

PORTATONE *PSR-550* SERVICE MANUAL



■ CONTENTS

SPECIFICATIONS	3
PANEL LAYOUT	4
CIRCUIT BOARD LAYOUT & WIRING	6
BLOCK DIAGRAM	8
DISASSEMBLY PROCEDURE	9
LSI PIN DESCRIPTION	13
IC BLOCK DIAGRAM	18
CIRCUIT BOARDS	19
TEST PROGRAM	28
DATA BACKUP & INITIALIZATION	32
ALERT MESSAGE LIST	33
MIDI IMPLEMENTATION CHART	35
OVERALL CIRCUIT DIAGRAM	
PARTS LIST	

This document is printed on chlorine free (ECF) paper with soy ink.

SPECIFICATIONS

Keyboards

- 61 standard-size keys (C1 — C6) with touch response.

Display

- Large multi-function LCD display

Setup

- STANDBY/ON
- Master Volume : MIN — MAX

Demo

- 9 Songs

Realtime Controls

- Pitch Bend wheel

Control & Number Buttons

- SONG
- STYLE
- MUSIC DATABASE
- VOICE L
- VOICE R1
- VOICE R2
- VOICE CHANGE
- MIXER
- NEXT/BACK
- DIRECT ACCESS
- EXIT
- Data dial, [1] — [0], [+ / YES], [- / NO]

Overall Controls

- Tempo : 32 — 280
- Transpose

Voice

- 219 Panel Voices +14 Drum Kits + 480 XG Voices
- Polyphony : 32
- Voice Set
- R1/R2/L Voices
- Part on/off (R1/R2/L)
- Voice Change : Voice number
- Mixer : Volume, Octave, Pan, Reverb Depth, Chorus Depth, DSP Depth

Auto Accompaniment

- 112 Styles
- Accompaniment Track : RHYTHM SUB/MAIN, BASS, CHORD 1/2, PAD, PHRASE1/2
- Accompaniment Track Settings : ON/OFF
- Accompaniment Control : ACMP ON/OFF, SYNC START, SYNC STOP, START/STOP, INTRO, MAIN A/B (AUTO FILL), ENDING/rit
- Beat Indicator
- Accompaniment Volume
- Voice Change : Voice number
- Mixer : Volume, Pan, Reverb depth, Chorus depth, DSP depth
- One Touch Setting
- Fingering Mode : Multi Finger/Single Finger/Fingered 1/ Fingered 2/Full Keyboard

Music Database

- 220

Multi Pads

- 40 Multi Pad Banks
- 4 Pads + STOP
- Chord Match
- Naming

Digital Effects

- Reverb : 24 types
- Chorus : 16 types
- DSP (system/insertion) : 74 types
- Harmony/Echo : 22 types

Registration Memory

- 32 Registration Banks : 1 — 4
- Naming
- Accompaniment Freeze

Disk Operations

- Song playback/recording
- Load (Style/Multi Pad/Registration Memory)
- Save (Style/Multi Pad/Registration Memory)
- Utility : Format, Song Copy, Delete File

Song

- Song Volume
- Song Track Settings : ON/OFF
- Repeat Play
- Song Transpose

Song Recording

- Quick Record, Multi Record
- Recording Tracks : 1 — 16
- Punch In/Punch Out
- Quantize
- Naming
- Clear
- Setup Data : Volume, Octave, Pan, Reverb depth, Chorus depth, DSP depth

Multi Pad Recording

- User Pad Bank : 4 (41 — 44)
- Naming
- Clear
- Chord Match

Style Recording

- User Styles : 3 (113 — 115)
- Recording Tracks : 6 Sections x 8 tracks
- Drum Cancel
- Quantize
- Naming
- Clear

MIDI

- Transmit settings
- Receive settings
- Local Control
- Clock
- Initial Data Send
- MIDI template

Other functions

- Metronome
- Upper Octave
- Master Tuning
- Scale Tuning
- Split Point
- Touch Sensitivity
- Voice Set
- Footswitch function
- Pitch Bend Range

Auxiliary Jacks

- DC IN 10-12V, PHONES/OUTPUT, SUSTAIN, MIDI IN/OUT, TO HOST

Amplifiers

- 6W + 6W (when using PA-6 power adaptor)
- 4.5W + 4.5W (when using batteries)

Speakers

- 12 cm (4-3/4") x 2, 3 cm (1-3/16") x 2

Power Consumption

- 22W (when using PA-6 power adaptor)

Power Supply

- Adaptor : Yamaha PA-6 AC power adaptor
 - Rated Voltage DC 10-12V
 - Rated Current 2A
- Batteries : Six "D" size, R20P (LR20) or equivalent batteries

Dimensions (W x D x H)

- 952 x 387 x 169 (mm)
(37-1/2" x 15-1/4" x 6-5/8")

Weight

- 8.7 Kg (19.2 lbs.) excluding batteries

Supplied Accessories

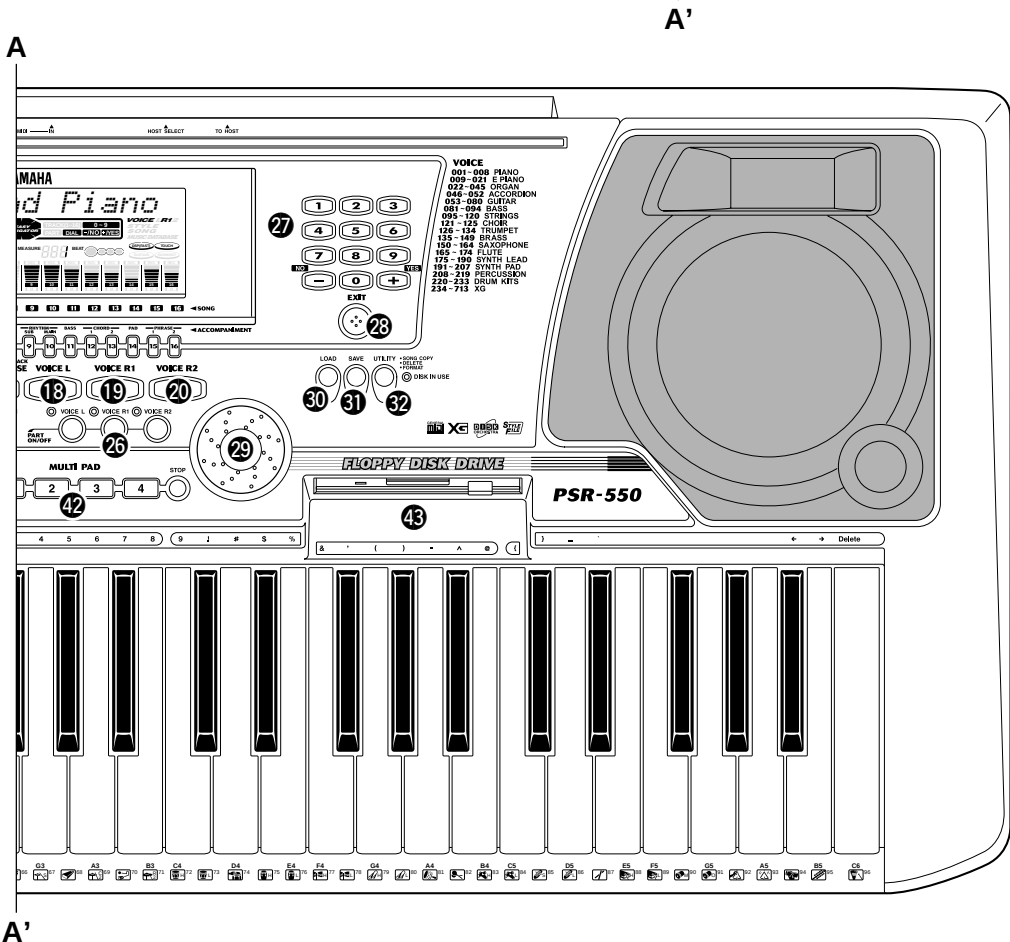
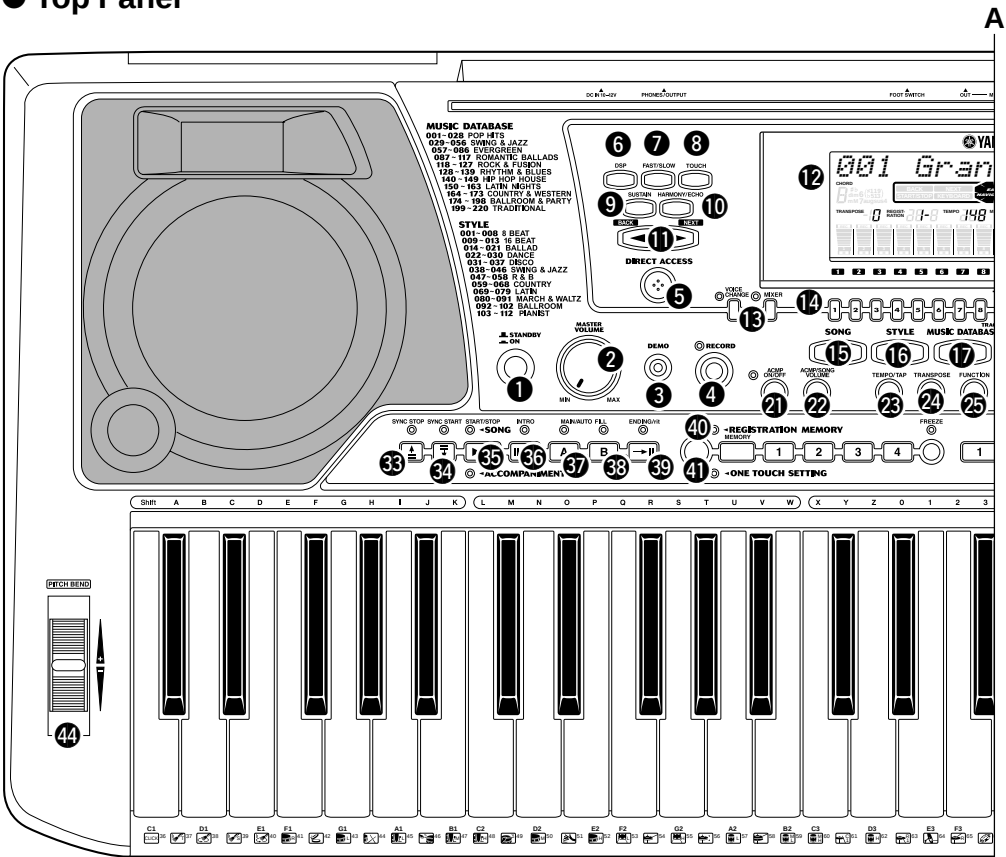
- Data Disk
- Music Stand
- Owner's Manual

Optional Accessories

- Headphones : HPE-150
- AC Power Adaptor : PA-6
- Foot Switch : FC4, FC5
- Keyboard Stand : L-6, L-7

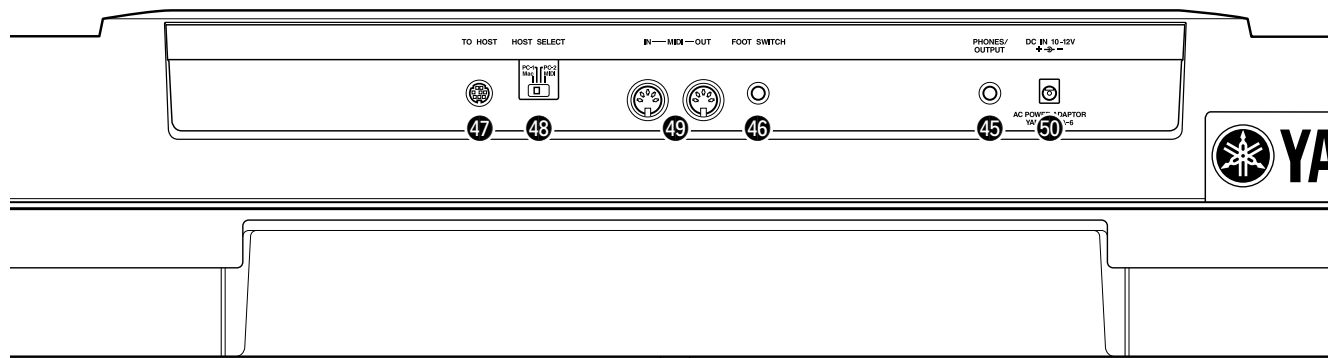
PANEL LAYOUT

Top Panel



- ❶ Power switch ([STANDBY/ON])
- ❷ [MASTER VOLUME] dial
- ❸ [DEMO] button
- ❹ [RECORD] button
- ❺ [DIRECT ACCESS] button
- ❻ [DSP] button
- ❼ [FAST/SLOW] button
- ❽ [TOUCH] button
- ❾ [SUSTAIN] button
- ❿ [HARMONY/ECHO] button
- ⓫ [BACK] button, [NEXT] button
- ⓬ LCD display
- ⓭ [VOICE CHANGE] button, [MIXER] button
- ⓮ [TRACK 1–16] buttons
- ⓯ [SONG] button
- ⓰ [STYLE] button
- ⓱ [MUSIC DATABASE] button
- ⓲ [VOICE L] button
- ⓳ [VOICE R1] button
- ⓴ [VOICE R2] button
- ⓵ [ACMP ON/OFF] button
- ⓶ [ACMP/SONG VOLUME] button
- ⓷ [TEMPO/TAP] button
- ⓸ [TRANPOSE] button
- ⓹ [FUNCTION] button
- ⓺ [PART ON/OFF]
 - [VOICE L] button
 - [VOICE R1] button
 - [VOICE R2] button
- ⓻ Number buttons [1]–[0], [–/NO], [+ /YES]
- ⓼ [EXIT] button
- ⓽ Data dial
- ⓾ [DISK LOAD] button
- ⓿ [DISK SAVE] button
- ⓿ [DISK UTILITY] button
- ⓿ [SYNC STOP] button
- ⓿ [SYNC START] button
- ⓿ [START/STOP] button
- ⓿ [INTRO] button
- ⓿ [MAIN/AUTO FILL A] button
- ⓿ [MAIN/AUTO FILL B] button
- ⓿ [ENDING/rit.] button
- ⓿ [REGISTRATION MEMORY] buttons
- ⓿ [ONE TOUCH SETTING] buttons
- ⓿ [MULTI PAD] buttons
- ⓿ Disk Drive
- ⓿ [PITCH BEND] wheel

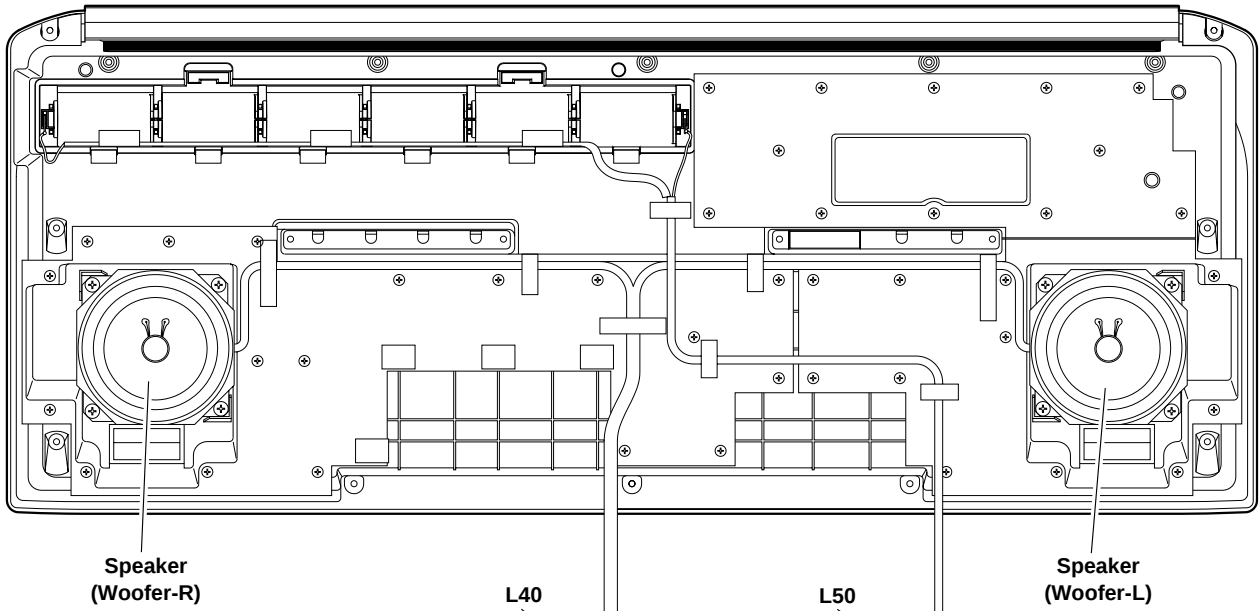
● Rear Panel



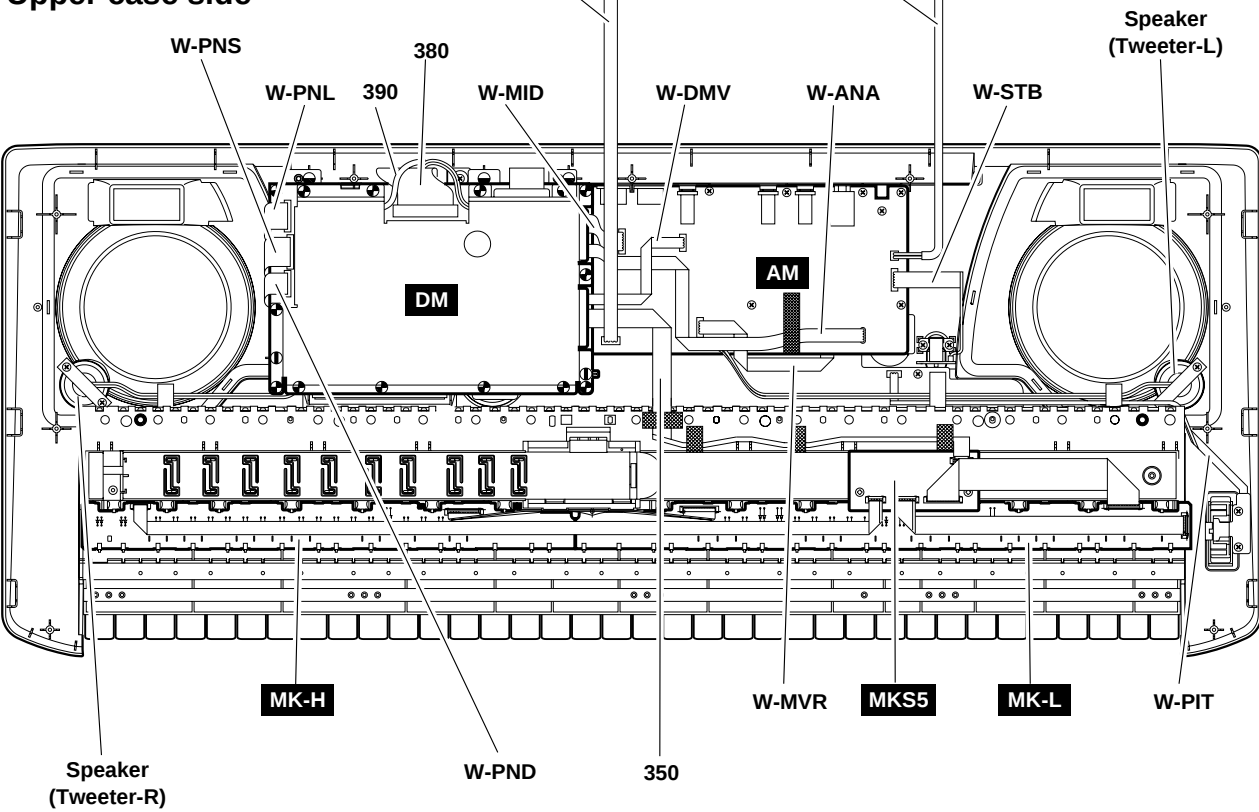
- ❹ [PHONES/OUTPUT] jack
- ❹ [FOOT SWITCH] jack
- ❹ [TO HOST] connector
- ❹ [HOST SELECT] switch
- ❹ [MIDI IN], [MIDI OUT] connectors
- ❹ [DC IN 10–12V] jack

■ CIRCUIT BOARD LAYOUT & WIRING

● Lower case side

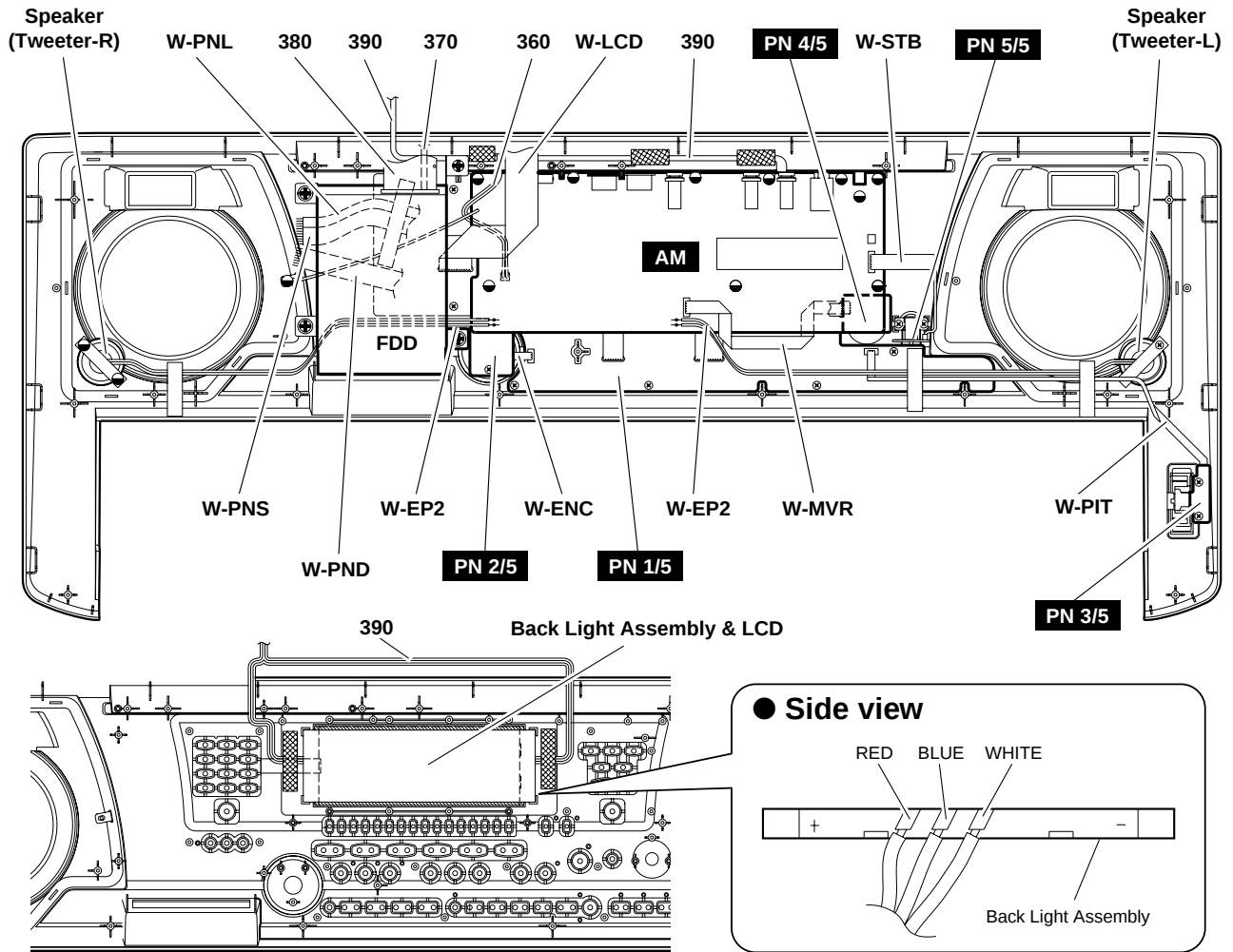


● Upper case side



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

● Upper case side



Location	Part No.	Connector Assembly	Destination				Remarks
350	—	MKB	MKS5-CN1 *2	*1	DM-CN180 *2	*1	6P (V381860)
360	—	LCV	DM-CN960	*1	PN 1/5-CN102	*1	2P (V381920)
370	V4468500	FDV	DM-CN950	*1	FDD-CN2	*1	3P
380	V3819400	FDD	DM-CN850	*1	FDD-CN1	*1	34P
390	—	BLT	DM-CN999	*1	Back Light		6P (V705780)
L40	—	SPW	AM-CN480	*1	Speaker (Wo)		4P (V381950)
L50	—	BAT	AM-CN510	*1	Battery		2P (V705790)
W-ANA	—	ANA	AM-CN100		DM-CN250	*1	4P (V381820)
W-DMV	—	DMV	AM-CN530		DM-CN920	*1	5P (V381840)
W-EP2	—	EP2	AM-J411,J412		Speaker (Tw-L)		L=160 (V457700)
W-EP2	—	EP2	AM-J421,J422		Speaker (Tw-R)		L=160 (V457700)
W-MID	—	MID	AM-CN800		DM-CN170	*1	7P (V381870)
W-ENC	—	ENC	PN 2/5-CN602		PN 1/5-CN502	*1	3P (V381800)
W-LCD	—	LCD	PN 1/5-CN101		DM-CN750	*1	12P (V445890)
W-MVR	—	MVR	PN 4/5-CN801		AM-CN390	*1	5P (V381830)
W-PIT	—	PIT	PN 3/5-CN603		PN 1/5-CN503	*1	3P (V381810)
W-PND	—	PND	PN 1/5-CN301		DM-CN650	*1	8P (V381880)
W-PNL	—	PNL	PN 1/5-CN501		DM-CN550	*1	10P (V381890)
W-PNS	—	PNS	PN 1/5-CN401		DM-CN150	*1	11P (V381900)
W-STB	—	STB	PN 5/5-CN701		AM-CN520	*1	6P (V381850)

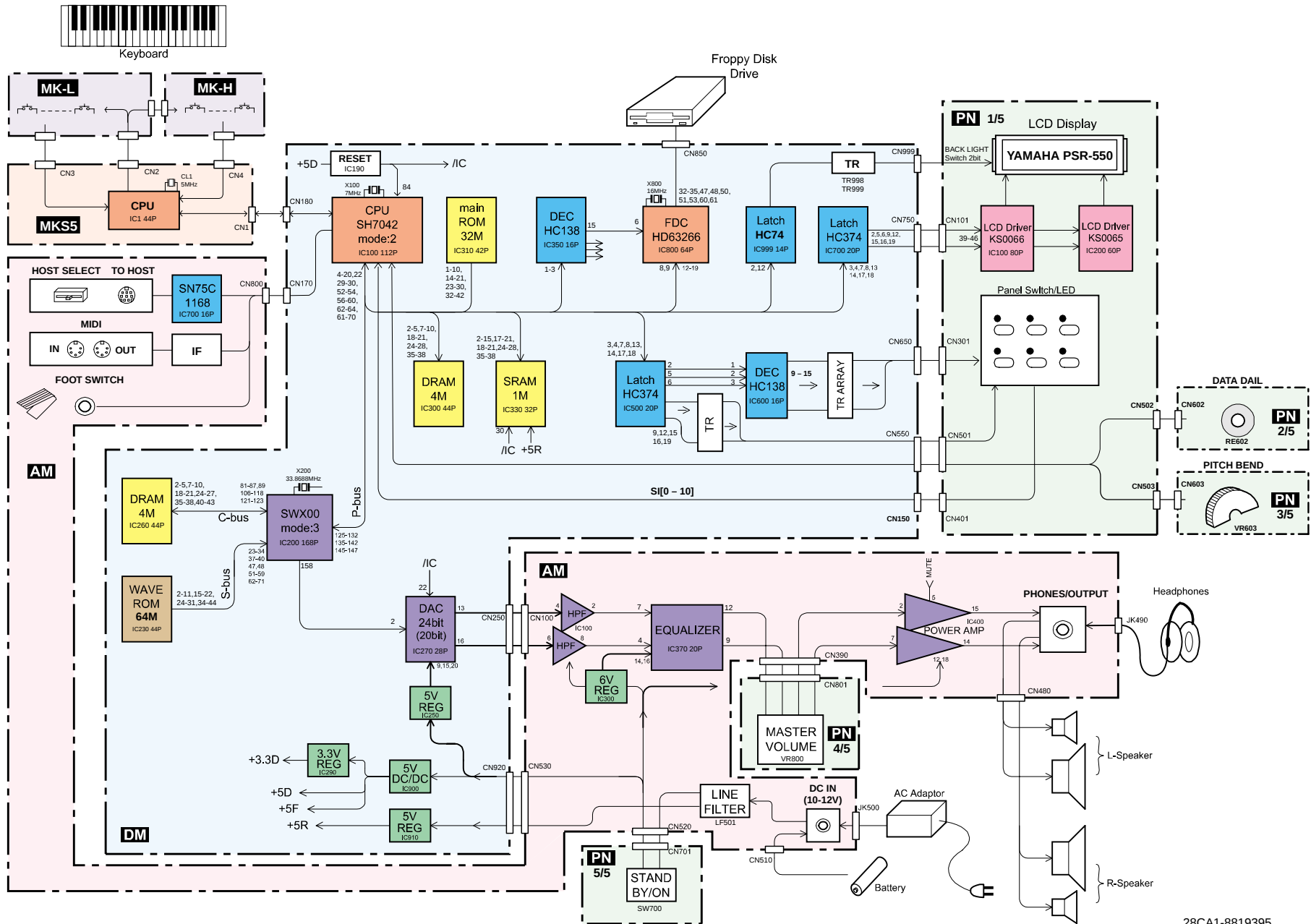
* The parts with "—" in "Part No." are not available as spare parts.

* 1 : Edge mark is adjusted to Pin 1 mark (△mark).

* 2 : Be sure to make a correct match when connecting MKS5 (CN1) and DM (CN180).

Connecting the connectors in the wrong way around may cause damage to the MKS5 circuit board.

BLOCK DIAGRAM

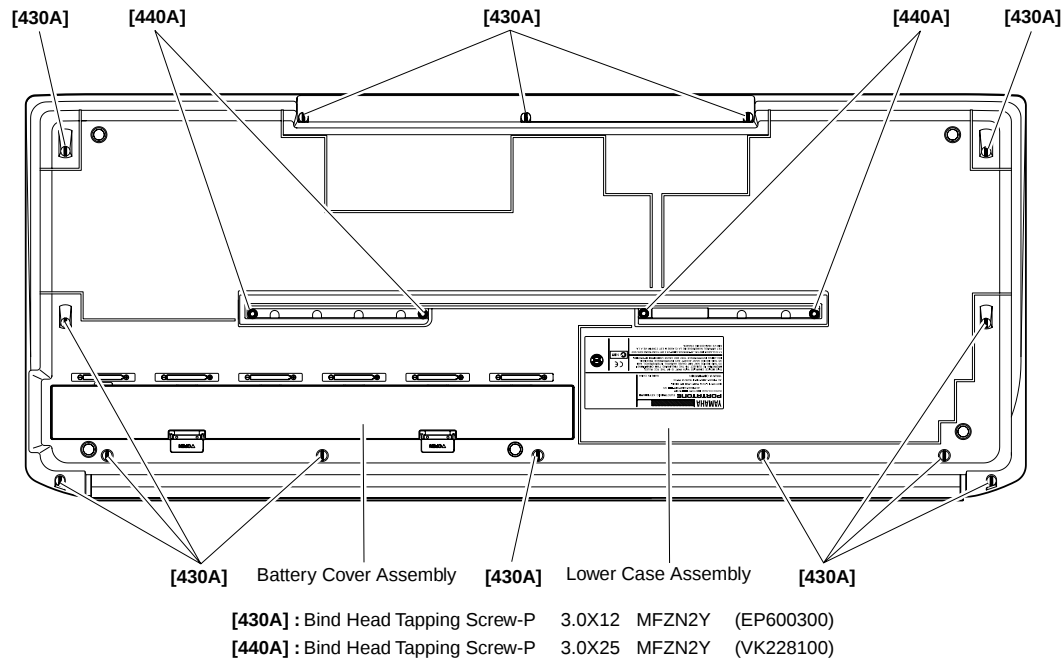


28CA1-8819395

■ DISASSEMBLY PROCEDURE

1. Lower Case Assembly (Time required : About 5 min.)

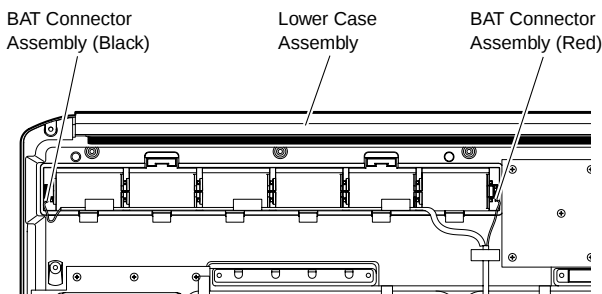
- 1-1. Remove the fourteen (14) screws marked [430A] and the four (4) screws marked [440A]. The lower case assembly can then be removed. (Fig. 1)



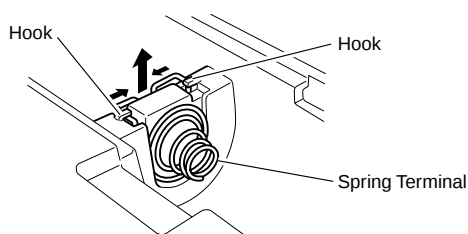
(Fig.1)

2. Spring Terminal (Time required : About 10 min.)

- 2-1. Remove the lower case assembly. (See procedure 1)
 2-2. Remove the BAT connector assembly (red/black) soldered to the spring terminal (+)/(-). (Fig. 2)
 2-3. Remove the battery cover assembly. (Fig. 1)
 2-4. Remove the spring terminal by releasing hooks (2 locations for each). (Fig. 3)



(Fig.2)



(Fig.3)

3. DM Circuit Board, Shield Box U and L (Time required : About 10 min.)

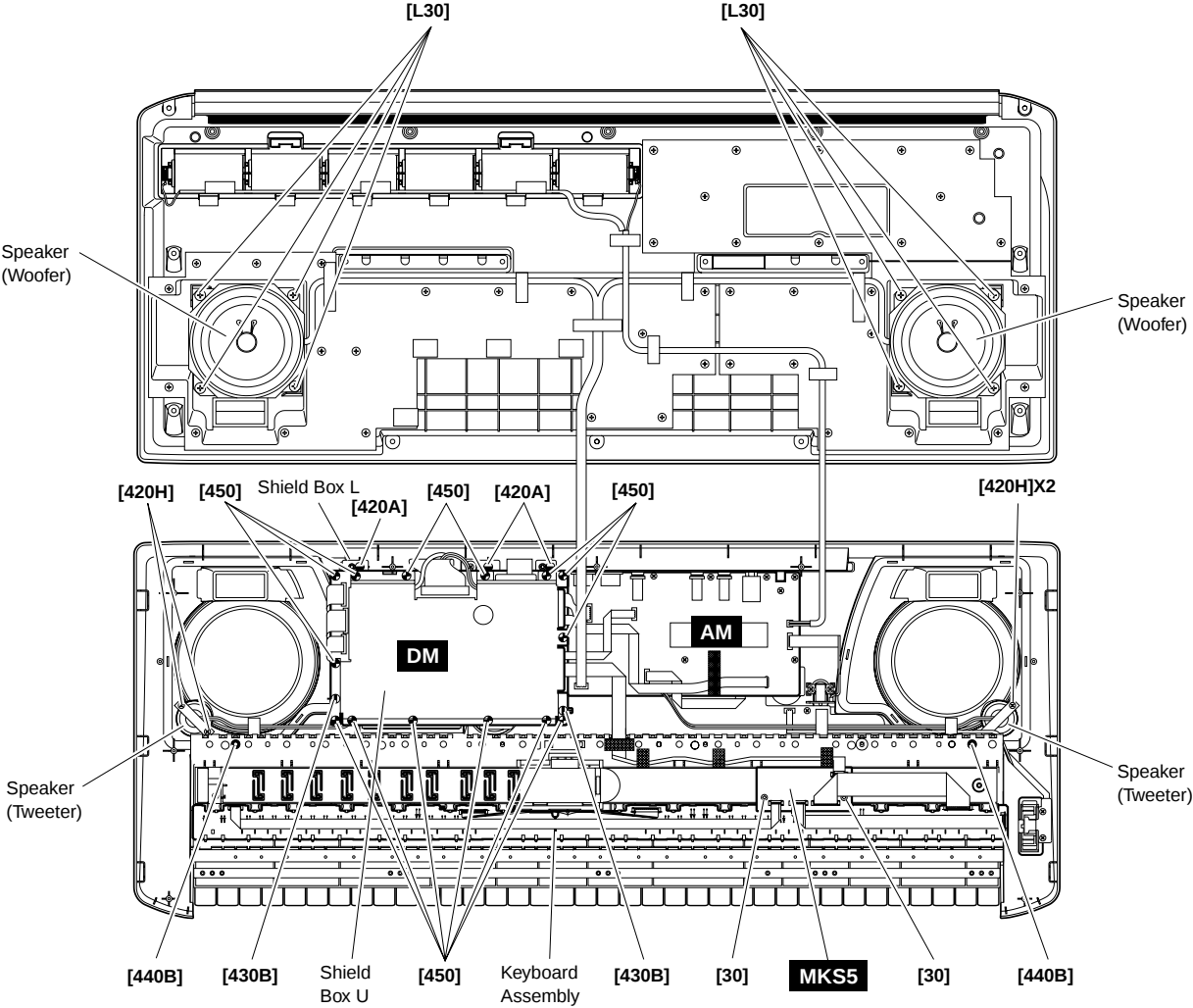
- 3-1. Remove the lower case assembly. (See procedure 1)
 3-2. Remove the two (2) screws marked [430B] and the fourteen (14) screws marked [450]. The shield box U and the DM circuit board can then be removed. (Fig. 4)
 3-3. Remove the three (3) screws marked [420A]. The shield box L can then be removed. (Fig. 4)

4. Floppy Disk Drive Assembly (Time required : About 10 min.)

- 4-1. Remove the lower case assembly. (See procedure 1)
 4-2. Remove the DM circuit board and the shield box U and L. (See procedure 3)
 4-3. Remove the four (4) screws marked [460]. The floppy disk assembly can then be removed. (Fig. 5)

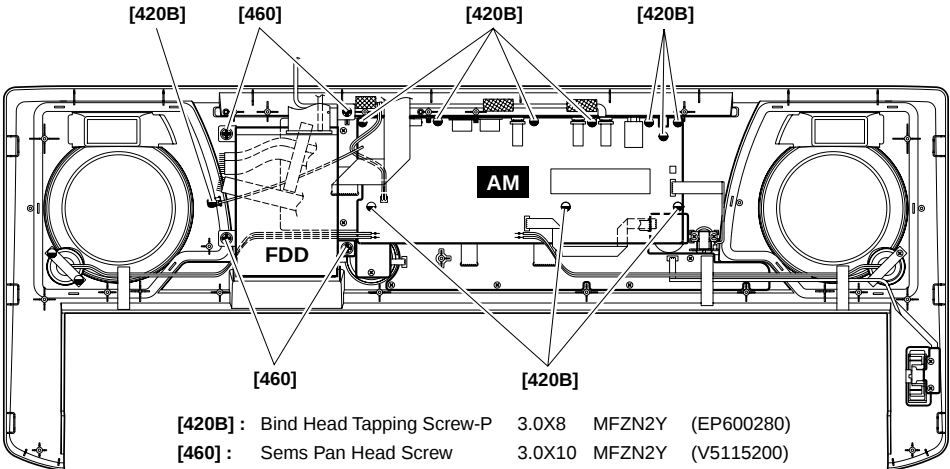
5. AM Circuit Board (Time required : About 15 min.)

- 5-1. Remove the lower case assembly. (See procedure 1)
 5-2. Remove the DM circuit board and the shield box U and L. (See procedure 3)
 5-3. Remove the eleven (11) screws marked [420B]. The AM circuit board can then be removed. (Fig. 5)



[30] :	Bind Head Tapping Screw-P	3.0X8	MFZN2Y	(EP600280)
[420] :	Bind Head Tapping Screw-P	3.0X8	MFZN2Y	(EP600280)
[430B] :	Bind Head Tapping Screw-P	3.0X12	MFZN2Y	(EP600300)
[440B] :	Bind Head Tapping Screw-P	3.0X25	MFZN2Y	(VK228100)
[450] :	Bind Head Tapping Screw-B	3.0X8	MFZN2Y	(EP600250)
[L30] :	Bind Head Tapping Screw-P	4.0X8	MFZN2BL	(VB931600)

(Fig.4)



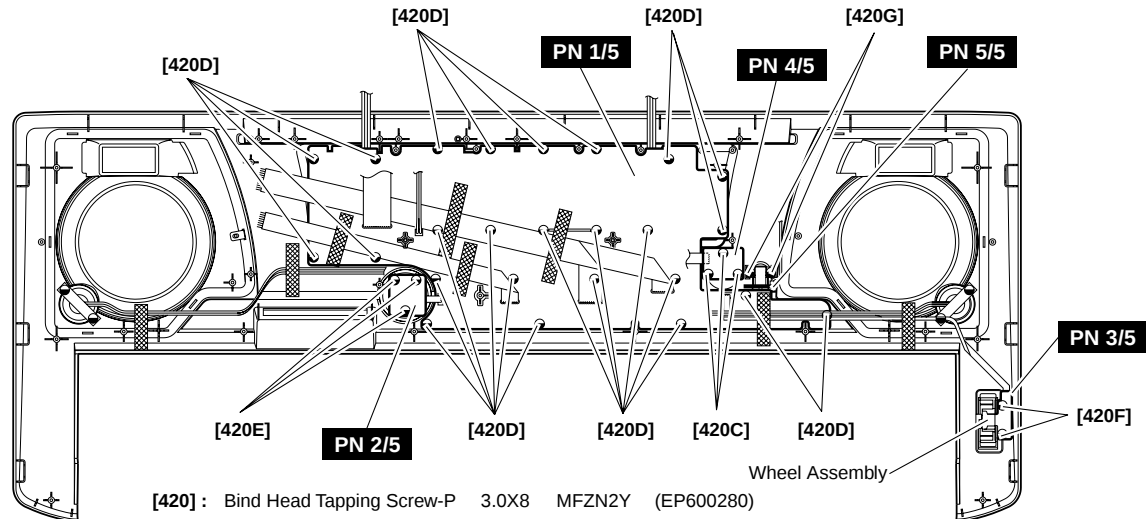
[420B] :	Bind Head Tapping Screw-P	3.0X8	MFZN2Y	(EP600280)
[460] :	Sems Pan Head Screw	3.0X10	MFZN2Y	(V5115200)

(Fig.5)

6. PN 4/5 Circuit Board**(Time required : About 15 min.)**

- 6-1. Remove the lower case assembly. (See procedure 1)
- 6-2. Remove the DM circuit board and the shield box U and L. (See procedure 3)

- 6-3. Remove the AM circuit board. (See procedure 5)
- 6-4. Remove the volume knob from the control panel side. (Fig. 7)
- 6-5. Remove the three (3) screws marked [420C]. The PN 4/5 circuit board can then be removed. (Fig. 6)



(Fig.6)

7. PN 1/5 Circuit Board**(Time required : About 20 min.)**

- 7-1. Remove the lower case assembly. (See procedure 1)
- 7-2. Remove the DM circuit board and the shield box U and L. (See procedure 3)
- 7-3. Remove the floppy disk drive assembly. (See procedure 4)
- 7-4. Remove the AM circuit board. (See procedure 5)
- 7-5. Remove the PN 4/5 circuit board. (See procedure 6)
- 7-6. Remove the twenty-five (25) screws marked [420D]. The PN 1/5 circuit board can then be removed. (Fig. 6)

9. PN 3/5 Circuit Board**(Time required : About 5 min.)**

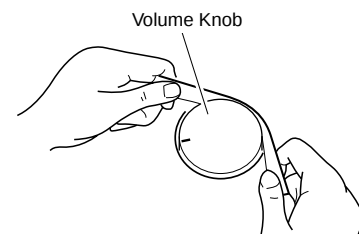
- 9-1. Remove the lower case assembly. (See procedure 1)
- 9-2. Remove the two (2) screws marked [420F]. The PN 3/5 circuit board can then be removed with the wheel assembly. (Fig. 6)

10. PN 5/5 Circuit Board**(Time required : About 5 min.)**

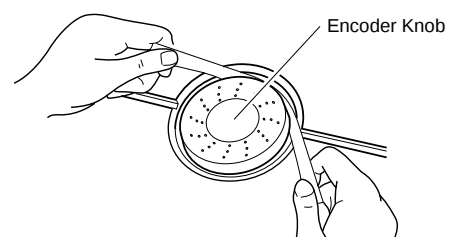
- 10-1. Remove the lower case assembly. (See procedure 1)
- 10-2. Remove the two (2) screws marked [420G]. The PN 5/5 circuit board can then be removed. (Fig. 6)

8. PN 2/5 Circuit Board**(Time required : About 15 min.)**

- 8-1. Remove the lower case assembly. (See procedure 1)
- 8-2. Remove the DM circuit board and the shield box U and L. (See procedure 3)
- 8-3. Remove the AM circuit board. (See procedure 5)
- 8-4. Remove the encoder knob from the control panel side. (Fig. 8)
- 8-5. Remove the three (3) screws marked [420E]. The PN 2/5 circuit board can then be removed. (Fig. 6)



(Fig.7)



(Fig.8)

11. Keyboard Assembly

(Time required : About 10 min.)

- 11-1. Remove the lower case assembly. (See procedure 1)
- 11-2. Remove the two (2) screws marked [440B]. The keyboard assembly can then be removed. (Fig. 4)

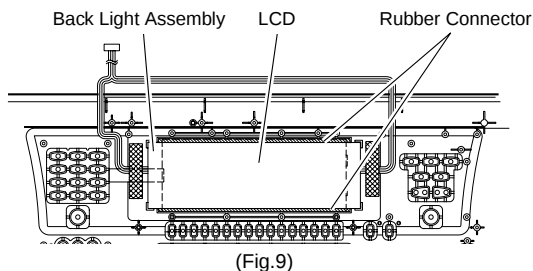
12. Speakers (Time required : About 10 min.)

- 12-1. Remove the lower case assembly. (See procedure 1)
- 12-2. Remove the right and left (woofer) speakers by removing four (4) screws marked [L30] from each speaker. (Fig. 4)
- 12-3. Remove the right and left (tweeter) speakers by removing two (2) screws marked [420H] from each speaker. (Fig. 4)

13. LCD and Back Light Assembly

(Time required : About 20 min.)

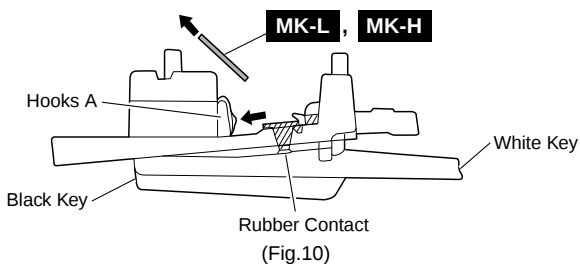
- 13-1. Remove the lower case assembly. (See procedure 1)
- 13-2. Remove the DM circuit board and the shield box U and L. (See procedure 3)
- 13-3. Remove the floppy disk drive assembly. (See procedure 4)
- 13-4. Remove the AM circuit board. (See procedure 5)
- 13-5. Remove the PN 1/5 circuit board. (See procedure 6)
- 13-6. The LCD can then be removed with the back light assembly. (Fig. 9)



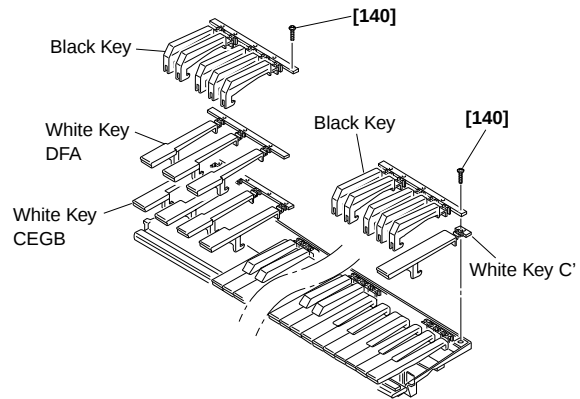
(Fig.9)

14. Disassembling the Keyboard Assembly

- 14-1. Remove the keyboard assembly. (See procedure 11.)
- 14-2. Remove the two (2) screws marked [30]. The MKS5 circuit board can then be removed. (Fig. 4)
- 14-3. Remove the MK-L and MK-H circuit boards while pressing the fifteen (15) hooks A inward, and then remove the rubber contact. (Fig. 10)
- 14-4. Remove the twenty-one (21) screws marked [140], then remove the black keys from the lower notes. Afterwards, remove the white keys DFA and C' and then remove the white keys CEGB from the higher notes. At this time, lift the keys from the front and slide them towards you. the keys can then be removed from the assembly. (Fig. 11)



(Fig.10)

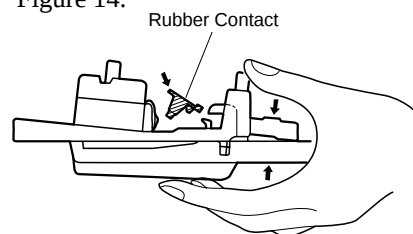


[140] : Bind Head Tapping Screw-P 3.0X16 MFZN2Y (EP600310)

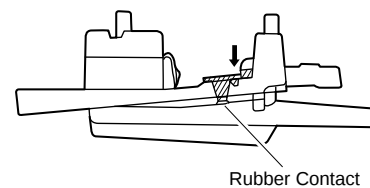
(Fig.11)

15. Assembling the Keyboard Assembly

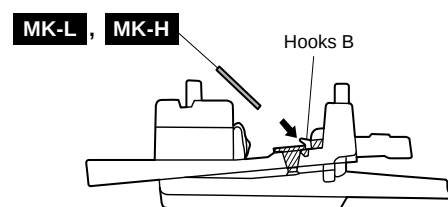
- 15-1. Install the white keys CEGB from the lower notes, and then install the DFA keys and C' key. Afterwards install the black keys from the higher notes, and tighten the twenty-one (21) screws marked [140]. (Fig. 11)
- 15-2. Install the rubber contacts in the assembly while pressing the keys as shown in Figure 12. Check that the rubber contact has been firmly placed into position in the area indicated by the arrow in Figure 13. When fitting the rubber contacts, raise both ends of the frame so that keys do not push the rubber contact up.
- 15-3. Install the MK-L and MK-H circuit boards in the assembly so that the hooks B hold it as shown in Figure 14.



(Fig.12)



(Fig.13)



(Fig.14)

■ LSI PIN DESCRIPTION

μPD789022GB-A15-8E (XZ560100) CPU	13
HD6437042AF90F (XZ787100) CPU	14
HG73C205AFD (XU947C00) SWX00B (Tone Generator)	15
HD63266F (XI939A00) FDC (Floppy Disk Controller)	16
S6A0065B01-Q0RJ (XV993A00) LCD DRIVER	16
S6A0069X10-Q0RJ (XV226A00) LCD DRIVER	17
PCM1716E (XU829A00) DAC (Digital to Analog Converter)	13

● μPD789022GB-A15-8E (XZ560100) CPU

MKS5 : IC1

PIN NO.	NAME	I/O	FUNCTION	PIN NO.	NAME	I/O	FUNCTION
1	P12	I/O	Port 1	23	P32/INTP2/CPT2	I/O	Port 3/External interrupt input/Capture edge input
2	P11	I/O		24	P31/INTP1	I/O	Port 3/External interrupt input
3	P10	I/O		25	P30/INTP0	I/O	
4	P47/KR7	I/O		26	P22/RXD/SI0	I/O	Port 2/Asynchronous serial interface serial data input/Serial interface serial data input
5	P46/KR6	I/O	Port 4/Key return signal detection input	27	P21/TXD/SO0	I/O	Port 2/Asynchronous serial interface serial data output/Serial interface serial data output
6	P45/KR5	I/O		28	P20/ASCK/SCK0	I/O	Port 2/Asynchronous serial interface serial clock input/Serial interface serial clock
7	P44/KR4	I/O		29	P07	I/O	Port 0
8	P43/KR3	I/O		30	P06	I/O	
9	P42/KR2	I/O		31	P05	I/O	
10	P41/KR1	I/O		32	P04	I/O	
11	P40/KR0	I/O		33	P03	I/O	
12	NC		Internally connected (N.C.)	34	P02	I/O	
13	IC			35	P01	I/O	Power supply Ground
14	X2		Clock	36	P00	I/O	
15	X1	I		37	NC		
16	VSS0		Ground	38	VDD1		
17	VDD0		Power supply	39	VSS1		Port 1
18	/RESET	I	System reset	40	P17	I/O	
19	P53	I/O	Port 5	41	P16	I/O	Port 1
20	P52	I/O		42	P15	I/O	
21	P51/TO2	I/O	Port 5/16-bit timer output	43	P14	I/O	
22	P50/TI0/TO0	I/O	Port 5/External count clock input to 8-bit timer/8-bit timer output	44	P13	I/O	

● PCM1716E (XU829A00) DAC (Digital to Analog Converter)

DM : IC270

PIN NO.	NAME	I/O	FUNCTION	PIN NO.	NAME	I/O	FUNCTION
1	LRCK	I	Data input	15	Vcc1	-	Analog power supply (+5 V)
2	DATA	I		16	VOU1L	O	Lch, analog voltage output
3	BCK	I	Bit clock	17	NC	-	
4	CLKO	O	Clock input	18	EXTL	O	Lch, analog output
5	XTI	I	Clock input	19	AGND2L	-	Analog ground
6	XTO	O	Clock out	20	Vcc2L	-	Analog power supply (+5 V)
7	DGND	-	Digital ground	21	/ZERO	O	Zero data flag
8	VDD	-	Digital power supply (+5 V)	22	/RST	I	Reset
9	Vcc2R	-	Analog power supply (+5 V)	23	/CS/IWO	I	Chip select
10	AGND2R	-	Analog ground	24	MODE	I	Mode control select (H: Software, L: Hardware)
11	EXTR	O	Rch, analog output	25	/MUTE	I	Mute control
12	NC	-		26	MD/DM0	I	Mode control data/ De-emphasis select1
13	VOU1R	O	Rch, analog voltage output	27	MC/DM1	I	Mode control BCK/De-emphasis select2
14	AGND1	-	Analog ground	28	ML/IIS	I	Mode control Latch/input format select

● HD6437042AF90F (XZ787100) CPU

DM : IC100

PIN NO.	NAME	I/O	FUNCTION	PIN NO.	NAME	I/O	FUNCTION
1	TIOC/DACK/PE14	I/O	MTU I/O / DMA acknowledge / Port E	57	D11	I/O	Data bus
2	PE15	O	Port E	58	D10	I/O	
3	VSS	I	Ground	59	D9	I/O	
4	A0	O	Address bus	60	D8	I/O	Data bus
5	A1	O		61	VSS	I	
6	A2	O		62	D7	I/O	
7	A3	O		63	D6	I/O	Data bus
8	A4	O		64	D5	I/O	
9	A5	O		65	VCC	I	
10	A6	O		66	D4	I/O	Data bus
11	A7	O		67	D3	I/O	
12	A8	O		68	D2	I/O	
13	A9	O		69	D1	I/O	Data bus
14	A10	O		70	D0	I/O	
15	A11	O		71	VSS	I	
16	A12	O		72	XTAL	I	Crystal oscillator
17	A13	O		73	MD3	I	Mode control
18	A14	O		74	EXTAL	I	Crystal oscillator
19	A15	O		75	MD2	I	Mode control
20	A16	O		76	NMI	I	Non-maskable interrupt request
21	VCC	I	Power supply	77	VCC	I	Power supply
22	A17	O	Address bus	78	MD1	I	Mode control
23	VSS	I	Ground	79	MD0	I	Mode control
24	/RAS/PB2	I/O	Row address strobe / Port B	80	PLL VCC	I	PLL Power supply
25	/CASL/PB3	I/O	Column address strobe (low) / Port B	81	PLLCAP	I	PLL capacitor
26	/CASH/PB4	I/O	Column address strobe (high) / Port B	82	PLL VSS	I	PLL Ground
27	VSS	I	Ground	83	PA15 / CK	O	Port A / Clock
28	/RDWR / PB5	I/O	DRAM read / write / Port B	84	/RES	I	Power on reset
29	A18/BACK/PB6	I/O	Address bus / Bus acknowledge / Port B	85	PE0/DREQ0	I/O	Port E / DMA request
30	A19/BREQ/PB7	I/O	Address bus / Bus request / Port B	86	PE1/DRAK0	O	Port E / DMA acknowledge
31	A20/PB8	O	Address bus/ Port B	87	PE2	O	Port E
32	A21/PB9	O		88	PE3	O	
33	VSS	I		89	PE4	O	
34	/RD	O	Read	90	VSS	I	Ground
35	/WDTOVF	O	Watch dog timer overflow	91	PF0 / AN0	I	Port F / Analog input
36	/WRH/PA13	O	High write / Port A	92	PF1 / AN1	I	
37	VCC	I	Power supply	93	PF2 / AN2	I	
38	/WRL	O	Low write	94	PF3 / AN3	I	
39	VSS	I	Ground	95	PF4 / AN4	I	Analog ground
40	/CS1	O	Chip select	96	PF5 / AN5	I	
41	/CS0	O	Chip select	97	AVSS	I	
42	/IRQ3/TCLKD/PA9	I/O	Interrupt request / Timer clock/ Port A	98	PF6 / AN6	I	Port F / Analog input
43	TCLKC/IRQ2/PA8	I/O	Timer clock / Interrupt request / Port A	99	PF7 / AN7	I	
44	/CS3	O	Chip select	100	AVCC	I	Power supply
45	/CS2	O	Chip select	101	VSS	I	Ground
46	/IRQ1/PAS/CLK1	I/O	Interrupt request / Port A / Serial clock	102	PE5	O	Port E
47	TXD1/PA4	O	Data transmission / Port A	103	VCC	I	Power supply
48	RXD1	I	Data reception	104	PE6	I/O	Port E
49	/IRQ0/PA2	I/O	Interrupt request / Port A	105	PE7	I/O	
50	TXD0	O	Data transmission	106	PE8	I/O	
51	RXD0	I	Data reception	107	PE9	O	
52	D15	I/O	Data bus	108	PE10	O	Ground
53	D14	I/O		109	VSS	I	
54	D13	I/O		110	PE11	O	Port E
55	VSS	I	Ground	111	PE12	O	
56	D12	I/O	Data bus	112	/MRES/PE13	I	Manual reset / Port E

● HG73C205AFD (XU947C00) SWX00B (Tone Generator)

DM : IC200

PIN NO.	NAME	I/O	FUNCTION	PIN NO.	NAME	I/O	FUNCTION
1	ICN	I	Initial clear	85	CMA3	O	Program address bus
2	RFCLKI	I	PLL Clock	86	CMA8	O	Program address bus
3	TM2	I	PLL Control	87	CMA2	O	Program address bus
4	AVDD_PLL		Power supply	88	CRD	O	read signal
5	AVSS_PLL		Ground	89	CMA1	O	Program address bus
6	MODE0	I	SWX dual mode	90	CUB	O	high byte effective signal
7	VCC7		Power supply	91	VCC91		Power supply
8	GND8		Ground	92	GHND92		Ground
9	XIN	I	crystal oscillator	93	CS1	O	CS signal
10	XOUT	O	crystal oscillator	94	CMA0	O	Program address bus
11	MODE1	I	SWX separate mode	95	CLB	O	low byte effective signal
12	TEST0	I	TEST pin	96	CMA12	O	Program address bus
13	TESTON	I	TEST pin	97	CMA11	O	Program address bus
14	AN0-P40	I	A/D converter	98	CMA10	O	Program address bus
15	AN1-P41	I	A/D converter	99	CMA9	O	Program address bus
16	AN2-P42	I	A/D converter	100	GND100		Ground
17	AN3-P43	I	A/D converter	101	CWE	O	write signal
18	AVDD_AN		Power supply	102	CMA16	O	Program address bus
19	AVSS_AN		Ground	103	CMA15	O	Program address bus
20	TXD0	O	for MIDI or TO-HOST	104	CMA14	O	Program address bus
21	TXD1	O	for MIDI	105	CMA13	O	Program address bus
22	EXCLK	I	Crystal oscillator	106	CMD8	I/O	Program memory Data bus
23	SMD11	I/O	Wave memory data bus	107	CMD7	I/O	Program memory Data bus
24	SMD4	I/O	Wave memory data bus	108	CMD9	I/O	Program memory Data bus
25	SMD3	I/O	Wave memory data bus	109	CMD6	I/O	Program memory Data bus
26	SMD12	I/O	Wave memory data bus	110	CMD10	I/O	Program memory Data bus
27	SMD10	I/O	Wave memory data bus	111	CMD5	I/O	Program memory Data bus
28	SMD5	I/O	Wave memory data bus	112	CMD11	I/O	Program memory Data bus
29	SMD2	I/O	Wave memory data bus	113	CMD4	I/O	Program memory Data bus
30	SMD13	I/O	Wave memory data bus	114	CMD12	I/O	Program memory Data bus
31	SMD9	I/O	Wave memory data bus	115	CMD3	I/O	Program memory Data bus
32	SMD6	I/O	Wave memory data bus	116	CMD13	I/O	Program memory Data bus
33	SMD1	I/O	Wave memory data bus	117	CMD2	I/O	Program memory Data bus
34	SMD14	I/O	Wave memory data bus	118	CMD14	I/O	Program memory Data bus
35	VCC35		Power supply	119	VCC119		Power supply
36	GND36		Ground	120	GND115		Ground
37	SMD8	I/O	Wave memory data bus	121	CMD1	I/O	Program memory Data bus
38	SMD7	I/O	Wave memory data bus	122	CMD15	I/O	Program memory Data bus
39	SMD0	I/O	Wave memory data bus	123	CMD0	I/O	Program memory Data bus
40	SMD15	I/O	Wave memory data bus	124	CMA21	O	Program address bus
41	SOE	O	read signal	125	PDT15	I/O	SWX access data bus
42	SWE	O	write signal	126	PDT14	I/O	SWX access data bus
43	SRAS	O	RAS signal	127	PDT13	I/O	SWX access data bus
44	SCAS	O	CAS signal	128	PDT12	I/O	SWX access data bus
45	REFRESH	O	REFRESH signal	129	PDT11	I/O	SWX access data bus
46	CS0	O	CS signal	130	PDT10	I/O	SWX access data bus
47	SMA0	O	Memory address bus	131	PDT9	I/O	SWX access data bus
48	SMA16	O	Memory address bus	132	PDT8	I/O	SWX access data bus
49	VCC49		Power supply	133	VCC133		Power supply
50	GND50		Ground	134	GND134		Ground
51	SMA1	O	Memory address bus	135	PDT7	I/O	SWX access data bus
52	SMA15	O	Memory address bus	136	PDT6	I/O	SWX access data bus
53	SMA2	O	Memory address bus	137	PDT5	I/O	SWX access data bus
54	SMA14	O	Memory address bus	138	PDT4	I/O	SWX access data bus
55	SMA3	O	Memory address bus	139	PDT3	I/O	SWX access data bus
56	SMA13	O	Memory address bus	140	PDT2	I/O	SWX access data bus
57	SMA4	O	Memory address bus	141	PDT1	I/O	SWX access data bus
58	SMA12	O	Memory address bus	142	PDT0	I/O	SWX access data bus
59	SMA5	O	Memory address bus	143	VCA143		Power supply
60	GND60		Ground	144	GND144		Ground
61	VCC61		Power supply	145	PAD2	I	SWX access address bus
62	SMA11	O	Memory address bus	146	PAD1	I	SWX access address bus
63	SMA6	O	Memory address bus	147	PAD0	I	SWX access address bus
64	SMA10	O	Memory address bus	148	VCC148		Power supply
65	SMA7	O	Memory address bus	149	GND149		Ground
66	SMA9	O	Memory address bus	150	PCS	I	Chip select
67	SMA17	O	Memory address bus	151	PWR	I	write enable
68	SMA8	O	Memory address bus	152	PRD	I	read enable
69	SMA18	O	Memory address bus	153	RXD0	I	for Midi or TO-HOST
70	SMA19	O	Memory address bus	154	RXD1	I	for Midi or Key scan
71	SMA20	O	Memory address bus	155	SCLKI	I	EXT Clock
72	SMA21	O	Memory address bus	156	ADIN	I	A/D converter
73	SMA22	O	Memory address bus	157	ADLR	O	A/D converter LR clock
74	SMA23	O	Memory address bus	158	DO0	O	DAC
75	CMA20	O	Program address bus	159	DO1	O	DAC
76	CMA19	O	Program address bus	160	SYSCCLK	O	1/2 clock
77	VCC77		Power supply	161	VCC161		Power supply
78	GND78	O	Ground	162	GND162		Ground
79	CMA18	O	Program address bus	163	WCLK	O	for DAC LR clock
80	CMA17	O	Program address bus	164	QCLK	O	1/12 clock
81	CMA5	O	Program address bus	165	BCLK	O	IIS-DAC clock
82	CMA6	O	Program address bus	166	SYI	I	Synch signal
83	CMA4	O	Program address bus	167	IRQ0	I	Interrupt request
84	CMA7	O	Program address bus	168	NMI	I	Interrupt request

● HD63266F (X1939A00) FDC (Floppy Disk Controller)

DM : IC800

PIN NO.	NAME	I/O	FUNCTION	PIN NO.	NAME	I/O	FUNCTION
1	8"/5"	I	Data transmission speed	33	/TRKO	I	Track 00 signal
2	XTALSET	I	Clock select	34	/INDEX	I	Index signal
3	/RESET	I	Rest	35	/RDATA	I	Read data input from FDD
4	E//RD	I	Enable/Read	36	XTAL2	}	Clock
5	RW//WR	I	Read/write/Write	37	EXTAL2		
6	/CS	I	Chip select	38	NC	}	Clock
7	/DACK	I	DMA acknowledge	39	XTAL1		
8	RS0	I	Register select	40	EXTAL1	}	Ground
9	RS1	I		41	VSS4		
10	VSS1	}	Ground	42	VSS5	}	Ground
11	VSS2			43	NC		
12	D0	I/O	Data bus	44	VCC2	}	Power supply
13	D1	I/O		45	VCC3		
14	D2	I/O		46	VCC4		
15	D3	I/O		47	/WGATE	O	Write control
16	D4	I/O		48	/WDATA	O	Writ data to FDD
17	D5	I/O		49	VSS6	O	Ground
18	D6	I/O		50	/STEP	O	Step signal to control head of FDD
19	D7	I/O		51	/HDIR	O	Direction
20	/DREQ	O	DMA request	52	/HLOAD	O	Head load
21	/IRQ	O	Interrupt request	53	/HSEL	O	Head select
22	/DEND	I	Data end	54	VSS7	O	Ground
23	VSS3	}	Ground	55	/DS0	O	Drive select
24	1/2 EX1			56	/DS1	O	
25	VCC1			57	/DS2	O	
26	NUM1	I	Power supply	58	/DS3	O	
27	NUM3	I		59	VSS8	O	Ground
28	IFS	I	Host interface select	60	/MON0	O	
29	SFORM	I	Format data	61	/MON1	O	Motor on
30	/INP	I	Index pulse	62	/MON2	O	
31	/READY	I	Ready from FDD	63	/MON3	O	
32	/WPRT	I	Write control signal	64	VSS9	O	Ground

● S6A0065B01-Q0RJ (XV993A00) LCD DRIVER

PN : IC200

PIN NO.	NAME	I/O	FUNCTION	PIN NO.	NAME	I/O	FUNCTION
1	SC29	O	Segment signal output for LCD driving	31	Vcc		LCD driver circuit (-5V)
2	SC28	O		32	CL1	I	Data shift
3	SC27	O		33	CL2	I	Latch clock
4	SC26	O		34	GND(Vss)		GND (0V)
5	SC25	O		35	DL1	I/O	Data input / output
6	SC24	O		36	DR1	I/O	
7	SC23	O		37	DL2	I/O	
8	SC22	O		38	DR2	I/O	
9	SC21	O		39	NC		Alternated signal for LCD driver output
10	SC20	O		40	M	I	
11	SC19	O		41	SHL1	I	Data interface
12	SC18	O		42	SHL2	I	Data interface
13	SC17	O		43	FCS	I	Mods selection
14	SC16	O		44	V1	I	Power supply
15	SC15	O		45	V2	I	
16	SC14	O		46	V3	I	
17	SC13	O		47	V4	I	
18	SC12	O		48	V5	I	
19	SC9	O	Power supply	49	V6	I	
20	SC10	O		50	SC40	O	Segment signal output for LCD driving
21	SC11	O	Segment signal output for LCD driving	51	SC39	O	
22	SC8	O		52	SC38	O	
23	SC7	O		53	SC37	O	
24	VDD			54	SC36	O	
25	SC6	O		55	SC35	O	
26	SC5	O		56	SC30	O	
27	SC4	O		57	SC31	O	
28	SC3	O		58	SC32	O	
29	SC2	O		59	SC33	O	
30	SC1	O		60	SC34	O	

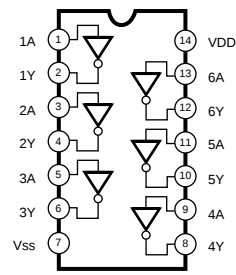
● S6A0069X10-Q0RJ (XV226A00) LCD DRIVER

PN : IC100

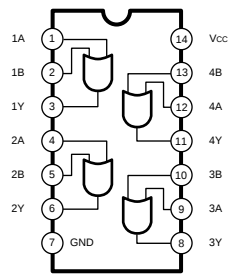
PIN NO.	NAME	I/O	FUNCTION	PIN NO.	NAME	I/O	FUNCTION
1	S22	O	Segment signal output for LCD driving	41	DB2	I/O	Data interface
2	S21	O		42	DB3	I/O	
3	S20	O		43	DB4	I/O	
4	S19	O		44	DB5	I/O	
5	S18	O		45	DB6	I/O	
6	S17	O		46	DB7	I/O	
7	S16	O		47	C1	O	Common signal output for LCD driving
8	S15	O		48	C2	O	
9	S14	O		49	C3	O	
10	S13	O		50	C4	O	
11	S12	O		51	C5	O	
12	S11	O		52	C6	O	
13	S10	O		53	C7	O	
14	S9	O		54	C8	O	
15	S8	O		55	C9	O	
16	S7	O		56	C10	O	
17	S6	O		57	C11	O	
18	S5	O		58	C12	O	
19	S4	O		59	C13	O	
20	S3	O		60	C14	O	
21	S2	O		61	C15	O	
22	S1	O		62	C16	O	
23	Vss		Ground	63	S40	O	Segment signal output for LCD driving
24	OSC1	I	Oscillator	64	S39	O	
25	OSC2	O	Oscillator	65	S38	O	
26	V1		Power supply	66	S37	O	
27	V2			67	S36	O	
28	V3			68	S35	O	
29	V4			69	S34	O	
30	V5			70	S33	O	
31	CLK1	O	Data latch clock	71	S32	O	
32	CLK2	O	Data shift clock	72	S31	O	
33	Vdd		Power supply (+5 V)	73	S30	O	
34	M	O	Altamated signal for LCD driver outout	74	S29	O	
35	D	O	Display data interface	75	S28	O	
36	RS	I		76	S27	O	
37	R/W	I	Read/write	77	S26	O	
38	E	I	Enable	78	S25	O	
39	DB0	I/O	Data interface	79	S24	O	
40	DB1	I/O	Data interface	80	S23	O	

IC BLOCK DIAGRAM

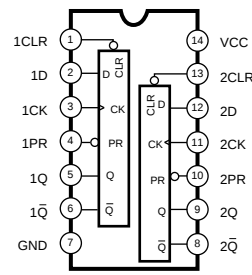
- **TC74HCU04AP** (IG142200)
SN74HCU04N (IG142250)
Hex Inverter
AM : IC810



- **TC74HC32AP** (IR003200)
SN74HC32N (IR0032500)
Quad 2 Input OR
DM : IC360

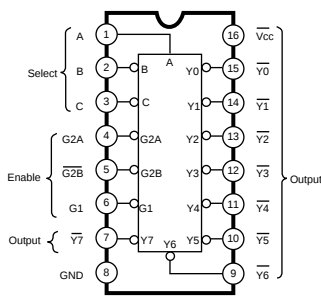


- **TC74HC74AP** (IR007400)
SN74HC74N (IR007450)
Dual D-Type Flip-Flop
DM : IC999

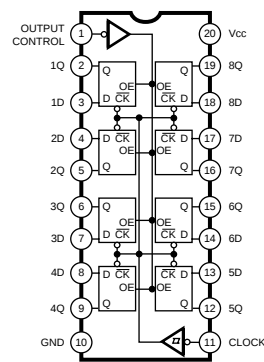


INPUTS				OUTPUTS	
PR	CLR	CLK	D	Q	Q̄
L	H	X	X	H	L
H	L	X	X	L	H
L	L	X	X	H	H
H	H	f	H	H	L
H	H	f	L	L	H
H	H	L	X	Q _o	Q _o

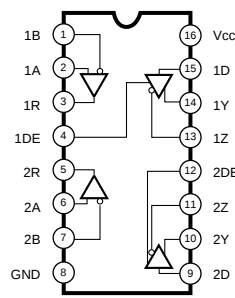
- **TC74HC138AP** (IR013800)
SN74HC138N (IR013850)
3 to 8 Demultiplexer
DM : IC350, 600



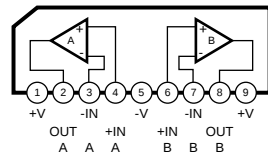
- **TC74HC374AP** (IR037400)
SN74HC374N (IR037450)
Octal 3-State D-Type Flip-Flop
DM : IC500, 700



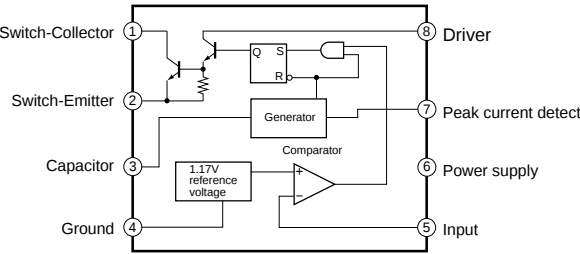
- **SN75C1168N** (XU463A00)
Line Driver / Receiver
AM : IC700



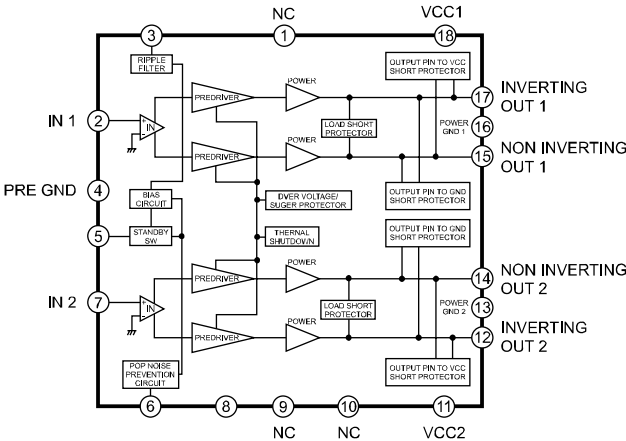
- **μPC4572HA** (XF633A00)
Dual Operational Amplifier
AM : IC100



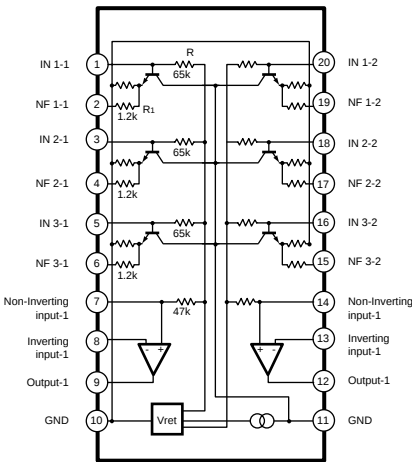
- **M5291P** (XV856A00)
DC-DC Converter
DM : IC900



- **LA4705NA (XQ619A00)**
Power Amplifier
AM: IC400



- **M5243AP06 (XU911A00)**
Graphic Equalizer
AM : IC370



■ **CIRCUIT BOARDS INDEX**

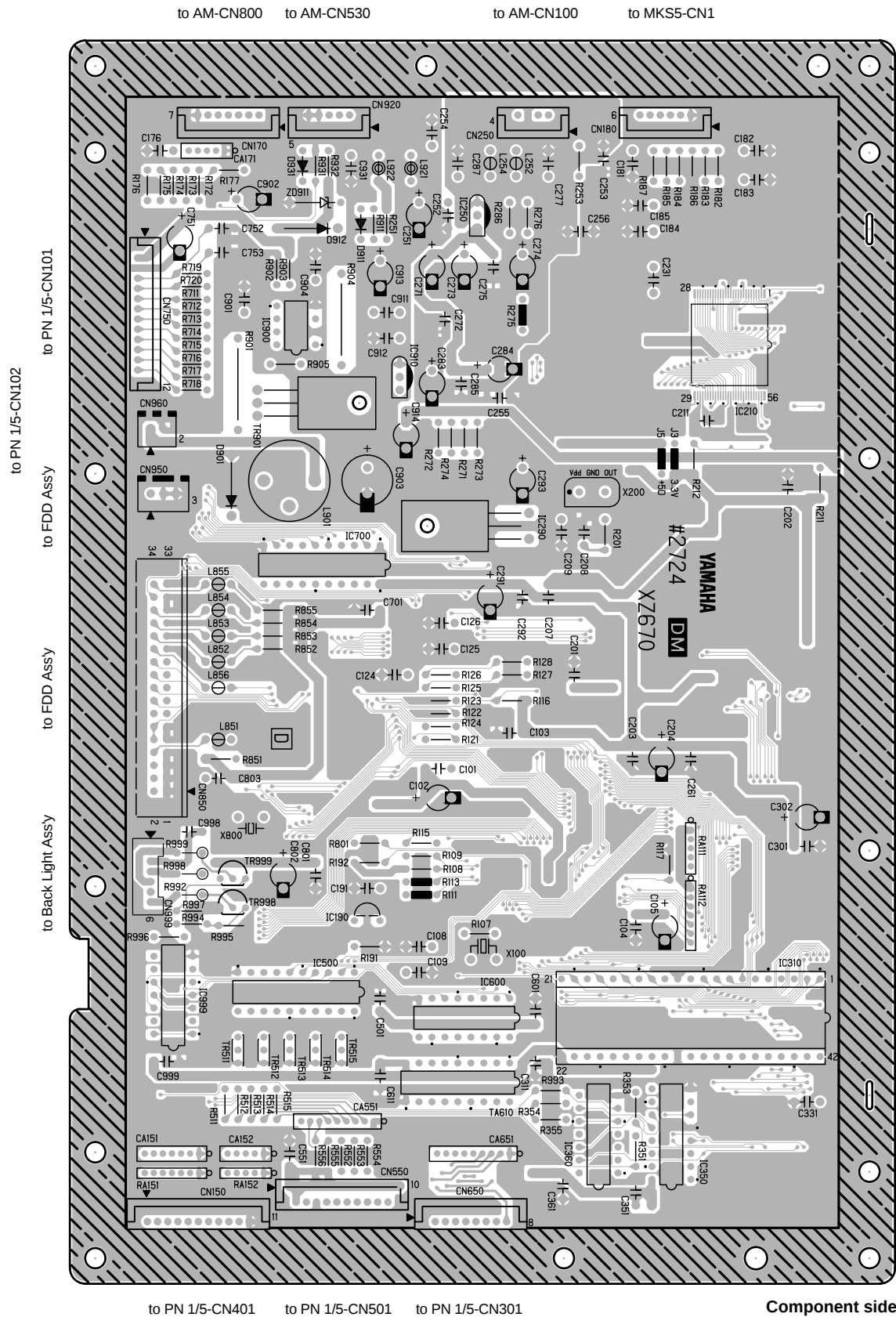
AM (XV935C0)	24
DM (XZ670D0)	20/21
MK-H (XR565C0)	27
MK-L (XR564C0)	26
MKS5 (XZ594A0)	26

PN 1/5 (XV934B0)	22/23
PN 2/5 (XV934B0)	24
PN 3/5 (XV934B0)	24
PN 4/5 (XV934B0)	25
PN 5/5 (XV934B0)	25

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

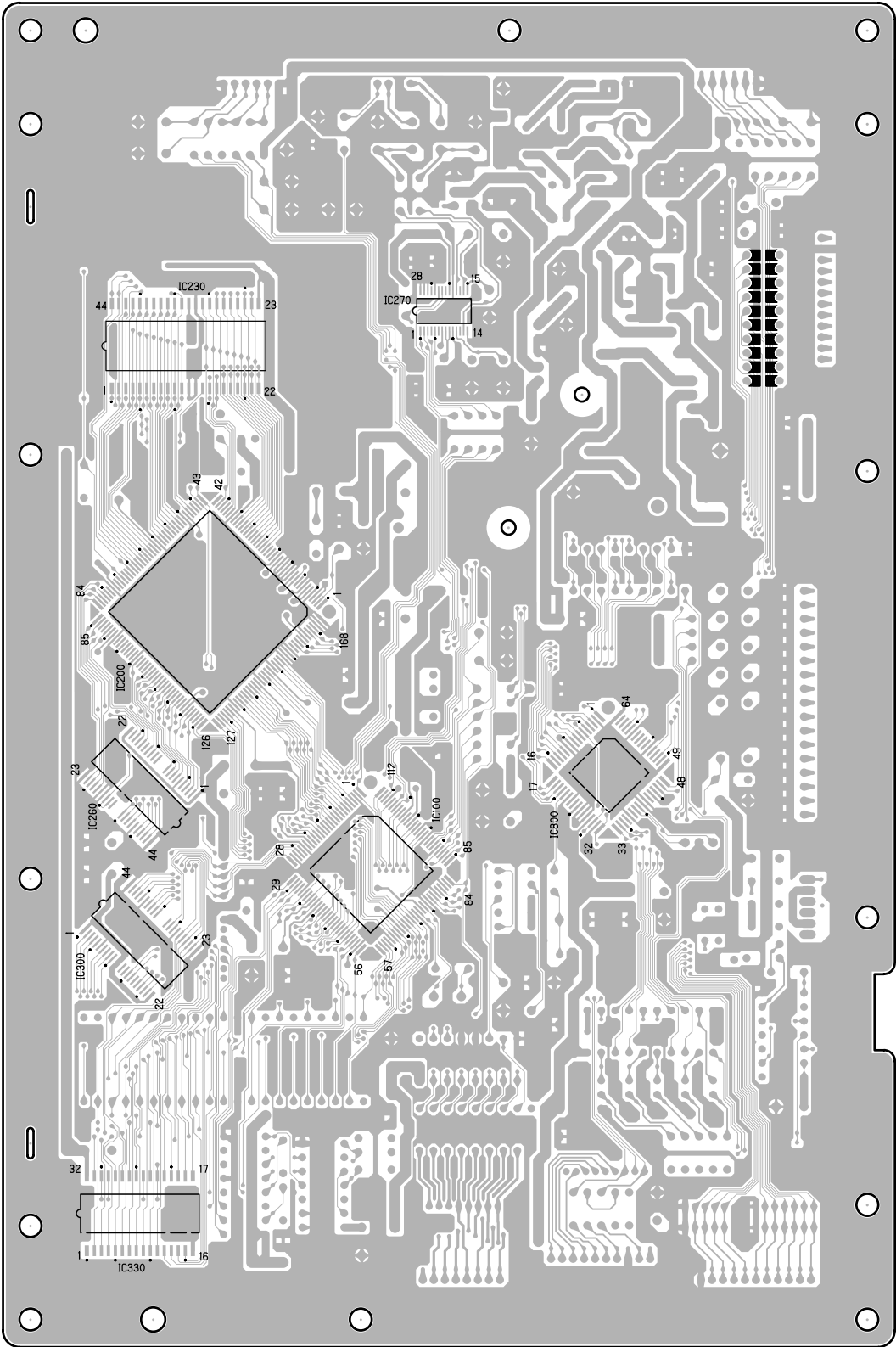
CIRCUIT BOARDS

DM Circuit Board



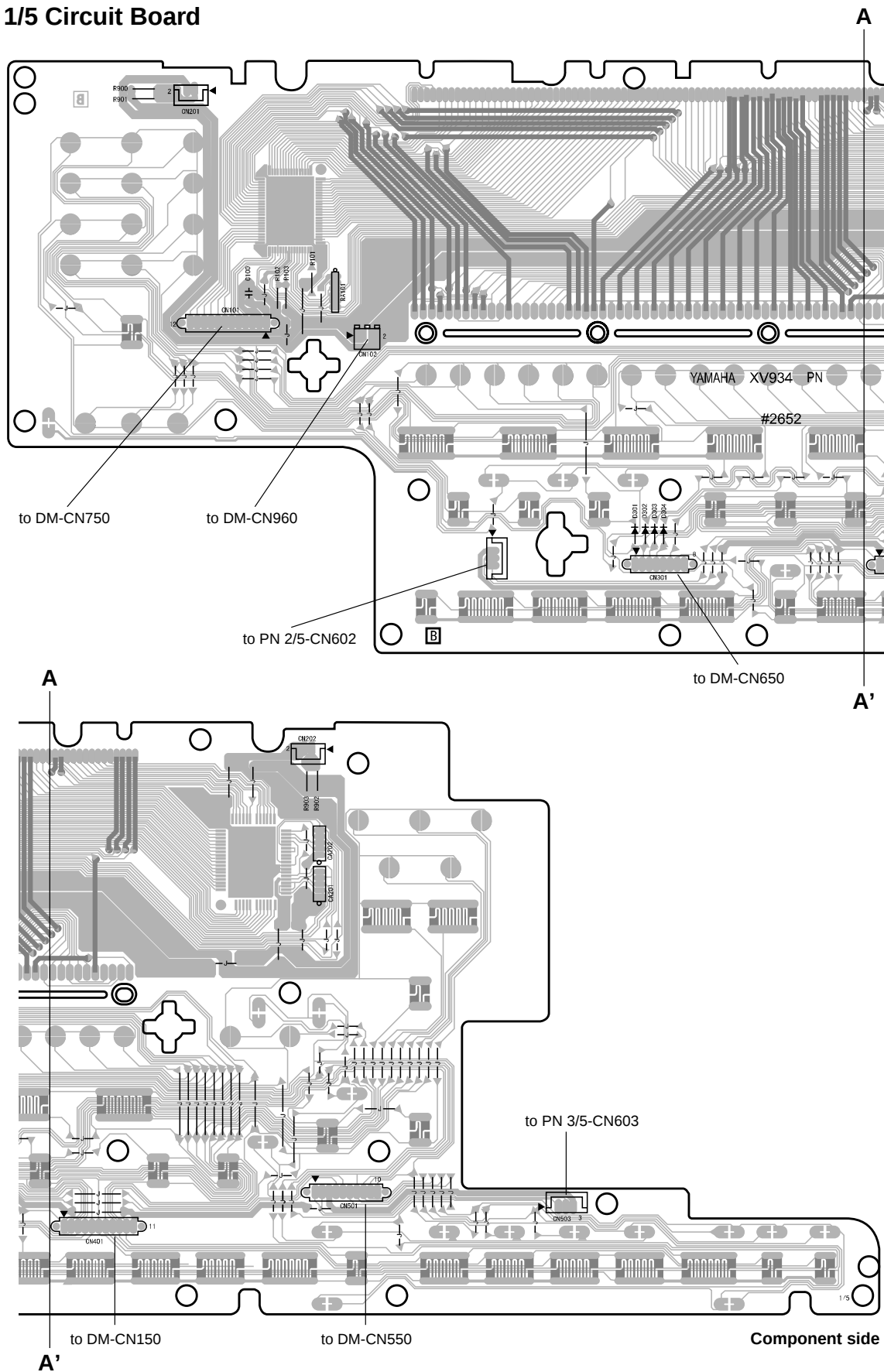
Component side

● DM Circuit Board

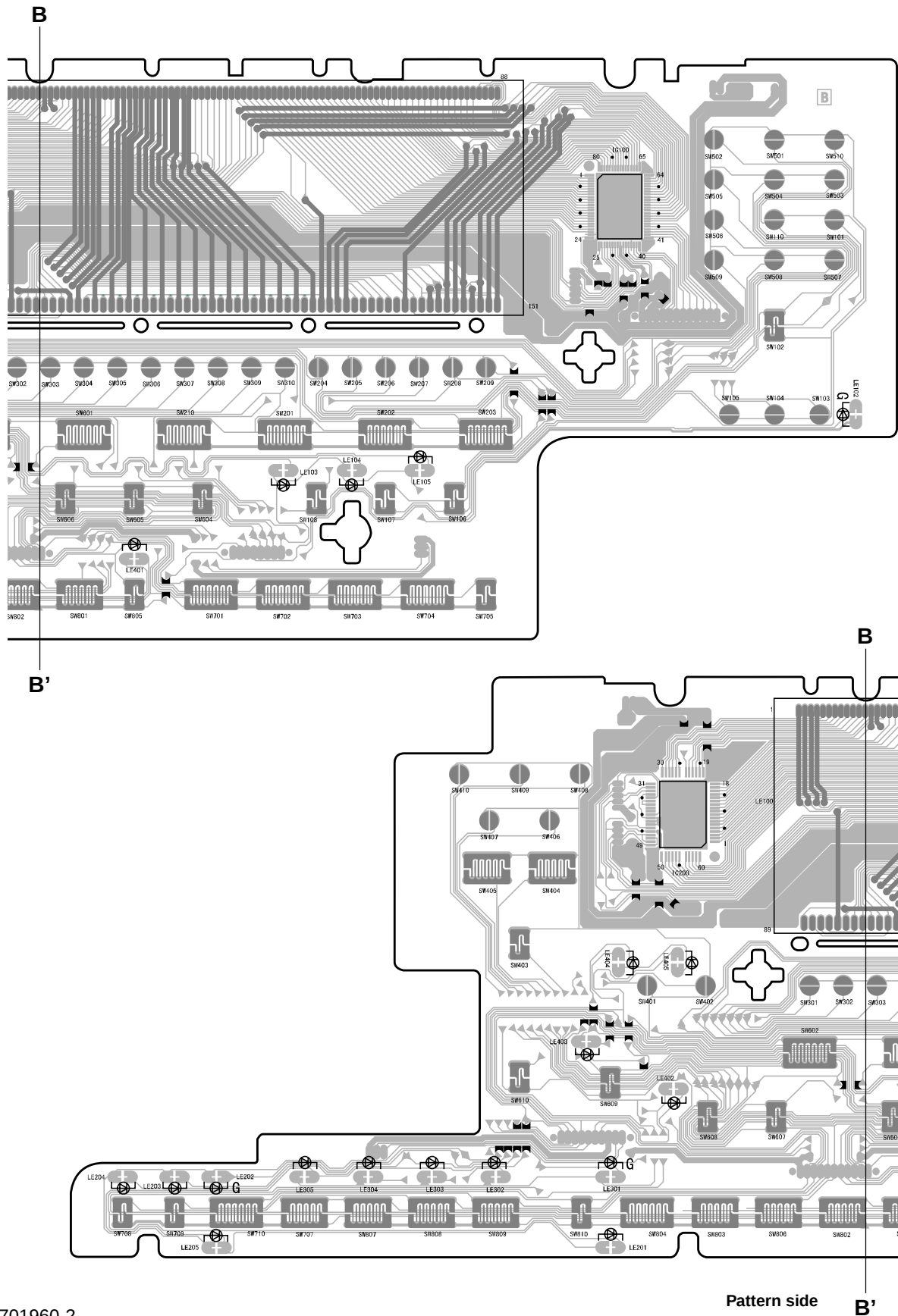


Pattern side

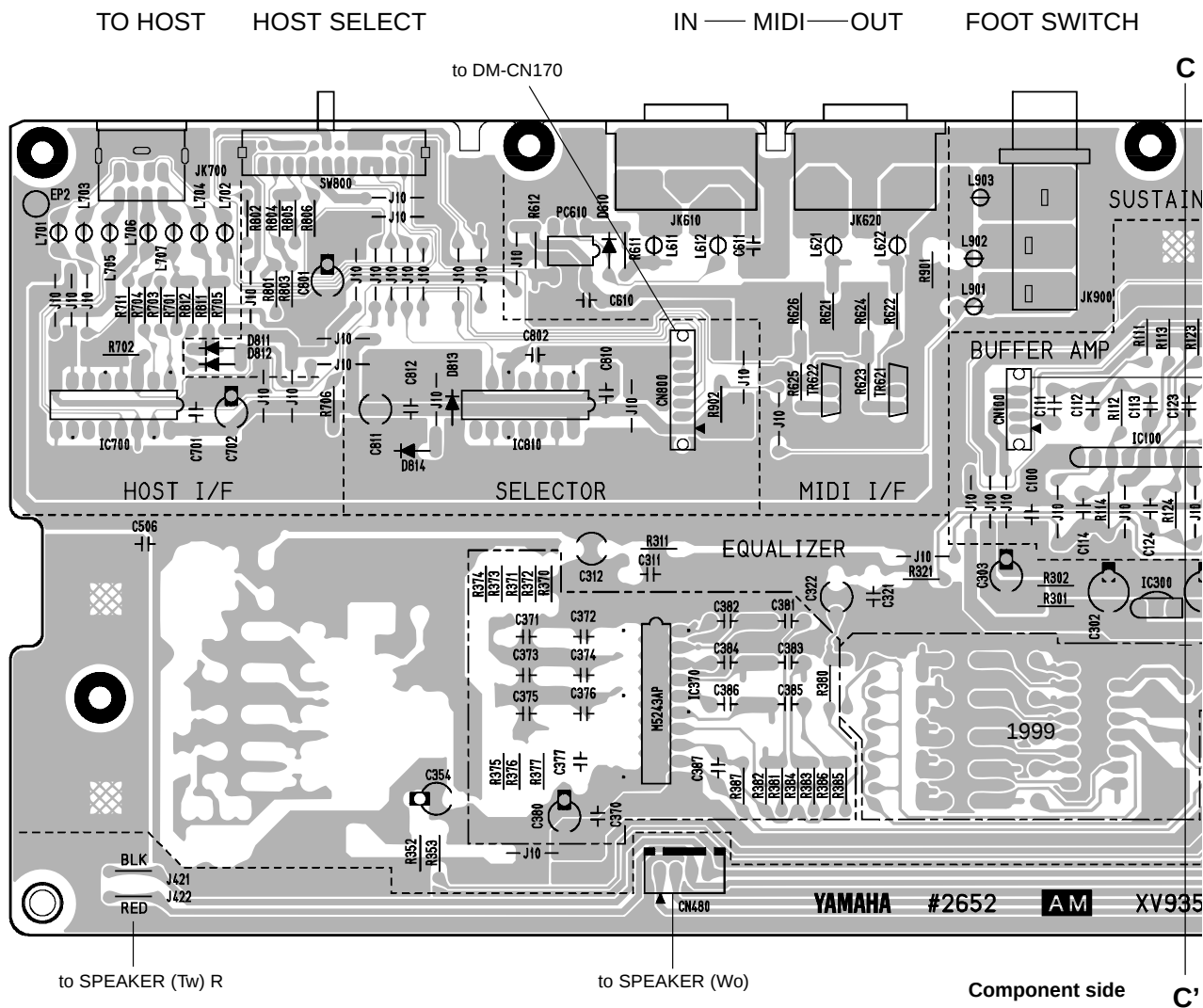
2NA-V701960-1



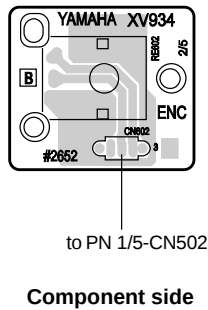
● PN 1/5 Circuit Board



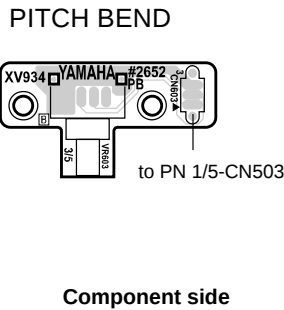
● AM Circuit Board



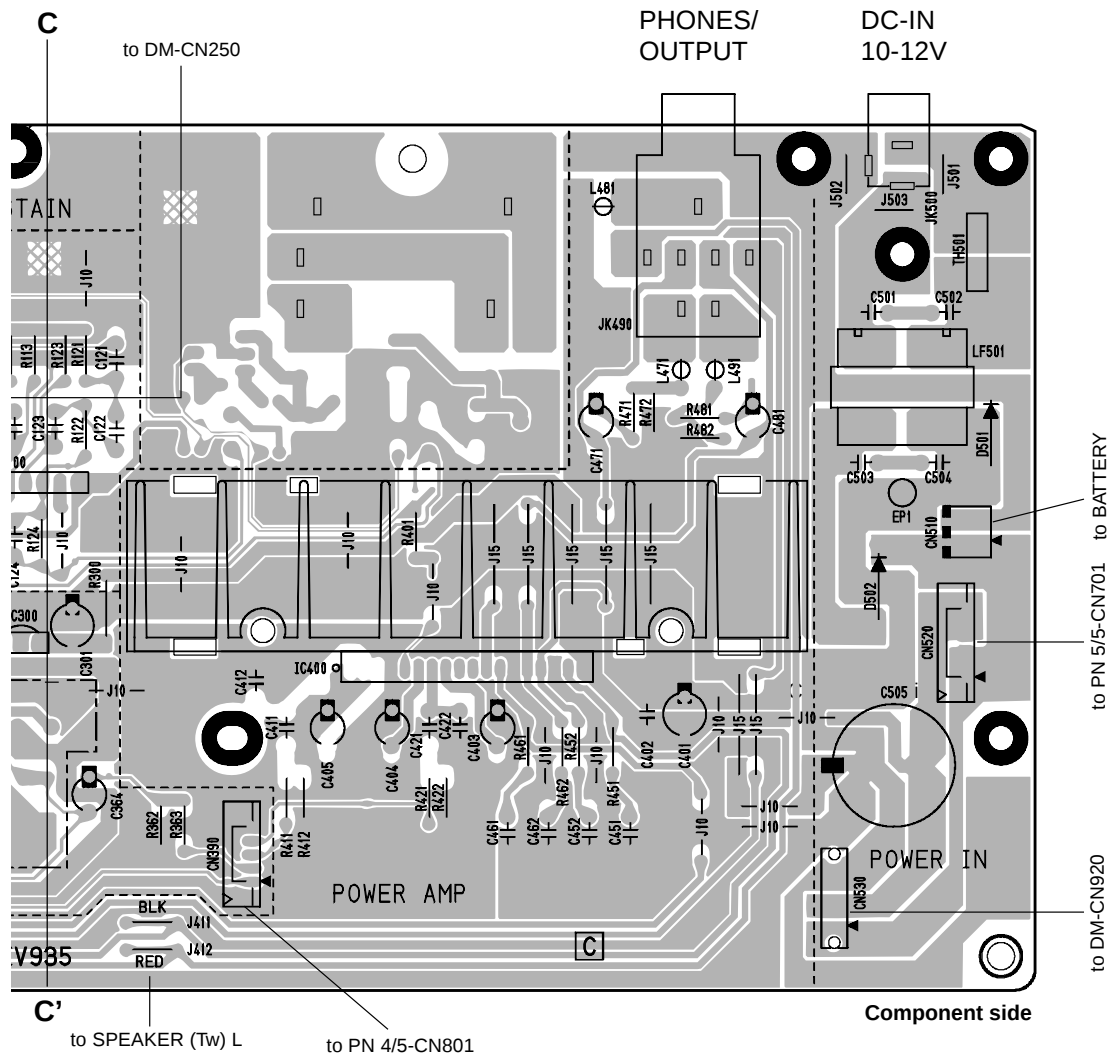
● PN 2/5 Circuit Board



● PN 3/5 Circuit Board



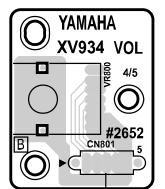
AM : 2NA-V362300 
PN 2/5, PN 3/5 : 2NA-V701960-1



● PN 4/5 Circuit Board

● PN 5/5 Circuit Board

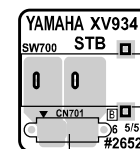
MASTER VOLUME



to AM-CN390

Component side

STANDBY/ON



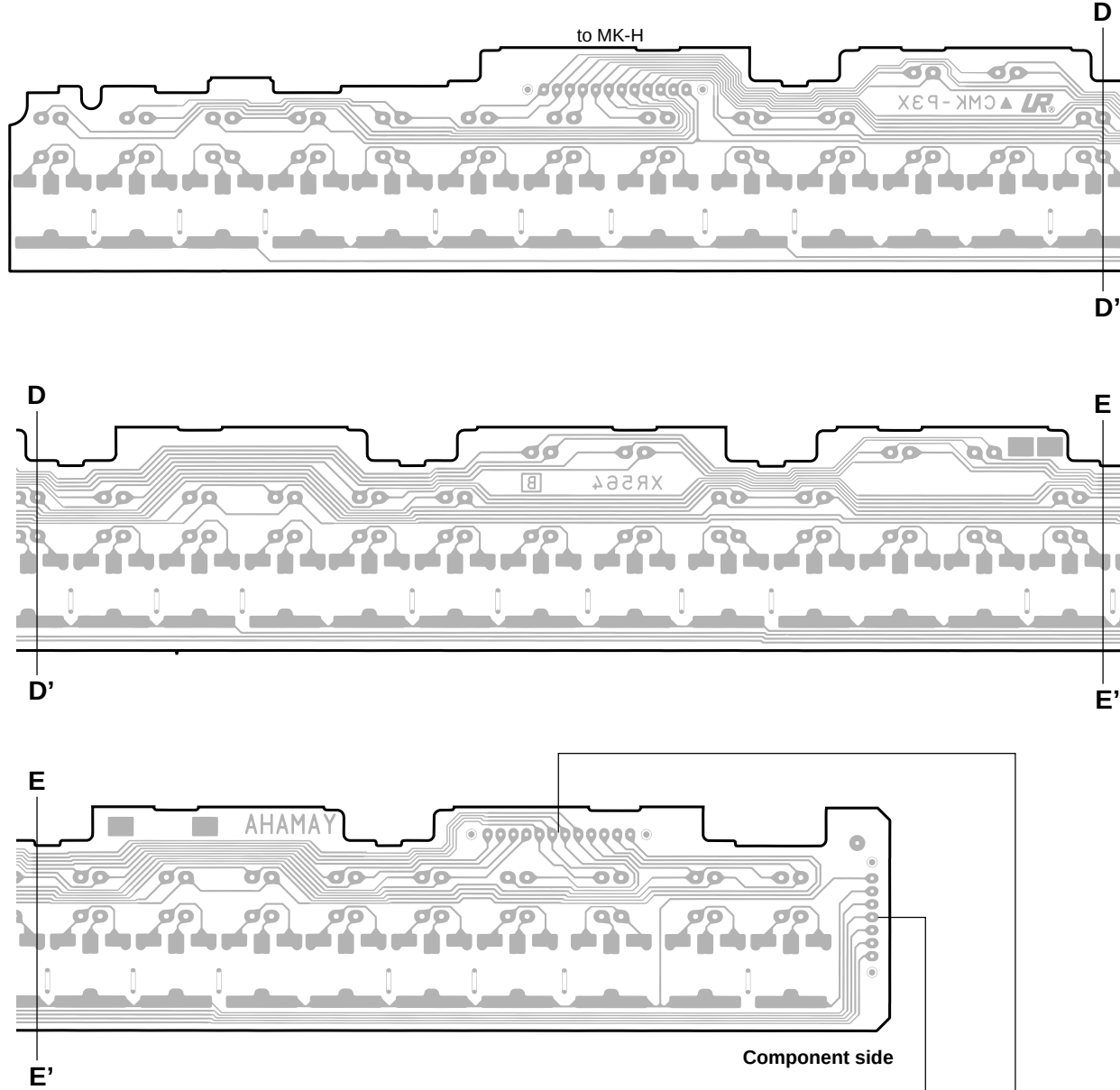
to AM-CN520

Component side

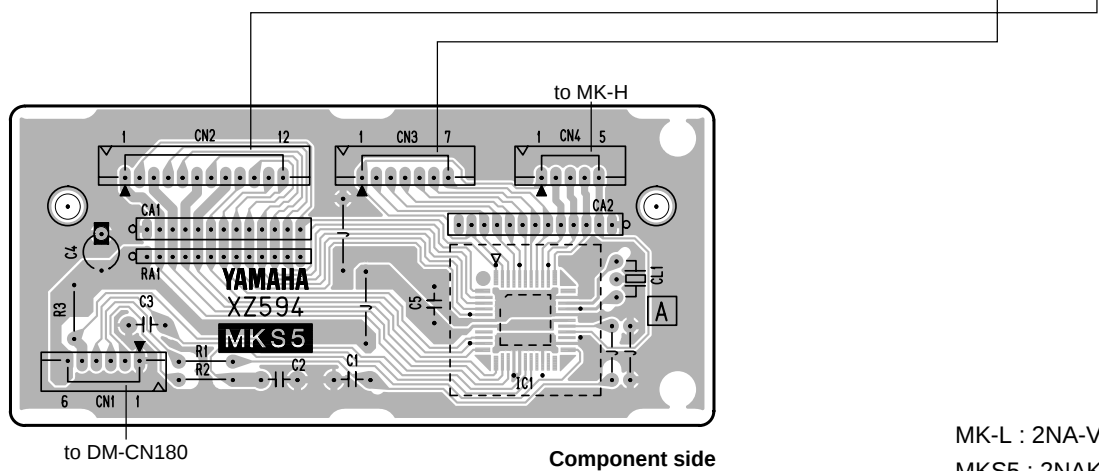
AM : 2NA-V362300 

PN 4/5, PN 5/5 : 2NA-V701960-1

● MK-L Circuit Board

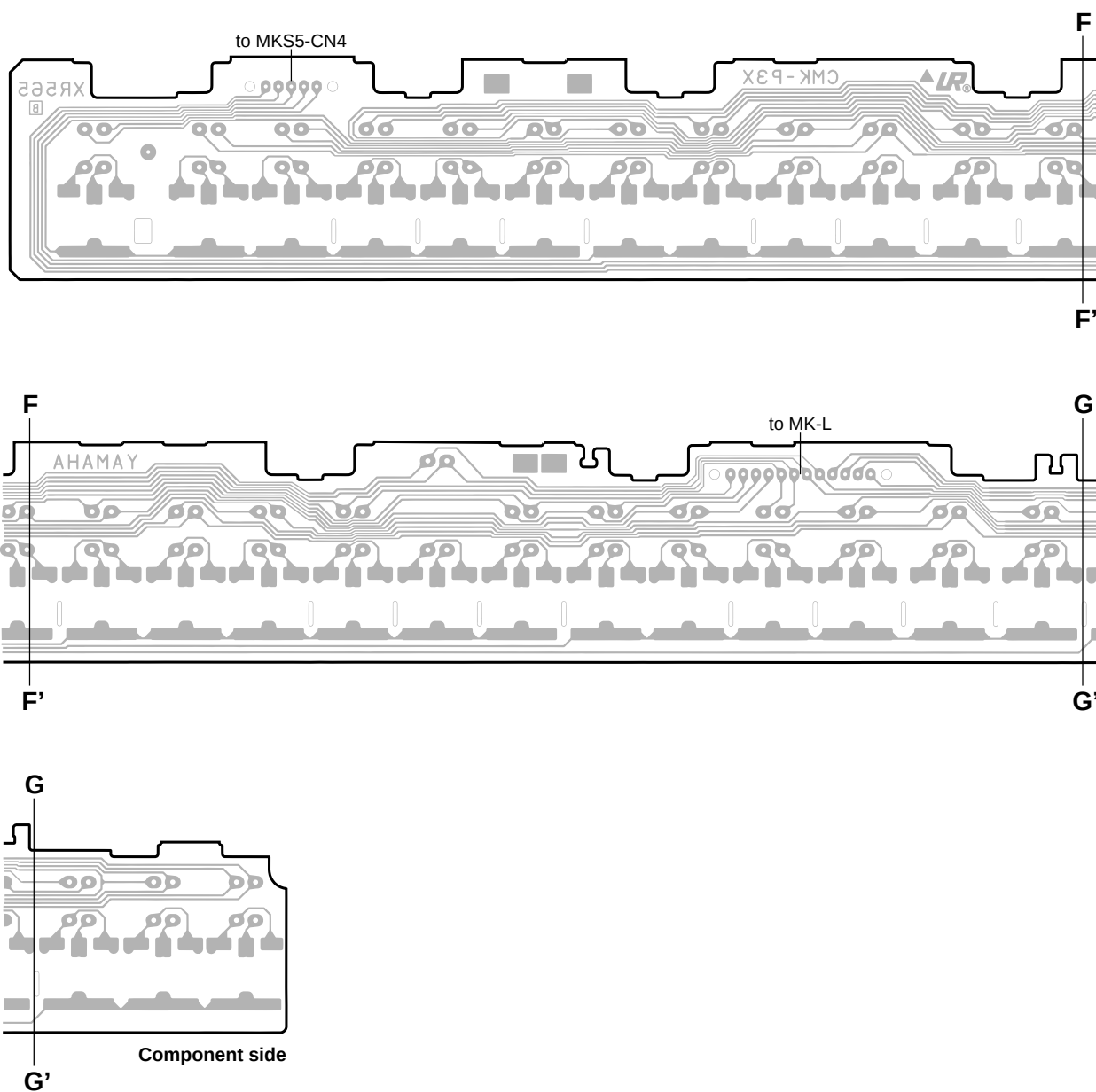


● MKS5 Circuit Board



MK-L : 2NA-VV58380
MKS5 : 2NAKZ-V679750 

● MK-H Circuit Board



■ TEST PROGRAM

1. PREPARATION

- 1) PA-6 (AC adaptor) is used.
- 2) The volume is usually moved to the use position when no volume change is required.
- 3) Measuring instruments: frequency counter, level meter (with JIS-C filter)

Note : Connect a stereo plug to the [PHONES/OUTPUT] jack at 33 ohms.
- 4) Jigs : foot switch, MIDI cable, floppy disk (2HD & 2DD)

2. HOW TO ENTER THE TEST PROGRAM

MANUAL MODE :

While pressing the C2#, F2 and G2# keys, turn the [STANDBY/ON] switch on.

3. PROCEEDING THROUGH THE TEST PROGRAM

MANUAL MODE :

- 1) When the test program is started, "TEST" appears on the LCD.
- 2) Select the test program item to be executed by pressing the [BACK] or [NEXT] button.
- 3) Press the [START/STOP] button to execute testing.
When the test result is OK, press the [START/STOP] button to return to the test item name on display.
Proceed to the next test by pressing the [BACK] or [NEXT] button. When the test result is OK, an asterisk (*) is added in front of its item name on display.
When the test result is NG, press the [DEMO] button or the lowest (leftmost) white key on the keyboard to return to the test item name on display and then turn off the [STANDBY/ON] switch to end the test program.

4. TEST PROGRAM LIST

TEST No.	LCD (initial)	Test Functions and Judgment Criteria
1	001:Version	Displays ROM version. ROM (Program, Wave) versions are displayed alternately on the LCD.
2	002:Rom Chk1	Checks the ROM. The test results appear on the LCD.
3	003:Ram Chk1	Checks all the RAMs that are connected to the CPU. The test results appear on the LCD.
4	004:WaveRomChk1	Checks the WAVE ROMs that are connected to the CPU. The test results appear on the LCD.
7	007:FDD Chk	Insert the floppy disks one by one (2DD and 2HD). Checks the floppy disk drive unit.
9	009:Eff1Ram Chk	Checks the effect RAM1. Check by hearing that the sound of C3 is produced and no noise is heard.
11	011:TG1 Chk	Outputs the sine wave by changing the channels in sequence from C2 to G4. After auto-scaling is finished, individual keys can be played. (If playing two or more keys simultaneously, the first pressed key has priority to make a sound.) If the [VOICE R1] button is pressed, that effect is applied when the sound is produced.
13	013:Pitch Chk	Connect the frequency counter to the [PHONES] jack. Sets PAN to Center and produces a signal at 440 +/- 0.22 Hz Check that the correct signal is produced.
14	014:Output R	Connect the level meter (with a JIS-C filter) to the [PHONES] jack. (33 ohm load) Set the [MASTER VOLUME] at maximum and check the output level (1 kHz). PHONES L : less than -50.0 dBm PHONES R : -11.0 dBm +/- 2 dB
15	015:Output L	Connect the level meter (with a JIS-C filter) to the [PHONES] jack. (33 ohm load) Set the [MASTER VOLUME] at maximum and check the output level (1 kHz). PHONES L : -11.0 dBm +/- 2 dB PHONES R : less than -50.0 dBm
16	016:EQ Low	Check the sine wave output at about 65.4Hz (C1).
17	017:EQ Mid	Check the sine wave output at about 523Hz (C4).
18	018:EQ High	Check the sine wave output at about 4186Hz (C7).

TEST No.	LCD (initial)	Test Functions and Judgment Criteria
19	019:D/A Noise	Connect the level meter (with a JIS-C filter) to the [PHONES] jack. (33 ohm load) Set the [MASTER VOLUME] at maximum. Check D/A converter noise. PHONES L/R : Less than -80.0 dBm
20	020:SW,LED Chk	Check the switches on the panel and LED. Press the switches on the LCD as instructed. A pre-assigned note is output when the switch is pressed. (See table 1.) When the switch with LED is pressed, that LED will light up. As the check result appears on the LCD when all the switches are pressed as instructed. Check that OK is displayed. For the dial check, confirm that turning the data dial clockwise will increase the figure in the range of 0 to 100 and turning it counterclockwise will reduce it. (To stop this check before reaching its end, press the lowest (leftmost) white key on the keyboard to return to the test item name on display.)
21	021:All LED On	Check that the all LEDs on the panel are on.
22	022:Red LED On	Check that the all red LEDs on the panel are on.
23	023:GreenLED On	Check that the all green LEDs on the panel are on.
28	028:All LCD On	Check that all LCD dots are on.
29	029:All LCD Off	Check that all LCD dots are off.
30	030:LCD BackLig	Lighting (color) check of LCD back light. Press the [DIRECT ACCESS] button and check that the back light color changes in the order of violet, red, OFF and blue.
32	032:Pedal1 Chk	Connect the foot switch (FC-4 or FC-5) to the [FOOT SWITCH] jack. Check that the C3 note is output when pressing and releasing the pedal and the C4 note is output when pressing the pedal again.
34	034:PBWheel Chk	Check that the C3 note is output when rotating the [PITCH BEND] wheel to minimum and the C4 note is output when rotating it to maximum.
38	038:Midi Chk	After connecting the [MIDI IN] jack and [MIDI OUT] jack with a MIDI cable, execute the test. Set the [HOST SELECT] switch to MIDI Check that the C4 note is output and that the test results appear on the LCD.
39	039:To Host Chk	Connect pin 3 to pin 5 and pin 6 to pin 8 of the TO HOST terminal, and execute the test. Check that the following note sounds when changing the HOST SELECT switch position according to the LCD indication; the LCD will display "OK". (PC1 : note C3 ; PC2 : note C4 ; MAC : note C5) If there is no output after one second, it is judged NG.
41	041:Battery Chk	Removing the AC adapter sets to the Battery Check mode. (In advance, install the batteries.) As the check result appears on the LCD, check that OK and the A/D value of the battery are displayed. The A/D value of the battery is detected and displayed on the LCD about 10 seconds after the power was turned on.
42	042:Rom Chk2	Checks the ROMs that are connected to the CPU. The test results appear on the LCD.
43	043:Ram Chk2	Checks the RAMs that are connected to the CPU. The test results appear on the LCD.
44	044:WaveRomChk2	Checks the WAVE ROM. The test results appear on the LCD.
47	047:BackUp Chk2	Performs the RAM back-up check. Check that the display reads "NG," then turn off the power switch. (A time of the beginnings surely becomes NG.) Enter the test program and perform the RAM back-up checks, then check again. Check that the LCD displays "OK."

TEST No.	LCD (initial)	Test Functions and Judgment Criteria
48	<i>048:Factory Set</i>	All the RAMs are initialized and set to the factory preset data when executing this test. The results appear on the LCD.
49	<i>049:Test Exit</i>	Exit from the test program after executing this test.

* NOTE : The above tests **Nos. 42-47**, require approximately 25 minutes to conduct.

If the time is not available to perform the tests, proceed the test No.48 by pressing several the [NEXT] button.

● TABLE 1

ORDER	SWITCH	LCD	NOTE
1	DSP	Push DSP	C3
2	DSP FAST/SLOW	Push Fast/Slow	C#3
3	TOUCH	Push Touch	D3
4	SUSTAIN	Push Sustain	D#3
5	HARMONY	Push Harmony	E3
6	BACK	Push Back	F3
7	NEXT	Push Next	F#3
8	DIRECT ACCESS	Push Direct Acces	G3
9	VOICE CHANGE	Push Voice Change	G#3
10	MIXER	Push Mixer	A3
11	Track 1	Push Track 1	A#3
12	Track 2	Push Track 2	B3
13	Track 3	Push Track 3	C4
14	Track 4	Push Track 4	C#4
15	Track 5	Push Track 5	D4
16	Track 6	Push Track 6	D#4
17	Track 7	Push Track 7	E4
18	Track 8	Push Track 8	F4
19	Track 9	Push Track 9	F#4
20	Track 10	Push Track 10	G4
21	Track 11	Push Track 11	G#4
22	Track 12	Push Track 12	A4
23	Track 13	Push Track 13	A#4
24	Track 14	Push Track 14	B4
25	Track 15	Push Track 15	C5
26	Track 16	Push Track 16	C#5
27	(Tenkey) 1	Push Tenkey 1	D5
28	(Tenkey) 2	Push Tenkey 2	D#5
29	(Tenkey) 3	Push Tenkey 3	E5
30	(Tenkey) 4	Push Tenkey 4	F5
31	(Tenkey) 5	Push Tenkey 5	F#5
32	(Tenkey) 6	Push Tenkey 6	G5
33	(Tenkey) 7	Push Tenkey 7	G#5
34	(Tenkey) 8	Push Tenkey 8	A5
35	(Tenkey) 9	Push Tenkey 9	A#5
36	(Tenkey) –	Push Tenkey –	B5
37	(Tenkey) 0	Push Tenkey 0	C3
38	(Tenkey) +	Push Tenkey +	C#3

ORDER	SWITCH	LCD	NOTE
39	EXIT	Push Exit	D3
40	DEMO	Push Demo	D#3
41	RECORD	Push Record	E3
42	SONG	Push Song	F3
43	STYLE	Push Style	F#3
44	MUSIC DATABASE	Push MDB	G3
45	VOICE L	Push Voice L	G#3
46	VOICE R1	Push Voice R1	A3
47	VOICE R2	Push Voice R2	A#3
48	ACMP ON/OFF	Push Acmp On/Off	B3
49	ACMP/SONG VOLUME	Push Acmp Volume	C4
50	TEMPO/TAP	Push Tempo/Tap	C#4
51	TRANSPOSE	Push Transpose	D4
52	FUNCTION	Push Function	D#4
53	PART ON/OFF VOICE L	Push Part Voice L	E4
54	PART ON/OFF VOICE R1	Push Part Voice R1	F4
55	PART ON/OFF VOICE R2	Push Part Voice R2	F#4
56	LOAD	Push Load	G4
57	SAVE	Push Save	G#4
58	UTILITY	Push Utility	A4
59	SYNC STOP	Push Sync Stop	A#4
60	SYNC START	Push Sync Start	B4
61	START/STOP	Push Start/Stop	C5
62	INTRO	Push Intro	C#5
63	MAIN A	Push Main A	D5
64	MAIN B	Push Main B	D#5
65	ENDING	Push Ending	E5
66	ONE TOUCH SETTING	Push OTS	F5
67	MEMORY	Push Memory	F#5
68	REGIST 1	Push Regist 1	G5
69	REGIST 2	Push Regist 2	G#5
70	REGIST 3	Push Regist 3	A5
71	REGIST 4	Push Regist 4	A#5
72	FREEZE	Push Freeze	B5
73	MULTI PAD 1	Push Pad 1	C3
74	MULTI PAD 2	Push Pad 2	C#3
75	MULTI PAD 3	Push Pad 3	D3
76	MULTI PAD 4	Push Pad 4	D#3
77	MULTI PAD STOP	Push Pad Stop	E3
78	Dial	Dial Down	—
79	Dial	Dial Up	—

■ DATA BACKUP & INITIALIZATION

● Data Backup

Except for the data listed below, all PSR-550 panel settings are reset to their initial settings whenever the power is turned on. The data listed below are backed up - i.e. retained in memory - as long as an AC adaptor is connected or a set of batteries is installed.

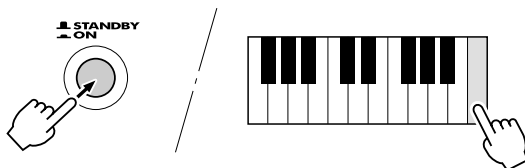
- User Style data
- User Pad data
- Registration Memory data
- Registration Memory Bank Number
- Registration Memory/One Touch Setting status
- Freeze on/off
- MIDI Transmit settings
- MIDI Receive settings
- Voice Set on/off
- Voice L (Voice Change, Mixer)
- Fingering mode
- Split Point
- Sustain on/off
- Upper Octave setting
- Pitch Bend Range
- Scale Tuning
- Transpose
- Footswitch Function, Polarity
- Touch on/off, Sensitivity
- Multi Pad setting
- Master Tuning
- Metronome on/off

Even though these settings are retained in memory, you should save them — and all your important data — to floppy disk for permanent, safe storage. To save all of the data types listed above to floppy disk, use the Save operation and select “All” as the file type.

All data listed above will be lost if the power is interrupted — in other words, if the power is turned off, the AC adaptor is disconnected and the batteries are removed. When this happens, the next time you turn on the PSR-550, a “Clear Backup” message appears in the display, the Data Initialization operation (below) is automatically executed, and the PSR-550 is set to the Style mode.

● Data Initialization

All data can be initialized and restored to the factory preset condition by turning on the power while holding the highest (rightmost) white key on the keyboard. “Now Initializing” will appear briefly on the display.



Now Initializing

⚠ CAUTION

- All registration and User Style/Pad memory data, plus the other settings listed above, will be erased and/or changed when the data initialization procedure is carried out.
- Carrying out the data initialization procedure will usually restore normal operation if the PSR-550 freezes or begins to act erratically for any reason.

■ ALERT MESSAGE LIST

<i>No File</i>	The disk contains no file to be loaded, copied, or be deleted. Insert the disk that contains files to be loaded, copied, or deleted.
<i>Unformatted Disk</i>	An unformatted disk is inserted.
<i>Disk Error</i>	An error occurred during execution of a disk operation. Try changing the disk. This message also may appear when executing the Load operation if the internal memory becomes full.
<i>Write-Protected</i>	The floppy disk's write-protect tab is set to ON. Remove the disk, set write-protect to off, reinsert the disk and attempt the operation again.
<i>File Protected</i>	The file is a purposely "copy-protected" disk. The Copy function is not possible.
<i>No Disk</i>	There is no floppy disk inserted into the disk drive. Insert a disk.
<i>Insert Song Disk</i>	This message appears when you press the [SONG] button without a disk in the disk drive.
<i>Disk Removed</i>	An error occurred because the disk was removed during a disk operation. Never remove a disk during a disk operation since this could damage both the disk and the drive.
<i>Disk Full</i>	The disk's memory capacity is full and no additional data can be recorded. Delete one or more unneeded songs (using Delete), and attempt the operation again.
<i>Wrong Disk</i>	When using the Copy operation, the inserted disk is different from the source or destination disk. Remove the disk and reinsert the proper Disk.
<i>Same Name</i>	More than one file has the same name on the disk. Change the name.
<i>Maximum 60 Songs</i>	Maximum of 60 songs can be recorded. Delete one or more unneeded songs (using Delete), and attempt the song recording again.
<i>Memory Full</i>	If the internal memory becomes full during Style/Pad recording, this message will appear on the display and recording will stop.

<i>Memory Over</i>	This message appears when executing the Quantize or Recording operations (in the Style Recording mode) when the internal memory is full.
<i>Data Not Found</i>	This message appears when you attempt to edit, quantize or clear the track which contains no data in the Record mode.
<i>User Style Full</i>	This message indicates that recording a new User style cannot be started when all three User styles have recorded data. Make sure to clear at least one of the three User styles before recording a new User style.
<i>Preset Data</i>	This message appears when you attempt to edit, or quantize the track (other than RHYTHM) which contains preset data in the Style Record mode.
<i>Cannot Operate</i>	This function cannot be used during Song/Style/Pad recording.
<i>Cannot Set MIDI</i>	The MIDI function cannot be set during recording, playback, and disk operations.
<i>Cannot Turn Har. On</i>	Harmony cannot be turned on during Style/Pad recording.
<i>Cannot Turn DSP On</i>	DSP cannot be turned on during Style/Pad recording.
<i>Cannot Enter Func.</i>	This message appears to indicate you cannot enter the function when you select a Multi Pad function in the Multi Pad Recording mode.
<i>Clear Backup</i>	• This message may appear when the PSR-550 is turned on, and indicates that user data temporarily stored in the internal memory has been lost . When this happens, the Data Initialization operation is automatically executed, and the PSR-550 is set to the Style mode. • If this message appears even when the AC adaptor is connected or the battery power is adequate, the backup data is faulty. Use the Data Initialization function .
<i>Now Initializing</i>	All data can be initialized and restore to the factory preset condition by turning the STANDBY switch ON while holding the highest (rightmost) white key on the keyboard.
<i>Battery Low</i>	When the batteries run down this message appears every few seconds. Exchange all the batteries with the new ones .

MIDI IMPLEMENTATION CHART

[Portable Keyboard]

Date : 30-NOV-2000

Model : PSR-550

MIDI Implementation Chart

Version : 1.0

Function...	Transmitted	Recognized	Remarks
Basic Default Channel Changed	1 - 16 *1 1 - 16 *1	1 - 16 *2 1 - 16 *2	
Mode Default Messages Altered	3 x *****	3 x x	
Note Number : True voice	0 - 127 *****	0 - 127 0 - 127	
Velocity Note ON Note OFF	o 9nH,v=1-127 x 9nH,v=0	o 9nH,v=1-127 x	
After Key's Touch Ch's	x x	x o	
Pitch Bend	o	o	
Control Change	0,32 o 1,5,11 x 7,10 o 6,38 o 64,66-67 o 65 x 72 o 71,73-74 x 84 x 91,93-94 o 96-97 x 98-99 x 100-101 o	o o o o o o o o o o o o o o	Bank Select Data Entry Portamento Sound Controller Sound Controller Portament Cntrl Effect SendLevel Data Inc,Dec NRPN LSB,MSB RPN LSB,MSB
Prog Change : True #	o 0 - 127 *****	o 0 - 127	
System Exclusive	o	o	
: Song Pos. Common : Song Sel. : Tune	x x x	x x x	
System : Clock Real Time : Commands	o o	o o	
Aux : All Sound Off : Reset All Cntrls : Local ON/OFF Mes- : All Notes OFF sages : Active Senseo : Reset	x x x x o x	o o x o (123-127) x	

Mode 1 : OMNI ON, POLY

Mode 2 : OMNI ON, MONO

o : Yes

Mode 3 : OMNI OFF, POLY

Mode 4 : OMNI OFF, MONO

x : No

PORTATONE

PSR-550

PARTS LIST

■ CONTENTS

OVERALL ASSEMBLY	2
KEYBOARD ASSEMBLY	5
ELECTRICAL PARTS	6 – 13

Notes : DESTINATION ABBREVIATIONS

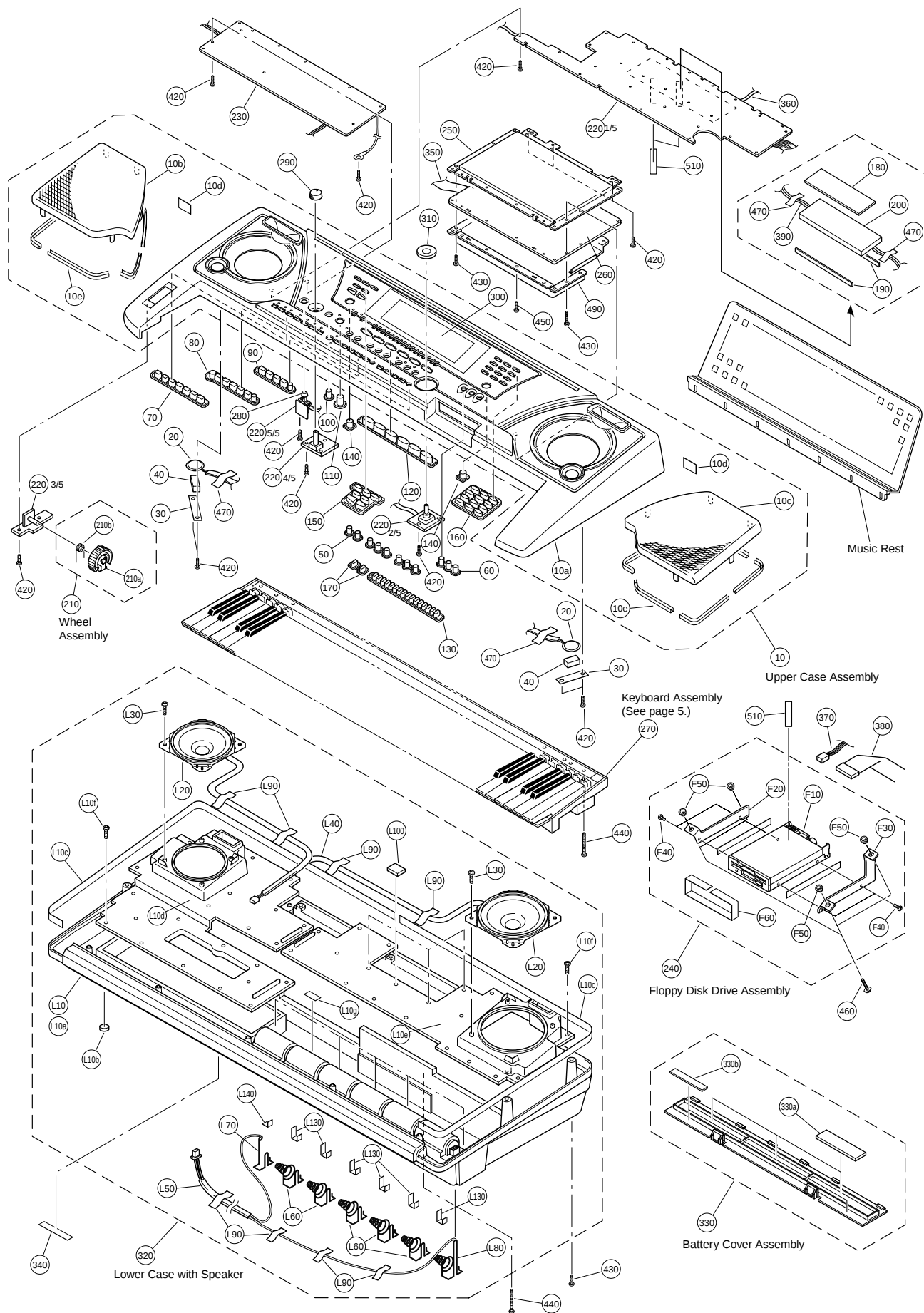
A : Australian model	M : South African model
B : British model	O : Chinese model
C : Canadian model	Q : South-east Asia model
D : German model	T : Taiwan model
E : European model	U : U.S.A. model
F : French model	V : General export model (110V)
H : North European model	W : General export model (220)
I : Indonesian model	N,X : General export model
J : Japanese 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		REMARKS	QTY	RANK
	--	OVERALL ASSEMBLY		PSR-550 (V703480)		
* 10	V7038900	Upper Case Assembly				
10a	--	Upper Case		(V703910)		
* 10b	V7038700	Speaker Grille	LEFT			
* 10c	V7038800	Speaker Grille	RIGHT			
10d	VJ861500	Vibration-proof Tape	18X25		2	03
10e	--	Spacer	L100	(V384790)	12	
20	XV948A00	Speaker	3.0cm	TWEETER	2	02
30	--	Holder		(V364540)	2	
40	--	Sponge		(V364550)	2	
* 50	V7044100	Panel Switch	x1 IVORY	ACMP ON/OFF,FINGERING, TEMPO/TAP,TRANSPOSE,ACMP/ SONG VOLUME,VOICE L/R1/R2	8	
* 60	V7404800	Panel Switch	x3 BLUE	LOAD,SAVE,UTILITY		
* 70	V7044200	Panel Switch	x7 IVORY/RED	SYNC. STOP,SYNC START, START/STOP,INTRO,MAIN/ AUTO FILL ENDING/rit.		
* 80	V7044300	Panel Switch	x7 IVORY/RED	REGISTRATION MEMORY M/1-4		
* 90	V7044400	Panel Switch	x5 IVORY	MULTI PAD 1-4,STOP		
* 100	V7044500	Panel Switch	x1 IVORY	DEMO		
* 110	V7044600	Panel Switch	x1 RED	RECORD		
* 120	V7404900	Panel Switch	x6 BLUE	FANCTION,SONG,STYLE, VOICE L/R1/R2		
* 130	V7044700	Panel Switch	x16 IVORY	Display Select TRACK 1-16		
* 140	V7405400	Panel Switch	x1 BLUE	DIRECT ACCESS,EXIT	2	
* 150	V7044800	Panel Switch	x7 BLACK/IVORY	DSP,FAST/SLOW,TOUCH, SUSTAIN,HARMONY/ECHO, BACK,NEXT		
* 160	V7378300	Panel Switch	x12 BLACK	0-9,NO/-,YES/+		
* 170	V7044900	Panel Switch	x1 IVORY	VOICE CHANGE,MIXER	2	
* 180	V7126700	LCD	TTR			
190	V3836800	Rubber Connector	SS-174W		2	01
* 200	V7042500	Back Light Assembly	PT			
210	--	Wheel Assembly		(VT48770)		
210a	VT366400	Wheel	BLACK	PITCH BEND		03
210b	VT440100	Spring				03
* 220	V7019600	Circuit Board	PN (1/5-5/5)			
230	V3623000	Circuit Board	AM			27
240	--	Floppy Disk Drive Assembly		(V704320)		
250	--	Shield Box	LOWER	(V375850)		
* 260	V7019400	Circuit Board	DM			
* 270	V7127100	Keyboard Assembly	16M C61 P2M MKS5			
280	VQ218800	Knob	RED	STANDBY/ON		03
290	VU432400	Knob	BLACK	MASTER VOLUME		01
* 300	V7045000	LCD Panel				
310	V3833900	Encoder Knob	IVORY	DATA Dial		02
320	--	Lower Case with Speaker		(V703900)		
* 330	V7042300	Battery Cover Assembly	PT			
330a	--	Battery Cushion	WHITE	(V710060)	3	
330b	--	Nonwoven Fabric Cloth	10X70X0.5	(V781030)	2	
340	--	Label	FE	(V703710)		
350	--	Connector Assembly	MKB 6P	(V381860)		
360	--	Connector Assembly	LCV 2P	(V381920)		
370	V4468500	Connector Assembly	FDV 3P			02
380	V3819400	Connector Assembly	FDD 34P			03
390	--	Connector Assembly	BLT PH 6P	(V705780)		
420	EP600280	Bind Head Tapping Screw-P	3.0X8 MFZN2Y		53	01
430	EP600300	Bind Head Tapping Screw-P	3.0X12 MFZN2Y		16	01
440	VK228100	Bind Head Tapping Screw-P	3.0X25 MFZN2Y		6	01
450	EP600250	Bind Head Tapping Screw-B	3.0X8 MFZN2Y		14	01
460	V5115200	Sems Pan Head Screw	SW3.0X10		4	01
470	VA126100	Adhesive Tape	12X50		17	03
490	--	Shield Box	UPPER	(V375860)		
510	VN195400	Adhesive Tape	12X70		3	03
	--	Floppy Disk Drive Assembly		(V704320)		
F10	V6492300	Floppy Disk Drive	3.5inch DF354H			13
F20	--	Holder, FDD	LEFT	(V362620)		
F30	--	Holder, FDD	RIGHT	(V362630)		
F40	EG330150	Bind Head Screw	3.0X5 MFZN2Y		4	01

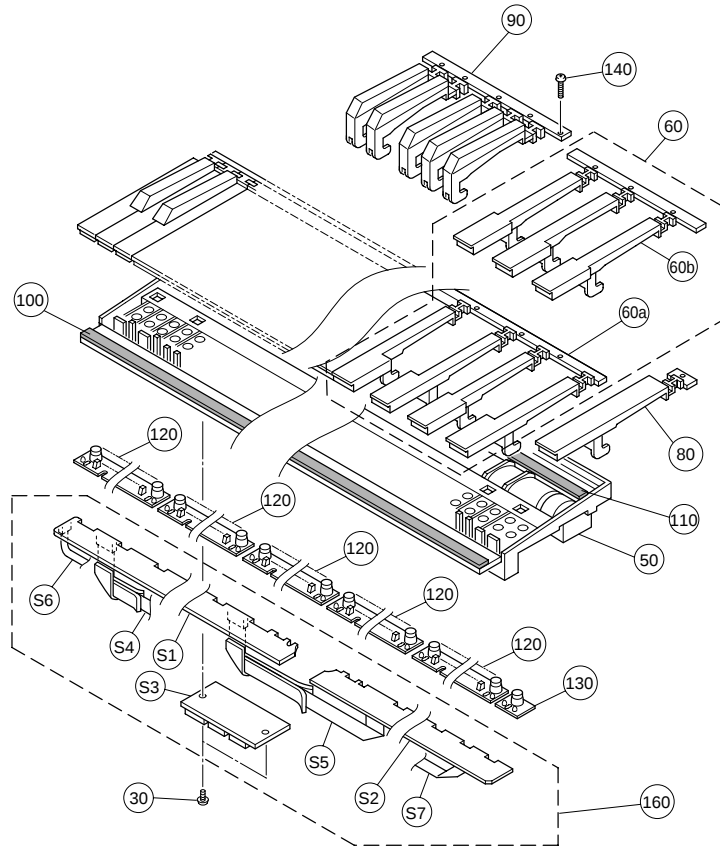
*: New Parts

RANK: Japan only

[illegible]

RANK: Japan only

■ KEYBOARD ASSEMBLY



REF NO.	PART NO.	DESCRIPTION		REMARKS	QTY	RANK
*	V7127100	KEYBOARD ASSEMBLY	16M C61 P2M MKS5	PSR-550		
30	EP600280	Bind Head Tapping Screw-P	3.0X8 MFZN2Y		2	01
30	EP630220	Bind Head Tapping Screw-P	3.0X8 MFZN2BL		2	01
50	--	Frame	C61	(VS15380)		
50	VU328600	Frame	C61 16M			10
50	--	Frame	C61 16M,L	(V676090)		
60	VH1809C0	White Key	16L CEGBDFA		5	03
60a	--	White Key	16L CEGB	(VH18090)	5	03
60b	--	White Key	16L DFA	(VH18100)	5	03
80	VH181100	White Key	16L C'			01
90	VH181200	Black Key	16L #		5	03
100	VH181300	Felt				03
110	VH181400	Rubber Sheet				01
120	VU328400	Rubber Contact	16M OCT 2M 12KEYS		5	06
130	VU328500	Rubber Contact	16M C' 2M 1KEY			05
140	EP600310	Bind Head Tapping Screw-P	3.0X16 MFZN2Y		21	01
140	VB205200	Bind Head Tapping Screw-P	3.0X16 MFZN2BL		21	01
140	VS756700	Bind Head Tapping Screw-P	3.0X16 MFZN2B		21	01
150	TX920280	Grease	G-31KA 50g			10
160	--	Circuit Board Assembly	MKS5 TY KBD SW	(V712720)		
170	--	Nonwoven Fabric Cloth	40X13X0.5	(V771130)		
	--	Circuit Board Assembly	MKS5 TY KBD SW	(V712720)		
S1	VV583800	Circuit Board	MK-L			09
S2	VV583900	Circuit Board	MK-H			09
* S3	V7112200	Circuit Board	MKS5			
S4	VV583100	Cable	MK-A 12P			03
S5	VV583600	Cable	MK-B 12P			03
S6	VV583500	Cable	MK-C 7P			03
S7	VV583700	Cable	MK-D 5P			03
S8	--	Sponge	A 16M	(VV61890)	2	
S9	--	Sponge	B 16M	(VV61900)	2	
S10	--	Adhesive Tape	C 12	(VV61910)		
S11	--	Adhesive Tape	D 12	(VV61920)	3	

*: New Parts

RANK: Japan only

ELECTRICAL PARTS

REF NO.	PART NO.	DESCRIPTION		REMARKS	QTY	RANK
		ELECTRICAL PARTS		PSR-550		
	V3623000	Circuit Board	AM	(XV935C0)		27
	V7019400	Circuit Board	DM	(XZ670D0)		
	VV583900	Circuit Board	MK-H	(XR565C0)		09
	VV583800	Circuit Board	MK-L	(XR564C0)		09
	V7112200	Circuit Board	MKS5	(XZ594A0)		
	V7019600	Circuit Board	PN	(XV934B0)		
	V3623000	Circuit Board	AM	(XV935C0)		27
	VV856400	Heat Sink				05
	--	Jumper Wire	0.55	(VA07890)		
C0100	VC694800	Semiconductive Cera. Cap.	0.1000 25V Z			01
C0111	UA654680	Mylar Capacitor	0.0680 50V J			02
-0113	UA654680	Mylar Capacitor	0.0680 50V J			02
C0121	UA654680	Mylar Capacitor	0.0680 50V J			02
-0123	UA654680	Mylar Capacitor	0.0680 50V J			02
C0301	UR848100	Electrolytic Cap.	100.00 25.0V			01
C0302	UR848100	Electrolytic Cap.	100.00 25.0V			01
C0303	UR837100	Electrolytic Cap.	10.00 16.0V			01
C0311	UA654100	Mylar Capacitor	0.0100 50V J			01
C0312	UN837100	Electrolytic Cap.-BP	10.00 16.0V			01
C0321	UA654100	Mylar Capacitor	0.0100 50V J			01
C0322	UN837100	Electrolytic Cap.-BP	10.00 16.0V			01
C0354	UR866470	Electrolytic Cap.	4.70 50.0V			01
C0364	UR866470	Electrolytic Cap.	4.70 50.0V			01
C0370	VC694800	Semiconductive Cera. Cap.	0.1000 25V Z			01
C0371	VR168700	Monolithic Mylar Capacitor	ECQ-V1H224JL3			01
C0372	UA654220	Mylar Capacitor	0.0220 50V J			01
C0373	UA654100	Mylar Capacitor	0.0100 50V J			01
C0374	UA654270	Mylar Capacitor	0.0270 50V J			01
C0375	UA653470	Mylar Capacitor	4700P 50V J			01
C0376	UA654150	Mylar Capacitor	0.0150 50V J			01
C0377	FG613150	Ceramic Capacitor-B	1500P 50V K			01
C0380	UR837470	Electrolytic Cap.	47.00 16.0V			01
C0381	VR168700	Monolithic Mylar Capacitor	ECQ-V1H224JL3			01
C0382	UA654220	Mylar Capacitor	0.0220 50V J			01
C0383	UA654100	Mylar Capacitor	0.0100 50V J			01
C0384	UA654270	Mylar Capacitor	0.0270 50V J			01
C0385	UA653470	Mylar Capacitor	4700P 50V J			01
C0386	UA654150	Mylar Capacitor	0.0150 50V J			01
C0387	FG613150	Ceramic Capacitor-B	1500P 50V K			01
C0401	UR848100	Electrolytic Cap.	100.00 25.0V			01
C0402	VC694800	Semiconductive Cera. Cap.	0.1000 25V Z			01
C0403	UR865470	Electrolytic Cap.	0.47 50.0V			01
C0404	UR827330	Electrolytic Cap.	33.00 10.0V			01
C0405	UR828100	Electrolytic Cap.	100.00 10.0V			01
C0411	VT757800	Monolithic Ceramic Cap.	1.000 25V Z			01
C0411	V6490000	Monolithic Ceramic Cap.	1.000 25V Z			01
C0412	FG612470	Ceramic Capacitor-B	470P 50V K			01
C0421	VT757800	Monolithic Ceramic Cap.	1.000 25V Z			01
C0421	V6490000	Monolithic Ceramic Cap.	1.000 25V Z			01
C0422	FG612470	Ceramic Capacitor-B	470P 50V K			01
C0451	UA654470	Mylar Capacitor	0.0470 50V J			01
C0452	UA654470	Mylar Capacitor	0.0470 50V J			01
C0461	UA654470	Mylar Capacitor	0.0470 50V J			01
C0462	UA654470	Mylar Capacitor	0.0470 50V J			01
C0471	UR837470	Electrolytic Cap.	47.00 16.0V			01
C0481	UR837470	Electrolytic Cap.	47.00 16.0V			01
C0501	VC694800	Semiconductive Cera. Cap.	0.1000 25V Z			01
-0504	VC694800	Semiconductive Cera. Cap.	0.1000 25V Z			01
C0505	VT848900	Electrolytic Cap.	6800 25.0V			03
C0506	VC694800	Semiconductive Cera. Cap.	0.1000 25V Z			01
C0610	FG644100	Ceramic Capacitor-F	0.0100 50V Z			01
C0611	FG644100	Ceramic Capacitor-F	0.0100 50V Z			01
C0701	FG644100	Ceramic Capacitor-F	0.0100 50V Z			01
C0702	UR837100	Electrolytic Cap.	10.00 16.0V			01
C0801	UR837100	Electrolytic Cap.	10.00 16.0V			01
C0802	FG612100	Ceramic Cap.-B	100P 50V K			01
C0810	FG644100	Ceramic Capacitor-F	0.0100 50V Z			01
C0811	UN817470	Electrolytic Cap.-BP	47.00 6.3V			01

*: New Parts

RANK: Japan only

REF NO.	PART NO.	DESCRIPTION		REMARKS	QTY	RANK
C0812	VC694800	Semiconductive Cera. Cap.	0.1000 25V Z			01
CN100	VI878200	Cable Holder	51048 4P TE			01
CN390	VK024900	Wire Trap	52147 5P TE			01
CN480	LB918040	Base Post Connector	XH 4P TE			01
CN510	LB918020	Base Post Connector	XH 2P TE			01
CN520	VF728300	Wire Trap	52147 6P TE			01
CN530	VI878300	Cable Holder	51048 5P TE			01
CN800	VI878500	Cable Holder	51048 7P TE			01
D0501	VL723600	Diode	20E1-FC4			01
D0502	VL723600	Diode	20E1-FC4			01
D0610	VB941200	Diode	1SS133,1SS176			01
-0814	VB941200	Diode	1SS133,1SS176			01
IC100	XF633A00	IC	UPC4572HA	OP AMP		02
IC300	XE924A00	IC	AN78L06	REGULATOR +6V		01
IC370	XU911A00	IC	M5243AP06	EQUALIZER		03
IC400	XQ619A00	IC	LA4705NA 17W BTL	POWER AMP.		05
IC700	XU463A00	IC	SN75C1168N	LINE TRANSCEIVER		05
IC810	IG142200	IC	TC74HCU04AP	INVERTER		02
IC810	IG142250	IC	SN74HCU04N			01
J0411	--	Jumper Wire	0.55	(VA07890)		
J0412	--	Jumper Wire	0.55	(VA07890)		
J0421	--	Jumper Wire	0.55	(VA07890)		
J0422	--	Jumper Wire	0.55	(VA07890)		
J0501	--	Jumper Wire	0.55	(VA07890)		
J0502	--	Jumper Wire	0.55	(VA07890)		
J0503	--	Jumper Wire	0.55	(VA07890)		
JK490	LB101870	Phone Jack	YKB21-5006	PHONES/OUTPUT		03
JK500	V6557600	Connector	HTJ-020-05AZ	DC-IN 10-12V		
JK610	VJ107200	DIN Connector	5P YKF51-5050	MIDI IN		01
JK620	VJ107200	DIN Connector	5P YKF51-5050	MIDI OUT		01
JK700	VM761000	DIN Connector	DIN 8P MD-S810	TO HOST		03
JK900	VB312600	Phone Jack	YKB21-5012 BLACK	FOOT SWITCH		02
L0471	VB835000	Coil	FL5R200QNT 20uH			01
L0471	V2889500	Choke Coil	R-5C.20U 20uH			01
L0471	V2993400	Choke Coil	R-5C.20U 20uH			01
L0481	VB835000	Coil	FL5R200QNT 20uH			01
L0481	V2889500	Choke Coil	R-5C.20U 20uH			01
L0481	V2993400	Choke Coil	R-5C.20U 20uH			01
L0491	VB835000	Coil	FL5R200QNT 20uH			01
L0491	V2889500	Choke Coil	R-5C.20U 20uH			01
L0491	V2993400	Choke Coil	R-5C.20U 20uH			01
L0611	VB835000	Coil	FL5R200QNT 20uH			01
L0611	V2889500	Choke Coil	R-5C.20U 20uH			01
L0611	V2993400	Choke Coil	R-5C.20U 20uH			01
L0612	VB835000	Coil	FL5R200QNT 20uH			01
L0612	V2889500	Choke Coil	R-5C.20U 20uH			01
L0612	V2993400	Choke Coil	R-5C.20U 20uH			01
L0621	VB835000	Coil	FL5R200QNT 20uH			01
L0621	V2889500	Choke Coil	R-5C.20U 20uH			01
L0621	V2993400	Choke Coil	R-5C.20U 20uH			01
L0622	VB835000	Coil	FL5R200QNT 20uH			01
L0622	V2889500	Choke Coil	R-5C.20U 20uH			01
L0622	V2993400	Choke Coil	R-5C.20U 20uH			01
L0701	GE300670	Ferrite Bead	BL02RN2-R62T4			02
-0707	GE300670	Ferrite Bead	BL02RN2-R62T4			02
L0901	VB835000	Coil	FL5R200QNT 20uH			01
-0903	VB835000	Coil	FL5R200QNT 20uH			01
L0901	V2889500	Choke Coil	R-5C.20U 20uH			01
-0903	V2889500	Choke Coil	R-5C.20U 20uH			01
L0901	V2993400	Choke Coil	R-5C.20U 20uH			01
-0903	V2993400	Choke Coil	R-5C.20U 20uH			01
LF501	VI486800	Line Filter	SU10VD-20020			03
PC610	VG181900	Photo Coupler	PC-900V			03
R0111	HF757150	Carbon Resistor	15.0K 1/4 J			01
R0112	HF756270	Carbon Resistor	2.7K 1/4 J			01
R0113	HF758390	Carbon Resistor	390.0K 1/4 J			01
R0114	--	Jumper Wire	0.55	(VA07890)		
R0121	HF757150	Carbon Resistor	15.0K 1/4 J		01	
R0122	HF756270	Carbon Resistor	2.7K 1/4 J		01	
R0123	HF758390	Carbon Resistor	390.0K 1/4 J		01	

*: New Parts

RANK: Japan only

REF NO.	PART NO.	DESCRIPTION		REMARKS	QTY	RANK
R0124	--	Jumper Wire	0.55	(VA07890)		
R0300	HF754470	Carbon Resistor	47.0 1/4 J			01
R0301	HF756220	Carbon Resistor	2.2K 1/4 J			01
R0302	HF756220	Carbon Resistor	2.2K 1/4 J			01
R0311	HF755150	Carbon Resistor	150.0 1/4 J			01
R0321	HF755150	Carbon Resistor	150.0 1/4 J			01
R0352	HF757100	Carbon Resistor	10.0K 1/4 J			01
R0353	HF755560	Carbon Resistor	560.0 1/4 J			01
R0362	HF757100	Carbon Resistor	10.0K 1/4 J			01
R0363	HF755560	Carbon Resistor	560.0 1/4 J			01
R0370	HF756270	Carbon Resistor	2.7K 1/4 J			01
R0371	--	Jumper Wire	0.55	(VA07890)		
R0372	HF757220	Carbon Resistor	22.0K 1/4 J			01
R0373	HF755680	Carbon Resistor	680.0 1/4 J			01
R0374	HF757180	Carbon Resistor	18.0K 1/4 J			01
R0375	HF755470	Carbon Resistor	470.0 1/4 J			01
R0376	HF757180	Carbon Resistor	18.0K 1/4 J			01
R0377	HF756270	Carbon Resistor	2.7K 1/4 J			01
R0380	HF756270	Carbon Resistor	2.7K 1/4 J			01
R0381	--	Jumper Wire	0.55	(VA07890)		
R0382	HF757220	Carbon Resistor	22.0K 1/4 J			01
R0383	HF755680	Carbon Resistor	680.0 1/4 J			01
R0384	HF757180	Carbon Resistor	18.0K 1/4 J			01
R0385	HF755470	Carbon Resistor	470.0 1/4 J			01
R0386	HF757180	Carbon Resistor	18.0K 1/4 J			01
R0387	HF756270	Carbon Resistor	2.7K 1/4 J			01
R0401	HF757100	Carbon Resistor	10.0K 1/4 J			01
R0411	HF757180	Carbon Resistor	18.0K 1/4 J			01
R0412	HF756680	Carbon Resistor	6.8K 1/4 J			01
R0421	HF757180	Carbon Resistor	18.0K 1/4 J			01
R0422	HF756680	Carbon Resistor	6.8K 1/4 J			01
R0451	HF753220	Carbon Resistor	2.2 1/4 J			01
R0452	HF753220	Carbon Resistor	2.2 1/4 J			01
R0461	HF753220	Carbon Resistor	2.2 1/4 J			01
R0462	HF753220	Carbon Resistor	2.2 1/4 J			01
R0471	HF755100	Carbon Resistor	100.0 1/4 J			01
R0472	HF755330	Carbon Resistor	330.0 1/4 J			01
R0481	HF755100	Carbon Resistor	100.0 1/4 J			01
R0482	HF755330	Carbon Resistor	330.0 1/4 J			01
R0611	HF755220	Carbon Resistor	220.0 1/4 J			01
R0612	HF756100	Carbon Resistor	1.0K 1/4 J			01
R0621	HF755220	Carbon Resistor	220.0 1/4 J			01
R0622	HF755220	Carbon Resistor	220.0 1/4 J			01
R0623	HF756150	Carbon Resistor	1.5K 1/4 J			01
R0624	HF757220	Carbon Resistor	22.0K 1/4 J			01
R0625	HF757220	Carbon Resistor	22.0K 1/4 J			01
R0626	HF757100	Carbon Resistor	10.0K 1/4 J			01
R0701	HF757100	Carbon Resistor	10.0K 1/4 J			01
R0702	HF757100	Carbon Resistor	10.0K 1/4 J			01
R0703	HF755220	Carbon Resistor	220.0 1/4 J			01
R0704	HF755220	Carbon Resistor	220.0 1/4 J			01
R0705	HF757100	Carbon Resistor	10.0K 1/4 J			01
R0706	HF757100	Carbon Resistor	10.0K 1/4 J			01
R0711	HF757100	Carbon Resistor	10.0K 1/4 J			01
R0801	HF755100	Carbon Resistor	100.0 1/4 J			01
R0802	HF755100	Carbon Resistor	100.0 1/4 J			01
R0803	HF757100	Carbon Resistor	10.0K 1/4 J			01
-0806	HF757100	Carbon Resistor	10.0K 1/4 J			01
R0811	HF755100	Carbon Resistor	100.0 1/4 J			01
R0812	HF755100	Carbon Resistor	100.0 1/4 J			01
R0901	HF757470	Carbon Resistor	47.0K 1/4 J			01
R0902	HF757470	Carbon Resistor	47.0K 1/4 J			01
SW800	VQ665200	Slide Switch	SSSF144-S06N-0	HOST SELECT		03
TH501	VV458000	Protector Switch	RUE250 2.50A 30V	Overcurrent protection		03
TR621	VS885800	Transistor	2SC			01
TR622	VS885800	Transistor	2SC			01
W-ANA	--	Connector Assembly	ANA 4P	(V381820)		
W-DMV	--	Connector Assembly	DMV 5P	(V381840)		
W-EP2	--	Connector Assembly	EP2 L=160	(V457700)		
W-MID	--	Connector Assembly	MID 7P	(V381870)		

*: New Parts

RANK: Japan only

REF NO.	PART NO.	DESCRIPTION		REMARKS	QTY	RANK
*	V7019400	Circuit Board	DM	(XZ670D0)	2	01
	EP600190	Bind Head Tapping Screw-B	3.0X8 MFZN2BL			01
C0101	VC694800	Semiconductive Cera. Cap.	0.1000 25V Z			01
C0102	UR837100	Electrolytic Cap.	10.00 16.0V			01
C0103	VC694800	Semiconductive Cera. Cap.	0.1000 25V Z			01
C0104	VC694800	Semiconductive Cera. Cap.	0.1000 25V Z			01
C0105	UR837100	Electrolytic Cap.	10.00 16.0V			01
C0108	FG612470	Ceramic Capacitor-B	470P 50V K			01
C0109	FG612470	Ceramic Capacitor-B	470P 50V K			01
C0124	FG612100	Ceramic Cap.-B	100P 50V K			01
C0125	VC694800	Semiconductive Cera. Cap.	0.1000 25V Z			01
C0126	VC694800	Semiconductive Cera. Cap.	0.1000 25V Z			01
C0176	FG612100	Ceramic Cap.-B	100P 50V K			01
C0181	VC694800	Semiconductive Cera. Cap.	0.1000 25V Z			01
C0182	FG612470	Ceramic Capacitor-B	470P 50V K			01
C0183	FG612470	Ceramic Capacitor-B	470P 50V K			01
C0184	FG612100	Ceramic Cap.-B	100P 50V K			01
C0185	FG612100	Ceramic Cap.-B	100P 50V K			01
C0191	FG612100	Ceramic Cap.-B	100P 50V K			01
C0201	VC694800	Semiconductive Cera. Cap.	0.1000 25V Z			01
-0203	VC694800	Semiconductive Cera. Cap.	0.1000 25V Z			01
C0204	UR828100	Electrolytic Cap.	100.00 10.0V			01
C0207	VC694800	Semiconductive Cera. Cap.	0.1000 25V Z			01
C0208	FG651270	Ceramic Capacitor-SL	27P 50V J			01
C0209	VC694800	Semiconductive Cera. Cap.	0.1000 25V Z			01
C0211	VC694800	Semiconductive Cera. Cap.	0.1000 25V Z			01
C0231	VC694800	Semiconductive Cera. Cap.	0.1000 25V Z			01
C0251	UR847100	Electrolytic Cap.	10.00 25.0V			01
C0252	VC694800	Semiconductive Cera. Cap.	0.1000 25V Z			01
-0261	VC694800	Semiconductive Cera. Cap.	0.1000 25V Z			01
C0271	UR828100	Electrolytic Cap.	100.00 10.0V			01
C0272	VC694800	Semiconductive Cera. Cap.	0.1000 25V Z			01
C0273	UR837100	Electrolytic Cap.	10.00 16.0V			01
C0274	UR866470	Electrolytic Cap.	4.70 50.0V			01
C0275	VC694800	Semiconductive Cera. Cap.	0.1000 25V Z			01
C0277	UA654220	Mylar Capacitor	0.0220 50V J			01
C0283	UR837100	Electrolytic Cap.	10.00 16.0V			01
C0284	UR866470	Electrolytic Cap.	4.70 50.0V			01
C0285	VC694800	Semiconductive Cera. Cap.	0.1000 25V Z			01
C0287	UA654220	Mylar Capacitor	0.0220 50V J			01
C0291	UR828100	Electrolytic Cap.	100.00 10.0V			01
C0292	VC694800	Semiconductive Cera. Cap.	0.1000 25V Z			01
C0293	UR828100	Electrolytic Cap.	100.00 10.0V			01
C0301	VC694800	Semiconductive Cera. Cap.	0.1000 25V Z			01
C0302	UR837100	Electrolytic Cap.	10.00 16.0V			01
C0311	VC694800	Semiconductive Cera. Cap.	0.1000 25V Z			01
C0331	VC694800	Semiconductive Cera. Cap.	0.1000 25V Z			01
C0351	VC694800	Semiconductive Cera. Cap.	0.1000 25V Z			01
C0361	VC694800	Semiconductive Cera. Cap.	0.1000 25V Z			01
C0501	VC694800	Semiconductive Cera. Cap.	0.1000 25V Z			01
C0551	VC694800	Semiconductive Cera. Cap.	0.1000 25V Z			01
C0601	VC694800	Semiconductive Cera. Cap.	0.1000 25V Z			01
C0611	VC694800	Semiconductive Cera. Cap.	0.1000 25V Z			01
C0701	VC694800	Semiconductive Cera. Cap.	0.1000 25V Z			01
C0751	UR837100	Electrolytic Cap.	10.00 16.0V			01
C0752	FG612100	Ceramic Cap.-B	100P 50V K			01
C0753	FG612100	Ceramic Cap.-B	100P 50V K			01
C0801	VC694800	Semiconductive Cera. Cap.	0.1000 25V Z			01
C0802	UR837100	Electrolytic Cap.	10.00 16.0V			01
C0803	VC694800	Semiconductive Cera. Cap.	0.1000 25V Z			01
C0901	FG644100	Ceramic Capacitor-F	0.0100 50V Z			01
C0902	UR848100	Electrolytic Cap.	100.00 25.0V			01
C0903	UR839100	Electrolytic Cap.	1000 16.0V			01
C0904	FG612330	Ceramic Capacitor-B	330P 50V K			01
C0911	FG644100	Ceramic Capacitor-F	0.0100 50V Z			01
C0912	FG644100	Ceramic Capacitor-F	0.0100 50V Z			01
C0913	UR847100	Electrolytic Cap.	10.00 25.0V			01
C0914	UR828100	Electrolytic Cap.	100.00 10.0V			01
C0931	FG644100	Ceramic Capacitor-F	0.0100 50V Z			01

*: New Parts

RANK: Japan only

REF NO.	PART NO.	DESCRIPTION		REMARKS	QTY	RANK
C0998	VC694800	Semiconductive Cera. Cap.	0.1000 25V Z			01
C0999	VC694800	Semiconductive Cera. Cap.	0.1000 25V Z			01
CA151	VH483900	Ceramic Capacitor Array	100P 50V M			01
CA152	VK994900	Ceramic Capacitor Array	100P 50V M			01
* CA171	V4654200	Ceramic Capacitor Array	470P 50V M			
CA551	VH285600	Ceramic Capacitor Array	470P 50V M			02
CA651	VH285600	Ceramic Capacitor Array	470P 50V M			02
CN150	VK025500	Wire Trap	52147 11P TE			01
CN170	VK025100	Wire Trap	52147 7P TE			01
CN180	VF728300	Wire Trap	52147 6P TE			01
CN250	VK024800	Wire Trap	52147 4P TE			01
CN550	VF728200	Wire Trap	52147 10P TE			01
CN650	VK025200	Wire Trap	52147 8P TE			01
CN750	VK025600	Wire Trap	52147 12P TE			01
CN850	VQ391300	Connector	34P TE			03
CN850	V3858700	Connector Header	302A 34P TE			05
CN920	VK024900	Wire Trap	52147 5P TE			01
CN950	LB918030	Base Post Connector	XH 3P TE			01
CN960	LB918020	Base Post Connector	XH 2P TE			01
CN999	VB390200	Connector Base Post	PH 6P TE			01
D0901	V2320300	Diode	RK33			01
D0911	VB941200	Diode	1SS133,1SS176			01
D0912	VB481900	Diode	11ES4			01
D0931	VB941200	Diode	1SS133,1SS176			01
* IC100	XZ787100	IC	HD6437042AF90F	CPU		
IC190	XR902A00	IC	IC-PST591D-2	SYSTEM RESET		02
IC200	XU947C00	IC	HG73C205AFD	TONE GENERATOR (SWX00B)		09
* IC230	XZ786100	IC		MASK ROM 64M WAVE		
IC250	XT625A00	IC	S-81250SGY-Z	REGULATOR +5V		02
IC260	XT810A00	IC	MSM514260C-60TS-K	DRAM 4M		16
IC260	XW125A00	IC	SDM4260CLTM-6S			08
IC270	XU829A00	IC	PCM1716E	DAC		06
IC290	XT333A00	IC	UPC29M33HF	REGULATOR		03
IC300	XT810A00	IC	MSM514260C-60TS-K	DRAM 4M		16
IC300	XW125A00	IC	SDM4260CLTM-6S			08
* IC310	XZ785200	IC		MASK ROM 32M PROGRAM		
IC330	XT138A00	IC	UPD431000AGW-70LL	SRAM 1M		07
IC330	XV976A00	IC	M5M51008CFP-70H			07
IC350	IR013800	IC	TC74HC138AP	DECODER		02
IC350	IR013850	IC	SN74HC138N			05
IC360	IR003200	IC	TC74HC32AP	OR		03
IC360	IR003250	IC	SN74HC32N			03
IC500	IR037400	IC	TC74HC374AP	D-FF		06
IC500	IR037450	IC	SN74HC374N			06
IC600	IR013800	IC	TC74HC138AP	DECODER		02
IC600	IR013850	IC	SN74HC138N			05
IC700	IR037400	IC	TC74HC374AP	D-FF		06
IC700	IR037450	IC	SN74HC374N			06
IC800	XI939A00	IC	HD63266F	FDC		09
IC900	XV856A00	IC	M5291P	DC-DC CONVERTER		03
IC910	XT625A00	IC	S-81250SGY-Z	REGULATOR +5V		02
IC999	IR007400	IC	TC74HC74AP	D-FF		04
IC999	IR007450	IC	SN74HC74N			04
IS310	VK863100	IC Socket	DICF-42CS-E			03
J0003	--	Jumper Wire	0.55	(VA07890)		
L0252	VM898600	Ferrite Bead	EXC-ELDR35V			01
L0254	VM898600	Ferrite Bead	EXC-ELDR35V			01
L0851	VM898600	Ferrite Bead	EXC-ELDR35V			01
-0856	VM898600	Ferrite Bead	EXC-ELDR35V			01
L0901	VZ060700	Choke Coil	220U ELC15E221 15E			05
L0921	VN381200	Coil	SNT-D20TF 10uH			03
L0922	VN381200	Coil	SNT-D20TF 10uH			03
R0107	HF755560	Carbon Resistor	560.0 1/4 J			01
R0108	HF755220	Carbon Resistor	220.0 1/4 J			01
R0109	HF756330	Carbon Resistor	3.3K 1/4 J			01
R0111	--	Jumper Wire	0.55	(VA07890)		
R0113	--	Jumper Wire	0.55	(VA07890)		
R0115	HF755220	Carbon Resistor	220.0 1/4 J			01
R0116	HF757470	Carbon Resistor	47.0K 1/4 J			01
R0117	HF757470	Carbon Resistor	47.0K 1/4 J			01

*: New Parts

RANK: Japan only

REF NO.	PART NO.	DESCRIPTION		REMARKS	QTY	RANK
R0121	HF757470	Carbon Resistor	47.0K 1/4 J			01
-0123	HF757470	Carbon Resistor	47.0K 1/4 J			01
R0124	HF755100	Carbon Resistor	100.0 1/4 J			01
R0125	HF756100	Carbon Resistor	1.0K 1/4 J			01
R0126	HF756100	Carbon Resistor	1.0K 1/4 J			01
R0127	HF758470	Carbon Resistor	470.0K 1/4 J			01
R0128	HF758470	Carbon Resistor	470.0K 1/4 J			01
R0172	HF757100	Carbon Resistor	10.0K 1/4 J			01
R0173	HF757100	Carbon Resistor	10.0K 1/4 J			01
R0174	HF756100	Carbon Resistor	1.0K 1/4 J			01
-0176	HF756100	Carbon Resistor	1.0K 1/4 J			01
R0177	HF757470	Carbon Resistor	47.0K 1/4 J			01
R0182	HF756100	Carbon Resistor	1.0K 1/4 J			01
R0183	HF756100	Carbon Resistor	1.0K 1/4 J			01
R0184	HF755100	Carbon Resistor	100.0 1/4 J			01
R0185	HF755100	Carbon Resistor	100.0 1/4 J			01
R0186	HF757470	Carbon Resistor	47.0K 1/4 J			01
R0187	HF757470	Carbon Resistor	47.0K 1/4 J			01
R0191	HF757100	Carbon Resistor	10.0K 1/4 J			01
R0192	HF757100	Carbon Resistor	10.0K 1/4 J			01
R0201	HF754680	Carbon Resistor	68.0 1/4 J			01
R0211	HF757470	Carbon Resistor	47.0K 1/4 J			01
R0212	HF757470	Carbon Resistor	47.0K 1/4 J			01
R0251	HF754330	Carbon Resistor	33.0 1/4 J			01
R0253	HF756100	Carbon Resistor	1.0K 1/4 J			01
R0271	HF755220	Carbon Resistor	220.0 1/4 J			01
-0274	HF755220	Carbon Resistor	220.0 1/4 J			01
R0275	--	Jumper Wire	0.55	(VA07890)		01
R0276	HF755180	Carbon Resistor	180.0 1/4 J			01
R0286	HF755180	Carbon Resistor	180.0 1/4 J			01
R0351	HF755100	Carbon Resistor	100.0 1/4 J			01
R0353	HF755100	Carbon Resistor	100.0 1/4 J			01
-0355	HF755100	Carbon Resistor	100.0 1/4 J			01
R0511	HF754470	Carbon Resistor	47.0 1/4 J			01
-0515	HF754470	Carbon Resistor	47.0 1/4 J			01
R0552	HF757100	Carbon Resistor	10.0K 1/4 J			01
R0553	HF756100	Carbon Resistor	1.0K 1/4 J			01
R0554	HF756100	Carbon Resistor	1.0K 1/4 J			01
R0555	HF757470	Carbon Resistor	47.0K 1/4 J			01
R0556	HF757470	Carbon Resistor	47.0K 1/4 J			01
R0711	HF755220	Carbon Resistor	220.0 1/4 J			01
-0720	HF755220	Carbon Resistor	220.0 1/4 J			01
R0801	HF757100	Carbon Resistor	10.0K 1/4 J			01
R0851	HF756100	Carbon Resistor	1.0K 1/4 J			01
-0855	HF756100	Carbon Resistor	1.0K 1/4 J			01
R0901	VC722800	Metal Oxide Film Resistor	0.22 1W J			01
R0902	HF756120	Carbon Resistor	1.2K 1/4 J			01
R0903	HF756390	Carbon Resistor	3.9K 1/4 J			01
R0904	VC731200	Metal Oxide Film Resistor	100.0 1W J			01
R0905	HF755330	Carbon Resistor	330.0 1/4 J			01
R0911	HF756100	Carbon Resistor	1.0K 1/4 J			01
R0931	HF757220	Carbon Resistor	22.0K 1/4 J			01
R0932	HF757390	Carbon Resistor	39.0K 1/4 J			01
* R0992	V3733100	Metal Oxide Film Resistor	39.0 1W J			01
R0993	HF755100	Carbon Resistor	100.0 1/4 J			01
R0994	HF756220	Carbon Resistor	2.2K 1/4 J			01
R0995	HF757100	Carbon Resistor	10.0K 1/4 J			01
R0996	HF756220	Carbon Resistor	2.2K 1/4 J			01
R0997	HF757100	Carbon Resistor	10.0K 1/4 J			01
* R0998	V3733100	Metal Oxide Film Resistor	39.0 1W J			01
R0999	VP939900	Metal Oxide Film Resistor	15.0 1W J			01
RA111	VF773900	Resistor Array	RGLE4X473J			01
RA112	VH307000	Resistor Array	RGLE6X473J			01
RA151	VH307000	Resistor Array	RGLE6X473J			01
RA152	VF773900	Resistor Array	RGLE4X473J			01
TA610	VH885000	Transistor Array	TD62785P SOURCE			04
TR511	VK165500	Digital Transistor	DTC123JS TP			01
-515	VK165500	Digital Transistor	DTC123JS TP			01
TR901	V3795100	Transistor	2SA2006 E,F			02
TR998	V3375500	Transistor	2SC3581 E			01

*: New Parts

RANK: Japan only

REF NO.	PART NO.	DESCRIPTION		REMARKS	QTY	RANK
TR999	V3375500	Transistor	2SC3581 E			01
X0100	V3797500	Ceramic Resonator	7MHz EFOMC7004A4			01
X0200	VV345500	Quartz Crystal Unit	DOC-49S5			05
X0800	V3681400	Ceramic Resonator	16MHz EFOEX1605X4			01
ZD911	VG439500	Zener Diode	MTZ J 10.0B 10.0V			01
ZD911	VQ296000	Zener Diode	MTZJ10B 10.0V			01
	VV583900	Circuit Board	MK-H	(XR565C0)		09
	VK025600	Wire Trap	52147 12P TE			01
	VK024900	Wire Trap	52147 5P TE			01
	VV437800	Diode	1N4148(DO-34)			01
	VV583800	Circuit Board	MK-L	(XR564C0)		09
	VK025600	Wire Trap	52147 12P TE			01
	VK025100	Wire Trap	52147 7P TE			01
	VV437800	Diode	1N4148(DO-34)			01
*	V7112200	Circuit Board	MKS5	(XZ594A0)		
	--	Vibration-proof Tape	10X64X0.5	(VK34680)		
	--	Jumper Wire	0.55	(VA07890)		
C1	FG651220	Ceramic Capacitor-SL	22P 50V J			01
-3	FG651220	Ceramic Capacitor-SL	22P 50V J			01
C1	VR027400	Ceramic Capacitor-SL	22P 63V J			01
-3	VR027400	Ceramic Capacitor-SL	22P 63V J			01
C4	UR828100	Electrolytic Cap.	100.00 10.0V			01
C5	VC694800	Semiconductive Cera. Cap.	0.1000 25V Z			01
C5	VM902400	Semiconductive Cera. Cap.	0.1000 25V Z			01
CA1	VP755200	Ceramic Capacitor Array	100P 50V K			02
CA2	VP755200	Ceramic Capacitor Array	100P 50V K			02
* CL1	V6781400	Ceramic Resonator	5.00M EF0EC5004T4Q			
CN1	VF728300	Wire Trap	52147 6P TE			01
CN2	VK025600	Wire Trap	52147 12P TE			01
CN3	VK025100	Wire Trap	52147 7P TE			01
CN4	VK024900	Wire Trap	52147 5P TE			01
* IC1	XZ560100	IC	UPD789022GB-A15-8E	CPU		
R1	HF456470	Carbon Resistor	4.7K 1/4 J			01
-3	HF457470	Carbon Resistor	47.0K 1/4 J			01
R1	VL631400	Carbon Resistor	4.7K 1/6 J			01
-3	VL632600	Carbon Resistor	47.0K 1/6 J			01
RA1	VH373200	Resistor Array	RGLE12X473J			01
*	V7019600	Circuit Board	PN	(XV934B0)		
	--	Jumper Wire	0.55	(VA07890)		
C0100	VC694800	Semiconductive Cera. Cap.	0.1000 25V Z			01
C0200	VC694800	Semiconductive Cera. Cap.	0.1000 25V Z			01
CA201	VK994900	Ceramic Capacitor Array	100P 50V M			01
CA202	VK994900	Ceramic Capacitor Array	100P 50V M			01
CN101	VI879000	Cable Holder	51048 12P TE			01
CN102	LB918020	Base Post Connector	XH 2P TE			01
CN301	VI878600	Cable Holder	51048 8P TE			01
CN401	VI878900	Cable Holder	51048 11P TE			01
CN501	VI878800	Cable Holder	51048 10P TE			01
CN502	VK024700	Wire Trap	52147 3P TE			01
CN503	VK024700	Wire Trap	52147 3P TE			01
CN602	VI878100	Cable Holder	51048 3P TE			01
CN603	VI878100	Cable Holder	51048 3P TE			01
CN701	VI878400	Cable Holder	51048 6P TE			01
CN801	VI878300	Cable Holder	51048 5P TE			01
D0301	VB941200	Diode	1SS133,1SS176			01
-0304	VB941200	Diode	1SS133,1SS176			01
IC100	XV226A00	IC	S6A0069X10-Q0RJ	LCD DRIVER		05
IC200	XV933A00	IC	S6A0065B01-Q0RJ	LCD DRIVER		04
LE102	VG778600	LED Green	SLZ290B-03-T2	DISK IN USE		01
LE103	VI100100	LED Red	SLZ-190B-11-T1	VOICE L		01
LE104	VI100100	LED Red	SLZ-190B-11-T1	VOICE R1		01
LE105	VI100100	LED Red	SLZ-190B-11-T1	VOICE R2		01
LE201	VC341300	LED Red	SLZ-190B-01	ONE TOUCH SETTING		01
LE202	V3621200	LED Green	SLZ-290B-10-T2	SONG START/STOP		01
LE203	VT387900	LED Red	SLZ-190B-10-T2	SYNC START		01
LE204	VT387900	LED Red	SLZ-190B-10-T2	SYNC STOP		01

*: New Parts

RANK: Japan only

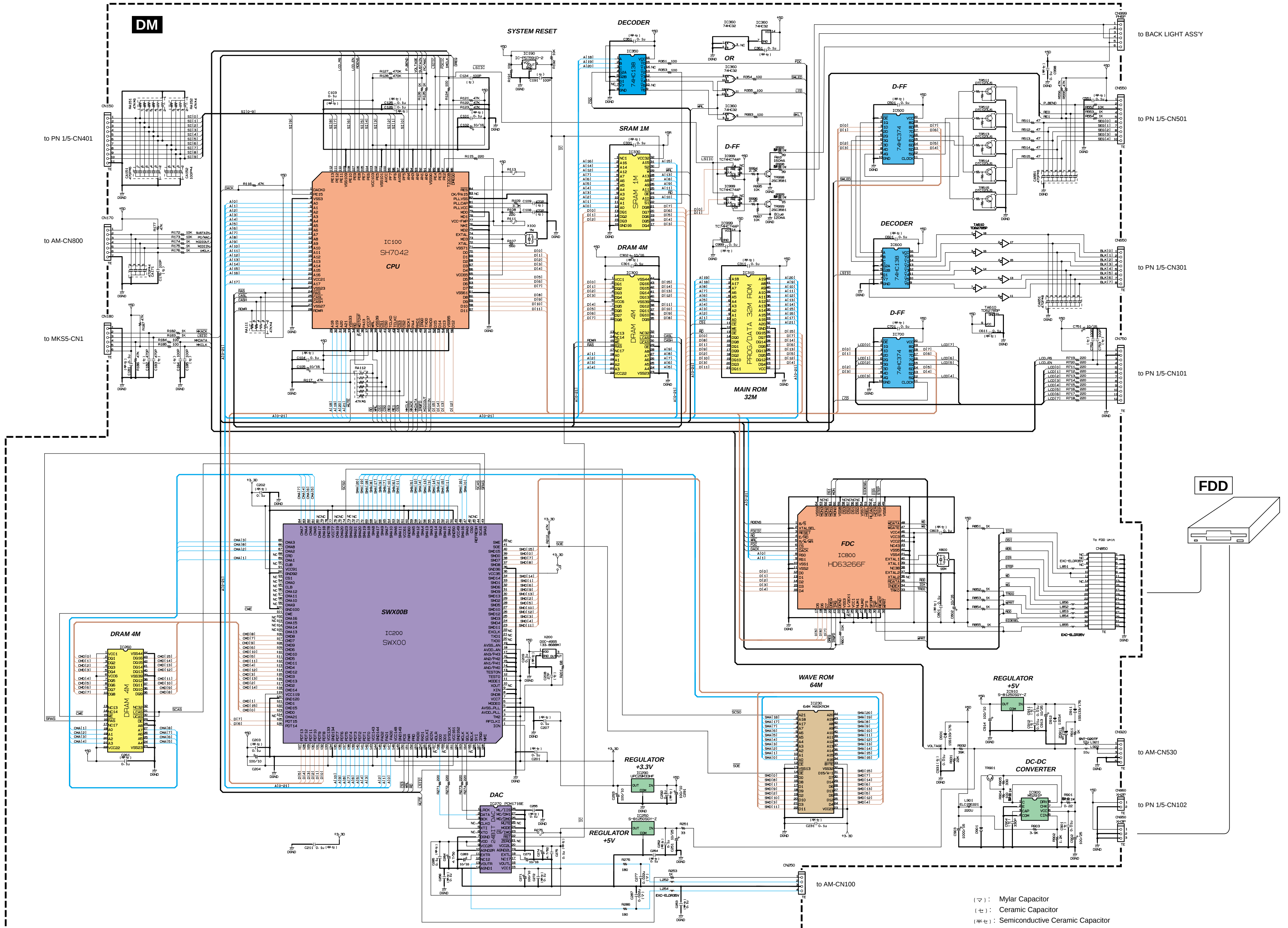
[illegible]

*: New Parts

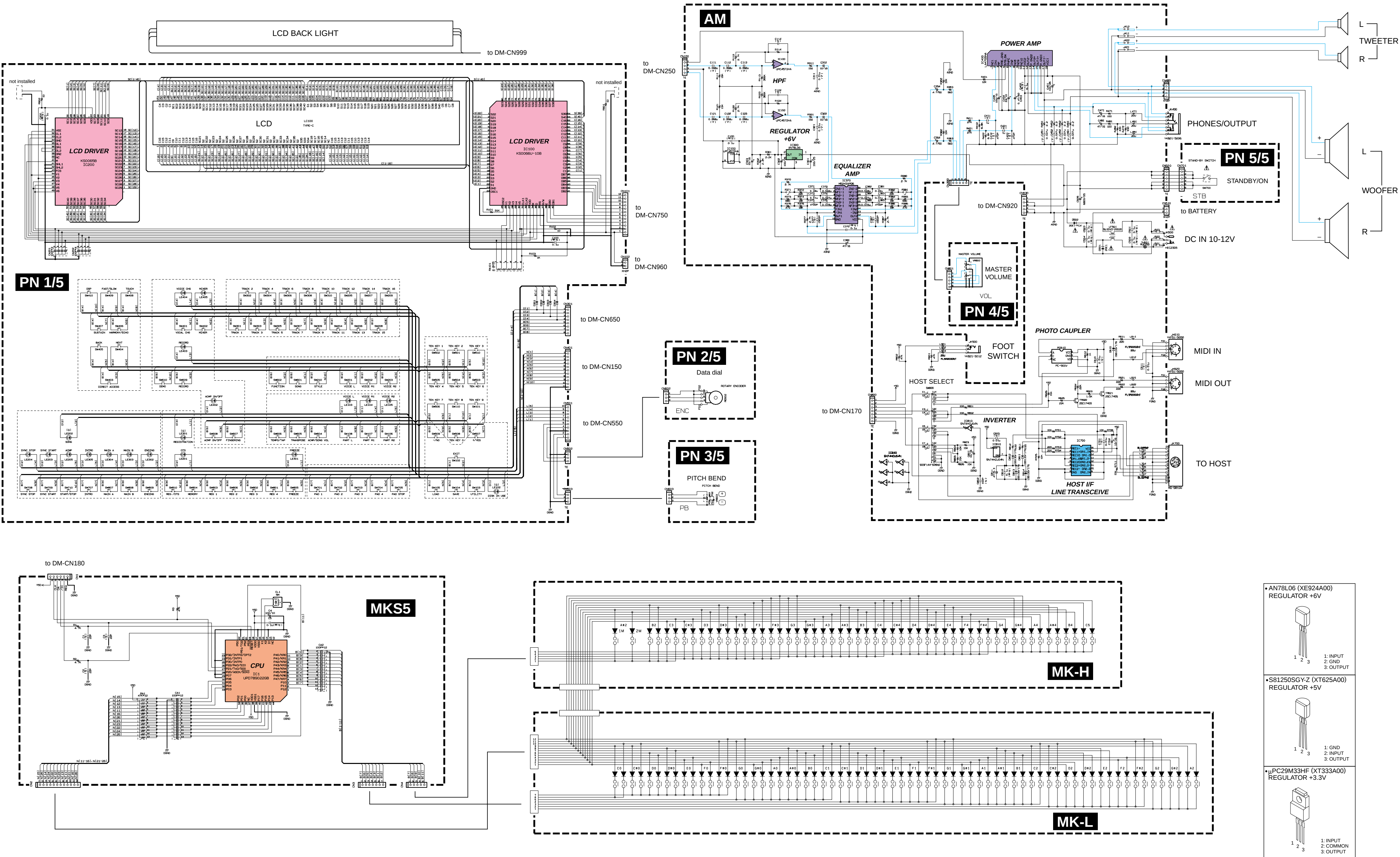
RANK: Japan only

■ PSR-550 OVERALL CIRCUIT DIAGRAM 1/2 (DM)

PSR-550



PSR-550 OVERALL CIRCUIT DIAGRAM 2/2 (PN, AM, MKS5, MK-L, MK-H)



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

(マ) : Mylar Capacitor
(セ) : Ceramic Capacitor
(半セ) : Semiconductive Ceramic Capacitor
Note : See parts list for details of circuit board component parts.

PN: 28CC1-8819394
AM: 28CC1-8813690
MK-H: 28CC1-8812655
MK-L: 28CC1-8812655