

TA-AX35

SERVICE MANUAL

US Model
AEP Model
UK Model
E Model

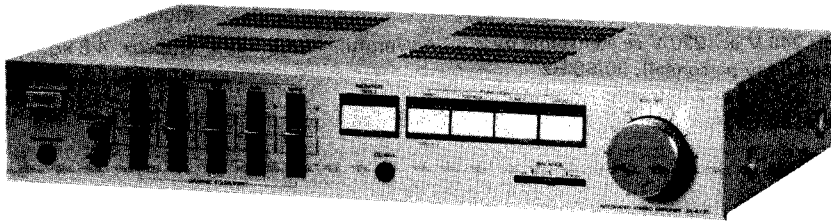


PHOTO : US model

SPECIFICATIONS

AUDIO POWER SPECIFICATIONS

(US model)

POWER OUTPUT AND TOTAL HARMONIC DISTORTION:
With 8 ohm loads, both channels driven, from 20 – 20,000Hz;
rated 30 watts per channel minimum RMS power, with no
more than 0.08% total harmonic distortion from 250 milliwatts
to rated output.

Amplifier section

Continuous RMS power output
(AEP, UK, E model) At 1 kHz

- 40 + 40 watts (5% THD, 8 ohms)
- 35 + 35 watts (0.08% THD, 8 ohms)
- At 20 Hz – 20 kHz, 0.08% THD
- 30 + 30 watts (8 ohms)
- According to DIN 45500
- 30 + 30 watts (8 ohms)

Power bandwidth (IHF)

10 Hz – 30 kHz

Dynamic headroom 1.8 dB ('78 IHF)

Harmonic distortion Less than 0.08% at rated output

Intermodulation (IM) distortion

(60 Hz : 7 kHz = 4 : 1) Less than 0.08% at rated output

Frequency response PHONO : RIAA equalization curve ± 0.5 dB

TUNER

CD/AUX 15 Hz – 50 kHz $\pm \frac{0}{3}$ dB

TAPE-1, 2

Residual noise Less than 140 μ V (8 ohms, network A)
Damping factor 30 (8 ohms, 1 kHz)

Inputs

	Sensitivity	Impedance	Maximum input capability (1 kHz)	S/N (weighting network, input level)
PHONO	2.5 mV	50 k Ω	80 mV	73 dB 75 dB * (A, 2.5 mV)
TUNER CD/AUX TAPE-1, 2	150 mV	50 k Ω	—	93 dB 80 dB * (A, 150 mV)

* '78 IHF

Outputs

REC OUT

Voltage 150 mV
Impedance 4.7 kohms

SPEAKER

Accepts speakers of 8 – 16 ohms.

HEADPHONES

Accepts low and high impedance headphones.

Graphic equalizer

Boost/cut range: ± 10 dB

Center frequencies: 63 Hz, 250 Hz, 1 kHz, 4 kHz, 12 kHz

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.

— Continued on page 2 —



INTEGRATED STEREO AMPLIFIER

SONY®



TA-AX35

General System

Preamplifier section :
Low-noise NF type equalizer amp,
5-control graphic equalizer circuit
Power amplifier section :
Quasi-complementary SEPP OTL OCL
amplifier with all stages direct coupled

Power requirements US model: 120 V ac, 60 Hz
AEP model: 220 V ac (240 V ac adjustable by
authorized Sony personnel), 50/60 Hz
UK model: 240 V ac (220 V ac adjustable by
authorized Sony personnel), 50/60 Hz
E model: 120, 220 or 240 V ac
adjustable, 50/60 Hz

Power consumption AEP model: 80 watts
US, UK, E model: 75 watts
AC outlets AEP, UK model: 3 switched, total 100 watts
max.
US, E model: 2 switched, total 100 watts max.
1 unswitched, 100 watts max.
Dimensions Approx. 430 × 80 × 295 mm (w/h/d)
(17 × 3¼ × 11⅝ inches)
including projecting parts and controls
Weight Approx. 4.8 kg (10 lbs 10 oz) net
Approx. 5.5 kg (12 lbs 2 oz) in shipping
carton

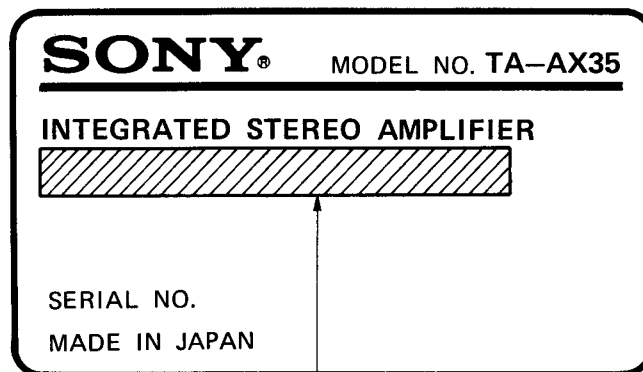
FEATURES

The Sony TA-AX35 integrated stereo amplifier provides dynamic high-fidelity sound despite a remarkably compact cabinet.

- Slim, smart case.
- A built-in graphic equalizer allows you to compensate the acoustic characteristics and to equalize the sound to be recorded.
- CD/AUX inputs for connecting a CD (compact disc) player.
- A second CD/AUX input on the front panel for CD player or auxiliary program source playback and duplication.
- There are connections for two tape decks so that it is possible to duplicate tapes.
- Soft-touch function switches.

MODEL IDENTIFICATION

— Specification Label —



AEP model: AC: 220V ~ 50/60Hz 80W
UK model: AC: 240V ~ 50/60Hz 75W
E model: AC: 110, 120, 220, 240V ~ 50/60Hz 75W
US model: AC: 120V 60Hz 75W

SAFETY CHECK-OUT (US Model)

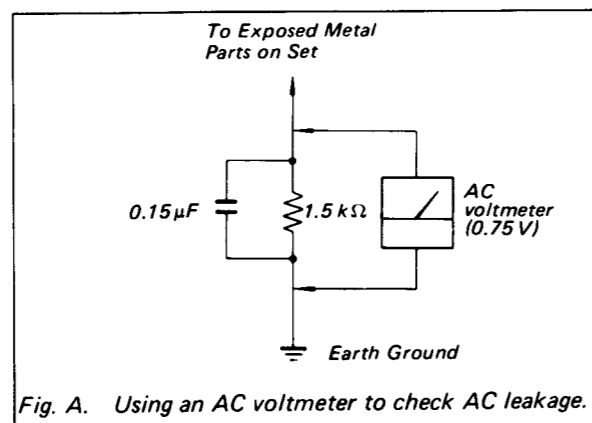
After correcting the original service problem, perform the following safety check before releasing the set to the customer:

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

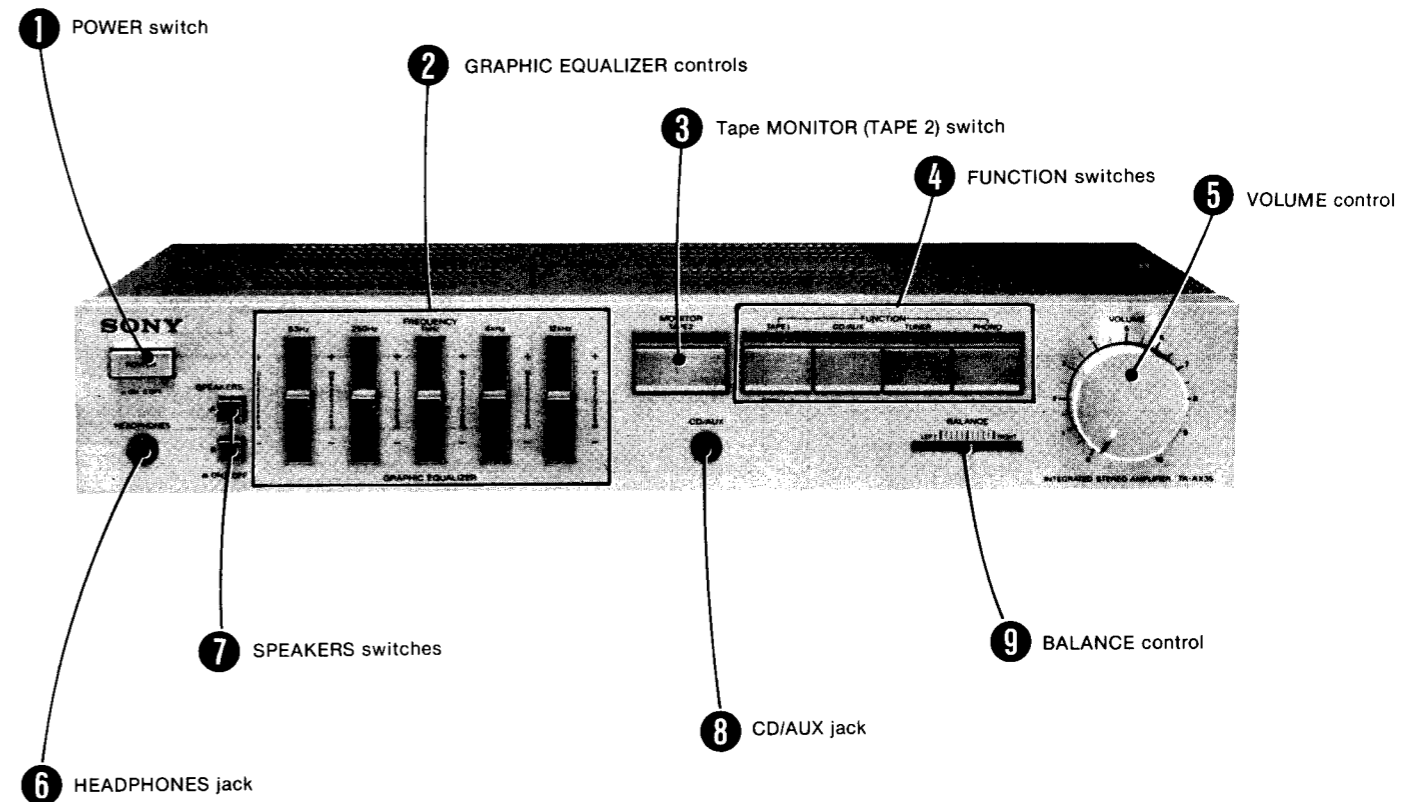
The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5 mA (500 microamperes). Leakage current can be measured by any one of three methods.

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 0.75 V, 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)



LOCATION AND FUNCTION OF CONTROLS

Each number in the photo is keyed to the descriptive text.



1 POWER switch

Turns the operating power on or off.

2 GRAPHIC EQUALIZER controls

Slide upwards or downwards to equalize the signal selected by the FUNCTION switches.

3 Tape MONITOR (TAPE 2) switch

Press this switch to listen to a tape recorder connected to TAPE RECORDER 2 jacks on the rear panel.

4 FUNCTION switches

Press one of these switches to select a desired program source.

PHONO: For disc programs (connected to PHONO jacks)

TUNER: For broadcast programs (connected to TUNER jacks)
(When the power is turned on, the unit is automatically set to tuner mode.)

CD/AUX: For compact disc or other auxiliary programs (connected to the CD/AUX jacks on the rear panel or front panel)

TAPE 1 (COPY 1→2): For taped program (connected to TAPE RECORDER 1 jacks) to tape recorder 2 (connected to TAPE RECORDER 2 jacks)

5 VOLUME control

Regulates the overall sound level. Clockwise rotation of the VOLUME control increases the sound level and counterclockwise rotation decreases it. Be sure to lower the volume whenever you turn the amplifier on or off.

6 HEADPHONES jack

Accepts any low or high impedance stereo headphones.

7 SPEAKERS switches

Select speaker system A or B, or both.

8 CD/AUX jack

This stereo phone jack allows you to quickly and easily connect an auxiliary source such as a tape recorder for playback with the optional RK-81A connecting cord (stereo phone plug to two phono plugs). The program thus played back can be copied by the tape recorder connected to the TAPE RECORDER jacks on the rear panel.

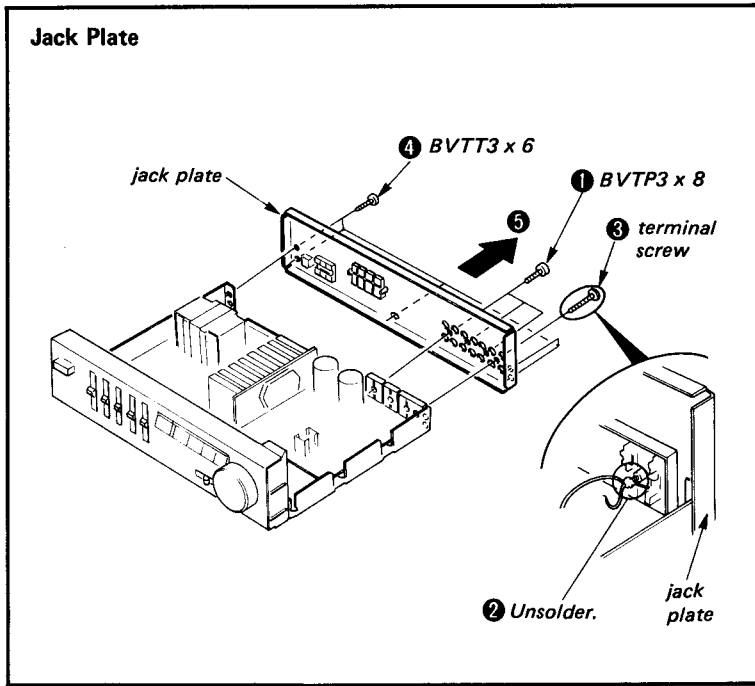
9 BALANCE control

Governs the amount of sound coming from each paired speaker to get optimum stereo effect. When you slide the BALANCE control to the right, the left channel volume is decreased, and vice versa.

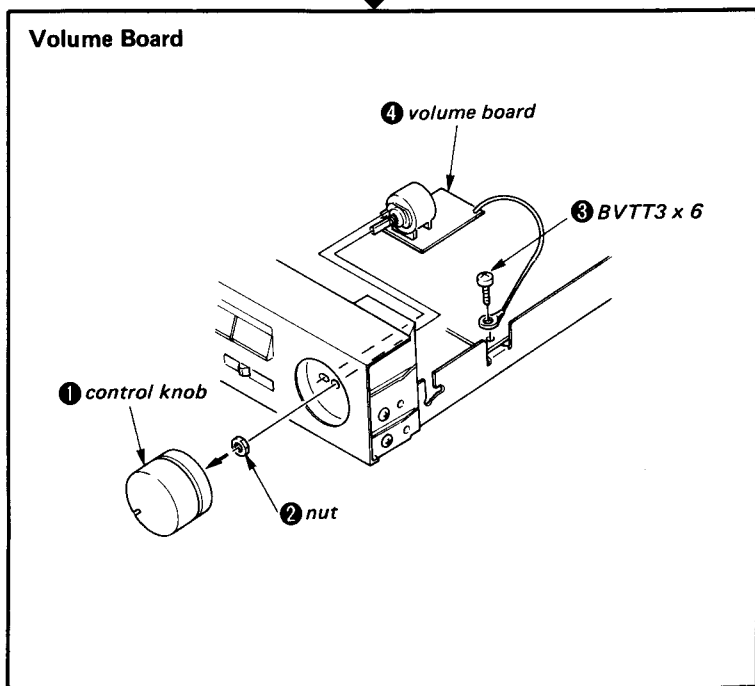
**SECTION 2
DISASSEMBLY**

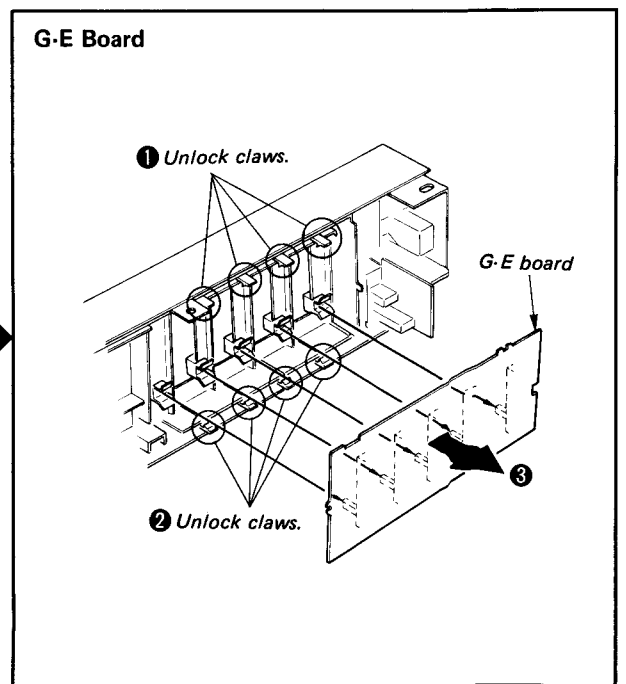
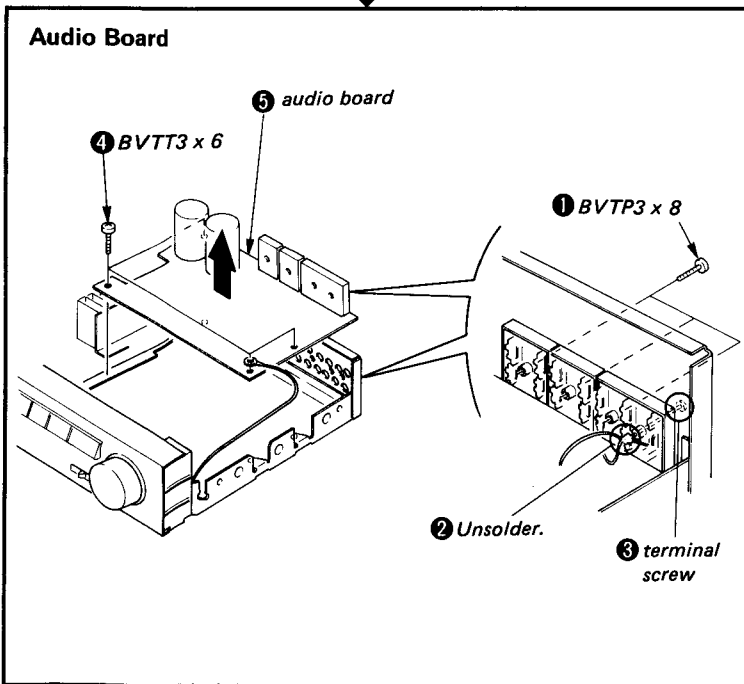
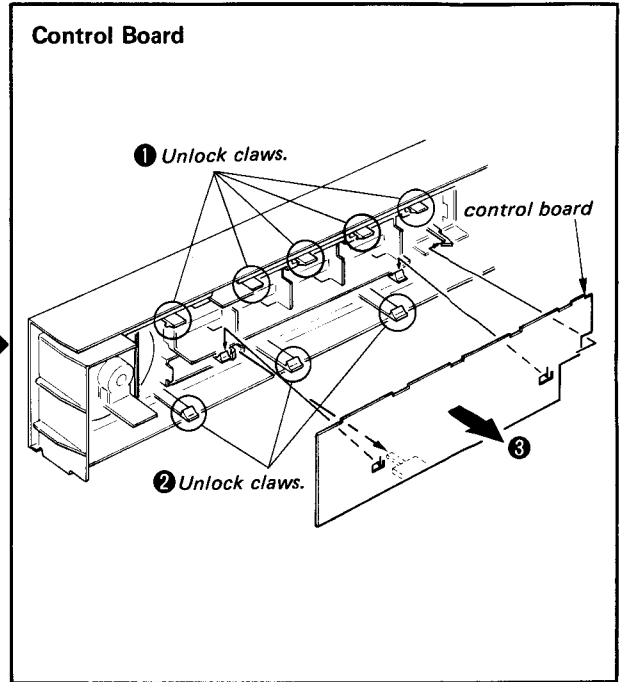
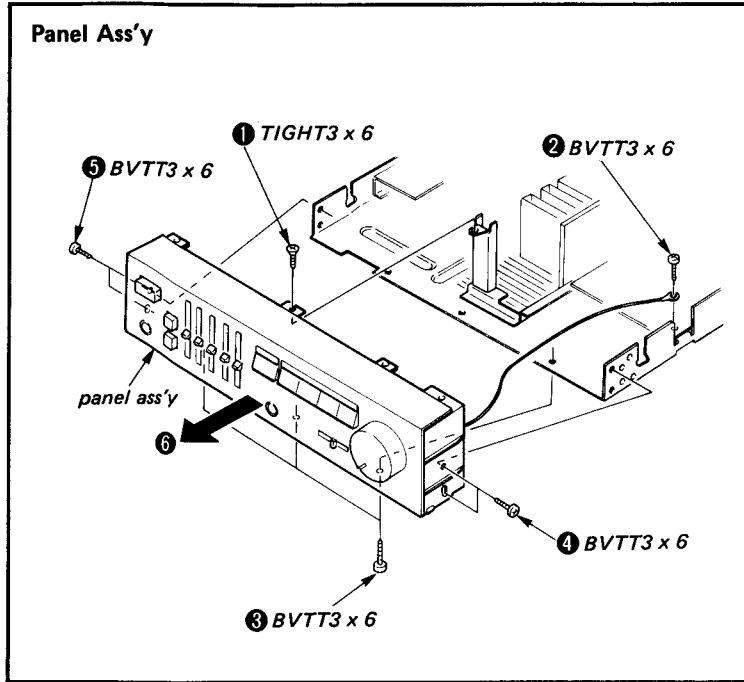
Note: Follow the disassembly procedure in the numerical order given.

Top Cover
Remove the four top cover securing screws at both sides.



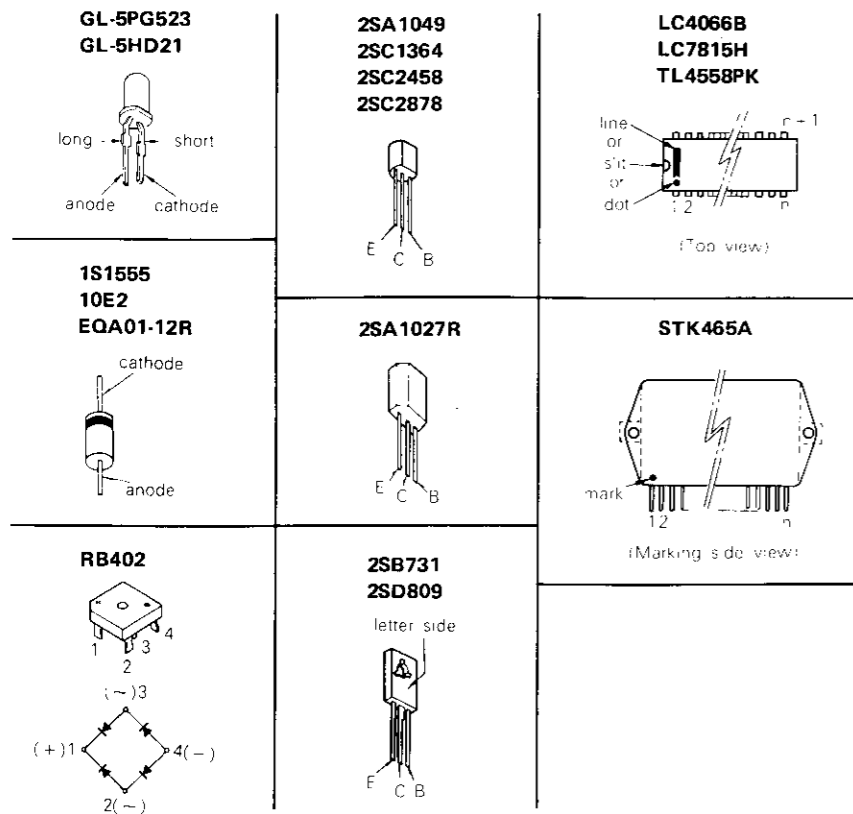
Bottom Plate
Remove the bottom plate by removing four screws.





SECTION 3
DIAGRAMS

Semiconductor Lead Layouts



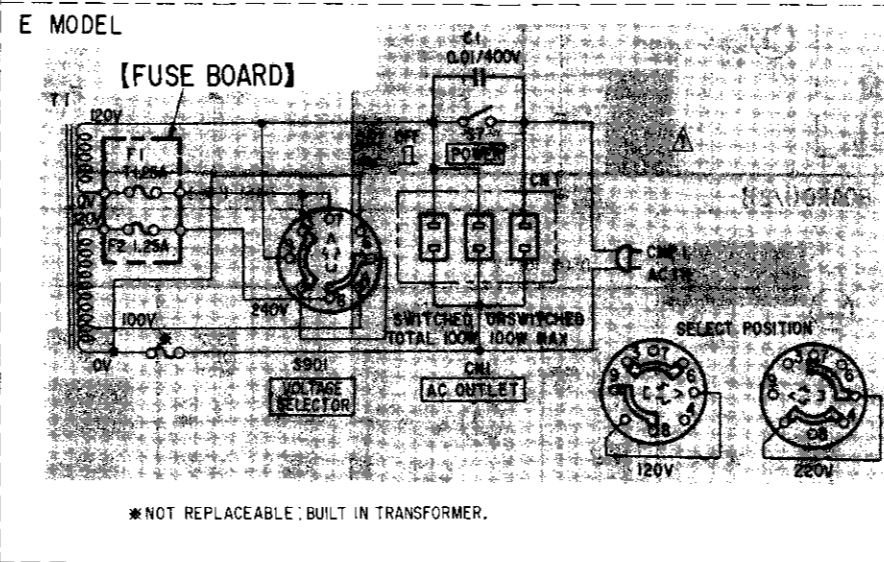
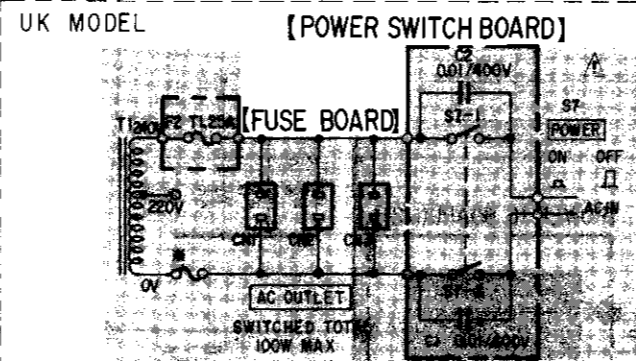
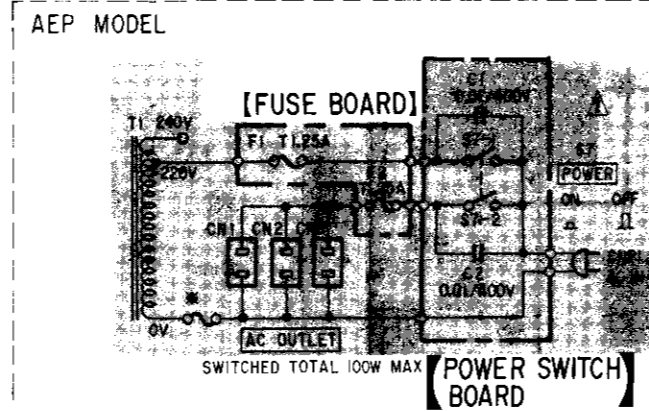
Note on schematic diagram:

- All capacitors are in μF unless otherwise noted. $\text{pF} : \mu\mu\text{F}$ 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in ohms, $\frac{1}{4}\text{W}$ unless otherwise noted. $\text{k}\Omega : 1000\ \Omega$, $\text{M}\Omega : 1000\ \text{k}\Omega$
- : nonflammable resistor.
- : fusible resistor.
- Δ : internal component.
- Switches

Ref. No.	Switch	Position
S1	PHONO	OFF
S2	TUNER	OFF
S3	CD/AUX	OFF
S4	TAPE 1	OFF
S5	MONITOR TAPE 2	OFF
S6	SPEAKERS	ON
S7	POWER	OFF
S901	VOLTAGE SELECT (E model)	240V

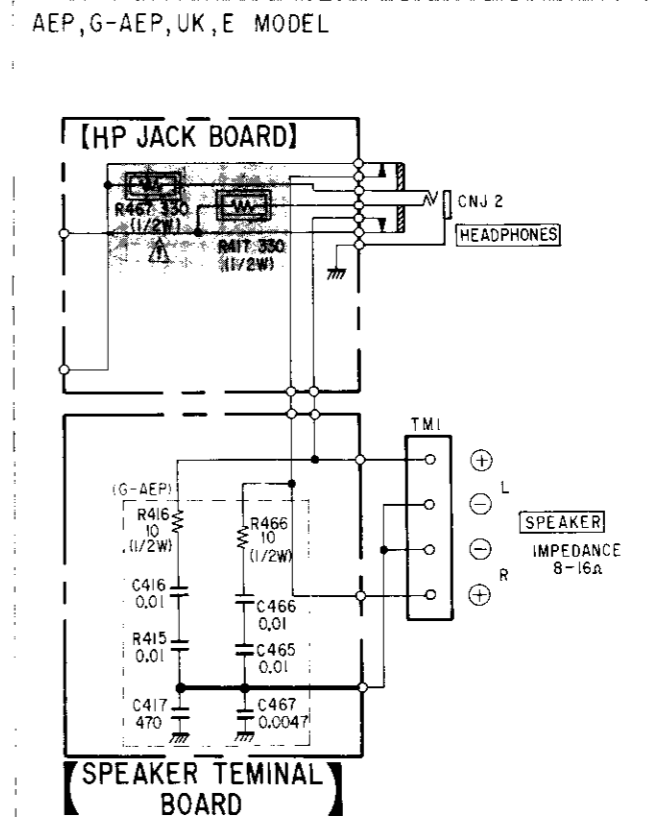
- : adjustment for repair.
- : B+ bus.
- : B- bus.
- Voltages are dc with respect to ground unless otherwise noted.
- Readings are taken under no-signal conditions with a VOM.
- Voltage variations may be noted due to normal production tolerances.
- : signal path

3-1. SCHEMATIC DIAGRAM
- Power Supply Section -



Note: Voltages are measured with a VOM (50k Ω /V).

- Speaker Terminal Section -

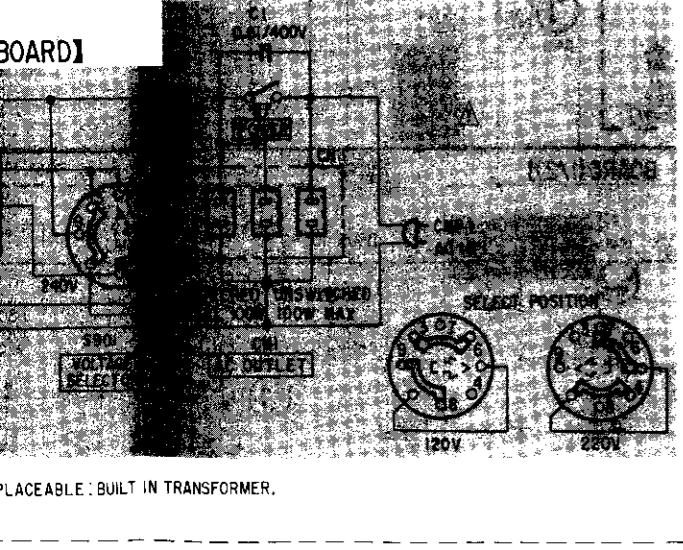
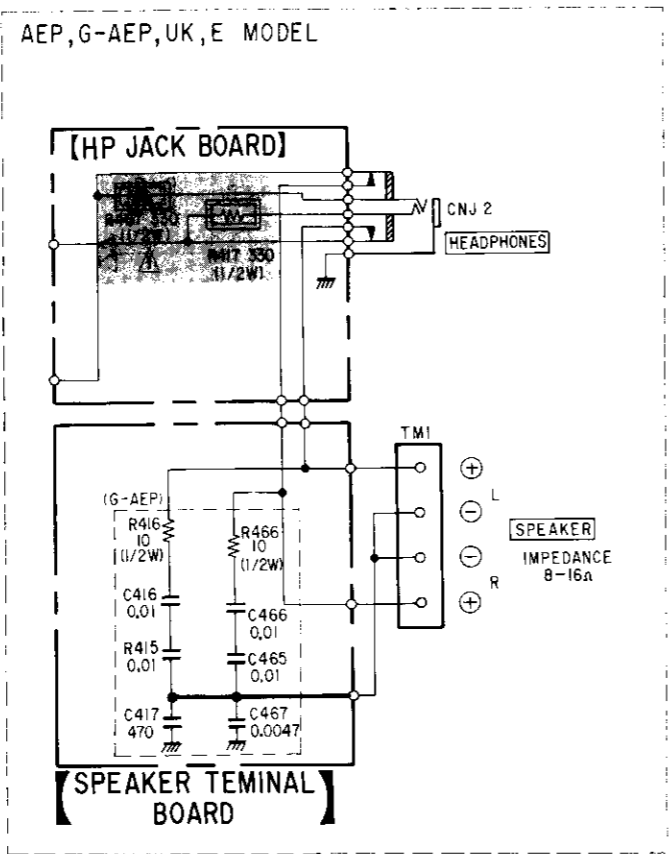
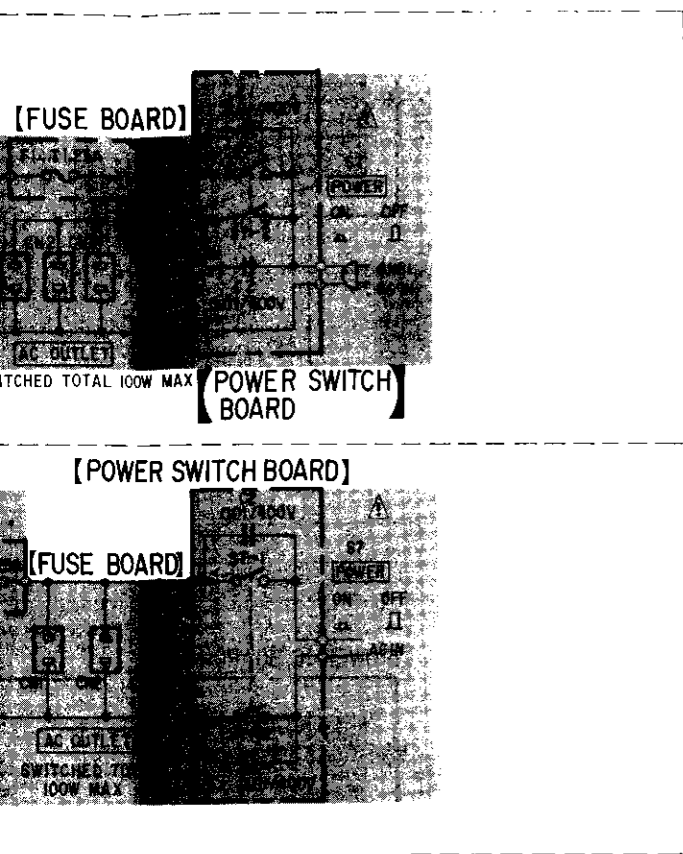


Note: The components identified by shading and mark Δ are critical for safety. Replace only with part number specified.

C D E F G H I J

RAM
on -

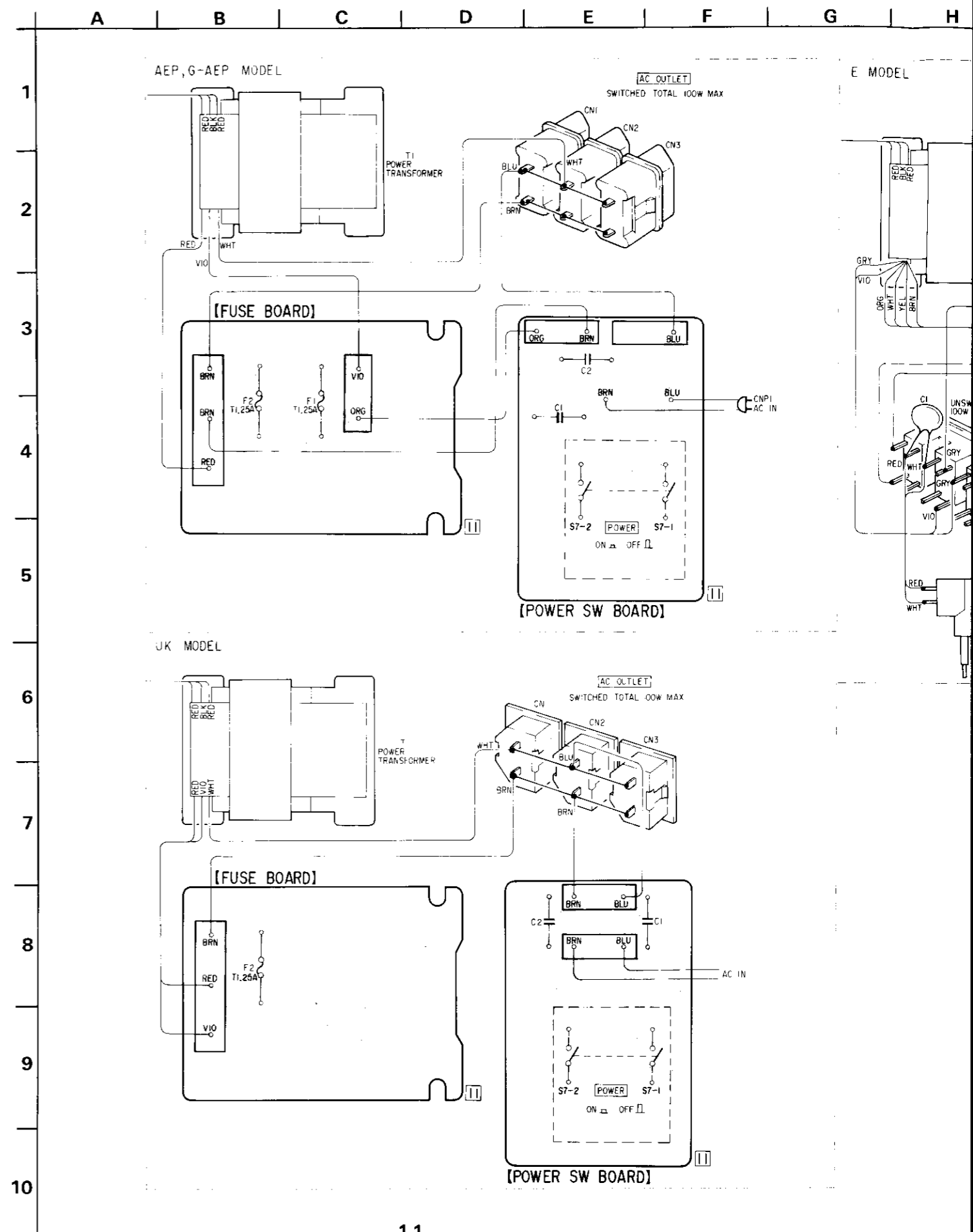
- Speaker Terminal Section -



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

Resistances are measured with a VOM (50kΩ/V).

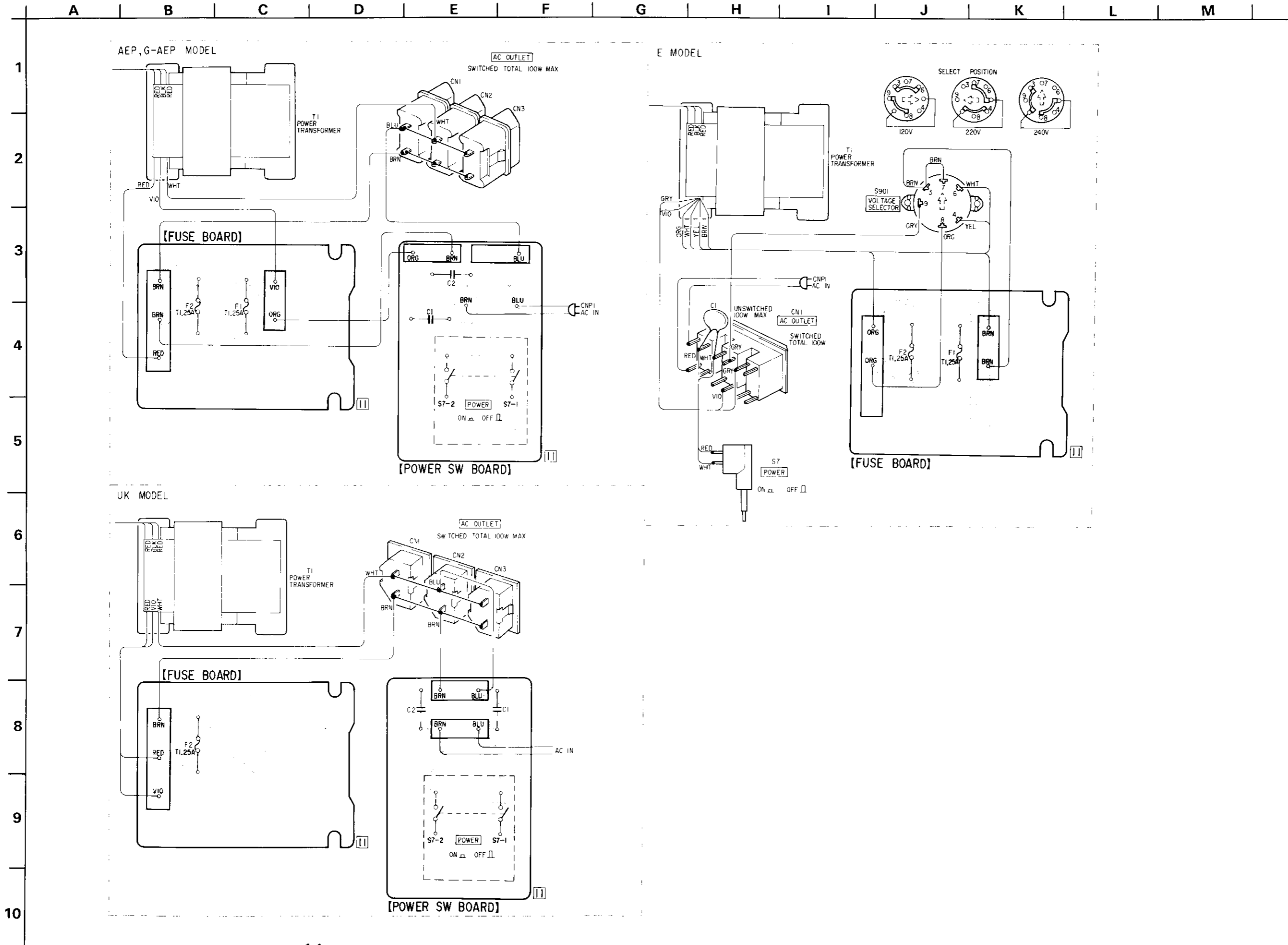
3-2. MOUNTING DIAGRAM
- Power Supply Section -

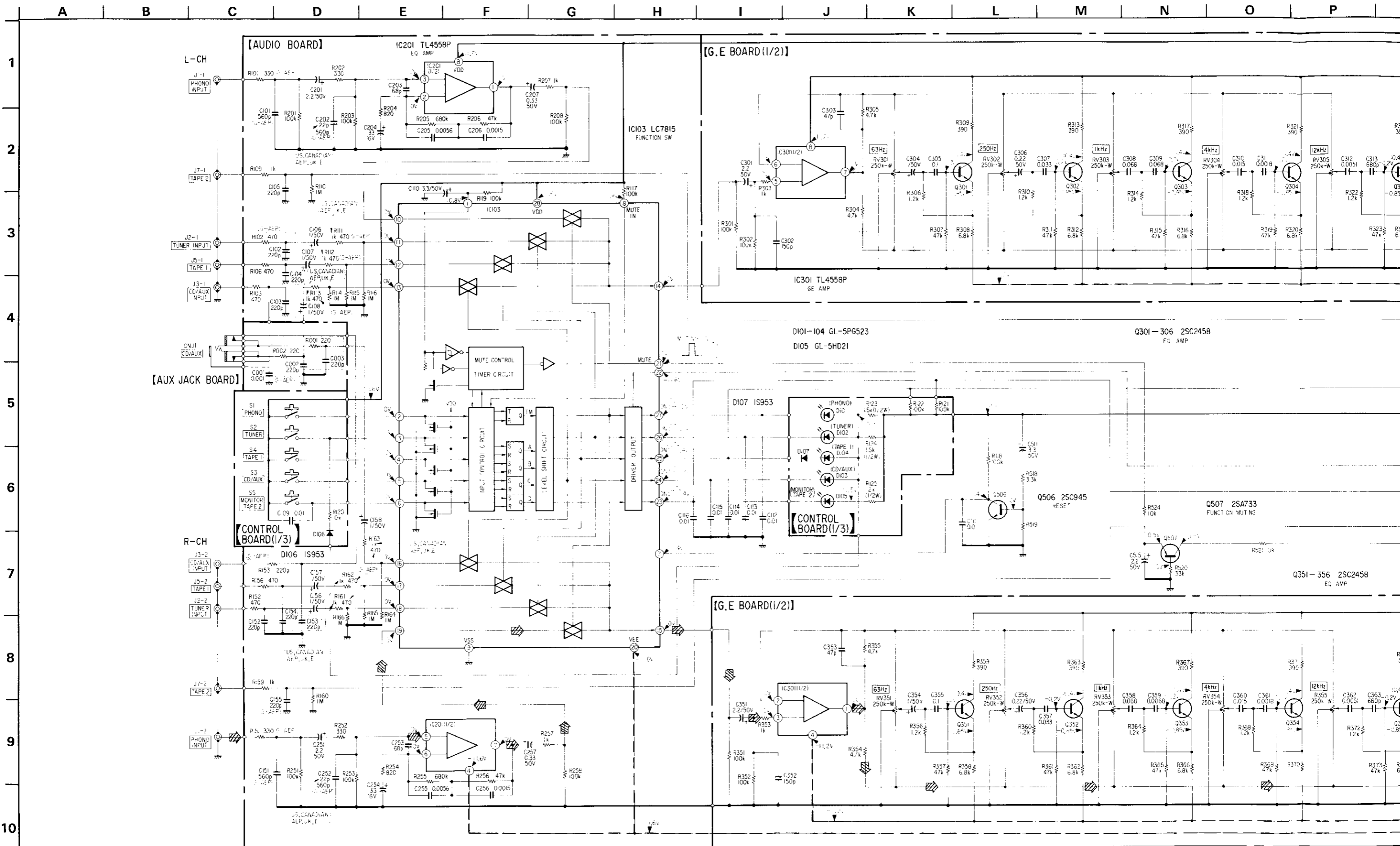


3-2. MOUNTING DIAGRAM
 — Power Supply Section —

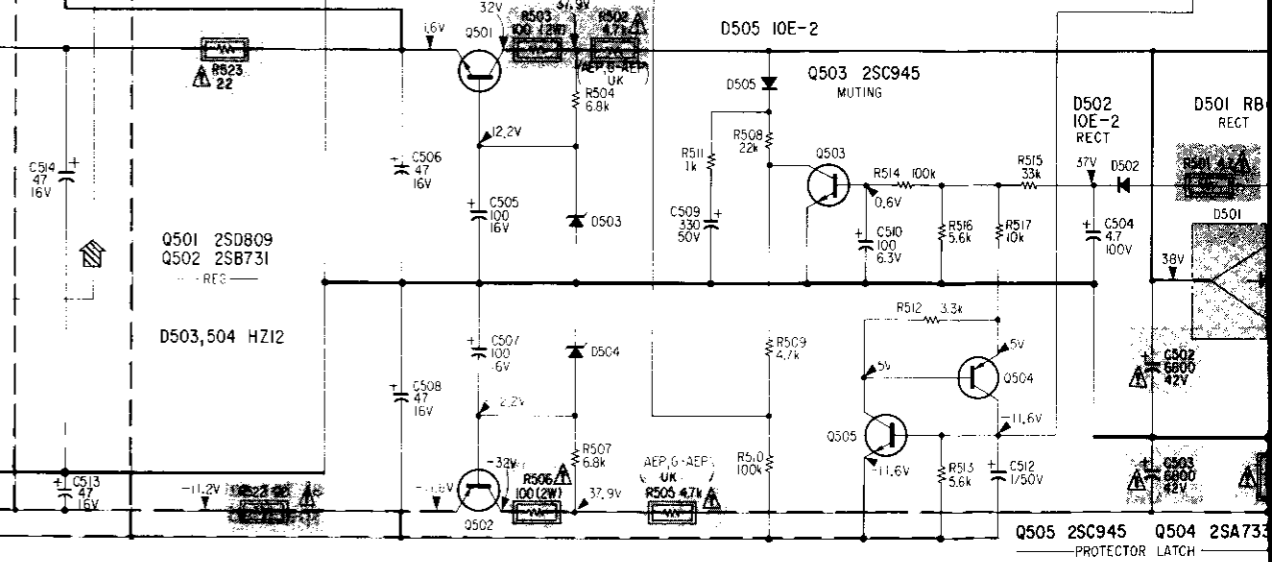
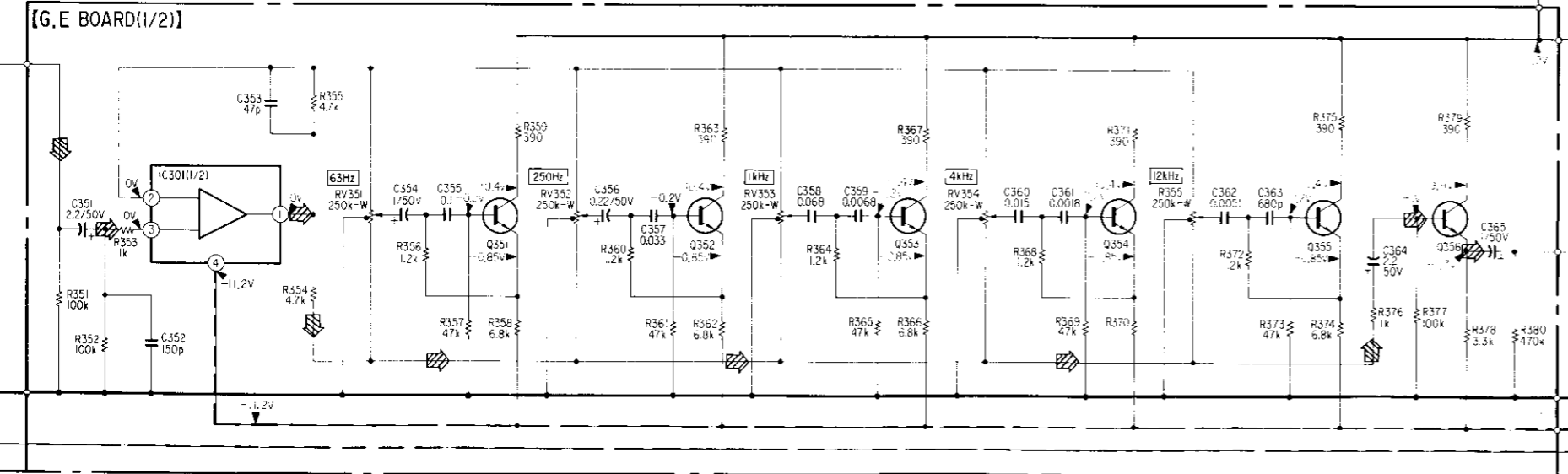
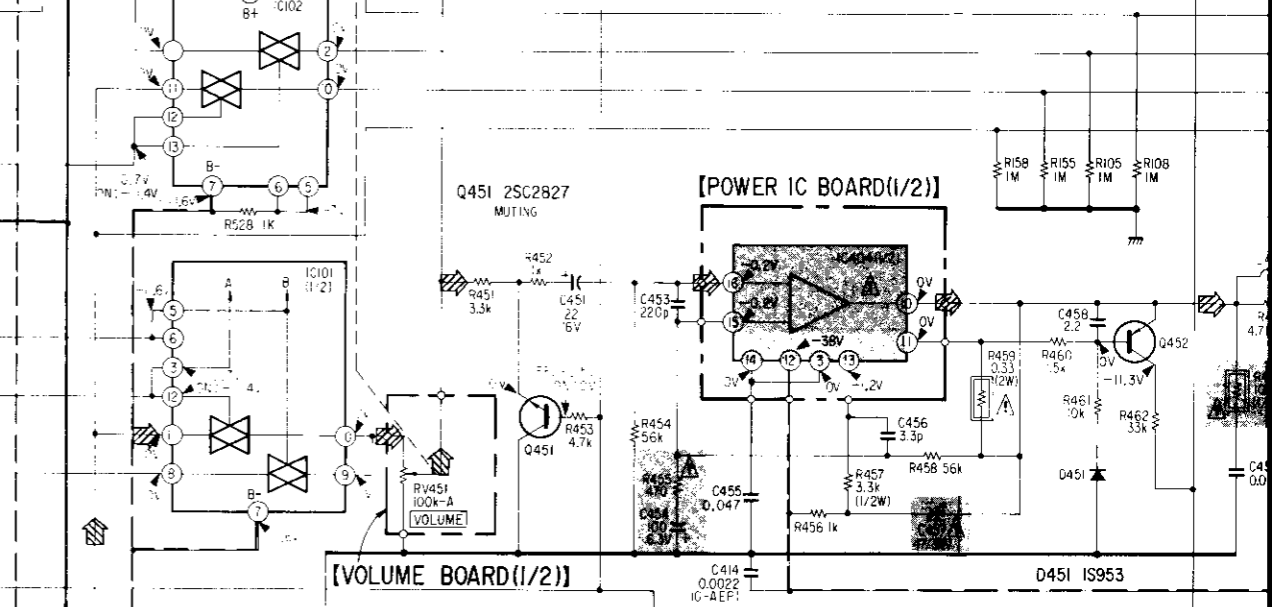
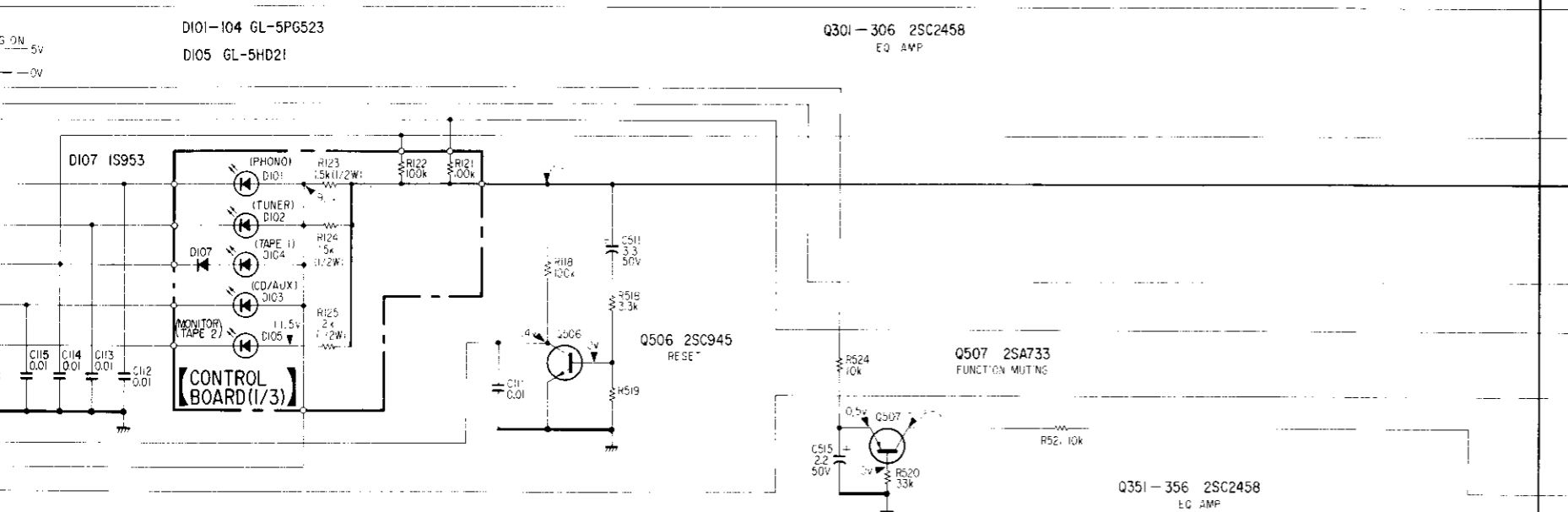
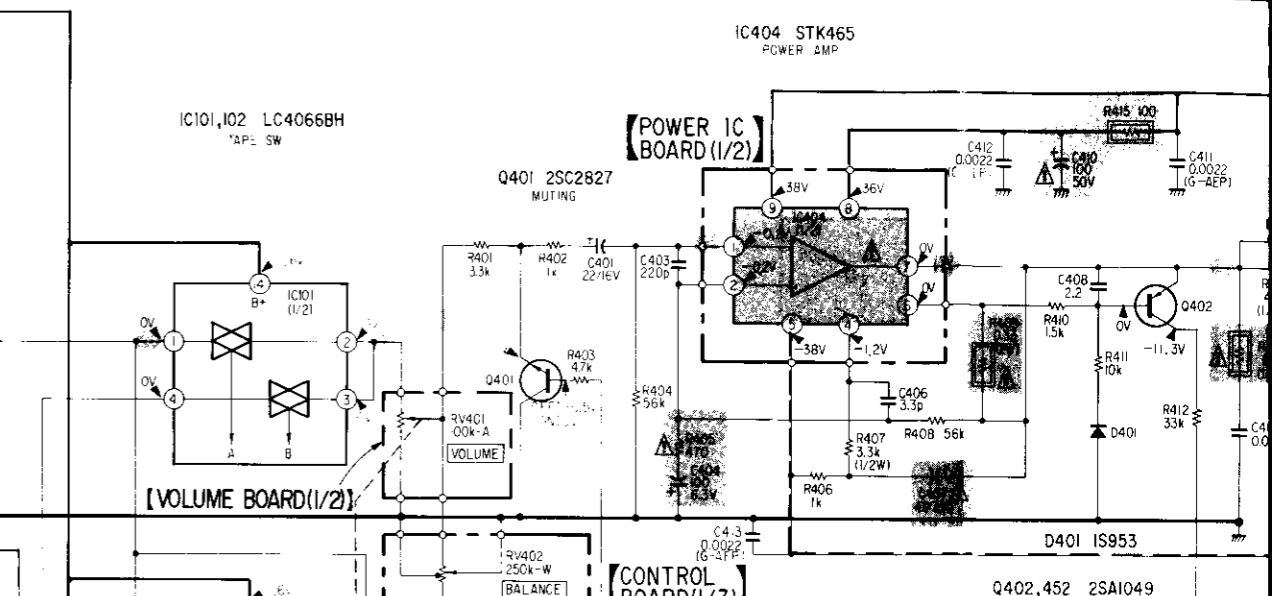
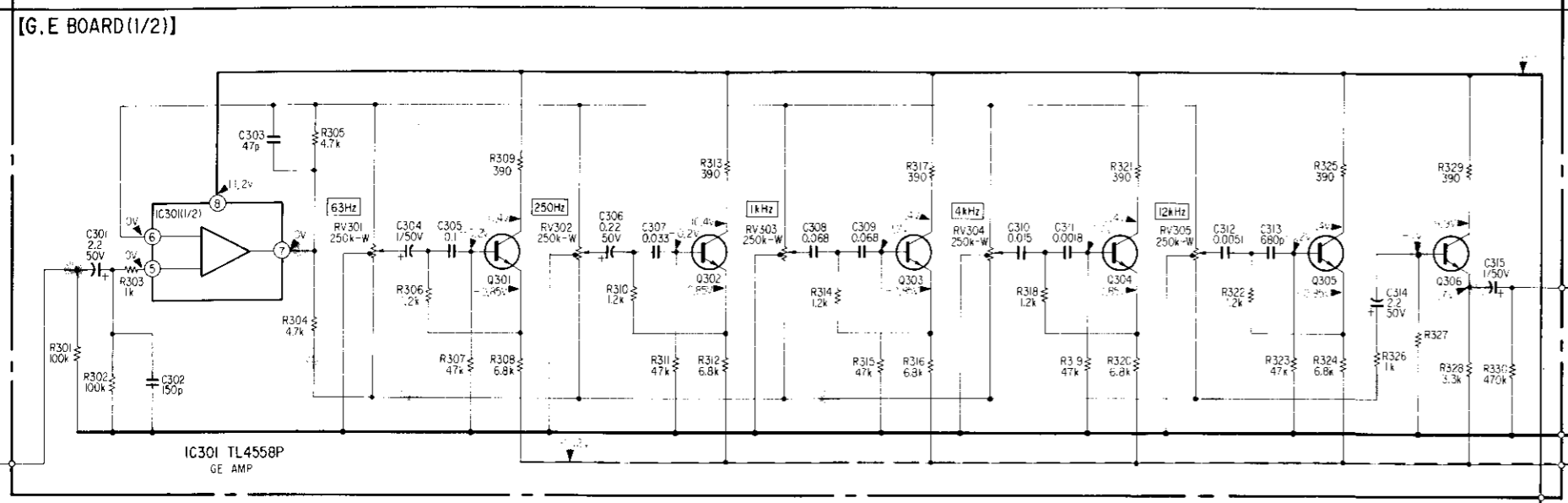
TA-AX35 TA-AX35

J

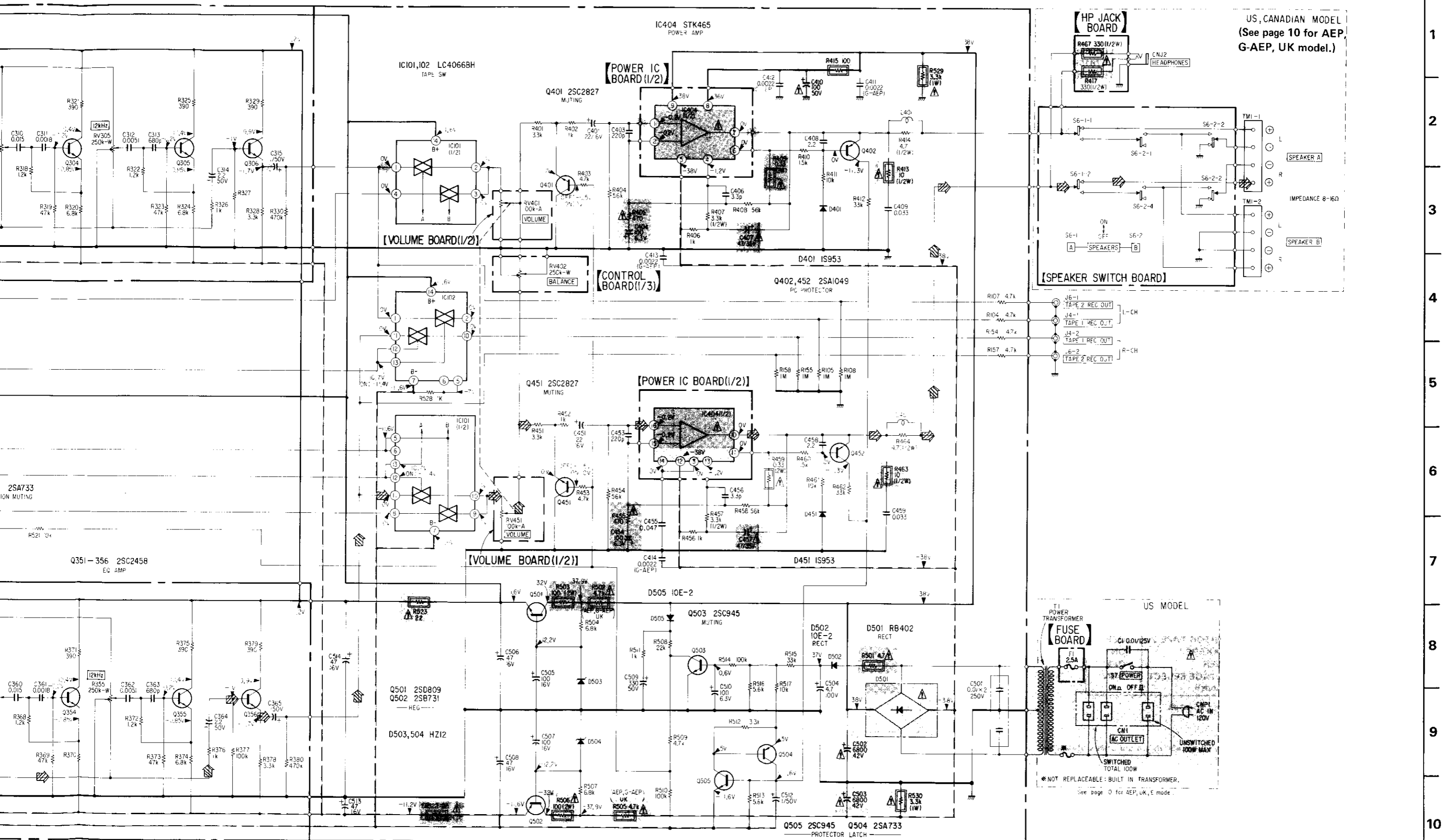




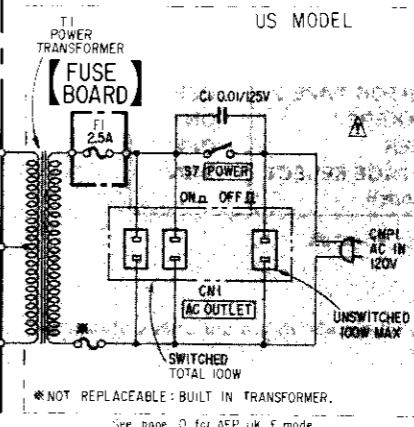
I J K L M N O P Q R S T U V W X Y



O P Q R S T U V W X Y Z A1 B1 C1 D1



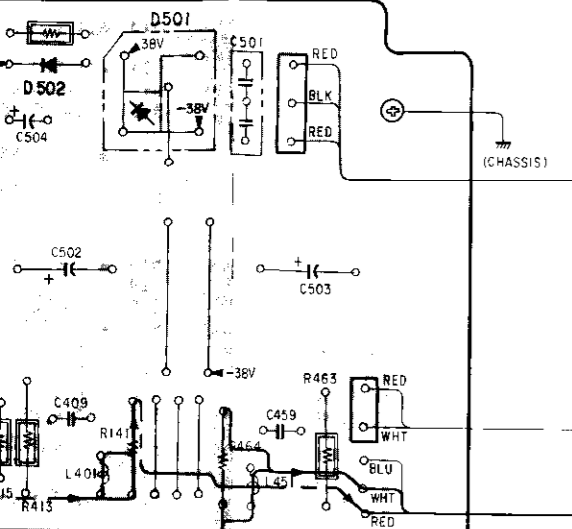
US, CANADIAN MODEL
(See page 10 for AEP,
G-AEP, UK model.)



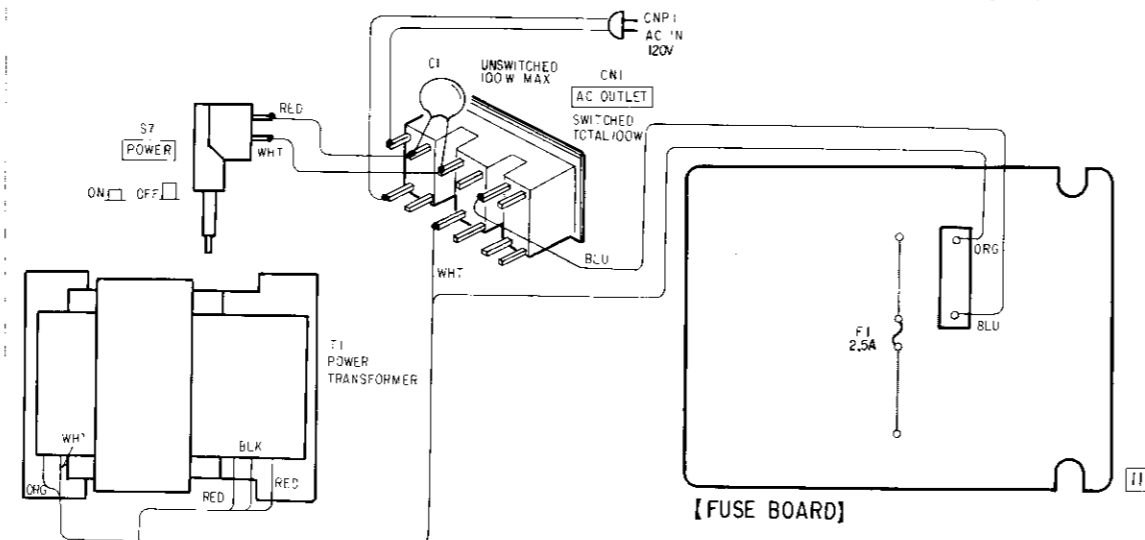
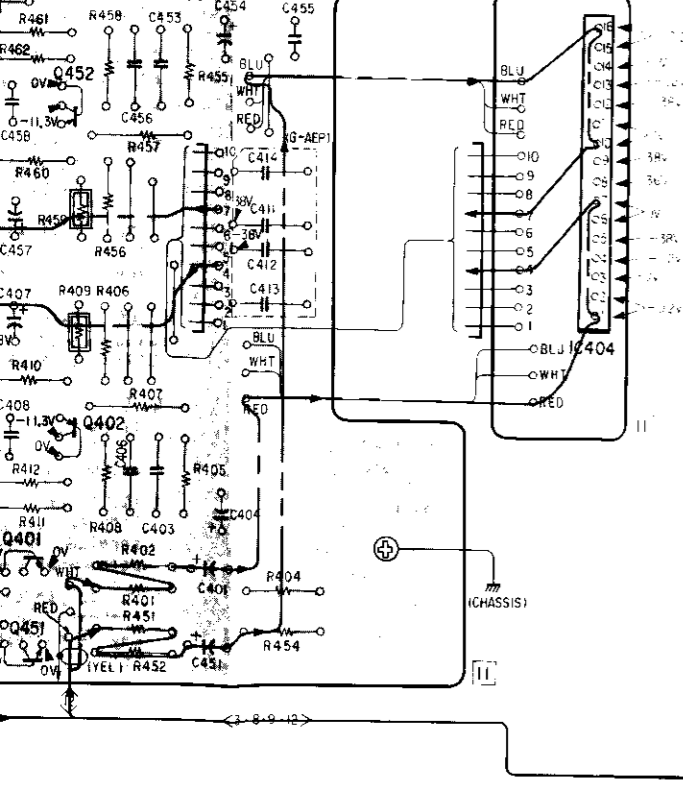
US, CANADIAN MODEL
 (See pages 11, 12 for
 AEP, G-AEP, UK model.)

452	402	IC404	Q, IC
401	451		
502	501	D	

[AUDIO BOARD]

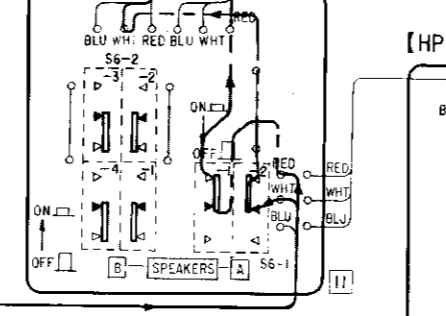


[POWER IC BOARD]

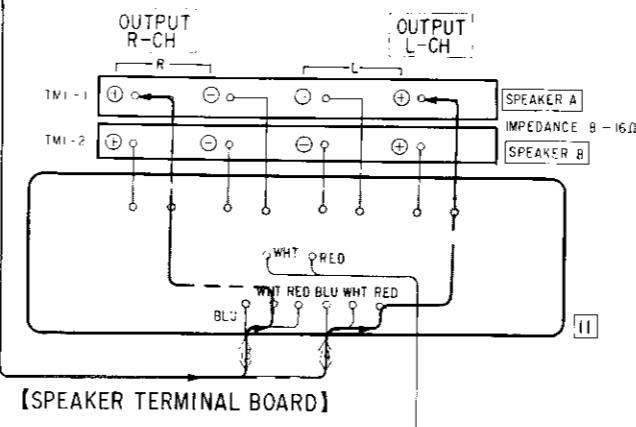
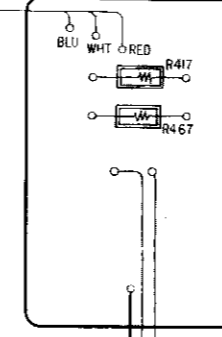


[FUSE BOARD]

[SPEAKER SWITCH BOARD]

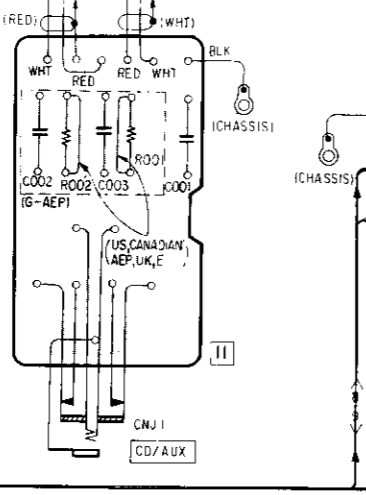


[HP JACK BOARD]

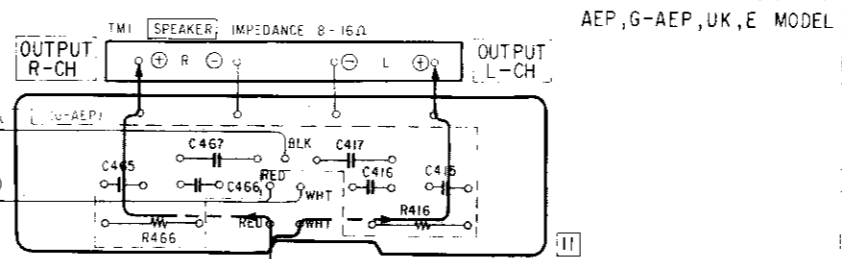
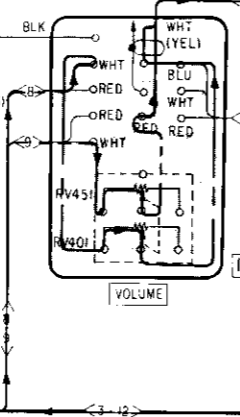


[SPEAKER TERMINAL BOARD]

[AUX JACK BOARD]

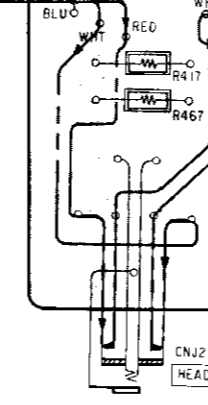


[VOLUME BOARD]



[HP JACK BOARD]

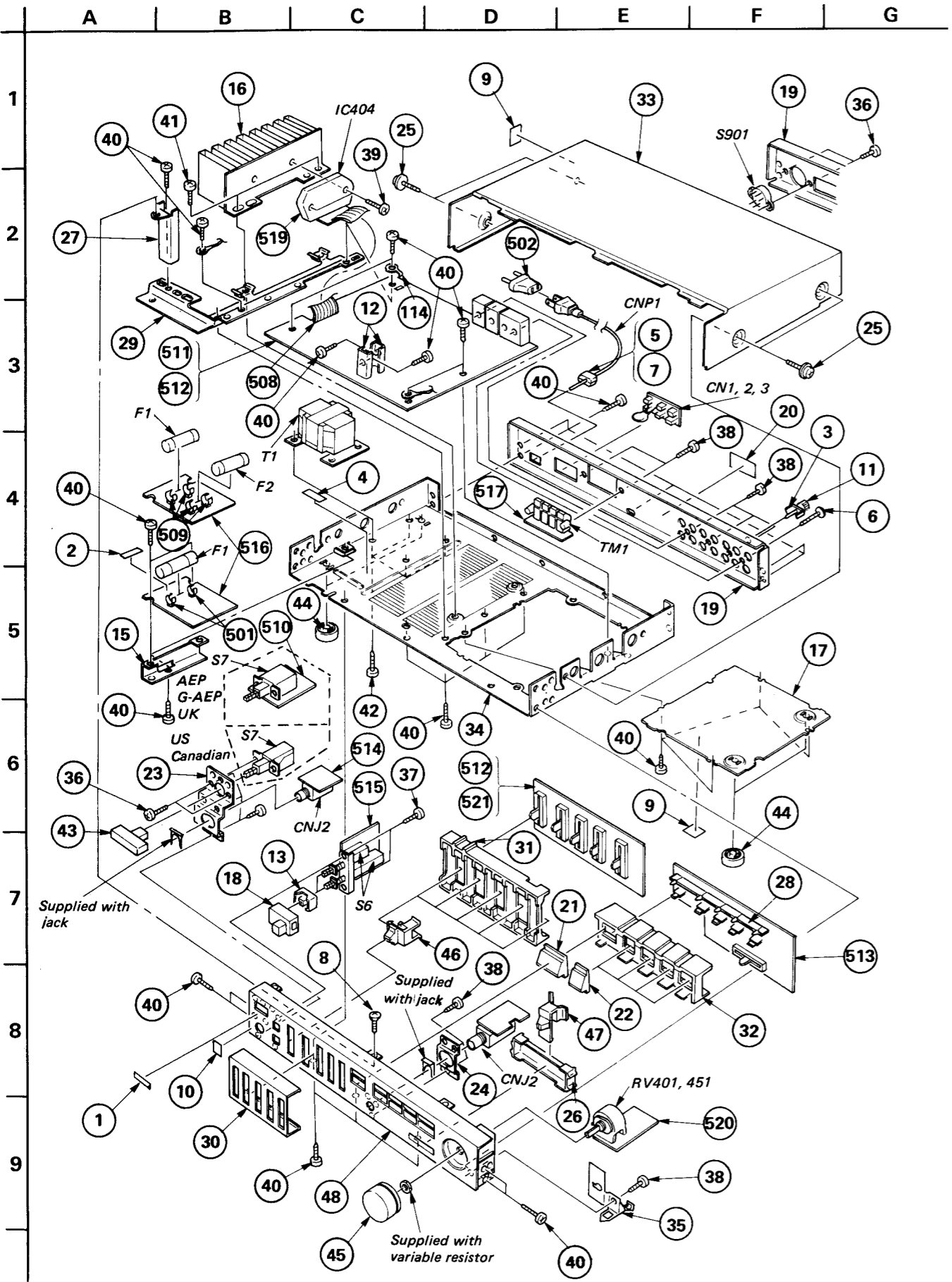
[SPEAKER TERMINAL BOARD]



- Note:**
- Color code of sleeving over the end of the jacket.
 - WHT, RED, (RED)(GRY)
 - : parts extracted from the component side.
 - : indicates side identified with part number.
 - : B+ pattern
 - : signal path
 - : L-CH signal path
 - : R-CH signal path

1
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10

SECTION 4
EXPLODED VIEW AND PARTS LIST



GENERAL SECTION		
No.	Part No.	Description
1	3-701-690-00	(UK)...LABEL (MADE IN JAPAN)
2	3-701-946-24	(US,Canadian)...LABEL, FUSE
3	3-701-993-00	SPACER, TERMINAL
4	3-703-044-26	(US,Canadian)...LABEL, CAUTION
5	3-703-244-00	(AEP,G-AEP,UK)...BUSHING, CORD
6	3-703-473-00	SCREW, TERMINAL
7	3-703-571-00	(US,Canadian,E)...BUSHING (S), CORD
8	3-703-583-00	TIGHT (3X6), PLATE TAP
9	3-703-680-00	(US)...LABEL, CAUTION, SUB, NEW UL
10	3-703-710-01	STICKER, SONY SYMBOL (12)
11	3-706-165-00	SCREW
12	4-861-002-11	HEAT SINK
13	4-864-307-00	(US,Canadian)...RING
14	4-870-539-00	PLATE, GROUND
15	4-881-414-00	BRACKET (FUSE)
16	4-881-415-00	HEAT SINK (A)
17	4-881-424-00	PLATE, BOTTOM
18	4-886-814-41	(US,Canadian)...KNOB, SPEAKER
19	4-889-302-00	(US,Canadian)...PLATE, JACK
19	4-889-303-00	(AEP,G-AEP)...PLATE, JACK
19	4-889-304-00	(UK)...PLATE, JACK
19	4-889-305-00	(E)...PLATE, JACK
20	4-889-310-00	(E)...LABEL, MODEL NUMBER (E)
20	4-889-311-00	(UK)...LABEL, MODEL NUMBER (UK)
20	4-889-312-00	(AEP,G-AEP)...LABEL, MODEL NUMBER (AEP)
20	4-889-313-00	(Canadian)...LABEL, MODEL NUMBER (CND)
20	4-889-314-00	(US)...LABEL, MODEL NUMBER (U)
21	4-889-317-01	KNOB (16XL), SQUARE
22	4-889-317-11	KNOB (16XL), SQUARE
23	4-889-318-00	HOLDER, POWER SWITCH
24	4-889-319-00	HOLDER, MICROPHONE
25	4-889-321-01	SCREW
26	4-889-322-00	GUIDE (B), KNOB
27	4-889-323-00	REINFORCEMENT
28	4-889-326-00	HOLDER, LED
29	4-889-327-00	FRAME, CENTER
30	4-889-330-00	(US,Canadian)...COVER, GRAPHIC
31	4-889-331-00	GUIDE (A), KNOB
32	4-889-332-00	HINGE, KNOB
33	4-889-334-00	COVER, TOP
34	4-889-335-00	CHASSIS
35	4-889-336-00	PLATE, SHIELD
36	7-682-547-09	SCREW +B 3X6
37	7-685-534-19	(US,Canadian)...SCREW +BTP 2.6X8 TYPE2 N-S
38	7-685-646-11	SCREW +BVTP 3X8 TYPE2 N-S

NOTE:

- Items with no part number and no description are not stocked because they are seldom required for routine service.
- Items marked "▲" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- Due to standardization, parts with part numbers (Δ-ΔΔΔ-ΔΔΔ-XX or Δ-ΔΔΔΔ-ΔΔΔ-X) may be different from those used in the set.
- 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.

CAPACITORS:
MF:μF, PF:μμF.

RESISTORS
All resistors are in ohms.
F: nonflammable

COILS
MMH: mH, UH: μH

SEMICONDUCTORS
In each case, U: μ, for example:
UA...: μA...; UPA...: μPA...; UPC...: μPC...
UPD...: μPD...

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

GENERAL SECTION		
No.	Part No.	Description
39	7-685-649-21	SCREW +BVTP 3X14 TYPE2 N-S
40	7-685-871-01	SCREW +BVTT 3X6 (S)
41	7-685-872-01	SCREW +BVTT 3X8 (S)
42	7-685-881-01	SCREW +BVTT 4X8 (S)
43	X-4875-108-0	KNOB ASSY, POWER
44	X-4875-123-1	FOOT ASSY, MF
45	X-4889-302-0	KNOB ASSY, CONTROL
46	X-4889-303-0	KNOB (9X12.6) ASSY, SQUARE
47	X-4889-304-0	KNOB (3X8) ASSY, SQUARE
48	X-4889-306-1	(US,Canadian)...PANEL ASSY
48	X-4889-307-1	(AEP,G-AEP,UK,E)...PANEL ASSY

ACCESSORY & PACKING MATERIAL		
No.	Part No.	Description
101	3-701-630-00	BAG, POLYETHYLENE
102	3-703-390-01	(US)...INSTRUCTION
103	3-773-437-11	(AEP,UK,E)...MANUAL, INSTRUCTION
103	3-773-437-21	(US,Canadian)...MANUAL, INSTRUCTION
103	3-773-437-31	(Canadian)...MANUAL, INSTRUCTION
103	3-773-437-41	(AEP,G-AEP)...MANUAL, INSTRUCTION
104	4-875-448-00	CUSHION, UPPER
105	4-875-449-00	CUSHION, LOWER
106	4-876-352-00	SHEET, PROTECTION
107	4-889-338-00	INDIVIDUAL CARTON

ELECTRICAL PARTS

Ref.No.	Part No.	Description
501	1-517-072-00	(US,Canadian)...LAMP HOLDER
502	▲1-526-565-00	(E)...AC PLUG ADAPTOR
503	▲;1-535-115-00	TERMINAL
504	▲;1-535-116-00	TERMINAL
505	▲;1-535-135-00	(AEP,G-AEP,UK)...BASE POST 14MM (10MM PITCH)
506	▲;1-535-139-00	BASE POST 19MM (10MM PITCH)
507	▲;1-535-416-00	(AEP,G-AEP)...TERMINAL
508	1-535-481-00	PLATE, JUMPER
509	1-553-131-00	(AEP,G-AEP,UK,E)...HOLDER, FUSE
510	▲;1-607-216-00	(AEP,G-AEP)...PC BOARD, POWER SW
510	▲;1-607-217-00	(UK)...PC BOARD, POWER SW
511	▲;1-610-654-00	PC BOARD, AUDIO
512	▲;1-610-655-00	PC BOARD, G.E
513	▲;1-610-656-00	PC BOARD, CONTROL
514	▲;1-610-658-00	PC BOARD, HP JACK
515	1-610-659-00	(US,Canadian)...PC BOARD, SP SWITCH
516	▲;1-610-660-00	PC BOARD, FUSE
517	▲;1-610-661-00	(AEP,G-AEP)...PC BOARD, SPEAKER TERMINAL (A)
517	▲;1-610-662-00	(US,Canadian)...PC BOARD, SPEAKER TERMINAL (B)
518	▲;1-610-663-00	PC BOARD, AUX JACK
519	▲;1-610-664-00	PC BOARD, POWER IC
520	▲;1-610-665-00	PC BOARD, VOLUME
521	▲;A-4375-175-A	MOUNTED PCB, G.E
522	▲;A-4388-350-A	(US,Canadian,E)...MOUNTED PCB, AUDIO
522	▲;A-4388-351-A	(AEP,UK)...MOUNTED PCB, AUDIO
522	▲;A-4388-352-A	(G-AEP)...MOUNTED PCB, AUDIO
C1	▲.1-161-744-00	(US,Canadian,E)...CAP, CERAMIC
C1	▲.1-161-744-51	(AEP,G-AEP,UK)...CERAMIC
C2	▲.1-161-744-51	(AEP,G-AEP,UK)...CERAMIC
C001	1-161-323-00	CERAMIC 0.001MF 10% 50V
C002	1-161-315-00	(G-AEP)...CERAMIC 220PF 10% 50V
C003	1-161-315-00	(G-AEP)...CERAMIC 220PF 10% 50V
C101	1-161-320-00	(G-AEP)...CERAMIC 560PF 10% 50V
C102	1-161-315-00	(G-AEP)...CERAMIC 220PF 10% 50V
C103	1-161-315-00	(G-AEP)...CERAMIC 220PF 10% 50V
C104	1-161-315-00	(G-AEP)...CERAMIC 220PF 10% 50V
C105	1-161-315-00	(G-AEP)...CERAMIC 220PF 10% 50V
C106	1-123-380-00	ELECT 1MF 20% 50V
C107	1-123-380-00	ELECT 1MF 20% 50V
C108	1-123-380-00	ELECT 1MF 20% 50V
C109	1-161-330-00	CERAMIC 0.01MF 30% 25V
C110	1-123-354-00	ELECT 3.3MF 20% 50V
C111	1-161-330-00	CERAMIC 0.01MF 30% 25V

ELECTRICAL PARTS

Ref.No.	Part No.	Description
C112	1-161-330-00	CERAMIC 0.01MF 30% 25V
C113	1-161-330-00	CERAMIC 0.01MF 30% 25V
C114	1-161-330-00	CERAMIC 0.01MF 30% 25V
C115	1-161-330-00	CERAMIC 0.01MF 30% 25V
C116	1-161-330-00	CERAMIC 0.01MF 30% 25V
C201	1-123-353-00	ELECT 2.2MF 20% 50V
C202	1-161-263-00	(US,Canadian,AEP,E)...CERAMIC 22PF 5% 50V
C202	1-161-320-00	(G-AEP)...CERAMIC 560PF 10% 50V
C203	1-161-269-00	CERAMIC 68PF 5% 50V
C204	1-123-318-00	ELECT 33MF 20% 16V
C205	1-108-573-00	MYLAR 0.0056MF 5% 50V
C206	1-108-559-00	MYLAR 0.0015MF 5% 50V
C207	1-123-609-00	ELECT 0.33MF 20% 50V
C301	1-123-612-00	ELECT 2.2MF 20% 50V
C302	1-101-361-00	CERAMIC 150PF 5% 50V
C303	1-101-880-00	CERAMIC 47PF 5% 50V
C304	1-123-611-00	ELECT 1MF 20% 50V
C305	1-130-632-00	FILM 0.1MF 5% 50V
C306	1-123-608-00	ELECT 0.22MF 20% 50V
C307	1-130-626-00	FILM 0.033MF 5% 50V
C308	1-130-630-00	FILM 0.068MF 5% 50V
C309	1-108-575-00	MYLAR 0.0068MF 5% 50V
C310	1-130-622-00	FILM 0.015MF 5% 50V
C311	1-108-561-00	MYLAR 0.0018MF 5% 50V
C312	1-108-572-00	MYLAR 0.0051MF 5% 50V
C313	1-102-116-00	CERAMIC 680PF 10% 50V
C314	1-123-612-00	ELECT 2.2MF 20% 50V
C315	1-123-611-00	ELECT 1MF 20% 50V
C401	1-123-317-00	ELECT 22MF 20% 16V
C403	1-161-315-00	CERAMIC 220PF 10% 50V
C404	▲1-123-295-00	ELECT 100MF 20% 6.3V
C406	1-161-253-00	CERAMIC 3.3PF 10% 50V
C407	▲1-123-512-00	ELECT 47MF 20% 35V
C408	1-123-230-00	ELECT 2.2MF 20% 50V
C409	1-108-244-00	MYLAR 0.033MF 10% 50V
C410	▲1-123-513-00	ELECT 100MF 20% 50V
C411	1-161-326-00	(G-AEP)...CERAMIC 0.0022MF 30% 50V
C412	1-161-326-00	(G-AEP)...CERAMIC 0.0022MF 30% 50V
C413	1-161-326-00	(G-AEP)...CERAMIC 0.0022MF 30% 50V
C414	1-161-326-00	(G-AEP)...CERAMIC 0.0022MF 30% 50V
C415	1-108-239-00	(G-AEP)...MYLAR 0.01MF 10% 50V
C416	1-108-239-00	(G-AEP)...MYLAR 0.01MF 10% 50V
C417	1-161-328-00	(G-AEP)...CERAMIC 4700PF 5% 50V
C501	1-102-394-00	CERAMIC 250V

ELECTRICAL PARTS

Ref.No.	Part No.	Description
C502	▲1-124-030-00	ELECT 6800MF 20% 42V
C503	▲1-124-030-00	ELECT 6800MF 20% 42V
C504	1-123-527-00	ELECT 4.7MF 20% 100V
C505	1-123-484-00	ELECT 100MF 20% 16V
C506	1-123-493-00	ELECT 47MF 20% 16V
C507	1-123-484-00	ELECT 100MF 20% 16V
C508	1-123-493-00	ELECT 47MF 20% 16V
C509	1-123-515-00	ELECT 330MF 20% 50V
C510	1-123-295-00	ELECT 100MF 20% 6.3V
C511	1-123-354-00	ELECT 3.3MF 20% 50V
C512	1-123-380-00	ELECT 1MF 20% 50V
C513	1-123-493-00	ELECT 47MF 20% 16V
C514	1-123-493-00	ELECT 47MF 20% 16V
C515	1-123-353-00	ELECT 2.2MF 20% 50V
CN1	▲.1-526-574-00	(US,Canadian,E)...OUTLET, AC (3 GANG)
CN1	▲.1-526-694-00	(AEP,G-AEP)...OUTLET, AC
CN1	▲.1-526-751-00	(UK)...OUTLET, AC
CN2	▲.1-526-694-00	(AEP,G-AEP)...OUTLET, AC
CN2	▲.1-526-751-00	(UK)...OUTLET, AC
CN3	▲.1-526-694-00	(AEP,G-AEP)...OUTLET, AC
CN3	▲.1-526-751-00	(UK)...OUTLET, AC
CNJ1	1-507-729-00	JACK, LARGE TYPE, CD/AUX
CNJ2	1-507-729-00	(AEP,G-AEP,UK,E)...JACK, LARGE TYPE
CNJ2	1-507-669-00	(US,Canadian)...JACK, HEADPHONES
CNP1	▲.1-534-817-XX	(AEP,G-AEP)...CORD, POWER EURO PLUG
CNP1	▲.1-551-472-00	(E)...CORD, POWER
CNP1	▲.1-551-628-00	(US,Canadian)...CORD, POWER
CNP1	▲.1-551-884-00	(UK)...CORD, POWER
D101	8-719-907-00	DIODE GL-5PG523
D102	8-719-907-00	DIODE GL-5PG523
D103	8-719-907-00	DIODE GL-5PG523
D104	8-719-907-00	DIODE GL-5PG523
D105	8-719-907-00	DIODE GL-5PG523
D106	8-719-815-55	DIODE 1S1555
D107	8-719-815-55	DIODE 1S1555
D401	8-719-815-55	DIODE 1S1555
D501	▲8-719-300-57	DIODE RB402
D502	8-719-200-02	DIODE 10E-2
D503	8-719-913-12	DIODE EQA01-12R
D504	8-719-913-12	DIODE EQA01-12R
D505	8-719-200-02	DIODE 10E-2
F1	▲.1-532-285-00	(AEP,G-AEP,E)...FUSE, TIME-LAG 1.25A
F1	▲.1-532-348-00	(US,Canadian)...FUSE
F2	▲.1-532-285-00	(AEP,G-AEP,UK,E)...FUSE, TIME-LAG 1.25A

ELECTRICAL PARTS

Ref.No.	Part No.	Description
IC101	8-759-800-03	IC LC4066B
IC102	8-759-800-03	IC LC4066B
IC103	8-759-800-33	IC LC7815H
IC201	8-759-935-58	IC TL4558PK
IC301	8-759-935-58	IC TL4558PK
IC404	▲8-749-946-50	IC STK465A
J1	1-507-769-00	JACK, PIN 6P, PHONO
J2	1-507-769-00	JACK, PIN 6P, TUNER
J3	1-507-769-00	JACK, PIN 6P, CD/AUX
J4	1-507-762-00	JACK, PIN 4P, TAPE1, REC OUT
J5	1-507-762-00	JACK, PIN 4P, TAPE1
J6	1-507-762-00	JACK, PIN 4P, TAPE2, REC OUT
J7	1-507-762-00	JACK, PIN 4P, TAPE2
L401	▲;1-420-872-00	COIL, AIR CORE
L451	▲;1-420-872-00	COIL, AIR CORE
Q301	8-729-245-83	TRANSISTOR 2SC2458
Q302	8-729-245-83	TRANSISTOR 2SC2458
Q303	8-729-245-83	TRANSISTOR 2SC2458
Q304	8-729-245-83	TRANSISTOR 2SC2458
Q306	8-729-245-83	TRANSISTOR 2SC2458
Q401	8-729-201-04	TRANSISTOR 2SC2878
Q402	8-729-204-91	TRANSISTOR 2SA1049
Q501	8-729-180-93	TRANSISTOR 2SD809
Q502	8-729-173-13	TRANSISTOR 2SB731
Q503	8-729-663-47	TRANSISTOR 2SC1364
Q504	8-729-612-77	TRANSISTOR 2SA1027R
Q505	8-729-663-47	TRANSISTOR 2SC1364
Q506	8-729-663-47	TRANSISTOR 2SC1364
Q507	8-729-612-77	TRANSISTOR 2SA1027R
Q601	8-729-245-83	TRANSISTOR 2SC2458
R001	1-246-457-15	(G-AEP)...CARBON 220 5% 1/4W
R002	1-246-457-15	(G-AEP)...CARBON 220 5% 1/4W
R101	1-246-461-00	(G-AEP)...CARBON 330 5% 1/4W
R102	1-246-465-00	(G-AEP)...CARBON 470 5% 1/4W
R103	1-246-465-00	(G-AEP)...CARBON 470 5% 1/4W
R104	1-246-489-00	CARBON 4.7K 5% 1/4W
R105	1-246-545-00	CARBON 1M 5% 1/4W
R106	1-246-465-00	(G-AEP)...CARBON 470 5% 1/4W
R107	1-246-489-00	CARBON 4.7K 5% 1/4W
R108	1-246-545-00	CARBON 1M 5% 1/4W
R109	1-246-473-00	CARBON 1K 5% 1/4W
R110	1-246-545-00	CARBON 1M 5% 1/4W
R111	1-246-465-00	(G-AEP)...CARBON 470 5% 1/4W
R111	1-246-473-00	(US,Canadian,AEP,UK,E)...CARBON 1K 5% 1/4W
R112	1-246-465-00	(G-AEP)...CARBON 470 5% 1/4W
R112	1-246-473-00	(US,Canadian,AEP,UK,E)...CARBON 1K 5% 1/4W

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- 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.

CAPACITORS:

MF:µF, PF:µµF.

RESISTORS

- All resistors are in ohms.
- F: nonflammable

COILS

MMH: mH, UH: µH

SEMICONDUCTORS

In each case, U: µ, for example:
 UA...: µA...; UPA...: µPA...; UPC...: µPC,
 UPD...: µPD...

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

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ELECTRICAL PARTS

Ref.No.	Part No.	Description				
R113	1-246-465-00	(G-AEP)...CARBON	470	5%	1/4W	
R113	1-246-473-00	(US,Canadian,AEP,UK,E)...CARBON	1K	5%	1/4W	
R114	1-246-545-00	CARBON	1M	5%	1/4W	
R115	1-246-545-00	CARBON	1M	5%	1/4W	
R116	1-246-545-00	CARBON	1M	5%	1/4W	
R117	1-246-521-00	CARBON	100K	5%	1/4W	
R118	1-246-521-00	CARBON	100K	5%	1/4W	
R119	1-246-521-00	CARBON	100K	5%	1/4W	
R120	1-246-497-00	CARBON	10K	5%	1/4W	
R121	1-246-521-00	CARBON	100K	5%	1/4W	
R122	1-246-521-00	CARBON	100K	5%	1/4W	
R123	1-244-877-00	CARBON	1.5K	5%	1/2W	
R124	1-244-877-00	CARBON	1.5K	5%	1/2W	
R125	1-244-880-00	CARBON	2K	5%	1/2W	
R201	1-246-521-00	CARBON	100K	5%	1/4W	
R202	1-246-461-00	CARBON	330	5%	1/4W	
R203	1-246-521-00	CARBON	100K	5%	1/4W	
R204	1-246-471-00	CARBON	820	5%	1/4W	
R205	1-246-541-00	CARBON	680K	5%	1/4W	
R206	1-246-513-00	CARBON	47K	5%	1/4W	
R207	1-246-473-00	CARBON	1K	5%	1/4W	
R208	1-246-521-00	CARBON	100K	5%	1/4W	
R301	1-246-807-00	CARBON	100K	5%	1/8W	
R302	1-246-807-00	CARBON	100K	5%	1/8W	
R303	1-246-783-00	CARBON	1K	5%	1/8W	
R304	1-246-791-00	CARBON	4.7K	5%	1/8W	
R305	1-246-791-00	CARBON	4.7K	5%	1/8W	
R306	1-246-784-00	CARBON	1.2K	5%	1/8W	
R307	1-246-803-00	CARBON	47K	5%	1/8W	
R308	1-246-793-00	CARBON	6.8K	5%	1/8W	
R309	1-246-778-00	CARBON	390	5%	1/8W	
R310	1-246-784-00	CARBON	1.2K	5%	1/8W	
R311	1-246-803-00	CARBON	47K	5%	1/8W	
R312	1-246-793-00	CARBON	6.8K	5%	1/8W	
R313	1-246-778-00	CARBON	390	5%	1/8W	
R314	1-246-784-00	CARBON	1.2K	5%	1/8W	
R315	1-246-803-00	CARBON	47K	5%	1/8W	
R316	1-246-793-00	CARBON	6.8K	5%	1/8W	
R317	1-246-778-00	CARBON	390	5%	1/8W	
R318	1-246-784-00	CARBON	1.2K	5%	1/8W	
R319	1-246-803-00	CARBON	47K	5%	1/8W	
R320	1-246-793-00	CARBON	6.8K	5%	1/8W	
R321	1-246-778-00	CARBON	390	5%	1/8W	
R322	1-246-784-00	CARBON	1.2K	5%	1/8W	

ELECTRICAL PARTS

Ref.No.	Part No.	Description				
R323	1-246-803-00	CARBON	47K	5%	1/8W	
R324	1-246-793-00	CARBON	6.8K	5%	1/8W	
R325	1-246-778-00	CARBON	390	5%	1/8W	
R326	1-246-783-00	CARBON	1K	5%	1/8W	
R327	1-246-807-00	CARBON	100K	5%	1/8W	
R328	1-246-789-00	CARBON	3.3K	5%	1/8W	
R329	1-246-778-00	CARBON	390	5%	1/8W	
R330	1-247-049-00	CARBON	470K	5%	1/8W	
R401	1-246-485-00	CARBON	3.3K	5%	1/4W	
R402	1-246-473-00	CARBON	1K	5%	1/4W	
R403	1-246-489-00	CARBON	4.7K	5%	1/4W	
R404	1-246-515-00	CARBON	56K	5%	1/4W	
R405	△ 1-246-465-00	CARBON	470	5%	1/4W	
R406	1-246-473-00	CARBON	1K	5%	1/4W	
R407	1-244-885-00	CARBON	3.3K	5%	1/2W	
R408	1-246-515-00	CARBON	56K	5%	1/4W	
R409	△ 1-207-615-00	RES, METAL PLATE	0.33		2W	
R410	1-246-477-00	CARBON	1.5K	5%	1/4W	
R411	1-246-497-00	CARBON	10K	5%	1/4W	
R412	1-246-509-00	CARBON	33K	5%	1/4W	
R413	△ 1-247-192-00	CARBON	10	5%	1/2W	F
R414	1-244-817-00	CARBON	4.7	5%	1/2W	
R415	△ 1-247-107-00	CARBON	100	5%	1/4W	F
R416	1-244-825-00	(G-AEP)...CARBON	10	5%	1/2W	
R417	△ 1-247-228-00	CARBON	330	5%	1/2W	F
R501	△ 1-247-079-00	CARBON	4.7	5%	1/4W	F
R502	△ 1-202-852-00	(AEP,G-AEP,UK)...SOLID	4.7	Y%	1/4W	
R503	△ 1-206-640-00	METAL OXIDE	100	5%	2W	F
R504	1-246-493-00	CARBON	6.8K	5%	1/4W	
R505	△ 1-202-852-00	(AEP,G-AEP,UK)...SOLID	4.7	Y%	1/4W	
R506	△ 1-206-640-00	METAL OXIDE	100	5%	2W	F
R507	1-246-493-00	CARBON	6.8K	5%	1/4W	
R508	1-246-505-00	CARBON	22K	5%	1/4W	
R509	1-246-489-00	CARBON	4.7K	5%	1/4W	
R510	1-246-521-00	CARBON	100K	5%	1/4W	
R511	1-246-473-00	CARBON	1K	5%	1/4W	
R512	1-246-485-00	CARBON	3.3K	5%	1/4W	
R513	1-246-491-00	CARBON	5.6K	5%	1/4W	
R514	1-246-521-00	CARBON	100K	5%	1/4W	
R515	1-246-509-00	CARBON	33K	5%	1/4W	
R516	1-246-491-00	CARBON	5.6K	5%	1/4W	
R517	1-246-497-00	CARBON	10K	5%	1/4W	
R518	1-246-485-00	CARBON	3.3K	5%	1/4W	
R519	1-246-497-00	CARBON	10K	5%	1/4W	
R520	1-246-509-00	CARBON	33K	5%	1/4W	

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R521	1-246-497-00	CARBON 10K 5% 1/4W
R522	△1-247-091-00	CARBON 22 5% 1/4W F
R523	△1-247-091-00	CARBON 22 5% 1/4W F
R524	1-246-497-00	CARBON 10K 5% 1/4W
R528	1-246-545-00	CARBON 1M 5% 1/4W
R529	△1-213-149-00	METAL OXIDE 3.3K 5% 1W F
R530	△1-213-149-00	METAL OXIDE 3.3K 5% 1W F
RV301	1-230-148-00	RES, VAR, SLIDE 250K/250K, 63Hz
RV302	1-230-148-00	RES, VAR, SLIDE 250K/250K, 250Hz
RV303	1-230-148-00	RES, VAR, SLIDE 250K/250K, 1KHz
RV304	1-230-148-00	RES, VAR, SLIDE 250K/250K, 4KHz
RV305	1-230-148-00	RES, VAR, SLIDE 250K/250K, 12KHz
RV351	1-230-148-00	RES, VAR, SLIDE 250K/250K, 63Hz
RV352	1-230-148-00	RES, VAR, SLIDE 250K/250K, 250Hz
RV353	1-230-148-00	RES, VAR, SLIDE 250K/250K, 1KHz
RV354	1-230-148-00	RES, VAR, SLIDE 250K/250K, 4Hz
RV355	1-230-148-00	RES, VAR, SLIDE 250K/250K, 250Hz
RV401	1-230-149-00	RES, VAR, CARBON 100K/100K, VOLUME
RV402	1-230-146-00	RES, VAR, SLIDE 250K, BALANCE
RV451	1-230-149-00	RES, VAR, CARBON 100K/100K, VOLUME

ELECTRICAL PARTS

Ref.No.	Part No.	Description
S1	1-554-210-00	SWITCH, PUSH, PHONO
S2	1-554-210-00	SWITCH, PUSH, TUNER
S3	1-554-210-00	SWITCH, PUSH, CD/AUX
S4	1-554-210-00	SWITCH, PUSH, TAPE1
S5	1-554-210-00	SWITCH, PUSH, MONITOR, TAPE2
S6	1-554-125-00	(US,Canadian)...SWITCH, PUSH (2 KEY), SPEAKERS
S7	△1-553-318-00	(US,Canadian,E)..SWITCH, PUSH(AC POWER)
S7	△1-553-447-00	(AEP,G-AEP,UK)...SWITCH, PUSH(AC POWER)
S901	△1-526-576-51	(E)...SELECTOR, POWER VOLTAGE
T1	△1-447-640-00	(US,Canadian)...TRANSFORMER, POWER
T1	△1-447-641-00	(AEP,G-AEP)...TRANSFORMER, POWER
T1	△1-447-642-00	(E)...TRANSFORMER, POWER
TM1	1-536-705-00	(AEP,G-AEP,UK,E)...TERMINAL BOARD (SP)
TM1	1-536-706-00	(US,Canadian)...TERMINAL BOARD (SP)

NOTE:

- Items with no part number and no description are not stocked because they are seldom required for routine service.
- Items marked "△" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- Due to standardization, parts with part numbers (△-△△△-△△-XX or △-△△△△-△△△-X) may be different from those used in the set.
- 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.

CAPACITORS:

MF:μF, PF:μμF.

RESISTORS

All resistors are in ohms.

F : nonflammable

COILS

MMH : mH, UH : μH

SEMICONDUCTORS

In each case, U : μ, for example:

UA...: μA..., UPA...: μPA..., UPC...: μPC,

UPD...: μPD...

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