

# MIDI KEYBOARD CONTROLLER

# PCR-30 PCR-50 PCR-80

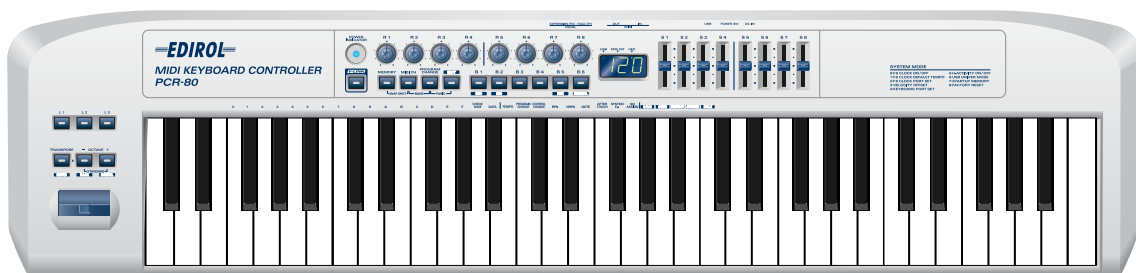
## SERVICE NOTES

*Third Edition*

*Issued by RJA*

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# SPECIFICATIONS

## PCR-30/PCR-50/PCR-80

### : MIDI KEYBOARD CONTROLLER

- Keyboard
  - PCR-30: 32 Keys(with velocity)
  - PCR-50: 49 Keys(with velocity)
  - PCR-80: 61 Keys(with velocity)
  
- Contoroller
  - Memory Button
  - MIDI Channel Button
  - Program Change Button
  - Edit Button
  - V-LINK Button
  - Octave Shift Buttons (+/-)
  - Transpose Button
  - Assignable Buttons (B1--6,L1--3)
  - Bender/Modulation Lever
  - Assignable Rotary Volumes (R1--8)
  - Assignable Sliders (S1--8)
  - Assignable Pedals(P1--2)
  
- Display
  - 7 segments, 3 characters (LED)
  - Power Indicator
  
- Rear Panel
  - Power Switch (USB BUS/OFF/DC IN)
  
- Connectors
  - Hold Pedal Jack
  - Expression Pedal Jack
  - MIDI Jacks (IN/OUT)
  - USB Jack
  - DC IN Jack
  
- Power Supply
  - DC 9 V (AC Adaptor) or USB Bus Power
  
- Current Draw
  - 300 mA (AC Adaptor)
  - 300 mA (USB Bus Power)
  
- Dimensions
  - PCR-30:
    - 600 (W) x 232 (D) x 86.4 (H) mm
    - 23-5/8 (W) x 9-3/16 (D) x 3-7/16 (H) inches
  - PCR-50:
    - 833 (W) x 232 (D) x 86.4 (H) mm
    - 32-13/16 (W) x 9-3/16 (D) x 3-7/16 (H) inches
  - PCR-80:
    - 1,000 (W) x 232 (D) x 86.4 (H) mm
    - 39-3/8 (W) x 9-3/16 (D) x 3-7/16 (H) inches
  
- Weight
  - PCR-30: 2.4 kg / 5 lbs 5 oz (excluding AC adaptor)
  - PCR-50: 3.3 kg / 7 lbs 5 oz (excluding AC adaptor)
  - PCR-80: 3.7 kg / 8 lbs 3 oz (excluding AC adaptor)

- Accessories
  - Owner's Manual
    - E/I/S/F/G (#03341989)
    - JAPANESE(#03341978)

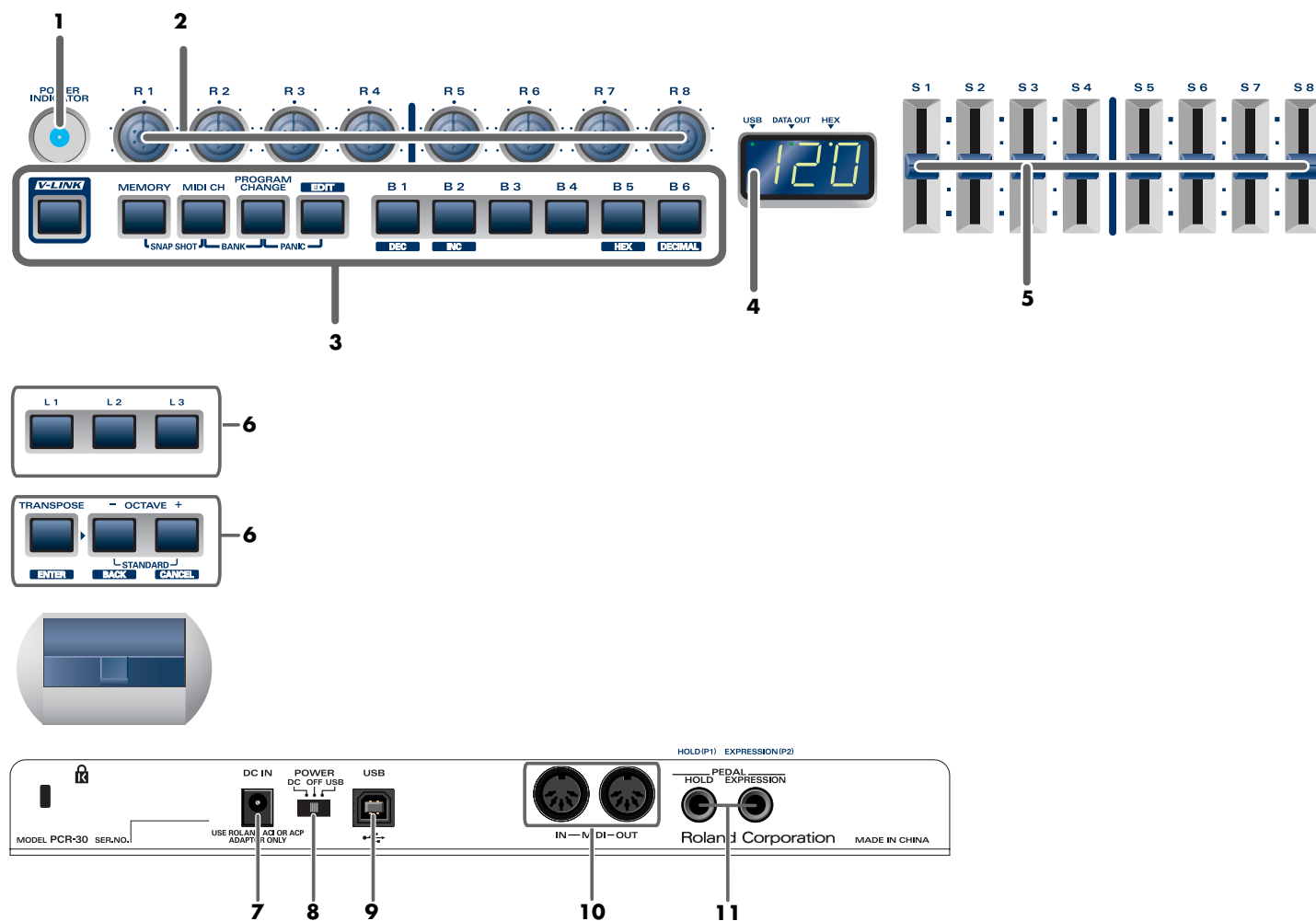
- AC Adaptor (ACP Series)
  - 120V(#02231167)
  - 230V(#02231178)
  - 230VE(#02231189)
  - 240A(#02231201)

- CD-ROM(#03341967)
- USB Cable(#02239578)
- Template Sheets <GM2/BLANK>
  - GM2 PANEL (#03234178)
  - GM2 SIDE (#03234189)
  - BLANK PANEL (#03234201)
  - BLANK SIDE (#03234212)

- Options
  - Pedal Switch: DP-2
  - Expression Pedal: EV-5

\* In the interest of product improvement, the specifications and/or appearance of this unit are subject to change without prior notice.

# LOCATION OF CONTROLS



# LOCATION OF CONTROLS PARTS LIST

No	PART CODE	Part name	Description	Q'TY
1	03230501	LED COVER		1
2	03230445	R-KNOB		8
2	03234156	RK09D1130 G6888916M	9M/M ROTARY POTENTIOMETER	8
3	03230478	RUBBER SW PANEL A	PUSH SWITCH	1
4	03230490	DISPLAY COVER		1
5	03230456	S-KNOB		8
5	03234167	RS30111 G67894540	30M/M SLIDE POTENTIOMETER	8
6	03230467	RUBBER SW 3P	PUSH SWITCH	2
7	13449711	HEC-0470-01-630	AC ADAPTOR JACK	1
8	03012701	SLD-23-466E2	SLIDE SWITCH	8
9	01459945	YKF45-0002	USB CONNECTOR	1
10	02892878	2DJ-0060003	DIN(MIDI) JACK	2
11	00569278	LGR4609-7100	6.5MM JACK	2

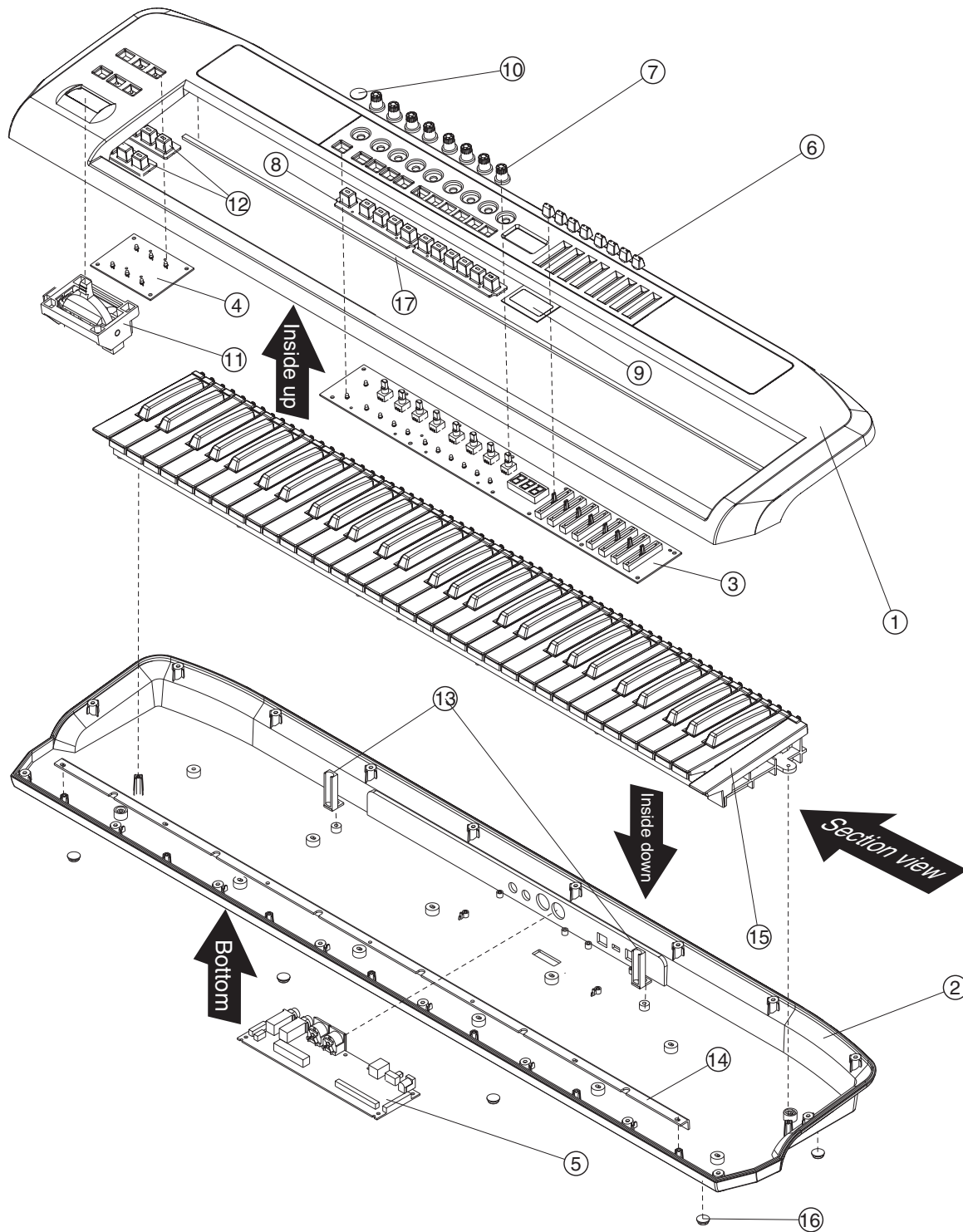
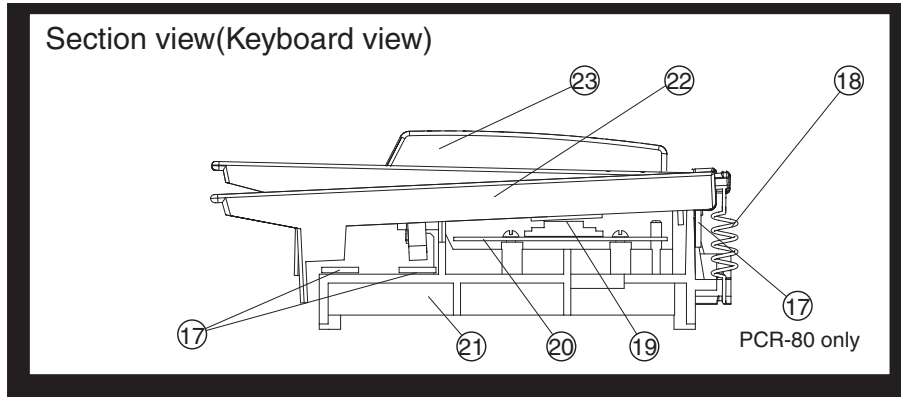
## NOTE

When you exchange volumes, it is necessary to solder both the surface and the back of a substrate,

Please refer to the other volumes which are not exchanged.

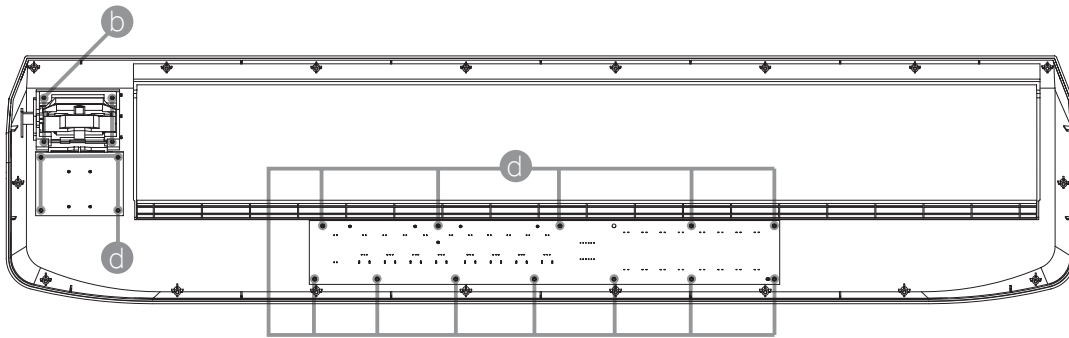
Please be careful when soldering is not correctly, the unit does unstable operation or does not operate.

# EXPLODED VIEW

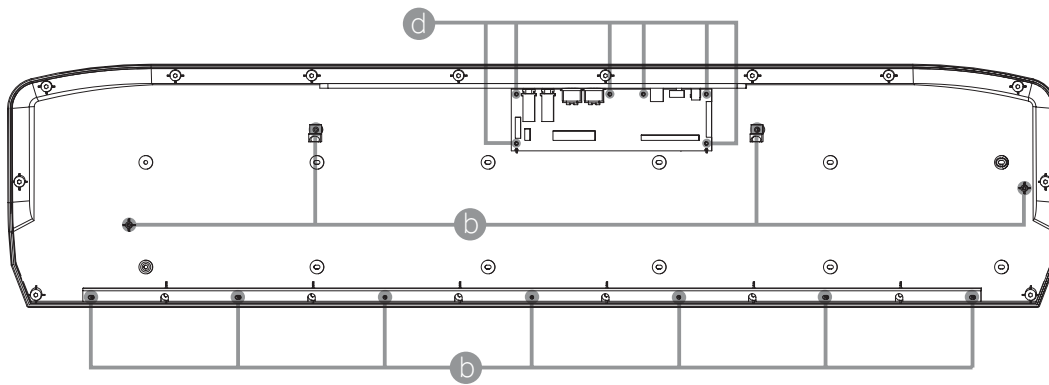




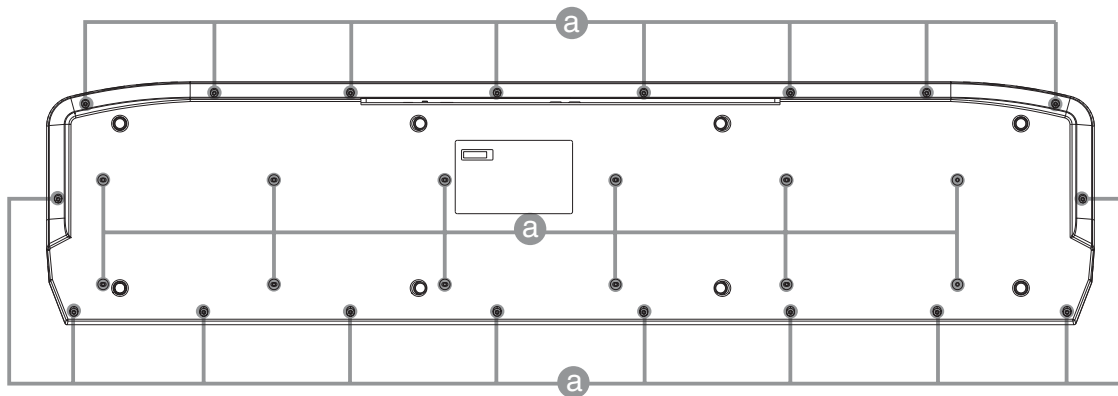
Inside up



Inside down



Bottom



# EXPLODED VIEW PARTS LIST

## [PARTS]

NO.	PART CODE	PART NAME	DESCRIPTION	Model name	Q'TY :PCR-30	Q'TY :PCR-50	Q'TY :PCR-80
1	03230423	TOP CASE		FOR PCR-30	1		
1	03230401	TOP CASE		FOR PCR-50		1	
1	03237145	TOP CASE		FOR PCR-80			1
2	03230412	BOTTOM CASE		FOR PCR-50		1	
2	03237156	BOTTOM CASE		FOR PCR-80			1
2	03230434	BOTTOM CASE		FOR PCR-30	1		
3	03239267	PANELBOARD ASSY FOR SERVICE			1	1	1
4	03239278	SIDEBOARD ASSY FOR SERVICE			1	1	1
5	03239256	MAIN BOARD ASSY	FOR SERVICE		1	1	1
6	03230456	S-KNOB			8	8	8
7	03230445	R-KNOB			8	8	8
8	03230478	PUSH SWITCH	RUBBER SW PANEL A		1	1	1
9	03230490	DISPLAY COVER			1	1	1
10	03230501	LED COVER			1	1	1
11	03239289	BENDER ASSY FOR SERVICE			1	1	1
12	03230467	PUSH SWITCH	RUBBER SW 3P		2	2	2
13	03237178	SUPPORT BAR		FOR PCR-80			2
14	03458512	REINFORCE BAR		FOR PCR-50		1	
14	03237167	REINFORCE BAR		FOR PCR-80			1
14	03458545	REINFORCE BAR		FOR PCR-30	1		
15	03239301	KEYBOARD ASSY FOR SERVICE		FOR PCR-30	1		
15	03239290	KEYBOARD ASSY FOR SERVICE		FOR PCR-50		1	
15	03456845	KEYBOARD ASSY FOR SERVICE		FOR PCR-80			1
16	12359137	RUBBER FOOT	SJ-5012 BLK		4	6	8
17	03457001	KEY FELT			1	1	1

## [KEYBOARD PARTS LIST]

NO.	PART CODE	PART NAME	DESCRIPTION	Model name	Q'TY :PCR-30	Q'TY :PCR-50	Q'TY :PCR-80
17	03457001	KEY FELT			2	2	3
18	03456967	COILED SPRING	NATURAL KEY		19	29	36
18	03456978	COILED SPRING	SHARP KEY		13	20	25
19	03456867	RUBBER SW KEYBOARD 13P	RUBBER SW		1	1	1
19	03456856	RUBBER SW KEYBOARD 12P	RUBBER SW		2	3	4
20	03456989	PWB KEYBOARD HI ASSY		FOR PCR-80			1
20	03456990	PWB KEYBOARD LO ASSY		FOR PCR-80			1
20	03458489	PWB KEYBOARD ASSY		FOR PCR-50		1	
20	03458567	PWB KEYBOARD ASSY		FOR PCR-30	1		
21	03458556	CHASSIS KEYBOARD		FOR PCR-30	1		
21	03458490	CHASSIS KEYBOARD		FOR PCR-50		1	
21	03458534	CHASSIS KEYBOARD		FOR PCR-80			1
22	03459790	NATURAL KEY C			2	4	5
22	03459801	NATURAL KEY F			3	4	5
22	03456912	NATURAL KEY C'			1	1	1
22	03456923	NATURAL KEY D			2	4	5
22	03459812	NATURAL KEY E			2	4	5
22	03459823	NATURAL KEY B			3	4	5
22	03456945	NATURAL KEY G			3	4	5
22	03456890	NATURAL KEY A			3	4	5
23	03456956	SHARP KEY			13	20	25


## [SCREWS]

NO.	PART CODE	PART NAME	DESCRIPTION	Q'TY
a	40011323	SCREW 3X10	BINDING TAPTITE P BZC	
b	40011189	SCREW 3X8	PAN TAPTITE-P FE ZC	
d	40011278	SCREW 3X8	BINDING TAPTITE P FE ZC	



# PART LIST

**SAFETY PRECAUTIONS:**

The parts marked  have safety-related characteristics. Use only listed parts for replacement.

**CONSIDERATION ON PARTS ORDRING**

When ordering any parts listed in the parts list, please specify the following items in the order sheet.

	QTY	PART NUMBER	DESCRIPTION	MODEL NUMBER
Ex.	10	22575241	Sharp Key	C-20/50
	15	2247017300	Knob (orange)	DAC-15D

Failure to completely fill the above items with correct number and description will result in delayed or even undelivered replacement.

NOTE: The parts marked # are new. (initial parts)



Supply is im possible except the spare parts for repairing listed by the service notes because it is hard to obtain them .  
 When you need repairing of a main unit and you need the except the parts listed by the service notes ,  
 please order a new one from the service center and replace it w ith a new one .

**CASING**

#	03237156	BOTTOM CASE		FOR PCR-80	1
#	03237145	TOP CASE		FOR PCR-80	1
	03230412	BOTTOM CASE		FOR PCR-50	1
	03230401	TOP CASE		FOR PCR-50	1
	03230434	BOTTOM CASE		FOR PCR-30	1
	03230423	TOP CASE		FOR PCR-30	1
	03230490	DISPLAY COVER			1
	03230501	LED COVER			1

**KNOB, BUTTON**

	03230445	R-KNOB			8
	03230456	S-KNOB			8

**SWITCH**

	03230467	PUSH SWITCH	RUBBER SW 3P		1
	03230478	PUSH SWITCH	RUBBER SW PANEL A		2
	03012701	SLIDE SWITCH	SLD-23-466E2		1

**JACK, EXT TERMINAL**

	02892878	DIN(MIDI) JACK	2DJ-0060003		2
	01459945	USB CONNECTOR	YKF45-0002		1
	00569278	6.5MM JACK	LGR4609-7100		2
	13449711	AC ADAPTOR JACK	HEC0470-01-630		1

**BENDER UNIT**

#	03239289	BENDER ASSY FOR SERVICE			1
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NOTE: Replacement BENDER ASSY FOR SERVICE should be made on a unit base.

**KEYBOARD ASSY**

#	03239301	KEYBOARD ASSY FOR SERVICE		FOR PCR-30	1
#	03239290	KEYBOARD ASSY FOR SERVICE		FOR PCR-50	1
#	03456845	KEYBOARD ASSY FOR SERVICE		FOR PCR-80	1

NOTE: See 'KEYBOARD PARTS LIST' for details.

**PWB ASSY**

	03239256	MAIN BOARD ASSY	FOR SERVICE		1
#	03239267	PANELBOARD ASSY FOR SERVICE			1
#	03239278	SIDEBOARD ASSY FOR SERVICE			1

**POTENTIOMETER**

	03234156	RK09D1130 G6888916M	9M/M ROTARY POTENTIOMETER		8
	03234167	RS30111 G67894540	30M/M SLIDE POTENTIOMETER		8

**WIRING, CABLE**

#	03457012	WIRING	12X650-P2.0-PHR-PHR-F		1
#	03457023	WIRING	13X450-P2.0-PHR-PHR-F		1
#	03457034	WIRING	9X200-P2.0-PHR-PHR-F		1
	02342101	WIRING	4X600-P2.0-PHR-PHR-F		1
	02344289	WIRING	15X200-P2.0-PHR-PHR-F		1

**SCREW**

40011323	SCREW 3X10	BINDING TAPTITE P BZC
40011189	SCREW 3X8	PAN TAPTITE-P FE ZC
40011278	SCREW 3X8	BINDING TAPTITE P FE ZC

**PACKING**

	03230512	PACKING PAD L			1
	03230523	PACKING PAD R			1
	03230534	ACCESSORIES PAD			1
#	03458456	PACKING PAD CENTER			1
	03230567	GIFT BOX	JAPANESE	FOR PCR-30	1
	03230578	GIFT BOX	ENGLISH	FOR PCR-30	1
	03230556	GIFT BOX	ENGLISH	FOR PCR-50	1
	03230545	GIFT BOX	JAPANESE	FOR PCR-50	1
#	03237189	GIFT BOX	JAPANESE	FOR PCR-80	1
#	03237190	GIFT BOX	ENGLISH	FOR PCR-80	1

**MISCELLANEOUS**

	12359137	RUBBER FOOT	SJ-5012 BLK		1
	03237178	SUPPORT BAR		FOR PCR-80	1
	03458512	REINFORCE BAR		FOR PCR-50	1
	03237167	REINFORCE BAR		FOR PCR-80	1
	03458545	REINFORCE BAR		FOR PCR-30	1

**ACCESSORIES (STANDARD)**

△	02231156	AC ADAPTOR	ACP-100		1
△	02231167	AC ADAPTOR	ACP-120		1
△	02231178	AC ADAPTOR	ACP-230		1
△	02231189	AC ADAPTOR	ACP-230UK		1
△	02231201	AC ADAPTOR	ACP-240A		1
	02239578	USB CONNECT CORD	YAF11-0791 2M		1
#	03341967	CD-ROM V1.00	DRIVER+EDITOR		1
#	03341978	OWNER'S MANUAL	JAPANESE		1
#	03341989	OWNER'S MANUAL	E/I/S/F/G		1
	03234178	TEMPLATE SHEET	GM2 PANEL		1
	03234189	TEMPLATE SHEET	GM2 SIDE		1
	03234201	TEMPLATE SHEET	BLANK PANEL		1
	03234212	TEMPLATE SHEET	BLANK SIDE		1
	40348001	WARRANTY CARD	EDIROL JAPAN ONLY		1

# IDENTIFYING VERSION NUMBER

1. While holding down the [V-LINK] and [MEMORY] buttons, turn on the power of the PCR. The seven-segment LED will indicate the version number.



2. After you have noted the version number, turn off the power to end the procedure.

# TEST MODE

## Required items

- A computer that will work with the PCR-series (Windows/Mac)
- PCR-series USB driver software CD-ROM (#03341967)
- MIDI sound module (e.g., SD-80)
- Monitor speakers (e.g., MA-10)
- AC adaptor ACP Series
- Expression pedal (e.g., EV-5)
- Foot pedal (e.g., DP-2)
- USB cable x1 (#02239578)
- MIDI cable x1
- Audio cables x2

### NOTE

On a Windows or Mac PC you can use a maximum of ten types of USB audio device driver.

If ten different USB audio device drivers are installed, delete unneeded drivers and then install the driver for the device you want to use.

## Test mode procedure

1. Connect the ACP Series AC adaptor to the PCR's DC jack. Connect an EV-5 to the EXPRESSION PEDAL jack and a DP-2 to the HOLD PEDAL jack.
2. Use a MIDI cable to connect the MIDI OUT connector to the MIDI IN connector of your external MIDI sound module.

### MEMO

Also use audio cables to connect your external MIDI sound module to monitor speakers.

3. While holding down the [L1] and [L3] buttons, turn on the power of the PCR to enter Test mode.
4. Press the [MEMORY] button, and the seven-segment LED will display the version number.



5. Next hold down the [CANCEL] button and press the [B2] button to perform the SW&LED test.
6. Press each button one by one and verify that its LED goes dark.
7. Next press the [CANCEL] button, and then press the [B4] button to perform the AD test.
8. Move the bender all the way to the left, return it to the center, and press the [B1] button.
9. Move the bender all the way to the right, return it to the center, and press the [B2] button.
10. Move the bender all the way to the upward position, return it to the original position, and press the [B3] button.
11. Move the bender all the way to the left, and verify that the seven-segment LED indicates "00".



12. Move the bender all the way to the right, and verify that the seven-segment LED indicates "7F".



13. Return the bender to the center, and verify that the seven-segment LED indicates "40".



14. Move the bender all the way upward, and verify that the seven-segment LED indicates "7F".



15. Return the bender to the center, and verify that the seven-segment LED indicates "00".



16. Verify that the value of each rotary control changes from "00" through "7F".



Also verify that detented rotary controls stop at the detent, and indicate a value of "40".



17. Verify that the value of each slide control changes from "00" through "7F".



18. Operate the EXPRESSION PEDAL and verify that the value changes from "00" through "7F".



19. Turn off the power of the PCR. Then turn it on again to start it up in normal operating mode, and verify that each key will sound.
20. While playing the keyboard, press the HOLD PEDAL and verify that notes are held.
21. Turn off the power of the PCR.
22. Use a USB cable to connect the PCR's USB connector to your computer, turn on the power of your computer and the PCR to start it up in normal operating mode.
23. Verify that the computer recognizes the PCR.
24. Press the [V-LINK] button, play the keyboard, and verify that sound is produced.

25. Press the [EDIT] button, press the [SYSTEM] key of the keyboard, press the [8] key of the keyboard, and then press the [ENTER] button three times.
26. When the seven-segment LED indicates "1", turn off the power of the PCR to end the procedure.

