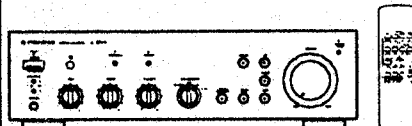


Service Manual

PIONEER
The Art of Entertainment



The illustration shows model A-504R.

ORDER NO.
ARP2894

STEREO AMPLIFIER

A-504R

A-504R-G
A-404R

THIS MANUAL IS APPLICABLE TO THE FOLLOWING MODEL(S) AND TYPE(S).

Type	Model			Power Requirement	The voltage can be converted by the following method.
	A-504R	A-504R-G	A-404R		
HE	○	—	○	AC 220V - 230V	AC 240V, *
HBW	—	—	○	AC 230V	AC 240V, *
HEWZ	○	—	○	AC 220V - 230V	AC 240V, *
HEZ	—	○	—	AC 220V - 230V	AC 240V, *

*: After the wiring of the Power-supply block at the primary winding of Power-transformer referring to the "Line Voltage Selection" described in Service Manual.

• For the following : A-504R/HEWZ ; A-504R-G/HEZ ; A-404R/HBW and HEWZ, refer to page 19.

CONTENTS

1. EXPLODED VIEWS, PACKING AND PARTS LIST	2
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4. FOR A-504R/HEWZ, A-504R-G/HEZ, A-404R/HBW AND HEWZ.....	19
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6. SPECIFICATIONS	25

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1. EXPLODED VIEWS, PACKING AND PARTS LIST

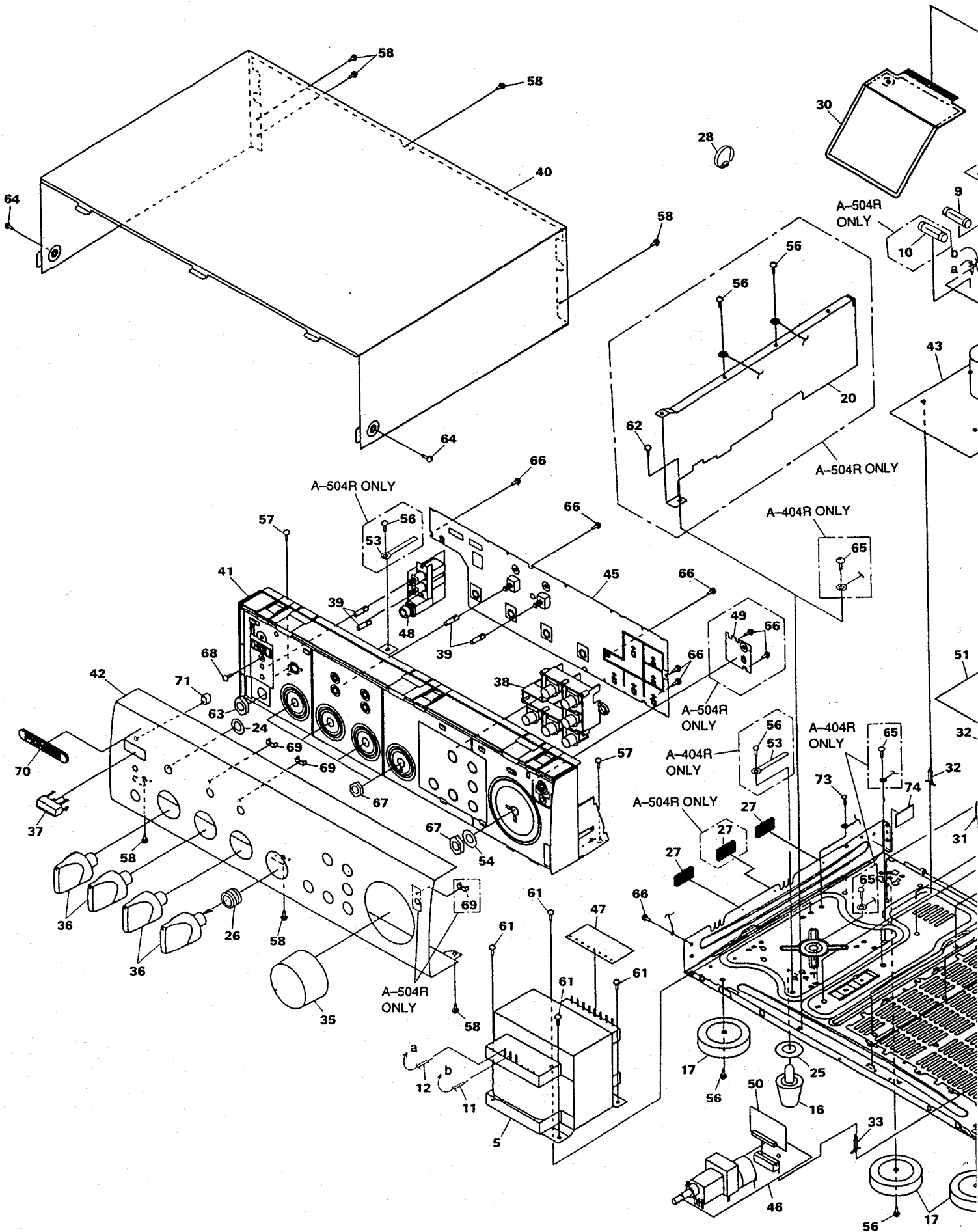
NOTES:

- Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.
- The Δ 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.
- Parts marked by "⊙" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.

1.1 EXPLODED VIEWS

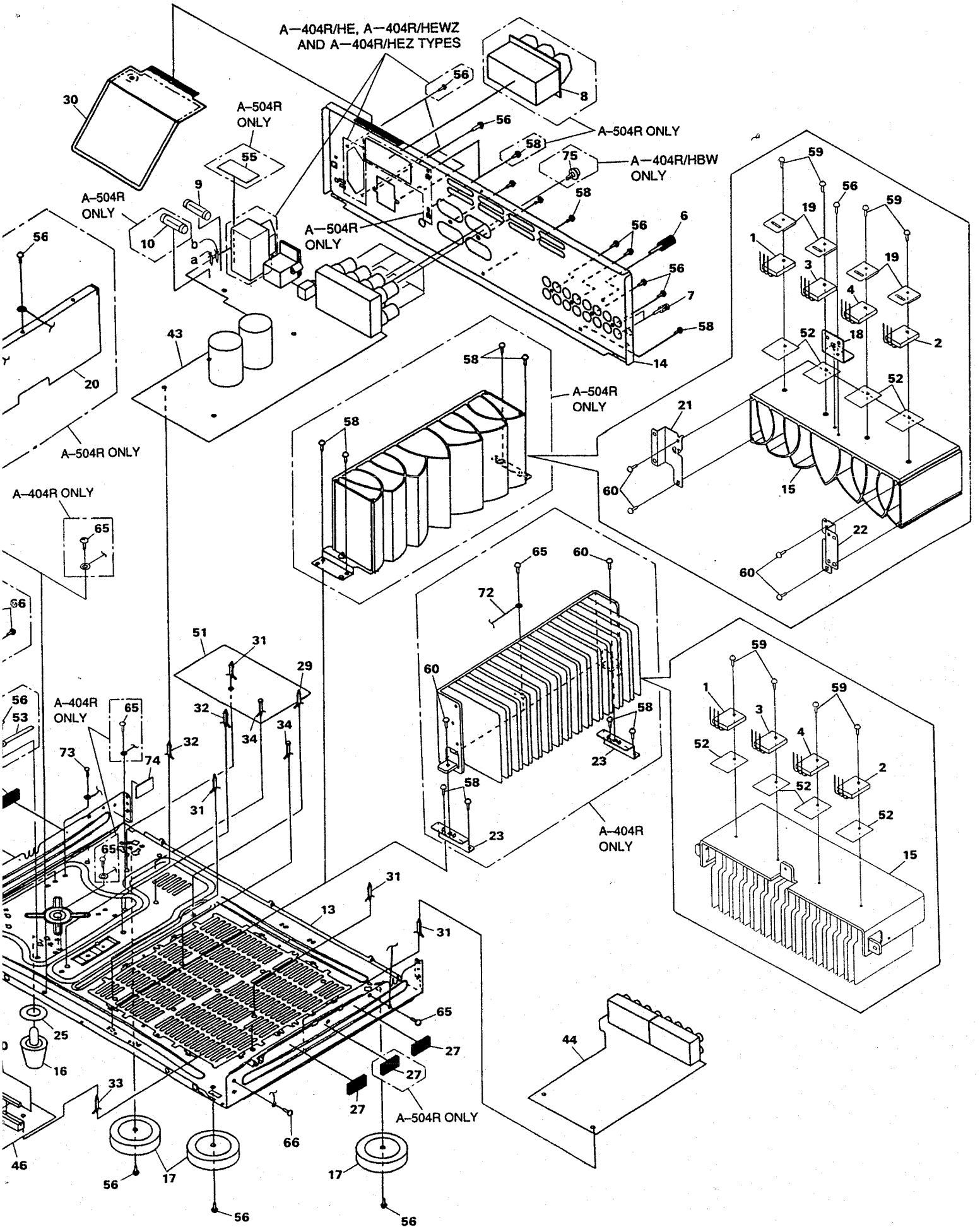
(For A-504R/HE and A-404R/HE)

Mark	No.	Description	Parts No.	Mark	No.	Description	Parts No.
Δ	1	TRANSISTOR (Q1) (A-504R)	2SC3281		36	ROTARY KNOB S	AAB1349
Δ	1	TRANSISTOR (Q1) (A-404R)	2SC3181N		37	POWER BUTTON (PLS)	AAD2421
Δ	2	TRANSISTOR (Q2) (A-504R)	2SC3281		38	FUNCTION BUTTON (PLS)	AAD2422
Δ	2	TRANSISTOR (Q2) (A-404R)	2SC3181N		39	PUSH BUTTON (PLS)	AAD2423
Δ	3	TRANSISTOR (Q3) (A-504R)	2SA1302		40	BONNET CASE (MET) (A-504R)	ANE7061
Δ	3	TRANSISTOR (Q3) (A-404R)	2SA1264N		40	BONNET CASE (MET) (A-404R)	ANE7066
Δ	4	TRANSISTOR (Q4) (A-504R)	2SA1302		41	PANEL BASE	AMB7222
Δ	4	TRANSISTOR (Q4) (A-404R)	2SA1264N		42	FRONT PANEL (A-504R)	ANB7008
Δ	5	POWER TRANSFORMER (T1) (A-504R)	ATS1537		42	FRONT PANEL (A-404R)	ANB7010
Δ	5	POWER TRANSFORMER (T1) (A-404R)	ATS1532		43	AF ASS'Y (A-504R)	AWZ7736
	6	TERMINAL SCREW	AKE-031		43	AF ASS'Y (A-404R)	AWZ7744
	7	SHORT PIN PLUG	AKM-050		44	INPUT ASS'Y (A-504R)	AWZ7737
Δ	8	AC SOCKET 3-P (A-504R ONLY)	AKP-502		44	INPUT ASS'Y (A-404R)	AWZ7745
Δ	9	FUSE (FU1 T2A/250V) (A-504R)	AEK-511		45	CONTROL ASS'Y (A-504R)	AWZ7738
Δ	9	FUSE (FU1 T1.6A/250V) (A-404R)	AEK-510		45	CONTROL ASS'Y (A-404R)	AWZ7746
Δ	10	FUSE (FU2 T500mA/250V) (A-504R ONLY)	AEK-505		46	VOLUME ASS'Y (A-504R)	AWZ7739
Δ	11	CUT WIRE (Y2)	YJ8OW1-35-35/35	NSP	46	VOLUME ASS'Y (A-404R)	AWZ7747
Δ	12	CUT WIRE (Y1)	YJ8OW9-35-35/35	NSP	47	TRANS ASS'Y	AWZ7740
NSP	13	CHASSIS	ANA1489	NSP	48	SP SW ASS'Y	AWZ7741
	14	REAR PANEL (A-504R)	ANC7228	NSP	49	MUTE SW ASS'Y (A-504R ONLY)	AWZ7742
	14	REAR PANEL (A-404R)	ANC7230	NSP	50	LOUDNESS ASS'Y (A-504R)	AWZ7743
	15	HEAT SINK (A-504R)	ANH1428	NSP	50	LOUDNESS ASS'Y (A-404R)	AWZ7748
	15	HEAT SINK (A-404R)	ANH1266		51	BARRIER	AEC7033
	16	FOOT ASSY	AEC1531		52	SHEET	AEE1014
	16	FOOT ASSY	AEC1531		53	BINDER	AEP-215
	17	INSULATOR	PNW1912		54	WASHER	WA92F140U100
NSP	18	PCB HOLDER (A-504R ONLY)	ANG1062	NSP	55	FUSE CARD (A-504R ONLY)	AAX1581
	19	TRANSISTOR COVER LL (A-504R ONLY)	ANG1840		56	SCREW	ABA-298
	20	CHAMBER FRAME (A-504R ONLY)	ANG7026		57	SCREW (STEEL)	ABA1011
	20	CHAMBER FRAME (A-504R ONLY)	ANG7026		58	SCREW (STEEL)	ABA1048
	21	HEAT SINK HOLDER A (A-504R ONLY)	ANG7027		59	SCREW	ABA1082
	22	HEAT SINK HOLDER B (A-504R ONLY)	ANG7028		60	SCREW (STEEL)	ABA1193
	23	HEAT SINK HOLDER C (A-404R ONLY)	ANG7029		61	SCREW	ABA1200
	24	REMOCON WINDOW	AAK2457		62	SCREW (STEEL) (A-504R ONLY)	ABA1048
	25	PVC RING	ABF1030		63	NUT	ABN-065
	26	SPRING	ABH7055		64	SCREW	BBT30P060FZK
NSP	27	SPACER	AEB1254		65	SCREW	BBZ30P060FMC
	28	NYLON BINDER	AEC-093		66	SCREW	BFZ30P080FMC
NSP	29	PCB SUPPORT	AEC1216		67	NUT	NK90FUC
NSP	30	SHIELD PLATE C	AEC1538		68	SCREW	VMZ30P060FCU
	31	PCB SUPPORT S	AEC7027		69	LED LENS	AAK2459
	32	PCB SUPPORT M	AEC7028		70	NAME PLATE (METAL)	AAM1058
	33	PCB SUPPORT L	AEC7029		71	LED LENS	PNW2019
	34	PCB SUPPORT M	AEC7031		72	GROUND LEAD (A-404R ONLY)	ADX1565
	35	ROTARY KNOB L (PLS)	AAB1343		73	SCREW	BBZ30P060FMC
					74	SPACER	AEC1403
					75	HOLE PLUG (A-404R/HBW ONLY)	AEC7040



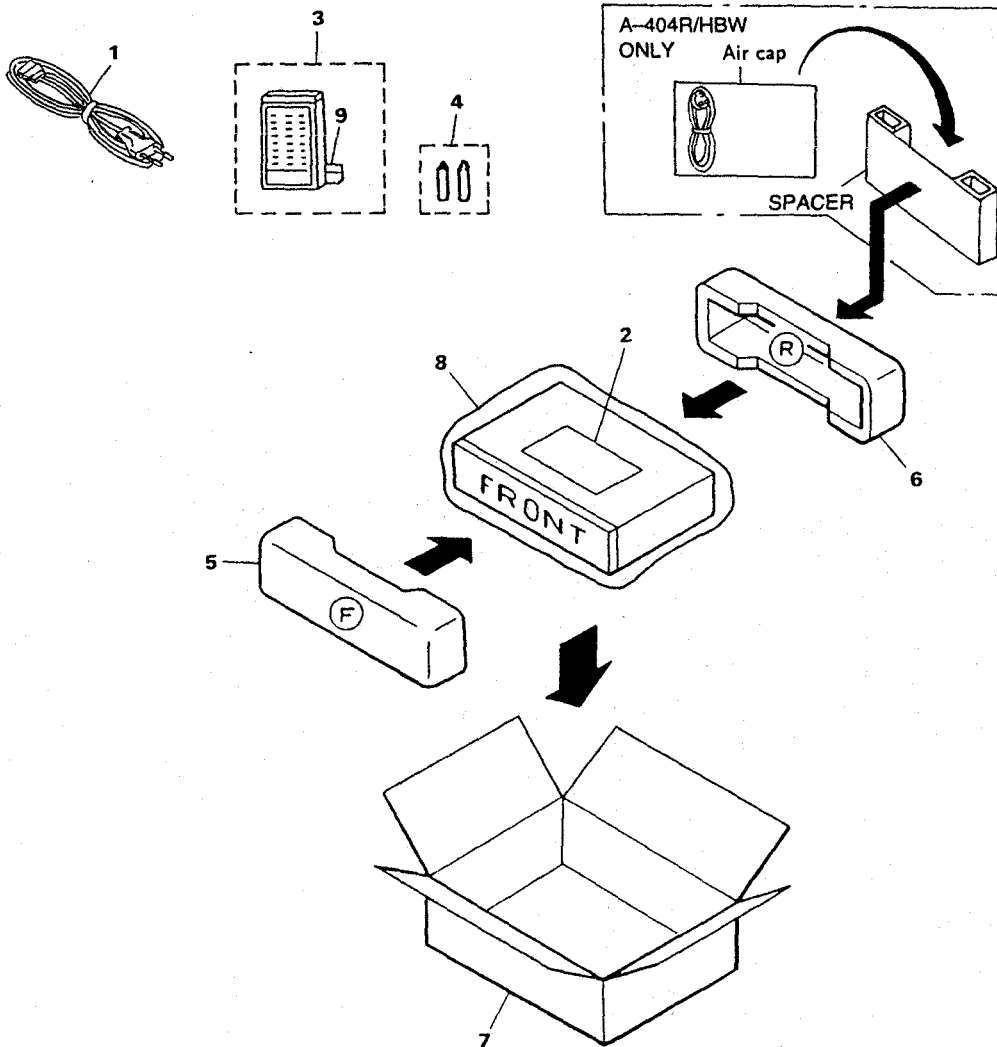
NOTE: Screws adjacent to ▼ mark on product are used for disassembly.

A-404R/HE, A-404R/HEWZ
AND A-404R/HEZ TYPES



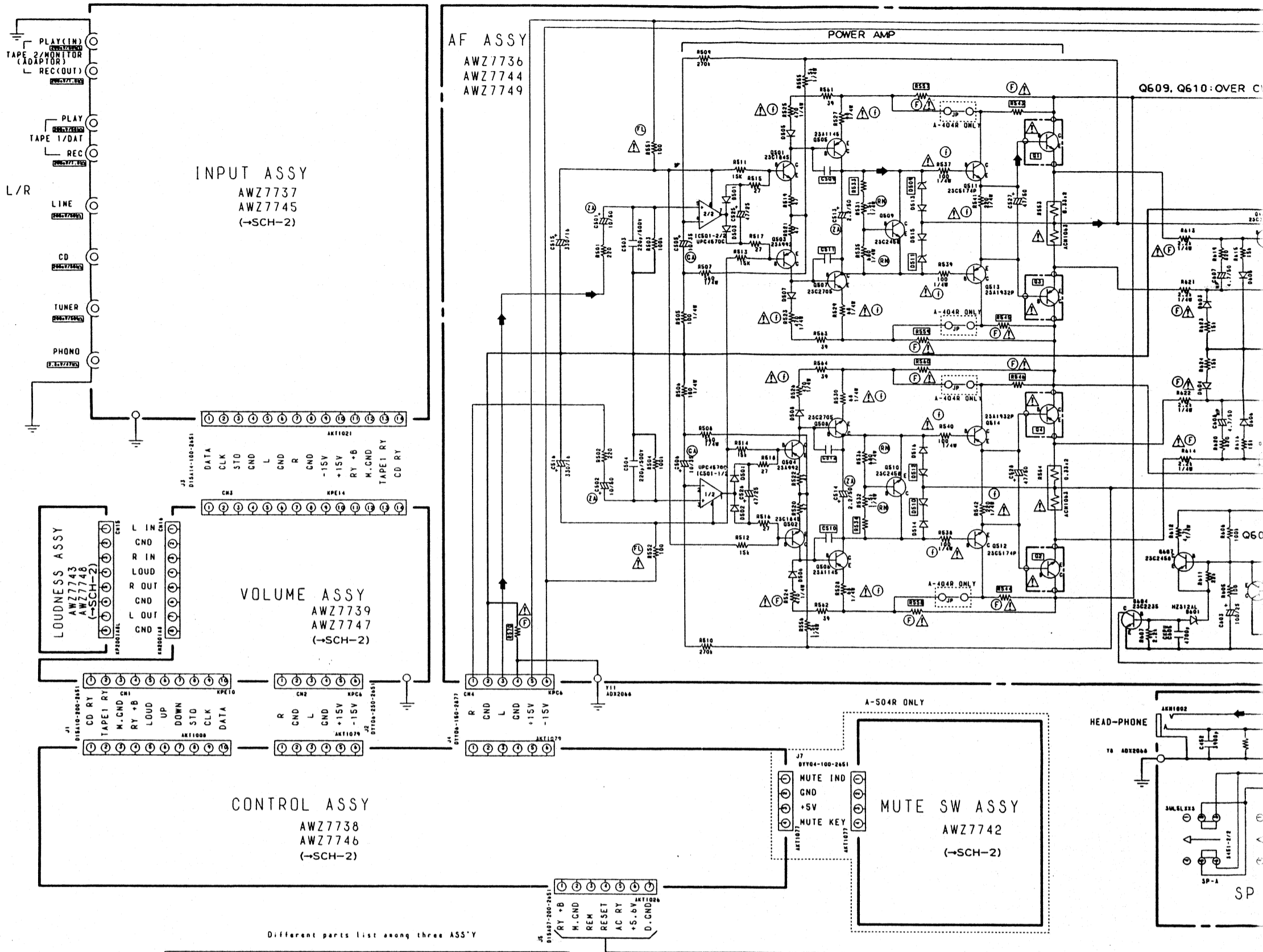
1.2 PACKING (For A-504R/HE and A-404R/HE)

Mark	No.	Description	Parts No.
△	1	AC POWER CORD	ADG1127
	2	INSTRUCTION MANUAL (English/German/French/Italian/ Swedish/Spanish/Dutch/Portuguese)	ARE7042
	3	REMOTE CONTROL UNIT (CU-A013)	AXD7053
NSP	4	BATTERY(R6P,AA)	AEX-010
	5	FRONT PAD	AHA1590
	6	REAR PAD	AHA1591
	7	PACKING CASE (A-504R)	AHD7165
	7	PACKING CASE (A-404R)	AHD7167
	8	PACKING SHEET	AHG1016
	9	BATTERY COVER	AZN2249



2. SCHEMATIC AND PCB CONNECTION DIAGRAMS

2.1 OVERALL WIRING DIAGRAM, AF, TRANS AND SP SW ASSEMBLIES



Different parts list among three ASS'Y

	AWK7185 A-504R/HEWZ, HE A-504R-C/HEZ	AWK7166 A-404R/HEWZ, HE	AWK7187 A-404R/HBW
DS09-512	HZ59A2L	HZ57B2L	←
RS33-534	JP	47	←
RS43-546	2.2 (1/2W) (F)	4.7 (1/2W) (F)	←
RS57-560	2.2 (1/2W) (F)	VACANT	←
RS70	VACANT	10 (1/4W) (F)	←
CS09-512	180p/500V	120p/500V	←
C701	ACH7014 (10000uF/56V)	ACH7016 (6800uF/56V)	←
C702	ACH7020 (10000uF/56V)	ACH7015 (6800uF/56V)	←
C725-726	VACANT	0.01u	←
AC INLET CN12	AKP1132	←	AKP1133
AC OUTLET	—	AKP1034	←
SP TERMINAL	AKE1011	←	AKE7008
Y3	ADX1931	—	—
Y4	ADX1930	—	—
Y5	ADX1932	—	—
H3.4	AKR1003	VACANT	←

Different parts list among three models

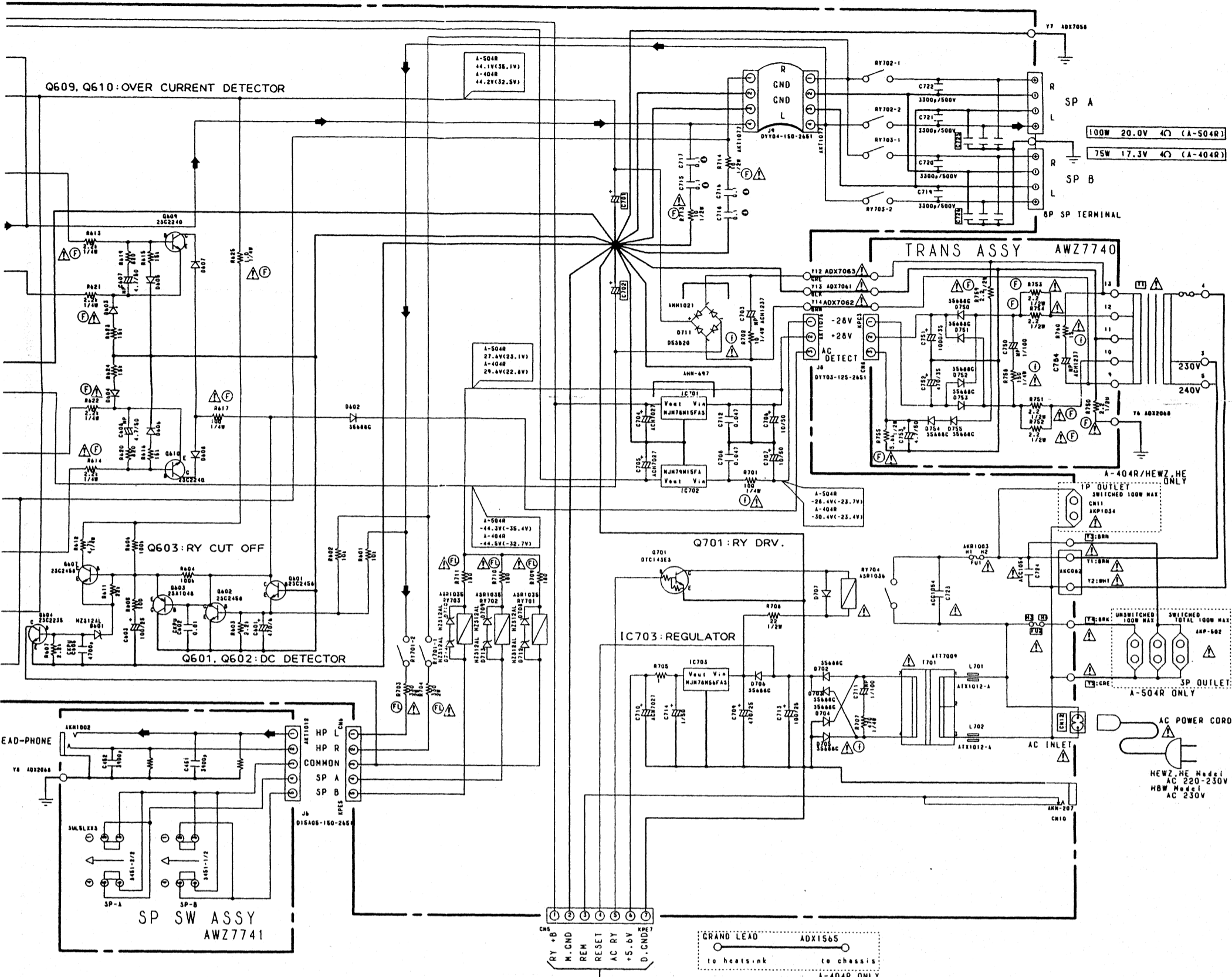
	A-504R/HEWZ, HE A-504R-C/HEZ	A-404R/HEWZ, HE	A-404R/HBW
Q1.02	25C3281	25C3181N	←
Q3.04	25A1302	25A1264N	←
FU1	AEK-511 (250V 2A)	AEK-510 (250V 1.6A)	←
FU2	AEK-505 (250V 500mA)	VACANT	VACANT
T1	ATS1537 (ATS7064)	ATS1532 (ATS7065)	←
POWER CODE	ADC1127	←	ADC1143
AC OUTLET	AKP-502	—	—
GRAND LEAD	—	ADX1565	←

- NOTE FOR S...**
- When order "PARTS LIST" PARTS LIST
 - Since these values of component.
 - RESISTORS:** Unit: k:K, M: M Rated power noted. Tolerance: (F) less otherwise.
 - CAPACITORS:** Unit: p:pF or Ratings: cap: Rated voltage.
 - COILS:** Unit: m:mH
 - VOLTAGE AMPLIFIER:** Sign: or - V DC: Value or - DC: Value
 - OTHERS:**
 - or ○ : A
 - or △ : M
 - The Δ marks importance of placing, be
 - SCH-□ ON**
 - SCH-□ inc
 - gram. (SCH
 - SWITCHES (CONTROL ASS'Y)**
 - S801 : DIP
 - S802 : LOU
 - S850 : REC
 - S851 : CD
 - S852 : PHO
 - S853 : TUN
 - S854 : LIN
 - S855 : TAP
 - S856 : TAP
 - S857 : PO
 - SP SW ASS'Y**
 - S451-1 : S
 - S451-2 : S
 - MUTE SW ASS'Y**
 - S401 : MU

SCH-1

OVERALL, AF ASSY, TRANS ASSY, SP SW ASSY

AUDIO SIGNAL ROUTE



NOTE FOR SCHEMATIC DIAGRAMS (Type 1A)

- When ordering service parts, be sure to refer to "PARTS LIST of EXPLODED VIEWS" or "PCB PARTS LIST".
- Since these are basic circuits, some parts of them or the values of some components may be changed for improvement.
- RESISTORS:
Unit: k:kΩ, M:MΩ, or Ω unless otherwise noted.
Rated power: 1/4W, 1/6W, 1/8W, 1/10W unless otherwise noted.
Tolerance: (F): ±1%, (G): ±2%, (K): ±10%, (M): ±20% or ±5% unless otherwise noted.
- CAPACITORS:
Unit: p:pF or μF unless otherwise noted.
Ratings: capacitor (μF)/voltage (V) unless otherwise noted.
Rated voltage: 50V except for electrolytic capacitors.
- COILS:
Unit: m:mH or μH unless otherwise noted.
- VOLTAGE AND CURRENT:
V: Signal voltage at rated output.
or - V:
DC voltage (V) at no input signal unless otherwise noted.
Value in () is DC voltage at rated power.
mA or - mA:
DC current at no input signal unless otherwise noted.
- OTHERS:
⊙ or ⊙: Adjusting point.
◀: Measurement point.
The Δ mark found on some component parts indicates the importance of the safety factor of the parts. Therefore, when replacing, be sure to use parts of identical designation.
- SCH-□ ON THE SCHEMATIC DIAGRAM:
SCH-□ indicates the drawing number of the schematic diagram. (SCH stands for schematic diagram.)
- SWITCHES (Underline indicates switch position):
CONTROL ASSY
S801: DIRECT ON-OFF
S802: LOUDNESS ON-OFF
S850: REC SELECTOR
S851: CD
S852: PHONO
S853: TUNER
S854: LINE
S855: TAPE1/DAT
S856: TAPE2 MONITOR
S857: POWER STANDBY/ON
SP SW ASSY
S451-1: SPEAKER B SELECTOR ON-OFF
S451-2: SPEAKER A SELECTOR ON-OFF
MUTE SW ASSY
S401: MUTING (A-504R ONLY)

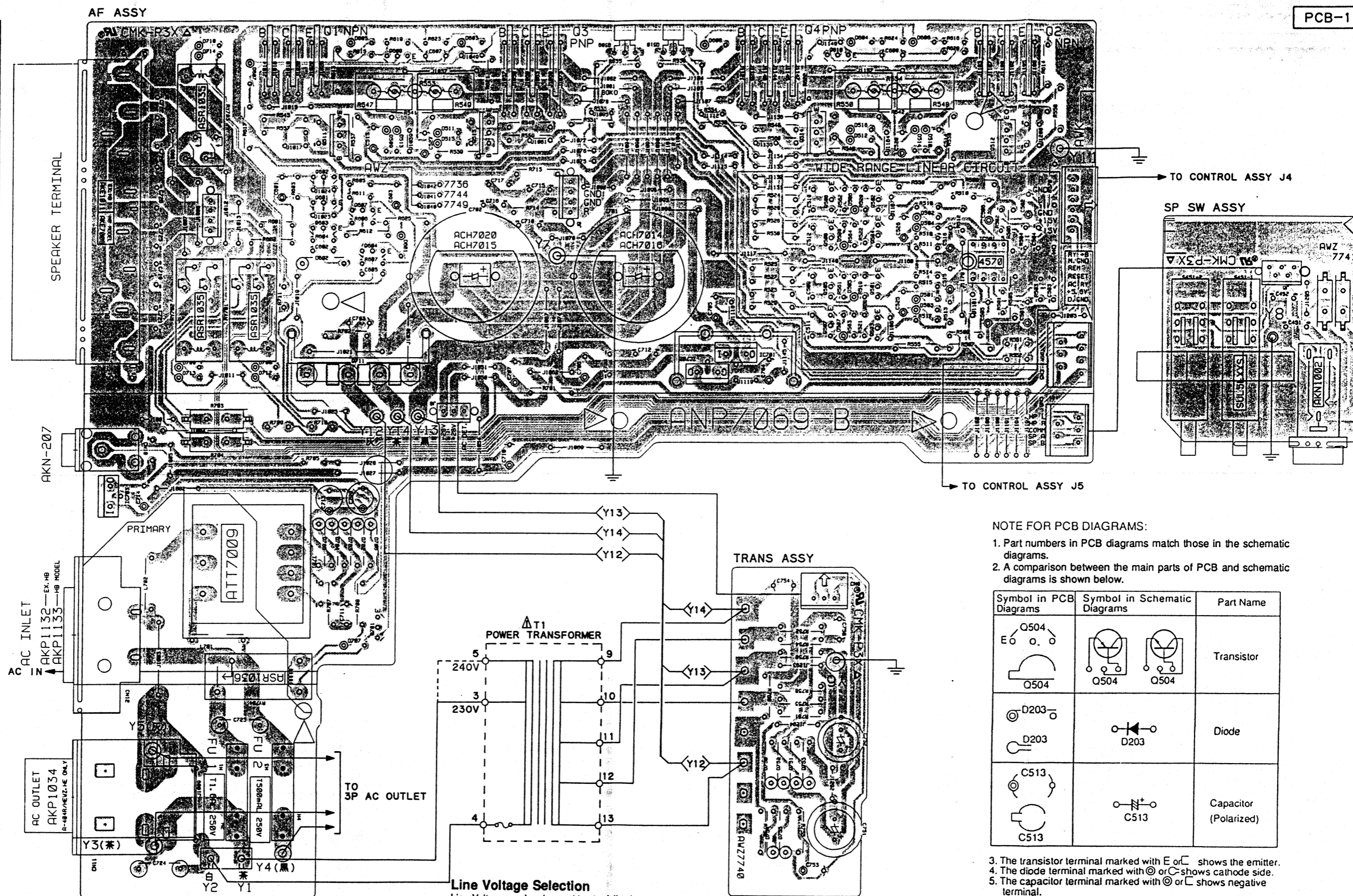
ASSY NAME LIST

	COMPLEX ASS'Y		
	A-504R/HEWZ,HE A-504R-G/HEZ AWK7185	A-404R/HEWZ,HE AWK7186	A-404R/HBW AWK7187
AF ASS'Y	AWZ7736	AWZ7744	AWZ7749
INPUT ASS'Y	AWZ7737	AWZ7745	←
CONTROL ASS'Y	AWZ7738	AWZ7746	←
VOLUME ASS'Y	AWZ7739	AWZ7747	←
TRANS ASS'Y	AWZ7740	←	←
SP SW ASS'Y	AWZ7741	←	←
MUTE SW ASS'Y	AWZ7742	←	←
LOUDNESS ASS'Y	AWZ7743	AWZ7748	←

OVERALL, AF ASSY, TRANS ASSY, SP SW ASSY

• This diagram is viewed from the mounted parts side.

PCB-1



NOTE FOR PCB DIAGRAMS:

1. Part numbers in PCB diagrams match those in the schematic diagrams.
2. A comparison between the main parts of PCB and schematic diagrams is shown below.

Symbol in PCB Diagrams	Symbol in Schematic Diagrams	Part Name
<p>Q504</p>	<p>Q504 Q504</p>	Transistor
<p>D203</p>	<p>D203</p>	Diode
<p>C513</p>	<p>C513</p>	Capacitor (Polarized)

3. The transistor terminal marked with E or shows the emitter.
4. The diode terminal marked with or shows cathode side.
5. The capacitor terminal marked with or shows negative terminal.

6. The parts mounted on each PCB include all necessary parts for several destinations. For further information for respective destinations, be sure to check with the schematic diagram.

Line Voltage Selection

- Line Voltage can be changed by the following modification:
1. Disconnect the AC power cord.
 2. Remove the cover.
 3. Change the connection of the power transformer primary taps.
 4. Stick a line voltage label on the rear panel.

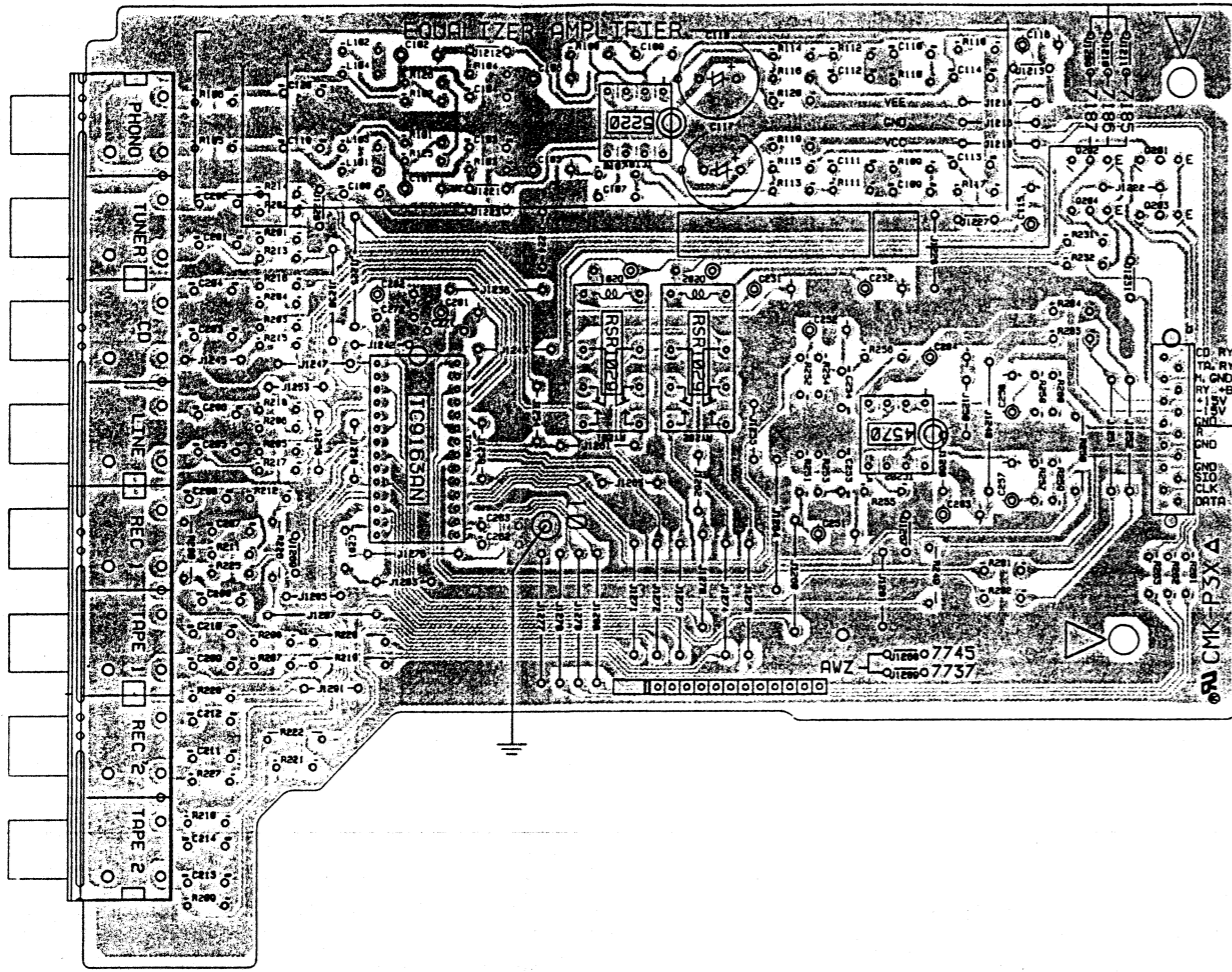
Part No.	Description
AAX-193	220V label
AAX-192	240V label

2.2 INPUT, CONTROL, VOLUME, MUTE SW AND LOUDNESS ASSEMBLIES

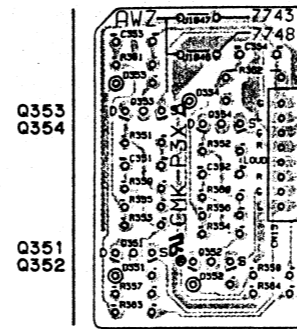
● This diagram is viewed from the mounted parts side.

PCB-2

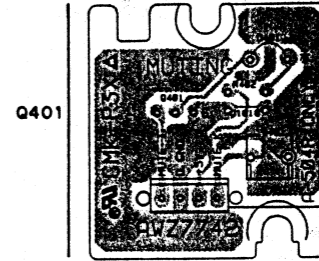
INPUT ASSY



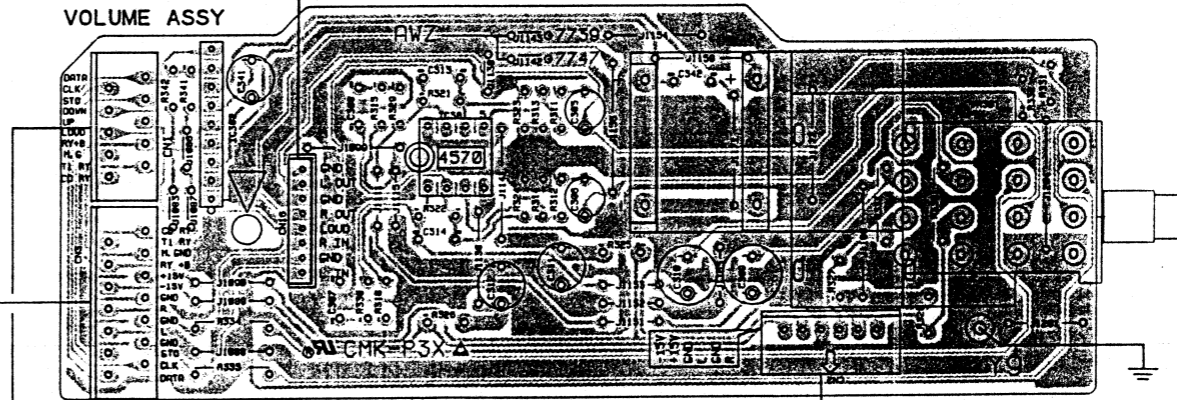
LOUDNESS ASSY



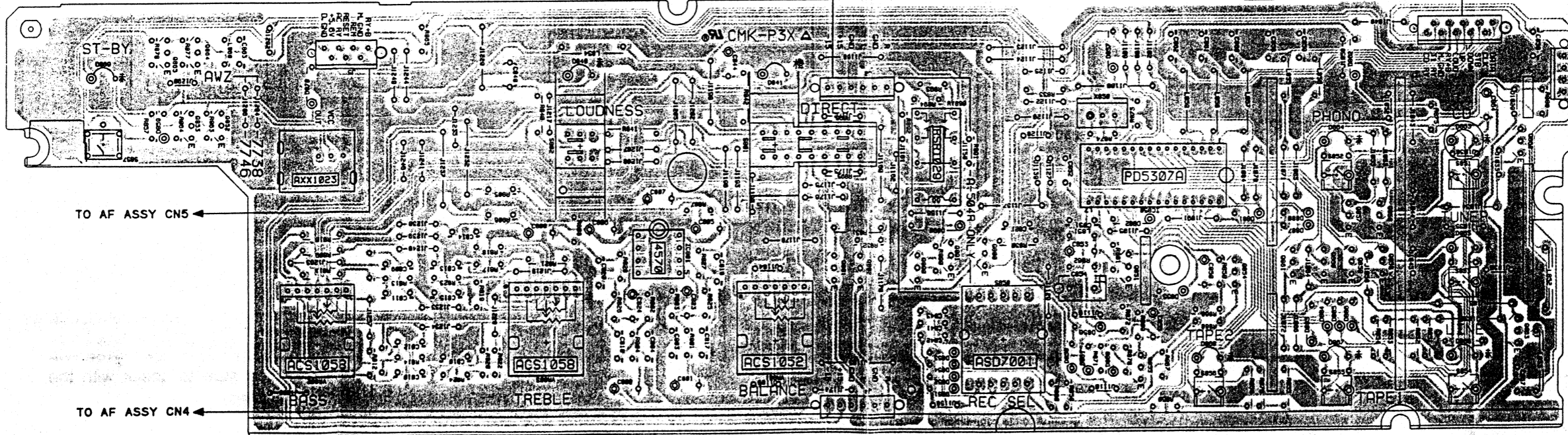
MUTE SW ASSY



VOLUME ASSY



CONTROL ASSY



TO AF ASSY CN5

TO AF ASSY CN4

Q865 Q864
Q853 Q852

IC801

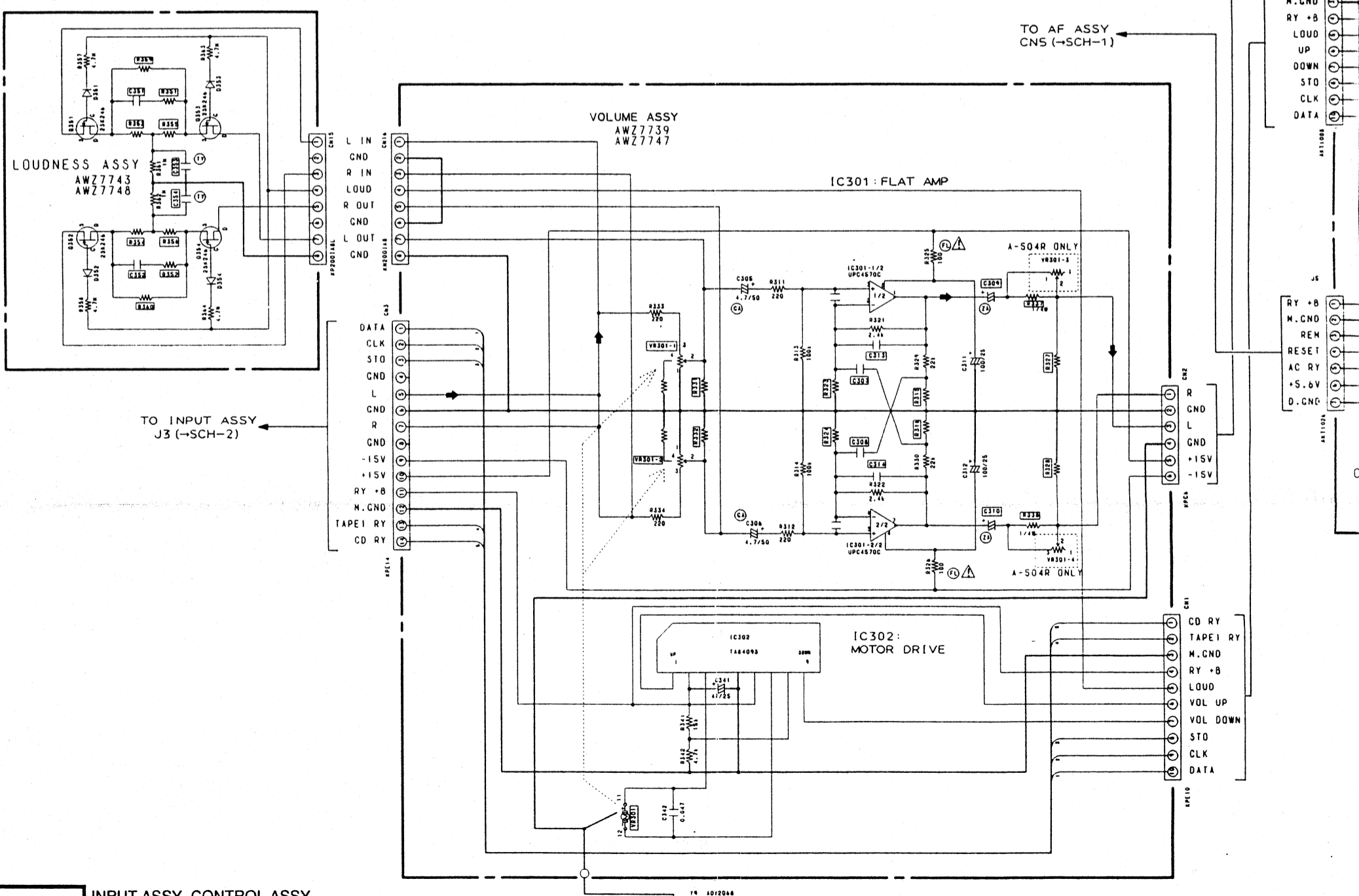
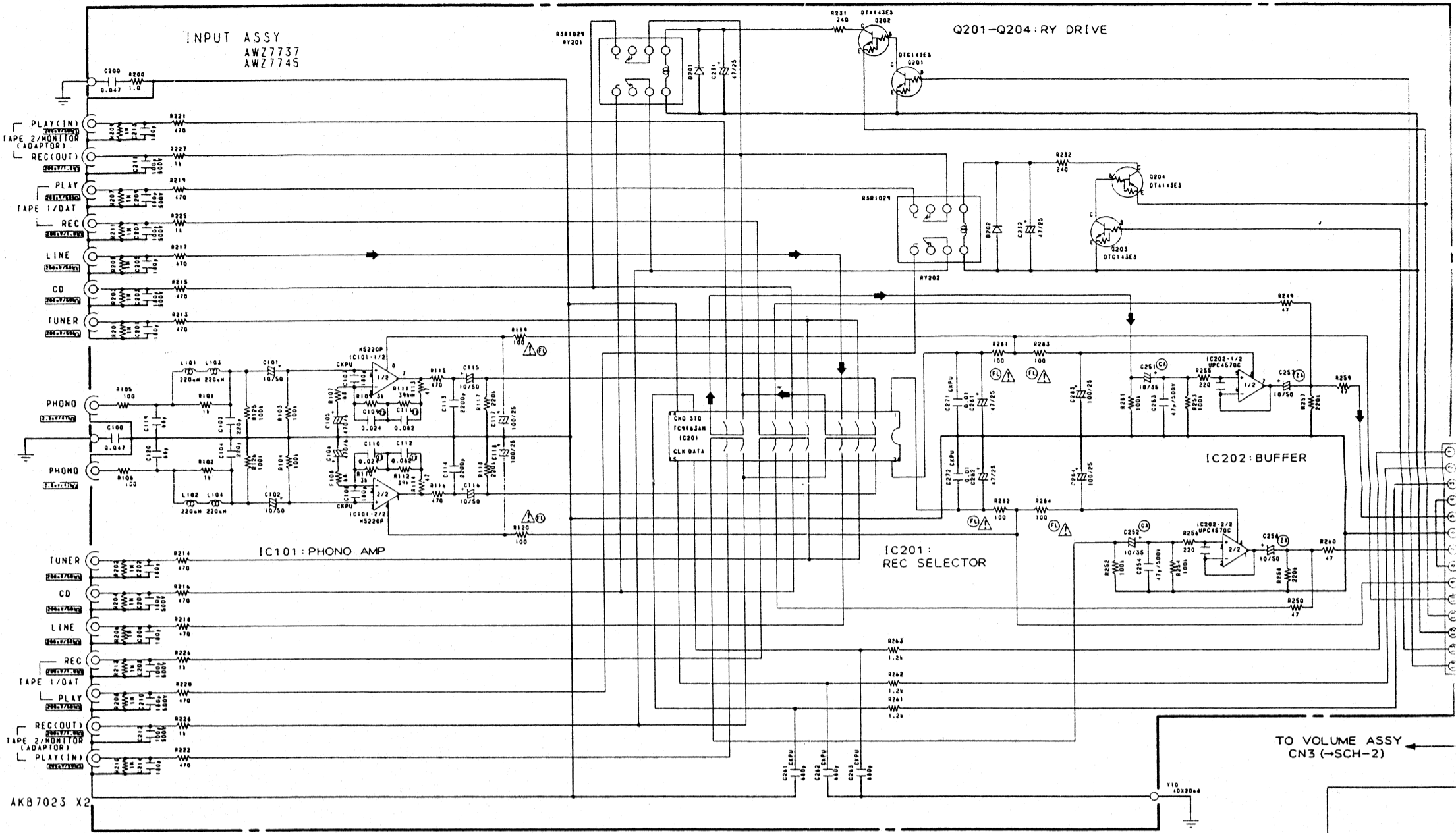
Q801 Q802 Q890 Q891 Q800

Q851 Q855
IC850

Q854 Q861 Q860 Q857 Q856
Q859 Q858

Q862
Q863

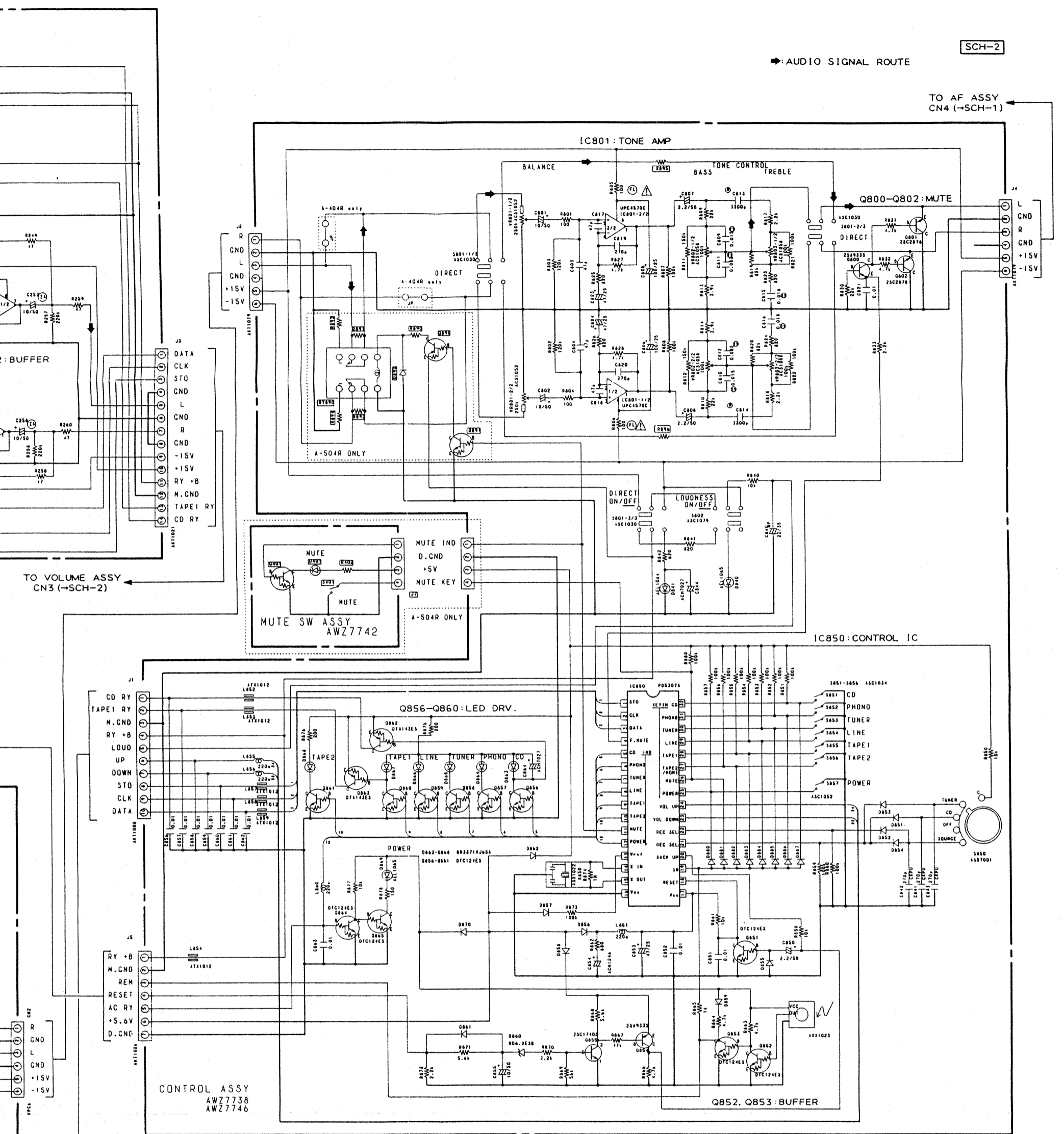
ANP7069-B



SCH-2 INPUT ASSY, CONTROL ASSY, VOLUME ASSY, MUTE SW ASSY, LOUDNESS ASSY

SCH-2

AUDIO SIGNAL ROUTE

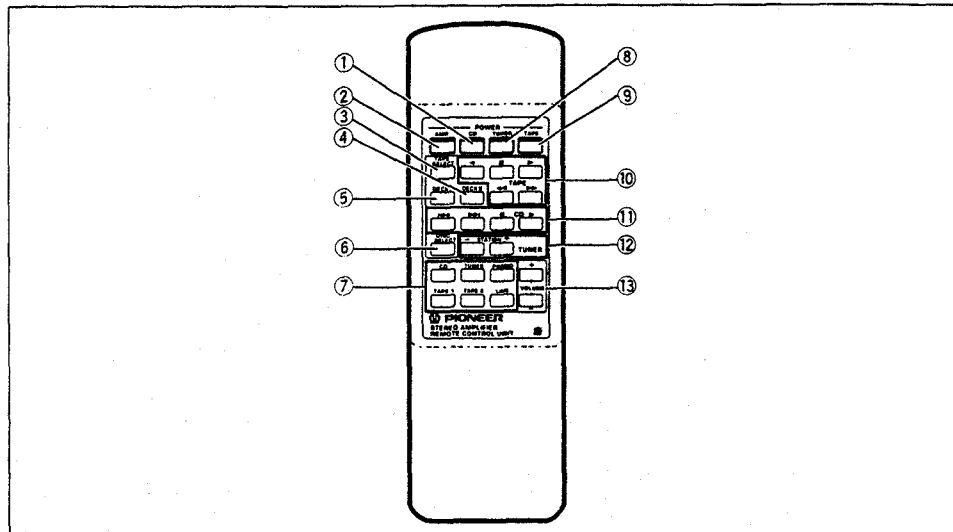


Different parts list between two ASS'Y

	A-504R A-504R-C AWK7185	A-404R AWK7186 AWK7187		A-504R A-504R-C AWK7185	A-404R AWK7186 AWK7187
R315.316	2.7k	1k	C307	39p/500V	82p/500V
R323.324	510	680	C308	39p/500V	100p/500V
R327.328	1k	100k	C309.310	33u/50V	10u/50V
R331.332	8.2k	100k	C313.314	150p	390p
R337.338	3.3k (1/4W)	470 (1/4W)	C351.352	1500p	470p
R351.352	15k	68k	C353.354	0.22u	0.002u
R353.354	4.7k	12k	D401	AEL1065	VACANT
R355.356	8.2k	27k	D890	ISS252	VACANT
R359.360	82k	VACANT	Q401	DTC124E5	VACANT
R402	200	VACANT	Q890.891	DTA143E5	VACANT
R890	240	VACANT	Rv890	RSR1029	VACANT
R891.892	910	VACANT	S401	ASC1034	VACANT
R893.894	100	VACANT	J7	DYT04-100-2651	VACANT
R895.896	100	JP	4P Cable holder	AKT1077 x2	VACANT
VR301	ACX7007	ACX7008			

INPUT ASSY, CONTROL ASSY,
VOLUME ASSY, MUTE SW ASSY,
LOUDNESS ASSY

SCH-2



① CD POWER button
Switches CD player power ON/OFF.

② AMP POWER button
Switches the amplifier power ON/OFF.

③ TAPE SELECT button
Selects the cassette No. (1 to 6) for a multi-cassette changer.

④ DECK II button
To operate Deck II, press this button before pressing the operating buttons. Also, when using a single deck, press this button before pressing the operating buttons.

⑤ DECK I button
To operate Deck I, press this button before pressing the operating buttons.

⑥ DISC SELECT button
Press this to select discs on a multi or twin tray compact disc player.

⑦ Input selector buttons
Use to select the playback source.
CD : For compact disc playback with a CD player.
TUNER : For AM or FM broadcast reception with a tuner.
PHONO : For record playback with a turntable.
TAPE 1 : For playback with a cassette deck or digital audio cassette deck connected to the TAPE 1/DAT terminals.
TAPE 2 : For playback with a cassette deck or adaptor connected to the TAPE 2 MONITOR terminals.
LINE : For playback with a component connected to the LINE terminal.

⑧ TUNER POWER button
Switches TUNER power ON/OFF.

⑨ TAPE POWER button
Switches the cassette deck power ON/OFF.

⑩ TAPE operation buttons
 ◀ ▶ : Playback in the direction of the arrows.
 ■ : Stop
 ◀▶▶ : Tape fast forward.

⑪ CD player operation buttons
 ◀◀ : Returns you to the start of the current track. (Track search)
 ▶▶ : Takes you to the start of the next track. (Track search)
 ■ : Stop
 ▶ : Play

⑫ STATION +, - buttons
Calls each station number in sequence.

⑬ VOLUME +, - buttons
 + : Increases the volume.
 - : Decreases the volume.

NOTE:
When the accessory remote control unit is used to operate other PIONEER components with the mark, it cannot be used to operate functions which do not correspond to the functions listed on the remote control unit.

6. SPECIFICATIONS

[A-504R/HE]

Amplifier Section

Continuous power output (both channels driven at 20 Hz to 20 kHz)**
 T.H.D. 0.03 %, 8 Ω 55 W + 55 W*
 T.H.D. 0.05 %, 4 Ω 75 W + 75 W*
 DIN Continuous power output (both channels driven at 1 kHz)
 T.H.D. 1.0 %, 8 Ω 70 W + 70 W
 T.H.D. 1.0 %, 4 Ω 100 W + 100 W
 Total harmonic distortion**
 20 Hz to 20 kHz, 30 W, 8 Ω 0.02 %*

* The above values are applicable when AC 230 V power is supplied.

Input sensitivity/impedance
 PHONO (MM) 2.8 mV/50 kΩ
 CD, TUNER, LINE, TAPE 1/DAT, TAPE 2 MONITOR (ADPT) 200 mV/50 kΩ

PHONO overload level
 1 kHz, T.H.D. 0.1 % (MM) 150 mV

Output level/impedance
 TAPE 1/DAT, TAPE 2 MONITOR (ADPT) output 200 mV/1 kΩ

Frequency response
 PHONO (MM) 20 Hz to 20 kHz, ±0.5 dB
 CD, TUNER, LINE, TAPE 1/DAT, TAPE 2 MONITOR (ADPT) 5 Hz to 100 kHz, ±3 dB*

Tone control
 BASS ±8 dB (100 Hz)
 TREBLE ±8 dB (10 kHz)
 Loudness contour (volume control set at -30 dB position)
 +6 dB (100 Hz)/+3 dB (10 kHz)

Signal-to-Noise ratio (IHF short circuit, A network)
 PHONO (MM, 5 mV input) 89 dB*
 CD, TUNER, LINE, TAPE 1/DAT, TAPE 2 MONITOR (ADPT) 107 dB*

Signal-to-Noise ratio (DIN, continuous power/50 mW)
 PHONO (MM) 72 dB/70 dB*
 CD, TUNER, LINE, TAPE 1/DAT, TAPE 2 MONITOR (ADPT) 95 dB/80 dB*

MUTING -20 dB

Power Supply/Miscellaneous

Power requirements a.c. 220 — 230 Volts, 50/60 Hz
 Power consumption 500 W
 Dimensions (including knobs and other protruding parts)
 420 (W) x 360 (D) x 125 (H) mm
 Weight (without package) 8.1 kg

Accessories

Remote control unit 1
 Batteries (IEC R6P, AA) 2
 Operating instructions 1
 Power cord 1

NOTE:
Specifications and design are subject to possible modifications without notice, due to improvements.

* Measured with DIRECT button set to on.
 ** Measured by Audio Spectrum Analyzer.

[A-404R/HE]

Amplifier Section

Continuous power output (both channels driven at 20 Hz to 20 kHz)**
 T.H.D. 0.03 %, 8 Ω 40 W + 40 W*
 T.H.D. 0.05 %, 4 Ω 50 W + 50 W*
 DIN Continuous power output (both channels driven at 1 kHz)
 T.H.D. 1.0 %, 8 Ω 60 W + 60 W
 T.H.D. 1.0 %, 4 Ω 75 W + 75 W
 Total harmonic distortion**
 20 Hz to 20 kHz, 20 W, 8 Ω 0.02 %*

* The above values are applicable when AC 230 V power is supplied.

Input sensitivity/impedance
 PHONO (MM) 2.8 mV/50 kΩ
 CD, TUNER, LINE, TAPE 1/DAT, TAPE 2 MONITOR (ADPT) 200 mV/50 kΩ

PHONO overload level
 1 kHz, T.H.D. 0.1 % (MM) 150 mV

Output level/impedance
 TAPE 1/DAT, TAPE 2 MONITOR (ADPT) output 200 mV/1 kΩ

Frequency response
 PHONO (MM) 20 Hz to 20 kHz, ±0.5 dB
 CD, TUNER, LINE, TAPE 1/DAT, TAPE 2 MONITOR (ADPT) 5 Hz to 100 kHz, ±3 dB*

Tone control (volume control set at -30 dB position)
 BASS ±8 dB (100 Hz)
 TREBLE ±8 dB (10 kHz)
 Loudness contour (volume control set at -30 dB position)
 +6 dB (100 Hz)/+3 dB (10 kHz)

Signal-to-Noise ratio (IHF short circuit, A network)
 PHONO (MM, 5 mV input) 85 dB*
 CD, TUNER, LINE, TAPE 1/DAT, TAPE 2 MONITOR (ADPT) 106 dB*

Signal-to-Noise ratio (DIN, continuous power/50 mW)
 PHONO (MM) 71 dB/67 dB*
 CD, TUNER, LINE, TAPE 1/DAT, TAPE 2 MONITOR (ADPT) 95 dB/71 dB*

Power Supply/Miscellaneous

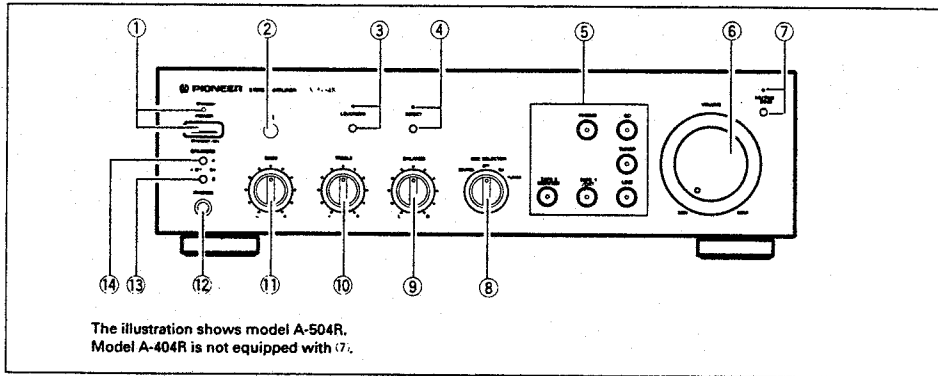
Power requirements a.c. 220 — 230 Volts, 50/60 Hz
 Power consumption 440 W
 Dimensions (including knobs and other protruding parts)
 420 (W) x 360 (D) x 125 (H) mm
 Weight (without package) 6.5 kg

Accessories

Remote control unit 1
 Batteries (IEC R6P, AA) 2
 Operating instructions 1
 Power cord 1

NOTE:
Specifications and design are subject to possible modifications without notice, due to improvements.

* Measured with DIRECT button set to on.
 ** Measured by Audio Spectrum Analyzer.



FRONT PANEL

(1) POWER STANDBY/ON switch/indicator

This is the switch for electric power.

ON : When set to the ON position, power is supplied and the unit becomes operational.

STANDBY : When set to the STANDBY position, the main power flow is cut and the unit is no longer fully operational. A minute flow of power feeds the unit to maintain operation readiness.

When the STANDBY indicator lights, the unit is in STANDBY.

NOTE:

When performing timer recording with this unit, be sure to set the POWER STANDBY/ON switch to ON.

(2) Remote control sensor window

(3) LOUDNESS button/indicator

Use when listening at low volume level.

On : The indicator lights: Boosts low and high frequencies to give added punch to playback even at a low volume level.

Off : The indicator goes off: Should normally be left in this position.

NOTE:

This button does not operate when the DIRECT button is in the on position.

(4) DIRECT button/indicator

Use this button when you do not wish to pass the output from input terminal equipment through the various frequency adjusting circuits (BASS, TREBLE, BALANCE, LOUDNESS).

On : The indicator lights: The signals input through the input terminals are reproduced without passing through the various frequency adjusting circuits. This results in flat, pure sound which is a more faithful reproduction of the input source.

Off : The indicator goes out: The signal passes through the various frequency adjusting circuits.

(5) Input selector buttons/indicators

Use to select the playback source.

PHONO : For record playback with a turntable.

CD : For compact disc playback with a CD player.

TUNER : For AM or FM broadcast reception with a tuner.

LINE : Set to this position when listening to a program from a component connected to the LINE terminals.

TAPE 1/DAT : For playback with a cassette deck or digital audio cassette deck connected to TAPE 1/DAT terminals.

TAPE 2 MONITOR : For playback with a cassette deck or adaptor connected to the TAPE 2 MONITOR terminals.

(6) VOLUME control

Use to adjust the volume level.

NOTE:

The TONE effect functions regardless of volume levels.

(7) MUTING button/indicator (A-504R only)

Use to temporarily lower sound volume.

On : The indicator lights: The sound volume is lowered to one-tenth (-20 dB).

Off : The indicator goes off: The sound will return to its previous volume.

(8) REC SELECTOR switch

When this switch is set to a position other than SOURCE or OFF, the equipment selected by REC SELECTOR switch can be recorded, irrespective of the input selector buttons and the DIRECT button settings. (TAPE 1/DAT terminals)

The function selected using the input selector buttons will be recorded irrespective of the position of the REC SELECTOR switch. (TAPE 2 MONITOR (ADPT) terminals)

SOURCE : To record from the equipment selected by input selector button.

OFF : In this position, nothing from the REC terminals of TAPE 1/DAT is output. Set to this position when not recording; the cassette deck will be disconnected, improving sound quality.

CD : To record from the equipment connected to CD terminals.

TUNER : To record from the equipment connected to TUNER terminals.

(9) 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, turn toward the L (left) position and if the left side is louder, turn toward the R (right) position.

NOTE:

This control does not operate when DIRECT button is in the on position.

(10) TREBLE tone control

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

NOTE:

This control does not operate when DIRECT button is in the on position.

(11) BASS tone control

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

NOTE:

This control does not operate when DIRECT button is in the on position.

(12) PHONES jack

When using headphones, insert the plug into this jack.

(13) SPEAKERS B selector button

Use this button to listen to the speaker system connected to SPEAKER B terminals.

ON (◡) : Depressed position: Sound is heard from the speaker system.

OFF (◡) : Released position: No sound is heard from the speaker system. Set to this position when listening with headphones.

(14) SPEAKERS A selector button

Use this button to listen to the speaker system connected to SPEAKER A terminals.

ON (◡) : Depressed position: Sound is heard from the speaker system.

OFF (◡) : Released position: No sound is heard from the speaker system. Set to this position when listening with headphones.

4.2 FOR A-404R/HBW AND HEWZ

A-404R/HBW, HEWZ and HE have the same construction except for the following:

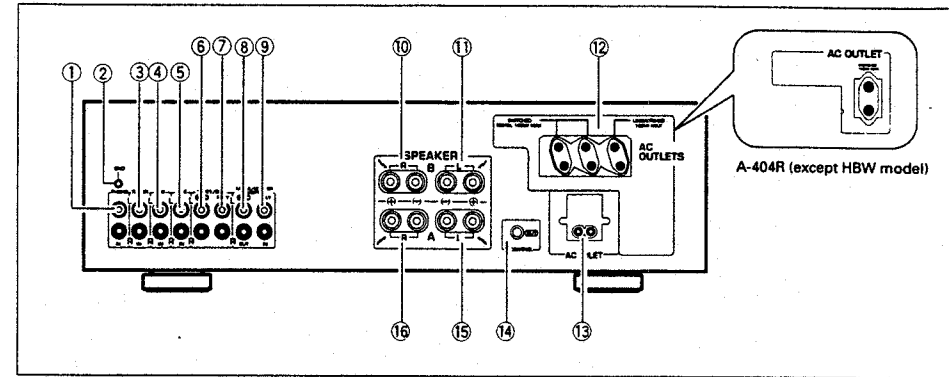
Mark	Symbol & Description	Part No.			Remarks
		A-404R/HE	A-404R/HBW	A-404R/HEWZ	
NSP	Complex assy	AWK7186	AWK7187	AWK7186	
	AF assy	AWZ7744	AWZ7749	AWZ7744	
	AC power cord	ADG1127	ADG1143	ADG1127	
	Rear panel	ANC7230	ANC7229	ANC7230	
	Hole plug	Not used	AEC7040	Not used	
	Operating instructions (English/French/German/Italian/Swedish/Dutch/Portuguese)	ARE7042	Not used	Not used	For speaker terminal
	Operating instructions (English)	Not used	ARB7041	Not used	
	Operating instructions (German)	Not used	Not used	ARC7062	
NSP	Packig case	AHD7167	AHD7168	AHD7167	For packing
	Spacer	Not used	AHB1110	Not used	
	Air cap	Not used	AHG1087	Not used	For packing

AF ASSEMBLY

AWZ7749 and AWZ7744 have the same construction except for the following:

Mark	Symbol & Description	Part No.		Remarks
		AWZ7744	AWZ7749	
	8P speaker terminal	AKE1011	AKE7008	
△	AC outlet (1P)	AKP1034	Not used	
△	AC inlet (1P)	AKP1132	AKP1133	

5. PANEL FACILITIES



REAR PANEL

- ① PHONO terminals
 - ② Turntable ground terminal (GND)
 - ③ TUNER terminals
 - ④ CD terminals
 - ⑤ LINE terminals
 - ⑥ TAPE 1/DAT REC terminals
 - ⑦ TAPE 1/DAT PLAY terminals
 - ⑧ TAPE 2/MONITOR REC (ADAPTOR OUT) terminals
 - ⑨ TAPE 2/MONITOR PLAY (ADAPTOR IN) terminals
 - ⑩ SPEAKER B terminals (right channel)
 - ⑪ SPEAKER B terminals (left channel)
 - ⑫ AC OUTLETS
 - ⑬ AC INLET jack
- Connect one end of the power cord to here and the other end to an AC wall socket, or the AC outlet of an audio timer. If you are going to be away from home for a long period of time, disconnect the unit from the wall socket.
- ⑭ CONTROL OUT jack
- This jack is for output of control signals when operating other components bearing the mark with the attached remote control unit.
- ⑮ SPEAKER A terminals (left channel)
 - ⑯ SPEAKER A terminals (right channel)

Mark	No.	Description	Parts No.	Mark	No.	Description	Parts No.
	VR801	(250kΩ)	ACS1052			CABLE HOLDER	AKT1012
	VR802, VR803	(100kΩ)	ACS1058			MUTE SW ASSY (FOR A-504R)	
	Other Resistors		RD1/8PM□□□□			SEMICONDUCTORS	
OTHERS		CABLE HOLDER (4P) (for A-504R)	AKT1077			Q401	DTC124ES
		CABLE HOLDER (6P)	AKT1079			D401	AEL1065
		X850 (4.19MHz)	ASS1022			SWITCHES AND RELAYS	
		REMOTE RECEIVER UNIT	AXX1023			S401	ASG1034
		VOLUME ASSY (FOR A-504R)				RESISTORS	
		SEMICONDUCTORS				All Resistors	RD1/8PM□□□□
		IC302	TA8409S			OTHERS	
		IC301	UPC4570C			CABLE HOLDER (4P)	AKT1077
		CAPACITORS				LOUDNESS ASSY	
		C313, C314 (for A-504R)	CCCSL151J50			SEMICONDUCTORS	
		C313, C314 (for A-404R)	CKCYB391K50			Q351 -Q354	2SK246
		C307, C308 (for A-504R)	CCCSL390K500			D351 -D354	1SS252
		C307 (for A-404R)	CCCSL820K500			CAPACITORS	
		C308 (for A-404R)	CCCSL101K500			C353, C354 (for A-504R)	CFTYA224J50
		C311, C312	CEAS101M25			C353, C354 (for A-404R)	CFTYA823J50
		C341	CEAS470M25			C351, C352 (for A-504R)	CKCYB152K50
		C305, C306	CEGA4R7M50			C351, C352 (for A-404R)	CKCYB471K50
		C309, C310 (for A-504R)	CEZA330M50			RESISTORS	
		C309, C310 (for A-404R)	CEZA100M50			All Resistors	RD1/8PM□□□□
		C342	CKCYX473M25			OTHERS	
RESISTORS		R337, R338 (for A-504R)	RD1/4PM332J			CN15 (8P SOCKET)	KP200IA8L
		R337, R338 (for A-404R)	RD1/4PM471J				
▲		R325, R326	RD1/8MMF101J				
		VR301 (20kΩ) (for A-504R)	ACX7007				
		VR301 (50kΩ) (for A-404R)	ACX7008				
		Other Resistors	RD1/8PM□□□□				
OTHERS		CN16 (8P PLUG)	KM200IA8				
		CN2 (JUMPER CONNECTOR)	KPC6				
		CN1 (CONNECTOR 10P)	KPE10				
		CN3 (CONNECTOR 14P)	KPE14				
TRANS ASSY							
SEMICONDUCTORS		D750 -D755	S5688G				
CAPACITORS		C754 (1μ / 100V)	ACH1237				
		C750	CEANP010M100				
		C751	CEAS102M35				
		C752	CEAS471M35				
		C753	CEAS4R7M50				
RESISTORS		R750 -R754, R759	RD1/2PMF2R2J				
▲		R755	RD1/2PMF562J				
▲		R760	RFA1/4PS150J				
▲		R758	RFA1/4PS151J				
OTHERS		CN8 (JUMPER CONNECTOR 3-P)	KPC3				
SP SW ASSY							
SWITCHES AND RELAYS		S451	SUL5LXXS				
CAPACITORS		C451, C452	CKCYB392K50				
OTHERS		JACK	AKN1002				

4. FOR A-504R/HEWZ, A-504R-G/HEZ, A-404R/HBW AND HEWZ

NOTES:

- Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.
- 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.
- Parts marked by "◎" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.

4.1 FOR A-504R/HEWZ AND A-504R-G/HEZ

A-504R/HEWZ, A-504R-G/HEZ and A-504R/HE have the same construction except for the following:

Mark	Symbol & Description	Part No.			Remarks
		A-504R/HE	A-504R/HEWZ	A-504R-G/HEZ	
	Rotary Knob L	AAB1343	AAB1343	AAB1355	For bonnet case
	Rotary Knob S	AAB1349	AAB1349	AAB1350	
	Power button	AAD2421	AAD2421	AAD2450	
	Function button	AAD2422	AAD2422	AAD2451	
	Push button	AAD2423	AAD2423	AAD2452	
	Name plate	AAM1058	AAM1058	VAM1051	
	Panel base	AMB7222	AMB7222	AMB7223	
	Front panel	ANB7008	ANB7008	ANB7009	
	Bonnet case	ANE7061	ANE7061	ANE7062	
	Screw	BBT30P060FZK	BBT30P060FZK	ABA-274	
	Remote control unit (CU-A013)	AXD7053	AXD7053	Not used	
	Remote control unit (CU-A015)	Not used	Not used	AXD7054	
	Operating Instructions (English/French/German/Italian/Swedish/Spanish/Dutch/Portuguese)	ARE7042	Not used	ARE7042	
	Operating instructions (German)	Not used	ARC7062	Not used	
	Packing case	AHD7165	AHD7165	AHD7166	

Mark	No.	Description	Parts No.	Mark	No.	Description	Parts No.
		VR801 (250KΩ)	ACS1052			CABLE HOLDER	AKT1012
		VR802, VR803 (100KΩ)	ACS1058				
		Other Resistors	RD1/8PM□□□□			MUTE SW ASSY (FOR A-504R)	
OTHERS						SEMICONDUCTORS	
		CABLE HOLDER (4P) (for A-504R)	AKT1077			Q401	DTC124ES
		CABLE HOLDER (6P)	AKT1079			D401	AEL1065
		X850 (4.19MHz)	ASS1022			SWITCHES AND RELAYS	
		REMOTE RECEIVER UNIT	AXX1023			S401	ASG1034
VOLUME ASSY (FOR A-504R)						RESISTORS	
						All Resistors	RD1/8PM□□□□
SEMICONDUCTORS						OTHERS	
		IC302	TA8409S			CABLE HOLDER (4P)	AKT1077
		IC301	UPC4570C			LOUDNESS ASSY	
CAPACITORS						SEMICONDUCTORS	
		C313, C314 (for A-504R)	CCCSL151J50			Q351, Q354	2SK246
		C313, C314 (for A-404R)	CKCYB391K50			D351, D354	1SS252
		C307, C308 (for A-504R)	CCCSL390K500			CAPACITORS	
		C307 (for A-404R)	CCCSL820K500			C353, C354 (for A-504R)	CFTYA224J50
		C308 (for A-404R)	CCCSL101K500			C353, C354 (for A-404R)	CFTYA823J50
		C311, C312	CEAS101M25			C351, C352 (for A-504R)	CKCYB152K50
		C341	CEAS470M25			C351, C352 (for A-404R)	CKCYB471K50
		C305, C306	CEGA44R7M50			RESISTORS	
		C309, C310 (for A-504R)	CEZA330M50			All Resistors	RD1/8PM□□□□
		C309, C310 (for A-404R)	CEZA100M50			OTHERS	
		C342	CKCYX473M25			CN15 (8P SOCKET)	KP200IA8L
RESISTORS							
		R337, R338 (for A-504R)	RD1/4PM332J				
		R337, R338 (for A-404R)	RD1/4PM471J				
		R325, R326	RD1/8MMF101J				
		VR301 (20KΩ) (for A-504R)	ACX7007				
		VR301 (50KΩ) (for A-404R)	ACX7008				
		Other Resistors	RD1/8PM□□□□				
OTHERS							
		CN16 (8P PLUG)	KM200IA8				
		CN2 (JUMPER CONNECTOR)	KPC6				
		CN1 (CONNECTOR 10P)	KPE10				
		CN3 (CONNECTOR 14P)	KPE14				
TRANS ASSY							
SEMICONDUCTORS							
		D750, D755	S5688G				
CAPACITORS							
		C754 (1μ/100V)	ACH1237				
		C750	CEANP010M100				
		C751	CEAS102M35				
		C752	CEAS471M35				
		C753	CEAS44R7M50				
RESISTORS							
		R750, R754, R759	RD1/2PMF2R2J				
		R755	RD1/2PMF562J				
		R760	RFA1/4PS150J				
		R758	RFA1/4PS151J				
OTHERS							
		CN8 (JUMPER CONNECTOR 3-P)	KPC3				
SP SW ASSY							
SWITCHES AND RELAYS							
		S451	SUL5LXXS				
CAPACITORS							
		C451, C452	CKCYB392K50				
OTHERS							
		JACK	AKN1002				

Mark	No.	Description	Parts No.	Mark	No.	Description	Parts No.	
RESISTORS								
		R553, R554 (0.33Ω/5W)	ACN1063			C231, C232, C281, C282	CEAS470M25	
		R708	RD1/2PM220J			C105, C106	CEAS471M6	
		R713, R714	RD1/2PMF100J			C251, C252	CEGA100M35	
		R543, R546 (for A-504R)	RD1/2PMF2R2J			C257, C258	CEZA100M50	
		R543, R546 (for A-404R)	RD1/2PMF4R7J			C109, C110	CFTXA243J50	
		R557, R560 (for A-504R)	RD1/2PMF2R2J			C111, C112	CFTXA823J50	
		R505, R506	RD1/4PM101J			C113, C114	CKCYB222K50	
		R555, R556	RD1/4PM152J			C100, C200	CKCYF473Z50	
		R612	RD1/4PM472J			C107, C108	CKPUYB181K50	
		R507, R508	RD1/4PM561J			C261, C263	CKPUYB681K50	
		R625	RD1/4PMF010J			C271, C272	CKPUYF103Z25	
		R570 (for A-404R)	RD1/4PMF100J	RESISTORS				
		R617	RD1/4PMF101J			R119, R120, R281, R284	RD1/8MMF101J	
		R613, R614, R621, R622	RD1/4PMF222J			Other Resistors	RD1/8PM□□□□	
		R551, R552	RD1/8MMF101J	OTHERS				
		R709, R711	RD1/8MMF181J			CN100, CN101 (PIN JACK 8P)	AKB7023	
		R702	RFA1/4PS100J	CONTROL ASSY				
		R537, R540, R701	RFA1/4PS101J			SEMICONDUCTORS		
		R541, R542	RFA1/4PS221J			IC850	PD5307A	
		R523, R526, R707	RFA1/4PS471J			IC801	UPC4570C	
		R527, R530	RFA1/4PS680J			Q800, Q854	2SA933S	
		R531, R532	RN1/4PC1501F			Q855	25C1740S	
		R535, R536	RN1/4PC6800F			Q801, Q802	25C2878	
		R703, R704	RS2MMF331J			Q862, Q863	DTA143ES	
		Other Resistors	RD1/8PM□□□□			Q890 (for A-504R)	DTA143ES	
OTHERS								
		SCREW	ABA-298			Q851, Q853, Q856, Q861	DTC124ES	
		SPEAKER TERMINAL 8-P	AKE1011			Q864, Q865	DTC124ES	
		CN10 (JACK)	AKN-207			Q891 (for A-504R)	DTA143ES	
		CN11 (AC SOCKET 1P) (for A-404R)	AKP1034			D851, D859, D861, D862, D870	1SS252	
		CN12 (AC INLET 1P)	AKP1132			D880, D887	1SS252	
		H1 -H4 (FUSE CLIP) (for A-504R)	AKR1003			D890 (for A-504R)	1SS252	
		H1 -H2 (FUSE CLIP) (for A-404R)	AKR1003			D840, D869	AEL1065	
		CABLE HOLDER (3P)	AKT1076			D860	AEL1084	
		CABLE HOLDER (3P)	AKT1077			D863, D868	BR3371XJ65A	
		HEAT SINK M	ANH-697			D860	RD6.2ESB	
		HEAT SINK B	ANH1021	COILS AND FILTERS				
		CN4 (JUMPER CONNECTOR)	KPC6			L852, L854, L857, L859	ATX1012	
		CN6 (CONNECTOR 5P)	KPE5			L851, L855, L856, L860	LAU221K	
		CN5 (CONNECTOR 7P)	KPE7	SWITCHES AND RELAYS				
INPUT ASSY								
SEMICONDUCTORS								
		IC101	M5220P			S850	ASD7001	
		IC201	TC9163AN			S801	ASG1030	
		IC202	UPC4570C			S851, S856	ASG1034	
		Q202, Q204	DTA143ES			S857	ASG1052	
		Q201, Q203	DTC143ES			S802	ASG1079	
		D201, D202	1SS252			RY890 (for A-504R)	RSR1029	
COILS AND FILTERS								
		L101, L104	LAU221K	CAPACITORS				
SWITCHES AND RELAYS								
		RY201, RY202	RSR1029			C854 (0.047F/5.5V)	ACH1246	
CAPACITORS								
		C207, C208, C211, C212	CCCSL101K500			C844, C864 (3.3μ/25V)	ACH7027	
		C201, C202, C205, C206	CCCSL181J50			C819, C820	CCCSL271J50	
		C213, C214	CCCSL181J50			C803, C804, C817, C818	CCCSL470J50	
		C203, C204, C209, C210	CCCSL181K500			C840	CEANP220M35	
		C103, C104	CCCSL221J50			C801, C802, C855	CEAS100M50	
		C253, C254	CCCSL470K500			C805, C806	CEAS101M25	
		C119, C120	CCCSL680J50			C807, C808, C850	CEAS2R2M50	
		C101, C102, C115, C116	CEAS100M50			C823, C824, C853	CEAS470M25	
		C117, C118, C283, C284	CEAS101M25			C809, C810	CFTYA153J50	
						C815, C816	CFTYA183J50	
						C811, C812	CFTYA823J50	
						C821, C851, C852, C856, C863	CKCYF103Z50	
						C841, C843	CKPUYB271K50	
						C813, C814	COMA332J50	
RESISTORS								
		R805, R806	RD1/8MMF101J					

3. PCB PARTS LIST (for A-504R/HE and A-404R/HE)

NOTES:

- Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.
- The Δ 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.
- Parts marked by "⊙" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.
- 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 ohms and 47k ohms (tolerance is shown by J = 5%, and K = 10%).
560 Ω → 56 × 10¹ → 561 ----- RD1/8PM 5 6 1 J
47k Ω → 47 × 10³ → 473 ----- RD1/4PS 4 7 3 J
0.5 Ω → 0R5 ----- RN2H 0 R 5 K
1 Ω → 010 ----- RS1P 0 1 0 K

Ex.2 When there are 3 effective digits (such as in high precision metal film resistors).
5.62k Ω → 562 × 10¹ → 5621 ----- RNI/4PC 5 6 2 1 F

Mark	No.	Description	Parts No.	Mark	No.	Description	Parts No.
A-504R/HE							
NSP		COMPLEX ASSY	AWK7185		D711	D5SB20	
		— AF ASSY	AWZ7736		D601 ,D708 ,D710 ,D712 ,D714	HZS12AL	
		— INPUT ASSY	AWZ7737		D509 -D512(for A-504R)	HZS9A2L	
		— CONTROL ASSY	AWZ7738		D509 -D512(for A-404R)	HZS7B2L	
		— VOLUME ASSY	AWZ7739		D602 ,D702 -D706	S5688G	
NSP		— TRANS ASSY	AWZ7740	COILS AND FILTERS			
NSP		— SP SW ASSY	AWZ7741		L701 ,L702	ATX1012	
NSP		— MUTE SW ASSY	AWZ7742	TRANSFORMERS			
NSP		— LOUDNESS ASSY	AWZ7743	Δ	T701	ATT7009	
				SWITCHES AND RELAYS			
					RY701 -RY703	ASR1035	
				Δ	RY704	ASR1036	
A-404R/HE				CAPACITORS			
NSP		COMPLEX ASSY	AWK7186	Δ	C723 ,C724 (0.01 μ / AC400V)	ACG1054	
		— AF ASSY	AWZ7744		C703 (1 μ / 100V)	ACH1237	
		— INPUT ASSY	AWZ7745		C701 (10000 μ / 56V)(for A-504R)	ACH7014	
		— CONTROL ASSY	AWZ7746		C701 (6800 μ / 56V)(for A-404R)	ACH7016	
		— VOLUME ASSY	AWZ7747		C702 (10000 μ / 56V)(for A-504R)	ACH7020	
NSP		— TRANS ASSY	AWZ7740		C702 (6800 μ / 56V)(for A-404R)	ACH7015	
NSP		— SP SW ASSY	AWZ7741		C704 ,C705 ,C710 (3.3 μ / 25V)	ACH7027	
NSP		— LOUDNESS ASSY	AWZ7748		C509 -C512(for A-504R)	CCCSL181K500	
					C509 -C512(for A-404R)	CCCSL121K500	
					C503 ,C504	CCCSL221K500	
AF ASSY (FOR A-504R)					C711	CEANP010M100	
					C607 ,C608	CEANP4R7M50	
					C714	CEAS010M50	
SEMICONDUCTORS					C706 ,C707	CEAS100M50	
	IC701	NJM78M15FAS			C603 ,C713	CEAS101M25	
	IC703	NJM78M56FAS			C515 ,C516	CEAS331M16	
	IC702	NJM79M15FA			C525 ,C526	CEAS470M25	
	IC501	UPC4570C			C527 ,C528	CEAS470M50	
	Q603	2SA1048			C709	CEAS471M25	
	Q505 ,Q506	2SA1145			C601	CEAS471M6	
	Q513 ,Q514	2SA1932P			C505 ,C506	CEGA100M35	
	Q503 ,Q504	2SA992			C501 ,C502	CEZA100M50	
	Q501 ,Q502	2SC1845			C513 ,C514	CEZA2R2M50	
	Q604	2SC2235			C715 -C718	CFTYA104J50	
	Q609 ,Q610	2SC2240			C719 -C722	CKCYB332K500	
	Q508 ,Q510 ,Q601 ,Q602 ,Q607	2SC2458			C725 ,C726(for A-404R)	CKCYF103Z50	
	Q507 ,Q508	2SC2705			C708 ,C712	CKCYF473Z50	
	Q511 ,Q512	2SC5174P			C602	CKPUYF103Z25	
	Q701	DTC143ES			C605	CKPUYF472M16	
	D501 -D508 ,D513 -D516	1SS252					
	D603 -D608 ,D707	1SS252					

Mark	No.	Description	Parts No.	Mark	No.	Description	Parts No.
RESISTORS							
Δ	R553 ,R554 (0.33 Ω / 5W)	ACN1063			C231 ,C232 ,C281 ,C282	CEAS470M25	
	R708	RD1/2PM220J			C105 ,C106	CEAS471M6	
Δ	R713 ,R714	RD1/2PMF100J			C251 ,C252	CEGA100M35	
Δ	R543 -R546 (for A-504R)	RD1/2PMF2R2J			C257 ,C258	CEZA100M50	
Δ	R543 -R546 (for A-404R)	RD1/2PMF4R7J			C109 ,C110	CFTXA243J50	
Δ	R557 -R560 (for A-504R)	RD1/2PMF2R2J			C111 ,C112	CFTXA823J50	
	R505 ,R506	RD1/4PM101J			C113 ,C114	CKCYB222K50	
	R555 ,R556	RD1/4PM152J			C100 ,C200	CKCYF473Z50	
	R612	RD1/4PM472J			C107 ,C108	CKPUYB181K50	
	R507 ,R508	RD1/4PM561J			C261 -C263	CKPUYB681K50	
Δ	R625	RD1/4PMF010J			C271 ,C272	CKPUYF103Z25	
Δ	R570 (for A-404R)	RD1/4PMF100J		RESISTORS			
Δ	R617	RD1/4PMF101J		Δ	R119 ,R120 ,R281 -R284	RD1/8MMF101J	
Δ	R613 ,R614 ,R621 ,R622	RD1/4PMF222J			Other Resistors	RD1/8PM□□□□	
Δ	R551 ,R552	RD1/8MMF101J		OTHERS			
Δ	R709 -R711	RD1/8MMF181J			CN100 ,CN101 (PIN JACK 8P)	AKB7023	
Δ	R702	RFA1/4PS100J		CONTROL ASSY			
Δ	R537 -R540 ,R701	RFA1/4PS101J		SEMICONDUCTORS			
Δ	R541 ,R542	RFA1/4PS221J			IC850	PD5307A	
Δ	R523 -R526 ,R707	RFA1/4PS471J			IC801	UPC4570C	
Δ	R527 -R530	RFA1/4PS680J			Q800 ,Q854	2SA933S	
Δ	R531 ,R532	RN1/4PC1501F			Q855	2SC1740S	
Δ	R535 ,R536	RN1/4PC6800F			Q801 ,Q802	2SC2878	
Δ	R703 ,R704	RS2MMF331J			Q862 ,Q863	DTA143ES	
	Other Resistors	RD1/8PM□□□□			Q890 (for A-504R)	DTA143ES	
OTHERS						Q851 -Q853 ,Q856 -Q861	DTC124ES
	SCREW	ABA-298			Q864 ,Q865	DTC124ES	
	SPEAKER TERMINAL 8-P	AKE1011			Q891 (for A-504R)	DTC143ES	
	CN10 (JACK)	AKN-207			D851 -D859 ,D861 ,D862 ,D870	1SS252	
Δ	CN11 (AC SOCKET 1P) (for A-404R)	AKP1034			D890 (for A-504R)	1SS252	
Δ	CN12 (AC INLET 1P)	AKP1132			D840 ,D869	AEL1065	
Δ	H1 -H4 (FUSE CLIP) (for A-504R)	AKR1003			D841	AEL1084	
Δ	H1 -H2 (FUSE CLIP) (for A-404R)	AKR1003			D863 -D868	BR3371XJ65A	
	CABLE HOLDER (3P)	AKT1076			D860	RD6.2ESB	
	CABLE HOLDER (3P)	AKT1077		COILS AND FILTERS			
	HEAT SINK M	ANH-697			L852 ,L854 ,L857 -L859	ATX1012	
	HEAT SINK B	ANH1021			L851 ,L855 ,L856 ,L860	LAU221K	
	CN4 (JUMPER CONNECTOR)	KPC6		SWITCHES AND RELAYS			
	CN6 (CONNECTOR 5P)	KPE5			S850	ASD7001	
	CN5 (CONNECTOR 7P)	KPE7			S801	ASG1030	
INPUT ASSY						S851 -S856	ASG1034
					S857	ASG1052	
					S802	ASG1079	
					RY890 (for A-504R)	RSR1029	
SEMICONDUCTORS				CAPACITORS			
	IC101	M5220P			C854 (0.047F / 5.5V)	ACH1246	
	IC201	TC9163AN			C844 ,C864 (3.3 μ / 25V)	ACH7027	
	IC202	UPC4570C			C819 ,C820	CCCSL271J50	
	Q202 ,Q204	DTA143ES			C803 ,C804 ,C817 ,C818	CCCSL470J50	
	Q201 ,Q203	DTC143ES			C840	CEANP220M35	
	D201 ,D202	1SS252			C801 ,C802 ,C855	CEAS100M50	
COILS AND FILTERS						CEAS101M25	
	L101 -L104	LAU221K			C805 ,C806	CEAS2R2M50	
SWITCHES AND RELAYS						CEAS2R2M50	
	RY201 ,RY202	RSR1029			C807 ,C808 ,C850	CEAS470M25	
CAPACITORS						CFTYA153J50	
	C207 ,C208 ,C211 ,C212	CCCSL101K500			C815 ,C816	CFTYA183J50	
	C201 ,C202 ,C205 ,C206	CCCSL181J50			C811 ,C812	CFTYA823J50	
	C213 ,C214	CCCSL181J50			C821 ,C851 ,C852 ,C856 -C863	CKCYF103Z50	
	C203 ,C204 ,C209 ,C210	CCCSL181K500			C841 -C843	CKPUYB271K50	
	C103 ,C104	CCCSL221J50			C813 ,C814	CQMA332J50	
	C253 ,C254	CCCSL470K500		RESISTORS			
	C119 ,C120	CCCSL680J50		Δ	R805 ,R806	RD1/8MMF101J	
	C101 ,C102 ,C115 ,C116	CEAS100M50					
	C117 ,C118 ,C283 ,C284	CEAS101M25					