



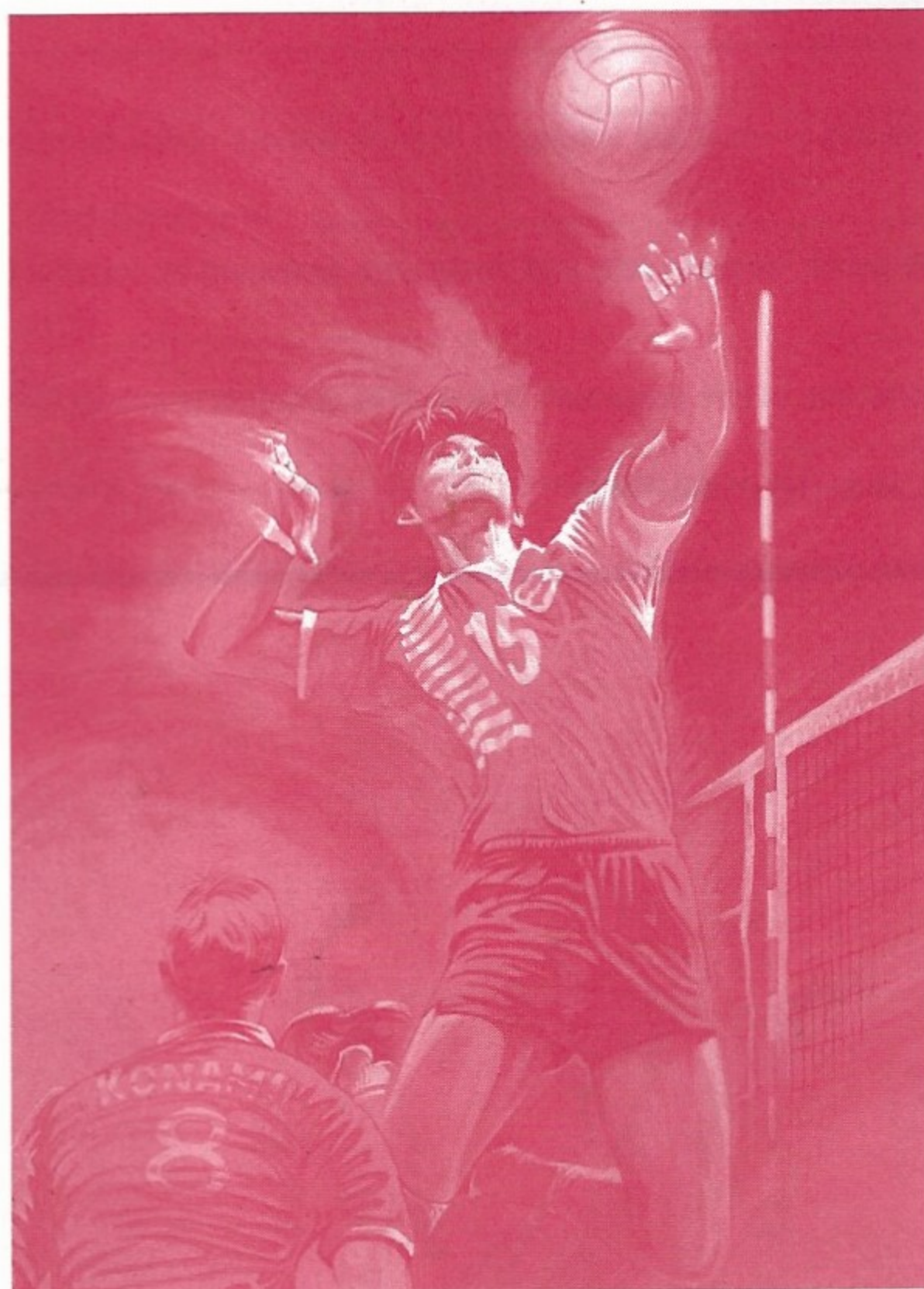
ORIGINAL VIDEO GAME

OPERATOR'S MANUAL

WINNINGSPIKE



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- Failure to operate the machine correctly could result in malfunction or accidents, so please read this manual carefully before commencing operation. Be sure to operate the machine as described in this manual.
- Keep this manual carefully so as to be ready for use when necessary.

About this product

Thank you for purchasing this Konami product. This manual explains how to operate your game machine correctly and safely.



- **Failure to operate the machine correctly could result in malfunction or accidents, so please read this manual carefully before commencing operation. Be sure to operate the machine as described in this manual.**
- **Keep this manual carefully so as to be ready for use when necessary.**
- **If the machine still fails to display or to get started, immediately turn OFF the power switch and contact your nearest dealer.**

- The specifications of this product are subject to change without notice for reasons such as improving the performance.
- The contents of this game, its main data and design are protected by copyright law and industrial property law.
- Unauthorized reproduction of this document or any of its contents is strictly forbidden.

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■ Precautions for use

In this manual, the precautions to be followed without fail in order to prevent damage to persons to install, use or maintain "WINNINGSPIKE™" or other persons or to properties are shown as follows.

Be sure to read the following

•The following suggestions show the degree of danger and damage caused when the product is used improperly with the suggestions disregarded.



WARNING

Indicates a situation where disregarding the suggestions could result in death or serious injury.



CAUTION

Indicates a situation where disregarding the suggestions could result in injury or product damage.

•The following graphic suggestions describe the types of precautions to be followed.



Indicates a matter of which care should be taken.



Indicates a matter which is forbidden.



Indicates a matter which should be performed without fail.

Setting Up



WARNING

- **Handle this machine with due care when installing it.**

- Otherwise, a machine trouble or accident may be caused.
- Parts inside the machine get very hot structurally. Do not touch them until completely cooled down.
- This machine has some projections. Be very careful not to get injured when handling the machine.

- **This machine is designed for indoor use. Do not place it outdoors.**

- Outdoor use may cause an accident or machine trouble.



- **Do not set up the game machine:**

- in a place exposed to rain or moisture.
- in a place exposed to direct sunlight.
- in a place exposed to direct heat from air-conditioning and heating equipment, etc..
- near hazardous flammable substances such as thinner and kerosene.
- in a place exposed to strong vibration.
- in a place exposed to excessive dust.
- near equipment generating strong magnetism or electric waves.



- **Do not place containers holding chemicals or water on or near the game machine.**

- Electrical shock or damage could be caused by water or foreign matter entering the inside of the machine.



- **Before setting the DIP switches, take antistatic measure by use of a grounding band or the like.**

- Static electricity may lead to breakage of electronic parts mounted on the PCBs.

- **Be sure to turn OFF the machine's power switch before mounting and dismounting the PCBs.**

- Otherwise, a machine trouble or electric shock may be caused.

- **The PCBs' card edge connectors conform to the JAMMA standard requirements. Never connect any other types of connectors than specified.**

- Otherwise, a machine trouble or fire may be caused.

- **In setting up the PCBs, identify all the connectors and connect them properly.**

- Otherwise, a machine trouble or fire may be caused.

Operation



WARNING

- **If there is any abnormality such as smoke, bad smell or abnormal noise being emitted from the machine, immediately unplug the power cord to stop operating it.**



• Using the machine in abnormal conditions could result in fire or accidents.

In case of abnormality

1. Turn OFF the power switch.
2. Unplug the power cord.
3. Contact your nearest dealer.

- **Do not leave the power cord plugged improperly or covered with dust.**

• Doing so could result in electrical shock or fire, so inspect the power cord periodically.



- **Never disassemble, repair or modify any section other than those specified in this manual.**

• Doing so could result in fire, malfunction or equipment failure.



We do not assume any responsibility for any damages that would be caused by tampering with the machine.

- **Do not touch the machine with wet hands.**

• Otherwise, an electric shock may be caused.



Operation



CAUTION

- **Do not use this product anywhere other than industrial areas.**

• Using in a residential area or an area next to a residential area could affect signal reception of radios, television sets, telephones, etc..

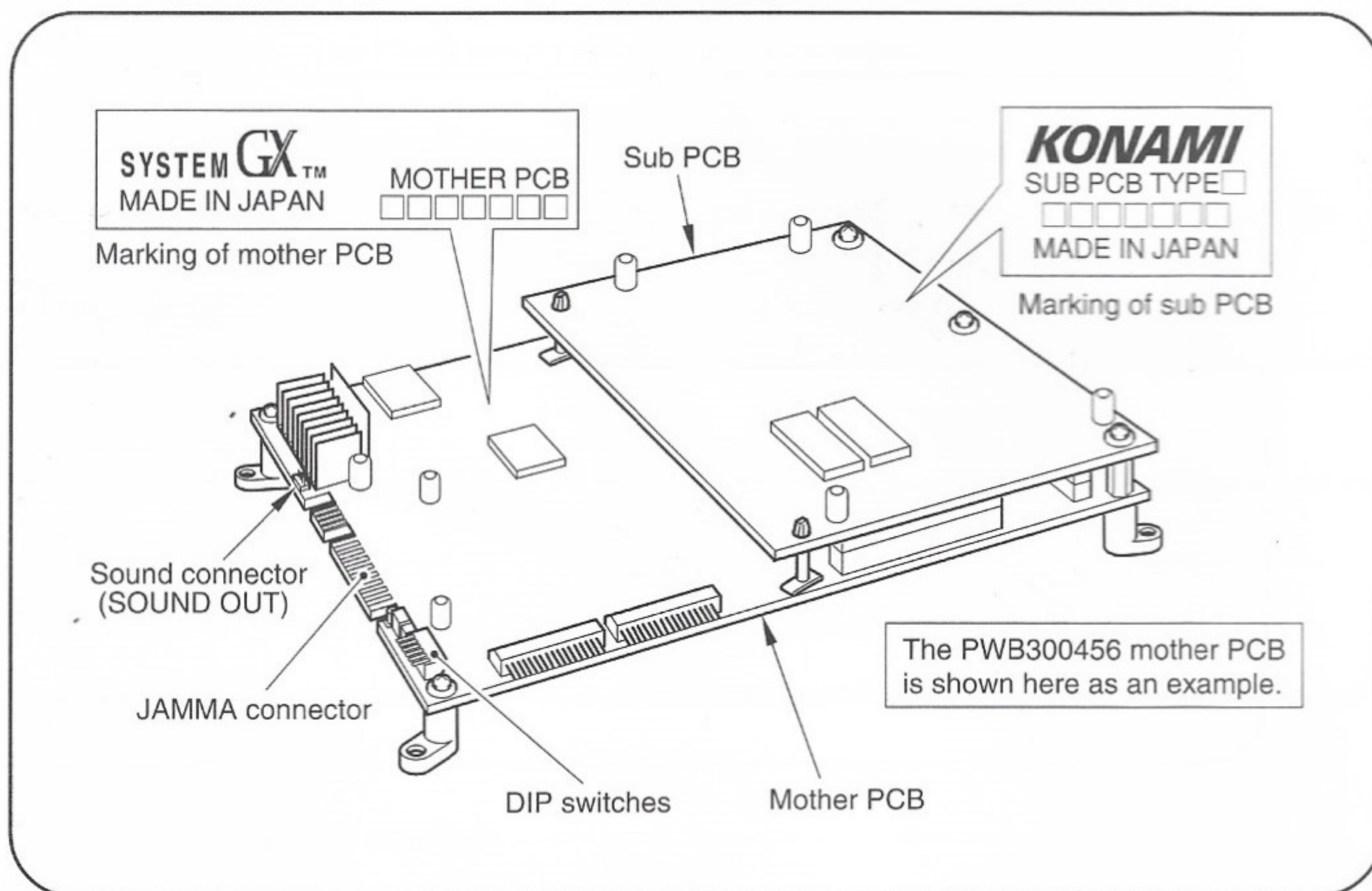


PRECAUTION IN HANDLING

- When setting up, handling, inspecting, maintaining, moving or transporting this product, follow the procedures and instructions set forth in this manual and perform such work safely.
- Do not remove labels of "WARNING", "CAUTION", etc. attached to the product.
- Do not set up, handle, inspect, maintain, move or transport this product under conditions equivalent to the condition of "WARNING" or "CAUTION" specified in this manual.
- If a new owner is to have this product as a result of transfer, etc., be sure to give this manual to the new owner.

1 Names of parts and specifications

1-1 Names of parts



1-2 Specifications

■ Specifications of PCB power supply : GND-Vcc, more than 5V/6A

GND-(more than +12V/2A) *See "6 Wiring diagram" on page 19.

- The PCBs can be connected to general color monitor cabinets.
- Use the control unit with 1P and 2P sockets arranged side by side. Use a simultaneous play type that has two sets of an 8-way joystick and 3 press buttons.
- Use the monitors arranged side by side.
- No sound volume control is provided on the PCBs. Adjust the sound volume in the manual test mode. (See "3-2 Adjusting the game environment (manual test)" on page 8 and "SOUND OPTIONS" on page 11.)

Connect the cabinet speaker terminals to the sound connector ("SOUND OUT" terminal on the PCB).(See "6 Wiring diagram" on page 19.)

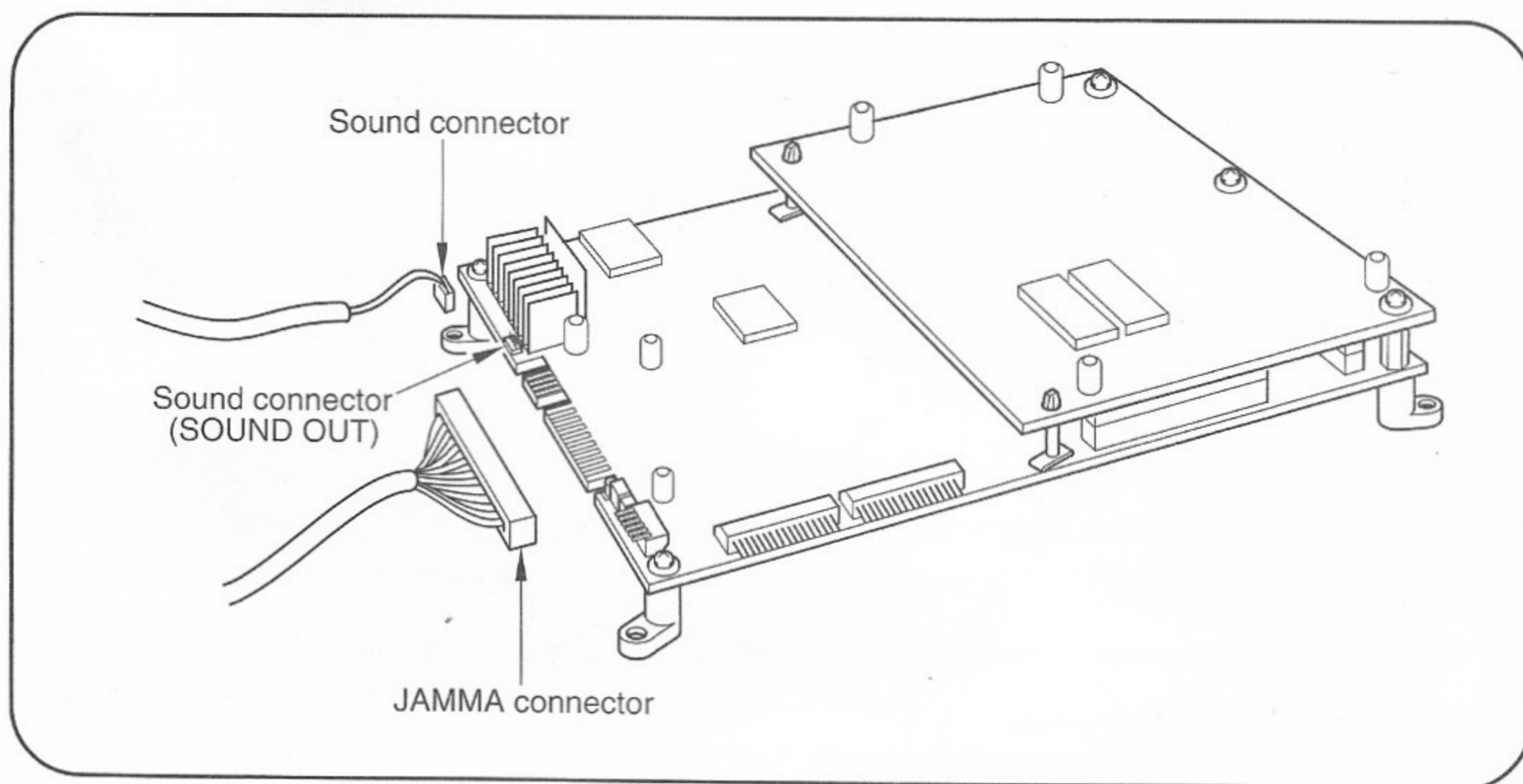
Note: The speaker terminals of cabinets by manufacturers other than KONAMI may be in compatible in the specifications.

- Use due care in handling the game PCBs, which are precision devices, at the time of transportation. For transport, be sure to place the PCBs in their specific packages.

2 Setting the PCBs in the machine

■ Connecting the connectors

- Connect the JAMMA edge connector and the sound connector in their specified directions.



3 PCB settings

3-1 PCB start-up check (self test)

Turn on the machine's power switch after installation. The PCBs will be automatically checked for performance. The check results will appear on the screen.



- **Be sure to perform the self test before using the machine. If an abnormality persists or the machine does not operate properly, turn OFF the power switch immediately to stop operating the machine.**

■ Result of test —————

If test is OK

- The machine goes to the game mode and the demonstration game gets started.

If any abnormality is detected

- "BAD" appears on the screen, and the checking is repeated.

If "22D/M BAD" appears, turn OFF the power switch, hold down the mother PCB test switch on the machine or on the PCB, and turn ON the power switch again. (The settings in the manual test mode will be back to the factory settings.)

When the machine has been installed or any of the PCBs has been repaired or replaced, hold down the test switch on the machine or on the mother PCB and turn ON the power switch. The settings will be back to the factory ones. If anything unusual keeps appearing on the screen or the machine fails, immediately turn OFF the power switch and contact your nearest dealer.

3-2 Adjusting the game environment (manual test)

Manually check and change the settings for the screen displays and game contents.

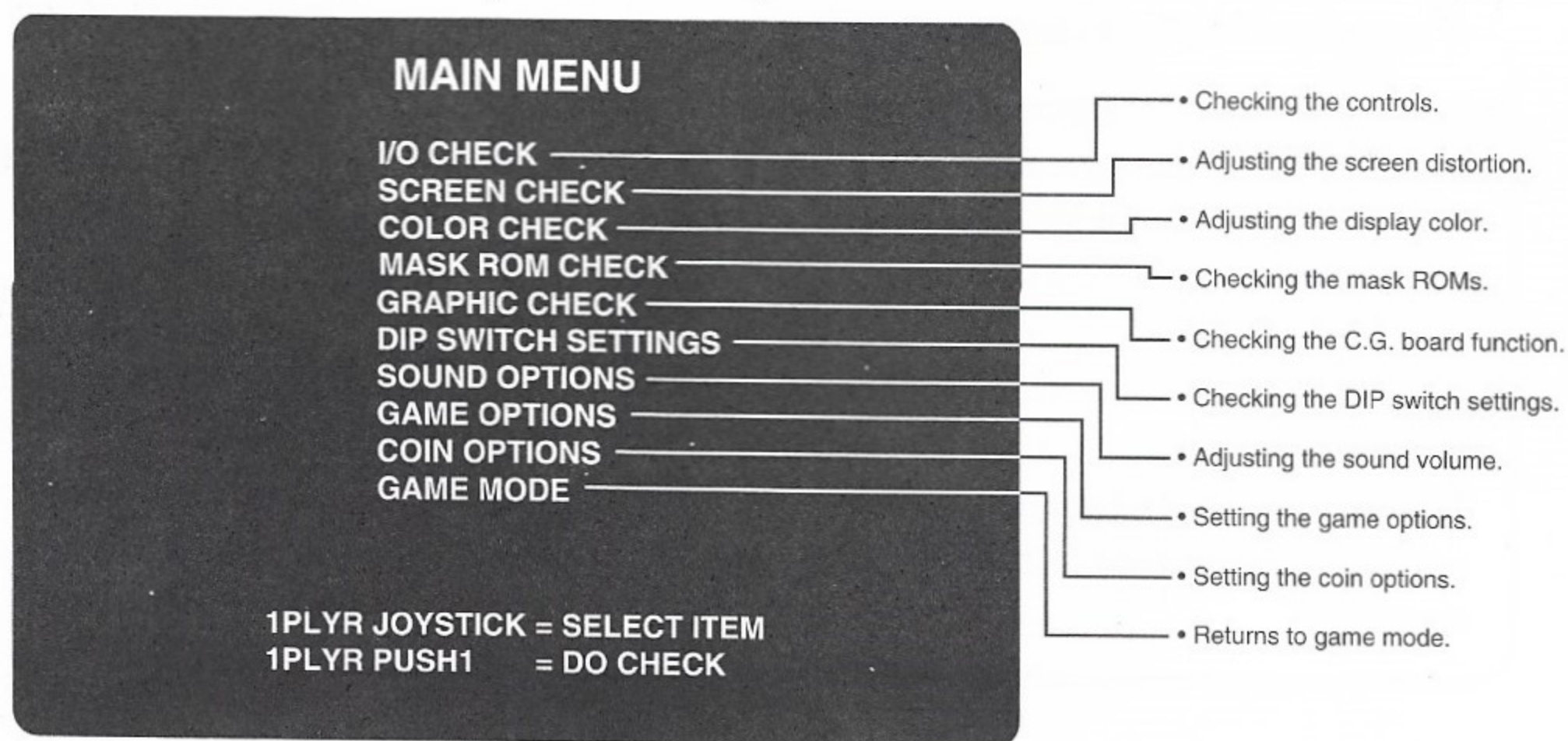
■ Starting the manual test mode — — — — —

- 1 Turn ON the power switch.
- 2 While the demo game is on, press the mother PCB test switch on the machine or on the mother PCB. (If the power switch is turned on with the test switch down, the current settings will be erased and replaced by the factory settings.)
 - The manual test mode is called and the main menu appears on the screen.

■ Quit the manual test mode — — — — —

- 1 Using the 1P joystick, select "GAME MODE" on the main menu screen.
- 2 Press the 1P A (PUSH 1) button.
 - The screen goes back to the game mode.

■ Main mode screen (basic items) — — — — —



■ Selecting each mode — — — — —

Select an item with the 1P joystick, press the 1P A (PUSH 1) button, and the selected item is called up.

The modes are discussed on the following pages in detail.

3-3 Mode descriptions

- The original factory settings are displayed in green; the changed settings are displayed in red. Move the 1P joystick up and down to select an item to be modified and move it right and left to change its setting.
- After the settings have been modified, select "SAVE AND EXIT" and press the 1P A (PUSH 1) button. The new settings are saved automatically and the screen returns to the main menu.
- If "EXIT" is selected after the settings have been changed, the message "YOU DID NOT SAVE, DO YOU WANT TO SAVE? YES/NO" will appear. Using the 1P joystick, select "YES" or "NO" and press the 1P A (PUSH 1) button.
- If "YES" is selected, the message "NOW SAVING" will appear, the modified settings will be saved and the screen will return to the main menu.
- If "NO" is selected, the message "NO MODIFICATION" will appear and the modified settings will not be saved.

■ If "FACTORY SETTINGS" is selected and the 1P A (PUSH 1) button is pressed, all the settings will return to the factory ones.

MEMO

I/O CHECK

Checking the controls

- Mode for checking the performance of each control.
- When any control switch is pressed, "1" appears on the screen.
- To return to the main menu, press the 1P A and 2P A (PUSH 1) buttons at once.

SCREEN CHECK

Adjusting the screen distortion

- Mode for checking the screen display.
- Adjust the focus, distortion and size of the monitor screen while watching the crosshatch pattern. Use the monitor adjusting PCB to make the adjustment. To return to the main menu, press the 1P A (PUSH 1) button.

COLOR CHECK

Adjusting the display color

- Mode for checking the display color.
- Make the adjustment using the monitor adjusting PCB so that the colors of the color bars should appear properly graduated. To return to the main menu, press the 1P A (PUSH 1) button.

MASK ROM CHECK

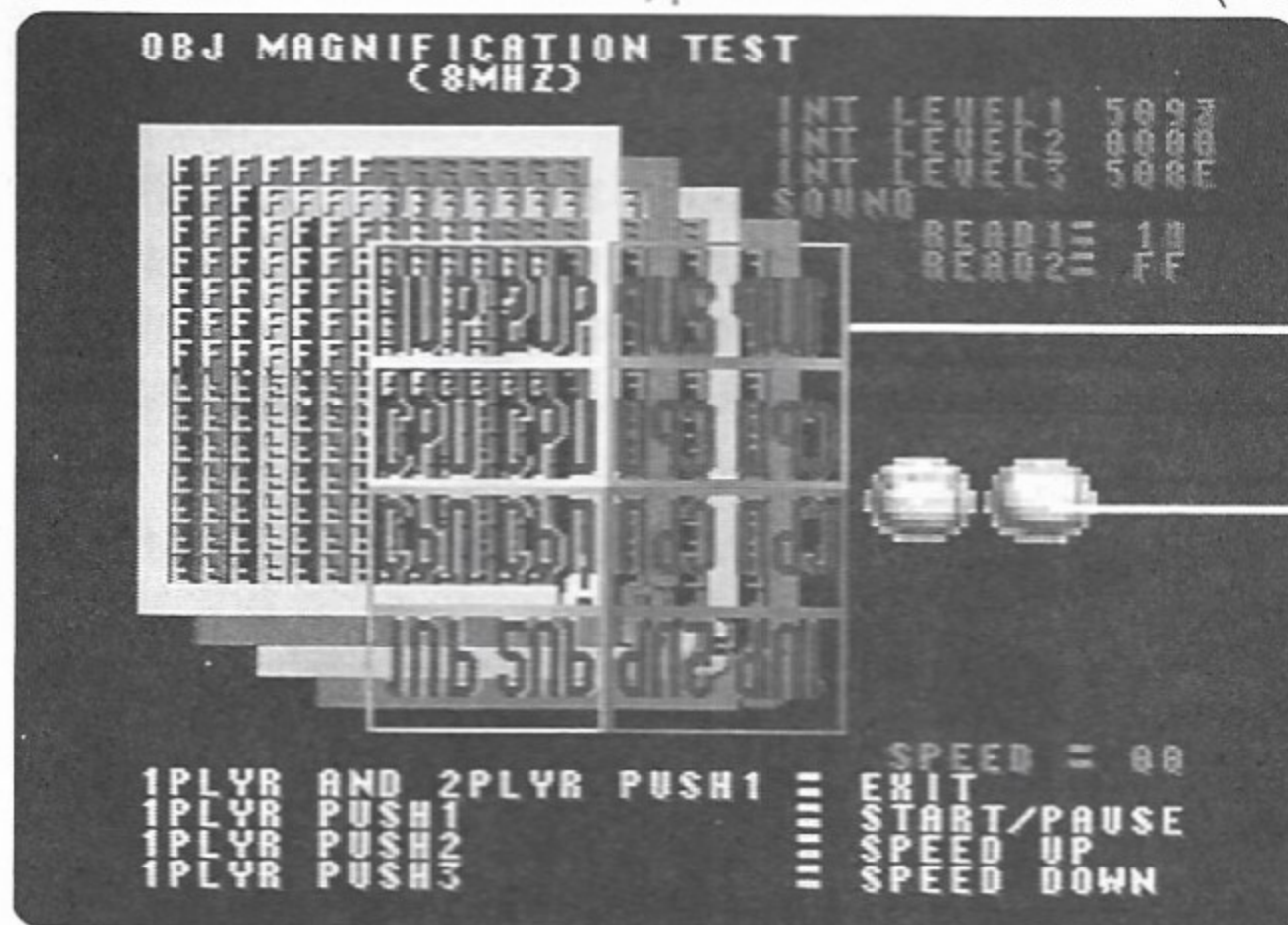
Checking the mask ROMs

- The mask ROMs are checked one by one. If everything is okay, "OK" appears. If anything unusual is found, "BAD" appears.
- If any of the mask ROMs is defective, the game may get in trouble. Contact your nearest dealer.
- To return to the main menu, press the 1P A (PUSH 1) button.

GRAPHIC CHECK

Checking the C.G. board function

- Mode for checking the function of the C.G. board. Observe the monitor screen in this mode to make sure the C.G. board is functioning well.
To return to the main menu, press the 1P A and 2P A (PUSH 1) buttons at once.



•The cards are moving from the front to the background.

•The balls change their shape temporarily.

There are 2 C.G. board function test screens. The next screen comes up automatically after the above one.

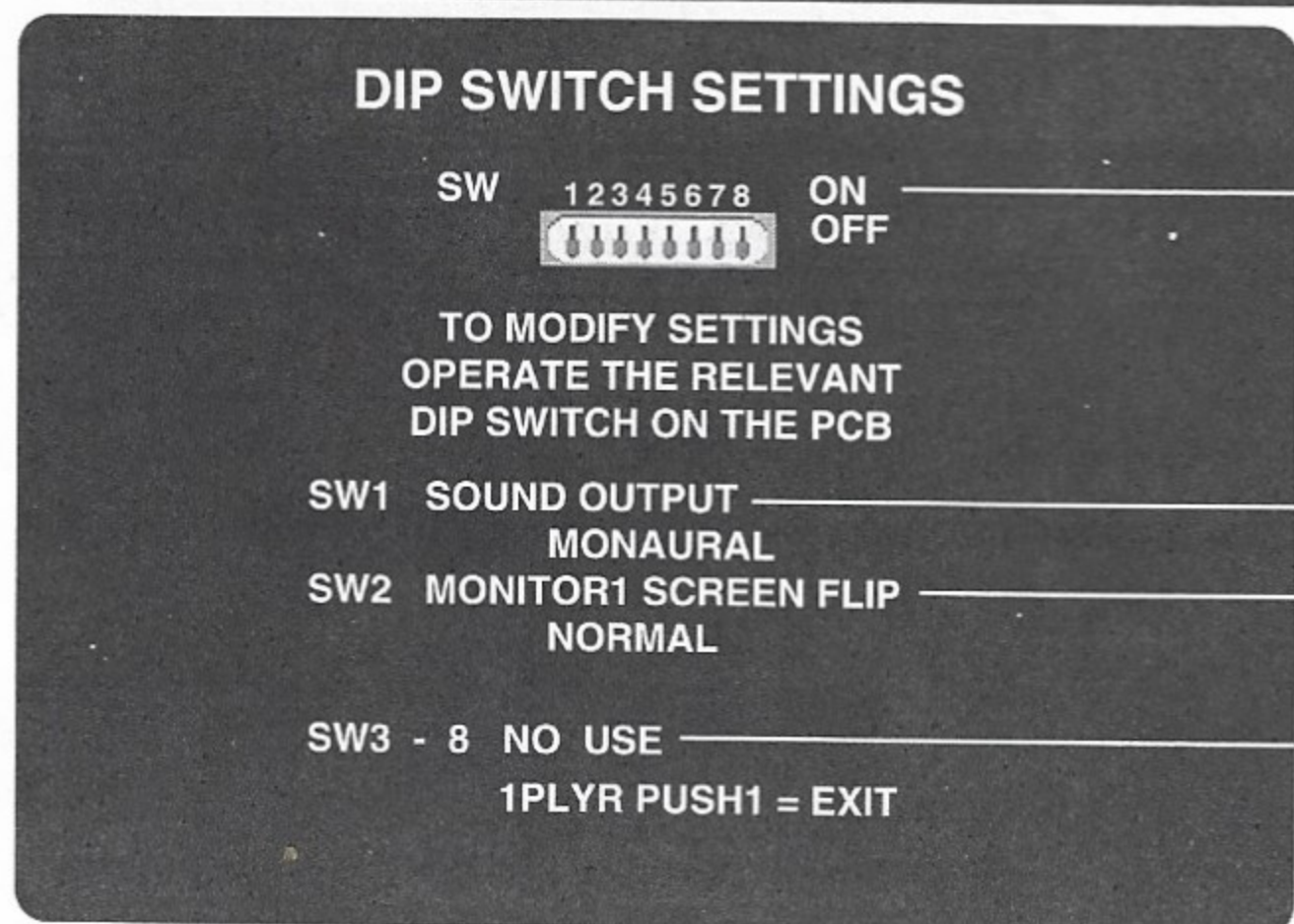
DIP SWITCH SETTINGS

Checking the DIP switch settings

- Mode for checking the DIP switch settings
To change the settings, use the DIP switches on the mother PCB.
To return to the main menu, press the 1P A (PUSH 1) button.



- Before changing the DIP switch settings, be sure to turn off the machine's power switch. And take antistatic measure using a grounding band or the like.



•Displays the current DIP switch settings.

•DIP switch 1: Setting the sound level.
•ON ...Stereo
•OFF...Monaural

•Sets the monitor position.
•ON ...Reverse
•OFF...Normal

•The DIP switches 3 thru 8 are not used. Keep all of them off.

- The DIP switch on the mother PCB can be shifted easily by utilizing a thin flatblade screwdriver or a ball-point pen.

MEMO

SOUND OPTIONS

Adjusting the sound volume

■ In this mode, the following appears on the screen.

To return to the main menu, select "EXIT" and press the 1P A (PUSH 1) button.

SOUND OPTIONS

SOUND IN ATTRACT MODE _____
ALL THE TIME

SOUND VOLUME _____
18

SOUND SCALE CHECK _____

FACTORY SETTINGS _____
SAVE AND EXIT
EXIT

1PLYR JOYSTICK UP/DOWN = SELECT OPTION
1PLYR JOYSTICK RIGHT/LEFT = MODIFY SETTING

- Turns on and off the demo play sound.
- ALL THE TIME.....Sound always on.
- ONCE EVERY 4 CYCLES...Sound on every 4 cycles.
- COMPLETE OFF...Sound always off.
- Adjusts the volume from the level 0 (no sound) to 30 (max.).
- To turn up the sound level, tilt the 1P joystick to the right.
- To turn down the sound level, tilt the 1P joystick to the left.
- You will hear a "do, re, mi, ... do" musical scale from the left speaker first and then from the right speaker, which is repeated twice. There are two sound sources. Check both of them.
- Returns all the settings to the factory settings.

GAME OPTIONS

Setting the game options

■ In this mode, the following appears on the screen.

To return to the main menu, select "EXIT" and press the 1P A (PUSH 1) button.

GAME OPTIONS

DIFFICULT LEVEL	4/MEDIUM	
LOOP SETTING	1 LOOP	END
START SCORE <CPU>	10 - 10	
<VS>	8 - 8	
<1COIN VS>	8 - 8	
CONTINUE PLAY FOR FINAL	NO	
FREE CONTINUE PLAY BY WINNING		
CPU PLAY YES / VS PLAY YES		
BONUS GAME		
LANGUAGE SELECT		
FACTORY SETTINGS		
SAVE AND EXIT		
EXIT		

1PLYR JOYSTICK UP/DOWN = SELECT OPTION
1PLYR JOYSTICK RIGHT/LEFT = MODIFY SETTING

- Sets a difficulty level. (from the 8 levels)

1/EASIEST
2/VERY EASY
3/EASY
4/MEDIUM
5/MEDIUM HARD
6/HARD
7/VERY HARD
8/HARDEST

Easier
↑
Medium
↓
Harder
- Sets the number of loops for <vs CPU> play. (1 to 2)
- Sets the score at the start of <vs CPU> play. (10 VS 10)
- Sets the score at the start of 2-person play. (8 to 8)
- Sets the score at the start of 1coin 2 person play. (8 to 8)
- Sets to continue or discontinue at the final game. (YES or NO)
- Sets to give one more match play to the winning player.
• CPU PLAY YES / VS PLAY YES
• CPU PLAY YES / VS PLAY NO
• CPU PLAY NO / VS PLAY YES
- Sets to give a bonus game to the player who won the finalgame. (YES or NO)
- This entry is not available in the Asian (AA) and Korean (KA) versions.
The language used on the screen during title looping and various games can be selected.
- Returns all the settings to the factory settings.

■ Language selection

• The language used on the screen during title looping and various games can be selected.

■ Scelta della lingua

• È possibile scegliere la lingua usata sullo schermo durante l' iterazione e i vari giochi elettronici.

■ Selección de idioma

• El idioma empleado en la pantalla durante la iteración de títulos y varios juegos puede ser seleccionado.

■ 언어 선택에 대하여

• 타이틀을 표시할 때나 각종 게임중의 화면에서 사용되는 언어를 설정할 수 있습니다.

COIN OPTIONS

Setting the coin options

- In this mode, the following appears on the screen.
To return to the main menu, select "EXIT" and press the 1P A (PUSH 1) button.



•Note that the coin setting options are not displayed when "FREE PLAY" is set to "YES".

COIN OPTIONS

FREE PLAY

COIN MECHANISM

COIN SLOT1

COIN SLOT2

PREMIUM START

1 CREDIT

1 CREDIT

FACTORY SETTINGS

SAVE AND EXIT

EXIT

1PLYR JOYSTICK UP/DOWN = SELECT OPTION

1PLYR JOYSTICK RIGHT/LEFT = MODIFY SETTING

NO

COMMON

1 COIN 1 CREDIT

1 COIN 1 CREDIT

NO

TO START

TO CONTINUE

•Selects a free play. (YES or NO)

•Specification of cabinet coin mechanism (The specification can not be changed to "Independent type".)

•Sets the number of credits for a coin. (See "Table of Coin Settings" shown below.)

•Sets the premium start. The premium start can be selected among "NO" or "YES 1-4". (See the explanation below for how to set.)

•Returns all the settings to the factory settings.

■ Relationship between coins and credits

COIN(S)	1	1	1	1	1	1	1	2	2	2	3	3	3	4	4	4	5	6	7	8	9
CREDIT(S)	1	2	3	4	5	6	7	1	3	5	1	2	4	1	3	5	1	1	1	1	1

■ "PREMIUM START" Setting

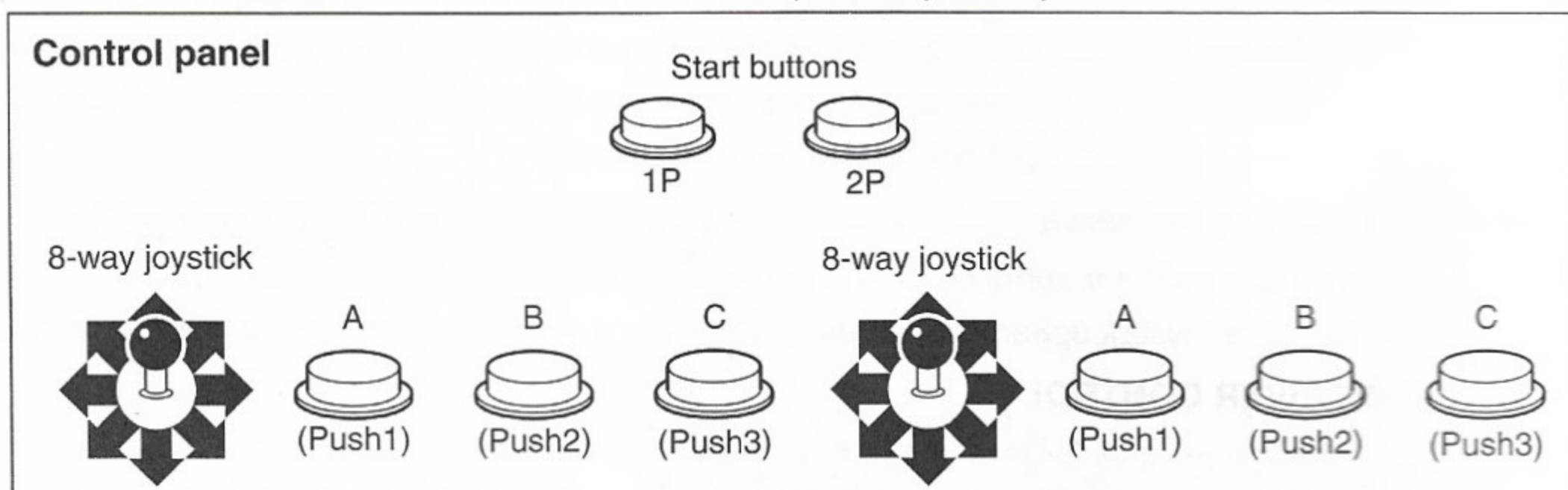
- It is possible to set the different numbers of credits for the start of the game and for its continuation. First, select a difference in the number of credits between the start and the continuation among "YES1"- "YES4", and set the number of credits for continuation. The number of credits for start is automatically set as the addition of the number of credits for continuation and the above selected difference. When "PREMIUM START" is not set, the number of credits required for start and that for continuation become the same.

Example: "PREMIUM START YES1" selected

Credit 1 at continuation + Difference in the number 1 = Credit 2 at start

4 How to Play

The "WINNINGSPIKE™" is a volleyball video game in which the player can play with the machine or two persons can play each other. Computer graphic rendering provides for realistic animation, whereas the most exciting commentary adds the heat of the game as if on a live broadcasting. Let's win and win to reach the Konami World Cup Championship.



■ How to play

- 1 Put a coin in the slot. Press the START button and the game type select screen shows up. Press the 1P or 2P button to select the player vs CPU or the two-player game, respectively. (When a two-player match with a coin is selected, the game will be over after the match.)
- 2 Select one of the ten national teams to play with.
- 3 Player vs CPU game The play starts at the score 10 vs 10 in the 5th set.
Player vs player game The play starts at the score 8 vs 8 in the 5th set.
You maneuver the members of a selected team according to the basic volleyball rules. There is no fault play in this game.
(The scores at the start of the game can be set referring to "GAME OPTIONS" on page 11.)

The game proceeds by the rally points rule.

- 4 The player who takes 15 points first will win the game.
When the set ends up in a deuce (14 vs 14), the player who gets 17 points first will win the game.

·The 9th game is the final one. One bonus game will be added, however, if the game is cleared with one coin or over 16 credits are won. (Make this setting,referring to “GAME OPTIONS” on page 11.)
(Bonus game The ball will become a bomb and you will play with a special team.
When a spike hits well, the ball will explode.)

■ Joining the game halfway

Another player can join the game while the other players are playing. In such a case, two settings are optional: The game is over for the loser alone, or it is over for both the players. (Refer to “GAME OPTIONS” on page 11.)

Continuing the game

The game can be continued when the necessary procedure is taken within 20 seconds before the game is over.

You can skip this stage by pressing any of the A, B and C (PUSH 1, PUSH 2 and PUSH 3) buttons.

■ How to maneuver —————

SERVE

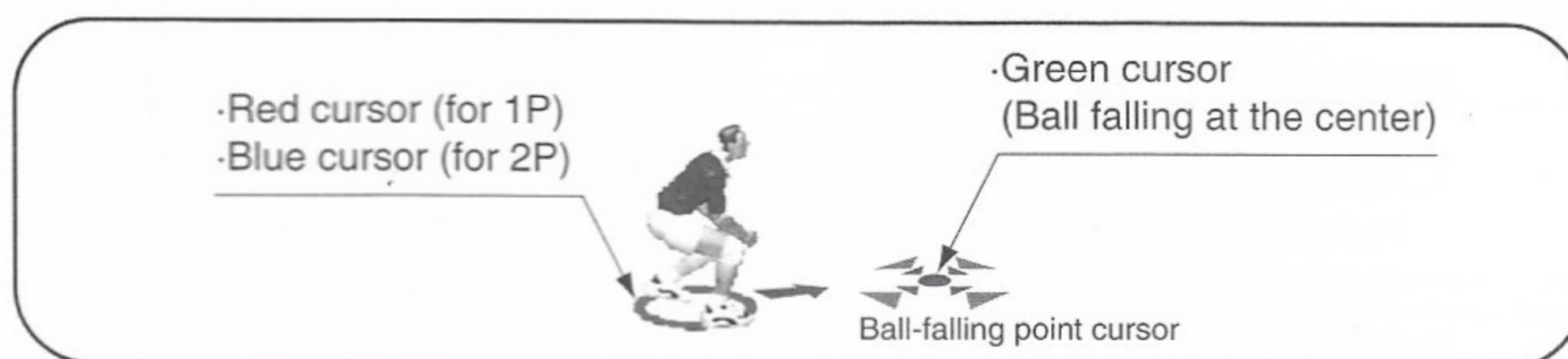
- Button A Floater serve (100% sure weak serve)
- Button B Drive serve (powerful serve with chances to go out of the court)
- Button C Jump serve (more powerful serve than drive serve. Difficult to receive but risky to go out of the court)

Selecting the serve

You can select a serve by pressing the serve button and moving the joystick.
Move the joystick upward and downward to aim at the right and left on the opposing team's court.

RECEIVER CONTROL

Move the joystick to get the player to the cursor where the ball will fall.



SETTER CONTROL

For the moment from a receiving to a setting, press the button to pick up the attacker.

- Button A Setting to a front attacker
- Button B Setting to the front center
- Button C Setting to the right

ATTACK (effective while the ball is flashing)

- Button A Weak spike (less powerful but sure into the opposing team's court)
- Button B Strong spike (most powerful but risky to go out of the court)
- Button C Feint (dropping the ball close to the net in the opposing team's court)

Attacking directions

Press the attack button and move the joystick upward or downward to decide a attacking direction. (You can aim at the right and left on the opposing team's court.)

BLOCKER CONTROL

For the moment from a setting to a attack from the opposing team, press the button on time.
Move the joystick upward and downward to position a blocker against the attacker.

- Button A Two-man block (effective against a feint from the opposing team)
- Button B Two-man block (effective against a feint from the opposing team)
- Button C Three-man block (able to cover a wide area against a attack)

DELAYED ATTACK

For the moment from a receiving to a setting, press two or more buttons in order to give fake attacker's.
The ball will be setting to the player of the last pressed button.

QUICK ATTACK

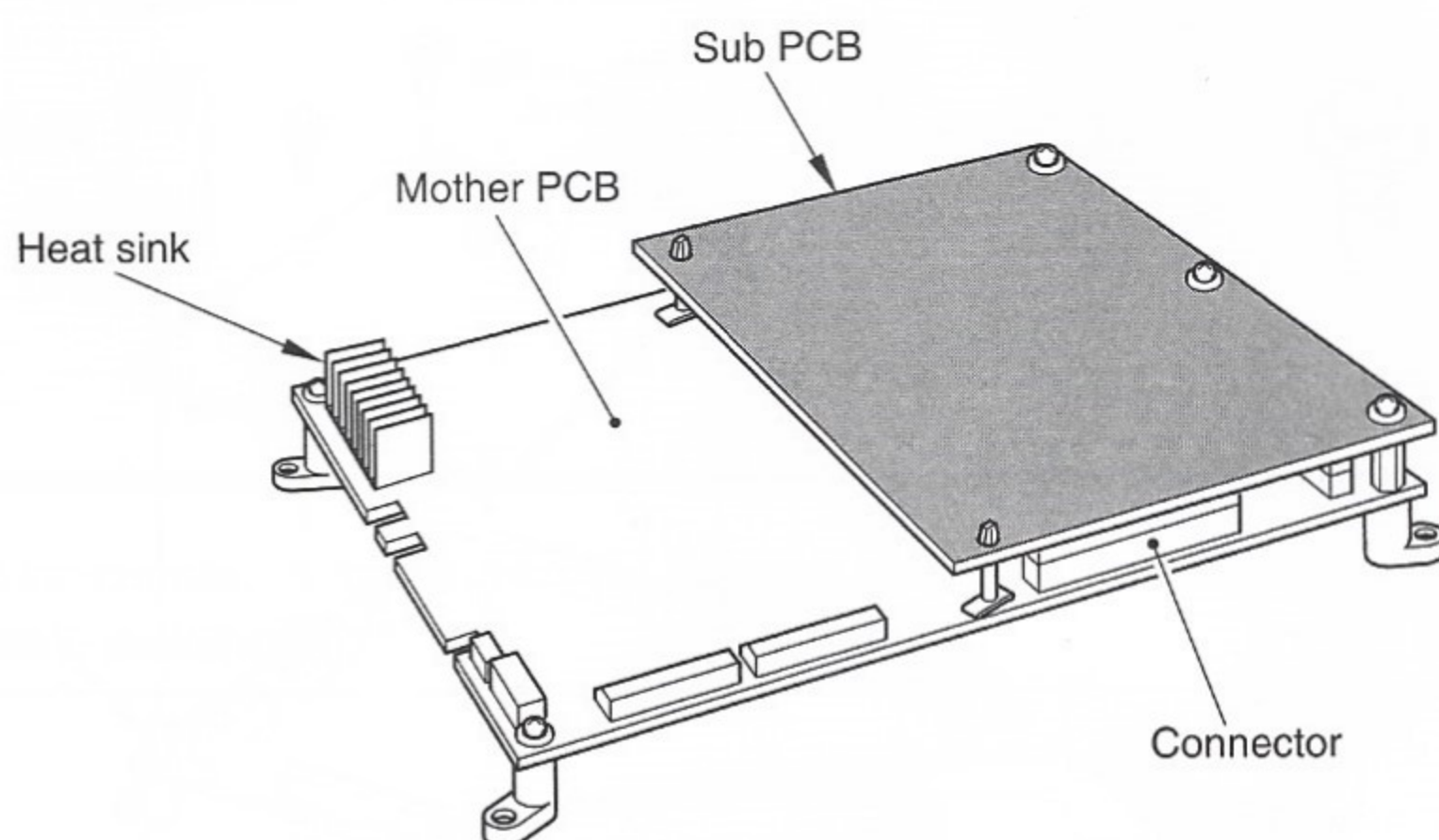
A quick attack can be produced by picking up a attacker quickly after receiving the ball.

5 Sub PCB Replacement and Cautions

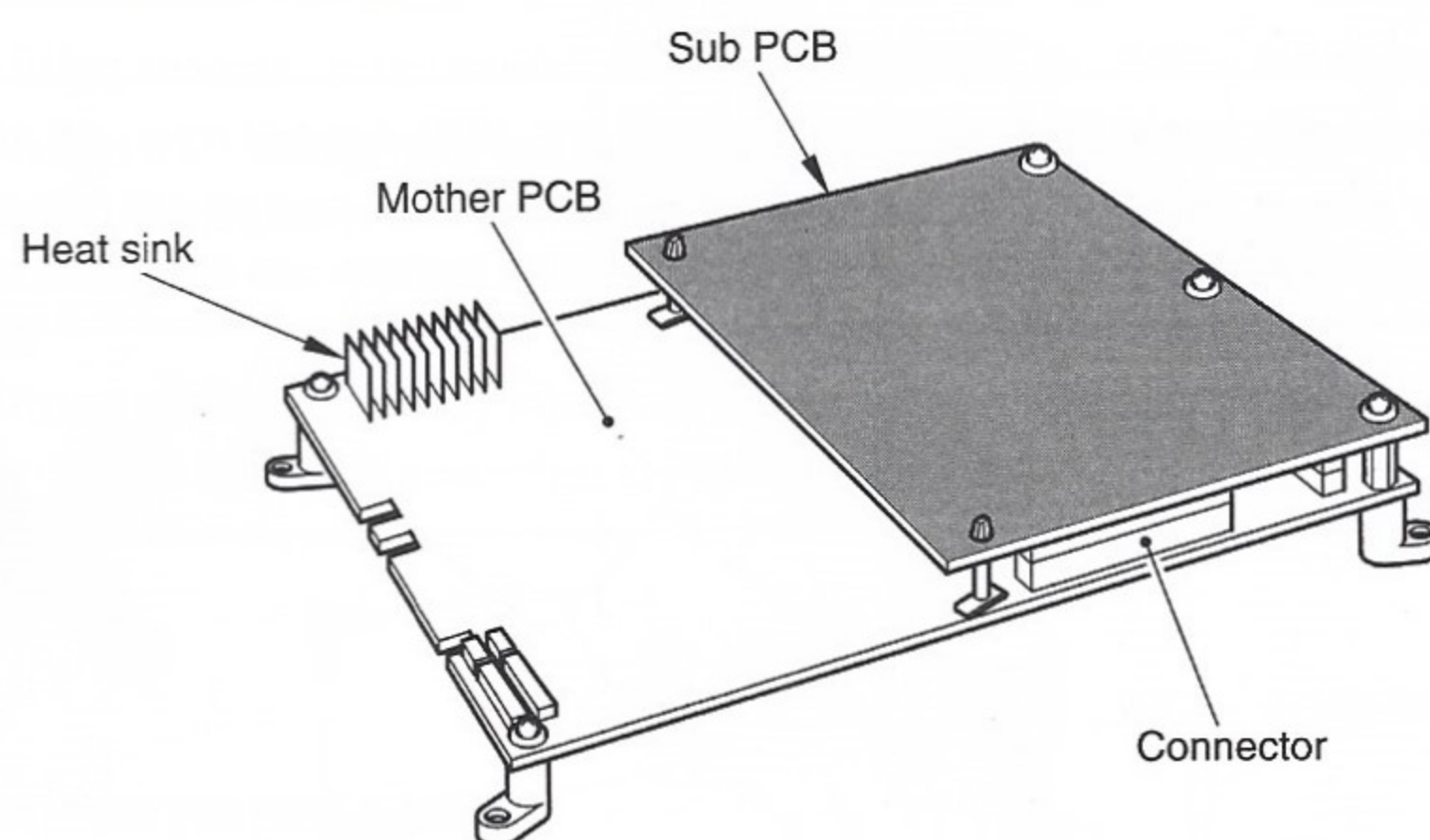
5-1 Types of mother PCB

- The "System GX" is made up of the mother PCB and sub PCB.
The type of game can be changed by replacing the "System GX" sub PCB with the one for another type of game.

For the PWB300456□mother PCB



For the PWB354192□mother PCB



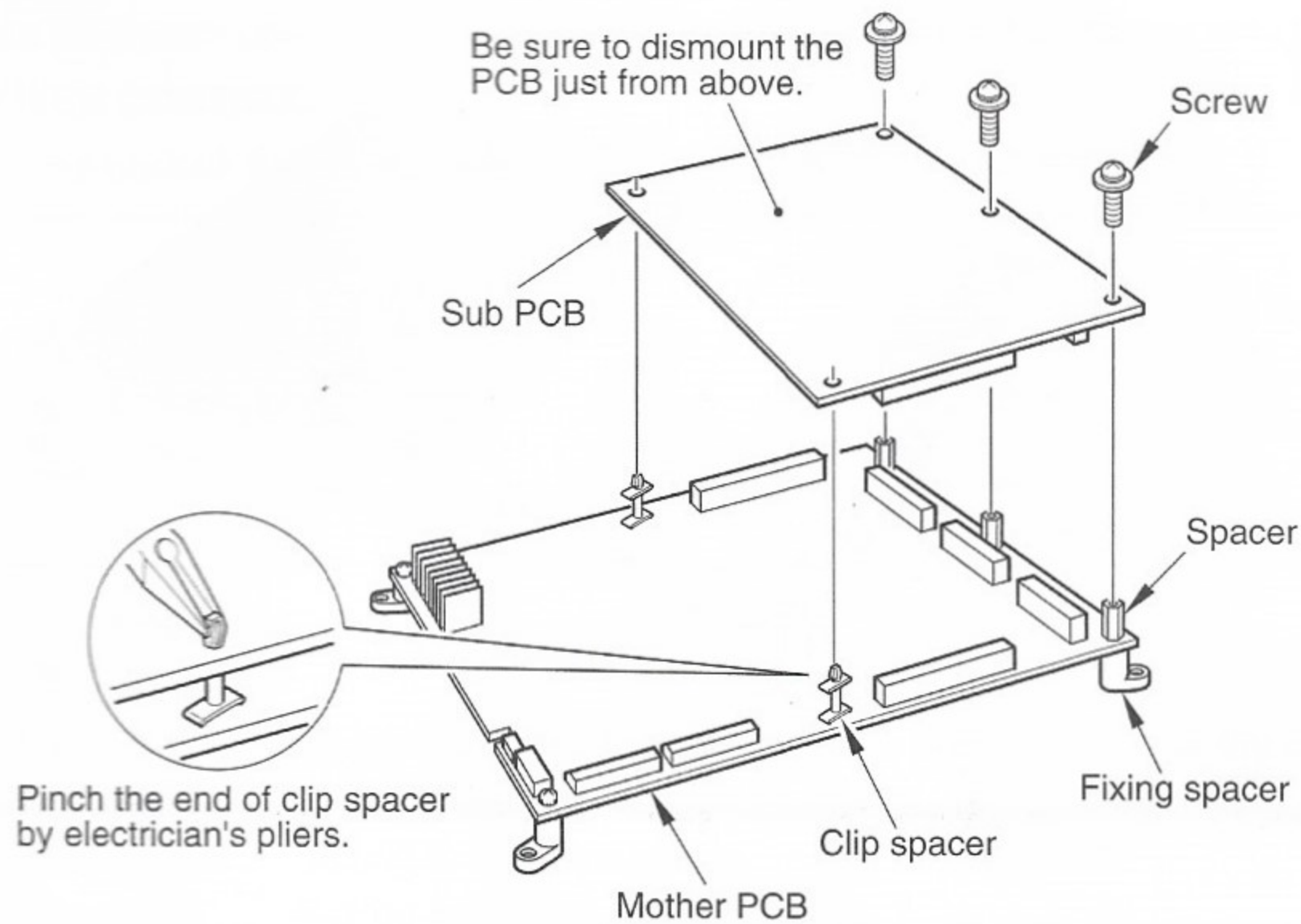
5-2 Dismounting the sub PCB

(For the PWB300456□ mother board)

The sub PCB is fixed to the mother PCB with fasteners such as clip spacers, spacers and screws. Remove all these fasteners and dismount the sub PCB just from above.

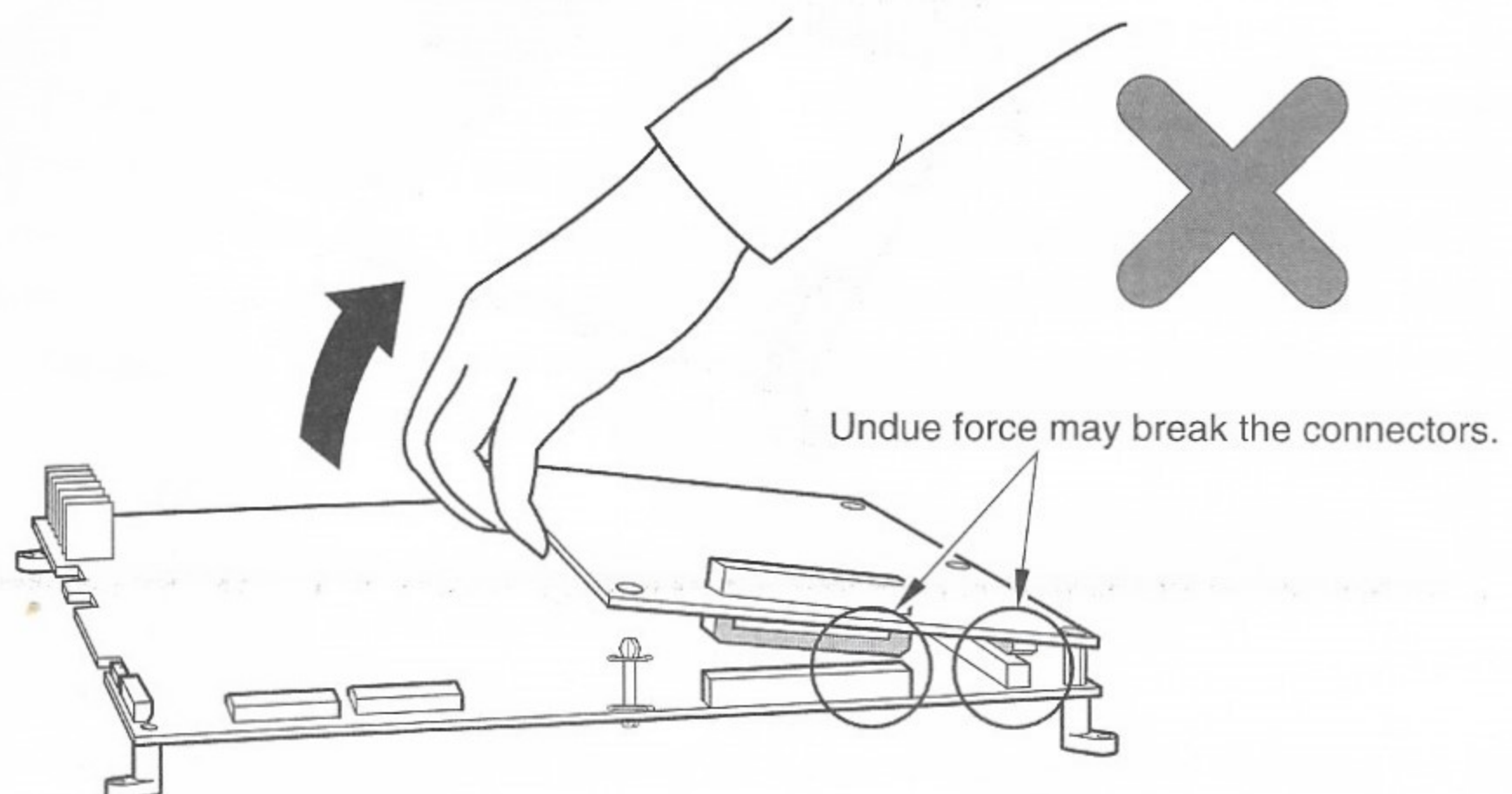
The clips of clip spacers can be easily unhooked with electrician's pliers or the like.

(The quantities and positions of the fasteners are the same for any mother PCB. The same screw holes of the sub PCB are used.)



- Keep in mind that the hole diameter for the clip spacer is different from that of the spacer.

Be sure to dismount the sub PCB by holding it up just from above. If it is pulled up by force in the way as shown below, the PCBs may be deformed and malfunction, or the connectors may eventually broken.



5-3 Mounting the sub PCB

Check the parts supplied together.

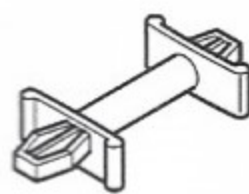
(For the PWB300456 □ mother PCB)

The following fasteners are required to mount the sub PCB.

• Fixing spacer



• Clip spacer



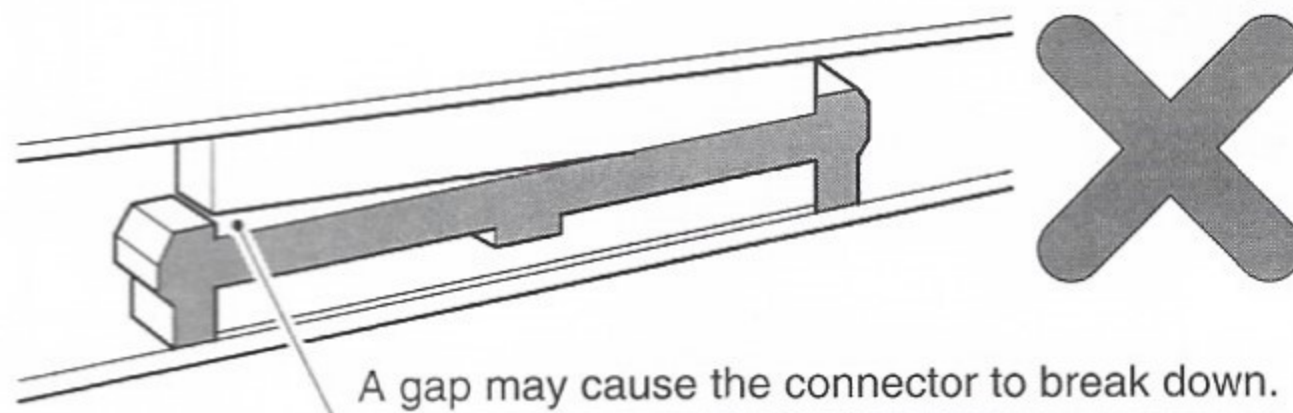
• Spacer



• Screw



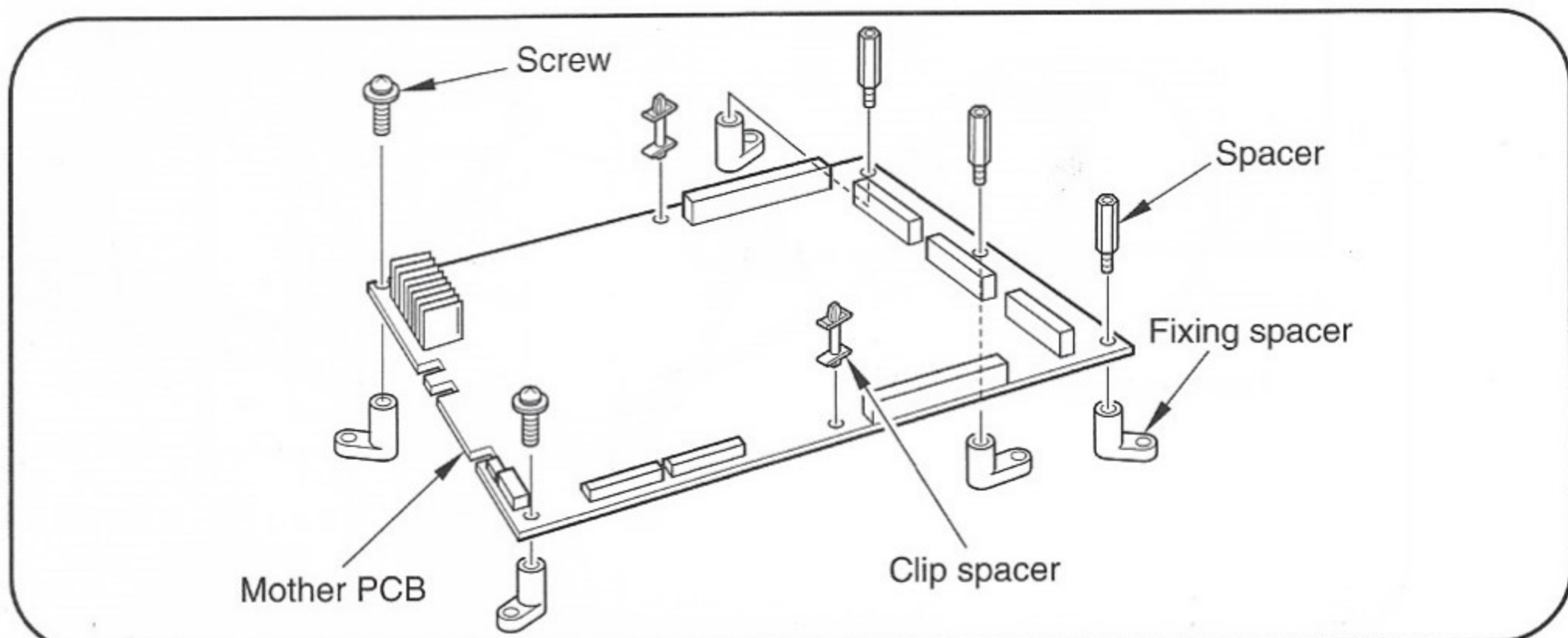
Connect the connectors tightly enough. If in poor contact as shown below, the connector may be damaged or malfunction.



- 1 Fit the fixing spacers on the mother PCB (PWB300456 □). Screw the spacers for the fixing spacers between the sub PCB and the mother PCB. And secure the other fixing spacers directly with the screws.

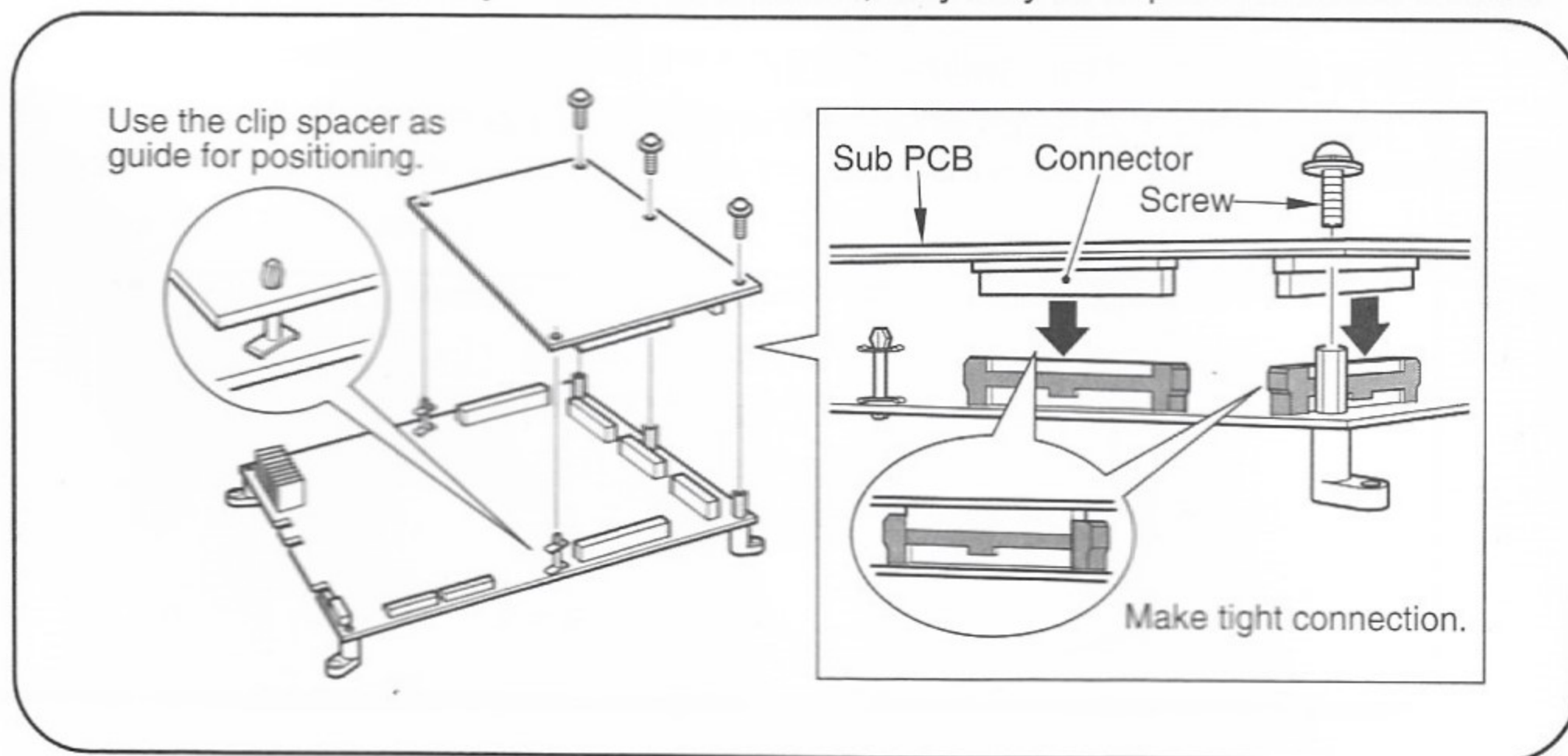
Be sure to use the clip spacers for fixing the sub PCB at the positions where there are no fixing spacers.

These fixing positions are very important to prevent the PCBs from getting warped. Be sure to carry out the mounting according to the illustration below.



- 2 Confirm the connector positions in the mother and sub PCBs. Insert all the connectors in the PCBs by using the clip spacers as guide for positioning. At the same time, fit and fix the clip spacers into position.

If the connectors are out of position or overloaded, they may be in poor contact or broken.



5-4 Test Switch

(For the PWB300456□ mother PCB)

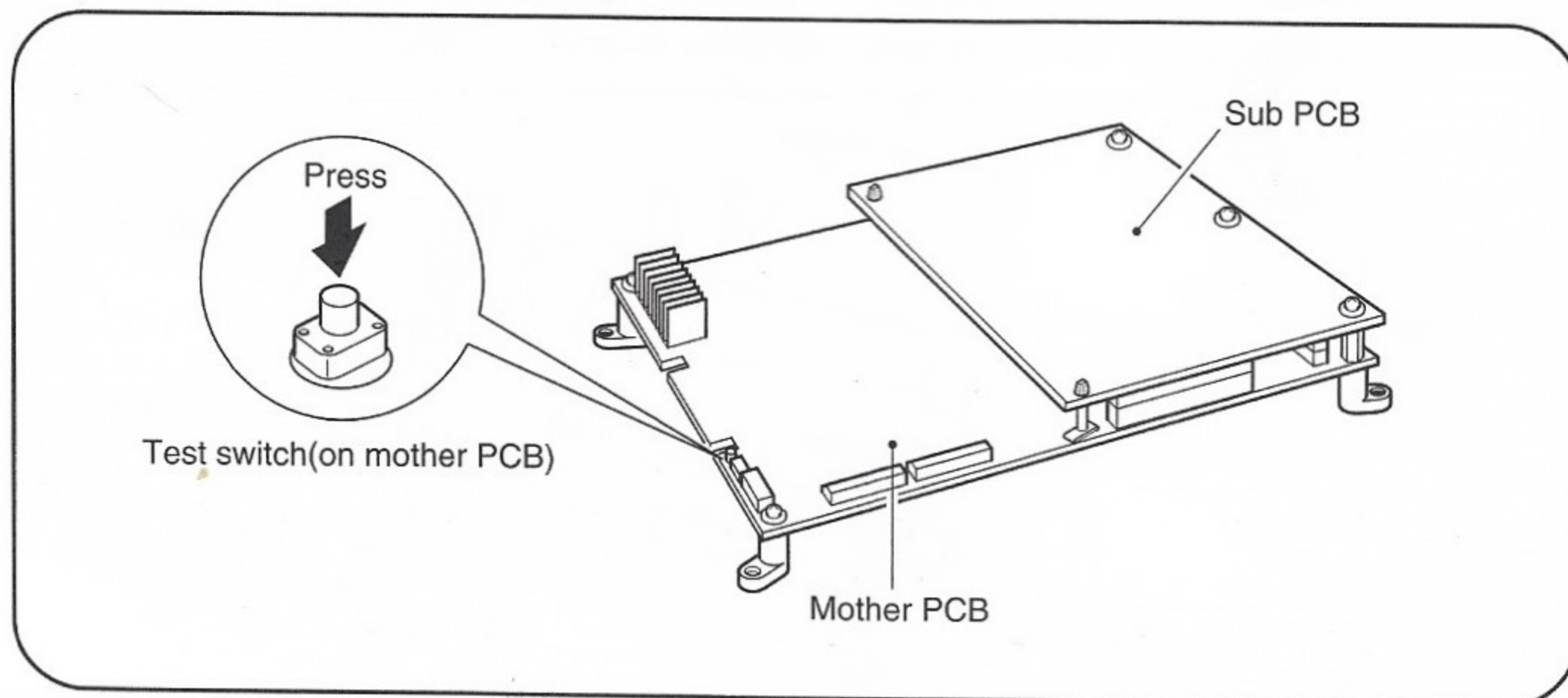
Use this switch to run the machine in the test mode or to initialize the memory.

•Test mode

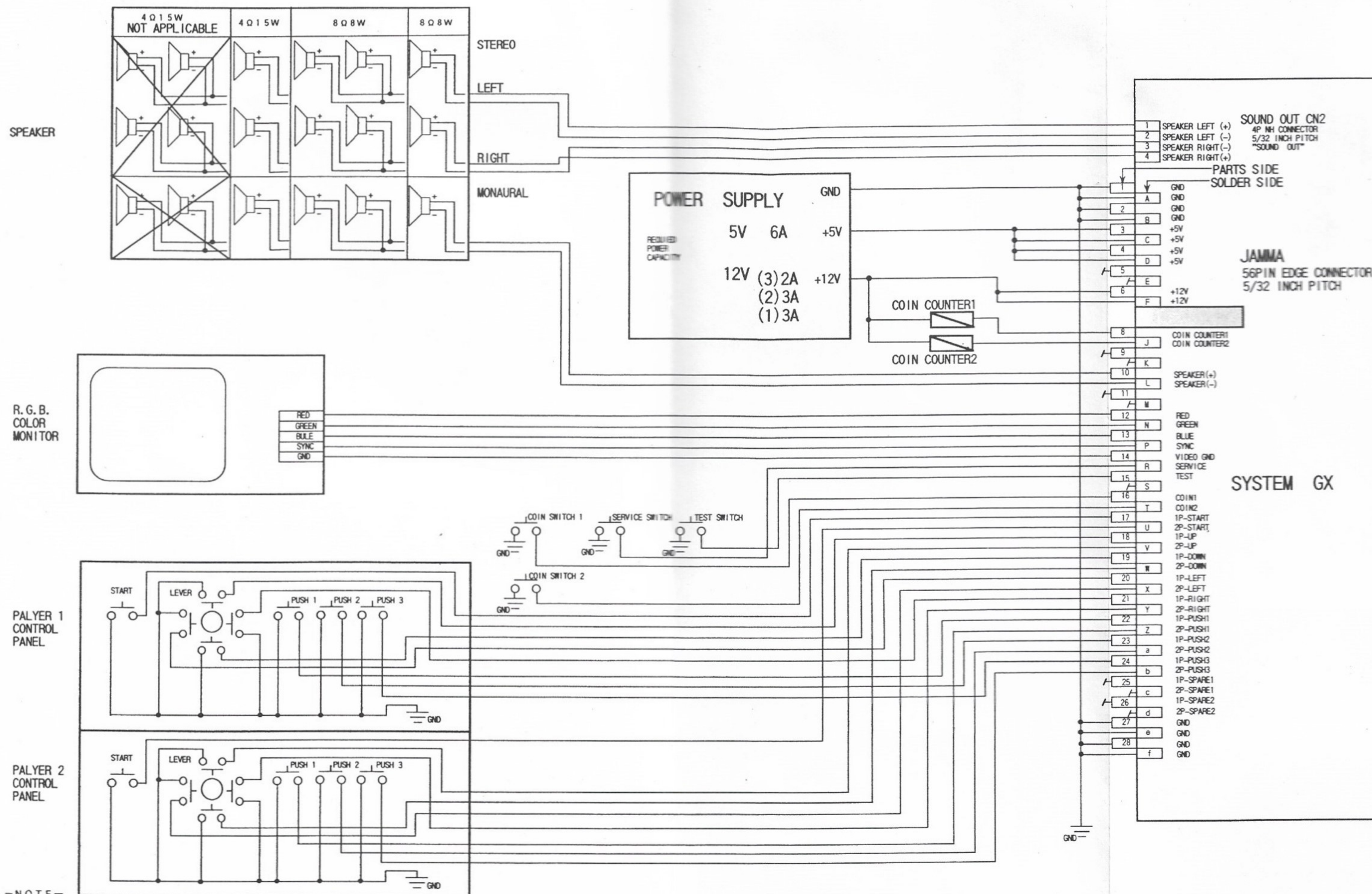
In this mode, it is possible to check or change the settings relating to screen display or type of game. (See "3-2 Adjusting the game environment" on page 8.) when the test switch on the machine or on the mother PCB is pressed during display on the screen, the machine goes into the test mode and the main menu appears on the screen.

•Initialization

After the DIP switch settings have been done at the time of machine installation, turn ON the power switch while holding down the test switch of the machine or the mother PCB. Normally the contents of memory are automatically verified, and if necessary, the memory is initialized. (See "3-1 PCB start-up check" on page 7.)



6 Wiring diagram



1. SURGE KILLER DIODES FOR COIN COUNTER INSTALLED ON THE PCB.
2. YOU CANNOT USE BOTH STEREO AND MONAURAL OUTPUT AT THE SAME TIME.
3. DO NOT CONNECT SPEAKER (-) TO GND.