

# TA-F444ESII

## SERVICE MANUAL



*US Model*

*Canadian Model*

*AEP Model*

*UK Model*

*E Model*

### SPECIFICATIONS

#### AUDIO POWER SPECIFICATIONS

#### POWER OUTPUT AND TOTAL HARMONIC DISTORTION : (US, Canadian model)

With 6 ohm loads, both channels driven, from 20 - 20,000 Hz; rated 120 watts per channel minimum RMS power, with no more than 0.006% total harmonic distortion from 250 milliwatts to rated output.

With 8 ohm loads, both channels driven, from 20 - 20,000 Hz; rated 100 watts per channel minimum RMS power, with no more than 0.004% total harmonic distortion from 250 milliwatts to rated output.

#### OTHER SPECIFICATIONS

##### Amplifier

| Item  | Condition                          | TA-F444ESII                                     |
|---|------------------------------------|---|
| Continuous RMS power output (both channels driven simultaneously) | 4 ohms, 20 Hz - 20 kHz, THD 0.008% | 140 W + 140 W (E model)                         |
|   | 6 ohm, 20 Hz - 20 kHz, THD 0.006%  | 120 W + 120 W (G-AEP, UK, E and Canadian model) |
|   |                                    | 110 W + 110 W (AEP model)                       |
|   | 8 ohms, 20 Hz - 20 kHz, THD 0.004% | 100 W + 100 W (G-AEP, UK, E and Canadian model) |
|   |                                    | 90 W + 90 W (AEP model)                         |

|                            |                   |                           |
|----------------------------|-------------------|---------------------------|
| Power bandwidth (IHF)      | 4 ohms, THD 0.02% | 10 Hz - 100 kHz (E model) |
|                            | 6 ohms, THD 0.02% | 10 Hz - 100 kHz           |
|                            | 8 ohms, THD 0.02% | 10 Hz - 100 kHz           |
| Dynamic headroom ('78 IHF) | 4 ohms            | 2 dB (E model)            |
|                            | 6 ohms            | 1.5 dB                    |
|                            | 8 ohms            | 1.2 dB                    |

— Continued on page 2 —

#### SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY SHADING AND MARK ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

#### ATTENTION AU COMPOSANT AYANT RAPPORT À LA SÉCURITÉ!

LES COMPOSANTS IDENTIFIÉS PAR UNE TRAME ET UNE MARQUE SUR LES DIAGRAMMES SCHÉMATIQUES ET LA LISTE DES PIÈCES SONT CRITIQUES POUR LA SÉCURITÉ DE FONCTIONNEMENT. NE REMPLACER CES COMPOSANTS QUE PAR DES PIÈCES SONY DONT LES NUMÉROS SONT DONNÉS DANS CE MANUEL OU DANS LES SUPPLÉMENTS PUBLIÉS PAR SONY.

# INTEGRATED STEREO AMPLIFIER

# SONY®



MICROFILM

AUD

| Item  | Condition  |   | TA-F444ESII           |
|---|--|---|-----------------------|
| Total harmonic distortion   | 4 ohms,<br>at 10 watt<br>output                            | 0.006%<br>(E model)                                   |                       |
|   | 6 ohms,<br>at 10 watt<br>output                            | 0.004%  |                       |
|   | 8 ohms,<br>at 10 watt<br>output                            | 0.002%  |                       |
| Intermodula-<br>tion (IM) distortion<br>$60 \text{ Hz} : 7 \text{ kHz} = 4 : 1$ | 4 ohms,<br>at rated<br>output                              | 0.008%<br>(E model)                                   |                       |
|   | 6 ohms,<br>at rated<br>output                              | 0.006%  |                       |
|   | 8 ohms,<br>at rated<br>output                              | 0.004%  |                       |
| Damping factor  | 8 ohms, 1 kHz  | 50  |                       |
| Slew rate   | —  | 125 V/ $\mu$ sec<br>250 V/ $\mu$ sec<br>(inside)      |                       |
| Dynamic range   | input<br>TUNER, CD,<br>TAPE 1, 2,<br>VIDEO 1, 2<br>(audio) | 120 dB  |                       |
| Channel<br>separation<br>(at 1 kHz)   | PHONO MC   | 80 dB   |                       |
|   | PHONO MM   | 95 dB   |                       |
|   | TUNER, CD,<br>TAPE 1, 2,<br>VIDEO 1, 2<br>(audio)          | 100 dB  |                       |
| Residual noise  | network A  | 28 $\mu$ V  |                       |
| Frequency<br>response   | PHONO MM   | RIAA equaliza-<br>tion curve<br>$\pm 0.2$ dB          |                       |
|   | TUNER, CD,<br>TAPE 1, 2,<br>VIDEO 1, 2<br>(audio)          | 2 Hz – 200 kHz<br>$\pm 0$<br>$-3$ dB                  |                       |
|   | TUNER, CD,<br>TAPE 1, 2,<br>VIDEO 1, 2<br>(audio)          | 2 Hz – 100 kHz<br>$\pm 0$<br>$-3$ dB<br>(G-AEP model) |                       |
| Input sensitivi-<br>ty/impedance  | PHONO  | 3 ohms  | 0.17 mV,<br>40 ohms   |
|   |  | MC  | 0.17 mV,<br>100 ohms  |
|   | MM   |   | 2.5 mV,<br>50 kilohms |
| Maximum input<br>capability<br>(1 kHz)  | PHONO<br>(1 kHz,<br>THD<br>0.003%)                         | MC  | 9 mV                  |
|   |  | MM  | 150 mV                |

| Item              | Condition   |  | TA-F444ESII   |
|-------------------|---|--|---|
| S/N (network)     | PHONO   | MC   | 71 dB*, 68 dB (A)   |
|                   |   | MM   | 83 dB*, 87 dB (A)   |
|                   | TUNER, CD,<br>TAPE 1, 2,<br>VIDEO 1, 2<br>(audio) |  | 102 dB*, 97 dB (A)  |
| * 78 IHF          | Output voltage<br>impedance                       | REC OUT 1, 2,<br>VIDEO 1<br>(audio)  | 150 mV,<br>1 kilohms  |
|                   |   | HEADPHONES   | 25 milliwatts<br>(at 8 ohms)<br>Accepts low<br>and high im-<br>pedance<br>headphones. |
|                   | Tone controls                                     | BASS, at 60 Hz   | $\pm 8$ dB (turn-<br>over freq.<br>300 Hz)  |
| T                 |   | TREBLE, at<br>25 kHz   | $\pm 8$ dB (turn-<br>over freq.<br>5 kHz)   |
|                   | BASS BOOST  | at 50 Hz   | + 4 dB  |
|                   | SUBSONIC<br>filter                                |  | 6 dB/octave<br>attenuation<br>below 15 Hz   |
| Video             |   |  |   |
| Item              | Condition   | TA-F444ESII  |   |
| Input/output      | voltage   | 1 V p-p  |   |
|                   | impedance   | 75 ohms  |   |
| General<br>System | Preamplifier section:                             | low-noise IC NF type<br>equalizer amplifier  |   |
|                   | Power amplifier section:                          | quasi-<br>complementary SEPP OTL OCL power<br>amplifier with all stages direct coupled   |   |
|                   | Power requirements                                | AEP, G-AEP model: 220 V ac, 50/60 Hz<br>US, Canadian model: 120 V ac, 60 Hz<br>UK model: 240 V ac, 50 Hz<br>E model: 120, 220, or 240 V ac adjustable,<br>50/60 Hz |   |
| Power consumption | AEP model;  | 270 watts  |   |
|                   | US model;   | 270 watts  |   |
|                   | Canadian model;                                   | 520VA  |   |
| AC outlets        | G-AEP model;                                      | 280 watts  |   |
|                   | UK model;   | 260 watts  |   |
|                   | E model;  | 330 watts  |   |
| Dimensions        | AEP, G-AEP, UK model:                             | 1 switched,<br>100 watts max.  |   |
|                   | US, Canadian model:                               | 2 switched, total 100 watts<br>max., 2 unswitched, total 100 watts.  |   |
|                   | E model:  | 1 unswitched, 100 watts max.,<br>1 switched, 100 watts max.  |   |
| Weight            | Approx.   | 430 x 135 x 425 mm (w/h/d)<br>(17 x 5 $\frac{1}{8}$ x 16 $\frac{1}{4}$ inches)   |   |
|                   | including projecting parts and controls           |  |   |
|                   | Approx.   | 13.3 kg (29 lbs 6 oz) net  |   |

## FEATURES

**A.C.T. (AUDIO CURRENT TRANSFER) TECHNOLOGY**  
With A.C.T. technology, which reduces interference and noise as low as possible, the 4 signals of right and left channels of the pre-amp and power amp sections are separated, obtaining the best performance at the normal listening level.

**SUPER LEGATO LINEAR POWER AMPLIFIER STAGE**  
The operation of the power amplifier stage is stable without any observable distortion up through the higher frequencies. Because of its very low switching distortion, the output waveform is smooth.

### POWERFUL POWER SUPPLY

Powerful transformer of 250 VA are respectively used in the power supply section to obtain rich sound. In addition, use of the ES filter together with the newly developed large chemical capacitor eliminates the power interference.

### SELECTED AUDIO PARTS

A large heatsink and high-rigidity chassis are used to prevent thermal modulation distortion and vibration distortion, respectively. LC-OFC (Linear Crystal Oxion-free Copper) leads are used for internal wiring and speaker output coil. In addition, other audio parts are selected by frequent sound monitoring.

## SAFETY CHECK-OUT (US Model)

After connecting the original service bypasses, perform the following safety check before lessening the set to the minimum.

### VARIOUS VIDEO OPERATIONS

This amplifier is equipped with 2 pairs of video jacks (one pair for playback/recording and one for playback) to allow you to perform various video operations.

### SPEAKER PROTECTION CIRCUIT

When a short circuit or DC component is detected at the speaker outputs, the power/standby indicator blinks in red and the built-in speaker protection circuit functions to protect the speakers.

### MUTING CIRCUIT

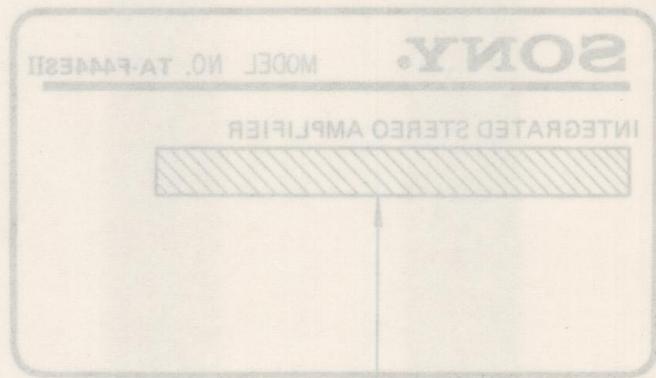
When the power is supplied, the power/standby indicator blinks in red and the muting circuit functions until the amplifier operation becomes stable.

### CARTRIDGE SELECTOR

The high-gain equalizer amplifier stage accepts both MM (Moving-Magnet) and MC (Moving-Coil) cartridges.

### AUDIO REC OUT SELECTOR SWITCH

With the AUDIO REC OUT SELECTOR switch, you can select the sound source to be recorded while listening to another audio source. This switch is also used to select tape (audio and video) dubbing and editing mode.



|         |                        |          |        |             |        |           |        |                |        |          |        |
|---------|------------------------|----------|--------|-------------|--------|-----------|--------|----------------|--------|----------|--------|
| E MODEL | AC120\220\240A 20\80Hs | UK MODEL | AC220A | G-AEP MODEL | AC220A | AEP MODEL | AC220A | Cusdcius MODEL | AC120A | US MODEL | AC120A |
|         | 330W                   |          | 280W   | 20\60Hs     | 280W   | 20\80Hs   | 280W   | 20\80Hs        | 280W   | 20\80Hs  | 280W   |
|         |                        |          |        |             |        |           |        |                |        |          |        |

## SAFETY CHECK-OUT (US Model)

After correcting the original service problem, perform the following safety check before releasing the set to the customer:

Check the antenna terminals, metal trim, "metallized" knobs, screws, and all other exposed metal parts for AC leakage. Check leakage as described below.

### LEAKAGE TEST

The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5 mA (500 microamperes). Leakage current can be measured by any one of three methods.

1. A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufacturers' instructions to use these instruments.
2. A battery-operated AC milliammeter. The Data Precision 245 digital multimeter is suitable for this job.

3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The "limit" indication is 0.75V, so analog meters must have an accurate low-voltage scale. The Simpson 250 and Sanwa SH-63Trd are examples of a passive VOM that is suitable. Nearly all battery operated digital multimeters that have a 2V AC range are suitable. (See Fig. A)

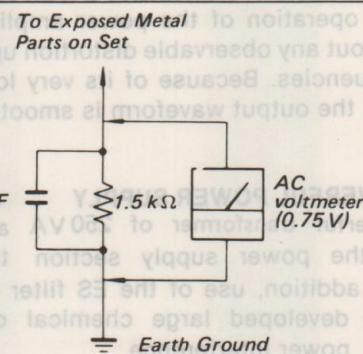


Fig. A. Using an AC voltmeter to check AC leakage.

### MODEL IDENTIFICATION

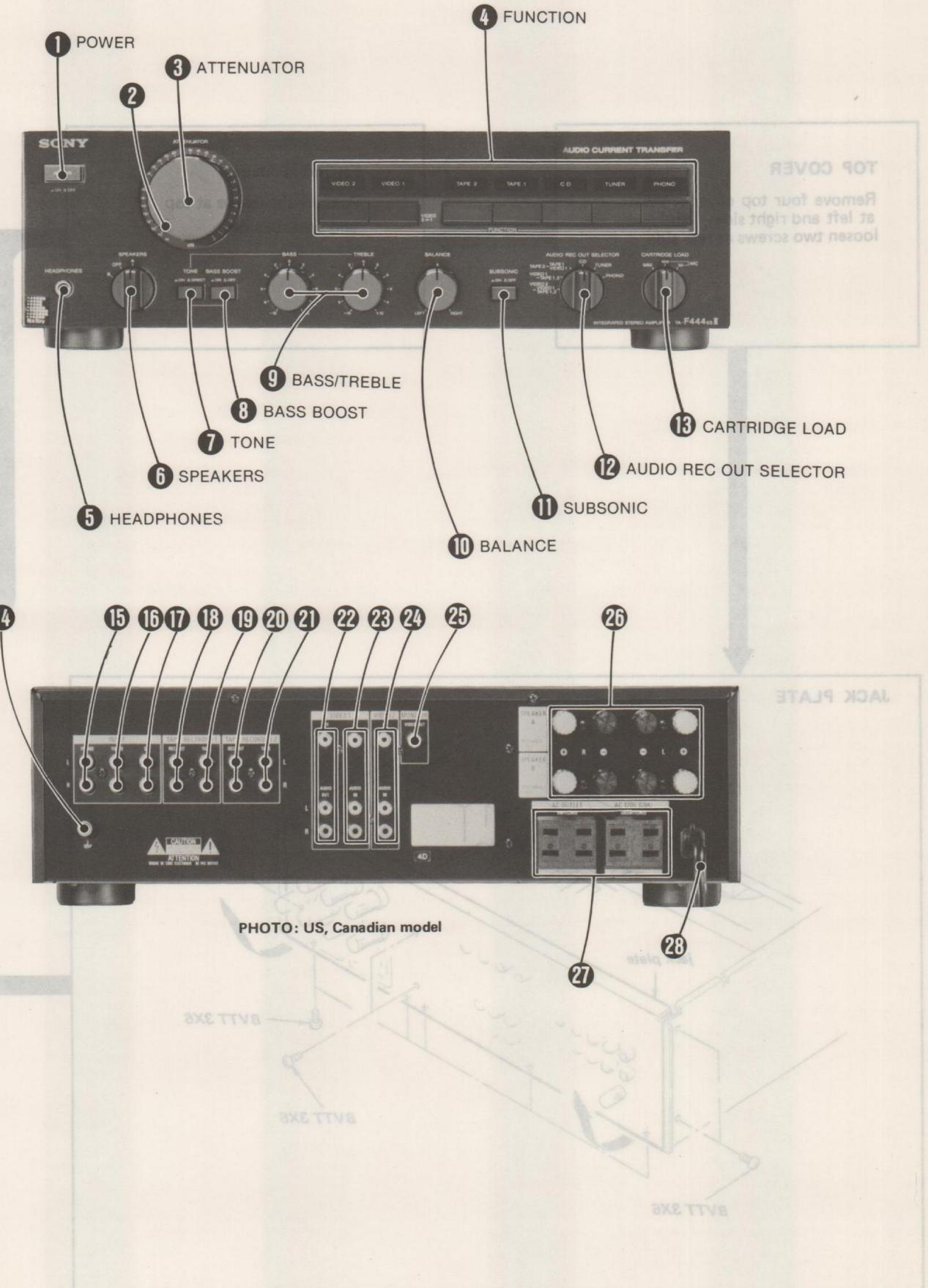
— Specification Label —

**SONY®**

MODEL NO. TA-F444ESII

INTEGRATED STEREO AMPLIFIER

|                |   |                |         |       |
|----------------|---|----------------|---------|-------|
| US MODEL       | : | AC120V         | 60Hz    | 270W  |
| Canadian MODEL | : | AC120V         | 60Hz    | 520VA |
| AEP MODEL      | : | AC220V         | 50/60Hz | 270W  |
| G-AEP MODEL    | : | AC220V         | 50/60Hz | 280W  |
| UK MODEL       | : | AC240V         | 50/60Hz | 260W  |
| E MODEL        | : | AC120/220/240V | 50/60Hz | 330W  |

SECTION 5  
DISASSEMBLY

## FUNCTION OF CONTROLS

**① POWER switch**  
Turns the operating power on or off.

**② Power/standby indicator**  
When the power is turned on, the muting circuit activates and the indicator blinks in red. The indicator then lights up in green indicating that the unit is now in standby. The indicator will also blink in red when the protection circuit is activated.

**③ ATTENUATOR knob**  
Regulates the overall sound level. Turning the knob toward 0 increases the volume and turning it toward  $-\infty$  decreases the volume. Be sure to lower the volume whenever you turn the amplifier on or off.

**④ FUNCTION buttons and indicators**  
Press to select the desired audio or video program source. Press another button to change the program. The indicator lamp above the pressed button will light up, indicating the program in use.

**⑤ HEADPHONES jack**  
Accepts any low or high impedance stereo headphones. For headphone monitoring only, set the SPEAKERS selector to OFF.

**⑥ SPEAKERS selector**  
Selects speaker system A or B.

**⑦ TONE switch**  
Depress this switch ( $\Delta$  ON) when you adjust the tone controls or when you use the BASS BOOST switch. While you keep the switch released ( $\Delta$  DIRECT), the tone control circuits are completely disconnected from the signal path and a flat frequency response is obtained.

**⑧ BASS BOOST switch**  
Depress this switch ( $\Delta$  ON) when you are driving a speaker system such as a small bookshelf type system, which has a weak bass response. When the BASS BOOST switch is to be used, be sure to first depress the TONE switch ( $\Delta$  ON).

**⑨ BASS and TREBLE tone controls**  
These knobs control the prominence of bass and treble response. Clockwise rotation increases response; counterclockwise rotation decreases it. Adjust the tone to the acoustic condition of the listening room or to your preference. When these tone controls are to be used, be sure to first depress the TONE switch ( $\Delta$  ON).

**⑩ BALANCE control**  
Governs the amount of sound coming from each paired speaker to get optimum stereo effect.

**⑪ SUBSONIC filter switch**  
If subsonic noise components created by warped records, etc. are present, the audible range frequencies may be modulated and cause irritating intermodulation distortion. In this case, depress the switch ( $\Delta$  ON) to reduce unwanted noise components in the program source. The filter will cut off any input signals below 15 Hz at a 6 dB-per-octave rate. Press the switch again to release it ( $\Delta$  OFF).

**⑫ AUDIO REC OUT SELECTOR switch**  
Permits you to select the desired program source you want to record. For tape dubbing or video editing, set this switch to appropriate position.

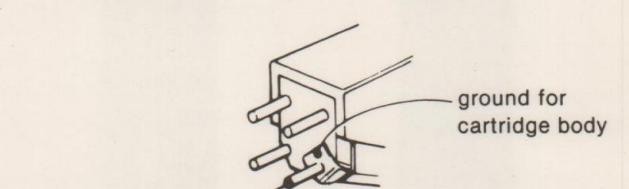
**⑬ CARTRIDGE LOAD selector**  
Before you play a record, be sure to set the selector as follows:

Moving-Magnet (MM) type cartridge  
Set the CARTRIDGE LOAD selector to MM.  
Moving-Coil (MC) type cartridge  
 $40\Omega$ : for a cartridge with an impedance of 40 ohms or more.  
 $3\Omega$ : for a cartridge with an impedance in the 3 to 40 ohms range.

## Rear panel

**⑭ Ground terminal**  
To prevent hum, be sure to connect the ground wire of the turntable system to this ground terminal. If hum still exists, it may be helpful to connect the ground terminal directly to earth via a ground rod.

**Note**  
In some particular MM cartridges, the ground for signal is connected to the ground for cartridge body. If this type of cartridge should be installed to a metal cartridge shell, current will flow through the tonearm ground in a loop and will cause hum noise. In this case, disconnect the turntable ground wire from the  $\Delta$  terminal of the amplifier, or disconnect the ground for cartridge body from the ground for signal.



**⑮ PHONO inputs (phono jack)**

**⑯ TUNER inputs (phono jack)**

**⑰ CD inputs (phono jack)**

**⑱ TAPE RECORDER 1 REC OUT outputs (phono jack)**  
Accept the inputs of a tape deck for recording.

**⑲ TAPE RECORDER 1 TAPE inputs (phono jack)**  
Accept the line outputs of a tape deck for playback.

**⑳ TAPE RECORDER 2 REC OUT outputs (phono jack)**  
Accept the inputs of a second tape deck for recording.

**㉑ TAPE RECORDER 2 TAPE inputs (phono jack)**  
Accept the line outputs of a second tape deck for playback.

**㉒ VIDEO 1 OUT output and VIDEO 1 AUDIO OUT outputs (phono jack)**

**VIDEO 1 OUT:** Accepts the video input of a video recorder.

**VIDEO 1 AUDIO OUT:** Accept the audio inputs of a video recorder.

**㉓ VIDEO 1 IN input and VIDEO 1 AUDIO IN inputs (phono jack)**

**VIDEO 1 IN:** Accepts the video output of a video recorder.

**VIDEO 1 AUDIO IN:** Accept the audio outputs of a video recorder.

**㉔ VIDEO 2 IN input and VIDEO 2 AUDIO IN inputs (phono jack)**

**VIDEO 2 IN:** Accepts the video output of a TV tuner for multiple video source connection, a monaural video recorder or a second video recorder for video editing.

**VIDEO 2 AUDIO IN:** Accept the audio outputs of a TV tuner for multiple video source connection, a monaural video recorder or a second video recorder for video editing.

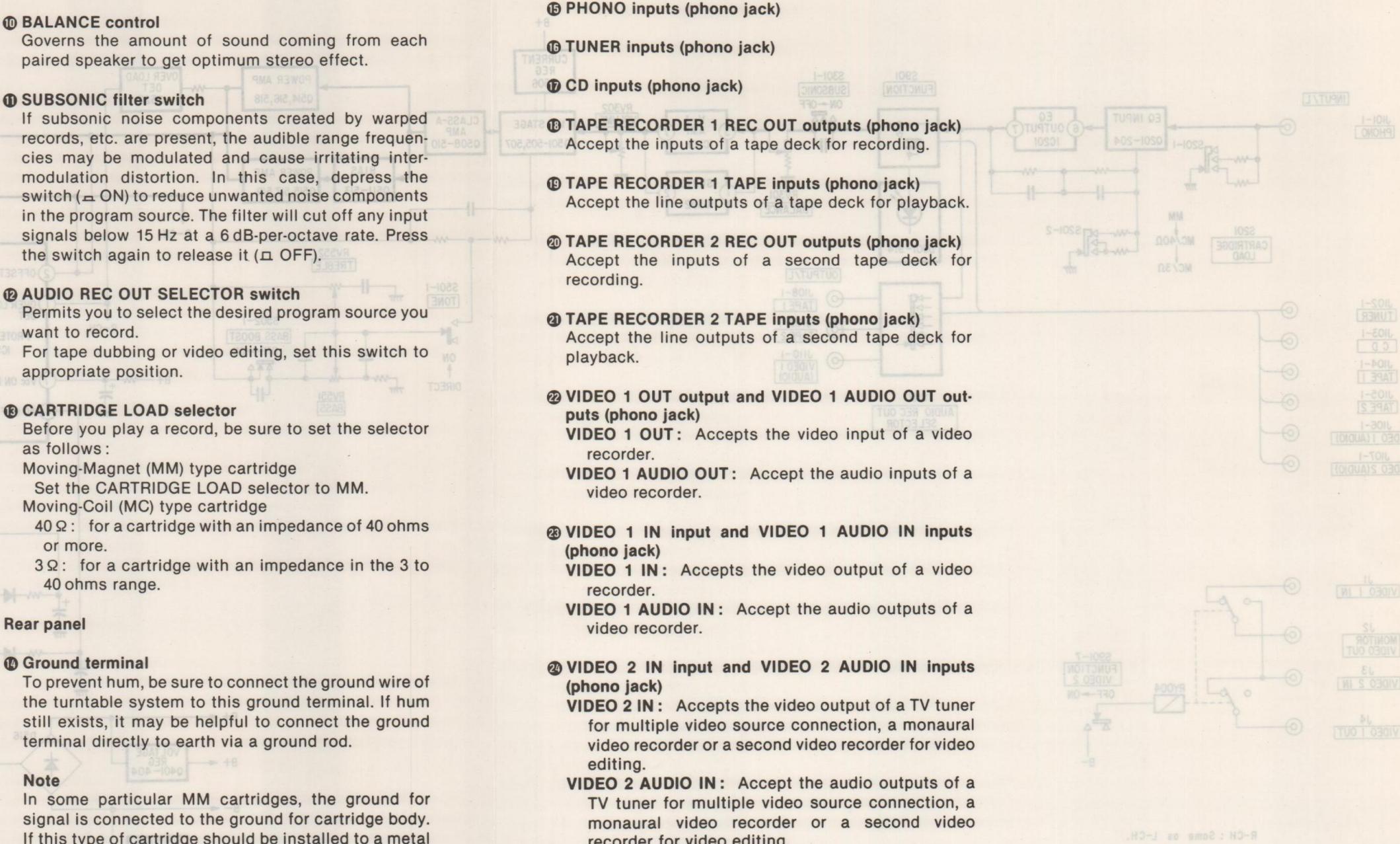
**㉕ MONITOR VIDEO OUT output (phono jack)**  
Accepts the input of a color monitor.

**㉖ SPEAKER A, B connectors**

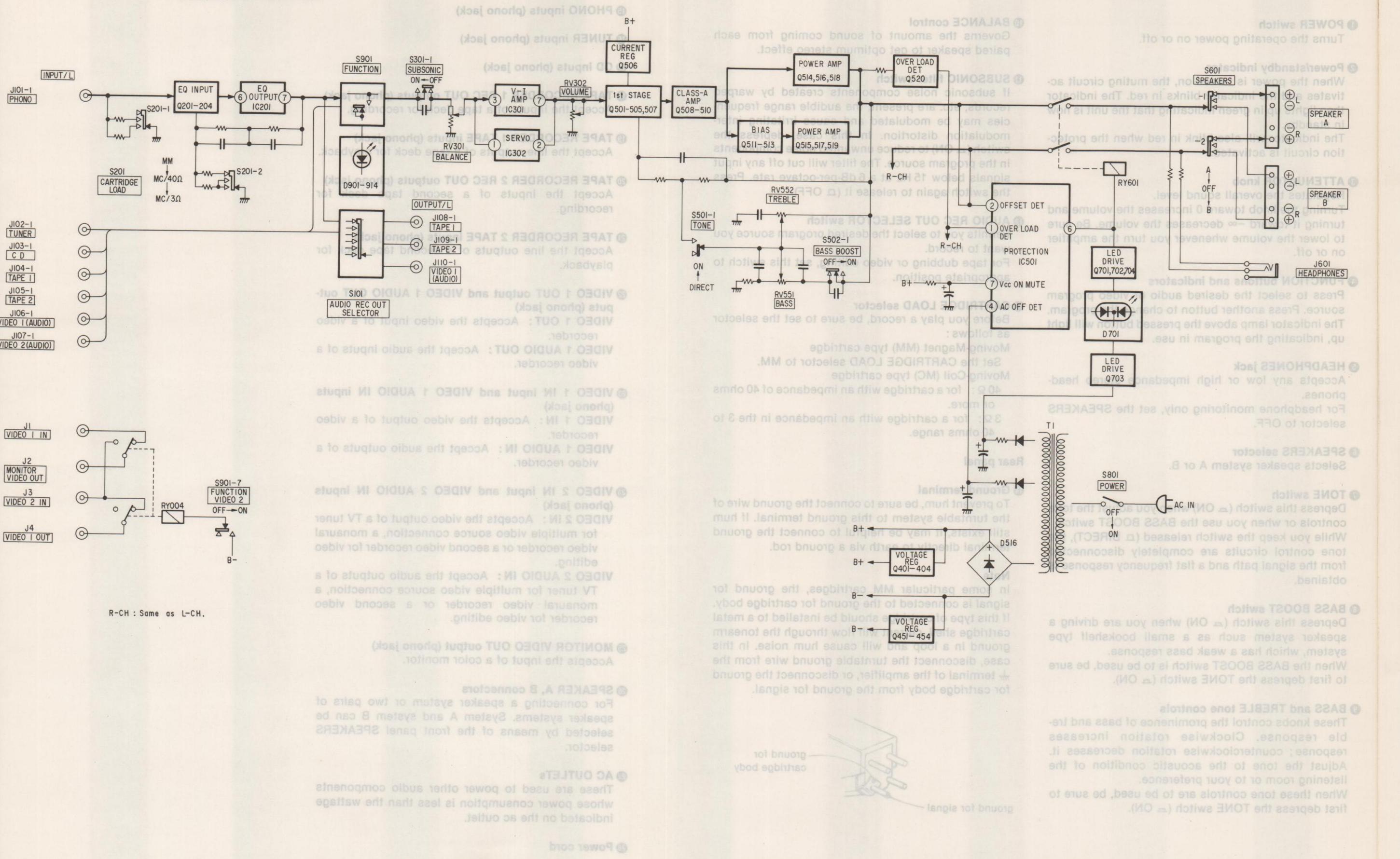
For connecting a speaker system or two pairs of speaker systems. System A and system B can be selected by means of the front panel SPEAKERS selector.

**㉗ AC OUTLETS**  
These are used to power other audio components whose power consumption is less than the wattage indicated on the ac outlet.

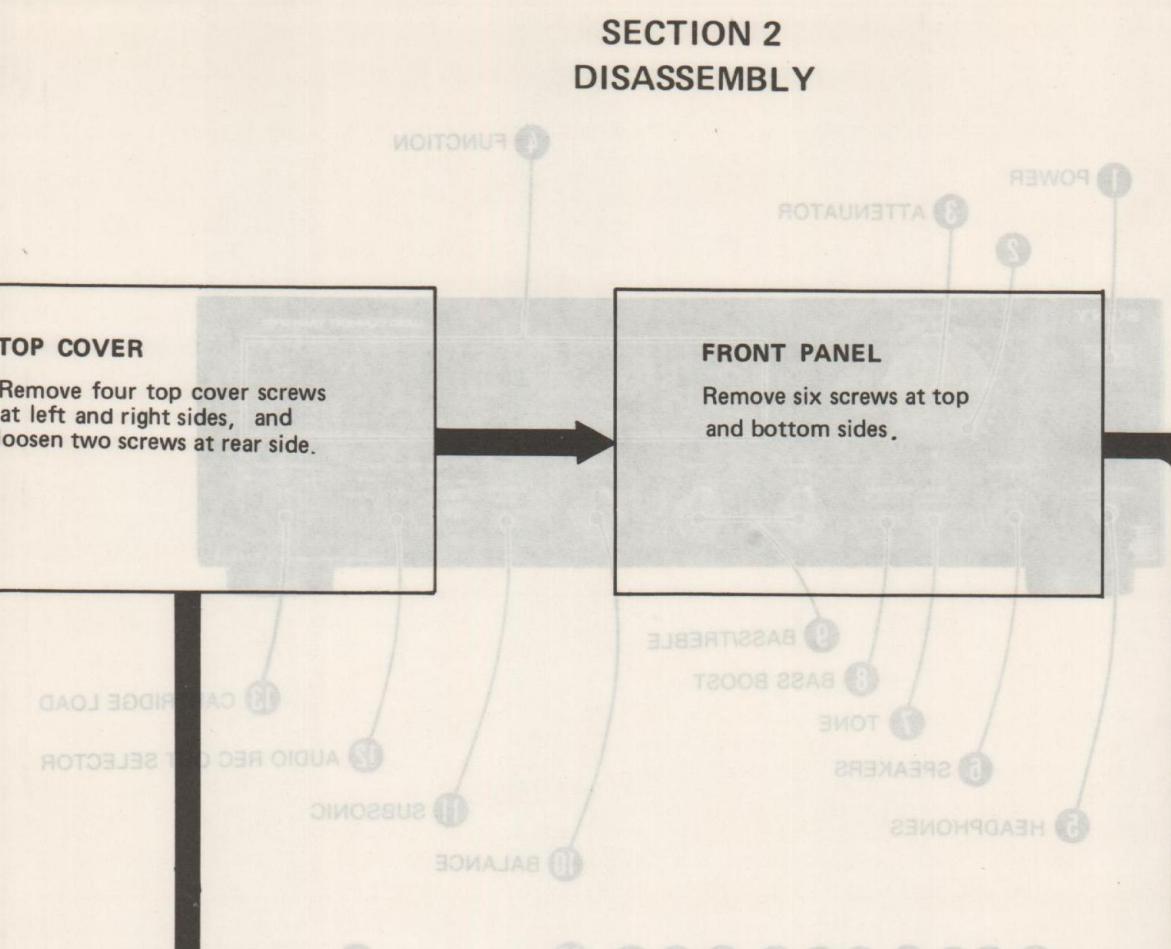
**㉘ Power cord**

SECTION 1  
BLOCK DIAGRAM

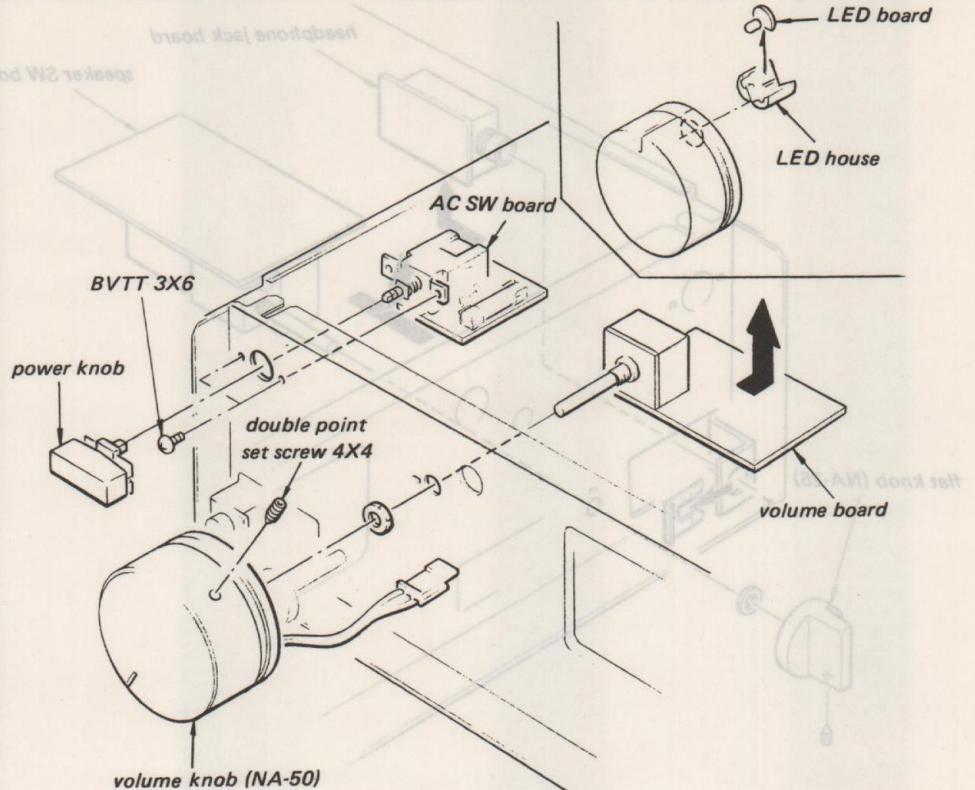
## SECTION 1 BLOCK DIAGRAM



## SECTION 2 FUNCTION OF CONTROLS

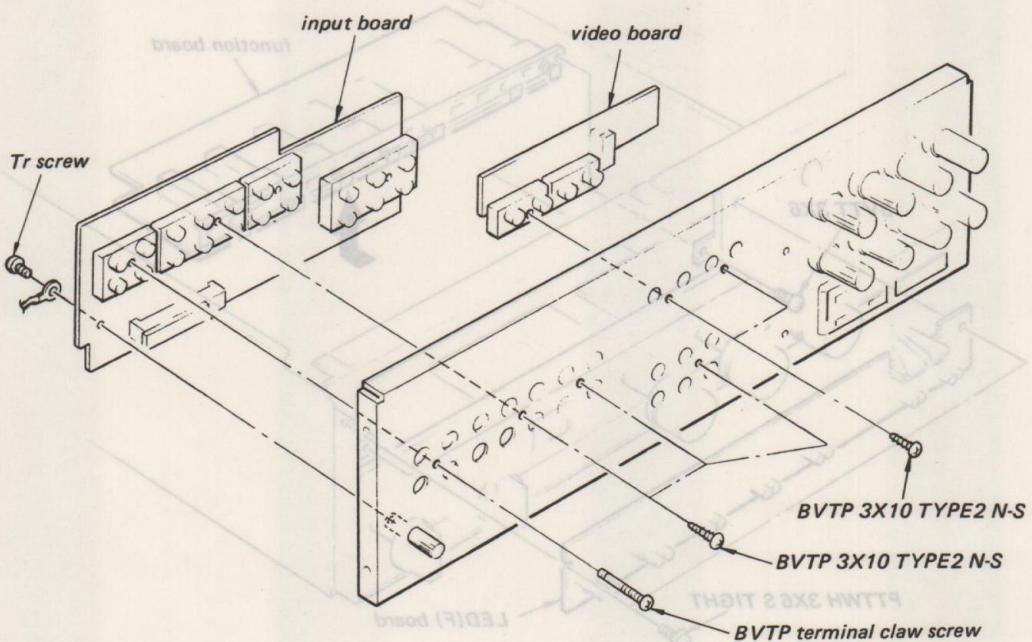


## AC SW BOARD / VOLUME BOARD / LED BOARD

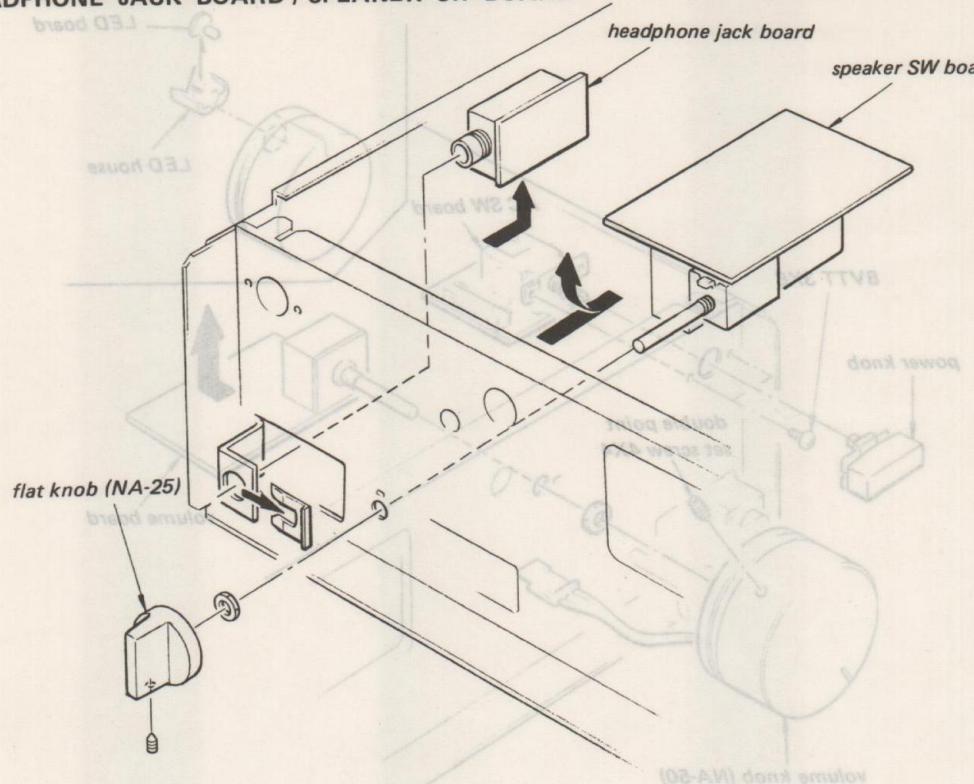


## INPUT BOARD / VIDEO BOARD

## FUNCTION BOARD / LED(H) BOARD

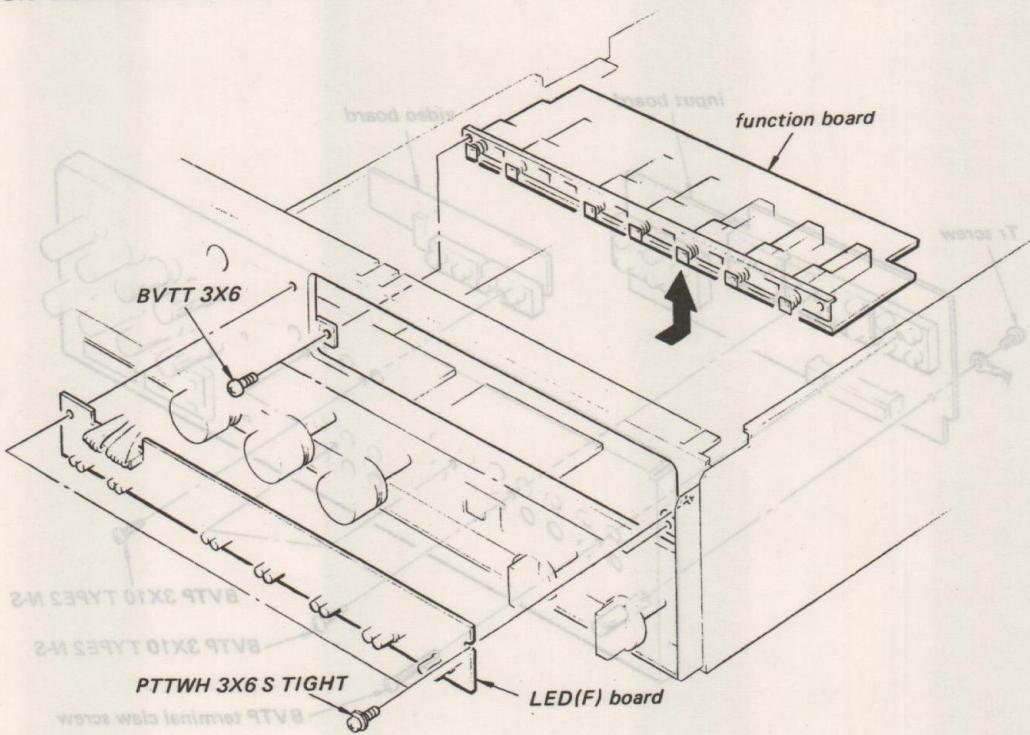


## HEADPHONE JACK BOARD / SPEAKER SW BOARD

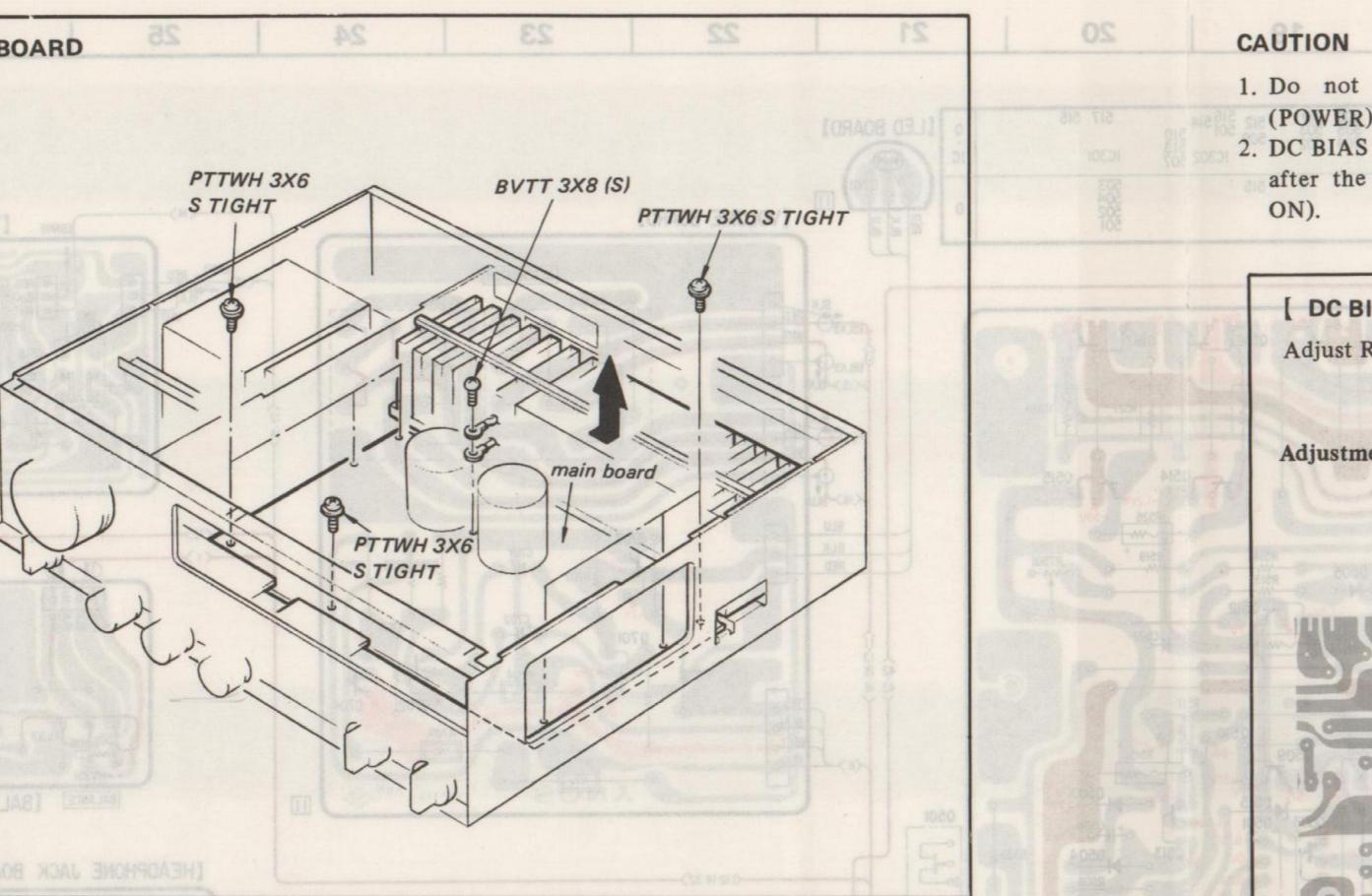
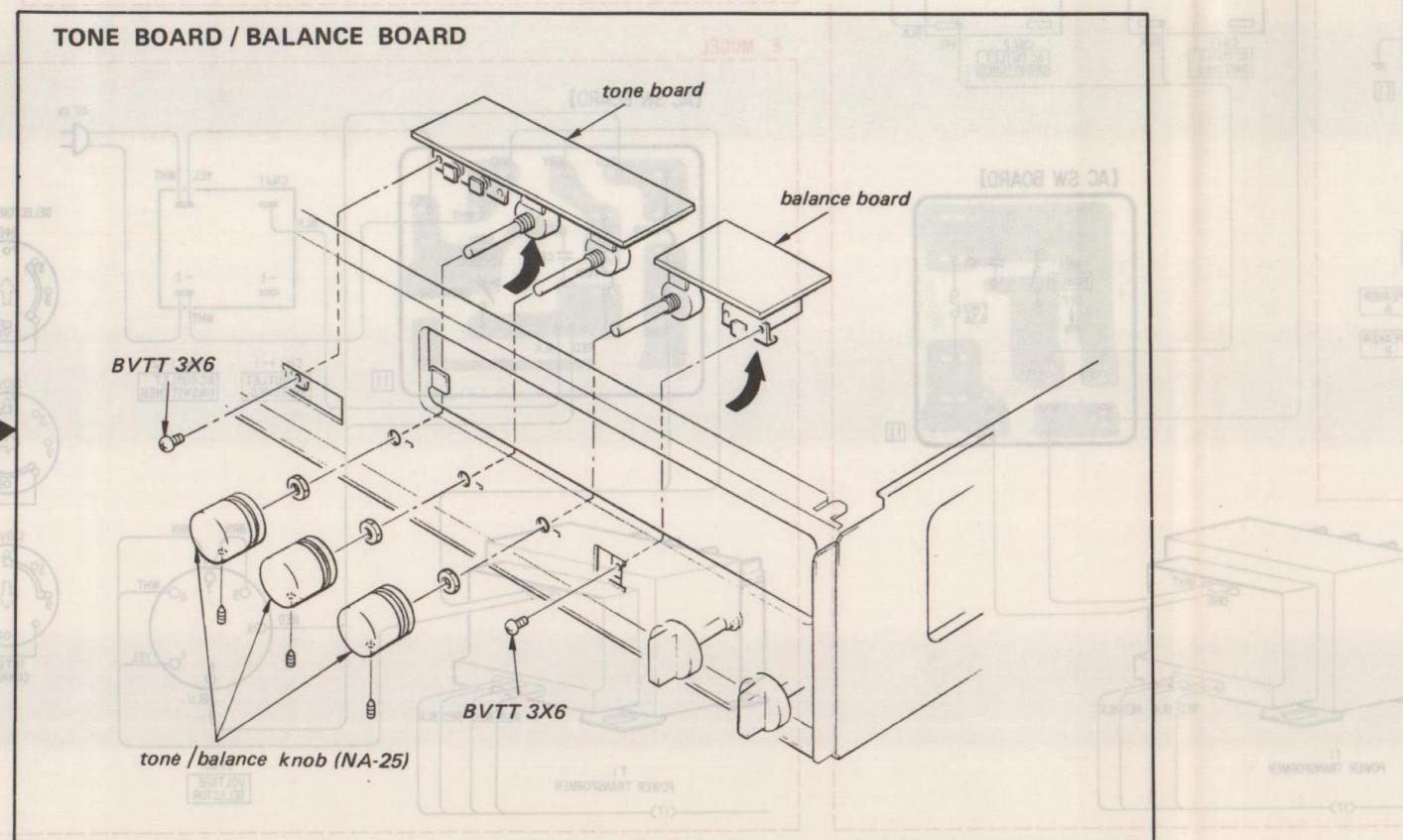
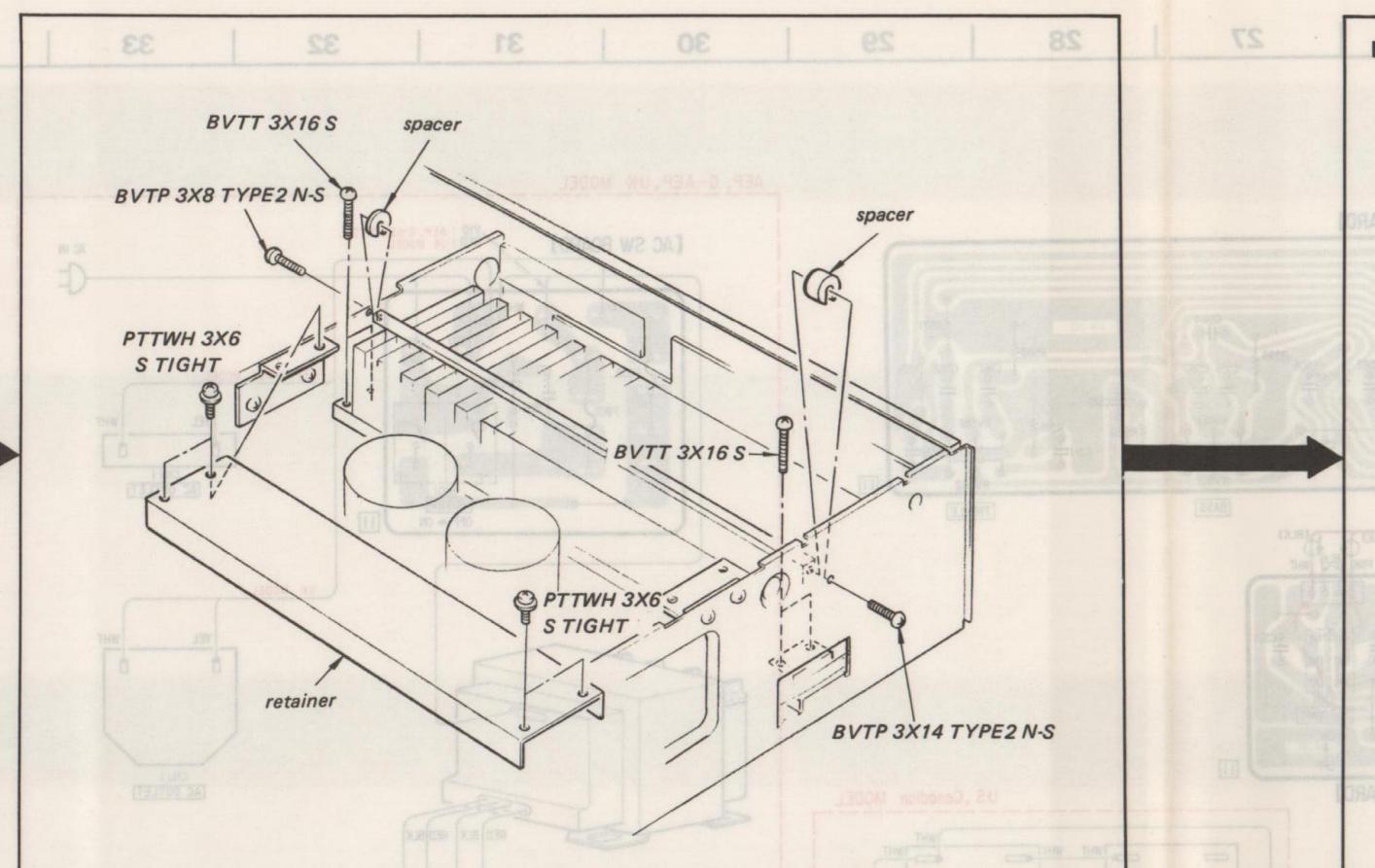


## FUNCTION BOARD / LED(F) BOARD

## INPUT BOARD / VIDEO BOARD



## TA-F444ESII TA-F444ESII

SECTION 3  
ADJUSTMENT

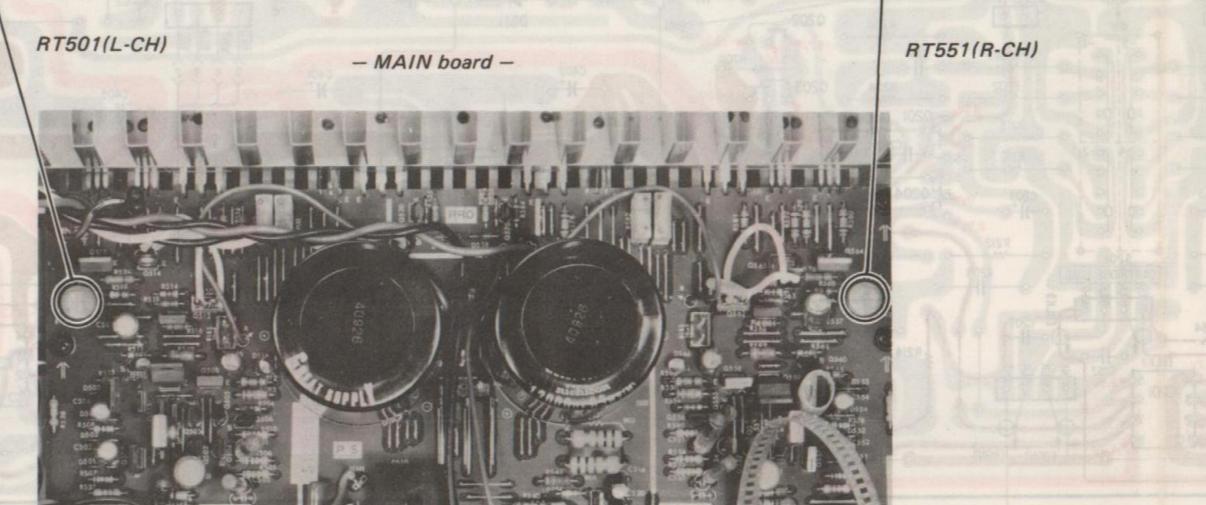
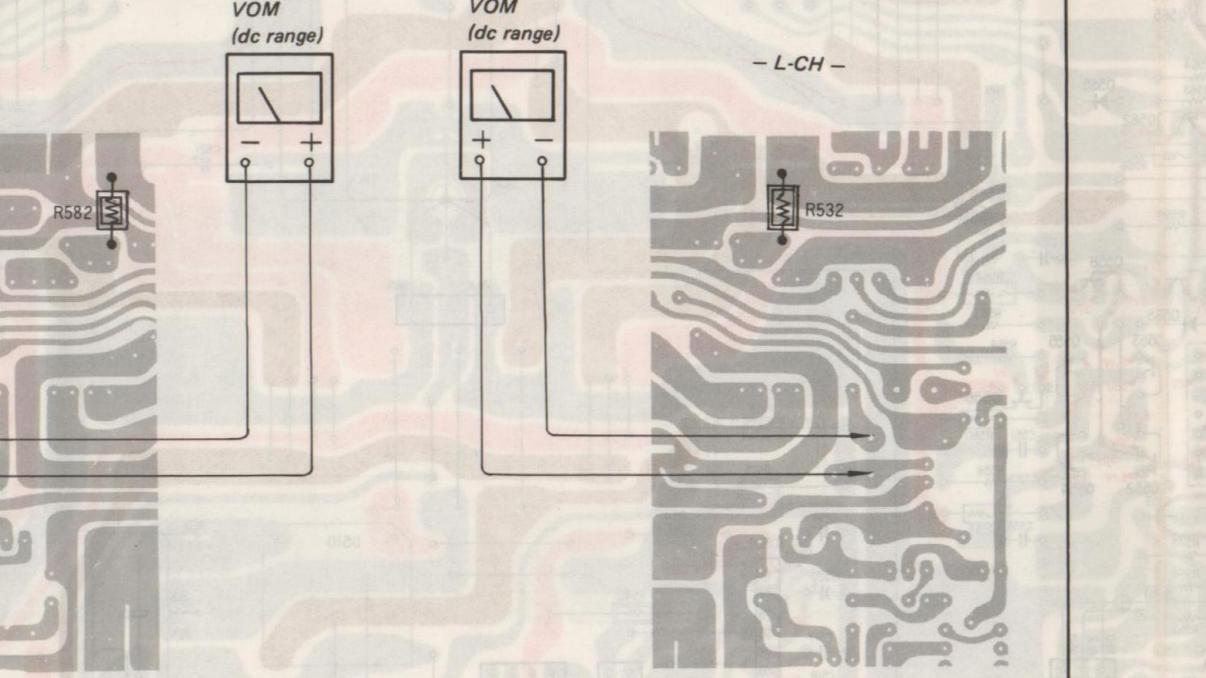
## CAUTION

1. Do not switch S601 (SPEAKER) and S801 (POWER) with audio signal applied to speakers.
2. DC BIAS adjustments should be made 10 minutes after the POWER switch is pushed on (POWER ON).
3. When replacing or repairing power transistors, be sure to replace resistors (R526-R531 or R576-R581) with new one, and make the DC BIAS adjustment.

## [ DC BIAS Adjustment (with no signal) ]

Adjust RT501(L-CH), RT551(R-CH) for 7mV reading on the VOM.

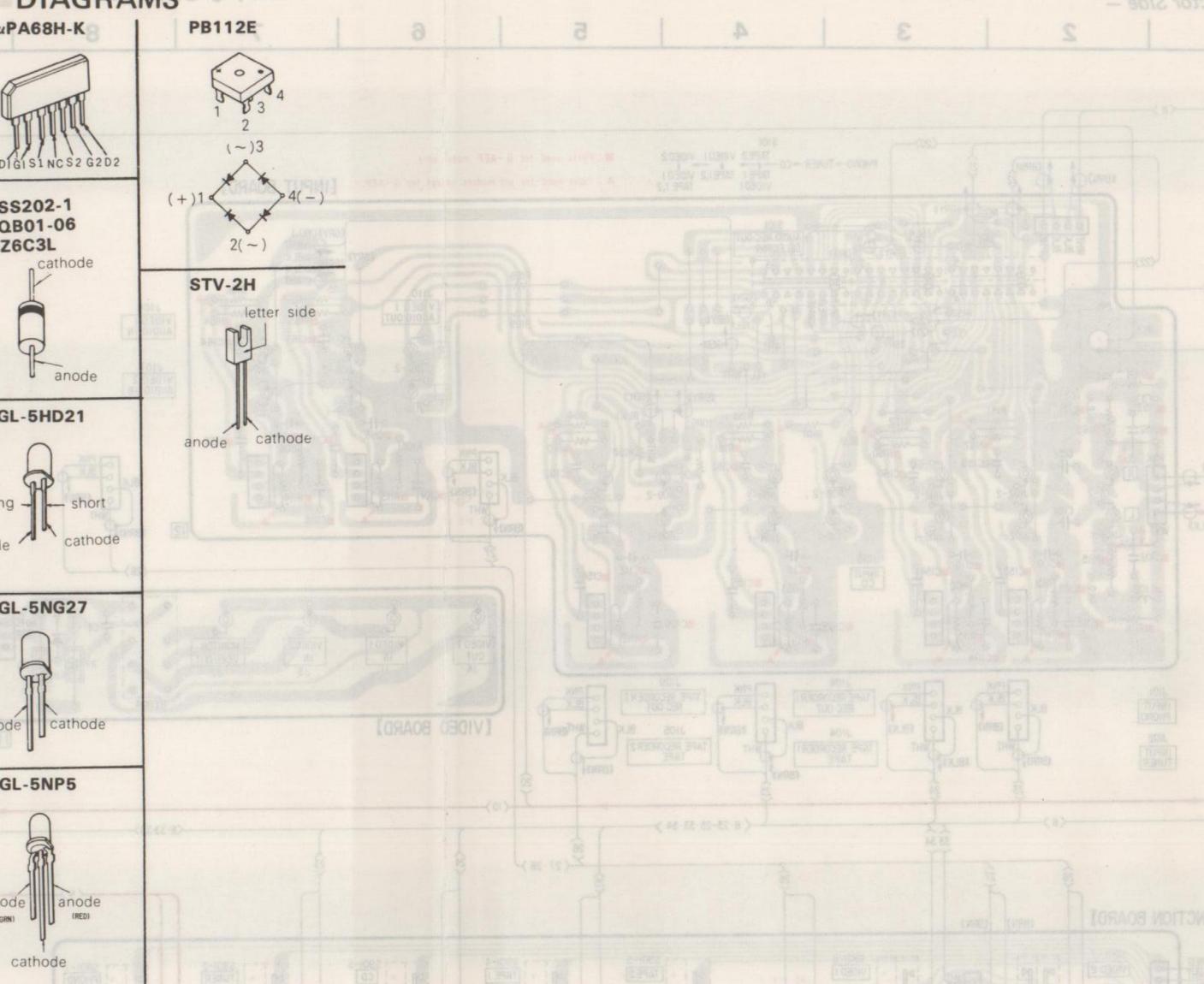
Adjustment Location: - MAIN board -



## TA-F444ESII TA-F444ESII

SECTION 4  
DIAGRAMS

## 4-1. SEMICONDUCTOR LEAD LAYOUTS

|  |  |
|--|--|
| NE5532P<br>TL082CP                                       | 2SA1142<br>2SC2682<br>2SB731<br>2SD809   |
| PB112E   |  |
| 1SS202-1<br>EQB01-06<br>HZ6C3L                           |  |
| 2SA1175<br>2SC2785-E                                     |  |
| STV-2H   |  |
| 2SA733-P<br>2SC945-P                                     |  |
| GL-5HD21   |  |
| 2SA1386-Y<br>2SC3519-Y                                   |  |
| 2SA985-P<br>2SA1383<br>2SC1826-Y<br>2SC2275-P<br>2SC3514 |  |
| 2SK170   |  |
| GL-5NG27   |  |
| 2SA1027R   |  |
| 2SK246-GR2<br>2SK246-GR3<br>2SK246-Y                     |  |
| GL-5NP5  |  |

## 4-2. CIRCUIT BOARDS LOCATION



## TA-F444ESII

SECTION 4  
DIAGRAMS

## MOUNTING DIAGRAM

\* See base J6 for semiconductor lead layouts and circuit board location.

- Connector strip -

- Component side -

- Case base -

- Case back -

- Case top -

- Component side -

- Case base -

- Case back -

- Case top -

- Component side -

- Case base -

- Case back -

- Case top -

- Component side -

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- Component side -

- Case base -

- Case back -

- Case top -

- Component side -

- Case base -

- Case back -

- Case top -

- Component side -

- Case base -

- Case back -

- Case top -

- Component side -

- Case base -

- Case back -

- Case top -

- Component side -

- Case base -

- Case back -

- Case top -

- Component side -

- Case base -

- Case back -

- Case top -

- Component side -

- Case base -

- Case back -

- Case top -

- Component side -

- Case base -

- Case back -

- Case top -

- Component side -

- Case base -

- Case back -

- Case top -

- Component side -

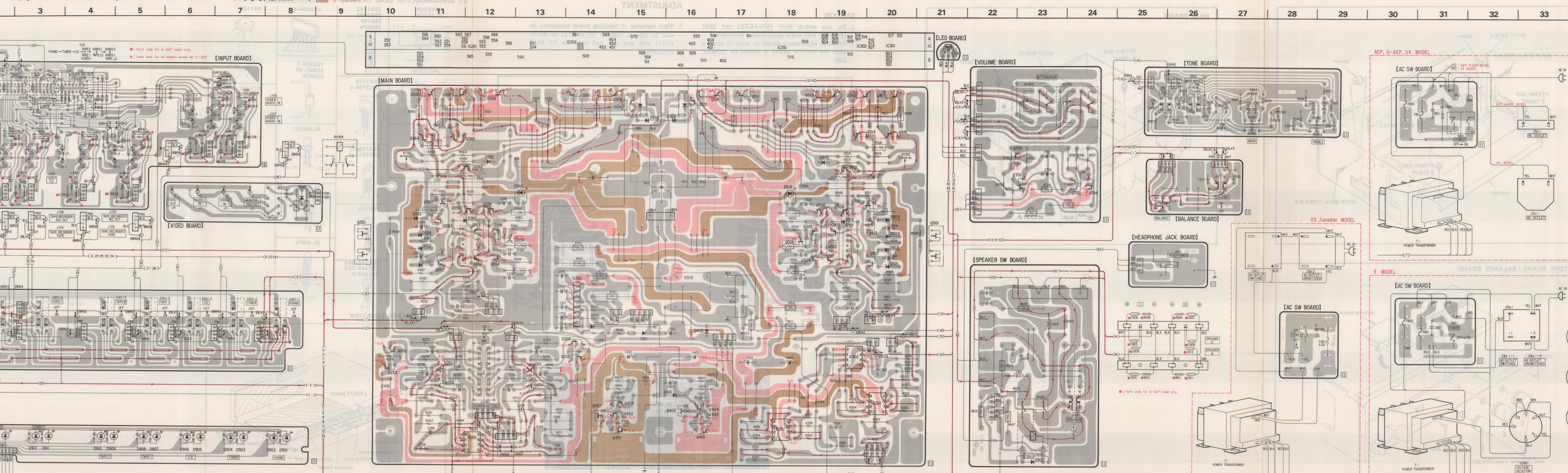
- Case base -

- Case back -

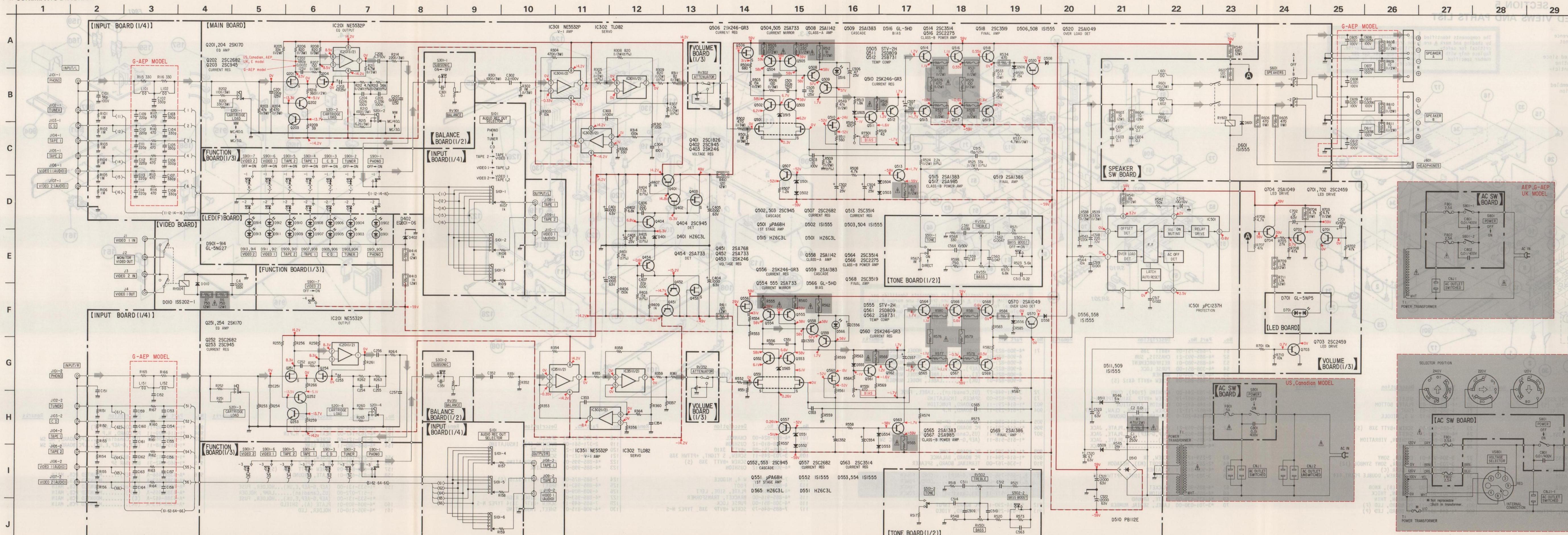
- Case top -

## 4.3. MOUNTING DIAGRAM

Conductor Side



#### 4-4. SCHEMATIC DIAGRAM



Note on Schematic Diagrams

- A**

  - All capacitors are in  $\mu\text{F}$  unless otherwise noted. pF:  $\mu\mu\text{F}$  50 WV or less are not indicated except for electrolytics and tantalums.
  - All resistors are in  $\Omega$  and  $\frac{1}{4}\text{W}$  or less unless otherwise specified.
  -  : signal path

**B** Note: The components identified by shading and mark △ are critical for safety. Replace only with part number specified.

**C** Note: Les composants identifiés par une trame et une marque  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

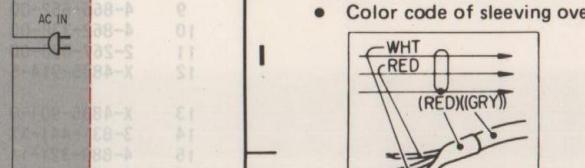
- Components for right channel have same values as for left channel.
  -  : nonflammable resistor.
  -  : fusible resistor.
  - Switch

|   | Ref. No. | Switch                     | Position |
|---|----------|----------------------------|----------|
| E | S101     | AUDIO REC OUT SELECTOR     | PHONO    |
|   | S201     | CARTRIDGE LOAD             | MM       |
|   | S301     | SUBSONIC                   | OFF      |
|   | S501     | TONE                       | DIRECT   |
|   | S502     | BASS BOOST                 | OFF      |
|   | S601     | SPEAKERS                   | A        |
|   | S801     | POWER                      | OFF      |
| F | S901-1   | PHONO                      | ON       |
|   | S901-2   | TUNER                      | OFF      |
|   | S901-3   | CD                         | OFF      |
|   | S901-4   | TAPE 1                     | OFF      |
|   | S901-5   | TAPE 2                     | OFF      |
|   | S901-6   | VIDEO 1                    | OFF      |
|   | S901-7   | VIDEO 2                    | OFF      |
|   | VS801    | VOLTAGE SELECTOR (E model) | 240V     |

- : B+ bus.
  - : B- bus.
  - : adjustment for repair.
  - Voltages are dc with respect to ground unless otherwise noted.
  - Readings are taken under no-signal conditions with a VOM ( $50 \text{ k}\Omega/\text{V}$ ).
  - Voltage variations may be noted due to normal produc-

10-80 10-5\* 10-9 10-10

- #### Note on Mounting Diagram



- : parts extracted from the component side.
  - : L-CH signal path

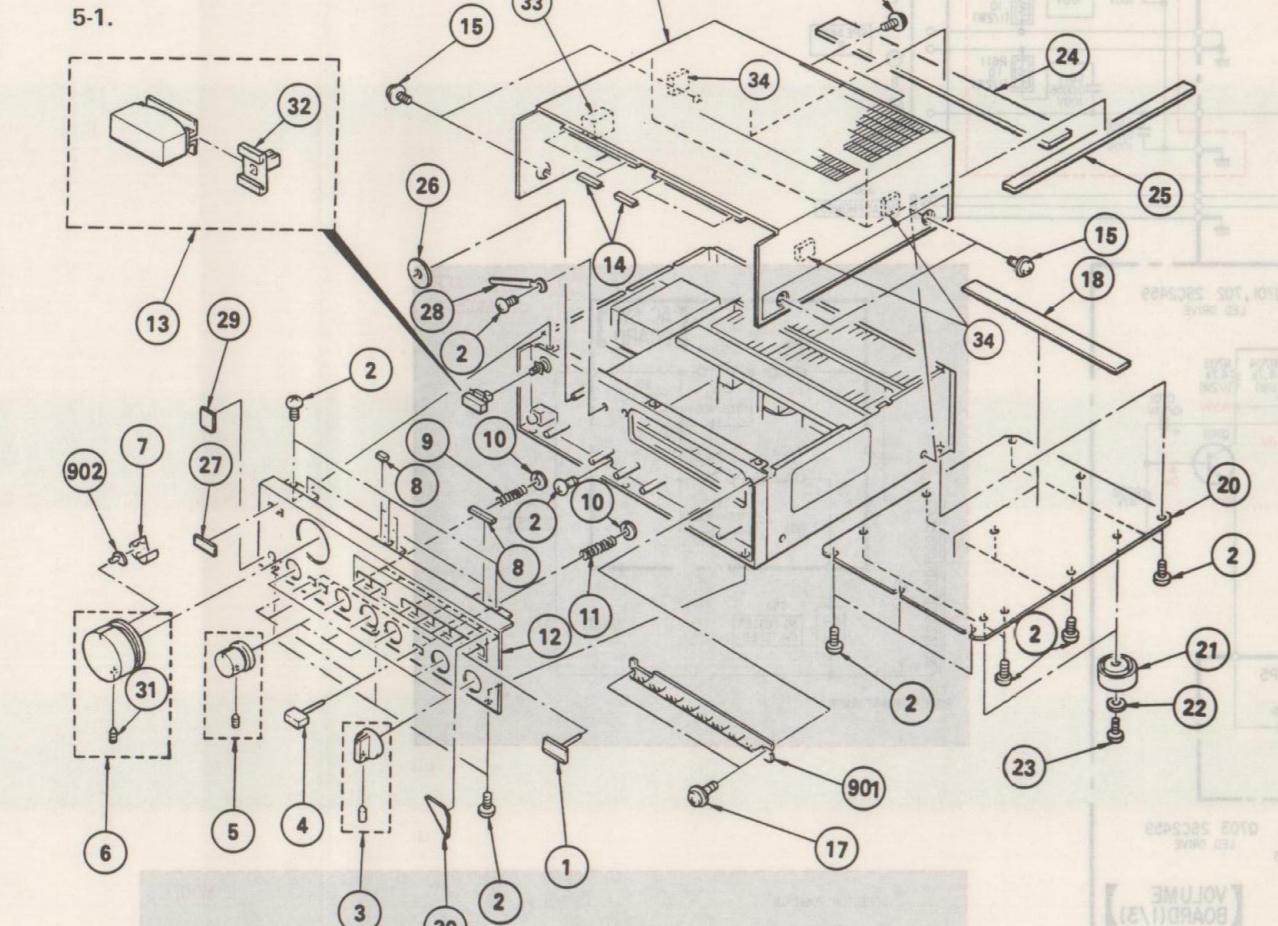
**SECTION 5  
EXPLODED VIEWS AND PARTS LIST**

**NOTE:**  
 - The mechanical parts with no reference number in the exploded views are not supplied.

- Items marked "\*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

- The construction parts of an assembled part are indicated with a collocation number in the remark column.

The components identified by shading and mark A are critical for safety. Replace only with part number specified.



## SECTION 6 ELECTRICAL PARTS LIST

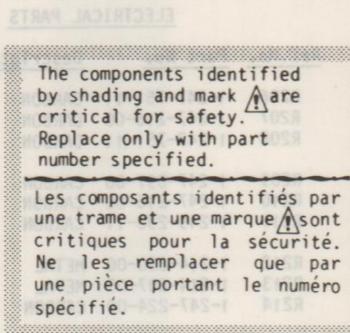
## NOTE:

- Items marked "★" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- If there are two or more same circuits in a set such as a stereophonic machine, only typical circuit parts may be indicated and capacitors and resistors in other same circuits may be omitted.
- RESISTORS
  - MF:  $\mu$ F, PF:  $\mu$ F.
  - All resistors are in ohms.
  - F: nonflammable
- COILS
  - MMH: mH, UH:  $\mu$ H
- SEMICONDUCTORS
  - In each case, U:  $\mu$ , for example:  
UA...:  $\mu$ A..., UPA...:  $\mu$ PA..., UPC...:  $\mu$ PC,  
UPD...:  $\mu$ PD...

## ELECTRICAL PARTS

| Ref. No. | Part No.       | Description                        |
|----------|----------------|------------------------------------|
| 901      | *1-614-295-11  | PC BOARD, LED (F)                  |
| 902      | *1-614-301-11  | PC BOARD, LED (P)                  |
| 903      | *1-614-291-11  | PC BOARD, FUNCTION                 |
| 904      | *1-614-299-11  | PC BOARD, H.P                      |
| 905      | *1-614-298-11  | PC BOARD, SP-SW                    |
| 906      | *1-614-297-11  | PC BOARD, VOL                      |
| 907      | *1-614-296-11  | (US,Canadian)....PC BOARD, AC SW   |
|          | *1-615-518-11  | (AEP,G-AEP,E,UK)...PC BOARD, AC SW |
| 908      | *1-614-293-11  | PC BOARD, TONE                     |
| 909      | *1-614-294-11  | PC BOARD, BALANCE                  |
| 910      | 1-536-767-00   | TERMINAL BOARD, SPEAKER            |
| 911      | Δ.1-555-795-00 | (AEP,G-AEP)....CORD, POWER         |
|          | Δ.1-556-035-00 | (UK).....CORD, POWER               |
|          | Δ.1-556-091-00 | (E).....CORD, POWER                |
|          | Δ.1-557-577-11 | (US,Canadian)...CORD, POWER        |
| 912      | *1-614-290-11  | PC BOARD, INPUT                    |
| 913      | *1-614-292-11  | PC BOARD, VIDEO                    |
| 914      | *1-560-242-61  | BUS BAR 2P                         |
| 915      | *1-560-242-31  | BUS BAR 5P                         |
| 916      | *A-4388-466-A  | (G-AEP)....MOUNTED PCB, MAIN       |
|          | *A-4388-463-A  | (US).....MOUNTED PCB, MAIN         |
|          | *A-4388-464-A  | (Canadian)....MOUNTED PCB, MAIN    |
|          | *A-4388-465-A  | (AEP)....MOUNTED PCB, MAIN         |
|          | *A-4388-467-A  | (E).....MOUNTED PCB, MAIN          |
|          | *A-4388-473-A  | (UK).....MOUNTED PCB, MAIN         |
| 917      | 1-535-108-00   | GT PIN                             |
| 919      | *1-562-249-00  | SOCKET, CONNECTOR 4P               |
| 920      | *1-562-250-00  | SOCKET, CONNECTOR 5P               |
| 921      | *1-562-327-00  | SOCKET, CONNECTOR 3P               |
| 922      | *1-564-505-11  | PLUG, CONNECTOR 2P                 |
| 923      | *1-564-505-31  | PLUG, CONNECTOR 2P                 |
| 924      | *1-564-505-41  | PLUG, CONNECTOR 2P                 |
| 925      | *1-564-506-11  | PLUG, CONNECTOR 3P                 |
| 926      | *1-564-507-11  | PLUG, CONNECTOR 4P                 |
| 927      | *1-564-507-21  | PLUG, CONNECTOR 4P                 |
| 928      | *1-564-507-31  | PLUG, CONNECTOR 4P                 |
| 929      | *1-564-507-41  | PLUG, CONNECTOR 4P                 |
| 930      | *1-508-809-00  | BASE POST (14MM) 2P                |
| 931      | *1-535-117-00  | TERMINAL                           |
| 932      | 1-535-416-00   | TERMINAL                           |
| C1       | 1-130-796-51   | FILM 0.47MF 5% 250V                |
| C2       | 1-136-153-00   | FILM 0.01MF 5% 50V                 |
| C4       | 1-130-273-00   | FILM 0.001MF 5% 100V               |
| C101     | 1-107-294-00   | MICA 56PF 5% 100V                  |
| C102     | 1-161-317-00   | (G-AEP)...CERAMIC 330PF 10% 50V    |
| C103     | 1-161-317-00   | (G-AEP)...CERAMIC 330PF 10% 50V    |
| C104     | 1-161-317-00   | (G-AEP)...CERAMIC 330PF 10% 50V    |
| C105     | 1-161-317-00   | (G-AEP)...CERAMIC 330PF 10% 50V    |

The components identified by shading and mark **Δ** are critical for safety. Replace only with part number specified.



The components identified by shading and mark **Δ** are critical for safety. Replace only with part number specified.

Les composants identifiés par une trame et une marque **Δ** sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

## ELECTRICAL PARTS

| Ref. No. | Part No.       | Description                                    |
|----------|----------------|--|
| C354     | 1-124-611-00   | ELECTROLYTIC CAPACITOR 1MF 82-105-20% 100V     |
| C401     | 1-123-378-00   | ELECTROLYTIC CAPACITOR 1000MF 081-20% 63V      |
| C402     | 1-123-378-00   | ELECTROLYTIC CAPACITOR 1000MF 081-20% 63V      |
| C403     | 1-123-332-00   | ELECTROLYTIC CAPACITOR 47MF 20% 25V            |
| C404     | 1-123-378-00   | ELECTROLYTIC CAPACITOR 1000MF 20% 63V          |
| C405     | 1-123-378-00   | ELECTROLYTIC CAPACITOR 1000MF 20% 63V          |
| C406     | 1-107-284-00   | MICA 22PF 5% 100V                              |
| C407     | 1-107-284-00   | MICA 22PF 5% 100V                              |
| C501     | 1-104-233-00   | POLYSTYRENE 220PF 5% 125V                      |
| C502     | 1-123-332-00   | ELECTROLYTIC CAPACITOR 47MF 20% 25V            |
| C503     | 1-124-614-00   | ELECTROLYTIC CAPACITOR 10MF 20% 100V           |
| C504     | 1-123-332-00   | ELECTROLYTIC CAPACITOR 47MF 20% 25V            |
| C505     | 1-104-262-00   | POLYSTYRENE 10PF 10% 125V                      |
| C506     | 1-123-332-00   | ELECTROLYTIC CAPACITOR 47MF 20% 25V            |
| C507     | 1-123-359-00   | ELECTROLYTIC CAPACITOR 47MF 20% 50V            |
| C509     | 1-136-173-00   | FILM 0.47MF 5% 50V                             |
| C510     | 1-136-161-00   | FILM 0.047MF 5% 50V                            |
| C511     | 1-136-160-00   | FILM 0.039MF 5% 50V                            |
| C512     | 1-106-188-00   | MYLAR 0.0047MF 10% 50V                         |
| C513     | 1-136-169-00   | FILM 0.22MF 5% 50V                             |
| C514     | 1-124-186-00   | ELECTROLYTIC CAPACITOR 10MF 20% 50V            |
| C515     | 1-104-263-00   | POLYSTYRENE 15PF 10% 125V                      |
| C516     | 1-123-307-00   | ELECTROLYTIC CAPACITOR 100MF 20% 10V           |
| C517     | 1-136-157-00   | FILM 0.022MF 5% 50V                            |
| C518     | 1-123-308-00   | ELECTROLYTIC CAPACITOR 220MF 20% 10V           |
| C519     | 1-106-172-00   | MYLAR 0.001MF 5% 50V                           |
| C520     | 1-123-369-00   | ELECTROLYTIC CAPACITOR 4.7MF 20% 63V           |
| C521     | 1-125-381-00   | CAP, ELECTROLYTIC 12000MF 63V                  |
| C522     | 1-125-381-00   | CAP, ELECTROLYTIC 12000MF 63V                  |
| C523     | 1-123-370-00   | ELECTROLYTIC CAPACITOR 10MF 20% 63V            |
| C524     | 1-104-233-00   | POLYSTYRENE 220PF 5% 125V                      |
| C525     | 1-123-332-00   | ELECTROLYTIC CAPACITOR 47MF 20% 25V            |
| C553     | 1-124-614-00   | ELECTROLYTIC CAPACITOR 10MF 20% 100V           |
| C554     | 1-123-332-00   | ELECTROLYTIC CAPACITOR 47MF 20% 25V            |
| C555     | 1-104-262-00   | POLYSTYRENE 10PF 10% 125V                      |
| C556     | 1-123-332-00   | ELECTROLYTIC CAPACITOR 47MF 20% 25V            |
| C557     | 1-123-359-00   | ELECTROLYTIC CAPACITOR 47MF 20% 50V            |
| C559     | 1-136-173-00   | FILM 0.47MF 5% 50V                             |
| C560     | 1-136-161-00   | FILM 0.047MF 5% 50V                            |
| C561     | 1-136-160-00   | FILM 0.039MF 5% 50V                            |
| C562     | 1-106-188-00   | MYLAR 0.0047MF 10% 50V                         |
| C563     | 1-136-169-00   | FILM 0.22MF 5% 50V                             |
| C564     | 1-124-186-00   | ELECTROLYTIC CAPACITOR 10MF 20% 50V            |
| C565     | 1-104-263-00   | POLYSTYRENE 15PF 10% 125V                      |
| C566     | 1-123-332-00   | ELECTROLYTIC CAPACITOR 47MF 20% 25V            |
| C567     | 1-124-185-00   | FILM 0.1MF 5% 50V                              |
| C202     | 1-104-150-00   | (US,Canadian,AEP,UK,E)... STYROL 680PF 5% 125V |
| C202     | 1-104-151-00   | (G-AEP)...POLYSTYRENE 0.0022MF 5% 125V         |
| C203     | 1-123-332-00   | ELECTROLYTIC CAPACITOR 47MF 20% 25V            |
| C204     | 1-136-247-00   | FILM 0.016MF 3% 100V                           |
| C205     | 1-136-248-00   | FILM 0.056MF 3% 100V                           |
| C206     | 1-124-185-00   | ELECTROLYTIC CAPACITOR 4.7MF 20% 50V           |
| C207     | 1-104-151-00   | POLYSTYRENE 0.0022MF 5% 125V                   |
| C251     | 1-104-233-00   | POLYSTYRENE 220PF 5% 125V                      |
| C202     | 1-104-150-00   | (US,Canadian,AEP,UK,E)... STYROL 680PF 5% 125V |
| C202     | 1-104-151-00   | (G-AEP)...POLYSTYRENE 0.0022MF 5% 125V         |
| C203     | 1-123-332-00   | ELECTROLYTIC CAPACITOR 47MF 20% 25V            |
| C204     | 1-136-247-00   | FILM 0.016MF 3% 100V                           |
| C205     | 1-136-248-00   | FILM 0.056MF 3% 100V                           |
| C206     | 1-124-185-00   | ELECTROLYTIC CAPACITOR 4.7MF 20% 50V           |
| C207     | 1-104-151-00   | POLYSTYRENE 0.0022MF 5% 125V                   |
| C251     | 1-104-233-00   | POLYSTYRENE 220PF 5% 125V                      |
| C252     | 1-104-150-00   | (US,Canadian,AEP,UK,E)... STYROL 680PF 5% 125V |
| C252     | 1-104-151-00   | (G-AEP)...POLYSTYRENE 0.0022MF 5% 125V         |
| C253     | 1-123-332-00   | ELECTROLYTIC CAPACITOR 47MF 20% 25V            |
| C254     | 1-136-247-00   | FILM 0.016MF 3% 100V                           |
| C255     | 1-136-248-00   | FILM 0.056MF 3% 100V                           |
| C256     | 1-124-185-00   | ELECTROLYTIC CAPACITOR 4.7MF 20% 50V           |
| C257     | 1-104-151-00   | POLYSTYRENE 0.0022MF 5% 125V                   |
| C301     | 1-136-165-00   | FILM 0.1MF 5% 50V                              |
| C302     | 1-124-612-00   | ELECTROLYTIC CAPACITOR 2.2MF 20% 100V          |
| C303     | 1-124-611-00   | ELECTROLYTIC CAPACITOR 1MF 20% 100V            |
| C304     | 1-124-611-00   | ELECTROLYTIC CAPACITOR 1MF 20% 100V            |
| C305     | 1-136-165-00   | FILM 0.1MF 5% 50V                              |
| C306     | 1-124-612-00   | ELECTROLYTIC CAPACITOR 2.2MF 20% 100V          |
| C307     | 1-124-611-00   | ELECTROLYTIC CAPACITOR 1MF 20% 100V            |
| C801     | Δ.1-161-744-00 | CERAMIC 0.01MF 5% 400V                         |
| C802     | Δ.1-161-744-00 | (AEP,G-AEP,UK)... CERAMIC 0.01MF 5% 400V       |

The components identified by shading and mark **Δ** are critical for safety. Replace only with part number specified.

## ELECTRICAL PARTS

| Ref. No. | Part No.       | Description         |
|----------|----------------|---------------------|
| CNJ1     | Δ.1-526-751-00 | (UK).....OUTLET, AC |
| CNJ1     | Δ.1-526-794-11 | (A                  |

## ELECTRICAL PARTS

| Ref.No. | Part No.      | Description                      | Part No. | Description    | Part No.              | Description | Part No.     | Description |
|---------|---------------|----------------------------------|----------|----------------|-----------------------|-------------|--------------|-------------|
| J106    | 1-507-831-00  | JACK, PIN 6P (VIDEO 1,AUDIO IN)  | Q560     | 8-729-201-56   | TRANSISTOR 2SK246-GR2 | R206        | 1-247-751-11 | CARBON      |
| J107    | 1-507-831-00  | JACK, PIN 6P (VIDEO 2,AUDIO IN)  | Q561     | 8-729-180-93   | TRANSISTOR 2SD809     | R207        | 1-247-216-00 | CARBON      |
| J108    | 1-507-831-00  | JACK, PIN 6P (TAPE 1 OUT)        | Q562     | 8-729-173-13   | TRANSISTOR 2SB731     | R208        | 1-247-751-11 | CARBON      |
| J109    | 1-507-830-21  | JACK, PIN 4P (TAPE 2 OUT)        | Q563     | 8-729-104-18   | TRANSISTOR ZSC3514    | R209        | 1-247-097-00 | CARBON      |
| J110    | 1-507-831-00  | JACK, PIN 6P (VIDEO 1,AUDIO OUT) | Q564     | 8-729-104-18   | TRANSISTOR ZSC3514    | R210        | 1-247-216-00 | CARBON      |
| J601    | 1-507-669-00  | JACK (HEADPHONE)                 | Q565     | 8-729-104-91   | TRANSISTOR 2SA1383    | R211        | 1-249-298-11 | CARBON      |
| L101    | 1-413-101-00  | (G-AEP)...COIL, INPUT            | Q566     | 8-729-127-53   | TRANSISTOR ZSC2275-P  | R212        | 1-214-880-00 | METAL       |
| L102    | 1-413-101-00  | (G-AEP)...COIL, INPUT            | Q567     | 8-729-118-53   | TRANSISTOR 2SA985-P   | R213        | 1-214-907-00 | METAL       |
| L151    | 1-413-101-00  | (G-AEP)...COIL, INPUT            | Q568     | 8-729-301-82   | TRANSISTOR ZSC3519-Y  | R214        | 1-247-224-00 | CARBON      |
| L152    | 1-413-101-00  | (G-AEP)...COIL, INPUT            | Q569     | 8-729-301-86   | TRANSISTOR 2SA1386-Y  | R215        | 1-211-585-11 | CARBON      |
| L601    | *1-422-031-00 | COIL, AIRCORE                    | Q570     | 8-729-612-77   | TRANSISTOR 2SA1027R   | R216        | 1-247-229-00 | CARBON      |
| L602    | *1-422-031-00 | COIL, AIRCORE                    | Q701     | 8-729-178-55   | TRANSISTOR ZSC2785-E  | R217        | 1-247-204-00 | CARBON      |
| Q201    | 8-729-217-03  | TRANSISTOR 2SK170                | Q702     | 8-729-178-55   | TRANSISTOR ZSC2785-E  | R218        | 1-247-217-00 | CARBON      |
| Q202    | 8-729-194-57  | TRANSISTOR 2SC945-P              | Q703     | 8-729-178-55   | TRANSISTOR ZSC2785-E  | R219        | 1-247-280-00 | CARBON      |
| Q203    | 8-729-194-57  | TRANSISTOR 2SC945-P              | Q704     | 8-729-117-54   | TRANSISTOR 2SA1175    | R220        | 1-247-232-00 | CARBON      |
| Q204    | 8-729-217-03  | TRANSISTOR 2SK170                | R1       | Δ.1-247-208-00 | CARBON                | R221        | 1-247-276-00 | CARBON      |
| Q251    | 8-729-217-03  | TRANSISTOR 2SK170                | R6       | Δ.1-206-661-11 | METAL OXIDE           | R222        | 1-247-751-11 | CARBON      |
| Q252    | 8-729-194-57  | TRANSISTOR 2SC945-P              | R7       | Δ.1-206-661-11 | METAL OXIDE           | R223        | 1-247-216-00 | CARBON      |
| Q253    | 8-729-194-57  | TRANSISTOR 2SC945-P              | R101     | 1-246-545-00   | CARBON                | R224        | 1-247-224-00 | CARBON      |
| Q254    | 8-729-217-03  | TRANSISTOR 2SK170                | R102     | 1-246-545-00   | CARBON                | R225        | 1-247-217-00 | CARBON      |
| Q401    | 8-729-382-63  | TRANSISTOR 2SC1826-Y             | R103     | 1-246-545-00   | CARBON                | R226        | 1-247-229-00 | CARBON      |
| Q402    | 8-729-194-57  | TRANSISTOR 2SC945-P              | R104     | 1-246-545-00   | CARBON                | R227        | 1-249-298-11 | CARBON      |
| Q403    | 8-729-224-61  | TRANSISTOR ZSC246-Y              | R105     | 1-246-545-00   | CARBON                | R228        | 1-214-880-00 | METAL       |
| Q404    | 8-729-194-57  | TRANSISTOR 2SC945-P              | R106     | 1-246-545-00   | CARBON                | R229        | 1-214-907-00 | METAL       |
| Q451    | 8-729-118-53  | TRANSISTOR 2SA985-P              | R107     | 1-247-131-00   | CARBON                | R230        | 1-247-224-00 | CARBON      |
| Q452    | 8-729-173-37  | TRANSISTOR 2SA733-P              | R108     | 1-247-131-00   | CARBON                | R231        | 1-211-585-11 | CARBON      |
| Q453    | 8-729-224-61  | TRANSISTOR 2SK246-Y              | R109     | 1-247-131-00   | CARBON                | R232        | 1-247-229-00 | CARBON      |
| Q454    | 8-729-173-37  | TRANSISTOR 2SA733-P              | R110     | 1-247-123-00   | (G-AEP)...CARBON      | R233        | 1-247-216-00 | CARBON      |
| Q501    | 8-729-103-64  | TRANSISTOR UPA68H-K              | R111     | 1-247-123-00   | (G-AEP)...CARBON      | R234        | 1-247-216-00 | CARBON      |
| Q502    | 8-729-194-57  | TRANSISTOR 2SC945-P              | R112     | 1-247-123-00   | (G-AEP)...CARBON      | R235        | 1-244-945-00 | CARBON      |
| Q503    | 8-729-194-57  | TRANSISTOR 2SC945-P              | R113     | 1-247-123-00   | (G-AEP)...CARBON      | R236        | 1-247-155-00 | CARBON      |
| Q504    | 8-729-173-37  | TRANSISTOR 2SA733-P              | R114     | 1-247-123-00   | (G-AEP)...CARBON      | R237        | 1-247-232-00 | CARBON      |
| Q505    | 8-729-173-37  | TRANSISTOR 2SA733-P              | R115     | 1-247-119-00   | (G-AEP)...CARBON      | R238        | 1-247-232-00 | CARBON      |
| Q506    | 8-729-201-56  | TRANSISTOR 2SK246-GR2            | R116     | 1-247-119-00   | (G-AEP)...CARBON      | R239        | 1-247-216-00 | METAL       |
| Q507    | 8-729-168-22  | TRANSISTOR ZSC2682               | R117     | 1-247-123-00   | (G-AEP)...CARBON      | R240        | 1-214-868-00 | METAL       |
| Q508    | 8-729-114-22  | TRANSISTOR 2SA1142               | R118     | 1-247-123-00   | (G-AEP)...CARBON      | R241        | 1-214-862-00 | METAL       |
| Q509    | 8-729-104-91  | TRANSISTOR 2SA1383               | R119     | 1-246-545-00   | CARBON                | R242        | 1-214-862-00 | METAL       |
| Q510    | 8-729-201-56  | TRANSISTOR 2SK246-GR2            | R120     | 1-246-545-00   | CARBON                | R243        | 1-247-179-00 | CARBON      |
| Q511    | 8-729-180-93  | TRANSISTOR 2SD809                | R121     | 1-246-545-00   | CARBON                | R244        | 1-247-214-00 | CARBON      |
| Q512    | 8-729-173-13  | TRANSISTOR 2SB731                | R122     | 1-246-545-00   | CARBON                | R245        | 1-247-179-00 | CARBON      |
| Q513    | 8-729-104-18  | TRANSISTOR ZSC3514               | R123     | 1-246-545-00   | CARBON                | R246        | 1-247-216-00 | CARBON      |
| Q514    | 8-729-104-18  | TRANSISTOR ZSC3514               | R124     | 1-246-545-00   | CARBON                | R247        | 1-244-945-00 | CARBON      |
| Q515    | 8-729-104-91  | TRANSISTOR 2SA1383               | R125     | 1-247-131-00   | CARBON                | R248        | 1-244-945-00 | CARBON      |
| Q516    | 8-729-127-53  | TRANSISTOR ZSC2275-P             | R126     | 1-247-131-00   | CARBON                | R249        | 1-247-155-00 | CARBON      |
| Q517    | 8-729-118-53  | TRANSISTOR 2SA985-P              | R127     | 1-247-131-00   | CARBON                | R250        | 1-247-232-00 | CARBON      |
| Q518    | 8-729-301-82  | TRANSISTOR ZSC3519-Y             | R128     | 1-247-131-00   | CARBON                | R251        | 1-247-232-00 | CARBON      |
| Q519    | 8-729-301-86  | TRANSISTOR 2SA1386-Y             | R129     | 1-247-123-00   | (G-AEP)...CARBON      | R252        | 1-247-179-00 | CARBON      |
| Q520    | 8-729-612-77  | TRANSISTOR 2SA1027R              | R130     | 1-247-123-00   | (G-AEP)...CARBON      | R253        | 1-247-214-00 | CARBON      |
| Q551    | 8-729-103-64  | TRANSISTOR UPA68H-K              | R131     | 1-247-123-00   | (G-AEP)...CARBON      | R254        | 1-247-179-00 | CARBON      |
| Q552    | 8-729-194-57  | TRANSISTOR 2SC945-P              | R132     | 1-247-123-00   | (G-AEP)...CARBON      | R255        | 1-247-214-00 | CARBON      |
| Q553    | 8-729-194-57  | TRANSISTOR 2SC945-P              | R133     | 1-247-123-00   | (G-AEP)...CARBON      | R256        | 1-247-179-00 | CARBON      |
| Q554    | 8-729-173-37  | TRANSISTOR 2SA733-P              | R134     | 1-247-123-00   | (G-AEP)...CARBON      | R257        | 1-247-214-00 | CARBON      |
| Q555    | 8-729-173-37  | TRANSISTOR 2SA733-P              | R135     | 1-247-119-00   | (G-AEP)...CARBON      | R258        | 1-247-179-00 | CARBON      |
| Q556    | 8-729-201-56  | TRANSISTOR 2SK246-GR2            | R136     | 1-247-119-00   | (G-AEP)...CARBON      | R259        | 1-247-179-00 | CARBON      |
| Q557    | 8-729-168-22  | TRANSISTOR ZSC2682               | R137     | 1-247-123-00   | (G-AEP)...CARBON      | R260        | 1-247-179-00 | CARBON      |
| Q558    | 8-729-114-22  | TRANSISTOR 2SA1142               | R138     | 1-247-123-00   | (G-AEP)...CARBON      | R261        | 1-247-179-00 | CARBON      |
| Q559    | 8-729-104-91  | TRANSISTOR 2SA1383               | R139     | 1-247-123-00   | (G-AEP)...CARBON      | R262        | 1-247-179-00 | CARBON      |
|         |               |                                  | R203     | 1-247-280-00   | CARBON                | R263        | 1-247-179-00 | CARBON      |
|         |               |                                  | R204     | 1-247-232-00   | CARBON                | R264        | 1-247-179-00 | CARBON      |
|         |               |                                  | R205     | 1-247-276-00   | CARBON                | R265        | 1-247-179-00 | CARBON      |

| Ref.No. | Part No.     | Description           | Part No. | Description  | Part No. | Description | Part No.     | Description |
|---------|--------------|-----------------------|----------|--------------|----------|-------------|--------------|-------------|
| Q560    | 8-729-201-56 | TRANSISTOR 2SK246-GR2 | R206     | 1-247-751-11 | CARBON   | R404        | 1-214-750-00 | METAL       |
| Q561    | 8-729-180-93 | TRANSISTOR 2SD809     | R207     | 1-247-216-00 | CARBON   | R405        | 1-214-749-00 | METAL       |
| Q562    | 8-729-173-13 | TRANSISTOR 2SB731     | R208     | 1-247-751-11 | CARBON   | R406        | 1-246-525-00 | CARBON      |
| Q563    | 8-729-104-18 | TRANSISTOR ZSC3514    | R209     | 1-247-097-00 | CARBON   | R407        | 1-247-131-00 | CARBON      |
| Q564    | 8-729-104-18 | TRANSISTOR ZSC3514    | R210     | 1-247-216-00 | CARBON   | R409        | 1-247-131-00 |             |

ELECTRICAL PARTS

| Ref. No. | Part No.     | Description        | Value | Tolerance | Power | Mark |
|----------|--------------|--------------------|-------|-----------|-------|------|
| R553     | 1-247-268-00 | CARBON             | 15K   | 5%        | 1/2W  |      |
| R554     | 1-247-127-00 | CARBON             | 680   | 5%        | 1/4W  |      |
| R555 Δ.  | 1-212-990-00 | FUSIBLE            | 220   | 5%        | 1/2W  | F    |
| R556     | 1-247-216-00 | CARBON             | 100   | 5%        | 1/3W  |      |
| R557     | 1-247-133-00 | CARBON             | 1.2K  | 5%        | 1/4W  |      |
| R558     | 1-247-147-00 | CARBON             | 4.7K  | 5%        | 1/4W  |      |
| R559     | 1-214-867-00 | METAL              | 1.3K  | 1%        | 1/2W  |      |
| R560 Δ.  | 1-212-990-00 | FUSIBLE            | 220   | 5%        | 1/2W  | F    |
| R561     | 1-247-127-00 | CARBON             | 560   | 5%        | 1/4W  |      |
| R562 Δ.  | 1-206-486-00 | FUSIBLE            | 91    | 5%        | 1/2W  | F    |
| R563     | 1-247-137-00 | CARBON             | 1.8K  | 5%        | 1/4W  |      |
| R564     | 1-247-123-00 | CARBON             | 470   | 5%        | 1/4W  |      |
| R565 Δ.  | 1-217-445-00 | FUSIBLE            | 82    | 5%        | 1/2W  | F    |
| R566 Δ.  | 1-217-402-00 | FUSIBLE            | 180   | 5%        | 1/4W  | F    |
| R567     | 1-246-545-00 | CARBON             | 1M    | 5%        | 1/4W  |      |
| R568     | 1-247-119-00 | CARBON             | 330   | 5%        | 1/4W  |      |
| R569     | 1-247-098-00 | CARBON             | 43    | 5%        | 1/4W  |      |
| R570     | 1-247-151-00 | CARBON             | 6.8K  | 5%        | 1/4W  |      |
| R571     | 1-247-138-00 | CARBON             | 2K    | 5%        | 1/4W  |      |
| R573     | 1-247-149-00 | CARBON             | 5.6K  | 5%        | 1/4W  |      |
| R574     | 1-214-872-00 | METAL              | 2.2K  | 1%        | 1/2W  |      |
| R575     | 1-214-901-00 | METAL              | 33K   | 1%        | 1/2W  |      |
| R576 Δ.  | 1-217-454-00 | FUSIBLE            | 470   | 5%        | 1/2W  | F    |
| R577 Δ.  | 1-217-434-00 | FUSIBLE            | 10    | 5%        | 1/2W  | F    |
| R578 Δ.  | 1-217-434-00 | FUSIBLE            | 10    | 5%        | 1/2W  | F    |
| R579 Δ.  | 1-217-446-00 | FUSIBLE            | 100   | 5%        | 1/2W  | F    |
| R580 Δ.  | 1-217-434-00 | FUSIBLE            | 10    | 5%        | 1/2W  | F    |
| R581 Δ.  | 1-217-434-00 | FUSIBLE            | 10    | 5%        | 1/2W  | F    |
| R582     | 1-217-657-11 | METAL PLATE        | 0.1   |           | 5W    |      |
| R583     | 1-217-657-11 | METAL PLATE        | 0.1   |           | 5W    |      |
| R584     | 1-247-123-00 | CARBON             | 470   | 5%        | 1/4W  | F    |
| R585     | 1-247-159-00 | CARBON             | 15K   | 5%        | 1/4W  |      |
| R587     | 1-249-298-11 | CARBON             | 4.7M  | 5%        | 1/3W  |      |
| R598     | 1-247-128-00 | CARBON             | 750   | 5%        | 1/4W  |      |
| R599     | 1-247-280-00 | CARBON             | 47K   | 5%        | 1/2W  |      |
| R601     | 1-247-192-00 | CARBON             | 10    | 5%        | 1/3W  |      |
| R602     | 1-247-192-00 | CARBON             | 10    | 5%        | 1/3W  |      |
| R603     | 1-206-463-00 | METAL OXIDE        | 10    | 5%        | 2W    | F    |
| R604     | 1-206-463-00 | METAL OXIDE        | 10    | 5%        | 2W    | F    |
| R605     | 1-213-139-00 | METAL OXIDE        | 470   | 5%        | 1W    | F    |
| R606     | 1-213-139-00 | METAL OXIDE        | 470   | 5%        | 1W    | F    |
| R607     | 1-213-132-11 | METAL OXIDE        | 120   | 5%        | 1W    | F    |
| R608     | 1-124-192-00 | (G-AEP) ... CARBON | 10    | 5%        | 1/2W  | F    |
| R609     | 1-124-192-00 | (G-AEP) ... CARBON | 10    | 5%        | 1/2W  | F    |
| R610     | 1-124-192-00 | (G-AEP) ... CARBON | 10    | 5%        | 1/2W  | F    |
| R611     | 1-124-192-00 | (G-AEP) ... CARBON | 10    | 5%        | 1/2W  | F    |
| R701     | 1-247-155-00 | CARBON             | 10K   | 5%        | 1/4W  |      |
| R702     | 1-247-171-00 | CARBON             | 47K   | 5%        | 1/4W  |      |
| R703     | 1-247-256-00 | CARBON             | 4.7K  | 5%        | 1/2W  |      |
| R704     | 1-213-151-11 | METAL OXIDE        | 4.7K  | 5%        | 1W    | F    |
| R705     | 1-247-165-00 | CARBON             | 27K   | 5%        | 1/4W  |      |
| R706     | 1-247-147-00 | CARBON             | 4.7K  | 5%        | 1/4W  |      |
| R707     | 1-247-171-00 | CARBON             | 47K   | 5%        | 1/4W  |      |
| R708     | 1-247-171-00 | CARBON             | 47K   | 5%        | 1/4W  |      |

ELECTRICAL PARTS

| Ref. No. | Part No.       | Description   |
|----------|----------------|---|
| R709     | 1-206-667-11   | METAL OXIDE   |
| R710     | 1-247-155-00   | CARBON  |
| R711     | 1-206-667-11   | METAL OXIDE   |
| RT501    | 1-224-248-XX   | RES, ADJ, SOLID 470                                       |
| RT551    | 1-224-248-XX   | RES, ADJ, SOLID 470                                       |
| RV301    | 1-230-654-11   | RES, VAR, CARBON 100K/100K (BALANCE)                      |
| RV302    | 1-230-657-11   | RES, VAR, CARBON 10K/10K (ATTENUATOR)                     |
| RV351    | 1-230-654-11   | RES, VAR, CARBON 100K/100K (BALANCE)                      |
| RV352    | 1-230-657-11   | RES, VAR, CARBON 10K/10K (ATTENUATOR)                     |
| RV501    | 1-230-655-11   | RES, VAR, CARBON 24K/24K (BASS)                           |
| RV502    | 1-230-656-11   | RES, VAR, CARBON 37K/37K (TREBLE)                         |
| RV551    | 1-230-655-11   | RES, VAR, CARBON 24K/24K (BASS)                           |
| RV552    | 1-230-656-11   | RES, VAR, CARBON 37K/37K (TREBLE)                         |
| RY004    | 1-515-495-00   | RELAY (VIDEO)   |
| RY601    | 1-515-356-00   | RELAY   |
| S101     | 1-570-076-11   | SWITCH, SLIDE<br>(REMOTE TYPE, REC OUT SELECT)            |
| S201     | 1-554-019-00   | SWITCH, SLIDE<br>(REMOTE TYPE, CARTRIDGE LOAD)            |
| S301     | 1-570-078-11   | SWITCH, PUSH (1 KEY, SUBSONIC)                            |
| S501     | 1-570-079-11   | SWITCH, PUSH (2 KEY, TONE)                                |
| S502     | 1-570-079-11   | SWITCH, PUSH (2 KEY, BASS BOOST)                          |
| S601     | 1-570-077-11   | SWITCH, ROTARY SLIDE (SPEAKERS)                           |
| S801 Δ.  | 1-552-246-00   | (US, Canadian)... SWITCH, PUSH (AC POWER)                 |
| S801 Δ.  | 1-554-880-11   | (AEP, G-AEP, UK, E)... SWITCH, PUSH<br>(AC POWER) (1 KEY) |
| S901     | 1-570-075-11   | SWITCH, PUSH (7 KEY, FUNCTION)                            |
| SR101    | 1-570-081-11   | (AEP, G-AEP, UK, E)... SWITCH, ROTARY<br>SLIDE (REMOTE)   |
| SR201    | 1-570-080-11   | SWITCH, ROTARY SLIDE (REMOTE)                             |
| T1       | Δ.1-448-173-11 | (US, Canadian)... TRANSFORMER, POWER                      |
| T1       | Δ.1-448-174-11 | (AEP)..... TRANSFORMER, POWER                             |
| T1       | Δ.1-448-175-11 | (G-AEP)..... TRANSFORMER, POWER                           |
| T1       | Δ.1-448-176-11 | (UK)..... TRANSFORMER, POWER                              |
| T1       | Δ.1-448-177-11 | (E)..... TRANSFORMER, POWER                               |
| VS801Δ.  | 1-526-576-31   | (E)... SELECTOR, POWER VOLTAGE                            |

ACCESSORY & PACKING MATERIAL

| Part No.     | Description               |
|--------------|---------------------------|
| 2-297-403-00 | Sheet (Large), Protection |
| 3-701-630-00 | BAG, POLYETHYLENE         |
| 3-760-469-11 | MANUAL, INSTRUCTION       |
| 4-885-951-01 | CUSHION (FRONT), LOWER    |
| 4-885-952-01 | CUSHION (REAR), LOWER     |
| 4-885-949-01 | CUSHION (FRONT), UPPER    |
| 4-885-950-01 | CUSHION (REAR), UPPER     |
| 4-908-813-01 | INDIVIDUAL CARTON         |

The components identified by shading and mark Δ are critical for safety. Replace only with part number specified.

Les composants identifiés par une trame et une marque Δ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

**Sony Corporation**