

SK-50/SK-50IV SERVICE NOTES

MULTI TIMBRAL KEYBOARD

Second Edition

Issued by RJA

SK-50IV is a different colour version of SK-50.
SK-50IV consists of components identical to those used for SK-50 except for the following components which are related to the difference in colour.

関連バンドリング商品 ... ミュージ郎SK-50等
SK-50IVとSK-50の違いは、トップパネル、ボタン類の色が違うだけです。回路構成及び機能はSK-50と全く同じです。

SK-50IV Ivory / アイボリー
SK-50 Dark Gray / ダーク・グレー

This service notes describes the difference between SK-50IV and SK-50, and should be used in conjunction with the service notes(#17059705 :issued in Jun.1993) for SK-50.

この色の違いにより、下記の部品だけがSK-50と違います。それ以外についてはSK-50のサービスノート (#17059705 : 1993年6月発行) を参照して下さい。

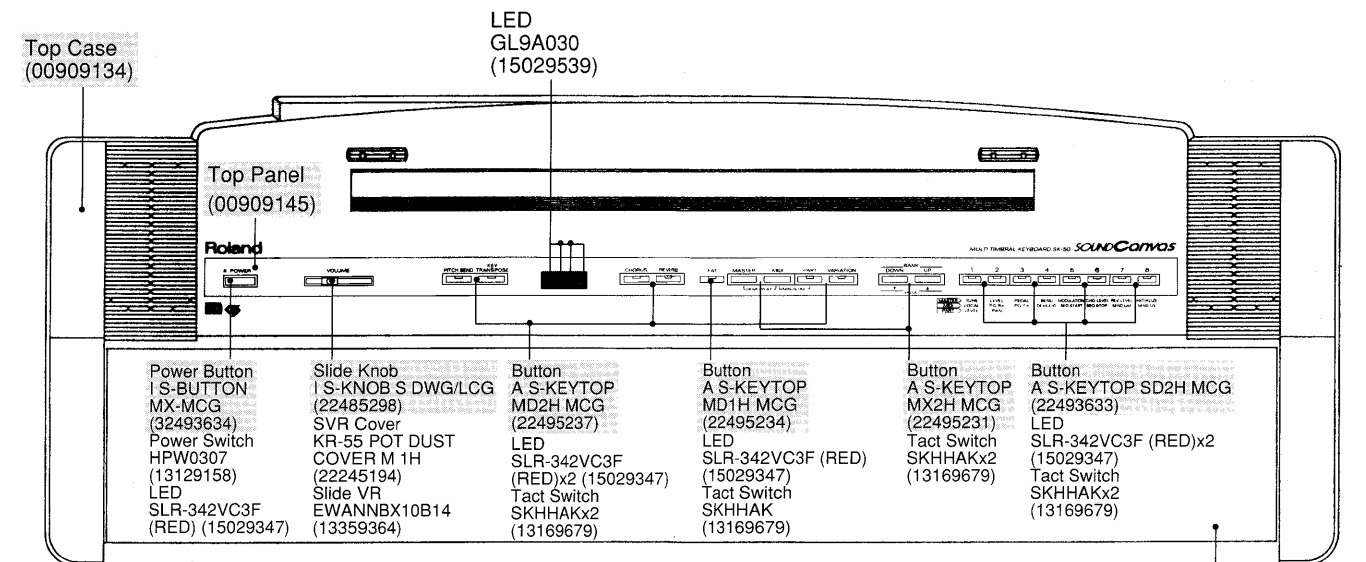
Difference between SK-50IV and SK-50 / SK-50IVとSK-50のパーツリスト比較

PART NAME / 部品名		SK-50IV (Ivory / アイボリー)	SK-50 (Dark Gray / ダークグレー)
Top Case / トップケース		(#00909134) Ivory / アイボリー	(#22043465) Dark Gray / ダークグレー
Top Panel / トップパネル		(#00909145) Gray / グレー	(#22213990) Black / 黒
Knob, Button ツマミ, ボタン	COMPUTER	FR-KNOB S MCG/LCG (#22483288) Gray / グレー	FR-KNOB S BLK/MCG (#22485168) Black / 黒
	POWER	IS-BUTTON MX-MCG (#32493634) Gray / グレー	IS-BUTTON MX BLK (#32495597) Black / 黒
	VOLUME	IS-KNOB S DWG/LCG (#22485298) Gray / グレー	IS-KNOB S BLK/LCG (#22485192) Black / 黒
	1, 2, 3, ..., 8 (Number Buttons)	AS-KEYTOP SD2H MCG (#22493633) Gray / グレー	AS-KEYTOP SD2H BLK (#22495224) Black / 黒
	BANK DOWN/UP, MASTER, MIDI	AS-KEYTOP MX2H MCG (#22495231) Gray / グレー	AS-KEYTOP MX2H BLK (#22495230) Black / 黒
	FAT	AS-KEYTOP MD1H MCG (#22495234) Gray / グレー	AS-KEYTOP MD1H BLK (#22495233) Black / 黒
PITCH.BEND, KEY TRANSPOSE CHORUS, REVERB, PART, VARIATION		AS-KEYTOP MD2H MCG (#22495237) Gray / グレー	AS-KEYTOP MD2H BLK (#22495236) Black / 黒
Music Rest / 譜面立		(#00909167) Clear & Gray / グレーで透明	(#22193685) Black / 黒
Packing Case / 梱包材		* SK-50IV Packing Case (#01013178) * Pad L(#22645356) * Pad R(#22645357)	* SK-50 Packing Case (#22603390) * Pad L(#22645356) * Pad R(#22645357)

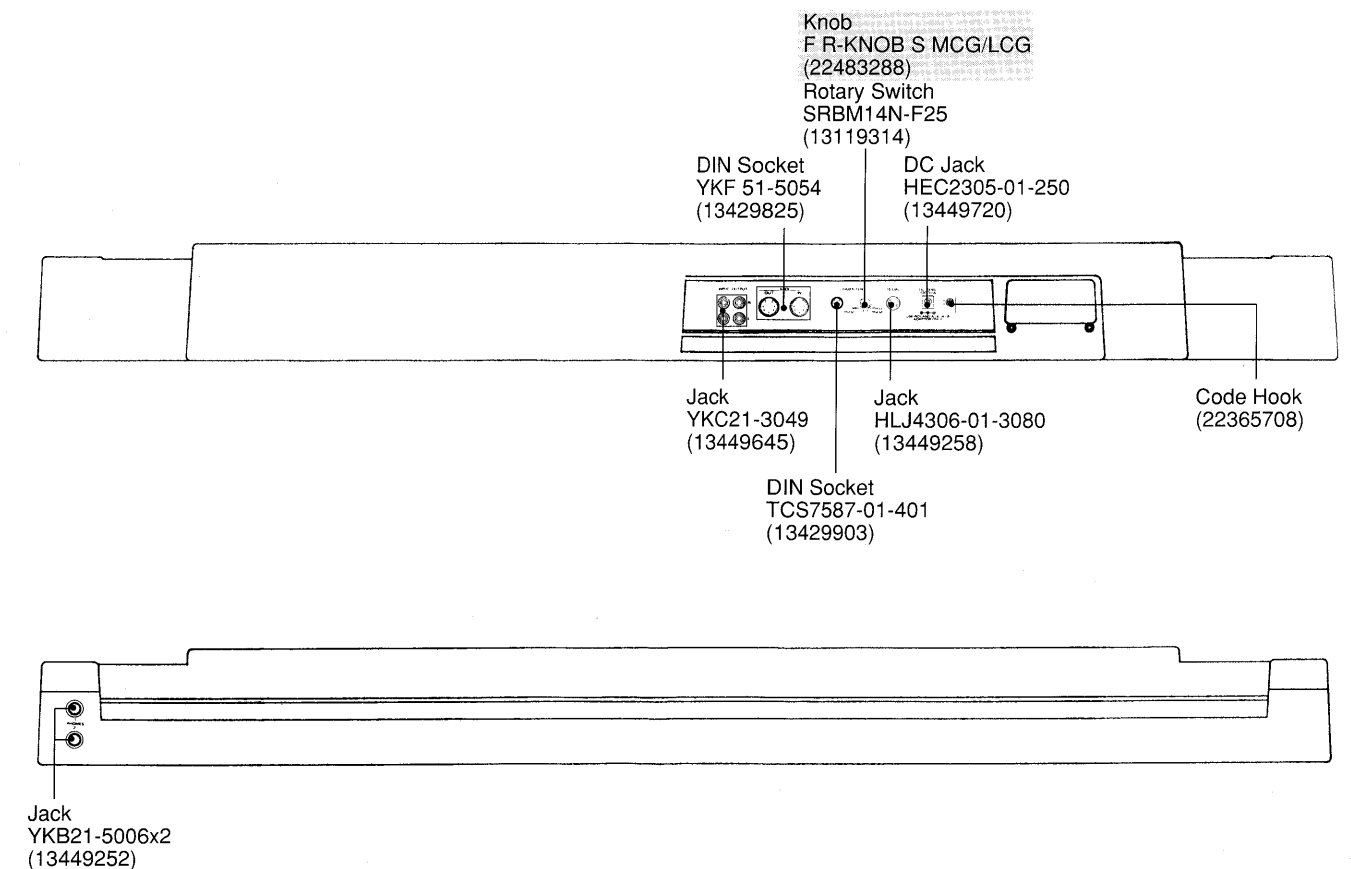
LOCATION OF CONTROLS / パネル配置図

SK-50IV

NOTE : The parts marked with a shaded box are different colored parts.
注意 : 陰影で囲まれた部品は、色違いの部品です。



Keyboard SK-8P61-A KEYBOARD ASSY (7626220000)



SK-50

SERVICE NOTES

SOUND Canvas

First Edition

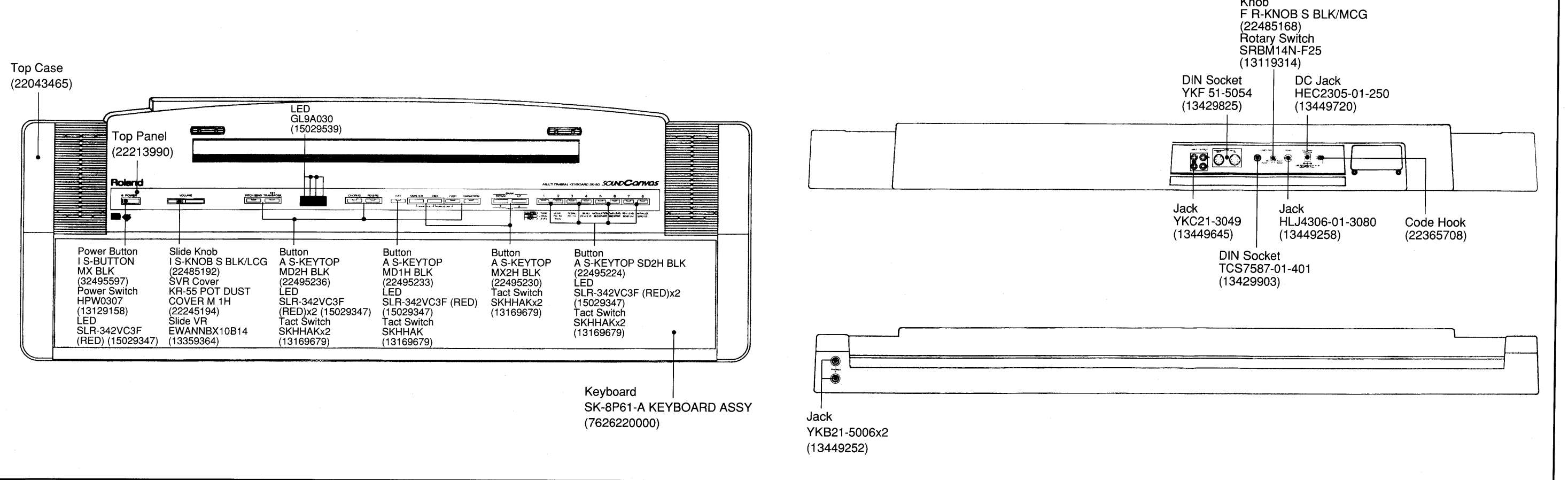
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POWER BOARD ASS'Y	POWER BOARD ASS'Y 14, 15
PHONES BOARD ASS'Y	PHONES BOARD ASS'Y 14, 15

SPECIFICATIONS/仕様

◎SOUND GENERATOR	: 16 Parts (Include Rhythm parts) Maximam Polyphony 28 Voices	◎POWER CONSUMPTION	: 800mA/DC9V (AC Adaptor)
◎NUMBER OF INSTRUMENTS	: 226 tones	◎DIMENSIONS	: 929(W)*340(D)*100(H) mm 36 5/8"(W)*13 7/16"(D)*3 15/16"(H) inches
◎EFFECTS	: Reverb/Delay, Chorus	◎WEIGHT	: 7.0Kg / 15 lbs 7 oz
◎DISPLAY	: 8 segment LED * 4	◎ACCESSORIES	: Owner's Manual Set * 1 Japanese (No.7629229100) English (No.7629229900)
◎INTERFACE WITH HOST COMPUTERS	: RS422 : for Apple Macintosh RS232C-1 : for NEC PC-98 and others RS232C-2 : for IBM PC and others MIDI	AC Adaptor * 1	
◎I/O CONNECTERS	: INPUT : RCA pin Jack L, R OUTPUT : RCA pin Jack L, R PHONES : Stereo Jacks * 2 COMPUTER : Mini DIN 8 pin Jack MIDI : DIN 5 pin Jack (IN/OUT) PEDAL : Stereo Jack DC IN : Adaptor Jack	ACK-100 100V (No.12449630) ACK-120 117V (No.12449631) ACB-220 220V (No.12449548) ACB-240 240VA (No.12449549) ACB-240E 240VE (No.12449564)	
◎SPEAKERS	: 12cm (4.0 ohm) * 2	◎OPTIONS	: SERIAL CABLE RSC-15N (For NEC Computer <25pin>) RSC-15I (For IBM PC/AT Computer <9pin>) RSC-15APL (For Apple Macintosh Computer)
◎OUTPUT POWER	: 4.0W * 2		

LOCATION OF CONTROLS/パネル配置図



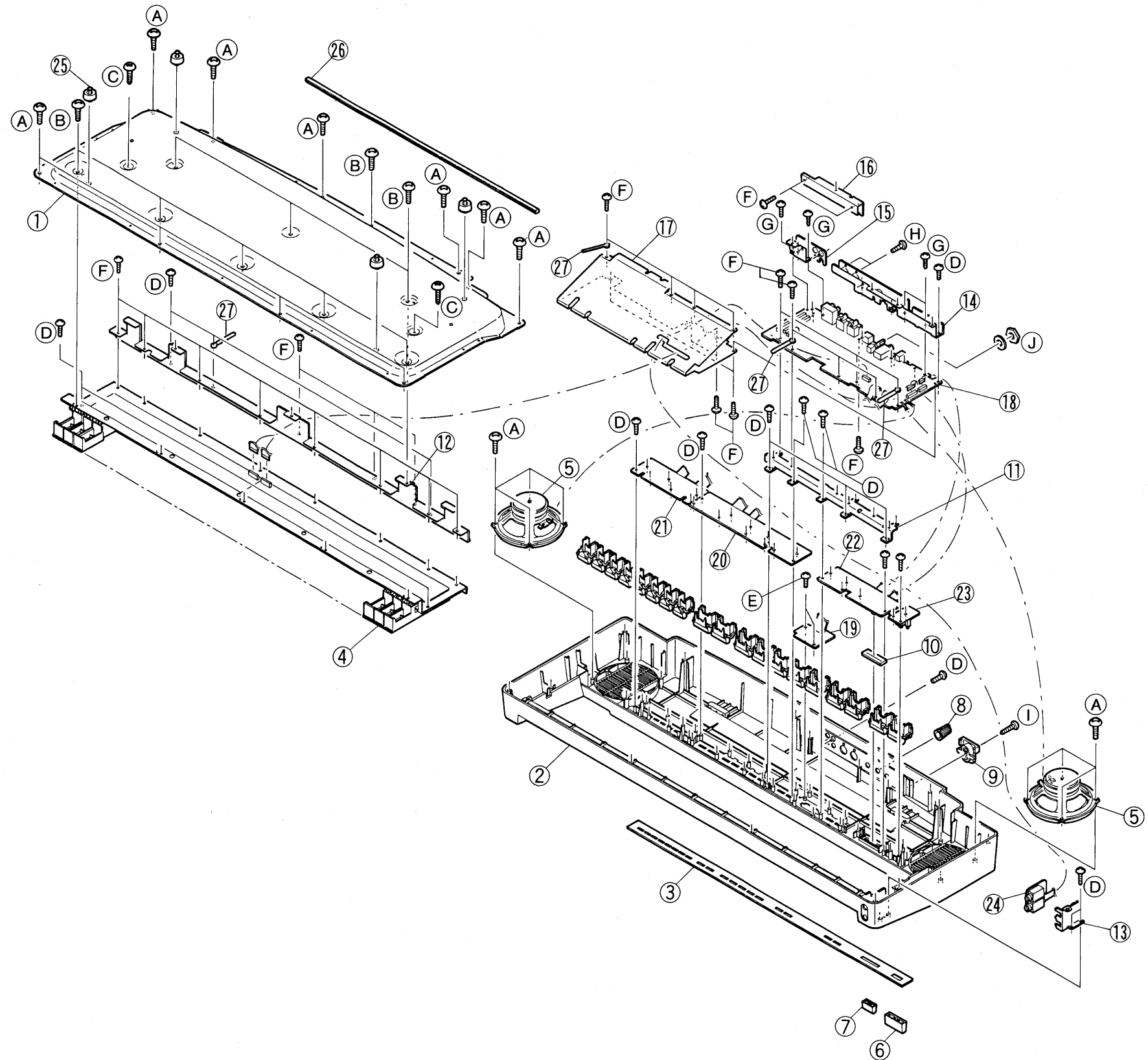
EXPLODED VIEW/分解図

No. PARTS NUMBER PARTS NAME

①	22035468	Buttom Cover	
②	22043465	Top Case	
③	22213990	Top Panel	
④	7629220000	SK-8P61-A	
⑤	22415702	HD-10 E/F SPEAKER PD-12302A	
⑥	32495597	I S-BUTTON MX BLK	
⑦	22485192	I S-KNOB S BLK/LCG	
⑧	22485168	F R-KNOB S BLK/MCG	
⑨	22365708	PAD80 CORD HOOK	
⑩	22245194	KR-55 POT DUST COVER M 1H	
⑪	22205484	EP-3 MAIN PCB HOLDER FR	
⑫	22103156	SK-50 ANGLE	(included SK-8P61-A)
⑬	22205482	EP-3 PHONES HOLDER	(included Phones Board Assy)
⑭	22203885	Jack Holder	(included Main Board Assy)
⑮	22203886	Jack Holder B	(included Main Board Assy)
⑯	22203887	MB Rear Holder	(included Main Board Assy)
⑰	22253384	SK-50 Shield Sheet	(included Main Board Assy)
⑱	7629210000	Main Board Assy	
⑲	7629211000	8seg Board Assy	
⑳	7629212000	Switch Board 1 Assy	
㉑	7629213000	Switch Board 2 Assy	
㉒	7629214000	Volume Board Assy	
㉓	7629215000	Power Board Assy	
㉔	7629216000	Phones Board Assy	
㉕	12359139	Rubber Foot	(included Buttom Cover)
㉖	22235117	TRIM 223-117	(included Buttom Cover)
㉗	*****	CS-1	

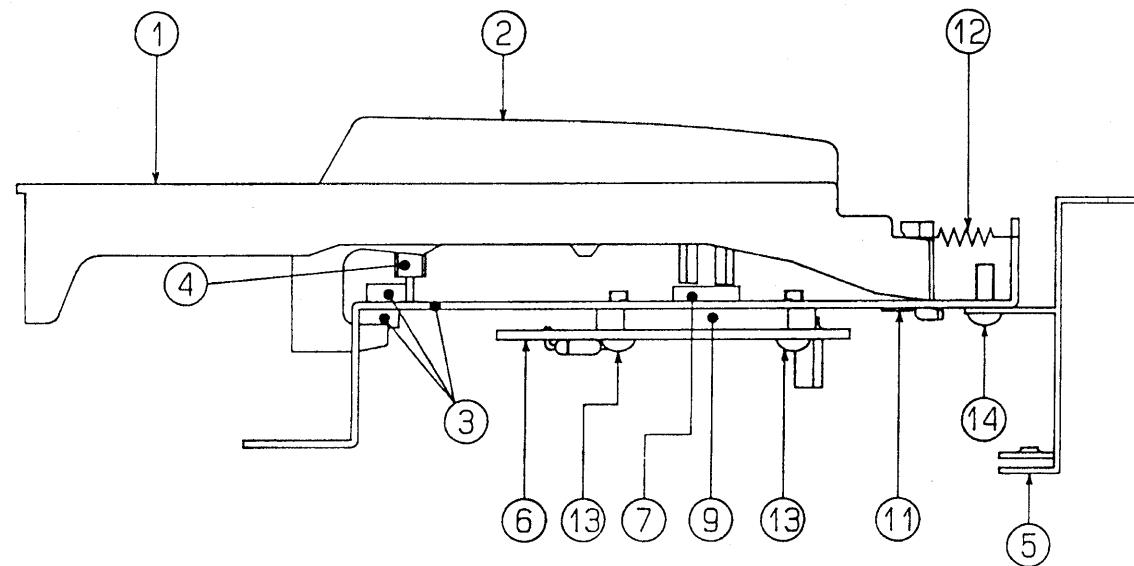
[SCREW]

A	*****	4x10mm Binding P-Tight ZnB
B	*****	4x10mm Binding B-Tight ZnB
C	*****	4x12mm Binding S-Tight ZnB
D	*****	3x8mm Binding P-Tight ZnB
E	*****	3x6mm Binding P-Tight ZnC
F	*****	3x8mm Binding B-Tight ZnC
G	*****	3x6mm Binding S-Tight ZnC
H	*****	3x8mm Pan P-Tight ZnB
I	*****	3x10mm Binding A-Tight ZnB
J	*****	M7 NUT and WASHER



KEYBOARD PARTS LIST/鍵盤パーツリスト

No.	PARTS NUMBER	PARTS NAME
①	32575358	SK-8P NATURAL KEY C/F
	32575357	SK-8P NATURAL KEY E/B
	32575359	SK-8P NATURAL KEY D
	32575360	SK-8P NATURAL KEY G
	32575356	SK-8P NATURAL KEY A
	32575362	SK-8P NATURAL KEY C'/F'
②	32575355	SK-8 SHARP KEY
③	22815839	SK-8 CHASSIS 61P-C ASSY
	22815838	SK-8P CHASSIS 61P-C
	22265528	SK-861 CUSHION 61P-A (UPPER)
	22265529	SK-861 CUSHION 61P-B (LOWER)
④	32155199	SK-8 GUIDE
⑤	22103156	MM-55 ANGLE
⑥	7626722001	SK-861-A PCB 32P LOW ASSY
	7626723001	SK-861-A PCB 29P HI ASSY
⑦	22185253	SK-8 RUBBER SWITCH 12P
⑧	22185254	SK-8 RUBBER SWITCH 13P
⑨	22205598	SK-8 PCB SPACER 12P
⑩	22205598	SK-8 PCB SPACER 13P
⑪	22135444	SK-8 61P STOPPER 213-444
⑫	42505102	SK-8 SPRING
⑬	*****	TAP TITE SCREWS B TITE 3x10 BINDING HEAD
⑭	*****	TAP TITE SCREWS B TITE 3x8 BINDING HEAD



KEYBOARD DISASSEMBLY/鍵盤分解手順

1. Attaching the PCBs

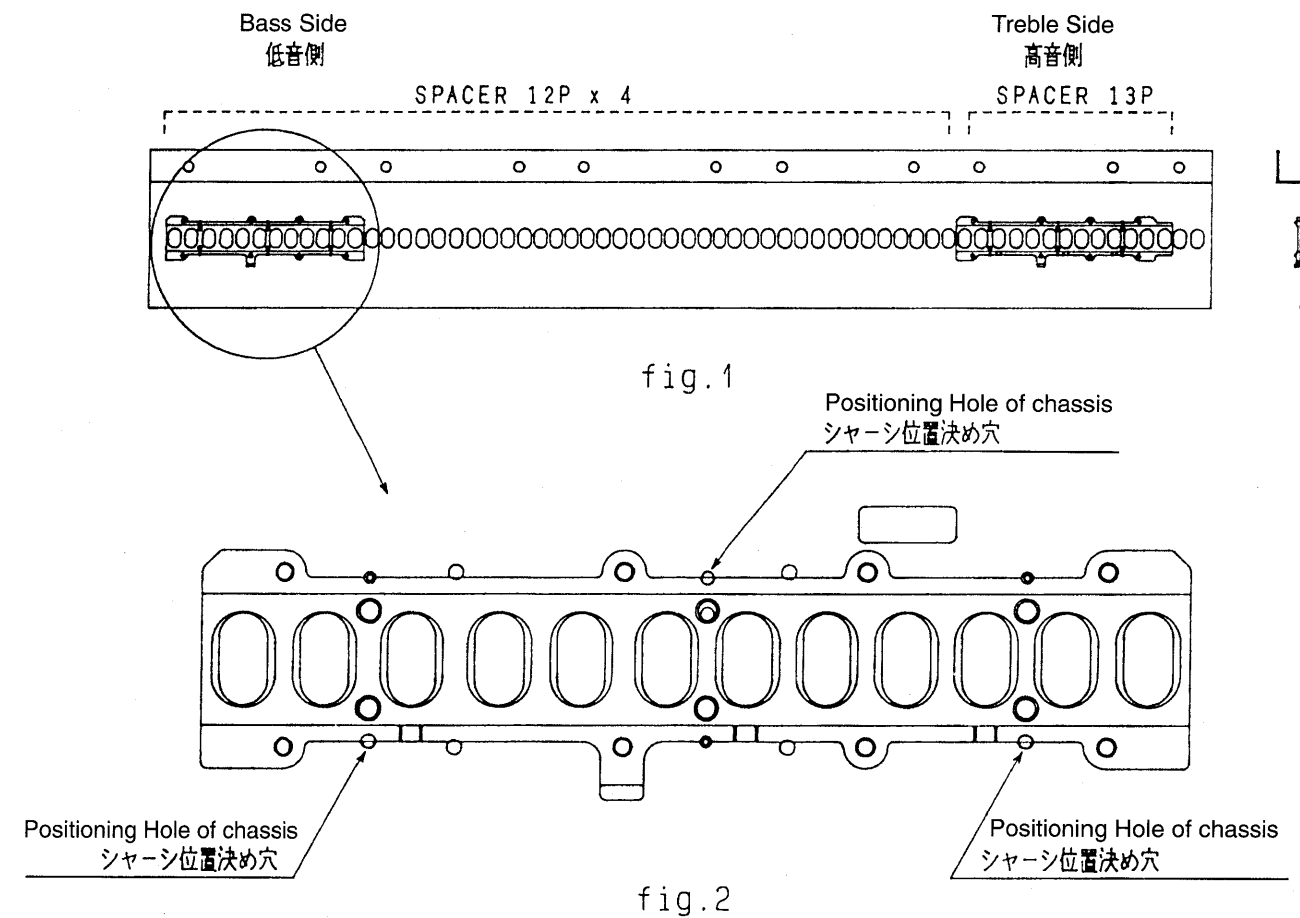
1. 基板の取り付け方

Required Parts / 必要部品

PARTS No.	PARTS NAME	Qty/員数
7626722001	SK-861-A PCB 32PLOW ASSY	1
7626723001	SK-861-A PCB 29PHI ASSY	1
22185253	SK-8 RUBBER SWITCH 12P	4
22185254	SK-8 RUBBER SWITCH 13P	1
22205597	SK-8 PCB SPACER 12P	4
22205598	SK-8 PCB SPACER 13P	1
*****	TAP TITE SCREWS B-TITE 3x10 BIND	32

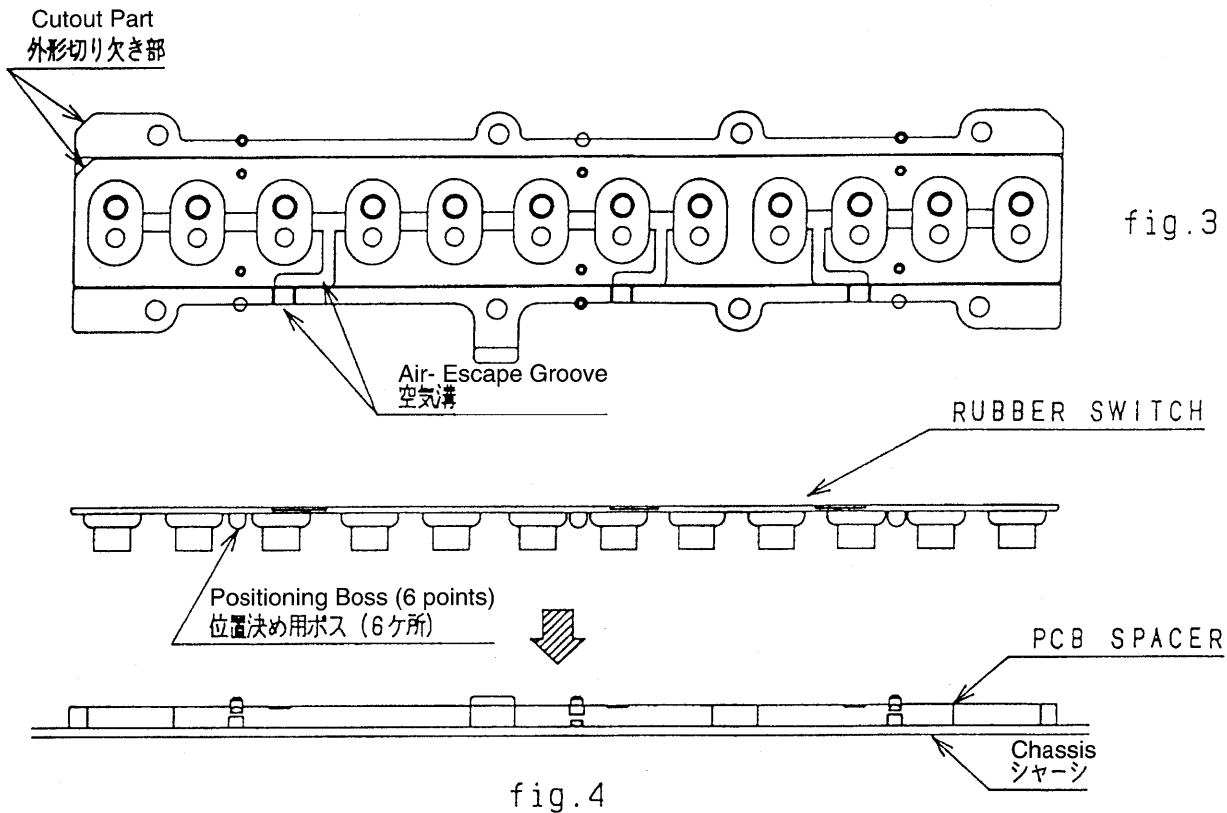
1) First, turn the chassis over on the other side, being careful not to reverse the right and left ends. Next, as shown in fig. 1, place SPACER 12P (4 pieces) on the chassis from the left end (the bass side of keyboard), aligning them with the positioning holes provided on the chassis. (Refer to fig. 2.) In the same way, place SPACER 13P on the right side of the chassis (the treble side).

1) まず、シャーシを左右が逆にならないように裏返します。次に、fig. 1に示すように左側（鍵の低音側）よりSPACER 12Pをシャーシ位置決め穴にあわせて順に4ヶおいていきます。（fig. 2参照のこと）右側（高音側）にはSPACER 13Pを同様におきます。



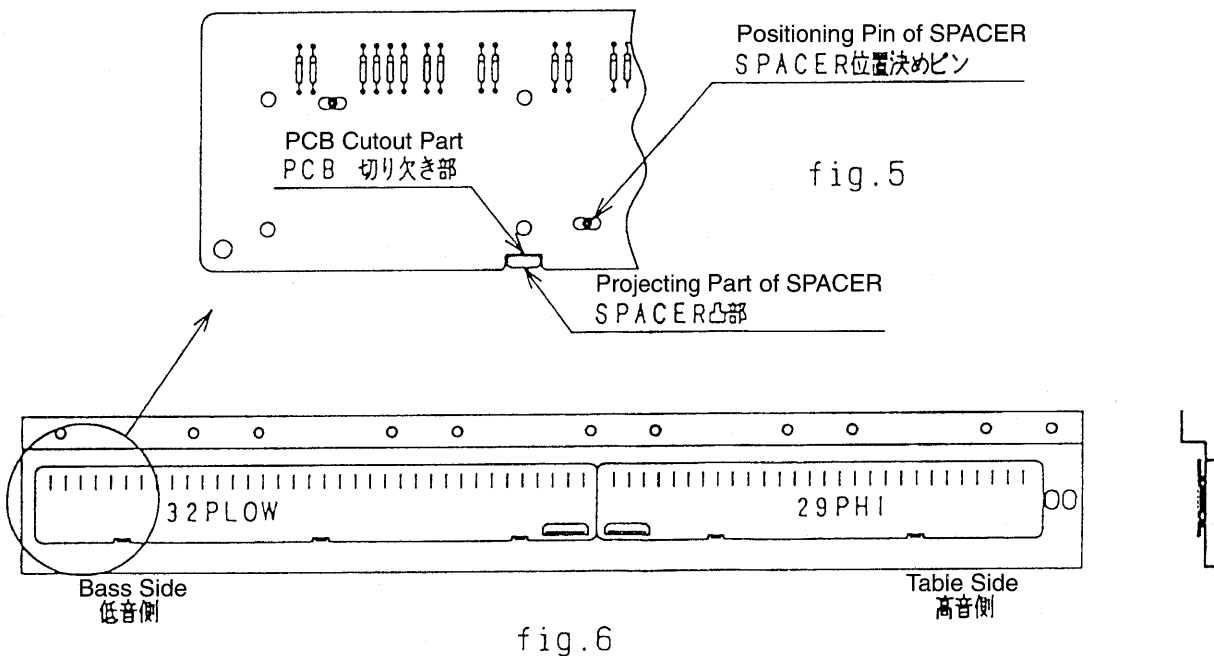
2) Next, aligning the positioning bosses of RUBBER SWITCH with the circular holes of SPACER, place RUBBER SWITCH 12P (4 pieces) on SPACER from the bass side as was done for SPACER; then place RUBBER SWITCH 13P on the treble side. In this procedure, make sure that RUBBER SWITCH and SPACER are positioned with their cutout parts and air-escape grooves aligned, respectively. (Refer to fig. 3 and fig. 4)

2) 次に、SPACERの丸穴部にRUBBER SWITCHのボスを位置決めして、SPACERと同様に低音側よりRUBBER SWITCH 12Pを順に4ヶおき、高音側にはRUBBER SWITCH 13Pをおきます。この際、RUBBER SWITCHとSPACERの外形切り欠き部、及び空気溝の位置が合うように注意してください。(fig. 3 fig. 4参照のこと)



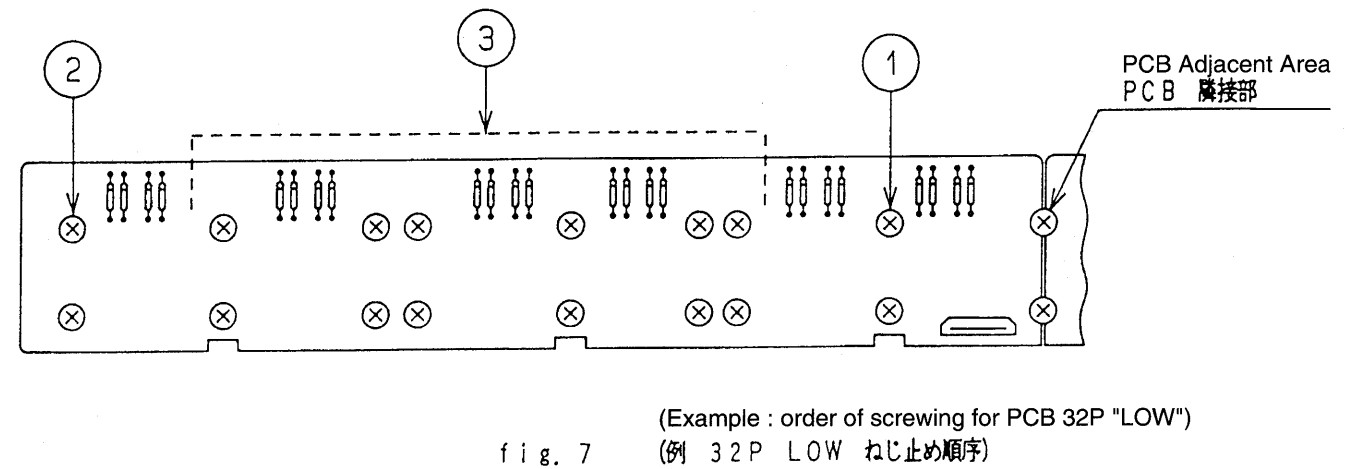
3) Next, using the cutout part of PCB and the projecting part of SPACER as positioning guide, place PCB so that the positioning pin of SPACER fits into the positioning hole of PCB. (Refer to fig. 5.) As fig. 6 shows, PCBs consist of two boards, "LOW" and "HI".

3) 次に、PCBの切り欠き部とSPACERの凸部を目印として、SPACERの位置決めピンにPCBの位置決め穴がはまるようにPCBをおきます。(fig. 5参照のこと) PCBは、fig. 6で示されるようにLOW, HIの2枚で構成されています。



5) Next, using TAP TITE SCREWS, fasten PCBs "LOW" and "HI" in place from the center of the keyboard, for example, from ① in the case of "LOW" as shown in fig. 7. PCBs may possibly float from SPACER by screwing. To avoid this, after screwing the center of the PCB, ①, fasten the opposite end, ②, before screwing other areas. Also, PCBs may have been warped by soldering, etc., it is recommendable to screw them while lightly pressing the center area. Finally, screw the adjacent area between PCBs "LOW" and "HI".

5) 次に、TAP TITE SCREWSでPCB LOW, HIとともに鍵盤中央部1からねじ止めていきます。ねじ止めによって、PCBがSPACERより浮き上がってしまうことがあるため、中央部、1をねじ止めたのち端部、2を先に締結します。(fig. 7参照のこと) 基板がハンダ付け等によってソリを生じていることがあるため中央部を軽くおさえながらネジを止めるとよいでしょう。最後にPCBのLOW, HIの隣接部もねじ止めします。



NOTE

When using an electric screwdriver, take sufficient care to control the driving torque. If an excess torque is applied, the PCB may crack or break.

注意

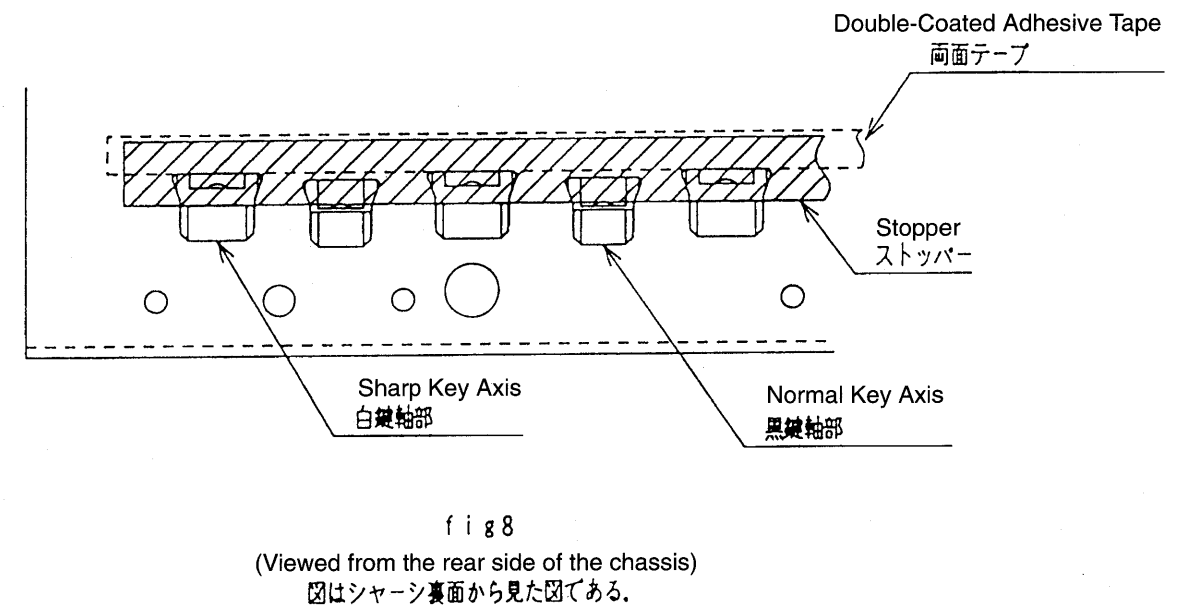
電気ドライバー等を使用する際は、トルク管理十分注意してください。過大な力が加わると、PCBが割れまたは欠けるおそれがあります。

2. How to glue the stopper

Attach the stopper in contact with the ends of the natural key axes. Hold down the surface of the stopper along the double-coated adhesive tape so that it is securely fixed. (Refer to fig. 8.)

2. ストッパーの貼り方

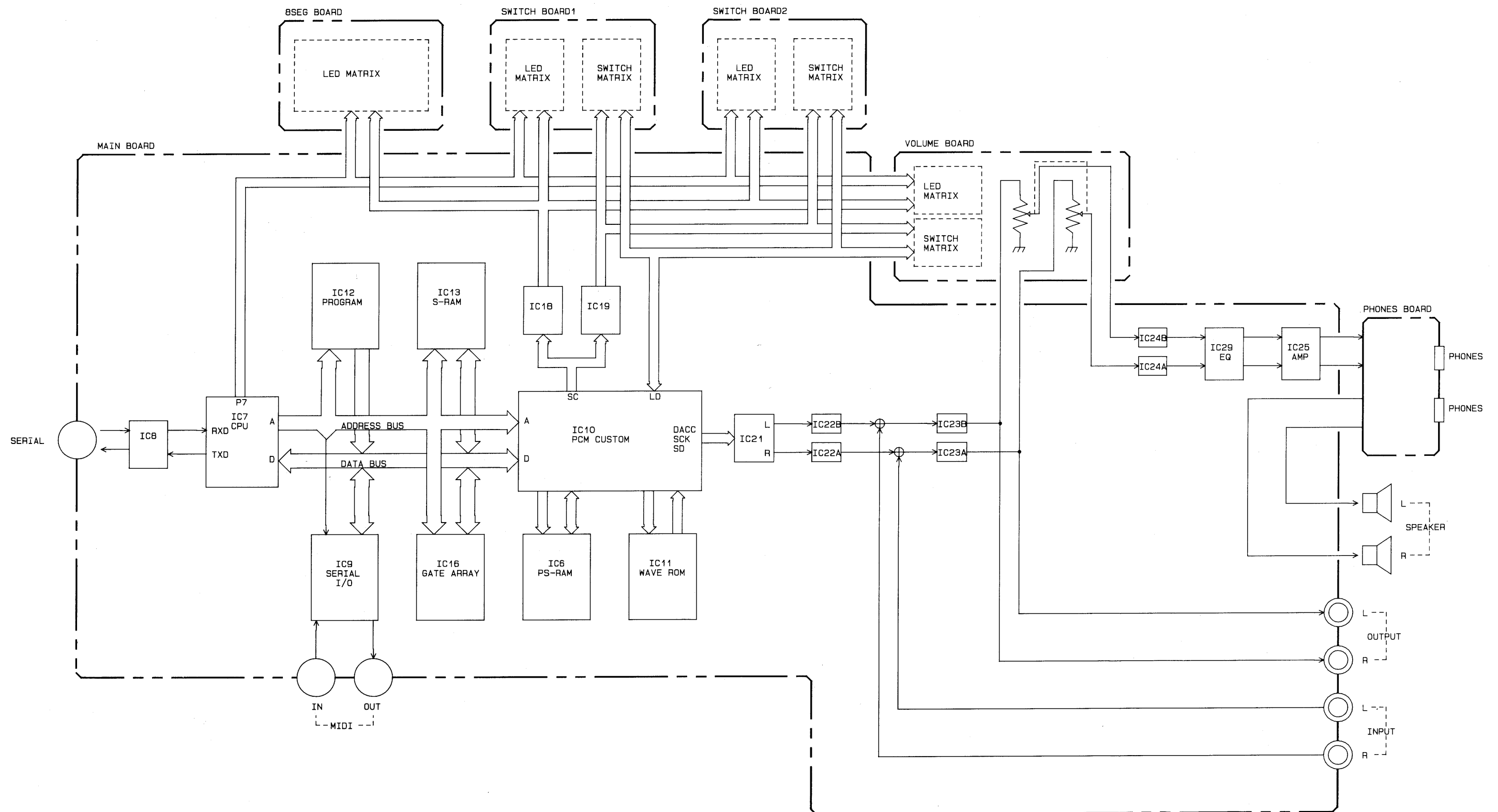
ストッパーは白鍵軸部に密接させて取り付け、両面テープ上をおさえつけ確実に固定させてください。(fig. 8参照のこと)



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

A BLOCK DIAGRAM/ブロック図

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



PARTS LIST/パーツリスト

SAFETY PRECAUTIONS: The parts marked Δ have safety-related characteristics. Use only listed parts for replacement. 安全上の注意: Δ が付いている部品は、安全上特別な規格でつくられたものです。交換の際は、指定された部品番号以外の部品は使わないようにして下さい。		CONSIDERATIONS ON PARTS ORDERING When ordering any parts listed in the parts list, please specify the following items in the order sheet. <i>Ex.</i> <table border="1"> <thead> <tr> <th>QTY</th> <th>PART NUMBER</th> <th>DESCRIPTION</th> <th>MODEL NUMBER</th> </tr> </thead> <tbody> <tr> <td>10</td> <td>22575241</td> <td>Sharp Key</td> <td>C-20/50</td> </tr> <tr> <td>15</td> <td>2247017300</td> <td>Knob (orange)</td> <td>DAC-15D</td> </tr> </tbody> </table> Failure to completely fill the above items with correct number and description will result in delayed or even undelivered replacement. パーツ発注に関するお願い オーダーシートには、必ず下記の4項目は正確に記入して下さい。(例外は除く) <table border="1"> <thead> <tr> <th>必要数</th> <th>パーツナンバー</th> <th>品名</th> <th>使用機種</th> </tr> </thead> <tbody> <tr> <td>例) 10</td> <td>22575241</td> <td>Sharp Key</td> <td>C-20/50</td> </tr> <tr> <td>15</td> <td>2247017300</td> <td>Knob (orange)</td> <td>DAC-15D</td> </tr> </tbody> </table> もし記入漏れ、誤記等がある場合、必要部品が発送出来なかったり、大幅な遅れの原因になります。御協力をお願いします。		QTY	PART NUMBER	DESCRIPTION	MODEL NUMBER	10	22575241	Sharp Key	C-20/50	15	2247017300	Knob (orange)	DAC-15D	必要数	パーツナンバー	品名	使用機種	例) 10	22575241	Sharp Key	C-20/50	15	2247017300	Knob (orange)	DAC-15D
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例) 10	22575241	Sharp Key	C-20/50																								
15	2247017300	Knob (orange)	DAC-15D																								
MB -----> Main Board Assy SB2 -----> Switch Board 2 Assy PB -----> Phones Board Assy 8B -----> 8seg Board Assy	SB1 -----> Switch Board 1 Assy VB -----> Volume Board Assy PWB -----> Power Board Assy																										

CASING/ケース

22035468	Bottom Cover
22043465	Top Case
22213990	Top Panel
22245194	KR-55 POT DUST COVER M 1H
00019067	SK-50 ACCESSORY CASE

NOTE : Use in SK-50APL, SK-50AT, SK-50N.
 注 : SK-50APL, SK-50AT, SK-50Nで使用。

CHASSIS/シャーシ

22205484	EP-3 MAIN BOARD HOLDER FR	
22203885	Jack Holder	on MB
22203886	Jack Holder B	on MB
22203887	MB Rear Holder	on MB
22205482	EP-3 PHONES HOLDER	on PB

KNOB, BUTTON/ツマミ、ボタン

22485168	F R-KNOB S BLK/MCG	COMPUTER
32495597	I S-BUTTON MX BLK	POWER
22485192	I S-KNOB S BLK/LCG	VOLUME
22495224	A S-KEYTOP SD2H BLK	
22495230	A S-KEYTOP MX2H BLK	
22495233	A S-KEYTOP MD1H BLK	
22495236	A S-KEYTOP MD2H BLK	

SWITCH/スイッチ

13119314	SRBM14N-F25	on MB
13169679	SKHHAK	on SB1, SB2, VB
13129158	HPW0307	Power Switch on PB

JACK, SOCKET/ジャック、ソケット

13449645	YKC21-3049	INPUT/OUTPUT	on MB
13429825	YKF51-5054	MIDI IN/OUT	on MB
13449258	HLJ4306-01-3080	PEDAL	on MB
13429903	TCS7587-01-401	COMPUTER	on MB
13449720	HEC2305-01-250	DC IN	on MB
13449252	YKB21-5006	PHONES	on PB

SPEAKER, BUZZER/スピーカー、ブザー

22415702	HD-10 E/F SPEAKER PD-12302A
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KEYBOARD/鍵盤完成品

7629220000	SK-8P61-A	61 Key
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NOTE : See "SK-8P61-A PARTS LIST" (P. 3) for details.
 注 : 詳細は、"鍵盤パーツ・リスト SK-8P61-A" (P. 3) を参照して下さい。

PCB ASSY/基板完成品

7629210000	Main Board Assy	(pcb 22933466)
7629211000	8seg Board Assy	(pcb 22933474)
7629212000	Switch Board 1 Assy	(pcb 22933465 1/5)

NOTE : Replacement Switch Board 1 Assy includes the following.
 注 : 補修用スイッチ・ボード・1 は下記4基板を含みます。

Switch Board 2 Assy
 Volume Board Assy
 Power Board Assy
 Phones Board Assy

IC/集積回路

15199855	HD6435328RW12F (Flat)	Mask CPU	IC7 on MB
00124745	LH532HVB	2M Mask ROM	IC12 on MB
15239229	TC6116 (GP-4) (Flat)	Custom Sound Generator	IC10 on MB

15239124	SSC1000 (Flat)	Gate Array	IC16 on MB
15279824	HN624116FBC90 (Flat)	16M Mask ROM LCGS-2	IC11 on MB
15279510	HM65256BLFP-12T (Flat)	Pseudo SRAM 256K	IC6 on MB
15279534	SRM20256SLM-12 (Flat)	SRAM 256K	IC13 on MB
15209278	MB89251 (Flat)	Serial I/O	IC9 on MB
15289712	M5M34051FP (Flat)	RS-422 Transceiver	IC8 on MB
15289702	uPD6376GS-E2 (Flat)	D/A Converter	IC21 on MB
15289713	M5243FP09 (Flat)	Graphic Equalizer IC	IC29 on MB
15259701T0	TC74HC00F-T2 (Flat)	Quad 2-Input NAND Gate	IC14 on MB
15259704T0	TC74HC04F-T2 (Flat)	Hex Inverters	IC2 on MB
15259706T0	TC74HCU04F-T2 (Flat)	Hex Inverters	IC4 on MB
15259720T0	TC74HC74F-T2 (Flat)	Dual D-FFs	IC3 on MB
15259738T0	TC74HC138F-T2 (Flat)	3-8 Decoder	IC18, 19 on MB
15249134	TC4SU69 (Chip/Taping)	1 Gate Inverter	IC5 on MB
15289125	PC410 (Flat)	Photo Cupler	IC1 on MB
15289106	M5238FP (Flat)	OP Amp	IC15 on MB
15289107	M5218AFP (Flat)	OP Amp	IC24 on MB
15289120	NUM4565MD-TE3 (Flat)	OP Amp	IC22, 23, 26 on MB
15159708	M54584P	Digital Transistor Array	IC17 on MB
00019112	TD62381P	Digital Transistor Array	IC17 on MB

NOTE : use TD62381P or M54584P for IC17.
 注 : TD62381PとM54584Pのどちらかを使用。

15159709	M54586P	Digital Transistor Array	IC20 on MB
15149150	TD62787AP	Digital Transistor Array	IC20 on MB

NOTE : use TD62787AP or M54586AP for IC20.
 注 : TD787PとM54586APのどちらかを使用。

15199562	AN7147	Dual Audio Power Amplifier	IC25 on MB
15199155	L78MR05R	+5V Voltage Regulator	IC27 on MB
15199246	uPC24M08	+8V Voltage Regulator	IC30 on MB

TRANSISTOR/トランジスタ

15329507	DTA114EK (Chip/Taping)	Q1 on MB
15329503	DTA124EK (Chip/Taping)	Q10 on MB
15329511	DTC114TK (Chip/Taping)	Q8 on MB
15329510D0	DTC144EK (Chip/Taping)	Q9 on MB
15329505	DTC314TK (Chip/Taping)	Q13, 14 on MB
15309101	2SA1037KR (Chip/Taping)	Q11, 12 on MB

DIODE/ダイオード

15019281	ISR35-100A (Taping)	D8 on MB
15339112	DA119 (Chip/Taping)	on MB
15339102	MA151WK (Chip/Taping)	D5 on MB
15339307	RLZ5.1C (Chip/Taping)	D13 on MB
15019125	1SS-133	on SB1, SB2, VB

RESISTOR/レジスタ

15399907	MNR34J5A153E	15Kx4	on MB
15399917	MNR34J5A103E	10Kx4	on MB
15399932	MNR34J5A101	100x4	on MB
13749205	ELR50XJ 100	1/2W 100	on PB
13749314D0	R50XJ T-34V (Taping)	2.2	on MB
15393352	MCR50JZH470 (Chip/Taping)	1/2W 47	on MB
13749597T0	SR25NJ 1K	1/4W 1K	on PWB

POTENTIOMETER/ボリューム

13359364	EWANNBX10B14	Slide Volume	on VB
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CAPACITOR/コンデンサー

13649653M0	ECEA1CU102	16V/1000u	C55, 56, 67 on MB
13639175J0	SME25VB2200	25V/2200u	C65, 69 on MB

INDUCTOR, COIL, FILTER/インダクター、コイル、フィルター

12449390	SNT-D20		on MB
12449380	EXC-ELDR25V (Taping)	BEADS Inductor	on MB
12449381	SBT-0460TF (Taping)	SB Coil	on MB

CRYSTAL, RESONATOR/クリスタル、発振子

15299180	MA-506 24MHz	Crystal	X1 on MB
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OPTICAL DEVICE/光関連部品

15029539	GL9A030	8seg LED	on 8B
15029347	SLR-342VC3F	LED (red)	on SB1, 2, VB, PWB

CONNECTOR/コネクタ

13379152	IL-FPC-16ST-N	FFC Connector	CN4, CN5 on MB
13369601	52147-0610	Wire Trap	CN2, CN6 on MB
13369602	52147-0710	Wire Trap	CN9 on MB
13369604	52147-0910	Wire Trap	CN11, CN12 on MB
13369605	52147-1010	Wire Trap	CN3 on MB
13369606	52147-1110	Wire Trap	CN10 on MB
13369607	52147-1210	Wire Trap	CN1 on MB
13429295	51048-0600	Cable Holder	on SB1, PB
13429296	51048-0700	Cable Holder	on VB
13429298	51048-0900	Cable Holder	on SB2, VB

13429299	51048-1000	Cable Holder	on SB2
13429300	51048-1100	Cable Holder	on SB1

WIRING, CABLE/ワイヤリング、ケーブル

23473458	FUJI CARD 16x420-A6.0BBR-H10-A	Keyboard to MB
23473459	FUJI CARD 16x360-A6.0BBR-H10-A	Keyboard to MB
23485614	EP-3/5 Speaker Cable	on MB
23503815	KM-25B Speaker Cable	on MB
23503682	KM-25B WIRING A (6P)	on SB1
23503683	KM-25B WIRING B (11P)Shield	on SB1
23503684	KM-25B WIRING C (10P)	on SB2
23503685	KM-25B WIRING D (9P)Shield	on SB2
23503686	KM-25B WIRING E (7P)	on VB
23503687	KM-25B WIRING F (9P)	on VB
23503688	KM-25B WIRING G (5P)	PWB to VB
23503689	KM-25B WIRING H (6P)Shield	on PB
23503690	KM-25B WIRING I (12P)Shield	on 8B

BATTERY/電池

12569249S0	CR2032
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SCREW/ねじ類

*****	3x6mm Binding S-Tight ZnC
*****	3x6mm Binding P-Tight ZnC
*****	3x8mm Binding P-Tight ZnB
*****	3x8mm Binding B-Tight ZnC
*****	3x8mm Pan P-Tight ZnB
*****	3x10mm Binding A-Tight ZnB
*****	4x10mm Binding P-Tight ZnB
*****	4x10mm Binding B-Tight ZnB

MISCELLANEOUS/その他

22365708	PAD80 GORD HOOK	For AC Adaptor
22235520	Sponge Cramp	
22235523	EP-7 Angle Cushion	
22253384	SK-50 Shield Sheet	on MB
12569420	Bttery Holder	on MB
12169359	LDS-140G	LED Spacer
17049906	Computer test cable for SC-55 mk II	on PWB

ACCESSORIES/付属品

Δ 12449630	ACK-100	AC Adaptor 100V
Δ 12449631	ACK-120	AC Adaptor 117V
Δ 12449548	ACB-220	AC Adaptor 220V
Δ 12449564	ACB-240E	AC Adaptor 240VE
Δ 12449549	ACB-240	AC Adaptor 240VA
26053871	Owner's Manual Set	Japanese
26053872	Owner's Manual Set	English
22193685	MUSIC REST	

OPTION/別売品

*****	RSC-15APL	For MAC
*****	RSC-15AT	For IBM
*****	RSC-15N	For NEC

TEST MODE/テストモード

Before entering the TEST MODE, holding down [NUM1], [NUM2] and [NUM3], press [POWER] key.

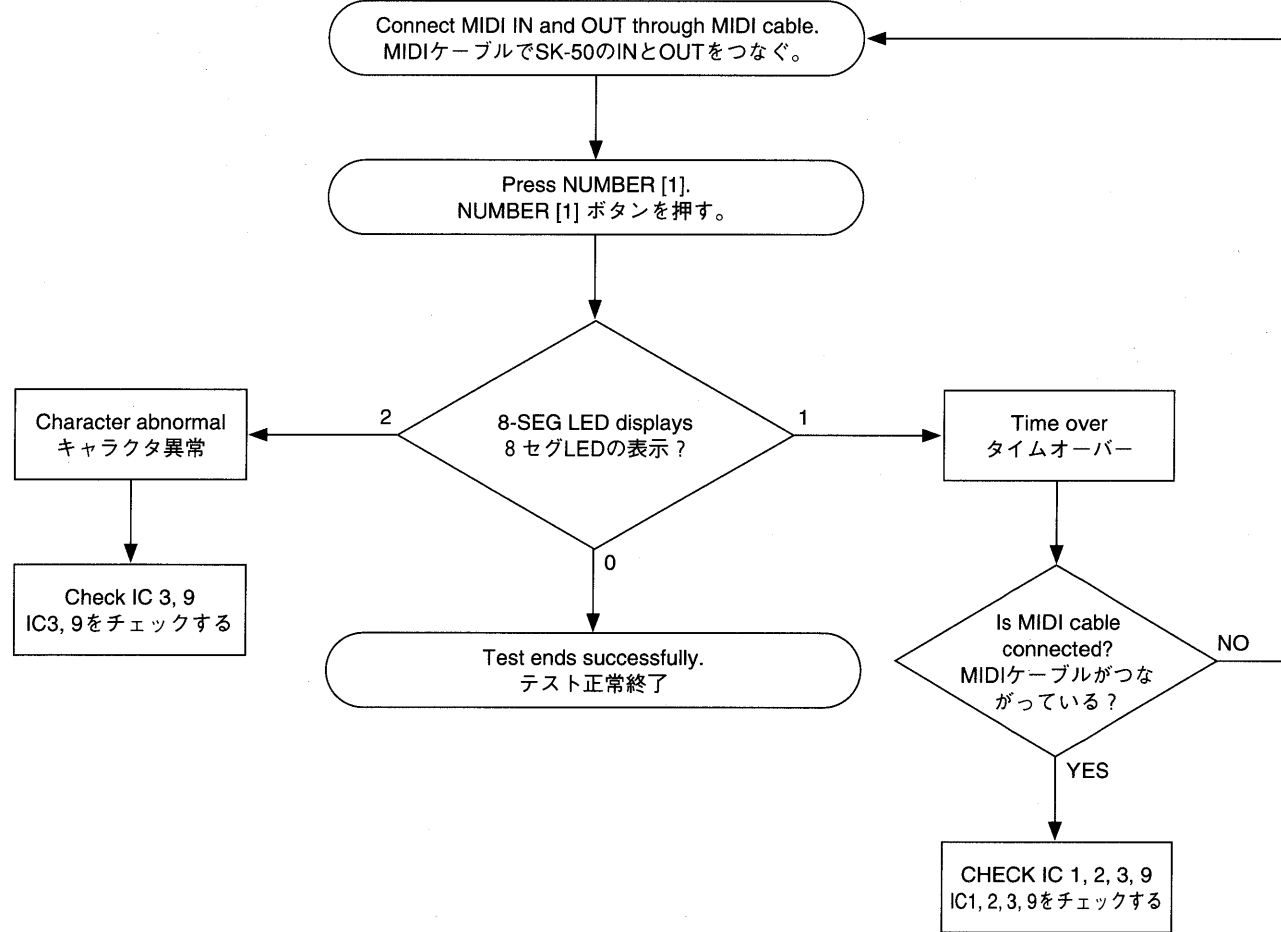
テスト・モードに入る前には、[NUM1], [NUM2], [NUM3] を押しながら電源を入れて下さい。

1. MIDI CHECK

Item required :
MIDI cable

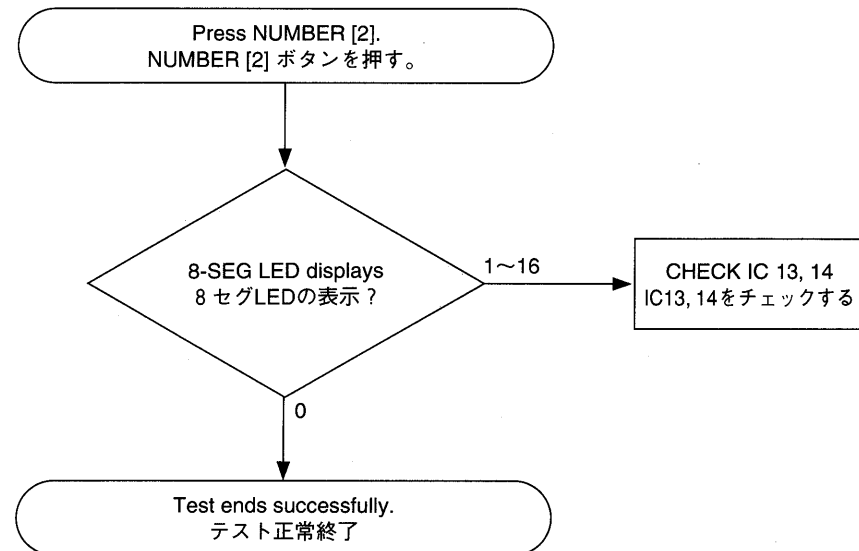
1. MIDIチェック

用意する物：
MIDIケーブル



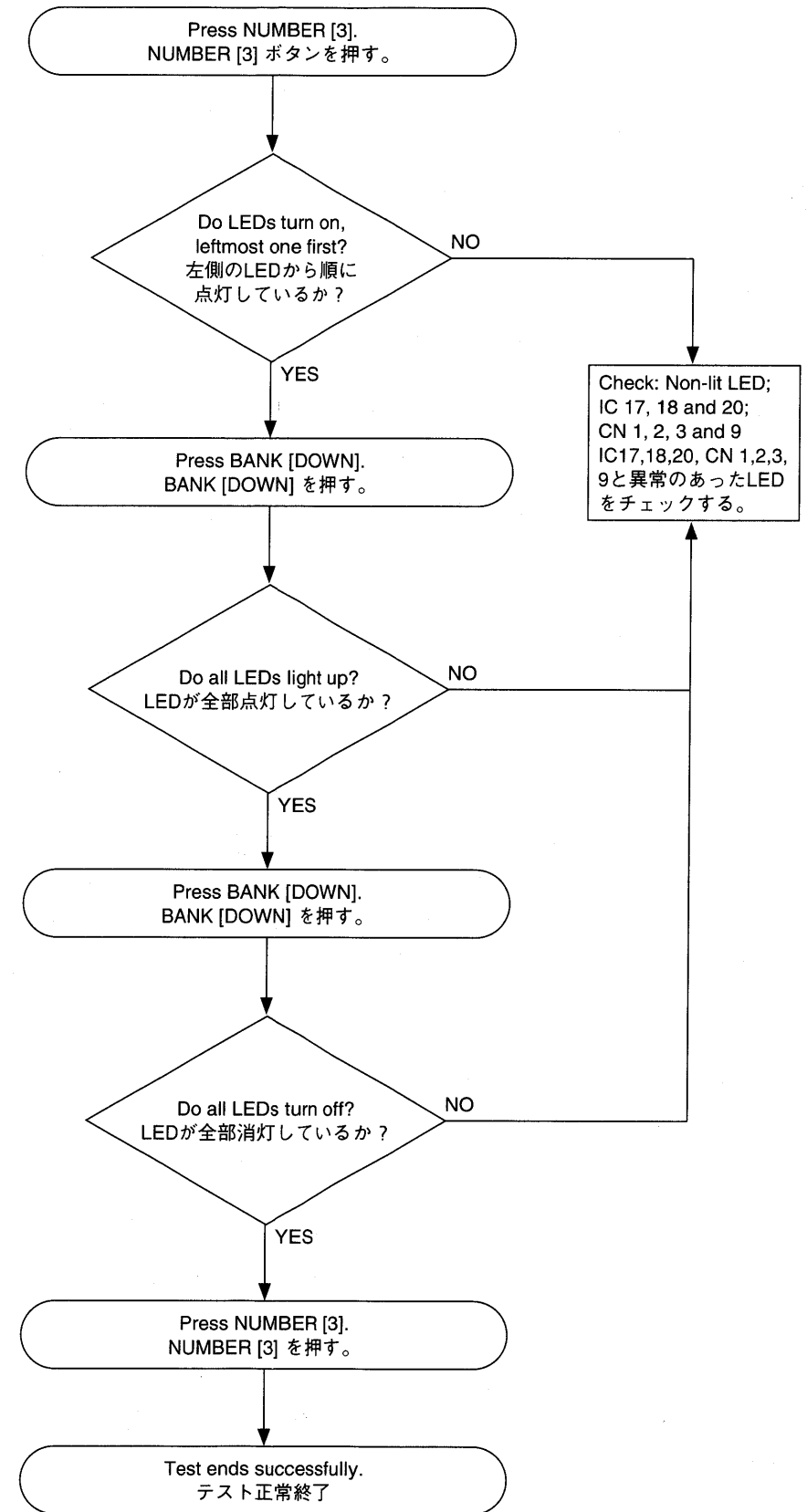
2. RAM CHECK

2. RAMチェック

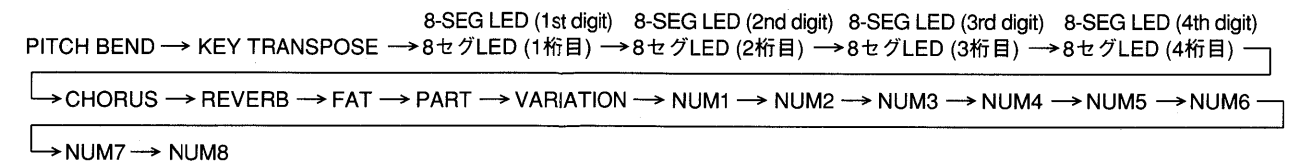


3. LED CHECK

3. LEDチェック

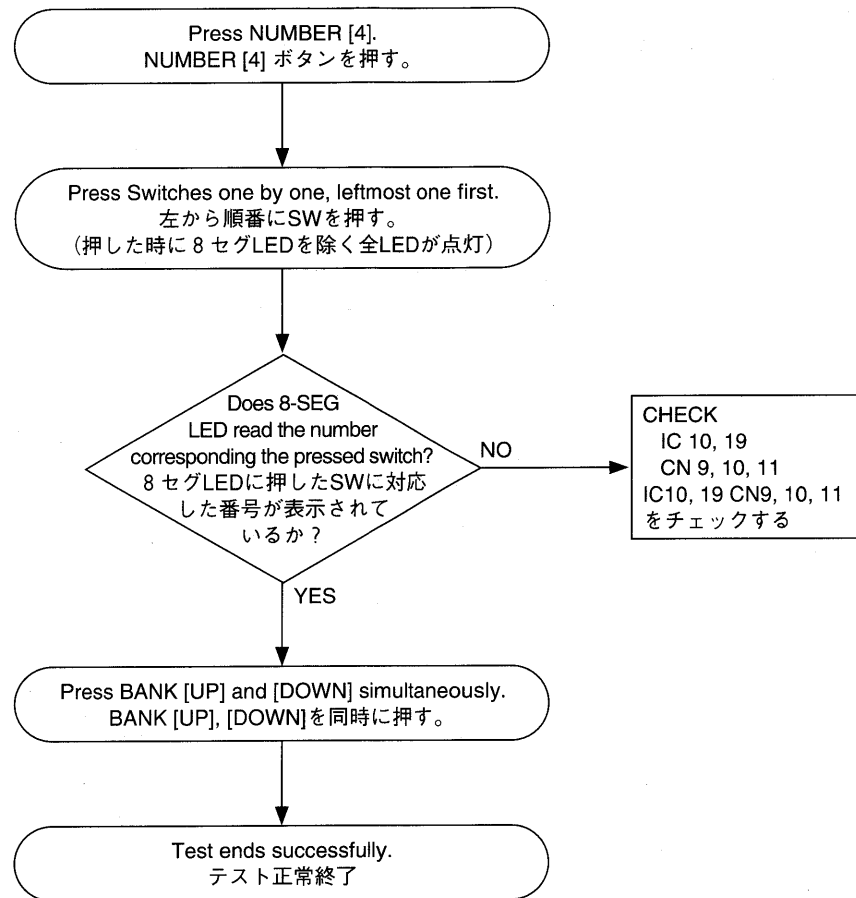


※LED lighting order
LED点灯順序



4. SWITCH CHECK

4. スイッチチェック

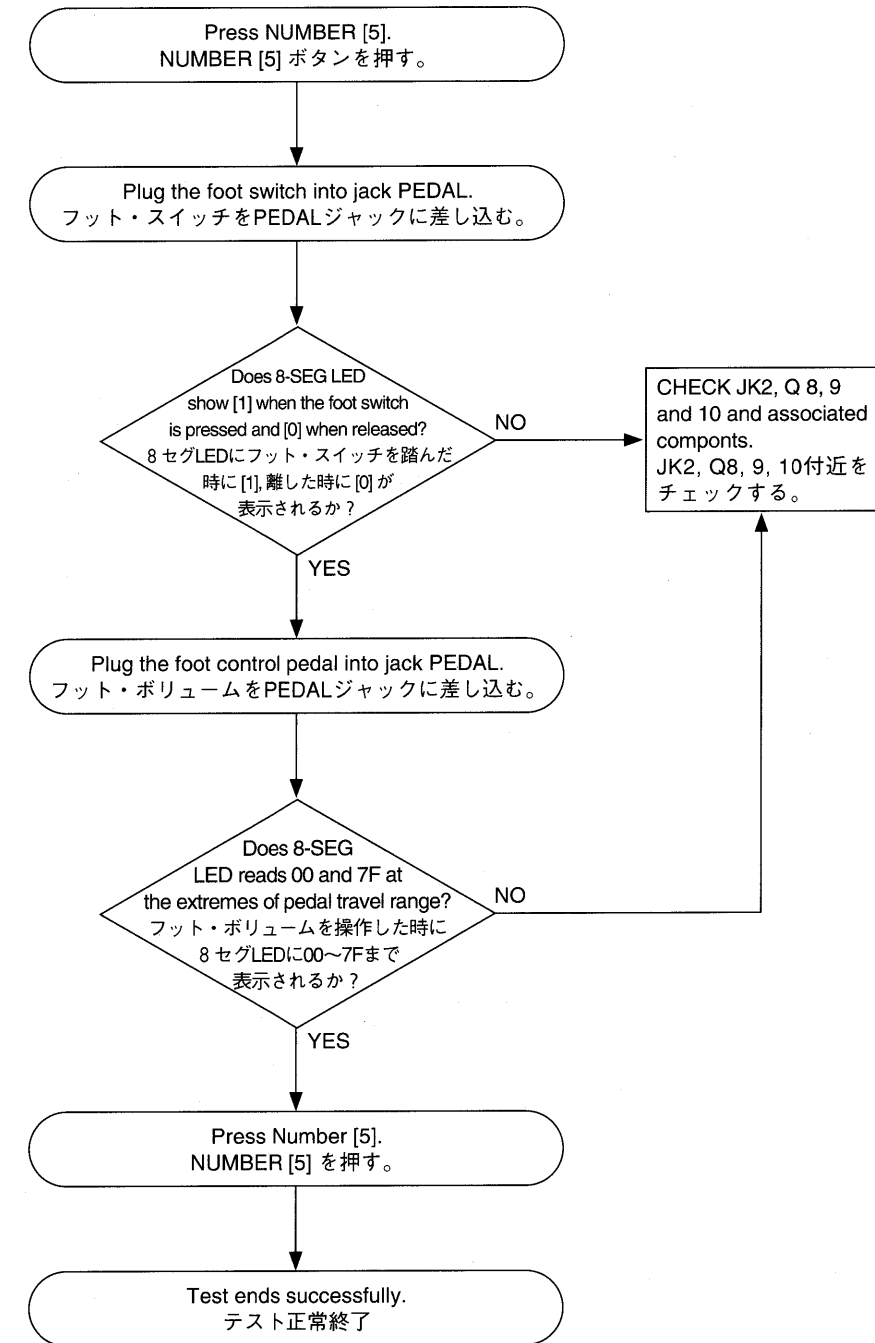


Switch vs number on 8-SEG LED
スイッチナンバー対応表

SWITCH スイッチ名	NUMBER ナンバー
PITCH BEND	1
KEY TRANSPOSE	2
CHORUS	3
REVERB	4
FAT	5
MASTER	6
MIDI	7
PART	8
VARIATION	9
BANK DOWN	10
BANK UP	11
NUMBER 1	12
NUMBER 2	13
NUMBER 3	14
NUMBER 4	15
NUMBER 5	16
NUMBER 6	17
NUMBER 7	18
NUMBER 8	19

5. PEDAL CHECK

5. ペダルチェック



Equipment required :
Foot switch (DP-2 or equivalent)
Foot volume control (EV-5 or equivalent)

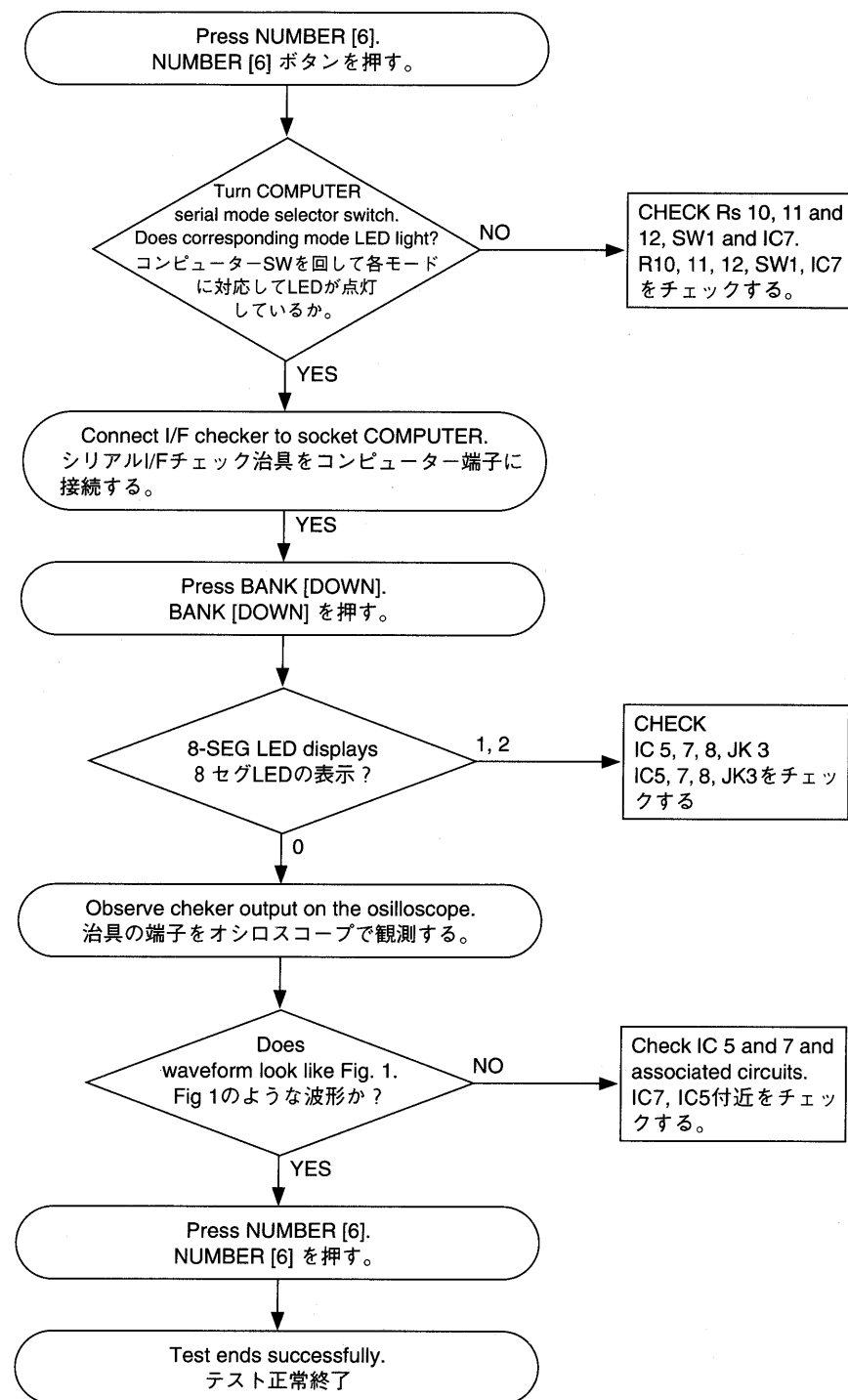
用意する物:
フット・スイッチ (DP-2など)
フット・ボリューム (EV-5など)

6. SERIAL I/F CHECK

6. シリアル I/Fチェック

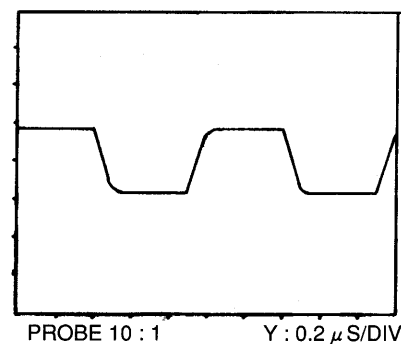
Equipment required :
Serial I/F checker (P/N 17049906)
Oscilloscope

用意する物 :
シリアルI/Fチェック 治具 (17049906のコードでサービス・センターに要求して下さい。)
オシロスコープ



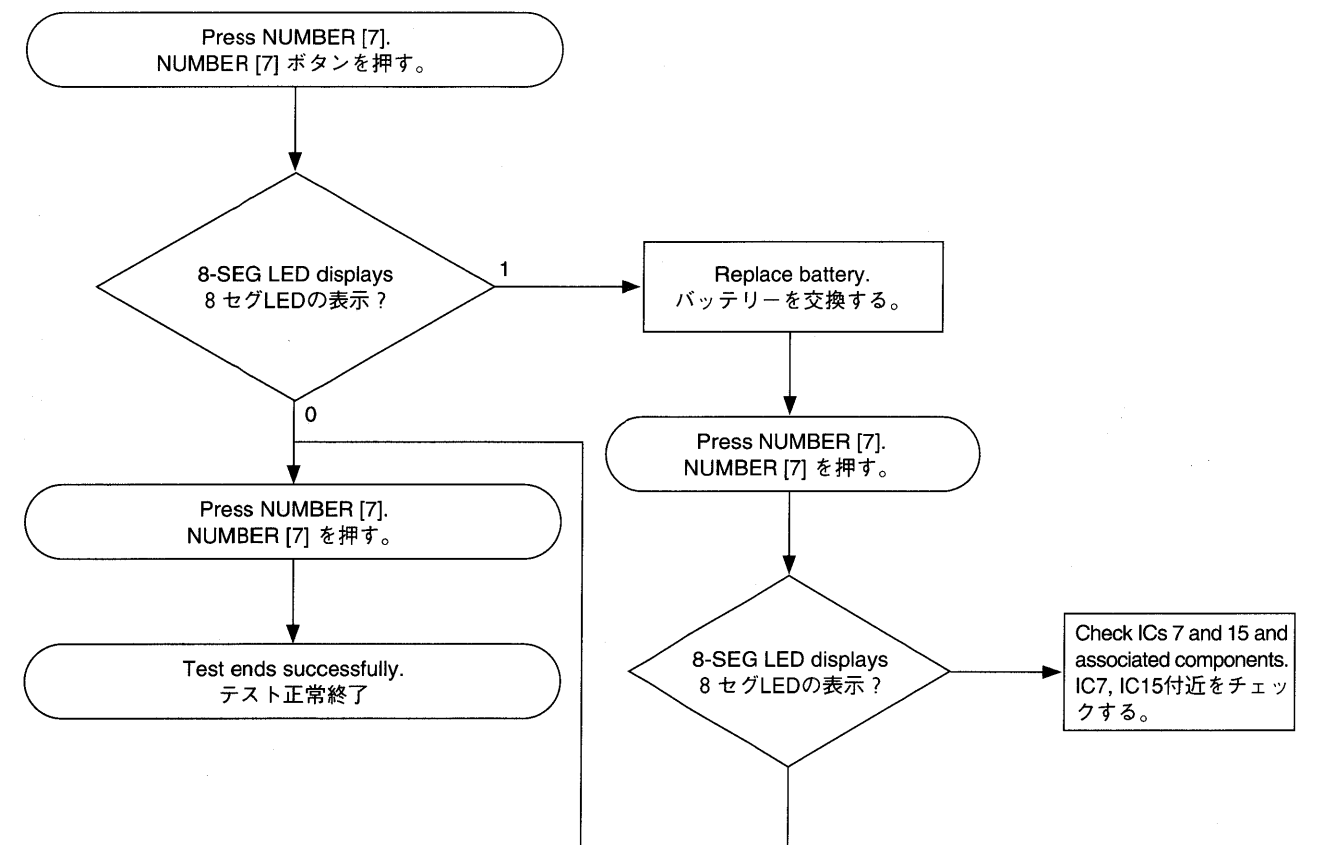
X : 200mV/DIV
DC

Fig 1
HSKO



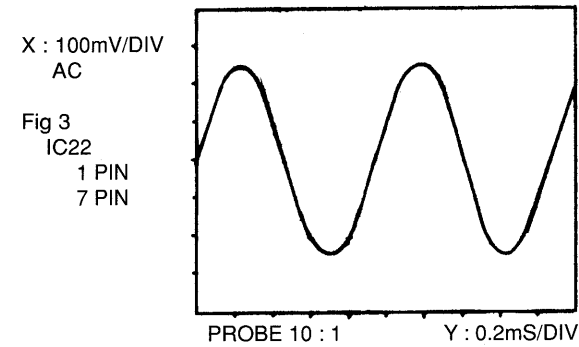
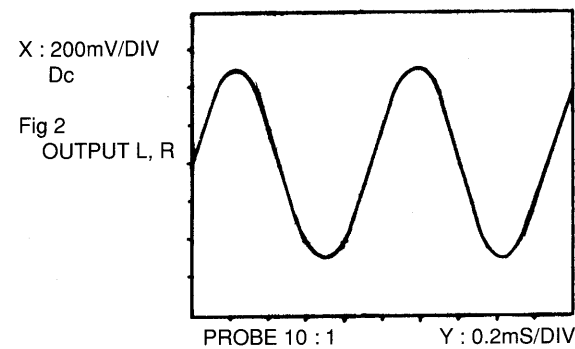
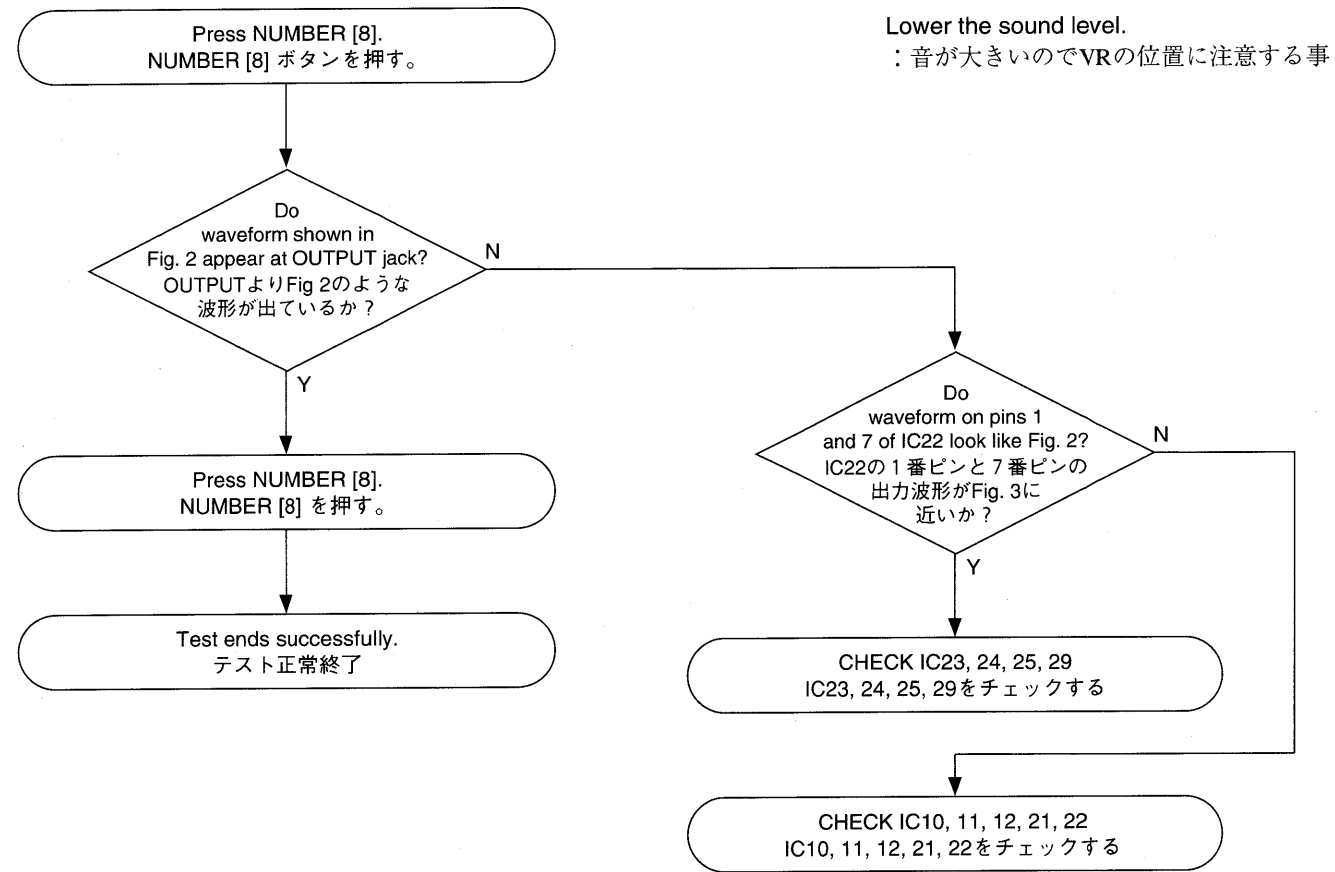
7. BATTERY CHECK

7. バッテリーチェック



8. D/A CHECK

8. D/Aチェック



INITIALIZE/イニシャライズ

The following steps default the MIDI-set parameters to the factory settings.

1. Press [MASTER] and [NUMBER 8] simultaneously. Please [MASTER].

NUMBER 8 LED blinks and 8-SEG LED shows "Sure".

2. Press [NUMBER 8] again. The unit defaults to the factory settings.

The 8-SEG LED shows "1-1".

外部からMIDIで設定が変更されたSK-50を工場出荷時の設定に戻す(イニシャライズする)ときは、以下の操作をします。

1. [MASTER] と [NUMBER 8] を同時に押します。
*このとき [MASTER] からは指を離さないでください。

NUMBER [8] のLEDが点滅し、8セグメントLEDに "Sure" の表示がされます。

2. 再度NUMBER [8] を押します。
イニシャライズが実行され、工場出荷時の設定に戻ります。

8セグメントLEDに "1-1" と表示されます。

IDENTIFYING VERSION NUMBER/バージョンナンバーの確認

While holding down NUMBER [1], [2] and [3], turn power on. The unit enters the test mode.

The 8-SEG LED shows the version number as :x. XX".

NUMBER [1], [2], [3] を押しながら電源スイッチをONにします(テスト・モード)。

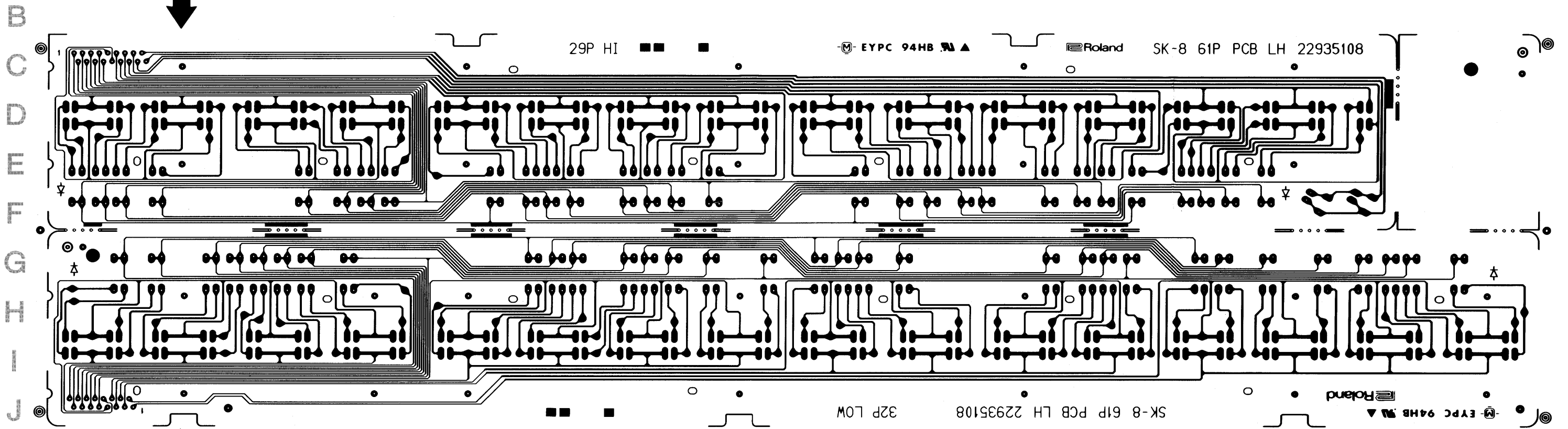
8セグメントLEDに "x. xx" とバージョン・ナンバーが表示されます。

CAUTION: The program stored in the mask ROM of the CPU (IC7) works in connection with the program in the program ROM (IC12). Both program must be in the same program version range. When replacing the CPU or the program ROM, refer to service information bulletins for matched programs.

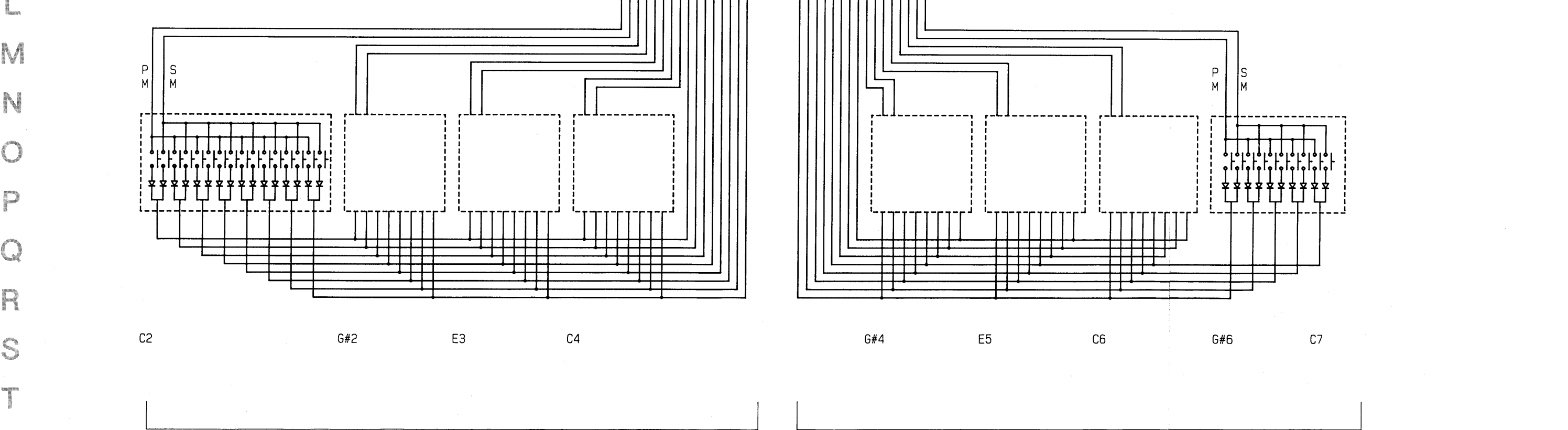
注意: 本機はCPU (マスクROM)にもプログラムされています。そのため、CPU (IC7)、プログラムROM (IC12)のそれぞれにバージョン・ナンバーがあります。それらの関係は密接なものであるため、バージョン・アップの際はサービスインフォメーションに注意してください。

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

A SK-861-A PCB 29P HI ASS'Y
ASSY 7626723001



K SK-861-A PCB 32P LOW ASS'Y
ASSY 7626722001



SK-861-A PCB 32P LOW ASS'Y

SK-861-A PCB 29P HI ASS'Y

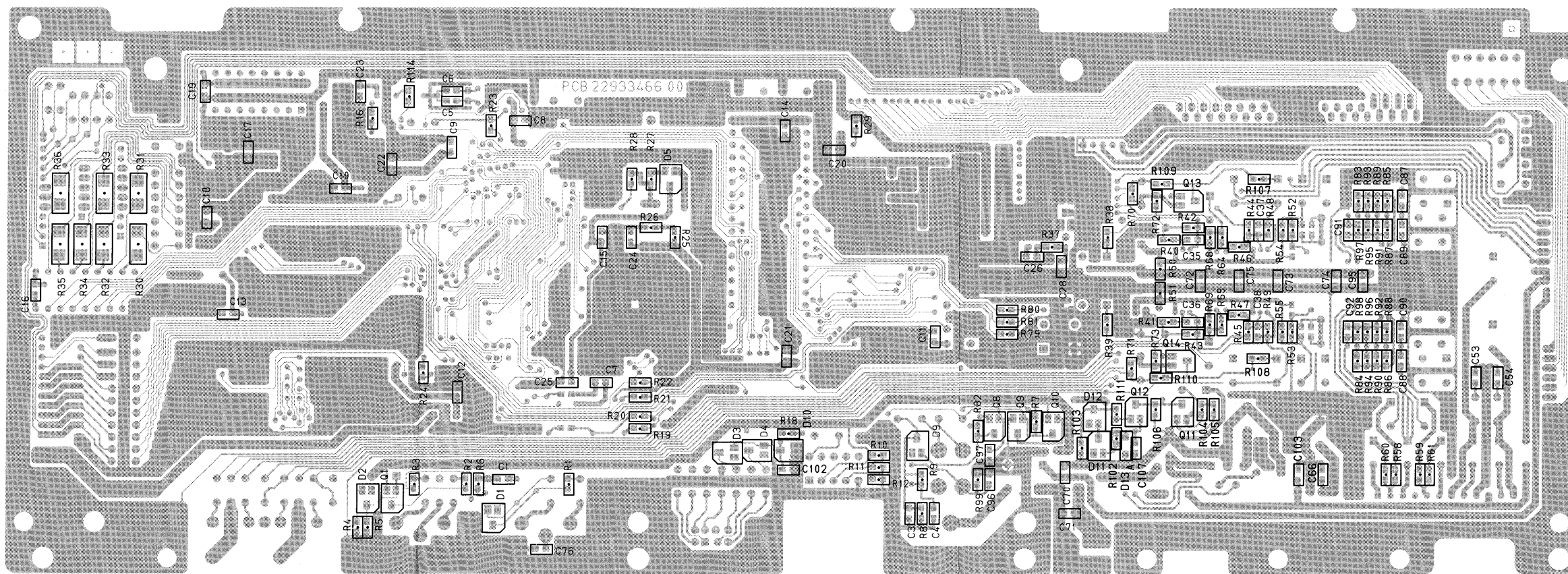
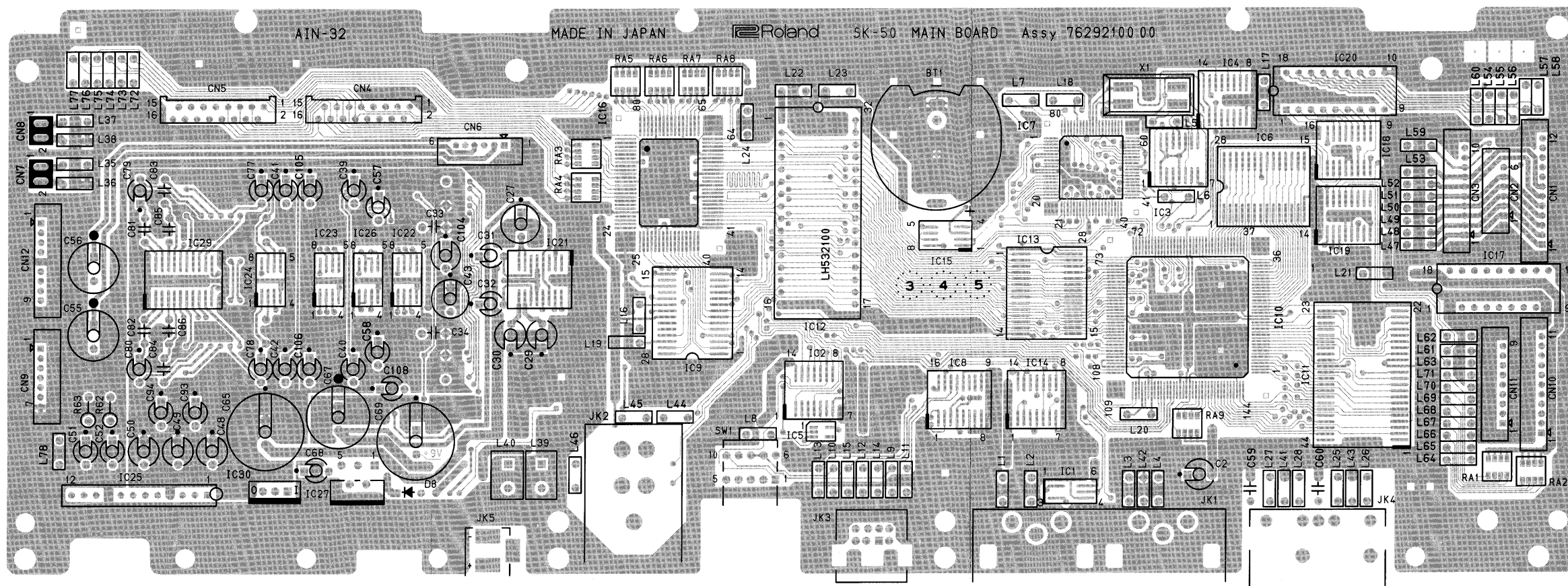
U

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

A
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E MAIN BOARD ASS'Y

ASSY 7629210000
(pcb 22933466)



For Nordic Countries

Apparatus containing Lithium batteries

ADVARSEL!

Lithiumbatteri – Eksplosionsfare ved fejlagtig håndtering.
Udskiftning må kun ske med batteri af samme fabrikat og type.
Levér det brugte batteri tilbage til leverandøren.

ADVARSEL!

Lithiumbatteri – Eksplosionsfare.
Ved udskiftning benyttes kun batteri som anbefalt av apparatfabrikanten.
Brukt batteri returneres apparatleverandøren.

VARNING!

Explosionsfara vid felaktigt batteribyte.
Använd samma batterityp eller en ekvivalent typ som rekommenderas av apparatillverkaren.
Kassera använt batteri enligt fabrikantens instruktion.

VAROITUS!

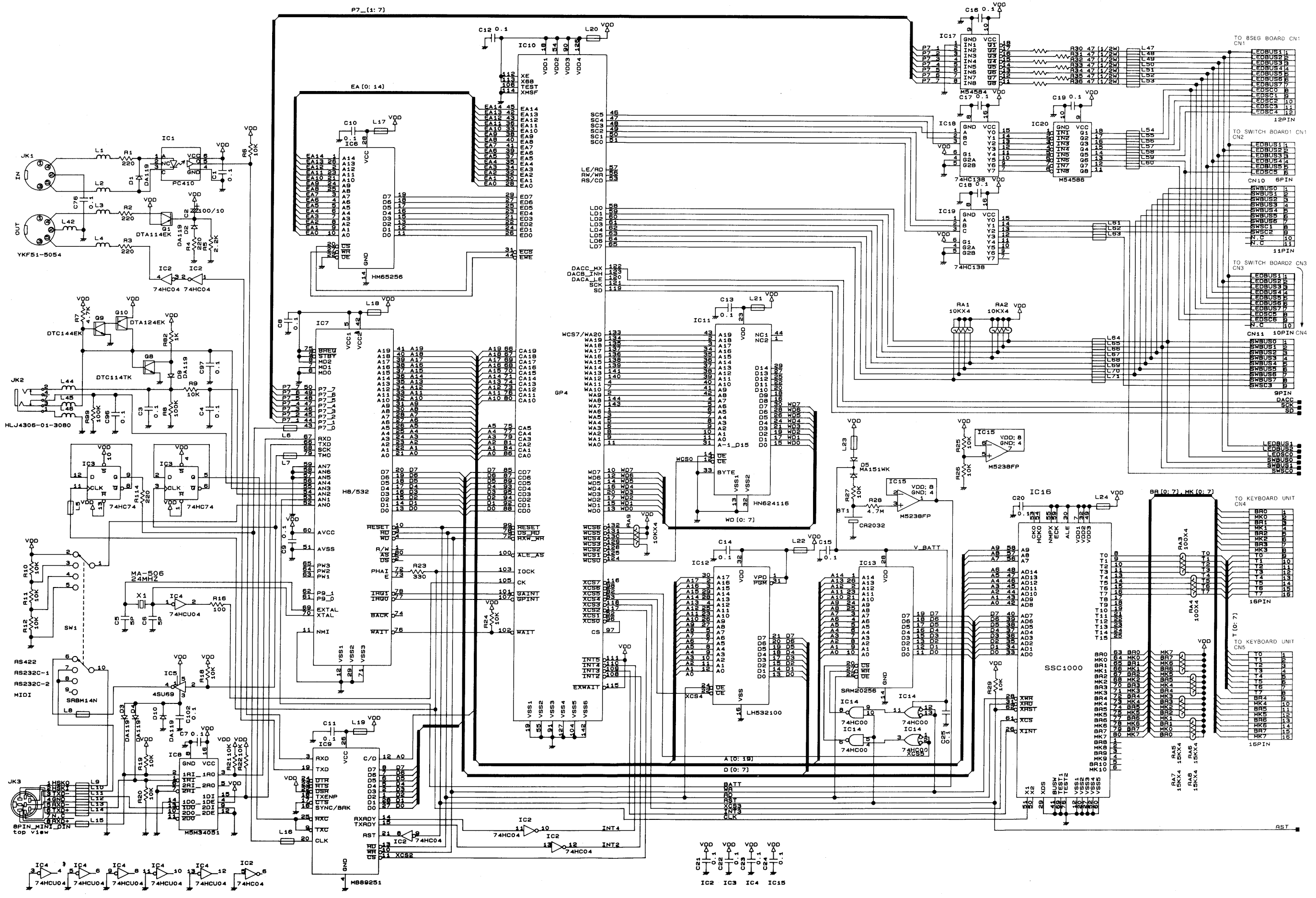
Paristo voi räjähtää, jos se on virheellisesti asennettu.
Vaihda paristo ainoastaan laitevalmistajan suosittelemaan tyyppiin. Hävitä käytetty paristo valmistajan ohjeiden mukaisesti.

View from component 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

A [E] MAIN BOARD ASS'Y

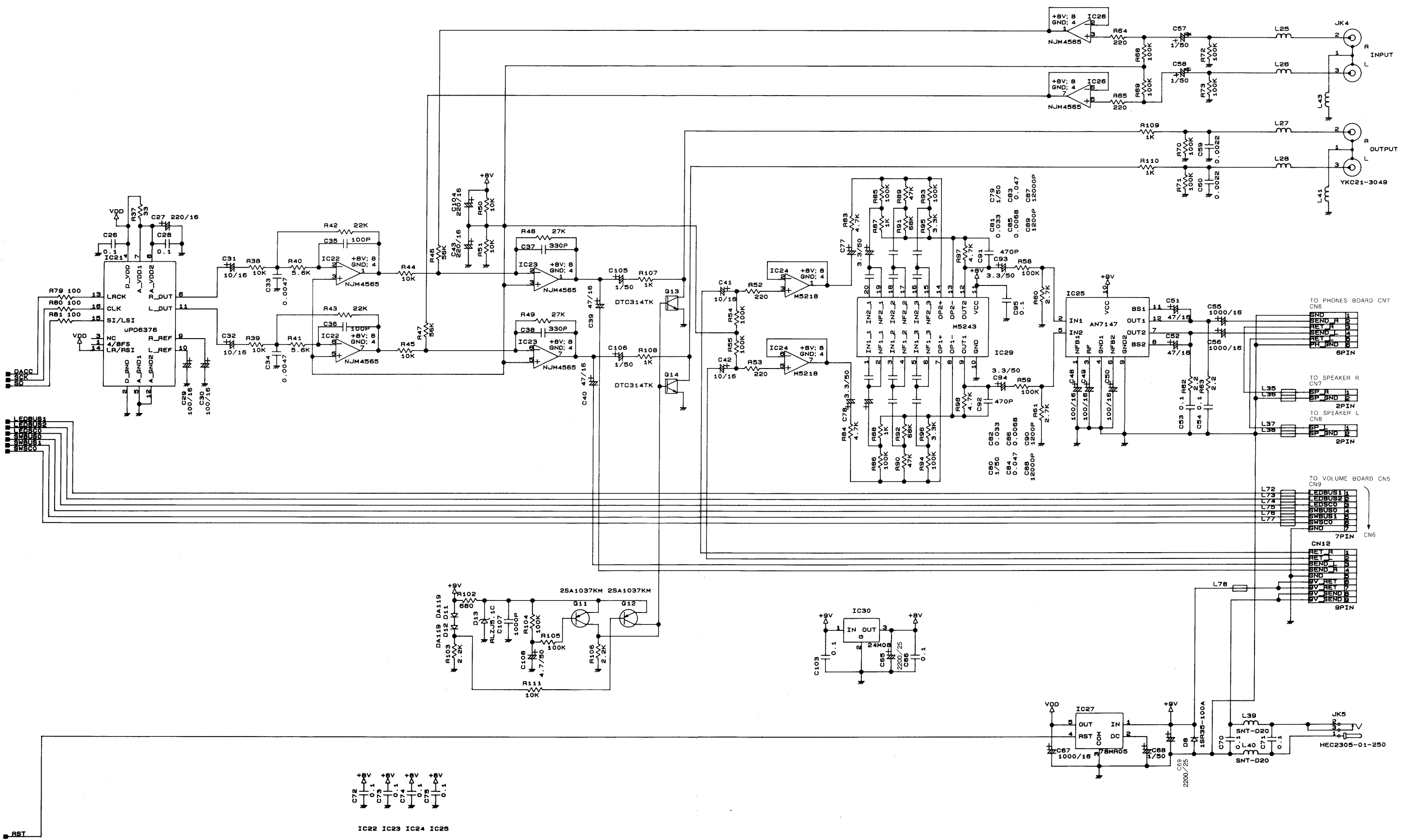
B
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1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

A [E] MAIN BOARD ASS'Y

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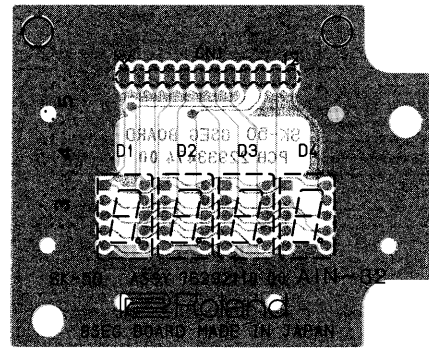


1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

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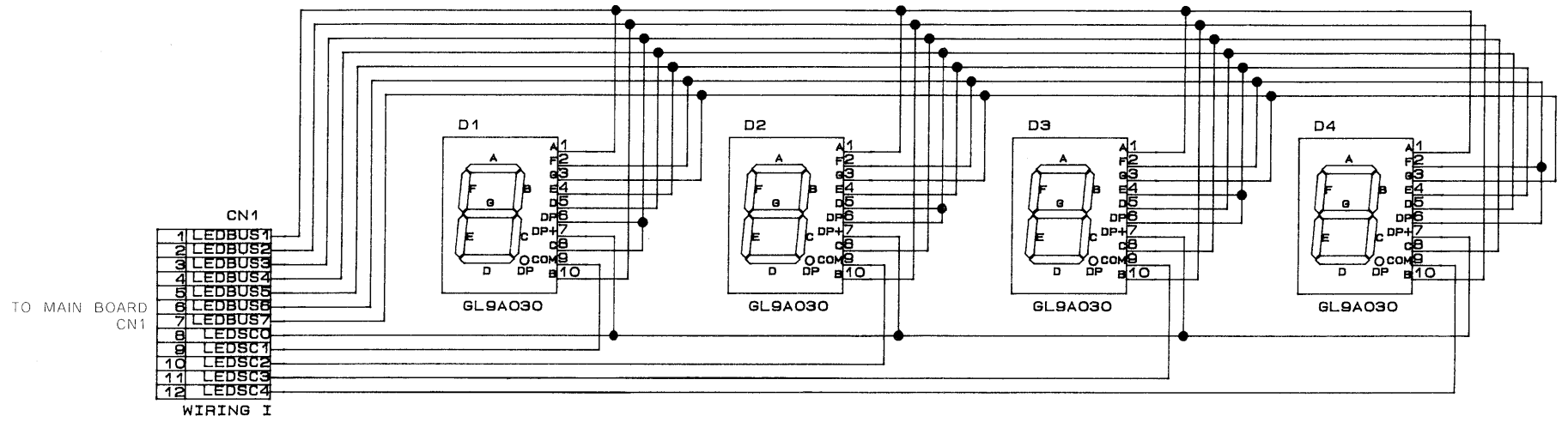
8SEG BOARD ASS'Y

ASSY 7629211000
(pcb 22933474)



View from component side

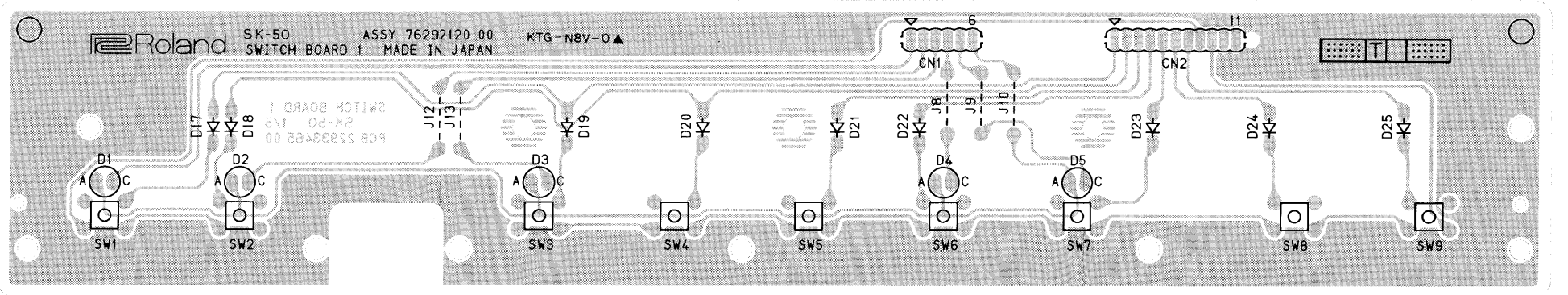
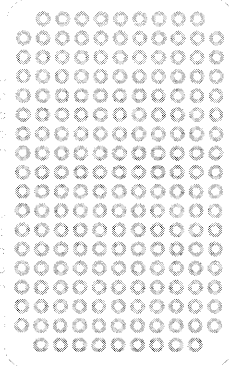
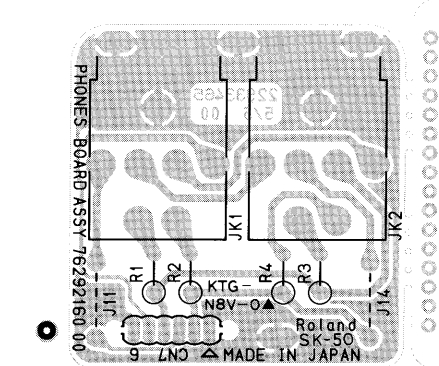
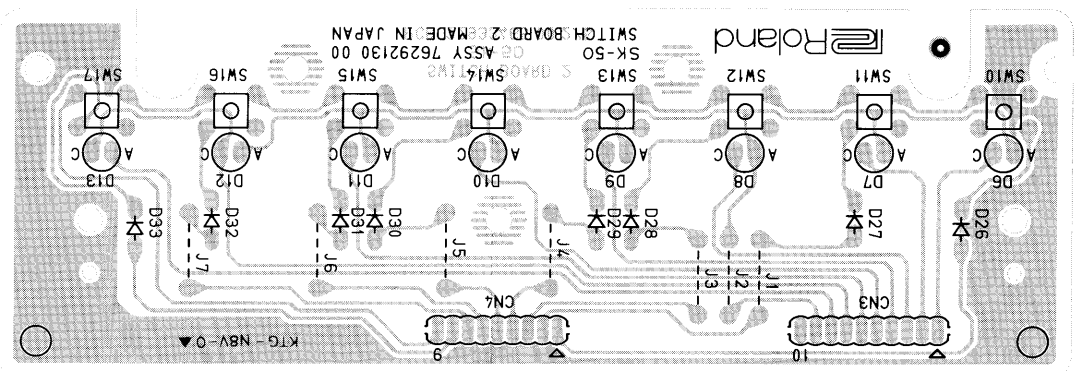
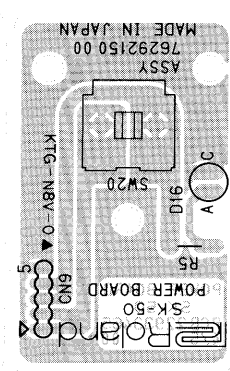
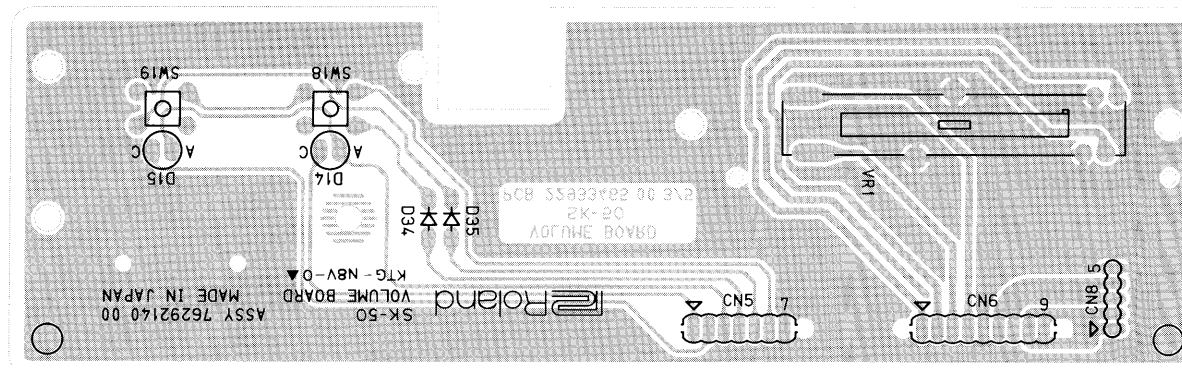
8SEG BOARD ASS'Y



VOLUME BOARD ASS'Y

POWER BOARD ASS'Y

SWITCH BOARD 2 ASS'Y



PHONES BOARD ASS'Y

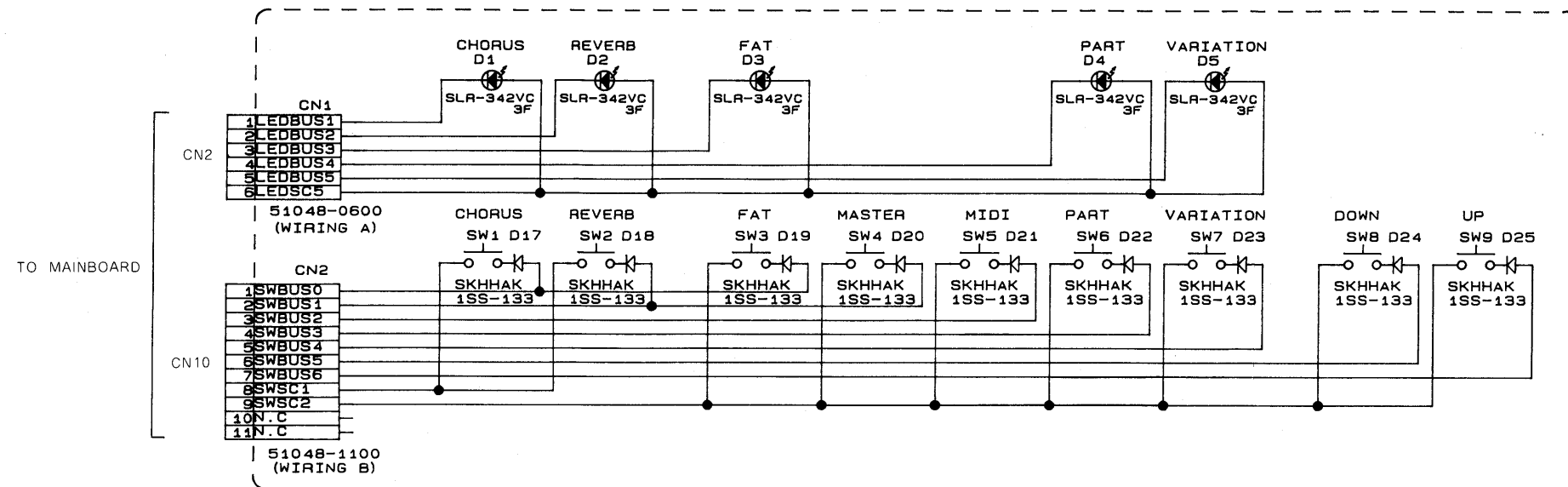
SWITCH BOARD 1 ASS'Y

ASSY 7629212000
(pcb 22933465)

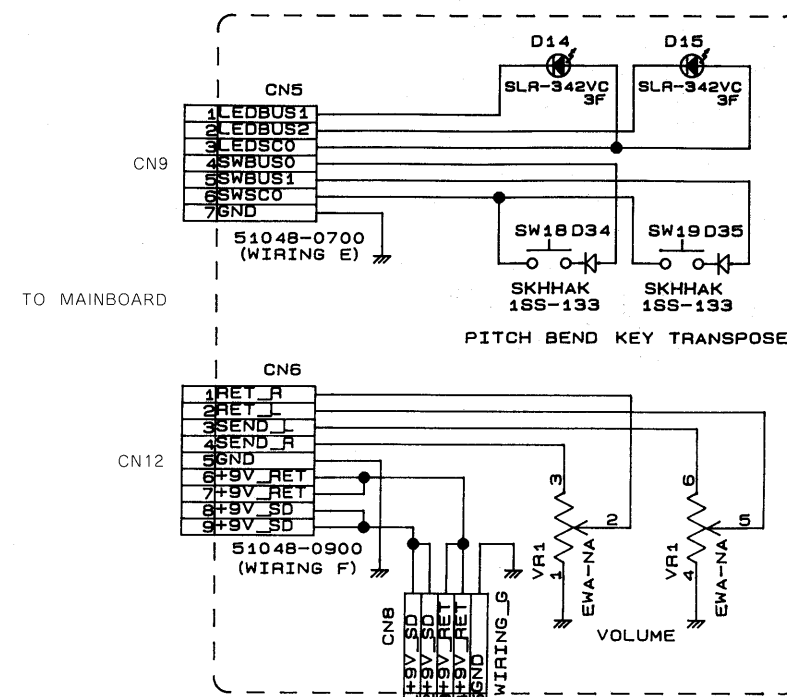
View from component side

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

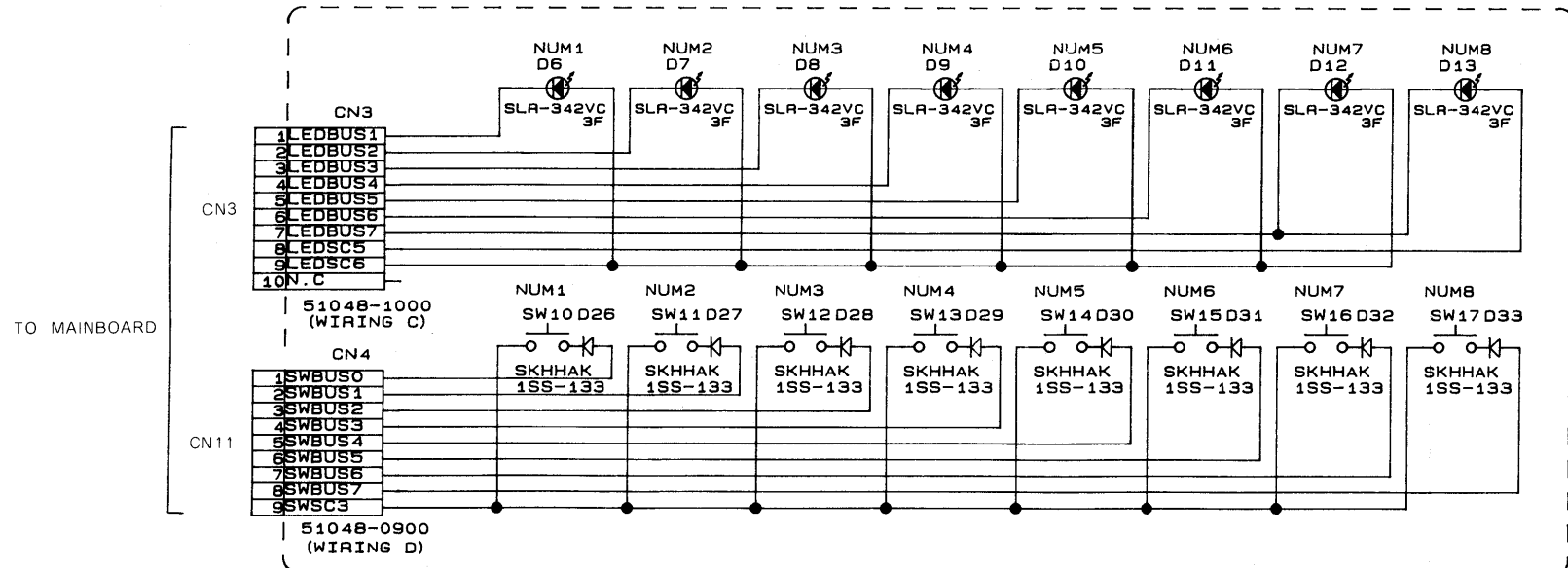
A SWITCH BOARD 1 ASS'Y



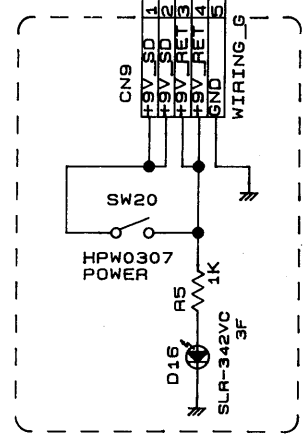
VOLUME BOARD ASS'Y



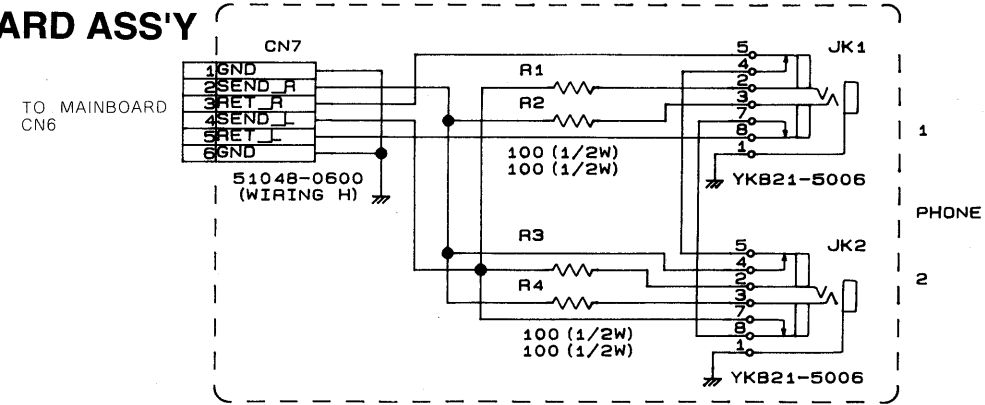
SWITCH BOARD 2 ASS'Y



POWER BOARD ASS'Y



PHONES BOARD ASS'Y



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