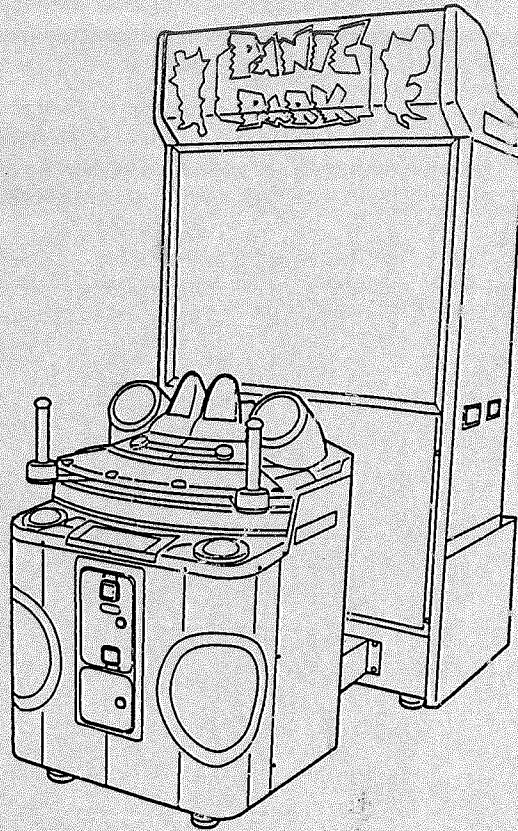


**namco®**



# Panic Park DX

## OPERATION MANUAL

Illustrations may be slightly different from actual products.



**DANGER**

- To ensure safety, read this operation manual carefully before using.
- Be sure to keep this operation manual together with the "Projector Adjustment Manual" for immediate and easy reference whenever necessary.

## **Important**

**Read PRECAUTIONS and INSTALLATION  
Sections before operating game**

## **FCC Notice**

Note: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operating in a commercial environment. This equipment uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

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**MITSUBISHI**

**VS-50603 MODEL**

**120463 SERIAL**

**MITSUBISHI**  
THE BIG SCREEN COMPANY™

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and you'll be automatically  
entered for a chance to win  
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**PRODUCT REGISTRATION**

Panic Park TV

Mitsubishi:

50"

VS-50603



## **INTRODUCTION**

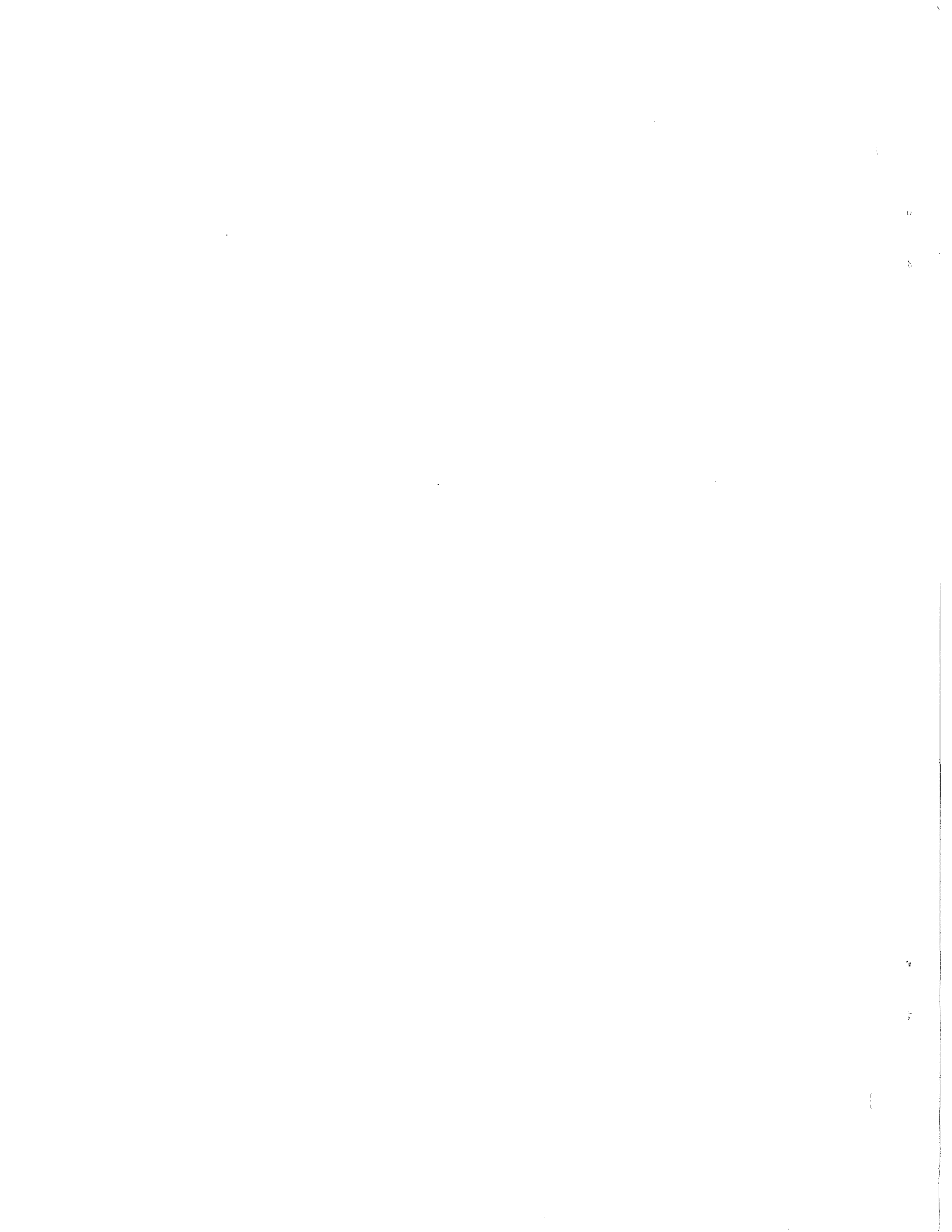
Thank you very much for purchasing our Panic Park DX (hereinafter referred to as "this machine").

This operation manual contains:

- methods of operation, installation, transportation/moving, maintenance, and disposal of this machine;
- methods of correct operation so as to fully utilize the functions of this machine; and
- methods of securing the safety of players as well as viewers

Contact:

- For further information on the Panic Park DX as well as repairs, please contact your distributor.



## 1. SAFETY PRECAUTIONS




Be sure to read this in order to use the machine safely.

### To owners:

When you entrust other persons to operate, install, transport, move, maintain and dispose this machine, direct them to read the applicable items in advance and observe the instructions.

### 1-1 Explanation of levels of danger

As far as this machine and this operation manual are concerned, the cautionary phrases and the resultant physical damage or injury are classified as described below according to the level of danger:

-  **DANGER:** Death or serious injury will occur, should the danger be unavoidable.
-  **WARNING:** Death or serious injury will possibly occur, should the danger be unavoidable.
-  **CAUTION:** Slight injury or damage to other goods and materials will possibly occur, should the danger be unavoidable.

Cautions irrelevant to safety are displayed with the following mark.



Cautions concerning the functions and protection of the product.

### 1-2 Definition of technicians

This operation manual has been written mainly for operators and location staff. However, the work procedure contained in any item with a note, saying "to be conducted only by technicians" has been written for technicians. Therefore such work must be conducted only by technicians.

#### Technicians:

People who are engaged in design, manufacture, inspection and maintenance services of equipment at an amusement (AM) equipment manufacturer, who have expertise in electric, electronic and mechanical engineering equivalent to or higher than technical high school graduates and who are engaged in the maintenance and control (including repair, etc.) on a routine basis.

### 1-3 Top-priority safety precautions



#### DANGER

- When adjusting the projector, do not touch anything other than specified in the work procedure. Carelessly touching any part inside the projector other than the parts specified may cause you an electric shock or injury.
  - The projector contains some parts that retain high heat and voltage after power-off.



#### WARNING

- Should any trouble occur, turn off the power and stop operating this machine immediately. Then do not forget to unplug the power cord. Operating this machine with its trouble unsolved may cause a fire or other accidents.
- Keeping the inside of the projector dusty for a long time may cause a fire or breakdown. Consult your distributor for internal cleaning about once a year after purchase.
- When disposing this machine, do not detach the screen of the projector. The screen detached or the lens contained in it may cause a fire, burning or loss of eyesight.
- This machine has the parts essential for ensuring safety of players and viewers. Operating the machine with the "Parts essential for ensuring safety of players and viewers" (See P-36) damaged, broken, worn, or poorly mounted may cause players and viewers injury. Should any trouble be discovered, replace them as soon as possible. To order parts, contact your distributor.
- Dust accumulated on the power plug may cause a fire. Conduct a regular check and remove dust.
- Firmly insert the power plug into the service outlet all the way. Insufficient contact may cause heat, resulting in a fire or burning.
- A damaged power cord may cause a fire, an electric shock or leakage. Observe the following instructions:
  - Do not make the cord come close to a heating device.
  - Do not twist the cord.
  - Do not bend the cord forcefully.
  - Do not modify it.
  - Do not bundle it.
  - Do not pull it. (Do not pull the cord when unplugging. Always hold the power plug to pull it out.)
  - Do not place anything on it.
  - Do not get it caught by this machine, other product, or wall.
  - Do not do anything else that may damage the power cord.
  - Do not wet the power cord or power plug with water. That might cause an electric shock or leakage.
  - Do not touch the power plug with a wet hand. That might give you an electric shock.
- This machine has a power capacity of AC110V - maximum electric current consumption 5.2A (AC 220 V , maximum electric current consumption 1.9A.) Always use indoor wiring that conforms to the power specifications of this machine. Otherwise a fire or an electric shock might result.
- Operate this machine with a supply voltage in the AC 110-120V (AC 220 - 240 V) range. Using this machine at any voltage outside the specified range might cause a fire or electric shock. To ensure this machine runs under its best condition, use a rated voltage whenever possible.
- Use specified brands of consumables and service parts (including screws). To order any part, contact your distributor.
- Do not remodel this machine without permission. Do not carry out any task not covered in this Operation Manual. Unauthorized remodeling may result in an unexpected risk.
- When re-selling this machine, always attach this Operation Manual and the Projector Adjustment Manual to this machine.



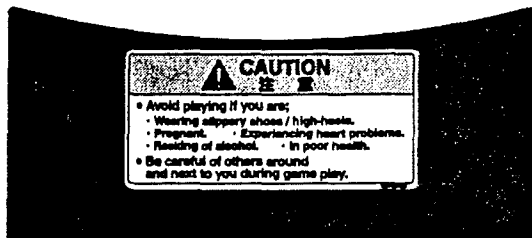
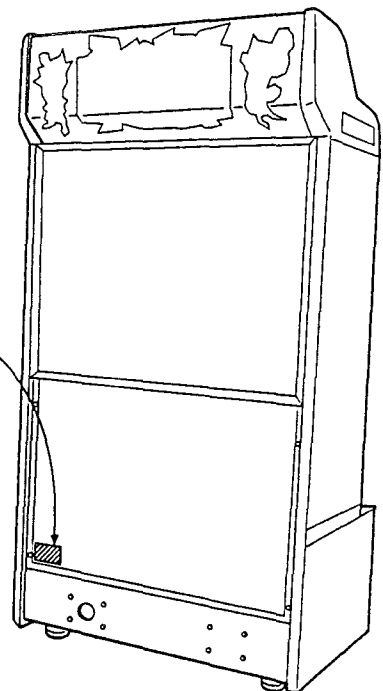
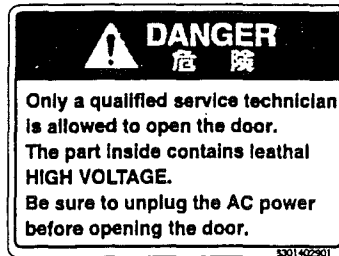
## 1-4 Explanation of "Warning" stickers on this machine

### WARNING

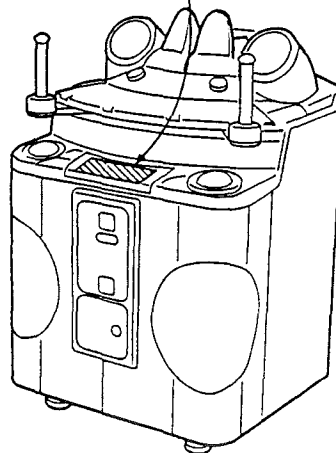
- Warning stickers provide important cautions for safety. Please observe the following instructions:
  - Give attention to the location, lighting and dirt of the warning stickers on the machine so that they may be fully readable. Be careful not to make the stickers invisible behind other game machines.
  - Do not remove or modify the warning stickers.
  - Should a sticker be markedly soiled or torn, replace it with a new one. For obtaining a new one, please contact your distributor.

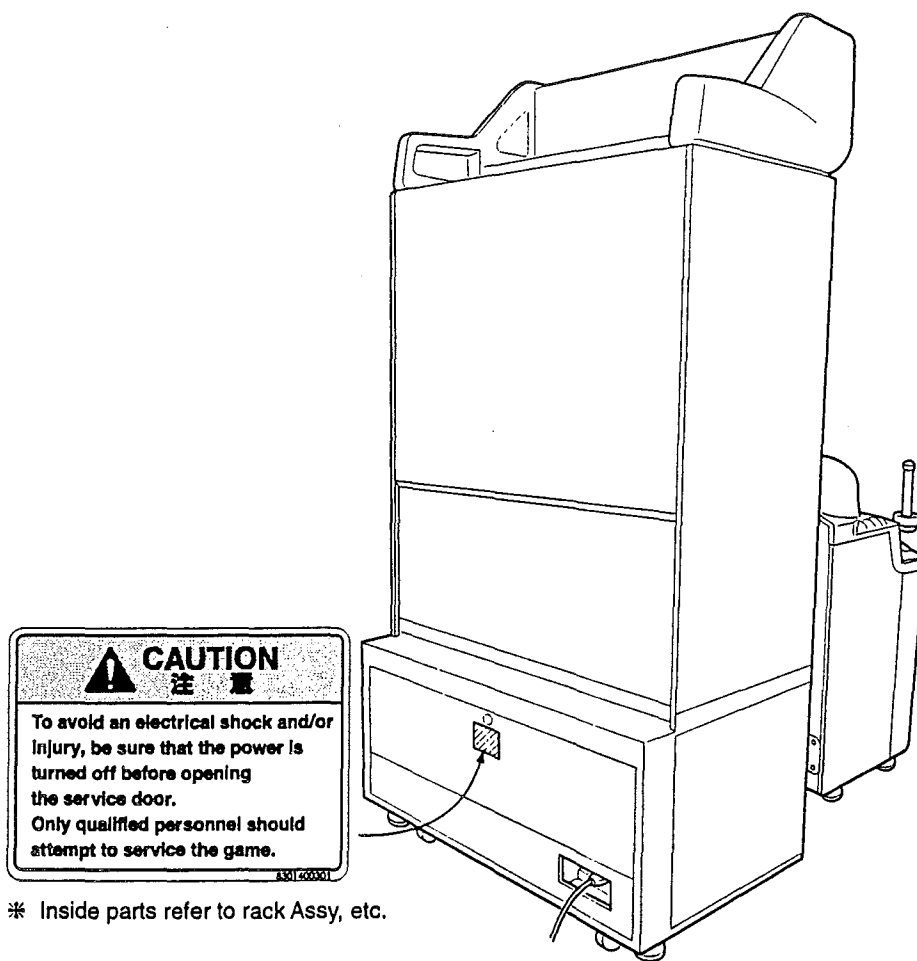
※ High voltage parts refer to specific parts inside the projector. (See "8-3-2(1) Replacement of the projector" on P-63)

Warning sticker (High voltage)  
Parts number: 461-371



Caution sticker (Play)  
Parts number: 461-374





Caution stickers (Maintenance)  
Parts number: 461-359

# CONTENTS

<b>1. SAFETY PRECAUTIONS</b> .....	1
1-1 Explanation of levels of danger .....	1
1-2 Definition of technicians .....	1
1-3 Top-priority safety precautions .....	2
1-4 Explanation of "Warning " stickers on this machine .....	3
<b>CONTENTS</b> .....	4
<b>2. SPECIFICATIONS</b> .....	9
<b>3. INSPECTION OF THE PACKAGE</b> .....	12
<b>4. COMPONENTS (NAME OF EACH PART)</b> .....	14
<b>5. INSTALLATION</b> .....	15
5-1 Conditions of Installation .....	15
5-1-1 Locations not to be installed .....	15
5-1-2 Play zone as installed .....	16
5-2 Minimum measurement requirements for carrying- in-route (door, corridor, etc.) .....	17
5-3 Assembly .....	21
5-3-1 Attaching the signboard Assy .....	21
5-3-2 Combining the projector Assy with the front Assy .....	22
5-3-3 Adjusting level adjusters .....	24
5-4 Connecting the power cord and the ground .....	25
(1) With a 3P service outlet .....	25
(2) With a 2P service outlet .....	25
(3) With a 2P service outlet without a ground terminal .....	26
5-5 Adjusting the projector .....	27
<b>6. MOVING AND TRANSPORTING</b> .....	28
6-1 Moving (on the same floor) .....	28
6-2 Transporting .....	29
6-2-1 Dividing .....	29
6-2-2 Carrying by hands (carrying up and down the stairs) .....	32
6-2-3 Loading into and unloading from vehicles, etc. ....	33
6-2-4 Transporting by a vehicle .....	34
<b>7. OPERATION</b> .....	35
7-1 Persons not recommended to play .....	35
7-2 Safety precautions when playing .....	36
7-3 Explanation of parts essential for the safety of players and viewers .....	36
7-4 Inspection before beginning the operation .....	37

7-4-1	Inspection of the outward appearance .....	37
7-4-2	Inspection of workings .....	38
7-4-3	Regular inspection .....	38
7-5	How to Play .....	39
7-5-1	How to Control .....	39
7-5-2	Mode .....	39
7-5-3	Rules of the game .....	39
7-6	Adjustment .....	40
7-6-1	Turn the power switch ON. ....	40
7-6-2	Adjustment switches .....	41
7-7	Test mode .....	42
7-7-1	Explanation of the menu screen (MENU) .....	42
7-7-2	Setting of game fees and free play (Coin options) .....	43
7-7-3	Setting the game contents (Game options) .....	44
7-7-4	Input/Output test of switches (I/O TEST) .....	45
7-7-5	Various monitor adjustments (MONITOR TEST) .....	48
7-7-6	Adjusting sound volume (SOUND TEST) .....	49
7-7-7	Displaying and initializing the game data (ADS DATA) .....	50
7-7-8	Initialization of backup memory, etc. (OTHERS) .....	51
7-8	Adjustment when parts are replaced (INITIALIZATION) .....	52
7-8-1	Method of initializing the volume of the swing lever Assy .....	52
<b>8.</b>	<b>MAINTENANCE .....</b>	<b>54</b>
8-1	Maintenance and inspection .....	54
8-1-1	Greasing up coil springs of the swing lever Assy .....	55
8-1-2	Checking abrasion of versus cushions of the swing lever Assy .....	56
8-2	Troubleshooting measures .....	58
8-2-1	The whole body .....	59
8-2-2	Signboard Assy .....	59
8-2-3	Projector Assy .....	60
8-2-4	Front Assy .....	60
8-2-5	Swing lever Assy .....	61
8-3	Detachment, mounting and replacement .....	62
8-3-1	Signboard Assy .....	62
	(1) Replacement of a fluorescence lamp and a glow lamp .....	62
8-3-2		
	(2) Disassembling and assembling the rack Assy .....	66
	(3) Replacing the game PC board .....	68
8-3-3	Cabinet Assy .....	70
	(1) Replacing start buttons and lamps .....	70
8-3-4	Swing lever Assy .....	72
	(1) Replacing volumes .....	72
	(2) Replacing versus cushions .....	73
	(3) Replacing bar side covers .....	74

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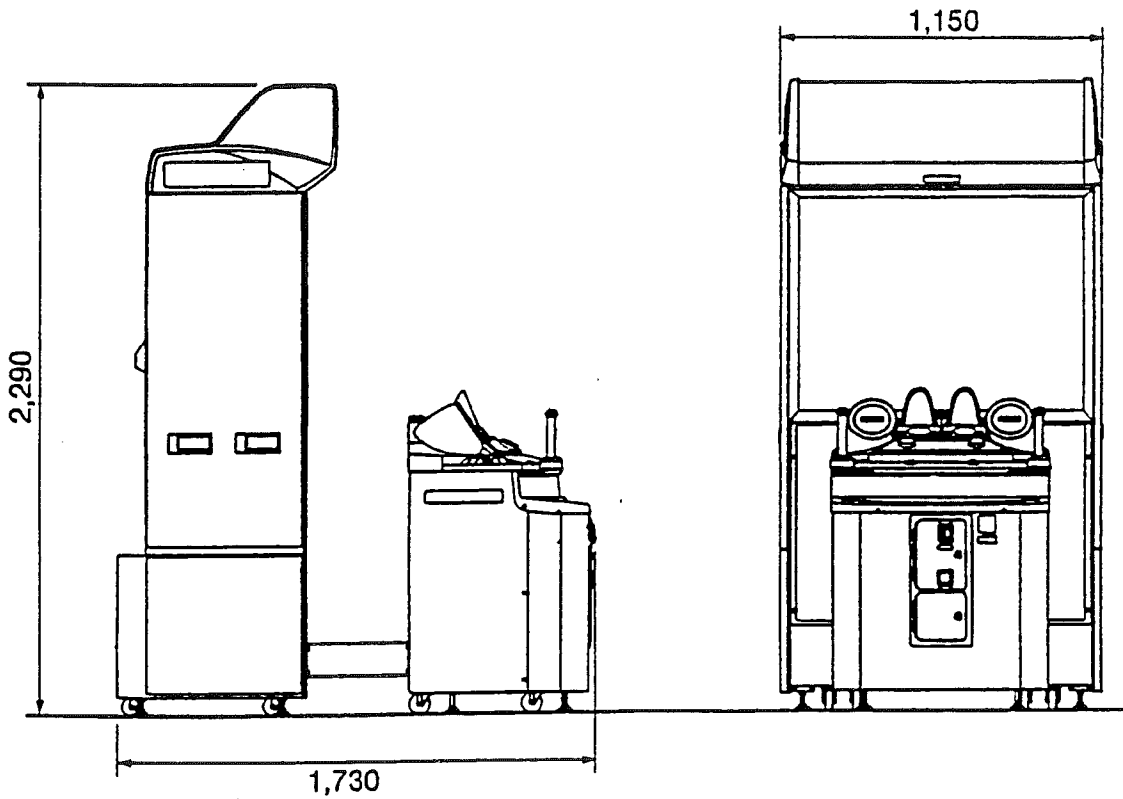
<b>9. DISPOSAL</b> .....	75
<b>10. PARTS LIST</b> .....	76
10-1 Signboard Assy .....	76
10-2 Projector Assy .....	78
10-3 Joint Assy .....	80
10-4 Front Assy (1) .....	82
10-4 Front Assy (2) .....	84
10-5 Swing lever Assy .....	86
10-6 Rack Assy .....	88
10-7 Cord box Assy .....	90
10-8 Coin Assy .....	92
<b>11. WIRING DIAGRAM</b> .....	94



## 2. SPECIFICATIONS

- (1) Rated power: 110V to 120V AC or 220V to 240V AC (50/60 Hz)
- (2) Maximum power consumption: 330W (for 110V AC power supply)  
311W (for 220V AC power supply)
- (3) Maximum current consumption: 5.2A (for 110V AC power supply)  
1.9A (for 220V AC power supply)
- (4) Capacity of the cash box: About \$1,350 in US quarters
- (5) Projector: 50 inch rear projector
- (6) Dimensions:

① As installed: Width 1,150 × Depth 1,730 × Height 2,290 (mm)

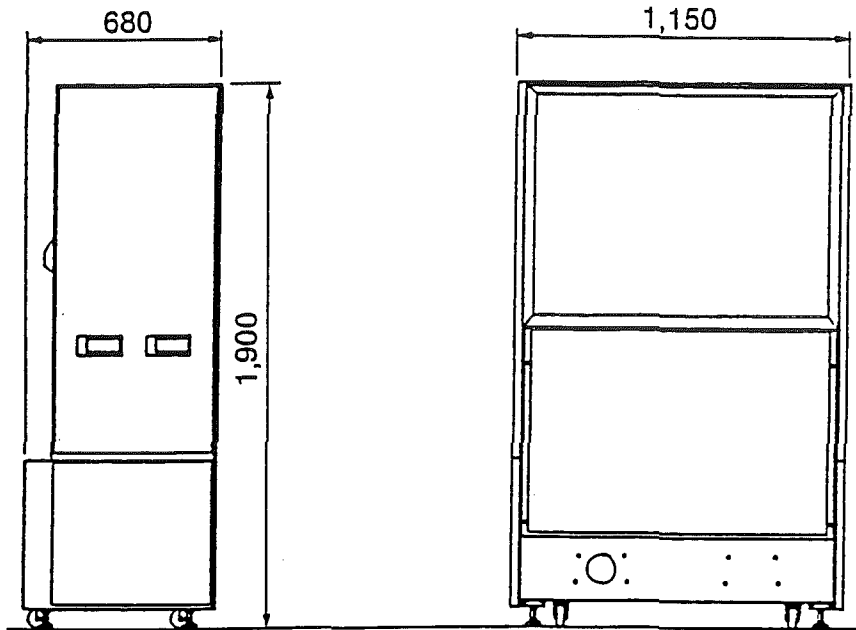


## 2. SPECIFICATIONS

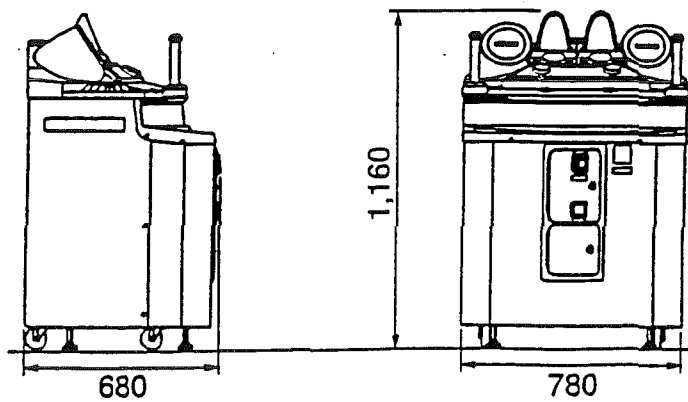
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- ② *As divided :*
- Projector Assy : Width 1,150 × Depth 680 × Height 1,900 (mm)
  - Front Assy : Width 780 × Depth 680 × Height 1,160 (mm)
  - Signboard Assy : Width 1,150 × Depth 700 × Height 390 (mm)
  - Joint Assy : Width 210 × Depth 370 × Height 120 (mm)

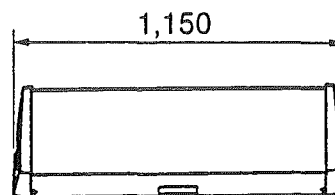
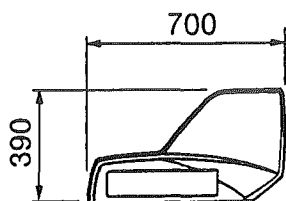
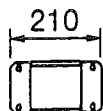
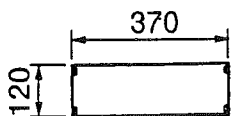
**Projector Assy**



**Front Assy**





**Signboard Assy****Joint Assy****(7) Weight**

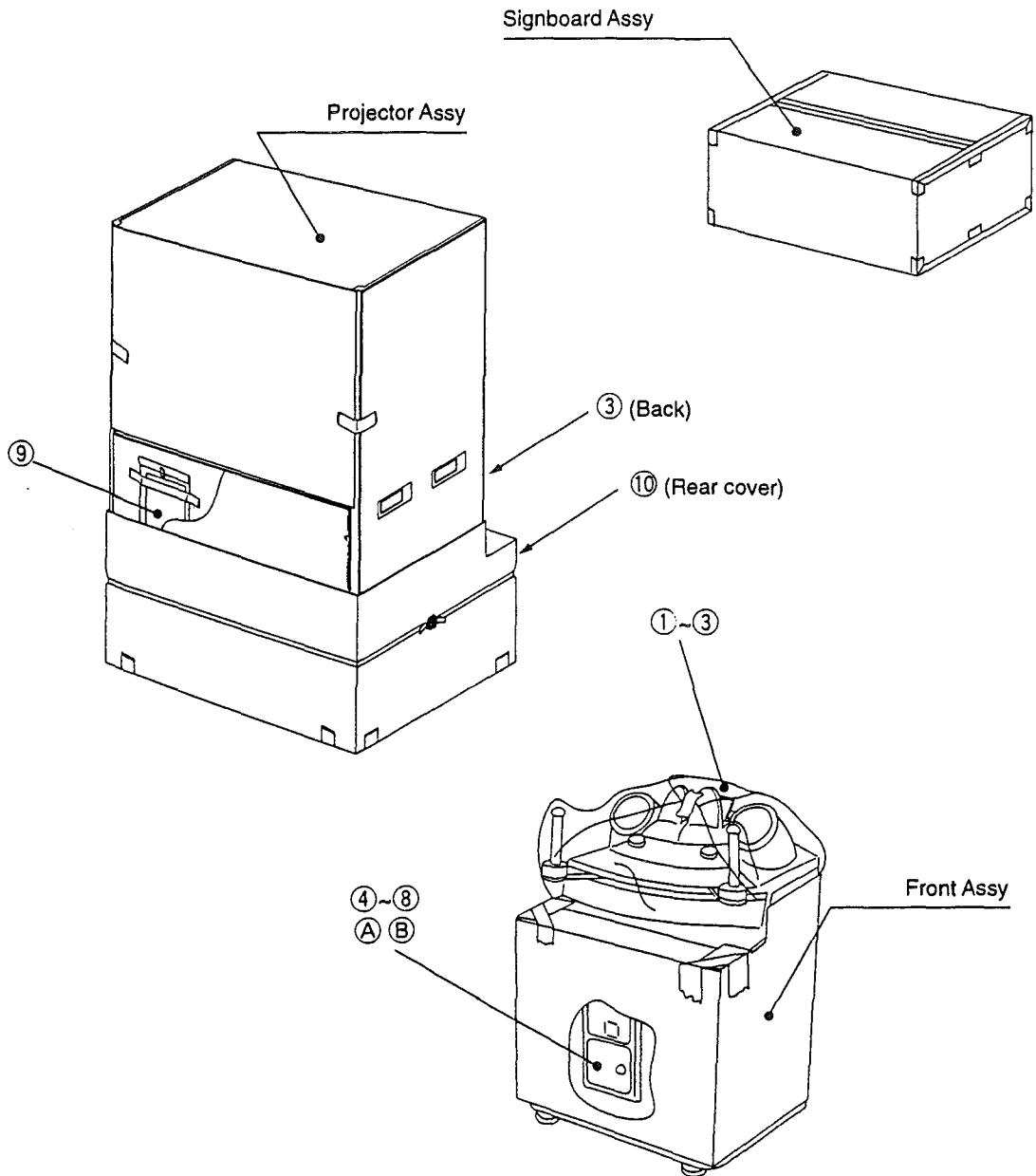
① As installed	:	267 kg
② As divided:		
Projector Assy	:	170 kg
Front Assy	:	75 kg
Signboard Assy	:	16 kg
Joint Assy (2 pieces)	:	6 kg

### 3. INSPECTION OF THE PACKAGE

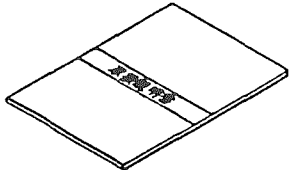
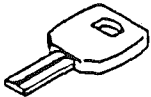



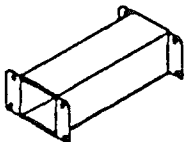
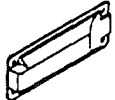
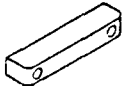
The package contains all parts and accessories illustrated in the figure below when shipped.



- Be sure to check for any missing parts and accessories or shipping damage.
- Contact your distributor in case of any shortage or damage.

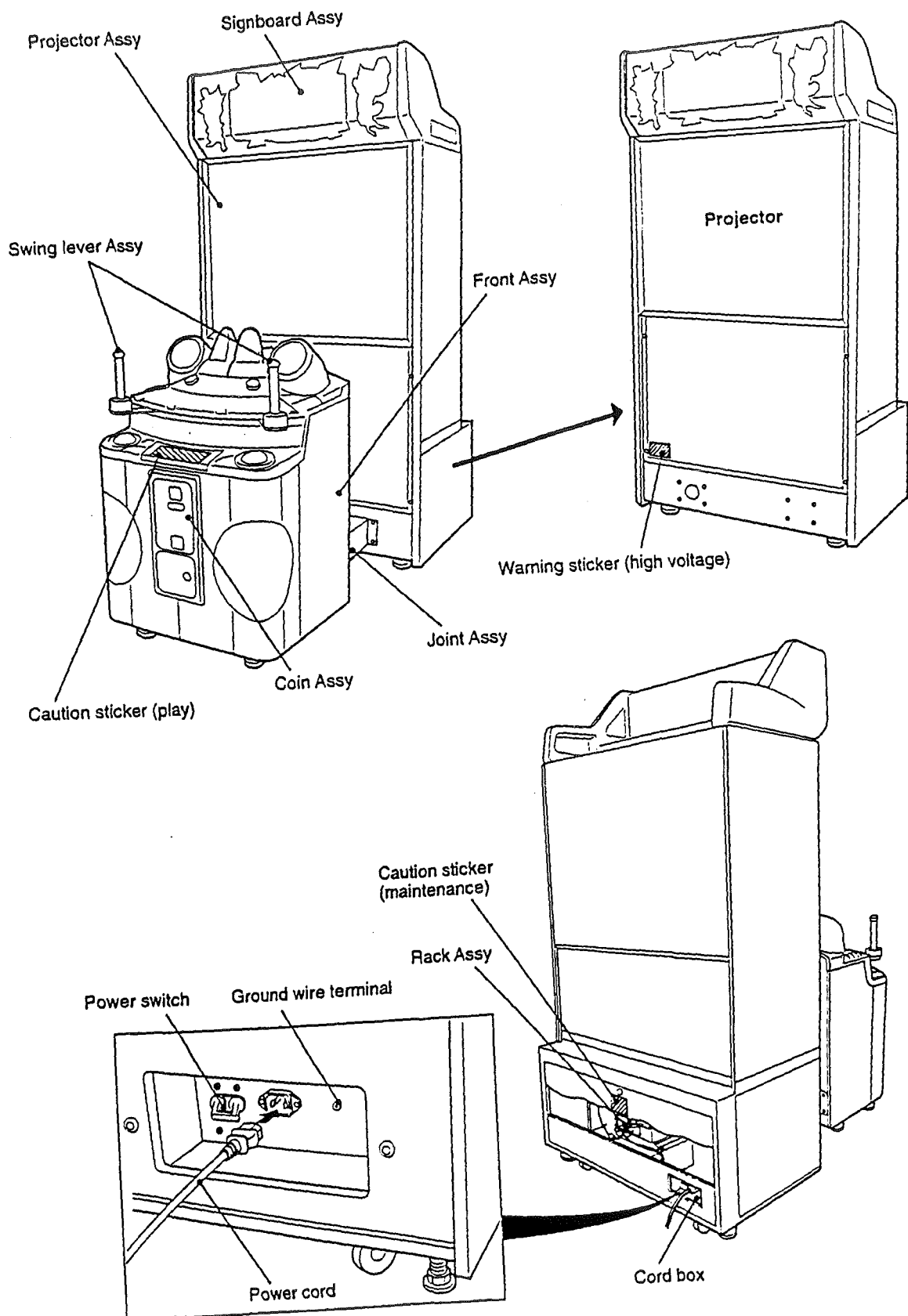


## ● List of accessories

No.	Name	Specifications	Q'ty
1	Operation Manual (this manual)		1
2	Key for cash box		2
3	Keys for service door and rear cover		4
4	Flange socket	M8 × 40 (for joints) 	16
5	(+) Hexagonal bolt (with flat washer and spring washer attached)	M6 × 20 (for signboard) 	2
10	Joint		2
A	Versus cushion		1
B	Bar side cover (essential parts for safety)		1

4. COMPONENTS (name of each part)

4. COMPONENTS (name of each part)



## 5. INSTALLATION



### WARNING

- Install the machine in accordance with the explanation given and the work procedure specified (See "5. Installation" on P- 15) in this manual. Otherwise a fire, an electric shock, injury or machine trouble may occur.
- Be sure to plug in all the way into an outlet. Insufficient contact might cause overheating, and consequently fire or burning.
- Be sure the machine is grounded. Otherwise an electric shock might occur in case of electric leakage. (See "5-4 Method of connecting a power cord and a ground wire" on P-25)
- When installing the machine, be sure to fix it with the level adjusters. Otherwise an accident or injury might occur. (See "5-3-3 Adjustment of a Level Adjuster" on P-24)

### 5-1 Conditions of Installation



### WARNING

- You must not put anything near the vent in the back of this machine, nor block up the vent by a wall. This might cause the inside of the device to overheat causing a fire or machine trouble.

#### 5-1-1 Locations not to be installed



### WARNING

- This machine is for indoor use. Be sure not to install it outdoors. The following locations are also not recommended for indoor use:
  - in direct sunlight;
  - where the ceiling is leaking;
  - high humidity;
  - dusty area;
  - high temperature;
  - close to a heater;
  - extremely low temperature;
  - where a drastic change in temperature might cause dew condensation;
  - where the machine, if installed, may be an obstacle in case of a disaster such as close to an emergency exit or where fire equipment is placed;
  - unstable or shaky.

### 5-1-2 Play zone as installed

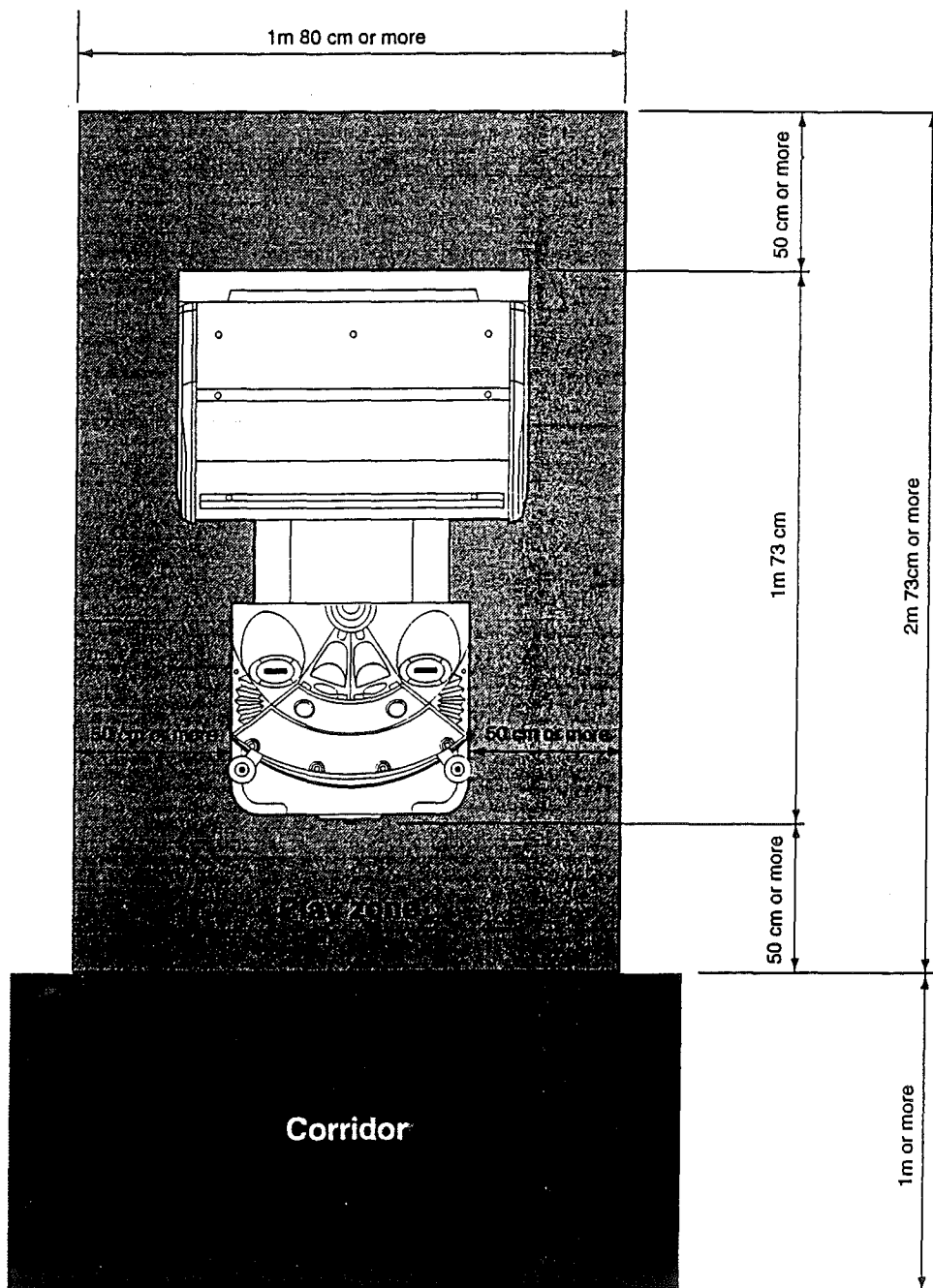


#### WARNING

- Secure a play zone as illustrated in the figure below in order to prevent the players from getting in contact with viewers or passers-by.



- At least 2m 29 cm is required from the machine to the ceiling.
- Keep the back of the machine at least 50 cm from the wall or other machines for easy removal of the rack Assy or front Assy for maintenance.



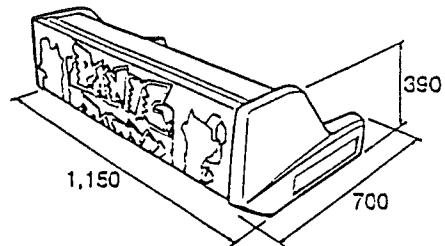
## 5-2 Minimum measurement requirements for carrying-in-route (door, corridor, etc.)

This machine is divided when shipped. The dimension of each part is given below.

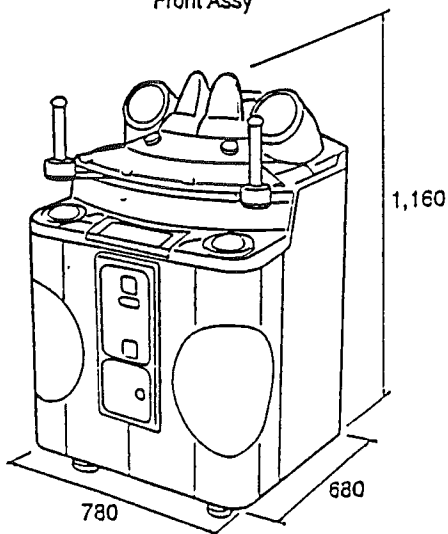
- Signboard Assy : Width 1,150 × Depth 700 × Height 390mm  
Weight 16 kg
- Projector Assy : Width 1,150 × Depth 680 × Height 1,900mm  
Weight 176 kg (including Joint Assy) = 388 lbs
- Front Assy : Width 780 × Depth 680 × Height 1,160mm  
Weight 75 kg

Accordingly carrying-in-route needs at least the above dimensions.

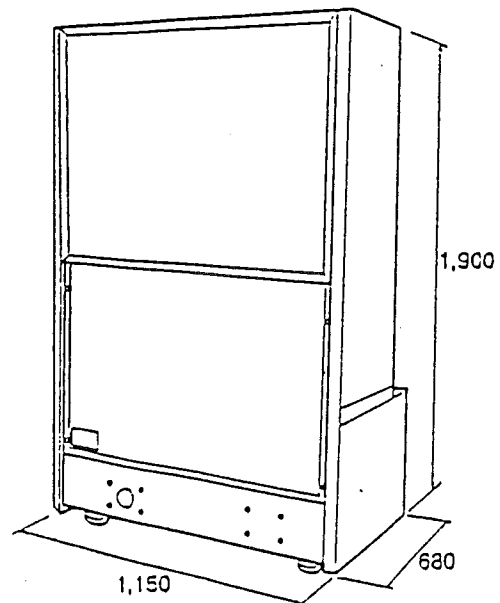
Signboard Assy



Front Assy



Projector Assy











## 5-3 Assembly

### 5-3-1 Attaching the signboard Assy

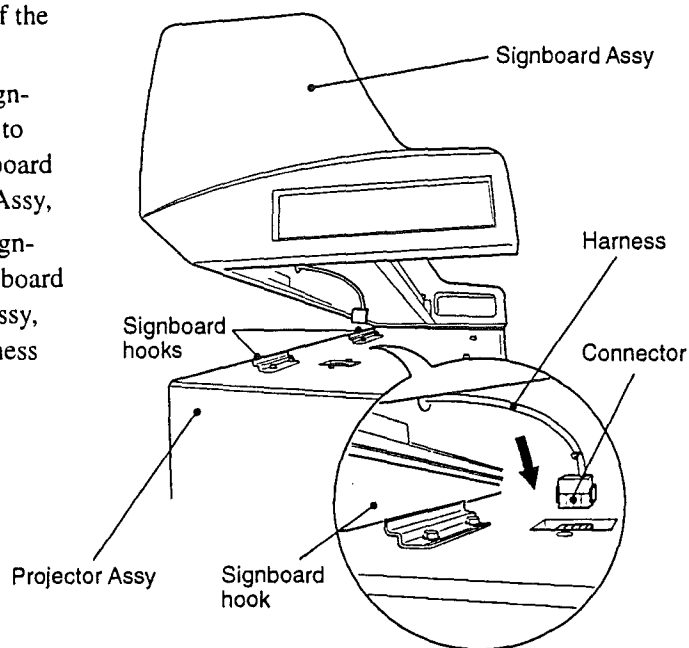
– to be conducted by technicians only –



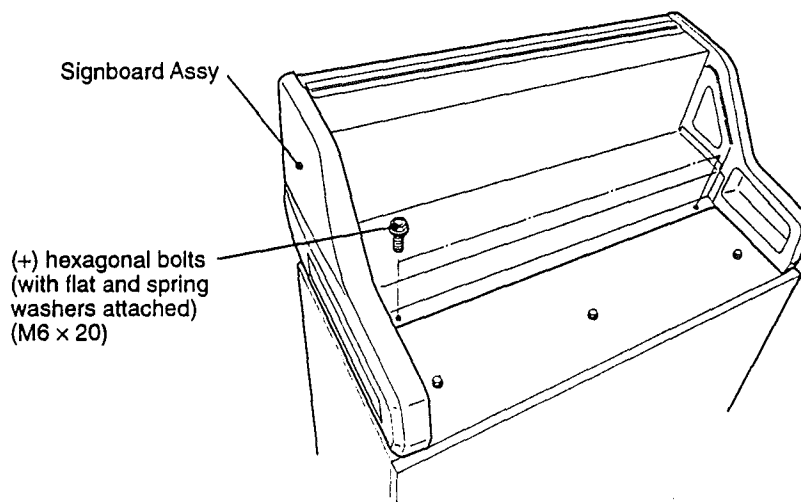
#### WARNING

- Signboard Assy weighs about 16 kg. When attaching, secure two or more workers and enough space for the work.

- 1 Place the signboard Assy on top of the projector Assy.
- 2 Slightly lift the right end of the signboard Assy viewed from the front to connect the connector of the signboard Assy (1 piece) with the projector Assy,
- 3 Fit the hole at the bottom of the signboard Assy to the hook of the signboard Assy on the top of the projector Assy, giving attention not to get the harness caught by the signboard Assy.



- 4 Fix the signboard Assy with two (+) hexagonal bolts (with flat and spring washers attached) (M6 × 20).

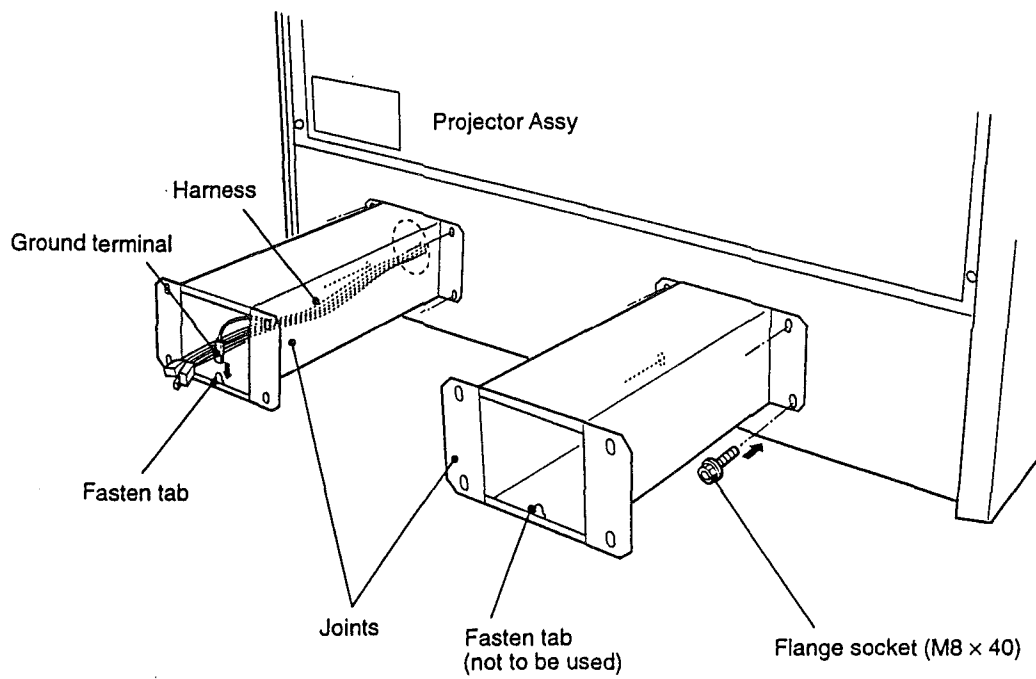


- Detachment is to be conducted in a reverse order.

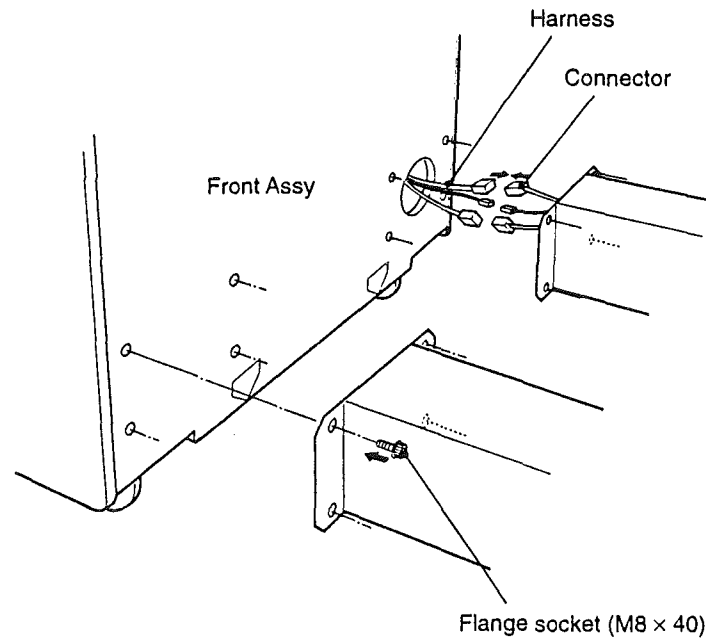
### 5-3-2 Combining the projector Assy with the front Assy

– to be conducted by technicians –

- 1 Pull out the harness from the projector Assy and let it through the left joint.
- 2 Fix both joints to the projector Assy with the eight flange sockets (M8 × 40) attached.
- 3 Insert the ground terminal into the fasten tab.



- 4 Bring the front Assy close to the joint Assy to connect the connectors (3 pieces).
- 5 Fix the front Assy to the joint Assys on both sides with the eight flange sockets (M8 × 40) attached. Be careful not to get the connectors and harness caught by the Assys then.



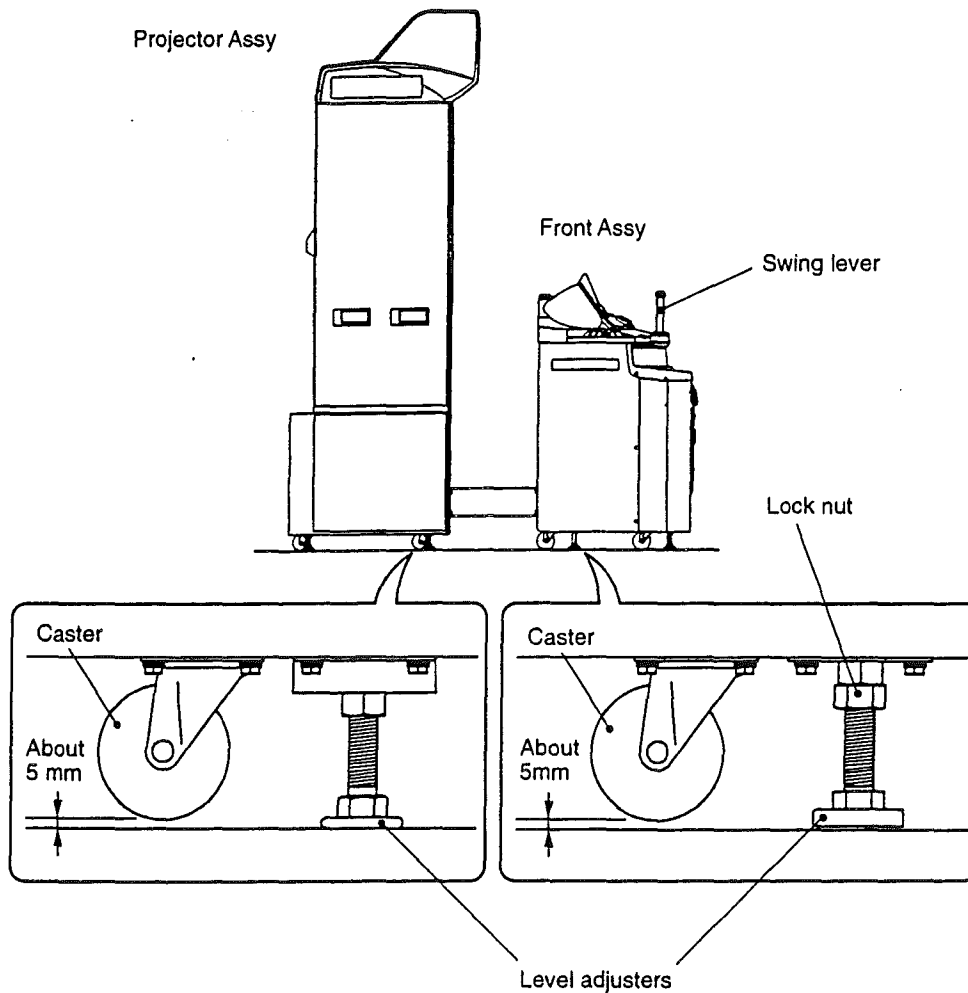
- Detachment is to be conducted in reverse order.

### 5-3-3 Adjusting level adjusters

**NOTICE**

- Install the front Assy level with the ground. If slanted, the swing lever may not return to its original position.
- Be sure to tighten lock nuts. Loose lock nuts may cause the Assys to be rickety.

- 1 Lower the level adjusters of the projector Assy (4 positions) and the front Assy (4 positions) so that the caster is kept at the position 5 mm up from the floor.
- 2 After checking if any level adjuster is not touching the ground, tighten the lock nuts of the front Assy to fix it.



## 5-4 Connecting the power cord and the ground

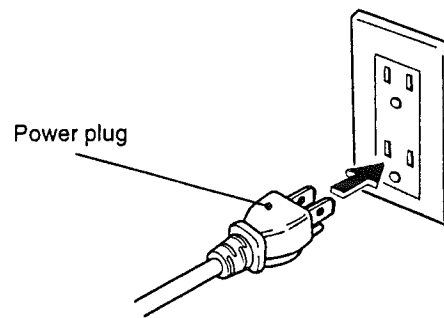


### WARNING

- Be sure to ground the ground conductor in either of the methods described below. Failure to ground a ground conductor may cause an electric shock in case of leakage.
  - (1) Ground the ground conductor with a 3P plug.
  - (2) (If the ground conductor cannot be grounded with a 3P plug,) ground the ground conductor with a 3P-2P conversion plug.
  - (3) (If the ground conductor cannot be grounded with either a 3P plug or a 3P-2P conversion plug,) ground the machine by connecting the grounding wire to the ground terminal of this machine.

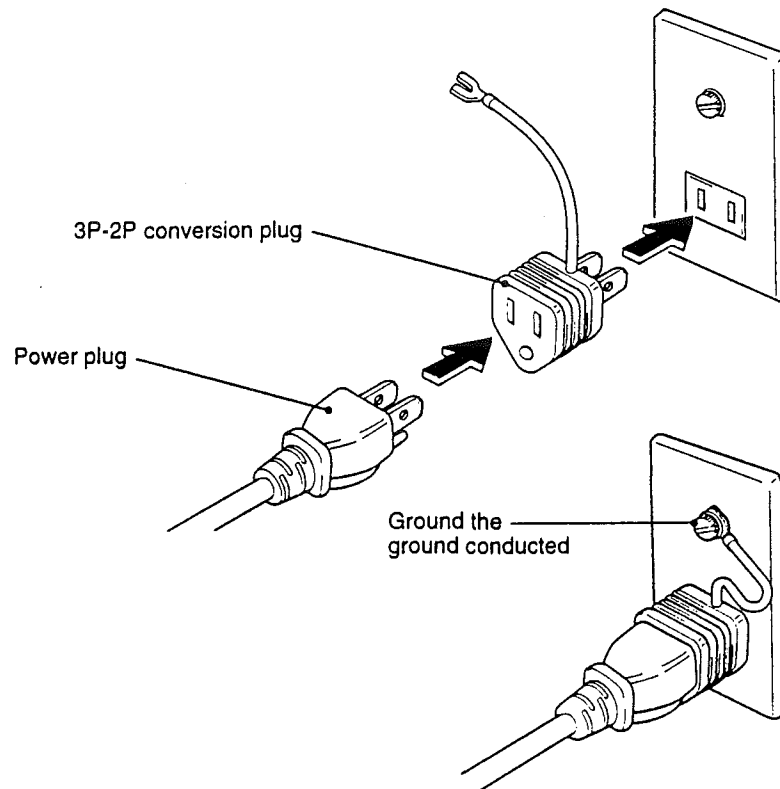
### (1) With a 3P service outlet

Simply insert the power plug.



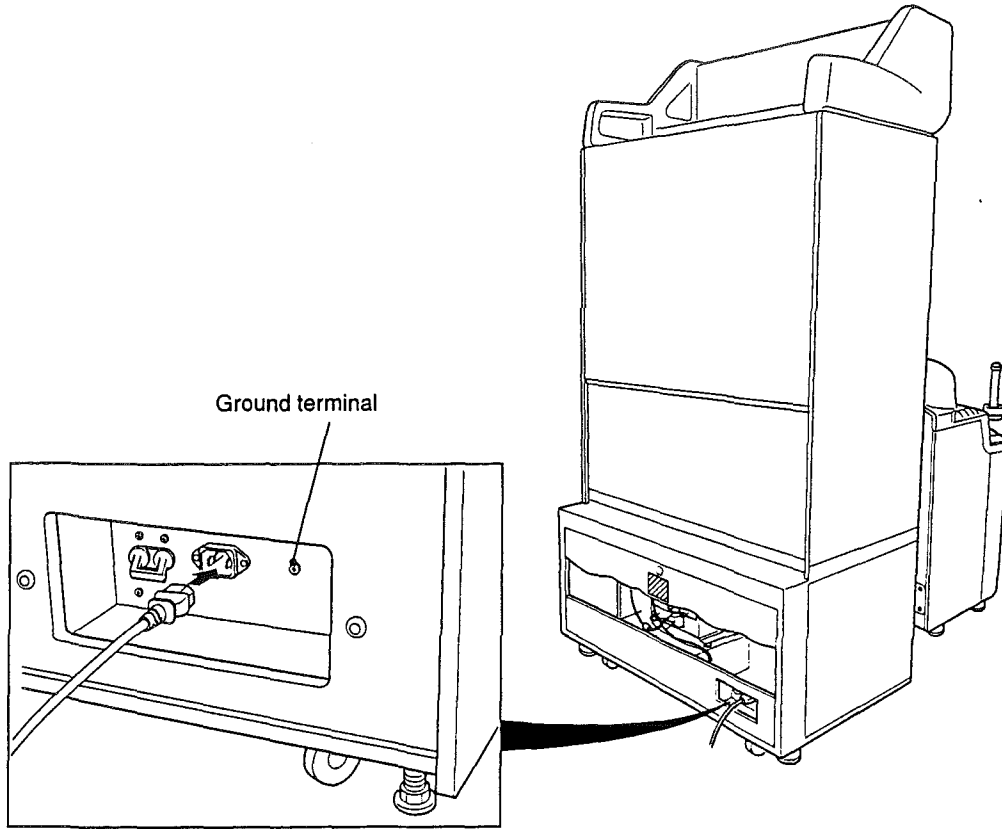
### (2) With a 2P service outlet

Ground the ground conductor with the 3P-2P conversion plug furnished with this machine.



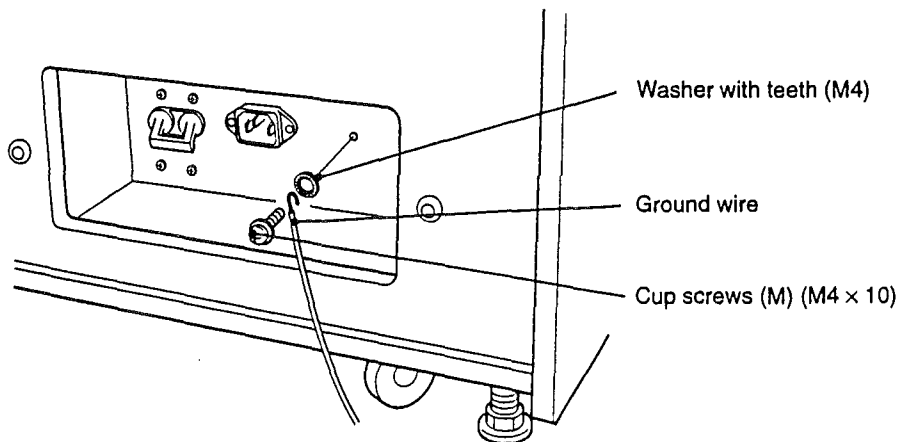
(3) With a 2P service outlet without a ground terminal

Connect the ground wire to the ground terminal on the back of the projector Assy to be grounded.  
(The ground wire is not furnished)



**NOTICE**

● Connect the ground wire as illustrated below.





## 5-5 Adjusting the projector

– To be conducted by technicians only –



**DANGER**

- When adjusting the projector, do not touch anything other than specified in the work procedure. Carelessly touching any part inside the projector other than the parts specified may cause you an electric shock or injury.
- The projector contains some parts that retain high heat and voltage after power-off.

The projector may cause color displacement depending on vibration that may occur during movement and on their orientation as installed. If such trouble occurs, perform adjustment according to the procedure specified below. For the specific procedure for adjusting the projector, see the Projector Adjustment Manual attached.



- Failure to observe the adjustment procedure or touching any control other than the specified ones may result in the particular control becoming unable to return to normal.

- 2** Adjust the projector according to the Projector Adjustment Manual.
- 3** After completing the adjustment, attach the front cover in reverse order.

## 6. MOVING AND TRANSPORTING



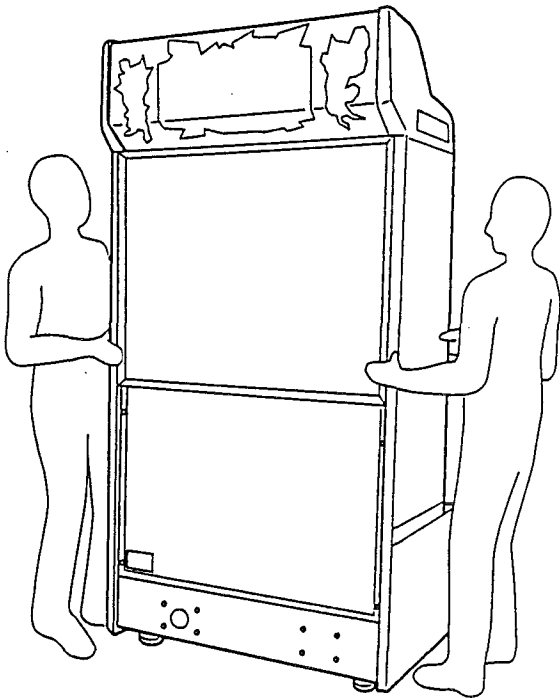
### WARNING

- Leaving this machine on a slope might cause falling or other unexpected accidents.

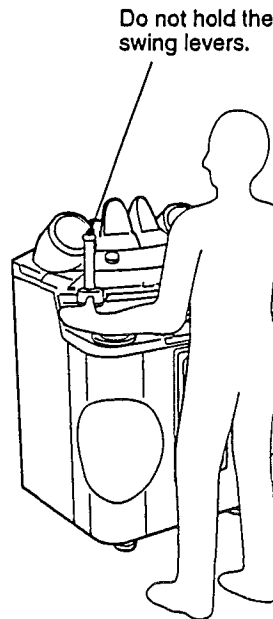
### 6-1 Moving (on the same floor)

#### NOTICE

- Should the projector Assy, joint Assy and front Assy be combined together, be sure to divide the Assys, referring to "6-2-1 Dividing" on P-29.
- Be sure to pull the level adjuster up to the top in moving even a short distance.
- The total height of the projector Assy is 2 m 29 cm. Check the height of the entrance.  
(See "6-2-1 Dividing" on P-29 for detaching the signboard Assy)
- Carry the machine carefully not to damage it.
- Do not hold the swing levers when carrying the machine.



Carry the projector Assy  
in this way.



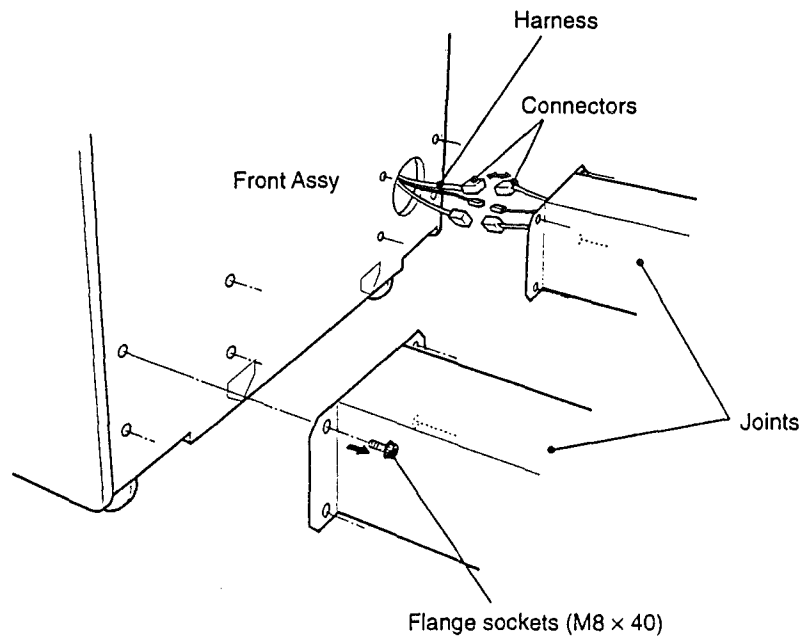
Carrying the front Assy  
in this way.

## 6-2 Transporting

### 6-2-1 Dividing

– to be conducted only by technicians –

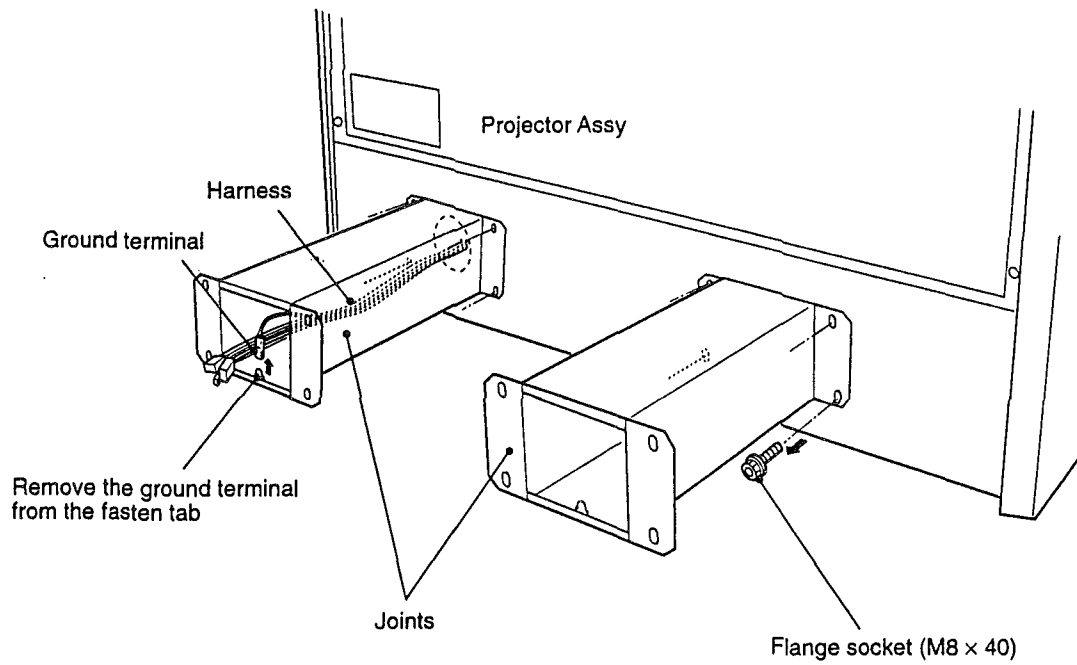
- 1 Tighten the lock nuts (4) of the front Assy and pull up the level adjusters to the top.
- 2 Remove the eight flange sockets (M8 × 40) on the front Assy side and then remove both joints.
- 3 Disconnect the connectors (3). Pull back and store the harness in the front Assy.



6. MOVING AND TRANSPORTING

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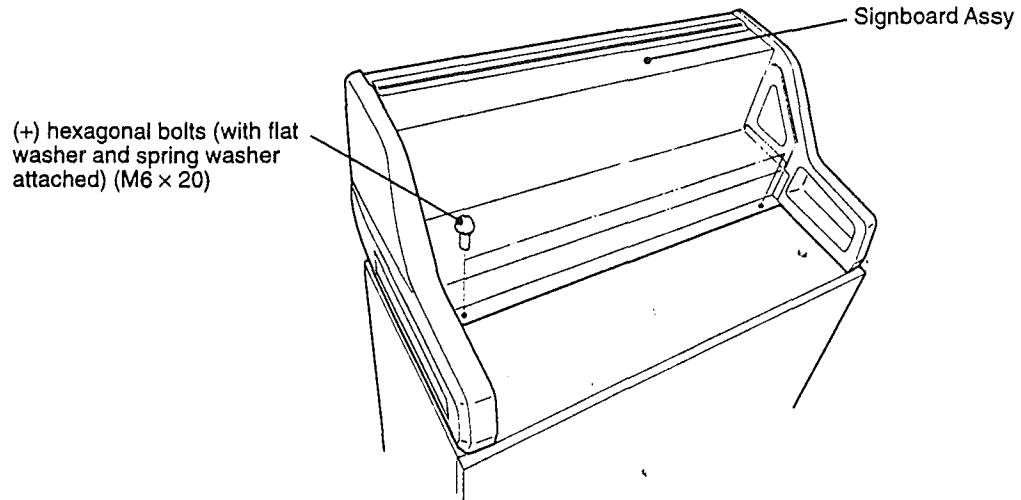
- 4 Detach the ground terminal from the fasten tab.
- 5 Remove the eight flange sockets (M8 × 40) on the projector Assy side and then remove both joints. Pull the harness back and store it in the projector Assy after division.



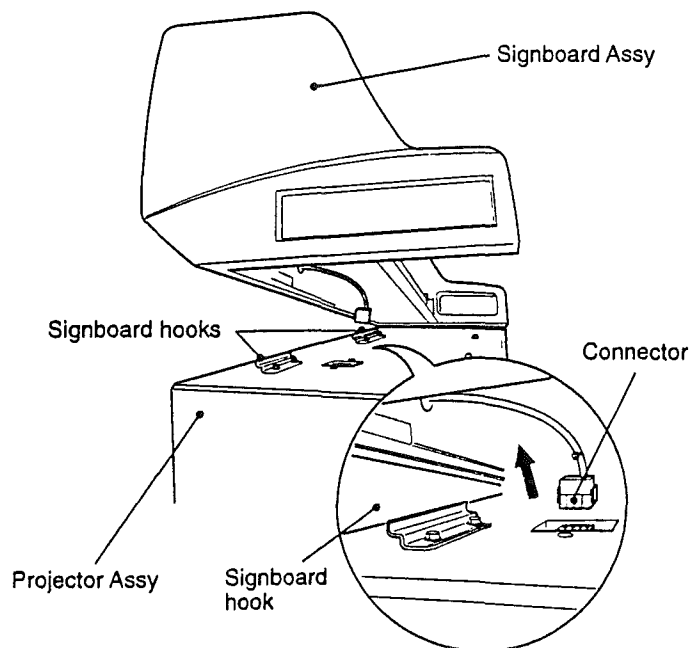
- 6 Remove the two (+) hexagonal bolts (with flat washer and spring washer attached) (M6 × 20) on the back of the signboard Assy.

**WARNING**

- A Signboard Assy weighs approximately 16 kg. When detaching it, secure 2 or more workers and enough work space in order to prevent accidents.



- 7 Move the signboard Assy forward to detach it from the signboard hooks.
- 8 Remove the connector (1) on the right side of the signboard Assy as you face it.
- 9 Detach the signboard Assy from the projector Assy and put it down.



6-2-2 Carrying by hands (carrying up and down the stairs)



**WARNING**

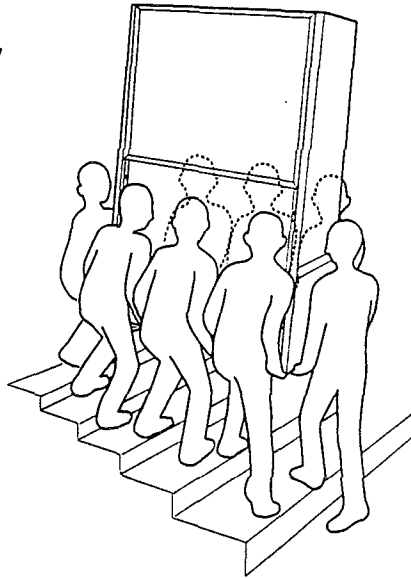
- Be sure to divide into the signboard Assy, projector Assy, front Assy and joint Assy.  
(See "6-2-1 Dividing" on P-29) Carrying the machine undivided may cause an accident or injury.
- When carrying by hands, be sure to secure the number of persons listed below. Forceful handling may cause an accident or injury.
  - Signboard Assy (16 kg) : 1 or more
  - Projector Assy (170 kg) : 8 or more
  - Front Assy (75 kg) : 4 or more
  - 2 Joint Assys (6 kg in total) : 1 or more



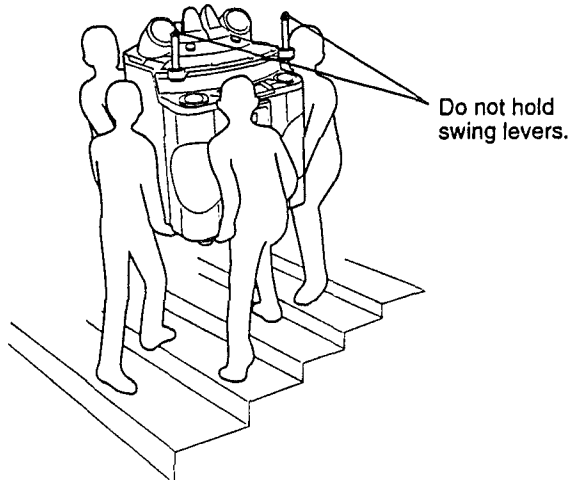
**NOTICE**

- Do not hold the swing levers when carrying the front Assy.
- Be sure to pull the level adjuster to the top.

Projector Assy



Front Assy



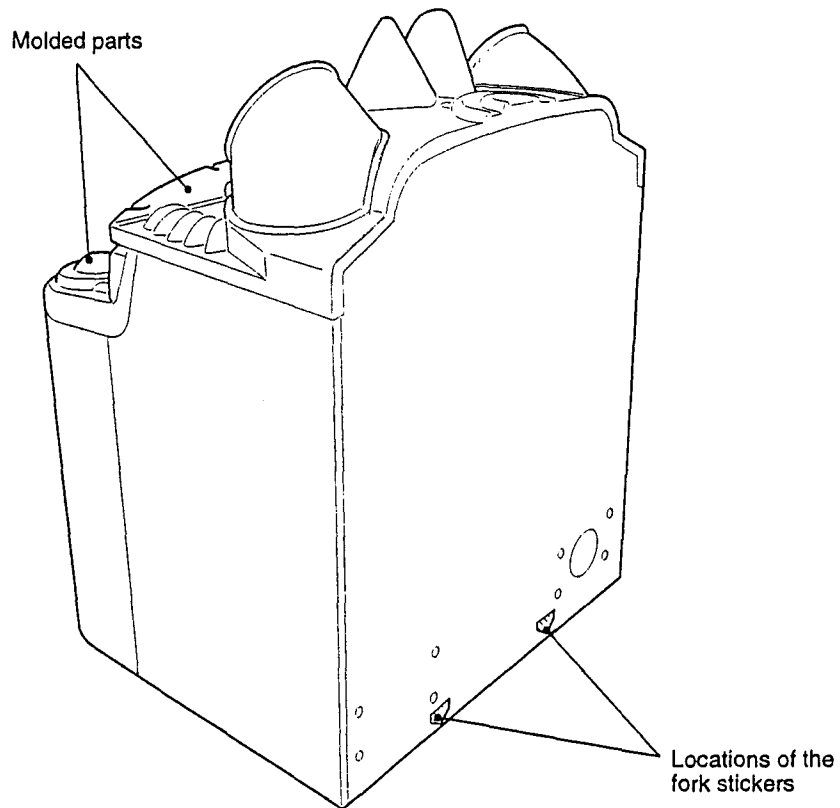
## 6-2-3 Loading into and unloading from vehicles, etc.

**WARNING**

- Be sure to divide into the signboard Assy, projector Assy, front Assy and joint Assy. (See "6-2-1 Dividing" on P-29) Carrying the machine undivided may cause an accident or injury.
- When moving and transporting by a fork lift, observe the specified locations of the fork stickers. Otherwise falling or other unexpected accidents may occur.

**NOTICE**

- Carry the machine carefully not to damage it.
- Molded parts are fragile. Do not handle them forcefully.
- Be sure to pull the level adjuster to the top.
- Do not give a shock when taking the machine one step down.
- Do not hold the swing levers when carrying.



### 6-2-4 Transporting by a vehicle

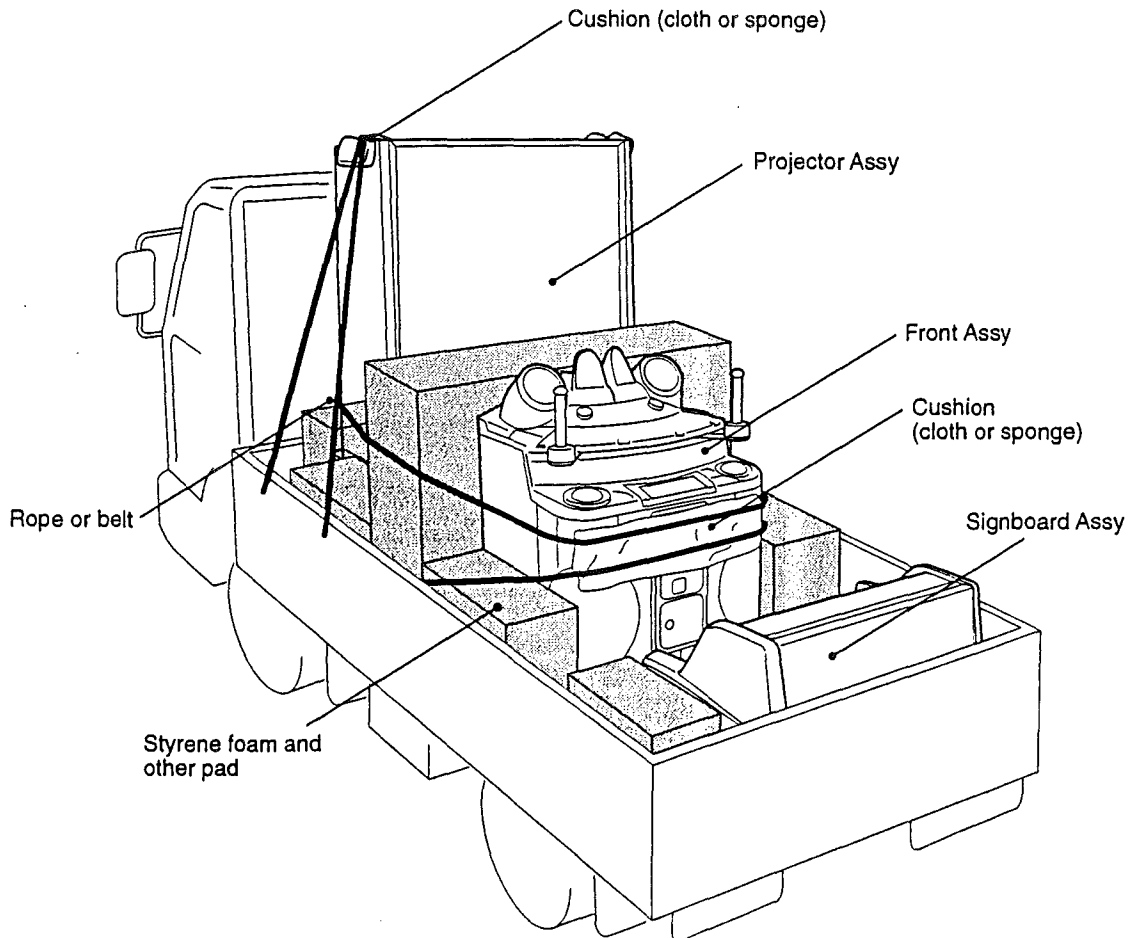


#### WARNING

- In order to transport this machine by a vehicle, tie it fast with a rope so that the rope might not become loose when the vehicle gains speed or slows down. Otherwise an accident might occur.



- Do not give a shock when taking the machine one step down.
- Rope up exactly as illustrated in the figure below.
- Put styrene foam or other pads between the load-carrying platform and the machine to prevent the surface of the machine from being damaged.





## 7. OPERATION



### WARNING

- Should any trouble occur, turn off the power and stop operating this machine immediately. Then do not forget to unplug the power cord. Operating this machine with its trouble unsolved may cause a fire or other accidents.
- Keeping the inside of the projector dusty for a long time may cause a fire or breakdown. Consult your distributor for internal cleaning about once a year after purchase.
- Dust accumulated on the power plug may cause a fire. Conduct a regular check and remove dust.
- Firmly insert the power plug into the service outlet all the way. Insufficient contact may cause heat, resulting in a fire or burning.
- Make sure that installation is made conforming to the explanation and the specified procedures (See "5. Installation" on P-15) in this Operation Manual before operation. Unless normally installed, a fire, electric shock, injury or a machine trouble might occur.
- Warning stickers provide important cautions for safety. Please observe the following instructions:
- Give attention to the location, lighting and dirt of the warning stickers on the machine so that they may be fully readable. Be careful not to make the stickers invisible behind other game machines.
- Do not remove or modify the warning stickers.
- Should a sticker be markedly soiled or torn, replace it with a new one. For obtaining a new one, please contact your distributor.

### 7-1 Persons not recommended to play



### CAUTION

- To ensure the safety of players, those who—
  - wear slippery shoes or shoes with high heels;
  - are pregnant;
  - have heart problems;
  - are drunk;
  - are not feeling well; or
  - violate any of the warning notices of this machine are not recommended to play. An accident may occur.

## 7-2 Safety precautions when playing



### CAUTION

- Give warning to a person who stands so close to a player that he or she is likely to touch the player's elbows or arms. Contacting with a player may cause an accident.

## 7-3 Explanation of parts essential for the safety of players and viewers



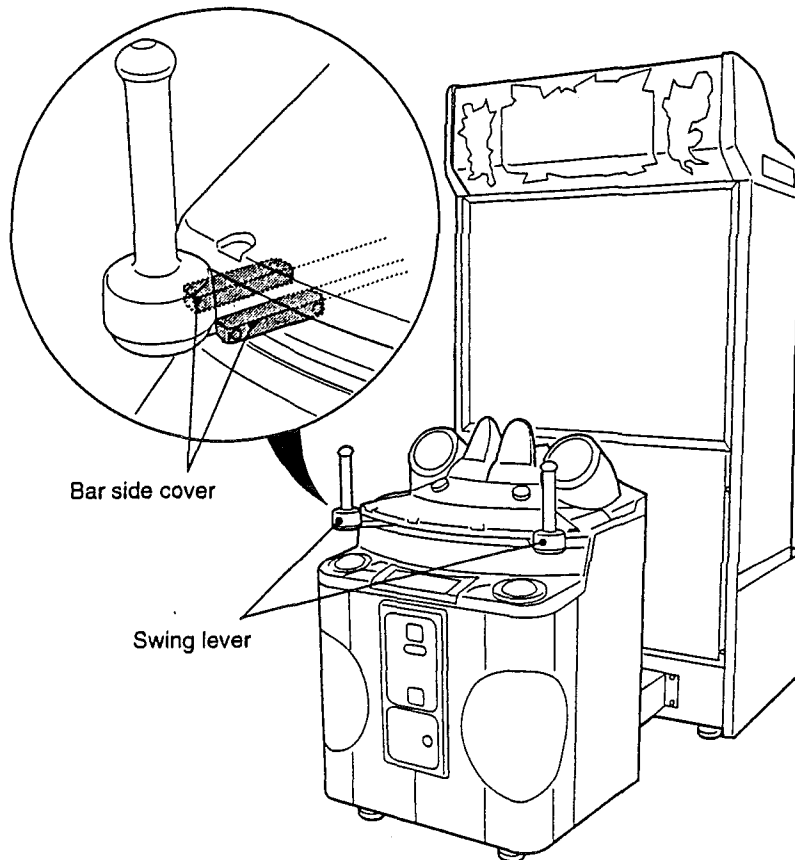
### CAUTION

- When a bar side cover is broken, replace it as soon as possible. Otherwise it may cause an injury. (See "8-3-4 (3) Replacement of bar side covers" on P-74)

### Bar side cover

Its function: It prevents players or others from getting their fingers caught by a small opening along the path of a swing lever.

Part No.: 681-220



## 7-4 Inspection before beginning the operation

Check the following items before starting the operation.

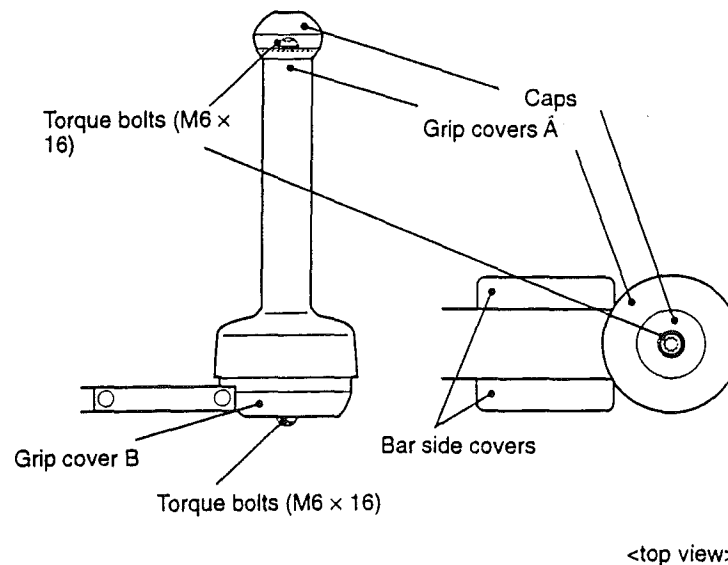
Should any problem be found, refer to "8-2 Troubleshooting Measures" on P-58.

### 7-4-1 Inspection of the outward appearance

#### CAUTION

- This machine has parts important for ensuring the safety of players and viewers. Should the "parts essential for the safety of players and viewers" (See 7-3 "Explanation of the parts essential for safety of players" on P-36 ) remain to be damaged, broken, worn out, or poorly installed when this machine is in operation, players and viewers may be injured. Inspection before operation is therefore indispensable. Should anything wrong be discovered, replace the parts as soon as possible. (See "8-3-4 (3) Replacement of bar side covers" on P-74)  
To order parts, consult your distributor.
- Checks should be made on the following points before operation. This is necessary for preventing any accident or injury:
  - Warning notice is easily legible. (See "1-4 Explanation of 'warning notices' stuck to this machine" on P-4 )
  - All the level adjusters are firmly fixed. (See "5-3-3 Adjusting level adjusters" on P-24 )
  - Enough space is secured. (See "5-1 Conditions of installation" on P-15)
  - Bar side covers are correctly mounted.
  - Flange sockets fastening joint Assy are firmly fixed.
  - Swing lever Assy caps, torque bolts (M6 × 16) fastening grip covers A and B are firmly fixed. Parts are not broken.

Swing lever Assy



### 7-4-2 Inspection of workings

- 1 Sound check
- 2 Fluorescent lights check
- 3 Image check
- 4 Check on workings of swing levers (Check to ensure that swing levers naturally return to both ends and are sustained by magnets, when pulled and then let go of hands.  
Check on the following points by pressing the service switch to actually play it. (See the figure of "7-6-2 Adjustment switches" on P- 41.)
- 5 Reaction of swing levers check

### 7-4-3 Regular inspection

- 1 Check on abrasion of versus cushions every 3 months. If worn out, replace them. (See "8-1-2 Check on abrasion of versus cushions of swing levers Assy" on P- 56 )
- 2 Grease up the coil springs every 6 months. (See "8-1-1 Grease up coil springs of swing levers Assy" on P-55 )

## 7-5 How to Play

This machine is a variety game played with only one lever.

### 7-5-1 How to Control

Simple control by hitting a lever from left to right and vice versa.

The characters on the screen move to left or right in agreement with the control of the lever.

### 7-5-2 Mode

This machine has the following three modes.

■ One player mode

This is the "trial" mode played by one person.

5 mini games are played (as initialized) with one credit. (The player is allowed to play 5 mini games, no matter how many times he or she fails.) In the last mini game, the player is assigned to any one of the 15 different levels according to his or her results so far. He or she is deemed to have achieved the level by clearing it. His or her goal is to clear the final stage of the highest possible level.

■ Match mode for 2 players

This is the "match mode" played by two persons.

The players fight the game by hitting each other's lever and interrupting the other's play. The game is decided by the number of items achieved. The player who has achieved better results wins the game. Five mini games are played (as initialized) with one credit. (The players are allowed to play 5 mini games, no matter how many times they failed.)

Only this mode has extended play. Three further stages (as initialized) can be played by adding credits after the final stage.

■ Panic King mode

This is the "score attack mode" for advanced players.

The players can make a choice by inserting a coin by pressing either right or left start button. (In the case of the free play, it is selected by holding either the right or left button for two seconds.) Different from a one-player game or a match, only one kind of mini game is allowed to be played with one credit. The mini game to be selected is already decided each month and renewed once a month by the timer function of the PC board.

### 7-5-3 Rules of the game

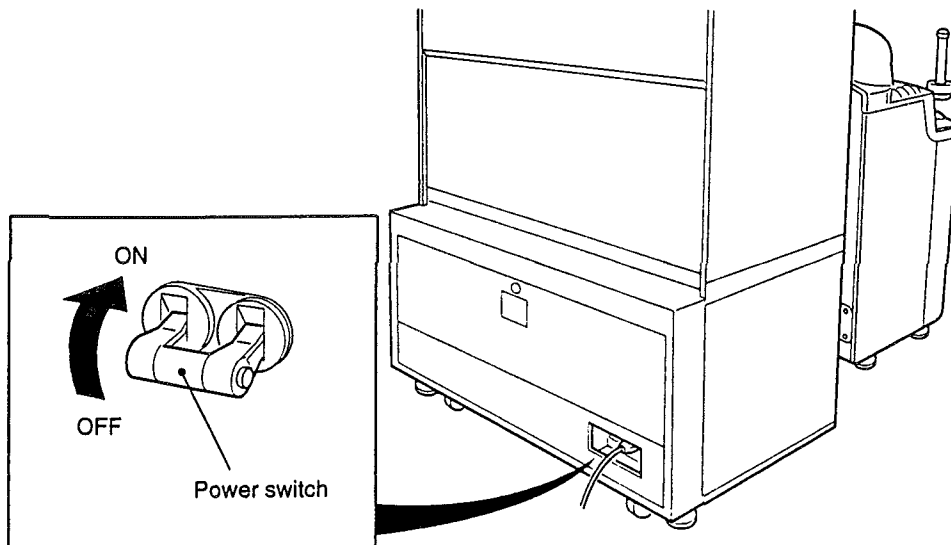
Since this is a variety game, the rules are different for each mini game. The characters on the screen are moved by hitting a lever from left to right and vice versa in any of the mini games.

In some of the mini games, NORM (only in one-player mode) and LIFE are displayed after the instructions. NORM represents the number of items that the player is required to achieve and LIFE represents the number of times the player is allowed to fail by hitting an obstacle, etc. If the player does not achieve NORM or loses all LIFE, it does not end in "game over". NORM is referred to when judging which level of the final stage the player is assigned to. If LIFE becomes 0, the mini game is broken off right away.

## 7-6 Adjustment

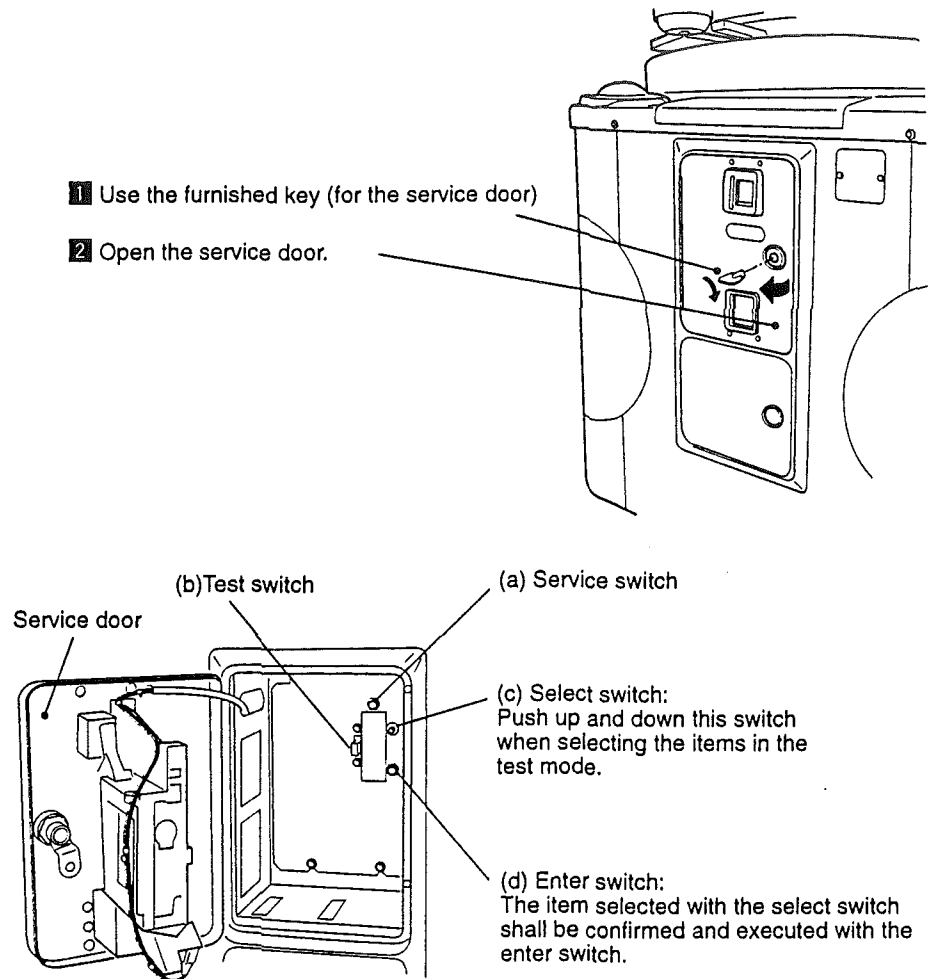
### 7-6-1 Turn the power switch ON.

Turn on the power switch that is located in the lower right of the back of this machine after "5. Installation" on P- 15 .



## 7-6-2 Adjustment switches

There is adjustment switches inside the service door of the coin Assy.



- (a) Service switch (red)  
By pressing this switch the number of credits can be increased without operating coin counters.
- (b) Test switch  
By turning this switch ON, the mode is switched to the test mode. In the test mode, the game fees can be changed and tests can be conducted on each part. (See "7-7 Test mode" on P-42 )
- (c) Select switch  
The items can be selected by pushing up and down this switch in the test mode.
- (d) Enter switch (green)  
After the item is selected with the select switch, the selection shall be confirmed and executed by pressing this switch.



### NOTICE

- For proper operation of the service switch, press it slowly and firmly.

## 7-7 Test mode

### 7-7-1 Explanation of the menu screen (MENU)

- 1 Unlock the service door with the furnished key and turn the test switch ON. "MENU" is displayed on the screen.
- 2 Select the item by pushing up and down the select switch.  
The item being selected is displayed blinking.
- 3 Press the enter switch to confirm the selected item.
- 4 Select EXIT after adjustment is over and press the enter switch to return to the MENU screen.
- 5 Turn the test switch OFF after all the adjustments to return to the GAME screen.

MENU		
COIN OPTIONS	..... Setting of game fees, etc.	See 7-7-2 (P-43)
GAME OPTIONS	..... Setting of game contents	See 7-7-3 (P-44)
I/O TEST	..... Input/output test of switches	See 7-7-4 (P-45)
MONITOR TEST	..... Various monitor adjustments	See 7-7-5 (P-46)
SOUND TEST	..... Sound volume adjustment	See 7-7-6 (P-47)
ADS DATA	..... Display and initialization of game data	See 7-7-7 (P-50)
OTHERS	..... Initialization, etc. of backup memory	See 7-7-8 (P-51)
The internal battery's dead.	..... (a) This message is not displayed if the battery is sufficiently charged.	
SELECT SW: CHOOSE ENTER SW: ENTER		

[MENU screen]

- (a) Display of the short charge of the internal battery  
This message is displayed when the battery is dead. Since the battery on the MAIN (1) Game PC board needs to be replaced, consult your distributor.



### 7-7-2 Setting of game fees and free play (Coin options)

For setting game cost and free play,

- 1 Select "COIN OPTIONS" in the "MENU" screen and press the enter switch.  
"COIN OPTIONS" screen is displayed.

COIN OPTIONS [DEFAULT IN GREEN]	
GAME COST (1P)	2 COIN(S) 1 CREDIT ..... (a)
GAME COST (2P)	4 COIN(S) 1 CREDIT ..... (b)
CONTINUE COST (2P)	2 COIN(S) 1 CREDIT ..... (c)
FREE PLAY	OFF ..... (d)
EXIT	
SELECT SW : CHOOSE ENTER SW : ENTER	

**COIN OPTIONS screen**

- Settings of the contents are displayed in the following colors.  
Default (as shipped) settings : in green  
Others : in red

Items	Description	Default
(a) One-player game fee	Number of coins necessary for a game for one player 1 to 9 coins * If (a) is changed, (b) and (c) are automatically recommended	2
(b) Match game fee	Number of coins necessary for a match game 1 to 18 coins * If (b) is changed, (c) is automatically recommended. * The setting of the fee is restricted depending on a one-player game fee. The fee of a match game is not allowed to be set lower than one - player game nor higher than double the cost of a one- player game.	4
(c) Extended play fee	The number of coins necessary for an extended play 1 to 18 coins * Setting is restricted depending on the fee set for a match game. The fee of extended play is not allowed to be set higher than that of a match game.	2
(d) Free play	OFF ON * If a free play is set to "ON", a game starts by pressing the left or right start button. (Panic King mode is selected by holding the left or right start button for 2 seconds.)	OFF

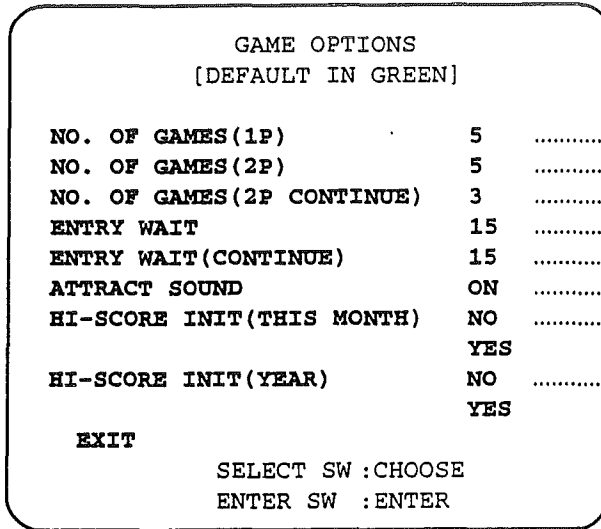
#### [List of COIN OPTION settings]

- 2 Select any item that you want to change by the select switch.  
The item being selected blinks.
- 3 Decide the item to be changed by pressing Enter Switch.
- 4 After the item is decided, change the contents of the item by the select switch.
- 5 Press the enter switch after the contents of the item are changed to return to the selection screen.
- 6 Select Exit and press the enter switch to return to MENU screen,.

### 7-7-3 Setting the game contents (Game options)

For setting the game contents,

- 1 Select "GAME OPTIONS" in the "MENU" screen and press the enter switch.  
"GAME OPTIONS" screen is displayed.



■ Settings of the contents are displayed in the following colors.  
Default (as shipped) : in green  
Others : in red

[GAME OPTIONS screen]

Items	Description	Default
(a) Number of mini games for a one-player game	3,4,5,6,7 * If (a) is changed, (b) and (c) are automatically recommended.	5
(b) Number of mini games for a match by two players	3,4,5,6,7 * If (b) is changed, (c) is automatically recommended.	5
(c) Number of mini games played in extended play	0 (No extended play), 2,3,4,5,6,7	3
(d) Waiting time for entry for a match	10, 15, 20, 25	15
(e) Waiting time for an extended play	10, 15, 20, 25	15
(f) Sound in attract mode	ON OFF	ON
(g) Initialization of high score (for the current month)	NO (not to be initialized) YES (to be initialized)	—
(h) Initialization of high score (for the year)	NO (not to be initialized) YES (to be initialized)	—

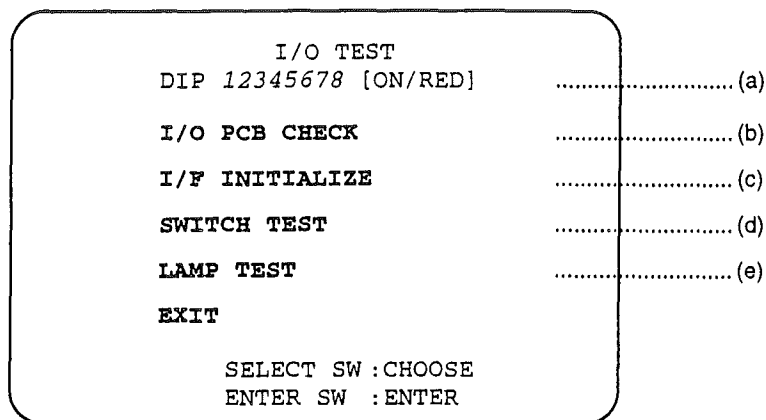
[List of GAME OPTION settings]

- 2 Select any item that you want to change by Select Switch.  
The item being selected blinks.
- 3 Decide the item to be changed by pressing the enter switch.
- 4 After the item is decided, the contents of the item are changed by the select switch.
- 5 Press the enter switch after the contents of the item are changed to return to the selection screen.
- 6 Select Exit and press the enter switch to return to MENU screen.

### 7-7-4 Input/Output test of switches (I/O TEST)

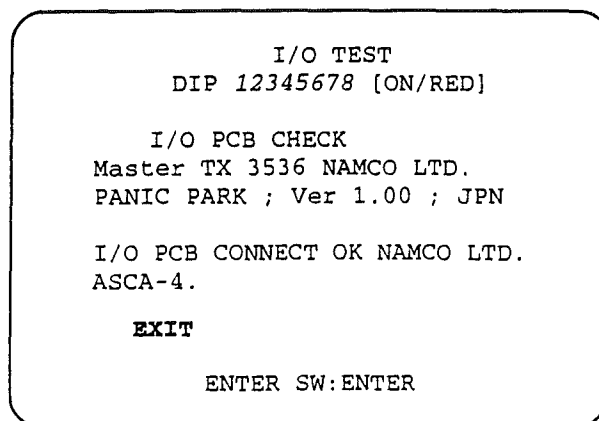
I/O test is conducted on each switch.

- 1 Select "I/O TEST" in the "MENU" screen. Press the enter switch.  
"I/O TEST" screen is displayed.



[I/O TEST screen]

- 2 Select any item that you want to execute by the select switch.  
The item being selected blinks.
- 3 To move to TEST screen of the blinking item, press the enter switch.
- 4 To return to the MENU screen, select EXIT and press the enter switch.
  - (a) State of the DIP switch
    - The state of the DIP switch on the game PC board is displayed.  
The switch for the number displayed in red is ON.  
(Factory setting : OFF )
    - It shall be OFF normally.
  - (b) I/O PC Board CHECK  
I/O PC Board is checked.
    - To return to I/O TEST screen, press the enter switch.



[I/O PC BOARD CHECK screen]

(c) I/F INITIALIZE

The levers are initialized. (See "7-8-1 Method of initialization of volume of Swing Lever Assy" on P-52)

Move both levers to the left end and press the start button. Then likewise move them to the right end and to the center and press the start button.

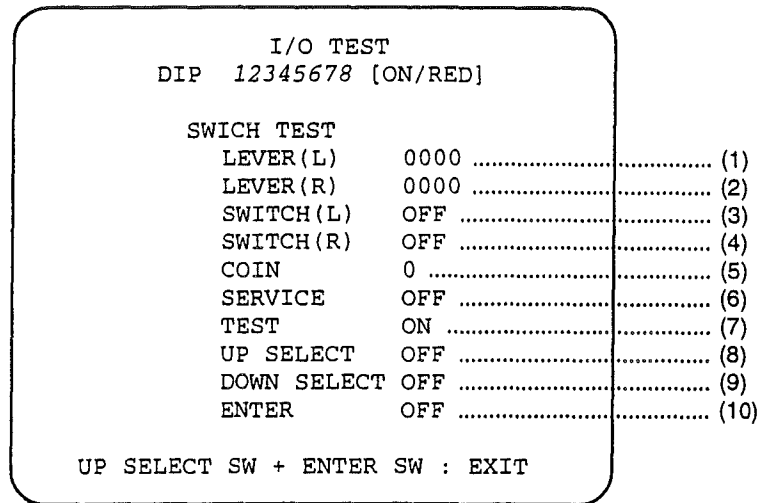


• Do not hit the lever to the end too forcefully. The rubber between levers may shrink and cause the adjustment to be out of place.

- To return to I/O TEST screen, press the enter switch.

(d) SWITCH TEST

Tests are conducted on various switches.

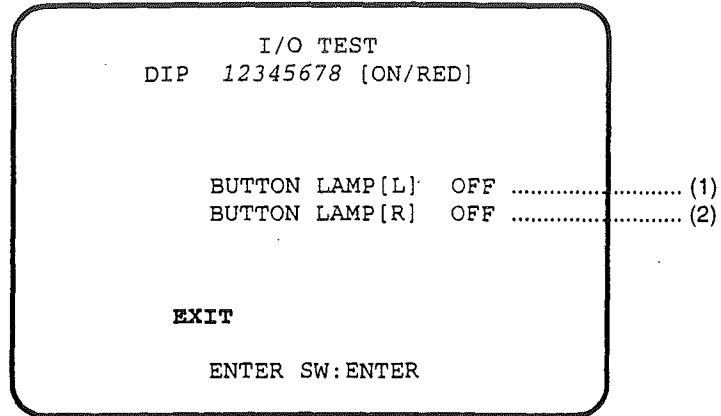


[Switch Test screen]

- The state of each switch is displayed on the Switch Test screen.
- The display changes by handling switches.
  - (1) Figures change by moving the left lever.
  - (2) Figures change by moving the right lever.
  - (3) The display turns to ON by pressing the left start button.
  - (4) The display turns to ON by pressing the right start button.
  - (5) Every time the Coin Switch turns ON, the times are counted.
  - (6) The display turns to ON by pressing the service switch.
  - (7) The display turns to ON when the test switch is turned ON.
  - (8) The display turns to ON by pushing up the select switch.
  - (9) The display turns to ON by pushing down the select switch.
  - (10) The display turns to ON by pressing the enter switch.
- To return to I/O TEST screen, press the enter switch, keeping the select switch pushed up.

## (e) LAMP TEST

Tests are conducted on lamps.



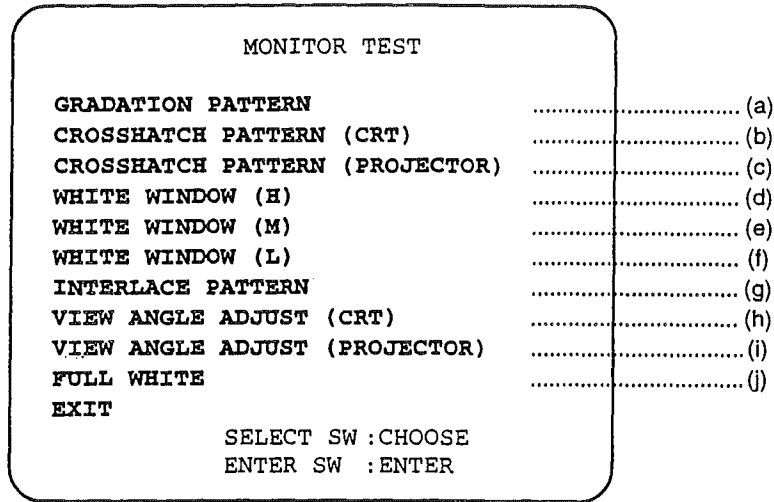
[LAMP TEST screen]

- (1) The lamp of the start button is lit while the start button is pressed. (The screen displays ON while the lamp is on.)
- To return to I/O TEST screen, press the enter switch.

**7-7-5 Various monitor adjustments (MONITOR TEST)**

Various adjustments of monitors are made.

- 1** Select MONITOR TEST on the MENU screen and press the enter switch.  
MONITOR TEST screen is displayed.



**[Monitor Test screen]**

- 2** Select any item by the select switch.  
The item being selected blinks.
- 3** Each pattern is displayed by pressing the enter switch.  
To get out of the pattern screens, press the enter switch again.
  - (a) The gradation pattern is displayed.
  - (b) Crosshatch pattern for the CRT monitor is displayed. (Not to be used for this machine.)
  - (c) Crosshatch pattern for the projector is displayed.
  - (d) White window (high) is displayed.
  - (e) White window (middle) is displayed.
  - (f) White window (low) is displayed.
  - (g) Interlace pattern is displayed.
  - (h) Adjustment screen for the CRT monitor is displayed. (Not to be used for this machine)
  - (i) Adjustment screen for the projector is displayed.
  - (j) The entire screen turns to white.
- 4** To return to the MENU screen, select EXIT and press the enter switch.

### 7-7-6 Adjusting sound volume (SOUND TEST)

The adjustment of sound volume and stereo checking are conducted.

- 1 Select SOUND TEST on the MENU screen and press the Enter Switch.  
SOUND TEST screen is displayed.

SOUND TEST		
[DEFAULT IN GREEN]		
VOLUME	FRONT L SP (0-64) 45	..... (a)
	FRONT R SP (0-64) 45	..... (b)
REQUEST	SONG NO. 000	..... (c)
MESSAGE:		..... (d)
EXIT		
SERVICE SW: REQUEST ON/OFF		
SELECT SW : CHOOSE		
ENTER SW : ENTER		

[Sound Test screen]

- 2 Select any item that you want to change by the select switch.  
The item being selected blinks.
- 3 Select (a) (b) and (c) and press the enter switch. The numerical value of the item is displayed blinking.  
Adjust the value by pushing the select switch up and down.

Item	Description	As shipped
(a) Setting the volume of the left speaker	00 (min) - 64 (max.)	45
(b) Setting the volume of the right speaker	00 (min) - 64 (max.)	45
(c) Selection of tunes	Selection of tunes and sound effects	—

[List of sound settings]

In (c) above, the digit of the value to be adjusted changes every time the enter switch is pressed. Adjust each digit by the Select Switch and set the number.

In order to have the tune or sound corresponding to the number, press the Service Switch. (for up to 10 seconds)

\* "000" represents no sound and "001" represents stereo.

When 001 is selected and the service switch is pressed, the speakers play in the order of left, right and both. With the sound of each speaker, LEFT, RIGHT, and CENTER is displayed.

- 4 To return to MENU screen, select EXIT and press the enter switch.

### 7-7-7 Displaying and initializing the game data (ADS DATA)

Various data on the game is displayed.

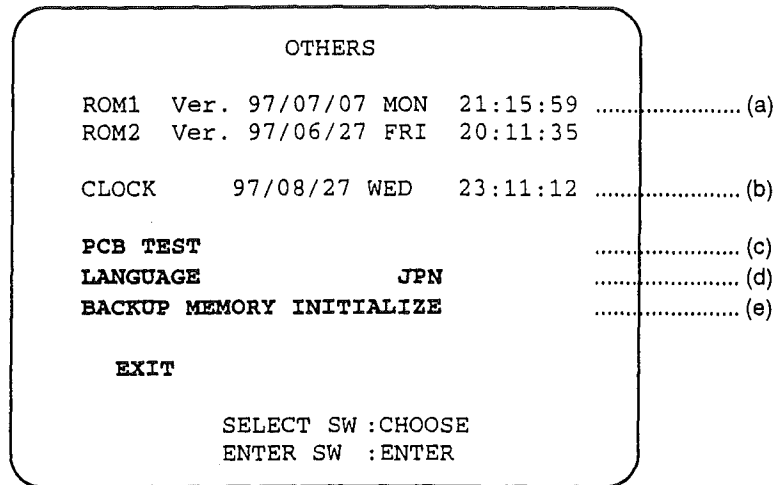
- ❶ Select ADS DATA on the MENU screen and press the enter switch. ADS DATA screen is displayed.
- ❷ Even if the power switch is turned OFF, no data will be lost without executing ADS INITIALIZE in ADS DATA or BACKUP MEMORY INITIALIZE in OTHERS.
- ❸ To return to MENU screen, select EXIT and press the enter switch after checking.



**7-7-8 Initialization of backup memory, etc. (OTHERS)**

The backup memory is initialized and a PC board test, etc. is conducted.

- 1** Select OTHERS on the MENU screen and press the enter switch.  
The OTHERS screen is displayed.



**[OTHERS screen]**

- 2** Select any item that you want to execute by the select switch.  
The item being selected blinks.
- 3** To execute the blinking item, press the enter switch.
- 4** To return to the MENU screen, select EXIT and press the enter switch.

- (a) The version of the software is displayed.
- (b) The current time is displayed. (The time cannot be reset.)
- (c) It is used for the PC board test. (not to be used in operation)
- (d) The language to be used is displayed. (English: ENG, German:GER, French: FRA, Spanish: SPA, Portuguese: POR, Italian: ITA)
- (e) The backup memory is initialized.  
Select YES and press the enter switch. All the high scores and various other settings are cleared and the settings return to the factory settings (default).  
\* Levers are not initialized.

## 7-8 Adjustment when parts are replaced (INITIALIZATION)

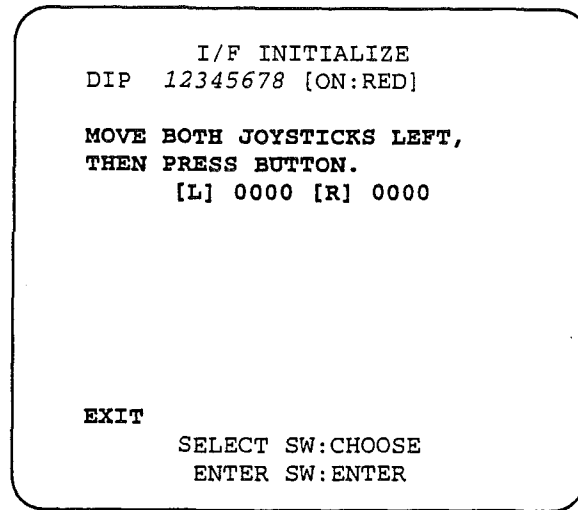
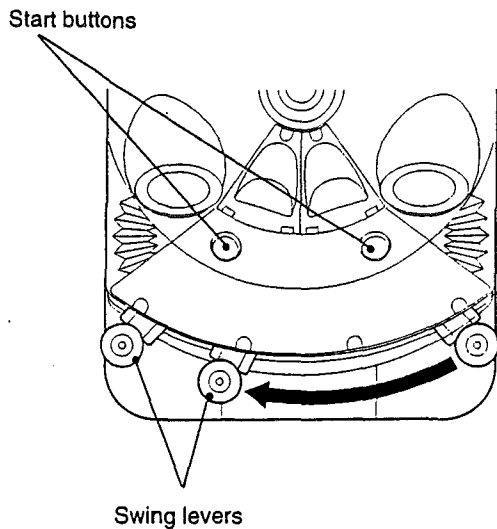
### NOTICE

- Be sure to initialize whenever the game PC board and the volume of the swing lever Assy is replaced or the backup data is initialized. Games are unable to be normally played without initialization.
- Do not hit levers too forcefully. Rubber between levers shrinks and the adjustment is caused to be out of place.

### 7-8-1 Method of initializing the volume of the swing lever Assy

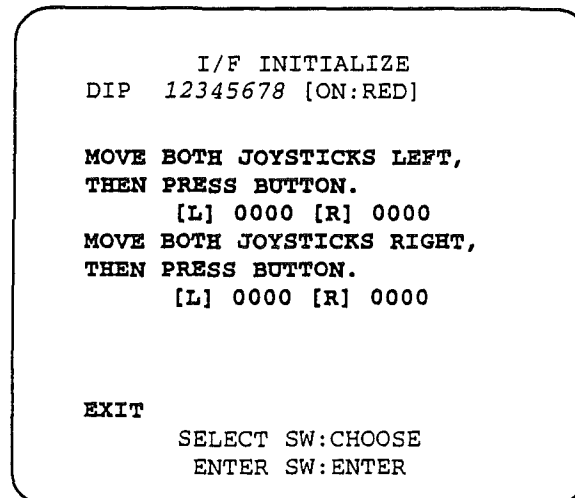
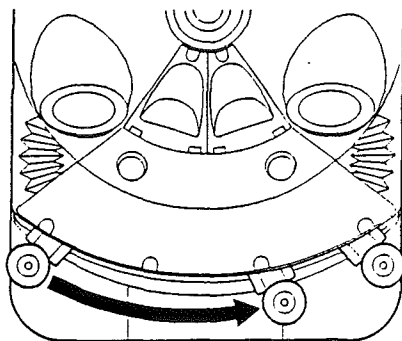
Initialize levers. To enter this mode, either turn the test switch ON holding the service switch, or enter I/F INITIALIZE in I/O TEST.

- 1 Move both levers to the left end and press either the left or right start button.



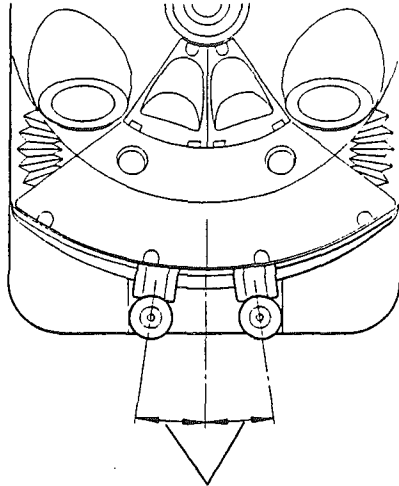
[Example of I/F INITIALIZE screen]

- 2 Move both levers to the right end and press either the left or right start button.



[Example of I/F INITIALIZE screen]

- 3 Move both levers to the center and press either the left or right start button. The entire procedure is completed, if COMPLETED is displayed.



To be moved to the center at approximately the same angle.

```
I/F INITIALIZE
DIP 12345678 [ON:RED]

MOVE BOTH JOYSTICKS LEFT,
THEN PRESS BUTTON.
  [L] 0000 [R] 0000
MOVE BOTH JOYSTICKS RIGHT,
THEN PRESS BUTTON.
  [L] 0000 [R] 0000
MOVE BOTH JOYSTICKS CENTER,
THEN PRESS BUTTON.
  [L] 0000 [R] 0000
  COMPLETED

EXIT
  SELECT SW: CHOOSE
  ENTER SW: ENTER
```

[Example of I/F INITIALIZE screen]

- 4 Turn the test switch OFF after initialization is completed.

## 8. MAINTENANCE



### DANGER

- The projector contains some parts that retain high heat and voltage after turning the power switch OFF. Carelessly touching any part inside the projector other than the parts specified may give you an electric shock or get you injured.



### WARNING

- Be sure to turn the power switch OFF to prevent workers and others from suffering an electric shock, accident or injury when conducting maintenance work (troubleshooting measures and repairs, etc.)

### 8-1 Maintenance and inspection



### CAUTION

- Be sure to conduct a regular inspection. It is indispensable to prevent accidents.

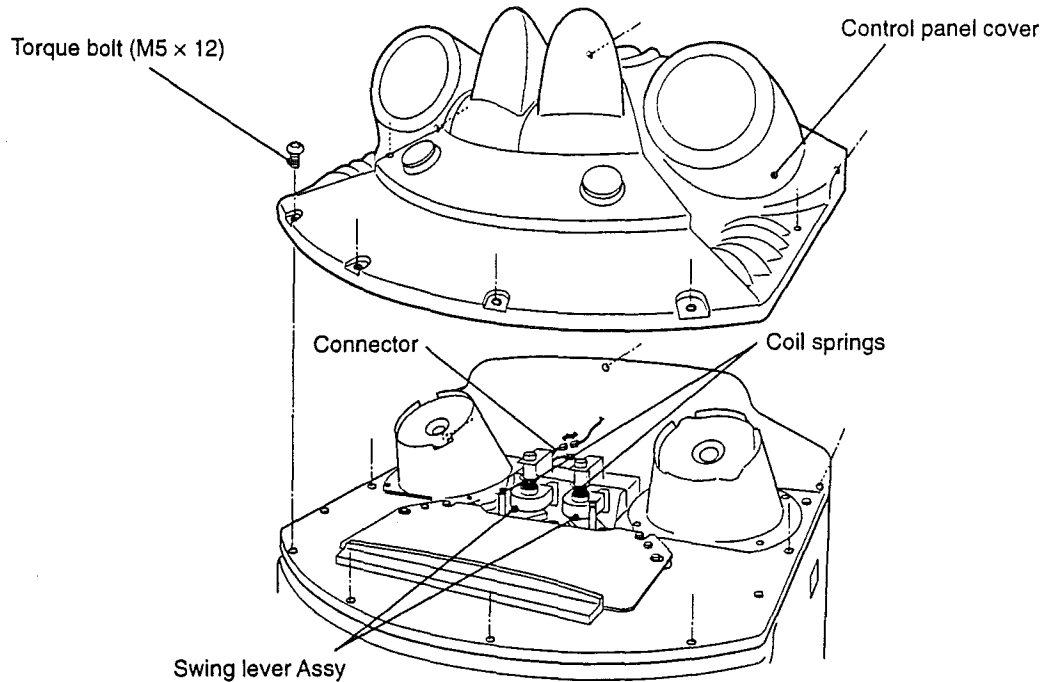
### 8-1-1 Greasing up coil springs of the swing lever Assy

– To be conducted by technicians only –

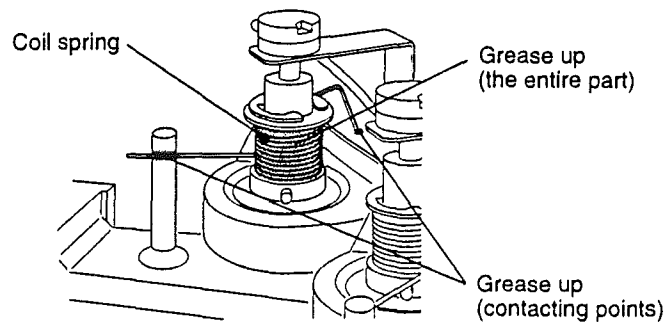


- Grease up coil springs once every 6 months.

- 1 Remove 9 torque bolts (M5 × 12) on the control panel cover.
- 2 Remove the connector and detach the control panel cover.



- 3 Apply grease to the three points in the following figure where a coil spring contacts a swing lever Assy. (Same on the opposite side)  
The specified grease: Albania grease No.2 (Showa Shell)



- 4 Assembly is to be made in reverse order.

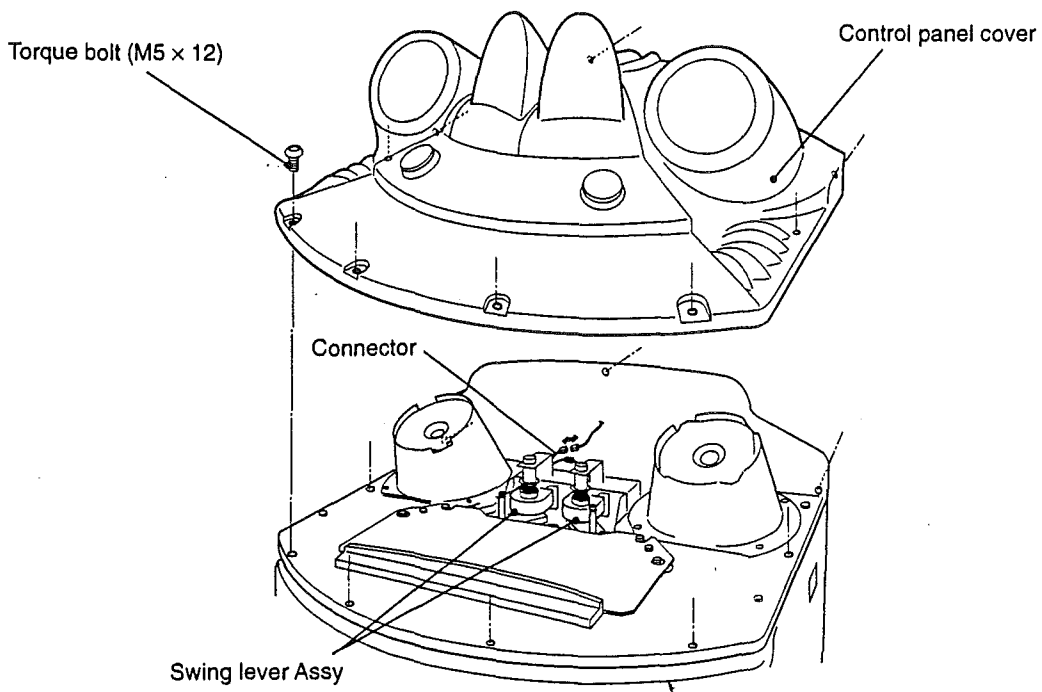
### 8-1-2 Checking abrasion of versus cushions of the swing lever Assy

– To be conducted by technicians only –

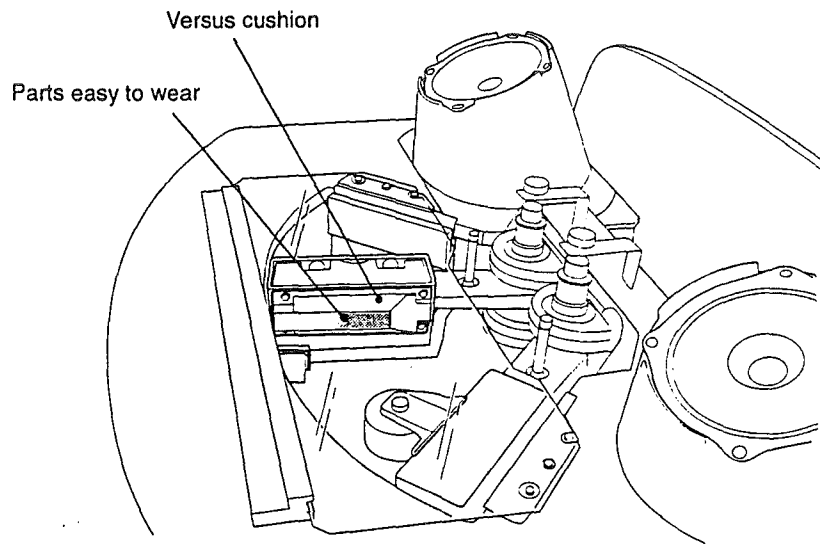


● Check abrasion of the versus cushions once every 3 months.

- 1** Remove the nine torque bolts (M5 × 12) on the control panel cover.
- 2** Remove the connector and detach the control panel cover.

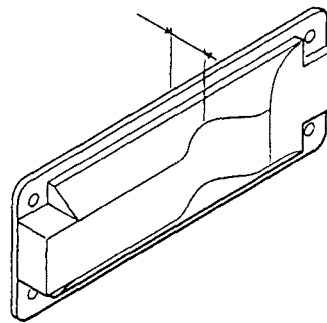


- 3 Check if the versus cushion wears with your eyes.



- 4 Replace the versus cushion if worn out. (See "8-3-4 (2) Replacement of versus cushions" on P-73)

Replace it if this part becomes about 7 mm or less.



- 5 Assembly is made in reverse order.

## 8-2 Troubleshooting measures



### WARNING

- Be sure to turn the power switch OFF before starting work in order to prevent workers and others from suffering an electric shock or injury as well as to prevent electric circuits from breaking down.

### NOTICE

- First make sure that each connector is firmly connected if trouble has occurred.
- Contact your distributor, if the trouble is not applicable in any of the items given on P. 59 - P. 61 or no improvement is made if some measures have been taken.
- Do not attempt to repair the game PCB yourself. Be sure not to try to conduct a continuation test using testers, etc. The internal voltage of a multi-meter may damage the IC.
- Pack carefully when sending components for repair. Especially when sending game PCB boards, wrap up with sponge or air cap and pack in a cardboard box in order to prevent them from being pressed by external force.



**8-2-1 The whole body**

– To be conducted by technicians only –

Symptom	Causes	Measures	Reference page
Actions are unstable. Sometimes mal-functions.	The power voltage is not stable within the range of the rated voltage.	Remove large electric capacity equipment on the same line (such as air conditioners and large ride-games) to secure the specified power voltage.	—
The power turns OFF halfway.	The circuit protector operates and the power is turned OFF.	Turn the power switch ON again. If the circuit protector operates repeatedly, the machine has some problem. Consult your distributor.	Page 40
The error message is displayed on the screen after turning the switch ON.	—	The machine has some problem. Consult your distributor.	—

**8-2-2 Signboard Assy**

– To be conducted by technicians only –

Symptom	Causes	Measures	Reference page
Unable to turn on the fluorescence light.	The connectors is disconnected.	Connect the connector.	Page 21
	The fluorescence light is burned out.	Replace the fluorescence light.	Page 62
	The glow lamp is burned out.	Replace the glow lamp.	Page 62

**8-2-3 Projector Assy**

– To be conducted by technicians only –

Symptom	Causes	Measures	Reference page
No image is displayed on the projector.	The connector to connect the projector and the projector base is disconnected.	Detach the front cover and connect the connector.	Page 63
	The connector of the rack Assy is disconnected.	Detach the rear cover and connect the connector.	Page 66
	The power switch of the projector is OFF. (Only Pioneer's product)**	Turn the power switch on according to the Projector Adjustment Manual.	Page 94

\*\* When inquiring about the projector and the Projector Adjustment Manual, refer to the alphabet letter given on each identification seal.

**8-2-4 Front Assy**

– Be sure to conduct by technicians only –

Symptom	Causes	Measures	Reference page
The start button lamp is not on.	The lamp bulb has burned out.	Replace the start button lamp.	Page 70
The machine does not start to operate by pressing the start button.	The connector is disconnected.	Detach the control panel cover and connect the connector.	Page 70
	The micro switch is broken.	Replace the start button.	Page 70
The speaker does not sound.	The connector is disconnected.	Detach the control panel cover and connect the connector.	Page 55 Page 94
	The volume is low.	Reset the volume.	Page 49

**8-2-5 Swing lever Assy**

– To be conducted by technicians only –

Symptom	Causes	Measures	Reference page
Characters on the screen do not react to the movement of a lever.	The connectors is disconnected.	Detach the control panel cover and connect the connector.	Page 72
	The volume is broken.	Replace the volume	Page 72
Characters move only halfway on the screen.	The volume is not initialized.	Initialize the volume.	Page 52
	The volume is broken.	Replace the volume.	Page 72
A lever does not return to the end.	A coil spring has come off.	Detach the control panel cover and re-mount the coil spring.	Page 55
When a lever hit the other lever, the cushion does not work.	The versus cushion is worn or damaged.	Replace the versus cushion.	Page 73

## 8-3 Detachment, mounting and replacement

### 8-3-1 Signboard Assy

– To be conducted only by technicians –

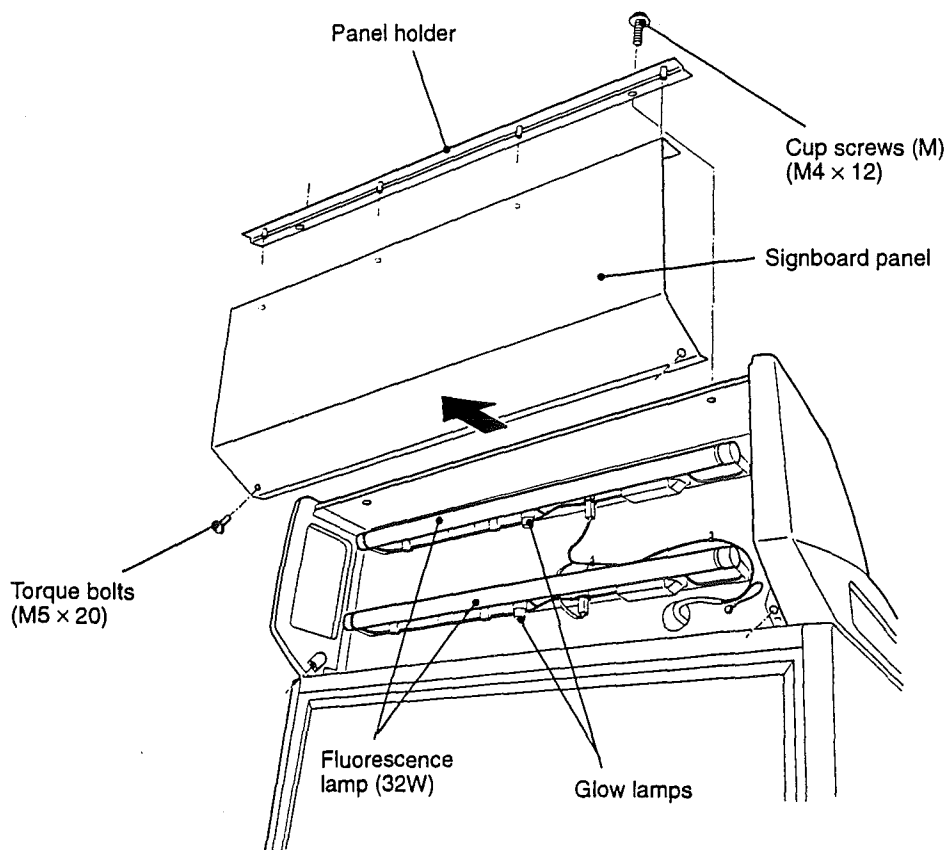
#### (1) Replacement of a fluorescence lamp and a glow lamp



### WARNING

- Be sure to turn the power switch OFF before starting work in order to prevent workers and others from an electric shock, injury or other accidents as well as to prevent electric circuits from breaking down.

- 1** Remove the two torque bolts (M5 × 20) and the two cup screws (M) (M4 × 12) and detach the panel holder, holding the signboard panel.
- 2** Draw out the signboard panel forward and detach it.
- 3** Replace a fluorescence lamp (32W) or a glow lamp.
- 4** Mounting is conducted in reverse order.







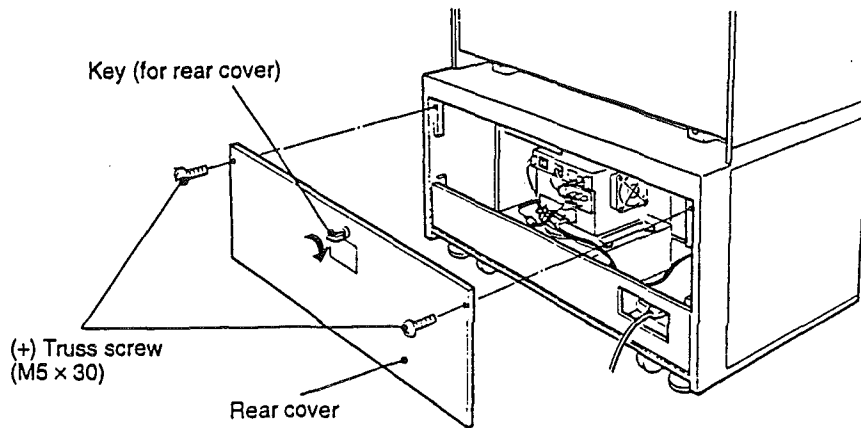


(2) Disassembling and assembling the rack Assy

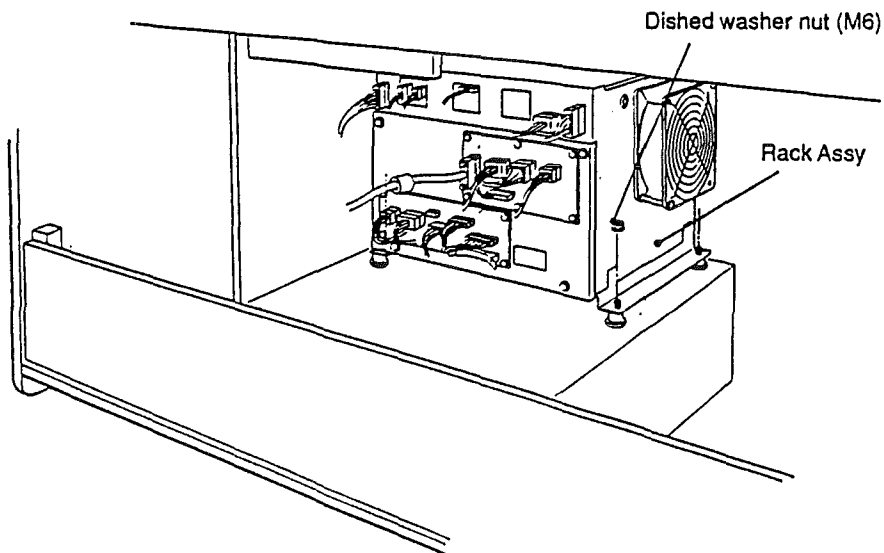
 **WARNING**

- Be sure to turn the power switch OFF before starting work to prevent workers and others from suffering an electric shock, accident or injury as well as to prevent electric circuits from breaking down.

- 1** Remove the two (+) truss screws (M5 × 30) on the rear cover and unlock the upper lock with the furnished key (for rear cover) to detach the rear cover.

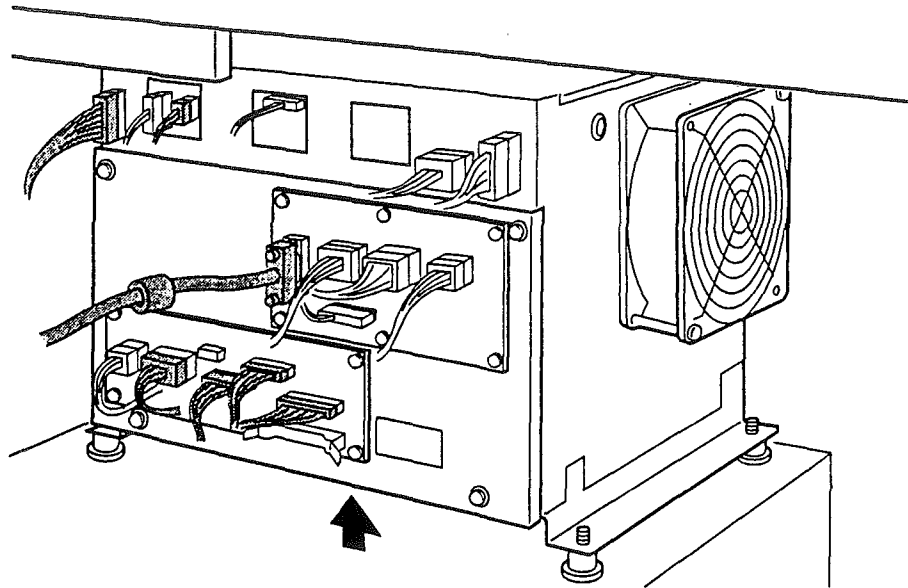


- 2** Remove the four dished washer nuts (M6).





- 3 Remove the seven connectors illustrated shaded in the figure below.
- 4 Lift the rack Assy supporting its bottom with a hand. Be careful not to damage harnesses then.



- 5 Assembly is conducted in reverse order.
- 6 After the replacement is completed, be sure to check the operation and setting. (See "7-7 Test mode" on P-42 and "7-8 Adjustment when replacing parts (INITIALIZATION)" on P-52)

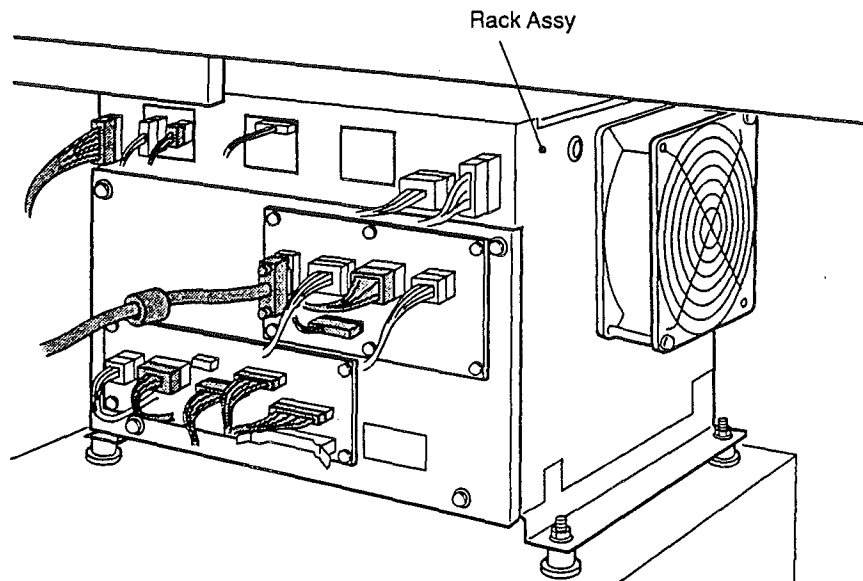
### (3) Replacing the game PC board



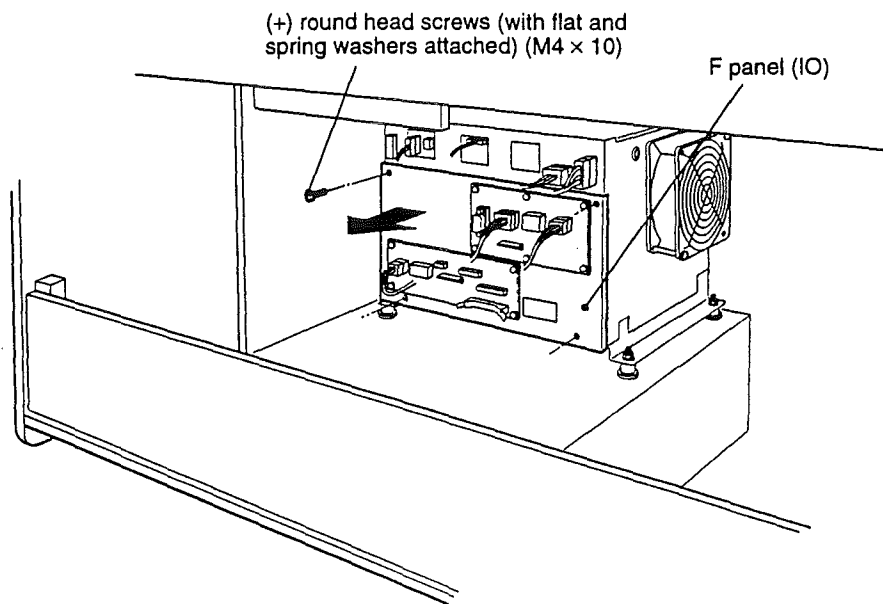
#### WARNING

- Be sure to turn the power switch OFF before starting work to prevent workers and others from suffering an electric shock, accident or injury as well as to prevent electric circuits from breaking down.

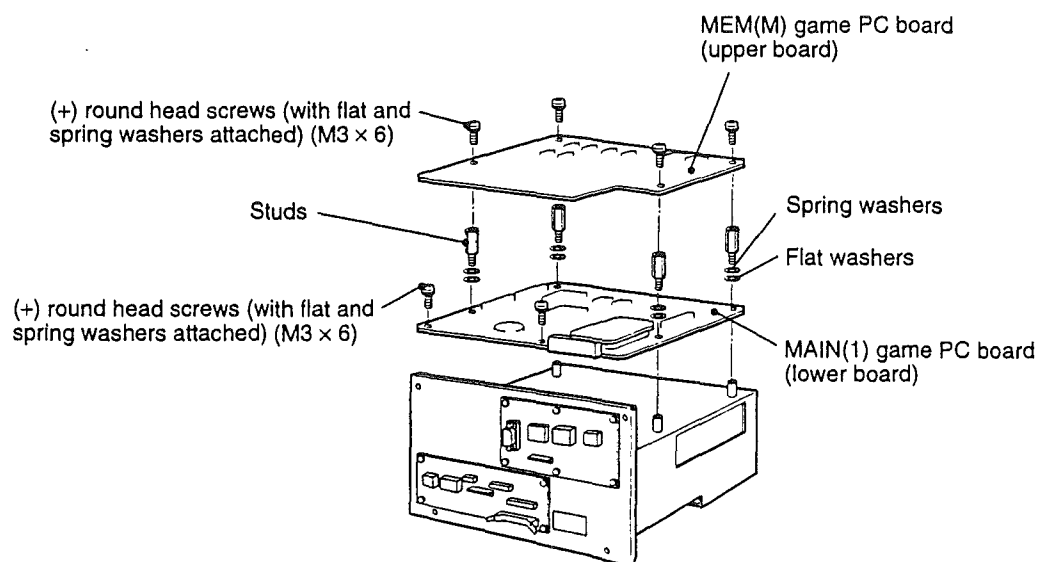
- 1** Remove the rear cover. (See “8-3-2 (2) Disassembling and assembling rack Assy” on P-66)
- 2** Remove the nine connectors shaded in the figure.



- 3** Remove the four (+) round head screws (with flat and spring washers attached) (M4 × 10) to draw out the F panel (IO).



- 4** Remove the four (+) round head screws (with flat and spring washers attached) (M3 × 6) on the upper board and four each of the stud flat washers and spring washers and the two (+) round head screws (with flat and spring washers attached) (M3 × 6) on the lower board to detach the two game PC boards.



- 5** Assembly is conducted in reverse order.
- 6** After the replacement is completed, be sure to check the operation and setting. (See "7-7 Test mode" on P-42 and "7-8 Adjustment when replacing parts (INITIALIZATION)" on P-52)

### 8-3-3 Cabinet Assy

– To be conducted by technicians only –

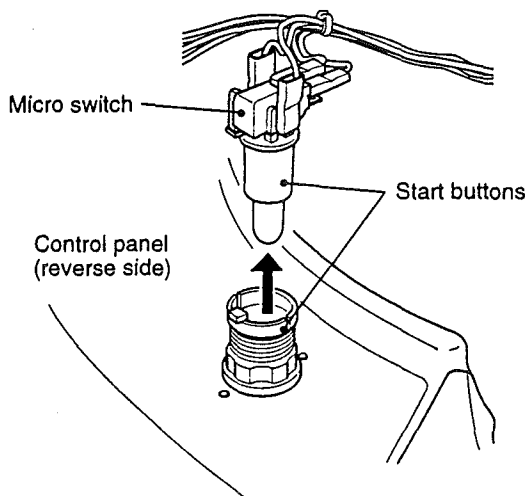
#### (1) Replacing start buttons and lamps



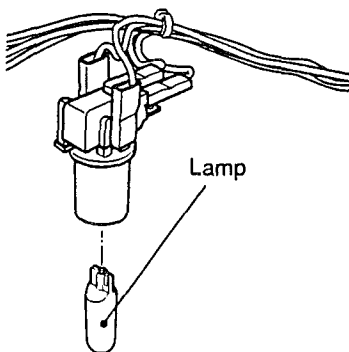
#### CAUTION

- Be sure to turn the power switch OFF before starting work to prevent workers and others from suffering an electric shock, accident or injury as well as to prevent electric circuits from breaking down.

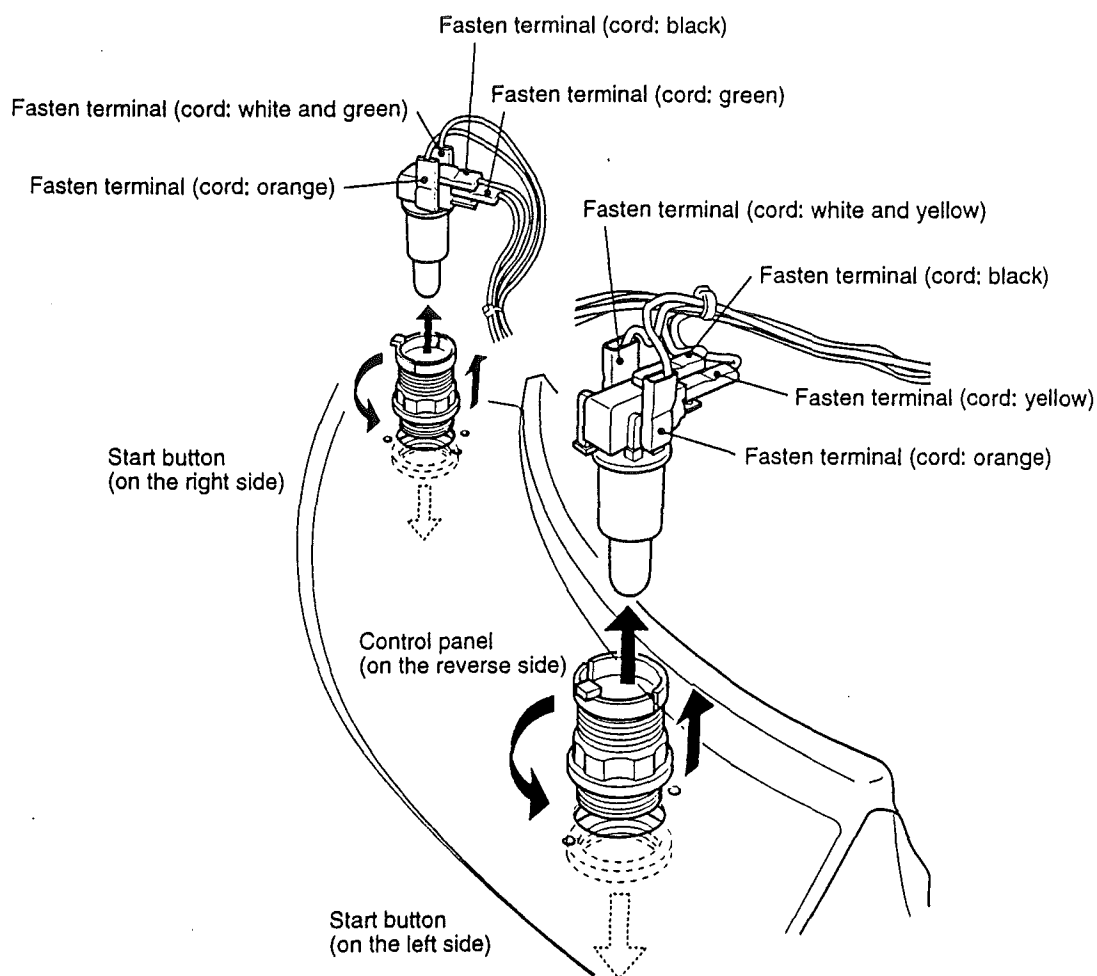
- 1** Detach the control panel cover. (“8-1-1 Greasing up the coil springs of the swing lever Assy” on P-55)
- 2** Reverse the detached control panel cover and remove the start button on the side of the micro switch.



- 3** When the lamp bulb is burned out, replace the lamp only. (See “10-4 Front Assy (2)” on P-85)



- 4 Remove the four fasten terminals when replacing the start button.
- 5 Remove the start button by turning it.



- 5 Replace the start button with a new one.
- 6 Assembly is conducted in reverse order.

**NOTICE**

- When mounting a start button, be sure to mount in the orientation illustrated above.
- Give attention to the color of the cord when connecting a fasten terminals. Be sure to connect correctly the terminal of each color to the specified part.

### 8-3-4 Swing lever Assy

– To be conducted by technicians only –

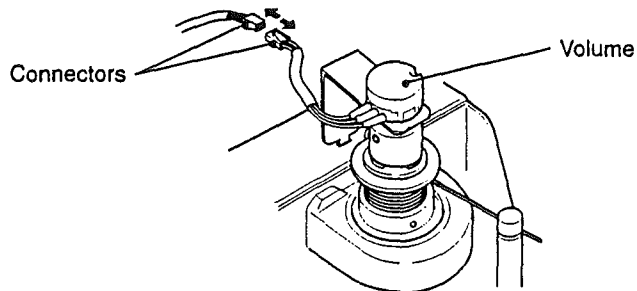
#### (1) Replacing volumes



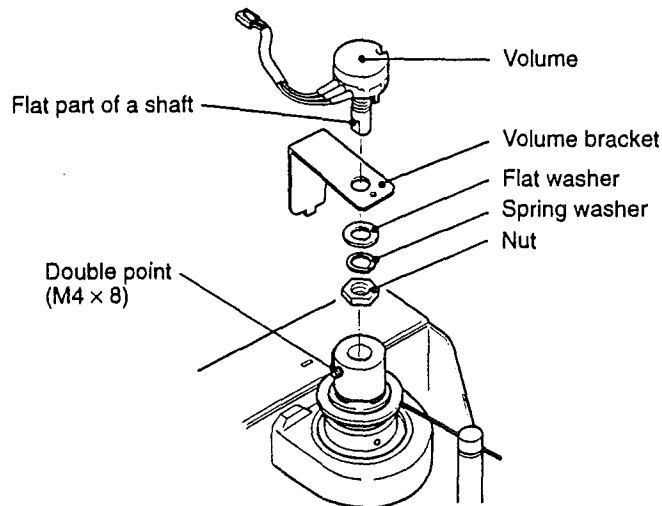
### CAUTION

- Be sure to turn the power switch OFF before starting work to prevent workers and others from suffering an electric shock, accident or injury as well as to prevent electric circuits from breaking down.

- 1 Detach the control panel cover. (See “8-1-1 Greasing up the coil springs of the swing lever Assy” on P-55)
- 2 Remove the connectors of the volume.



- 3 Pull the swing lever to be replaced to the center of the machine.
- 4 Loosen the double point (M4 × 8) to remove the volume.



- 5 Replace with a new volume.
- 6 Mounting is conducted in reverse order.
- 7 After the replacement is completed, initialize the volume. (See “7-8-1 Method of initializing volumes of the swing lever Assy” on P-52)

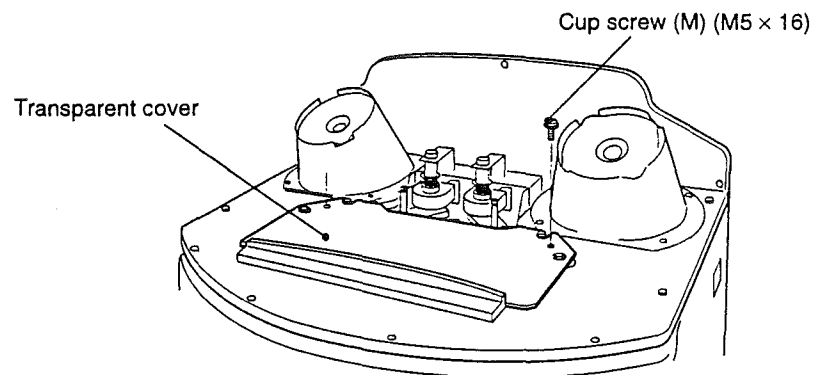


- When mounting a volume to the swing lever Assy, fit the flat part of the volume shaft to the position of the double point.

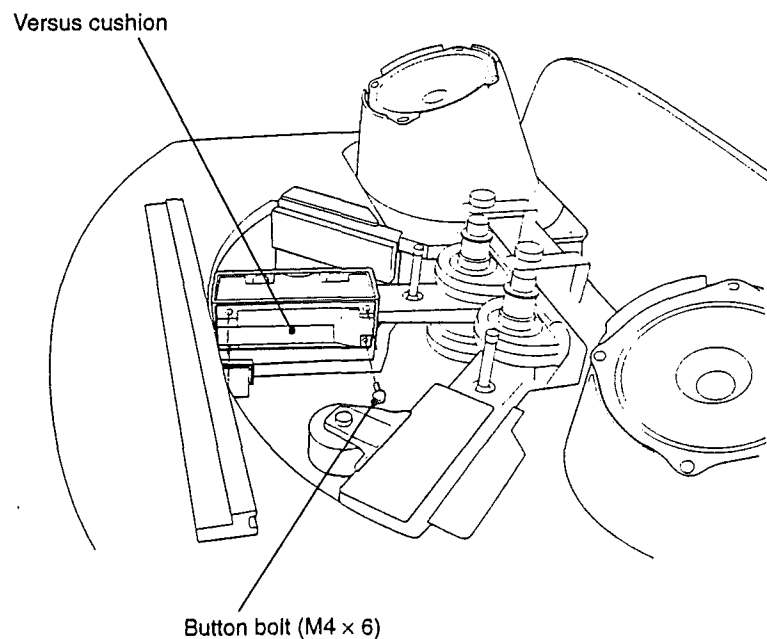
**(2) Replacing versus cushions****⚠ CAUTION**

- Be sure to turn the power switch OFF before starting work to prevent workers and others from suffering an electric shock, accident or injury as well as to prevent electric circuits from breaking down.

- 1** Detach the control panel cover. (See "8-1-2 Check on abrasion of versus cushions of swing levers Assy" on P- 56 )
- 2** Remove the two cup screws (M) (M5 × 16) and remove the transparent cover.



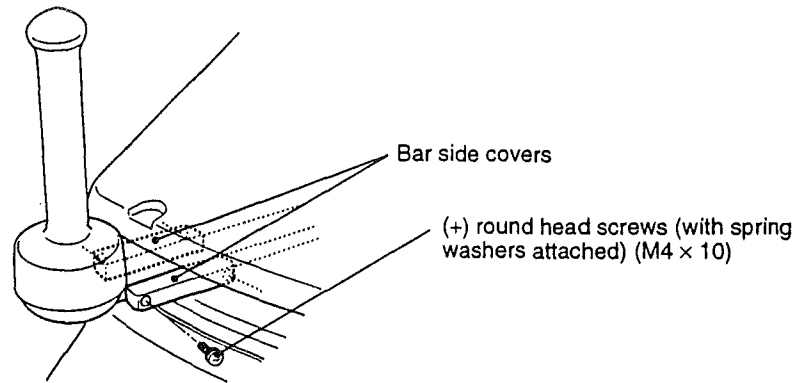
- 3** Remove the four button bolts (M4 × 6) of the versus cushion.



- 4** Replace with a new versus cushion.
- 5** Mounting is conducted in reverse order.

**(3) Replacing bar side covers**

- 1** Remove the two (+) round head screws (with spring washers attached) (M4 × 10) on the two bar side cover.



- 2** Replace with a new bar side cover.
- 3** Mounting is conducted in reverse order.



## 9. DISPOSAL

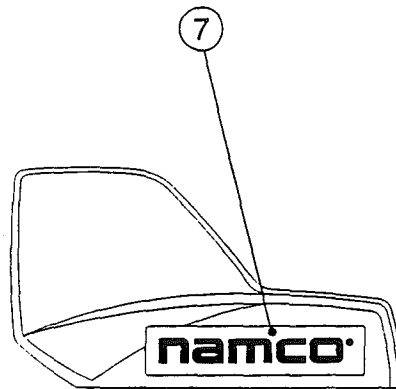
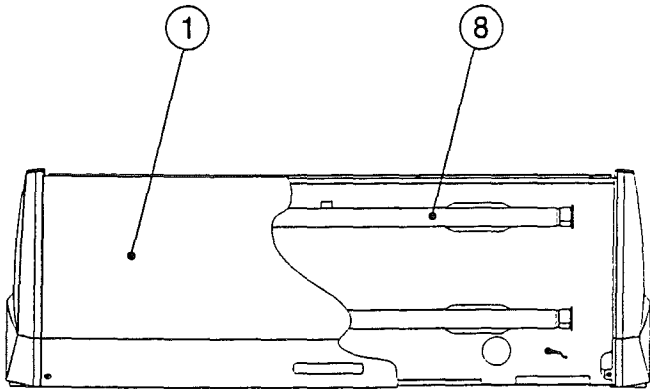
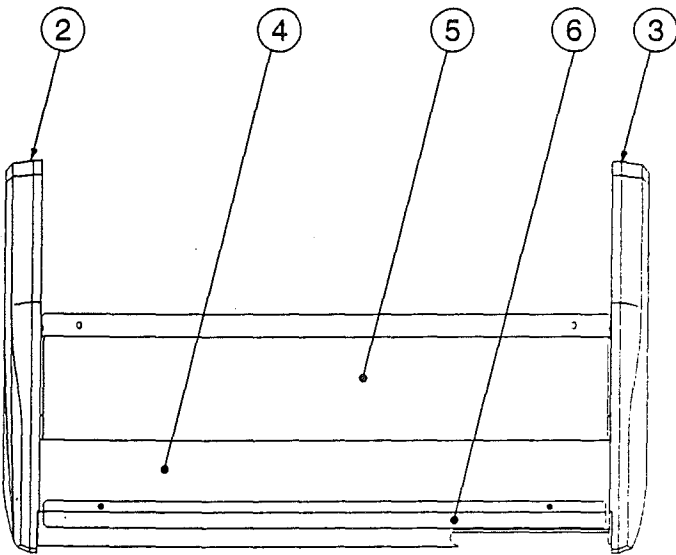


### WARNING

- When disposing this machine, gather, transport and scrap the components in accordance with law and orders.
- If entrusting others to gather, transport and scrap the components, hire specialists in each of such work.
- When disposing this machine, do not detach the screen of the projector. The screen detached or the lens contained in it may cause a fire, burning or loss of eyesight.

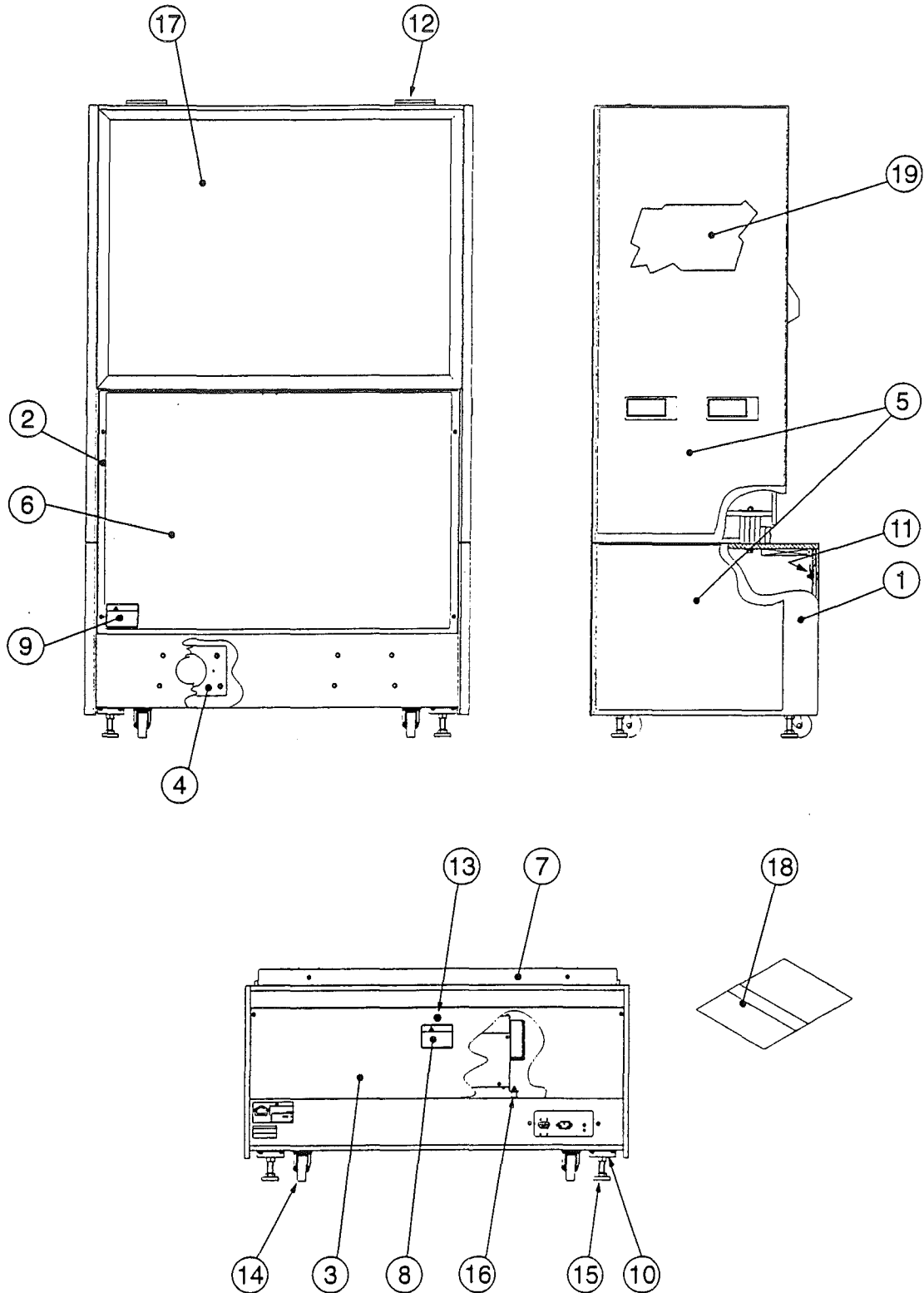
# 10. PARTS LIST

## 10-1 Signboard Assy



No.	Name	Q'ty	Model & Rating	Parts No.
1	Signboard Panel (DX)	1		681-411
2	Sideboard (L)	1		451-081
3	Sideboard (R)	1		451-011
4	Frame	1		451-012
5	Cover frame	1		451-013
6	Panel holder	1		451-014
7	Namco sticker	2		451-016
8	Fluorescent light	2	FL32W	—

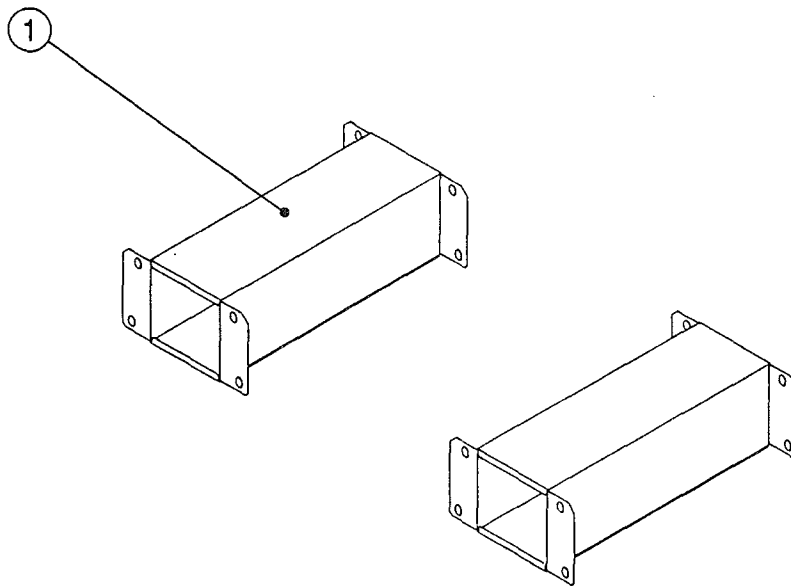
### 10-2 Projector Assy



No.	Name	Q'ty	Model & Rating	Parts No.
1	Projector base	1		681-311
2	Front cover	1		681-312
3	Rear cover	1		681-313
4	Reinforcing plate	2		681-314
5	Sideboard and base sticker set	2		681-316
6	Front sticker	1		681-318
7	Small lid	1		619-214
8	Caution sticker (maintenance)	1		461-359
9	Warning sticker (High voltage)	1		461-371
10	Adjuster bracket	4		450-120
11	Key Washer	1		450-124
12	Signboard hook	2		450-128
13	Coin lock	1	C-88-1(Random Number)	101-011 <sup>1)</sup>
14	Caster (L)	4	NMK/TNG/KRN075	102-169
15	Adjust bolt	4	M16x75	102-170
16	Rounded vibration proof rubber	4	KA-20-20h (Hardness 45 Åã)	106-011
17	Projector	1	SD-B5070N2 (Pioneer) or P500GNA (Toshiba)	—
18	Projector Adjustment Manual	1	PTV-P (Pioneer) or PTV-T (Toshiba)	—
19	Battle sticker (DX)	2		681-319

<sup>1)</sup> To order the parts of No. 13 to be specified by the number (corresponding number), contact separately.

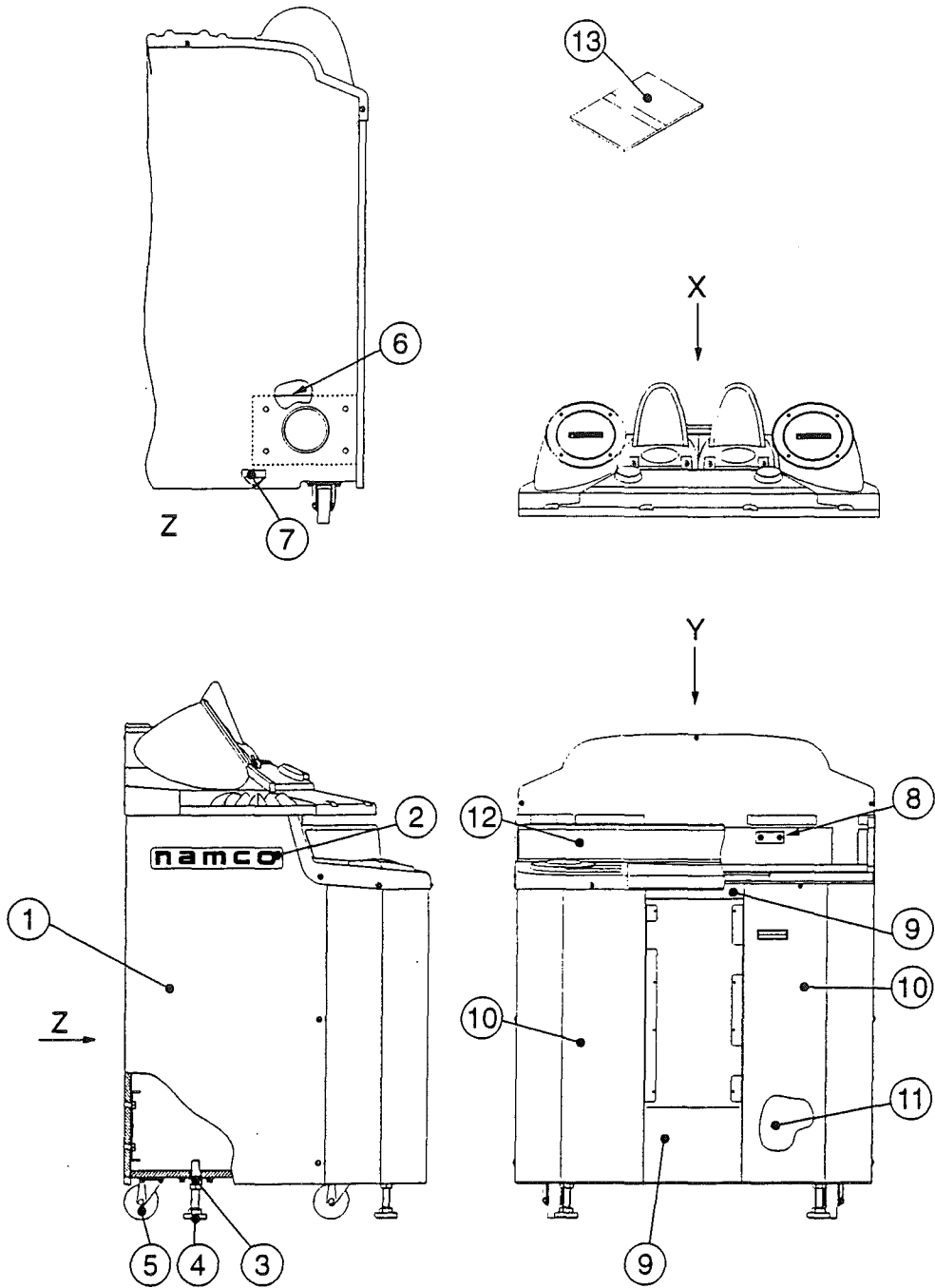
### 10-3 Joint Assy



---

No.	Name	Q'ty	Model & Rating	Parts No.
1	Joint	2		681-611

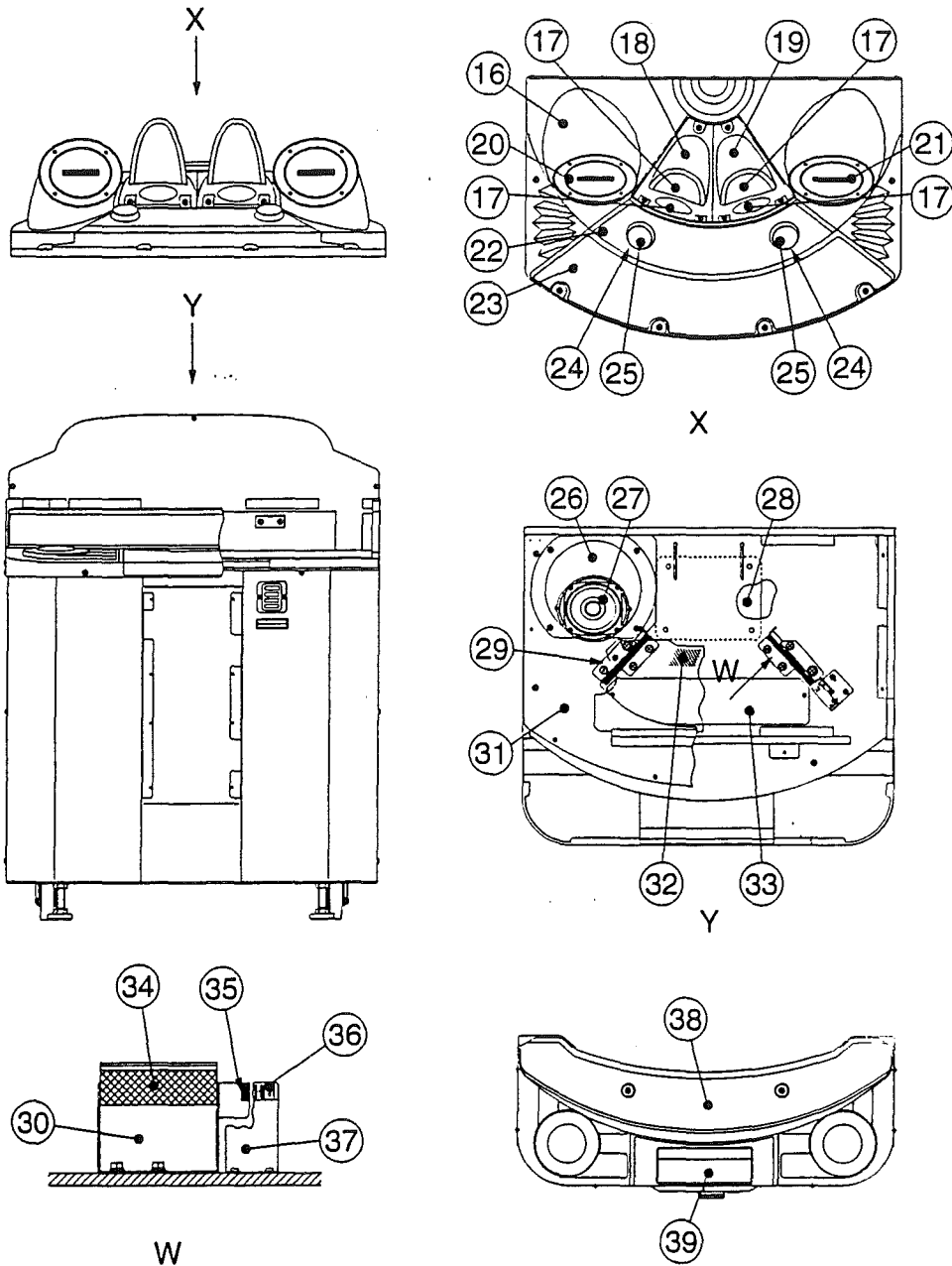
### 10-4 Front Assy (1)





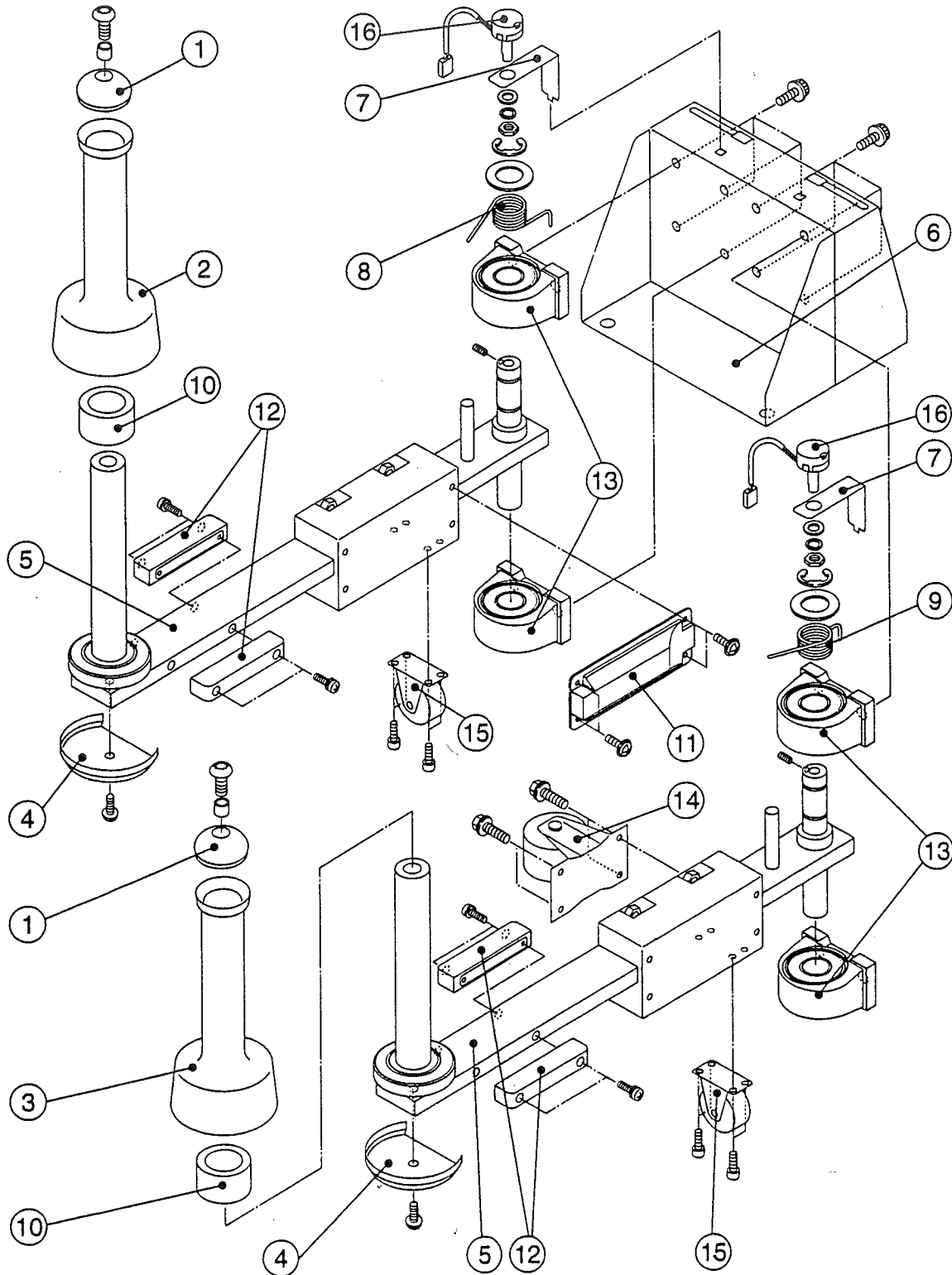
No.	Name	Q'ty	Model & Rating	Parts No.
1	Front cabinet	1		681-111
2	Namco logo sticker	2		646-342
3	Adjuster bracket	4		681-121
4	Adjustment bolt	4	D-B3 16 x 100-3 types	102-171
5	Caster (L)	4	NMK/TNG/KRN075	102-169
6	Reinforcing plate(B)	2		681-117
7	Fork sticker	2		229-441
8	L-shaped metal fittings	2		681-118
9	Front sticker (U.D.) set	1		681-139
10	Front sticker (L.R.) set	1		681-137
11	Front cover	1		681-112
12	Counter sticker	1		681-131
13	Operation Manual (This manual)	1		681-003

### 10-4 Front Assy (2)



No.	Name	Q'ty	Model & Rating	Parts No.
16	Control panel cover	1		681-122
17	Meter cover sticker set	1		681-126
18	Meter cover (L)	1		681-163
19	Meter cover (R)	1		681-123
20	Speaker cover (L)	1		681-165
21	Speaker cover (R)	1		681-125
22	Installation sticker (S)	1		681-127
23	Installation sticker (L)	1		681-168
24	Start button	2	PS-14-S-04 (White) 12 V	000-347
25	Start button sticker set	1		681-173
26	Speaker base	2		670-313
27	Speaker	2	FW 130G51-3	006-112
28	Reinforcing plate (A)	1		681-116
29	Stopper plate (L)	1		681-120
30	Stopper plate (R)	1		681-160
31	Control panel base	1		681-113
32	Transparent cover	1		681-115
33	Caster floor	1		681-114
34	Stop Cushion(A)	2		681-134
35	Stop Cushion (B)	2		681-136
36	Magnet Catch	2	C-158-4	208-031
37	Plate spring	2		681-119
38	Counter cover	1		681-124
39	Caution sticker (Play)	1		461-374
-	Start button lamp	-	12V-3W	002-080

### 10-5 Swing lever Assy

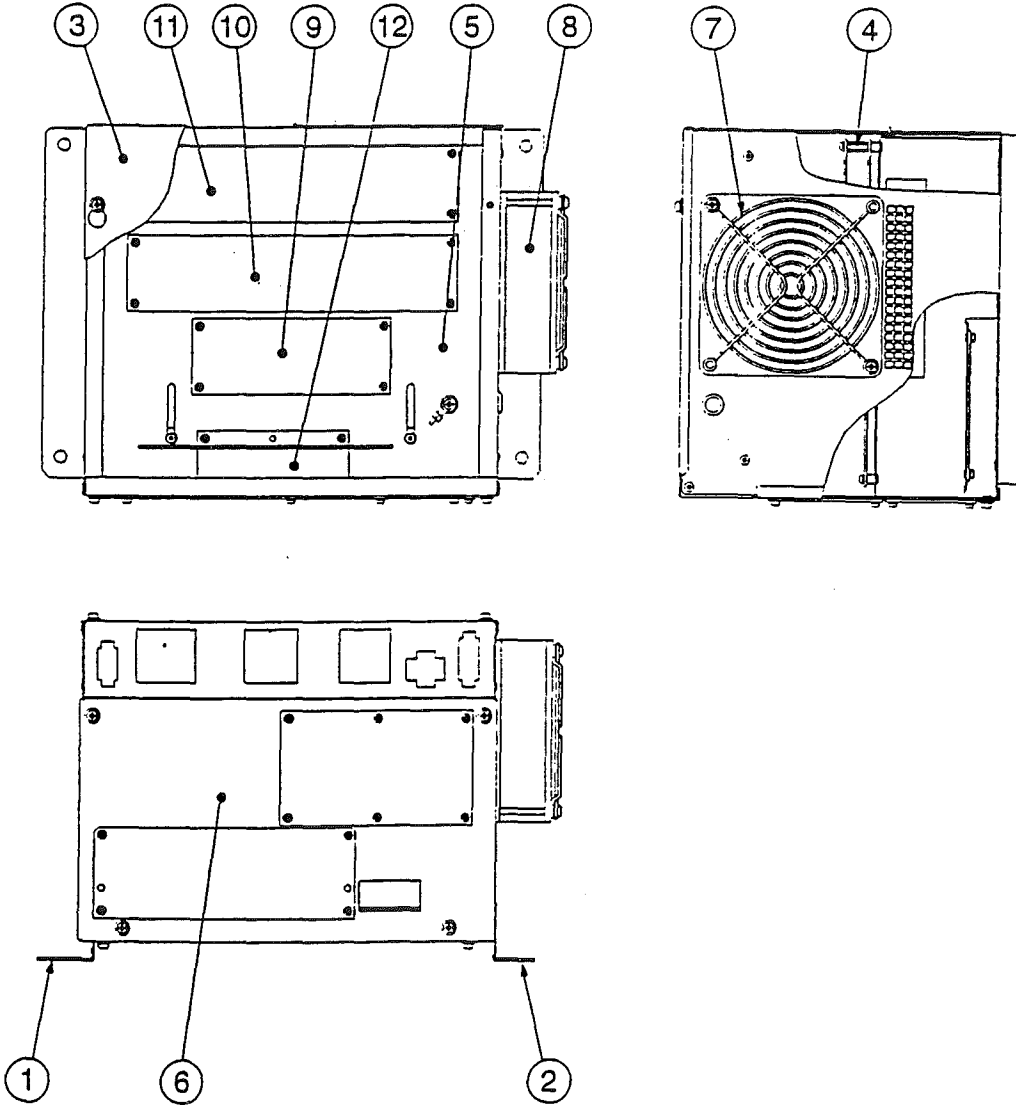


No.	Name	Q'ty	Model & Rating	Parts No.
✓ (1)	Cap	2		681-211
✓ (2)	Grip cover A (L)	1		681-262
✓ (3)	Grip cover A (R)	1		681-212
✓ (4)	Grip cover B	2		681-213
	5	2		681-214
	6	1		681-215
	7	2		681-216
✓	8	1		681-217
✓	9	1		681-267
✓	10	2		681-218
✓ (11)	Versus cushion	1		681-219
✓	12	4		681-220
✓	13	4	UCPA204-E4H	103-093
✓ (14)	Caster	1	420SR-N50 (separately made)	102-168
✓ (15)	Caster	2	420R-N38	102-054
	16	2	EWSV8AF20E13 95°	008-027

B 43.31  
 107  
 B ? PP 982  
 494 H36-20

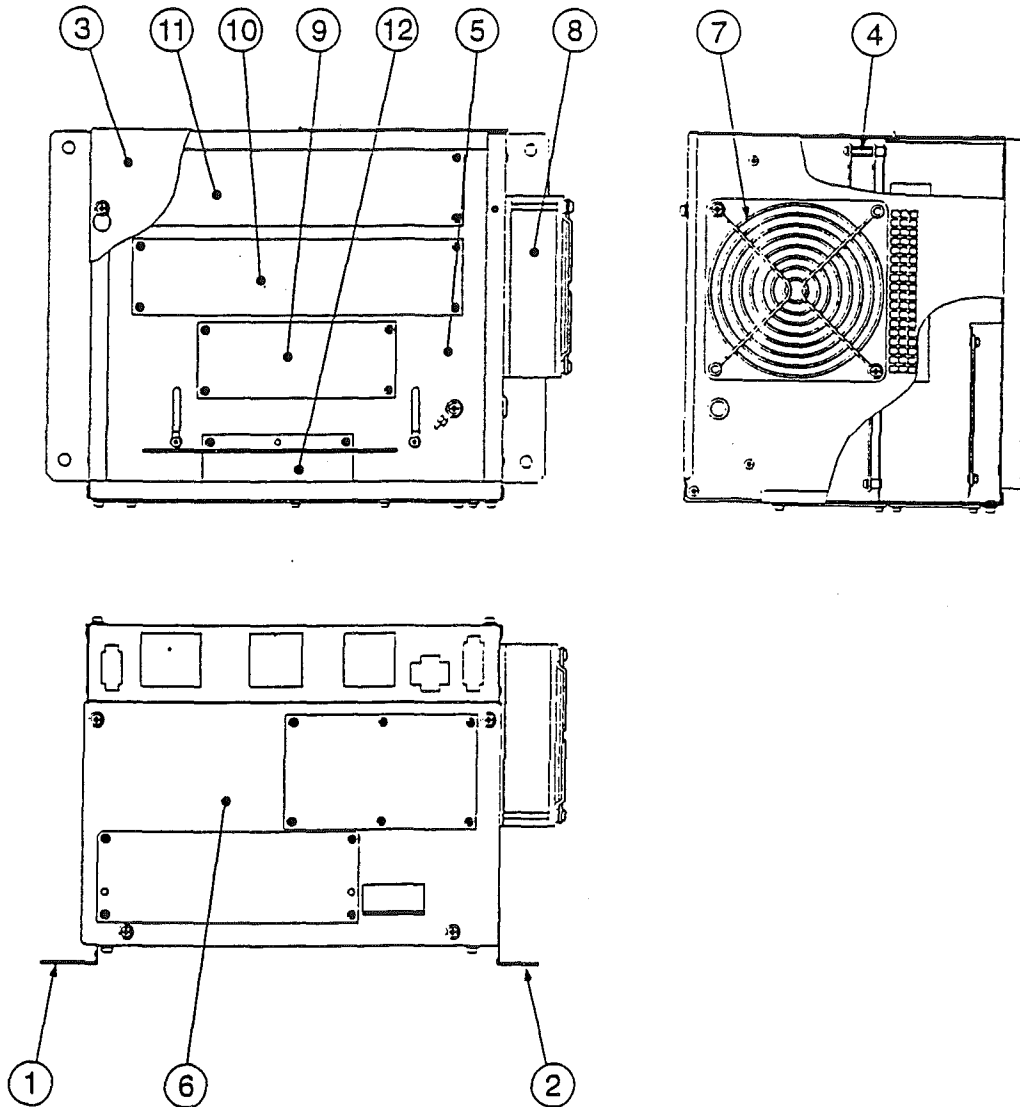
Parts@nomco.com

10-6 Rack Assy



No.	Name	Q'ty	Model & Rating	Parts No.
1	Rack bracket (L)	1		681-511
2	Rack bracket (R)	1		681-512
3	Cover	1		461-716
4	Stud	4		461-717
5	Case (IO)	1		461-069
6	F panel (IO)	1		461-068
7	Fan guard	1	PG-47-02	—
8	Fan Motor	1	4715MS-10T-B50-B00	005-209
9	Switching regulator	1	VS30B-3	009-100
10	Switching regulator	1	LCA75S-5	009-059
11	Switching regulator	1	LCA75S-12	009-060
12	AMP(2)PC board Assy	1		—

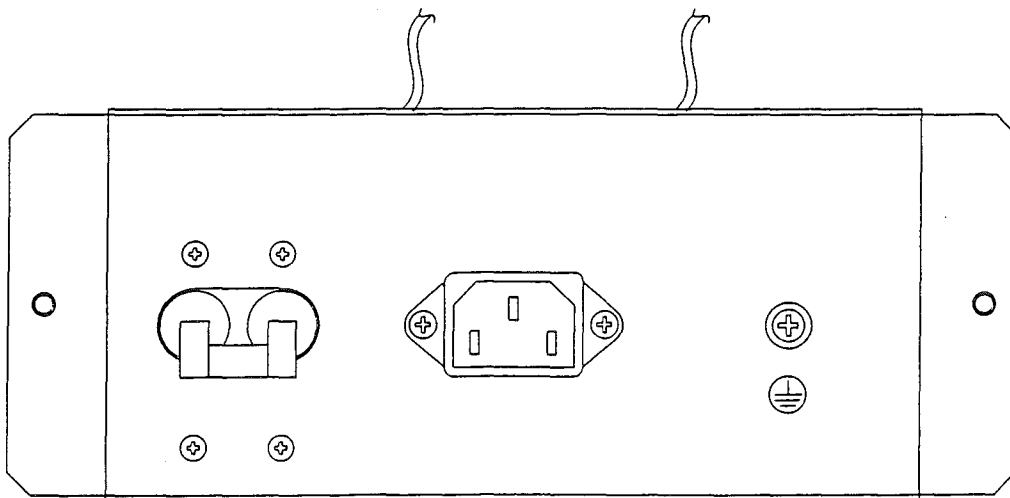
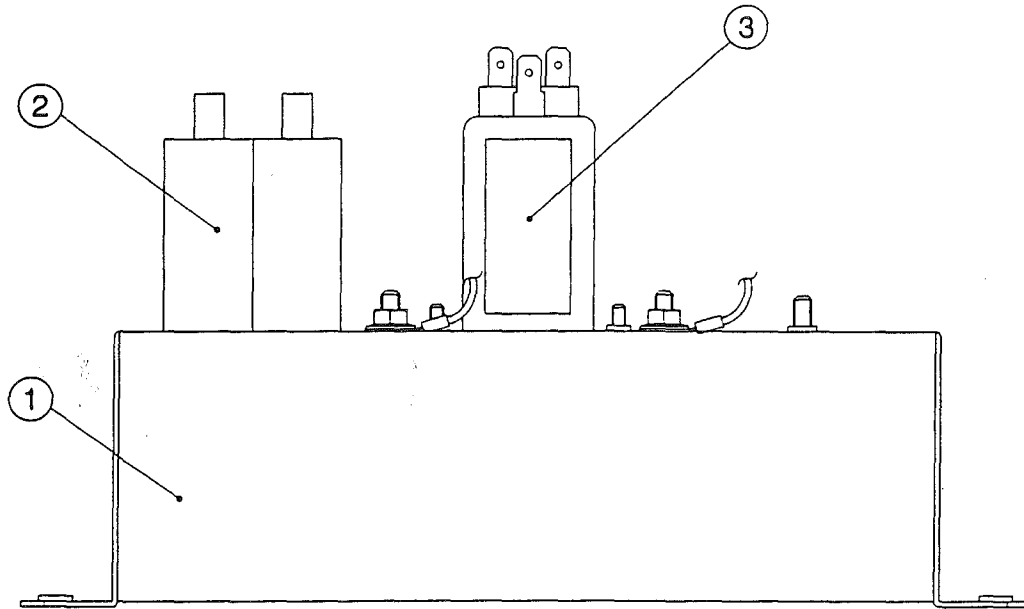
10-6 Rack Assy





No.	Name	Q'ty	Model & Rating	Parts No.
1	Rack bracket (L)	1		681-511
2	Rack bracket (R)	1		681-512
3	Cover	1		461-716
4	Stud	4		461-717
5	Case (IO)	1		461-069
6	F panel (IO)	1		461-068
7	Fan guard	1	PG-47-02	—
8	Fan Motor	1	4715MS-10T-B50-B00	005-209
9	Switching regulator	1	VS30B-3	009-100
10	Switching regulator	1	LCA75S-5	009-059
11	Switching regulator	1	LCA75S-12	009-060
12	AMP(2)PC board Assy	1		—

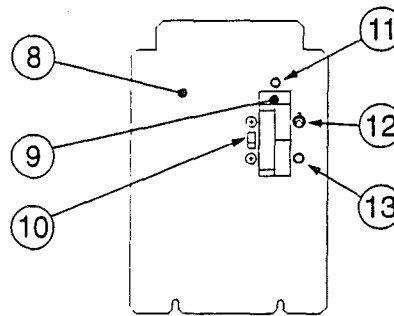
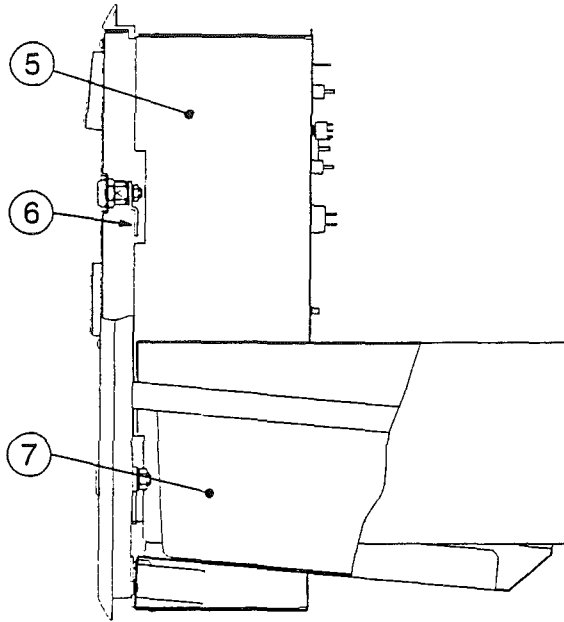
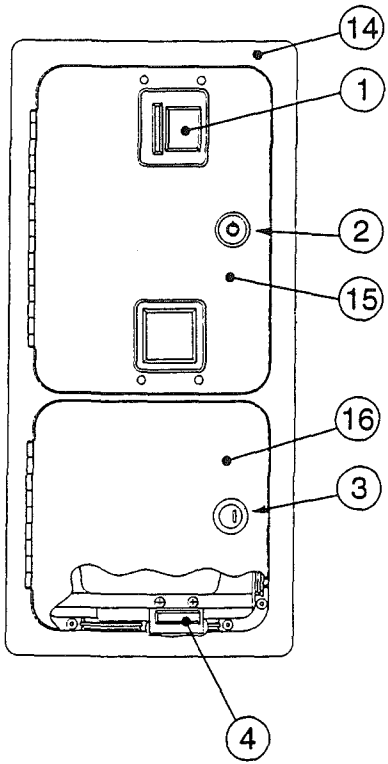
### 10-7 Cord box Assy



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No.	Name	Q'ty	Model & Rating	Parts No.
1	Cord box	1		681-451
2	Circuit protector	1	CP-S2PA1-M5A	—
3	Noise filter	1	SUP-C4210F	—

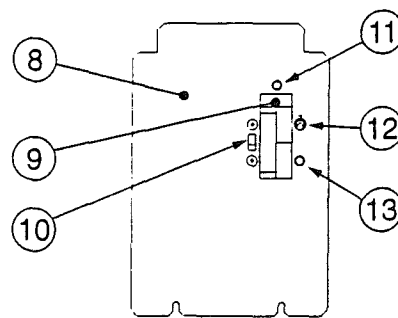
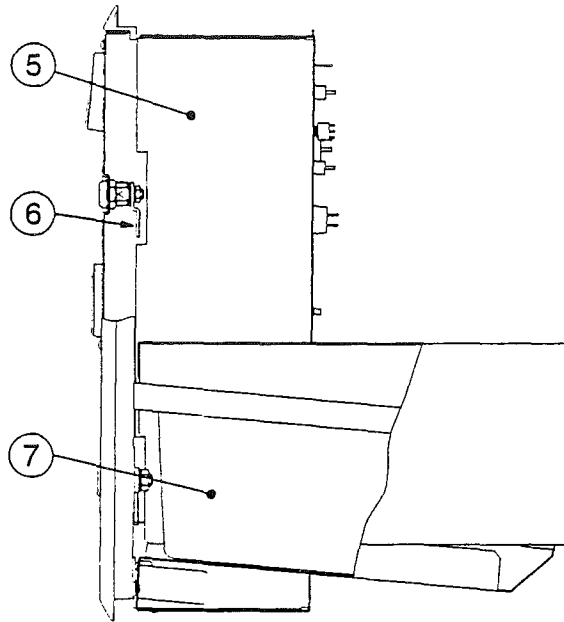
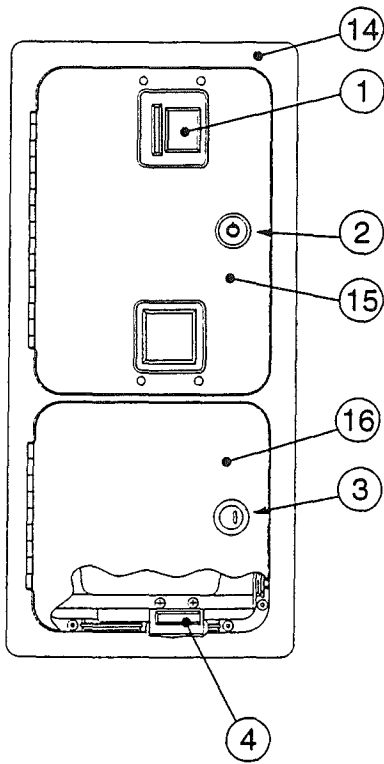
### 10-8 Coin Assy



No.	Name	Q'ty	Model & Rating	Parts No.
1	Front plate Assy	1	Coin selector attached	100-143
2	Coin lock	1	C-88-1 (Random number)	101-011**
3	Electric lock	1	VM78Z	101-034
4	Coin counter	1	NX-06FD 12V	003-023
5	Coin case	1		464-022
6	Hook (C)	1		100-121
7	Cash box (K)	1		461-040
8	Service plate (B-1P)	1		461-721
9	Service sticker M (B)	1		461-722
10	Test switch	1	SDS-103A-03#13BJ (Slide type)	—
11	Service switch	1	AP-1-1R (Push type: red)	000-097
12	Select switch	1	SDSA-331G-CR (Toggle type)	000-337
13	Enter switch	1	AP-1-1G (Push type: green)	000-310
14	Front cover	1		461-036
15	Service door (B)	1		461-725
16	Coin door	1		461-038

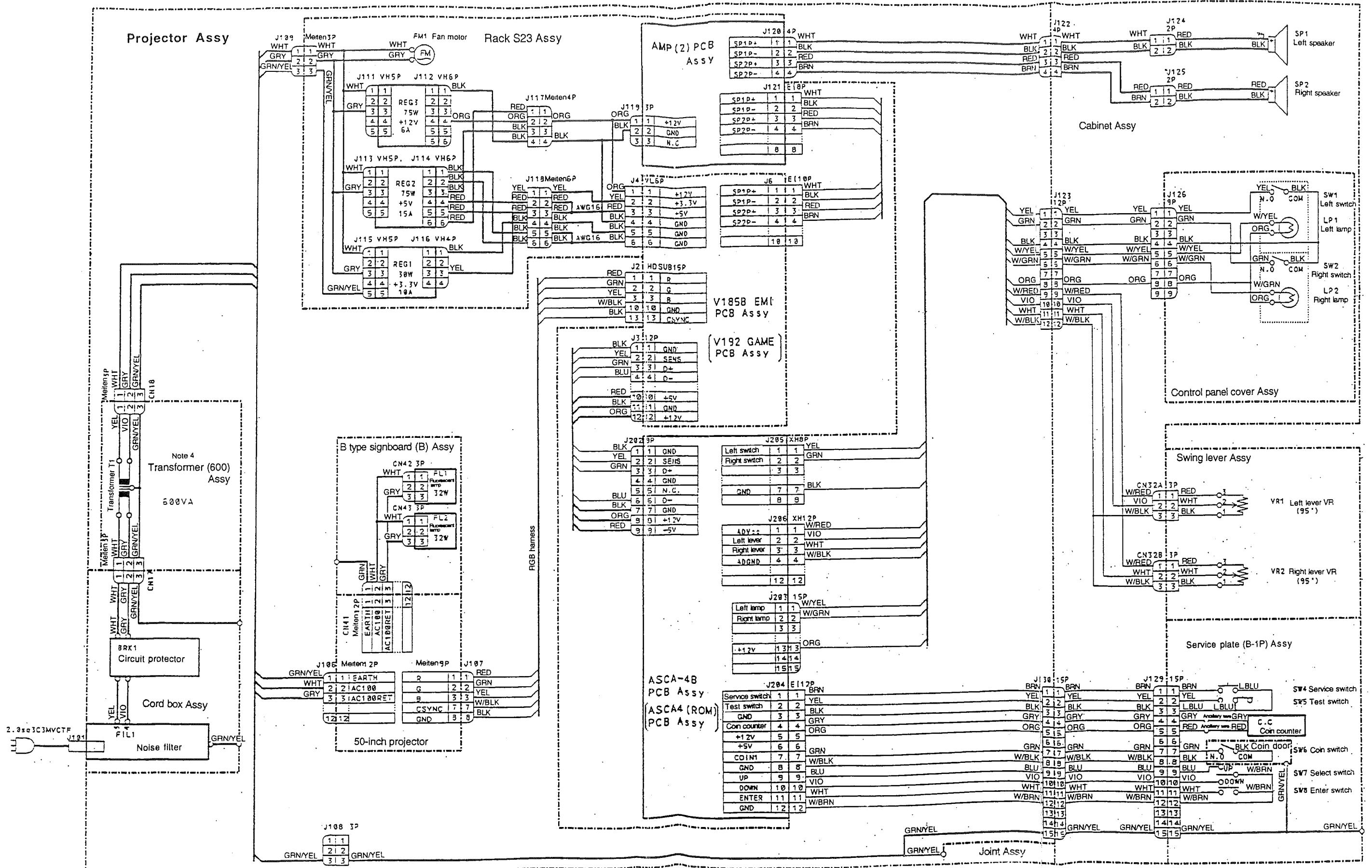
\*\* To order the parts of No. 3 to be specified by the number (corresponding number), contact separately.

### 10-8 Coin Assy



No.	Name	Q'ty	Model & Rating	Parts No.
1	Front plate Assy	1	Coin selector attached	100-143
2	Coin lock	1	C-88-1 (Random number)	101-011 <sup>1)</sup>
3	Electric lock	1	VM78Z	101-034
4	Coin counter	1	NX-06FD 12V	003-023
5	Coin case	1		464-022
6	Hook (C)	1		100-121
7	Cash box (K)	1		461-040
8	Service plate (B-1P)	1		461-721
9	Service sticker M (B)	1		461-722
10	Test switch	1	SDS-103A-03#13BJ (Slide type)	—
11	Service switch	1	AP-1-1R (Push type: red)	000-097
12	Select switch	1	SDSA-331G-CR (Toggle type)	000-337
13	Enter switch	1	AP-1-1G (Push type: green)	000-310
14	Front cover	1		461-036
15	Service door (B)	1		461-725
16	Coin door	1		461-038

<sup>1)</sup> To order the parts of No. 3 to be specified by the number (corresponding number), contact separately.



Notes:

1. Use socket contact for a plug connector and use pin? contact for a cap connector.
2. Use a mini universal maintain lock connector if a connector is unspecified.
3. Use AWG24 if a thin wire is unspecified. Use AWG16 as a thick wire for a green key. Use AWG18 if a thick wire is unspecified.
4. Refer to only overseas specifications.



## WARRANTY

Seller warrants that its printed circuit boards and parts thereon are free from defects in materials and workmanship under normal use and service for a period of ninety (90) days from the date of shipment. Seller warrants that its video displays (in games supplied with video displays) are free from defects in material and workmanship under normal use and service for a period of thirty (30) days from the date of shipment. None of the Seller's other products or parts thereof are warranted. Seller's sole liability shall be, at its option, to repair, replace, or credit Buyer's account for such products which are returned to Seller during said warranty period, provided:

- a) Seller is promptly notified in writing upon discovery by Buyer that said products are defective.
- b) Such products are returned prepaid to Seller's plant; and
- c) Seller's examination of said products discloses to Seller's satisfaction that such alleged defects existed and were not caused by accident, misuse, neglect, alteration, improper repair, improper installation, or improper testing.

In no event shall Seller be liable for loss of profits, loss of use, incidental or consequential damages.

Except for any express warranty set forth in a written contract between Seller and Buyer which contract supersedes the terms herein, this warranty is in lieu of all other warranties expressed or implied, including the implied warranties of merchantability and fitness for a particular purpose, and all other obligations or liabilities on the Seller's part, and it neither assumes nor authorizes any other person to assume for the Seller any other liabilities in connection with the sale of products by Seller.

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11/16/98