

disklavier™ II

P I A N O S

SERVICE MANUAL

- DG1FII
- DG2FII
- DC7FIIW
- DGH1BII

■ CONTENTS

UNIT LAYOUT	2
WIRING	2
SPECIFICATIONS	3
FORMATTING FLOPPY DISKS	4
PANEL LAYOUT	6
BLOCK DIAGRAM	8
LCD ERROR MESSAGES	10
DISASSEMBLY PROCEDURE	11
MIDI DATA FORMAT	15
SENSOR OUTPUT ADJUSTMENT (PEDAL DRIVE UNIT)	17
MIDI IMPLEMENTATION CHART	18
TEST MODE	19
LSI PIN DESCRIPTION	21
IC BLOCK DIAGRAM	27
CIRCUIT BOARDS	28
PARTS LIST	

IMPORTANT NOTICE

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

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

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

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

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

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

WARNING: CHEMICAL CONTENT NOTICE!

The solder used in the production of this product contains LEAD. In addition, other electrical/electronic and/or plastic (where applicable) components may also contain traces of chemicals found by the California Health and Welfare Agency (and possibly other entities) to cause cancer and/or birth defects or other reproductive harm.

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

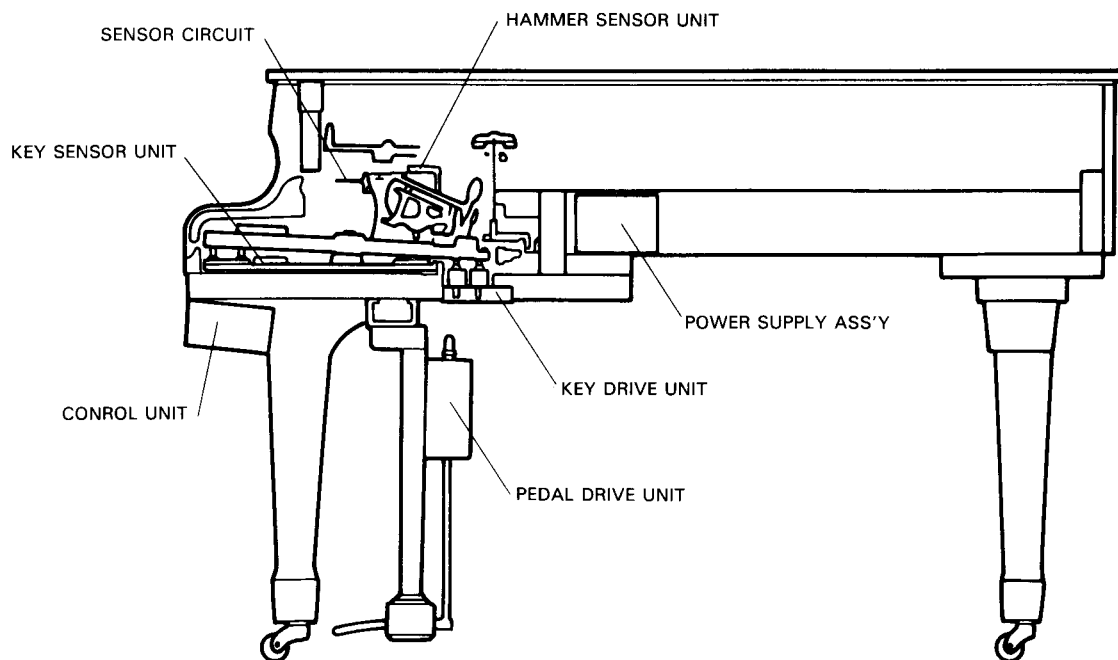
Avoid prolonged, unprotected contact between solder and your skin! When soldering, do not inhale solder fumes or expose eyes to solder/flux vapor!

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

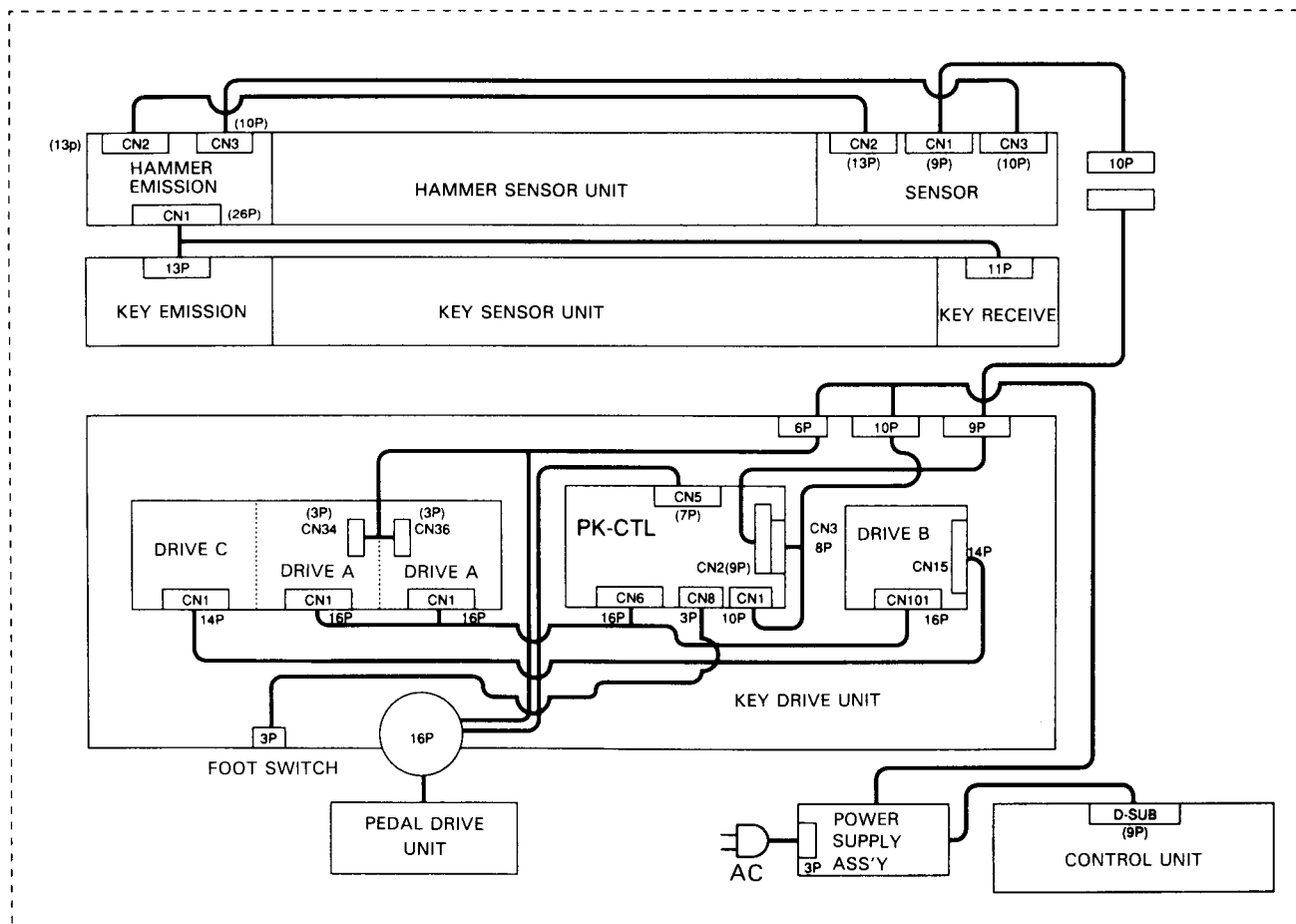
■ **WARNING:**

Components having special characteristics are marked \triangle and must be replaced with parts having specifications equal to those originally installed.

UNIT LAYOUT



WIRING



SPECIFICATIONS

Sensor System	Key Sensor	88 key, speed sensing, single-beam optical sensors		
		Dual key hammer locations		
		16-note polyphonic		
	Pedal Sensor	Sustain	Continuous (half pedal)	
		Sostenuto ¹	on/off ²	
Soft (Shift)		Continuous (half pedal)		
Drive System	Key Drive	Self-calibrating, long-stroke, key-end solenoids		
	Pedal Drive	Trapwork integrated solenoids		
		Sustain	Continuous (half pedal)	
		Sostenuto ¹		
	Soft (Shift)	Continuous (half pedal)		
Song Storage	Media	3.5" 2DD floppy disk		
	Capacity	Max 60 songs (depends on song file size)		
	Disk Capacity	720KByte		
	Song File Format	E-SEQ		
Controller	Switches	Power on/off		
	Buttons *with LED Indicator	Song Select Rev-Fwd, Play/Pause*, Stop, Part Select L*.R*, Record*, Volume*, Transpose, Tempo*/0/+, -/NO, 0, +/YES, <> Cursor, Enter, Disk*, Metronome*, Function/Edit*		
	Controls	Rotary dial with ring of LED indicators		
	LCD	24 character, 2 line		
	Song Number Indicator	7 segment, 2 digit display		
Remote Control	Buttons	Record, Part Select L-R, 0~9 keypad, Search, Repeat, A-B, Transpose -/0/+, Tempo */0/+, Rev-Fwd, volume */+, Song Select Rev-Fwd, Play, Pause, Stop		
Metronome	bpm	40~230		
	Time Signature	1/4, 2/4, 3/4, 4/4, 5/4, 6/4, 7/4, 8/4, 9/4		
	Beep	on/off		
Volume	Disklavier grand	11 steps: 0 ~ -10		
	Disklavier upright	11 steps: 0 ~ -10 (-7 to -10 with soft pedal)		
Transpose	±24 semitones (2 octaves) in 1 semitone steps			
Tempo	-50% - +20% in 1% steps			
Titles	Song	Up to 32 characters		
	Disk	Up to 64 characters		
Connections	MIDI	MIDI IN		
		MIDI OUT		
	Foot Controller	FOOT CNTRL		
Supplied Accessories	Remote control & batteries			
	Disklavier piano sample disk (PianoSoft)			
	Blank 3.5" 2DD floppy disk			
	<i>Getting Started & Playback Manual</i>			
	<i>Advanced Operation Manual</i>			
	<i>HOW TO CARE FOR YOUR YAMAHA PIANO</i> guide			
Optional Accessories	FC-5 Foot Switch (cable length 1.7m)			
	FC-7 Foot Controller (cable length 1.7m)			
Location Temperature	5-40°C (41~104°F)			
Power Requirement & Consumption	See Disklavier piano's Serial No. plate			

1. Data for the Disklavier upright's muffler pedal and a Disklavier grand's "bass sustain" pedal are not recorded or reproduced.
2. For notes held over by the sostenuto pedal, note off will be recorded when the sostenuto pedal is released.

■ FORMATTING FLOPPY DISKS

New **floppy disks must be formatted before they can be used with the Disklavier piano.**

Formatting prepares the disk so that it is ready to store Disklavier piano song data. Formatting a disk erases all the data previously stored on the disk, so always make sure that the disk you are going to format does not contain songs that you want to keep.

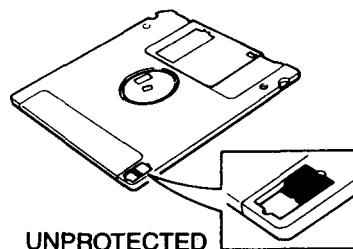
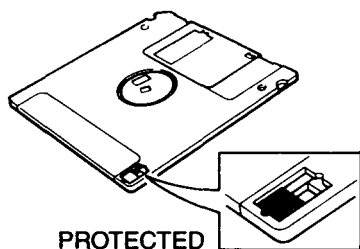
What Type of Floppy Disk

The Disklavier uses MF2-DD (double sided, double density) 3.5 inch floppy disks.

Accidental Erasure Protection

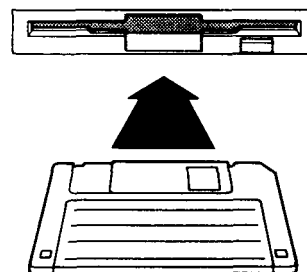
These floppy disks have an erasure protection tab which can be set so that the Disklavier cannot record new data onto the disk. This is useful for protecting valuable song data against accidental erasure and disk formatting. The protection tab is located on the reverse side of the disk, in the bottom right-hand corner.

- With the tab window open recording is not possible (protected).
- With the tab window closed recording is possible (unprotected).



1 Make sure that the disk's erasure protection tab is set to unprotected as shown above.

2 Insert the floppy disk into the disk drive.

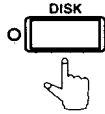


If the disk has not been formatted, the following display will be shown.

UNFORMATTED DISK

If the disk contains some songs, it might be worth checking them to see if there are any that you want to keep.

3 Press the [DISK] button.



The green DISK indicator will light up and the following display will be shown.

```
▶FORMAT          *SONG DELETE  
(+, →, ENT)    *SONG COPY →
```

4 Press the [ENTER] button.



The following display will be shown.

```
==DISK FORMAT==      SURE?  
FORMAT START        (YES,NO)
```

5 Press the [+YES] button to start the disk formatting process.



If you do not want to continue with the formatting process, press the [-/NO] button and the previous display will be shown.

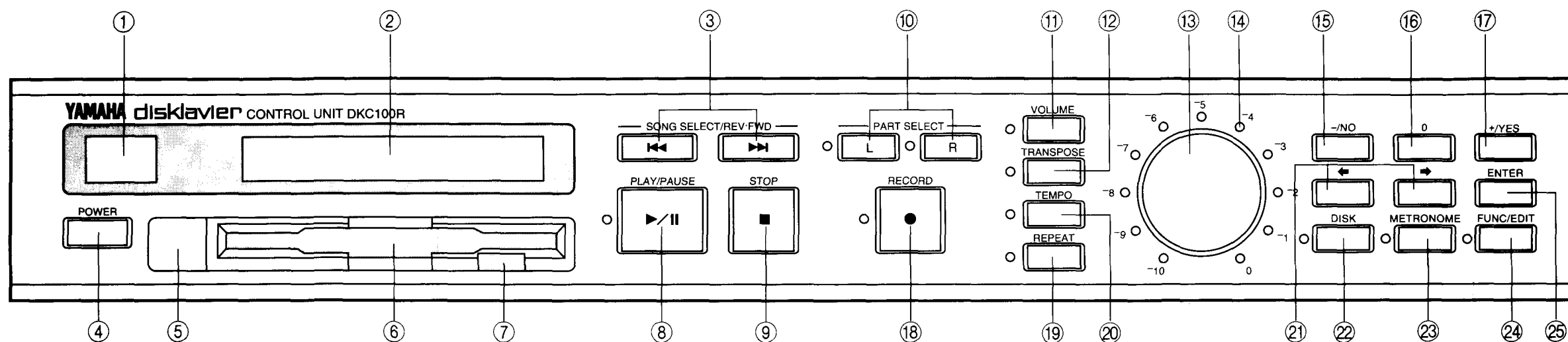
During the disk formatting process, the following display is shown and the RECORD indicator flashes.

```
WRITING TO DISK  
DO NOT REMOVE DISK!
```

Formatting a disk takes about a minute.

■ PANEL LAYOUT

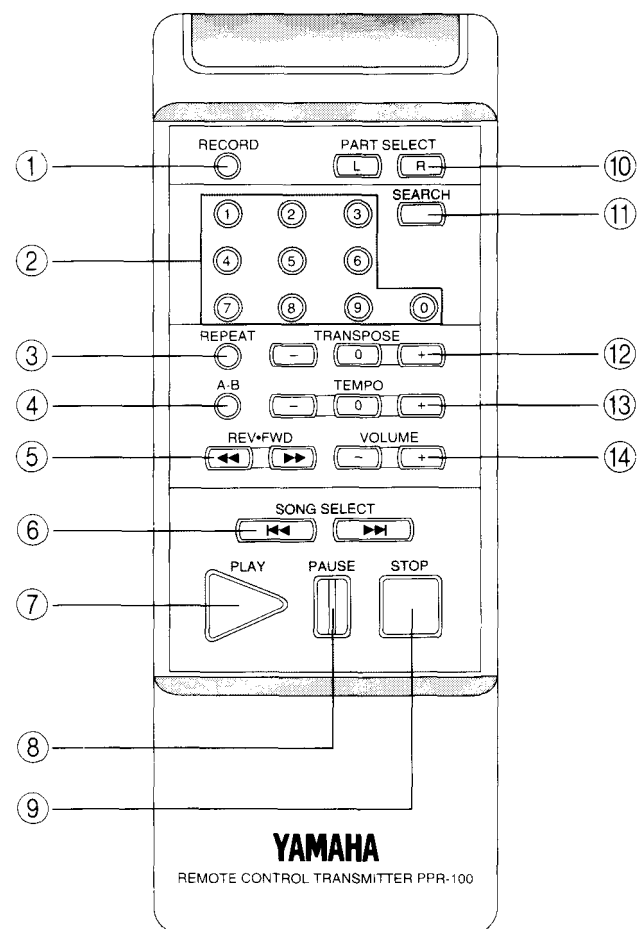
• Controller Front Panel



• Controller Front Panel

- ① Song number indicator
- ② LCD
- ③ [SONG SELECT/REV•FWD] buttons
- ④ [POWER] switch
- ⑤ Remote control sensor
- ⑥ Floppy disk drive
- ⑦ Floppy disk eject button
- ⑧ [PLAY/PAUSE] button
- ⑨ [STOP] button
- ⑩ [L] [R] PART SELECT buttons
- ⑪ [VOLUME] button
- ⑫ [TRANPOSE] button
- ⑬ Rotary DIAL
- ⑭ LED volume indicators
- ⑮ [-/NO] button
- ⑯ [0] button
- ⑰ [+ /YES] button
- ⑱ [RECORD] button
- ⑲ [REPEAT] button
- ⑳ [TEMPO] button
- ㉑ [←] [→] Cursor buttons
- ㉒ [DISK] button
- ㉓ [METRONOME] button
- ㉔ [FUNC/EDIT] button
- ㉕ [ENTER] button

• The Remote Control

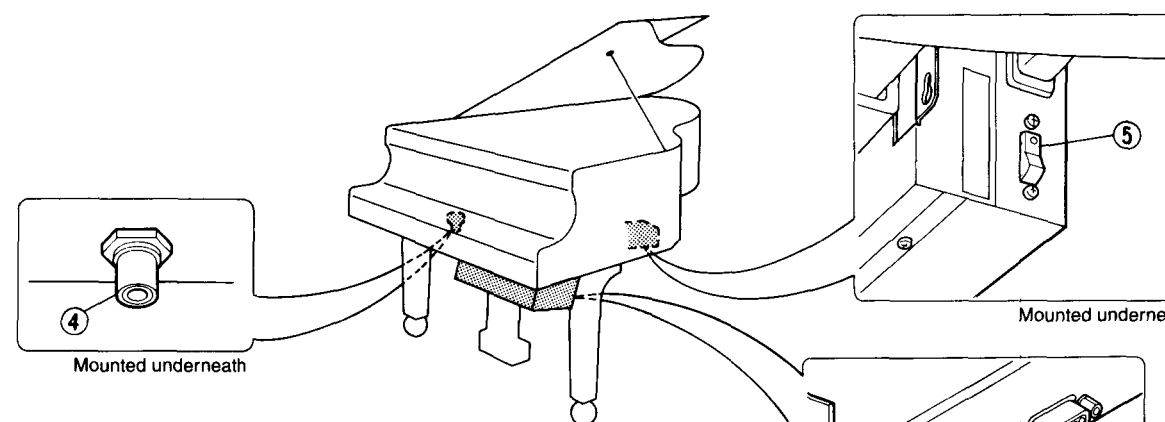


• The Remote Control

- ① [RECORD] button
- ② Number keypad*
- ③ [REPEAT] button
- ④ [A-B] button
- ⑤ [REV•FWD] buttons*
- ⑥ [SONG SELECT] buttons*
- ⑦ [PLAY] button*
- ⑧ [PAUSE] button*
- ⑨ [STOP] button
- ⑩ [PART SELECT] buttons
- ⑪ [SEARCH] button*
- ⑫ [TRANPOSE] buttons
- ⑬ [TEMPO] buttons
- ⑭ [VOLUME] buttons

* The operation of these remote control buttons is a little different to their counterparts on the controller's front panel.

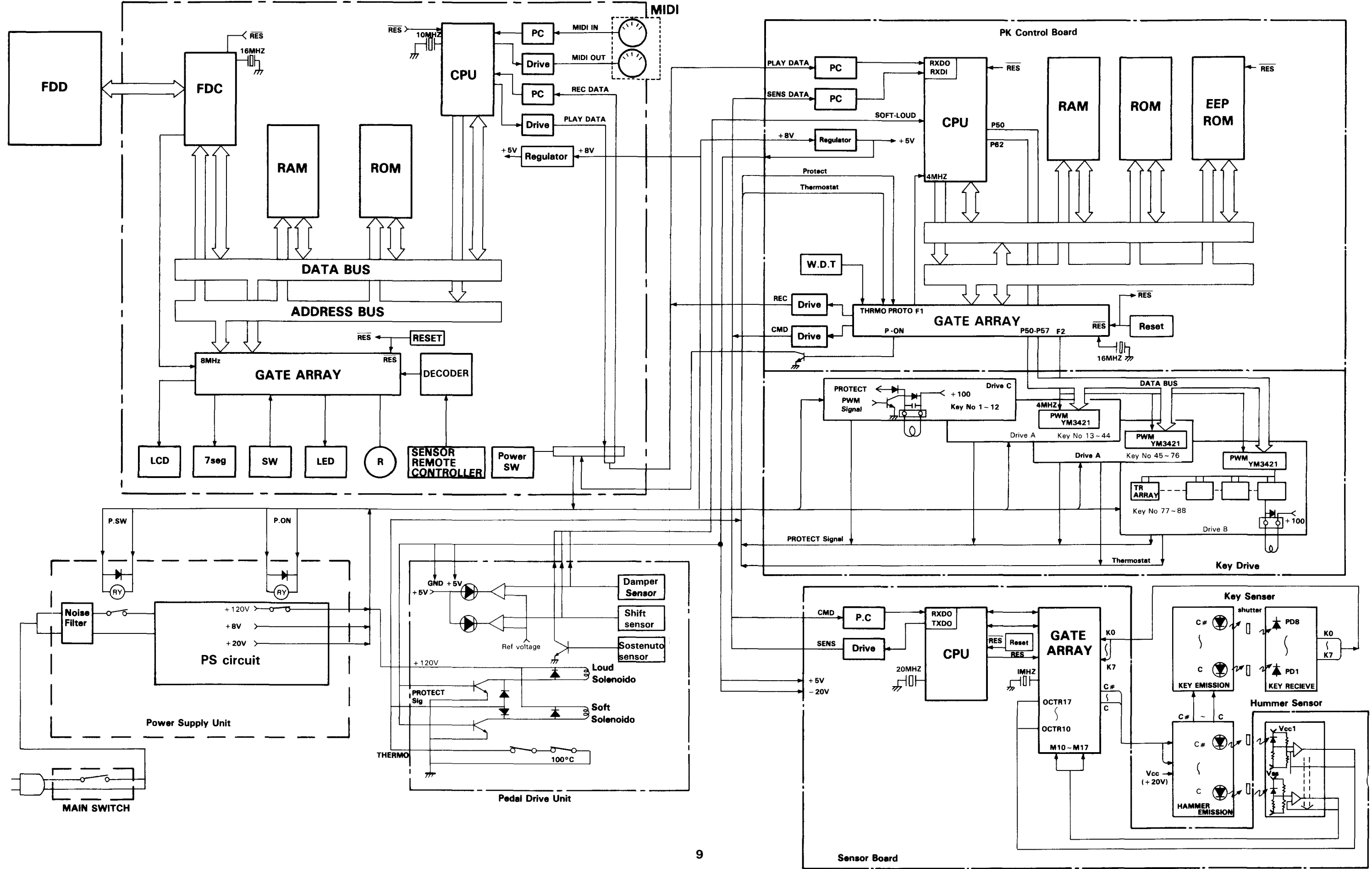
• Main Switch, MIDI Connections & Foot Controller



• Main Switch, MIDI Connections & Foot Controller

- ① MIDI OUT
- ② MIDI IN
- ③ TO CONTROL CABLE FOR PIANO (Disklavier grand only)
- ④ FOOT CONTROL
- ⑤ MAINS ON-OFF

■ BLOCK DIAGRAM



■ LCD ERROR MESSAGES

While operating your Disklavier piano, an error message may appear on the LCD. If an error message does appear, look in the table below for an explanation of the message.

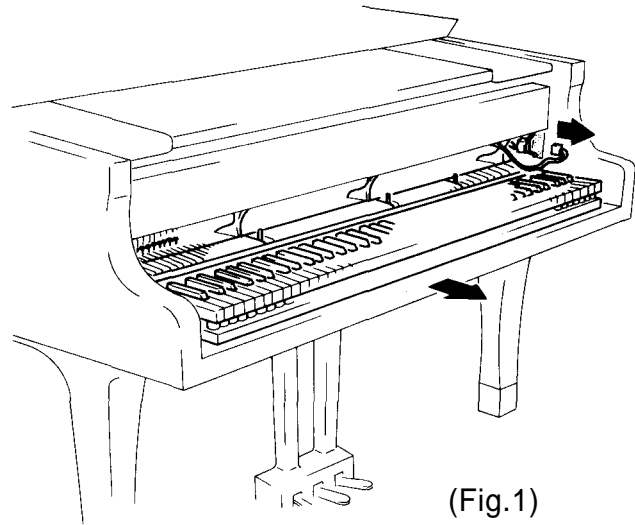
Note: This table does not explain every Disklavier piano error message.

Message	Explanation
CANNOT EXECUTE FILE TYPE	Cannot use this function because the Disklavier piano does not recognize the type of file.
CANNOT EXECUTE OTHER E-SEQ DISK	This function cannot be used on this disk because the Disklavier piano cannot recognize this type of E-SEQ disk.
CANNOT EXECUTE OTHER E-SEQ FILE	This function cannot be used on this file because the Disklavier piano cannot recognize this type of E-SEQ file.
CANNOT EXECUTE PLEASE DO MX100 CONVERT	This disk must be converted (from MX100) before this function can be used.
CANNOT EXECUTE PLEASE DO E-SEQ CONVERT	This disk must be converted before this function can be used.
CANNOT EXECUTE PROTECTED FILE EXIST	Cannot use this function because a protected file exists on the disk.
CANNOT EXECUTE PROTECTED FILE	Cannot use this function on this file because it is a protected file.
CANNOT RECORD MORE SONGS	The floppy disk contains 60 songs (the maximum). Use a new disk.
CANNOT RECORD TO DISK PLEASE DO E-SEQ CONVERT	This disk must be converted before a song can be recorded onto it.
CANNOT RE-RECORD OTHER E-SEQ FILE	Re-recording cannot be performed on this file because the Disklavier piano cannot recognize this type of E-SEQ file.
CANNOT RE-RECORD PLEASE DO MX100 CONVERT	This disk must be converted (from MX100) before you re-record.
DIFFERENT DISK	During disk copy the wrong disk has been inserted. Insert the correct disk. For both copy functions, the source disk should be set to "protected" and the destination disk to "unprotected".
DISK FULL!	No more song data can be recorded onto the disk because it is full. Use a new disk.
DISK WRITE PROTECTED!	The current function can not be performed because the disk's erasure protection tab is set to protected.
ERROR OCCURRED!! (PUSH STOP KEY!)	An internal error has occurred. Push the [STOP] button to continue normal operation.
NOT ENOUGH DISK SPACE	No more song data can be recorded onto the disk because it is full. Use a new disk.
NOT ENOUGH MEMORY	Cannot copy because the controller's internal memory (RAM) is full.
REPEAT 255 TIMES ALREADY!	255 is the maximum number of song repeats possible for each Repeat mode.
SELECT REC TRACK!	You must select the track you want to record before starting Ensemble song recording or LR song re-recording.
UNFORMATTED DISK	The floppy disk is either new and has not yet been formatted for use with the Disklavier piano or it uses a format not recognized by the Disklavier piano.

■ DISASSEMBLY PROCEDURE

1 Removing the Action Unit

- 1-1 Remove the Fall Board.
- 1-2 Remove the Key-Block screws, then remove the Key-Blocks.
- 1-3 Remove the Key-Slip.
- 1-4 Press down both sides of the Action Unit and pull it towards you. (Fig.1)



2 Removing the Control Unit

- 2-1 Loosen the two (2) screws [13], then remove the D-SUB Connector.
- 2-2 Remove the four (4) screws [31G], then remove the Control Unit. (Fig.2)

[13]:LOCK SCREW (ロックネジ) RDG-LNA-W1(01)

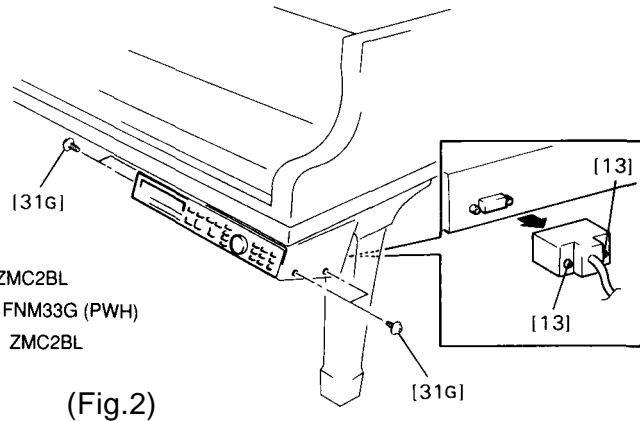
[31G]:FLAT HEAD SCREW (＋皿小ネジ) 4.0X10 ZMC2BL
FLAT HEAD SCREW (＋皿小ネジ) 4.0X10 FNM33G (PWH)

3 Removing the Controller Board

- 3-1 Remove the Control Unit. (See procedure 2)
- 3-2 Remove the five (5) screws [8G], then remove the Top Cover.
- 3-3 Remove the six (6) screws [18G], then remove the Controller Board.

[8G]:BIND HEAD TAPPING SCREW-S (＋バインドSタイト) A 3.0X6 ZMC2BL
BIND HEAD TAPPING SCREW-S (＋バインドSタイト) A 3.0X6 FNM33G (PWH)

[18G]:BIND HEAD TAPPING SCREW-S (＋バインドSタイト) 3.0X6 ZMC2BL



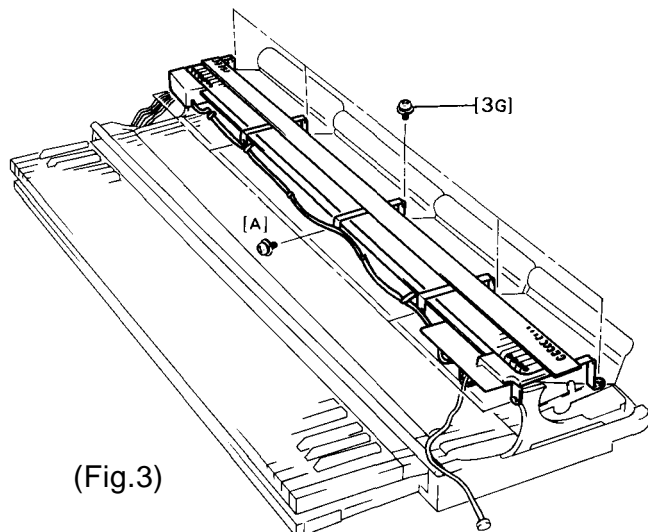
4 Removing the FDD Unit

- 4-1 Remove the Control Unit. (See procedure 2)
- 4-2 Remove the Top Cover. (See procedure 3)
- 4-3 Remove the three (3) screws [11G], then remove the FDD Unit.

[11G]:BIND HEAD TAPPING SCREW-S (＋バインドSタイト) 3.X25

5 Removing the Hammer Sensor Unit

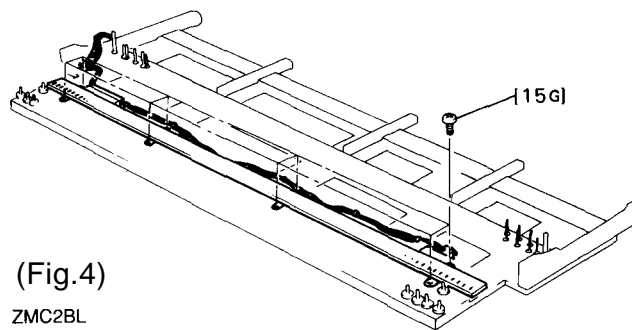
- 5-1 Remove the Action Unit. (See procedure 1)
- 5-2 Remove the five (5) screws [3G] and the five (5) screws [A], then remove the Hammer Sensor Unit. (Fig.3)



[3G]:LONG LOCK SCREW (ロングロックネジ) 4X14 FNM33G

6 Removing the Key Sensor Unit

- 6-1 Remove the Action Unit. (See procedure 1)
- 6-2 Remove the Hammer Unit.
- 6-3 Remove the Key Stopper Rail.
- 6-4 Remove the Keyboard.
- 6-5 Remove the eight (8) screws [15G], then remove the Key Sensor Unit. (Fig.4)

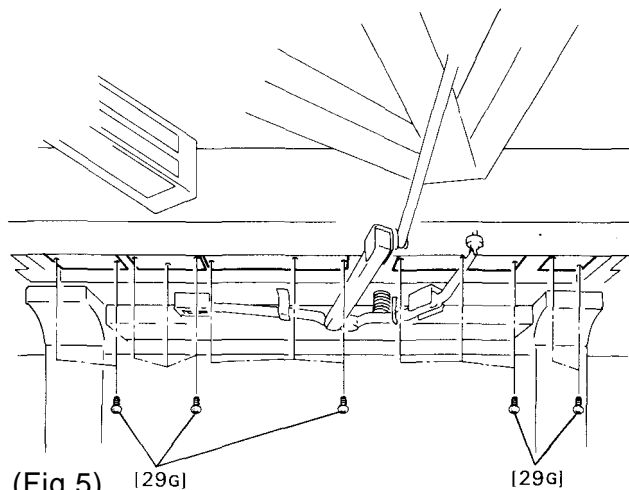


(Fig.4)

[15G]:BIND HEAD TAPPING SCREW-1 (+バインド T P 1種) 3.0X10 ZMC2BL

7 Removing the PK-CTL, Drive A, Drive B and Drive C

- 7-1 Remove the Yoke Cover.
- 7-2 Remove the three (3) screws [29G] to remove the PK-CTL.
- 7-3 Remove the three (3) screws [29G] to remove the Drive A.
- 7-4 Remove the two (2) screws [29G] to remove the Drive B.
- 7-5 Remove the two (2) screws [29G] to remove the Drive C. (Fig.5)



(Fig.5)

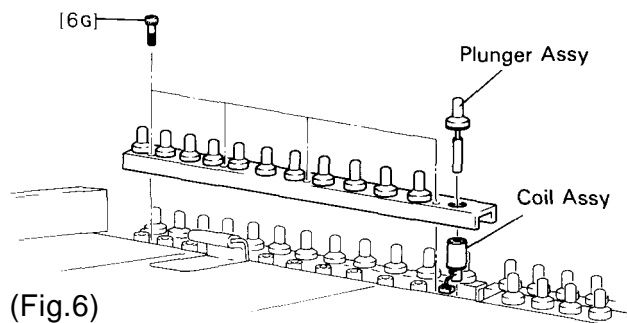
[29G]:BIND HEAD TAPPING SCREW-S (+バインド S タイト) 3.0X5 ZMC2Y

8 Removing the Plunger Ass'y and the Coil Ass'y

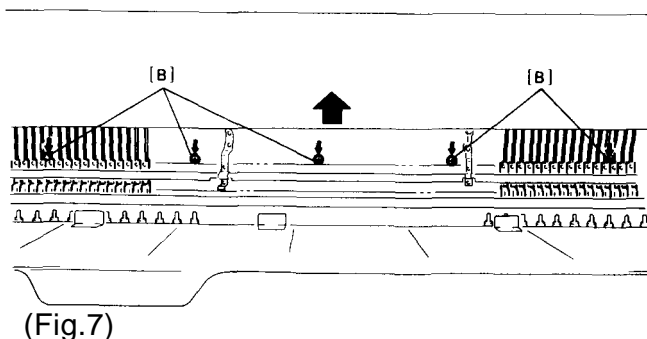
- 8-1 Remove the Action Unit, then remove the Plunger Ass'y. (See procedure 1)
- 8-2 Remove the Yoke Cover.
- 8-3 Remove the screws [6G] to remove the Upper York, then remove the Coil Ass'y. (Fig.6)

Note) Remove the Front Upper York when removing the Back Upper York.

Loosen the Damper Stop Rail Screws, remove the Upper York while lifting up the Damper Stop Rail.



(Fig.6)

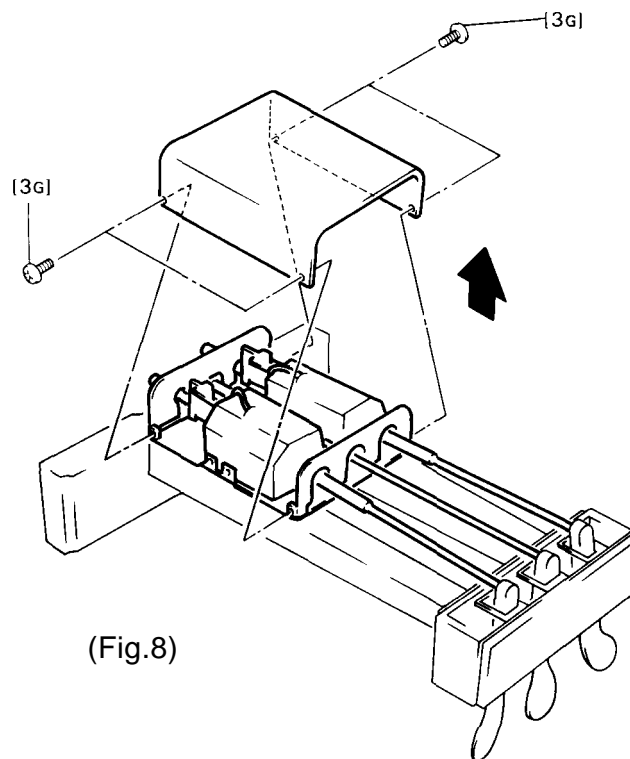


(Fig.7)

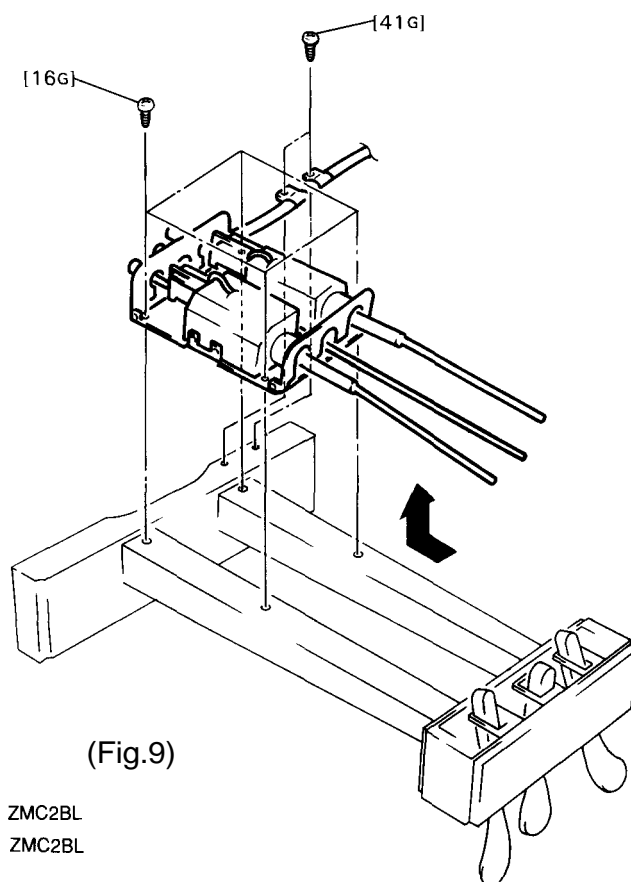
[6G]:CAP SCREW (六角穴付ボルト) 4.0X30 ZMC2-Y

9 Removing the Pedal Drive Unit

- 9-1 Remove the Pedal Unit.
- 9-2 Remove the four (4) screws [3G], then remove the Cover. (Fig.8)
- 9-3 Remove the two (2) screws [41G] and the four (4) screws [16G], then remove the Pedal Drive Unit. (Fig.9)



(Fig.8)



(Fig.9)

[3G]: BIND HEAD SCREW (+バインド小ネジ) 4.0X6 ZMC2Y

[16G]: TRUS HEAD TAPPING SCREW-1 (+トラス T P 1 種) 4.0X2 ZMC2BL

[41G]: TRUS HEAD TAPPING SCREW-1 (+トラス T P 1 種) 4.0X1 ZMC2BL

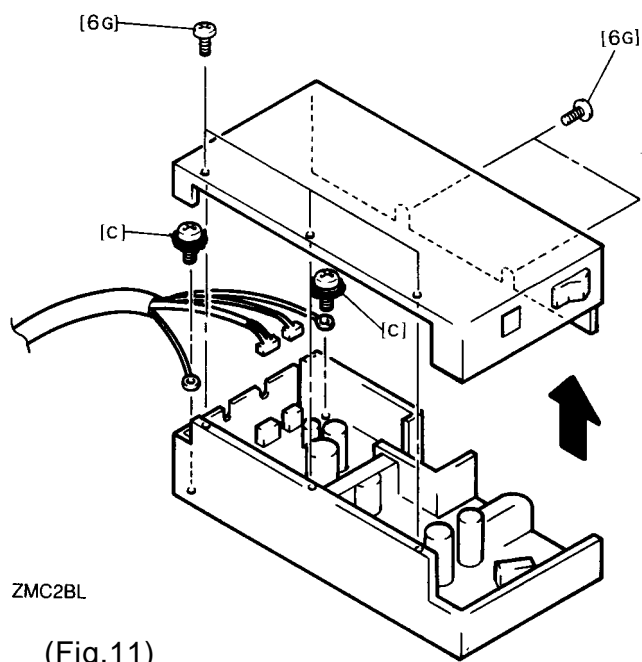
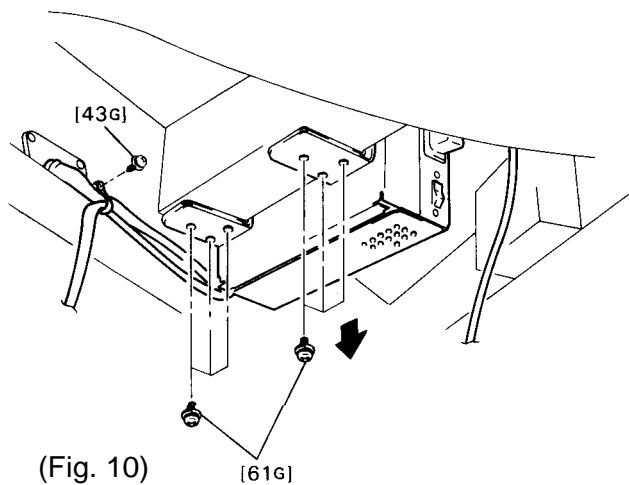
10 Removing the Power Supply Unit

10-1 Remove the screw [43G]. (Fig.10)

10-2 Loosen the six (6) screws [61G], then remove the Power Supply Unit. (Fig.10)

10-3 Remove the five (5) screws [6G] to remove the Cover. (Fig.11)

10-4 Remove the two (2) screws [C].



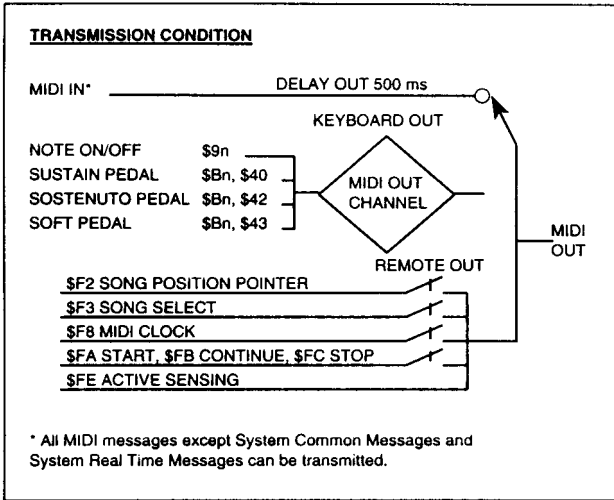
[6G]:BIND HEAD SCREW (十バインド小ネジ) A 3.0X6 ZMC2BL

[43G]:TRUS HEAD TAPPING SCREW-1 (十トラス T P 1 種) 4.0X12 ZMC2BL

[61G]:PAN HEAD SCREW (十ナベ小ネジ) SP 4.0X8 ZMC2BL

■ MIDI DATA FORMAT

<Transmitted Data>



1. Channel Messages

1.1 Note on/off (\$9n, \$kk, \$vv)

n (MIDI channel) = \$0...\$F (0...15) : channel 1~16
kk (note number) = \$00...\$7F(0...127) : C-2~G8
vv (velocity) = \$00...\$7F (0...127) : 0=note off

1.2 Control Change

Volume (\$Bn, \$07, \$vv)

n (MIDI channel) = \$0...\$F (0...15) : channel 1~16
vv (data) = \$00...\$7F (0...127)

Sustain pedal (\$Bn, \$40, \$vv)

Switch mode

n (MIDI channel) = \$0...\$F (0...15) : channel 1~16
vv (data) = \$00, \$7F(0, 127) : channel 1~16

Half pedal mode (add the following messages)

n (MIDI channel) = \$2 (3) : channel 1~16
vv (data) = \$00...\$7F (0...127)

Soft pedal (Shift pedal) (\$Bn, \$43, \$vv)

Switch mode

n (MIDI channel) = \$0...\$F (0...15) : channel 1~16
vv (data) = \$00, \$7F(0, 127) : 0=off, 127=on

Half pedal mode (add the following messages)

n (MIDI channel) = \$2 (3) : channel 3
vv (data) = \$00...\$7F (0...127)

Sostenuto pedal (\$Bn, \$42, \$vv)

n (MIDI channel) = \$0...\$F (0...15) : channel 1~16
vv (data) = \$00, \$7F (0, 127) : 0=off, 127=on

1.3 Program Change (\$Cn, \$pp) - Sent only in MIDI setup mode

n (MIDI channel) = \$0...\$F (0...15) : channel 1~16
pp (program number) = \$00...\$7F (0...127)

2. Channel Mode Messages

2.1 All note off (\$Bn, \$7B, \$00)

n (MIDI channel) = \$0...\$F (0...15) : channel 1~16

2.2 All sound off (\$Bn, \$78, \$00)

n (MIDI channel) = \$0...\$F (0...15) : channel 1~16

3. System Information

3.1 System common messages

Song position pointer (\$F2, \$ll, \$hh) - When remote Out is on

ll (value) = \$00...\$7F (0...127)
hh (value) = \$00...\$7F (0...127)

Song select (\$F3, \$ss) - When remote Out is on

ss (song number) = \$00...\$7F (0...127)

3.2 System real-time messages

Timing clock (\$F8) - When remote Out is on

Start (\$FA) - When remote Out is on

Continue start (\$FB) - When remote Out is on

Stop (\$FC) - When remote Out is on

Active sensing (\$FE) - Always transmitted.

Note: When pause, stop, or eject is selected during playback, the following messages are transmitted.

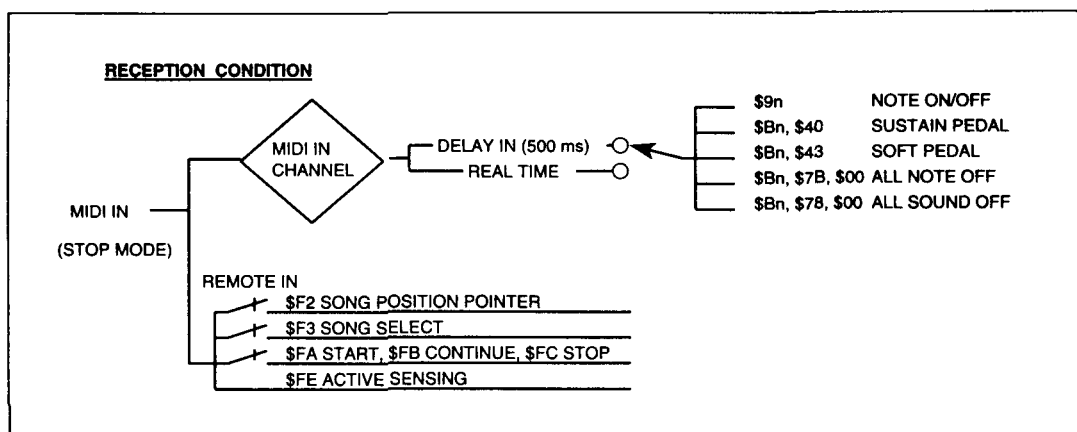
Note off (\$9n, \$kk, \$00) - Only for notes that are on

All sound off (\$Bn, \$78, \$00) - Channel 1~16

All note off (\$Bn, \$7B, \$00) - Channel 1~16

Pedal off (\$Bn, \$40, \$00, \$Bn, \$43, \$00)

<Receive data>



1. Channel Voice Message

1.1 Note off (\$8n, \$kk, \$vv)

n (MIDI channel) = \$0...\$F (0...15) : channel 1~16
kk (note number) = \$15...\$6C (21...108): A-1~C7
vv (velocity) = \$00...\$7F (0...127)

1.2 Note on/off (\$9n, \$kk, \$vv)

n (MIDI channel) = \$0...\$F (0...15) : channel 1~16
kk (note number) = \$15...\$6C (21...108): A-1~C7
vv (velocity) = \$00...\$7F(0...127) : 0=note off

1.3 Control change

Sustain pedal (\$Bn, \$40, \$vv)

Switch mode

n (MIDI channel) = \$0...\$F (0...15) : channel 1~16
vv(data) = \$00...\$3F,\$40...\$7F (0...63,64...127)
:0~63=off 64~127=on

Half pedal mode (add the following messages)

n (MIDI channel) = \$2 (3) : channel 3
vv (data) = \$00...\$7F (0...127)

Soft pedal (Shift pedal) (\$Bn, \$43, \$vv)

Switch mode

n (MIDI channel) = \$0...\$F (0...15) : channel 1~16
vv(data) = \$00...\$3F, \$40...\$7F (0...63, 64... 127)
:0~63=off 64~127=on

Half pedal mode (add the following messages)

n (MIDI channel) = \$2 (3) : channel 3
vv (data) = \$00...\$7F (0...127)

2. Channel Mode Messages

2.1 All note off (\$Bn, \$7B, \$00)

n (MIDI channel) = \$0...\$F(0...15) : channel 1~16

2.2 All sound off (\$Bn, \$78, \$00)

n (MIDI channel) = \$0...\$F (0...15) : channel 1~16

3. System Information

3.1 System common messages

Song position pointer (\$F2, \$II, \$hh) - When remote In is on

II(value) = \$00...\$7F (0...127)

hh (value) = \$00...\$7F(0...127)

3.2 Real-time system messages

Start (\$FA) - When remote In is on

Continue start (\$FB) - When remote In is on

Stop (\$FC) - When remote In is on

Active sensing (\$FE) - Always received

■ SENSOR OUTPUT ADJUSTMENT (PEDAL DRIVE UNIT)

[Inspection Method]

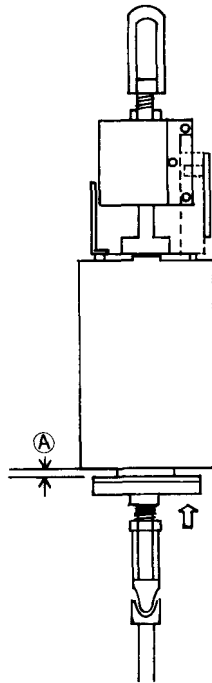
Push the solenoid up and confirm that the gap (A) is 1.5—2.0 mm by checking for the lighted LED.

[Adjustment Method]

Adjust the VR so the LED comes on when gap (A) is 1.5 ~ 2.0 mm.

	LED	Adjustment Position
Damper	LED 1 (RE)	R2, R3
Shift	LED 2 (GR)	R7, R8

* Use the R3 and R8 for fine adjustment.

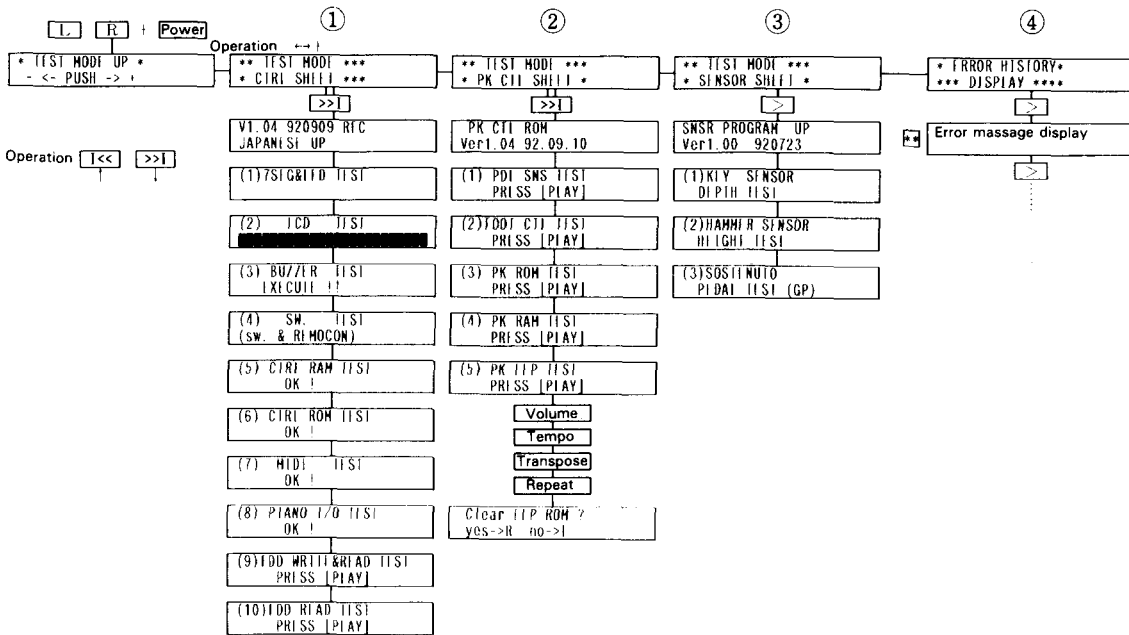


Function...	Transmitted	Recognized	Remarks
Basic Default Channel Changed	1-16 1-16	1-16 1-16	Memorized HP→ch1, 3
Mode Default Messages Altered	3 X *****	3 X X	
Note Number : True voice	0-127 *****	21-108 21-108	
Velocity Note ON Note OFF	O9nH, v=1-127 X 9nH, v=0 *1	O v=1-127 O	
After Key's Touch Ch's	X X *1	X X	
Pitch Bend	X *1	X	
Control Change	64 O 66 *3 67 O 7 O 120 O *1	O X O X O	Sustain Pedal Sostenuto Pedal Soft Pedal Volume All Sound Off
Prog Change :True #	O (0-127) *****	X	
System Exclusive	X *1	X	
Common : Song Pos : Song Sel : Tune	O O X *2	O O X *2	
System : Clock Real Time : Commands	O O *2	X O *2	
Aux :Local ON/OFF :All Notes OFF Mes- :Active Sense sages :Reset	X 0(123) O X	X O (123) O X	

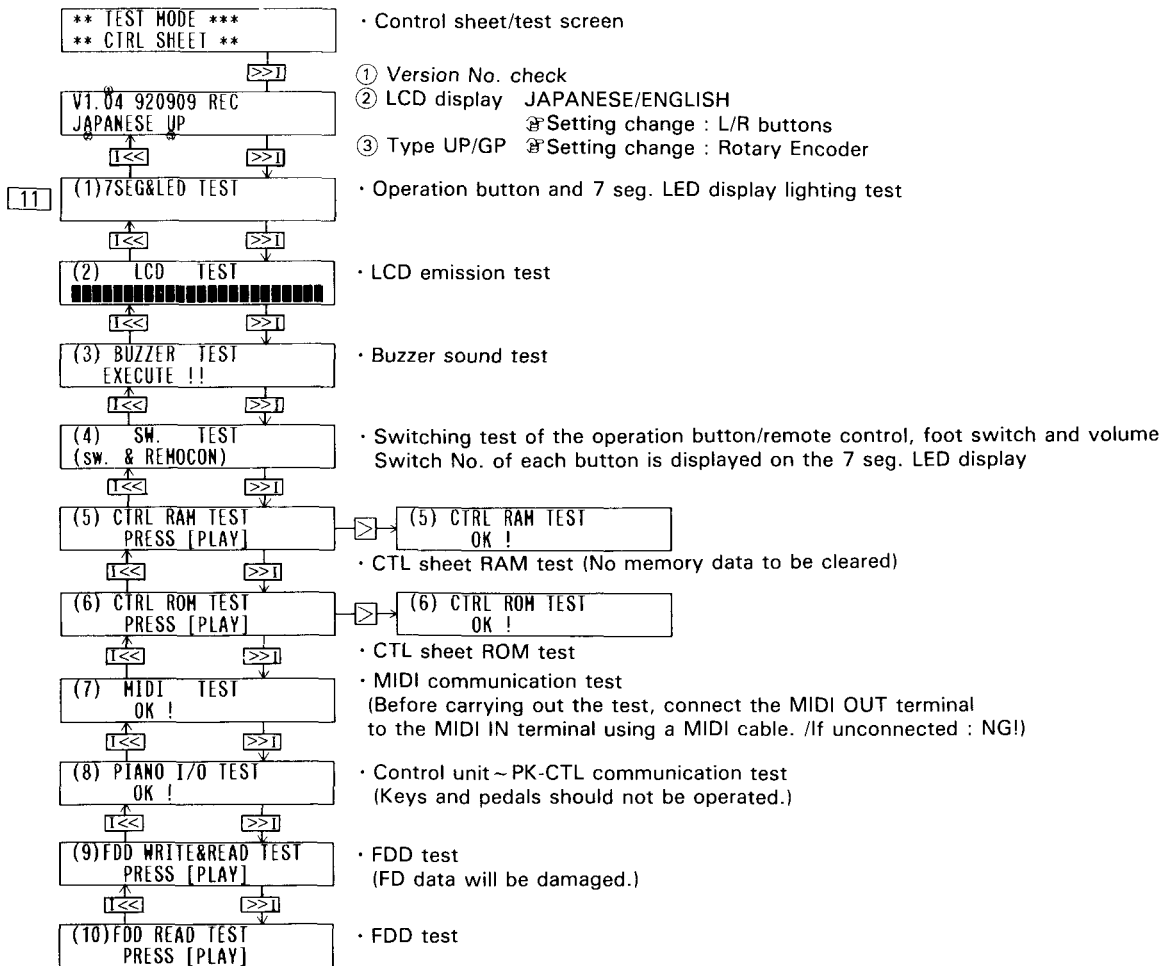
Notes All recognized data are transmitted 500msec later
if controller mode is STOP and DELAYOUT mode is on.
*1=Possible to transmit all data if E-SEQ disk is used.
*2=Enabled or disabled using REMOTE functions.
*3=Transmit if this model has a Sostenuto Pedal.

TEST MODE

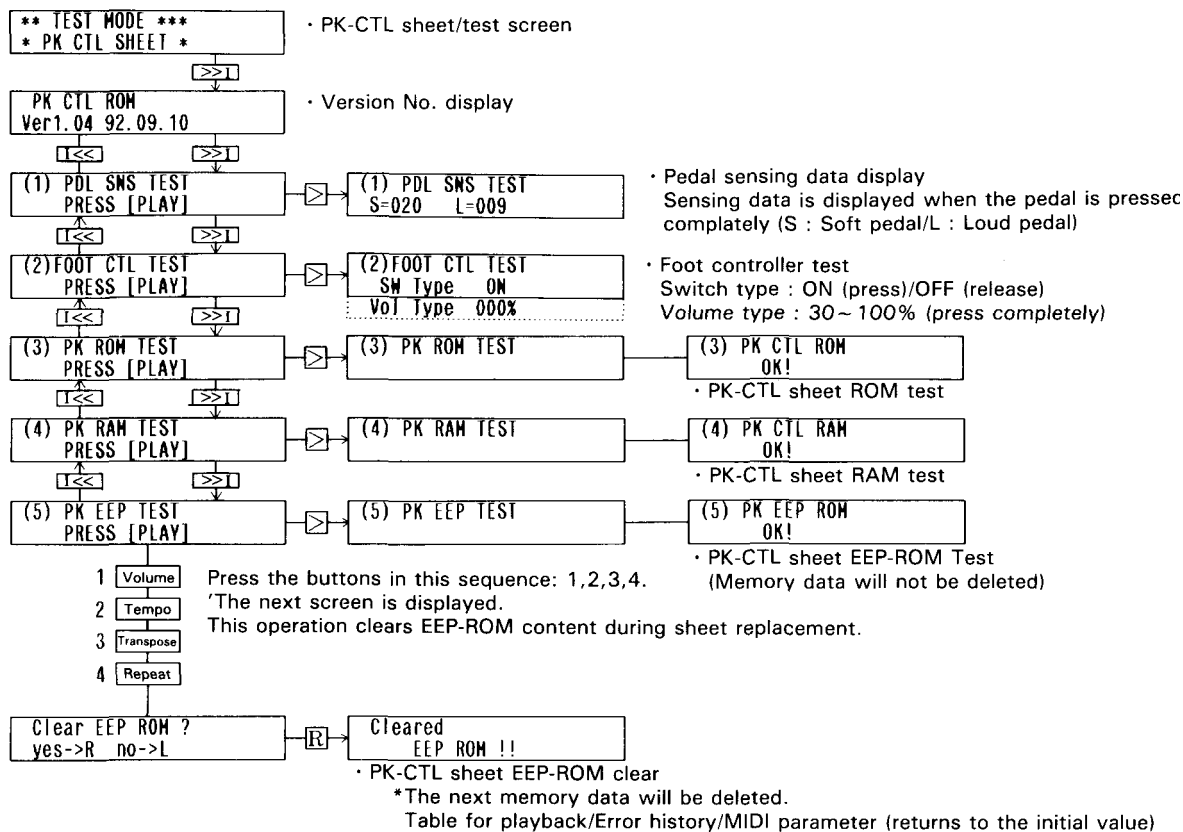
TEST MODE <MENU>



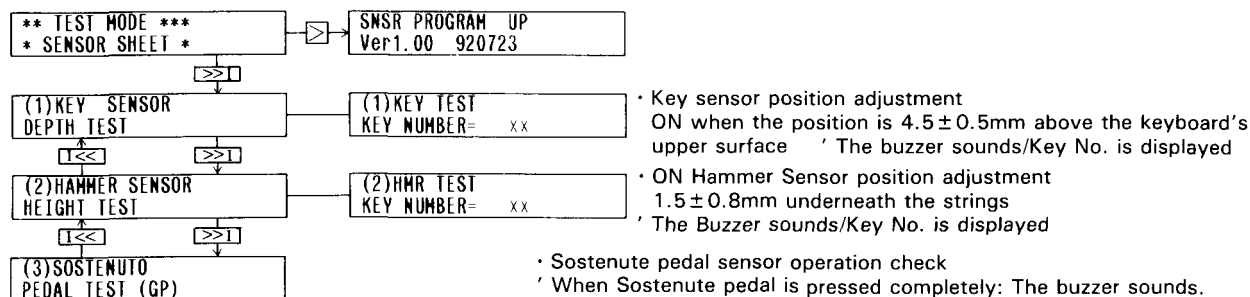
① Control (CTRL) sheet Test



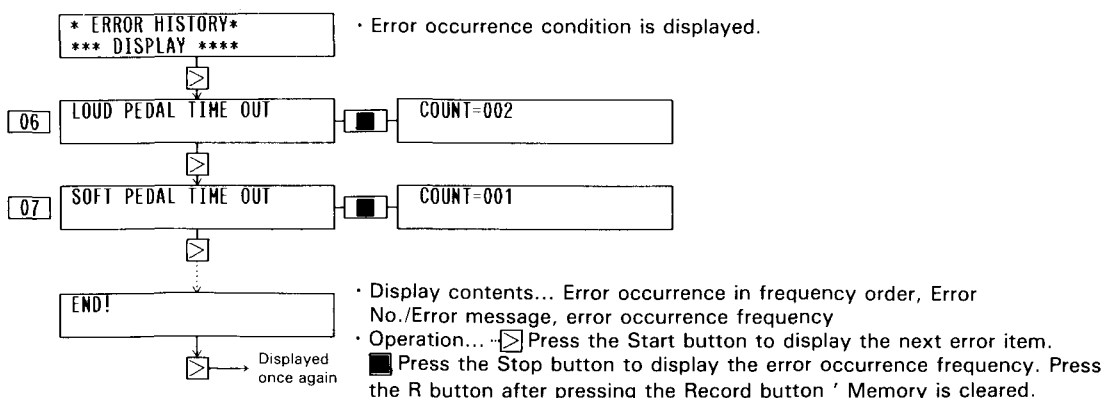
② PK-CTL Test



③ Sensor sheet Test



④ Error history



LSI PIN DESCRIPTION

• Z8018008PSC (XI040A00) CPU, CONTROLLER

PIN NO.	NAME	I/O	FUNCTION	PIN NO.	NAME	I/O	FUNCTION	
1	Vss		Ground	33	Vss	I	Ground	
2	XTAL	I	Clock	34	D0	I/O	Data bus	
3	EXTAL	I		35	D1	I/O		
4	WAIT	I	Wait	36	D2	I/O		
5	BUSACK	O	Bus acknowledge	37	D3	I/O		
6	BUSREQ	I	Bus request	38	D4	I/O		
7	RESET	I	Reset	39	D5	I/O		
8	NMI	I	Non-Maskable interrupt	40	D6	I/O		
9	INT0	I	Interrupt 0	41	D7	I/O		
10	INT1	I	Interrupt 1	42	RTS0	O	Request to send for asynchronous SCI channel 0	
11	INT2	I	Interrupt 2	43	CTS0	I	Clear to send for asynchronous SCI channel 0	
12	ST	O	Status	44	DCD0	I	Data carrier detect for asynchronous SCI channel 0	
13	A0	O	Address bus	45	TXA0	O	Transfer data for asynchronous SCI channel 0	
14	A1	O			46	RXA0	I	Receive data for asynchronous SCI channel 0
15	A2	O			47	CKA0/ DREQ0	I/O	Clock for asynchronous SCI channel 0/DMA request for channel 0
16	A3	O			48	TXA1	O	Transfer data for asynchronous SCI channel 1 MIDI OUT
17	A4	O			49	RXA1	I	Receive data for asynchronous SCI channel 1 MIDI IN
18	A5	O			50	CKA1/ TEND0	I/O	Clock for asynchronous SCI channel 1/ Transfer end for channel 0
19	A6	O			51	TXS	O	Transfer data for serial I/O port
20	A7	O			52	RXS/ CTS1	I	Receive data for serial I/O port /Clear to send for asynchronous SCI channel 1
21	A8	O			53	CKS	I/O	Clock for serial I/O port
22	A9	O			54	DREQ1	I	DMA request for channel 1
23	A10	O		55	TEND1	O	Transfer end for channel 1	
24	A11	O		56	HALT	O	Halt	
25	A12	O		57	REF	O	Refresh	
26	A13	O		58	IOE	O	I/O enable	
27	A14	O		59	ME	O	Memory enable	
28	A15	O		60	E	O	Enable	
29	A16	O		61	M1	O	Machine cycle 1	
30	A17	O		62	WR	O	Write	
31	A18/ TOUT	O	Address bus/Timer out	63	RD	O	Read	
32	Vcc	I	Power supply	64	Ø	O	System clock	

• YM3421-F (XL150A00) PWM GENERATOR FP

PIN NO.	NAME	I/O	FUNCTION	PIN NO.	NAME	I/O	FUNCTION
1	D6	I	Data bus	33	C2#	O	Key drive pulse
2	D5	I		34	C1	O	
3	D4	I		35	B1	O	
4	D3	I		36	A1#	O	
5	D2	I		37	A1	O	
6	D1	I		38	G1#	O	
7	D0	I		39	G1	O	
8	C3	O	Key drive pulse	40	F1#	O	
9	B3	O		41	F1	O	
10	A3#	O		42	E1	O	
11	Vss	I	Ground	43	D1#	O	Power supply
12	A3	O	44	D1	O		
13	G3#	O	45	C1#	O		
14	G3	O	46	C0	O		
15	F3#	O	47	B0	O		
16	F3	O	48	A0#	O		
17	E3	O	49	A0	O		
18	D3#	O	Key drive pulse	50	G0#	O	
19	D3	O		51	G0	O	
20	C3#	O		52	F0#	O	
21	C2	O	Ground	53	F0	O	
22	B2	O		54	E0	O	
23	A2#	O		55	D0#	O	
24	A2	O	Key drive pulse	56	D0	O	
25	G2#	O		57	C0#	O	
26	Vss	I		58	VDD	I	
27	G2	O	Key drive pulse	59	ØM	I	
28	F2#	O		60	IC	I	
29	F2	O		61	CS	I	
30	E2	O	Ground	62	AE	I	
31	D2#	O		63	DE	I	
32	D2	O		64	D7	I	

• LC9201 1B-726 (XL029A00) GATE ARRAY, CONTROLLER

PIN NO.	NAME	I/O	FUNCTION	PIN NO.	NAME	I/O	FUNCTION
1	D0	I/O	Data bus	41	RINA	I	Rotary encoder IN A
2	D1	I/O		42	LCDE	O	LCD enable
3	D2	I/O		43	E	I	E clock
4	D3	I/O		44	DAC4	O	DAC
5	D4	I/O		45	DAC3	O	
6	D5	I/O		46	DAC2	O	
7	D6	I/O		47	DAC1	O	
8	D7	I/O		48	DAC0	O	Load instruction register
9	RAM/CS	O	RAM chip select	49	LIR	I	
10	ROM/CS	O	ROM chip select	50	RFSH	O	
11	A14	I	Address bus	51	Vcc	I	Power supply
12	/ME	I	Memory enable	52	GND	I	Ground
13	GND	I	Ground	53	/RD	I	Read
14	SR0	I	Switch read	54	/WR	I	Write
15	SR1	I		55	FDC/WR	O	FDC write
16	SR2	I		56	FDC/RD	O	FDC read
17	SR3	I		57	EXFIN	I	External frequency IN
18	SR4	I		58	MVBCLK	O	Multi vibrator clock
19	SR5	I		59	MVB/Q	I	Multi vibrator Q
20	SR6	I		Sink	60	SINK5	O
21	SR7	I	61		SINK4	O	
22	SW0	O	62		SINK3	O	
23	SW1	O	63		SINK2	O	
24	SW2	O	64		SINK1	O	
25	SW3	O	Reset IN	65	SINK0	O	
26	/RESIN	O		66	SRS6	O	Source
27	/RES	O		67	SRS5	O	
28	A3	I	68	SRS4	O		
29	A4	I	Address bus	69	SRS3	O	
30	A5	I	Power supply	70	SRS2	O	
31	Vcc	I		71	SRS1	O	
32	A6	I		72	SRS0	O	
33	A7	I	Address bus	73	Vcc	I	Power supply
34	/IOE	I		74	GND	I	Ground
35	CT0	O		FDC chip select	75	RC5	I
36	CT1	O	FDC data acknowledge	76	RC4	I	
37	ØIN	I	Clock 8MHz	77	RC3	I	
38	FO1	O	Frequency out 2MHz	78	RC2	I	
39	PSW	I	Power switch	79	RC1	I	
40	RINB	I	Rotary encoder IN B	80	RC0	I	

• LC92011B-656 (XK441A00) GATE ARRAY, PK-CTL

PIN NO.	NAME	I/O	FUNCTION	PIN NO.	NAME	I/O	FUNCTION
1	D0	I/O	Data bus	41	F0	O	Frequency 0 16M
2	D1	I/O		42	F1	O	Frequency 1 8M
3	D2	I/O		43	F2	O	Frequency 2 4M
4	D3	I/O		44	1SHOT	O	One shot
5	D4	I		45	OK1S	I	OK one shot
6	D5	I		46	TESTIN	I	Test pin, not used
7	D6	I		47	RESET	I	Reset
8	D7	I		48	RES	O	Reset
9	ALE	I	Address latch enable	49	/RES	O	Reset
10	A15	I		50	GAP60	I	Gate array port
11	A14	I	Address bus	51	GAP61	O	
12	A13	I		52	Vss	I	Ground
13	Vss	I		53	Vcc	I	Power supply
14	Vcc	I	Power supply	54	PON	O	Play ON
15	A12	I		55	THERMO	I	Thermostat signal
16	A11	I	Address bus	56	Vss	I	Ground
17	A10	I		57	MD10	O	MIDI
18	A9	I		58	MD12	O	MIDI
19	A8	I		59	Vss	I	Ground
20	A7	I	Not used	60	OP5	O	Output port
21	NC	I		61	OP4	O	
22	A1	I	Address bus	62	OP3	O	
23	A0	I		63	OP2	O	
24	WDCLR	O	Watching dog timer	64	OP1	O	
25	WDOK	I	Watching dog timer OK	65	/RD	O	Read
26	PROTO	I	Protect 0	66	/WR	O	Write
27	Vss	I	Ground	67	BS11	O	Bank select
28	MD00	I	MIDI	68	BS10	O	
29	MD02	O	MIDI	69	BS9	O	
30	Vss	I	Ground	70	BS8	O	
31	Vcc	I	Power supply	71	BS7	O	Power supply
32	R/W	I	Read/Write	72	Vss	I	
33	/E	I	E clock	73	Vcc	I	
34	RAM/CS	O	RAM Chip select	74	BS6	O	
35	ROM/CS	O	ROM Chip select	75	BS5	O	
36	EEPROM/CS	O	EEP-ROM Chip select	76	BS4	O	Bank select
37	Vss	I	Ground	77	BS3	O	
38	EXTAL	I	Clock	78	BS2	O	
39	XTAL	O	Clock	79	BS1	O	
40	Vss	I	Ground	80	BS0	O	

• RF5GF26-028 (XK652A00) GATE ARRAY, HAMMER SENSOR

PIN NO.	NAME	I/O	FUNCTION	PIN NO.	NAME	I/O	FUNCTION
1	NC	-	Not used	51	NC	-	Not used
2	Vcc	I	Power supply	52	Vcc	I	Power supply
3	M10	I	Make 1	53	IRQK	O	Interrupt key
4	M11	I		54	OCTK0	O	Oct. Key
5	M12	I		55	OCTK1	O	
6	M13	I		56	OCTK2	O	
7	M14	I		57	OCTK3	O	
8	M15	I		58	OCTK4	O	
9	M16	I		59	OCTK5	O	
10	M17	I	60	OCTK6	O		
11	XIN	I	Clock	61	OCTK7	O	
12	SYSRE-	I	Reset	62	K0	I	Key
	SIN	O		63	K1	I	
13	N0	O	Note	64	K2	I	
14	N1	O		65	K3	I	
15	N2	O		66	K4	I	
16	N3	O		67	K5	I	
17	OCTM10	O	Oct. Make 1	68	K6	I	
18	OCTM11	O		69	K7	I	
19	OCTM12	O		70	C	O	
20	OCTM13	O		71	B	O	
21	OCTM14	O		72	A#	O	
22	OCTM15	O	Note	73	A	O	
23	OCTM16	O		74	G#	O	
24	OCTM17	O		75	G	O	
25	M20	I		76	F#	O	
26	M21	I	Vss	77	F	O	
27	M22	I		78	E	O	
28	M23	I	Ground	79	GND	I	Vss
29	GND	I		80	NC	-	Not used
30	NC	-	Not used	81	Vcc	I	Power supply
31	Vcc	I	Power supply	82	D#	O	Note
32	M24	I	Vss	83	D	O	
33	M25	I		84	C#	O	
34	M26	I		85	OCTR10	O	
35	M27	I		86	OCTR11	O	
36	OCTM20	O		Oct. Make 2	87	OCTR12	O
37	OCTM21	O	88		OCTR13	O	
38	OCTM22	O	89		OCTR14	O	
39	OCTM23	O	90		NC	-	Not used
40	OCTM24	O	Not used	91	OCTR15	O	Oct. Reference 1
41	NC	-		92	OCTR16	O	
42	OCTM25	O		93	OCTR17	O	
43	OCTM26	O	Oct. Make 2	94	SW3	I	Switch
44	OCTM27	O		95	SW2	I	
45	ACKM1	I	Acknowledge Make 1	96	SW1	I	
46	ACKM2	I	Acknowledge Make 2	97	SW0	I	Switch 1A
47	ACKK	I	Acknowledge Key	98	SW1A	I	
48	IRQM1	O	Interrupt Make 1	99	SW1B	I	Switch 2B
49	IRQM2	O	Interrupt Make 2	100	GND	I	Vss
50	GND	I	Vss				

• M37700SAFP (X1286A00) CPU, PK-CTL

PIN NO.	NAME	I/O	FUNCTION	PIN NO.	NAME	I/O	FUNCTION
1	ANO. P70	I	Port 7, Analog input	41	D3	I/O	Data bus
2	P67	I/O		42	D2	I/O	
3	P66	I/O		43	D1	I/O	
4	P65	I/O	44	D0	I/O		
5	P64	I/O	Port 6	45	A15	O	Address bus
6	P63	I/O		46	A14	O	
7	P62	I/O		47	A13	O	
8	P61	I/O		48	A12	O	
9	P60	I/O		49	A11	O	
10	P57	I/O	50	A10	O		
11	P56	I/O	51	A9	O		
12	P55	I/O	52	A8	O		
13	P54	I/O	Port 5	53	A7	O	
14	P53	I/O		54	A6	O	
15	P52	I/O		55	A5	O	
16	P51	I/O		56	A4	O	
17	P50	I/O		57	A3	O	
18	P47	I/O	Port 4	58	A2	O	
19	P46	I/O		59	A1	O	
20	P45	I/O		60	A0	O	
21	P44	I/O		61	TXD1. P87	O	Transfer data channel 1
22	P43	I/O		62	RXD1. P86	I	Receive data channel 1
23	P42	I/O	Ready	63	P85	I/O	Port 8
24	/RDY. P41	I		64	/CTS1. /RTS1	I/O	Clear to send channel 1/ Request to send channel 1
25	/HOLD. P40	I	Hold request	65	TXD0. P83	O	Transfer data channel 0
26	BYTE	I	Byte enable	66	RXD0. P82	I	Receive data channel 0
27	CNVss	I	Processor mode control	67	P81	I/O	Port 8
28	/RES	I	Reset	68	/CTS0. /RTS0	I/O	Clear to send channel 0/ Request to send channel 0
29	XIN	I	Clock	69	Vcc		Power supply
30	XOUT	O		70	AVCC		Analog power supply
31	/E	O	Enable	71	VREF	1	Reference voltage
32	Vss	I	Ground	72	AVSS		Analog ground
33	/HLDA. P33	O	Hold acknowledge	73	Vss		Ground
34	ALE	O	Address latch enable	74	P77	I/O	Port 7 } Analog input
35	/BHE. P31	O	Byte high enable	75	AN6. P76	I	
36	R/W	O	Read write control	76	AN5. P75	I	
37	D7	I/O	Data bus	77	AN4. P74	I	
38	D6	I/O		78	AN3. P73	I	
39	D5	I/O		79	AN2. P72	I	
40	D4	I/O		80	AN1. P71	I	

• HD6433258A46F (XL588E00) CPU, HAMMER SENSOR

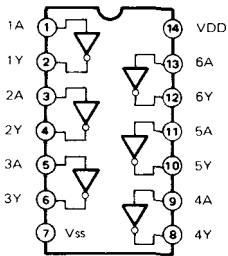
PIN NO.	NAME	I/O	FUNCTION	PIN NO.	NAME	I/O	FUNCTION
1	XTAL	I	Clock	33	P26	O	Port 2
2	EXTAL	I		34	P25	O	
3	MD1	I	Model select	35	P24	O	
4	MD0	I		36	P23	O	
5	NMI	I	Non-maskable interrupt request	37	P22	O	Ground
6	Vcc	I	Power supply	38	P21	O	
7	STBY	I	Stand-by mode signal	39	P20	O	
8	Vss	O	Ground	40	Vss	O	
9	P40	O	Port 4	41	P17	O	Port 1
10	P41	O		42	P16	O	
11	P42	I		43	P15	O	
12	P43	O		44	P14	O	
13	P44	O	Port 5	45	P13	O	Port 3
14	P45	O		46	P12	O	
15	P46	O		47	P11	O	
16	P47	O		48	P10	O	
17	P50	O	Port 7	49	P30	O	Port 6
18	P51	O		50	P31	O	
19	P52	O		51	P32	O	
20	P53	O		52	P33	O	
21	P54	O	Port 7	53	P34	O	Reset
22	P55	O		54	P35	O	
23	P70	O		55	P36	O	
24	P71	O		56	P37	O	
25	P72	O	Power supply Port 2	57	P60	O	Reset
26	P73	I		58	P61	I	
27	P74	O		59	P62	I	
28	P75	O		60	P63	I	
29	P76	O	Power supply Port 2	61	P64	I	Reset
30	P77	O		62	P65	I	
31	Vcc	O		63	P66	I	
32	P27	O		64	RES	I	

• HD63266FP (XI939A00) FDC (Floppy Disk Controller)

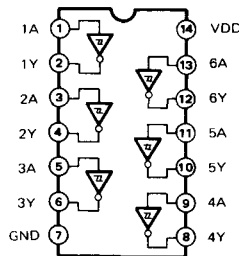
PIN NO.	NAME	I/O	FUNCTION	PIN NO.	NAME	I/O	FUNCTION
1	8"/5"	I	Data transmission speed	33	TRKO	I	Track 00 signal
2	XTALSET	I	Clock select	34	INDEX	I	Index signal
3	RESET	I	Reset	35	RDATA	I	Read data input from FDD
4	E/RD	I	Enable /Read	36	XTAL2	I	Clock
5	R/W/WR	I	Read /write /Write	37	EXTAL2	I	
6	CS	I	Chip select	38	NC	I	Clock
7	DACK	I	DMA acknowledge	39	XTAL1	I	
8	RS0	I	Register select	40	EXTAL1	I	
9	RS1	I		41	VSS4	I	Ground ¹
10	VSS1	I	Ground	42	VSS5	I	
11	VSS2	I		43	NC	I	Power supply
12	DO	I/O	Data bus	44	VCC2	I	
13	D1	I/O		45	VCC3	I	
14	D2	I/O		46	VCC4	I	
15	D3	I/O		47	WGATE	O	Write control
16	D4	I/O	DMA request	48	WDATA	O	Write 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
20	DREQ	O		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	I	Ground	55	DS0	O	Drive select
24	1/2EX2	O	Clock 8MHZ	56	DS1	O	
25	VCC1	O	Power supply	57	DS2	O	
26	NUM1	I	Host interface select	58	DS3	O	Ground
27	NUM2	I		59	VSS8	O	
28	IFS	I		60	MON0	O	
29	SFORM	I		Format data	61	MON1	
30	INP	I	Index pulse	62	MON2	O	Motor on
31	READY	I	Ready from FDD	63	MON3	O	
32	WPRT	I	Write protected signal	64	VSS9	O	Ground

IC BLOCK DIAGRAM

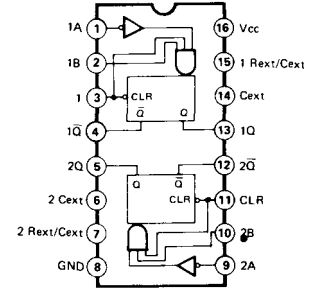
- **SN74HCU04NSR** (XC723A00)
Hex Inverter



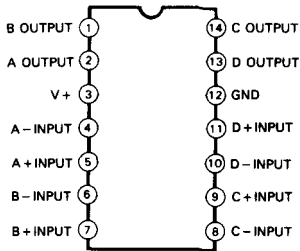
- **SN74HC14NSR** (XC725A00)
Hex Inverter



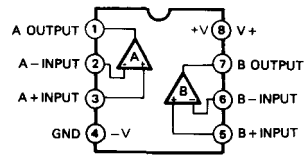
- **HD74HC123AFP** (XK410A00)
Dual Retriggerable Single Shot



- **NJM2901M-T1** (XK910A00)
Comparator

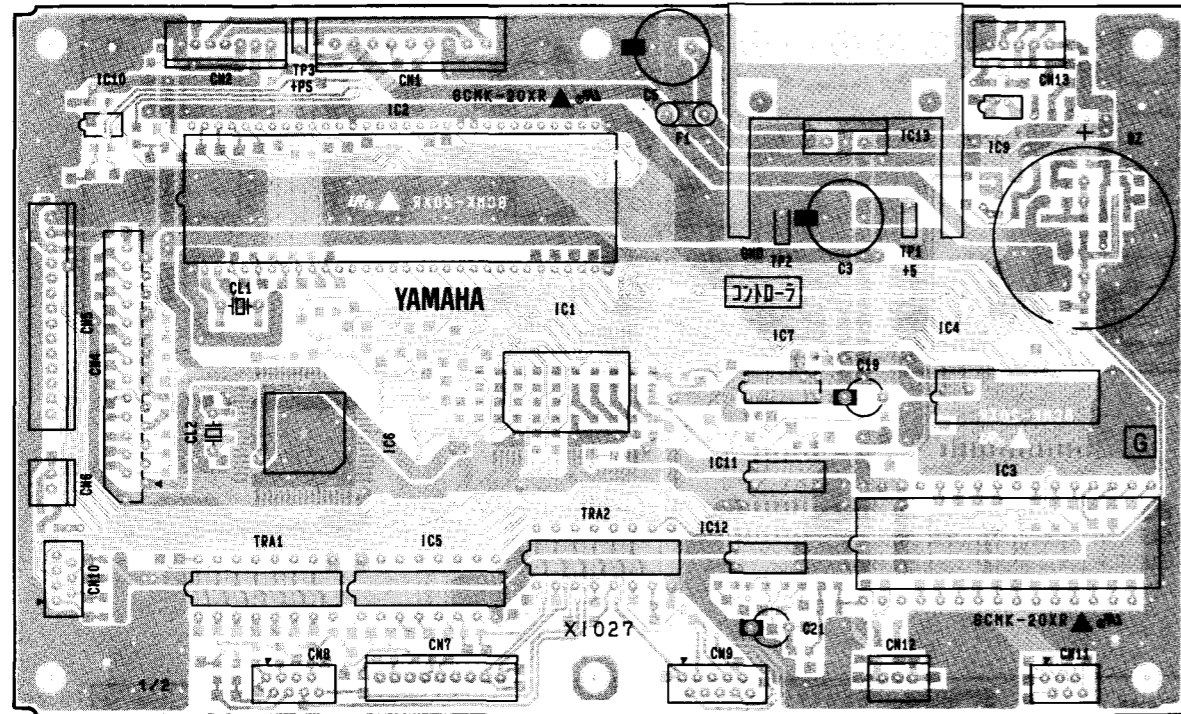


- **NJM2903M-T1** (XD672A00)

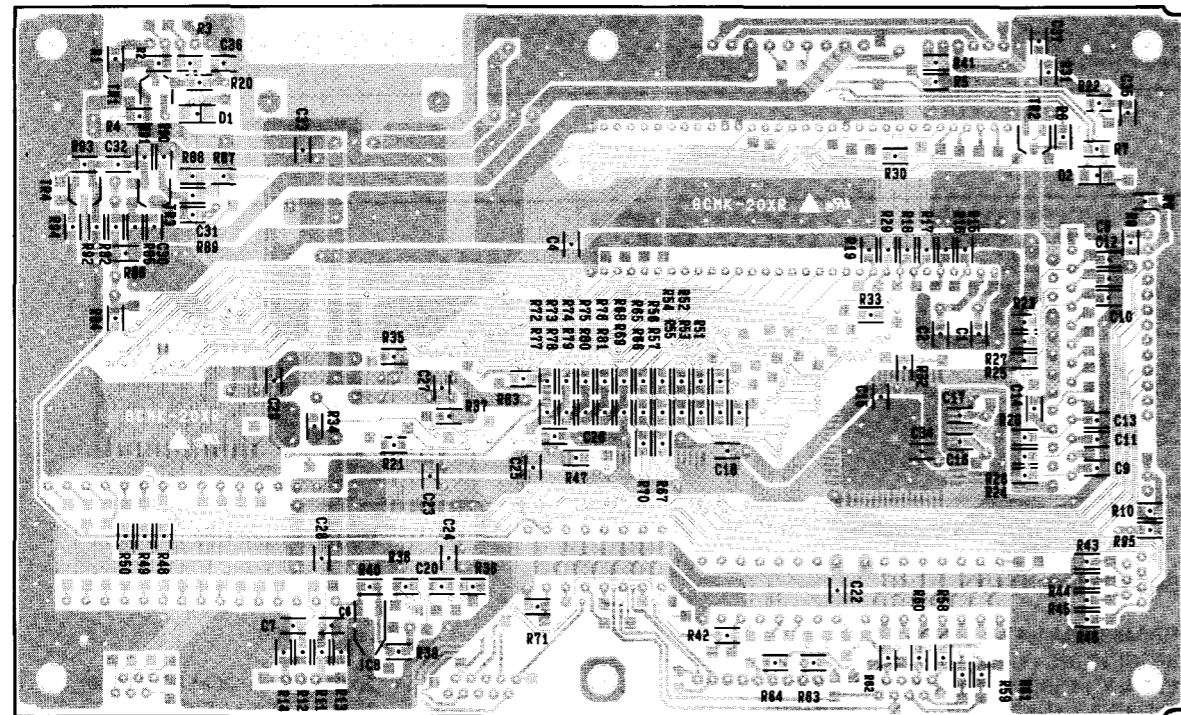


■CIRCUIT BOARDS

• CONTROLLER

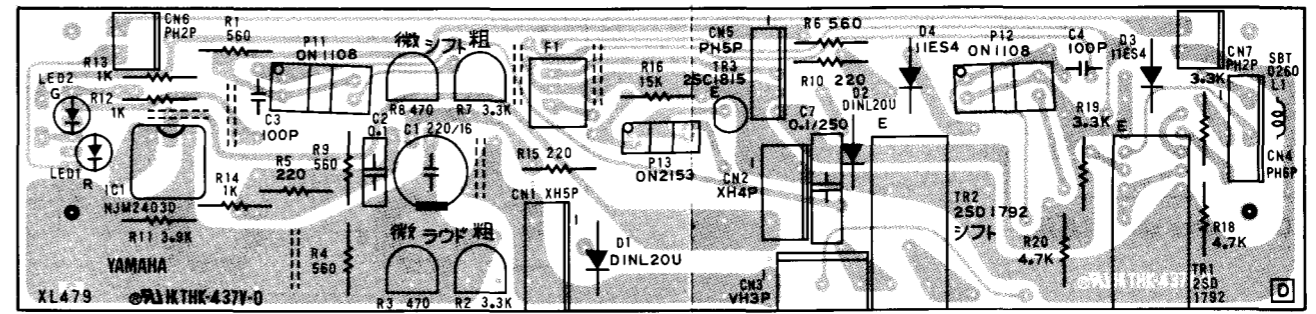


Components side (部品側)



Pattern side (パターン側)

• PEDAL DRIVE



Components side (部品側)

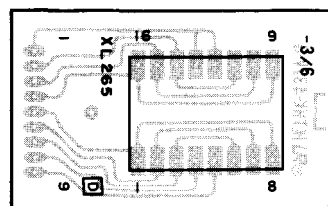
Notes)

- * Circuit Board : PEDAL DRIVE (VP188700)
- 1. TRANSISTOR
TR3: 2SC1815Y,GR(IC1815M0)
TR1,2: 2SD1792 (VM610600)
- 2. PI SENSOR
PI1,2: ON1108(VP216000)
PI3: ON2153(VP216100)
- 3. DIODE
D3,4: 11ES4 (VB481900)
D1,2: D1NL20U (VN517300)
- 4. LED
LED1: SLZ-981C-12 (VD180200) RED
LED2: : SLZ-389C-02-T1 (VN518200) GREEN
- 5. IC
IC1: NJM2403D (XG061A00) COMPARATOR
- 6. TRIMMER POTENTIOMETER
R2,7: B 3.3K 3P (VA787800)
R3,8: B 470 3P (VA787500)

Notes)

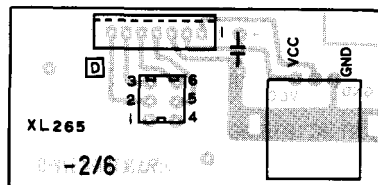
- * Circuit Board : COTROLLER (VN587400)
- 1. IC
IC2: Z8018008PSC (XI040A00) CPU
IC1: LC9201 1B-726 (XL029A00) GATE ARRAY
IC3: (XL652E00) MASKROM
IC4: HM658128ALFP-10 (XM175A00) PS RAM
IC6: HD63266F FDC (XI939A00) FDC
IC8: PST572CMT-R (XL122A00) SYSTEM RESET
IC12: SN74HCU04NSR (XC723A00) INVERTER
IC11: SN74HC14NSR (XC725A00) INVERTER
IC7: HD74HC123AFP (XL106A00) SINGLE SHOT
IC5: LU59530 (XF937A00) DECODER
IC13: UPC2405HF 5V (XK310A00) REGULATOR 5V
- 2. PHOTO COUPLER
IC9,10: HCPL-0600-500 (VN406200)
- 3. CERAMIC RESONATOR
CL2: 16M CSA (VH307600)
CL1: 10MHZ (VG931300)
- 4. EMI FILTER
F1: LS MT Y223NB (FZ006970)
- 5. DIODE
D1,2: RLS-73 (VB797600)
- 6. TRANSISTOR ARRAY
TRA1: LB1215 (VN516800)
TRA2: LB1211 (VN516900)
- 7. TRANSISTOR
TR1-4: 2SC2412K Q,R,S (IC241200)

• LED 7 SEG.



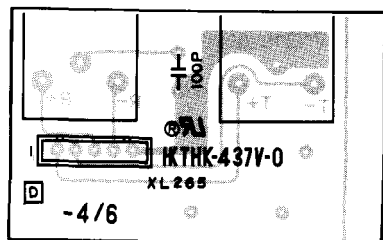
Components side (部品側)

• POWER SWITCH



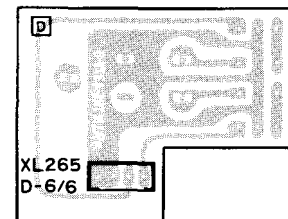
Components side (部品側)

• CTRL-OUT



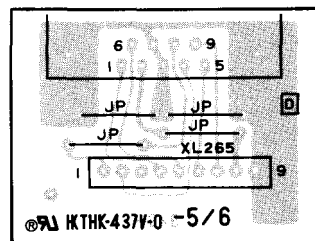
Components side (部品側)

• CTRL-IN



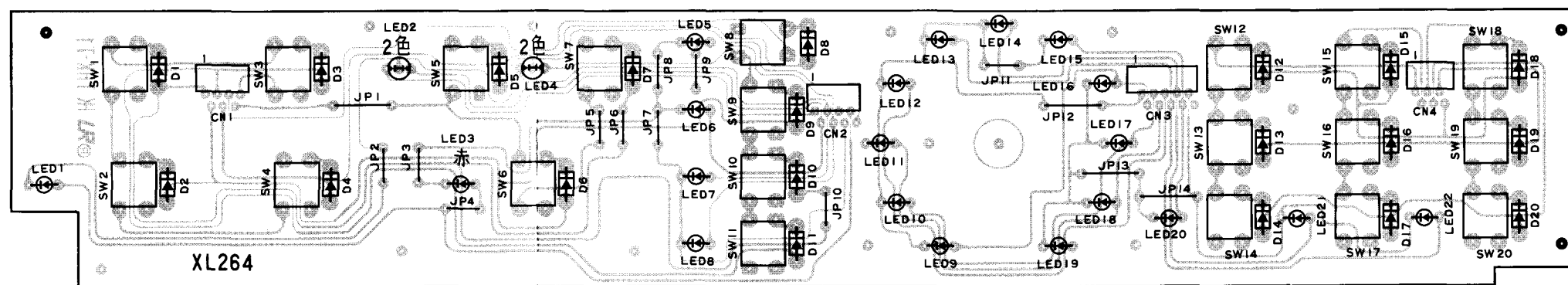
Components side (部品側)

• CONNECTION



Components side (部品側)

• PANEL SWITCH

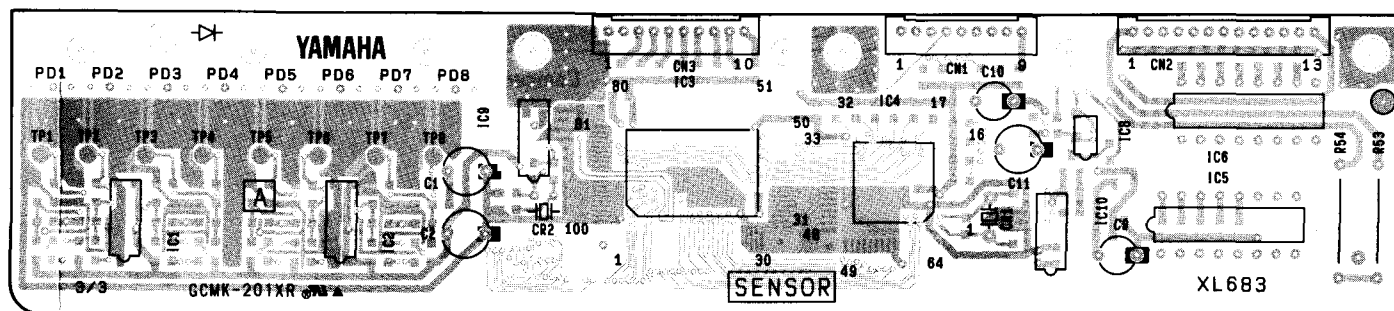


Components side (部品側)

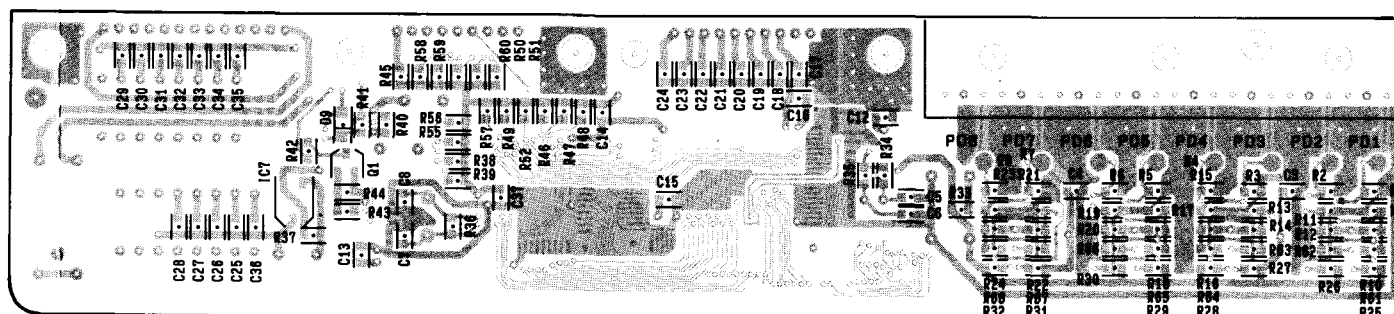
Notes)

- | | | | |
|-------------------|-------------------------|---------------------------------|--|
| * Circuit Board : | PANEL SWITCH (VN587500) | | |
| 1. TACT SWITCH | SW1-20: | SKEYAB (VJ253600) | |
| 2. DIODE | D1-20: | 1SS133,1SS176 (VB941200) | |
| 3. LED | LED1,5-22: | SLZ-389C-02-T1 (VN518200) GREEN | |
| | LED3: | SLZ-981C-12 (VD180200) RED | |
| | LED2,4: | GL3ED8 (VG197600) GREEN/RED | |

• SENSOR



Components side (部品側)



Pattern side (パターン側)

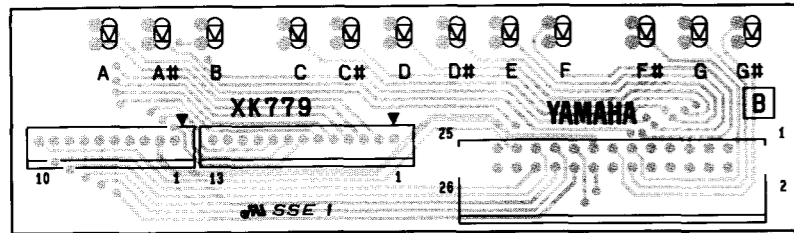
Notes)

- | | | | |
|-------------------|-------------------|-------------------------------------|----------------------|
| * Circuit Board : | SENSOR (VQ111600) | | |
| 1. IC | IC4: | HD6433258A46F(XL588F00) CPU | 4. PHOTO DIODE |
| | IC3: | RF5GF26-028 (XK652A00) GATE ARRAY | PD1-8: |
| | IC10: | SN74HC14NSR (XC725A00) INVERTER | 5. CERAMIC RESONATOR |
| | IC9: | SN74HCU04NSR (XC723A00) INVERTER | CR1: |
| | IC1,2: | NJM2901M-T1 (XK910A00) COMPARATOR | CR2: |
| | IC7: | PST572CMT-R (XL122A00) SYSTEM RESET | 6. TRANSISTOR |
| 2. PHOTO COUPLER | IC8: | HCPL-0600-500 (VN406200) | Q1: |
| | IC5,6: | MC1413P (VH441500) | 7. DIODE |
| | | | D9: |
| | | | RLS-73 (VB797600) |

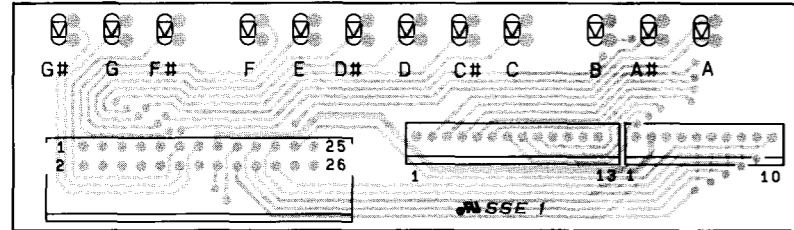
Notes)

- | | |
|------------------------------|---------------------------------------|
| * Circuit Board : | CONNECTION (VP366900) |
| * Circuit Board : | CTRL OUT (VP367100) |
| * Circuit Board : | LED 7 SEG. (VP367400) |
| * Circuit Board : | POWER SWITCH (VP367500) |
| * Circuit Board : | CTRL IN (VP367600) |
| 1. SENSOR, REMOTE CONTROLLER | SPS-420-1 (VJ791000) |
| 2. PUSH SWITCH | SPPH23 (VN388300) POWER SWITCH |
| 3. LED DISPLAY | (VG922200) |
| 4. DIN CONNECTOR | 3P YKF51-50 (VH303500) MIDI |
| 5. PHONE JACK | 1P,ST HLJ2306 (VN638300) FOOT CONTROL |
| 6. EMI FILTER | LS MT Y223NB (FZ006970) |
| 7. D-SUB CONNECTOR | RDG 9P SE (VN585600) |

• HAMMER EMISSION



Components side (部品側)

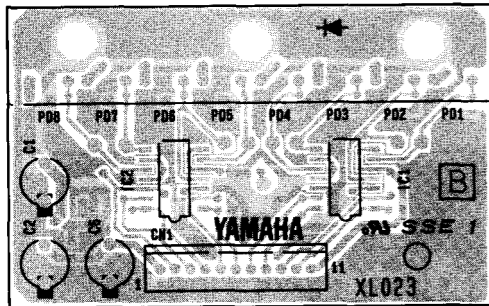


Pattern side (パターン側)

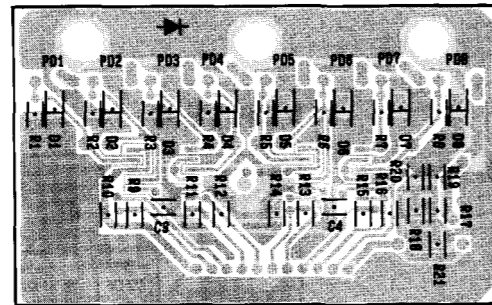
Notes)

- * Circuit Board : HAMMER EMISSION (VP176100)
- 1. LED H-1000 (VB434100) RED

• KEY RECEIVE



Components side (部品側)



Pattern side (パターン側)

Notes)

- * Circuit Board : KEY RECEIVE (VN244500)
- 1. DIODE (VB434400)
- PD1-8: (VB434400)
- D1-8: RLS-73 (VB797600)
- 2. IC NJM2901M-T1 (XK910A00) COMPARATOR
- IC1,2:

• KEY EMISSION

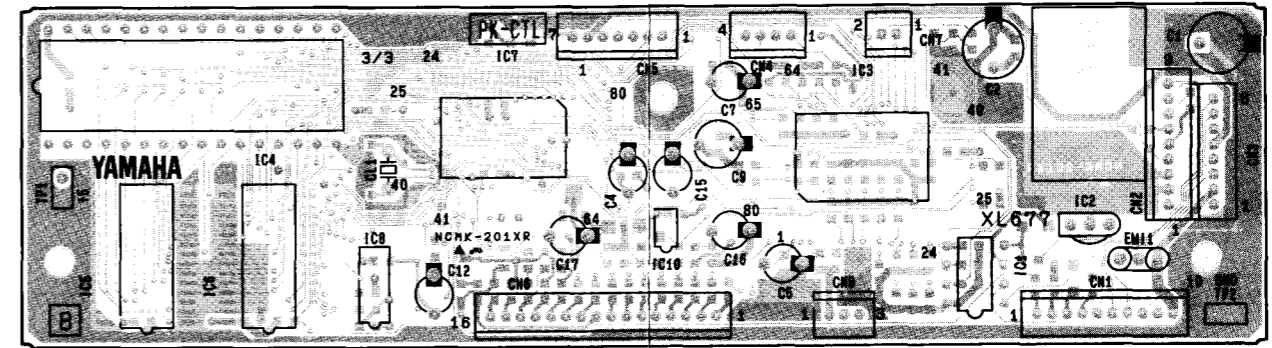


Components side (部品側)

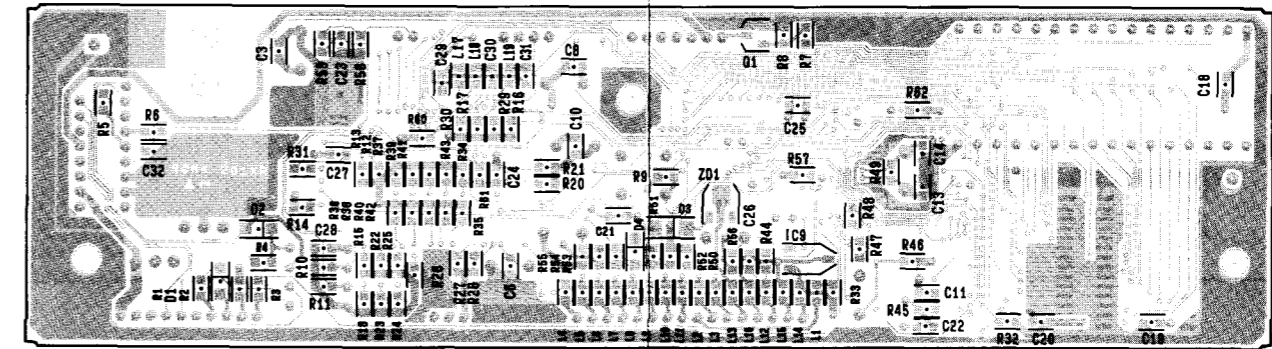
Notes)

- * Circuit Board : KEY EMISSION (VN613300)
- 1. LED SLA-580JT190F (VP843600)

• PK-CTL



Components side (部品側)

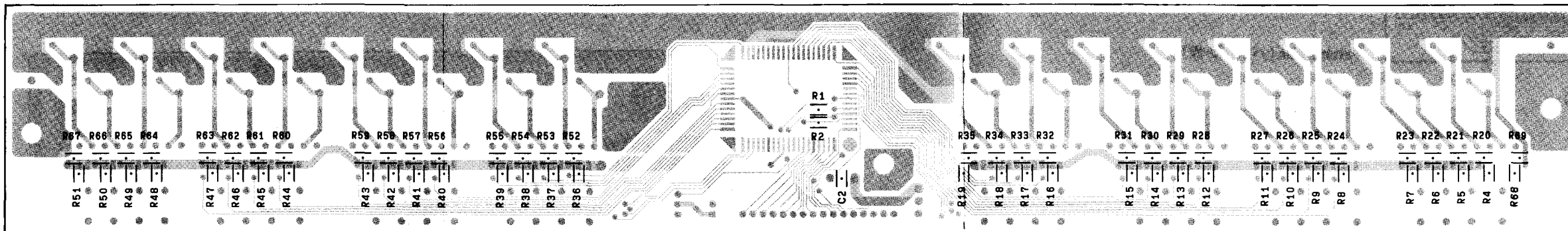
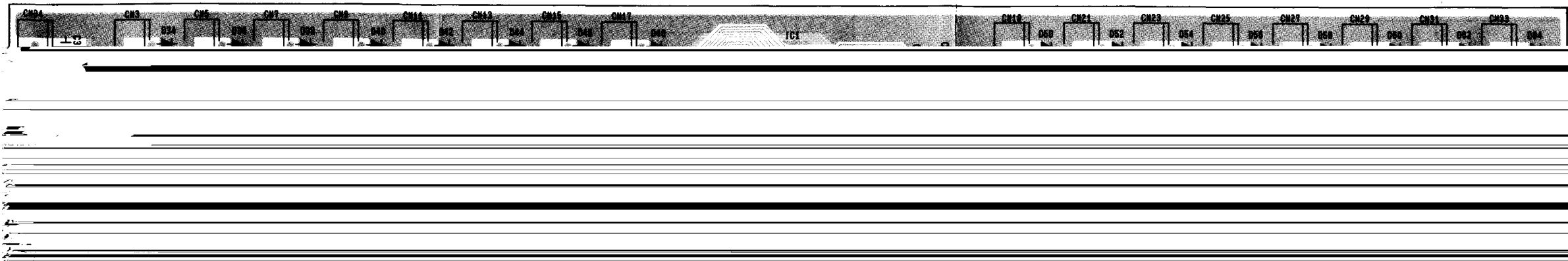


Pattern side (パターン側)

Notes)

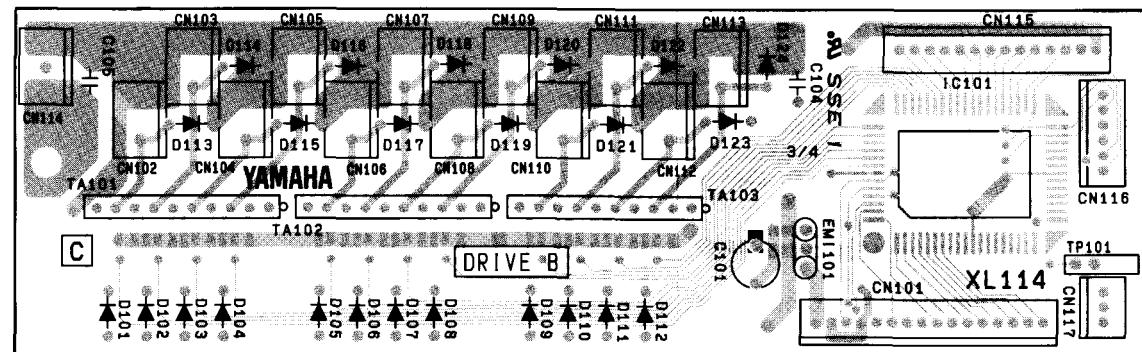
- * Circuit Board : PK-CTL (VN588100)
- 1. IC IC3: M37700SAFP (XI286A00) CPU
- IC7: LC92011B-656 (XK441A00) GATE ARRAY
- IC4: PK-CTL ROM (XL653E00) ROM
- IC5: HM65256BLFP-10 (XI020A00) PS-RAM
- IC6: HN58C66FP-25 (XL026A00) EEP-ROM
- IC8: HD74HC123AFP (XL106A00) SINGLE SHOT
- IC10: NJM2903MT1 (XD672A00) I
- IC9: PST572CMT-R (XL122A00) SYSTEM RESET
- 2. IC IC2: NJM7805FA (XC719A00) REGULATOR 5V
- 3. PHOTO COUPLER IC1: PC9D10 (VN516100) or HCPL-2630 (VN593900)
- 4. CERAMIC RESONATOR CL1: 16M CSA16 (VH307600)
- 5. TRANSISTOR Q1: 2412K Q, R, S (IC241200)
- 6. DIODE D3: EC10DS4-TE12L (VN681100) or D1F40 (VP531700)
- D1,2,4: RLS-73 (VB797600)
- 7. ZENER DIODE ZD1: RD62P-T2 62V (VP615600)

• DRIVE A

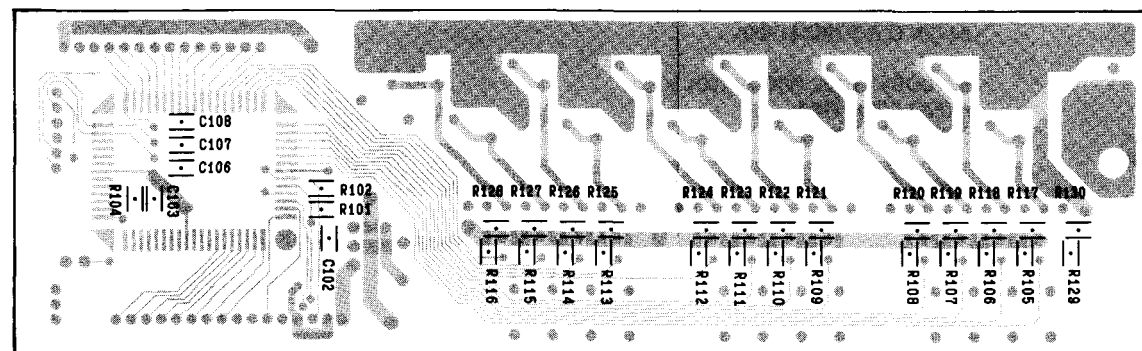


Pattern side (パターン側)

• DRIVE B



Components side (部品側)



Pattern side (パターン側)

Notes)

- * Circuit Board : DRIVE A (VN588200)
- 1. IC
IC1: PWM GENERATOR (XL150A00) YM3421-F
- 2. TRANSISTOR ARRAY
TA1-8: TH3L20 (VB293700) or PU4162 (VP497600)
- 3. DIODE
D1-32: 11ES4 (VB481900)
D33-64: D1NL20U (VN517300)
- 4. EMI FILTER
EMI1: LS MT Y223NB (FZ006970)

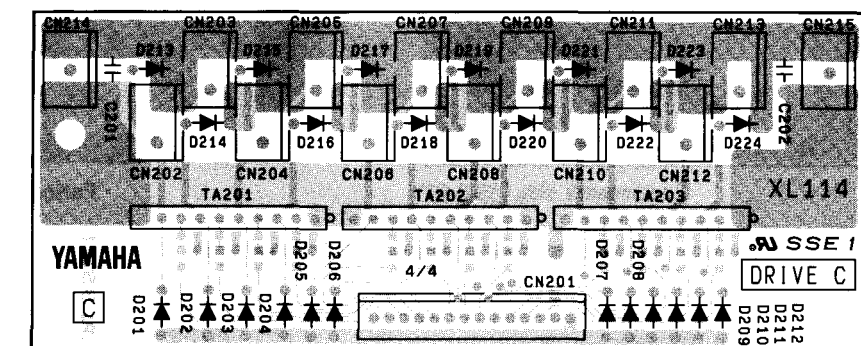
Notes)

- * Circuit Board : DRIVE B (VN588300)
- 1. IC
IC101: PWM GENERATOR (XL150A00) YM3421-F
- 2. TRANSISTOR ARRAY
TA101-103: TH3L20 (VB293700) or PU4162 (VP497600)
- 3. DIODE
D101-112: 11ES4 (VB481900)
D113-124: D1NL20U (VN517300)
- 4. EMI FILTER
EMI101: LS MT Y223NB (FZ006970)

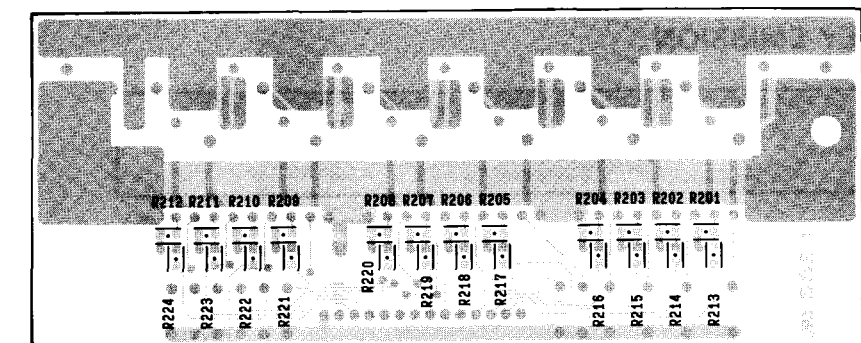
Notes)

- * Circuit Board : DRIVE C (VN588400)
- 1. TRANSISTOR ARRAY
TA201-203: TH3L20 (VB293700) or PU4162 (VP497600)
- 2. DIODE
D201-212: 11ES4 (VB481900)
D213-224: D1NL20U (VN517300)

• DRIVE C

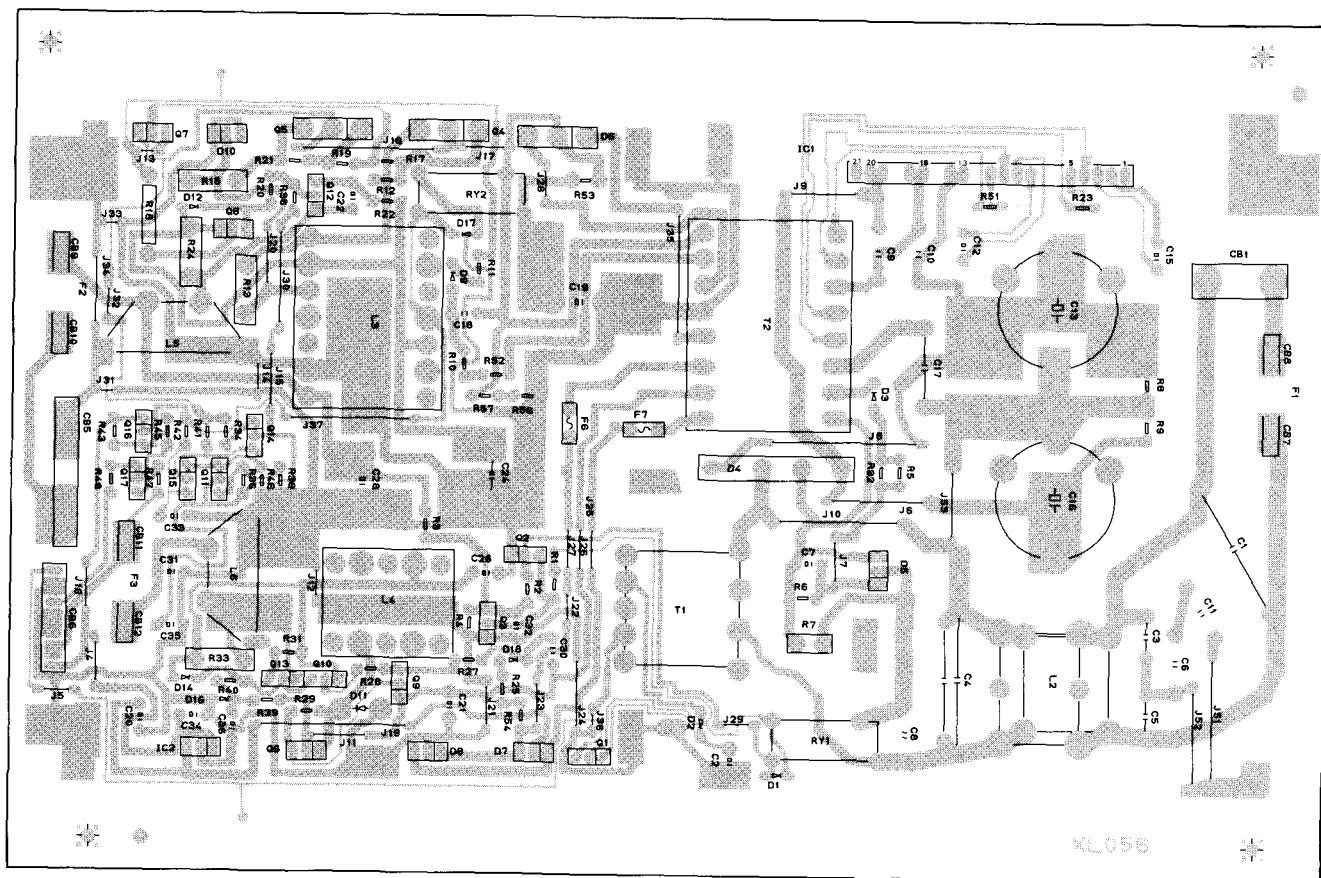


Components side (部品側)



Pattern side (パターン側)

• POWER SUPPLY



Components side (部品側)

Notes)

- * POWER SUPPLY UNIT : (VP182400)J
(VP182900)UC
(VP183000)AB
(VP591800)UC, PWH
(VP591900)AB, PWH
- 1. IC
IC1: YH-S1 (XK413A00) REGULATOR
IC2: NJM78M20FA20V (XK742A00) REGULATOR
- 2. DIGITAL TRANSISTOR
Q1: DTA114ES (VD678500) or UN4111-(TA) (VH800700)
- 3. TRANSISTOR
Q2,13,17: 2SC1815 Y,GR (IC1815M0)
Q3: 2SC1740S R,S (IC174020) or 2SC2603 E,F (IC260320) or 2SC3311A Q,R,S (VH800600) 2SC2336B Q,P (VN838300) 2SB560 E,F (IB056020)
Q8: 2SD438 E,F (ID0438200)
Q9: 2SC3334 (VN932000)
Q10: 2SA1321 (VN931900)
Q11, 12,15: 2SA1015 O,Y (IA101590)
Q14: 2SD1913 R,S (VC407900)
Q16: 2SC3263 (VN137600)
Q4,5: 2SA1006B Q,P (VN838200)
Q7: 2SC3263 (VN137600)
- 4. DIODE
D1,12,14,17: 1SS133T-77 (IF004600)
D2: 1SR139-100T-32 (VH770800)
D3,9,18: D1NL20U (VN478200)
D11: D3S3M02P7.5 (VN417000)
D10: D5LC40 (VN715800)
- 5. ZENER DIODE
D16: MTZ J 9.1C (VG439300)
- 6. DIODE STACK
D4: RBV-606 (VN932100) or D5SBA60 (VN953300)
D8: FMU-12R (VN399400)
D7: FMU-12S (VN399300)
D6: FMU-36S (VN399500)
- 7. THYRISTOR
D5: TM1641S-L (VN774500)
D5: TM1641S-L (VN774600) G

disklavier™ II

PIANOS

DG1FII DC7FIW
DG2FII DGH1BII

PARTS LIST

■ CONTENTS

DISKLAVIERII (Grand) UNITS	1
OVERALL ASSEMBLY	3
CONTROL UNIT	5
PANEL UNIT	7
HAMMER SENSOR UNIT	9
KEY SENSOR UNIT	10
KEY DRIVE UNIT	11
PEDAL DRIVE UNIT	13
ELECTRICAL PARTS	14
POWER SUPPLY UNIT	18
ACCESORIES	20

Notes DESTINATION ABBREVIATIONS

J : Japanese model	C : European model
U : U.S. model	North European model
Canadian model	Hong Kong model
Taiwanese model	A : Australian model
G : General export model	B : British model

- The numbers with "pc." or "pcs" in "Remarks" show quantities for each unit.
- The parts with "—" in "Part No." are not available as spare parts.

■ WARNING:

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

disklavier™ II (Grand) UNITS

PIANO	U.S.	Canadian	Taiwanese	European		
	models	models	models	North European models		
	DG1FII	DG2FII	DC7FIW	DGH1BII	DG1FII	DG2FII
1. CONTROL UNIT (SE SAW) (PE) (PWH)						
1-1. PANEL UNIT (SE SAW)	VP169800	←	←	←	←	←
(PE)	VP169900	←	←	←	←	←
(PWH)	VP170000	←	←	←	←	←
LED 7SEG. P.C.B.	VP367400	←	←	←	←	←
POWER SWITCH P.C.B.	VP367500	←	←	←	←	←
PANEL SWITCH P.C.B.	VN587500	←	←	←	←	←
1-2. CONNECTION P.C.B.	VP366900	←	←	←	←	←
1-3. CTRL OUT P.C.B.	VP367100	←	←	←	←	←
1-4. FDD UNIT	VN522800	←	←	←	←	←
1-5. CONTROLLER P.C.B.	VN587400	←	←	←	←	←
2. HAMMER SENSOR UNIT	VP182100	VP 182200	VP 182300	VP182200	VP182100	VP 182200
2-1. SENSOR P.C.B.	VQ111600	←	←	←	←	←
2-2. EMISSION P.C.B.	VP176100	←	←	←	←	←
3. KEY SENSOR UNIT	VP182500	←	VP182700	VP182500	←	←
3-1. EMISSION P.C.B.	VN613300	←	←	←	←	←
3-2. RECEIVE P.C.B.	VN244500	←	←	←	←	←
4. KEY DRIVE UNIT						
4-1. PK-CTL P.C.B.	VN588100	←	←	←	←	←
4-2. DRIVE A P.C.B	VN588200	←	←	←	←	←
4-3. DRIVE B P.C.B	VN588300	←	←	←	←	←
4-4. DRIVE C P.C.B	VN588400	←	←	←	←	←
4-5. PLUNGER ASS'Y	NX551030	←	←	←	←	←
PLUNGER ASS'Y	NX551040	←	←	←	←	←
4-6. COIL ASS'Y	NX551050	←	←	←	←	←
5. PEDAL DRIVE UNIT(SE SAW, PE) (PWH)	VP191600	←	←	←	←	←
	VP191700	←	←	←	←	←
5-1. PEDAL DRIVE P.C.B.	VP188700	←	←	←	←	←
6. POWER SUPPLY ASS'Y (SE SAW, PE) (PWH)	VP182900	←	←	←	VP183000	←
	VP591800	←	←	←	VP591900	←
7. AC CORD ASS'Y	VP185200	←	←	←	VP185300	←

Hong Kong models		British models				Australian models			
DC7FIIW	DGH1BII	DG1F II	DG2FII	DC7FIIW	DGH1BII	DG1FII	DG2F II	DC7FIIW	DGH1BII
←	←	←	←	←	←	←	←	←	←
←	←	←	←	←	←	←	←	←	←
←	←	←	←	←	←	←	←	←	←
←	←	←	←	←	←	←	←	←	←
←	←	←	←	←	←	←	←	←	←
←	←	←	←	←	←	←	←	←	←
←	←	←	←	←	←	←	←	←	←
←	←	←	←	←	←	←	←	←	←
←	←	←	←	←	←	←	←	←	←
←	←	←	←	←	←	←	←	←	←
VP182300	VP182200	VP182100	VP182200	VP182300	VP182200	VP182100	VP182200	VP182300	VP182200
←	←	←	←	←	←	←	←	←	←
←	←	←	←	←	←	←	←	←	←
VP182700	VP182500	←	←	VP182700	VP182500	←	←	VP182700	VP182500
←	←	←	←	←	←	←	←	←	←
←	←	←	←	←	←	←	←	←	←
←	←	←	←	←	←	←	←	←	←
←	←	←	←	←	←	←	←	←	←
←	←	←	←	←	←	←	←	←	←
←	←	←	←	←	←	←	←	←	←
←	←	←	←	←	←	←	←	←	←
←	←	←	←	←	←	←	←	←	←
←	←	←	←	←	←	←	←	←	←
←	←	←	←	←	←	←	←	←	←
←	←	←	←	←	←	←	←	←	←
←	←	VP185400	←	←	←	VP185500	←	←	←

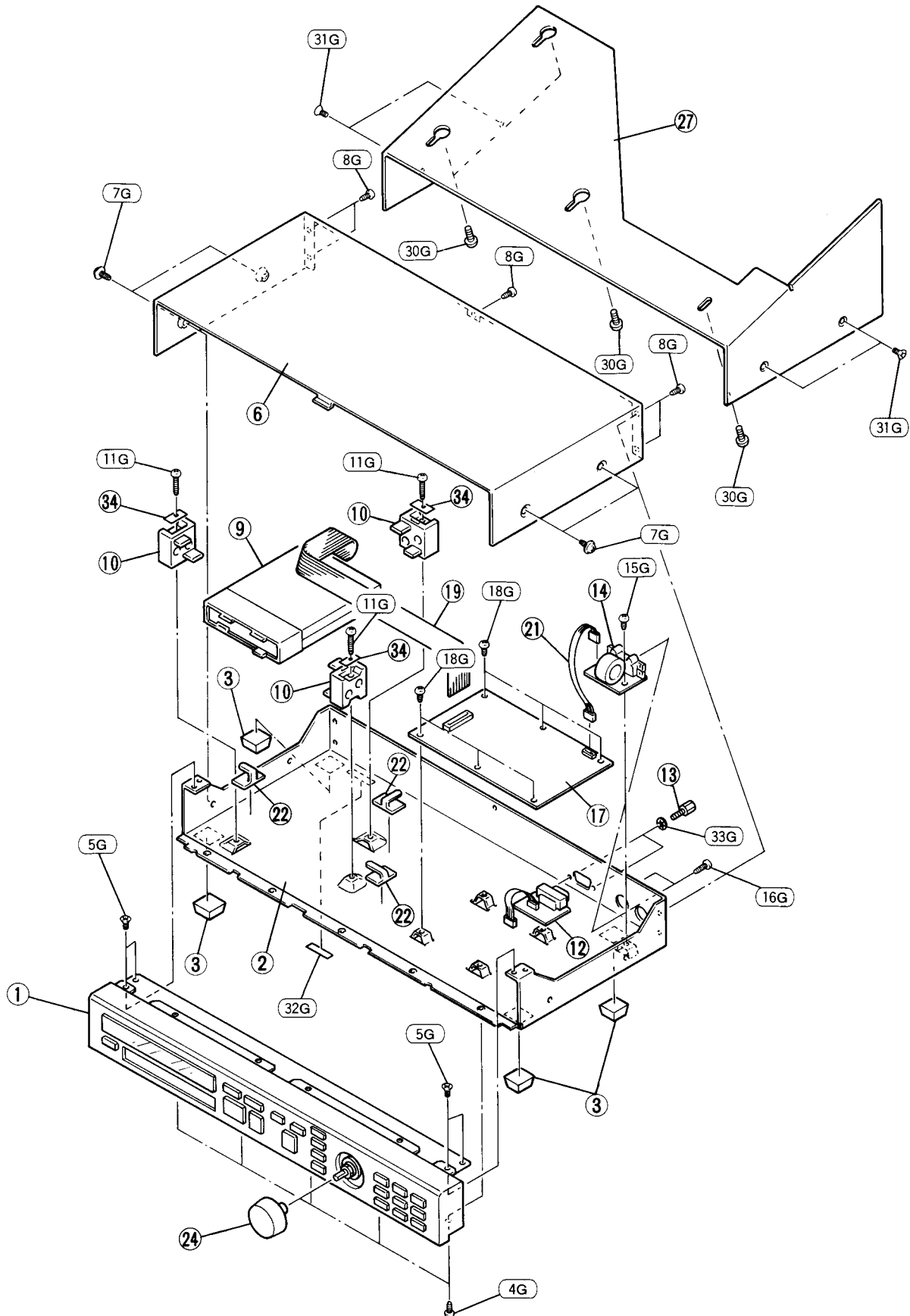
Ref. No.	Part No.	Description	部 品 名	Remarks	ランク
1	--	<OVERALL ASSEMBLY>	<総組立>		
1	--	CONTROL UNIT	コントロールユニット	J (VP16630)	
1	--	CONTROL UNIT	コントロールユニット	J (VP84530)	
1	--	CONTROL UNIT	コントロールユニット	G SAW (VP16660)	
1	--	CONTROL UNIT	コントロールユニット	G PE (VP16670)	
1	--	CONTROL UNIT	コントロールユニット	G PWH (VP16680)	
2	VP182100	HAMMER SENSOR UNIT	ハンマーセンサーユニット		57
2	VP182200	HAMMER SENSOR UNIT	ハンマーセンサーユニット		56
2	VP182300	HAMMER SENSOR UNIT	ハンマーセンサーユニット		57
10	--	LABEL, ACTION	アクション注意書きラベル	J (VH69530)	
10	--	LABEL, ACTION	アクション注意書きラベル	G (VH69540)	
11	VP182500	KEY SENSOR UNIT	キーセンサーユニット		45
11	VP182700	KEY SENSOR UNIT	キーセンサーユニット		46
19	--	FLAT CABLE	束線	(VP18090)	
20	CB818120	NYLON CLAMP	ナイロンクランプ		01
23	--	KEY DRIVE UNIT	キードライブユニット		(VP17530)
23	--	KEY DRIVE UNIT	キードライブユニット		(VP17540)
23	--	KEY DRIVE UNIT	キードライブユニット		(VP17550)
23	--	KEY DRIVE UNIT	キードライブユニット		(VP17560)
23	--	KEY DRIVE UNIT	キードライブユニット		(VP17570)
23	--	KEY DRIVE UNIT	キードライブユニット		(VP17580)
23	--	KEY DRIVE UNIT	キードライブユニット		(VP17590)
23	--	KEY DRIVE UNIT	キードライブユニット		(VP17600)
37	VP182400	POWER SUPPLY UNIT	電源ユニット	J	58
37	VP182900	POWER SUPPLY UNIT	電源ユニット	U	59
37	VP183000	POWER SUPPLY UNIT	電源ユニット	ABC	58
37	VP591800	POWER SUPPLY UNIT	電源ユニット	U	59
37	VP591900	POWER SUPPLY UNIT	電源ユニット	ABC	58
△38	VP185100	AC CORD ASS'Y	電源コードASSY	J	
△38	VP185200	AC CORD ASS'Y	電源コードASSY	U	
△38	VP185300	AC CORD ASS'Y	電源コードASSY	C	
△38	VP185400	AC CORD ASS'Y	電源コードASSY	B	
△38	VP185500	AC CORD ASS'Y	電源コードASSY	A	
40	--	NYLON CLAMP	ナイロンクランプ		(VP35900)
41	--	NYLON CLAMP	ナイロンクランプ		(VP35910)
42	CB818120	NYLON CLAMP	ナイロンクランプ	J	01
42	--	NYLON CLAMP	ナイロンクランプ	G	(VP35910)
44	--	CORD BINDER	コード止めバンド		(VP93940)
46	--	PLATE	奥かまちプレート		(VP18570)
48	CB069250	CORD BINDER	奥かまちロックタイ		01
50	--	NYLON CLAMP	ナイロンクランプ		(VP35900)
57	VP191600	PEDAL DRIVE UNIT	P. ドライブユニット		69
57	VP191700	PEDAL DRIVE UNIT	P. ドライブユニット		69
58	VP187800	COVER, PEDAL DRIVE UNIT	ペダルメインカバー		
58	VP187900	COVER, PEDAL DRIVE UNIT	ペダルメインカバー		
60	VP343900	ANGLE BRACKET, PS	電源アングル		
3G	VP205500	LONG LOCK SCREW	ロングロックネジ		
6S	VP180300	HAMMER SHUTTER	ハンマーシャッター	88pcs	
15G	EI330100	BIND HEAD TAPPING SCREW-1	ハインドTP1種	8pcs	01
16S	BB500690	KEY SHUTTER	キーシャッター	88pcs	01
21G	EX500116	TRUS HEAD TAPPING SCREW-1	トラスTP1種	2pcs	01
22G	VG007600	PAN HEAD TAPPING SCREW	ナベTP1種	2pcs	01
28G	VI240300	CAP SCREW	六角穴付ボルト	4pcs	
28G	VP183300	CAP SCREW	六角穴付ボルト	PWH 4pcs	
29G	ET500140	FLAT WASHER	平座金みがき丸	4pcs	01
29G	VP239700	FLAT WASHER	平座金みがき丸	PWH 4pcs	
30G	ET700150	SPRING WASHER	バネ座金	4pcs	
30G	EV301600	SPRING WASHER	バネ座金	PWH 4pcs	01
31G	EN640120	TRUS HEAD TAPPING SCREW-1	トラスTP1種	4pcs	
31G	VP183500	TRUS HEAD TAPPING SCREW-1	トラスTP1種	PWH 4pcs	
39G	EN640120	TRUS HEAD TAPPING SCREW-1	トラスTP1種	4pcs	
43G	EX500116	TRUS HEAD TAPPING SCREW-1	トラスTP1種	4pcs	01
47G	EX500116	TRUS HEAD TAPPING SCREW-1	トラスTP1種	2pcs	01
49G	EX500116	TRUS HEAD TAPPING SCREW-1	トラスTP1種	1pc.	01
51G	VP233600	BIND HEAD SCREW	ハインド小ネジ	1pc.	
61G	VL064300	PAN HEAD SCREW	ナベ小ネジ	6pcs	01

* : New Parts (新規部品) NR

ランク : Japan Only



■ CONTROL UNIT

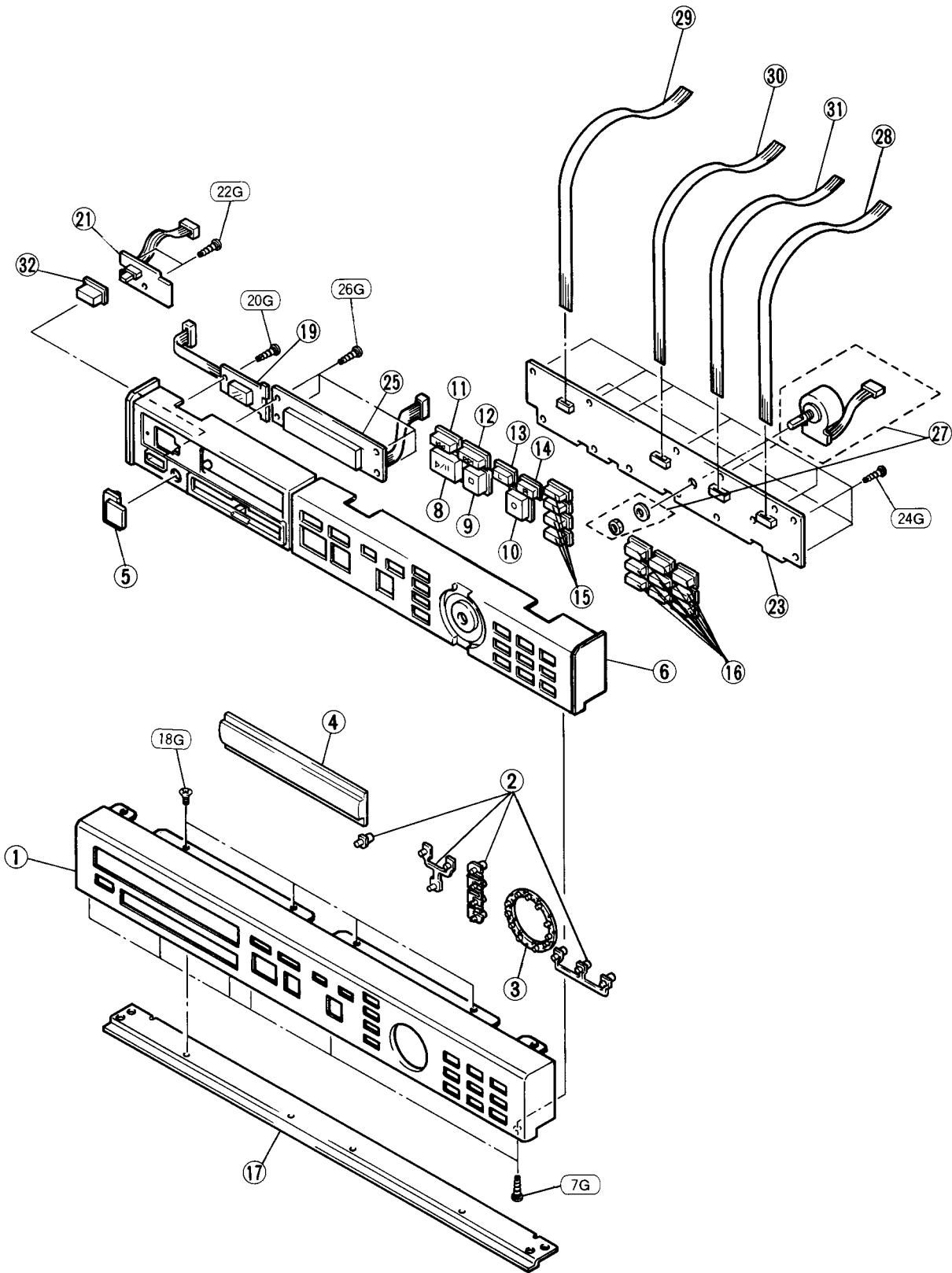


Ref. No.	Part No.	Description	部品名	Remarks	ランク
1	VP169400	<CONTROL UNIT> PANEL UNIT	<コントロールユニット> パネル ユニッ ト	J	
1	VP169800	PANEL UNIT	SAV パネル ユニッ ト	UCAB	
1	VP169900	PANEL UNIT	PE パネル ユニッ ト	UCAB	
1	VP170000	PANEL UNIT	PWH パネル ユニッ ト	UCAB	
* 2	VM772500	BOTTOM CHASSIS	ボトムシャーシ		
* 2	VP170200	BOTTOM CHASSIS	PWH ボトムシャーシ	黒白	
* 3	CB826590	FOOT	ゴトムアッ シ		02
* 6	VH772800	TOP COVER	トップカバー	黒白	
* 6	VP171700	TOP COVER	PWH トップカバー	黒白	
* 9	VN522800	FDD UNIT	MF355E-492HD	3.5 FDD	32
* 10	VM778600	SPACER	FDD	スペーサ	06
* 12	VP366900	CIRCUIT BOARD	CONNECTION	本体接続シ ート	
* 13	VN632900	LOCK SCREW	RDG-LNA-W1 (01)	ロック ネジ	2pcs
* 14	VP367100	CIRCUIT BOARD	CTRL OUT	CTRL OUTシ ート	
* 17	VH587400	CIRCUIT BOARD	CONTROLLER	コントローラシ ート	29
* 19	VN520100	FFC CABLE	300mm	FFC ケーブル	04
* 21	--	CONNECTOR ASSEMBLY	OUT PUT	束線 出力	(VN52080)
* 22	--	CORD BINDER		束線 止め	(VP34320)
* 24	VM775900	KNOB		ノブ 黒	04
* 24	VN636400	KNOB	PWH	ノブ 白	04
* 27	VP811800	HANGER ASS'Y		ハンガ ー A S S Y	黒白
* 27	VP812100	HANGER ASS'Y	PWH	ハンガ ー A S S Y	黒白
* 34	VP765100	LIMITER	FDD	リミッ ター	
* 4G	EP630210	BIND HEAD TAPPING SCREW-S	3.0X6 ZMC2BL	+ バイ ン ド S タ イ ト	5pcs
* 4G	VP206100	BIND HEAD TAPPING SCREW-S	3.0X6 FNM33G	+ バイ ン ド S タ イ ト	PWH 5pcs
* 5G	VF378100	FLAT HEAD TAPPING SCREW-S	3.0X6 ZMC2Y	+ 皿 S タ イ ト	4pcs
* 7G	EX550170	BW HEAD TAPPING SCREW-S	4.0X8-10 FCM3BL	+ B W H S タ イ ト	4pcs
* 7G	VD069600	BW HEAD TAPPING SCREW-S	4X8-10 FNM33G	+ B W H S タ イ ト	PWH 4pcs
* 8G	VP552000	BIND HEAD TAPPING SCREW-S	A 3.0X6 ZMC2BL	+ バイ ン ド S タ イ ト	5pcs
* 8G	VP552100	BIND HEAD TAPPING SCREW-S	A 3.0X6 FNM33G	+ バイ ン ド S タ イ ト	PWH 5pcs
* 11G	VP813600	BIND HEAD TAPPING SCREW-S	3X25	+ バイ ン ド S タ イ ト	3pcs
* 15G	EP630210	BIND HEAD TAPPING SCREW-S	3.0X6 ZMC2BL	+ バイ ン ド S タ イ ト	1pc.
* 16G	VJ555800	BIND HEAD TAPPING SCREW-P	3.0X12 ZMC2BL	+ バイ ン ド P タ イ ト	2pcs
* 18G	EP630210	BIND HEAD TAPPING SCREW-S	3.0X6 ZMC2BL	+ バイ ン ド S タ イ ト	6pcs
* 30G	EG350170	BIND HEAD SCREW	5.0X12 ZMC2BL	+ バイ ン ド 小 ネジ	4pcs
* 31G	VP234100	FLAT HEAD SCREW	4.0X10 ZMC2BL	+ 皿 小 ネジ	4pcs
* 31G	EB040100	FLAT HEAD SCREW	4.0X10 FNM33G	+ 皿 小 ネジ	PWH 4pcs
* 32G	--	LABEL	SER.NO	ラベ ル	(VP54470)
* 33G	VP594800	TOOTHED LOCK WASHER	2.6 FNM33G	歯付 き 座 金 内 歯 形	2pcs

* : New Parts (新規部品) NR

ランク : Japan Only

■ PANEL UNIT



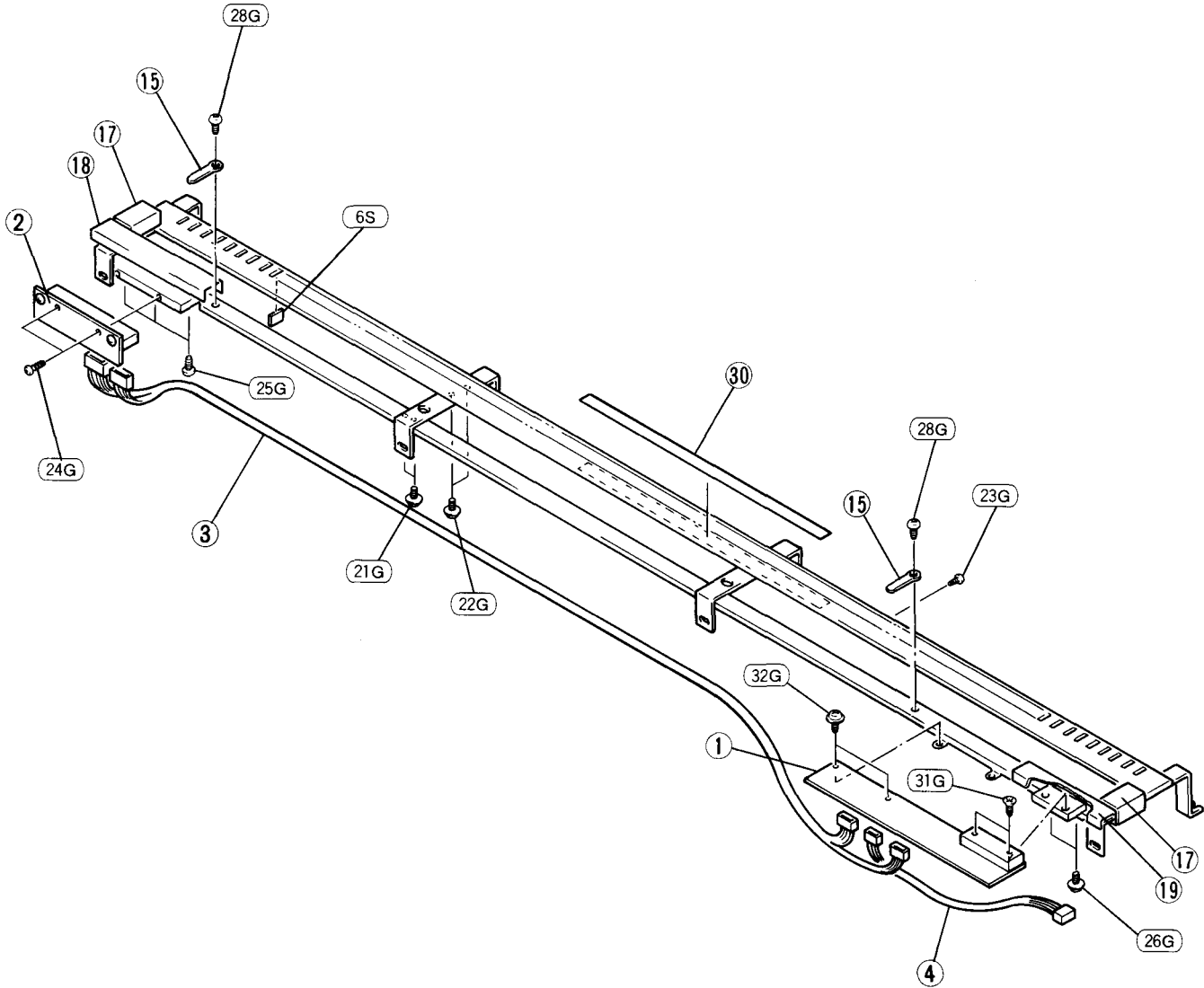
Ref. No.	Part No.	Description	部品名	Remarks	ランク	
	VP169400 VP169800 VP169900 VP170000	<PANEL UNIT> PANEL UNIT PANEL UNIT PANEL UNIT PANEL UNIT	SAW PE PWH	<パネルユニット> パネルユニット パネルユニット パネルユニット パネルユニット	J UCAB UCAB UCAB	
1	VP138100	FRONT PANEL		フロントパネル	J	
1	VP138400	FRONT PANEL	SAW	フロントパネル	UCAB	
1	VP138500	FRONT PANEL	PE	フロントパネル	UCAB	
1	VP138600	FRONT PANEL	PWH	フロントパネル	UCAB	
2	VM767200	LENS		レンズ		05
3	VM767100	LENS		レンズ		04
4	VM773500	LCD COVER		LCDマスク		08
5	VM766900	LENS		レンズ		04
6	VM773600	CONNECTOR HOUSING		ハウジング		07
6	VN633000	CONNECTOR HOUSING	PWH	ハウジング		08
8	VM773700	BUTTON, SWITCH	PLAY 380	キートップ	SAW	03
8	VM773800	BUTTON, SWITCH	PLAY 346	キートップ	PE	03
8	VN833100	BUTTON, SWITCH	PLAY WH	キートップ	PWH	03
9	VM773900	BUTTON, SWITCH	STOP 380	キートップ	SAW	03
9	VM774000	BUTTON, SWITCH	STOP 346	キートップ	PE	03
9	VN633200	BUTTON, SWITCH	STOP WH	キートップ	PWH	03
10	VM774100	BUTTON, SWITCH	REC	キートップ		04
10	VN633300	BUTTON, SWITCH	REC WH	キートップ	PWH	04
11	VM774200	BUTTON, SWITCH	REV 380	キートップ	SAW	03
11	VM774400	BUTTON, SWITCH	REV 346	キートップ	PE	03
11	VN633400	BUTTON, SWITCH	REV WH	キートップ	PWH	03
12	VH774500	BUTTON, SWITCH	FWD 380	キートップ	SAW	03
12	VM774600	BUTTON, SWITCH	FWD 346	キートップ	PE	03
12	VN633500	BUTTON, SWITCH	FWD WH	キートップ	PWH	03
13	VM774700	BUTTON, SWITCH	L 380	キートップ	SAW	03
13	VM774900	BUTTON, SWITCH	L 346	キートップ	PE	03
13	VN633600	BUTTON, SWITCH	L WH	キートップ	PWH	03
14	VM775100	BUTTON, SWITCH	R 380	キートップ	SAW	03
14	VM775200	BUTTON, SWITCH	R 346	キートップ	PE	03
14	VN633700	BUTTON, SWITCH	R WH	キートップ	PWH	03
15	VM775400	BUTTON, SWITCH		キートップ		03
15	VN633800	BUTTON, SWITCH	WH	キートップ	PWH	03
16	VM775600	BUTTON, SWITCH		キートップ		03
16	VN633900	BUTTON, SWITCH	WH	キートップ	PWH	03
17	VM772700	STRUCTURE		ストラクチャー		06
19	VP367400	CIRCUIT BOARD	LED 7 SEG.	7セグLEDシート		
21	VP367500	CIRCUIT BOARD	POWER SWITCH	電源スイッチシート		
23	VN587500	CIRCUIT BOARD	PANEL SWITCH	パネルスイッチシート		
25	VN635200	LCD MODULE	LCD ASS'Y	LCD ASS'Y		22
27	VN626800	ROTARY ENCODER ASS'Y		ロータリーエンコーダー		
28	VN520200	FFC CABLE	6P 100mm	FFCケーブル		01
29	VN520400	FFC CABLE	7P 150mm	FFCケーブル		01
30	VN520600	FFC CABLE	8P 100mm	FFCケーブル		02
31	VN520700	FFC CABLE	10P 100mm	FFCケーブル		02
32	VM775800	BUTTON, SWITCH	PW	キートップ		03
32	VN665400	BUTTON, SWITCH	PW WH	キートップ		03
7G	VA819100	BIND HEAD TAPPING SCREW-P	3.0X6 ZMC2BL	+ バインド P タイト	6pcs	01
7G	VP206200	BIND HEAD TAPPING SCREW-P	3.0X6 FNM33G	+ バインド P タイト	WH 6pcs	
18G	VF378100	FLAT HEAD TAPPING SCREW-S	3.0X6 ZMC2Y	+ 皿 S タイト	4pcs	01
20G	VD016700	BIND HEAD TAPPING SCREW-P	2.0 X 6 ZMC2Y	+ バインド P タイト	1pc.	01
22G	VA819100	BIND HEAD TAPPING SCREW-P	3.0X6 ZMC2BL	+ バインド P タイト	2pcs	01
24G	VA819100	BIND HEAD TAPPING SCREW-P	3.0X6 ZMC2BL	+ バインド P タイト	13pcs	01
26G	VD016700	BIND HEAD TAPPING SCREW-P	2.0 X 6 ZMC2Y	+ バインド P タイト	4pcs	01

* : New Parts (新規部品) NR

※キートップ：国内はSAW

ランク：Japan Only

■ HAMMER SENSOR UNIT

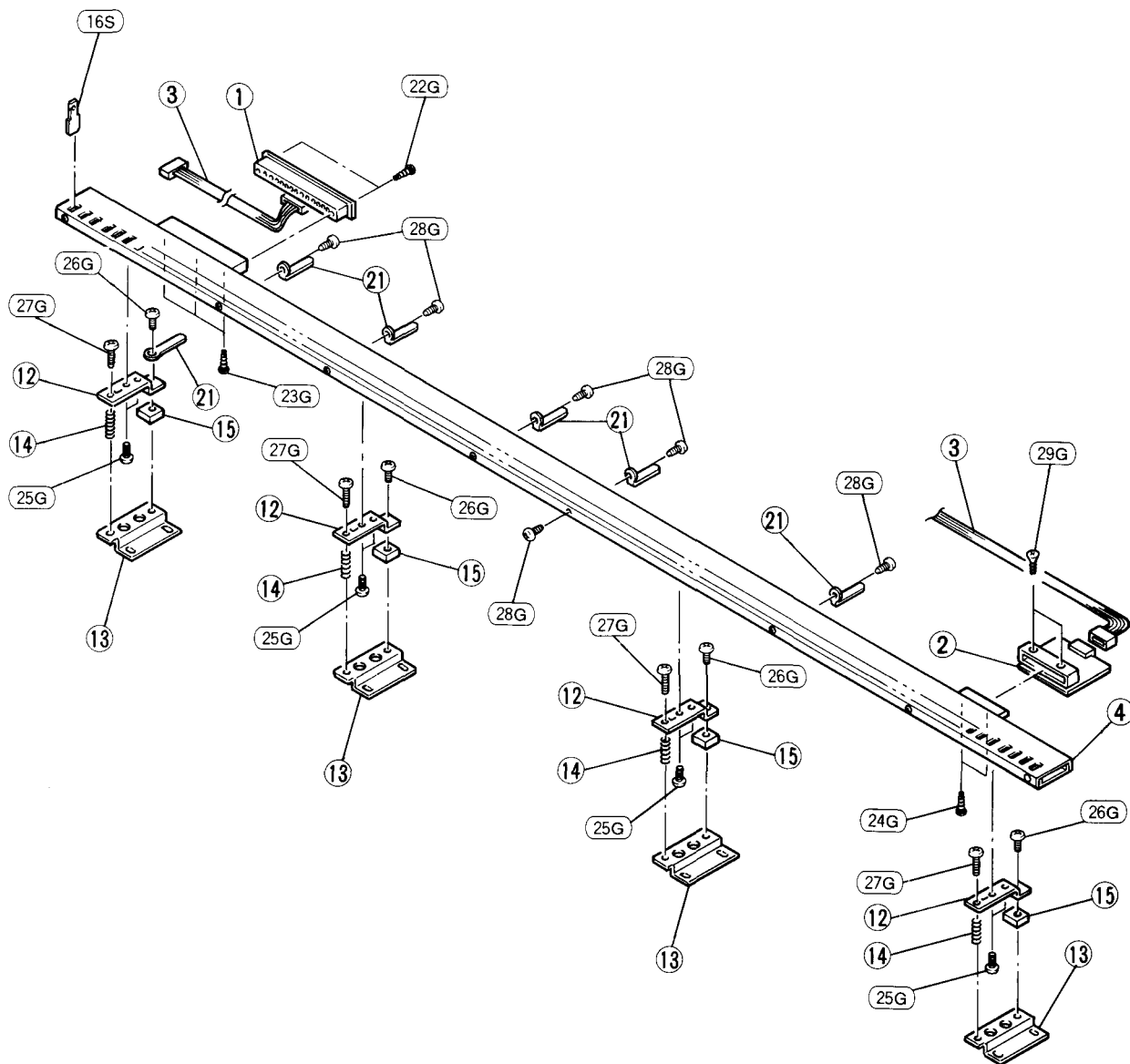


Ref. No.	Part No.	Description	部品名	Remarks	ランク
		<HAMMER SENSOR UNIT>	<ハンマーセンサーユニット>		
	VP182100	HAMMER SENSOR UNIT	ハンマーセンサー ユニット		57
	VP182200	HAMMER SENSOR UNIT	ハンマーセンサー ユニット		56
	VP182300	HAMMER SENSOR UNIT	ハンマーセンサー ユニット		57
*	1	VQ1111600	CIRCUIT BOARD	センサーシート	
*	2	VP178100	CIRCUIT BOARD	ハンマー発光シート	
	3	--	CONNECTOR ASSEMBLY	東線 GHS-A	(VP17670)
	4	--	FLAT CABLE	東線 GHS-B	(VP17690)
	15	CB502030	CORD BINDER	S-75B	
	17	--	COVER A	A	保護カバー (VP17860)
	18	--	COVER B	B	保護カバー (VP17870)
	19	--	COVER C	C	保護カバー (VP17880)
	30	--	LABEL, HAMMER SENSOR	注意書ラベル	(VP24310)
*	6S	VP180300	HAMMER SHUTTER	ハンマーシャッター	88pcs
*	21G	VP178900	BW HEAD SCREW	+ BWH小ネジ	8pcs
*	22G	VP178900	BW HEAD SCREW	+ BWH小ネジ	8pcs
*	23G	VP265500	PAN HEAD TAPPING SCREW-S	+ナベSタイト	8pcs
*	24G	VP265600	PAN HEAD TAPPING SCREW-P	+ナベPタイト	2pcs
*	25G	VP179200	PAN HEAD TAPPING SCREW-1	+ナベTP 1種	3pcs
*	26G	VP179200	PAN HEAD TAPPING SCREW-1	+ナベTP 1種	2pcs
	28G	VA078100	BIND HEAD TAPPING SCREW-S	+バインドSタイト	5pcs
	31G	VA214700	FLAT HEAD TAPPING SCREW-1	+皿TP 1種	2pcs
*	32G	VH661200	BW HEAD TAPPING SCREW-S	+ BWH Sタイト	2pcs

* : New Parts (新規部品) NR

ランク : Japan Only

■ KEY SENSOR UNIT



Ref. No.	Part No.	Description	部品名	Remarks	ランク
		<KEY SENSOR UNIT>			
	VP182500	KEY SENSOR UNIT	G1 G2	<キーセンサーユニット>	45
	VP182700	KEY SENSOR UNIT	C7	キーセンサーユニット	46
*	1	VN613300	CIRCUIT BOARD	キー発光シート	
*	2	VN244500	CIRCUIT BOARD	キー受光シート	
	3	--	FLAT CABLE	束線	(VP18280)
*	4	VP578100	BRACKET	センサーブラケット	
	12	AA503940	STAY	センサーステー	04
	13	AA503960	STAY	キーセンサーステー	04
	14	AA503970	SPRING	高さ調整パネ	01
	15	CB502800	SPACER	ゴムスペーサー	01
	21	CB502030	CORD BINDER	束線止め	01
	16S	BB500690	KEY SHUTTER	キーシャッター	88pcs
	22G	VP265600	PAN HEAD TAPPING SCREW-P	ナベPタイト	2pcs
*	23G	VP179200	PAN HEAD TAPPING SCREW-1	ナベTP 1種	3pcs
*	24G	VP179200	PAN HEAD TAPPING SCREW-1	ナベTP 1種	2pcs
*	25G	VP178900	BW HEAD SCREW	+BWH小ネジ	8pcs
	26G	VB659000	BIND HEAD SCREW	+パインド小ネジ	4pcs
	27G	EG330450	BIND HEAD SCREW	+パインド小ネジ	4pcs
*	28G	VP183100	PAN HEAD TAPPING SCREW-S	ナベSタイト	16pcs
	29G	VA214700	FLAT HEAD TAPPING SCREW-1	+皿TP 1種	2pcs

* : New Parts (新規部品) NR

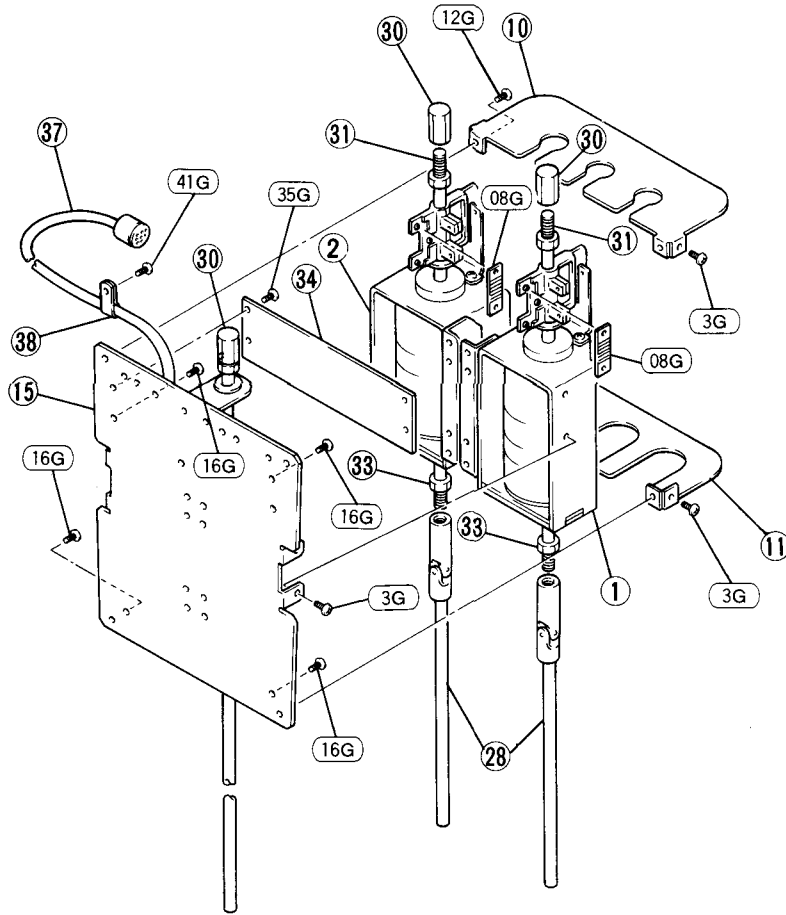
ランク : Japan Only

Ref. No.	Part No.	Description	部品名	Remarks	ランク
		<KEY DRIVE UNIT>		<キードライブユニット>	
1	--	UPPER YOKE	G1R	(VP16110)	
1	--	UPPER YOKE	G7R	(VP16140)	
2	--	UPPER YOKE	G1C	(VP16120)	
2	--	UPPER YOKE	G7C	(VP16150)	
3	--	UPPER YOKE	G1L	(VP16130)	
3	--	UPPER YOKE	G7L	(VP16160)	
7	--	LOWER YOKE	G1	(VP16170)	
7	--	LOWER YOKE	G1-WH	(VP16210)	
7	--	LOWER YOKE	G2	(VP16180)	
7	--	LOWER YOKE	G2-WH	(VP16220)	
7	--	LOWER YOKE	C7	(VP16200)	
7	--	LOWER YOKE	C7-WH	(VP16240)	
7	--	LOWER YOKE	GH1	(VP16190)	
7	--	LOWER YOKE	GH1-WH	(VP16230)	
8	--	YOKE COVER	1A	(VP16250)	
8	--	YOKE COVER	1A-WH	(VP16260)	
8	--	YOKE COVER	7A	(VP16440)	
8	--	YOKE COVER	7A-WH	(VP16480)	
8	--	YOKE COVER	H1A	(VP16340)	
8	--	YOKE COVER	H1A-WH	(VP16430)	
9	--	YOKE COVER	1B	(VP16280)	
9	--	YOKE COVER	1B-WH	(VP16390)	
9	--	YOKE COVER	7B	(VP16450)	
9	--	YOKE COVER	7B-WH	(VP16490)	
10	--	YOKE COVER	1C	(VP16300)	
10	--	YOKE COVER	1C-WH	(VP16400)	
10	--	YOKE COVER	7C	(VP16460)	
10	--	YOKE COVER	7C-WH	(VP16500)	
11	--	YOKE COVER	1D	(VP16330)	
11	--	YOKE COVER	1D-WH	(VP16470)	
11	--	YOKE COVER	7D	(VP16470)	
11	--	YOKE COVER	7D-WH	(VP16510)	
16	--	SIDE ANGLE	R	(VP16560)	
16	--	SIDE ANGLE	R-WH	(VP16580)	
17	--	SIDE ANGLE	L	(VP16570)	
17	--	SIDE ANGLE	L-WH	(VP16590)	
20	--	CONNECTOR CASE		(VP16690)	
25	VN588100	CIRCUIT BOARD	PK-CTL	スト	28
26	VN588200	CIRCUIT BOARD	DRIVE A	ドライブ A シート	19
27	VN588300	CIRCUIT BOARD	DRIVE B	ドライブ B シート	19
28	VN588400	CIRCUIT BOARD	DRIVE C	ドライブ C シート	19
30	--	CONNECTOR ASSEMBLY	GKD-A	東線 GKD-A	(VP56470)
31	--	CONNECTOR ASSEMBLY	GKD-B	東線 GKD-B	(VP16710)
32	--	CONNECTOR ASSEMBLY	GKD-C	東線 GKD-C	(VP16720)
33	--	CONNECTOR ASSEMBLY	GKD-D	東線 GKD-D	(VP16730)
34	--	CONNECTOR ASSEMBLY	GKD-E	東線 GKD-E	(VP16740)
35	--	CONNECTOR ASSEMBLY	GKD-F	東線 GKD-F	(VP16750)
36	--	CONNECTOR ASSEMBLY	GKD-G	東線 GKD-G	(VP16760)
37	VP167700	CONNECTOR ASSEMBLY	GKD-H	東線 GKD-H	
37	VP248600	CONNECTOR ASSEMBLY	GKD-H(W)	東線 GKD-H	
40	--	BUSHING	KG-024L	自在ブッシュ	(VP60370)
42	--	COVER		ホールカバー	(VP17010)
45	VN613100	THERMISTOR ASSEMBLY	KEY DRIVE	サーミスタ Assy	
47	VP167900	THERMOSTAT ASSEMBLY	GP KD TH	サーモスタット Assy	
48	NX551030	PLUNGER ASSEMBLY	B2.5	プランジャー Assy	
49	NX551040	PLUNGER ASSEMBLY	W2.5	プランジャー Assy	
50	NX551050	COIL ASSEMBLY	WB210	コイル Assy	
55	VP169000	PHONE JACK ASSEMBLY		ホンジャック Assy	
60	--	LABEL, FOOT CONTROL		フットコントローラ ラベル	(VP49650)
6G	VP171400	CAP SCREW	4.0X30 ZMC2-Y	六角穴付ボルト	32pcs
14G	EG340340	BIND HEAD SCREW	4.0X6 ZMC2BL	+ バインド小ネジ	22pcs
14G	VP891300	BIND HEAD SCREW	4.0X6 FNN33G	+ バインド小ネジ	22pcs
21G	VP171400	CAP SCREW	4.0X30 ZMC2-Y	六角穴付ボルト	2pcs
23G	EG340340	BIND HEAD SCREW	4.0X6 ZMC2BL	+ バインド小ネジ	6pcs
29G	VA078100	BIND HEAD TAPPING SCREW-S	3.0X5 ZMC2Y	+ バインド S タイト	13pcs
41G	EP630210	BIND HEAD TAPPING SCREW-S	3.0X6 ZMC2BL	+ バインド S タイト	4pcs
41G	VP252300	BIND HEAD TAPPING SCREW-S	3.0X6 FNN33G	+ バインド S タイト	4pcs
46G	VA078100	BIND HEAD TAPPING SCREW-S	3.0X5 ZMC2Y	+ バインド S タイト	1pc.

* : New Parts (新規部品) NR

ランク : Japan Only

■ PEDAL DRIVE UNIT



Ref. No.	Part No.	Description	部品名	Remarks	ランク
	VP191600	<PEDAL DRIVE UNIT>	<ペダルドライブユニット>		
	VP191700	PEDAL DRIVE UNIT	P.ドライブユニット	PWH	69
	VP186200	PEDAL DRIVE UNIT	P.ドライブユニット		69
△ 1	VP186200	SOLENOID, LOUD	ラウドソレノイド Assy		
△ 2	VP186300	SOLENOID, SHIFT	シフトソレノイド Assy		
10	VP187400	TOP COVER	トップカバー		
10	VP187500	TOP COVER	トップカバー		
11	VP187600	BOTTOM COVER	ボトムカバー		
11	VP187700	BOTTOM COVER	ボトムカバー	PWH	
15	--	BASE PLATE	ペダルベースプレート	(VP18800)	
15	--	BASE PLATE	ペダルベースプレート	PWH (VP18810)	
28	VP189600		突き上げ棒 L R Assy		
28	VP189700		突き上げ棒 L R Assy	PWH	
30	--	NUT	袋ナット	(VH16690)	
31	--	NUT	突き上げ棒ナット	(VH16700)	
33	--	NUT	突き上げ棒ナット	(VH16700)	
34	VP188700	CIRCUIT BOARD	Pドライブシート		
36	--	FLAT CABLE	TH-GPD		
37	VP188900	FLAT CABLE	東線	(VP18900)	
37	VP251600	FLAT CABLE	東線	PWH	
38	--	NYLON CLAMP	ナイロンクランプ	(VP35950)	
38	--	NYLON CLAMP	ナイロンクランプ	PWH (VI45580)	
3G	EG340100	BIND HEAD SCREW	+バインド小ネジ	8pcs	
8G	VP033600	GRAY SCALE	グレースケール G P		
12G	VP256500	BIND HEAD SCREW	+バインド小ネジ	4pcs	
14G	EG340340	BIND HEAD SCREW	+バインド小ネジ	4pcs	01
14G	VP256400	BIND HEAD SCREW	+バインド小ネジ	PWH 4pcs	
16G	EH040208	TRUS HEAD TAPPING SCREW-1	+トラス T P 1種	4pcs	01
35G	VA078100	BIND HEAD TAPPING SCREW-S	+バインド S タイト	5pcs	01
41G	EX500116	TRUS HEAD TAPPING SCREW-1	+トラス T P 1種	2pcs	01

* : New Parts (新規部品) NR

ランク : Japan Only

■ ELECTRICAL PARTS

Ref	Part No	Description	部品名	Remarks	ランク	
* * * * *	VN587400 VP366900 VP367100 VP367400 VP367500	<ELECTRICAL PARTS> CIRCUIT BOARD CIRCUIT BOARD CIRCUIT BOARD CIRCUIT BOARD CIRCUIT BOARD	COTROLLER CONNECTION CTRL OUT LED 7 SEG. POWER SWITCH	<電気部品> コントローラシート 本体接続シート CTRL OUTシート 7セグLEDシート 電源スイッチシート		29
* * * * *	VP367600 VN587500 VQ111600 VP176100 VN244500	CIRCUIT BOARD CIRCUIT BOARD CIRCUIT BOARD CIRCUIT BOARD CIRCUIT BOARD	CTRL IN PANEL SWITCH SENSOR HAMMER EMISSION KEY RECEIVE	CTRL INシート パネルスイッチシート センサシート ハンマー発光シート キー受光シート		
* * * * *	VN613300 VN588100 VN588200 VN588300 VN588400	CIRCUIT BOARD CIRCUIT BOARD CIRCUIT BOARD CIRCUIT BOARD CIRCUIT BOARD	KEY EMISSION PK-CTL DRIVE A DRIVE B DRIVE C	キー発光シート PK-CTLシート ドライブAシート ドライブBシート ドライブCシート		28 19 19 19
* * * * *	VP188700	CIRCUIT BOARD	PEDAL DRIVE	Pドライブシート		
* * * * *	VN587400 XI040A00 XL029A00	CIRCUIT BOARD IC IC	COTROLLER Z8018008PSC LC92011B-726	コントローラシート IC IC	CPU GATE ARRAY	29
* * * * *	XL652G00 XM175A00 XI939A00 XI122A00 XC723A00	IC IC IC IC IC	HM658128ALFP-10 HD63266F FDC PST572CMT-R SN74HCU04NSR	IC IC IC IC IC	MASKROM PS RAM FDC SYSTEM RESET INVERTER	08 09 01
* * * * *	XC725A00 XL106A00 XF937A00 VN406200 RD253470	IC IC IC PHOTO COUPLER CHIP CARBON RESISTOR	SN74HC14NSR HD74HC123AFP LU59530 HCPL-0600-500 4.7 0.1 J	IC IC IC フォトカプラー チップ抵抗	INVERTER SINGLE SHOT DECODER	03 05 05 01
* * * * *	RD254220 RD254470 RD254820 RD255100 RD255220	CHIP CARBON RESISTOR CHIP CARBON RESISTOR CHIP CARBON RESISTOR CHIP CARBON RESISTOR CHIP CARBON RESISTOR	22.0 0.1 J 47.0 0.1 J 82.0 0.1 J 100.0 0.1 J 220.0 0.1 J	チップ抵抗 チップ抵抗 チップ抵抗 チップ抵抗 チップ抵抗		01 01 01 01 01
* * * * *	RD256100 RD256180 RD256330 RD256470 RD257100	CHIP CARBON RESISTOR CHIP CARBON RESISTOR CHIP CARBON RESISTOR CHIP CARBON RESISTOR CHIP CARBON RESISTOR	1.0K 0.1 J 1.8K 0.1 J 3.3K 0.1 J 4.7K 0.1 J 10.0K 0.1 J	チップ抵抗 チップ抵抗 チップ抵抗 チップ抵抗 チップ抵抗		01 01 01 01 01
* * * * *	RD257560 RD257680 RD258100 RD258120 RD258150	CHIP CARBON RESISTOR CHIP CARBON RESISTOR CHIP CARBON RESISTOR CHIP CARBON RESISTOR CHIP CARBON RESISTOR	56.0K 0.1 J 68.0K 0.1 J 100.0K 0.1 J 120.0K 0.1 J 150.0K 0.1 J	チップ抵抗 チップ抵抗 チップ抵抗 チップ抵抗 チップ抵抗		01 01 01 01 01
* * * * *	RD258270 RD259100 UB051220 UB051330 UB052100	CHIP CARBON RESISTOR CHIP CARBON RESISTOR MONOLITHIC CERA. CAP. (CHIP MONOLITHIC CERA. CAP. (CHIP MONOLITHIC CERA. CAP. (CHIP	270.0K 0.1 J 1.0M 0.1 J SL 22P 50V J SL 33P 50V J SL 100P 50V J	チップ抵抗 チップ抵抗 チップ積層セラコン チップ積層セラコン チップ積層セラコン		01 01 01 01 01
* * * * *	UB012470 UB013100 UB245100 UI566100 UJ838470	MONOLITHIC CERA. CAP. (CHIP MONOLITHIC CERA. CAP. (CHIP MONOLITHIC CERA. CAP. (CHIP ELECTROLYTIC CAP. ELECTROLYTIC CAP.	B 470P 50V K B 1000P 50V K F 0.100 25V Z 1.00 50.0V 470.00 16.0V	チップ積層セラコン チップ積層セラコン チップ積層セラコン ケミコン ケミコン		01 01 01 01 01
* * * * *	VD004500 VD004600 VD004800 VD005000 VD005200	BASE PIN BASE PIN BASE PIN BASE PIN BASE PIN	PH 2P TE PH 3P TE PH 5P TE PH 7P TE PH 9P TE	ベースピン ベースピン ベースピン ベースピン ベースピン		01 01 01 01 01
* * * * *	VE352600 LB918090 VN517800 VN517900 VN518000	BASE POST CONNECTOR BASE POST CONNECTOR FFC CONNECTOR FFC CONNECTOR FFC CONNECTOR	PH 14P TE XH 9P TE FM 6P TE FM 7P TE FM 8P TE	コネクタベースポスト コネクタベースポスト コネクタFFC コネクタFFC コネクタFFC		01 01 01 01 01
* * * * *	VN518100 VN520900 VH307600 VG931300 FZ006970	FFC CONNECTOR FFC CONNECTOR CERAMIC RESONATOR CERAMIC RESONATOR EMI FILTER	FM 10P TE 52045 26P TE 16M CSA 10MHZ LS MT Y223NB	コネクタFFC コネクタFFC セラミック共振動子 セラミック共振動子 LCフィルタEMI		01 02 02 02 02
* * * * *	VB797600 VN516800 VN516900 IC241200 XK310A00	DIODE TRANSISTOR ARRAY TRANSISTOR ARRAY TRANSISTOR IC	RLS-73 LB1215 LB1211 2SC2412K Q,R,S UPC2405HF 5V	ダイオード トランジスタアレイ トランジスタアレイ トランジスタ IC		01 03 03 01 04
* * * * *	XE143A00 VN638800 VB659000	SPEAKER HEAT SINK BIND HEAD SCREW	PKM22EPP-4001 OSH-3030-SPL 3.0X8 ZMC2BL	スピーカー 放熱板 + バインド小ネジ		02 01

Ref. No.	Part No.	Description	部 品 名	Remarks	ランク	
	EP600630 EA026120 EV100266	PAN HEAD TAPPING SCREW-P PAN HEAD SCREW HEXAGONAL NUT	3.0X8 ZMC2BL 2.6X12 ZMC2Y 2.6 ZMC2Y	ナベPタイ ナベ小ネジ 六角ナット		01 01 01
*	VN244500	CIRCUIT BOARD	KEY RECEIVE	キー受光シート		
	VB434400 VB797600 XK910A00 RD257330 RD257120	DIODE DIODE IC CHIP CARBON RESISTOR CHIP CARBON RESISTOR	RLS-73 NJM2901M-T1 33.0K 0.1 J 12.0K 0.1 J	シリコンフォトダイオード ダイオード IC チップ抵抗 チップ抵抗	COMPARATOR	03 01 01 01 01
	RD256470 RD254470 RD254100 UI538100 UB245100	CHIP CARBON RESISTOR CHIP CARBON RESISTOR CHIP CARBON RESISTOR ELECTROLYTIC CAP. MONOLITHIC CERA. CAP.(CHIP	4.7K 0.1 J 47.0 0.1 J 10.0 0.1 J 100.00 16.0V F 0.100 25V Z	チップ抵抗 チップ抵抗 チップ抵抗 ケミコン チップ積層セラコン		01 01 01 01 01
*	VB389600 VP263000 -- EP630180	BASE POST CONNECTOR SOCKET GND WIRE PAN HEAD TAPPING SCREW-P	PH 11P SE 58EX 3.0X6 ZMC2BL	コネクタベースポスト 受光ソケットB アース線 Assy ナベPタイ	(VN67990)	01 04 01
*	VN613300 VP843600 VF283100 VH155800 EP630180	CIRCUIT BOARD LED BASE POST CONNECTOR SOCKET PAN HEAD TAPPING SCREW-P	KEY EMISSION SLA-580JT190F PH 13P TE 3.0X6 ZMC2BL	キー発光シート LED コネクタベースポスト キー発光ソケットA ナベPタイ		01 08 01
*	VH588100 XI286A00 XK441A00 XL653F00	CIRCUIT BOARD IC IC IC	PK-CTL M37700SAFP LC92011B-656 PK-CTL ROM	P K - C T L シート IC IC IC	CPU GATE ARRAY ROM	28 10 14
*	XI020A00 XL026A00 XL106A00 XD672A00 RD255100	IC IC IC IC CHIP CARBON RESISTOR	HM65256BLFP-10 HN58C68FP-25 HD74HC123AFP NJM2903MT1 100.0 0.1 J	IC IC IC IC チップ抵抗	PS-RAM EEP-ROM SINGLE SHOT	08 01 01 01 01
	RD255220 RD256100 RD256220 RD2S8470 RD257100	CHIP CARBON RESISTOR CHIP CARBON RESISTOR CHIP CARBON RESISTOR CHIP CARBON RESISTOR CHIP CARBON RESISTOR	220.0 0.1 J 1.0K 0.1 J 2.2K 0.1 J 4.7K 0.1 J 10.0K 0.1 J	チップ抵抗 チップ抵抗 チップ抵抗 チップ抵抗 チップ抵抗		01 01 01 01 01
	RD257120 RD257560 RD258100 RD258220 RD259100	CHIP CARBON RESISTOR CHIP CARBON RESISTOR CHIP CARBON RESISTOR CHIP CARBON RESISTOR CHIP CARBON RESISTOR	12.0K 0.1 J 56.0K 0.1 J 100.0K 0.1 J 220.0K 0.1 J 1.0M 0.1 J	チップ抵抗 チップ抵抗 チップ抵抗 チップ抵抗 チップ抵抗		01 01 01 01 01
*	UB051330 UB051820 UB052100 UB245100 UB013100	MONOLITHIC CERA. CAP.(CHIP MONOLITHIC CERA. CAP.(CHIP MONOLITHIC CERA. CAP.(CHIP MONOLITHIC CERA. CAP.(CHIP MONOLITHIC CERA. CAP.(CHIP	SL 33P 50V J SL 82P 50V J SL 100P 50V J F 0.100 25V Z B 1000P 50V K	チップ積層セラコン チップ積層セラコン チップ積層セラコン チップ積層セラコン チップ積層セラコン		01 01 01 01 01
*	UI586100 UI537100 UI538100 VG852700 VB389800	ELECTROLYTIC CAP. ELECTROLYTIC CAP. ELECTROLYTIC CAP. ELECTROLYTIC CAP. SS BASE POST CONNECTOR	1.00 50.0V 10.00 16.0V 100.00 16.0V 220.00 16.0V PH 2P TE	ケミコン ケミコン ケミコン ケミコン SS コネクタベースポスト		01 01 01 01 01
	VB389900 VB390000 VB390300 VB390400 VB390500	BASE POST CONNECTOR BASE POST CONNECTOR BASE POST CONNECTOR BASE POST CONNECTOR BASE POST CONNECTOR	PH 3P TE PH 4P TE PH 7P TE PH 8P TE PH 9P TE	コネクタベースポスト コネクタベースポスト コネクタベースポスト コネクタベースポスト コネクタベースポスト		01 01 01 01 03
	VB390600 VF283400 VH307600 FZ006970 VL139800	BASE POST CONNECTOR BASE POST CONNECTOR CERAMIC RESONATOR EMI FILTER INDUCTOR	PH 10P TE PH 16P TE 16M CSA16 LS MT Y223NB BLM21B03PT	コネクタベースポスト コネクタベースポスト セラミック共振子 LCフィルタ EMI チップソリッドインダクタ		01 01 02 02 01
*	VP916100 XL122A00 IC241200 VN681100 VP531700	EMI FILTER IC TRANSISTOR DIODE DIODE	NFM52R10P206 PST572CMT-R 2SC2412K Q,R,S EC10DS4-TE12L D1F40	チップEMIフィルタ IC トランジスタ チップダイオード チップダイオード	SYSTEM RESET	01
*	VB797600 XC719A00 VN516100 VN593900 VP615600	DIODE IC PHOTO COUPLER PHOTO COUPLER ZENER DIODE	RLS-73 NJM7805FA PC9D10 HCPL-2630 RD62P-T2 62V	ダイオード 電源IC フォトカブラ フォトカブラ ツェナーダイオード	REGULATOR 5V	01 02 06
*	VN588200 VN588300 VN588400	CIRCUIT BOARD CIRCUIT BOARD CIRCUIT BOARD	DRIVE A DRIVE B DRIVE C	ドライブ A シート ドライブ B シート ドライブ C シート		19 19 19

* : New Parts (新規部品) NR

Ref. No.	Part No.	Description	部品名	Remarks	ランク	
*	XL150A00	IC	PWM GENERATOR	IC	YM3421-F	
*	VB293700	TRANSISTOR ARRAY	TH3L20	トランジスタアレイ		05
*	VP497600	TRANSISTOR ARRAY	PU4162	トランジスタアレイ		
*	RD256330	CHIP CARBON RESISTOR	3.3K 0.1 J	チップ抵抗		01
*	RD256470	CHIP CARBON RESISTOR	4.7K 0.1 J	チップ抵抗		01
*	RD257100	CHIP CARBON RESISTOR	10.0K 0.1 J	チップ抵抗		01
*	RD257120	CHIP CARBON RESISTOR	12.0K 0.1 J	チップ抵抗		01
*	RD257330	CHIP CARBON RESISTOR	33.0K 0.1 J	チップ抵抗		01
*	UB245100	MONOLITHIC CERA. CAP. (CHIP	F 0.100 25V Z	チップ積層セラコン		01
*	UI538100	ELECTROLYTIC CAP.	100.00 16.0V	ケミコン		01
*	△ △	MYLAR CAP.	0.1000 250V K	マイラーコン		01
*	VB481900	DIODE	11ES4	ダイオード		01
*	VN517300	DIODE	D1NL20U	ダイオード		01
*	FZ006970	EMI FILTER	LS MT Y223NB	LCフィルタ	EMI	02
*	VB389800	BASE POST CONNECTOR	PH 2P TE	コネクタベースポスト		01
*	VB389900	BASE POST CONNECTOR	PH 3P TE	コネクタベースポスト		01
*	VB390200	BASE POST CONNECTOR	PH 6P TE	コネクタベースポスト		01
*	VE352600	BASE POST CONNECTOR	PH 14P TE	コネクタベースポスト		01
*	VF283400	BASE POST CONNECTOR	PH 16P TE	コネクタベースポスト		01
*	VH808600	BASE POST CONNECTOR	EH 3P TE	コネクタベースポスト		01
*	LB918030	BASE POST CONNECTOR	XH 3P TE	ベースツキポスト		01
*	UB052220	MONOLITHIC CERA. CAP. (CHIP	SL 220P 50V J	チップ積層セラコン		01
*	VP188700	CIRCUIT BOARD	PEDAL DRIVE	Pドライブシート		
*	FG652100	CERAMIC CAP.-SL	100P 50V J	セラコン (SL)		01
*	VI307100	MONOLITHIC CERA. CAP.	0.100 50V Z	積層セラコン		01
*	FZ000680	MYLAR CAP.	0.1000 250V K	マイラーコン		02
*	VE439400	FERRITE BEAD	DSS310-55D223S	フェライトビーズ		01
*	VG852700	ELECTROLYTIC CAP. SS	220.00 16.0V	ケミコン SS		01
*	IC1815H0	TRANSISTOR	2SC1815 Y,GR	トランジスタ		01
*	VM610600	TRANSISTOR	2SD1792	トランジスタ		
*	VP216000	PI SENSOR	ON1108	PIセンサ		
*	VP216100	PI SENSOR	ON2153	PIセンサ		
*	△ △	DIODE	11ES4	ダイオード		01
*	VN517300	DIODE	D1NL20U	ダイオード		01
*	VD180200	LED	SLZ-981C-12	LED	RED	01
*	VN518200	LED	SLZ-389C-02-T1	LED	GREEN	01
*	XG061A00	IC	NJM2403D	IC	COMPARATOR	03
*	VB389800	BASE POST CONNECTOR	PH 2P TE	コネクタベースポスト		01
*	LB932030	BASE POST CONNECTOR	VH 3P TE	ベースポスト		01
*	LB918040	BASE POST CONNECTOR	XH 4P TE	ベースツキポスト		01
*	LB918050	BASE POST CONNECTOR	XH 5P TE	ベースツキポスト		01
*	VB390100	BASE POST CONNECTOR	PH 5P TE	コネクタベースポスト		01
*	VB390200	BASE POST CONNECTOR	PH 6P TE	コネクタベースポスト		01
*	VP189200	RADIATION PLATE		コベダTRプレート		
*	VA787800	TRIMMER POTENTIOMETER	B 3.3K 3P	半固定VR		01
*	VA787500	TRIMMER POTENTIOMETER	B 470 3P	半固定VR		01
*	VF968800	COIL	SBT-0260TF 60u	コイル		01
*	BB500710	WASHER	3mm	アワッシャー		
*	EP600070	BIND HEAD TAPPING SCREW-S	3.0X8 ZMC2Y	ナブインDSタイト		01

* : New Parts (新規部品) NR

ランク : Japan Only

■ POWER SUPPLY UNIT

Ref. No.	Part No.	Description	部 品 名	Remarks	ランク
	VP182400	<POWER SUPPLY UNIT>	<電源ユニット>	J	58
	VP182900	POWER SUPPLY UNIT	電源ユニット	UC	59
	VP183000	POWER SUPPLY UNIT	電源ユニット	AB	58
	VP591800	POWER SUPPLY UNIT	電源ユニット	UC	59
	VP591900	POWER SUPPLY UNIT	電源ユニット	AB	58
	VP181000	COVER	電源カバー	J	
	VP181600	POWER SWITCH ASSEMBLY	電源スイッチアッセンブリ	UC	
	VP181800	POWER SWITCH ASSEMBLY	電源スイッチアッセンブリ	AB	
	VP256600	POWER SWITCH ASSEMBLY	電源スイッチアッセンブリ	AB	
	VH785100	SEESAW SWITCH	シーソースイッチ		04
	VN774700	AC INLET	ACインレット		
	LB300770	CONNECTOR HOUSING	コネクタハウジング		01
	VC362700	FERRITE CORE	フェライトコア		04
	VP180000	CONNECTOR ASSEMBLY	コネクタ束		
	CB069250	CORD BINDER	コード束		01
	--	LABEL, CAUTION	注意ラベル		
	VP180100	D-SUB CABLE	D-サブケーブル	PWH	(VB95110)
	VP585000	D-SUB CABLE	D-サブケーブル		
	--	NYLON CLAMP	ナイロンクランプ		(VP35950)
	--	NYLON CLAMP	ナイロンクランプ		(VP35910)
	VP156600	BIND HEAD SCREW	バインドヘッド小ネジ	7pcs	01
	EC340360	BIND HEAD SCREW	バインドヘッド小ネジ	2pcs	01
	--	LABEL, PS	電源ラベル	J	(VP99050)
	--	LABEL, PS	電源ラベル	U	(VP99070)
	--	LABEL, PS	電源ラベル	CAB	(VP99090)
	--	BASE	ベース		(VN41200)
	--	SUPPORT	サポート		(VP09250)
	--	RUBBER	ゴム		(VN74650)
	VN757900	INSULATOR	インシュレーター		
	EG340220	BIND HEAD SCREW	バインドヘッド小ネジ	4pcs	01
	EG340220	BIND HEAD SCREW	バインドヘッド小ネジ	6pcs	01
	--	LABEL, FUSE	注意書き	UC	(CB81875)
	LB301470	BASE POST CONNECTOR	ベースポスト		02
	LB932070	BASE POST CONNECTOR	ベースポスト		01
	VD005300	BASE PIN	ベースピン		01
	VP208500	FUSE HOLDER	ヒューズホルダー		
	VN921500	CERAMIC CAP.	規格認定コンデンサ		03
	VN921600	CERAMIC CAP.	規格認定コンデンサ	G	04
	FI383220	CERAMIC CAP.	規格認定コンデンサ		01
	VP838100	CERAMIC CAP.	規格認定コンデンサ	U C	
	V0035100	CERAMIC CAP.	規格認定コンデンサ		02
	FI383470	CERAMIC CAP.	規格認定コンデンサ	G	01
	VN695300	ELECTROLYTIC CAP. PR	ケミコン PR		01
	VN698300	ELECTROLYTIC CAP. PR	ケミコン PR		01
	VJ762800	ELECTROLYTIC CAP. PR	ケミコン PR		01
	VN702000	ELECTROLYTIC CAP. PR	ケミコン PR		01
	VN698400	ELECTROLYTIC CAP. PR	ケミコン PR		02
	VN694900	ELECTROLYTIC CAP. PR	ケミコン PR		01
	VN695500	ELECTROLYTIC CAP. PR	ケミコン PR		01
	VN694000	ELECTROLYTIC CAP. PR	ケミコン PR		01
	VN701200	ELECTROLYTIC CAP. PR	ケミコン PR		01
	VM704200	ELECTROLYTIC CAP. PR	ケミコン PR		01
	VN701900	ELECTROLYTIC CAP. PR	ケミコン PR		01
	VN705600	ELECTROLYTIC CAP. PR	ケミコン PR		01
	VN694800	ELECTROLYTIC CAP. PR	ケミコン PR		01
	VP126700	ELECTROLYTIC CAP. GQ	ケミコン GQ		09
	VN997800	ELECTROLYTIC CAP. GQ	ケミコン GQ	U C	08
	VP011900	ELECTROLYTIC CAP. GQ	ケミコン GQ		
	VP011800	ELECTROLYTIC CAP. GQ	ケミコン GQ		06
	VN760400	ELECTROLYTIC CAP. GQ	ケミコン GQ		05
	FI514100	RECOGNIZED CAP.	ケミコン		02
	V0005400	POLYPROPYLEN FILM CAP.	PPコンデンサ		01
	V0005800	POLYPROPYLEN FILM CAP.	PPコンデンサ	G	01
	VN775900	POLYPROPYLEN FILM CAP.	PPコンデンサ		03
	VP286900	ELECTROLYTIC CAP.	ケミコン		08
	VP288400	ELECTROLYTIC CAP.	ケミコン	U C	
	VP604100	ELECTROLYTIC CAP.	ケミコン	G	
	VP646600	ELECTROLYTIC CAP.	ケミコン	G	
	VP286800	ELECTROLYTIC CAP. HA	ケミコン HA		
	VP286700	ELECTROLYTIC CAP. HA	ケミコン HA	G	
	VP286300	ELECTROLYTIC CAP. HA	ケミコン HA		
	UA655100	MYLAR CAP.	マイラーコン		01
	IF004600	DIODE	ダイオード	G	01
	VH770800	DIODE	ダイオード		01
	VN478200	DIODE	ダイオード		01
	VN417000	DIODE	ダイオード		03
	VG439300	ZENER DIODE	ツェナーダイオード		01
	VN579200	FUSE	ヒューズ	JU	04

* : New Parts (新規部品) NR

Ref. No.	Part No.	Description	部 品 名	Remarks	ランク
* △	KB003340	FUSE	T- 4.00A S 250V	ヒューズ	G 02
* △	VN579500	FUSE	4.00A S 250V	ヒューズ	G 02
* △	VN579100	FUSE	T- 2.0A 125V	ヒューズ	JU 02
* △	VN579300	FUSE	1.8A S 250V	ヒューズ	G 01
* △	VM793100	FUSE	K19374 3.15A	小型ヒューズ	JU 02
* △	VN792600	FUSE	K19372 2.0A	小型ヒューズ	G 02
* △	VP604000	COIL	18D650C 8.2mH	コイル	
* △	VP234300	COIL	18D850C 2X8.2mH	コイル	06
* △	VN398100	COIL	SC-02 2X44mH	コイル	09
* △	VN433600	COIL	BP-074 20	チョークコイル	06
* △	VN433700	COIL	BP-148 20	チョークコイル	05
* △	VN774400	COIL	961-31 220uH	チョークコイル	04
* △	VD678500	DIGITAL TRANSISTOR	DTA114ES	デジタルトランジスタ	03
* △	VH800700	DIGITAL TRANSISTOR	UN4111-(TA)	デジタルトランジスタ	03
* △	IC1815M0	TRANSISTOR	2SC1815 Y,GR	トランジスタ	01
* △	IC174020	TRANSISTOR	2SC1740S R,S	トランジスタ	01
* △	IC260320	TRANSISTOR	2SC2603 E,F	トランジスタ	01
* △	VH800600	TRANSISTOR	2SC3311A Q,R,S	トランジスタ	01
* △	VN838300	TRANSISTOR	2SC2336B Q,P	トランジスタ	03
* △	IB056020	TRANSISTOR	2SB560 E,F	トランジスタ	01
* △	ID043820	TRANSISTOR	2SD438 E,F	トランジスタ	01
* △	VN932000	TRANSISTOR	2SC3334	トランジスタ	01
* △	VN931900	TRANSISTOR	2SA1321	トランジスタ	01
* △	IA101590	TRANSISTOR	2SA1015 O,Y	トランジスタ	01
* △	VD506000	RELAY	DC DG12D1-0(M)	リレー	05
* △	VJ888700	RELAY	DC DG24D1-0(M)	リレー	04
* △	HV757100	FLAME PROOF C. RESISTOR	10.0K 1/4 J	不燃酸化カーボン抵抗	01
* △	HV756330	FLAME PROOF C. RESISTOR	3.3K 1/4 J	不燃酸化カーボン抵抗	01
* △	HV758120	FLAME PROOF C. RESISTOR	120.0K 1/4 J	不燃酸化カーボン抵抗	01
* △	HV755510	FLAME PROOF C. RESISTOR	510.0 1/4 J	不燃酸化カーボン抵抗	01
* △	HV754220	FLAME PROOF C. RESISTOR	22.0 1/4 J	不燃酸化カーボン抵抗	01
* △	HV756100	FLAME PROOF C. RESISTOR	1.0K 1/4 J	不燃酸化カーボン抵抗	01
* △	HV754270	FLAME PROOF C. RESISTOR	27.0 1/4 J	不燃酸化カーボン抵抗	01
* △	HV754470	FLAME PROOF C. RESISTOR	47.0 1/4 J	不燃酸化カーボン抵抗	01
* △	HV753100	FLAME PROOF C. RESISTOR	1.0 1/4 J	不燃酸化カーボン抵抗	01
* △	HV755390	FLAME PROOF C. RESISTOR	390.0 1/4 J	不燃酸化カーボン抵抗	01
* △	HV754560	FLAME PROOF C. RESISTOR	56.0 1/4 J	不燃酸化カーボン抵抗	01
* △	HV755100	FLAME PROOF C. RESISTOR	100.0 1/4 J	不燃酸化カーボン抵抗	01
* △	HV757120	FLAME PROOF C. RESISTOR	12.0K 1/4 J	不燃酸化カーボン抵抗	01
* △	HV757820	FLAME PROOF C. RESISTOR	82.0K 1/4 J	不燃酸化カーボン抵抗	01
* △	HV757150	FLAME PROOF C. RESISTOR	15.0K 1/4 J	不燃酸化カーボン抵抗	
* △	HV756680	FLAME PROOF C. RESISTOR	6.8K 1/4 J	不燃酸化カーボン抵抗	
* △	HV756270	FLAME PROOF C. RESISTOR	2.7K 1/4 J	不燃酸化カーボン抵抗	01
* △	VN067400	WIRE WOUND RESISTOR	6.8 5W K	セメント抵抗	03
* △	VN630600	WIRE WOUND RESISTOR	6.8 5W K	セメント抵抗	03
* △	VN765700	WIRE WOUND RESISTOR	0.33 3W K	セメント抵抗	01
* △	HL214470	METAL OXIDE FILM RESISTOR	47.0 1W J	酸化金属被膜抵抗	01
* △	HL714470	METAL OXIDE FILM RESISTOR	47.0 1W J	酸化金属被膜抵抗	01
* △	VN398300	WIRE WOUND RESISTOR	0.1 3W K	セメント抵抗	01
* △	VN765600	WIRE WOUND RESISTOR	0.22 3W K	セメント抵抗	01
* △	VP265300	WIRE WOUND RESISTOR	6.8 5W K	セメント抵抗	02
* △	XC542A00	POWER TRANSFORMER	CDX-10000	電源トランス	J 05
* △	XC083A00	POWER TRANSFORMER	RX-700	電源トランス	UG 05
* △	XC084A00	POWER TRANSFORMER	RX-700	電源トランス	UG 05
* △	XL206A00	POWER TRANSFORMER	11102	電源トランス	J 05
* △	XL207A00	POWER TRANSFORMER	11102	電源トランス	UG
* △	XL208A00	POWER TRANSFORMER	11102	電源トランス	UG
* △	VH454200	RADIATOR DB		ラジエーター D B	
* △	VN932100	DIODE STACK	RBV-608	ダイオードスタック	04
* △	VN953300	DIODE STACK	D5SBA60	ダイオードスタック	04
* △	VN774500	THYRISTOR	TM1641S-L	トライアック	04
* △	VN774600	THYRISTOR	TM1661S-L	トライアック	G 04
* △	VP033300	SUPPORT	SUS301CSP	サポート	
* △	EZ000570	SELF TAPPING SCREW	3.0X8 FCM3BL	キャップスクリュー	1pc. 01
* △	EP600450	BIND HEAD TAPPING SCREW-B	3.0X5 ZMC2BL	キャップスクリュー	1pc. 01
* △	VN412200	SUPPORT	SUS301CSP	サポート	
* △	VN473800	RADIATOR H IC		ラジエーター H I C	
* △	XK413A00	IC	YH-S1	電源 IC	REGULATOR
* △	VN757800	INSULATOR	A	インシュレーター	
* △	VP055500	H IC CASE L	PRE 94V-1	H IC ケース L	
* △	VN412700	RADIATOR DI		ラジエーター D I	
* △	XK742A00	IC	NJW78M20FA 20V	電源 IC	REGULATOR
* △	VC407900	TRANSISTOR	2SD1913 R,S	トランジスタ	01
* △	VN399400	DIODE STACK	FMU-12R	ダイオードスタック	03
* △	VN399300	DIODE STACK	FMU-12S	ダイオードスタック	03
* △	VN447600	SUPPORT DI	SUS301CSP	サポート	
* △	EP600450	BIND HEAD TAPPING SCREW-B	3.0X5 ZMC2BL	キャップスクリュー	2pcs 01
* △	VN412600	RADIATOR PWA		ラジエーター P W A	
* △	VN399500	DIODE STACK	FMU-36S	ダイオードスタック	05

Ref. No.	Part No.	Description	部品名	Remarks	ランク	
* * * * *	VK137600 VN715800 VN838200 VN822000 EP600140	TRANSISTOR DIODE BRIDGE TRANSISTOR BUSHING BIND HEAD TAPPING SCREW-B	2SC3263 D5LC40 2SA1006B Q,P TRB1749-A 3.0X10 ZNC2BL	トランジスタ ローロスダイオード トランジスタ ブッシング + バインド B タイト	1pc.	05 03 03 01 01
* * * * *	VK195900 VH829800 VP047400 VP049500 EP600450 VP244800	RADIATION SHEET RADIATION SHEET SUPPORT DH SUPPORT PW BIND HEAD TAPPING SCREW-B SOCKET PW	BFG-20AD 19X24 BFG-20AD 13X18 SUS301CSP SUS301CSP 3.0X5 ZNC2BL	放熱シート 放熱シート サポート DH サポート PW + バインド B タイト P W ソケット	3pcs J	01 01 01 03

* : New Parts (新規部品) NR

ランク : Japan Only

■ ACCESSORIES

Ref. No.	Part No.	Description	部品名	Remarks	ランク	
* *	VN668700 VN668800	<ACCESSORIES> REMOTE CONTROLLER UNIT REMOTE CONTROLLER UNIT	<付属品> リモートコントローラ リモートコントローラ	J UCAB	11 11	
* * * * *	-- VP626600 VP610000 VP610300 VP626400 VD780000	SCHOOL KIT COVER BRACKET R BRACKET L SPACER FLAT HEAD TAPPING SCREW-S	HQG31RS HQG31RS HQG31RS HQG31RS HQG31RS 3.0X6 ZMC2BL	スクールキット コントロールカバー 丁番取付金具 (右) 丁番取付金具 (左) ゴムスペーサー +皿Sタイト	J J J J J 4pcs	(VP61190) 01
* *	VQ184500 VQ184700	<SERVICE PART> D-SUB CABLE D-SUB CABLE	10m BL 10m WH	<サービス用> D-SUBケーブル D-SUBケーブル		

* : New Parts (新規部品) NR

ランク : Japan Only

