

Super Scooper OPERATION MANUAL

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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INTRODUCTION

Thank you for purchasing the "Super Scooper" game machine (hereafter referred to as the "machine").

This Operation Manual describes:

- How to install, operate, relocate, transport, maintain and discard the machine safely and properly.
- How to operate the machine correctly and make full use of its features.
- How to ensure safety of players and bystanders.

Inquiries concerning the machine and repairs:

- For further information about the machine and repairs, please contact your distributor.

1. SAFETY PRECAUTIONS -Make sure to read these instructions to ensure safety-

Instructions to the owner:

• If you entrust another party to perform installation, operation, relocation, transportation, maintenance or discarding of the machine, instruct the concerned party to read and observe all the instructions and precautions in this Operation Manual regarding the particular action to be taken.

1-1 Magnitudes of risk

On the labels attached to the machine and in this Operation Manual, precautions regarding safety and property damage are classified as shown below in accordance with the magnitude of the particular risk.

 **WARNING** : Failure to avoid the risk may result in death or serious injury.

 **CAUTION** : Failure to avoid the risk may result in minor injury or property damage.

Functional notes not related to safety are marked with the following indication.

 **NOTICE** : Notes related to functions or protection of the machine.

1-2 Definition of the term “technician”

This Operation Manual is written for arcade personnel. However, the sections marked “-To be conducted by a technician only-” in the table of contents are written for technicians. These tasks must be conducted by technicians only.

Technician: A person engaged in machine design, manufacture, inspection or maintenance service for a manufacturer of amusement equipment, or a person who has technical knowledge related to electricity, electronics or mechanical engineering at a level equal to or higher than that of technical high school graduates, and who is engaged routinely in the maintenance (repair) of amusement machines.

1-3 Top-priority safety precautions

WARNING

- Should any problem occur, turn off the power switch immediately to stop operating the machine. Then, unplug the power cord from the service outlet. Operating the machine without correcting a problem may cause fire or accident.
- Dust accumulated on the power plug may cause fire. Check the power plug regularly and remove dust.
- Insert the power plug firmly into the service outlet. Poor contact may cause overheating that can lead to a fire or burns.
- A damaged power cord can cause fire, electric shock or electrical leakage. Observe the following instructions.
 - Keep the power cord away from heating devices.
 - Do not twist the power cord.
 - Do not bend the power cord excessively.
 - Do not alter the power cord.
 - Do not bundle the power cord.
 - Do not pull the power cord. (When unplugging, always pull the plug, not the cord.)
 - Do not place anything on the power cord.
 - Do not pinch the power cord with the machine, other products, or against the wall.
 - Do not do anything else that might damage the power cord.
- Do not wet the power cord or power plug with water. Water can cause an electric shock or leakage.
- Do not touch the power plug with a wet hand. Going so can result in an electric shock.
- The power rating for the machine is 120 VAC, 3.5A. To prevent fire and electric shock, always use indoor wiring that conforms to the machine's power specifications.
- Operate the machine with a power supply voltage in the range of 110 to 120 VAC. Using the machine with a supply voltage outside this range may cause a fire or electric shock. To ensure that the machine operates in optimum condition, maintain the power supply at 120 VAC.
- For safe operation of the machine, make sure to always conduct pre-service check (refer to 7-1 Pre-service check .) and maintenance (refer to 8. MAINTENANCE.) procedures.
 - Use only specified parts to replace consumables and service parts (including fasteners). To order parts, contact your distributor.
- Do not convert the machine without permission. Do not perform any work that is not described in this Operation Manual. Unauthorized conversion of the machine may create unforeseen hazards.
- When transferring the ownership of the machine, make sure to provide this Operation Manual with the machine.

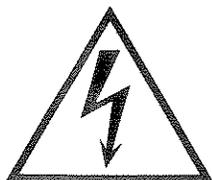
1-4 Description of warning labels attached to the machine

WARNING

- The warning labels describe important safety precautions. Observe the following:
 - Install the machine at a proper location with ample illumination, and keep it clean, and free of dirt so that the warning labels attached to the machine are easily legible. Also, make sure that the labels are not hidden behind another game machine or other objects.
 - Do not remove or alter the warning labels.
 - If the warning labels become dirty or damaged, replace them with new ones. To order warning labels, contact your distributor.

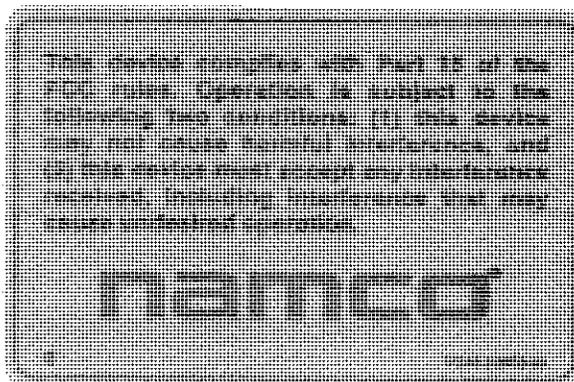
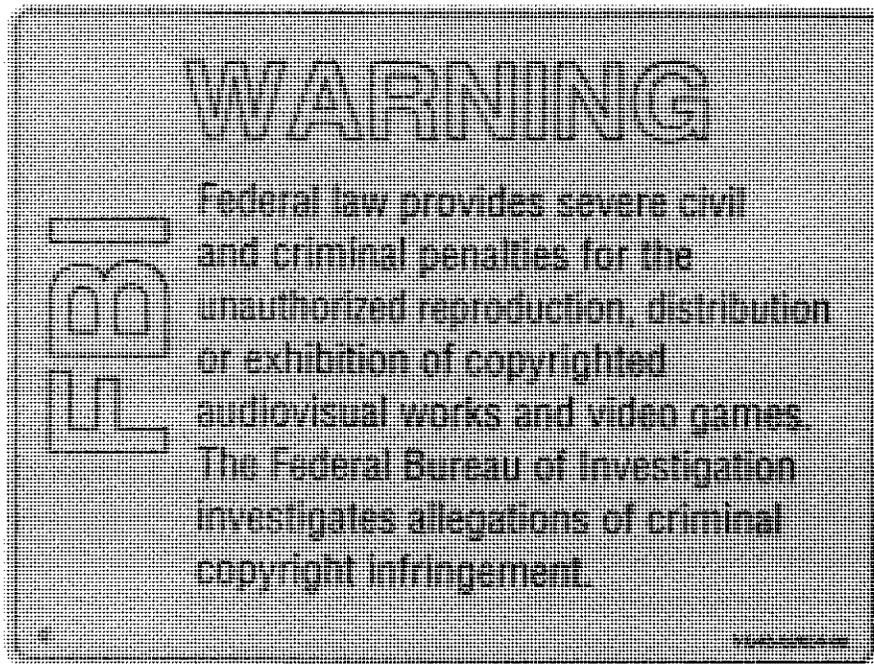
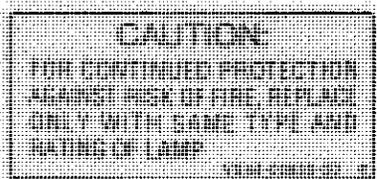
The following WARNING and CAUTION labels are attached on designated areas of the machine for precautionary purposes during operation, maintenance, transportation and relocation of the machine.

DANGER



HIGH VOLTAGE

VG44-05532-00 1



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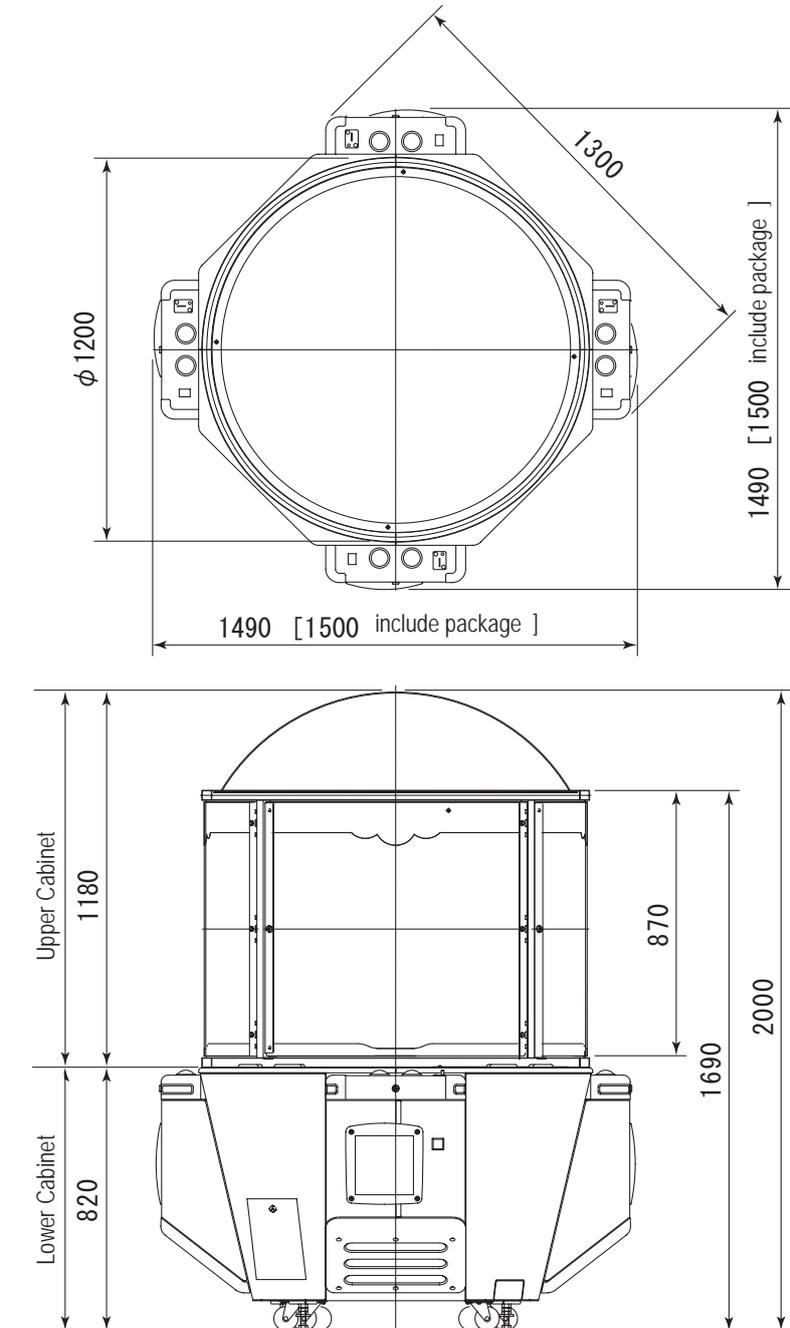
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2. SPECIFICATIONS

- (1) Rated power supply: 110-120 VAC (50/60 Hz)
- (2) Maximum power consumption: 222W
- (3) Maximum current consumption: 3.5A
- (4) Coin box capacity: Approx. 2,000 25-cents coins
- (5) Dimensions:
 - ① Upon delivery 1,500 (W) × 1,500 (D) × 2,000 (H) [mm]
 - ② When sub-divided
 - Upper Cabinet Assy: 1,200 (W) × 1,200 (D) × 1,180 (H) [mm]
 - Lower Cabinet Assy: 1,490 (W) × 1,490 (D) × 820 (H) [mm]



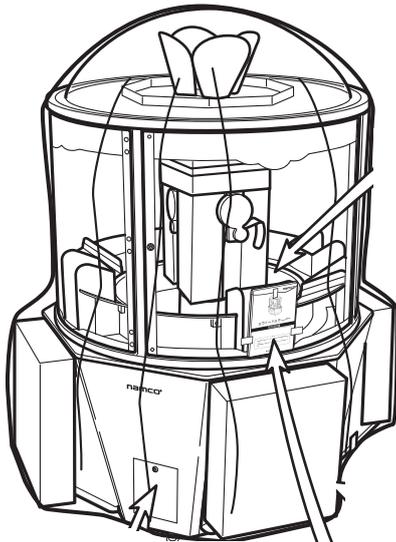
- (6) Weight Total: 300kg
 - Upper Cabinet Assy: 100kg
 - Lower Cabinet Assy: 195kg

3. CHECKING THE PACKAGE CONTENTS

The product packages contain the following assemblies and accessories when shipped.



- Make sure all the assemblies and accessories shown below are included in the product packages.
- If any assembly or accessory is missing, contact your distributor.



[Acryl Door]

Operation Manual



Coin lock key



Cam lock key

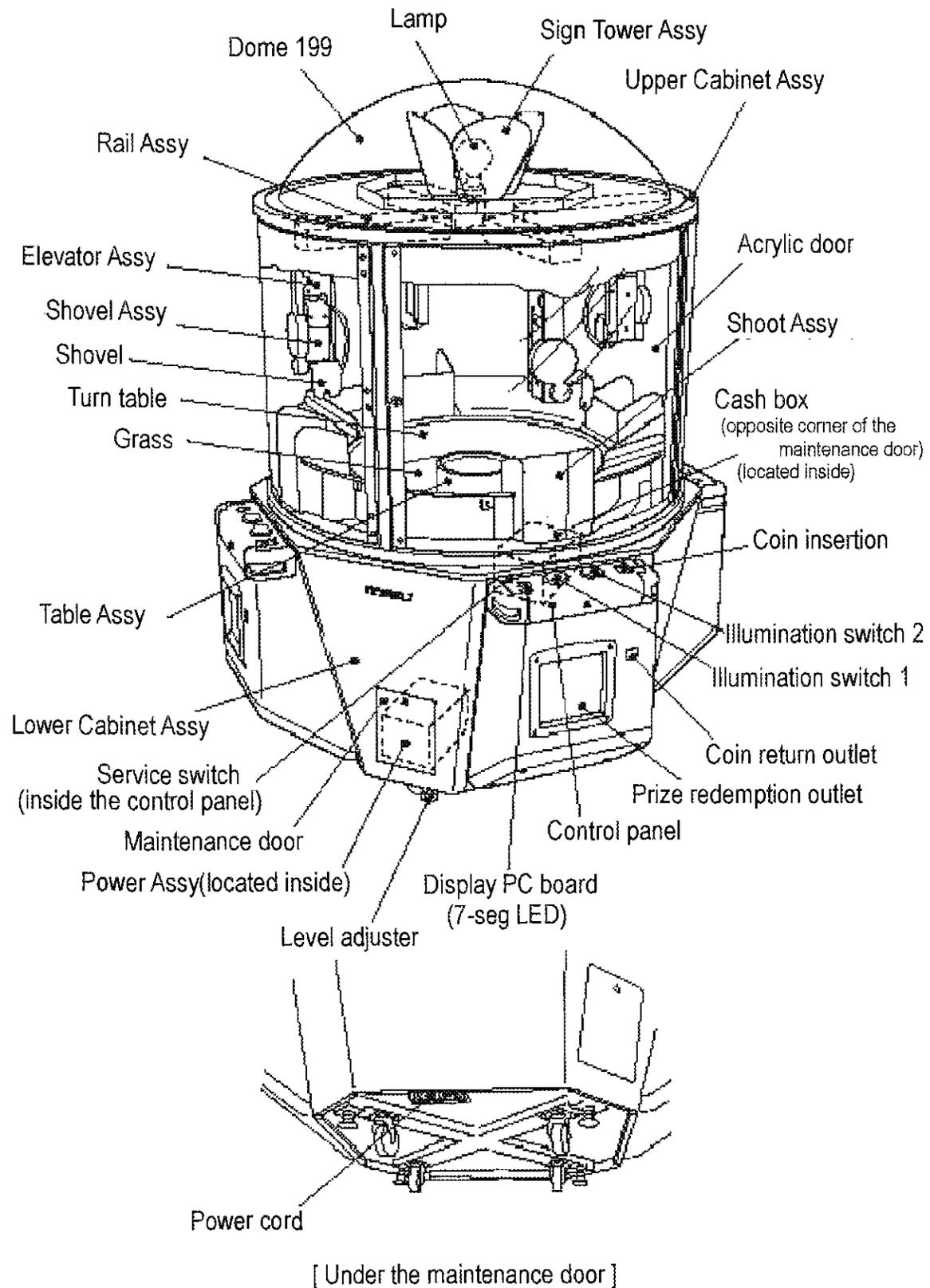


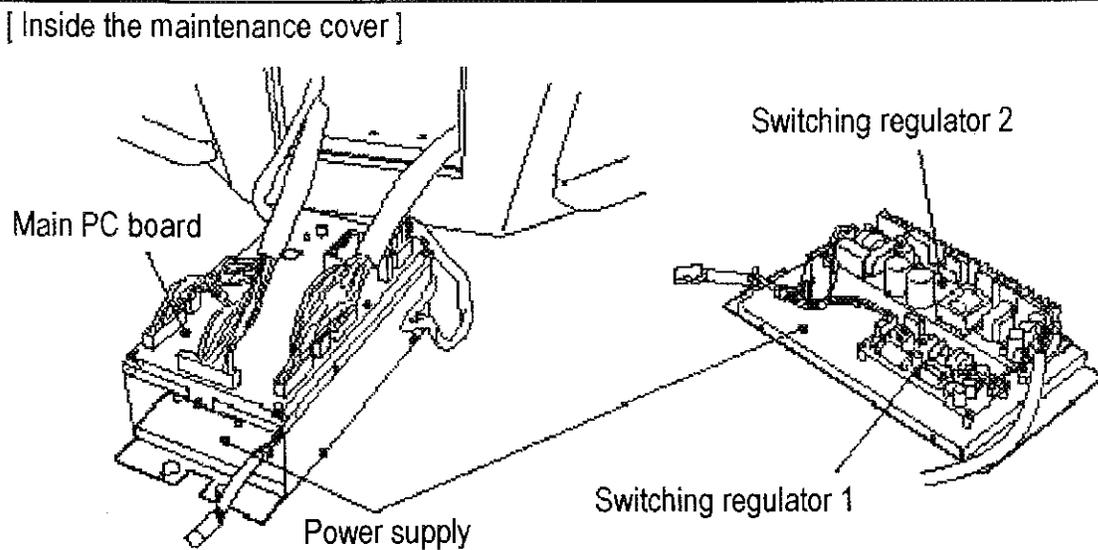
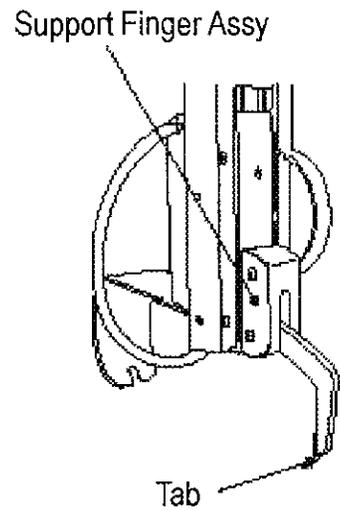
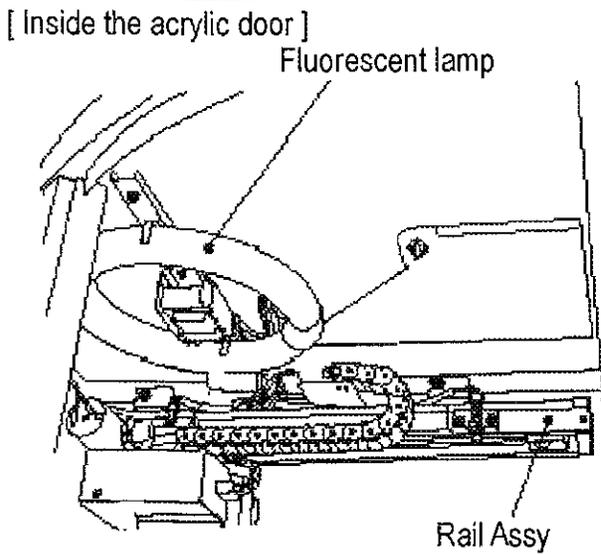
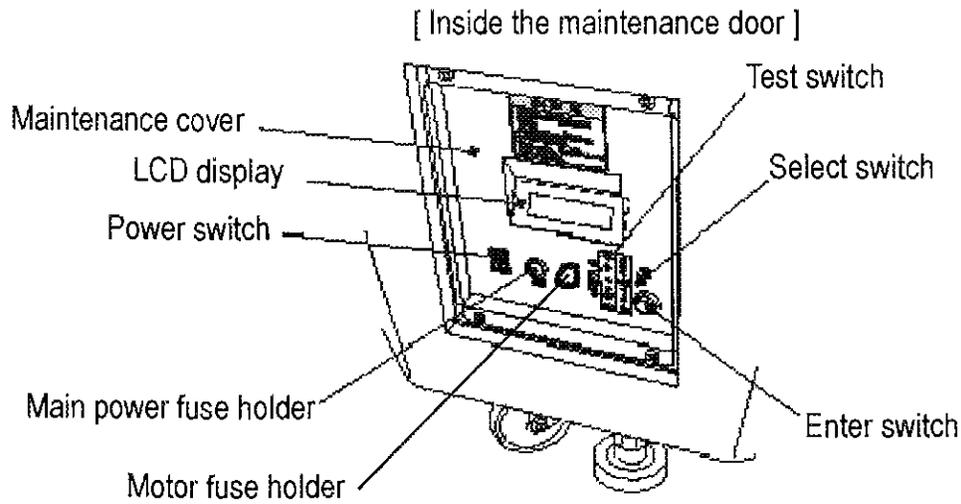
3. CHECKING THE PACKAGE CONTENTS

• Accessory list

Name	Specification	Qty
Operation Manual		1
Coin lock key		2
Cam lock key		1

4. OVERALL CONSTRUCTION (Name of Parts)





5. INSTALLATION

WARNING

- Install the machine according to the instructions and procedures described in the Operation Manual. Failure to follow the specified procedures may result in a fire, electric shock, injury, or machine malfunction.
- Insert the power plug firmly into the service outlet. Poor contact may cause overheating that can lead to a fire or burns.
- Make sure to connect the ground lead. Using the machine without proper grounding can result in an electric shock if electric leakage occurs. (Refer to 5-4 Connecting the power cord and ground lead.)
- Install the machine securely in place by using the level adjusters. Unstable machine installation can result in an accident or injury. (Refer to 5-3-1 Adjusting the level adjusters.)

5-1 Installation conditions

5-1-1 Locations to avoid

WARNING

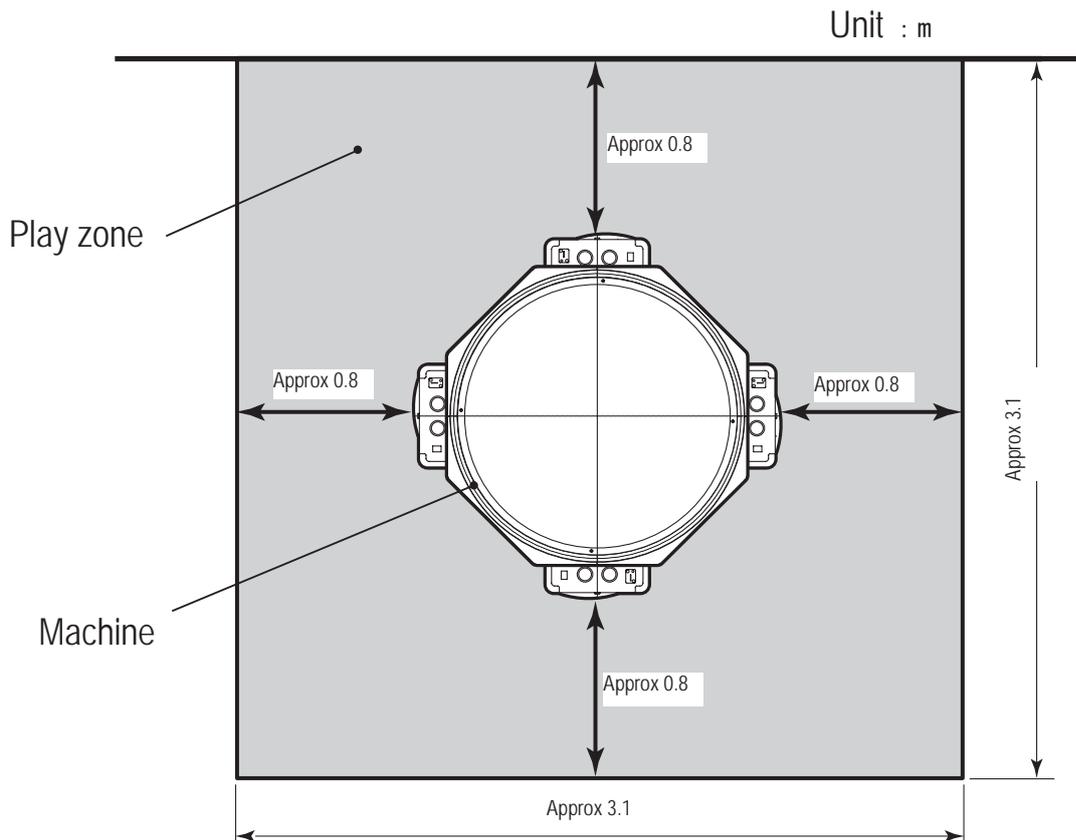
- The machine is designed for indoor use. Never install the machine outdoors or at any of the following locations:
 - Places exposed to direct sunlight
 - Places exposed to rain or water leakage
 - Damp places
 - Dusty places
 - Close to heating devices
 - Hot places
 - Extremely cold places
 - Places where dew condensation may occur due to temperature differences
 - Places where the machine may become an obstruction during emergencies (such as near emergency exits) and places where fire extinguishers or similar equipment are installed
 - Unstable places or location subject to vibration
- Note that depending on environmental conditions and/or types of prize-items selected for the game, "freshness" may get affected.
- Ventilation tends not to be good inside the field. Also, the temperature inside the field will be higher than its exterior surrounding temperature due to the use of fluorescent lighting to light up the prize-items. Avoid outdoor locations or areas where the machine will be under direct sunlight.

5-1-2 Play zone of installed machine



- Secure a play zone as illustrated in the diagram below to prevent contact between players, observers, or passersby.

Upon installation, secure a play zone area as illustrated below. This play zone area will also be required when undertaking maintenance tasks, so make sure that the space is secured.



5-2 Required dimensions for carry-in (frontage) and passageways

The installation site must have a frontage and passageway of higher and wider dimensions than the machine.

The maximum size of the machine upon delivery is accordingly.

Upon delivery: 1,500 (W) × 1,500 (D) × 2,000 (H) [mm]: 300kg

When sub-divided:

Upper Cabinet Assy: 1,200 (W) × 1,200 (D) × 1,180 (H) [mm]: 100kg

Lower Cabinet Assy: 1,490 (W) × 1,490 (D) × 820 (H) [mm]: 195kg

Make sure that there is ample room to smoothly carry the machine into the installation site.

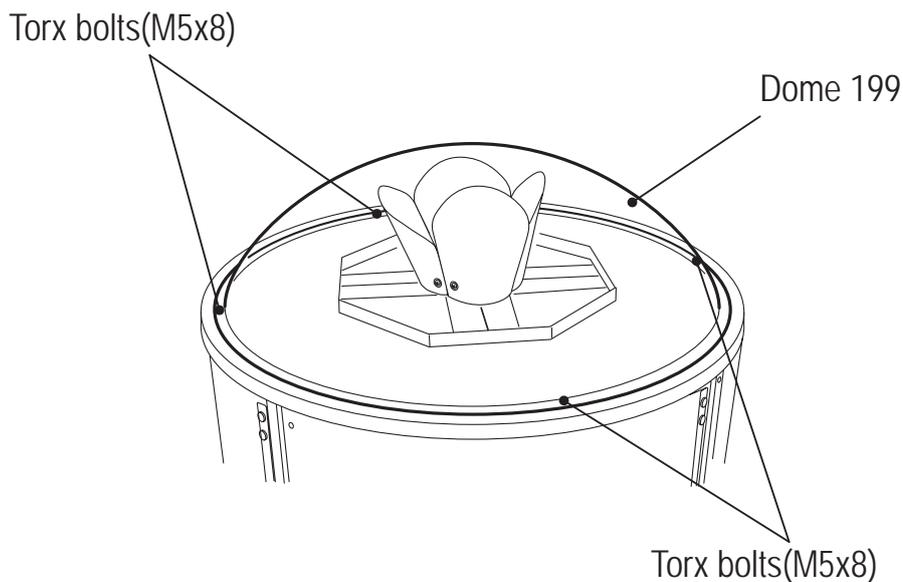
5-2-1 Removing/reinstalling the Dome 199

(according to frontage conditions) -To be conducted by a technician only-

⚠ WARNING

- To remove/reinstall the Dome 199 will require high-reaching tasks. Make sure to use a step ladder to facilitate work. Forcing the task from a low position by straining your body may lead to possible injury or machine failure.
- Upon removing/reinstalling the Dome 199, make sure to carry out the task with 2 or more people and secure ample space for work to avoid accidents.
- Upon removing/reinstalling the Dome 199, make sure to fixate the machine firmly by using the level adjusters. Unstable machine installation can result in an accident or injury. (Refer to 5-3-1 Adjusting the level adjusters.)

1. Remove the 4 torx bolts (M5x8) and remove the Dome 199.



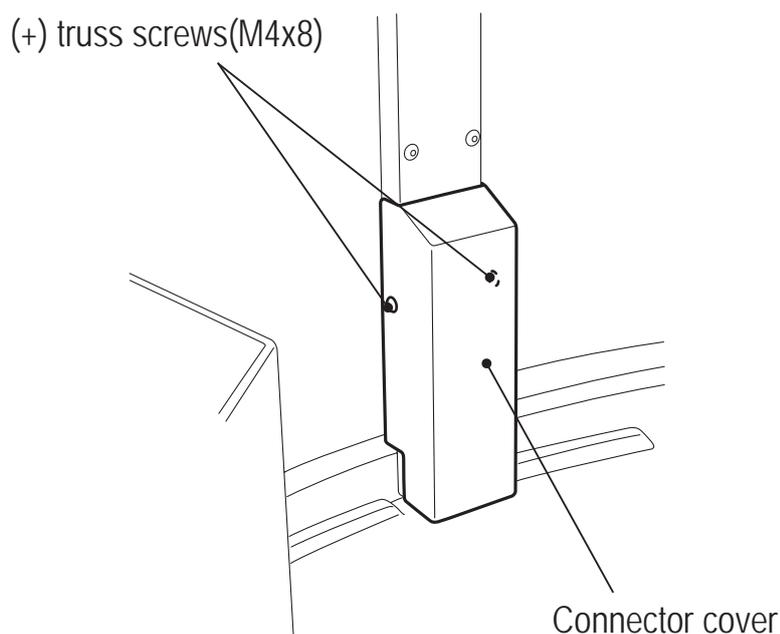
2. Reverse procedures to reinstall.

5-2-2 Separating the Upper Cabinet Assy and the Lower Cabinet Assy(according to frontage conditions) -To be conducted by a technician only-

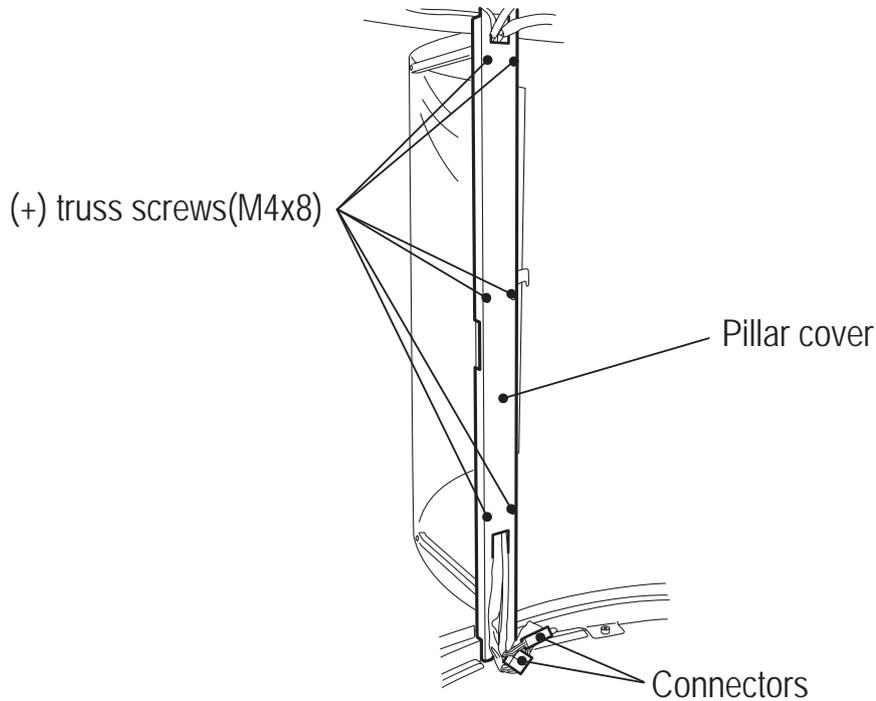
!WARNING

- The Upper Cabinet Assy weights approximately 100kg. Make sure to carry out the task with 4 or more people and secure ample space for work to avoid accidents.
- When detaching the Upper Cabinet Assy, make sure that people on task and surrounding objects do not get hit by the acrylic door.
- When separating the Upper Cabinet Assy the Lower Cabinet Assy, make sure to fixate the machine firmly by using the level adjusters. Unstable machine installation can result in an accident or injury. (Refer to 5-3-1 Adjusting the level adjusters.)

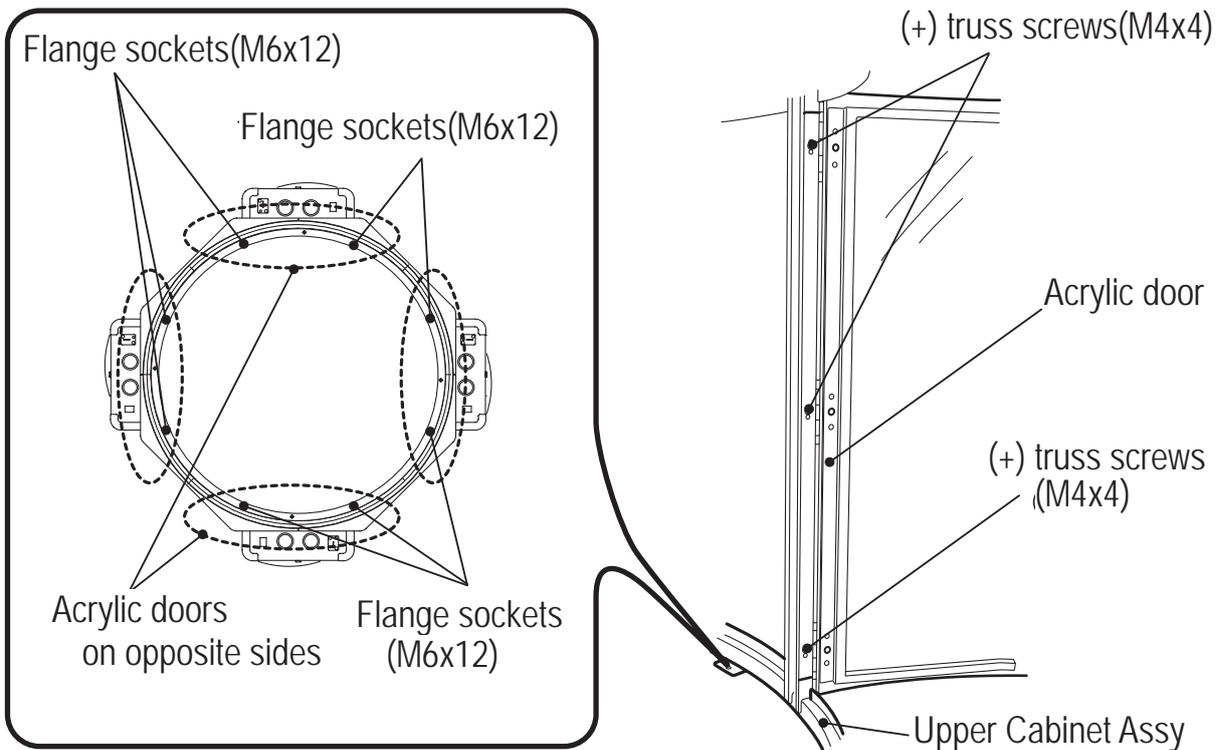
1. Open the acrylic door with the coin lock key.
(Refer to 5-3-2 How to open/close the acrylic door.)
2. Remove all the slopes.
(Refer to 8-4-7 (4) Removing/reinstalling the slope.)
3. Remove the wall.
(Refer to 8-4-9 (2) Removing/reinstalling the wall.)
4. Remove the 2 (+) truss screws (M4×8) and the 4 connector covers.



5. Remove 2 connectors in 2 areas and 1 connector in 2 other areas (6 in total).
6. Remove the 6 (+) truss screws (M4x8) and the 4 pillar covers.



7. Unfasten the 3 (+) truss screws (M4x4) and remove the 2 acrylic doors on the opposite side.



8. Remove the 8 flange sockets (M6x12) and detach the Upper Cabinet Assy.
9. Reverse procedures to reinstall.

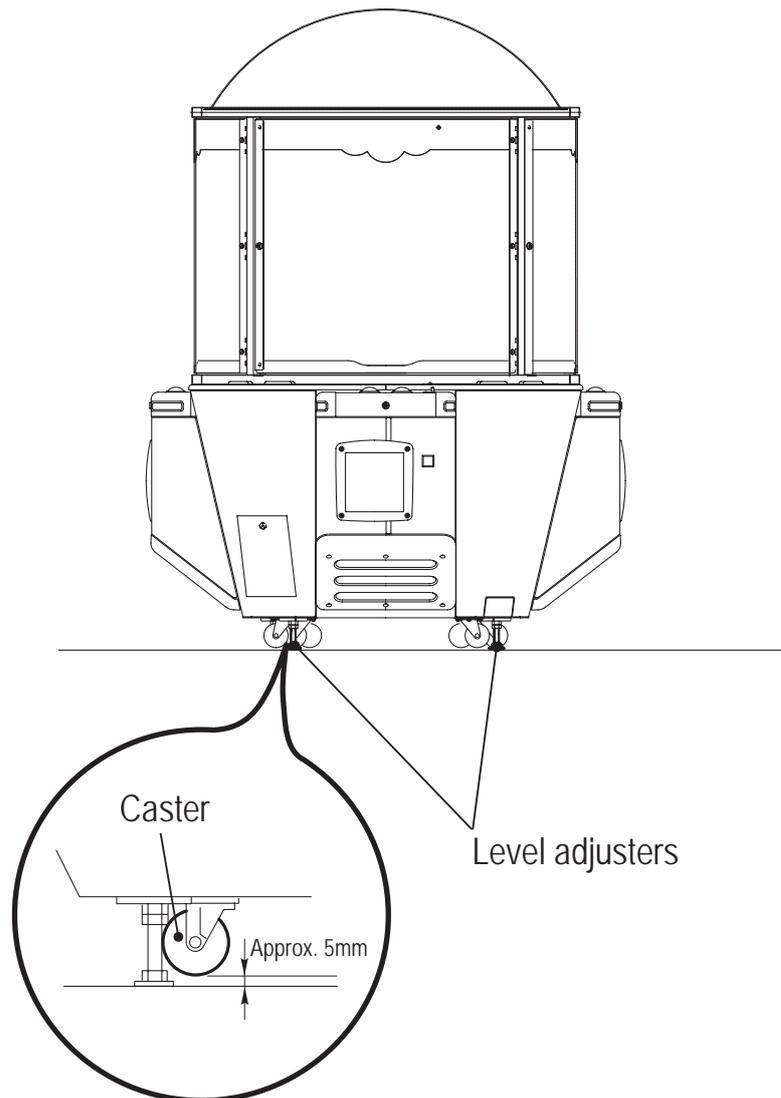
5-3 Installation method

5-3-1 Adjusting the level adjusters

 WARNING

- Install the machine securely in place by using the level adjusters. Unstable machine installation can result in an accident or injury.

Adjust the 4 level adjusters located underneath the machine for firm grounding and level positioning. (Make sure the casters are approx. 5mm off-ground.)

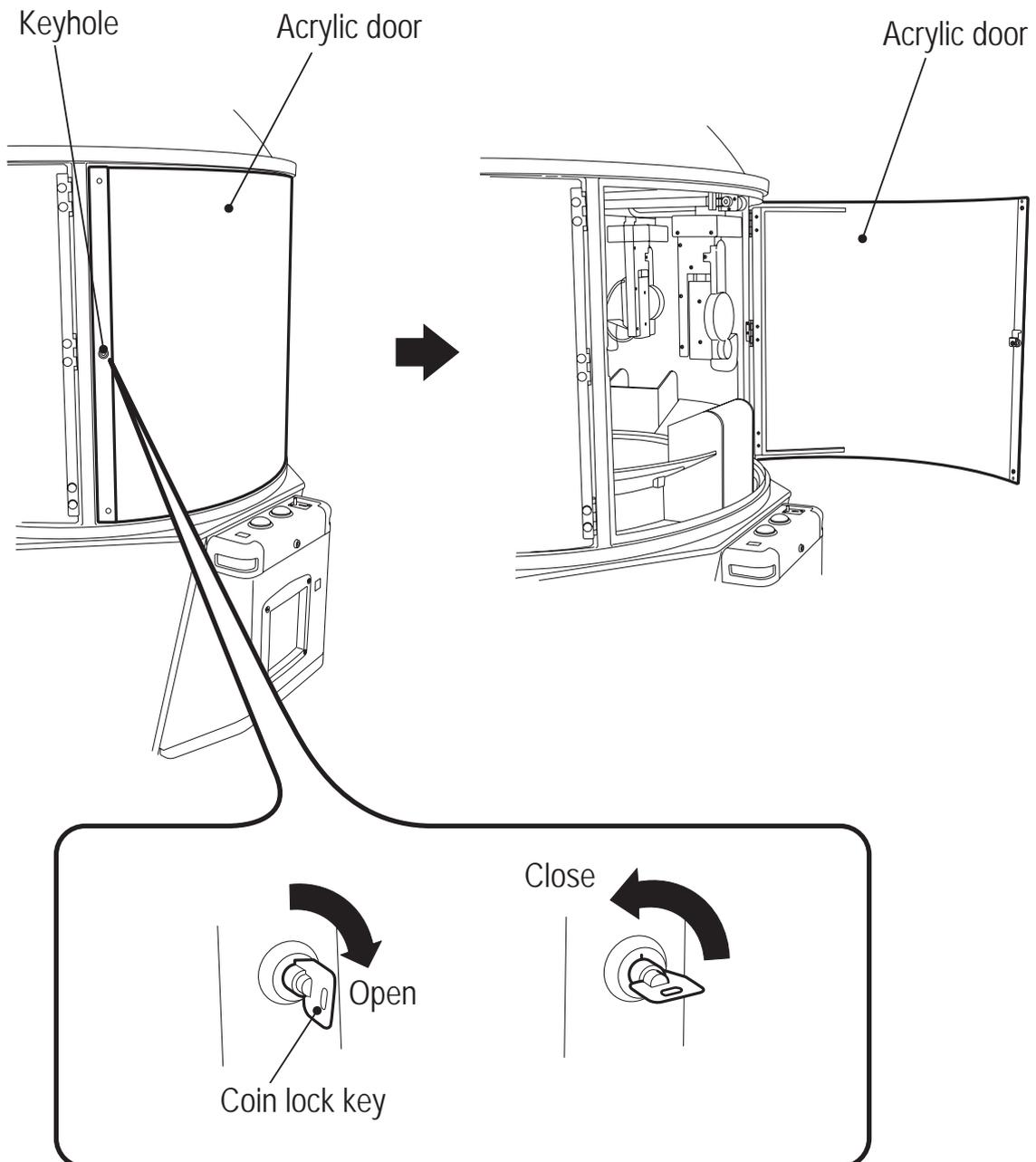


5-3-2 How to open/close the acrylic door

⚠ CAUTION

- When opening/closing the acrylic door, take extra caution to make sure that people's hands and fingers do not get caught in between, or their heads and bodies get hit by its corners.
- When opening/closing the acrylic door, take extra caution to make sure that players and surrounding people do not get hit by the acrylic door.

Insert the coin lock key into the keyhole of the acrylic door and open by turning the key to the right. (Angle to open is approximately 90 degrees.)



6. MOVING AND TRANSPORTING

⚠ WARNING

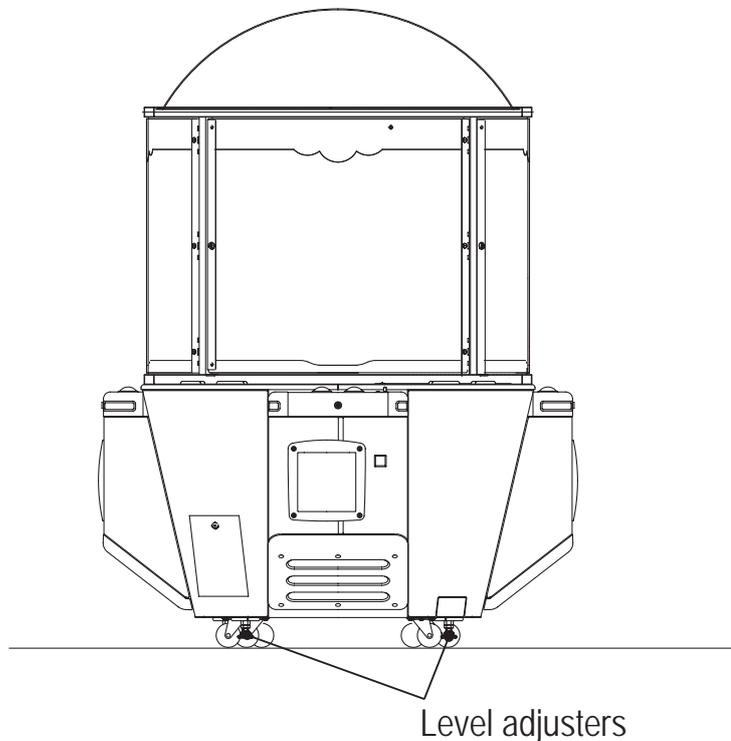
- Do not leave the machine on a sloped surface as it may topple and cause an unforeseen accident.

When moving the machine, make sure to set the level adjusters at highest position.

- Failing to do so will allow the level adjusters to get caught in bumpy surfaces, causing the machine to topple down and lead to unexpected accidents.
- The machine is not designed to be transported by a forklift. Do not use a forklift to move or transport the machine as it may topple and cause an unforeseen accident.

6-1 Moving (within the floor space)

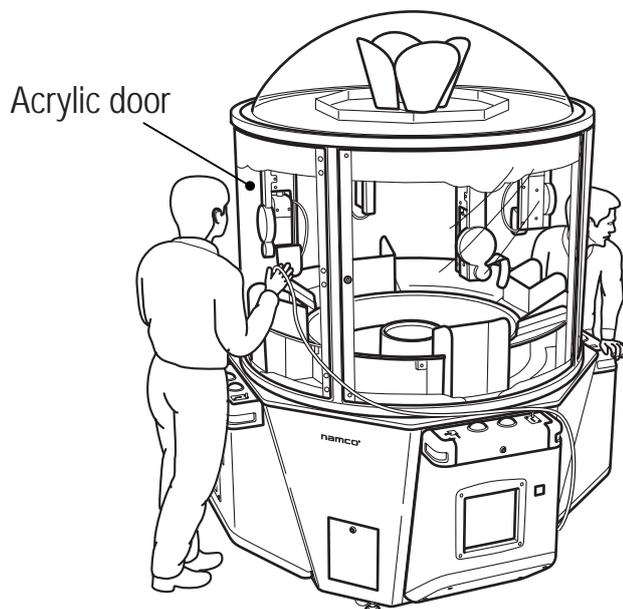
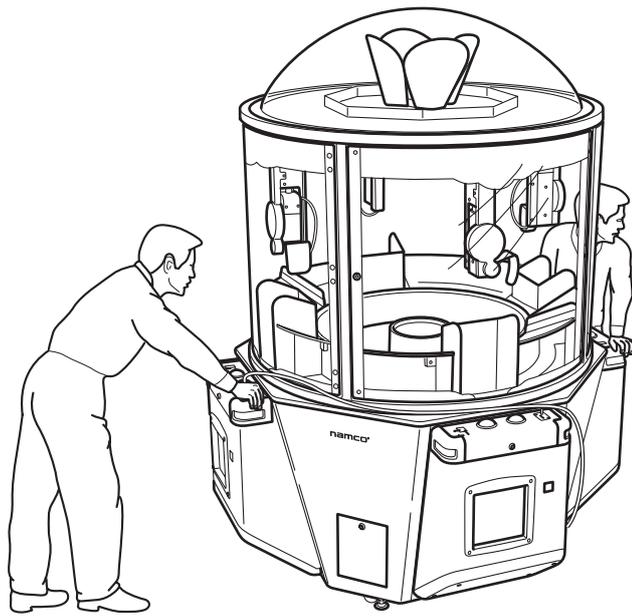
1. Remove the maintenance door of the machine with the coin lock key and turn off the power switch. 1. (Refer to 7-3-1 Turning the power on.)
2. Set the level adjusters (in 4 areas) to highest position. (Refer to 5-3-1 Adjusting the level adjusters.)



6. MOVING AND TRANSPORTING

3. Pull out the power plug from the electrical outlet. Lift the power cord making sure it does not get tangled.
4. Once the machine is moved to the installation site, set the machine down following procedures described in 5-3-1 Adjusting the level adjusters.

NOTICE - Do not move or transport the machine by holding the Upper Cabinet Assy or the acrylic door. Doing so may cause the acrylic door to get damaged.



6-2 Transporting

6-2-1 Manual transport (carrying up/down stairs, etc.)

⚠ WARNING

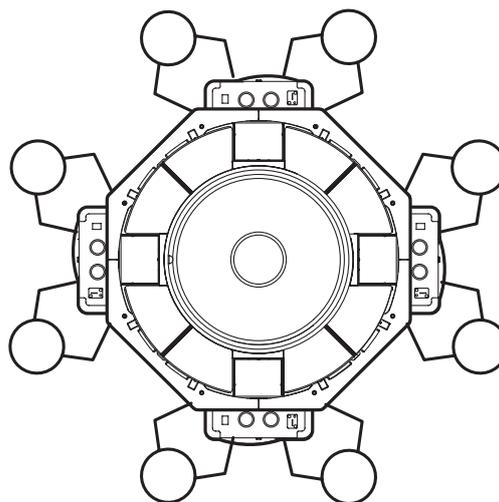
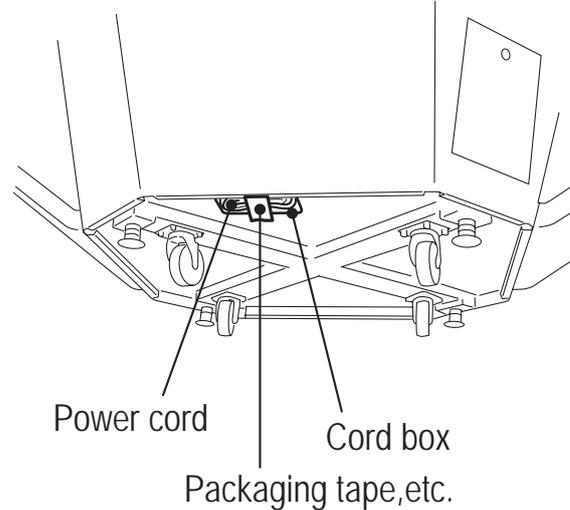
- When manually transporting the machine, make sure to always separate the Upper Cabinet Assy and the Lower Cabinet Assy to facilitate the task. {Refer to 5-2-2 Separating the Upper Cabinet Assy and the Lower Cabinet Assy (according to frontage conditions).}

Failing to do so may cause unexpected accidents.

- When manually transporting the machine, make sure to always carry out the task as specified below. Failing to do so may cause unexpected accidents.

Upper Cabinet Assy..... (100kg: task requires 4 people or more)

Lower Cabinet Assy..... (195kg: task requires 8 people or more)



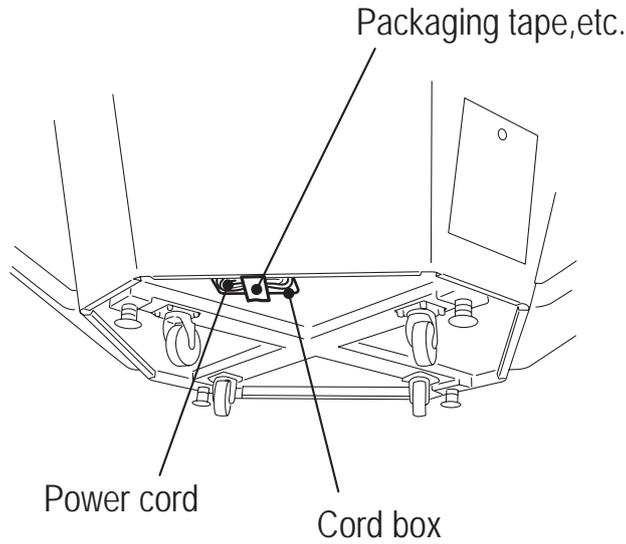
ⓘ NOTICE

- Make sure to remove all prize-items from the machine when transporting. Prize-items sliding into unexpected areas in the machine may cause possible machine failure or malfunction.

- When unloading the machine from an unlevel grounding, gently lower the machine to avoid any harmful impact. Unnecessary impact onto the machine may cause possible machine failure or malfunction.

6. MOVING AND TRANSPORTING

1. Remove the maintenance door of the machine with the coin lock key and turn off the power switch. (Refer to 7-3-1 Turning the power on.)
2. Unplug the power cord from the electrical outlet and insert it inside the cord box, then secure it with packaging tape.



3. Set the level adjusters (in 4 areas) to highest position. (Refer to 5-3-1 Adjusting the level adjusters.)
4. Once the machine is moved to the installation site, set the machine down following procedures described in 5-3-1 Adjusting the level adjusters.

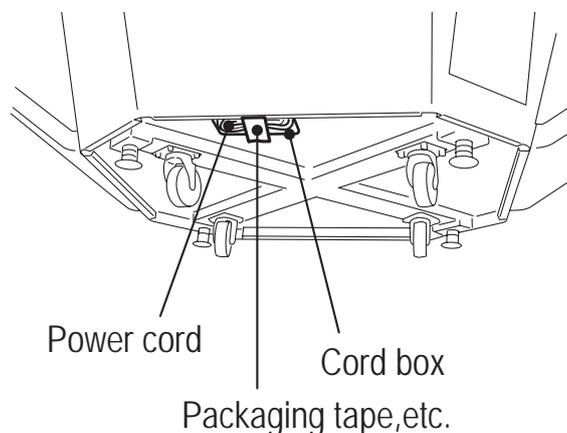
6-2-2 Loading and unloading onto a vehicle

⚠️ WARNING

- Do not leave the machine on a sloped surface as it may topple and cause an unforeseen accident.
- When moving the machine, make sure to set the level adjusters at highest position. Failing to do so will allow the level adjusters to get caught in bumpy surfaces, causing the machine to topple down and lead to unexpected accidents.
- The machine is not designed to be transported by a forklift. Do not use a forklift to move or transport the machine as it may topple and cause an unforeseen accident.
- The machine weighs approx. 290kg. A minimum of 12 people is required to load or unload the machine. Forcing the task with less than 12 people may cause possible accident or injury.

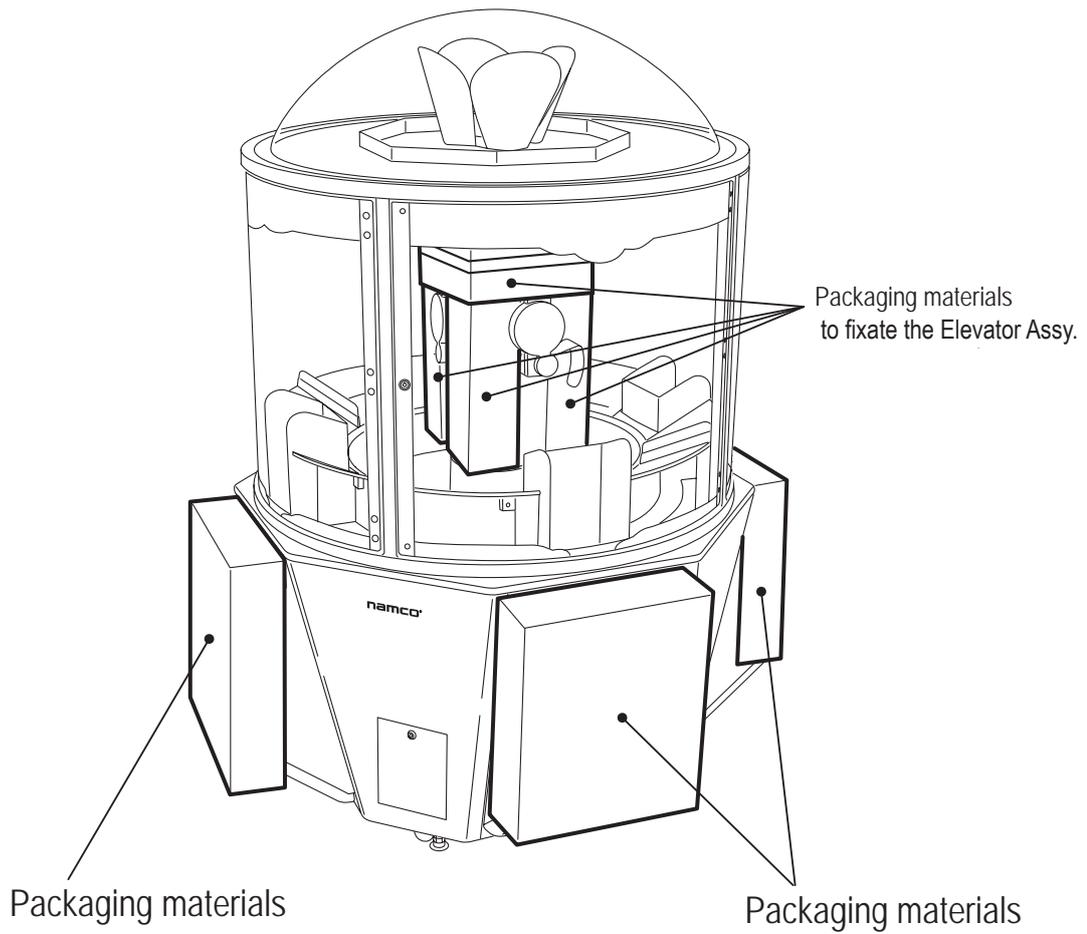
📌 NOTICE

- Make sure to remove all prize-items from the machine when assembling. Prize-items sliding into unexpected areas in the machine may cause possible machine failure or malfunction.
 - When loading/unloading the machine, protect the Elevator Assy from getting damaged by fixating it with packaging materials.
 - When unloading the machine from an unlevel grounding, gently lower the machine to avoid any harmful impact. Unnecessary impact onto the machine may cause possible machine failure or malfunction.
1. Set the machine to factory shipment mode (refer to 7-5 Factory shipment mode).
 2. Remove the maintenance door of the machine with the coin lock key and turn off the power switch. (Refer to 7-3-1 Turning the power on.)
 3. Unplug the power cord from the electrical outlet and insert it inside the cord box, then secure it with packaging tape.



6. MOVING AND TRANSPORTING

4. Set the level adjusters (in 4 areas) to highest position.
(Refer to 5-3-1 Adjusting the level adjusters.)
5. Attach the packaging materials and load the machine onto the transporting vehicle.



7. OPERATION

WARNING

Should any problem occur, turn off the power switch immediately to stop operating the machine. Then, unplug the power cord from the electrical outlet. Operating the machine without correcting a problem may cause a fire or accident.

- Dust accumulated on the power plug may cause a fire. Check the power plug regularly and remove dust.
- Insert the power plug firmly into the electrical outlet. Poor contact may cause overheating that can lead to a fire or burn.
- Before operating the machine, make sure that the machine has been installed in accordance with the instructions and procedures specified in this Operation Manual (refer to 5. INSTALLATION). If the machine is not installed properly, it may result in a fire, electric shock, injury or malfunction.
- For safe operation of the machine, make sure to always conduct pre-service check (refer to 7-1 Pre-service check) and maintenance (refer to 8. MAINTENANCE) procedures. Failing to do so may lead to an unforeseen accident.
- The warning labels describe important cautions. Make sure to observe the following.
 - Install the machine at a proper location with ample illumination, and keep it clean, and free of dirt so that the warning labels attached to the machine are easily legible. Also, make sure that the labels are not hidden behind another game machine or other objects.
 - Do not remove or alter the warning labels.
 - If the warning labels become dirty or damaged, replace them with new ones. To order warning labels, contact your distributor.

7-1 Pre-service check

Check the following before commencing operation.

If any problem is found, take corrective measures by referring to 8-1 Maintenance and inspection.

7-1-1 Safety check (before turning on the power switch)

WARNING

- To prevent accidents and injury, make sure to check the following before commencing operation.

- (1) Are all warning indications legible?
(Refer to 1-4 Description of warning labels attached to the machine.)
- (2) Is the required space secured?
(Refer to 5-1-2 Play zone of installed machine.)
- (3) Are all the level adjusters fixated?
(Refer to 5-3-1 Adjusting the level adjusters.)
- (4) Is the acrylic door securely locked?
(Refer to 5-3-2 How to open/close the acrylic door.)

-
- (5) Is the acrylic door intact and not damaged?
 - (6) Is the control panel switch intact and not damaged?
(Refer to 8-4-10 (2) Replacing the illumination switch.)
 - (7) Is the Dome 199 intact and not damaged?
 - (8) Is the prize redemption outlet intact and not damaged?
 - (9) Is the coin return outlet intact and not damaged?

7-1-2 Functional check (after turning on the power switch)

- (1) Check that the turn table moves properly.
- (2) Check that there are no prize-items caught in between the turn table.
- (3) Check that the coin switch and coin counter operate properly.
(Refer to 7-6 Test mode.)
- (4) Check that the Rail Assy operates properly.
(Refer to 7-6 Test mode.)
- (5) Check that the Elevator Assy operates properly.
(Refer to 7-6 Test mode.)
- (6) Check that the shovel operates properly.
(Refer to 7-6 Test mode.)
- (7) Check that the 7-seg LED lights up properly.
(Refer to 7-6 Test mode.)
- (8) Check that the sound and effects get outputted properly.
(Refer to 7-6 Test mode.)
- (9) Check that the fluorescent and glow lamps light up properly.
(Refer to 8-4-1 (2) Replacing the fluorescent and glow lamps.)
(Refer to 8-4-5 (2) Replacing the fluorescent lamp.)

7-2 How to play

This is a shovel-style crane game designed for people of all ages, from small children to adults, to enjoy.

[Normal game mode] (initial setting)

1. Insert coin(s).
2. Allotted game play count will be displayed on the 7-seg LED.
3. Player moves the arm to the deep end with the illumination switch 1. The arm will stop when player releases the button.
4. Player lowers the arm with the illumination switch 2 to scoop the prize-items on the turn table with the shovel and then brings it upwards.
5. The arm returns back to its original position (above the prize-dropping outlet) and the shovel will start dropping the scooped prizes.
6. Player can redeem all prizes that fall into the prize redemption outlet.

[Time limit game]

1. Insert coin(s).
2. The arm and shovel can be freely operated within the given time limit (initial setting: 30 seconds).
3. Player moves the arm to the deep end with the illumination switch 1. The arm will stop when player releases the button.
4. Player lowers the arm with the illumination switch 2 to scoop the prize-items on the turn table with the shovel and then brings it upwards.
5. The arm returns back to its original position (above the prize-dropping outlet) and the shovel will start dropping the scooped prizes.
6. Player can redeem all prizes that fall into the prize redemption outlet.
7. Even after redeeming the prizes, player can repeatedly operate the arm as long as it is within the given time limit.
8. Once the time limit is within 9 seconds, the 7-seg LED will start the countdown.
9. When time is up, the arm will stop operation and will automatically return to its start position.
(When operation stops while the shovel is still scooping, the shovel will return back to its start position and drop the scooped prizes.)
10. Game play can be continued by adding coins during game play. Additional time will be added to the remaining time and game play will be extended.

[Play till win game]

1. Insert coin(s). The 7-seg LED will be displayed as [F].
2. Allotted game play count will be displayed on the 7-seg LED.
3. Player moves the arm to the deep end with the illumination switch 1. The arm will stop when player releases the button.
4. Player lowers the arm with the illumination switch 2 to scoop the prize-items on the turn table with the shovel and then brings it upwards.
5. The arm returns back to its original position (above the prize-dropping outlet) and the shovel will start dropping the scooped prizes.
6. Player can redeem all prizes that fall into the prize redemption outlet. If player did not win any prize, game play will resume from step 3 and repeat sequences 3, 4, 5 until player wins prizes.

[Free play mode]

At free play mode, game can be played without inserting coins.

The 7-seg LED will be displayed as [F].

Game play is the same as in normal game mode.

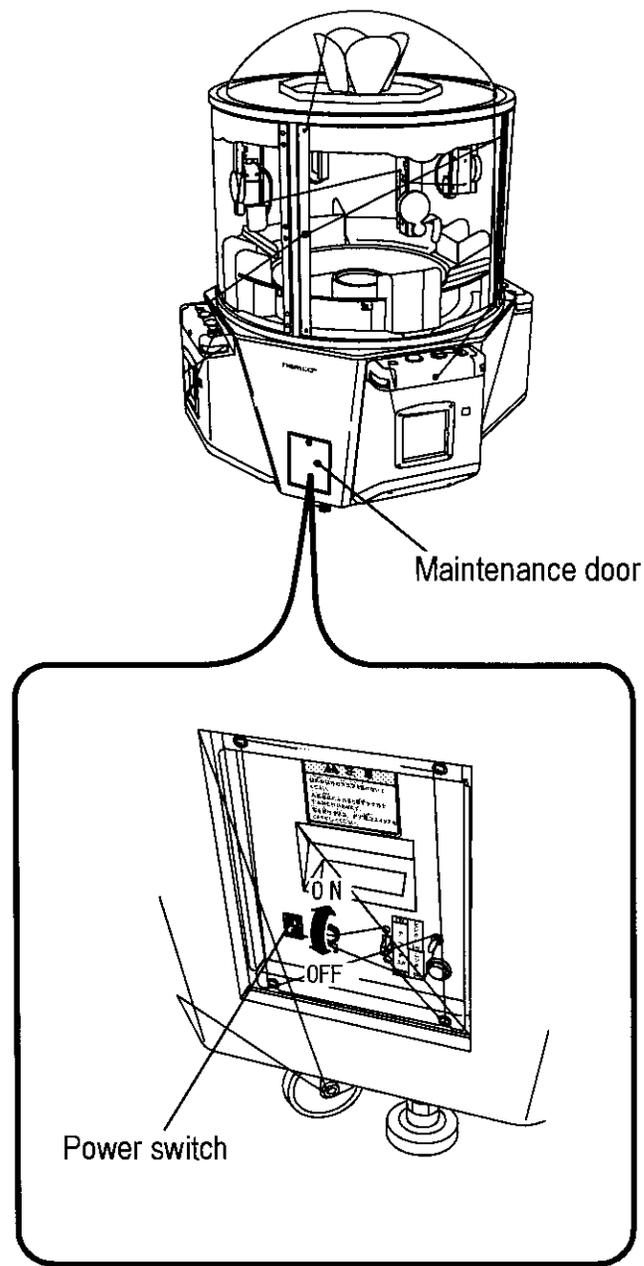
NOTICE

- At the [play till win game] mode, game play can be repeated until player is able to win prizes. As such, if items that cannot be detected by the photo sensor are used for prizes, game play can be continued even after player has won prizes. Make sure that all prize-items can be detected by the photo sensor. Also, game play can be continued even if the photo sensor is not functioning; thus, make sure to conduct regular inspection to check that the photo sensor is operating properly.

7-3 Adjustment

7-3-1 Turning the power on

1. Insert the power cord into the electrical outlet.
2. Remove the maintenance door of the machine with the key and turn on the power switch.



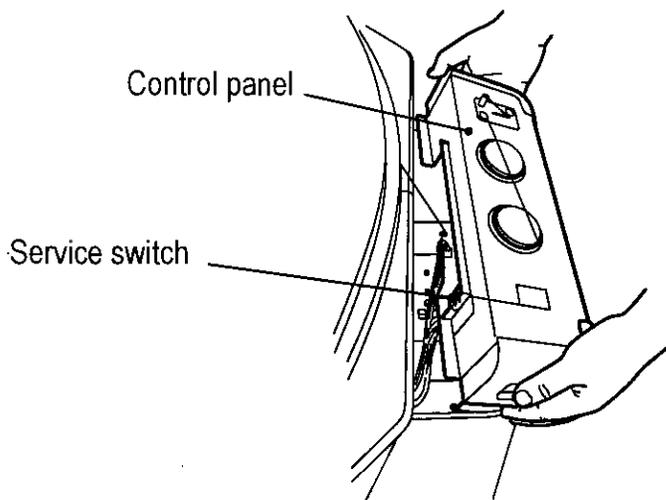
7-3-2 Adjustment switches

(1) Service switch

The service switch is located inside each control panel. Open the control panel with the key and pull it out. The credit count can be added without operating the coin counter by pressing the switch.

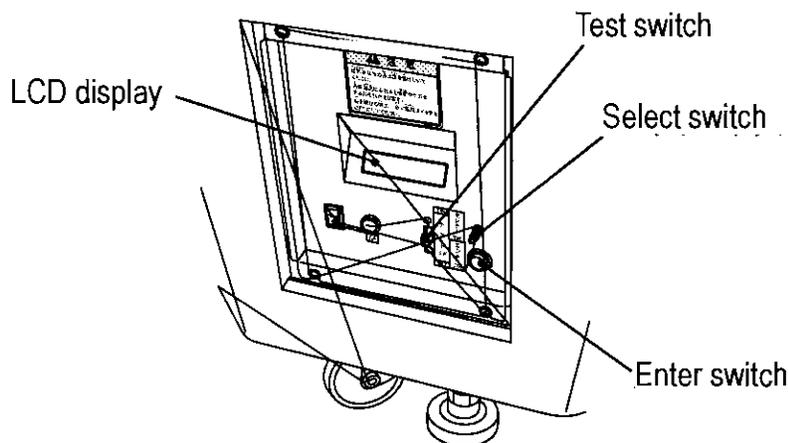


• Press the service switch slowly and firmly.



(2) Volume adjustment

1. Remove the maintenance door of the machine with the key and turn on the power switch..
(Refer to 7-3-1 Turning the power on.)
2. The volume is to be adjusted by pressing the select switch up/down.
The entire volume can be adjusted in 16 levels by pressing the switch (volume goes up by pressing upwards and down by pressing downwards).
※ Volume for error sounds can be adjusted at the setting mode (refer to 7-4 Setting mode).



7-5 Factory shipment mode

Setting modes can all be reset back to factory shipment settings. (Operation data will remain intact.)

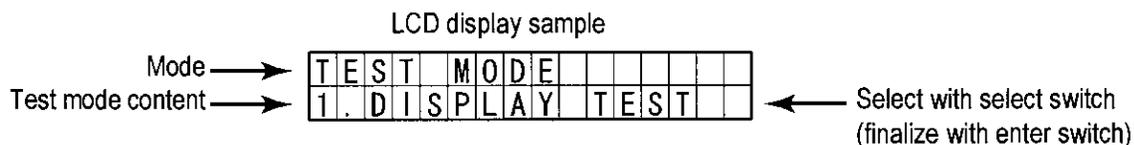
The rail, elevator, and shovel will be set suitable for transport purposes.

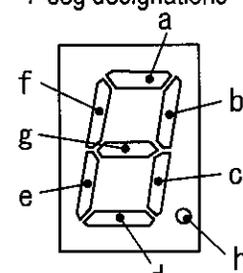
1. Enter setting mode. (Refer to 7-4 Setting.)
2. Turn the test off switch while pressing the enter switch.
3. [INITIALIZE SETUP] will be displayed on the LCD display and all settings will be reset back to factory shipment settings.
4. The arm will operate. After operation is complete, [STANDBY] will be audio-outputted and visually-outputted onto the LCD display.
5. Turn the power switch off and close the maintenance door.

(Refer to 7-3-1 Turning the power on.)

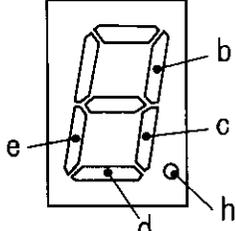
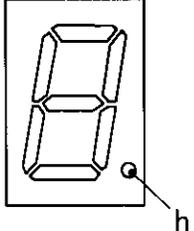
7-6 Test mode

1. Remove the maintenance door of the machine with the key and turn on the power switch.. (Refer to 7-3-1 Turning the power on)
2. Turn the test switch on.
3. The test mode contents will be indicated on the LCD display. Select with the select switch and finalize with the enter switch.
4. Exit the test mode by turning the test switch off.



Test mode content	Description																
1. Display test	<p>The numbers  —  will be repetitively displayed on the 7-seg LED.</p> <p>Button 1 will light up with even numbers and button 2 will light with odd numbers (all stations).</p> <p>Upon pressing buttons 1 or 2, the lamp of the pressed button will light up.</p> <p>The station No. will be displayed on the 7-seg LED while the button is pressed.</p> <div style="text-align: center;"> <table border="1" style="border-collapse: collapse;"> <tr><td>1. DISPLAY TEST</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>←BACK</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> </table> </div>	1. DISPLAY TEST								←BACK							
1. DISPLAY TEST																	
←BACK																	
2. Sound test	<p>The sound No. is selected with the button 1 and outputted with button 2 (maximum 10 seconds).</p> <p>The sound No. (0-67) will displayed on the LCD.</p> <p>The volume can be adjusted with the select switch during the sound test.</p> <div style="text-align: center;"> <table border="1" style="border-collapse: collapse;"> <tr><td>2. SOUND TEST</td><td></td><td></td><td></td><td></td><td></td><td>00</td><td></td></tr> <tr><td>←BACK</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> </table> <p style="margin-left: 150px;">← Sound No.</p> </div>	2. SOUND TEST						00		←BACK							
2. SOUND TEST						00											
←BACK																	
3. Input test 1	<p>The input conditions will be indicated on the 7-seg display of each station. The display will light up when the sensor is on. Buttons 1 and 2 will also light up when pressed.</p> <div style="display: flex; align-items: flex-start;"> <div style="flex: 1;"> <p>7-seg designations</p>  </div> <div style="flex: 2;"> <ul style="list-style-type: none"> a. Elevator sensor (up) b. Rail sensor (inner) c. Shovel sensor d. Service switch e. Button 1 / button 2 f. Rail sensor (outer) g. Elevator sensor (down) h. Coin switch </div> </div> <div style="text-align: center; margin-top: 10px;"> <table border="1" style="border-collapse: collapse;"> <tr><td>3. INPUT TEST 1</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>←BACK</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> </table> </div>	3. INPUT TEST 1								←BACK							
3. INPUT TEST 1																	
←BACK																	

7. OPERATION

Test mode content	Description																
<p>4. Input test 2</p>	<p>The input conditions will be indicated on the 7-seg display of each station. The display will light up when the sensor is on.</p> <p>7-seg designations</p> <div style="display: flex; align-items: center;">  <div style="margin-left: 20px;"> <p>b. Select switch (up) c. Select switch (down) d. Prize sensor e. Test switch h. Enter switch</p> </div> </div> <div style="text-align: center; margin-top: 10px;"> <table border="1" style="border-collapse: collapse; width: 100%;"> <tr> <td style="width: 10%;">3.</td> <td style="width: 15%;">INPUT</td> <td style="width: 15%;">TEST</td> <td style="width: 15%;">2</td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> </tr> <tr> <td>←</td> <td>BACK</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table> </div>	3.	INPUT	TEST	2					←	BACK						
3.	INPUT	TEST	2														
←	BACK																
<p>5. Drive test</p>	<p>The motor-driven areas corresponding to each station will operate. Select with button 1 and operate with button 2. Release buttons to stop operation. (Operation will continue when buttons 1 and 2 are pressed together.) The rail and elevator will reverse movement with each press of the button 2. The input condition of the selected drive-area No. will be displayed in h on the 7-seg LED.</p> <div style="display: flex; justify-content: space-around; align-items: flex-start; margin-top: 20px;"> <div style="text-align: center;">  <p>Shovel</p> </div> <div style="text-align: center;">  <p>Rail</p> </div> <div style="text-align: center;">  <p>Elevator</p> </div> <div style="text-align: center;">  </div> </div> <div style="text-align: center; margin-top: 10px;"> <table border="1" style="border-collapse: collapse; width: 100%;"> <tr> <td style="width: 10%;">4.</td> <td style="width: 15%;">DRIVE</td> <td style="width: 15%;">TEST</td> <td style="width: 15%;"></td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> </tr> <tr> <td>←</td> <td>BACK</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table> </div>	4.	DRIVE	TEST						←	BACK						
4.	DRIVE	TEST															
←	BACK																

7-7 Prize replenishment

⚠ CAUTION

- Be careful when replenishing prize-items. Touching motor-operating areas may cause possible injury or malfunction.

7-7-1 Prize-items

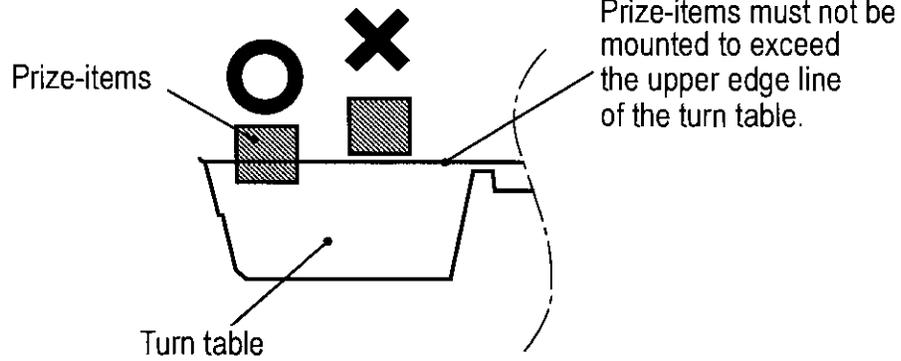
⚠ WARNING

- Do not use items that may be unsafe or unsanitary for prizes.
 - ※ Prize-items with expiration dates must be "consumed" by the use-by date.
- Note that depending on environmental conditions and/or types of prize-items selected for the game, "freshness" may get affected.
 - ※ Ventilation tends not to be good inside the field. Also, the temperature inside the field will be higher than its exterior surrounding temperature due to the use of fluorescent lighting to light up the prize-items. Avoid outdoor locations or areas where the machine will be under direct sunlight.
(Refer to 5-1-1 Locations to avoid.)
- Food items that were on display inside the Dome 199 must not be used as prize-items.
 - ※ Due to the temperature near the dome 199 being higher than the exterior surrounding temperature, "freshness" of food items may get affected.

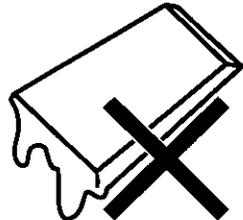
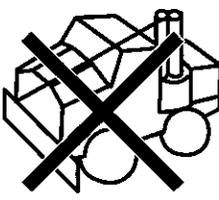
◀ NOTICE

- The following guidelines are criteria for prize-items that must be abided by.
 - (1) Weight: maximum of up to 500g per prize-item
(total weight capacity for prize-items on the turn table is 10kg)
 - (2) Size: rectangular solid-shaped items must be 14cm×14cm×18cm or smaller
 - (3) Prize-items to be avoided (refer to illustrations shown on the following page)
- If non-conforming prize-items or capsules are used, it may result in failure or malfunction of the machine.
- Take caution when using odd-shaped or odd-weighted prize-items.
- Take caution when using painted prize-items as paint may get rubbed off and stain the machine.
- Take caution when using metallic prize-items as they may damage the machine.
- Do not use small prize-items that may fall into the machine through the gaps around the turn table.

Turn table capacity



Items that must avoided

(a) liquid 	(b) living things 	(c) easily melting things 
(d) perishable things 	(e) bumpy objects 	(f) ignitable items such as lighters or fire 
(g) easily breakable items such glass products 		

7-7-2 How to replenish prize-items

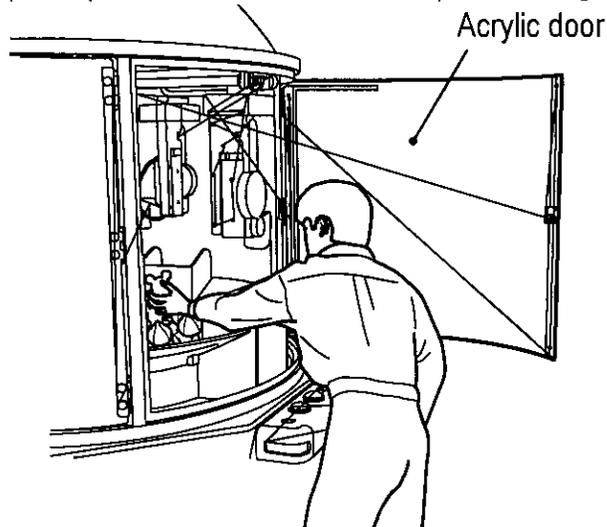
⚠ CAUTION

- When opening/closing the acrylic door, take extra caution to make sure that people's hands and fingers do not get caught in between, or their heads and bodies get hit by its corners.
- When opening/closing the acrylic door, take extra caution to make sure that players and surrounding people do not get hit by the acrylic door.
- When replenishing prize-items, make sure not to touch the motor areas as it may cause possible injury or accident.

1. Open the acrylic door.
(Refer to 5-3-2 How to open/close the acrylic door.)
2. Replenish prizes within the capacity limit of the turn table (do not overload).
(Refer to illustration on Turn table capacity, described in 7-7-1 Prize-items)

◀ NOTICE

- Replenish prize-items on the turn table to keep the total weight within 10kg.

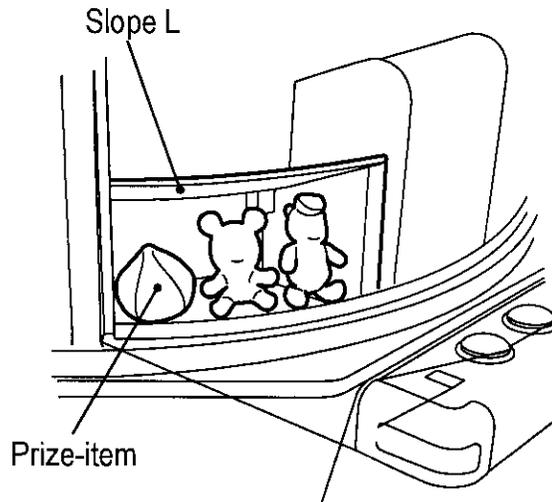


3. After replenishing prize-items, close the acrylic door.
(Refer to 5-3-2 How to open/close the acrylic door.)

7-7-3 How to display prize-items

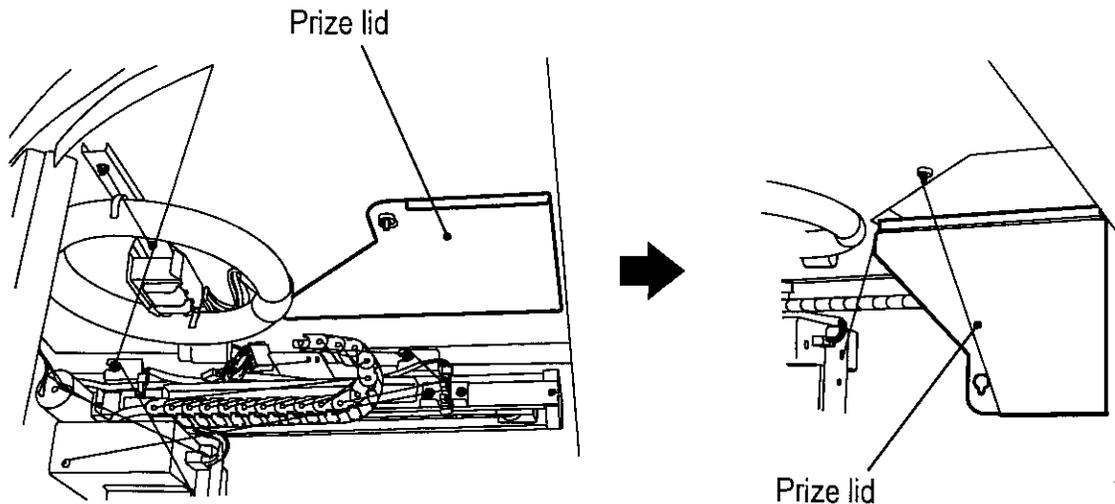
[Inside the acrylic door]

1. Open the acrylic door.
(Refer to 5-3-2 How to open/close the acrylic door.)
2. Display the prize-items under the slope L.



[To display inside the Dome 199 through the acrylic door]

1. Open the acrylic door.
(Refer to 5-3-2 How to open/close the acrylic door.)
2. Open the prize lid and display the prize-items on top of the upper frame.
3. Close the prize lid when complete.
4. Close the acrylic door.
(Refer to 5-3-2 How to open/close the acrylic door.)



7-8 Operating the machine

7-8-1 Adjusting the play difficulty level

The win ratio is to be adjusted according to the following elements.

[Hardware]

1.Prize selection/layout

Difficulty level is managed by the size, form, weight-balance, chain-hook availability, etc. of prize-items.

Scooping difficulty is adjusted by the positioning, abundance, and crowdedness of prize-items.

2.Support finger spring adjustment

The grasp strength can be controlled by adjusting the spring of the support finger.
(Refer to 7-8-4 (3) Adjusting the spring.)

[Setting mode]

1.Game setting (time limit game)

Time limit game will allow repetitive operation of the arm and the win ratio will go up.

2.Game setting (wall setting)

The payout ratio can be managed by adjusting the height of the wall. The lower the wall, the higher the win ratio will be for prize-items to drop into the prize outlet area.

3.Win ratio

Adjust the operation range of the arm and shovel to come close to the set values.

※ This machine is designed for players to directly aim for the prize-items. Have in mind that depending on the form or size of the prize-items, the set values may not come within range even after adjustment.

4.Shovel operation time

The win ratio can be controlled by altering the scooping angle (operating time) of the shovel. The shallower the angle, the higher the scooping difficulty will be.

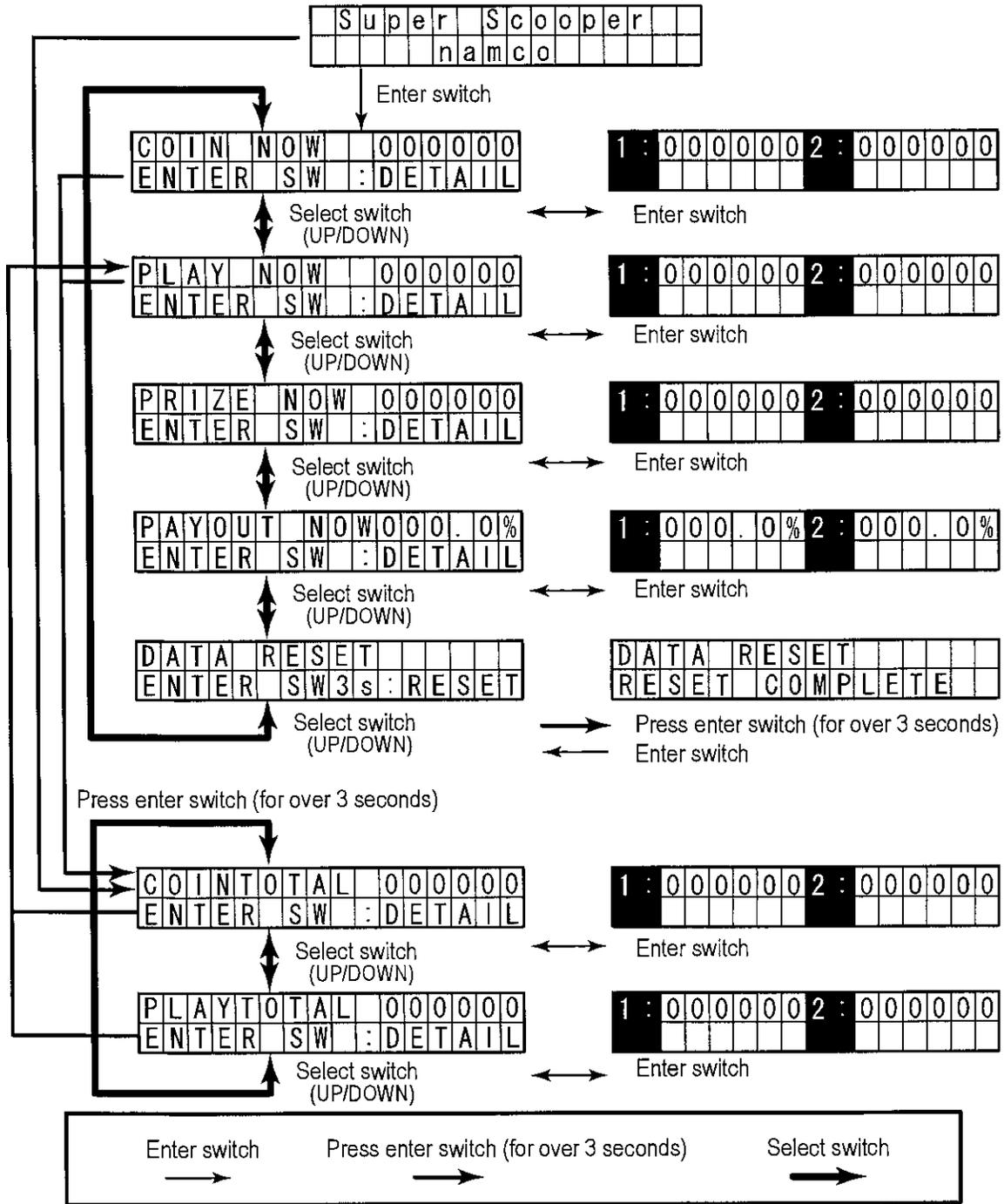
7-8-2 Displaying the operation data

The operation data can be indicated on the LCD display.

1. Remove the maintenance door of the machine with the key and turn on the power switch.
 (Refer to 7-3-1 Turning the power on)
2. Upon pressing the enter switch at the title display screen, the paid-in coin count, game play count, paid-out prize count, and payout ratio can be checked.
3. By pressing the enter switch for 3 seconds or longer, the total paid-in coin count and total game play count can be checked.

Display will return to the title screen if no operation follows for over 20 seconds after pressing of the switch.

Display data	Description	LCD display
Paid-in coin count	Accumulated paid-in coin count after data reset.	COIN NOW
Game play count	Accumulated game play count after data reset.	PLAY NOW
Paid-out prize count	Accumulated paid-out prize count after data reset.	PRIZE NOW
Win ratio	Total payout ratio count after data reset. [Payout ratio % (paid-out count/game play count)] is displayed.	PAYOUT NOW
Data reset	Data reset of paid-in coin count, game play count, paid-out prize count	DATA RESET
Total paid-in coin count	Total paid-in coin count (operator reset will not be applicable)	COIN TOTAL
Total game play count	Total game play count (operator reset will not be applicable)	PLAY TOTAL



7-8-3 Replacing the shovel -To be conducted by a technician only-

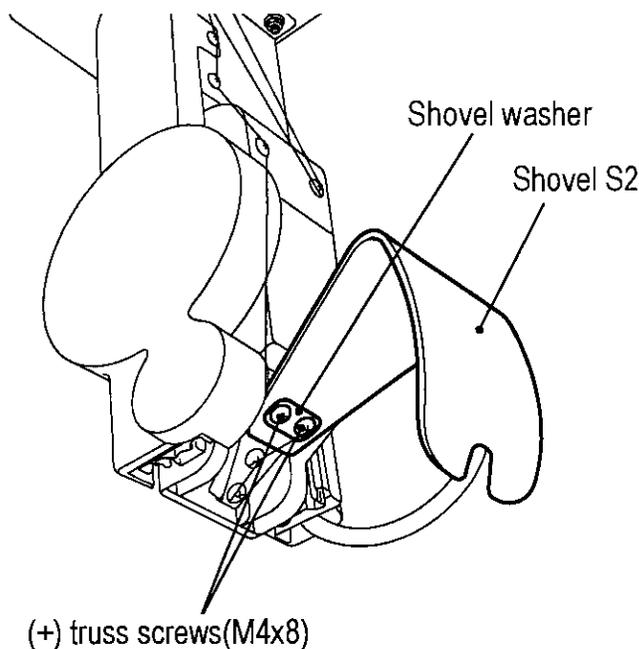
⚠ WARNING

- To protect the service staff and other people from an electric shock, accident and injury, and to prevent damage to the electrical circuitry of the machine, always turn off the power switch before initiating the described task.

⚠ CAUTION

- When opening/closing the acrylic door, take extra caution to make sure that people's hands and fingers do not get caught in between, or their heads and bodies get hit by its corners.
- When opening/closing the acrylic door, take extra caution to make sure that players and surrounding people do not get hit by the acrylic door.
- When replenishing prize-items, make sure not to touch the motor areas as it may cause possible injury or accident.
- When opening/closing the acrylic door, make sure that your fingers do not get caught in between.

1. Remove the maintenance door of the machine with the key and turn on the power switch.
(Refer to 7-3-1 Turning the power on)
2. Open the acrylic door.
(Refer to 5-3-2 How to open/close the acrylic door.)
3. Remove the 2 (+) truss screws (M4×8) and the shovel washer, then replace the shovel.
4. Close the acrylic door.
(Refer to 5-3-2 How to open/close the acrylic door.)



7-8-4 Attaching/detaching, adjusting the support finger -To be conducted by a technician only-

(1) Attaching/detaching the support finger

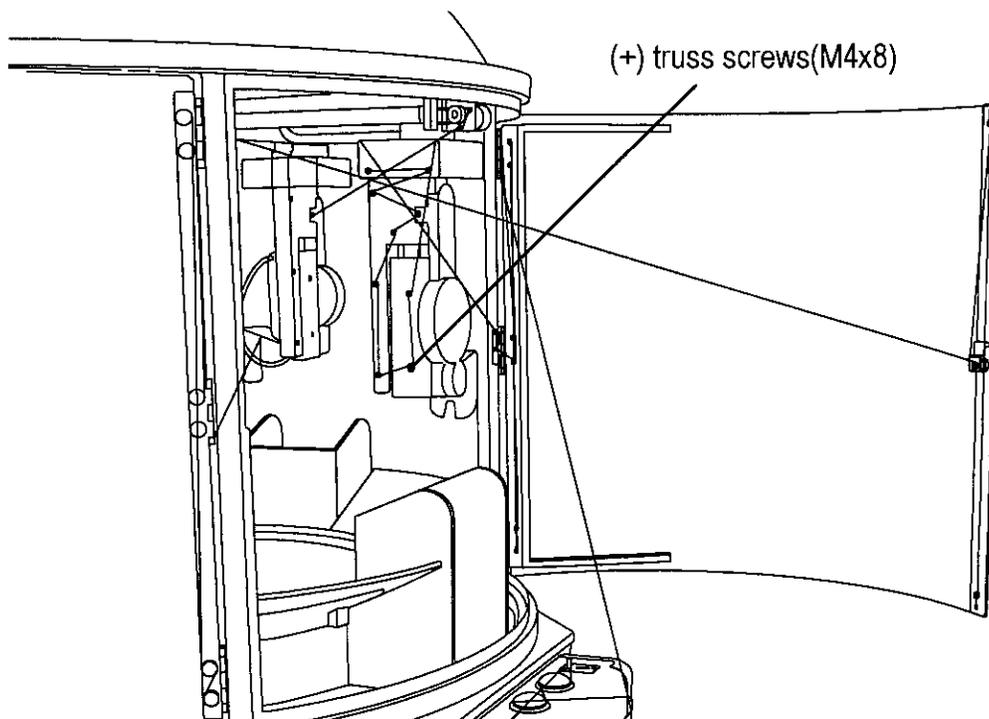
⚠ WARNING

- To protect the service staff and other people from an electric shock, accident and injury, and to prevent damage to the electrical circuitry of the machine, always turn off the power switch before initiating the described task.

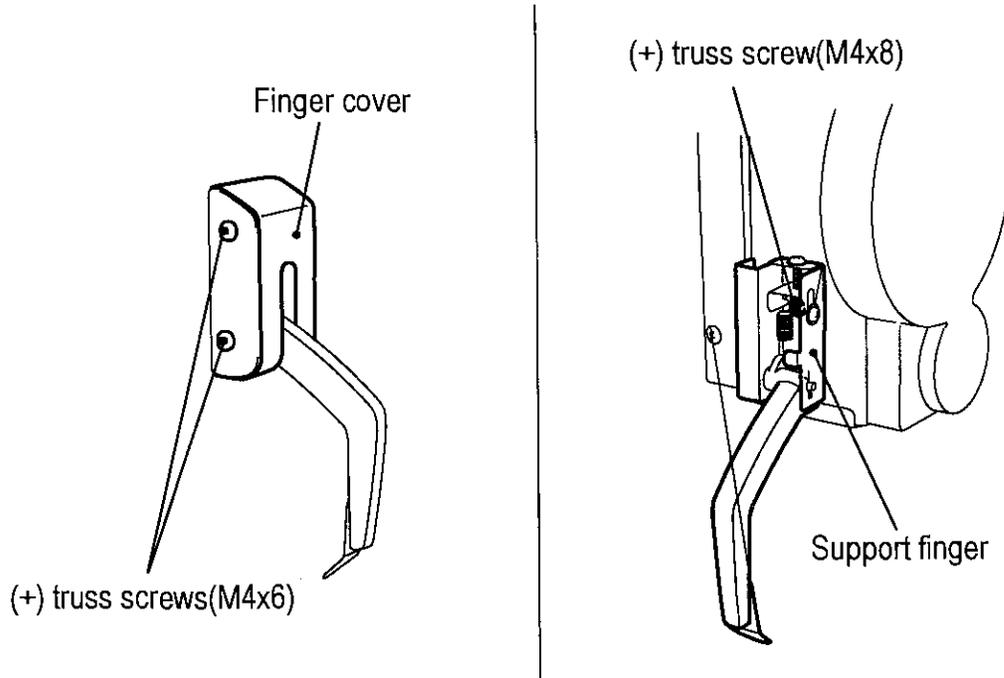
⚠ CAUTION

- When opening/closing the acrylic door, take extra caution to make sure that people's hands and fingers do not get caught in between, or their heads and bodies get hit by its corners.
- When opening/closing the acrylic door, take extra caution to make sure that players and surrounding people do not get hit by the acrylic door.
- When replenishing prize-items, make sure not to touch the motor areas as it may cause possible injury or accident.
- When opening/closing the acrylic door, make sure that your fingers do not get caught in between.

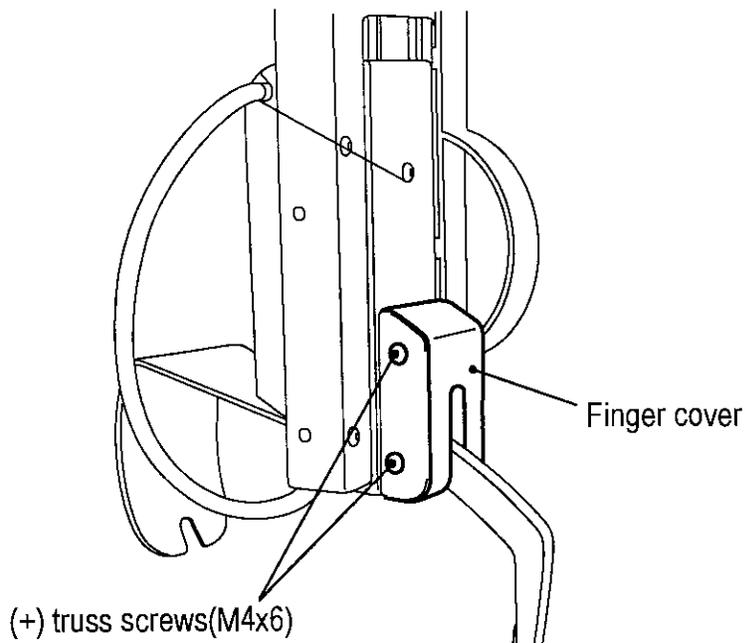
1. Remove the maintenance door of the machine with the key and turn on the power switch.
(Refer to 7-3-1 Turning the power on)
2. Open the acrylic door.
(Refer to 5-3-2 How to open/close the acrylic door.)
3. Remove the (+) truss screws (M4×8).



4. Unfasten the 2 (+) truss crews (M4×6) and remove the finger cover.
5. Reattach the support finger using the (+) truss screw (M4×8) unfastened in step 3.

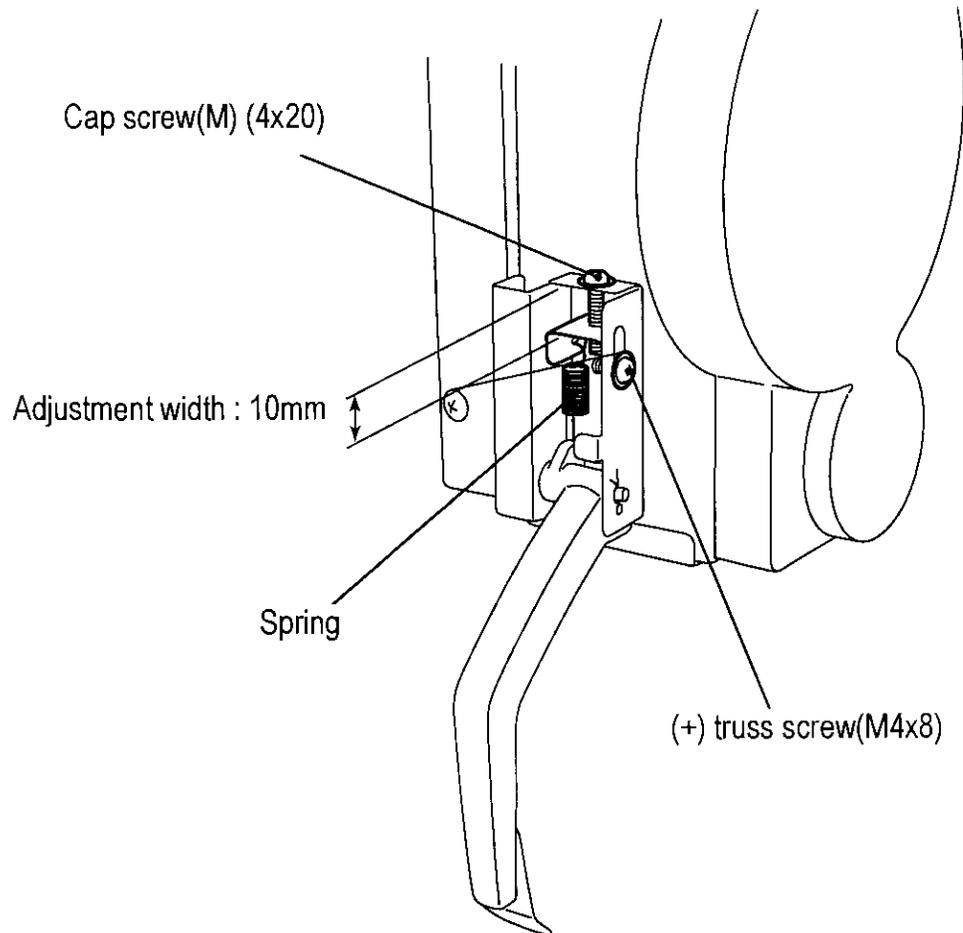


6. Reattach the finger cover with the 2 (+) truss crews (M4×6) unfastened in step 4.
7. Close the acrylic door.
(Refer to 5-3-2 How to open/close the acrylic door.)



(2) Adjusting the spring

1. Remove the maintenance door of the machine with the key and turn on the power switch.
(Refer to 7-3-1 Turning the power on)
2. Open the acrylic door.
(Refer to 5-3-2 How to open/close the acrylic door.)
3. Attach the support finger.
(Refer to 7-8-4 (1) Attaching/detaching the support finger, steps 3-5.)
4. Loosen the (+) truss screw (M4×8) and adjust the spring (adjustment width: 10mm) with the cap screw (M) (4×20).
※ The support finger's effectiveness will maximize by tightening, and minimize by loosening the cap screw (M) (4×20).
5. Reverse procedures to reattach each part.



7-9 Cleaning the turn table

⚠ WARNING

- To protect the service staff and other people from an electric shock, accident and injury, and to prevent damage to the electrical circuitry of the machine, always turn off the power switch before initiating the described task.

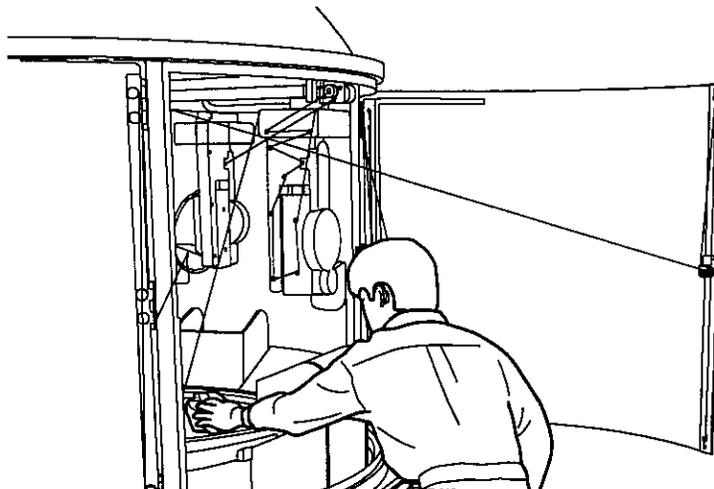
⚠ CAUTION

- When opening/closing the acrylic door, take extra caution to make sure that people's hands and fingers do not get caught in between, or their heads and bodies get hit by its corners.
- When opening/closing the acrylic door, take extra caution to make sure that players and surrounding people do not get hit by the acrylic door.
- When opening/closing the acrylic door, make sure that your fingers do not get caught in between.

ⓘ NOTICE

- Do not use organic solvents for cleaning. Using organic solvents may result in material degradation.

1. Remove the maintenance door of the machine with the key and turn on the power switch.
(Refer to 7-3-1 Turning the power on)
2. Open the acrylic door.
(Refer to 5-3-2 How to open/close the acrylic door.)
3. Remove the prize-items from the turn table.
4. Clean the turn table using a cloth soaked in mild detergent or water.
Make sure to finish by wiping off all liquid remains with a dry cloth.
5. Clean the grass area by using a vacuum cleaner.
6. Close the acrylic door.
(Refer to 5-3-2 How to open/close the acrylic door.)



8. MAINTENANCE

WARNING

- Before conducting maintenance (troubleshooting, repair, etc.), make sure to turn off the power switch to protect the service staff and other people from electric shock, accidents and injury
- The PC board inside the machine will remain hot even after the power switch is turned off.
- Do not touch the PC board area to avoid suffering burns

8-1 Maintenance and inspection

WARNING

- Before conducting maintenance (troubleshooting, repair, replacement, etc.), make sure to unplug the power plug from the electrical socket to protect the service staff and other people from electric shock, accidents and injury.
- Conduct maintenance regularly. Failure to conduct periodic maintenance may lead to unexpected accidents.
- Conduct a pre-service check everyday. Pre-service check is important for preventing accidents.
(Refer to 7-1 Pre-service check.)

8-1-1 Regular inspection -To be conducted by a technician only-

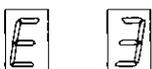
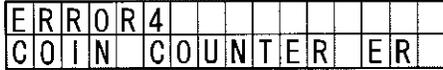
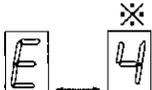
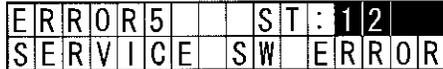
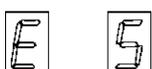
Routinely check the following for any irregularities.

- (1) Checking of the level adjusters
 - Check and make sure that the level adjusters are securely fixated.
- (2) Checking of the power plug
 - Check and make sure that the power plug is firmly plugged into the electrical socket.
 - If there is dust on the electrical socket area, make sure to dust it off.
 - Check and make sure the power cord is not damaged or soiled.
 - If any irregularity is found with the power cord, make sure to replace it with a new one.
- (3) Checking for any loosened screws
 - Check and make sure that the following listed screws are not loosened. If any are found loosened, make sure to tighten them.
 - Dome 199: attachment screws
(Refer to 5-2-1 Removing/reinstalling the Dome 199.)
 - Upper Cabinet Assy and Lower Cabinet Assy: connecting screws
(Refer to 5-2-2 Separating the Upper Cabinet Assy and the Lower Cabinet Assy.)
 - Rail Assy: attachment screws
(Refer to 8-4-2 (1) Removing/reinstalling the Rail Assy.)
 - Elevator Assy: attachment screws
(Refer to 8-4-3 (1) Removing/reinstalling the Elevator Assy.)
 - Shovel Assy: attachment screws
(Refer to 8-4-4 (1) Removing/reinstalling the Shovel Assy.)

8.MAINTENANCE

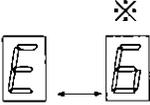
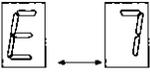
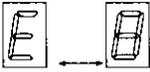
8-2 Error Display

- When an error occurs, an error display will appear on the 7-seg LED: indication of [E] followed by the error description will be displayed interchangeably. (There will be no display on the 7-seg LED for coin counter error and EEPROM error. In the case of multiple errors, all applicable errors will be numerically displayed in sequence.)
- The error number and its location will be displayed on the LCD. In the case of multiple errors, display will sequentially change every 3 seconds.
- The warning alarm will continue for 1 minute and stop. If coins are newly inserted or buttons pressed immediately after, the warning alarm will sound off once again (except for coin counter and EEPROM errors).
- Upon pressing the button 2 during an error, the coin count (not yet played) prior to the error occurrence will be displayed on the 7-seg LED (except for coin counter and EEPROM errors).
- ※ Upon pressing the button 1, the credit display will decrease by "1."

Error contents	Warning alarm	Description	7-Seg LED display
1. Coin error	Available	Coin jam, coin switch failure. 	
2. Elevator error	Available	Failure in the elevator's drive motor and photo sensor. The error-occurring station No. will be displayed. 	
3. Shovel error	N/A	Failure in the shovel's drive motor and photo sensor. The error-occurring station No. will be displayed. 	
4. Coin counter error	Available	Failure in the coin counter. 	
5. Service sw. error	Available	Failure in the service switch. The error-occurring station No. will be displayed. 	

※ Will only be displayed when other errors have also occurred. (7-seg LED display)

8. MAINTENANCE

Error contents	Warning alarm	Description	7-seg LED display																																
6. EEPROM error	N/A	Failure in the EEPROM. All settings will become invalid. <table border="1" style="margin-left: auto; margin-right: auto;"> <tr><td>E</td><td>R</td><td>R</td><td>O</td><td>R</td><td>6</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>E</td><td>E</td><td>P</td><td>R</td><td>O</td><td>M</td><td>E</td><td>R</td><td>R</td><td>O</td><td>R</td><td></td><td></td><td></td><td></td><td></td></tr> </table>	E	R	R	O	R	6											E	E	P	R	O	M	E	R	R	O	R						
E	R	R	O	R	6																														
E	E	P	R	O	M	E	R	R	O	R																									
7. Prize sensor error	Available	Failure in the prize sensor. The error-occurring station No. will be displayed. <table border="1" style="margin-left: auto; margin-right: auto;"> <tr><td>E</td><td>R</td><td>R</td><td>O</td><td>R</td><td>7</td><td></td><td></td><td>S</td><td>T</td><td>:</td><td>1</td><td>2</td><td></td><td></td><td></td></tr> <tr><td>P</td><td>R</td><td>I</td><td>Z</td><td>E</td><td>R</td><td>S</td><td>E</td><td>N</td><td>S</td><td>O</td><td>R</td><td>E</td><td>R</td><td></td><td></td></tr> </table>	E	R	R	O	R	7			S	T	:	1	2				P	R	I	Z	E	R	S	E	N	S	O	R	E	R			
E	R	R	O	R	7			S	T	:	1	2																							
P	R	I	Z	E	R	S	E	N	S	O	R	E	R																						
8. Rail error	Available	Failure in the rail's drive motor and photo sensor. The error-occurring station No. will be displayed. <table border="1" style="margin-left: auto; margin-right: auto;"> <tr><td>E</td><td>R</td><td>R</td><td>O</td><td>R</td><td>8</td><td></td><td></td><td>S</td><td>T</td><td>:</td><td>1</td><td>2</td><td></td><td></td><td></td></tr> <tr><td>R</td><td>A</td><td>I</td><td>L</td><td>E</td><td>R</td><td>R</td><td>O</td><td>R</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> </table>	E	R	R	O	R	8			S	T	:	1	2				R	A	I	L	E	R	R	O	R								
E	R	R	O	R	8			S	T	:	1	2																							
R	A	I	L	E	R	R	O	R																											

※ Will only be displayed when other errors have also occurred. (7-seg LED display).



Refer to 8-3 Troubleshooting when taking corrective measures.

8-3 Troubleshooting

WARNING

- To protect the service staff and other people from an electric shock, accident and injury, and to prevent damage to the electrical circuitry of the machine, always turn off the power switch before initiating the described task.
- If problems out of the range than those described in 8-3 Troubleshooting occur, or if improvements cannot be seen after taking measures, contact your distributor for further support.

NOTICE

- In the event of a problem, make sure to check that all connectors are firmly connected.
- If problems out of the range than those described in the following pages occur, or if improvements cannot be seen after taking measures, contact your distributor for further support.
 - The PC board is sensitive to static electricity. If a technician charged with static electricity handles the PC board, the parts on the PC board can get damaged. Before handling the PC board, make sure to always touch the grounded metal surface to discharge any static electricity.
- If there is a problem in any of the PC boards, do not use a circuit tester or equivalent tool to check the conductivity.
 - Otherwise, the tester's internal voltage may damage the ICs.

8-3-1 General -To be conducted by a technician only-

S y m p t o m	M a i n c a u s e	M e a s u r e	Page
Machine cannot be operated after turning on the power switch.	• No power coming in. Power plug is disconnected.	• Plug the power cord to an outlet where power is coming in.	-
	Fuse is out.	Replace the fuse.	-
• Operation is unstable. Malfunction occurs.	Power voltage is exceeding the limit.	Disconnect the large-capacity device operating on the same line to secure the required power voltage.	- -
	Failure in the game PC board.	Contact your distributor.	-
Error alarm is sounding off but no error is being displayed.	Required voltage (DC +12V) is not being outputted from the switching regulator 2.	Check whether the required voltage (DC +12V) is being outputted. If power is coming in but the required voltage is not being outputted, failure in the switching regulator is highly likely. Replace the switching regulator.	P.106
Coin counter does not operate. ("Error 4" is displayed on the 7-seg LED.)	Failure in the coin counter.	Replace the coin counter.	-
	Failure in the game PC board.	Contact your distributor.	-
Fluorescent lamp does not light up	Fluorescent lamp is out	Replace the fluorescent lamp.	P.59
	Connector is disconnected.	Connect the connector	P.59

8. MAINTENANCE

8-3-2 Rail Assy -To be conducted by a technician only-

S y m p t o m	M a i n c a u s e	M e a s u r e	P a g e
Rail does not move. Or, movement is irregular. ("Error 8" is displayed on the 7-seg LED.)	Connector is disconnected.	Connect the connector.	P.60
	Failure in the rail's photo sensor.	Replace the rail's photo sensor.	P.61
	Failure in the rail's drive motor.	Replace the rail's drive motor.	P.62
	Failure in the game PC board	Contact your distributor.	-

8-3-3 Elevator Assy -To be conducted by a technician only-

S y m p t o m	M a i n c a u s e	M e a s u r e	P a g e
Elevator does not move. Or, movement is irregular. ("Error 2" is displayed on the 7-seg LED.)	Connector is disconnected.	Connect the connector.	P.66
	Failure in the elevator's photo sensor.	Replace the elevator's photo sensor.	P.67
	Failure in the elevator's drive motor.	Replace the elevator's drive motor.	P.69
	Failure in the S2DRV PC board	Contact your distributor.	-

8-3-4 Shovel Assy -To be conducted by a technician only-

S y m p t o m	M a i n c a u s e	M e a s u r e	P a g e
Shovel does not move. Or, movement is irregular. ("Error 2" is displayed on the 7-seg LED.)	Connector is disconnected.	Connect the connector	P.75
	Failure in the shovel's photo sensor.	Replace the shovel's photo sensor.	P.75
	Failure in the shovel's drive motor.	Replace the shovel's drive motor.	P.79
	Damage in the gear.	Replace the gear.	P.76
	Failure in the game PC board	Contact your distributor.	-

8-3-5 Sign Tower Assy -To be conducted by a technician only-

S y m p t o m	M a i n c a u s e	M e a s u r e	P a g e
Fluorescent lamp does not light up.	Fluorescent lamp is out.	Replace the fluorescent lamp.	P.81

8-3-6 Table Assy -To be conducted by a technician only

Symptom	Main cause	Measure	Page
Turn table does not move. Or, movement is irregular.	Alien object is jammed.	Remove the alien object.	—
	Connector is disconnected.	Connect the connector.	P.90
	Failure in the table's drive motor.	Replace the table's drive motor or the gear head.	P.90

8-3-7 Control Panel Assy -To be conducted by a technician only-

Symptom	Main cause	Measure	Page
"Error 1" is displayed on the 7-seg LED	Coin jam.	Remove the jammed coin(s).	—
7-seg LED does not light up.	Connector is disconnected.	Connect the connector (especially the one on the PC board).	P.99
	Failure in the S2DRV PC board	Contact your distributor.	—
Buttons 1 and 2 do not respond. Fluorescent lamp does not light up.	Connector, Faston terminal are disconnected.	Connect the connector and Faston terminal.	P.99
	Fluorescent lamp is out.	Replace the fluorescent lamp.	P.101
	Failures in buttons 1 and 2.	Replace the buttons 1 and 2.	P.100
	Failure in the S2DRV PC board	Contact your distributor.	—

8-4 Removing, reinstalling and replacing Assys/parts

8-4-1 Upper Cabinet Assy -To be conducted by a technician only-

(1) Removing/reinstalling the Dome 199

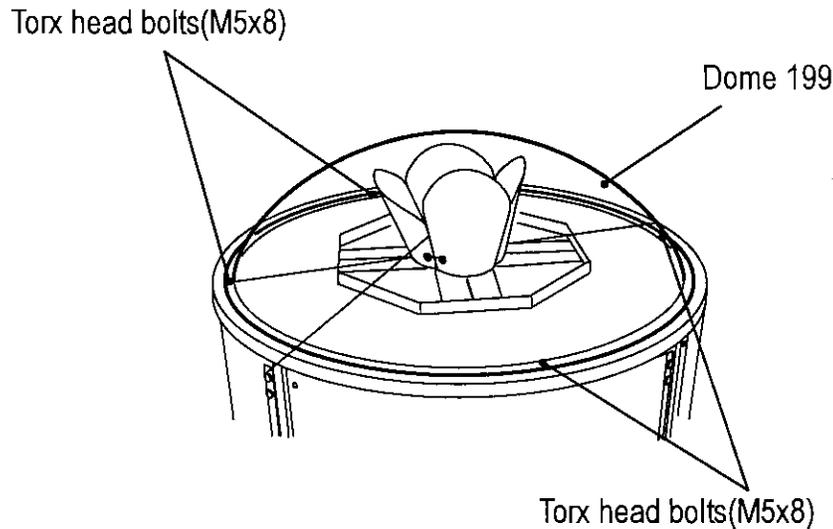
⚠ WARNING

- To remove/reinstall the Dome 199 will require high-reaching tasks. Make sure to use a step ladder to facilitate work. Forcing the task from a low position by straining your body may lead to possible injury or machine failure.
- Upon removing/reinstalling the Dome 199, make sure to carry out the task with 2 or more people and secure ample space for work.

Upon removing/reinstalling the Dome 199, make sure to fixate the machine firmly by using the level adjusters. Unstable machine installation can result in an accident or injury.

(Refer to 5-3-1 Adjusting the level adjusters.)

1. Remove the 4 torx head bolts (M5×8) and 4 plain washers (M5); then remove the Dome 199.



2. Reverse procedures to reinstall.

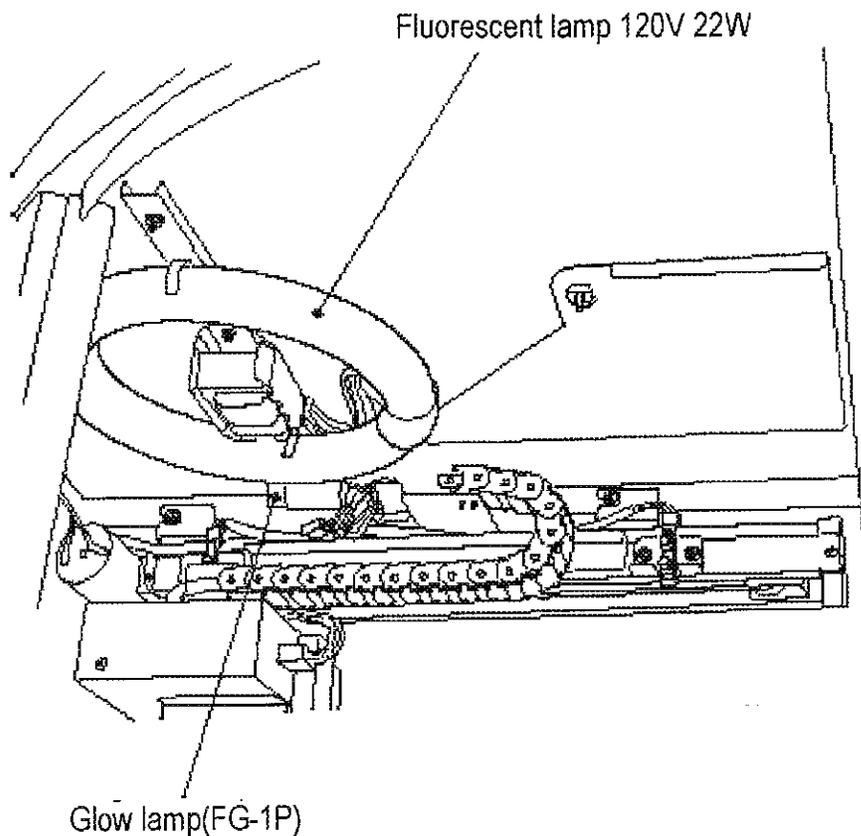
(2) Replacing the fluorescent and glow lamps

WARNING

- To protect the service staff and other people from an electric shock, accident and injury, and to prevent damage to the electrical circuitry of the machine, always turn off the power switch before initiating the described task.

The lamps inside the machine will remain hot so be extra careful when removing them.

1. Remove the maintenance door of the machine with the key and turn off the power switch.
(Refer to 7-3-1 Turning the power on.)
2. Open the acrylic door.
(Refer to 5-3-2 How to open/close the acrylic door.)
3. Replace the fluorescent lamp (22W) and the glow lamp (FG-1P).
Make sure to use 120V 22W for the fluorescent lamp.
4. Close the acrylic door.
(Refer to 5-3-2 How to open/close the acrylic door.)



8-4-2 Rail Assy -To be conducted by a technician only-

(1) Removing/reinstalling the Rail Assy

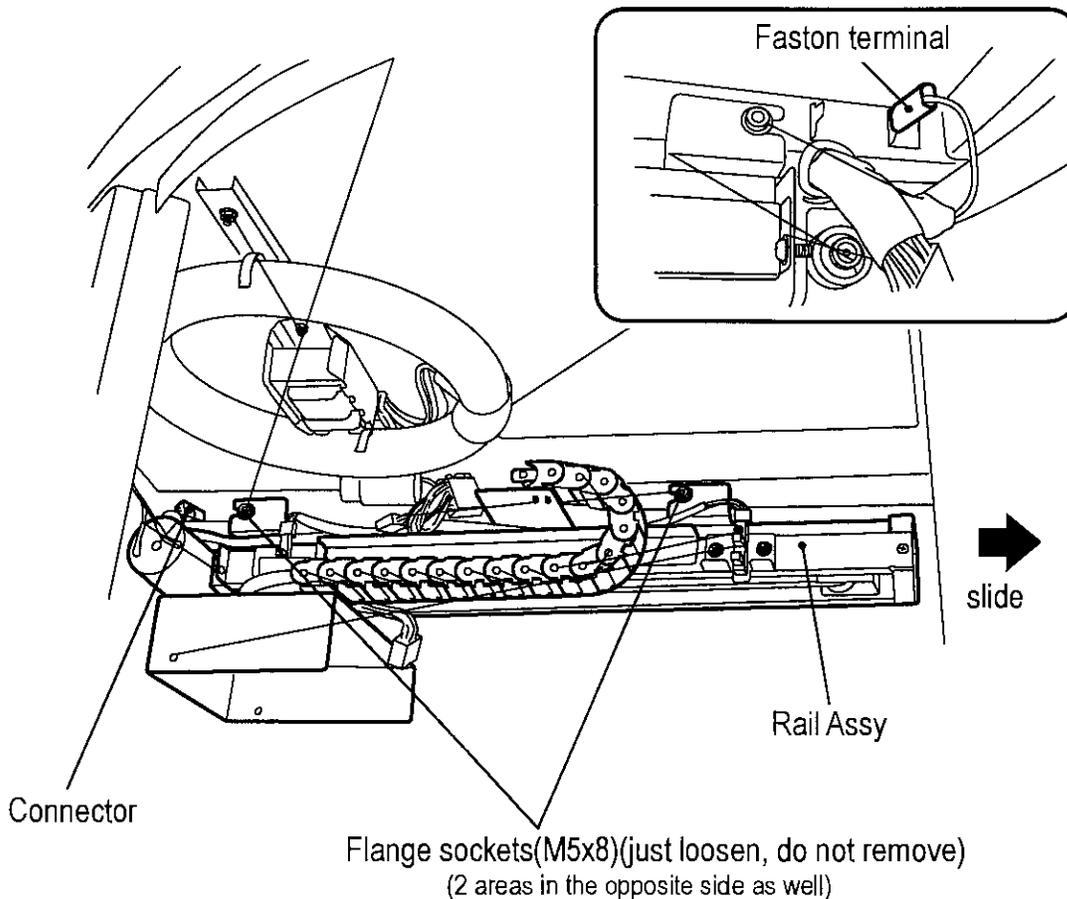
⚠ WARNING

To protect the service staff and other people from an electric shock, accident and injury, and to prevent damage to the electrical circuitry of the machine, always turn off the power switch before initiating the described task.

1. Remove the maintenance door of the machine with the key and turn off the power switch.
(Refer to 7-3-1 Turning the power on.)
2. Open the acrylic door
(Refer to 5-3-2 How to open/close the acrylic door.)
3. Remove the Elevator Assy.
(Refer to 8-4-3 (1) Removing/reinstalling the Elevator Assy.)
4. First remove the connector and the ground's Faston terminal, then loosen the 4 flange sockets (M5×8). Remove the Rail Assy by sliding it away from you.
5. Reverse procedures to reinstall.

ⓘ NOTICE

When reinstalling, make sure the connector is locked securely.



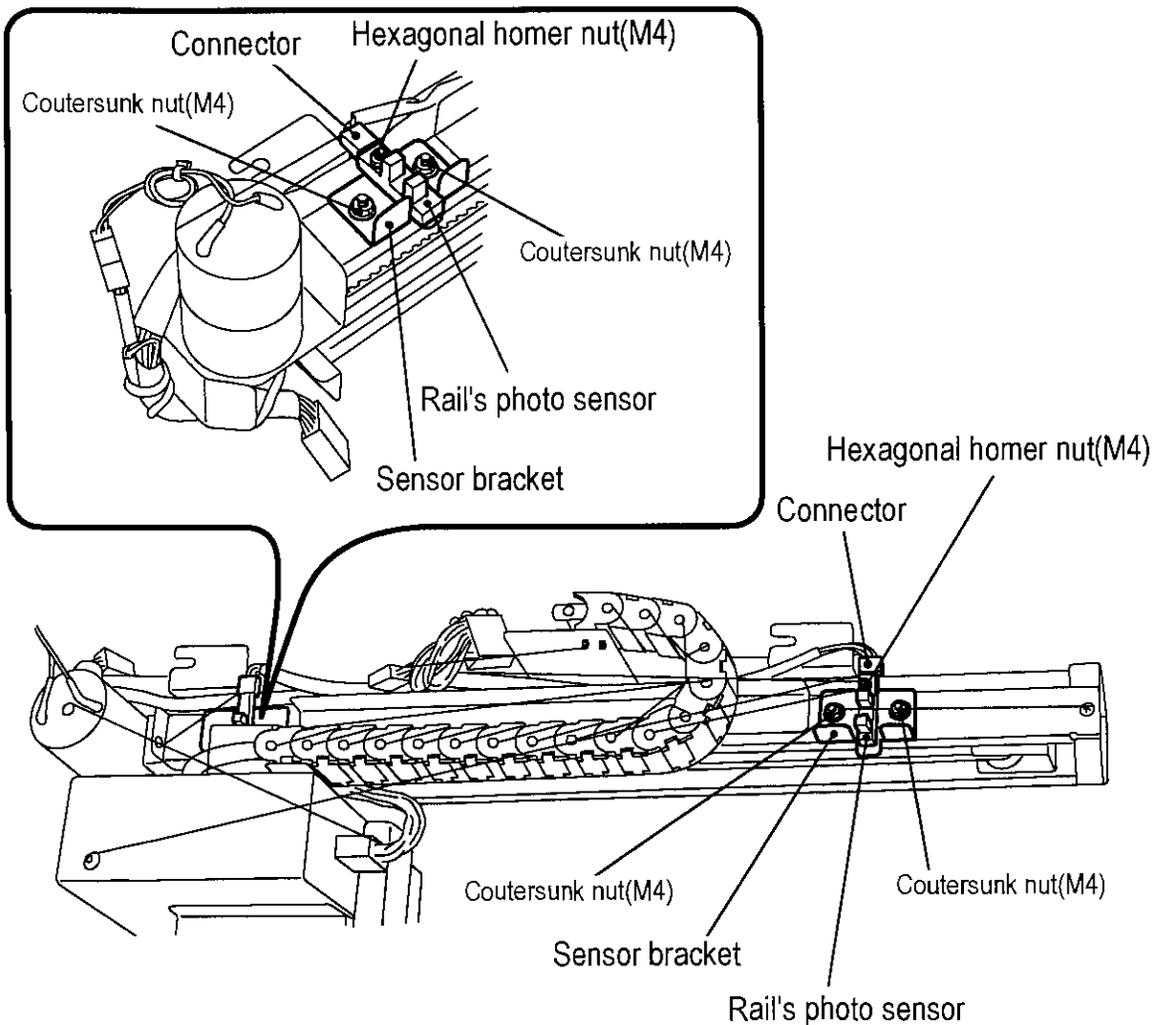
(2) Replacing the rail's photo sensor

⚠ WARNING

- To protect the service staff and other people from an electric shock, accident and injury, and to prevent damage to the electrical circuitry of the machine, always turn off the power switch before initiating the described task.

1. Remove the maintenance door of the machine with the key and turn off the power switch.
(Refer to 7-3-1 Turning the power on.)
2. Open the acrylic door.
(Refer to 5-3-2 How to open/close the acrylic door.)
3. Remove the 2 countersunk nuts (M4) and remove the sensor bracket.
4. Remove the hexagonal nut (M4) and the connector, then replace the rail's photo sensor.
5. Reverse procedures to reinstall.

NOTICE - When reinstalling, make sure the connector is locked securely.



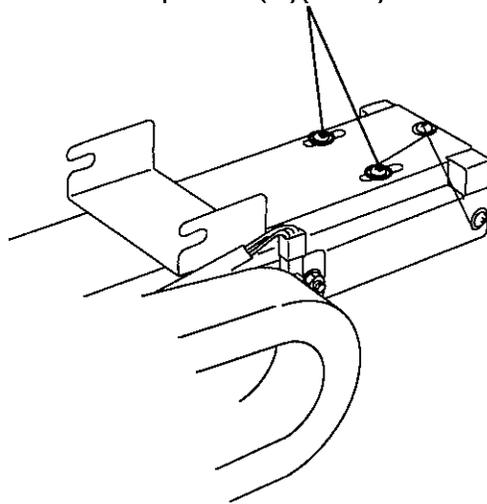
(3) Replacing the rail's motor drive

⚠ WARNING

To protect the service staff and other people from an electric shock, accident and injury, and to prevent damage to the electrical circuitry of the machine, always turn off the power switch before initiating the described task.

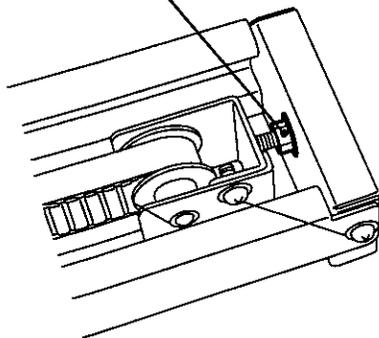
1. Remove the maintenance door of the machine with the key and turn off the power switch.
(Refer to 7-3-1 Turning the power on.)
2. Open the acrylic door.
(Refer to 5-3-2 How to open/close the acrylic door.)
3. Remove the Rail Assy.
(Refer to 8-4-2 (1) Removing/reinstalling the Rail Assy.)
4. Loosen the 2 cap screws (M) (M4×8).

Cap screw(M)(M4x8)

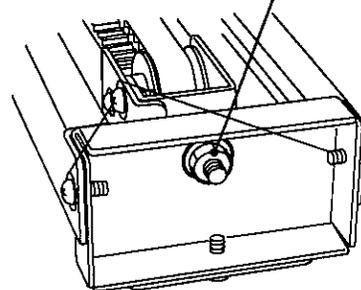


5. Loosen the 2 countersunk nuts (M5).

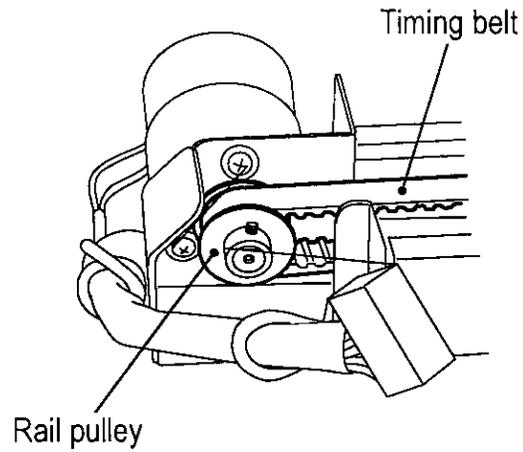
Countersunk nut(M5)



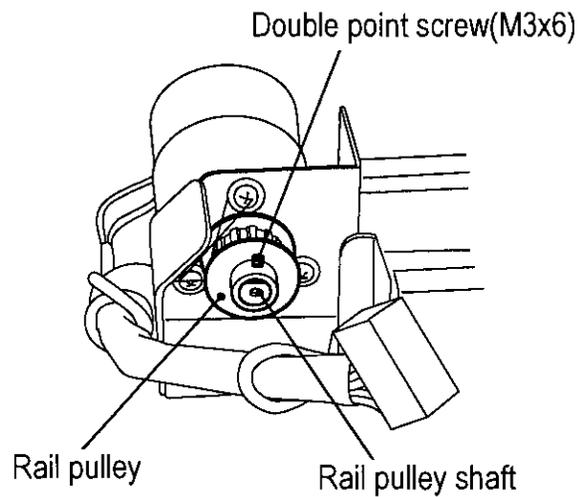
Countersunk nut(M5)



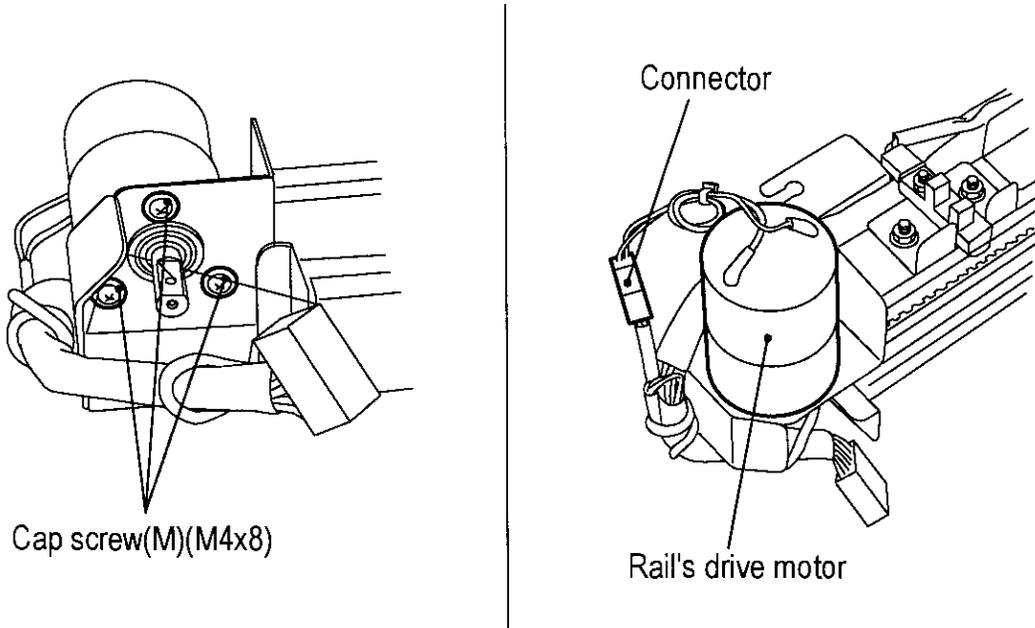
6. Let the timing belt sag quite loosely before removing it from the rail pulley.



7. Loosen the double point screw (M3x6) and remove the rail pulley from the rail pulley shaft.



8. Remove the 3 cap screws (M) (M4×8) and the connector; then replace the rail's drive motor.

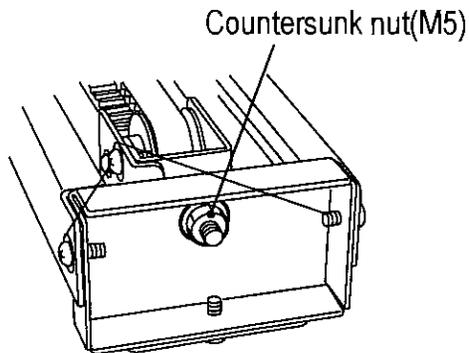


9. Reverse procedures to reinstall.

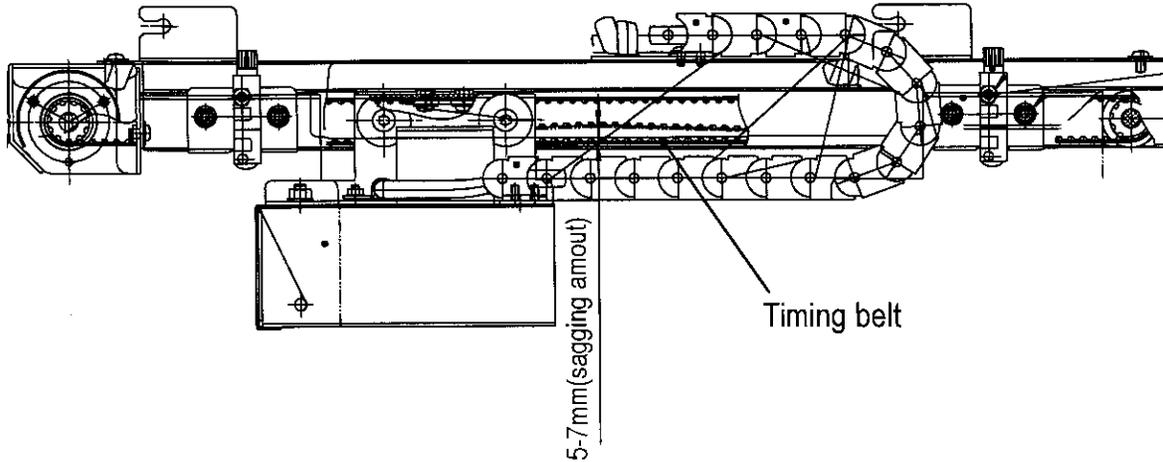
NOTICE - When reinstalling, make sure the connector is locked securely.

[Adjusting the timing belt]

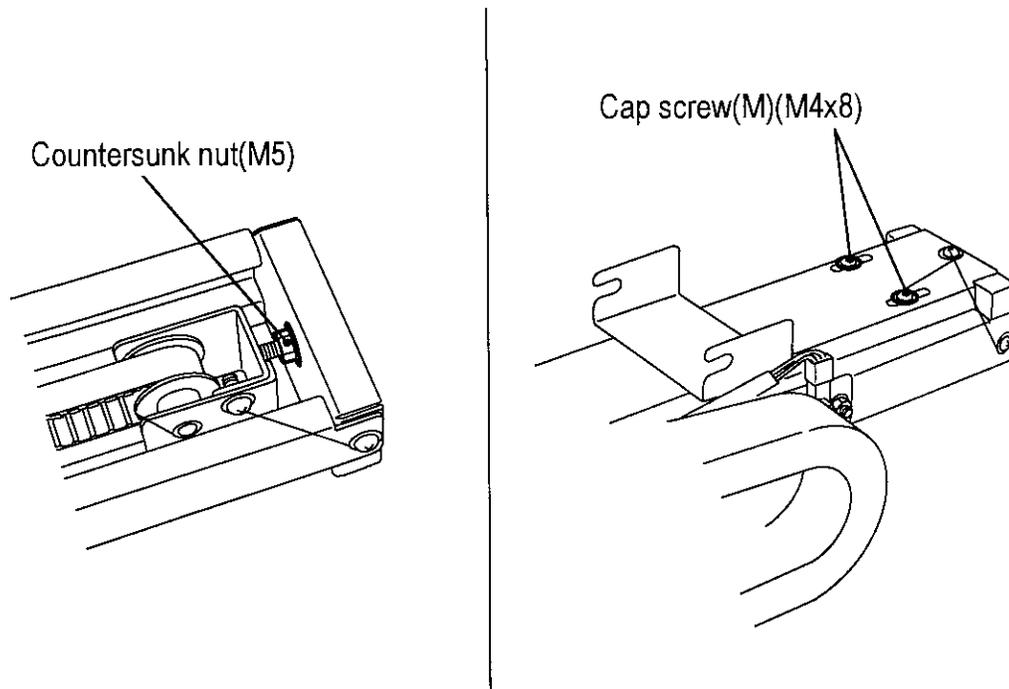
10. Adjust the tensile strength of the timing belt to 24.5N (2.5kgf) by using the outer countersunk nut (M5).



11. As a guide, check that the timing belt sags 5-7mm when applying a load of 1.8N (180gf) onto the center area between the pulleys.



12. After adjustment is complete, tighten the inner countersunk nut (M5) and fasten the 2 cap screws (M) (M4x8).



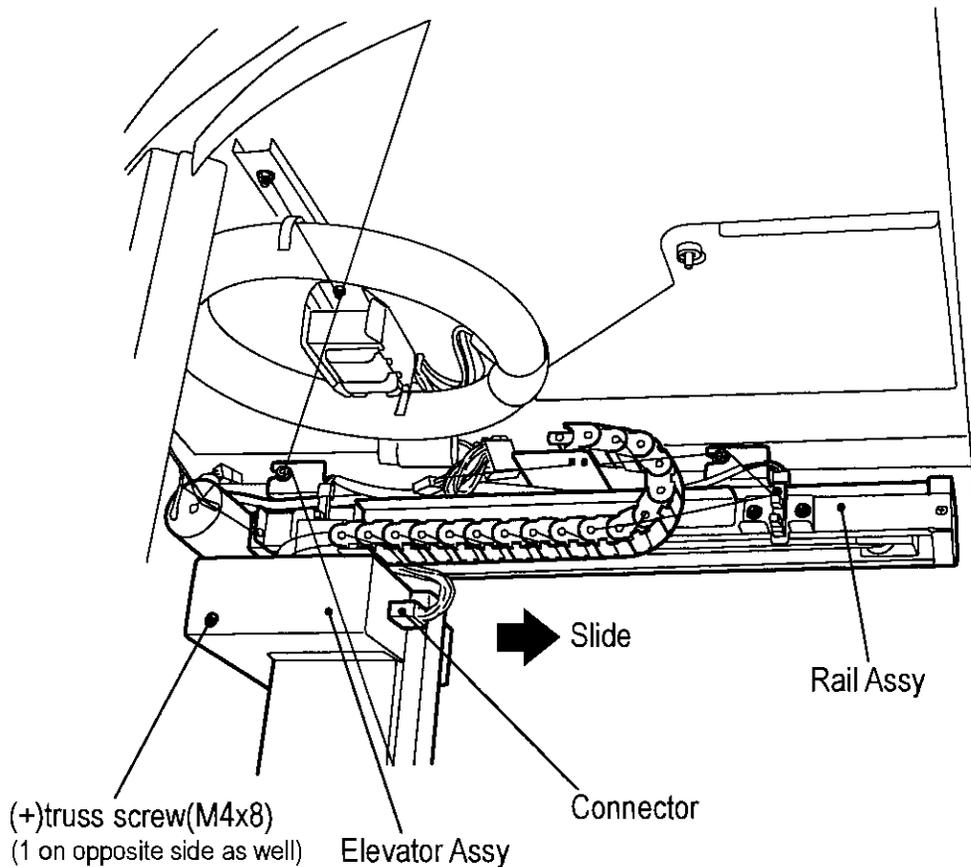
8-4-3 Elevator Assy -To be conducted by a technician only-

(1) Removing/reinstalling the Elevator Assy

WARNING

To protect the service staff and other people from an electric shock, accident and injury, and to prevent damage to the electrical circuitry of the machine, always turn off the power switch before initiating the described task

1. Remove the maintenance door of the machine with the key and turn off the power switch.
(Refer to 7-3-1 Turning the power on.)
2. Open the acrylic door.
(Refer to 5-3-2 How to open/close the acrylic door.)
3. Remove the 2 (+) truss screws (M4×8) and the connector, then slide the Elevator Assy away from you and remove it from the Rail Assy
4. Reverse procedures to reinstall.



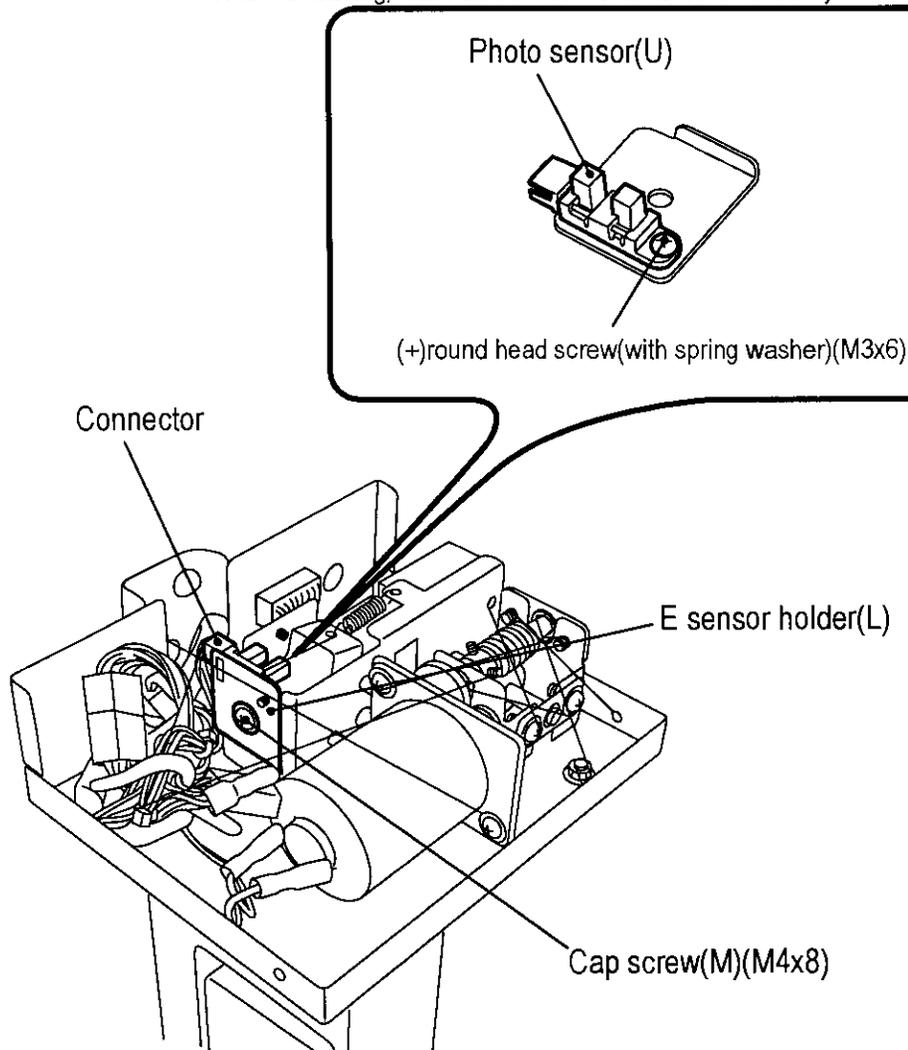
(2) Replacing the photo sensor (U)**⚠ WARNING**

- To protect the service staff and other people from an electric shock, accident and injury, and to prevent damage to the electrical circuitry of the machine, always turn off the power switch before initiating the described task.

1. Remove the maintenance door of the machine with the key and turn off the power switch.
(Refer to 7-3-1 Turning the power on.)
2. Remove the Elevator Assy.
(Refer to 8-4-3 (1) Removing/reinstalling the Elevator Assy.)
3. Remove the cap screw (M4×8) and take out the E sensor holder (L).
4. Remove the (+) round head screw (with spring washer) (M3×6) and the connector; then replace the photo sensor (U).
5. Reverse procedures to reinstall.

NOTICE

- When reinstalling, make sure the connector is locked securely.

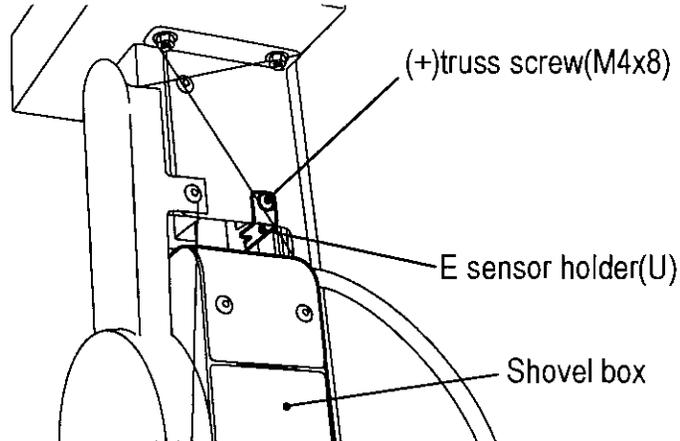


(3) Replacing the photo sensor (D)

! WARNING

- To protect the service staff and other people from an electric shock, accident and injury, and to prevent damage to the electrical circuitry of the machine, always turn off the power switch before initiating the described task.

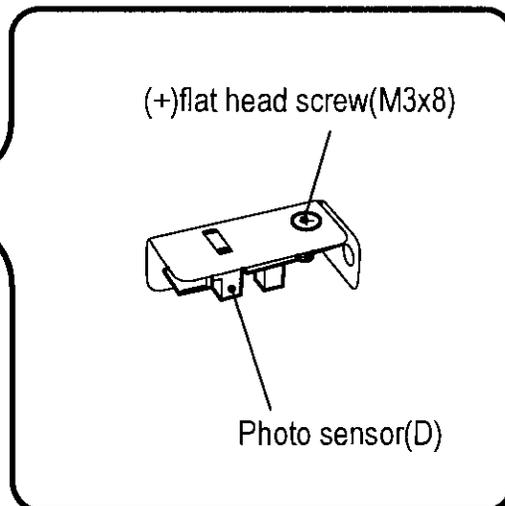
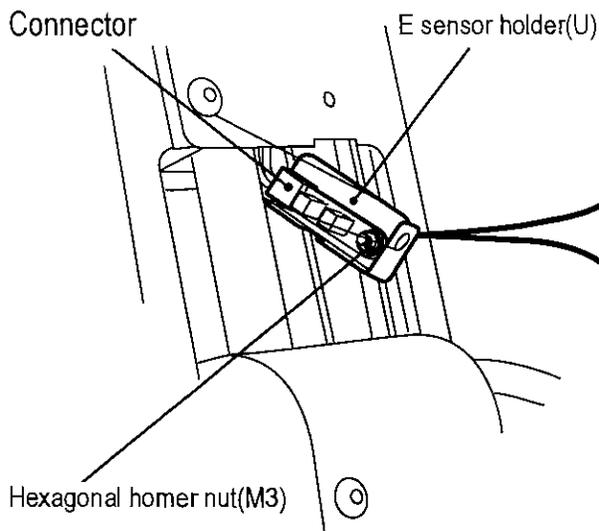
1. Lower the shovel box about 10cm by operating through the test mode.
(Refer to 7-6 Test Mode 6. Drive Test.)
2. Remove the maintenance door of the machine with the key and turn off the power switch.
(Refer to 7-3-1 Turning the power on.)
3. Remove the (+) truss screw (M4×8) and take out the E sensor holder (U).



4. Remove the (+) flat head screw (M3×8), hexagonal nut (M3), and the connector; then replace the photo sensor (D).
5. Reverse procedures to reinstall.

NOTICE

- When reinstalling, make sure the connector is locked securely.

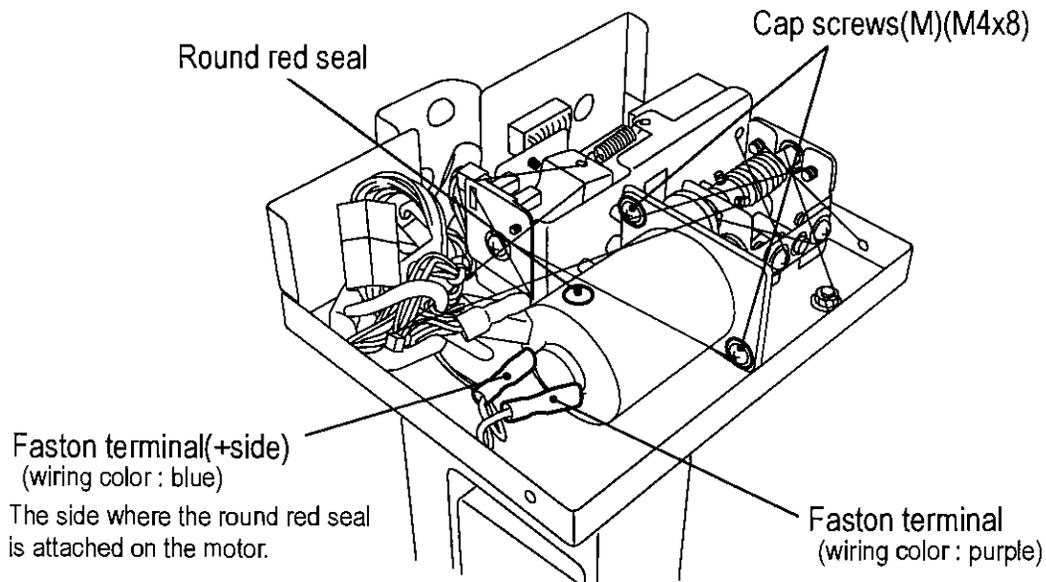


(4) Replacing the elevator's drive motor

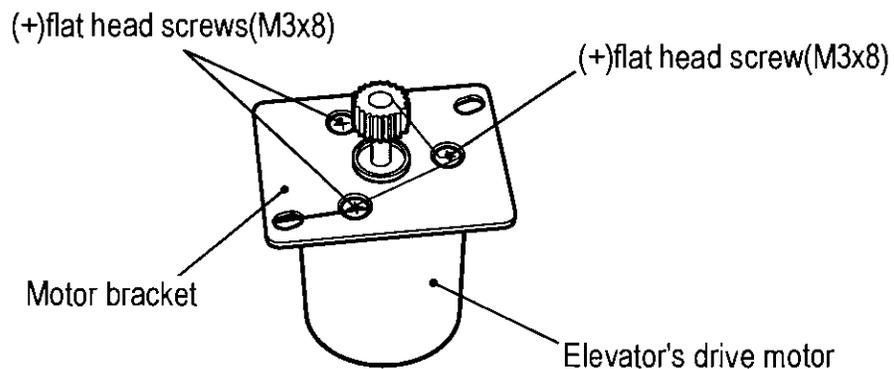
⚠ WARNING

- To protect the service staff and other people from an electric shock, accident and injury, and to prevent damage to the electrical circuitry of the machine, always turn off the power switch before initiating the described task.

1. Remove the maintenance door of the machine with the key and turn off the power switch. (Refer to 7-3-1 Turning the power on.)
2. Remove the Elevator Assy. (Refer to 8-4-3 (1) Removing/reinstalling the Elevator Assy.)
3. Remove the 2 cap screws (M4×8) and the 2 Faston terminals.



4. Remove the 3 (+) flat head screws (M3×8) and the motor bracket; then replace the elevator's drive motor.

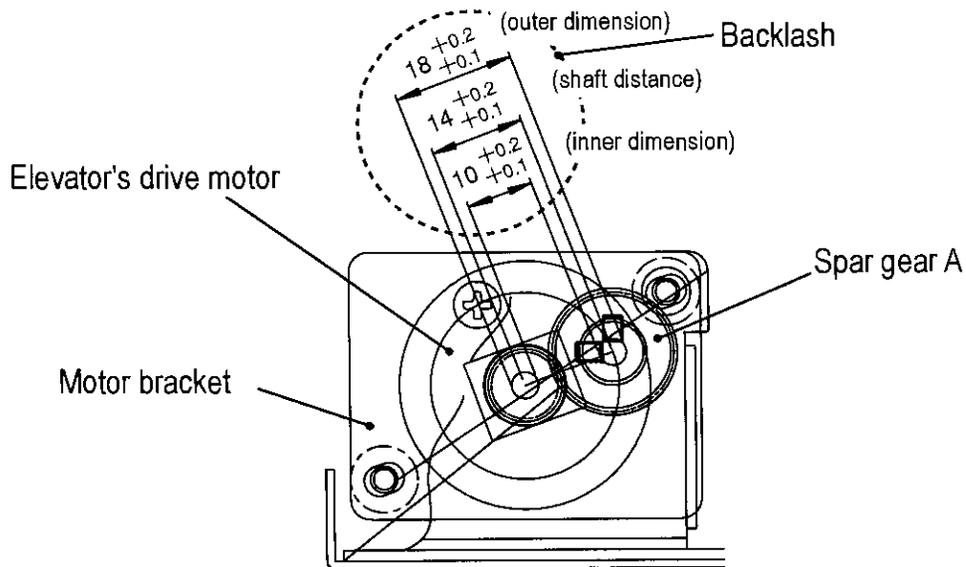


5. Reverse procedures to reinstall.

NOTICE

- Upon reinstalling the motor bracket and the elevator's drive motor, adjust the distance between the spar gear A and the shaft to create a backlash.
- Upon reinstalling, make sure the Faston terminals are securely locked.
- Upon reinstalling, make sure the Faston terminals' polarity characters are correctly positioned.

Measure the inner or outer dimension.

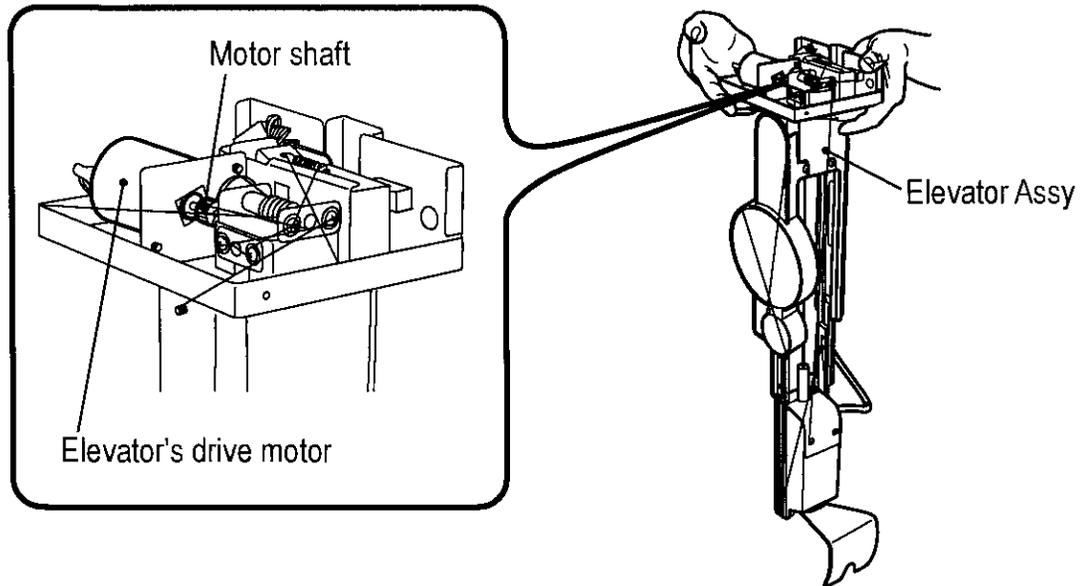


(5) Replacing the wire

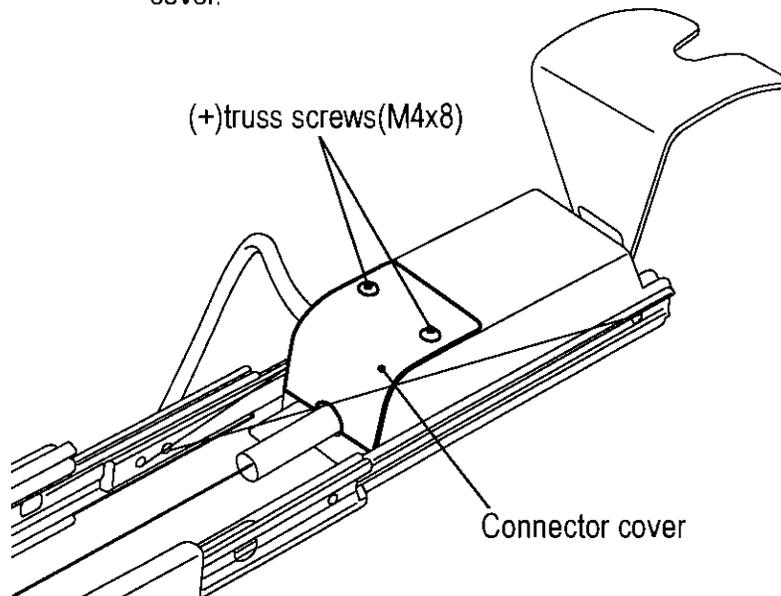
⚠ WARNING

- To protect the service staff and other people from an electric shock, accident and injury, and to prevent damage to the electrical circuitry of the machine, always turn off the power switch before initiating the described task.

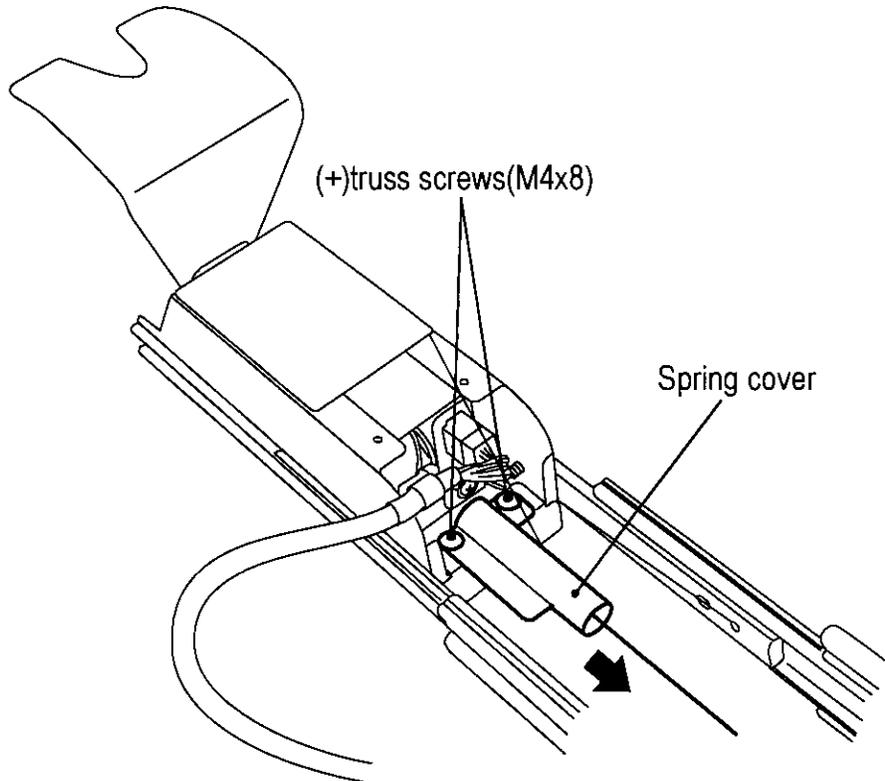
1. Remove the maintenance door of the machine with the key and turn off the power switch. (Refer to 7-3-1 Turning the power on.)
2. Remove the Elevator Assy.
(Refer to 8-4-3 (1) Removing/reinstalling the Elevator Assy.)
3. Manually turn the shaft of the elevator's drive motor and extend the Elevator Assy to its maximum capacity.



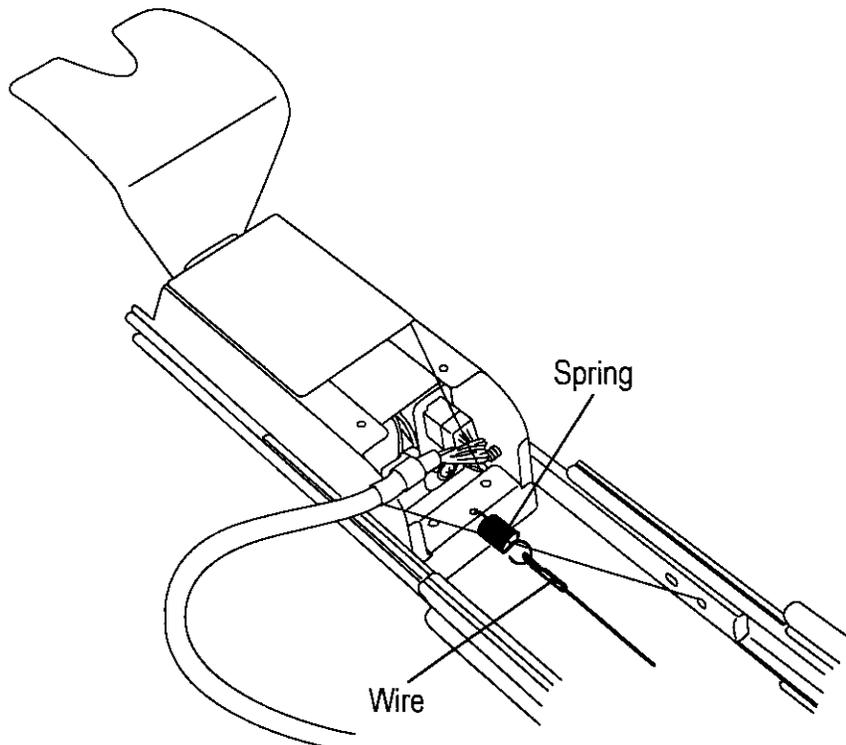
4. Unfasten the 2 (+) truss screws (M4x8) and remove the connector cover.



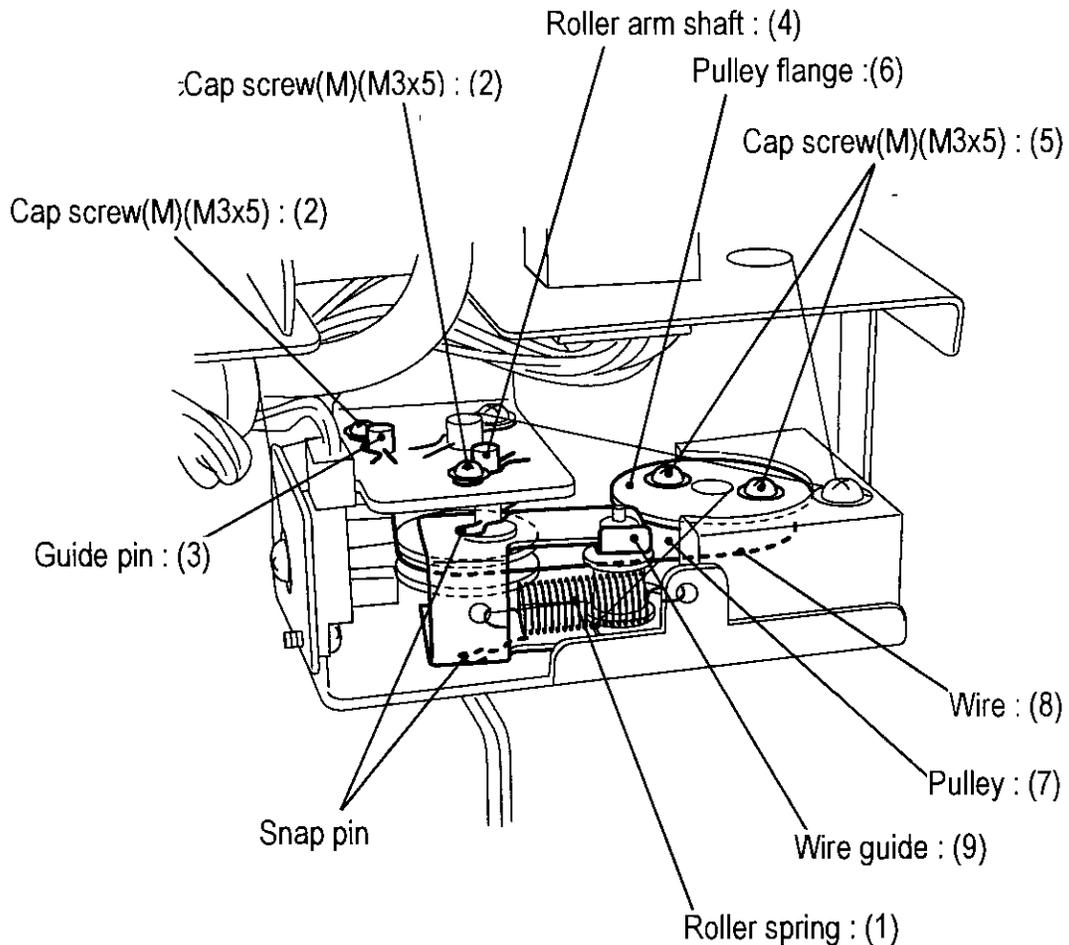
5. Remove the 2 (+) truss screws (M4x8), then take out the spring cover with the wire still through and slide it along the wire in direction of the arrow.



6. Remove the wire from the spring and pull it out of the spring cover.

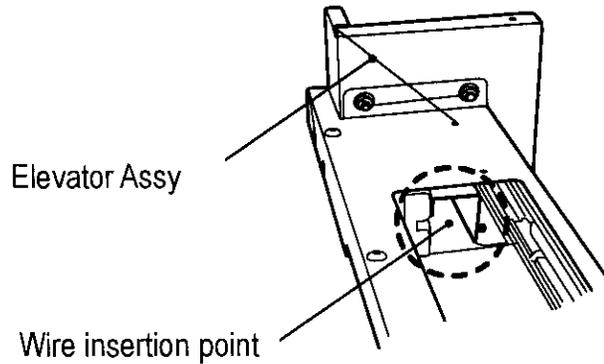


7. Remove the roller spring : (1) .
8. Remove the 2 cap screws (M) (M3x5) : (2); then pull out the guide pin : (3) and the roller arm shaft : (4) on the one side only.
9. Remove the 2 cap screws (M) (M3x5) : (5), then take out the pulley flange : (6) .
10. Remove the wire : (8) terminal (round) from the pulley : (7) .
11. Pull out the wire terminal (round) from in between the wire guide : (9), the roller arm shaft : (4), and the guide pin : (3); then remove the wire : (8) .

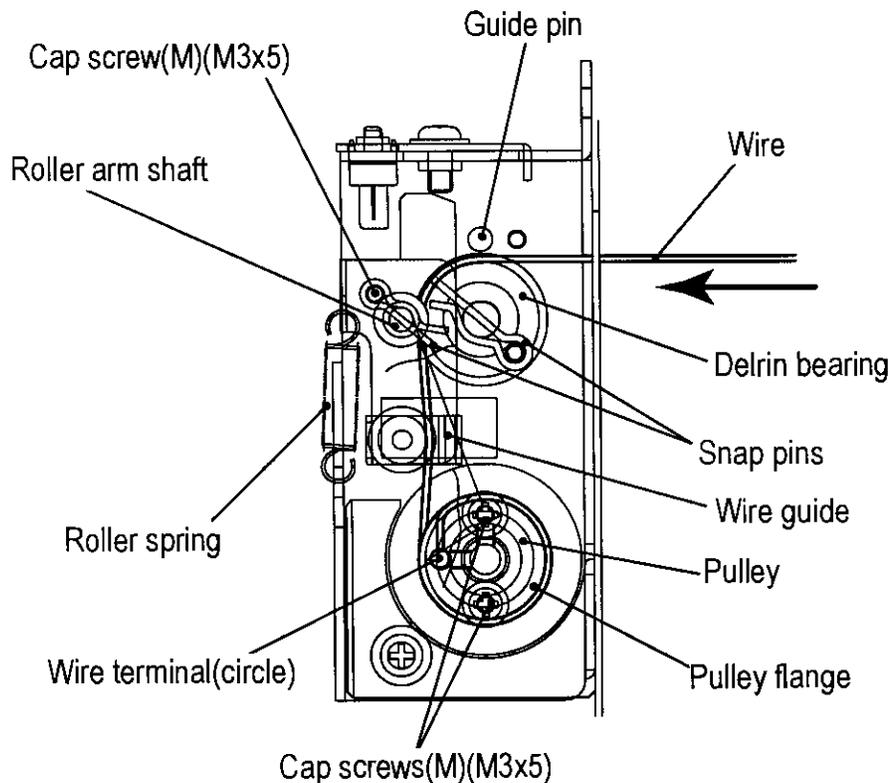


[How to attach the wire]

1. Insert the wire from underneath the Elevator Assy.



2. Align the wire along the groove of the Delrin bearing.
3. Insert the guide pin.
4. Pull the wire through in between the roller arm shaft and the Delrin bearing, then pull it through inside the wire guide, and insert it into the roller arm shaft.
5. Insert the wire terminal (round) into the groove of the pulley, then attach the pulley flange with the 2 cap screws (M) (M3x5).
6. Assemble the guide pin and the roller arm shaft with the 2 snap pins and 2 cap screws (M) (M3x5); then attach the roller spring.



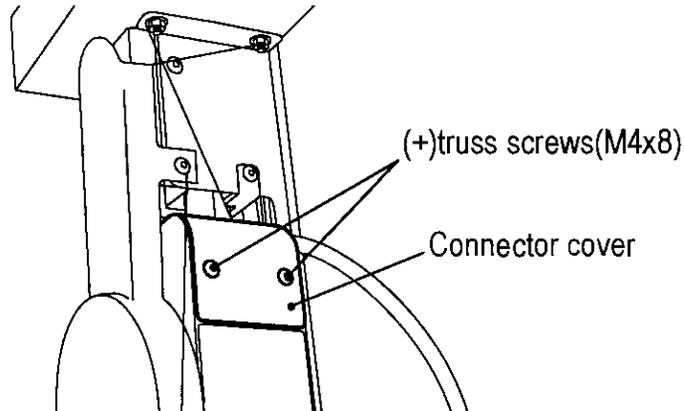
8-4-4 Shovel Assy -To be conducted by a technician only-

(1) Removing/reinstalling the Shovel Assy

⚠ WARNING

- To protect the service staff and other people from an electric shock, accident and injury, and to prevent damage to the electrical circuitry of the machine, always turn off the power switch before initiating the described task.

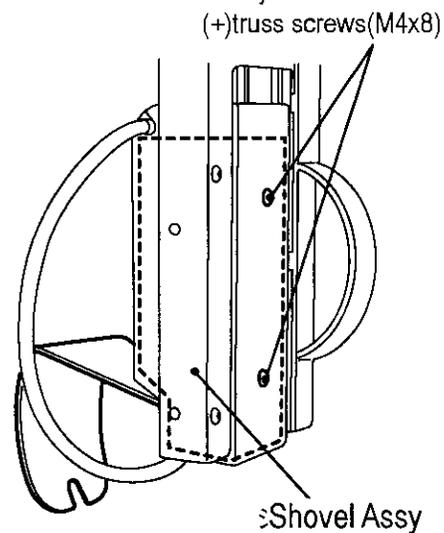
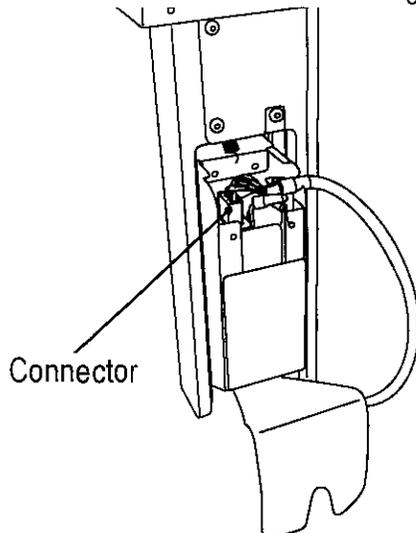
1. Remove the maintenance door of the machine with the key and turn off the power switch.
(Refer to 7-3-1 Turning the power on.)
2. Open the acrylic door.
(Refer to 5-3-2 How to open/close the acrylic door.)
3. Unfasten the 2 (+) truss screws (M4×8) and remove the connector cover.



4. Unfasten the connector and the 2 (+) truss screws (M4×8), then remove the Shovel Assy.
※ The Shovel Assy can be pulled out downwards by slightly lifting it first.
5. Reverse procedures to reinstall.

NOTICE

- When reinstalling, make sure the connector is locked securely.

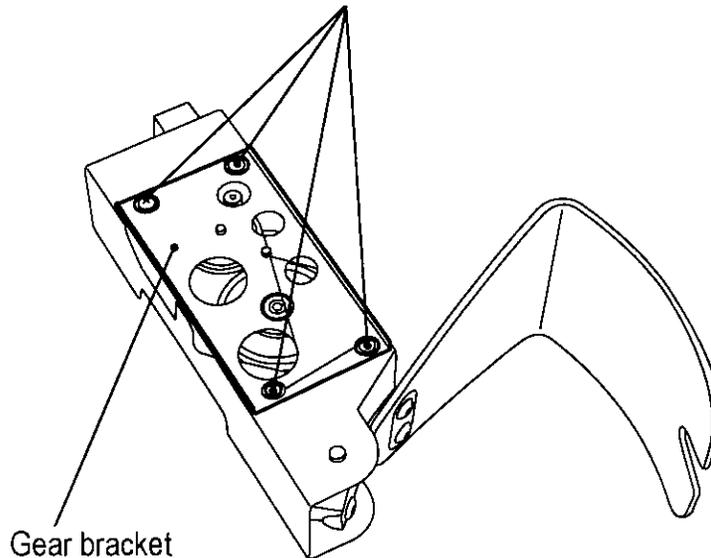


(2) Replacing the gear

⚠ WARNING

- To protect the service staff and other people from an electric shock, accident and injury, and to prevent damage to the electrical circuitry of the machine, always turn off the power switch before initiating the described task.

1. Remove the maintenance door of the machine with the key and turn off the power switch.
(Refer to 7-3-1 Turning the power on.)
2. Remove the Shovel Assy.
(Refer to 8-4-4 (1) Removing/reinstalling the Shovel Assy.)
3. Unfasten the 4 cap screws (M) (M3×6) and remove the gear bracket.
Cap screws(M)(M3x6)

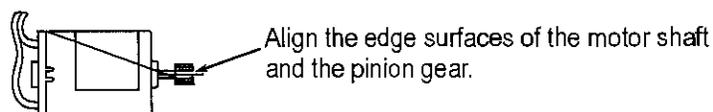
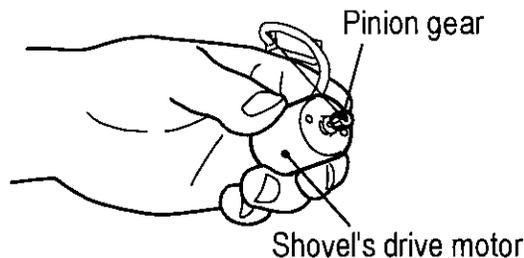


[For pinion gears]

1. Replace the pinion gear.
2. Reverse procedures to reinstall.

NOTICE

- Upon reinstalling, make sure that the edge surfaces of the motor shaft and the pinion gear are aligned. In doing so, make sure that no grease gets applied onto the motor shaft.



[For gear A]

1. Replace the gear A.
2. Reverse procedures to reinstall.

[For gear C]

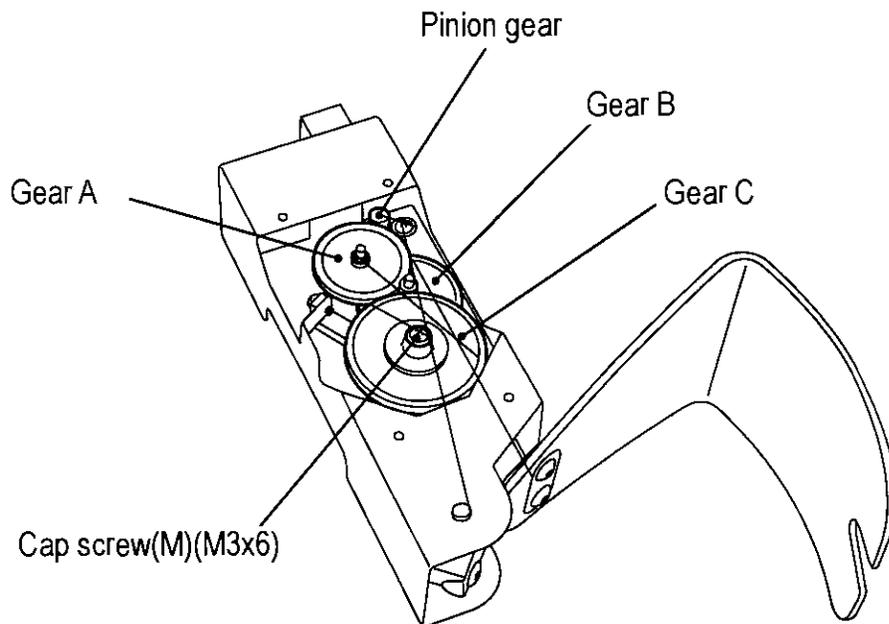
1. Remove the cap screw (M) (M3×6) and replace the gear C.
2. Reverse procedures to reinstall.

[For gear B]

1. Remove the gears A and C, then replace the gear B.
2. Reverse procedures to reinstall.



• When attaching the gears, make sure to apply lithium grease on each gear.
(Do not use Molybdenum grease. Using such grease will shorten the longevity of the gears.)



(3) Replacing the shovel's photo sensor

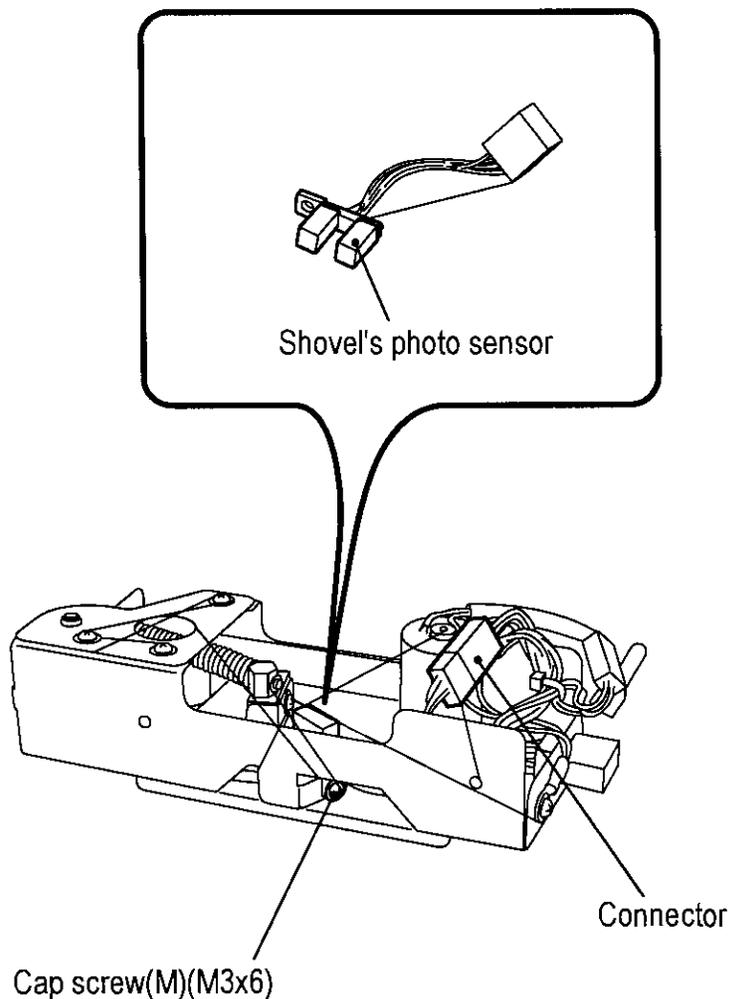
⚠ WARNING

- To protect the service staff and other people from an electric shock, accident and injury, and to prevent damage to the electrical circuitry of the machine, always turn off the power switch before initiating the described task.

1. Remove the maintenance door of the machine with the key and turn off the power switch.
(Refer to 7-3-1 Turning the power on.)
2. Remove the Shovel Assy.
(Refer to 8-4-4 (1) Removing/reinstalling the Shovel Assy.)
3. Remove the cap screw (M) (M3×6) and the connector, then replace the shovel's photo sensor.
4. Reverse procedures to reinstall.

ⓘ NOTICE

- When reinstalling, make sure the connector is locked securely.



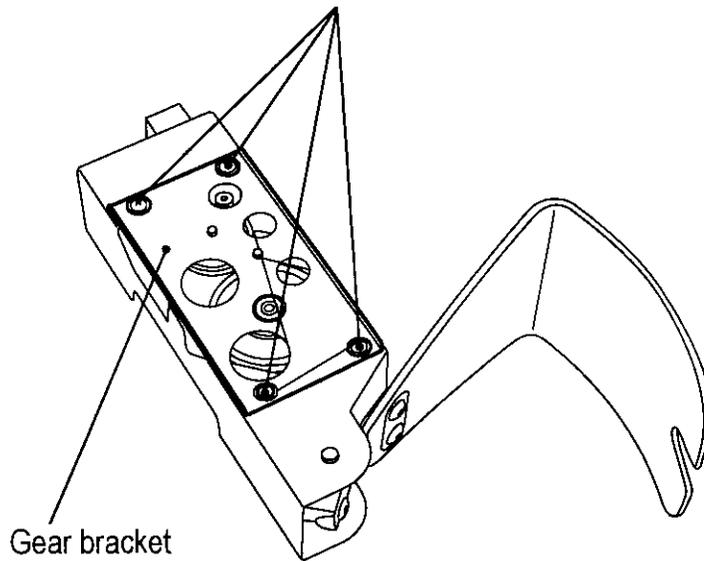
(4) Replacing the shovel's drive motor

⚠ WARNING

- To protect the service staff and other people from an electric shock, accident and injury, and to prevent damage to the electrical circuitry of the machine, always turn off the power switch before initiating the described task.

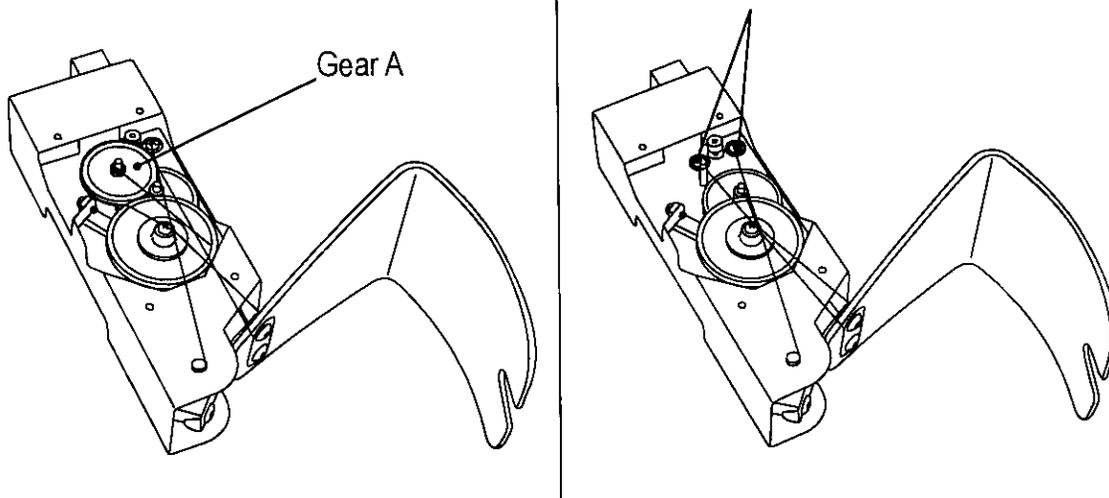
1. Remove the maintenance door of the machine with the key and turn off the power switch.
(Refer to 7-3-1 Turning the power on.)
2. Remove the Shovel Assy.
(Refer to 8-4-4 (1) Removing/reinstalling the Shovel Assy.)
3. Unfasten the 4 cap screws (M) (M3×6) and remove the gear bracket.

Cap screws(M)(M3×6)

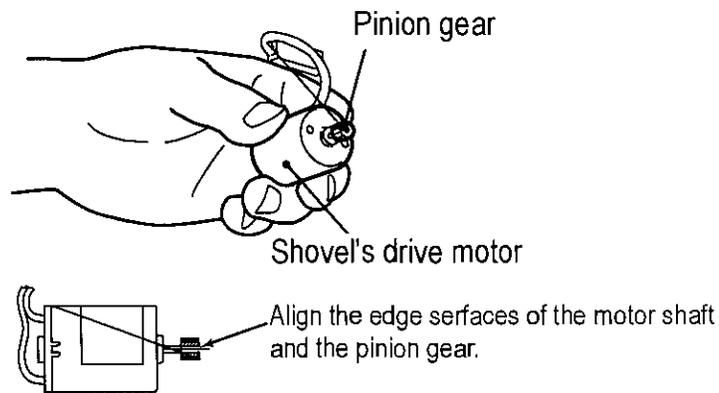
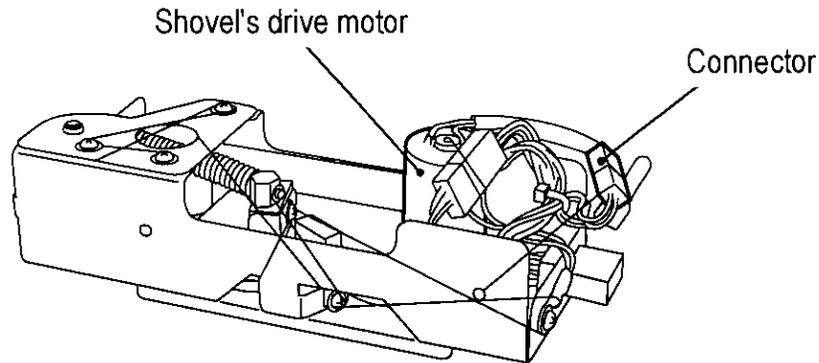


4. Remove the gear A and the 2 cap screws (M) (M3×6), then take out the shovel's drive motor.

Cap screws(M)(M3×6)



5. Remove the connector and the pinion gear; then replace the shovel's drive motor.



6. Reverse procedures to reinstall.

NOTICE

- When attaching the gears, make sure to apply lithium grease on each gear. (Do not use Molybdenum grease. Using such grease will shorten the longevity of the gears.)
- Upon reinstalling, make sure that the edge surfaces of the motor shaft and the pinion gear are aligned. In doing so, make sure that no grease gets applied on the motor shaft.
- When reinstalling, make sure the connector is locked securely.

8-4-5 Sign Tower Assy -To be conducted by a technician only-

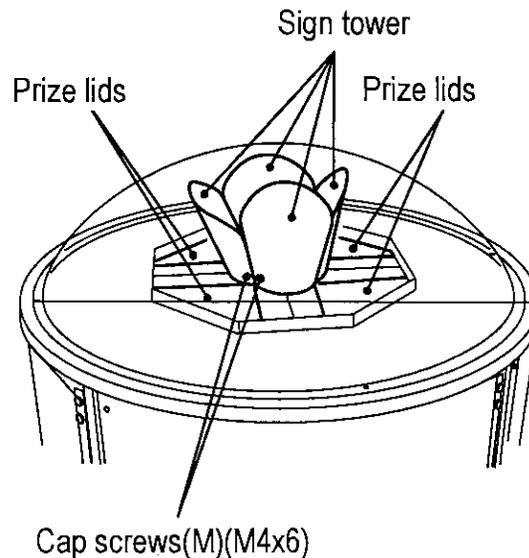
(1) Replacing the Sign Tower

⚠ WARNING

To replace the sign tower will require high-reaching tasks. Make sure to use a step ladder to facilitate work. Forcing the task from a low position by straining your body may lead to possible injury or machine failure.

The fluorescent lamp inside the machine will remain hot even after the power switch is turned off. Do not touch the lamp area to avoid suffering burns.

1. Remove the maintenance door of the machine with the key and turn off the power switch.
(Refer to 7-3-1 Turning the power on.)
2. Open the acrylic door.
(Refer to 5-3-2 How to open/close the acrylic door.)
3. Open the prize lid.
(Refer to 7-7-3 How to display prizes.)
4. Remove the 2 cap screws (M) (M4×6) and replace the sign tower.
5. Reverse procedures to reinstall.

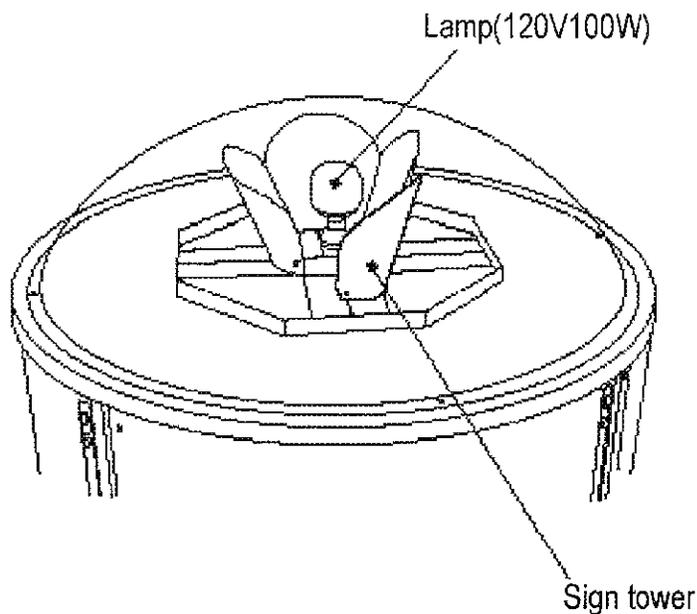


(2) Replacing the fluorescent lamp

WARNING

- To protect the service staff and other people from an electric shock, accident and injury, and to prevent damage to the electrical circuitry of the machine, always turn off the power switch before initiating the described task.
- The lamp inside the machine will remain hot even after the power switch is turned off. Do not touch the lamp area to avoid suffering burns.
- When replacing the fluorescent lamp, make sure to always use that of the same specification (120V100W). Failing to do so may generate heat or cause machine failure.

1. Remove the maintenance door of the machine with the key and turn off the power switch.
(Refer to 7-3-1 Turning the power on.)
2. Open the acrylic door.
(Refer to 5-3-2 How to open/close the acrylic door.)
3. Remove the sign tower.
(Refer to 8-4-5 (1) Replacing the sign tower.)
4. Replace the fluorescent lamp (100W).
[Make sure to use 120V100W for the fluorescent lamp.]
5. Reverse procedures to reinstall.



8-4-6 Support Finger Assy -To be conducted by a technician only-

(1) Removing/reinstalling the support finger

 **WARNING**

• To protect the service staff and other people from an electric shock, accident and injury, and to prevent damage to the electrical circuitry of the machine, always turn off the power switch before initiating the described task.

1. Remove the maintenance door of the machine with the key and turn off the power switch.
(Refer to 7-3-1 Turning the power on.)
2. Attach the support finger.
(Refer to 7-8-4 (1) Attaching/detaching the support finger.)
3. To remove, reverse procedures.

8-4-7 Lower Cabinet Assy -To be conducted by a technician only-

(1) Replacing the fuse

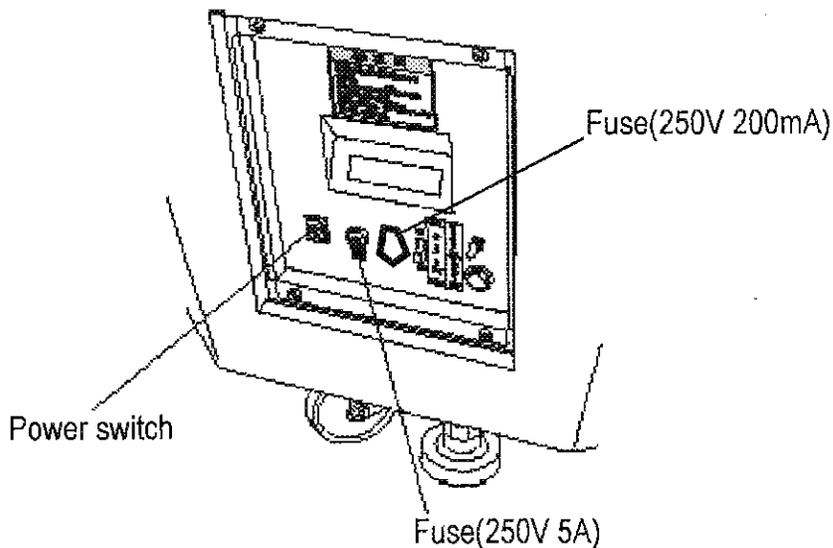


To protect the service staff and other people from an electric shock, accident and injury, and to prevent damage to the electrical circuitry of the machine, always turn off the power switch and unplug the cord from the electrical outlet before initiating the described task.
To prevent fire or malfunction, do not use any other fuse except that specified for this machine. For fuse replacement, contact your distributor.



• If the fuse goes out instantly after replacement, a different problem may be the cause. In such an event, immediately unplug the power cord and contact your distributor for further support.

1. Remove the maintenance door of the machine with the key and turn off the power switch.
(Refer to 7-3-1 Turning the power on.)
2. Remove the fuse holder cover (head part) by turning the flathead screwdriver to the left, then take out the fuse.
3. Replace the fuse and tighten by turning the cover (head part) to the right.
[Make sure to use the correct fuse rating (250V 5A).]
(250V 200mA)



(2) Replacing the LCD PC board

! WARNING

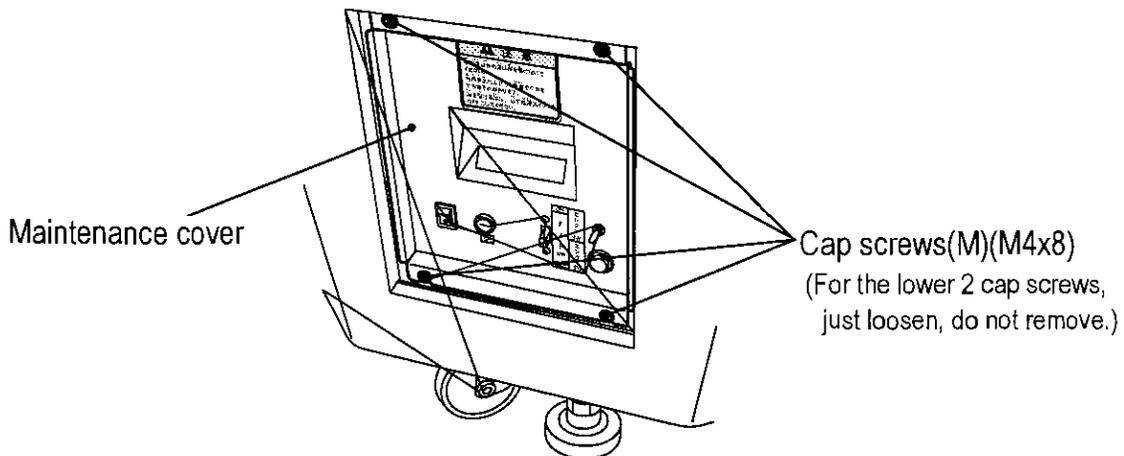
- To protect the service staff and other people from an electric shock, accident and injury, and to prevent damage to the electrical circuitry of the machine, always turn off the power switch and unplug the cord from the electrical outlet before initiating the described task.

NOTICE

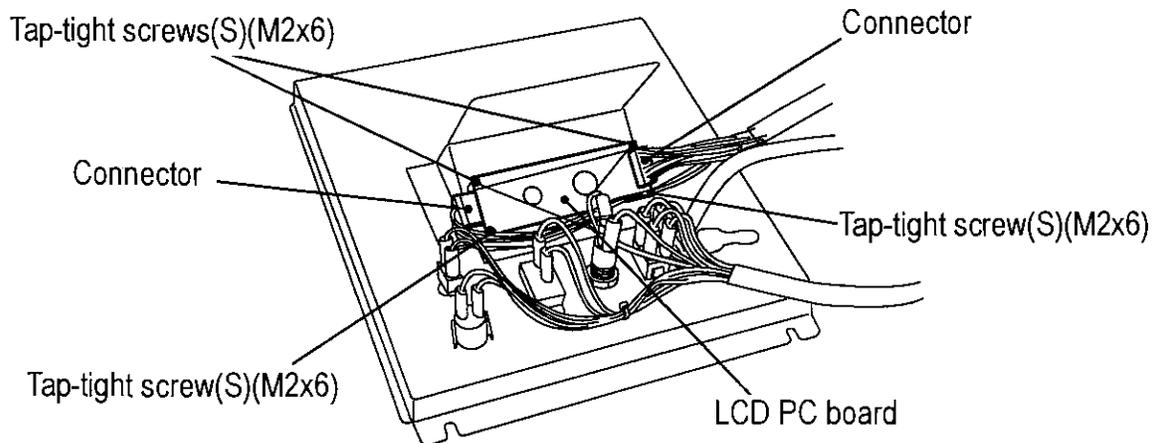
- The PC board is sensitive to static electricity. If a technician charged with static electricity handles the PC board, the parts on the PC board can get damaged.

Before handling the PC board, make sure to always touch the grounded metal surface to discharge any static electricity.

1. Remove the maintenance door of the machine with the key and turn off the power switch.
(Refer to 7-3-1 Turning the power on.)
2. Unfasten the upper 2 cap screws (M) (M4×8) and loosen the lower 2, then remove the maintenance cover.



3. Remove the 4 tap-tight screws (S) (M2×6) and the 2 connectors, then replace the LCD PC board.



4. Reverse procedures to reinstall.

NOTICE

- When reinstalling, make sure the connector is locked securely.

(3) Replacing the Game PC board

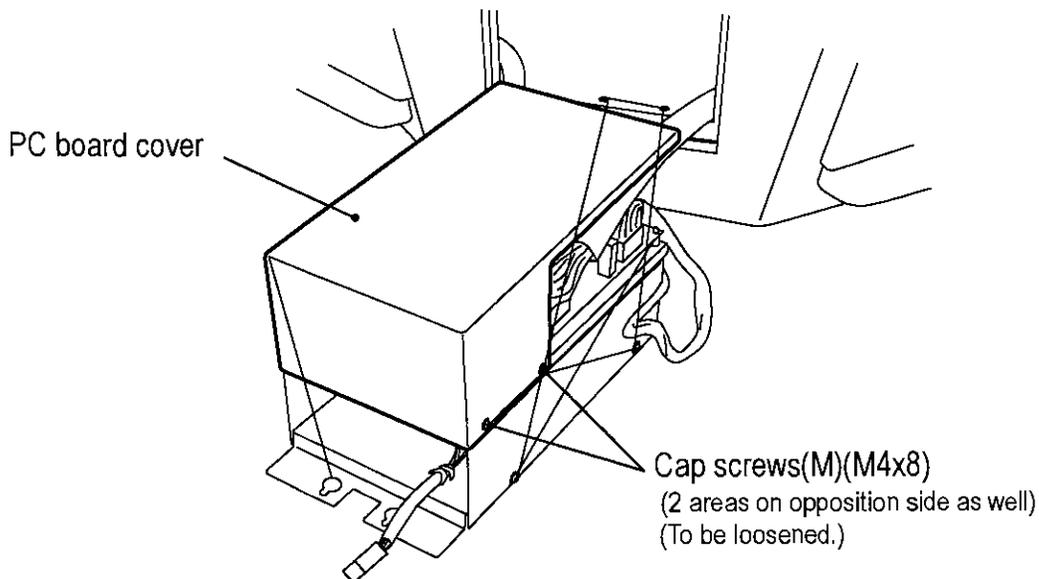
⚠ WARNING

- To protect the service staff and other people from an electric shock, accident and injury, and to prevent damage to the electrical circuitry of the machine, always turn off the power switch and unplug the cord from the electrical outlet before initiating the described task.
The PC board inside the machine will remain hot even after the power switch is turned off.
Do not touch the PC board area to avoid suffering burns.

NOTICE

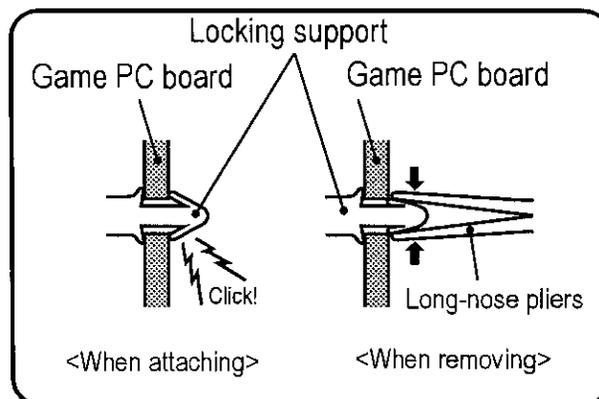
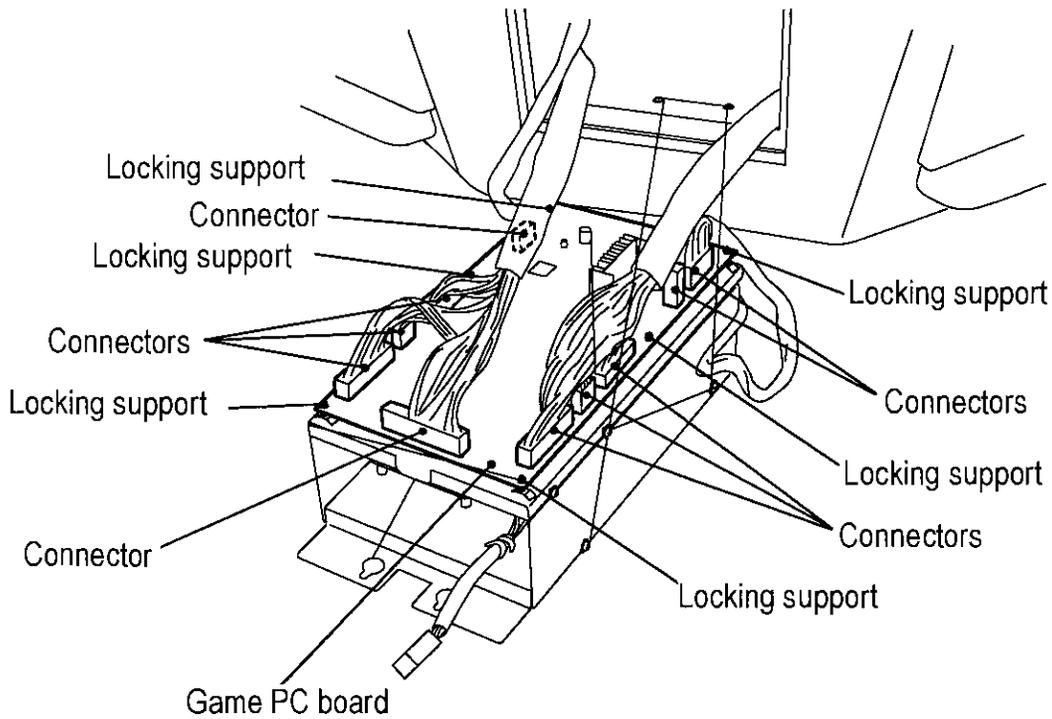
- The PC board is sensitive to static electricity. If a technician charged with static electricity handles the PC board, the parts on the PC board can get damaged.
Before handling the PC board, make sure to always touch the grounded metal surface to discharge any static electricity.

1. Remove the maintenance door of the machine with the key and turn off the power switch.
(Refer to 7-3-1 Turning the power on.)
2. Remove the Power Assy.
(Refer to 8-4-11 (1) Removing/reinstalling the Power Assy.)
3. Loosen the 4 cap screws (M) (M4×8) and remove the PC board cover.



4. Remove the 10 connectors and the 6 locking supports; then replace the game PC board.
5. Reverse procedures to reinstall.

NOTICE - When reinstalling, make sure the connector is locked securely.

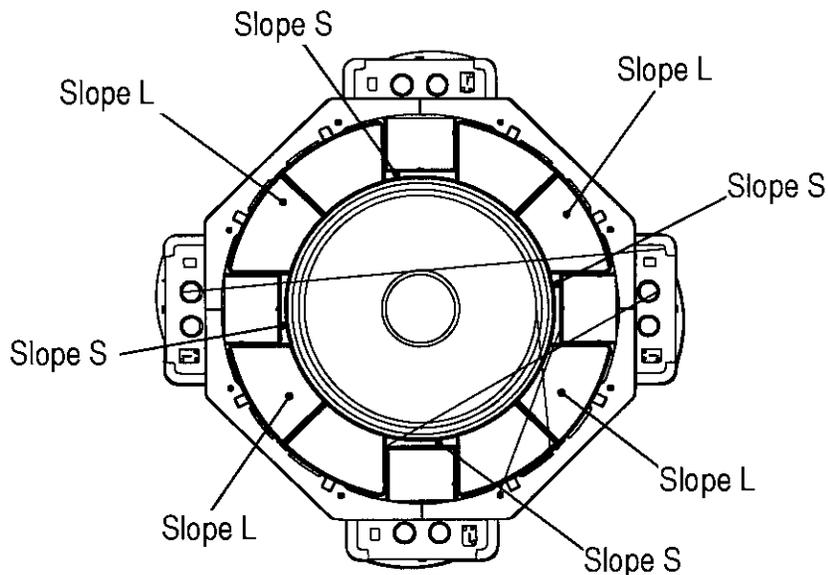


(4) Removing/reinstalling the slope

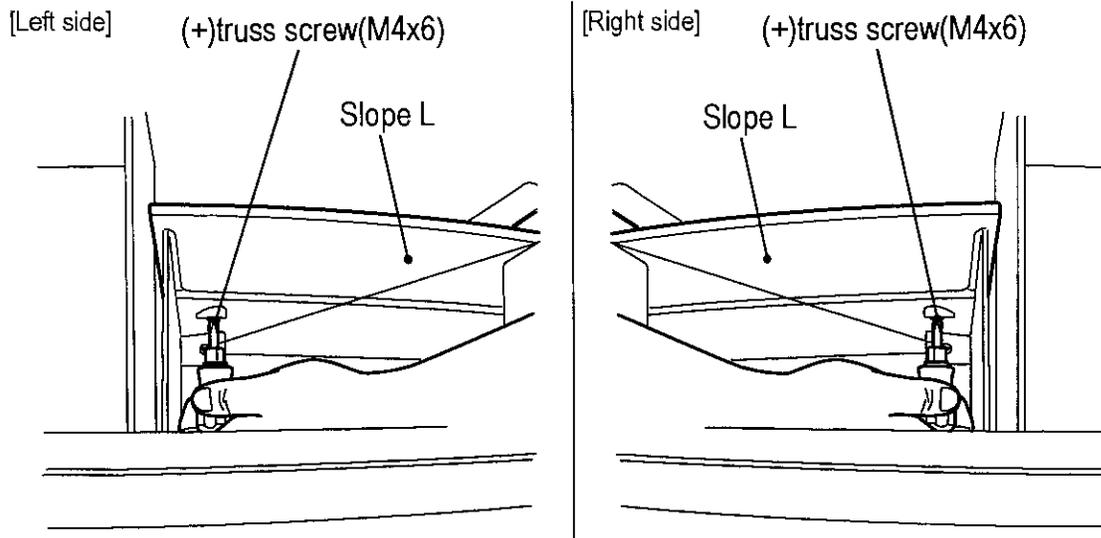
⚠ WARNING

- To protect the service staff and other people from an electric shock, accident and injury, and to prevent damage to the electrical circuitry of the machine, always turn off the power switch before initiating the described task.

1. Remove the maintenance door of the machine with the key and turn off the power switch.
(Refer to 7-3-1 Turning the power on.)
2. Open the acrylic door.
(Refer to 5-3-2 How to open/close the acrylic door.)



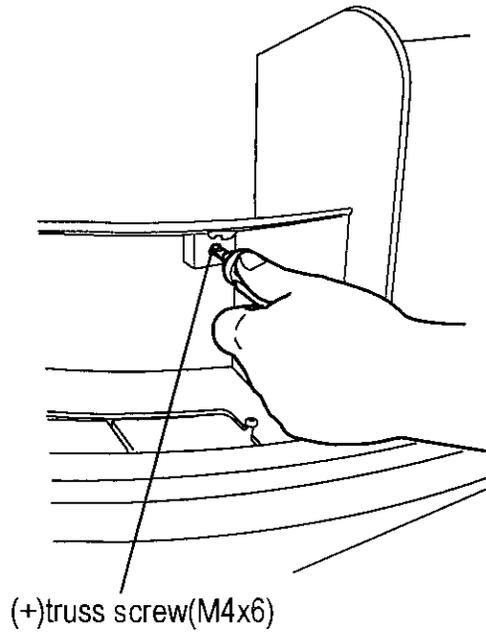
3. Unfasten the 2 (+) truss screws (M4x6) and remove the Slope L.



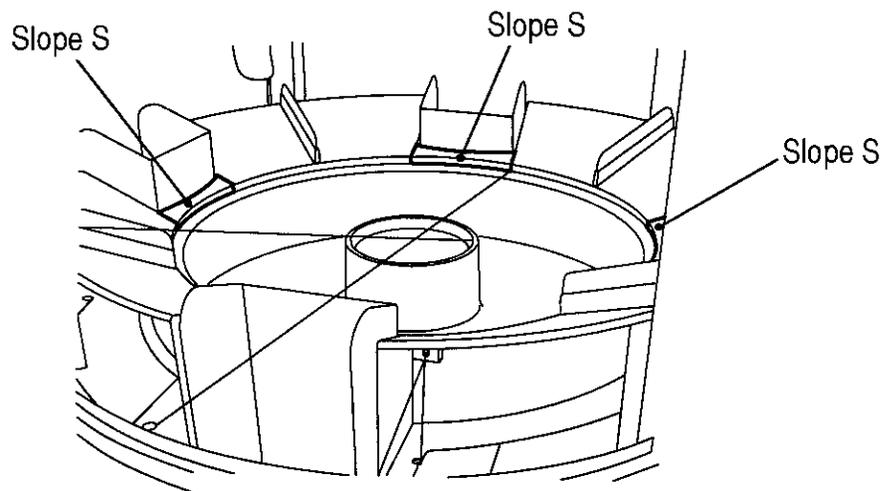
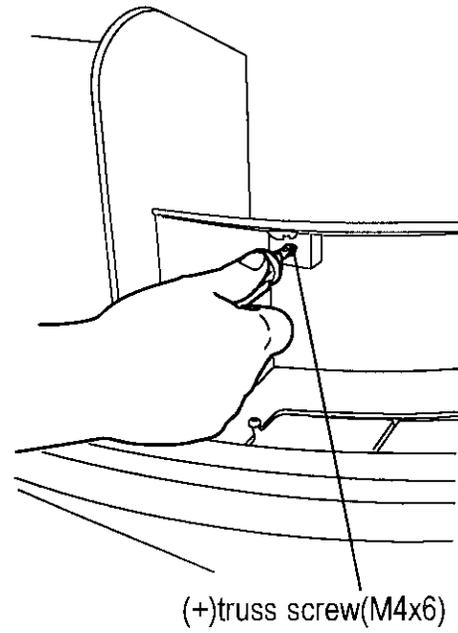
4. Reverse procedures to reinstall.

5 Unfasten the 2 (+) truss screws (M4x6) and remove the Slope S.

[Left side]



[Right side]



6. Reverse procedures to reinstall.

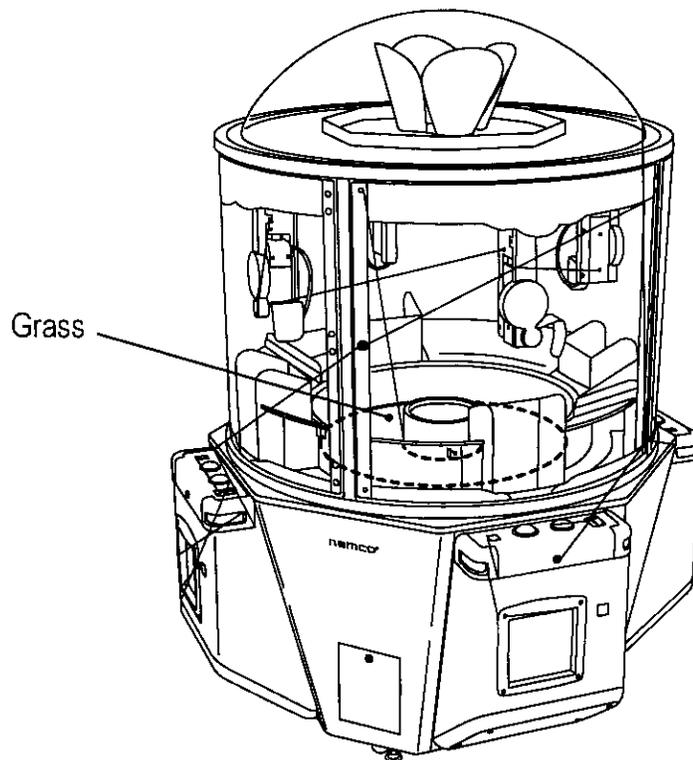
8-4-8 Table Assy -To be conducted by a technician only-

(1) Replacing the turf

WARNING

To protect the service staff and other people from an electric shock, accident and injury, and to prevent damage to the electrical circuitry of the machine, always turn off the power switch before initiating the described task.

1. Remove the maintenance door of the machine with the key and turn off the power switch.
(Refer to 7-3-1 Turning the power on.)
2. Open the acrylic door.
(Refer to 5-3-2 How to open/close the acrylic door.)
3. Remove the old grass and replace with a new one.
4. Close the acrylic door.
(Refer to 5-3-2 How to open/close the acrylic door.)

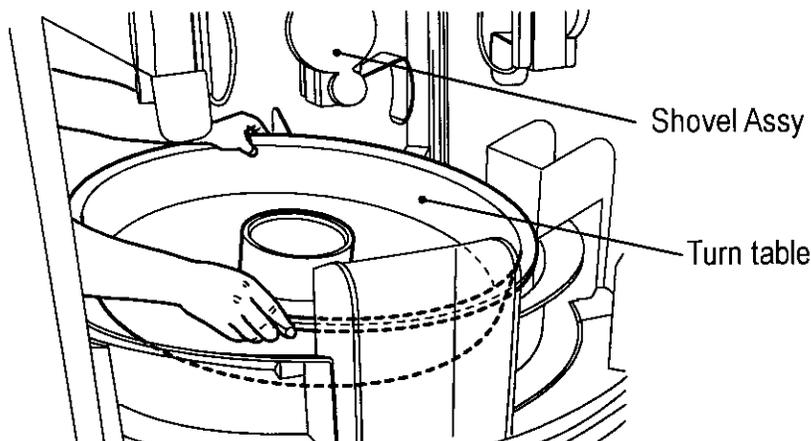


(2) Replacing the turn table

⚠ WARNING

To protect the service staff and other people from an electric shock, accident and injury, and to prevent damage to the electrical circuitry of the machine, always turn off the power switch before initiating the described task.

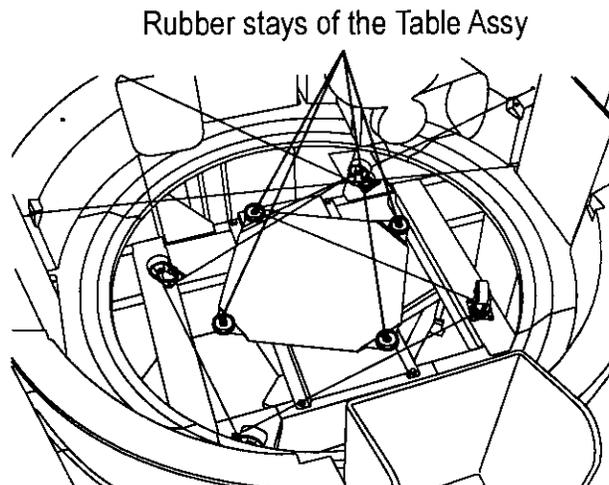
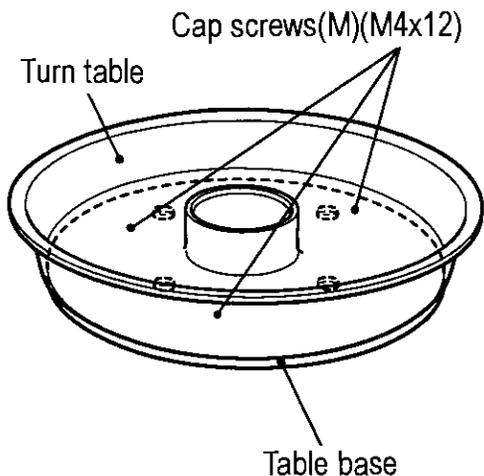
1. Remove the maintenance door of the machine with the key and turn off the power switch.
(Refer to 7-3-1 Turning the power on.)
2. Open the acrylic door.
(Refer to 5-3-2 How to open/close the acrylic door.)
3. Slide the Shovel Assy inwards.
4. Remove the slope.
(Refer to 8-4-7 (4) Removing/reinstalling the slope.)
5. Remove the turn table by lifting it upwards.



6. Remove the 3 cap screws (M) (M4×12) and replace the turn table.
7. Reverse procedures to reinstall.

NOTICE

• Upon reinstalling, make sure to put the rubber stays (4 areas) of the Table Assy inside the hole of the table base.

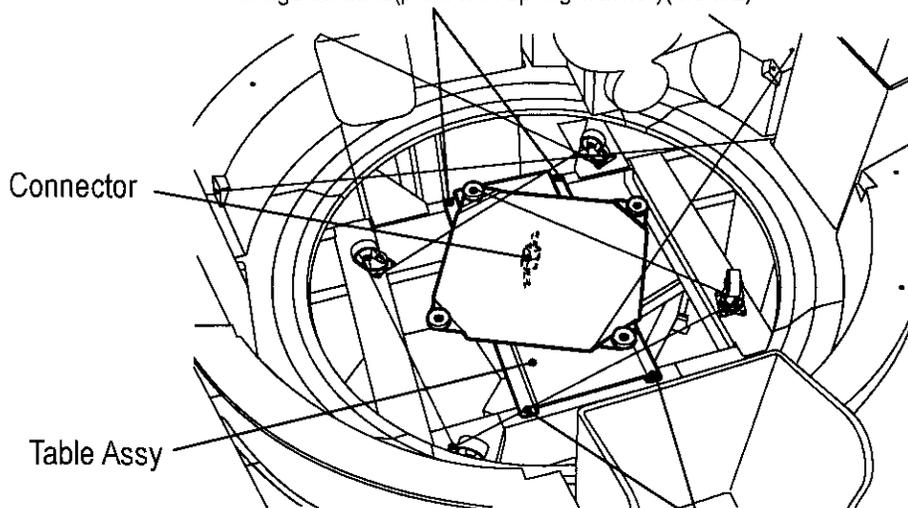


(3) Replacing the table's drive motor and gear head

! WARNING

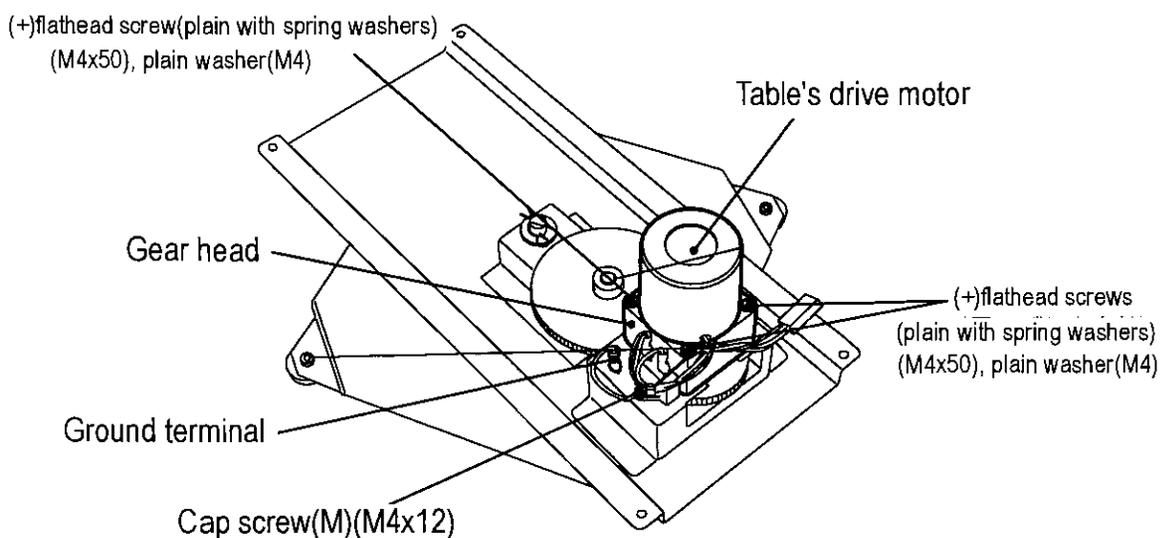
- To protect the service staff and other people from an electric shock, accident and injury, and to prevent damage to the electrical circuitry of the machine, always turn off the power switch before initiating the described task.

1. Remove the maintenance door of the machine with the key and turn off the power switch.
(Refer to 7-3-1 Turning the power on.)
2. Remove the turn table.
(Refer to 8-4-8 (2) Replacing the turn table.)
3. Remove the 4 hexagonal bolts (plain with spring washer) (M5×12) and the connector; then take out the Table Assy.
Hexagonal bolts(plain with spring washer)(M5x12)



Hexagonal bolts(plain with spring washer)(M5x12)

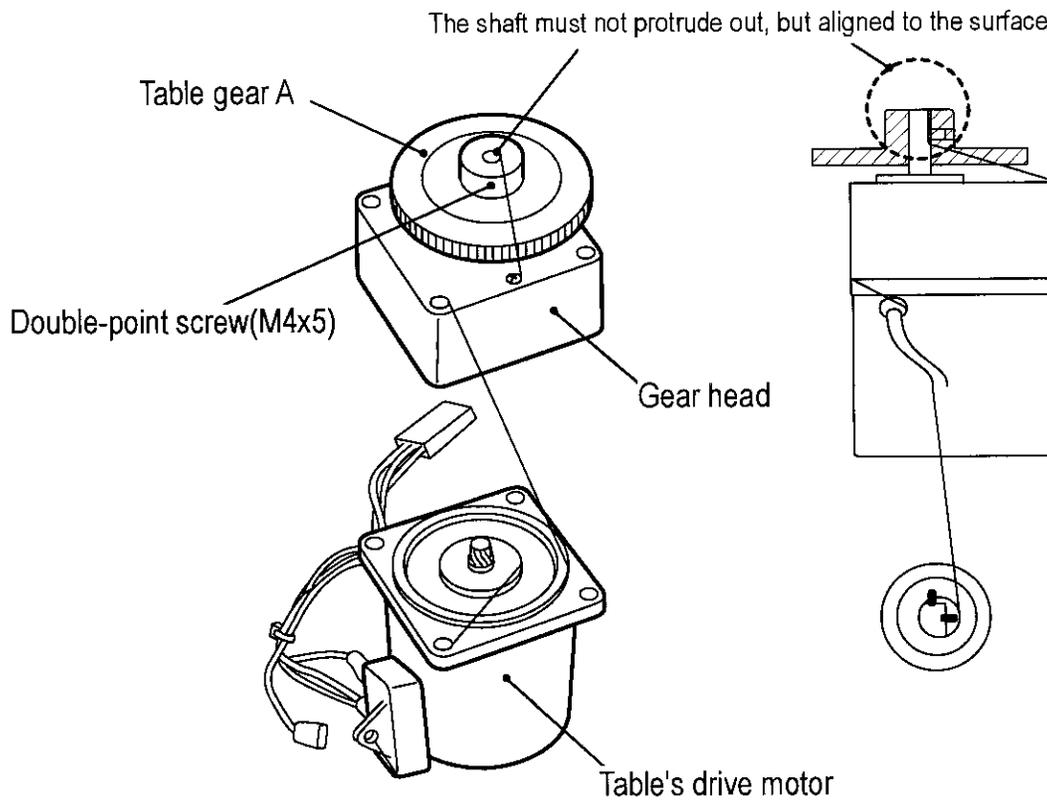
4. Unfasten the 4 (+) flathead screws (plain with spring washers) (M4×50), the 4 plain washers (M4), the cap screw (M) (M4×12), and the ground terminal; then remove the table's drive motor and the gear head.



5. Loosen the 2 double-point screws (M4×5) and remove the table gear A; then replace the table's drive motor and the gear head.
6. Reverse procedures to reinstall.

NOTICE

• Upon tightening the double-point screws (M4×5), align the gear head shaft's edge surface and the table gear A's surface by adjusting them to the gear head shaft's D-cut surface.



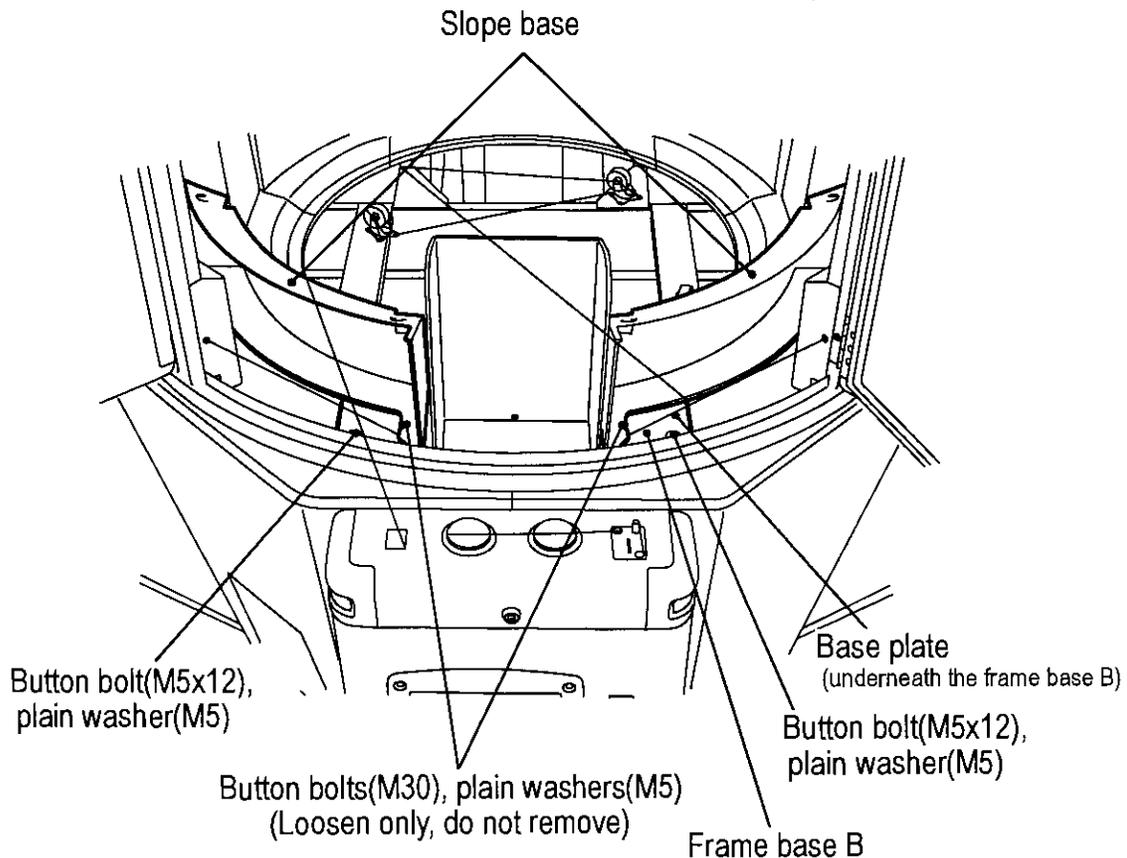
8-4-9 Shoot Assy -To be conducted by a technician only-

(1) Removing/reinstalling the Shoot Assy

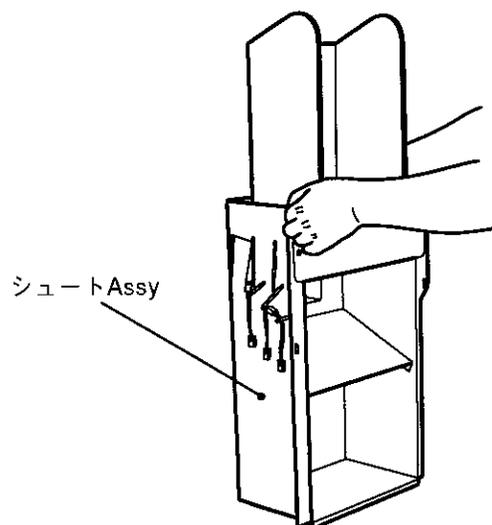
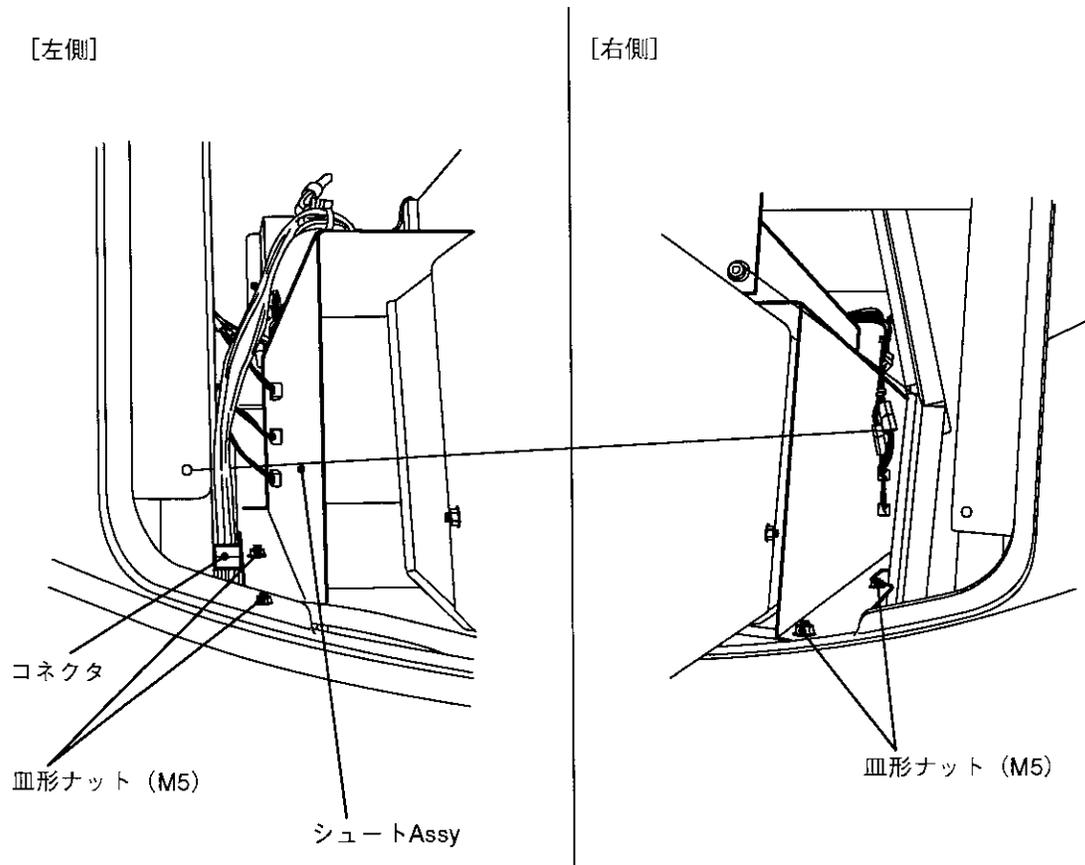
⚠ WARNING

- To protect the service staff and other people from an electric shock, accident and injury, and to prevent damage to the electrical circuitry of the machine, always turn off the power switch before initiating the described task.

1. Remove the maintenance door of the machine with the key and turn off the power switch.
(Refer to 7-3-1 Turning the power on.)
2. Open the acrylic door.
(Refer to 5-3-2 How to open/close the acrylic door.)
3. Remove the slopes L and S.
(Refer to 8-4-7 (4) Removing/reinstalling the slope.)
4. Remove the turn table.
(Refer to 8-4-8 (2) Replacing the turn table.)
5. Loosen the 2 button bolts (M5×30) and remove the 2 slope bases.
6. Unfasten the 2 button bolts (M5×12) and the 2 plain washers (M5); then remove the frame base B and the base plate.



7. Unfasten the r countersunk nuts (M5) and the connector; then remove the Shoot Assy.
8. Reverse procedures to reinstall.

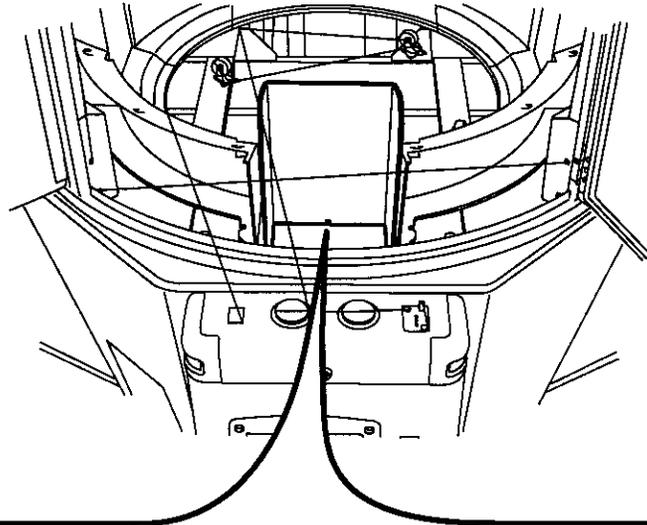


(2) Removing/reinstalling the wall

⚠ WARNING

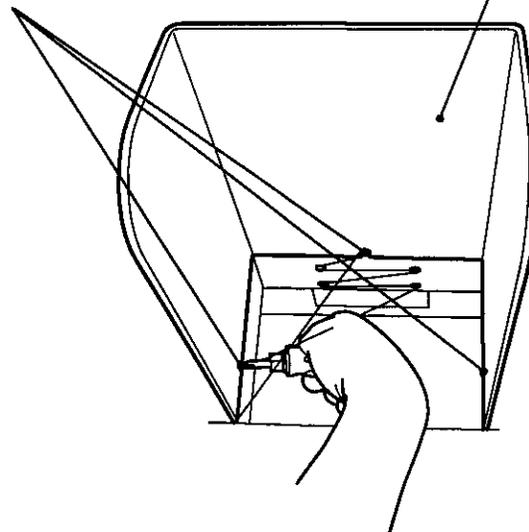
- To protect the service staff and other people from an electric shock, accident and injury, and to prevent damage to the electrical circuitry of the machine, always turn off the power switch before initiating the described task.

1. Remove the maintenance door of the machine with the key and turn off the power switch.
(Refer to 7-3-1 Turning the power on.)
2. Open the acrylic door.
(Refer to 5-3-2 How to open/close the acrylic door.)
3. Loosen the 3 (+) truss screws (M4×8) and replace the wall by lifting it upwards.
4. Reverse procedures to reinstall.



(+)truss screws(M4x8)
(Loosen only, do not remove)

Wall



(3) Replacing the prize area's photo sensor

⚠ WARNING

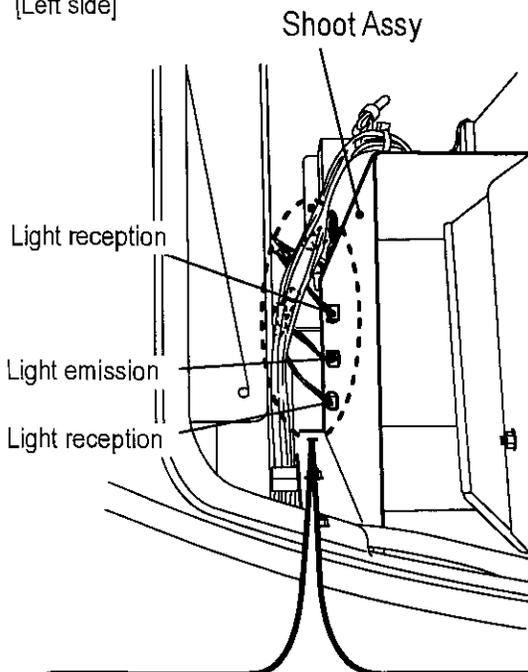
• To protect the service staff and other people from an electric shock, accident and injury, and to prevent damage to the electrical circuitry of the machine, always turn off the power switch before initiating the described task.

1. Remove the maintenance door of the machine with the key and turn off the power switch.
(Refer to 7-3-1 Turning the power on.)
2. Remove the frame base B and the base plate.
(Refer to 8-4-9 (1) Removing/reinstalling the Shoot Assy, steps 2-6.)
3. Remove the hexagonal nut with flange (M3) and the connector; then replace the prize area's photo sensor.
4. Reverse procedures to reinstall.

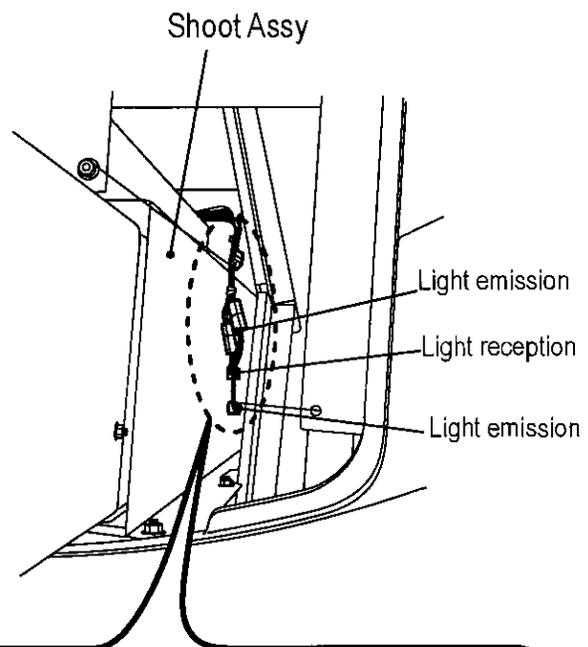
NOTICE

• When reinstalling, make sure the connector is locked securely.

[Left side]

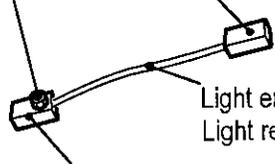


[Right side]



Hexagonal nut with flange(M3)

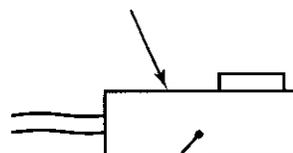
Connector



Light emission is with 2 harnesses
Light reception is with 3 harnesses

Prize area's photo sensor

Attachment surface



Prize area's photo sensor

8-4-10 Control Panel Assy -To be conducted by a technician only-

(1) Removing/reinstalling the Control Panel Assy

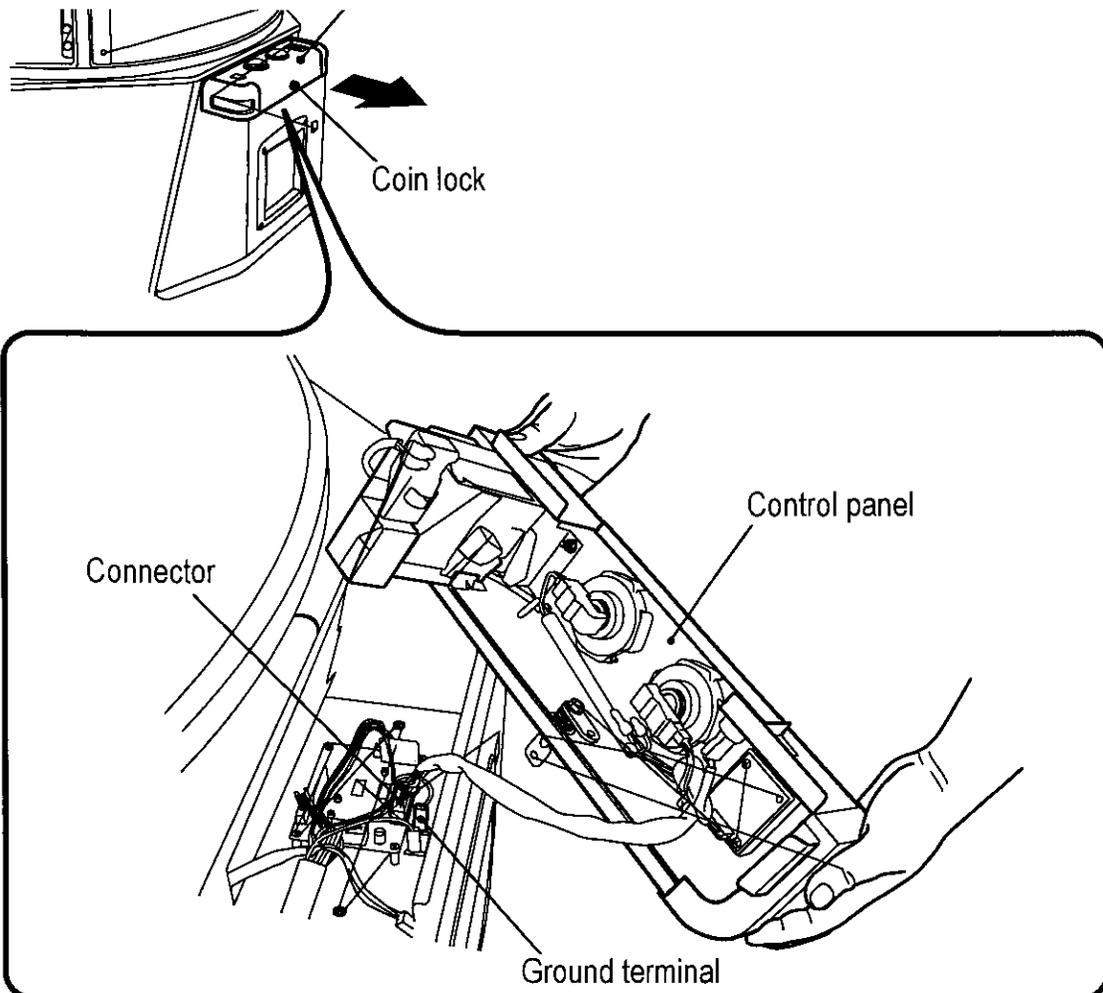
⚠ WARNING

- To protect the service staff and other people from an electric shock, accident and injury, and to prevent damage to the electrical circuitry of the machine, always turn off the power switch before initiating the described task.

1. Remove the maintenance door of the machine with the key and turn off the power switch.
(Refer to 7-3-1 Turning the power on.)
2. Open the control panel with the key and pull it towards you. Remove the connector and the ground terminal; then take out the control panel.
3. Reverse procedures to reinstall.

ⓘ NOTICE

- When reinstalling, make sure the connector is locked securely.



(2) Replacing the illumination switch

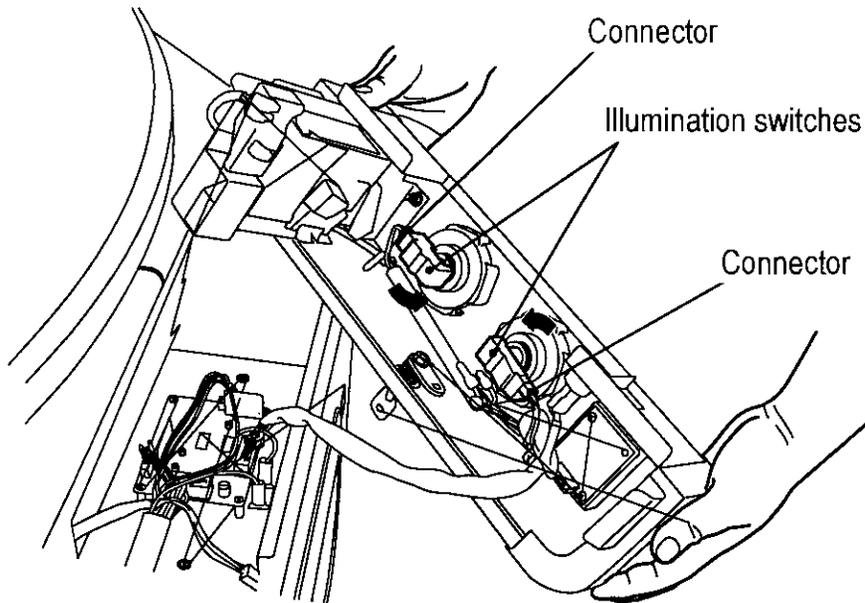
⚠ WARNING

- To protect the service staff and other people from an electric shock, accident and injury, and to prevent damage to the electrical circuitry of the machine, always turn off the power switch before initiating the described task.

1. Remove the maintenance door of the machine with the key and turn off the power switch.
(Refer to 7-3-1 Turning the power on.)
2. Remove the Control Panel Assy.
(Refer to 8-4-10 (1) Removing/reinstalling the Control Panel Assy.)
3. Remove the connector, turn the illumination switch 45 degrees to the left, and replace the control panel switch.
4. Reverse procedures to reinstall.

ⓘ NOTICE

- When reinstalling, make sure the connector is locked securely.

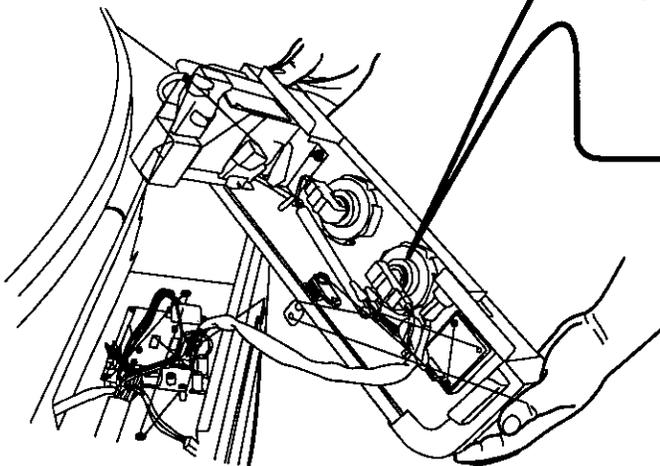
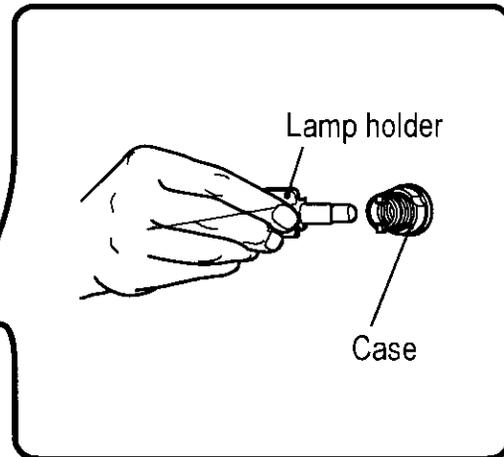
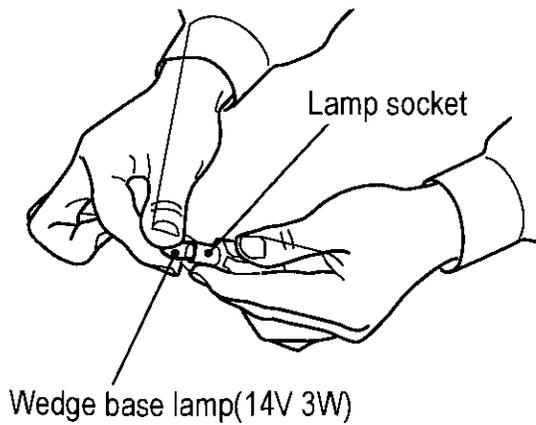


(3) Replacing the wedge base lamp

⚠ WARNING

- To protect the service staff and other people from an electric shock, accident and injury, and to prevent damage to the electrical circuitry of the machine, always turn off the power switch before initiating the described task.

1. Remove the maintenance door of the machine with the key and turn off the power switch.
(Refer to 7-3-1 Turning the power on.)
2. Remove the illumination switch.
(Refer to 8-4-10 (2) Replacing the illumination switch.)
3. Pull out the wedge lamp from the lamp holder and replace it.
[Make sure to use a wedge base lamp of 14V3W.]
4. Reverse procedures to reinstall.



(4) Replacing the display PC board

⚠ WARNING

- To protect the service staff and other people from an electric shock, accident and injury, and to prevent damage to the electrical circuitry of the machine, always turn off the power switch and unplug the cord from the electrical outlet before initiating the described task.

NOTICE

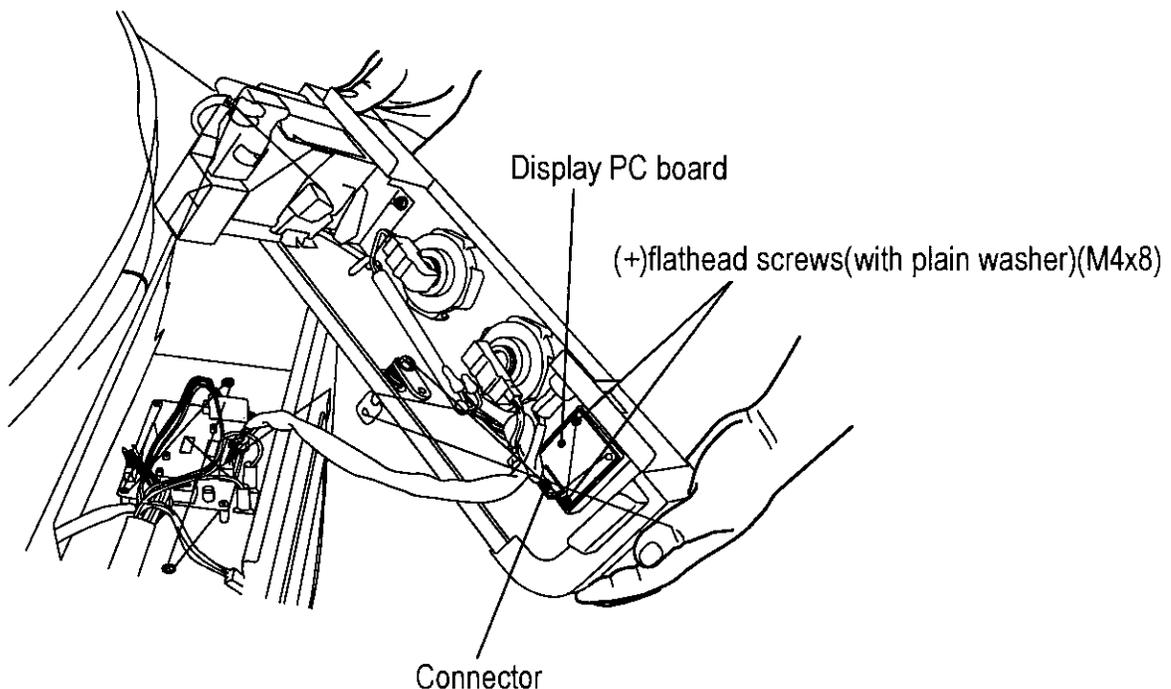
- The PC board is sensitive to static electricity. If a technician charged with static electricity handles the PC board, the parts on the PC board can get damaged.

Before handling the PC board, make sure to always touch the grounded metal surface to discharge any static electricity.

1. Remove the maintenance door of the machine with the key and turn off the power switch.
(Refer to 7-3-1 Turning the power on.)
2. Remove the Control Panel Assy.
(Refer to 8-4-10 (1) Removing/reinstalling the Control Panel Assy.)
3. Remove the 2 (+) flathead screws (with plain washer) (M4×8) and the connector; then replace the display PC board.
4. Reverse procedures to reinstall.

NOTICE

- When reinstalling, make sure the connector is locked securely.



(5) Replacing the S2DRV PC board**⚠ WARNING**

- To protect the service staff and other people from an electric shock, accident and injury, and to prevent damage to the electrical circuitry of the machine, always turn off the power switch and unplug the cord from the electrical outlet before initiating the described task.
- The PC board inside the machine will remain hot even after the power switch is turned off. Do not touch the PC board area to avoid suffering burns.

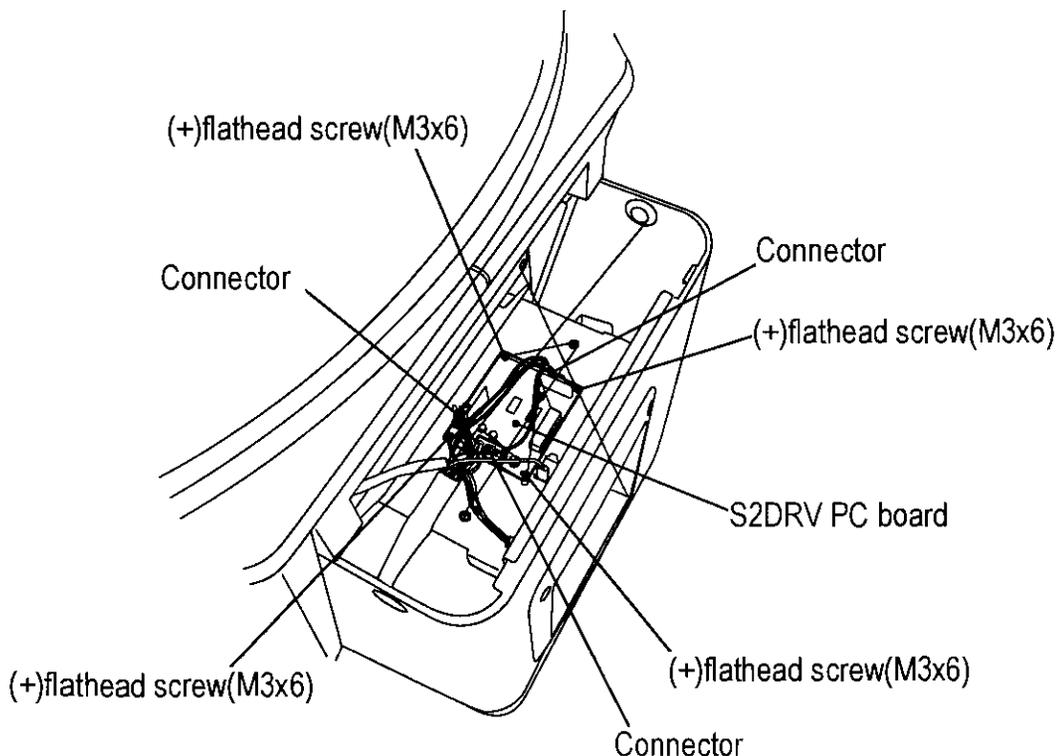
NOTICE

- The PC board is sensitive to static electricity. If a technician charged with static electricity handles the PC board, the parts on the PC board can get damaged.
Before handling the PC board, make sure to always touch the grounded metal surface to discharge any static electricity.

1. Remove the maintenance door of the machine with the key and turn off the power switch.
(Refer to 7-3-1 Turning the power on.)
2. Remove the Control Panel Assy.
(Refer to 8-4-10 (1) Removing/reinstalling the Control Panel Assy.)
3. Remove the 4 (+) flathead screws (M3x6) and the 3 connectors; then replace the S2DRV PC board.
4. Reverse procedures to reinstall.

NOTICE

- When reinstalling, make sure the connector is locked securely.



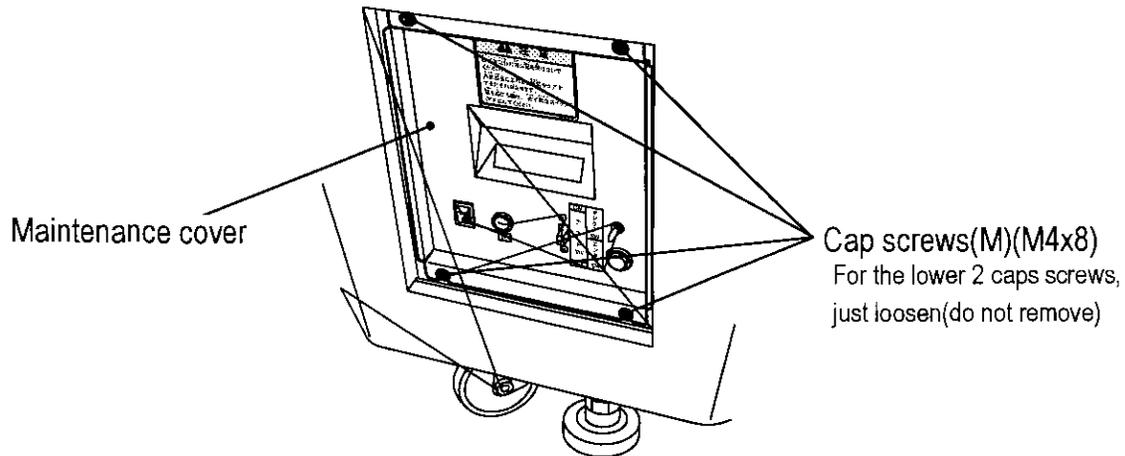
8-4-11 Power Assy -To be conducted by a technician only-

(1) Removing/reinstalling the Power Assy

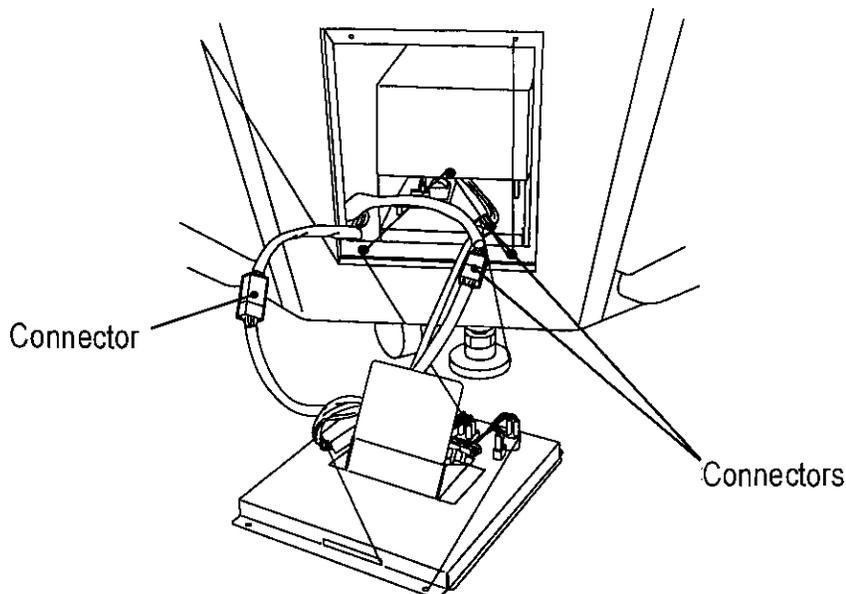
! WARNING

- To protect the service staff and other people from an electric shock, accident and injury, and to prevent damage to the electrical circuitry of the machine, always turn off the power switch before initiating the described task.
- The PC board inside the machine will remain hot even after the power switch is turned off. Do not touch the PC board area to avoid suffering burns.

1. Remove the maintenance door of the machine with the key and turn off the power switch.
(Refer to 7-3-1 Turning the power on.)
2. Unfasten the upper 2 cap screws (M) (M4×8) and only loosen the lower 2; then remove the maintenance cover.



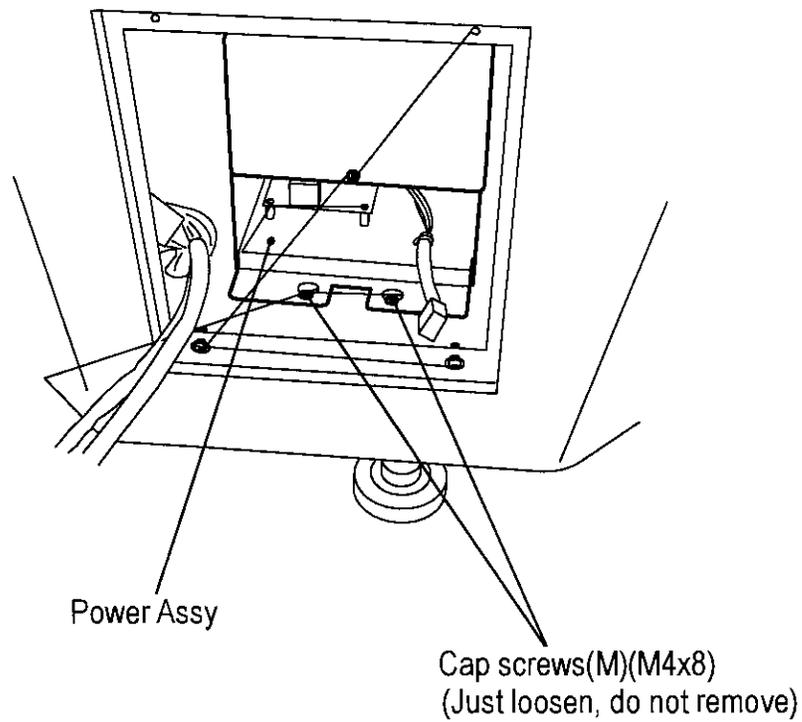
3. Remove the 3 connectors.



4. Loosen the 2 cap screws (M) (M4×8) and remove the Power Assy.
5. Reverse procedures to reinstall.

NOTICE

- When reinstalling, make sure the connector is locked securely.
- When reinstalling, make sure to fully insert the Power Assy into the far-end hook (being careful with the harness), then fixate with the 2 cap screws (M) (M4×8).

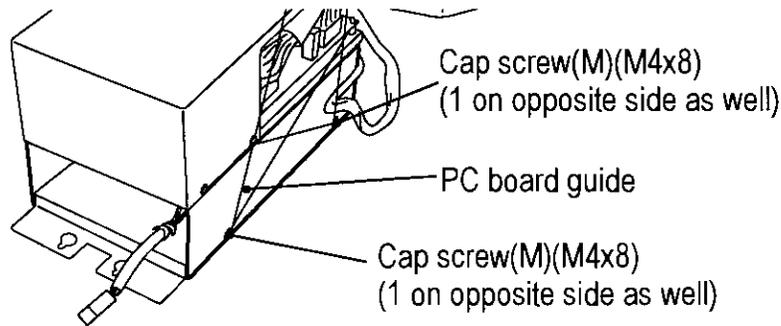


(2) Replacing the switching regulator

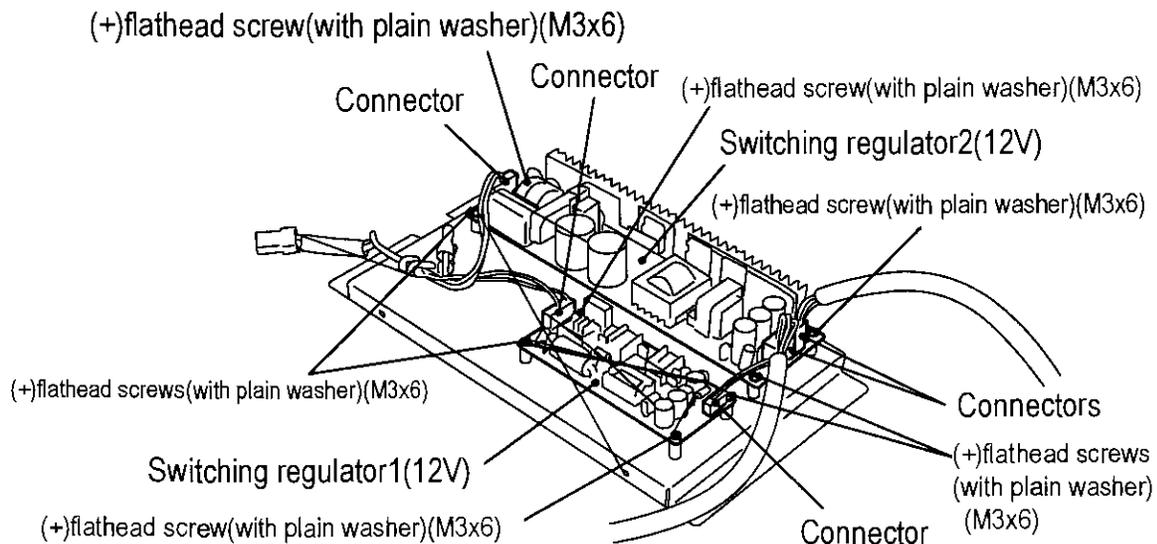
⚠ WARNING

- To protect the service staff and other people from an electric shock, accident and injury, and to prevent damage to the electrical circuitry of the machine, always turn off the power switch before initiating the described task.

1. Remove the maintenance door of the machine with the key and turn off the power switch.
(Refer to 7-3-1 Turning the power on.)
2. Remove the Power Assy.
(Refer to 8-4-11 (1) Removing/reinstalling the Power Assy.)
3. Remove the 4 cap screws (M) (M4×8) and remove the PC board guide.



4. Remove the 4 (+) flathead screws (with plain washer) (M3×6) and 5 connectors; then replace the switching regulator 1 or 2.
5. Reverse procedures to reinstall.



NOTICE

• When reinstalling, make sure the connector is locked securely.

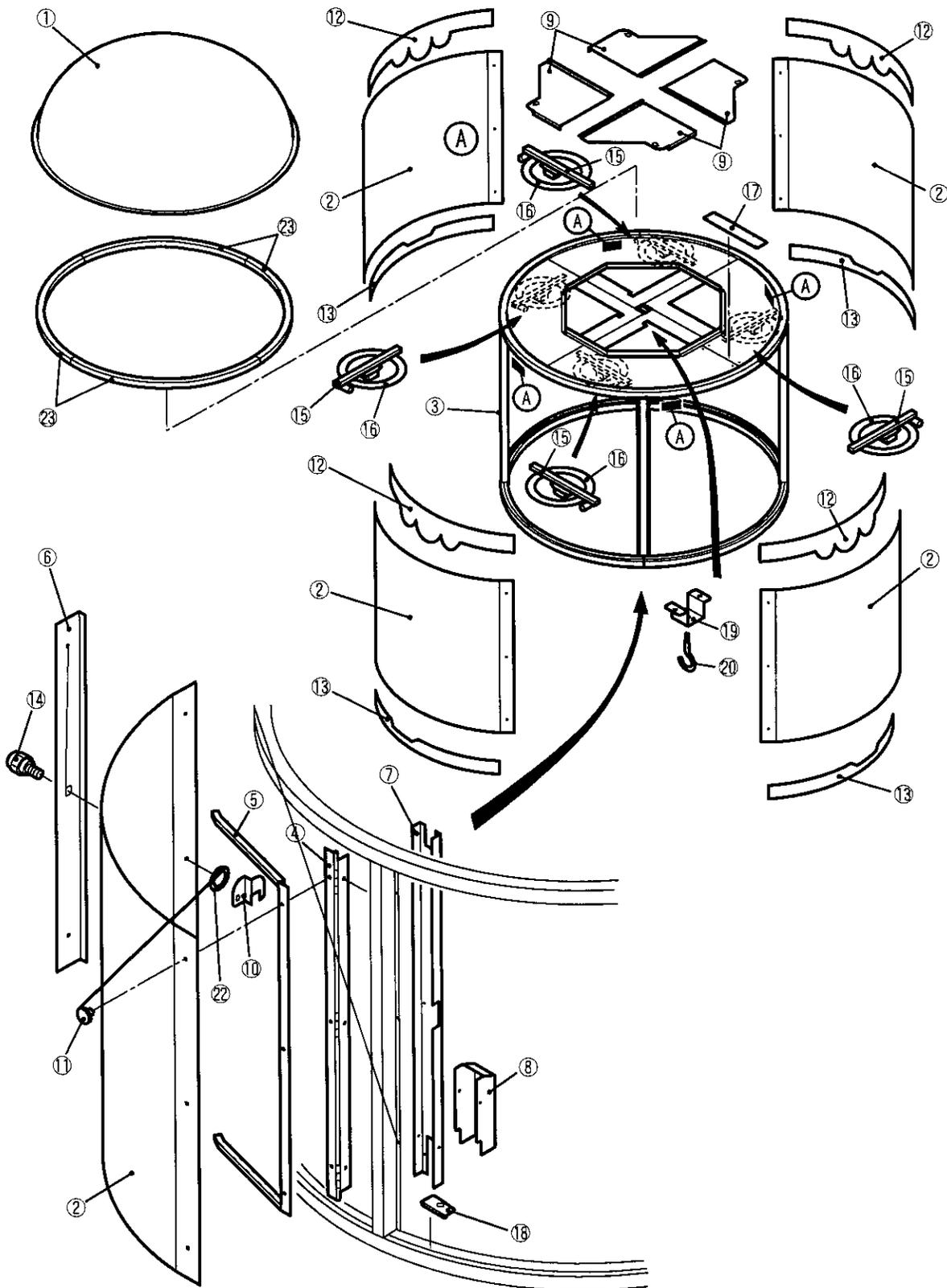
9. DISCARDING THE MACHINE

 WARNING

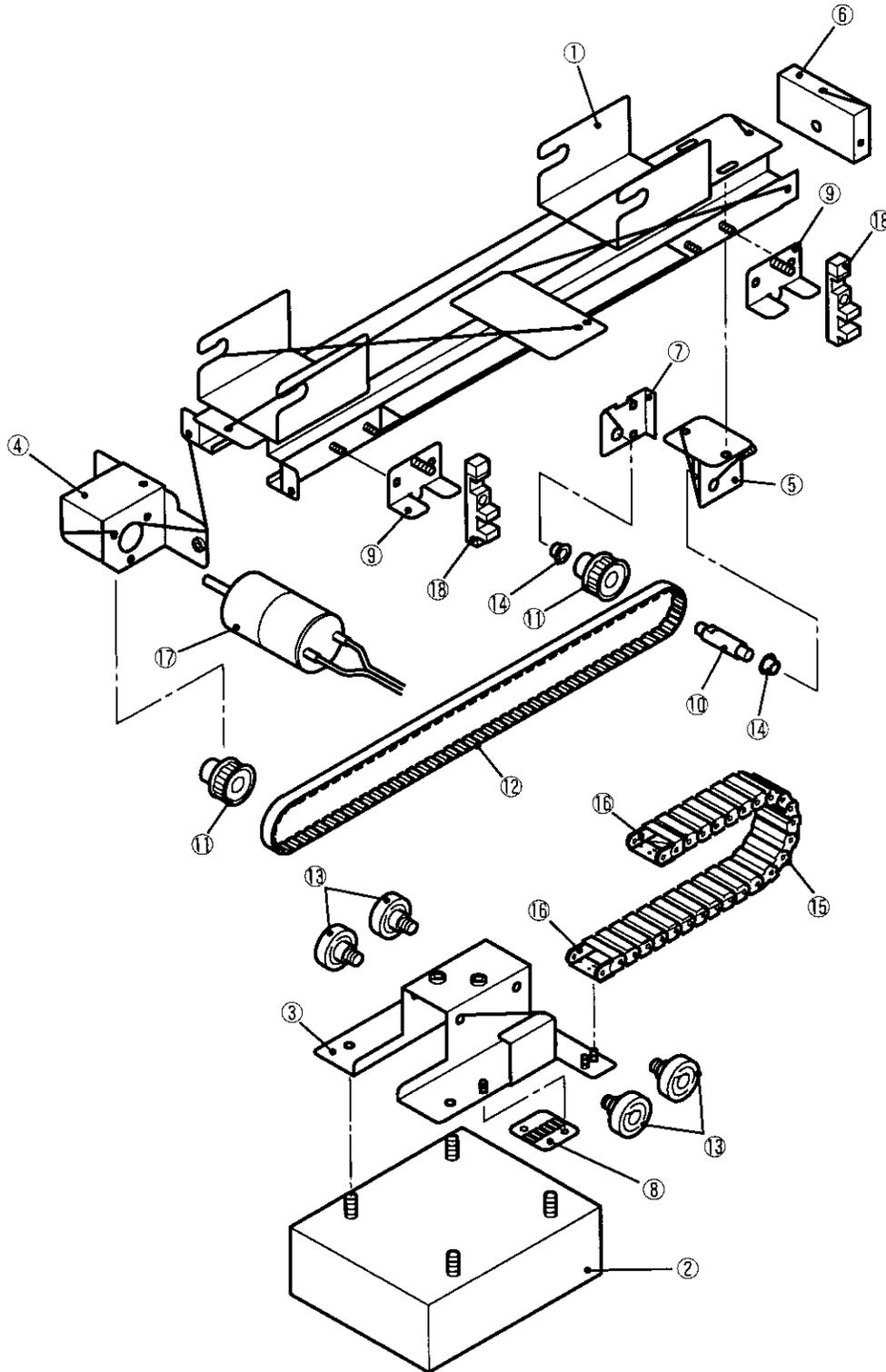
- The machine must be collected, transported and discarded in accordance with the local laws and regulations.
- When entrusting a third party to collect, transport and discard the machine, make sure to use specialist companies to perform those tasks.

10. PARTS LIST

10-1 Upper Cabinet Assy

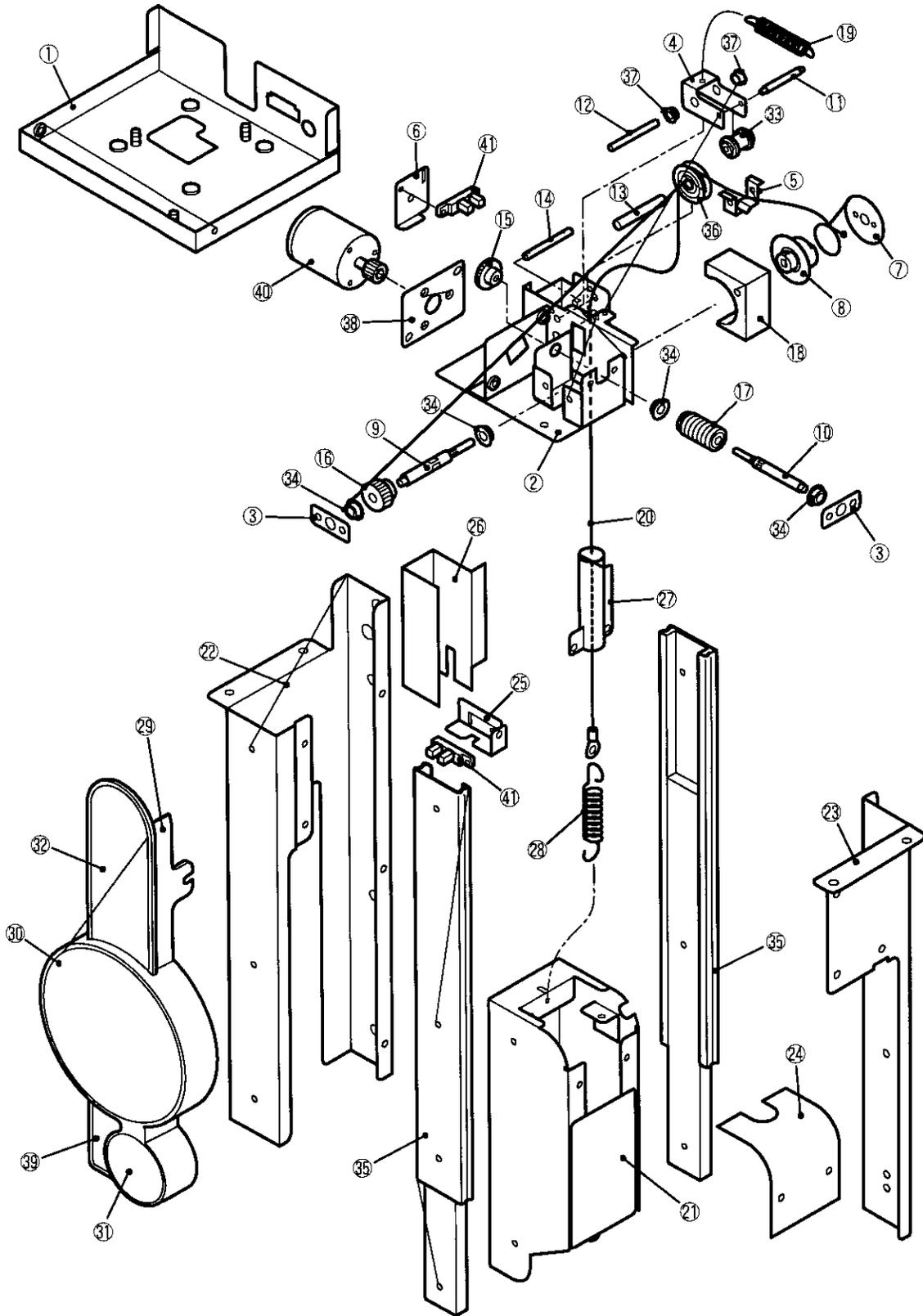


10-2 Rail Assy



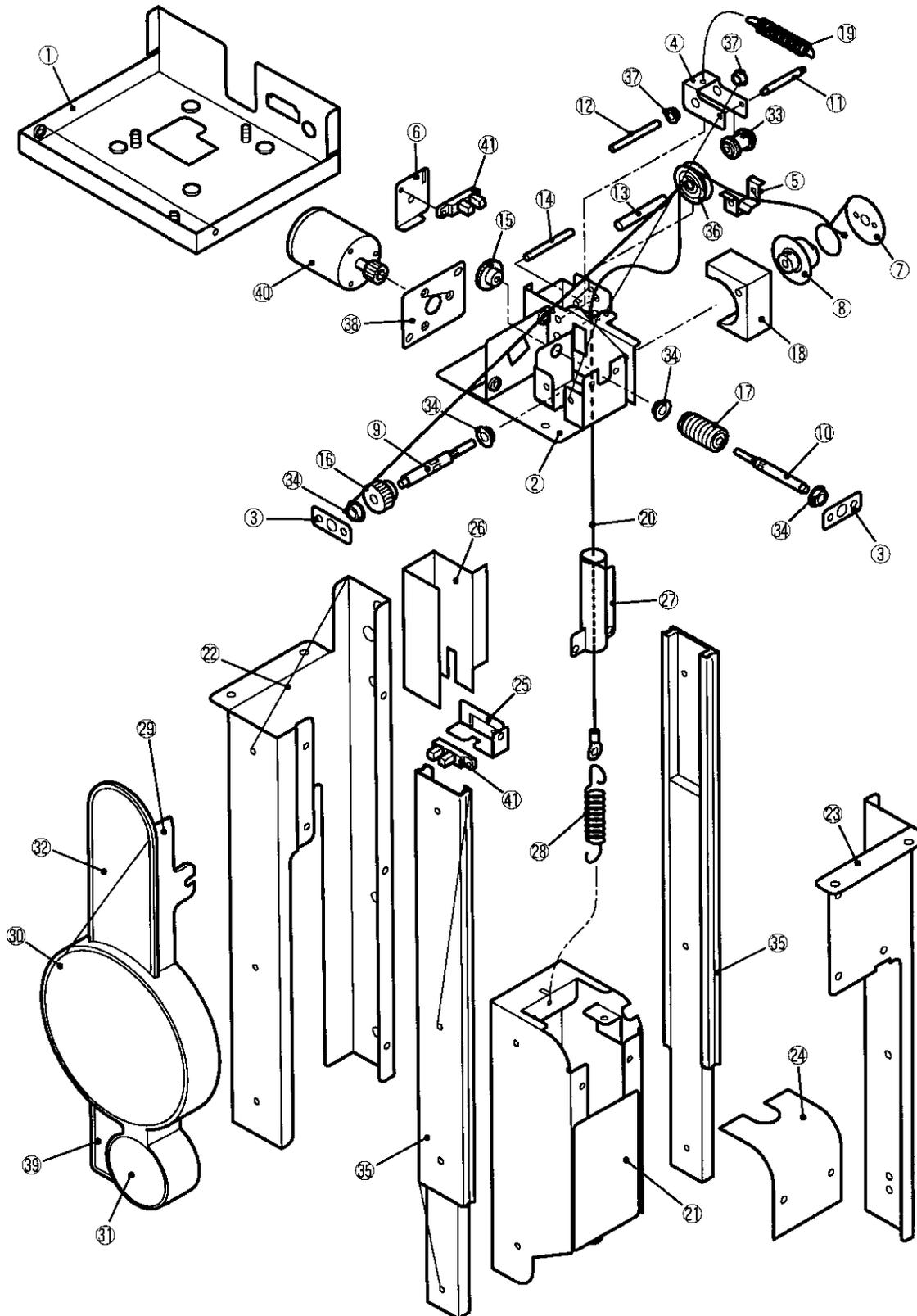
No.	Name	Qty	[Model / Rating]	Part No.
1	Rail frame	1		712-280
2	Elevator holder frame	1		712-281
3	Roller base	1		712-282
4	Motor frame	1		712-283
5	Pulley frame	1		712-284
6	Tension base	1		712-285
7	Rail pulley holder	1		712-286
8	Belt holder	1		712-287
9	Sensor bracket	2		712-288
10	Rail pulley shaft	1		712-289
11	Rail pulley	2	11XL037-6F	712-329
12	Timing belt	1	364XL037	108-052
13	Delrin bearing	4	DR-22-B5-M5-JH	103-152
14	Bearing	2	MF85ZZS	103-174
15	Cable pair: main	1	TKP 0180-20B-R28-15L	108-051
16	Cable pair: fixating tool	2	TKP 0180-20B-PKA-1K	108-049
17	DC motor (with connector)	1	TG-06D-KU-24-D838, 12V	005-368
18	Photo interrupter	2	K11300-AA07	000-601

10-3 Elevator Assy

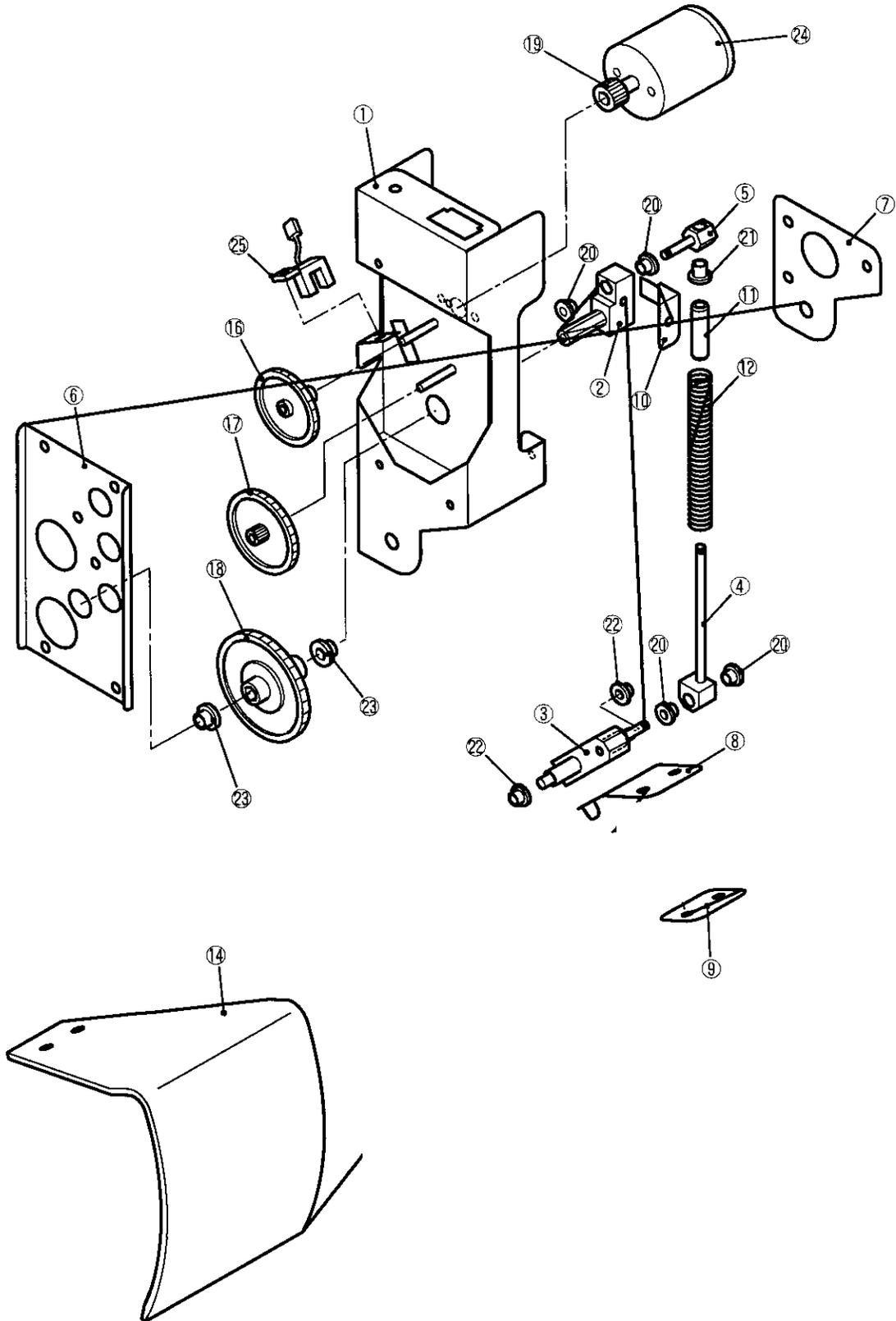


No.	Name	Qty	[Model / Rating]	Part No.
1	Elevator base	1		712-290
2	Pulley frame	1		712-291
3	Housing plate	2		712-292
4	Roller arm	1		712-293
5	Wire guide	1		712-294
6	E sensor holder L	1		712-295
7	Pulley flange	1		712-296
8	Pulley	1		712-297
9	Pulley shaft	1		712-298
10	Worm shaft	1		712-299
11	Roller pin	1		712-300
12	Roller arm shaft	1		712-301
13	Guide roller shaft	1		712-302
14	Guide pin	1		712-303
15	Spar gear A	1	50B 36B+0303	712-304
16	Worm wheel A	1	G80A 20+R1	712-305
17	Worm A	1	W80S R1+B	712-306
18	Pulley guide	1		712-307
19	Roller spring	1		712-308
20	Wire rope	1		712-309
21	Shove box	1		712-310
22	Arm base A	1		712-311
23	Arm base B	1		712-312
24	Connector cover	1		712-313
25	E sensor holder U	1		712-314
26	Wire guide	1		712-315
27	Spring cover	1		712-316
28	Wire spring	1		712-317
29	Arm base cover	1		712-318
30	Arm sticker (A)	1		
31	Arm sticker (B)	1		
32	Arm sticker (C)	1		
33	Wire guide roller	1		712-320
34	Bearing	4	MF85ZZS	103-174
35	Slide rail	2	C3271-6574	107-142
36	Delrin bearing	1	DU-22-H	103-157

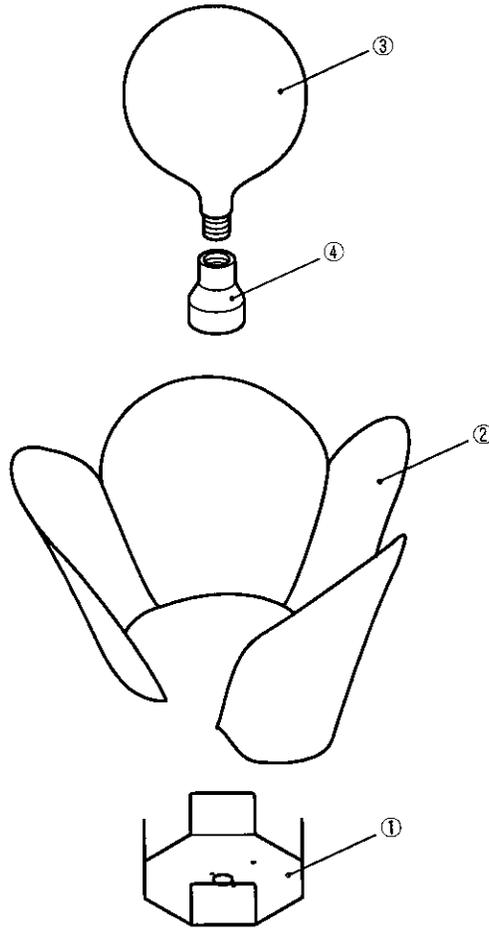
10-3 Elevator Assy



10-4 Shovel Assy

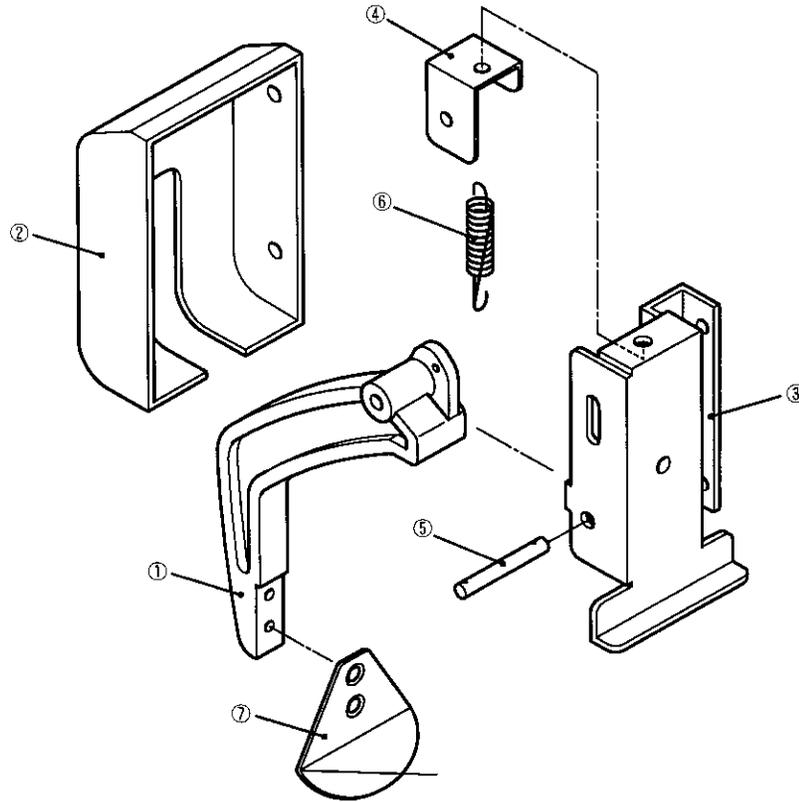


10-5 Sign Tower Assy



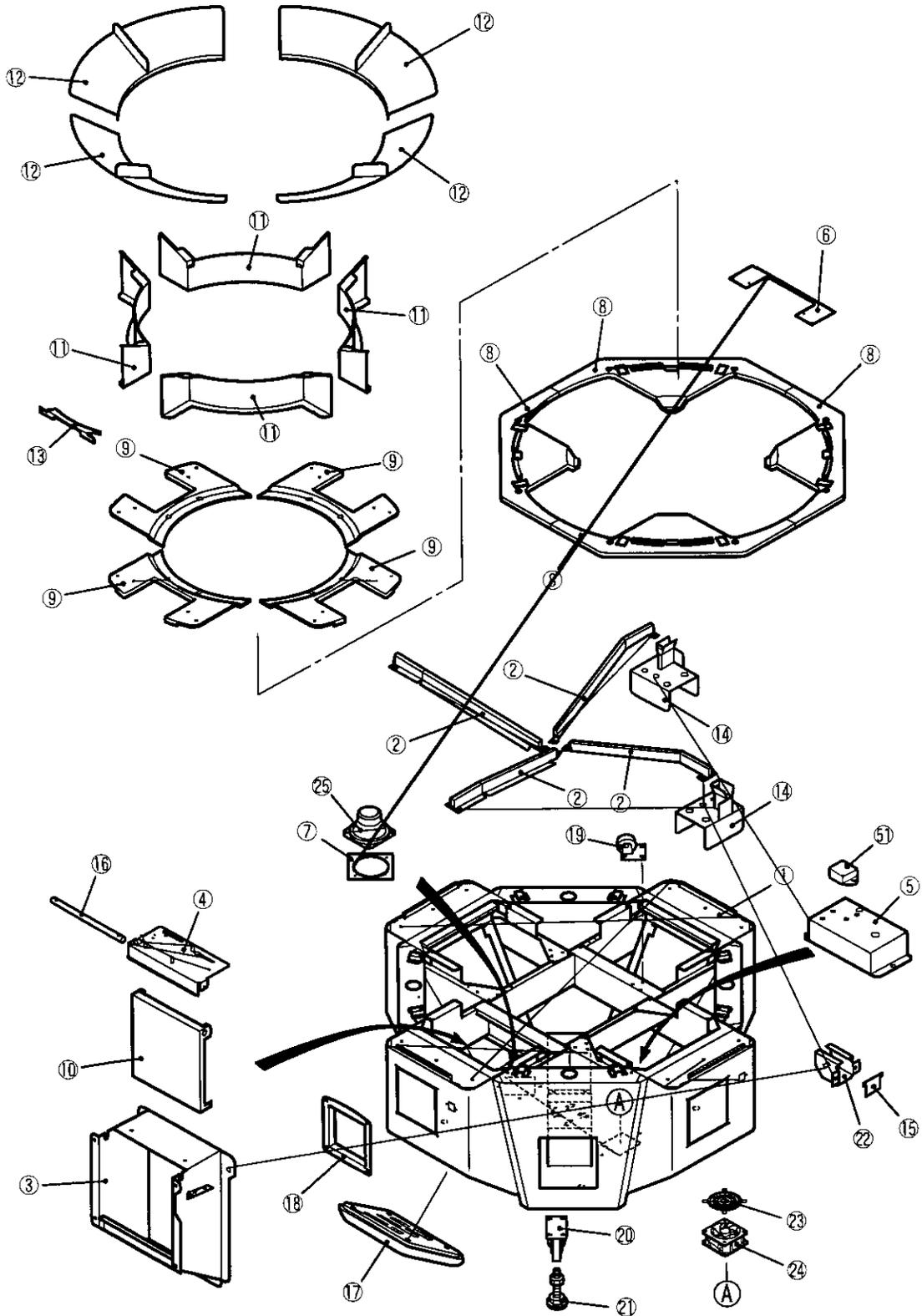
No.	Name	Qty	[Model / Rating]	Part No.
1	Lamp bracket	1	SS10-12078-00	712-345
2	Sign tower	1	SS90-12048-00	712-346
3	Lamp	1	SS57-12118-00	
4	Lamp Holder	1	SS57-12117-00	
5	Label,Lamp Replacement	1	VG44-03850-00	

10-6 Support Finger Assy

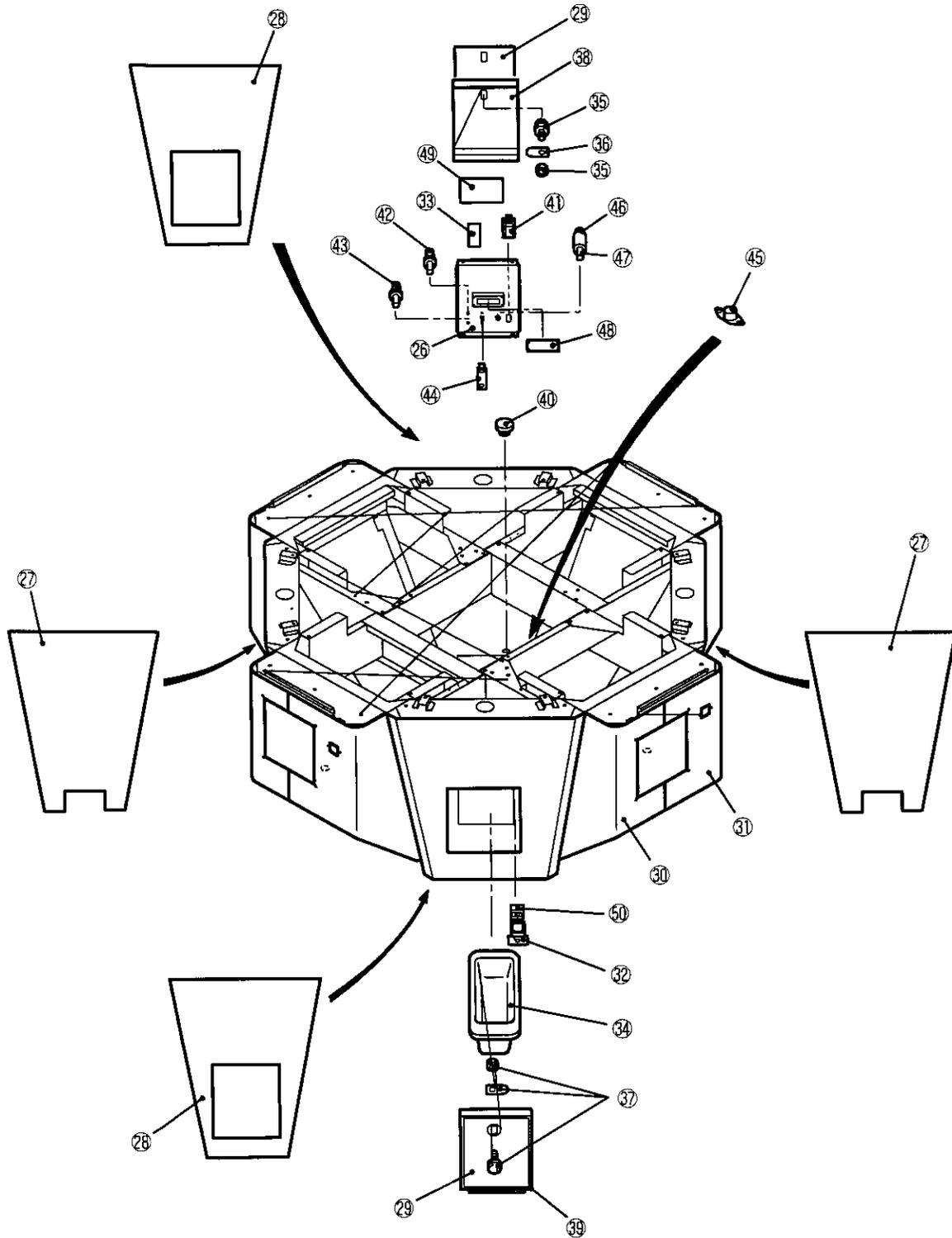


No.	Name	Qty	[Model / Rating]	Part No.
1	Support arm	1		712-350
2	Finger cover	1		712-351
3	Finger base	1		712-352
4	Tension bracket	1		712-353
5	Finger shaft	1		712-354
6	Finger spring	1		712-355
7	Round tab	1		708-197

10-7 Lower Cabinet Assy (Part-1)

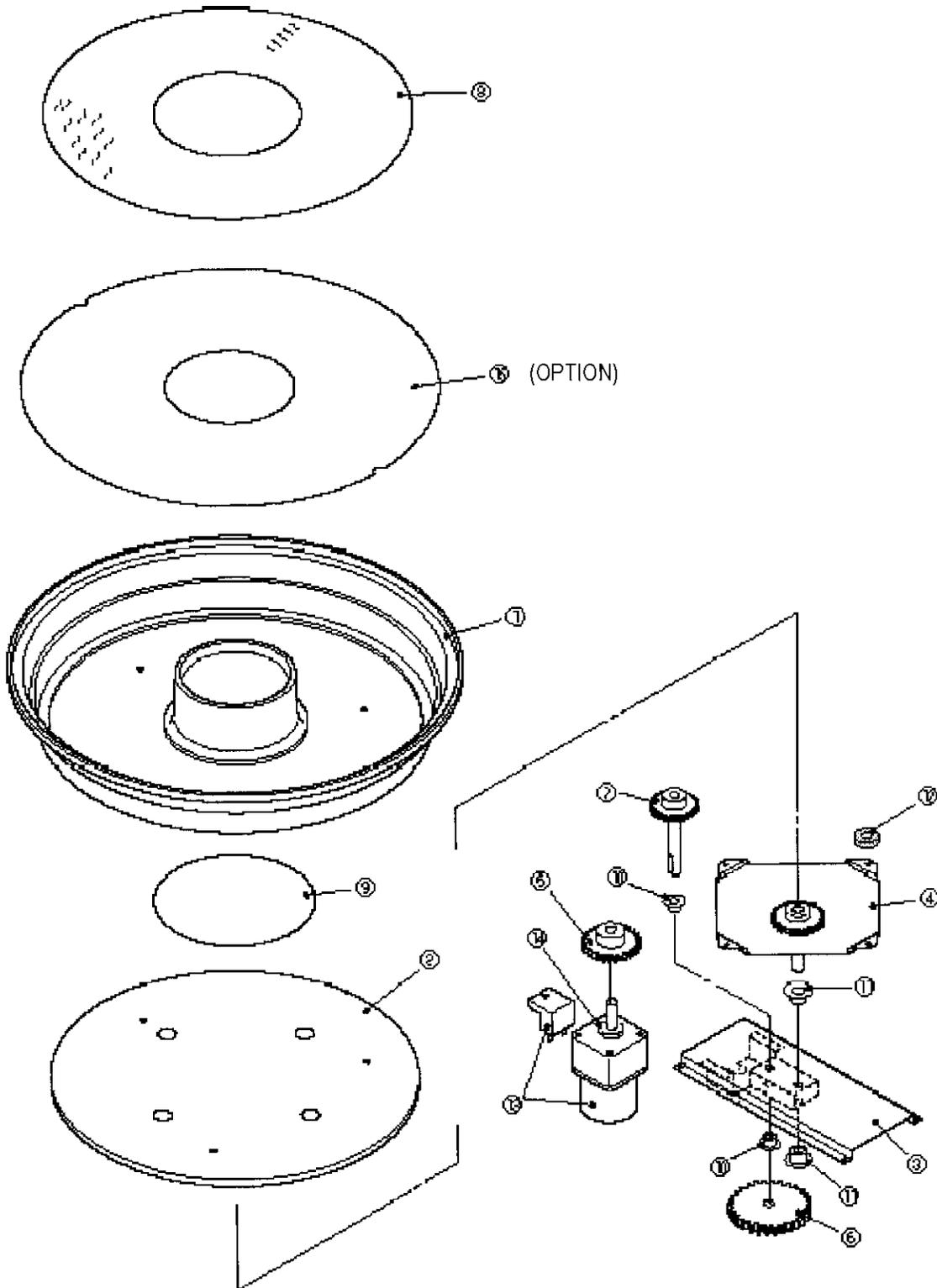


10-7 Lower Cabinet Assy (Part-2)



No.	Name	Qty	[Model / Rating]	Part No.
26	Maintenance Lid	1	SS10-12083-00	712-364
27	Panel ST (A)	2	SS40-12032-00	712-373
28	Panel ST (B)	2	SS40-12033-00	712-374
29	Door ST	2	SS40-12034-00	712-375
30	Counter ST (L)	4	SS40-12035-00	712-376
31	Counter ST (R)	4	SS40-12132-00	712-377
32	Counter bracket	1	SS10-12088-00	695-675
34	Cashbox (K)	1	SS90-12058-00	461-040
35	Coin lock	1	F750MSDS	101-138
36	Clasp	1	For F750MSDS t3.2	101-147
37	Cam lock	1	F935-R90	101-139
38	Maintenance door	1	SS10-12089-00	712-378
39	Coin door	1	SS10-12090-00	712-379
40	Fill cap	1	KD-333-301B	106-168
41	Power switch (tumbler)	1	VG53-04683-00	
42	Select switch (toggle)	1		
43	Enter switch (push)	1	VGT53-12129-01	
44	Test switch (toggle)	1	VG53-06867-00	
47	Fuse holder	1	VG52-09496-00	
48	LCD display	1	SS05-12002-00	306-579
50	Coin counter	1	VG83-02094-00	
51	Noise filter	1	VG78-12120-00	
	Transformer	1	VG56-12123-00	

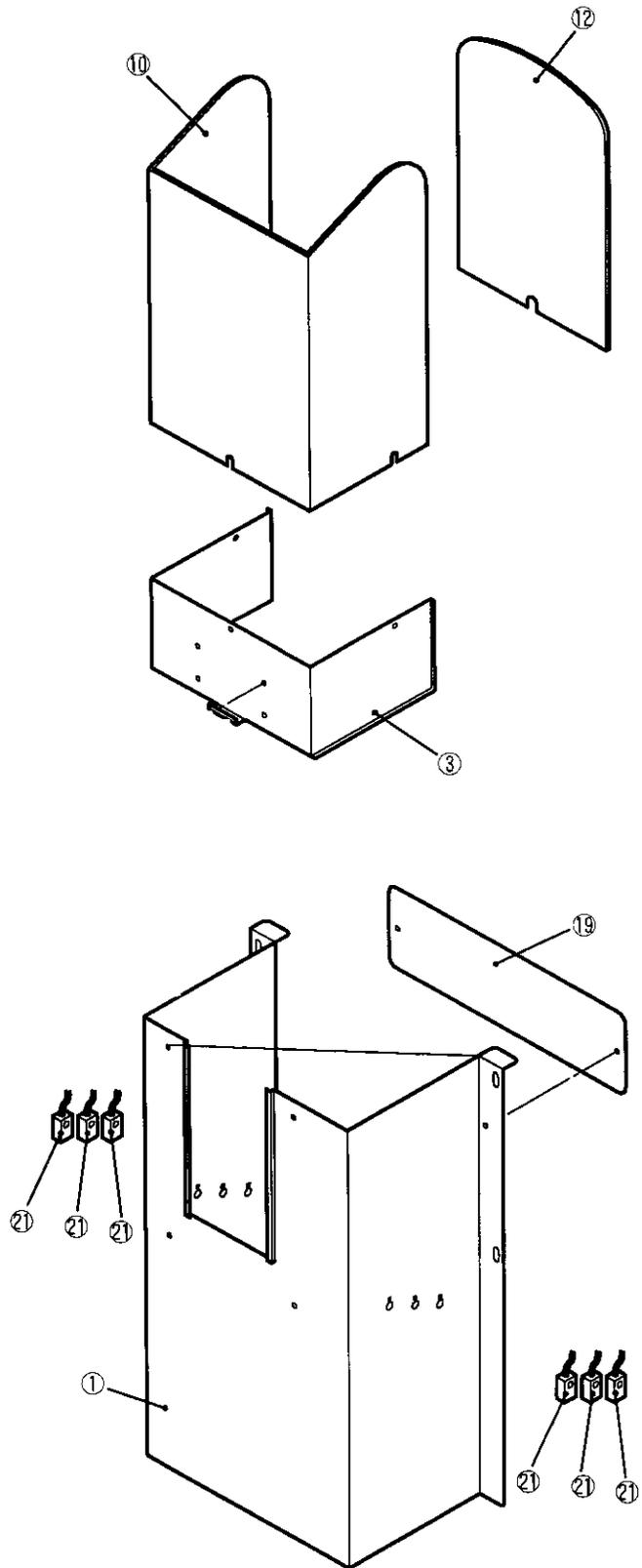
10-8 Table Assy



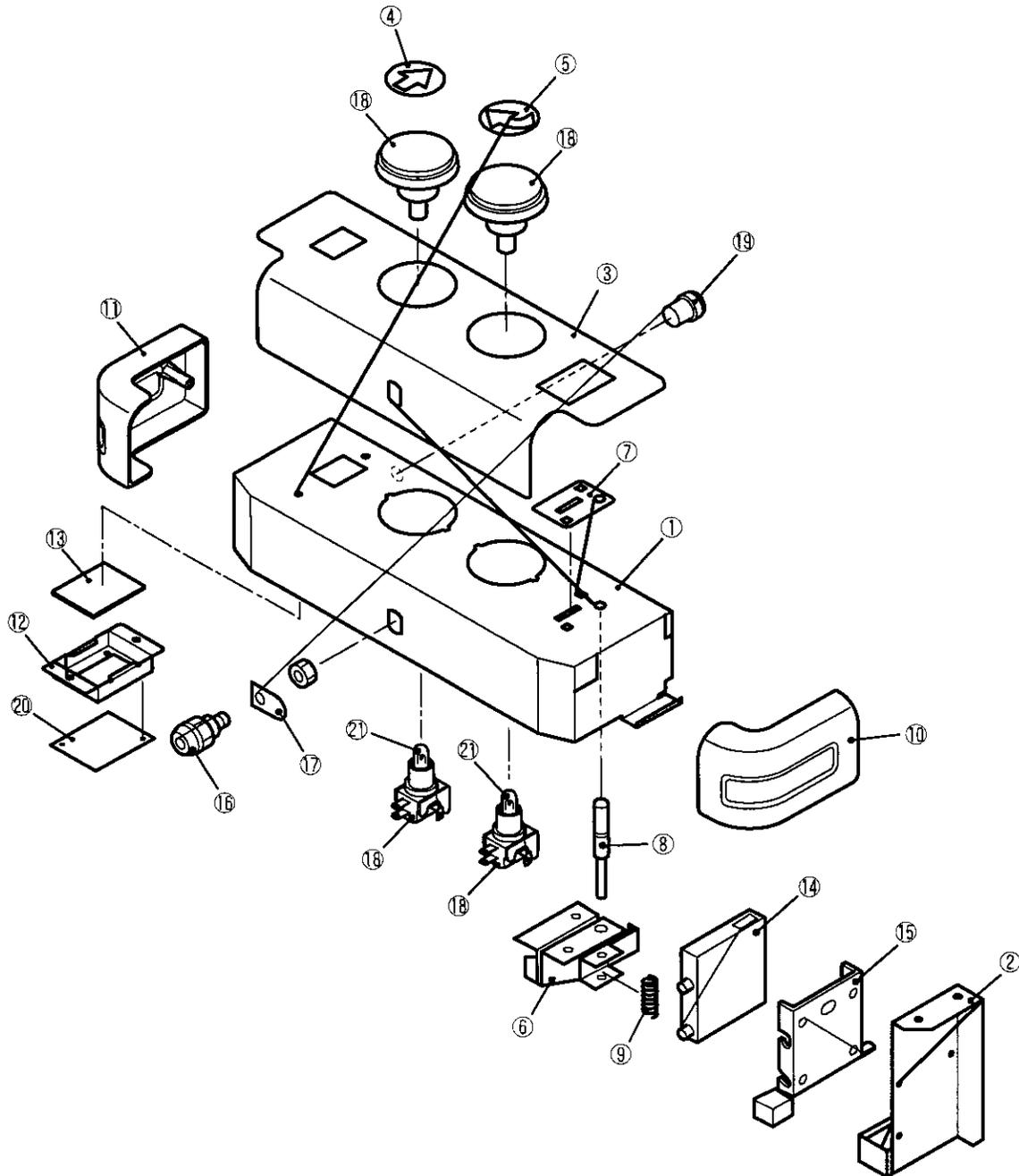
10. PARTS LIST

No.	Name	Qty	[Model / Rating]	Part No.
1	Turn table	1	SS90-10259-00	712-385
2	Table base	1		712-386
3	Gear base	1	SS10-12093-00	712-387
4	Gear plate	1	SS10-12042-00	712-388
5	Table gear A	1	SS10-12043-00	712-389
6	Table gear B	1	SS10-12044-00	712-390
7	Table gear C	1	SS10-12045-00	712-391
8	Turf	1	SS90-12050-00	712-392
9	Turn table ST	1	SS40-12110-00	712-393
10	Flange bush(LFF1006)	2	GP59-08471-00	104-004
11	Flange bush(LFF1206)	2	SS59-12038-00	104-030
12	Rubber Leg(K-12W)	4	SS20-12039-00	106-1033
13	AC motor (with connector)	1	SS58-12040-00	005-371
14	Gear head	1	SS59-12041-00	005-258
15	Bottom Up Plate(OPTION)	1	SS90-12061-00	712-394

10-9 Shoot Assy

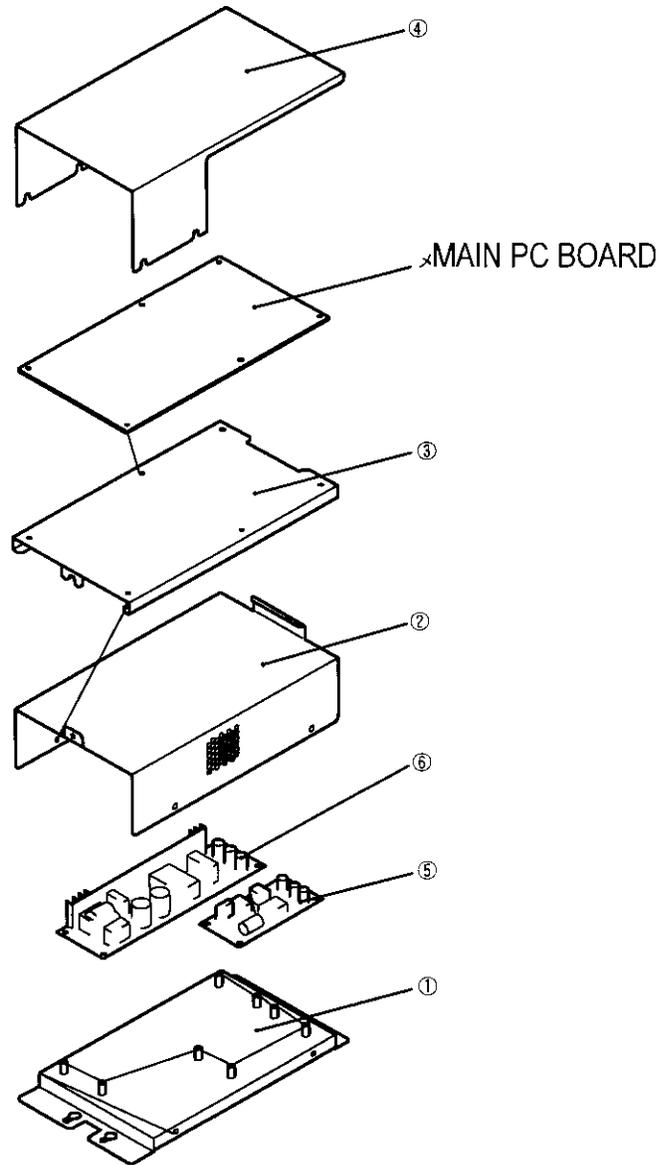


10-10 Control Panel Assy



No.	Name	Qty	[Model / Rating]	Part No.
1	Control panel	1	SS10-12099-00	712-420
2	Selector BK	1	SS10-12100-00	712-421
3	Control panel ST	1	SS40-12128-00	712-422
4	Switch sticker (A)	1	SS40-12133-00	
5	Switch sticker (B)	1	SS40-12133-01	
6	Coin drop	1	SS10-12101-00	695-667
7	Coin plate	1	SS10-12102-00	695-668
8	Cancel pin	1	SS10-12103-00	695-669
9	Cancel spring	1	SS22-12046-00	695-676
10	Control panel cover (R) blue	1	SS90-12064-01	712-424
11	Control panel cover (L) blue	1	SS90-12064-00	712-425
12	LED BK	1	SS10-12104-00	708-551
13	LED CV	1	SS90-12063-00	708-552
14	Coin Mech	1	VG83-09943-00	
15	Channel Assy	1	C-103 with coin micro switch	100-050
16	Coin lock	1	F750MSDS	101-138
17	Clasp	1	For F750MSDS t3.2	101-147
18	Illumination switch	2		
19	Service switch	1	VG53-12129-00	
20	Display PC board	1	SS05-12111-00	695-610
21	Wedge base lamp	2		

10-11 Power Supply Assy



No.	Name	Qty	[Model / Rating]	Part No.
1	Power supply base	1	SS10-12105-00	708-625
2	PC board guide	1	SS10-12106-00	695-632
3	PC board base	1	SS10-12107-00	712-430
4	PC board cover	1	SS10-12108-00	712-431
5	Switching Power supply	1	SS88-12114-00	009-078
6	Switching Power supply	1	SS88-12113-00	009-104

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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. 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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Hours: 8:00 am - 4:00 pm PST

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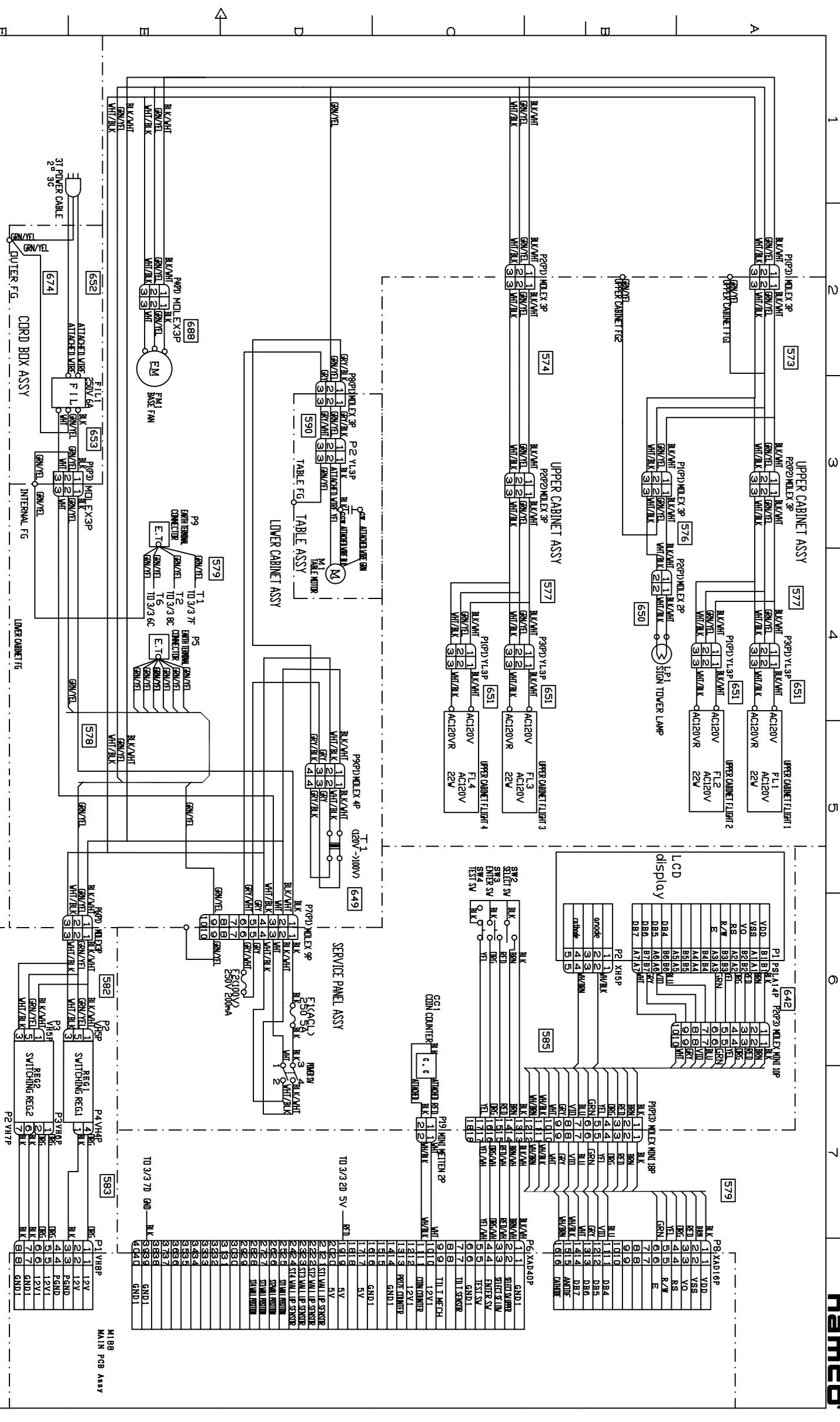


Table 1: LCD display pinout

P1: P8/A14P	REG23: MUX EX: HNT: 1P	
VDD	B1	REG23: MUX EX: HNT: 1P
VSS	A1/A1	REG23: MUX EX: HNT: 1P
VO	B2/B2	REG23: MUX EX: HNT: 1P
RS	A2/A2	REG23: MUX EX: HNT: 1P
R/W	B3/B3	REG23: MUX EX: HNT: 1P
R	A3/A3	REG23: MUX EX: HNT: 1P
B1/B4	A4/A4	REG23: MUX EX: HNT: 1P
B5/B5	B5/B5	REG23: MUX EX: HNT: 1P
A5/A5	B6/B6	REG23: MUX EX: HNT: 1P
A6/A6	A6/A6	REG23: MUX EX: HNT: 1P
A7/A7	B7/B7	REG23: MUX EX: HNT: 1P
D87	A7/A7	REG23: MUX EX: HNT: 1P

Table 2: P8: XHSP pinout

P8: XHSP	REG23: MUX EX: HNT: 1P
REG1	REG23: MUX EX: HNT: 1P
REG2	REG23: MUX EX: HNT: 1P
REG3	REG23: MUX EX: HNT: 1P
REG4	REG23: MUX EX: HNT: 1P
REG5	REG23: MUX EX: HNT: 1P
REG6	REG23: MUX EX: HNT: 1P
REG7	REG23: MUX EX: HNT: 1P
REG8	REG23: MUX EX: HNT: 1P
REG9	REG23: MUX EX: HNT: 1P
REG10	REG23: MUX EX: HNT: 1P
REG11	REG23: MUX EX: HNT: 1P
REG12	REG23: MUX EX: HNT: 1P
REG13	REG23: MUX EX: HNT: 1P
REG14	REG23: MUX EX: HNT: 1P
REG15	REG23: MUX EX: HNT: 1P
REG16	REG23: MUX EX: HNT: 1P
REG17	REG23: MUX EX: HNT: 1P
REG18	REG23: MUX EX: HNT: 1P
REG19	REG23: MUX EX: HNT: 1P
REG20	REG23: MUX EX: HNT: 1P
REG21	REG23: MUX EX: HNT: 1P
REG22	REG23: MUX EX: HNT: 1P

Table 3: P9: HNT: HNTEN: 2P pinout

P9: HNT: HNTEN: 2P	REG23: MUX EX: HNT: 1P
HNTEN	REG23: MUX EX: HNT: 1P
HNT	REG23: MUX EX: HNT: 1P

Table 4: P19: MUX EX: 3P pinout

P19: MUX EX: 3P	REG23: MUX EX: HNT: 1P
MUX EX 1	REG23: MUX EX: HNT: 1P
MUX EX 2	REG23: MUX EX: HNT: 1P
MUX EX 3	REG23: MUX EX: HNT: 1P

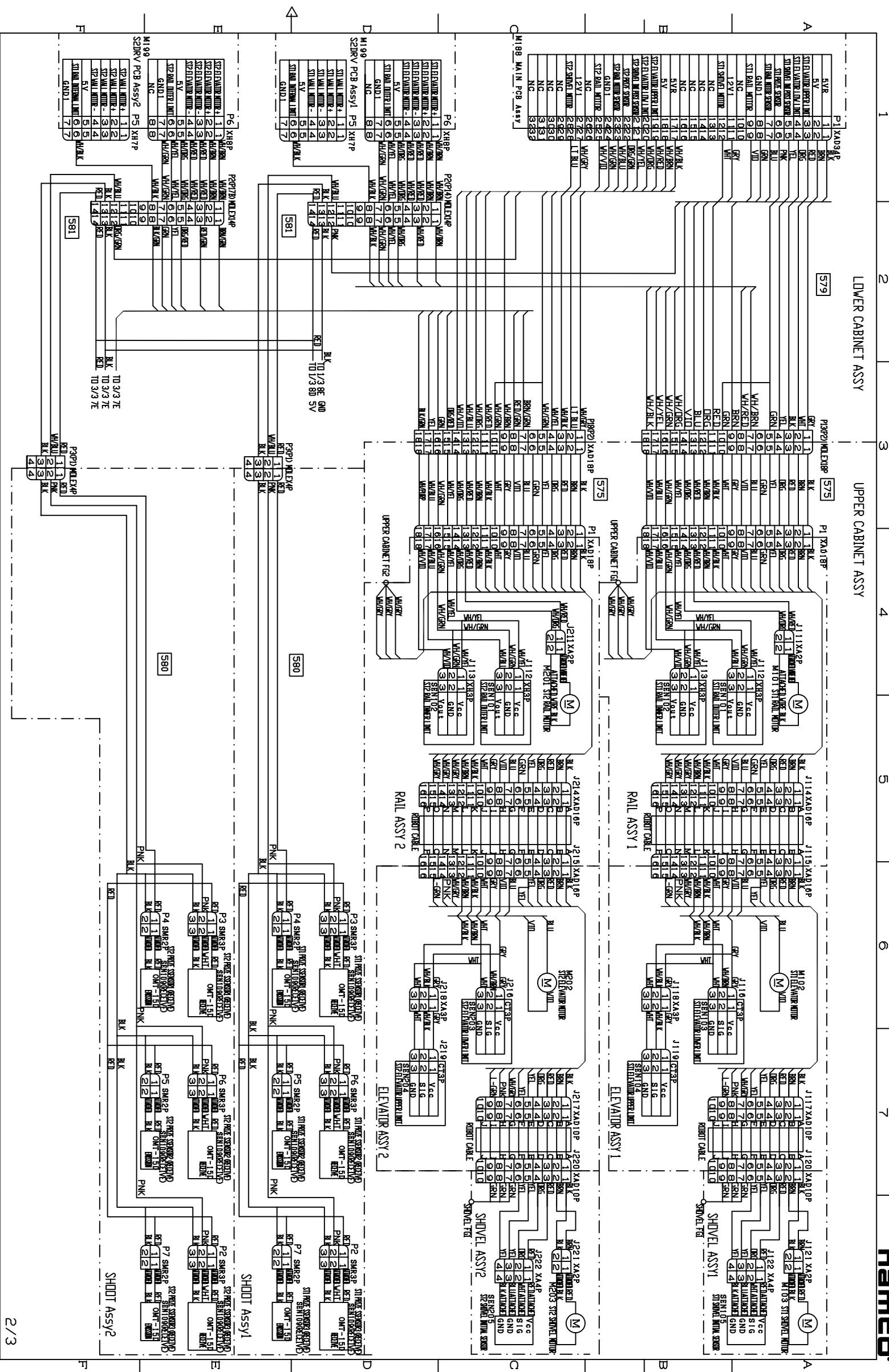
Table 5: P1: P8/A14P pinout

P1: P8/A14P	REG23: MUX EX: HNT: 1P	
VDD	B1	REG23: MUX EX: HNT: 1P
VSS	A1/A1	REG23: MUX EX: HNT: 1P
VO	B2/B2	REG23: MUX EX: HNT: 1P
RS	A2/A2	REG23: MUX EX: HNT: 1P
R/W	B3/B3	REG23: MUX EX: HNT: 1P
R	A3/A3	REG23: MUX EX: HNT: 1P
B1/B4	A4/A4	REG23: MUX EX: HNT: 1P
B5/B5	B5/B5	REG23: MUX EX: HNT: 1P
A5/A5	B6/B6	REG23: MUX EX: HNT: 1P
A6/A6	A6/A6	REG23: MUX EX: HNT: 1P
A7/A7	B7/B7	REG23: MUX EX: HNT: 1P
D87	A7/A7	REG23: MUX EX: HNT: 1P

Table 6: P2: VHPSP pinout

P2: VHPSP	REG23: MUX EX: HNT: 1P
VHPSP 1	REG23: MUX EX: HNT: 1P
VHPSP 2	REG23: MUX EX: HNT: 1P
VHPSP 3	REG23: MUX EX: HNT: 1P
VHPSP 4	REG23: MUX EX: HNT: 1P
VHPSP 5	REG23: MUX EX: HNT: 1P
VHPSP 6	REG23: MUX EX: HNT: 1P
VHPSP 7	REG23: MUX EX: HNT: 1P
VHPSP 8	REG23: MUX EX: HNT: 1P
VHPSP 9	REG23: MUX EX: HNT: 1P
VHPSP 10	REG23: MUX EX: HNT: 1P
VHPSP 11	REG23: MUX EX: HNT: 1P
VHPSP 12	REG23: MUX EX: HNT: 1P
VHPSP 13	REG23: MUX EX: HNT: 1P
VHPSP 14	REG23: MUX EX: HNT: 1P
VHPSP 15	REG23: MUX EX: HNT: 1P
VHPSP 16	REG23: MUX EX: HNT: 1P
VHPSP 17	REG23: MUX EX: HNT: 1P
VHPSP 18	REG23: MUX EX: HNT: 1P
VHPSP 19	REG23: MUX EX: HNT: 1P
VHPSP 20	REG23: MUX EX: HNT: 1P
VHPSP 21	REG23: MUX EX: HNT: 1P
VHPSP 22	REG23: MUX EX: HNT: 1P
VHPSP 23	REG23: MUX EX: HNT: 1P
VHPSP 24	REG23: MUX EX: HNT: 1P
VHPSP 25	REG23: MUX EX: HNT: 1P
VHPSP 26	REG23: MUX EX: HNT: 1P
VHPSP 27	REG23: MUX EX: HNT: 1P
VHPSP 28	REG23: MUX EX: HNT: 1P
VHPSP 29	REG23: MUX EX: HNT: 1P
VHPSP 30	REG23: MUX EX: HNT: 1P
VHPSP 31	REG23: MUX EX: HNT: 1P
VHPSP 32	REG23: MUX EX: HNT: 1P
VHPSP 33	REG23: MUX EX: HNT: 1P
VHPSP 34	REG23: MUX EX: HNT: 1P
VHPSP 35	REG23: MUX EX: HNT: 1P
VHPSP 36	REG23: MUX EX: HNT: 1P
VHPSP 37	REG23: MUX EX: HNT: 1P
VHPSP 38	REG23: MUX EX: HNT: 1P
VHPSP 39	REG23: MUX EX: HNT: 1P
VHPSP 40	REG23: MUX EX: HNT: 1P
VHPSP 41	REG23: MUX EX: HNT: 1P
VHPSP 42	REG23: MUX EX: HNT: 1P
VHPSP 43	REG23: MUX EX: HNT: 1P
VHPSP 44	REG23: MUX EX: HNT: 1P
VHPSP 45	REG23: MUX EX: HNT: 1P
VHPSP 46	REG23: MUX EX: HNT: 1P
VHPSP 47	REG23: MUX EX: HNT: 1P
VHPSP 48	REG23: MUX EX: HNT: 1P
VHPSP 49	REG23: MUX EX: HNT: 1P
VHPSP 50	REG23: MUX EX: HNT: 1P
VHPSP 51	REG23: MUX EX: HNT: 1P
VHPSP 52	REG23: MUX EX: HNT: 1P
VHPSP 53	REG23: MUX EX: HNT: 1P
VHPSP 54	REG23: MUX EX: HNT: 1P
VHPSP 55	REG23: MUX EX: HNT: 1P
VHPSP 56	REG23: MUX EX: HNT: 1P
VHPSP 57	REG23: MUX EX: HNT: 1P
VHPSP 58	REG23: MUX EX: HNT: 1P
VHPSP 59	REG23: MUX EX: HNT: 1P
VHPSP 60	REG23: MUX EX: HNT: 1P
VHPSP 61	REG23: MUX EX: HNT: 1P
VHPSP 62	REG23: MUX EX: HNT: 1P
VHPSP 63	REG23: MUX EX: HNT: 1P
VHPSP 64	REG23: MUX EX: HNT: 1P
VHPSP 65	REG23: MUX EX: HNT: 1P
VHPSP 66	REG23: MUX EX: HNT: 1P
VHPSP 67	REG23: MUX EX: HNT: 1P
VHPSP 68	REG23: MUX EX: HNT: 1P
VHPSP 69	REG23: MUX EX: HNT: 1P
VHPSP 70	REG23: MUX EX: HNT: 1P
VHPSP 71	REG23: MUX EX: HNT: 1P
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VHPSP 73	REG23: MUX EX: HNT: 1P
VHPSP 74	REG23: MUX EX: HNT: 1P
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VHPSP 76	REG23: MUX EX: HNT: 1P
VHPSP 77	REG23: MUX EX: HNT: 1P
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VHPSP 79	REG23: MUX EX: HNT: 1P
VHPSP 80	REG23: MUX EX: HNT: 1P
VHPSP 81	REG23: MUX EX: HNT: 1P
VHPSP 82	REG23: MUX EX: HNT: 1P
VHPSP 83	REG23: MUX EX: HNT: 1P
VHPSP 84	REG23: MUX EX: HNT: 1P
VHPSP 85	REG23: MUX EX: HNT: 1P
VHPSP 86	REG23: MUX EX: HNT: 1P
VHPSP 87	REG23: MUX EX: HNT: 1P
VHPSP 88	REG23: MUX EX: HNT: 1P
VHPSP 89	REG23: MUX EX: HNT: 1P
VHPSP 90	REG23: MUX EX: HNT: 1P
VHPSP 91	REG23: MUX EX: HNT: 1P
VHPSP 92	REG23: MUX EX: HNT: 1P
VHPSP 93	REG23: MUX EX: HNT: 1P
VHPSP 94	REG23: MUX EX: HNT: 1P
VHPSP 95	REG23: MUX EX: HNT: 1P
VHPSP 96	REG23: MUX EX: HNT: 1P
VHPSP 97	REG23: MUX EX: HNT: 1P
VHPSP 98	REG23: MUX EX: HNT: 1P
VHPSP 99	REG23: MUX EX: HNT: 1P
VHPSP 100	REG23: MUX EX: HNT: 1P

M198 MAIN PCB Assy



LOWER CABINET ASSY

UPPER CABINET ASSY

1

2

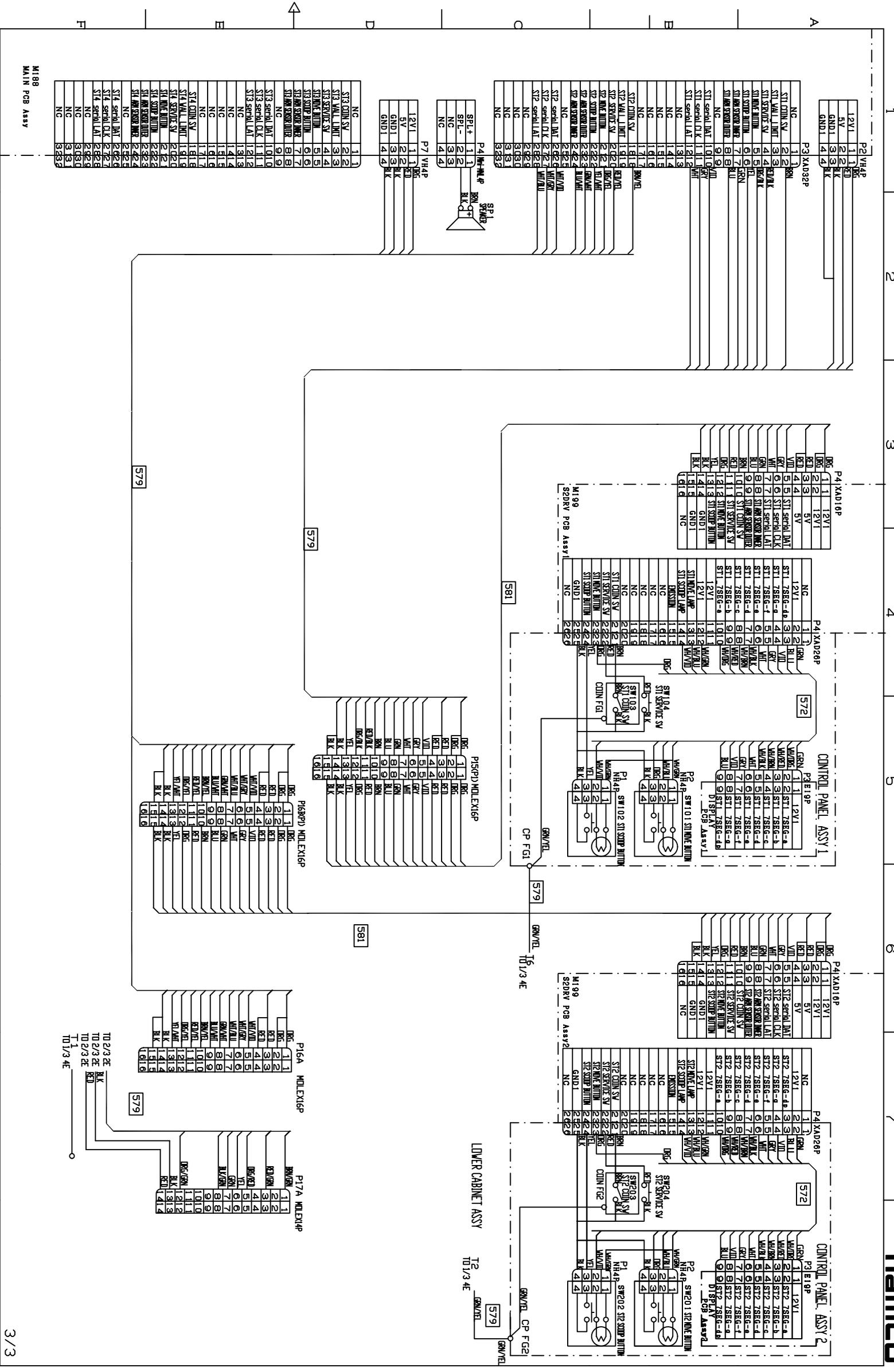
3

4

5

6

7



M189
MAIN PCB Assy

7-4 Setting mode

The setting conditions can be displayed on the LCD display.

1. Remove the maintenance door of the machine with the key and turn on the power switch.
(Refer to 7-4-1 Turning the power on.)
2. Turn the test switch on while pressing the enter switch and enter into the setting mode.
3. Select the setting item with the select switch, then press the enter switch.
4. Turn the test switch off and close the maintenance door.
✕ To return to factory shipment setting, set at [factory shipment mode].
(Refer to 7-5 Factory shipment mode.)

[Available setting items]

1. Game setting
Normal game, time limit game, free play, play till win modes can be selected.
2. Coin setting
Game price (coin and play count) can be selected.
3. Win ratio setting
Target win ratio can be set.
4. Shovel operation time
Shovel's operation time can be set.
5. Rail operation
Rail's amount of operation can be selected.
6. Elevator stop
Elevator can be set to stop operation with button 2.
7. Elevator descent time
Elevator's descending time can be set.
8. Machine failure stop
The station to stop operation can be set.
9. BGM
BGM's on/off can be set. 3 types of BGM can be selected from.
10. Sound and effects
Sound/effects on/off during operation can be set.
11. Error sound volume
Error sounds' on/off can be set. Volume can be set at 3 levels.
✕ Refer to following pages for details in setting modes.

7. OPERATION

Game mode.

SETTING MODE					
1: GAME SETTING					

1: GAME SETTING					
1: NORMAL GAME ★					
2: TIME LIMIT					
3: FREE PLAY					
4: PLAY TILL WIN					
←BACK					

If [time limit game] is selected, game play time is to be selected next.

2: TIME LIMIT					
1: TIME 30sec					
2: TIME 60sec					
3: TIME 100sec					
4: TIME 120sec					
←BACK					

Coin and play count setting.
※ If settings are changed, change display with the replacement sticker.

SETTING MODE					
2: CR SET P=PLAY					

2: CR SET P=PLAY					
1: 1CR 1P					
2: 1CR 1P 2CR 3P					
3: 1CR 1P 5CR 6P					
4: 2CR 1P★					
5: 2CR 1P 3CR 2P					
6: 2CR 1P 5CR 3P					
7: 3CR 1P					
8: 3CR 1P 5CR 2P					
9: 4CR 1P					
10: 5CR 1P					
11: 6CR 1P					
12: 1CR 2P					
13: 1CR 2P 2CR 5P					
14: 1CR 3P					
15: 1CR 4P					
16: 1CR 5P					

→ indicates turning the enter switch on

□ indicates switching with the select switch

★ indicates initial setting

Target Win ratio setting

SETTING MODE					
3: PAYOUT %					

SUPER AUTO: Quick Setting
CUSTOM: Custom Setting
If [SUPER AUTO] is selected, the shovel operation time may be changed.

3: PAYOUT %					
1: SUPER AUTO					
2: CUSTOM★					
←BACK					

Target Win ratio selection

3: PAYOUT %					
1: ALWAYS HARD					
2: 5%					
3: 8%					
4: 10%					
5: 12%					
6: 15%★					
7: 20%					
8: 25%					
9: 30%					
10: 35%					
11: 40%					
12: 45%					
13: 50%					
14: 60%					
15: 70%					
16: 80%					
17: 90%					
18: 100%					
←BACK					

Shovel operation time setting

SETTING MODE					
4: SHOVEL TIME					

Select the station to set the shovel operation time. [ALL] sets all stations at once.

4: SHOVEL TIME					
0: ALL★					
1: ST1					
2: ST2					
3: ST3					
4: ST4					
←BACK					

If set at [0: AUTO], machine will undertake automatic adjustment operation when power is turned on. Set at [automatic] under regular operating conditions.

4: SHOVEL TIME SET 2					
0: AUTO★					
1: 0.40sec					
2: 0.50sec					
3: 0.60sec					
4: 0.65sec					
5: 0.70sec					
6: 0.75sec					
7: 0.80sec					
8: 0.85sec					
9: 0.90sec					
10: 0.95sec					
11: 1.00sec					
12: 1.10sec					
13: 1.20sec					
14: 1.30sec					
15: 1.40sec					
←BACK					

Rail operation setting

SETTING MODE					
5: RAIL ACTION					

Select the station to set the rail operation. [ALL] sets all stations at once.

5: RAIL ACTION					
0: ALL★					
1: ST1					
2: ST2					
3: ST3					
4: ST4					
←BACK					

After station is selected, rail operation is to be selected next.

5: RAIL ACTION SET 2					
1: ONE WAY					
2: ROUND TRIP					
3: NO LIMIT★					
←BACK					

Shovel will operate according to set angles.

If set at [time limit game], game will operate under [NO LIMIT] mode.

Station display

7. OPERATION

