

HP-335

ROLAND PIANO DIGITAL

SERVICE NOTES

First Edition

Issued by RJA

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GENERAL VIEW



SPECIFICATIONS

HP335 : Roland Digital Piano

<Keyboard>

- Keyboard : 88 keys Hammer action mechanism
- TouchSensitivity : 3 Levels
- Keyboard Mode : Whole
 - : Split(adjustable split point)
 - : Dual
 - : Pianist
 - : Manual Drum/SFX

<Sound Source> Conforms to GM/GS

- Max.Polyphony : 64 voices
- Tones : 8 groups 263 variations (incl.8 drum sets,1 SFX set)
- Temperament : 7 types, selectable tonic
- Stretched Tuning : 2 types
- Master Tuning : 415.3 Hz ~466.2 Hz (0.1 Hz Step)
- Transpose : Key Transpose (-6~+5 Half-steps)
 - : Playback Transpose (-6~+5 Half-steps)
- Effects : Reverb(10 levels), Chorus(10 levels)
 - : Sympathetic Resonance(10 levels)

<Arranger>

- Music Styles : 22 Pianist Styles
- Control : Start/Stop
 - : Intro/Ending

<Composer>

- Metronome : Beat : 2/2,0/4,2/4,3/4,4/4,5/4,6/4,7/4,3/8,6/8,9/8,12/8
 - : Volume:10 levels
- Tracks : 3 tracks
- Song : 1 song
- Note Storage : Approx. 30,000 notes
- Tempo : Quarter note = 20 - 250
- Resolution : 120 ticks per quarter note
- Control : Song Select, Play/Stop, Rec, All Song Play
 - : Track Select, PlaybackBalance, CountIn

<Others>

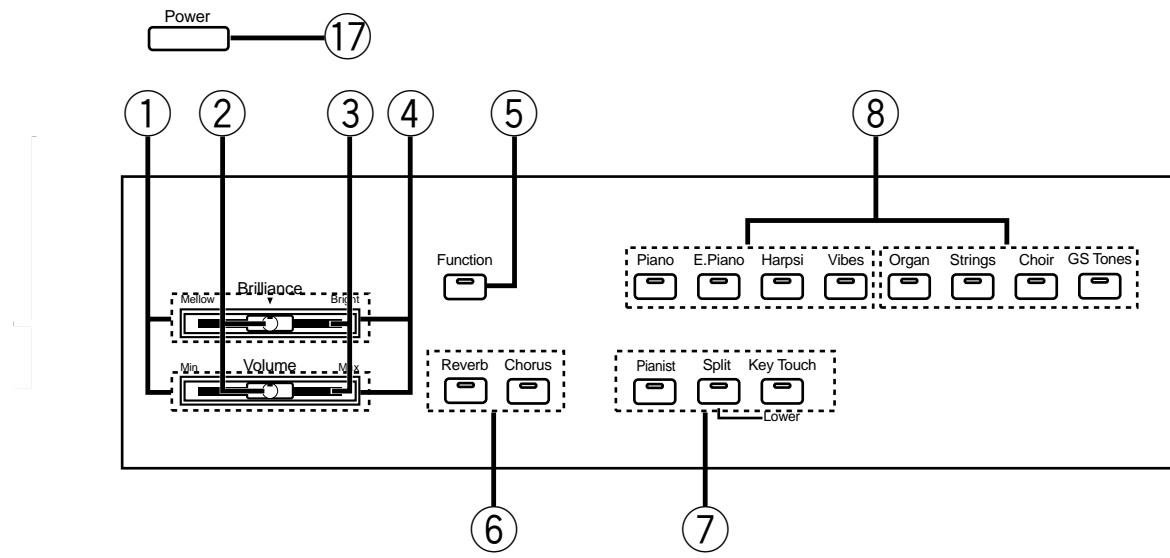
- Rated Power Output : 30 W×2
- Speakers : 20cm × 2
- Display : Beat Indicator
 - : 7-segment, 3-digit LED
- Control : Volume
 - : Microphone Volume, Microphone Echo
 - : Brilliance
- Pedals : Damper (half-pedal recognition)
 - : Soft (half-pedal recognition)
 - : Sostenuto (Function assignable)
- Other Functions : Panel Lock
- Connectors : Output jacks (Stereo/Mono)
 - : Input jacks (Stereo/Mono)
 - : Microphone jack(with echo)
 - : Headphone jack × 2 (Stereo)
 - : MIDI IN connector × 2 / MIDI OUT connector
 - : Computer connector
 - : Pedal Connector (8 pin DIN type)
- Power supply : AC117V/AC230V/AC240V
- PowerConsumption : 85W(117V)/68W(230V)/68W(240V)
- Cabinet finish : Simulated rosewood
- Dimensions(including Piano Stand)
 - : 1,445 mm(W) × 525 mm(D) × 892 mm(H)
 - : 56-15/16(W) × 20-11/16 (D) × 35-1/8(H)
- Weights(including piano Stand)
 - : 60.9 kg / 134 lbs 5 oz
- Accessories : Owner's manual English(71015401)
 - : Power cord 100V : (13499219)
 - 117V : (13499220)
 - 230V : (13499221)
 - 240V : (13499222)
 - : Euro converter plug(230V only) (00905234)

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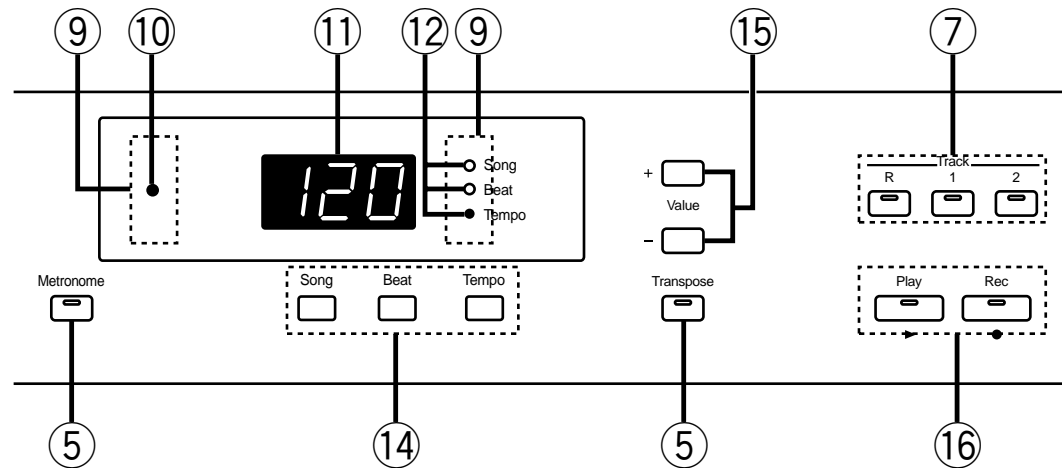
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LOCATION OF CONTROLS

HP-335 Front panel



HP-335 Rear panel



PANEL LAYOUT PARTS LIST

No.	Part Number	Part Name
①	00671556	SLIDE POT. EWANNKX10B14
②	22485192	I S-KNOB S BLK/LCG
③	22245194	POT DUST COVER M 1H
④	32225353	I S-ESCT SX1V BLK L=30
⑤	00900145	D S-KEYTOP SD1H BLK
	15039245	LED SEL6210S TPS
⑥	00900156	D S-KEYTOP SD2H BLK
	15039245	LED SEL6210S TPS
⑦	00900167	D S-KEYTOP SD3H BLK
	15039245	LED SEL6210S TPS (Pianist, Split)
	01121689	LED SPR-325MVWT31 (Key Touch)
⑧	00900178	D S-KEYTOP SD4H BLK
	15039245	LED SEL6210S TPS
⑨	01011312	ISOLATOR LED SPONGE
⑩	01121689	LED SPR-325MVWT31
⑪	00239767	LED LB-603VF
⑫	15039245	LED SEL6210S TPS
⑬	01344589	DISPLAY COVER
⑭	00904245	D S-KEYTOP SX3H BLK
⑮	00900189	D S-KEYTOP SX1H BLK
⑯	22495278	D S-KEYTOP MD2H BLK
	15039245	LED SEL6210S TPS
⑰	22495576	A S BUTTON LX BLK
	13129139	AC PUSH SWITCH SDDLBI-A-D-2 TV-5 5A/250V

*All Tact Switches are #13169752 EVQ 213 05R TACT SWITCH.

EXPLODED VIEW PARTS LIST

[PARTS LIST]

No.	Part No.	Part Name
①	01344378	TOP BOARD
②	00900478	TOP BOARD HOLDER
③	00900401	MUSIC REST
④	22325182	MR HINGE ASSY
⑤	00900278	MUSIC STOPPER
⑥	00239367	SHOULDER SCREW 1165
⑦	00900312	BLIND UPPER
⑧	71011878	PAB3 INLET 100/117V
⑨	01017134	LID RAIL STOPPER
⑩	00900534	BRACKET
⑪	00900101	SIDE PANEL UPPER L
⑫	71012023	SIDE PANEL L ASSY
⑬	01455767	END BLOCK L
⑭	01344467	SW HOLDER
⑮	71011867	PAB3 FRONT JACK BRD
⑯	13129139	AC PUSH SWITCH
⑰	22495576	A S-BUTTON LX BLK
⑱	01344389	LID BOARD
⑲	01450212	PWR TRANS 01450212 UNIVERSAL
⑳	71011856	PAB3 ANALOG PHANTOM
㉑	71013190	MAIN BOARD ASSY
㉒	00900123	SIDE PANEL UPPER R
㉓	71012034	SIDE PANEL R ASSY
㉔	01455778	END BLOCK R
㉕	71011901	IC BOARD ASSY
㉖	01349778	FULL-RANGE PD-20103A3
㉗	00900467	PWB HOLDER
㉘	71017734	BLIND ASSY
㉙	01344390	FRONT PANEL
㉚	00900289	CENTER HOLDER
㉛	00900567	PANEL HOLDER FP
㉜	01017678	LID BLIND
㉝	00900378	LID BLIND CAP

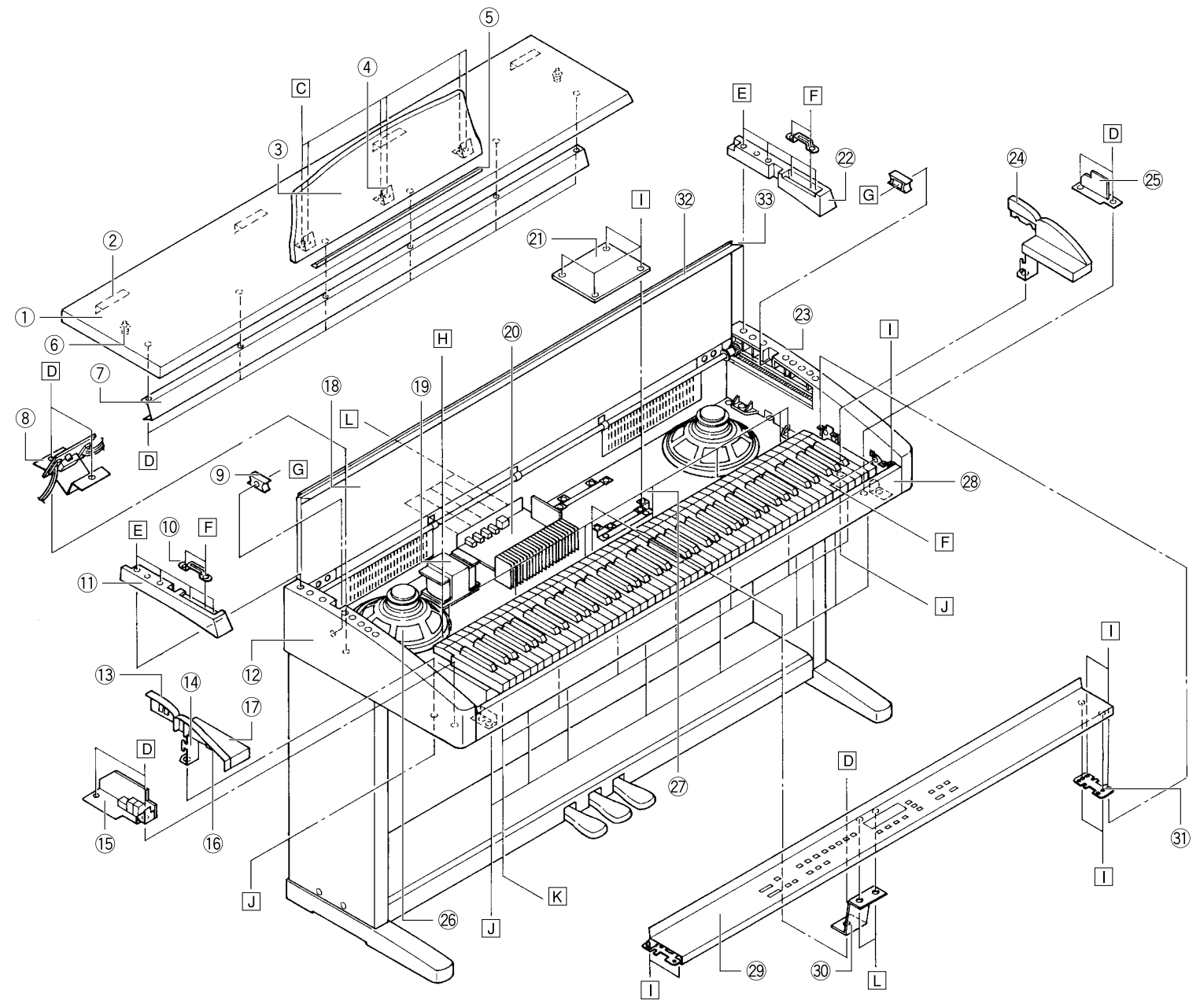
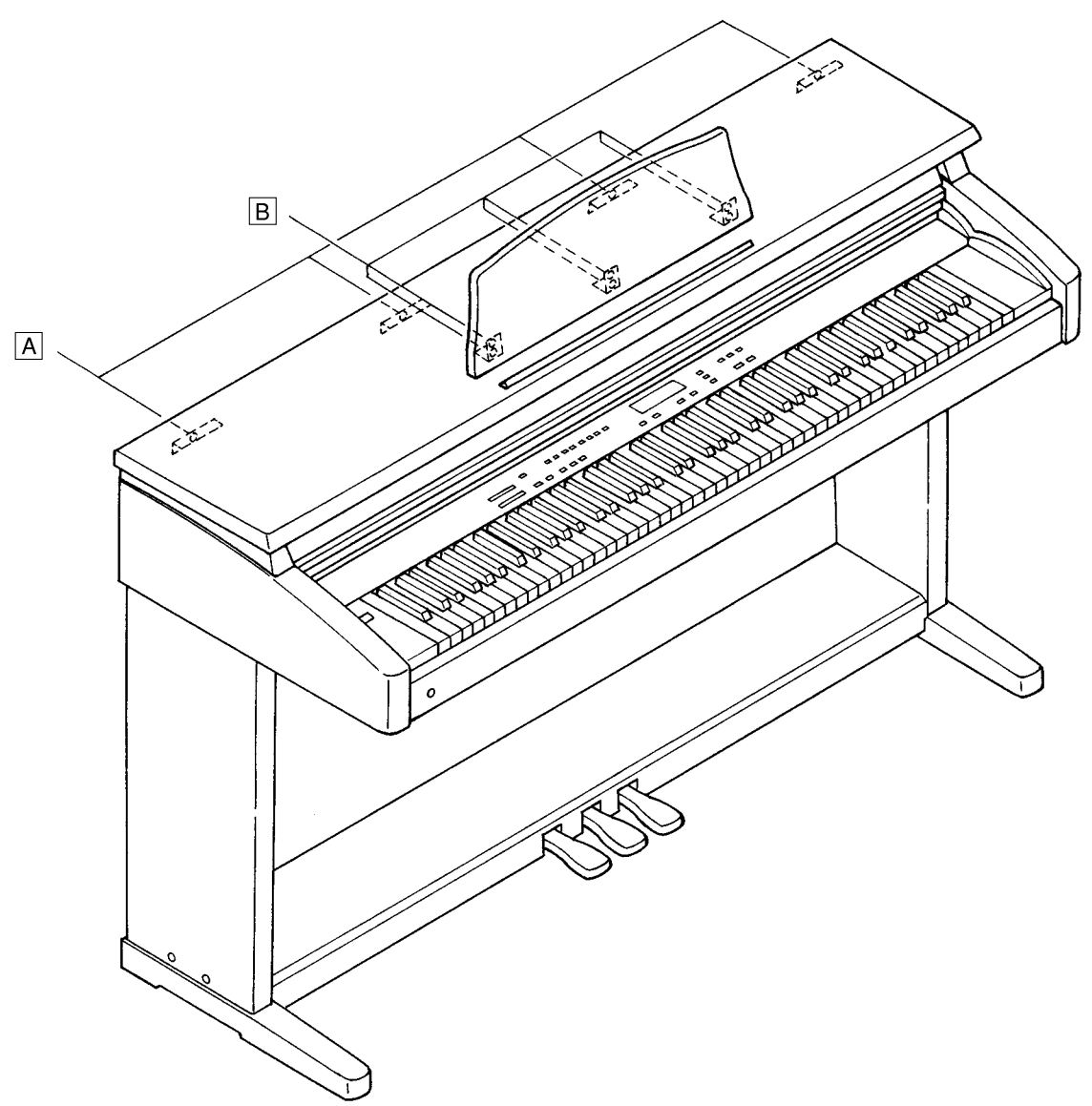
[Screw]

No.	Part No.	Part Name
Ⓐ	40011123	BINDING TAPTITE B 4*8 BZC
Ⓑ	40011312	BINDING TAPTITE P 3*8 BZC
Ⓒ	40012178	TPA BIND 3*12 BZC
Ⓓ	40012145	TPA TRUSS 4*14 BZC
Ⓔ	*****	TRUSS TAPTITE P 4*25 ZC
Ⓕ	40012490	PAN TAPTITE P 4*10 BZC
Ⓖ	40011323	PAN TAPTITE P 3*10 BZC
Ⓗ	40232845	PAN MACHINE SCREW W/SW+PW 4*16 ZC
Ⓘ	40011056	BINDING TAPTITE B 3*6 ZCB
Ⓝ	40128512	BINDING TAPTITE B WH 4*25*20 BZC W=11
Ⓚ	40012034	TRUSS MACHINE SCREW 4*18 BZC
Ⓛ	40011101	BINDING TAPTITE B 3*8 BZC

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40

A EXPLODED VIEW

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PARTS LIST

SAFETY PRECAUTION:
The parts marked Δ have safety-related characteristics.
Use only listed parts for replacement.

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

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

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

FJB : FRONT JACK BOARD
PAB : PAB ANALOG BOARD
MIC : MIC BOARD
PLB : PANEL L BOARD
PRB : PLB PANEL R BOARD
MB : MAIN BOARD
EB : EQ BOARD
IB : INLET BOARD

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

CASING

#	01344378	TOP BOARD
	00900401	MUSIC REST
	22325182	MR HINGE ASSY
	00900278	MUSIC STOPPER
#	01344389	LID BOARD
	00900378	LID BLIND CAP
	01017678	LID BLIND
	00900312	BLIND UPPER
#	01344445	REAR PANEL
#	01344390	FRONT PANEL
	32225353	I S-ESCT SX1V BLK L=30
	00341778	KEY FELT
#	01344589	DISPLAY COVER
#	01455767	END BLOCK L
#	01455778	END BLOCK R
	00900501	SIDE PLATE L
	00900523	SIDE PLATE R
	00121945	SPEAKER COVER
	00890990	ROLAND BADGE 12 GOLD
#	71011990	BOTTOM BOARD
		NOTE : BOTTOM BOARD includes the following parts.
	00569156	CUSHION T1*25*1200
	01011534	CUSHION
#	71012023	SIDE PANEL L ASSY
		NOTE : 'SIDE PANEL L ASSY' includes the following parts.
	*****	SIDE PANEL L
	00900101	SIDE PANEL UPPER L
#	71012034	SIDE PANEL R ASSY
		NOTE : 'SIDE PANEL R ASSY' includes the following parts.
	*****	SIDE PANEL R
	00900123	SIDE PANEL UPPER R
#	71017734	BLIND ASSY
		NOTE : 'BLIND ASSY' includes the following parts.
	*****	BLIND
#	01456034	SPACER BLIND D6×16.8

CHASSIS

01017134	LID RAIL STOPPER
00900356	LID ANGLE
00900390	LID SHAFT
22175664	LID GEAR
00900478	TOP BOARD HOLDER
00900289	CENTER HOLDER
00900490	PANEL HOLDER L

	00900512	PANEL HOLDER R
	00900467	PWB HOLDER
Δ	12339355	SWITCH COVER 721128-18
	22245194	POT DUST COVER M 1H
#	01346401	ISOLATOR LED SPONGE
	22145199	SHAFT STAY L
	22145901	SHAFT STAY R
	01011390	SHAFT CUSHION
	00900567	PANEL HOLDER FP
#	01344467	SW HOLDER
	00900534	BRACKET
	01011312	ISOLATOR LED SPONGE

KNOB,BUTTON

	22495576	A S-BUTTON LX BLK	POWER SWITCH
	22495278	D S-KEYTOP MD2H BLK	
	00900145	D S-KEYTOP SD1H BLK	
	00900156	D S-KEYTOP SD2H BLK	
	00900167	D S-KEYTOP SD3H BLK	
	00900178	D S-KEYTOP SD4H BLK	
	00900189	D S-KEYTOP SX1H BLK	
	00904245	D S-KEYTOP SX3H BLK	
	22485192	I S-KNOB S BLK/LCG	

SWITCH

	13129139	SDDL1-A-D-2 TV-5 5A/250V	AC PUSH SWITCH
	13169752	EVQ 213 05R TACT SWITCH	SW1,3-10,12,13,15-17 on PLB/SW1,3-12 on PRB
	13159363	SSSF124-S09N-1	SLIDE SWITCH SW301 on FJB

JACK,SOKET

	13429911	TCS7927-28-401	DIN SOCKET	JK304 on FJB
	00340223	YKF51-5031	DIN SOCKET	JK5 on PAB
	13449283	HLJ7101-01-3010	JACK	JK1-4 on PAB
	13449252	YKB21-5006	JACK	JK1 on MIC/JK301,302 on FJB
	13429672	YKF51-5047	MIDI	JK303 on FJB
	13429676	YKF51-5048	MIDI	JK6 on PAB

SPEAKER

	01349778	PD-20103A3 FULL-RANGE
		NOTE : For details, please refer to KEYBOARD PARTS LIST (page 10).

KEYBOARD ASSY

#	71017401	PA-4A88-C2 KEYBOARD ASSY
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PCB ASSY

#	71013190	MAIN BOARD ASSY
#	71011834	PANEL R BOARD ASSY
		NOTE : PANEL R BOARD ASSY includes the following parts.
#		12169390 LED SPACER LH-36-4 on PRB
#		01450001 WIRING 14X120-P2.0-51065-51015-F on PRB
#		01450012 WIRING 15X180-P2.0-51065-51015-F on PRB
	71013490	PANEL L BOARD ASSY
		NOTE : PANEL L BOARD ASSY includes the following parts.
#		01450023 WIRING 9X350-P2.0-51065-51015-F on PLB
#		01450034 WIRING 12X400-P2.0-51065-51015-F on PLB
#		01450045 WIRING 8X400-P2.0-51065-51015-F on PLB
#	71011856	PAB3 ANALOG PHANTOM
		NOTE : PAB3 ANALOG PHANTOM includes the following PWBs.
	*****	PAB3 EQ BOARD
	*****	PAB3 ANALOG BOARD

NOTE : PAB3 ANALOG BOARD includes the following parts.

#	01346412	PAB HOLDER	on PAB(1 pcs.)
#	01346423	HEATSINK	on PAB(1 pcs.)
	22195973	POWER AMP HOLDER	on PAB(1 pcs.)
	22195975	TR HOLDER	on PAB(5 pcs.)
#	01349912	WIRING 12X130-P2.0-PH-SAN-F	on PAB(1 pcs.)
#	01349978	WIRING 7X250-P2.0-PH-SAN-F	on PAB(1 pcs.)
#	01349990	WIRING W4	on PAB(1 pcs.)

71011867 PAB3 FRONT JACK BOARD

NOTE : PAB3 FRONT JACK BOARD includes the following parts.

#	01344545	JACK HOLDER
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71011901 MIC BOARD ASSY

NOTE : MIC BOARD ASSY includes the following parts.

#	01344489	MIC HOLDER
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71011878 PAB3 INLET 100/117V

NOTE1: PAB3 INLET 100/117V includes the following parts.

23425740	AC INLET INL-8 10A/125V 2P PO
12559444	FUSE 5x20 SB 4 4A/125V
00129367	INLET HOLDER

NOTE2: Replacemant INLET BOARD ""PAB3 INLET ASSY"" is for 100/117V version exclusive use.

When using ""PAB3 INLET ASSY"" for 230/240V version, be sure to make the following modifications.

- INLET BOARD FOR 100/117V version differs from 230V version in FUSE system.
Replace fuse(F1 on INLET BOARD) to specific one.(#12559550 FUSE 5x20 S506 1.6A T1.6AL250V for 230V version) See TABLE A.
- For safety standards, place fuse seal (#40013712 FUSE SEAL T1.6AL250V #407) at the proper place of the INLET BOARD.
The location of fuse seal is over the following printing (see fig A) of the PWB.
When necessary, please order fuse seal separately from INLET BOARD.

TABLE A

100V/117V	FUSE 5x20 SB 4 4A/125V
230V/240V	FUSE 5X20 S506 1.6A T1.6AL250V

Fig.A 3.15A/125V

IC

01126612	DRAM TC514260DJS-60(YEL)	IC22,23 on MB
01344278	CPU HD6437034AD72F	IC3 on MB
00343823	CUSTOM IC M60205-0601FP	IC8 on MB
00897078	CUSTOM IC RA01-005 (TC170C200AF-005)	IC13 on MB
00129278	CUSTOM IC SSC1080F0B	IC1 on MB
00899812	FLASH MEM LH28F800SUT-70	IC38 on MB
# 01344245	MASK ROM LHMNOPYL WAVE	IC18 on MB
15189250	BIPOLAR OP M5218AL	IC1,4 on PAB/IC5,8 on PLB
15189184	BIPOLAR OP NE5532	IC201,202 on EQ
15189189	BIPOLAR OP UPC4570HA	IC3,4 on MIC/IC6,7,8,9 on PAB
15289105	BIPOLAR OP UPC4570G2-T2	IC4,12 on MB
15259885	CMOS TC7S32F(TE85L)	IC11 on MB
00127490	CMOS TC7W08F(TE12L)	IC19 on MB
15249111	CMOS TC7WU04F(TE12L)	IC7 on MB
15289402	REGULATOR TA78L05F(TE12L)	IC6 on MB

15169515	CMOS TC74HC00AP	IC301 on FJB
15169550T0	CMOS TC74HC138AP	IC3,4 on PLB
15169556T0	CMOS TC74HC574AP	IC1 on PLB
00232567	DAC PCM69AU-1/T2	IC5 on MB
01238012	DIGITAL ECHO IC M65850P	IC2 on on MIC
15199904	IC M51953BL-600Y	IC13 on PAB/IC9 on PLB
00780645	IC M5M34051P RS422 TRANSCEIVER	IC303 on FJB
15229706S0	PHOTO COUPLER PC910X	IC10 on PAB/IC302 on FJB
# Δ 01340467	POWER AMP STK401-040	IC12 on PAB
15199231	REGULATOR UPC78L05J-T	IC1 on MIC
Δ 15199176	REGULATOR L78M12ML 0.5A/12V	IC5 on PAB
Δ 15199177	REGULATOR L79M12ML 0.5A/-12V	IC3 on PAB
# Δ 01344512	REGULATOR UPC24A05HF	IC2 on PAB
00456856	TR-ARRAY TD62593AP	IC2 on PLB
15169304H0	TTL HD74LS04P	IC11 on PAB

CAPACITOR

# Δ 01340389	BLOCK CAPACITOR ECOS1VP682BB	C39,51 on PAB
Δ 01453278	CERAMIC CAPACITOR DE1307E 472M-KH	C401 on IB
# Δ 01452189	CERAMIC CAPACITOR ECKDBE472ZF	C5,44 on PAB
# Δ 13639144M0	CHEMICAL CAPACITOR ECA1CM682	C22 on PAB

TRANSISTOR

00898201	TRANSISTOR RN2421(TE85L)	Q1 on MB
15119132	TRANSISTOR 2SA1015-GR(TPE2)	Q3,4,10,15 on PAB
15119615	TRANSISTOR 2SB647CTZ	Q17 on PAB
15129151	TRANSISTOR 2SC1815-GR(TPE2)	Q2,5,13,18,19 on PAB
15129152	TRANSISTOR 2SC2878-A(TPE2)	Q1,8 on PAB
15129623	TRANSISTOR 2SD667CTZ	Q16 on PAB
15139124	TRANSISTOR 2SK363-GR(TPE2)	Q6,7,11,12 on PAB
15129168	TRANSISTOR DTC124ESATP	Q22,21 on PAB
15119163	TRANSISTOR RN2227(TPE4)	Q14,20,23 on PAB/Q1-3 on PLB/Q301 on FJB/Q1-5 on PRB

DIODE

Δ 15039176	BRIDGE DIODE D3SBA20 4A/200V	D1,15 on PAB
01121323	ARRAY DIODE DA204U T106	D2-4 on MB
Δ 15039159T0	RECTIFIER DIODE S5688G(TPA3)	D3,4,9,11-14,19 on PAB
15019126	SWITCHING DIODE 1SS133 T-77	D5-8,12,18,22-24 on PAB/D1,4-13,15-17,20,21 on PLB
15019126	SWITCHING DIODE 1SS133 T-77	D1-4 on MIC/D302 on FJB/D1-12 on PRB
15019685	ZENER DIODE MTZJ T-77 27C	D303-308 on FJB
15019444	ZENER DIODE MTZJ T-77 9.1B	D17,20,21 on PAB

OPTICAL DEVICE

01121689	LED SPR-325MVWT31	LED17 on PLB / LED2 on PRB
15039245	LED SEL6210S TP5	LED1,4-13,15,16 on PLB/LED1,7-15 on PRB
# 01345445	LED L-1384AD/11D	D301 on FJB
00239767	LED LB-603VF	LED6 on PRB

RESISTOR

00126112	R ARRAY EXBV8V101JV	RA2,3,5,19,30-32,38-40 on MB
01013578	R-ARRAY EXBV8V470JV	RA24-27 on MB
15399965	R-ARRAY RCE9A103JAG7A	RA1,4,6-12,28 on MB
15409113	R-ARRAY EXBV8V103JV	RA13-18,20-23,34,35 on MB
# 01014278	CARBON RESISTOR ERDSS1VJ331T	R1,2 on PAB

POTENTIOMETER

00671556	30M/M SLIDE POT. EWANNKX10B14(10KBX2)	VR1,2 on PLB
# 01348189	12M/M ROTARY POT. EVJ05HEB1B14	VR1,2 on on MIC

CRYSTAL

00894023	MA-406 20.000MHZ TE24	CRYSTAL	X3 on MB
00901912	MA-406 24.576MHZ TE24	CRYSTAL	X2 on MB

RELAY

00899245	RELAY G5Z-2A DC12V/5A	RL1 on PAB
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FILTER

△ 00452034	FERRITE-BEAD BK2125HM102-T	L1-21 on MB
△ 12449380	FERRITE-BEAD EXC ELDR25V	L301-311 on FJB

FUSE,FUSE HOLDER

△ 12559550	FUSE 5X20 S506 1.6A T1.6AL250V	F1 on IB
△ 12559444	FUSE 5X20 SB 4 4A/125V	F5 on PAB/F1 on IB
△ 12559445	FUSE 5X20 SB 5 5A/125V	F3,4 on PAB
△ 12189823	FUSE HOLDER CNT47-0003A	FH1-8 on PAB/FH401,402 on IB

CONNECTOR

# 01344578	10JQ-ST	CN201 on EQ
13369928	53253-0610	CN11 on PAB/CN1 on MIC
13369930	53253-0810	CN13 on PAB
13369931	53253-0910	CN7 on MB
13369934	53253-1210	CN6 on MB
13369936	53253-1410	CN6 on PLB
13369937	53253-1510	CN5 on PLB
# 01344567	B10B-XH-A	CN15 on PAB
13369564	B12B-PH-K-S JST	CN11 on MB
△ 13369898	B2P3-VH 7A/250V	CN402 on IB
△ 13369585	B3P5-VH 7A/250V	CN402 on IB
13369567	B4B-PH-K-S JST	CN4 on PAB
△ 13369981	B5P-VH 7A/250V	CN2 on PAB
13369503	B7B-PH-K-S JST	CN10 on MB
13369504	B8B-PH-K-S JST	CN1 on PAB/CN301 on FJB
△ 13369890	B8P-VH 7A/250V	CN9 on PAB
13369516	B9B-PH-K-S JST	CN9 on MB/CN302 on FJB
13379151	FFC IL-FPC-14ST-N	CN4 on MB
13379152	FFC IL-FPC-16ST-N	CN3 on MB
12199584	GROUNDING TERMINAL M1698	TER3,4 on PAB
# 01347923	GROUNDING TERMINAL MEP1866-A	TER1,2 on PAB

WIRING,CABLE

00347201	FUJI CARD 14X180-A6.0BBR-P1.25-HBL10-S
00347234	FUJI CARD 16X180-A6.0BBR-P1.25-HBL10-S
# 01450101	WIRING W1
# 01450090	WIRING W2
# 01450089	WIRING W3
# 01450056	WIRING 6X1050-P2.0-51065-51065-F
# 01450078	WIRING 8X800-P2.0-PH-PH-F
# 01450067	WIRING 9X1050-P2.0-PH-PH-F-S

TRANSFORMER

# △ 01450212	POWER TRANSFORMER	UNIVERSAL
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AC INLET

△ 23425740	INL-8 10A/125V 2P PO	JK401 on IB
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SCREW

40011112	BINDING TAPTITE B 3×10 BZC
40012256	BINDING TAPTITE B 3×10 ZC
40011056	BINDING TAPTITE B 3×6 ZC
40011067	BINDING TAPTITE B 3×8 ZC
40011267	BINDING TAPTITE P 3×6 ZC
40012534	BINDING TAPTITE S 3×6 BZC
22285342	CONNECTING PIN
22150756	JACK NUT 2
40011490	PAN MACHINE SCREW W/SW M3×6 BZC
40012890	PAN MACHINE SCREW W/SW+PW M3×16 ZC
40012901	PAN MACHINE SCREW W/SW+PW M3×20 ZC
40012867	PAN MACHINE SCREW W/SW+PW M3×8 ZC
40231090	PAN TAPPING A 6×12 ZC
40011312	PAN TAPTITE P3×8 BZC
40011956	PLAIN WASHER 3×10×0.8 ZC

00239367	SHOULDER SCREW 1165
40011712	WOOD ANCHOR NUT B M4×11.5 ZC
40011723	WOOD ANCHOR NUT B M5×12 ZC
40012634	WOOD ANCHOR NUT B M8×13.5 ZC
40011123	BINDING TAPTITE B 4×8 BZC
40012178	TPA BIND 3×12 BZC
40012145	TPA TRUSS 4×14 BZC
40012490	PAN TAPTITE P 4×10 BZC
40011323	PAN TAPTITE P 3×10 BZC
40232845	PAN MACHINE SCREW W/SW+PW 4×16 ZC
40128512	BINDING TAPTITE B WH 4×25×20 BZC W=11
40012034	TRUSS MACHINE SCREW 4×18 BZC
40011101	BINDING TAPTITE B 3×8 BZC

PACKING CASE

# 01344601	PACKING CASE	117/230/240V ONLY
# 01344590	PACKING CASE (FOR JAPAN)	100V ONLY
00908112	PAD L	
00908123	PAD R	
22675517	PACKING SHEET	

MISCELLANEOUS

△ 40013712	FUSE SEAL T1.6AL250V #407
△ 40017089	CAUTION SEAL CSA
△ 40124690	CAUTION SEAL FUSE

ACCESSORIES

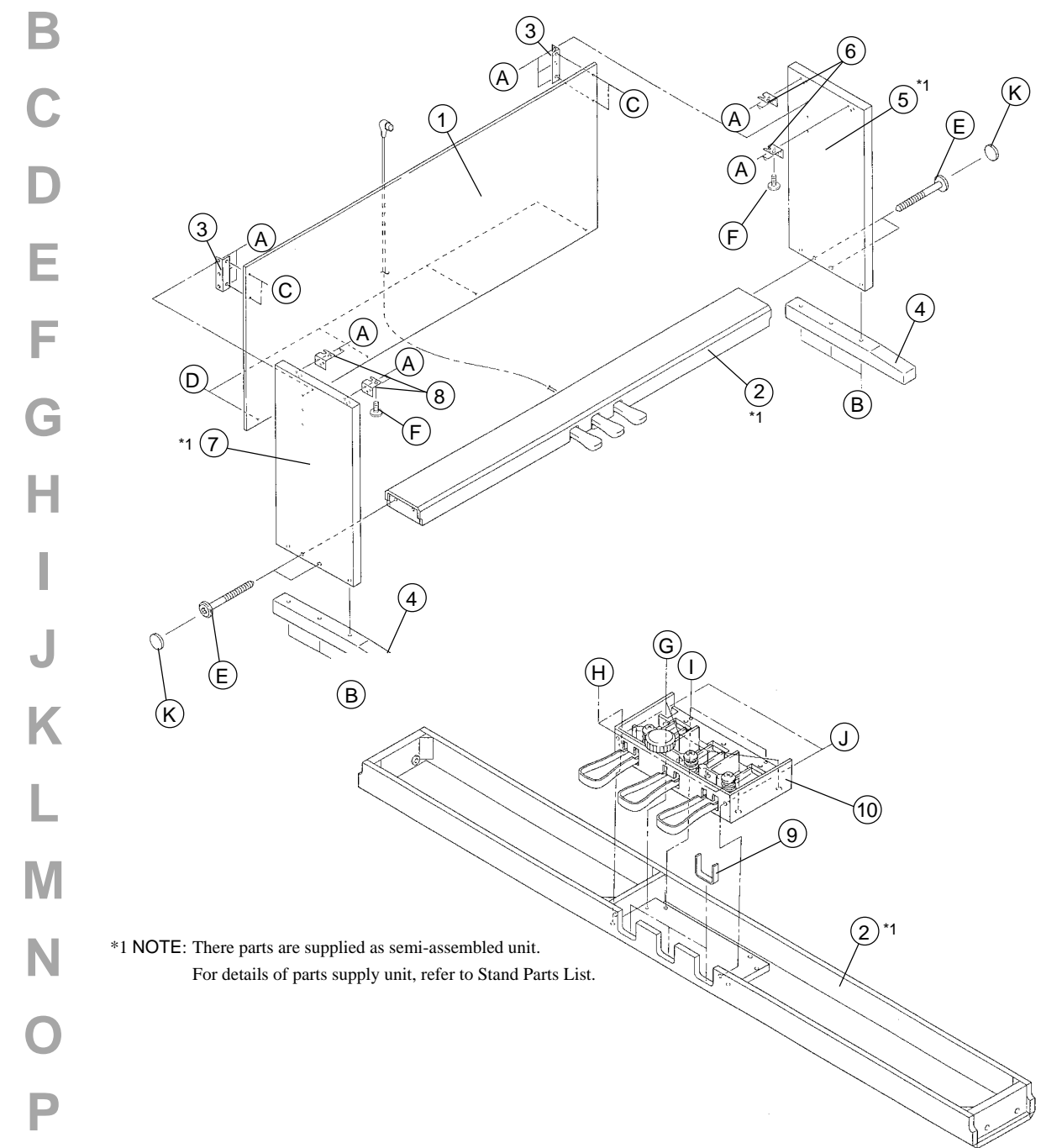
# 71015401	OWNER'S MANUAL ENGLISH	
# 71011790	OWNER'S MANUAL JAPANESE	
△ 13499219	AC CORD SET 100V DC-382-J01 VFF2P	
△ 13499220	AC CORD SET 120V UC-713-J01 SJT2P18AWG60	
△ 13499221	AC CORD SET 230V EC-511-E07 H03VVH2-F 2P	
△ 13499222	AC CORD SET 240V A SC-078-J02 ES206-75HMA	
△ 00905234	EURO CONVERTER PLUG ECP01-5A	
40239434	PIANIST TEMPLATE JAPANESE	100V version only

STAND PARTS LIST (KS-305)

01348789	REAR BOARD	
71016990	SIDE BOARD ASSY R	
	NOTE : SIDE BOARD ASSY R includes the following parts.	
	*****	SIDE BOARD R
	22125675	ANGLE
	01348812	TOE BLOCK
	22205518	JOINT HOLDER R
71017001	SIDE BOARD ASSY L	
	NOTE : SIDE BOARD ASSY L includes the following parts.	
	*****	SIDE BOARD L
	22125675	ANGLE
	01348812	TOE BLOCK
	22205517	JOINT HOLDER L
71128167	PEDAL BOARD ASSY	
	NOTE : PEDAL BOARD ASSY includes the following parts.	
	22245308	PEDAL BOARD FELT
	40011712	WOOD ANCHOR NUT M4*11.5 ZC
	40235989	WOOD ANCHOR NUT M6*15.5 ZC
71019823	PEDAL UNIT	
	NOTE : PEDAL UNIT includes the following parts.	
	71018601	CONNECT CODE
	NOTE : CONNECT CODE includes the following parts.	
	15229728	PHOTO INTERRUPTER
	15119112	2SA1015Y TRANSISTOR
	13299199	EVND8AA03B13 TRIMMER
	00907045	PEDAL CABLE
	00904190	PEDAL CHASSIS
	00908023	FELT L
	00904223	COILED SPRING
	00908034	6x35mm JOINT BOLT
	00677978	6x12mm JOINT NUT
	22285396	ADJUST BOLT
	40011278	3x8mm BINDING HEAD P-TITE FeBC
	40011334	3x12mm BINDING HEAD P-TIGHT Fe BZC
	71018623	PEDAL CENTER ASSY
	NOTE : PEDAL CENTER ASSY includes the following parts.	
	*****	PEDAL CENTER
	01451667	FELT
70677445	SCREW SET	
	NOTE : SCREW SET includes the following parts.	
	40127701	4x16mm PAN WASHER HEAD C-TITE Fe BZC(x4)
	40010689	4x25mm TRUSS HEAD TAPPING A1 Fe BZC(x4)
	40233856	6x70mm JBA-0109M JOINT BOLT Fe ZC (x4)
	40010589	5x20mm TRASS HEAD FeBZC (x2)
	40233867	JOINT BOLT CAP BLACK (x4)
40010678	4x20mm TRUSS HEAD TAPPING A1 Fe BZC	
40010701	4x35mm TRUSS HEAD TAPPING A1 Fe BZC	
40012123	4x25mm TRUSS HEAD TAPPING A1 Fe ZC	
40012923	4x25mm DOUBLE SEMS Fe ZC	
40011323	3x10mm BINDING HEAD P-TITE Fe BZC	
40011556	3.1x10mm ROUND WOOD ZC	
40238701	LEAFLET	
01348934	KS-305 PACKING CASE	for 117V, 230V, 240V Version
01348790	KS-305D PACKING CASE	for 100V Version
	NOTE : The following parts are accessories for KS-305D (100V version).	
00898189	HEAD PHONE RH-30	
01127245	STOOL TYPE D	

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18

A KS-305 STAND EXPLODED VIEW (KS-305)



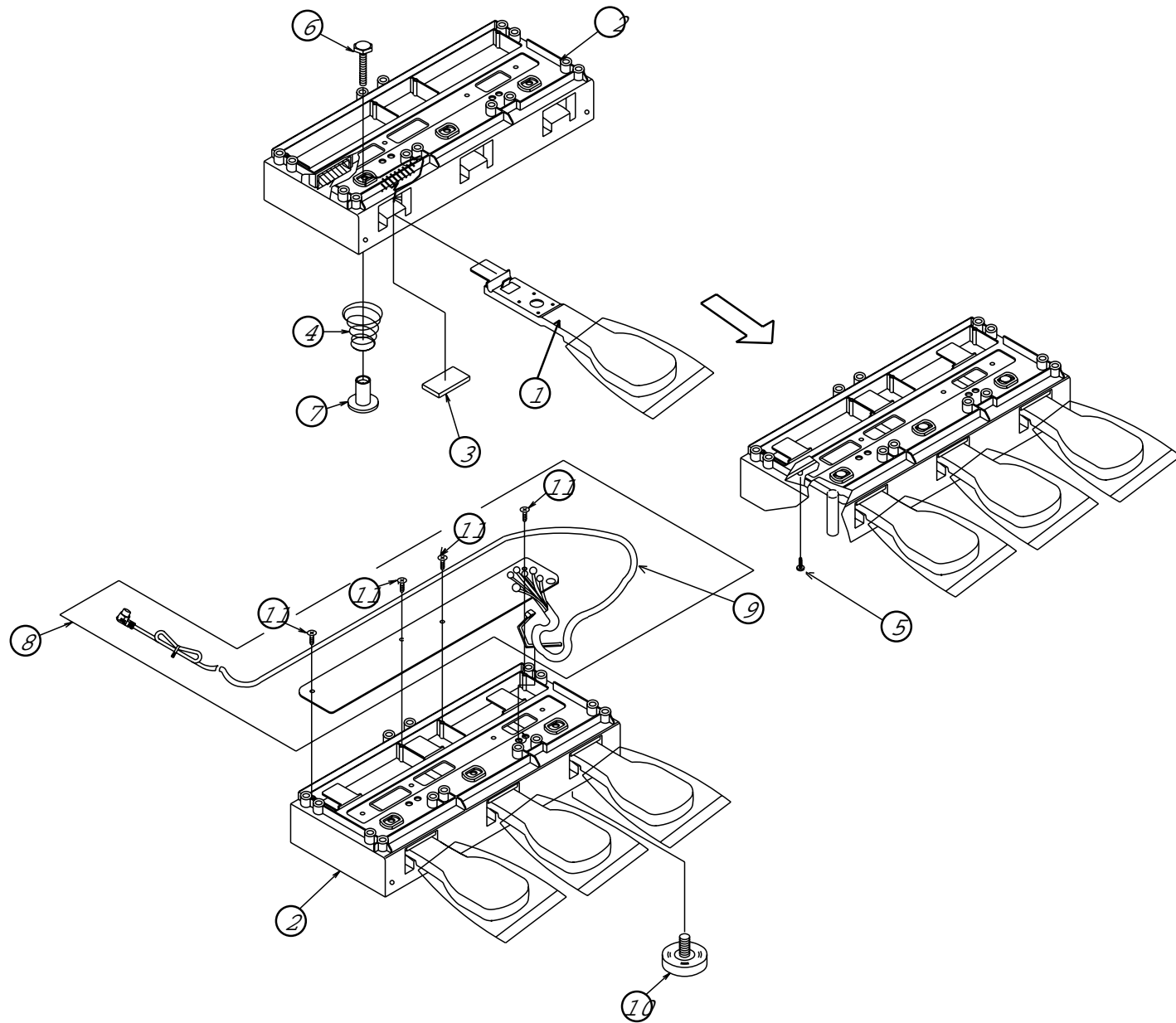
*1 NOTE: There parts are supplied as semi-assembled unit.
For details of parts supply unit, refer to Stand Parts List.

Q STAND EXPLODED VIEW PARTS LIST

No.	Part No.	Description	No.	Part No.	Description
①	01348789	REAR BOARD	Ⓐ	40010678	4x20mm Truss Head Tapping A1 Fe BZC
②	71128167	PEDAL BOARD ASSY	Ⓑ	40010701	4x35mm Truss Head Tapping A1 Fe BZC
③	22125675	ANGLE	Ⓒ	40127701	4x16mm Pan Washer Head C-tight Fe BZC
④	01348812	TOE BLOCK	Ⓓ	40010689	4x25mm Truss Head Tapping A1 Fe BZC
⑤	71016990	SIDE BOARD ASSY R	Ⓔ	40233856	6x70mm JBA-0109M Joint Bolt Fe ZC
⑥	22205518	JOINT HOLDER R	Ⓕ	40010589	5x20mm Truss Head Tapping A1 Fe BZC
⑦	71017001	SIDE BOARD ASSY L	Ⓖ	40012123	4x25mm Truss Head Tapping A1 Fe BZC
⑧	22205517	JOINT HOLDER L	Ⓗ	40012923	4x25mm Truss Head Tapping A1 Fe BZC
⑨	22245308	PEDAL BOARD FELT	Ⓘ	40011323	3x10mm Binding Head P-tight Fe BZC
⑩	71019823	PEDAL UNIT	Ⓣ	40011556	3.1 x 10mm Round Wood ZC
			Ⓚ	40233867	Joint Bolt Cap Black

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39

A PEDAL UNIT EXPLODED VIEW



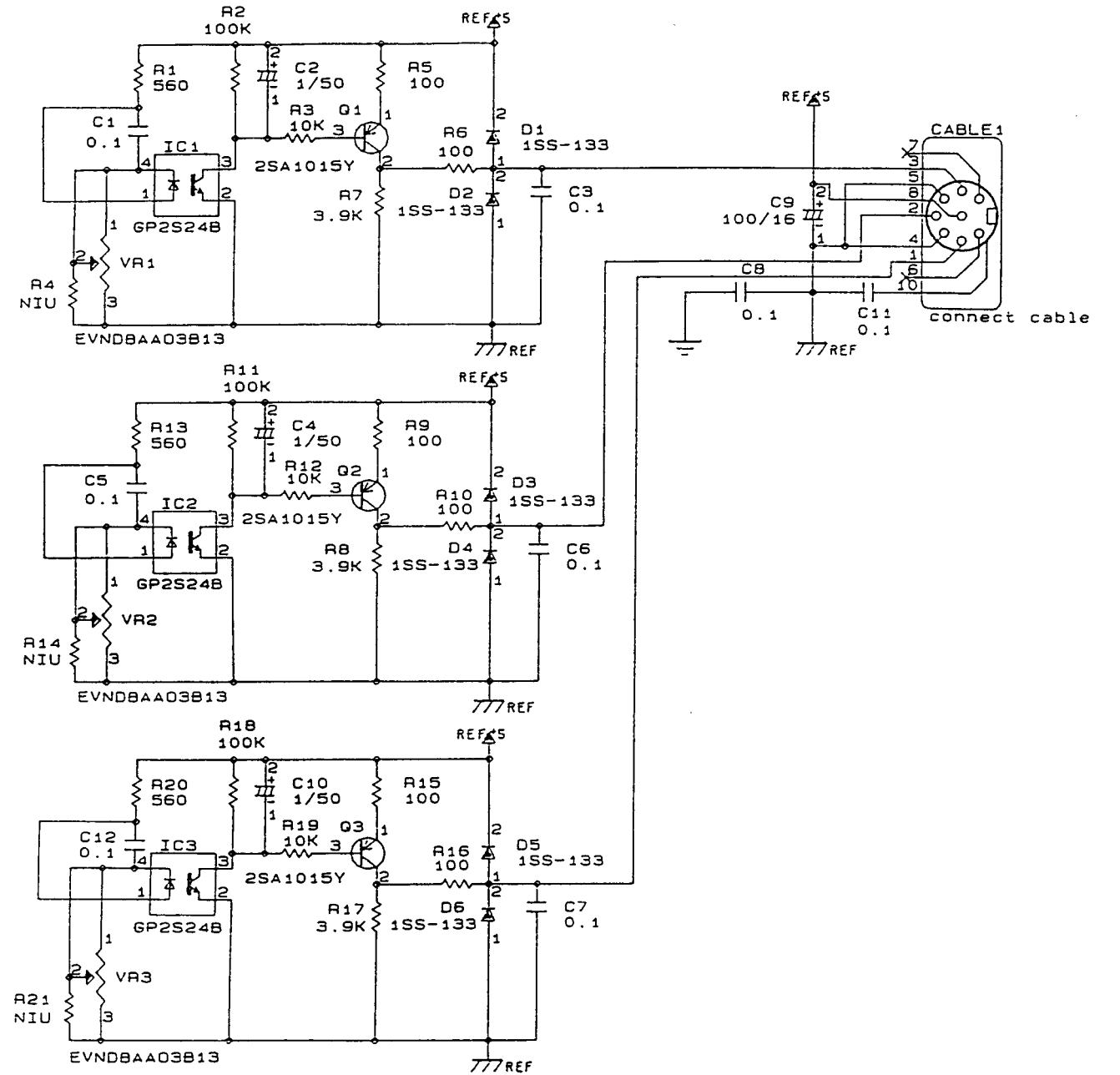
PARTS LIST

No.	Parts No.	Description
①	71018623	PEDAL CENTER ASSY
②	00904190	PEDAL CHASSIS
③	00908023	FELT L
④	00904223	COILED SPRING
⑤	40011334	3×12mm Binding Head P-TITE Fe BZC
⑥	00908034	6×35mm JOINT BOLT
⑦	00677978	6×12mm JOINT NUT
⑧	71018601	CONNECT CORD
⑨	00907045	PEDAL CABLE
⑩	22285396	ADJUST BOLT
⑪	40011278	3×8mm Binding Head P-TITE Fe ZC

CONNECT BOARD PARTS LIST

15229728	GP2S24B	PHOTO INTERRUPTER
15119112	2SA1015Y	TRANSISTOR
13299199	EVND8AA03B13	TRIMMER

CONNECT BOARD CIRCUIT DIAGRAM



STAND ASSEMBLY (KS-305)

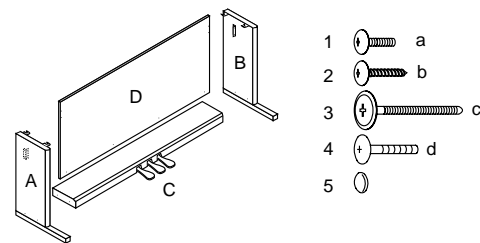
Make sure that another person is on hand to help with the assembly and setup.

To move the piano, lift it carefully—all the while keeping it level. Be very careful, when you assemble and move the piano, to make sure that you do not drop it on your hands or feet.

●Part Check

Before you begin assembling the stand, check that all the parts were supplied. You will also need to have a Phillips screwdriver.

- A : Side Board (left) 1 : Screw a (4 × 16 mm) × 4
- B : Side Board (right) 2 : Screw b (4 × 25 mm) × 4
- C : Pedal Board 3 : Screw c (M6 × 70 mm) × 4
- D : Rear Board 4 : Screw d (M5 × 20 mm) × 2
- 5 : Cap × 4

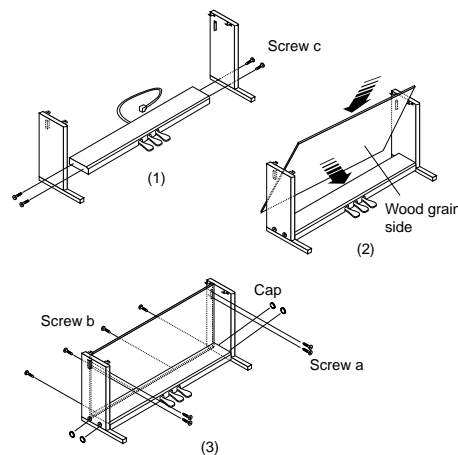


●Assembly Procedure

- * Fasten each screw tightly, then place the stand in a stable and horizontal place.
- * Do not allow the pedal cord or power cable to get twisted or pinched while assembling the stand.

1. Stand Assembly

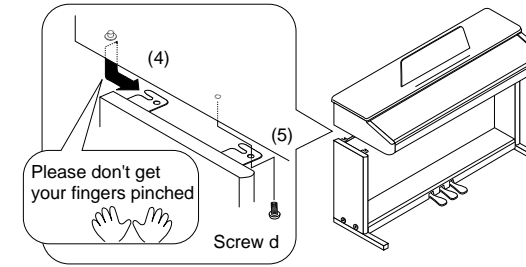
- (1) Attach the side boards for the right and left sides to the pedal board (so that the metal parts face inside) using screws “c” (M6 × 70 mm).
- (2) Place the rear board as shown below, with the wood grain side facing inside.
- (3) Attach the rear board to the metal parts on the side boards from the front using screws “a” (4 × 16 mm). For clamping the rear board, press each upper portion of both side boards. Then, fasten it to the pedal board from the back using screws “b” (4 × 25 mm) and attach the caps on screw “c.”



- * At first, assemble the entire stand in a temporary fashion, without really tightening the screws. Then, after checking the overall alignment of the boards (and gently shifting certain parts where necessary), go around and tightly fasten each of the screws.

2. Installing the Piano on the Stand

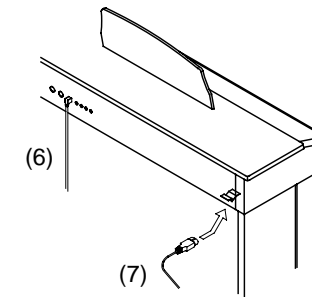
- (4) Align the protruding screws (one each at right and left) on the bottom of the piano with the openings in the metal fittings on the side board, then slide the piano forward until the screws are held in place.
- (5) Fasten the piano to the stand with the screw “d” (M5 X 20 mm) (one each for the right and left).



- * When handling the piano, firmly grasp it at the front and back. Be careful, so you do not get your fingers pinched.

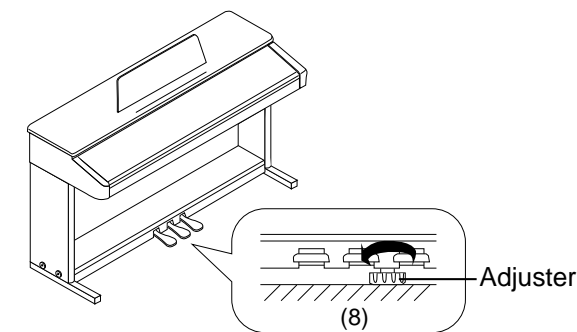
3. Connecting the Pedal and Power Cords

- (6) Connect the pedal cord to the Pedal jack on the rear of the piano.
- (7) Connect the power cord to the power inlet on the piano, then plug the other end into a wall socket.



4. Adjusting the Adjuster

- (8) Lower the adjuster at the bottom of the pedal board (by rotating it), so that the pedal board touches the floor. If you have the piano placed on a carpet, lower it until it pushes into the carpet.



When Moving the Piano

Disconnect the power cord and raise the stand's adjuster. Then lift the piano while keeping it level, and move it with care, so that you do not drop it on your feet, or get your hands caught.

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39

A KEYBOARD PARTS LIST

B

C

D

E

F

G

H

I

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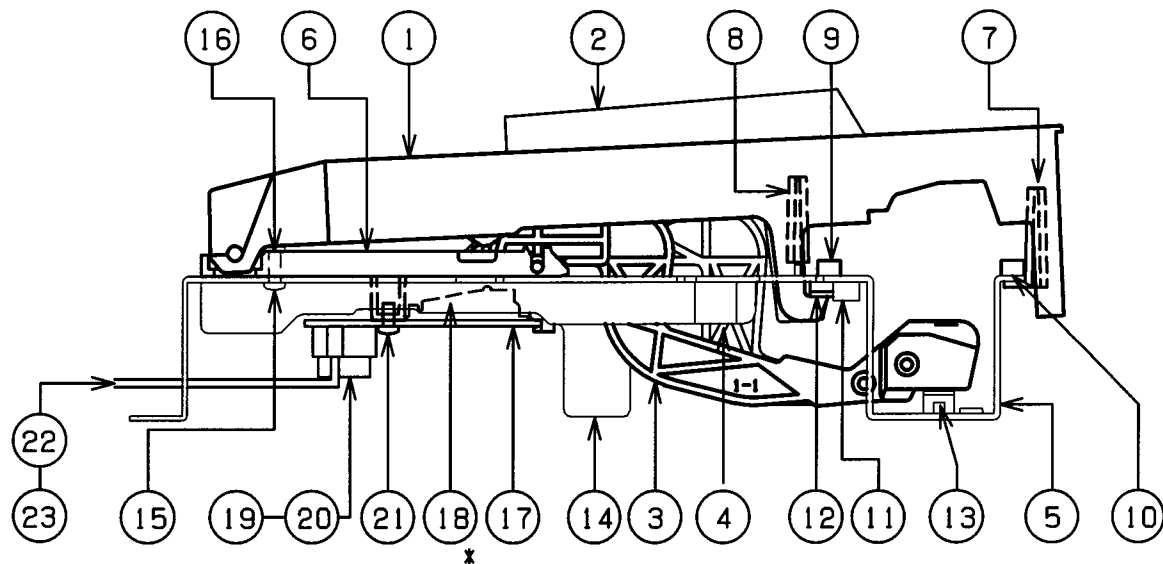
U

V

HP-335/535/245/555G-KR-575/575P
PA-4A88-C2 KEYBOARD ASSY PARTS LIST
71017401

No.	PARTS No.	PARTS NAME	Qty.	
1	00455501	PA-4A N-KEY A	7/ 1	
	00455512	PA-4A N-KEY B	8/ 1	
	00455534	PA-4A N-KEY C	7/ 1	
	00455545	PA-4A N-KEY D	7/ 1	
	00455556	PA-4A N-KEY E	7/ 1	
	00455578	PA-4A N-KEY F	7/ 1	
	00455589	PA-4A N-KEY G	7/ 1	
	00458689	PA-4A N-KEY A'	1/ 1	
	00458690	PA-4A N-KEY C'	1/ 1	
	2	32575291	PA-4 S-KEY	36/ 1
3	00458178	PA-4A N-KEY HAMMER	52/ 1	
4	00458189	PA-4A S-KEY HAMMER	36/ 1	
5	*****	PA-4A CHASSIS 88P-CK ASSY	1/ 1	
	00453401	PA-4A CHASSIS 88P	1/ 1	
	01019690	PA-4A SUB CHASSIS A	7/ 1	
	01019701	PA-4A SUB CHASSIS B	1/ 1	
	22155784	PA-4 GUIDE BUSHING A	52/ 1	
	8	00019912	PA-4 GUIDE BUSHING S-KEY	36/ 1
	9	22265498	PA-4 CUSHION A	2/ 1
	10	00452145	PA-4 CUSHION U ZUREN DBK-2	1/ 1
	12	00564867	PA-4A CUSHION I	1/ 1
	13	01237089	PA-4A CUSHION RZA	1/ 1
	14	00561890	PA-4A CHANNEL	8/ 1
	15	40011067	BINDING TAPTITE B 3X8 ZC	16/ 1
	16	40012256	BINDING TAPTITE B 3X10 ZC	30/ 1
	17	70894556	PA-4A PWB LOW ASSY	1/ 1
		70894567	PA-4A PWB MID ASSY	1/ 1
		70894578	PA-4A PWB HI ASSY	1/ 1
18	22185247	PA-4 RUBBER SWITCH 12P	8/ 1	
19	23475965	FUJI CARD 14X70-A5.0BB-P1.25-HBL8	1/ 1	
20	23475342	FUJI CARD 8X60-A5.0BB-P1.25-H8	1/ 1	
21	40011267	BINDING TAPTITE P 3X6 ZC	10/ 1	
22	00347201	FUJI CARD 14X180-A6.0BBR-P1.25-HBL10-S	1/ 1	
23	00347234	FUJI CARD 16X180-A6.0BBR-P1.25-HBL10-S	1/ 1	

Item 18 marked * is included in each unit of item 17.



KEYBOARD DISASSEMBLY

Removing PA-4A key

While holding the front end of the key, insert the tip of long-nose pliers into the U-groove on the shaft side (shaded area in Fig.1) and hold down the key in the direction of arrow A.

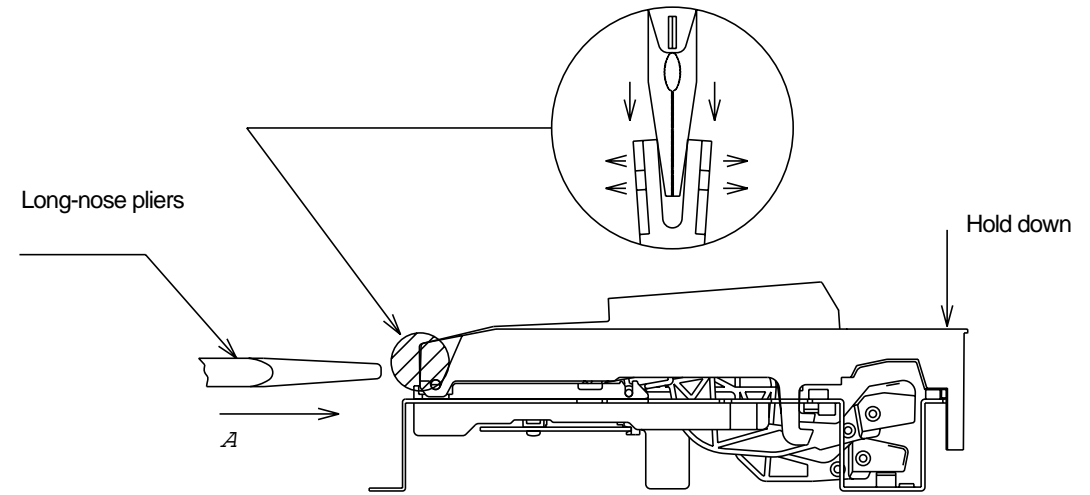


Fig.1

Installing the PA-4A key

While placing the front inner wall of the key against the guide, pass the foot through the hole of the chassis, as shown in Fig.2. Then press the dotted area of the key in the direction of arrow.

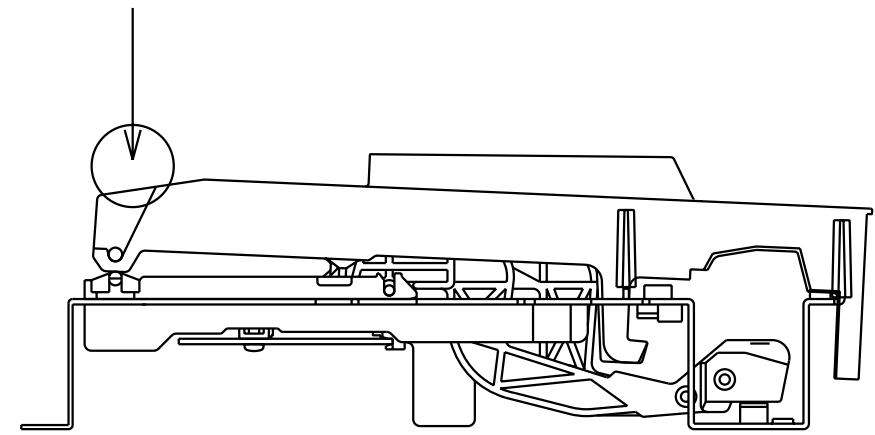


Fig.2

Installing the PA-4A board

As shown in Fig.3, place the board against the hook part a of the sub-shassis, and screw the board into the sub-shassis.

Screw in order, from the round hole(positioning hole) on the connector side.

Be sure to screw manually. (Care should be taken to avoid screw damage.)

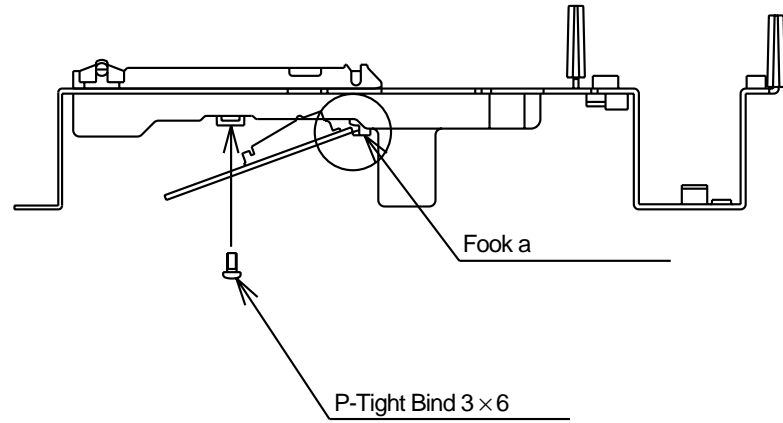


Fig.3

Greasing points

After the key or hammer has been replaced, the specified grease must be applied to the following 4 points as shown in Fig.4.

Fig.4

1. Froir GP-1RS....gray (PNo. 17049544)
 - (a) Key and hammer bearing section
 - (b) Key and hammer joint section (actuator section)
2. Froir G-336A....white (PNo. 17049543)
 - (a) Side of guide bushing for white key and black key

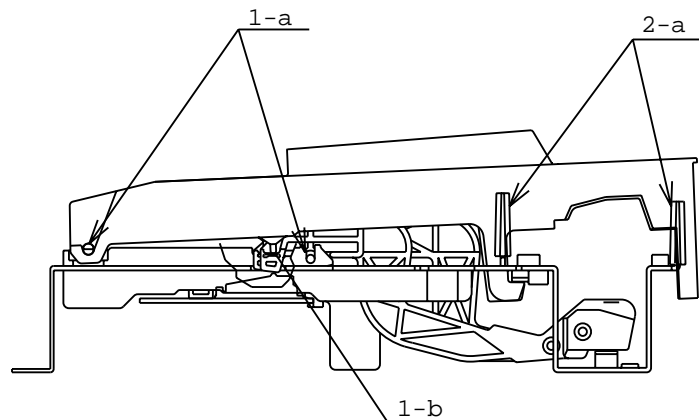
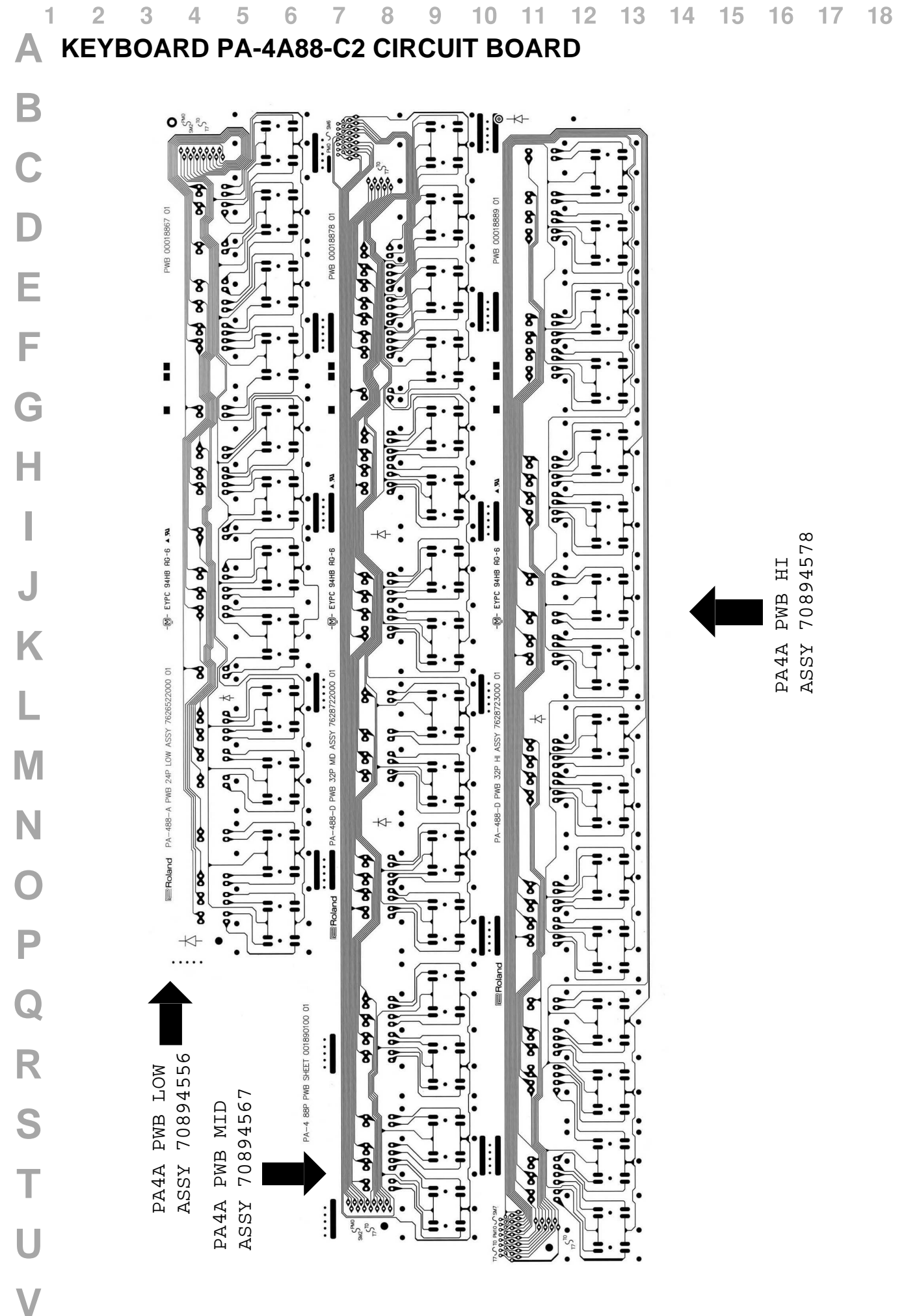


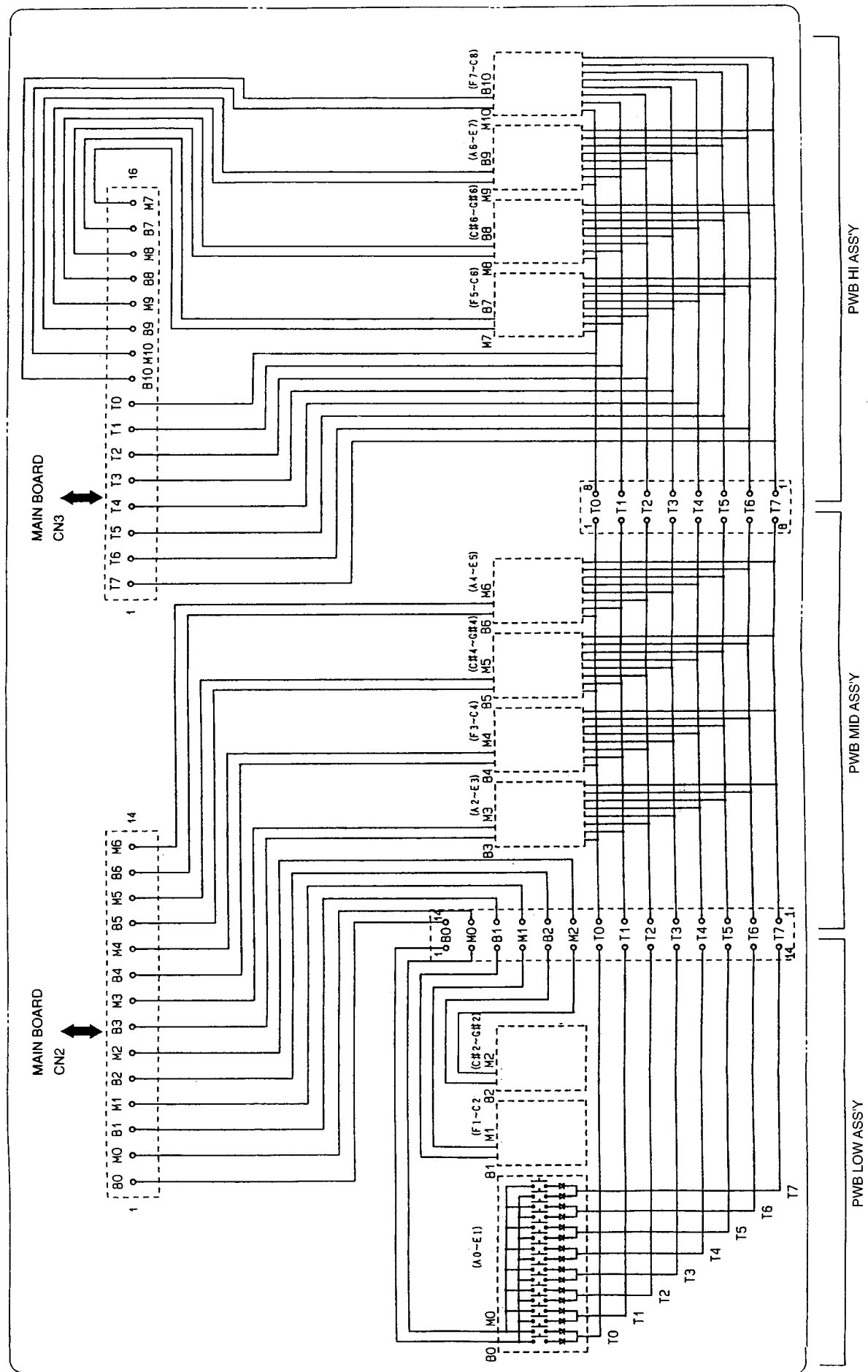
Fig.4



1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18

A KEYBOARD PA-4A88-C2 CIRCUIT DIAGRAM

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Q
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S
T
U
V



TEST MODE

Required items

- MIDI cable (1.5m or longer Part No.23485229 1.5m)
- Computer test cable for SOUND CANVAS SC-88 (Part No.17049906)
- Microphone
- Oscilloscope

1. To enter the test mode

Get into the FUNCTION MODE from pressing [Function] button after turning the power On. (Each LED may blink.)

Then press [Function] button while holding down the [Track 2] and [Play] buttons. 'JIG' is displayed and the piano shall automatically enter into the TEST MODE.

Press [Function] button to get into stage 2.

- * To exit the Test Mode, turn the power Off.
- * To proceed on the next mode, press [Function] button. However, there are some mode that will move to the next item automatically. Please refer to the explanations written to the each mode.

NOTE : When there is a malfunction during the TEST MODE, switch the power On again.

2. Display of DEVICE CHECK, ROM VERSION

*** DEVICE CHECK**

When enter into the TEST MODE, the DEVICE CHECK will be executed automatically. If there is no malfunction, ROM VERSION is displayed to the 7-SEG LED.

In the event of a malfunction, one of the following shall be displayed.

7-SEG LED	Failed DEVICE
E01	Program ROM
E02	Working DRAM
E03	Wave ROM
E04	DSP RAM

Press [Function] to go on the TEST MODE.

*** BUILD NUMBER**

This numbers are displayed for factory purpose only, please ignore when you execute test mode.

NOTE : Basically, this mode will be bypassed and jump to the MODEL NAME mode. However, with early productions, the BUILD number will be displayed to the 7-SEG LED.

Press [Function] to go on the TEST MODE.

* MODEL NAME

"335" shall be displayed to the 7-SEG LED.

Press [Function] to go on the TEST MODE.

3. Buttons and LEDs Check

All of the LEDs on the panel shall illuminate.

NOTE: When you press [Function] button at the start it will move to the next mode and this mode will be bypassed. When you execute the check of Buttons and LEDs, do not press [Function] button first.

* Press the following buttons. Confirm the sound output and the LED becomes non-illuminated.

[piano] [E.piano] [Harpsi] [Vibes] [Organ] [Strings] [Choir] [GS Tones] [Reverb] [Choru] [Pianist] [Split] [Transpose] [Track R] [Track 1] [Track 2] [Play] [Rec] [Function]

* Press the following button twice. Confirm the sound output and the LED alternately changes from "Orange" → "Green" → non-illuminated.

[Key Touch]

* Press the following button twice. Confirm the sound output and the LED at the left side of the 7-SEG LED alternately changes from "Orange" → "Green" → non-illuminated.

[Metronome]

* Press the following buttons. Confirm the sound output and related LEDs at the right side of the 7-SEG LED becomes non-illuminated.

[Song] [Beat] [Tempo]

* Press the following button. Confirm the sound output and left two figures of the 7-SEG LED become non-illuminated.

[Value +]

* Press the following button. Confirm the sound output and right one figure of the 7-SEG LED becomes non-illuminated.

[Value -]

When you finish this Buttons and LEDs check, it automatically moves to the next Test item.

In the other words, unless you perform all of the buttons and LEDs check, it cannot proceed on to the next mode.

4. Effect Sound, Speaker and Panning Check

(When you want to proceed on to the next stage during this test, press [Function] button.)

When you get into this mode, 7-SEG LED displays "Pan".

Press following buttons and confirm the Effect sound and other settings.

BUTTON	PANNING	TONE	EFFECTS
[piano]	Center	Piano	Non
[E.piano]	Center	Piano	Chorus
[Harpsi]	Center	Piano	Reverb
[Vibes]	Center	Piano	Resonance
[Organ]	Left	440Hz Sine Wave	Non
[Strings]	Right	440Hz Square Wave	Non
[Choir]	Center	440Hz Sine Wave	Non

Press [Function] to go on the TEST MODE.

5. Pedal Check

(When you want to proceed on to the next stage during this test, press [Function] button.)

When you get into this mode, 7-SEG LED displays .

Depress each [Soft], [Sostenuto] and [Damper] pedals one by one slowly. The output sound (Tone) should be changed related to the depressed depth of the pedal and also the value should appear on the 7-SEG LED. The value may change from 0 to 9 and at the full depressed position, a Metronome sound could be heard.

The correspondence between the display and the Pedals are as follows.

7-SEG LED display	Checked Pedal
3rd figure of the 7-SEG LED	: Soft Pedal
2nd figure of the 7-SEG LED	: Sostenuto Pedal
1st figure of the 7-SEG LED	: Damper Pedal

When you finish checking and there is no malfunction with all of the three Pedals, it automatically moves to the next Test mode.

6. Serial Interface Check

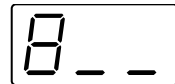
When press [Function] during this Serial Interface Check, it will jump back to the beginning of the Test Mode (2. Device Check).

When you get into this mode, 7-SEG LED displays .

*** MIDI CHECK**

Set the Computer Switch on the underside of the keyboard to "MIDI". The LED on the left side of the 7-SEG LED will be illuminated.

Connect MIDI In on the underside of the keyboard and MIDI Out on the rear panel. If there is no malfunction, the following is displayed on the 7-SEG LED.



Connect MIDI In and MIDI Out on the rear panel. If there is no malfunction, the following is displayed on the 7-SEG LED.



*** COMPUTER I/F CHECK**

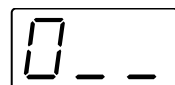
To perform this test, a "Computer Test Cable for SOUND CANVAS SC-88" (#17049906) is required. Please order this cable from the local Roland Service Center if necessary.

1)Set the Computer Switch on the underside of the keyboard to "Mac".

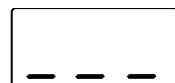
The LED on the right side of the 7-SEG LED will be illuminated.

Connect the Computer Test Cable to the Computer Jack on the underside of the keyboard. Connect the oscilloscope to a white terminal (Signal line) of Computer Test Cable and the GND to a black terminal (GND line). Check if the 1MHz square wave appears or not.

Turn the Computer Test Cable SW to On. If there is no malfunction, the following is displayed on the 7-SEG LED.



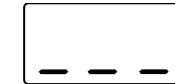
Turn the Computer Test Cable SW to Off. If there is no malfunction, the following is displayed on the 7-SEG LED.



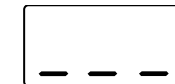
2)Set the Computer Switch on the underside of the keyboard to "PC1".

The Beat LED on the right side of the 7-SEG LED will be illuminated.

Connect the Computer Test Cable to the Computer Jack on the underside of the keyboard and turn the Computer Test Cable SW to On. If there is no malfunction, the following is displayed on the 7-SEG LED.



Turn the Computer Test Cable SW to Off. If there is no malfunction, the following is displayed on the 7-SEG LED.



3)Set the Computer Switch on the underside of the keyboard to "PC2".

The Song LED on the right side of the 7-SEG LED will be illuminated.

Connect the Computer Test Cable to the Computer Jack on the underside of the keyboard and turn the Computer Test Cable SW to On. If there is no malfunction, the following is displayed on the 7-SEG LED.



Turn the Computer Test Cable SW to Off. If there is no malfunction, the following is displayed on the 7-SEG LED.



It will jump to the beginning of the Test Mode (2. Device Check) by pressing [Function] button.

7. To exit the Test Mode

To exit the Test Mode, turn the power Off.

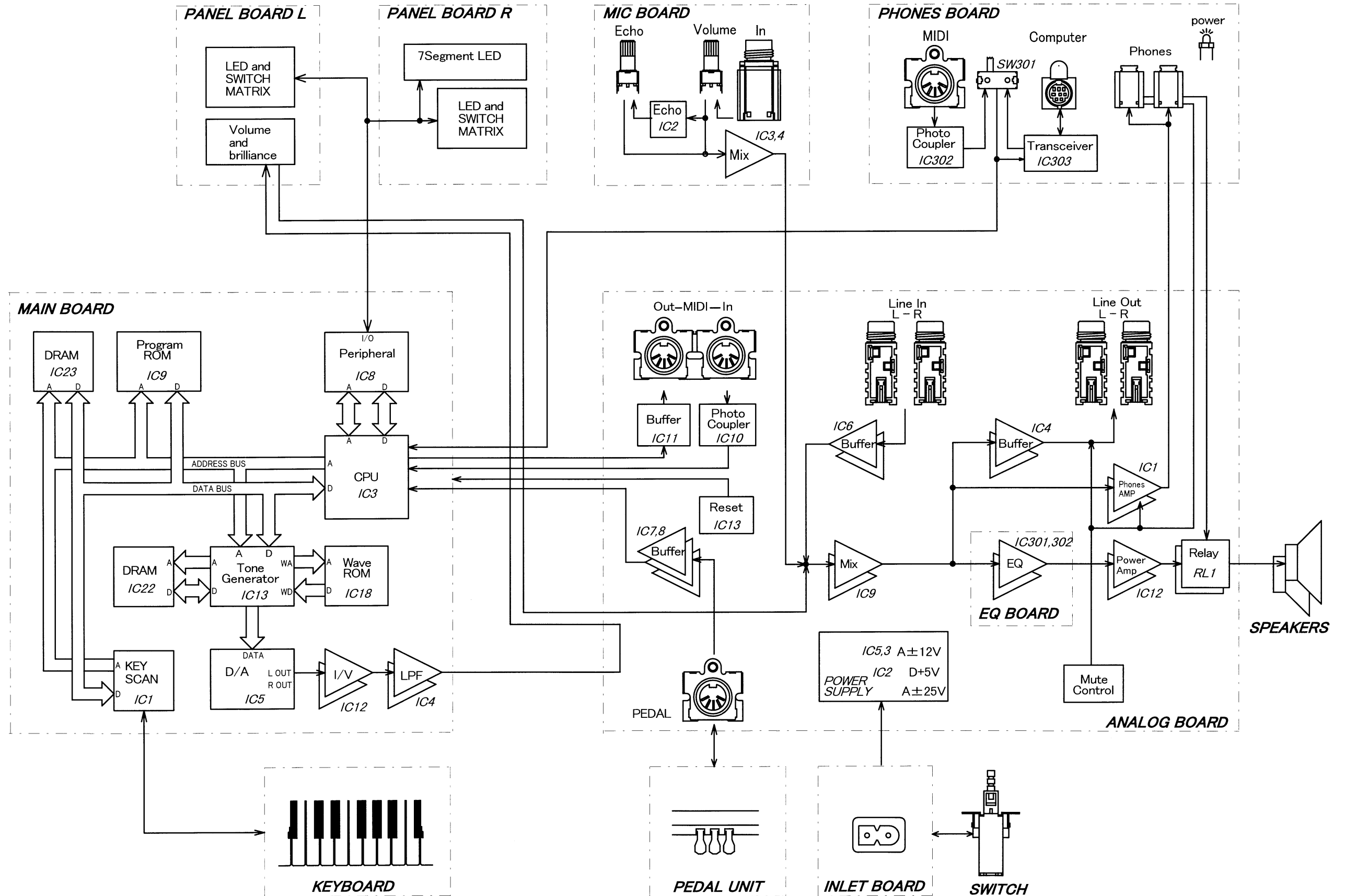
8. Microphone Check

After executing the Test Mode, turn the power On again and connect a Microphone to the Mic In Jack on the underside of the keyboard. Confirm if it functions correctly or not by turning the Echo Knob and Volume Knob near the Mic In Jack.

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39

A BLOCK DIAGRAM

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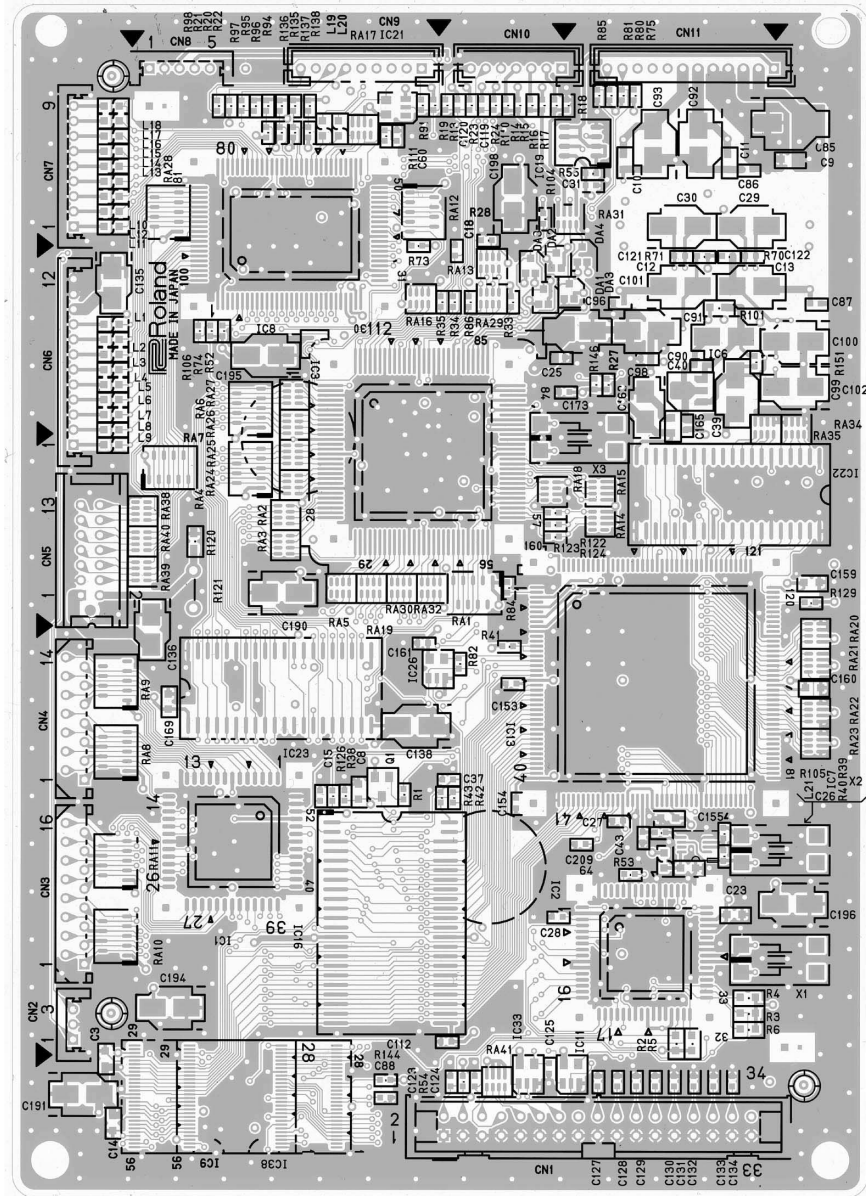


1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40

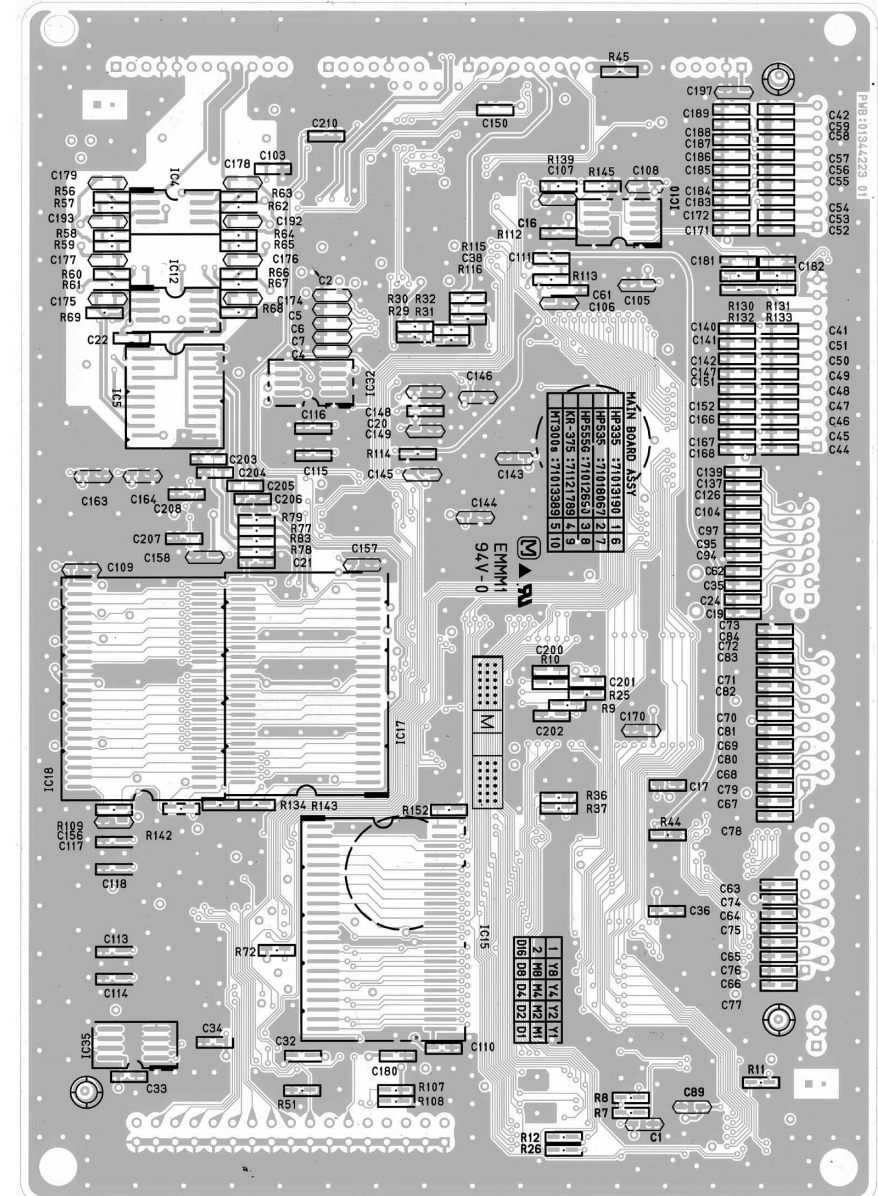
A CIRCUIT BOARD (MAIN)

71013190 MAIN BOARD ASSY

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View from components side.



View from foil side.

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40

A CIRCUIT BOARD (PANEL L)

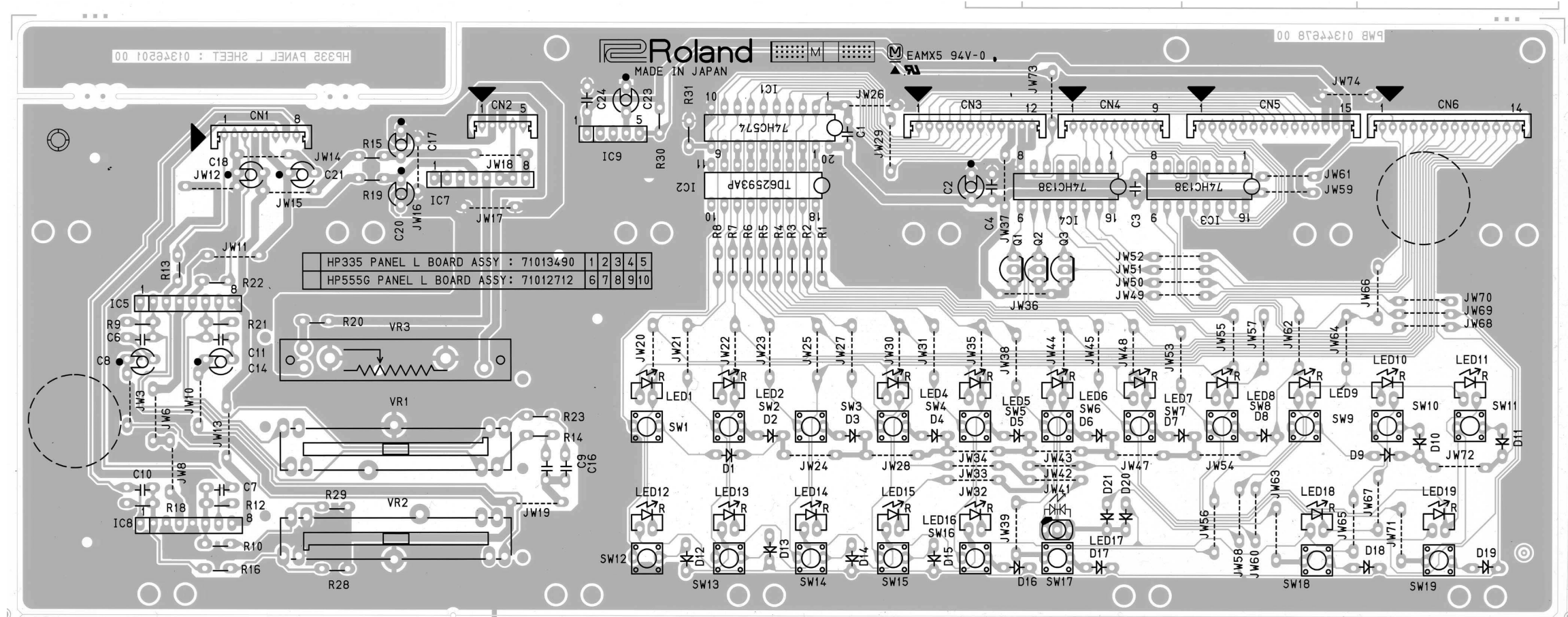
71013490 PANEL L BOARD ASSY

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NOTE

PANEL L BOARD ASSY includes the following parts.

01450023	WIRING 9X350-P2.0-51065-51015-F	on PLB
01450034	WIRING 12X400-P2.0-51065-51015-F	on PLB
01450045	WIRING 8X400-P2.0-51065-51015-F	on PLB

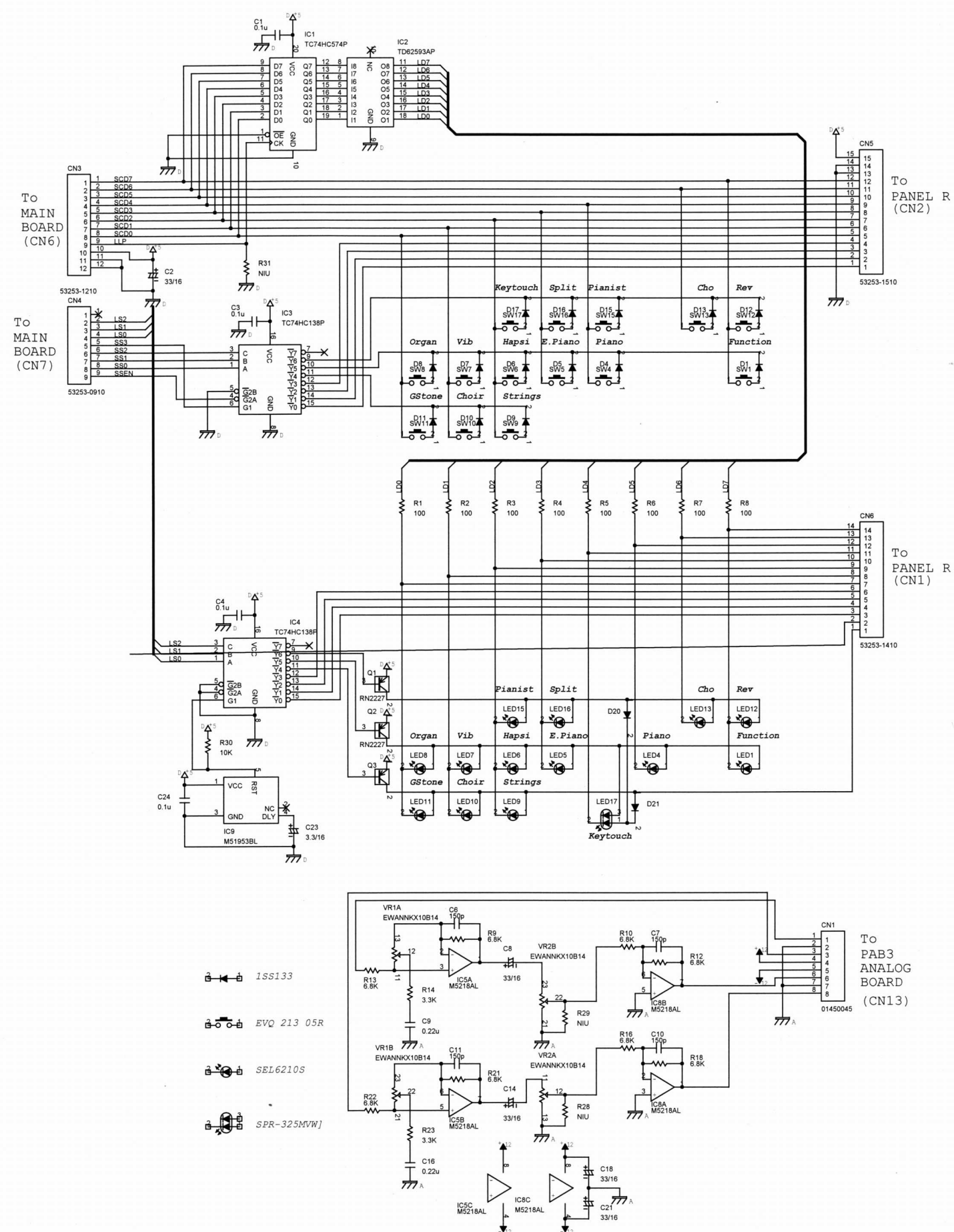


View from components side.

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40

A CIRCUIT DIAGRAM (PANEL L)

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- 1SS133
- EVQ 213 05R
- SEL6210S
- SPR-325MVW

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40

A CIRCUIT BOARD (PANEL R)

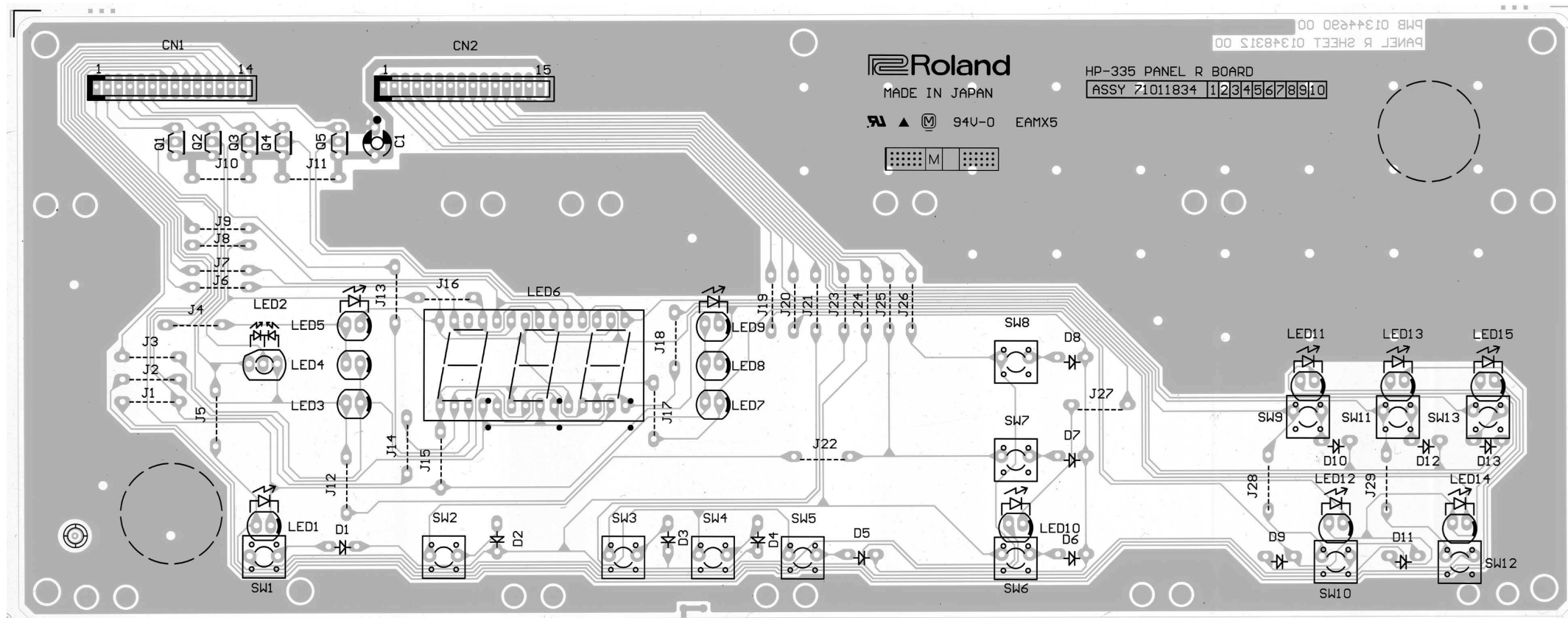
71011834 PANEL R BOARD ASSY

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NOTE

PANEL R BOARD ASSY includes the following parts.

12169390	LED SPACER LH-36-4	on PRB
01450001	WIRING 14X120-P2.0-51065-51015-F	on PRB
01450012	WIRING 15X180-P2.0-51065-51015-F	on PRB

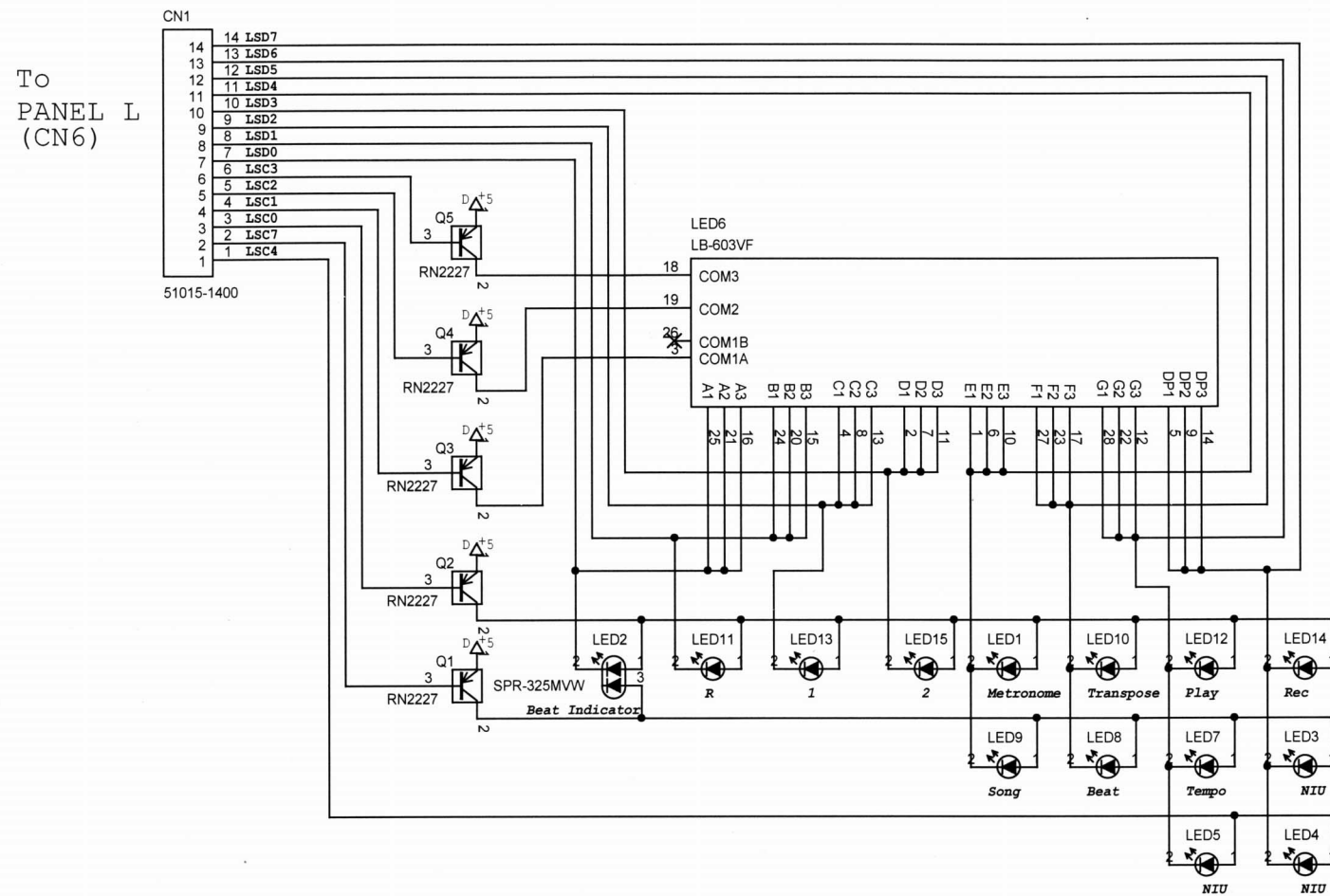


View from components side.

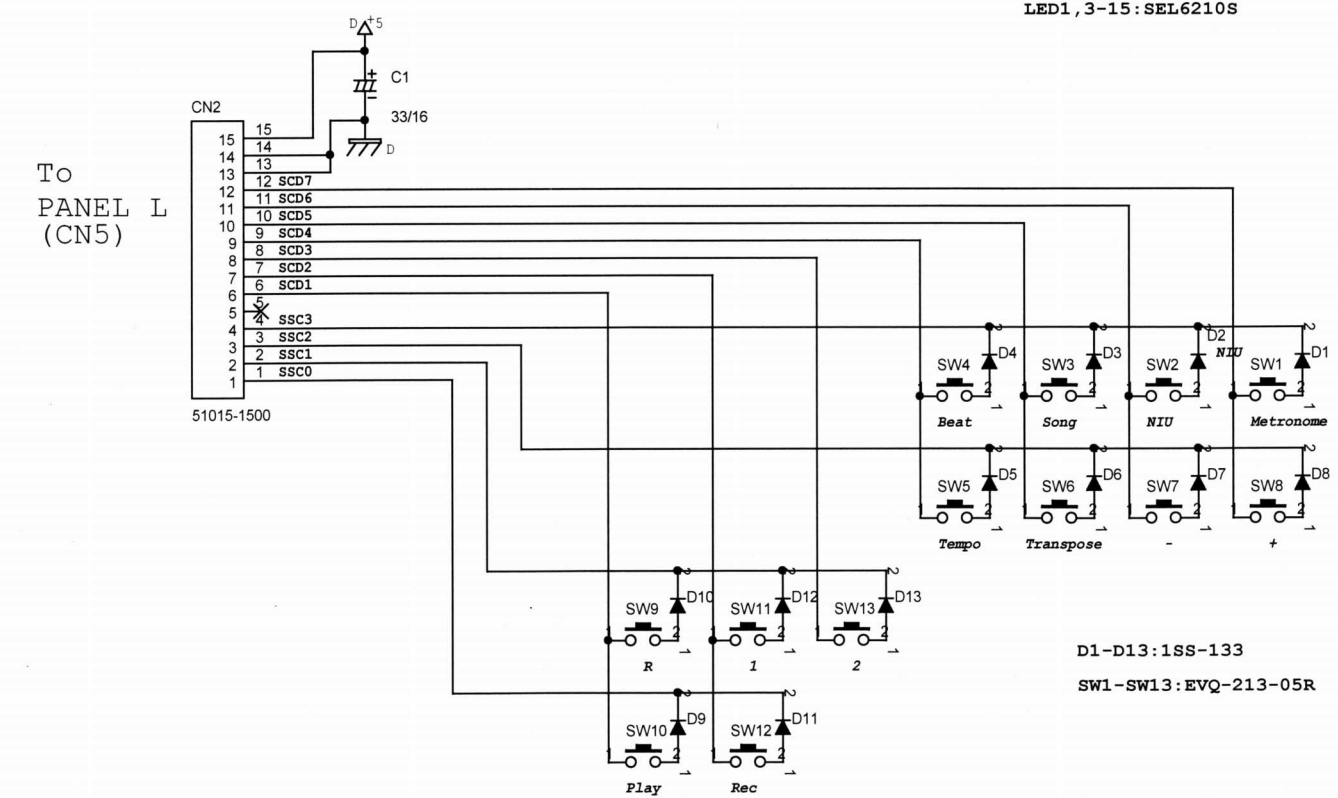
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40

A CIRCUIT DIAGRAM (PANEL R)

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LED1, 3-15: SEL6210S



D1-D13: 1SS-133
SW1-SW13: EVQ-213-05R

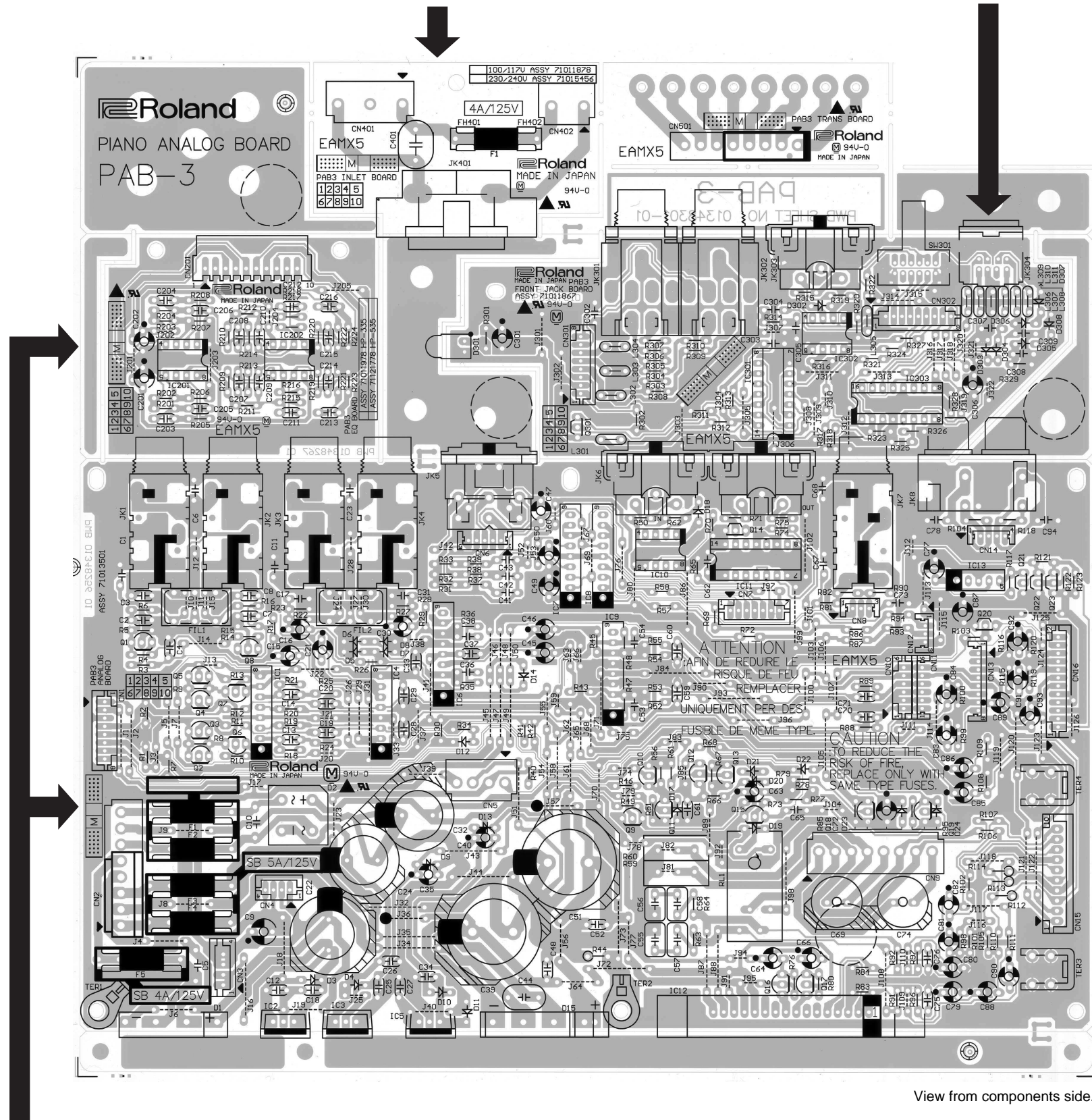
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40

A CIRCUIT BOARD (FRONT JACK, ANALOG ,INLET)

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71011878 PAB3 INLET 100/117V

71011867 FRONT JACK BOARD



View from components side.

71011856 PAB3 ANALOG PHANTOM

NOTE

PAB3 ANALOG PHANTOM includes the following PWBs.

- ***** PAB3 EQ BOARD
- ***** PAB3 ANALOG BOARD
- NOTE:PAB3 ANALOG BOARD includes the following parts.
- 22195975 TR HOLDER
- 22195973 POWER AMP HOLDER
- 01349990 WIRING W4
- 01349978 7x250-P2.0-PH-SAN-F
- 01349912 12x130-P2.0-PH-SAN-F
- 01346423 HEATSINK
- 01346412 PAB HOLDER

NOTE

PAB3 FRONT JACK BOARD includes the following parts.

- 01344545 JACK HOLDER

NOTE

PAB3 INLET 100/117V includes the following parts.

- 23425740 AC INLET INL-8 10A/125V 2P PO
- 12559444 FUSE 5x20 SB 4 4A/125V
- 00129367 INLET HOLDER

Replacment INLET BOARD ""PAB3 INLET ASSY"" is for 100/117V version exclusive use.

When using ""PAB3 INLET ASSY"" for 230/240V version, be sure to make the following modifications.

1. INLET BOARD FOR 100/117V version differs from 230V version in FUSE system. Replace fuse(F1 on INLET BOARD) to specific one.(#12559550 FUSE 5x20 S506 1.6A T1.6AL250V for 230V version)See TABLE A.
2. For safety standards, place fuse seal (#40013712 FUSE SEAL T1.6AL250V #407) at the proper place of the INLET BOARD.

The location of fuse seal is over the following printing (see fig A) of the PWB. When necessary, please order fuse seal separately from INLET BOARD.

TABLE A

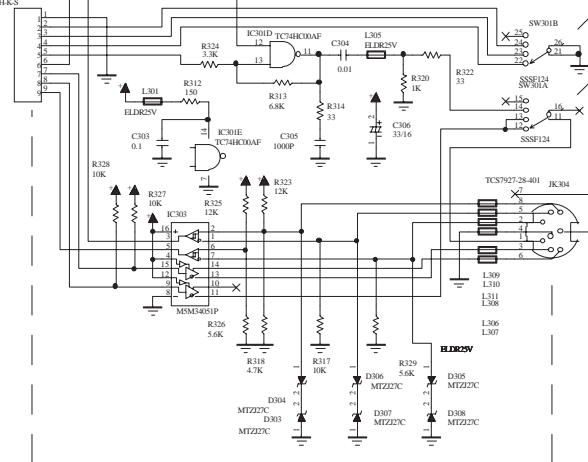
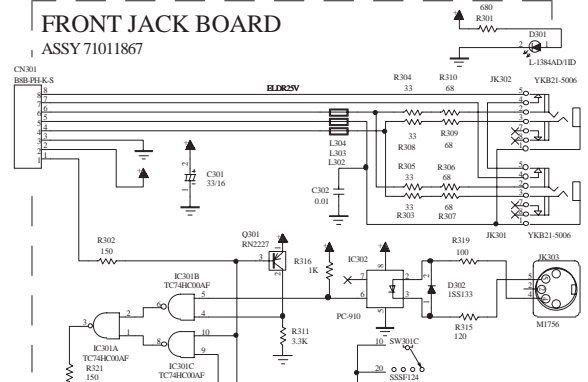
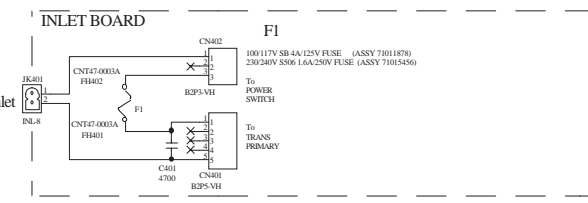
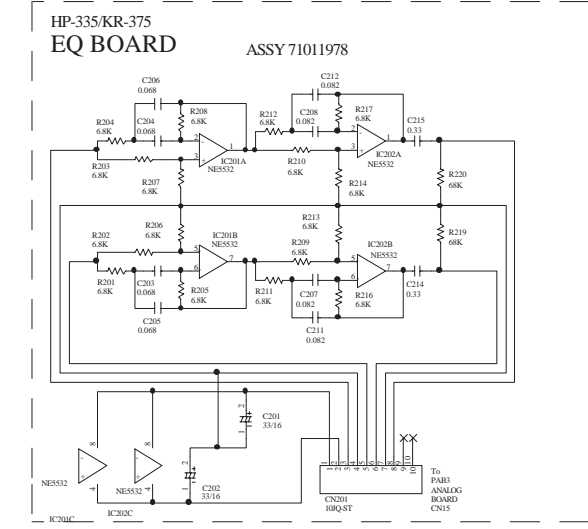
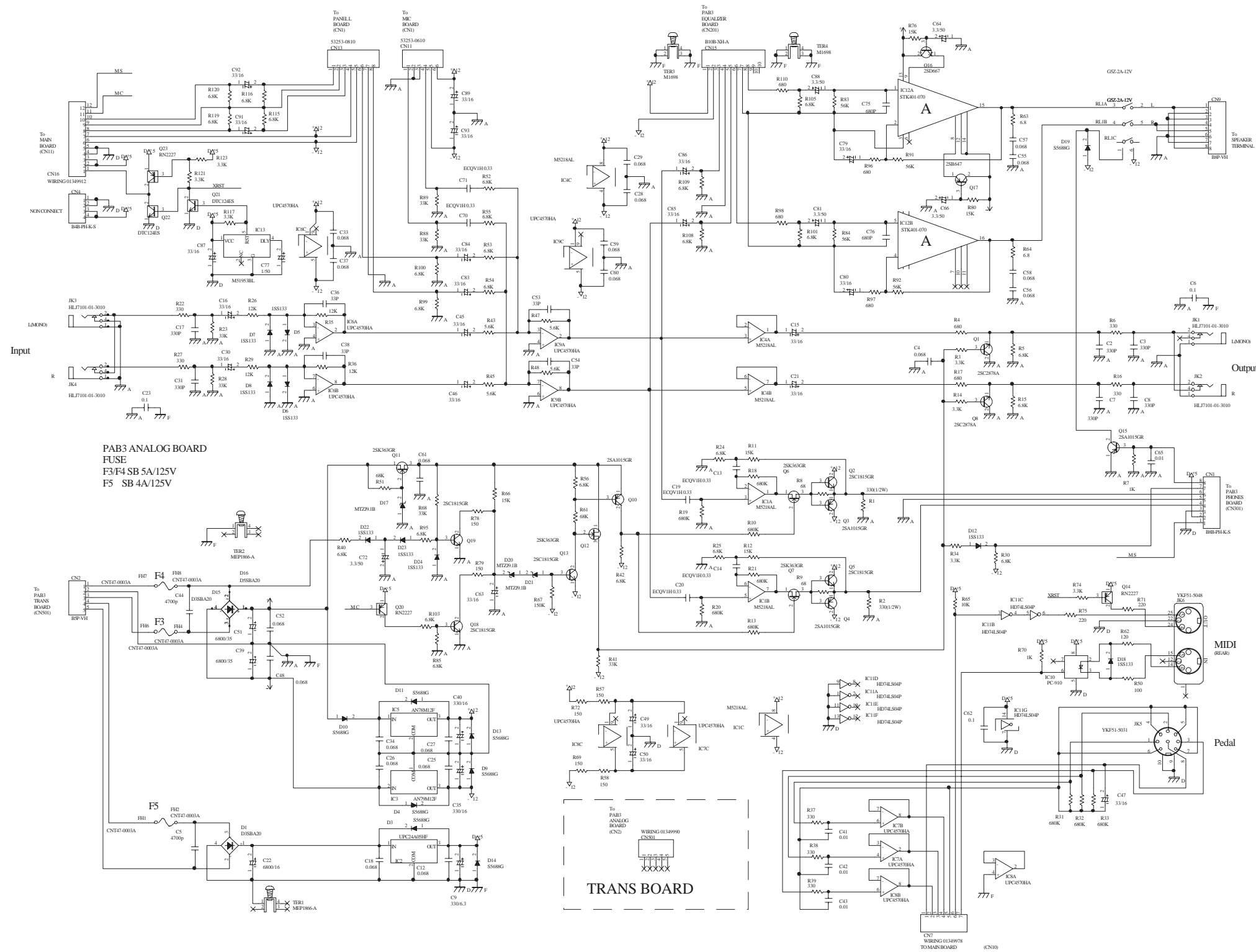
100V/117V	FUSE 5x20 SB 4 4A/125V
230V/240V	FUSE 5X20 S506 1.6A T1.6AL250V

Fig.A 3.15A/125V

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40

A CIRCUIT DIAGRAM (FRONT JACK, ANALOG, INLET)

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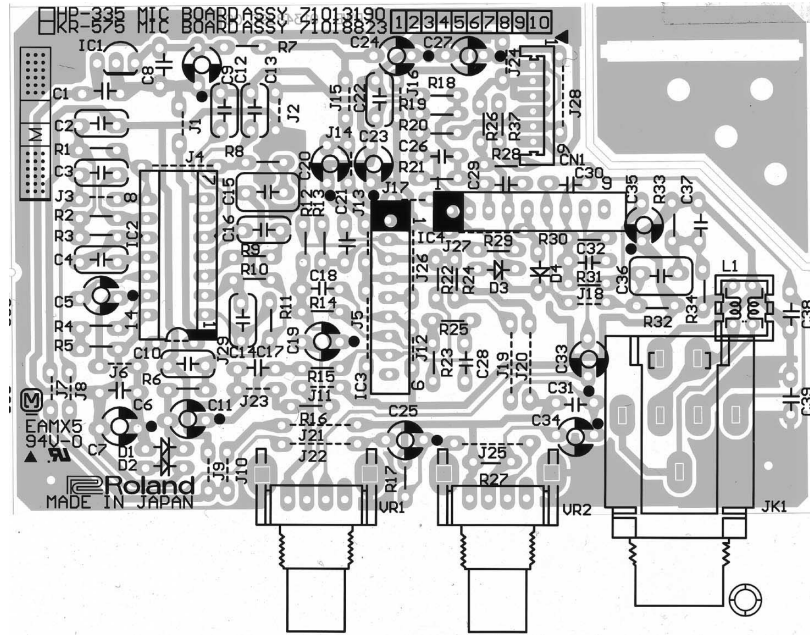


PIANO ANALOG BOARD

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40

A CIRCUIT BOARD (MIC)

71011901 MIC BOARD ASSY



View from components side.

NOTE

MIC BOARD ASSY includes the following parts.

01344489 MIC HOLDER

J CIRCUIT DIAGRAM (MIC)

