DIGITAL WORKSTATION

PSR-A3000

SERVICE MANUAL



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PK 001918

YAMAHA

HAMAMATSU, JAPAN

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IMPORTANT NOTICE

This manual has been provided for the use of authorized Yamaha Retailers and their service personnel. It has been assumed that basic service procedures inherent to the industry, and more specifically Yamaha Products, are already known and understood by the users, and have therefore not been restated.

WARNING : Failure to follow appropriate service and safety procedures when servicing this product may result in personal injury, destruction of expensive components and failure of the product to perform as specified. For these reasons, we advise all Yamaha product owners that all service required should be performed by an authorized Yamaha Retailer or the appointed service representative.

IMPORTANT : This presentation or sale of this manual to any individual or firm does not constitute authorization certification, recognition of any applicable technical capabilities, or establish a principal-agent relationship of any form.

The data provided is believed to be accurate and applicable to the unit(s) indicated on the cover. The research engineering, and service departments of Yamaha are continually striving to improve Yamaha products. Modifications are, therefore, inevitable and changes in specification are subject to change without notice or obligation to retrofit. Should any discrepancy appear to exist, please contact the distributor's Service Division.

WARNING : Static discharges can destroy expensive components. Discharge any static electricity your body may have accumulated by grounding yourself to the ground bus in the unit (heavy gauge black wires connect to this bus.)

IMPORTANT : Turn the unit OFF during disassembly and parts replacement. Recheck all work before you apply power to the unit.

WARNING: This product contains chemicals known to the State of California to cause cancer, or birth defects or other reproductive harm.

DO NOT PLACE SOLDER, ELECTRICAL/ELECTRONIC OR PLASTIC COMPONENTS IN YOUR MOUTH FOR ANY REASON WHAT SO EVER!

Avoid prolonged, unprotected contact between solder and your skin! When soldering, do not inhale solder fumes or expose eyes to solder/flux vapor!

If you come in contact with solder or components located inside the enclosure of this product, wash your hands before handling food.

IMPORTANT NOTICE FOR THE UNITED KINGDOM

Connecting the Plug and Cord

IMPORTANT. The wires in this mains lead are coloured in accordance with the following code:

BLUE : NEUTRAL
BROWN : LIVE

As the colours of the wires in the mains lead of this apparatus may not correspond with the coloured makings identifying the terminals in your plug proceed as follows:

The wire which is coloured BLUE must be connected to the terminal which is marked with the letter N or coloured BLACK.

The wire which is coloured BROWN must be connected to the terminal which is marked with the letter L or coloured RED.

Making sure that neither core is connected to the earth terminal of the three pin plug.

(2 wires)

■ WARNING

Components having special characteristics are marked ⚠ and must be replaced with parts having specification equal to those originally installed.

■ SAVING DATA



Be sure to perform it

- The edited Songs/Styles/Voices/Multi Pads and MIDI settings are lost when you turn off the power to the instrument. This also occurs when the power is turned off by the Auto Power Off function. Save the edited data to the instrument, or to a USB flash drive. However, the data saved to the instrument may be lost due to some failure, an operation mistake, etc. Save your important data onto a USB flash drive.
- To protect against data loss through USB flash drive damage, we recommend that you save your important data onto spare USB flash drive or an external device such as a computer as backup data.

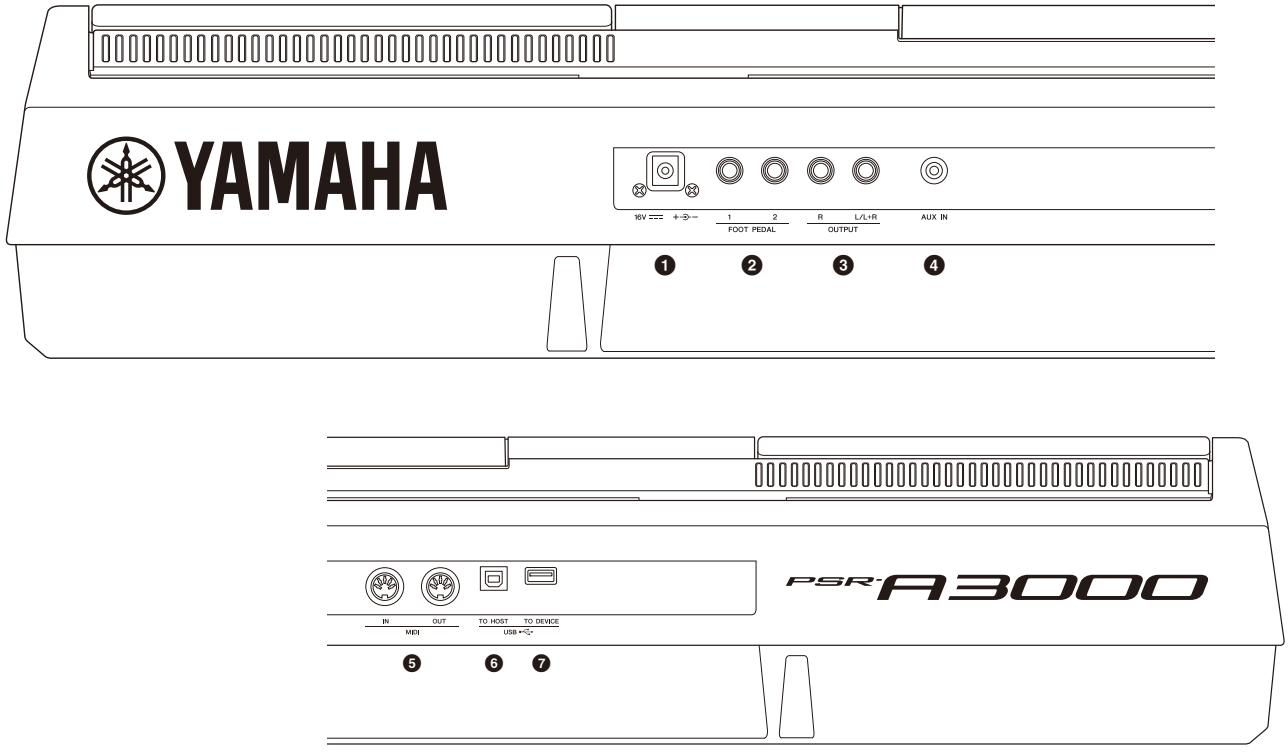
■ SPECIFICATIONS

Product name			Digital Keyboard
Size/Weight	Dimensions (W x D x H)		1,002 mm x 437 mm x 148 mm (39-7/16" x 17-3/16" x 5-13/16")
	Weight		11.2 kg (24 lbs., 11 oz.)
Control Interface	Keyboard	Number of Keys	61
		Type	Organ
		Touch Response	Hard 2, Hard 1, Medium, Soft 1, Soft 2
	Other Controllers	Joystick	Yes (Assignable)
	Display	Type	TFT Color Wide VGA LCD
		Size	7 inch
		Language	English, German, French, Spanish, Italian
	Panel	Language	English
Voices	Tone Generation	Tone Generation Technology	AWM Stereo Sampling
	Polyphony	Number of Polyphony (max.)	128
	Preset	Number of Voices	997 Voices + 58 Drum/SFX Kits + 480 XG Voices
		Featured Voices	107 S.Art!, 23 MegaVoices, 41 Sweet!, 64 Cool!, 90 Live!, 20 Organ Flutes! (including 171 Oriental Voices, 25 Oriental Kits)
	Compatibility		XG, GS (for Song playback), GM, GM2
	Part		Right 1, Right 2, Left
Effects	Reverb Block		52 Preset + 3 User
	Chorus Block		106 Preset + 3 User
	DSP Block		295 Preset + 10 User
	Master Compressor		5 Preset + 5 User
	Master EQ		5 Preset + 2 User
	Part EQ		27 Parts
Styles	Preset	Number of Styles	400
		Featured Styles	380 Pro, 10 Session, 10 DJ
		Fingering	Single Finger, Fingered, Fingered On Bass, Multi Finger, AI Fingered, Full Keyboard, AI Full Keyboard
		Style Control	INTRO x 3, MAIN VARIATION x 4, FILL x 4, BREAK, ENDING x 3
	Other Features	Music Finder (Max.)	1,200
		One Touch Setting (OTS)	4 for each Style
	Compatibility		Style File Format (SFF), Style File Format GE (SFF GE)
Songs (MIDI)	Preset	Number of Preset Songs	4
	Recording	Number of Tracks	16
		Data Capacity	approx. 300 KB/Song
		Recording Function	Quick Recording, Multi Track Recording, Step Recording
	Data Format	Playback	SMF (Format 0 & 1), XF
		Recording	SMF (Format 0)
Multi Pads	Preset	Number of Multi Pad Banks	228 banks x 4 Pads
	Audio	Audio Link	Yes
Functions	Voices	Harmony	Yes
		Arpeggio	Yes
		Panel Sustain	Yes
		Mono/Poly	Yes (with Mono Legato)
		Voice Information	Yes
	Styles	Style Creator	Yes
		OTS Information	Yes
	Songs	Song Creator	Yes
		Score Display Function	Yes
		Lyrics Display Function	Yes
		Text Display Function	Yes
		Wallpaper Customization	Yes
		Guide	Follow Lights, Any Key, Karao-Key, Your Tempo
		Performance Assistant Technology (P.A.T.)	Yes
	Multi Pads	Multi Pad Creator	Yes

Functions	Registration Memory	Number of Buttons	8
		Control	Registration Sequence, Freeze
	USB Audio Player/Recorder	Playback Format	.wav (WAV format: 44.1 kHz sample rate, 16 bit resolution, stereo) .mp3 (MPEG-1 Audio Layer-3: 44.1/48.0 kHz sample rate, 64–320 kbps and variable bit rate, mono/stereo)
		Recording Format	.wav (WAV format: 44.1 kHz sample rate, 16 bit resolution, stereo)
		Recording Time (max.)	80 minutes/Song
		Time Stretch	Yes
		Pitch Shift	Yes
		Vocal Cancel	Yes
	Demonstration		Yes
	Overall Controls	Metronome	Yes
		Tempo	5 – 500
		Transpose	-12 – 0 – +12
		Tuning	414.8 – 440.0 – 466.8 Hz
		Octave Button	Yes
		Scale Type	9 types
		Scale Setting	Yes
		Scale Memory	Yes
	Miscellaneous	Direct Access	Yes
Expandability (Expansion Packs)	Expansion Voice		Yes (approx. 512 MB max.)
	Expansion Style		Yes (internal memory)
Storage and Connectivity	Storage	Internal Memory	Yes (approx. 13 MB max.)
		External Drives	USB flash drive
	Connectivity	DC IN	16 V
		Headphones	Standard stereo phone jack
		MIDI	IN, OUT
		AUX IN	Stereo mini jack
		OUTPUT	L/L+R, R
		FOOT PEDAL	1 (SUSTAIN), 2 (ARTICULATION 1), Function assignable
		USB TO DEVICE	Yes
		USB TO HOST	Yes
Amplifiers/ Speakers	Amplifiers		15 W x 2
	Speakers		13 cm x 2 + 5 cm x 2
Power Supply	Power Supply	Adaptor	PA-300C or an equivalent recommended by Yamaha
	Power Consumption		19 W
	Auto Power Off		Yes
Included Accessories			• Owner's Manual • Online Member Product Registration • Music rest • AC adaptor* (PA-300C or an equivalent recommended by Yamaha), power cord* * May not be included depending on your area. Check with your Yamaha dealer.
Separately Sold Accessories (May not be available depending on your area.)			• AC adaptor: PA-300C or an equivalent recommended by Yamaha • Headphones: HPH-50/HPH-100/HPH-150 • Footswitches: FC4/FC4A/FC5 • Foot controller: FC7 • USB MIDI Interface for iPhone/iPod touch/iPad: i-UX1 • MIDI Interface for iPhone/iPod touch/iPad: i-MX1 • USB wireless LAN adaptor: UD-WL01 • USB-MIDI Interface: UX16 • Keyboard stand: L-6/L-7 (The exterior size of the PSR-A3000 is beyond the limits as described in the L-6 Assembly Instructions. However, we have determined through tests that the stand can be safely used for the instrument.)

■ PANEL LAYOUT

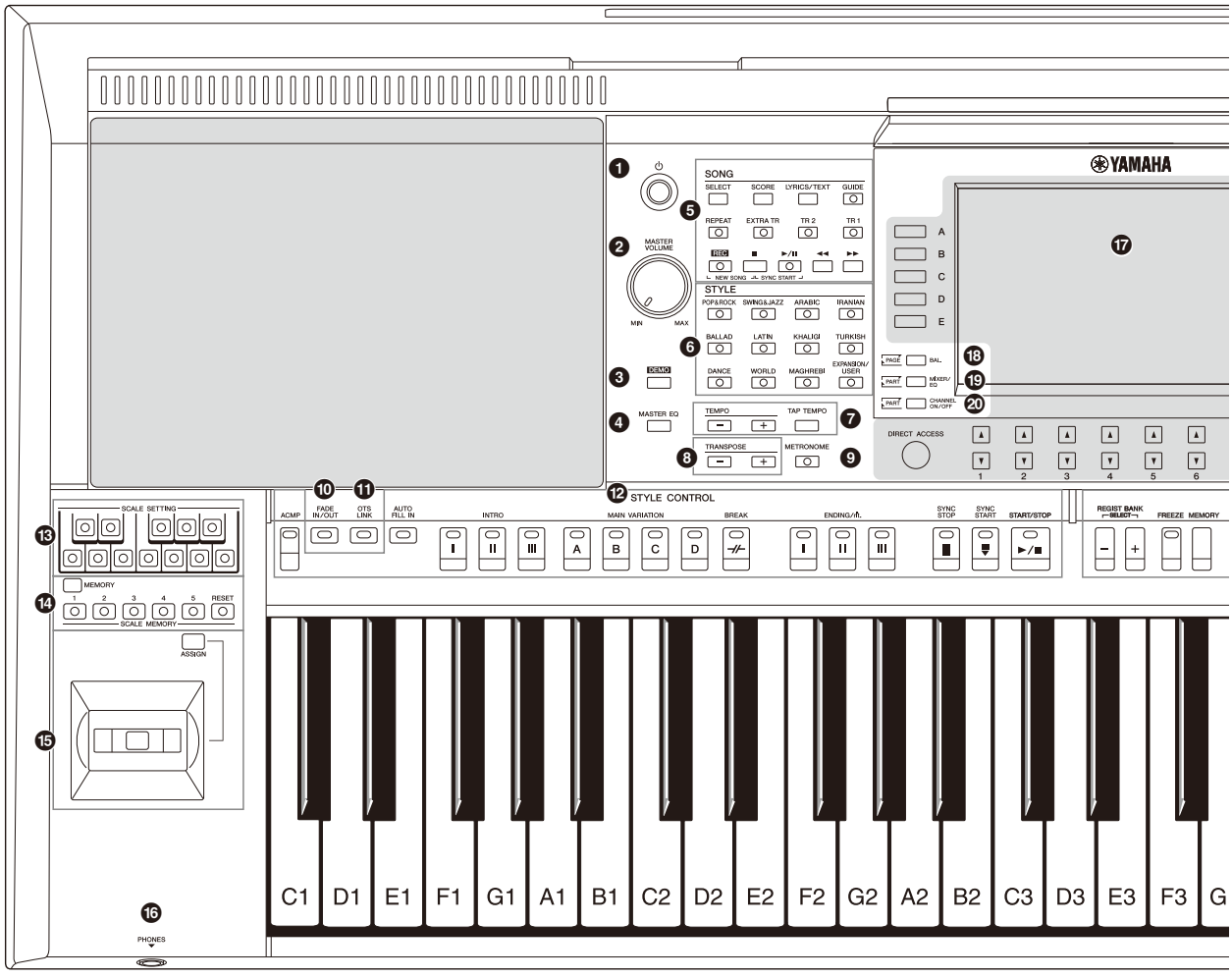
• Rear Panel



■ Rear Panel

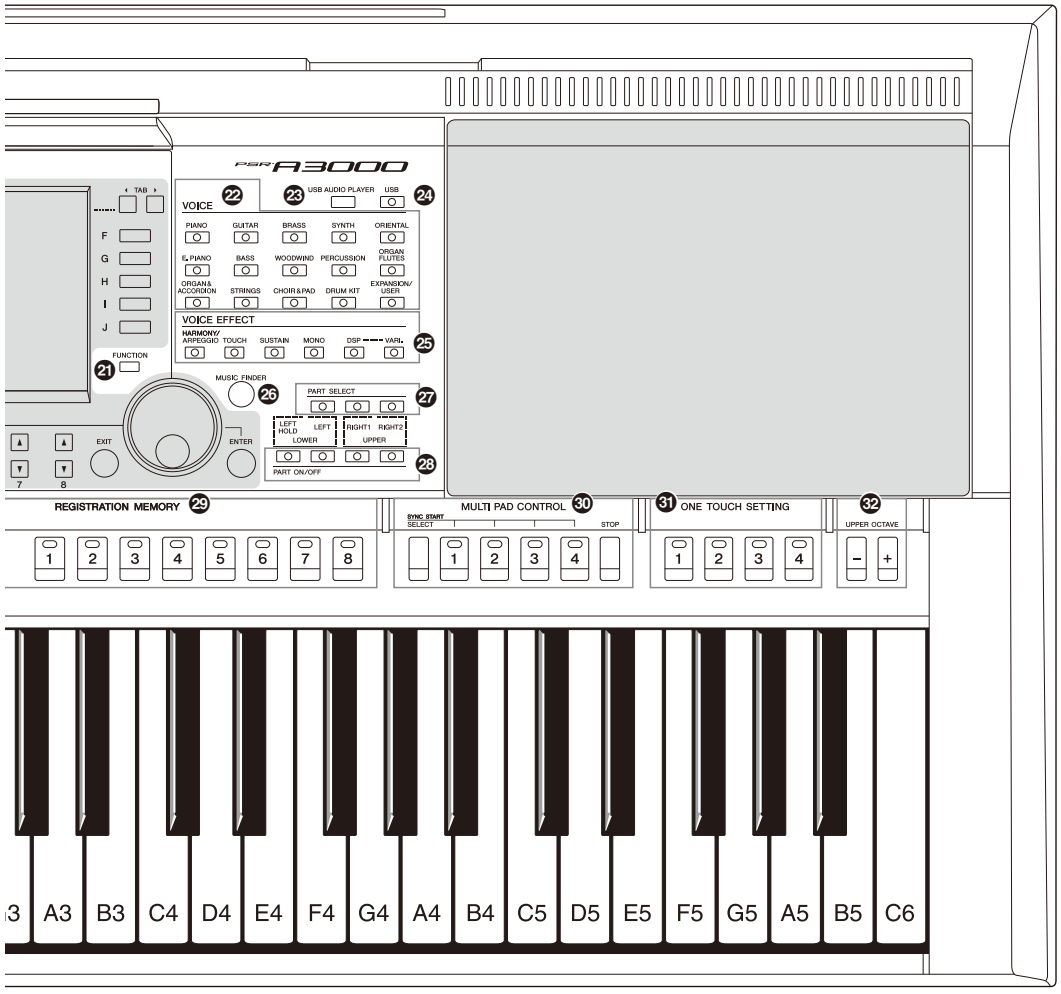
❶ DC IN jack
❷ FOOT PEDAL [1]/[2] jacks
❸ OUTPUT [L/L+R]/[R] jacks
❹ [AUX IN] jack
❺ MIDI [IN]/[OUT] terminals
❻ [USB TO HOST] terminal
❼ [USB TO DEVICE] terminal

• Front Panel



■ Front Panel

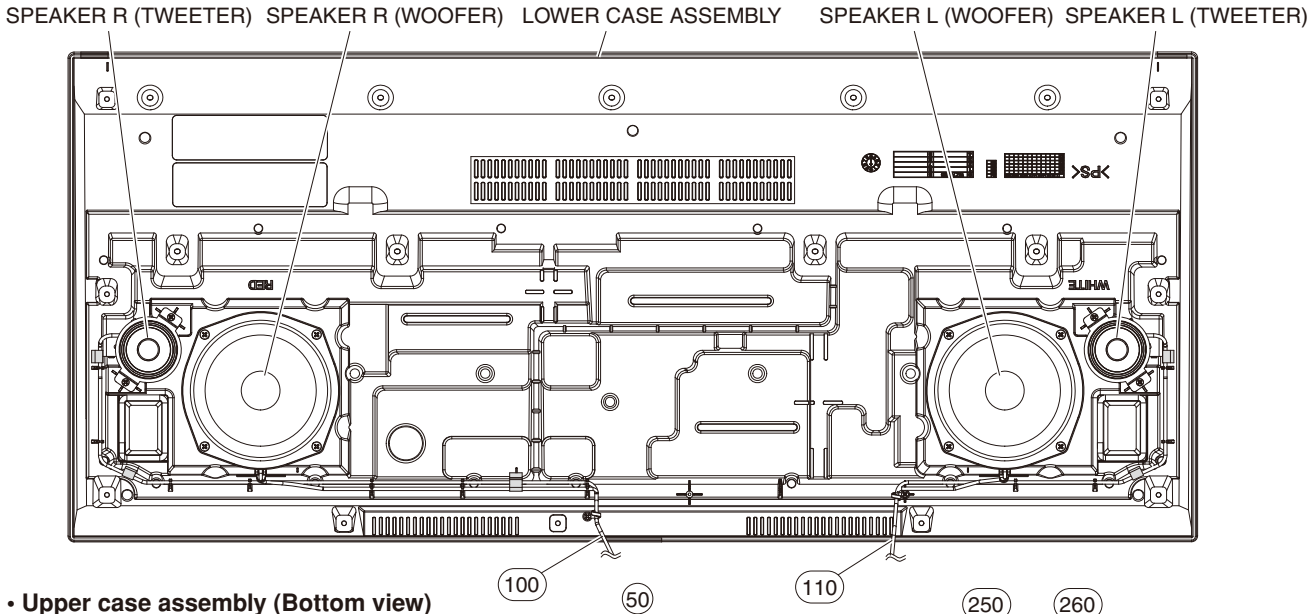
❶ [⏻] (Standby/On) switch
❷ [MASTER VOLUME] dial
❸ [DEMO] button
❹ [MASTER EQ] button
❺ SONG buttons
❻ STYLE category selection buttons
❼ [TAP TEMPO]/TEMPO buttons
❽ TRANSPOSE buttons
❾ [METRONOME] button
❿ [FADE IN/OUT] button
⓫ [OTS LINK] button
⓬ STYLE CONTROL buttons
⓭ SCALE SETTING buttons
⓮ SCALE MEMORY [MEMORY], [1] – [5], [RESET] buttons
⓯ Joystick, [ASSIGN] button
⓰ [PHONES] jack
⓱ LCD and related controls
⓲ [BAL.] button
⓳ [MIXER/EQ] button
⓴ [CHANNEL ON/OFF] button
㉑ [FUNCTION] button
㉒ VOICE category selection buttons
㉓ [USB AUDIO PLAYER] button



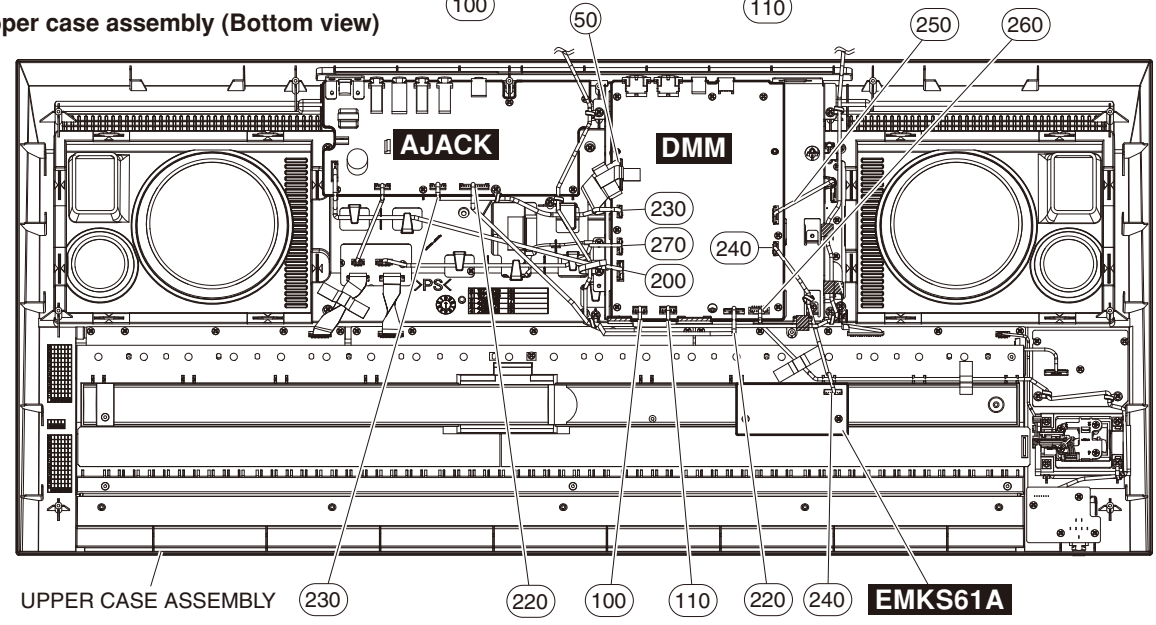
㉔ [USB] button
㉕ VOICE EFFECT buttons
㉖ [MUSIC FINDER] button
㉗ PART SELECT buttons
㉘ PART ON/OFF buttons
㉙ REGISTRATION MEMORY buttons
㉚ MULTI PAD CONTROL buttons
㉛ ONE TOUCH SETTING buttons
㉜ UPPER OCTAVE buttons

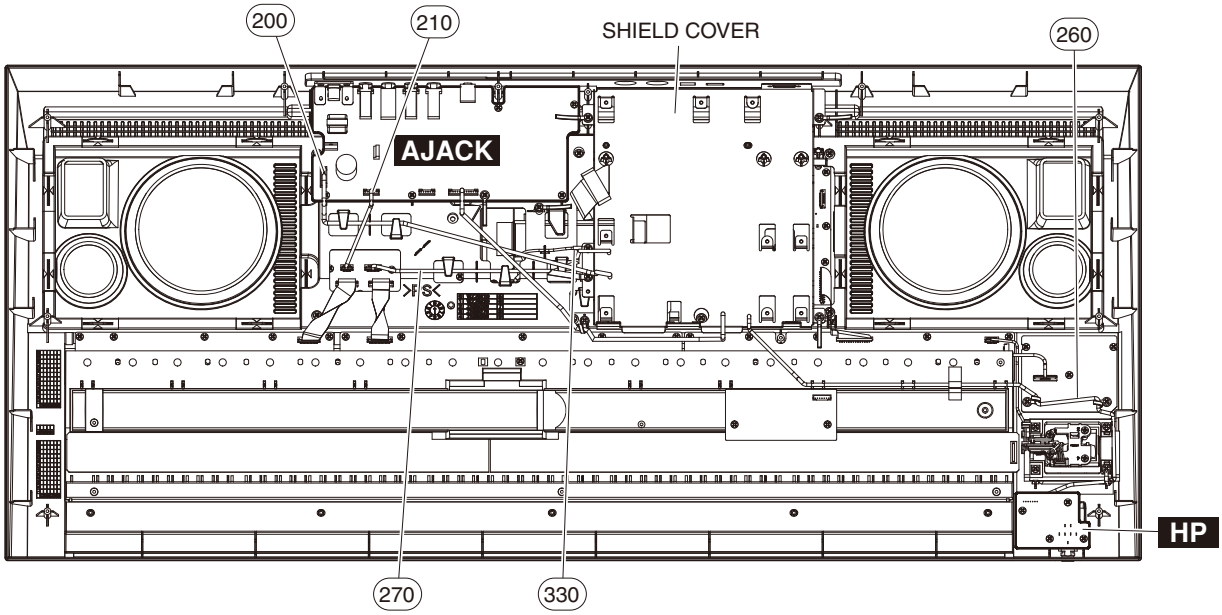
■ CIRCUIT BOARD LAYOUT & WIRING

• Lower case assembly (Top view)

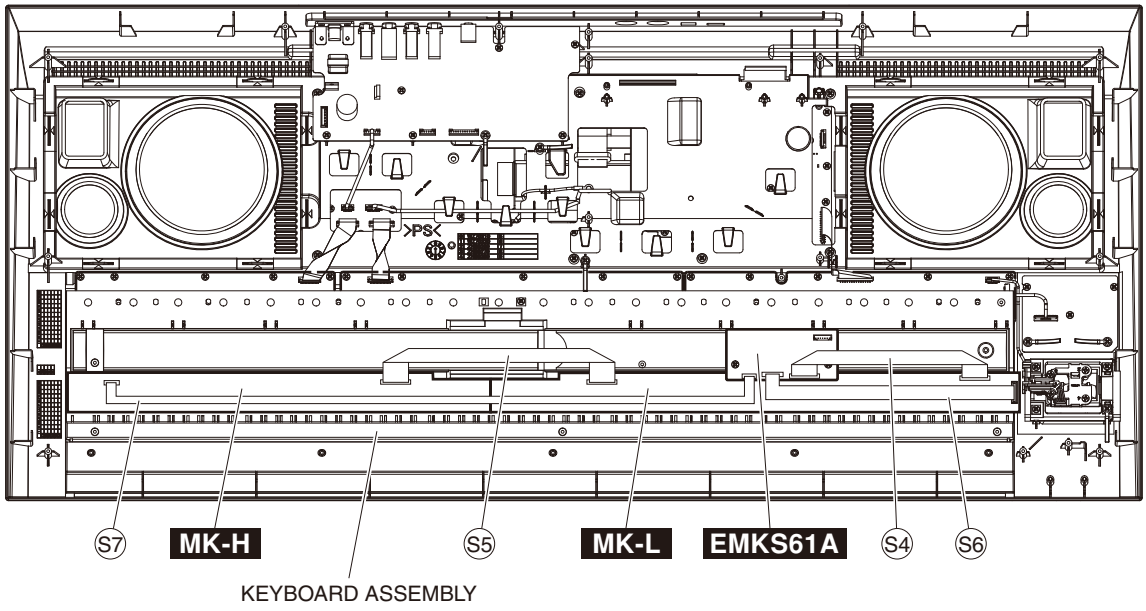


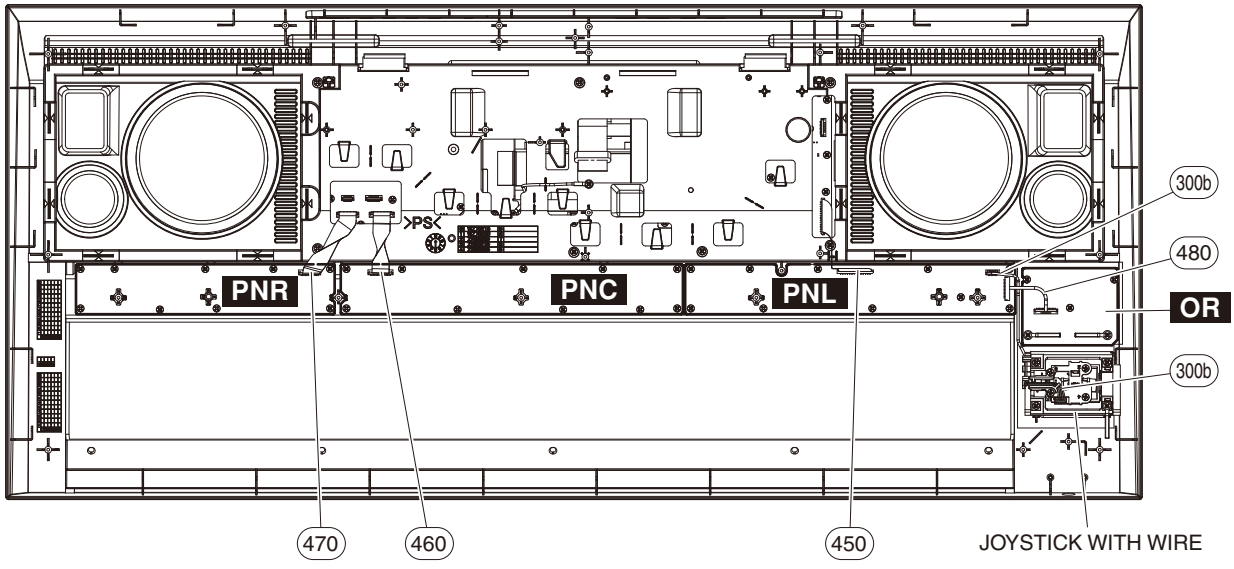
• Upper case assembly (Bottom view)



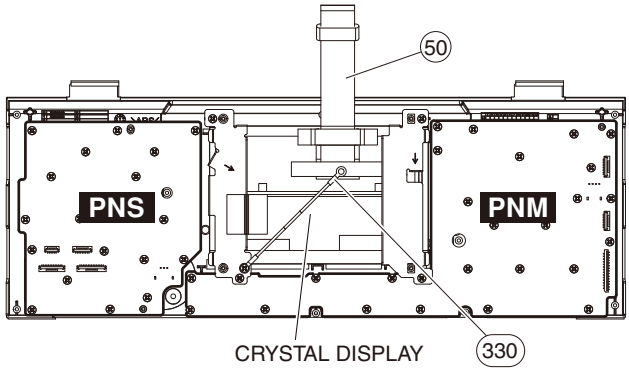


• **Upper case assembly (Bottom view)**





• **CENTER PANEL ASSEMBLY**



Unit Name	Location	Parts No.	Parts Name	Connection	Remarks
OVERALL ASSEMBLY	200	(ZP69140)	Connector Assembly XH S	DMM CN802 - AJACK CN102	6P L=320
	210	(ZP44110)	Connector Assembly PH-GH S	AJACK CN104 - PNS CN202	6P L=110
	220	(ZP44070)	Connector Assembly PH-GH S	DMM CN803 - AJACK CN100	12P L=335
	230	(ZP44090)	Connector Assembly PH-GH S	DMM CN004 - AJACK CN101	7P/6P L=210
	240	(ZP44100)	Connector Assembly PH-GH S	DMM CN003 - EMKS61A CN1	7P L=180
	250	(ZP44120)	Connector Assembly GH S	DMM CN002 - PNM CN100	10P L=110
	260	(ZP11440)	Connector Assembly PH S	DMM CN805 - HP CN200	7P L=550
	270	(ZP44130)	Connector Assembly GH S	DMM CN005 - PNS CN203	9P L=250
UPPER CASE ASSEMBLY	300b	ZT218900	Connector Assembly JS S	PNL CN101 - JS-CN1	7P/4P L=220
	450	ZA581500	Connector Assembly FFC S	PNM CN101 - PNL CN102	29P L=130
	460	(ZP44140)	Connector Assembly GH S	PNS CN201 - PNC CN200	15P L=100
	470	(ZP44150)	Connector Assembly GH S	PNS CN200 - PNR CN300	13P L=110
	480	(ZP44160)	Connector Assembly GH S	PNL CN100 - OR CN300	14P L=70
CENTER PANEL ASSEMBLY	50	ZP442000	Wiring Assembly FFC S LF	DMM CN401 - LCD	50P L=150
	330	(WJ01350)	Connector Assembly GROUND3	LCD FIXTURE R - SHIELD COVER	L=80
LOWER CASE ASSEMBLY	100	(ZA58080)	Connector Assembly SPR S	DMM CN801-SP Rch (Wo, Tw)	4P L=780
	110	(ZA58110)	Connector Assembly SPL S	DMM CN800-SP Lch (Wo, Tw)	5P L=660
KEYBOARD ASSEMBLY	S4	VU95890R	Cable	EMKS61A CN2 - MK-L	12P L=190
	S5	VU65950R	Cable	MK-M - MK-L	12P
	S6	VU65940R	Cable	EMKS61A CN4 - MK-L	7P
	S7	VU65960R	Cable	EMKS61A CN3 - MK-H	5P

* The parts with "( )" in "**Part No.**" are not available as spare parts.

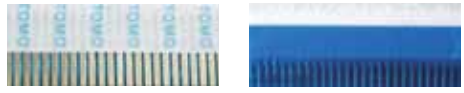
Caution: Be sure to attach the removed filament tape just as it was before removal.

■ DISASSEMBLY PROCEDURE

Precautions

* **Disassembly or assembly should be performed on a cloth so as not to damage the LCD.**
* **Install the filament tape and the harness clamp in the same way as they were before removal.**

* **Notes on Flat Cable**
  Contacts are visible from the back. Pay attention not to insert and install the cable to the connector inversely. (Photo 1)



Front Side Back Side

Photo 1

1. Bottom Board Assembly

(Time required: About 4 minutes)

Remove the twenty-two (22) screws marked [450]. The bottom board assembly can then be removed. (Fig. 1)

2. Lower Case Assembly

(Time required: About 4 minutes)

Remove the nine (9) screws marked [400], the five (5) screws marked [410] and the four (4) screws marked [420A]. The lower case assembly can then be removed. (Fig. 2)

<Bottom view>

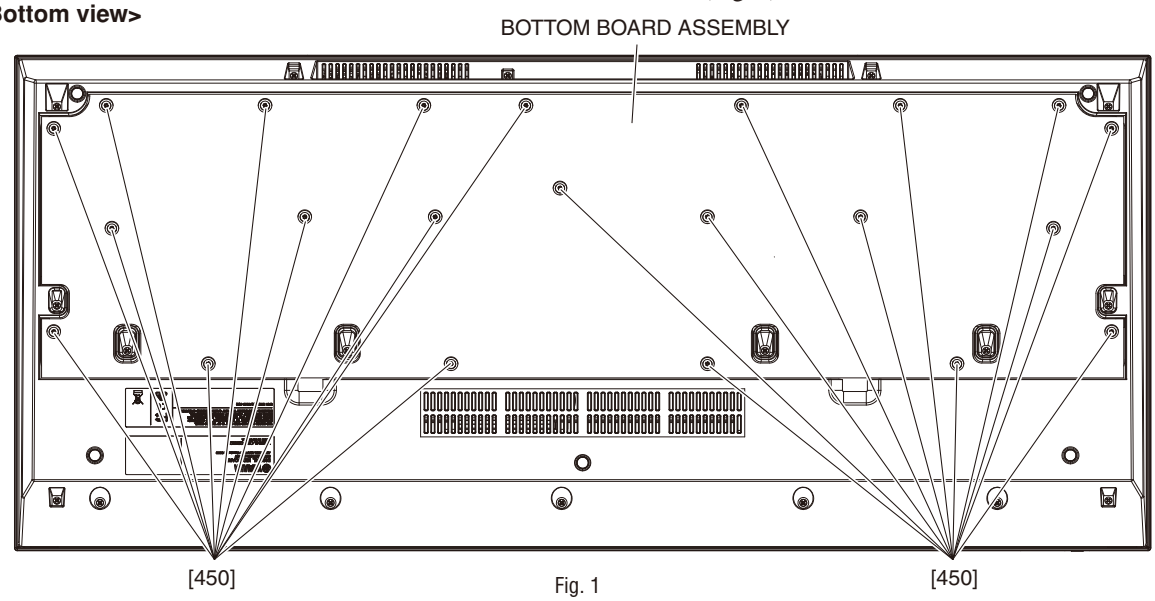


Fig. 1

<Bottom view>

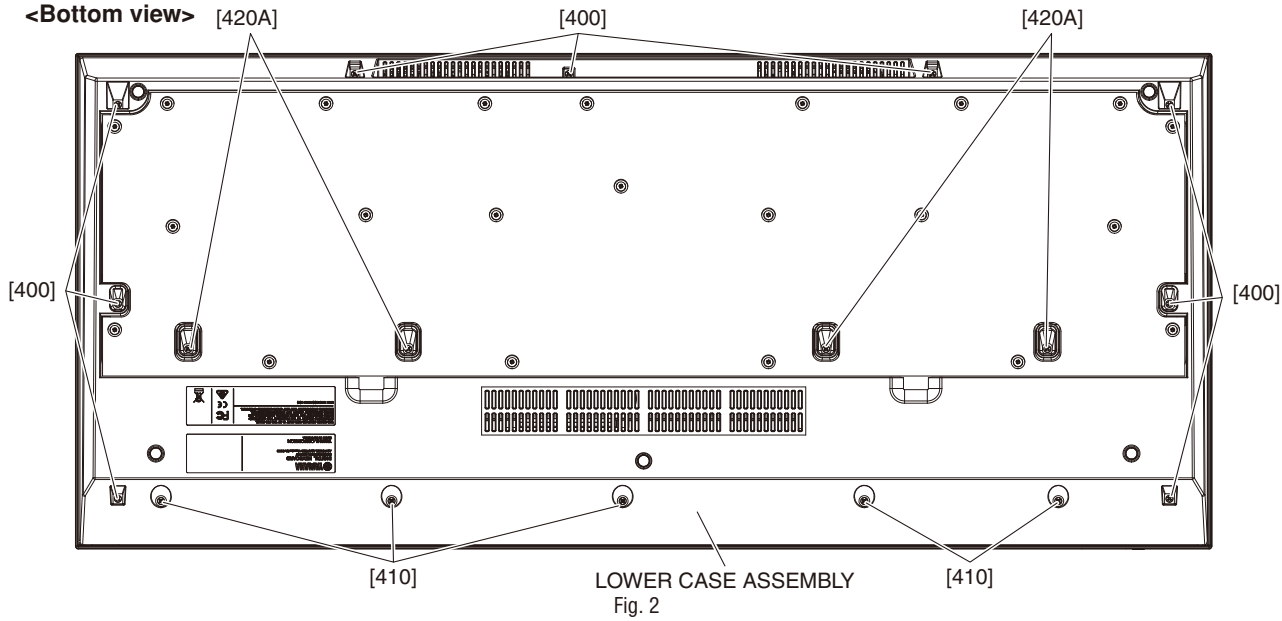


Fig. 2

3. DMM Circuit Board

(Time required: About 5 minutes)

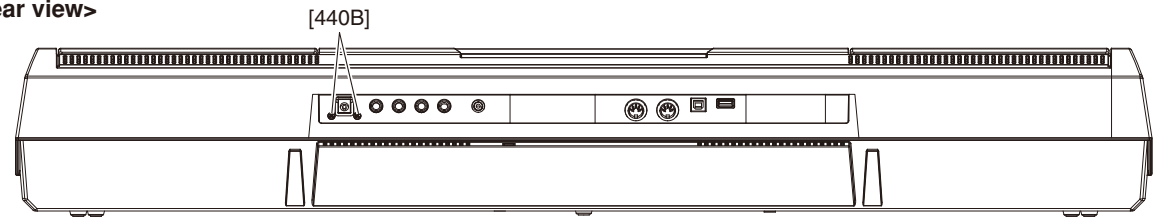
3-1. Remove the lower case assembly. (See procedure 2.)

3-2. Remove the seven (7) screws marked [440A]. The DMM circuit board can then be removed. (Fig. 3)

* ***After replacing the DMM circuit board, make sure to execute the " Factory Set" in the Test program.***

* ***Hardware ID is stored in the Backup ROM on the DMM circuit board. If the DMM circuit board is replaced, Hardware ID will be changed.***

<Rear view>



<Bottom view>

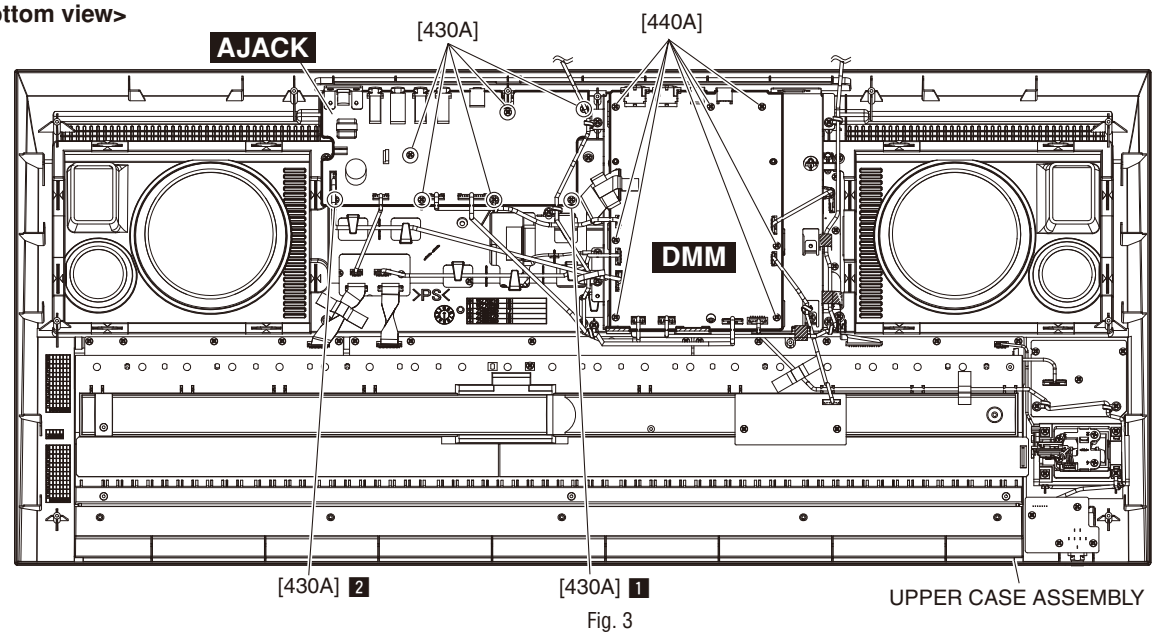


Fig. 3

<Bottom view>

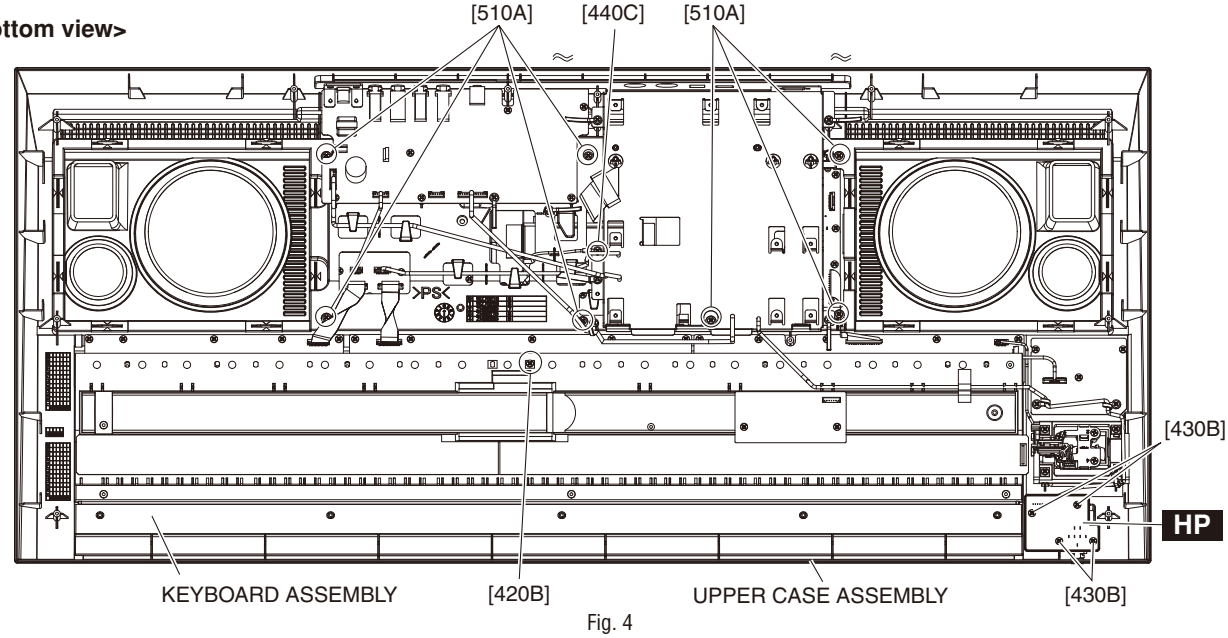


Fig. 4

4. AJACK Circuit Board

(Time required: About 5 minutes)

4-1. Remove the lower case assembly. (See procedure 2.)

4-2. Remove the two (2) screws marked [440B] on the rear and the seven (7) screws marked [430A]. The AJACK circuit board can then be removed. (Fig. 3)

* ***When installing the AJACK circuit board, tighten the screws 1 and 2 shown in Fig. 3 in numerical order and then tighten the other screws.***

5. Center Panel Assembly

(Time required: About 6 minutes)

5-1. Remove the lower case assembly. (See procedure 2.)

5-2. Remove the seven (7) screws marked [510A] and the screw marked [440C]. (Fig. 4)

5-3. Remove the encoder and volume knobs. (Fig. 5)

5-4. Remove the screw marked [510B]. The center panel assembly can then be removed. (Fig. 5)

* ***When installing the center panel assembly, fit claws of the center panel into the holes in the upper case and install the center panel in the arrow direction. (Fig. 6)***

6. Crystal Display

(Time required: About 7 minutes)

6-1. Remove the lower case assembly. (See procedure 2.)

6-2. Remove the center panel assembly. (See procedure 5.)

6-3. Remove the two (2) screws marked [300A]. The LCD fixture L can then be removed. (Fig. 7)

6-4. Remove the two (2) screws marked [300B]. The LCD fixture R can then be removed. (Fig. 7)

* ***When installing the LCD fixture L and R, tighten screws while pushing it in the arrow direction.***

* ***When installing the LCD fixture L and R, tighten screws in the order of 1 to 4 as shown in Fig. 7.***

6-5. Remove the crystal display.

6-6. Remove the FFC S LF wiring assembly. (Fig. 7)

<Top view>

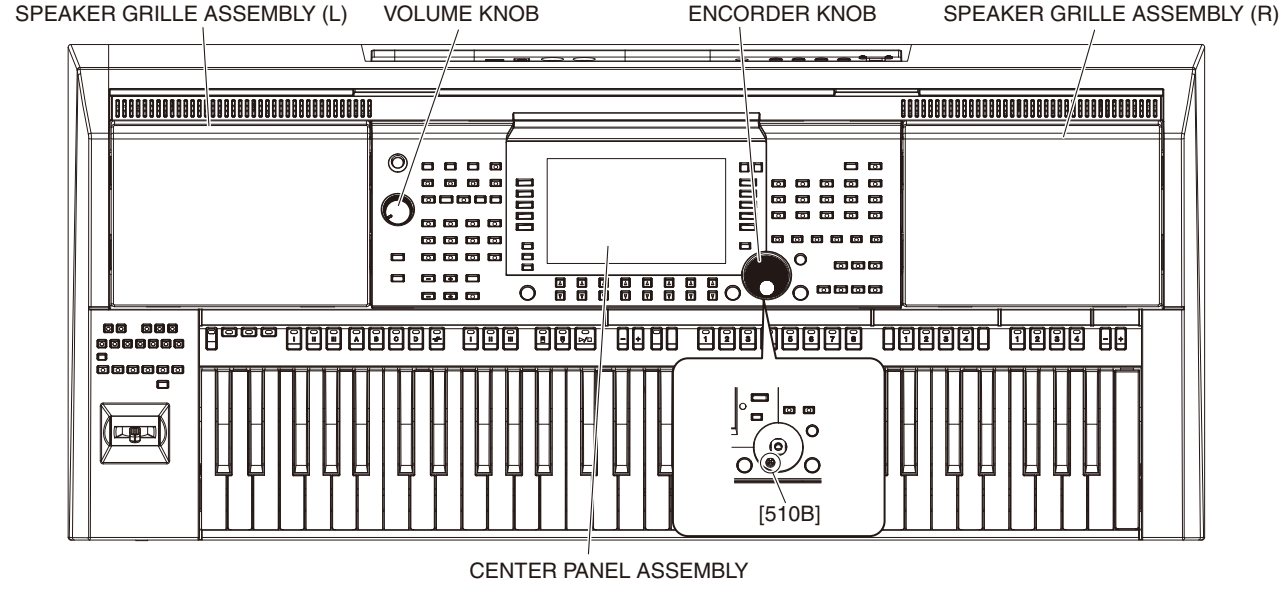


Fig. 5

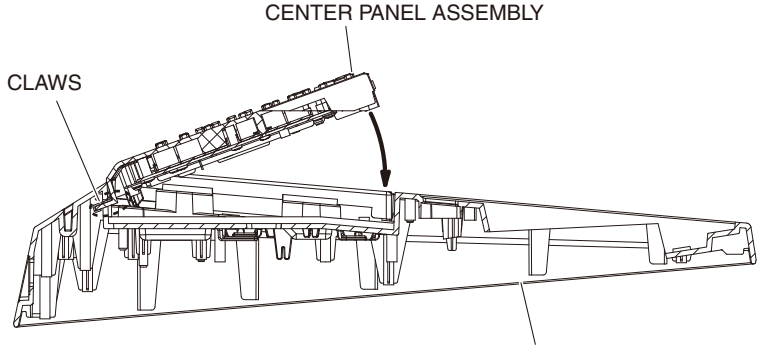


Fig. 6

7. PNS Circuit Board

(Time required: About 9 minutes)

7-1. Remove the lower case assembly. (See procedure 2.)
7-2. Remove the center panel assembly. (See procedure 5.)
7-3. Remove the eighteen (18) screws marked [300C]. The PNS circuit board can then be removed. (Fig. 8)

* ***When installing the PNS circuit board, fit the PNS circuit board to the positioning pins at 2 locations shown in Fig. 8 first, tighten the screws 1 and 2 in that order and then tighten the other screws.***

8. PNM Circuit Board

(Time required: About 10 minutes)

8-1. Remove the lower case assembly. (See procedure 2.)
8-2. Remove the center panel assembly. (See procedure 5.)
8-3. Remove the LCD fixture L. (See procedure 6-3.)
8-4. Remove the LCD fixture R. (See procedure 6-4.)
8-5. Remove the twenty-six (26) screws marked [300D]. The PNM circuit board can then be removed. (Fig. 8)

* ***When installing the PNM circuit board, apply the PNM circuit board to the positioning marks at 3 locations shown in Fig. 8 first, tighten the screws 1 and 2 in that order and then tighten the other screws.***

● **CENTER PANEL ASSEMBLY**

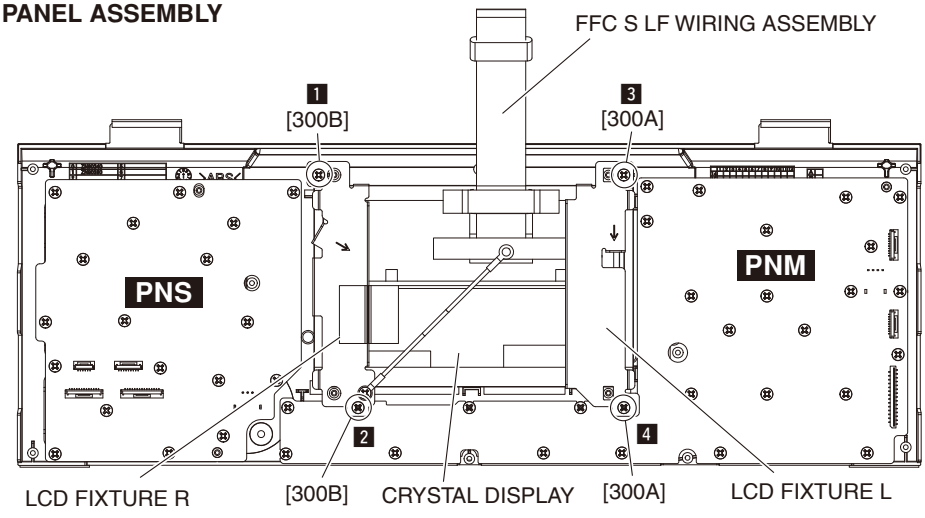


Fig. 7

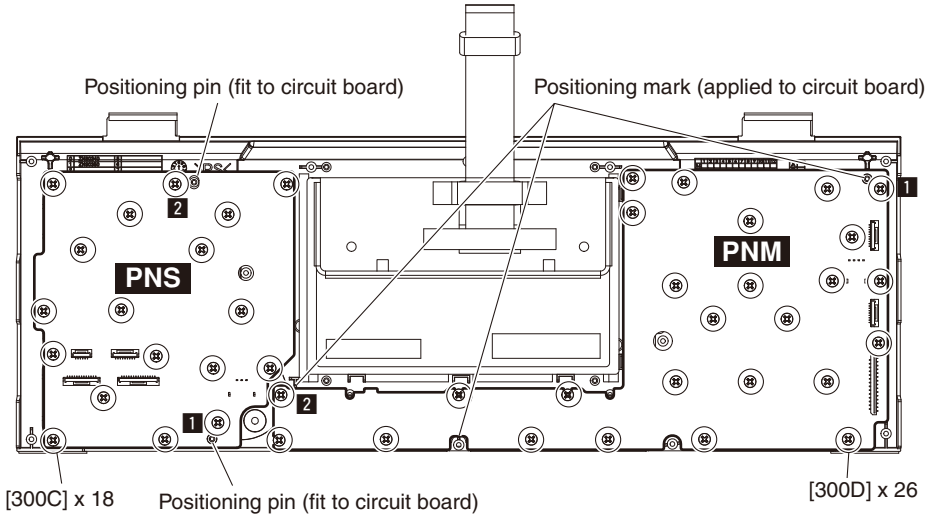


Fig. 8

9. HP Circuit Board

(Time required: About 4 minutes)

9-1. Remove the lower case assembly. (See procedure 2.)

9-2. Remove the four (4) screws marked [430B]. The HP circuit board can then be removed. (Fig. 4)

10. Keyboard Assembly

(Time required: About 4 minutes)

10-1. Remove the lower case assembly. (See procedure 2.)

10-2. Remove the screw marked [420B]. The keyboard assembly can then be removed. (Fig. 4)

11. PNL Circuit Board

(Time required: About 5 minutes)

11-1. Remove the lower case assembly. (See procedure 2.)

11-2. Remove the keyboard assembly. (See procedure 10.)

11-3. Remove the ten (10) screws marked [500A]. The PNL circuit board can then be removed. (Fig. 9)

* ***When installing the PNL circuit board, tighten the screws 1 and 2 shown in Fig. 9 in numerical order and then tighten the other screws.***

12. PNC Circuit Board

(Time required: About 5 minutes)

12-1. Remove the lower case assembly. (See procedure 2.)

12-2. Remove the keyboard assembly. (See procedure 10.)

12-3. Remove the ten (10) screws marked [500B]. The PNC circuit board can then be removed. (Fig. 9)

* ***When installing the PNC circuit board, tighten the screws 1 and 2 shown in Fig. 9 in numerical order and then tighten the other screws.***

13. PNR Circuit Board

(Time required: About 5 minutes)

13-1. Remove the lower case assembly. (See procedure 2.)

13-2. Remove the keyboard assembly. (See procedure 10.)

13-3. Remove the nine (9) screws marked [500C]. The PNR circuit board can then be removed. (Fig. 9)

* ***When installing the PNR circuit board, tighten the screws 1 and 2 shown in Fig. 9 in numerical order and then tighten the other screws.***

14. OR Circuit Board

(Time required: About 4 minutes)

14-1. Remove the lower case assembly. (See procedure 2.)

14-2. Remove the five (5) screws marked [500D]. The OR circuit board can then be removed. (Fig. 9)

15. Joystick

(Time required: About 4 minutes)

15-1. Remove the lower case assembly. (See procedure 2.)

15-2. Remove the four (4) screws marked [520]. The joystick can then be removed. (Fig. 9)

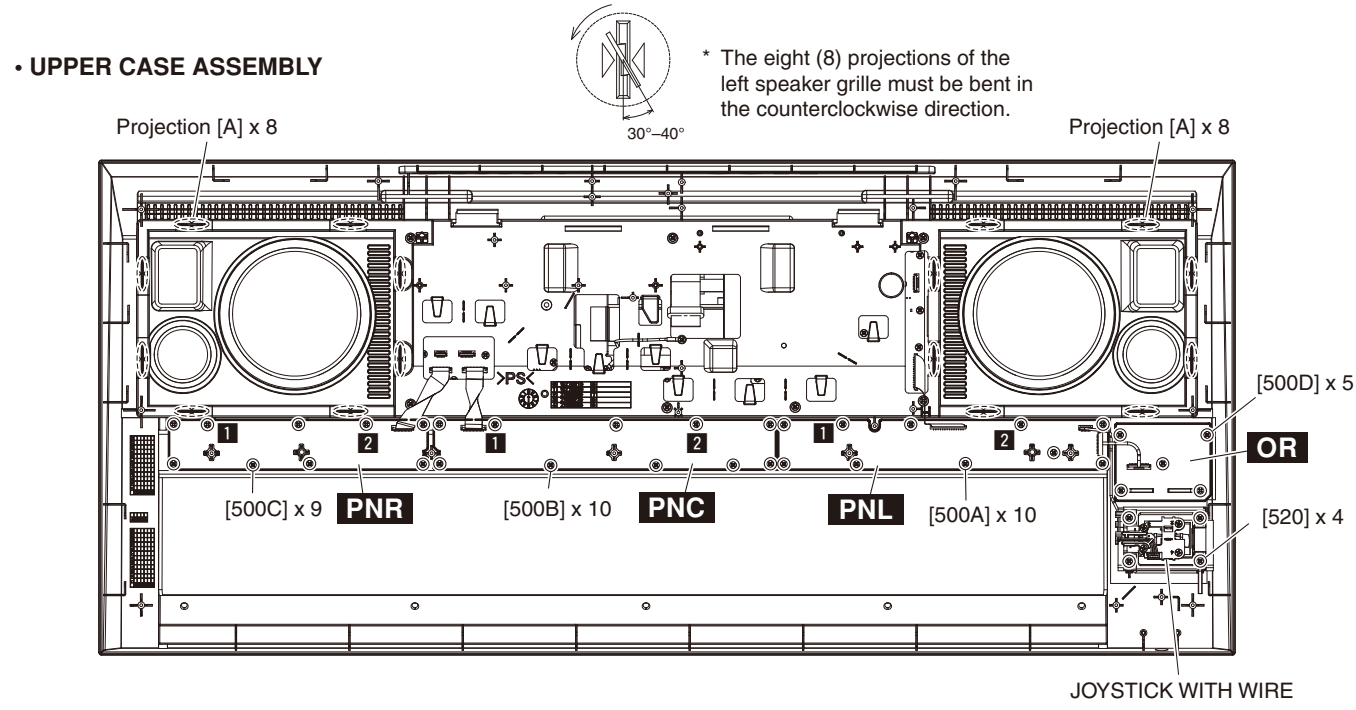


Fig. 9

16. Tweeter

(Time required: About 4 minutes)

16-1. Remove the lower case assembly. (See procedure 2.)

16-2. Remove the two (2) screws marked [210]. The tweeter can then be removed. (Fig. 10)

* ***The left and right tweeters can be removed in the same method.***

17. Woofer

(Time required: About 4 minutes)

17-1. Remove the lower case assembly. (See procedure 2.)

17-2. Remove the four (4) screws marked [200]. The woofer can then be removed. (Fig. 10)

* ***The left and right woofers can be removed in the same method.***

18. Speaker Grille Assembly

(Time required: About 5 minutes)

18-1. Remove the lower case assembly. (See procedure 2.)

18-2. Restraighten the eight (8) projections marked [A] to come off the slots of the upper case assembly. (Fig. 9)

18-3. Remove the speaker grille assembly. (Fig. 5)

* ***The left and right speaker grille assembly can be removed in the same method.***

* ***The eight (8) projections of the speaker grille must be bent in the counterclockwise direction.***

• Top view

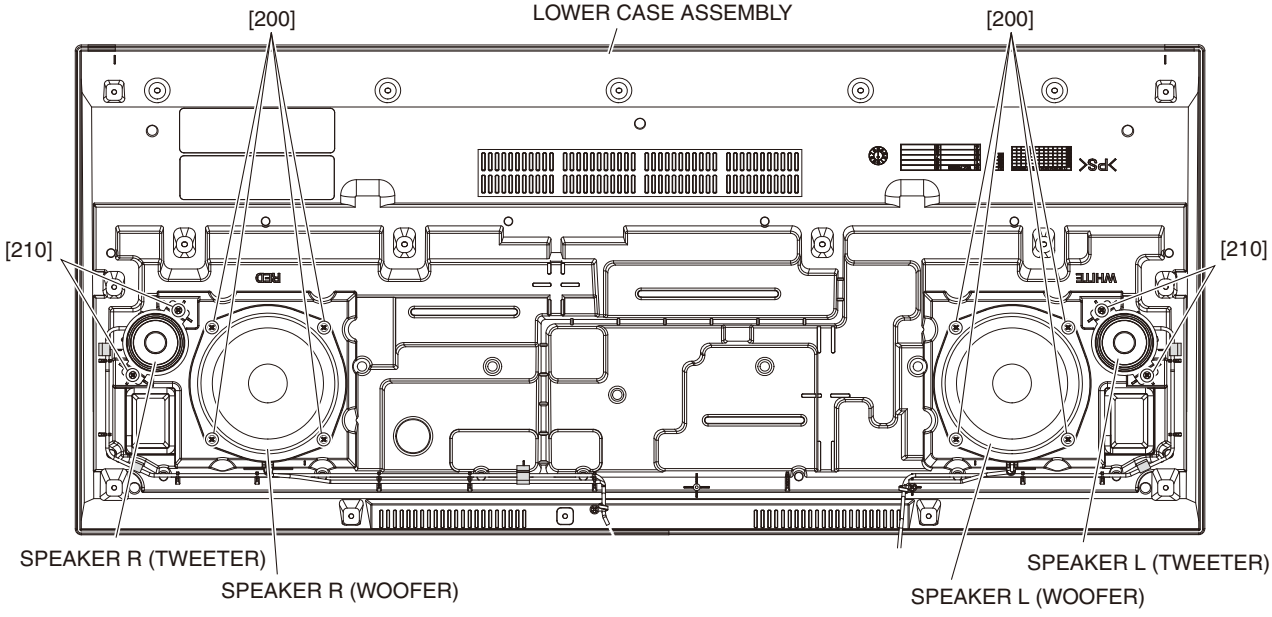


Fig. 10

19. Disassembling the Keyboard Assembly

19-1. Remove the lower case assembly. (See procedure 2.)
19-2. Remove the keyboard assembly. (See procedure 10.)

19-3. **EMKS61A Circuit Board**
(Time required: About 5 minutes)
19-3-1. Remove the two (2) screws marked [30]. The EMKS61A circuit board can then be removed. (Fig. 11)

19-4. **MK-L Circuit Board**
(Time required: About 6 minutes)
19-4-1. Remove the EMKS61A circuit board. (See procedure 19-3.)
19-4-2. Remove the MK-L circuit board while pressing the eight (8) hooks A in the direction of the arrow. (Fig. 12)

19-5. **MK-H Circuit Board**
(Time required: About 6 minutes)
19-5-1. Remove the MK-H circuit board while pressing the seven (7) hooks A in the direction of the arrow. (Fig. 12)

19-6. **Rubber Contact**
19-6-1. Remove the rubber contact. (Fig. 12) (Photo 2)

19-7. **White and Black Keys**
19-8. Remove the twenty-one (21) screws marked [140K], then remove the black keys from the lower notes. (Fig. 13)
19-8-1. Remove the white keys DFA and C'. (Fig. 13)
19-8-2. Remove the while keys CEGB from the higher notes. (Fig. 13)

* ***Lift the front portion of the keys and slide them towards you. The keys can then be removed from the assembly.***

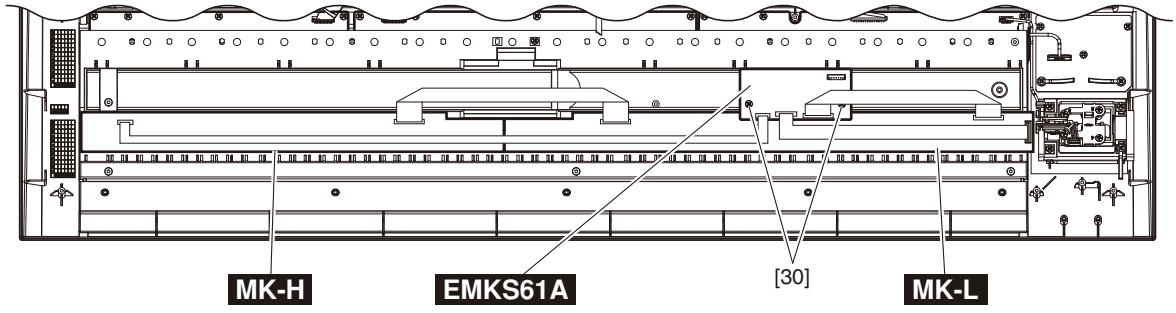


Fig. 11

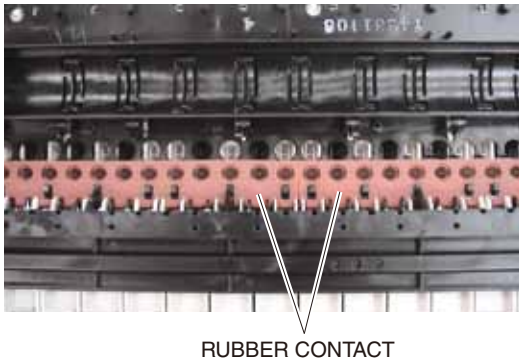


Photo 2

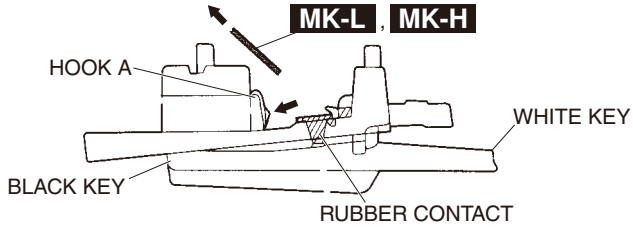


Fig. 12

20. Assembling the Keyboard Assembly

20-1. Install the white keys CEGB from the lower notes. (Fig. 13)

20-2. Install the white keys DFA and C'. (Fig. 13)

20-3. Install the black keys from the higher notes, and tighten the twenty-one (21) screws marked [140K]. (Fig. 13)

* ***To install the white and black keys, insert the projections of the keys into the respective slots [C] on the frame first. (Photo 3, Photo 4, Photo 5)***

20-4. Install the rubber contacts while pulling the keys up. (Fig. 14, Fig. 15)

* ***When fitting the rubber contacts, raise both ends of the frame so that keys do not push the rubber contact up.***

20-5. Install the MK-L and MK-H circuit boards in the assembly so that the hooks B hold it. (Fig. 16)

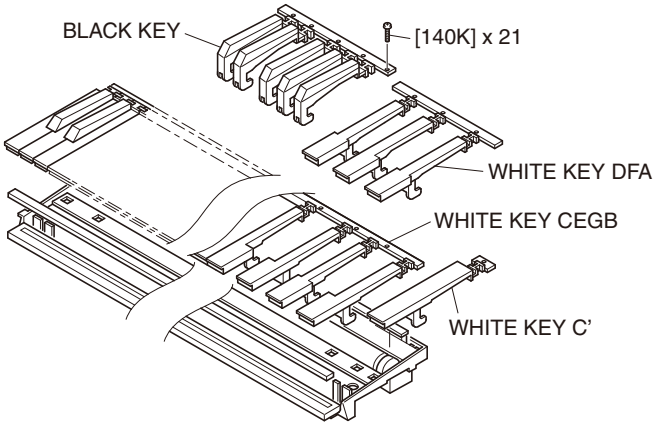


Fig. 13

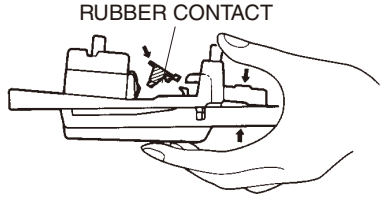


Fig. 14

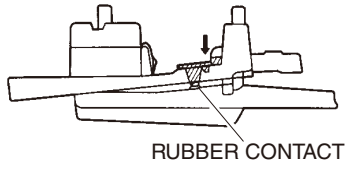


Fig. 15

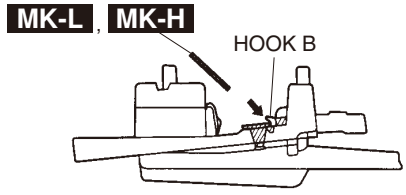


Fig. 16

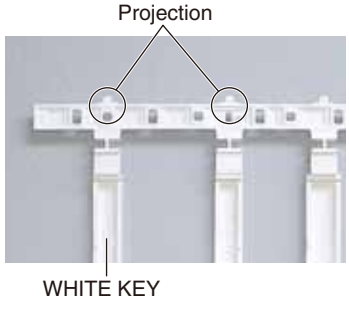


Photo 3

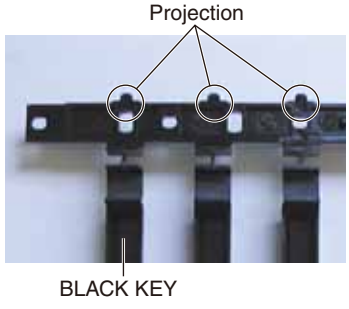


Photo 4

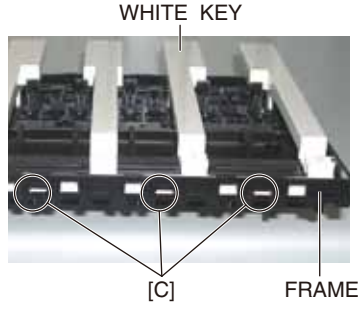


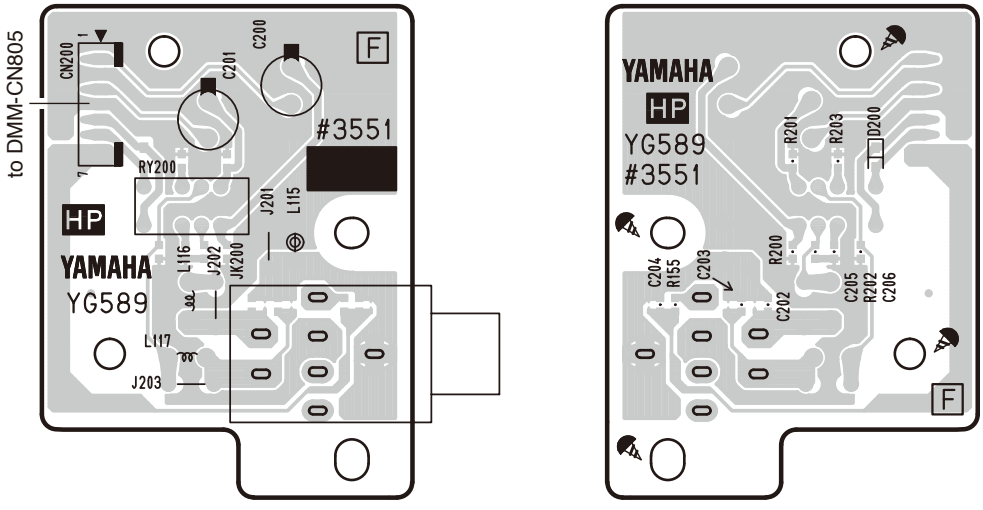
Photo 5

■ CIRCUIT BOARDS

AJACK Circuit Board (YG589F0) 22/23
DMM Circuit Board (YG546C0) 20/21
EMKS61A Circuit Board (X6637C0) 32/33
HP Circuit Board (YG589F0) 19
JS Circuit Board (YD299A0) 31
MK-H Circuit Board (XR565C0) 33
MK-L Circuit Board (XR564C0) 32
OR Circuit Board (YG581D0) 31
PNC Circuit Board (YG588D0) 28
PNL Circuit Board (YG588D0) 29
PNM Circuit Board (YG581D0) 24/25
PNR Circuit Board (YG588D0) 30
PNS Circuit Board (YG581D0) 26/27

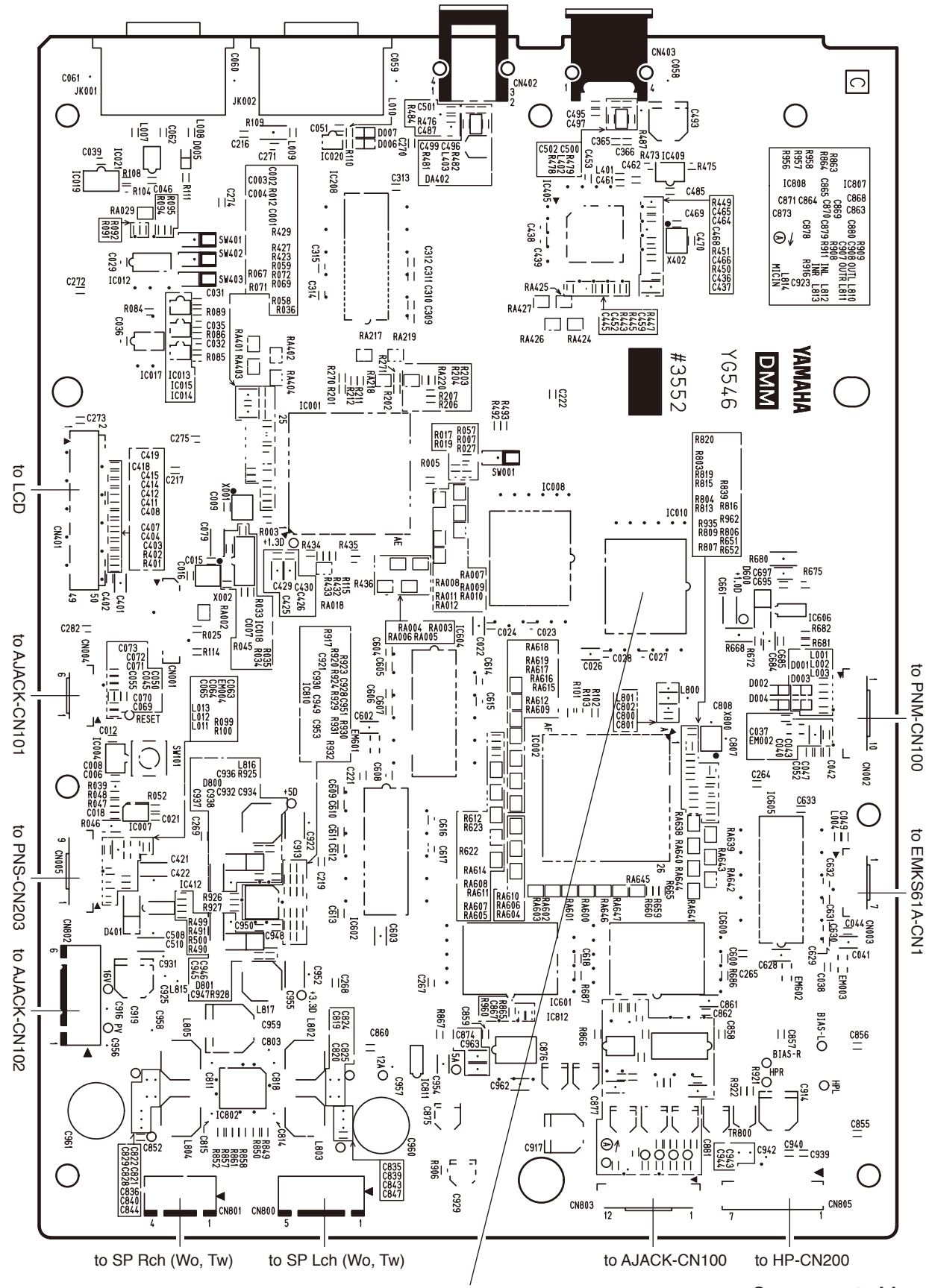
Note: See parts list for details of circuit board component parts.

● HP Circuit Board



Component side **Pattern side**

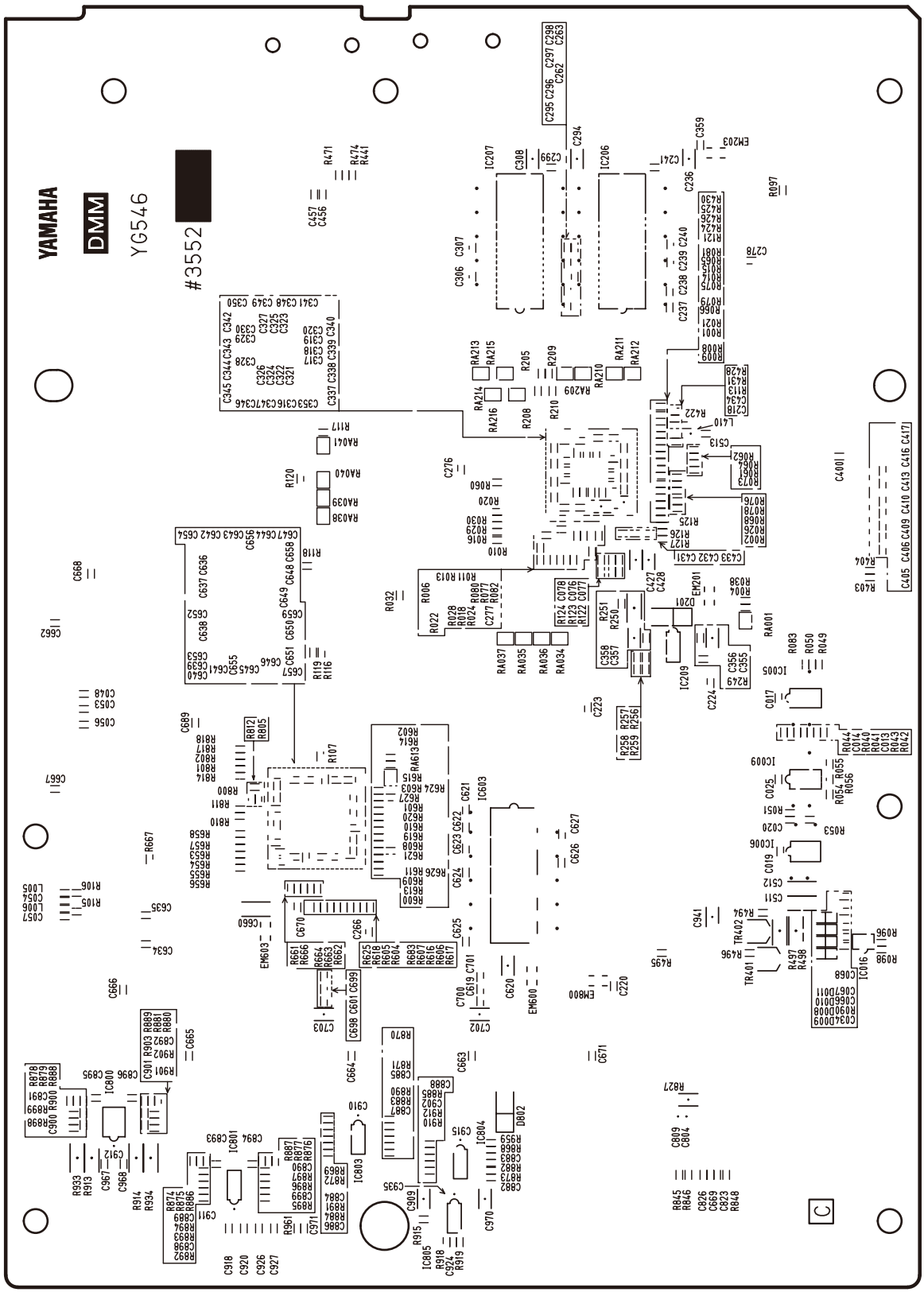
● DMM Circuit Board



Component side

The Backup ROM, IC010, cannot be replaced individually with new one because the IC010 has a "Hardware ID" which is exclusive or unique to each DMM circuit board. A Hardware ID cannot be exported or imported due to Copy protection.

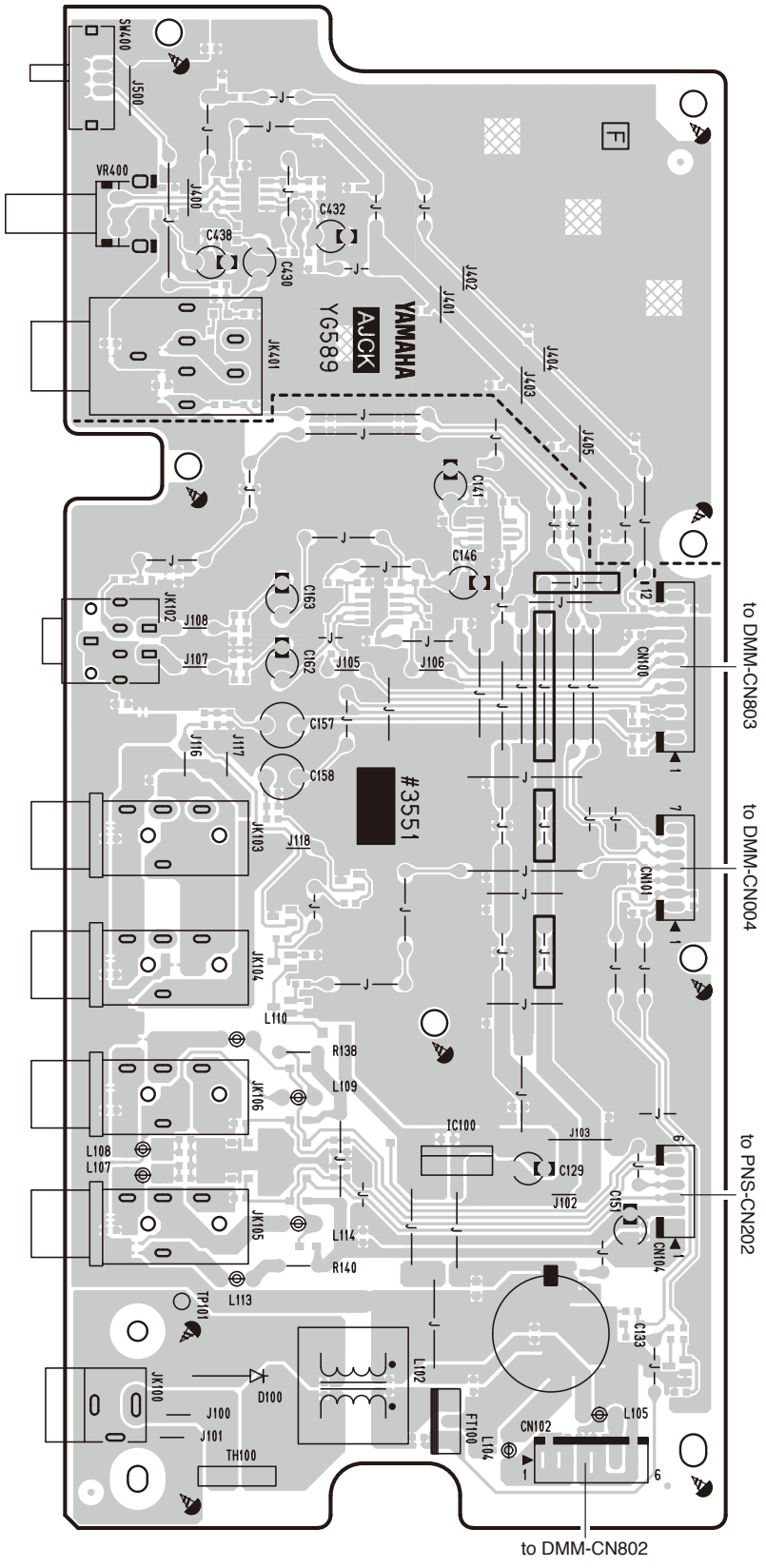
● DMM Circuit Board



Pattern side

● AJACK Circuit Board

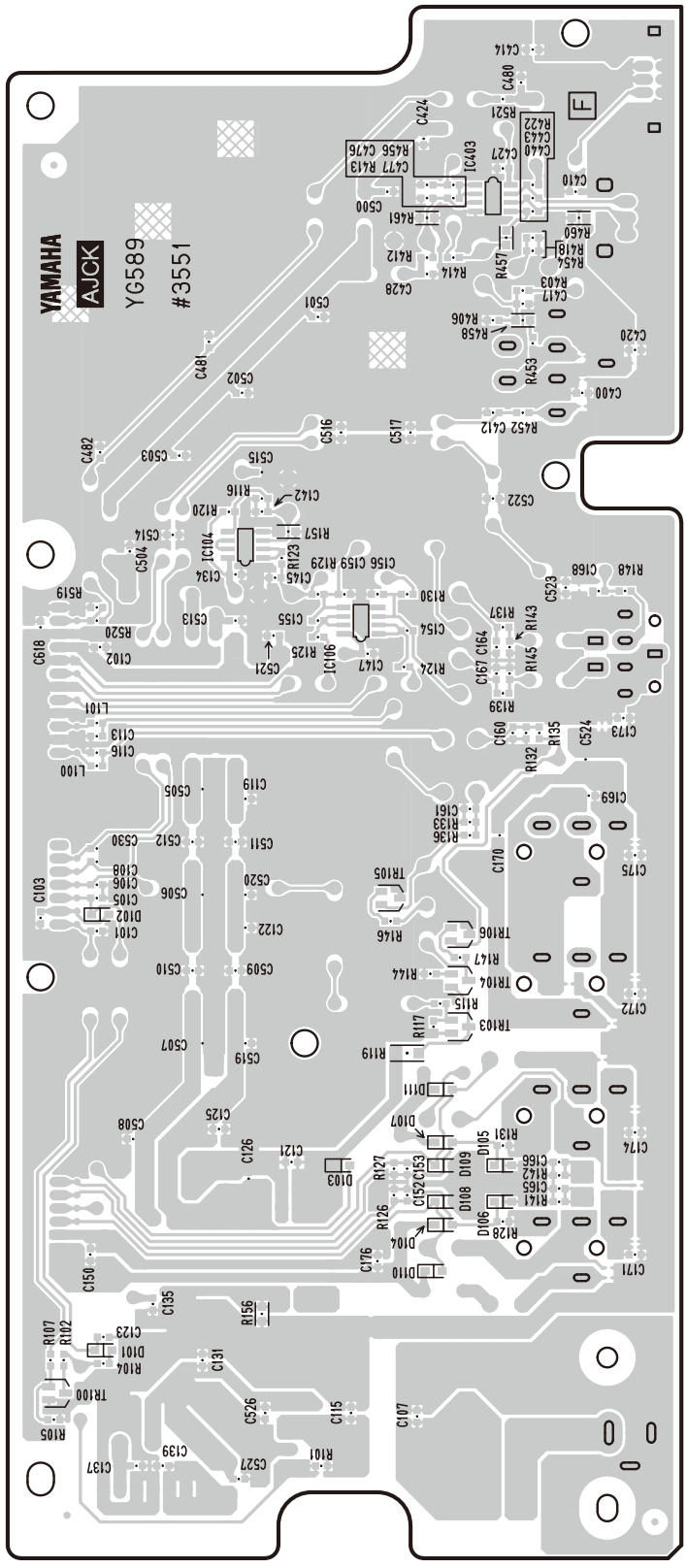
Scale: 90/100



Component side

● AJACK Circuit Board

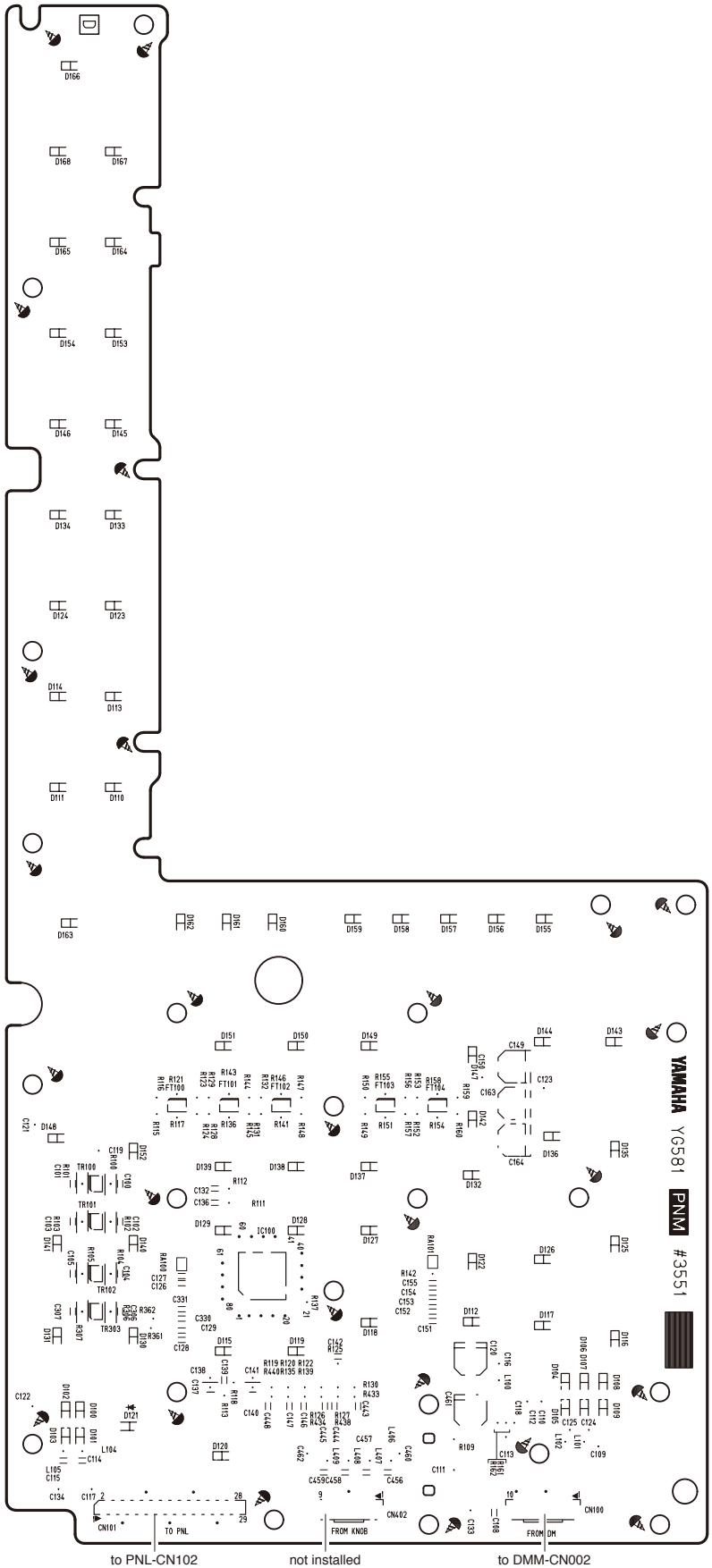
Scale: 90/100



Pattern side

● PNM Circuit Board

Scale: 70/100

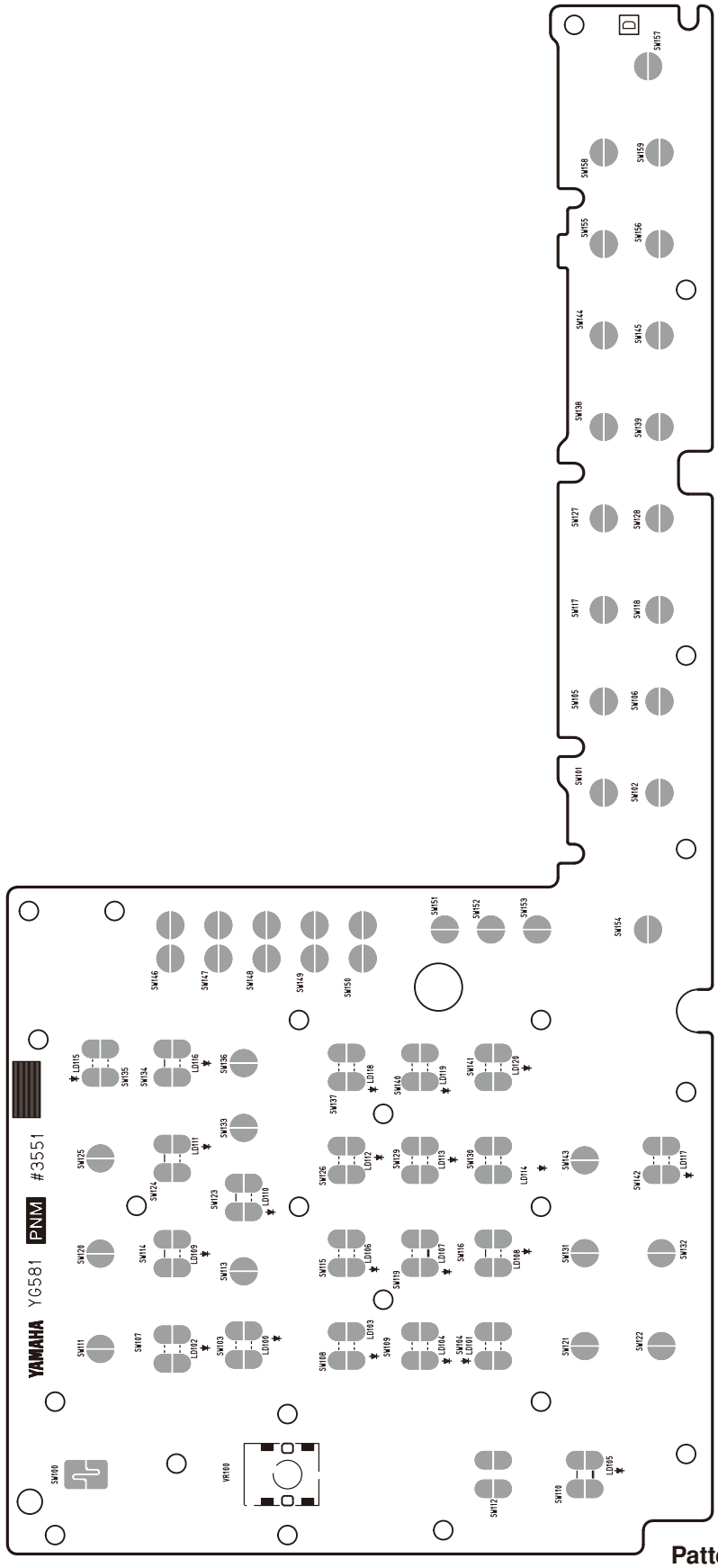


Component side

2NA-ZN43310 ⚠4

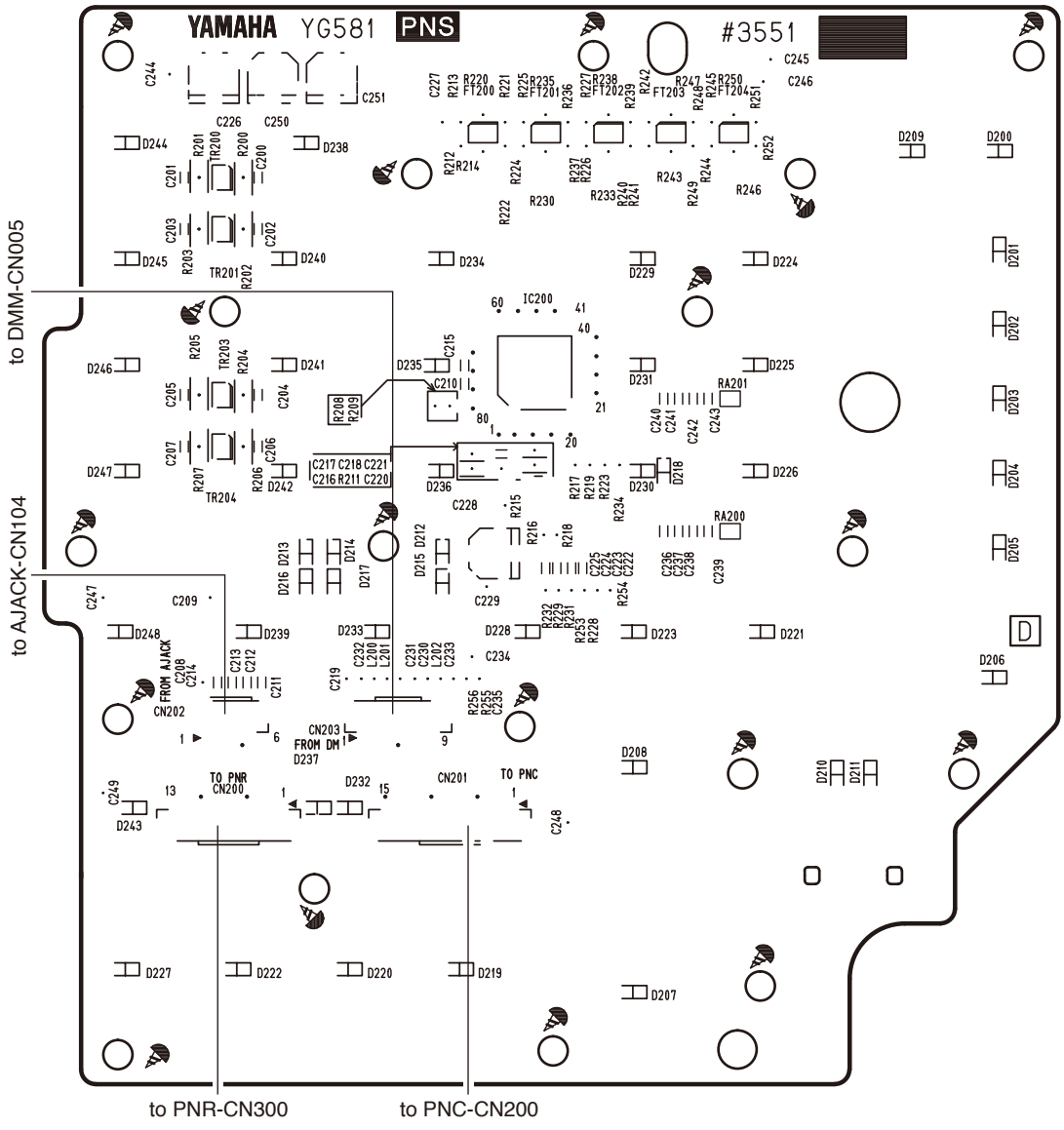
● PNM Circuit Board

Scale: 70/100

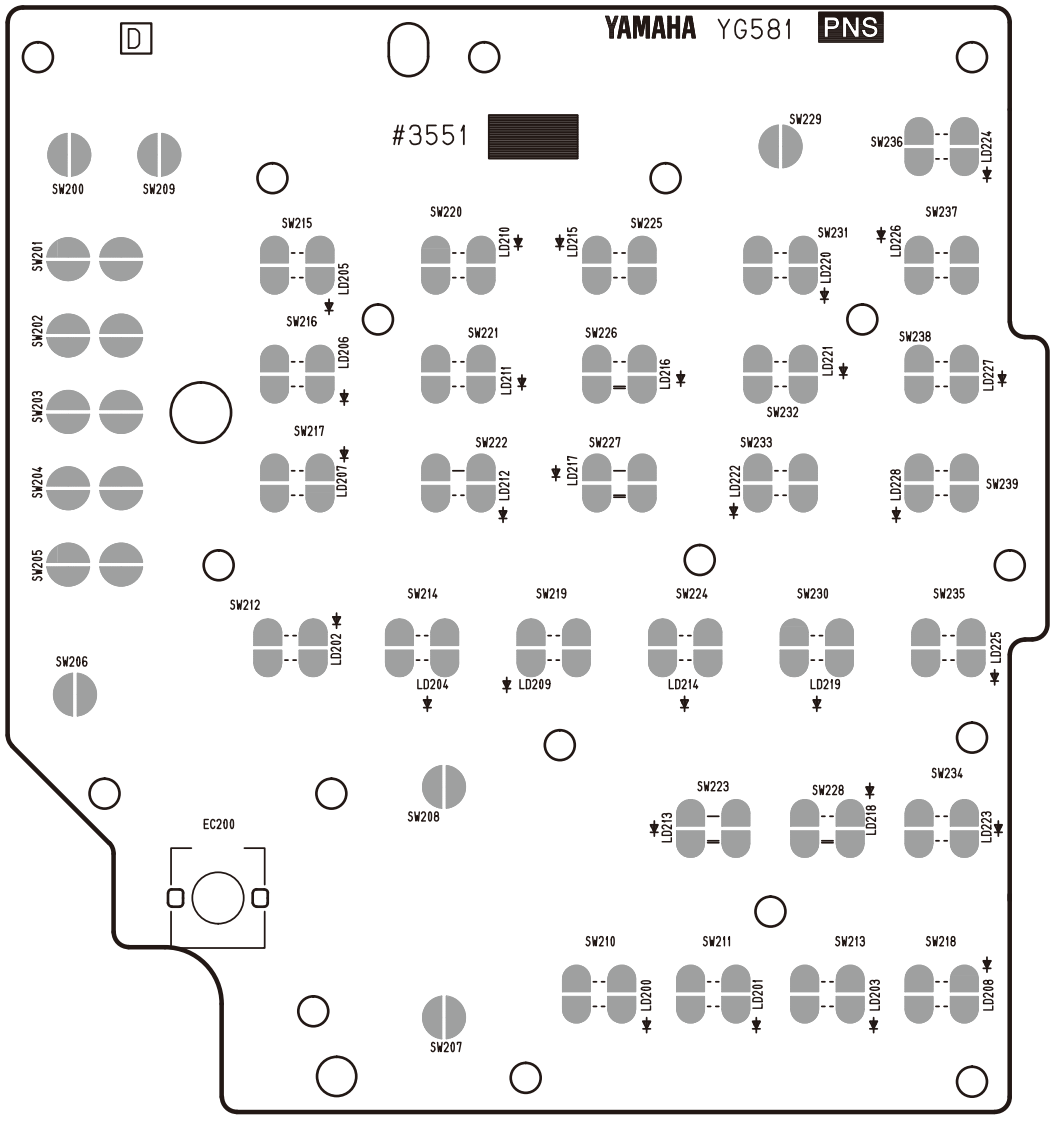


Pattern side

● PNS Circuit Board



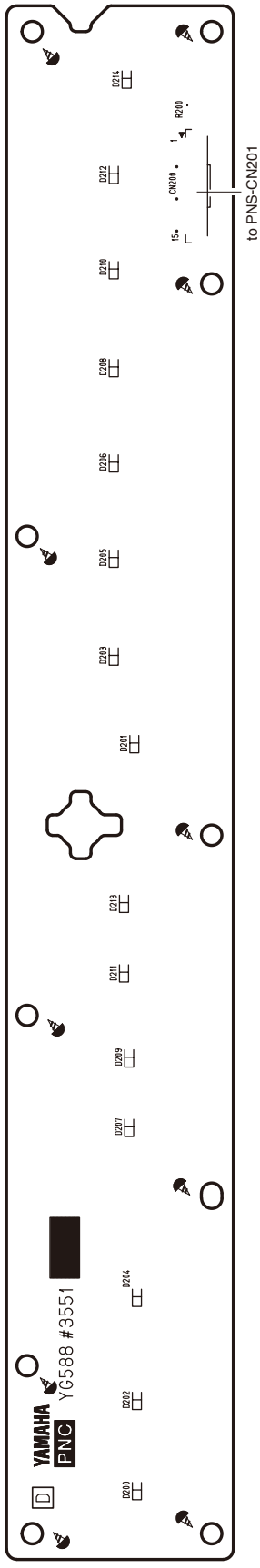
● PNS Circuit Board



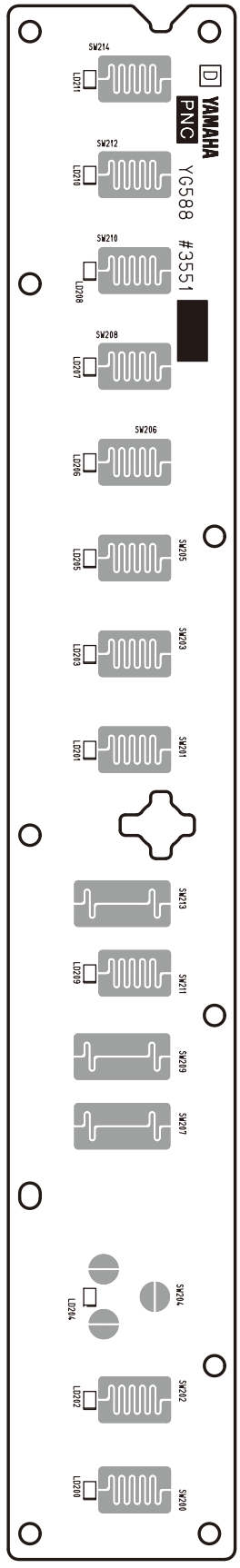
Pattern side

● PNC Circuit Board

Scale: 75/100



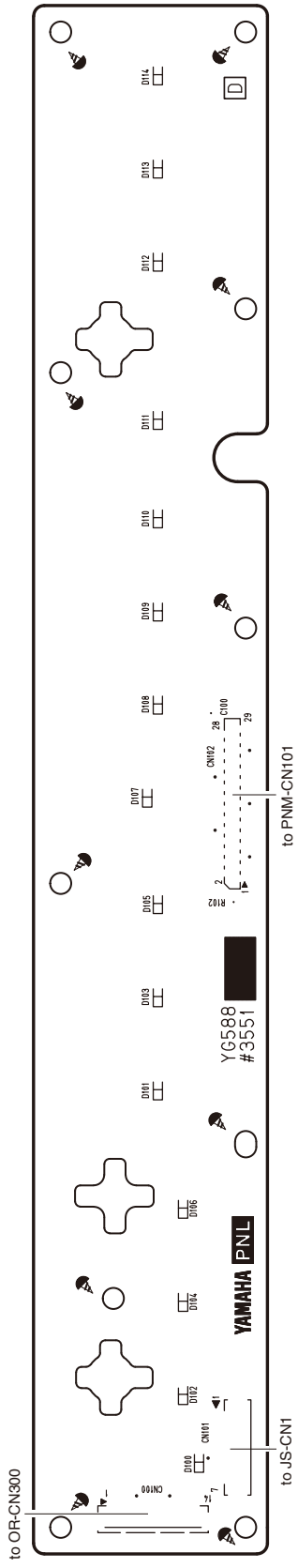
Component side



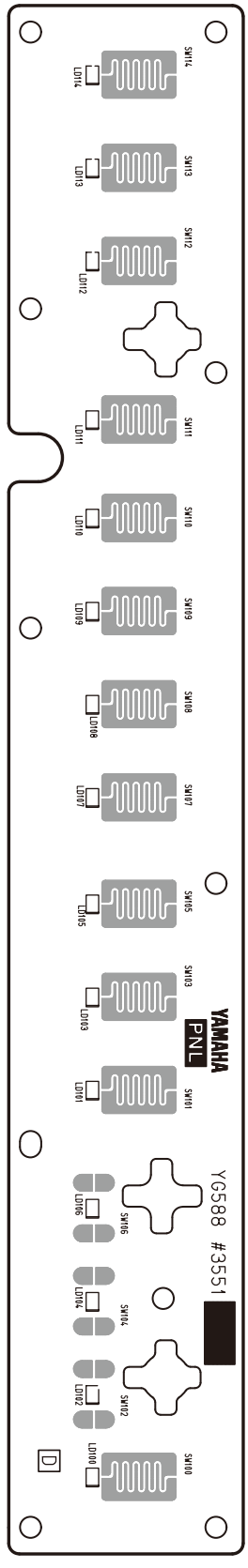
Pattern side

● PNL Circuit Board

Scale: 75/100



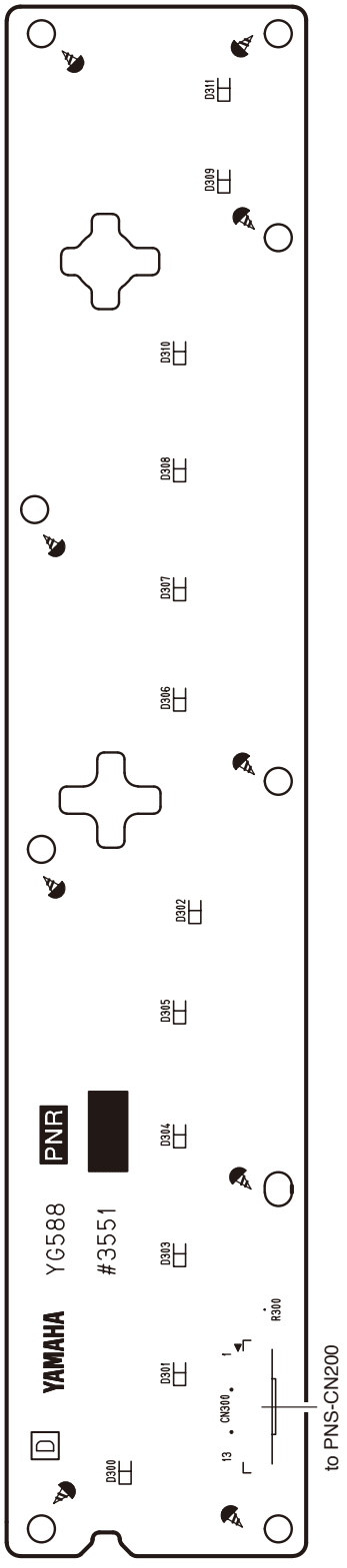
Component side



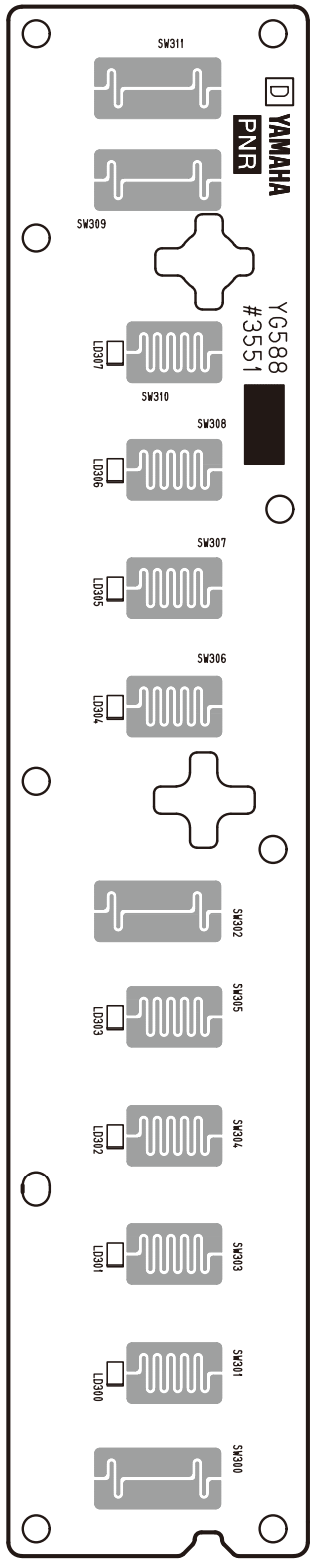
Pattern side

● PNR Circuit Board

Scale: 90/100

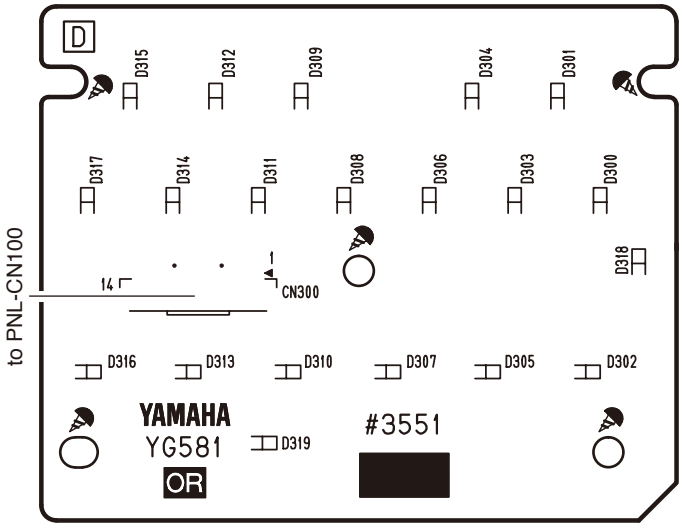


Component side

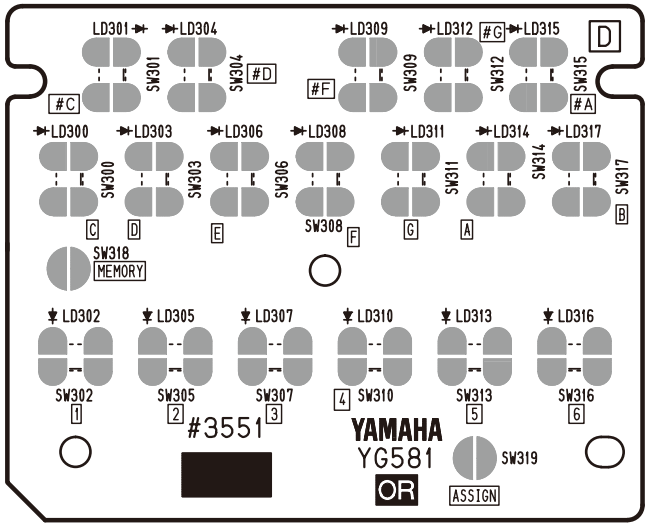


Pattern side

● OR Circuit Board



Component side



Pattern side

● JS Circuit Board

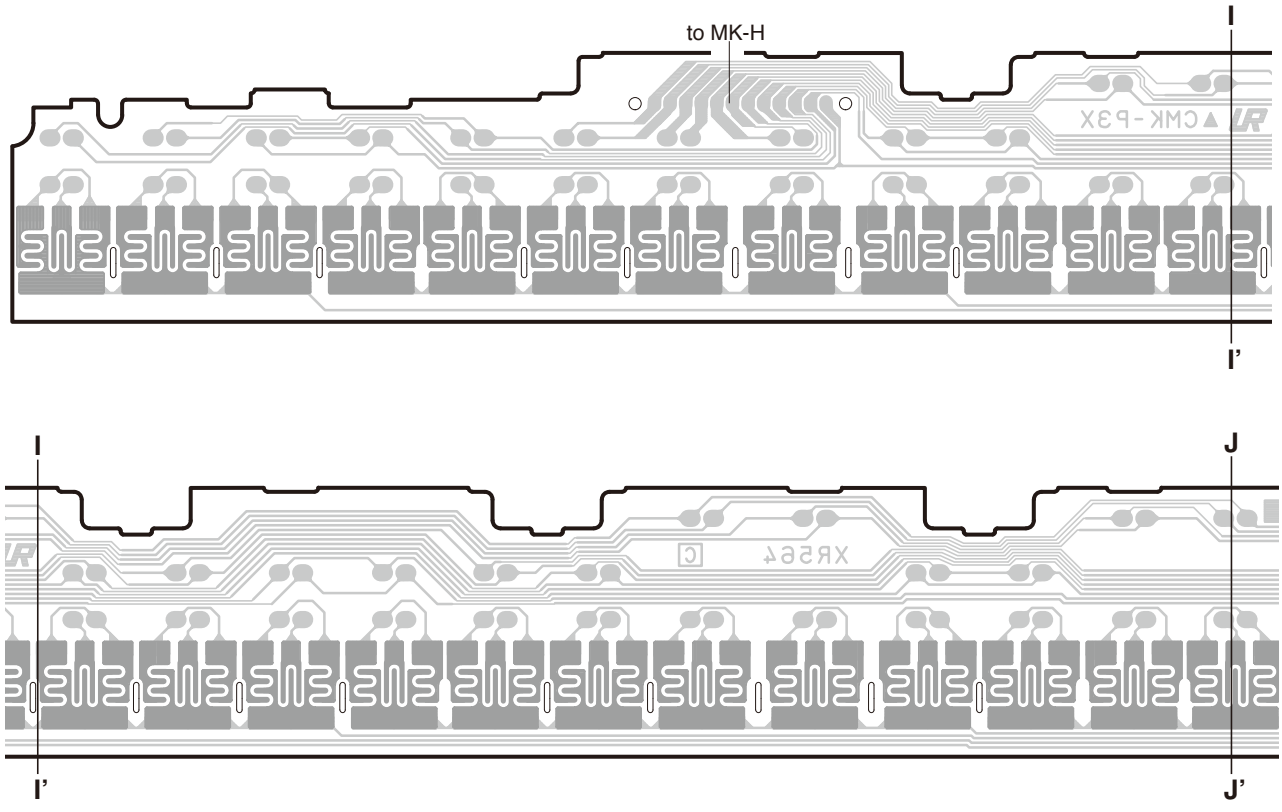


Component side **Pattern side**

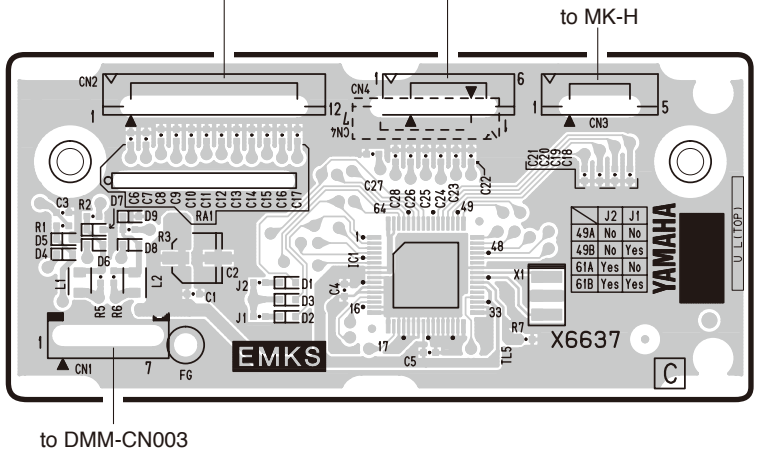
OR: 2NA-ZN43310 ⚠4
JS: 2NA-WY02620 ⚠1

● MK-L Circuit Board

Scale: 90/100



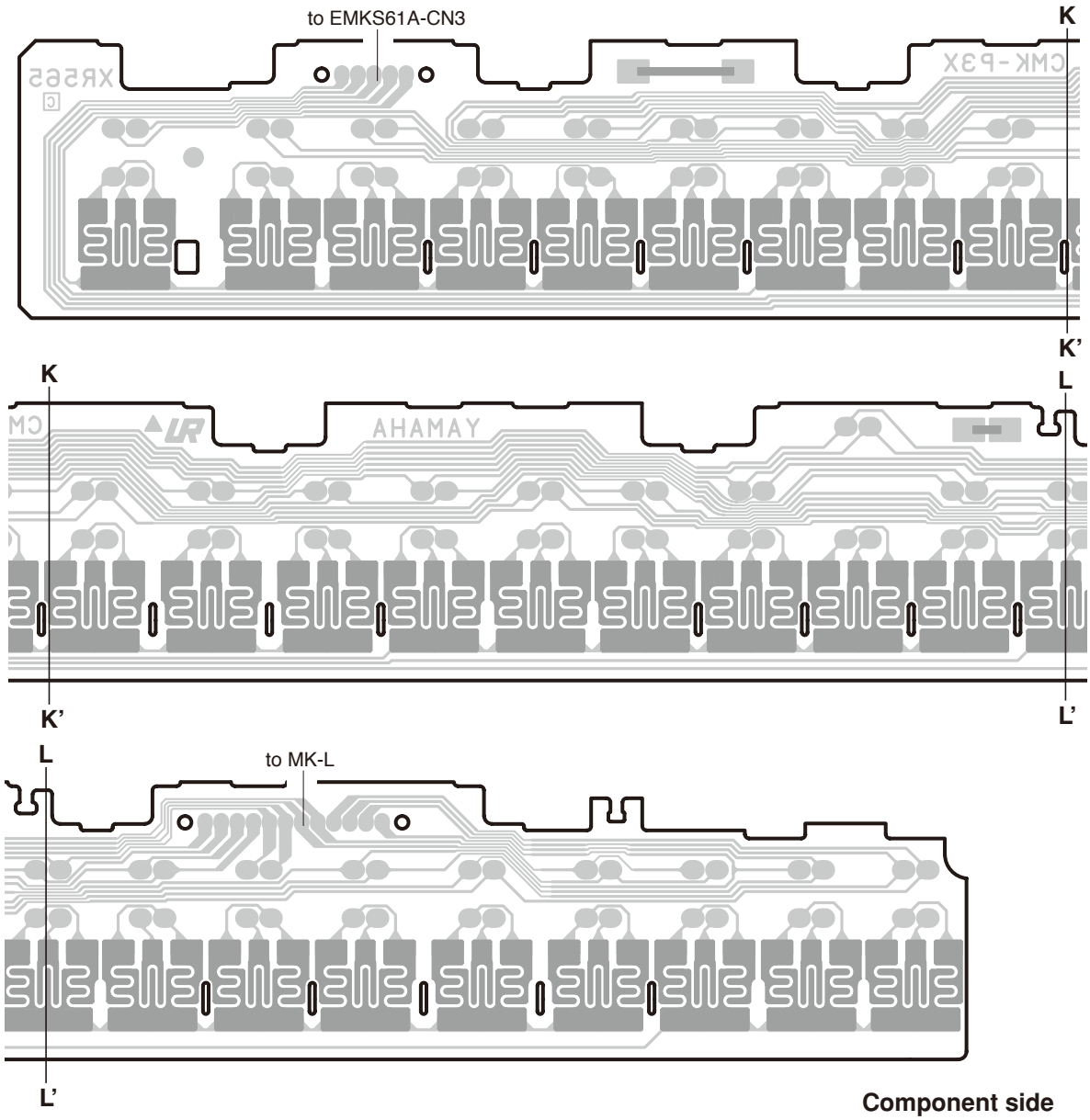
● EMKS61A Circuit Board



EMKS61A: 2NA-WF31010
MK-L: 2NA-VV58380

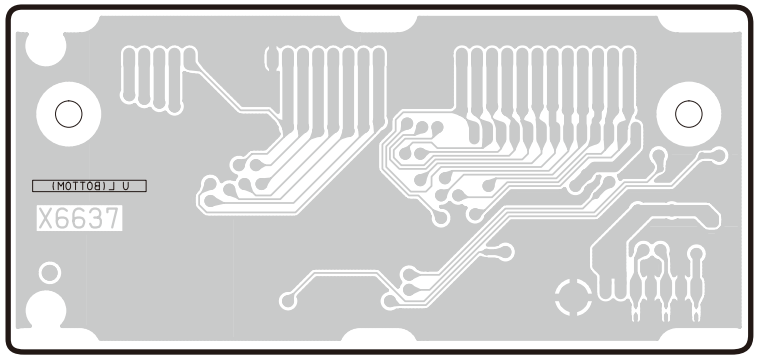
● MK-H Circuit Board

Scale: 90/100



Component side

● EMKS61A Circuit Board



Pattern side

EMKS61A: 2NA-WF31010
MK-H: 2NA-VV58390

■ TEST PROGRAM

**** If you execute Test No. 81 Factory Set, the setting data and user data will be lost. Be sure to save these data for backup in advance. (See page 53.)***

1. Measurement condition

1-1. Environment

Perform tests under following conditions.

Ordinary temperature (5°C to 40°C)

Ordinary humidity (20% to 90%)

If the test results deviate from the test standard range, however, re-test under such conditions as the ordinary temperature (5°C to 40°C) and ordinary humidity (30% to 90% relative humidity).

1-2. Power voltage

Use PA-300C for the AC adaptor.

The AC power should be 50Hz or 60Hz and the capacity should be 500VA or more.

The voltage should be ±10% of the rating voltage of the adaptor being used.

1-3. Measuring instrument

Make sure that the instruments used for inspections have enough accuracy and precision.

Use the instruments with more than 1M-ohms input impedance.

- Level meter (using JIS-C filter)
- Frequency counter (should be capable of measuring to three places of decimals)
- Oscilloscope
- Oscillator

1-4. Test jig

Following jigs are required for testing.

- Stereo mini-plug cable (for AUX IN)
- MIDI cable
- USB cable (A-B type)
- USB flash drive
- Foot controller (FC7)

1-5. Terminal condition

Unless otherwise specified, take measurement at the PHONES jack. (Use a stereo plug.)

PHONES :	Install a measuring plug (L/R ch: 33-ohms load)
AUX IN :	Install a measuring plug
OUTPUT [L/L+R]/[R] :	Install a measuring plug (L/R ch: 10k-ohms load)
FOOT PEDAL [1]/[2]:	Connect the foot controller (FC7)

1-6. Control condition

Unless otherwise specified, set control knobs as follows.

MASTER VOLUME : Max

Set others in the default state when the power is turned on.

1-7. Measurement unit

0 dBu = 0.775 Vrms

2. Test mode

2-1. Starting Up Test mode

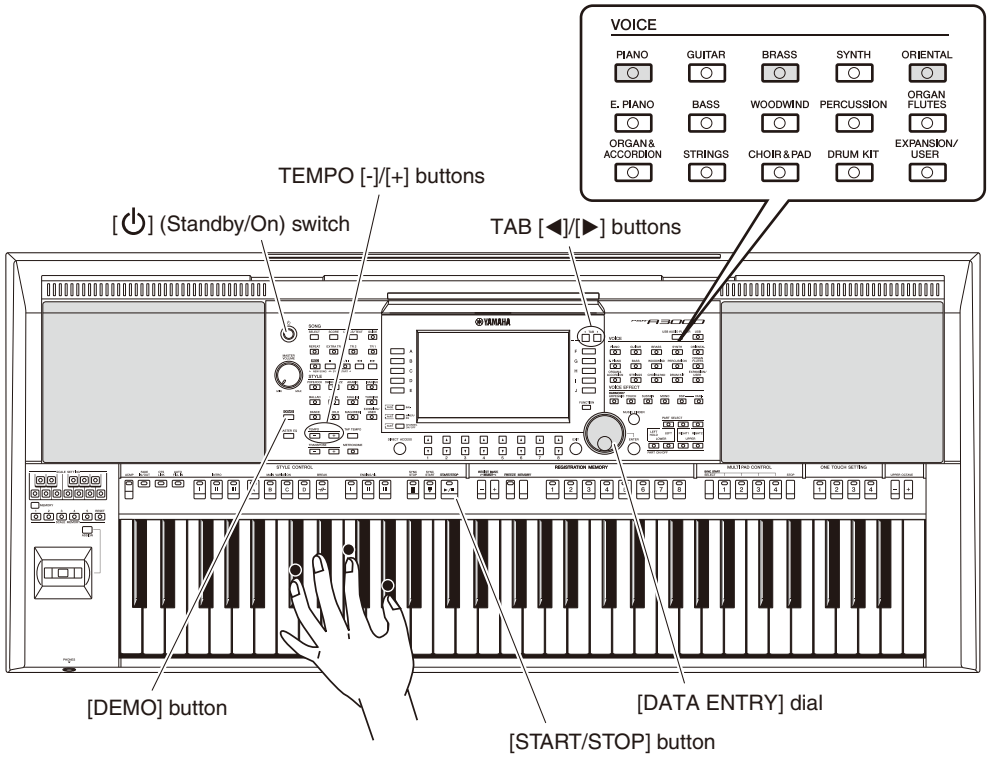
There are two methods to start up the Test mode.

Method 1

1) While pressing keys [C#2], [F2], [G#2] (C#2 major chord) simultaneously, turn on the [⏻] (Standby/On) switch.
2) When Test mode started successfully, "**TEST**" is shown on the LCD.

Method 2

1) While pressing the buttons [PIANO], [BRASS] and [ORIENTAL] simultaneously, turn on the [⏻] (Standby/On) switch.
2) When Test mode started successfully, "**TEST**" is shown on the LCD.



2-2. Selection/execution of Test items

1) Select an item with the TEMPO [-]/[+] buttons or [DATA ENTRY] dial.

**** When selecting a test item, the first item (No. 001) can be switched to the last item (No. 083) by pressing the TEMPO [-] button or turning the [DATA ENTRY] dial counterclockwise. Similarly, the last item (No. 083) can be returned to the first item (No. 001) by pressing the TEMPO [+] button or turning the [DATA ENTRY] dial clockwise.***

2) Press the [START/STOP] button to execute the test item. For details, refer to the explanation page for each Test Program item.

2-3. If the test result shows "OK"

To return to the display of test item selection, press the [START/STOP] button.

**** Test item the result of which was OK is shown with an asterisk (*) at the left of the name.***

2-4. If the test result shows "NG"

To return to the display of test item selection, press the [DEMO] button or the lowest key.

3. Test program list

LCD display	Test items and judging conditions
001 : Version	Indicates the model name, designated country information and each ROM version (***.****). 1) Press the [START/STOP] button, and the versions are shown on the LCD. **Model Name : PSR-A3000 (E)** **Main Prog ROM : ＊.＊＊** **Wave Data ROM : ＊.＊＊** **Hardware ID : ＊＊＊＊＊＊＊＊＊＊＊** Confirm that an 11 digit alphanumeric is shown. 2) Switch the pages with the TAB [◀] [▶] buttons as the menu contains two pages. **Main Boot : ＊.＊＊** **Main Program : ＊.＊＊** **Bitmap1 : ＊.＊＊** **Contents1 : ＊.＊＊** **Wave1 : ＊.＊＊** 3) Press the [START/STOP] button to exit the TEST item.
002 : Memory Check1 All	Executes the simplified check of all the memories (test No. 003 to 009) at one time. (It will take 6 seconds.) 1) Press the [START/STOP] button to start the test. OK: **OK** NG: The same message will be showned as tests No. 003 to 009. 2) Confirm that "**OK**" is shown on the LCD. 3) Press the [START/STOP] button to exit the TEST item. If the result is OK: tests No. 003 to 009 can be skipped. If the result is NG: the test stops when any problem is found. To check details, execute the test from No. 003 to 009.
003 : ROM Check1	Executes the simplified check of the ROM connected to the CPU bus. 1) Press the [START/STOP] button to start the test. OK: **OK** NG: **MAIN PROG ROM (IC＊＊＊) NG** 2) Confirm that "**OK**" is shown on the LCD. 3) Press the [START/STOP] button to exit the TEST item.
005 : RAM Check1	Executes the simplified check of the RAM connected to the CPU bus. 1) Press the [START/STOP] button to start the test. OK: **OK** NG: **MAIN SDRAM (IC＊＊＊,＊＊＊) NG** 2) Confirm that "**OK**" is shown on the LCD. 3) Press the [START/STOP] button to exit the TEST item.
006 : Backup ROM Check1	Executes the simplified check of the Backup ROM. (It will take about 4 seconds.) 1) Press the [START/STOP] button to start the test. OK: **OK** NG: **BACKUP (IC＊＊＊) NG** 2) Confirm that "**OK**" is shown on the LCD. 3) Press the [START/STOP] button to exit the TEST item.
007 : Wave ROM Check1	Executes the simplified check of the Wave ROM. 1) Press the [START/STOP] button to start the test. OK: **OK** NG: **Wave (IC＊＊＊,＊＊＊) NG** 2) Confirm that "**OK**" is shown on the LCD. 3) Press the [START/STOP] button to exit the TEST item.

LCD display	Test items and judging conditions
008 : Wave RAM Check1	Executes the simplified check of the Wave RAM. 1) Press the [START/STOP] button to start the test. OK: **OK** NG: **Wave RAM (IC＊＊＊) NG** 2) Confirm that "**OK**" is shown on the LCD. 3) Press the [START/STOP] button to exit the TEST item.
009 : Effect RAM Check1	Executes the simplified check of the Effect RAM. 1) Press the [START/STOP] button to start the test. OK: **OK** NG: **Effect 1 TG1 (IC＊＊＊) NG** 2) Confirm that "**OK**" is shown on the LCD. 3) Press the [START/STOP] button to exit the TEST item.
012 : IRQ Check	Checks whether the IRQ and DREQ communication between the Main CPU and SWP70 is executed properly or not. 1) Press the [START/STOP] button to start the test. OK: **OK** NG: **NG (IRQ＊)** 2) Confirm that "**OK**" is shown on the LCD. 3) Press the [START/STOP] button to exit the TEST item.
014 : Pitch Check	Checks whether the output from this instrument is correct pitch or not. 1) Connect the frequency counter to the PHONES jack at either L or R. 2) Set the [MASTER VOLUME] control to the maximum position. 3) Press the [START/STOP] button to produce the A3 sine wave sound. 4) Measure the frequency and confirm that the measured value is 440.943Hz ± 0.2Hz. 5) Press the [START/STOP] button to stop the sound and to exit the TEST item.
015 : Output R Check	Checks each output level from the R channel of the jacks. 1) Connect the level meter to an output jack. 2) Set the [MASTER VOLUME] control to the maximum position. 3) Press the [START/STOP] button to produce the C5 sine wave sound. 4) Measure the output level and confirm that the measured values are within the specified range. [PHONES] (33Ω load) PHONES L: -56.0 dBu or less PHONES R: -0.34 ± 2 dBu [OUTPUT] (10kΩ load) L/L+R; -60.0 dBu or less R: +5.3 ± 2 dBu **** When disconnecting the plug from the OUTPUT R jack, the sound is produced from OUTPUT L/L+R jack.*** **** When disconnecting the plug from the PHONES jack, the sound is produced from the speaker.*** 5) Press the [START/STOP] button to stop the sound and to exit the TEST item.
016 : Output L Check	Checks each output level from the L channel of the jacks. 1) Connect the level meter to an output jack. 2) Set the [MASTER VOLUME] control to the maximum position. 3) Press the [START/STOP] button to produce the C5 sine wave sound. 4) Measure the output level and confirm that the measured values are within the specified range. [PHONES] (33Ω load) PHONES L: -0.34 ± 2 dBu PHONES R: -56.0 dBu or less [OUTPUT] (10kΩ load) L/L+R: +5.3 ± 2 dBu R: -60.0 dBu or less **** When disconnecting the plug from the PHONES jack, the sound is produced from the speaker.*** 5) Press the [START/STOP] button to stop the sound and to exit the TEST item.
017 : EQ Low Check	Checks the low-frequency sound. 1) Press the [START/STOP] button to produce the C1 sine wave sound. 2) Press the [START/STOP] button to stop the sound and to exit the TEST item.

LCD display	Test items and judging conditions
018 : EQ Mid Check	Checks the middle-frequency sound. 1) Press the [START/STOP] button to produce the C4 sine wave sound. 2) Press the [START/STOP] button to stop the sound and to exit the TEST item.
019 : EQ High Check	Checks the high-frequency sound. 1) Press the [START/STOP] button to produce the C7 sine wave sound. 2) Press the [START/STOP] button to stop the sound and to exit the TEST item.
022 : SP MUTE Check	Checks whether the SP MUTE for the Speakers works properly or not. 1) Press the [START/STOP] button to produce the C5 sine wave sound. "**OFF**" is shown on the LCD. 2) Press the TAB [▶] button to activate the SP MUTE circuit. "**ON**" is shown on the LCD and the speakers are muted. 3) Press the TAB [◀] button to cancel the SP MUTE circuit. "**OFF**" is shown on the LCD and the C5 sound is produced. 4) Press the [START/STOP] button to stop the sound and to exit the TEST item. **Caution:** While this test is executed, connection/disconnection of the headphone is not detected. (Sound comes out of the speaker even if the headphone is connected.)
023 : DAC MUTE Check	Checks whether the DAC MUTE for the DAC IC's output works properly or not. 1) Press the [START/STOP] button to produce the C5 sine wave sound. "**OFF**" is shown on the LCD. 2) Press the TAB [▶] button to activate the DAC MUTE circuit. "**ON**" is shown on the LCD, and all the output from the speakers, PHONES, and OUTPUT jacks are muted. 3) Press the TAB [◀] button to cancel the DAC MUTE circuit. "**OFF**" is shown on the LCD and the C5 sound is produced. 4) Press the [START/STOP] button to stop the sound and to exit the TEST item.
024 : MUTE Check	Checks whether the MUTE for all outputs works properly or not. 1) Press the [START/STOP] button to produce the C5 sine wave sound. "**OFF**" is shown on the LCD. 2) Press the TAB [▶] button to activate the MUTE circuit. "**ON**" is shown on the LCD, and all the output from the speakers, PHONES, and OUTPUT jacks are muted. 3) Press the TAB [◀] button to cancel the MUTE circuit. At this time, check that the muting relay on the HP circuit board works properly. "**OFF**" is shown on the LCD and the C5 sound is produced. 4) Press the TAB [▶] button to activate the MUTE circuit. 5) Connect the level meter to the OUTPUT jacks. 6) Measure the output levels and confirm that the measured values are within the specified range. [OUTPUT] (10kΩ load) L/L+R: -35.0 dBu or less R: -35.0 dBu or less 7) Press the [START/STOP] button to stop the sound and to exit the TEST item. **Caution:** When checking the output of the speakers, do not insert any plug to the PHONES jack.
025 : Emergency Circuit Check	Checks whether the Fail-Safe Circuit for digital volume control works properly or not. 1) Press the [START/STOP] button to produce the C5 sine wave sound. "**OFF**" is shown on the LCD. 2) Press the TAB [▶] button to activate the Fail-Safe Circuit function. "**ON**" is shown on the LCD, and all the output from the speakers, PHONES, and OUTPUT jacks are muted. 3) Press the TAB [◀] button to cancel the Fail-Safe Circuit function. At this time, check that the muting relay on the HP circuit board works properly. "**OFF**" is shown on the LCD and the A3 sound is produced. 4) Press the [START/STOP] button to stop the sound and to exit the TEST item. **Caution:** When checking the output of the speakers, do not insert any plug to the PHONES jack.

LCD display	Test items and judging conditions
026 : SIOF Check	Checks whether the two SIOF circuits, which are defined Line-A and Line-B in this test, are connected properly. Also, checks whether the control ports of AUDIO clock are connected properly. 1) Press the [START/STOP] button to start the test of Line-A and AUDIO-clock ports. "**Line-A**" is shown on the LCD. If there is no problem, the beep of the A3 sine wave will be repeated from the L channel. The sound is produced and "**ON**" appears on the LCD while the clock turns ON state. The sound stops and "**OFF**" appears on the LCD while the clock turns OFF state. If there is a problem, the A3 sound is produced continuously and "**ON**" appears on the LCD, or no sound is there and "**OFF**" appears on the LCD. 2) Press the TAB [▶] button to start the test of Line-B and AUDIO-clock ports. "**Line-B**" is shown on the LCD. If there is no problem, the beep of the C5 sine wave will be repeated from the R channel. The sound is produced and "**ON**" appears on the LCD while the clock turns ON state. The sound stops and "**OFF**" appears on the LCD while the clock turns OFF state. If there is a problem, the C5 sound is produced continuously and "**ON**" appears on the LCD, or no sound is there and "**OFF**" appears on the LCD. 3) Press the [START/STOP] button to stop the sound and to exit the TEST item. ***NOTE:*** You can check the Line-A and Line-B alternatively by using the TAB [◀][▶] buttons.
028 : AUX-IN Check	Checks whether the AUX IN jack works properly or not. 1) Press the [START/STOP] button. "**Not Inserted**" is shown on the LCD. 2) Connect the plug to the AUX IN jack. "**Inserted**" is shown on the LCD. 3) Disconnect the plug. "**Not Inserted**" is shown on the LCD. 4) Press the [START/STOP] button to exit the TEST item.
031 : SW, LED Check	Checks whether each panel button with its LED (if available) works properly or not. 1) Press the [START/STOP] button to start the test. "**Push ＊＊＊**" is shown on the LCD. The LCD shows you the should-be-pressed button. ***NOTE:*** The "＊＊＊" means each button name. 2) Press the button specified on the LCD one by one. If the correct button is pressed, "**＊＊＊ On**" is shown on the LCD and the sound of the note assigned to the pressed button will be produced. Also, the LED (if available) lights. Regarding what note and LED are assigned, refer to the Switch Test Sequence on page 45. ***NOTE:*** • "**NG [pressed button name] On**" will be shown on the LCD if the wrong button is pressed. • "**Over Two Sw**" will be shown on the LCD if two or more buttons are pressed. 3) After all the buttons are completed and "**Dial DOWN 50**" appears on the LCD, check the [DATA ENTRY] dial. Rotate the dial counter-clockwise until "**Dial UP xx**" appears on the LCD. 4) Rotate the dial clockwise until "**End**" appears on the LCD. 5) Press the [START/STOP] button to exit the TEST item. ***NOTE:*** You can exit this test by pressing the lowest key. Also, you can exit the test by pressing the [DEMO] button after the button is tested.
032 : All LED On	Checks whether all the LED lamps light properly or not. 1) Press the [START/STOP] button to start the test. All the LED lamps are turned on, and "**- -**" is shown on the LCD. 2) Confirm that all the LED lamps light. 3) Press the [START/STOP] button to exit the TEST item and to turn off all the LED.

LCD display	Test items and judging conditions
033 : Red LED On	Checks whether all the red LED lamps light properly or not. 1) Press the [START/STOP] button to start the test. All the red LED lamps are turned on, and "**- -**" is shown on the LCD. 2) Confirm that all the red LED lamps light. 3) Press the [START/STOP] button to exit the TEST item and to turn off all the red LED.
034 : Green LED On	Checks whether all the green LED lamps light properly or not. 1) Press the [START/STOP] button to start the test. All the green LED lamps are turned on, and "**- -**" is shown on the LCD. 2) Confirm that all the green LED lamps light. 3) Press the [START/STOP] button to exit the TEST item and to turn off all the green LED.
037 : All LCD On	Checks whether all the LCD dots are turned on (black) properly or not. 1) Press the [START/STOP] button to start the test. 2) Check that all the dots of the LCD are turned on (black). 3) Press the [START/STOP] button to exit the TEST item.
038 : All LCD Off	Checks whether all the LCD dots are turned off (white) properly or not. 1) Press the [START/STOP] button to start the test. 2) Check that all the dots of the LCD are turned off (white). 3) Press the [START/STOP] button to exit the TEST item.
040 : LCD Pattern Check	Checks whether the color pattern of the LCD is shown properly or not. 1) Press the [START/STOP] button to start the test. 2) Use the TAB [◀][▶] buttons to call up the color patterns. Check whether the following patterns are shown on the LCD properly or not. • RGB • Rainbow • Flicker Noise (horizontal) • Flicker Noise (vertical) 3) Press the [START/STOP] button to exit the TEST item.
041 : LCD Backlight Off Check	Checks whether the LCD backlight is turned ON/OFF properly or not. 1) Press the [START/STOP] button to start the test. The LCD backlight is turned off. 2) Use the TAB [◀][▶] buttons to turn on/off the LCD Backlight. 3) Press the [START/STOP] button to exit the TEST item.
042 : Main Volume Check	Checks whether the MASTER VOLUME control works properly or not. 1) Press the [START/STOP] button. "**Main Volume MIN xx**" is shown on the LCD. 2) Rotate the [MASTER VOLUME] control to the minimum position. The value: 0 to 255 is shown on the LCD depending on the [MASTER VOLUME] control position. When the minimum value is detected, "**Main Volume MAX 0**" is shown on the LCD. 3) Rotate the [MASTER VOLUME] control to the maximum position. When the maximum value is detected, "**OK 255**" is shown on the LCD. 4) Press the [START/STOP] button to exit the TEST item.

LCD display	Test items and judging conditions
047 : JoyStick Calibration	Calibrates the [Joystick] value depending on the position. 1) Press the [START/STOP] button. "**Joystick Left H:xxx V:xxx**" is shown on the LCD. V: vertical direction H: horizontal direction The value: 0 to 255 is shown on the LCD depending on the [Joystick] control position. 2) Move the [Joystick] to the left to the minimum position to produce the C3 beep. "**Joystick Right H:0 V:xxx**" is shown on the LCD. 3) Move the [Joystick] to the right to the maximum position to produce the D3 beep. "**Joystick Center H:255 V:xxx**" is shown on the LCD. 4) Release the [Joystick] to the center position to produce the E3 beep. "**Joystick Down H:xxx V:xxx**" is shown on the LCD. 5) Move the [Joystick] to the lower to the minimum position to produce the F3 beep. "**Joystick Up H:xxx V:0**" is shown on the LCD. 6) Move the [Joystick] to the upper to the maximum position to produce the G3 beep. "**Joystick Center H:xxx V:255**" is shown on the LCD. 7) Release the [Joystick] to the center position to produce the C4 beep. "**DATA WRITE**" is shown on the LCD. "**OK**" is shown on the LCD. 8) Press the [START/STOP] button to exit the TEST item. ***NOTE:*** In Step 1), if the "**No Calibration**" message is shown on the LCD, proceed to Step 2) as is. This means that the calibration has never been executed.
048 : JoyStick Check	Checks whether the Joystick works properly or not. 1) Press the [START/STOP] button. "**Joystick Left H:128 V:128**" is shown on the LCD. 2) Move the [Joystick] to the left to the minimum position to produce the C3 beep. "**Joystick Right H:0 V:128**" is shown on the LCD. 3) Move the [Joystick] to the right to the maximum position to produce the D3 beep. "**Joystick Center H:255 V:128**" is shown on the LCD. 4) Release the [Joystick] to the center position to produce the E3 beep. "**Joystick Down H:128 V:128**" is shown on the LCD. 5) Move the [Joystick] to the lower to the minimum position to produce the F3 beep. "**Joystick Up H:128 V:0**" is shown on the LCD. 6) Move the [Joystick] to the upper to the maximum position to produce the G3 beep. "**Joystick Center H:128 V:255**" is shown on the LCD. 7) Release the [Joystick] to the center position to produce the C4 beep. "**OK**" is shown on the LCD. 8) Press the [START/STOP] button to exit the TEST item. ***NOTE:*** In Step 1), if the "**No Calibration**" message is shown on the LCD, proceed to Step 2) as is. This means that the calibration has never been executed.
053 : Pedal1 Check	Checks whether the Foot Pedal plugged into FOOT PEDAL1 jack works properly or not. 1) Connect the foot pedal (FC7) to FOOT PEDAL 1 jack. 2) Press the [START/STOP] button to start the test. "**Pedal1 Down**" is shown on the LCD. When the pedal is not detected, "**No Pedal**" is shown on the LCD. 3) Press the pedal to the maximum position to produce the C3 sound. "**Pedal1 Up**" is shown on the LCD. 4) Press the pedal to the minimum position to produce the G3 sound. "**Pedal1 Out**" is shown on the LCD. 5) Disconnect the pedal from the FOOT PEDAL 1 jack to produce the C4 sound. "**OK**" is shown on the LCD. 6) Press the [START/STOP] button to exit the TEST item.

LCD display	Test items and judging conditions
054 : Pedal2 Check	Checks whether the Foot Pedal plugged into FOOT PEDAL2 jack works properly or not. 1) Connect the foot pedal (FC7) to FOOT PEDAL 2 jack. 2) Press the [START/STOP] button to start the test. "**Pedal2 Down**" is shown on the LCD. When the pedal is not detected, "**No Pedal**" is shown on the LCD. 3) Press the pedal to the maximum position to produce the C3 sound. "**Pedal2 Up**" is shown on the LCD. 4) Press the pedal to the minimum position to produce the G3 sound. "**Pedal2 Out**" is shown on the LCD. 5) Disconnect the pedal from the FOOT PEDAL 2 jack to produce the C4 sound. "**OK**" is shown on the LCD. 6) Press the [START/STOP] button to exit the TEST item.
056 : MIDI Check	Checks whether the MIDI terminals work properly or not. 1) Connect the single MIDI cable to MIDI IN and OUT terminals. 2) Press the [START/STOP] button to start the test. If no problem is found, the C4 sine wave sound is produced for a second and "**OK**" is shown on the LCD. If any problem is found, "**NG**" is shown on the LCD. 3) Press the [START/STOP] button to exit the TEST item. 4) Disconnect the MIDI cable from the terminals.
060 : USB to Device/Host Check	Checks whether the USB [TO DEVICE] and USB [TO HOST] terminals work properly or not. 1) Press the [START/STOP] button first. "**Connect Device-Host**" is shown on the LCD. 2) Using the USB cable, connect the USB [TO DEVICE] terminal and USB [TO HOST] terminal. Confirm that "**OK**" is shown on the LCD and the C4 sound is produced for a second. 3) Press the [START/STOP] button to exit the TEST item. 4) Disconnect the USB cable.
061 : USB Storage Device Check	Checks whether or not the instrument can access the USB memory device connected to the USB [TO DEVICE] terminal. 1) Insert the USB flash drive and press the [START/STOP] button. 2) Confirm that "**OK**" is shown on the LCD. If no media is inserted, "**NO DISK**" will be displayed. If the media is unformatted, "**UNFORMAT DISK**" will be displayed. If the media is protected, "**PROTECT DISK**" will be displayed. If failed in reading/writing, "**NG**" will be displayed. 3) Press the [START/STOP] button to exit the TEST item. 4) Disconnect the USB flash memory.
063 : Keyboard Type Check	Checks whether this instrument can recognize the keyboard type correctly or not. 1) Press the [START/STOP] button to start the test. 2) Confirm that "**OK (16M)**" is shown on the LCD. 3) Press the [START/STOP] button to exit the TEST item.
067 : ROM Check2	Executes the complete check of the ROM. (It will take about 10 seconds.) 1) Press the [START/STOP] button to start the test. OK: **OK** NG: **MAIN PROG ROM (IC＊＊＊) NG** 2) Confirm that "**OK**" is shown on the LCD. 3) Press the [START/STOP] button to exit the TEST item.
069 : RAM Check2	Executes the complete check of the RAM. 1) Press the [START/STOP] button to start the test. OK: **OK** NG: **MAIN SDRAM (IC＊＊＊,＊＊＊) NG** 2) Confirm that "**OK**" is shown on the LCD. 3) Press the [START/STOP] button to exit the TEST item.

LCD display	Test items and judging conditions
070 : Backup ROM Check2	Executes the complete check of the Backup ROM. (It will take about 1 minute 30 seconds.) 1) Press the [START/STOP] button to start the test. OK: **OK** NG: **BACKUP (IC＊＊＊) NG** 2) Confirm that "**OK**" is shown on the LCD. 3) Press the [START/STOP] button to exit the TEST item. ***NOTE: The power must not be turned off while testing, because the original data will be re-written at the end of this test.***
071 : Wave ROM Check2	Executes the complete check of the Wave ROM. (It will take about 1 minutes 30 seconds.) 1) Press the [START/STOP] button to start the test. OK: **OK** NG: **Wave TG (IC＊＊＊,＊＊＊) NG** 2) Confirm that "**OK**" is shown on the LCD. 3) Press the [START/STOP] button to exit the TEST item.
072 : Wave RAM Check2	Executes the complete check of the Wave RAM. (It will take about 20 seconds.) 1) Press the [START/STOP] button to start the test. OK: **OK** NG: **Wave RAM (IC＊＊＊) NG** 2) Confirm that "**OK**" is shown on the LCD. 3) Press the [START/STOP] button to exit the TEST item.
073 : Effect RAM Check2	Executes the complete check of the Effect RAM . (It will take about 30 seconds.) 1) Press the [START/STOP] button to start the test. OK: **OK** NG: **Effect 1 TG1 (IC＊＊＊) NG** 2) Confirm that "**OK**" is shown on the LCD. 3) Press the [START/STOP] button to exit the TEST item.
074 : Panel PCB Check 1	This test is for the PNC, PNL, and PNR circuit boards only to check whether each panel button with its LED (if available) works properly or not. Refer to the "031: SW, LED Check" for details as the operation is similar. Regarding what note and LED are assigned, refer to the Panel PCB division check 1 on page 46.
075 : Panel PCB Check 2	This test is for the PNM, PNS and OR circuit boards only to check whether each panel button with its LED (if available) works properly or not. Refer to the "031: SW, LED Check" for details as the operation is similar. Regarding what note and LED are assigned, refer to the Panel PCB division check 2 on page 47.
081 : Factory Set	To initialize all the backup areas to restore factory default. The actual Factory Set has not been executed yet at this timing, but will be executed next time the power is turned on. ***Caution:*** Note that all user data will be cleared. Before executing the factory reset procedure, be sure to save the important data as a backup in the USB flash drive. (Refer to page 54) 1) Press the [START/STOP] button to restore initial data and "**OK**" is shown on the LCD. 2) Press the [START/STOP] button to exit from this test. * When the power is turned on next time, "**Force Format Mode**" is shown on the LCD. After restarting, the instrument return to the play mode and the main screen appears. ***NOTE: Never turn off the power until the Main display appears. Doing so may cause a malfunction. (It will take about 20 seconds.)***
083 : Test Exit	Let's you exit from the Test mode to the normal mode. 1) Press the [START/STOP] button. The Test mode will end, then the PSR-A3000 will be restarted. ***NOTE: Never turn off the power until the Main display appears. Doing so may cause a malfunction.***

4. Other Inspections

4-1. AUX IN

Take measurement with the Test Program [028: AUX-IN Check] selected.
Check that each terminal output is as shown in the table below when a signal is inputted into AUX IN.

INPUT \ OUTPUT	PHONES (33 Ω load)	
	L	R
AUX IN L: Sine wave (1 kHz, 0 dBu) AUX IN R: No input	+1.6 ± 2 dBu	-56.0 dBu or less
AUX IN L: No input AUX IN R: Sine wave (1 kHz, 0 dBu)	-56.0 dBu or less	+1.6 ± 2 dBu

4-2. Noise Level Check

1) Do not connect anything to the [AUX IN] jack.
2) Connect the level meter (using the JIS-C fi lter) to the L/R [PHONES] and L/R [OUTPUT] jacks.
3) Turn the master volume to the maximum position.
4) Measure the output voltage and confirm that the measured values are within specification as follows:

<PHONES>
L: -90.0 dBu or less
R: -90.0 dBu or less

<OUTPUT>
L: -90.0 dBu or less
R: -90.0 dBu oe less

● Switch Test Sequence

Turn	SW Name/Display	LED made to turn on	Note No.
1	SELECT	-	C2
2	SCORE	-	C#2
3	LYRICS/TEXT	-	D2
4	GUIDE	GUIDE	D#2
5	REPEAT	REPEAT	E2
6	EXTRA TR	EXTRA TR (RED, GREEN)	F2
7	TR 2	TR2 LEFT (RED, GREEN)	F#2
8	TR 1	TR1 RIGHT (RED, GREEN)	G2
9	REC	REC	G#2
10	STOP	-	A2
11	PLAY/PAUSE	PLAY/PAUSE (RED, GREEN)	A#2
12	REW	-	B2
13	FF	-	C3
14	POP & ROCK	POP & ROCK	C#3
15	SWING & JAZZ	SWING & JAZZ	D3
16	ARABIC	ARABIC	D#3
17	IRANIAN	IRANIAN	E3
18	BALLAD	BALLAD	F3
19	LATIN	LATIN	F#3
20	KHALIGI	KHALIGI	G3
21	TURKISH	TURKISH	G#3
22	DEMO	-	A3
23	DANCE	DANCE	A#3
24	WORLD	WORLD	B3
25	MAGHREBI	MAGHREBI	C4
26	EXPANSION USER	EXPANSION USER	C#4
27	MASTER EQ	-	D4
28	TEMPO -	-	D#4
29	TEMPO +	-	E4
30	TAP TEMPO	-	F4
31	TRANSPOSE -	-	F#4
32	TRANSPOSE +	-	G4
33	METRONOME	METRONOME	G#4
34	SCALE C#	SCALE C#	A4
35	SCALE D#	SCALE D#	A#4
36	SCALE F#	SCALE F#	B4
37	SCALE G#	SCALE G#	C5
38	SCALE A#	SCALE A#	C#5
39	SCALE C	SCALE C	D5
40	SCALE D	SCALE D	D#5
41	SCALE E	SCALE E	E5
42	SCALE F	SCALE F	F5
43	SCALE G	SCALE G	F#5
44	SCALE A	SCALE A	G5
45	SCALE B	SCALE B	G#5
46	MEMORY	-	A5
47	MEMORY 1	MEMORY 1	A#5
48	MEMORY 2	MEMORY 2	B5
49	MEMORY 3	MEMORY 3	C2
50	MEMORY 4	MEMORY 4	C#2
51	MEMORY 5	MEMORY 5	D2
52	RESET	RESET	D#2
53	ASSIGN	-	E2
54	ACMP	ACMP	F2
55	FADE IN/OUT	FADE IN/OUT	F#2
56	OTS LINK	OTS LINK	G2
57	AUTO FILL IN	AUTO FILL IN	G#2
58	INTRO I	INTRO 1 (RED, GREEN)	A2
59	INTRO II	INTRO 2 (RED, GREEN)	A#2
60	INTRO III	INTRO 3 (RED, GREEN)	B2
61	MAIN A	MAIN A (RED, GREEN)	C3
62	MAIN B	MAIN B (RED, GREEN)	C#3
63	MAIN C	MAIN C (RED, GREEN)	D3
64	MAIN D	MAIN D (RED, GREEN)	D#3
65	BREAK	BREAK (RED, GREEN)	E3
66	ENDING/rit. I	ENDING/rit. 1 (RED, GREEN)	F3
67	ENDING/rit. II	ENDING/rit. 2 (RED, GREEN)	F#3
68	ENDING/rit. III	ENDING/rit. 3 (RED, GREEN)	G3
69	SYNC STOP	SYNC STOP	G#3
70	SYNC START	SYNC START	A3
71	START/STOP	START/STOP (RED, GREEN)	A#3
72	A	-	B3
73	B	-	C4
74	C	-	C#4
75	D	-	D4
76	E	-	D#4
77	BALANCE	-	E4
78	MIXING CONSOLE	-	F4
79	CHANNEL ON/OFF	-	F#4
80	DIRECT ACCESS	-	G4
81	TAB <	-	G#4
82	TAB >	-	A4
83	F	-	A#4
84	G	-	B4
85	H	-	C5
86	I	-	C#5
87	J	-	D5
88	FUNCTION	-	D#5
89	1-U	-	E5
90	2-U	-	F5
91	3-U	-	F#5
92	4-U	-	G5
93	5-U	-	G#5
94	6-U	-	A5
95	7-U	-	A#5
96	8-U	-	B5
97	1-L	-	C2
98	2-L	-	C#2
99	3-L	-	D2
100	4-L	-	D#2
101	5-L	-	E2
102	6-L	-	F2
103	7-L	-	F#2
104	8-L	-	G2
105	EXIT	-	G#2
106	USB AUDIO PLAYER	-	A2
107	USB	USB	A#2
108	PIANO	PIANO	B2
109	GUITAR	GUITAR	C3
110	BRASS	BRASS	C#3
111	SYNTH	SYNTH	D3
112	ORIENTAL	ORIENTAL	D#3
113	E.PIANO	E.PIANO	E3
114	BASS	BASS	F3
115	WOODWIND	WOODWIND	F#3
116	PERCUSSION	PERCUSSION	G3
117	ORGAN FLUTES	ORGAN FLUTES	G#3
118	ORGAN & ACCODION	ORGAN & ACCODION	A3
119	STRINGS	STRINGS	A#3
120	CHOIR & PAD	CHOIR & PAD	B3
121	DRUM KIT	DRUM KIT	C4
122	EXPANSION USER	EXPANSION USER	C#4
123	HARMONY / ARPEGGIO	HARMONY / ARPEGGIO	D4
124	TOUCH	TOUCH	D#4
125	SUSTAIN	SUSTAIN	E4
126	MONO	MONO	F4

Turn	SW Name/Display	LED made to turn on	Note No.
127	DSP	DSP	F#4
128	VARI.	VARI.	G4
129	MUSIC FINDER	-	G#4
130	PART SELECT LEFT	PART SELECT LEFT	A4
131	PART SELECT RIGHT1	PART SELECT RIGHT1	A#4
132	PART SELECT RIGHT2	PART SELECT RIGHT2	B4
133	ENTER	-	C5
134	LEFT HOLD	LEFT HOLD	C#5
135	PART ON/OFF LEFT	PART ON/OFF LEFT	D5
136	PART ON/OFF RIGHT1	PART ON/OFF RIGHT1	D#5
137	PART ON/OFF RIGHT2	PART ON/OFF RIGHT2	E5
138	REGIST BANK -	-	F5
139	REGIST BANK +	-	F#5
140	FREEZE	-	G5
141	MEMORY	-	G#5
142	REGIST. MEMORY 1	REGIST. MEMORY 1 (RED, GREEN)	A5
143	REGIST. MEMORY 2	REGIST. MEMORY 2 (RED, GREEN)	A#5
144	REGIST. MEMORY 3	REGIST. MEMORY 3 (RED, GREEN)	B5
145	REGIST. MEMORY 4	REGIST. MEMORY 4 (RED, GREEN)	C2
146	REGIST. MEMORY 5	REGIST. MEMORY 5 (RED, GREEN)	C#2
147	REGIST. MEMORY 6	REGIST. MEMORY 6 (RED, GREEN)	D2
148	REGIST. MEMORY 7	REGIST. MEMORY 7 (RED, GREEN)	D#2
149	REGIST. MEMORY 8	REGIST. MEMORY 8 (RED, GREEN)	E2
150	M.PAD SELECT	-	F2
151	M.PAD 1	M.PAD 1 (RED, GREEN)	F#2
152	M.PAD 2	M.PAD 2 (RED, GREEN)	G2
153	M.PAD 3	M.PAD 3 (RED, GREEN)	G#2
154	M.PAD 4	M.PAD 4 (RED, GREEN)	A2
155	M.PAD STOP	-	A#2
156	OTS 1	OTS 1 (RED, GREEN)	B2
157	OTS 2	OTS 2 (RED, GREEN)	C3
158	OTS 3	OTS 3 (RED, GREEN)	C#3
159	OTS 4	OTS 4 (RED, GREEN)	D3
160	UPPER OCTAVE -	-	D#3
161	UPPER OCTAVE +	-	D3

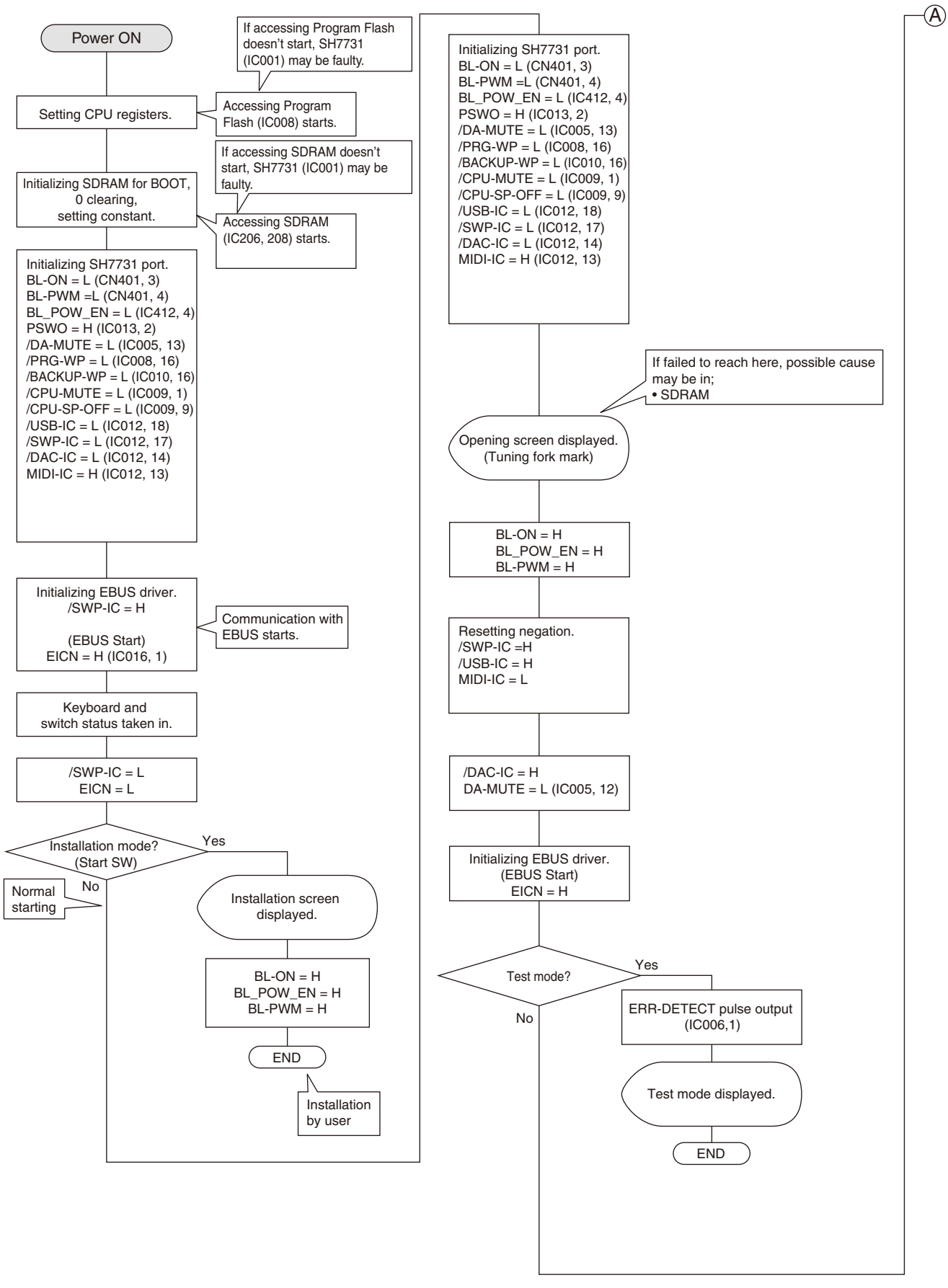
● Panel PCB division check 1 (PNC, PNL and PNR circuit boards)

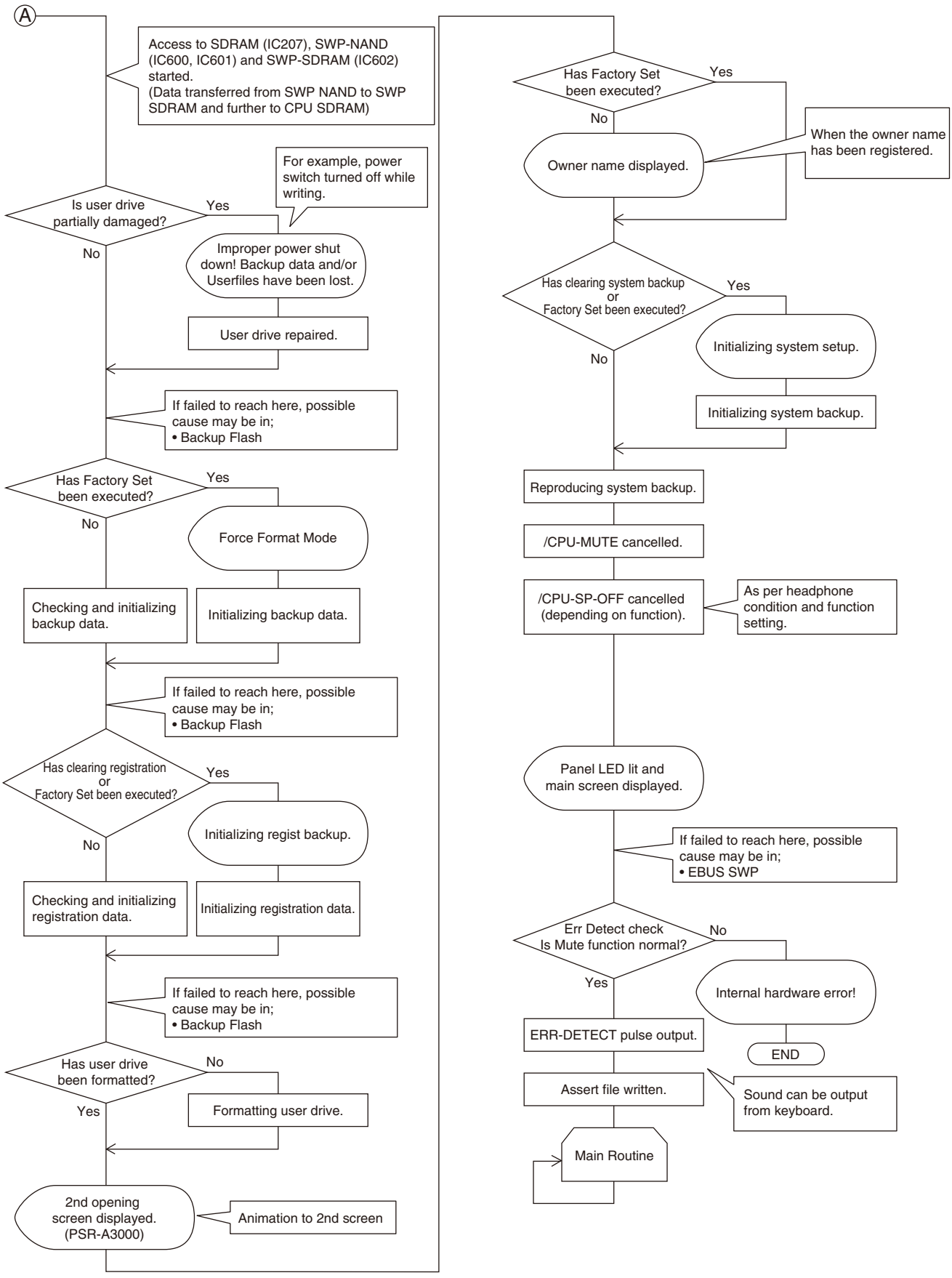
Turn	SW Name/Display	LED made to turn on	Note No.
1	REGIST. MEMORY 8	REGIST. MEMORY 8 (RED, GREEN)	G4
2	REGIST. MEMORY 7	REGIST. MEMORY 7 (RED, GREEN)	F#4
3	REGIST. MEMORY 6	REGIST. MEMORY 6 (RED, GREEN)	F4
4	REGIST. MEMORY 5	REGIST. MEMORY 5 (RED, GREEN)	E4
5	REGIST. MEMORY 4	REGIST. MEMORY 4 (RED, GREEN)	D#4
6	REGIST. MEMORY 3	REGIST. MEMORY 3 (RED, GREEN)	D4
7	REGIST. MEMORY 2	REGIST. MEMORY 2 (RED, GREEN)	C#4
8	REGIST. MEMORY 1	REGIST. MEMORY 1 (RED, GREEN)	C4
9	MEMORY	-	B3
10	FREEZE	-	A#3
11	REGIST BANK +	-	A3
12	REGIST BANK -	-	G#3
13	START/STOP	START/STOP (RED, GREEN)	C#2
14	SYNC START	SYNC START	C2
15	SYNC STOP	SYNC STOP	B5
16	ENDING/rit. III	ENDING/rit. 3 (RED, GREEN)	A#5
17	ENDING/rit. II	ENDING/rit. 2 (RED, GREEN)	A5
18	ENDING/rit. I	ENDING/rit. 1 (RED, GREEN)	G#5
19	BREAK	BREAK (RED, GREEN)	G5
20	MAIN D	MAIN D (RED, GREEN)	F#5
21	MAIN C	MAIN C (RED, GREEN)	F5
22	MAIN B	MAIN B (RED, GREEN)	E5
23	MAIN A	MAIN A (RED, GREEN)	D#5
24	INTRO III	INTRO 3 (RED, GREEN)	D5
25	INTRO II	INTRO 2 (RED, GREEN)	C#5
26	INTRO I	INTRO 1 (RED, GREEN)	C5
27	AUTO FILL IN	AUTO FILL IN	B4
28	OTS LINK	OTS LINK	A#4
29	FADE IN/OUT	FADE IN/OUT	A4
30	ACMP	ACMP	G#4
31	UPPER OCTAVE +	-	G5
32	UPPER OCTAVE -	-	F#5
33	OTS 4	OTS 4 (RED, GREEN)	F5
34	OTS 3	OTS 3 (RED, GREEN)	E5
35	OTS 2	OTS 2 (RED, GREEN)	D#5
36	OTS 1	OTS 1 (RED, GREEN)	D5
37	M.PAD STOP	-	C#5
38	M.PAD 4	M.PAD 4 (RED, GREEN)	C5
39	M.PAD 3	M.PAD 3 (RED, GREEN)	B4
40	M.PAD 2	M.PAD 2 (RED, GREEN)	A#4
41	M.PAD 1	M.PAD 1 (RED, GREEN)	A4
42	M.PAD SELECT	-	G#4

● Panel PCB division check 2 (PNM, PNS and OR circuit boards)

Turn	SW Name/Display	LED made to turn on	Note No.
1	SELECT	-	C2
2	SCORE	-	C#2
3	LYRICS/TEXT	-	D2
4	GUIDE	GUIDE	D#2
5	REPEAT	REPEAT	E2
6	EXTRA TR	EXTRA TR (RED, GREEN)	F2
7	TR 2	TR2 LEFT (RED, GREEN)	F#2
8	TR 1	TR1 RIGHT (RED, GREEN)	G2
9	REC	REC	G#2
10	STOP	-	A2
11	PLAY/PAUSE	PLAY/PAUSE (RED, GREEN)	A#2
12	REW	-	B2
13	FF	-	C3
14	POP & ROCK	POP & ROCK	C#3
15	SWING & JAZZ	SWING & JAZZ	D3
16	ARABIC	ARABIC	D#3
17	IRANIAN	IRANIAN	E3
18	BALLAD	BALLAD	F3
19	LATIN	LATIN	F#3
20	KHALIGI	KHALIGI	G3
21	TURKISH	TURKISH	G#3
22	DEMO	-	A3
23	DANCE	DANCE	A#3
24	WORLD	WORLD	B3
25	MAGHREBI	MAGHREBI	C4
26	EXPANSION USER	EXPANSION USER	C#4
27	MASTER EQ	-	D4
28	TEMPO -	-	D#4
29	TEMPO +	-	E4
30	TAP TEMPO	-	F4
31	TRANSPOSE -	-	F#4
32	TRANSPOSE +	-	G4
33	METRONOME	METRONOME	G#4
34	A	-	B3
35	B	-	C4
36	C	-	C#4
37	D	-	D4
38	E	-	D#4
39	BALANCE	-	E4
40	MIXING CONSOLE	-	F4
41	CHANNEL ON/OFF	-	F#4
42	DIRECT ACCESS	-	G4
43	1-U	-	E5
44	2-U	-	F5
45	3-U	-	F#5
46	4-U	-	G5
47	5-U	-	G#5
48	6-U	-	A5
49	7-U	-	A#5
50	8-U	-	B5
51	1-L	-	C2
52	2-L	-	C#2
53	3-L	-	D2
54	4-L	-	D#2
55	5-L	-	E2
56	6-L	-	F2
57	7-L	-	F#2
58	8-L	-	G2
59	EXIT	-	B4
60	TAB <	-	G#4
61	TAB >	-	A4
62	F	-	A#4
63	G	-	B4
64	H	-	C5
65	I	-	C#5
66	J	-	D5
67	FUNCTION	-	D#5
68	USB AUDIO PLAYER	-	A2
69	USB	USB	A#2
70	PIANO	PIANO	B2
71	GUITAR	GUITAR	C3
72	BRASS	BRASS	C#3
73	SYNTH	SYNTH	D3
74	ORIENTAL	ORIENTAL	D#3
75	E.PIANO	E.PIANO	E3
76	BASS	BASS	F3
77	WOODWIND	WOODWIND	F#3
78	PERCUSSION	PERCUSSION	G3
79	ORGAN FLUTES	ORGAN FLUTES	G#3
80	ORGAN & ACCODION	ORGAN & ACCODION	A3
81	STRINGS	STRINGS	A#3
82	CHOIR & PAD	CHOIR & PAD	B3
83	DRUM KIT	DRUM KIT	C4
84	EXPANSION USER	EXPANSION USER	C#4
85	HARMONY / ARPEGGIO	HARMONY / ARPEGGIO	D4
86	TOUCH	TOUCH	D#4
87	SUSTAIN	SUSTAIN	E4
88	MONO	MONO	F4
89	DSP	DSP	F#4
90	VARI.	VARI.	G4
91	MUSIC FINDER	-	G#4
92	PART SELECT LEFT	PART SELECT LEFT	A4
93	PART SELECT RIGHT1	PART SELECT RIGHT1	A#4
94	PART SELECT RIGHT2	PART SELECT RIGHT2	B4
95	ENTER	-	C5
96	LEFT HOLD	LEFT HOLD	C#5
97	PART ON/OFF LEFT	PART ON/OFF LEFT	D5
98	PART ON/OFF RIGHT1	PART ON/OFF RIGHT1	D#5
99	PART ON/OFF RIGHT2	PART ON/OFF RIGHT2	E5
100	SCALE C#	SCALE C#	A4
101	SCALE D#	SCALE D#	A#4
102	SCALE F#	SCALE F#	B4
103	SCALE G#	SCALE G#	C5
104	SCALE A#	SCALE A#	C#5
105	SCALE C	SCALE C	D5
106	SCALE D	SCALE D	D#5
107	SCALE E	SCALE E	E5
108	SCALE F	SCALE F	F5
109	SCALE G	SCALE G	F#5
110	SCALE A	SCALE A	G5
111	SCALE B	SCALE B	G#5
112	MEMORY	-	A5
113	MEMORY 1	MEMORY 1	A#5
114	MEMORY 2	MEMORY 2	B5
115	MEMORY 3	MEMORY 3	C2
116	MEMORY 4	MEMORY 4	C#2
117	MEMORY 5	MEMORY 5	D2
118	RESET	RESET	D#2
119	ASSIGN	-	E2

■ SYSTEM BOOTING FLOWCHART




A
Access to SDRAM (IC207), SWP-NAND (IC600, IC601) and SWP-SDRAM (IC602) started.
(Data transferred from SWP NAND to SWP SDRAM and further to CPU SDRAM)
Is user drive partially damaged?
Yes
No
For example, power switch turned off while writing.
Improper power shut down! Backup data and/or Userfiles have been lost.
User drive repaired.
If failed to reach here, possible cause may be in;
• Backup Flash
Has Factory Set been executed?
Yes
No
Force Format Mode
Checking and initializing backup data.
Initializing backup data.
If failed to reach here, possible cause may be in;
• Backup Flash
Has clearing registration or Factory Set been executed?
Yes
No
Initializing regist backup.
Checking and initializing registration data.
Initializing registration data.
If failed to reach here, possible cause may be in;
• Backup Flash
Has user drive been formatted?
No
Yes
Formatting user drive.
2nd opening screen displayed. (PSR-A3000)
Animation to 2nd screen
Has Factory Set been executed?
Yes
No
When the owner name has been registered.
Owner name displayed.
Has clearing system backup or Factory Set been executed?
Yes
No
Initializing system setup.
Initializing system backup.
Reproducing system backup.
/CPU-MUTE cancelled.
/CPU-SP-OFF cancelled (depending on function).
As per headphone condition and function setting.
Panel LED lit and main screen displayed.
If failed to reach here, possible cause may be in;
• EBUS SWP
Err Detect check Is Mute function normal?
No
Yes
Internal hardware error!
END
ERR-DETECT pulse output.
Assert file written.
Sound can be output from keyboard.
Main Routine

■ DMM CIRCUIT BOARD CHECK METHOD

The DMM Circuit Board is provided with test points for service check purposes.
Check the test points on the DMM Circuit Board if the following symptoms appear.

Symptoms and check items

(1) No LCD display with Power SW ON --> Check items ① to ⑦ sequentially.
(2) No sound or distorted sound --> Check items ① , ⑧ to ⑬ sequentially and OUTPUT check items.

Test Point

NO.	Test Point	Circuit	Judgment criteria	Measured by	Parts with possible defects
①	PV	Power supply for Power amplifier IC	More than 14.0V	Multimeter	TH100 or FT100 (On AJACK circuit board)
②	16V	Power supply for digital circuit	More than 14.0V	Multimeter	TH100 or FT100 (On AJACK circuit board)
③	+5D	5V power for digital circuit	5.0V±0.5V	Multimeter	IC810
④	+3.3D	3.3V power for digital circuit	3.3V±0.3V	Multimeter	IC810
⑤	+1.3D	1.3V power for CPU	1.3V±0.1V	Multimeter	IC209
⑥	+1.0D	1.0V power for TG	1.0V±0.1V	Multimeter	IC606
⑦	RESET	CPU & memory reset signal	3.3V±0.3V	Multimeter	IC004
⑧	12A	12V power for analog circuit	12V±1V	Multimeter	IC100 (On AJACK circuit board)
⑨	5A	5V power for analog circuit	5.0V±0.5V	Multimeter	IC811
⑩	OUTL	AUX output L channel	There shall be audio output without distortion.	Signal Checker	IC801 or IC807
⑪	OUTR	AUX output R channel	There shall be audio output without distortion.	Signal Checker	IC801 or IC807
⑫	HPL	HP output L channel	There shall be audio output without distortion.	Signal Checker	IC800 or IC807
⑬	HPR	HP output R channel	There shall be audio output without distortion.	Signal Checker	IC800 or IC807

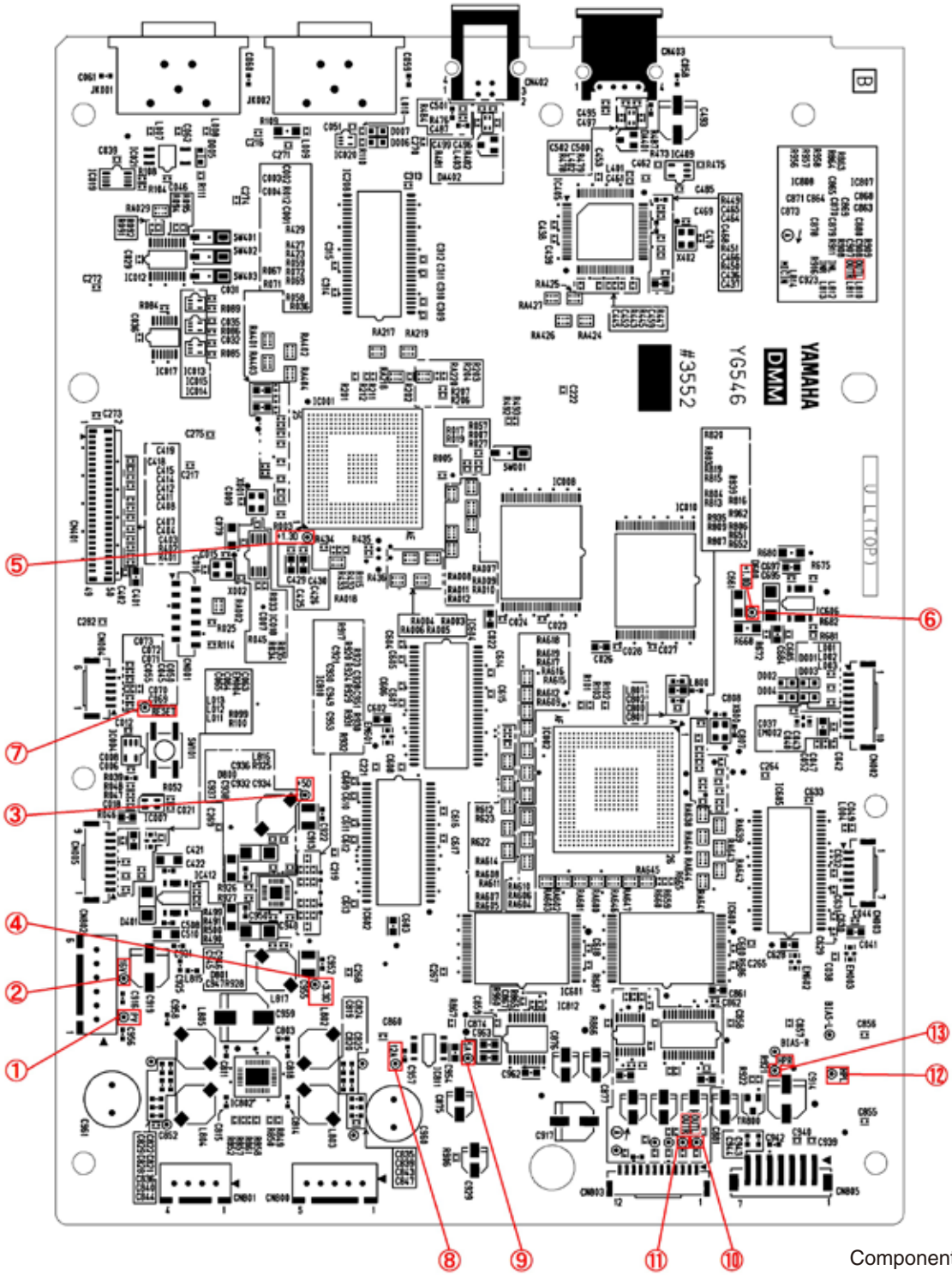
Note1: Use the standard AC adapter PA-300C for check operation.

Output states

NO.	SPEAKER	PHONES	OUTPUT	Parts with possible defects
1	×	×	×	IC001, IC002, IC007 or CPU Error Detect Circuit
2	×	○	○	IC802, SP-/MUTE Signal or HP JACK
3	○	×	×	IC807 or IC805
4	○	×	○	IC800, TR800 or RY200 (On HP circuit board)
5	○	○	×	IC801 or TR103-TR106 (On AJACK circuit board)

Note: " ○ " mark expresses normalcy and " × " mark expresses a failed state.

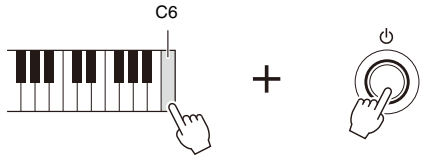
DMM Circuit Board (ZN440300)



Component side

■ RESETTING TO THE FACTORY-PROGRAMMED SETTINGS

While holding the right-most key (C6) on the keyboard, turn the power on. This resets the settings of the entire instrument (referred to as the System Setup parameters) to their factory default settings. Refer to the "Parameter Chart" in the Data List on the website for details about which parameters belong to System Setup.



NOTE

The recorded Songs, Expansion Packs, and other files saved to this instrument are not deleted by this operation.

You can also reset specified settings to the factory default value or delete all files and folders in the USER drive. Call up the operation display: [FUNCTION] → TAB [▶] MENU 2 → [G] SYSTEM → TAB [▶] RESET. For details, refer to the Advanced Features section, Chapter 11.

■ DATA BACKUP

You can back up all data saved in the USER drive (except Protected Songs and Expansion Voices/Styles) and all settings of the instrument to a USB flash drive as a single file.

1 Connect a USB flash drive to the [USB TO DEVICE] terminal for the backup destination.

NOTE

You can also back up files in the USER drive, such as Voice, Song, Style, Multi Pad and Registration Memory, by copying them individually to a USB flash drive as desired.

2 Call up the operation display.

[FUNCTION] → TAB [▶] MENU 2 → [G] SYSTEM → TAB [◀][▶] BACKUP/RESTORE



NOTE

You can also back up System settings, MIDI settings, User Effect settings, and Music Finder Records individually as desired. Call up the operation display: [FUNCTION] → TAB [▶] MENU 2 → [G] SYSTEM → TAB [◀][▶] SETUP FILES.

3 Press the [G] (BACKUP) button to save the data to the USB flash drive.

When confirmation messages appear, follow the on-display instructions.

NOTE

Completing the back up/restore operation may take a few minutes.

Restoring the Backup File

To do this, press the [I] (RESTORE) button in the BACKUP/RESTORE page (see above). When confirmation messages appear, follow the on-display instructions. When the operation is completed, the instrument will be restarted automatically.

NOTICE

Move the Protected Songs (saved to the USER drive) to a USB flash drive before restoring. If the Songs are not moved, the operation deletes the data.

■ VERSION UPGRADE

Download the version upgrade program from the Yamaha official website.

● List of the updating Flash ROM

PSR-A3000	Main Program	DMM	IC008
	Wave Data		IC600, IC601

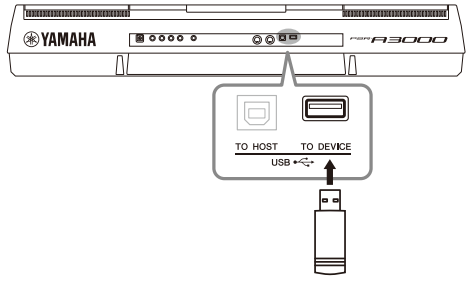
● File name

· PSR-A3000SETUP.PRG

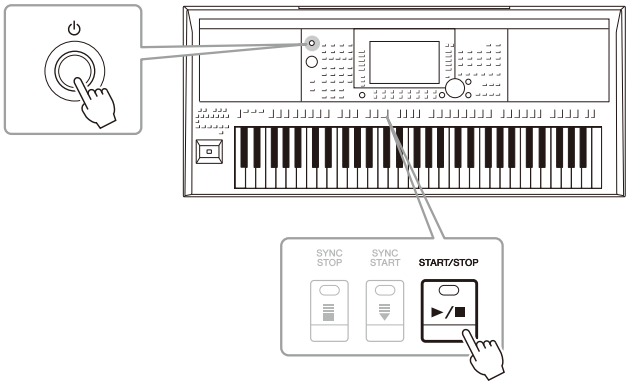
● How to Install

⚠ Never turn the instrument off while installing.
It may break the boot Flash ROM device.
Particularly, turning off the power immediately after staring installation may cause damage to the boot.
If operation still fails even after re-installation, the DMM circuit board must be replaced.
Never pull off the USB flash drive from the instrument while installing.

1 Insert the USB flash drive to the instrument.



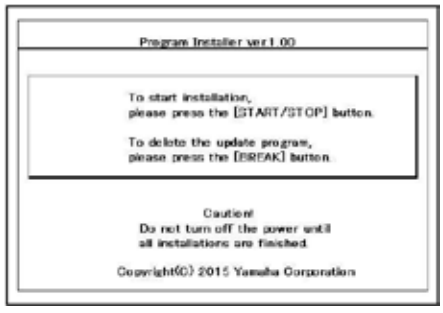
2 While holding down the [START/STOP] button, press the [⏻] (Standby/On) switch to start up installation mode.



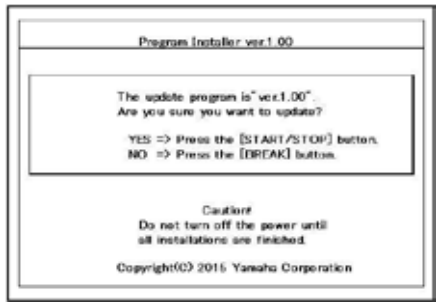


* Follow the display on the LCD for this operation.

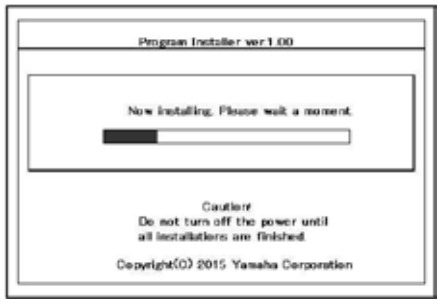
3 Press the [START/STOP] button to start the installations.



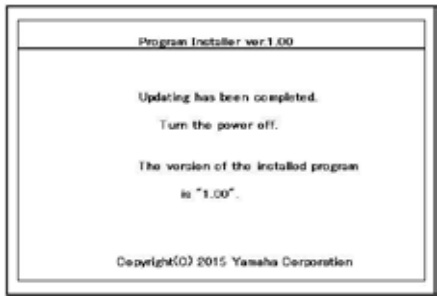
4 Press the [START/STOP] button again.



5 A progress bar for installation will appear.



6 When the installation is complete, the following message appears with a new firmware version.



7 Press the [⏻] (Standby/On) switch to turn the power off. Remove the USB flash drive from the instrument.

DIGITAL WORKSTATION

PSR-A3000

PARTS LIST

■ CONTENTS

OVERALL ASSEMBLY 2
UPPER CASE ASSEMBLY 4
CENTER PANEL ASSEMBLY 6
JOYSTICK 8
LOWER CASE ASSEMBLY 9
KEYBOARD ASSEMBLY 10
ELECTRICAL PARTS 11–15

Notes : DESTINATION ABBREVIATIONS

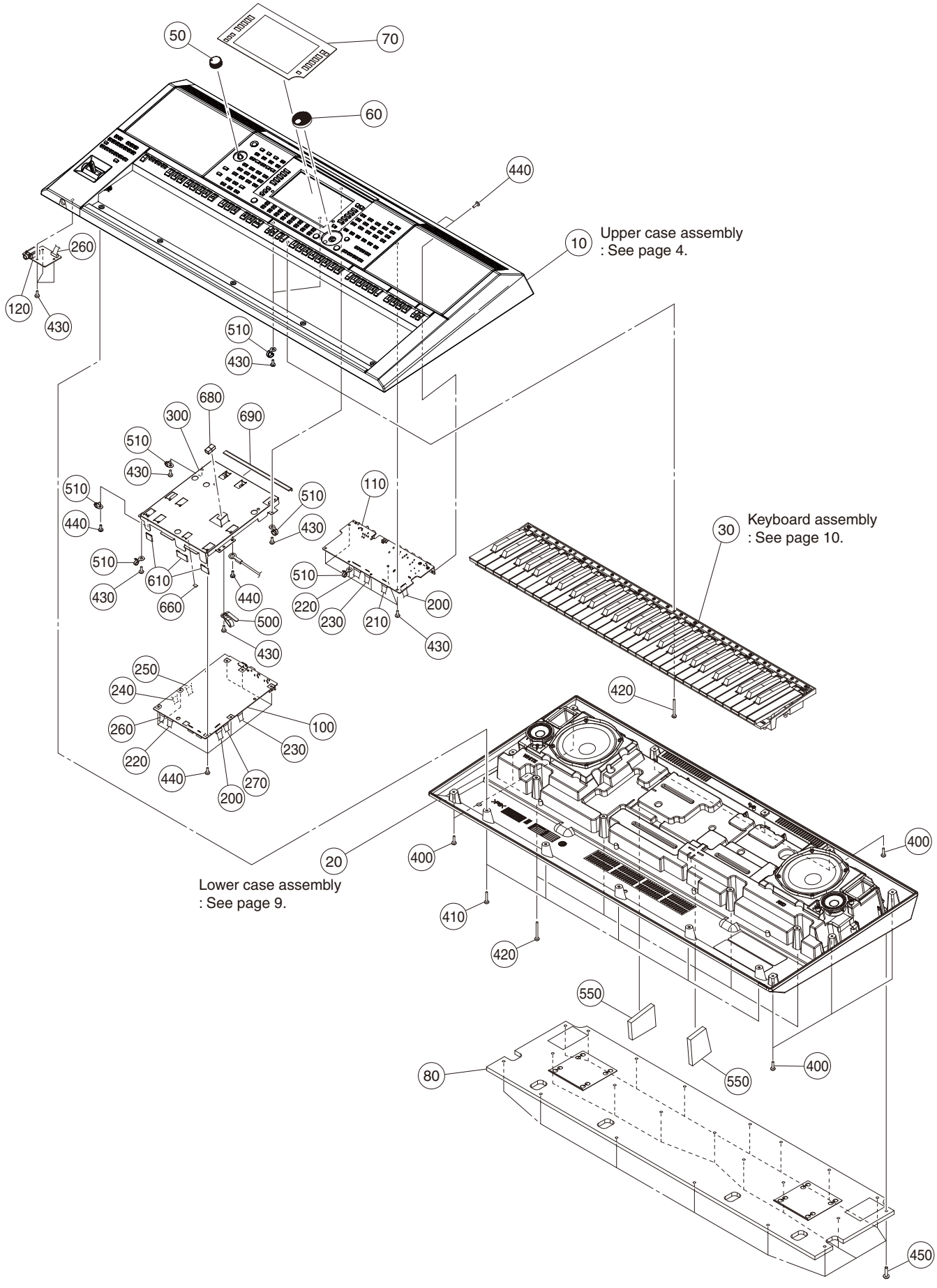
A :	Australian model	M :	South African model
B :	British model	O :	Chinese model
C :	Canadian model	P :	Blazillian model
D :	German model	Q :	South-east Asia model
E :	European model	T :	Taiwan model
F :	French model	U :	U.S.A. model
H :	North European model	V :	General export model (110V)
I :	Indonesian model	W:	General export model (220V)
J :	Japanese model	N,X:	General export model
K :	Korean model	Y :	Export model

■ WARNING

Components having special characteristics are marked ⚠ and must be replaced with parts having specification equal to those originally installed.

- The numbers “QTY” show quantities for each unit.
- The parts with “--” in “PART NO.” are not available as spare parts.
- This mark “ } ” in the REMARKS column means these parts are interchangeable.
- The second letter of the shaded ( ) part number is O, not zero.
- The second letter of the shaded ( ) part number is I, not one.

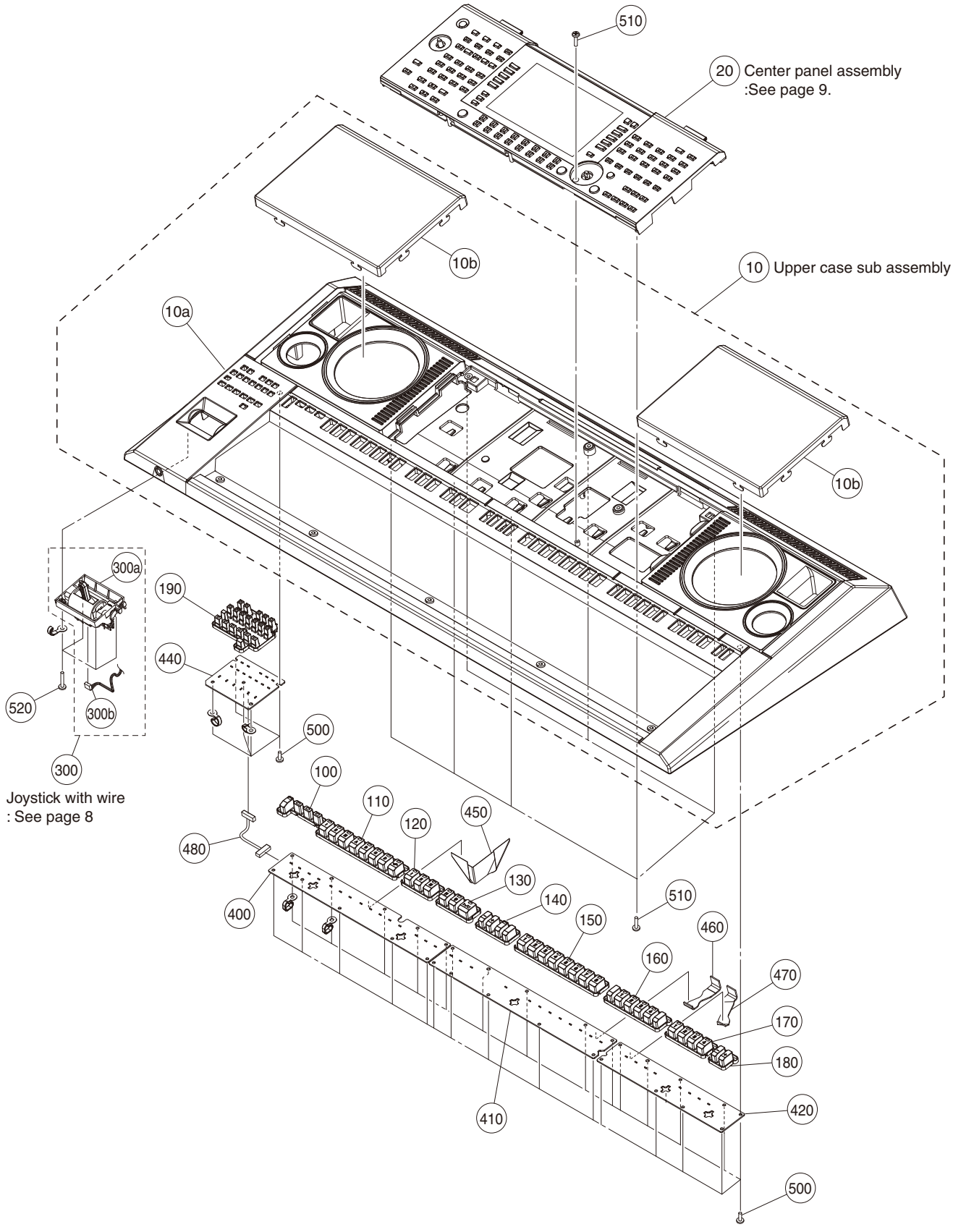
■ OVERALL ASSEMBLY



	REF NO.	PART NO.	DESCRIPTION		部品名	REMARKS	QTY
			OVERALL ASSEMBLY		総組立	PSR-A3000	
		--	OVERALL ASSEMBLY		総組立	(ZP42910)	
	10	--	UPPER CASE ASSEMBLY		上ケースAss'y	(ZP42930)	
	20	--	LOWER CASE ASSEMBLY		下ケースAss'y	(ZP54100)	
	30	**WB91420R**	KEYBOARD ASSEMBLY	16M C61-2M-EBUS	16M鍵盤EMKSA		
	50	**WZ703600**	VOLUME KNOB BLACK		ボリュームツマミ		
	60	**ZA304900**	ENCODER KNOB BLACK		エンコーダー成形品		
	70	**ZN937800**	LCD COVER		LCDカバー印刷品		
	80	**ZC650700**	BOTTOM BOARD ASSEMBLY		底板Ass'y		
*	100	**ZN440300**	CIRCUIT BOARD	DMM	DMMシート		
*	110	**ZQ105600**	CIRCUIT BOARD	AJACK	AJACKシート		
*	120	**ZQ105700**	CIRCUIT BOARD	HP	HPシート		
	200	--	CONNECTOR ASSEMBLY	XH S XH6P L=320	XH S束線	(ZP69140)	
	210	--	CONNECTOR ASSEMBLY	PH-GH S PH6P-GH6P L=110	PH-GH S束線	(ZP44110)	
	220	--	CONNECTOR ASSEMBLY	PH-GH S PH12P-GH12P L=335	PH-GH S束線	(ZP44070)	
	230	--	CONNECTOR ASSEMBLY	PH-GH S PH7P-GH6P L=210	PH-GH S束線	(ZP44090)	
	240	--	CONNECTOR ASSEMBLY	PH-GH S PH7P-GH7P L=180	PH-GH S束線	(ZP44100)	
	250	--	CONNECTOR ASSEMBLY	GH S GH10P L=110	GH S束線	(ZP44120)	
	260	--	CONNECTOR ASSEMBLY	PH S PH7P L=550	PH S束線	(ZR11440)	
	270	--	CONNECTOR ASSEMBLY	GH S GH9P L=250	GH S束線	(ZP44130)	
	300	--	SHIELD COVER		シールドカバー	(ZN89430)	
	400	**WE98740R**	BIND HEAD TAPPING SCREW-B	3.0X12 MFZN2W3	Bタイト十BIND		9
	410	**WE97340R**	BIND HEAD TAPPING SCREW-B	3.0X16 MFZN2W3	Bタイト十BIND		5
	420	**WF491001**	BIND HEAD TAPPING SCREW-B	3.0X30 MFZN2W3	Bタイト十BIND		5
	430	**WE774301**	BIND HEAD TAPPING SCREW-B	3.0X8 MFZN2W3	Bタイト十BIND		17
	440	**WE983600**	BIND HEAD SCREW	3.0X8 MFZN2B3	小ネジ十BIND		11
	450	**WF15410R**	BIND HEAD TAPPING SCREW-B	4.0X16 MFZN2W3	Bタイト十BIND		22
	500	--	CLIP, WIRE		束線止め	(CB81751)	
	510	--	CORD CLAMPER		束線止め	(CB83620)	7
	550	--	SOUND ABSORBENT FELT		吸音材	(ZA69910)	2
	600	--	FILAMENT TAPE	12X50	粘着テープ	(VA12610)	8
	610	--	ADHESIVE TAPE	15X30	アセテートクロス粘着テープ	(WG52680)	
	660	--	GASKET	L8X5	ガスケット	(ZP35400)	
	680	--	SOFT GASKET	L10	ソフトガスケット	(ZF66010)	2
	690	--	CUSHION PE	190X13X2	クッションPE	(ZS82600)	
			ACCESSORIES		付属品		
		ZF451800	MUSIC REST WITH BAG BLACK		譜面板袋入り		
⚠		**WU691400**	AC ADAPTOR	PA-300C	ACアダプター	E	
⚠		**ZS681400**	AC ADAPTOR	PA-300C	ACアダプター	U	
⚠		**ZC295100**	POWER SUPPLY CORD SET	UC 2P 7A 2.44m	電源コードセット	U	
⚠		**V2917100**	POWER SUPPLY CORD SET	E 2P 2.5m 2.5A	電源コードセット	E	

*: New Parts

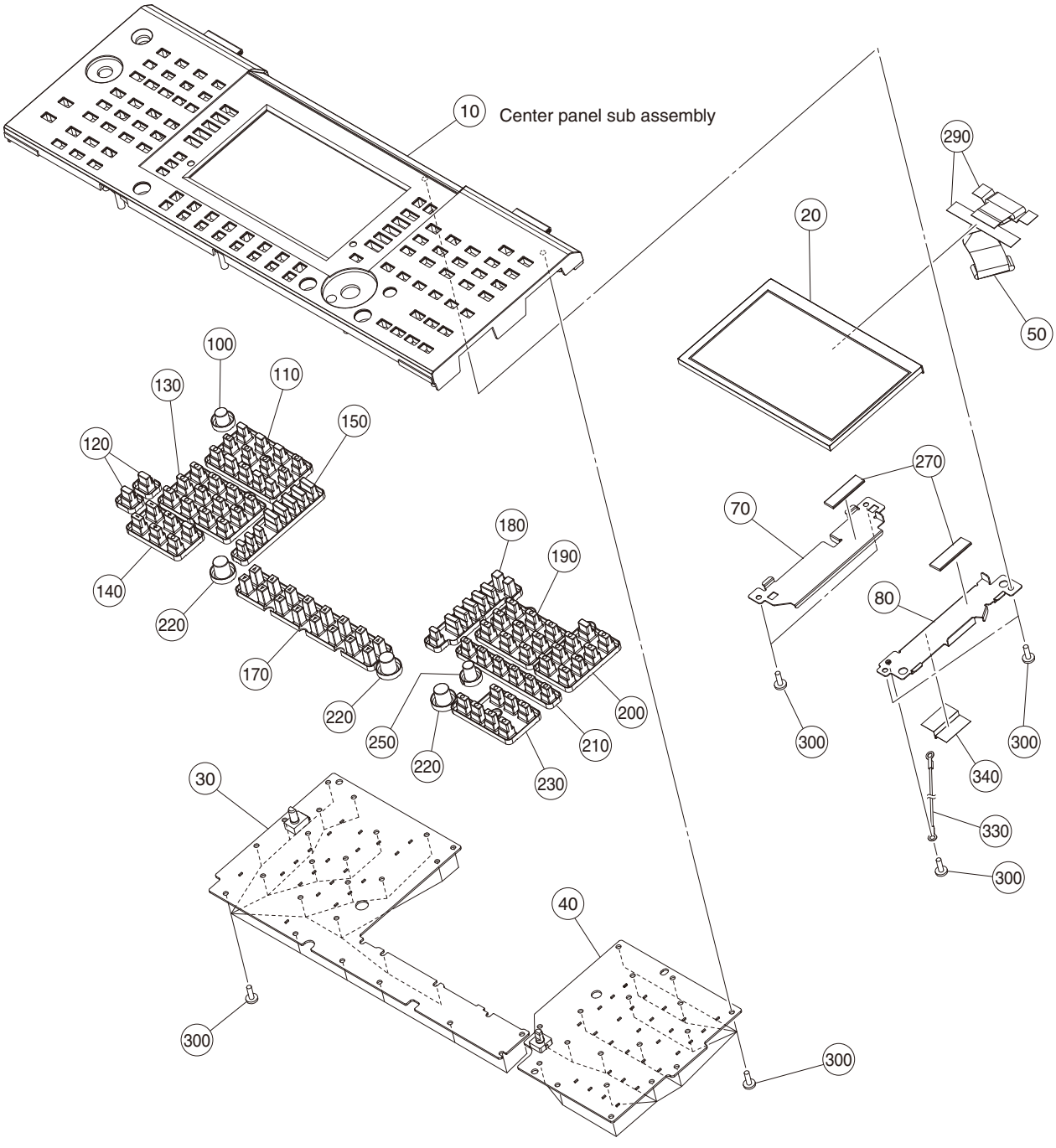
■ UPPER CASE ASSEMBLY



	REF NO.	PART NO.	DESCRIPTION		部品名	REMARKS	QTY
			UPPER CASE ASSEMBLY		上ケースAss'y	PSR-A3000	
		--	UPPER CASE ASSEMBLY		上ケースAss'y	(ZP42930)	
*	10	ZP429400	UPPER CASE SUB ASSEMBLY		上ケースサブAss'y		
	10a	--	UPPER CASE SATIN BLACK		上ケース印刷品	(ZN89350)	
	10b	ZA325300	SPEAKER GRILLE		SPグリル塗装品		2
	20	--	CENTER PANEL ASSEMBLY		Cパネル Ass'y	(ZP42960)	
	100	ZC188200	SWITCH ASSEMBLY A	X4 with LED LENS	スイッチAss'y A	ACMP, FADE IN/OUT, OTS LINK, AUTO FILL IN	
	110	WZ962000	SWITCH ASSEMBLY B	X8 with LED LENS	スイッチAss'y B	INTRO, MAIN VARIATION, BREAK	
	120	WZ962100	SWITCH ASSEMBLY C	X3 with LED LENS	スイッチAss'y C	ENDING/rit.	
	130	WZ962200	SWITCH ASSEMBLY D	X3 with LED LENS	スイッチAss'y D	SYNC STOP, SYNC START, START/STOP	
	140	WZ962300	SWITCH ASSEMBLY E	X4 with LED LENS	スイッチAss'y E	REGIST BANK (-,+), FREEZE, MEMORY	
	150	WZ962400	SWITCH ASSEMBLY F	X8 with LED LENS	スイッチAss'y F	REGISTRATION MEMORY (1-8)	
	160	WZ962500	SWITCH ASSEMBLY G	X6 with LED LENS	スイッチAss'y G	MULTI PAD CONTROL (SELECT, 1-4, STOP)	
	170	WZ962600	SWITCH ASSEMBLY H	X4 with LED LENS	スイッチAss'y H	ONE TOUCH SETTING (1-4)	
	180	WZ960300	PANEL SWITCH I	X2	PNスイッチ I	UPPER OCTAVE (-,+)	
*	190	ZP435100	SWITCH ASSEMBLY AM	X20	スイッチAss'y AM	SCALE SETTING, SCALE MEMORY, ASSIGN	
	300	--	JOYSTICK WITH WIRE		JS束線付き	(ZP75180)	
	300a	WW997300	JOYSTICK		ジョイスティック		
	300b	ZT218900	CONNECTOR ASSEMBLY	JOYSTICK PH4P-GH7P	JOYSTICK束線		
*	400	ZQ105300	CIRCUIT BOARD	PNL	PNLシート		
*	410	ZQ105400	CIRCUIT BOARD	PNC	PNCシート		
*	420	ZQ105500	CIRCUIT BOARD	PNR	PNRシート		
*	440	ZQ105200	CIRCUIT BOARD	OR	ORシート		
	450	ZA581500	WIRING ASSEMBLY	FFC S 29P P=1.0 L=130	FFC S束線		
	460	--	CONNECTOR ASSEMBLY	GH S GH15P L=100	GH S束線	(ZP44140)	
	470	--	CONNECTOR ASSEMBLY	GH S GH13P L=110	GH S束線	(ZP44150)	
	480	--	CONNECTOR ASSEMBLY	GH S GH14P L=70	GH S束線	(ZP44160)	
	500	WE774301	BIND HEAD TAPPING SCREW-B	3.0X8 MFZN2W3	Bタイト十BIND		34
	510	WE98740R	BIND HEAD TAPPING SCREW-B	3.0X12 MFZN2W3	Bタイト十BIND		8
	520	WE97340R	BIND HEAD TAPPING SCREW-B	3.0X16 MFZN2W3	Bタイト十BIND		4

*: New Parts

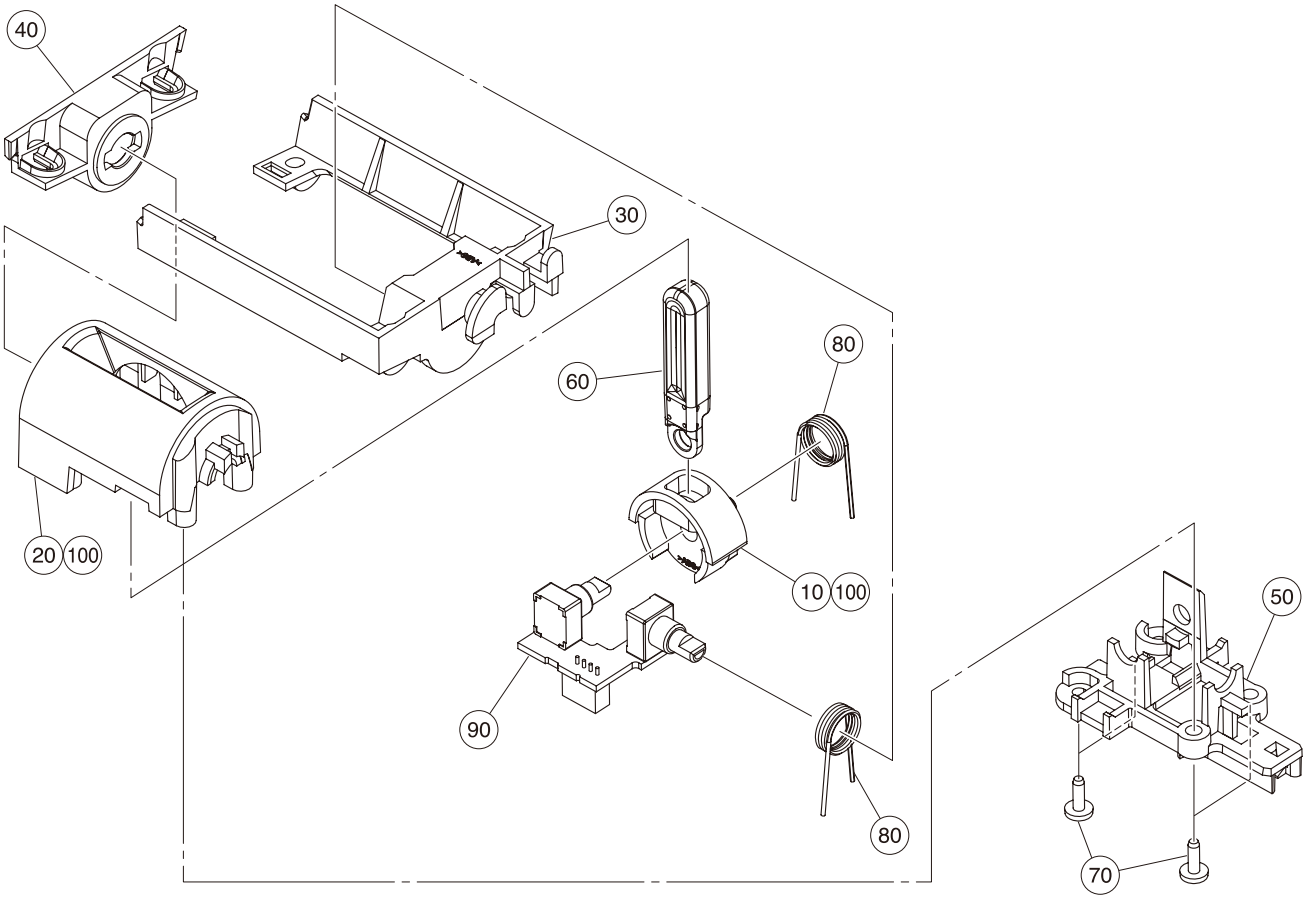
■ CENTER PANEL ASSEMBLY



	REF NO.	PART NO.	DESCRIPTION		部品名	REMARKS	QTY
			CENTER PANEL ASSEMBLY		Ｃパネル Ａｓｓ’ｙ	PSR-A3000	
		--	CENTER PANEL ASSEMBLY		Ｃパネル Ａｓｓ’ｙ	(ZP42960)	
*	10	**ZP429500**	CENTER PANEL SUB ASSEMBLY		Ｃパネルサブ Ａｓｓ’ｙ		
	20	**ZN547100**	CRYSTAL DISPLAY	M070SWP1 R5	液晶ディスプレイ		
*	30	**ZQ103900**	CIRCUIT BOARD	PNM	ＰＮＭシート		
*	40	**ZQ105100**	CIRCUIT BOARD	PNS	ＰＮＳシート		
	50	**ZP442000**	WIRING ASSEMBLY	FFC S LF 50P P=0.5 L=150	ＦＦＣ Ｓ ＬＦ束線		
	70	--	LCD FIXTURE L	LEFT	ＬＣＤ固定金具 Ｌ	(ZN89200)	
	80	--	LCD FIXTURE R	RIGHT	ＬＣＤ固定金具 Ｒ	(ZN89220)	
	100	**WZ960400**	PANEL SWITCH J	X1	ＰＮスイッチ Ｊ	STANDBY/ON	
	110	**ZP351400**	SWITCH ASSEMBLY K	X13	スイッチ Ａｓｓ’ｙ Ｋ	SONG (SELECT-►►)	
	120	**ZN912100**	PANEL SWITCH L1	X1	ＰＮスイッチ Ｌ１	DEMO, MASTER EQ	2
	130	**ZP351600**	SWITCH ASSEMBLY M	X12	スイッチ Ａｓｓ’ｙ Ｍ	STYLE (POP&ROCK-EXPANSION/USER)	
	140	**ZP351900**	SWITCH ASSEMBLY N	X6	スイッチ Ａｓｓ’ｙ Ｎ	TEMPO (-,+), TAP TEMPO, TRANSPOSE (-,+), METRONOME	
	150	**ZN912400**	PANEL SWITCH O1	X8	ＰＮスイッチ Ｏ１	A-E, BAL., MIXER/EQ,CHANNEL ON/OFF	
	170	**ZN912500**	PANEL SWITCH Q1	X16	ＰＮスイッチ Ｑ１	1-8 (▲/▼)	
	180	**ZN912600**	PANEL SWITCH R1	X8	ＰＮスイッチ Ｒ１	TAB◄ ►, F-J, FUNCTION	
	190	**ZP353400**	SWITCH ASSEMBLY S	X9	スイッチ Ａｓｓ’ｙ Ｓ	VOICE (PIANO-CHOIR&PAD)	
	200	**ZP353500**	SWITCH ASSEMBLY T	X8	スイッチ Ａｓｓ’ｙ Ｔ	USB AUDIO PLAYER, USB, VOICE (SYNTH-EXPANSION/USER)	
	210	**ZP353700**	SWITCH ASSEMBLY U	X6	スイッチ Ａｓｓ’ｙ Ｕ	VOICE EFFECT (HARMONY/ARPEGGIO-VARI.)	
	220	**WZ961600**	PANEL SWITCH V	X1	ＰＮスイッチ Ｖ	DIRECT ACCESS,EXIT,ENTER	3
	230	**ZP353800**	SWITCH ASSEMBLY W	X7	スイッチ Ａｓｓ’ｙ Ｗ	PART SELECT, PART ON/OFF (LEFT HOLD, LEFT, RIGHT1&2)	
	250	**ZN913200**	PANEL SWITCH Y1	X1	ＰＮスイッチ Ｙ１	MUSIC FINDER	
	270	--	CUSHION PE	36X17X1	クッション ＰＥ	(ZS77820)	2
	290	--	FILAMENT TAPE	12X70	粘着テープ	(V255510)	2
	300	**WE774301**	BIND HEAD TAPPING SCREW-B	3.0X8 MFZN2W3	Ｂタイト＋ＢＩＮＤ		49
	330	--	GROUND3 WIRE	L=80mm	アース線 ３	(WJ01350)	
	340	--	EL ADHESIVE TAPE 0 40X20m	AL-40 40MMX20M	導電性粘着テープ	(WA53090)	

*: New Parts

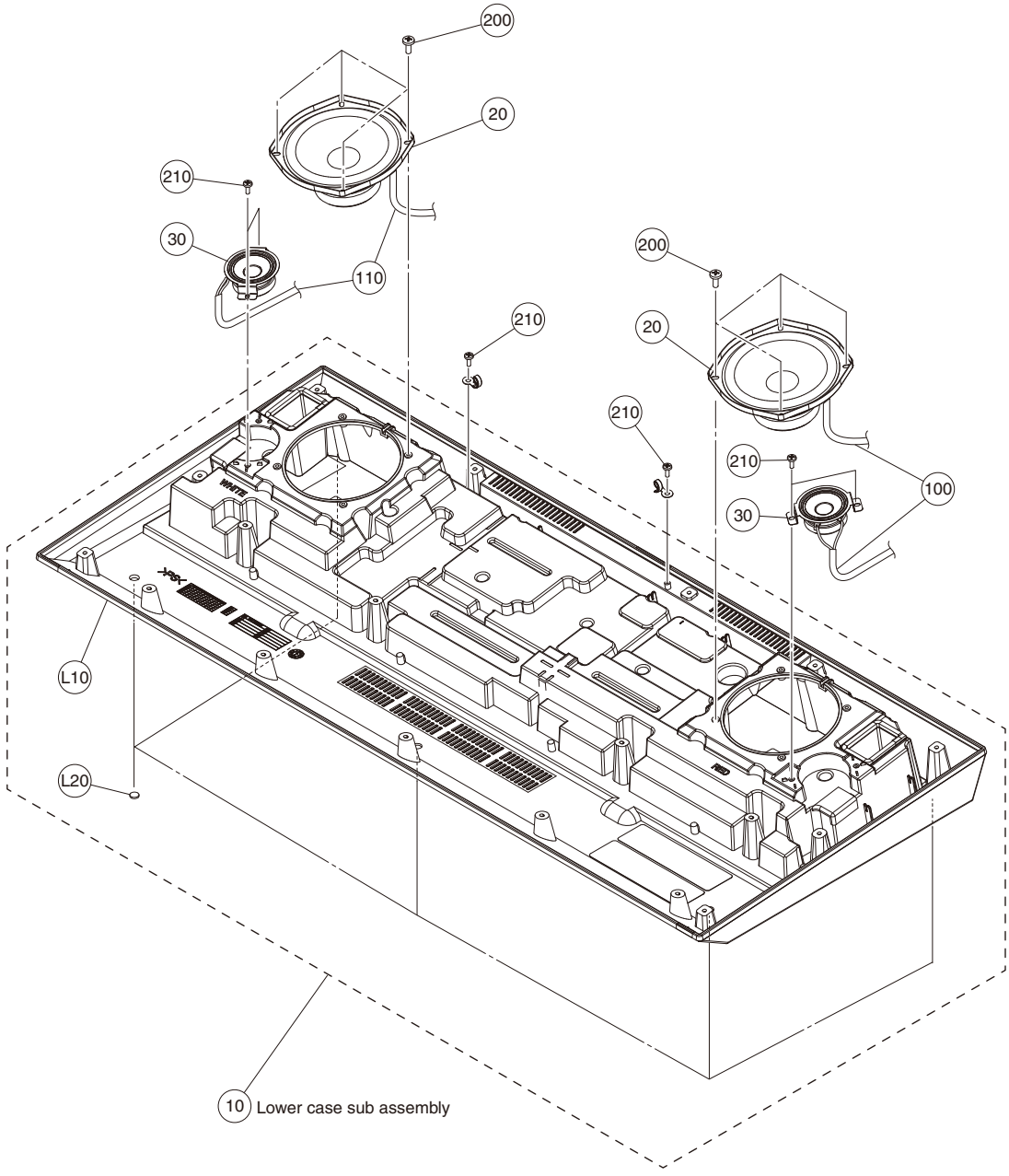
■ JOYSTICK



REF NO.	PART NO.	DESCRIPTION		部品名	REMARKS	QTY
		JOYSTICK		ジョイスティック	PSR-A3000	
	WW997300	JOYSTICK		ジョイスティック		
10	--	X-WHEEL		X ホイール	(WY02540)	
20	--	Y-WHEEL		Y ホイール	(WY02550)	
30	--	L-HOUSING		L ハウジング	(WY02560)	
40	--	S-HOUSING		S ハウジング	(WY02570)	
50	--	FRAME		フレーム	(WY02580)	
60	--	KNOB		ノブ	(WY02590)	
70	**WR901300**	BIND HEAD TAPPING SCREW-B	3.0X14 MFZN2W3	Bタイト十BIND		4
80	--	TORSION SPRING		ねじりコイルばね	(WY02600)	2
90	--	CIRCUIT BOARD	JS	JSシート	(WY02620)	
100	--	GREASE	MOLYKOTE EM-D110	グリス	(WY02610)	

✻: New Parts

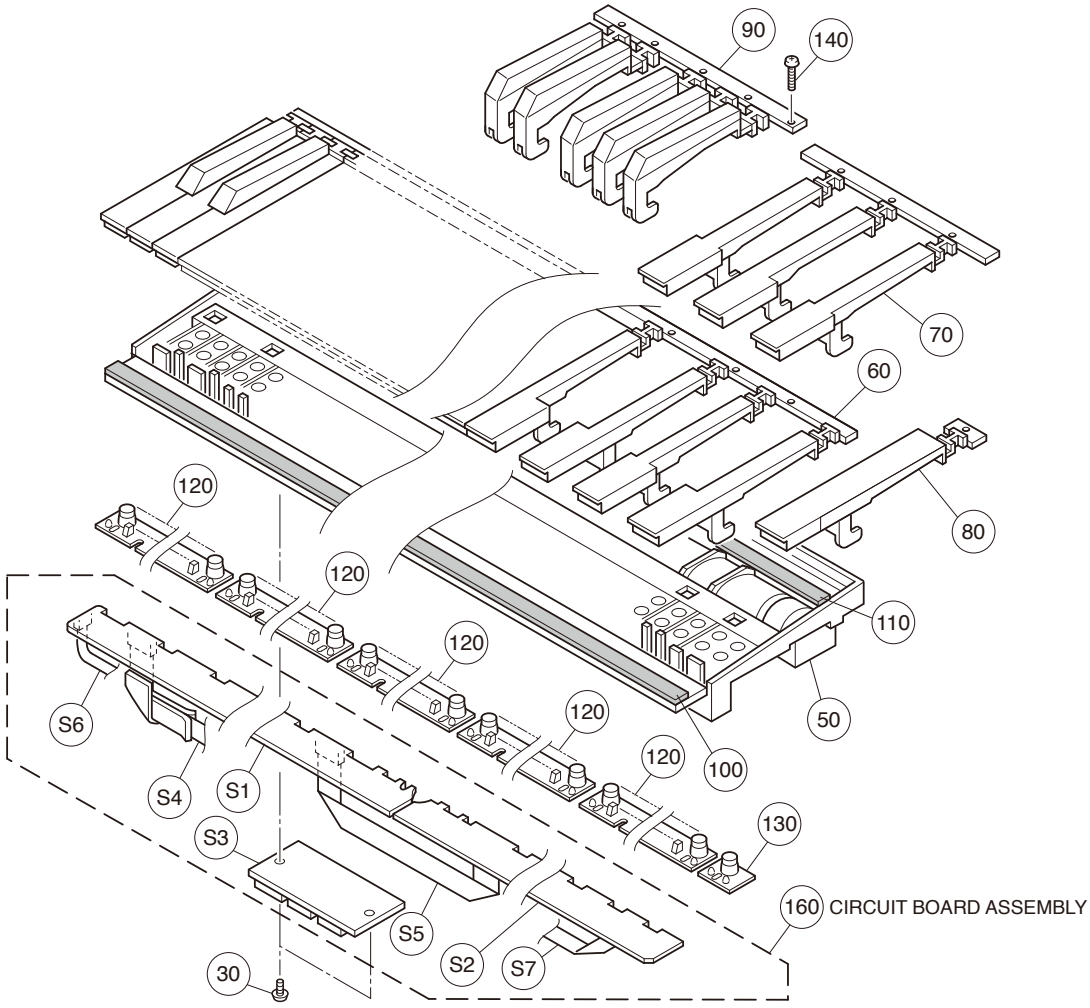
■ LOWER CASE ASSEMBLY



REF NO.	PART NO.	DESCRIPTION		部品名	REMARKS	QTY
		LOWER CASE ASSEMBLY		下ケースAss'y	PSR-A3000	
	--	LOWER CASE ASSEMBLY		下ケースAss'y	(ZP54100)	
10	**WZ899400**	LOWER CASE SUB ASSEMBLY		下ケースサブAss'y		
20	**YE178A00**	SPEAKER	13.0cm 4ohm 20W	スピーカ	WOOFER	2
30	**YD681A00**	LOUD SPEAKER	5.0cm 6ohm 10W	スピーカ	TWEETER	2
100	--	CONNECTOR ASSEMBLY	SPR S XH4P-RECEP L=780	SPR S束線	(ZA58080)	
110	--	CONNECTOR ASSEMBLY	SPL S XH5P-RECEP L=660	SPL S束線	(ZA58110)	
200	**WE97450R**	BIND HEAD TAPPING SCREW-B	4.0X10 MFZN2W3	Bタイト十BIND		8
210	**WE774301**	BIND HEAD TAPPING SCREW-B	3.0X8 MFZN2W3	Bタイト十BIND		6
	WZ899400	LOWER CASE SUB ASSEMBLY		下ケースサブAss'y		
L10	--	LOWER CASE BLACK		下ケース成形品	(WZ70280)	
L20	**CB043753**	RUBBER FOOT BLACK	T1.6	ゴム脚		5

*: New Parts

■ KEYBOARD ASSEMBLY



REF NO.	PART NO.	DESCRIPTION		部品名	REMARKS	QTY
		KEYBOARD ASSEMBLY		16M鍵盤EMKSA	PSR-A3000	
	WB91420R	KEYBOARD ASSEMBLY	16M C61-2M-EBUS	16M鍵盤EMKSA		
30	**WF266600**	BIND HEAD TAPPING SCREW-P	3.0X8 MFZN2B3	Pタイト十BIND		2
50	**--**	KEYBOARD FRAME BLACK	C61 16M	フレーム	(VU32860)	
60	**VH180900**	WHITE KEY	CEGB 16L	白鍵CEGB		5
70	**VH181000**	WHITE KEY	DFA 16L	白鍵DFA		5
80	**VH181102**	WHITE KEY	C' 16L	白鍵C'		
90	**VH181202**	BLACK KEY		黒鍵		5
100	**VH181300**	FELT	16L C-61	フェルト		
110	**ZH086100**	CUSHION SHEET	16L,16M	クッションシート		
120	**VU328401**	KEYBOARD RUBBER CONTACT	CT 2M 12KEYS	接点ゴム		5
130	**VU328501**	KEYBOARD RUBBER CONTACT	16M C' 2M 1KEY	接点ゴム		
140	**WE973000**	BIND HEAD TAPPING SCREW-P	3.0X16 MFZN2W3	Pタイト十BIND		21
140	**WE983200**	BIND HEAD TAPPING SCREW-P	3.0X16 MFZN2B3	Pタイト十BIND		21
150	**TX920280**	GREASE	G-31KA 50g	グリス	(VE96850)	
160	**--**	CIRCUIT BOARD ASSEMBLY	16M C61 P2M EBUS	鍵盤SWシート	(WB91430)	
	--	CIRCUIT BOARD ASSEMBLY	16M C61 P2M EBUS	鍵盤SWシート	(WB91430)	
S1	**VU648101**	CIRCUIT BOARD	MK-L	MKーLシート		
S2	**VU648200**	CIRCUIT BOARD	MK-H	MKーHシート		
S3	**WF310500**	CIRCUIT BOARD	EMKS61A(E-BUS)	EMKS61Aシート		
S4	**VU95890R**	CABLE	12P L=190	ケーブル		
S5	**VU65950R**	CABLE	12P	ケーブル		
S6	**VU65940R**	CABLE	7P	ケーブル		
S7	**VU65960R**	CABLE	5P	ケーブル		

✻: New Parts

■ ELECTRICAL PARTS

AJACK/HP and DMM

	REF NO.	PART NO.	DESCRIPTION		部品名	REMARKS	QTY
			ELECTRICAL PARTS		電気部品	PSR-A3000	
*		**ZQ105600**	CIRCUIT BOARD	AJACK	AJACKシート	(ZP35180)(YG589F0)	
*		**ZQ105700**	CIRCUIT BOARD	HP	HPシート	(ZP35180)(YG589F0)	
*		**ZN440300**	CIRCUIT BOARD	DMM	DMMシート	(YG546C0)	
		WF310500	CIRCUIT BOARD	EMKS61A(E-BUS)	EMKS61Aシート	(WF31010)(X6637C0)	
		--	CIRCUIT BOARD	JS	JSシート	(YD299A0) (WY02620)	
		VU648200	CIRCUIT BOARD	MK-H	MK-Hシート	(VU64800)(XR565C0)	
		VU648101	CIRCUIT BOARD	MK-L	MK-Lシート	(VU64790)(XR564C0)	
*		**ZQ105200**	CIRCUIT BOARD	OR	ORシート	(ZP35150)(YG581D0)	
*		**ZQ103900**	CIRCUIT BOARD	PNM	PNMシート	(ZP35150)(YG581D0)	
*		**ZQ105100**	CIRCUIT BOARD	PNS	PNSシート	(ZP35150)(YG581D0)	
*		**ZQ105400**	CIRCUIT BOARD	PNC	PNCシート	(ZP35170)(YG588D0)	
*		**ZQ105300**	CIRCUIT BOARD	PNL	PNLシート	(ZP35170)(YG588D0)	
*		**ZQ105500**	CIRCUIT BOARD	PNR	PNRシート	(ZP35170)(YG588D0)	
*		**ZQ105600**	CIRCUIT BOARD	AJACK	AJACKシート	(ZP35180)(YG589F0)	
*		**ZQ105700**	CIRCUIT BOARD	HP	HPシート	(ZP35180)(YG589F0)	
		--	DC JACK PLATE		DCジャック金具塗装品	(ZN88960)	
		WE774301	BIND HEAD TAPPING SCREW-B	3.0X8 MFZN2W3	Bタイト十BIND		2
	C133	**UR749680**	ELECTROLYTIC CAPACITOR	6800 25.0V FORM.	ケミコン		
⚠	D100	**V9917100**	DIODE	S3V60-5004P15 FOR.	ダイオード		
	FT100	**ZA675500**	FET	TJ20A10M3 SUTO	FET		
	IC100	**XJ602A00**	IC	NJM78M12FA	IC	REGULATOR +12V	
	JK100	**V814980R**	DC CONNECTOR	DJ-0735-029	電源コネクタ		
	JK102	**VB23040R**	PHONE CONNECTOR	YKB21-5352N	ホーンコネクタ		
	JK102	**ZA590000**	PHONE CONNECTOR	JACK MINI STEREO	ホーンコネクタ		
	JK103	**VS11540R**	PHONE CONNECTOR BLACK	LGR4609-7100F	ホーンコネクタ（黒）		
	JK104	**VS11540R**	PHONE CONNECTOR BLACK	LGR4609-7100F	ホーンコネクタ（黒）		
	JK105	**VS11540R**	PHONE CONNECTOR BLACK	LGR4609-7100F	ホーンコネクタ（黒）		
	JK106	**VS11540R**	PHONE CONNECTOR BLACK	LGR4609-7100F	ホーンコネクタ（黒）		
	JK200	**WJ306200**	PHONE CONNECTOR	MSJ-064-15A B AG	ホーンコネクタ		
	L102	**ZC240800**	LINE FILTER	UF1815SG-800Y3R0-0	ラインフィルター		
	L107	**--**	COIL	SBT-0240TF TATETE	コイル	(ZK72630)	
	-110	**--**	COIL	SBT-0240TF TATETE	コイル	(ZK72630)	
	L113	**--**	COIL	SBT-0240TF TATETE	コイル	(ZK72630)	
	L114	**--**	COIL	SBT-0240TF TATETE	コイル	(ZK72630)	
	RY200	**V824560R**	RELAY	DC ATX203 12V	リレー		
	RY200	**V8616501**	RELAY	DC G6S-2 12V	リレー 12V		
	RY200	**WB17080R**	RELAY	DC NA-12W-K 12V	リレー 12V		
	RY200	**WB751900**	RELAY	DC EC2-12NU-F 12V	リレー 12V		
⚠	TH100	**VV45800R**	PROTECTOR SWITCH	RUEF250 2.50A 30V	ポリスイッチ		
	IC104	**X5482A00**	IC	NE5532DR	IC	OP AMP	
	IC106	**X5482A00**	IC	NE5532DR OP AMP	アンプIC SOP		
	R119	**RD156390**	CARBON RESISTOR (CHIP)	3.9K 1/4 J TP	チップ抵抗		
	TR100	**VJ927100**	TRANSISTOR	2SC2712-Y(TE85R,F)	トランジスタ 2SC		
	TR103	**VJ927100**	TRANSISTOR	2SC2712-Y(TE85R,F)	トランジスタ 2SC		
	TR104	**VJ92720R**	TRANSISTOR	2SA1162-Y(TE85R,F)	トランジスタ 2SA		
	TR105	**WC883401**	TRANSISTOR	2SD2704 K TP	トランジスタ 2SD		
	TR106	**WC883401**	TRANSISTOR	2SD2704 K TP	トランジスタ 2SD		
	C129	**UR838101**	ELECTROLYTIC CAPACITOR	100.00 16.0V RX TP	ケミコン		
	C141	**UR837470**	ELECTROLYTIC CAPACITOR	47.00 16.0V RX TP	ケミコン		
	C146	**UR838101**	ELECTROLYTIC CAPACITOR	100.00 16.0V RX TP	ケミコン		
	C151	**UR837470**	ELECTROLYTIC CAPACITOR	47.00 16.0V RX TP	ケミコン		
	C157	**UN867100**	ELECTROLYTIC CAPACITOR BP	10.00 50.0V RX TP	BPケミコン		
	C158	**UN867100**	ELECTROLYTIC CAPACITOR BP	10.00 50.0V RX TP	BPケミコン		
	C162	**UR867100**	ELECTROLYTIC CAPACITOR	10.00 50.0V RX TP	ケミコン		
	C163	**UR867100**	ELECTROLYTIC CAPACITOR	10.00 50.0V RX TP	ケミコン		
	C200	**UR848220**	ELECTROLYTIC CAPACITOR	220.00 25.0V RX TP	ケミコン		
	C201	**UR848220**	ELECTROLYTIC CAPACITOR	220.00 25.0V RX TP	ケミコン		
	R138	**HF454220**	CARBON RESISTOR	22.0 1/4 J AX TP	カーボン抵抗		
	R140	**HF454220**	CARBON RESISTOR	22.0 1/4 J AX TP	カーボン抵抗		
*		**ZN440300**	CIRCUIT BOARD	DMM	DMMシート	(YG546C0)	
	C960	**VQ755900**	ELECTROLYTIC CAPACITOR BP	3.30 50.0V TATEJI	BPケミコン		
	C961	**VQ755900**	ELECTROLYTIC CAPACITOR BP	3.30 50.0V TATEJI	BPケミコン		
	CN402	**V6802600**	USB JACK	USB 4P SE	USBジャック		
	CN403	**WH780300**	USB RECEPTACLE	UBA 4P SE	USBリセプタクル		
	JK001	**VJ10720R**	DIN CONNECTOR	5P YKF51-5050N	DINコネクタ		
	JK001	**VZ085800**	DIN CONNECTOR	5P HDC-052SP-01	DINコネクタ		
	JK002	**VJ10720R**	DIN CONNECTOR	5P YKF51-5050N	DINコネクタ		

*: New Parts

DMM

REF NO.	PART NO.	DESCRIPTION		部品名	REMARKS	QTY
JK002	**VZ085800**	DIN CONNECTOR	5P HDC-052SP-01	DINコネクタ		
D201	**VT532500**	DIODE	1SR154-400 TE-25 1A 400V	ダイオード		
D802	**VT532500**	DIODE	1SR154-400 TE-25 1A 400V	ダイオード		
IC206	**X4943D00**	IC	W9825G6JH-6	IC	SDR-SDRAM 256M WORK	
IC207	**X3584E00**	IC	W9812G6JH-6	IC	SDR-SDRAM 128M WORK	
IC209	**YG611A00**	IC	RP132S001D-E2-FE	IC	REGULATOR +1.3V	
IC800	**X5049A0R**	IC	NJM4556AM-TE1	IC	OP AMP	
IC801	**X5482A00**	IC	NE5532DR	IC	OP AMP	
IC803	**X5482A00**	IC	NE5532DR	IC	OP AMP	
IC805	**X5482A00**	IC	NE5532DR	IC	OP AMP	
R250	**RD150000**	CARBON RESISTOR (CHIP)	0.0 1/4 J TP	チップ抵抗		
R256	**RA156680**	METAL FILM RESISTOR (CHIP)	6.8K 63M D RECT.	チップ金被抵抗		
R257	**RA156680**	METAL FILM RESISTOR (CHIP)	6.8K 63M D RECT.	チップ金被抵抗		
R258	**RA157100**	METAL FILM RESISTOR (CHIP)	10.0K 63M D RECT.	チップ金被抵抗		
R259	**RA157120**	METAL FILM RESISTOR (CHIP)	12.0K 63M D RECT.	チップ金被抵抗		
R497	**RD155680**	CARBON RESISTOR (CHIP)	680.0 1/4 J TP	チップ抵抗		
R498	**RD155680**	CARBON RESISTOR (CHIP)	680.0 1/4 J TP	チップ抵抗		
R874	**RA156270**	METAL FILM RESISTOR (CHIP)	2.7K 63M D RECT.	チップ金被抵抗		
-881	**RA156270**	METAL FILM RESISTOR (CHIP)	2.7K 63M D RECT.	チップ金被抵抗		
R886	**RA156820**	METAL FILM RESISTOR (CHIP)	8.2K 63M D RECT.	チップ金被抵抗		
-889	**RA156820**	METAL FILM RESISTOR (CHIP)	8.2K 63M D RECT.	チップ金被抵抗		
R892	**RA156820**	METAL FILM RESISTOR (CHIP)	8.2K 63M D RECT.	チップ金被抵抗		
R893	**RA156180**	METAL FILM RESISTOR (CHIP)	1.8K 63M D RECT.	チップ金被抵抗		
R894	**RA156180**	METAL FILM RESISTOR (CHIP)	1.8K 63M D RECT.	チップ金被抵抗		
R895	**RA156820**	METAL FILM RESISTOR (CHIP)	8.2K 63M D RECT.	チップ金被抵抗		
R896	**RA156180**	METAL FILM RESISTOR (CHIP)	1.8K 63M D RECT.	チップ金被抵抗		
R897	**RA156180**	METAL FILM RESISTOR (CHIP)	1.8K 63M D RECT.	チップ金被抵抗		
R898	**RA156820**	METAL FILM RESISTOR (CHIP)	8.2K 63M D RECT.	チップ金被抵抗		
R899	**RA156180**	METAL FILM RESISTOR (CHIP)	1.8K 63M D RECT.	チップ金被抵抗		
R900	**RA156180**	METAL FILM RESISTOR (CHIP)	1.8K 63M D RECT.	チップ金被抵抗		
R901	**RA156820**	METAL FILM RESISTOR (CHIP)	8.2K 63M D RECT.	チップ金被抵抗		
R902	**RA156180**	METAL FILM RESISTOR (CHIP)	1.8K 63M D RECT.	チップ金被抵抗		
R903	**RA156180**	METAL FILM RESISTOR (CHIP)	1.8K 63M D RECT.	チップ金被抵抗		
R913	**RD15468R**	CARBON RESISTOR (CHIP)	68.0 1/4 J TP	チップ抵抗		
R914	**RD15468R**	CARBON RESISTOR (CHIP)	68.0 1/4 J TP	チップ抵抗		
R933	**RD15468R**	CARBON RESISTOR (CHIP)	68.0 1/4 J TP	チップ抵抗		
R934	**RD15468R**	CARBON RESISTOR (CHIP)	68.0 1/4 J TP	チップ抵抗		
C493	**WV584900**	ELECTROLYTIC CAPACITOR	150.00 10.0V CHIP	ケミコン RVD		
C876	**ZH232500**	ELECTROLYTIC CAPACITOR(CHIP)	10.00 25.0V CHIP	チップケミコン UD		
-881	**ZH232500**	ELECTROLYTIC CAPACITOR(CHIP)	10.00 25.0V CHIP	チップケミコン UD		
C914	**WN422300**	ELECTROLYTIC CAPACITOR(CHIP)	47.00 35.0V TP	チップケミコン UD		
C917	**WQ574000**	ELECTROLYTIC CAPACITOR(CHIP)	100 25V RVS-25V101	チップケミコン		
C919	**WQ574000**	ELECTROLYTIC CAPACITOR(CHIP)	100 25V RVS-25V101	チップケミコン		
C929	**ZH232500**	ELECTROLYTIC CAPACITOR(CHIP)	10.00 25.0V CHIP	チップケミコン UD		
C959	**ZC041800**	ELECTROLYTIC CAPACITOR(CHIP)	220.00 25.0V	チップケミコン CL		
D401	**VT532500**	DIODE	1SR154-400 TE-25 1A 400V	ダイオード		
D600	**VT532500**	DIODE	1SR154-400 TE-25 1A 400V	ダイオード		
D800	**V6267600**	DIODE	RB051L-40 TP	ダイオード		
D801	**V6267600**	DIODE	RB051L-40 TP	ダイオード		
IC001	**--**	IC	R8A77310D333BG	IC	MAIN CPU (YC170A0)	
IC002	**--**	IC	YMW832-CZ	IC	SWP70 (YF447B0)	
IC004	**X7701A00**	IC	BU4229G-TR	IC	SYSTEM RESET	
IC007	**YC019A00**	IC	S-80944CNNB-G9ET2G	IC	SYSTEM RESET	
* IC008	**YG960D00**	IC	S29GL512S10TFI020	IC	NOR FLASH ROM 512M MAIN PROGRAM	
* IC010	**YA121B00**	IC	S29GL128S90TFI020	IC	NOR FLASH ROM 128M BACKUP	
IC018	**YG621A00**	IC	MB88155PFT-G-112	IC	SPREAD SPECTRUM CLOCK GENERATOR	
IC021	**VR90370R**	PHOTO COUPLER	HCPL-M600-500E	フォトカプラ		
IC208	**X4943D00**	IC	W9825G6JH-6	IC	SDR-SDRAM 256M WORK	
IC405	**YD546A00**	IC	UPD720150GK-9EU-A	IC	USB CONTROLLER	
IC409	**YD235A00**	IC	R5524N002A-TR-FE	IC	USB HIGH SIDE POWER SWITCH	
IC412	**YG554A00**	IC	R1517S001C-E2-FE	IC	REGULATOR +12V	
* IC600	**YG961D00**	IC	S34ML04G100TFI000	IC	NAND FLASH ROM 4G WAVE-L	
* IC601	**YG962D00**	IC	S34ML04G100TFI000	IC	NAND FLASH ROM 4G WAVE-H	
IC602	**X4943D00**	IC	W9825G6JH-6	IC	SDR-SDRAM 256M WAVE-WORK	
IC605	**YA658C00**	IC	W9864G6KH-5	IC	SDR-SDRAM 64M DSP	
IC606	**YG611A00**	IC	RP132S001D-E2-FE	IC	REGULATOR +1.0V	
IC802	**YD652A00**	IC	YDA164C-QZE2	IC	POWER AMPLIFIER 20Wx2	
IC807	**X8324A00**	IC	AK4396VF-E2	IC	DAC	
IC808	**X7585A01**	IC	AK5357ET-E2	IC	ADC	
IC810	**YD766A00**	IC	ISL85033IRTZ-T	IC	DC-DC CONVERTER	

*: New Parts

DMM and EMKS61A and JS and MK-H and MK-L and OR/PNM/PNS

REF NO.	PART NO.	DESCRIPTION		部品名	REMARKS	QTY
IC811	**YF520A00**	IC	R1190S050B-E2-FE	I C	REGULATOR +5V	
R046	**VI196800**	METAL FILM RESISTOR (CHIP)	5.6K 1/10 D RECT.	チップ金被抵抗		
R047	**RA156220**	METAL FILM RESISTOR (CHIP)	2.2K 63M D RECT.	チップ金被抵抗		
R048	**RA155470**	METAL FILM RESISTOR (CHIP)	470.0 63M D RECT.	チップ金被抵抗		
R109	**RD15447R**	CARBON RESISTOR (CHIP)	47.0 1/4 J TP	チップ抵抗		
R668	**RD150000**	CARBON RESISTOR (CHIP)	0.0 1/4 J TP	チップ抵抗		
R680	**RD150000**	CARBON RESISTOR (CHIP)	0.0 1/4 J TP	チップ抵抗		
R681	**RA156120**	METAL FILM RESISTOR (CHIP)	1.2K 63M D RECT.	チップ金被抵抗		
R682	**RA156470**	METAL FILM RESISTOR (CHIP)	4.7K 63M D RECT.	チップ金被抵抗		
R917	**RA156330**	METAL FILM RESISTOR (CHIP)	3.3K 63M D RECT.	チップ金被抵抗		
R920	**RA157510**	METAL FILM RESISTOR (CHIP)	51.0K 63M D RECT.	チップ金被抵抗		
R923	**RA157100**	METAL FILM RESISTOR (CHIP)	10.0K 63M D RECT.	チップ金被抵抗		
R930	**RA157100**	METAL FILM RESISTOR (CHIP)	10.0K 63M D RECT.	チップ金被抵抗		
R931	**RA157270**	METAL FILM RESISTOR (CHIP)	27.0K 63M D RECT.	チップ金被抵抗		
R932	**RA156470**	METAL FILM RESISTOR (CHIP)	4.7K 63M D RECT.	チップ金被抵抗		
X001	**ZF320500**	QUARTZ CRYSTAL UNIT	32.768KHz DSO321SR	水晶発振器		
X002	**WN318100**	RESONATOR QUARTZ	20MHz DSX321G	水晶振動子		
X402	**WG415900**	QUARTZ CRYSTAL UNIT	30MHz DSX321G	水晶振動子		
X800	**WM284900**	QUARTZ CRYSTAL UNIT	22.5792MHz DSX321G	水晶振動子		
	WF310500	CIRCUIT BOARD	EMKS61A(E-BUS)	EMKS61Aシート	(WF31010)(X6637C0)	
C0002	**UF038100**	ELECTROLYTIC CAPACITOR(CHIP)	100 16V	チップケミコン		
IC001	**X003120R**	IC	UPD780031AYGK-N04	I C	E-LKS	
X0001	**V615050R**	CERAMIC RESONATOR	8.38MHz EFOS8384E5	セラミック振動子	}	
X0001	**WU956300**	CERAMIC RESONATOR	8.38MHz CSTCC8M38G56	セラミック振動子	}	
	--	CIRCUIT BOARD	JS	JSシート	(YD299A0)(WY02620)	
VR1	**WN154400**	ROTARY VARIABLE RESISTOR	B 10.0K RK09Y11L00	ロータリーVR1連		
VR2	**WN154400**	ROTARY VARIABLE RESISTOR	B 10.0K RK09Y11L00	ロータリーVR1連		
	VU648200	CIRCUIT BOARD	MK-H	MK-Hシート	(VU64800)(XR565C0)	
	VB941200	DIODE	1SS133,1SS176 TE-5	ダイオード	A#3-C6	54
	VU648101	CIRCUIT BOARD	MK-L	MK-Lシート	(VU64790)(XR564C0)	
	VB941200	DIODE	1SS133,1SS176 TE-5	ダイオード	C1-A3	68
*	**ZQ105200**	CIRCUIT BOARD	OR	ORシート	(ZP35150)(YG581D0)	
*	**ZQ103900**	CIRCUIT BOARD	PNM	PNMシート	(ZP35150)(YG581D0)	
*	**ZQ105100**	CIRCUIT BOARD	PNS	PNSシート	(ZP35150)(YG581D0)	
EC200	**WZ590700**	ENCODER	EC12E24204A2	12形エンコーダ	Data entry	
VR100	**VQ67050R**	ROTARY VARIABLE RESISTOR	B 10K RK11K1130A0M	ロータリーボリューム	MASTER VOLUMR	
VR100	**ZK790600**	ROTARY VARIABLE RESISTOR	B 10.0K XV012113YN	ロータリーボリューム	}	
LD100	**WJ491700**	LED (CHIP) AMBER	BL-HJF36J-TRB	チップLED	REC	
LD101	**WJ491700**	LED (CHIP) AMBER	BL-HJF36J-TRB	チップLED	DANCE	
LD102	**WJ491700**	LED (CHIP) AMBER	BL-HJF36J-TRB	チップLED	REPEAT	
LD103	**WJ491700**	LED (CHIP) AMBER	BL-HJF36J-TRB	チップLED	POP&ROCK	
LD104	**WJ491700**	LED (CHIP) AMBER	BL-HJF36J-TRB	チップLED	BALLAD	
LD106	**WJ491700**	LED (CHIP) AMBER	BL-HJF36J-TRB	チップLED	SWIMG&JAZZ	
LD107	**WJ491700**	LED (CHIP) AMBER	BL-HJF36J-TRB	チップLED	LATIN	
LD108	**WJ491700**	LED (CHIP) AMBER	BL-HJF36J-TRB	チップLED	WORLD	
LD109	**WJ491600**	LED (CHIP) AMBER/Y.GREEN	BL-HJFGE36J-TRB	チップ2色LED	EXTRA TR	
LD110	**WJ491600**	LED (CHIP) AMBER/Y.GREEN	BL-HJFGE36J-TRB	チップ2色LED	PLAY/PAUSE	
LD111	**WJ491600**	LED (CHIP) AMBER/Y.GREEN	BL-HJFGE36J-TRB	チップ2色LED	TR2	
LD112	**WJ491700**	LED (CHIP) AMBER	BL-HJF36J-TRB	チップLED	ARABIC	
LD113	**WJ491700**	LED (CHIP) AMBER	BL-HJF36J-TRB	チップLED	KHALIGI	
LD114	**WJ491700**	LED (CHIP) AMBER	BL-HJF36J-TRB	チップLED	MAGHREBI	
LD115	**WJ491700**	LED (CHIP) AMBER	BL-HJF36J-TRB	チップLED	GUIDE	
LD116	**WJ491600**	LED (CHIP) AMBER/Y.GREEN	BL-HJFGE36J-TRB	チップ2色LED	TR1	
LD117	**WJ491700**	LED (CHIP) AMBER	BL-HJF36J-TRB	チップLED	METRONOME	
LD118	**WJ491700**	LED (CHIP) AMBER	BL-HJF36J-TRB	チップLED	IRANIAN	
LD119	**WJ491700**	LED (CHIP) AMBER	BL-HJF36J-TRB	チップLED	TURKISH	
LD120	**WJ491700**	LED (CHIP) AMBER	BL-HJF36J-TRB	チップLED	EXPANSION/USER	
LD200	**WJ491700**	LED (CHIP) AMBER	BL-HJF36J-TRB	チップLED	ON/OFF LEFT HOLD	
LD201	**WJ491700**	LED (CHIP) AMBER	BL-HJF36J-TRB	チップLED	ON/OFF LEFT	
LD202	**WJ491700**	LED (CHIP) AMBER	BL-HJF36J-TRB	チップLED	HERMONY/ARPEGGIO	
LD203	**WJ491700**	LED (CHIP) AMBER	BL-HJF36J-TRB	チップLED	ON/OFF RIGHT1	
LD204	**WJ491700**	LED (CHIP) AMBER	BL-HJF36J-TRB	チップLED	TOUCH	
LD205	**WJ491700**	LED (CHIP) AMBER	BL-HJF36J-TRB	チップLED	PIANO	
LD206	**WJ491700**	LED (CHIP) AMBER	BL-HJF36J-TRB	チップLED	E.PIANO	
LD207	**WJ491700**	LED (CHIP) AMBER	BL-HJF36J-TRB	チップLED	ORGAN & ACCORDION	

*: New Parts

OR/PNM/PNS

REF NO.	PART NO.	DESCRIPTION		部品名	REMARKS	QTY
LD208	**WJ491700**	LED (CHIP) AMBER	BL-HJF36J-TRB	チップ LED	ON/OFF RIGHT2	
LD209	**WJ491700**	LED (CHIP) AMBER	BL-HJF36J-TRB	チップ LED	SUSTAIN	
LD210	**WJ491700**	LED (CHIP) AMBER	BL-HJF36J-TRB	チップ LED	GUITAR	
LD211	**WJ491700**	LED (CHIP) AMBER	BL-HJF36J-TRB	チップ LED	BASS	
LD212	**WJ491700**	LED (CHIP) AMBER	BL-HJF36J-TRB	チップ LED	STRINGS	
LD213	**WJ491700**	LED (CHIP) AMBER	BL-HJF36J-TRB	チップ LED	SELECT LEFT	
LD214	**WJ491700**	LED (CHIP) AMBER	BL-HJF36J-TRB	チップ LED	MONO	
LD215	**WJ491700**	LED (CHIP) AMBER	BL-HJF36J-TRB	チップ LED	BRASS	
LD216	**WJ491700**	LED (CHIP) AMBER	BL-HJF36J-TRB	チップ LED	WOODWIND	
LD217	**WJ491700**	LED (CHIP) AMBER	BL-HJF36J-TRB	チップ LED	CHOIR&PAD	
LD218	**WJ491700**	LED (CHIP) AMBER	BL-HJF36J-TRB	チップ LED	SELECT RIGHT1	
LD219	**WJ491700**	LED (CHIP) AMBER	BL-HJF36J-TRB	チップ LED	DSP	
LD220	**WJ491700**	LED (CHIP) AMBER	BL-HJF36J-TRB	チップ LED	SYNTH	
LD221	**WJ491700**	LED (CHIP) AMBER	BL-HJF36J-TRB	チップ LED	PERCUSSION	
LD222	**WJ491700**	LED (CHIP) AMBER	BL-HJF36J-TRB	チップ LED	DRUM KIT	
LD223	**WJ491700**	LED (CHIP) AMBER	BL-HJF36J-TRB	チップ LED	SELECT RIGHT2	
LD224	**WJ491700**	LED (CHIP) AMBER	BL-HJF36J-TRB	チップ LED	USB	
LD225	**WJ491700**	LED (CHIP) AMBER	BL-HJF36J-TRB	チップ LED	VARI	
LD226	**WJ491700**	LED (CHIP) AMBER	BL-HJF36J-TRB	チップ LED	ORIENTAL	
LD227	**WJ491700**	LED (CHIP) AMBER	BL-HJF36J-TRB	チップ LED	ORGAN FLUTES	
LD228	**WJ491700**	LED (CHIP) AMBER	BL-HJF36J-TRB	チップ LED	EXPANSION/USER	
LD300	**WJ491700**	LED (CHIP) AMBER	BL-HJF36J-TRB	チップ LED	SCALE SETTING C	
LD301	**WJ491700**	LED (CHIP) AMBER	BL-HJF36J-TRB	チップ LED	SCALE SETTING C#	
LD302	**WJ491700**	LED (CHIP) AMBER	BL-HJF36J-TRB	チップ LED	SCALE MEMORY 1	
LD303	**WJ491700**	LED (CHIP) AMBER	BL-HJF36J-TRB	チップ LED	SCALE SETTING D	
LD304	**WJ491700**	LED (CHIP) AMBER	BL-HJF36J-TRB	チップ LED	SCALE SETTING D#	
LD305	**WJ491700**	LED (CHIP) AMBER	BL-HJF36J-TRB	チップ LED	SCALE MEMORY 2	
LD306	**WJ491700**	LED (CHIP) AMBER	BL-HJF36J-TRB	チップ LED	SCALE SETTING E	
LD307	**WJ491700**	LED (CHIP) AMBER	BL-HJF36J-TRB	チップ LED	SCALE MEMORY 3	
LD308	**WJ491700**	LED (CHIP) AMBER	BL-HJF36J-TRB	チップ LED	SCALE SETTING F	
LD309	**WJ491700**	LED (CHIP) AMBER	BL-HJF36J-TRB	チップ LED	SCALE SETTING F#	
LD310	**WJ491700**	LED (CHIP) AMBER	BL-HJF36J-TRB	チップ LED	SCALE MEMORY 4	
LD311	**WJ491700**	LED (CHIP) AMBER	BL-HJF36J-TRB	チップ LED	SCALE SETTING G	
LD312	**WJ491700**	LED (CHIP) AMBER	BL-HJF36J-TRB	チップ LED	SCALE SETTING G#	
LD313	**WJ491700**	LED (CHIP) AMBER	BL-HJF36J-TRB	チップ LED	SCALE MEMORY 5	
LD314	**WJ491700**	LED (CHIP) AMBER	BL-HJF36J-TRB	チップ LED	SCALE SETTING A	
LD315	**WJ491700**	LED (CHIP) AMBER	BL-HJF36J-TRB	チップ LED	SCALE SETTING A#	
LD316	**WJ491700**	LED (CHIP) AMBER	BL-HJF36J-TRB	チップ LED	SCALE MEMORY RESET	
LD317	**WJ491700**	LED (CHIP) AMBER	BL-HJF36J-TRB	チップ LED	SCALE SETTING B	
C120	**UF038100**	ELECTROLYTIC CAPACITOR(CHIP)	100 16V	チップケミコン		
C149	**UF038100**	ELECTROLYTIC CAPACITOR(CHIP)	100 16V	チップケミコン		
C163	**UF038100**	ELECTROLYTIC CAPACITOR(CHIP)	100 16V	チップケミコン		
C164	**UF038100**	ELECTROLYTIC CAPACITOR(CHIP)	100 16V	チップケミコン		
C226	**UF038100**	ELECTROLYTIC CAPACITOR(CHIP)	100 16V	チップケミコン		
C228	**UF038100**	ELECTROLYTIC CAPACITOR(CHIP)	100 16V	チップケミコン		
C250	**UF038100**	ELECTROLYTIC CAPACITOR(CHIP)	100 16V	チップケミコン		
C251	**UF038100**	ELECTROLYTIC CAPACITOR(CHIP)	100 16V	チップケミコン		
FT100	**ZA683700**	FET	US6K1TR	FET		
-104	**ZA683700**	FET	US6K1TR	FET		
FT100	**ZA777500**	FET	US6K4TR TAPE	FET		
-104	**ZA777500**	FET	US6K4TR TAPE	FET		
FT200	**ZA683700**	FET	US6K1TR	FET		
-204	**ZA683700**	FET	US6K1TR	FET		
FT200	**ZA777500**	FET	US6K4TR TAPE	FET		
-204	**ZA777500**	FET	US6K4TR TAPE	FET		
IC100	**YD841B00**	IC	TMP89FW24AFG-7KH4	IC	E-PNS3a	
IC200	**YD841B00**	IC	TMP89FW24AFG-7KH4	IC	E-PNS3a	
R100	**RD15518R**	CARBON RESISTOR (CHIP)	180.0 1/4 J TP	チップ抵抗		
R101	**RD15518R**	CARBON RESISTOR (CHIP)	180.0 1/4 J TP	チップ抵抗		
R102	**RD155120**	CARBON RESISTOR (CHIP)	120.0 1/4 J TP	チップ抵抗		
R103	**RD15518R**	CARBON RESISTOR (CHIP)	180.0 1/4 J TP	チップ抵抗		
R104	**RD155120**	CARBON RESISTOR (CHIP)	120.0 1/4 J TP	チップ抵抗		
R105	**RD15518R**	CARBON RESISTOR (CHIP)	180.0 1/4 J TP	チップ抵抗		
R200	**RD155120**	CARBON RESISTOR (CHIP)	120.0 1/4 J TP	チップ抵抗		
R201	**RD15518R**	CARBON RESISTOR (CHIP)	180.0 1/4 J TP	チップ抵抗		
-205	**RD15518R**	CARBON RESISTOR (CHIP)	180.0 1/4 J TP	チップ抵抗		
R206	**RD155120**	CARBON RESISTOR (CHIP)	120.0 1/4 J TP	チップ抵抗		
R207	**RD15518R**	CARBON RESISTOR (CHIP)	180.0 1/4 J TP	チップ抵抗		
R306	**RD155120**	CARBON RESISTOR (CHIP)	120.0 1/4 J TP	チップ抵抗		
R307	**RD155120**	CARBON RESISTOR (CHIP)	120.0 1/4 J TP	チップ抵抗		

✻: New Parts

PNC/PNL/PNR

	REF NO.	PART NO.	DESCRIPTION		部品名	REMARKS	QTY
*		**ZQ105400**	CIRCUIT BOARD	PNC	PNCシート	(ZP35170)(YG588D0)	
*		**ZQ105300**	CIRCUIT BOARD	PNL	PNLシート	(ZP35170)(YG588D0)	
*		**ZQ105500**	CIRCUIT BOARD	PNR	PNRシート	(ZP35170)(YG588D0)	
	LD100	**WJ491700**	LED (CHIP) AMBER	BL-HJF36J-TRB	チップLED	ACMP	
	LD101	**WJ491600**	LED (CHIP) AMBER/Y.GREEN	BL-HJFGE36J-TRB	チップ2色LED	INTRO I	
	LD102	**WJ491700**	LED (CHIP) AMBER	BL-HJF36J-TRB	チップLED	FADE IN/OUT	
	LD103	**WJ491600**	LED (CHIP) AMBER/Y.GREEN	BL-HJFGE36J-TRB	チップ2色LED	INTRO II	
	LD104	**WJ491700**	LED (CHIP) AMBER	BL-HJF36J-TRB	チップLED	OTS LINK	
	LD105	**WJ491600**	LED (CHIP) AMBER/Y.GREEN	BL-HJFGE36J-TRB	チップ2色LED	INTRO III	
	LD106	**WJ491700**	LED (CHIP) AMBER	BL-HJF36J-TRB	チップLED	AUTO FILL IN	
	LD107	**WJ491600**	LED (CHIP) AMBER/Y.GREEN	BL-HJFGE36J-TRB	チップ2色LED	MAIN A	
	LD108	**WJ491600**	LED (CHIP) AMBER/Y.GREEN	BL-HJFGE36J-TRB	チップ2色LED	MAIN B	
	LD109	**WJ491600**	LED (CHIP) AMBER/Y.GREEN	BL-HJFGE36J-TRB	チップ2色LED	MAIN C	
	LD110	**WJ491600**	LED (CHIP) AMBER/Y.GREEN	BL-HJFGE36J-TRB	チップ2色LED	MAIN D	
	LD111	**WJ491600**	LED (CHIP) AMBER/Y.GREEN	BL-HJFGE36J-TRB	チップ2色LED	BREAK	
	LD112	**WJ491600**	LED (CHIP) AMBER/Y.GREEN	BL-HJFGE36J-TRB	チップ2色LED	ENDING I	
	LD113	**WJ491600**	LED (CHIP) AMBER/Y.GREEN	BL-HJFGE36J-TRB	チップ2色LED	ENDING II	
	LD114	**WJ491600**	LED (CHIP) AMBER/Y.GREEN	BL-HJFGE36J-TRB	チップ2色LED	ENDING III	
	LD200	**WJ491700**	LED (CHIP) AMBER	BL-HJF36J-TRB	チップLED	SYNC STOP	
	LD201	**WJ491600**	LED (CHIP) AMBER/Y.GREEN	BL-HJFGE36J-TRB	チップ2色LED	REG 1	
	LD202	**WJ491700**	LED (CHIP) AMBER	BL-HJF36J-TRB	チップLED	SYNC START	
	LD203	**WJ491600**	LED (CHIP) AMBER/Y.GREEN	BL-HJFGE36J-TRB	チップ2色LED	REG 2	
	LD204	**WJ491600**	LED (CHIP) AMBER/Y.GREEN	BL-HJFGE36J-TRB	チップ2色LED	START/STOP	
	LD205	**WJ491600**	LED (CHIP) AMBER/Y.GREEN	BL-HJFGE36J-TRB	チップ2色LED	REG 3	
	LD206	**WJ491600**	LED (CHIP) AMBER/Y.GREEN	BL-HJFGE36J-TRB	チップ2色LED	REG 4	
	LD207	**WJ491600**	LED (CHIP) AMBER/Y.GREEN	BL-HJFGE36J-TRB	チップ2色LED	REG 5	
	LD208	**WJ491600**	LED (CHIP) AMBER/Y.GREEN	BL-HJFGE36J-TRB	チップ2色LED	REG 6	
	LD209	**WJ491700**	LED (CHIP) AMBER	BL-HJF36J-TRB	チップLED	FREEZE	
	LD210	**WJ491600**	LED (CHIP) AMBER/Y.GREEN	BL-HJFGE36J-TRB	チップ2色LED	REG 7	
	LD211	**WJ491600**	LED (CHIP) AMBER/Y.GREEN	BL-HJFGE36J-TRB	チップ2色LED	REG 8	
	LD300	**WJ491600**	LED (CHIP) AMBER/Y.GREEN	BL-HJFGE36J-TRB	チップ2色LED	PAD CTRL 1	
	LD301	**WJ491600**	LED (CHIP) AMBER/Y.GREEN	BL-HJFGE36J-TRB	チップ2色LED	PAD CTRL 2	
	LD302	**WJ491600**	LED (CHIP) AMBER/Y.GREEN	BL-HJFGE36J-TRB	チップ2色LED	PAD CTRL 3	
	LD303	**WJ491600**	LED (CHIP) AMBER/Y.GREEN	BL-HJFGE36J-TRB	チップ2色LED	PAD CTRL 4	
	LD304	**WJ491600**	LED (CHIP) AMBER/Y.GREEN	BL-HJFGE36J-TRB	チップ2色LED	OTS 1	
	LD305	**WJ491600**	LED (CHIP) AMBER/Y.GREEN	BL-HJFGE36J-TRB	チップ2色LED	OTS 2	
	LD306	**WJ491600**	LED (CHIP) AMBER/Y.GREEN	BL-HJFGE36J-TRB	チップ2色LED	OTS 3	
	LD307	**WJ491600**	LED (CHIP) AMBER/Y.GREEN	BL-HJFGE36J-TRB	チップ2色LED	OTS 4	
		ZN547100	CRYSTAL DISPLAY	M070SWP1 R5	液晶ディスプレイ		
		YE178A00	SPEAKER	13.0cm 4ohm 20W	スピーカ		2
		YD681A00	LOUD SPEAKER	5.0cm 6ohm 10W	スピーカ		2

*: New Parts

DIGITAL WORKSTATION

PSR-A3000

CIRCUIT DIAGRAM

■ **CONTENTS**

BLOCK DIAGRAM 3
CIRCUIT DIAGRAM
- DMM (001–005) 4–8
- AJACK (AJACK, HP) 9
- PN1 001 (PNM) 10
- PN1 002 (PNS) 11
- PN1 003 (OR), JS 12
- PN2 (PNC/PNL/PNR) 13
- EMKS61A, MK-H, MK-L 14

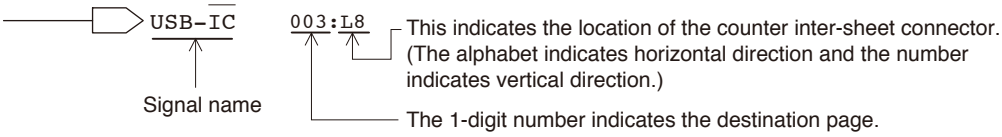
Note : See parts list for details of circuit board conponent parts.

■ **WARNING**

Components having special characteristics are marked ⚠ and must be replaced with parts having specification equal to those originally installed.

Notation for Circuit Diagrams

1. How to identify inter-sheet connectors



2. Connection of connectors.

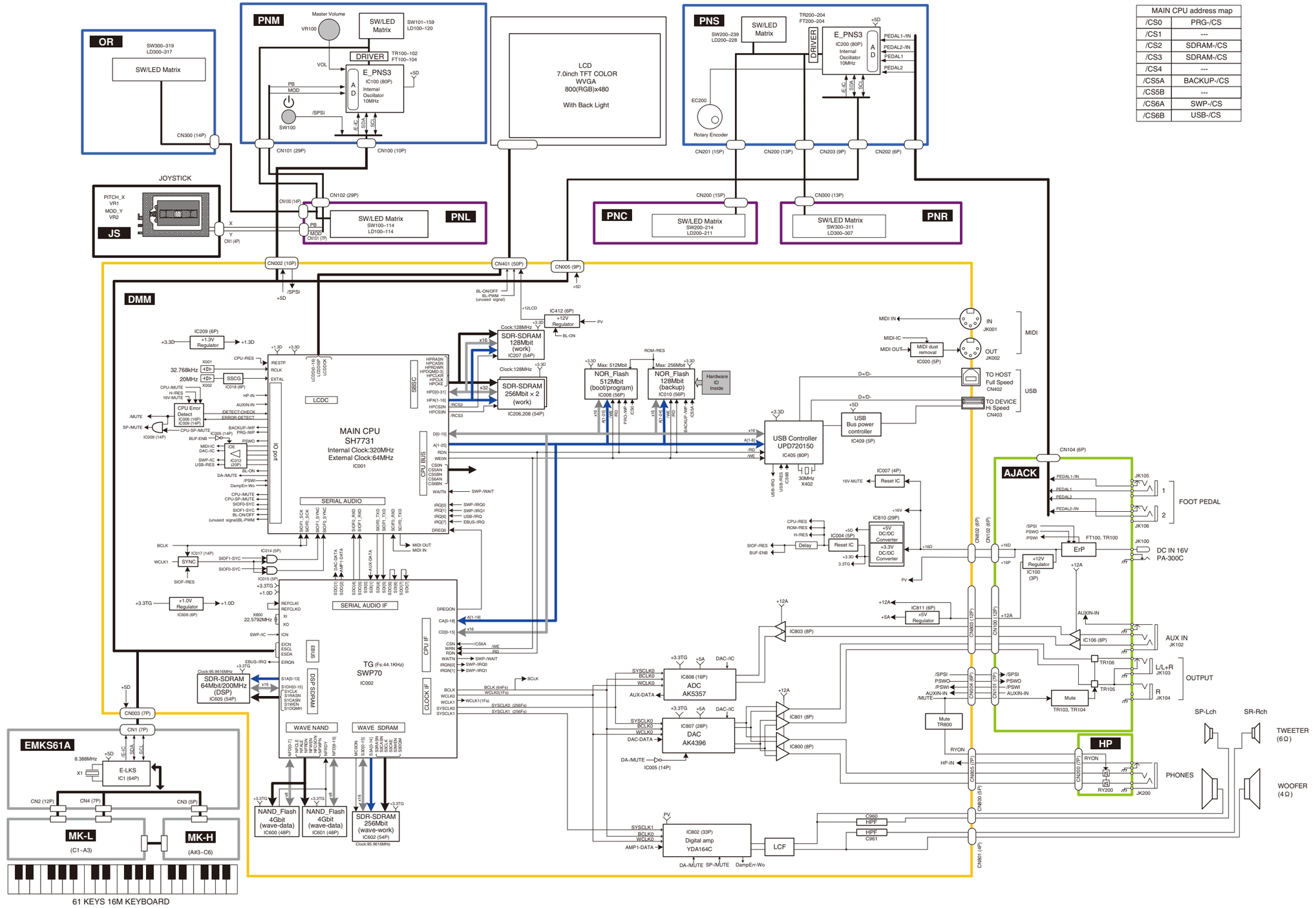
(Example) to PNM-CN100
<Page 10: P-2>

Page 10 are the page of a circuit diagram.

P-2 is indicates the location of the counter inter-circuit board connector.
(The alphabet indicates horizontal direction and the number indicates vertical direction.)

■ PSR-A3000 BLOCK DIAGRAM

MAIN CPU address map	
/CS0	PRG-/CS
/CS1	---
/CS2	SDRAM-/CS
/CS3	SDRAM-/CS
/CS4	---
/CS5A	BACKUP-/CS
/CS5B	---
/CS6A	SWP-/CS
/CS6B	USB-/CS



■ DMM 001 CIRCUIT DIAGRM (PSR-A3000)

MAIN CPU

NOR FLASH ROM 512M BOOT/PROGRAM

NOR FLASH ROM 128M BACKUP

SWP70

OR

not installed

to PNM-CN100 <Page 10: P-2>

to PNS-CN203 <Page 11: K-12>

to EMKS61A-CN1 <Page 14: J-3>

Photo Coupler

INVERTER

MIDI

OR GATE

to AJACK-CN101 <Page 9: O-6>

MAIN CPU

not installed for debug

OR GATE

D-FF

AND

TRANSCEIVER

INVERTER

MAIN CPU

not installed

SINGLE SHOT

AND

AND

SYSTEM RESET

INVERTER

INVERTER

INVERTER

not installed

not installed

not installed

SPREAD SPECTRUM CLOCK GENERATOR

not installed

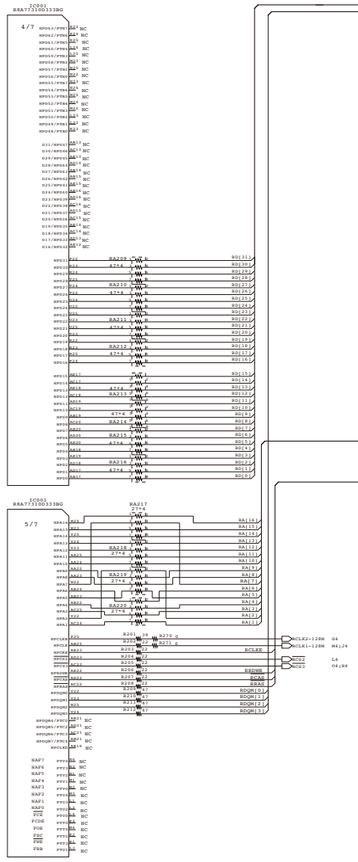
not installed

JTAG-ICE

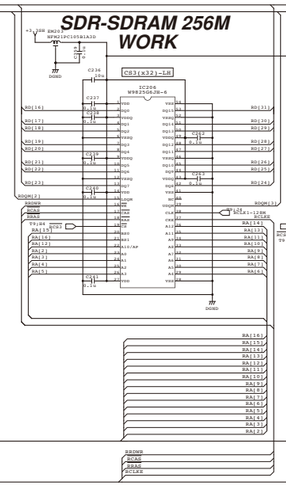
SYSTEM RESET

■ DMM 002 CIRCUIT DIAGRM (PSR-A3000)

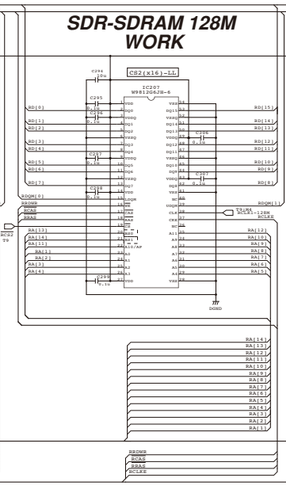
MAIN CPU



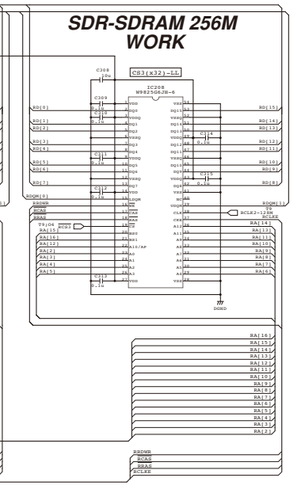
SDR-SDRAM 256M WORK



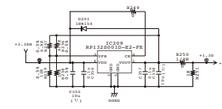
SDR-SDRAM 128M WORK

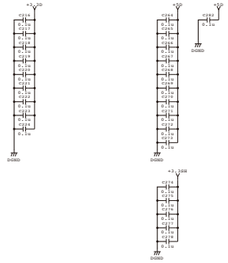


SDR-SDRAM 256M WORK

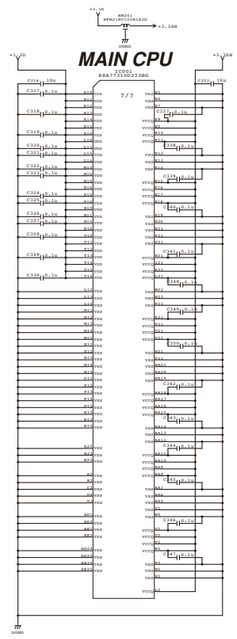


REGULATOR +1.3V

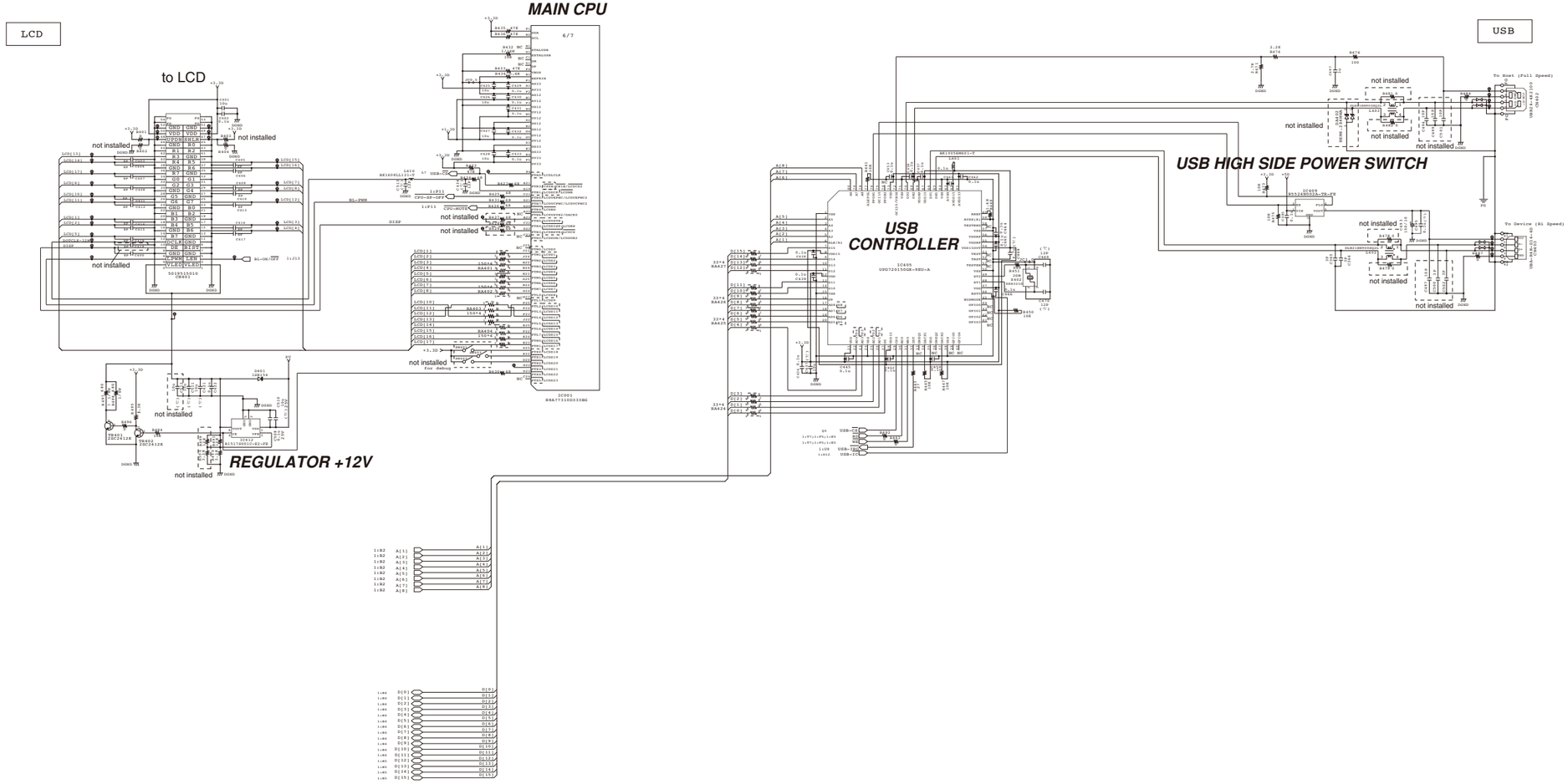




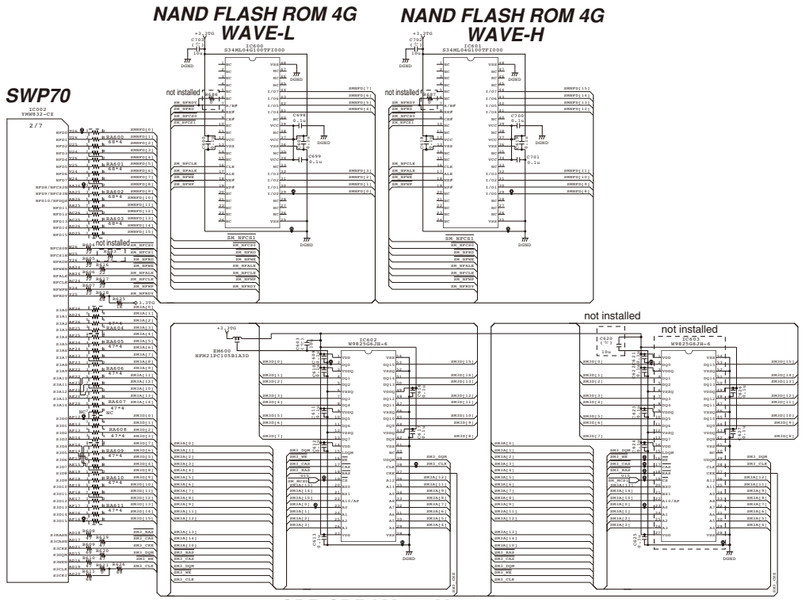
MAIN CPU

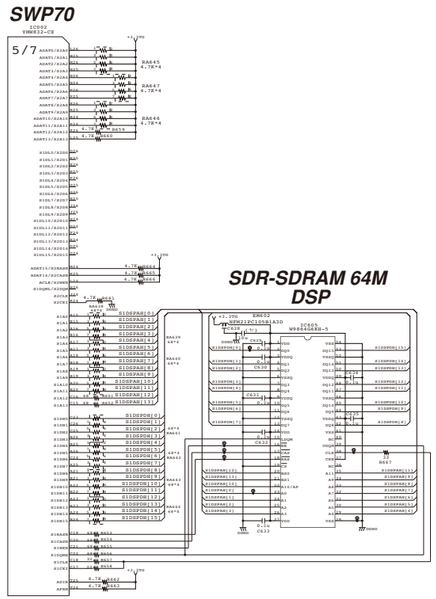


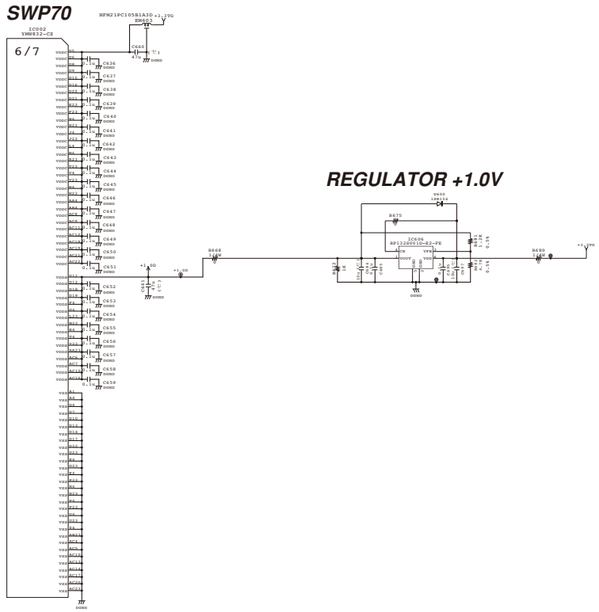
■ DMM 003 CIRCUIT DIAGRM (PSR-A3000)

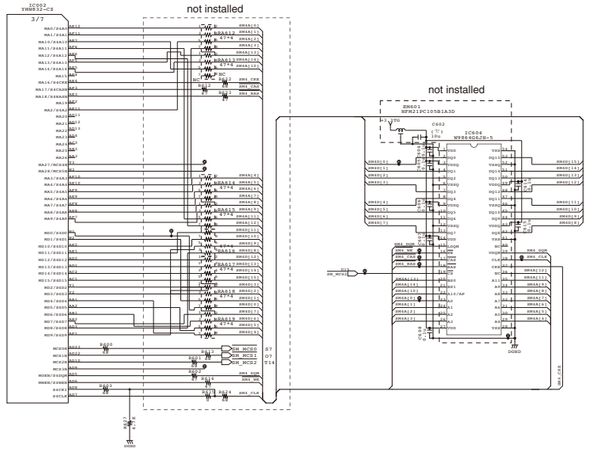


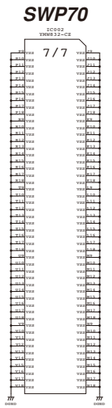
■ DMM 004 CIRCUIT DIAGRM (PSR-A3000)

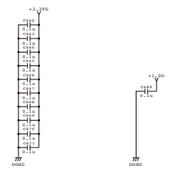




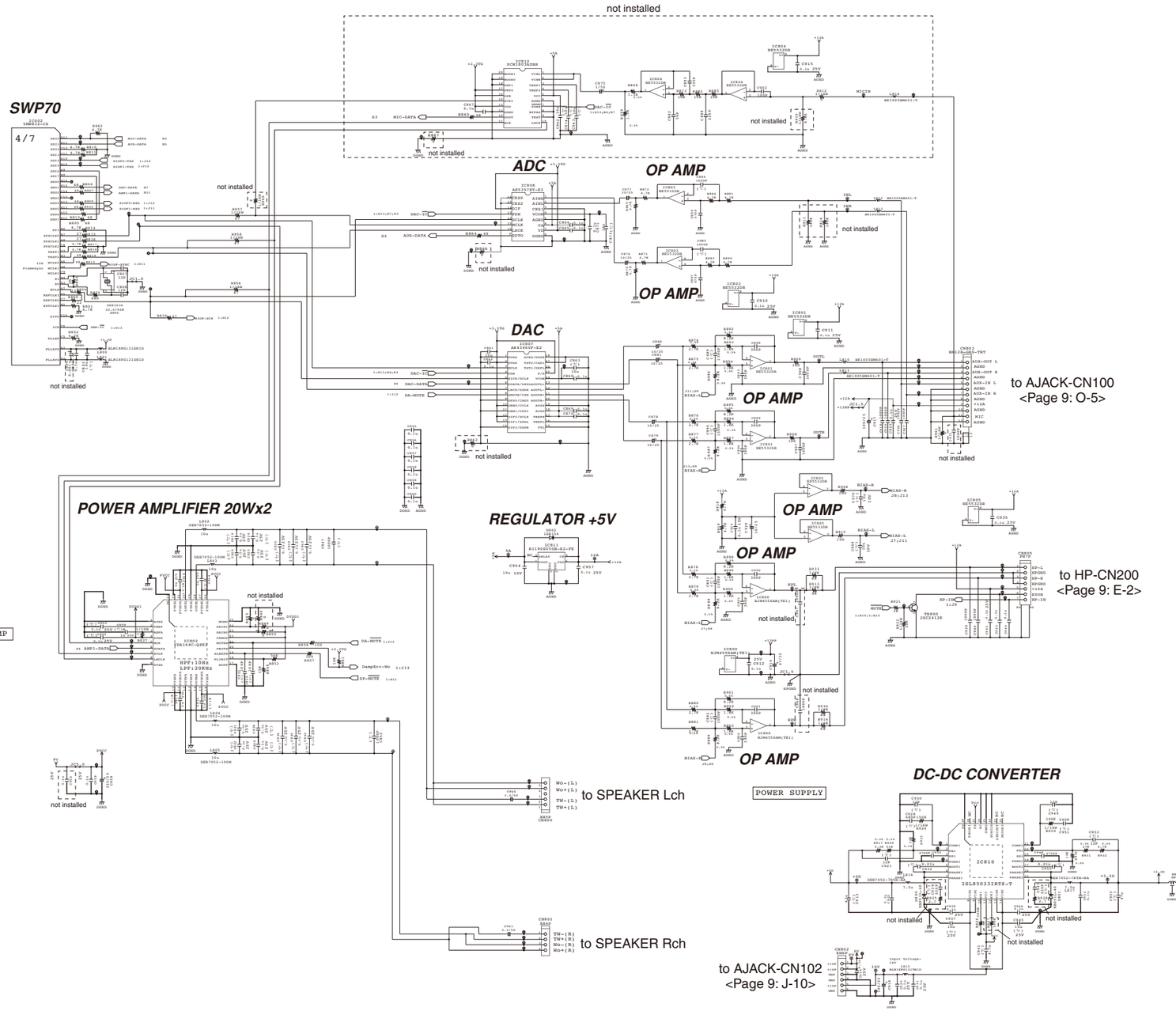




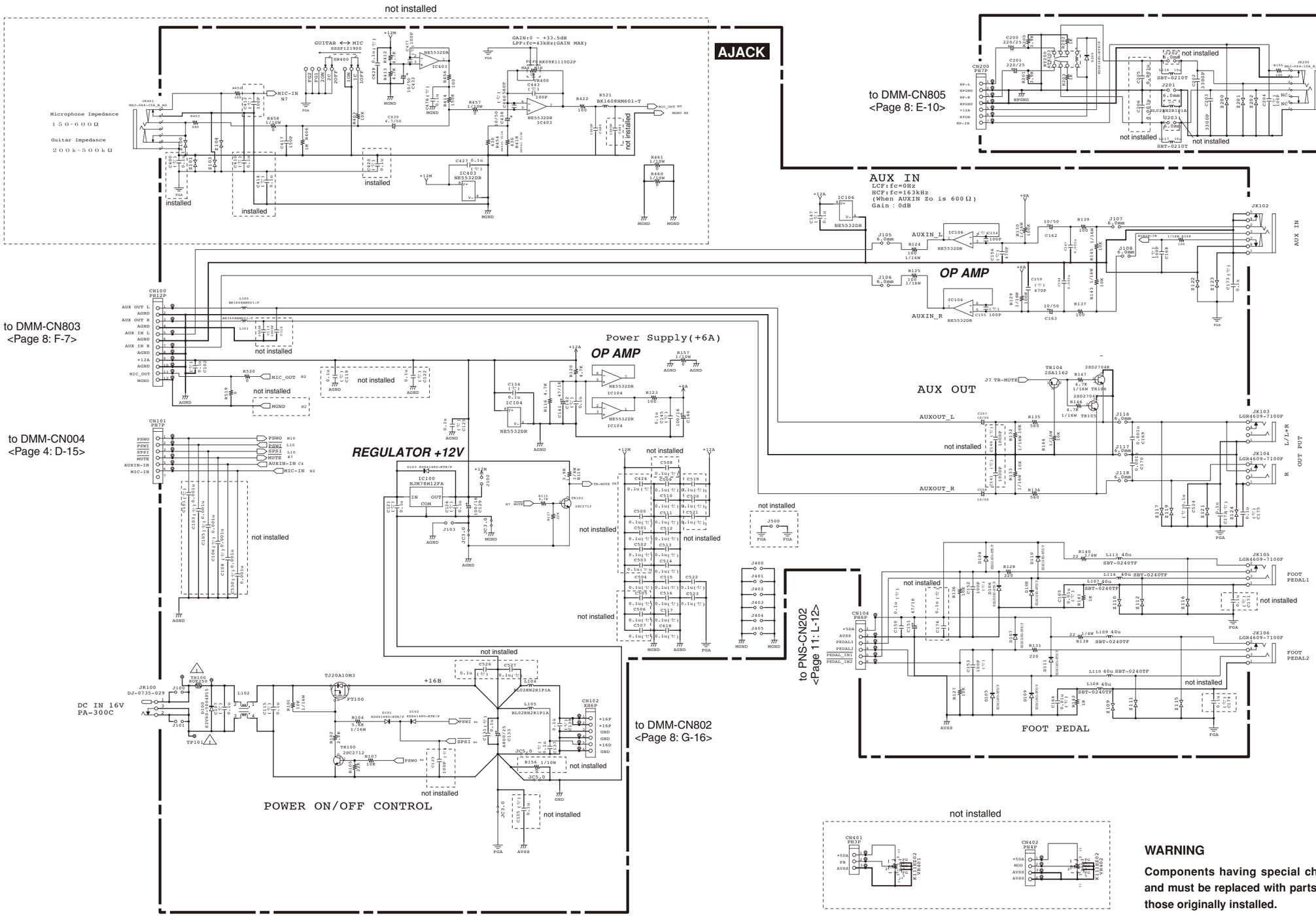




■ DMM 005 CIRCUIT DIAGRM (PSR-A3000)



■ AJACK CIRCUIT DIAGRAM (PSR-A3000)

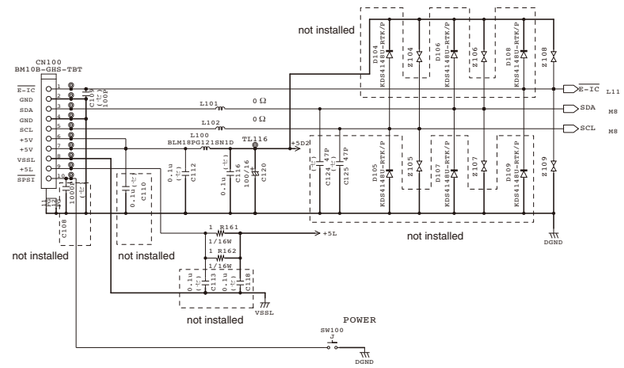


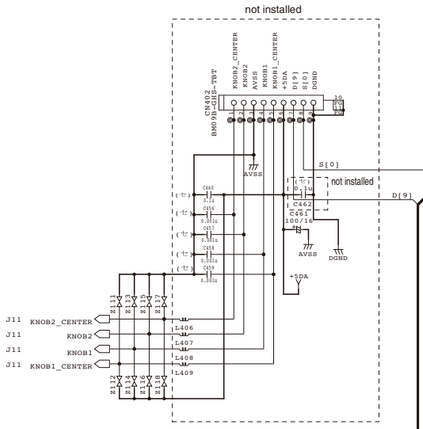
28CC1-2001145936 ⚠3

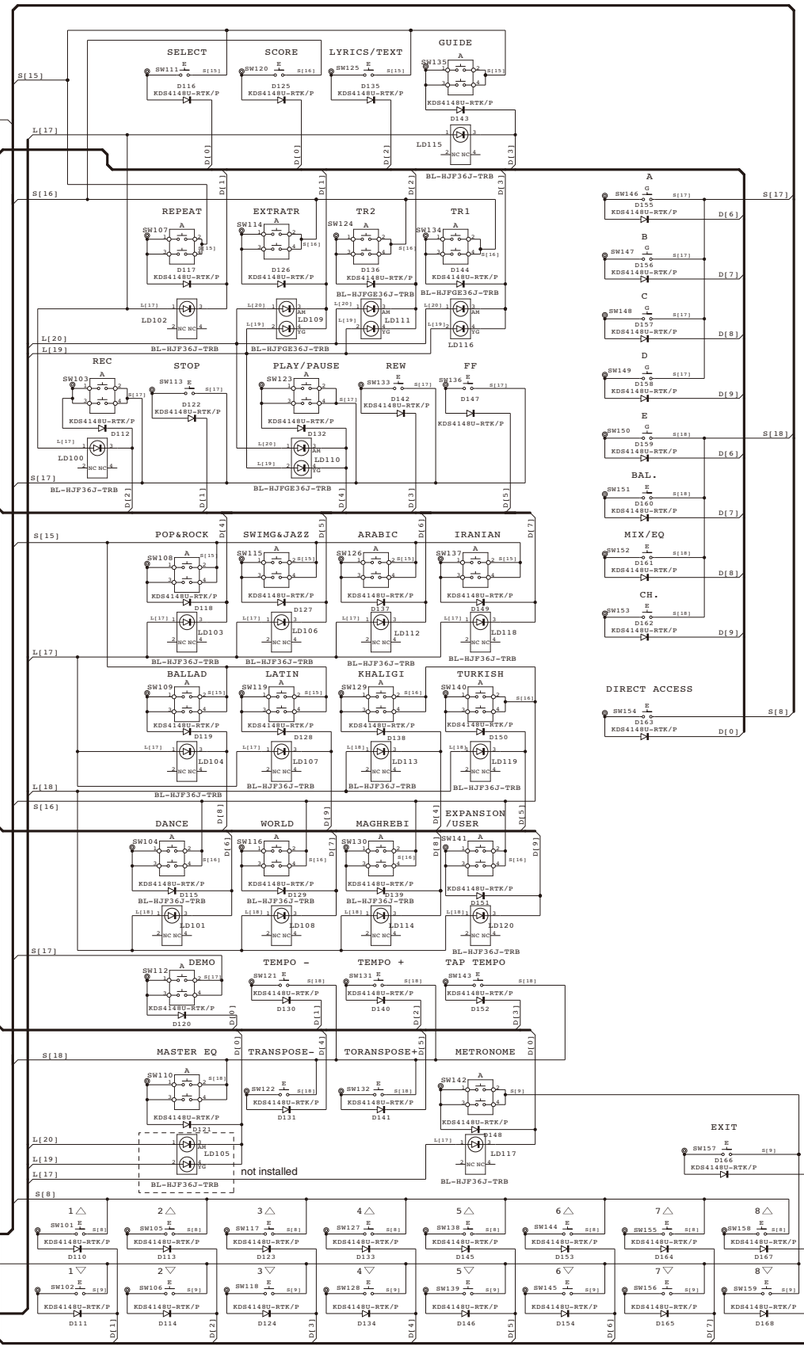
■ AJACK CIRCUIT DIAGRAM (PSR-A3000)

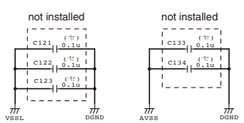
■ PN1 001 (PNM) CIRCUIT DIAGRAM (PSR-A3000)

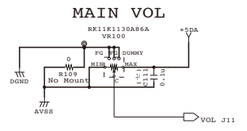
to DMM-CN002
<Page 4: D-7>

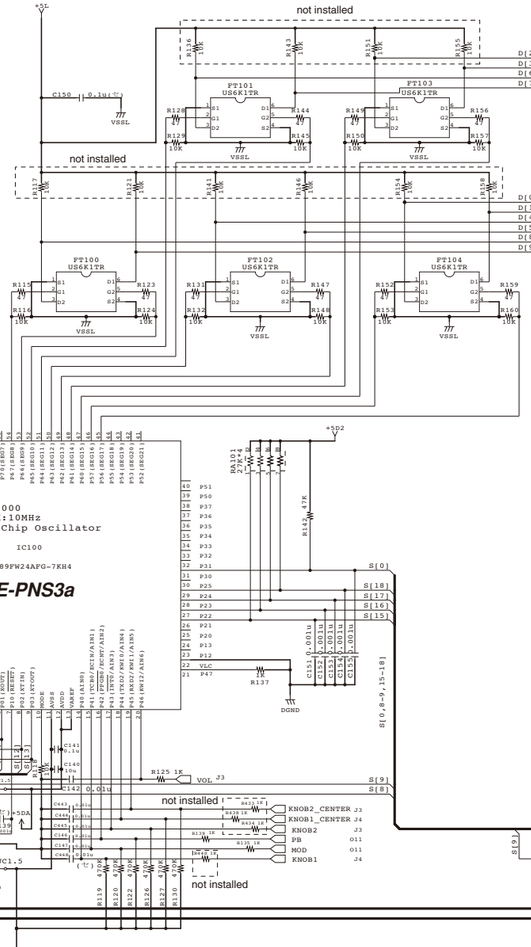


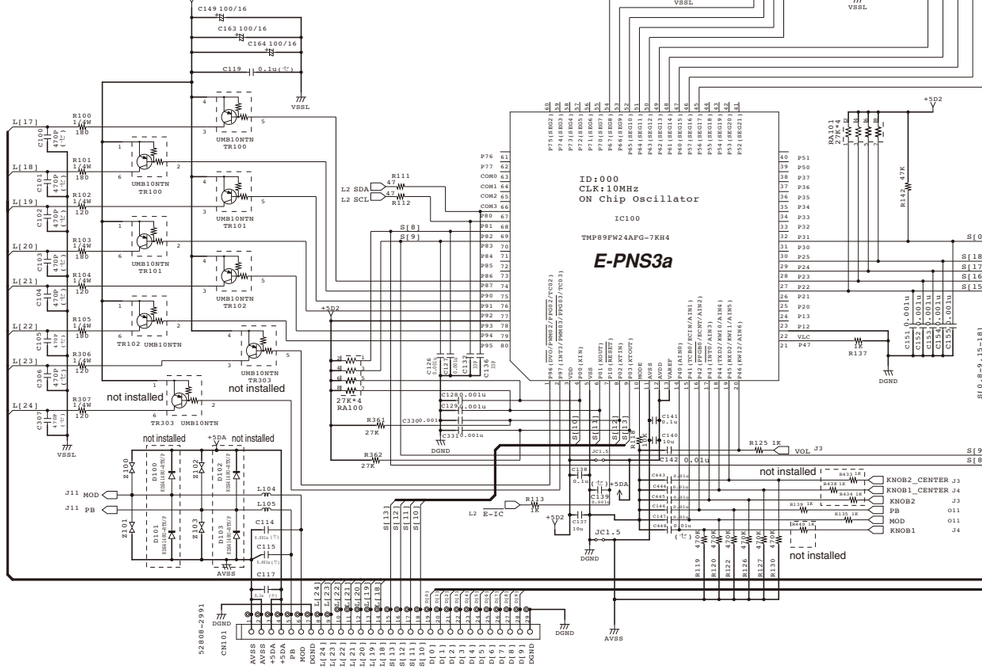




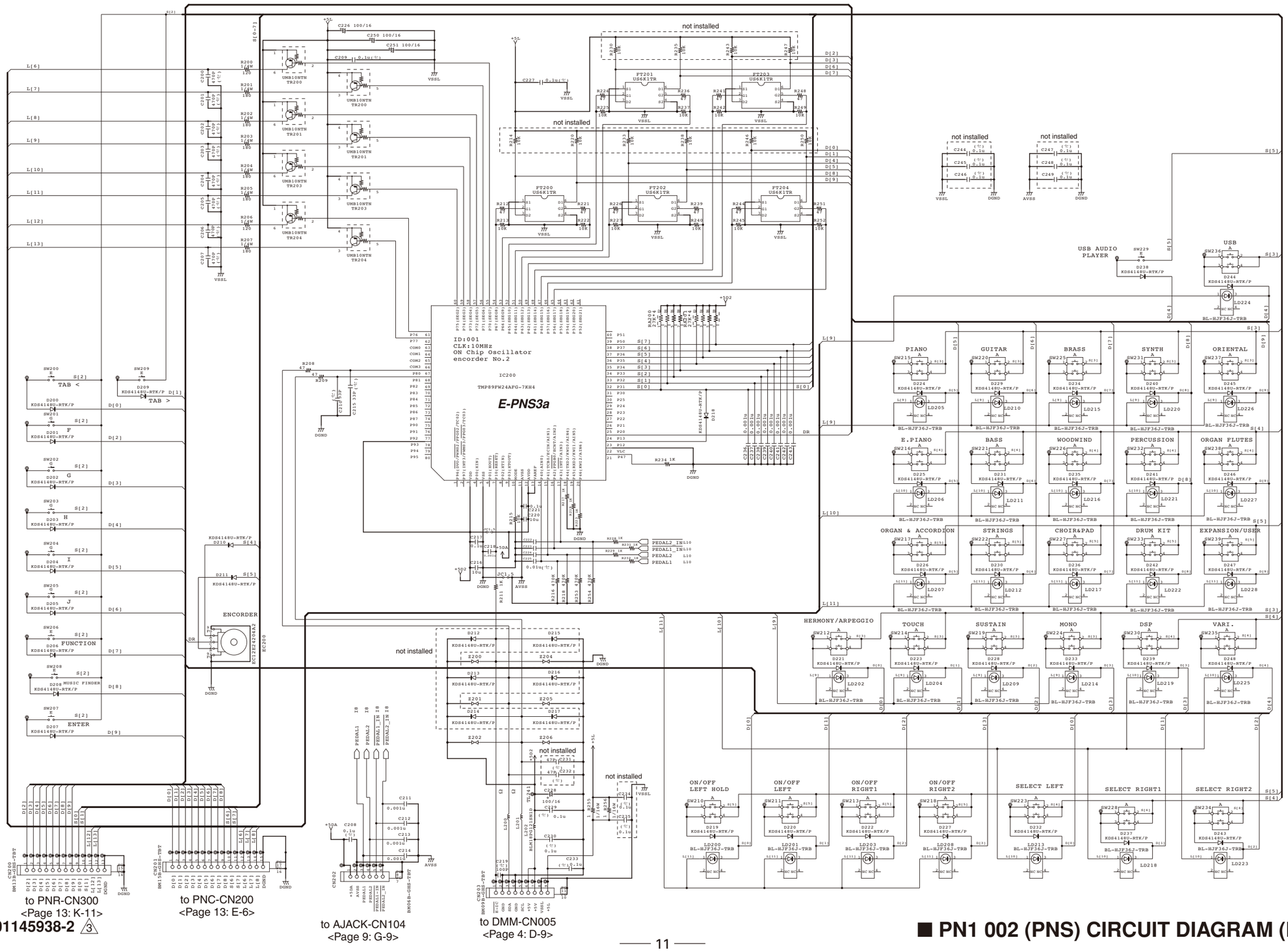




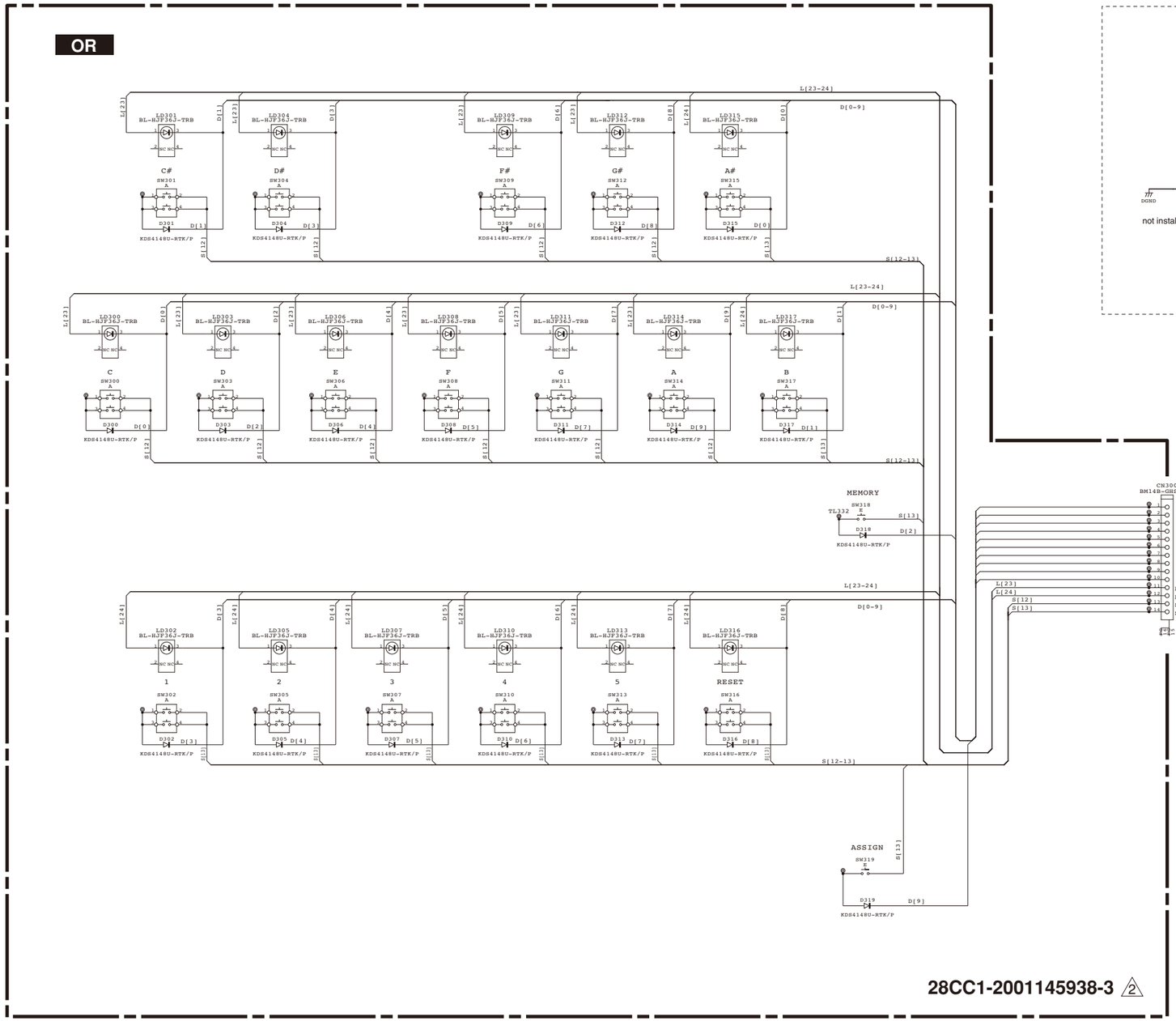



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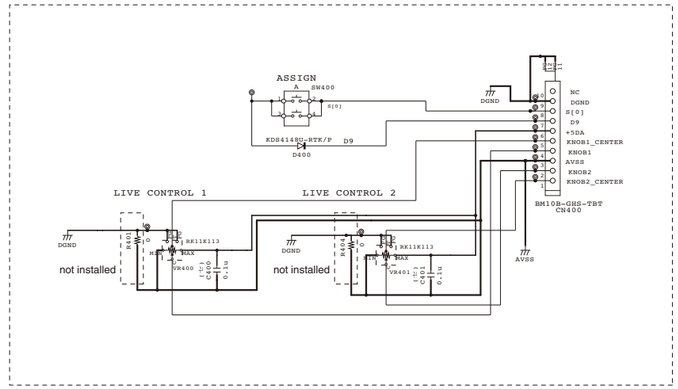
■ PN1 002 (PNS) CIRCUIT DIAGRAM (PSR-A3000)


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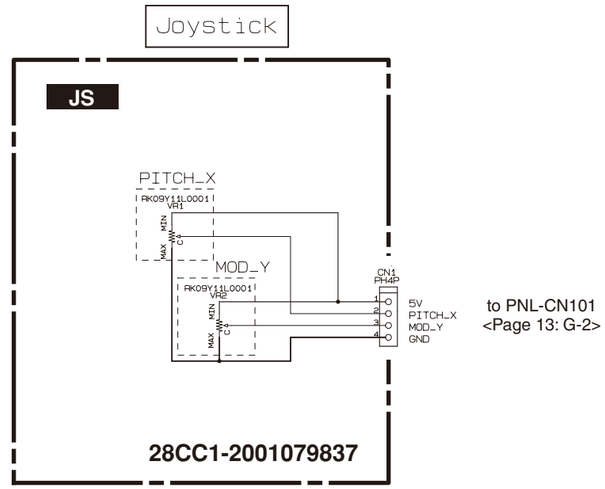
■ PN1 003 (OR), JS CIRCUIT DIAGRAM (PSR-A3000)



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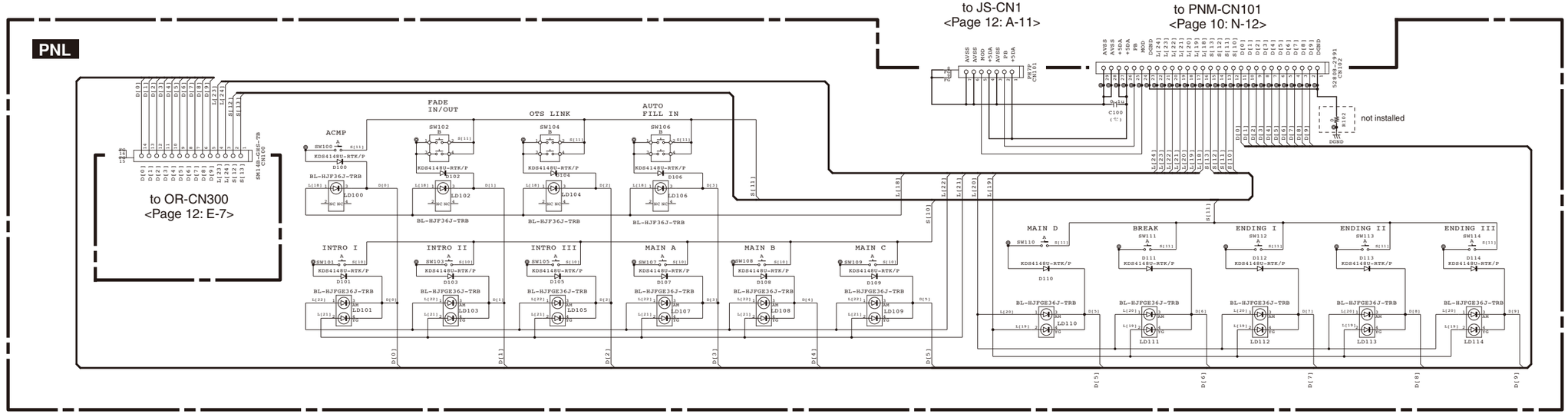
Joystick



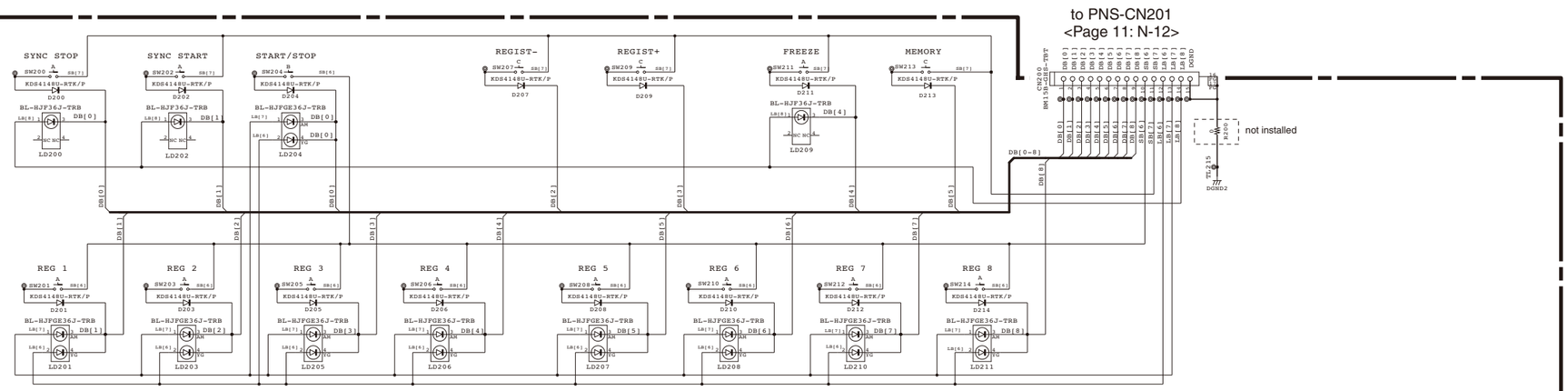
■ PN1 003 (OR), JS CIRCUIT DIAGRAM (PSR-A3000)

■ PN2 (PNC/PNL/PNR) CIRCUIT DIAGRAM (PSR-A3000)

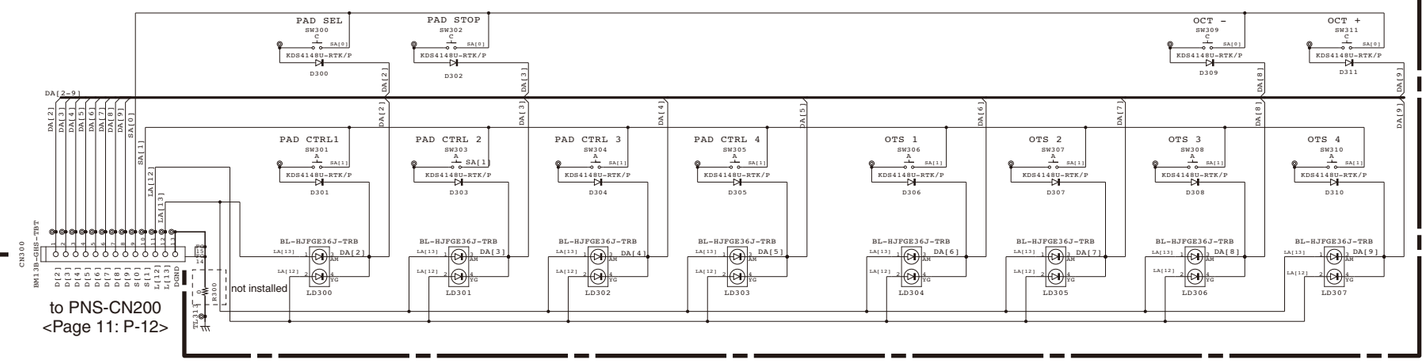
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PNC



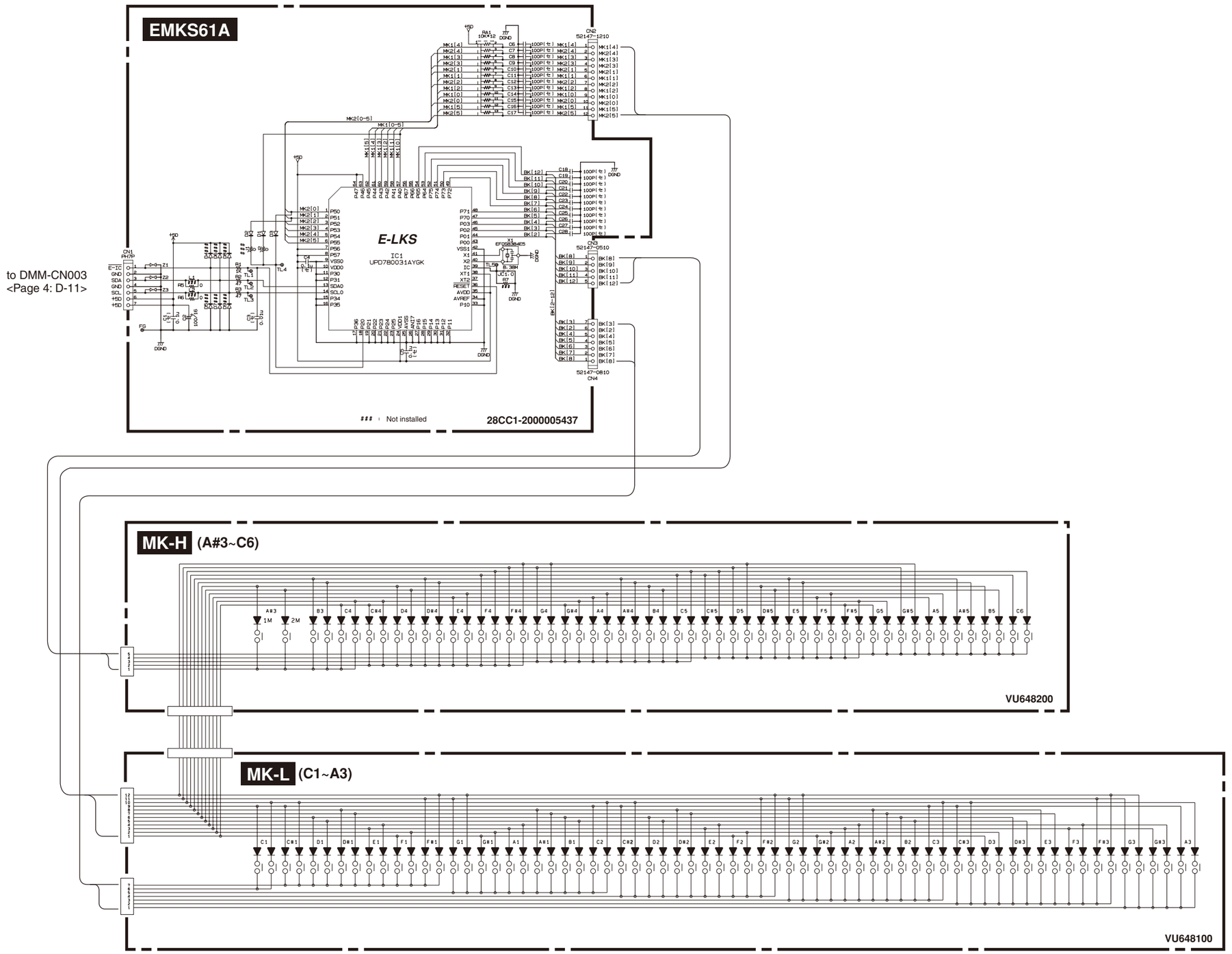
PNR



28CC1-2001145937 ⚠1

■ PN2 (PNC/PNL/PNR) CIRCUIT DIAGRAM (PSR-A3000)

■ EMKS61A, MK-H, MK-L CIRCUIT DIAGRAM (PSR-A3000)



■ EMKS61A, MK-H, MK-L CIRCUIT DIAGRAM (PSR-A3000)