



# Service Manual

**CIRCUIT DESCRIPTIONS  
REPAIR & ADJUSTMENTS**



**ORDER NO.  
ARP1149-0**

**STEREO AMPLIFIER**

# SA-570(BK) SA-570

MODEL SA-570 COMES IN FOUR VERSIONS DISTINGUISHED AS FOLLOWS:

Type	Applicable model		Power requirement	Destination
	SA-570 [BK]	SA-570		
HE	○	○	AC220V, 240V (switchable)	European continent
HB	○	○	AC220V, 240V (switchable)	United Kingdom
S	○	—	AC110V, 120V, 220V, 240V (switchable)	General market
HEZ	○	○	AC220V, 240V (switchable)	West Germany

- This service manual is applicable to the HE, HB and S types.
- As to the HB and S types, please refer to pages 20, 21.
- As to the HEZ type, please refer to the additional service manual (ARP1150).

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# 1. SPECIFICATIONS

## Amplifier Section

Continuous average power output is 30 watts\* per channel, min., at 8 ohms from 40 Hertz to 20,000 Hertz with no more than 0.5% total harmonic distortion.

Continuous Power Output (both channels driven)	
T. H. D. 0.5%, 1 kHz, 8 Ω	40 W per channel
T. H. D. 0.5%, 40 Hz to 20 kHz, 8 Ω	30 W per channel
DIN, Continuous Power Output at 1 kHz (both channels driven)	
T. H. D. 1%, 1 kHz, 8 Ω	40 W per channel
Input (Sensitivity/Impedance)	
PHONO	2.5 mV/50 kΩ
TUNER, TAPE PLAY, ADAPTOR IN	150 mV/50 kΩ
Phono Overload Level (T. H. D. 0.1%, 1 kHz)	
	150 mV
Output (Level/Impedance)	
TAPE REC, ADAPTOR OUT	150 mV/2.2 kΩ
Headphone	67 mV/8 Ω
Frequency Response	
PHONO (RIAA Equalization)	
	20 Hz to 20 kHz ±0.5 dB
TUNER, ADAPTOR IN, TAPE PLAY	
	20 Hz to 70 kHz ± $\frac{2}{3}$ dB
Tone control	
BASS	±10 dB (100 Hz)
TREBLE	±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	
ADAPTOR IN, TUNER, TAPE PLAY	98 dB
Hum and Noise (DIN, continuous power /50 mW)	
PHONO	
ADAPTOR IN, TUNER, TAPE PLAY	82 dB/62 dB
Speaker Load Impedance	
A or B	6—16 Ω
A + B	6—16 Ω

## Miscellaneous

### Power requirements

European model	a. c. 220 V~, 50/60 Hz
U. K. models	a. c. 240 V~, 50/60 Hz
Other destination models	~AC 110 V/120 V/ 220 V/240 V (switchable), 50/60 Hz

### Power Consumption

European, U. K. models	240 W
Other destination models	100 W

Dimensions ..... 420 (W) × 98 (H) × 223 (D) mm  
16-1/2 (W) × 3-7/8 (H) × 8-3/4 (D) in

Weight (without package) ..... 4 kg (8 lb 13 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.



## 2. FRONT PANEL FACILITIES

### FRONT PANEL

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

#### 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.

#### 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.

#### TREBLE tone control

Use to adjust the high-frequency tone.

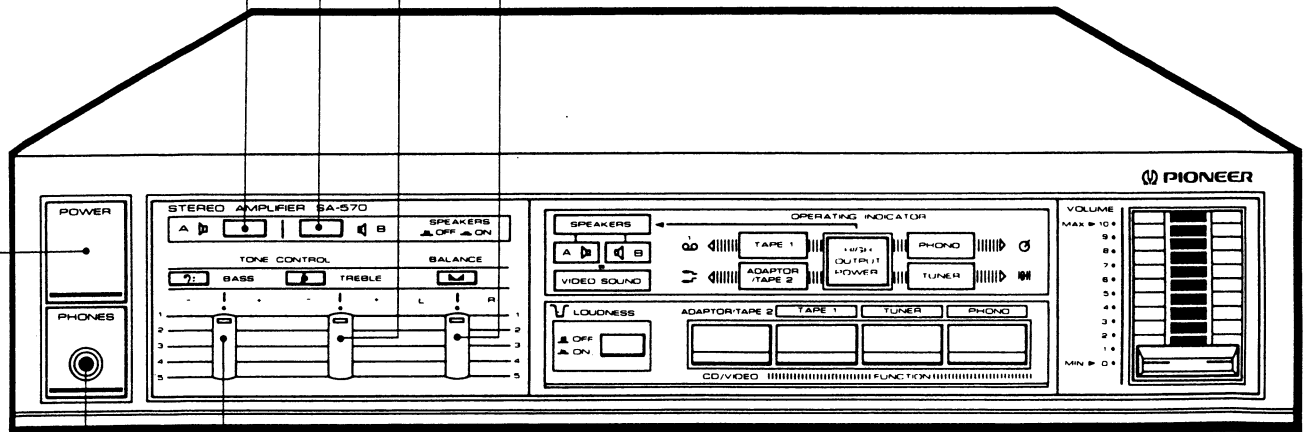
The central position is the flat (normal) position. When moved to the right, high-frequency tones are emphasized; when moved to the left, high-frequency tones are de-emphasized.

#### 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.

#### NOTE:

When the speaker system is connected to only one speaker terminal (A or B) and both A and B selector switches are ON, there will be no sound. Turn ON only the selector to which the speaker system is connected.



#### PHONES jack

When using headphones, insert their plug into this jack.

#### POWER switch

Press to turn power to the unit ON and OFF.

#### BASS tone control

Use to adjust the low-frequency tone. The central positions 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.

# SA-570(BK), SA-570

## PANEL FACILITIES

### 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.

### VOLUME control

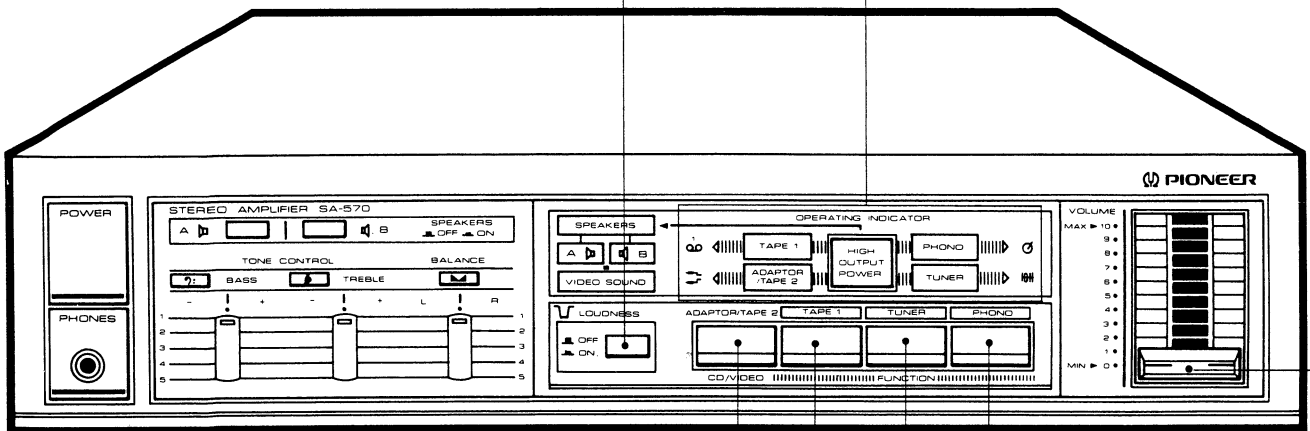
Use to adjust volume level.

Move up to increase volume.

Move down to lower volume.

### OPERATING indicators (◀, ▶)

The indicators light to show the positions of the FUNCTION switches and ADAPTOR/TAPE2 switch.



### ADAPTOR/TAPE2/ (CD/VIDEO) switch

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

[OFF] — ADAPTOR/TAPE2 indicator goes out: When not in use.

[ON] — ADAPTOR/TAPE2 indicator lights: When using the adaptor component or listening to the component connected to the ADAPTOR/TAPE2 terminals.

#### 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.)

### 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.

[TAPE 1] — Press when listening to tape playback with a tape deck.

#### NOTE:

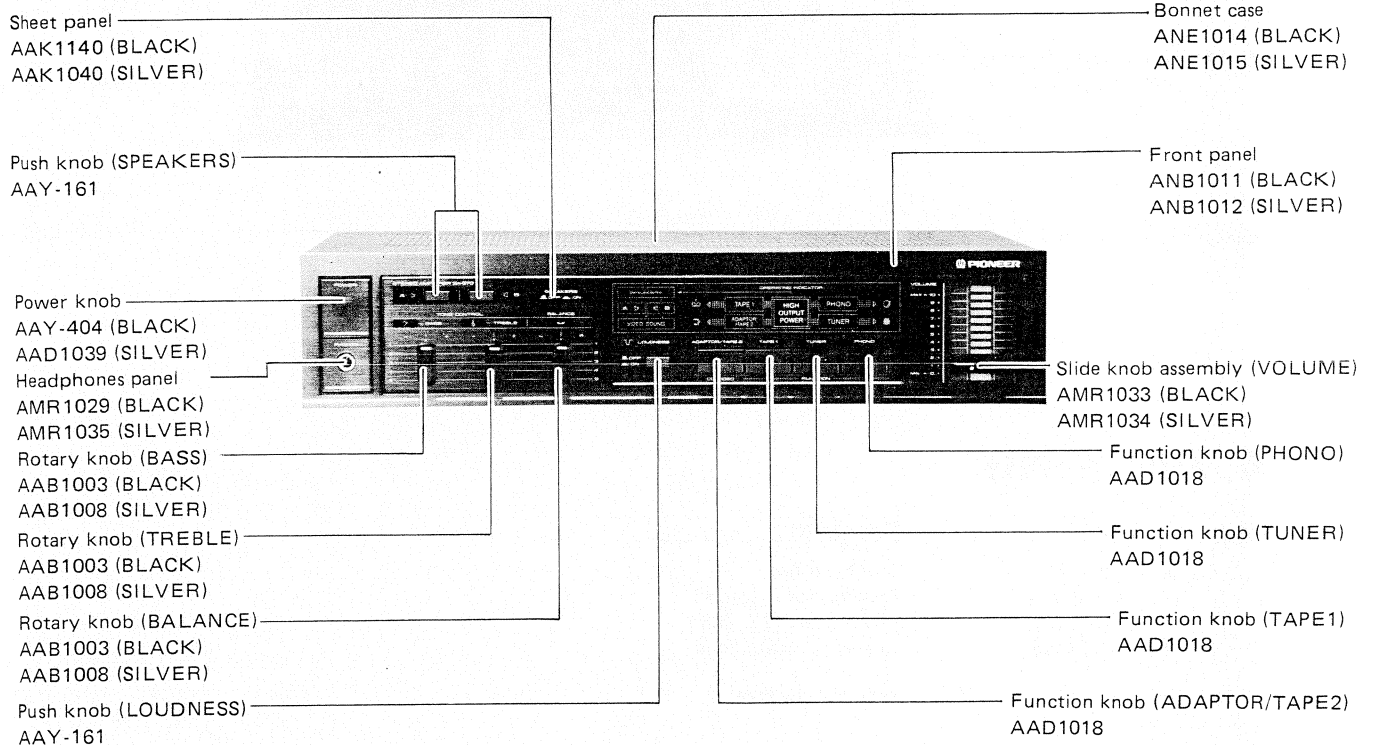
Function switches should be pressed firmly; otherwise, all the function indicators will light, and no output will be produced. If this occurs, press the desired function switch again.

### 3. PARTS LOCATION

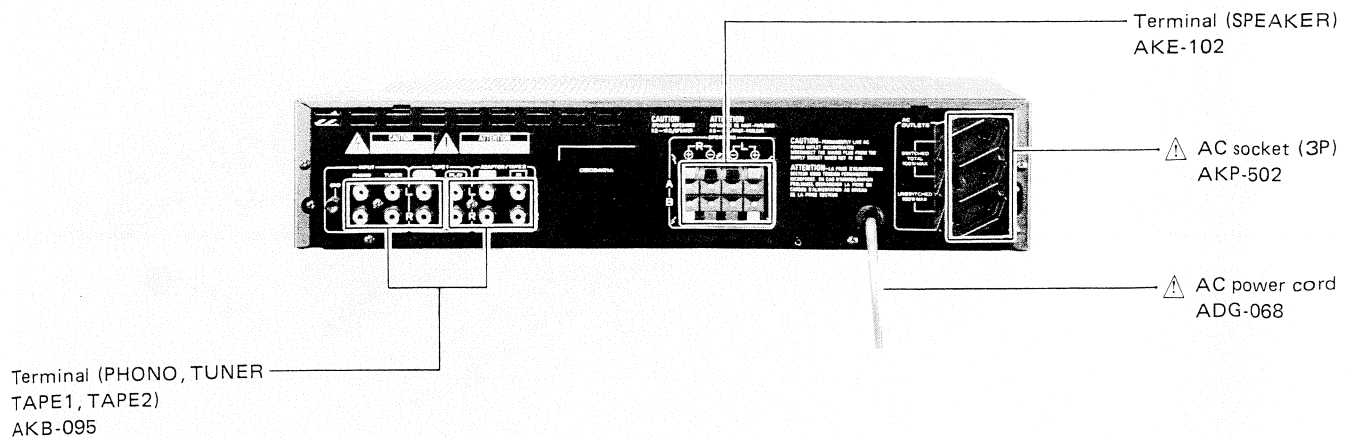
#### NOTES:

- 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.
- Parts marked by "⊙" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.

#### Front Panel View

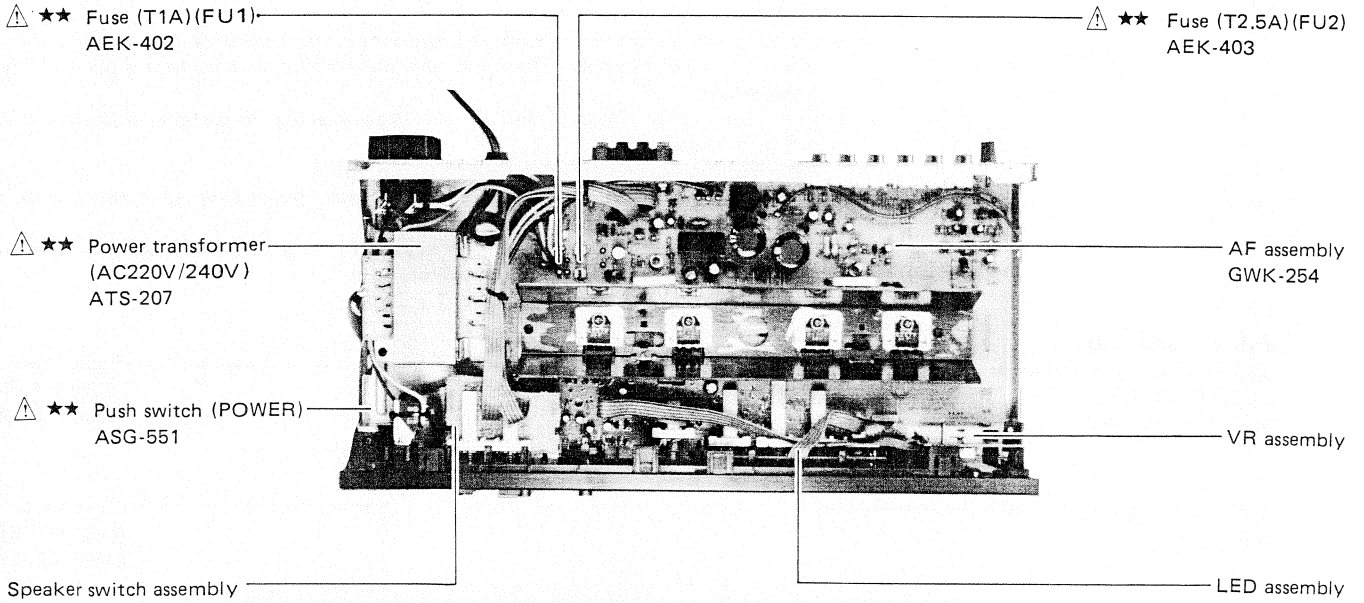


#### Rear Panel View



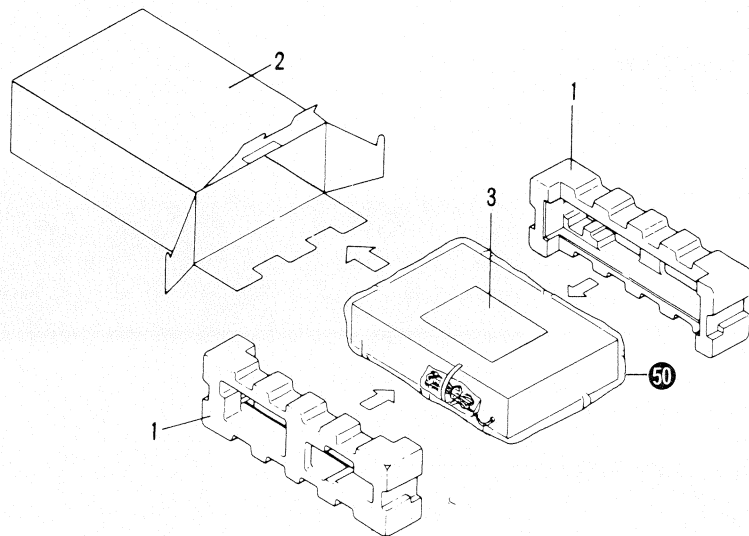
# SA-570(BK), SA-570

## Top View with Bonnet Case Removed

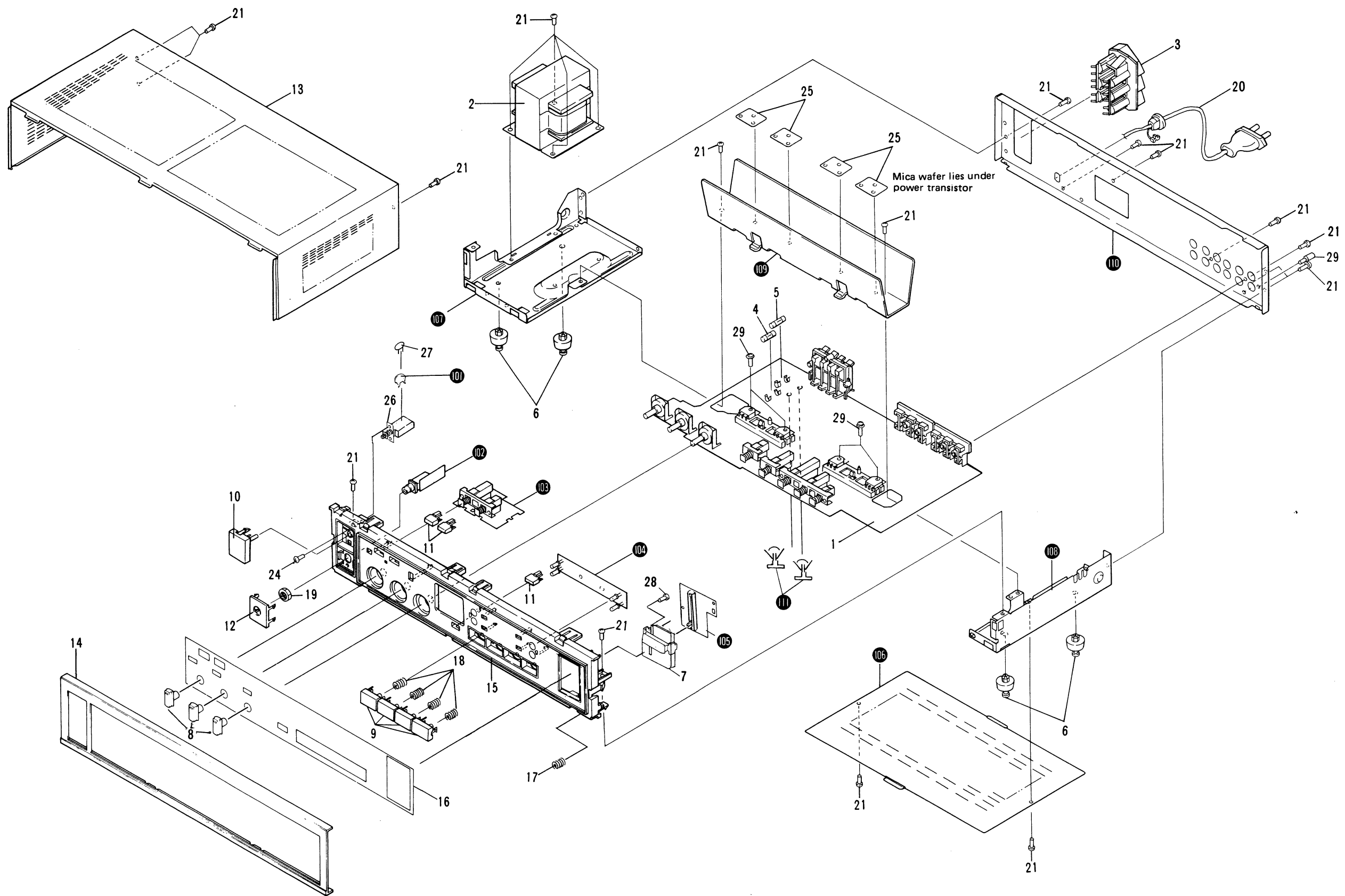


## 4. PACKING

Mark	No.	Part No.	Description
	1	AHA-340	Front rear pad
	2	AHD1024	Packing case (BLACK)
		AHD1025	Packing case (SILVER)
	3	ARE1002	Operating instructions
	50		Polyethylene sheet

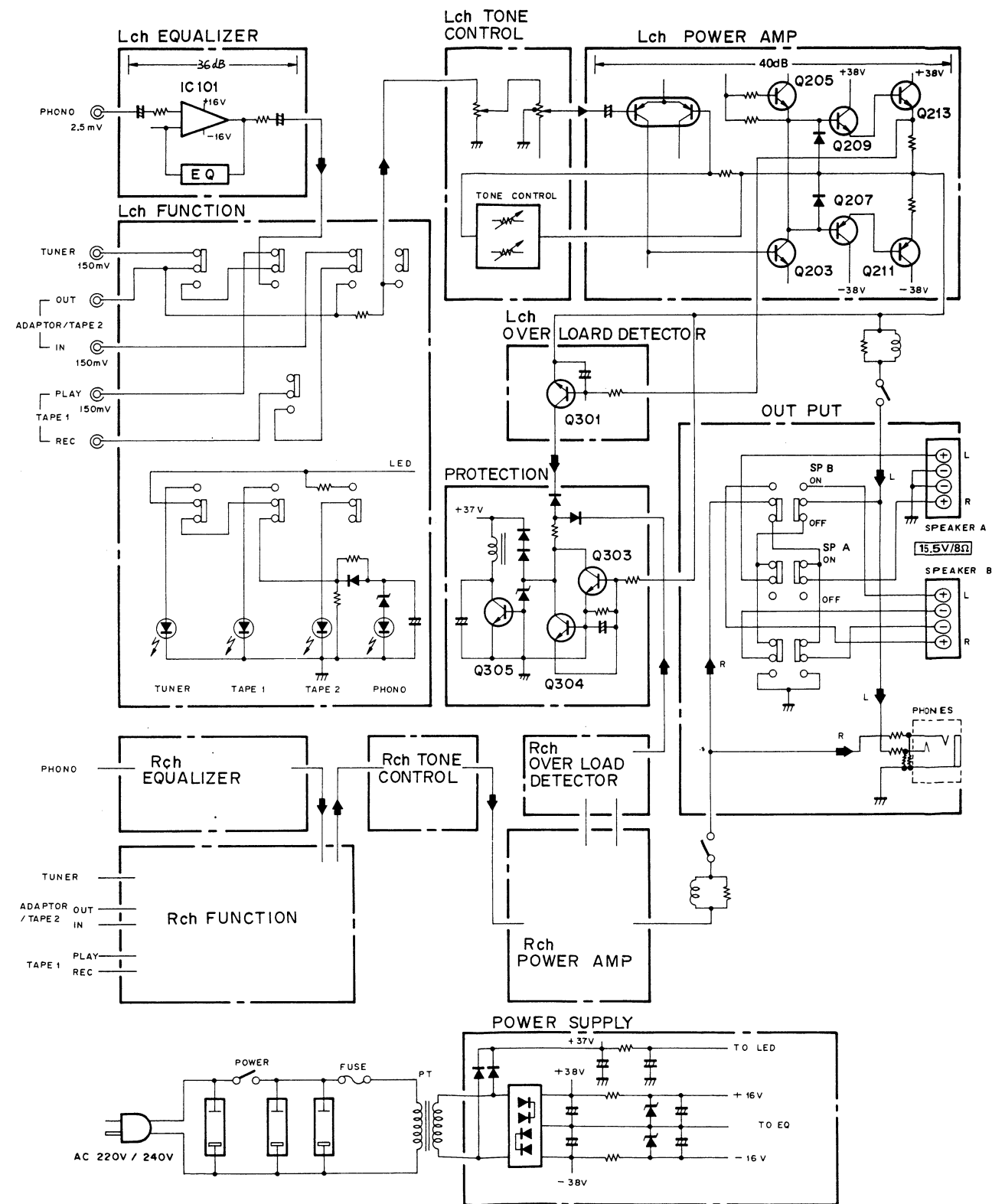


# 5. EXPLODED VIEWS AND PARTS LIST



Mark	No
	1
△ ★	2
△ ★★	3
△ ★★	4
△ ★★	5
	6
	7
	8
	9
	10
	11
	12
	13
	14
	15
	16
	17
	18
	19
	20
	21
	22
	23
	24
	25
△ ★★	26
△ ★★	27
	28
	29

## 6. BLOCK DIAGRAM



**NOTES:**

- Parts without part number cannot be supplied.
- 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.
- Parts marked by "  $\odot$  " are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.

Mark	No.	Part No.	Description	Mark	No.	Part No.	Description
	1	GWK-254	AF assembly		101		Condenser cover
$\Delta$ *	2	ATS-207	Power transformer (AC220V/240V) (T1)		102		Headphone assembly
$\Delta$	3	AKP-502	AC socket (3P)		103		Speaker switch assembly
$\Delta$ **	4	AEK-402	FU1 Fuse (T1A)		104		LED assembly
$\Delta$ **	5	AEK-403	FU2 Fuse (T2.5A)		105		Volume assembly
	6	AEC-784	Leg assembly		106		Bottom plate
	7	AMR1033	Slide knob assembly (BLACK)		107		Trans frame
		AMR1034	Slide knob assembly (SILVER)		108		Right frame
	8	AAB1003	Rotary knob (BLACK)		109		Heat sink
		AAB1008	Rotary knob (SILVER)		110		Rear panel
	9	AA Y1018	Function knob				
	10	AA Y-404	Power knob (BLACK)		111		P.C.B. holder
		AAD1039	Power knob (SILVER)				
	11	AA Y-161	Push knob (SPEAKERS)				
	12	AMR1029	Headphones panel (BLACK)				
		AMR1035	Headphones panel (SILVER)				
	13	ANE1014	Bonnet case (BLACK)				
		ANE1015	Bonnet case (SILVER)				
	14	ANB1011	Front panel (BLACK)				
		ANB1012	Front panel (SILVER)				
	15	AMB1025	Panel base				
	16	AAK1140	Sheet panel (BLACK)				
		AAK1040	Sheet panel (SILVER)				
	17	ABH-041	Coil spring				
	18	ABH-155	Coil spring				
	19	ABN-093	Nut				
	20	ADG-068	AC power cord				
	21	BBZ30P080FZK	Screw (3 x 8)				
	22	.....	.....				
	23	.....	.....				
	24	VMZ30P060FMC	Screw (3 x 6)				
	25	AEC-818	Mica wafer				
$\Delta$ **	26	ASG-551	Push switch (POWER S5)				
$\Delta$	27	ACG-502	Ceramic capacitor (C1 0.01/400V)				
	28	VBZ30P060FMC	Screw (3 x 6)				
	29	ABA-258	Screw				



# 7. P.C. BOARDS CONNECTION DIAGRAM

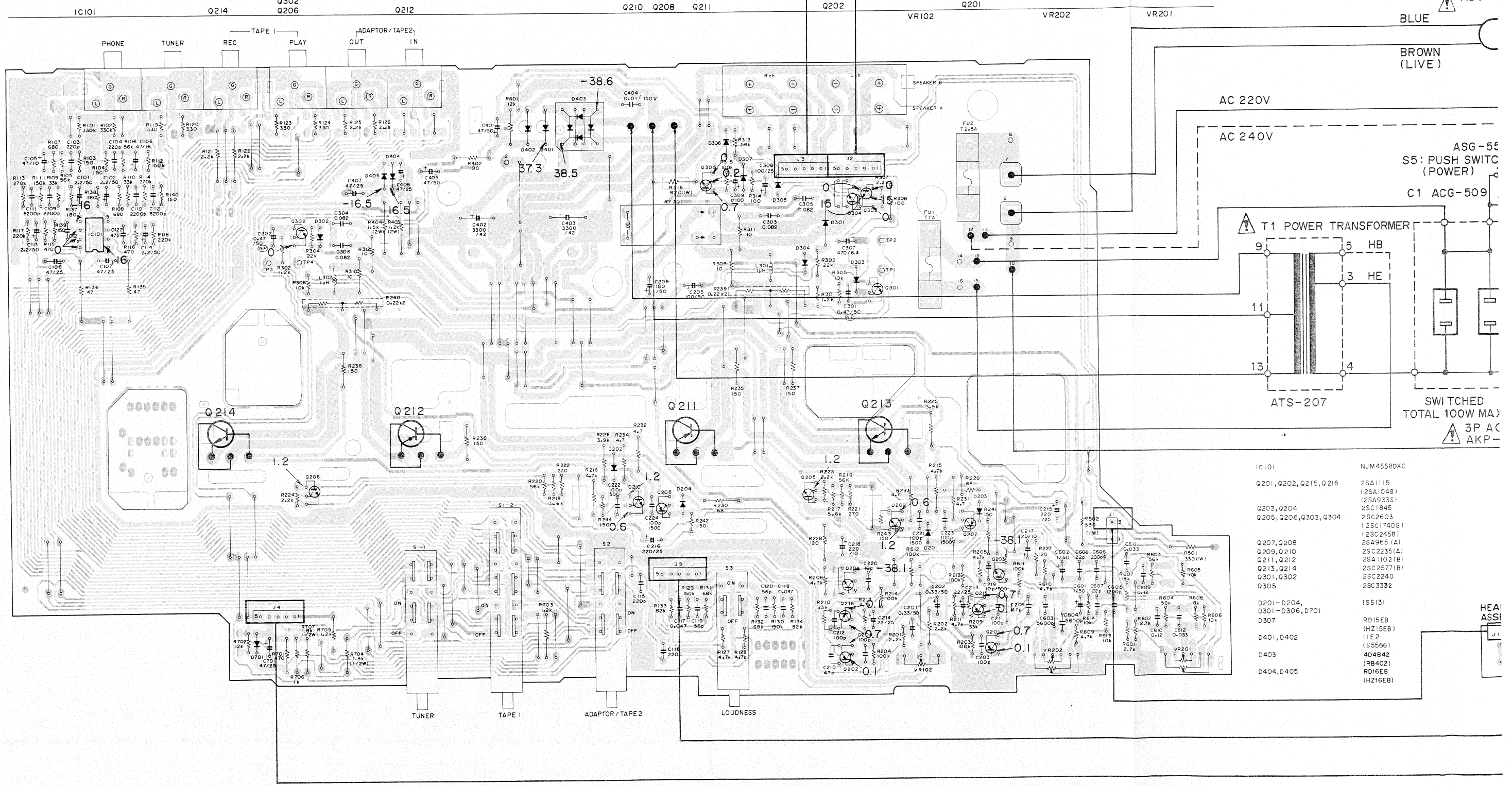
A

B

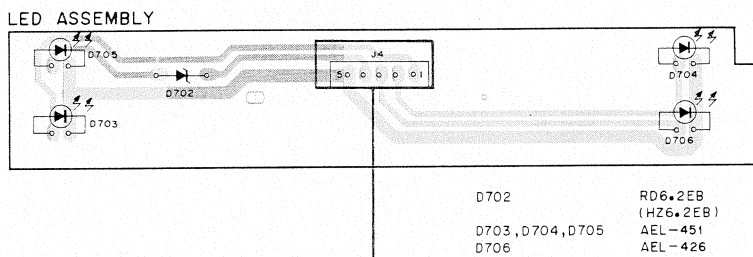
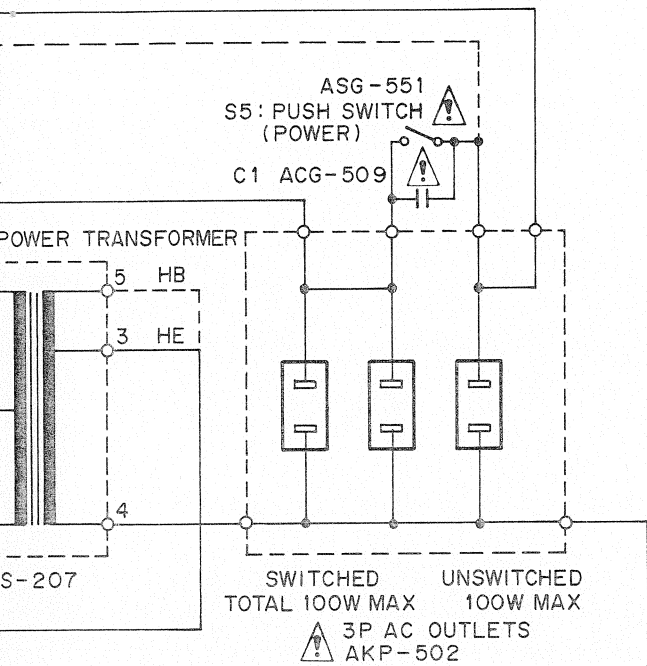
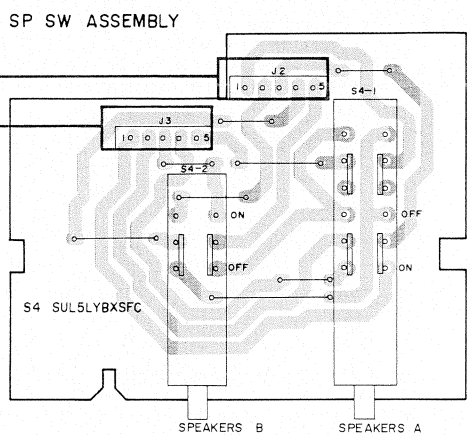
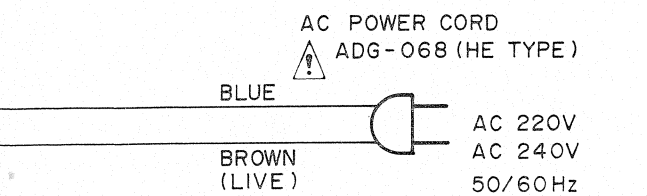
C

D

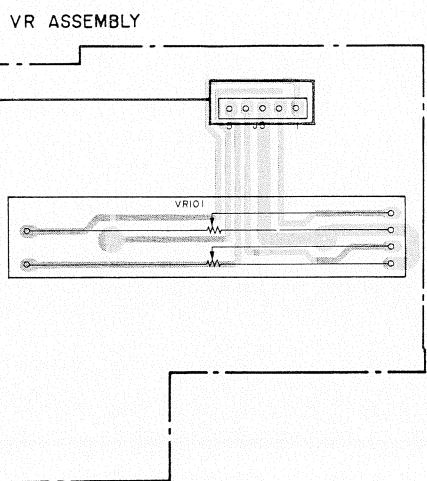
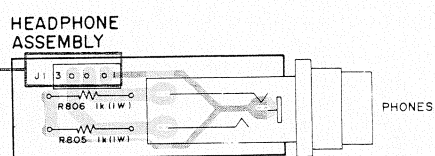
AF ASSEMBLY (GWK-254)



IC101	NJM4558DXC
Q201, Q202, Q215, Q216	2SA1115 (2SA1048) (2SA933S) 2SC1845 2SC2603 (2SC1740S) 2SA965 (A) 2SC2458 2SA2235 (A) Q211, Q212 2SA1102 (B) 2SC2577 (B) 2SC2240 Q301, Q302 2SC3332
Q203, Q204 Q205, Q206, Q303, Q304	2SC1740S (2SC2458) 2SA965 (A) 2SC2235 (A) Q211, Q212 2SA1102 (B) 2SC2577 (B) 2SC2240 2SC3332
Q207, Q208 Q209, Q210 Q211, Q212 Q213, Q214 Q301, Q302 Q305	ISS131 RD15EB (HZ15EB) 11E2 (S5566) 4D4B42 (RB402) RD16EB (HZ16EB)
D201-D204, D301-D306, D701	ISS131
D307	RD15EB (HZ15EB) 11E2 (S5566)
D401, D402	4D4B42 (RB402) RD16EB (HZ16EB)
D403	4D4B42 (RB402) RD16EB (HZ16EB)
D404, D405	4D4B42 (RB402) RD16EB (HZ16EB)

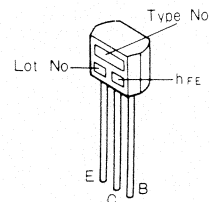


- NJM4558DXC
- 02, Q215, Q216
- 04
- 06, Q303, Q304
- 08
- 10
- 12
- 14
- 02
- 204,  
306, D701
- 402
- 405
- RD15EB (HZ15EB)  
11E2 (S5566)  
4D4B42 (RB402)  
RD16EB (HZ16EB)

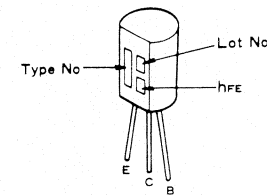


External Appearances of Transistor and ICs

2SA1115  
2SC2603

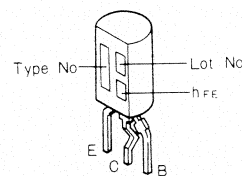


2SC1845

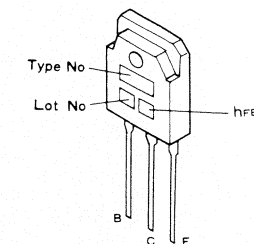


A

2SA965 (A)  
2SC2235 (A)

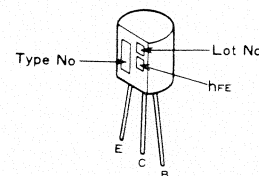


2SA1102

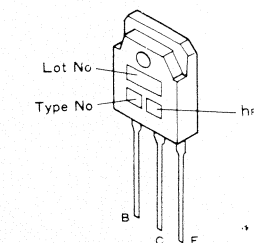


B

2SC2240  
2SC2389

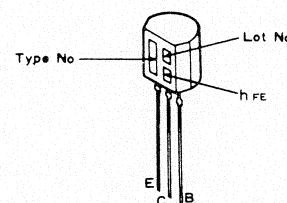


2SC2577

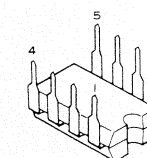


C

2SC3332

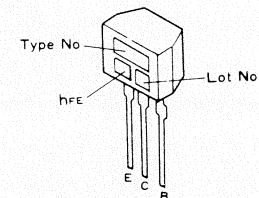


NJM4558DXC

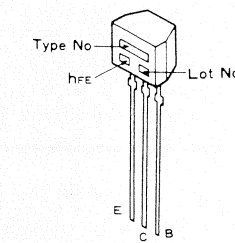


D

2SA933S  
2SC1740S



2SA1048  
2SC2458



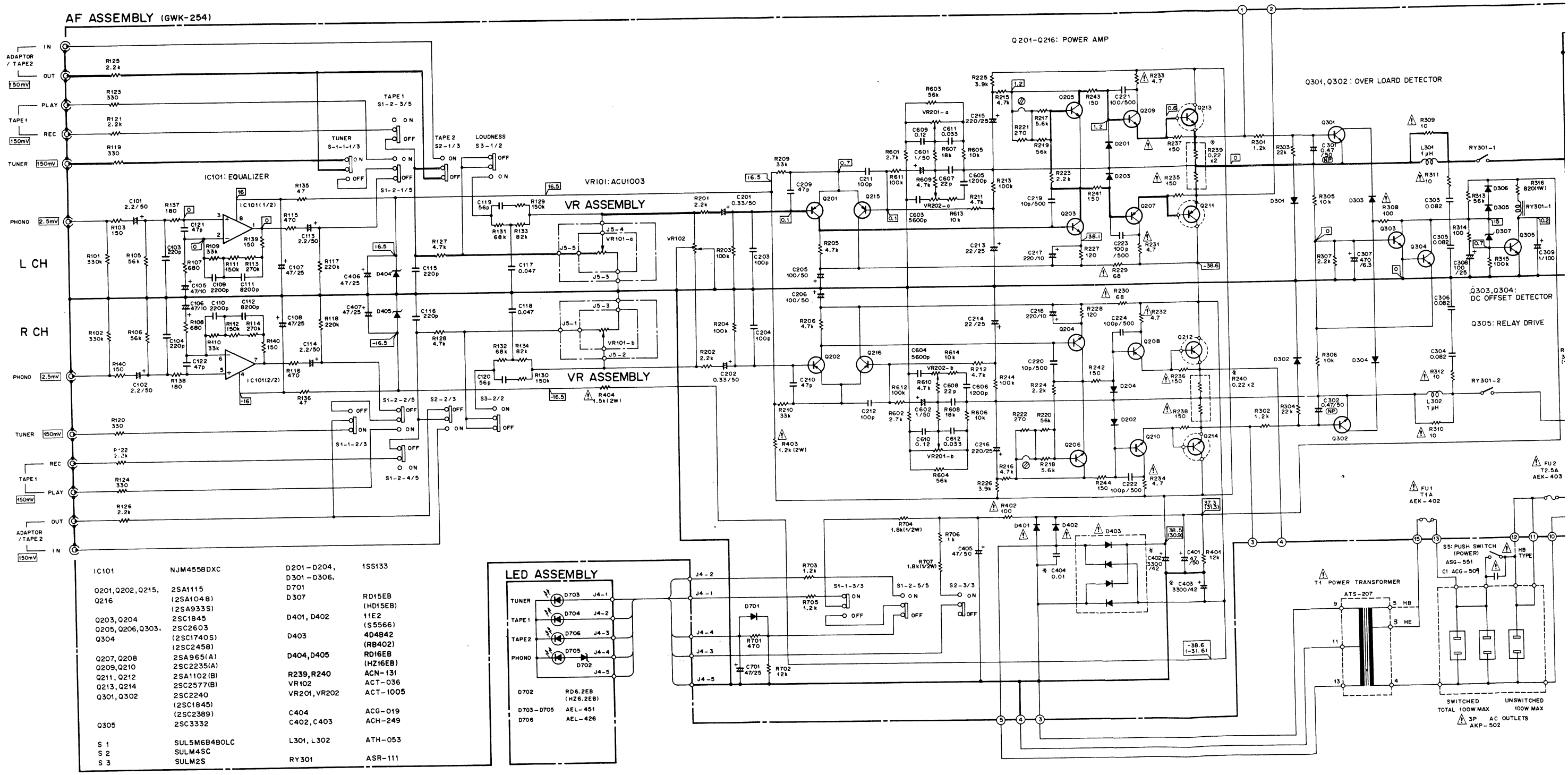
# 8. SCHEMATIC DIAGRAM

A

B

C

D



1

2

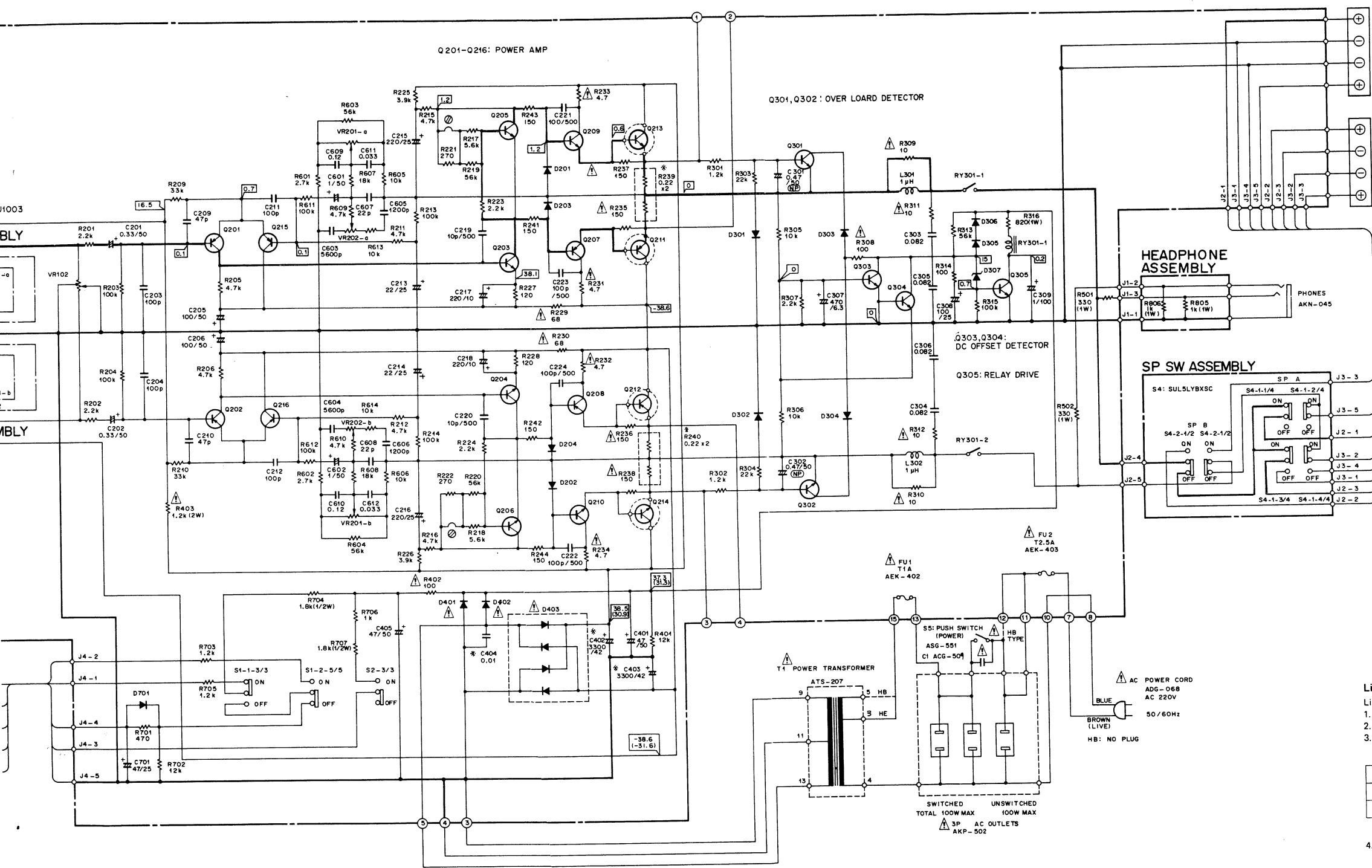
3

4

5

6

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



- RESISTORS:**  
Indicated in Ω, 1/4W, and 1/8W, ±5% tolerance unless otherwise noted; k: kΩ, M: MΩ, (F): ±1%, (G): ±2%, (K): ±10%, (M): ±20% tolerance
  - CAPACITORS:**  
Indicated in capacity (μF)/voltage (V) unless otherwise noted; p: pF. Indication without voltage is 50V except electrolytic capacitor.
  - VOLTAGE, CURRENT:**  
    - ⏏: Signal voltage at W + W, 8Ω output (1 kHz)
    - ⏏: DC voltage (V) at no input signal Value in ( ) is DC voltage at rated power.
  - OTHERS:**
    - : Signal route.
    - ⊗: Adjusting point.
    - ⚠: The 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.
    - ⊗: marked capacitors and resistors have parts numbers. The underlined indicates the switch position.
- This is the basic schematic diagram, but the actual circuit may vary due to improvements in design.
- SWITCHES:**
    - S1-1 FUNCTION(TUNER) ON-OFF
    - S1-2 FUNCTION(TAPE 1) ON-OFF
    - S2 FUNCTION(TAPE 2/ADAPTOR) ON-OFF
    - S3 LOUDNESS ON-OFF
    - S4-1 SPEAKERS A ON-OFF
    - S4-2 SPEAKERS B ON-OFF
    - S5 POWER ON-OFF
- THE UNDERLINED INDICATES THE SWITCH POSITION

**Line voltage selection (HE and HB types)**

- Line voltage can be changed with following steps.
1. Descomment 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

A

B

C

D

## 9. 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	RD4PS	5	6	1	J
47kΩ	47 × 10 <sup>3</sup>	473	RD4PS	4	7	3	J
0.5Ω	0R5		RN2H	0	R	5	K
1Ω	010		RS1P	0	1	0	K
  - Ex. 2 When there are 3 effective digits (such as in high precision metal film resistors).
 

5.62kΩ	562 × 10 <sup>1</sup>	5621	RN4SR	5	6	2	1	F
--------	-----------------------	------	-------	---	---	---	---	---
- The **△** 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 ★**  
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- Parts marked by " **⊙** " are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.

**Miscellaneous Parts List**

**P.C. BOARD ASSEMBLIES**

Mark	Symbol & Description	Part No.
	AF Assembly	GWK-254
	Speaker Switch Assembly	no supply
	Power Switch Assembly	no supply
	LED Assembly	no supply
	Headphone Assembly	no supply
	Volume Assembly	no supply

**OTHERS**

Mark	Symbol & Description	Part No.
△ ★	T1 Power transformer (AC220V/240V)	ATS-207
△	AC Socket (3P)	AKP-502
△★★	FU1 Fuse (T1A)	AEK-402
△★★	FU2 Fuse (T2.5A)	AEK-403
△	AC Power cord	ADG-068
△★★	S5 Push switch (POWER)	ASG-551
△	C1 Ceramic capacitor	ACG-502

**AF Assembly (GWK-254)**

**SEMICONDUCTORS**

Mark	Symbol & Description	Part No.
★★	IC101	NJM4558DXC
★★	Q211, Q212	2SA1102 (B)
★★	Q201, Q202, Q215, Q216	2SA1115 (2SA1048) (2SA933S)
★★	Q207, Q208	2SA965 (A)
★★	Q203, Q204	2SC1845
★★	Q209, Q210	2SC2235 (A)
★★	Q301, Q302	2SC2240 (2SC1845) (2SC2389)

Mark	Symbol & Description	Part No.
★★	Q213, Q214	2SC2577 (B)
★★	Q205, Q206, Q303, Q304	2SC2603 (2SC1740S) (2SC2458)
★★	Q305	2SC3332
△ ★	D403	RD4B42 (RB402)
★	D307	RD15EB (HZ15EB)
★	D404, D405	RD16EB (HZ16EB)
★	D201 - D204, D301 - D306, D701	1SS131
△ ★	D401, D402	11E2 (S5566)

**SWITCHES**

Mark	Symbol & Description	Part No.
★★	RY301 Relay	ASR-111
★★	S3 Push switch (LOUDNESS)	SULM2S
★★	S2 Push switch (TAPE2/ADAPTOR)	SULM4SC
★★	S1 Push switch (TUNER, TAPE1)	SUL5M6B4B0LC

**COILS**

Mark	Symbol & Description	Part No.
	L301, L302	ATH-053

**CAPACITORS**

Mark	Symbol & Description	Part No.
	C404 (0.01/250V)	ACG-019
	C402, C403 (3300μF/42V)	ACH-249
	C219, C220	CCCSL100D500 (CCDSL100D500)
	C203, C204, C211, C212	CCCSL101J50 (CCDSL101J50)
	C221 - C224	CCCSL101K500 (CCDSL101K500)
	C607, C608	CCCSL220J50 (CCDSL220J50)
	C103, C104, C115, C116	CCCSL221J50 (CCDSL221J50)
	C121, C122, C209, C210	CCCSL470J50 (CCDSL470J50)
	C119, C120	CCCSL560J50 (CCDSL560J50)
	C301, C302	CEANPR47M50
	C201, C202	CEASR33M50
	C309	CEAS010M100
	C601, C602	CEAS010M50
	C308	CEAS101M25
	C205, C206	CEAS101M50
	C101, C102, C113, C114	CEAS2R2M50
	C213, C214	CEAS220M25
	C217, C218	CEAS221M10
	C215, C216	CEAS221M25
	C105, C106	CEAS470M10
	C107, C108, C406, C407, C701	CEAS470M25
	C401, C405	CEAS470M50
	C307	CEAS471M6
	C303 - C306	CQMA823K50
	C605, C606	CQMA122K50
	C609, C610	CQMA124K50
	C109, C110	CQMA222J50
	C611, C612	CQMA333K50
	C117, C118	CQMA473K50
	C603, C604	CQMA562K50
	C111, C112	CQMA822J50

**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.
★★	VR102 (BALANCE)	ACT-036
★★	VR201, VR202 (BASS, TREBEL)	ACT1005
	R239, R240 (0.22Ω x 2)	ACN-131
	R704, R707	RD1/2PM182J
△	R229, R230, R308-R312, R402	RD1/4PMF □□□J
	R121, R122, R135, R136, R202, R215, R216, R225 - R228, R401, R701, R703, R705, R706	RD1/4PM □□□J
△	R235-R238	RFA1/4PS □□□J
△	R231-R234	RFA1/4PS4R7J
	R316, R501, R502	RS1LMF □□□J
	R403, R404	RS2LMF □□□J
	Other resistors	RD1/8PM □□□J

**OTHERS**

Mark	Symbol & Description	Part No.
	Terminal (PHONO, TUNER, TAPE1, TAPE2)	AKB-095
	Terminal (SPEAKER)	AKE-102
	Mica wafer	AEC-818
	Screw	ABA-258

**Speaker Switch Assembly**

**SWITCH**

Mark	Symbol & Description	Part No.
★★	S4 Push switch (SPEAKER A,B)	SUL5LYBXSC

**LED Assembly**

**SEMICONDUCTORS**

Mark	Symbol & Description	Part No.
★	D703 - D705	AEL-451
★	D706	AEL-426
★	D702	RD6.2EB (HZ6.2EB)

**Headphone Assembly**

**RESISTOR**

Mark	Symbol & Description	Part No.
	R805, R806	RS1LMF102J

**OTHER**

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

**Volume Assembly (AWZ1001)**

**RESISTOR**

Mark	Symbol & Description	Part No.
★	VR101 Slide volume (VOLUME)	ACU1003

**10. F**

The HB :

10.1 CC

Mark
△ ★ T
△ ★ T
△★★ S
△★★ F
△★★ F
△★★ F
△★★ F
△

**CAPACITORS**

Mark	Symbol & Description	Part No.
	C404 (0.01/250V)	ACG-019
	C402, C403 (3300 $\mu$ F/42V)	ACH-249
	C219, C220	CCCSL100D500 (CCDSL100D500)
	C203, C204, C211, C212	CCCSL101J50 (CCDSL101J50)
	C221 - C224	CCCSL101K500 (CCDSL101K500)
	C607, C608	CCCSL220J50 (CCDSL220J50)
	C103, C104, C115, C116	CCCSL221J50 (CCDSL221J50)
	C121, C122, C209, C210	CCCSL470J50 (CCDSL470J50)
	C119, C120	CCCSL560J50 (CCDSL560J50)
	C301, C302	CEANPR47M50
	C201, C202	CEASR33M50
	C309	CEAS010M100
	C601, C602	CEAS010M50
	C308	CEAS101M25
	C205, C206	CEAS101M50
	C101, C102, C113, C114	CEAS2R2M50
	C213, C214	CEAS220M25
	C217, C218	CEAS221M10
	C215, C216	CEAS221M25
	C105, C106	CEAS470M10
	C107, C108, C406, C407, C701	CEAS470M25
	C401, C405	CEAS470M50
	C307	CEAS471M6
	C303 - C306	CQMA823K50
	C605, C606	CQMA122K50
	C609, C610	CQMA124K50
	C109, C110	CQMA222J50
	C611, C612	CQMA333K50
	C117, C118	CQMA473K50
	C603, C604	CQMA562K50
	C111, C112	CQMA822J50

**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.
★★	VR102 (BALANCE)	ACT-036
★★	VR201, VR202 (BASS, TREBEL)	ACT1005
	R239, R240 (0.22 $\Omega$ x 2)	ACN-131
	R704, R707	RD1/2PM182J
⚠	R229, R230, R308-R312, R402	RD1/4PMF □□□J
	R121, R122, R135, R136, R202, R215, R216, R225 - R228, R401, R701, R703, R705, R706	RD1/4PM □□□J
⚠	R235-R238	RFA1/4PS □□□J
⚠	R231-R234	RFA1/4PS4R7J
	R316, R501, R502	RS1LMF □□□J
	R403, R404	RS2LMF □□□J
	Other resistors	RD1/8PM □□□J

**OTHERS**

Mark	Symbol & Description	Part No.
	Terminal (PHONO, TUNER, TAPE1, TAPE2)	AKB-095
	Terminal (SPEAKER)	AKE-102
	Mica wafer	AEC-818
	Screw	ABA-258

**Speaker Switch Assembly**

**SWITCH**

Mark	Symbol & Description	Part No.
★★	S4 Push switch (SPEAKER A,B)	SUL5LYBXSC

**LED Assembly**

**SEMICONDUCTORS**

Mark	Symbol & Description	Part No.
★	D703 - D705	AEL-451
★	D706	AEL-426
★	D702	RD6.2EB (HZ6.2EB)

**Headphone Assembly**

**RESISTOR**

Mark	Symbol & Description	Part No.
	R805, R806	RS1LMF102J

**OTHER**

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

**Volume Assembly (AWZ1001)**

**RESISTOR**

Mark	Symbol & Description	Part No.
★	VR101 Slide volume (VOLUME)	ACU1003

**10. FOR HB, AND S TYPES**

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

**10.1 CONTRAST OF MISCELLANEOUS PARTS**

Mark	Symbol & Description	Part No.				
		SA-570 [BK]/ HE type	SA-570 [BK]/ HB type	SA-570 [BK]/ S type	SA-570/ HE type	SA-570/ HB type
⚠ ★	T1 Power transformer (220V/240V)	ATS-207	ATS-207	.....	ATS-207	ATS-207
⚠ ★	T1 (110V/120V/220V/240V)	.....	.....	ATS-249	.....	.....
⚠	AC socket (AC OUTLETS) 3P	AKP-502	AKP-505	AKP-504	AKP-502	AKP-505
⚠ ★★	S6 Line voltage selector	.....	.....	AKX-504	.....	.....
⚠ ★★	FU1 Fuse (T1A)	AEK-402	AEK-508	.....	.....	AEK-508
⚠ ★★	FU1 Fuse (1.6A)	.....	.....	AEK-121	AEK-402	.....
⚠ ★★	FU2 Fuse (T2.5A)	AEK-403	AEK-512	.....	AEK-403	AEK-512
⚠ ★★	FU2 Fuse (1.6A)	.....	.....	AEK-121	.....	.....
	Slide knob assembly	AMR1033	AMR1033	AMP1033	AMP1034	AMR1034
	Rotary knob	AAB1003	AAB1003	AAB1003	AAB1008	AAB1008
	Sheet panel	AAK1039	AAK1039	AAK1039	AAK1040	AAK1040
	Power knob	AAV-404	AAV-404	AAV-404	AAV1039	AAV1039
	Headphone panel	AMR1029	AMR1029	AMR1029	AMR1035	AMR1035
	Bonnet case	ANE1014	ANE1014	ANE1014	ANE1015	ANE1015
	Operating instructions (English/German/French/Italian)	ARE1002	.....	.....	ARE1002	.....
	Operating instructions (English) (Spanish)	.....	ARB1028	ARB1028	.....	ARB1028
	AC power cord	ADG-068	ADG-063	ADG-073	ADG-068	ADG-063
⚠	Screw (3 x 10)	.....	.....	VTZ30P100FZK	.....	.....
	Packing case	AHD1024	AHD1024	AHD1024	AHD1025	AHD1025
	P.C.B. holder	Non supply	Non supply	.....	Non supply	Non supply
	Fuse card	.....	.....	Non supply	.....	.....
	Nylon rivet	.....	AEC-525	.....	.....	AEC-525
	Outlet barrier	.....	Non supply	.....	.....	Non supply

### 10.2 SCHEMATIC DIAGRAM (Power Supply Sections)

For S type

AF ASSEMBLY (GWK-254)

