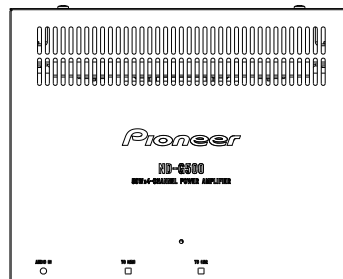


**Pioneer** *sound.vision.soul*

# ***Service Manual***



ND-G500/XS/E5

ORDER NO.  
**CRT4156**

**4-CHANNEL GATEWAY AMPLIFIER**

# **ND-G500** /XS/E5



For details, refer to "Important Check Points for Good Servicing".

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# SAFETY INFORMATION

This service manual is intended for qualified service technicians; it is not meant for the casual do-it-yourselfer. Qualified technicians have the necessary test equipment and tools, and have been trained to properly and safely repair complex products such as those covered by this manual. Improperly performed repairs can adversely affect the safety and reliability of the product and may void the warranty. If you are not qualified to perform the repair of this product properly and safely, you should not risk trying to do so and refer the repair to a qualified service technician.

A

**Where in a manufacturer’s service documentation, for example in circuit diagrams or lists of components, a symbol is used to indicate that a specific component shall be replaced only by the component specified in that documentation for safety reasons, the following symbol shall be used:**



B

■

C

■

D

■

E

■

F

## [Important Check Points for Good Servicing]

In this manual, procedures that must be performed during repairs are marked with the below symbol. Please be sure to confirm and follow these procedures.

### 1. Product safety



Please conform to product regulations (such as safety and radiation regulations), and maintain a safe servicing environment by following the safety instructions described in this manual.

- ① Use specified parts for repair.

Use genuine parts. Be sure to use important parts for safety.

- ② Do not perform modifications without proper instructions.

Please follow the specified safety methods when modification (addition/change of parts) is required due to interferences such as radio/TV interference and foreign noise.

- ③ Make sure the soldering of repaired locations is properly performed.

When you solder while repairing, please be sure that there are no cold solder and other debris. Soldering should be finished with the proper quantity. (Refer to the example)

- ④ Make sure the screws are tightly fastened.

Please be sure that all screws are fastened, and that there are no loose screws.

- ⑤ Make sure each connectors are correctly inserted.

Please be sure that all connectors are inserted, and that there are no imperfect insertion.

- ⑥ Make sure the wiring cables are set to their original state.

Please replace the wiring and cables to the original state after repairs. In addition, be sure that there are no pinched wires, etc.

- ⑦ Make sure screws and soldering scraps do not remain inside the product.

Please check that neither solder debris nor screws remain inside the product.

- ⑧ There should be no semi-broken wires, scratches, melting, etc. on the coating of the power cord.

Damaged power cords may lead to fire accidents, so please be sure that there are no damages. If you find a damaged power cord, please exchange it with a suitable one.

- ⑨ There should be no spark traces or similar marks on the power plug.

When spark traces or similar marks are found on the power supply plug, please check the connection and advise on secure connections and suitable usage. Please exchange the power cord if necessary.

- ⑩ Safe environment should be secured during servicing.

When you perform repairs, please pay attention to static electricity, furniture, household articles, etc. in order to prevent injuries. Please pay attention to your surroundings and repair safely.

### 2. Adjustments



To keep the original performance of the products, optimum adjustments and confirmation of characteristics within specification. Adjustments should be performed in accordance with the procedures/instructions described in this manual.

### 3. Lubricants, Glues, and Replacement parts



Use grease and adhesives that are equal to the specified substance. Make sure the proper amount is applied.

### 4. Cleaning



For parts that require cleaning, such as optical pickups, tape deck heads, lenses and mirrors used in projection monitors, proper cleaning should be performed to restore their performances.

### 5. Shipping mode and Shipping screws



To protect products from damages or failures during transit, the shipping mode should be set or the shipping screws should be installed before shipment. Please be sure to follow this method especially if it is specified in this manual.

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A

B

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# 1. SERVICE PRECAUTIONS

## 1.1 SERVICE PRECAUTIONS



1. You should conform to the regulations governing the product (safety, radio and noise, and other regulations), and should keep the safety during servicing by following the safety instructions described in this manual.
2. Be careful in handling ICs. Some ICs such as MOS type are so fragile that they can be damaged by electrostatic induction.
3. The area where the temperature gets high as a completely assembled product is the heat sink.  
As a unit, on the other hand, sub-heat sink and the periphery of the sub-heat sink are the areas where the temperature gets high.
4. Approximately one hour after activating, the temperature on part of outer surface reaches nearly 70 °C.  
Therefore, be careful not to get burn, immediately after turning off power.
5. Watch out for a hot heat sink.  
Operations while removing a heat sink can cause failure.
6. As a heat sink (approx. 250 g to 300 g) is heavy comparing with the product weight (approx. 900 g).  
Keep a balance when taking out the board.

## 1.2 NOTES ON SOLDERING

- For environmental protection, lead-free solder is used on the printed circuit boards mounted in this unit.  
Be sure to use lead-free solder and a soldering iron that can meet specifications for use with lead-free solders for repairs accompanied by reworking of soldering.
- Compared with conventional eutectic solders, lead-free solders have higher melting points, by approximately 40 °C.  
Therefore, for lead-free soldering, the tip temperature of a soldering iron must be set to around 373 °C in general, although the temperature depends on the heat capacity of the PC board on which reworking is required and the weight of the tip of the soldering iron.

Compared with eutectic solders, lead-free solders have higher bond strengths but slower wetting times and higher melting temperatures (hard to melt/easy to harden).

The following lead-free solders are available as service parts:

- Parts numbers of lead-free solder:  
GYP1006 1.0 in dia.  
GYP1007 0.6 in dia.  
GYP1008 0.3 in dia.

# 2. SPECIFICATIONS

## 2.1 SPECIFICATIONS

A

Power source .....	14.4 V DC (10.8 V to 15.1 V allowable)
Grounding system .....	Negative type
Max. current consumption .....	10 A (at continuous power, 4 Ω)
Average current consumption .....	4 A
Fuse .....	10 A × 1
Backup current .....	1 mA or less
Dimensions .....	140 mm (W) × 28 mm (H) × 174 mm (D)
Weight .....	0.8 kg (Leads for wiring not included)
Maximum power output .....	50 W × 1 (4 Ω)
Continuous power output .....	22 W × 4 (at 14.4 V, 4 Ω, 50 Hz to 15 kHz 5% THD)
Load impedance .....	4 Ω (4 Ω to 8 Ω allowable (2 Ω for one channel))
Frequency response .....	0±1.5 dB (20 Hz/1 kHz, 20 kHz/1 kHz)
Signal-to-noise ratio .....	60 dB (1 W into 4 Ω LPF 20 kHz)
Distortion .....	0.2 % or less (1 kHz 20 kHz-LPF)
Separation .....	50 dB or more (Rg=1 kΩ, 1 kHz 20 kHz-LPF)
Maximum input level / impedance .....	AUDIO IN: 5.6 V / 22 kΩ SPEAKER OUTPUT: 46 V / 10.56 kΩ

B

C

Power output .....	12 W RMS × 4 channels (4 Ω and ≤ 1 % THD+N)
Signal-to-noise ratio .....	91 dBA (Reference: 1 W into 4 Ω)



### Note:

- Specifications and the design are subject to possible modification without notice due to improvements.

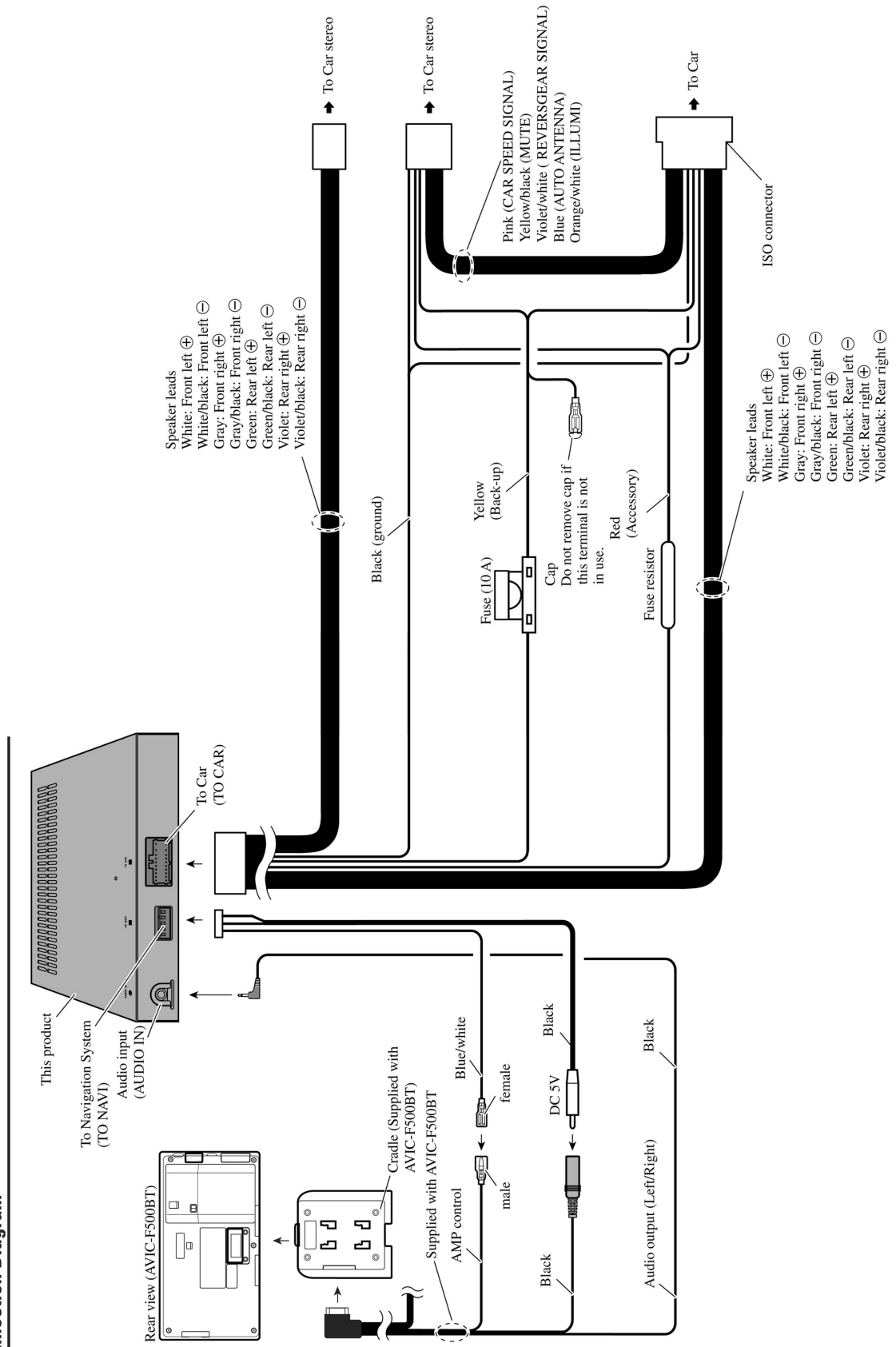
D

E

F

## 2.2 CONNECTION DIAGRAM

Connection Diagram



# 3. BASIC ITEMS FOR SERVICE

## 3.1 CHECK POINTS AFTER SERVICING

A

To keep the product quality after servicing, please confirm following check points.

No.	Procedures	Item to be confirmed
1	Confirm whether the customer complain has been solved.	The customer complain must not be reappeared. Audio and operations must be normal.
2	Check the output sound.	Audio and operations must be normal.
3	Appearance check	No scratches or dirt on its appearance after receiving it for service.

B

See the table below for the items to be checked regarding video and audio:

Item to be checked regarding audio
Distortion
Noise
Volume too low
Volume too high
Volume fluctuating
Sound interrupted

C

D

E

F



## 4. BLOCK DIAGRAM

There is not information to be shown in this chapter.

## 5. DIAGNOSIS

### 5.1 TROUBLESHOOTING

Output audio from the Speaker is switched by “AMP control terminal” (Blue/white cable)

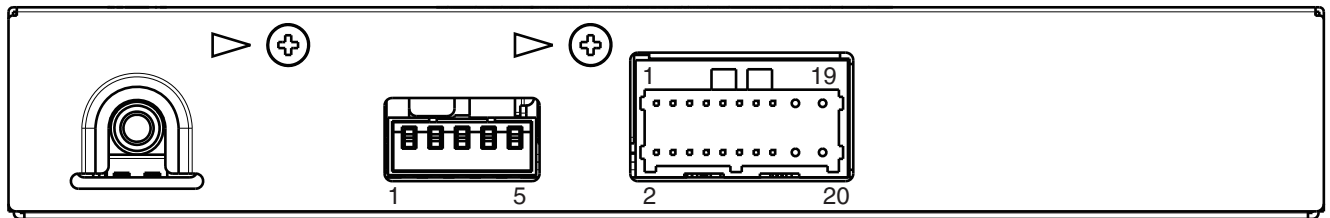
If the terminal signal is “L”, the audio from Mini-plug (AVIC-F500BT) is selected.

If the terminal signal is “H”, Car stereo audio is selected.

Please see following table for more detail.

Output Audio from	AMP Control terminal (Blue/White)	Inside of a product		
		Q790 - Base (CONT2)	IC220, 250 2pin (CNT1)	IC220, 250 4pin (CNT2)
Car stereo	H	L	L	L
AVIC-F500BT	L	H	H	L

### 5.2 CONNECTOR FUNCTION DESCRIPTION



AUDIO INPUT

- 1. CNT
- 2. NC
- 3. GND
- 4. NC
- 5. 5V

- 1. FL-OUT
- 2. FL-IN
- 3. FL+OUT
- 4. FL+IN
- 5. FR-OUT
- 6. FR-IN
- 7. FR+OUT
- 8. FR+IN
- 9. RR+OUT
- 10. RR+IN
- 11. RR-OUT
- 12. RR-IN
- 13. RL+OUT
- 14. RL+IN
- 15. RL-OUT
- 16. RL-IN
- 17. ACC
- 18. GND
- 19. BUP
- 20. GND

## 6. SERVICE MODE

There is not information to be shown in this chapter.

# 7. DISASSEMBLY

(Caution)

1) Approximately one hour after activating, the temperature on part of outer surface reaches nearly 70 °C. Therefore, be careful not to get burn, immediately after turning off power.

2) Watch out for a hot heat sink.

Operations while removing a heat sink can cause failure.

3) As a heat sink (approx. 250 g to 300 g) is heavy comparing with the product weight (approx. 900 g). Keep a balance when taking out the board.

## ● Removing the Case (Fig.1)

**1** Remove the eight screws and then remove the Case.

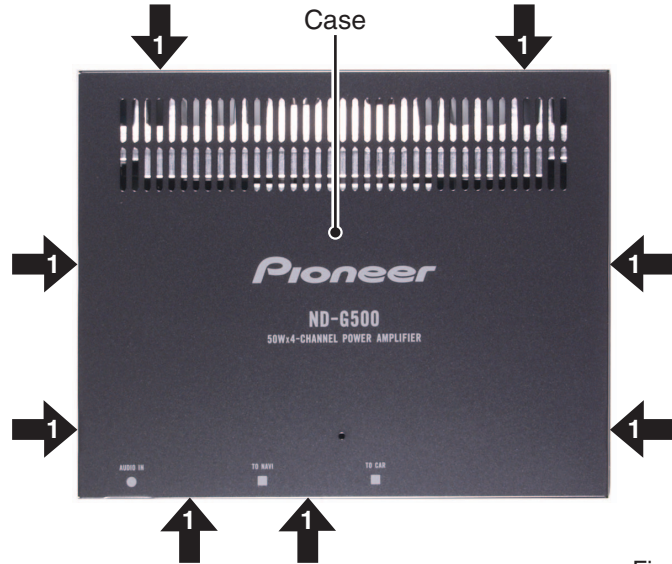
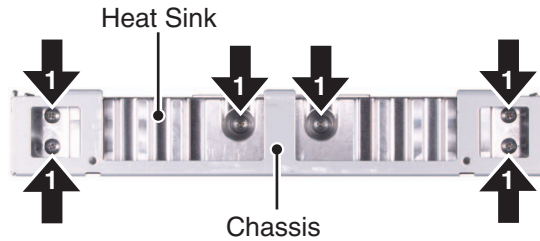


Fig.1

## ● Removing the Amp Unit (Fig.2)

**1** Remove the six screws and then separate the Heat Sink and the Chassis.



**2** Remove the five screws and then remove the Amp Unit.

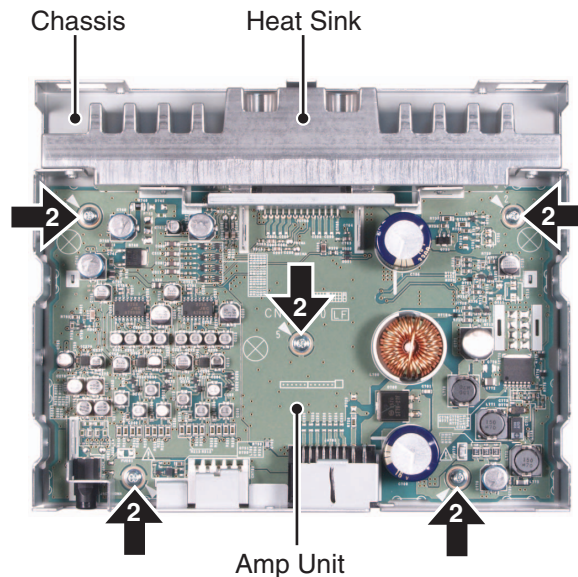


Fig.2

(Note)

While fixing a heat sink to a chassis, Amp Unit cannot be removed. Meanwhile, even if screws are taken out, the heat sink is not removed from the chassis.

(The heat sink is removed together with Amp Unit. They cannot be removed separately.)

## 8. EACH SETTING AND ADJUSTMENT

There is not information to be shown in this chapter.

## 9. EXPLODED VIEWS AND PARTS LIST

NOTES : • Parts marked by " \* " are generally unavailable because they are not in our Master Spare Parts List.

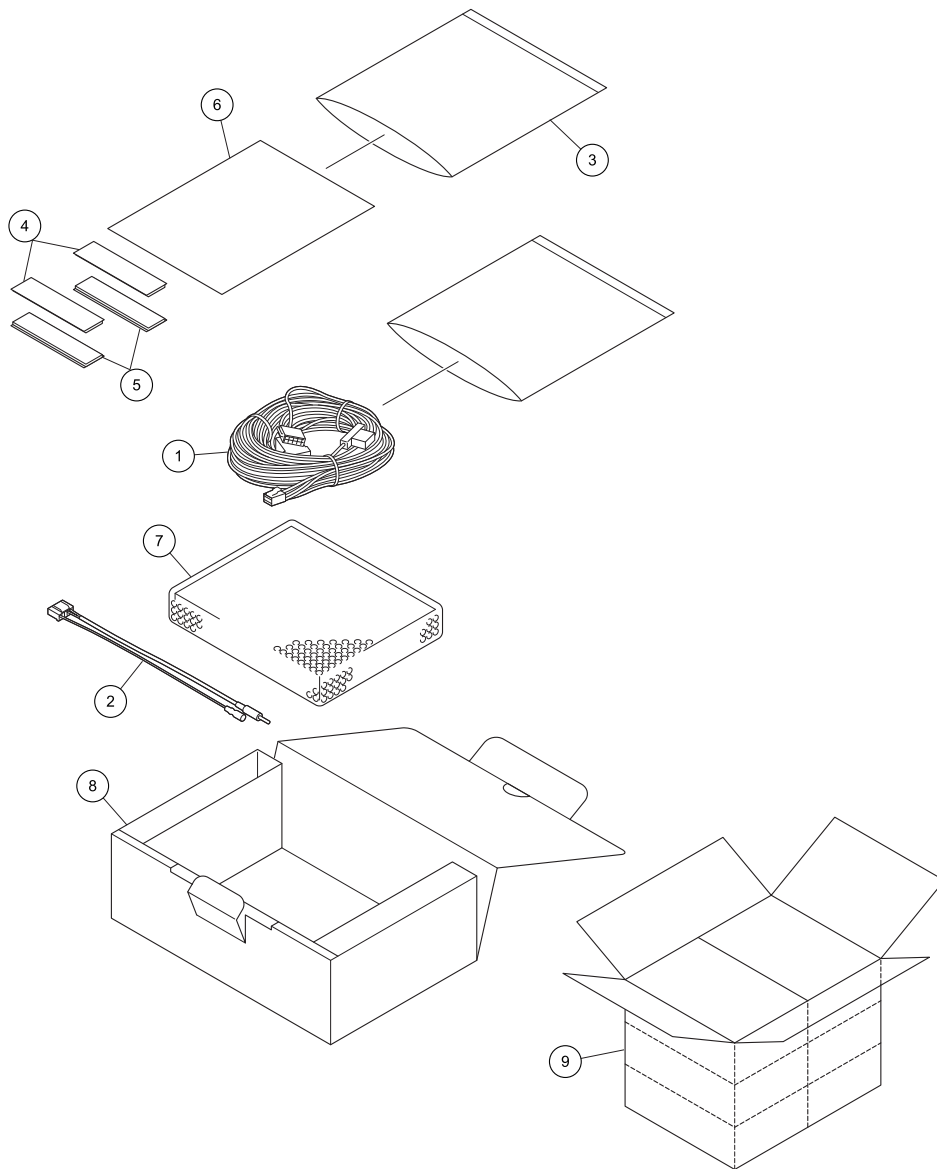
• The  $\triangle$  mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.

• Screw adjacent to  $\nabla$  mark on the product are used for disassembly.

• For the applying amount of lubricants or glue, follow the instructions in this manual.

(In the case of no amount instructions, apply as you think it appropriate.)

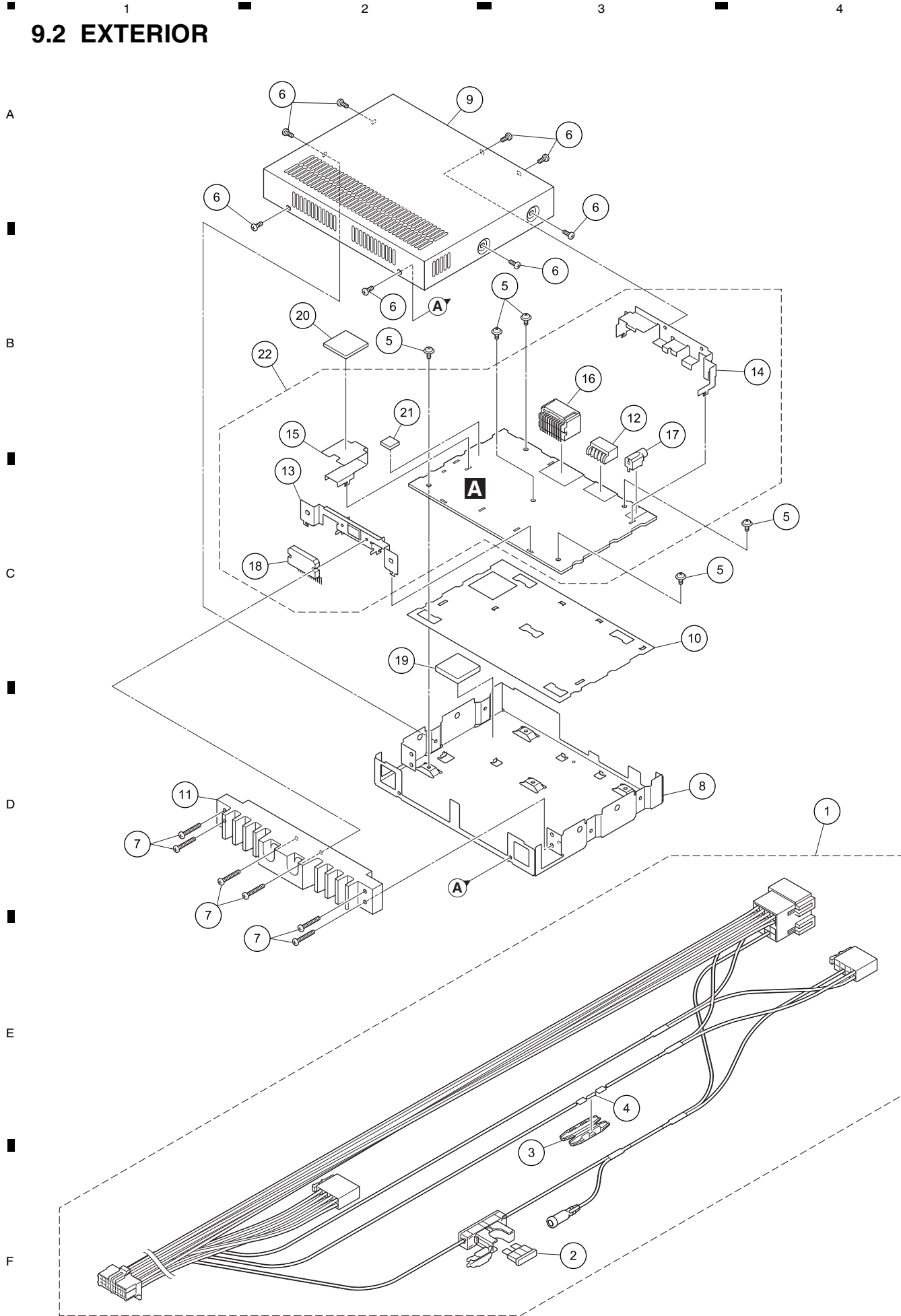
### 9.1 PACKING



#### PACKING SECTION PARTS LIST

<u>Mark No.</u>	<u>Description</u>	<u>Part No.</u>	<u>Mark No.</u>	<u>Description</u>	<u>Part No.</u>
1	Cord Assy	CDP1133	6	Owner's Manual	CRD4344
2	Cord Assy	CDP1140	(English, Spanish, German, French, Italian, Dutch, Russian)		
3	Polyethylene Bag	CEG1116	7	Air Cushioned Bag	CEG1007
4	Fastener	CNM3728	8	Unit Box	CHG6544
5	Fastener	CNM3729	9	Contain Box	CHL6544

# 9.2 EXTERIOR



ND-G500/XS/E5

## EXTERIOR SECTION PARTS LIST

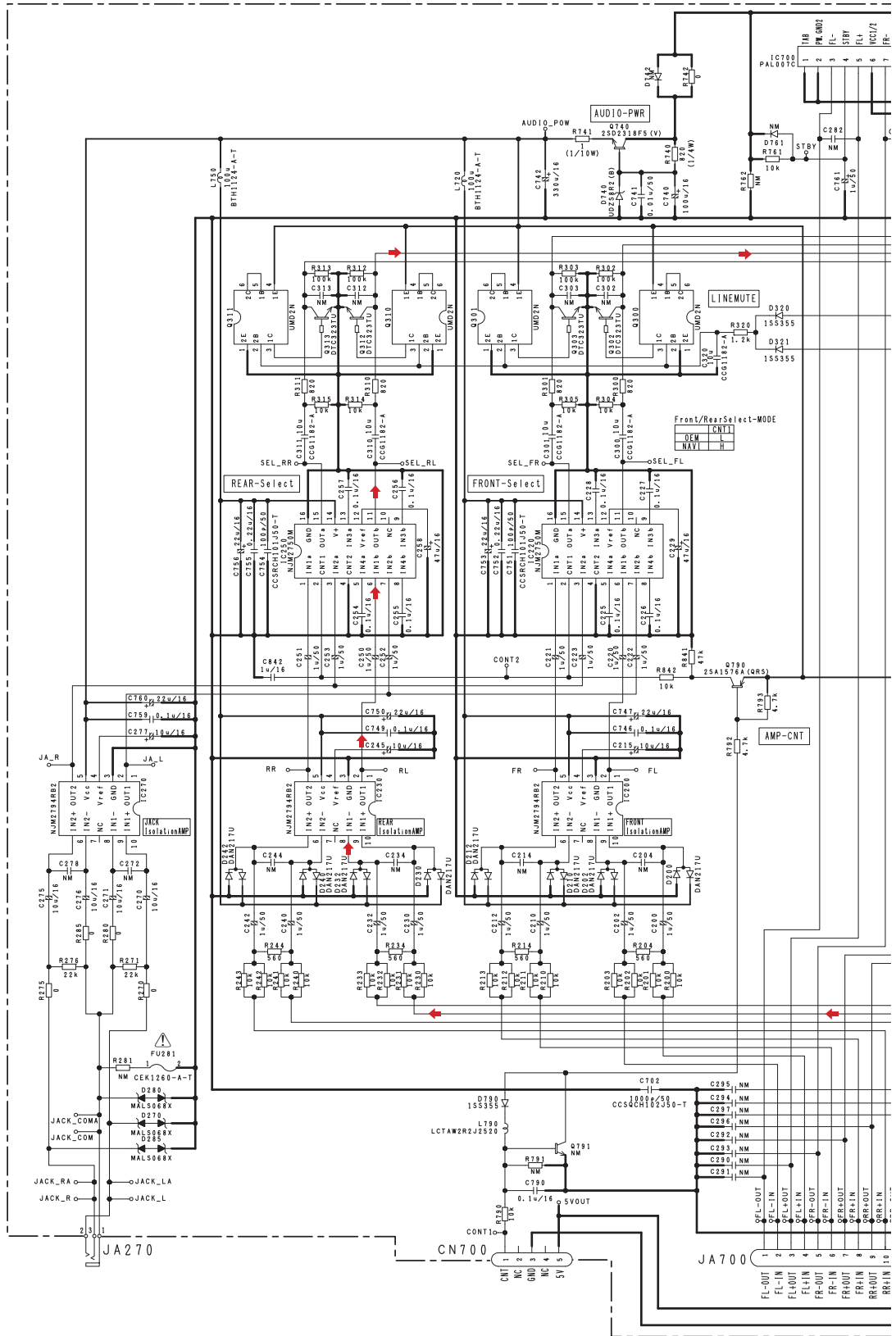
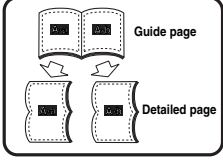
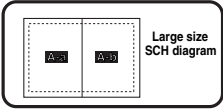
<u>Mark No.</u>	<u>Description</u>	<u>Part No.</u>	
1	Cord Assy	CDP1133	
⚠ 2	Fuse(10 A)	CEK1136	A
3	Cap	CNS1472	
4	Resistor	RS1/2PMF102J	
5	Screw	ASZ26P050FTC	
6	Screw	BSZ26P060FTB	
7	Screw	BSZ26P160FTC	
8	Chassis	CNA3074	
9	Case	CNB3511	
10	Insulator	CNN2375	
11	Heat Sink	CNR1962	B
12	Plug(CN700)	CKM1132	
13	Holder	CND4613	
14	Holder	CND4614	
15	Holder	CND4694	
16	Connector(JA700)	CKM1438	
17	Connector(JA270)	CKS4124	
18	IC(IC700)	PAL007C	
19	Sheet	CNN2464	
20	Sheet	CNN2466	C
21	Sheet	CNN2465	
22	Amp Unit	CWN3555	

# 10. SCHEMATIC DIAGRAM

## 10.1 AMP UNIT(GUIDE PAGE)

Note: When ordering service parts, be sure to refer to "EXPLODED VIEWS AND PARTS LIST" or "ELECTRICAL PARTS LIST".

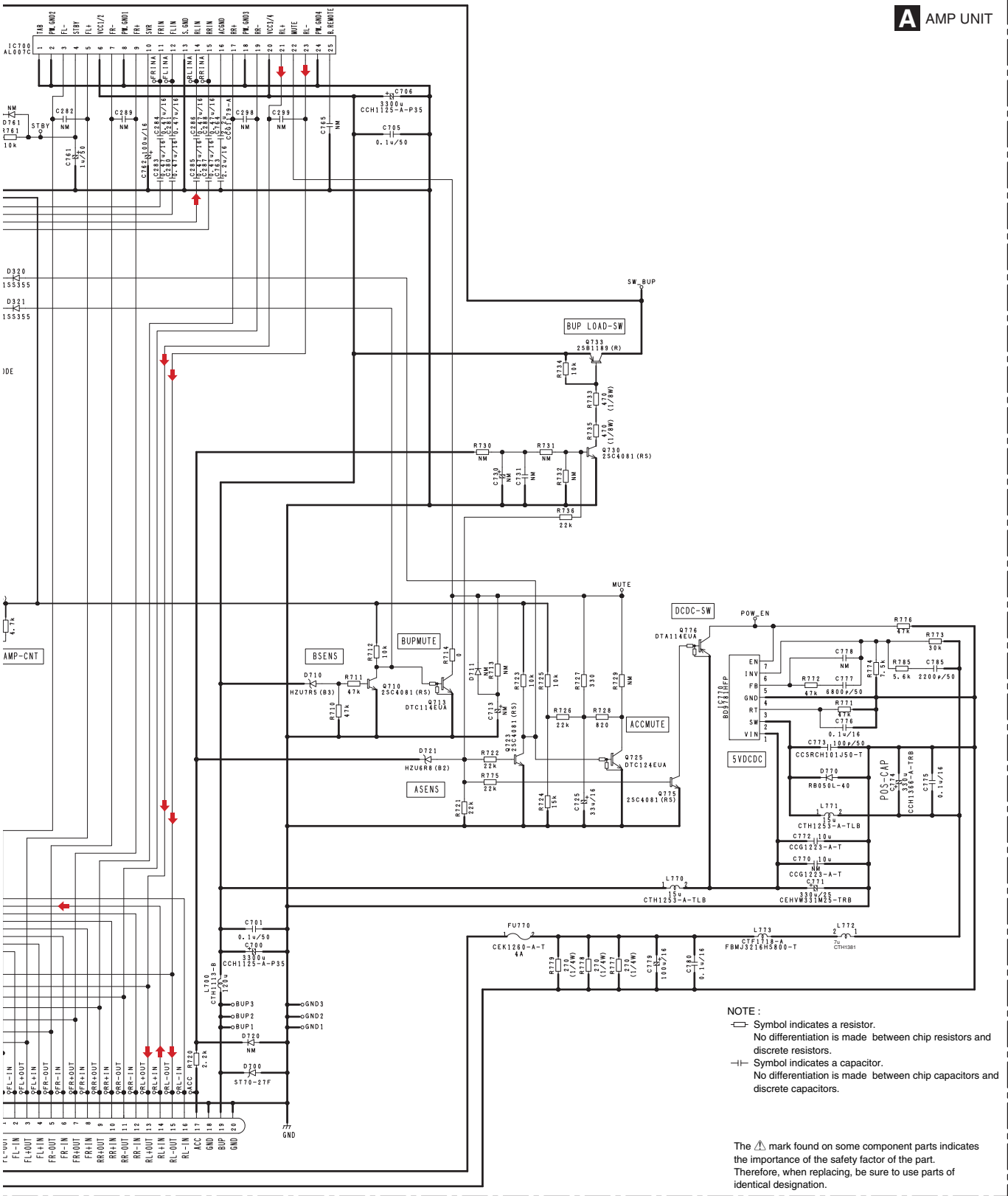
### A-a



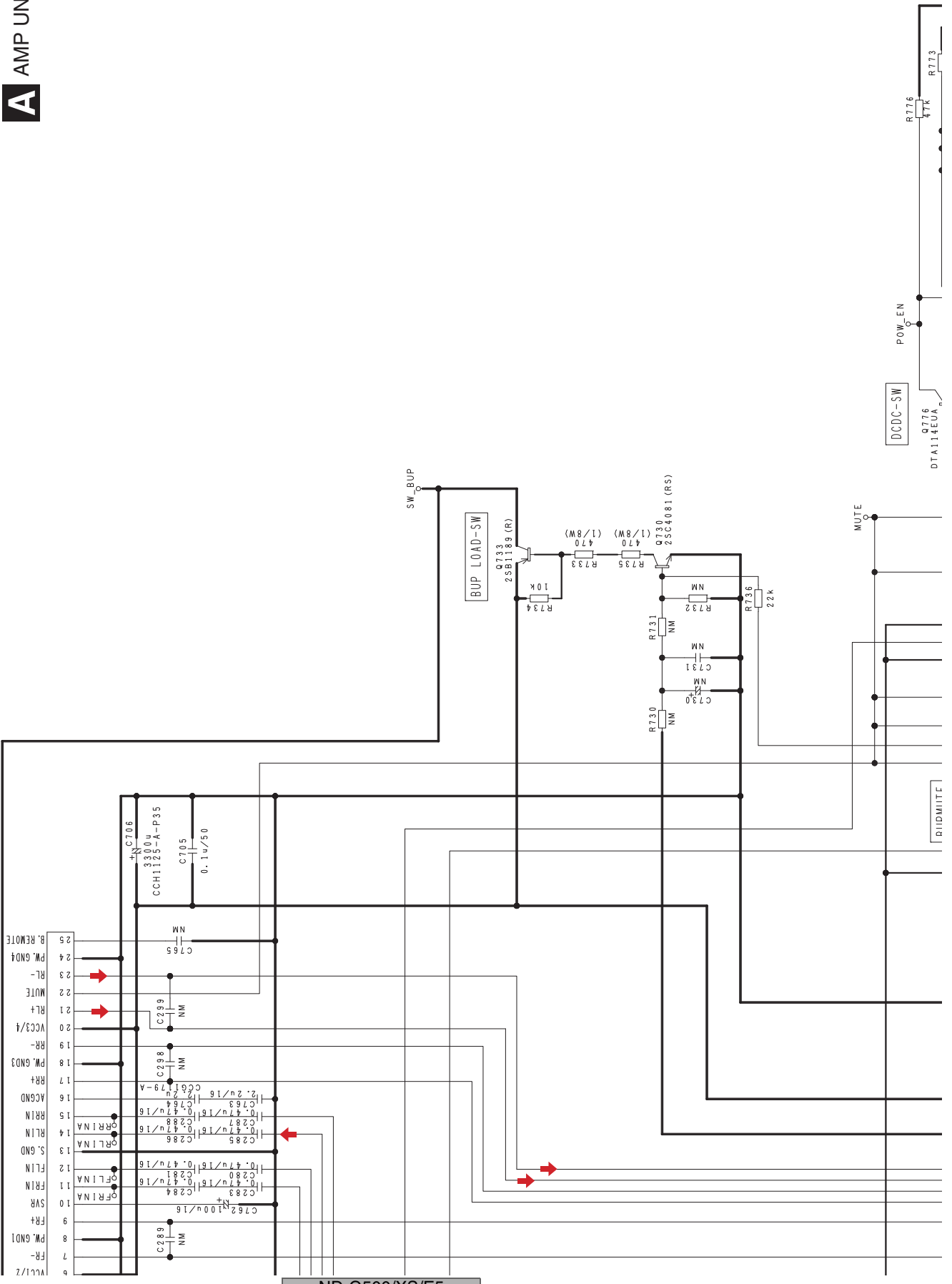
# A

# A-b

**A** AMP UNIT



# A AMP UNIT

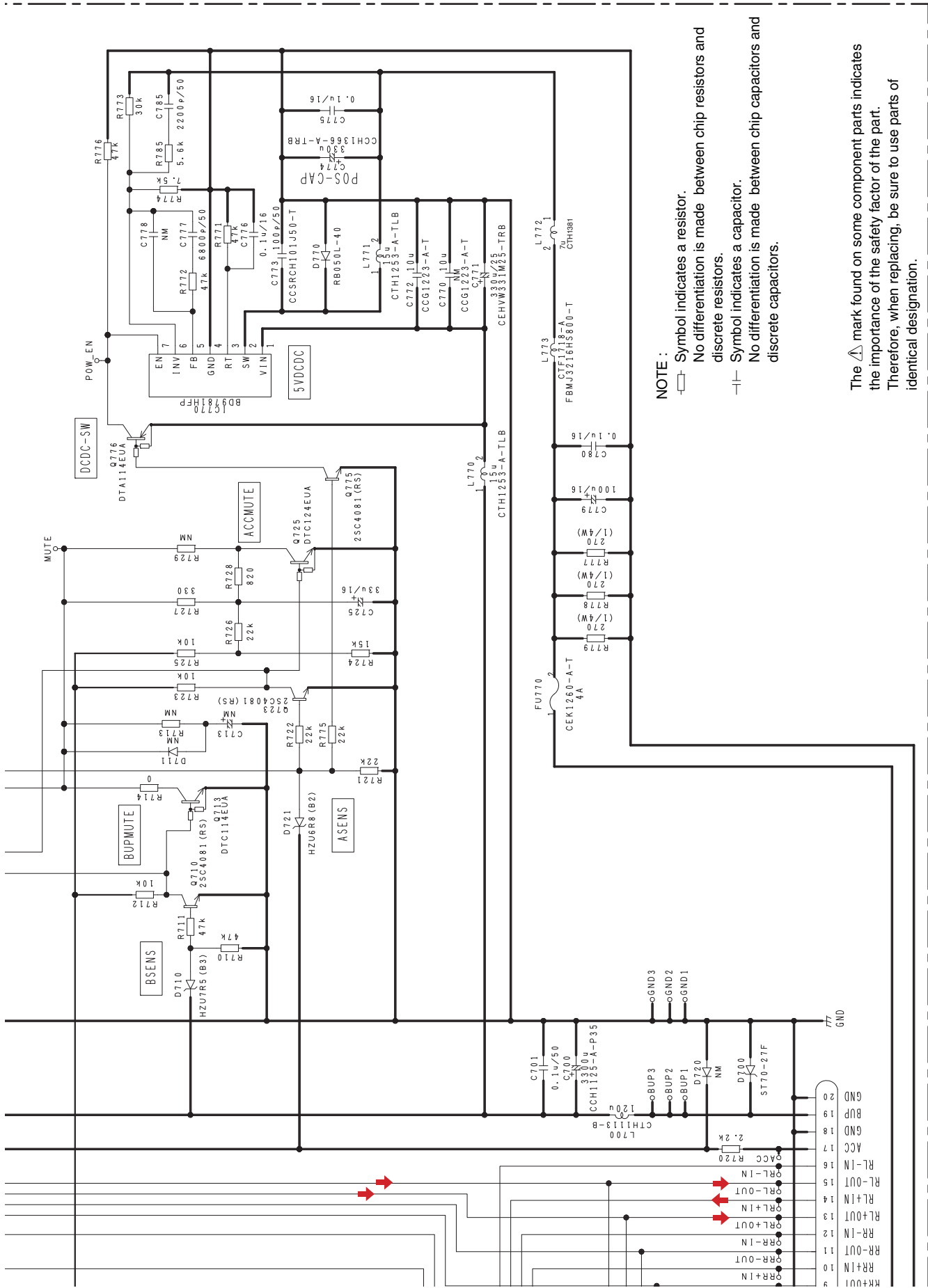


6	RL1/2	FR-	8	PM_GND1	FR+	9	FR+	10	SVR	CFR1NA	C284	11	FR1N	CFLNA	C281	12	FL1N	CFLNA	C280	13	S_GND	CFR1NA	C283	14	RL1N	CFR1NA	C287	15	RL1N	CFR1NA	C288	16	ACGND	CFR1NA	C289	17	FR+	CFR1NA	C290	18	PM_GND3	CFR1NA	C291	19	RR-	VCC3/4	CFR1NA	C292	20	RL+	MUTE	CFR1NA	C293	21	RL+	MUTE	CFR1NA	C294	22	RL-	MUTE	CFR1NA	C295	23	RL-	PM_GND4	CFR1NA	C296	24	PM_GND4	CFR1NA	C297	25	B_REMOTE	CFR1NA	C298
---	-------	-----	---	---------	-----	---	-----	----	-----	--------	------	----	------	-------	------	----	------	-------	------	----	-------	--------	------	----	------	--------	------	----	------	--------	------	----	-------	--------	------	----	-----	--------	------	----	---------	--------	------	----	-----	--------	--------	------	----	-----	------	--------	------	----	-----	------	--------	------	----	-----	------	--------	------	----	-----	---------	--------	------	----	---------	--------	------	----	----------	--------	------

A-a A-b

A-b





NOTE :

□ Symbol indicates a resistor.

○ No differentiation is made between chip resistors and discrete resistors.

⊞ Symbol indicates a capacitor.

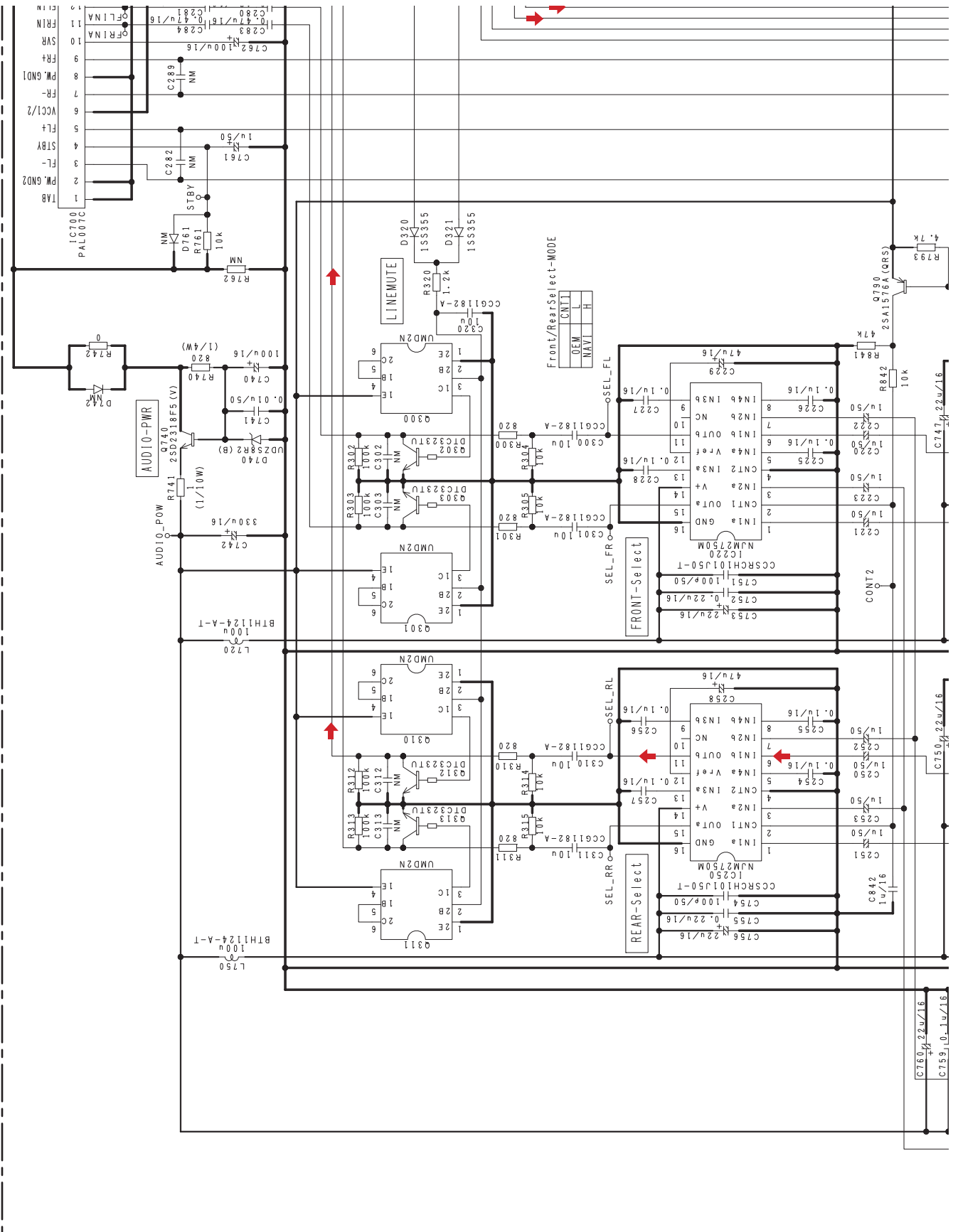
⊞ No differentiation is made between chip capacitors and discrete capacitors.

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.

A-a A-b

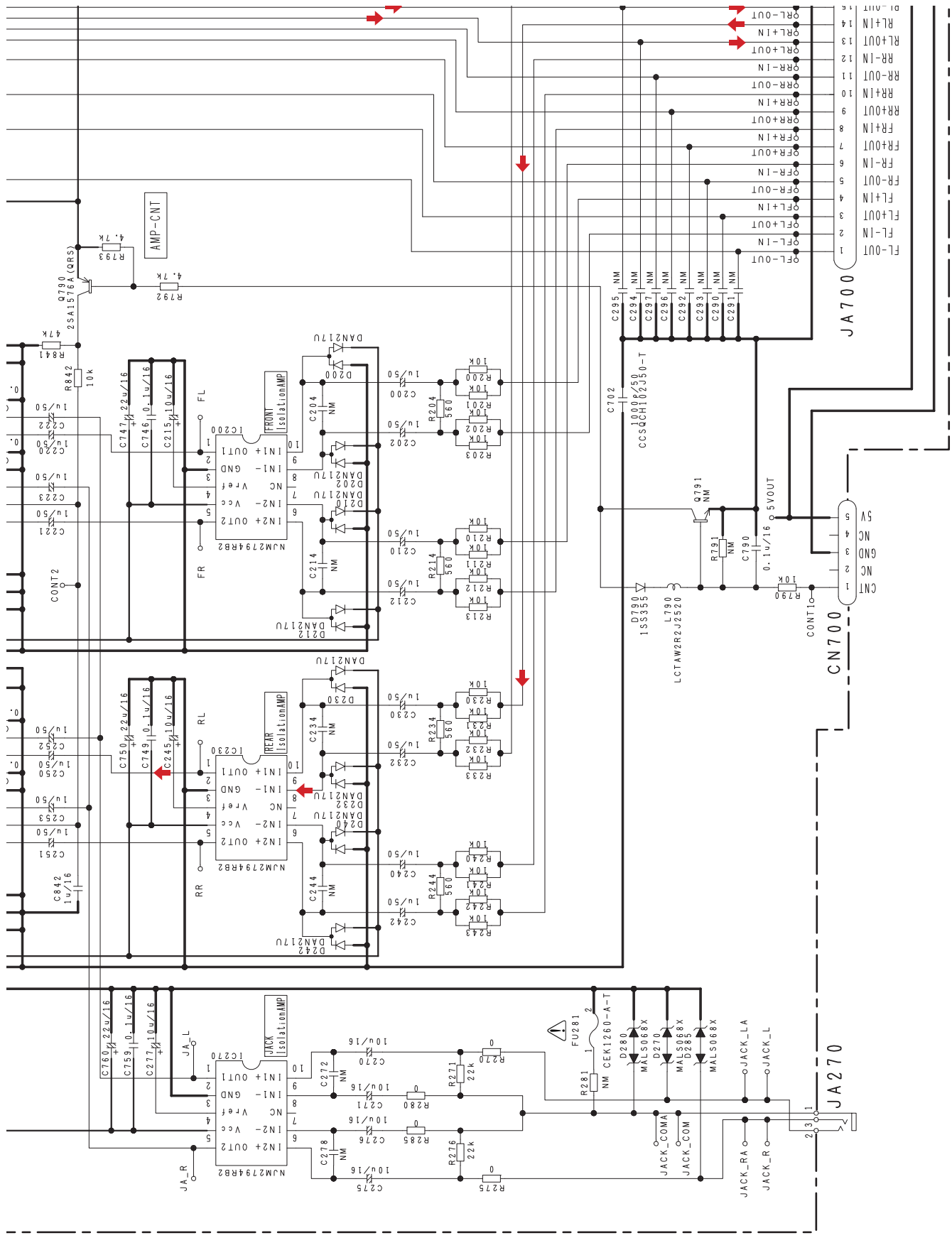
A-b

A-b



A-a

A-a



A-b

A-a

A-a

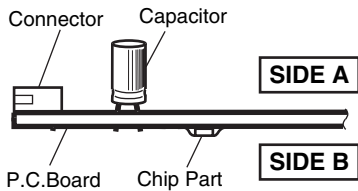
# 11. PCB CONNECTION DIAGRAM

## 11.1 AMP UNIT

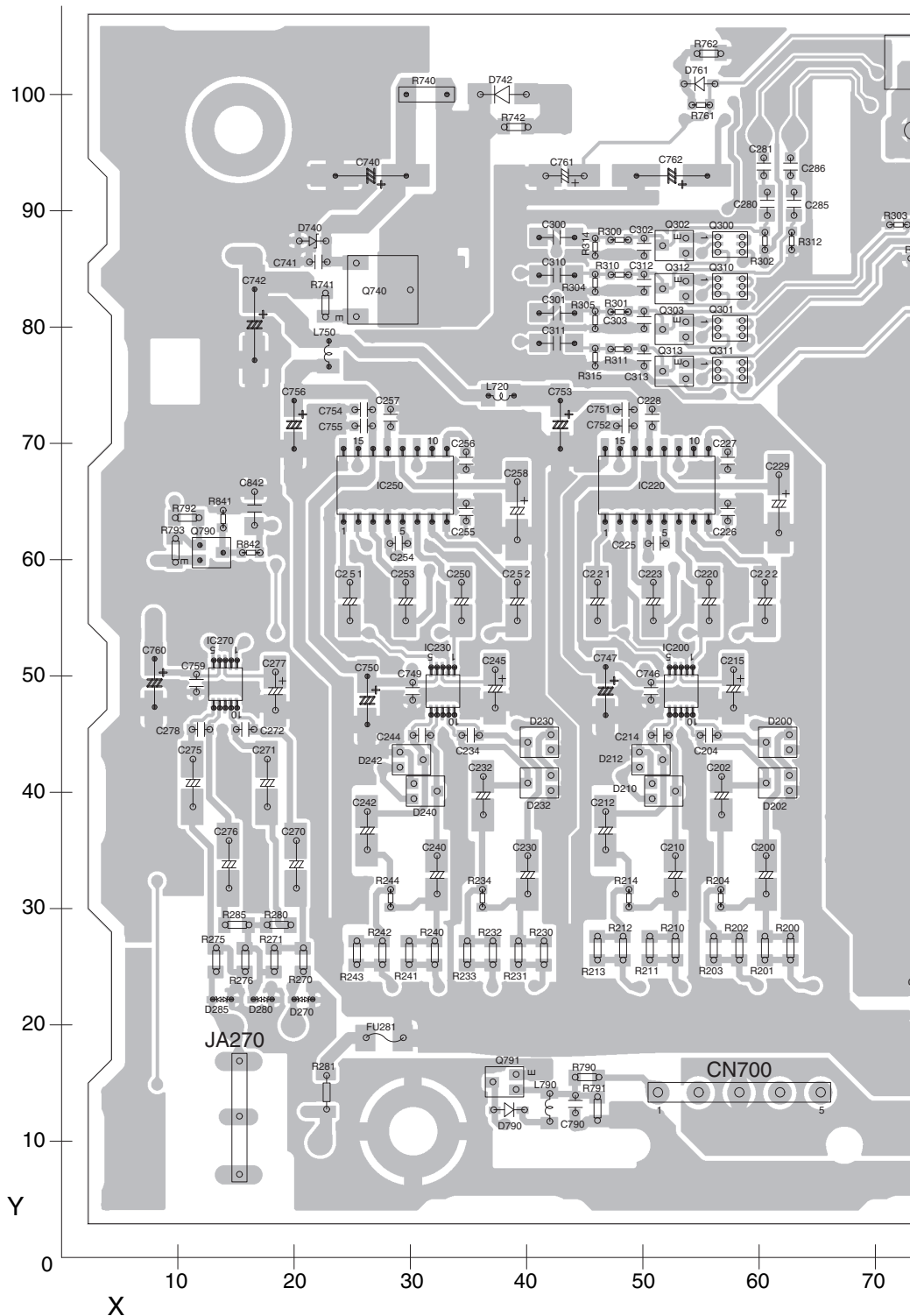
### NOTE FOR PCB DIAGRAMS

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

2. Viewpoint of PCB diagrams

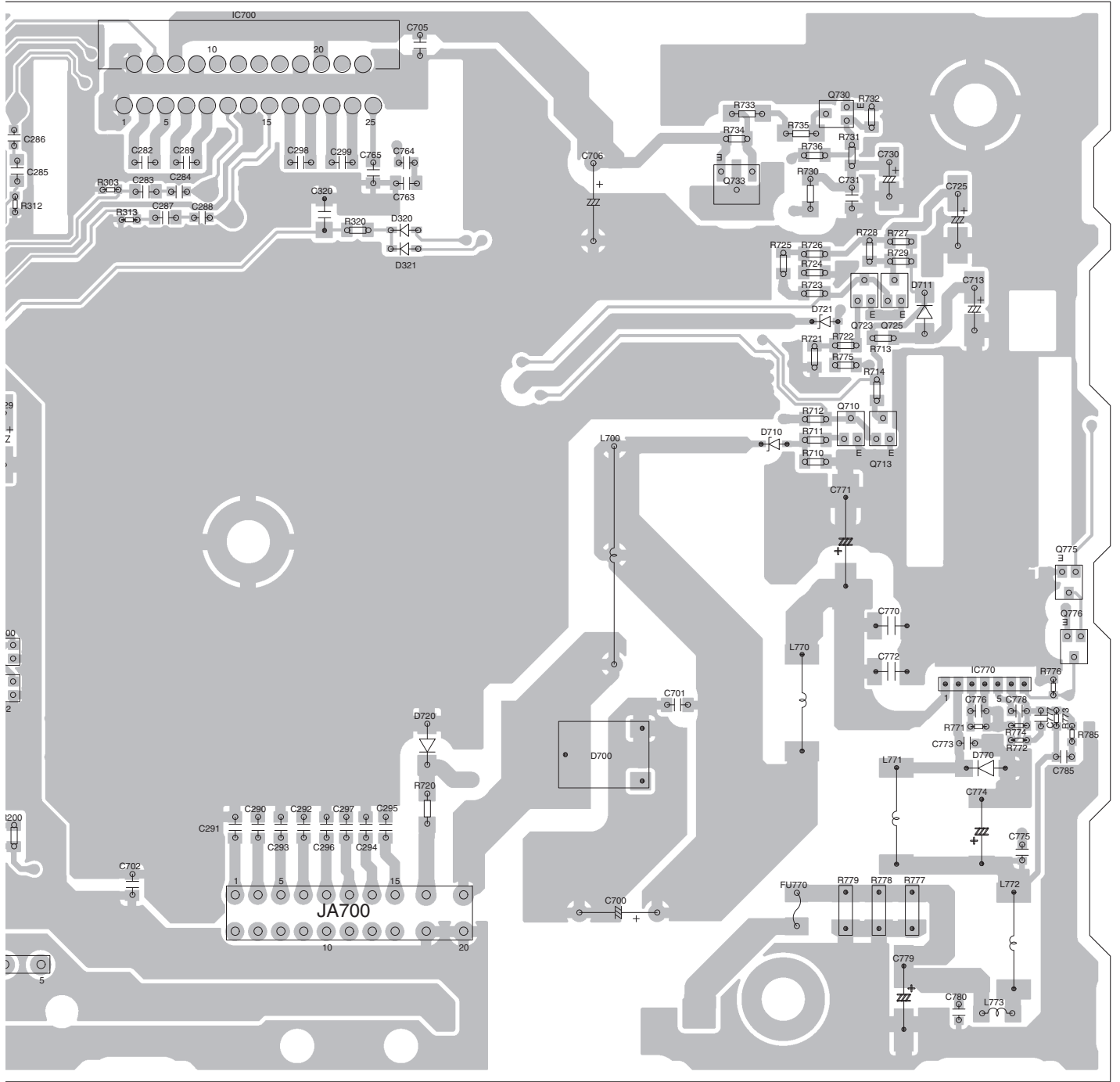


### A AMP UNIT



**SIDE A**

⚠ FU 770 (A,138,20) Fuse 4 A CEK1260



70

80

90

100

110

120

130

140

150

160

FRONT

ND-G500/XS/E5

**A**

A

**A** AMP UNIT

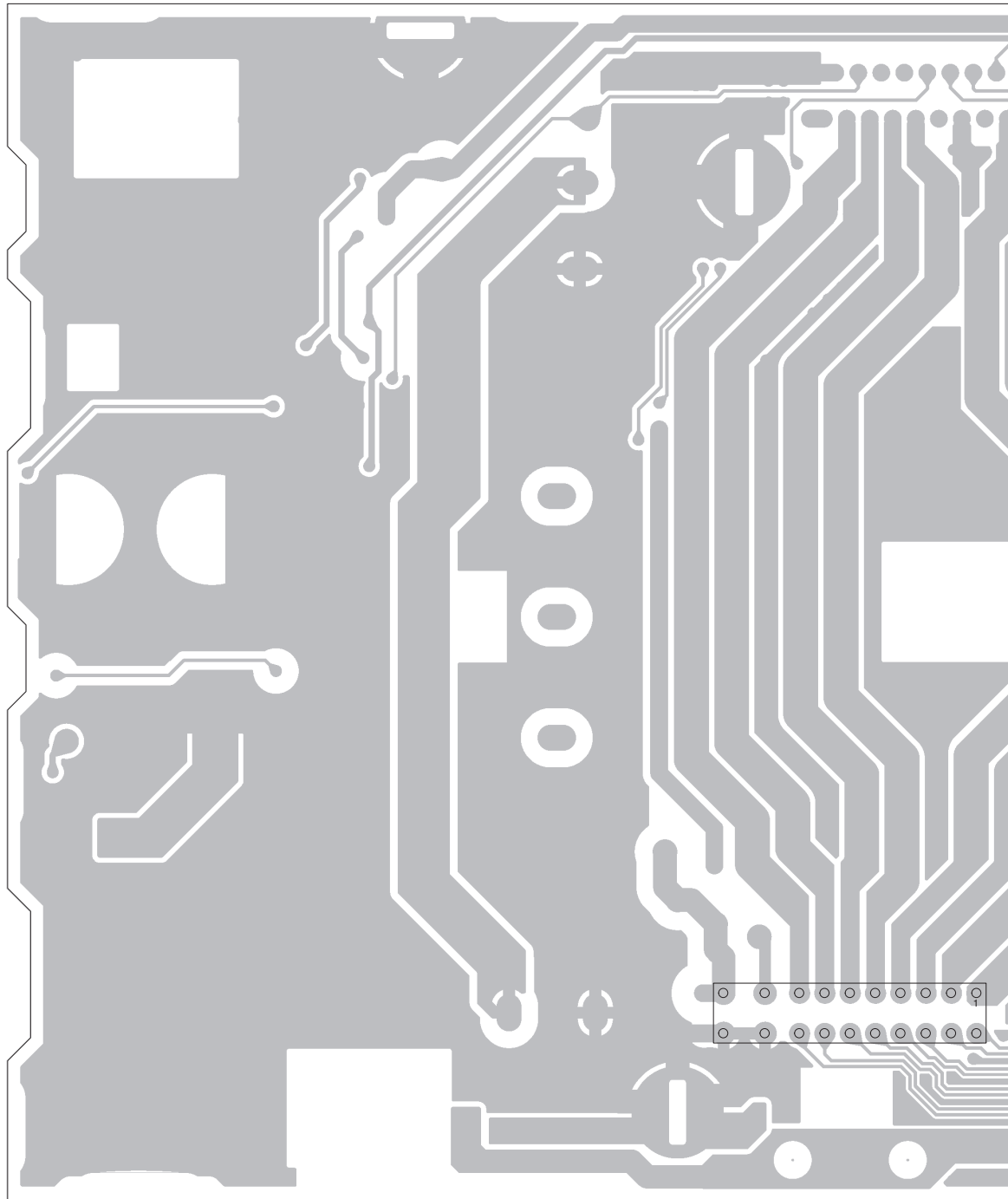
B

C

D

E

F



160 150 140 130 120 110 100 90

**A**

**SIDE B**

A

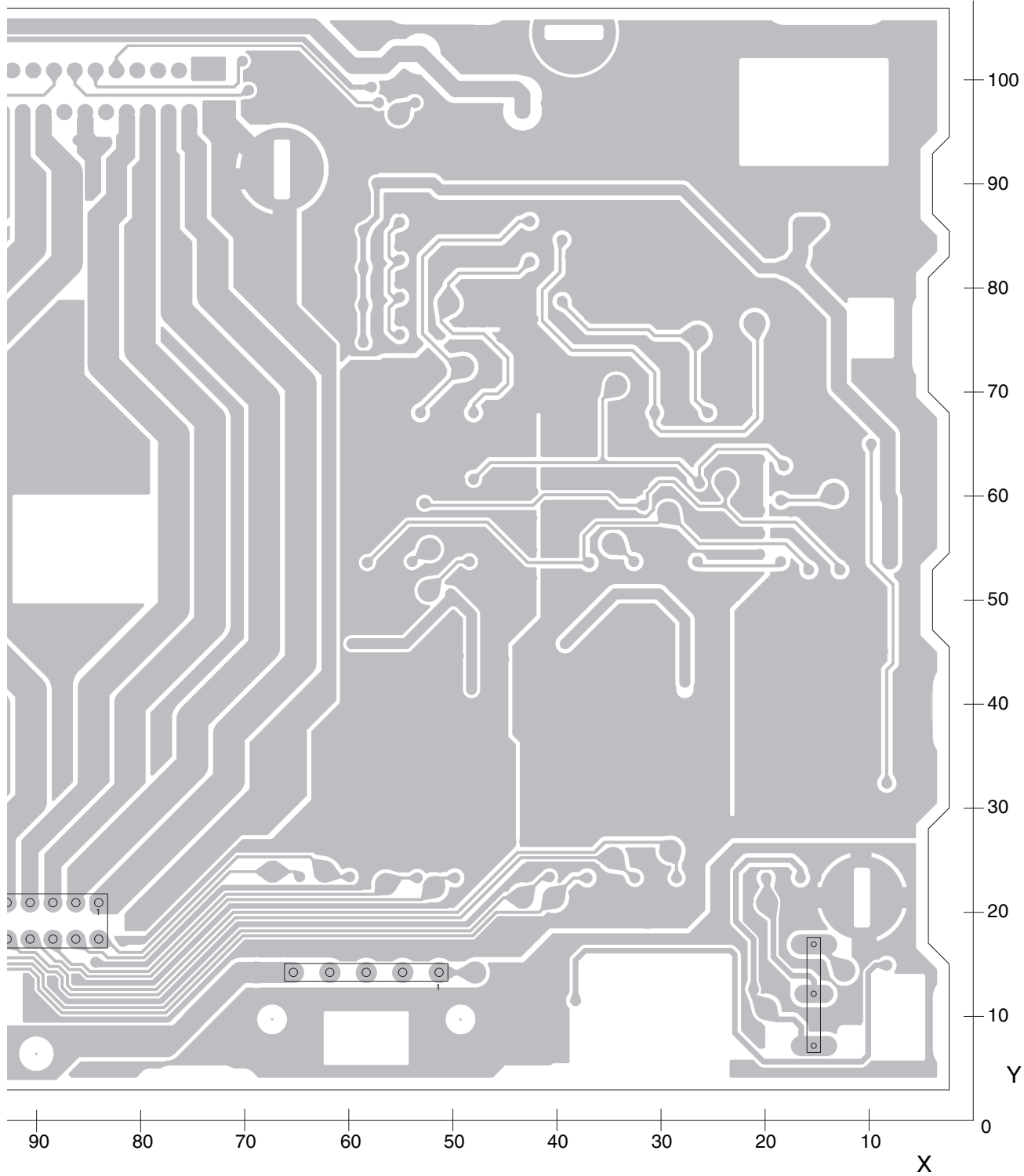
B

C

D

E

F



# 12. ELECTRICAL PARTS LIST

**NOTE:**

- Parts whose parts numbers are omitted are subject to being not supplied.
- The part numbers shown below indicate chip components.

*Chip Resistor*

RS1/○S○○○○J,RS1/○○S○○○○J

*Chip Capacitor (except for CQS.....)*

CKS....., CCS....., CSZS.....

- 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.
- Meaning of the figures and others in the parentheses in the parts list.

Example) IC 301 is on the point (face A, 91 of x-axis, and 111 of y-axis) of the corresponding PC board.

IC 301 (A, 91, 111) IC NJM2068V

- The expression of the unit in this manual is shown by u instead of  $\mu$ . Please do not make a mistake.

<u>Circuit Symbol and No.</u>	<u>Part No.</u>	<u>Circuit Symbol and No.</u>	<u>Part No.</u>
<b>Unit Number: CWN3555</b>		D 230 (A,41,44) Diode	DAN217U
<b>Unit Name : Amp Unit</b>		D 232 (A,41,41) Diode	DAN217U
		D 240 (A,31,40) Diode	DAN217U
		D 242 (A,30,43) Diode	DAN217U
		D 270 (A,21,22) Diode	MALS068X
		D 280 (A,17,22) Diode	MALS068X
		D 285 (A,14,22) Diode	MALS068X
		D 320 (A,100,85) Diode	1SS355
		D 321 (A,100,83) Diode	1SS355
		D 700 (A,116,34) Diode	ST70-27F
		D 710 (A,136,64) Diode	HZU7R5(B3)
		D 721 (A,141,76) Diode	HZU6R8(B2)
		D 740 (A,22,87) Diode	UDZS8R2(B)
		D 770 (A,156,33) Diode	RB050L-40
		D 790 (A,39,13) Diode	1SS355
		L 700 (A,121,54) Coil	CTH1113
		L 720 (A,38,74) Chip Coil	BTH1124
		L 750 (A,23,78) Chip Coil	BTH1124
		L 770 (A,139,39) Inductor	CTH1253
		L 771 (A,148,29) Inductor	CTH1253
		L 772 (A,159,17) Inductor	CTH1381
		L 773 (A,157,10) Inductor	CTF1718
		L 790 (A,42,13) Inductor	LCTAW2R2J2520
		$\triangle$ FU770 (A,138,20) Fuse 4 A	CEK1260

**MISCELLANEOUS**

IC 200 (A,53,49) IC	NJM2794RB2
IC 220 (A,51,66) Audio Selector IC	NJM2750M
IC 230 (A,33,49) IC	NJM2794RB2
IC 250 (A,29,66) Audio Selector IC	NJM2750M
IC 270 (A,14,49) IC	NJM2794RB2
IC 700 (A,85,103) IC	PAL007C
IC 770 (A,156,46) Regulator IC	BD9781HFP
Q 300 (A,58,87) Transistor	UMD2N
Q 301 (A,58,80) Transistor	UMD2N
Q 302 (A,53,87) Transistor	DTC323TU
Q 303 (A,53,80) Transistor	DTC323TU
Q 310 (A,58,84) Transistor	UMD2N
Q 311 (A,58,76) Transistor	UMD2N
Q 312 (A,53,83) Transistor	DTC323TU
Q 313 (A,53,76) Transistor	DTC323TU

**RESISTORS**

Q 710 (A,143,66) Transistor	2SC4081	R 200 (A,63,27)	RS1/10S103J
Q 713 (A,146,66) Chip Transistor	DTC114EUA	R 201 (A,61,27)	RS1/10S103J
Q 723 (A,145,79) Transistor	2SC4081	R 202 (A,58,27)	RS1/10S103J
Q 725 (A,148,79) Chip Transistor	DTC124EUA	R 203 (A,56,27)	RS1/10S103J
Q 730 (A,142,96) Transistor	2SC4081	R 204 (A,57,31)	RS1/16S561J
Q 733 (A,132,89) Transistor	2SB1189	R 210 (A,53,27)	RS1/10S103J
Q 740 (A,30,83) Transistor	2SD2318F5	R 211 (A,51,27)	RS1/10S103J
Q 775 (A,164,51) Transistor	2SC4081	R 212 (A,48,27)	RS1/10S103J
Q 776 (A,165,45) Chip Transistor	DTA114EUA	R 213 (A,46,27)	RS1/10S103J
Q 790 (A,13,61) Transistor	2SA1576A	R 214 (A,49,31)	RS1/16S561J
D 200 (A,62,44) Diode	DAN217U	R 230 (A,42,26)	RS1/10S103J
D 202 (A,62,41) Diode	DAN217U	R 231 (A,39,26)	RS1/10S103J
D 210 (A,52,40) Diode	DAN217U	R 232 (A,37,26)	RS1/10S103J
D 212 (A,51,43) Diode	DAN217U		



5		6		7		8	
<u>Circuit Symbol and No.</u>		<u>Part No.</u>		<u>Circuit Symbol and No.</u>		<u>Part No.</u>	
R 233	(A,35,26)	RS1/10S103J		R 841	(A,14,64)	RS1/16S473J	
R 234	(A,36,31)	RS1/16S561J		R 842	(A,16,61)	RS1/16S103J	
R 240	(A,32,26)	RS1/10S103J		<b><u>CAPACITORS</u></b>			
R 241	(A,30,26)	RS1/10S103J		C 200	(A,61,33)	CEVWNP1R0M50	
R 242	(A,28,26)	RS1/10S103J		C 202	(A,57,40)	CEVWNP1R0M50	
R 243	(A,25,26)	RS1/10S103J		C 210	(A,53,33)	CEVWNP1R0M50	
R 244	(A,28,31)	RS1/16S561J		C 212	(A,47,37)	CEVWNP1R0M50	
R 270	(A,21,26)	RS1/10S0R0J		C 215	(A,58,49)	CEHWV100M16	
R 271	(A,18,26)	RN1/10SE2202D		C 220	(A,56,56)	CEVWNP1R0M50	
R 275	(A,13,26)	RS1/10S0R0J		C 221	(A,46,56)	CEVWNP1R0M50	
R 276	(A,16,26)	RN1/10SE2202D		C 222	(A,61,56)	CEVWNP1R0M50	
R 280	(A,19,29)	RS1/10S0R0J		C 223	(A,51,56)	CEVWNP1R0M50	
R 285	(A,15,29)	RS1/10S0R0J		C 225	(A,51,61)	CKSRYB104K16	
R 300	(A,48,88)	RS1/16S821J		C 226	(A,57,64)	CKSRYB104K16	
R 301	(A,48,81)	RS1/16S821J		C 227	(A,57,69)	CKSRYB104K16	
R 302	(A,61,87)	RS1/16S104J		C 228	(A,51,72)	CKSRYB104K16	
R 303	(A,72,89)	RS1/16S104J		C 229	(A,62,65)	CEHWV470M16	
R 304	(A,46,87)	RS1/16S103J		C 230	(A,40,33)	CEVWNP1R0M50	
R 305	(A,46,81)	RS1/16S103J		C 232	(A,36,40)	CEVWNP1R0M50	
R 310	(A,48,85)	RS1/16S821J		C 240	(A,32,33)	CEVWNP1R0M50	
R 311	(A,48,78)	RS1/16S821J		C 242	(A,26,37)	CEVWNP1R0M50	
R 312	(A,63,87)	RS1/16S104J		C 245	(A,37,49)	CEHWV100M16	
R 313	(A,74,86)	RS1/16S104J		C 250	(A,34,56)	CEVWNP1R0M50	
R 314	(A,46,84)	RS1/16S103J		C 251	(A,25,56)	CEVWNP1R0M50	
R 315	(A,46,77)	RS1/16S103J		C 252	(A,39,56)	CEVWNP1R0M50	
R 320	(A,96,85)	RS1/10S122J		C 253	(A,30,56)	CEVWNP1R0M50	
R 710	(A,140,63)	RS1/10S473J		C 254	(A,29,61)	CKSRYB104K16	
R 711	(A,140,65)	RS1/10S473J		C 255	(A,35,64)	CKSRYB104K16	
R 712	(A,140,67)	RS1/10S103J		C 256	(A,35,69)	CKSRYB104K16	
R 714	(A,146,70)	RS1/10S0R0J		C 257	(A,28,72)	CKSRYB104K16	
R 720	(A,103,29)	RS1/8S222J		C 258	(A,39,64)	CEHWV470M16	
R 721	(A,140,73)	RS1/10S223J		C 270	(A,20,34)	CEVWNP100M16	
R 722	(A,143,74)	RS1/10S223J		C 271	(A,18,41)	CEVWNP100M16	
R 723	(A,140,79)	RS1/10S103J		C 275	(A,11,41)	CEVWNP100M16	
R 724	(A,140,81)	RS1/10S153J		C 276	(A,14,34)	CEVWNP100M16	
R 725	(A,137,82)	RS1/10S103J		C 277	(A,18,49)	CEHWV100M16	
R 726	(A,140,83)	RS1/10S223J		C 280	(A,61,91)	CKSQYB474K16	
R 727	(A,148,84)	RS1/10S331J		C 281	(A,60,94)	CKSRYB474K16	
R 728	(A,145,83)	RS1/10S821J		C 283	(A,75,89)	CKSQYB474K16	
R 733	(A,133,96)	RS1/8S471J		C 284	(A,79,89)	CKSRYB474K16	
R 734	(A,132,94)	RS1/10S103J		C 285	(A,63,91)	CKSQYB474K16	
R 735	(A,139,94)	RS1/8S471J		C 286	(A,63,94)	CKSRYB474K16	
R 736	(A,140,92)	RS1/10S223J		C 287	(A,77,86)	CKSQYB474K16	
R 740	(A,31,100)	RS1/4S821J		C 288	(A,81,86)	CKSRYB474K16	
R 741	(A,23,82)	RS1/10S1R0J		C 300	(A,43,88) 10 uF	CCG1182	
R 742	(A,39,97)	RS1/10S0R0J		C 301	(A,43,81) 10 uF	CCG1182	
R 761	(A,55,99)	RS1/16S103J		C 310	(A,43,84) 10 uF	CCG1182	
R 771	(A,156,37)	RS1/16S473J		C 311	(A,43,79) 10 uF	CCG1182	
R 772	(A,160,36)	RS1/16S473J		C 320	(A,93,86) 10 uF	CCG1182	
R 773	(A,163,38)	RS1/16S3602D		C 700	(A,121,19) 3 300 uF/16 V	CCH1583	
R 774	(A,160,37)	RS1/16S7501D		C 701	(A,127,39)	CKSQYB104K50	
R 775	(A,143,72)	RS1/10S223J		C 702	(A,74,22)	CCSQCH102J50	
R 776	(A,163,41)	RS1/16S473J		C 705	(A,102,103)	CKSQYB104K50	
R 777	(A,149,19)	RS1/4S271J		C 706	(A,119,88) 3 300 uF/16 V	CCH1583	
R 778	(A,146,19)	RS1/4S271J		C 725	(A,154,86)	CEHWV330M16	
R 779	(A,143,19)	RS1/4S271J		C 740	(A,27,93)	CEHWV101M16	
R 785	(A,165,36)	RS1/16S562J		C 741	(A,22,86)	CKSRYB103K50	
R 790	(A,45,16)	RS1/10S103J		C 742	(A,17,80)	CEHWV331M16	
R 792	(A,11,64)	RS1/10S472J					
R 793	(A,10,61)	RS1/10S472J					

**Circuit Symbol and No.****Part No.**

	C 746	(A,51,49)		CKSRYB104K16
	C 747	(A,47,49)		CEHVW220M16
	C 749	(A,30,49)		CKSRYB104K16
A	C 750	(A,26,48)		CEHVW220M16
	C 751	(A,49,73)		CCSRCH101J50
	C 752	(A,49,72)		CKSRYB224K16
	C 753	(A,43,72)		CEHVW220M16
	C 754	(A,26,73)		CCSRCH101J50
	C 755	(A,26,72)		CKSRYB224K16
	C 756	(A,20,72)		CEHVW220M16
	C 759	(A,12,49)		CKSRYB104K16
	C 760	(A,8,49)		CEHVW220M16
	C 761	(A,43,93)		CEHVW1R0M50
	C 762	(A,53,93)		CEHVW101M16
B	C 763	(A,101,89)		CKSQYB225K16
	C 764	(A,101,91) 2.2 uF		CCG1179
	C 771	(A,143,55)		CEHVW331M25
	C 772	(A,147,42) 10 uF		CCG1223
	C 773	(A,155,36)		CCSRCH101J50
	C 774	(A,156,27) 220 uF/10 V		CCH1409
	C 775	(A,160,25)		CKSRYB104K16
	C 776	(A,156,39)		CKSRYB104K16
	C 777	(A,162,38)		CKSRYB682K50
	C 779	(A,148,11)		CEHVW101M16
	C 780	(A,154,10)		CKSRYB104K16
C	C 785	(A,164,34)		CKSRYB222K50
	C 790	(A,44,13)		CKSRYB104K16
	C 842	(A,17,64)		CKSYB105K16

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