SEGA®

OWNER'S MANUAL

LOVE AND BERRY
Dress up and Dance! ™

Transform using a Fashion Magic Card

You can get a card

SEGA®

IMPORTANT

- Before using this product, read this manual carefully to understand the contents herein stated.
- After reading this manual, be sure to keep it near the product or in a convenient place for easy reference when necessary.

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INTRODUCTION

This manual is intended to provide detailed descriptions together with all the necessary information covering the general operation of electronic assemblies, electro-mechanicals, servicing control, spare parts, etc. for the product, **"LOVE AND BERRY Dress up and Dance!"**

This manual is intended for the owners, personnel and managers in charge of operation of the product.
Operate the product after carefully reading and sufficiently understanding the instructions.

In the unlikely event that the product does not function correctly, DO NOT allow anyone other than a technician to touch the internal system. Turn off the power to the machine, making sure to unplug the electrical cord from the outlet, and contact the office listed below or the point-of-purchase for this product.

Use of this product is unlikely to cause physical injuries or damage to property. However, points that require special attention are indicated by thick underlining, the word "IMPORTANT" and the symbol below.

(STOP) Indicates important information that, if ignored, may result in the mishandling of the product and cause faulty operation or damage to the product.

IMPORTANT

Sega Amusements U.S.A., Inc.
800 Arthur Avenue, Elk Grove Village, IL 60007-5215, U.S.A.

TEL: 1-847-364-9787
TOLL FREE: 1-888-877-2669
FAX: 1-847-427-1065

SPECIFICATIONS

Installation space:	719mm (28.3 in.) [Width] × 730 mm (28.7 in.) [Depth]
Height [POP assembled]:	1,285 mm (50.6 in.); [1,629 mm (64.1 in.)]
Weight:	88 kg (194.0 lbs.)
Power, maximum current:	75.5 W, 1.1 A (AC 120 V, 60 Hz Area)
Card capacity:	600 (Max.)
Monitor:	14 Type Color Monitor

NOTE: The contents herein described are subject to change without notice.

⚠ **WARNING**

> Procedures not described in this manual or marked as 'to be carried out by site maintenance personnel or other qualified professionals' should not be carried out by personnel without the necessary skill or technology. Work carried out by unqualified persons may cause serious accidents, including electrocution.

Parts replacement, maintenance inspections and troubleshooting should be carried out by site maintenance personnel or other qualified professionals. This manual includes directions that potentially dangerous procedures should only be carried out by professionals with the appropriate specialized knowledge.

The 'site maintenance personnel or other qualified professionals' mentioned in this manual are defined as follows:

Site maintenance personnel:

Individuals with experience in maintaining amusement equipment, vending machines, etc., working under the supervision of the owner/operator of this product to maintain machines within amusement facilities or similar premises by carrying out everyday procedures such as assembly, maintenance inspections, and replacement of units/expendable parts.

Activities to be carried out by site maintenance personnel:

Amusement equipment/vending machine assembly, maintenance inspection and replacement of units/expendable parts.

Other qualified professionals:

Persons employed by amusement equipment manufacturers, or involved in design, production, testing or maintenance of amusement equipment. The individual should have either graduated from technical school or hold similar qualifications in electrician/electronics/mechanical engineering.

Activities to be carried out by other qualified professionals:

Amusement equipment/vending machine assembly, repair/adjustment of electrical/electronic/mechanical parts.

1. HANDLING PRECAUTIONS

When installing or inspecting the machine, be very careful of the following points and pay attention to ensure that the player can enjoy the game safely.
Non-compliance with the following points or inappropriate handling running counter to the cautionary matters herein stated can cause personal injury or damage to the machine.

WARNING

- Before performing work, be sure to turn the power off. Performing the work without turning the power off can cause an electric shock or short circuit. In the case work should be performed in the status of power on, this manual always states to that effect.
- To avoid an electric shock or short circuit, do not plug in or unplug quickly.
- To avoid an electric shock, do not plug in or unplug with a wet hand.
- Do not expose power cords or earth wires on the surface, (floor, passage, etc.). If exposed, the power cords and earth wires are susceptible to damage. Damaged cords and wires can cause an electric shock or short circuit.
- To avoid causing a fire or an electric shock, do not put things on or damage the power cords.
- When or after installing the product, do not unnecessarily pull the power cord. If damaged, the power cord can cause a fire or an electric shock.
- In case the power cord is damaged, ask for a replacement through where the product was purchased from or the office herein stated. Using the cord as is damaged can cause fire, an electric shock or leakage.
- Be sure to perform grounding appropriately. Inappropriate grounding can cause an electric shock.
- Be sure to use fuses meeting the specified rating. Using fuses exceeding the specified rating can cause a fire or an electric shock.
- Completely make connector connections for IC BD and others. Insufficient insertion can cause an electric shock.
- Specification changes, removal of equipment, conversion and/or addition, not designated by SEGA are not permitted.
  - Failure to observe this may cause a fire or an electric shock. Non-compliance with this instruction can have a bad influence upon physical conditions of the players or the onlookers, or result in injury during play.
  - SEGA shall not be held responsible for damage, compensation for damage to a third party, caused by specification changes not designated by SEGA.
- Be sure to perform periodic maintenance inspections herein stated.

STOP IMPORTANT

- For the IC board circuit inspections, only the logic tester is allowed. The use of a multiple-purpose tester is not permitted, so be careful in this regard.
- When cleaning the CRT surfaces, use a soft and dry cloth. Do not apply chemicals such as thinner, benzine, etc.
- Static electricity from your body may damage some electronics devices on the IC board. Before handling the IC board, touch a grounded metallic surface so that the static electricity can be discharged.
- Do not turn the power on and off continuously. Repeatedly turning the power on and off may cause product malfunction or parts damage.
- Some parts are not designed and manufactured specifically for this game machine. The manufacturers may discontinue, or change the specifications of such general-purpose parts. If this is the case, SEGA cannot repair or replace a failed game machine whether or not a warranty period has expired.
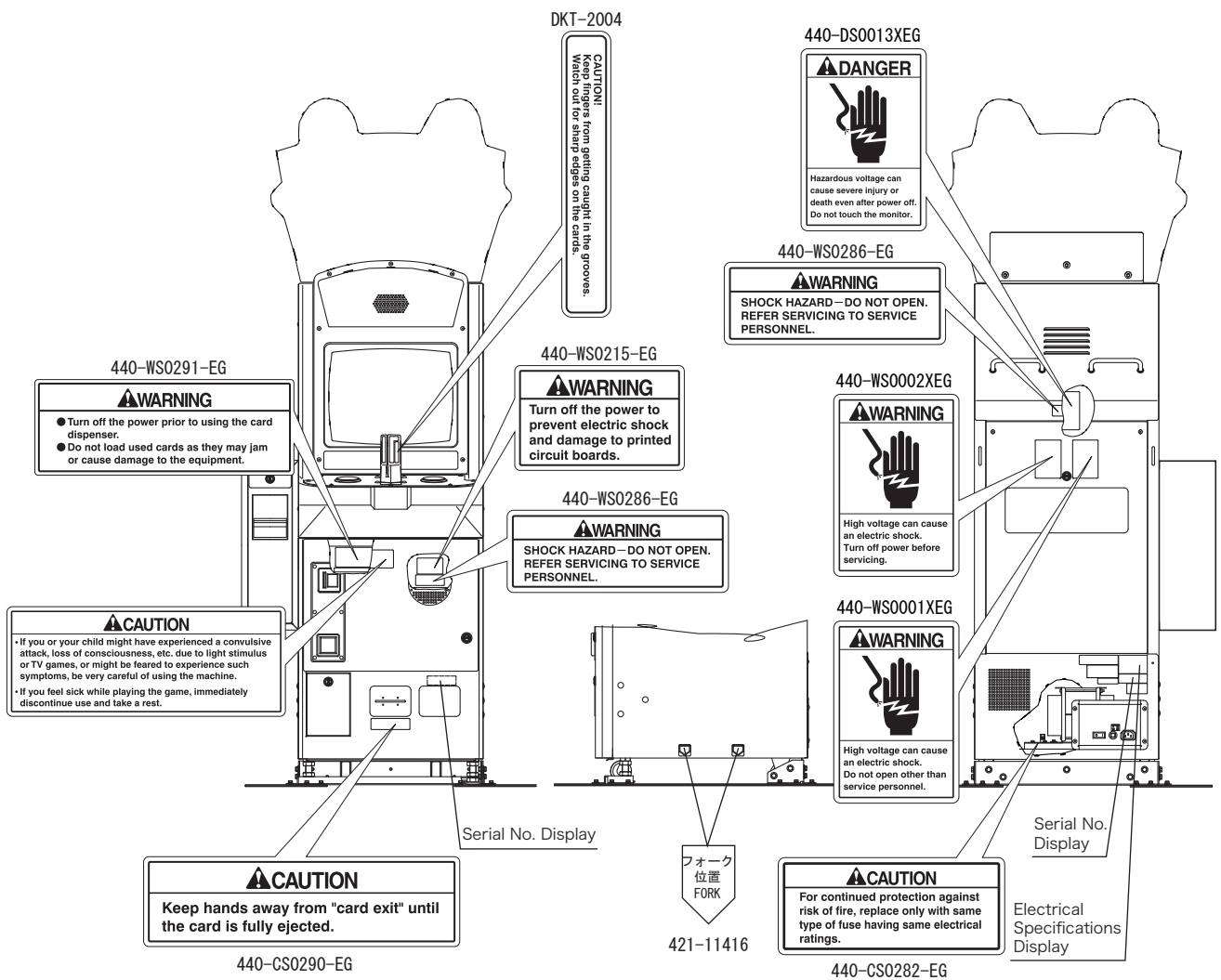
CONCERNING THE STICKER DISPLAY

This SEGA product has stickers attached describing the product manufacture No. (Serial No.) and Electrical Specifications. It also has a Sticker describing where to contact for repair and for purchasing parts.
When inquiring about or asking for repairs, mention the Serial No. and Name of Machine indicated on the Sticker. The Serial Number indicates the product register. Identical machines could have different parts depending on the date of production. Also, improvements and modifications might have been made after the publication of this manual. In order to ensure you order the correct parts, mention the Serial No. when contacting the applicable places.

CONCERNING WARNING DISPLAYS

This SEGA product has warning displays on stickers, labels and/or printed instructions adhered/attached to or incorporated in the places where a potentially hazardous situation could arise. The warning displays are intended for accident prevention for customers and for avoiding hazardous situations relating to maintenance and servicing work. Some portions of the cabinet contain high voltage and may cause accidents if touched. When performing maintenance, be very careful of the warning displays. It is especially important that any complex repair and replacement work not mentioned herein should be performed by those technical personnel who have knowledge of electricity and technical expertise. In order to prevent accidents, caution any customer ignoring the warnings to cease and desist immediately.

DKT-2004

CAUTION!
Keep fingers from getting caught in the grooves.
Watch out for sharp edges on the cards.

440-DS0013XEG

⚠ DANGER

Hazardous voltage can cause severe injury or death even after power off. Do not touch the monitor.

440-WS0286-EG

⚠ WARNING

SHOCK HAZARD—DO NOT OPEN. REFER SERVICING TO SERVICE PERSONNEL.

440-WS0215-EG

⚠ WARNING

Turn off the power to prevent electric shock and damage to printed circuit boards.

440-WS0291-EG

⚠ WARNING

● Turn off the power prior to using the card dispenser.
● Do not load used cards as they may jam or cause damage to the equipment.

440-WS0002XEG

⚠ WARNING

High voltage can cause an electric shock. Turn off power before servicing.

440-WS0286-EG

⚠ WARNING

SHOCK HAZARD—DO NOT OPEN. REFER SERVICING TO SERVICE PERSONNEL.

⚠ CAUTION

• If you or your child might have experienced a convulsive attack, loss of consciousness, etc. due to light stimulus or TV games, or might be feared to experience such symptoms, be very careful of using the machine.
• If you feel sick while playing the game, immediately discontinue use and take a rest.

440-WS0001XEG

⚠ WARNING

High voltage can cause an electric shock. Do not open other than service personnel.

Serial No. Display

フォーク
位置
FORK

421-11416

⚠ CAUTION

Keep hands away from "card exit" until the card is fully ejected.

440-CS0290-EG

Serial No. Display

Electrical Specifications Display

⚠ CAUTION

For continued protection against risk of fire, replace only with same type of fuse having same electrical ratings.

440-CS0282-EG

2. PRECAUTIONS REGARDING INSTALLATION LOCATION

⚠️ **WARNING**

This product is an indoor game machine. Do not install it outside. Even indoors, avoid installing in places mentioned below so as not to cause a fire, electric shock, injury and/or malfunction.
・ Places subject to rain or water leakage, or places subject to high humidity in the proximity of an indoor swimming pool and or shower, etc.
・ Places subject to direct sunlight, or places subject to high temperatures in the proximity of heating units, etc.
・ Places filled with inflammable gas or vicinity of highly inflammable/volatile chemicals or hazardous matter.
・ Dusty places.
・ Sloped surfaces.
・ Places subject to any type of violent impact.
・ Vicinity of anti-disaster facilities such as fire exits and fire extinguishers.
・ The operating (ambient) temperature range is from 5℃ to 30℃.

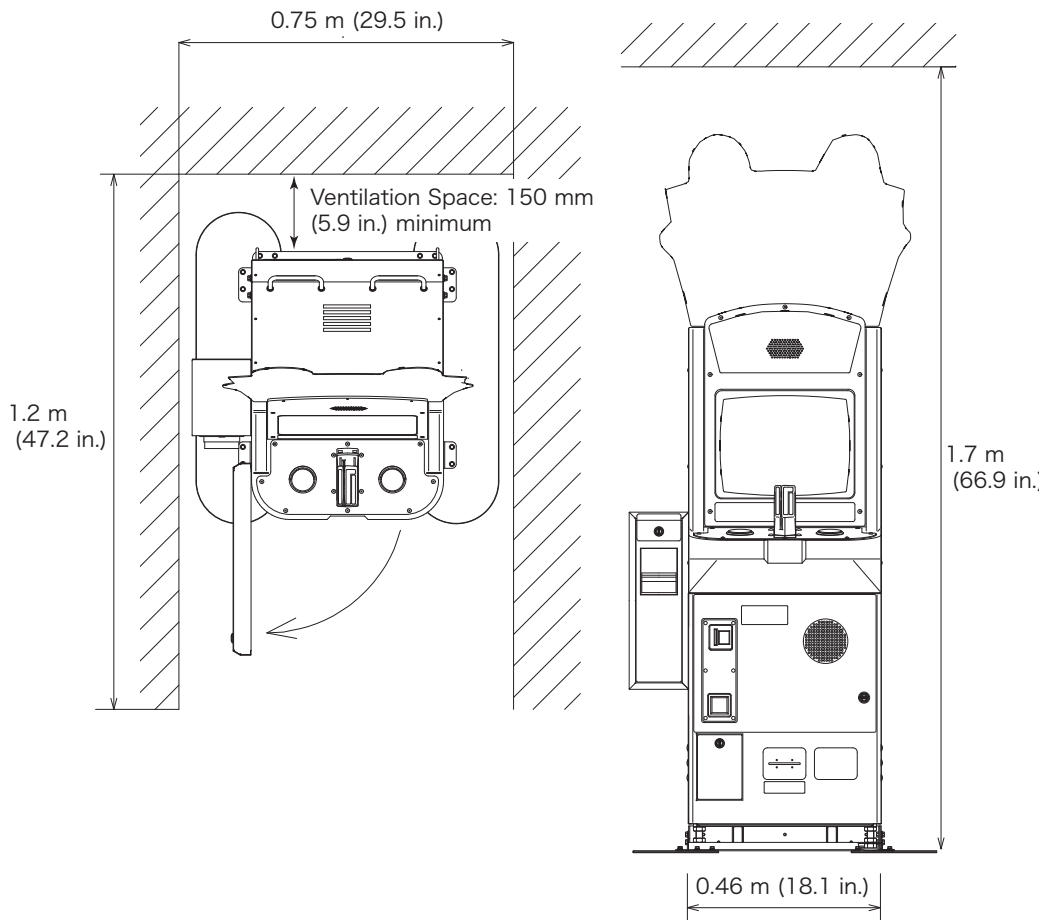## 2－1　LIMITATIONS OF USAGE

⚠️ **WARNING**

● Be sure to check the Electrical Specifications. Ensure that this product is compatible with the location's power supply, voltage and frequency requirements. A plate describing Electrical Specifications is attached to the product. Non-compliance with the Electrical Specifications can cause a fire and electric shock.
● This product requires a breaker and earth mechanism as part of the location facilities. Using the product without these can cause a fire and electric shock.
● Ensure that the indoor wiring for the power supply is rated at 7A or higher (AC single phase 100V～120V area), and 4A or higher (AC 220V～240V area). Non-compliance with the Electrical Specifications can cause a fire and electric shock.
● Be sure to use an independent power supply equipped with an earth leakage breaker. Using a power supply without an earth leakage breaker can cause an outbreak of fire if a power surge occurs.
● Putting many loads on one electrical outlet can cause generation of heat and a fire resulting from overload.
● When using an extension cord, ensure that the cord is rated at 7A or higher (AC 100V ～ 120V area) and 4A or higher (AC 220V～240V area). Using a cord rated lower than the specified rating can cause a fire and electric shock.

2

⚠
WARNING

● For the operation of this machine, secure a minimum area of 0.75 m (W) x 1.2 m (D). In order to prevent injury resulting from falls/accidents during game play, be sure to secure the minimum area for operation.
● Be sure to provide sufficient space (150 mm minimum) so as to allow this product's ventilation fan to function efficiently. To avoid machine malfunctions or fires, do not place any obstacles near the ventilation opening.
● Do not allow objects to block the ventilation ports. It can cause generation of heat and a fire.
● SEGA shall not be held responsible for damage or compensation for damage to a third party, resulting from the failure to observe this instruction.

0.75 m (29.5 in.)

Ventilation Space: 150 mm (5.9 in.) minimum

1.2 m (47.2 in.)

1.7 m (66.9 in.)

0.46 m (18.1 in.)

🛑
STOP

IMPORTANT

In order to transport the machine into a building, the minimum necessary dimensions of the opening (of doors, etc.) are 0.5 m (19.7 in.) [W] and 1.3 m (51.2 in.) [H].

Electricity Consumption:

MAX. 1.1 A   (AC 120 V, 60 Hz)
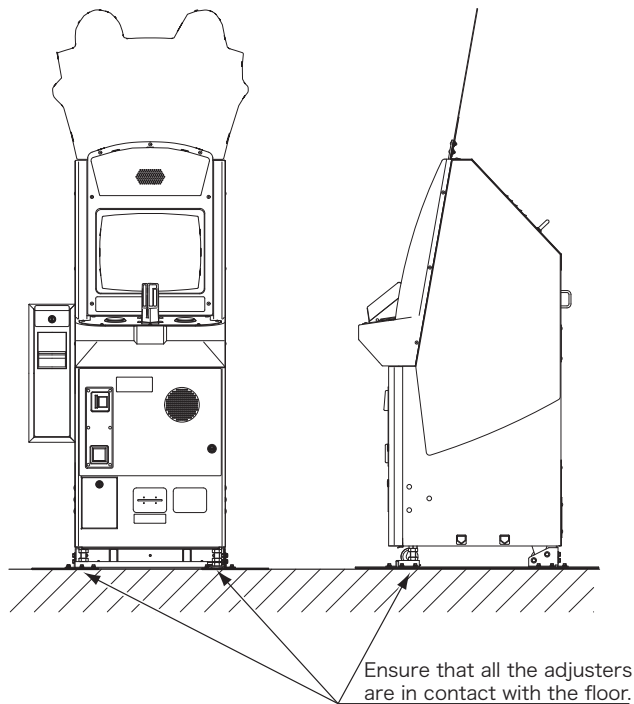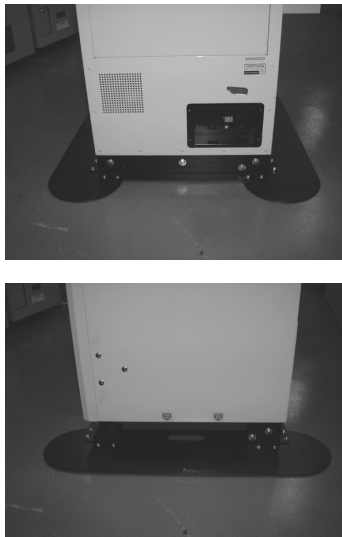
3. PRECAUTIONS REGARDING PRODUCT OPERATION

To avoid injury and trouble, be sure to pay attention to the behavior of visitors and players.

3－1　BEFORE OPERATION

⚠️ **WARNING**

In order to avoid accidents, check the following before starting the operation:
- To ensure maximum safety for the players and the customers, ensure that where the product is operated has sufficient lighting to allow any warnings to be read. Operation under insufficient lighting can cause players to bump into each other, causing trouble between customers.
- Be sure to perform appropriate adjustment of the monitor (projector). Do not leave the machine operating with the monitor flickering or malfunctioning. Failure to observe this can have a negative effect upon the players' or the customers' physical condition.
- It is suggested to ensure a space for players who feel sick while playing the game to take a rest.
- Check if all of the adjusters are in contact with the surface. If they are not, the cabinet can move and cause an accident.
- Do not put any heavy items on this product. Placing heavy items on the product can cause accidents or damage to parts.
- Do not climb on the product. Climbing on the product can cause accidents. To check the top portion of the product, use a stepladder.
- To avoid electric shock, check that none of the door & cover parts are damaged or missing.
- To avoid electric shock, short circuit and or parts damage, do not put the following items on or in the periphery of the product. Flower vases, flowerpots, cups, water tanks, cosmetics, and receptacles/containers/ vessels containing chemicals or water.

Ensure that all the adjusters are in contact with the floor.

⚠️ **CAUTION**

To avoid injury, be sure to provide sufficient space by considering the crowd situation at the installation location. Insufficient installation space can cause customers to bump into each other, causing trouble.

3-2 DURING OPERATION (PAYING ATTENTION TO CUSTOMERS)

To avoid injury and trouble, be sure to pay attention to the behavior of visitors and players.

WARNING

- To avoid injury and accidents, those who fall under the following categories are not allowed to play the game.
  - ・ Those who need assistance such as the use of an apparatus when walking.
  - ・ Those who have high blood pressure or a heart problem.
  - ・ Those who have experienced muscle convulsion or loss of consciousness when playing video games, etc.
  - ・ Those who have neck or spinal cord problems.
  - ＊ Intoxicated persons.
  - ＊ Pregnant women or those who could be pregnant.
  - ＊ Persons susceptible to motion sickness.
  - ＊ Persons who disregard the product's warning displays.
- Even players who have never been adversely affected by light stimulus might experience dizziness or headache depending on their physical condition when playing the game. Small children are especially likely to experience these symptoms. Caution guardians of small children to keep watch on their children during play.
- It is suggested to provide a space for players who feel sick while playing the game to take a rest.
- Instruct those who feel sick during play to have a medical examination.
- To avoid injury from falls and electric shocks due to spilled drinks, instruct the player not to place heavy items or drinks on the product.
- To avoid electric shocks and short circuits, do not allow customers to put hands and fingers or extraneous matter in the openings of the product or small openings in or around the doors.
- To avoid falls and resulting injury, immediately stop the customer from leaning against or climbing on the product, etc.
- To avoid electric shocks and short circuits, do not allow customers to unplug the power plug without a justifiable reason.

CAUTION

Immediately stop such violent acts as hitting and kicking the product. Such violent acts can cause parts damage or cause the cabinet to fall over, resulting in injury.

STOP

IMPORTANT

Make sure to avoid disturbing customers when moving/removing the machine from its current location.

4. PART DESCRIPTIONS

POP

SPEAKER

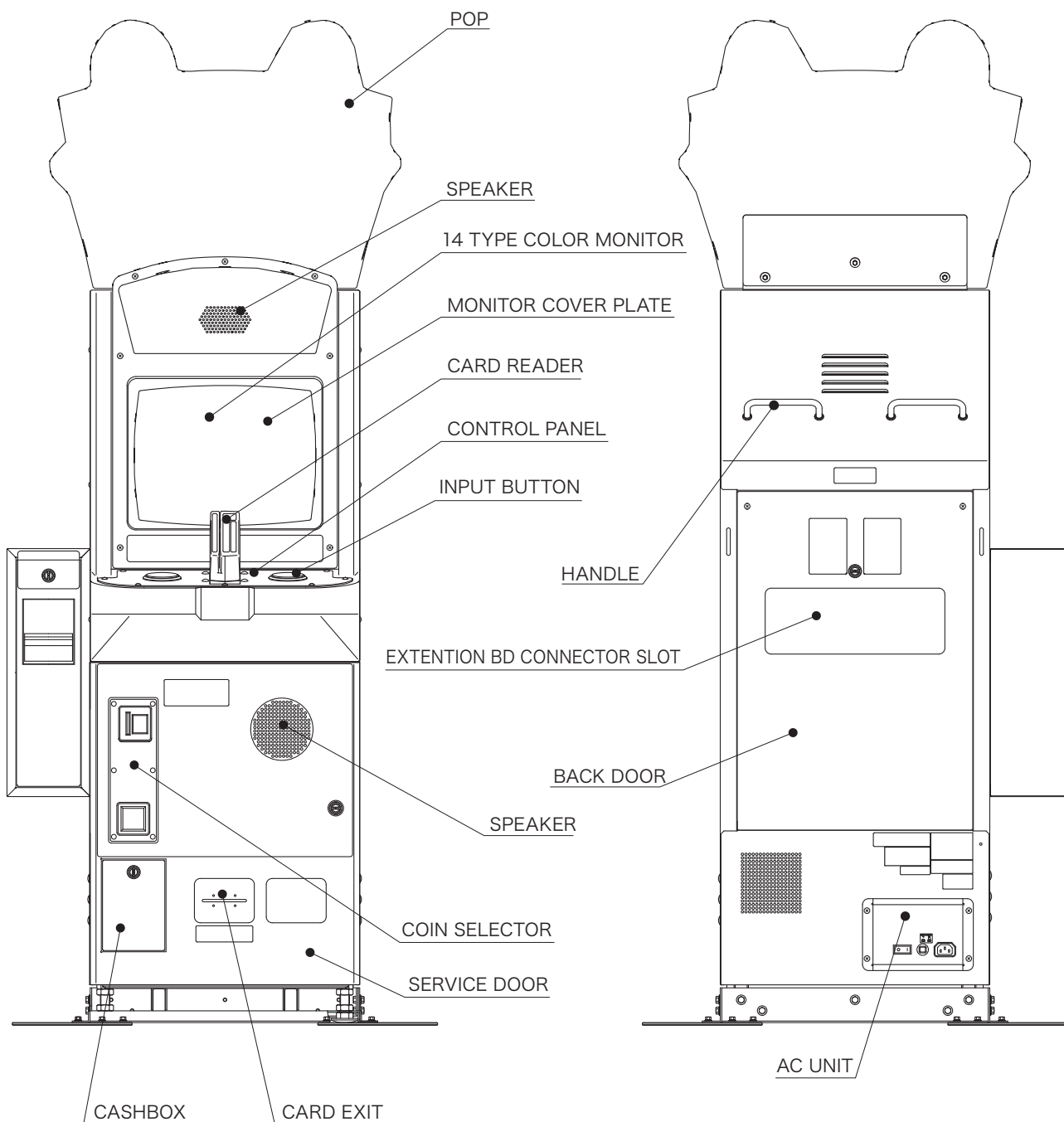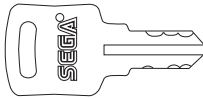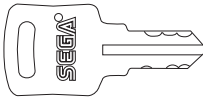14 TYPE COLOR MONITOR

MONITOR COVER PLATE

CARD READER

CONTROL PANEL

INPUT BUTTON

HANDLE

EXTENTION BD CONNECTOR SLOT

BACK DOOR

SPEAKER

COIN SELECTOR

SERVICE DOOR

AC UNIT

CASHBOX   CARD EXIT

FIG. 4

— 7 —
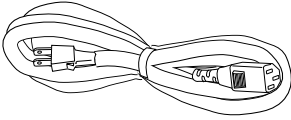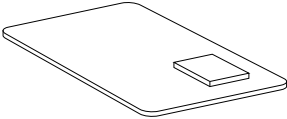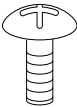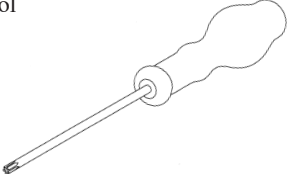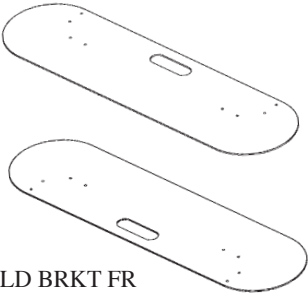
5. ACCESSORIES

Confirm that the accessories listed in the table below are present when setting up the product. Accessories marked "Spare" in the note column are consumable items but included as spares.

TABLE 5a ACCESSORIES

DESCRIPTION :	OWNER'S MANUAL	SERVICE MANUAL
Part No. (Qty.) :	420-6967-01 (1)	420-6968 (1)
Note :	This manual	For setting a latest software.

Figures :
Parts not labeled with part numbers are as yet unregistered or cannot be registered. Be sure to handle all parts with care, as some parts are not available for purchase separately.

KEY MASTER
220-5793-2-A001 (2)
For the back door
220-5793-2-A003 (2)
For the service door

KEY (2)
For the cashbox door
The keys are inside the service door (near the cashbox side) at the time of shipment from the factory.
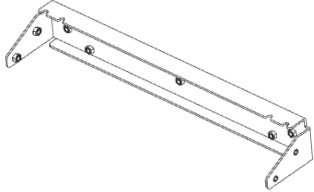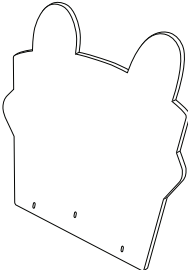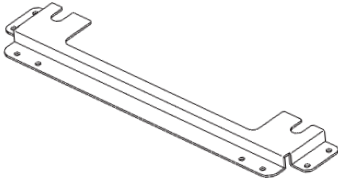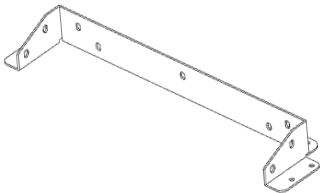
The following Table 5b lists the parts that had been separately packed when the product was shipped from the factory but are necessary when you use the product. These parts will be mounted on the product when installing and assembling it.

TABLE 5b ACCESSORIES

AC CABLE (POWER CORD)
600-7326 (1)
Used for installation, see Section 6, 2.

CLEANING CARD
MKG-0011-01 (1)

TRUSS SCREW (CHROME)
000-T00414-0C (3)
Used for securing POP,
see Section 6, 3.

TAMPERPROOF DRIVER M4
540-0069 (1)
Tool

CABINET HOLD BASE (L, R)
DKT-0009 (2)
Used for installation,
See Section 6, 1.

CABINET HOLD BRKT RR UPPER
DKT-0011 (1)
Used for installation,
See Section 6, 1.

POP SPC OSM ENG
SPC-0016 (1)
See Section 6, 3.

CABINET HOLD BRKT FR
DKT-0010 (1)
Used for installation,
See Section 6, 1.

CABINET HOLD BRKT RR LOWER
DKT-0012 (1)
Used for installation,
See Section 6, 1.

HEXAGON BOLT M5×8 (BLACK)
FAS-300048 (16)
See Section 6, 1.

HEXAGON BOLT M6×16 (BLACK)
030-000616-SB (13)
See Section 6, 1.

SPECIAL WASHER
068-652016-0B (13)
See Section 6, 1.

6. ASSEMBLY AND INSTALLATION

WARNING

- ● Perform assembly work by following the procedure herein stated. Failure to comply with the instructions can cause electric shock.
- ● Perform assembling as per this manual. Since this is a complex machine, incorrect assembling can cause an electric shock, machine damage and/or improper functioning as per specified performance.
- ● Ensure that connectors are accurately connected. Incomplete connections can cause electric shock.
- ● Be careful not to damage the wires. Damaged wires may cause electric shock or short circuit or present a risk of fire.
- ● This work should be performed by site maintenance personnel or other skilled professionals. Work performed by non-technical personnel can cause a severe accident such as electric shock. Failing to comply with this instruction can cause a severe accident such as electric shock to the player during operation.
- ● Provide sufficient space so that assembling can be performed. Performing work in places with narrow space or low ceiling may cause an accident and assembly work to be difficult.
- ● To perform work safely and avoid serious accidents such as the cabinet falling down, do not perform work in places where step-like grade differences, a ditch, or slope exist.

CAUTION

Handle molded parts with care. Excessive weight or pressure may cause them to break and the broken pieces may cause injury.

When carrying out the assembling and installation, follow the following 6-item sequence.

1 SECURING IN PLACE (ADJUSTER ADJUSTMENT)

2 POWER SUPPLY AND EARTH CONNECTION

3 ASSEMBLING THE POP

4 INSERTING THE MANAGEMENT CHIP AND FASHION MAGIC CARDS (See Section 7)

5 POWERING ON

6 ASSEMBLY CHECK

| Tools and Implements Required for the Work |
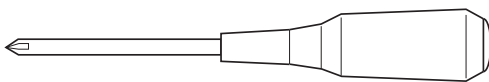
Phillips screwdriver (for M4 screws)
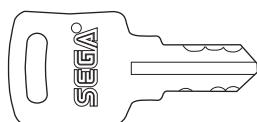
Socket wrench
(for M5, M6 hexagon bolts)

Master key
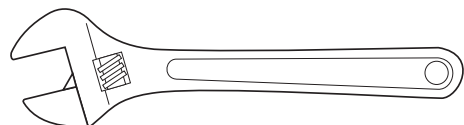
Spanner with a jaw width of 24 mm
(for M16 hexagon bolts)

1 SECURING IN PLACE (Attaching Cabinet Hold Brackets)

WARNING

● Make sure that all the adjusters are resting on the floor. The cabinet may move and cause an accident if the adjusters are not laid out properly.
● When aligning the adjusters, be sure to also secure the cabinet hold brackets to prevent tipping. Failure to do so could result in injury or other hazards.
● The cabinet hold brackets have been added to the game with the purpose of widening the games footprint and add stability. UL 22 requires that the cabinet hold brackets are properly installed prior to the games operation. SEGA cannot be responsible for any actions resulting in failure to follow these instructions.

STOP

IMPORTANT

The adjusters are made of metal and therefore present a risk of damaging the floor. Be sure to keep this in mind when positioning the cabinet.

The cabinet is equipped with 4 casters and 2 adjusters.
After deciding on a location, bring the adjusters into direct contact with the ground and adjust the cabinet so that it is completely level.

① Move the cabinet to the desired location. Make sure there is space in the back for air to flow.
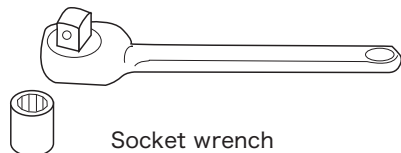
ADJUSTER (2)

ADJUSTABLE CASTER (2)

FIXED CASTER (2)

② Spread bubble wrap or another suitable material so as not to damage the cabinet and then lower it gently onto the ground so that the bill acceptor is facing upwards.
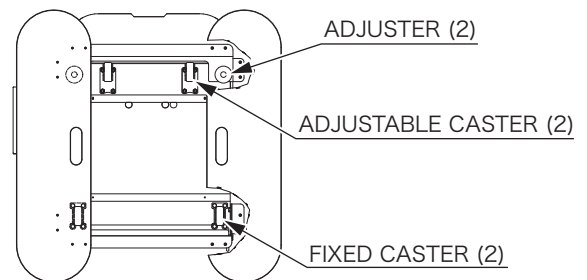
FIG. 6.1 a Bottom View

FIXED CASTER

HEXAGON BOLT (2 ea.)
M6×12, w/spring washer

③ Remove the 2 hexagon bolts from the outside of each fixed caster.
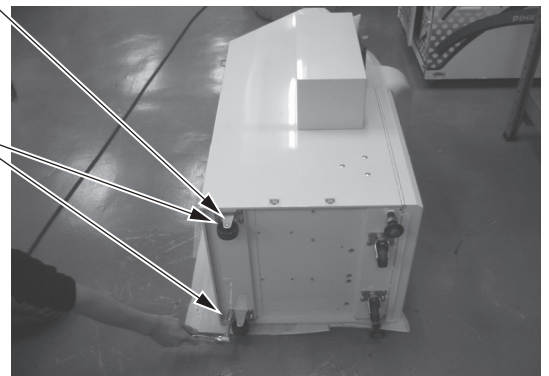
PHOTO 6.1a

④ Use the hexagon bolts and special washers provided to temporarily hold the casters in place.

HEXAGON BOLT (2 ea.)
M6x16, w/spring washer,
special washer used
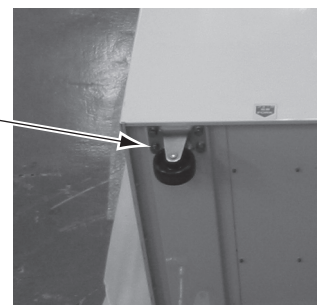
PHOTO 6.1b

⑤ Attach the supplied CABINET HOLD BRKT RR UPPER using the temporarily holding hexagon bolts on the front side.

CABINET HOLD BRKT RR UPPER
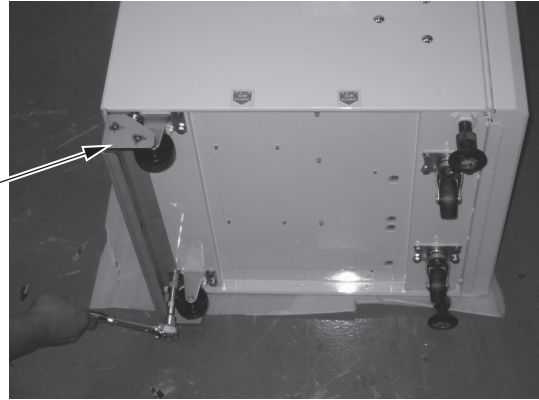
PHOTO 6.1c

PHOTO 6.1d

⑥ Raise the cabinet and return it to an upright position, placing it on top of CABINET HOLD BASE L and R. Use the leg adjusters to make sure that the cabinet is perfectly level at this point.

CABINET HOLD BRKT R

CABINET HOLD BRKT L
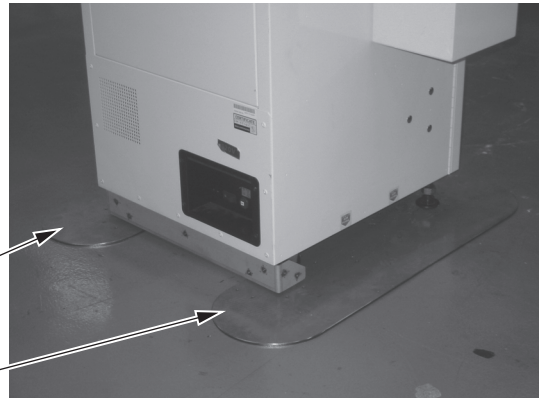
PHOTO 6.1e

⑦ Insert the CABINET HOLD BRKT FR between the leg adjusters and the hexagon nut, and then tighten the nut downwards to fix it in place.

HEXAGON NUT M16
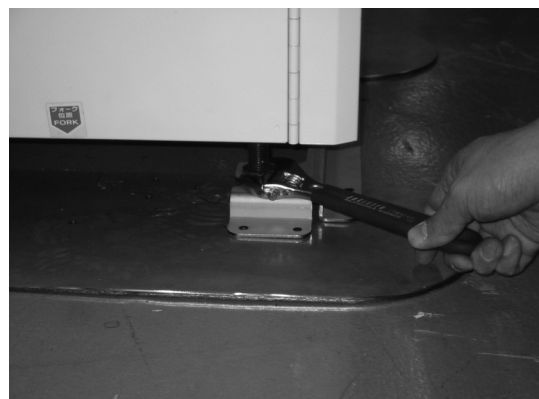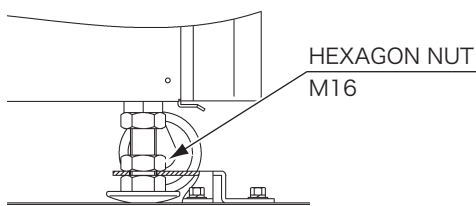
PHOTO 6.1f

⑧ Next attach the CABINET HOLD BRKT RR LOWER to the already attached frontal CABINET HOLD BRKT RR UPPER using the supplied hexagon bolts.

HEXAGON BOLT/M6x16, w/spring washer, special washer used

CABINET HOLD BRKT RR LOWER
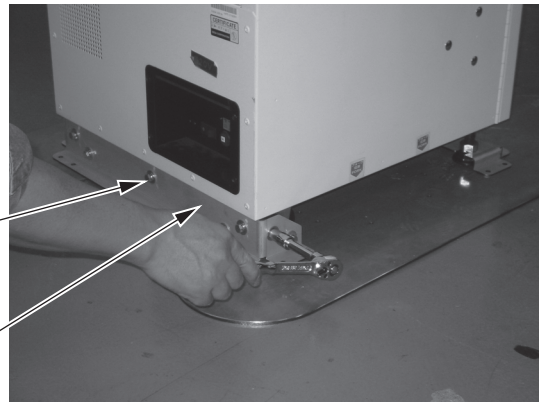
PHOTO 6.1g

⑨ Use the supplied hexagon bolts to firmly attach CABINET HOLD BRKT FR and CABINET HOLD BRKT RR LOWER to CABINET HOLD BASE L/R.

PHOTO 6.1h

HEXAGON BOLT/M5x8, w/flat & spring washers

PHOTO 6.1i

Ventilation space (15 cm minimum)
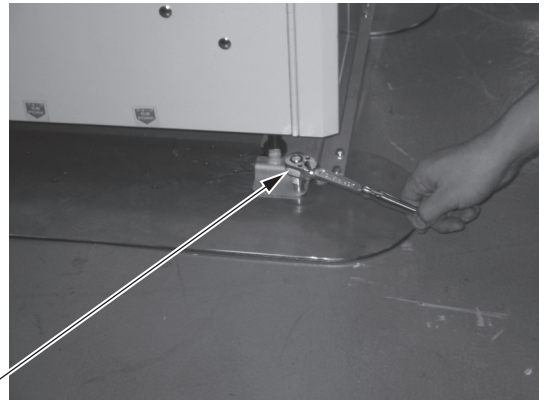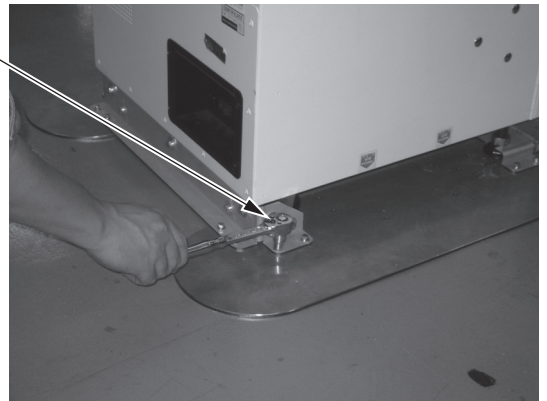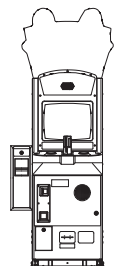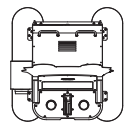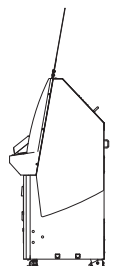
(Scale: 1/50) See the layout for the positioning location.
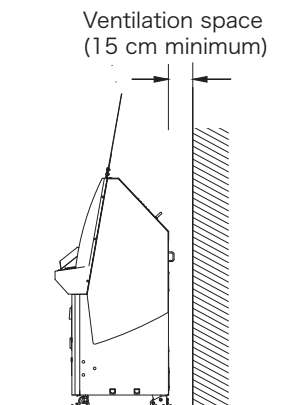
FIG. 6.1b

FIG. 6.1c Ensuring Ventilation Space

2 POWER SUPPLY AND EARTH CONNECTION

WARNING

● Be sure to independently use the power supply socket outlet equipped with an Surge Suppressor. Using a power supply without a Surge Suppressor can cause a fire when electric leakage occurs.
● Ensure that the "accurately grounded indoor earth terminal" and the earth wire cable are available (except in the case where a power cord plug with earth is used). This product is equipped with an earth terminal. Connect the earth terminal and the indoor earth terminal with the designated cable. If the grounding work is not performed appropriately, customers can be subjected to an electric shock, and the product may not function properly.
● Ensure that the power cord and earth wire are not exposed on the surface (passage, etc.). If exposed, they can be caught and are susceptible to damage. If damaged, the cord and wire can cause electric shock and short circuit accidents. Ensure that the wire is not in the customer's way and that the wiring has protective insulation.
● After wiring the power cord on the floor, be sure to protect the power cord. An exposed power cord is susceptible to damage and may cause an electric shock.

The AC unit is located at the back of the cabinet.
The AC unit features a main switch, a circuit protector, and an inlet for connecting the power cord.

① Ensure that the main switch is OFF.

Main SW off.

CIRCUIT PROTECTOR   INLET   AC CABLE (POWER CORD)

To the AC outlet

MAIN SWITCH
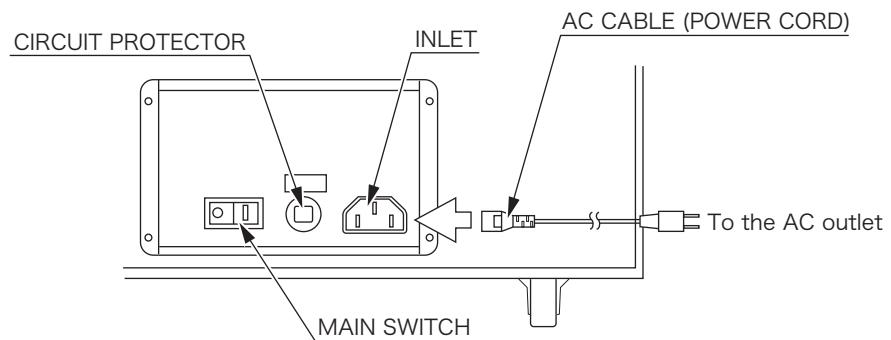
FIG. 6.2a

② Firmly insert the power plug into the socket outlet. Insert the opposite side of the power cord plug to the AC Unit's connector ("INLET").

③ Perform wiring for the power cord. Install protective insulation for the power cord.

WIRING COVER
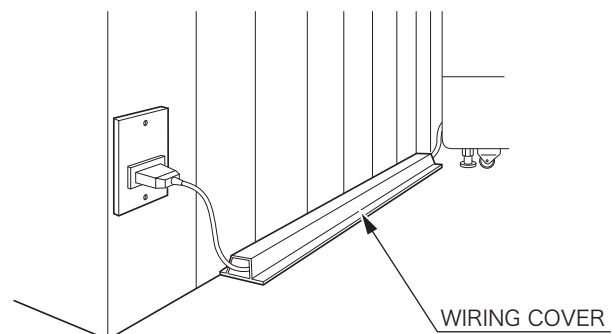
FIG. 6.2b Connecting the Power Cord

— 13 —

③ ASSEMBLING THE POP

Remove the 3 truss screws (M4 × 12) from the cabinet, replacing them with the 3 supplied truss screws (M4 × 14), and fasten the POP as shown in the figure on the right. The POP support board for this machine is packed in air-wrap and secured to the front of the monitor cover.

POP SUPPORT BOARD

TRUSS SCREW (3), chrome
M4×14
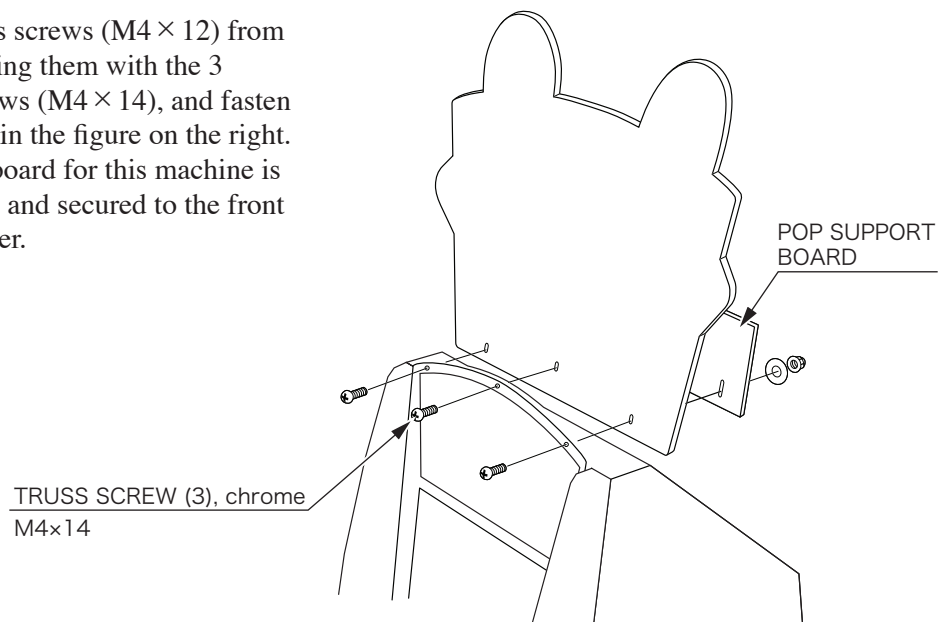
FIG. 6.3

4 INSERTING THE MANAGEMENT CHIP AND FASHION MAGIC CARDS

While consulting section 7, "MANAGEMENT CHIP AND FASHION MAGIC CARDS", insert the Management Chip into the Management Chip reader/writer, and load the cards into the card dispenser.

MANAGEMENT CHIP

MANAGEMENT CHIP READER/WRITER

PHOTO. 6.4

5 POWERING ON

STOP
IMPORTANT
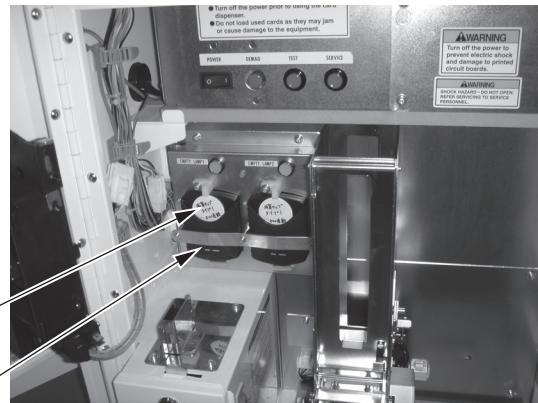
This machine cannot be powered on unless both the AC unit on the back of the cabinet and the power switch in the maintenance switch section on the inside of the service door are both turned on.

Turning on the AC unit main switch and the maintenance switch will power on the machine. When powering on the machine, the system start-up screen will be displayed, and an advertisement screen will be shown afterwards. On this machine, the number of credits will be saved even after shutting off the power. If credits allowing further play remain in the machine when powered off, a card will be dispensed and a game will begin when the machine is restarted.

・ In the event that there are no cards loaded into the card dispenser, a "CARD ERROR" message screen will be displayed. In such a case, turn off the machine, load cards, and turn it on again.

・ To adjust the sound volume, press the TEST Button and enter the SOUND TEST in the Test Mode. Also, the choice of whether or not to play sound during the advertisement screen can be selected in the TEST MODE settings.

POWER SWITCH   TEST BUTTON   MAINTENANCE SWITCH SECTION
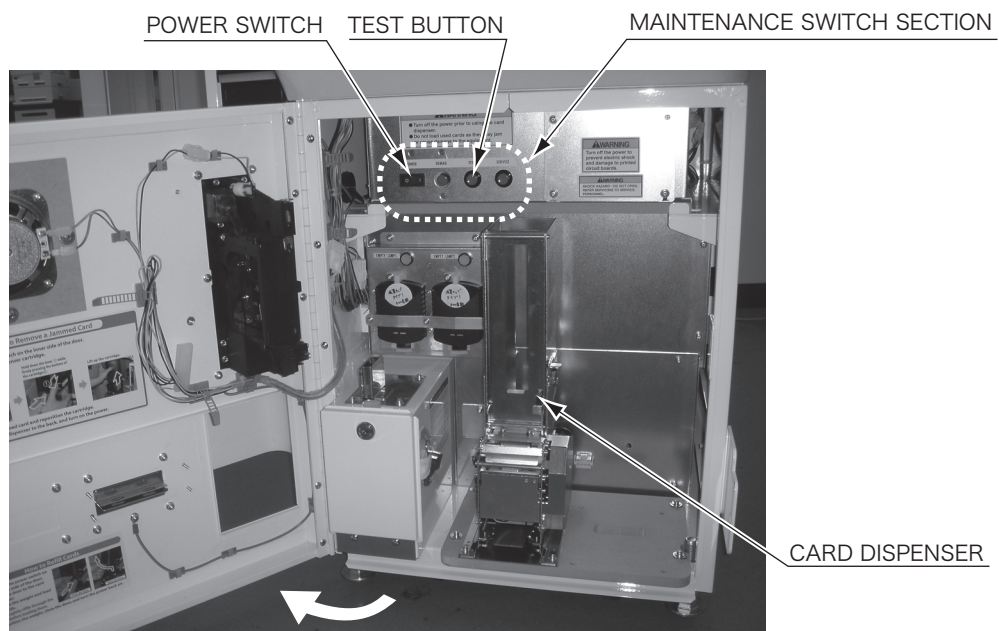
CARD DISPENSER

PHOTO. 6.5

6 ASSEMBLY CHECK

After powering on, press the SERVICE Button in the maintenance switch section to make sure that the machine is working properly.

Confirm the following items during operation:

☐ Are the cards dispensed properly?
☐ Does the game proceed properly on the screen?
☐ Do the input buttons work properly?
☐ Is the card scan carried out properly?

6

For more detailed, specific confirmation, refer to the TEST MODE. (See Section 11.)

7. MANAGEMENT CHIP AND FASHION MAGIC CARDS

<table>
<tr>
<td>⚠️
WARNING</td>
<td>● Turn off the power prior to using the card dispenser.
● Do not load used cards as they may jam or cause damage to the equipment.</td>
</tr>
</table>

<table>
<tr>
<td>🛑 STOP

IMPORTANT</td>
<td>Do not perform any of the following actions to avoid damaging the machine.
● Removing the Management Chip or turning the power on/off when the red Management Chip reader/writer "BUSY" lamp is flashing.
● Removing/inserting Management Chips while a game is in progress.
● Inserting Management Chips/Cards designed for other machines or game versions.
● Loading more than the maximum number of cards (600). Doing so can result in card jamming or faulty dispensing.</td>
</tr>
</table>

7－1　INSTALLING MANAGEMENT CHIP

The Management Chip is supplied with the card set for use with this machine.

① Turn off the power switch inside the door.

② Loosen the screw locking the Management Chip holder.

③ Insert the Management Chip firmly into the Management Chip reader/writer slot.

④ Turn on the power switch inside the door.

⑤ If the "EMPTY LAMP" lights up, there may be a malfunction. Check that the chip is correctly inserted.

MANAGEMENT CHIP HOLDER

PHOTO 7.1

NOTES:
・ *Be sure to turn the power off and on again when inserting/removing Management Chips, even if the machine is in use.*
・ *The counter in the Management Chip is set for the number of cards in one carton, and each dispensed card reduces the counter number by 1. One Management Chip allows game operation for one carton of cards.*

When the credits reach zero and the warning screen is displayed, install a new Management Chip.
A Management Chip that causes the "EMPTY LAMP" to light up cannot be used.
There are two reader/writer units. If the chip is recognized by either one of them, the game can be operated.
The status of the chip can be verified in Test Mode.

MANAGEMANT CHIP INDICATORS

● POWER LAMP: The green lamp lights up when the machine has properly recognized the reader/writer units.

● BUSY LAMP: The red lamp flashes when the reader/writer is communicating with the Management Chip. Do not remove the Management Chip when the lamp is blinking. In addition, do not turn the power off or perform any other operations on the machine.

● EMPTY LAMP: This lamp lights up when either the credits for the Management Chip reach zero or when an error has occurred with the Management Chip reader/writer.
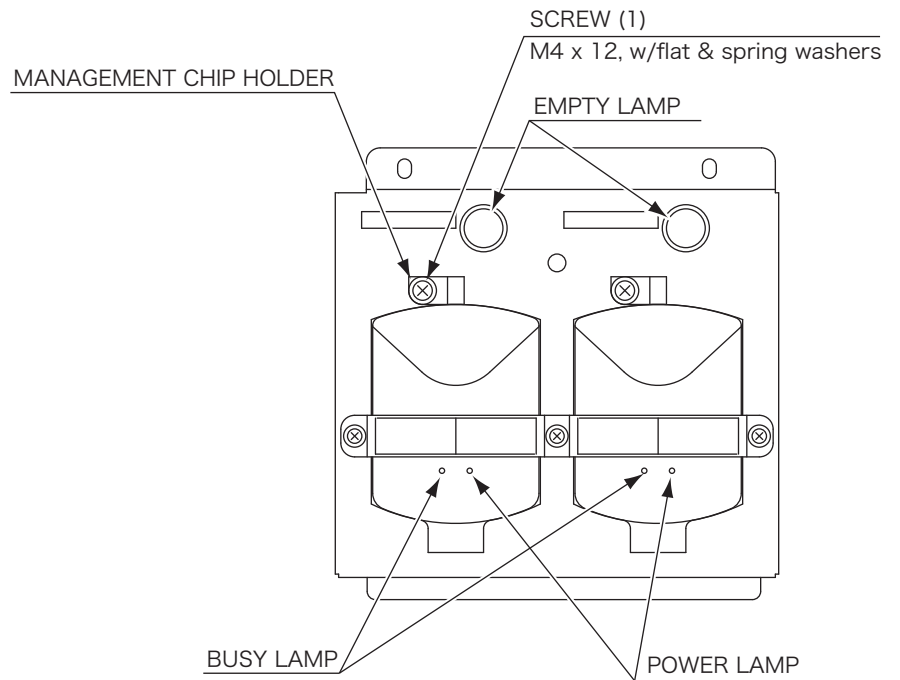
FIG. 7.1

7－2 MANAGEMENT CHIP ERROR CODES

When problems occur with the Management Chip, the following error codes will be displayed on the screen. Refer to the "cause" and "countermeasures" list below in order to deal with the problem appropriately.
The following error codes will not be displayed if either the Management Chip or the reader/writer is functioning properly.

ERROR 100: Management Chip, reader/writer error

[DISPLAY] ERROR 100
RFID READER NOT READY
(If the error occurs in Test Mode, "READER NOT READY" is displayed)

[CAUSE] The wire connection is not properly configured, or there may be a broken wire or damaged hardware.

[COUNTERMEASURES] Turn off the power, check the wire connection, and then restart the machine. If the problem still persists, the machine may be damaged. Replace broken parts with new ones.

ERROR 101: Management Chip read error

[DISPLAY] ERROR 101
RFID READ ERROR
(If the error occurs in Test Mode, "READ ERROR" is displayed)

[CAUSE] (1) The wire connection is not configured properly, or there may be a broken wire or damaged hardware.
(2) The Management Chip is not inserted properly in the slot.

[COUNTERMEASURES] (1) Turn off the power, check the wire connection, and then restart the machine. If the problem still persists, the machine may be damaged. Replace broken parts with new ones.
(2) Check the status of the Management Chip and reinsert it. The chip may be damaged. Replace it with a new one if necessary.

ERROR 102: Management Chip write error

[DISPLAY] ERROR 102
RFID WRITE ERROR

[CAUSE] The process of writing data to the Management Chip does not complete properly. The verified data does not match the results of the data check. The Management Chip is not inserted properly in the slot.

[COUNTERMEASURES] Reinsert the Management Chip properly. If the problem still persists, the chip may be damaged. Replace it with a new one.

ERROR 103: Management Chip decrement error

[DISPLAY] ERROR 103
RFID DECREMENT ERROR

[CAUSE] The process of credit reduction does not complete properly. The counter does not decrease by 1 after the reduction process. The Management Chip is not inserted properly in the slot.

[COUNTERMEASURES] Reinsert the Management Chip properly. If the problem still persists, the chip may be damaged. Replace it with a new one.

ERROR 104: Management Chip data error 1

[DISPLAY]   ERROR 104
             RFID UNKNOWN ERROR
             (If the error occurs in Test Mode, "UNKNOWN CHIP FORMAT" is displayed)

[CAUSE]   The inserted Management Chip is not for the correct machine or game version.

[COUNTERMEASURES]   Verify again that the Management Chip is correct.

ERROR 105: Management Chip data error 2

[DISPLAY]   ERROR 105
             AN ILLEGAL USE ERROR
             (If the error occurs in Test Mode, "THIS CHIP IS INVALID" is displayed)

[CAUSE]   The inserted Management Chip has been used previously and is illegal because its
             remaining credits have increased.

[COUNTERMEASURES]   Verify again that the Management Chip is correct.

WARNING DISPLAY FOR MANAGEMENT CHIP EXPIRATION

[DISPLAY]   Refer to the screen display on the right.
              (If the error occurs in Test Mode, "0" is
              displayed without an error message.)

[CAUSE]   The remaining credits on the Management
              Chip counter is "0".

[COUNTERMEASURES]   When this screen appears,
                     quickly replace the chip with
                     a new one, or a chip that still
                     has remaining credits.

Out of Management Chip

Please call the local attendant

To the local attendant
The management chip has expired.
Turn off the machine
and replace it with a new chip.
CREDIT(S) 0
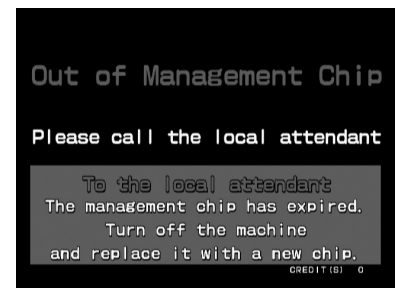
*NOTE: This screen only appears when all the chips installed in the reader/writer units have no
remaining credits left.*

7－3　REFILLING CARDS

When the card stock runs out while the game is operating, a warning screen will be displayed.
If this screen is displayed, be sure to promptly refill the cards.
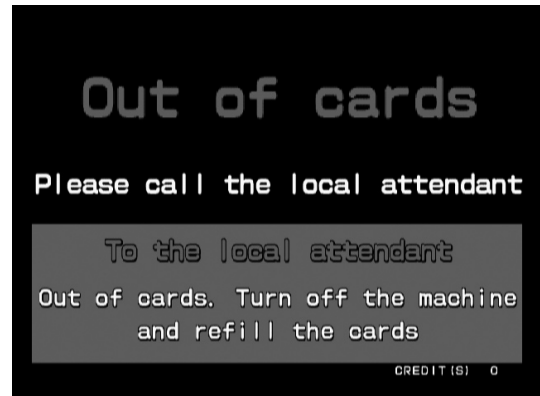
PHOTO 7.3a　Warning Screen when Out of Cards

HOW TO REFILL CARDS

① Open the service door and turn off the power switch in the maintenance switch section.

POWER SWITCH
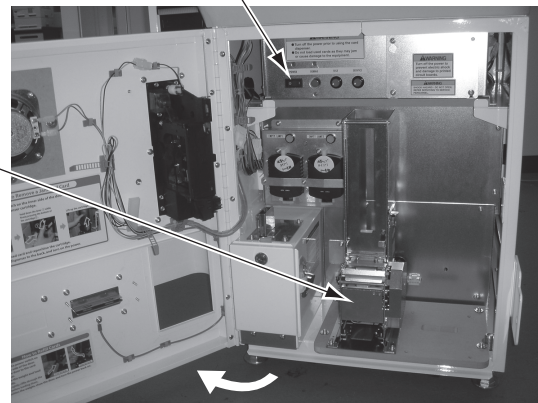
CARD DISPENSER

PHOTO 7.3b

② While pushing the lever, raise it to open up the dispenser.

LOCK LEVER
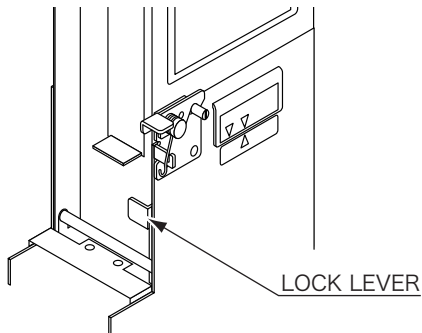
FIG. 7.3a
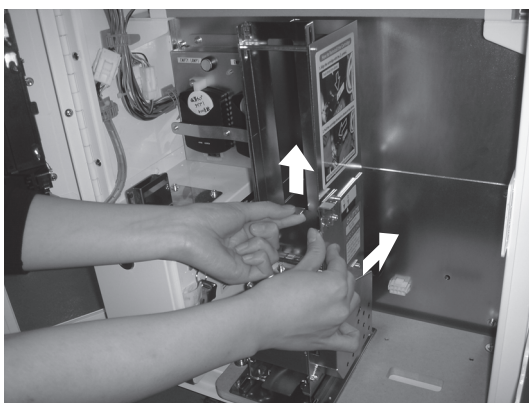
PHOTO 7.3c

PHOTO 7.3d

－ 21 －
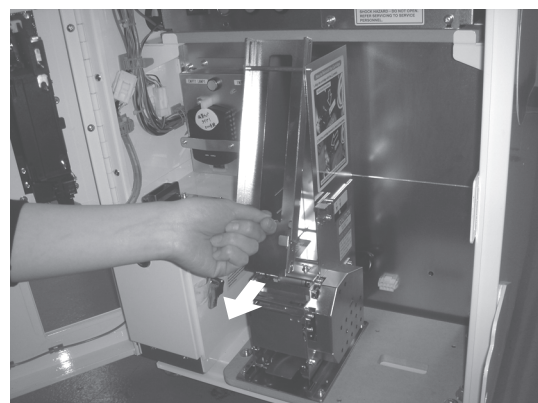
③ Take out the card weight. This part is covered in an air-wrap bag at the time of shipping.
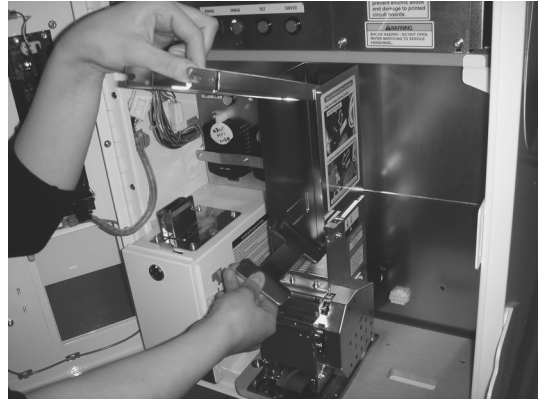
PHOTO 7.3e

④ Take the wrapping off the new cards and gently riffle through them.
・ Load the cards with the front faced down.
・ Cards come in packs of 200.
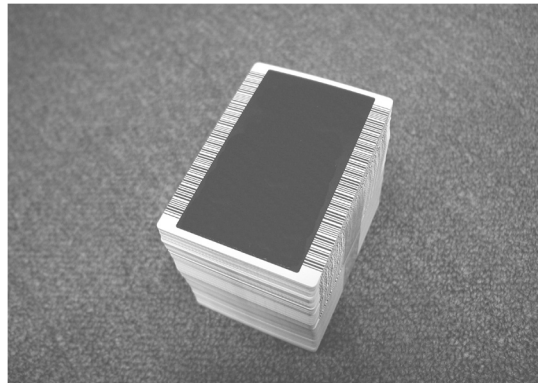
PHOTO 7.3f

⑤ Refill the cards. Do not load more than 600 cards.

⑥ Reposition the weight and close the refill door.

⑦ Turn the power back on and close the service door.
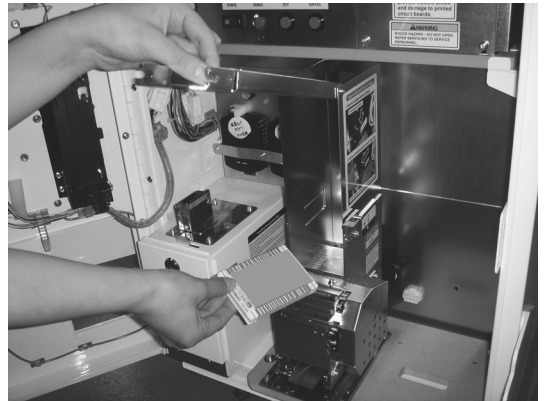
PHOTO 7.3g

7－4 DEALING WITH JAMMED CARDS

If a card jam occurs while the game
is operating, a warning screen will be
displayed. If this screen is displayed, be sure
to remove the jammed card immediately.
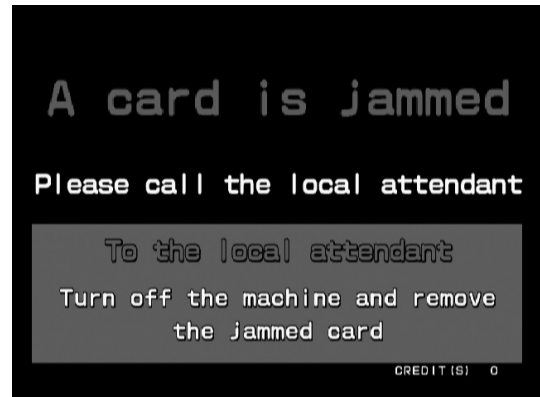
PHOTO 7.4a
Jammed Card Warning Screen

HOW TO REMOVE A JAMMED CARD

① Open the service door and turn off the
power switch in the maintenance switch
section.

② Take out the card weight and the cards
remained.

③ Hold down the lock lever on the bottom
section of the card dispenser and pull out
the card dispenser.

PHOTO 7.4b

CARTRIDGE

LOCK LEVER

CARD DISPENSER UNIT
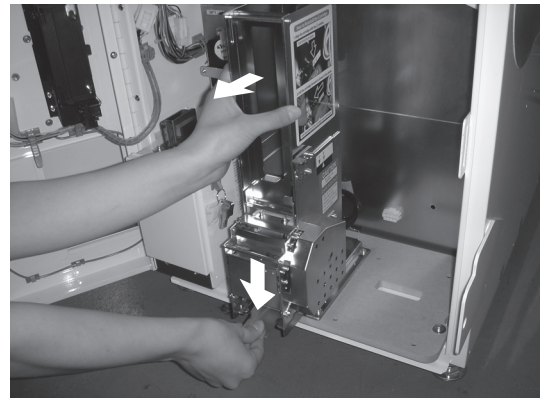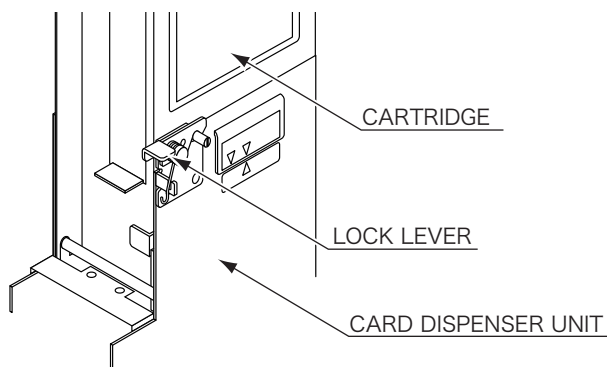
FIG. 7.4a

④ Push firmly on the front bottom of the
cartridge while holding down the lock
lever on the right. The cartridge will
slide back and stop.

PHOTO 7.4c

－ 23 －
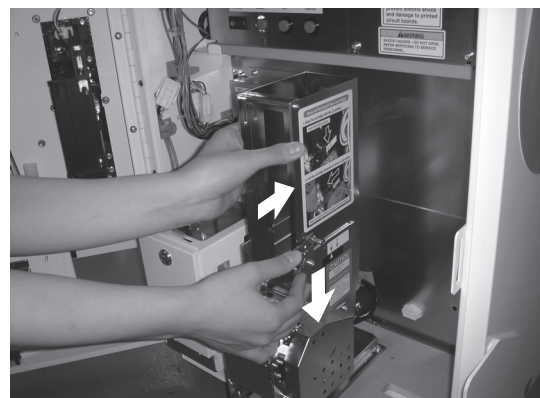
⑤ Lift up and release the cartridge. In some cases the bottom-most card will be stuck but proceed to lift up the cartridge. Afterwards, remove the jammed card.

PHOTO 7.4d

⑥ Reposition the cartridge. Align the cartridge with the "△" symbol by pushing firmly from above. Then pull the cartridge forward with both hands as shown in the picture.

Reinstalling the cartridge improperly will result in card dispenser malfunctions. Be sure to consult the diagram below and proceed carefully.

PHOTO 7.4e

Align the "△" symbol with position 1, and push firmly from above.

Pull forward so that the "△" symbol aligns with position 2.
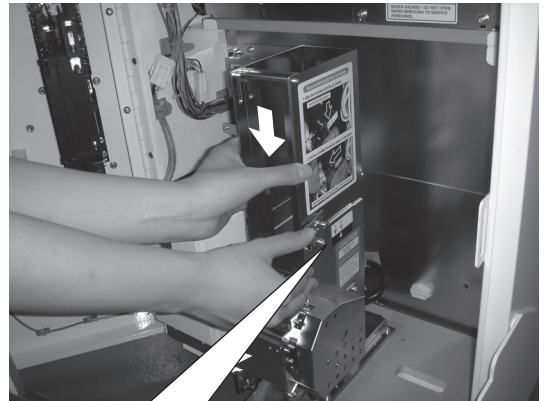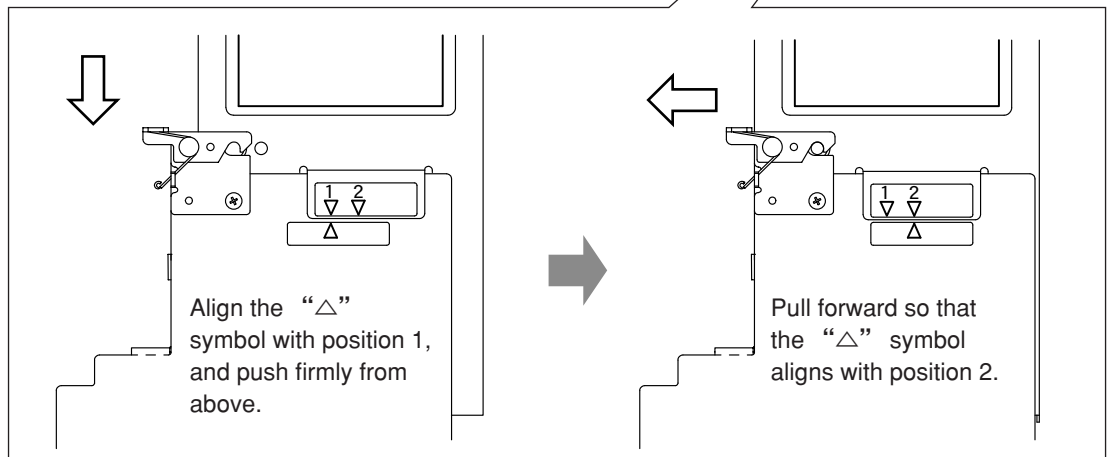
⑦ Return the card dispenser to the back.

⑧ Turn the power back on and close the service door.
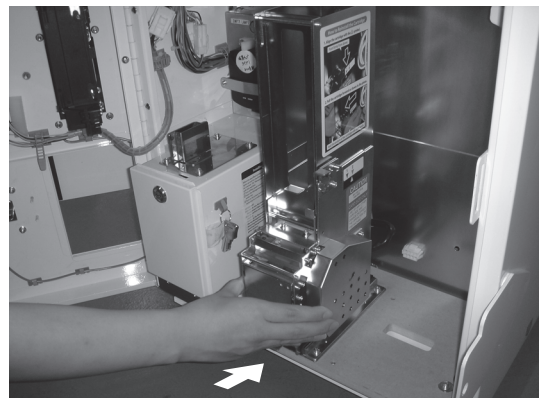
PHOTO 7.4f

CARTRIDGE REINSTALLATION WARNING

As shown in the diagram, be sure that the cartridge is not slanted off center and that the cartridge tabs are locked securely into the card dispenser.

Incorrect

Side View

Top View

Correct

Side View

Top View
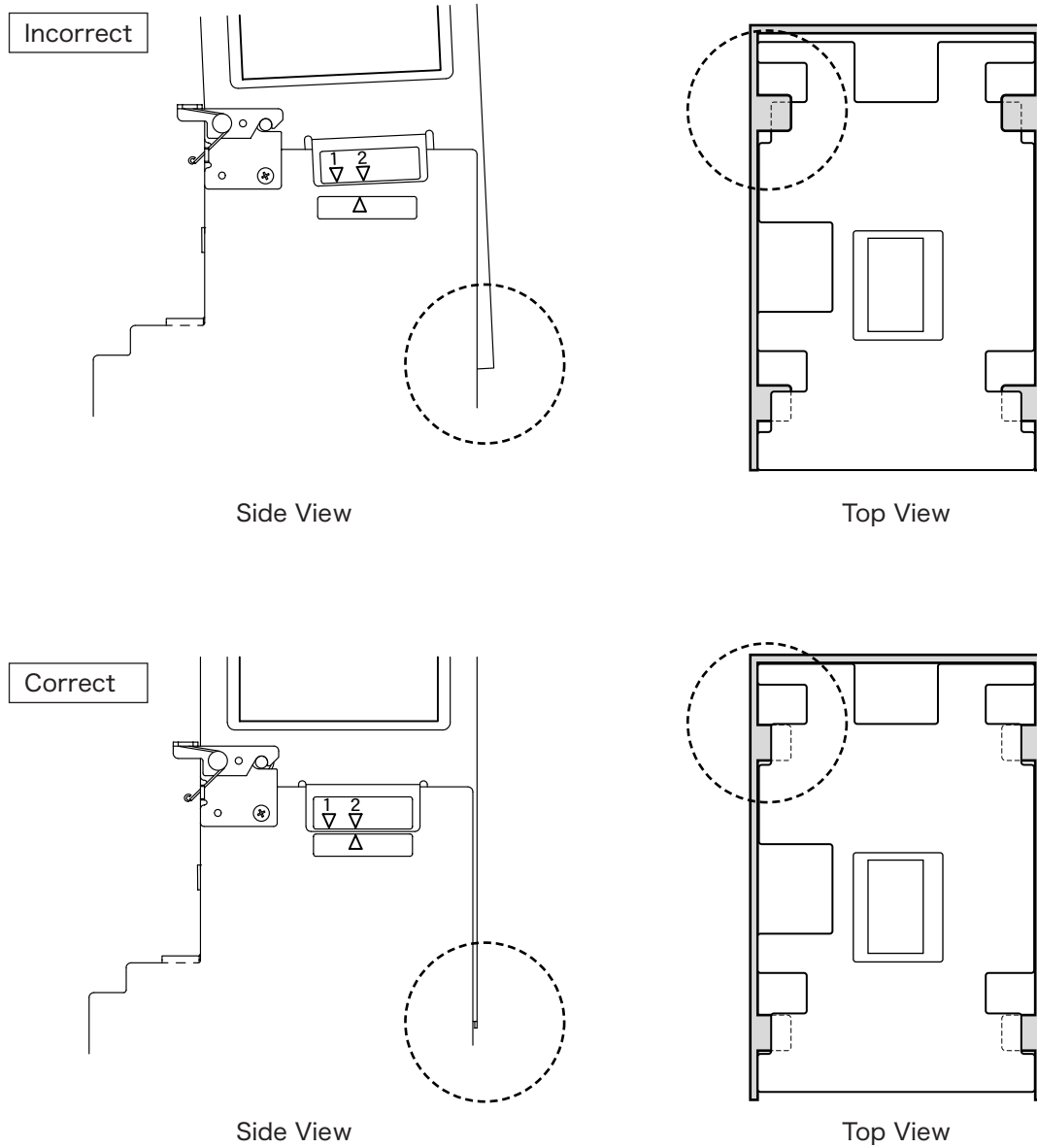
FIG. 7.4b

8. PRECAUTIONS WHEN MOVING THE MACHINE

WARNING

- When moving the machine, be sure to pull out the plug from the power supply. Moving the machine with the plug still inserted can cause the power cord to be damaged, resulting in a fire and/or electric shock.
- When moving the machine on the floor, remove the hold brackets and retract the adjusters, and ensure that the casters make contact with the floor. Pay careful attention so that the casters do not run over power cords and earth wires. Damaging the power cords can cause an electric shock and/or short circuit.
- When the casters are in contact with the floor, it is possible that the cabinet can move under its own weight if placed on an uneven area so extra care must be taken.
- When lifting the cabinet, be sure to hold the handles and the bottom part. Lifting the cabinet by holding other portions may damage parts and installation portions due to the empty weight of the cabinet, and may cause personal injury.

CAUTION

Do not push the front mask or molded parts. This may cause damage to the components, and the pieces may in turn cause injury.

Do not apply pressure to the cabinet's molded parts when moving the cabinet. There is a risk of breaking components and/or causing personal injury. When moving, be sure to use the handles at the upper back end of the cabinet.

Do not apply pressure to the front mask or other molded parts.

FRONT MASK

HANDLES
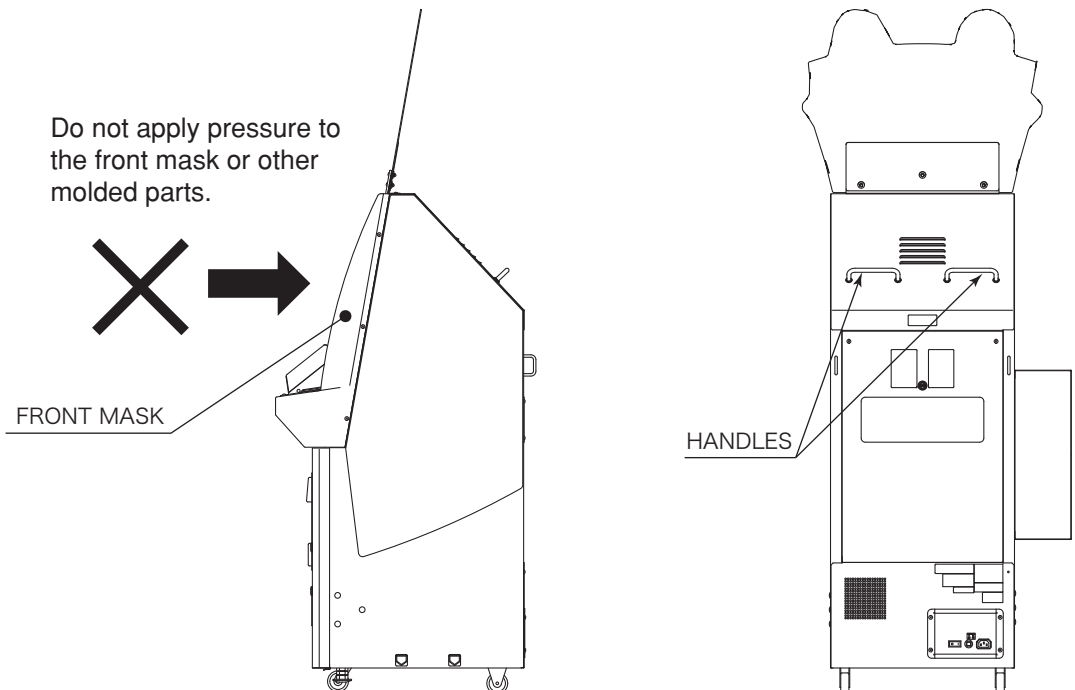
FIG. 8

9. GAME DESCRIPTION

Refer to the Service Manual for details.

10. SystemSP BOARD

10－1 EXTERNAL VIEW
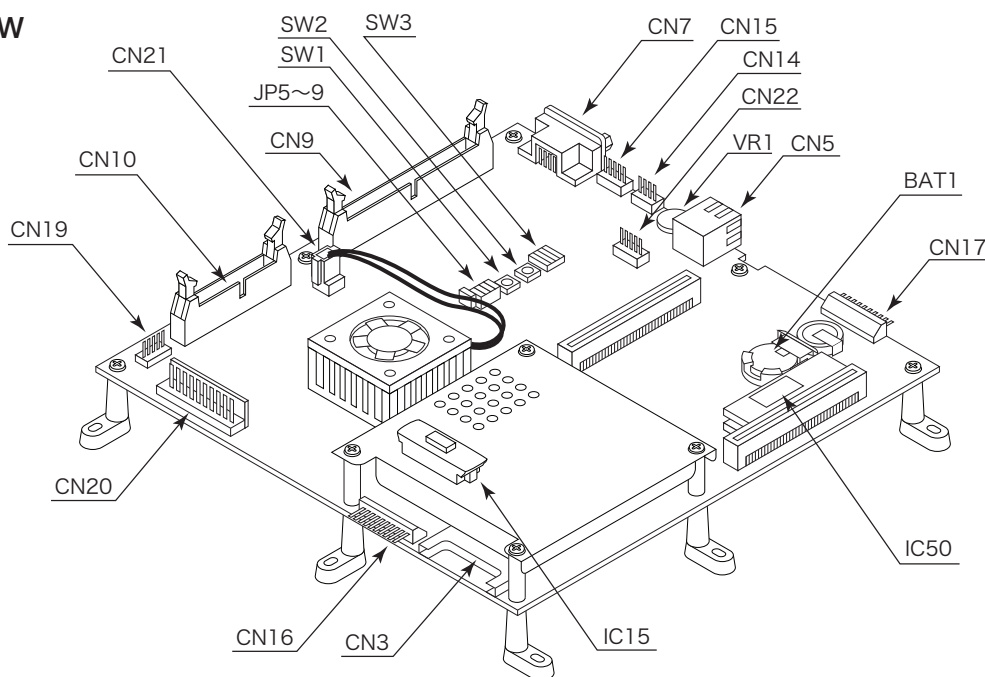
FIG. 10.1 SystemSP Board External View

Parts of CN3 to CN22 are used differently depending upon the game title.
See the "Wiring Diagram" at the back of this manual.

CN 3 :   Compact Flash^{TM}* card slot
CN 5 :   Ethernet
CN 7 :   RGB video output (MINI D-SUB 15P)
CN 9 :   Input/output 1 (JST RA 60P)
CN10 :   Input/output 2 (JST RA 30P)
CN14 :   Speaker output (JST NH 4P)
          1: L+   2: L-   3: R+   4: R-
CN15 :   Sound effects line output (JST NH 5P)
          1: GND   2: L   3: GND   4: R   5: GND
CN16 :   Serial 1 (JST NH 10P)
CN17 :   Serial 2 (JST NH 11P)
CN19 :   Input/output 3 (JST NH 7P)
CN20 :   DC power input (JST VH 10P)
          1: +3.3V   2: +3.3V   3: +5V   4: +5V   5: +12V
          6: +12V   7: GND   8: GND   9: GND   10: GND
CN21 :   Fan power supply (JST NH 3P)
CN22 :   MIDI (JST NH 6P)
SW1 :   Functions as the TEST Button.
SW2 :   Functions as the SERVICE Button.
SW3 :   Used to change the frequency of the video, etc.
          See the next chapter "Monitor Placement and Horizontal Scanning Frequency."
VR1 :   Sound volume
BAT :   Backup battery
IC15 :   Key Chip
IC50 :   SystemSP boot ROM
JP5 to 9 : The locations into which these are inserted must not be changed. If they are, not only may normal
          operation be impeded and be serious malfunction may occur.

*Compact Flash and its abbreviation CF are registered trademarks of SanDisk Corporation.

10－2 MONITOR PLACEMENT AND HORIZONTAL SCANNING FREQUENCY

Monitor Placement

Change the Monitor Placement (horizontal, vertical) to suit the game being used.
If there is no mention of the correct placement for the monitor in the documentation provided with the game the monitor should be set to horizontal.
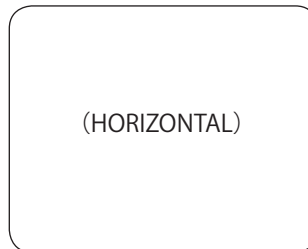
（HORIZONTAL）

Horizontal Scanning Frequency: 15.85kHz/31.69kHz

Depending upon the game either a frequency 15k or 31k Hz will be supported, or in some cases both.

Use the DIP SW (Dip Switch) 3 on the SystemSP board to specify the frequency output.
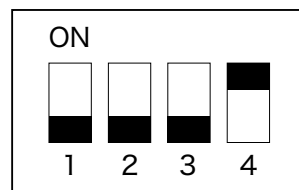
DIP SW 3 OFF: 31kHz
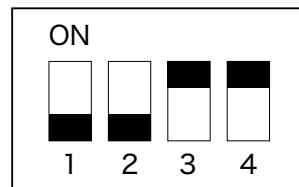
DIP SW 3 ON: 15kHz

Even if both 15k and 31k are supported always leave DIP SW 1 and 2 OFF, and 4 ON unless otherwise instructed to do so.

FIG. 10.2
SystemSP board DIP SW (The actual DIP SW layout may differ slightly from the above diagrams.)

Be aware that an interlaced display may cause a minor amount of flicker or image shaking to occur compared to a non-interlaced display.
Also, if the cabinet's monitor does not support an interlaced displayed, noise on the screen or other display errors may occur.

Among those games that support both 15k/31k, some are strongly recommended to be run at 31k. If these games are run at 15K, a warning message will be displayed when the game starts up.

When a SystemSP board is initially shipped the DIP SW may be set to 15k or 31k depending upon the enclosed game. Before placing the board into the cabinet, be sure to check the DIP SW and perform any changes if necessary.

This game requires DIP SW 1 and 2 to be OFF, and 3 and 4 to be ON.
This game runs at 15k.

10－3 ERROR MESSAGES

The following messages may appear upon turning on the power or leaving TEST Mode. Under these circumstances the game cannot be played. The error codes are roughly divided as follows.

Error Code	Category
Error 01～09	An error relating to the actual hardware or setup of the title program
Error 10～19	An error relating to something dependant upon the title program, such as JVS or the Firmware version.
Error 20～29	(Not used)
Error 30～39	An error relating to the Ether-network
Error 40～49	(Not used)
Caution 50～59	A warning related to set-up settings

TABLE 10.3: Error Code Categories

Error 01

Message:	THIS GAME IS NOT ACCEPTABLE BY MAIN BOARD.
Cause:	1) The title program in the flash memory on the SystemSP board is corrupted. 2) The Key Chip may not match the title program on the SystemSP board.
Solution:	1) If you have a CF memory including renewal data for the title program, insert that CF memory and then restart the machine. 2) Insert the correct Key Chip and then restart the machine. If the problem remains it is most likely a problem with the board itself. Use the instructions in the "Game Board" chapter to remove the SystemSP board and repair it along with the Key Chip.

Error 03

Message:	BAD SERIAL NUMBER ON MAIN BOARD.
Cause:	The SystemSP board's serial number is incorrect.
Solution:	This is a problem with the SystemSP board. Use the instructions in the "Game Board" chapter to remove the SystemSP board and repair it along with the Key Chip.

Error 05

Message:	THIS GAME IS NOT ACCEPTABLE BY MAIN BOARD.
Cause:	The SystemSP board set-up does not match with the set-up required by the title program.
Solution:	This game cannot be used. Use a different game.

Error 14

Message:	NETWORK FIRMWARE DOES NOT FULFILL THE GAME SPEC.
Cause:	The SystemSP board's firmware does not fulfill the specifications required by the title program.
Solution:	After confirming the specifications required by the title program, obtain firmware that meets these specifications and renew the firmware.

Error 33

Message:	GATEWAY IS NOT FOUND.
Cause:	Communication with the gateway server was not possible (for a couple of minutes).
Solution:	• Perform a system test to make sure the network settings are all correct. • The gateway server may not be active.

Error 34

Message:	GATEWAY CANNOT BE FOUND.
Cause:	Communication with the gateway server is not possible.
Solution:	The UTP cable is not connected.

Caution 51

Message:	WRONG VIDEO OUTPUT SETTING OF HORIZONTAL SCANNING FREQUENCY.
Cause:	The title program does not support the current monitor resolution.
Solution:	If necessary exchange the connected monitor, and then check the monitor resolution is set correctly (the DIP Switches on the SystemSP board).

Caution 52

Message:	WRONG VIDEO OUTPUT SETTING OF HORIZONTAL/VERTICAL SCREEN.
Cause:	The title program does not support the current monitor horizontal/vertical setting.
Solution:	If necessary change the horizontal/vertical placement of the monitor, and then enter the SYSTEM TEST Mode in SYSTEM ASSIGNMENTS and change the monitor horizontal/vertical settings.

10

10-4 REMOVING THE BOOT ROM

STOP

IMPORTANT

The ROM is a precision device. It can be damaged by heat, impact, and static electricity. Exercise caution in handling this equipment.

This operation must only be performed when changing the boot ROM version, and never at any other time.

① Use the special IC removal tool to remove the boot ROM (IC50) from its socket on the SystemSP board.
Although it may appear that a flat head screwdriver or other tool could perform this task, never use anything other than the special IC removal tool. Any marks or scratches caused to the pattern on the board may lead to malfunctions. All repairs will have to be paid for in full for any malfunctions caused by performing this operation with a tool other than the special IC removal tool will have to be paid for in full.

BOOT ROM

Never use a flat head screwdriver

10
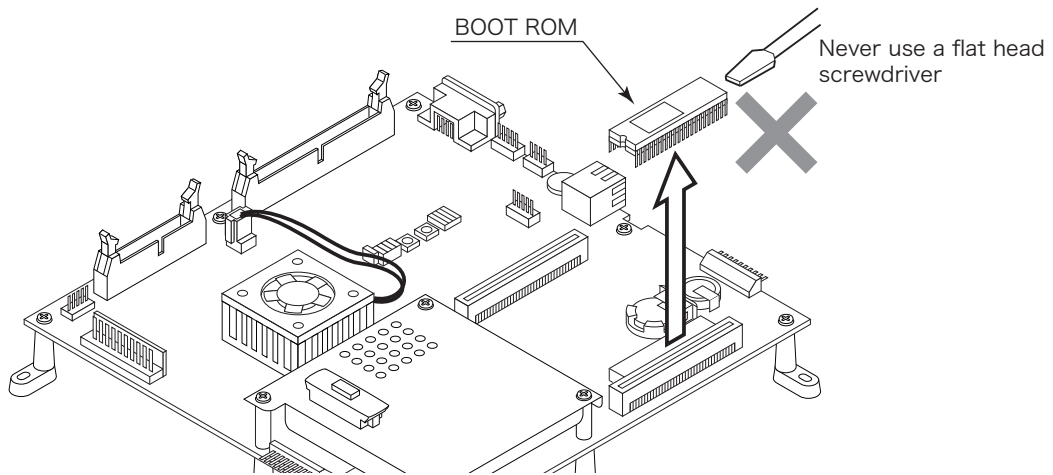
FIG. 10.4a

② Make sure you have the facing correct and insert the new ROM into the socket.

・ Newer ROM models have slightly wider feet. If this makes it difficult to insert the ROM into the socket, press the flat face of the feet inwards to allow the ROM to be inserted.

・ When inserting the ROM pay close attention to direction and be careful not to break the feet.

NOTE: If the power is turned under any of these conditions the ROM may break.

NOTCH → ROM

NOTCH → SOCKET

○

✕ Inserted off-centered.

✕ Inserted off-centered.

✕ Inserted facing the wrong way.
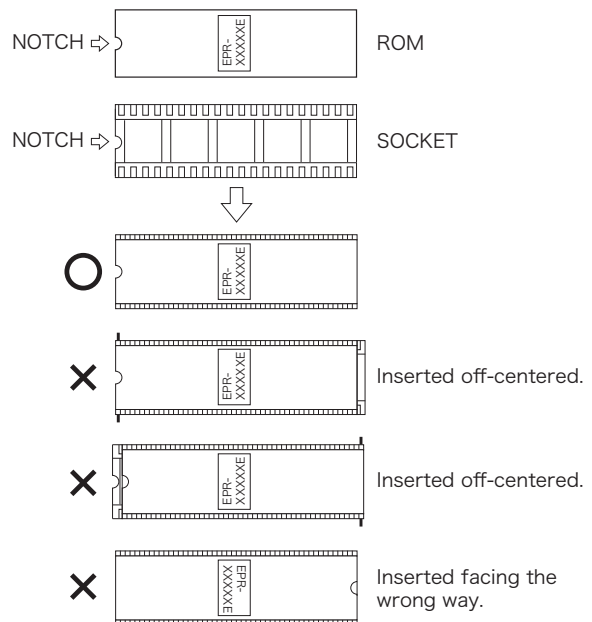
FIG. 10.4b

10－5 REMOVING THE LITHIUM BATTERY

⚠ **WARNING**

● When working with the product, be sure to turn the power off. Working with the power on may cause an electric shock or short circuit.
● Be careful not to damage wiring. Damaging wiring may cause electric shock or short circuit.
● To prevent overheating, explosion, or fire:
　・ Do not recharge, disassemble, heat, incinerate, or short the battery.
　・ Do not allow the battery to come into direct contact with metallic objects or other batteries.
　・ To preserve or to dispose of the battery, wrap it in tape or other insulating material.
● Follow local regulations when disposing of the battery. Improper disposal can damage the environment.

⚠ **CAUTION**

To avoid risk of malfunction and damage:
　・ Make sure the positive and negative ends are aligned correctly.
　・ Use only batteries approved for use with this unit.

🛑 **STOP**
IMPORTANT

If this error appears within one year then it is a problem with the board itself. The board must be replaced.

This operation must only be performed when the battery is dead or under other special circumstances and never at any other time.

① Carefully remove the battery in the battery holder (BAT1) on the SystemSP board.
② Place the new battery (CR2032) into the holder with the + terminal facing upwards.

SystemSP Battery

・ SEGA PART No.:
　　401-0054 or 401-0065

・ SEGA PART NAME:
　　BATTERY CR2032/1F MATSUSHITA
　　or
　　BATTERY CR2032 HITACHIMAXELL

BATTERY CR2032
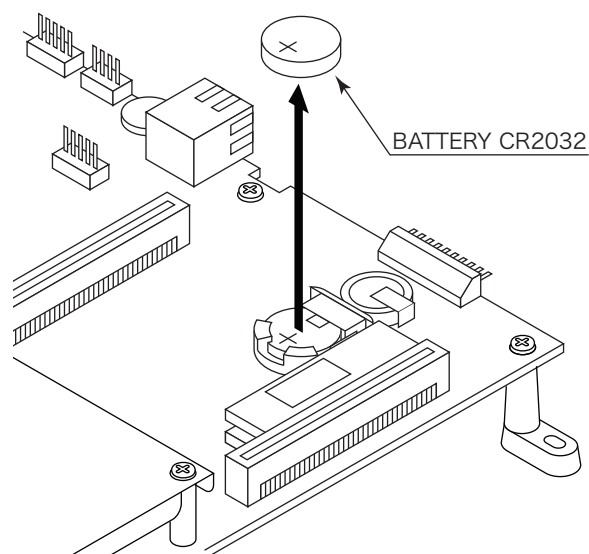
FIG. 10.5

10－6 INSERTION/REMOVAL OF THE LITHIUM BATTERY

| Insertion |

① Insert into the holder at a 45 degree angle.

② Push horizontally inwards.
The holder is fitting with a device to prevent incorrect insertion, making sure that the battery terminals are inserted correctly.

| Removal |

① Insert a flat, insulated object underneath the battery and lift it upwards.

② Bring it up and outwards whilst getting it over the sides of the holder.

FIG. 10.6

STOP
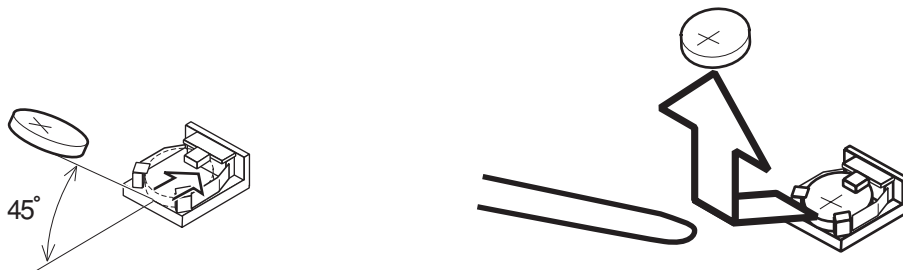
IMPORTANT

The Compact Flash (CF) is a precision device. It can be damaged by heat, impact, and static electricity. Exercise caution in handling this equipment.

Only perform this operation when performing a software upgrade, and never at any other time.

This product uses the SystemSP board. The software upgrade procedure for this board uses Compact Flash.

① Open the service door and turn the power switch to OFF.

POWER SWITCH
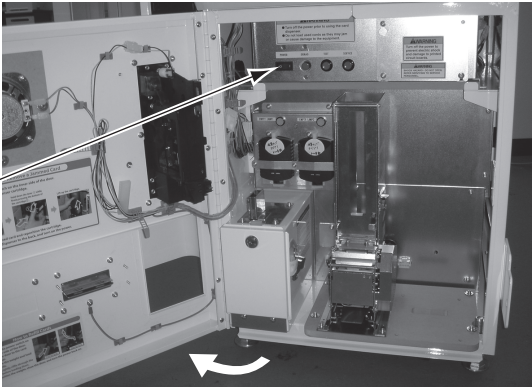
PHOTO 10.7a

② Loosen the 4 screws on the Compact Flash insertion port cover, slide upward the cover and remove it.

PHOTO 10.7b
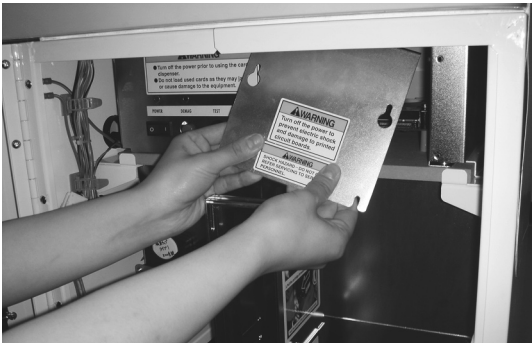
PHOTO 10.7c

③ With the game title sticker facing upwards and the correct way around, insert the Compact Flash all the way into the card slot. Be sure that it is as far in as it will go.
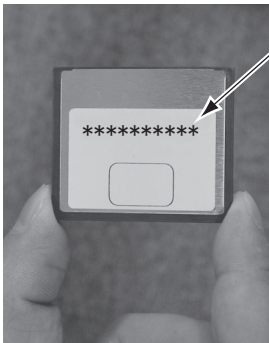
GAME TITLE

****

PHOTO 10.7d

PHOTO 10.7e

④ Turn the power switch back ON and the software upgrade will begin. The amount of time this will take differs depending upon the volume of the Compact Flash. The software upgrade will proceed as shown in screens ④-1 through to ④-4. If the software upgrade finishes successfully, the Title Screen will be displayed.

④−1

```
BOOTROM VER X.XX




TESTING A GAME PROGRAM.  20%
```

④−2

```
BOOTROM VER X.XX




LOADING A GAME PROGRAM.  15%
   DO NOT TURN OFF THE POWER
```

④−3

```
BOOTROM VER X.XX




GAME PROGRAM READY.
```

④−4

```




NOW LOADING...
```
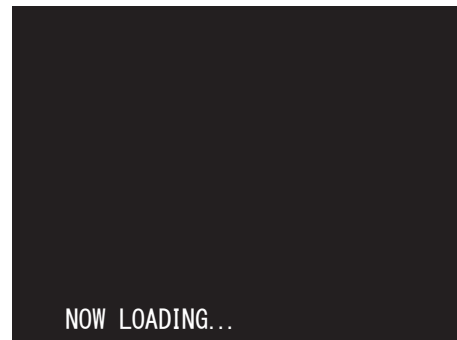

PHOTO 10.7f Title Screen

Cautions
- **After beginning the software upgrade process, do not turn off the power until it has finished.**
- **If the software upgrade is not successful, turn the power switch OFF and try reinserting the Compact Flash before turning the power switch ON again. If this still does not resolve the problem, contact your supplier.**

⑤ Once the software upgrade has been completed successfully turn the power switch OFF, remove the Compact Flash and place it back in its case.

⑥ Put the cover back in place removed in step 2, turn the power switch ON and close the service door. The product is ready to be used again.

STOP

IMPORTANT

● The Key Chip is a precision device. It can be damaged by heat, impact, and static electricity. Exercise caution in handling this equipment.
● A Key Chip must be used as a set with a board or Compact Flash of the same title.

Insertion

Insert the Key Chip into the hole on the upper surface of the SystemSP board's plating. Pay attention to the facing of the Key Chip and be sure it is pushed all the way in.

Removal

① Press the end of the Key Chip inwards and draw it out from the hole in the SystemSP board's plating.

② After removal keep the Key Chip in the box provided. Always store it together with the game board or Compact Flash that it is paired with.

PRONG
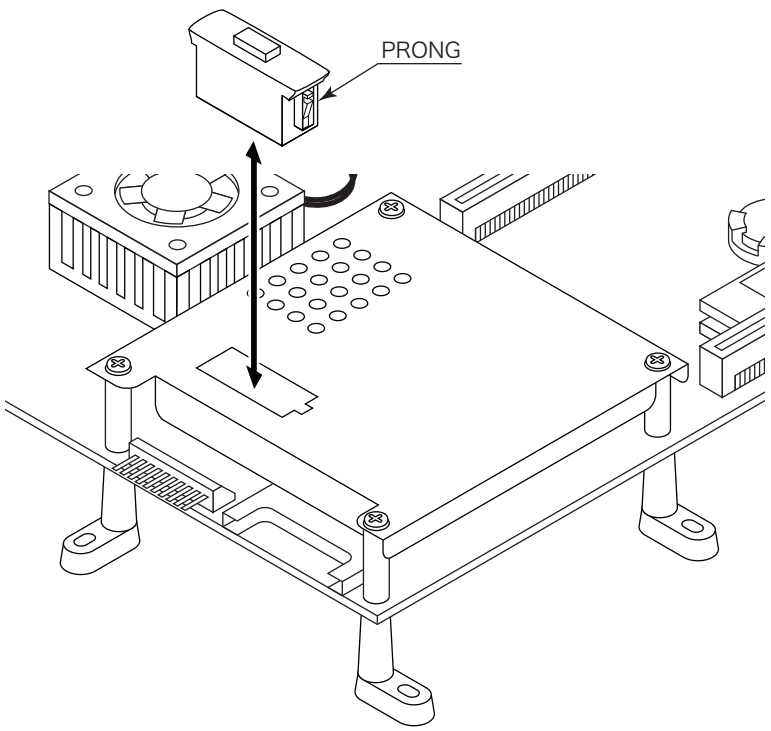
FIG. 10.8

11. EXPLANATION OF TEST AND DATA DISPLAY

By operating the TEST and SERVICE Buttons on the maintenance switch unit, periodically perform tests and data check. When installing the machine for the first time, collecting cash, or when the machine does not function correctly, perform a machine check in accordance with the explanations given in this section.

The chart below shows which test or screen should be used to handle each situation or problem. This product uses the SystemSP board. This system can become play different games simply by overwriting the ROM onboard the SystemSP board or by inserting compact flash.

Therefore this system has two Test Modes. The System Test Mode has numerous common functions for the SystemSP board such as automatic self-diagnostic test and coin settings, whilst the Game Test Mode has an input test for the specific controls for this product.

TABLE 11 EXPLANATION OF TEST MODE

ITEMS	DESCRIPTION	REFERENCE SECTIONS
INSTALLATION OF MACHINE	When the machine is installed, perform the following: 1. Check to ensure each setting is the standard setting at shipment. 2. Check each Input equipment in the INPUT TEST or the CARD READER TEST mode. 3. Check each Output equipment in the OUTPUT TEST or the CARD DISPENSER TEST mode. 4. Test on-IC-Board IC's in the self-test mode.	11-2, 11-3 A Service Manual Service Manual 11-2 C, L
MEMORY TEST	This test is automatically executed by selecting RAM TEST or ROM TEST in the Menu mode.	11-2 C, L
PERIODIC SERVICING	Periodically perform the following: 1. Run Memory Test. 2. Ascertain each setting. 3. Test each Input equipment in the INPUT TEST or the CARD READER TEST mode. 4. Test each Output equipment in the OUTPUT TEST or the CARD DISPENSER TEST mode.	11-2 C, L 11-2, 11-3 A Service Manual Service Manual
CONTROL SYSTEM	1. Check each Input/Output equipment in the Game Test mode. 2. Adjust or replace each Input/Output equipment. 3. If the problem still persists, check each equipment's mechanism movements.	Service Manual Service Manual Sections 12, 13, 14, 16
MONITOR (CRT)	In the Monitor Adjustment mode, check to see if monitor adjustments are appropriate.	Section 17
IC BOARD	Memory Test.	11-2 C, L

11

11－1 MAINTENANCE SWITCH UNIT AND COIN METER

⚠️ **WARNING**

Never touch places other than those specified. Touching places not specified can cause electric shock and short circuit accidents.

🛑 **IMPORTANT**

● Adjust the sound to an optimal level, taking into consideration the environmental requirements of the installation location.
● Removing the Coin Meter circuitry renders the game inoperable.

Maintenance Switch Unit

Open the service door, and the maintenance switch unit shown will appear.
The function of each switch is as follows:

(1) POWER SWITCH: Switch ON/OFF the power supply.
     (POWER)

(2) DEMAGNETIZER BUTTON : Eliminates the on-screen color unevenness due to
     (DEMAG)   magnetization of CRT. Use this switch first before performing
                              the monitor's color adjustment.

(3) TEST BUTTON: Press to enter Test Mode. Used during Test Mode to confirm
     (TEST)   or change selections.

(4) SERVICE BUTTON: Gives credits without registering on the coin meter. Used
     (SERVICE)   during Test Mode to move the cursor.

Power switch off.

POWER SWITCH

DEMAGNETIZER BUTTON   TEST BUTTON   SERVICE BUTTON
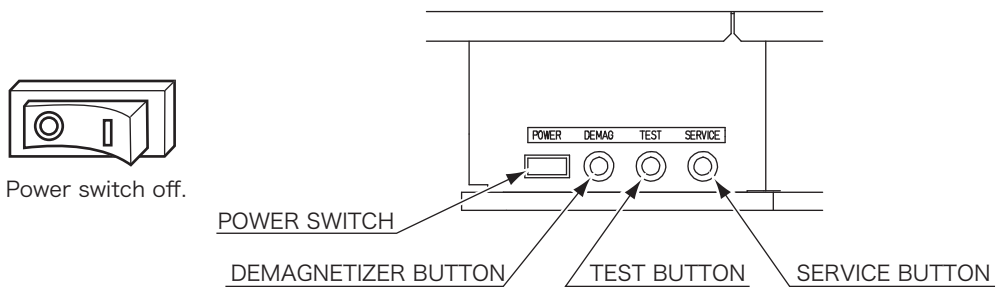
FIG. 11.1a

Coin Meter

Open the Cashbox Door by using the key to have the Coin Meter appear underneath the Cashbox.
The Coin Meter counts the number of coins inserted into the coin slot.

COIN METER

CASH BOX

FIG. 11.1b

STOP

IMPORTANT
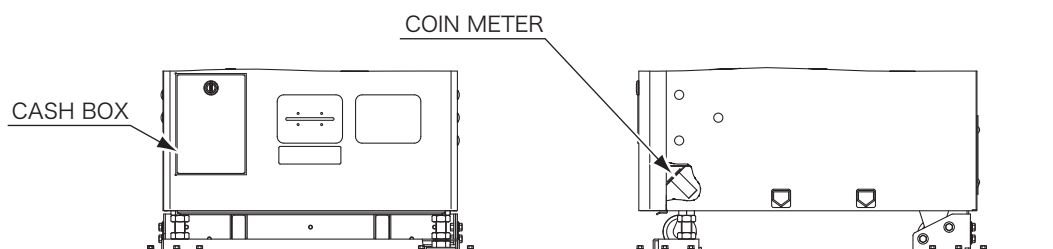
Any setting altered inside SYSTEM ASSIGNMENTS, COIN ASSIGNMENTS and GAME TEST MODE are saved only when ending Test Mode by selecting EXIT from the SYSTEM MENU. If the power is turned off before doing this, any alterations to settings will be lost.

```
            SYSTEM MENU

     SYSTEM INFORMATION
     RAM TEST
     I/O TEST
     SOUND TEST
     C.R.T. TEST
     SYSTEM ASSIGNMENTS
   ->COIN ASSIGNMENTS
     BOOKKEEPING
     BACKUP DATA CLEAR
     CLOCK SETTING
     ROM TEST
     COMPACT FLASH TEST
     NETWORK SETTING
     GAME TEST MODE
      [****************************]

     EXIT

        SELECT WITH SERVICE BUTTON
          AND PRESS TEST BUTTON
```

① After turning on the power, press the TEST Button to bring up the SYSTEM MENU, as shown in the figure.

② Press the SERVICE Button to move the cursor. Move the cursor down to COIN ASSIGNMENTS and press the TEST Button.

③ The COIN ASSIGNMENTS screen will appear. Press the SERVICE Button to move the cursor, and press the TEST Button to select the option highlighted by the cursor.

④ Check/alter the coin assignments.

⑤ Once settings are complete, move the cursor to EXIT and press the TEST Button. The screen will return to the SYSTEM MENU. Select EXIT again from here and press the TEST Button to return to the game.

11

```
          COIN ASSIGNMENTS

   COIN CHUTE TYPE  COMMON

   COIN CHUTE #1 COIN TO CREDIT RATE
     1 COIN(S)COUNT AS 1 CREDIT(S)

   COIN CHUTE #2 COIN TO CREDIT RATE
     1 COIN(S)COUNT AS 1 CREDIT(S)

  ->DETAIL SETTING

   GAME COST SETTING
   EXIT

        SELECT WITH SERVICE BUTTON
          AND PRESS TEST BUTTON
```

Always set to COMMON.

11－3 SYSTEM TEST MODE

- ● The settings changed in TEST MODE are stored when TEST MODE is ended using EXIT in the MENU MODE. If the power is turned off before TEST MODE is finished, the setting changes do not take effect.
- ● Executing BACKUP DATA CLEAR in SYSTEM TEST MODE does not clear the bookkeeping data in GAME TEST MODE.
- ● Use the machine in the specified setting. If the machine is used in an unspecified setting, an action unfit for actual operation, or a malfunction may occur.

A. SYSTEM MENU

SYSTEM TEST MODE can be used to check IC Board functioning, adjust the monitor, and change coin settings.
Be sure to employ the settings outlined below for this product.

- ● SYSTEM ASSIGNMENTS
  MONITOR TYPE: HORIZONTAL

- ● COIN ASSIGNMENTS
  COIN CHUTE TYPE: COMMON

- ● NETWORK SETTING
  NETWORK TYPE: NONE

① After the machine is powered up, press the TEST Button to display the VOLUME ADJUSTMENT Screen.
To enter SYSTEM TEST MODE, press the SERVICE Button to move the cursor to TEST MODE and press the test button.

NOTE: VOLUME ADJUSTMENT Screen (The background changes in accordance with the timing of button depression).

② Press the SERVICE Button to move the cursor and select an item.
Press the TEST Button to display the item selected on the screen.

③ Move the cursor to GAME TEST MODE and press the TEST Button to move to each game's specific TEST MENU. Refer to the Service Manual.

④ Once testing is complete, move the cursor to EXIT, press the TEST Button and the game will return to the ATTRACT MODE screen.

```
            SYSTEM MENU

  SYSTEM INFORMATION..................B
  RAM TEST............................C
  I/O TEST............................D
  SOUND TEST..........................E
  C. R. T.  TEST......................F
  SYSTEM ASSIGNMENTS..................G
  COIN ASSIGNMENTS....................H
  BOOKKEEPING.........................I
  BACKUP DATA CLEAR...................J
  CLOCK SETTING.......................K
  ROM TEST............................L
  COMPACT FLASH TEST..................M
  NETWORK SETTING.....................N
  GAME TEST MODE
    [***************************]......    (The name of
                                           the game will
  ->EXIT                                   be displayed.)

     SELECT WITH SERVICE BUTTON
       AND PRESS TEST BUTTON
```

B. SYSTEM INFORMATION

Check each system program version for the SystemSP board.

```
              SYSTEM INFORMATION

       REGION        ****              (A)
       BOOT VERSION  ****              (B)
       FIRM VERSION  **** (*******)    (C)
       SERIAL NO. **************       (D)



         PRESS TEST BUTTON TO EXIT
```

(A) REGION
    The SystemSP board's region code.

(B) BOOT VERSION
    The SystemSP board's boot program version.

(C) FIRM VERSION
    The SystemSP board's network firmware program version.

(D) SERIAL NO.
    The SystemSP board's serial no.

Press the TEST Button to return to the System Menu screen.

C. RAM TEST

Check the operation of the RAM on the SystemSP board.
If everything is operating correctly, "GOOD" will be displayed. If there is a problem, "BAD" will
be displayed.

```
                RAM TEST

              TESTING NOW

       IC71  GOOD
       IC52S GOOD
       IC33S GOOD       IC34  GOOD
       IC35  GOOD       IC36S GOOD
       IC37  GOOD       IC39  GOOD
       IC38S GOOD       IC40S GOOD
       IC41  GOOD       IC43  GOOD
       IC42S GOOD       IC44S GOOD

         PRESS TEST BUTTON TO EXIT
```

① The test will begin as soon as you enter this mode.

② The message "TESTING NOW" will be displayed during the test.

③ After the test is complete, press the TEST Button to return to the System Menu screen.

D. I/O TEST

Check the operation of the switches and connectors connected to the SystemSP board.

```
          I/O TEST

     SW1      OFF              (A)
     SW2      OFF              (A)
     TEST     OFF              (B)
     SERVICE  OFF              (B)
     COIN1    OFF              (B)
     COIN2    OFF              (B)

     COIN METER1 OFF           (C)
     COIN METER2 OFF           (C)

     IN_PORT0 11111111         (D)
     IN_PORT1 11111111         (E)
     IN_PORT2 11110011         (F)
     G_PORT   11111111         (G)

  PRESS TEST AND SERVICE BUTTON TO EXIT
```

(A) Change from OFF to ON when the SW1 and SW2 switches on the SystemSP board are operated.
(B) Change from OFF to ON when the TEST, SERVICE, COIN1 and COIN2 switches are operated.
(C) Change from OFF to ON when the COIN1 and COIN2 switches are operated.
(D) Changes from 1 to 0 when the switch connected to pin 17 to pin 24 of the CN9 is operated.
(E) Changes from 1 to 0 when the switch connected to pin 41 to pin 48 of the CN9 is operated.
(F) Changes from 1 to 0 when the DIP switch (SW3) or push switch (SW1, SW2) on the SystemSP board or the switch connected to pin 5 or pin 6 of the CN9 are operated.
(G) Changes from 1 to 0 when the switch connected to pin 9 to pin 16 of the CN10 is operated.

The "1" and "0" display for (D) to (G) differs depending upon the game title.
Press the TEST Button and SERVICE Button to return to the System Menu screen.

E. SOUND TEST

This mode allows a sound output test to be performed. A beep will be produced from each speaker.

NOTE: Two speakers are fitting for this product. RIGHT SPEAKER is on the monitor upper part and LEFT SPEAKER is on the front door.

```
          SOUND TEST

   RIGHT SPEAKER   OFF         (A)
   LEFT  SPEAKER   OFF         (A)

   ->EXIT

   SELECT WITH SERVICE BUTTON
     AND PRESS TEST BUTTON
```

① Press the SERVICE Button to move the cursor.
② Move the cursor to your desired selection and press the TEST Button.
③ Move the cursor to EXIT and press the TEST Button to return to the System Menu screen.

(A) RIGHT/LEFT SPEAKER (ON/OFF)
    Turn this option "ON" to produce a beeping noise from that speaker.

F. C.R.T. TEST

This mode allows the monitor color levels and screen size to be checked. However, the hue etc. of colors cannot be altered.

NOTE: Adjustments for this game should be made as detailed in "C.R.T. Test" in "Game Test Mode."

① First the monitor color check screen will be displayed.
Each color (red, green and blue) are displayed darkest on the left, getting lighter toward the right in 32 steps.
The monitor is set to the correct brightness level of the white color bar is black on the far left and white on the far right.

② Press the TEST Button to proceed to the size check screen.

③ Adjust the screen so that the entire check frame is visible.

④ Press the TEST Button to return to the System Menu screen.

Color Check Screen

```
          C. R. T. TEST 1/2
0                                    31
   Dark       Red         Light
   Dark       Green       Light
   Dark       Blue        Light
   Dark       White       Light

   PRESS TEST BUTTON TO CONTINUE
```

Size Check Screen

```
          C. R. T. TEST 2/2




       PRESS TEST BUTTON TO EXIT
```
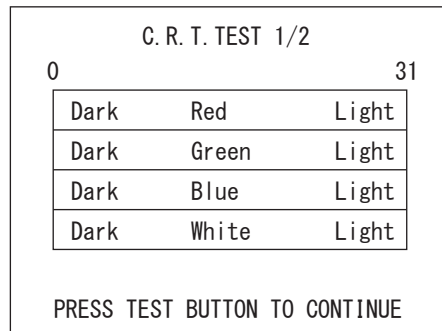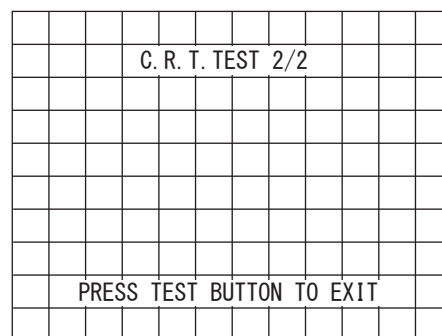
G. SYSTEM ASSIGNMENTS

This mode allows sound during Attract mode and monitor type to be altered.

① Press the SERVICE Button to move the cursor.

② Move the cursor to your desired selection and press the TEST Button.

③ Move the cursor to EXIT and press the TEST Button to return to the System Menu screen.

```
          SYSTEM ASSIGNMENTS

   ADVERTISE SOUND    ON           (A)
   MONITOR TYPE       HORIZONTAL   (B)
 ->EXIT

     SELECT WITH SERVICE BUTTON
      AND PRESS TEST BUTTON
```
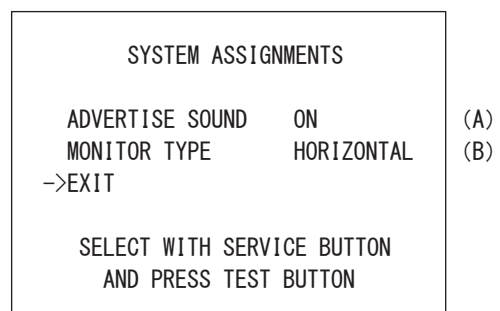
(A) ADVERTISE SOUND (ON/OFF)
Turn sound during the Attract mode ON or OFF.
ON :   Sound will play during Attract mode.
OFF : No sound will play (silent) during Attract mode.

(B) MONITOR TYPE (HORIZONTAL/VERTICAL)
Change the display of the screen to correspond with monitor type (vertical or horizontal)
HORIZONTAL : For when the monitor is placed horizontally.
VERTICAL :   For when the monitor is placed vertically.

H. COIN ASSIGNMENTS

This mode allows the number of credits awarded when a coin is inserted etc. to be altered. The game program will use the settings determined here to manage the number of total number of credits that have been played. Credit settings are saved to the main board when the System Test is ended. If credit settings are changed, the currently recorded number of credits held in back-up will be cleared.

① Press the SERVICE Button to move the cursor.

② Move the cursor to your desired selection and press the TEST Button.

③ Move the cursor to EXIT and press the TEST Button to return to the System Menu screen.

```
            COIN ASSIGNMENTS

     COIN CHUTE TYPE   COMMON              (A)

     COIN CHUTE #1 COIN TO CREDIT RATE     (B)
       1 COIN (S)  COUNT AS 1 CREDIT (S)

     COIN CHUTE #2 COIN TO CREDIT RATE     (B)
       1 COIN (S)  COUNT AS 1 CREDIT (S)

     DETAIL SETTING                        (C)

     GAME COST SETTING                     (D)

     ->EXIT

         SELECT WITH SERVICE BUTTON
           AND PRESS TEST BUTTON
```

When the COIN CHUTE TYPE is set to "COMMON"

```
            COIN ASSIGNMENTS

     COIN CHUTE TYPE   INDIVIDUAL

     COIN CHUTE #1 COIN TO CREDIT RATE
       1 COIN (S)  COUNT AS 1 CREDIT (S)

     COIN CHUTE #2 COIN TO CREDIT RATE
       1 COIN (S)  COUNT AS 1 CREDIT (S)

     DETAIL SETTING

     GAME COST SETTING

     ->EXIT

         SELECT WITH SERVICE BUTTON
           AND PRESS TEST BUTTON
```
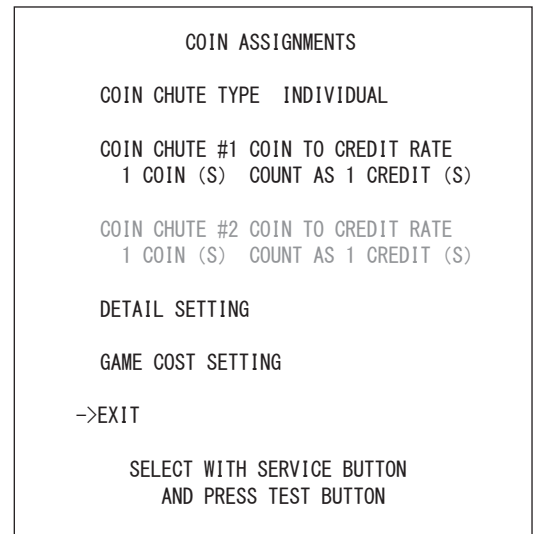
When the COIN CHUTE TYPE is set to "INDIVIDUAL"

(A) COIN CHUTE TYPE (COMMON/INDIVIDUAL)
This must be set to match the cabinet's coin chute system.

COMMON:
Suited to the style of cabinet where multiple players will insert there coins through the same coin chute. Each coin inserted awards one common credit.
Can be used with up to two coin chutes (#1, #2) and (B) COIN CHUTE #* COIN TO CREDIT RATE can be set differently for #1 and #2.

INDIVIDUAL:
Suited to the style of cabinet where each player has an individual coin chute. Each coin inserted awards one credit to that player.
(B) COIN CHUTE #2 COIN TO CREDIT RATE cannot be altered.

(B) COIN CHUTE #1 COIN TO CREDIT RATE, COIN CHUTE #2 COIN TO CREDIT RATE

Determines how many inserted coins count as a credit.
The message "○COIN(S) COUNT AS △CREDIT(S)" displays how many coins equal how many credits. If (A) COIN CHUTE TYPE is set to "COMMON" then the COIN CHUTE #* COIN TO CREDIT RATE for #1 and #2 can be set separately.
See table 1 COMMON and table 2 INDIVIDUAL below for more details.

(C) DETAIL SETTING

This option displays a menu that allows for more detailed coin to credit ratio settings than (B). If these DETAIL SETTING are changed any (B) COIN CHUTE #* COIN TO CREDIT RATE settings are ignored.

① Press the SERVICE Button to move the cursor.

② Move the cursor to your desired selection and press the TEST Button.

③ Move the cursor to EXIT and press the TEST Button to return to the Coin Assignments screen.

```
        COIN ASSIGNMENTS
        DETAIL SETTING

   COIN CHUTE #1 MULTIPLIER              (C1)
   1 COIN COUNT AS 1 COIN (S)


   COIN CHUTE #2 MULTIPLIER              (C1)
   1 COIN COUNT AS 1 COIN (S)


   BONUS ADDER    NO BONUS ADDER         (C2)


   COIN TO CREDIT  1 COIN (S)  1 CREDIT  (C3)


  ->EXIT


   COIN CHUTE #1 OPERATION
   COIN   1  2  3  4  5  6  7  8  9
   CREDIT 1  2  3  4  5  6  7  8  9


   COIN CHUTE #2 OPERATION
   COIN   1  2  3  4  5  6  7  8  9
   CREDIT 1  2  3  4  5  6  7  8  9

        SELECT WITH SERVICE BUTTON
         AND PRESS TEST BUTTON
```

When the COIN CHUTE TYPE is set to "COMMON"

```
        COIN ASSIGNMENTS
        DETAIL SETTING

   COIN CHUTE #1 MULTIPLIER
   1 COIN COUNT AS 1 COIN (S)


   COIN CHUTE #2 MULTIPLIER
   1 COIN COUNT AS 1 COIN (S)


   BONUS ADDER    NO BONUS ADDER


   COIN TO CREDIT  1 COIN (S)  1 CREDIT


  ->EXIT


   COIN CHUTE #1 OPERATION
   COIN   1  2  3  4  5  6  7  8  9
   CREDIT 1  2  3  4  5  6  7  8  9


   COIN CHUTE #2 OPERATION
   COIN   1  2  3  4  5  6  7  8  9
   CREDIT 1  2  3  4  5  6  7  8  9

        SELECT WITH SERVICE BUTTON
         AND PRESS TEST BUTTON
```

When the COIN CHUTE TYPE is set to "INDIVIDUAL"

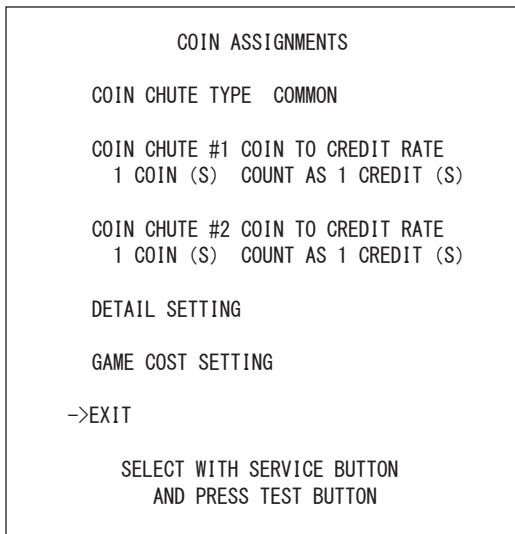**(C1) COIN CHUTE #1 COIN TO CREDIT RATE, COIN CHUTE #2 COIN TO CREDIT RATE**

Determines how many inserted coins count as a credit.
The message "○COIN(S) COUNT AS △CREDIT(S)" displays how many coins equal how many credits. If (A) COIN CHUTE TYPE is set to "COMMON" then the COIN CHUTE #* COIN TO CREDIT RATE for #1 and #2 can be set separately.
See table 3 COMMON and table 4 INDIVIDUAL below for more details.

(C2) BONUS ADDER

Determines the settings for awarding a bonus credit after a certain number of coins are converted by (B) COIN CHUTE #* COIN TO CREDIT RATE. If (A) COIN CHUTE TYPE is set to "COMMON" the total number of coins inserted into COIN CHUTE #* COIN TO CREDIT RATE #1 and #2 is used in this calculation.
The message "○COIN(S) GIVE △EXTRA COIN(S)" displays how many coins equal an extra credit. NO BONUS ADDER indicates that no bonus credits will be given.
See table 5 below for more details.

(C3) COIN TO CREDIT

Determines how many inserted coins count as a credit. The message "○COIN(S) COUNT AS △CREDIT(S)" displays how many coins equal how many credits. E.g. if this is set to 3 and C1 is set to 1, each inserted coin will award 1/3 of a credit. See table 6 below for more details.

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(D) GAME COST SETTING

Determines the number of credits needed to start the game and the number needed to continue after game over. The numbers that can be set here differ depending upon the game.

NOTE: This game does not have the (D2) 1 CREDIT(S) TO CONTINUE option.
Only (D1) 1 CREDIT(S) TO START applies.

① Press the SERVICE Button to move the cursor.

② Move the cursor to your desired selection and press the TEST Button.

③ Move the cursor to EXIT and press the TEST Button to return to the Coin Assignments screen.

```
              COIN ASSIGNMENTS
              GAME COST SETTING

   1 CREDIT (S)  TO START                    (D1)
   1 CREDIT (S)  TO CONTINUE                 (D2)


  ->EXIT

         SELECT WITH SERVICE BUTTON
           AND PRESS TEST BUTTON
```
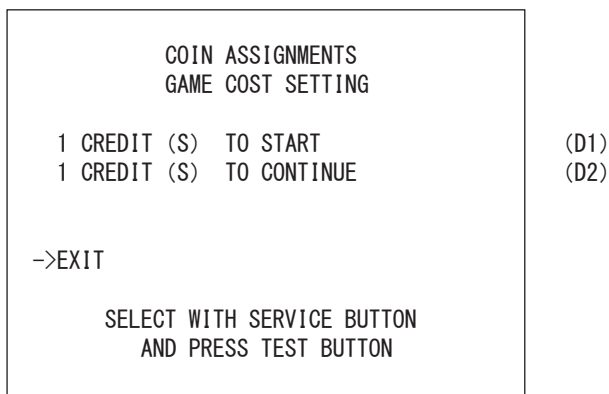
(D1) 1 CREDIT(S) TO START (Default Setting)

Determines the number of credits required to start the game. There are nine possible settings, from 1 CREDIT(S) TO START up to 9 CREDIT(S) TO START.

(D2) 1 CREDIT(S) TO CONTINUE (Default Setting)

Determines the number of credits required to continue the game after game over.

There are nine possible settings, from 1 CREDIT(S) TO CONTINUE up to 9 CREDIT(S) TO CONTINUE.

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Table 1-1:   COIN CHUTE #* COIN TO CREDIT RATE (COIN CHUTE TYPE COMMON)
              (If COIN CHUTE #1 is altered then COIN CHUTE #2 will automatically later itself in the same way)

COIN CHUTE #1 COIN TO CREDIT RATE Setting
1 COIN (S) COUNT AS 1 CREDIT (S)
2 COIN (S) COUNT AS 1 CREDIT (S)
3 COIN (S) COUNT AS 1 CREDIT (S)
4 COIN (S) COUNT AS 1 CREDIT (S)
5 COIN (S) COUNT AS 1 CREDIT (S)
1 COIN (S) COUNT AS 2 CREDIT (S)
1 COIN (S) COUNT AS 3 CREDIT (S)
1 COIN (S) COUNT AS 4 CREDIT (S)
1 COIN (S) COUNT AS 5 CREDIT (S)
FREE PLAY

COIN CHUTE #2 COIN TO CREDIT RATE Setting
1 COIN (S) COUNT AS 1 CREDIT (S)
2 COIN (S) COUNT AS 1 CREDIT (S)
3 COIN (S) COUNT AS 1 CREDIT (S)
4 COIN (S) COUNT AS 1 CREDIT (S)
5 COIN (S) COUNT AS 1 CREDIT (S)
1 COIN (S) COUNT AS 1 CREDIT (S)
1 COIN (S) COUNT AS 1 CREDIT (S)
1 COIN (S) COUNT AS 1 CREDIT (S)
1 COIN (S) COUNT AS 1 CREDIT (S)
FREE PLAY

Table 1-2:   COIN CHUTE #* COIN TO CREDIT RATE (COIN CHUTE TYPE COMMON)
              (If COIN CHUTE #2 is altered COIN CHUTE #1 will not change)

COIN CHUTE #1 COIN TO CREDIT RATE Setting
1 COIN (S) COUNT AS 1 CREDIT (S)
2 COIN (S) COUNT AS 1 CREDIT (S)
3 COIN (S) COUNT AS 1 CREDIT (S)
4 COIN (S) COUNT AS 1 CREDIT (S)
5 COIN (S) COUNT AS 1 CREDIT (S)
1 COIN (S) COUNT AS 2 CREDIT (S)
1 COIN (S) COUNT AS 3 CREDIT (S)
1 COIN (S) COUNT AS 4 CREDIT (S)
1 COIN (S) COUNT AS 5 CREDIT (S)
FREE PLAY

COIN CHUTE #2 COIN TO CREDIT RATE Setting
1 COIN (S) COUNT AS 1 CREDIT (S)
1 COIN (S) COUNT AS 2 CREDIT (S)
1 COIN (S) COUNT AS 3 CREDIT (S)
1 COIN (S) COUNT AS 4 CREDIT (S)
1 COIN (S) COUNT AS 5 CREDIT (S)

Table 2: COIN CHUTE #* COIN TO CREDIT RATE (COIN CHUTE TYPE INDIVIDUAL)

COIN CHUTE #1 COIN TO CREDIT RATE Setting
1 COIN (S) COUNT AS 1 CREDIT (S)
2 COIN (S) COUNT AS 1 CREDIT (S)
3 COIN (S) COUNT AS 1 CREDIT (S)
4 COIN (S) COUNT AS 1 CREDIT (S)
5 COIN (S) COUNT AS 1 CREDIT (S)
1 COIN (S) COUNT AS 2 CREDIT (S)
1 COIN (S) COUNT AS 3 CREDIT (S)
1 COIN (S) COUNT AS 4 CREDIT (S)
1 COIN (S) COUNT AS 5 CREDIT (S)
FREE PLAY

COIN CHUTE #2 COIN TO CREDIT RATE Setting
Separate settings cannot be made when set to INDIVIDUAL.

Table 3: DETAIL SETTING (COIN CHUTE TYPE COMMON)

COIN CHUTE #1 MULTIPLIER Setting
1 COIN COUNT AS 1 CREDIT (S)
1 COIN COUNT AS 2 CREDIT (S)
1 COIN COUNT AS 3 CREDIT (S)
1 COIN COUNT AS 4 CREDIT (S)
1 COIN COUNT AS 5 CREDIT (S)
1 COIN COUNT AS 6 CREDIT (S)
1 COIN COUNT AS 7 CREDIT (S)
1 COIN COUNT AS 8 CREDIT (S)
1 COIN COUNT AS 9 CREDIT (S)

COIN CHUTE #2 MULTIPLIER Setting
1 COIN COUNT AS 1 CREDIT (S)
1 COIN COUNT AS 2 CREDIT (S)
1 COIN COUNT AS 3 CREDIT (S)
1 COIN COUNT AS 4 CREDIT (S)
1 COIN COUNT AS 5 CREDIT (S)
1 COIN COUNT AS 6 CREDIT (S)
1 COIN COUNT AS 7 CREDIT (S)
1 COIN COUNT AS 8 CREDIT (S)
1 COIN COUNT AS 9 CREDIT (S)

Table 4: DETAIL SETTING (COIN CHUTE TYPE INDIVIDUAL)

COIN CHUTE #1 MULTIPLIER Setting
1 COIN COUNT AS 1 CREDIT (S)
1 COIN COUNT AS 2 CREDIT (S)
1 COIN COUNT AS 3 CREDIT (S)
1 COIN COUNT AS 4 CREDIT (S)
1 COIN COUNT AS 5 CREDIT (S)
1 COIN COUNT AS 6 CREDIT (S)
1 COIN COUNT AS 7 CREDIT (S)
1 COIN COUNT AS 8 CREDIT (S)
1 COIN COUNT AS 9 CREDIT (S)

COIN CHUTE #2 MULTIPLIER Setting
Separate settings cannot be made when set to INDIVIDUAL.

Table 5: DETAIL SETTING (BONUS ADDER)

BONUS ADDER Setting
NO BONUS ADDER
2 COINS GIVE 1 EXTRA COIN
3 COINS GIVE 1 EXTRA COIN
4 COINS GIVE 1 EXTRA COIN
5 COINS GIVE 1 EXTRA COIN
6 COINS GIVE 1 EXTRA COIN
7 COINS GIVE 1 EXTRA COIN
8 COINS GIVE 1 EXTRA COIN
9 COINS GIVE 1 EXTRA COIN

Table 6: DETAIL SETTING (COIN TO CREDIT)

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

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I. BOOKKEEPING

This mode allows total operation time, number of inserted coins, and number of awarded credits to be checked.

```
          BOOKKEEPING

     TOTAL TIME                  (A)
      *D **H **M **S

     COIN  1         *           (B)
     COIN  2         *           (B)

     TOTAL COIN      *           (C)
     COIN CREDIT     *           (D)
     SERVICE CREDIT  *           (E)
     TOTAL   CREDIT  *           (F)

     PRESS TEST BUTTON TO EXIT
```

(A) TOTAL TIME
   The total time the game has been in operation, (the length of time it has been powered on and not in Test Mode.)

(B) COIN 1/COIN 2
   The total number of coins inserted into coin chute 1.
   The total number of coins inserted into coin chute 2.

(C) TOTAL COIN
   The total number of coins inserted into all coin chutes.

(D) COIN CREDIT
   The total number of credits awarded from inserted coins.

(E) SERVICE CREDIT
   The total number of credits awarded by the SERVICE Button.

(F) TOTAL CREDIT
   The total of coin credits and service credits.

Press the TEST Button to return to the System Menu screen.

J. BACKUP DATA CLEAR

Select BACKUP DATA CLEAR to clear the contents of BOOKKEEPING data.

```
       BACKUP DATA CLEAR

         YES (CLEAR)
       ->NO (CANCEL)



     SELECT WITH SERVICE BUTTON
       AND PRESS TEST BUTTON
```

To clear data, use the SERVICE Button to move the cursor to YES (CLEAR) and then press the TEST Button.
When the data has been cleared, the message "COMPLETED" will be displayed.
Press the TEST Button again to return to the System Menu screen.

Move the cursor to NO (CANCEL) and press the TEST Button to return to the System Menu screen without clearing the data.

K. CLOCK SETTING

This mode allows the calendar settings for the SystemSP board to be altered.
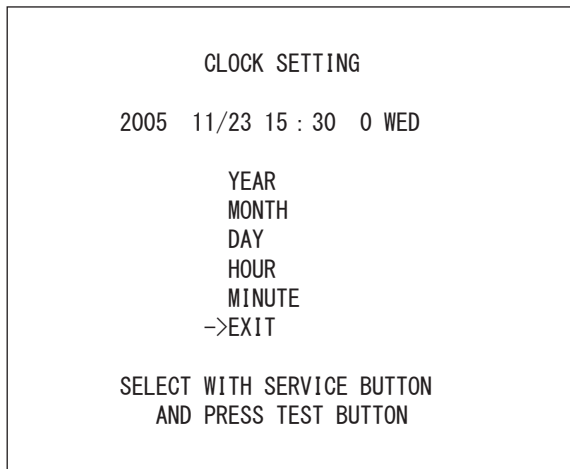
```
                CLOCK SETTING

      2005  11/23 15：30  0 WED

              YEAR
              MONTH
              DAY
              HOUR
              MINUTE
          →EXIT

        SELECT WITH SERVICE BUTTON
          AND PRESS TEST BUTTON
```

① Press the SERVICE Button to move the cursor.

② Move the cursor to your desired selection and press the TEST Button to increase that value.
   If YEAR is increased beyond "2030" it will return to "1998."

③ Move the cursor to EXIT and press the TEST Button to return to the System Menu screen.

11

L. ROM TEST

Check the operation of the ROM on the SystemSP board.
If everything is operating correctly, "GOOD" will be displayed. If there is a problem, "BAD" will be displayed.
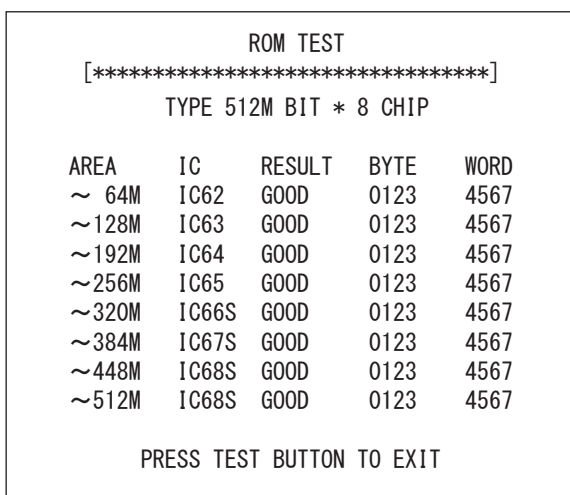
```
                ROM TEST
    [******************************]          ←The name of the game will be displayed.
       TYPE 512M BIT ＊ 8 CHIP

   AREA    IC    RESULT   BYTE   WORD
   ～ 64M   IC62  GOOD    0123   4567
   ～128M   IC63  GOOD    0123   4567          The number of rows displayed varies
   ～192M   IC64  GOOD    0123   4567          depending upon the game.
   ～256M   IC65  GOOD    0123   4567
   ～320M   IC66S GOOD    0123   4567
   ～384M   IC67S GOOD    0123   4567
   ～448M   IC68S GOOD    0123   4567
   ～512M   IC68S GOOD    0123   4567

        PRESS TEST BUTTON TO EXIT
```

① The test will begin as soon as you enter this mode.

② After the test is complete, press the TEST Button to return to the System Menu screen.

M. COMPACT FLASH TEST

This mode allows the content of compact flash (CF) to be tested to see if it is viable or not, if CF is detected. "GOOD" in the STATUS column indicates that everything is operating correctly, and "BAD" indicates that there is a problem.

```
    COMPACT FLASH TEST

    STATUS        CHECK
    PROGRESS      37. 1%
    OPEN ERROR (S)            0
    SUM ERROR (S)             0
    TOTAL SUM       F94B0425

    FILE           1080/2911
    *******************                 Only displayed whilst checking.
    FILE SUM 00EB7E88



    PRESS TEST BUTTON TO EXIT
```

① The test will begin as soon as you enter this mode.
② After the test is complete, press the TEST Button to return to the SYSTEM MENU Screen.

If CF is not detected or its key chip is not inserted, the following screens will be displayed.
NOTE: A game title that does not use CF will display this message when started up.

```
        COMPACT FLASH TEST

      COMPACT FLASH NOT READY




      PRESS TEST BUTTON TO EXIT
```

If the sum data necessary for the compact flash is unable to be found, the screen shown below will be displayed.

```
        COMPACT FLASH TEST

     TESTING THIS COMPACT FLASH
          IS NOT AVAILABLE




      PRESS TEST BUTTON TO EXIT
```

If there is a problem with the formatting of the CF's internal sum data or if the CF does not correspond to the key chip the following screen will be displayed.

```
        COMPACT FLASH TEST

       THIS COMPACT FLASH
        IS NOT ACCEPTABLE




      PRESS TEST BUTTON TO EXIT
```

N. NETWORK SETTING

This mode allows network settings to be determined and a communication test to be performed. The title program will use the communication settings set here to communicate. Unlike other settings, any changes made to communication settings are saved to the SystemSP board internal communications memory the instant that they are made.

After altering communications settings it is necessary to reset the machine. The new settings will not come into effect until the machine is turned off and restarted, meaning that allowing the program to continue without doing so may cause unforeseen errors to occur.

NOTE: The game does not use a network communication connection. Setting (A) NETWORK TYPE should be set to " NONE."

① Press the SERVICE Button to move the cursor.

② Move the cursor to your desired selection and press the TEST Button.

③ Move the cursor to EXIT and press the TEST Button to return to the System Menu screen.

```
        NETWORK SETTING

NETWORK TYPE   ETHER          (A)

SET IP ADDRESS                (B)

CLEAR NETWORK SETTING         (C)

NETWORK TEST                  (D)

->EXIT


  SELECT WITH SERVICE BUTTON
    AND PRESS TEST BUTTON
```

When the NETWORK TYPE is set to "ETHER"

```
        NETWORK SETTING

NETWORK TYPE    NONE



CLEAR NETWORK SETTING

NETWORK TEST

->EXIT


  SELECT WITH SERVICE BUTTON
    AND PRESS TEST BUTTON
```
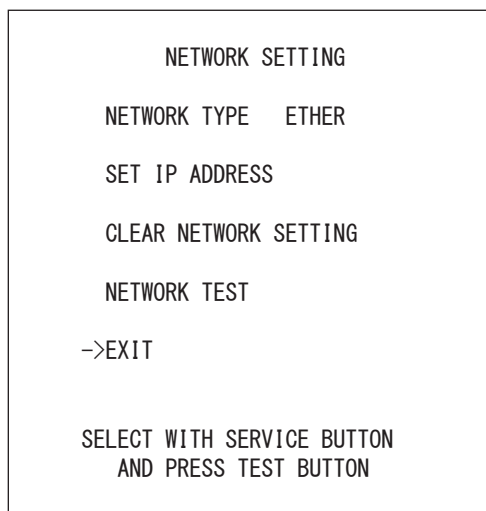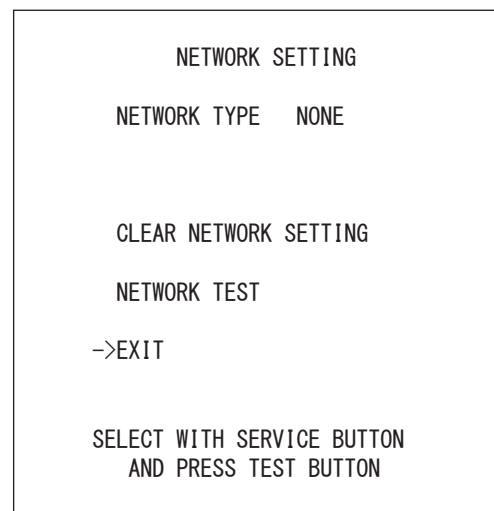
When the NETWORK TYPE is set to "NONE"

(A) NETWORK TYPE

Determines whether or not a communication connection will be used.
NONE: No communication connection will be used. Select this setting when no communication connection will be used.
ETHER: An ETHER communication connection will be used.

(B) SET IP ADDRESS

More detailed settings are required in order to use a communication connection. The content of these settings will vary depending upon the selection made under (A) NETWORK TYPE. Nothing will be displayed if (A) is set to "NONE."

```
        SET IP ADDRESS

    REMOTE          ENABLE          (B1)
    IP ADDRESS (E)                  (B2)
 -> _ _ _ . _ _ _ . _ _ _
    SUBNET MASK (E)                 (B3)

       _ _ _ . _ _ _ . _ _ _
    GATEWAY (E)                     (B4)
       _ _ _ . _ _ _ . _ _ _
    PRIMARY DNS                     (B5)
       0.  0.  0.  0    SET
    SECONDARY DNS                   (B6)
       0.  0.  0.  0    SET

    EXIT

     CURRENT ************           (B7)
       0.  0.  0.  0                (B7)

    SELECT WITH SERVICE BUTTON
    AND PRESS TEST BUTTON
```

```
        SET IP ADDRESS

    REMOTE          DISABLE
    IP ADDRESS (E)
 -> _10.  0.  0.  1
    SUBNET MASK (E)
      255.255.255.  0    SET
    GATEWAY (E)
        0.  0.  0.  1    SET
    PRIMARY DNS
       0.  0.  0.  0    SET
    SECONDARY DNS
       0.  0.  0.  0    SET

    EXIT

     CURRENT ************
       0.  0.  0.  0

    SELECT WITH SERVICE BUTTON
    AND PRESS TEST BUTTON
```

① Press the SERVICE Button to move the cursor.
If "ENABLE" is selected under REMOTE the "_" for the PRIMARY DNS and SECONDARY DNS settings will move.
If "DISABLE" is selected under REMOTE the "_" for the IP ADDRESS (E), SUBNET MASK (E), GATEWAY (E), PRIMARY DNS and SECONDARY DNS settings will move.

② Move the cursor to your desired selection and press the TEST Button.

③ Move the cursor to EXIT and press the TEST Button to return to the Network Setting screen.

(B1) REMOTE
Determines automated settings for communication settings.
ENABLE: Communication settings will be retrieved automatically.
DISABLE: Communication settings must be entered manually.

(B2) IP ADDRESS (E)
A setting required for communication, your own IP address.
After inputting the numbers move the cursor to "SET" and press the TEST Button to store the setting.
This cannot be selected when (B1) REMOTE is set to "ENABLE."

(B3) SUBNET MASK (E)
A setting required for communication, the subnet mask setting.
After inputting the numbers move the cursor to "SET" and press the TEST Button to store the setting.
This cannot be selected when (B1) REMOTE is set to "ENABLE."

(B4) GATEWAY (E)
A setting required for communication, the gateway setting.
After inputting the numbers move the cursor to "SET" and press the TEST Button to store the setting.
This cannot be selected when (B1) REMOTE is set to "ENABLE."

(B5) PRIMARY DNS

A setting required for communication, the primary DNS setting.

After inputting the numbers move the cursor to "SET" and press the TEST Button to store the setting.
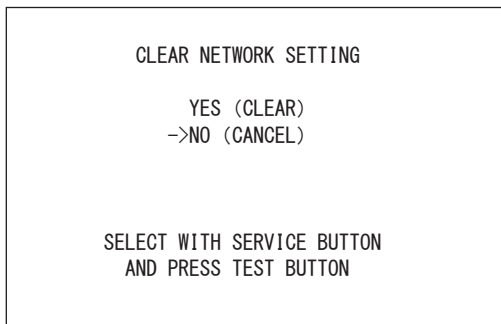
(B6) SECONDARY DNS

A setting required for communication, the secondary DNS setting.

After inputting the numbers move the cursor to "SET" and press the TEST Button to store the setting.

(B7) CURRENT ************, *. *. *. *

The current setting for the selected category.

(C) CLEAR NETWORK SETTING

Return all communication settings to the defaults and selected to not use communication.

(A) NETWORK TYPE will change to "NONE."

```
┌─────────────────────────────────────────┐
│                                          │
│          CLEAR NETWORK SETTING           │
│                                          │
│              YES (CLEAR)                 │
│            ->NO (CANCEL)                  │
│                                          │
│                                          │
│                                          │
│         SELECT WITH SERVICE BUTTON       │
│           AND PRESS TEST BUTTON          │
│                                          │
└─────────────────────────────────────────┘
```
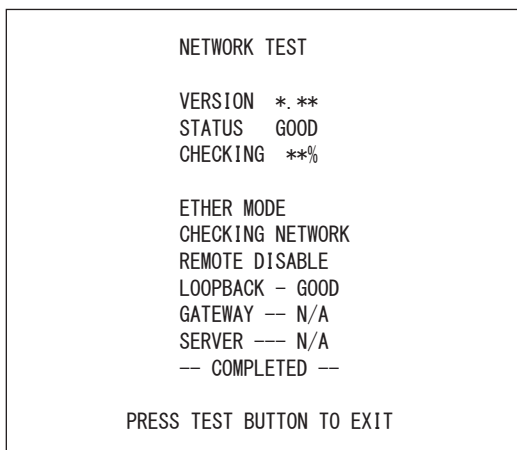
To clear settings, use the SERVICE Button to move the cursor to YES (CLEAR) and then press the TEST Button.

When the settings have been cleared, the message "WRITING DONE" will be blinked.

Press the TEST Button again to return to the Network Setting screen.

Move the cursor to NO (CANCEL) and press the TEST Button to return to the Network Setting screen without clearing the settings.

(D) NETWORK TEST

This mode allows a communication connection test to be performed.

```
┌─────────────────────────────────┐
│                                 │
│      NETWORK TEST               │
│                                 │
│      VERSION  *.**              │
│      STATUS   GOOD              │
│      CHECKING  **%              │      ←Only displayed during the test.
│                                 │
│      ETHER MODE                 │
│      CHECKING NETWORK           │
│      REMOTE DISABLE             │
│      LOOPBACK - GOOD            │      ←Loopback
│      GATEWAY -- N/A             │      ←Gateway server
│      SERVER --- N/A             │      ←External server
│      -- COMPLETED --            │
│                                 │
│     PRESS TEST BUTTON TO EXIT   │
│                                 │
└─────────────────────────────────┘
```

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① The test will begin as soon as you enter this mode.

② After the test is complete, press the TEST Button to return to the Network Setting screen.

    If the test completes successfully the message "GOOD" will be displayed, and "BAD" will be displayed if a problem occurred. If connection is not permitted "N/A" will be displayed.
If a test is performed directly after changing settings the results may be incorrect. This test should be performed after turning off and restarting the product.

11－4 GAME TEST MODE

    Refer to the Service Manual for details.

11

12. CARD DISPENSER

HOW TO REMOVE THE CARD DISPENSER

① Turn off the main AC unit power switch and open the service door.

② Unfasten the cord clamp and connecter on the cable connected to the card dispenser, and pull the card dispenser forward while pushing down on the lock lever on the lower section of the card dispenser.

PHOTO 12a

12

③ When it cannot be pulled forward any further, lift up on the card dispenser and detach it from the rail.
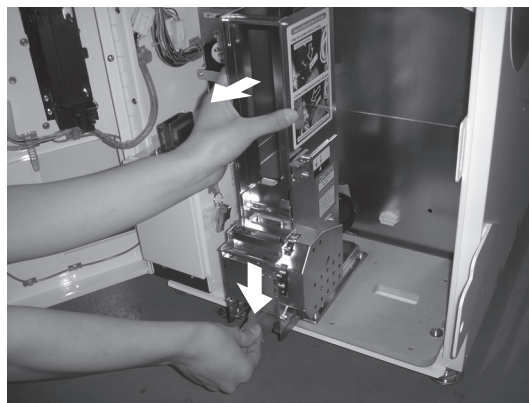
CONNECTOR

CORD CLAMP
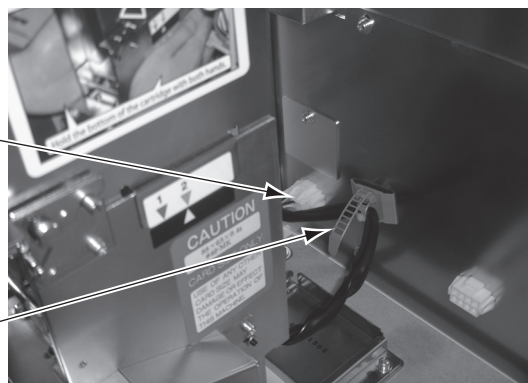
PHOTO 12b

CONNECTOR
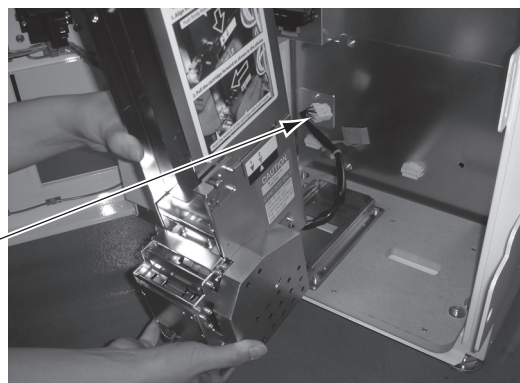
PHOTO 12c

13. CARD READER (CONTROL PANEL)

13－1 HOW TO CLEAN THE CARD READER

① Insert the Cleaning Card, aligning the cloth side with the red light in the Card Reader groove.

CLEANING CARD

Insert with the cloth side facing the correct direction.
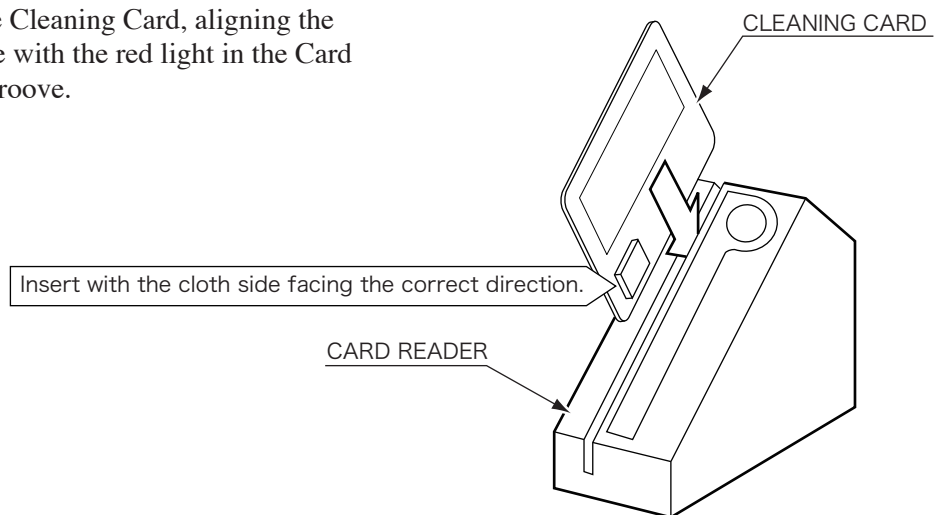
CARD READER

FIG. 13.1a

② Slowly slide the Cleaning Card up and down to clean off any accumulated dirt.
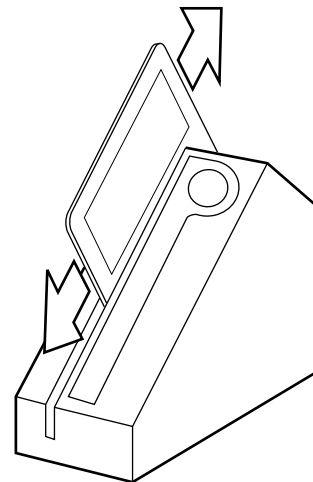
FIG. 13.1b

After cleaning, refer to the BARCODE READER TEST section of the Service Manual to test the functionality.

13－2 HOW TO REMOVE THE CARD READER

⚠️ **WARNING**

- ● When working with the machine, be sure to turn the power off. Working with the power on can cause an electric shock or a short circuit.
- ● Be careful not to damage the wires. Damaged wires may cause electric shock, short circuit, or present a risk of fire.
- ● Do not touch undesignated places. Touching these places can cause electric shock or short circuit.
- ● Do not attempt to disassemble the card reader unit. Doing so could result in exposure to hazardous laser radiation.
- ● This work should be performed by site maintenance personnel or other skilled professionals. Work performed by non-technical personnel can cause severe accidents such as electric shock.

① Turn off the main AC unit power switch.

② Remove the 8 tamperproof screws on the control panel.

TAMPERPROOF SCREW(8),chrome
M4×12

13
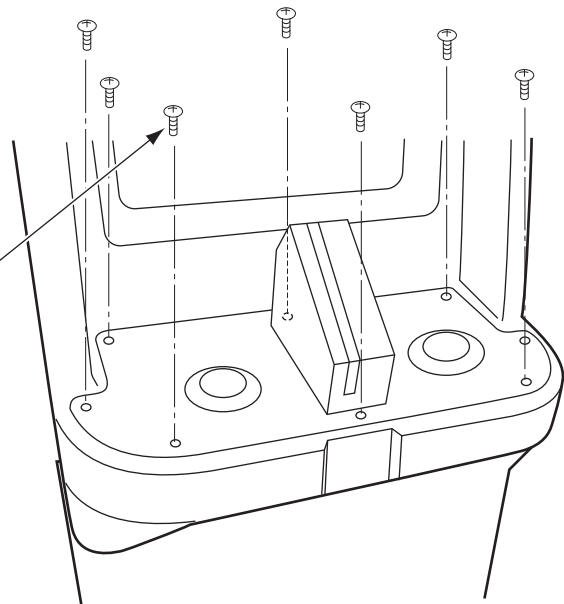
FIG. 13.2

③ Being careful not to damage the cord, unplug the connector from the control panel and pull it out of the cabinet.

CONTROL PANEL

CONNECTOR
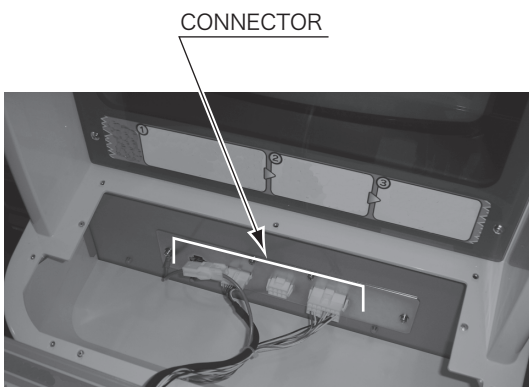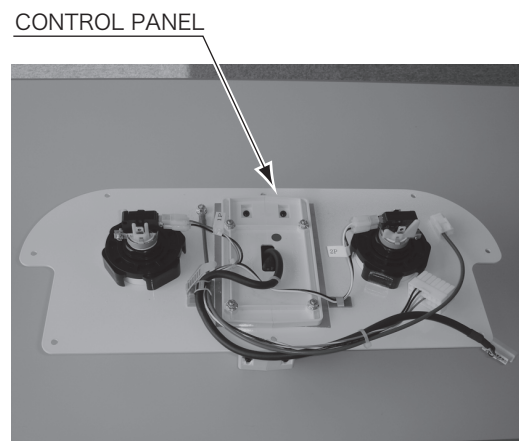
PHOTO 13.2a

PHOTO 13.2b

④ Release the cord clamp, use nippers to cut the tie belt.

CONTROL PANEL   TIE BELT

CORD CLAMP
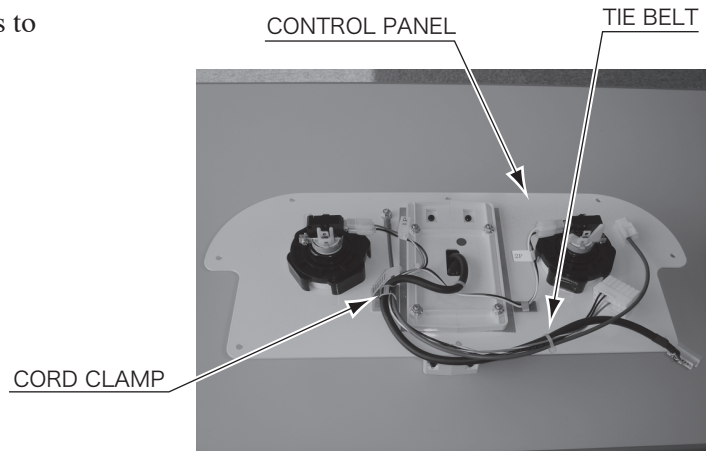
PHOTO 13.2c

⑤ Remove the 4 carriage bolts and the 4 flange nuts that secure the Card Reader, and then remove it from the Control Panel.

CARRIAGE BOLT (4), chrome
M4 x12

FLANGE NUT (4)
M4
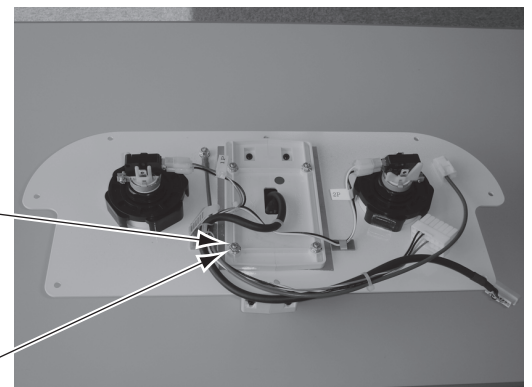
PHOTO 13.2d

13

CARD READER
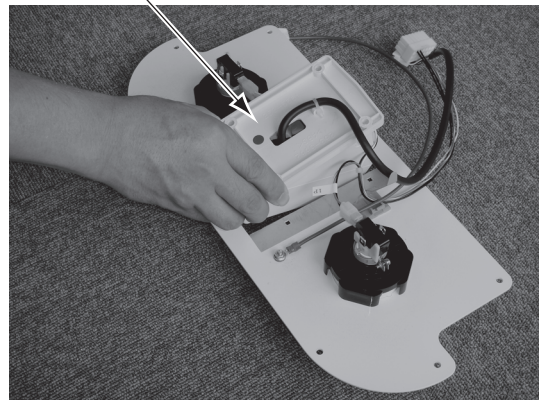
PHOTO 13.2e

13－3 REMOVING THE PUSH BUTTON

⚠ **CAUTION**

> If the switch is removed with its button in a depressed state, the button's parts can become damaged.

Because the Control Panel's button is operated every time the game is played, and it is often messed around with, subjected to excessive force, or has drinks split on it, be sure to carryout periodic inspections. If the button is operating in an unsatisfactory manner, it may be due to one of the following causes:

- The gaps around the button have become blocked with foreign substances.
- The button's parts have become distorted in shape or damaged.
- The switch's wiring is poor.
- The switch's connectors are connected poorly.
- The switch is faulty.

Before replacing the switch, check the malfunction is not due to another cause. Follow the below procedures to replace the switch:

Replacing the Switch

① Cut the AC unit's power, and remove the Control Panel.

② Release the cord clamp and pull out the faston tab connected to the switch that is to be replaced.

FASTON TAB
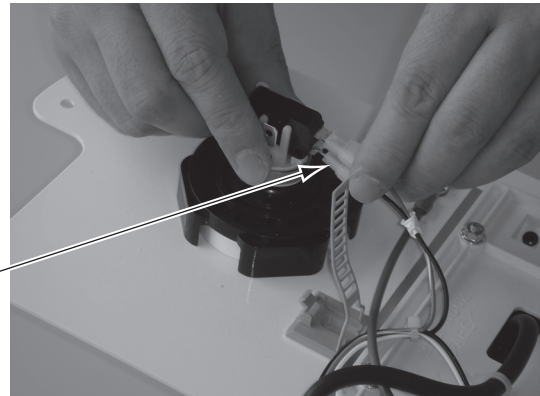
PHOTO 13.3a

③ Remove the screws and detach the lock.

SCREW

LOCK

PHOTO 13.3b

13
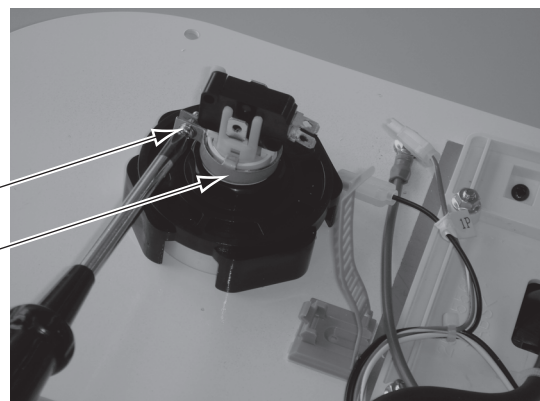
④ Pull the switch out straight from the base of the button, and then replace.
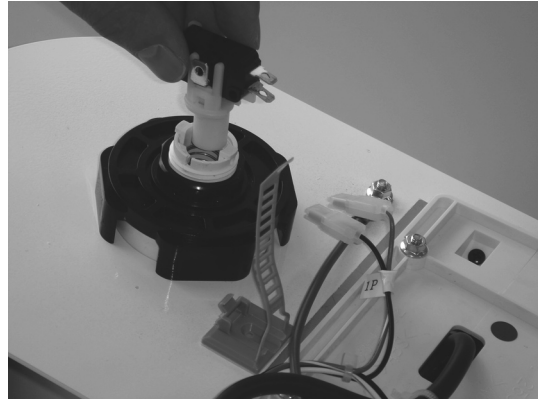
PHOTO 13.3c

Replacing the Button

① The nut must be undone before the supporter and the button can be removed.

NUT
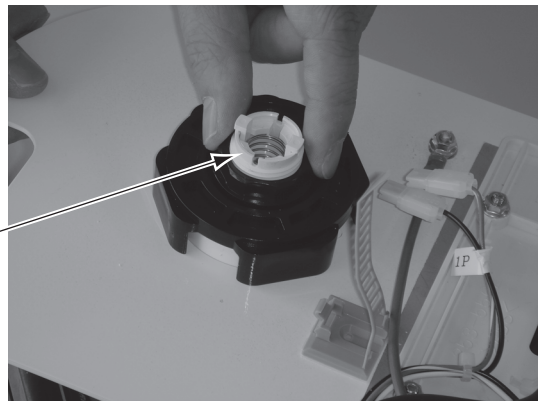
PHOTO 13.3d

② Replace with a new button, and fit the supporter and the nut.

SUPPORTER
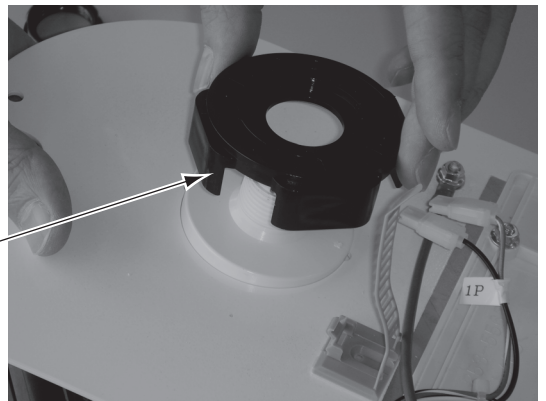
PHOTO 13.3e

14. POWER UNIT

⚠ **WARNING**

- ● When working with the machine, be sure to turn the power off. Working with the power on can cause an electric shock or a short circuit.
- ● Be careful not to damage the wires. Damaged wires may cause electric shock, short circuit, or present a risk of fire.
- ● Do not touch undesignated places. Touching these places can cause electric shock or short circuit.
- ● This work should be performed by the site maintenance individual or another skilled professional. Performing work by non-technical personnel can cause severe accidents such as electric shock.

14－1 HOW TO REMOVE THE POWER UNIT

① Turn off the main AC unit power switch.

② Remove the 2 truss screws, unlock with the master key and detach the back door.

TRUSS SCREW (2), chrome
M4×8

BACK DOOR
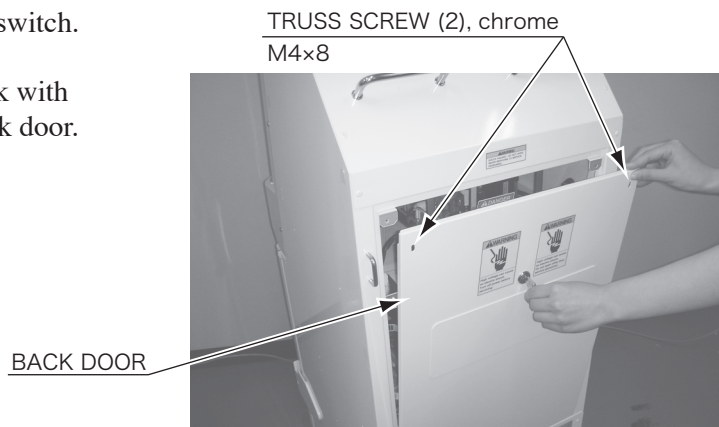
PHOTO 14.1a

③ Unplug all the connectors (L × 2, R × 1, and an earth wire) plugged into the Power & I/O Board unit.

SCREW (1)
M4 x 8, w/flat and spring washers
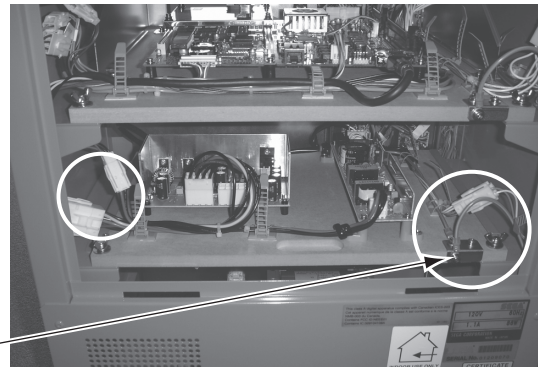
PHOTO 14.1b

④ Remove the 2 wing bolts and pull out the board.

WING BOLT (2)

M4 x 20, flat and spring washers used
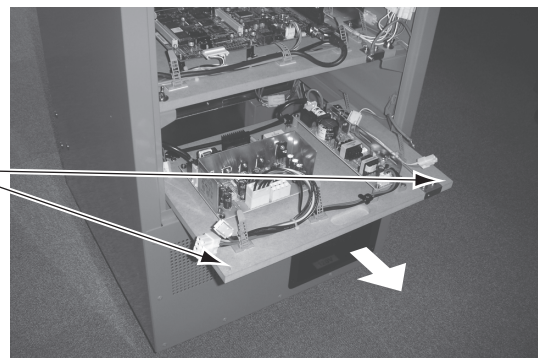
PHOTO 14.1c

14—2 COMPOSITION OF THE POWER UNIT

SW REGU 3.3V 4.2A, 5V 4A, 12V 1.5A
400-5458
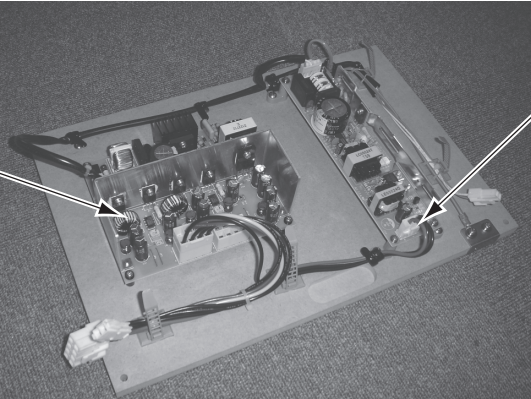
SW REGU VS50P-24
400-5462-05024

PHOTO 14.2

15. COIN SELECTOR AND BILL ACCEPTOR

REMOVING THE COIN SELECTOR

Loosen the screw to raise the lever and open the coin selector cover and then remove the coin selector.

LEVER

COIN SELECTOR COVER
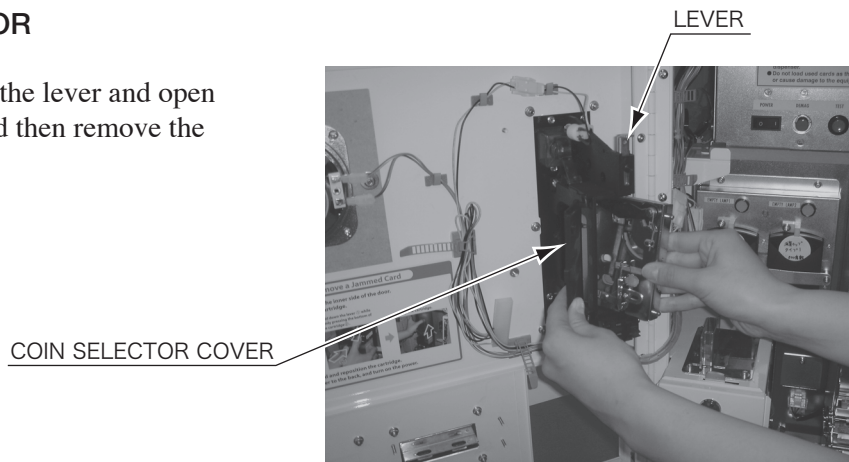
PHOTO 15

REMOVING A JAMMED COIN

When the coin return button fails to refund coins, open the service door and open the selector gate. Once the jammed coin is removed, insert a standard coin to ensure that the selector is working properly.

COIN SELECTOR

COIN METER

FIG. 15a

15

CLEANING THE COIN SELECTOR

STOP

IMPORTANT
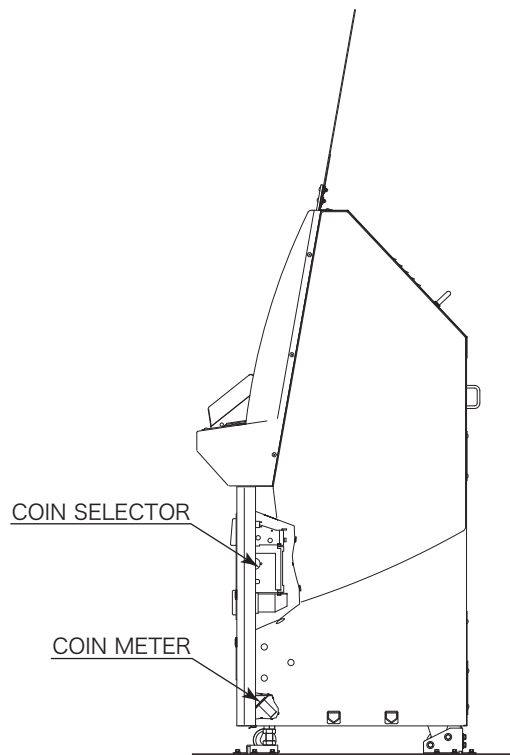
● Remove and clean smears using a soft cloth dipped in water or diluted chemical detergent and then wrung dry.
● Never apply machine oil, etc. to the coin selector.
● After cleaning the coin selector, properly insert a standard coin to ensure that the selector functions correctly.

The coin selector should be cleaned once every 3 months. When cleaning, follow the procedures below:

① Turn off the main AC unit power switch and open the service door.

② Open the gate and remove dust using a soft brush (made of wool, etc.).

③ Remove and clean smears by using a soft cloth dipped in water or diluted chemical detergent and then wrung dry.

④ Remove the cradle. When detaching the retaining ring (E ring), be extra careful not to bend the rotational axis.

⑤ Use a soft cloth to wipe any dirt/debris off the rotational axis and bearings.

⑥ After wiping as described in the previous step, use a dry cloth, etc. to dry the coin selector completely.

GATE

FIG. 15b

CRADLE
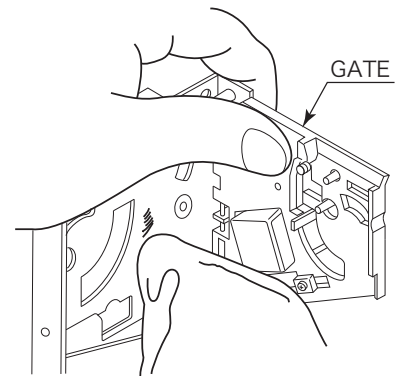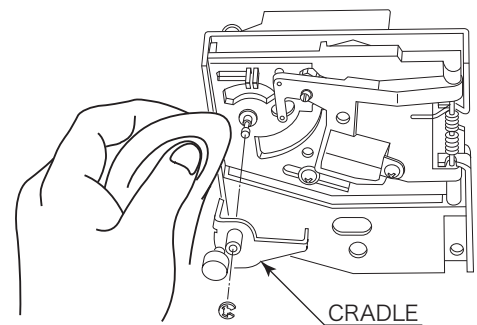
FIG. 15c

15

COIN INSERTION TEST

Carry out a coin insertion test once per month. At the same time, check the following points:

☐ Does the Coin Meter count properly?
☐ Do coins drop into the Cashbox correctly?
☐ Are coins rejected when inserted while holding down the Reject Button?

BILL ACCEPTOR

① When collecting money, performing a maintenance check or cleaning the unit first unlock it with the supplied key.

② See the attached sticker or enclosed Bill Acceptor manual (Bill Acceptor "Installation Guide") for further details on handling, checking and altering the settings for the bill acceptor.

16. MONITOR

16－1 CAUTIONS/WARNINGS REGARDING SAFETY FOR HANDLING THE MONITOR

Before handling the monitor, be sure to read the following points and comply with the caution/warning instructions given below. Note the caution/warning symbols and letters used in the instructions.

WARNING Indicates that handling the monitors improperly by disregarding this warning may potentially cause a hazardous situation, which could result in death or serious injury.

CAUTION Indicates that handling the monitors improperly by disregarding this warning may potentially cause a hazardous situation, which could result in death or serious injury.

Indicates the instruction to disconnect or unplug a power connector.

Indicates that access to a specific part of the equipment is forbidden.

WARNING

● When performing such work as installing and removing the monitor, inserting and disconnecting the external connectors to and from the monitor interior and the monitor itself, be sure to disconnect the power connector (plug) beforehand. Proceeding without doing so can cause electric shock or malfunctioning.

● Use of the monitor by converting it without permission is not allowed. SEGA shall not be liable for any malfunctioning and accidents caused by such a conversion.

WARNING

● Primary side and Secondary side
The monitor's circuit, which is divided into the Primary side and Secondary side, is electrically isolated. Do not touch the Primary side, or touch both the primary side and the secondary side simultaneously. Failing to observe this instruction can cause electric shock, leading to serious danger. When making monitor adjustments, use a non-conductive driver and make them without touching any part other than the Adjustment V. R. and knob. Also, be sure not to cause a short circuit to the Primary side and Secondary side. If a short circuit occurs, it can cause electric shock or malfunctioning, which poses a serious risk of danger.

SECONDARY SIDE (Chassis, CRT, etc.)

PRIMARY SIDE

● High Voltage
Some of the parts inside the monitor are subject to high voltage in excess of 20,000 volts and pose a serious threat. Therefore, do not touch the monitor interior. Should soldering & paper wastes, etc. be mixed in the monitor interior, turn the power off so as not to cause malfunctioning or a fire hazard.

ANODE CAP

ANODE LEAD· Approx. 29 kV

PRIMARY SIDE

DEMAGNETIZER COIL

REAR PART

MAIN BOARD

DEMAGNETIZER COIL

FOCUS LEAD (black) Approx. 10 kV

NECK PCB

Approx. 10 kV

SECONDARY SIDE (Chassis, Metal Plate, CRT, etc.)

Disconnect or unplug.

FBT Approx. 29 kV
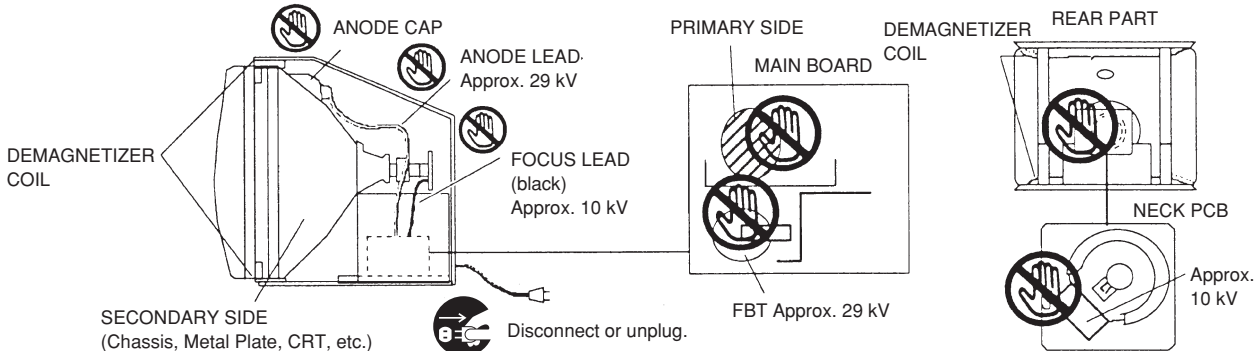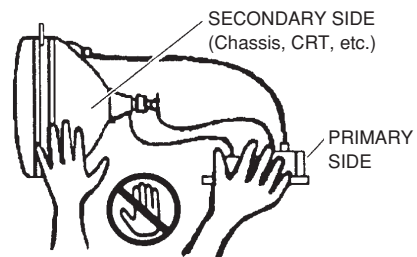
● Connecting the CRT and PCB
When combining the CRT and PCB, use the specified part No. to maintain the factory settings. The anode of the CRT itself will charge as time elapses, generating high voltage that is very dangerous. The monitor should be used with the Chassis, CRT, and PCB assembled. When repair, etc. is required at the time of malfunctioning, be sure to send it in an assembled state. If it is disassembled, the charged high voltage can be released, causing a very hazardous situation. Therefore, under no circumstances should it be disassembled.

CAUTION

● Static Electricity
Touching the CRT surface sometimes causes a slight shock. This is because the CRT surfaces are subject to static and will not adversely affect the human body.

● Installation and Removal
Ensure that the Demagnetizer Coil, FBT (Fly-Back Transformer), Anode Lead, and Focus Lead are not positioned close to the sheet metal work's sharp edges, etc. and avoid damaging the insulated portions so as not to cause electric shock and malfunctioning. (For the name of parts, refer to the figures above.)

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16－2 CLEANING THE CRT SURFACES AND THE MONITOR COVER

⚠️ **CAUTION**

Observe the following points to prevent damage when cleaning accessory surfaces.
- Remove smears using a dry, soft cloth (flannel, etc.). Do not use coarse gauze or other harsh materials.
- For smear removing solvent, alcohol (ethanol) is recommended. When using chemical detergent, be sure to follow the instructions below:
- Soak a soft cloth in a neutral household detergent diluted with water. Wring the cloth well, and then clean down the surface.
- Do not use bleach or detergent that contains abrasive agents.
- Do not use alkaline chemical detergents such as "glass cleaner" available on the market or solvents such as thinner, etc.
- Do not scrape or scratch surfaces using brushes, scouring pads, or other hard cleaning utensils.

Clean the CRT surface and the monitor cover once a week. Apply antistat after cleaning.

① Turn off the main AC unit power switch.

② Remove the 9 truss screws after removing the POP and detach the front mask half way, then disconnect the 3 connectors inside the control panel.

③ The monitor (CRT) will be exposed. Use an untreated soft cloth to wipe off both the CRT surface and the monitor cover.

④ After cleaning, spray antistat onto the CRT and the monitor side of the monitor cover.

16
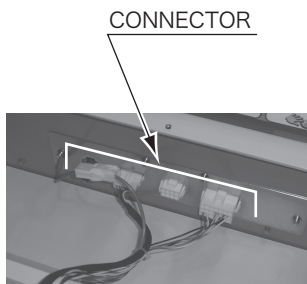
CONNECTOR

PHOTO 16.2

When disconnecting the connector, be careful not to pull the front mask too tightly.

TRUSS SCREW (3), chrome
M4x14
(reverse side of monitor cover)
M4 NUT/WASHER STOPPER

TRUSS SCREW (6), chrome
M4 x 12

FRONT MASK

FIG. 16.2

⚠️ **WARNING**
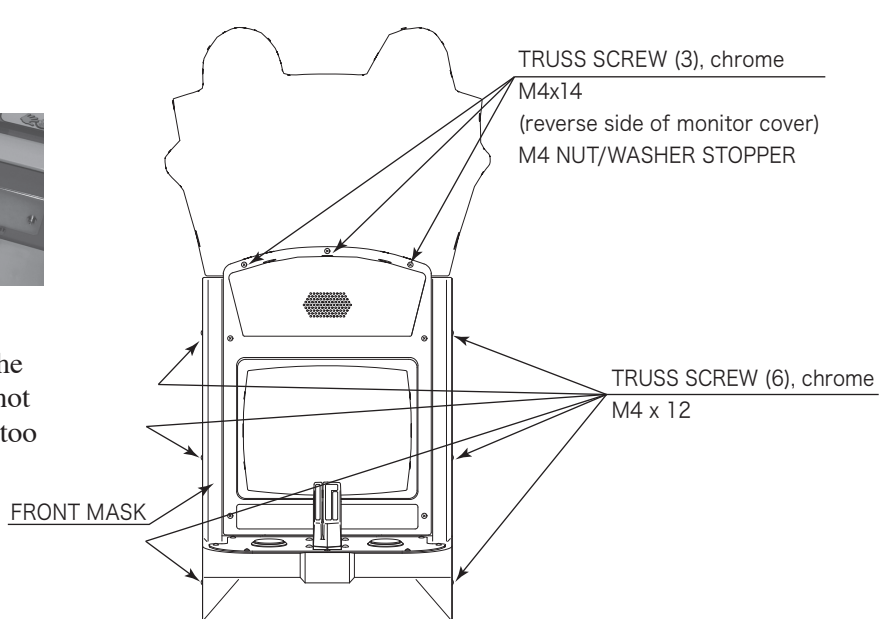
● Monitor adjustments have been made at the time of shipment. Therefore, do not make further adjustments without a justifiable reason. Adjusting the monitor containing high-tension parts is dangerous. Also, an improper adjustment can cause deviated synchronization and image fault, resulting in malfunctioning.
● When making monitor adjustments, use a resin regulating rod. Using bare hands or conductive tools can cause electrocution.
● Be sure to perform appropriate adjustments of the monitor. When operating this machine, do not leave the monitor's flickering or deviation unchecked. Failure to observe this can worsen the players' or the customers' physical conditions.
● Do not touch undesignated places. They can cause electric shock or short circuit.

The monitor regulation board is located on the lower part of the monitor.

DESCRIPTION OF ADJUSTMENT KNOBS
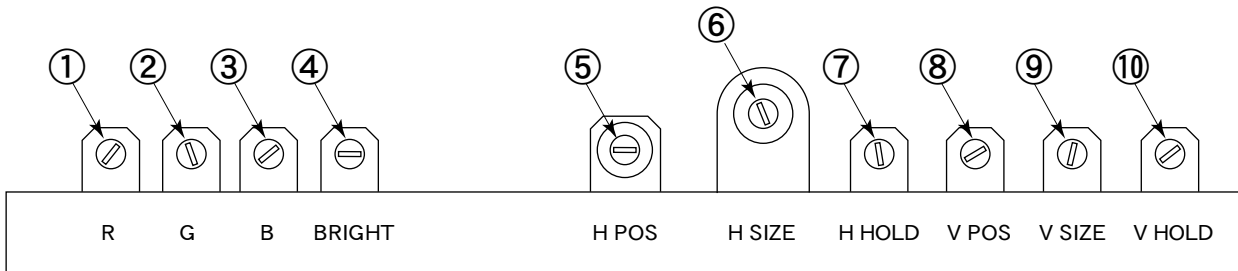
FIG. 16.3

① R. GAIN
② G. GAIN   } Adjusts each VR to get a suitable contrast and white balance.
③ B. GAIN
④ BRIGHT   ： Adjusts screen brightness.
⑤ H POSI   ： Adjusts horizontal positioning of screen.
⑥ H SIZE   ： Adjusts horizontal screen dimension.
⑦ H HOLD   ： Adjusts horizontal scrolling of screen.
⑧ V POSI   ： Adjusts vertical positioning of screen.
⑨ V SIZE   ： Adjusts vertical screen dimension.
⑩ V HOLD   ： Adjusts vertical scrolling of screen.

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HOW TO CONFIRM ADJUSTMENTS

① Enter TEST MODE and select GAME
TEST MODE by positioning the cursor
and pressing the TEST Button.

```
              SYSTEM MENU

       SYSTEM INFORMATION
       RAM TEST
       I/O TEST
       SOUND TEST
       C. R. T. TEST
       SYSTEM ASSIGNMENTS
       COIN ASSIGNMENTS
       BOOKKEEPING
       BACKUP DATA CLEAR
       CLOCK SETTING
       ROM TEST
       COMPACT FLASH TEST
       NETWORK SETTING
      ->GAME TEST MODE
      [***************************]

              EXIT

      SELECT WITH SERVICE BUTTON
         AND PRESS TEST BUTTON
```
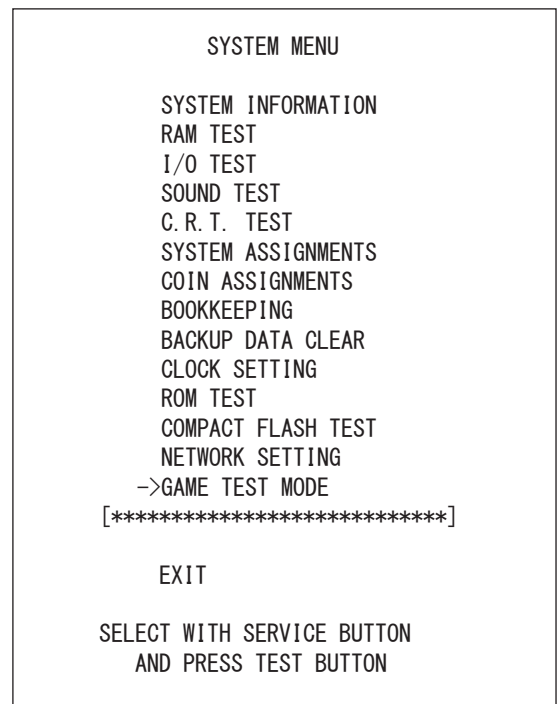
② Position the cursor with CRT TEST and
press the TEST Button to display the
CRT TEST screen.

```
            GAME TEST MODE

        INPUT TEST
        VOLUME ADJUSTMENT
     →  C. R. T.  TEST
        BARCODE READER TEST
        CARD DISPENSER TEST
        MANAGEMENT CHIP STATUS
        GAME ASSIGNMENTS
        BOOKKEEPING
        BACKUP DATA CLEAR

        EXIT

        SELECT WITH SERVICE BUTTON
           AND PRESS TEST BUTTON
```
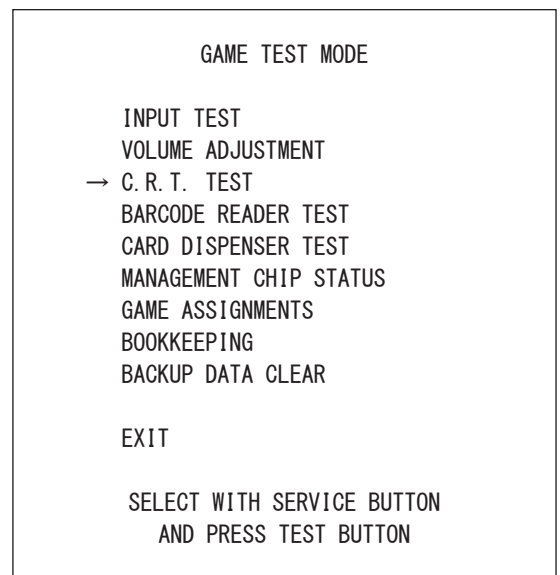
16

The white frame is visible
all around the screen.

The 31st color
gradation is set to be
faintly visible. (The
32nd gradation for
each color is black.)
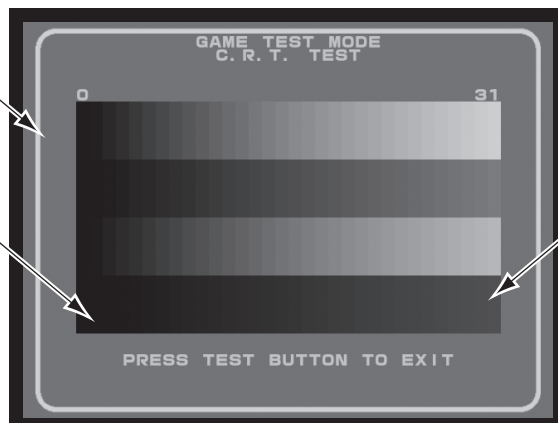
The black portion of the
image is not entirely visible
around the screen.

The top 2 gradations
are set at the same
level. (No gradation
difference.)

PHOTO 16.3

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17. PERIODIC INSPECTION

The items listed below require periodic check and maintenance to retain the performance of this machine and to ensure safe business operation.

WARNING

● Be sure to check once a year to see whether Power Cords are damaged, the plug is securely inserted, dust has accumulated between the Socket Outlet and the Power Plug, etc. Using the product with accumulated dust can cause fire and electric shock.
● Never use a water jet, etc. to clean inside and outside the cabinet. If the machine gets wet for any reason, do not use it until it has completely dried.
● Periodically, around once a year, get in touch with the place of contact herein stated or the Distributor, etc. where the product was purchased from, regarding internal cleaning. Using the product with accumulated dust in the interior can cause a fire or accident. Note that professional interior cleaning will require a fee.

TABLE 17 PERIODIC INSPECTION TABLE

ITEMS	DESCRIPTION	PERIOD	REFERENCE
CABINET	Checking Adjusters/Hold Brackets grounding	Daily before opening hours	3, 6 [1]
MONITOR	Screen Cleaning	Biweekly	16
	Check adjustments.	Monthly	16
GAME BOARD	Check settings.	Monthly	10, 19
CARD READER	Head Cleaning	Monthly	13
SPEAKERS/SOUND	Sound Test, Check sound volume adjustment.	Monthly	11
COIN SELECTOR	Coin Insertion Test	Monthly	15
	Cleaning	Tri-monthly	15
POWER SUPPLY PLUG	Inspection and Cleaning	Annually	See above.
INTERIOR	Cleaning	Annually	See above.
CABINET SURFACES	Cleaning	As necessary	See below.

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CLEANING THE CABINET SURFACES

When the cabinet surfaces become dirty, remove stains with a soft cloth soaked in water or diluted (with water) chemical detergent and then wrung dry. To avoid damaging the finish, do not use such solvents as thinner, benzene, etc. (other than ethyl alcohol) or abrasives (bleaching agent and chemical dust-cloth).

Some general-purpose household, kitchen, and furniture cleaning products may contain strong solvents that degrade plastic components, coatings, and print. Before using any cleaning product, read the product's cautionary notes carefully and test the product first on a small area that is not highly visible.

18. TROUBLESHOOTING

WARNING

● In order to prevent electric shock and short circuit, be sure to turn power off before working on the machine.
● Be careful not to damage wiring. Damaged wiring may cause electric shock or short circuit.
● After fixing the problems regarding the Circuit Protector, reinstate the Circuit Protector. Depending on the cause of the problem, using the Circuit Protector without addressing the malfunction can generate heat and can present a fire hazard.
● In the event that a problem cannot be resolved by employing the procedures listed in this manual, be sure to request service from the office shown on this manual or the dealer from whom the product was originally purchased. Attempts to employ procedures other than those specified in this manual can cause electrical shock, shorting, or fire.

STOP

IMPORTANT

If a problem occurs, first check to make sure that the wiring connectors are properly connected.

TABLE 18a TROUBLESHOOTING TABLE

PROBLEMS	CAUSE	COUNTERMEASURES
Turning on the power switch fails to power on the machine.	The power is not ON.	Firmly insert the power plug into the outlet.
	Either the main switch or the power switch is turned off.	Turn on both the main switch and the power switch.
	Incorrect power source/voltage.	Make sure that the power supply/ voltage is correct.
	The Circuit Protector malfunctions due to a power surge.	After eliminating the cause of the power surge, restore the Circuit Protector of the AC Unit. (See next page.)
Sound is not emitted.	Sound volume adjustment is not correct.	・ Adjust the sound volume in the Test Mode. ・ Adjust the sound volume with "VR1" on SystemSP board. (See Section 10.)
	Sound-related circuit malfunction.	Perform SOUND TEST.
Cards are not dispensed.	Cards are empty.	Refill cards.
	Card jam.	Remove the jammed card(s).
	The connector is not connected properly.	Ensure proper connection.
	Card dispenser malfunction.	Exchange the card dispenser.

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TABLE 18b TROUBLESHOOTING TABLE

PROBLEMS	CAUSE	COUNTERMEASURES
Cannot scan (read) cards.	Card reader card slot is dirty.	Use the attached cleaning card to clean the card slot.
	The connector is not connected properly.	Ensure proper connection.
	Card reader malfunction.	Exchange the card reader.
Cannot enter TEST MODE.	Switch malfunction.	Exchange the switch.
	Game Board abnormality.	Exchange the Game Board.
	The operation used to change to TEST MODE is incorrect.	Ensure correct operation.
Monitor display is abnormal.	Game Board and monitor connection failure.	Ensure proper connection (of connector).
	Monitor malfunction.	Exchange the monitor.
	Game Board malfunction.	Exchange the Game Board.
There is no response from control panel buttons.	Button failure.	Exchange the button(s).
	The connector is not connected properly.	Ensure proper connection.
	Not set to game mode.	Change setting to game mode.

CIRCUIT PROTECTOR
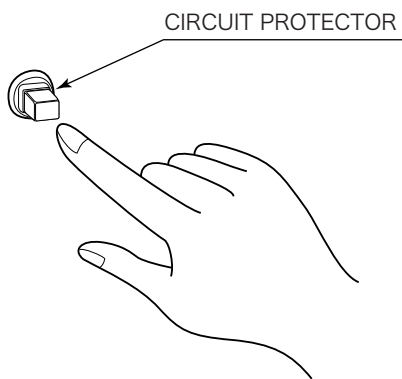
CIRCUIT PROTECTOR

FIG. 18

The Circuit Protector uses a bimetal to break the circuit. Due to the heat, the machine cannot be restarted until it cools. Wait at least 1 minute before restarting. (Press the button in.)

18

19. GAME BOARD

⚠️ **WARNING**

- ● In order to prevent electric shock and short circuit, be sure to turn power off before working on the machine.
- ● Be careful not to damage wiring. Damaged wiring may cause electric shock or short circuit.
- ● Do not expose the Game Board, etc. for any reason. Doing so may cause electric shock or malfunctioning.

⚠️ **CAUTION**

- ● There is no need to handle the Game Board for this machine since all setting changes are done in TEST MODE. Failure to use the Game Board or any other IC board as shipped can cause electric shock or malfunctioning.
- ● The chip components on IC boards can be damaged by electrostatic discharge from the human body. Before handling an IC board, always neutralize any static charge in the body by touching a grounded metal surface.

19－1 REMOVING THE GAME BOARD

This produce uses the SystemSP board. When exchanging or repairing it follow the steps below to first remove the ASSY MAIN board from the cabinet and then the SystemSP board.

① Turn the AC Unit's main switch OFF and open the back door.

② Disconnect all of the connectors to the ASSY MAIN board and undo the cord clamps.
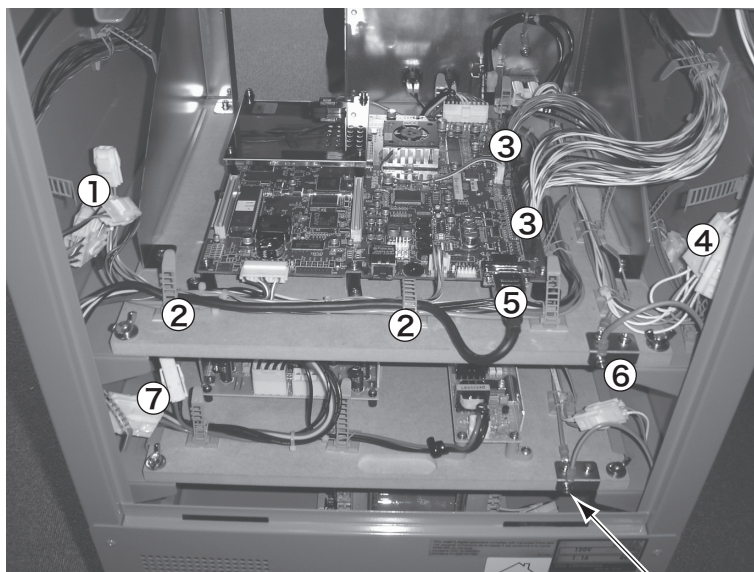
PHOTO 19.1a

① 3 connectors
② 1 cord clamp
③ 2 connectors
④ 2 connectors
⑤ D-SUB connector*
⑥ 1 earth terminal
⑦ 2 connectors and
　 1 cord clamp

*　The screws on the left and right of the D-SUB connector must be loosened before it can be removed.

SCREW (1)
M4×8, w/flat and spring washers

③ Remove the two wing bolts and take out the ASSY MAIN board.

WING BOLT (2)
M4×20, flat and spring washers used
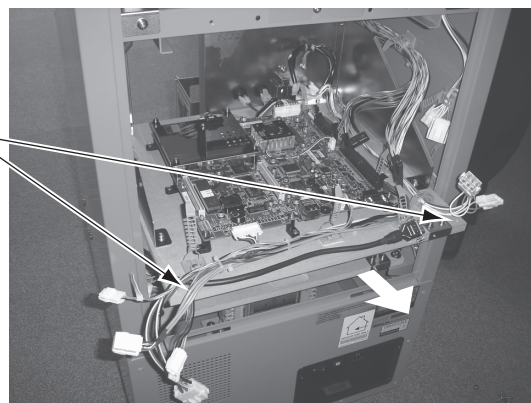
PHOTO 19.1b

④ Disconnect the four SystemSP board connectors, shown marked with circles in the picture below.
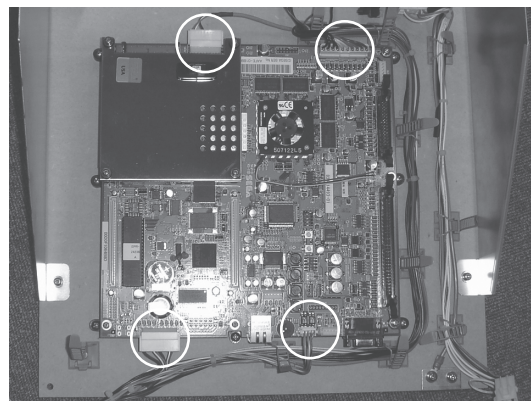
PHOTO 19.1c

⑤ Remove the 8 screws and take out the SystemSP board base.

TAPPING SCREW (8)
M3.5×16
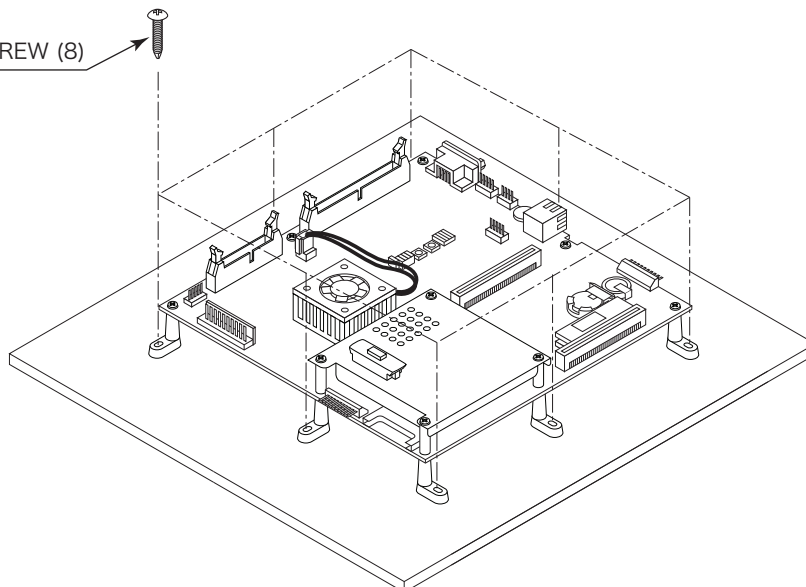
FIG. 19.1

19－2 COMPOSITION OF THE GAME BOARD

Refer to the Service Manual for details.

20. DESIGN-RELATED PARTS

For the Warning Display Stickers, refer to Section1.

POP SPC OSM ENG
SPC-0016

PLAY INSTR SHEET OSM ENG
OSM-0004-01

STICKER CTRL PANEL OSM
OSM-2004

STICKER BARCODE RDR CASE L ENG
OSM-2005X-01

STICKER CABI FRONT OSM ENG
SPC-0006

STICKER CABI SIDE R OSM ENG
SPC-0008
（Opposite Side）

STICKER CABI SIDE L OSM ENG
SPC-0007

STICKER BARCODE RDR CASE R ENG
OSM-2006X-01

PHOTO 20

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21. PARTS LIST
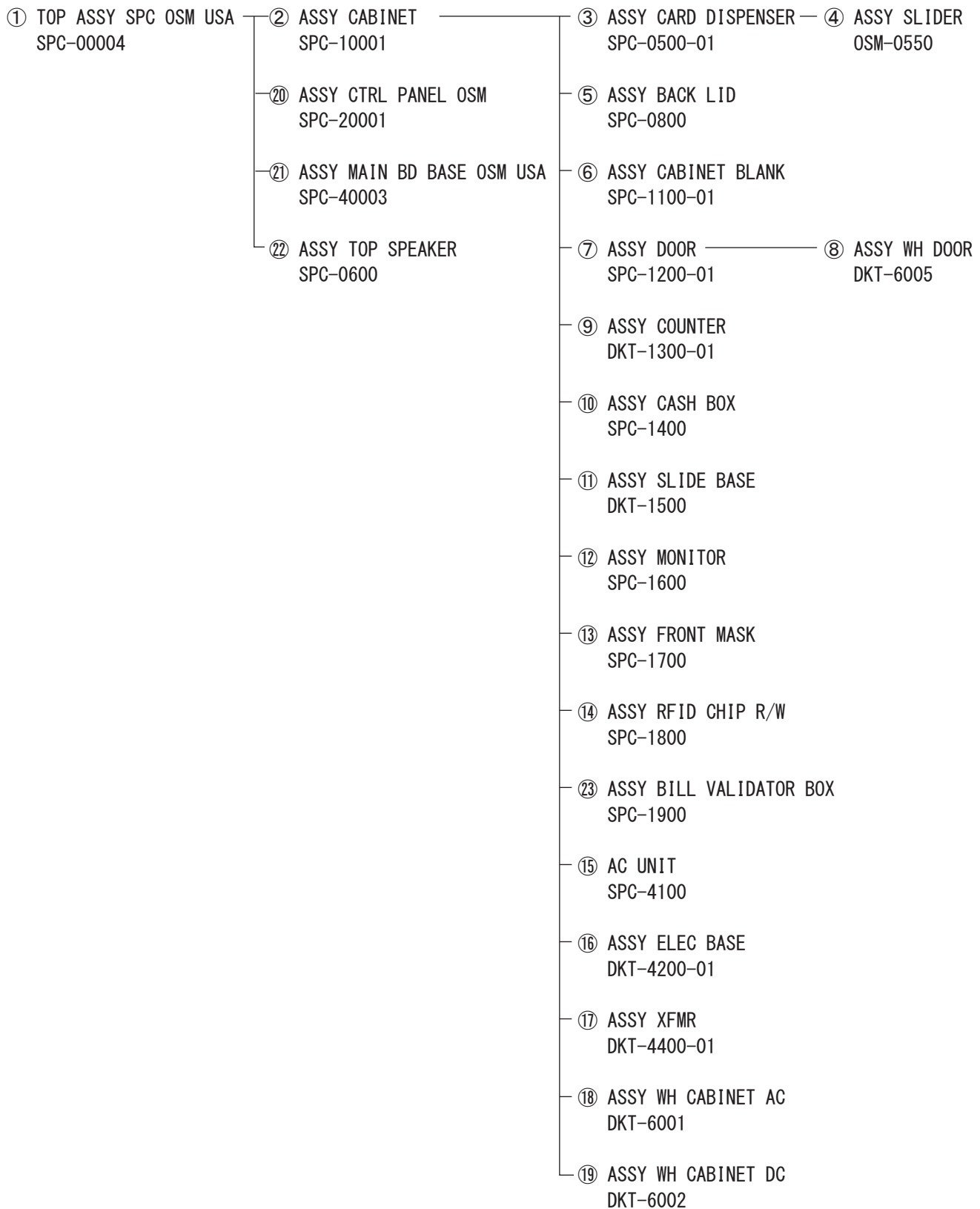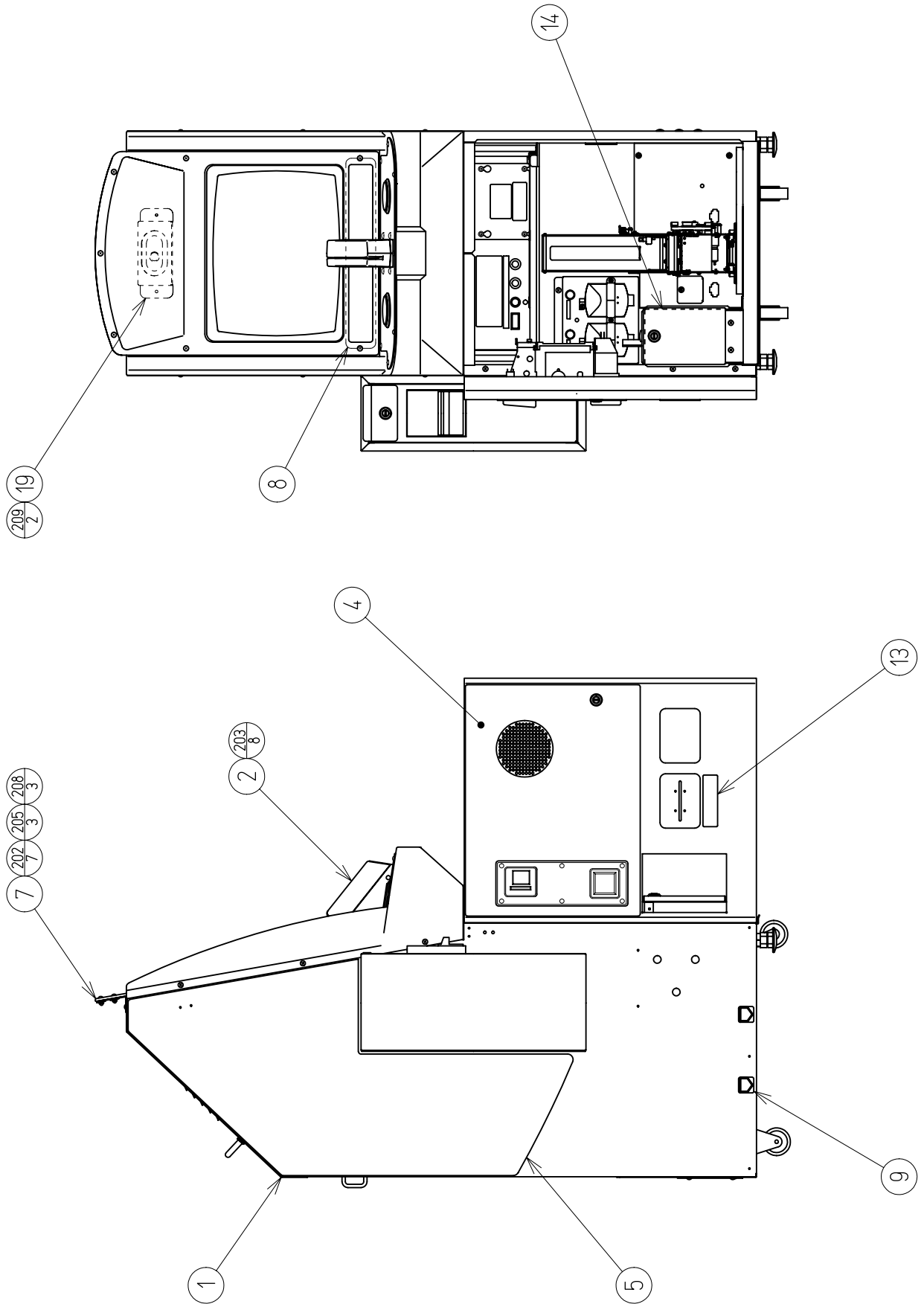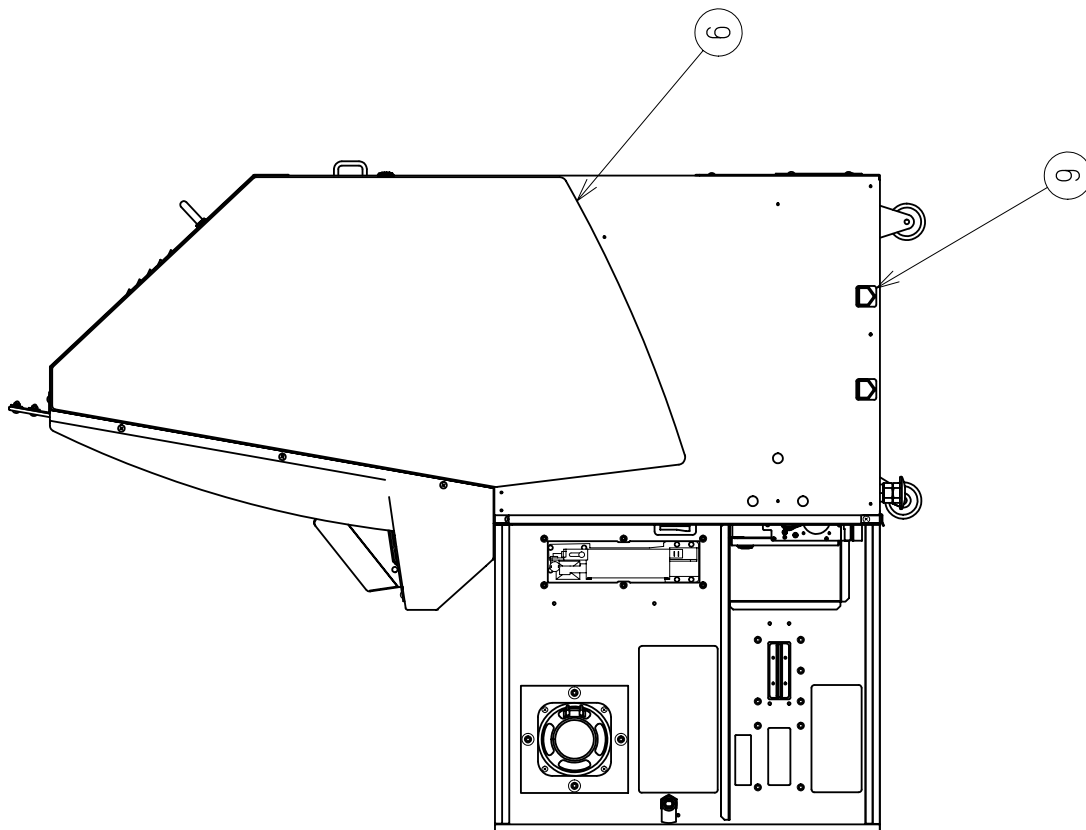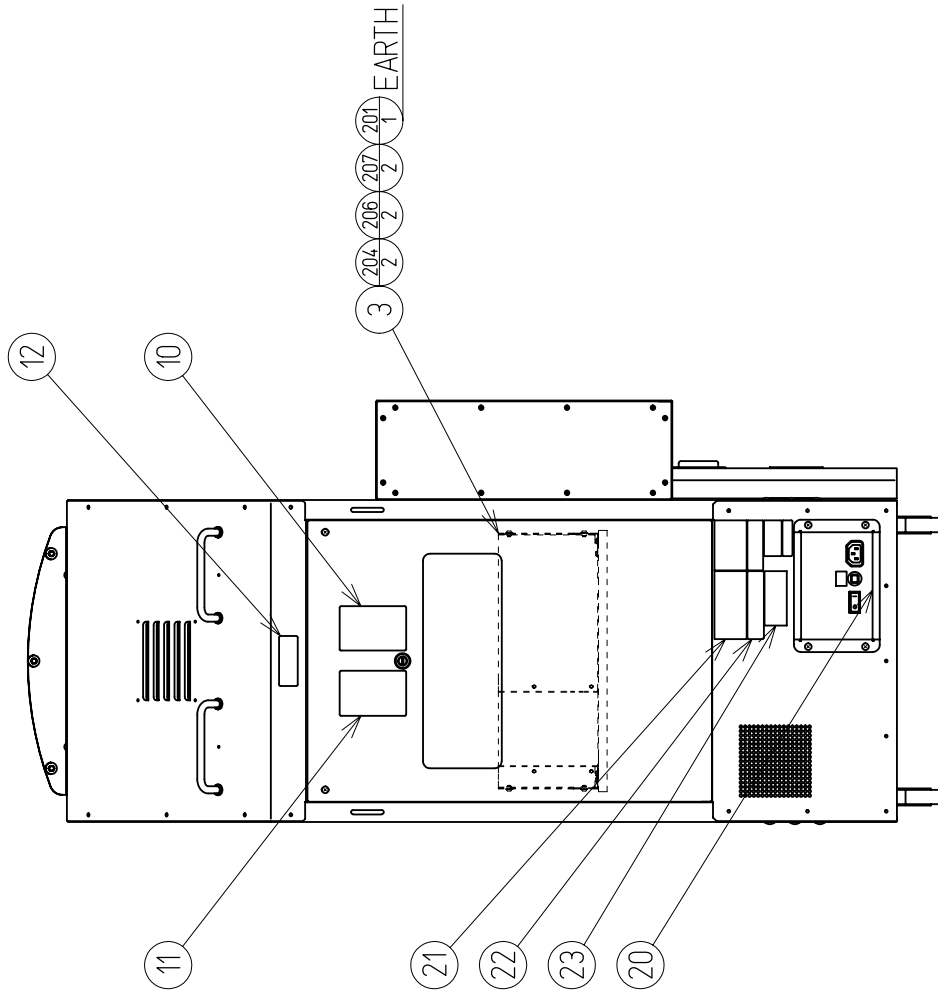
① TOP ASSY SPC OSM USA
SPC-00004

② ASSY CABINET
SPC-10001

⑳ ASSY CTRL PANEL OSM
SPC-20001

㉑ ASSY MAIN BD BASE OSM USA
SPC-40003

㉒ ASSY TOP SPEAKER
SPC-0600

③ ASSY CARD DISPENSER
SPC-0500-01

④ ASSY SLIDER
OSM-0550

⑤ ASSY BACK LID
SPC-0800

⑥ ASSY CABINET BLANK
SPC-1100-01

⑦ ASSY DOOR
SPC-1200-01

⑧ ASSY WH DOOR
DKT-6005

⑨ ASSY COUNTER
DKT-1300-01

⑩ ASSY CASH BOX
SPC-1400

⑪ ASSY SLIDE BASE
DKT-1500

⑫ ASSY MONITOR
SPC-1600

⑬ ASSY FRONT MASK
SPC-1700

⑭ ASSY RFID CHIP R/W
SPC-1800

㉓ ASSY BILL VALIDATOR BOX
SPC-1900

⑮ AC UNIT
SPC-4100

⑯ ASSY ELEC BASE
DKT-4200-01

⑰ ASSY XFMR
DKT-4400-01

⑱ ASSY WH CABINET AC
DKT-6001

⑲ ASSY WH CABINET DC
DKT-6002

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EARTH

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ITEM NO.	PART No.	DESCRIPTION	NOTE
1	SPC-10001	ASSY CABINET	
2	SPC-20001	ASSY CTRL PANEL OSM	
3	SPC-40003	ASSY MAIN BD BASE OSM USA	
4	SPC-0006	STICKER CABI FRONT OSM ENG	
5	SPC-0013	STICKER CABI SIDE L S OSM ENG	
6	SPC-0008	STICKER CABI SIDE R OSM ENG	
7	OSM-1702X-01	MONITOR COVER PLATE ENG	
8	OSM-0004-01	PLAY INSTR SHEET OSM ENG	
9	421-11416	STICKER CAUTION FORK	
10	440-WS0001XEG	STICKER W NOT OPEN DOOR ENG	
11	440-WS0002XEG	STICKER W POWER OFF ENG	
12	440-WS0286-EG	STICKER W DO NOT OPEN ENG	
13	440-CS0290-EG	STICKER C CARD PICOUT ENG	
14	MKG-0015-01	STICKER MANAGEMENT CP R/W ENG	
18	421-8479-01	STICKER INSTR SUNLIGHT ENG	
19	SPC-0600	ASSY TOP SPEAKER	
20	421-6690-01	STICKER 120V	
22	421-12154	STICKER ME-PM01-RA-SG FOR US	
23	421-11892-03	STICKER UL FOR SPC OSM	
201	000-P00408-W	M SCR PH W/FS M4×8	
202	000-T00412-0C	M SCR TH CRM M4×12	
203	008-T00412-0C	TMP PRF SCR TH CRM M4×12	
204	032-000420	WING BLT M4×20	
205	050-C00400-3C	CUP NUT TYPE3 CRM M4	
206	060-S00400	SPR WSHR M4	
207	068-441616	FLT WSHR 4.4-16×1.6	
208	068-441616-0C	FLT WSHR CRM 4.4-16×1.6	
209	000-P00412-W	M SCR PH W/FS M4×12	
401	SPC-0001	POP SUPPORT	
402	SPC-0016	POP SPC OSM ENG	
403	601-6604-70	CARTON BOX 70	
404	MKG-0011-01	CLEANING CARD FOR CARD RDR ENG	
405	SGM-2675X	POLYETHYLENE BAG 240 × 370	
406	SGM-4111Y	KEY BAG	
407	220-5793-2-A001	KEY MASTER A001	
408	220-5793-2-A003	KEY MASTER A003	
409	540-0069	DRIVER FOR TAMP PRF SCR M4	
410	600-7326	AC CABLE CONNECT TYPE USA 15A	
411	420-6967-01	OWNERS MANUAL SPC OSM UL	
412	420-6968	SERVICE MANUAL SPC OSM ENG	
413	000-T00414-0C	M SCR TH CRM M4×14	
414	DKT-0009	CABINET HOLD BASE	
415	DKT-0010	CABINET HOLD BRKT FR	
416	DKT-0011	CABINET HOLD BRKT RR UPPER	

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ITEM NO.	PART No.	DESCRIPTION	NOTE
417	DKT-0012	CABINET HOLD BRKT RR LOWER	
418	FAS-300047	HEX BLT W/FS BLK M5×8	
419	030-000616-SB	HEX BLT W/S BLK M6×16	
420	068-652016-0B	FLT WSHR BLK 6.5-20×1.6	

21

21
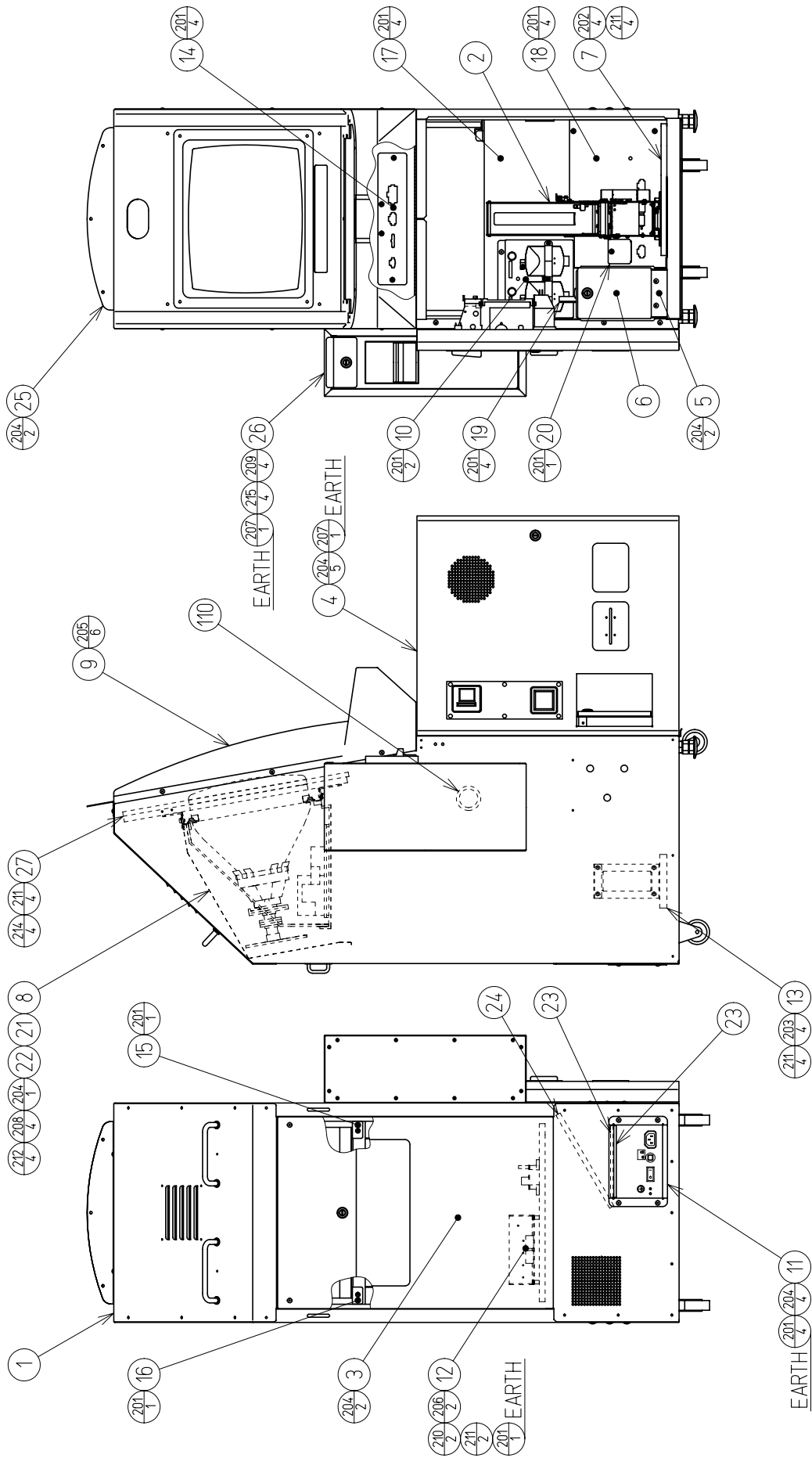
ITEM NO.	PART No.	DESCRIPTION	NOTE
1	SPC-1100-01	ASSY CABINET BLANK	
2	SPC-0500-01	ASSY CARD DISPENSER	
3	SPC-0800	ASSY BACK LID	
4	SPC-1200-01	ASSY DOOR	
5	DKT-1300-01	ASSY COUNTER	
6	SPC-1400	ASSY CASH BOX	
7	DKT-1500	ASSY SLIDE BASE	
8	SPC-1600	ASSY MONITOR	
9	SPC-1700	ASSY FRONT MASK	
10	SPC-1800	ASSY RFID CHIP R/W	
11	SPC-4100	AC UNIT	
12	DKT-4200-01	ASSY ELEC BASE	
13	DKT-4400-01	ASSY XFMR	
14	OSM-1001	PLATE CONN CTRL PANEL	
15	SPC-1006	PLATE CONN MONITOR AC	
16	SPC-1007	PLATE CONN MONITOR RGB	
17	DKT-1001	PARTITION UPPER	
18	DKT-1002	PARTITION LOWER	
19	DKT-1003	COIN CHUTE SHORT	
20	DKT-1004	UK COUNTER LID	
21	SPC-1001	BUSHING	
22	SPC-1002	SPACER	
23	MKG-1014	SPONGE WATER PROOF 147	
24	MKG-1015	SPONGE WATER PROOF 220	
25	SPC-1003	BOARD BRKT	
26	SPC-1900	ASSY BILL VALIDATOR BOX	
27	SPC-1004	MONITOR PROTECTOR	
101	280-6676	CORD CLAMP 25	
102	280-5277	CORD CLAMP 18	
103	280-5292	CORD CLAMP PUSH TYPE	
104	280-5275-SR10	CORD CLAMP SR10	
105	601-6231-B-025	EDGING NEW TYPE	
106	601-6231-B-110	EDGING NEW TYPE	
107	601-6231-D-050	EDGING NEW TYPE	
108	270-5117	FERRITE CORE TDK ZCAT3035-1330	
109	601-0460	PLASTIC TIE BELT 100M/M	
110	280-6581-29	BUSHING NB-29	
201	000-P00408-W	M SCR PH W/FS M4×8	
202	000-P00420-W	M SCR PH W/FS M4×20	
203	000-P00425-W	M SCR PH W/FS M4×25	
204	000-T00408-0C	M SCR TH CRM M4×8	
205	000-T00412-0C	M SCR TH CRM M4×12	
206	032-000420	WING BLT M4×20	
207	050-F00400	FLG NUT M4	
208	050-F00500	FLG NUT M5	

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ITEM NO.	PART No.	DESCRIPTION	NOTE
209	050-F00600	FLG NUT M6	
210	060-S00400	SPR WSHR M4	
211	068-441616	FLT WSHR 4.4-16 × 1.6	
212	068-552016	FLT WSHR 5.5-20 × 1.6	
213	031-000620-0C	CRG BLT CRM M6 × 20	
214	000-P00435-W	M SCR PH W/FS M4 × 35	
215	068-652016	FLT WSHR 6.5-20 × 1.6	
301	DKT-6001	ASSY WH CABINET AC	
302	DKT-6002	ASSY WH CABINET DC	
303	MKG-60035-01	WH EARTH CTRL PANEL EXT EXP	
304	OSM-60005	WH TOP SPEAKER EXT	
305	DKT-60001	WH DVA BOX EXT	
306	DKT-60009	WH EARTH DVA BOX	

21

③ ASSY CARD DISPENSER (SPC-0500-01)
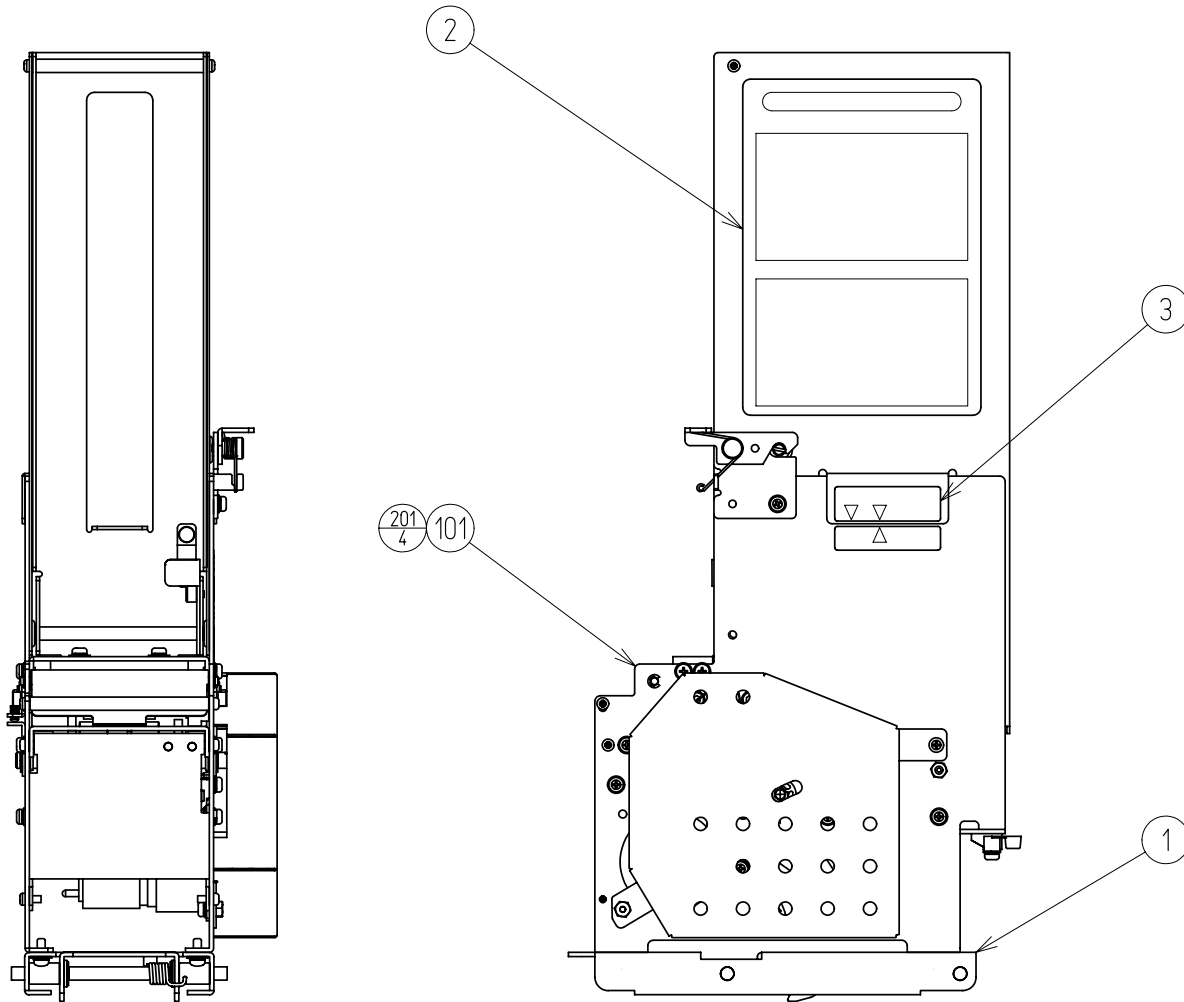
ITEM NO.	PART No.	DESCRIPTION	NOTE
1	OSM-0550	ASSY SLIDER	
2	MKG-0501-01	STICKER HOW TO RMV STOCKER ENG	
3	MKG-0502	STICKER STOCKER POSITION	
101	610-0668-02-91	CARD DISPENSER CD-1300 ENG SC	
201	000-P00308-W	M SCR PH W/FS M3×8	
301	DKT-60026	WH CARD DISPENSER	

21

④ ASSY SLIDER (OSM-0550)
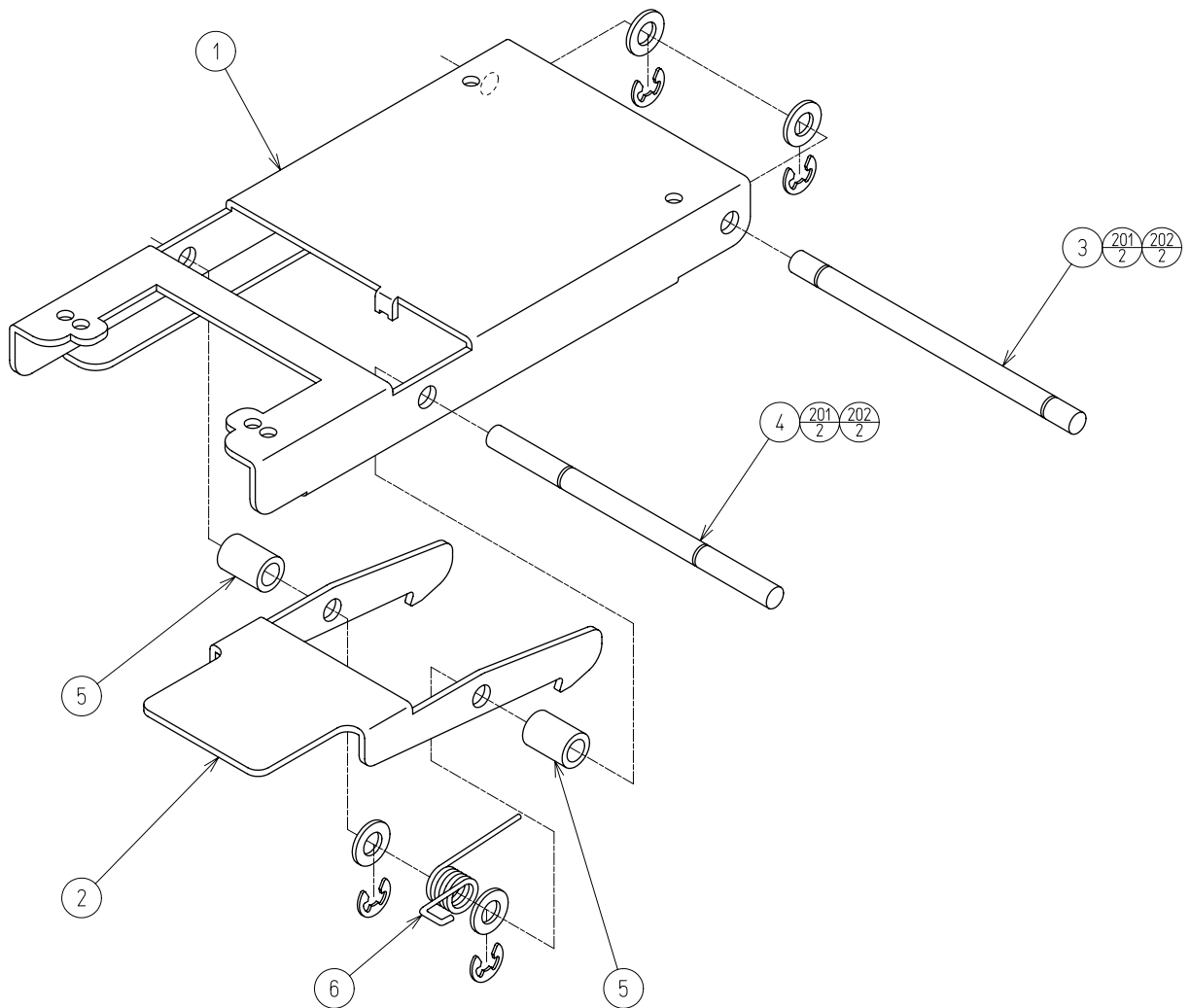
ITEM NO.	PART NO.	DESCRIPTION	NOTE
1	OSM-0551	CD BASE	
2	OSM-0552	STOPPER	
3	MKG-0553	SLIDE SHAFT	
4	MKG-0554	STOPPER SHAFT	
5	MKG-0555	SPACER	
6	MKG-0556	TORSION SPRING	
201	060-F00500	FLT WSHR M5	
202	065-E00400	E RING 4MM	

21

⑤ ASSY BACK LID (SPC-0800)
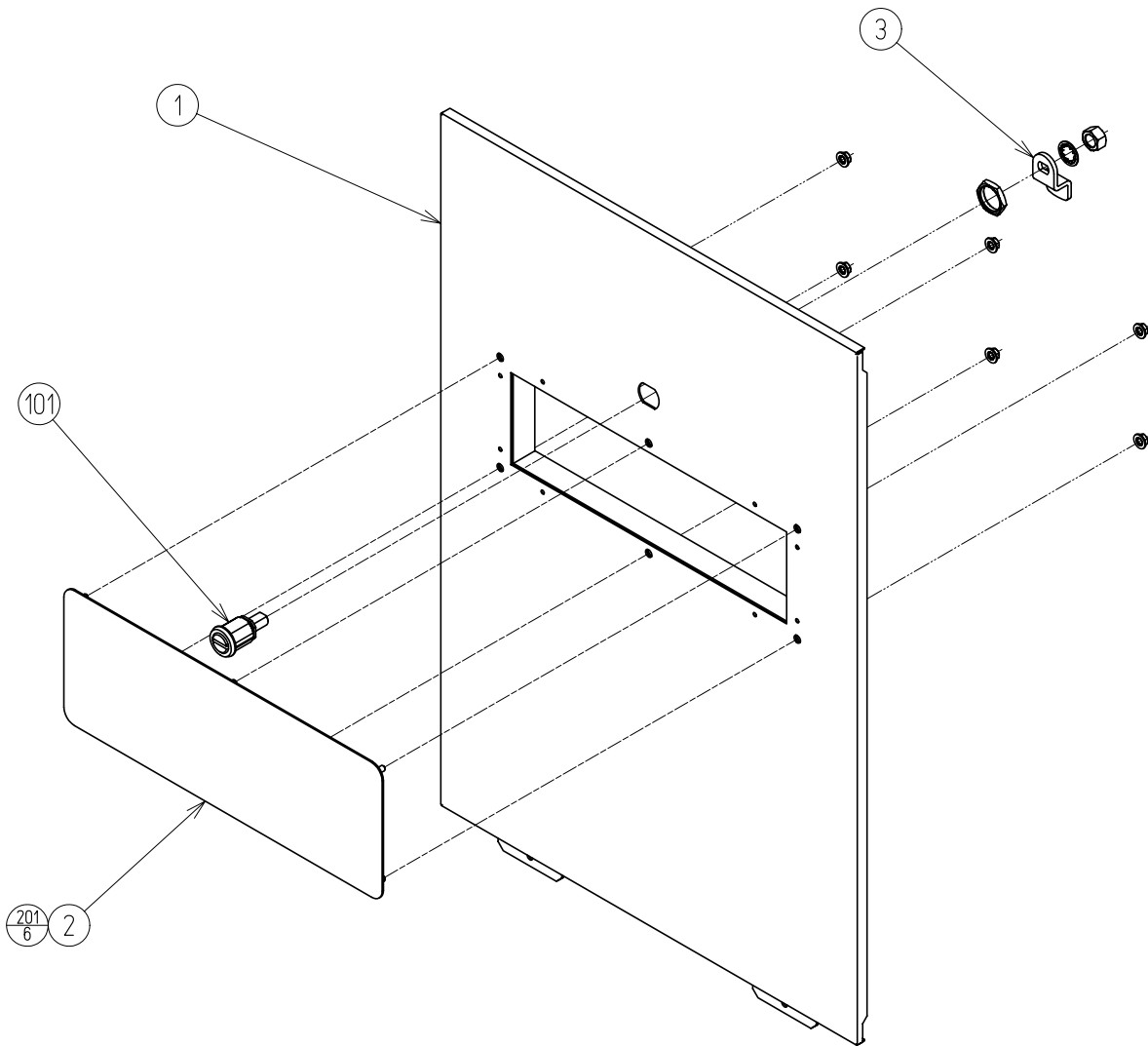
ITEM NO.	PART No.	DESCRIPTION	NOTE
1	SPC-0801	BACK LID	
2	SPC-0802	EXPAND CONN LID	
3	SPC-0803	TONGUE BACK LID	
101	220-5793-1-A001	CLY LOCK MASTER W/O KEY A001	
201	050-F00400	FLG NUT M4	

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⑥ ASSY CABINET BLANK (SPC-1100-01)
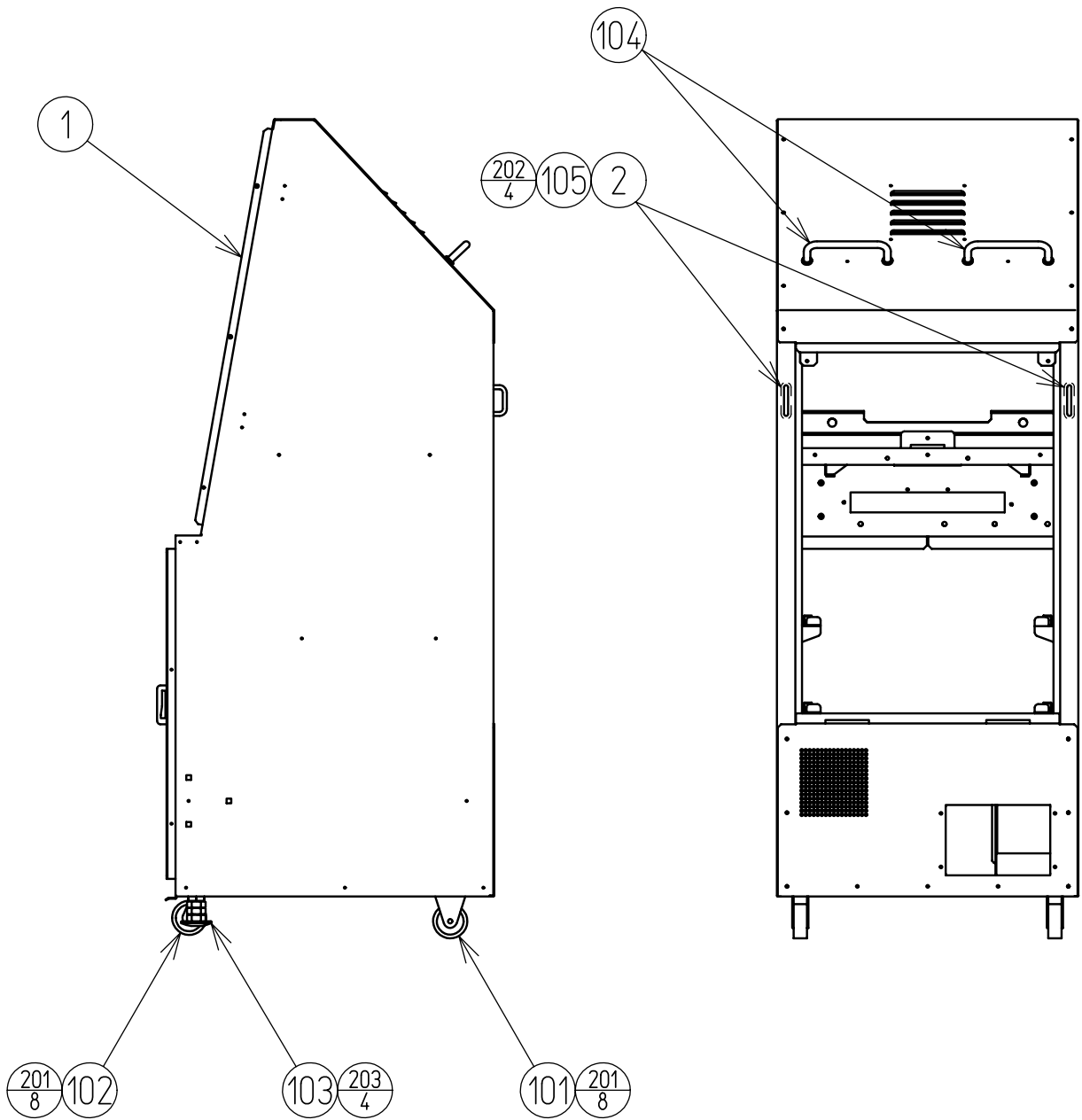
ITEM NO.	PART No.	DESCRIPTION	NOTE
1	SPC-1101-01	CABINET BLANK USA	
2	MKG-1103	PLATE CHAIN HOOK	
101	601-11634	CASTER D51H73 FIX	
102	601-11635	CASTER D51H67 FREE ST	
103	601-5699X	LEG ADJUSTER BOLT M16×75	
104	TOE-NMD252	STAINLESS ROUND BAR PULLS	
105	601-11419	SUS ROUND BAR THA-31SUS-2	
201	030-000612-S	HEX BLT W/S M6×12	
202	050-F00400	FLG NUT M4	
203	050-H01600-3	HEX NUT TYPE3 M16	

21

REAR VIEW

FRONT VIEW

EARTH

21
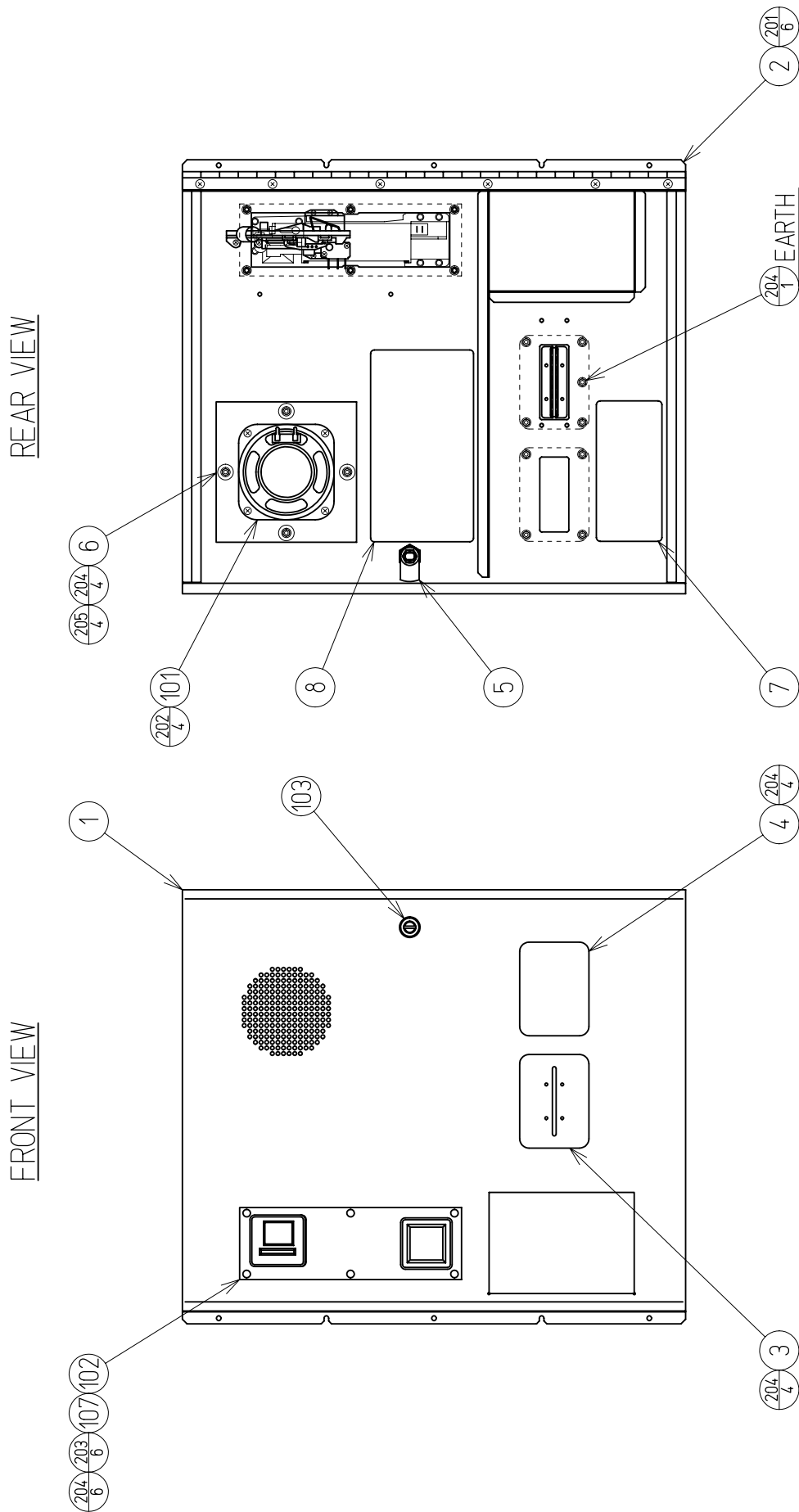
ITEM NO.	PART No.	DESCRIPTION	NOTE
1	SPC-1201	DOOR	
2	SPC-1202	HINGE	
3	OSM-1203	PICK OUT PLATE	
4	SPC-1203	PICK OUT LID	
5	MKG-1203	TONGUE	
6	MKG-1205	SPEAKER BASE WOODEN	
7	DKT-0005-01	STICKER HOW TO SET CARD ENG	
8	SPC-1204	STICKER HOW TO REMOVE CARD ENG	
101	130-5034	SPEAKER 8 OHM 10W	
102	220-5786	C.C BRKT A0710 (LORENZO)	
103	220-5793-1-A003	CLY LOCK MASTER W/O KEY A003	
104	280-5277	CORD CLAMP 18	
105	280-5275-SR10	CORD CLAMP SR10	
106	310-5029-D15	SUMI TUBE F D 15MM	
107	220-5208-05	COIN CHUTE REJ 25 AD-81P	
201	000-T00408-0C	M SCR TH CRM M4×8	
202	011-T03510	TAP SCR TH 3.5×10	
203	031-000410-0C	CRG BLT CRM M4×10	
204	050-F00400	FLG NUT M4	
205	068-441616	FLT WSHR 4.4-16×1.6	
301	DKT-6005	ASSY WH DOOR	
302	DKT-60002	WH REJECT LAMP	

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⑧ ASSY WH DOOR (DKT-6005)

This is comprised of the following wire harnesses. ASSY drawing is not available.

ITEM NO.	PART No.	DESCRIPTION	NOTE
101	310-5033-06-025	SPIRAL TUBE 06 025CM	
102	601-0460	PLASTIC TIE BELT 100M/M	
301	DKT-60018	WH DOOR	
302	DKT-60012	WH EARTH DOOR	

21

⑨ ASSY COUNTER (DKT-1300-01)
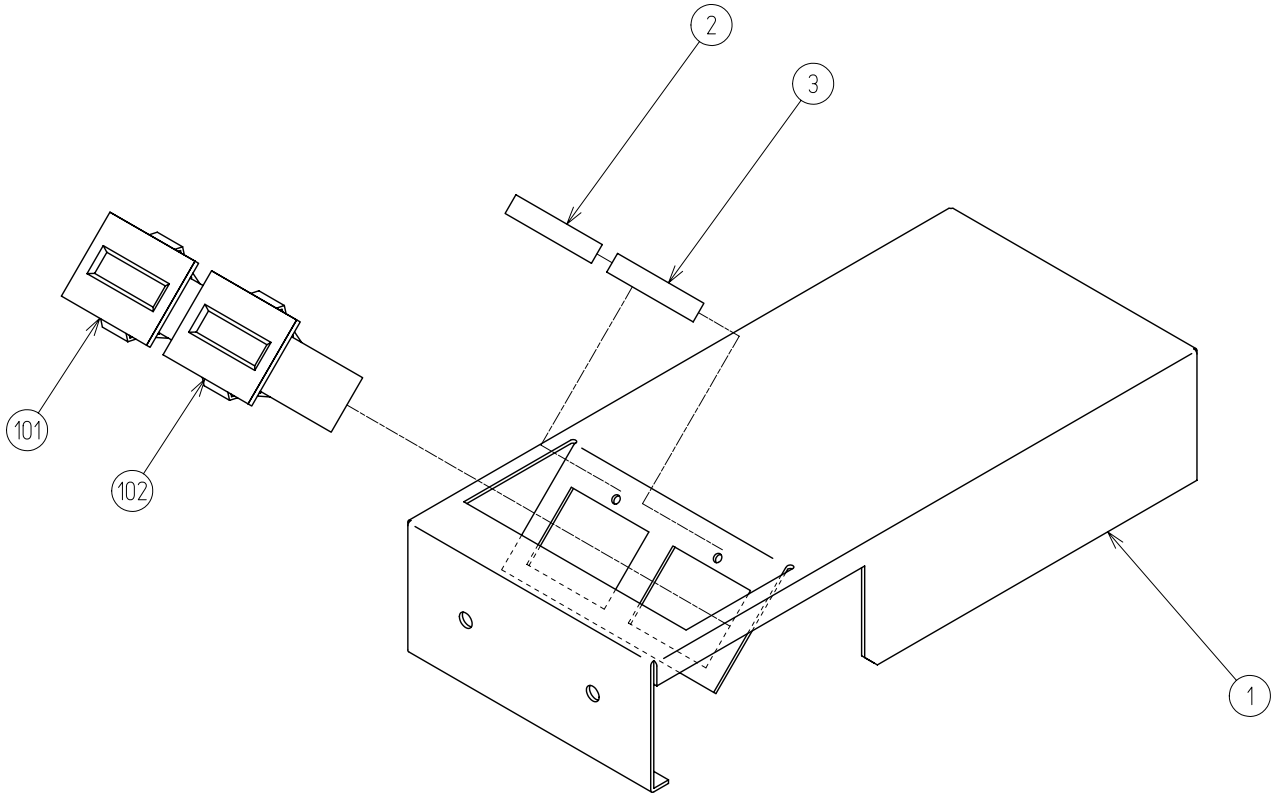
ITEM NO.	PART No.	DESCRIPTION	NOTE
1	MKS-1301	COUNTER BRKT	
2	421-9168-02	STICKER COIN METER 1	
3	421-9168-03	STICKER COIN METER 2	
101	220-5798-01	MAG CNTR 4P MZ674-DC5V-D41 JC	
102	220-5798-02	MAG CNTR 6P MZ674-DC5V-D42 JC	
103	280-5275-SR10	CORD CLAMP SR10	

21

⑩ ASSY CASH BOX (SPC-1400)
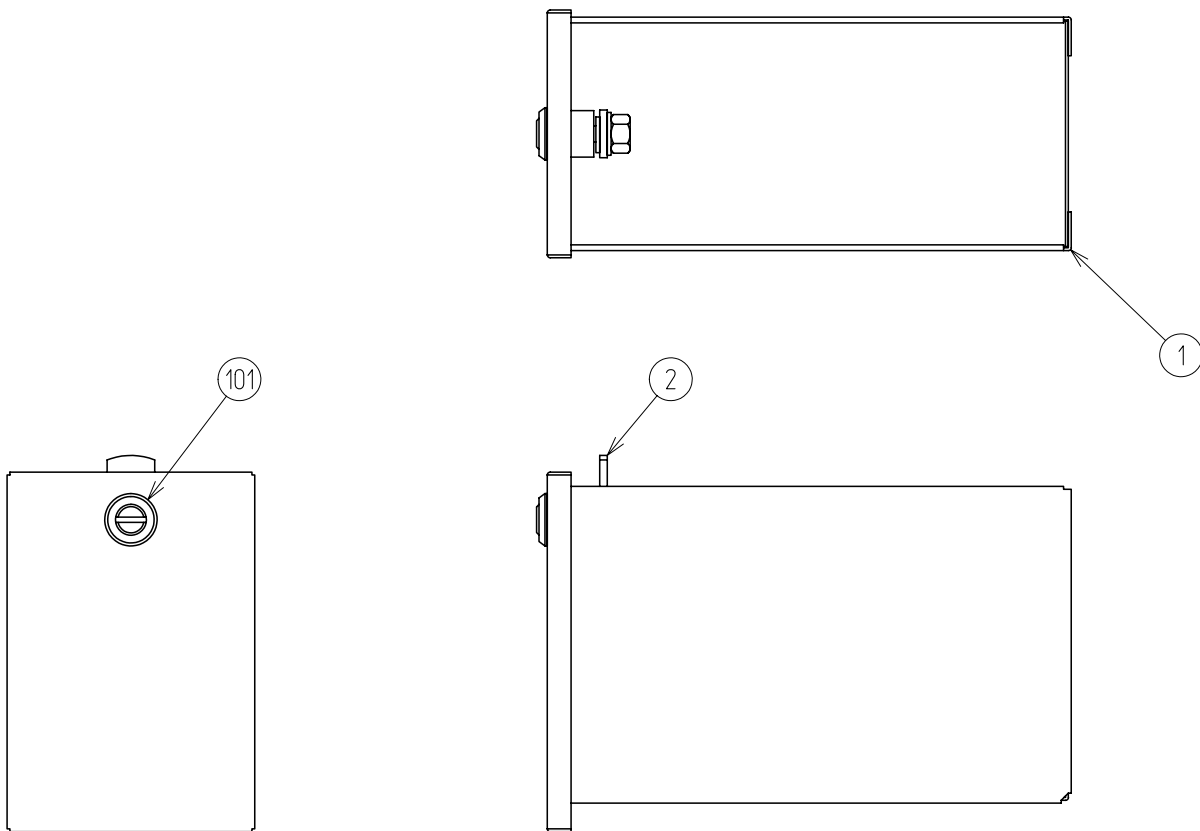
ITEM NO.	PART No.	DESCRIPTION	NOTE
1	SPC-1401	CASH BOX	
2	MKG-1203	TONGUE	
101	220-5794	CLY LOCK W/KEYS	

21

⑪ ASSY SLIDE BASE (DKT-1500)
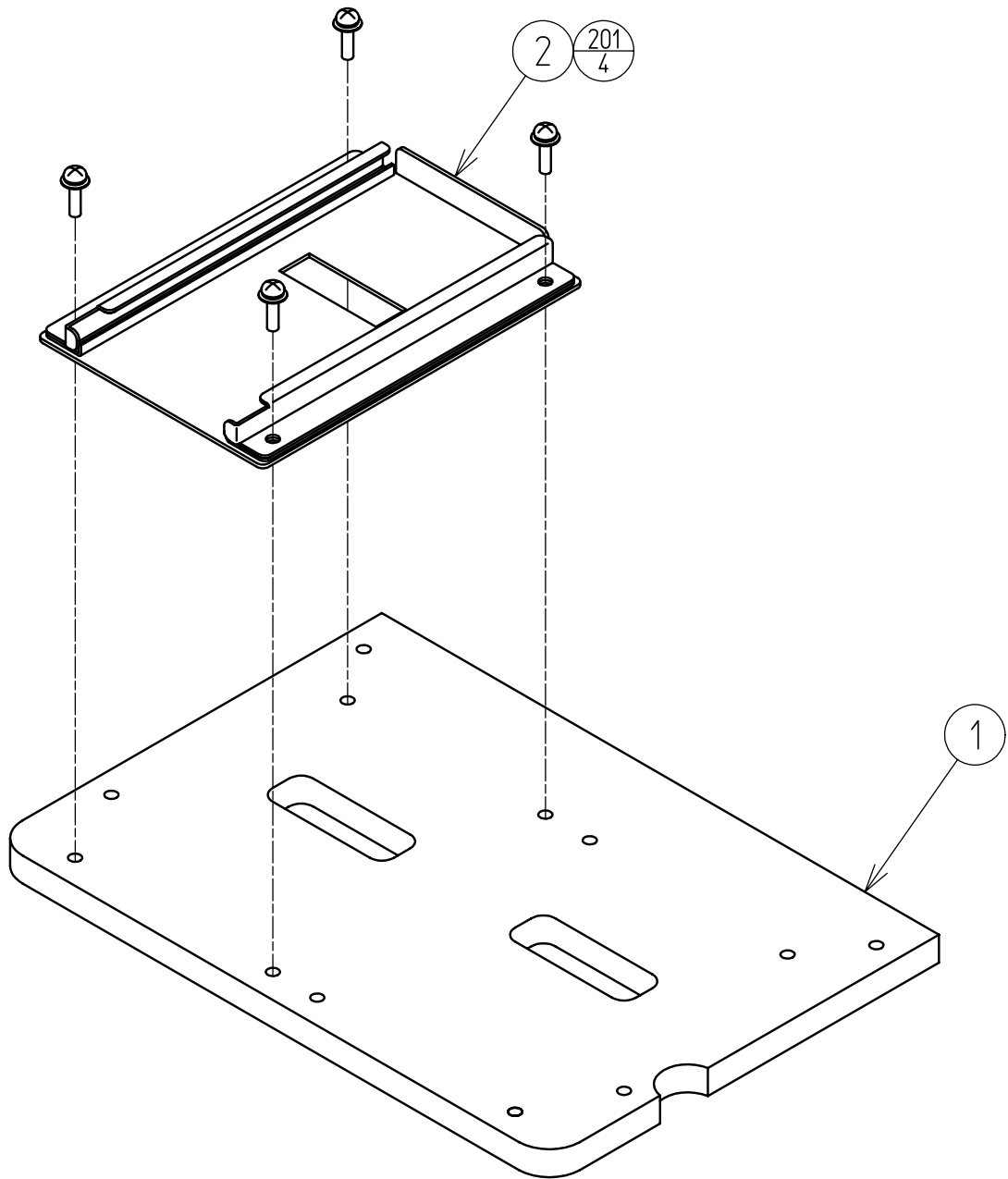
ITEM NO.	PART No.	DESCRIPTION	NOTE
1	OSM-1501	SLIDE BASE WOODEN	
2	OSM-1502	SLIDE BASE	
201	000-P00416-W	M SCR PH W/FS M4×16	

21

⑫ ASSY MONITOR (SPC-1600)

(D - 1/2)

21
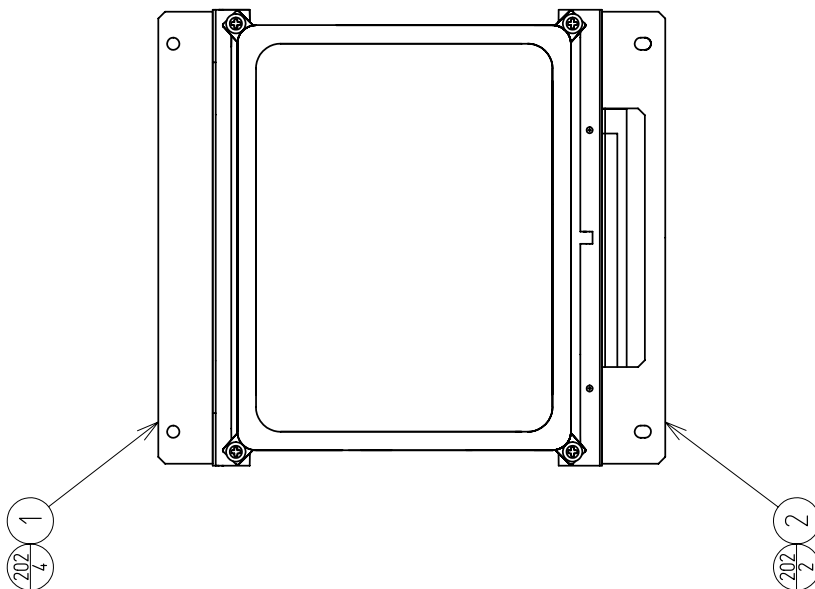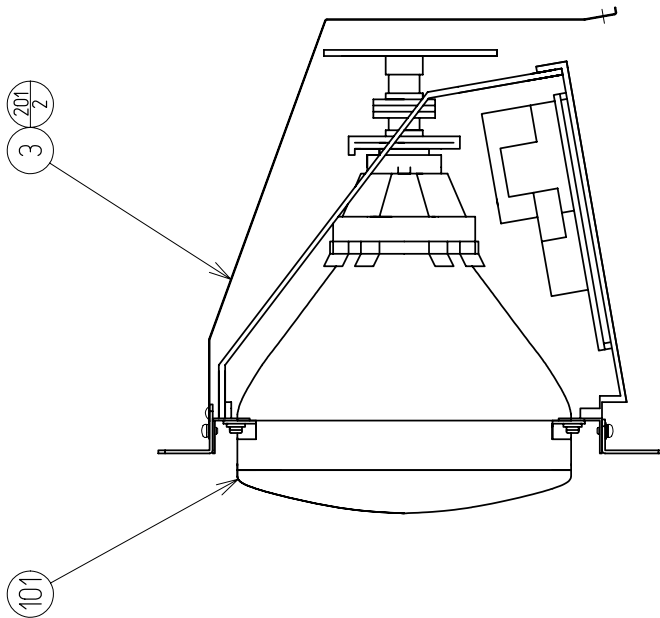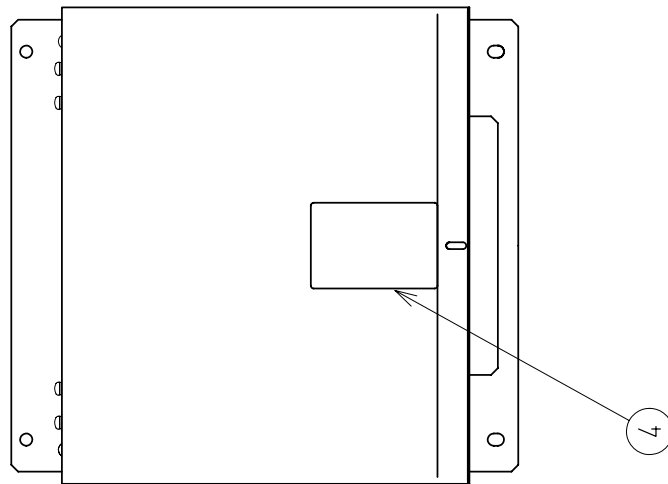
⑫ ASSY MONITOR (SPC-1600)　　　　　　　　　　　　　　　　　　　　(D‑2/2)

ITEM NO.	PART No.	DESCRIPTION	NOTE
1	MKG-1601	MONITOR BRKT UPPER	
2	MKG-1602	MONITOR BRKT LOWER	
3	SPC-1601	MONITOR REAR COVER	
4	440-DS0013XEG	STICKER D MONITOR ENG	
101	200-6035	CLR DSPL14 15K100V 14E15	
102	601-0460	PLASTIC TIE BELT 100M/M	
103	280-5275-SR10	CORD CLAMP SR10	
201	000-T00408-0C	M SCR TH CRM M4×8	
202	000-P00508-W	M SCR PH W/FS M5×8	

21

⑬ ASSY FRONT MASK (SPC-1700)
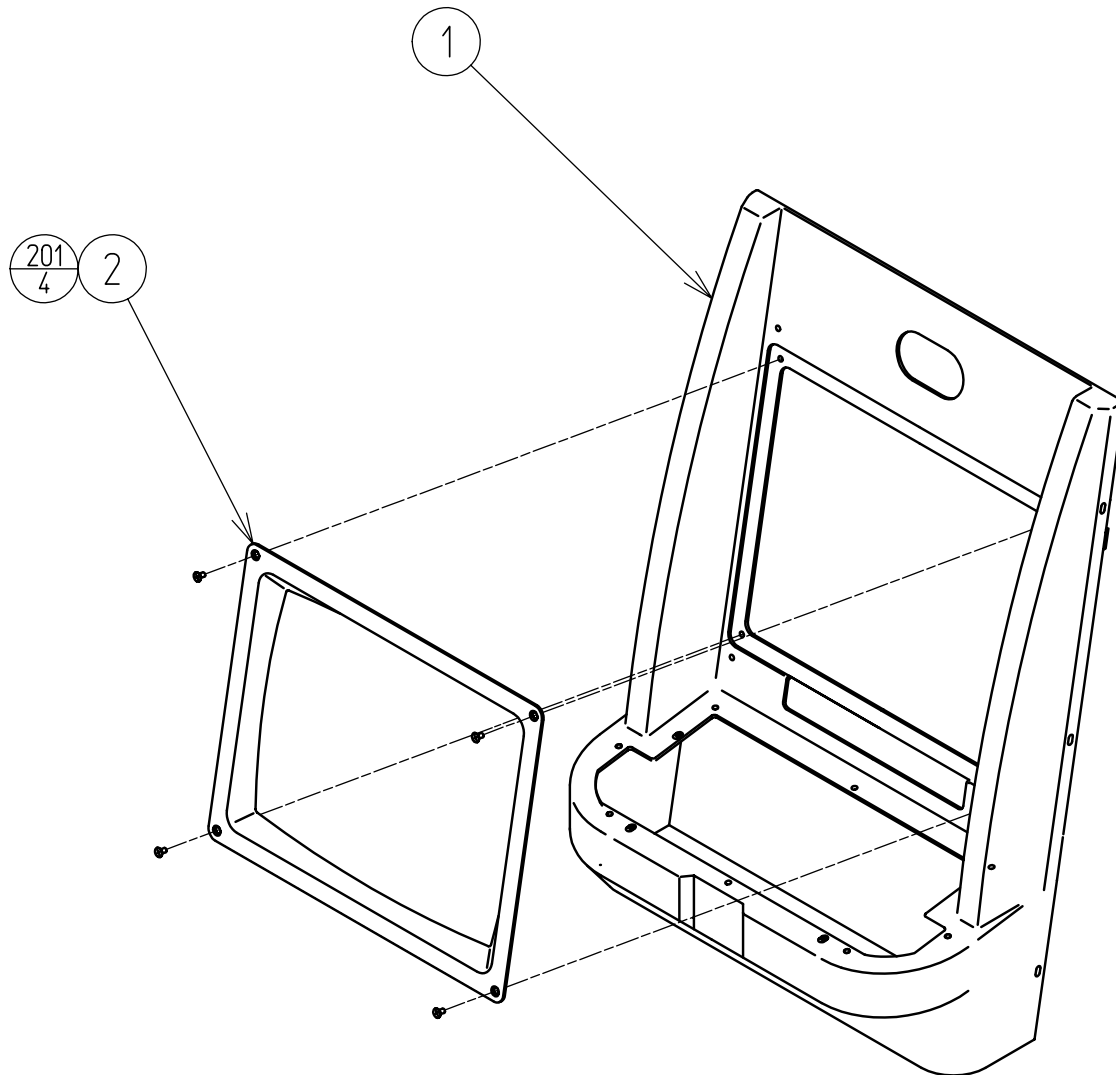
ITEM NO.	PART No.	DESCRIPTION	NOTE
1	OSM-1701X	FRONT MASK	
2	TOE-NMD105	MONITOR MASK	
201	000-F00408	M SCR FH M4×8	

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⑭ ASSY RFID CHIP R/W (SPC-1800)
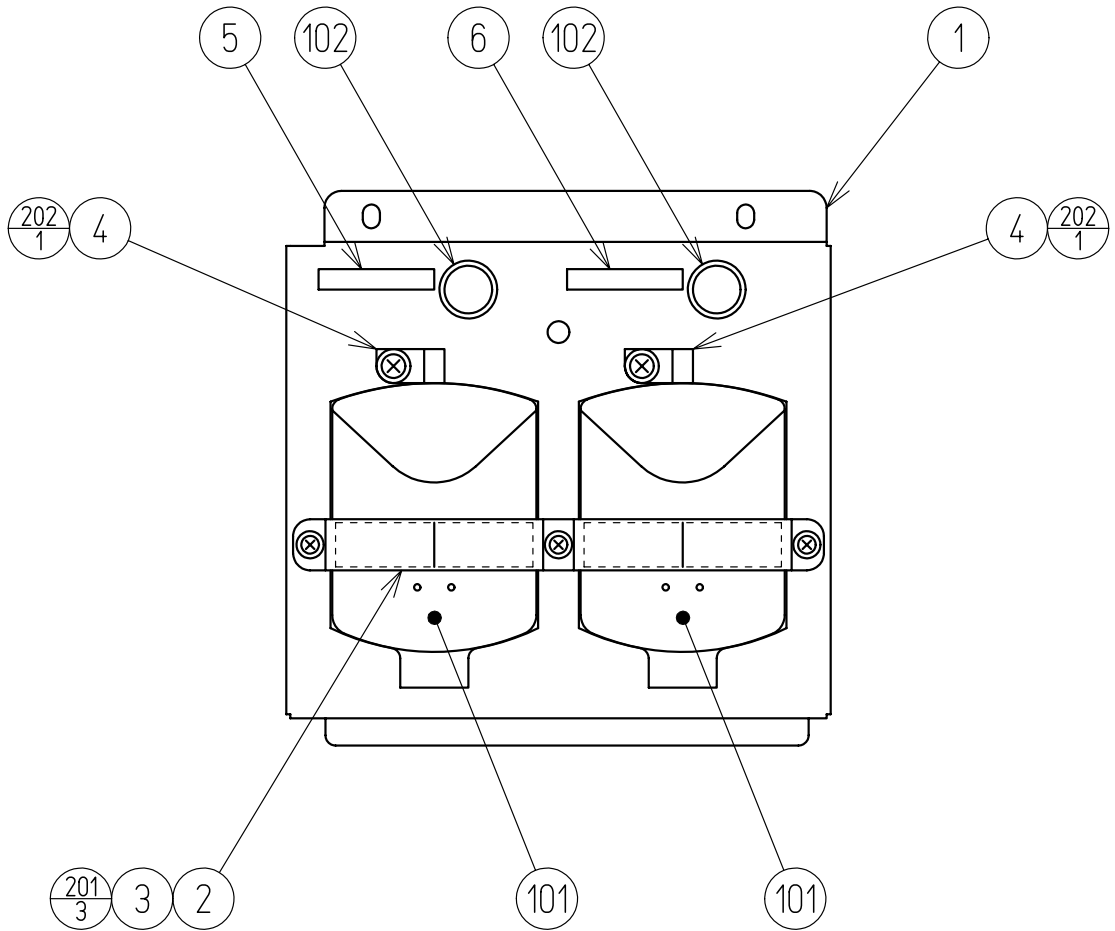
ITEM NO.	PART No.	DESCRIPTION	NOTE
1	SPC-1801	RFID CHIP R/W BRKT	
2	MKG-0602	RFID CHIP R/W STAY	
3	SPC-1802	CUSHION SPONGE	
4	DKT-1802	RFID CHIP HOLDER	
5	MKG-0604	STICKER EMPTY LAMP1	
6	MKG-0605	STICKER EMPTY LAMP2	
101	610-0760	RFID CHIP R/W UNIT	
102	390-6821	LED GREEN DB-100-R1A06-G	
103	280-5292	CORD CLAMP PUSH TYPE	
104	601-6231-B-110	EDGING NEW TYPE	
105	601-5525-043	BUSH 1.2t	
106	601-0460	PLASTIC TIE BELT 100M/M	
201	000-P00308-W	M SCR PH W/FS M3×8	
202	000-P00412-W	M SCR PH W/FS M4×12	
301	SPC-60001	WH SECURITY UNIT	

21
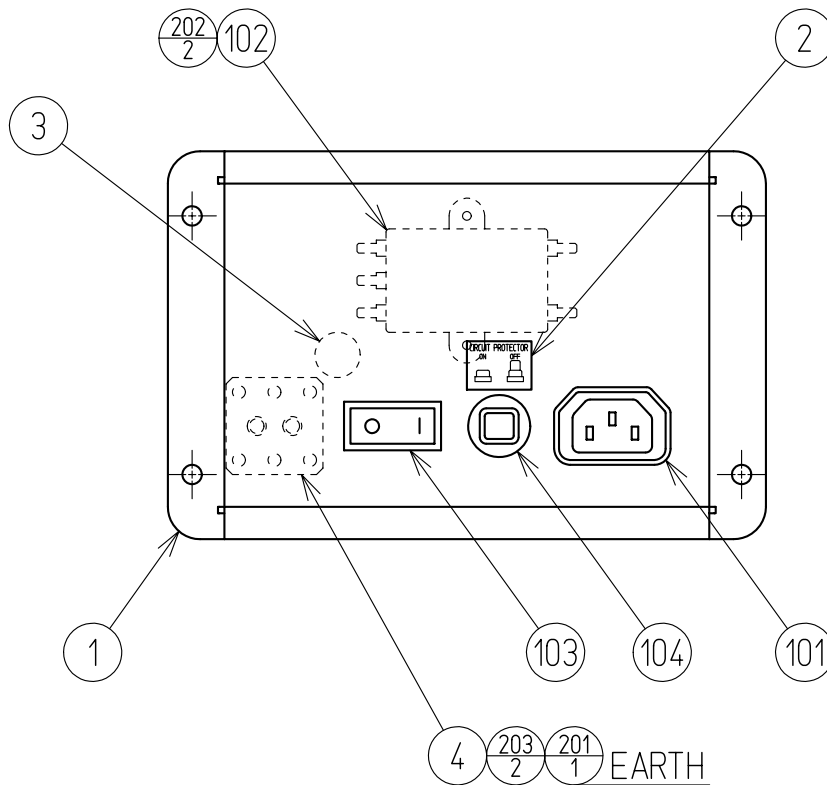
⑮ AC UNIT (SPC-4100)

ITEM NO.	PART No.	DESCRIPTION	NOTE
1	SPC-4101	AC UNIT BASE	
2	421-7468-02	STICKER C.P W/PIC	
3	421-8202	STICKER EARTH MARK	
4	SPC-4102	EARTH PLATE 6P	OTHERS
		NOT USED	TAIWAN
101	214-0202	AC INLET PANEL TYPE	
102	270-5020	NOISE FILTER AC 250V 6A	
103	509-6102-H-B	SW ROCKER J8 H-B AJ8202BF	
104	512-5046-91-03	C.P 3000mA CE UL	
105	601-0460	PLASTIC TIE BELT 100M/M	
106	310-5029-G20	SUMITUBE F G 20MM	
107	280-5275-SR10	CORD CLAMP SR10	
201	000-P00408-W	M SCR PH W/FS M4×8	OTHERS
		NOT USED	TAIWAN
202	010-P00306-F	S-TITE SCR PH W/F M3×6	
203	050-F00400	FLG NUT M4	OTHERS
		NOT USED	TAIWAN
301	DKT-60019	WH INLET L	
302	DKT-60020	WH AC UNIT J8 CONN	
303	DKT-60021	WH AC UNIT OUT	
304	MKG-60021-01	WH INLET E EXP	
/	280-0417	TERMINAL BINDING POST BLACK	TAIWAN

⑯ ASSY ELEC BASE (DKT-4200-01)
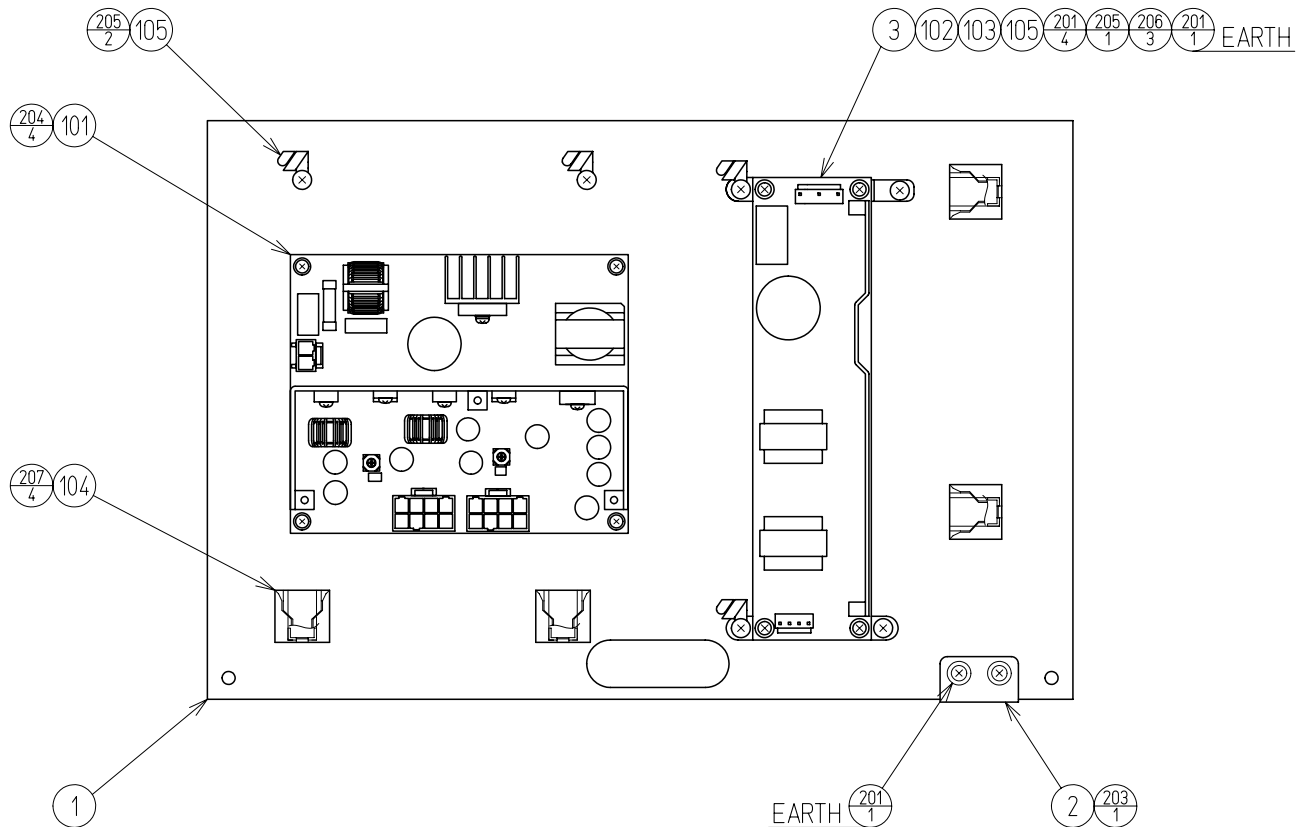
ITEM NO.	PART No.	DESCRIPTION	NOTE
1	DKT-4201	ELEC BASE WOODEN	
2	DKT-4306	EARTH BRKT	
3	MKG-4207	BD BRKT	
101	400-5458	SW REGU 3.3V4.2A 5V4A 12V1.5A	
102	400-5462-05024	SW REGU VS50P-24	
103	280-6681	L-LOCK LT-320PCG	
104	280-5277	CORD CLAMP 18	
105	280-5207	HARNESS LUG CC-1005	
201	000-P00308-W	M SCR PH W/FS M3×8	
202	000-P00408-W	M SCR PH W/FS M4×8	
203	000-P00412-W	M SCR PH W/FS M4×12	
204	011-P00325	TAP SCR PH 3×25	
205	011-T03512	TAP SCR TH 3.5×12	
206	011-T03516	TAP SCR TH 3.5×16	
207	011-F00312	TAP SCR FH 3×12	
301	MKS-60011	WH SW REGU AC	
302	MKS-60012	WH SW REGU DC	
303	DKT-60007	WH EARTH SW REGU 24V	

⑰ ASSY XFMR (DKT-4400-01)
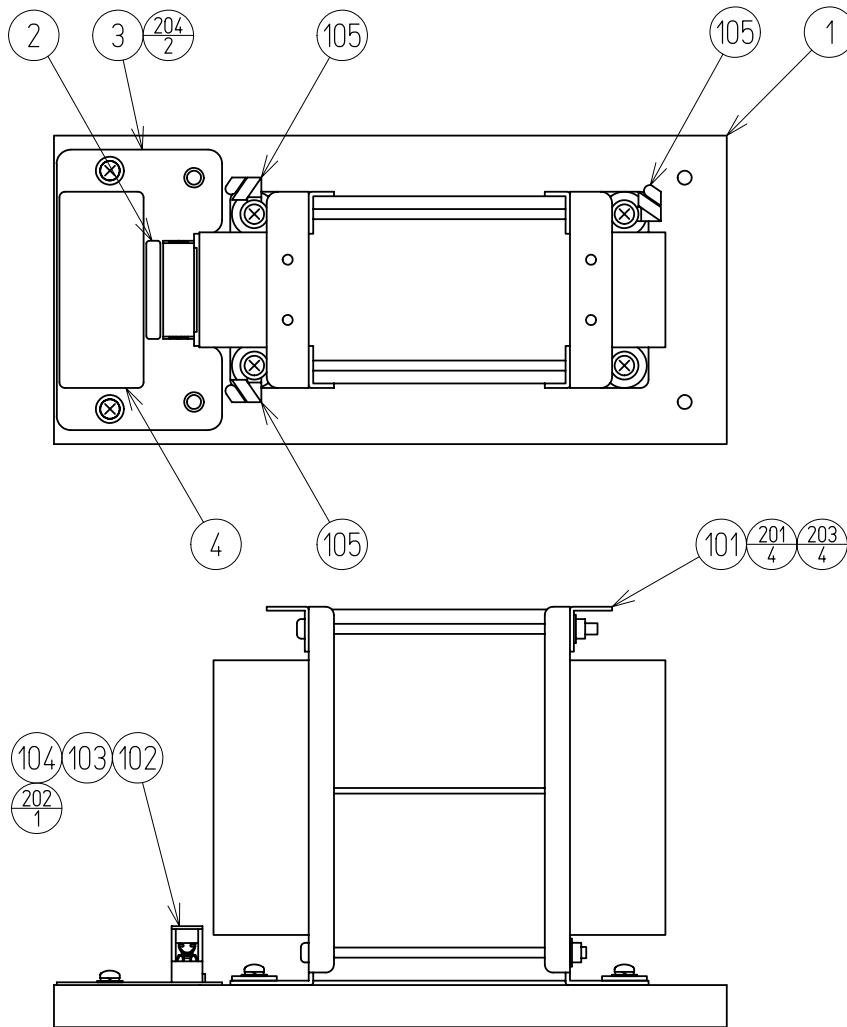
ITEM NO.	PART No.	DESCRIPTION	NOTE
1	DKT-4401	XFMR BASE	
2	421-12072	STICKER FUSE RATINGS SG5013 T	
3	DKT-4402	FUSE HOLDER BASE	
4	440-CS0282-EG	STICKER C FUSE REPLACEMENT ENG	
101	560-5515-V-91	XFMR 100-120V 100V5A WB UL	
102	514-5138-4000	FUSE SG5013 5X20 4000MA 250V	
103	514-5144	FUSE HOLDER 1P F-64-AD	
104	514-5145	FUSE HOLDER COVER F-64-1C	
105	280-5207	HARNESS LUG CC-1005	
201	000-P00416-W	M SCR PH W/FS M4×16	
202	FAS-000159	M SCR PH W/SMALL FS M3×8	
203	068-441616	FLT WSHR 4.4-16×1.6	
204	000-P00412-W	M SCR PH W/FS M4×12	
301	DKT-60005	WH FUSE HOLDER	

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⑱ ASSY WH CABINET AC (DKT-6001)

This is comprised of the following wire harnesses. ASSY drawing is not available.

ITEM NO.	PART No.	DESCRIPTION	NOTE
101	601-0460	PLASTIC TIE BELT 100M/M	
301	MKS-60001	WH AC EXT	
302	DKT-60016	WH MONITOR & ELEC BASE	
303	DKT-60010	WH EARTH ASSY ELEC BASE	
304	DKT-60011	WH EARTH ASSY MAIN BD BASE	
305	MKG-60033-01	WH EARTH DOOR EXT EXP	

⑲ ASSY WH CABINET DC (DKT-6002)

This is comprised of the following wire harnesses. ASSY drawing is not available.

ITEM NO.	PART No.	DESCRIPTION	NOTE
101	601-0460	PLASTIC TIE BELT 100M/M	
301	MKS-60003	WH SYSTEM SP RA30P	
302	DKT-60017	WH SYSTEM SP RA60P	

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⑳ ASSY CTRL PANEL OSM (SPC-20001)
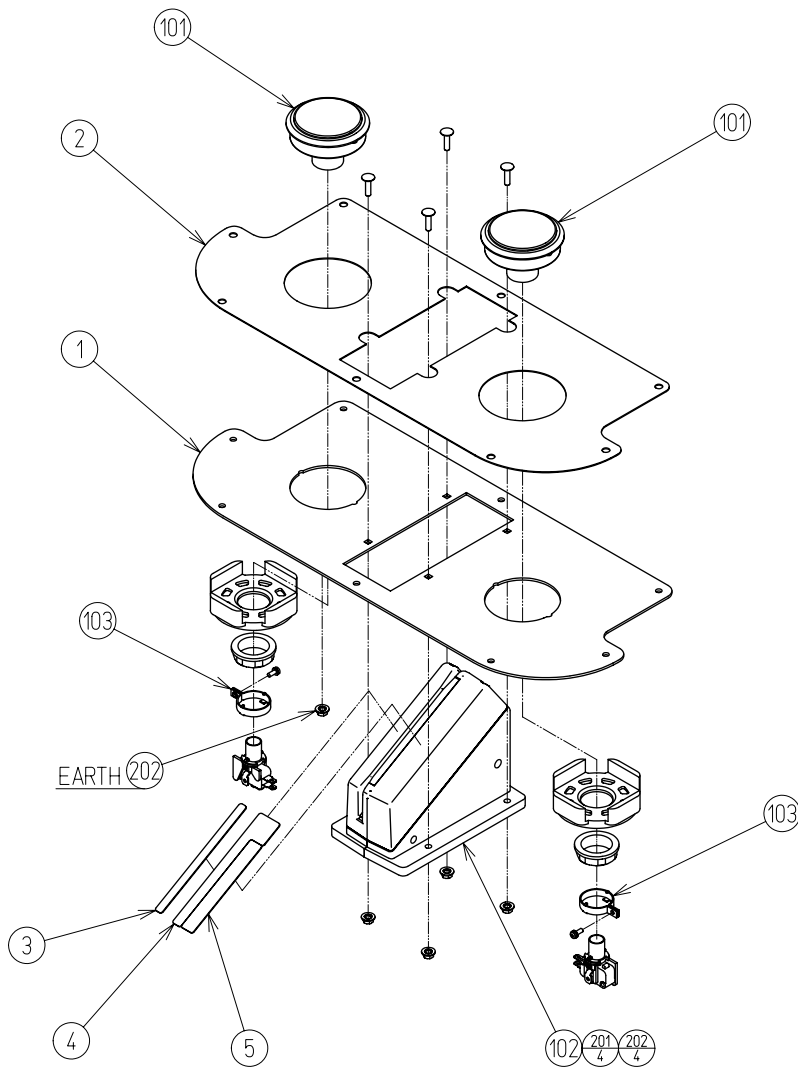
ITEM NO.	PART No.	DESCRIPTION	NOTE
1	OSM-2001	CTRL PANEL PLATE	
2	OSM-2004	STICKER CTRL PANEL OSM	
3	OSM-2005X-01	STICKER BARCODE RDR CASE L ENG	
4	OSM-2006X-01	STICKER BARCODE RDR CASE R ENG	
5	DKT-2004	STICKER C BARCODE RDR CS ENG	
101	509-6071-03	SW PB OBSA-W60UM-Y-D2RV-LN	
102	610-0717-91	BARCODE READER VA	
103	601-11801	OBAS-BK	
104	280-5277	CORD CLAMP 18	
105	280-5275-SR10	CORD CLAMP SR10	
106	601-0460	PLASTIC TIE BELT 100M/M	
201	031-000416-0C	CRG BLT CRM M4×16	
202	050-F00400	FLG NUT M4	
301	SPC-60002	WH CTRL PANEL SW SPC OSM	
302	MKG-60036-01	WH EARTH CTRL PANEL EXP	
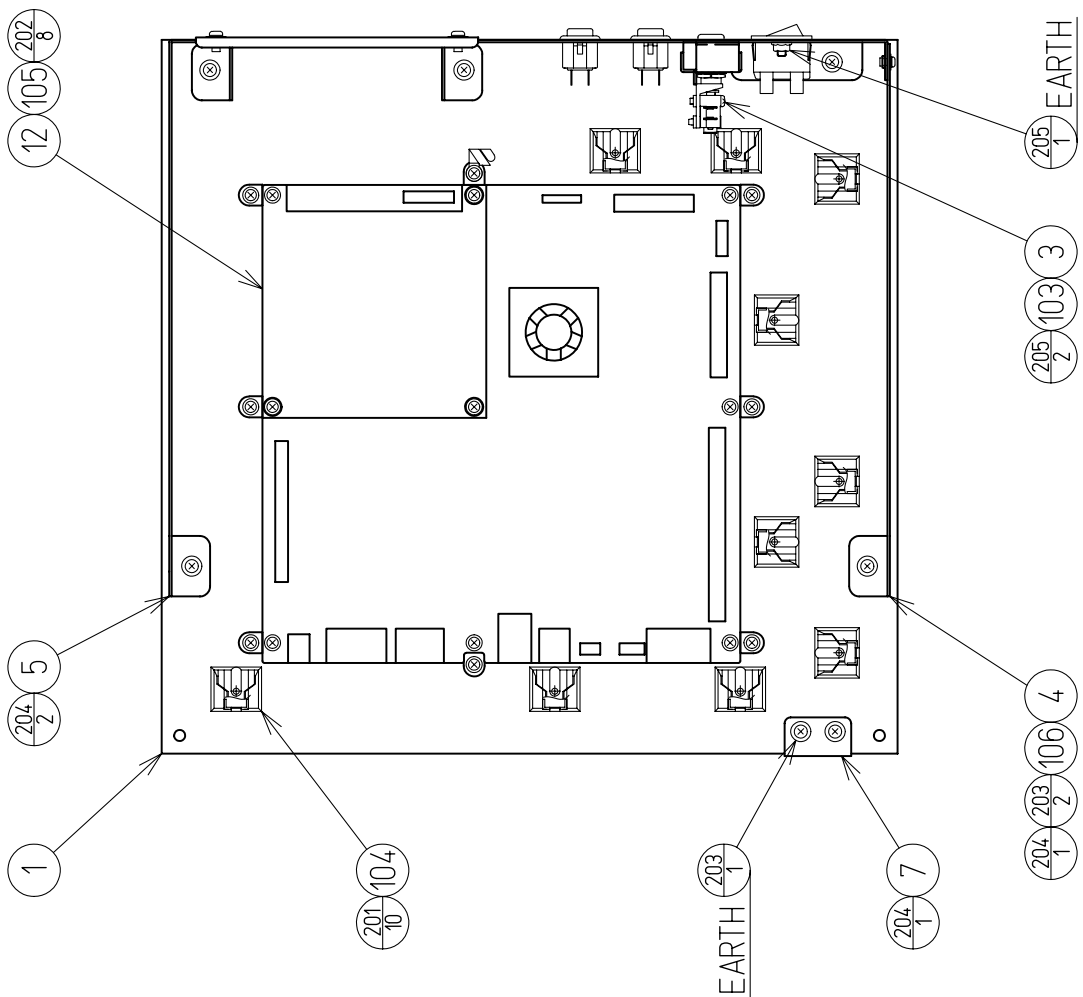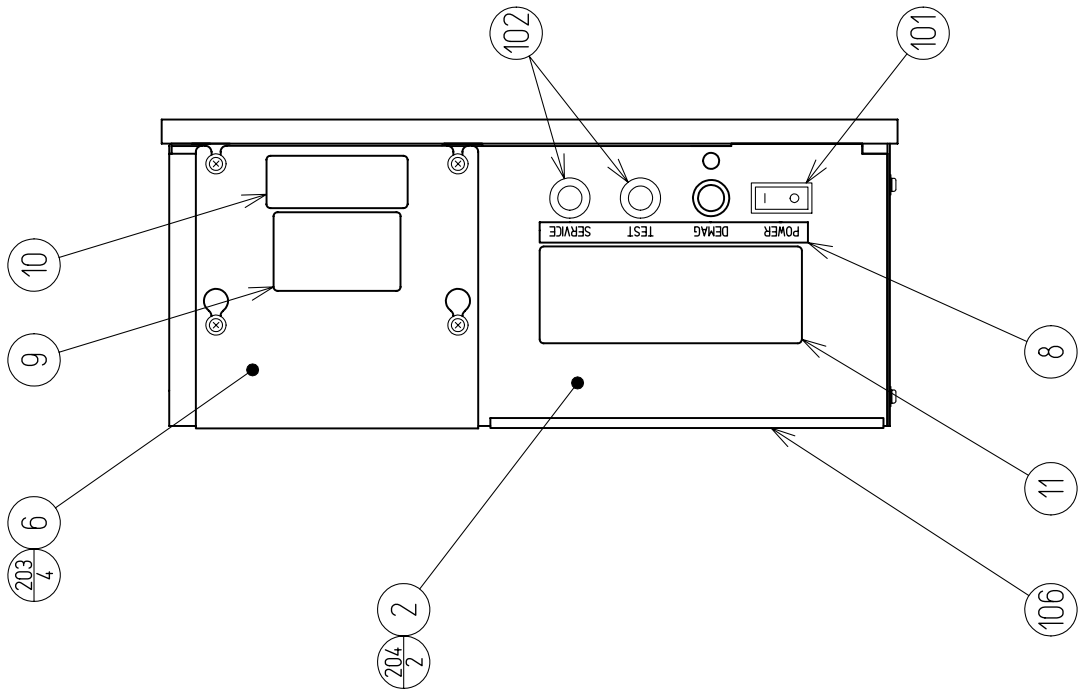
ITEM NO.	PART No.	DESCRIPTION	NOTE
1	DKT-4301	MAIN BD BASE WOODEN	
2	DKT-4302	SW PANEL	
3	DKT-4303	SW BRKT	
4	OSM-4303	JOINT PLATE L	
5	DKT-4304	JOINT PLATE R	
6	DKT-4305	CF CARD LID	
7	DKT-4306	EARTH BRKT	
8	OSM-4306	STICKER SW PANEL	
9	440-WS0215-EG	STICKER W BD POWER OFF S ENG	
10	440-WS0286-EG	STICKER W DO NOT OPEN ENG	
11	440-WS0291-EG	STICKER W DISPENSER ENG	
12	834-14661-01	GAME BD SP 512 OSM USA	
101	509-6102-H-B	SW ROCKER J8 H-B AJ8202BF	
102	509-5875	SW PB (SINDEN SDP-103C)	
103	509-6085	SW PB VAQ-4R-K V-15-1A5 (TUV)	
104	280-5277	CORD CLAMP 18	
105	280-5207	HARNESS LUG CC-1005	
106	601-6231-B-195	EDGING NEW TYPE	
107	601-0460	PLASTIC TIE BELT 100M/M	
201	011-F00312	TAP SCR FH 3×12	
202	011-T03516	TAP SCR TH 3.5×16	
203	000-P00408-W	M SCR PH W/FS M4×8	
204	000-P00412-W	M SCR PH W/FS M4×12	
205	050-F00400	FLG NUT M4	
301	DKT-60022	WH SUB SW & DEMAG EXP	
302	MKS-60014	WH SYSTEM SP DC	
303	MKS-60015	WH MONITOR D-SUB15P	
304	MKS-60016	WH SP OUT	
305	MKS-60017	WH TEST & SERVICE SW	
306	OSM-60015	WH SYSTEM SP SERIAL	
307	DKT-60008	WH EARTH SW PANEL	

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㉒ ASSY TOP SPEAKER (SPC-0600)
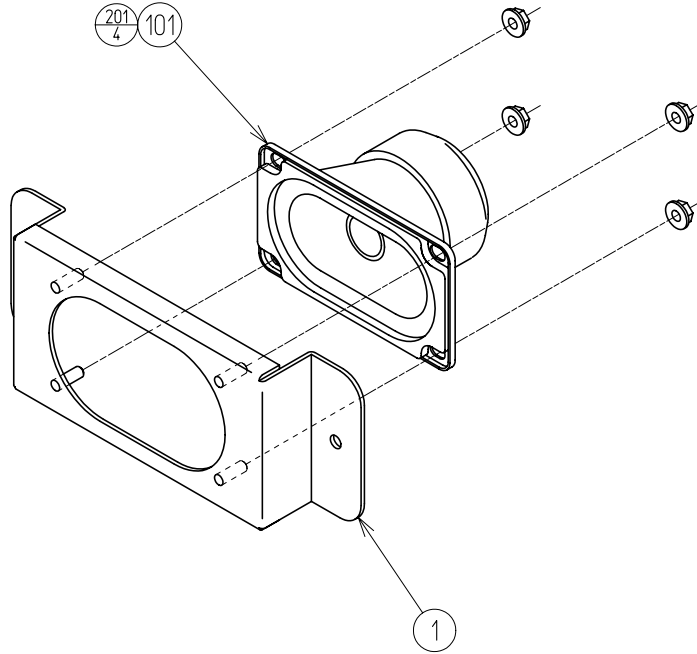
ITEM NO.	PART No.	DESCRIPTION	NOTE
1	OSM-1802	SPEAKER BRKT	
101	130-5249	SPKR 8OHM 10W 50×90 MAG SHIELD	
201	050-F00400	FLG NUT M4	
301	OSM-60007	WH TOP SPEAKER	

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㉓ ASSY BILL VALIDATOR BOX (SPC-1900)
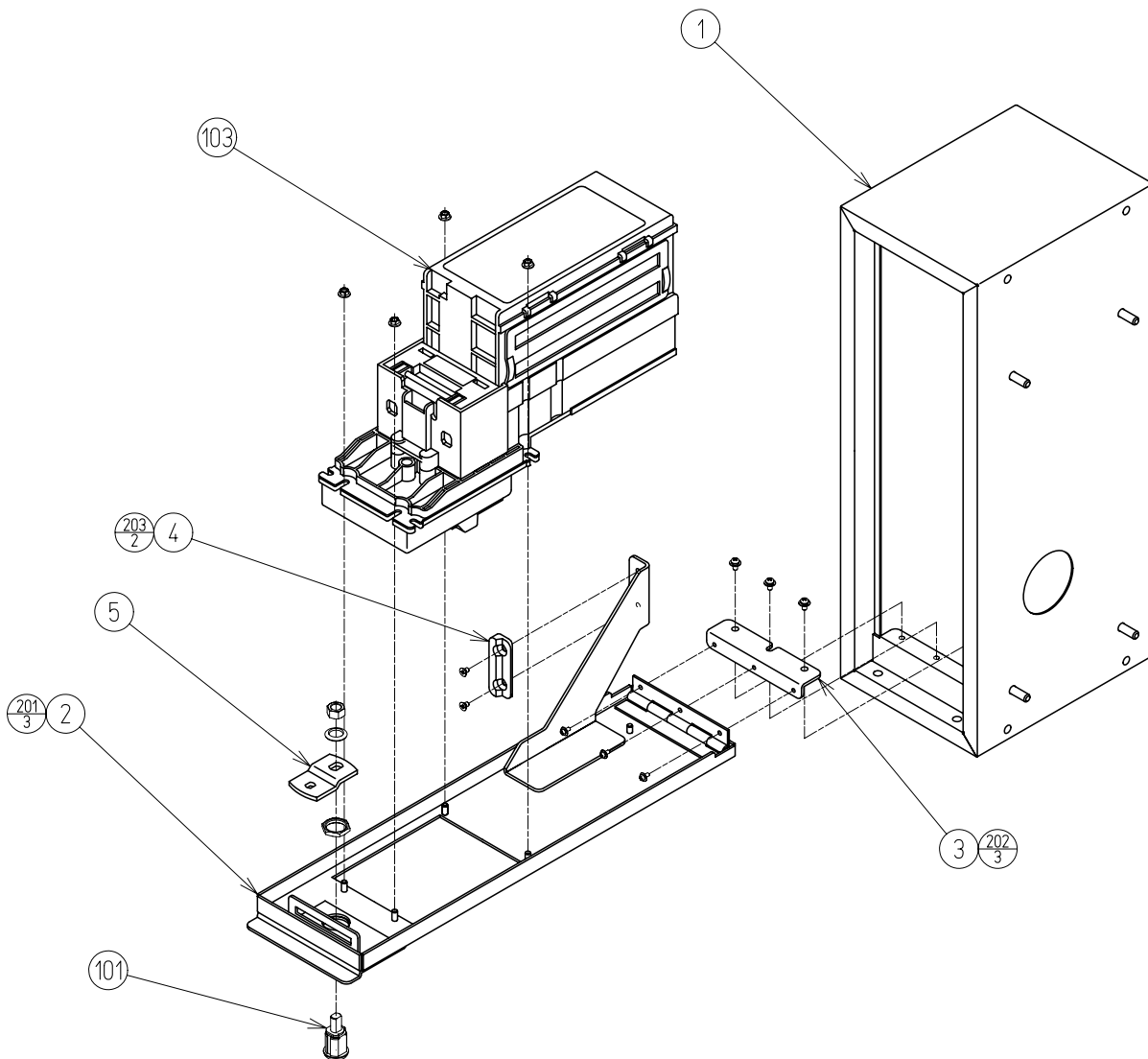
ITEM NO.	PART No.	DESCRIPTION	NOTE
1	SPC-1901	BILL VALIDATOR BOX	
2	SPC-1902	BILL VALIDATOR BOX DOOR	
3	SPC-1903	HINGE BRKT	
4	DKT-1904	STOPPER GUIDE	
5	DP-1148X	LKG TNG	
101	220-5794	CYL LOCK W/KEYS	
102	280-5277	CORD CLAMP 18	
103	601-11670	BILL VALIDATOR AE2431D5E MARS	
201	000-P00308-W	M SCR PH W/FS M3×8	
202	000-P00410-W	M SCR PH W/FS M4×10	
203	000-F00406	M SCR FH M4×6	
204	050-F00400	FLG NUT M4	
301	DKT-60006	WH EARTH DVA BOX DOOR	

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22. WIRE COLOR CODE TABLE

THE WIRE COLOR CODE is as follow:

    A   PINK
    B   SKY BLUE
    C   BROWN
    D   PURPLE
    E   LIGHT GREEN

Wires other than those of any of the above 5 single colors will be displayed by 2 alphanumeric characters.

    1   RED
    2   BLUE
    3   YELLOW
    4   GREEN
    5   WHITE
    7   ORANGE
    8   BLACK
    9   GRAY

If the right-hand side numeral of the code is 0, then the wire will be of a single color shown by the left-hand side numeral (see the above).

Note 1: If the right-hand side numeral is not 0, that particular wire has a spiral color code. The left-hand side character shows the base color and the right-hand side one, the spiral color.

        <Example> 51………WHITE/RED

                RED   WHITE
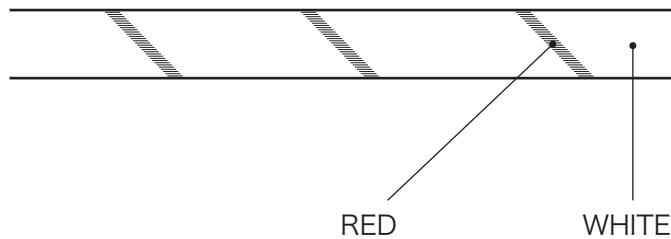
Note 2: The character following the wire color code indicates the size of the wire.

    U: AWG16
    K: AWG18
    L: AWG20
    None: AWG22

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23. WIRING DIAGRAM (D-1/2)

SPC-1800 ASSY RFID CHIP R/W

SPC-20001 ASSY CTRL PANEL OSM

SPC-10001 ASSY CABINET

SPC-1900 ASSY BILL VALIDATOR BOX

610-0760 RFID CHIP R/W UNIT

610-0760 RFID CHIP R/W UNIT

EMPTY LAMP1 (F187)

EMPTY LAMP1 (F187)

EMPTY LAMP1   EMPTY LAMP2

RFID CHIP R/W 1

RFID CHIP R/W 2

SPC-60001

C P
(D-1/X) pos. F1
YL 15P

SM WHITE

1 P SW1   2 P SW1

BAR CODE READER

610-0717-91 BARCODE READER VA

+5V T
SD
RD
BOOT
GND
+3.3V
CS
RS
SH
SM WHITE

A (D-1/X) pos. C1

B (D-1/X) pos. E1

GND
1P SW1 95
509-6071-03 (F187)

GND
2P SW1 59
509-6071-03 (F187)

SPC-60002
YL 2P

P1
1 CREDIT RELAY, COMMOM
2 RESERVED
3 RESERVED
4 115VAC NEUTRAL (POWER)
5 RESERVED
6 KEY
7 CREDIT-PULSE_NOT
8 INTERRUPT_NOT
9 SERIAL/PULSE_NOT
10 LOW LEVEL GND/SIGNAL GND
11 SERIAL DATA OUT
12 NOT USED
13 NOT USED
14 NOT USED
15 NOT USED
16 CREDIT RELAY, NORMALLY OPEN
17 RESERVED
18 RESERVED
19 KEY
20 115VAC HOT (POWER)
21 EARTH GROUND
22 OUT-OF-SERVICE_NOT
23 RESERVED
24 ACCEPT ENABLE_NOT
25 OUT-OF-SERVICE POWER
26 SEND_NOT/SERIAL DATA IN
27 RESERVED
28 RESERVED
29 RESERVED
30 RESERVED

601-11670 BILL VALIDATOR

DKT-60001

K (D-1/X) pos. A9

L (D-1/X) pos. F9

WHITE (MINI AMP)

DBA BASE

AMP 30P

1 : ON
2 : ON
3 : OFF
4 : ON
5 : OFF
6 : OFF
7 : ON
8 : OFF

FACTORY SETTING DIPSW
OFF / ON 1 2 3 4 5 6 7 8

SPC-0600 ASSY TOP SPEAKER

E5 (F187)
E8
OSM-60007 (F110)

130-5249 SPKR 8OHM 10W 50X90 MAG SHIELD

K (D-1/X) pos. C8
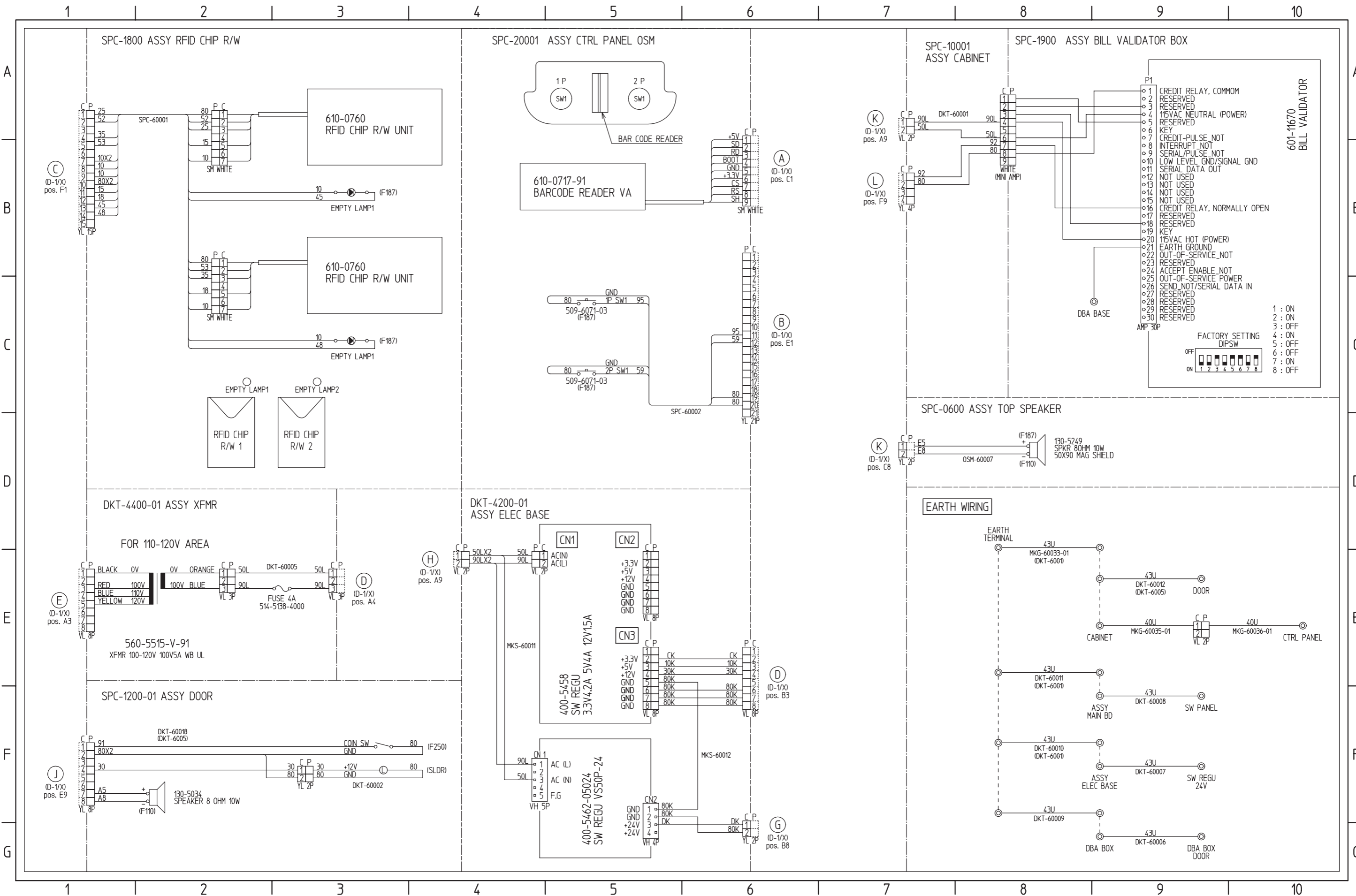
DKT-4400-01 ASSY XFMR

FOR 110-120V AREA

BLACK   0V   0V ORANGE   50L   DKT-60005   50L
RED   100V   100V BLUE   90L   90L
BLUE   110V
YELLOW 120V

FUSE 4A 514-5138-4000

E (D-1/X) pos. A3
YL 8P

D (D-1/X) pos. A4
YL 3P

560-5515-V-91 XFMR 100-120V 100V5A WB UL

SPC-1200-01 ASSY DOOR

DKT-60018 (DKT-6005)

COIN SW 80 (F250)
GND

+12V 80 (SLDR)
GND
DKT-60002

130-5034 SPEAKER 8 OHM 10W (F110)

J (D-1/X) pos. E9
YL 8P

DKT-4200-01 ASSY ELEC BASE

CN1   CN2   CN3

H (D-1/X) pos. A9

50LX2 50L AC(N)
90LX2 90L AC(L)

+3.3V
+5V
+12V
GND
GND
GND

CK   CK
10K 10K
30K 30K
80K 80K
80K 80K
80K 80K

400-5458 SW REGU 3.3V4.2A 5V4A 12V15A

MKS-60011

MKS-60012

CN1
1 AC (L)
2 AC (N)
3 F.G
VH 5P

400-5462-05024 SW REGU VS50P-24

CN2
1 GND
2 GND
3 DK
4 +24V
5 +24V
VH 4P

DK
80K

D (D-1/X) pos. B3

G (D-1/X) pos. B8

EARTH WIRING

EARTH TERMINAL

MKG-60033-01 (DKT-6001)

43U DKT-60012 (DKT-6005) DOOR

CABINET 40U MKG-60035-01 40U MKG-60036-01 CTRL PANEL

43U DKT-60011 (DKT-6001)
43U DKT-60008 SW PANEL
ASSY MAIN BD

43U DKT-60010 (DKT-6001)
43U DKT-60007 SW REGU 24V
ASSY ELEC BASE

43U DKT-60009
DBA BOX 43U DKT-60006 DBA BOX DOOR

23. WIRING DIAGRAM (D-2/2)