

YAMAHA PortaSound VSS-30

SERVICE MANUAL



VSS-30

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PARTS LIST	



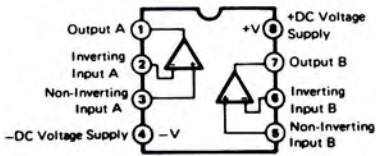
■ LSI DATA TABLE (LSI端子機能表)

● YM2416 (XD082001) GE11

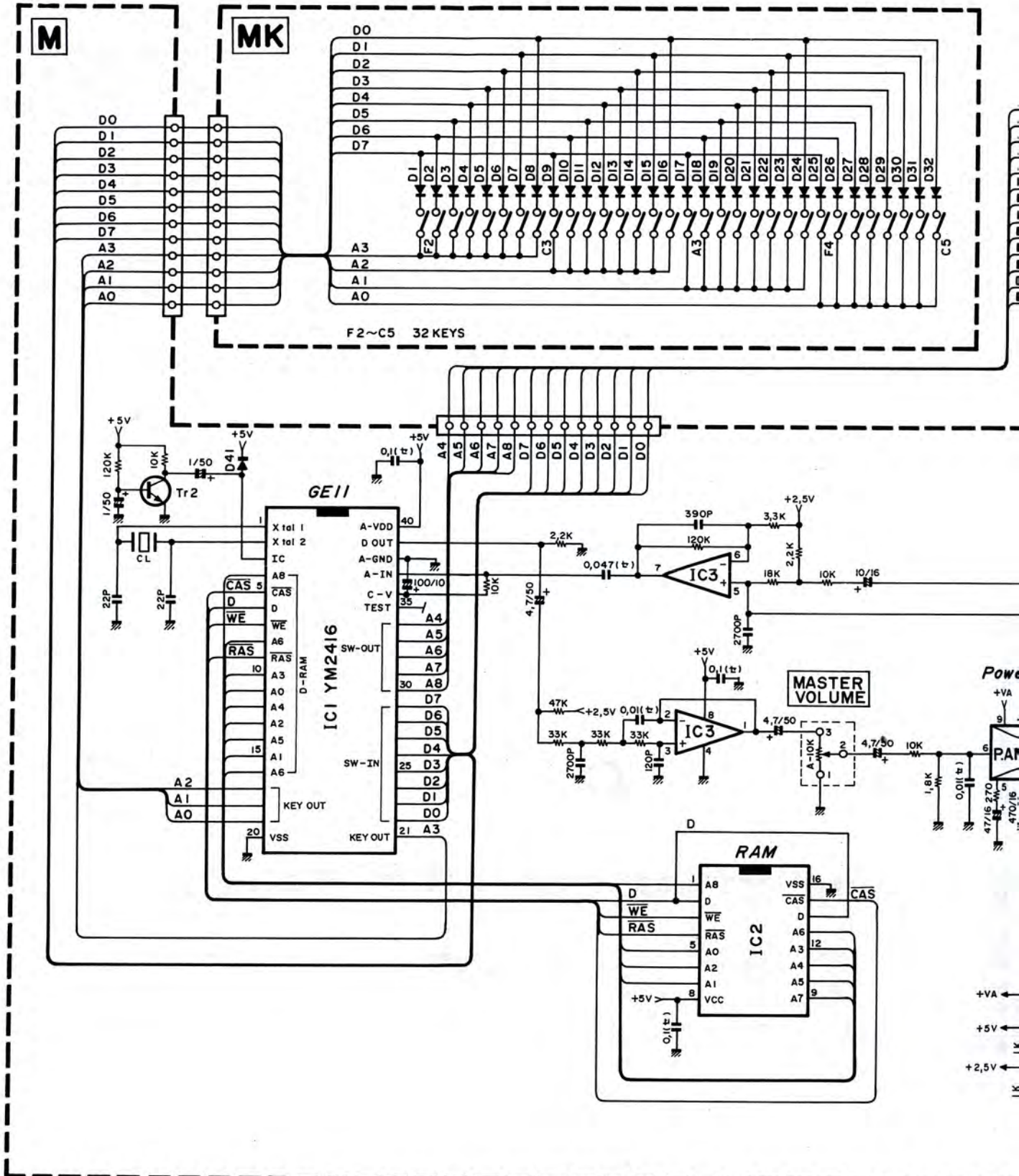
Pin No.	Pin Name	I/O	Function	Pin No.	Pin Name	I/O	Function
1	xtal1	}	Clock	21	A3	O	Output port (for keyboard switches)
2	xtal2			22	D0	I	
3	IC	I	Initial clear	23	D1	I	Input port (for keyboard and panel switches)
4	A8	I	External memory input	24	D2	I	
5	CAS	O	External memory control	25	D3	I	
6	D	O	Data output	26	D4	I	
7	WE	O	Write control	27	D5	I	
8	A6	I	External memory input	28	D6	I	
9	RAS	O	External memory control	29	D7	I	Output port (for panel switches)
10	A3	I	External memory input	30	A8	O	
11	A0	I					
12	A4	I					
13	A2	I					
14	A5	I					
15	A1	I					
16	A6	I	Output port (for keyboard switches)	35	SP OFF	O	Amplifier/speaker separating control
17	A2	O		36	VCC	I	
18	A1	O	Output port (for keyboard switches)	37	SAMPL A1	I	Sampling signal IN
19	A0	O		38	A-GND	I	Ground
20	VSS		Ground	39	OUT	O	Musical sound/voice
				40	A-VDD		DC supply

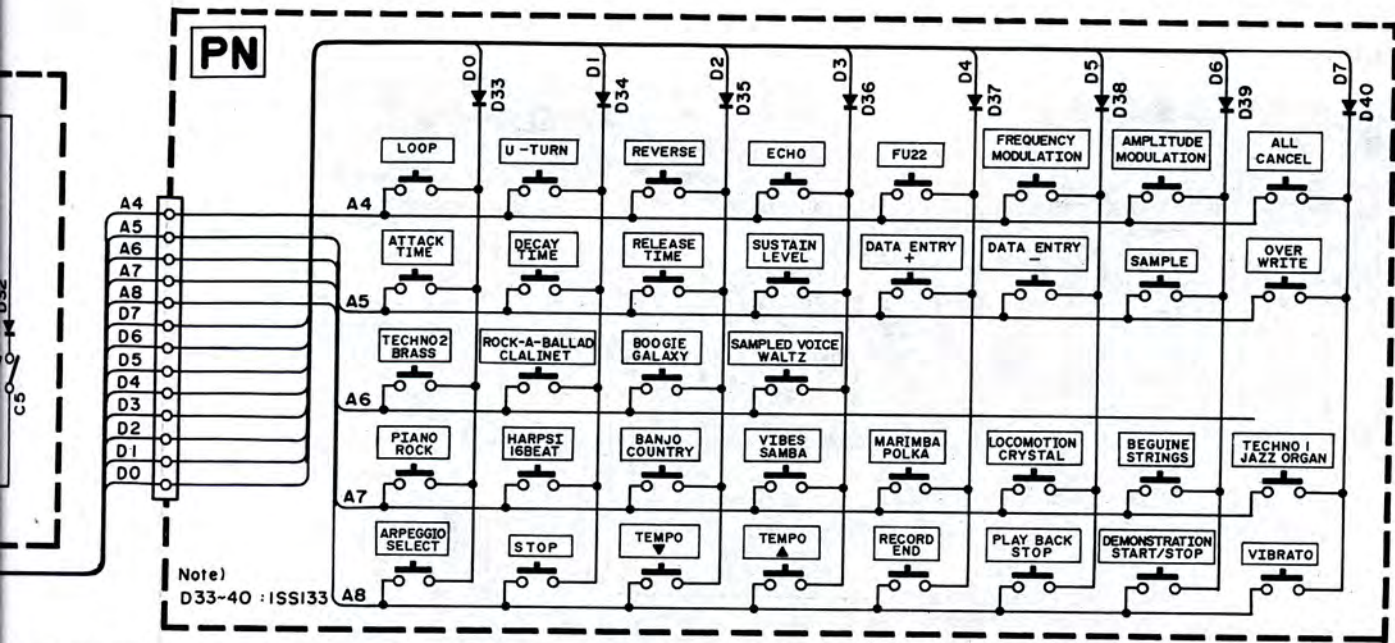
■ IC BLOCK DIAGRAM (ICブロック図)

● NJM4558DV (IG001390)
Dual Operational Amplifier

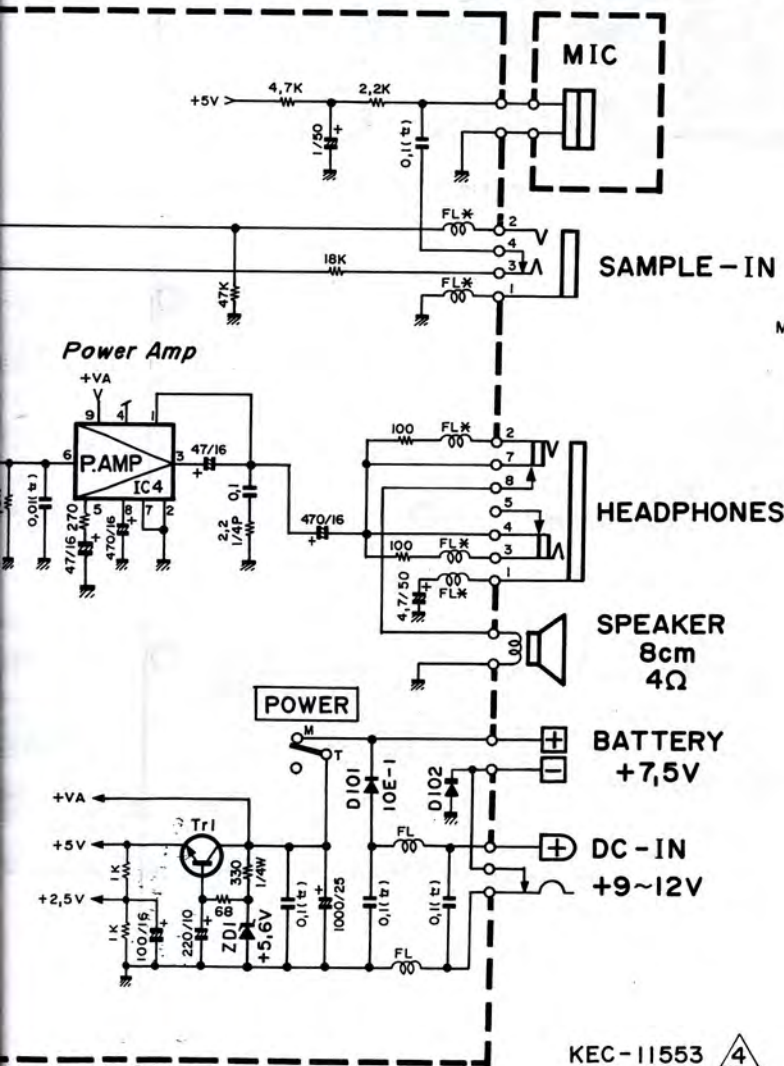


OVERALL CIRCUIT DIAGRAM (総回路図)





Note)
D33-40 : ISS133



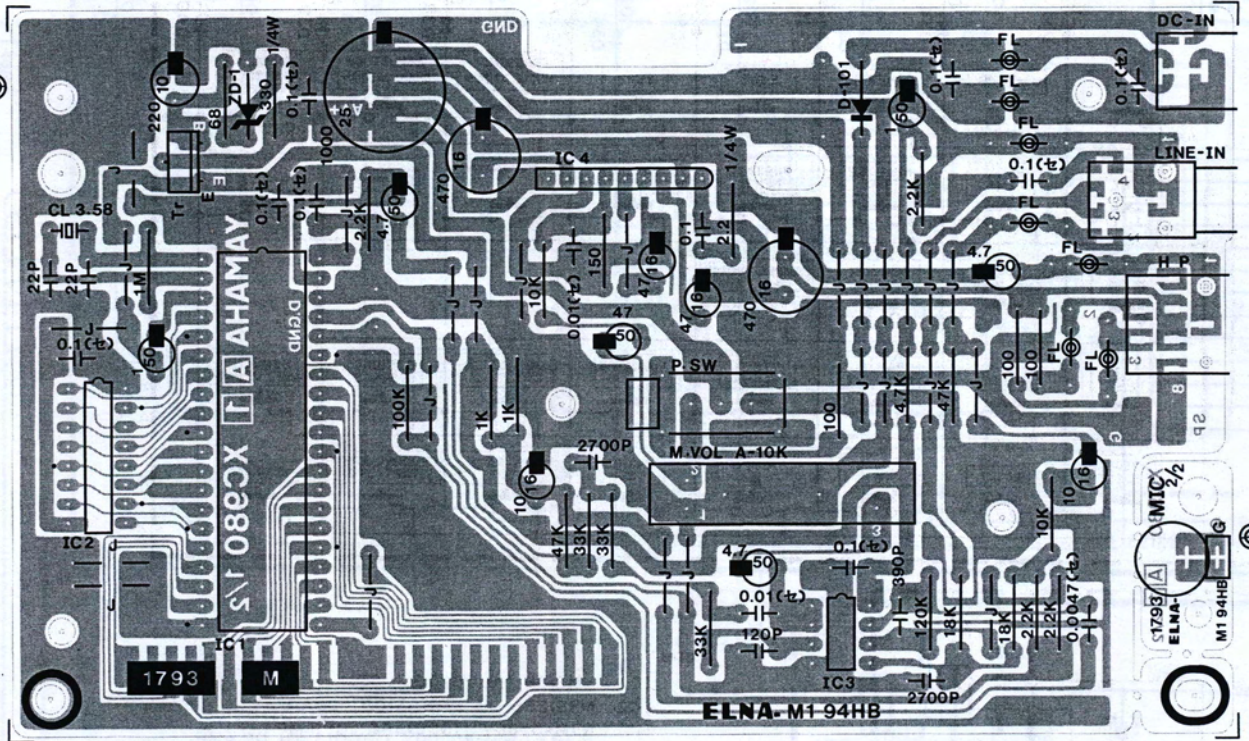
Notes)

- IC1 : YM2416 (XD082001) GE11
- IC2 : MB81256-15 (IG155100) DRAM
- IC3 : NJM4558DV (IG001390) OP AMP.
- IC4 : AN7140 (IG116800) 5W ICH
- Tr1 : 2SD880 (O),(Y)
- Tr2 : 2SC2603 (E),(F)
- D41 : ISS133
- D101,102 : 10E-1
- ZD1 : Zener Diode MTZ5.6C 20mA
- Marked O,1(±) : Semiconductive Cera. Cap.
- MIC : Condenser MIC WM-034B
- CL : Ceramic Resonator 3,58MHz
- FL : Coil 20μH
- Marked * : North European model only

KEC-11553

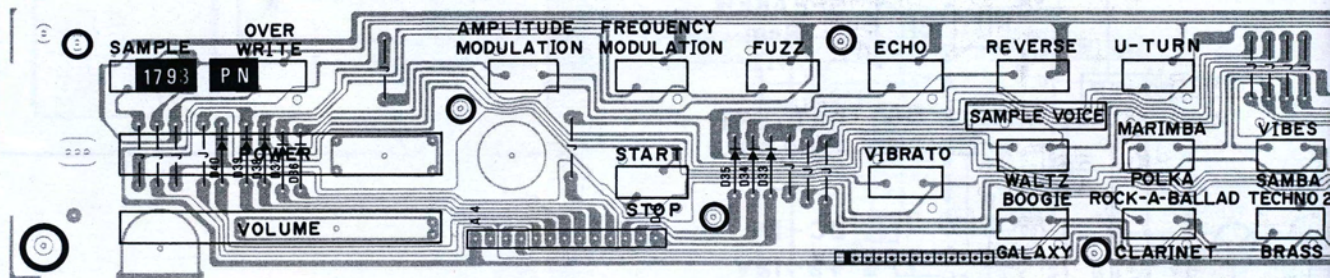
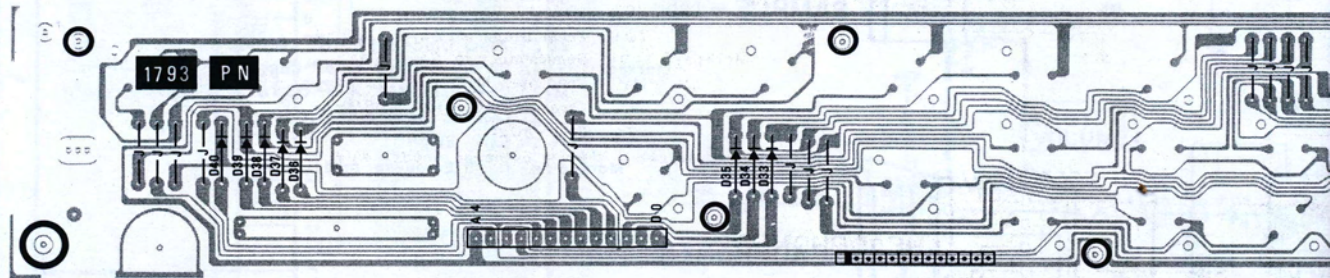
■ CIRCUIT BOARDS (シート基板図)

● M Circuit Board



Components side (部品側)

● PN Circuit Board



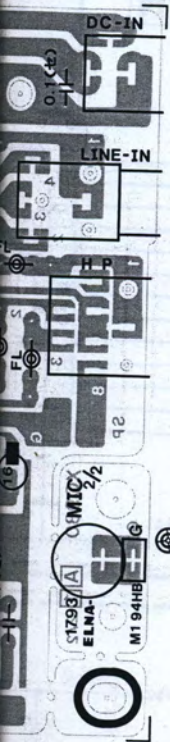
2NA-VD62780 \triangle : M Circuit Board (North European)

2NA-VD62830 \triangle : M Circuit Board (Others)

2NA-VD63110 \triangle : PN Circuit Board

LSI DATA TABLE (LSI端子表)

YM2416 (XD023001) GE11

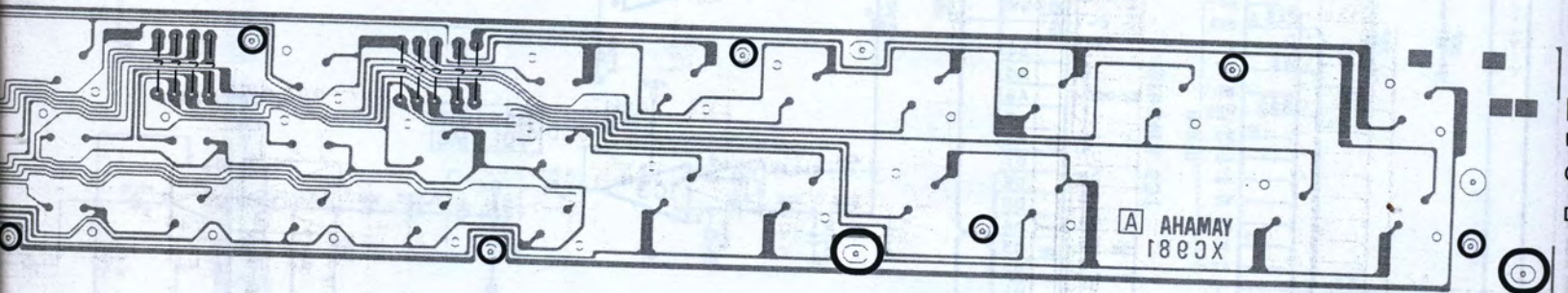


side (部品側)

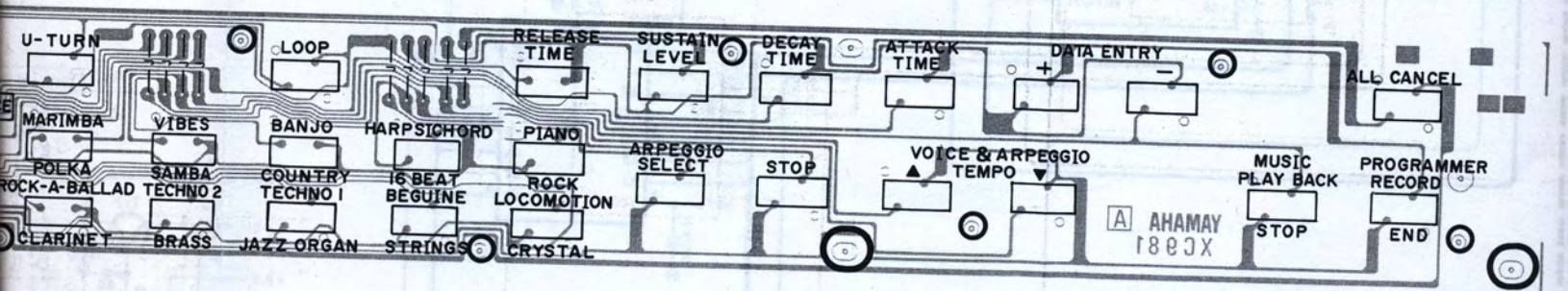
[M Circuit Board]

Notes)

Circuit Board:	XC98010
IC1:	YM2416 (XD082)
IC2:	MB81256-15 (IG)
IC3:	NJM4558DV (IG)
IC4:	AN7140 (IG1166)
Tr1:	2SD880 O, Y
Tr2:	2SC2603 E, F
D101:	10E-1 26MM
D41:	1SS133
ZD-1:	Zener Diode MTZ
Marked 0.1 (ㇿ):	Semiconductive C
MIC:	Condenser MIC W
CL:	Ceramic Resonato
FL:	Coil 20μ



Components side (部品側)



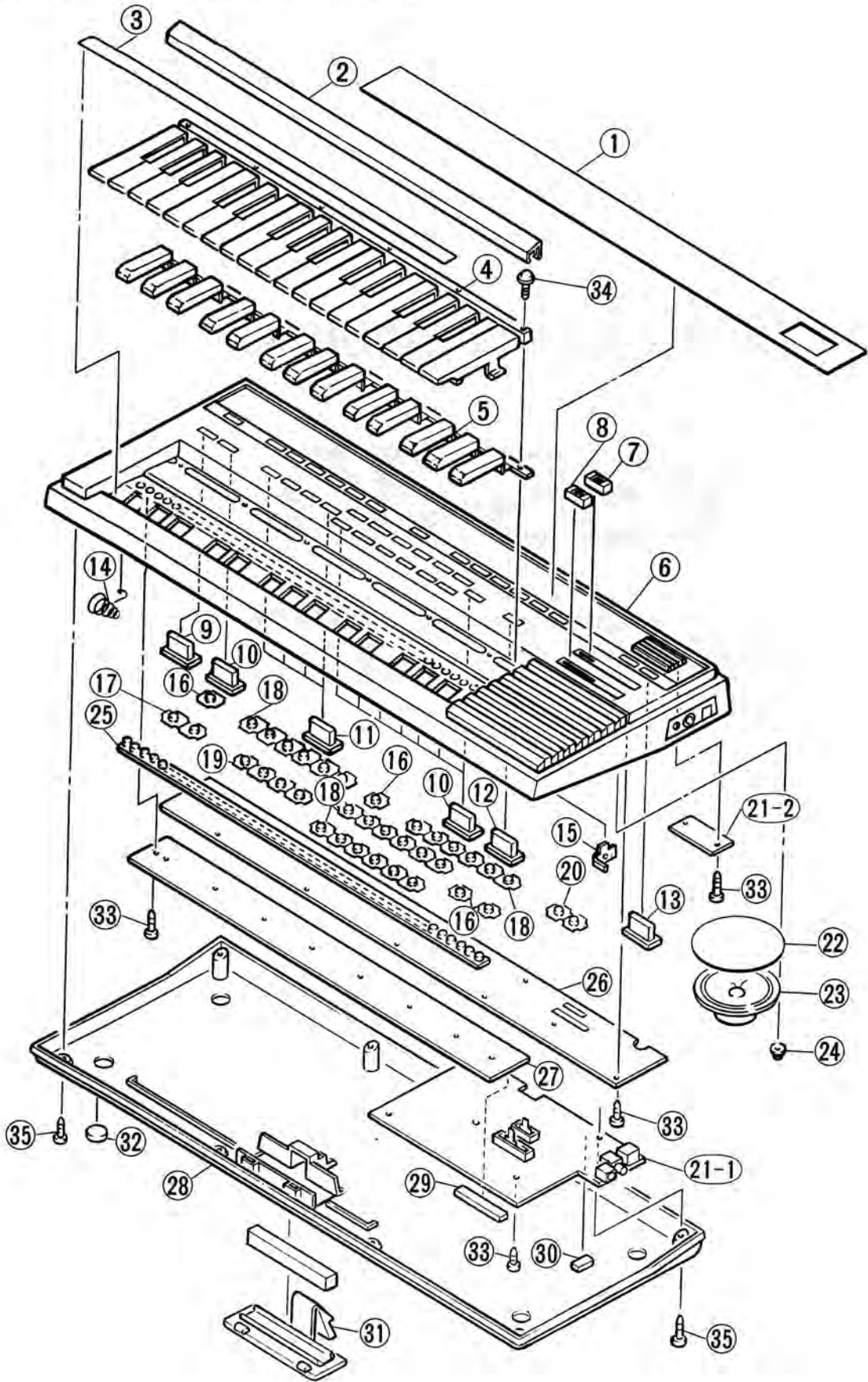
The application of switches on PN Circuit Board

[M Circuit Board]

Notes)

Circuit Board:	XC98010
IC1:	YM2416 (XD082001) GE11
IC2:	MB81256-15 (IG155100) DRAM
IC3:	NJM4558DV (IG001390) OP AM
IC4:	AN7140 (IG116800) 5W 1CH
Tr1:	2SD880 O, Y
Tr2:	2SC2603 E, F
D101:	10E-1 26MM
D41:	1SS133
ZD-1:	Zener Diode MTZ5.6C 20mA
Marked 0.1 (μ):	Semiconductive Cera. Cap.
MIC:	Condenser MIC WM-034B
CL:	Ceramic Resonator 3.58MHz
FL:	Coil 20 μ

■ OVERALL ASSEMBLY (総組立)



OVERALL ASSEMBLY (総組立)

VSS-30

Ref. No.	Part No.	Description	部品名	Remarks	ランク
1	VC535900	Panel Seal	パネルシール		
2	VC537700	Keyboard Holder	鍵盤押さえ		04
3	VC537000	Stopper Cloth	ストップバークロス		03
4	VC536100	White Key Assembly	白鍵盤 Ass'y		01
5	VC536300	Black Key Assembly	黒鍵盤 Ass'y		
6	VC535200	Upper Case	上ケース		
7	VC539000	Knob	スライドツマミ		10
8	VC545200	Knob	スライドツマミ	POWER	01
9	VC545000	Knob	スライドツマミ	VOLUME	01
10	VC539200	Knob	スライドツマミ	RECORD	01
11	VC544900	Knob	スライドツマミ	PB. SELECTOR	01
12	VC545100	Knob	スライドツマミ	TEMPO, STOP, ARP	01
13	VC544800	Knob	スライドツマミ	DEMONSTRATION	01
14	VC540200	Spring Terminal	スプリング端子板		01
15	BB005460	Terminal	端子板		01
16	VC544100	Rubber Contact	接点ラバー		01
17	VC544200	Rubber Contact	接点ラバー		01
18	VC544700	Rubber Contact	接点ラバー		01
19	VC544300	Rubber Contact	接点ラバー		01
20	VD631300	Rubber Contact	接点ラバー		01
21	VD627800	Circuit Board	Mシート		
21-1	VD628300	Circuit Board	Mシート	H OTHERS	
21-2	VD628300	Circuit Board	Mシート		
22	VC535700	Circuit Board	MICシート		
23	XC042001	Speaker	スピーカー		
24	EK003650	Self Threading Nut	セルフスレッドナット		04
25	VC548300	Rubber Contact	接点ラバー		01
26	NX002720	Circuit Board	PNシート	KEY SWITCH	03
27	NX002730	Circuit Board	MKシート		
28	VC540700	Lower Case Assembly	下ケース Ass'y		06
29	VD629100	Cushion	防振スポンジ		01
30	VD629200	Cushion	防振スポンジ		01
31	VB227600	Battery Cover	バッテリーカバー		01
32	CB043750	Foot	ゴム足		01
33	EI026080	Bind Head Tapping Screw	A*イント*タッピング*ネジ*		01
34	EK030030	BW Head Tapping Screw	BW*イント*タッピング*ネジ*		01
35	EI326126	Bind Head Tapping Screw	A*イント*タッピング*ネジ*		01

* New Parts (新規部品)

ELECTRICAL PARTS (電気部品)

ランク : Japan only

Ref. No.	Part No.	Description	部品名	Remarks	ランク
	VD627800	Circuit Board	Mシート		
	VD628300	Circuit Board	Mシート	H OTHERS	
	NX002720	Circuit Board	PNシート		
	NX002730	Circuit Board	MKシート		
	VD627800	Circuit Board	Mシート		
	VD628300	Circuit Board	Mシート	H OTHERS	
	IG001390	IC	IC	OP AMP	03
	IG116800	IC	IC	5W 1CH	04
	IG155100	IC	IC	DRAM	15
	XD082001	IC	IC		
	ID088000	Transistor	トランジスタ	GE11	03
	IC260310	Transistor	トランジスタ		03
	IH000590	Diode	ダイオード		01
	IF003450	Diode	ダイオード		03
	IF010720	Zener Diode	ダイオード		01
	VA855600	Slide Pot.	ツェナーダイオード		01
	UJ149220	Electrolytic Cap.	スライドポリウム	MASTER VOL	03
	FZ005030	Semiconductive Cera. Cap.	ケミコン		03
	VC961000	Condenser MIC.	半導体セラコン		03
	VR835000	Coil	マイクロホン		01
	QU008000	Ceramic Resonator	コイル		03
	VA856400	Slide Switch	セラミック振動子		01
	VA855500	Pin Jack	スライドスイッチ	POWER SW	03
	VR230400	Phone Jack	ピンジャック	SAMPLE IN	02
	VC664500	DC IN Connector	ホンジャック	HEADPHONE	03
	NX002720	Circuit Board	電源コネクタ	DC IN	01
	IF003450	Diode	PNシート		
	NX002730	Circuit Board	ダイオード		01
	IF003450	Diode	MKシート		
	XC042001	Speaker	ダイオード		01
			8.0cm 4Ω 1W	スピーカー	04

* New Parts (新規部品)

ランク : Japan only

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