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SEGA®

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LOVE AND BERRY Dress up and Dance! OWNER'S MANUAL 420-6967-01

SEGA®

OWNER'S MANUAL

LOVE AND BERRY™ Dress up and Dance!



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.

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.



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

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

Definition of 'Site Maintenance Personnel or Other Qualified Individuals'



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.

IMPORTANT

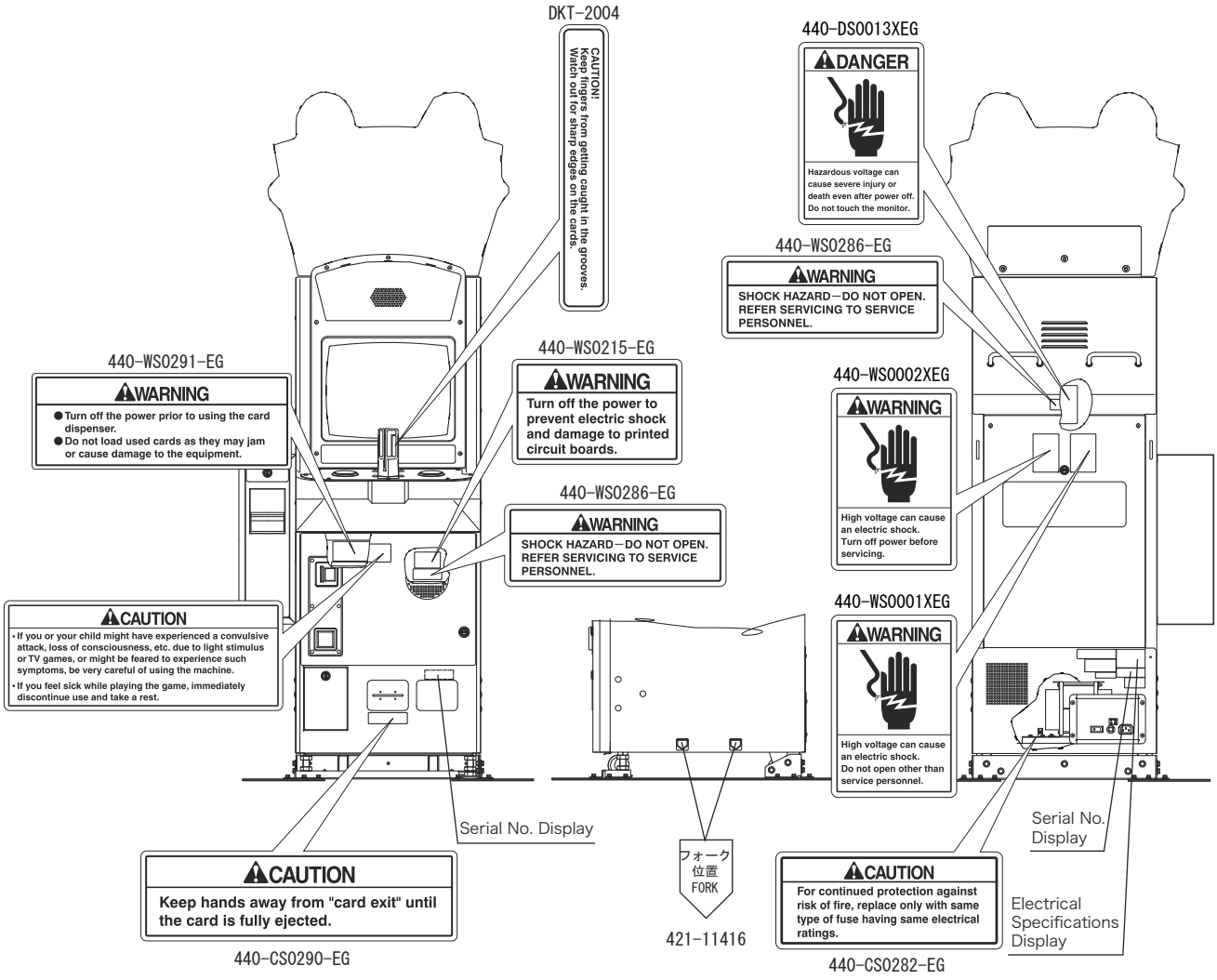
- For the IC board circuit inspections, only the logic tester is allowed. The use of a multiple-purpose tester is not permitted, so be careful in this regard.
- When cleaning the CRT surfaces, use a soft and dry cloth. Do not apply chemicals such as thinner, benzine, etc.
- Static electricity from your 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.



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

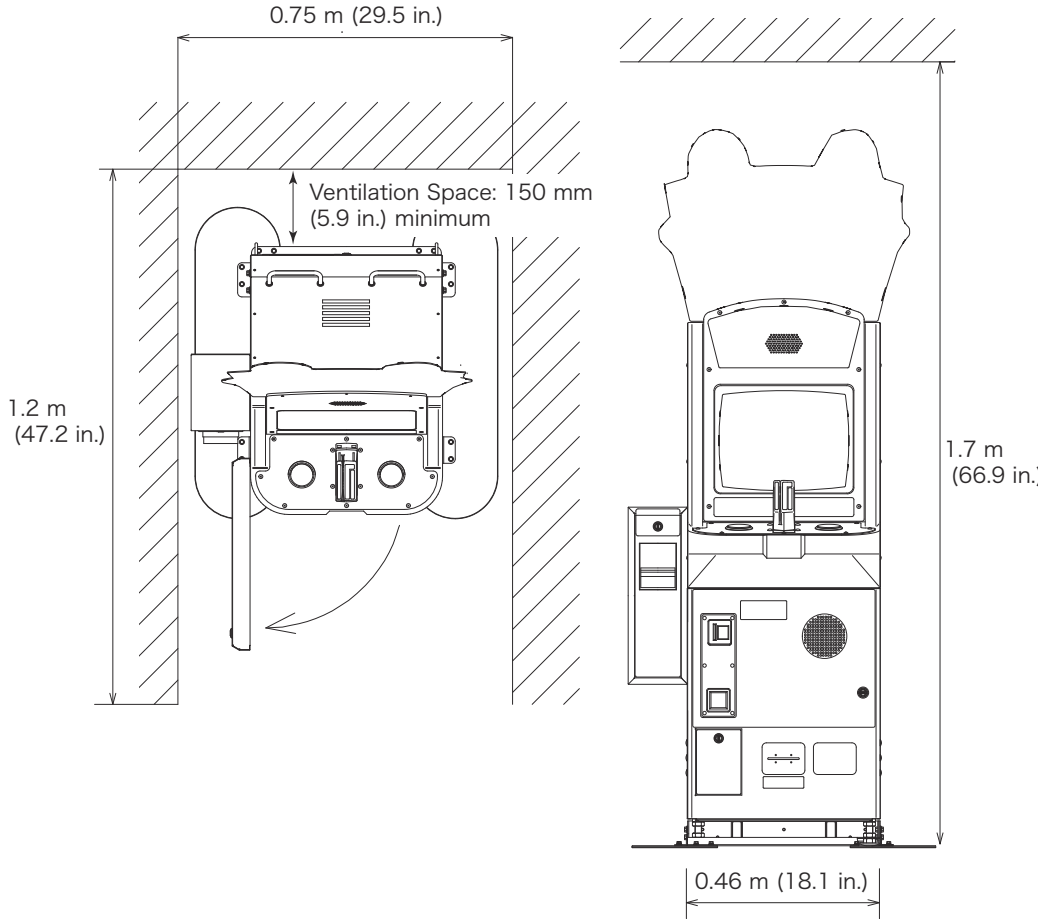


WARNING

- 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.

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.



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.

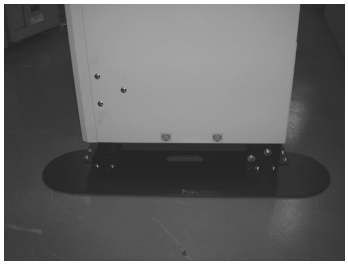
3—1 BEFORE OPERATION

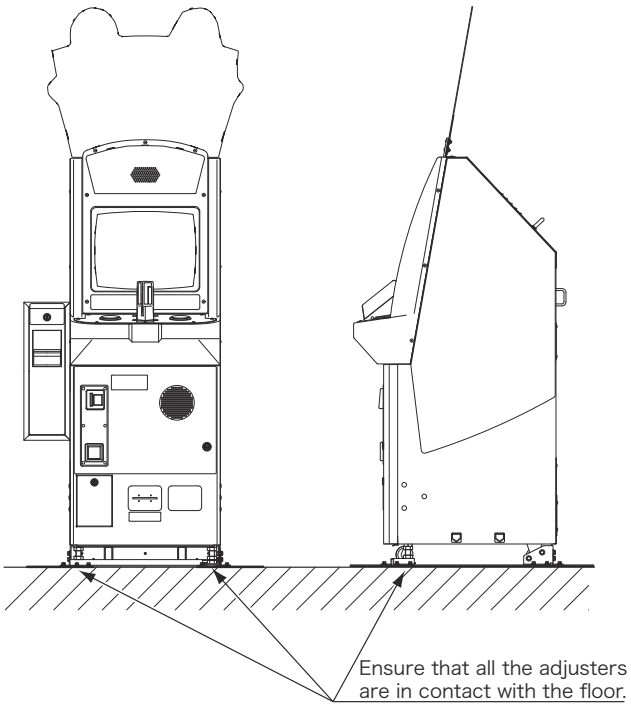
WARNING

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.







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.

IMPORTANT

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

4. PART DESCRIPTIONS

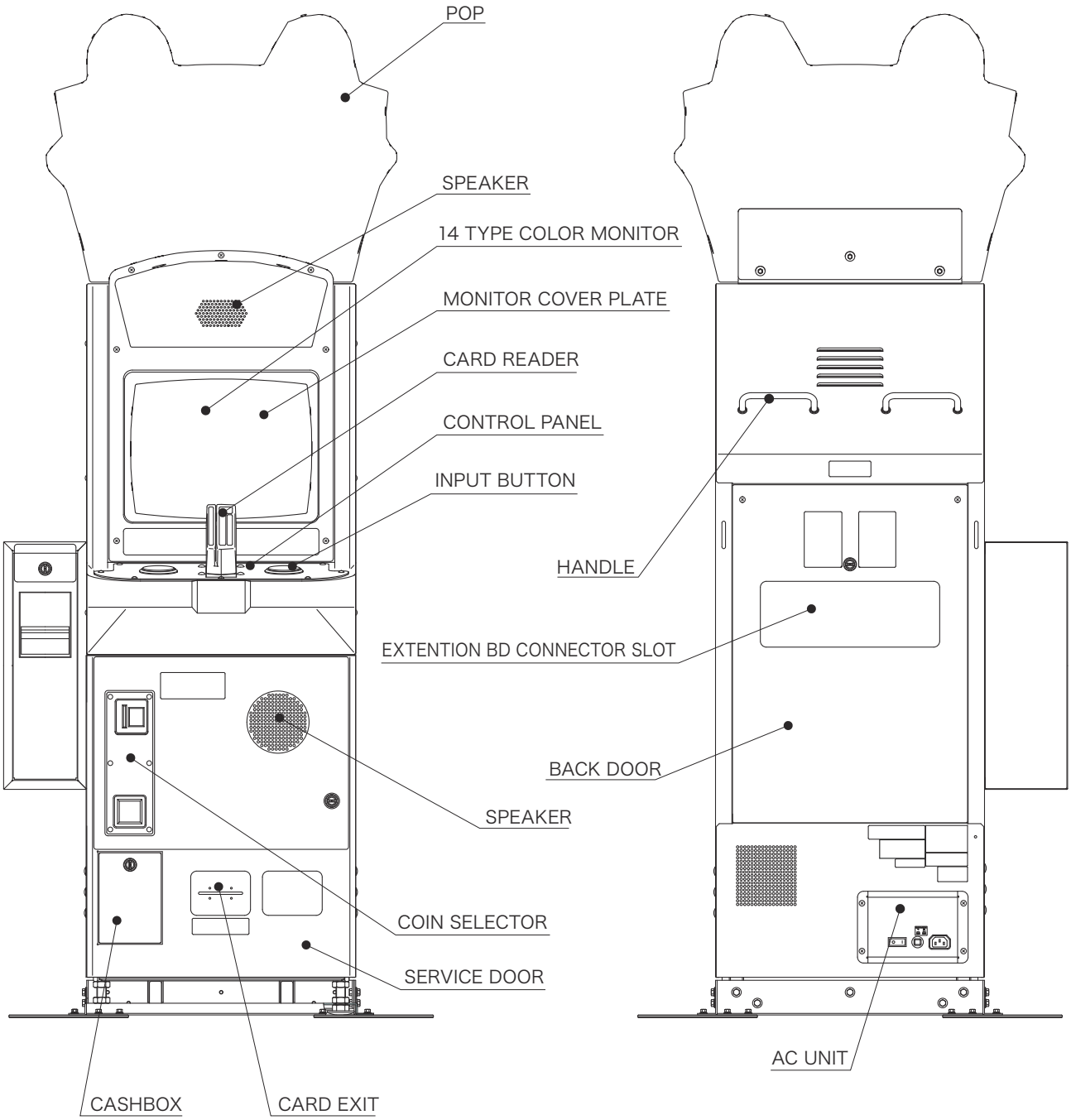


FIG. 4

5. ACCESSORIES

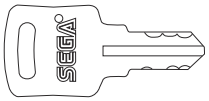
Confirm that the accessories listed in the table below are present when setting up the product. Accessories marked "Spare" in the note column are consumable items but included as spares.

TABLE 5a ACCESSORIES

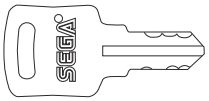
DESCRIPTION : OWNER'S MANUAL
Part No. (Qty.) : 420-6967-01 (1)
Note : This manual
Figures :
Parts not labeled with part numbers are as yet unregistered or cannot be registered. Be sure to handle all parts with care, as some parts are not available for purchase separately.

SERVICE MANUAL
420-6968 (1)
For setting a latest software.

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



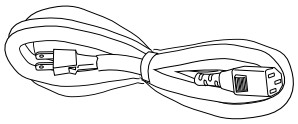
KEY (2)
For the cashbox door
The keys are inside the service door (near the cashbox side) at the time of shipment from the factory.



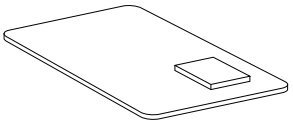
The following Table 5b lists the parts that had been separately packed when the product was shipped from the factory but are necessary when you use the product. These parts will be mounted on the product when installing and assembling it.

TABLE 5b ACCESSORIES

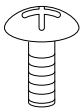
AC CABLE (POWER CORD)
600-7326 (1)
Used for installation, see Section 6, [2].



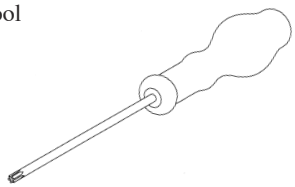
CLEANING CARD
MKG-0011-01 (1)



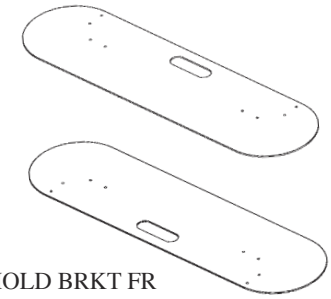
TRUSS SCREW (CHROME)
000-T00414-0C (3)
Used for securing POP,
see Section 6, [3].



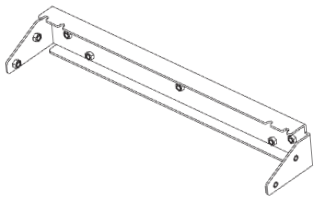
TAMPERPROOF DRIVER M4
540-0069 (1)
Tool



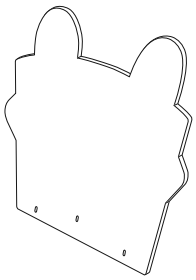
CABINET HOLD BASE (L, R)
DKT-0009 (2)
Used for installation,
See Section 6, [1] .



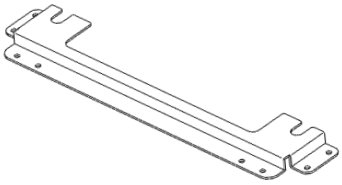
CABINET HOLD BRKT RR UPPER
DKT-0011 (1)
Used for installation,
See Section 6, [1].



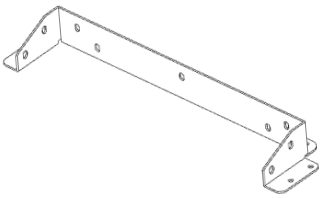
POP SPC OSM ENG
SPC-0016 (1)
See Section 6, [3].



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

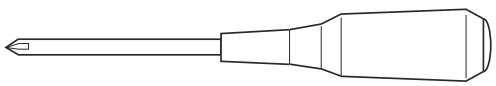
3 ASSEMBLING THE POP

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

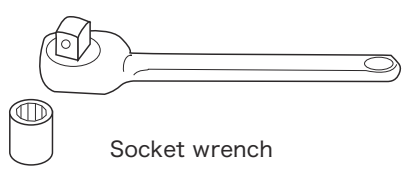
5 POWERING ON

6 ASSEMBLY CHECK

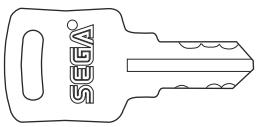
Tools and Implements Required for the Work



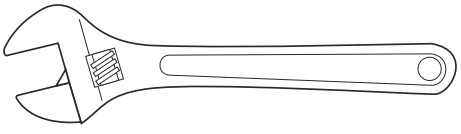
Phillips screwdriver (for M4 screws)



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.**

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.

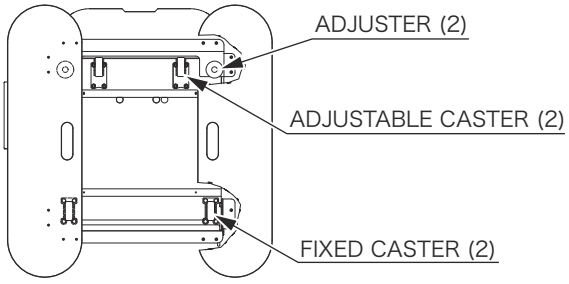


FIG. 6.1 a Bottom View

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.

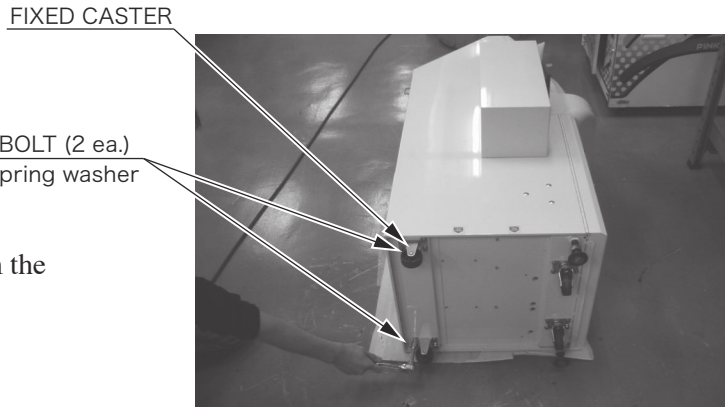


PHOTO 6.1a

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

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

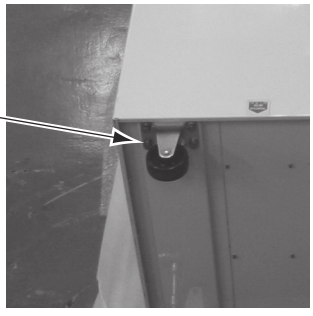


PHOTO 6.1b

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

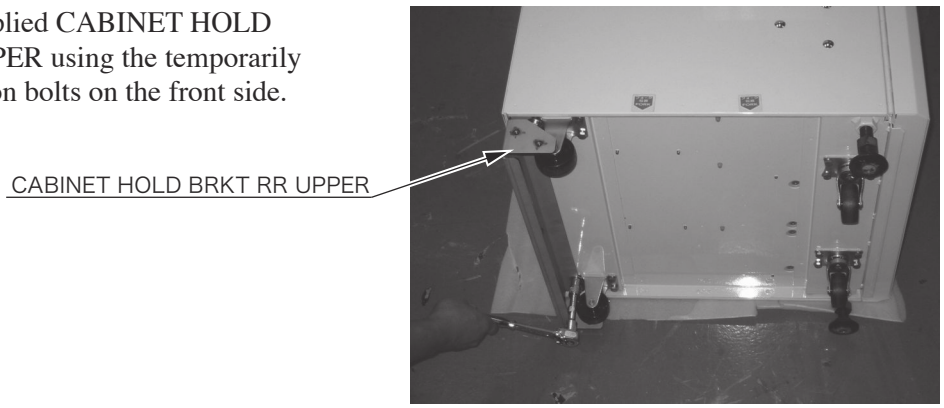


PHOTO 6.1c



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.

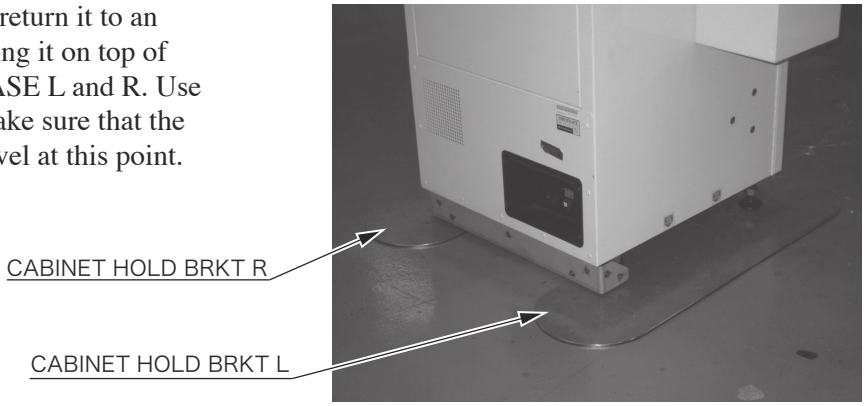
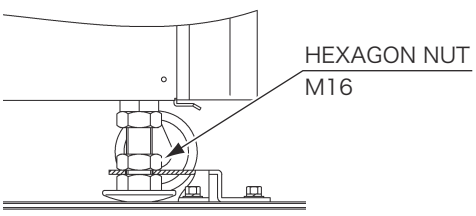


PHOTO 6.1e

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.



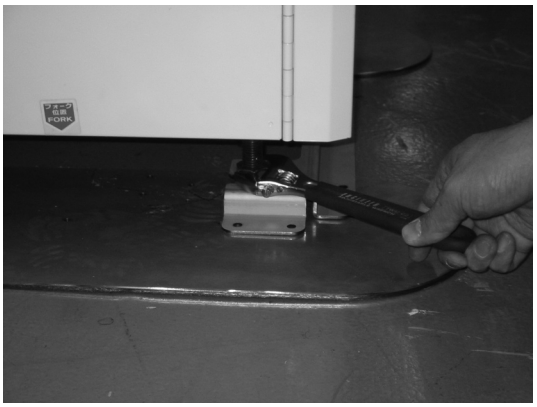


PHOTO 6.1f

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

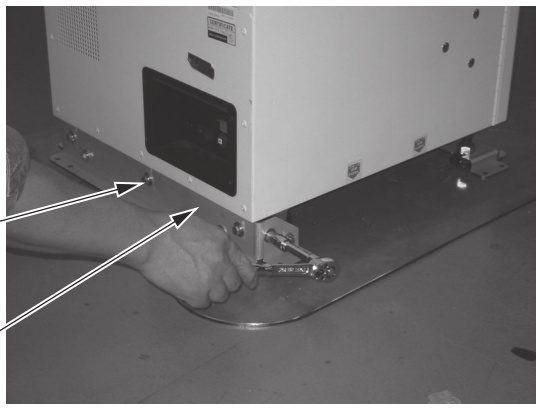


PHOTO 6.1g

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.

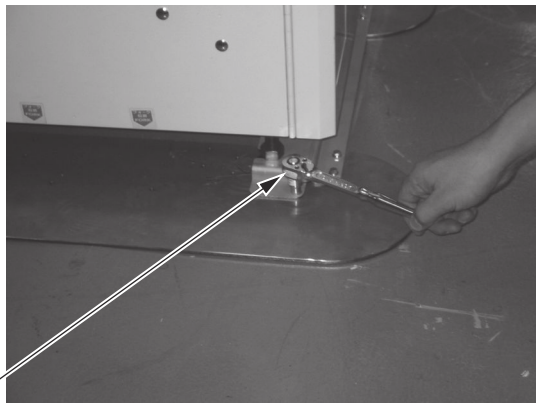


PHOTO 6.1h

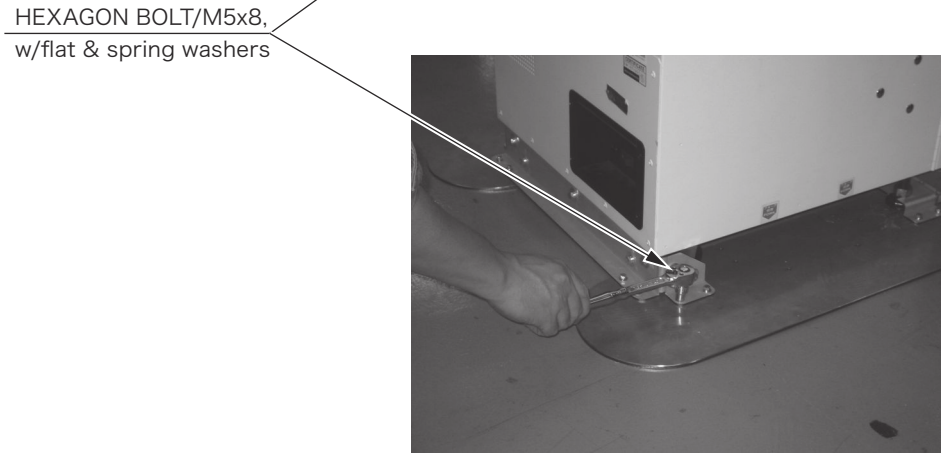
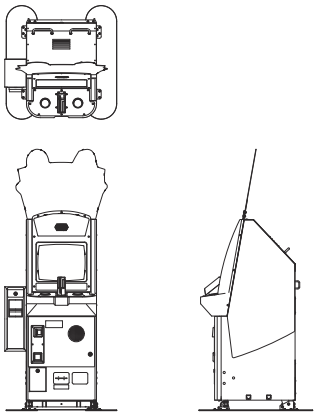


PHOTO 6.1i



(Scale: 1/50) See the layout for the positioning location.

FIG. 6.1b

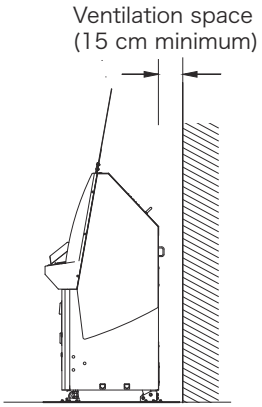


FIG. 6.1c Ensuring Ventilation Space

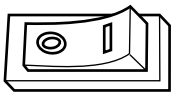
2 POWER SUPPLY AND EARTH CONNECTION

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.

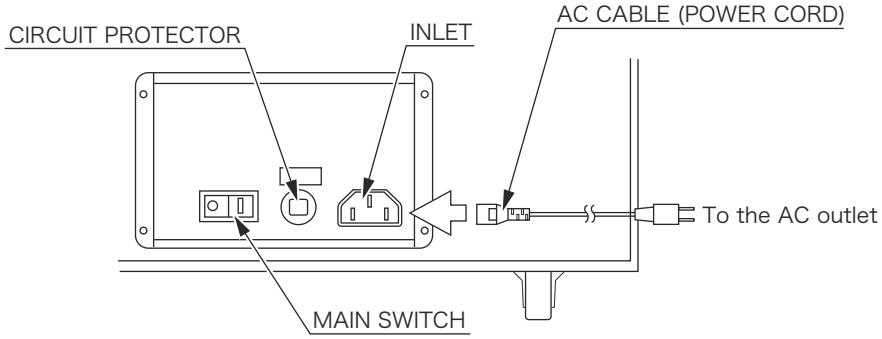


FIG. 6.2a

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.

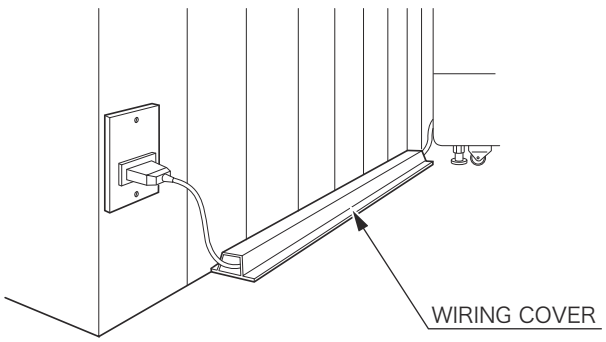


FIG. 6.2b Connecting the Power Cord

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.

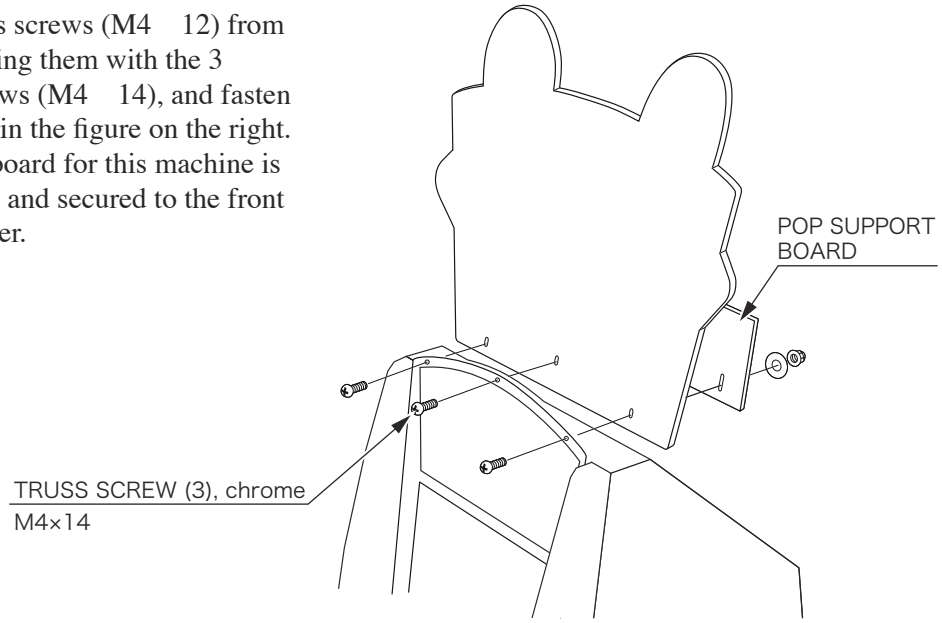


FIG. 6.3

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.

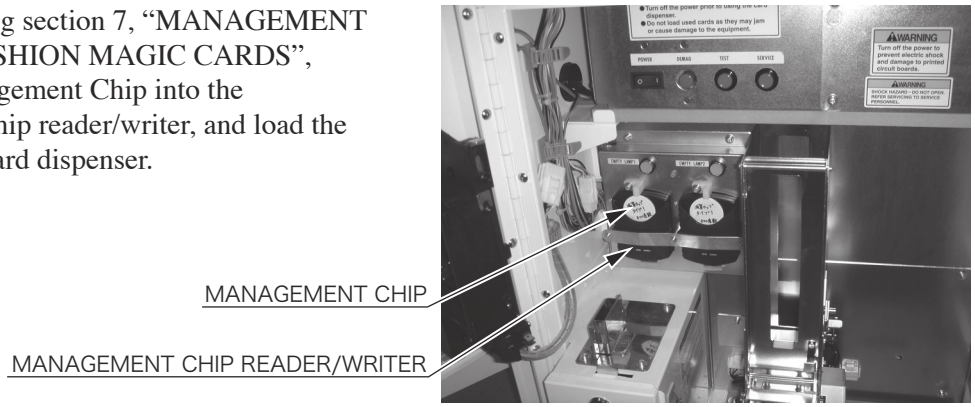


PHOTO. 6.4

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.

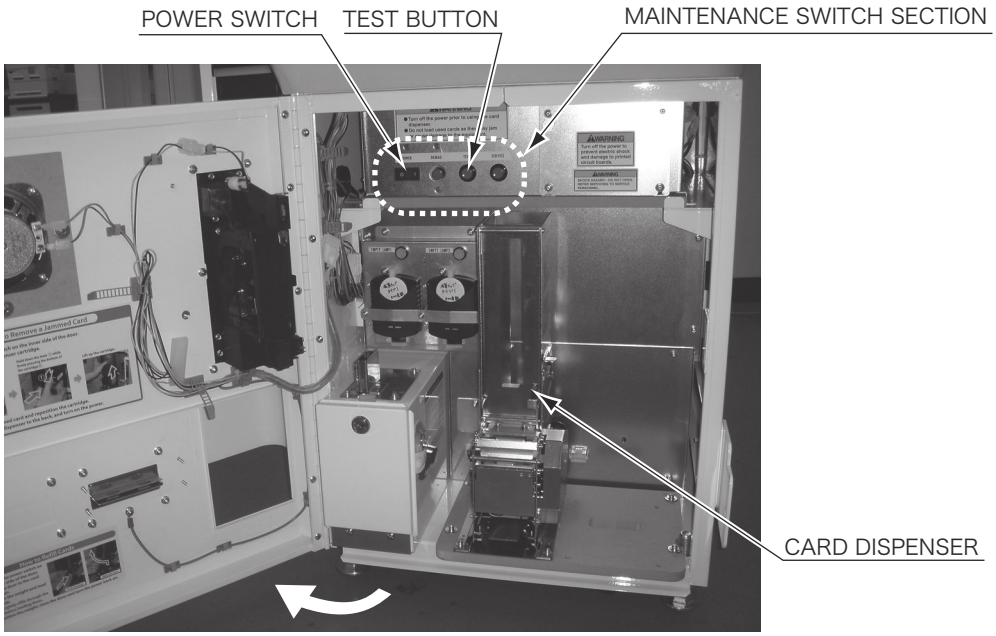


PHOTO. 6.5

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?

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

7. MANAGEMENT CHIP AND FASHION MAGIC CARDS

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.

IMPORTANT

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.

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.

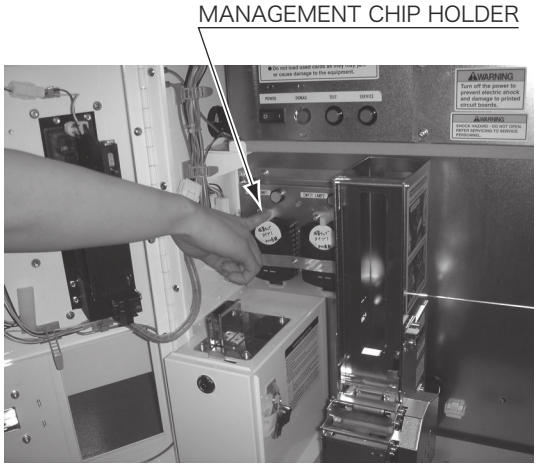


PHOTO 7.1

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.

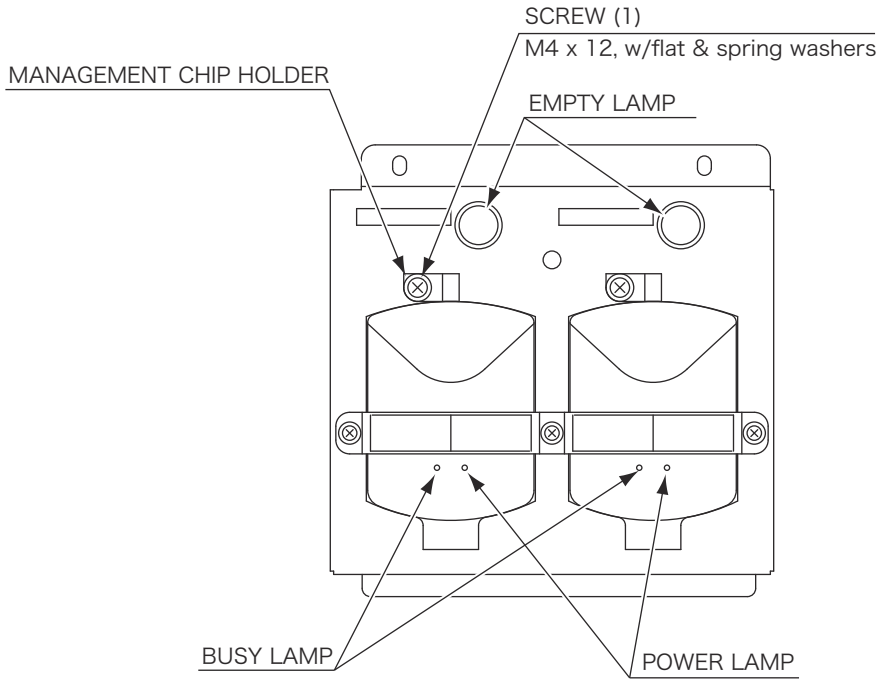


FIG. 7.1

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.

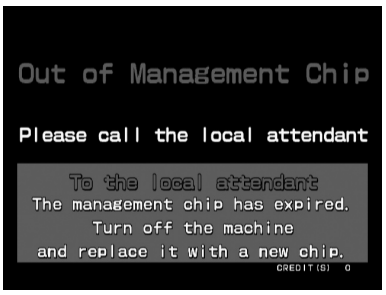
[COUNTERMEASURES] Verify again that the Management Chip is correct.

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.



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.

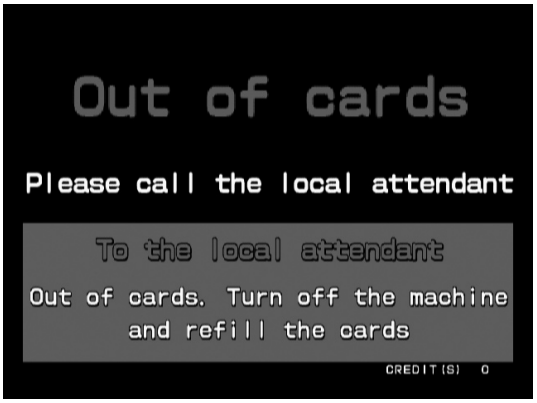


PHOTO 7.3a Warning Screen when Out of Cards

HOW TO REFILL CARDS

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

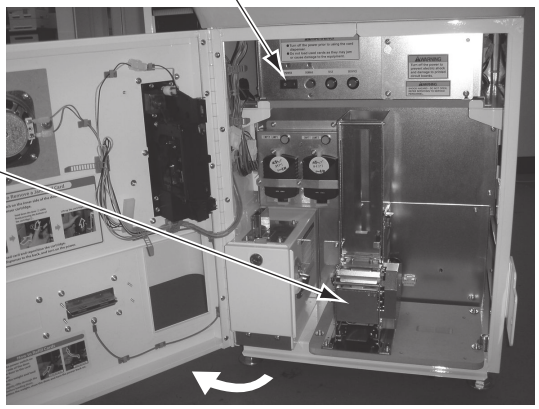


PHOTO 7.3b

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

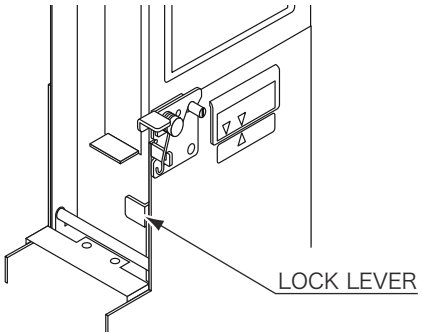


FIG. 7.3a

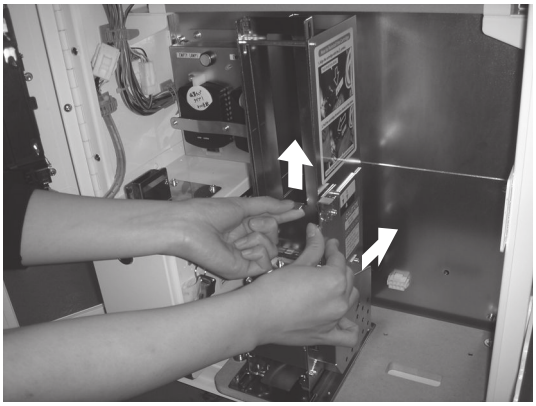


PHOTO 7.3c

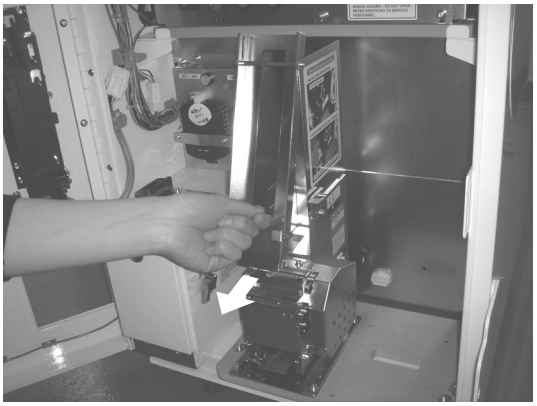


PHOTO 7.3d

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.

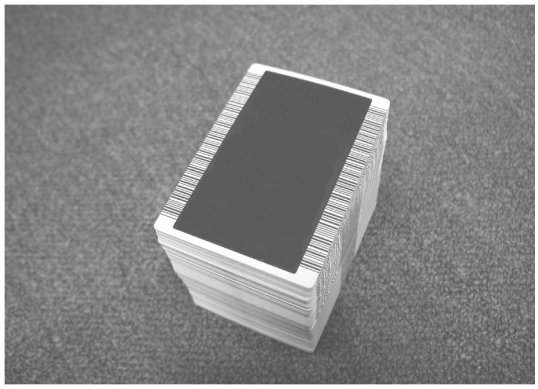


PHOTO 7.3f

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.

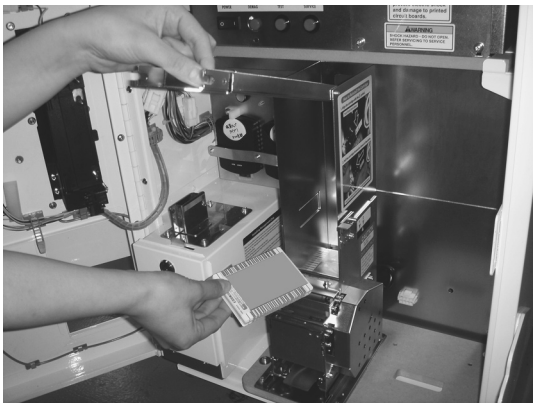


PHOTO 7.3g

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.

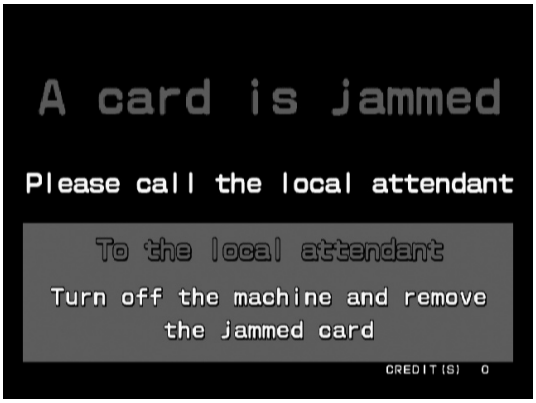


PHOTO 7.4a
Jammed Card Warning Screen

7

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.

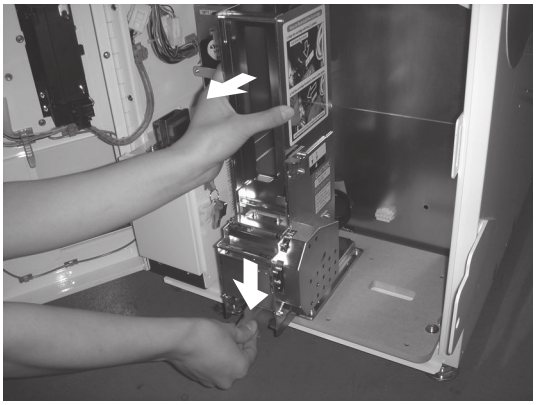


PHOTO 7.4b

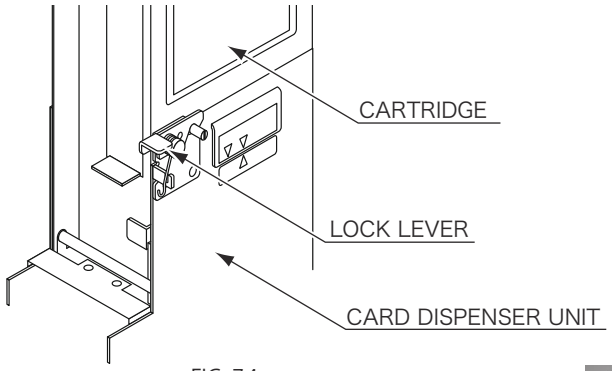


FIG. 7.4a

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.

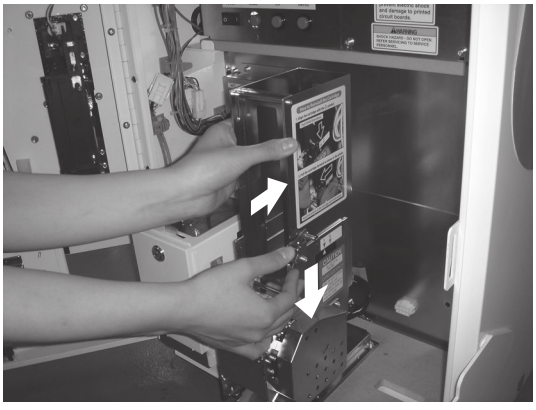


PHOTO 7.4c

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.

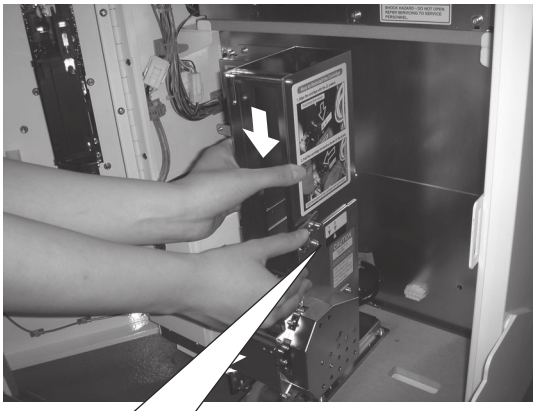
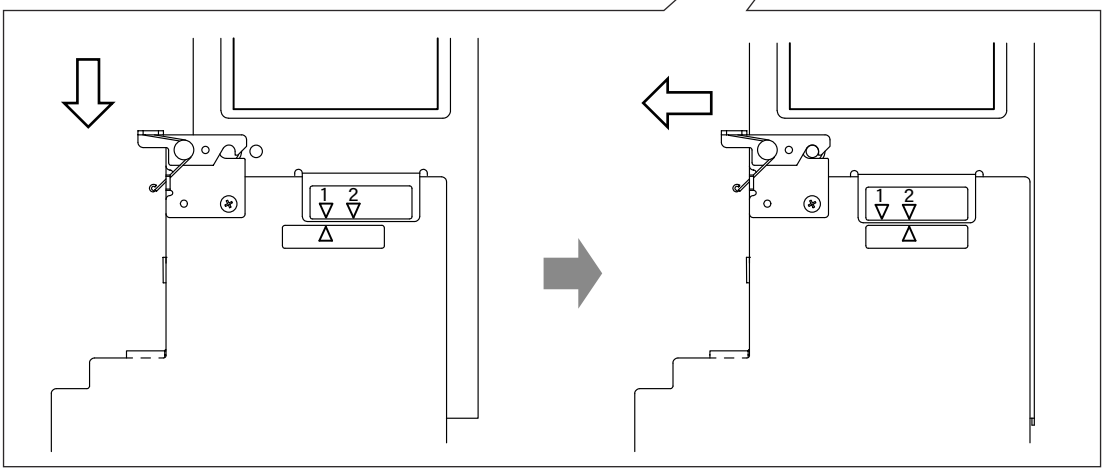


PHOTO 7.4e



⑦ Return the card dispenser to the back.

⑧ Turn the power back on and close the service door.

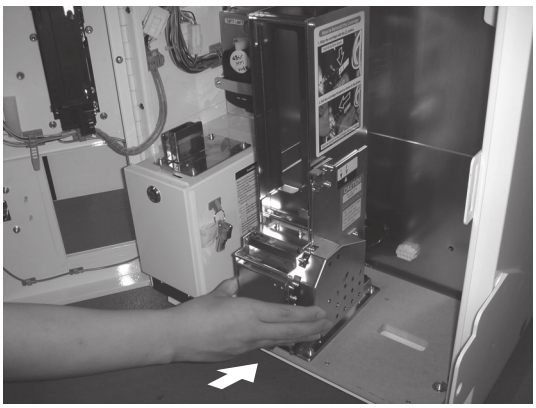


PHOTO 7.4f

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.

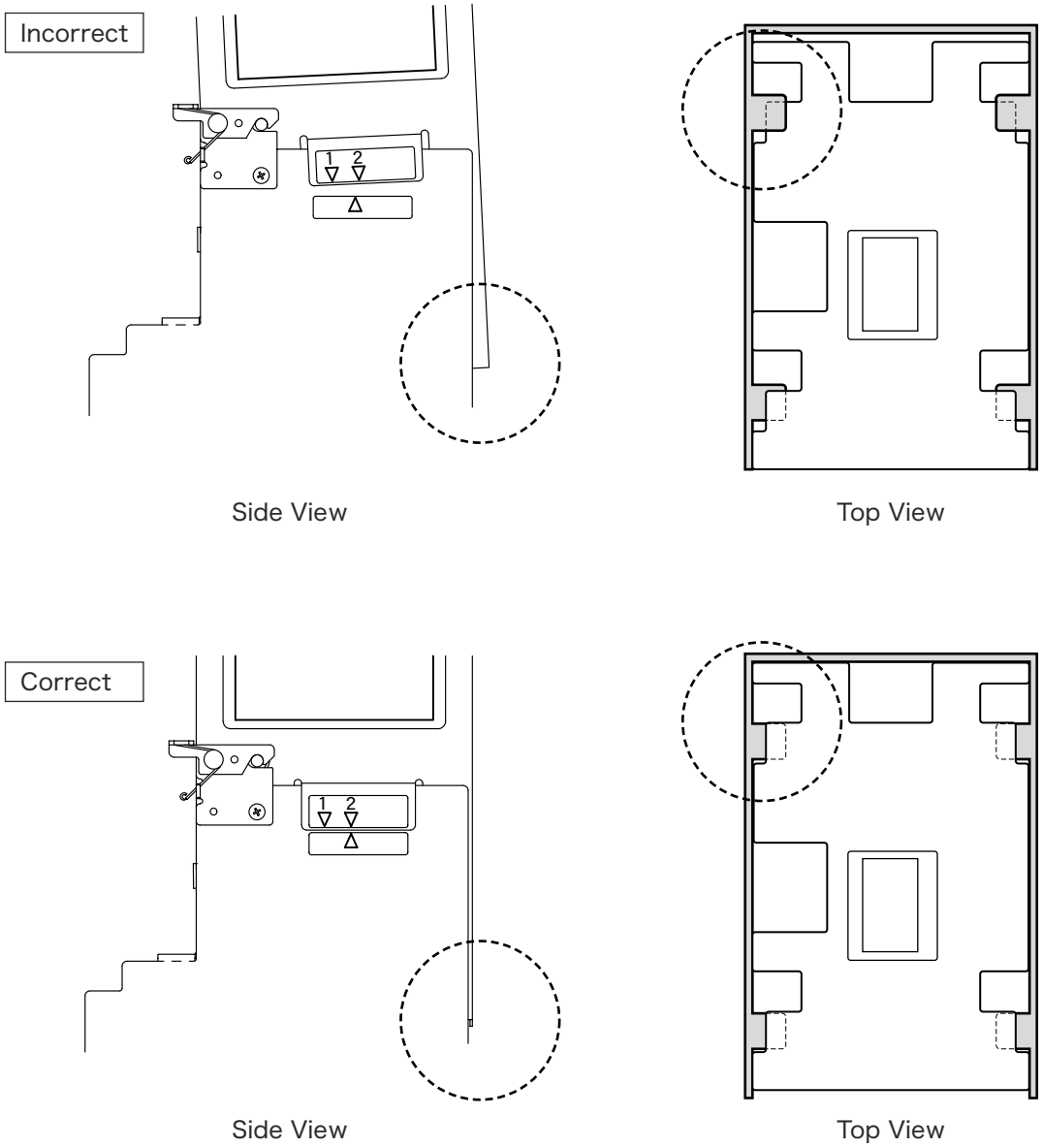


FIG. 7.4b

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.

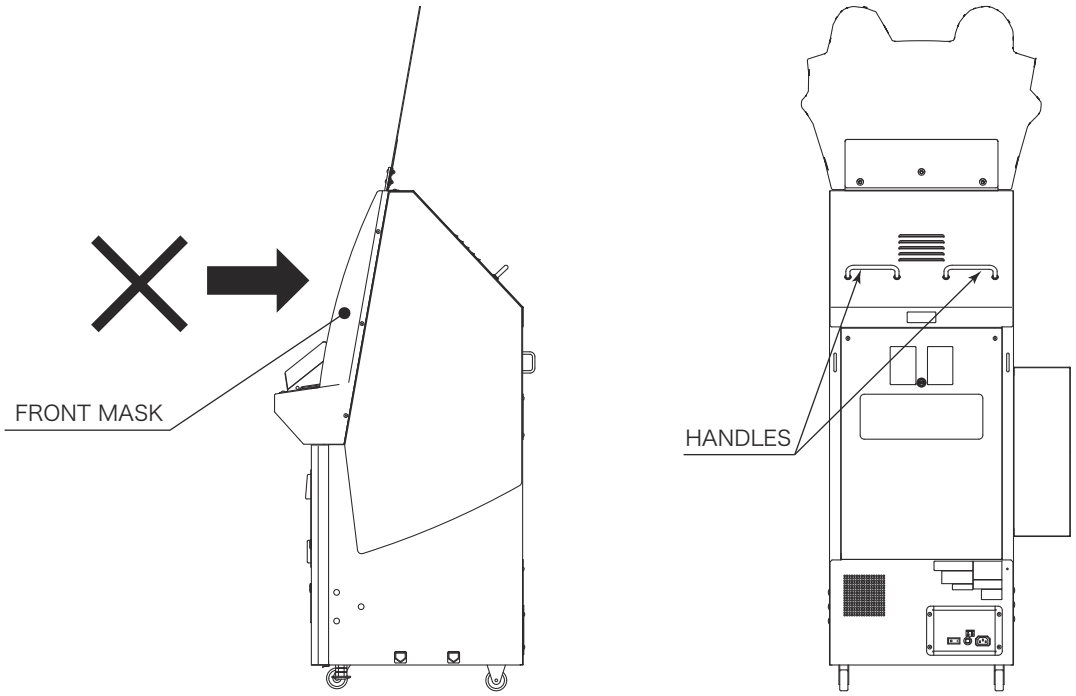


FIG. 8

9. GAME DESCRIPTION

Refer to the Service Manual for details.

10. SystemSP BOARD

10—1 EXTERNAL VIEW

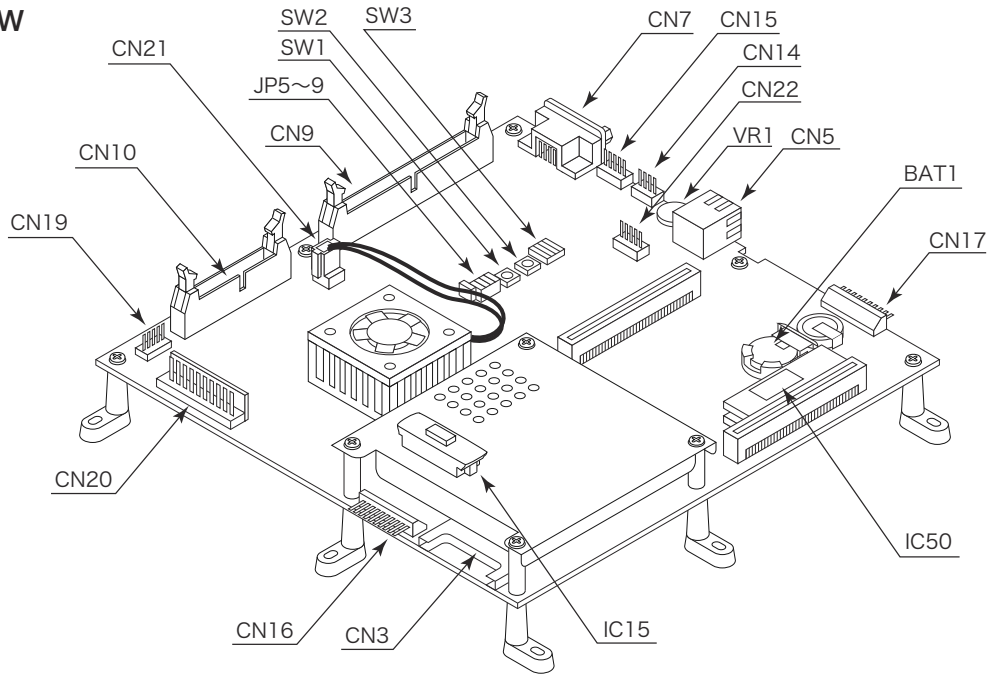


FIG. 10.1 SystemSP Board External View

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™* 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

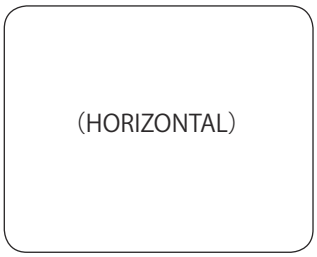
CN21 : Fan power supply (JST NH 3P)
CN22 : MIDI (JST NH 6P)
SW1 : Functions as the TEST Button.
SW2 : Functions as the SERVICE Button.
SW3 : Used to change the frequency of the video, etc.
See the next chapter Monitor Placement and Horizontal Scanning Frequency.
VR1 : Sound volume
BAT : Backup battery
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.



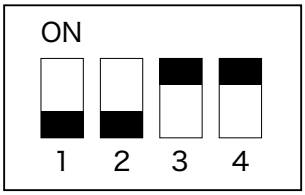
Horizontal Scanning Frequency: 15.85kHz/31.69kHz

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.

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.

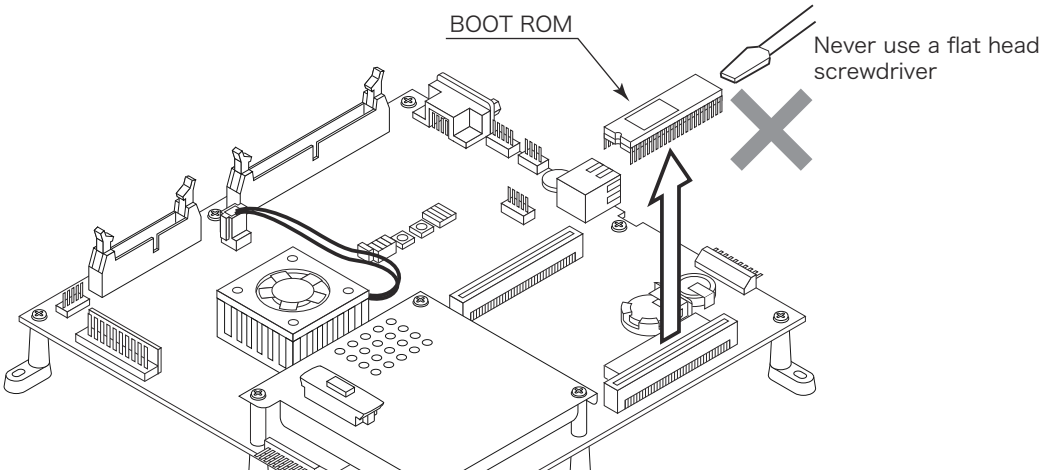


FIG. 10.4a

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.

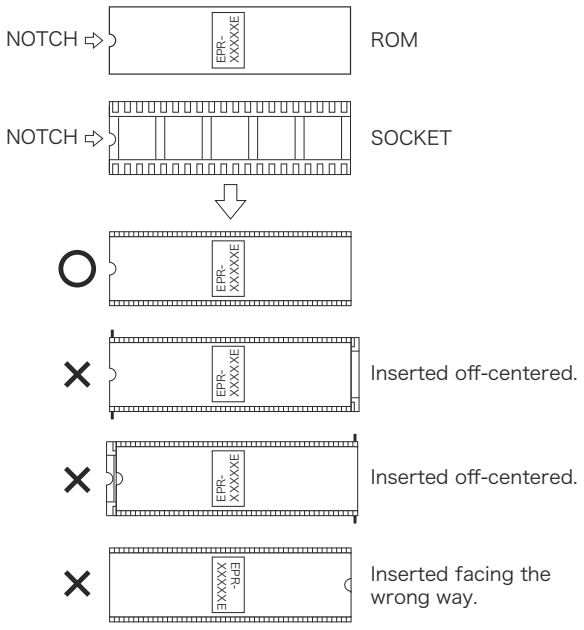


FIG. 10.4b

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.

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

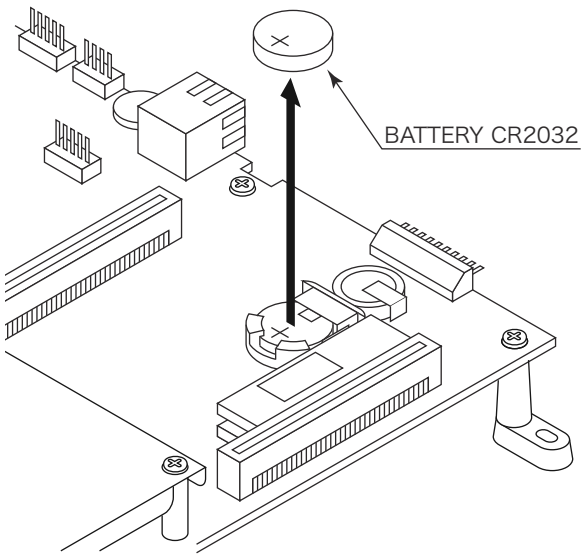


FIG. 10.5

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.

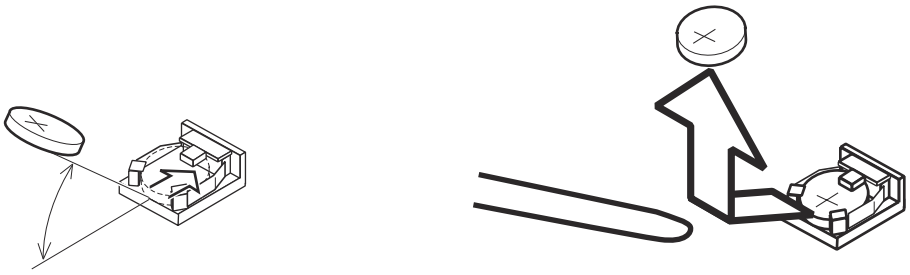


FIG. 10.6

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.

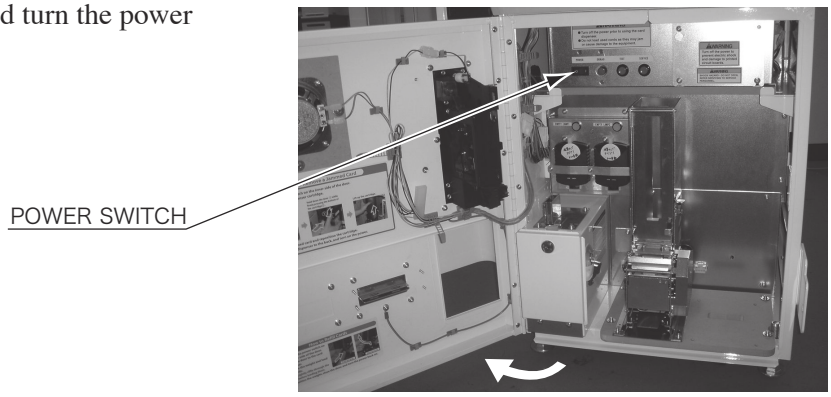


PHOTO 10.7a

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.

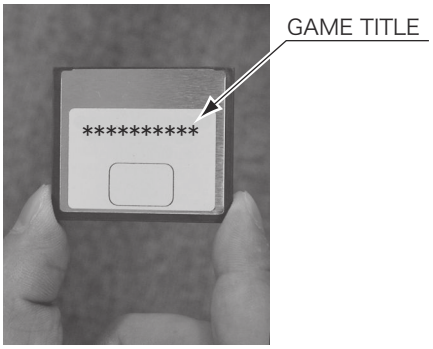


PHOTO 10.7d



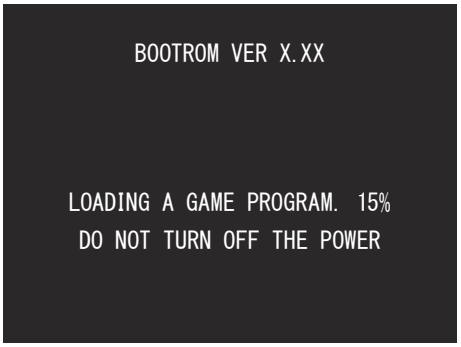
PHOTO 10.7e

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



④–2



④–3



④–4





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.

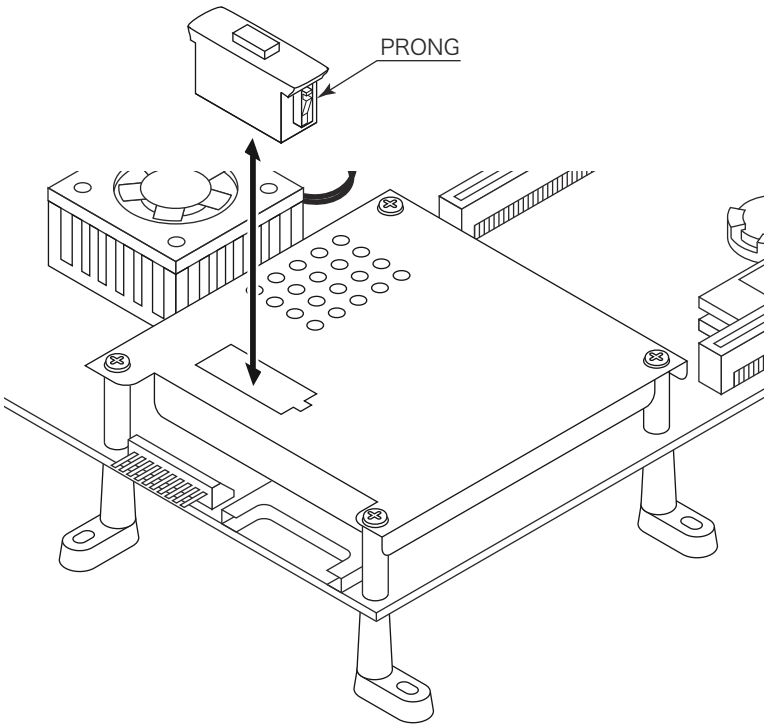


FIG. 10.8

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

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

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

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

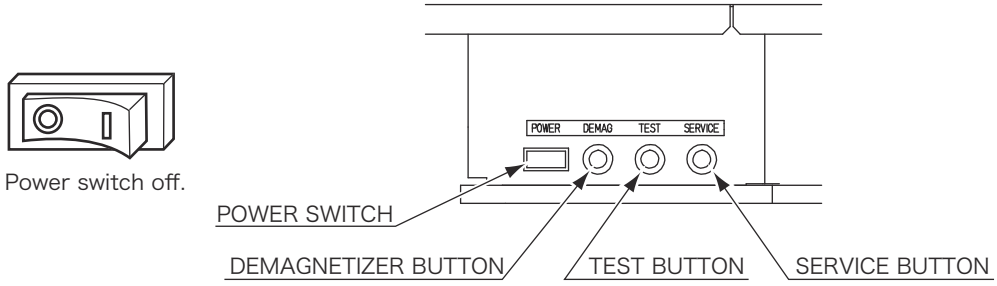


FIG. 11.1a

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.

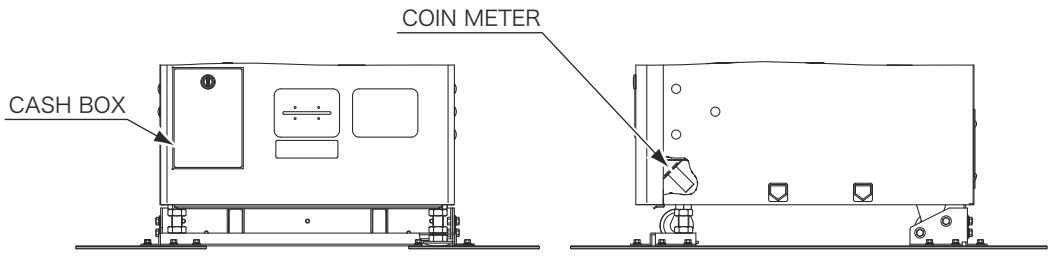
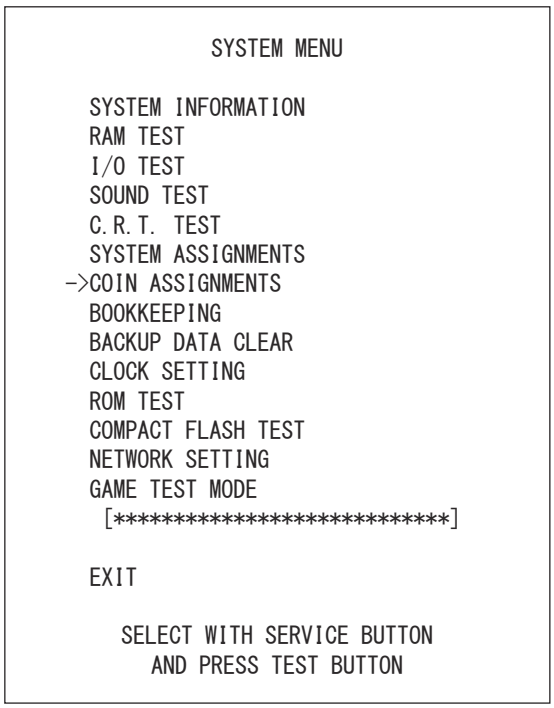


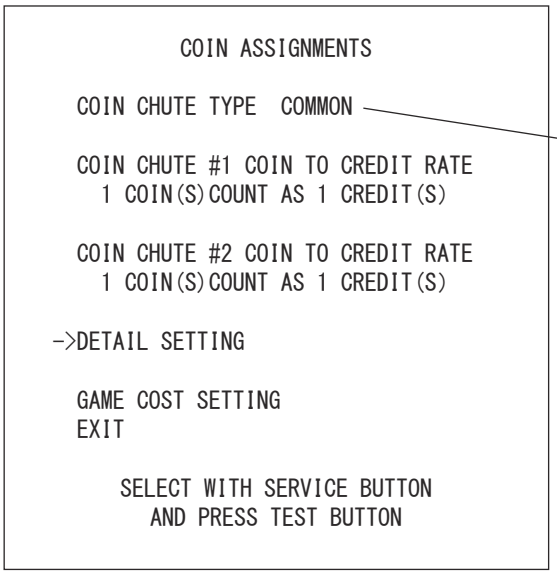
FIG. 11.1b

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.







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.

STOP
IMPORTANT

- 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.



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
   [**************************].....

->EXIT

    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.

```
            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

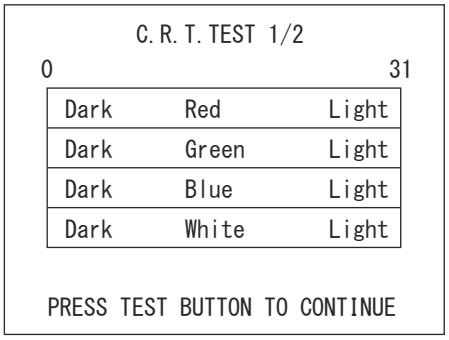
This mode allows the monitor color levels and screen size to be checked. However, the hue etc. of colors cannot be altered.

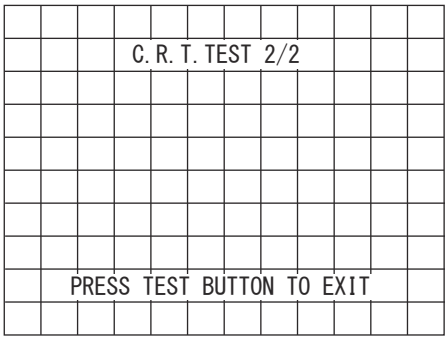
① First the monitor color check screen will be displayed.
Each color (red, green and blue) are displayed darkest on the left, getting lighter toward the right in 32 steps.
The monitor is set to the correct brightness level of the white color bar is black on the far left and white on the far right.

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.





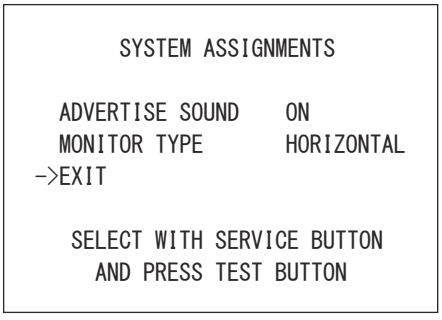
G. SYSTEM ASSIGNMENTS

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.



(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.

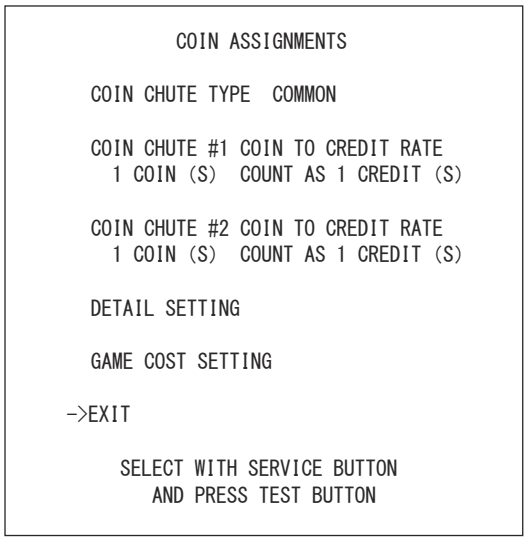
H. COIN ASSIGNMENTS

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.

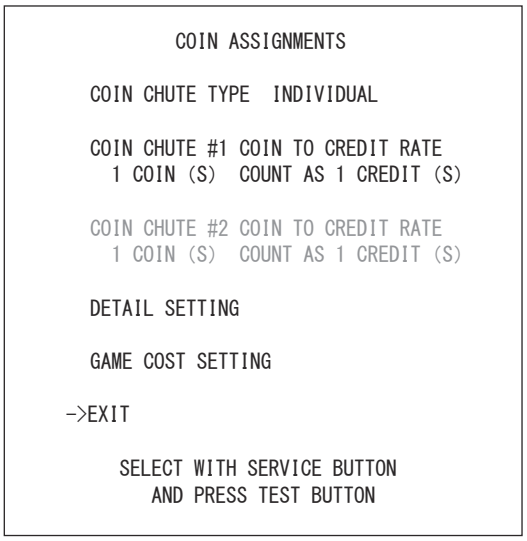
① Press the SERVICE Button to move the cursor.

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.



When the COIN CHUTE TYPE is set to "COMMON"



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.

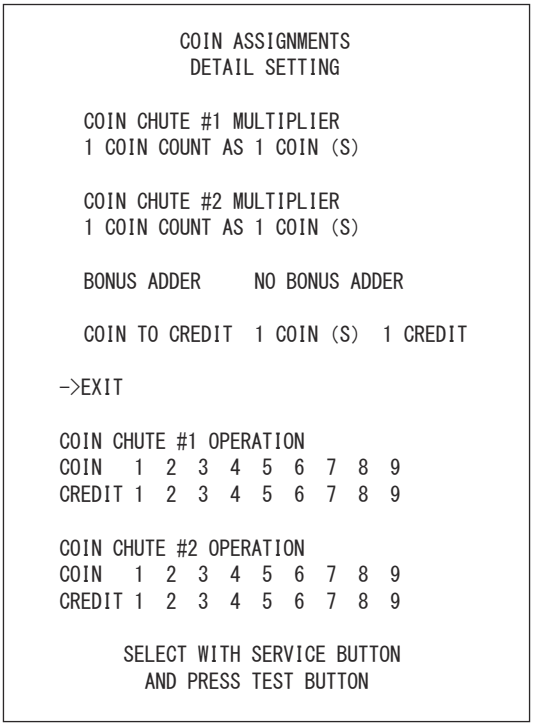
(C) DETAIL SETTING

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.

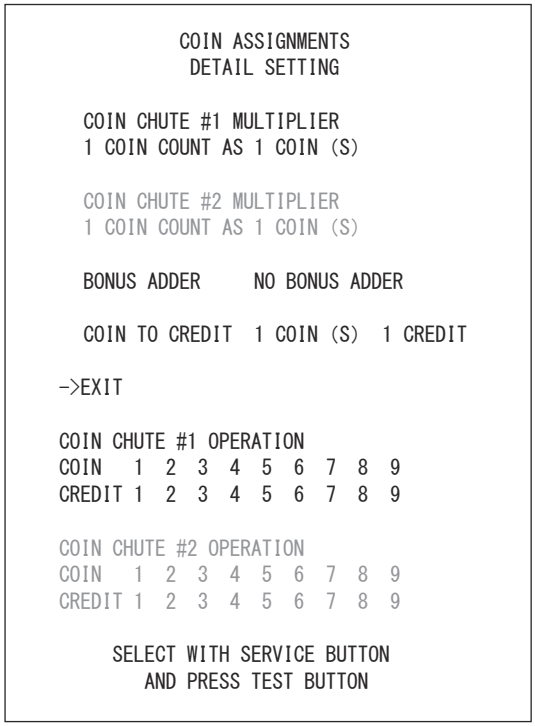
① Press the SERVICE Button to move the cursor.

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.



When the COIN CHUTE TYPE is set to "COMMON"



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.

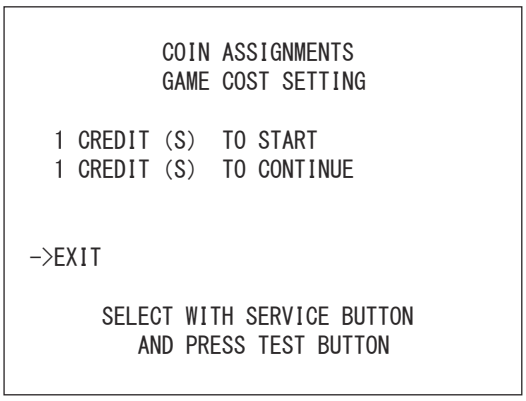
(D) GAME COST SETTING

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.

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.



(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.

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)

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)

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

Table 3: DETAIL SETTING (COIN CHUTE TYPE COMMON)

Table 4: DETAIL SETTING (COIN CHUTE TYPE INDIVIDUAL)

Table 5: DETAIL SETTING (BONUS ADDER)

Table 6: DETAIL SETTING (COIN TO CREDIT)

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.

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
    [**********************************]      ←
          TYPE 512M BIT * 8 CHIP

AREA      IC      RESULT   BYTE     WORD
～ 64M    IC62    GOOD     0123     4567
～128M    IC63    GOOD     0123     4567
～192M    IC64    GOOD     0123     4567
～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

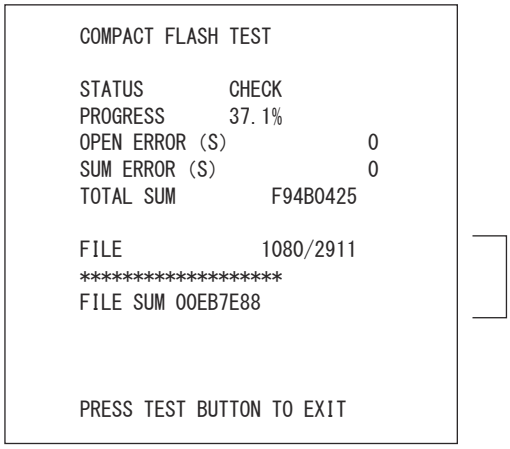
        PRESS TEST BUTTON TO EXIT
```

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.

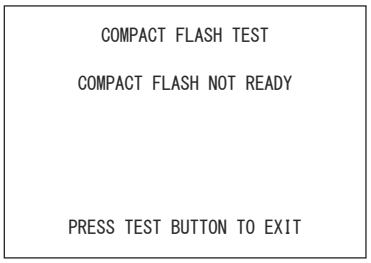
M. COMPACT FLASH TEST

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.

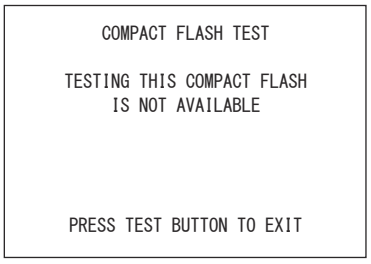


① The test will begin as soon as you enter this mode.
② After the test is complete, press the TEST Button to return to the SYSTEM MENU Screen.

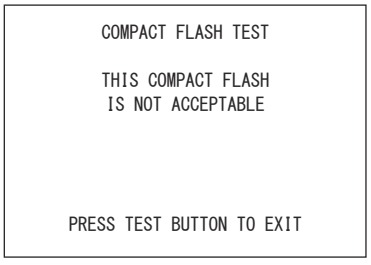
If CF is not detected or its key chip is not inserted, the following screens will be displayed.
A game title that does not use CF will display this message when started up.



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



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.



N. NETWORK SETTING

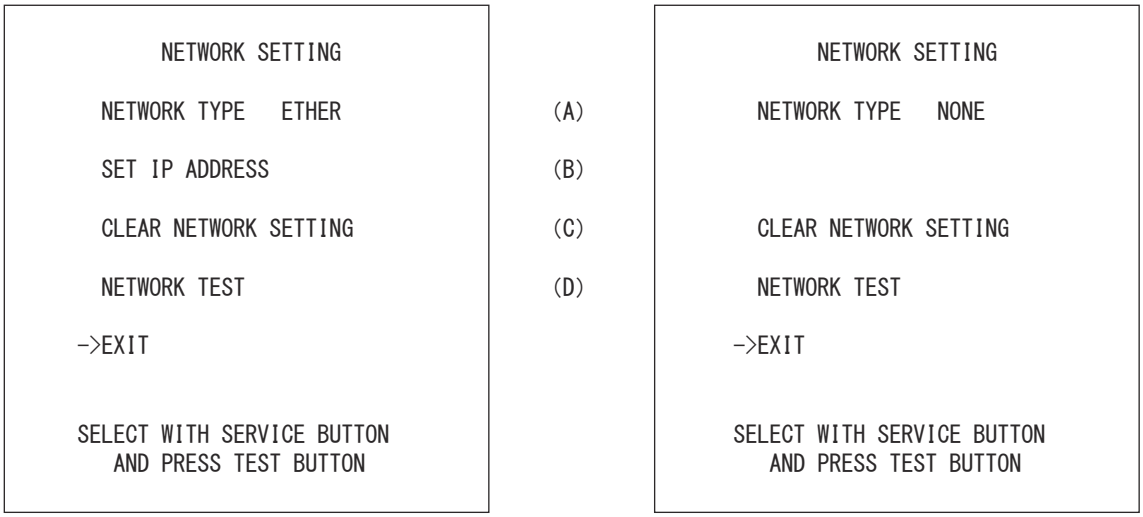
This mode allows network settings to be determined and a communication test to be performed. The title program will use the communication settings set here to communicate. Unlike other settings, any changes made to communication settings are saved to the SystemSP board internal communications memory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

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.



When the NETWORK TYPE is set to "ETHER"

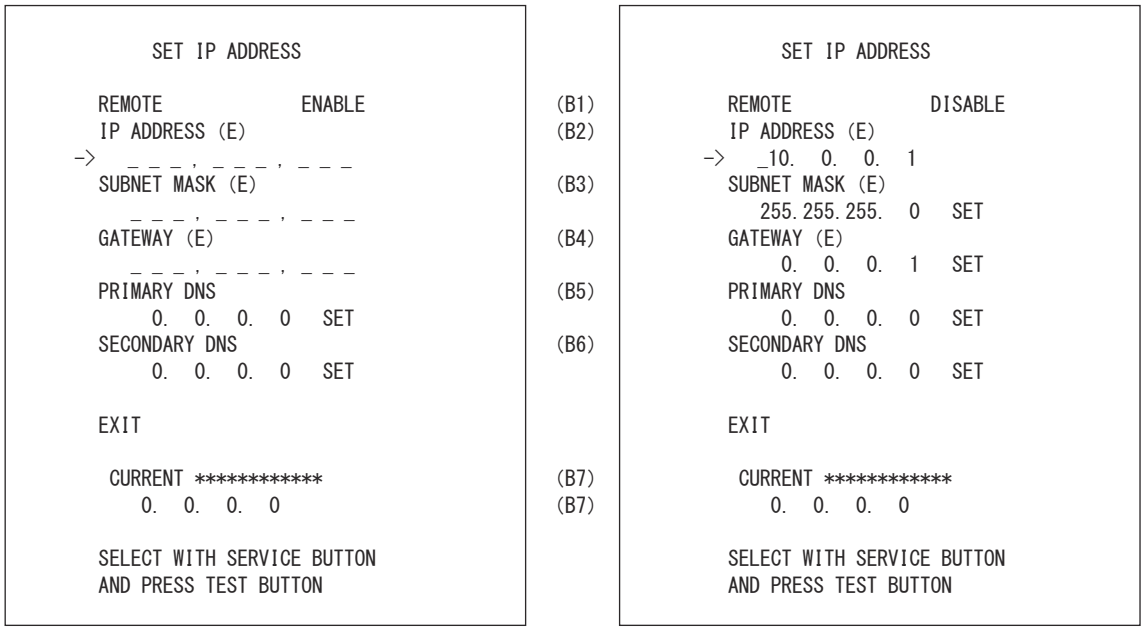
When the NETWORK TYPE is set to "NONE"

(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.”



11

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  **%                ←

          ETHER MODE
          CHECKING NETWORK
          REMOTE DISABLE
          LOOPBACK - GOOD              ←
          GATEWAY -- N/A               ←
          SERVER --- N/A               ←
          -- COMPLETED --

      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 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.

12. CARD DISPENSER

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.

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.

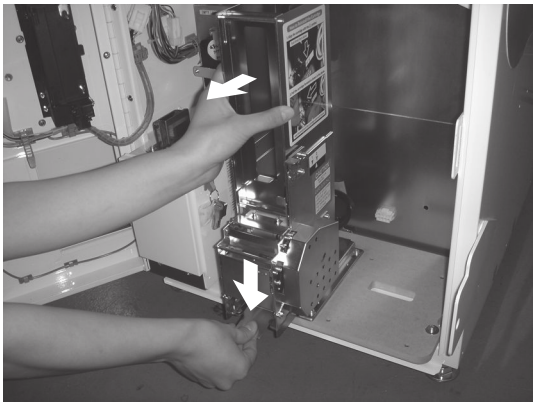


PHOTO 12a

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

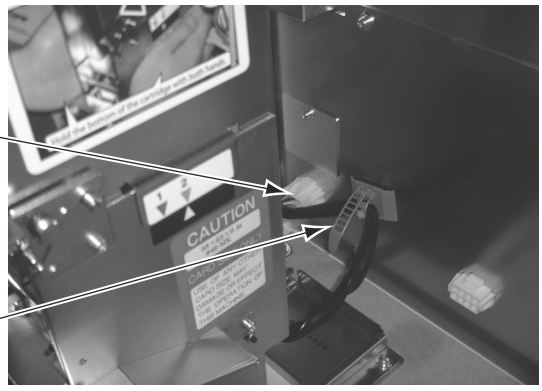


PHOTO 12b

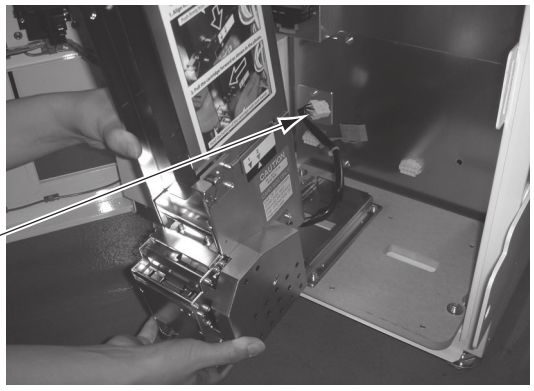


PHOTO 12c

13. CARD READER (CONTROL PANEL)

CAUTION

- **When cleaning the card reader, always use the designated Cleaning Card.**
- **Do not use chemical detergents such as "glass cleaner" available on the market or solvents such as thinner, etc.**

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.

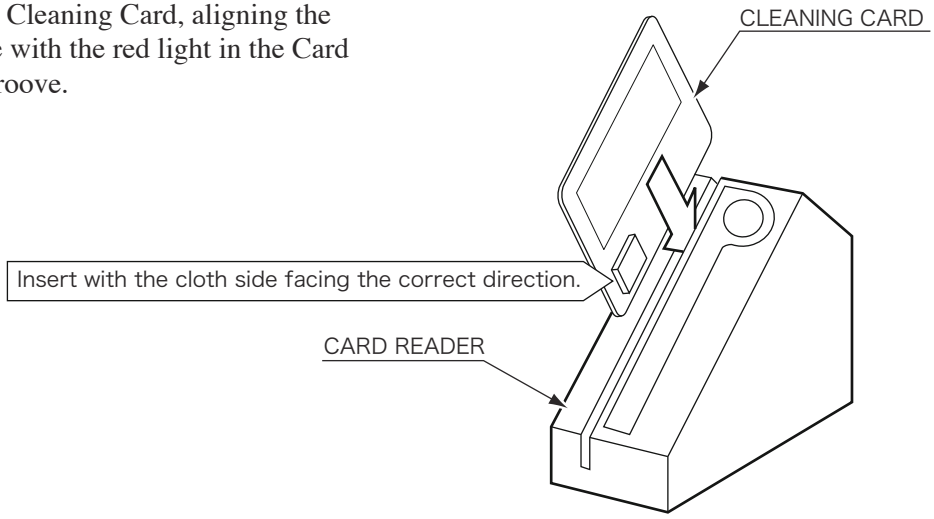


FIG. 13.1a

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

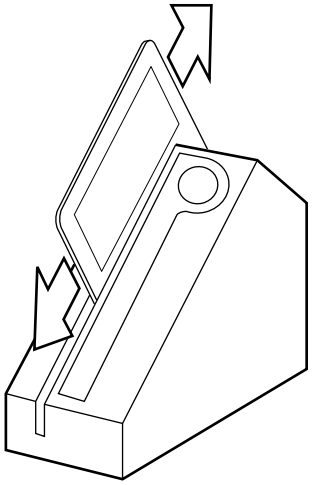


FIG. 13.1b

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.

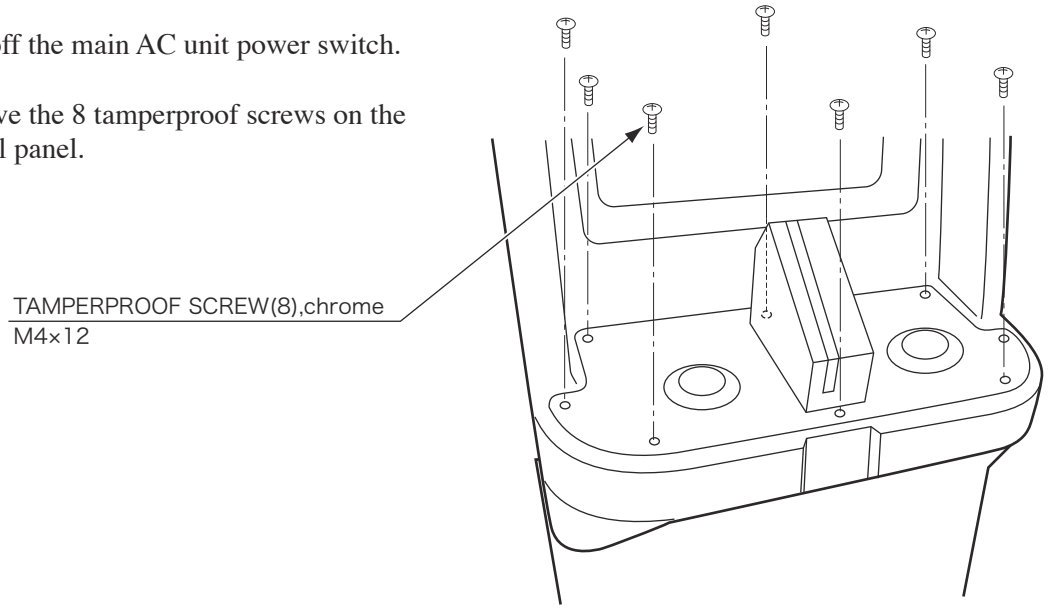


FIG. 13.2

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

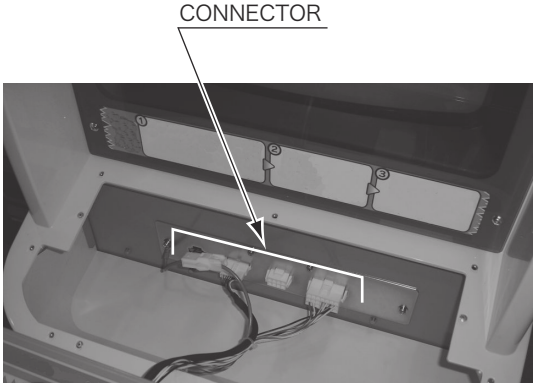


PHOTO 13.2a

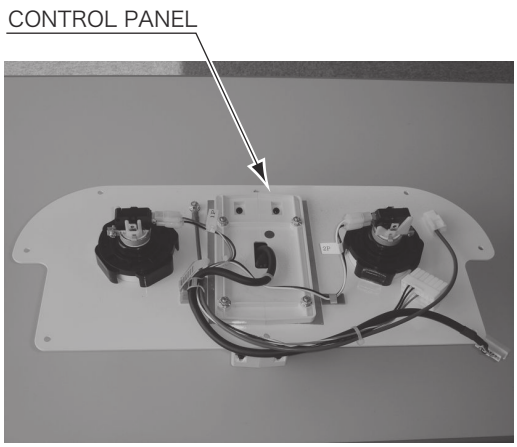


PHOTO 13.2b

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

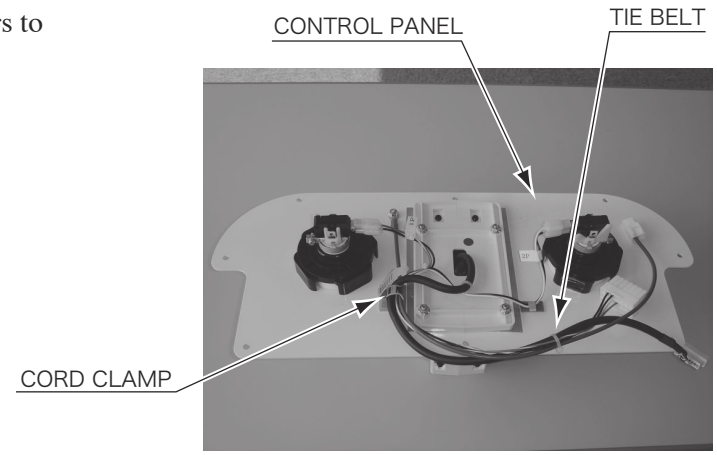


PHOTO 13.2c

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

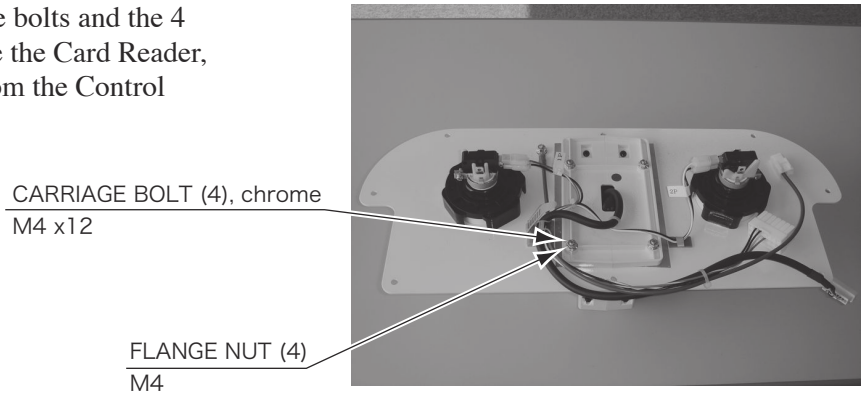


PHOTO 13.2d

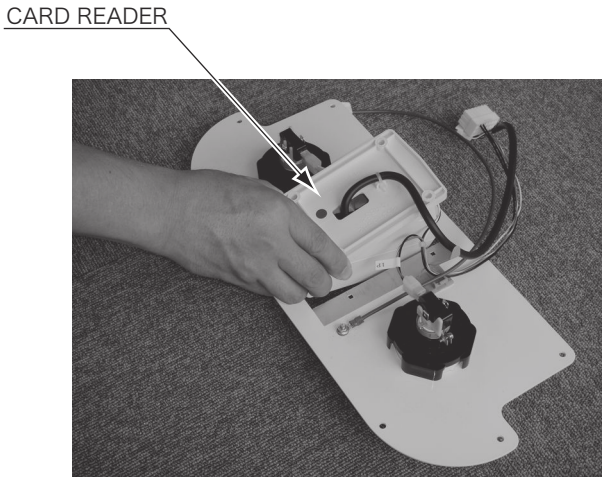


PHOTO 13.2e

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.

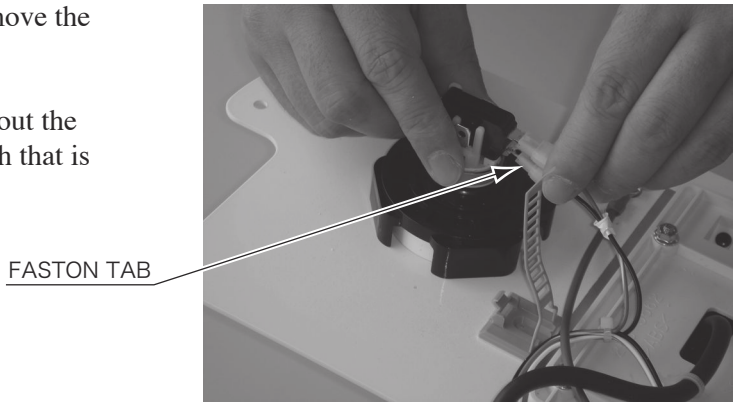


PHOTO 13.3a

③ Remove the screws and detach the lock.

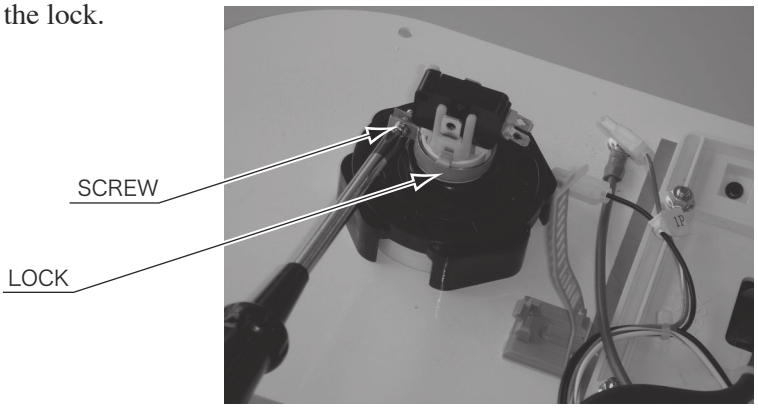


PHOTO 13.3b

④ Pull the switch out straight from the base of the button, and then replace.

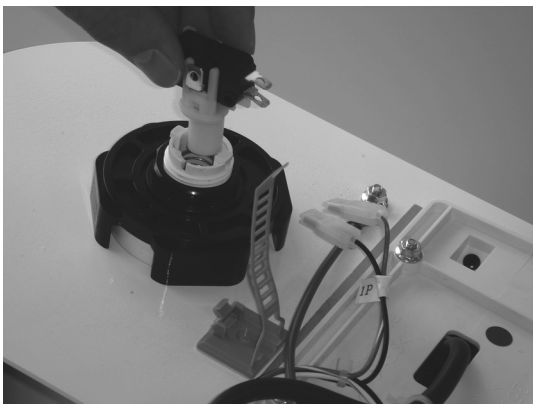


PHOTO 13.3c

Replacing the Button

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

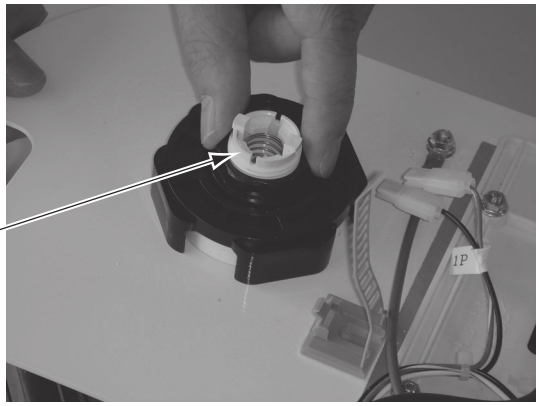


PHOTO 13.3d

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

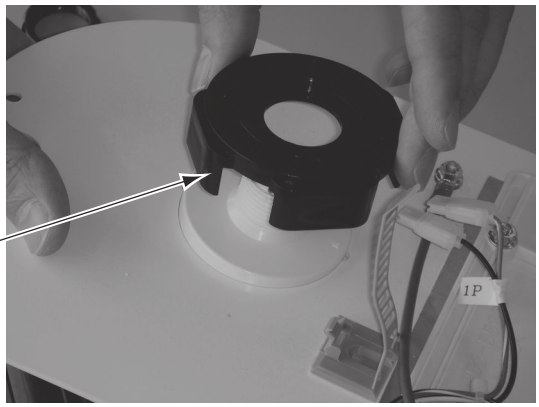


PHOTO 13.3e

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.



PHOTO 14.1a

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

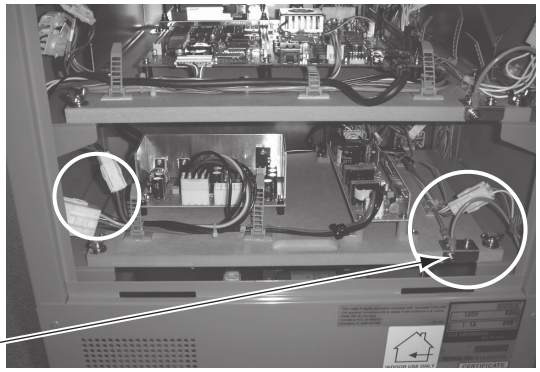


PHOTO 14.1b

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

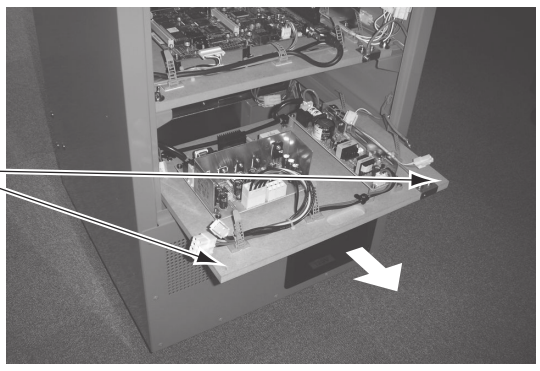


PHOTO 14.1c

14—2 COMPOSITION OF THE POWER UNIT

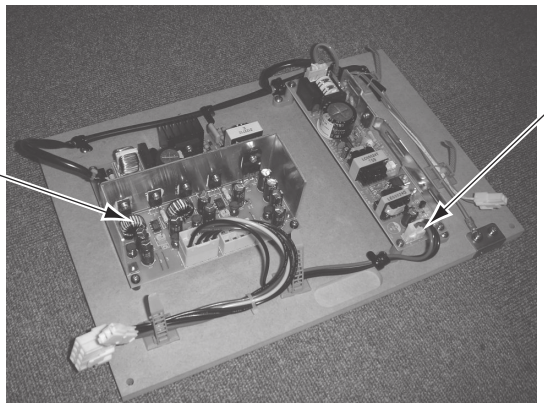


PHOTO 14.2

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.

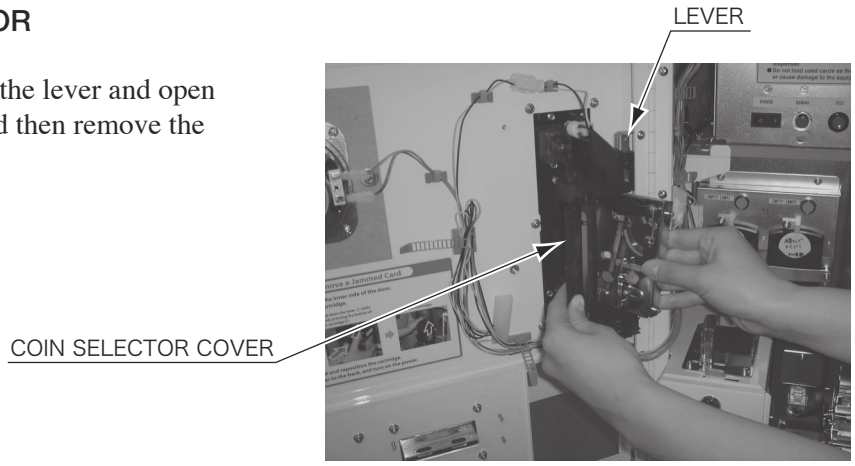


PHOTO 15

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.

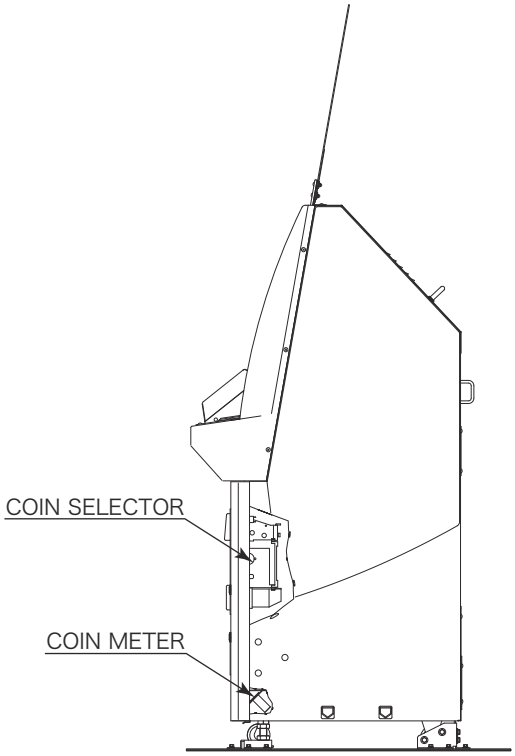


FIG. 15a

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.

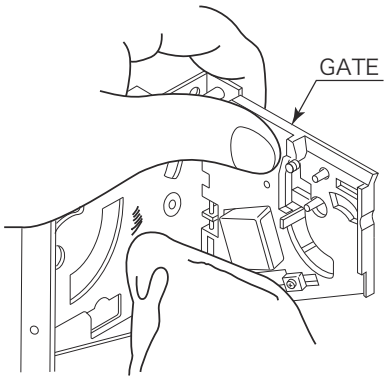


FIG. 15b

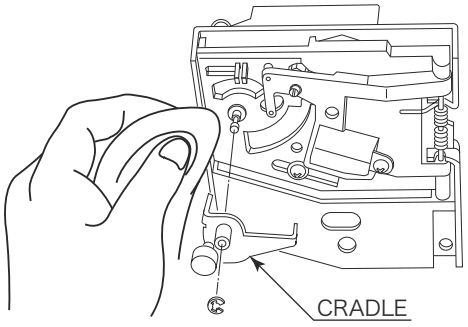


FIG. 15c

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

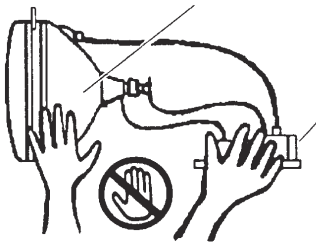
Indicates that handling the monitors improperly by disregarding this warning may potentially cause a hazardous situation, which could result in death or serious injury.

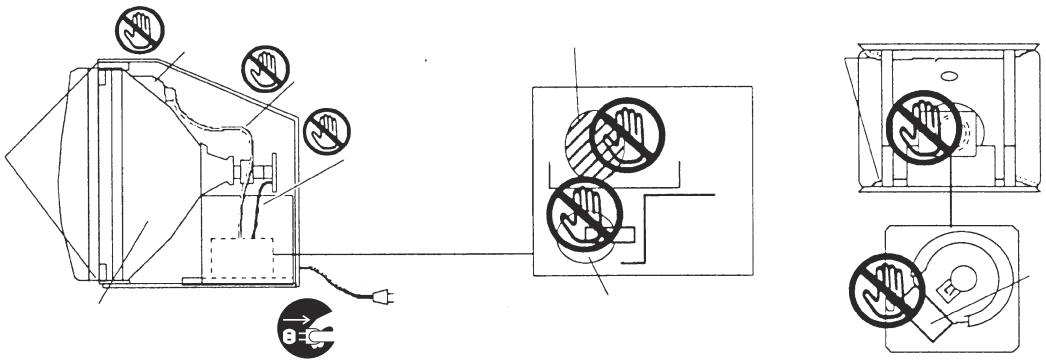
Indicates the instruction to disconnect or unplug a power connector.

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

WARNING

WARNING





CAUTION

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.

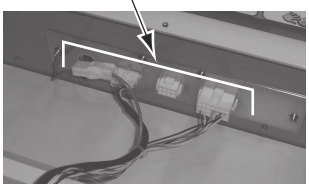


PHOTO 16.2

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

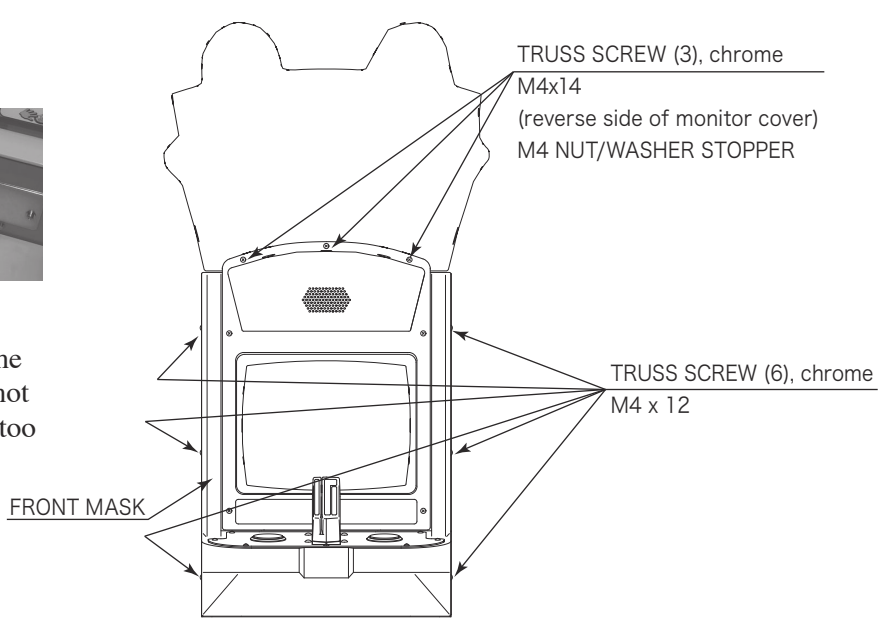


FIG. 16.2

16—3 MONITOR ADJUSTMENT

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

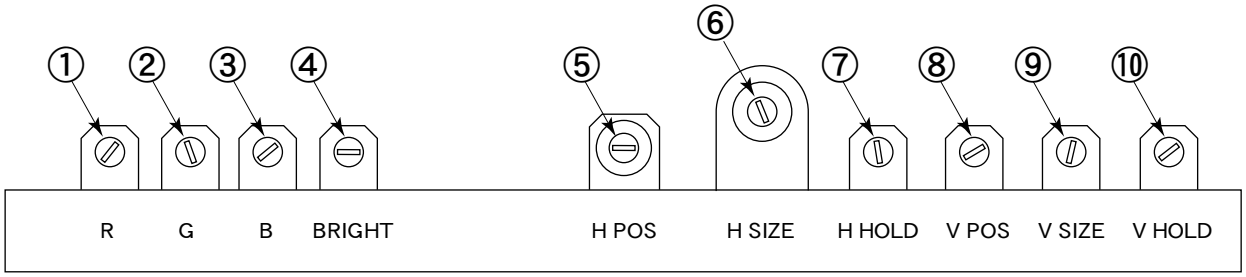


FIG. 16.3

① R. GAIN ② G. GAIN ③ B. GAIN	Adjusts each VR to get a suitable contrast and white balance.
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.

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
```

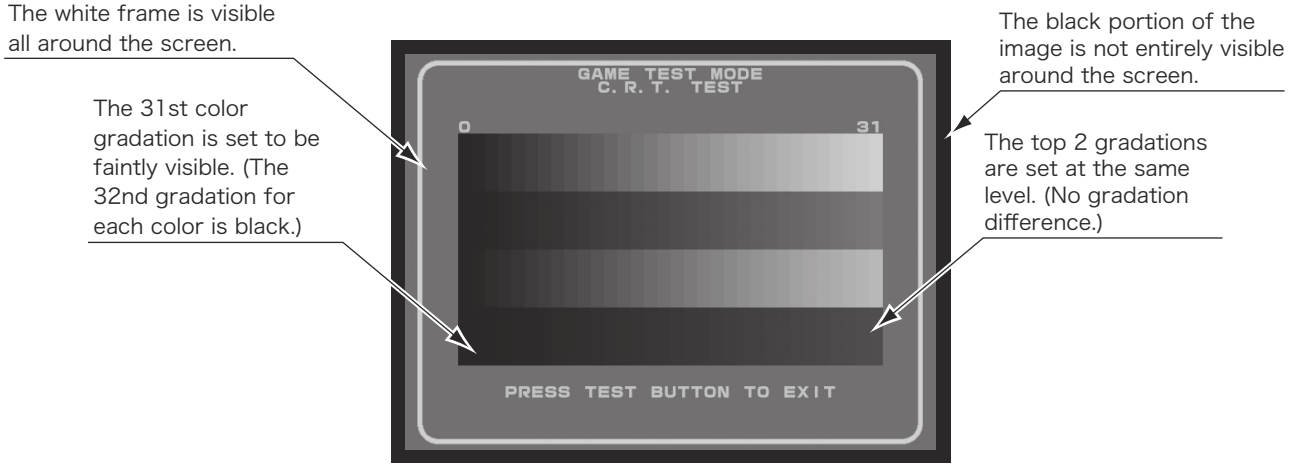



PHOTO 16.3

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.

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.

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.

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

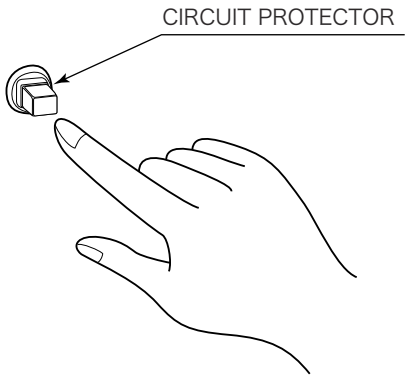


FIG. 18

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.)

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.

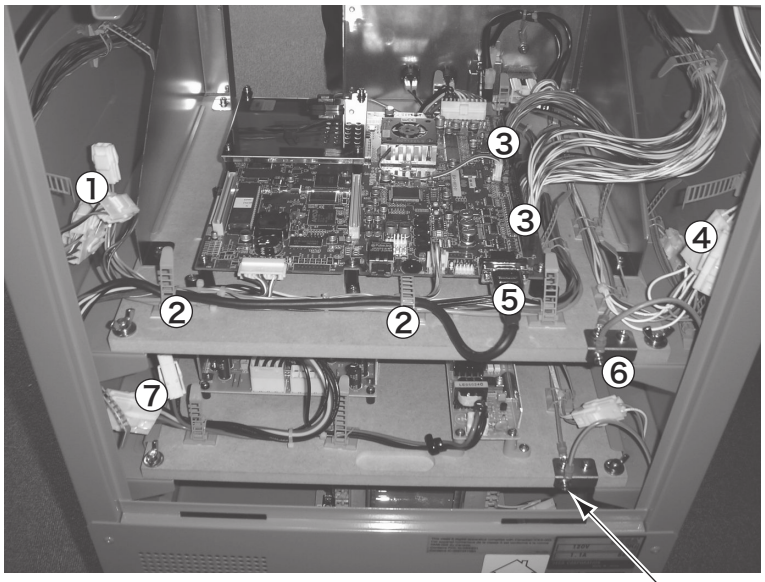


PHOTO 19.1a

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

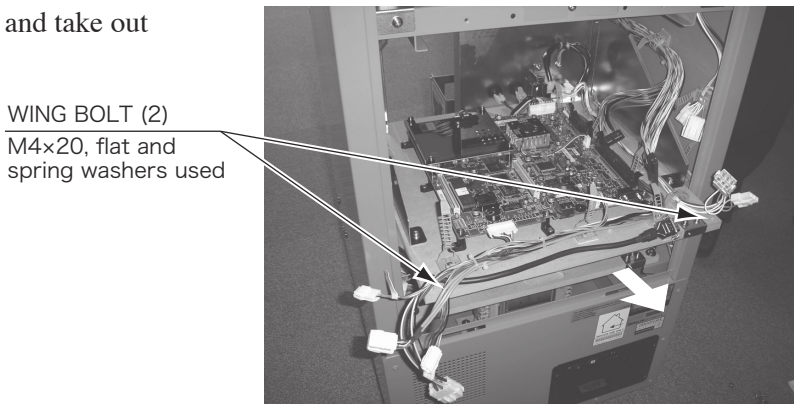


PHOTO 19.1b

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

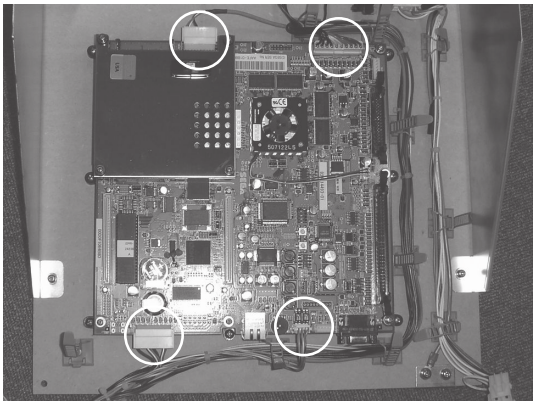


PHOTO 19.1c

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

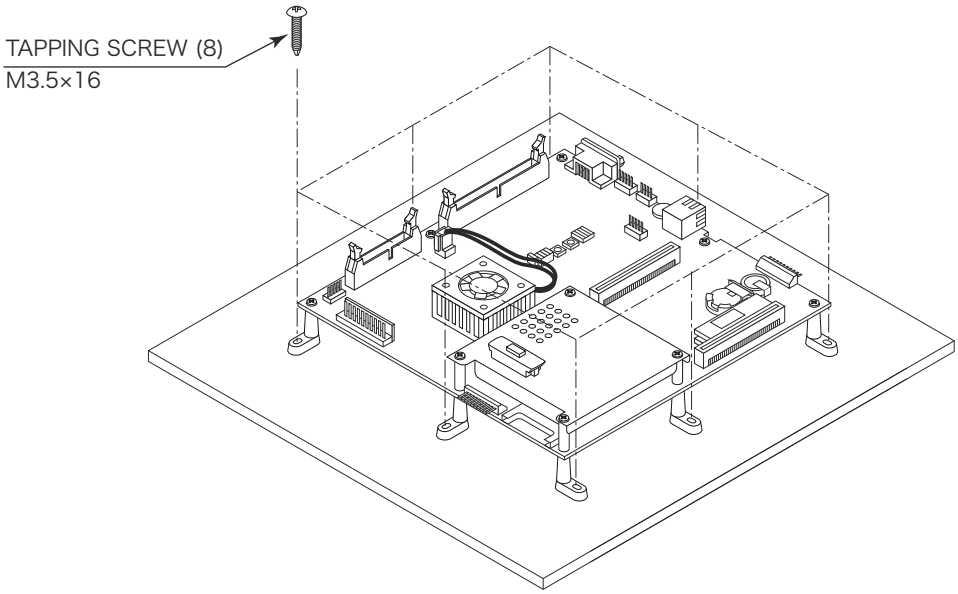


FIG. 19.1

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.

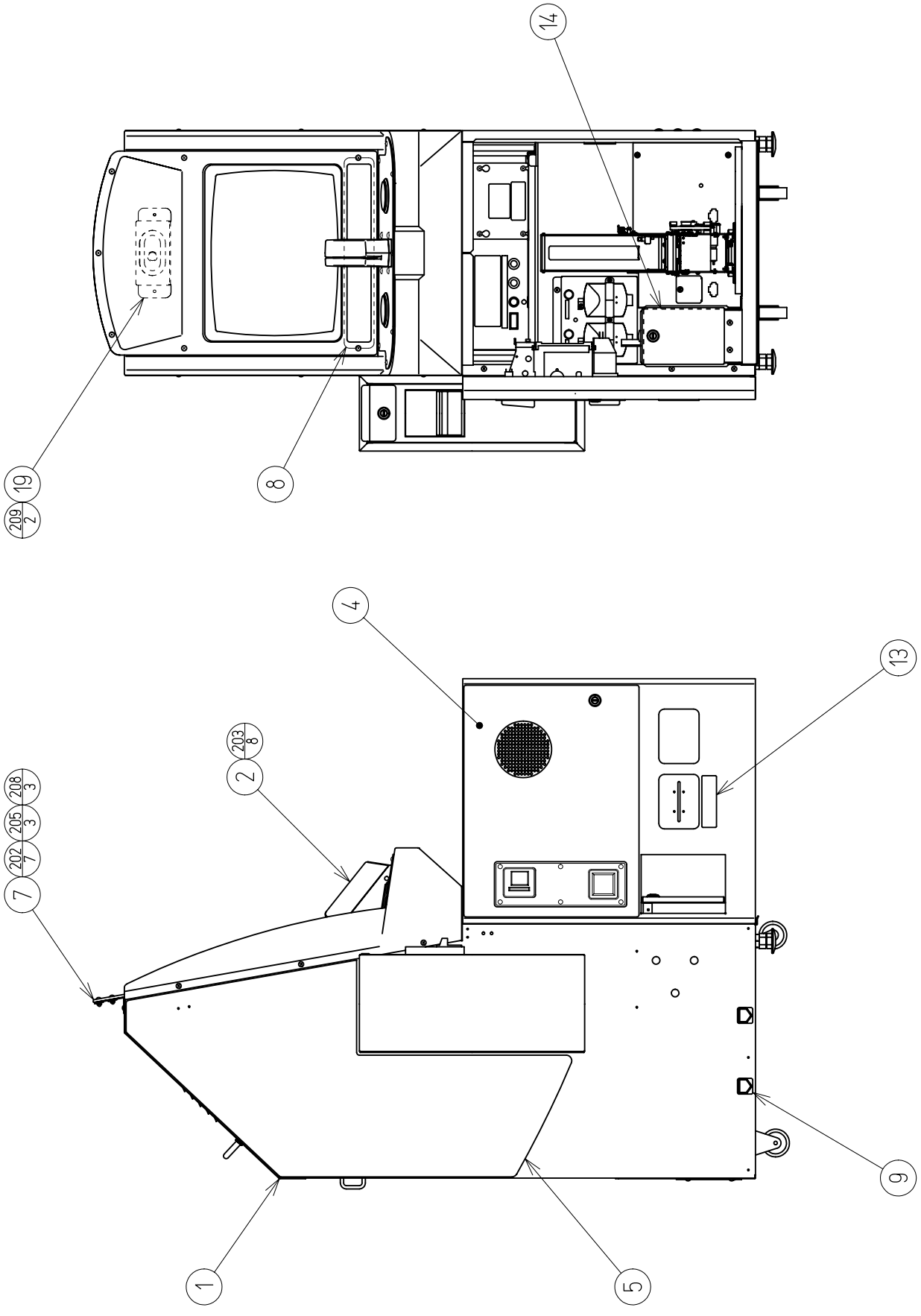


PHOTO 20

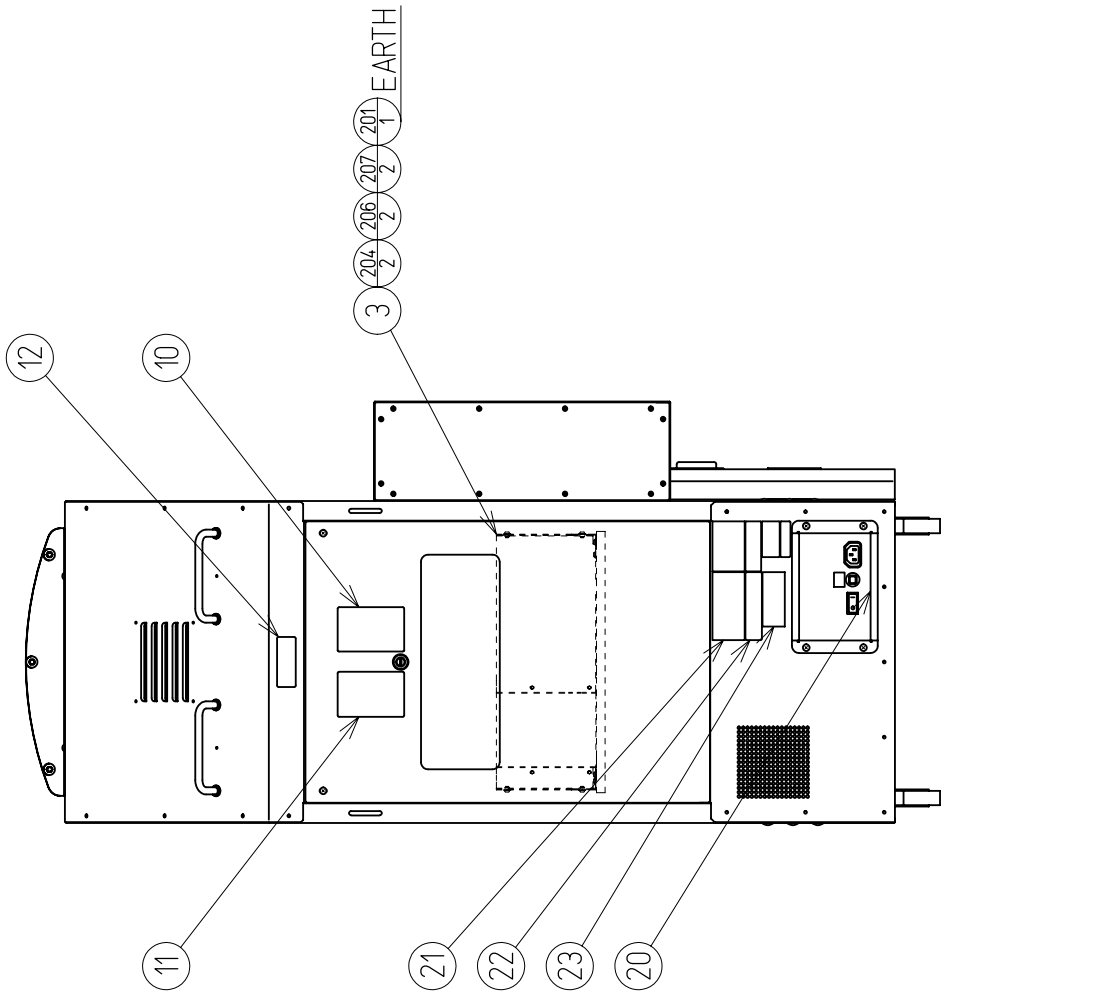
21. PARTS LIST

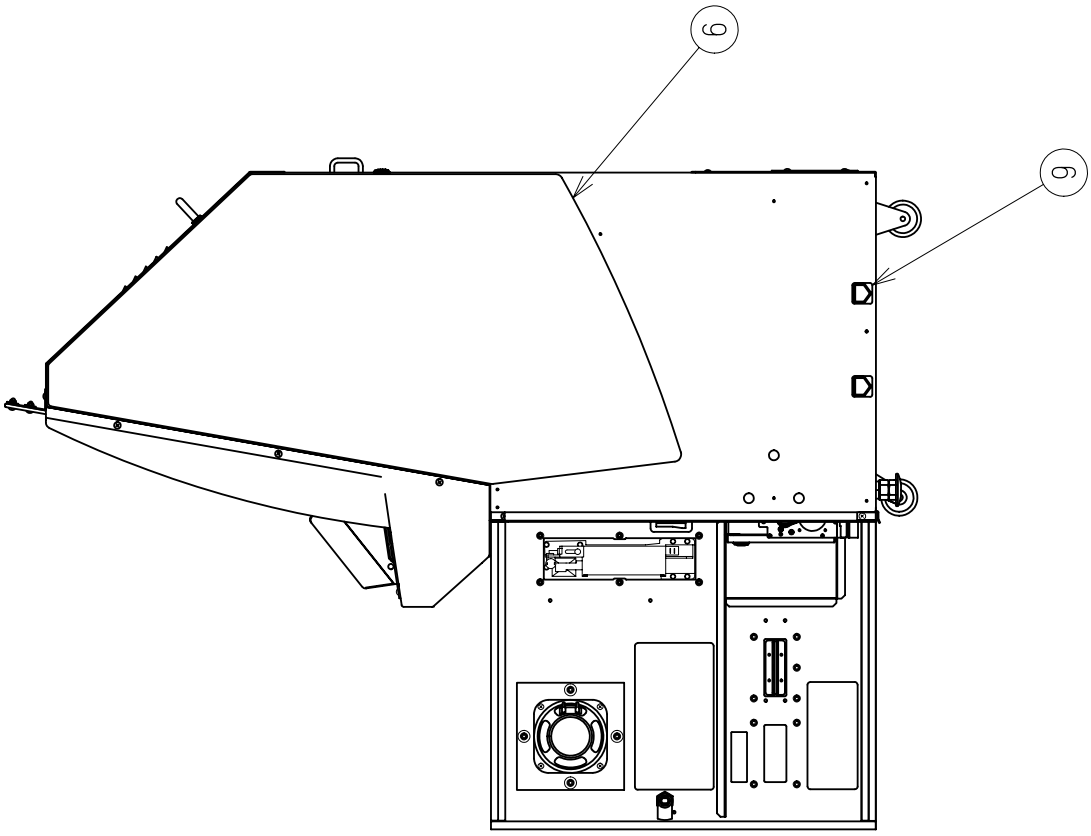
- ① TOP ASSY SPC OSM USA SPC-00004
  - ② ASSY CABINET SPC-10001
    - ③ ASSY CARD DISPENSER SPC-0500-01
      - ④ ASSY SLIDER OSM-0550
    - ⑤ ASSY BACK LID SPC-0800
    - ⑥ ASSY CABINET BLANK SPC-1100-01
    - ⑦ ASSY DOOR SPC-1200-01
      - ⑧ ASSY WH DOOR DKT-6005
    - ⑨ ASSY COUNTER DKT-1300-01
    - 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
    - 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
  - ⑳ ASSY CTRL PANEL OSM SPC-20001
  - ㉑ ASSY MAIN BD BASE OSM USA SPC-40003
  - ㉒ ASSY TOP SPEAKER SPC-0600

① TOP ASSY SPC OSM USA (SPC-00004) (D-1/4)

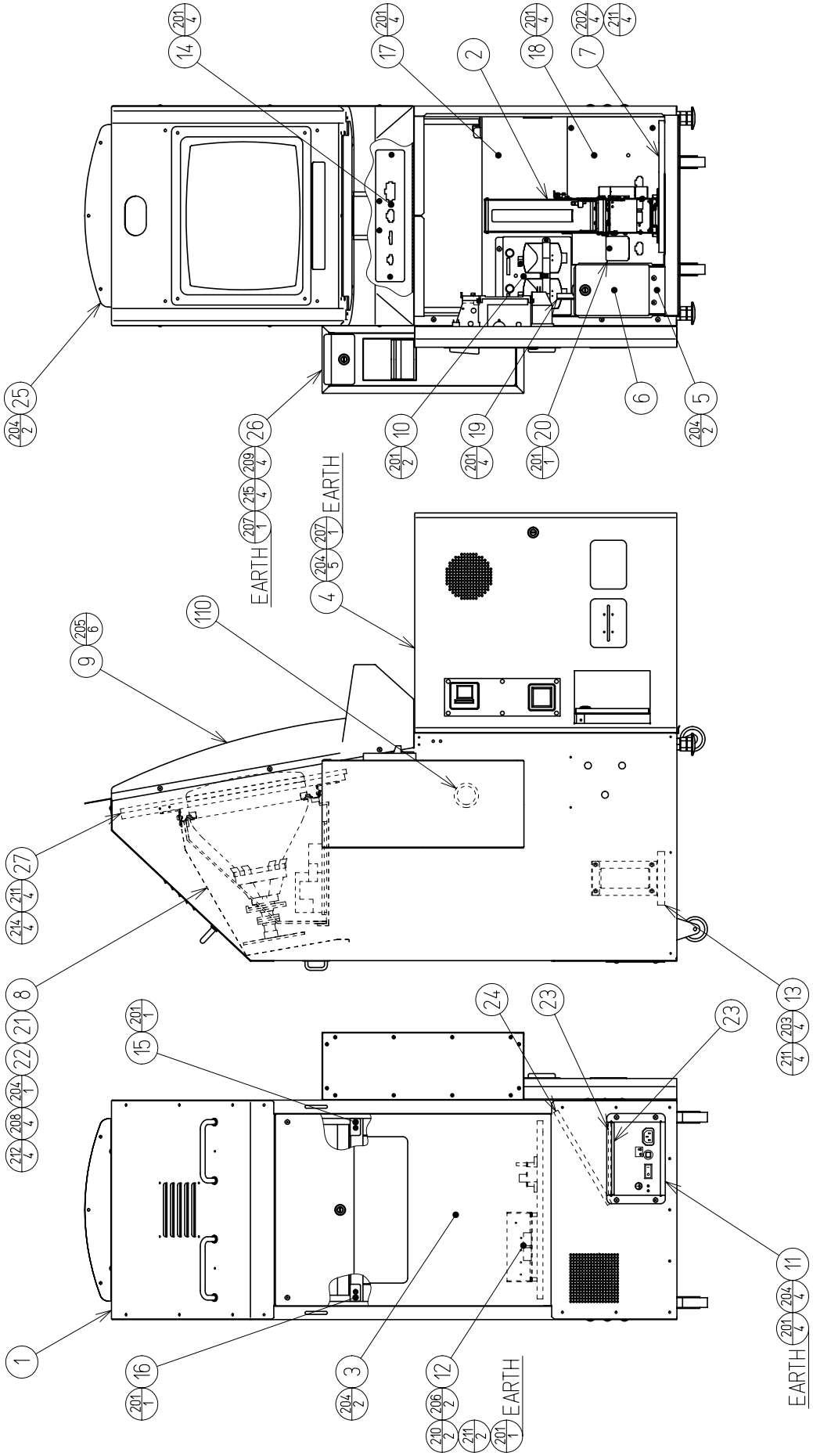


① TOP ASSY SPC OSM USA (SPC-00004) (D-2/4)

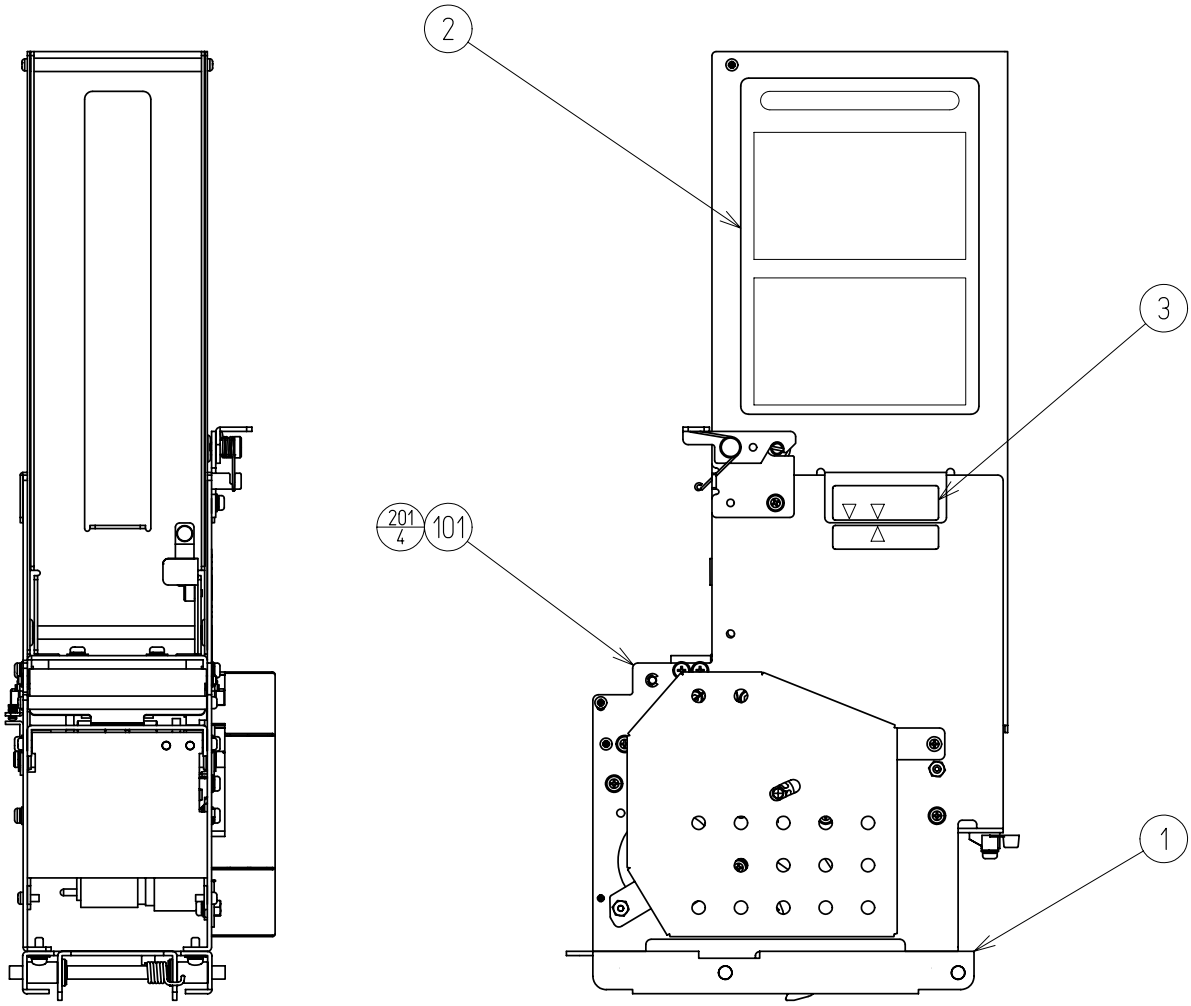




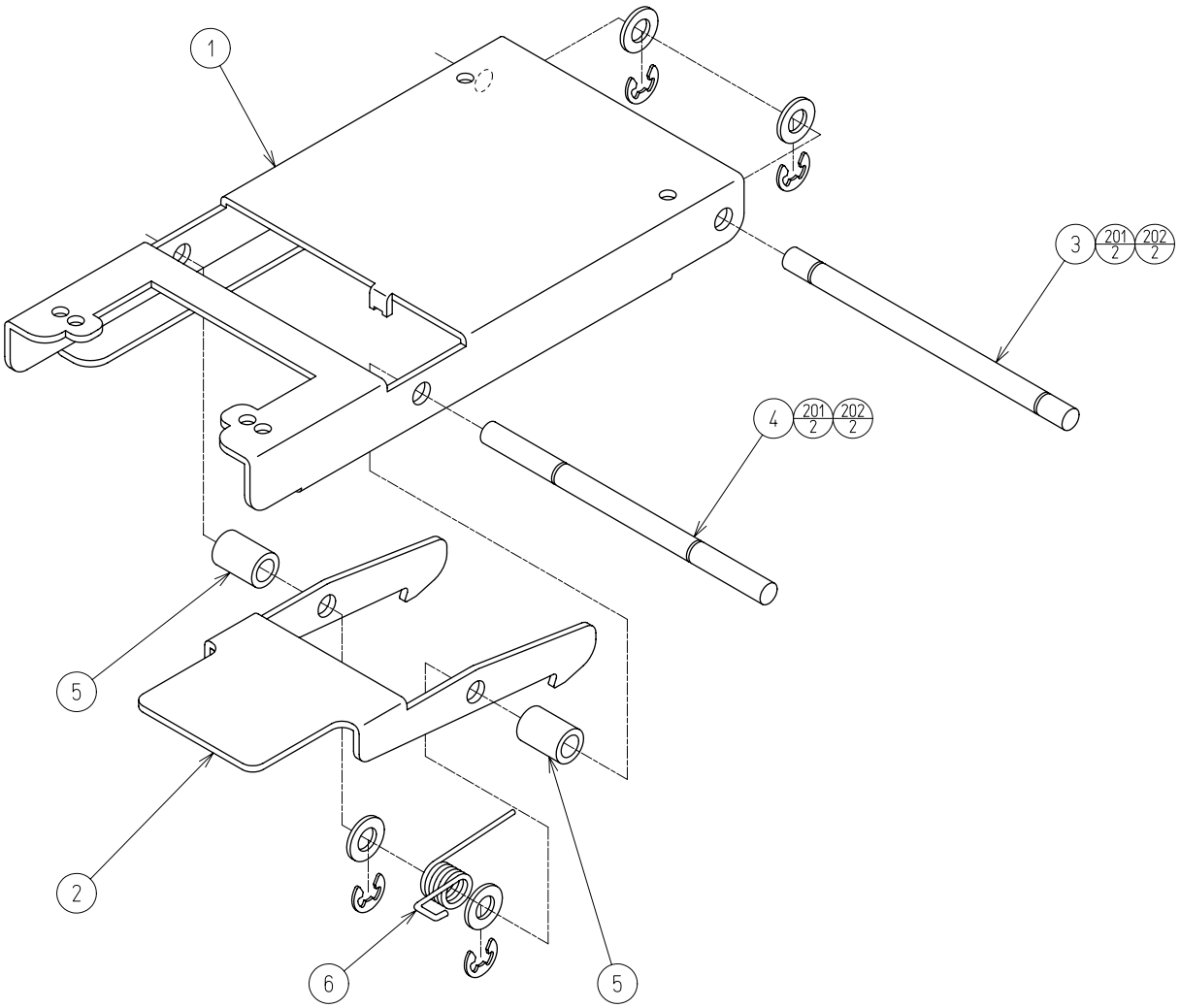
② ASSY CABINET (SPC-10001) (D-1/2)



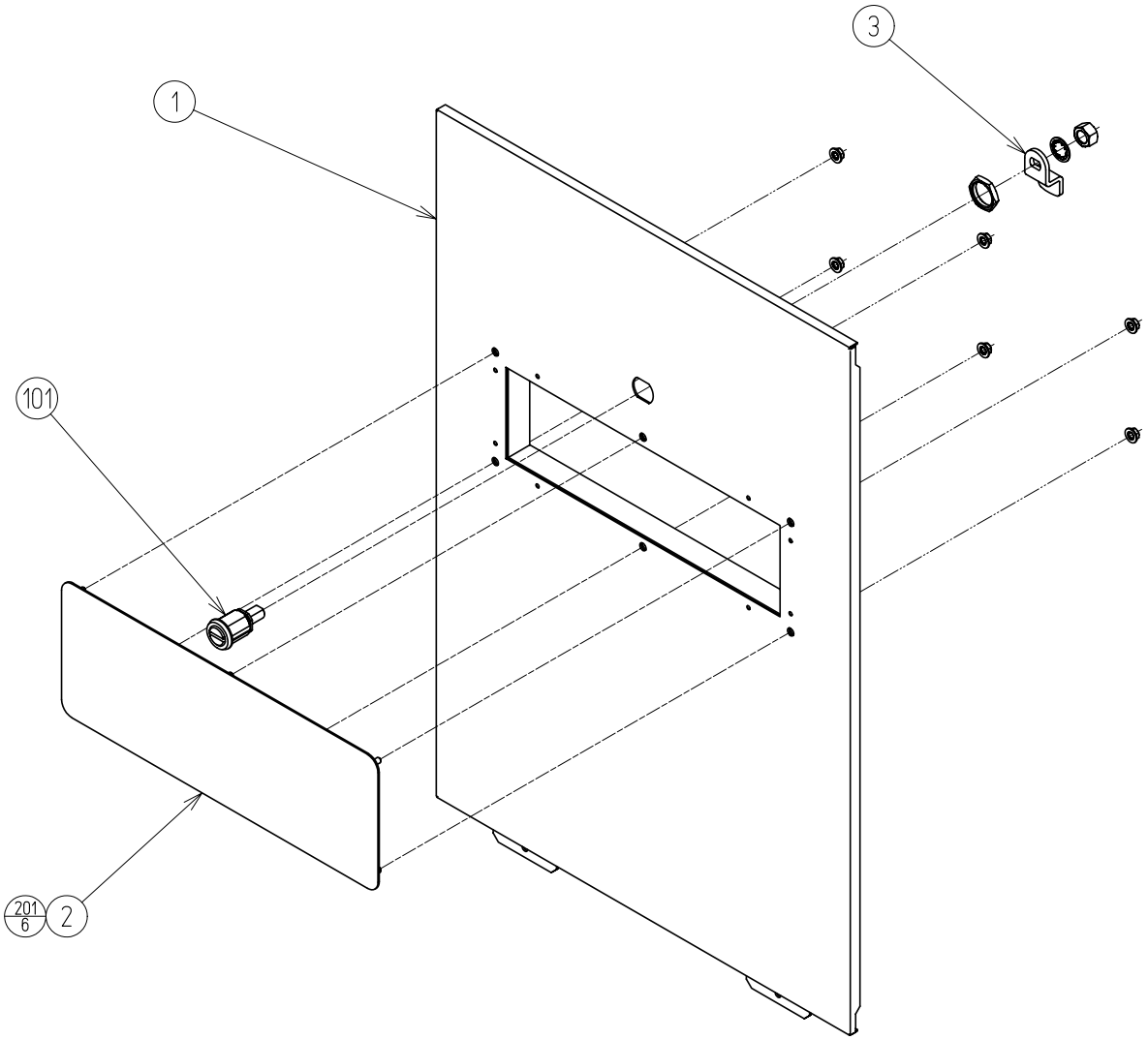
③ ASSY CARD DISPENSER (SPC-0500-01)



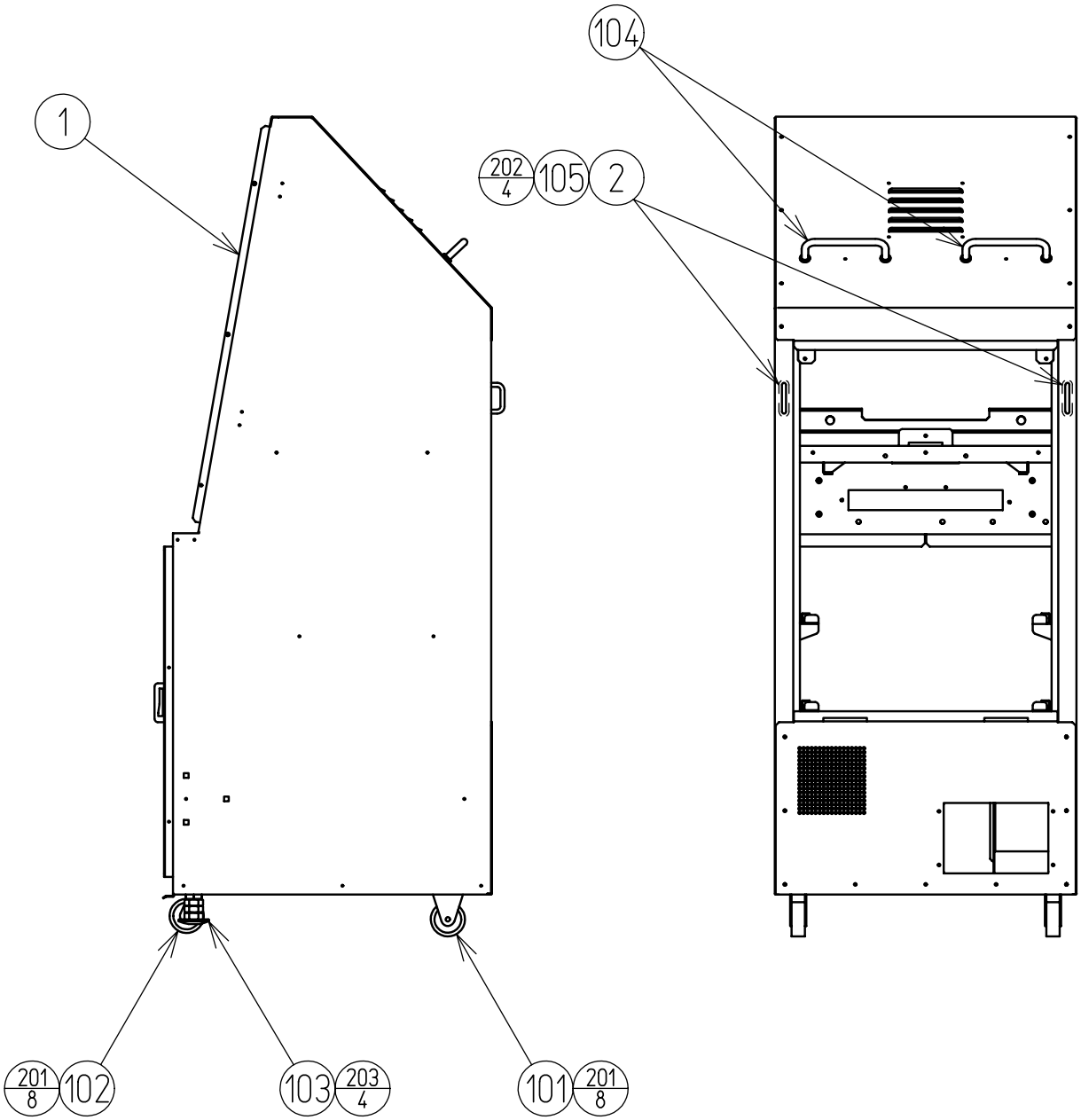
④ ASSY SLIDER (OSM-0550)



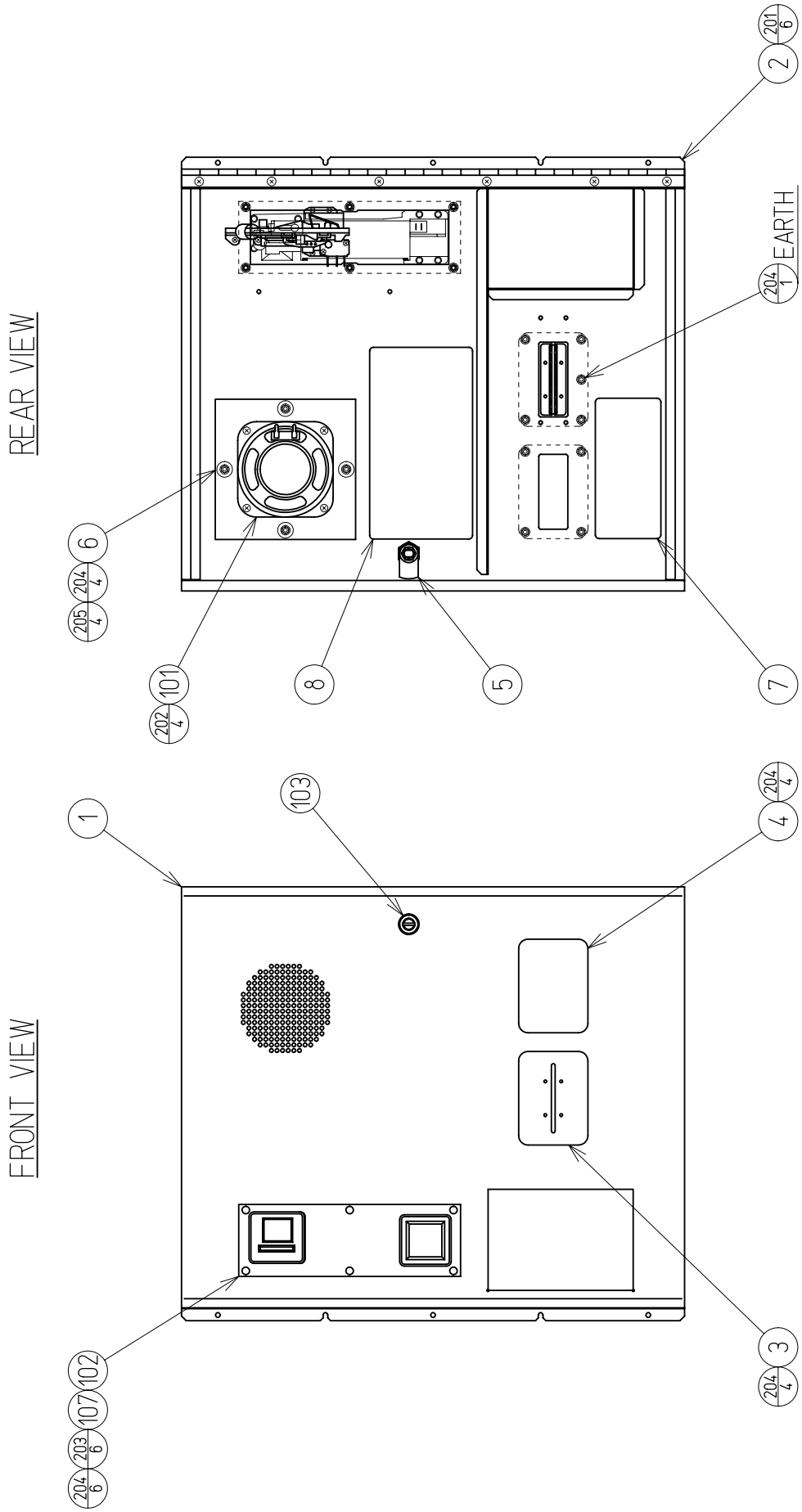
⑤ ASSY BACK LID (SPC-0800)



⑥ ASSY CABINET BLANK (SPC-1100-01)

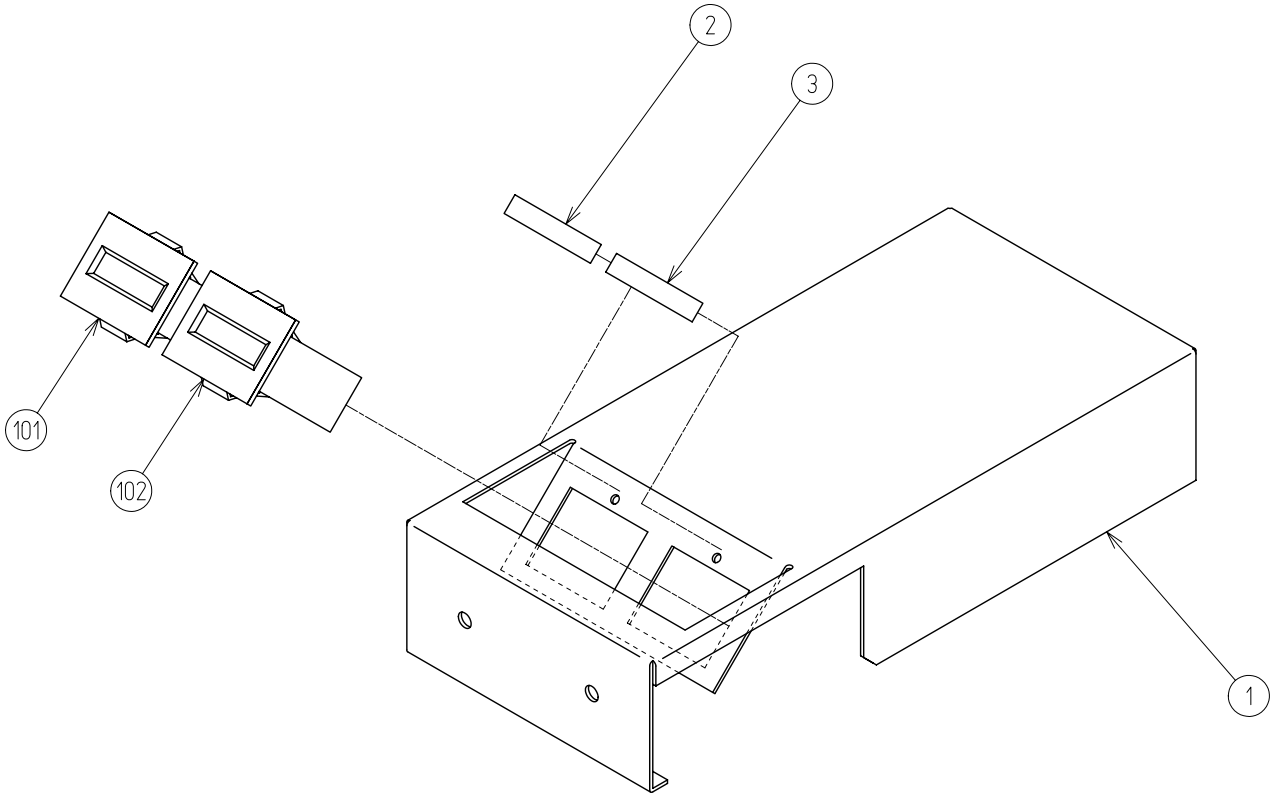


⑦ ASSY DOOR (SPC-1200-01) (D-1/2)

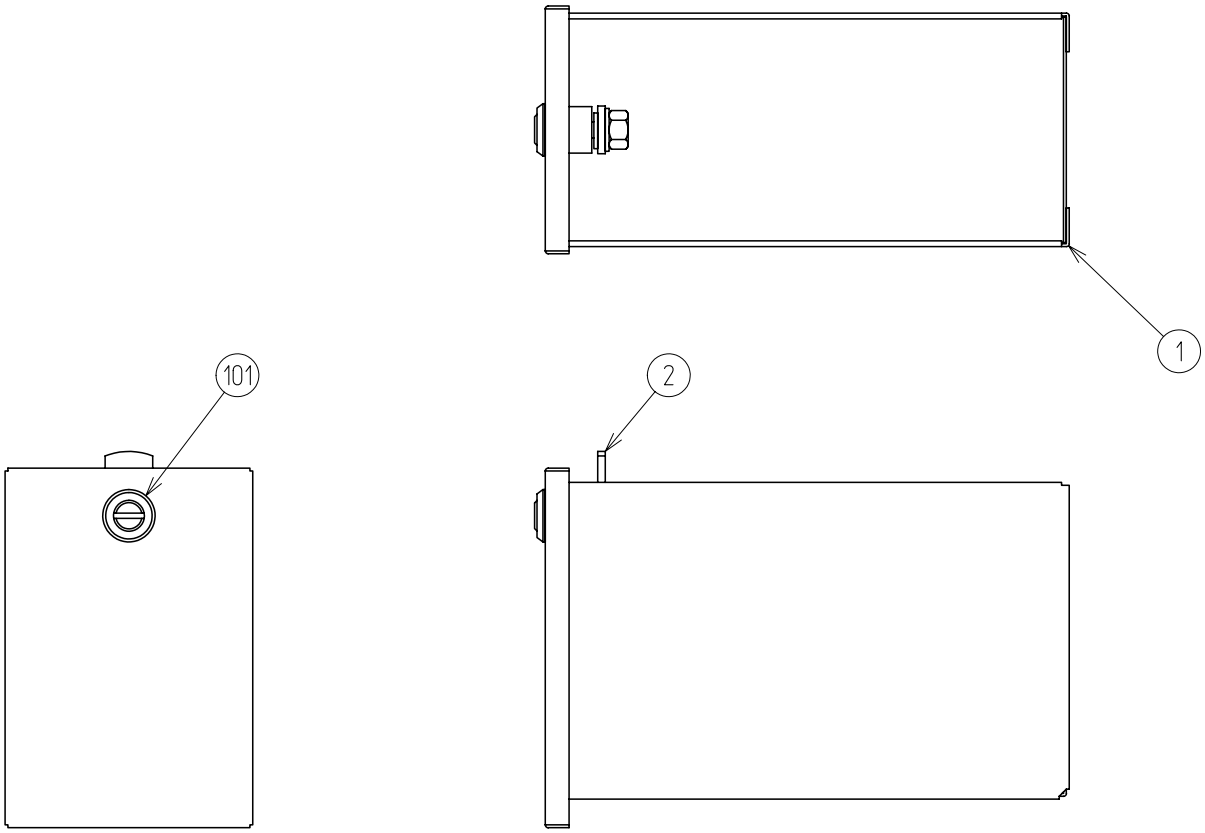


⑧ ASSY WH DOOR (DKT-6005)

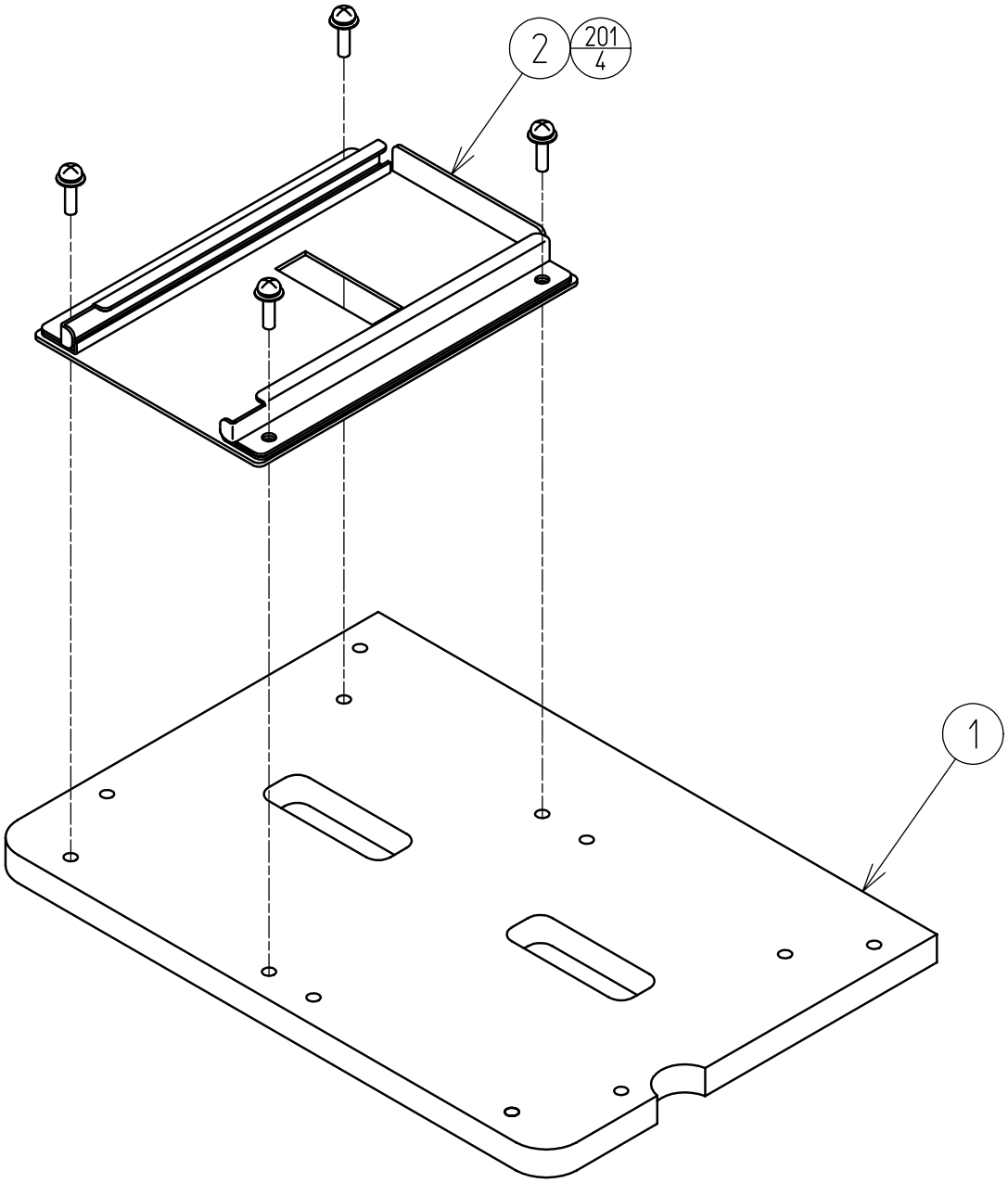
⑨ ASSY COUNTER (DKT-1300-01)



⑩ ASSY CASH BOX (SPC-1400)

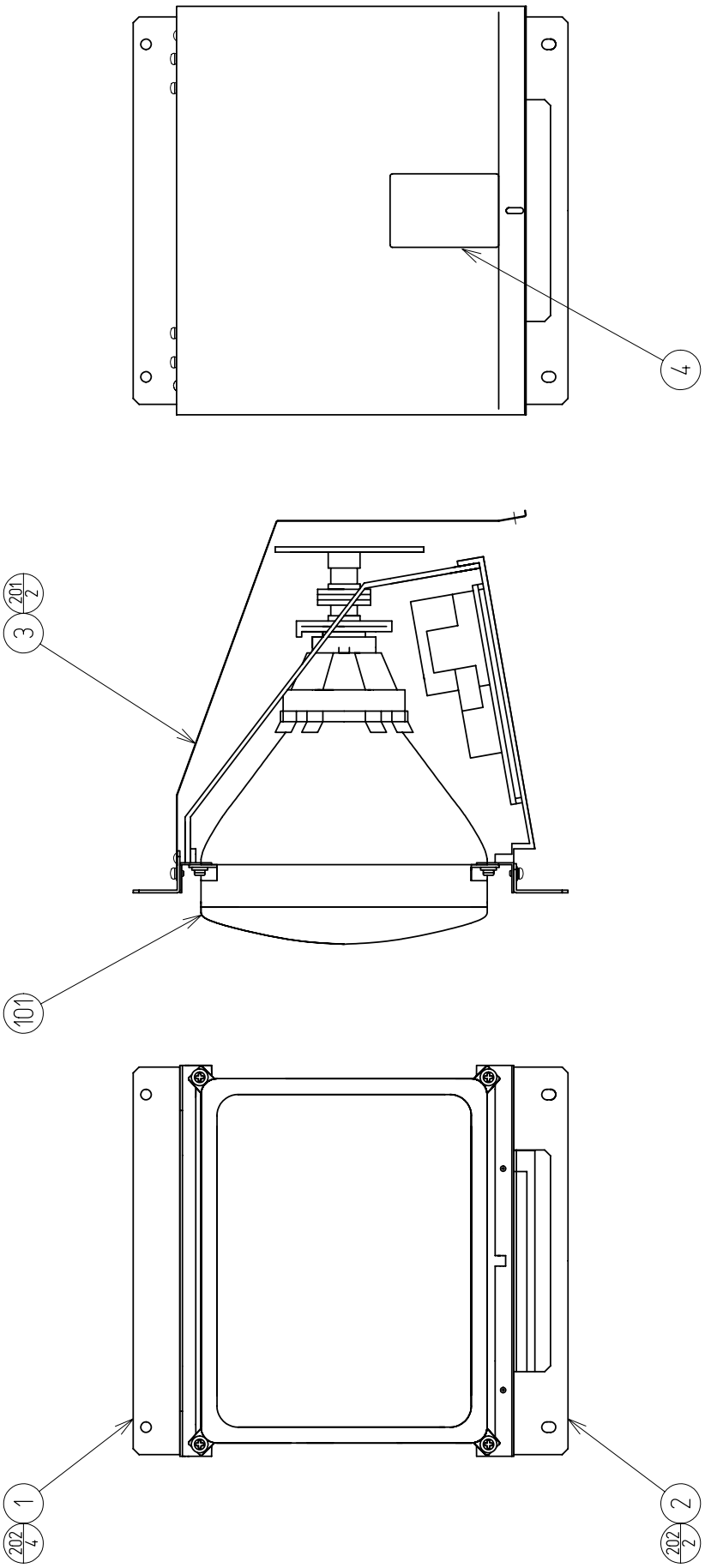


⑪ ASSY SLIDE BASE (DKT-1500)

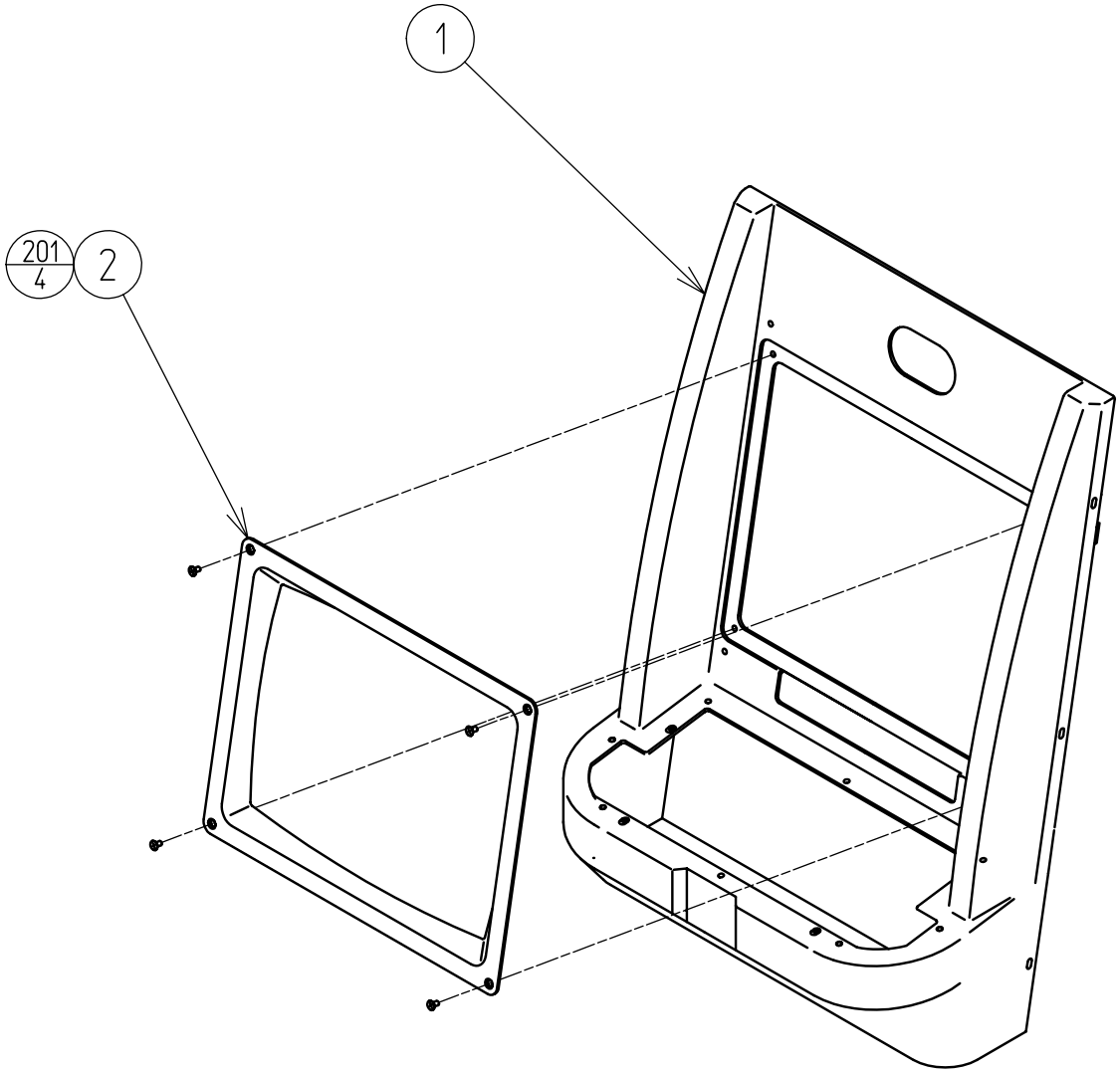


⑫ ASSY MONITOR (SPC-1600)

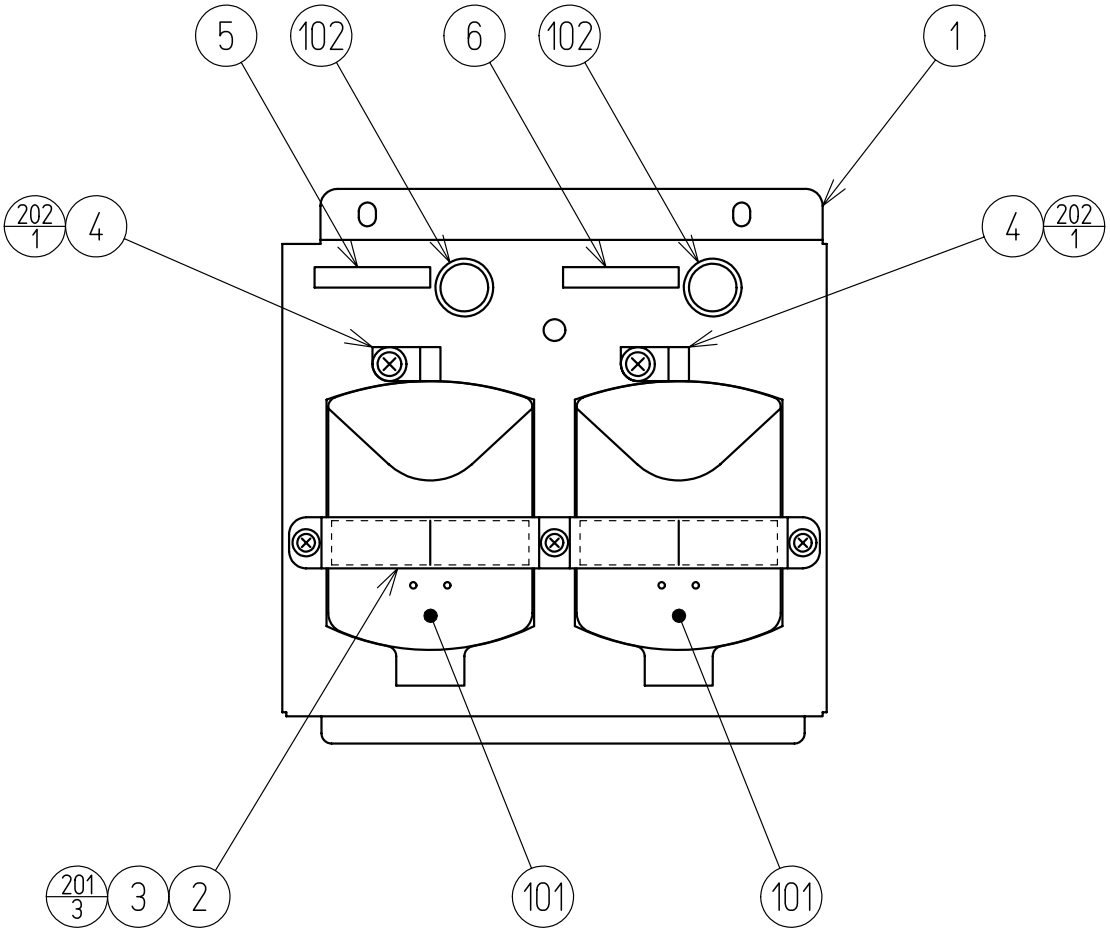
(D-1/2)



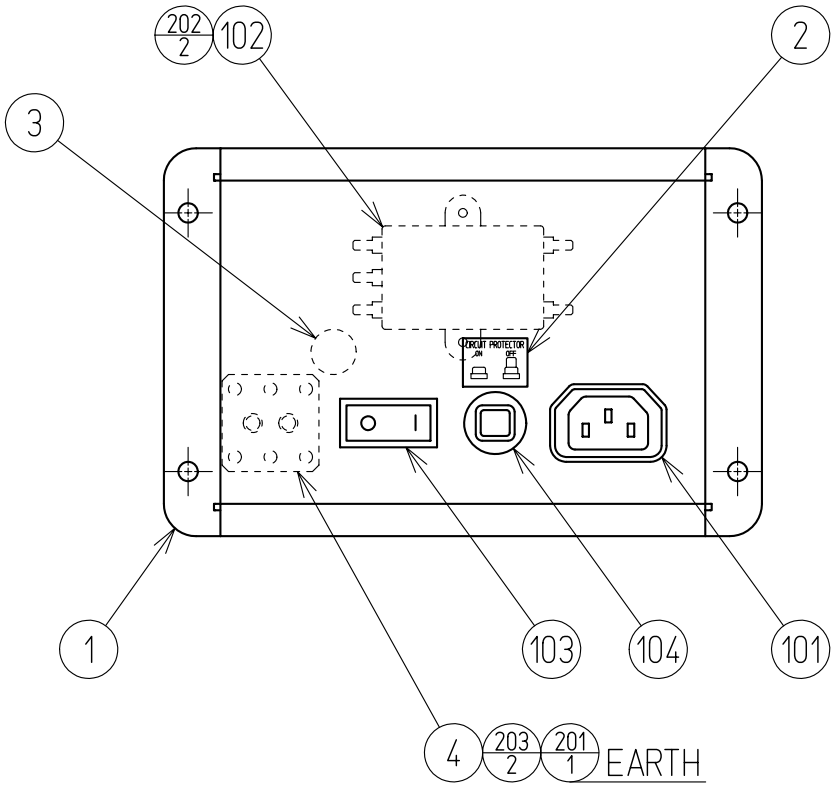
⑬ ASSY FRONT MASK (SPC-1700)



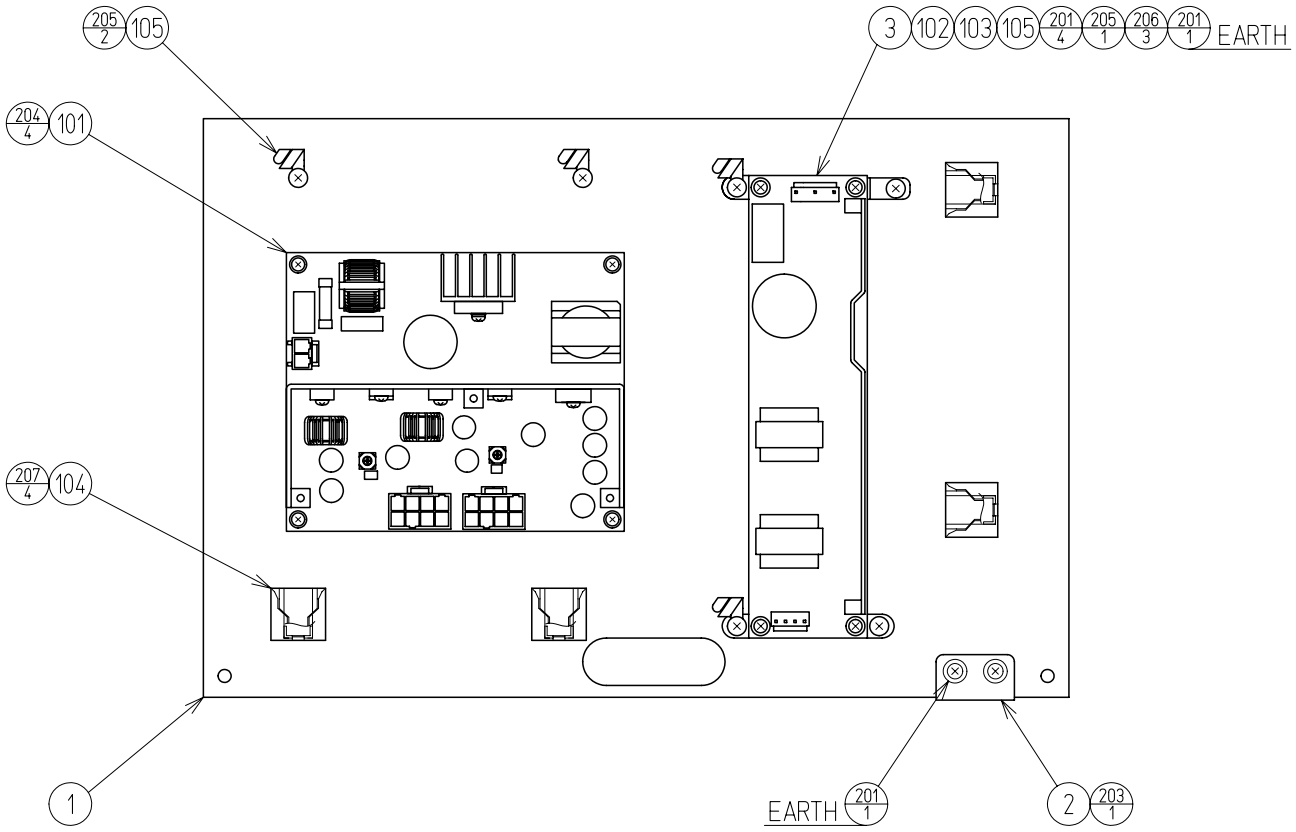
⑭ ASSY RFID CHIP R/W (SPC-1800)



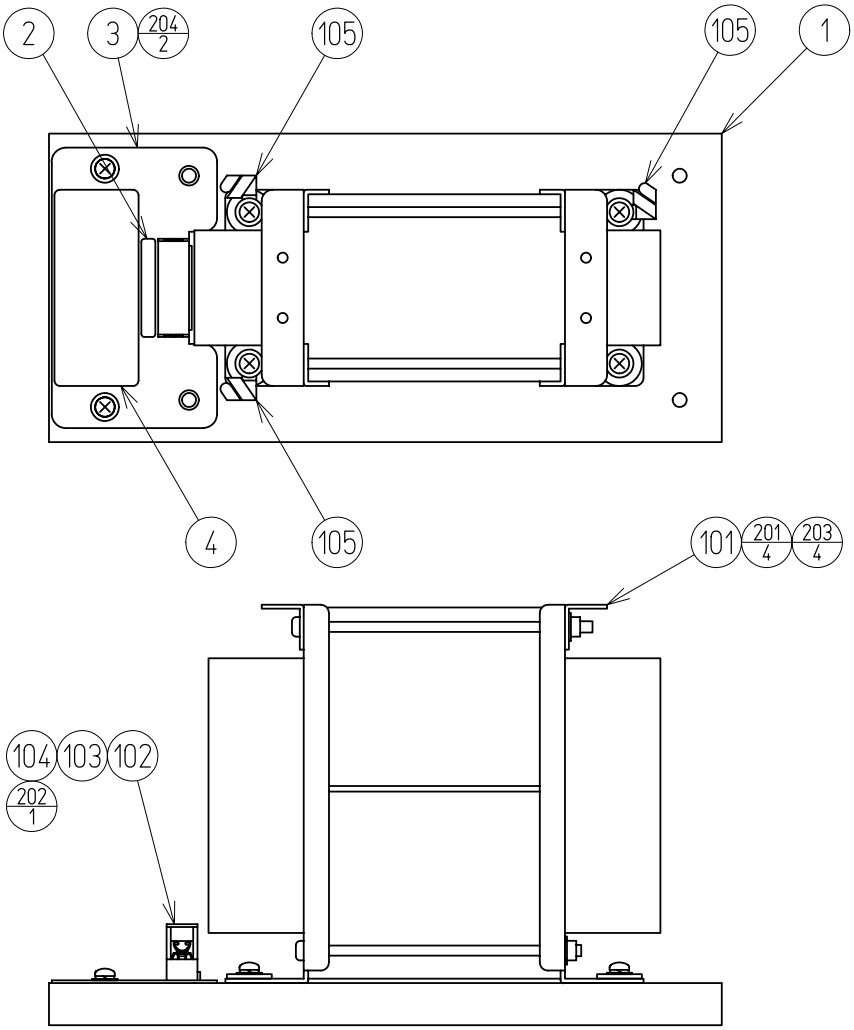
⑮ AC UNIT (SPC-4100)



⑯ ASSY ELEC BASE (DKT-4200-01)



⑰ ASSY XFMR (DKT-4400-01)



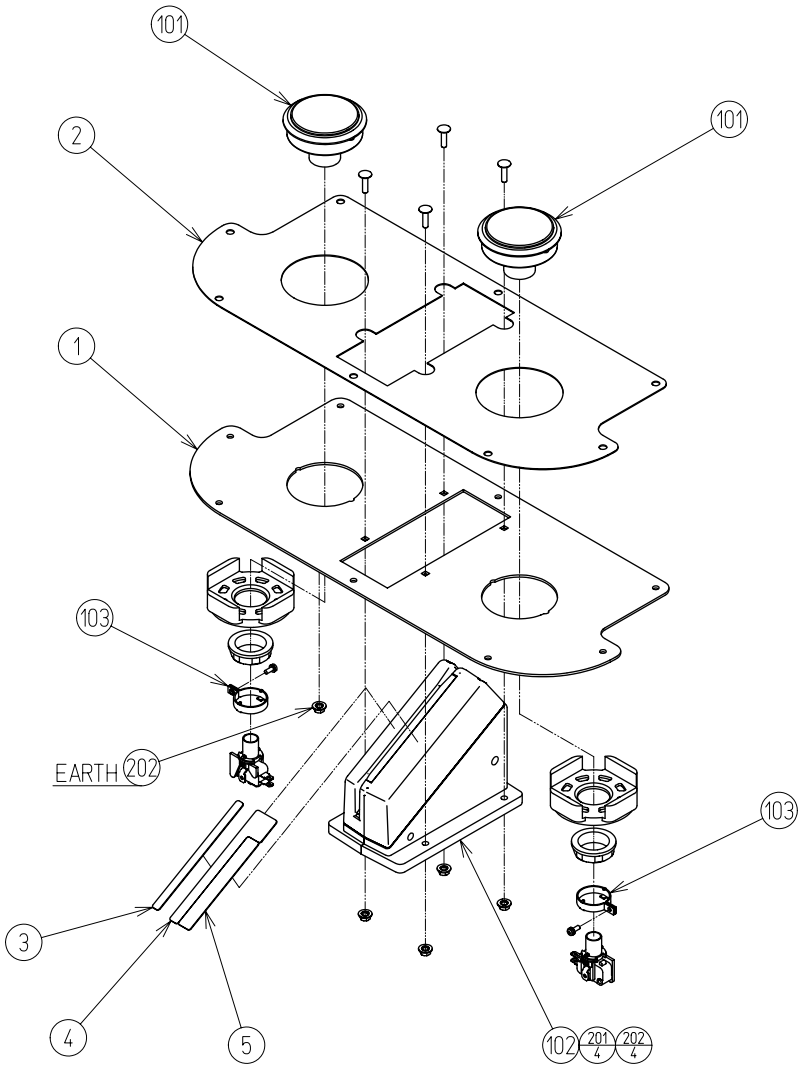
⑱ ASSY WH CABINET AC (DKT-6001)

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

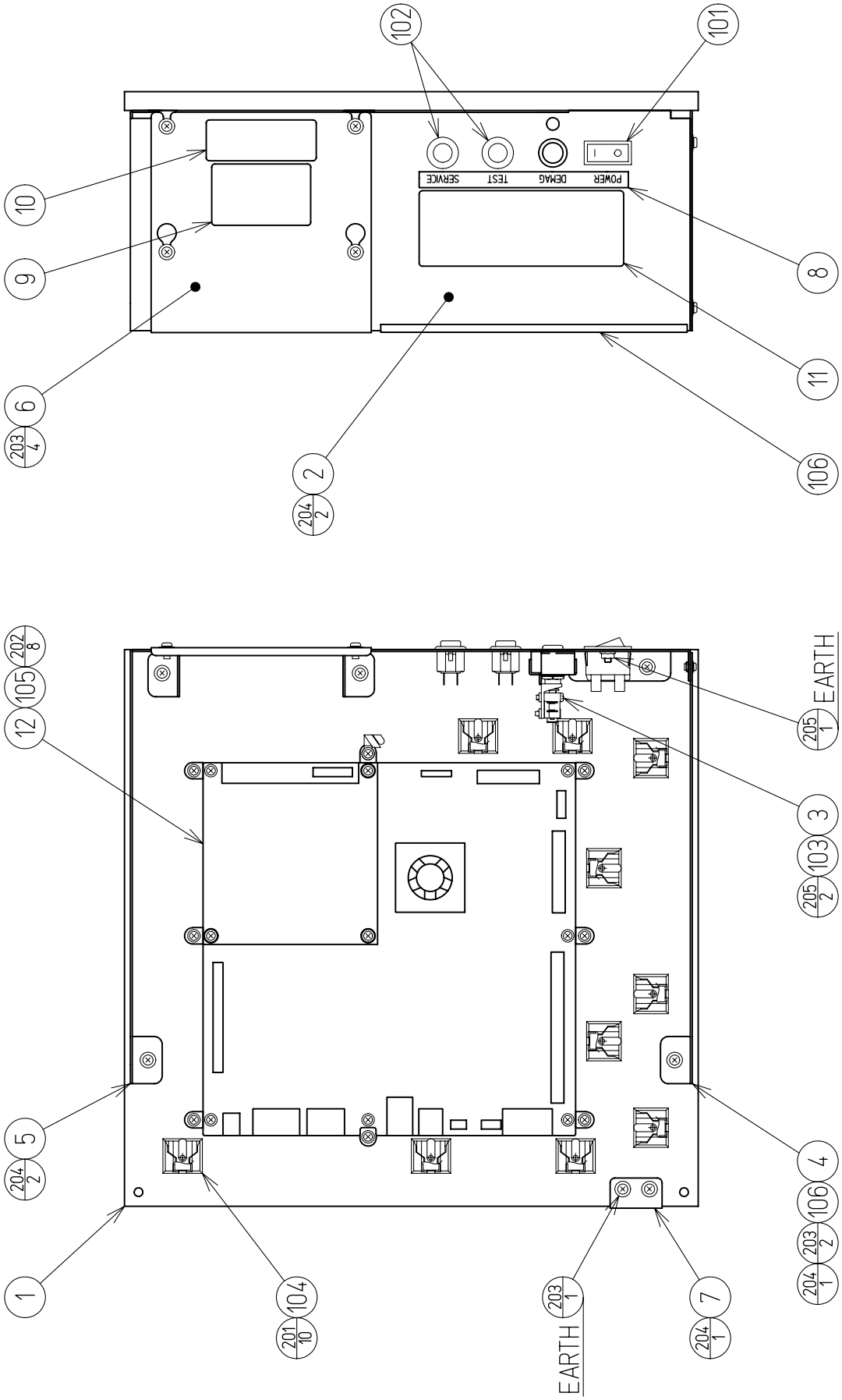
⑲ ASSY WH CABINET DC (DKT-6002)

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

⑳ ASSY CTRL PANEL OSM (SPC-20001)

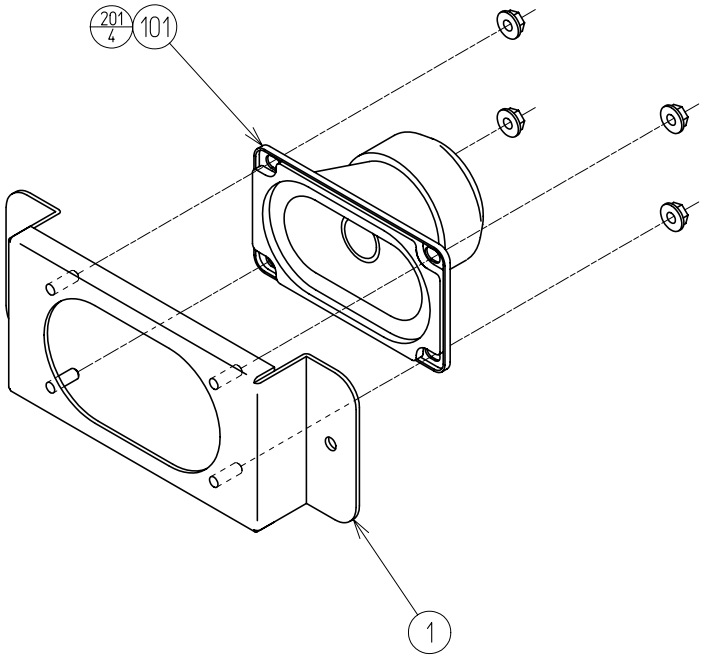


㉑ ASSY MAIN BD BASE OSM USA (SPC-40003) (D-1/2)

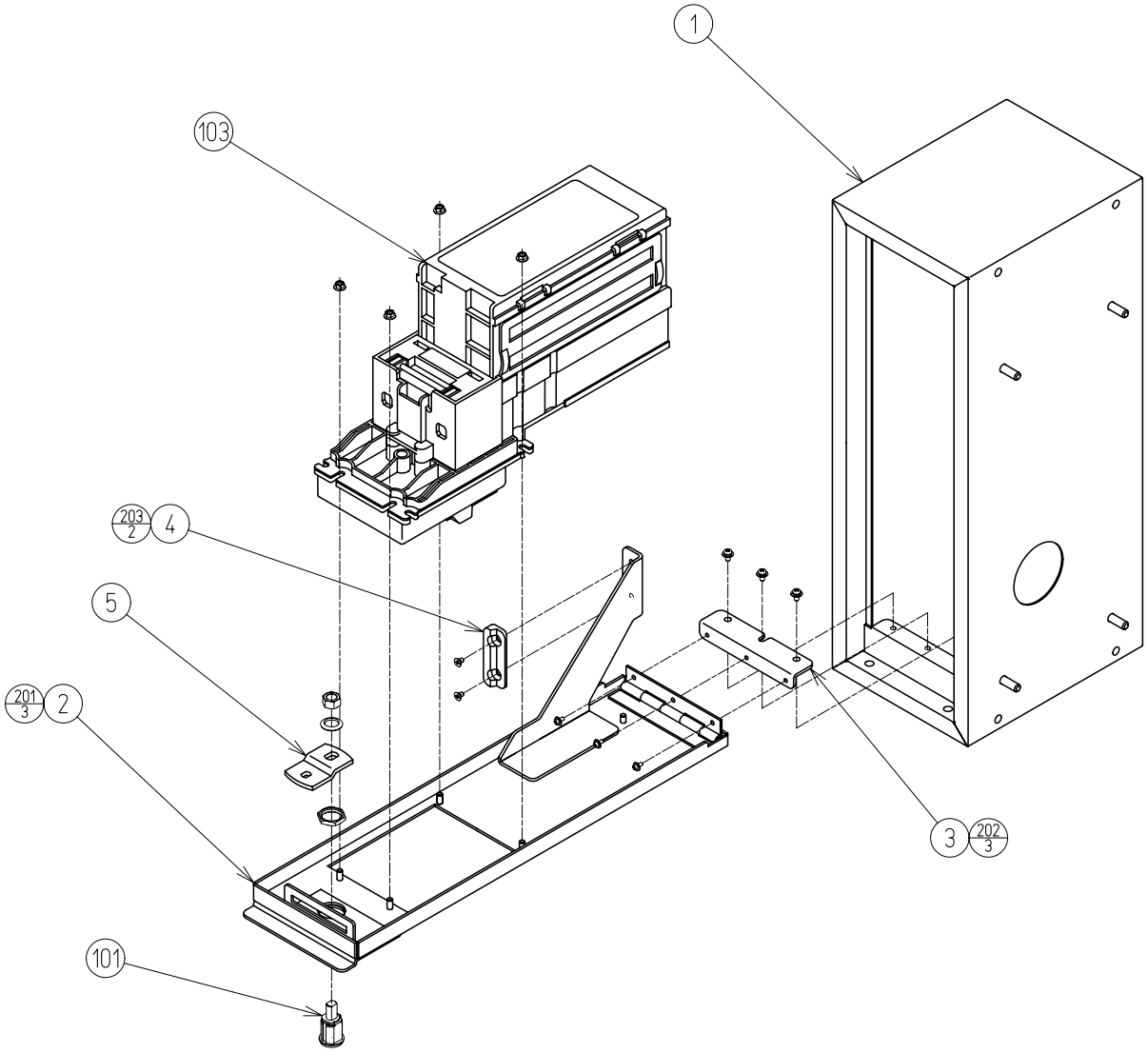


㉑ ASSY MAIN BD BASE OSM USA (SPC-40003) (D-2/2)

㉒ ASSY TOP SPEAKER (SPC-0600)



㉓ ASSY BILL VALIDATOR BOX (SPC-1900)



22. WIRE COLOR CODE TABLE

THE WIRE COLOR CODE is as follow:

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

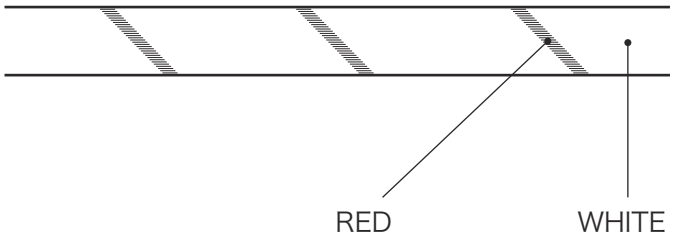
Wires other than those of any of the above 5 single colors will be displayed by 2 alphanumeric characters.

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).

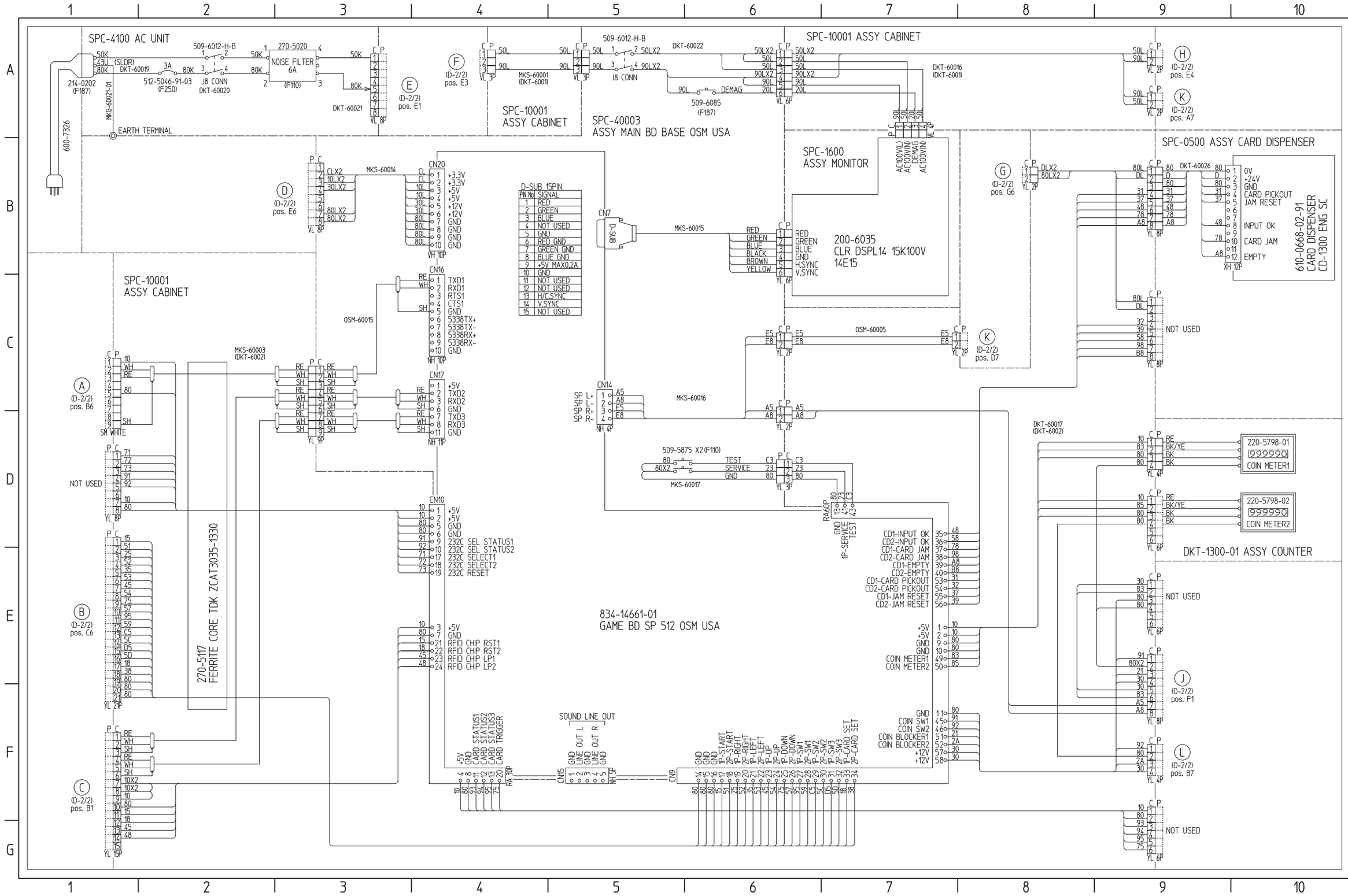
Note 1: If the right-hand side numeral is not 0, that particular wire has a spiral color code. The left-hand side character shows the base color and the right-hand side one, the spiral color.

<Example> 51……WHITE/RED

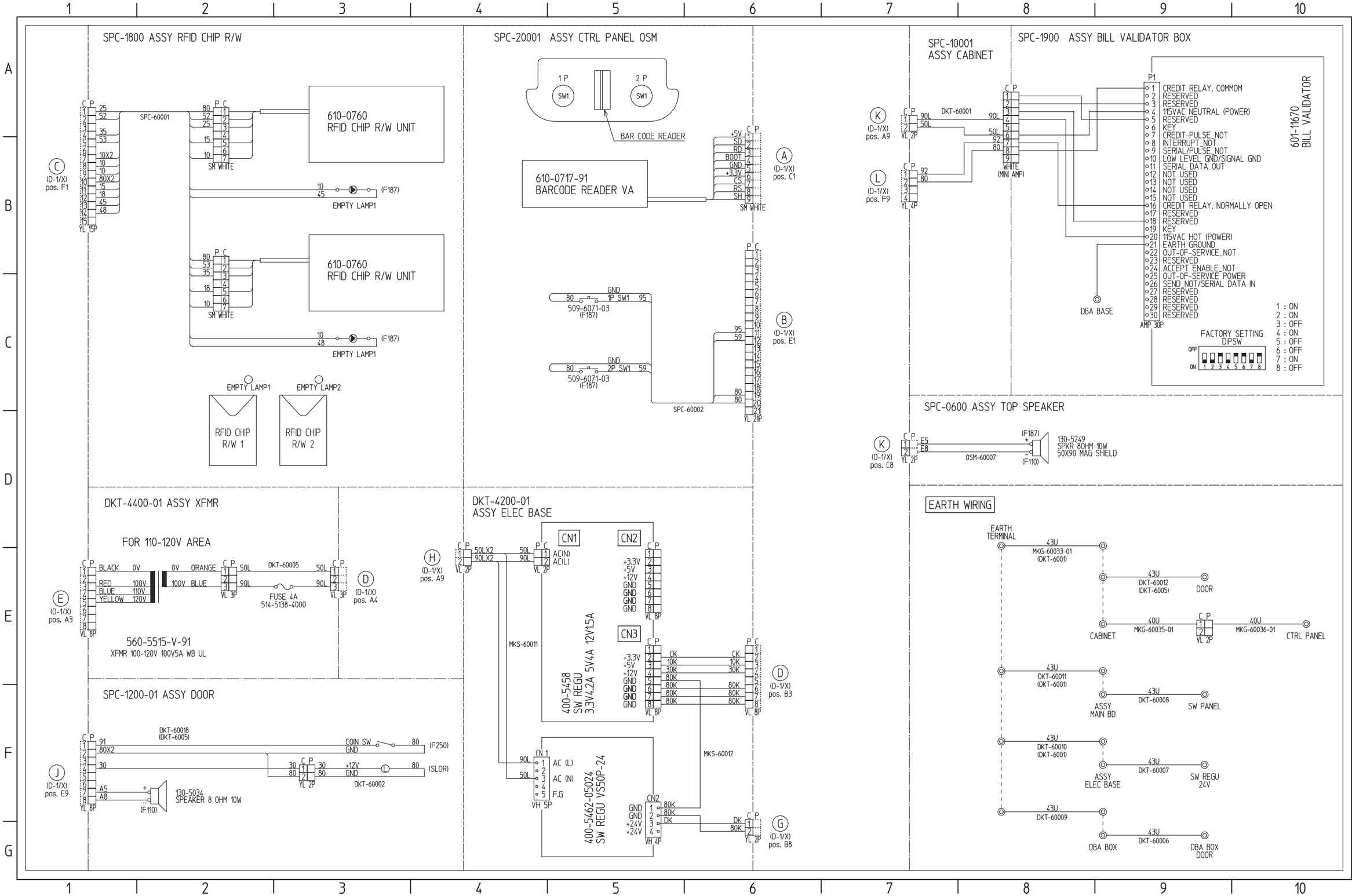


Note 2: The character following the wire color code indicates the size of the wire.

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



23. WIRING DIAGRAM (D-1/2)



23. WIRING DIAGRAM (D-2/2)