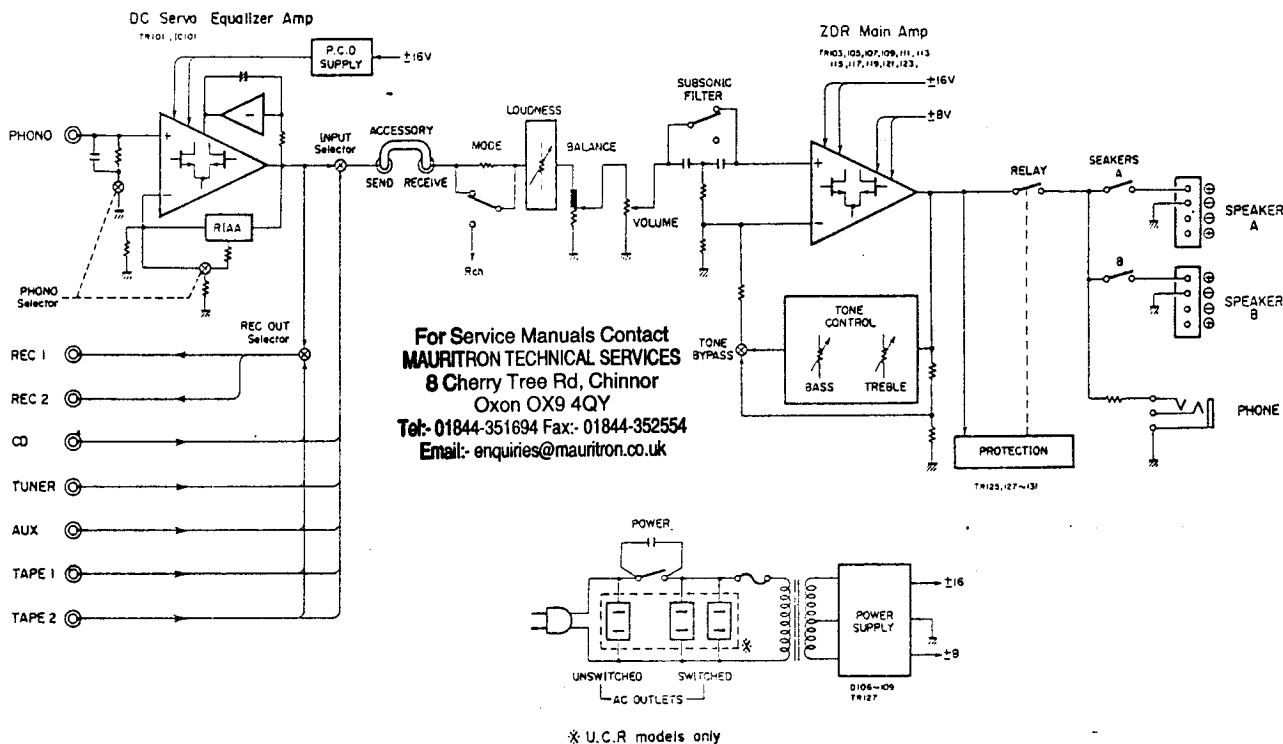


▼ British and Australian models



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BLOCK DIAGRAM



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* U.C.R models only

SPECIFICATIONS

Continuous Power Per Channel

| | |
|--|-----|
| 20Hz ~ 20kHz (0.01% THD 8Ω) | 75W |
| (0.015% THD 6Ω) | 80W |

DIN Standard Output Power Per Channel

| | |
|----------------------------|----------------|
| 1kHz, 1% THD, 4Ω | 112W (A)(G)(B) |
|----------------------------|----------------|

Dynamic Headroom

| | |
|--------------|------------------|
| 8Ω | 1.12dB (R)(U)(C) |
| 6Ω | 1.76dB (R)(U)(C) |

Dynamic Power Per Channel (IHF)

| | |
|--------------|----------------|
| 8Ω | 97W (R)(U)(C) |
| 6Ω | 120W (R)(U)(C) |

Power Bandwidth

| | |
|--------------------------------|--------------|
| 0.03% THD 37.5W (8Ω) | 10Hz ~ 50kHz |
|--------------------------------|--------------|

Damping Factor

| | |
|-------------------------|----------------|
| (at 1kHz, 8Ω) | better than 50 |
|-------------------------|----------------|

Input Sensitivity/Impedance

| | |
|--------------------------------|------------|
| Phono MC | 160μV/200Ω |
| MM | 2.5mV/47kΩ |
| Aux, Tape, Tuner, CD | 150mV/47kΩ |

Input Sensitivity (New IHF)

| | |
|--------------------------------|-----------------|
| Phono MC | 19μV (R)(U)(C) |
| MM | 0.3mV (R)(U)(C) |
| Aux, Tape, Tuner, CD | 18mV (R)(U)(C) |

Maximum Input Signal

| | |
|--------------------|-----------------|
| (1kHz, 0.01% THD) | |
| Phono MC | 10mV (R)(U)(C) |
| MM | 150mV (R)(U)(C) |

Output Level/Impedance

| | |
|-------------------|------------|
| Rec Out | 150mV/470Ω |
|-------------------|------------|

Headphone Jack Rated Output/Output Impedance

| | |
|------------------------|-----------|
| 0.01% THD 8Ω | 0.7V/270Ω |
|------------------------|-----------|

Frequency Response

| | |
|---|--------|
| 20Hz ~ 20kHz Aux, Tape, Tuner, CD | +0 dB |
| | -0.5dB |

RIAA Equalization Deviation

| | |
|----------------------------------|------------------|
| 20Hz ~ 20kHz, PHONO MC | ±0.3dB (R)(U)(C) |
| MM | ±0.2dB (R)(U)(C) |

Total Harmonic Distortion

| | |
|--|--------|
| (20Hz ~ 20kHz) | |
| Phono MC to Rec Out (3V) | 0.007% |
| Phono MM to Rec Out (3V) | 0.003% |
| Aux, Tape, Tuner, CD to SP Out 1W/8Ω | 0.005% |

Intermodulation Distortion

| | |
|----------------------------|------------------|
| Aux, Tape, Tuner, CD Rated | |
| Output/8Ω | 0.01% (R)(U)(C) |
| 1W/8Ω | 0.005% (R)(U)(C) |

Signal to Noise Ratio

| | |
|--|-----------------|
| (IHF-A-Network) | |
| Phono MC (500μV Input Shorted) | 75dB (R)(U)(C) |
| MM (5mV, Input Shorted) | 92dB (R)(U)(C) |
| Aux, Tape, Tuner, CD (5.1kΩ) | 100dB (R)(U)(C) |

Signal to Noise Ratio (New IHF)

| | |
|--------------------------------|----------------|
| Phono MC | 74dB (R)(U)(C) |
| MM | 78dB (R)(U)(C) |
| Aux, Tape, Tuner, CD | 84dB (R)(U)(C) |

Residual Noise (IHF-A-Network)

| | |
|--|-----------------|
| | 140μV (R)(U)(C) |
|--|-----------------|

Channel Separation

| | |
|---|------|
| Phono MM (Input shorted) 1kHz | 55dB |
| Aux, Tape, Tuner, CD (5.1kΩ) 1kHz | 55dB |

Tone Control Characteristics

| | |
|-----------------------------------|----------------------------|
| Bass boost/cut | ±10dB (at 20Hz) (R)(U)(C) |
| Bass turnover frequency | 350Hz (R)(U)(C) |
| Treble boost/Out | ±10dB (at 20kHz) (R)(U)(C) |
| Turnover frequency | 3.5kHz (R)(U)(C) |

Filter Characteristics

| | |
|--------------------------|---------------------------|
| Low (Subsonic) | 15Hz - 12dB/oct (R)(U)(C) |
|--------------------------|---------------------------|

Continuous Loudness Control

| | |
|------------------------------|--------------------------|
| (Level-related equalization) | |
| Attenuation | 40dB (at 1kHz) (R)(U)(C) |

Gain Tracking Error (0 to -60dB)

| | |
|--|---------------|
| | 2dB (R)(U)(C) |
|--|---------------|

Power Supplies

| | |
|---|------------------------------|
| U.S.A. and Canadian models | AC 120V, 60Hz |
| General model | AC 110/120/220/240V, 60/50Hz |
| British and Australian models | 240V, 50Hz |
| European model | 220V, 50Hz |

Power Consumption

| | |
|--|---------------------|
| | 290W/390W (G)(B)(A) |
|--|---------------------|

AC Outlet (R)(U)(C)

| | |
|--------------------------|-----------|
| Unswitched x 2 | 200W max. |
| Unswitched x 1 | 200W max. |

Dimensions (W x H x D)

| | |
|--|-----------------|
| | 435 x 136 x 339 |
|--|-----------------|

Weight

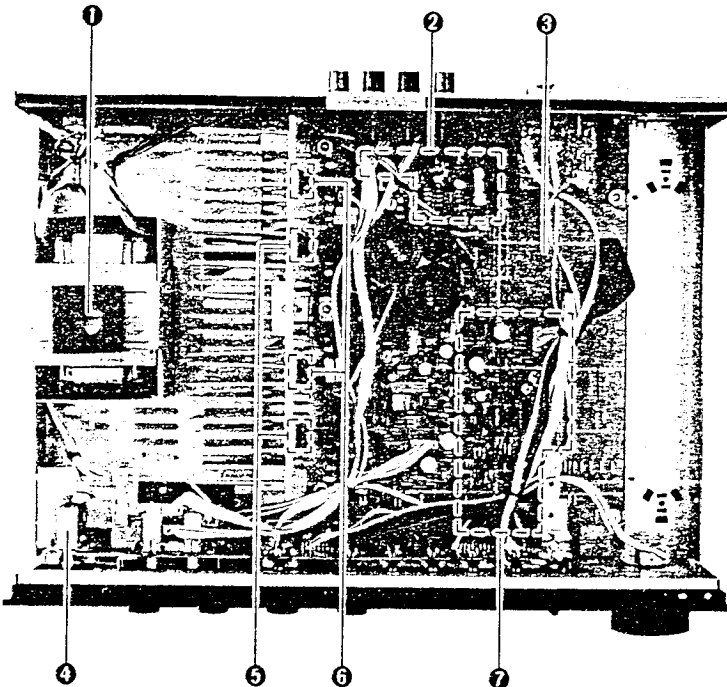
| | |
|--|-----------------------------|
| | (17-1/8 x 5-5/16 x 13-5/16) |
| | 7.5 kg (16.5 lbs.) |

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

Specifications subject to change without notice.

A-520

INTERNAL VIEW



- ① POWER TRANSFORMER
U.S.A. model: GA68030
Canadian model: GA68040
General model: GA68070
Australian & British models: GA68060
European model: GA68050
- ② PROTECTION SECTION
- ③ MAIN CIRCUIT BOARD
- ④ POWER SWITCH
- ⑤ POWER TRANSISTOR: 2SC3182 (R, O)
or 2SC2581 (O, P, Y)
- ⑥ POWER TRANSISTOR: 2SA1265 (R, O)
or 2SA1106 (O, P, Y)
- ⑦ EQ AMP SECTION

DISASSEMBLY PROCEDURES

(Remove parts in disassembly order as numbered.)

1. Removal of Top Cover
 - a. Remove 5 screws (①) in Fig. 1, and slide the Top Cover back.
2. Removal of Front Panel
 - a. Remove 5 screws (②) in Fig. 1, and pull the Front Panel forward.
3. Removal of Bottom Cover
 - a. Remove 5 screws (③) in Fig. 1.

ADJUSTMENTS

- IDLING CURRENT ADJUSTMENT
When replacing the power and drive transistors, adjust idling current. This adjustment should be carried out in the non-loaded condition and no sooner than one minute after power is turned ON. Adjust VR107 (Lch) and VR108 (Rch) so that the voltage across the terminals of R217 and R218 comes to $5mV \pm 2mV$ DC.

| | Test points | Adjustment points | Test points |
|-----|------------------------------|-------------------|---------------|
| Lch | Across the terminals of R217 | VR107 | $5mV \pm 2mV$ |
| Rch | Across the terminals of R218 | VR108 | $5mV \pm 2mV$ |

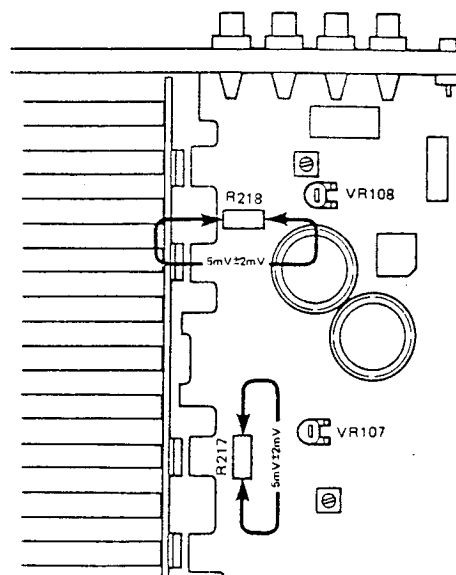
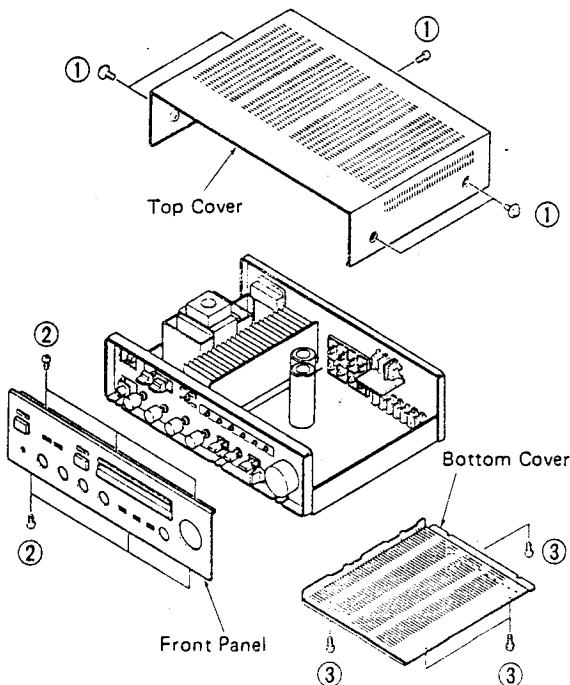


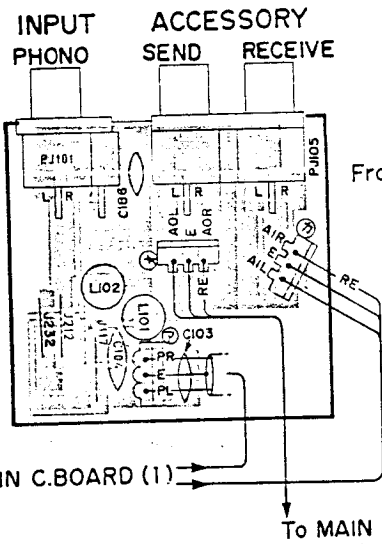
Fig. 2

PRINTED CIRCUIT BOARD (Pattern side)

Note:
文字面: Letter side

Note: As the following parts and values differ for each model,
please refer to the corresponding column.

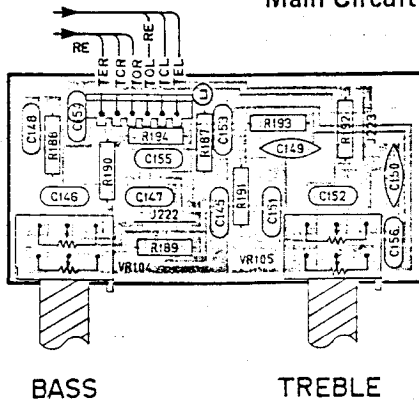
| | R | U | C | A, B | G |
|---------------------------------|------------|----------|----------|-------------|-------------|
| C103, 104 | OPEN | OPEN | OPEN | OPEN | 150P |
| C109, 110 | 330P | 330P | 330P | 330P | 150P |
| C105, 106 | OPEN | OPEN | OPEN | OPEN | 150P |
| J261, 264, 265 | SHORT | SHORT | SHORT | SHORT | OPEN |
| C181~184 187~192 195, 196 | OPEN | OPEN | OPEN | OPEN | 470P |
| C186 | 0.01 | 0.01 | 0.01 | 0.01 | OPEN |
| C193, 194 | OPEN | OPEN | OPEN | OPEN | 680P |
| C197~200 | OPEN | OPEN | OPEN | OPEN | 5600P |
| J271 | OPEN | OPEN | OPEN | OPEN | SHORT |
| C201~206 | OPEN | OPEN | OPEN | OPEN | 0.027 |
| C207 | 0.1/25 | 0.1/25 | 0.1/25 | 0.1/25 | OPEN |
| C178 | 0.01/500 | 0.01/500 | 0.01/500 | 0.01/500 | OPEN |
| C179, 180 | OPEN | OPEN | OPEN | OPEN | 0.047/100 |
| R101, 102 | 10 | 10 | 10 | 10 | 33 |
| R109, 110 | 33 | 33 | 33 | 33 | 4.7K |
| R285 | 4.7 | 4.7 | 4.7 | 4.7 | OPEN |
| R286, 287 | OPEN | OPEN | OPEN | OPEN | 4.7 |
| L101, 102 | SHORT | SHORT | SHORT | SHORT | 15μH |
| L103, 104 | OPEN | OPEN | OPEN | OPEN | 220μH |
| D108 | 4D4B41 | 4D4B41 | D4B820 | 4D4B41 | 4D4B41 |
| F101 | T7.0A 250V | 7A 125V | 7A 125V | T3.15A 250V | T3.15A 250V |
| F102 | T3.5A 250V | OPEN | OPEN | OPEN | OPEN |



Main Circuit Board (3)
From MAIN C. BOARD (1)

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Main Circuit Board (7)

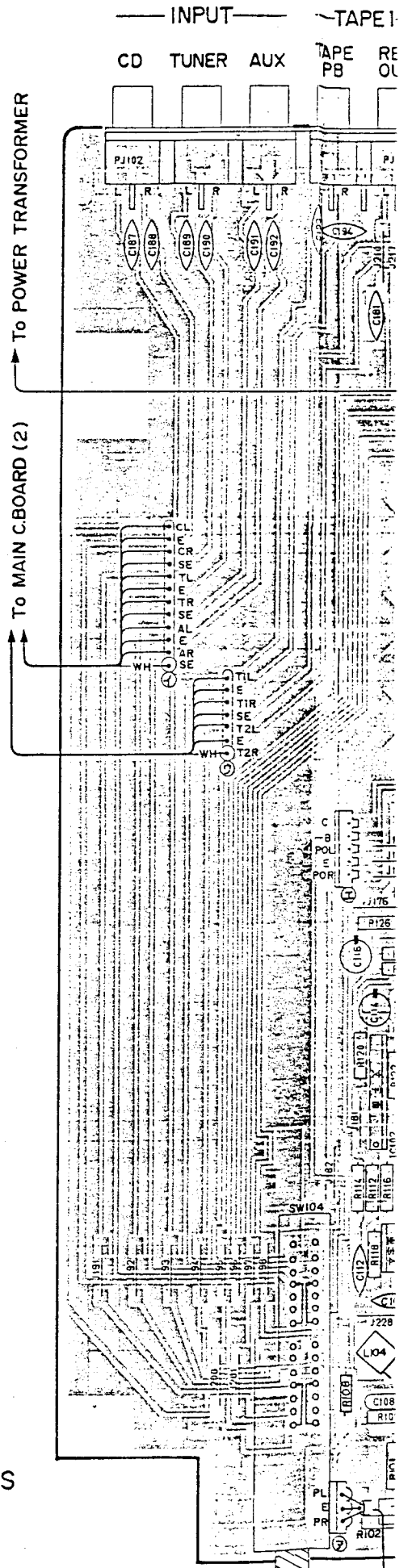


Main Circuit Board (5)

U, C MODELS



Main Circuit Board



ern side)

es differ for each model,
g column.

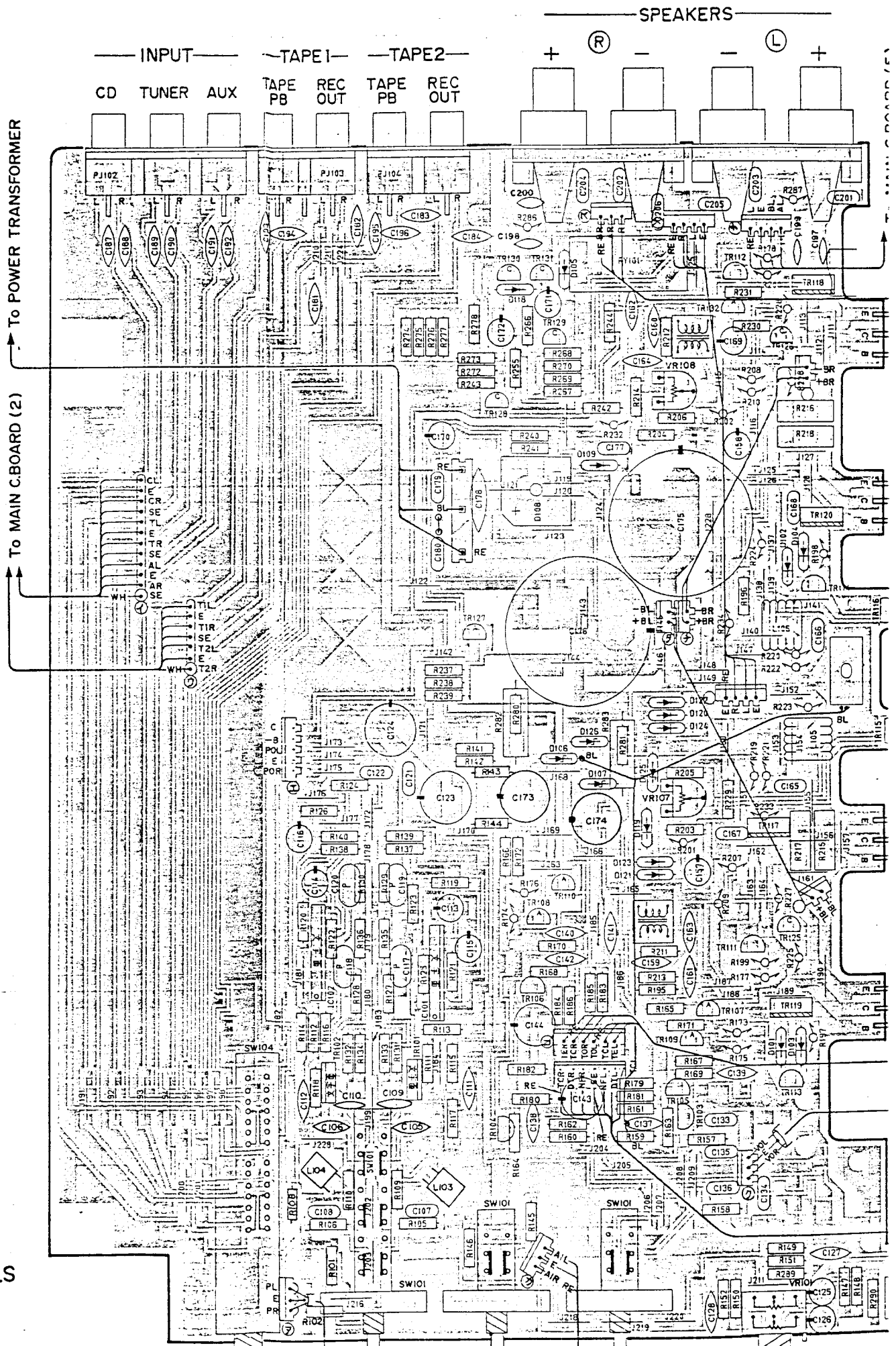
| |
|---------------|
| G |
| 150P |
| 150P |
| 150P |
| OPEN |
| 470P |
| OPEN |
| 680P |
| 5600P |
| SHORT |
| 0.027 |
| OPEN |
| OPEN |
| 0.047/100 |
| 33 |
| 4.7K |
| OPEN |
| 4.7 |
| 15μH |
| 220μH |
| 4D4B41 |
| OV T3.15A250V |
| OPEN |

it Board (3)
ARD (1)

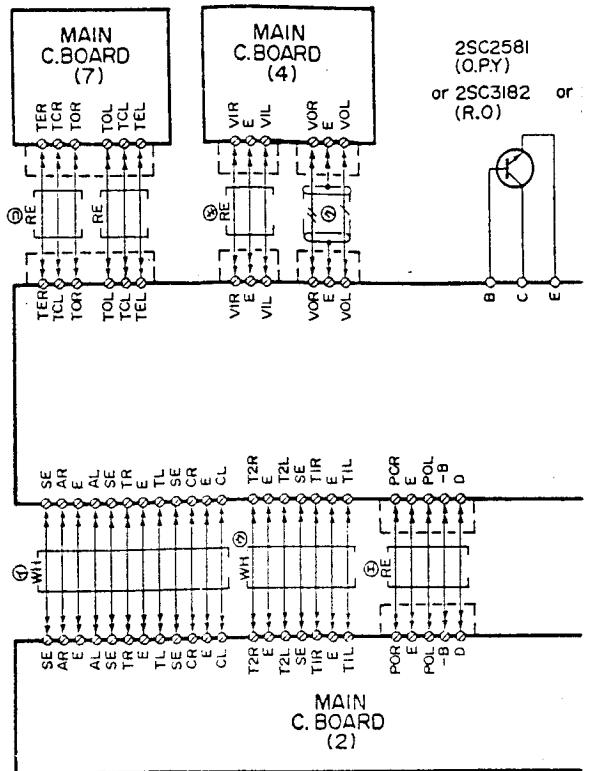
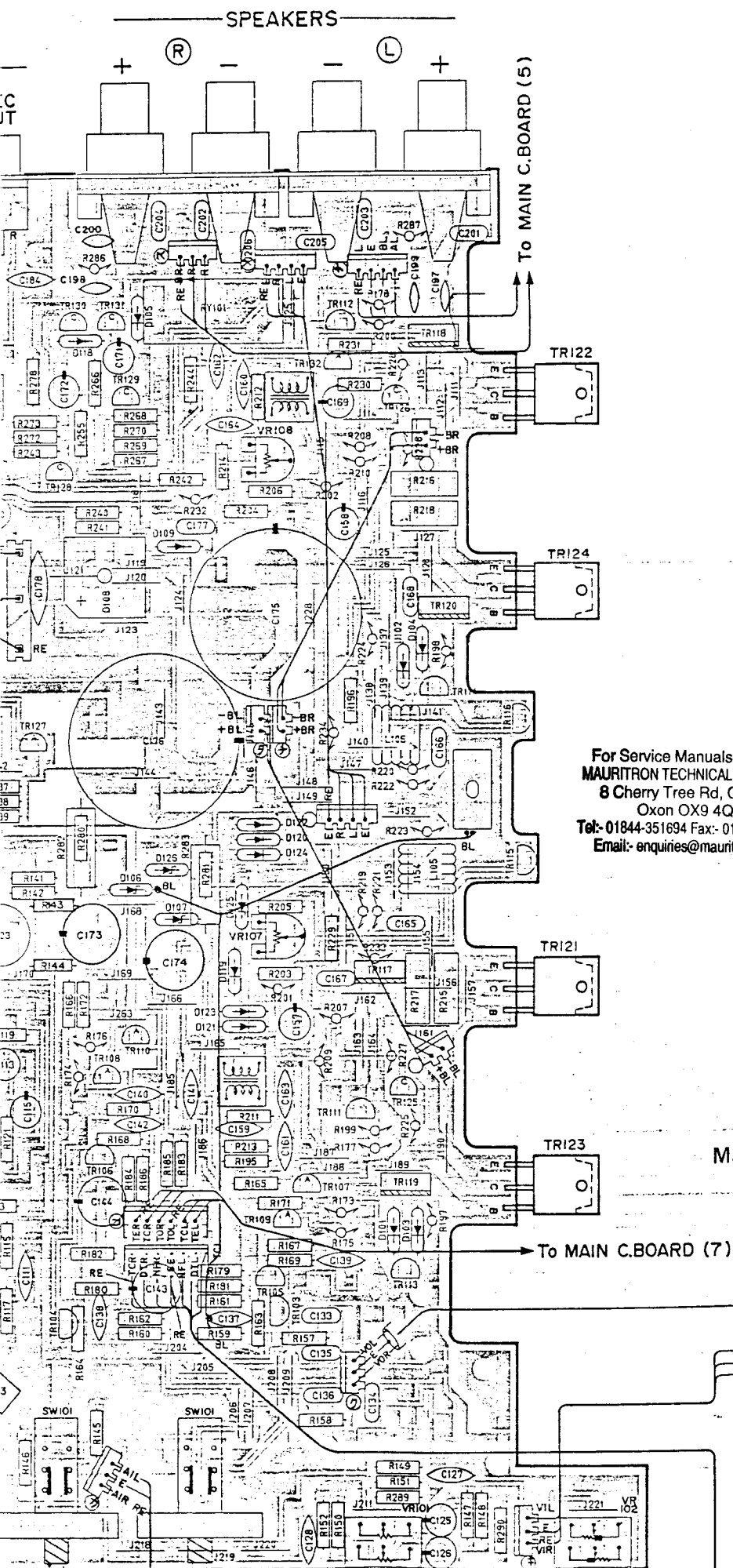
t Board (7)

U,C MODELS

Main Circuit Board (1)



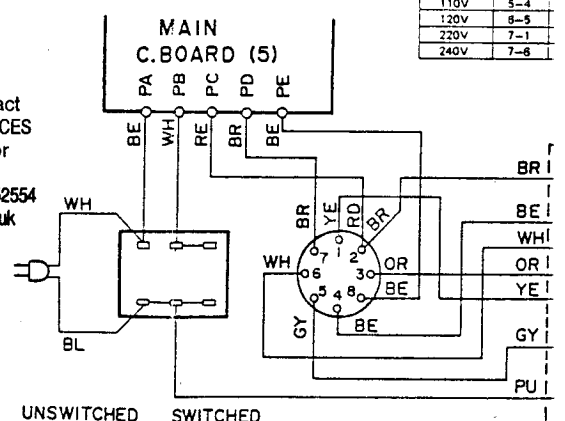
WIRING



General (R) model

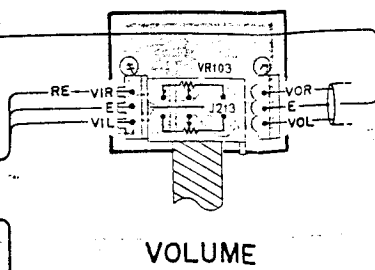
| Voltage | Terminals |
|---------|-----------|
| 110V | 5-4 |
| 120V | 6-5 |
| 220V | 7-1 |
| 240V | 7-6 |

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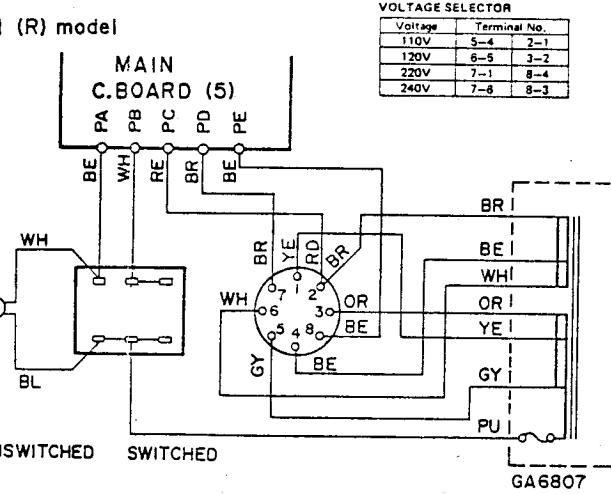
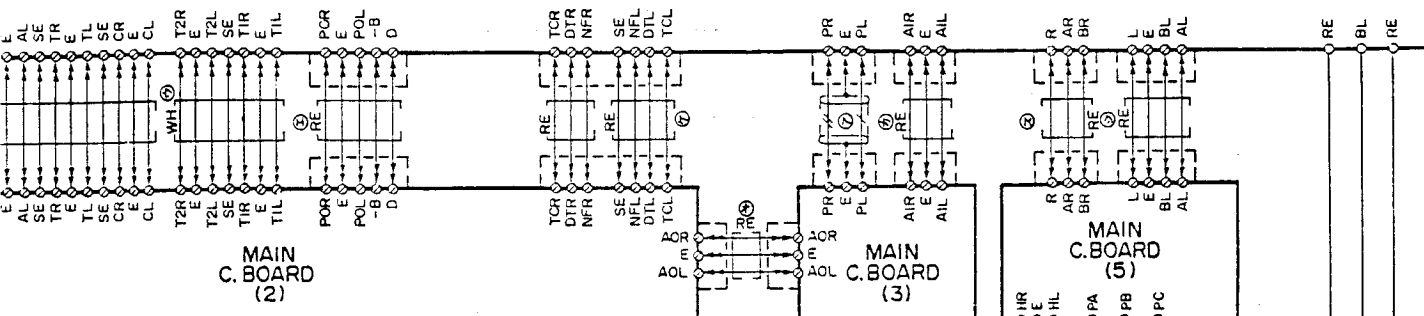
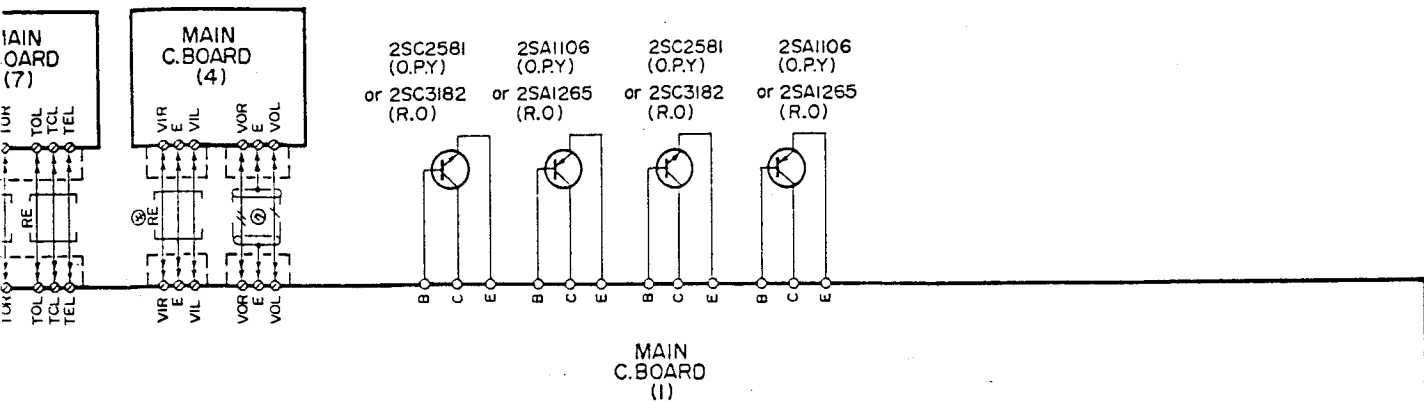
Main Circuit Board (4)

European (C)

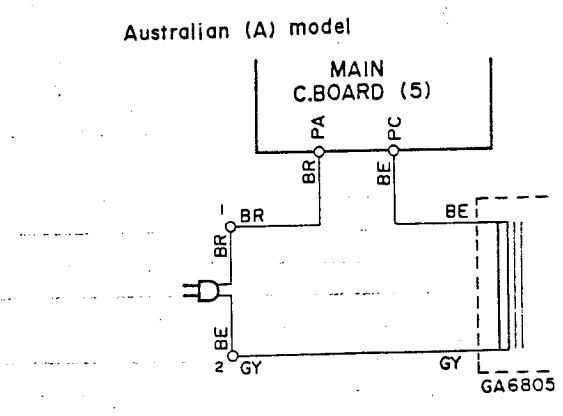
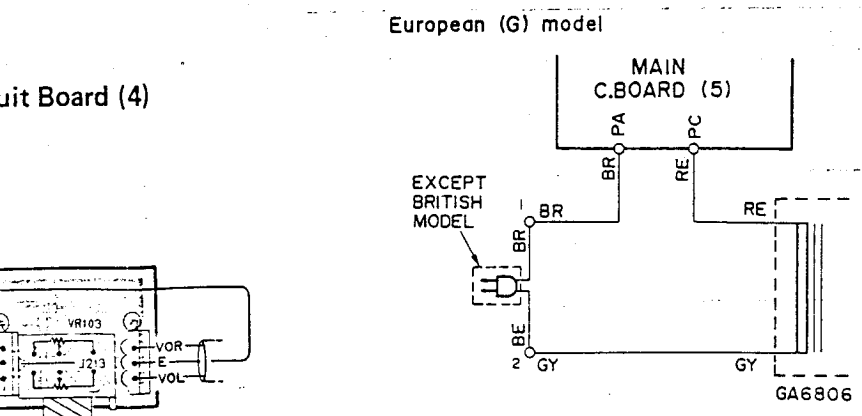


EXCEPT BRITISH MODEL

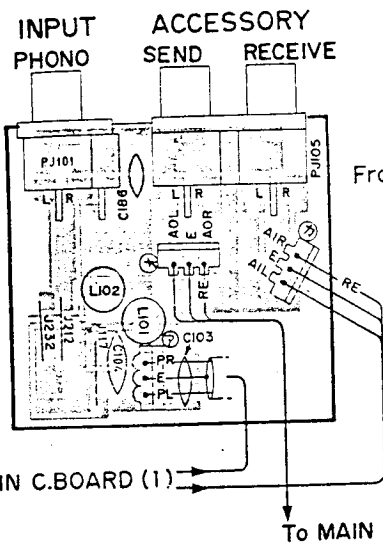
NG



U.S.A. (U) and Canadian (C) models U: GA6803 C: GA6804

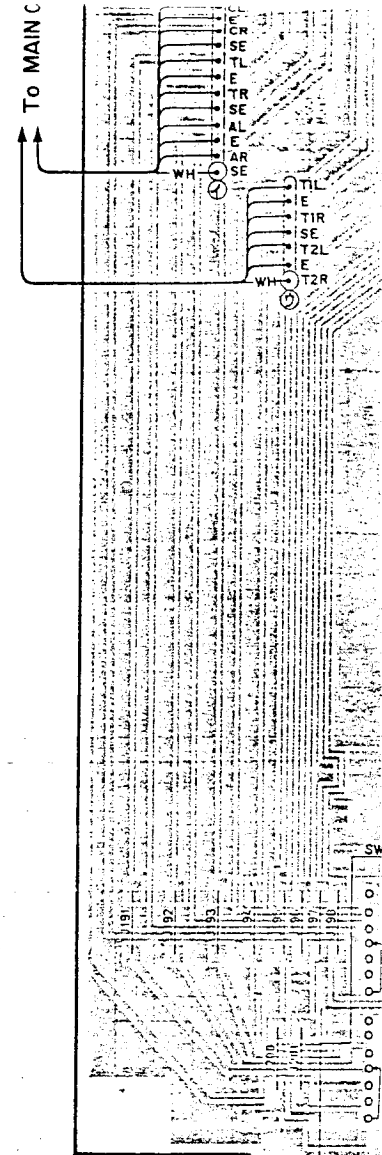


VOLUME

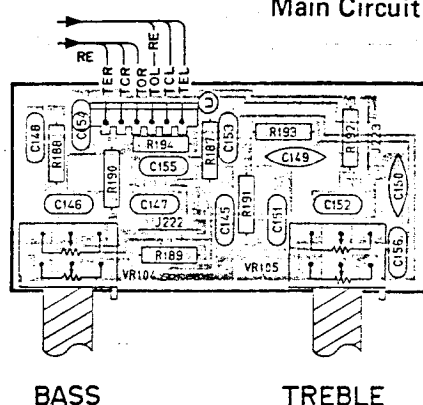


Main Circuit Board (3)
From MAIN C. BOARD (1)

From MAIN C. BOARD (1) →
→ To MAIN C. BOARD (2)



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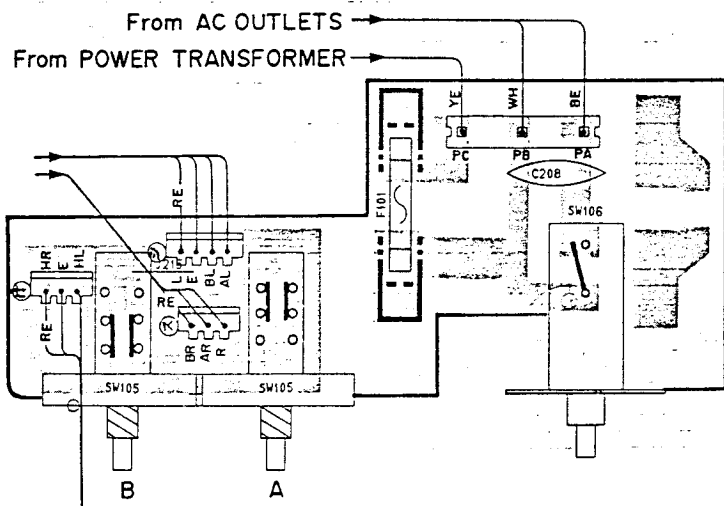


Main Circuit Board (7)

BASS TREBLE

Main Circuit Board (5)

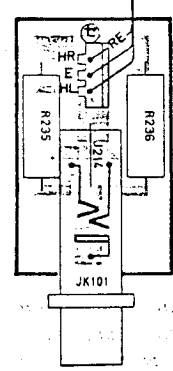
U, C MODELS



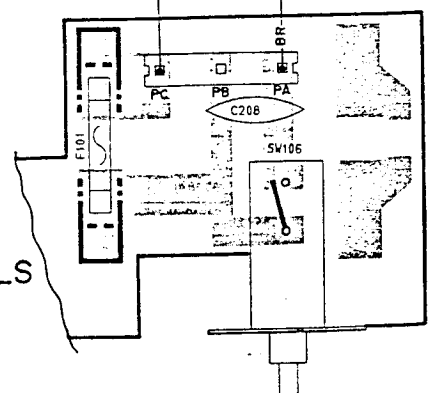
SPEAKERS

Main Circuit Board (6)

From POWER CORD
From POWER TRANSFORMER
A, B MODELS = RE
G MODEL = BE



PHONES



A, G, B MODELS

POWER

REC (SELEC)

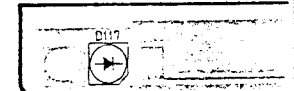
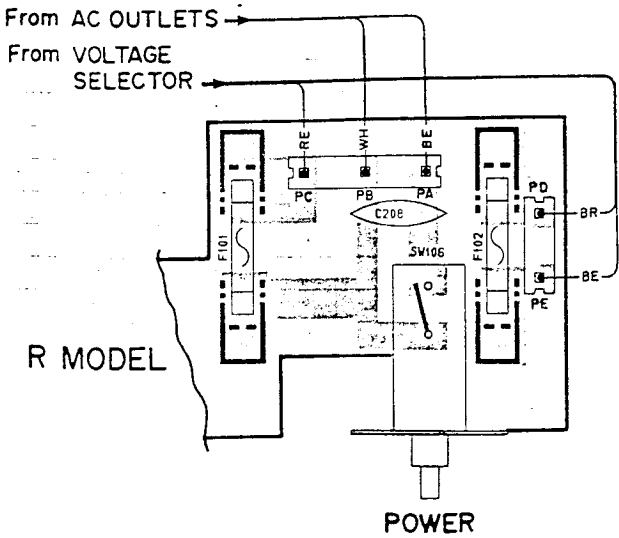
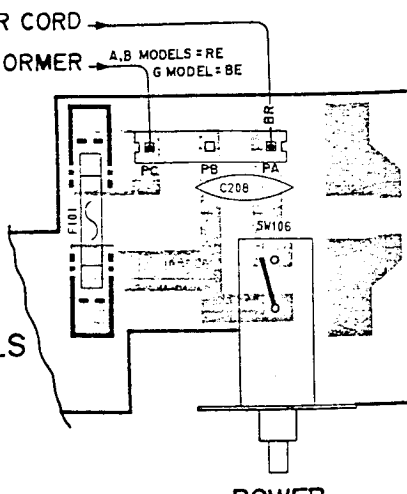
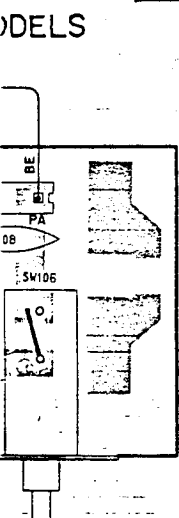
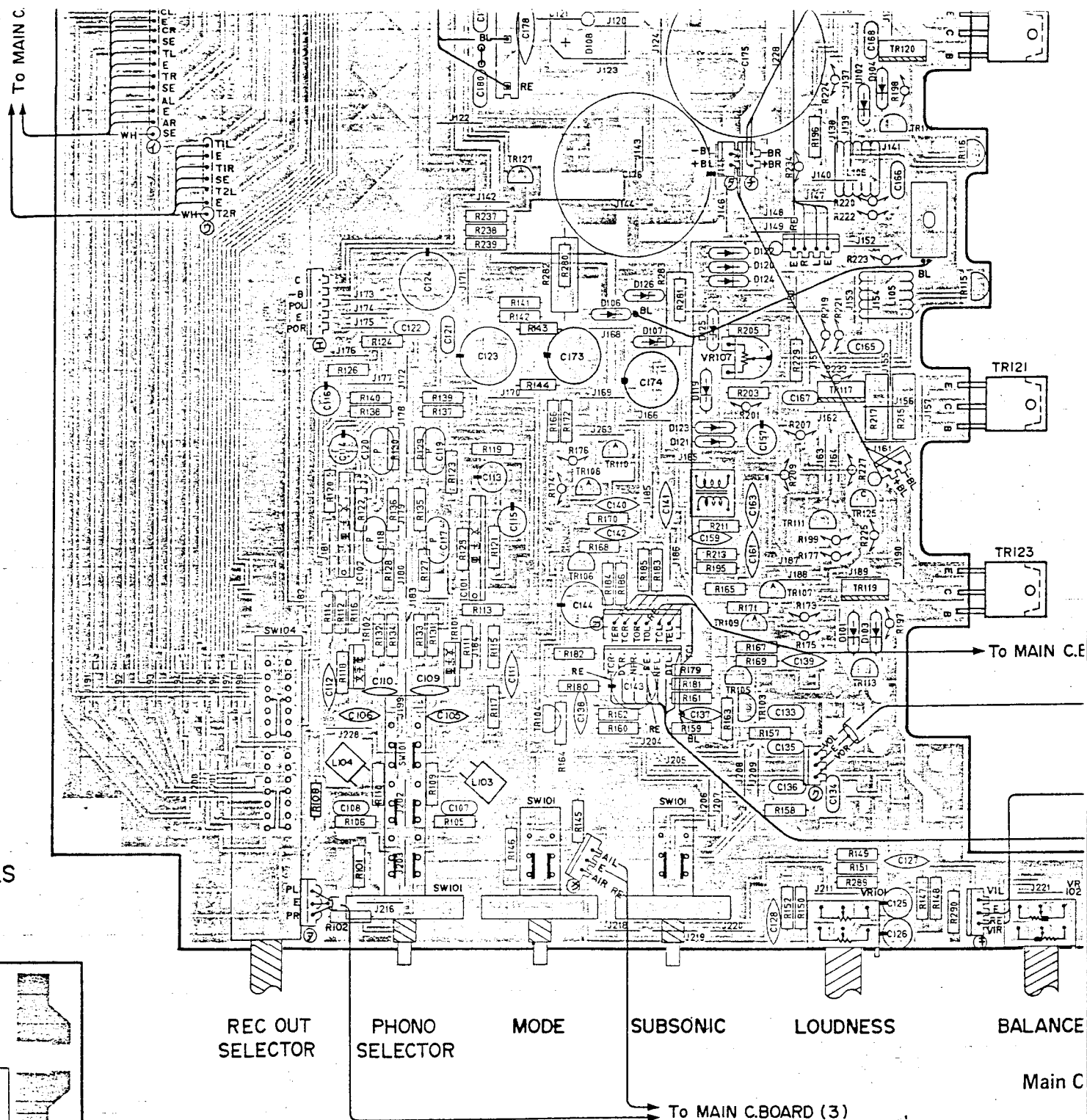
F1 F

4

6

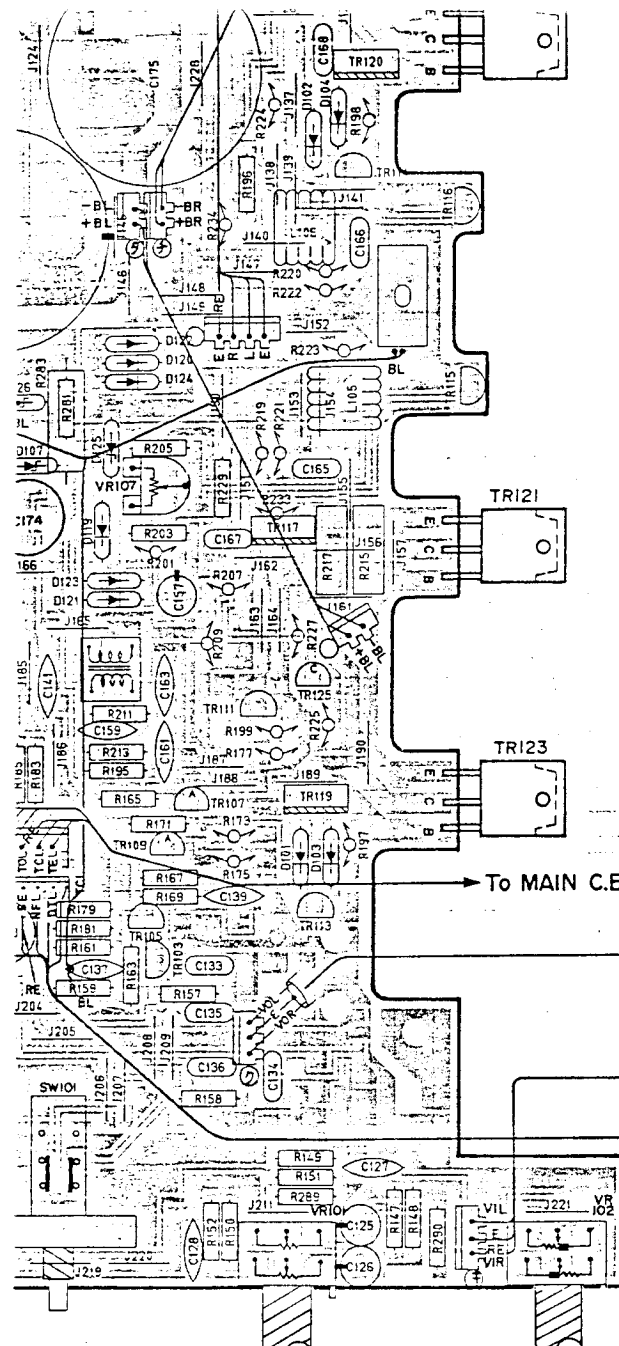
7

8



PIN CONNECTION DIAGRAM OF TRANSISTORS, DIODS

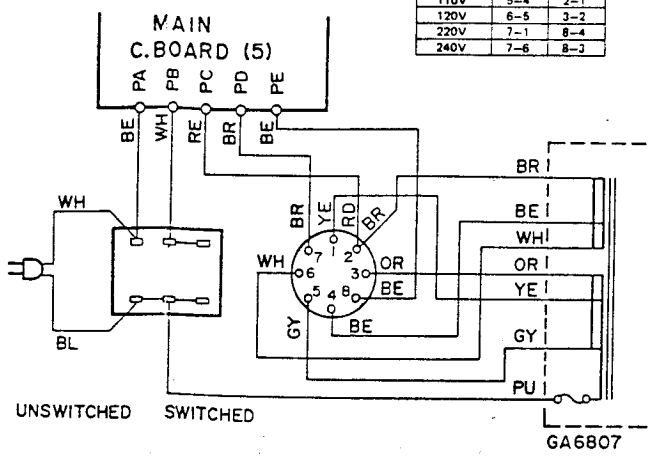
| | | |
|------------------|--------|----------------|
| 2SA970 (GR, BL) | 2SK117 | 2SA968 (O, Y) |
| 2SC2240 (GR, BL) | 2SK128 | 2SA1306A |
| 2SA1145 (O, Y) | 2SK108 | 2SA1306 |
| 2SC2705 (O, Y) | | 2SA1306B |
| | | 2SC2238 (O, Y) |
| | | 2SC3298A |
| | | 2SC3298 |
| | | 2SC3298B |



General (R) model

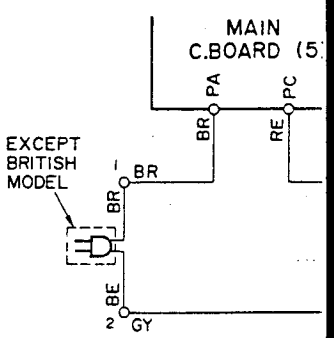
VOLTAGE SELECTOR

| Voltage | Terminal No. | Terminal No. |
|---------|--------------|--------------|
| 110V | 5-4 | 2-1 |
| 120V | 6-5 | 3-2 |
| 220V | 7-1 | 8-4 |
| 240V | 7-6 | 8-3 |

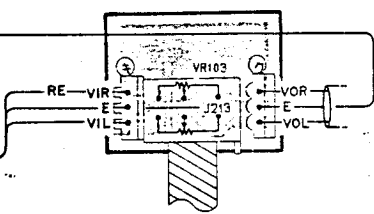


Main Circuit Board (4)

European (G) model



To MAIN C. BOARD (7)

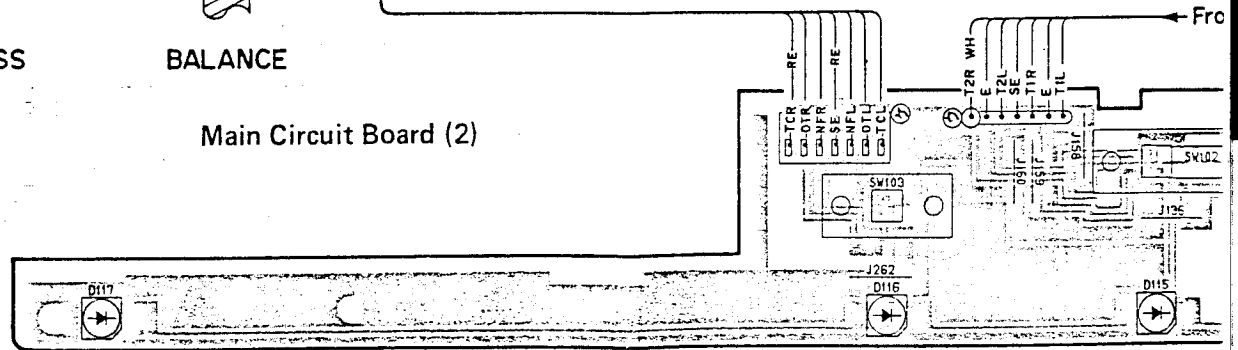


VOLUME

SUBSONIC LOUDNESS BALANCE

Main Circuit Board (2)

To MAIN C. BOARD (3)



POWER

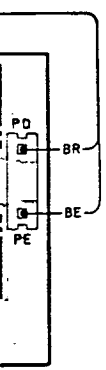
TONE BYPASS

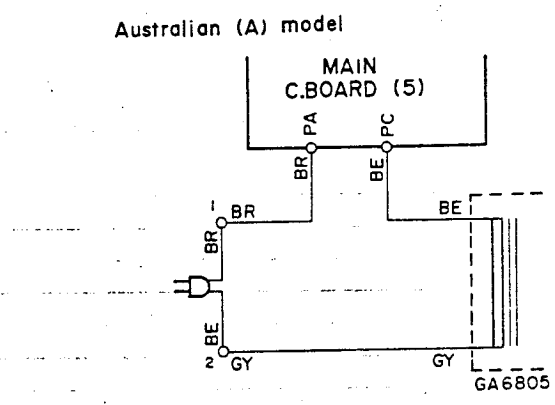
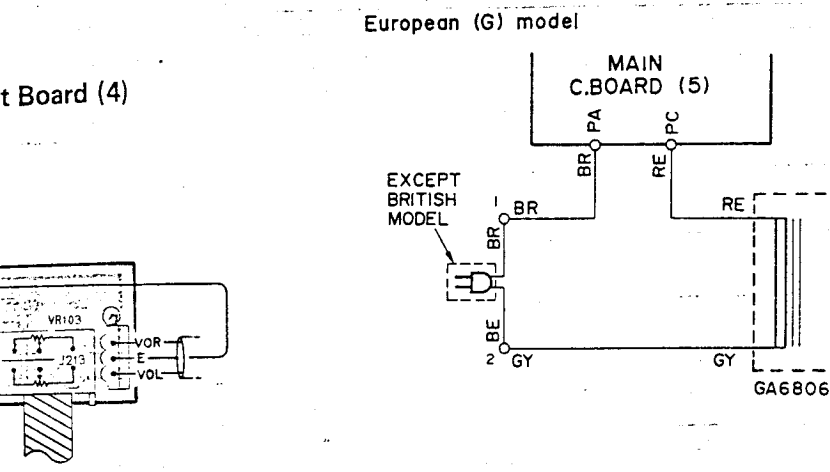
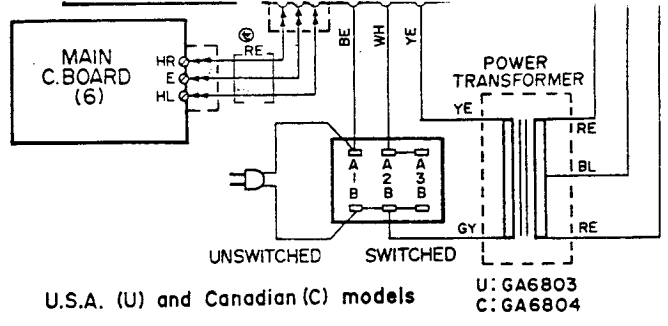
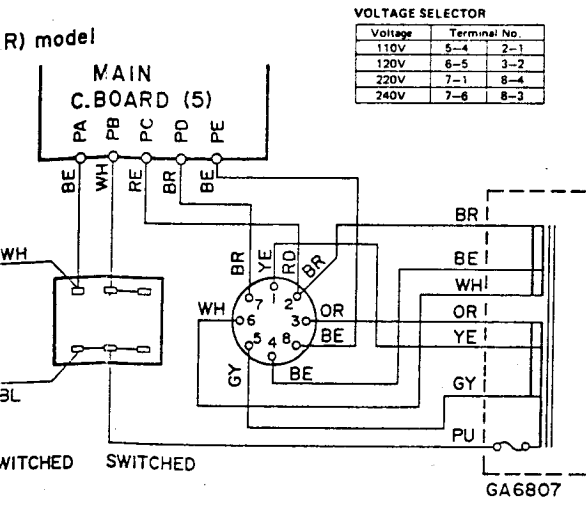
TAPE-2

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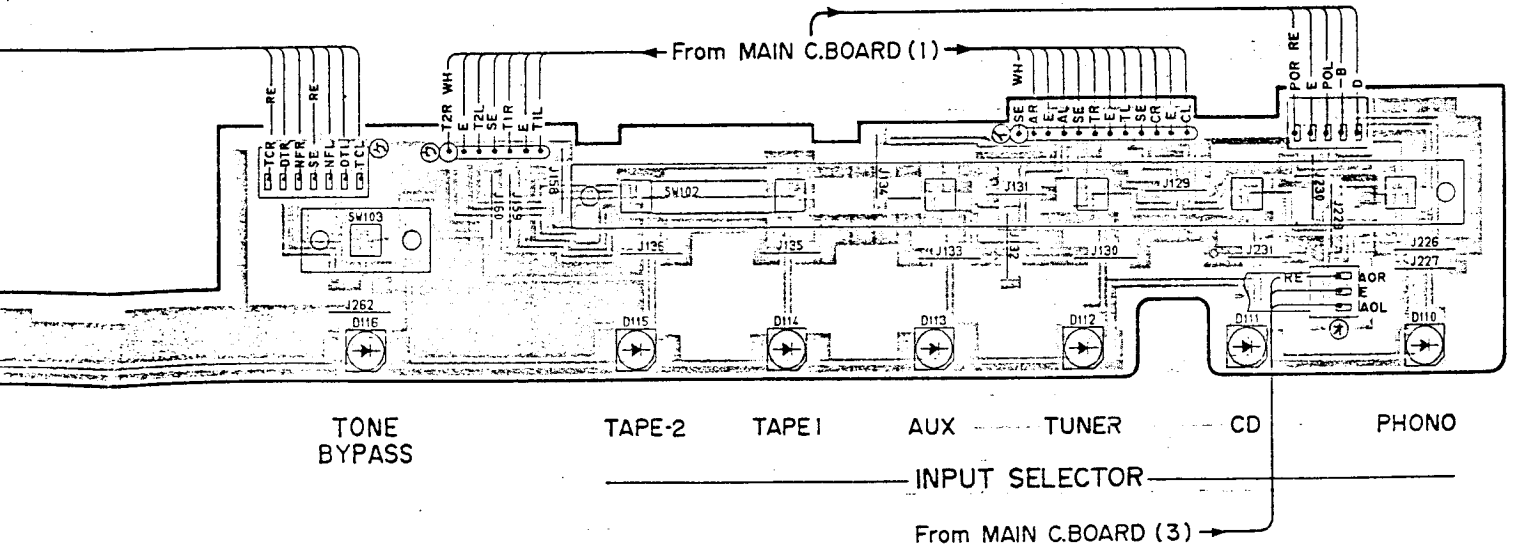
PIN CONNECTION DIAGRAM OF TRANSISTORS, DIODES AND ICs.

| | | | | | | | | |
|---|----------------------------|---|--|-------------------------------|---|------------------|----------|--------|
| 2SA970 (GR, BL) 25C2240 (GR, BL) 25A1145 (O, Y) 25C2705 (O, Y) | 2SK117 2SK128 2SK108 | 2SA968 (O, Y) 2SA1306A 2SA1306 2SA1306B 25C2238 (O, Y) 25C3298A 25C3298 25C3298B | 25C3182 (R, O) 25C2581 (O, P, Y) 25A1265 (R, O) 25A1106 (O, P, Y) | SLR-55URC Cathode Anode | 1S1555 1S2473 HZ16-3L 1S582 HZ6C-1L Anode Cathode | D48B20 4D4B41 | NJM4558S | M5218L |
|---|----------------------------|---|--|-------------------------------|---|------------------|----------|--------|





VOLUME



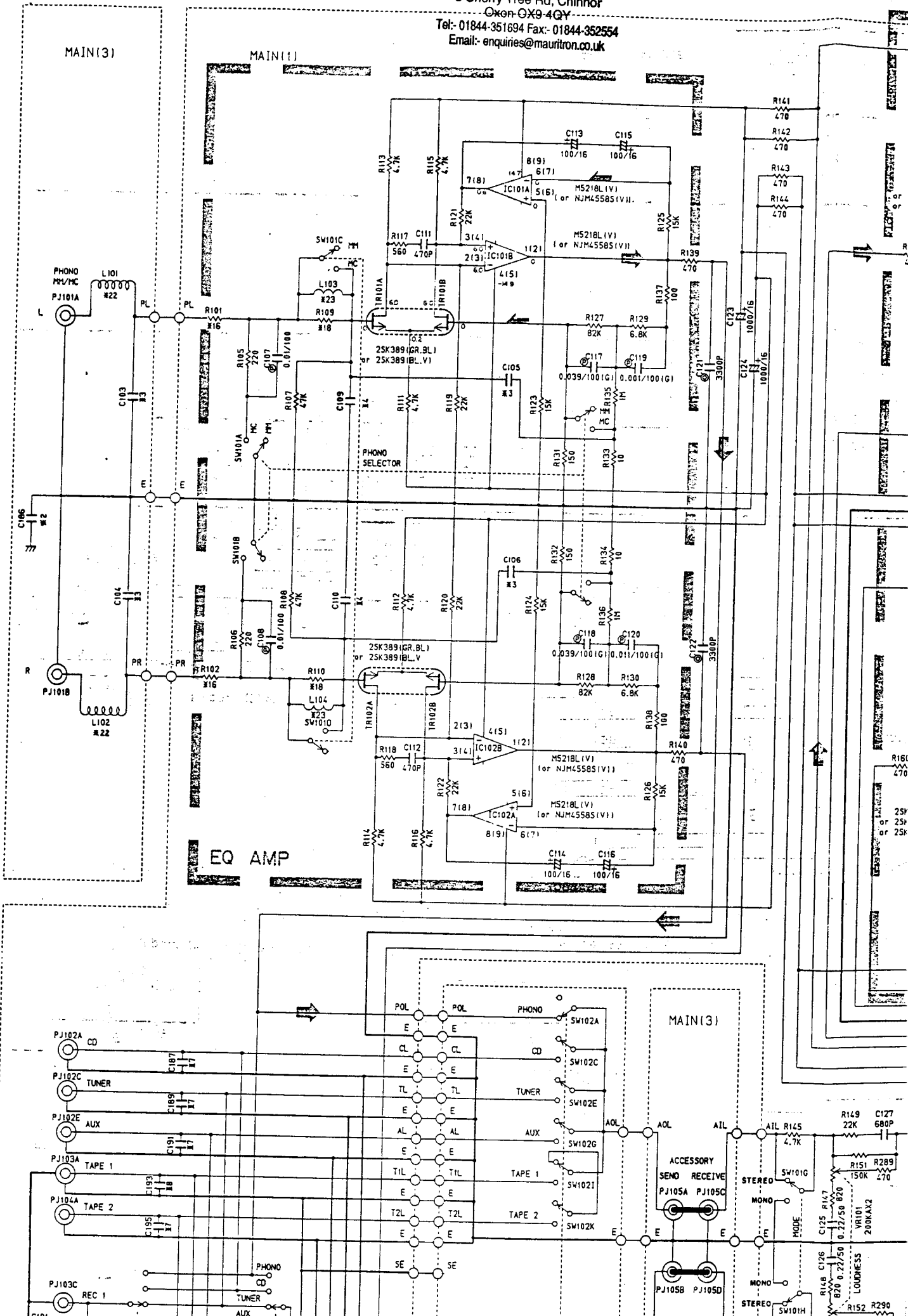
- WIRE COLOR ABBREVIATIONS
- BL ▶ Black
 - BR ▶ Brown
 - RE ▶ Red
 - OR ▶ Orange
 - YE ▶ Yellow
 - GR ▶ Green
 - BE ▶ Blue
 - VI ▶ Violet
 - GY ▶ Gray
 - WH ▶ White
 - GG ▶ Light Green
 - SB ▶ Light Blue
 - PK ▶ Pink

| | | | | | | |
|--|-----------|---|------------------|----------|--------|-----------------------------------|
| R, O) O, P, Y) R, O) O, P, Y) | SLR-55URC | 1S1555 1S2473 HZ16-3L 1SS82 HZ6C-1L | D48B20 4D4B41 | NJM4558S | M5218L | 2SK389 (BL, V) 2SK389 (GR, BL) |
| | | | | | | |

* Circuit board are subject to change without notice.

SCHEMATIC DIAGRAM

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MAIN(3)

MAIN(1)

EQ AMP

MAIN(3)

ACCESSORY

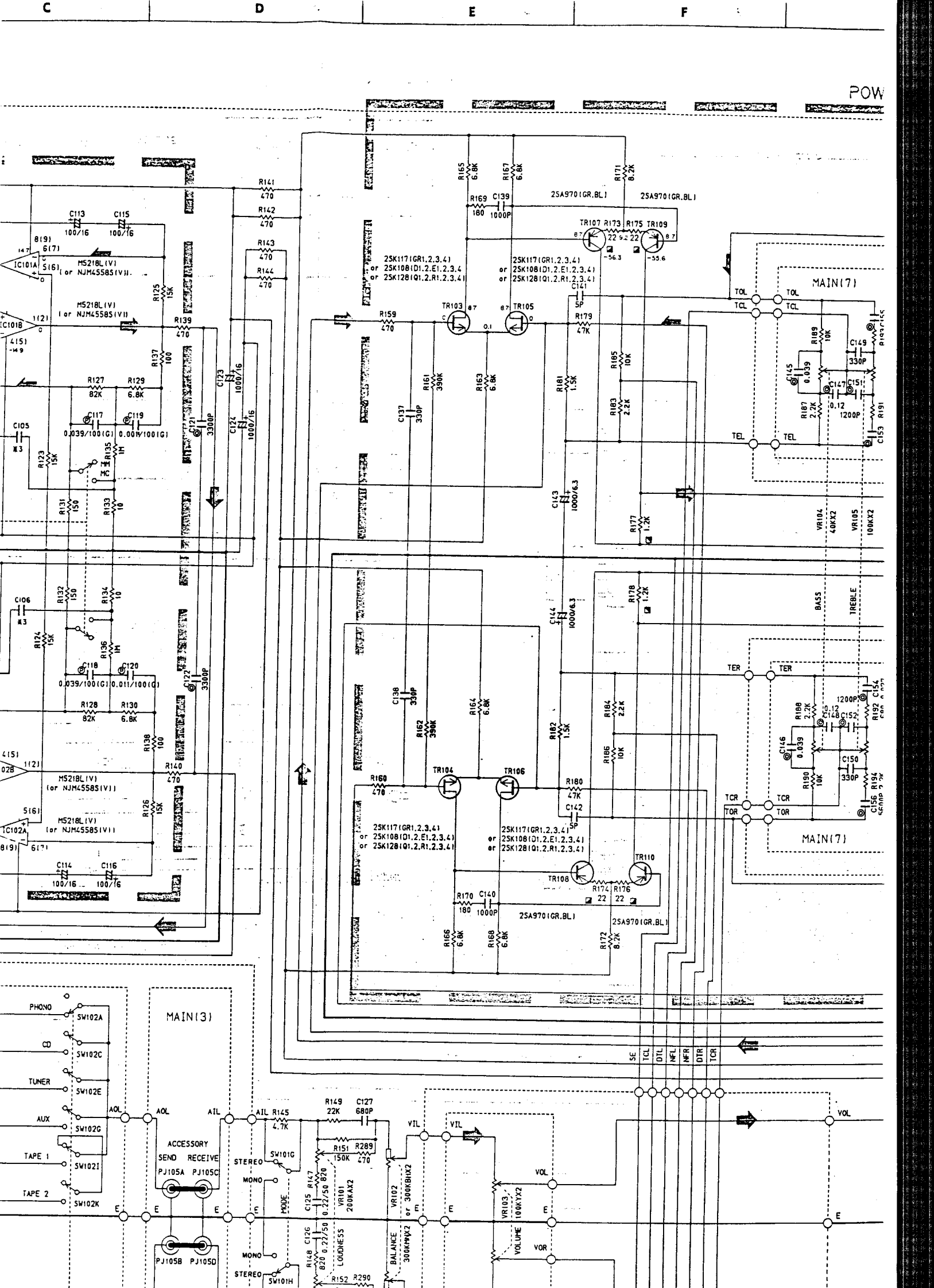
SENO RECEIVE

PJ105A PJ105C

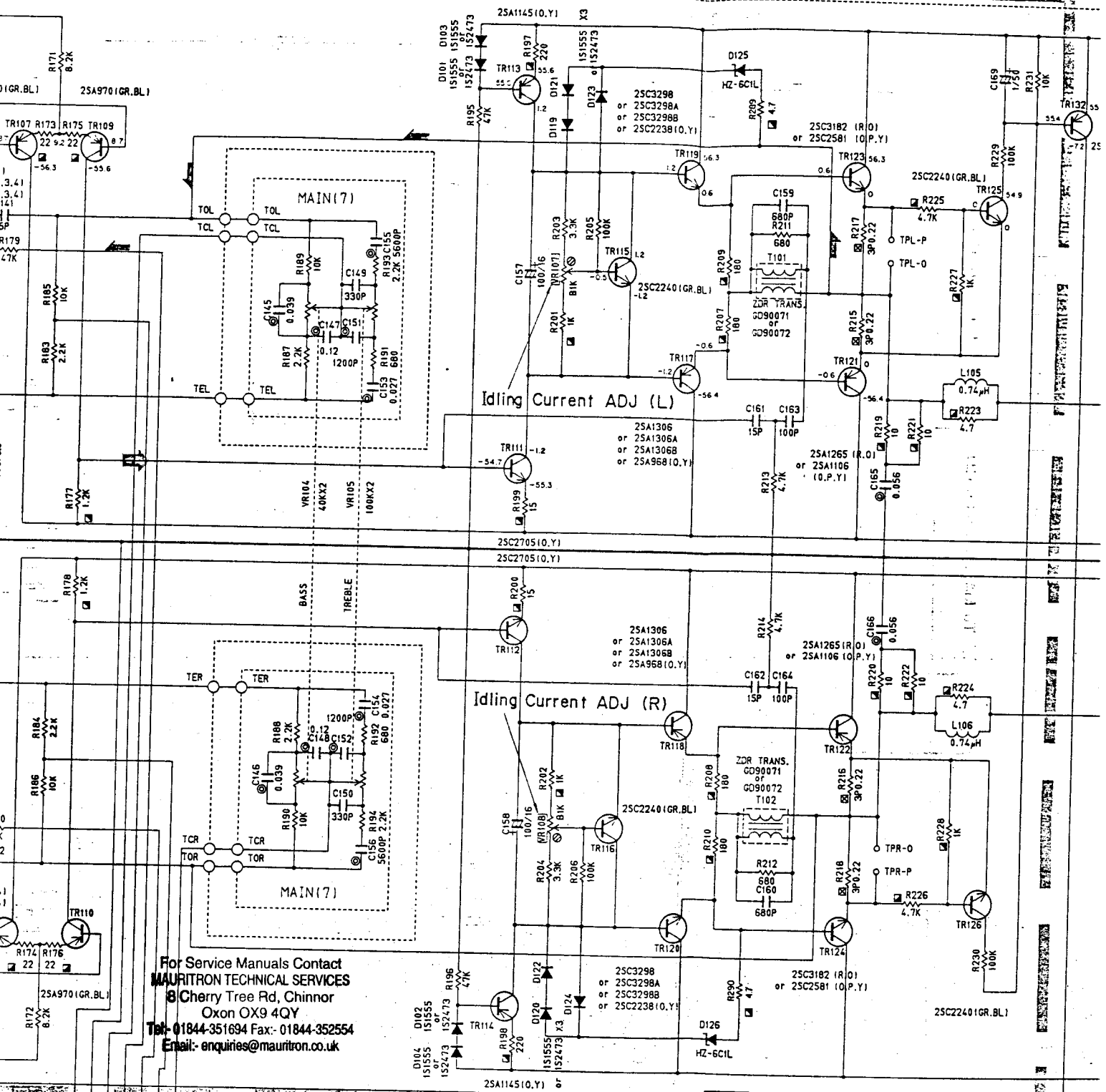
PJ105B PJ105D

STEREO MONO MODE

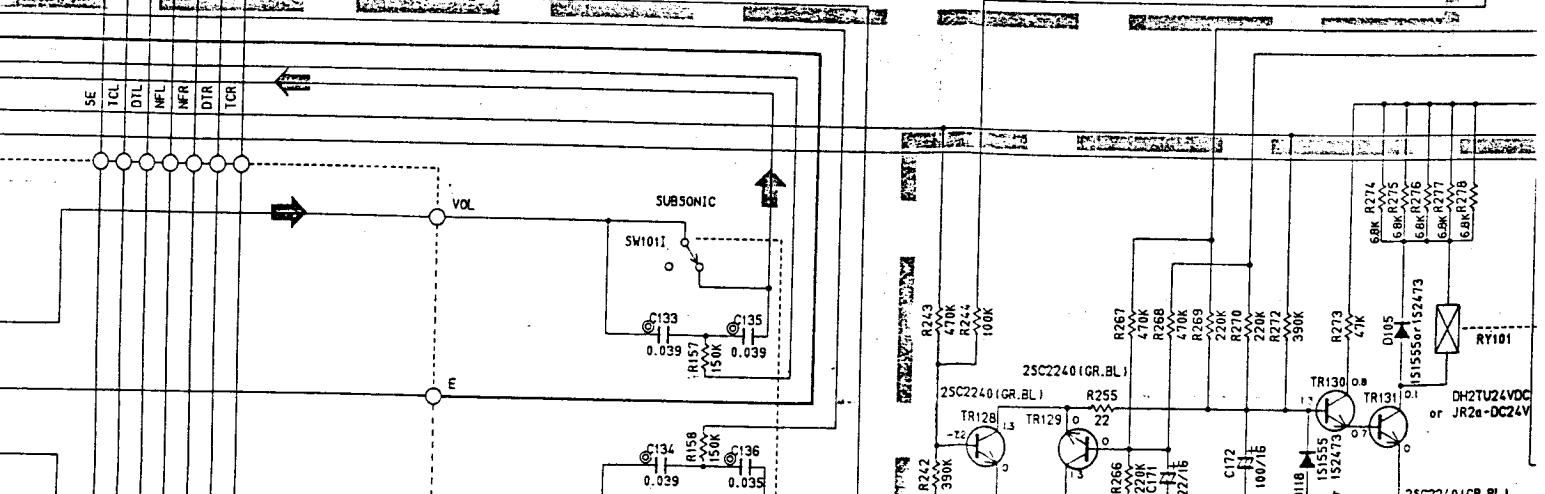
STEREO MONO

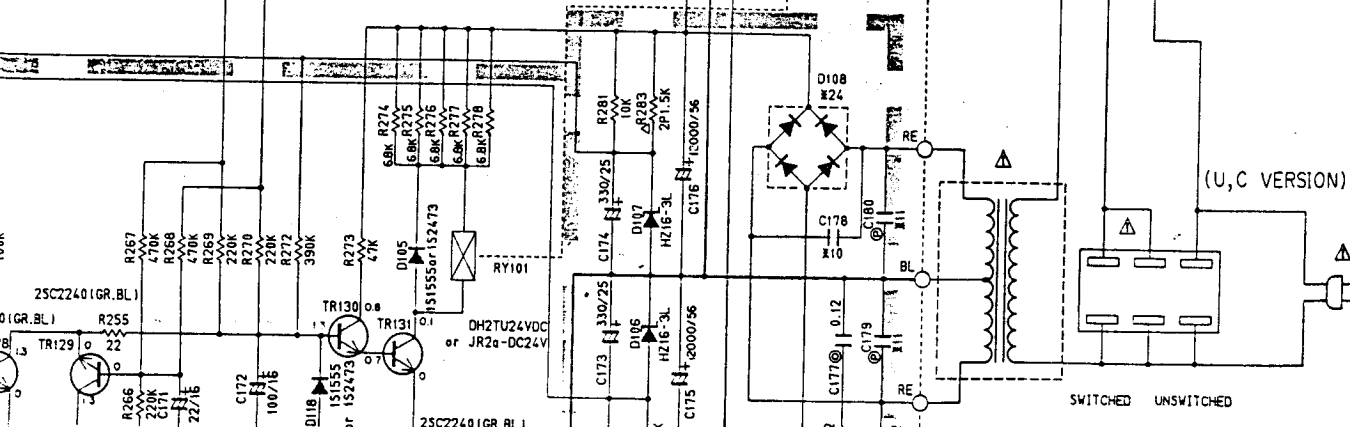
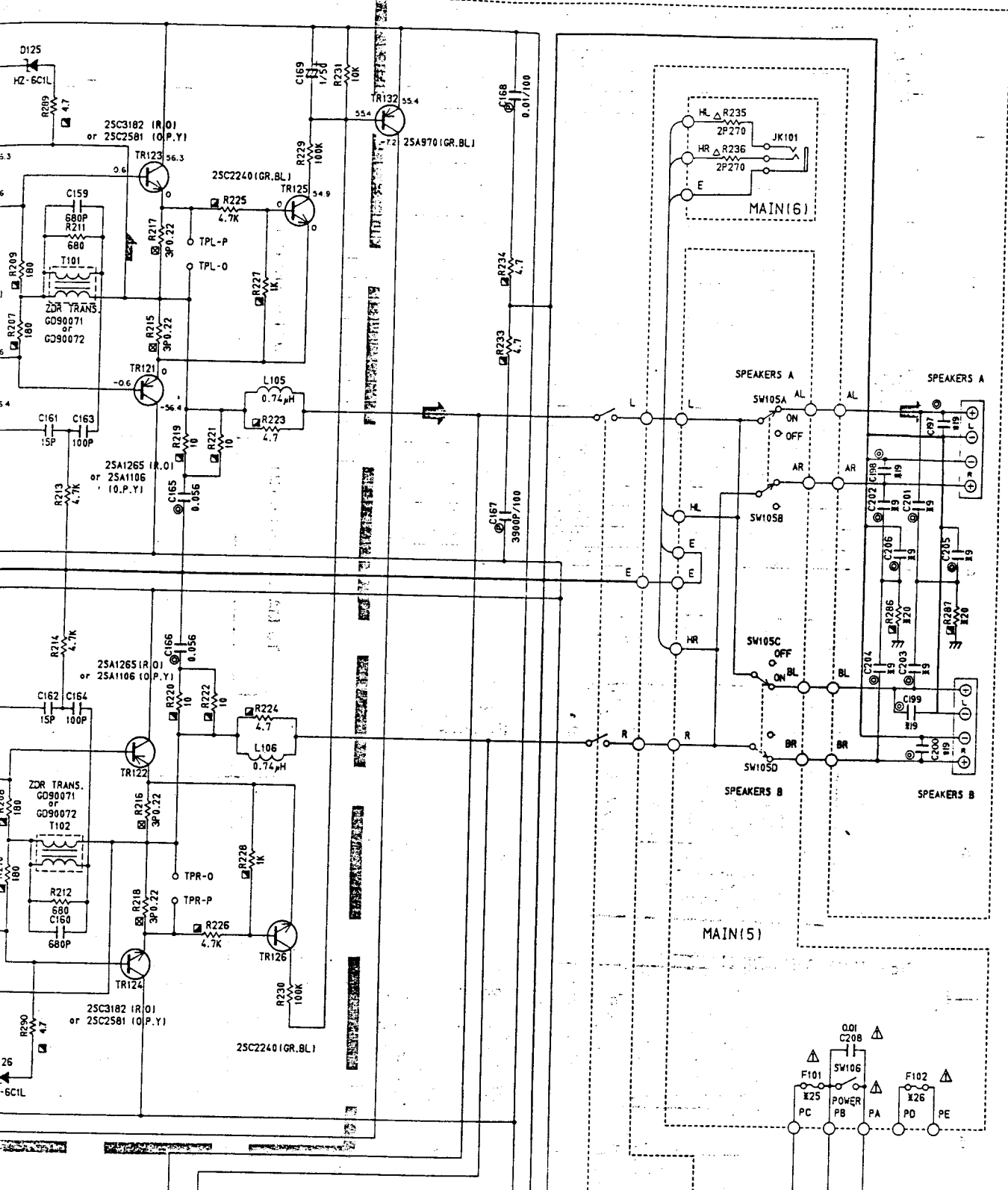


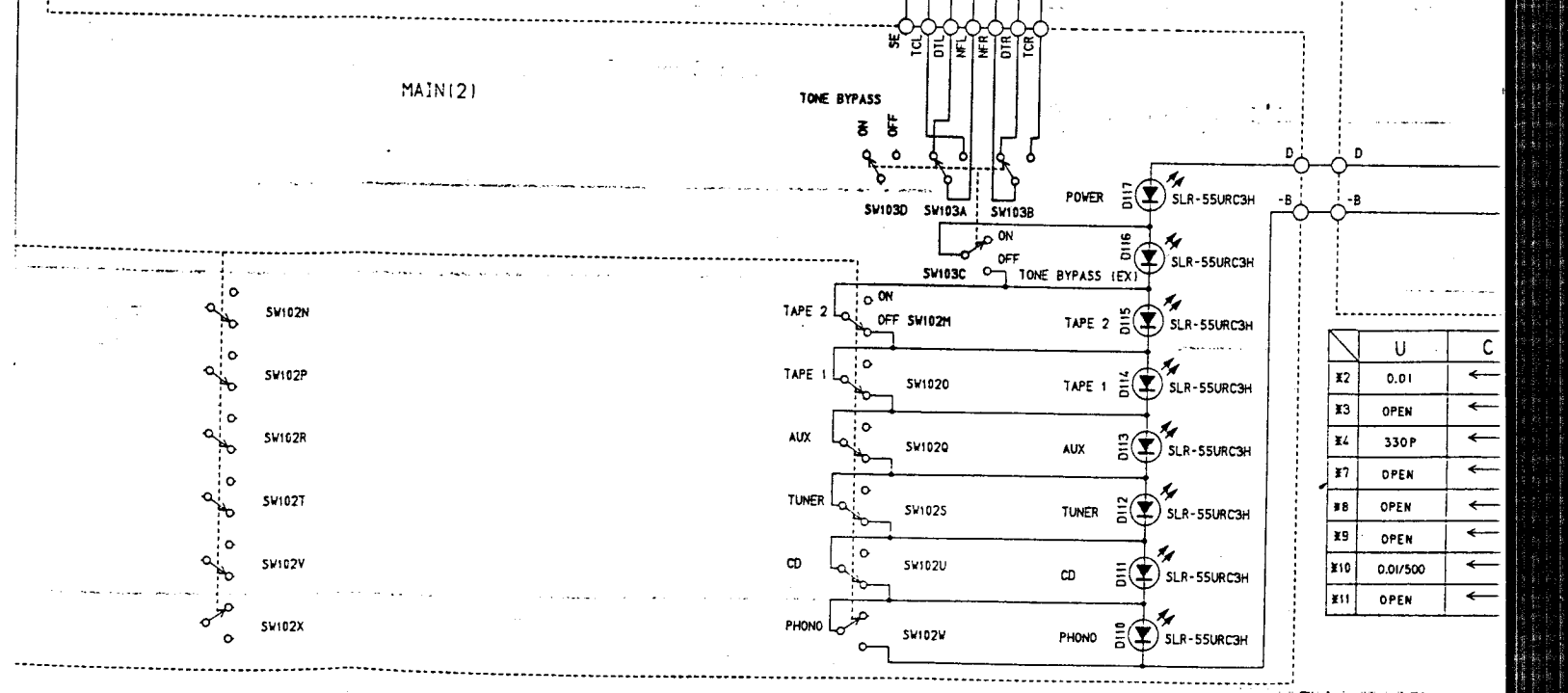
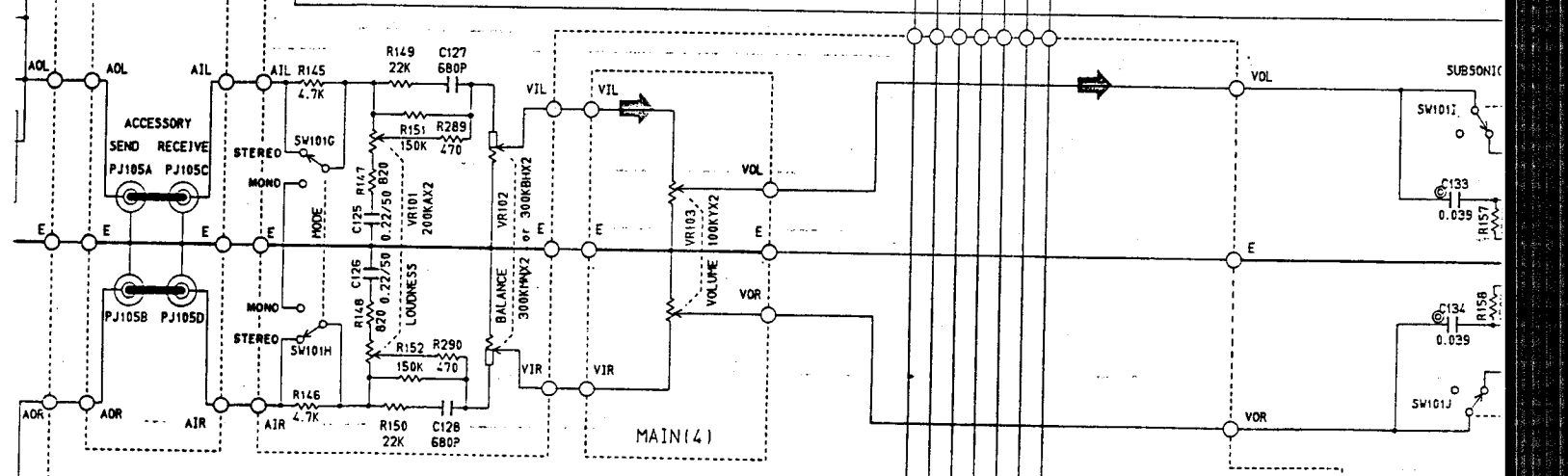
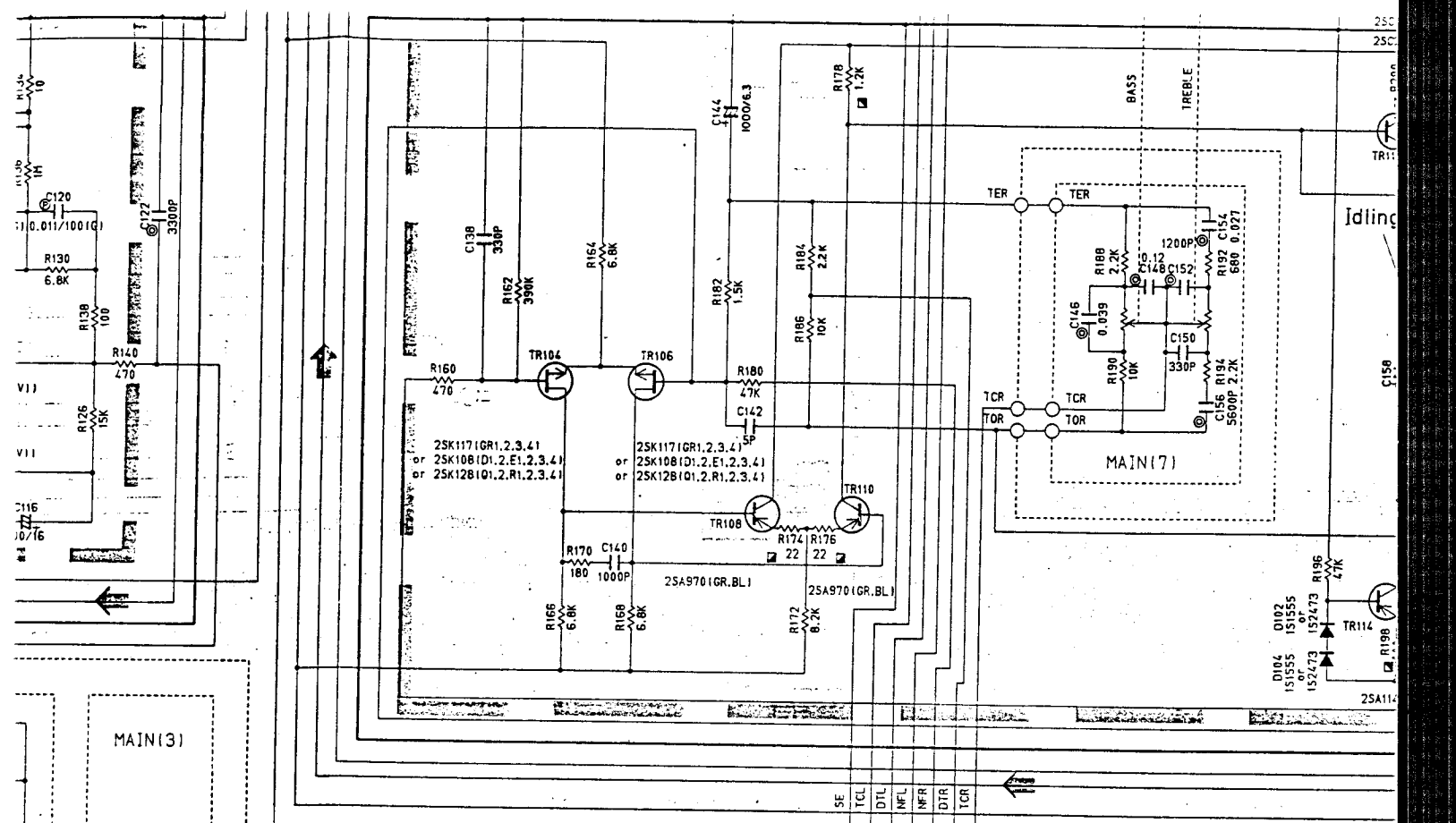
POWER AMP



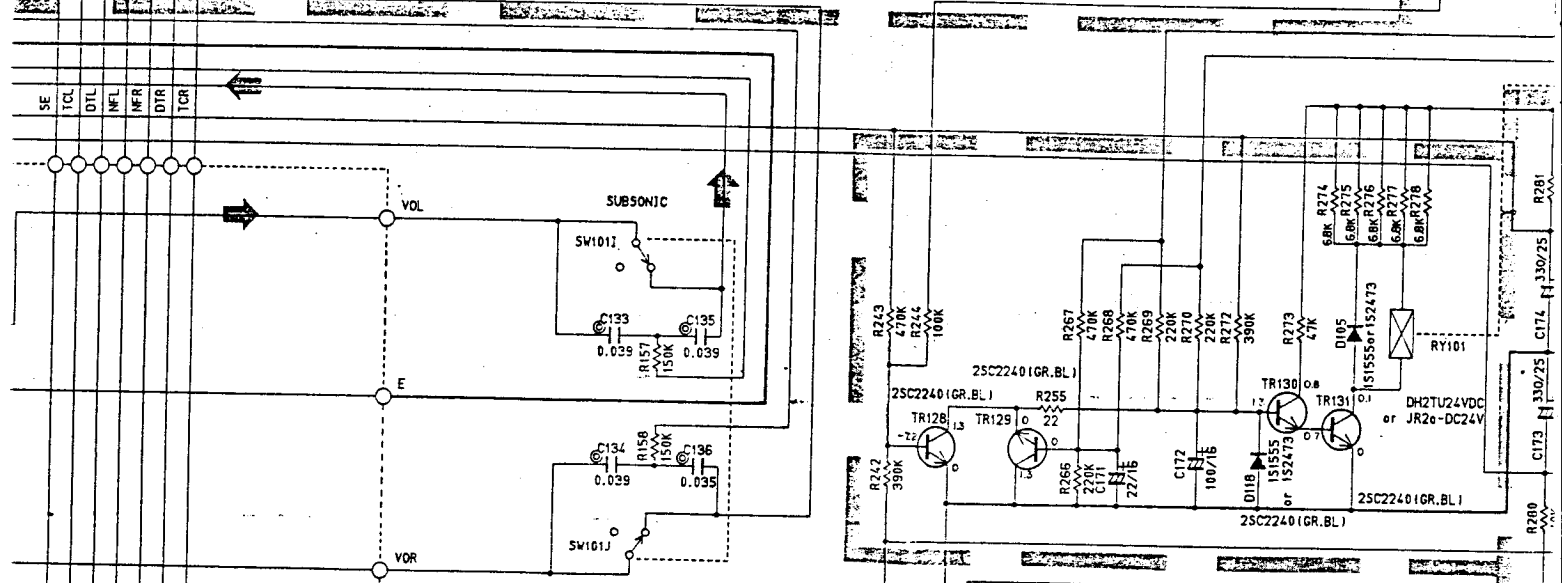
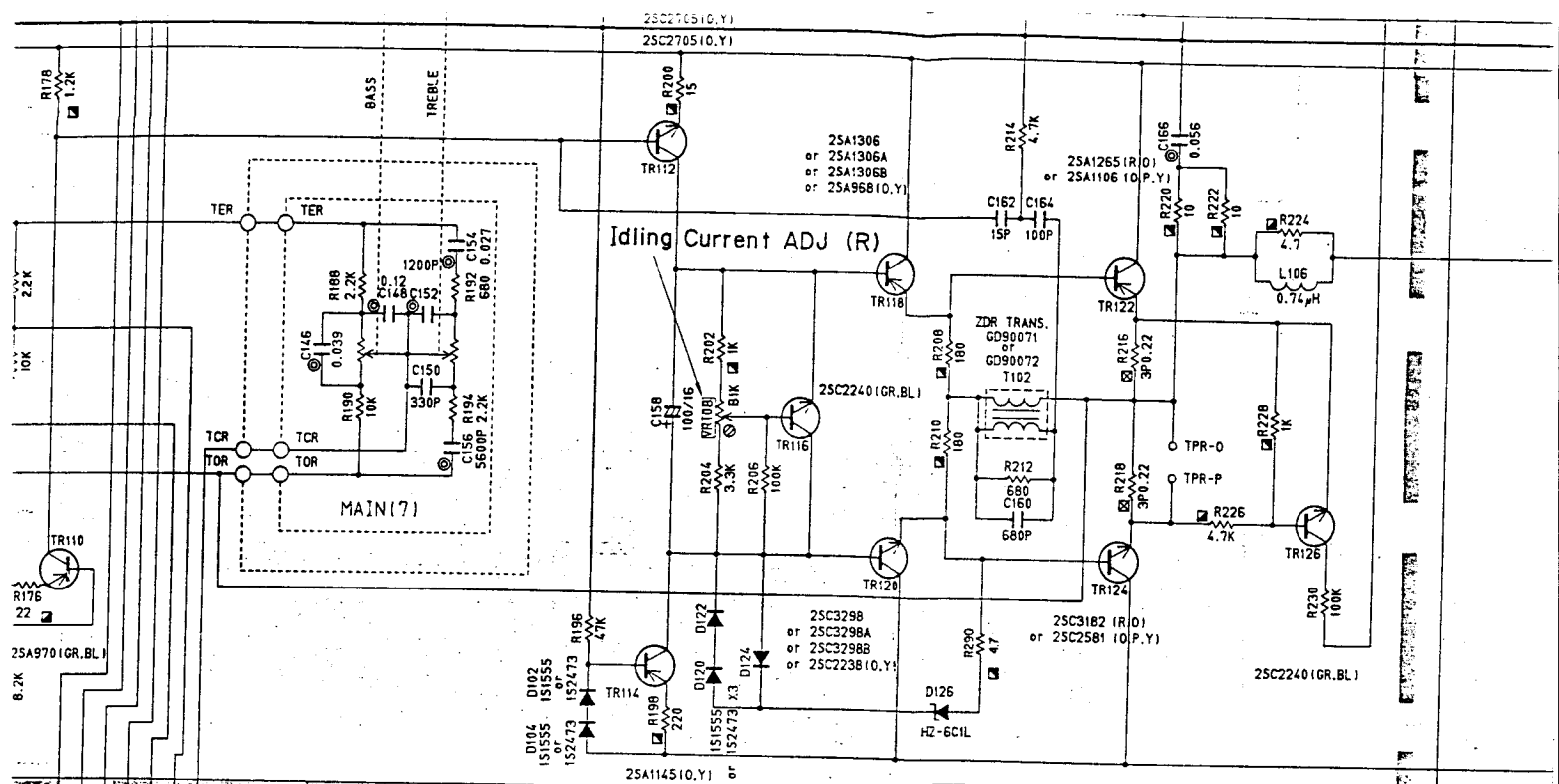
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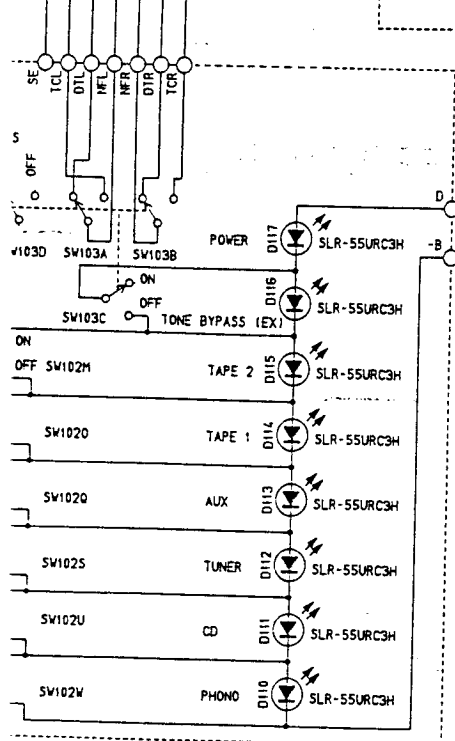




| | U | C |
|-----|----------|---|
| X2 | 0.01 | ← |
| X3 | OPEN | ← |
| X4 | 330P | ← |
| X7 | OPEN | ← |
| X8 | OPEN | ← |
| X9 | OPEN | ← |
| X10 | 0.01/500 | ← |
| X11 | OPEN | ← |

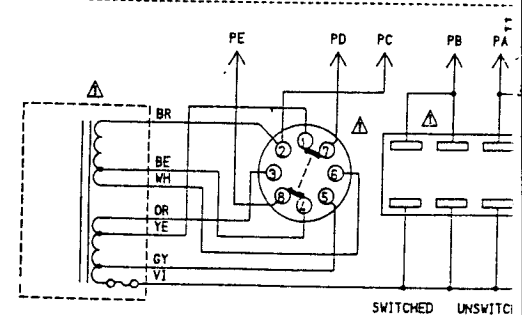


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| | U | C | R | A, B | G |
|-----|----------|---|---|------|-----------|
| X2 | 0.01 | ← | ← | ← | OPEN |
| X3 | OPEN | ← | ← | ← | 150P |
| X4 | 330P | ← | ← | ← | 150P |
| X7 | OPEN | ← | ← | ← | 470P |
| X8 | OPEN | ← | ← | ← | 680P |
| X9 | OPEN | ← | ← | ← | 0.027 |
| X10 | 0.01/500 | ← | ← | ← | OPEN |
| X11 | OPEN | ← | ← | ← | 0.047/100 |

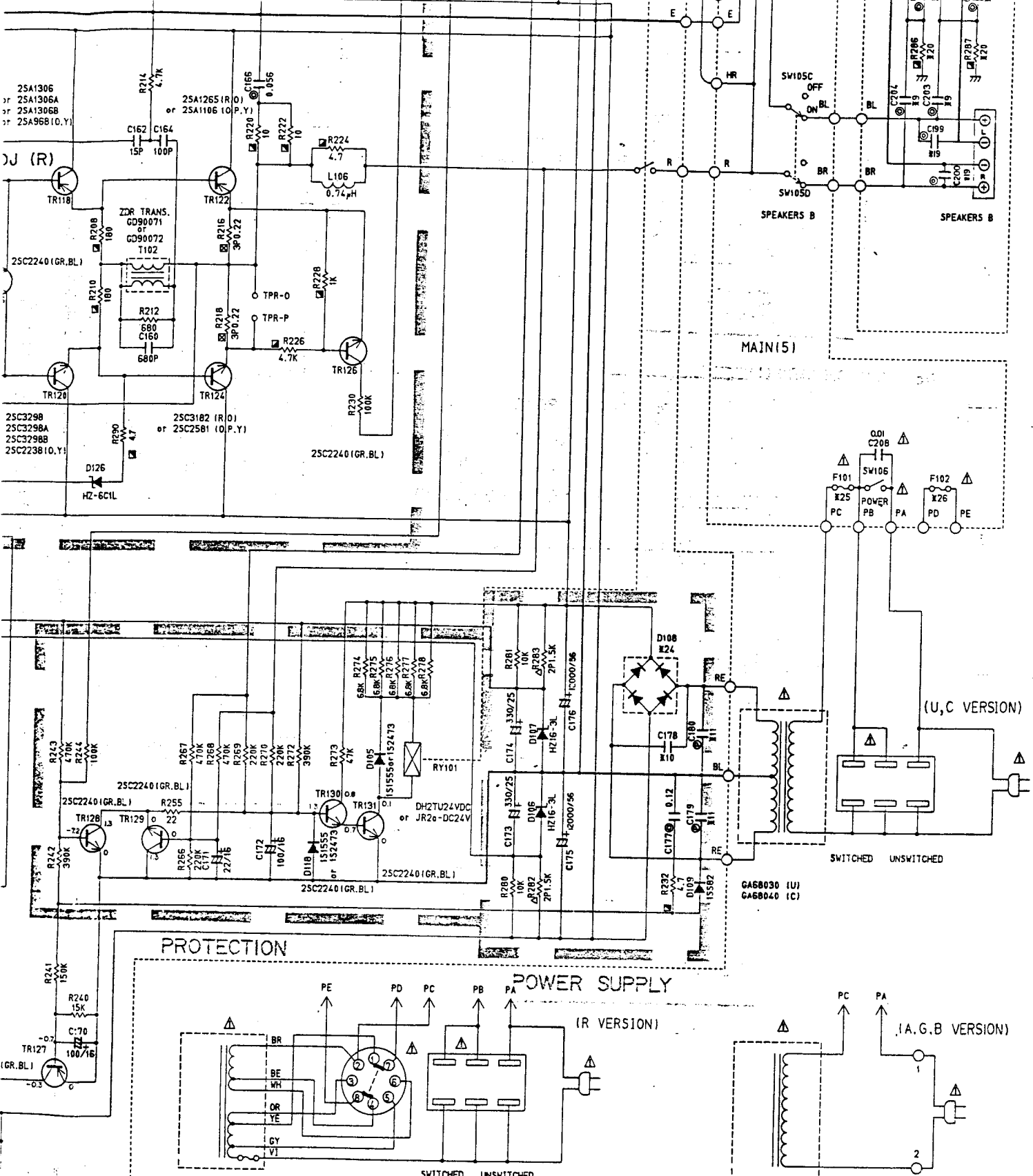
PROTECTION



GA6B070

| | U | C | R | A, B | G |
|-----|---------|--------|------------|-------------|-----|
| X16 | 10 | ← | ← | ← | 33 |
| X18 | 33 | ← | ← | ← | 4.7 |
| X19 | OPEN | ← | ← | ← | 560 |
| X20 | OPEN | ← | ← | ← | 4.7 |
| X22 | SHORT | ← | ← | ← | 15 |
| X23 | OPEN | ← | ← | ← | 220 |
| X24 | 4D4B41 | D4BB20 | 4D4B41 | ← | ← |
| X25 | 7A 125V | ← | 77.0A 250V | T3.15A 250V | ← |
| X26 | OPEN | ← | 73.5A 250V | OPEN | ← |

• Comp. replac
 • Schen



| A, B | G |
|------|-----------|
| ← | OPEN |
| ← | 150P |
| ← | 150P |
| ← | 470P |
| ← | 680P |
| ← | 0.027 |
| ← | OPEN |
| ← | 0.047/100 |

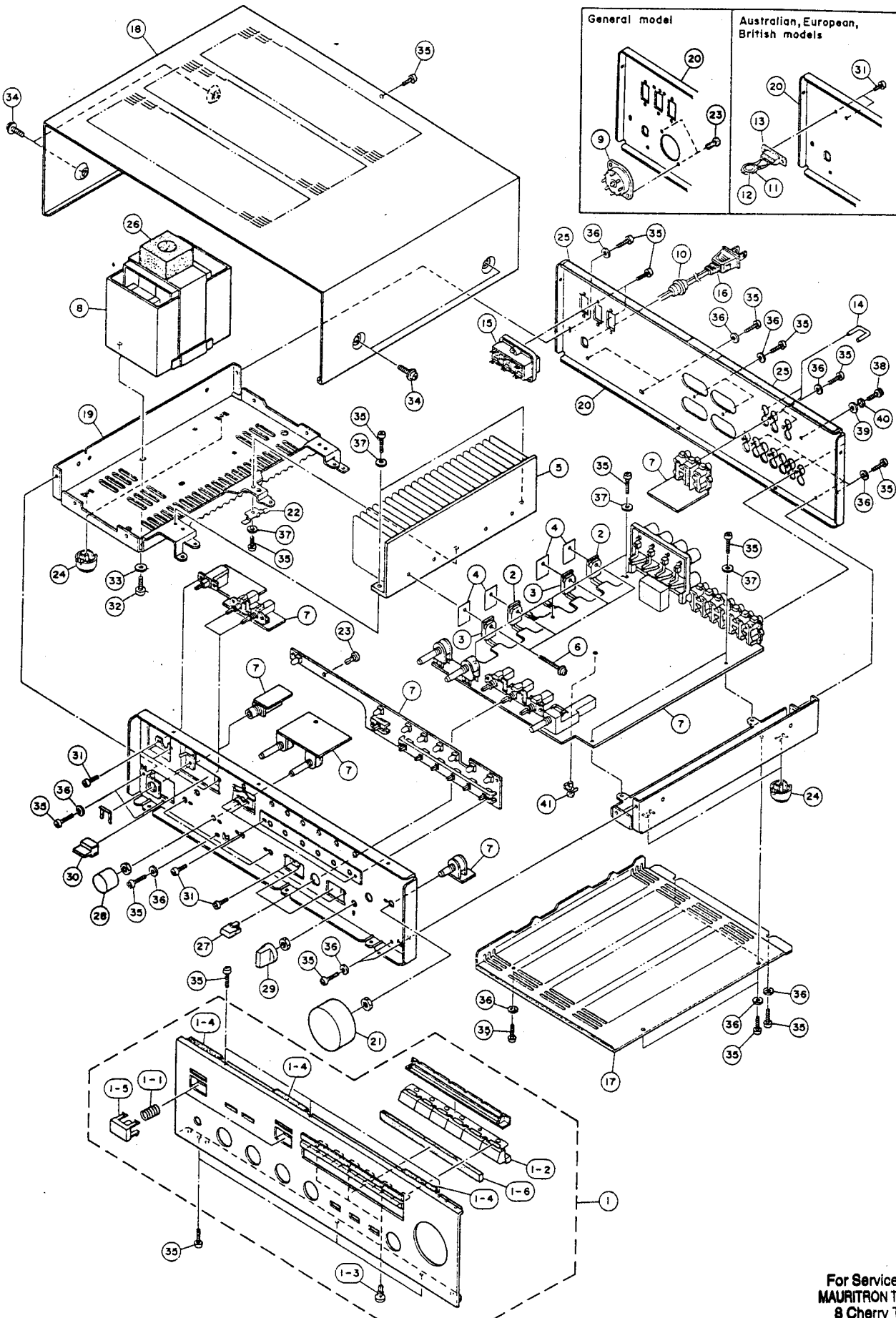
| | U | C | R | A, B | G |
|-----|---------|--------|------------|-------------|-------|
| ⊗16 | 10 | ← | ← | ← | 33 |
| ⊗18 | 33 | ← | ← | ← | 4.7 |
| ⊗19 | OPEN | ← | ← | ← | 5600P |
| ⊗20 | OPEN | ← | ← | ← | 4.7k |
| ⊗22 | SHORT | ← | ← | ← | 15μH |
| ⊗23 | OPEN | ← | ← | ← | 220μH |
| ⊗24 | 4D4B41 | D4BB20 | 4D4B41 | ← | ← |
| ⊗25 | 7A 125V | ← | T7.0A 250V | T3.15A 250V | ← |
| ⊗26 | OPEN | ← | T3.5A 250V | OPEN | ← |

| REMARKS | PARTS NAME |
|---------|----------------------------------|
| NO MARK | CARBON FILM RESISTOR |
| △ | METAL OXIDE FILM RESISTOR |
| ▲ | METAL FILM RESISTOR |
| ■ | METAL PLATE RESISTOR |
| ⊙ | FLAME PROOF CARBON FILM RESISTOR |
| ● | SEMI VARIABLE RESISTOR |

| REMARKS | PARTS NAME |
|---------|-----------------------------|
| NO MARK | ELECTROLYTIC CAPACITOR |
| NO MARK | CERAMIC CAPACITOR |
| ▲ | POLYESTER FILM CAPACITOR |
| ● | POLYPROPYLEN FILM CAPACITOR |

• Components having special characteristics are marked Δ and must be replaced with parts having specifications equal to those originally installed.
 • Schematic diagram is subject to change without notice.

EXPLODED VIEW



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PARTS LIST

ELECTRICAL PARTS

WARNING

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

- Carbon resistors of this stereo tuner are 1/6W. There is no discription about them in this parts list. Use the "Part No" HF850000 or equivalent.

322-175-322-255

| Ref. No. | Part No. | Description | 部 品 名 | Remarks | Common Model | Markets | ランク |
|----------|-------------|------------------------|-----------------|------------------------------|--------------|-----------------|----------|
| ※ | NA 08:58:90 | Main circuit Board | メ イ ン シ ー ト | Silver | | J | |
| ※ | NA 08:59:00 | " | " | Black | | J | |
| ※ | NA 08:59:10 | " | " | Silver | | R | |
| ※ | NA 08:59:20 | " | " | Black | | R | |
| ※ | NA 08:59:30 | " | " | Silver | | U | |
| ※ | NA 08:59:40 | " | " | Black | | U | |
| ※ | NA 08:59:50 | " | " | Silver | | A,B | |
| ※ | NA 08:59:60 | " | " | Black | | A,B | |
| ※ | NA 08:59:70 | " | " | Silver | | G | |
| ※ | NA 08:59:80 | " | " | Black | | G | |
| ※ | NA 08:59:90 | " | " | Silver | | C | |
| ※ | NA 08:60:00 | " | " | Black | | C | |
| | FG 41:11:50 | Ceramic Cap | セ ラ コ ン | C161,162 | | | |
| | FG 41:21:50 | " | " | C105,106 | | G | |
| | FG 41:21:00 | " | " | C163,164 | | | |
| | FG 41:21:50 | " | " | C103,104 | | G | |
| | FG 41:23:30 | " | " | C109,110 | | J,R,U,A. C,B | |
| | FG 41:21:50 | " | " | " | | G | |
| | FG 41:23:30 | " | " | C137,138,149,150 | | | |
| | FG 41:24:70 | " | " | C181~184,187~192 195,196 | | G | |
| | FG 41:24:70 | " | " | C111,112 | | | |
| | FG 41:26:80 | " | " | C127,128,159,160 | | | |
| | FG 41:26:80 | " | " | C193,194 | | G | |
| | FG 41:31:00 | " | " | C139,140 | | | |
| | FG 44:41:00 | " | " | C186 | | J,R,U,A. C,B | |
| | FG 41:05:00 | " | " | C141,142 | | | |
| | FH 23:41:00 | " | " | C178 | | J,R,U,A. C,B | |
| | Fi 32:41:00 | " | " | C208 | | J | Δ |
| | Fi 41:41:00 | " | " | C208 | | R,U,A,C,B | Δ |
| | Fi 38:41:00 | " | " | C208 | | G | Δ |
| | FZ 00:41:30 | " | 半 導 体 セ ラ コ ン | C207 | | J,R,U,A. C,B | |
| | FZ 00:37:10 | Electrolytic Cap | ブ ロ ッ ク ケ ミ コ ン | C175,176 | | R,U,A,G. C,B | |
| ※ | FZ 00:67:00 | " | " | C175,176 | | J | |
| | FZ 00:44:20 | Polypropylene Film Cap | ポ リ プ ロ コ ン | C179,180 | | G | |
| | FA 15:31:20 | Mylar Cap | マ イ ラ ー コ ン | C151,152 | | | |
| | UA 25:33:30 | " | " | C121,122 | | | |
| | UA 25:35:60 | " | " | C155,156 | | | |
| | UA 25:35:60 | " | " | C197~200 | | G | |
| | UA 25:43:90 | " | " | C129~132 | | J | |
| | UA 25:42:70 | " | " | C201~206 | | G | |
| | UA 25:42:70 | " | " | C153,154 | | | |
| | UA 25:43:90 | " | " | C145,146,133~136 | | | |
| | UA 25:45:60 | " | " | C165,166 | | | |
| | FA 15:51:20 | " | " | C147,148,177 | | | |
| | UT 46:41:10 | Polypropylene Film Cap | ポ リ プ ロ コ ン | C119,120 | | | |
| | UT 46:43:90 | " | " | C117,118 | | | |
| | UT 45:41:00 | " | " | C107,108,168 | | | |
| | UT 45:33:90 | " | " | C167 | | | |
| | UW 91:84:70 | Electrolytic Cap | ケ ミ コ ン | C143,144 | | J | |
| | UJ 17:91:00 | " | " | C143,144 | | R,U,A,G. C,B | |
| | UW 93:72:20 | " | " | C171 | | | |
| | UW 93:81:00 | " | " | C113~116,157,158, 170,172 | | | |
| | UW 94:83:30 | " | " | C173,174 | | | |

※New Parts (新規部品)

| Ref. No. | Part No. | Description | 部 品 名 | Remarks | Common Model | Markets | ランク |
|----------|-------------|----------------------------|-----------------------------|-------------------|-------------------------------|---------|-----------------|
| | UW 86 52 20 | Electrolytic Cap | 0.22 μ F 50V | ケ ミ コ ン | C125,126 | | |
| | UW 96 61 00 | " | 1 μ F 50V | " | C169 | | |
| | UJ 13 91 00 | " | 1000 μ F 16V | " | C123,124 | | |
| | GD 90 07 10 | Coil | 0.74 μ H | 空 芯 コ イ ル | L105,106 | | |
| | GE 90 03 30 | Choke Coil | 220 μ H | チ ョ ー ク コ イ ル | L103,104 | G | |
| | GE 90 08 40 | Coil | 15 μ H | コ イ ル | L101,102 | G | |
| | GD 90 07 10 | ZDR Transformer | 2mH | Z D R ト ラ ン ス | T101,102 | | |
| | GD 90 07 20 | " | 2mH | " | " | | |
| | HL 82 52 70 | Metal Film Oxide Resistor | 270 Ω 2P | 鍍 金 抵 抗 | R235,236 | | |
| | HL 62 61 50 | " | 1.5k Ω 2P | " | R282,283 | | |
| | HL 33 61 80 | " | 1.8k Ω 3P | " | R279 | J | |
| | HV 45 34 70 | Flam Proof Carbon Resistor | 4.7 Ω 1/4W | 不 燃 化 カ ー ボ ン 抵 抗 | R286,287,289,290 | G | |
| | HV 45 34 70 | " | 4.7 Ω 1/4W | " | R223,224,232-234 | | |
| | HV 45 41 00 | " | 10 Ω 1/4W | " | R219-222 | | |
| | HV 45 41 50 | " | 15 Ω 1/4W | " | R199,200 | | |
| | HV 45 42 20 | " | 22 Ω 1/4W | " | R173-176 | | |
| | HV 45 51 80 | " | 180 Ω 1/4W | " | R207-210 | | |
| | HV 45 52 20 | " | 220 Ω 1/4W | " | R197,198 | | |
| | HV 45 61 00 | " | 1k Ω 1/4W | " | R201,202,227,228 | | |
| | HV 45 64 70 | " | 4.7k Ω 1/4W | " | R225,226 | | |
| | HV 45 61 20 | " | 1.2k Ω 1/4W | " | R177,178 | | |
| | HZ 00 23 90 | Metal Plate Resistor | 0.22k Ω | 金 属 板 抵 抗 | R215,216 | | |
| | HZ 00 30 50 | " | 0.22 Ω | " | R217,218 | | |
| | HS 31 18 90 | Potentiometer | Y100k Ω ×2 | 可 変 抵 抗 器 | VR103 VOLUME | | |
| | HS 31 24 20 | " | T \times 100k Ω ×2 | " | VR105 TREBLE | | |
| | HS 41 24 30 | " | T \times 100k Ω ×2 | " | VR104 BASS | | |
| | HS 41 24 40 | " | A200k Ω ×2 | " | VR101 LOUDNESS | | |
| | HS 41 24 50 | " | MN300k Ω | " | VR102 BALANCE | | |
| | HT 37 03 40 | Pre-Set Potentiometer | B1k Ω | 半 固 定 抵 抗 器 | VR107,108 | | |
| | iA 09 70 00 | Transistor | 2SA970 (GR,BL) | ト ラ ン ジ ス タ | TR107-110,127,132 | | |
| | iA 11 45 00 | " | 2SA1145 (O,Y) | " | TR113,114 | | |
| | iC 22 40 00 | " | 2SC2240 (GR,GU) | " | TR115,116,125,126, 128-131 | | |
| | iC 27 05 00 | " | 2SC2705 (O,Y) | " | TR111,112 | | |
| | iA 09 68 00 | " | 2SA968 (O,Y) | " | TR117,118 | | |
| | iA 13 06 10 | " | 2SA1306 | " | " | | |
| | iC 22 38 00 | " | 2SC2238 (O,Y) | " | TR119,120 | | |
| | iX 60 22 50 | " | 2SC3298A | " | " | | |
| | iE 10 34 10 | FET | 2SK117 | F E T | TR103-106 | | |
| | iE 10 45 10 | Dual FET | 2SK389 (BL,V) | デュアル F E T | TR101,102 | | |
| | iE 10 45 00 | " | 2SK389 (BR,BL) | " | " | | |
| | iF 00 06 70 | Diode | 1S2473 | ダ イ オ ー ド | D101-105,118-124 | | |
| | iF 00 00 40 | " | 1S1555 | " | " | | |
| | iF 00 14 00 | " | 1SS82 | " | D109 | | |
| | iF 00 30 30 | Zener Diode | HZ16-3L | ツェナーダイオード | D106,107 | | |
| | iF 00 15 10 | " | HZ6C-1L | " | D125,126 | | |
| | iF 00 42 70 | LED | SLR-55URC3H | L E D | D110-117 | | |
| | iH 00 08 70 | Diode Bridge | 4D4B41 | ダイオードブリッジ | D108 | | J,R,U,A, G,B |

*New Parts (新規部品)

| Ref. No. | Part No. | Description | 部 品 名 | Remarks | Common Model | Markets | ランク |
|----------|--------------|------------------|----------------|------------|---------------------------------|---------------------|---------|
| | iH :00:11:70 | Diode Bridge | D48B20 | ダイオードブリッジ | D106 | | C |
| | iG :08:57:00 | IC | M5218L | I C | IC101,102 } Inter-changeable 併用 | | |
| | iG :14:50:00 | " | NJM4558S | " | | " | |
| ※ | KA :50:20:20 | Rotary Switch | SRZ-V | ロータリースイッチ | SW104 REC OUT | | |
| ※ | KA :80:35:70 | Push Switch | 2連単動 | プッシュスイッチ | SW105 SPEAKERS | | |
| ※ | KA :80:48:30 | " | 6連 | " | SW102 INPUT | | |
| ※ | KA :80:48:40 | " | 単動 | " | SW103 RICHNESS | | |
| ※ | KA :80:49:00 | " | SUF | 3連金具付スイッチ | SW101 PHONO,MODE,SUBSONIC | | |
| ※ | KA :80:48:60 | Power Switch | SDL81P(TYPE B) | パワースイッチ | SW106 POWER | | |
| | KB :00:03:70 | Fuse | T3.5A 250V | ヒ ユ ー ズ | F102 | | R |
| | KB :00:07:60 | " | T3.15A 250V | " | F101 | | A,G,B |
| | KB :00:13:00 | " | T7.0A 250V | " | F101 | | J,R |
| | KB :00:15:20 | " | 7A 125V | " | F101 | | U,C |
| | KC :00:19:40 | Relay | DH2TU24VDC | リ レ ー | RY101 | Inter-changeable 併用 | |
| ※ | KC :00:20:00 | " | JR2a-DC24V | " | " | | |
| | LB :20:22:90 | Pin Jack | 2P | ピンジャック | PJ101 | | |
| | LB :40:10:30 | " | 4P | " | PJ104,105 | | |
| | LB :40:10:40 | " | 4P | " | PJ103 | | |
| | LB :60:60:90 | " | 6P | " | PJ102 | | |
| | LB :30:17:50 | Head Phone Jack | GY | ホーンジャック | Silver JK101 | | |
| | LB :30:17:60 | " | BL | " | Black | | |
| | LA :00:21:40 | Lapping Terminal | 2P P=10 i-Type | i型ラッピング端子板 | | | R |
| | LA :00:21:50 | " | 3P P=10 i-Type | " | | | |
| ※ | LA :00:54:40 | Speaker Terminal | R ch | スピーカーターミナル | | | |
| ※ | LA :00:54:50 | " | L ch | " | | | |
| | LB :20:10:60 | Fuse Holder Pin | | ヒューズホルダーピン | | | A,G,B |
| | LB :20:19:70 | " | | " | | | J,R,U,C |
| | BB :06:83:70 | Ground Angle | | ア ー ス 金 具 | | | |
| | CB :08:60:30 | Spacer | | ス ペ ー サ ー | | A-500 | |
| | CB :09:52:60 | Cover for Cap | | コンデンサーカバー | | | G |
| | AA :61:47:20 | Shield Plate | | シールド板 | | | J |
| | AA :61:51:00 | " | | " | | | J |

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※New Parts (新規部品)

MECHANISM PARTS

| Ref. No. | Part No. | Description | 部 品 名 | Remarks | Common Model | Markets | ランク |
|----------|----------|-------------|--------------------|-----------------|-----------------|-------------|-----|
| ※ | 1 | NB 62 36 30 | Panel Unit | パネルユニット | Silver | J | |
| ※ | " | NB 62 36 40 | " | " | Black | J | |
| ※ | " | NB 62 36 50 | " | " | Silver | R,U,A,G,C,B | |
| ※ | " | NB 62 36 60 | " | " | Black | R,U,A,G,C,B | |
| | 1-1 | AA 62 20 80 | Spring | ス プ リ ン グ | | | |
| ※ | 1-2 | NB 62 28 00 | Knob Ass'y | ツ マ ミ Ass'y | INPUT Silver | | |
| ※ | " | NB 62 27 80 | " | " | INPUT Black | | |
| | 1-3 | CB 06 88 80 | Plastic Rivet | プラスチックリベット | | | |
| | 1-4 | CB 08 50 50 | Isolation Tape | 防 振 テ ー プ | | | |
| ※ | 1-5 | CB 63 51 00 | Button | ボ タ ン | Silver | | |
| ※ | " | CB 63 51 10 | " | " | Black | | |
| ※ | 1-6 | CB 63 52 60 | Cushion | ク ッ シ ョ ン | | | |
| ※ | 2 | iX 60 12 60 | Transistor | 2SA1106 (O,P,Y) | ト ラ ン ジ ス タ | TR121,122 | |
| ※ | 3 | iX 60 12 70 | " | 2SC2581 (O,P,Y) | " | TR123,124 | |
| | 4 | iL 00 05 70 | Insulation Base | マイカベース | | | |
| | 5 | BA 09 14 30 | Heat Sink | 放 熱 板 | | | |
| | 6 | EZ 00 13 50 | Cup Screw | 3x14 FCM3-BI | カップスクリュー(Bタイト) | | |
| ※ | 7 | NA 08 58 90 | Main Circuit Board | メインシート | Silver | J | |
| ※ | " | NA 08 59 00 | " | " | Black | J | |
| ※ | " | NA 08 59 10 | " | " | Silver | R | |
| ※ | " | NA 08 59 20 | " | " | Black | R | |
| ※ | " | NA 08 59 30 | " | " | Silver | U | |
| ※ | " | NA 08 59 40 | " | " | Black | U | |
| ※ | " | NA 08 59 50 | " | " | Silver | A,B | |
| ※ | " | NA 08 59 60 | " | " | Black | A,B | |
| ※ | " | NA 08 59 70 | " | " | Silver | G | |
| ※ | " | NA 08 59 80 | " | " | Black | G | |
| ※ | " | NA 08 59 90 | " | " | Silver | C | |
| ※ | " | NA 08 60 00 | " | " | Black | C | |
| ※ | 8 | GA 68 02 00 | Power Transformer | 電 源 ト ラ ン ス | | J | △ |
| ※ | " | GA 68 03 00 | " | " | | U | △ |
| ※ | " | GA 68 04 00 | " | " | | C | △ |
| ※ | " | GA 68 05 00 | " | " | | G | △ |
| ※ | " | GA 68 06 00 | " | " | | A,B | △ |
| ※ | " | GA 68 07 00 | " | " | | R | △ |
| | 9 | LB 20 14 80 | Voltage Selector | 電 圧 切 換 器 | | R | △ |
| | 10 | CB 61 68 10 | Cord Stopper | CM-22A | コ ー ド ス ト ッ パ ー | J | |
| | " | CB 62 01 90 | " | CM-22B | " | R,A,G,B | |
| | " | CB 62 02 00 | " | CM-22C | " | U,C | |
| | 13 | LA 00 29 50 | Terminal | 2P | 2 P 中 継 端 子 台 | A,G,B | △ |
| | 14 | LB 10 11 10 | Short Plug | | シ ョ ー ト プ ラ グ | | |
| | 15 | LB 60 39 20 | AC Outlet | | A C ア ウ ト レ ッ ト | J,R,U | △ |
| | " | LB 60 43 20 | " | | " | C | △ |
| | 16 | MG 00 17 50 | Power Cord | 7A 125V 2.2m | 電 源 コ ー ド | J | △ |
| | " | MG 00 17 60 | " | 7A 125V 2.2m | " | J | △ |
| | " | MG 00 16 30 | " | 6A 250V 2m | " | R | △ |
| | " | MG 00 14 50 | " | 10A 125V 1.98m | " | U,C | △ |
| | " | MG 00 14 60 | " | 10A 125V 2m | " | U,C | △ |
| | " | MG 00 09 60 | " | 2.5A 250V 2m | " | G | △ |
| | " | MG 00 16 20 | " | 2.5A 250V 2m | " | G | △ |
| | " | MG 00 09 20 | " | 7.5A 250V 2.5m | " | A | △ |
| | " | MG 00 14 90 | " | 7.5A 250V 2.5m | " | A | △ |
| | " | MG 00 18 60 | " | 2.5A 250V 2m | " | B | △ |

※New Parts (新規部品)

| Ref. No. | Part No. | Description | 部 品 名 | Remarks | Common Model | Markets | ランク |
|----------|-------------|----------------------------|-----------------------|-----------------|--------------|---------|-----|
| 17 | AA:61:46:30 | Bottom Cover | ボトムカバー | | A-500 | | |
| ※ 18 | AA:62:54:30 | Top Cover | トップカバー | Silver | | | |
| ※ " | AA:62:54:40 | " | " | Black | | | |
| ※ 19 | AA:62:36:00 | Side Frame (L) | サイドスレーム (L) | | | | |
| ※ 20 | AA:62:36:20 | Rear Panel | リアパネル | | | J | |
| ※ " | AA:62:36:30 | " | " | | | R | |
| ※ " | AA:62:36:40 | " | " | | | U,C | |
| ※ " | AA:62:36:50 | " | " | | | G | |
| ※ " | AA:62:36:60 | " | " | | | A,B | |
| ※ 21 | BA:09:12:60 | Knob | ツマミ | VOLUME Silver | | | |
| ※ " | BA:09:12:50 | " | " | " Black | | | |
| 22 | BB:07:01:20 | Transistor Pusher | トランジスタプッシャー | | | | |
| 23 | CB:06:88:80 | Plastic Rivet | プラスチックリベット | | | | |
| 24 | CB:62:07:30 | Leg | 脚 | | | | |
| 25 | CB:60:98:10 | Isolation Tape | 防振テープ | | T-6a | | |
| 26 | CB:63:74:80 | Cushion | クッション | | | | |
| ※ 27 | CB:63:42:20 | Push Button | プッシュボタン | Silver | | | |
| ※ " | CB:63:42:30 | " | " | Black | | | |
| ※ 28 | CB:63:82:30 | Knob | ツマミ | Silver | | | |
| ※ " | CB:63:82:40 | " | " | Black | | | |
| ※ 29 | CB:63:82:70 | " | " | REC OUT Silver | | | |
| ※ " | CB:63:82:80 | " | " | " Black | | | |
| ※ 30 | NB:62:36:20 | Button Ass'y (F) | ボタンAss'y(F) | SPEAKERS Silver | T-500 | | |
| " | NB:60:92:00 | " | " | Black | T-500 | | |
| 31 | Ei:33:00:66 | Binding Head Tapping Screw | 3x6 FCRM3-BI | バインドタッピングネジ | PACK | | |
| 32 | Ei:34:01:00 | " | 4x10 FCRM3-BI | " | PACK | | |
| 33 | EV:20:30:46 | Plain Washer | φ4 FCRM3-BI | 平座金 | PACK | | |
| 34 | EK:13:00:20 | BW Head Screw | 4x8 FNM3-3g | BWヘッド小ネジ | Silver | | |
| " | EK:36:50:40 | " | 4x8 FCRM3-BI | " | Black | | |
| 35 | Ei:33:00:86 | Binding Head Tapping Screw | 3x8 FCRM3-BI | バインドタッピングネジ | PACK | | |
| 36 | EV:41:30:36 | Toothed Lock Washer | φ3 FCRM3-BI | 歯付座金 | PACK | | |
| 37 | EV:20:30:36 | Plain Washer | φ3 FCRM3-BI | 平座金 | PACK | | |
| 38 | EZ:00:14:00 | Ground Terminal Screw | 3x13.5MFNi-II | アース端子ネジ | | | |
| 39 | EV:90:13:60 | Sems Plain Washer | φ10xφ3.5x10.8 FNM3-3g | セムス平座金 | | | |
| 40 | EV:42:00:30 | Toothed Lock Washer | M3 ZMC2-Y | 外歯付座金 | | | |
| 41 | CB:08:60:30 | P.C. Board Spacer | | プリントスペーサー | | | |
| | CB:06:92:50 | Binding Tie | BK-1 | インシュロックタイ | | | |

*New Parts (新規部品)