

# Service Manual

**CIRCUIT DESCRIPTIONS  
REPAIR & ADJUSTMENTS**



**ORDER NO.  
ARP-830-0**

**STEREO AMPLIFIER**

# SA-760(BK)

## SA-760

**MODEL SA-760 COMES IN SEVEN VERSIONS DISTINGUISHED AS FOLLOWS:**

Type	Applicable model		Power requirement	Destination
	SA-760 [BK]	SA-760		
KU	○	—	AC120V only	U.S.A.
HE	○	○	AC220V (240V) switchable	European continent
HB	○	○	AC240V (220V) switchable	United Kingdom
S	○	○	AC110V, 120V, 220V, 240V (Switchable)	General export
KC	○	—	AC120V only	Canada
HEZ	○	○	AC220V (240V) switchable	West Germany
YP	○	—	AC240V only	Australia

- This service manual is applicable to the KU, HE, HB and S types.
- As to the HEZ, YP types, please refer to the additional service manual (ARP-831).
- As to the KC type, please refer to the additional service manual (ARP-870).
- As to the HE, HB and S types, please see page 24.
- SA-760 [BK] is the same as the SA-760 except for the exterior design (color).

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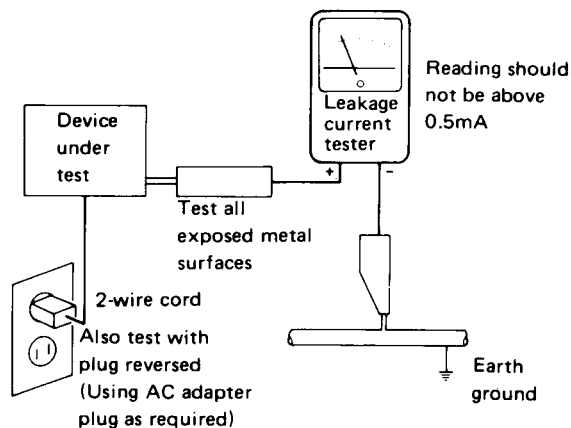
## 1. SAFETY INFORMATION

### 1. SAFETY PRECAUTIONS

The following check should be performed for the continued protection of the customer and service technician.

#### LEAKAGE CURRENT CHECK

Measure leakage current to a known earth ground (water pipe, conduit, etc.) by connecting a leakage current tester such as Simpson Model 229-2 or equivalent between the earth ground and all exposed metal parts of the appliance (input/output terminals, screwheads, metal overlays, control shaft, etc.). Plug the AC line cord of the appliance directly into a 120V AC 60Hz outlet and turn the AC power switch on. Any current measured must not exceed 0.5mA.



AC Leakage Test

**ANY MEASUREMENTS NOT WITHIN THE LIMITS OUTLINED ABOVE ARE INDICATIVE OF A POTENTIAL SHOCK HAZARD AND MUST BE CORRECTED BEFORE RETURNING THE APPLIANCE TO THE CUSTOMER.**

### 2. PRODUCT SAFETY NOTICE

Many electrical and mechanical parts in the appliance have special safety related characteristics. These are often not evident from visual inspection nor the protection afforded by them necessarily can be obtained by using replacement components rated for voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in this Service Manual.

Electrical components having such features are identified by marking with a  $\Delta$  on the schematics and on the parts list in this Service Manual.

The use of a substitute replacement component which does not have the same safety characteristics as the PIONEER recommended replacement one, shown in the parts list in this Service Manual, may create shock, fire, or other hazards.

Product Safety is continuously under review and new instructions are issued from time to time. For the latest information, always consult the current PIONEER Service Manual. A subscription to, or additional copies of, PIONEER Service Manual may be obtained at a nominal charge from PIONEER.

## 2. SPECIFICATIONS

### Amplifier Section

Continuous average power output is 50 watts\* per channel, min., at 8 ohms from 20 Hertz to 20,000 Hertz with no more than 0.2% total harmonic distortion.

#### Continuous Power Output (both channels driven)

T.H.D. 0.2%, 1 kHz, 8  $\Omega$  ..... 60 W per channel

T.H.D. 0.2%, 20 Hz to 20 kHz, 8  $\Omega$  ..... 50 W per channel

#### DIN, Continuous Power Output at 1 kHz (both channels driven)

T.H.D. 1%, 1 kHz, 8  $\Omega$  ..... 62 W per channel

#### Input (Sensitivity/Impedance)

PHONO ..... 2.5 mV/50 k $\Omega$

TUNER, CD/VIDEO, TAPE PLAY

ADAPTOR IN ..... 150 mV/50 k $\Omega$

#### Phono Overload Level (T.H.D. 0.01%, 1 kHz)

..... 150 mV

#### Output (Level/Impedance)

TAPE REC, ADAPTOR OUT ..... 150 mV/2.2 k $\Omega$

Headphone ..... 67 mV/8  $\Omega$

#### Frequency Response

PHONO (RIAA Equalization)

..... 20 Hz to 20 kHz  $\pm 0.5$  dB

TUNER, CD/VIDEO, ADAPTOR IN, TAPE PLAY

..... 10 Hz to 70 kHz  $\pm \frac{1}{3}$  dB

#### Tone Control

BASS .....  $\pm 10$  dB (100 Hz)

TREBLE .....  $\pm 10$  dB (10 kHz)

#### Loudness Contour (Volume control set at -40 dB position)

100 Hz ..... +6 dB

10 kHz ..... +3 dB

#### Hum and Noise (IHF, short circuited, A network)

PHONO ..... 72 dB

CD/VIDEO, ADAPTOR IN, TUNER,

TAPE PLAY ..... 102 dB

#### Hum and Noise (DIN, continuous power / 50 mW)

PHONO ..... 68 dB/60 dB

CD/VIDEO, ADAPTOR IN, TUNER,

TAPE PLAY ..... 84 dB/62 dB

#### Speaker Load Impedance

A or B ..... 6 - 16  $\Omega$

A + B ..... 6 - 16  $\Omega$

### Miscellaneous

#### Power Requirements

HE model ..... a.c. 220 V  $\sim$ , 50/60 Hz

HB, YP models ..... a.c. 240 V  $\sim$ , 50/60 Hz

S models .....  $\sim$ AC 110 V/120 V/220 V/240 V  
(switchable), 50/60 Hz

KU, KC models ..... AC 120 V, 60 Hz

#### Power Consumption

HE model ..... 400 W

HB, YP models ..... 400 W

S models ..... 140 W

KU model ..... 140 W (UL)

KC model ..... 290 VA (CSA)

Dimensions ..... 420 (W) x 98 (H) x 273 (D) mm

16-1/2 (W) x 3-7/8 (H) x 10-3/4 (D) in

Weight (without package) ..... 5.6 kg (12 lb 6 oz)

### Furnished Parts

Operating Instructions ..... 1

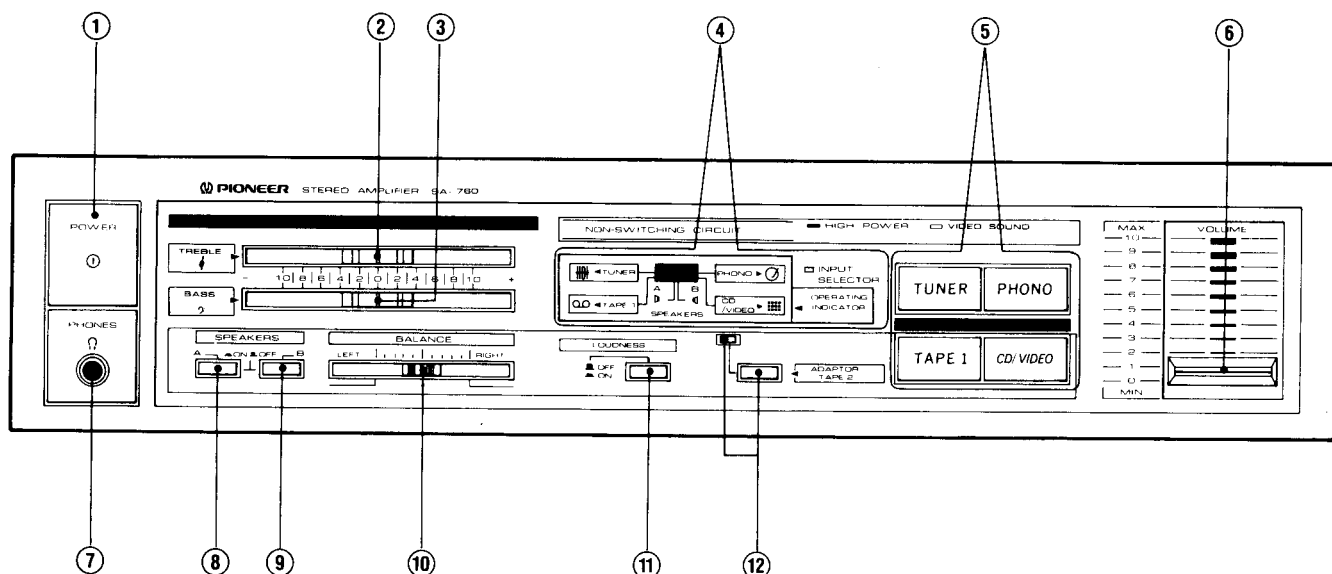
#### NOTE:

- Specifications and design subject to possible modification without notice due to improvements.
- \*Measured pursuant to the Federal Trade Commission's Trade Regulation rule on Power Claims for Amplifier.

## 3. FRONT PANEL FACILITIES

### FRONT PANEL

Indications on the actual unit may differ from those in the illustration. However, operating procedures are the same.



#### ① POWER switch

Press to turn power to the unit ON and OFF.  
 Depressed position (ON):  
 Power is supplied to the unit.  
 Released position (OFF):  
 Power to the unit is disconnected.

#### ② TREBLE tone control

Use to adjust the high-frequency tone.  
 The central "0" position is the flat (normal) position. When moved to the right, high-frequency tones are emphasized; when moved to the left, high-frequency tones are de-emphasized.

#### ③ BASS tone control

Use to adjust the low-frequency tone. The central "0" position is the flat (normal) position. When moved to the right, low-frequency tones are emphasized; when moved to the left, low-frequency tones are de-emphasized.

#### ④ Indicators

The indicators light to show the positions of the FUNCTION switches.

#### ⑤ FUNCTION switches

Use to select playback source.  
 [PHONO] — Press when listening to record playback on a turntable.  
 [TUNER] — Press when listening to AM or FM broadcasts with a tuner.  
 [CD/VIDEO] — Press when listening to programs from a component connected to the CD/VIDEO terminals.  
 [TAPE 1] — Press when listening to tape playback with a tape deck.

#### NOTE:

Function switches should be pressed firmly; otherwise, all the function indicators will light, and no output will be produced. If this occurs, press the desired function switch again.

#### ⑥ VOLUME control

Use to adjust volume level.  
 Move up to increase volume.  
 Move down to lower volume.

**⑦ PHONES jack**

When using headphones, insert their plug into this jack.

**⑧ SPEAKERS A selector switch**

Use this switch to listen to the speaker systems connected to the SPEAKERS A terminals.

[ON] — Depressed position: Sound is heard from speaker systems.

[OFF] — Released position: No sound is heard from speaker systems. Set to this position when listening with headphones.

**⑨ SPEAKERS B selector switch**

Use this switch to listen to the speaker systems connected to the SPEAKERS B terminals.

[ON] — Depressed position: Sound is heard from the speaker systems.

[OFF] — Released position: No sound is heard from the speaker systems. Set to this position when listening with headphones.

**⑩ BALANCE control**

Should normally be left in the center position. Adjust balance if the sound is louder from one of the speakers. If the right side is louder, move toward the LEFT position and if the left side is louder, move toward the RIGHT position.

**⑪ LOUDNESS switch**

Use when listening at low volume levels.

[OFF] — Released position: Should normally be left in this position.

[ON] — Depressed position: Boosts low and high frequencies to give added punch to playback even at low volume.

**⑫ ADAPTOR/TAPE 2 switch/indicator**

Use when there is an adaptor component (graphic equalizer, etc.) or tape deck connected to the ADAPTOR/TAPE 2 terminals.

[OFF] — Released position: When not in use.

[ON] — Depressed position: When using the adaptor component or listening to the tape deck.

**NOTE:**

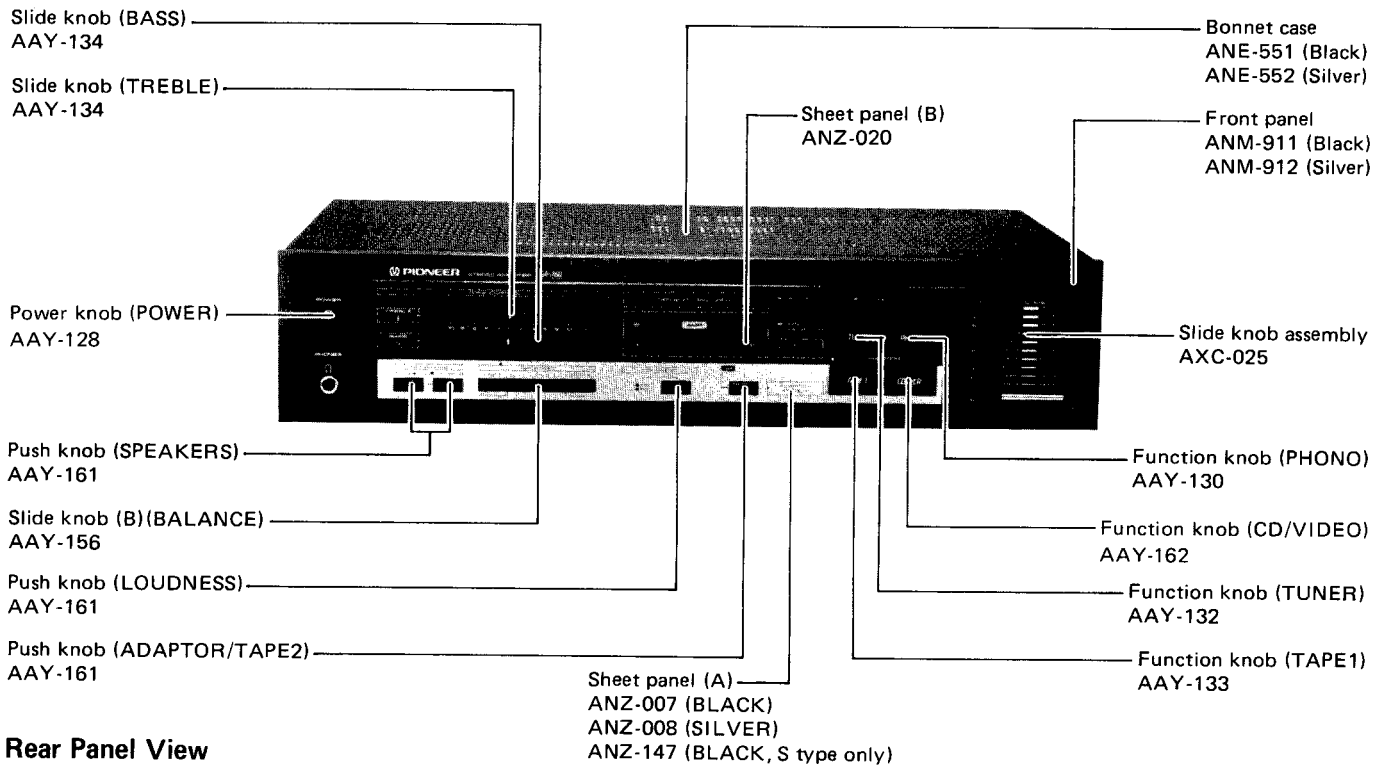
*When no connections are made to the ADAPTOR/TAPE 2 terminals, or when they are not in use, be sure to set this switch to the OFF position. (No sound will be heard if it is set to the ON position.)*

## 4. PARTS LOCATION

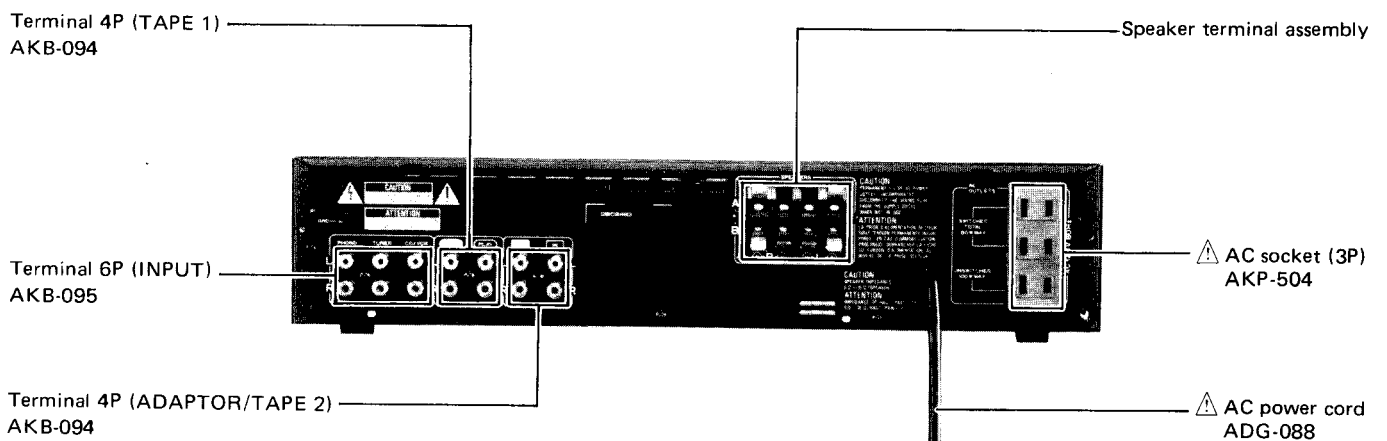
### NOTES:

- Parts without part number cannot be supplied.
- The  $\triangle$  mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.
- For your Parts Stock Control, the fast moving items are indicated with the marks **★★** and **★**.  
**★★ GENERALLY MOVES FASTER THAN ★.**  
This classification shall be adjusted by each distributor because it depends on model number, temperature, humidity, etc.

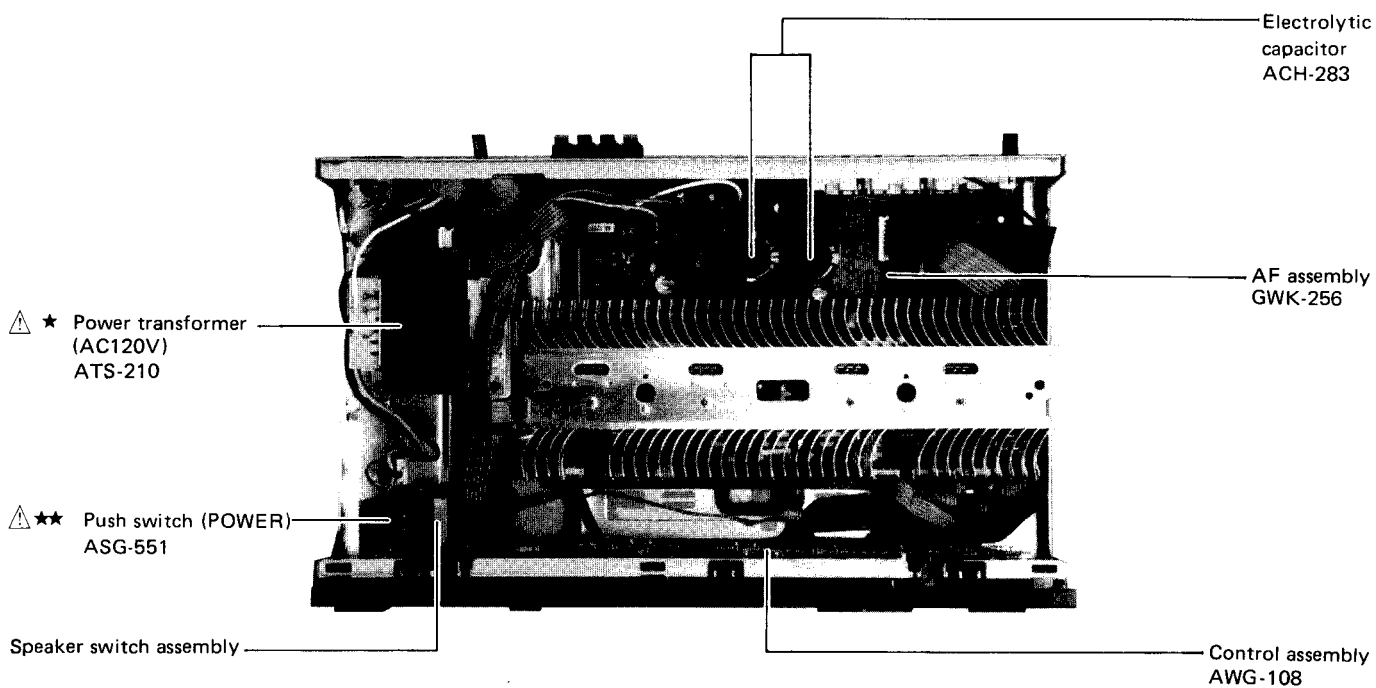
### Front Panel View



### Rear Panel View

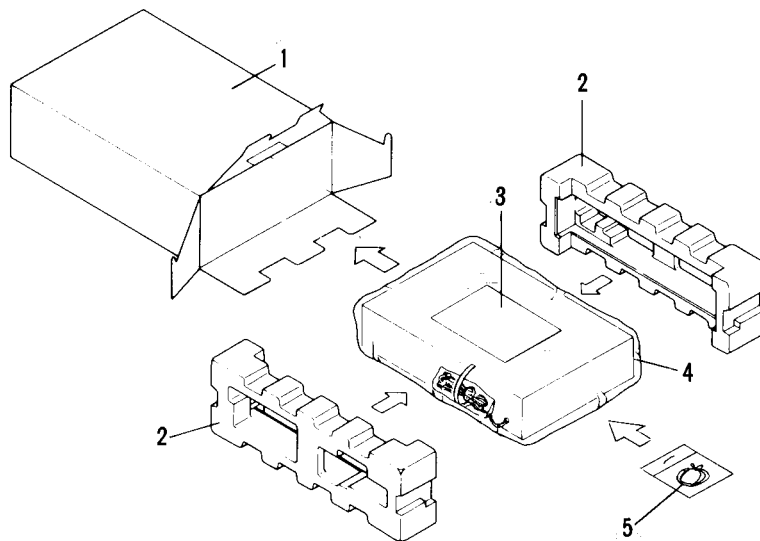


Top View



## 5. PACKING

Mark	No.	Part No.	Description
	1	AHE-535	Packing case (Black)
		AHE-536	" (Silver)
	2	AHA-340	Front rear pad
	3	ARB-664	Operating instructions (English)
	4	AHG-131	Polyethylene sheet
	5	AEA-057	Cable



## 6. EXPLODED VIEW

- *Parts without part number cannot be supplied.*
- *The  $\triangle$  mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *For your Parts Stock Control, the fast moving items are indicated with the marks **★★** and **★**.  
**★★** *GENERALLY MOVES FASTER THAN* **★**.  
*This classification shall be adjusted by each distributor because it depends on model number, temperature, humidity, etc.**

Mark	No.	Part No.	Description	Mark	No.	Part No.	Description
	1	AWG-108	Control assembly		101		Chassis
	2	GWK-256	AF assembly		102		Blind sheet
$\triangle$ ★	3	ATS-210	Power transformer (AC120V)		103		Base (GND)
$\triangle$	4	AKP-504	AC socket (3P)		104		Mount plate
$\triangle$ ★★	5	AEK-125	Fuse (4A)		105		Panel stay
$\triangle$ ★	6	AEC-784	Leg assembly		106		Cushion
	7	AAV-128	Power knob (POWER)		107		Speaker switch assembly
	8	AAV-130	Function knob (PHONO)		108		Bottom plate
	9	AAV-132	Function knob (TUNER)		109		Frame
	10	AAV-133	Function knob (TAPE 1)		110		P.C.B. holder
	11	AAV-134	Slide knob (BASS, TREBLE)		111		Heat sink
	12	AAV-156	Slide knob (B) (BALANCE)		112		Rear panel
	13	AAV-161	Push knob (LOUDNESS/ ADAPTOR/TAPE 2, SPEAKERS)		113		Terminal (GND)
	14	AAV-162	Function knob (CD/VIDEO)		114		E ring
	15	ANE-551	Bonnet case (Black)		115		Guide shaft
		ANE-552	Bonnet case (Silver)		116		Slide knob (L)
					117		Slider
	16	ANM-911	Front panel (Black)		118		Speaker terminal assembly
		ANM-912	Front panel (Silver)		119		Cushion
	17	ANR-992	Panel base		120		Cushion rubber
	18	ANZ-007	Sheet panel A (Black)				
		ANZ-147	Sheet panel A (Black, S type only)				
		ANZ-008	Sheet panel A (Silver)				
	19	ANZ-020	Sheet panel B				
	20	AXC-025	Slide knob assembly				
	21	ABH-155	Coil spring				
	22	AEC-471	Nylon rivet				
	23	AEC-818	Mica sheet				
	24	ABA-258	Screw				
$\triangle$	25	ADG-088	AC power cord				
	26	BBZ30P080FZK	Screw (3 x 8)				
	27	PMZ20P030FZK	Screw (2 x 6)				
	28	VBZ30P060FMC	Screw (3 x 6)				
	29	VMZ30P060FMC	Screw (3 x 6)				
$\triangle$ ★★	30	2SC2579 (A)	Q1, Q3 Power transistor*				
$\triangle$ ★★	31	2SA1104 (A)	Q2, Q4 Power transistor*				
			*hfe of Q1-Q4 should have the same value.				
$\triangle$ ★★	32	ASG-551	Push switch (POWER)				
$\triangle$	33	ACG-502	Ceramic capacitor (0.01/AC400V)				



1 2 3 4 5 6

7. BLOK

A

A

B

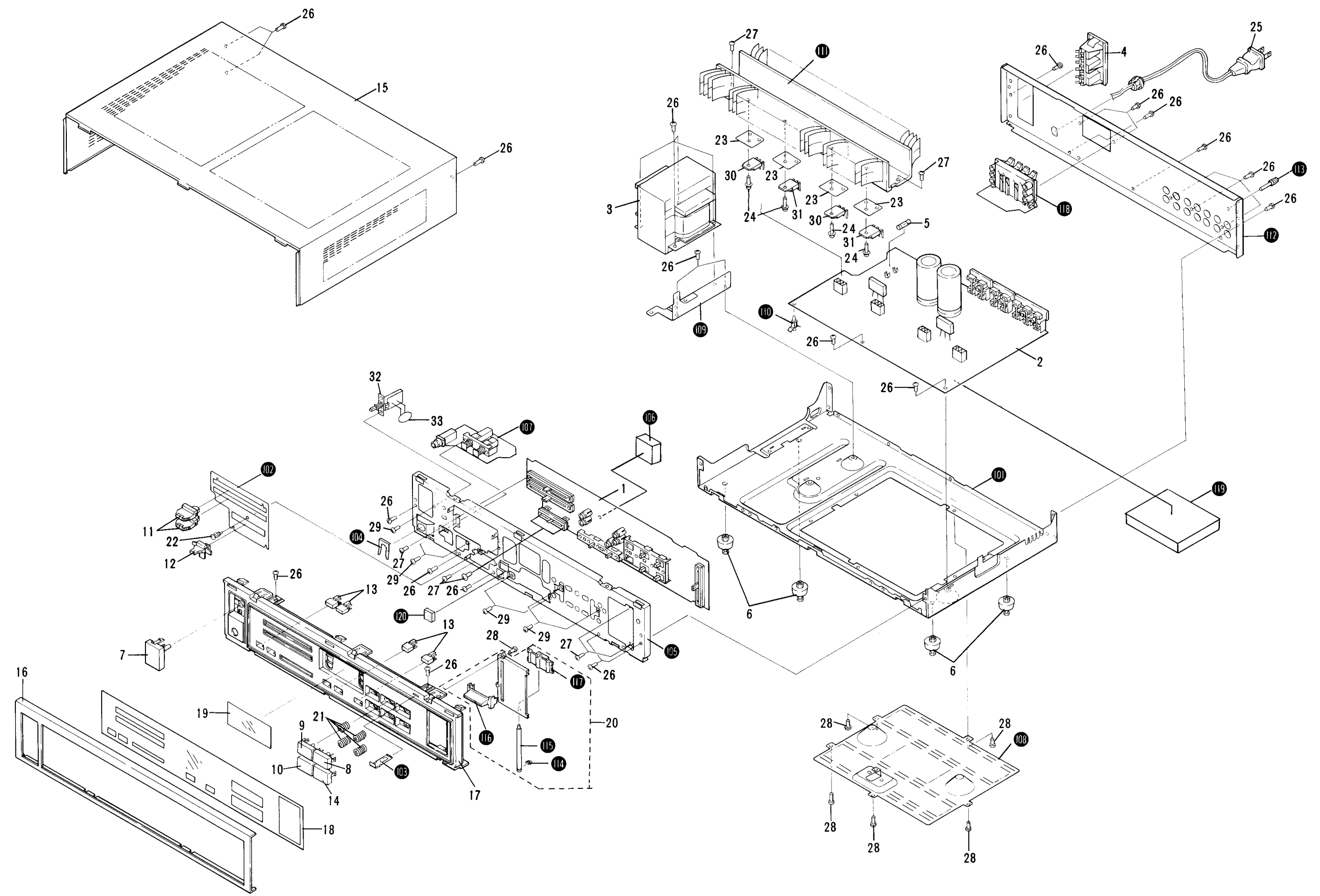
B

C

C

D

D



PHONO 2.5mV

CD 150mV

REC TAPE 1  
 PLAY 150mV  
 TUNER

OUT TAPE 2 / ADAP  
 TER IN 150mV

PHONO

TAPE 1

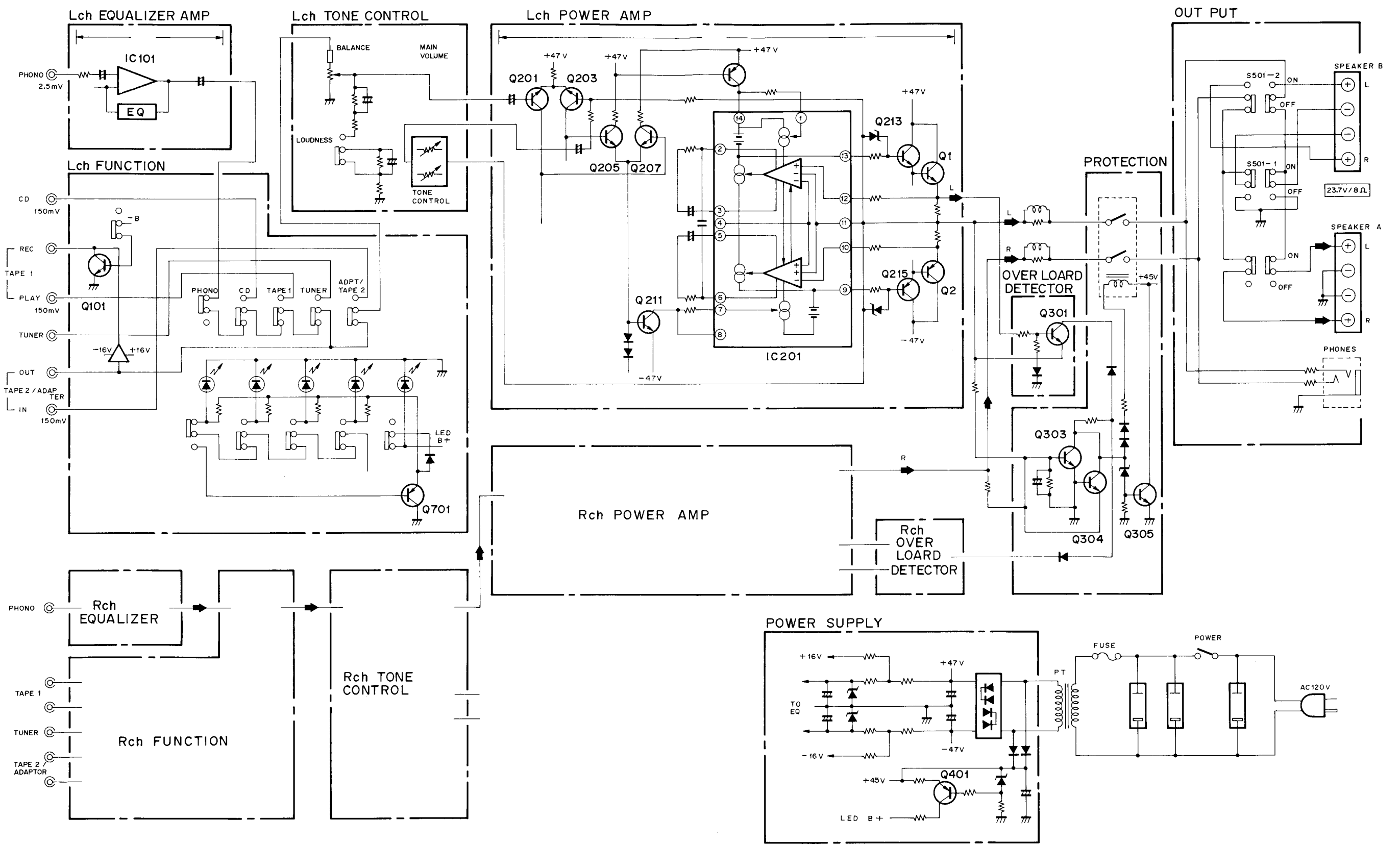
TUNER

TAPE 2 / ADAPTOR

1 2 3 4 5 6 10

# 7. BLOCK DIAGRAM

A  
B  
C  
D

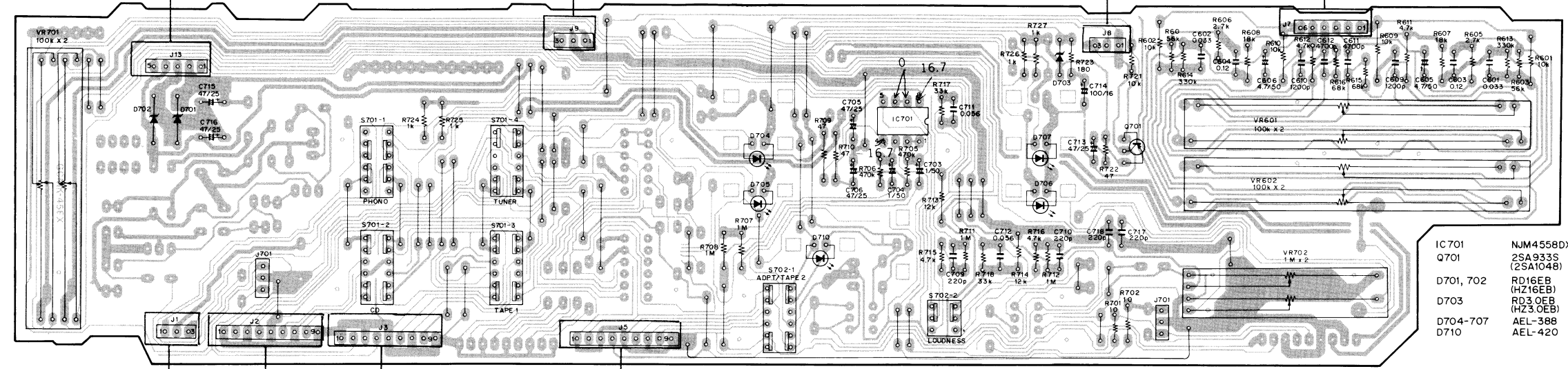


# 8. P.C. BOARDS CONNECTION DIAGRAM

A

B

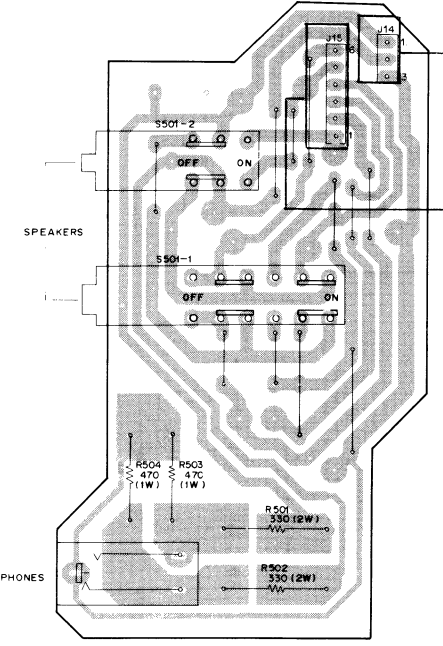
### CONTROL ASSEMBLY (AWG-108)



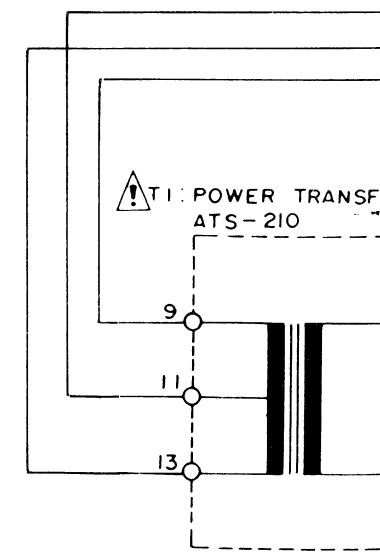
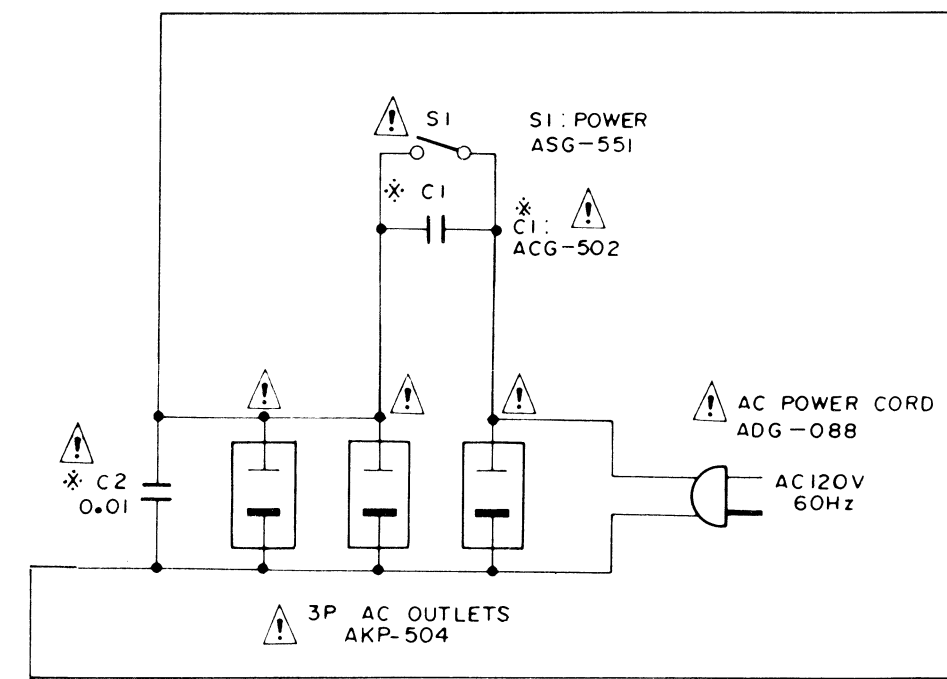
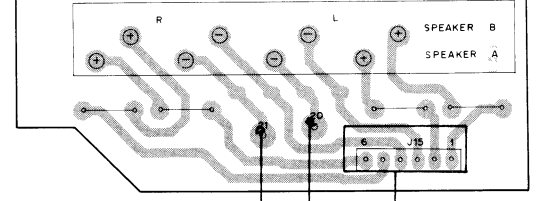
C

D

### SPEAKER SWITCH ASSEMBLY

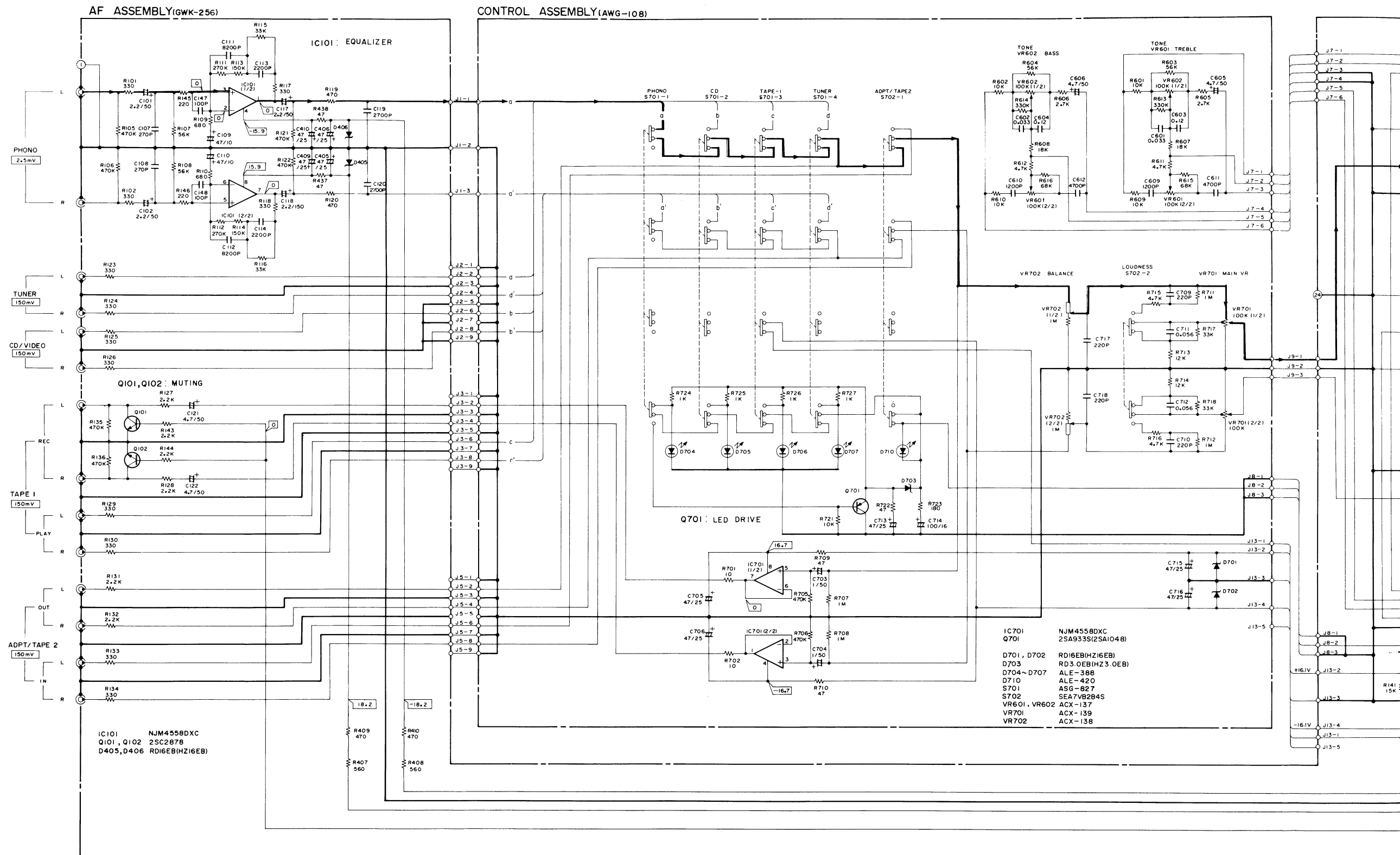


### SPEAKER TERMINAL ASSEMBLY





# 9. SCHEMATIC DIAGRAM



A

B

C

D

1

2

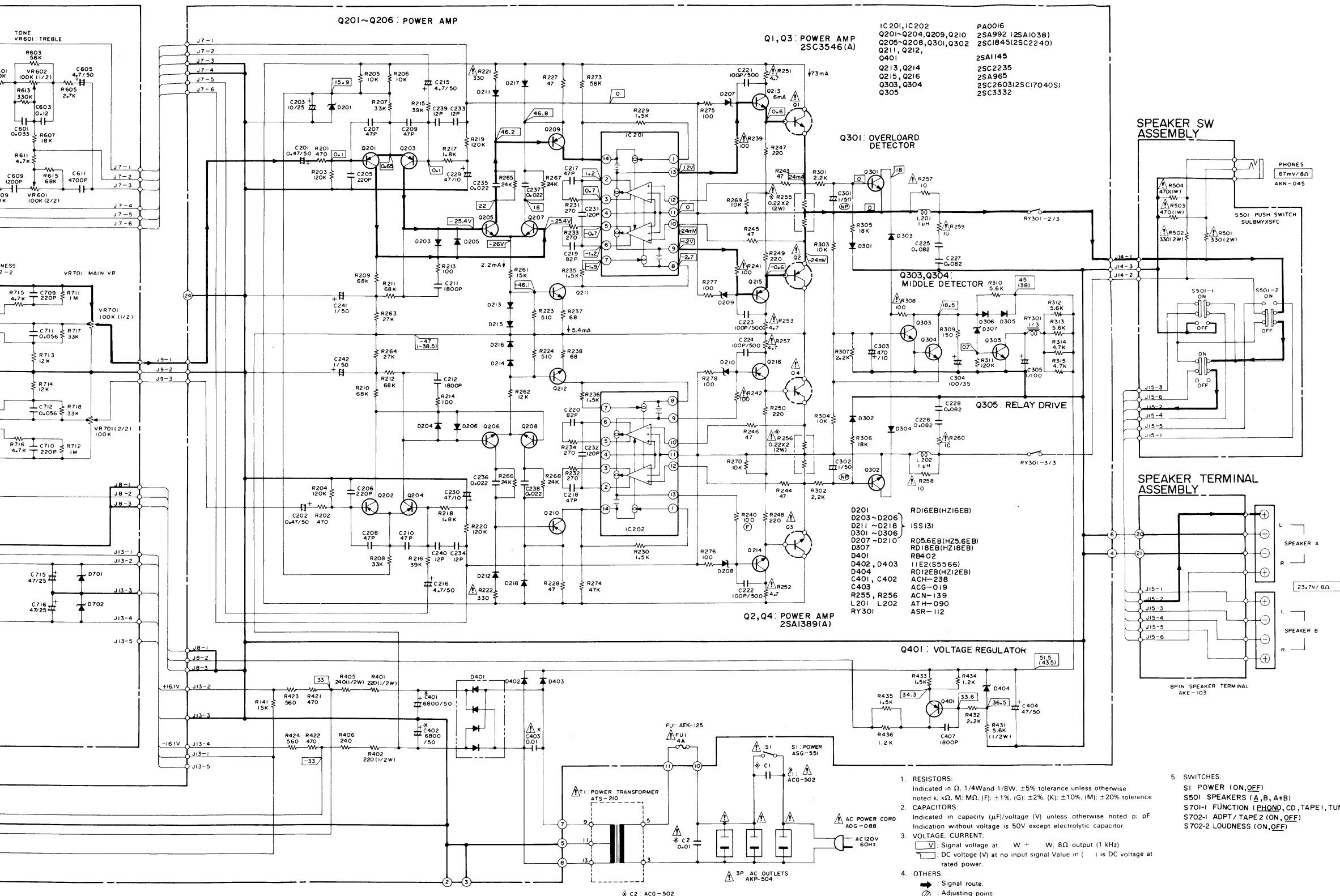
3

4

5

6

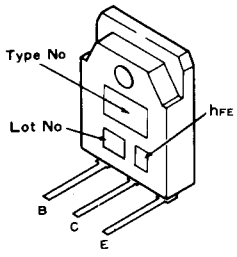
NOTE: The indicated semiconductors are representative ones only. Other alternative semiconductors may be used and are listed in the parts list.



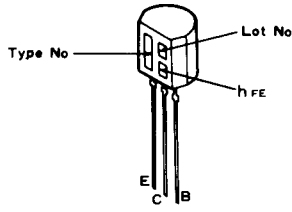
A  
B  
C  
D

**External Appearances of Transistor and ICs**

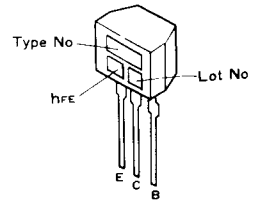
**2SA1104 (A)  
2SC2579 (A)**



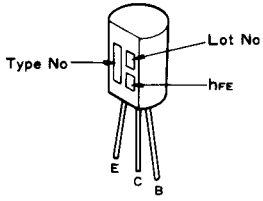
**2SC3332**



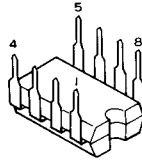
**2SC1740S**



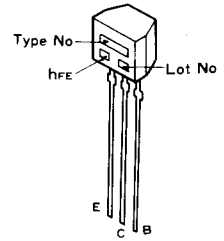
**2SA992  
2SC1845**



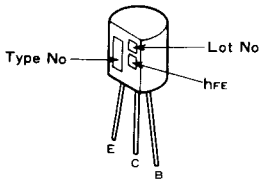
**NJM4558DXC**



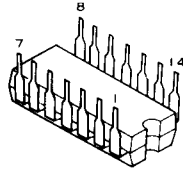
**2SC2458**



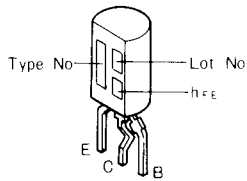
**2SA1145  
2SC2878**



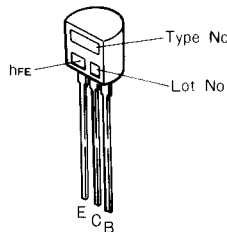
**PA0016**



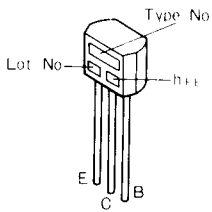
**2SC2235 (A)  
2SA965 (A)**



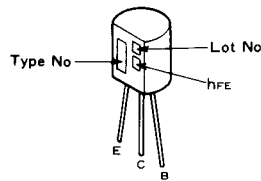
**2SA1038  
2SC2389**



**2SC2603**



**2SA970  
2SC2240**



# 10. ELECTRICAL PARTS LIST

## NOTES:

- When ordering resistors, first convert resistance values into code form as shown in the following examples.  
 Ex. 1 When there are 2 effective digits (any digit apart from 0), such as 560 ohm and 47k ohm (tolerance is shown by J = 5%, and K = 10%).  
 560Ω    56 × 10<sup>1</sup>    561 . . . . . RD¼PS 561J  
 47kΩ    47 × 10<sup>3</sup>    473 . . . . . RD¼PS 473J  
 0.5Ω    0R5 . . . . . RN2H 0R5K  
 1Ω    010 . . . . . RS1P 010K  
 Ex. 2 When there are 3 effective digits (such as in high precision metal film resistors).  
 5.62kΩ    562 × 10<sup>1</sup>    5621 . . . . . RN¼SR 5621F
- The  $\Delta$  mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.
- For your Parts Stock Control, the fast moving items are indicated with the marks **★★** and **★**.  
**★★** GENERALLY MOVES FASTER THAN **★**.  
 This classification shall be adjusted by each distributor because it depends on model number, temperature, humidity, etc.

## Miscellaneous Parts List

### P.C. BOARD ASSEMBLIES

Mark	Symbol & Description	Part No.
	AF Assembly	GWK-256
	Control Assembly	AWG-108
	Speaker Switch Assembly	non supply
	Speaker Terminal Assembly	non supply

### SEMICONDUCTORS

Mark	Symbol & Description	Part No.
$\Delta$ ★★	Q2, Q4	2SA1104 (A) O/P/Y*
$\Delta$ ★★	Q1, Q3	2SC2579 (A) O/P/Y*

\* hfe of Q1 – Q4 should have the same value.

### OTHERS

Mark	Symbol & Description	Part No.
$\Delta$	C2 Ceramic capacitor (0.01/AC400V)	ACG-502
$\Delta$ ★	T1 Power transformer (AC120V)	ATS-210
$\Delta$	AC Socket (AC OUTLETS)	AKP-504
$\Delta$ ★★	FU1 Fuse (4A)	AEK-125
$\Delta$	AC power cord	ADG-088
$\Delta$ ★★	S1 Push switch (POWER)	ASG-551

## AF Assembly (GWK-256)

### SEMICONDUCTORS

Mark	Symbol & Description	Part No.
★★	IC101	NJM4558DXC
★★	IC201, IC202	PA0016
★★	Q401	2SA1145
★★	Q215, Q216	2SA965(A)
★★	Q209, Q210	2SA992
		(2SA1038)
		(2SA970)
★★	Q201 – Q204	2SA992
★★	Q211, Q212, Q205 – Q208, Q301, Q302	2SC1845
		(2SC2240)
		(2SC2389)
★★	Q213, Q214	2SC2235(A)
★★	Q303, Q304	2SC2603
		(2SC1740S)
		(2SC2458)
★★	Q101, Q102	2SC2878
★★	Q305	2SC3332
★	D401	RB402
★	D404	RD12EB
		(HZ12EB)
★	D201, D405, D406	RD16EB
		(HZ16EB)
★	D307	RD18EB
		(HZ18EB)
★	D207 – D210	RD5.6EB
		(HZ5.6EB)
★	D203 – D206, D211 – D218, D301 – D306	1SS131
★	D402, D403	11E2
		(S5566)



## RELAY

Mark	Symbol & Description	Part No.
★★	RY301 Relay	ASR-111 (ASR-112)

## COIL & TRANSFORMER

Mark	Symbol & Description	Part No.
	L201, L202 Inductor (1μH)	ATH-090

## CAPACITORS

Mark	Symbol & Description	Part No.
⚠	C403 Ceramic capacitor C401, C402 (6800/50V) C147, C148	ACG-019 ACH-283 CCCSL101J50 (CCDSL101J50)
	C221 – C224	CCCSL101K500 (CCDSL101K500)
	C233, C234, C239, C240	CCCSL120J50 (CCDSL120J50)
	C231, C232 C205, C206	CCCSL121J50 CCCSL221J50 (CCDSL221J50)
	C107, C108	CCCSL271J50 (CCDSL271J50)
	C207 – C210, C217, C218	CCCSL470J50 (CCDSL470J50)
	C219, C220	CCCSL820J50 (CCDSL820J50)
	C101, C102 C301, C302 C201, C202 C305	CEANL2R2M50 CEANP010M50 CEASR47M50 CEAS010M100
	C241, C242 C203 C304 C117, C118 C121, C122, C215, C216	CEAS010M50 CEAS100M25 CEAS101M35 CEAS2R2M50 CEAS4R7M50
	C109, C110, C229, C230 C405, C406, C409, C410 C404 C303 C211, C212, C407	CEAS470M10 CEAS470M25 CEAS470M50 CEAS471M10 CKCYB182K50 (CKDYB182K50)
	C235 – C238	CKCYF223Z50 (CKDYF223Z50)
	C113, C114 C119, C120	CQMA222J50 CQMA272K50 (CQMA272J50)
	C111, C112 C225 – C228	CQMA822J50 CQMA823K50 (CQMA823J50)

## RESISTORS

Note: When ordering resistors, convert the resistance value into code form, and then rewrite the part no. as before.

Mark	Symbol & Description	Part No.
⚠	R255, R256 (0.22Ω × 2)	ACN-131
	R401, R402, R405, R406, R431	RD1/2PM □□□J
⚠	R257 – R260, R301, R302	RD1/4PMFL □□□J
⚠	R221, R222, R239 – R242, R308, R251 – R254, R243 – R250, R275 – R278	RFA1/4PS □□□J
	R205 – R208, R243 – R250, R261 – R270, R273 – R274, R303 – R306, R309, R312 – R315, R407 – R410, R421 – R424, R432 – R436	RD1/4PM □□□J
	Other resistors	RD1/8PM □□□J

## OTHERS

Mark	Symbol & Description	Part No.
	Terminal (4P) (TAPE1, ADAPTOR/TAPE2)	AKB-094
	Terminal (6P) (INPUT)	AKB-095
	Transistor socket	AKH-017

## Speaker Switch Assembly

### SWITCH

Mark	Symbol & Description	Part No.
★★	S501 Push switch (SPEAKERS)	SUL8MYXSFC

## RESISTORS

Note: When ordering resistors, convert the resistance value into code form, and then rewrite the part no. as before.

Mark	Symbol & Description	Part No.
⚠	R503, R504	RS1LMF471J
⚠	R501, R502	RS2LMF331J

## OTHERS

Mark	Symbol & Description	Part No.
	Jack (PHONES)	AKN-045

## OTHERS

Mark	Symbol & Description	Part No.
	Terminal strip for 2PL	AKC-128

## Speaker Terminal Assembly

### OTHERS

Mark	Symbol & Description	Part No.
	Terminal (SPEAKERS)	AKE-103

## Control Assembly (AWG-108)

### SEMICONDUCTORS

Mark	Symbol & Description	Part No.
★★	IC701	NJM4558DXC
★★	Q701	2SA933S (2SA1048)
★	D704 – D707	AEL-388
★	D710	AEL-420
★	D701, D702	RD16EB (HZ16EB)
★	D703	RD3.0EB (HZ3.0EB)

### CAPACITORS

Mark	Symbol & Description	Part No.
	C709, C710, C717, C718	CCCSL221J50 (CCDSL221J50)
	C703, C704	CEAS010M50
	C714	CEAS101M16
	C605, C606	CEAS4R7M50
	C705, C706, C713, C715, C716	CEAS470M25
	C609, C610	CQMA122K50
	C603, C604	CQMA124K50
	C601, C602	CQMA333K50
	C611, C612	CQMA472K50
	C711, C712	CQMA563K50

### RESISTORS

Note: When ordering resistors, convert the resistance value into code form, and then rewrite the part no. as before.

Mark	Symbol & Description	Part No.
★★	VR601, VR602 (TREBLE, BASS)	ACX-137
★★	VR702 (BALANCE)	ACX-138
★★	VR701 (MAIN)	ACX-139
	R601, R602, R609, R610, R709, R710	RD1/4PM □□□J
	Other resistors	RD1/8PM □□□J

### OTHERS

Mark	Symbol & Description	Part No.
★★	S701 Push switch (FUNCTION)	ASG-827
★★	S702 Push switch (ADAPTOR/TAPE2 LOUDNESS)	SEA7VB2B4S

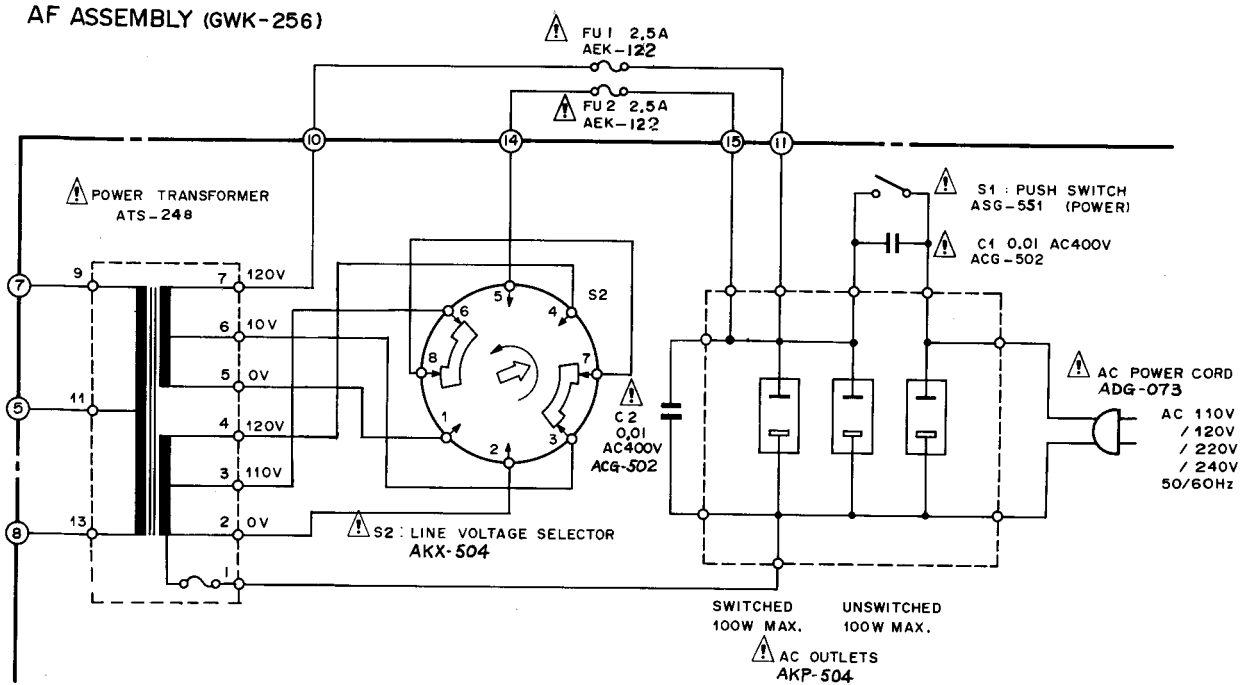
## 11. FOR HE, HB AND S TYPES

The HE, HB and S types are the same as the KU type with the exception of the following sections.

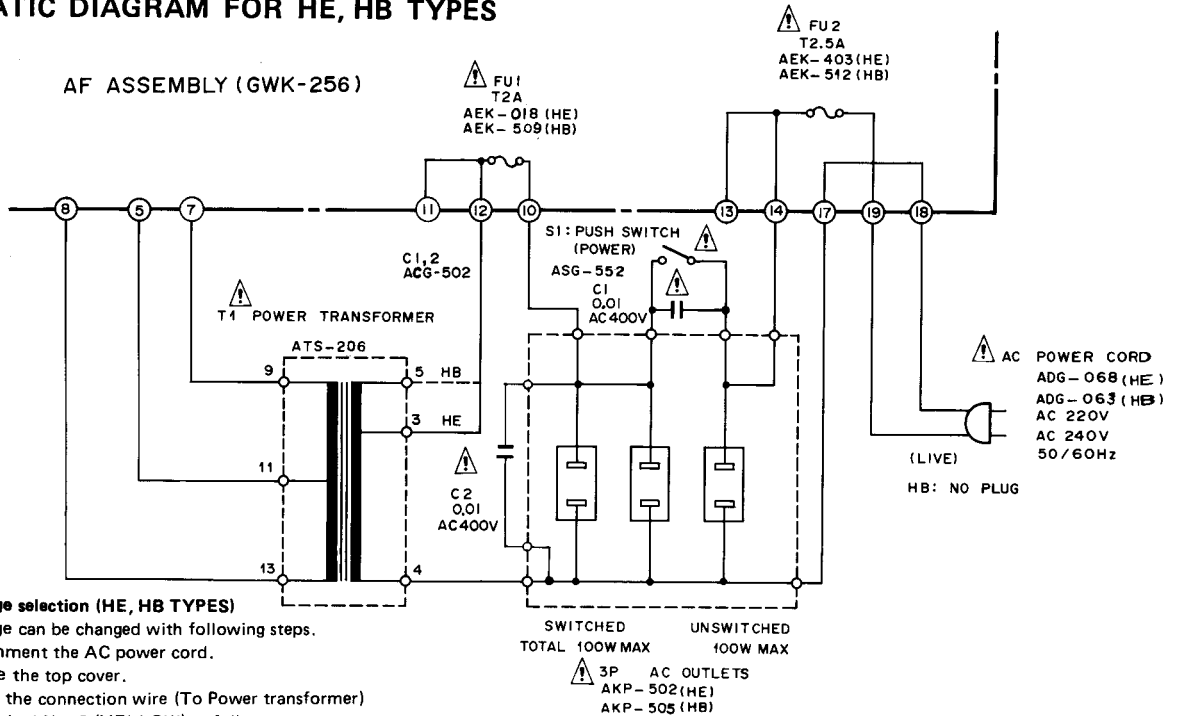
### Contrast of Miscellaneous Parts

Mark	Symbol & Description	Part No.			
		KU type	HE type	HB type	S type
⚠ ★	T1 Power transformer (120V) (220V/240V; (110V/120V/220V/240V)	ATS-210	.....	.....	.....
		.....	ATS-206	ATS-206	.....
		.....	.....	.....	ATS-248
⚠	AC socket (AC OUTLETS)	AKP-504	AKP-502	AKP-505	AKP-504
⚠★★	S1 Push switch (POWER)	ASG-551	ASG-552	ASG-552	ASG-551
⚠★★	S2 Line voltage selector	.....	.....	.....	AKX-504
⚠★★	FU1 Fuse (4A) (T1.25A) (2A)	AEK-125	.....	.....	.....
		.....	AEK-018	AEK-509	.....
		.....	.....	.....	AEK-122
⚠★★	FU2 Fuse (T2.5A) (2A) Sheet panel A (Black) (Silver) Operating instructions (English) (Spanish) (English/French/Germany/Italian)	.....	AEK-403	AEK-512	.....
		.....	.....	.....	AEK-122
		ANZ-007	ANZ-007	ANZ-007	ANZ-147
⚠	AC power cord	.....	ANZ-008	ANZ-008	ANZ-008
		ARB-664	.....	ARB-664	ARB-664
		.....	.....	.....	ARC-099
		ADG-088	ADG-068	ADG-063	ADG-073

**SCHEMATIC DIAGRAM FOR S TYPE**



**SCHEMATIC DIAGRAM FOR HE, HB TYPES**



**Line voltage selection (HE, HB TYPES)**  
 Line voltage can be changed with following steps.  
 1. Disconnect the AC power cord.  
 2. Remove the top cover.  
 3. Change the connection wire (To Power transformer) of Terminal No. 3 (YELLOW) as follows.

Voltage	Terminal No. 3	Terminal No. 5
220V	Yellow wire	.....
240V	.....	Yellow wire

4. Stick the voltage level on the rear panel.

Part No.	Description
AAX-193	220V level
AAX-192	240V level