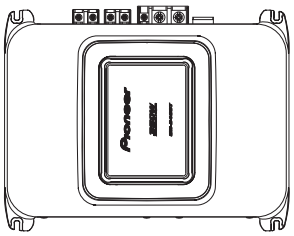
Pioneer

Service Manual



GM-3400T/XJUC

ORDER NO.
CRT4513

BRIDGEABLE TWO-CHANNEL POWER AMPLIFIER

GM-3400T/XJUC
GM-3400T/XJEW5
GM-3400T/XJES

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

PIONEER CORPORATION 4-1, Meguro 1-chome, Meguro-ku, Tokyo 153-8654, Japan
PIONEER ELECTRONICS (USA) INC. P.O. Box 1760, Long Beach, CA 90801-1760, U.S.A.
PIONEER EUROPE NV Haven 1087, Keetberglaan 1, 9120 Melsele, Belgium
PIONEER ELECTRONICS ASIACENTRE PTE. LTD. 253 Alexandra Road, #04-01, Singapore 159936

K-ZZZ. DEC. 2009 Printed in Japan

SAFETY INFORMATION

CAUTION

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.

WARNING

This product may contain a chemical known to the State of California to cause cancer, or birth defects or other reproductive harm.
Health & Safety Code Section 25249.6 - Proposition 65

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:

[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

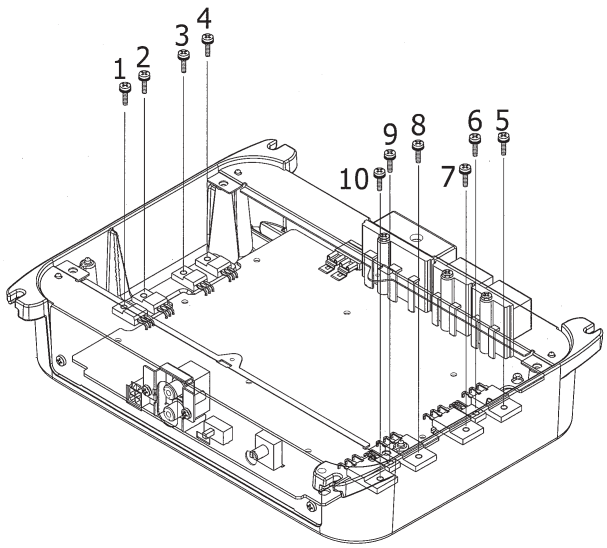
To protect products from damages or failures during transit, the shipping mode should be set or the shipping screws should be installed before shipment. Please be sure to follow this method especially if it is specified in this manual.

CONTENTS

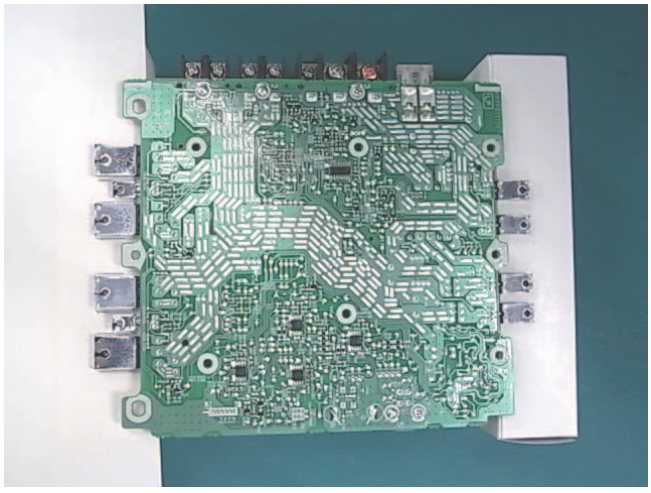
1. SERVICE PRECAUTIONS

1.1 SERVICE PRECAUTIONS

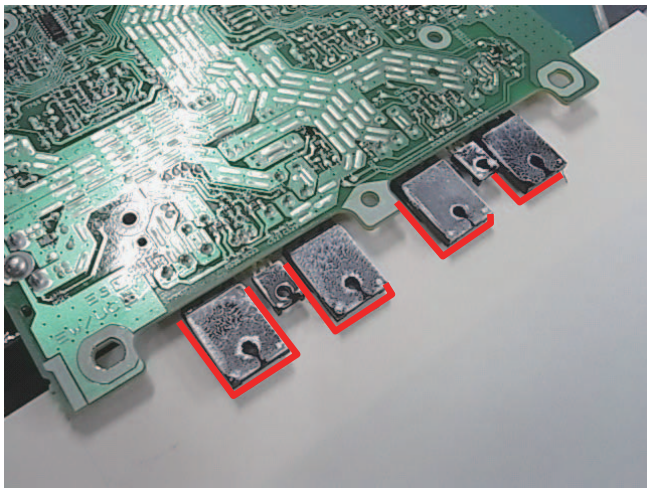
1. You should conform to the regulations governing the product (safety, radio and noise, and other regulations), and should keep the safety during servicing by following the safety instructions described in this manual.
2. Be careful in handling ICs. Some ICs such as MOS type are so fragile that they can be damaged by electrostatic induction.
3. When you tighten the screws No. 1 to 10, tightly hold a transistor or a diode to be fixed to prevent the part from turning by the force of tightening the screw.
   (If the part turned, a stress will be applied to the solder and may cause a failure such as a solder crack.)



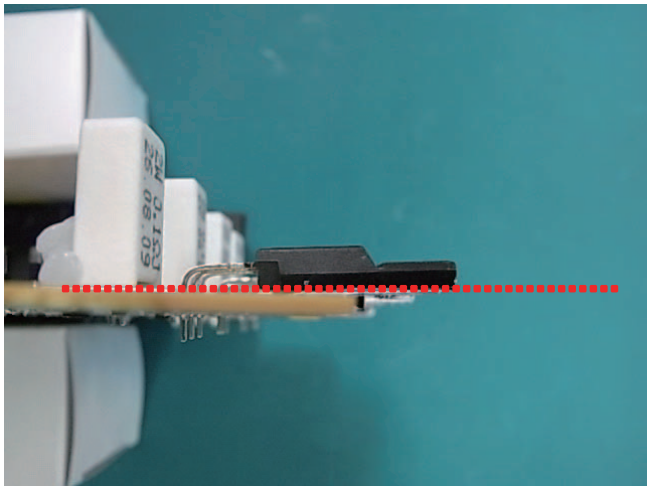
4. When you replace a part fixed to the heatsink (Q515, Q516, Q517,Q518, Q519, Q520, Q803, Q804, D821 and D822), adjust the position of the part according to the following.



Put the Amp Unit on blocks.

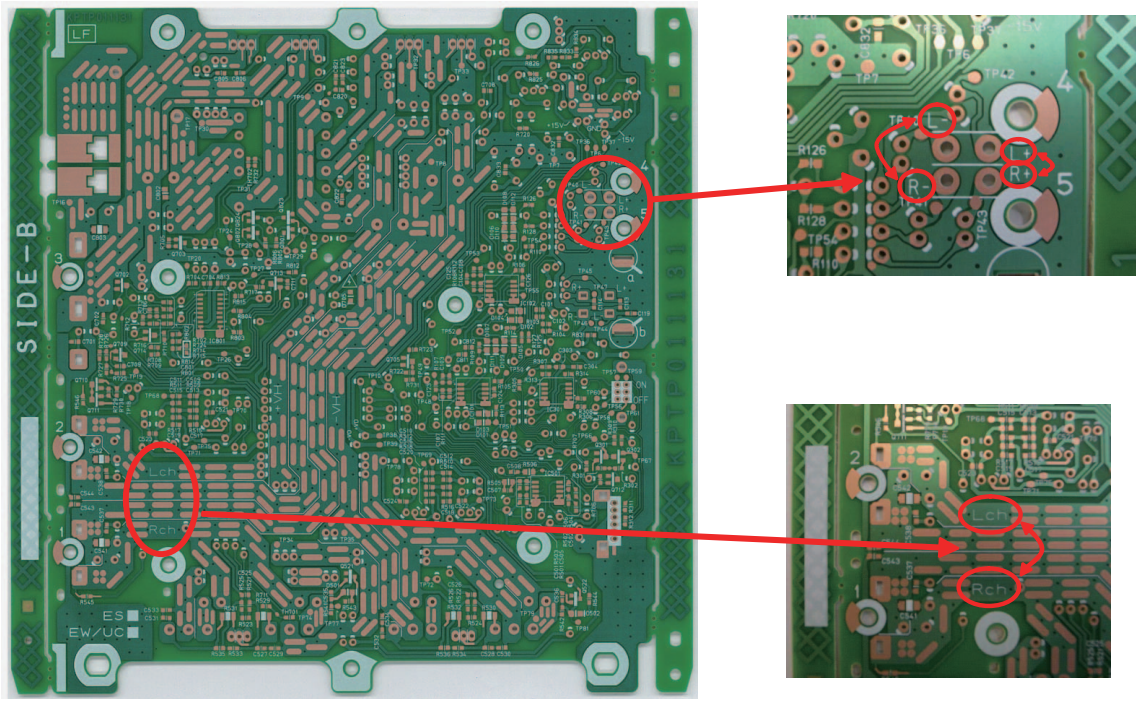


Put a paper between the block and the Amp Unit, and outline transistors and diodes.
Put a part to replace in the outline.



Align the bottom of a transistor or a diode with the top of the PC board, and solder it.
Apply grease, GEM1057 to the back of the part.

5. Silk-prints of "L" and "R" on the Amp Unit are printed wrongly each other. ("L" should be "R", and "R" should be "L".)



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 ℃.
  Therefore, for lead-free soldering, the tip temperature of a soldering iron must be set to around 373 ℃ 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

GM-3400T/XJUC

Power source ..... 14.4 V DC (10.8 V to 15.1 V allowable)
Grounding system ..... Negative type
Current consumption ..... 15 A (at continuous power, 4 ohm)
Average current drawn ..... 4 A (4 ohm for two channels)
7.8 A (4 ohm for one channel)
Backup current ..... 0.1 mA or less
Fuse ..... 25 A × 1
Dimensions (W × H × D) ... 263 mm × 61 mm × 206 mm(10-3/8 in. × 2-3/8 in. × 8-1/8 in.)
Weight ..... 2 kg (4.4 lbs) (Leads for wiring not included)
Maximum power output ..... 120 W × 2 (4 ohm)
/ 350 W × 1 (4 ohm)
Continuous power output ..60 W × 2 (at 14.4 V, 4 ohm , 20 Hz to 20 kHz 0.2% THD)
175 W × 1 (at 14.4 V, 4 ohm , 20 Hz to 20 kHz 0.8% THD)
85 W × 2 (at 14.4 V, 2 ohm , 20 Hz to 20 kHz 0.8% THD)
Load impedance ..... 4 ohm (2 ohm to 8 ohm allowable) (Bridge connection: 4 ohm to 8 ohm allowable)
Frequency response..... 10 Hz to 50 kHz (+0 dB, –1 dB)
Signal-to-noise ratio..... 95 dB (IHF-A network)
Distortion ..... 0.01 % (10 W, 1 kHz)
Separation ..... 70 dB (1 kHz)

Low pass filter:
Cut off frequency ..... 80 Hz
Cut off slope ..... –12 dB/oct
Gain control:
RCA ..... 200 mV to 6.5 V
Speaker ..... 0.8 V to 26 V
Maximum input level / impedance:
RCA ..... 6.5 V / 22 k ohm
Speaker ..... 26 V / 90 k ohm

CEA2006 Specifications

Power output ..... 60 W RMS × 2 Channels (at 14.4 V, 4 ohm and ≦ 1 % THD +N)
175 W RMS × 1 Channels (at 14.4 V, 4 ohm BRIDGE and ≦ 1 % THD+N)
85 W RMS × 2 Channels (at 14.4 V, 2 ohm and ≦ 1 % THD +N)
S/N ratio ..... 75 dBA (reference: 1 W into 4 ohm)

Notes

- Specifications and the design are subject to modifications without notice due to improvements.
- The average current drawn is nearly the maximum current drawn by this unit when an audio signal is input. Use this value when working out total current drawn by multiple power amplifiers.▣

GM-3400T/XJEW5, GM-3400T/XJES

Power source ..... 14.4 V DC (10.8 V to 15.1 V allowable)
Grounding system ..... Negative type
Current consumption ..... 15 A (at continuous power, 4 ohm)
Average current drawn ..... 4 A (4 ohm for two channels)
7.8 A (4 ohm for one channel)
Backup current ..... 0.1 mA or less
Fuse ..... 25 A × 1
Dimensions (W × H × D) ... 263 mm × 61 mm × 206 mm
Weight ..... 2 kg (Leads forwiring not included)
Maximum power output ..... 120 W × 2 (4 ohm)
/ 350 W × 1(4 ohm)
Continuous power output ... 60 W × 2 (at 14.4 V, 4 ohm)
, 20 Hz to 20 kHz 0.2% THD)
175 W × 1 (at 14.4 V, 4 ohm)
, 20 Hz to 20 kHz 0.8% THD)
85 W × 2 (at 14.4 V, 2 ohm)
, 20 Hz to 20 kHz 0.8% THD)
Load impedance ..... 4 ohm (2 ohm to 8 ohm allowable)
(Bridge connection: 4 ohm to 8 ohm allowable)
Frequency response ..... 10 Hz to 50 kHz (+0 dB, –1 dB)
Signal-to-noise ratio ..... 95 dB (IEC-A network)
Distortion ..... 0.01 % (10 W, 1 kHz)
Separation ..... 70 dB (1 kHz)
Low pass filter:
Cut off frequency ..... 80 Hz
Cut off slope ..... –12 dB/oct
Gain control:
RCA ..... 200 mV to 6.5 V
Speaker ..... 0.8 V to 26 V
Maximum input level / impedance:
RCA ..... 6.5 V / 22 k ohm
Speaker ..... 26 V / 90 k ohm

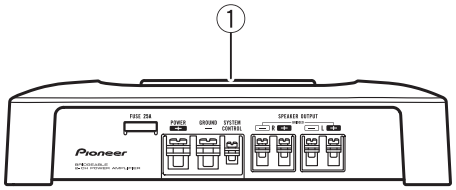
Notes

- Specifications and the design are subject to modifications without notice due to improvements.
- The average current drawn is nearly the maximum current drawn by this unit when an audio signal is input. Use this value when working out total current drawn by multiple power amplifiers.

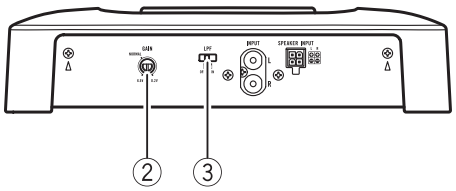
2.2 PANEL FACILITIES

What ’s what

Front side



Rear side



To adjust the switch, use a flathead screwdriver if needed.

① **Power indicator**
The power indicator lights up to indicate power ON.

② **GAIN (gain) control**
If output remains low, even when the car stereo volume is turned up, turn controls to lower level. If distortion occurs when the car stereo volume is turned up, turn these controls to higher level.

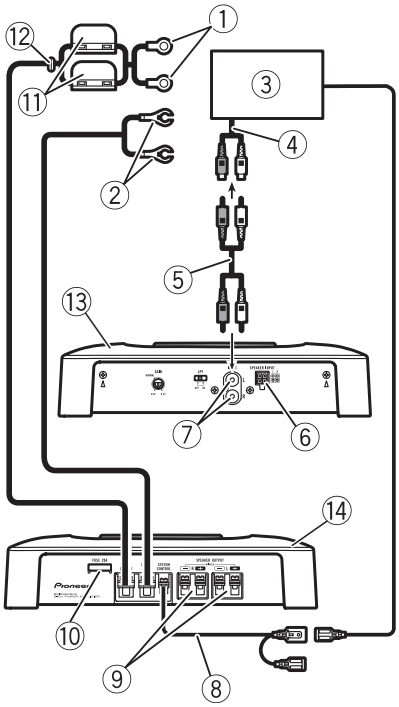
- For use with an RCA equipped car stereo (standard output of 500 mV), set to the **NORMAL** position. For use with an RCA equipped Pioneer car stereo, with max. output of 4 V or more, adjust level to match that of the car stereo output.
- If you hear too much noise when using the speaker input terminals, turn the gain control to higher level.

③ **LPF (low-pass filter) switch**
Switch the settings based on the connected speaker.

- When the Subwoofer is connected:
  Select **ON**. This eliminates high range frequency and outputs low range frequency.
- When the full range speaker is connected:
  Select **OFF**. **OFF** outputs the entire frequency range.■

2.3 CONNECTION DIAGRAM

Connection diagram



① Special red battery wire
RD-223 (sold separately)
After completing all other amplifier connections, finally connect the battery wire terminal of the amplifier to the positive (⊕) battery terminal.

② Ground wire (Black)
RD-223 (sold separately)
Connect to metal body or chassis.

③ Car stereo with RCA output jacks (sold separately)

④ External output

⑤ Connecting wire with RCA pin plugs (sold separately)

⑥ Speaker input terminal

⑦ RCA input jack

⑧ System remote control wire (sold separately)
Connect male terminal of this wire to the system remote control terminal of the car stereo (**SYSTEM REMOTE CONTROL**). The female terminal can be connected to the auto-antenna relay control terminal. If the car stereo lacks a system remote control terminal, connect the male terminal to the power terminal via the ignition switch.

⑨ Speaker output terminals
Please see the following section for speaker connection instructions. Refer to Connections when using the speaker input wire.

⑩ Fuse (25 A) × 1

⑪ Fuse (30 A) × 2

⑫ Grommet

⑬ Rear side

⑭ Front side ▣

3. BASIC ITEMS FOR SERVICE

3.1 CHECK POINTS AFTER SERVICING

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.

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

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

3.2 JIGS LIST

● **Lubricants and Glues List**

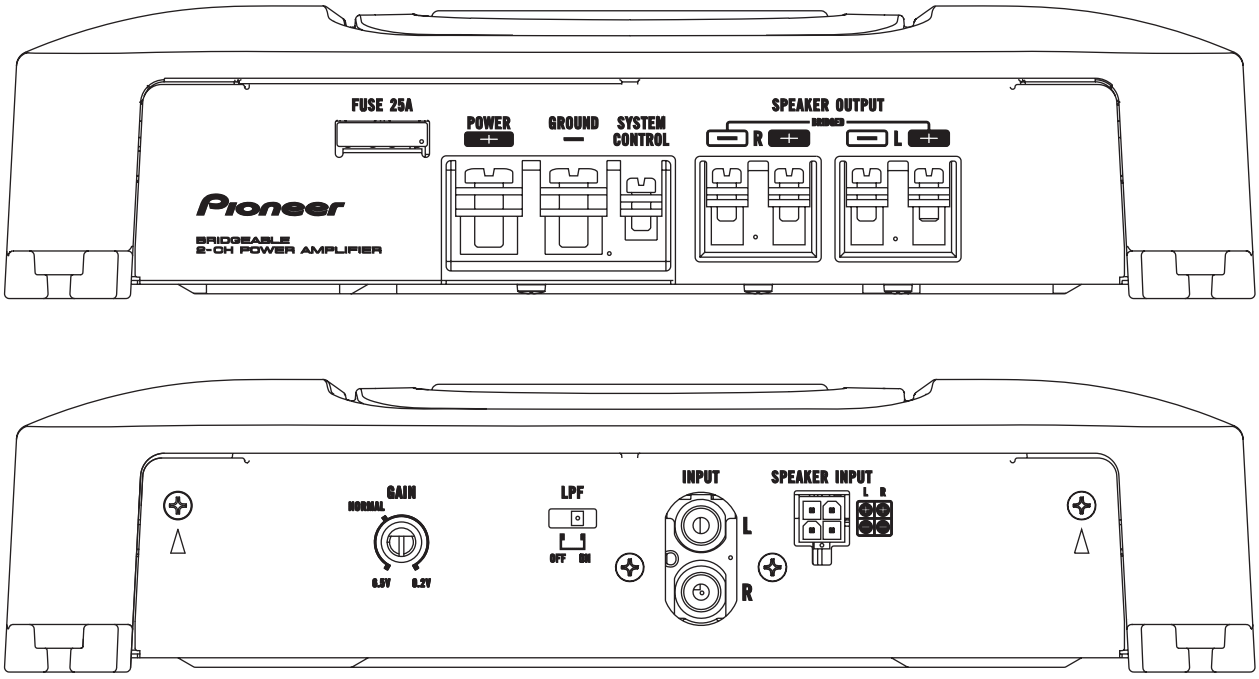
Name	Grease No.	Remarks
Grease	GEM1057	Applying to Heatsink
Bond	GYL1006	Applying to choke coil, resistor and capacitor

4. BLOCK DIAGRAM

There is not information to be shown in this chapter.

5. DIAGNOSIS

5.1 CONNECTOR FUNCTION DESCRIPTION



6. SERVICE MODE

There is not information to be shown in this chapter.

7. DISASSEMBLY

● Removing the Case (Fig.1)

1 Remove the four screws and then remove the Case.

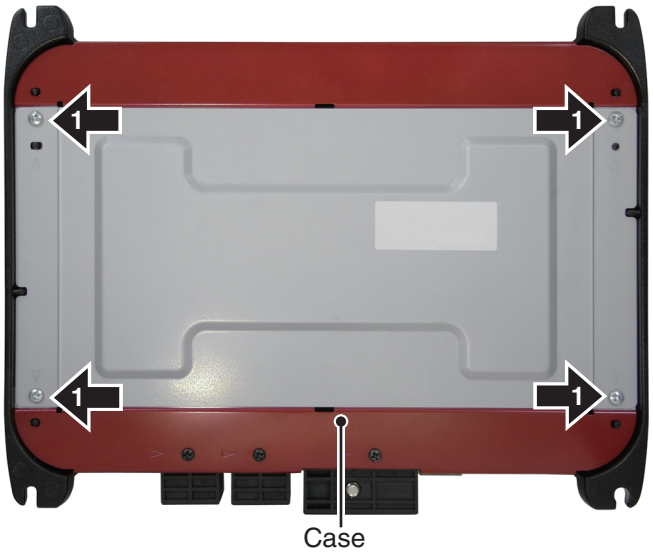


Fig.1

● Removing the Amp Unit (Fig.2)

1 Remove the two screws.

2 Remove the ten screws.

3 Remove the eight screws and then remove the Amp Unit.

When you tighten the screws indicated by Arrow 2, tightly hold a transistor or a diode to be fixed to prevent the part from turning by the force of tightening the screw.
(If the part turned, a stress will be applied to the solder and may cause a failure such as a solder crack.)

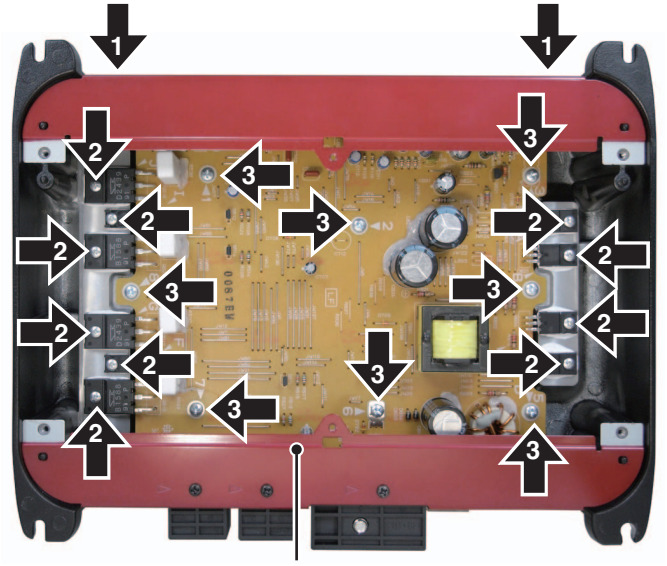
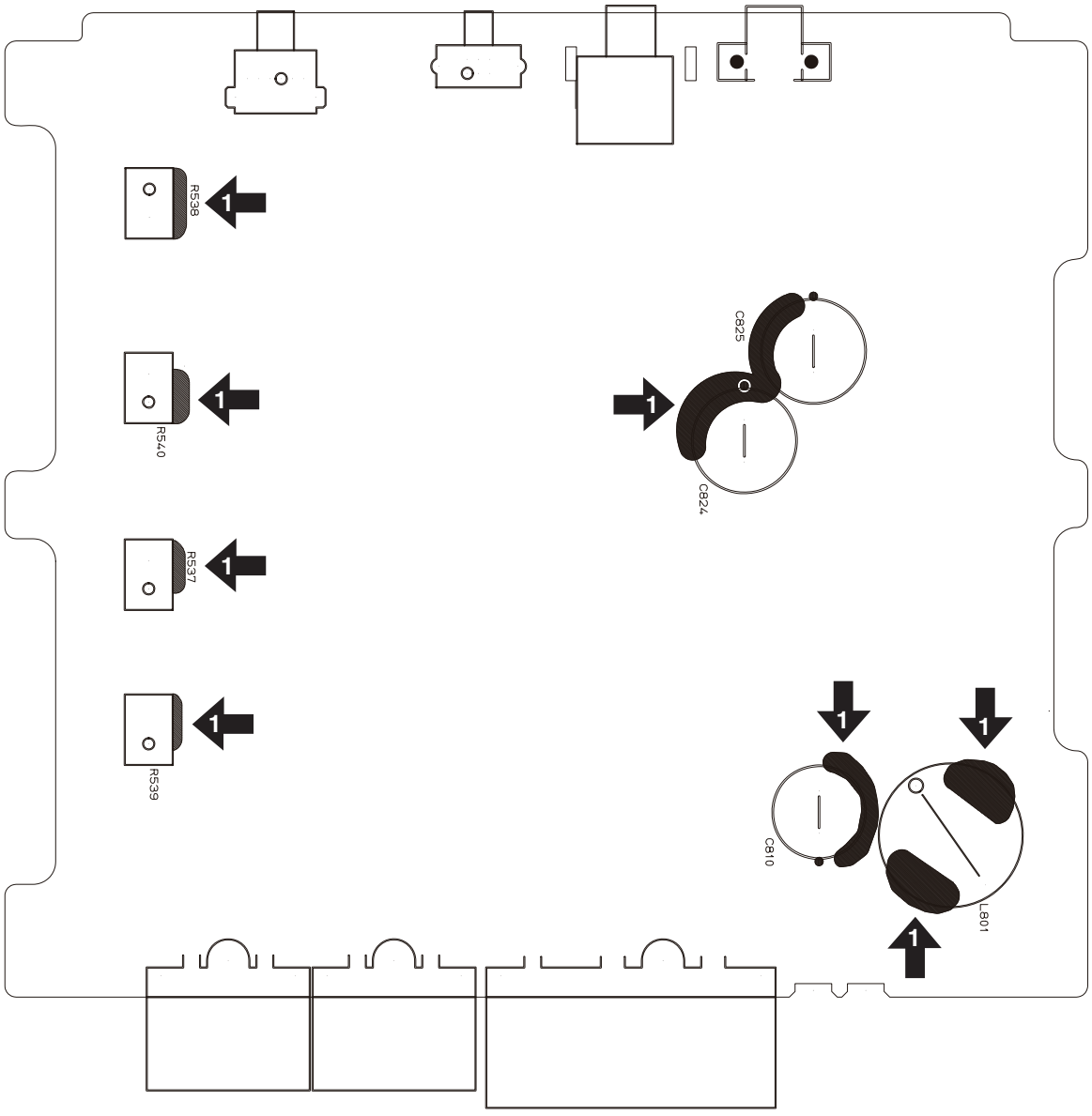


Fig.2

Bonding Position

1 GYL1006



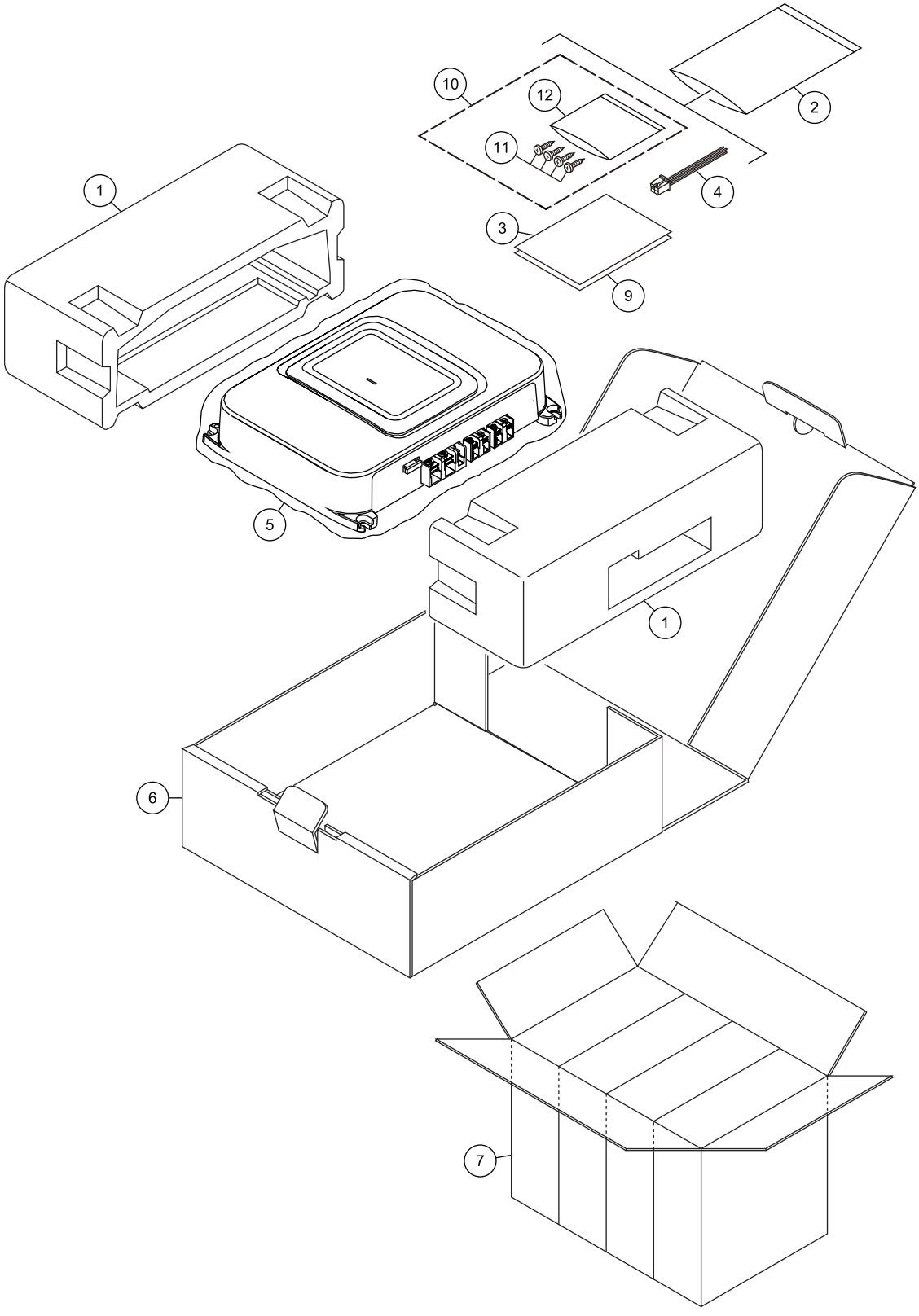
8. EACH SETTING AND ADJUSTMENT

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 ⚠ 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▽ 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



(1) PACKING SECTION PARTS LIST

Mark	No.	Description	Part No.
	1	Cushion	CZH6698
*	2	Polyethylene Bag	CEG1250
*	3	Warranty Card	See Contrast table(2)
	4	Cord Assy	CZD5517
*	5	Polyethylene Bag	See Contrast table(2)
	6	Unit Box	See Contrast table(2)
	7	Contain Box	CZH6703
	8	•••••	
	9	Owner's Manual	See Contrast table(2)
	10	Screw Assy	CEA5330
	11	Screw	BYC40P180FTB
*	12	Polyethyene Seet	CNM4338

(2) CONTRAST TABLE

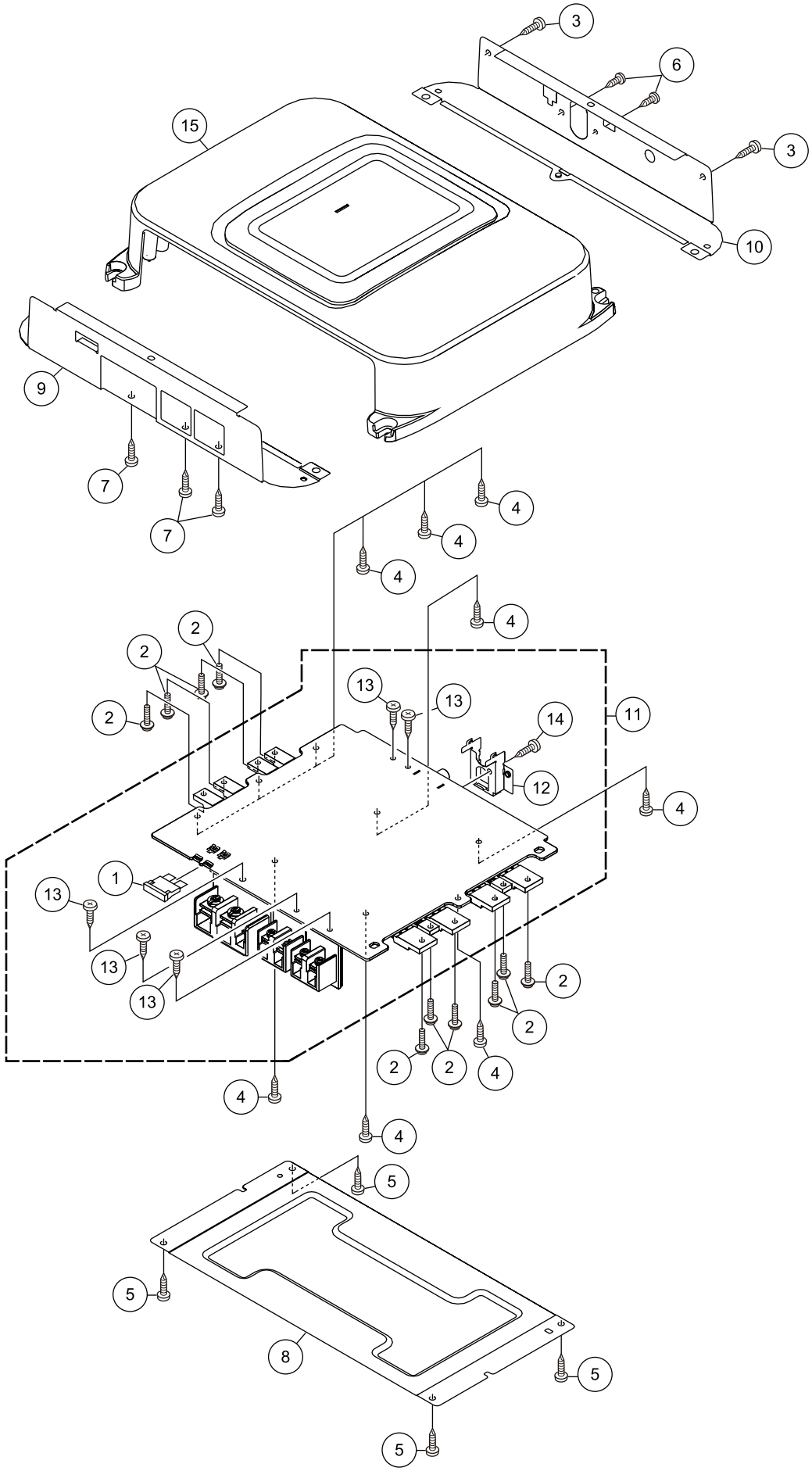
GM-3400T/XJUC, GM-3400T/XJEW5 and GM-3400T/XJES are constructed the same except for the following:

Mark	No.	Description	GM-3400T/XJUC	GM-3400T/XJEW5	GM-3400T/XJES
*	3	Warranty Card	CRY1276	CRY1279	Not used
*	5	Polyethylene Bag	CZE2992	CZE2991	CZE2991
	6	Unit Box	CZH6702	CZH6700	CZH6704
	7	Contain Box	CZH6703	CZH6701	CZH6705
	9	Owner's Manual	CZR5552	CZR5551	CZR5553

Owner's Manual,Installation Manual

Part No.	Language
CZR5551	English, Spanish(Espanol), German, French, Italian, Dutch, Russian
CZR5552	English, French, Spanish(Espanol)
CZR5553	English, Spanish(Espanol), Portuguese(B), Arabic

9.2 EXTERIOR



(1) EXTERIOR SECTION PARTS LIST

Mark	No.	Description	Part No.
⚠	1	Fuse(25 A)	CEK1329
	2	Screw	PBH26P120FTC
	3	Screw	BBZ30P080FTB
	4	Screw	BBZ30P080FTC
	5	Screw	BBZ30P080FTC
	6	Screw	BSZ30P060FTB
	7	Screw	PPZ30P100FTB
	8	Chassis (Botom)	CZN8457
	9	Panel F (2CH)	CZN8458
	10	Panel R (2CH)	CZN8459
	11	Amp Unit	See Contrast table (2)
	12	Holder	CZN8430
	13	Screw	PPZ30P100FNN
	14	Screw	PPZ30P100FTB
	15	Case Unit	See Contrast table (2)

(2) CONTRAST TABLE

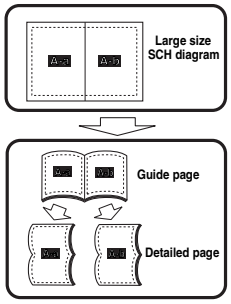
GM-3400T/XJUC, GM-3400T/XJEW5 and GM-3400T/XJES are constructed the same except for the following:

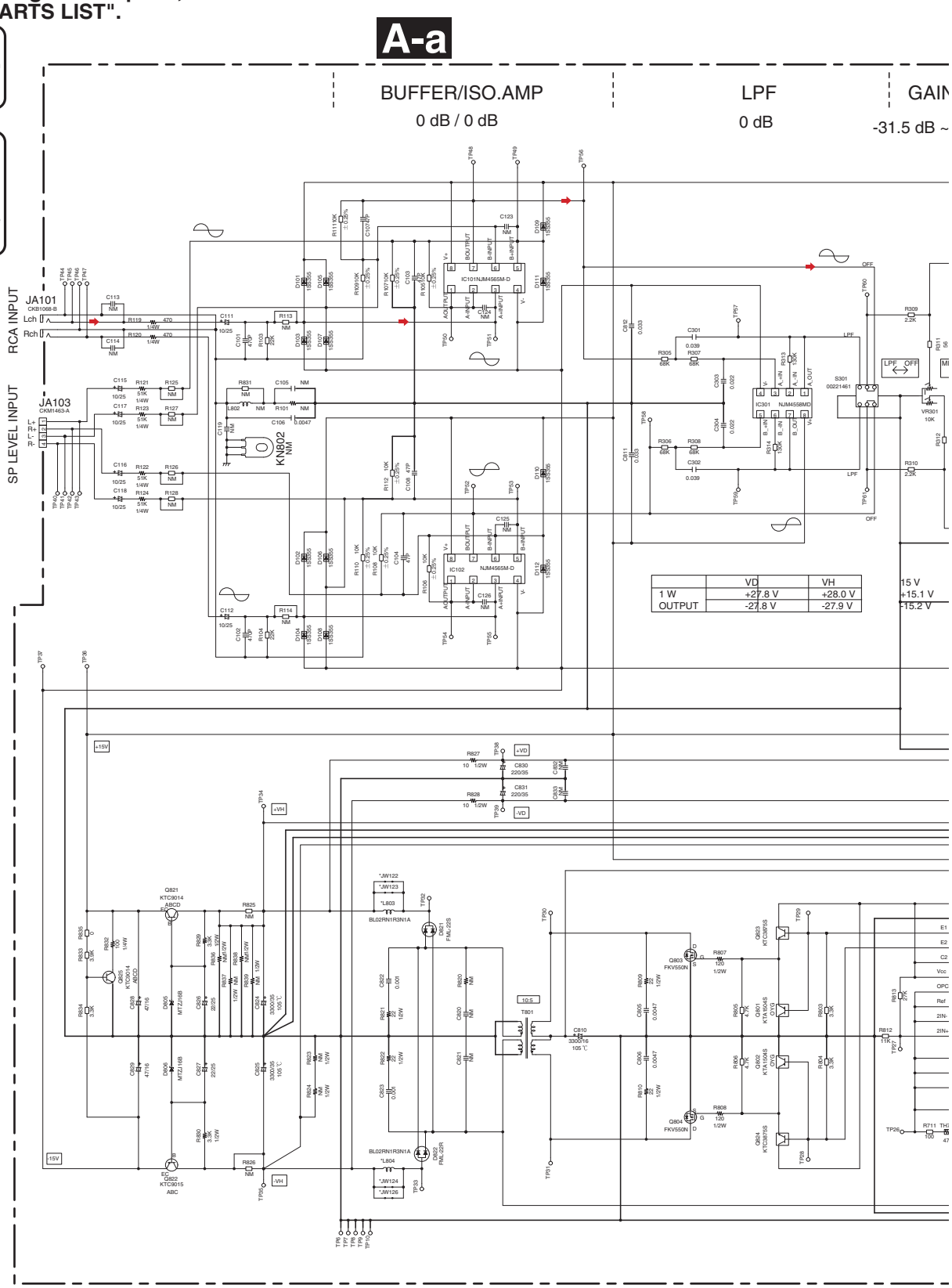
Mark	No.	Description	GM-3400T/XJUC	GM-3400T/XJEW5	GM-3400T/XJES
	11	Amp Unit	CZW5581	CZW5581	CZW5582
	15	Case Unit	CZX6655	CZX6654	CZX6654

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".

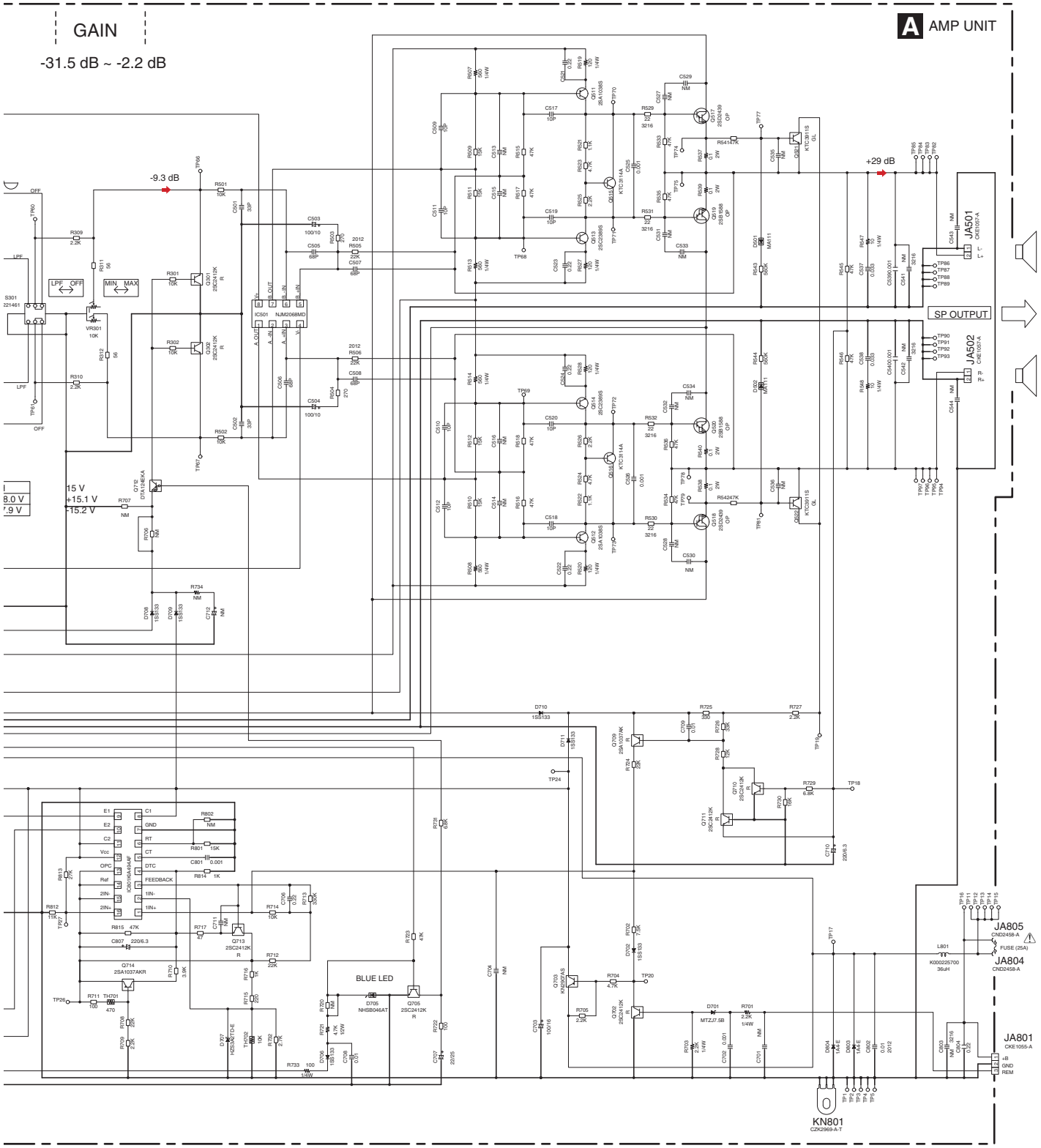




MODEL	L803	L804	JW122	JW123	JW124	JW126
GM-3400T/XJUC GM-3400T/XJEW5	×	×	○	○	○	○
GM-3400T/XJES	○	○	×	×	×	×

A-b

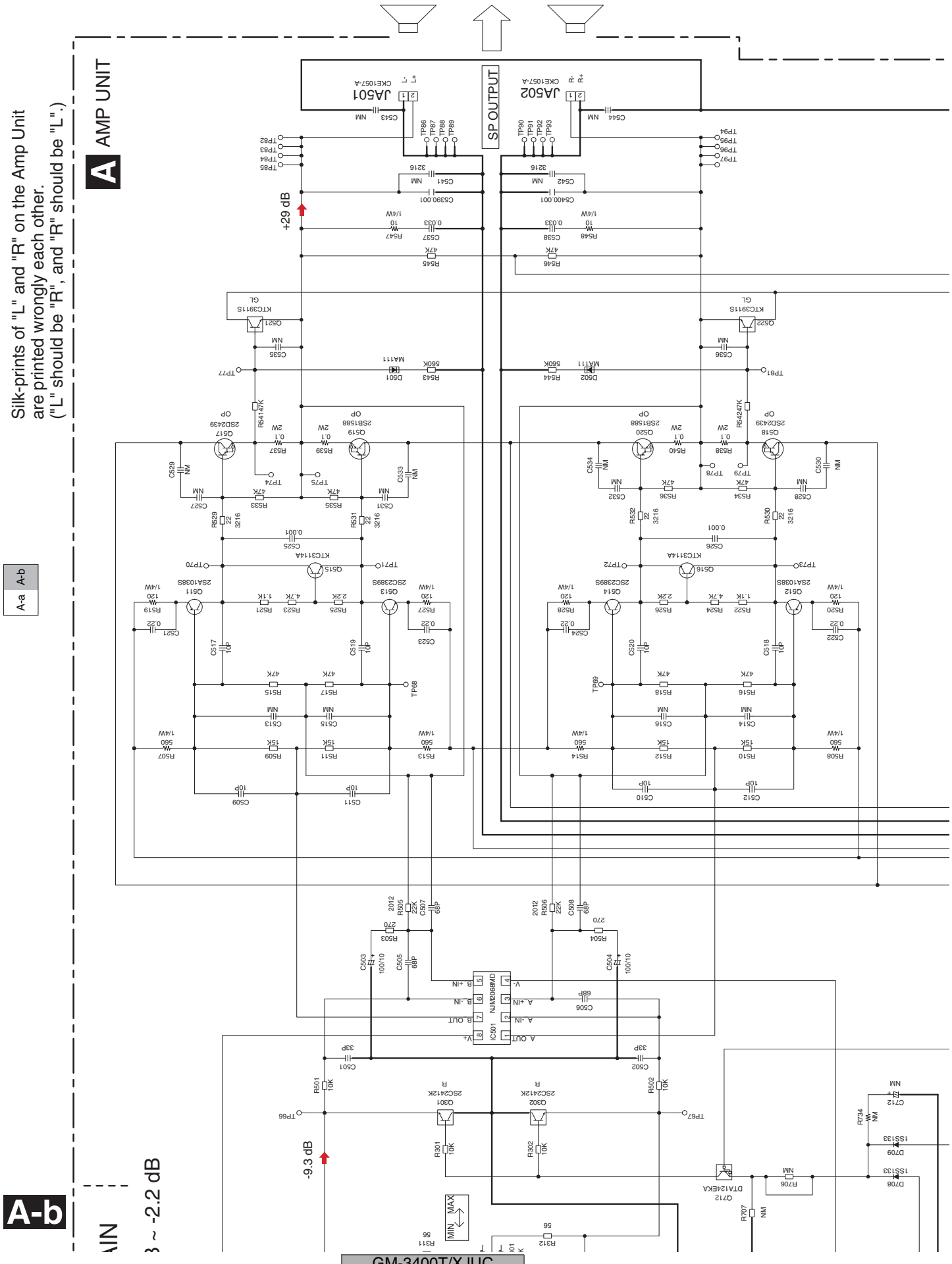
Silk-prints of "L" and "R" on the Amp Unit
are printed wrongly each other.
("L" should be "R", and "R" should be "L".)

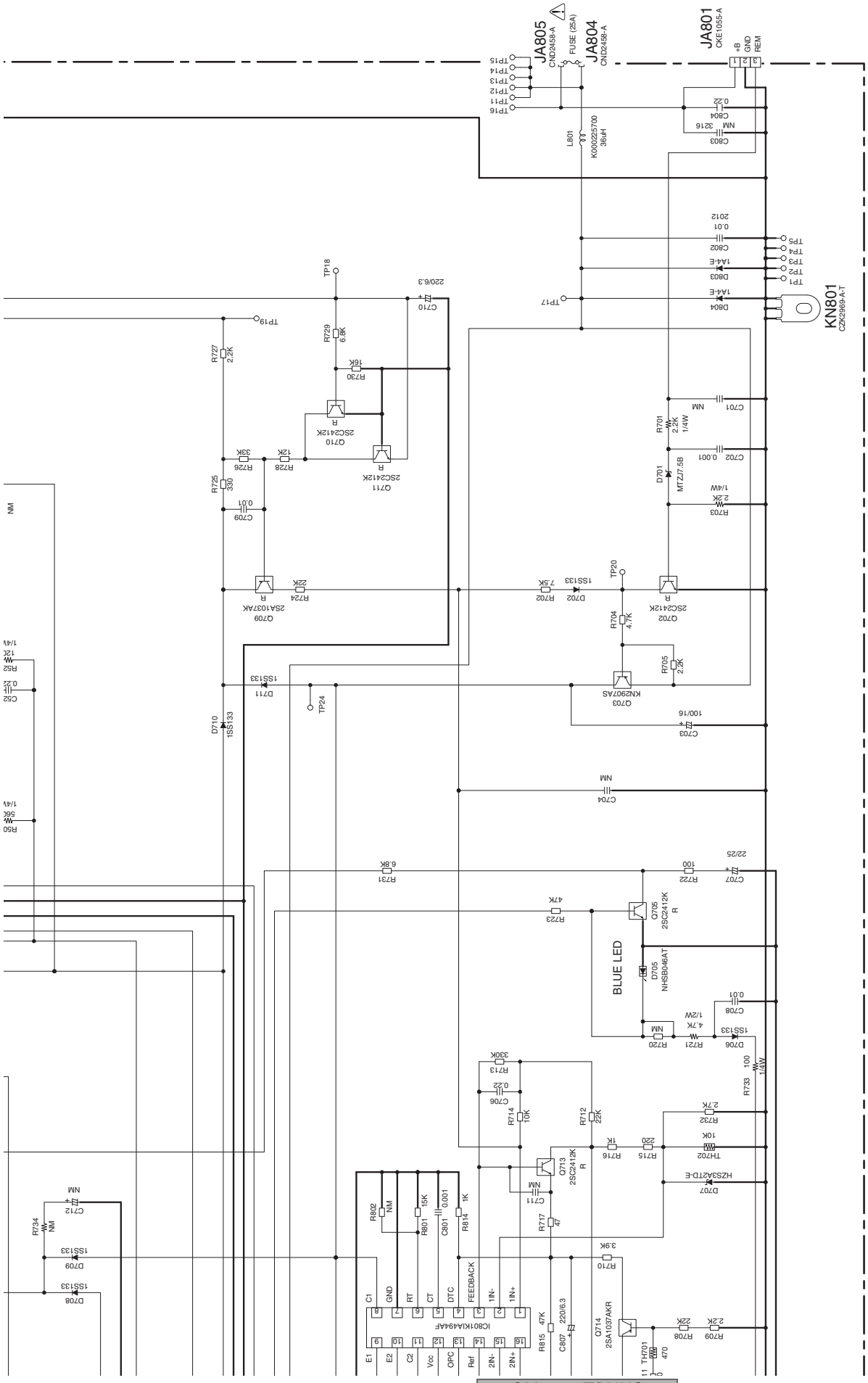


The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.

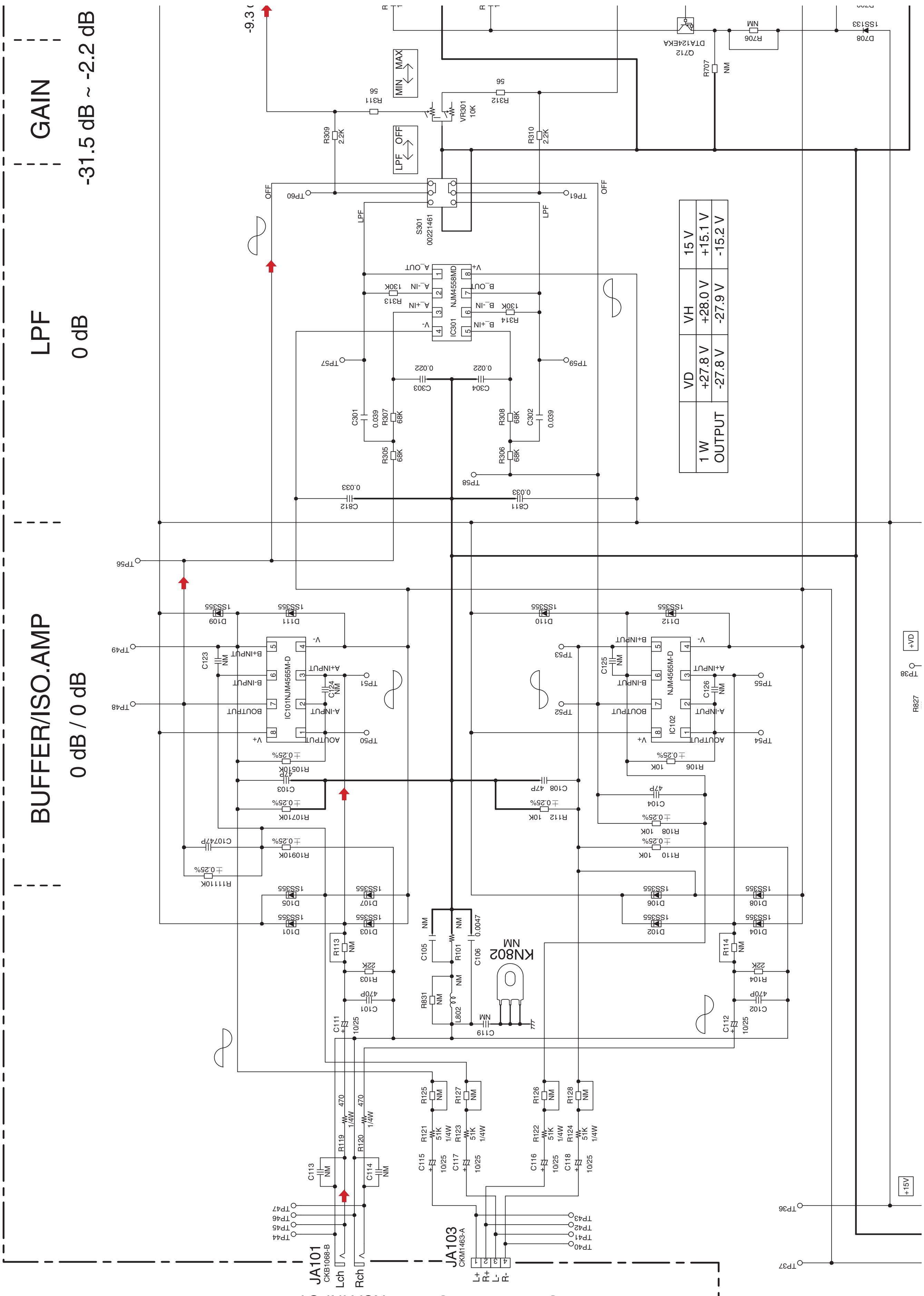
NOTE :
- Symbol indicates a resistor. No differentiation is made between chip resistors and discrete resistors.
- Symbol indicates a capacitor. No differentiation is made between chip capacitors and discrete capacitors.

NM : No Mount


A AMP UNIT
SP OUTPUT
JA501
JA502
CKE1057-A
+29 dB
-9.3 dB
KTC3911S
KTC3114A
2SD2439
2SB1588
2SA1038S
2SC2389S
2SC2412K
DTA124EKA
NJM2068MD
IC501
MAX
MIN
A-b
A-a
Silk-prints of "L" and "R" on the Amp Unit
are printed wrongly each other.
("L" should be "R", and "R" should be "L".)

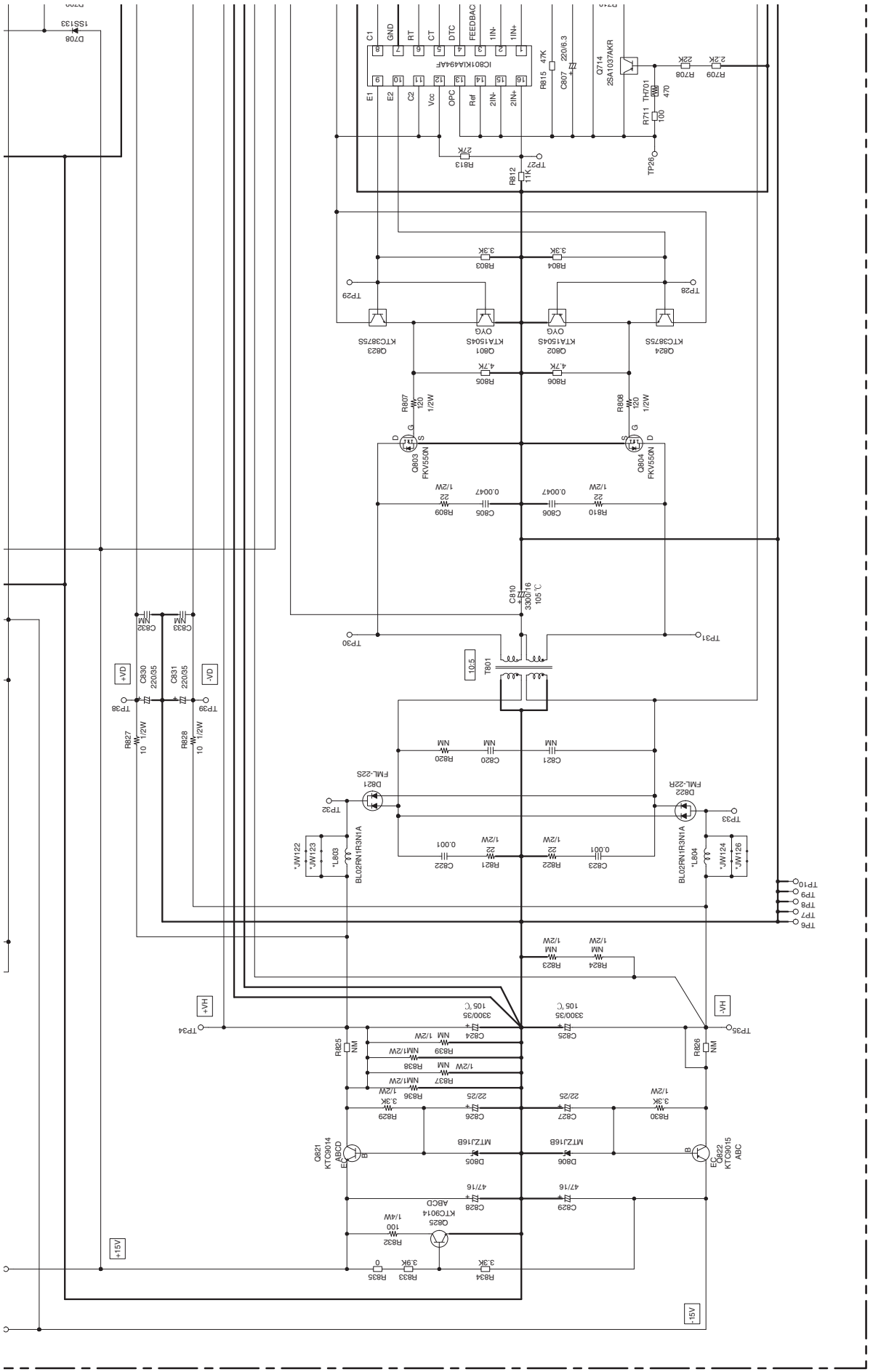

JA805
CND2458-A
FUSE (25A)
JA804
CND2458-A
JA801
CKE1055-A
+B
GND
REM
KN801
CZK2969-A-T
L801
K000225700
36uH
IC801KIA4944F
C1
GND
RT
CT
DTC
FEEDBACK
1IN-
1IN+
E1
E2
C2
Vcc
OPC
Ref
2IN-
2IN+
BLUE LED
NOTE :
Symbol indicates a resistor.
No differentiation is made between chip resistors and discrete resistors.
Symbol indicates a capacitor.
No differentiation is made between chip capacitors and discrete capacitors.
NM : No Mount
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.
A-b
A-a
A-b

A-b


GAIN
-31.5 dB ~ -2.2 dB
LPF
0 dB
BUFFER/ISO.AMP
0 dB / 0 dB
15 V
+15.1 V
-15.2 V
VH
+28.0 V
-27.9 V
VD
+27.8 V
-27.8 V
1 W
OUTPUT
IC301 NJM4558MD
S301
VR301
IC101 NJM4565M-D
IC102 NJM4565M-D
KN802 NM
JA101
CKB1068-B
Lch
Rch
JA103
CKM1463-A
RCA INPUT
SP LEVEL INPUT

A-a

A-b
A-a



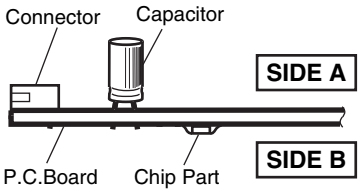
MODEL	L803	L804	JW122	JW123	JW124	JW126
GM-3400T/XJUC GM-3400T/XJEW5	×	○	○	○	○	×
GM-3400T/XJES	○	×	×	×	×	○

11. PCB CONNECTION DIAGRAM

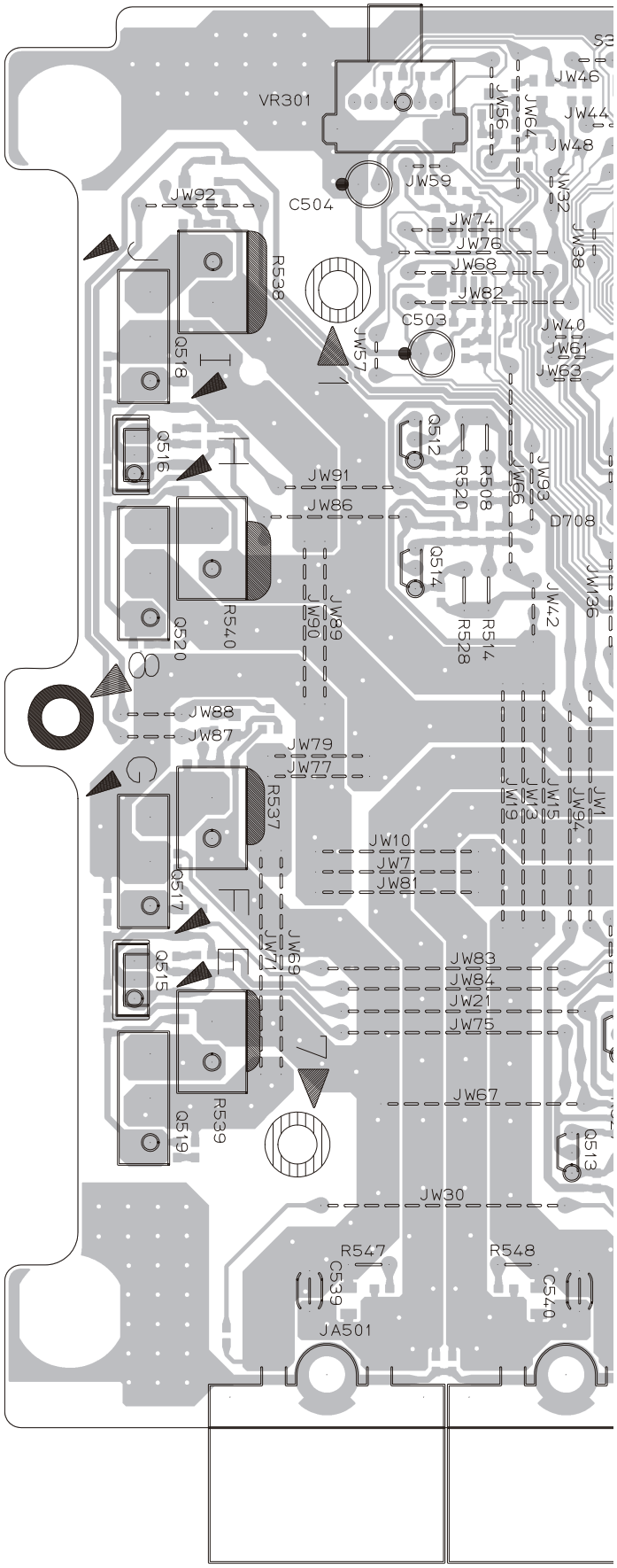
11.1 AMP UNIT

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

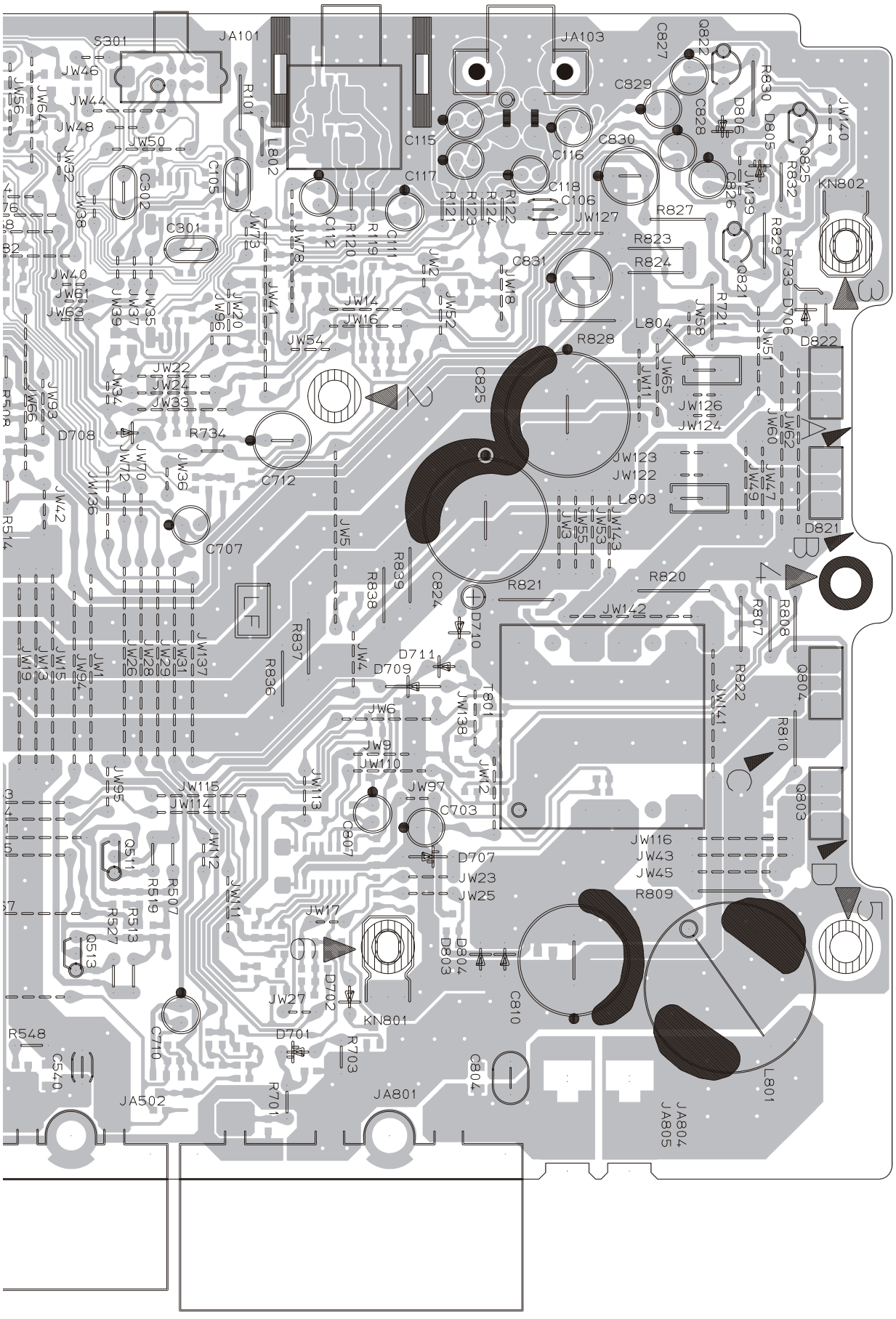


A AMP UNIT



A

SIDE A


S301
JA101
JA103
C827
Q822
C829
C828
R830
D806
D805
Q825
R832
JW140
C830
C826
JW139
KN802
C115
C116
C117
C118
C106
JW127
R827
R823
R824
C831
R828
L804
D822
C825
JW65
JW126
JW124
JW123
JW122
L803
D821
C824
R821
R820
JW142
D710
D711
D709
T801
JW138
R822
Q804
R810
Q803
JW116
JW43
JW45
R809
C703
D707
JW23
JW25
D804
D803
C810
KN801
D702
D701
R703
C804
L801
JA804
JA805
JA801
JA502
C712
C707
D708
R734
C710
C540
R548
R514
R511
R519
R507
R513
R527
Q513
Q511
C807
JW17
JW27
JW97
JW110
JW109
JW6
JW4
JW5
R839
R838
R837
R836
LF
C105
C302
C301
L802
R101
C112
C111
R120
R119
R121
R122
R123
R124
JW2
JW18
JW52
JW14
JW16
JW54
JW78
JW73
JW96
JW20
JW41
JW40
JW61
JW60
JW63
JW39
JW37
JW35
JW34
JW22
JW24
JW93
JW56
JW36
JW72
JW70
JW42
JW136
JW137
JW31
JW29
JW28
JW26
JW15
JW13
JW19
JW95
JW115
JW114
JW112
JW111
JW113
JW12
JW46
JW44
JW64
JW48
JW50
JW32
JW38
JW76
JW82
R733
D706
R721
JW58
JW51
JW62
JW60
JW47
JW49
JW53
JW55
JW3
JW143
JW141
R808
R807
JW116
JW43
JW45
JW12
JW9
JW11
JW10
JW8
JW7
JW1
JW24
JW25
JW30
JW27
JW33
JW71
JW69
JW68
JW67
JW66
JW65
JW64
JW63
JW62
JW61
JW60
JW59
JW58
JW57
JW56
JW55
JW54
JW53
JW52
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JW49
JW48
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JW44
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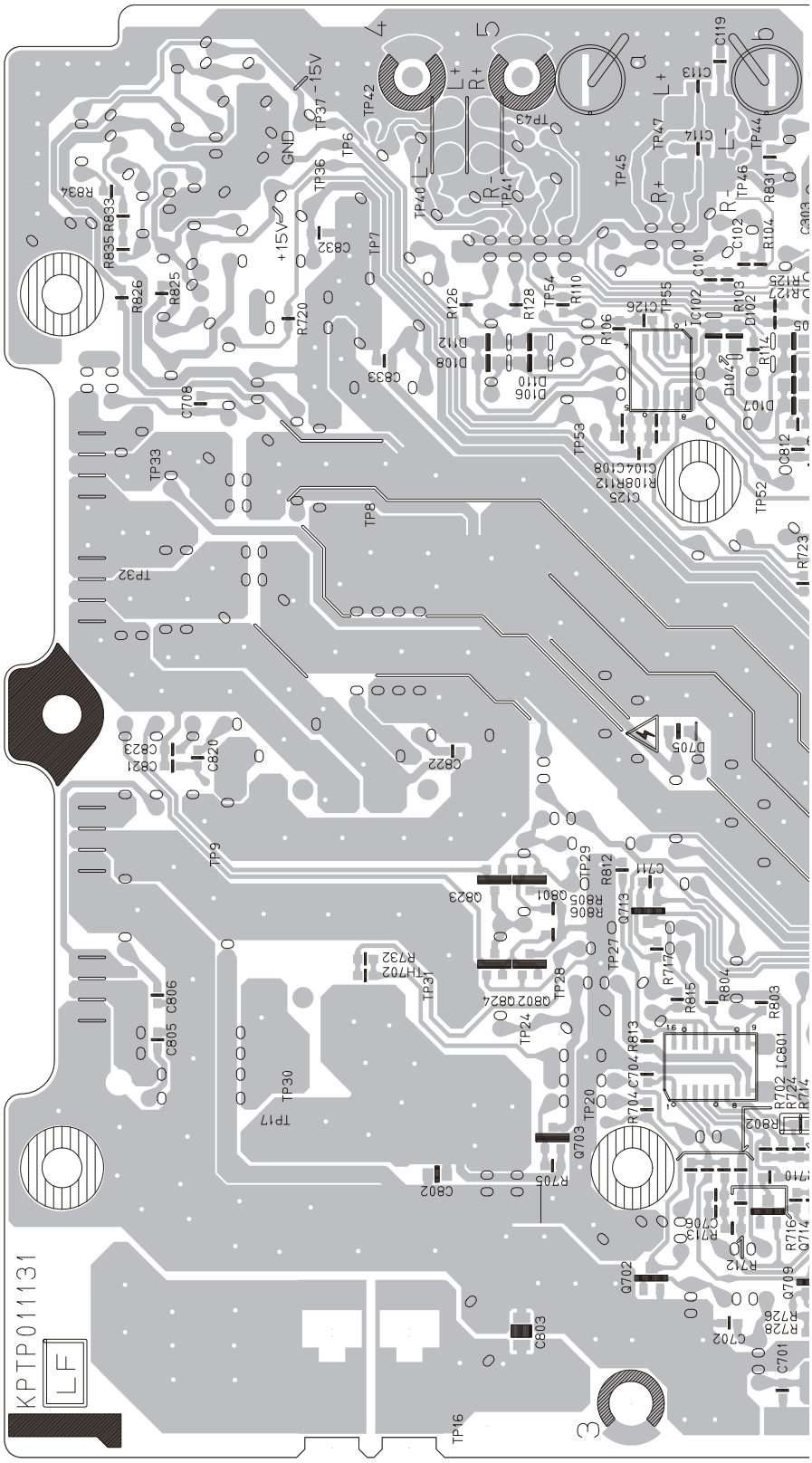
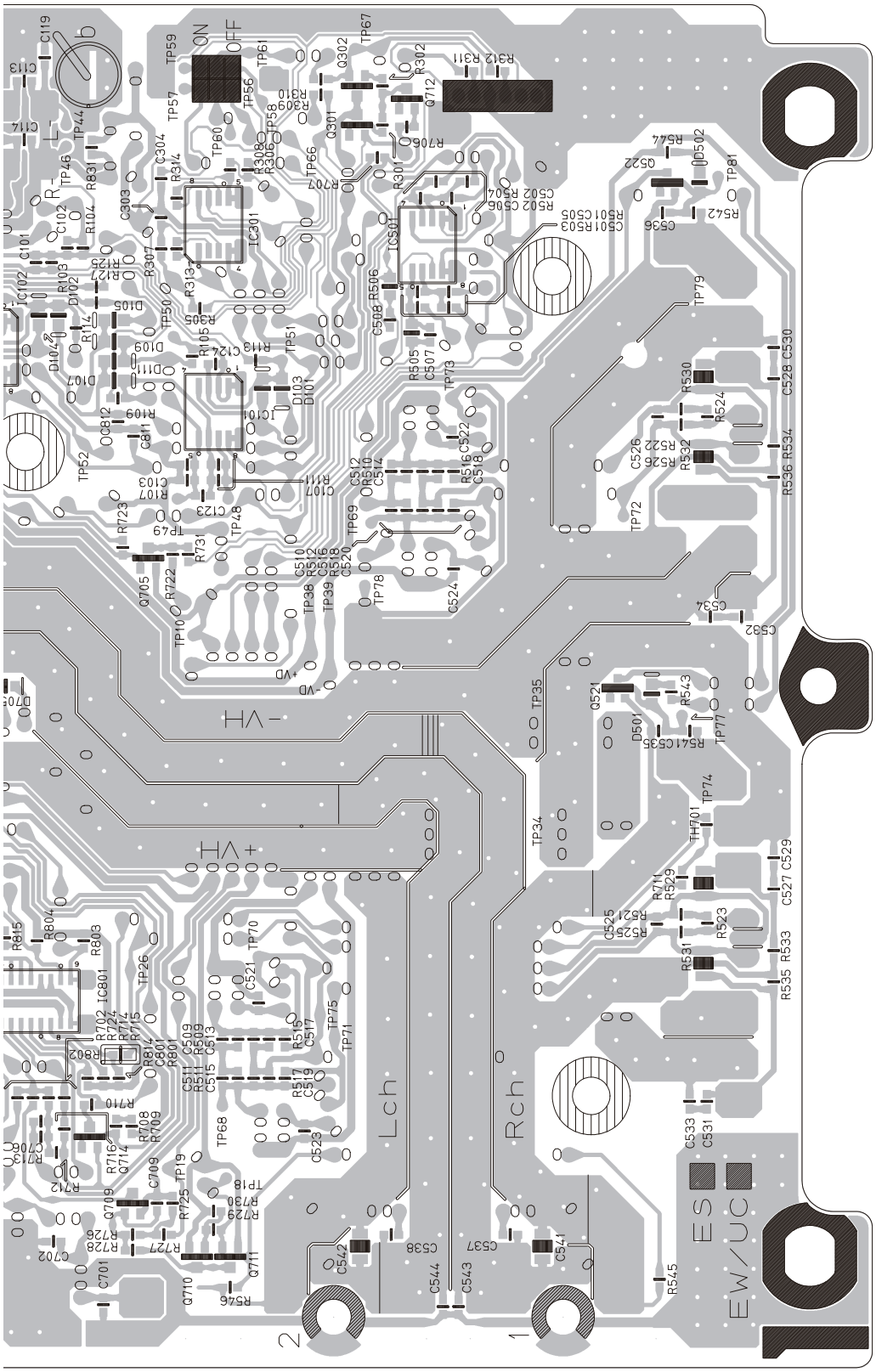
JW23
JW22
JW21
JW20
JW19
JW18
JW17
JW16
JW15
JW14
JW13
JW12
JW11
JW10
JW9
JW8
JW7
JW6
JW5
JW4
JW3
JW2
JW1

A AMP UNIT


KPTP011131
LF
TP16
TP17
TP20
TP24
TP27
TP28
TP29
TP30
TP31
TP32
TP33
TP37
TP42
TP43
TP44
TP45
TP46
TP47
TP52
TP53
TP54
TP55
GND
+15V
-15V
L+
L-
R+
R-
C119
C113
C114
C101
C102
C103
C104
C105
C106
C107
C108
C125
C126
C701
C702
C703
C704
C705
C708
C710
C711
C712
C713
C714
C715
C716
C717
C718
C802
C803
C805
C806
C820
C821
C822
C823
C832
C833
R104
R106
R110
R112
R114
R126
R128
R720
R723
R725
R726
R727
R728
R729
R730
R731
R732
R733
R734
R735
R825
R826
R802
R803
R804
R805
R806
R812
R813
R815
R816
R817
R818
R819
R820
R821
R822
R823
R824
R827
R828
R829
R830
R831
R832
R833
R834
R835
D101
D102
D103
D104
D105
D106
D107
D108
D109
D110
D111
D112
D705
IC102
IC801
Q702
Q703
Q709
Q712
Q713
Q714
Q716
Q801
Q802
Q812

SIDE B

Silk-prints of "L" and "R" on the Amp Unit are printed wrongly each other.
("L" should be "R", and "R" should be "L".)



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 ⚠ 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

Unit Number : CZW5581(UC,EW5)

Unit Number : CZW5582(ES)

Unit Name : Amp Unit

A

Unit Number : CZW5581(UC,EW5)

Unit Number : CZW5582(ES)

Unit Name : Amp Unit

MISCELLANEOUS

Circuit Symbol and No.		Part No.
IC 101	IC	NJM4565MD
IC 102	IC	NJM4565MD
IC 301	IC	NJM4558MD
IC 501	IC	NJM2068MD
IC 801	IC	KIA494AF
Q 301	Transistor	2SC2412K
Q 302	Transistor	2SC2412K
Q 511	Transistor	2SA1038S
Q 512	Transistor	2SA1038S
Q 513	Transistor	2SC2389S
Q 514	Transistor	2SC2389S
Q 515	Transistor	KTC3114
Q 516	Transistor	KTC3114
Q 517	Transistor	2SD2439
Q 518	Transistor	2SD2439
Q 519	Transistor	2SB1588
Q 520	Transistor	2SB1588
Q 521	Transistor	KTC3911S
Q 522	Transistor	KTC3911S
Q 702	Transistor	2SC2412K
Q 703	Transistor	KN2907AS
Q 705	Transistor	2SC2412K
Q 709	Transistor	2SA1037K
Q 710	Transistor	2SC2412K
Q 711	Transistor	2SC2412K
Q 712	Chip Digital Transistor	DTA124EKA
Q 713	Transistor	2SC2412K
Q 714	Transistor	2SA1037K
Q 801	Transistor	KTA1504S
Q 802	Transistor	KTA1504S
Q 803	Transistor	FKV550N
Q 804	Transistor	FKV550N
Q 821	Transistor	KTC9014
Q 822	Transistor	KTC9015
Q 823	Transistor	KTC3875S
Q 824	Transistor	KTC3875S
Q 825	Transistor	KTC9014
D 101	Diode	1SS355
D 102	Diode	1SS355
D 103	Diode	1SS355
D 104	Diode	1SS355
D 105	Diode	1SS355
D 106	Diode	1SS355
D 107	Diode	1SS355
D 108	Diode	1SS355
D 109	Diode	1SS355
D 110	Diode	1SS355
D 111	Diode	1SS355
D 112	Diode	1SS355
D 501	Diode	1SS355
D 502	Diode	1SS355
D 701	Diode	MTZJ7R5(B)
D 702	Diode	1SS133
D 705	Chip LED	NHSB046AT
D 706	Diode	1SS133
D 707	Diode	HZS3L(A2)
D 708	Diode	1SS133
D 709	Diode	1SS133
D 803	Diode	1A4-E
D 804	Diode	1A4-E
D 805	Diode	MTZJ16(B)
D 806	Diode	MTZJ16(B)
D 821	Diode	FML22S
D 822	Diode	FML22R
L 801	Choke Coil 36 uH	CZT2944
L 803	Coil(ES)	CZT2945
L 804	Coil(ES)	CZT2945
T 801	Transformer	CZT2946

Circuit Symbol and No.		Part No.
TH701	Posistor	CZC2982
TH702	Thermistor	CZC2994
S 301	Switch(LPF-OFF)	CZS2928
VR301	Variable Resistor 10 kohm	CZC2975
JA101	Pin Jack	CKB1068
JA103	Socket	CKM1463
JA501	Terminal	CKE1057
JA502	Terminal	CKE1057
JA801	Terminal	CKE1055
JA804	Terminal	CND2458
JA805	Terminal	CND2458
KN801	Terminal	CZK2969

RESISTORS

R 103		RS1/16S223J
R 104		RS1/16S223J
R 105	10 kohm	CCN1152
R 106	10 kohm	CCN1152
R 107	10 kohm	CCN1152
R 108	10 kohm	CCN1152
R 109	10 kohm	CCN1152
R 110	10 kohm	CCN1152
R 111	10 kohm	CCN1152
R 112	10 kohm	CCN1152
R 119	470 ohm	CZC2987
R 120	470 ohm	CZC2987
R 121	51 kohm	CZC2988
R 122	51 kohm	CZC2988
R 123	51 kohm	CZC2988
R 124	51 kohm	CZC2988
R 301		RS1/16S103J
R 302		RS1/16S103J
R 305		RS1/16S683J
R 306		RS1/16S683J
R 307		RS1/16S683J
R 308		RS1/16S683J
R 309		RS1/16S222J
R 310		RS1/16S222J
R 311		RS1/16S560J
R 312		RS1/16S560J
R 313		RS1/16S134J
R 314		RS1/16S134J
R 501		RS1/16S103J
R 502		RS1/16S103J
R 503		RS1/16S271J
R 504		RS1/16S271J
R 505		RS1/10S223J
R 506		RS1/10S223J
R 507	560 ohm	CZC2981
R 508	560 ohm	CZC2981
R 509		RS1/16S153J
R 510		RS1/16S153J
R 511		RS1/16S153J
R 512		RS1/16S153J
R 513	560 ohm	CZC2981
R 514	560 ohm	CZC2981
R 515		RS1/16S473J
R 516		RS1/16S473J
R 517		RS1/16S473J
R 518		RS1/16S473J
R 519	120 ohm	CZC2986
R 520	120 ohm	CZC2986
R 521		RS1/16S112J
R 522		RS1/16S112J
R 523		RS1/16S472J
R 524		RS1/16S472J
R 525		RS1/16S222J
R 526		RS1/16S222J
R 527	120 ohm	CZC2986
R 528	120 ohm	CZC2986
R 529		RS1/8S220J
R 530		RS1/8S220J
R 531		RS1/8S220J
R 532		RS1/8S220J
R 533		RS1/16S473J
R 534		RS1/16S473J
R 535		RS1/16S473J
R 536		RS1/16S473J
R 537	0.1 ohm	CZC2974
R 538	0.1 ohm	CZC2974
R 539	0.1 ohm	CZC2974
R 540	0.1 ohm	CZC2974
R 541		RS1/16S473J
R 542		RS1/16S473J
R 543		RS1/16S564J
R 544		RS1/16S564J
R 545		RS1/16S473J
R 546		RS1/16S473J
R 547	10 ohm	CZC2984
R 548	10 ohm	CZC2984
R 701	2.2 kohm	CZC2980
R 702		RS1/16S752J
R 703	2.2 kohm	CZC2980
R 704		RS1/16S472J
R 705		RS1/16S222J
R 708		RS1/16S223J
R 709		RS1/16S222J
R 710		RS1/16S392J
R 711		RS1/16S101J
R 712		RS1/16S223J
R 713		RS1/16S334J
R 714		RS1/16S103J
R 715		RS1/16S221J
R 716		RS1/16S102J
R 717		RS1/16S470J
R 721		RD1/2PM472J
R 722		RS1/16S101J
R 723		RS1/16S473J
R 724		RS1/16S223J
R 725		RS1/16S331J
R 726		RS1/16S333J
R 727		RS1/16S222J
R 728		RS1/16S123J
R 729		RS1/16S682J
R 730		RS1/16S163J
R 731		RS1/16S682J
R 732		RS1/16S272J
R 733	100 ohm	CZC2985
R 801		RS1/16S153J

Circuit Symbol and No.		Part No.
R 803		RS1/16S332J
R 804		RS1/16S332J
R 805		RS1/16S472J
R 806		RS1/16S472J
R 807		RD1/2PM121J
R 808		RD1/2PM121J
R 809		RD1/2PM220J
R 810		RD1/2PM220J
R 812		RS1/16S113J
R 813		RS1/16S273J
R 814		RS1/16S102J
R 815		RS1/16S473J
R 821		RD1/2PM220J
R 822		RD1/2PM220J
R 827		RD1/2PM100J
R 828		RD1/2PM100J
R 829		RD1/2PM332J
R 830		RD1/2PM332J
R 832	100 ohm	CZC2985
R 833		RS1/16S392J
R 834		RS1/16S332J
R 835		RS1/16S0R0J

CAPACITORS

C 101		CCSRCH471J50
C 102		CCSRCH471J50
C 103		CCSRCH470J50
C 104		CCSRCH470J50
C 106		CQMA472J50
C 107		CCSRCH470J50
C 108		CCSRCH470J50
C 111		CEAT100M50
C 112		CEAT100M50
C 115		CEAT100M50
C 116		CEAT100M50
C 117		CEAT100M50
C 118		CEAT100M50
C 301		CFTLA393J50
C 302		CFTLA393J50
C 303		CKSRYB223K50
C 304		CKSRYB223K50
C 501		CCSRCH330J50
C 502		CCSRCH330J50
C 503		CEAT101M10
C 504		CEAT101M10
C 505		CCSRCH680J50
C 506		CCSRCH680J50
C 507		CCSRCH680J50
C 508		CCSRCH680J50
C 517		CCSRCH100D50
C 518		CCSRCH100D50
C 519		CCSRCH100D50
C 520		CCSRCH100D50
C 521		CKSRYB224K16
C 522		CKSRYB224K16
C 523		CKSRYB224K16
C 524		CKSRYB224K16
C 525		CKSRYB102K50
C 526		CKSRYB102K50
C 537		CKSRYB333K50
C 538		CKSRYB333K50
C 539		CQMA102J50
C 540		CQMA102J50
C 702		CKSRYB102K50
C 703	100 uF/16 V	CZC2991
C 706		CKSRYB224K16
C 707	22 uF/25 V	CZC2989
C 708		CKSRYB103K50
C 709		CKSRYB103K50
C 710	220 uF/6.3 V	CZC2992
C 801		CCSRCH102J50
C 802		CKSQYB103K50
C 804		CFTLA224J50
C 805		CKSRYB472K50
C 806		CKSRYB472K50
C 807	220 uF/6.3 V	CZC2992
C 810	3 300 uF/16 V	CZC2977
C 811		CKSRYB333K50
C 812		CKSRYB333K50
C 822		CCSRCH102J50
C 823		CCSRCH102J50
C 824	3 300 uF/35 V	CZC2978
C 825	3 300 uF/35 V	CZC2978
C 826	22 uF/25 V	CZC2989
C 827	22 uF/25 V	CZC2989
C 828	47 uF/16 V	CZC2990
C 829	47 uF/16 V	CZC2990
C 830	220 uF/35 V	CZC2993
C 831	220 uF/35 V	CZC2993