

KC-100

4CH MIXING KEYBOARD AMPLIFIER

SERVICE NOTES

First Edition

Issued by RJA

SPECIFICATIONS

KC-100

Rated Power Output
Speaker : 60W/8Ω

Nominal Input Level (@1kHz)

Channel 1 XLR Type : -50dBm thru -20dBm

Channel 1 Phone Type : -50dBm thru -20dBm

Channel 2,3,4 : -20dBm

Nominal Output Level (@1kHz)

LINE OUT : +4dBm
0dBm=0.775Vrms

Speaker : 30cm(12") x1 + Tweeter x1

Controls

: Channel 1 MIC/LINE Volume
Channel 2 LINE Volume
Channel 3 LINE Volume
Channel 4 MONITOR Volume
LOW
TREBLE
Master VOLUME
POWER Switch
Power Indicator

Connectors

: Channel 1 Input Jack (XLR Type Balanced)
Channel 1 Input Jack
Channel 2 Input Jack
Channel 3 Input Jack
Channel 4 Input Jack
LINE OUT Jack
PHONES Jack

Power Consumption

: 40W (AC100V)
60W (AC117V/230V/240V)

Dimensions

: 478(W)x273(D)x430(H)mm
18-7/8(W)x10-3/4(D)x16-15/16(H)inches

Weight

: 14.5kg
32lbs

Accessories

: Owner's Manual (English) (17055092)
Owner's Manual (Japanese) (17055093)

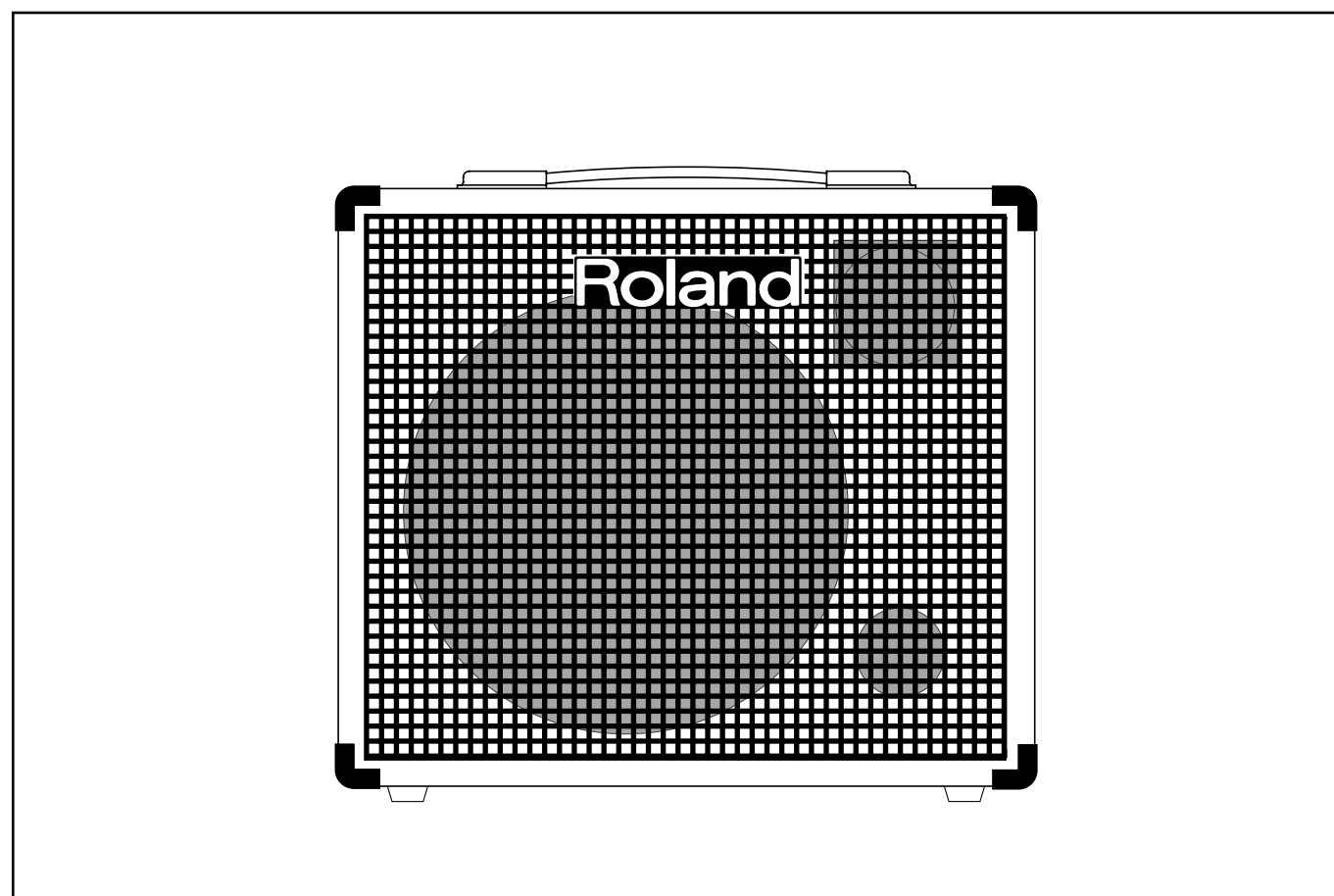
Options

: Speaker Stand SS-115A
Speaker Cap SS-CAP (H1017017)

*When using an SS-115A speaker stand, be sure to use a SS-CAP speaker cap in conjunction with it.

TABLE OF CONTENTS

	Page
SPECIFICATIONS	1
PANEL LAYOUT	2
CABINET EXPLODED VIEW	3
CHASSIS EXPLODED VIEW	4
PARTS LIST	5, 6
CIRCUIT BOARD	7
CIRCUIT DIAGRAM	8

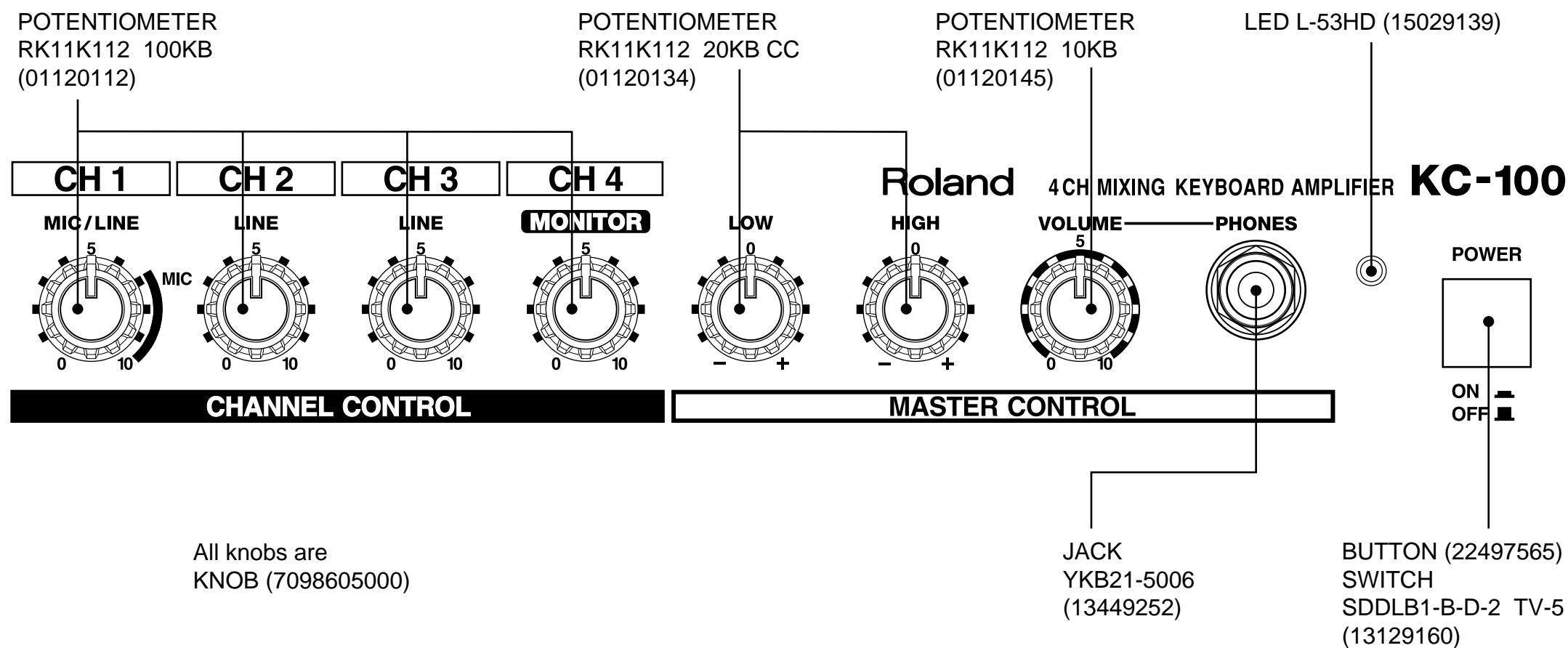


Copyright © 1997 by ROLAND CORPORATION

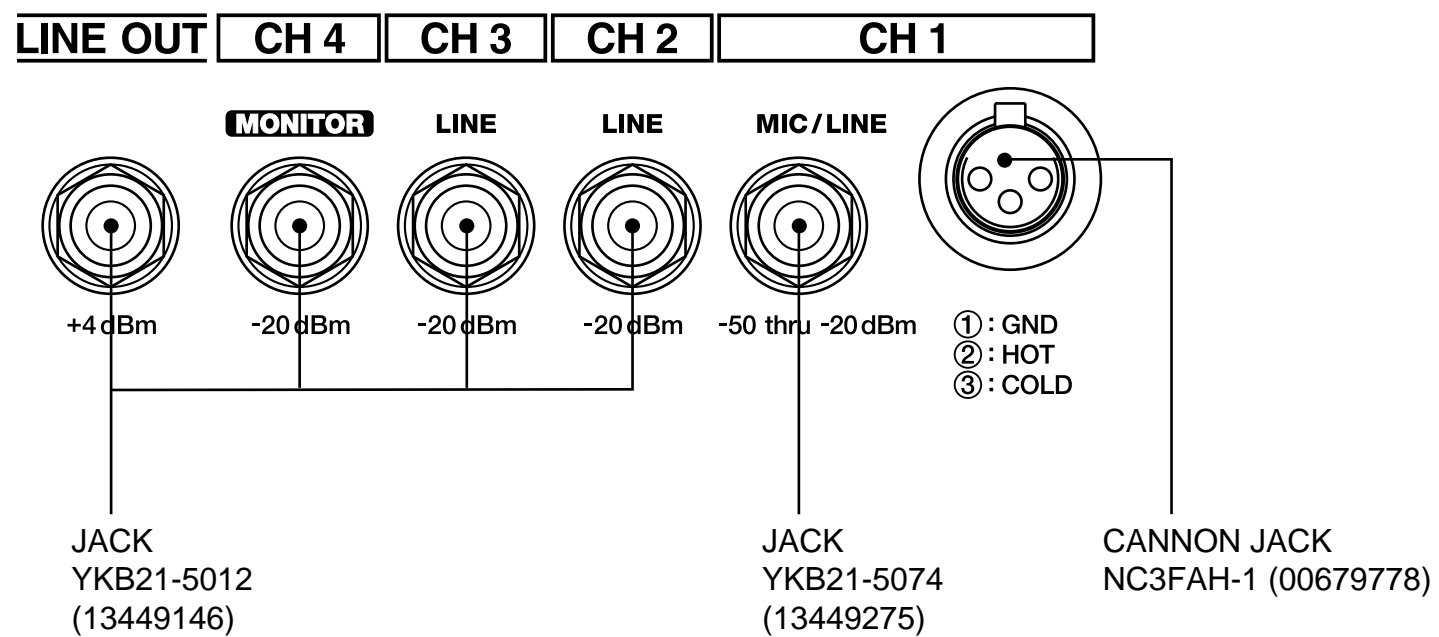
All rights reserved. No part of this publication may be reproduced in any form without the written permission of ROLAND CORPORATION.

LOCATION OF CONTROLS

CONTROL PANEL



JACK



CABINET EXPLODED VIEW

[PARTS]

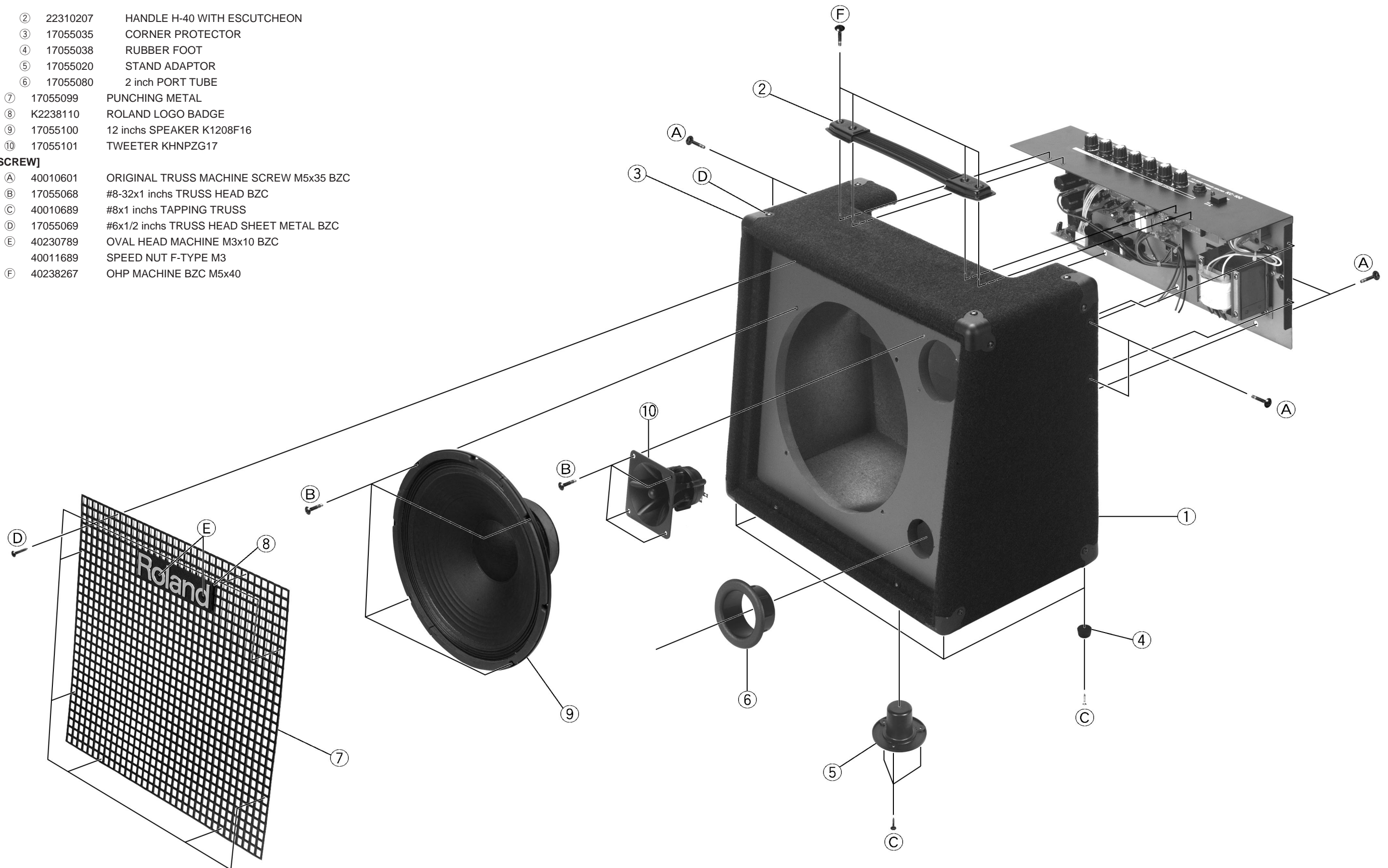
No.	Part Cord	Part Name
①	17055098	CABINET ASSY

NOTE: Replacement Cabinet Assy includes the following parts.

②	22310207	HANDLE H-40 WITH ESCUTCHEON
③	17055035	CORNER PROTECTOR
④	17055038	RUBBER FOOT
⑤	17055020	STAND ADAPTOR
⑥	17055080	2 inch PORT TUBE
⑦	17055099	PUNCHING METAL
⑧	K2238110	ROLAND LOGO BADGE
⑨	17055100	12 inchs SPEAKER K1208F16
⑩	17055101	TWEETER KHNPZG17

[SCREW]

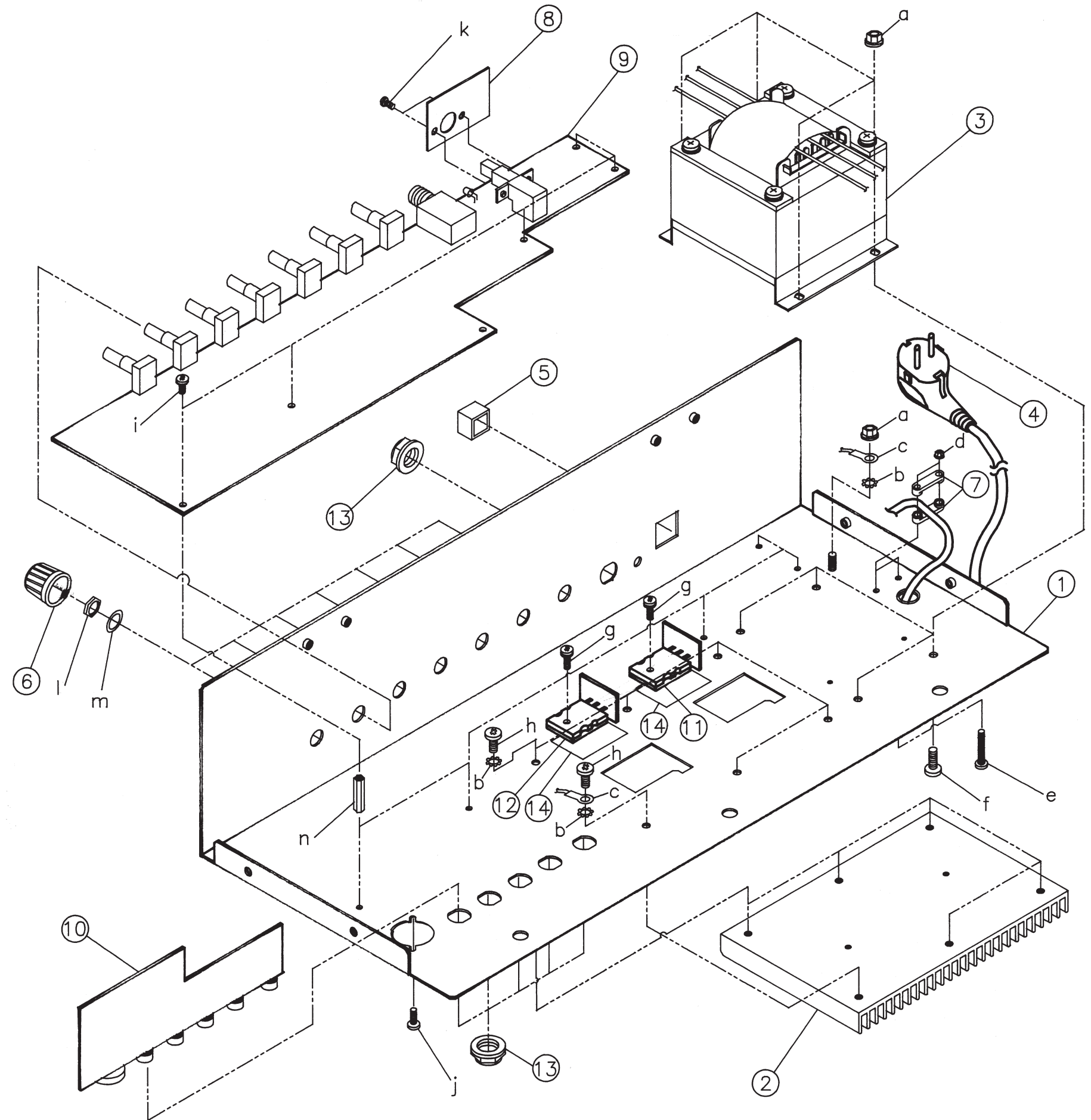
Ⓐ	40010601	ORIGINAL TRUSS MACHINE SCREW M5x35 BZC
Ⓑ	17055068	#8-32x1 inchs TRUSS HEAD BZC
Ⓒ	40010689	#8x1 inchs TAPPING TRUSS
Ⓓ	17055069	#6x1/2 inchs TRUSS HEAD SHEET METAL BZC
Ⓔ	40230789	OVAL HEAD MACHINE M3x10 BZC
	40011689	SPEED NUT F-TYPE M3
Ⓕ	40238267	OHP MACHINE BZC M5x40



CHASSIS EXPLODED VIEW

[PARTS]

No.	PART No.	PART NAME
①	G281711901	CHASSIS
②	G246770101	HEATSINK
③	G2457140	POWER TRANSFORMER 100V/117V
④	G2457139	POWER TRANSFORMER 230V/240V
⑤	G3497123	AC CORD VCTF 100V
⑥	G349712401	AC CORD SJT 117V
⑦	G3497125	AC CORD SY010 BLK 230V
⑧	G3497127	AC CORD 57226604 230VE
⑨	G3497126	AC CORD FC-305 230VA
⑩	22497565	BUTTON POWER SW
⑪	7098605000	AC KNOB
⑫	12369410RT	LINE CORD STRAIN RELIEF 1702B
⑬	F2257201	FUSE BARRIER(117V ONLY)
⑭	01341534	MAIN BOARD ASSY 230/240V
Ⓐ	01341534	MAIN BOARD ASSY 230/240V
Ⓑ	01341534	MAIN BOARD ASSY 230/240V
Ⓒ	01341534	MAIN BOARD ASSY 230/240V
Ⓓ	2215075600	JACK NUT #756
Ⓔ	G2257113	TO-3P INSULATING SHEET
Ⓕ	40011767	M4 FLANGE NUT ZC
Ⓖ	40011889	M4 EXT.TOOTH WASHER ZC
Ⓗ	*****	Pin (B-6)
Ⓙ	40011756	M3 FLANGE NUT ZC
Ⓚ	H5019411	M3x20 BINDING w/INT.TOOTH WASHER BZC
Ⓛ	40010345	M4x10 BINDING BZC
Ⓜ	40010434	M3x10 BINDING MACHINE SCREW W/SW BZC
Ⓝ	40010334	M4x8 BINDING BZC
Ⓟ	40010423	M3x8 BINDING w/INT.TOOTH WASHER BZC
Ⓠ	40011312	M3x8 BINDING TAPTIGHT P BZC
Ⓡ	H5019404	M3x6 BINDING w/SPRING WASHER BZC(117V ONLY)
Ⓢ	*****	V.R.Accessory Washer M8
Ⓣ	*****	V.R.Accessory Nut M8
Ⓤ	G2157502	STANDOFF M3x20



PARTS LIST

<p>SAFETY PRECAUTIONS:*2 The parts marked Δ have safety-related characteristics. Use only listed parts for replacement.</p>	<p style="text-align: center;">CONSIDERATIONS ON PARTS ORDERING</p> <p>When ordering any parts listed in the parts list, please specify the following items in the order sheet.</p> <table style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">QTY</th> <th style="text-align: left;">PART NUMBER</th> <th style="text-align: left;">DESCRIPTION</th> <th style="text-align: left;">MODEL NUMBER</th> </tr> </thead> <tbody> <tr> <td>Ex. 10</td> <td>22575241</td> <td>Sharp Key</td> <td>C-20/50</td> </tr> <tr> <td>15</td> <td>2247017300</td> <td>Knob (orange)</td> <td>DAC-15D</td> </tr> </tbody> </table> <p>Failure to completely fill the above items with correct number and description will result in delayed or even undelivered replacement.</p>	QTY	PART NUMBER	DESCRIPTION	MODEL NUMBER	Ex. 10	22575241	Sharp Key	C-20/50	15	2247017300	Knob (orange)	DAC-15D
QTY	PART NUMBER	DESCRIPTION	MODEL NUMBER										
Ex. 10	22575241	Sharp Key	C-20/50										
15	2247017300	Knob (orange)	DAC-15D										

*NOTE:**1 The parts marked # are new (initial parts)

CABINET

- # 17055098 CABINET ASSY
- NOTE: Replacement Cabinet Assy includes the following parts.
- | | | |
|----------|-----------------------------|--|
| 22310207 | HANDLE H-40 WITH ESCUTCHEON | |
| 17055035 | CORNER PROTECTOR | |
| 17055038 | RUBBER FOOT | |
| 17055020 | STAND ADAPTOR | |
| 17055080 | 2 inch PORT TUBE | |
- # 17055099 PUNCHING METAL
K2238110 ROLAND LOGO BADGE

SPEAKER

- # 17055100 12 inchs SPEAKER K1208F16
17055101 TWEETER KHNPZG17

CHASSIS

- # G281711901 CHASSIS

KNOB, BUTTON

- | | | |
|------------|---------|----------|
| 7098605000 | AC KNOB | |
| 22497565 | BUTTON | POWER SW |

SWITCH

- Δ 13129160 SDDL B1-B-D-2 TV-5 POWER SW

JACK

- | | | |
|----------|-----------------|-------|
| 00679778 | CANNON NC3FAH-1 | JK1 |
| 13449275 | YKB21-5074 | JK2 |
| 13449146 | YKB21-5012 | JK3-6 |
| 13449252 | YKB21-5006 | JK7 |

PCB ASSY

- # 01341534 MAIN BOARD ASSY 230V/240V
- NOTE: Replacement MAIN BOARD ASSY is 230V/240V version only. When using MAIN BOARD ASSY for 100V/117V version, be sure to replace fuse of specific voltage 100V/117V(REFER TO TABLE A). And change mark on PCB as shown in TABLE B.

TABLE A

	F1
100V/117V	SB 5x20 2A/125V(12559441)
230V/240V	5ST 5x20 1A/250V(F2559103)

TABLE B

	125V 2A	100V/117V ASSY 01341523	1	2	3	4	5
L	T1L 250V	230V/240V ASSY 01341534	6	7	8	9	10

TABLE B

	125V 2A	100V/117V ASSY 01341523	1	2	3	4	5
H	T1L 250V	230V/240V ASSY 01341534	6	7	8	9	10

FUSE, FUSE HOLDER

- | | | |
|----------|--------------------------|-------------------|
| Δ | 12559441 FUSE SB2 | 2A/125V 100V/117V |
| Δ | F2559103 FUSE 5ST1A | 1A/250V 230V/240V |
| | 12199550RT FUSE HOLDER | |
| | F2029601 FUSE COVER FH-1 | |

POWER TRANSFORMER

- | | | |
|------------|----------------------------|-----------|
| # Δ | G2457140 POWER TRANSFORMER | 100V/117V |
| # Δ | G2457139 POWER TRANSFORMER | 230V/240V |

AC CORD

- | | | |
|----------|----------------------------|-------|
| Δ | G3497123 AC CORD VCTF | 100V |
| Δ | G349712401 AC CORD SJT | 117V |
| Δ | G3497125 AC CORD SY010 BLK | 230V |
| Δ | G3497127 AC CORD 57226604 | 230VE |
| Δ | G3497126 AC CORD FC-305 | 240VA |

IC

- | | | |
|----------|----------|-----------|
| 15189250 | M5218AL | IC2-6,IC8 |
| 15219157 | M5241L | IC7 |
| F5189103 | NJM2068L | IC1 |

TRANSISOR

- | | | |
|------------|--------------------|-----------|
| | 15119423 2SA965Y | Q9 |
| | 15119158 2SA970GR | Q4,Q5 |
| | 15119132 2SA1015GR | Q7 |
| # Δ | 01341378 2SA1940-O | Q12 |
| Δ | 15119820 2SB1017Y | Q1 |
| | 15129151 2SC1815GR | Q3,Q8,Q13 |
| | 15129426 2SC2235Y | Q10 |
| | 15129437 2SC2705Y | Q6 |
| # Δ | 01341389 2SC5197-Y | Q14 |
| Δ | 15129835 2SD1408Y | Q2 |
| | 15139301 2SK30AY | Q11 |

DIODE

- | | | |
|----------|------------------------|--------------------|
| Δ | F5019203 FL402 BRIDGE | D1 |
| Δ | F5019654 RD16EB2 ZENER | D2,D3 |
| | F5019203 1N4004 | D5,D7 |
| | 15019126 1SS133 | D4,D6,D8-11,D14-17 |
| | 15029139 L-53HD LED | D13 |

POTENTIOMETER

- | | | |
|----------|------------------|---------|
| 01120145 | RK11K112 10KB | VR7 |
| 01120134 | RK11K112 20KB CC | VR5,VR6 |
| 01120112 | RK11K112 100KB | VR1-4 |

CAPACITOR

- | | | |
|----------|----------------------------------|-------|
| Δ | F3659241 ELECTROLYTIC 3300uF/63V | C6,C7 |
| Δ | F3639553 ELECTROLYTIC 470uF/16V | C2,C4 |
| Δ | F3519501 CERAMIC PY17FY472MLO | C93 |
| | F3519502 CERAMIC EC8472MH | C1 |

RESISTOR

- | | | |
|----------|---|---------|
| Δ | F3839181 CEMENT 0.33 Ω 5W | R41,R43 |
| | F2559804 NON FLAME 180 Ω 3W | R1,R4 |
| Δ | F3819901 OXIDE METAL 3.3 Ω 1/2W | R34,R36 |
| Δ | F3819902 OXIDE METAL 150 Ω 1/2W | R33 |
| Δ | F3819903 OXIDE METAL 1.3k Ω 1/2W | R23 |
| | 13829902 CARBON 6.8 Ω 1/2W | R55 |
| | 13749101 CARBON 4.7k Ω 1/2W | R2,R3 |

WIRING

- | | | | |
|---|---------------------|---------------|---------------------|
| # | G3417146 WIRING W1 | 2P L160 | (CN2 <-> CN3) |
| # | G3417147 WIRING W2 | 8P L100 | (CN1 <-> CN4) |
| # | H4019335 WIRING W3 | L90 BRW | (Q12) |
| # | H4019336 WIRING W4 | L90 RED | (Q12) |
| # | H4019337 WIRING W5 | L90 ORG | (Q12) |
| # | H4019338 WIRING W6 | L170 BRW | (Q14) |
| # | H4019339 WIRING W7 | L170 RED | (Q14) |
| # | H4019340 WIRING W8 | L170 ORG | (Q14) |
| # | G3489199 WIRING W9 | L500 RED +205 | (12 inches SPEAKER) |
| # | G3489200 WIRING W10 | L500 BLK +205 | (12 inches SPEAKER) |
| # | G3489201 WIRING W11 | L500 ORG +205 | (TWEETER) |

G3489202 WIRING W12 L500 BRW +205 (TWEETER)
 # H4019127 WIRING W13 L180 +B6 LAG (GND)
 # H4019128 WIRING W14 L130 +187 +B6 LAG (GND,for 230V/240V)

SCREWS

40238267 OHP MACHINE BZC M5x40 (fix CHASSIS,HANDLE)
 01755069 #6x1/2 inchs TRUSS HEAD SHEET METAL BZC (fix CORNER PROTECTOR,PUNCHING METAL)
 17055068 #8-32x1 inchs TRUSS HEAD BZC (fix 12 inchs SPEAKER,TWEETER)
 40230789 OVAL HEAD MACHINE M3x10 BZC (fix ROLAND LOGO BADGE)
 40011689 SPEED NUT F-TYPE M3 (fix ROLAND LOGO BADGE)
 40010689 #8x1 inchs TAPPING TRUSS (fix RUBBER FOOT,STAND ADAPTOR)
 40010601 ORIGINAL TRUSS MACHINE M5x35 BZC (fix CHASSIS)
 40010901 3x6 TAPPING BINDING BZC (fix NAME PLATE)
 40010267 M3x10 BINDING BZC
 40010334 M4x8 BINDING BZC
 40010345 M4x10 BINDING BZC
 40010412 M3x6 BINDING w/INT.TOOTH WASHER BZC
 40010423 M3x8 BINDING w/INT.TOOTH WASHER BZC
 40011756 M3 FLANGE NUT ZC
 40011767 M4 FLANGE NUT ZC
 40011889 M4 EXT.TOOTH WASHER ZC
 40019123 3x8 TAP TITE BZC
 40010434 M3x10 BINDING MACHINE SCREW W/SW BZC
 40011312 M3x8 BINDING TAPTIGHT P BZC
 G2157502 STAND OFF M3x20
 H5019404 M3x6 BINDING w/SPRING WASHER BZC (117V ONLY)
 H5019411 M3x20 BINDING w/INT.TOOTH WASHER BZC

PACKING CASE

17055102 PACKING CASE

MISCELLANEOUS

G246770101 HEATSINK
 2215075600 JACK NUT #756
 12369410RT LINE CORD STRAIN RELIEF 1702B
 G2257113 TO-3P INSULATING SHEET
 F2257201 FUSE BARRIER (117V ONLY)
 G2537608 GND MARK SEAL
 G2537710 FUSE CAUTION SEAL
 G2537711 BARRIER CAUTION SEAL (117V ONLY)

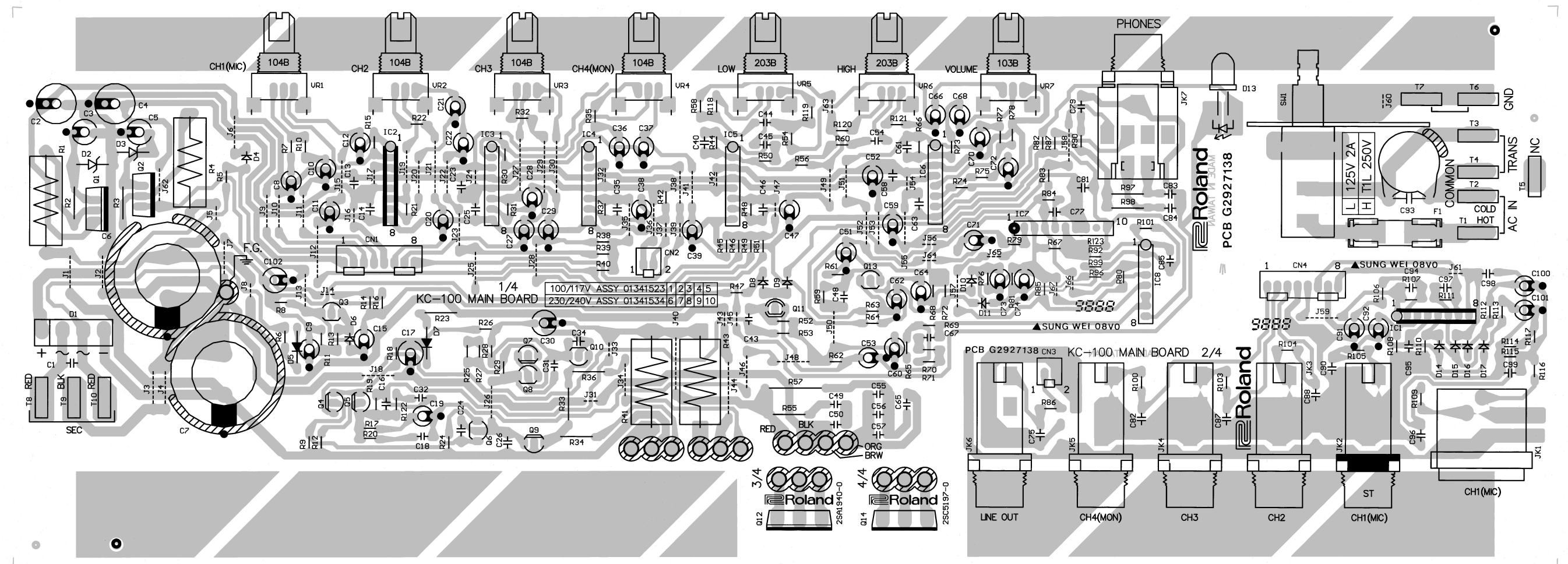
ACCESSORIES(STANDARD)

17055092 OWNER'S MANUAL (ENGLISH)
 # 17055093 OWNER'S MANUAL (JAPANESE)

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28

A CIRCUIT BOARD

B
C
D
E
F
G
H
I
J
K
L
M
N
O
P
Q
R
S
T
U



1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28

A **CIRCUIT DIAGRAM**

B
C
D
E
F
G
H
I
J
K
L
M
N
O
P
Q
R
S
T
U

