

YAMAHA Hi-Fi STEREO SERVICE MANUAL STEREO/ PRE-MAIN AMPLIFIER MODEL CA-400



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SPECIFICATIONS

■ AUDIO SECTION

POWER OUTPUT

| | |
|----------------------|------------------------------------|
| Dynamic Power | (IHF) |
| | 90 watts (4Ω) |
| | 70 watts (8Ω) |
| Continuous RMS Power | (each channel driven) |
| | 35/35 watts (4Ω) at 1,000Hz |
| | 27/27 watts (8Ω) at 1,000Hz |
| Continuous RMS Power | (both channels driven) |
| | 28+28 watts (4Ω) at 1,000Hz |
| | 22+22 watts (8Ω) at 1,000Hz |
| Continuous RMS Power | (both channels driven) |
| | 25+25 watts (4Ω) at 20 to 20,000Hz |
| | 20+20 watts (8Ω) at 20 to 20,000Hz |

TOTAL HARMONIC DISTORTION

| | |
|-------------------|--|
| Preamplifier Only | (PHONO to PRE OUT) |
| | Less than 0.1% (8Ω) at rated power (AUX to PRE OUT) |
| | Less than 0.02% (8Ω) at rated power (AUX to POWER OUTPUT) |
| Overall | Less than 0.1% (8Ω) at rated power (IHF, Closed Circuit A Network) |

HUM and NOISE

| | |
|---------------------------|------------------|
| Overall from PHONO 1, 2 | Better than 75dB |
| Overall from MIC | Better than 70dB |
| Overall from AUX, TAPE PB | Better than 90dB |

Volume at Minimum

Better than 90dB

INPUT SENSITIVITY AND IMPEDANCE

(at rated power, 1,000Hz)

| | |
|----------------------------------|--------------|
| PHONO 1 | 3mV (47kΩ) |
| PHONO 2 | 3mV (47kΩ) |
| PHONO 1, 2 Max. Input Capability | 135mV |
| MIC | 3mV (40kΩ) |
| MIC Max. Input Capability | 400mV |
| AUX 1, 2 | 150mV (55kΩ) |
| TAPE PB A, B | 150mV (55kΩ) |

OUTPUT LEVEL AND IMPEDANCE

| | |
|-------------------|---------------------------|
| | (at rated power, 1,000Hz) |
| TAPE REC OUT A, B | 150mV (1kΩ) |
| DIN REC OUT | 30mV (80kΩ) |
| PRE OUT | 450mV (2.7kΩ) |

TONE CONTROLS

| | |
|--------|--------------------------|
| BASS | +12dB, -12dB at 50Hz |
| TREBLE | +10dB, -10dB at 10,000Hz |

FILTERS

| | |
|------|----------------------------|
| LOW | -3dB at 50Hz (12dB/oct.) |
| HIGH | -3dB at 8,000Hz (6dB/oct.) |

INTERMODULATION DISTORTION

Overall (70Hz; 7,000Hz - 4:1 SMPTE method) (AUX to Power Output)

Less than 0.1% (8Ω) at rated output (IHF, distortion 0.5% const.)

POWER BANDWIDTH

8 to 70,000Hz

FREQUENCY RESPONSE

(at 1 watt)

Overall (AUX, TAPE PB to Power Output)

20 to 50,000Hz +0.5dB, -1dB

Overall (MIC to Power Output)

100 to 10,000Hz +0.5, -6dB

Deviation from RIAA (30 to 15,000Hz)

±0.5dB

LOAD IMPEDANCE

4 to 16Ω

DAMPING FACTOR

Over 50 at 1,000Hz (8Ω)

CHANNEL SEPARATION

(at rated power, 1,000Hz)

Overall from PHONO 1, 2 Better than 50dB

Overall from AUX, TAPE PB

Better than 50dB

LOUDNESS CONTROL

(vol. at -30dB)

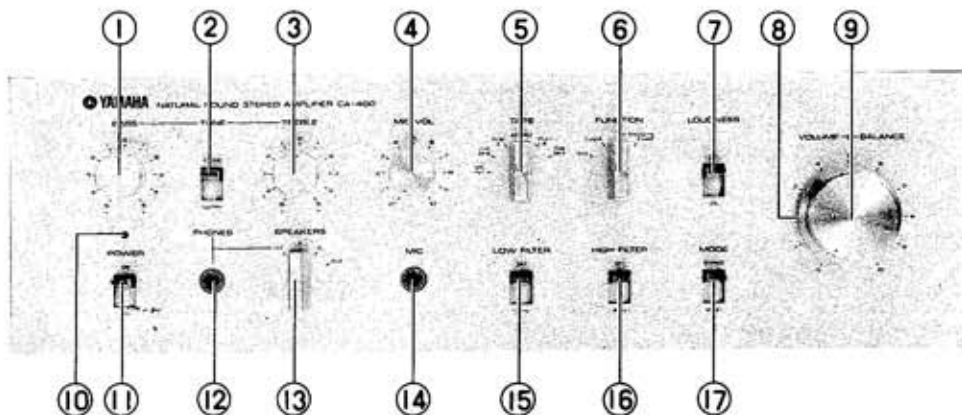
+8dB at 100Hz, +5dB at 10,000Hz

■ GENERAL

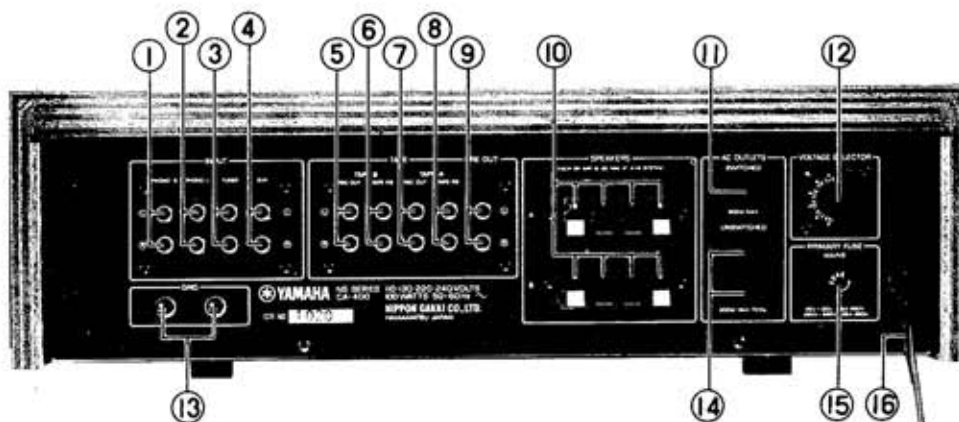
| | |
|-------------------|--|
| Semiconductors | 31 Transistors; 9 Diodes; 1 Zener Diode; 2 ICs |
| Power Source | AC 110, 117, 130, 220, 240V, 50/60Hz |
| Power Consumption | |
| Max. | 100 watts |
| Rated | 13 watts |
| AC Outlets | |
| Switched | 1 (200 watts) |
| Unswitched | 2 (total 200 watts) |
| Dimensions | (W x H x D) |
| | 436 x 144 x 300mm (17 1/4" x 5 3/4" x 12") |
| Weight | 8kg (17.6lbs.) |

EXTERNAL VIEW

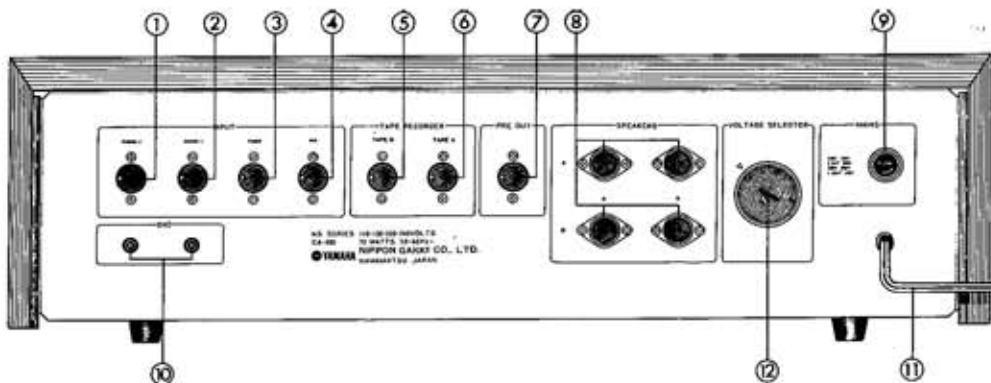
FRONT PANEL



REAR PANEL (U.S. & CANADIAN MODELS)



REAR PANEL (EUROPEAN MODEL)



FRONT PANEL

- | | | | |
|---|---------------------|---|----------------------|
| ① | BASS TONE CONTROL | ⑩ | POWER INDICATOR LAMP |
| ② | TONE DEFEAT SWITCH | ⑪ | POWER SWITCH |
| ③ | TREBLE TONE CONTROL | ⑫ | HEADPHONE JACK |
| ④ | MIC VOLUME CONTROL | ⑬ | SPEAKER SELECTOR |
| ⑤ | TAPE SELECTOR | ⑭ | MIC JACK |
| ⑥ | FUNCTION SELECTOR | ⑮ | LOW FILTER |
| ⑦ | LOUDNESS SWITCH | ⑯ | HIGH FILTER |
| ⑧ | BALANCE CONTROL | ⑰ | MODE SWITCH |
| ⑨ | VOLUME CONTROL | | |

REAR PANEL (U.S. & CANADIAN MODELS)

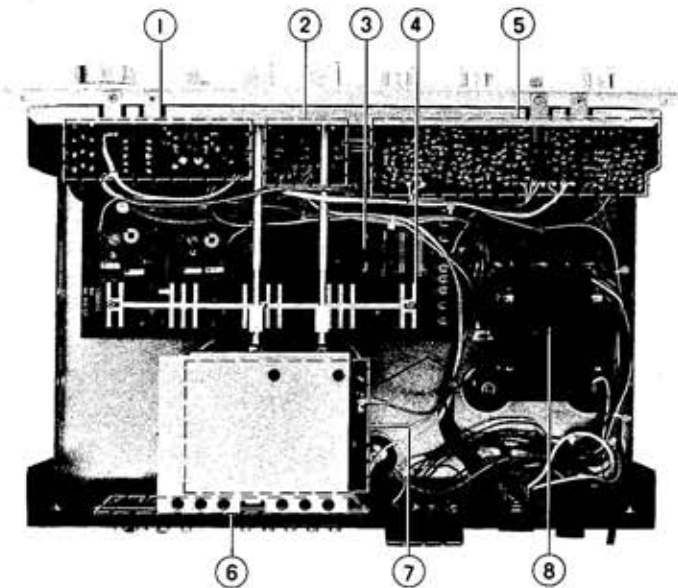
- | | | | |
|---|----------------------|---|-------------------------|
| ① | PHONO-2 INPUT JACKS | ⑨ | PRE OUT JACKS |
| ② | PHONO-1 INPUT JACKS | ⑩ | SPEAKER TERMINAL |
| ③ | TUNER INPUT JACKS | ⑪ | AC OUTLET (Switched) |
| ④ | AUX INPUT JACKS | ⑫ | VOLTAGE SELECTOR |
| ⑤ | TAPE B REC OUT JACKS | ⑬ | GROUND TERMINAL |
| ⑥ | TAPE B TAPE PB JACKS | ⑭ | AC OUTLETS (Unswitched) |
| ⑦ | TAPE A REC OUT JACKS | ⑮ | PRIMARY FUSE |
| ⑧ | TAPE A TAPE PB JACKS | ⑯ | AC CORD |

REAR PANEL (EUROPEAN MODEL)

- | | | | |
|---|-------------------------|---|-------------------|
| ① | PHONO-2 INPUT CONNECTOR | ⑦ | PRE OUT CONNECTOR |
| ② | PHONO-1 INPUT CONNECTOR | ⑧ | SPEAKER TERMINALS |
| ③ | TUNER INPUT CONNECTOR | ⑨ | PRIMARY FUSE |
| ④ | AUX INPUT CONNECTOR | ⑩ | GROUND TERMINALS |
| ⑤ | TAPE B REC/PB CONNECTOR | ⑪ | AC CORD |
| ⑥ | TAPE A REC/PB CONNECTOR | ⑫ | VOLTAGE SELECTOR |

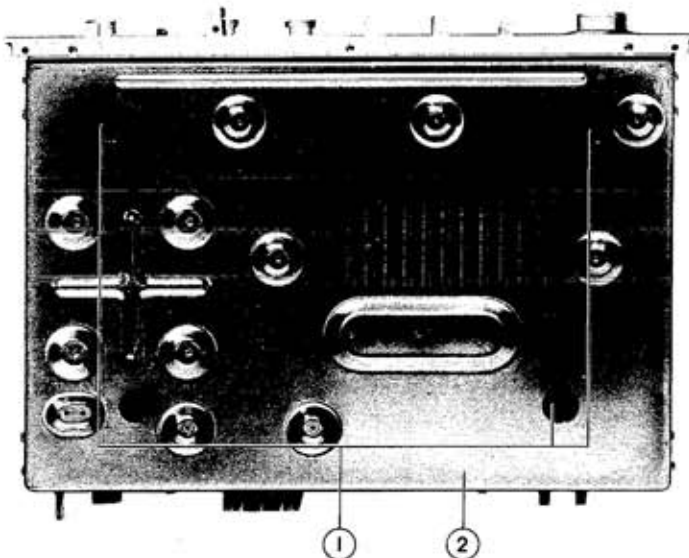
INTERNAL VIEW

TOP VIEW



- ① VOLUME CIRCUIT BOARD
NA06560: U.S. and Canadian models
NA06498: except U.S. and Canadian models
- ② FILTER CIRCUIT BOARD
NA06557: U.S. and Canadian models
NA06493: except U.S. and Canadian models
- ③ MAIN AMP CIRCUIT BOARD
NA06495: General and Australian models
NA06496: U.S. and Canadian models
NA06497: European model
- ④ HEAT SINK
- ⑤ TONE CONTROL AMP CIRCUIT BOARD
NA06558: U.S. and Canadian models
NA06493: except U.S. and Canadian models
- ⑥ PIN JACK CIRCUIT BOARD
NA06494: General and Australian models
NA06559: U.S. and Canadian models
DIN CONNECTOR CIRCUIT BOARD
NA06499: European model
- ⑦ FUNCTION CIRCUIT BOARD
NA06556: U.S. and Canadian models
NA06491: except U.S. and Canadian models
- ⑧ POWER TRANSFORMER
GA60742: European model
GA60741: except European model

BOTTOM VIEW

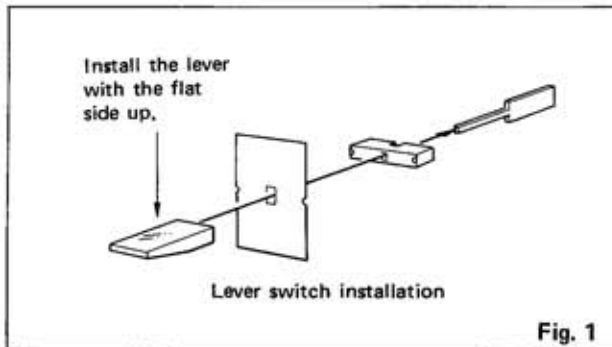


- ① LEG
- ② CHASSIS

PARTIAL DISASSEMBLY

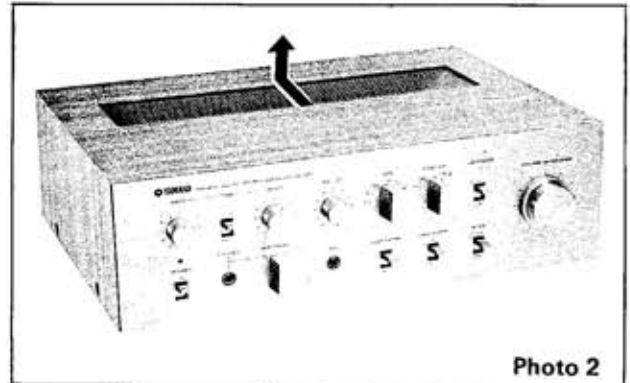
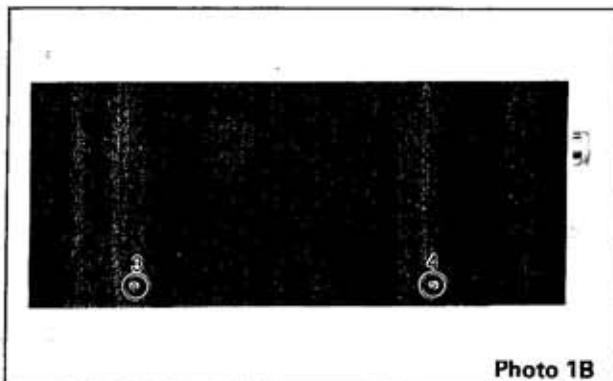
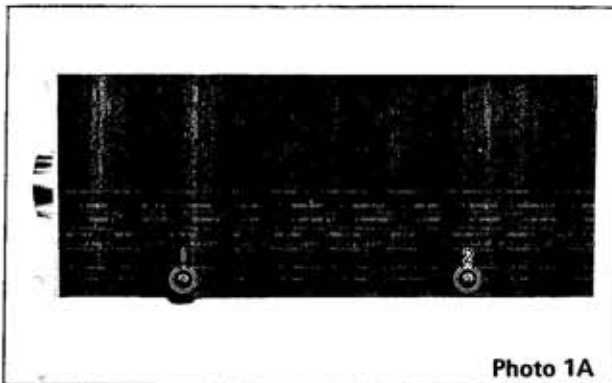
BEFORE DISASSEMBLY

- The screwdriver for each screw should match the screw size. If you use a smaller or larger size it will damage the groove.
- If you use excessive force on the printed circuit board it will crack or cut the print wiring, so be careful.
- When using a soldering iron finish all work as quickly as possible.
- Be careful not to install switches and knobs in the wrong place or upside-down. See Fig. 1.



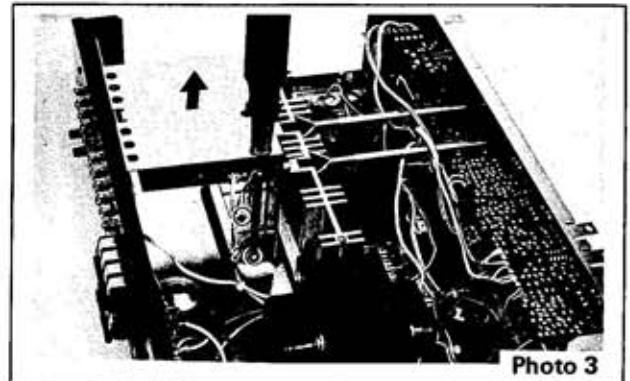
CABINET REMOVAL

- Remove screws 1~4 shown in Photo 1 (A), (B).
- Pull cabinet apart from the chassis as shown in Photo 2.



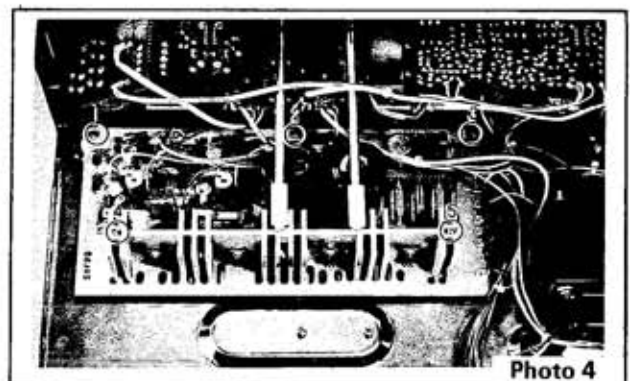
FUNCTION CIRCUIT REMOVAL

- Loosen screws 1, 2 as shown in Photo 3 on main chassis.
- Slide the joint toward the front panel as shown in Photo 3, then remove the function circuit board from the extension shaft.
- Pull the function circuit board in the direction of the *arrow in Photo 3, then lift it upward to remove.



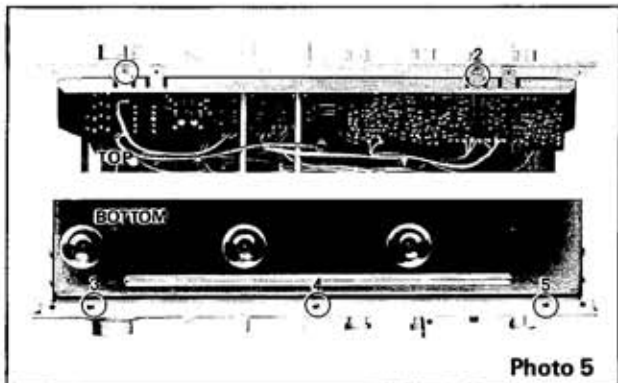
MAIN AMP CIRCUIT BOARD REMOVAL

- Slide the joint toward the front panel as shown in Photo 3, then remove the function circuit board from the extension shaft.
- Remove screws 1~5 shown in Photo 4, then lift it upward to remove.



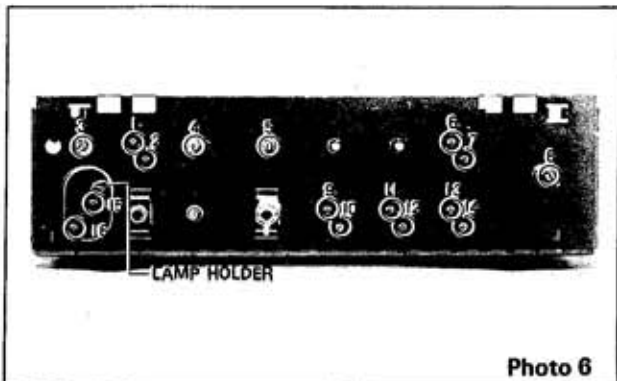
FRONT PANEL REMOVAL

- a. Remove all knobs. Use a hexagonal wrench to loosen the nuts on the TAPE, FUNCTION, SPEAKERS and BALANCE functions. Then remove these and other switches.
- b. Remove screws 1~5 as shown in Photo 5, then remove the front panel.



TONE CONTROL AMP CIRCUIT BOARD REMOVAL

- a. Remove the front panel.
- b. Remove screws 1, 2 and nuts 3~5 as shown in Photo 6. Tone control circuit board can now be removed.

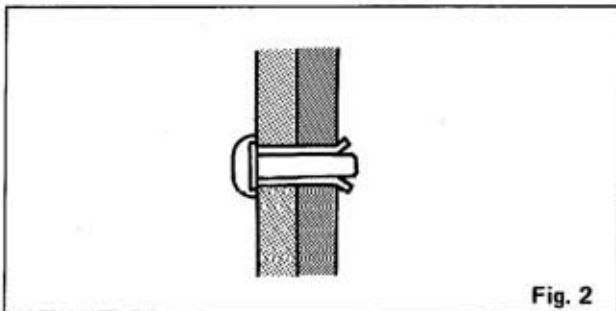
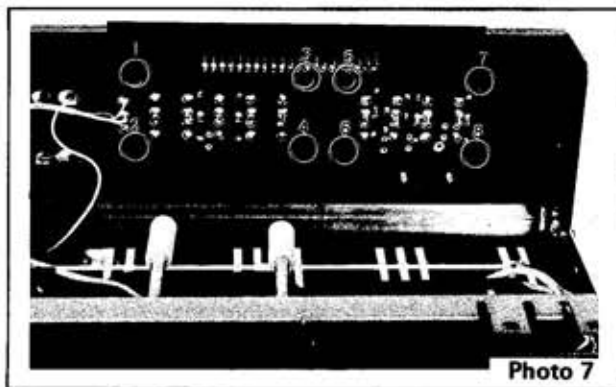


POWER SWITCH REMOVAL

- a. Remove the front panel.
- b. Slide the lamp holder to the right as shown in Photo 6 and remove it. When reinstalling the pilot lamp, be careful that it is not placed so far forward that it touches the front panel; it should not be too far from the lamp holder.
- c. Remove screws 15, 16 as shown in Photo 6, then remove the Power Switch.

PIN JACK (DIN) CIRCUIT BOARD REMOVAL

- a. Remove the function circuit board.
- b. Push plastic rivets 1~8 with screwdriver as shown in Photo 7 remove it. Pin jack circuit board can now be removed.



VOLUME CIRCUIT BOARD REMOVAL

- a. Remove the front panel.
- b. Remove screws 6, 7 and nut 8 as shown in Photo 6. Volume circuit board can now be removed.

FILTER CIRCUIT BOARD REMOVAL

- a. Remove the front panel.
- b. Remove screws 9~14 as shown in Photo 6. Filter circuit board can now be removed.

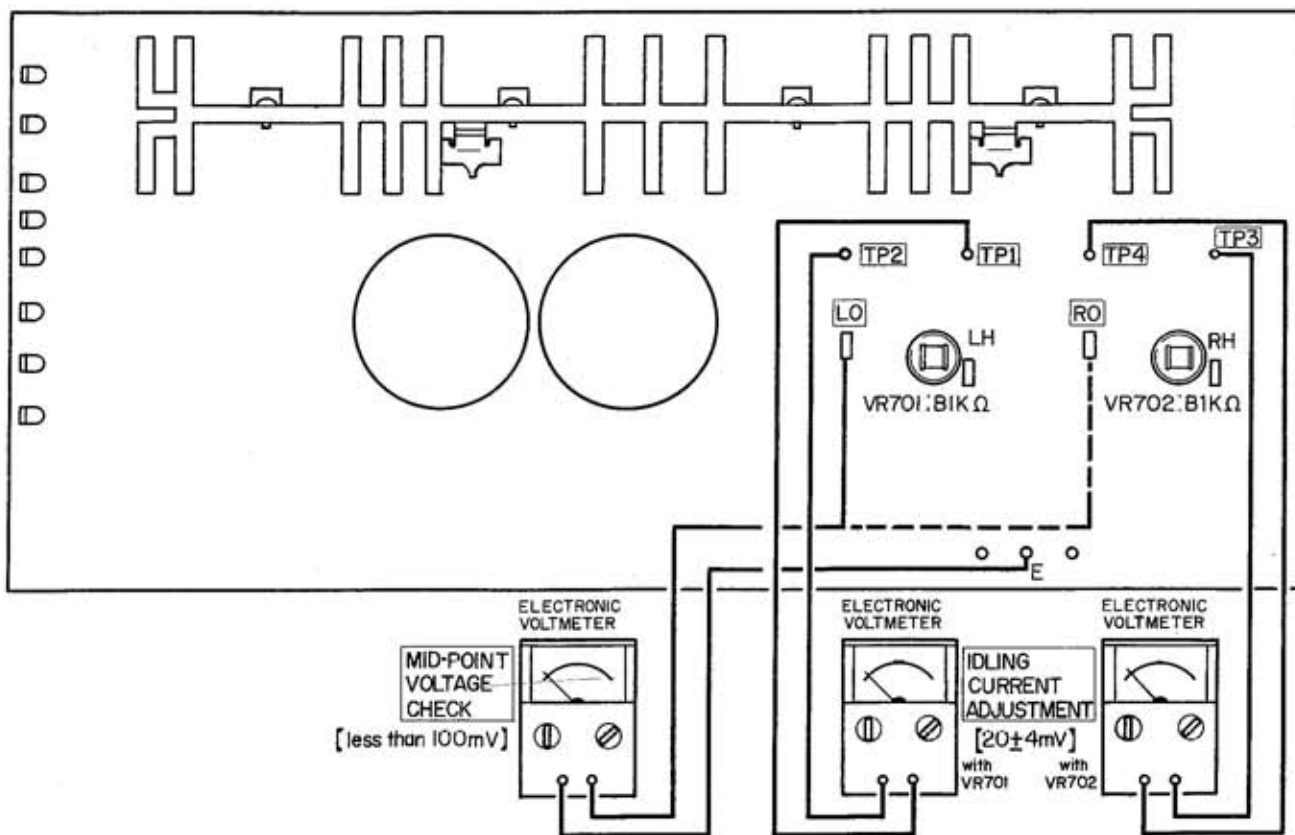
ADJUSTMENT

BEFORE ADJUSTMENT

- Carry out adjustment immediately after switching on the power, then readjust a few minutes later, so that all measurements fall within the prescribed standards.

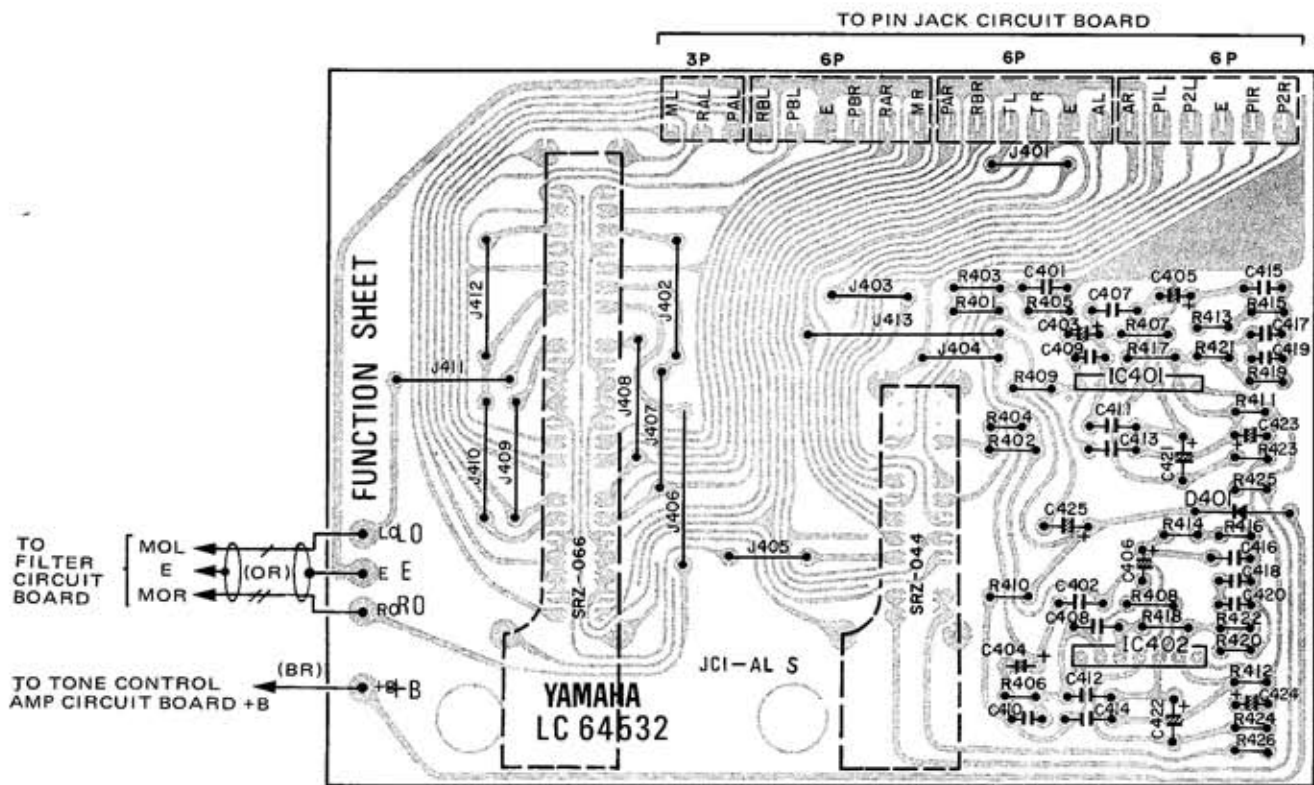
- During adjustment be sure to short the main amp circuit board input terminals, do not connect the speakers or dummy load resistors to the output terminals; leave them open.

| ADJUSTMENT | CONNECTION TERMINAL(s) AND INSTRUMENT(s) | ADJUSTMENT POINT | ADJUSTMENT METHOD | STANDARD MEASUREMENT |
|-------------------------|---|------------------|--|----------------------|
| Bias current adjustment | Connect a voltmeter between TP1 and TP2 then between TP3 and TP4. | VR701, VR702 | Adjust VR701 and/or VR702 so that the voltage between the TPs falls within the standard ratio. | $20 \pm 4\text{mV}$ |

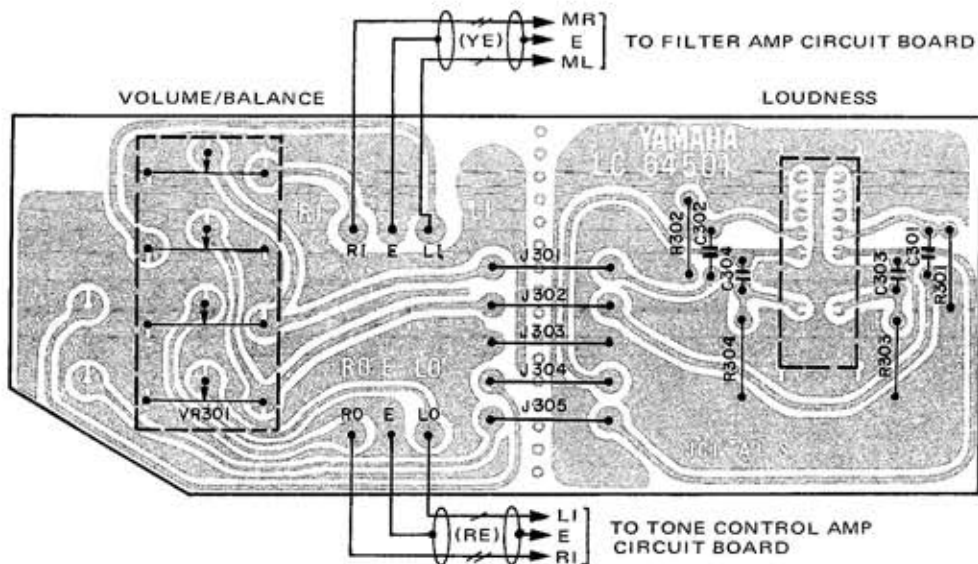


PRINTED CIRCUIT BOARD

FUNCTION CIRCUIT BOARD NA06491: GENERAL, AUSTRALIAN & EUROPEAN MODELS
 NA06556: U.S. & CANADIAN MODELS

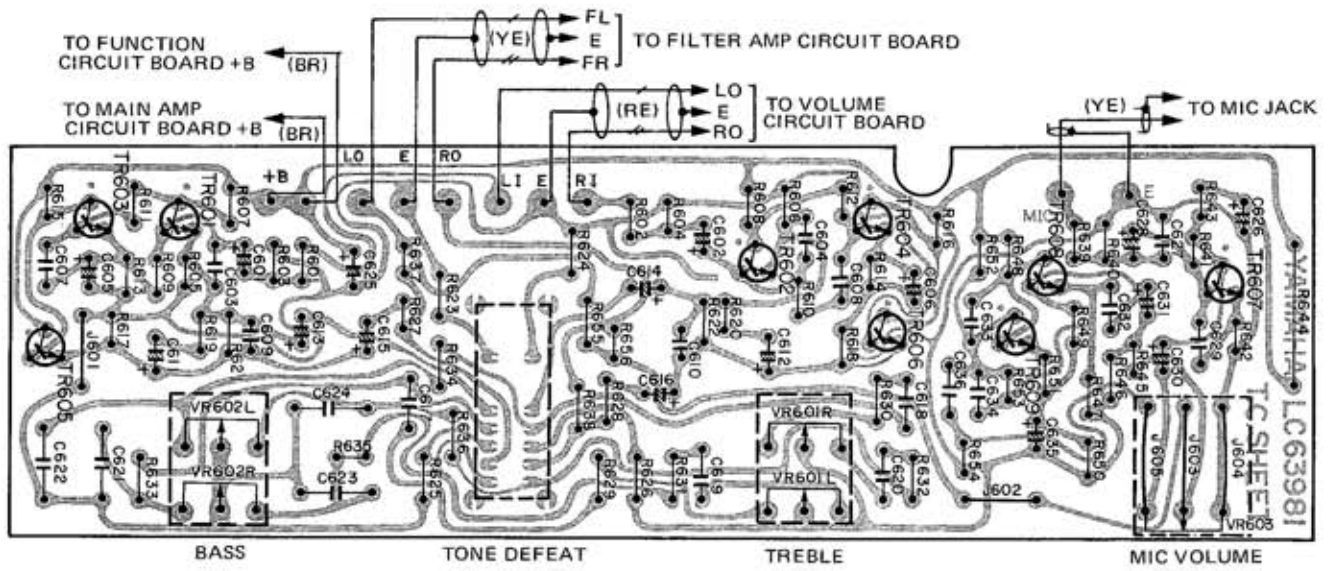


VOLUME CIRCUIT BOARD NA: 06560



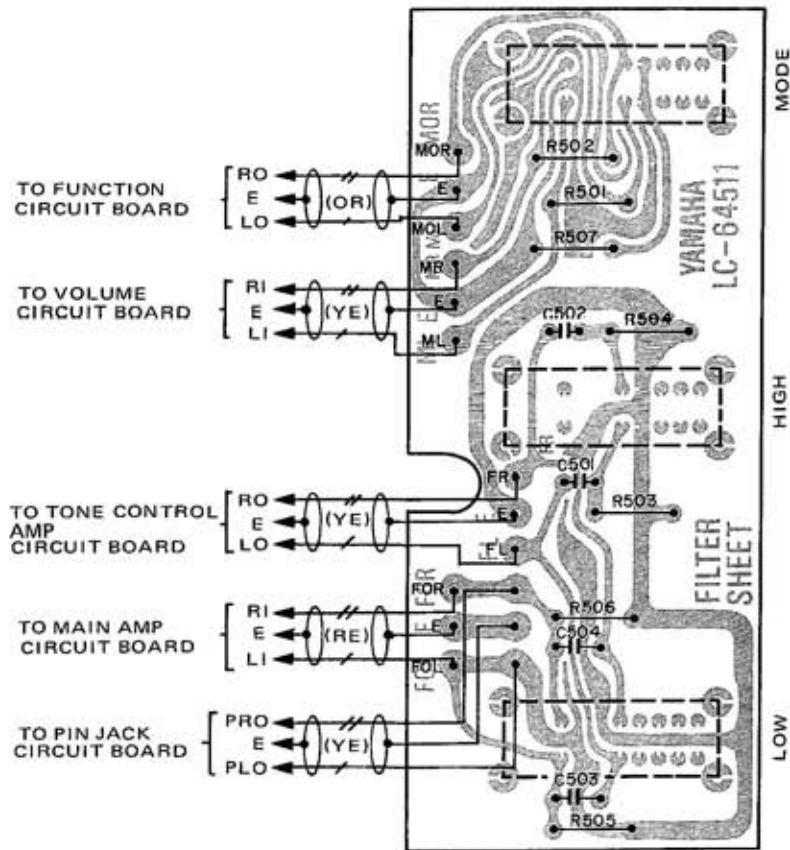
TONE CONTROL AMP CIRCUIT BOARD

NA06493: GENERAL, AUSTRALIAN & EUROPEAN MODELS
 NA06558: U.S. & CANADIAN MODELS



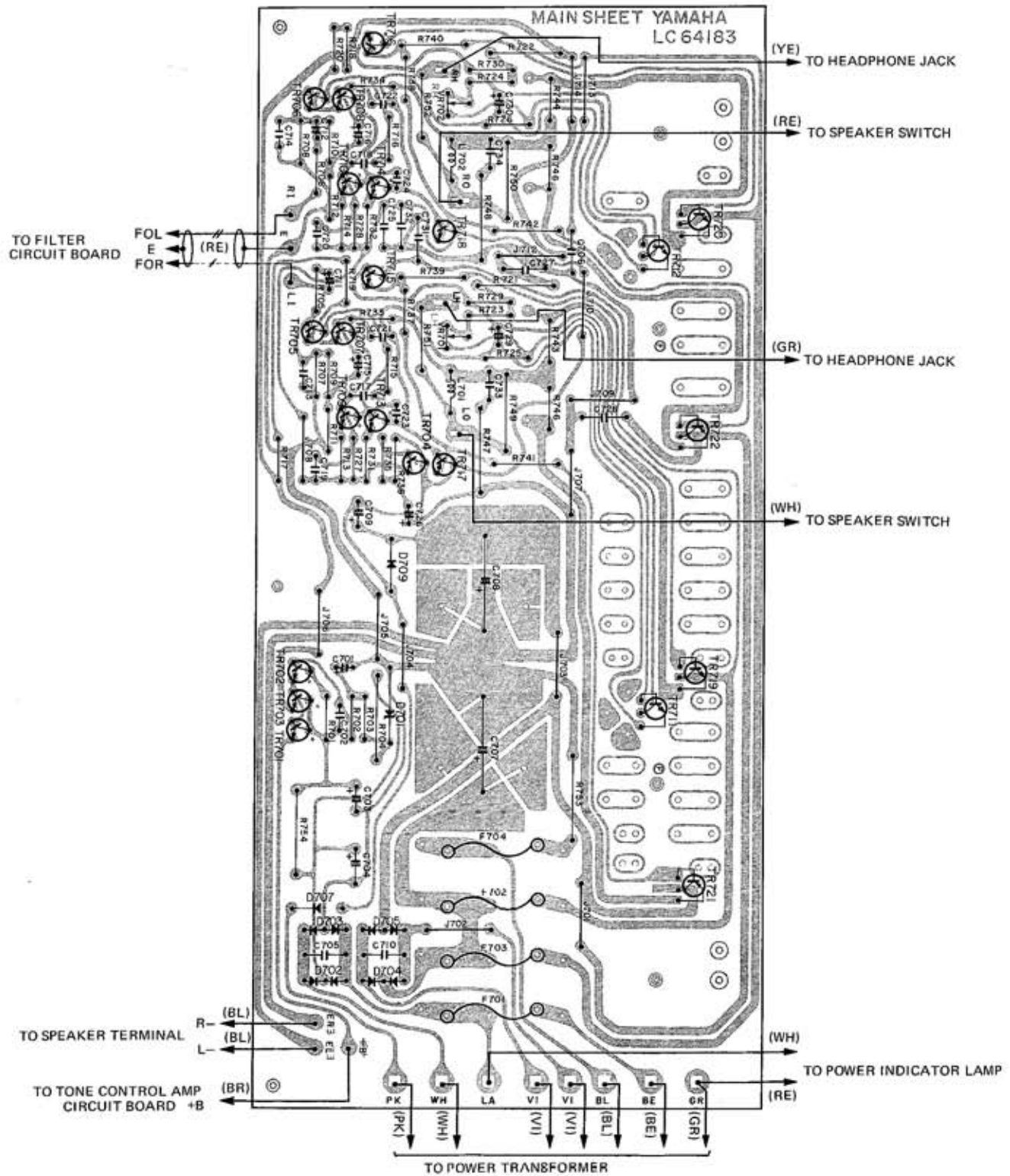
FILTER CIRCUIT BOARD

NA06492: GENERAL, AUSTRALIAN & EUROPEAN MODELS
 NA06557: U.S. & CANADIAN MODELS

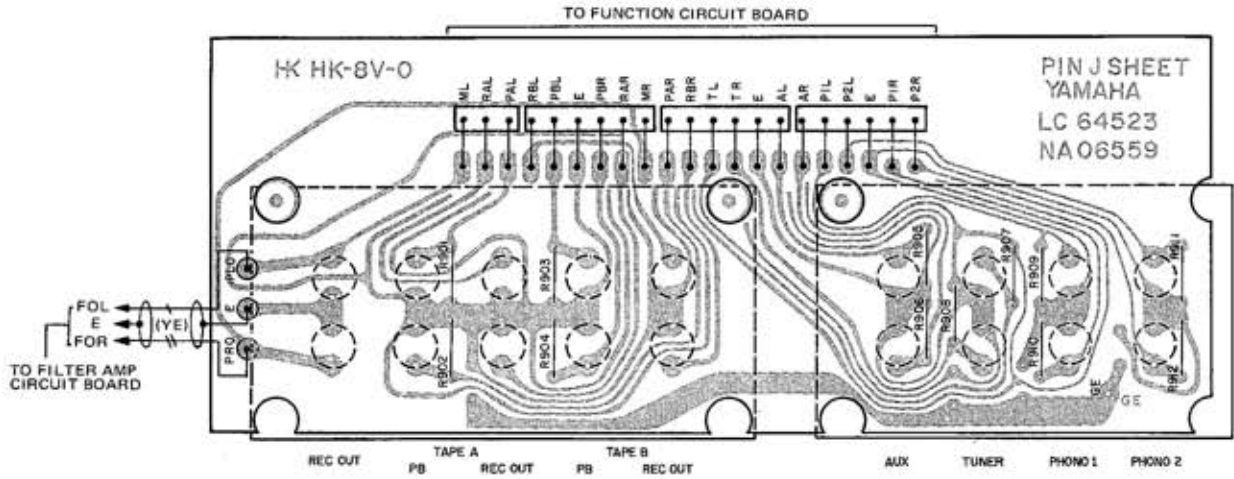


MAIN AMP CIRCUIT BOARD

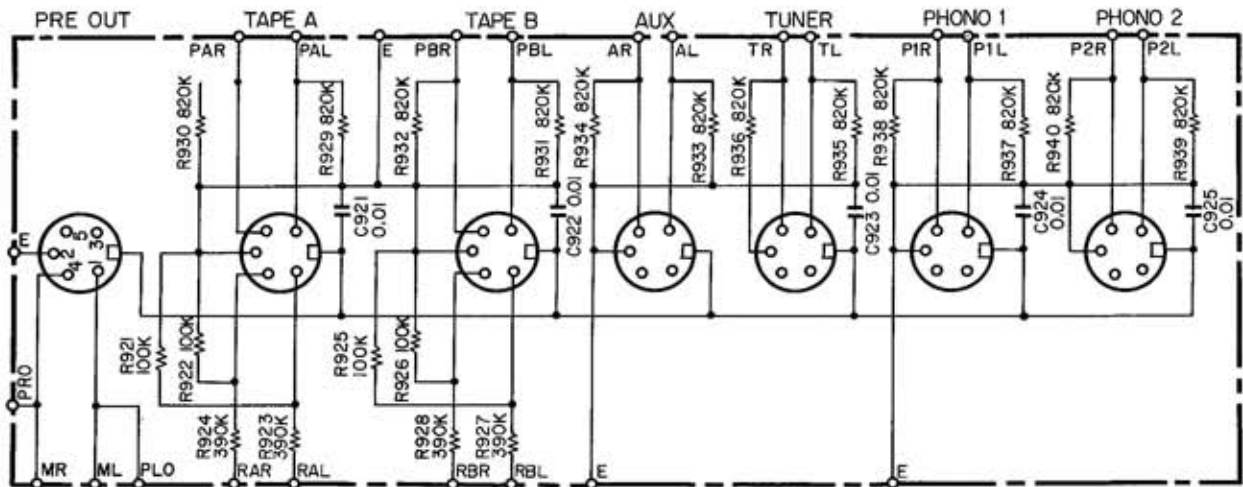
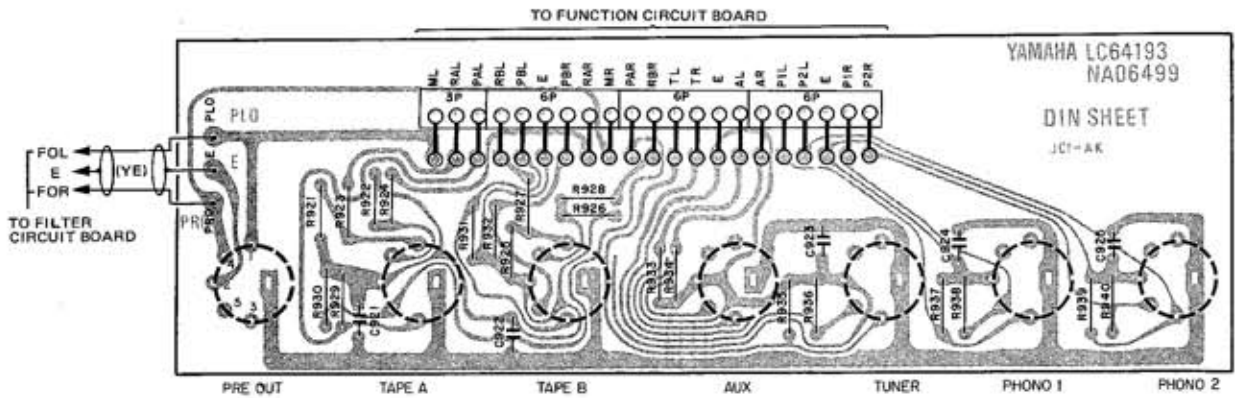
NA06495: GENERAL, AND AUSTRALIAN MODELS
 NA06496: U.S. & CANADIAN MODELS
 NA06497: EUROPEAN MODEL



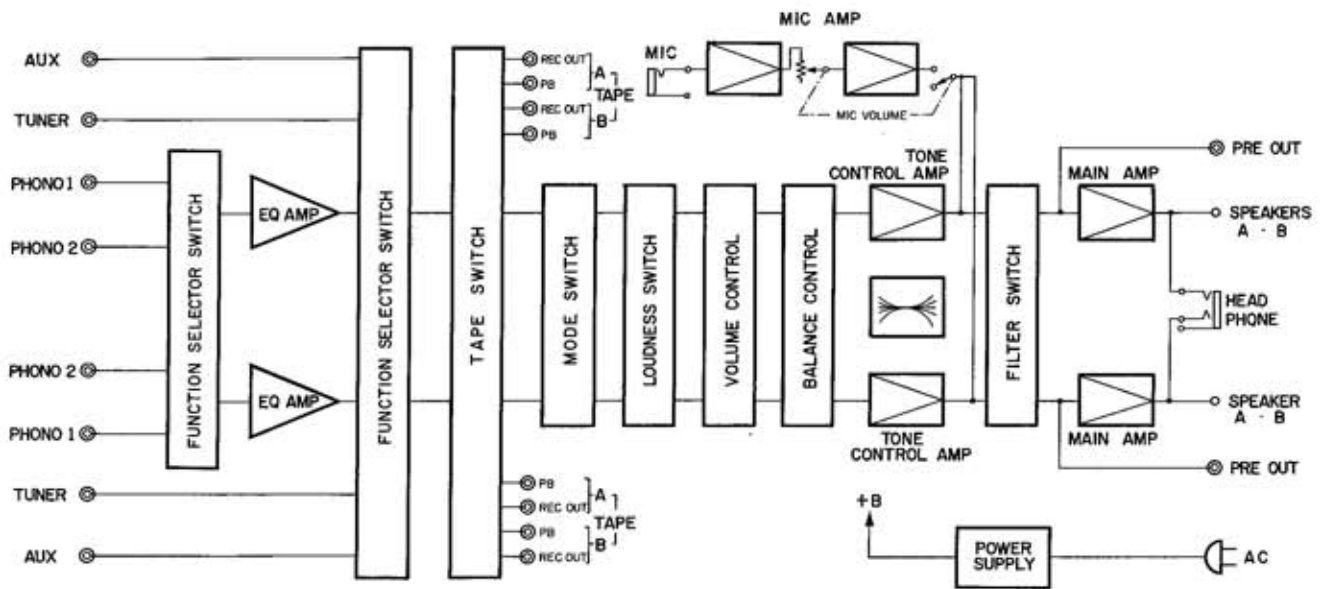
PIN JACK CIRCUIT BOARD NA06494: GENERAL, AND AUSTRALIAN MODELS
 NA06559: U.S. & CANADIAN MODELS



DIN CONNECTOR CIRCUIT BOARD NA06499: EUROPEAN MODEL ONLY



BLOCK DIAGRAM



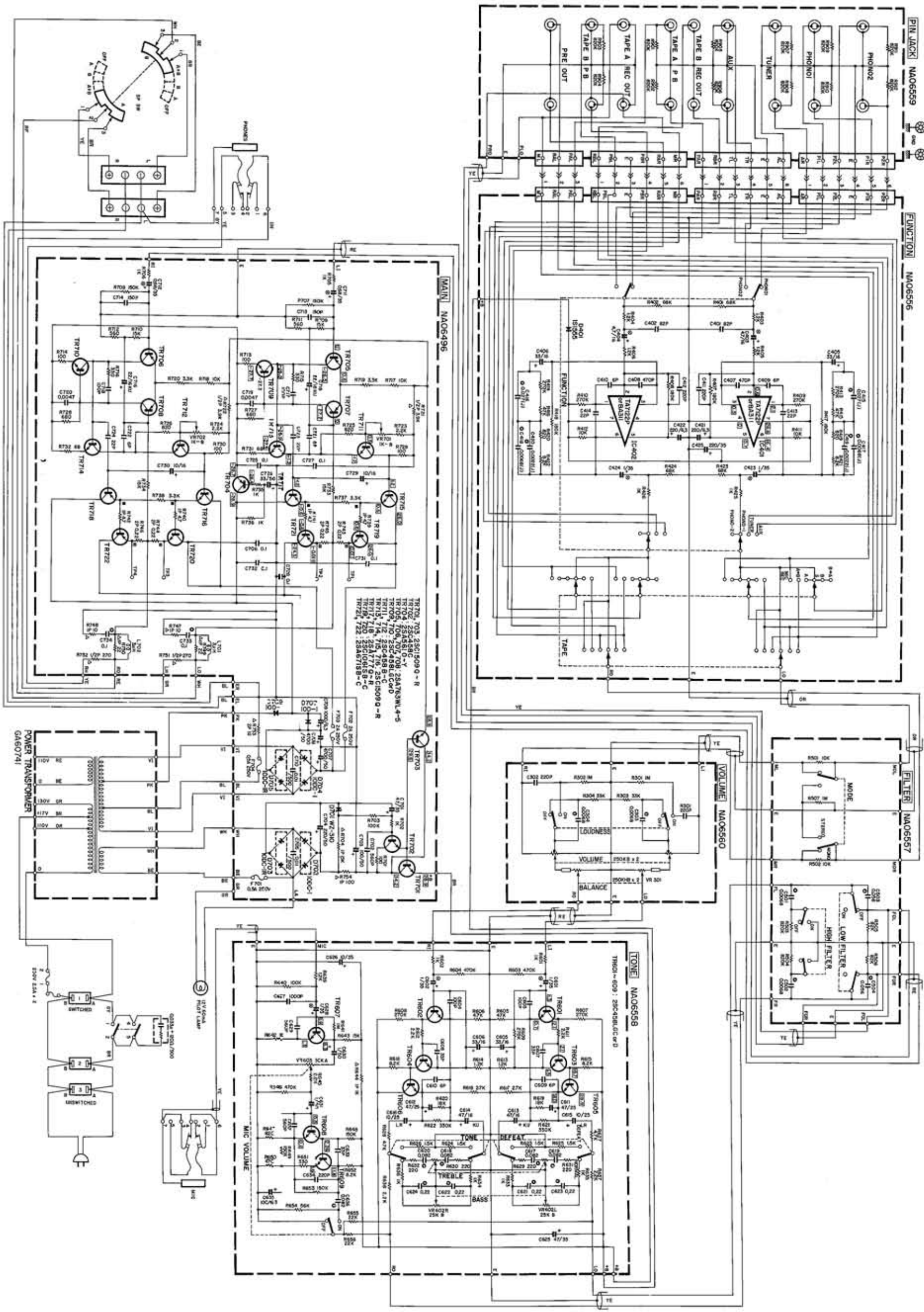
WIRE COLOR ABBREVIATIONS

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

| SYMBOL | PARTS NAME |
|---------|---------------------------|
| | FUSE RESISTOR |
| | METAL OXIDE RESISTOR |
| | CEMENT RESISTOR |
| NO MARK | CARBON RESISTOR |
| | CEMENT MOLDED RESISTOR |
| | METAL OXIDE FILM RESISTOR |
| | METAL PLATE RESISTOR |

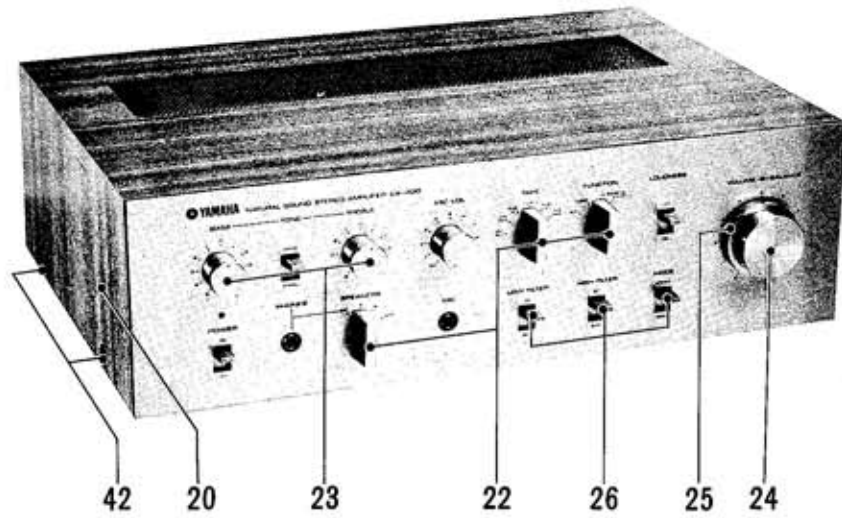
| SYMBOL | PARTS NAME | REMARKS |
|---------|-----------------------------------|---------|
| | MYLAR CAPACITOR | |
| NO MARK | CERAMIC CAPACITOR | |
| | POLYSTYRENE CAPACITOR | |
| NO MARK | (BI-POLAR) ELECTROLYTIC CAPACITOR | |
| | LOW-NOISE ELECTROLYTIC CAPACITOR | |
| | TANTALUM CAPACITOR | |

OVERALL SCHEMATIC DIAGRAM

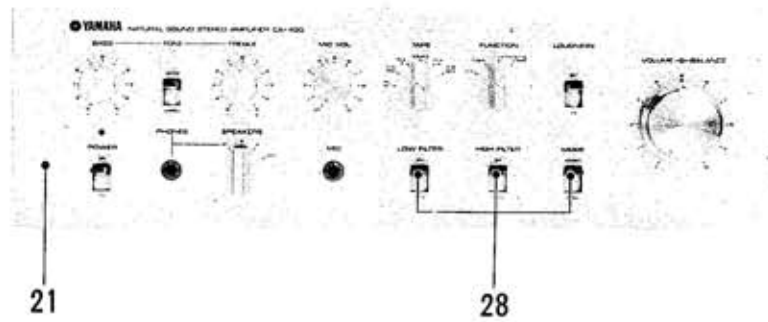


PARTS LIST

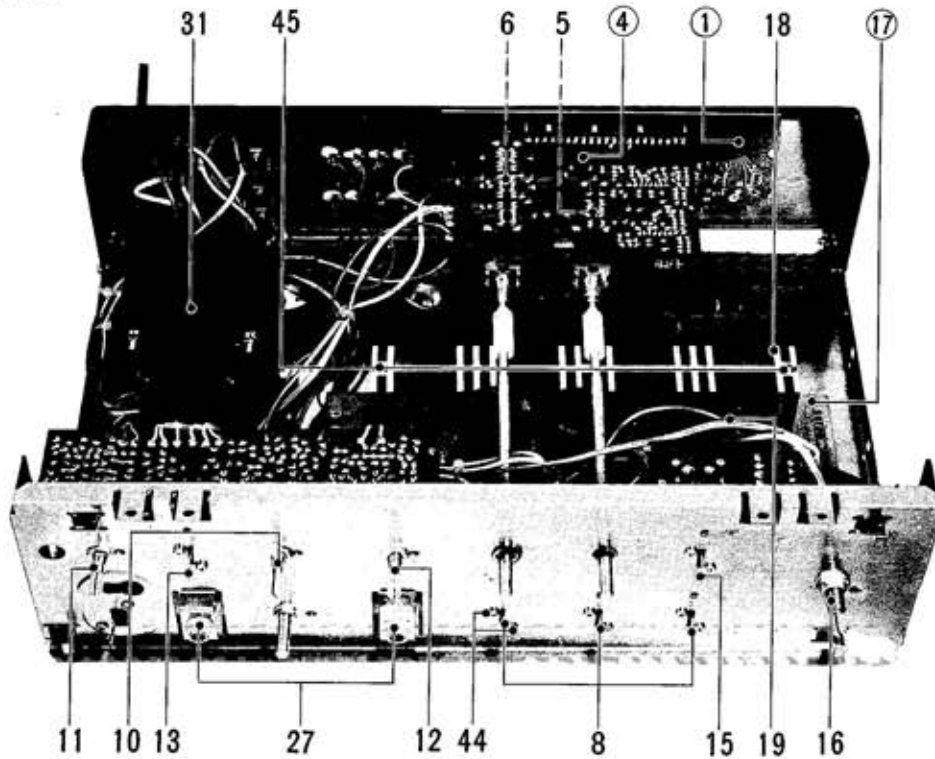
FRONT VIEW



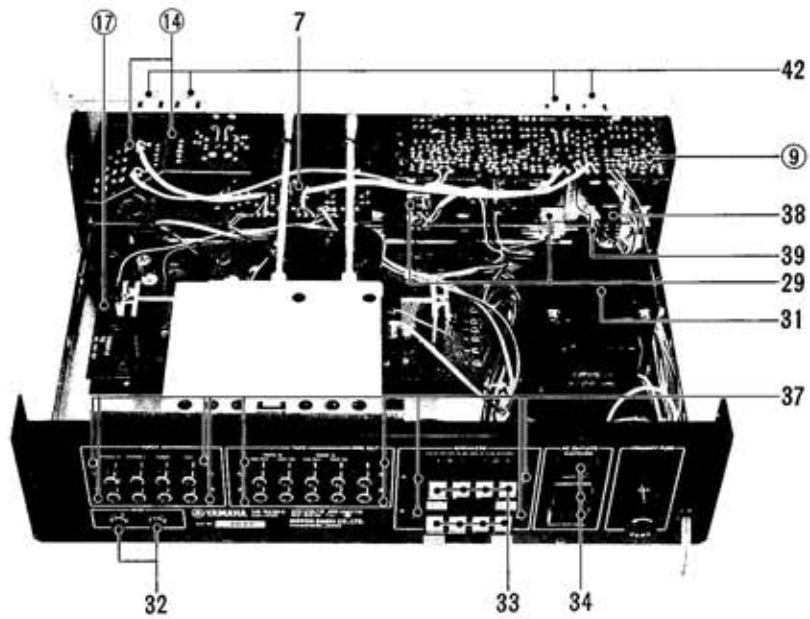
FRONT VIEW



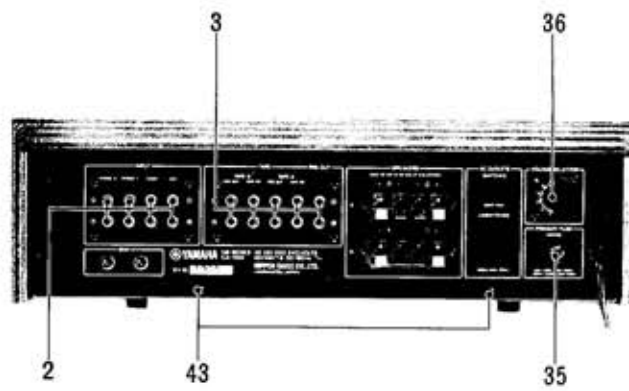
INTERNAL VIEW



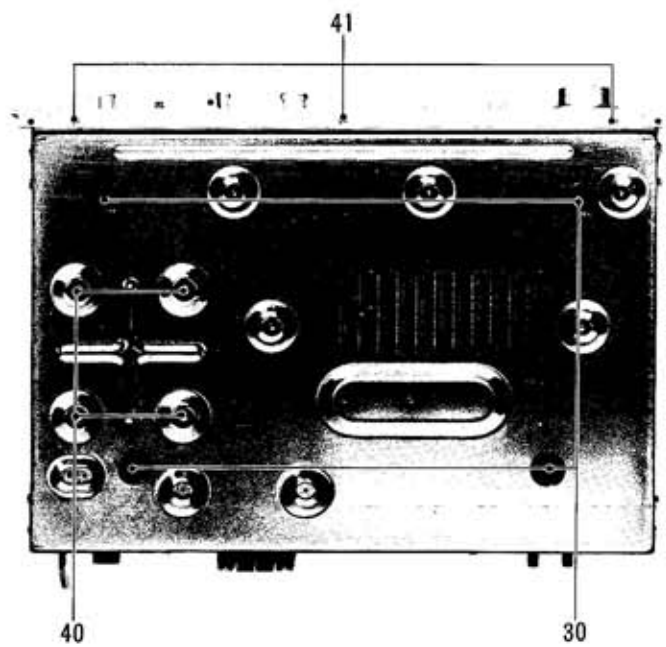
INTERNAL VIEW



BACK VIEW



BOTTOM VIEW



| Ref. No. | Part No. | Description | | Remarks | Common Models |
|----------|----------|-----------------------------|-----------------|---------------|---|
| ① | NA06494 | Pin jack circuit board | # 63990 | ピンジャックシート | Except U.S., Canadian & European models |
| | NA06559 | " | # 6452 | " | U.S. & Canadian models |
| | LB30012 | Connector pin | 2183 - 3A | コネクタースピン | |
| | LB60027 | " | 2402 - 6A | " | |
| 2 | LB60039 | 8P pin jack | | 8 P ピンジャック | |
| 3 | LB60049 | 10P " | | 10 P ピンジャック | |
| | NA06499 | DIN connector circuit board | # 64190 | D I N シ ー ト | European model |
| | LB30012 | Connector pin | 2183 - 3A | コネクタースピン | |
| | LB60027 | " | 2402 - 6A | " | |
| | LB50009 | DIN connector socket | 5P SMK | D I N ソ ケ ッ ト | |
| ④ | NA06491 | Function circuit board | # 63910 | ファンクションシート | Except U.S. & Canadian models |
| | NA06556 | " | # 64530 | " | U.S. & Canadian models |
| | FP13647 | Tantalum Capacitor | 4.7 μ F 16V | タンタルコン | |
| | FP15610 | " | 1 μ F 35V | " | |
| | iG00011 | Integrated circuit | TA-7122P | I C | |
| | iG00037 | " | BA-311 | I C | |
| | iF00004 | Diode | 1S1555 | ダイオード | |
| 5 | KA50024 | Rotary switch | SRZ-V-044 | ロータリースイッチ | |
| 6 | KA50040 | " | SRZ-066 | " | $\ell = 25$ Non-shorting |
| | LB30013 | Connector socket | 2145-3A | コネクタースOCKET | |
| | LB60028 | " | 2145-6A | " | |
| ⑦ | NA06492 | Filter circuit board | # 63920 | フィルタースシート | Except U.S. & Canadian models |
| | NA06557 | " | # 6451 | " | U.S. & Canadian models |
| 8 | KA20014 | Lever switch | SLA-34301 | レバースイッチ | Shorting |
| ⑨ | NA06493 | Tone control circuit board | # 63980 | トーンコンシート | Except U.S. & Canadian models |
| | NA06558 | " | # 64490 | " | U.S. & Canadian models |
| | FJ53747 | Electrolytic capacitor | 4.7 μ F 16V | ケシコン K U 型 | KU type |

| Ref. No. | Part No. | Description | | Remarks | Common Models |
|----------|----------|-------------------------------------|---|----------|-------------------------------|
| | FJ66610 | " | 1 μ F 50V | ケシコンLR型 | LR type |
| | FJ64710 | " | 10 μ F 25V | " | " |
| | FP15610 | Tantalum capacitor | 1 μ F 35V | タンタルコン | |
| 10 | HS41020 | Variable resistor V16R | 810K Ω x2 | 可変抵抗 | With 11 clicks |
| 11 | HS41021 | " | 825K Ω x2 | " | " |
| 12 | HS41015 | " | A50K | " | With switch |
| | | | | | |
| 13 | KA20012 | Lever switch | SL34202 | レバースイッチ | Shorting |
| | | | | | |
| | iC04589 | Transistor | 2SC458 LG C or D | トランジスター | |
| | | | | | |
| ⑬ | NA06498 | Volume circuit board | # 64081 | ボリュームシート | Except U.S. & Canadian models |
| | NA06560 | " | # 64501 | " | U.S. & Canadian models |
| | | | | | |
| 15 | KA20012 | Lever switch | SL34202 | レバースイッチ | Shorting |
| | | | | | |
| 16 | HS12041 | Variable resistor | 250K Ω 1Zx2 250K Ω Bx2 With C.T. | 可変抵抗 | |
| | | | | | |
| ⑰ | NA06495 | Main amp circuit board | # 64000 | メインシート | General & Australian models |
| | NA06496 | " | " | " | U.S. & Canadian models |
| | NA06497 | " | # 64180 | " | European model |
| | | | | | |
| | HZ00021 | Cement molded resistor (fire proof) | 4.7 Ω 1P | 不燃性抵抗 | |
| | | | | | |
| | HZ00058 | Fuse resistor | 100 Ω 1/2P | ヒューズ抵抗 | |
| | | | | | |
| | HL40527 | Metal oxide resistor | 270 Ω 1/2P | 酸化金属抵抗 | |
| | HL40639 | " | 3.9k Ω " | " | |
| | HL41410 | " | 10 Ω 1P | " | |
| | HL41422 | Metal oxide resistor | 22 Ω 1P | " | |
| | HL41615 | " | 1.5k Ω 1P | " | |
| | HL42410 | " | 10 Ω 2P | " | |
| | | | | | |
| | HZ00033 | Metal plate resistor | 0.22 Ω 2P | 金属板抵抗 | |
| | | | | | |
| | GD90005 | Coil | 3 μ H | コイル | |
| | | | | | |
| | FJ53722 | Electrolytic capacitor | 22 μ F 16V | KU型ケシコン | KU type |
| | | | | | |
| | FP15568 | Tantalum capacitor | 0.68 μ F 35V | タンタルコン | |
| | | | | | |

| Ref. No. | Part No. | Description | | | Remarks | Common Models |
|----------|---------------|--------------------------|--------------------|-------------|-----------------------------|---------------|
| | iH00008 | Diode | 10DC-1 | ダイオード | for service iH00014 | |
| | iH00009 | " | 10DC-1R | " | for service iH00015 | |
| | iH00003 | " | 10D-1 | " | for service iH00006 | |
| | iF00022 | Zener Diode | WZ-310 | ツェナーダイオード | | |
| | iA05617 | Transistor | 2SA561 O or Y | トランジスター | | |
| | iA07630 | | 2SA763 | " | | |
| | iA06719 | | 2SA671S B or C | " | | |
| | iA07773 | | 2SA777 Q or R | " | | |
| | iC04588 | | 2SC458 B or C | " | | |
| | iC10618 | | 2SC1061S B, C or D | " | | |
| | iC15093 | | 2SC1509 Q or R | " | | |
| | HT41002 | Variable resistor | SV10KR B1K | 可変抵抗器 | | |
| | iL00005 | Insulator for transistor | 2SC1061 | Tr用絶縁板 | AC221 | |
| | LB20057 | Fuse holder pin | SN-5053 | ヒューズホルダーピン | | |
| 18 | BA06522 | Heat sink | No. 6522 | 放熱器 | | |
| 19 | BB06308 | Transistor clamper | No. 6308 | Trブッシャー | | |
| | iL000025 | Bush No. 25 2.6 mm | | ブッシュ | PPO | |
| | FJ21910 | Electrolytic capacitor | 1000 μ F 6.3V | ケシコン (タテ) | | |
| | FM05947 | | 4700 μ F 50V | ケシコン (キバン) | | |
| | KB00031 | Fuse | 0.5AT 250V | 耐ラッシュヒューズ | General & Australian models | |
| | KB00035 | " | 2AT 250V | " | " | |
| | KB00101 | Fuse, UL listed | 0.5AT 250V | ULヒューズ | U.S. & Canadian models | |
| | KB00103 | " " | 2AT 250V | " | " | |
| | KB00071 | Miniature fuse | 0.5A 250V | Ⓢヒューズ速断 | European model | |
| | KB00056 | " " | 2A 250V | " | | |
| 20 | 3200337005000 | Outside case | | 外装箱 A/W | | |
| 21 | NB06942 | Front panel unit | | フロントパネルユニット | | |
| 22 | BA06442 | Knob | No. 6442 | スイッチつまみ | Switch | |
| 23 | BA06446 | " | No. 6446 | トーンコンツつまみ | Tone control | |
| 24 | BA06576 | Double knob | No. 1576 | ボリュームつまみ | Volume | |
| 25 | BA06577 | " | No. 6077 | バランスつまみ | Balance | |
| 26 | CB06857 | Lever knob | | レバーつまみ | | |

| Ref. No. | Part No. | Description | | | Remarks | Common Models |
|----------|----------|-----------------------------------|----------------------------|--|------------|---------------------------------|
| 27 | CB06827 | Phone nut | | | ホーンナット | |
| | CB06858 | Bush | No. 6858 | | スイッチブッシュ | Switch |
| 28 | CB06872 | Switch apron | No. 6872 | | スイッチエプロン | |
| | CB06862 | Lamp holder | | | ランプホルダー | |
| | CB06861 | Lamp lens | No. 6861 | | ランプレンズ | |
| 29 | LB10007 | Phone jack | | | ホーンジャック | |
| | | | | | | |
| 30 | CB06855 | Leg | No. 6855 | | 脚 | |
| | | | | | | |
| 31 | GA60741 | Power transformer | | | 電源トランス | Except European model |
| | GA60742 | " | | | " | European model |
| | LA00104 | 3P terminal lug | | | 3P中継端子台 | Australian & European models |
| 32 | LA00107 | Ground terminal (knob type) | | | アース端子 | |
| 33 | LA00132 | 4PE push terminal | X-Q2366 | | スピーカー端子 | Except European model |
| | LB20005 | DIN 2P socket | CS-220 | | DIN2Pソケット | European model |
| 34 | LB20071 | AC connector socket (spring type) | | | ACコンセント | General, U.S. & Canadian models |
| 35 | LB20048 | " | (UL type) | | " | Except European model |
| | LB20059 | " | FEB031-1401 | | " | European model |
| | | | | | | |
| | KB00043 | Fuse | 1.25AT 250V | | ヒューズ | General model |
| | KB00111 | Fuse, UL listed | 2.5A 250V SS-2 | | " | U.S. & Canadian models |
| | KB00068 | Miniature fuse | 1.25AT 250V | | " | European model |
| | KB00088 | Lead type fuse | 2.5A 250V ASF-3 | | " | U.S. & Canadian models |
| | KB00034 | Fuse | 1.5AT 250V | | " | Australian model |
| 36 | LB20025 | Voltage selector | 033-3001 | | 電圧切換器 | General & European models |
| 37 | CB06888 | Plastic rivet | | | プラスチックリベット | |
| | KA50033 | Rotary switch | | | ロータリースイッチ | Speaker selector |
| | | | | | | |
| 38 | KA20010 | Lever switch | JL-04 | | パワースイッチ | Except European model |
| | KA20011 | " | JL-08 | | " | European model |
| | | | | | | |
| 39 | FZ00011 | Spark killer | 0.33 μ F +120 Ω | | スパークキラー | Except European model |
| | | | | | | |
| | TX90083 | Hexagonal wrench | 2.0 mm | | 六角棒レンチ | |
| | | | | | | |
| | NB06678 | Service pad | No. 6678 | | サービスパッド | |
| | | | | | | |
| | MZ06189 | Connection cord | Pin-Pin | | 接続コード | Except European model |
| | MZ06160 | " | DIN-DIN | | " | European model |
| | | | | | | |
| | LB10018 | Shorting plug, Black | | | ショートプラグ | Except European model |
| | | | | | | |
| | JB00023 | Pilot lamp (lead type) | 12V 60mA | | リード付ランプ | |

