

SEGA™

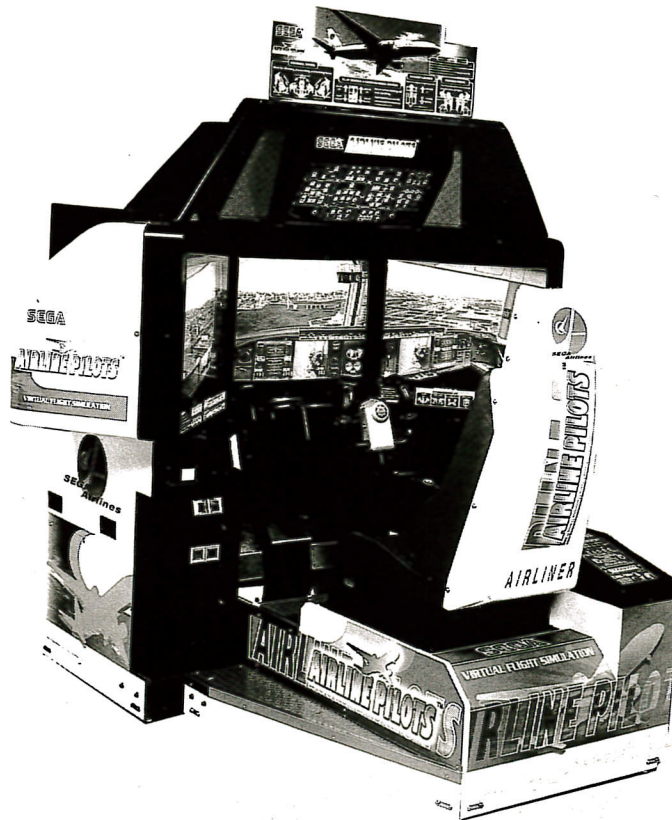
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AIRLINE PILOTS™

DX TYPE

OWNER'S MANUAL



- Before using this product, read this OWNER'S MANUAL carefully to understand the contents herein stated.
- After reading this manual, be sure to keep it available nearby the product or elsewhere convenient for referring to it anytime when necessary.

SEGA ENTERPRISES, LTD.

MANUAL NO. 420 - 6471 - 01

98384

BEFORE USING THE PRODUCT, BE SURE TO READ THE FOLLOWING:

To maintain the safety:

To ensure the safe usage of the product, be sure to read the following before using the product. The following instructions are intended for the users, operators and the personnel in charge of the operation of the product. After carefully reading and sufficiently understanding the warning displays and cautions, handle the product appropriately. Be sure to keep this manual nearby the product or elsewhere convenient for referring to it when necessary.

Herein, explanations which require special attention are enclosed with dual lines. Depending on the potentially hazardous degrees, the terms of DANGER!, WARNING!, CAUTION!, etc. are used. Be sure to understand the contents of the displays before reading the text.



DANGER!

Indicates that mishandling the product by disregarding this pictograph will cause severe injury or death.



CAUTION!

Indicates that mishandling the product by disregarding this caution will cause a slight hazardous situation which can result in personal injury and or material damage.



WARNING!

Indicates that mishandling the product by disregarding this warning will cause a potentially hazardous situation which can result in death or serious injury.



IMPORTANT!

Indicates that mishandling the product by disregarding this display can cause the product's intrinsic performance not to be obtained, resulting in malfunctioning.

For the safe usage of the product, the following pictographs are used:



Indicates "HANDLE WITH CARE." In order to protect the human body and equipment, this display is attached to places where the Owner's Manual and or Service Manual should be referred to.



Indicates a "Protective Earth Terminal." Before operating the equipment, be sure to connect it to the Ground.

- **Perform work in accordance with the instructions herein stated.**
Instructions for work are explained by paying attention to the aspect of accident prevention. Failing to perform work as per the instructions can cause accidents. In the case where only those who have technical expertise should perform the work to avoid hazardous situation, the instructions herein state that the serviceman should perform such work.
- **Be sure to turn off power before working on the machine.**
To prevent electric shock, be sure to turn off power before starting the work in which the worker touches the interior of the product. If the work is to be performed in the power-on status, the Instruction Manual herein always states to that effect.
- **Be sure to ground the Earth Terminal** (this, however, is not required in the case where a power cord with earth is used).
This product is equipped with the Earth Terminal. When installing the product, Connect the Earth Terminal to the "accurately grounded indoor earth terminal" by using an earth wire. Unless the product is grounded appropriately, the user can be subject to electric shock. After performing repair, etc. for the Control equipment, ensure that the Earth Wire is firmly connected to the Control equipment.
- **Ensure that the Power Supply used is equipped with an Earth Leakage Breaker.**
This product does not incorporate the Earth Leakage Breaker. Using a power supply which is not equipped with the Earth Leakage Breaker can cause a fire when earth leakage occurs.
- **Be sure to use fuses which meet the specified rating.** (only for the machines which use fuses).
Using fuses exceeding the specified rating can cause a fire and electric shock.

○ **Specification changes (removal of equipment, conversion and addition) not designated by SEGA are not allowed.**

The parts of the product include warning labels for safety, covers for personal protection, etc. It is very hazardous to operate the product by removing parts and or modifying the circuits. Should doors, lids and protective parts be damaged or lost, refrain from operating the product, and contact where the product was purchased from or the office herein stated.

○ **Ensure that the product meets the requirements of appropriate Electrical Specifications.**

Before installing the product, check for Electrical Specifications. SEGA products have a nameplate on which Electrical Specifications are described. Ensure that the product is compatible with the power supply voltage and frequency requirements of the location. Using any Electrical Specifications different from the designated Specifications can cause a fire and electric shock.

○ **Install and operate the product in places where appropriate lighting is available, allowing warning labels to be clearly read.**

To ensure safety for the customers, labels and printed instructions describing potentially hazardous situation are applied to places where accidents can be caused. Ensure that where the product is operated has sufficient lighting allowing the warnings to be read. If any label is peeled off, apply it again immediately. Please place an order with where the product was purchased from or the office herein stated.

○ **When handling the Monitor, be very careful. (Applies only to the product w/ monitor).**

Some of the monitor (TV) parts are subject to high tension voltage. Even after turning off power, some portions are still subject to high tension voltage sometimes. Monitor repair and replacement should be performed only by those technical personnel who have knowledge of electricity and technical expertise.

○ **When transporting or reselling this product, be sure to attach this manual to the product.**

In the case where commercially available monitors and printers are used in this product, only the contents relating to this product are explained herein. Some commercially available equipment has functions and reactions not stated in this manual. Read this manual together with the specific Instruction Manual of such equipment.

- Descriptions herein contained may be subject to improvement changes without notice.
- The contents described herein are fully prepared with due care. However, should any question arise or errors be found, please contact SEGA.

INSPECTIONS IMMEDIATELY AFTER TRANSPORTING THE PRODUCT TO THE LOCATION.

Normally, at the time of shipment, SEGA products are in a status allowing for usage immediately after transporting to the location. Nevertheless, an irregular situation may occur during transportation. Before turning on power, check the following points to ensure that the product has been transported in a satisfactory status.

- Are there any dented portions or defects (cuts, etc.) on the external surfaces of the cabinet?
- Are Casters and Adjusters, damaged?
- Do the power supply voltage and frequency requirements meet with those of the location?
- Are all wiring connectors correctly and securely connected? Unless connected in the correct direction, connector connections can not be made accurately. Do not insert connectors forcibly.
- Do power cords have cuts and dents?
- Do the fuses used meet specified rating? Is the Circuit Protector in an energized status?
- Are all accessories available?
- Can all Doors and Lids be opened with the Accessory keys? Can Doors and Lids be firmly closed?

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BEFORE USING THE PRODUCT, BE SURE TO READ THE FOLLOWING:

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SPECIFICATIONS

Installation space	: 2,080 mm (W) × 1,860 mm (D) (81.9 in. × 73.2 in.)
Height	: 2,000 mm (78.7 in.)
Weight	: 539 kg. (1,188.3 lbs.)
Power, maximum current	: 770 W 8.7 A (AC 110V 50 Hz AREA) 747 W 8.3 A (AC 110V 60 Hz AREA) 770 W 7.8 A (AC 120V 60 Hz AREA) 775 W 4.5 A (AC 220V 50 Hz AREA) 758 W 4.4 A (AC 220V 60 Hz AREA) 782 W 4.3 A (AC 230V 50 Hz AREA) 769 W 4.2 A (AC 230V 60 Hz AREA) 802 W 4.4 A (AC 240V 50 Hz AREA) 784 W 4.2 A (AC 240V 60 Hz AREA)
For TAIWAN	
Power, current	: 775 W 9.0 A (MAX.) 430 W 5.0 A (MIN.)
MONITOR	: 29 INCH COLOR MONITOR

INTRODUCTION OF THE OWNER'S MANUAL

This Owner's Manual is intended to provide detailed descriptions together with all the necessary information covering the general operation of electronic assemblies, electromechanicals, servicing control, spare parts, etc. as regards the product, **AIRLINE PILOTS DX TYPE.**

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. If the product fails to function satisfactorily, non-technical personnel should under no circumstances touch the internal system. Please contact where the product was purchased from.

SEGA ENTERPRISES, INC. (U.S.A.)/CUSTOMER SERVICE
45133 Industrial Drive, Fremont, California 94538, U.S.A.
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DEFINITION OF LOCATION MAINTENANCE MAN AND SERVICEMAN



Non-technical personnel who do not have technical knowledge and expertise should refrain from performing such work that this manual requires the location's maintenance man or a serviceman to carry out, or work which is not explained in this manual. Failing to comply with this instruction can cause a severe accident such as electric shock.

Ensure that parts replacement, servicing & inspections, and troubleshooting are performed by the location's maintenance man or the serviceman. It is instructed herein that particularly hazardous work should be performed by the serviceman who has technical expertise and knowledge.

The location's maintenance man and serviceman are herein defined as follows:

"Location's Maintenance Man" :

Those who have experience in the maintenance of amusement equipment and vending machines, etc., and also participate in the servicing and control of the equipment through such routine work as equipment assembly and installation, servicing and inspections, replacement of units and consumables, etc. within the Amusement Facilities and or locations under the management of the Owner and Owner's Operators of the product.

Activities of Location's Maintenance Man :

Assembly & installation, servicing & inspections, and replacement of units & consumables as regards amusement equipment, vending machines, etc.

Serviceman :

Those who participate in the designing, manufacturing, inspections and maintenance service of the equipment at an amusement equipment manufacturer.

Those who have technical expertise equivalent to that of technical high school graduates as regards electricity, electronics and or mechanical engineering, and daily take part in the servicing & control and repair of amusement equipment.

Serviceman's Activities :

Assembly & installation and repair & adjustments of electrical, electronic and mechanical parts of amusement equipment and vending machines.

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.



- Before performing work, be sure to turn power off. Performing the work without turning 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 electric shock or short circuit, do not plug in or unplug quickly.
- To avoid electric shock, do not plug in or unplug with a wet hand.
- Do not expose Power Cords and 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 electric shock or short circuit.
- To avoid causing a fire or electric shock, do not put things on or damage 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 electric shock.
- In case the power cord is damaged, ask for replacement through where the product was purchased from or the office herein stated. Using the cord as is damaged can cause fire, electric shock or leakage.
- Be sure to perform grounding appropriately. Inappropriate grounding can cause an electric shock.
- Be sure to use fuses meeting specified rating. Using fuses exceeding the specified rating can cause a fire or electric shock.
- Completely make connector connections for IC BD and others. Insufficient insertion can cause an electric shock.
- To avoid causing a fire or electric shock, do not make Specification changes by removing, converting and making additions unless otherwise designated by SEGA.
- Be sure to perform periodic maintenance inspections herein stated.



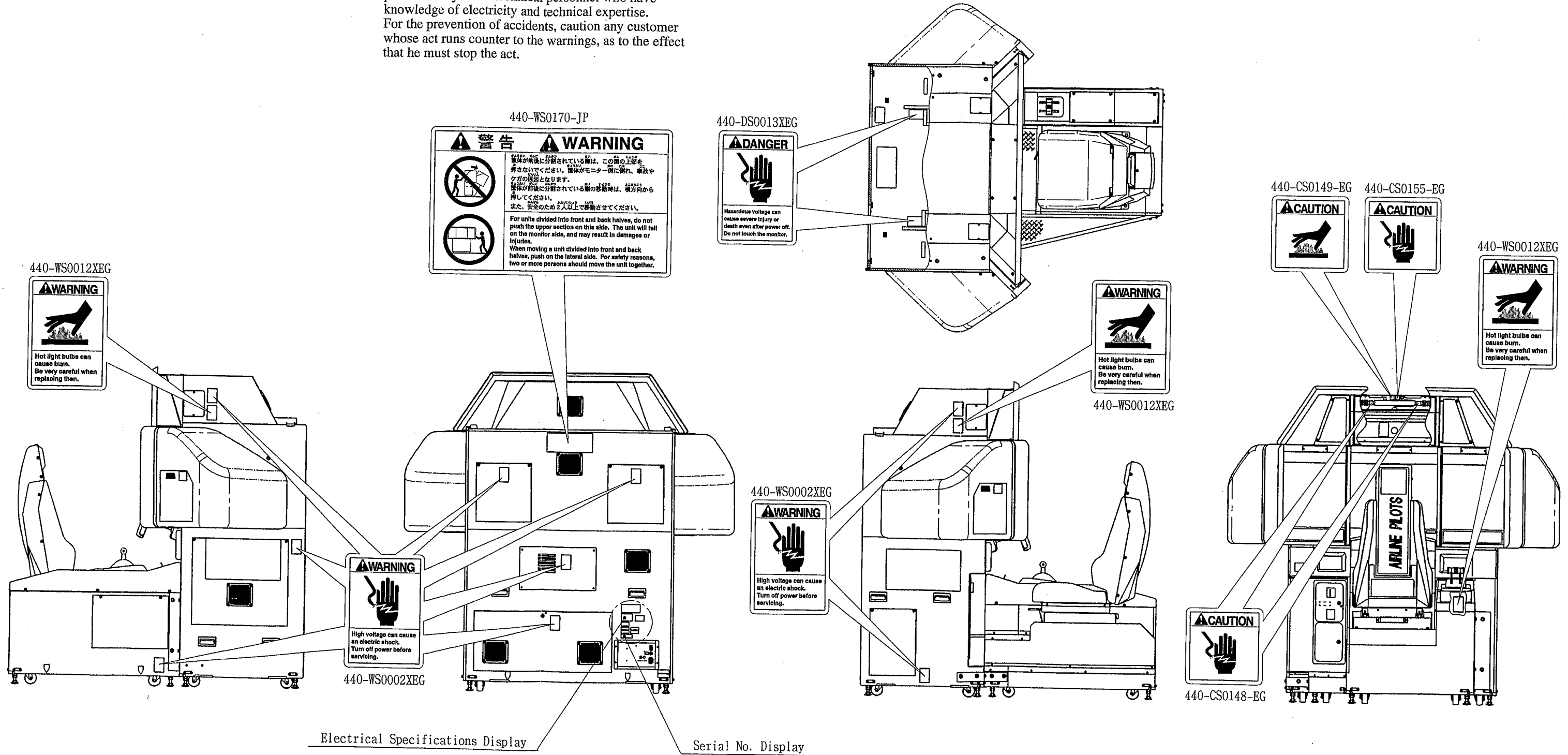
- For the IC board circuit inspections, only the logic tester is allowed. The use of a multiple-purpose tester is not permitted, so be careful in this regard.
- When cleaning the CRT surfaces, use a soft, dry cloth. Do not apply chemicals such as thinner, benzine, etc.
- The electronic parts on the IC Board could be damaged due to human body's static electricity. Before performing IC Board related work, be sure to discharge physically accumulated statics by touching grounded metallic surfaces, etc.

CONCERNING THE STICKER DISPLAY

SEGA product has Stickers describing the product manufacture No. (Serial No.) and Electrical Specifications. Also it has a Sticker describing where to contact for repair and for purchasing parts. When inquiring about or asking for repair, mention the Serial No. and Name of Machine indicated on the Sticker. The Serial No. 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 meet the above situations, mention the Serial No. when contacting the applicable places.

CONCERNING WARNING DISPLAYS

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 can arise. The warning displays are intended for accident prevention for the customers and for avoiding hazardous situation relating to maintenance and servicing work. There are some portions in the Cabinet, which are subject to high tension voltage, etc. where accidents can be caused merely by touching. When performing the servicing work, be very careful of the warning displays. Especially, any complex repair and replacement work not mentioned herein, should be performed by those technical personnel who have knowledge of electricity and technical expertise. For the prevention of accidents, caution any customer whose act runs counter to the warnings, as to the effect that he must stop the act.



440-WS0170-JP

警告 WARNING

機体が前後に分割されている際は、この面の上部を
押さないでください。機体がモニター側に倒れ、事故や
ケガの原因となります。
機体が前後に分割されている際の移動時は、横方向から
押してください。
また、安全のため入場上で移動させてください。

For units divided into front and back halves, do not
push the upper section on this side. The unit will fall
on the monitor side, and may result in damages or
injuries.
When moving a unit divided into front and back
halves, push on the lateral side. For safety reasons,
two or more persons should move the unit together.

440-DS0013XEG

⚠ DANGER

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

⚠ WARNING

Hot light bulbs can
cause burn.
Be very careful when
replacing them.

440-CS0149-EG

⚠ CAUTION

Hot light bulbs can
cause burn.
Be very careful when
replacing them.

440-CS0155-EG

⚠ CAUTION

Hot light bulbs can
cause burn.
Be very careful when
replacing them.

440-WS0012XEG

⚠ WARNING

Hot light bulbs can
cause burn.
Be very careful when
replacing them.

440-WS0002XEG

⚠ WARNING

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

440-CS0148-EG

⚠ CAUTION

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

Electrical Specifications Display

Serial No. Display

2. PRECAUTIONS CONCERNING INSTALLATION LOCATION



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 malfunctioning.

- 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°C to 40°C. Only in the case a projector is employed, the temperature range is from 5°C to 30°C.

LIMITATIONS OF USAGE REQUIREMENTS



- 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 Electric Specifications can cause a fire and electric shock.
- This product requires the Breaker and Earth Mechanisms as part of the location facilities. Using them in a manner not independent can cause a fire and electric shock.
- Ensure that the indoor wiring for the power supply is rated at 15A or higher (AC single phase 100 ~ 120V area), and 7A or higher (AC 220 ~ 240V area). Non-compliance with the Electrical Specifications can cause a fire and electric shock.
- Be sure to independently use the power supply equipped with the Earth Leakage Breaker. Using a power supply without the Earth Leakage Breaker can cause an outbreak of fire when earth leakage 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 15A or higher (AC 100 ~ 120V area) and 7A or higher (AC 220 ~ 240V area). Using a cord rated lower than the specified rating can cause a fire and electric shock.

Electric current consumption

MAX.	8.7 A	(AC 110V	50 Hz)
MAX.	8.3 A	(AC 110V	60 Hz)
MAX.	7.8 A	(AC 120V	60 Hz)
MAX.	1.5 A	(AC 220V	50 Hz)
MAX.	4.4 A	(AC 220V	60 Hz)
MAX.	4.3 A	(AC 230V	50 Hz)
MAX.	4.2 A	(AC 230V	60 Hz)
MAX.	4.4 A	(AC 240V	50 Hz)
MAX.	4.2 A	(AC 240V	60 Hz)
MAX.	9.0 A	(For TAIWAN)	



- For transporting the machine into the location's building, the minimum necessary dimensions of the opening (of doors, etc.) are 1.15m(W) and 2.1m(H).
- For the operation of this machine, secure a minimum area of 2.5m (W) × 2.8m (D). For ventilation, provide an approximately 20cm. space between the rear part of the cabinet and the wall.

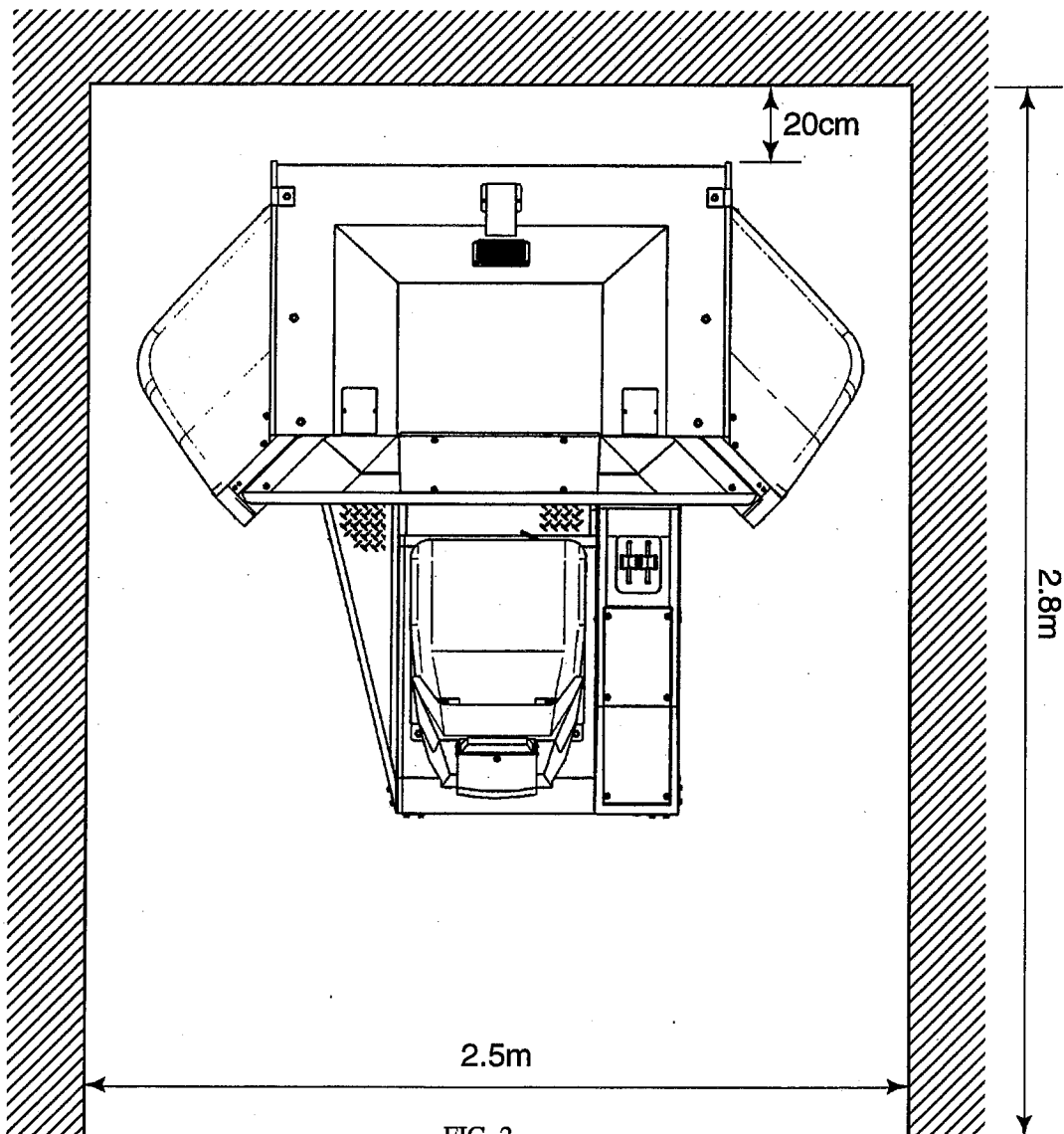


FIG. 2

3. OPERATION

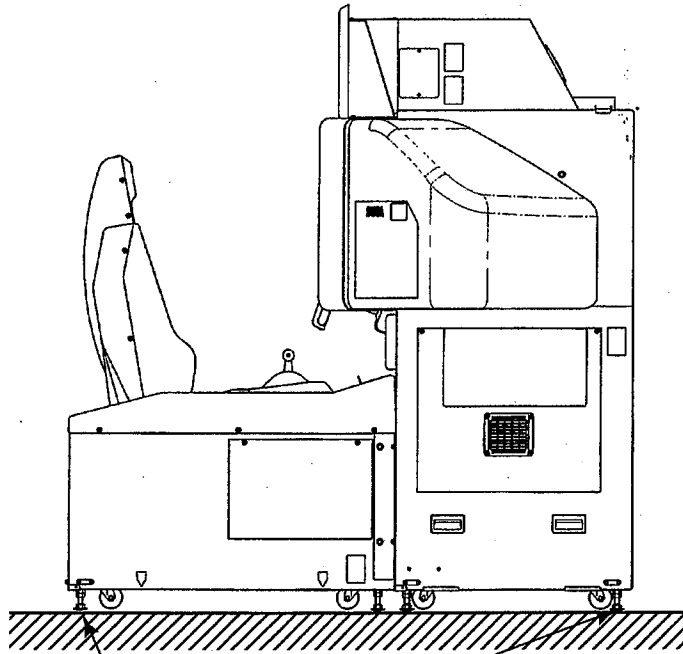
PRECAUTIONS TO BE HEEDED BEFORE STARTING THE OPERATION

To avoid injury and trouble, be sure to constantly give careful attention to the behavior and manner of the visitors and players.



In order to avoid accidents, check the following before starting the operation:

- Check if all of the adjusters are in contact with the surface. If they are not, the Cabinet can move and cause an accident.



Ensure that all of the Adjusters are in contact with the floor.

- Do not put any heavy item on this product. Placing any heavy item on the product can cause a falling down accident or parts damage.
- Do not climb on the product. Climbing on the product can cause falling down accidents. To check the top portion of the product, use a step.
- To avoid electric shock, check to see if door & cover parts are damaged or omitted.
- 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 and water.



To avoid injury, be sure to provide sufficient space by considering the potentially crowded situation at the installation location. Insufficient installation space can cause the customers to come into contact with or hit the others and result in injury or trouble.

PRECAUTIONS TO BE HEEDED DURING OPERATION (PAYING ATTENTION TO CUSTOMERS)

To avoid injury and trouble, be sure to constantly give careful attention to the behavior and manner of the visitors and players.



- 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 game, etc.
 - Those who have a trouble in the neck and or spinal cord.
 - Intoxicated persons.
 - Pregnant women or those who are in the likelihood of pregnancy.
 - Persons susceptible to motion sickness.
 - Persons whose act runs counter to the product's warning displays.
- To avoid injury resulting from falling down, and electric shock due to spilled drinks, instruct the player not to place heavy items or drinks on the product.
- To avoid electric shock and short circuit, 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 falling down and injury resulting from falling down, immediately stop the customer's leaning against or climbing on the product, etc.
- To avoid electric shock and short circuit, do not allow the customers to unplug the power plug without a justifiable reason.



Immediately stop such violent acts as hitting and kicking the product. Such violent acts can cause parts damage or falling down, resulting in injury due to fragments and falling down.

4. NAME OF PARTS

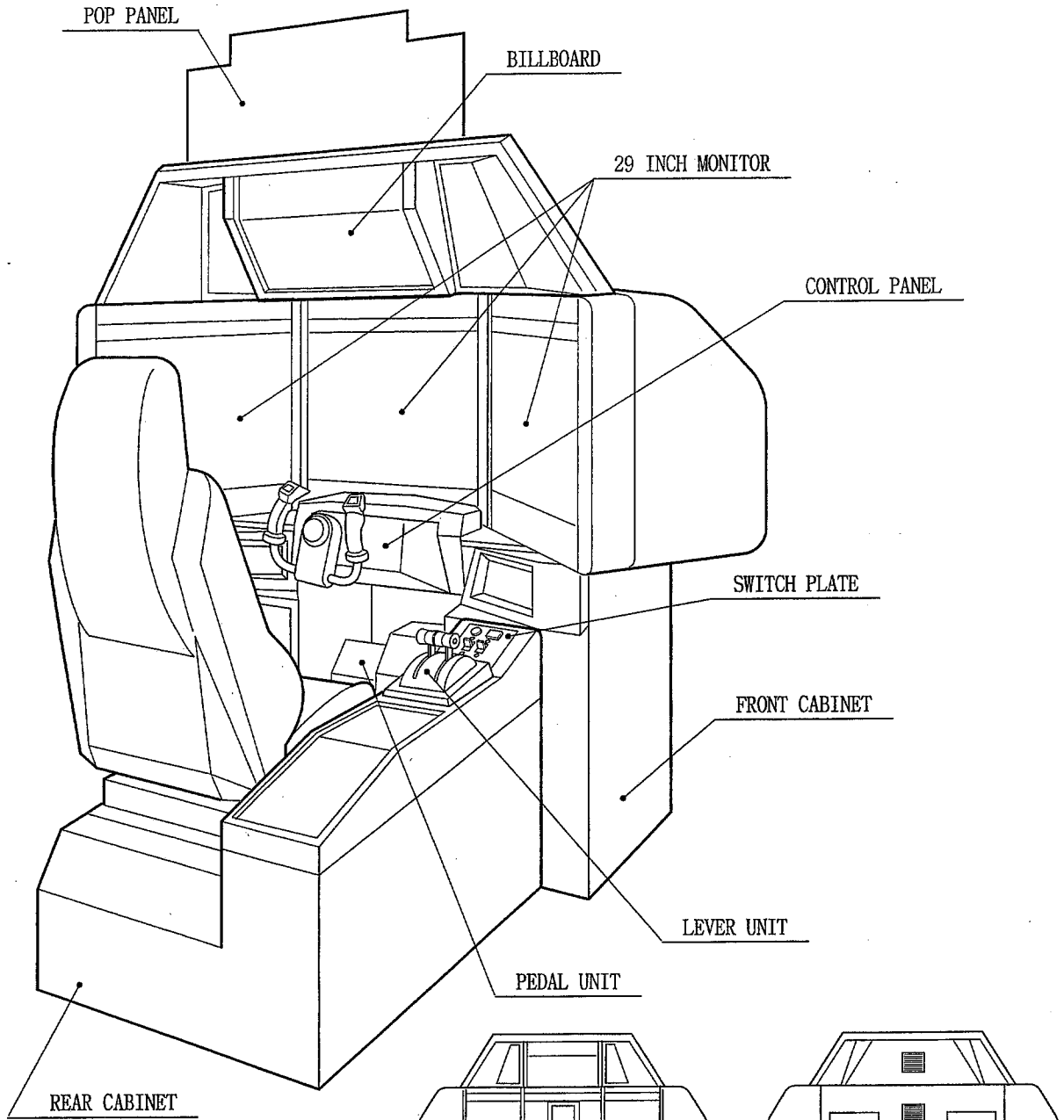


FIG. 4 a OVERVIEW

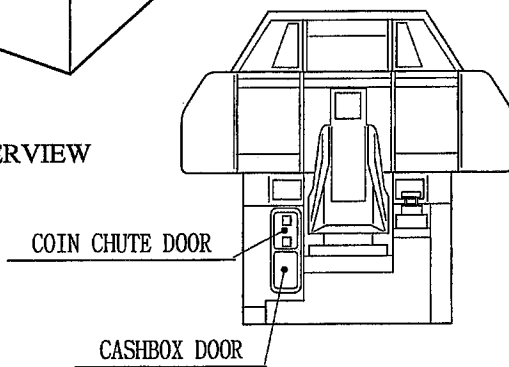


FIG. 4 b FRONT VIEW

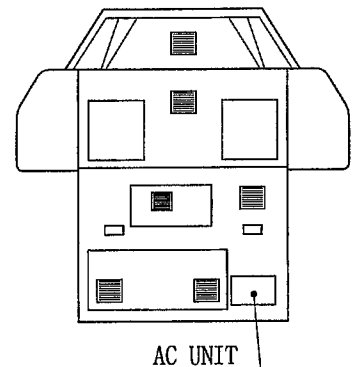


FIG. 4 c REAR VIEW

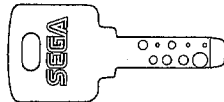
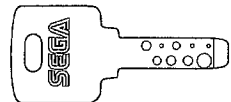
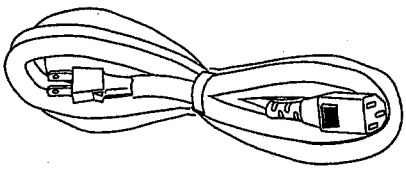
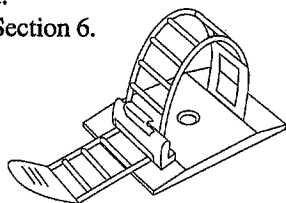
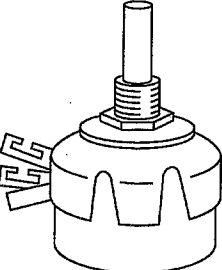
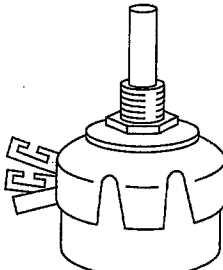
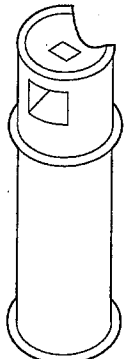
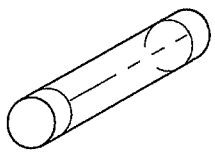
TABLE 4

	Width × Length × Height	Weight
FRONT CABINET	2,080 mm × 1,040 mm × 2,000 mm	432 kg
REAR CABINET	1,040 mm × 1,075 mm × 1,510 mm	107 kg
When assembled	2,080 mm × 1,860 mm × 2,000 mm	Approx. 539 kg

5. ACCESSORIES

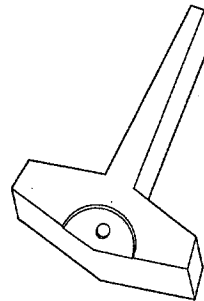
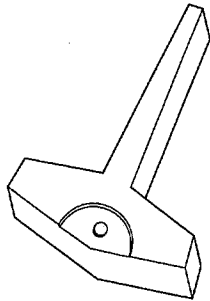
When transporting the machine, make sure that the following parts are supplied.

TABLE 5 ACCESSORIES

<p>DESCRIPTION OWNERS MANUAL Part No. (Qty.) 420-6471-01 (1) Note Figures If Part No. has no description, the Number has not been registered or can not be registered. Such a part may not be obtainable even if the customer desires to purchase it. Therefore, ensure that the part is in safekeeping with you.</p>	<p>KEY MASTER 220-5576 (2) For opening/closing the doors</p>	<p>KEY (2) For the CASHBOX DOOR</p>
		
<p>AC Cable (Power Cord) 600-6724 (1) AC 110V AREA 600-6729 (1) AC 120V AREA 600-6695 (1) AC 120V AREA 600-6618 (1) AC 220~240V AREA Used for installation, see [3] of Section 6.</p>	<p>CORD CLAMP 280-5009-01 (1) Used for securing the power cord. see [3] of Section 6.</p>	
		
<p>VOL CONT B-5K OHM 220-5484 (1) Spare, see Section 10, 11, 12.</p>	<p>VOL CONT B-5K OHM 220-5179 (1) Spare, see Section 10, 11, 12.</p>	<p>STATICIDE 090-0074 (1) Antistatic measures see Section 16.</p>
		
<p>FUSE 6.3A 250V 514-5086-6300 (1) Spare, see Section 17.</p>		
		

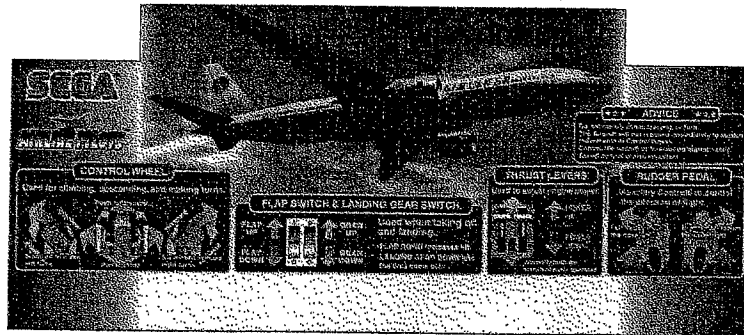
SWITCH LEVER (GRAY)
509-5911-G (1)
Spare, see Section 11.

SWITCH LEVER (RED)
509-5911-R (1)
Spare, see Section 11.



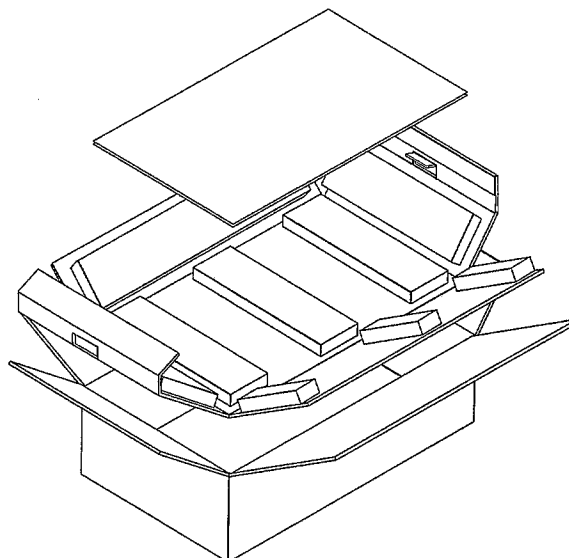
POP PANEL
429-0641-01 (1)

Used for installation,
see Section 6.



CARTON BOX
601-10577 (1)

Used for transporting the
Game Board.
Refer to Next Page.

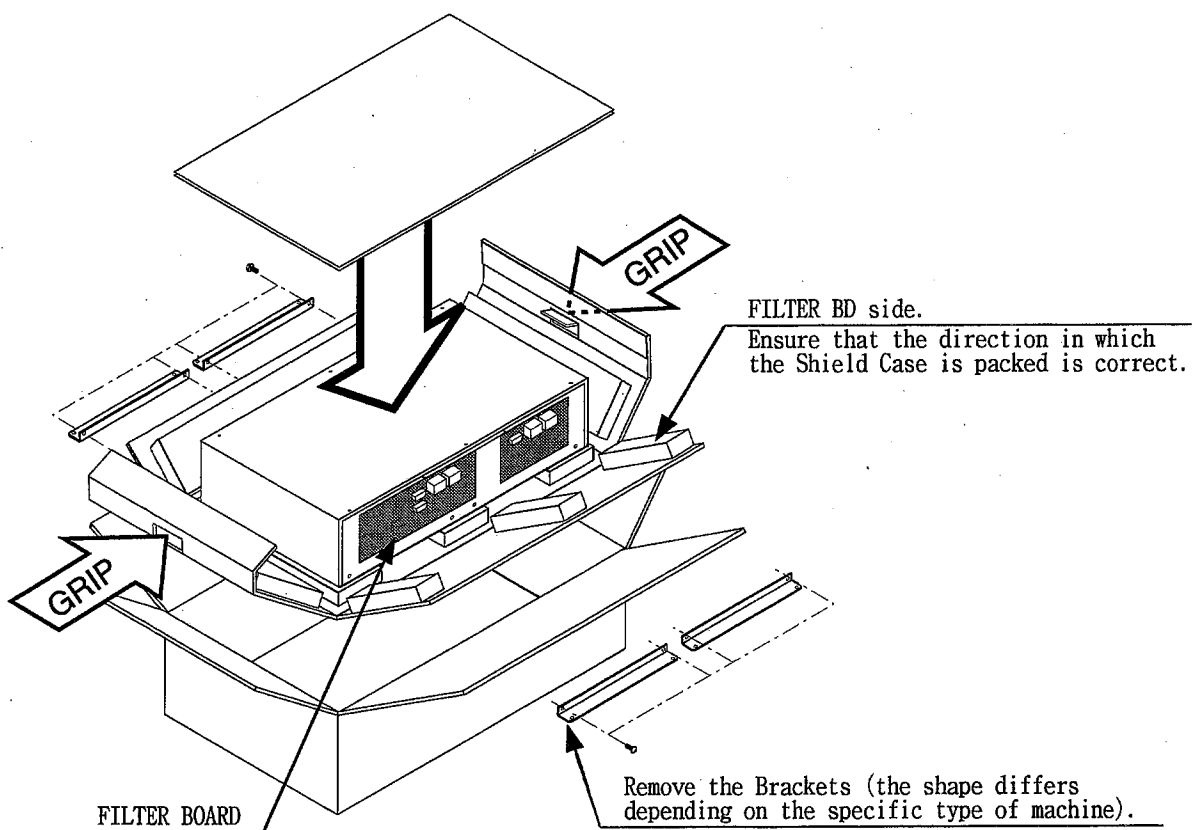


HOW TO USE THE CARTON BOX



When requesting for the replacement/repair of this product's Game Board (NAOMI BOARD), follow the instructions below. Transporting the Game Board in an undesignated status is unacceptable. An erroneous handling can cause parts damage.

- Put the Game Board in the Carton Box together with the Shield Case. Do not unnecessarily disassemble nor remove parts.
- By paying careful attention to the direction shown by the following Figure, put the Shield Case in the Carton Box.



Enfold the Shield Case with the packing material shown, and put it in the carton box. Positioning the Shield Case upside down or packing in the manner different from what is shown in this Figure can cause the Game Board and other parts to be damaged.

6. ASSEMBLING AND INSTALLATION

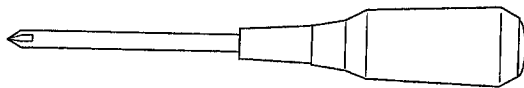


- Perform assembly work by following the procedure herein stated. Failing to comply with the instructions can cause electric shock hazard.
- Perform assembling as per this manual. Since this is a complex machine, erroneous assembling can cause an electric shock, machine damage and or not functioning as per specified performance.
- When assembling, be sure to use plural persons. Depending on the assembly work, there are some cases in which working by one person alone can cause personal injury or parts damage.
- Ensure that connectors are accurately connected. Incomplete connections can cause electric shock hazard.
- Be careful so as not to damage wirings. Damaged wiring can cause electric shock and short circuit hazards.
- In the case the cabinet is separated into the front and rear portions, do not push the upper rear part of the front cabinet. Failure to observe this causes the front cabinet to fall down towards the monitor side and result in accidents and injury to persons. When moving the front cabinet in the above case, be sure to push it from side directions and move it by 2 or more persons for safety.

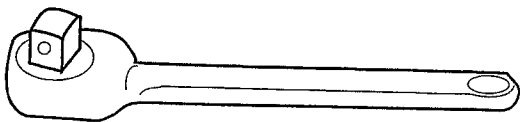
When carrying out the assembling and installation, follow the following 5-item sequence.

- 1 ASSEMBLING THE CABINET
- 2 SECURING IN PLACE (ADJUSTER ADJUSTMENT)
- 3 POWER SUPPLY, AND EARTH CONNECTION
- 4 TURNING POWER ON
- 5 ASSEMBLING CHECK

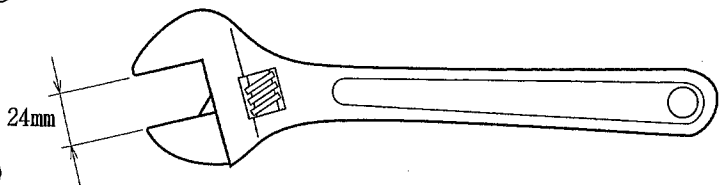
When assembling, prepare and make sure that tools such as the Phillips type screwdriver, wrench (M16 hexagon bolt), socket wrench and Ratchet Handle are available.



Phillips type screwdriver



SOCKET WRENCH, (for M8 hexagon bolt)
RATCHET HANDLE

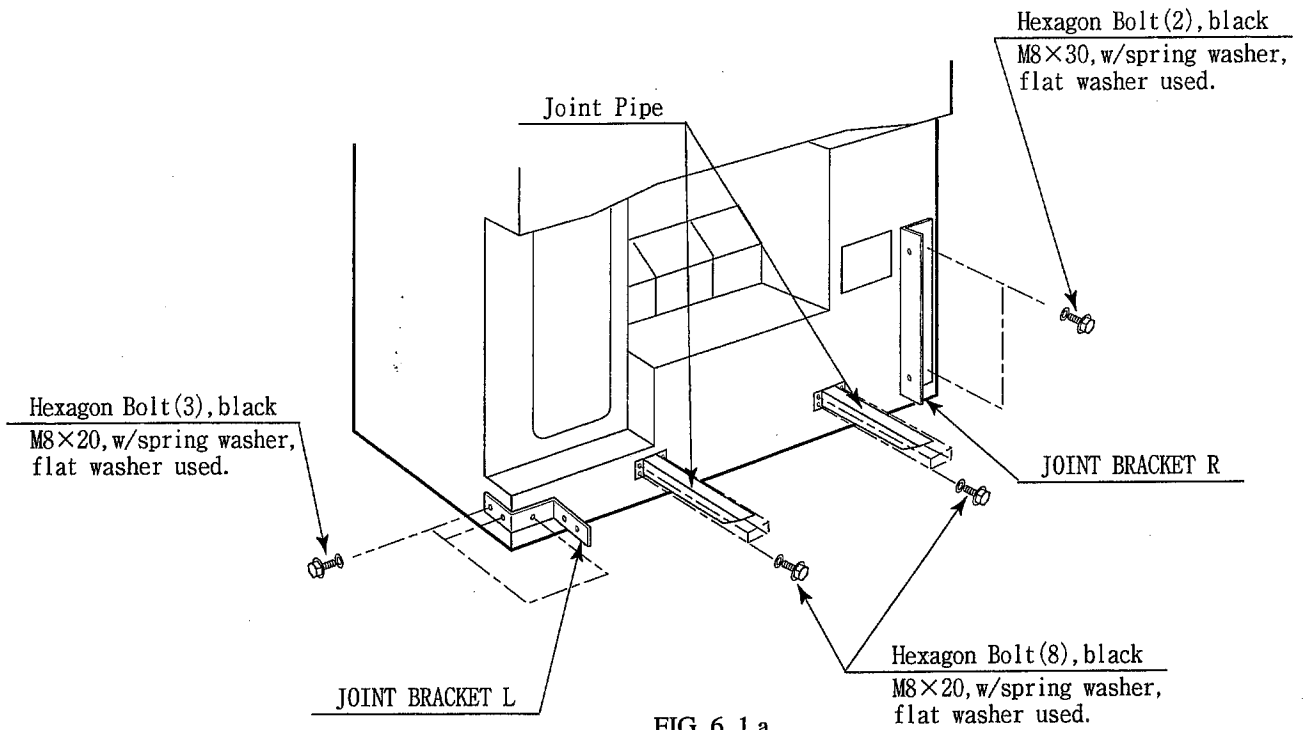


WRENCH (for M16 hexagon bolt)

1

ASSEMBLING THE CABINET

- ① Install Joint Bracket L & R to both sides of Front Cabinet as applicable, and 2 Joint Pipes to the inside.



- ② Connect the wiring from the Front Cabinet to the Rear Cabinet.

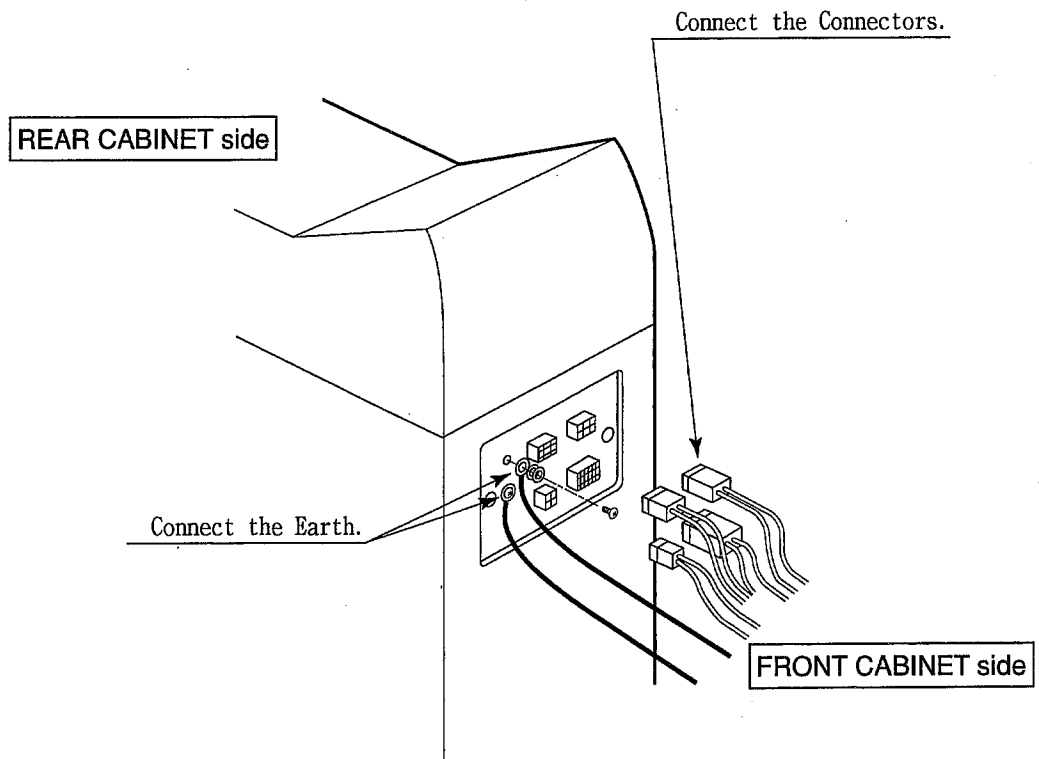


FIG. 6. 1 b

- ③ Insert the Front Cabinet's square pipes into the Rear Cabinet's square holes to fit both cabinets tight and secure with a total of 4 Hexagon Bolts.

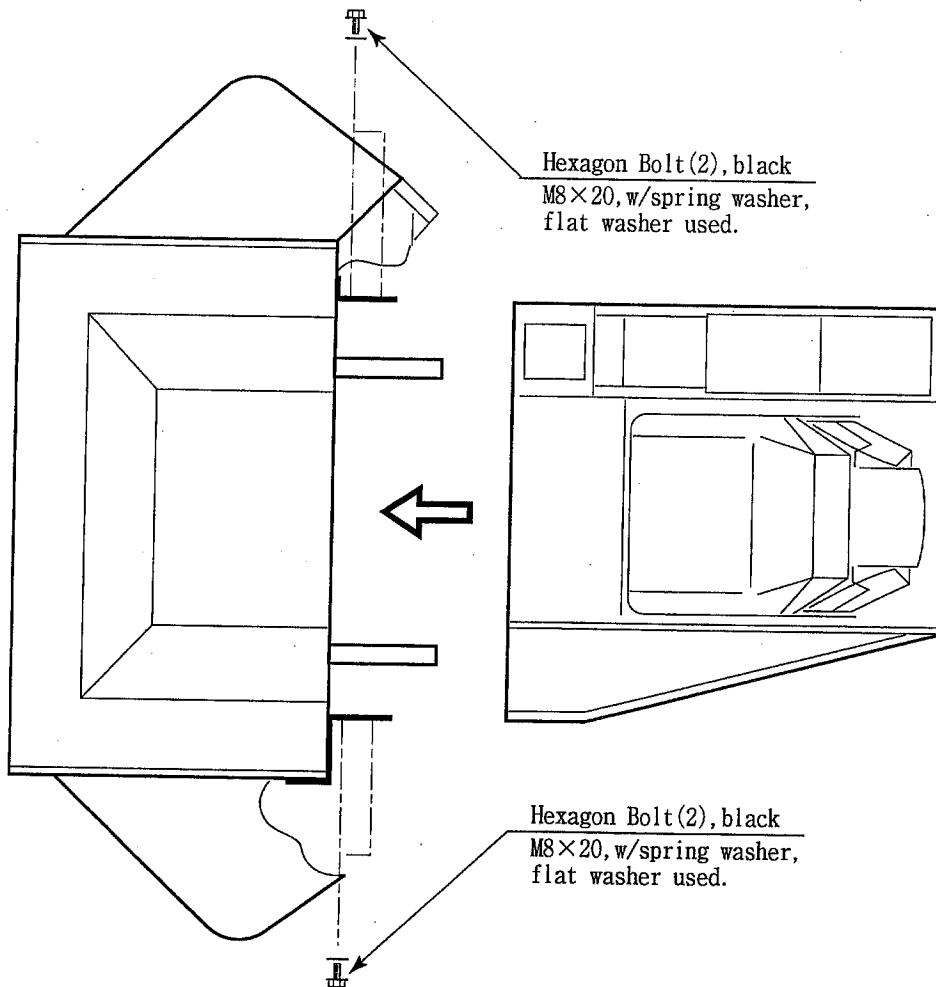


FIG. 6. 1 c

- ④ Apply the POP PANEL to the top of BILLBOARD.

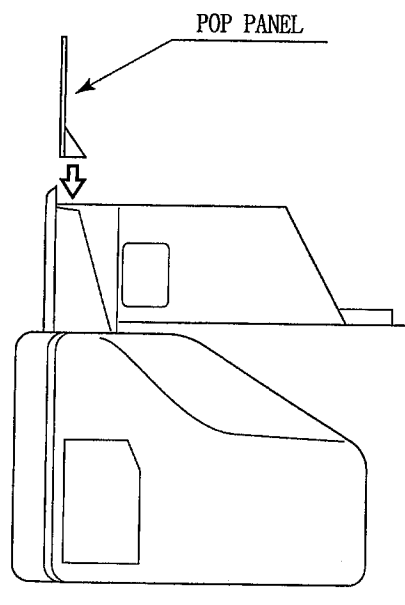


FIG. 6. 1 d

2

SECURING IN PLACE (ADJUSTER ADJUSTMENT)



Make sure that all of the adjusters are in contact with the floor. If they are not, the cabinet can move and cause an accident.

This product has 8 casters (4 for Front Cabinet, 4 for Rear Cabinet) and 8 Adjusters (4 for Front Cabinet, 4 for Rear Cabinet). (FIG. 6. 2a) When the installation position is determined, cause the adjusters to come into contact with the floor directly, make adjustments in a manner so that the casters will be raised approximately 5mm. from the floor and make sure that the machine position is level.

- ① Transport the product to the installation position. Be sure to provide adequate space allowing the player to get on and off.
- ② Have all of the Adjusters make contact with the floor. Adjust the Adjuster's height by using a wrench so that the machine position is kept level.
- ③ After making adjustment, fasten the Adjuster Nut upward and secure the height of Adjuster (FIG. 6. 2 b).

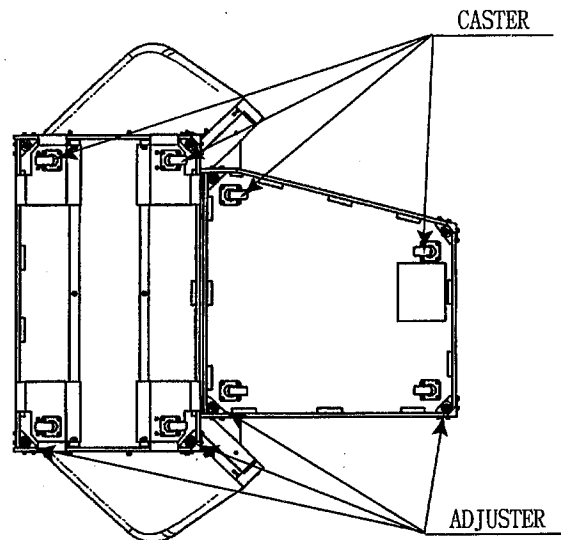


FIG. 6. 2 a BOTTOM VIEW

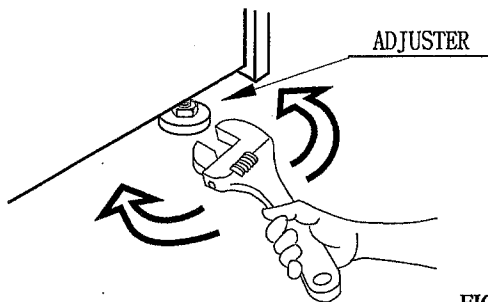


FIG. 6. 2 b ADJUSTER

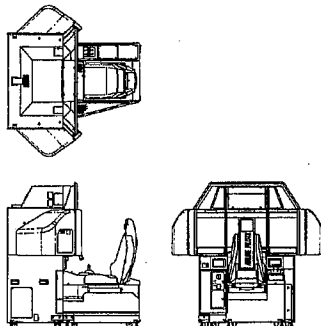
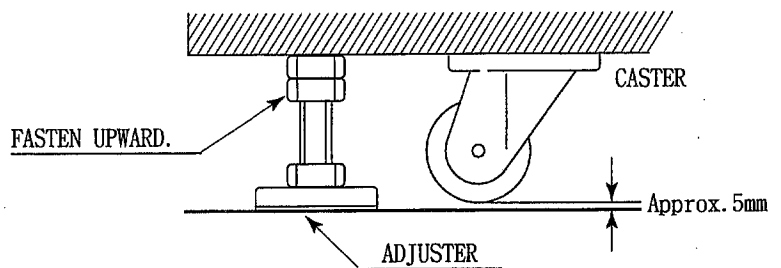


FIG. 6. 2 c
Refer to this Fig. (Scale:1/100)
for the layout of the place of
installation.

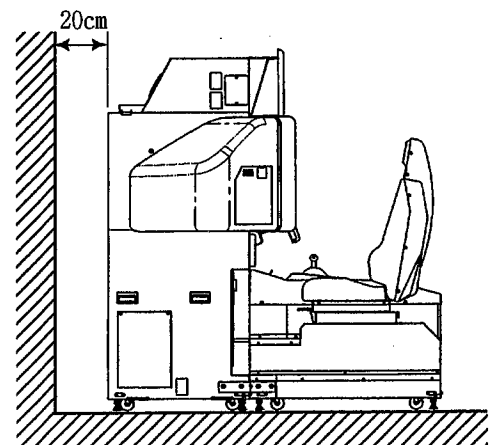


FIG. 6. 2 d
Be sure to provide space as shown between the Air
Vent and the wall surface.

3

POWER SUPPLY, AND EARTH CONNECTION



- Be sure to independently use the power supply socket outlet equipped with an Earth Leakage Breaker. Using a power supply without an Earth Leakage Breaker 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 the earth terminal. Connect the earth terminal and the indoor earth terminal with the prepared cable. If the grounding work is not performed appropriately, customers can be subjected to an electric shock, and the product's functioning may not be stable.
- 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 wiring position is not in the customer's passage way or the wiring has protective covering.

The AC Unit is mounted on the rear of the machine. The AC Unit has Main SW, Circuit Protector, Earth Terminal and the Inlet which connects the Power Cord.

- ① Ensure that the Main SW is OFF.

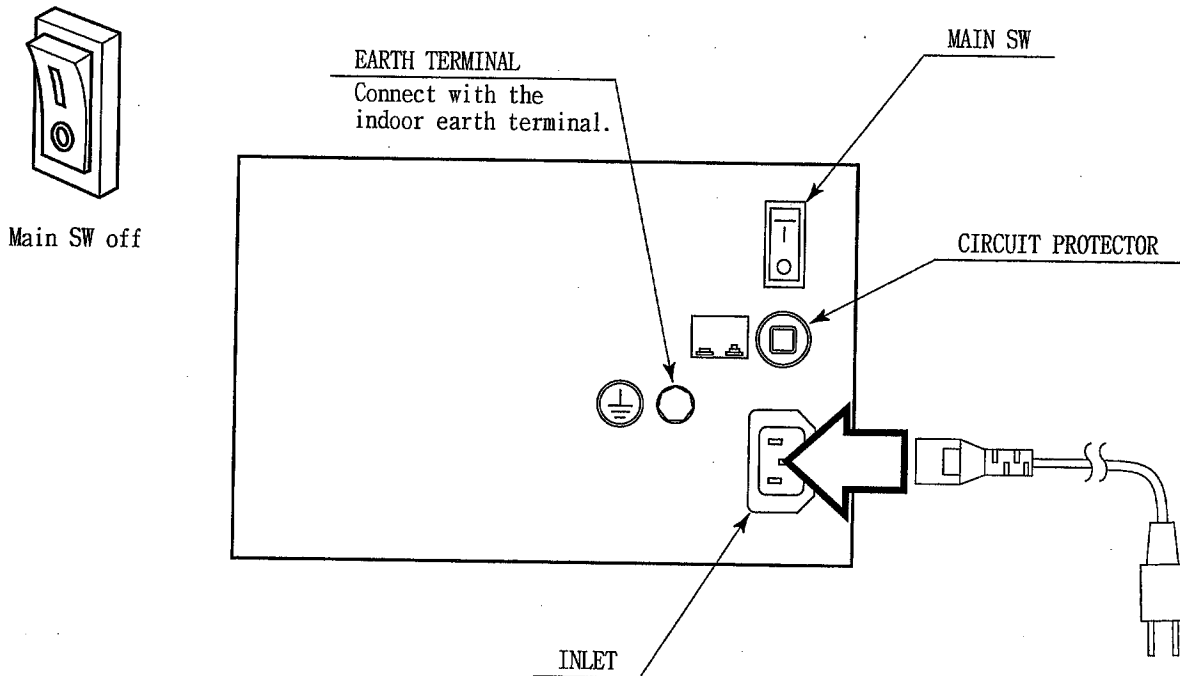


FIG. 6.3 a AC unit

- ② Connect one end of the earth wire to the AC Unit earth terminal, and the other end to the indoor earth terminal. The AC Unit earth terminal has a Bolt and Nut combination. Take off the Nut, pass the end of earth wire through the Bolt, and fasten the Nut.

Note that the Earth Wire is incorporated in the Power Cord for the Areas of AC 120V (USA) and AC 220 ~ 240V, and therefore, this procedure is not necessary.

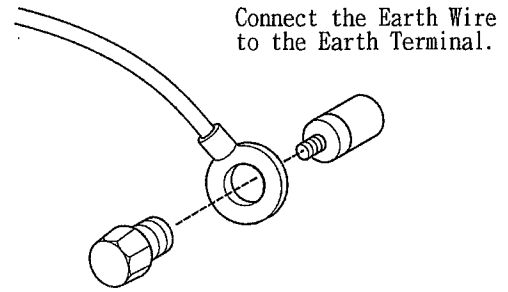


FIG. 6.3 b Earth Wire Connection

- ③ Firmly insert the power plug into the socket outlet.
Insert the opposite side of Power Cord plug to the AC Unit's connector ("INLET").
- ④ Perform wiring for the Power Cord and Earth Wire. Install protective covering for the Power Cord and Earth Wire.

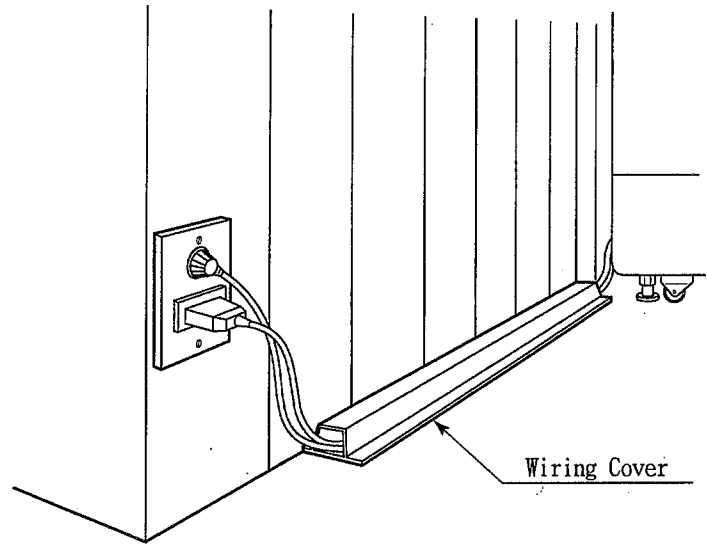


FIG. 6.3 c Connecting Power Cord and Earth Wire

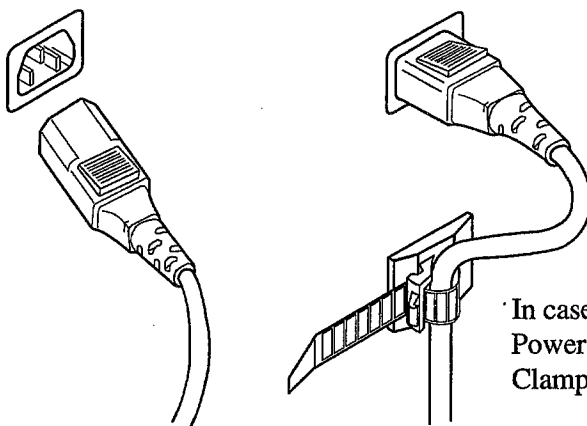


FIG. 6.3 d HOW TO USE THE CORD CLAMP

4**TURNING POWER ON**

Turn the Main SW of AC Unit ON to turn power ON for the 3 Monitors first. Approximately 15 seconds afterwards, the power is on for the rest other than the monitors, the Fluorescent Lamp lights up and then several seconds later, images are outputted on the monitors. After a while, the ADVERTISE mode appears. In this product, once the power is turned off, the data of inserted coins less than one credit and BONUS ADDER is cleared.

5**ASSEMBLING CHECK**

In the TEST MODE, ascertain that the assembly has been made correctly and IC:BD. is satisfactory (refer to Section 9).

In the test mode, perform the following test:

(1) MEMORY TEST

```

          RAM TEST

IC29 GOOD
IC35 GOOD
IC16 GOOD   IC18 GOOD
IC20 GOOD   IC22 GOOD
IC09 GOOD   IC10 GOOD
IC11 GOOD   IC12 GOOD

PRESS TEST BUTTON TO EXIT

```

Selecting the RAM TEST and ROM TEST on the test mode menu screen causes the on-board memory to be tested automatically. The game board is satisfactory if the display beside each IC No. shows GOOD.

```

          ROM BOARD TEST
          [AIRLINE PILOTS IN XXXX]

NO.  TYPE  RESULT  BYTE  WORD
IC22 32M  ————  XXXX  XXXX
IC1  64M  GOOD   XXXX  XXXX
IC2  64M  GOOD   XXXX  XXXX
IC3  64M  GOOD   XXXX  XXXX
IC4  64M  GOOD   XXXX  XXXX
IC5  64M  GOOD   XXXX  XXXX
IC6  64M  GOOD   XXXX  XXXX
IC7  64M  GOOD   XXXX  XXXX
IC8  64M  GOOD   XXXX  XXXX
IC9  64M  GOOD   XXXX  XXXX
IC10 64M  GOOD   XXXX  XXXX
IC11 64M  GOOD   XXXX  XXXX

PRESS TEST BUTTON TO EXIT

```

(2) C.R.T. TEST

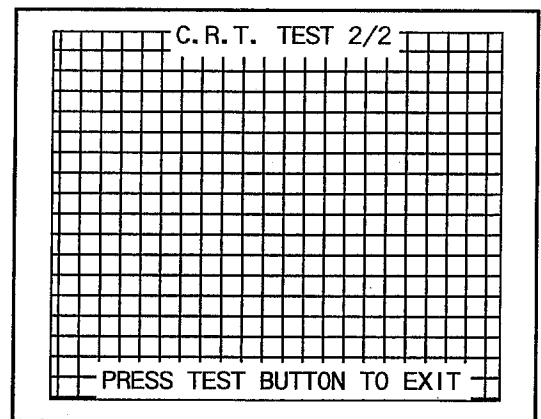
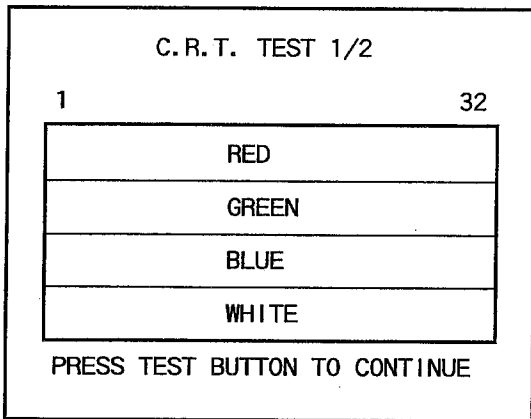
In the TEST mode menu, selecting C.R.T. TEST allows the screen (on which the monitor is tested) to be displayed. Although the monitor adjustments have been made at the time of shipment from the factory, color deviation, etc., may occur due to the effect caused by geomagnetism, the location building's steel frames and other game machines in the periphery. By watching the test mode screen, make judgment as to whether an adjustment is needed. If it is necessary, adjust the monitor by referring to Section 14.

Use the DEMAG SW to remove color deviation due to magnetization.

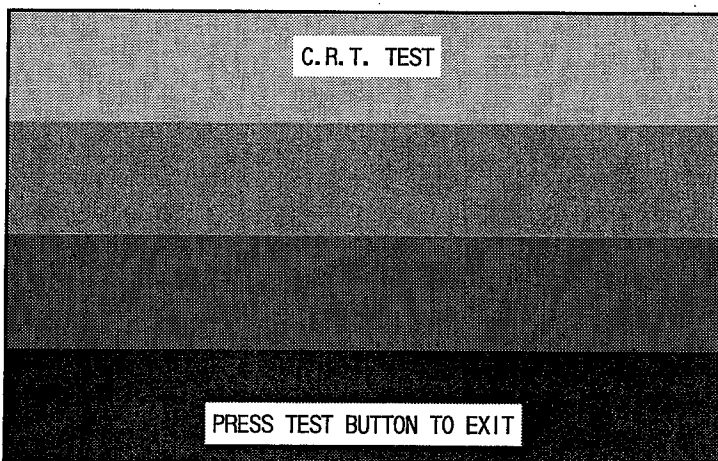
In the C.R.T. test of SYSTEM TEST mode, adjust color and screen size.

In the C.R.T. test of GAME TEST mode, adjust monitor brightness.

SYSTEM TEST mode



GAME TEST mode



(3) INPUT TEST

INPUT TEST	
LANDING GEAR SWITCH	UP
FLAP SWITCH	UP
VIEW CHANGE BUTTON	OFF
START BUTTON	OFF
SERVICE TEST	OFF
CONTROL WHEEL (AILERON)	ABH
CONTROL WHEEL (ELEVATOR)	ABH
RUDDER PEDAL	ABH
THRUST LEVER L	ABH
THRUST LEVER R	ABH

PRESS TEST AND SERVICE BUTTON TO EXIT

Selecting the INPUT TEST on the game test mode menu screen causes the screen (on which each switch and V.R. are tested) to be displayed. Press each switch. If the display beside each switch indicates "ON," the switch and wiring connections are satisfactory.

(4) OUTPUT TEST

OUTPUT TEST	
START BUTTON LAMP	OFF
LANDING GEAR UP LAMP	OFF
LANDING GEAR DOWN LAMP	OFF
FLAP UP LAMP	OFF
FLAP DOWN LAMP	OFF
VIEW CHANGE BUTTON LAMP	OFF
WARNING LAMP	OFF
COCKPIT WARNING LED	OFF
HEAD&SIDE PANEL LAMP	OFF
BASS SHAKER	OFF
-> EXIT	

SELECT WITH SERVICE BUTTON AND PRESS TEST BUTTON

Select OUTPUT TEST from the menu in the game test mode to cause the screen (on which each lamp is tested) to appear. Ensure that each lamp lights up satisfactorily.

(5) SOUND TEST

SOUND TEST	
No. 0	

SELECT WITH SERVICE BUTTON
PRESS TEST BUTTON TO EXIT

In the TEST mode, selecting SOUND TEST causes the screen (on which sound related BD and wiring connections are tested) to be displayed. Check if the sound is satisfactorily emitted from each speaker and the sound volume is appropriate.

Perform the above inspections also at the time of monthly inspection.

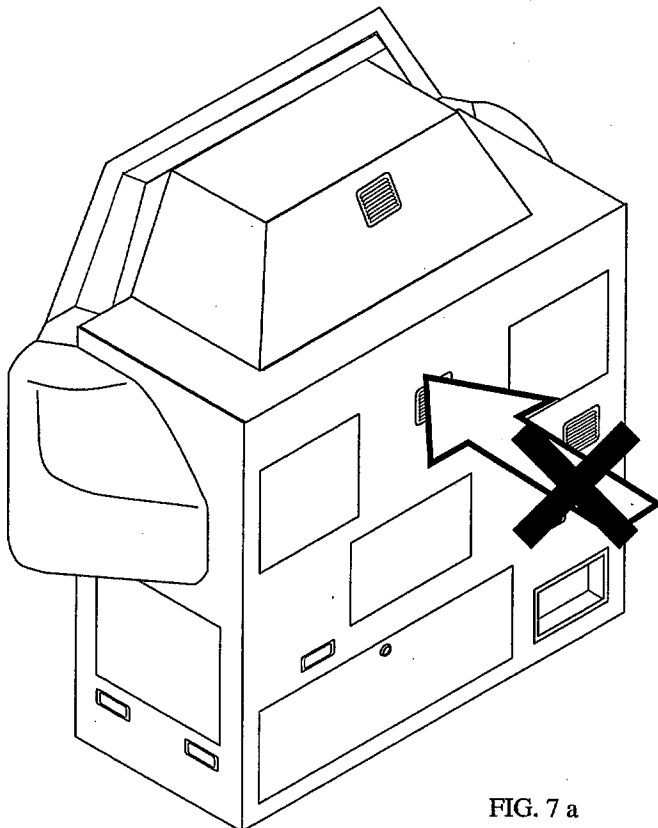
7. PRECAUTIONS TO BE HEEDED WHEN MOVING THE MACHINE



- When moving the machine, be sure to unplug the power plug. Moving the machine with the plug as is inserted can damage the power cord and cause fire and electric shock hazards.
- When moving the machine on the floor, retract the Adjusters and ensure that Casters make contact with the floor. During transportation, pay careful attention so that Casters do not tread power cords and earth wires. Damaging the power cords can cause electric shock and short circuit hazards.
- When lifting the cabinet, be sure to hold the grip portions or bottom part. Lifting the cabinet by holding other portions can damage parts and installation portions due to the empty weight of the cabinet, and cause personal injury.
- In the case the cabinet is separated into the front and rear portions, do not push the upper rear part of the front cabinet. Failure to observe this causes the front cabinet to fall down towards the monitor side and result in accidents and injury to persons. When moving the front cabinet in the above case, be sure to push it from side directions and move it by 2 or more persons for safety.

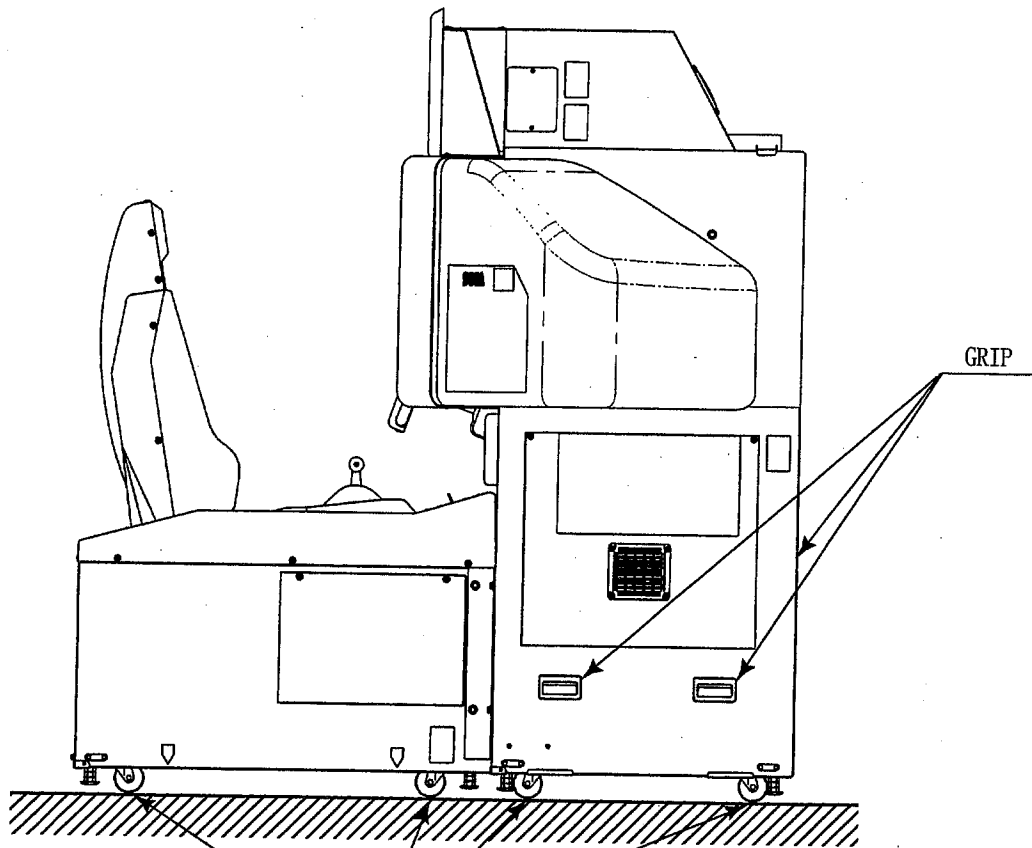


When transporting the product in places with steps, disassemble into each unit before transporting. Inclining the product in an as is assembled condition or placing the cabinet in places with steps can damage the unit's joining portions.



In the case the cabinet is separated into the front and rear portions, do not push the upper rear part of the front cabinet.

FIG. 7 a



Have casters make contact with the floor.

FIG. 7 b

When transporting the product in places with steps or step-like differences in grade, disassemble into each unit before transporting.

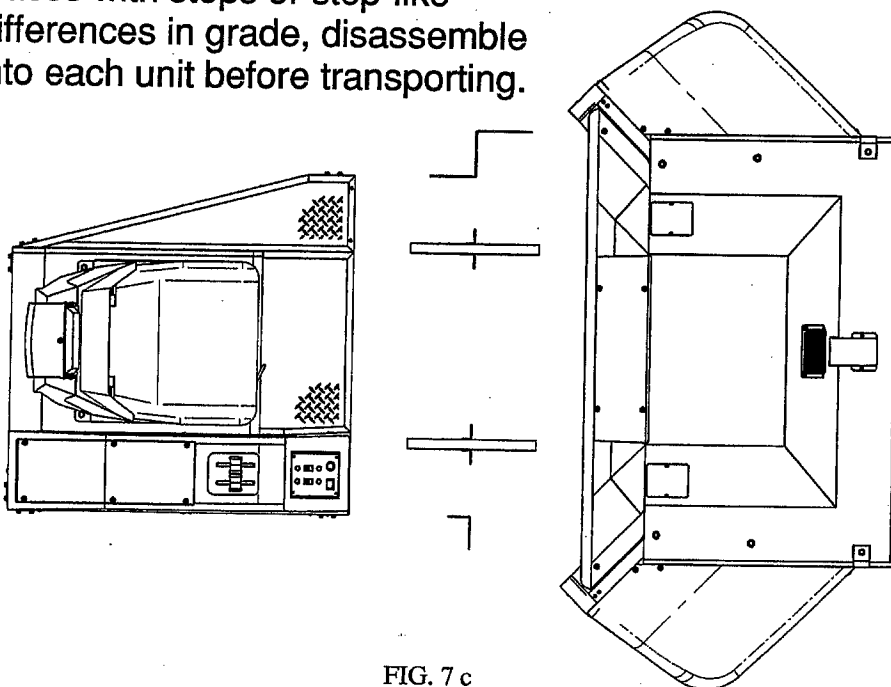
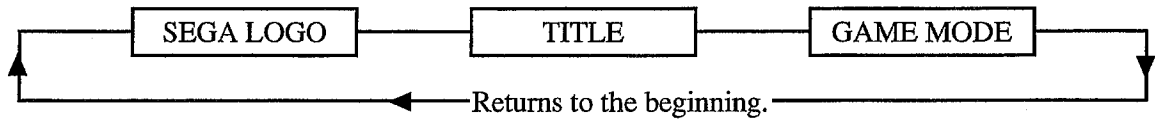


FIG. 7 c

8. CONTENTS OF GAME

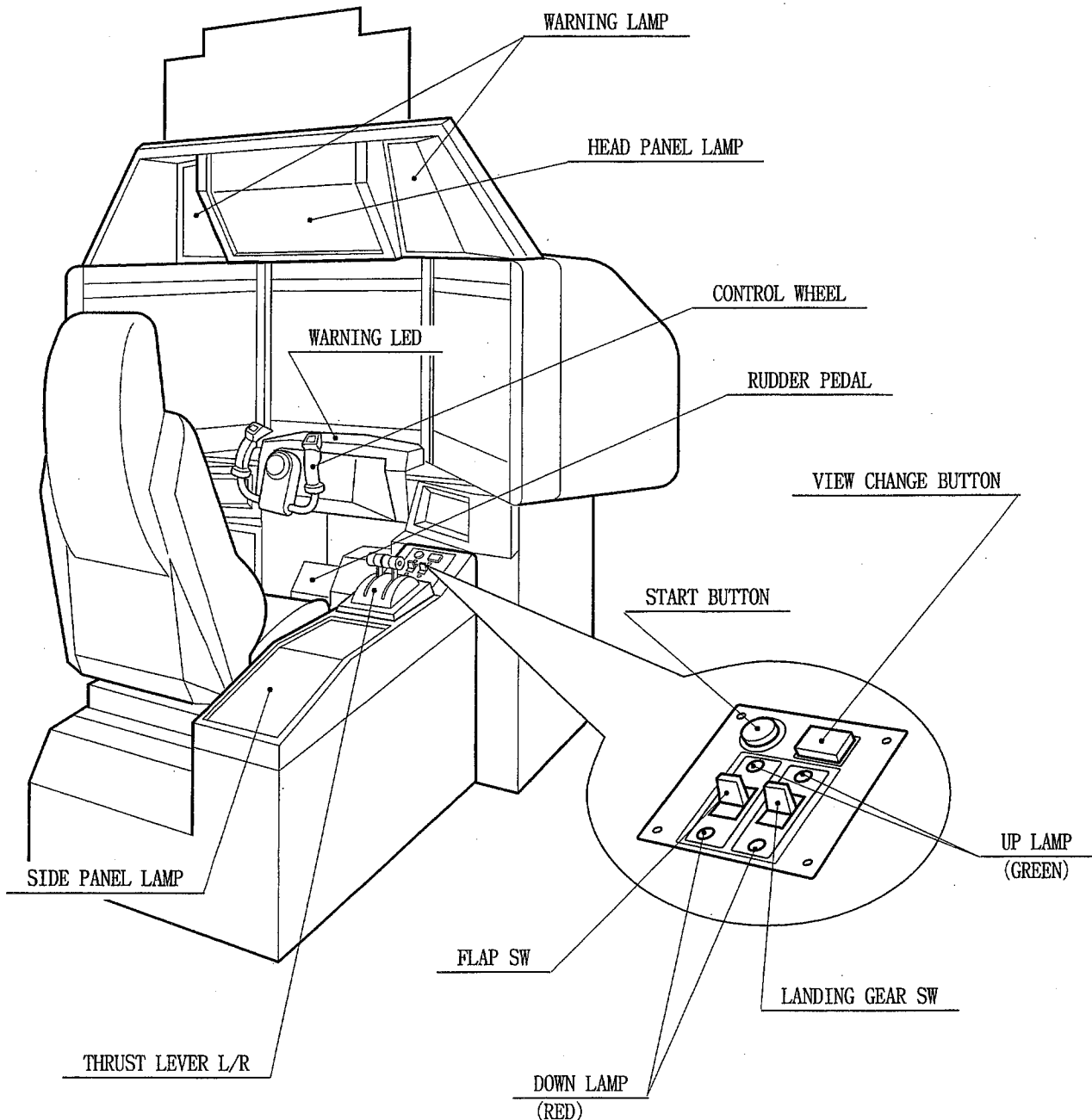
The following explanations apply to the case the product is functioning satisfactorily. Should there be any moves different from the following contents, some sort of faults may have occurred. Immediately look into the cause of the fault and eliminate the cause thereof to ensure satisfactory operation.



◆ From GAME START up to the end of SELECT.

Insert a credit worth number of coins.

Up to 9 credits can be counted at a time. Coins inserted after counting 9 credits are neither counted as credits nor returned. However, those coins inserted after counting 9 credits are included in the data display or Coin Meter as number of coins inserted.



Press the START button to start.

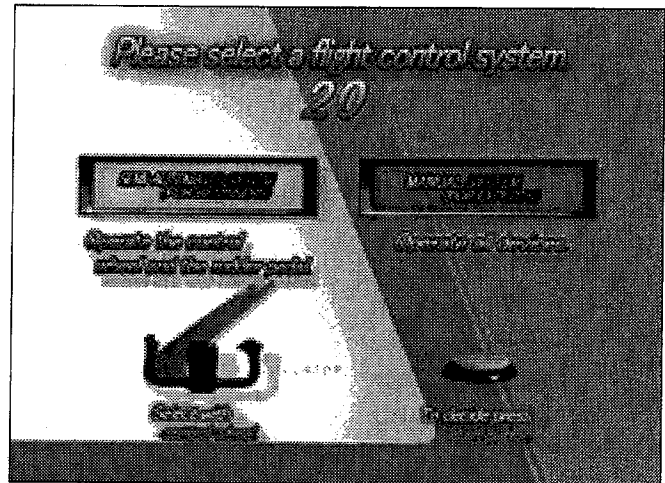
When the GAME MODE select screen appears, select TRAINING mode or FLIGHT mode.

- Incline the CONTROL WHEEL left or right to select and press the START button to confirm the selection (hereafter, this method applies to any selection).



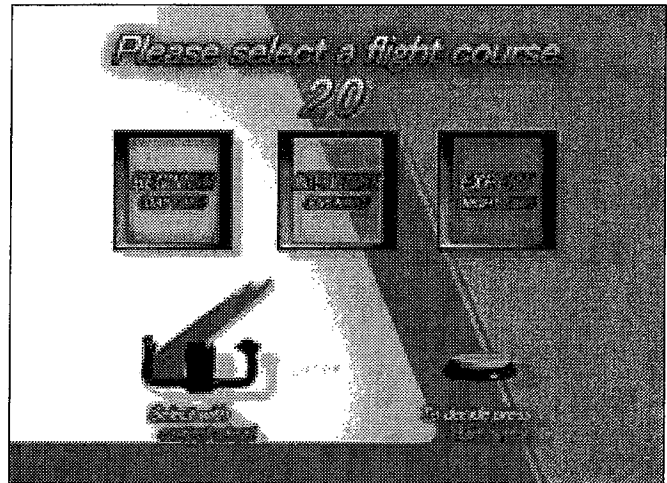
< In the case TRAINING MODE is selected:>

- When the CONTROL SYSTEM select screen appears, select AUTO CONTROL or FULL CONTROL.
- In the AUTO CONTROL, only the CONTROL WHEEL and the RUDDER PEDAL are operated by the player. The FLAP SW, LANDING GEAR SW, and THRUST LEVER are automatically controlled.
- In the FULL CONTROL, all Controllers are operated by the player.
- In the FULL CONTROL, the TRAINING mode game starts after setting Control Switches in accordance with the on-screen instruction.
- In the AUTO CONTROL, Control Switches need not be set. The TRAINING MODE game starts immediately.



< In the case FLIGHT MODE is selected:>

- The FLIGHT COURSE select mode appears on the screen. Select one from among BEGINNER, INTERMEDIATE, and EXPERT.
- The specific flight course of BEGINNER, INTERMEDIATE, and EXPERT corresponds to flight in the daytime, evening, and nighttime respectively.
- When the CONTROL SYSTEM select screen appears, select the CONTROL SYSTEM in the similar manner as in the TRAINING MODE.



◆ HOW TO PLAY IN THE TRAINING MODE

- This mode has 5 Training items, i. e., taking-off, turning, landing, evading engine trouble, and bad weather.
- The qualifying score is predetermined for each training item. If the qualifying score is cleared, the player can proceed to the next training item. If the player is disqualified, CONTINUE? appears on the screen.
- CONTINUE? appears on the screen also when nearing the end of flight time limit, deviating from the course, and crashing.
- When CONTINUED, the game starts from the beginning of that particular training.
- When all of the training items are cleared, the total score will be displayed and the game is finished.

◆ HOW TO PLAY IN THE FLIGHT MODE

- Take off from the airport and freely fly over Tokyo within the time limit.
- Passing near the Time Marker floating in the air increases the time limit.
- When nearing the time limit, select FLIGHT to continue flight for the remaining time, or LANDING.
- Select FLIGHT to continue up to the end of time limit. When time is up, CONTINUE? appears on the screen. If CONTINUED, flight can be continued again.
- When the LANDING MODE is selected, the on-screen scene changes to the LANDING course. If landing is successful, the game is finished. Failing to make a landing results in a game over.

9. EXPLANATION OF TEST AND DATA DISPLAY

By operating the switch unit, periodically perform the tests and data check. When installing the machine initially or collecting cash, or when the machine does not function correctly, perform checking in accordance with the explanations given in this section.

The following shows tests and modes that should be utilized as applicable.

NAOMI GAME BOARD is used for the product. The system of this game board allows another game to be played by replacing the ROM Board Case mounted on the NAOMI CASE. As such, the Test Mode of this system consists of the System Test Mode for the system to execute SELF-TEST, COIN ASSIGNMENTS, etc. used in common for the machines employing the NAOMI BOARD, and the Game Test Mode for the specific product to execute Input/Output test for the operation equipment, difficulty setting, etc.

TABLE 9 EXPLANATION OF TEST MODE

ITEMS	DESCRIPTION	REFERENCE SECTIONS
INSTALLATION OF MACHINE	When the machine is installed, perform the following: 1. Check to ensure each is the standard setting at shipment. 2. Check each Input equipment in the INPUT TEST mode. 3. Check each Output equipment in the OUTPUT TEST mode. 4. Test on-IC-Board IC's in the SELF-TEST mode.	9-2 9-3F 9-3B 9-3C 9-2①
MEMORY	This test is automatically executed by selecting RAM TEST, or ROM BOARD TEST in the Menu mode.	9-2①, 9-2⑩
PERIODIC SERVICING	Periodically perform the following: 1. MEMORY TEST 2. Ascertain each setting. 3. To test each Input equipment in the INPUT TEST mode. 4. To test each Output equipment in the OUTPUT TEST mode.	9-2①, 9-2⑩ 9-3F 9-3B 9-3C
CONTROL SYSTEM	1. To check each Input equipment in the INPUT TEST mode. 2. Adjust or replace each Input equipment. 3. If the problem still remains unsolved, check each equipment's mechanism movements.	9-2② 9-3B, G 10, 11, 12
MONITOR	In the Monitor Adjustment mode, check to see if Monitor (Projector) adjustments are appropriate.	9-2④, 9-3E 14
IC BOARD	1. MEMORY TEST 2. In the SOUND TEST mode, check the sound related ROMs.	9-2①, 9-2⑩ 9-3D
DATA CHECK	Check such data as game play time and histogram to adjust the difficulty level, etc.	9-2⑦ 9-3H

9-1 SWITCH UNIT AND COIN METER



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



- Adjust to the optimum sound volume by considering the environmental requirements of the installation location.
- If the COIN METER and the game board are electrically disconnected, game play is not possible.

SWITCH UNIT

Open the coin chute door, and the switch unit shown will appear. The function of each SW is as follows:

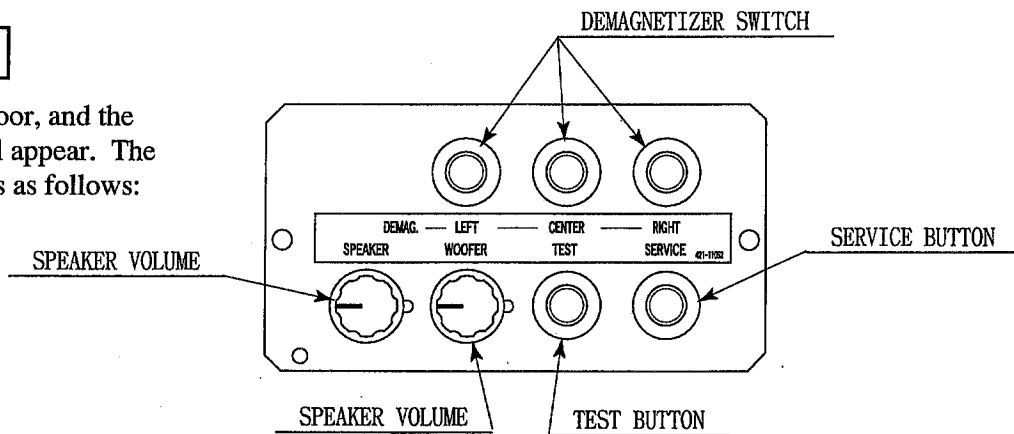


FIG. 9. 1 a SWITCH UNIT

SPEAKER VOLUME:
SPEAKER

Sound volume can be adjusted for the 2 Speakers.

SPEAKER VOLUME:
WOOFER

Adjusts the sound volume of WOOFER and the vibration of BASS SHAKER.

TEST BUTTON:
TEST

For the handling of the TEST BUTTON, refer to the following pages.

SERVICE BUTTON:
SERVICE

Gives credits without registering on the coin meter.

DEMAGNETIZER SWITCH:
DEMAG.

Eliminates the on-screen color unevenness due to magnetization of CRT. First use this SW before performing the monitor's color adjustment. Each monitor has this switch.

COIN METER

Open the Cashbox Door by using the key to have the Coin Meter appear underneath the Cashbox.

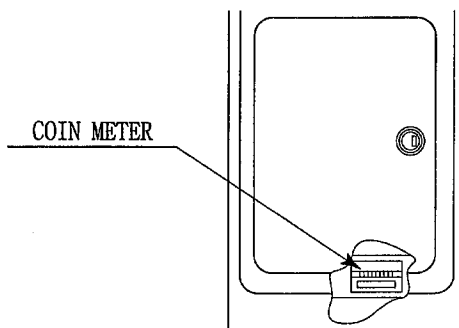


FIG. 9. 1 b COIN METER



The contents of setting changes in SYSTEM ASSIGNMENTS, COIN ASSIGNMENTS, and GAME TEST MODE are stored when the test mode is EXITed. If the power is turned off before EXITing, the contents of setting changes are ineffective. Be very careful of this point.

This test mode mainly allows the IC Board to be checked for accurate functioning, monitor color to be adjusted as well as COIN ASSIGNMENTS and GAME ASSIGNMENTS to be adjusted.

TEST ITEM SELECT

- 1) After turning power on, press the TEST button to have the following test item menu displayed. Although the menu is displayed on all of the 3 monitors (front, left and right), perform work by watching the front monitor only.

```
SYSTEM MENU
XXXX VERSION

RAM TEST
JVS TEST
SOUND TEST
C.R.T. TEST
SYSTEM ASSIGNMENTS
COIN ASSIGNMENTS
BOOKKEEPING
BACKUP DATA CLEAR
CLOCK SETTING

ROM BOARD TEST
GAME TEST MODE
[AIRLINE PILOTS IN XXXX]

-> EXIT

SELECT WITH SERVICE BUTTON
AND PRESS TEST BUTTON
```

- 2) Press the SERVICE button to move the arrow. Bring the arrow to the desired item and press the TEST button.
- 3) Upon finishing the test, bring the arrow to EXIT and press the TEST button to return to the Game mode.

① RAM TEST

This allows for checking the functioning of the RAM on the NAOMI Main BD.
"GOOD" is displayed for satisfactory RAMs, and "BAD" is indicated for irregular RAMs, if any.

In this test, check the 3 monitors.

```
RAM TEST

IC29 GOOD
IC35 GOOD
IC16 GOOD   IC18 GOOD
IC20 GOOD   IC22 GOOD
IC09 GOOD   IC10 GOOD
IC11 GOOD   IC12 GOOD

PRESS TEST BUTTON TO EXIT
```

During test, "TESTING NOW" is displayed.
Press the TEST button to return to the menu mode.

⑤ SYSTEM ASSIGNMENTS



If the settings of CABINET TYPE and MONITOR TYPE are not suitable for the connected game, Error Message is displayed after turning power on and upon finishing the TEST mode, and in this case, game is not playable.

The setting of cabinet and board can be changed. Game related assignments such as game difficulty, etc. are performed in ① GAME TEST MODE.

- 1) Press the SERVICE button to move the arrow. Bring the arrow to the desired item.
- 2) Press the TEST button to change the setting.
- 3) Upon finishing the setting, move the arrow to EXIT and press the TEST button.

```
SYSTEM ASSIGNMENTS

CABINET TYPE  1PLAYER(S)  (A)
ADVERTISE SOUND ON      (B)
MONITOR TYPE  HORIZONTAL  (C)
-> EXIT

SELECT WITH SERVICE BUTTON
AND PRESS TEST BUTTON
```

(A) CABINET TYPE (1PLAYER(S), 2PLAYER(S), 3PLAYER(S), 4PLAYER(S))
Fix setting to 1 PLAYER(S).

(B) ADVERTISE SOUND (ON, OFF)
Sets whether ADVERTISE sound is to be emitted or not. Normally, set to ON.

(C) MONITOR TYPE (HORIZONTAL, VERTICAL)
Fix setting to HORIZONTAL.

⑥ COIN ASSIGNMENTS

In this mode, the setting of incremental credit increase as against coin insertion can be changed.

- 1) Press the SERVICE button to move the arrow. Bring the arrow to the desired item.
- 2) Press the TEST button to change the setting.
- 3) Upon finishing the setting, bring the arrow to EXIT and press the TEST button.

COIN ASSIGNMENTS		
COIN CHUTE TYPE	COMMON	(A)
COIN/CREDIT SETTING	#1	(B)
COIN CHUTE #1		
1 COIN 1 CREDIT		
COIN CHUTE #2		
1 COIN 1 CREDIT		
MANUAL SETTING		(C)
SEQUENCE SETTING		(G)
->EXIT		
SELECT WITH SERVICE BUTTON AND PRESS TEST BUTTON		

(A) COIN CHUTE TYPE (COMMON, INDIVIDUAL)

Set to COMMON.

Up to 2 Coin Chutes (#1 and #2) can be used and also, (B) COIN/CREDIT SETTING ratio can be set separately for #1 and #2.

(B) COIN/CREDIT SETTING (# 1 ~ # 2 7)

Sets the credit increase increment per coin insertion. There are 27 settings from #1 to #27, expressed in ○○ credit(s) as against ○○ coins inserted. #27 refers to FREE PLAY.

For details, refer to Table 1 (COMMON).

(C) MANUAL SETTING

The Credit's incremental increase settings as against a coin insertion are shown in further details than in (B) above (refer to Table 3). Also, note that when this MANUAL SETTING is performed, (B) COIN CREDIT setting becomes ineffective.

MANUAL SETTING

COIN ASSIGNMENTS		
MANUAL SETTING		
COIN TO CREDIT	1	(D)
BONUS ADDER	NO BONUS ADDER	(E)
COIN CHUTE #1 MULTIPLIER		(F)
1 COIN COUNT AS 1 COIN		
COIN	1 2 3 4 5 6 7 8 9	
CREDIT	1 2 3 4 5 6 7 8 9	
COIN CHUTE #2 MULTIPLIER		(F)
1 COIN COUNT AS 1 COIN		
COIN	1 2 3 4 5 6 7 8 9	
CREDIT	1 2 3 4 5 6 7 8 9	
SEQUENCE SETTING		(G)
->EXIT		
SELECT WITH SERVICE BUTTON AND PRESS TEST BUTTON		

(D) COIN TO CREDIT

Determines COIN/CREDIT setting.

(E) BONUS ADDER

This sets how many coins should be inserted to obtain one SERVICE COIN.

(F) COIN CHUTE (# 1 / # 2) MULTIPLIER

This sets how many tokens one coin represents.

Table 1: COIN/CREDIT SETTING (COIN CHUTE COMMON TYPE)

NAME OF SETTING	COIN CHUTE 1		COIN CHUTE 2	
SETTING #1	1 COIN	1 CREDIT	1 COIN	1 CREDIT
SETTING #2	1 COIN	2 CREDITS	1 COIN	1 CREDIT
SETTING #3	1 COIN	3 CREDITS	1 COIN	1 CREDIT
SETTING #4	1 COIN	4 CREDITS	1 COIN	1 CREDIT
SETTING #5	1 COIN	5 CREDITS	1 COIN	1 CREDIT
SETTING #6	1 COIN	2 CREDITS	1 COIN	2 CREDITS
SETTING #7	1 COIN	5 CREDITS	1 COIN	2 CREDITS
SETTING #8	1 COIN	3 CREDITS	1 COIN	3 CREDITS
SETTING #9	1 COIN	4 CREDITS	1 COIN	4 CREDITS
SETTING #10	1 COIN	5 CREDITS	1 COIN	5 CREDITS
SETTING #11	1 COIN	6 CREDITS	1 COIN	6 CREDITS
SETTING #12	2 COINS	1 CREDIT	2 COINS	1 CREDIT
SETTING #13	1 COIN	1 CREDIT	2 COINS	1 CREDIT
SETTING #14	1 COIN	2 CREDITS	2 COINS	1 CREDIT
SETTING #15	1 COIN	1 CREDIT	1 COIN	1 CREDIT
	2 COINS	3 CREDITS	2 COINS	3 CREDITS
SETTING #16	1 COIN	3 CREDITS	1 COIN	1 CREDIT
			2 COINS	3 CREDITS
SETTING #17	3 COINS	1 CREDIT	3 COINS	1 CREDIT
SETTING #18	4 COINS	1 CREDIT	4 COINS	1 CREDIT
SETTING #19	1 COIN	1 CREDIT	1 COIN	1 CREDIT
	2 COINS	2 CREDITS	2 COINS	2 CREDITS
	3 COINS	3 CREDITS	3 COINS	3 CREDITS
	4 COINS	5 CREDITS	4 COINS	5 CREDITS
SETTING #20	1 COIN	5 CREDITS	1 COIN	1 CREDIT
			2 COINS	2 CREDITS
			3 COINS	3 CREDITS
			4 COINS	5 CREDITS
SETTING #21	5 COINS	1 CREDIT	5 COINS	1 CREDIT
SETTING #22	1 COIN	2 CREDITS	3 COINS	1 CREDIT
			5 COINS	2 CREDITS
SETTING #23	2 COINS	1 CREDIT	2 COINS	1 CREDIT
	4 COINS	2 CREDITS	4 COINS	2 CREDITS
	5 COINS	3 CREDITS	5 COINS	3 CREDITS
SETTING #24	1 COIN	3 CREDITS	2 COINS	1 CREDIT
			4 COINS	2 CREDITS
			5 COINS	3 CREDITS
SETTING #25	1 COIN	1 CREDIT	1 COIN	1 CREDIT
	2 COINS	2 CREDITS	2 COINS	2 CREDITS
	3 COINS	3 CREDITS	3 COINS	3 CREDITS
	4 COINS	4 CREDITS	4 COINS	4 CREDITS
	5 COINS	6 CREDITS	5 COINS	6 CREDITS
SETTING #26	1 COIN	6 CREDITS	1 COIN	1 CREDIT
			2 COINS	2 CREDITS
			3 COINS	3 CREDITS
			4 COINS	4 CREDITS
			5 COINS	6 CREDITS
SETTING #27	FREE PLAY		FREE PLAY	

Table 2: MANUAL SETTING

COIN TO CREDIT	1 COIN 1 CREDIT
	2 COINS 1 CREDIT
	3 COINS 1 CREDIT
	4 COINS 1 CREDIT
	5 COINS 1 CREDIT
	6 COINS 1 CREDIT
	7 COINS 1 CREDIT
	8 COINS 1 CREDIT
	9 COINS 1 CREDIT
BONUS ADDER	NO BONUS ADDER
	2 COINS GIVE 1 EXTRA COIN
	3 COINS GIVE 1 EXTRA COIN
	4 COINS GIVE 1 EXTRA COIN
	5 COINS GIVE 1 EXTRA COIN
	6 COINS GIVE 1 EXTRA COIN
	7 COINS GIVE 1 EXTRA COIN
	8 COINS GIVE 1 EXTRA COIN
	9 COINS GIVE 1 EXTRA COIN
COIN CHUTE (#1/#2) MULTIPLIER	1 COIN COUNTS AS 1 COIN
	1 COIN COUNTS AS 2 COINS
	1 COIN COUNTS AS 3 COINS
	1 COIN COUNTS AS 4 COINS
	1 COIN COUNTS AS 5 COINS
	1 COIN COUNTS AS 6 COINS
	1 COIN COUNTS AS 7 COINS
	1 COIN COUNTS AS 8 COINS
	1 COIN COUNTS AS 9 COINS

(G) SEQUENCE SETTING

Number of credits required for starting game, etc. can be set.

Function varies depending on the specific games. To find out what kind of functions are allotted to each sequence, or what is the initial value for each sequence, refer to the Instruction Manual of the game connected. Each sequence can be set between 1 ~ 5 credit(s).

COIN ASSIGNMENTS	
SEQUENCE SETTING	
SEQUENCE 1	1 CREDIT(S)
SEQUENCE 2	1 CREDIT(S)
SEQUENCE 3	1 CREDIT(S)
SEQUENCE 4	1 CREDIT(S)
SEQUENCE 5	1 CREDIT(S)
SEQUENCE 6	1 CREDIT(S)
SEQUENCE 7	1 CREDIT(S)
SEQUENCE 8	1 CREDIT(S)
-> EXIT	
[AIRLINE PILOTS IN XXXX]	
DESCRIPTION OF SEQUENCE	
1	CREDIT TO START
2	CREDIT TO CONTINUE
3	NO USE
4	NO USE
5	NO USE
6	NO USE
7	NO USE
8	NO USE
SELECT WITH SERVICE BUTTON	
AND PRESS TEST BUTTON	

(EXAMPLE)

In cases of video games such as AIRLINE PILOTS :

SEQUENCE 1 : Number of credits required for game start (initial value=2)

SEQUENCE 2 : Number of credits required for CONTINUE (initial value=1)

SEQUENCE 3~8 : NOT USED.

⑦ BOOKKEEPING

• BOOKKEEPING 1/2

This allows such data as operating time/No. of coins inserted/ No. of credits to be checked.
Perform work by watching the front monitor only.

BOOKKEEPING 1/2		
TOTAL TIME		
OD 00H 00M 00S		
CREDIT	0	(A)
COIN 1	0	(B)
COIN 2	0	
COIN 3 4	0	
TOTAL COIN	0	
COIN CREDIT	0	
SERVICE CREDIT	0	
TOTAL CREDIT	0	
PRESS TEST BUTTON TO CONTINUE		

(A) CREDIT 1,2(,3,4)

(B) COIN 1,2(,3,4)

Number of Display Items vary depending on the setting of CABINET TYPE in the SYSTEM ASSIGNMENTS.

Press the TEST button to proceed to BOOKKEEPING 2/2.

• BOOKKEEPING 2/2

Each sequence displays the frequency of functioning. The contents of each sequence vary depending on specific games. For the contents of each sequence, refer to the Instruction Manual of the game connected.

Display Items vary depending on the setting of CABINET TYPE in the SYSTEM ASSIGNMENTS.

Perform work by watching the front monitor only.

BOOKKEEPING 2/2		
P1 SEQ 1	0	
P1 SEQ 2	0	
P1 SEQ 3	0	
P1 SEQ 4	0	
P1 SEQ 5	0	
P1 SEQ 6	0	
P1 SEQ 7	0	
P1 SEQ 8	0	
PRESS TEST BUTTON TO EXIT		

(EXAMPLE) In cases of video games such as ZOMBIE ZONE, etc. :

P1(P2) SEQ 1 : Frequency of Game Start by the player.

P1(P2) SEQ 2 : Frequency of CONTINUE by Player (Player 2)

P1(P2) SEQ 3 ~ 8 : NOT USED.

⑧ BACKUP DATA CLEAR

Clears the contents of BOOKKEEPING (SYSTEM TEST MODE).

BACKUP DATA CLEAR

YES (CLEAR)
-> NO (CANCEL)

SELECT WITH SERVICE BUTTON
AND PRESS TEST BUTTON

When clearing, bring the arrow to YES by using the SERVICE button and press the TEST button. Bring the arrow to NO and press the TEST button to have the menu mode return without clearing the data. COMPLETED is displayed when clearing is completed. Press the TEST button to return to the menu mode.

⑨ CLOCK SETTING

Set YEAR, MONTH, DAY, HOUR, and MINUTE for NAOMI Main BD.

CLOCK SETTING

1998 12/02 14:30 33 WED

YEAR
MONTH
DAY
HOUR
MINUTE
-> EXIT

SELECT WITH SERVICE BUTTON
AND PRESS TEST BUTTON

Select the desired item with the SERVICE button and press the TEST button to increase the value. Upon finishing the SETTING, bring the arrow to EXIT and press the TEST button to return to the menu mode.

⑩ ROM BOARD TEST

In this test, on-ROM-BD ROM check is executed. If GOOD is displayed, it is satisfactory. However, Program ROMs (IC22 or IC 1) do not display GOOD or BAD. BYTE and WORD refers to the check sum of each unit.

ROM BOARD TEST				
[AIRLINE PILOTS IN XXXX]				
NO.	TYPE	RESULT	BYTE	WORD
IC22	32M	---	XXXX	XXXX
IC1	64M	GOOD	XXXX	XXXX
IC2	64M	GOOD	XXXX	XXXX
IC3	64M	GOOD	XXXX	XXXX
IC4	64M	GOOD	XXXX	XXXX
IC5	64M	GOOD	XXXX	XXXX
IC6	64M	GOOD	XXXX	XXXX
IC7	64M	GOOD	XXXX	XXXX
IC8	64M	GOOD	XXXX	XXXX
IC9	64M	GOOD	XXXX	XXXX
IC10	64M	GOOD	XXXX	XXXX
IC11	64M	GOOD	XXXX	XXXX

PRESS TEST BUTTON TO EXIT

The number of ROMs depends on each game.
Press the TEST button to return to the menu mode.

9-3 GAME TEST MODE

A. MENU MODE

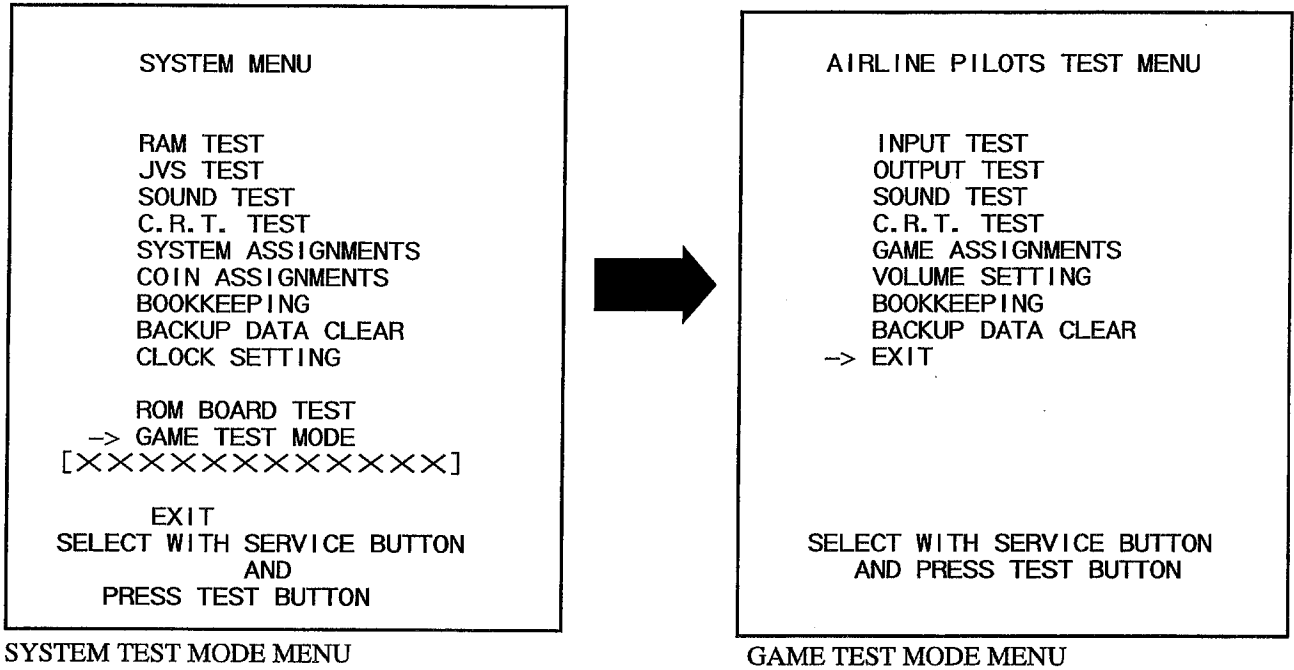


FIG. 9.3 a MENU MODE

- Press the TEST button to display the SYSTEM TEST MODE MENU.
- By pressing the SERVICE button, move the arrow (->) to select the GAME TEST MODE.
- Press the TEST button to enter GAME TEST MODE. The screen displays the GAME TEST MODE MENU.
- By pressing the SERVICE button, move the arrow (->) to select the desired item. Press the TEST button to execute the selected item.
- Select EXIT and press the TEST button to exit from the GAME TEST MODE and return to the SYSTEM TEST MODE MENU. Further, select EXIT and press the TEST button to finish SYSTEM TEST MODE and return to the normal mode.

B. INPUT TEST

Selecting INPUT TEST displays the following and allows the status of each switch to be checked and the Volume value of each operative unit to be observed. In this mode, periodically check the status of each switch and Volume.

INPUT TEST	
LANDING GEAR SWITCH	UP
FLAP SWITCH	UP
VIEW CHANGE BUTTON	OFF
START BUTTON	OFF
SERVICE TEST	OFF
CONTROL WHEEL (AILERON)	ABH
CONTROL WHEEL (ELEVATOR)	ABH
RUDDER PEDAL	ABH
THRUST LEVER L	ABH
THRUST LEVER R	ABH

PRESS TEST AND SERVICE BUTTON TO EXIT

- By pressing each switch, if the display on the right-hand side of the name of each switch changes to ON from OFF, the SW and the wiring connections are satisfactory. UP and DOWN are displayed for LANDING GEAR SWITCH and FLAP SWITCH.
- Operate CONTROL WHEEL, THRUST LEVER, etc. to check Volume value display variation. If the variation is not satisfactorily consistent with operation, refer to Sections 10, 11, and 12.

FIG. 9.3 b INPUT TEST

- To check the Coin SW of "COIN CHUTE", open the Coin Chute Door and insert a coin into the Coin Inlet.
- Simultaneously pressing the Service button and the Test button returns the Test Menu on the screen.

C. OUTPUT TEST

Selecting OUTPUT TEST displays the following on the monitor and allows the status of Lamp to be checked. In this mode, periodically check the lamp status.

OUTPUT TEST	
START BUTTON LAMP	OFF
LANDING GEAR UP LAMP	OFF
LANDING GEAR DOWN LAMP	OFF
FLAP UP LAMP	OFF
FLAP DOWN LAMP	OFF
VIEW CHANGE BUTTON LAMP	OFF
WARNING LAMP	OFF
COCKPIT WARNING LED	OFF
HEAD&SIDE PANEL LAMP	OFF
BASS SHAKER	OFF
-> EXIT	

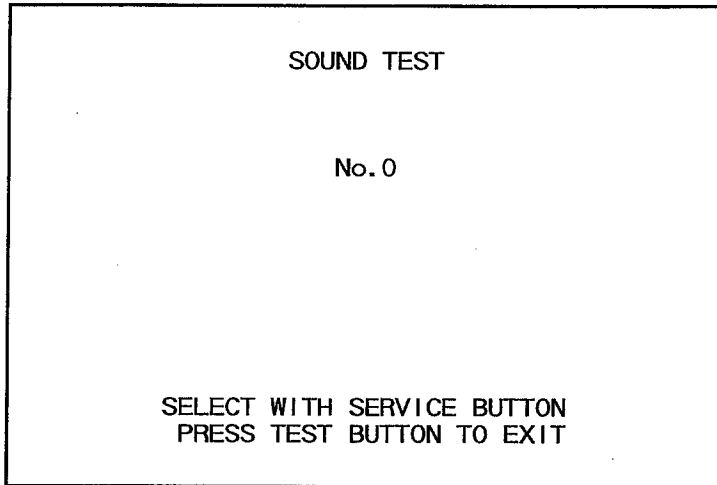
SELECT WITH SERVICE BUTTON
AND PRESS TEST BUTTON

- Select the item with the SERVICE button and press the TEST button to alternate the display to and from ON and OFF. Outputting is to correspond to the ON/OFF alternation.
- When exiting from OUTPUT TEST with ON display, all of ON displays change to OFF.
- Bring the arrow to EXIT and press the TEST BUTTON to return to the menu mode.

FIG. 9.3 c OUTPUT TEST

D. SOUND TESTS

Selecting SOUND TEST displays the following and allows sounds used in game to be checked.



Press the SERVICE button to increase the number sequentially so as to emit the next sound. Press the TEST button to return to TEST MENU.

FIG. 9.3 d SOUND TEST

E. C.R.T. TEST

Selecting C.R.T. test causes the monitor to display the following and allows the 3 screens (displayed simultaneously) to adjust brightness balance.

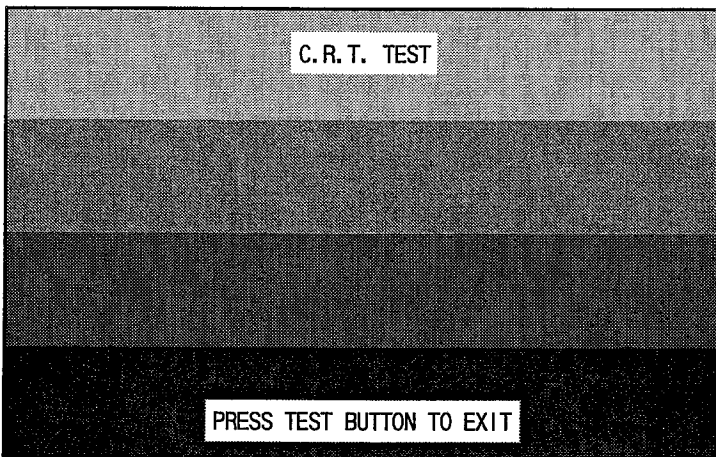


FIG. 9.3 e C.R.T. TEST

F. GAME ASSIGNMENTS

When GAME ASSIGNMENTS are selected, the following appears on the monitor and Game Difficulty, etc. can be set. The setting change is not renewed until the TEST mode is exited. After setting change, be sure to exit from the TEST mode.

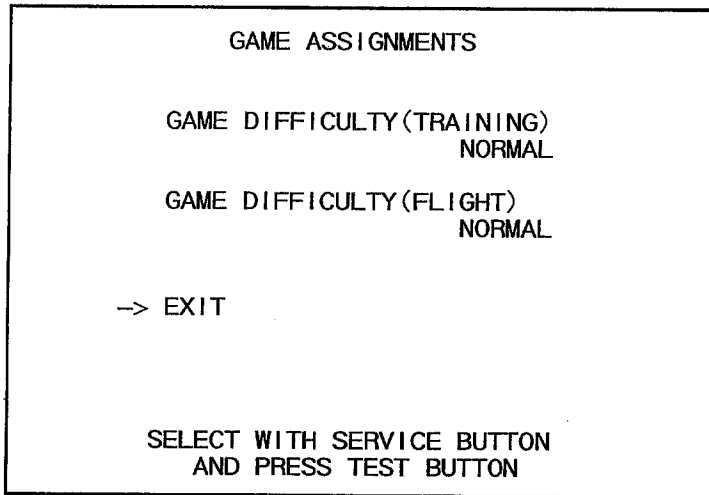


FIG. 9.3 f GAME ASSIGNMENTS

○ GAME DIFFICULTY (TRAINING)

Sets the game difficulty for the TRAINING Mode.

Game difficulty can be set from among the 5 categories, i. e., VERY EASY, MEDIUM EASY, NORMAL, MEDIUM HARD, and VERY HARD. Specifically, this varies the qualifying points.

○ GAME DIFFICULTY (FLIGHT)

Sets the game difficulty for the FLIGHT Mode.

Game difficulty can be set from among the 5 categories, i. e., VERY EASY, MEDIUM EASY, NORMAL, MEDIUM HARD, and VERY HARD.

Specifically, this varies the initial time for each course in the FLIGHT MODE.

Bring the arrow to EXIT and press the TEST BUTTON to return to the menu mode.

G. VOLUME SETTING

Selecting VOLUME SETTING causes the following to be displayed on the monitor and allows each Control Unit's Volume to be set.

If operability is unsatisfactory, or when adjusting or replacing the Volume, set the Volume in this mode.

VOLUME SETTING			
	MIN	MAX	NUE
CONTROL WHEEL (AILERON)	50H (20H)	80H (DFH)	BFH (B0H)
CONTROL WHEEL (ELEVATOR)	50H (20H)	80H (DFH)	BFH (B0H)
RUDDER PEDAL	50H (20H)	80H (DFH)	BFH (B0H)
THRUST LEVER L	50H (20H)	80H (DFH)	
THRUST LEVER R	50H (20H)	80H (DFH)	

EXIT WITH SAVE
-> EXIT WITHOUT SAVE

SELECT WITH SERVICE BUTTON
AND PRESS TEST BUTTON

FIG. 9.3 g VOLUME SETTING

METHOD OF VOLUME SETTING

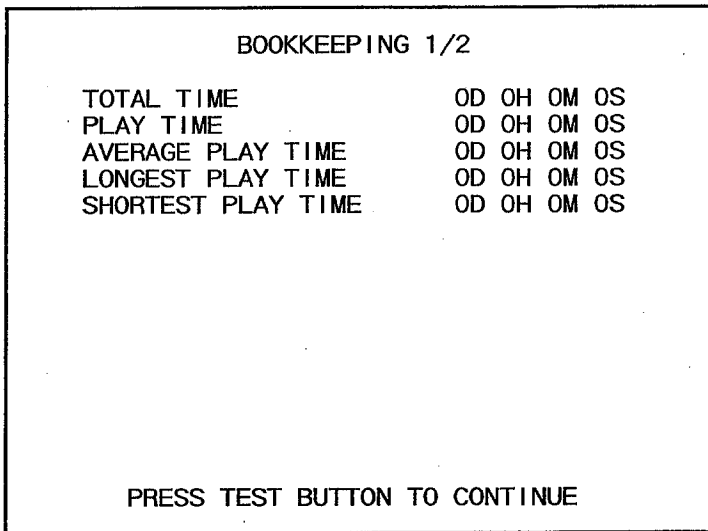
To perform Volume setting, move all Volumes from the minimum value to the maximum value and select "EXIT WITH SAVE" in the status the CONTROL WHEEL and RUDDER PEDAL are returned to the horizontal (neutral) position.

If "EXIT WITHOUT SAVE" is selected, the setting is cancelled.

The values in parentheses have already been saved.

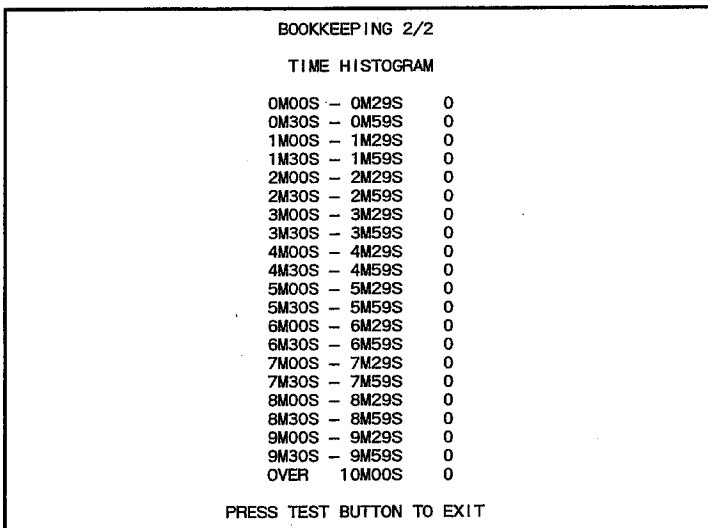
H. BOOKKEEPING

Selecting BOOKKEEPING allows the data of operating status in 2 pages. Each time the TEST button is pressed, the ensuing page appears. Pressing the TEST button while the second page is displayed causes the Menu mode to return on the screen.



- **TOTAL TIME:**
Refers to TOTAL TIME energized except for the time used for the TEST Mode.
- **PLAY TIME:**
Refers to the game play time.

FIG. 9.3 h a BOOKKEEPING (1/2)



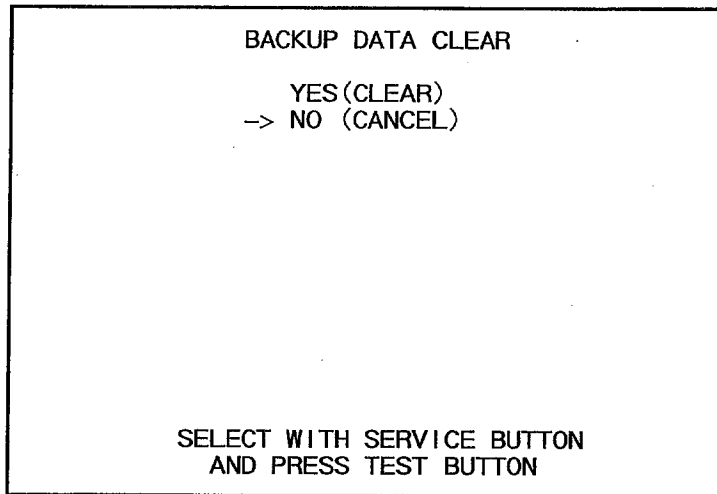
In Page 2/2, Histogram of Number of Play as against Play Time is displayed. For setting the DIFFICULTY, refer to this histogram.

FIG. 9.3 h b BOOKKEEPING (2/2)

By-playtime play frequency bookkeeping is displayed in increments of 30 seconds from 0M00S to 9M59S. Playtime in excess of 10 minutes is displayed all in the category of OVER 10 M00S.

I. BACKUP DATA CLEAR

This allows the contents of BOOKKEEPING and the Ranking data to be cleared. Despite the "clear" execution, the settings of GAME ASSIGNMENTS do not change. The remaining credits, however, will be deleted and therefore, be very careful of this point.



When clearing, use the SERVICE BUTTON to bring the arrow (>) to "YES (CLEAR)" and press the TEST BUTTON. When the data has been cleared, "COMPLETED" will be displayed. Bring the arrow to "NO (CANCEL)" and press the TEST BUTTON to return to the Menu mode without clearing the data.

FIG. 9.3 i BACKUP DATA CLEAR

10. CONTROL MECHANISM



- First, be sure to turn power off before performing work. Failure to observe this can cause electric shock and short circuit accidents.
- Use care so as not to damage wirings. Damaged wiring can cause electric shock and short circuit hazards.
- Do not touch undesignated places. Touching places not designated can cause electric shock and short circuit hazards.
- This work should be performed by the Location's Maintenance Man or Serviceman. Performing work by non-technical personnel can cause electric shock.

In the TEST mode, if the value movements of CONTROL WHEEL are irregular, adjust or replace the Volume in the following procedure:

10 - 1 TAKING OUT THE CONTROL MECHANISM

- ① Turn power off.
- ② Take out the 4 screws and remove the YOKE COVER from the CONTROL WHEEL.

TRUSS SCREW (4), chrome
M4×10, flat washer used

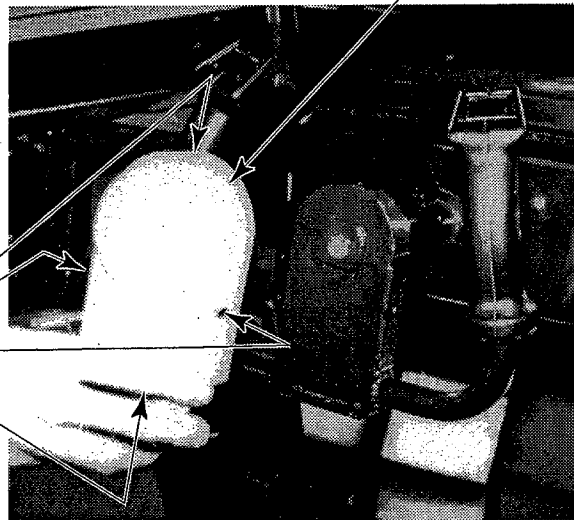


PHOTO 10. 1 a

- ③ Remove the Hexagon Socket Bolt and Spacer Ring to pull out the CONTROL WHEEL.

HEXAGON SOCKET BOLT
M8×20, spring washer used.

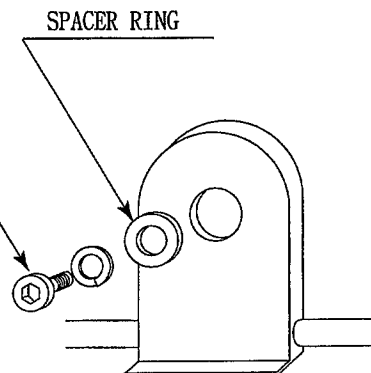


FIG. 10. 1

- ④ Take out the 6 screws and remove the Control Panel Cover.

TRUSS SCREW(2), black
M4×10, flat washer used.

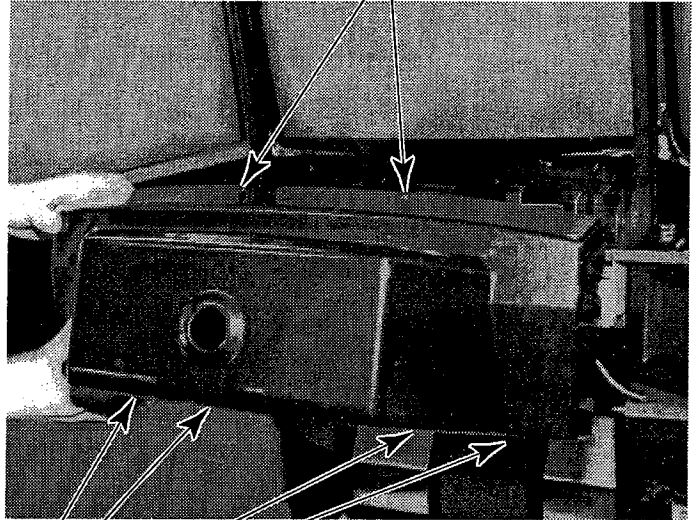
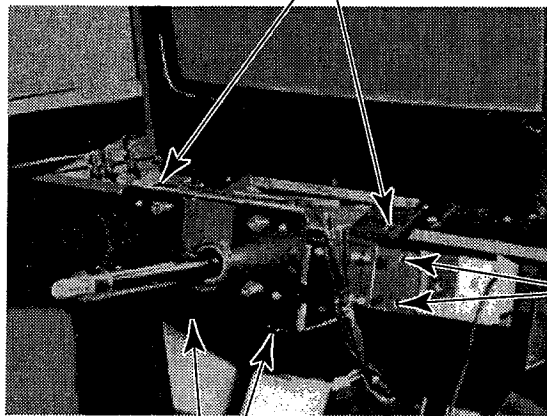


PHOTO 10. 1 b

TRUSS SCREW(4), black
M4×10, flat washer used.

- ⑤ Remove the LED PANEL by referring to 10-5 REPLACING THE LED BOARD.
⑥ Take out 6 bolts and 2 screws and pull out the Control Mechanism.

HEXAGON BOLT(2), black
M8×20, w/spring washer, flat washer used.



HEXAGON BOLT(2), black, both sides
M8×20, w/spring washer,
flat washer used.

TAMPERPROOF SCREW(2), black
M8×30, w/spring washer, flat washer used.

PHOTO 10. 1 c

10 - 2 ADJUSTING THE VOLUME



Never touch undesignated portions. Failure to observe this can cause electric shock and short circuit accidents.

- ① The Volume Brackets can be moved by loosening 2 screws from each Bracket.

- ② Move the Volume Brackets to disengage the Adjust Gear mesh, and move the Volume Shaft in the manner so that the cut portion of Volume Shaft faces opposite the Center Reference Hole of the Adjust Gear.

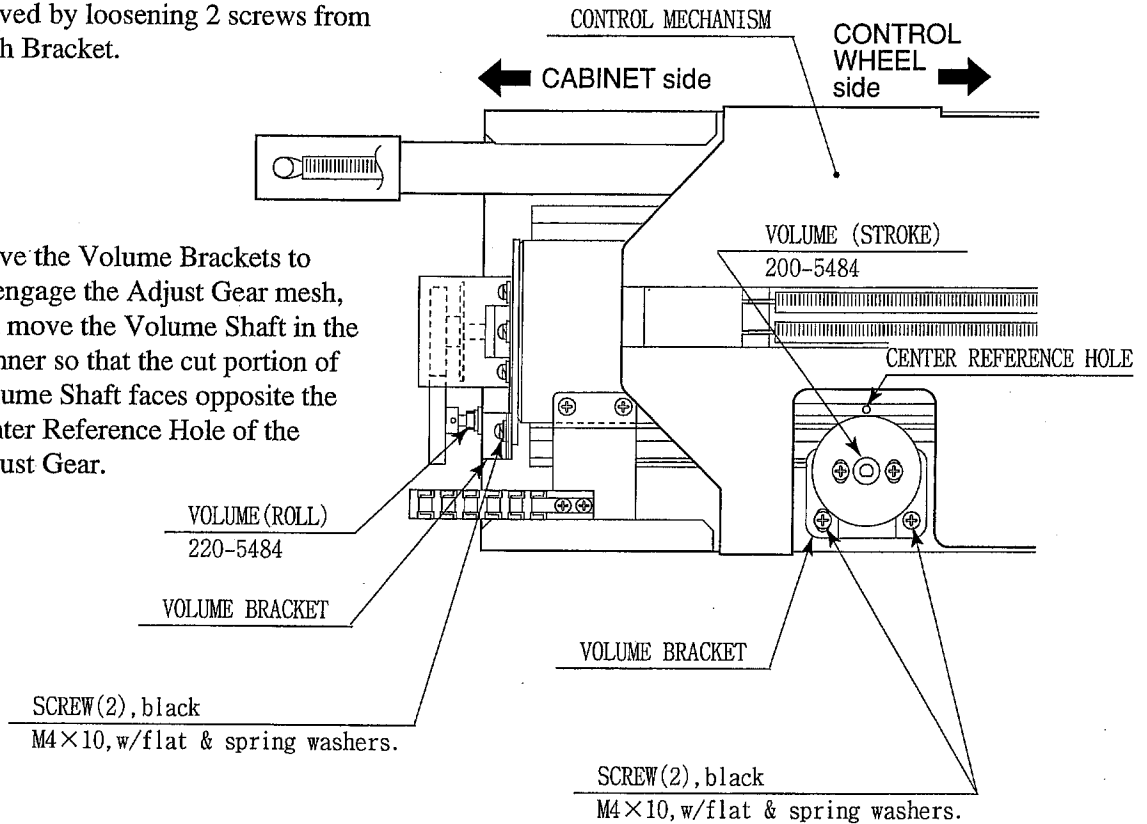


FIG. 10. 2

- ③ Engage Gears and fasten the 2 screws.
- ④ Carefully move the CONTROL WHEEL left/right & forward/backward, and check to ensure that the Volume range is not exceeded.
- ⑤ Upon completion of adjustment, be sure to perform Volume setting in the TEST mode.

10 - 3 REPLACING THE VOLUME



First, be sure to turn power off before performing work. Failure to observe this can cause electric shock and short circuit accidents.

- ① Remove the Volume Gear from the Volume to replace the Volume.
- ② After replacement, make adjustment in accordance with the procedure of 10-2 ADJUSTING THE VOLUME.

10-4 GREASING



First, be sure to turn power off before performing work. Failure to observe this can cause electric shock and short circuit accidents.



- Be sure to use the designated grease. Using undesignated grease can cause parts damage.
- Do not apply greasing to undesignated places. Failure to observe this can cause malfunctioning or quality deterioration of parts.

Apply greasing to the following portions once every three (3) months.
For Spray Grease, use NOK GLÜBER L60 or GREASE MATE (PART No. 090-0066).
For greasing for the backside of Centering Mechanism, take out the 4 Hexagon Socket Bolts and remove the Centering Base.

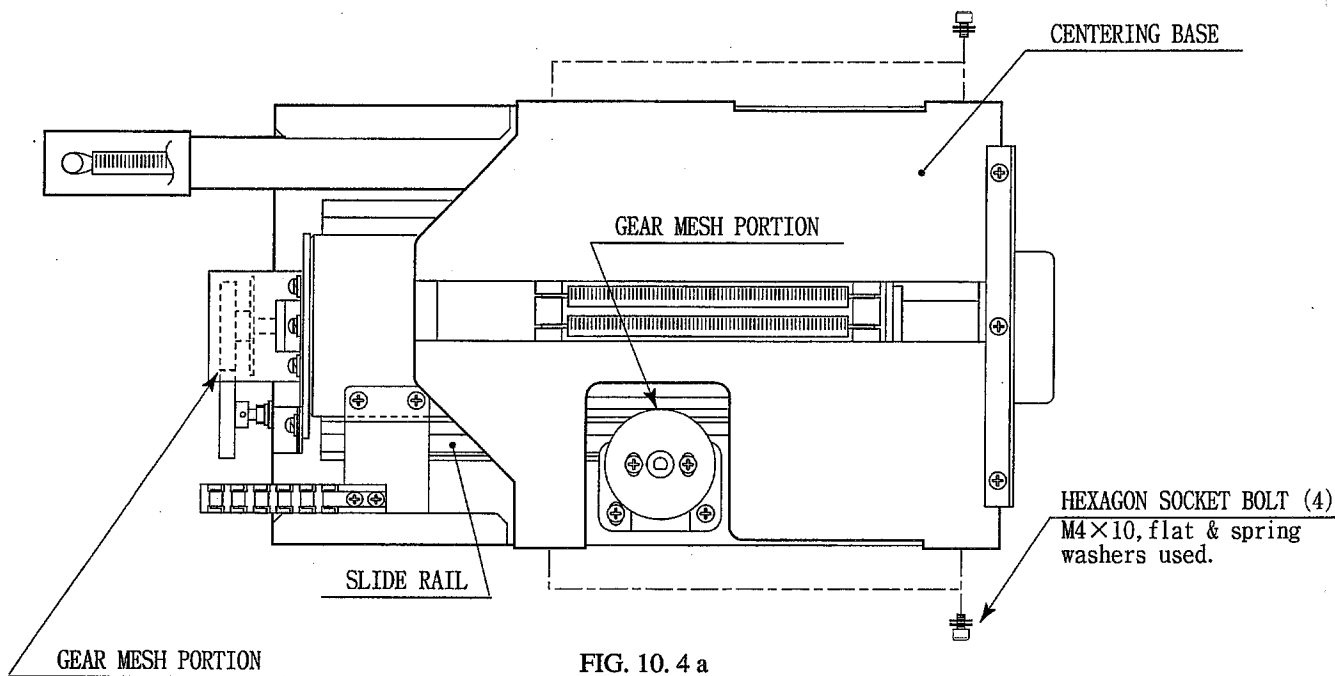


FIG. 10.4 a

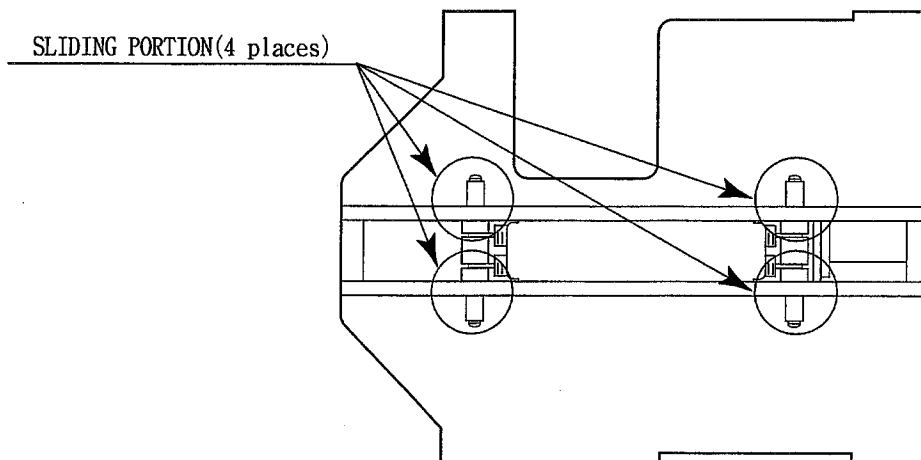


FIG. 10.4 b BACKSIDE OF CENTERING MECHANISM

10 - 5 REPLACING THE LED BOARD



- First, be sure to turn power off before performing work. Failure to observe this can cause electric shock and short circuit accidents.
- Do not touch undesignated places. Touching places not designated can cause electric shock and short circuit hazards.

- ① Take out the Control Panel Cover in accordance with 10-1 ①~④, and remove the 2 screws from the LED Panel.

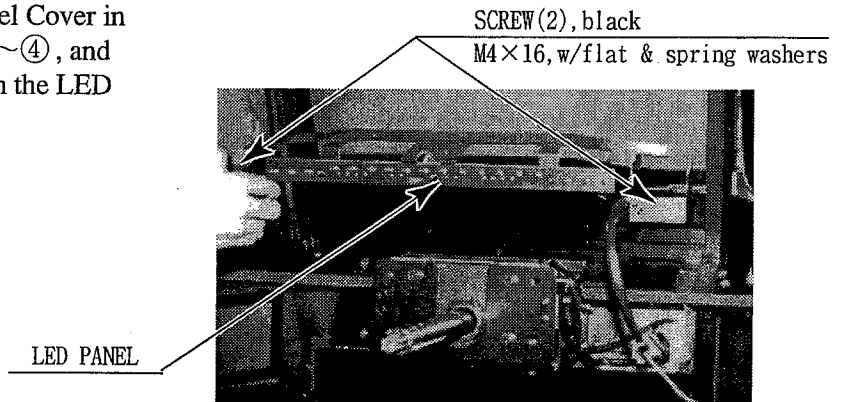


PHOTO 10. 5 a

- ② Take out 3 screws, remove LED BOARD from LED PANEL, and replace the LED BOARD.

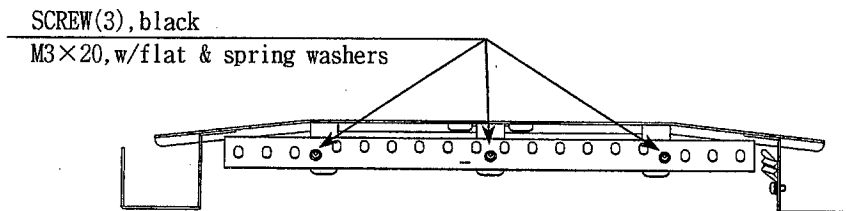


FIG. 10. 5

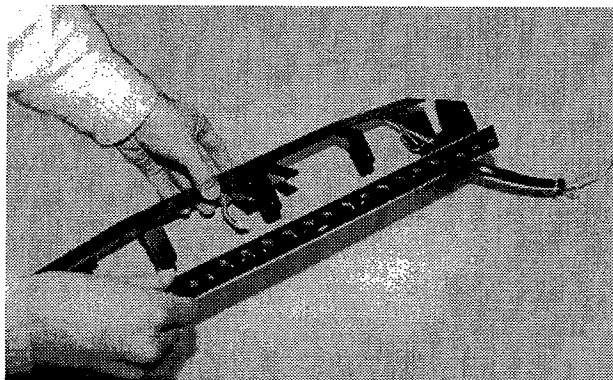


PHOTO 10. 5 b

11. LEVER UNIT



- First, be sure to turn power off before performing work. Failure to observe this can cause electric shock and short circuit accidents.
- Use care so as not to damage wirings. Damaged wiring can cause electric shock and short circuit hazards.
- Do not touch undesignated places. Touching places not designated can cause electric shock and short circuit hazards.
- This work should be performed by the Location's Maintenance Man or Serviceman. Performing work by non-technical personnel can cause electric shock.

If the value movements of the Lever are irregular, adjust or replace the Volume in the following procedure:

11 - 1 LOCATING THE VOLUME

- ① Take out the 4 truss screws, disconnect the connector and Earth Wire connected, and remove the Switch Plate.
- ② Take out 13 screws and remove Console Plate and Console Cover.

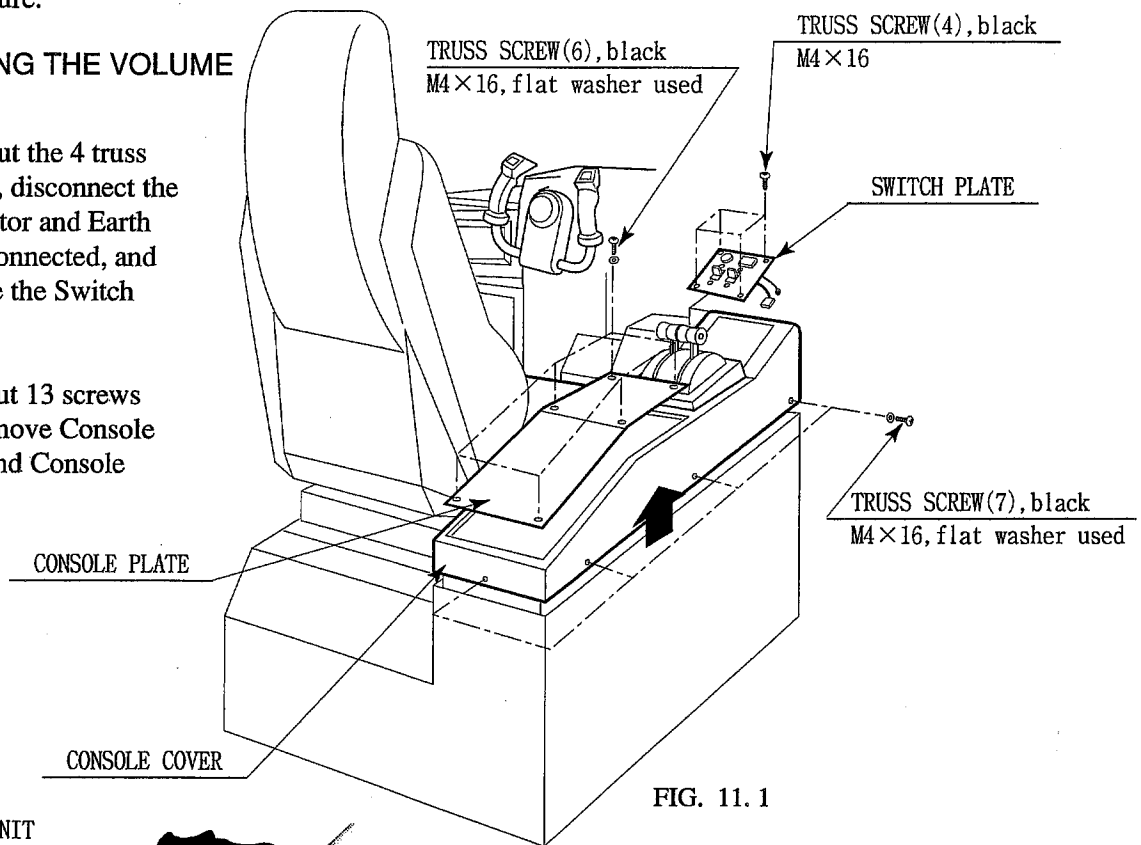


FIG. 11.1

LEVER UNIT

HEXAGON BOLT(4), black
M8x25, w/spring washer,
flat washer used.

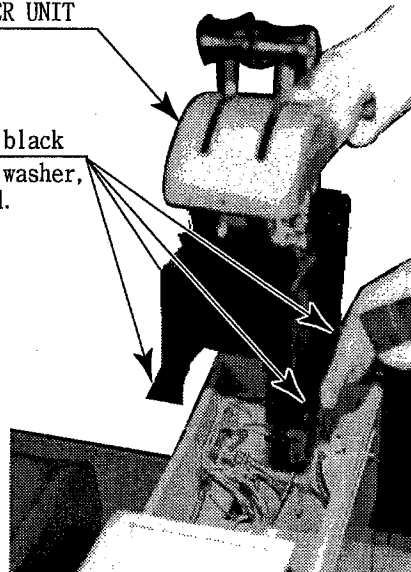


PHOTO 11.1

- ③ Disconnect the Connector connected to the Lever Unit, take out 4 Hexagon Bolts and remove Lever Unit.

11 — 2 ADJUSTING THE VOLUME



Do not touch undesignated places. Touching places not designated can cause electric shock and short circuit hazards.

- ① The Volume Brackets can be moved by loosening the 2 screws securing each.
- ② By moving the Volume Bracket, disengage ADJUST GEAR mesh. Move the Volume Shaft in the manner so that the cut portion of the Volume Shaft faces opposite the center of ADJUST GEAR.
- ③ Mesh gears and fasten the 2 screws.

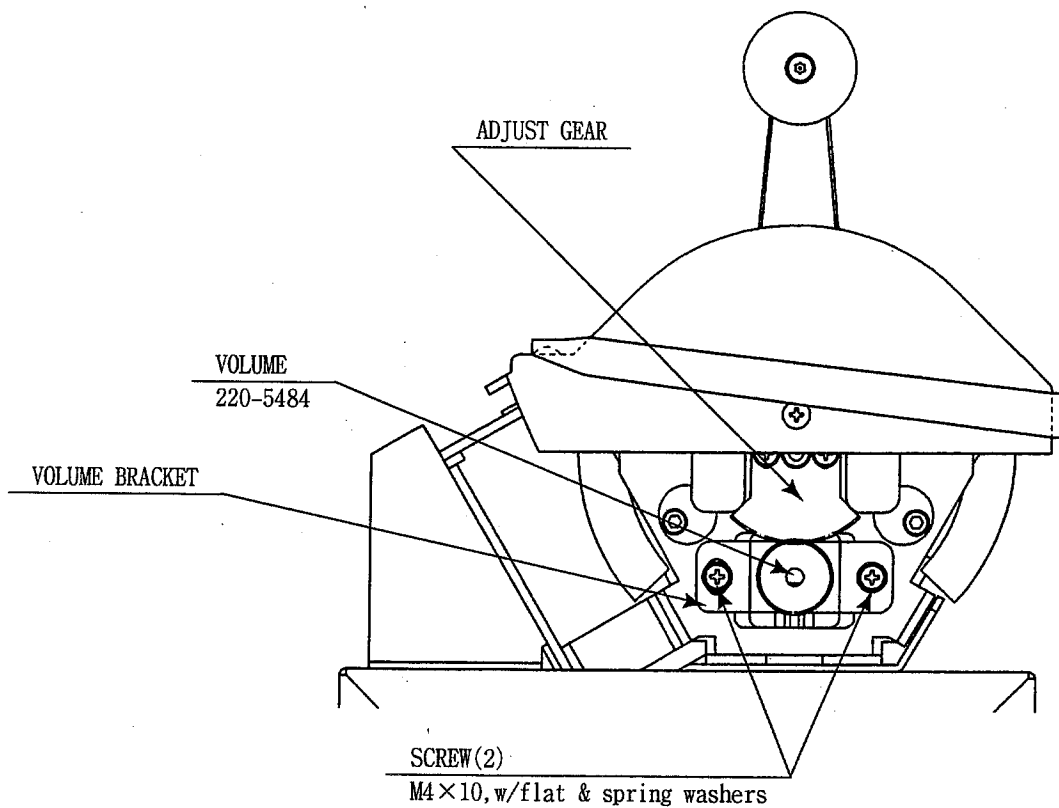


FIG. 11.2

- ④ Carefully move the Lever forward & backward, and check to ensure that the Volume range is not exceeded.
- ⑤ After making adjustments, be sure to perform Volume setting in the TEST mode.

11 - 3 REPLACING THE VOLUME



First, be sure to turn power off before performing work. Failure to observe this can cause electric shock and short circuit accidents.

- ① Remove the Volume Gear from the Volume to replace the Volume.
- ② After replacing the Volume, make adjustment as per the procedure of 11-2 ADJUSTING THE VOLUME.

11 - 4 GREASING



First, be sure to turn power off before performing work. Failure to observe this can cause electric shock and short circuit accidents.



- Be sure to use the designated grease. Using undesignated grease can cause parts damage.
- Do not apply greasing to undesignated places. Failure to observe this can cause malfunctioning or quality deterioration of parts.

Apply greasing to the following portions once every three (3) months.
For Spray Grease, use NOK GLUBER L60 or GREASE MATE (PART No. 090-0066).

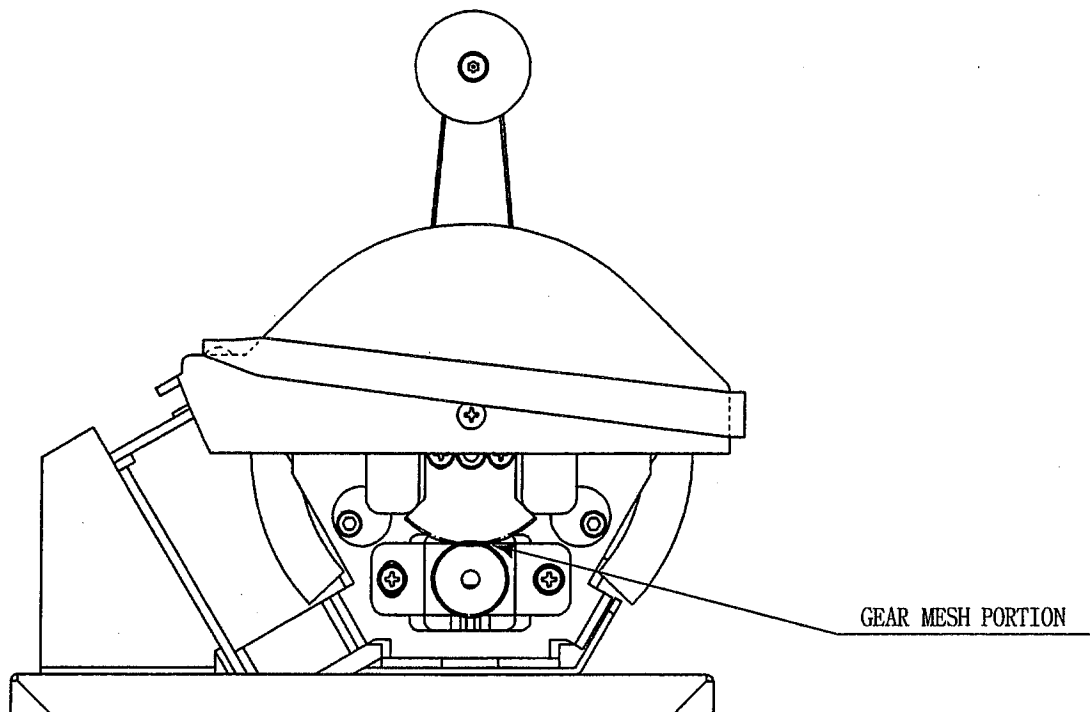


FIG. 11. 4

11 — 5 REPLACING THE SWITCH LEVER



- First, be sure to turn power off before performing work. Failure to observe this can cause electric shock and short circuit accidents.
- Use care so as not to damage wirings. Damaged wiring can cause electric shock and short circuit.

- ① Take out 4 screws and remove Switch Plate. At this time, be careful so as not to damage wiring.

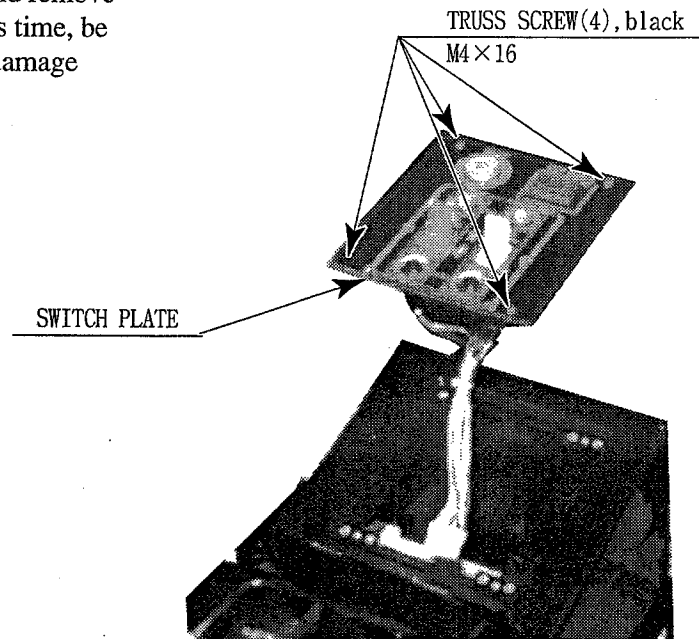


PHOTO 11. 4 a

- ② Take out 2 Flange Nuts (M3), remove and replace Switch Lever.

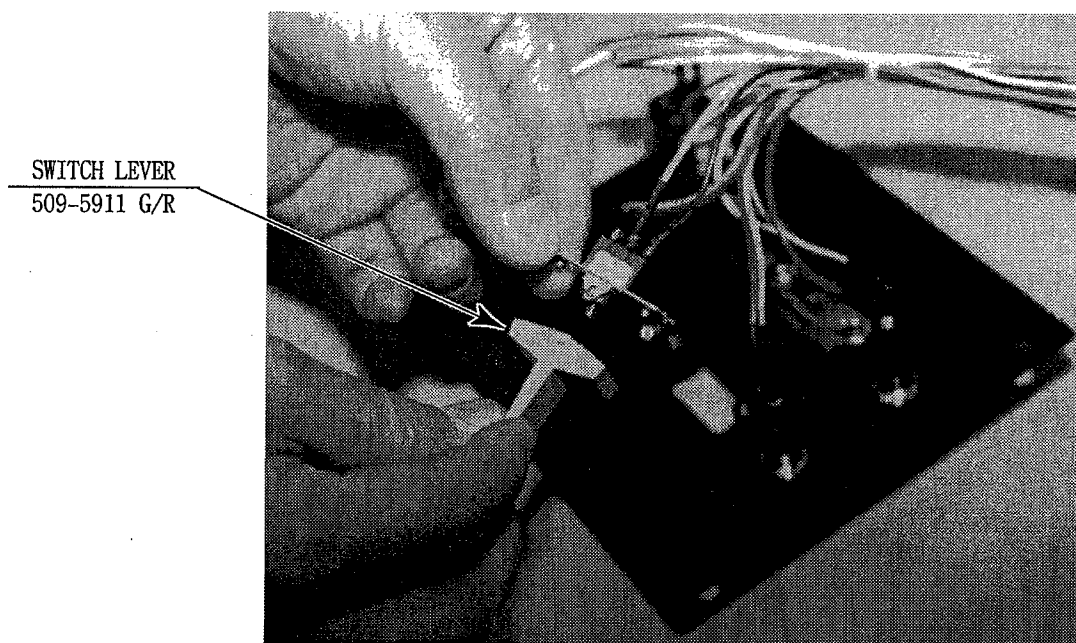


PHOTO 11. 4 b

12. PEDAL UNIT



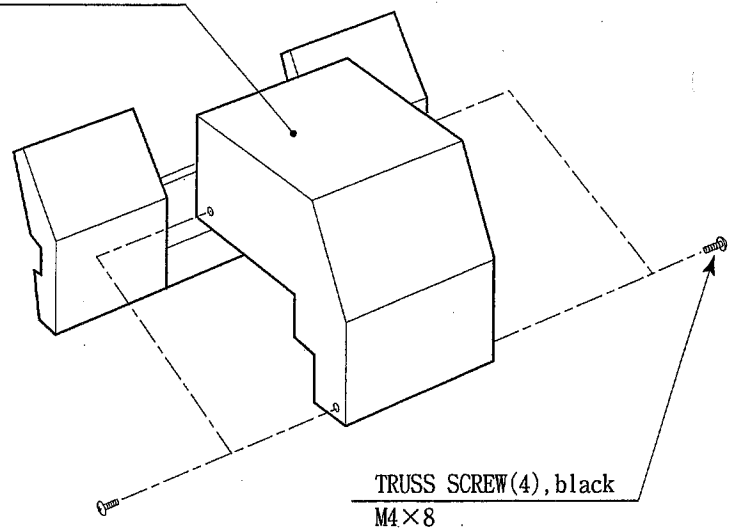
- First, be sure to turn power off before performing work. Failure to observe this can cause electric shock and short circuit accidents.
- Use care so as not to damage wirings. Damaged wiring can cause electric shock and short circuit.
- Do not touch undesignated places. Touching places not designated can cause electric shock and short circuit.
- This work should be performed by the Location's Maintenance Man or Serviceman. Performing work by non-technical personnel can cause electric shock.

In the TEST mode, if the value movements of CONTROL WHEEL are irregular, adjust or replace the Volume in accordance with the following procedure:

12 - 1 ADJUSTING THE VOLUME

- ① Take out the 4 screws and remove the Pedal Mechanism Cover.

PEDAL MECHANISM COVER

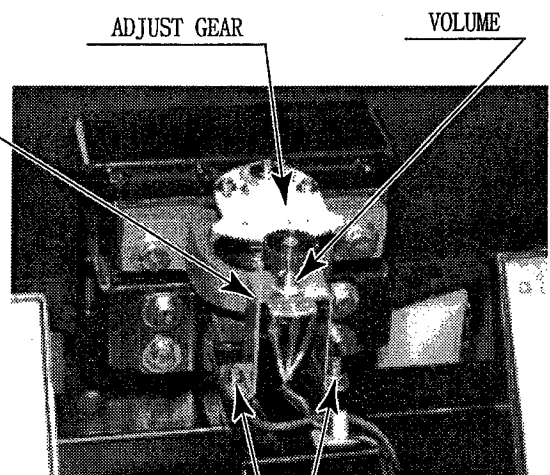


- ② Loosen the 2 screws securing each Volume Bracket and move the Volume Brackets.

FIG. 12. 1

- ③ Move the Volume Bracket to disengage gear mesh. Move the Volume Shaft in the manner so that the cut portion of the Volume Shaft faces opposite the center of ADJUST GEAR.
- ④ Engage the gears and fasten the 2 screws.
- ⑤ Carefully move the Pedal forward & backward and check to ensure that the Volume range is not exceeded.

VOLUME BRACKET



SCREW(2)
M4 x 10, w/flat & spring washers

PHOTO 12. 1

- ⑥ Upon completion of adjustment, be sure to perform Volume setting in the TEST mode.

12-2 REPLACING THE VOLUME



First, be sure to turn power off before performing work. Failure to observe this can cause electric shock and short circuit accidents.

- ① Remove the Volume Gear from the Volume to replace the Volume.
- ② After replacing the Volume, make adjustment as per the procedure of 12-1 ADJUSTING THE VOLUME.

12-3 GREASING

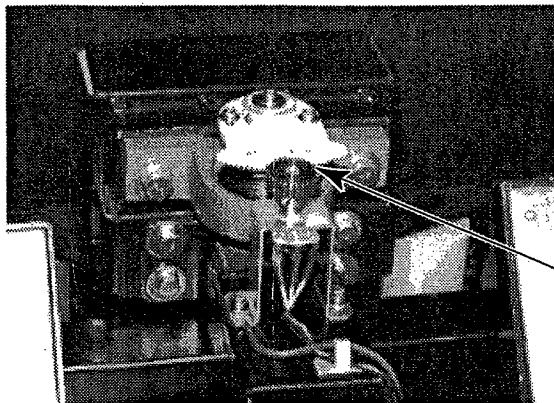


First, be sure to turn power off before performing work. Failure to observe this can cause electric shock and short circuit accidents.



- Be sure to use the designated grease. Using undesignated grease can cause parts damage.
- Do not apply greasing to undesignated places. Failure to observe this can cause malfunctioning or quality deterioration of parts.

Apply greasing to the following portions once every three (3) months.
For Spray Grease, use NOK GLUBER L60 or GREASE MATE (PART No. 090-0066).



GEAR MESH PORTION

PHOTO 12.3

13. COIN SELECTOR

HANDLING THE COIN JAM

If the coin is not rejected when the REJECT button is pressed, open the coin chute door and open the selector gate. After removing the jammed coin, put a normal coin in and check to see that the selector correctly functions.

CLEANING THE COIN SELECTOR



- Remove and clean smears by using a soft cloth dipped in water or diluted chemical detergent and then squeezed dry.
- Never apply machine oil, etc. to the Coin Selector.
- After cleaning the Coin Selector, insert a regular coin in the normal working status and ensure that the Selector correctly functions.

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

- ① Turn the power for the machine OFF. Open the coin chute door.
- ② Open the gate and dust off by 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 squeezed dry.
- ④ Remove the CRADLE.
When removing the retaining ring (E ring), be very careful so as not to bend the rotary shaft.
- ⑤ Remove stain from the rotary shaft and shaft receiving portions by wiping off with a soft cloth, etc.
- ⑥ After wiping off as per ⑤ above, further apply a dry cloth, etc. to cause the coin selector to dry completely.

COIN INSERTION TEST

Once every month, when performing the Coin SW Test, simultaneously check the following:

- Does the Coin Meter count satisfactorily?
- Does the coin drop into the Cashbox correctly?
- Is the coin rejected when inserted while keeping the Reject Button pressed down?

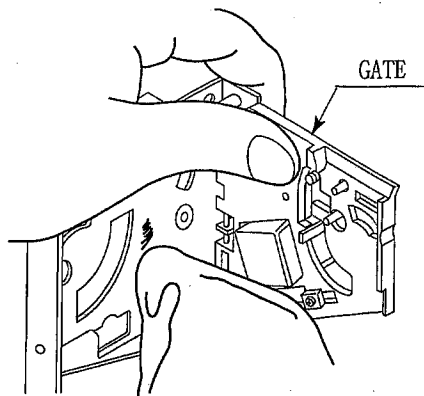


FIG. 13 a

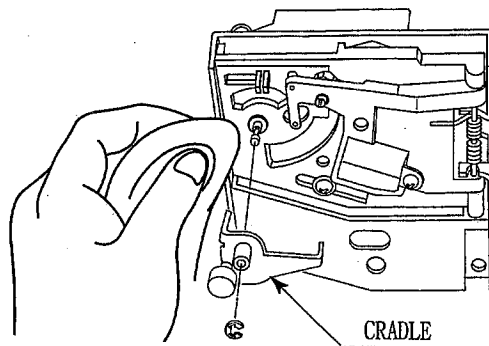
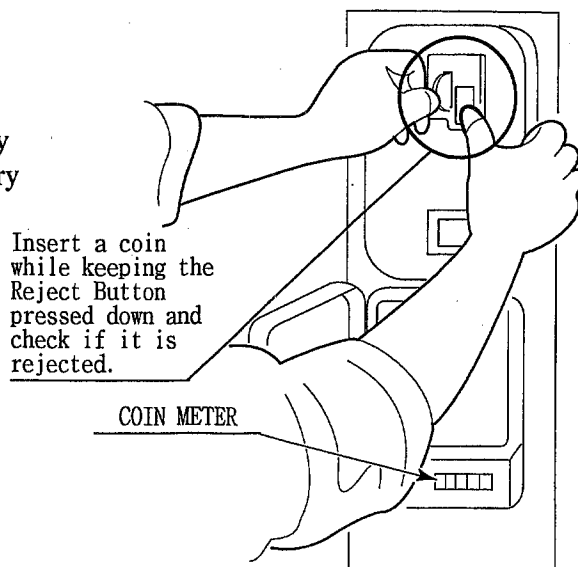


FIG. 13 b



Insert a coin while keeping the Reject Button pressed down and check if it is rejected.

FIG. 13 c

14. MONITOR

14 - 1 CAUTIONS AND WARNINGS CONCERNING THE SAFETY FOR HANDLING THE MONITORS

Before handling the monitors, be sure to read the following explanations and comply with the caution/warning instructions given below. Note that the caution/warning symbol marks and letters are used in the instructions.



WARNING!

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



CAUTION!

Indicates that handling the monitors by disregarding this caution may cause a potentially hazardous situation, which could result in personal injury and or material damage.



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



Indicates the instruction to disconnect a power connector or to unplug.



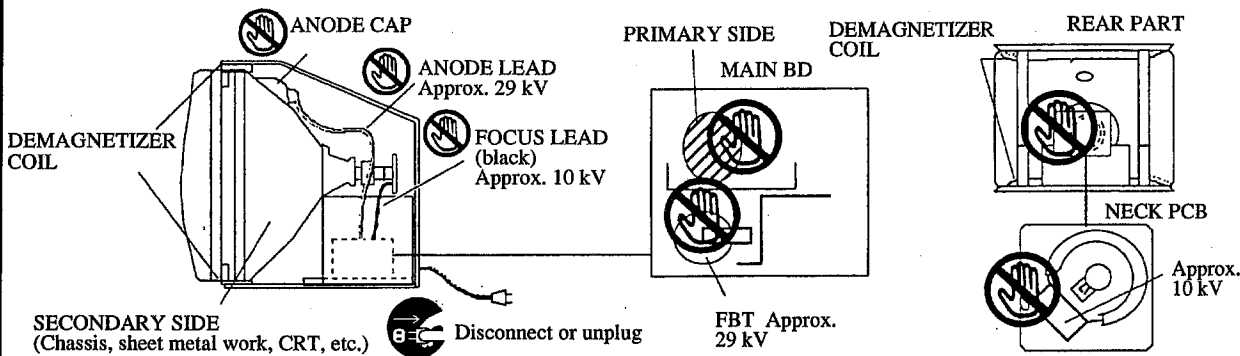
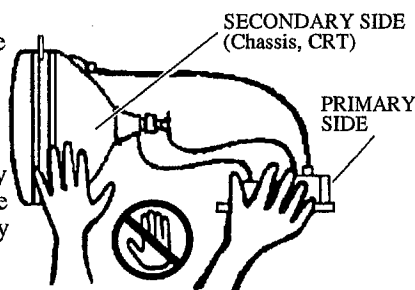
WARNING!

- When performing such work as installing and removing the monitor, inserting and disconnecting the external connectors to and from monitor interior and the monitor, be sure to disconnect the power connector (plug) before starting the work. Proceeding the work without following this instruction can cause electric shock or malfunctioning.
- Using the monitor by converting it without obtaining a prior permission is not allowed. SEGA shall not be liable for any malfunctioning and accident caused by said conversion.



WARNING!

- **Primary side and Secondary side**
The monitor's circuit which is divided into the Primary side and Secondary side, is electrically isolated. Do not touch the primary side, or do not touch both the primary side and the secondary side simultaneously. Failing to observe the instruction can cause electric shock and this is very dangerous. When making monitor adjustments, use a non-conductive driver and make adjustment without touching any part other than the Adjustment V. R. and knob. Also, be sure not to cause a short-circuit to the Primary side and Secondary side. If short-circuited, it can cause electric shock or malfunctioning, which is very dangerous.
- **High-tension Voltage**
Some of the parts inside monitor are subject to high-tension voltage in excess of 20,000 volts and very dangerous. Therefore, do not touch the monitor interior. Should soldering & paper wastes, etc. be mixed in the monitor interior, turn the power off so as not to cause malfunctioning or fire hazard.



- **Connecting the CRT and PCB**
For combining the CRT and PCB, use the specified part No. to maintain the status of adjustments made at the factory. The anode of the CRT itself will be accumulatively charged as time elapses, generating high-tension voltage which is very dangerous. The monitor should be used with the Chassis, CRT and PCB assembled. When repair, etc. is required at the time of malfunctioning, be sure to send it in an "as is assembled" condition. If these are disassembled, what's charged to said high tension voltage can be discharged, causing a very hazardous situation. Therefore, under no circumstances should it be disassembled.



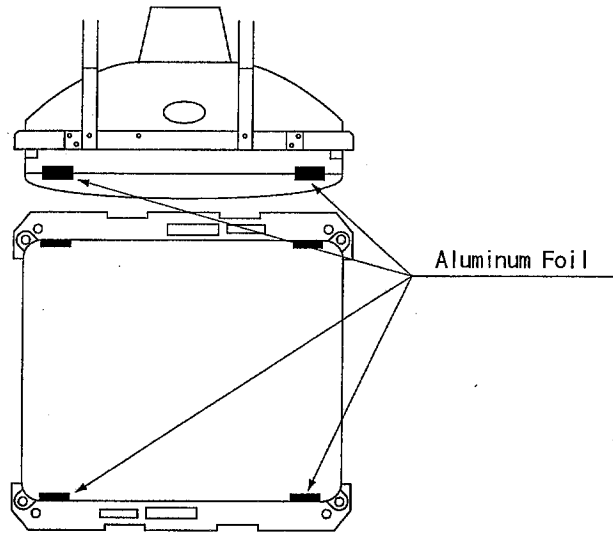
CAUTION!

- **Static Electricity**
Touching the CRT surface sometimes causes you to slightly feel electricity. This is because the CRT surfaces are subject to static and will not adversely affect the human body.
- **Installation and removal**
Ensure that the Magnetizer Coil, FBT (Fly-Back Transformer), Anode Lead and Focus Lead are not positioned close to the sheet metal work's sharp edges, etc. and avoid damaging the insulated portions so as not to cause electric shock and malfunctioning. (For the name of parts, refer to the above Figures).



For the purpose of static prevention, special coating is applied to the CRT face of this product. To protect the coating, pay attention to the following points. Damaging the coating film can cause electric shock to the customers.

- Do not apply or rub with a hard item (a rod with pointed edge, pen, etc.) to or on the CRT surfaces.
- Avoid applying stickers, seals, etc. on the CRT face.
- Do not remove aluminum foils from the CRT corners. Removing the aluminum foils can cause static prevention effects to be lowered.



14-2 CAUTIONS TO BE HEDED WHEN CLEANING THE CRT SURFACES



Static preventive coating is applied to the CRT surfaces. When cleaning, pay attention to the following points. Peeling off of static preventive coat can cause electric shock.

- Remove smears by using a dry, soft cloth (flannels, etc.). Do not use a coarse gauze, etc.
- For smear removing solvent, alcohol (ethanol) is recommended. When using chemical detergent, be sure to follow instructions below:
 - Dilute chemical detergent with water and dip a soft cloth in and then thoroughly wring it to wipe smears off.
 - Do not use a chemical detergent containing an abradant, powder or bleaching agent.
 - Do not use alkaline chemical detergents such as "glass cleaner" available on the market or solvents such as thinner, etc.
- Do not rub or scratch the CRT face with hard items such as brushes, scrub brush, etc.

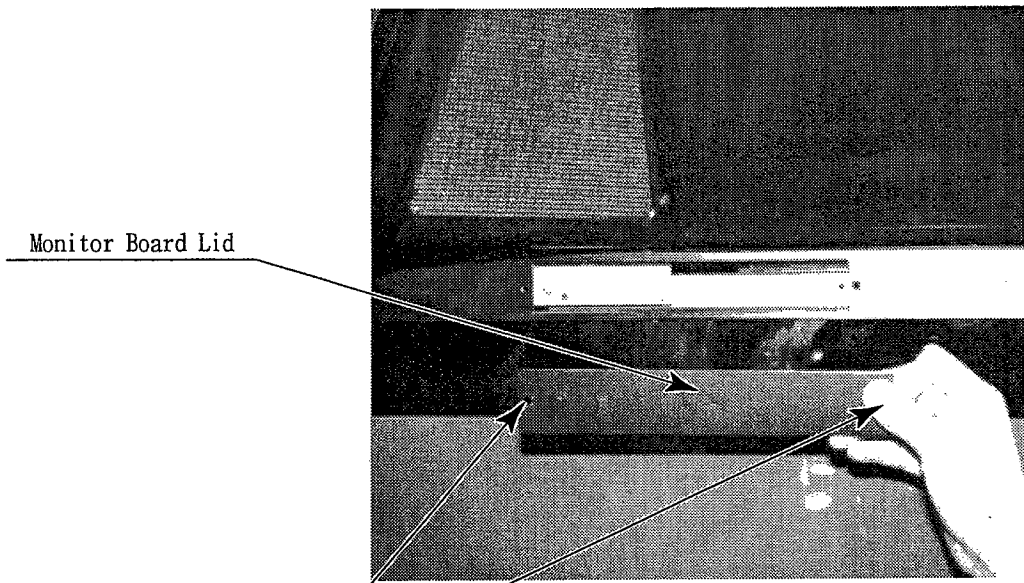
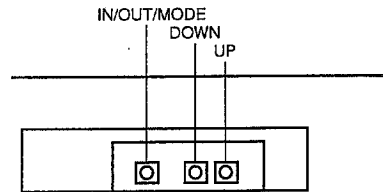
Clean the CRT surfaces once a week. When cleaning, pay attention to the above caution so that the antistatic coating will not come off.

14 - 3 ADJUSTMENT METHOD



- Monitor adjustments have been made at the time of shipment. Therefore, do not make further adjustment without a justifiable reason. Adjusting the monitor which contains high tension parts is a dangerous work. Also, an erroneous adjustment can cause deviated synchronization and image fault, resulting in malfunctioning.
- When making adjustment, utilize a resinous Alignment Rod. Servicing with bare hand or using conductive tools can cause electric shock.

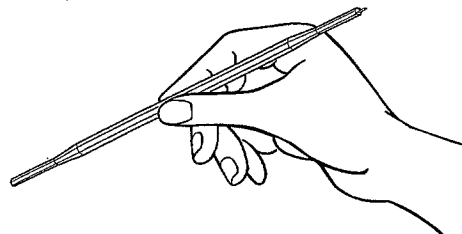
Remove the 2 screws from the Monitor Board Lid on top of the monitor, and the Adjustment Board appears.



Monitor Board Lid

TRUSS SCREW(2), black
M4×10

PHOTO 14.3



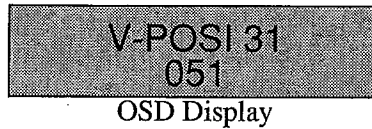
For adjustment, use the Resinous Adjustment Rod.

FIG. 14.3

OPERATION

- ① Press the MODE button to display OSD. The right-hand end numeral indicates INPUT FREQUENCY.

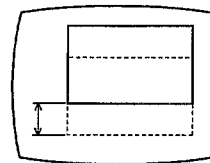
Example: 31 kHz Input



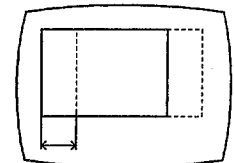
- ② Press the MODE button to select the adjustment item.
(Each time the MODE button is pressed, the OSD display shifts sequentially in order of V-POS1 → H-POS1 → V-SIZE → H-SIZE → CONTRAST → BRIGHT → DEGAUSS → RESET → OSD display disappears.)
Press the DOWN button while pressing the MODE button to return the adjustment item to the preceding one.
- ③ Adjust with UP button and DOWN button.
- ④ To exit from OSD, keep pressing the MODE button until the OSD display disappears.

- **V-POS1**
The image's vertical position is adjustable.

V-POS1



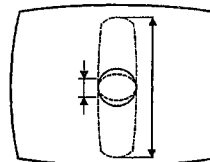
H-POS1



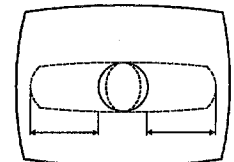
- **H-POS1**
The horizontal image's position is adjustable.

- **V-SIZE**
The vertical image size is adjustable.

V-SIZE



H-SIZE



- **H-SIZE**
The horizontal image size is adjustable.

- **CONTRAST**
Adjusts image contrast.

- **BRIGHT**
This adjusts the on-screen image brightness.

- **DEGAUSS**
Degaussing is performed. Once degaussed, it takes approximately 4 minutes and 30 seconds to have degaussing function again. Wait until the lower OSD display indicates PLEASE.

- **RESET**
Reset the on-screen setting status to the factory setting. (Press the UP button or DOWN button for one second or longer.) Note that the factory setting status is predetermined and not changeable.

14-4 CLEANING THE MONITOR GLASS.

FRONT MONITOR GLASS

- ① Take out a total of 6 screws, and remove each of Glass Holder Upper Center, Glass Holder Upper Lower, and Glass Sash.

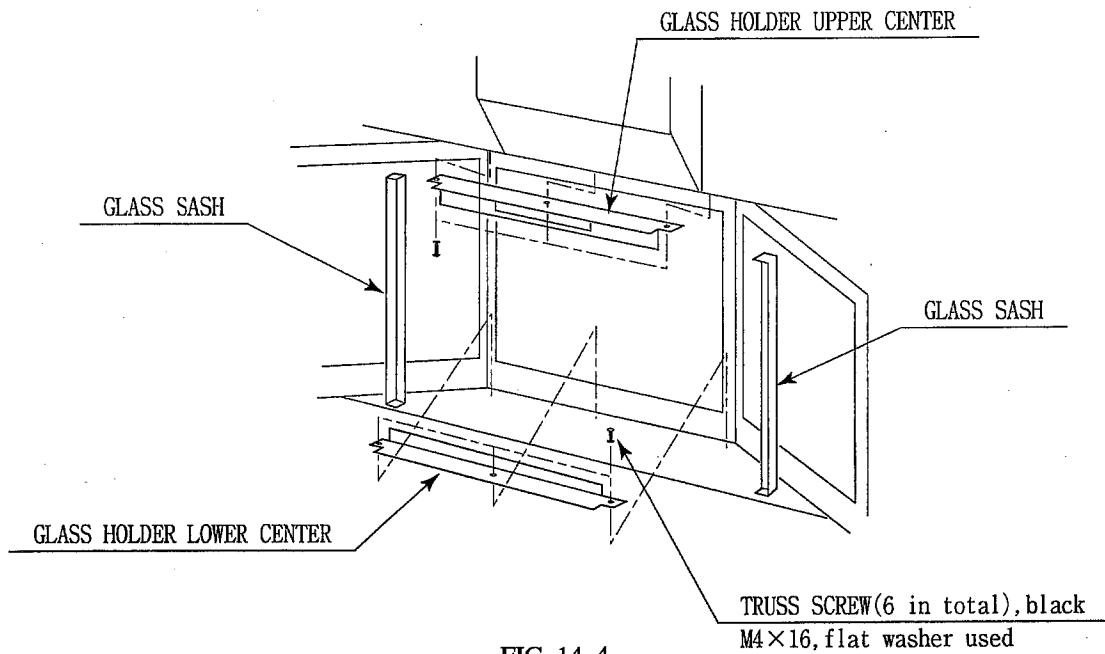


FIG. 14. 4

- ② Take out the Monitor Glass.

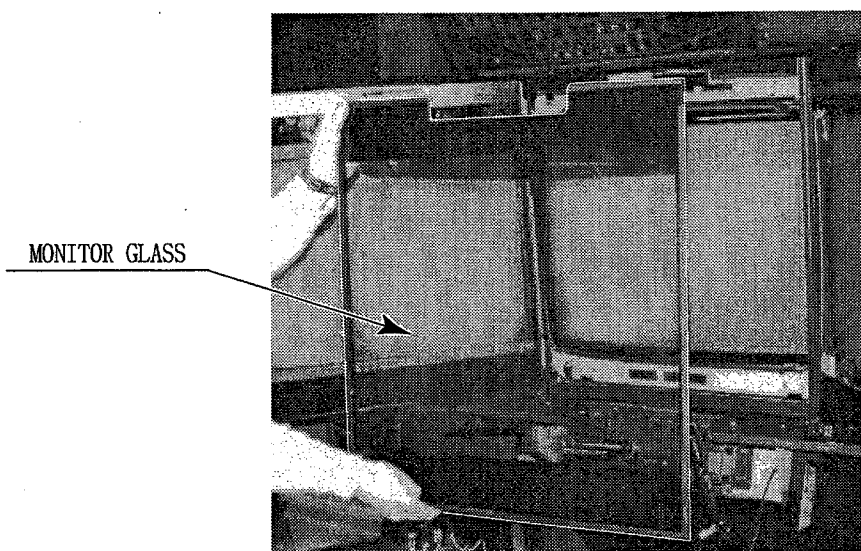


PHOTO 14. 4 a

BOTH SIDE MONITOR GLASS

- ① Take out 9 screws and remove Monitor Cover.

TRUSS SCREW(9 in total),chrome
M4×10, flat washer used

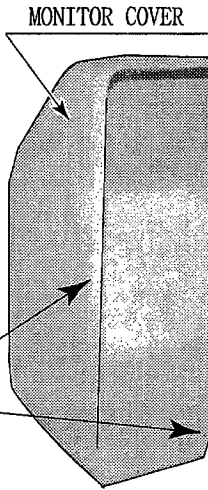


PHOTO 14. 4 b

- ② Take out 3 screws and remove Monitor Side Cover.

TRUSS SCREW(3),black
M4×8

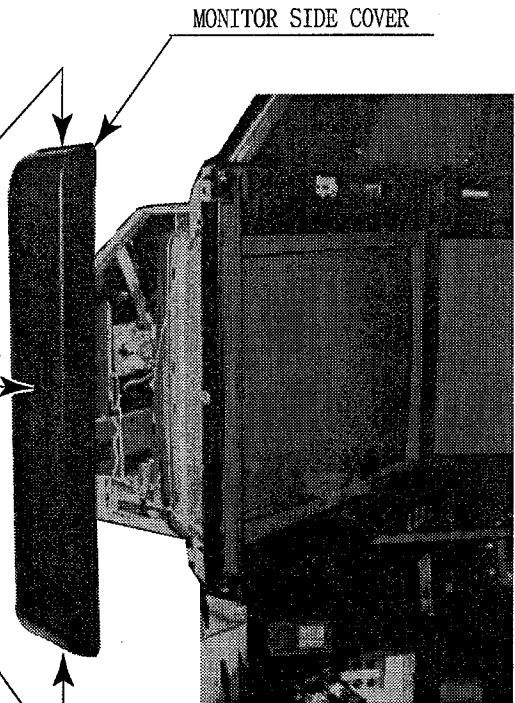


PHOTO 14. 4 c

- ③ Take out 2 screws, remove Side Cover Bracket, and pull out Monitor Glass.

SCREW(2)
M4×8, w/flat & spring washers

SIDE COVER BRACKET

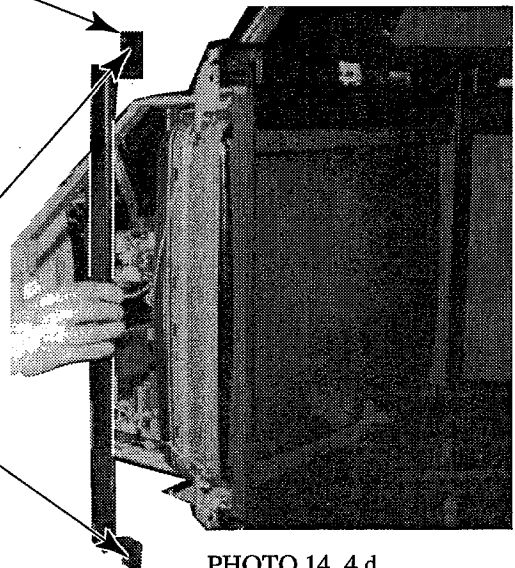


PHOTO 14. 4 d

15. REPLACING THE FLUORESCENT LAMP, AND LAMPS



- When performing work, be sure to turn power off. Working with power on can cause electric shock and short circuit hazards.
- The Fluorescent Lamp, when it gets hot, can cause burn. Be very careful when replacing the Fluorescent Lamp.



To perform work safely and securely, be sure to prepare a step which is in a secure and stable condition. Performing work without using the step can cause violent falling down accidents.

REPLACING FLUORESCENT LAMPS, ETC, INSIDE THE BILLBOARD.

Remove Billboard Plate by taking out 4 screws, and replace Fluorescent Lamps.

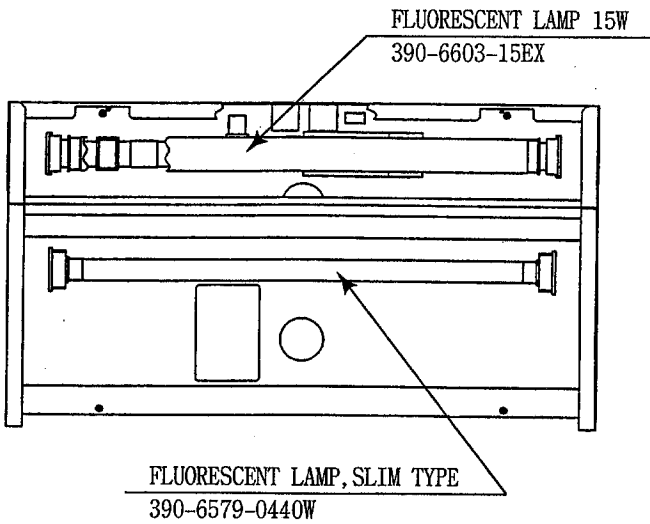
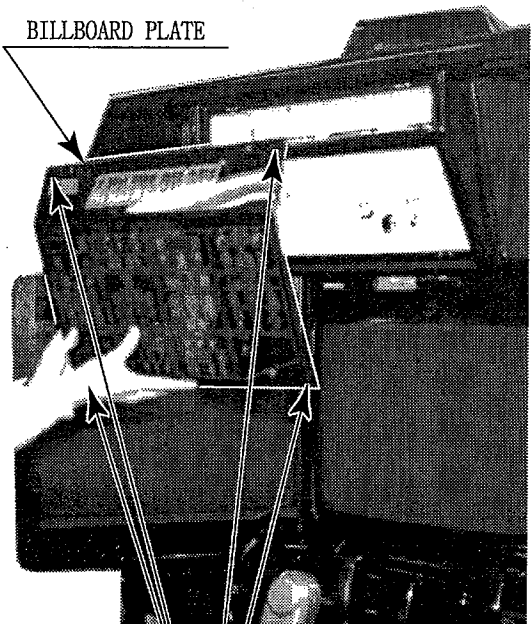
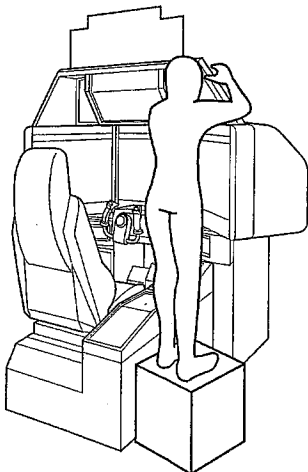


FIG. 15 a



TRUSS SCREW(4), black
M4×16, flat washer used

PHOTO 15 a



When performing work, prepare a step.

Take out 2 screws to remove the Lamp Lid from the side of Billboard, and replace the Lamp.

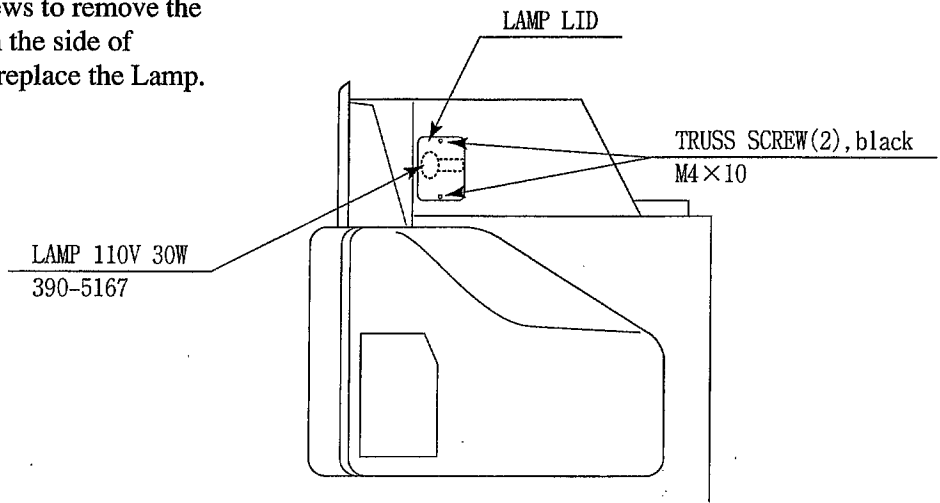


FIG. 15 b

REPLACING THE FLUORESCENT LAMP INSIDE THE CONSOLE

Remove the Console Plate by taking out 6 screws, and replace the Fluorescent Lamp.

TRUSS SCREW(6), black
M4 × 16, flat washer used.

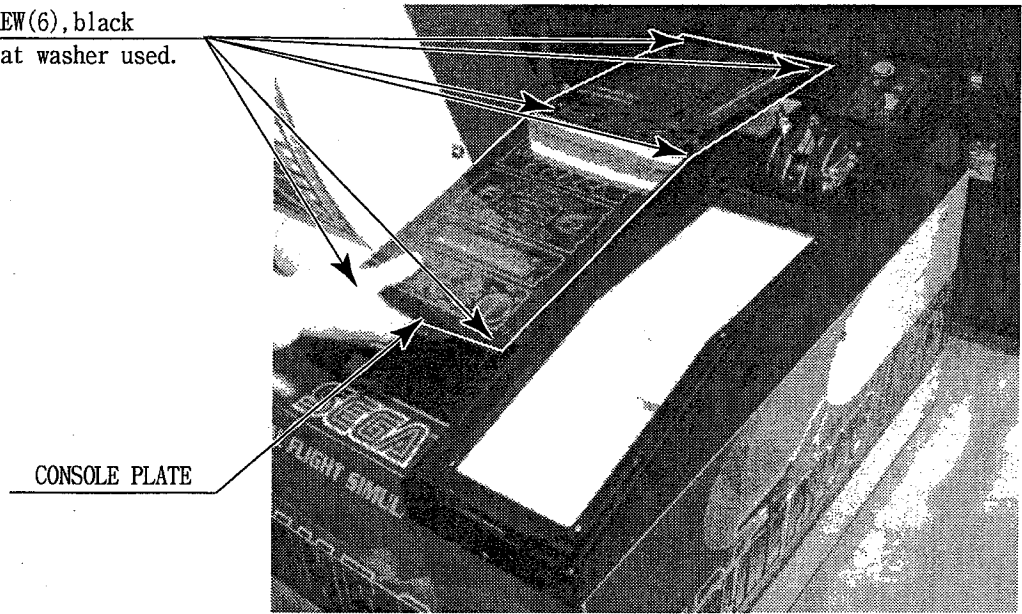
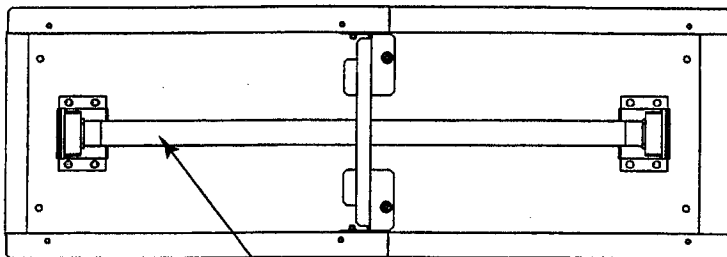


PHOTO 15 b



FLUORESCENT LAMP, SLIM TYPE
390-6579-0440W

FIG. 15 c

16. PERIODIC INSPECTION TABLE

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



- Be sure to check once a year to see if Power Cords are damaged, the plug is securely inserted, dust is accumulated between the Socket Outlet and the Power Plug, etc. Using the product with dust as is accumulated can cause fire and electric shock hazards.
- Periodically once a year, request the place of contact herein stated or the Distributor, etc. where the product was purchased from, as regards the internal cleaning. Using the product with dust as is accumulated in the interior without cleaning can cause a fire or accident. Note that cleaning the interior parts can be performed on a pay-basis.

TABLE 16

ITEMS	DESCRIPTION	PERIOD	REFERENCE
CABINET	Check Adjusters' contact with surface.	Daily	3
CONTROL MECHANISM	Check VOLUME value.	Monthly	9
LEVER UNIT	Check SW.	Monthly	9
	Check VOLUME value.	Monthly	9
	GREASING	Trimonthly	1 1
PEDAL UNIT	Check VOLUME value.	Monthly	9
COIN CHUTE DOOR	Check COIN SWes.	Monthly	9
	Coin insertion test.	Monthly	1 3
	COIN SELECTOR cleaning.	Trimonthly	1 3
MONITOR	Cleaning CRT face	Weekly	1 4 - 2
	Check adjustments.	Monthly or when moving	6、9、1 4
SEAT	Antistatic measures	Bimonthly	5
GAME BD	MEMORY TEST.	Monthly	9
	Setting check		
INTERIOR	Cleaning	Annually	See above.
POWER PLUG	Inspection and cleaning		
Cabinet surfaces	Cleaning	As occasion arises.	See below.

CLEANING THE CABINET SURFACES

If the Cabinet is badly stained, use a cloth which is dipped in the chemical detergent liquid diluted with water and then squeezed dry. Do not use thinner, benzine, alcohol or chemical dustcloth as they can damage the Cabinet surfaces.

17. TROUBLESHOOTING

In case a problem occurs, first check wiring connector connections.

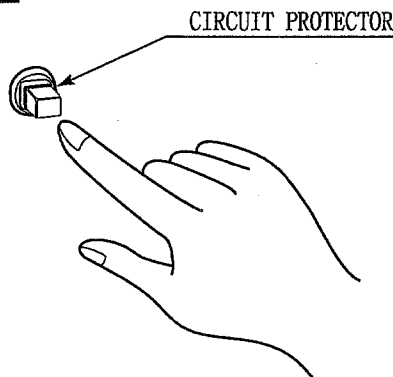


- In order to prevent electric shock and short circuit, be sure to turn power off before performing work.
- Be careful so as not to damage wirings. Damaged wiring can cause electric shock or short circuit.
- After removing the cause of the functioning of the Circuit Protector, reinstate the Circuit Protector. Depending on the cause of the functioning, using the Circuit Protector as is without removing the cause can cause generation of heat and fire hazard.

TABLE 17 a

PROBLEMS	CAUSE	COUNTERMEASURES
When the main SW is turned ON, the machine is not activated.	The power is not ON.	Firmly insert the plug into the outlet.
	Incorrect power source/voltage.	Make sure that the power supply/voltage are correct.
	AC UNIT CIRCUIT PROTECTOR functioned due to instantaneous overcurrent.	First, remove the cause of overcurrent and reinstate the circuit protector to its original status.
The color of image on MONITOR screen is incorrect.	Affected by C. R. T. magnetization.	Press the DEMAG. SW of SWITCH UNIT.
	Incorrect monitor adjustment.	Make appropriate adjustments.

CIRCUIT PROTECTOR



Functions due to the activation of bimetal. To restore the function, wait for approximately one minute or longer until the bimetal cools off. (Press the Button.)

TABLE 17 b

PROBLEMS	CAUSE	COUNTERMEASURES
Sound is not emitted.	Sound volume adjustment is not correct. Malfunctioning BD. and Amp.	Adjust the SWITCH UNIT's Speaker volume. Perform SOUND TEST.
No sound is emitted from WOOFER and BASS SHAKER.	Incorrect sound adjustment. APC-4300 ASSY AUDIO DX fuse is blown due to instantaneous overload. Malfunctioning of Board and Amplifier. Connection failure of connector.	Adjust Switch Unit's Woofer Volume. After removing the cause of overload, replace fuse. FUSE S.B 6300 MA 250V HBC CE 514-5086-6300 Perform Sound Test and Output Test to check. Correctly perform connector connection between Front and Rear Cabinets.
Switches are not functioning (depending on the game mode, some switches can not be used).	Connection failure of connector.	Correctly perform connector connection between Front and Rear Cabinets.
Operation of CONTROL WHEEL, RUDDER PEDAL, and THRUST LEVER is not satisfactory.	Deviation of Volume. Volume malfunctioning. ADJUST GEAR mesh is incorrect. Connection failure of connector.	Adjust Volume value in the TEST mode. Replace the Volume. Adjust ADJUST GEAR mesh. Correctly perform connector connection between Front and Rear Cabinets.
Head Panel Lamp and Side Panel Lamp do not light up (light up during game only).	The lamp needs replacement. Connection failure of connector.	Replace the lamp. Correctly connect connectors between Front and Rear Cabinets.
WARNING LAMP and LED do not light up (light up when the flight course is extremely deviated).	The lamp and LED need replacement.	Replace the lamp and LED Board.
Fluorescent lamp doesn't light up.	Fluorescent lamp need replacement.	Replace the fluorescent lamp.

REPLACEMENT OF FUSE



- In case fuse replacements other than those stated in this manual are necessary, contact where you purchased the product from for inquiries regarding this matter.
- Fuse replacements other than those specified can cause accidents and are strictly forbidden.
- In order to prevent an electric shock, be sure to turn power off and unplug from the socket outlet before performing work by touching the internal parts of the product.
- Be careful so as not to damage wirings. Damaged wiring can cause electric shock and short circuit accidents.
- Be sure to use fuses meeting specified rating. Using fuses exceeding the specified rating can cause fire and electric shock accidents.
- After eliminating the cause of the blowing of fuse, replace the fuse. Depending on the cause of fuse blowing, continued use with the fuse as is blown can cause generation of heat and fire hazard.

Remove Side Door R by taking out 2 screws. The fuse is located at the position shown.

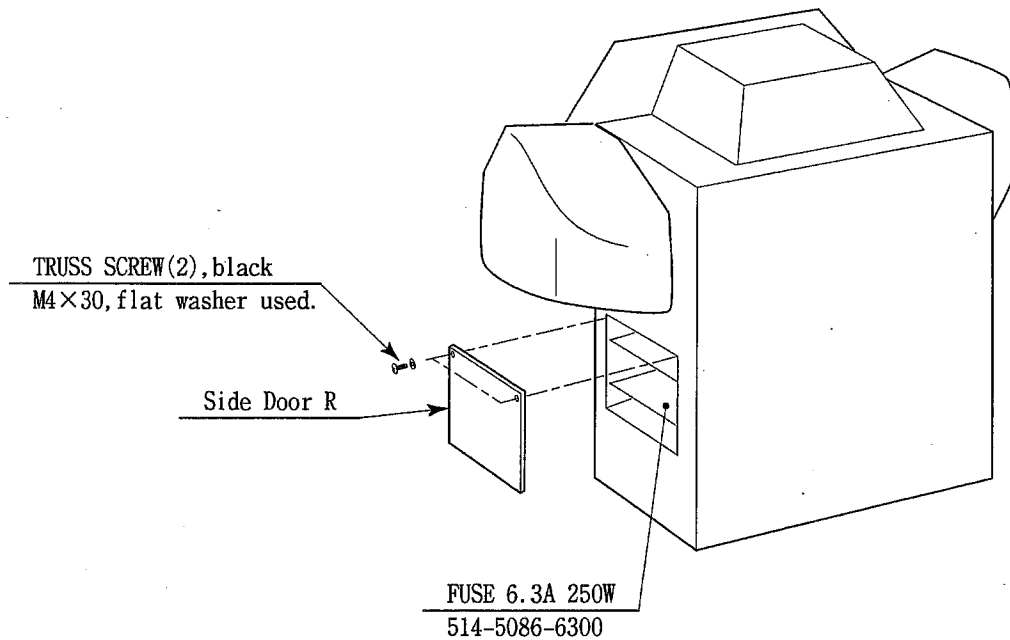


FIG. 17 b

18. GAME BOARD



- In order to prevent electric shock and short circuit hazards, be sure to turn power off before performing work.
- Be careful so as not to damage wirings. Damaged wiring can cause fire, electric shock and short circuit hazards.
- Do not expose the Game BD, etc. without a good reason. Failure to observe this can cause electric shock or malfunctioning.



The electronic parts on the IC Board could be damaged due to human body's static electricity. Before performing IC Board related work, be sure to discharge physically accumulated statics by touching grounded metallic surfaces, etc.

18-1 TAKING OUT THE BOARD

- ① Turn power off.
- ② Take out the 2 truss screws, unlock and remove the Back Door Lower.
- ③ Disconnect all of the Connectors connected to ASSY MAIN BOARD DX.
- ④ Remove the 2 Wing Bolts and take out ASSY MAIN BD DX with the Shield Case as is mounted.

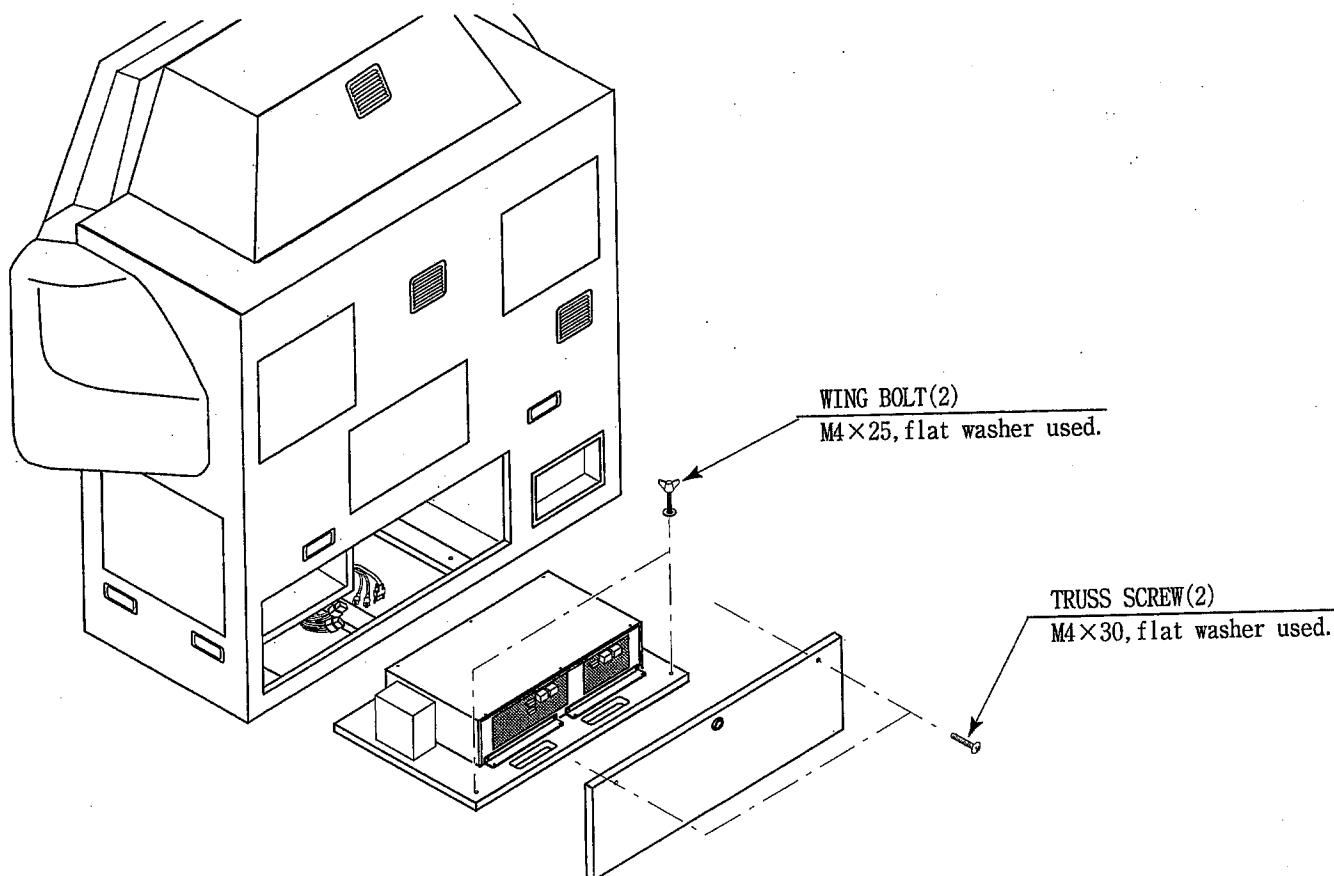


FIG. 18. 1 a

CONNECTING THE VIDEO SIGNAL LINE AND AUDIO SIGNAL LINE

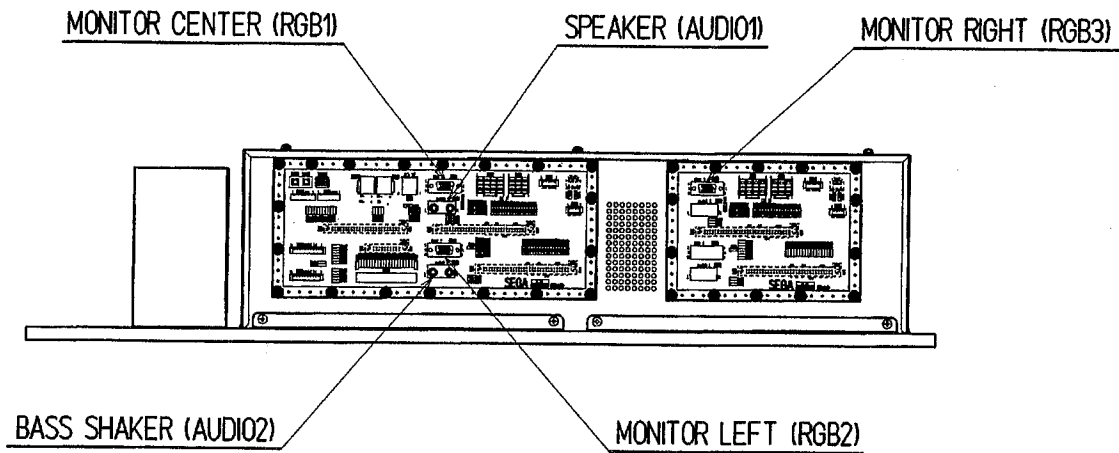


FIG. 18. 1 b

18 - 2 COMPOSITION OF GAME BOARD

- GAME BD APC DX USA W/O JAL (833-13762-06) : USA
- GAME BD APC DX EXP W/O JAL (833-13762-07) : OTHERS
- GAME BD APC DX KOR W/O JAL (833-13762-08) : KOREA
- GAME BD APC DX AUS W/O JAL (833-13762-09) : AUSTRALIA

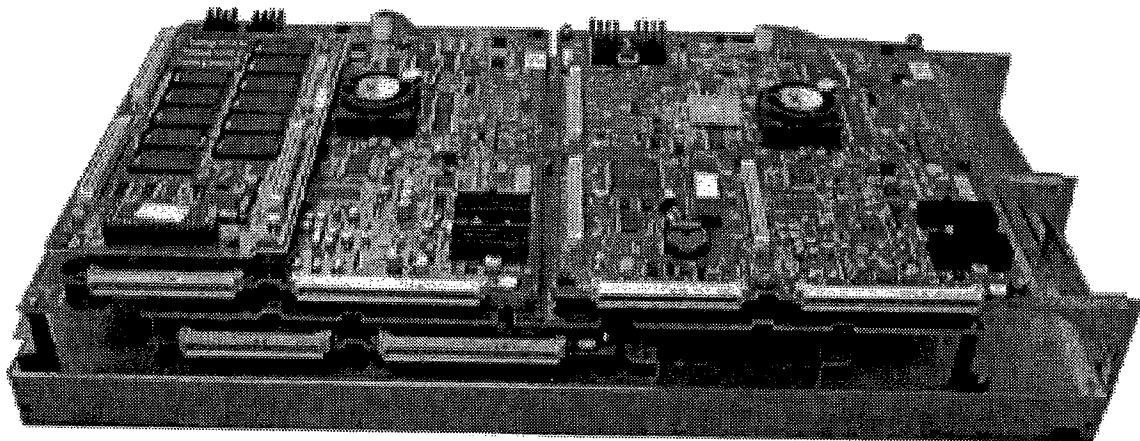


FIG. 18. 2 a

DIP SW SETTING

In the product, set all of the DIP SWes to OFF.

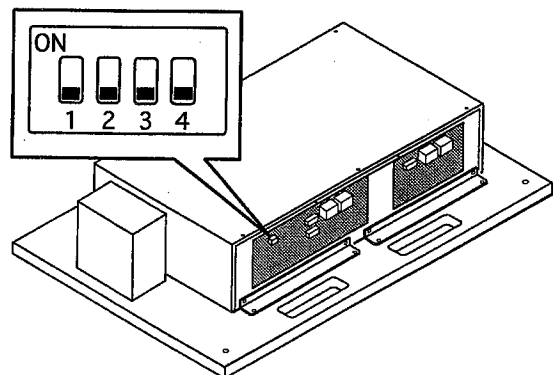
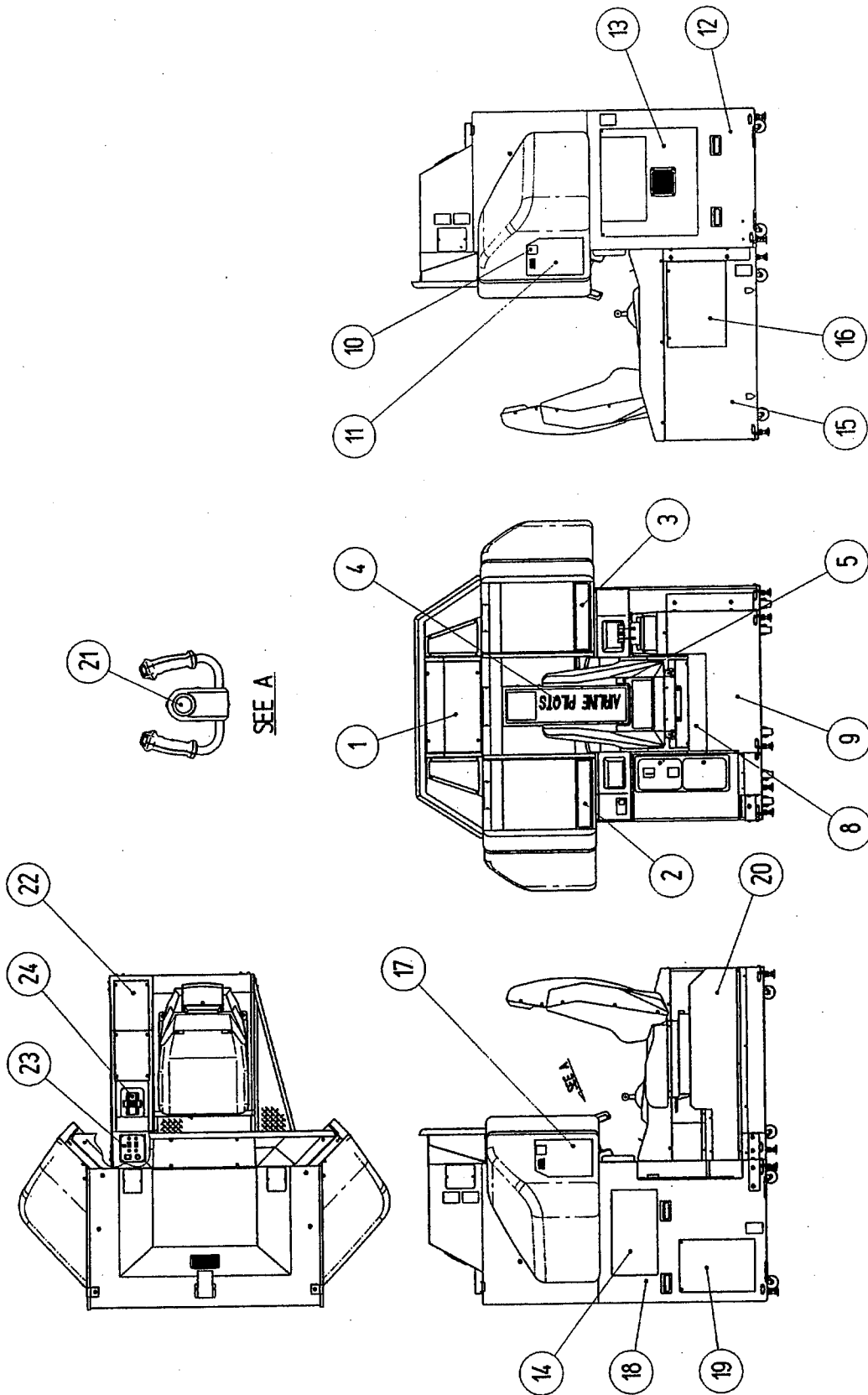


FIG. 18. 2 b

19. DESIGN RELATED PARTS

For the Warning Display stickers, refer to Section 1.

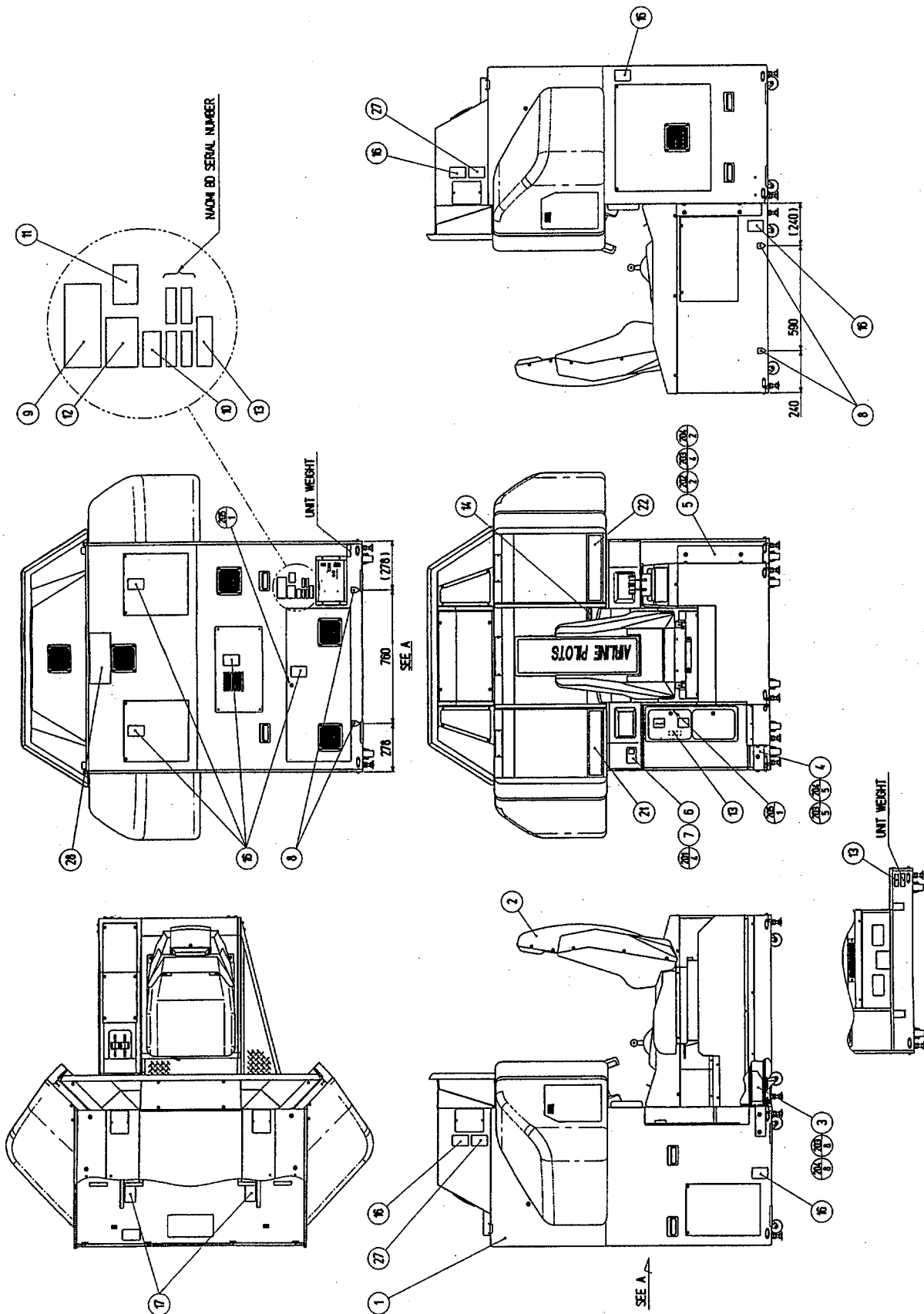


NO.	PART No.	DESCRIPTION
1	APC-0503	BILLBOARD PLATE
2	422-0741-01	PLAY INSTR SH APC DX L ENG
3	422-0742-01	PLAY INSTR SH APC DX R ENG
4	APC-3108-B	STICKER SEAT BACK UPPER
5	APC-3108-C	STICKER SEAT BACK LOWER
8	APC-3068	STICKER REAR UPPER
9	APC-3069	STICKER REAR LOWER
11	APC-1082-A	STICKER MONITOR COVER R
12	APC-1011	STICKER SIDE R
13	APC-1012	STICKER SIDE DOOR R
15	APC-3066	STICKER REAR SIDE R
16	APC-3067	STICKER REAR DOOR
17	APC-1081	STICKER MONITOR COVER L
18	APC-1010	STICKER SIDE L
19	APC-1013	STICKER SIDE DOOR L
20	APC-3065	STICKER REAR SIDE L
21	APC-1078	STICKER CENTER MARK
22	APC-3002	CONSOLE PLATE
23	APC-3003	SW PROTECT PLATE
24	APC-3005	STICKER THRUST

20. PARTS LIST

① TOP ASSY APC DX

(D-1/2)



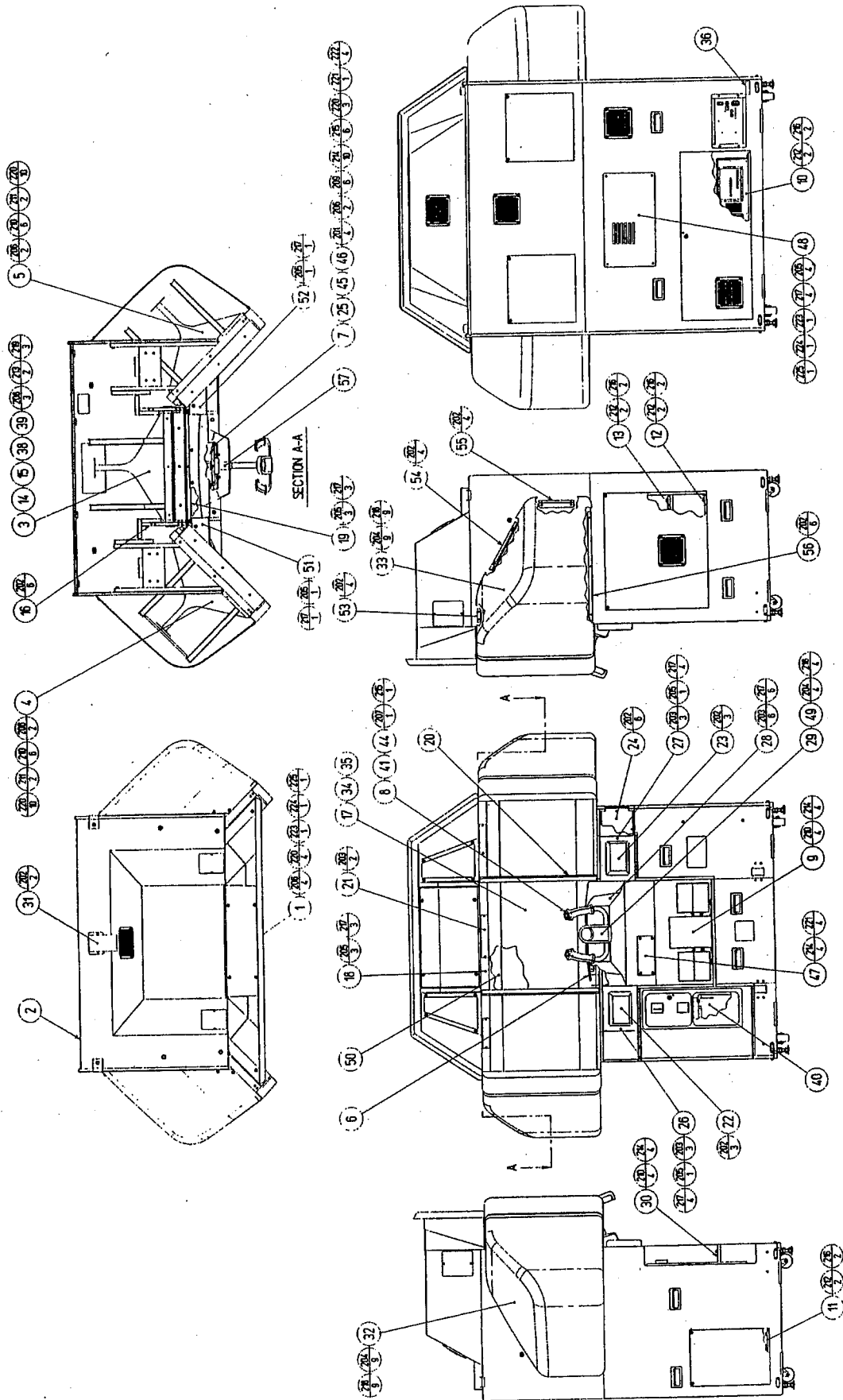
① TOP ASSY APC DX

(D-2/2)

ITEM NO.	PART NO.	DESCRIPTION	NOTE
1	APC-1000	ASSY FRONT CABINET	
2	APC-3000	ASSY REAR CABINET	
3	APC-0001	JOINT PIPE	
4	APC-0002	JOINT BRKT L	
5	APC-0003	JOINT BRKT R	
6	DYN-0011	DENOMI PLATE W/O ORIGINAL	
7	421-7308- ~	DENOMI SH 1GAME ~	
8	421-7020	STICKER CAUTION FORK	
15	421-8479-01	STICKER INSTR SUNLIGHT ENG	
16	440-WS0002XEG	STICKER W POWER OFF ENG	
17	440-DS0013XEG	STICKER D MONITOR ENG	
18	SGM-4048	POLY COVER 1250 × 1800 × 2100	
19	SGM-4425	POLY COVER 1100 × 1400 × 1600	
21	422-0741-01	PLAY INSTR SH APC DX L ENG	
22	422-0742-01	PLAY INSTR SH APC DX R ENG	
27	440-WS0012XEG	STICKER W HIGH TEMP ENG	
28	440-WS0170-JP	STICKER W FALL DOWN	
201	000-T00410-0B	M SCR TH BLK M4 × 10	
202	030-000830-SB	HEX BLT W/S BLK M8 × 30	
203	068-852216-0B	FLT WSHR BLK 8.5-22 × 1.6	
204	030-000820-SB	HEX BLT W/S BLK M8 × 20	
205	008-T00412-0B	TMP PRF SCR TH BLK M4 × 12	
206	000-P00408-S	M SCR PH W/S M4 × 8	
207	060-F00400	FLT WSHR M4	
401	601-6604-70	CARTON BOX 70	
402	SGM-2675	POLYETHYLENE BAG 240 × 370	
403	420-6471-01	OWNERS MANUAL APC DX ENG	
404	220-5576	KEY MASTER FOR 220-5575	
405	SGM-4111	KEY BAG (SGB-1035X)	
407	280-5009-01	CORD CLAMP 21	
408	090-0074	STATICIDE (300ML)	
410	600-6729	AC CABLE CONNECT TYPE 15A	} AC 110V AREA AC220V ~ 240V AREA AC 110V AREA
	600-6724	AC CABLE CONNECT TYPE 15A	
	600-6618	AC CABLE CONNECT TYPE FOR EXP	
	600-6695	AC CABLE CONNECT TYPE USA 15A	
411	220-5484	VOL CONT B-5K OHM	
412	429-0641-01	POP PNL APC DX ENG	
413	220-5179	VOL CONT B-5K OHM	
414	509-5911-G	SW LEVER AT-4157 GRAY	
415	509-5911-R	SW LEVER AT-4157 RED	
416	514-5086-6300	FUSE S.B 6300MA 250V HBC CE	
/	105-5356	SHIPPING BRKT	
/	421-8740	CAUTION INSTR COP U/R	
/	421-6690-03	STICKER 220V	AC 220V AREA
/	421-6690-05	STICKER 240V	AC 240V AREA
/	421-6690-06	STICKER 110V	AC 110V AREA
/	421-6690-01	STICKER 120V	AC 120V AREA
/	421-6119-91	STICKER FCC	
/	421-6120-91	STICKER SEGA USA	

② ASSY FRONT CABINET (APC-1000)

(D-1/3)



② ASSY FRONT CABINET (APC-1000)

(D-2/3)

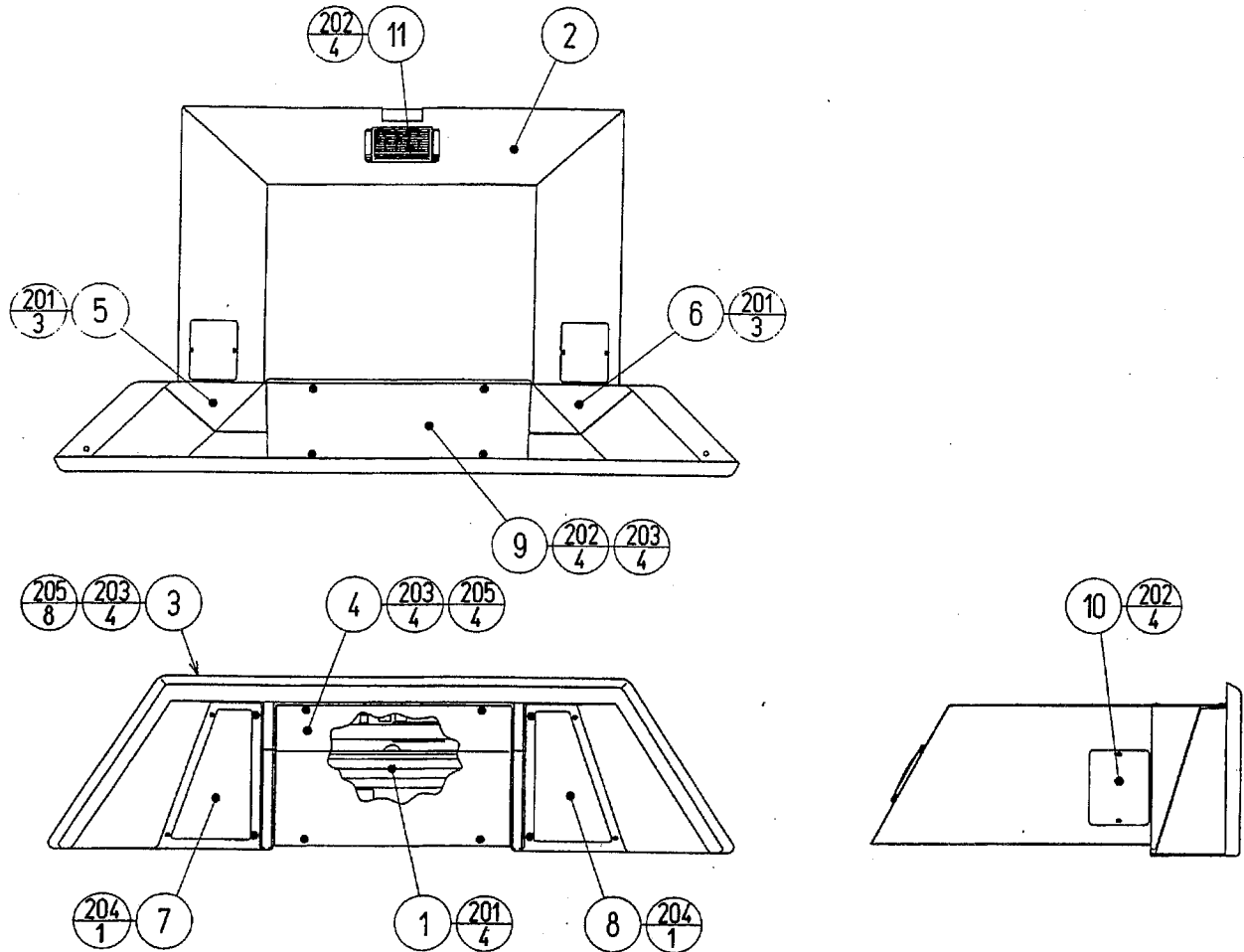
ITEM NO.	PART NO.	DESCRIPTION	NOTE
1	APC-0500	ASSY BILLBOARD	
2	APC-1001	ASSY FRONT SUB-CABI	
3	APC-1100	ASSY MONITOR CENTER	
4	APC-1150	ASSY MONITOR LEFT	
5	APC-1200	ASSY MONITOR RIGHT	
6	APC-1300	ASSY LED PANEL	
7	APC-2000	ASSY CONTROL MECHA	
8	APC-2100	ASSY YOKE	
9	APC-2200	PEDAL UNIT	
10	APC-4000	ASSY MAIN BD DX	
11	APC-4100	ASSY PWR SPLY DX	
12	APC-4200	ASSY I/O DX	
13	APC-4300	ASSY AUDIO DX	
14	APC-1051	BILLBOARD HOOK BRKT	
15	APC-1153X	MONITOR HOLD LOWER	
16	APC-1053X	GLASS HOLDER REAR	
17	APC-1054	GLASS	
18	APC-1055	GLASS HOLDER UPPER CENTER	
19	APC-1056	GLASS HOLDER LOWER CENTER	
20	APC-1057	GLASS SUSH	
21	APC-1058X	MONITOR BD LID	
22	APC-1059	SPEAKER NET L	
23	APC-1060	SPEAKER NET R	
24	APC-1061	SPEAKER COVER BRKT	
25	APC-1062	CONT PNL BRKT LOWER	
26	APC-1063	SPEAKER COVER L	
27	APC-1064	SPEAKER COVER R	
28	APC-1065	CONT PNL COVER	
29	APC-1066	YOKE COVER	
30	APC-1067	PEDAL FLOOR	
31	APC-1068	WIRE COVER	
32	APC-1081	ASSY MONITOR COVER L	
33	APC-1082	ASSY MONITOR COVER R	
34	601-10562-0170	RUBBER PACKING NO.96 L=170MM	
35	601-10562-0580	RUBBER PACKING NO.96 L=580MM	
38	280-5112	BUSH FOR TV	
39	280-5113	COLLAR FOR TV	
40	253-5366	CASH BOX	
41	SPG-2039	SPACER RING	
44	APC-1073	OUTER COLLAR	
45	APC-1074	MECHA ADJUSTER DX L	
46	APC-1075	MECHA ADJUSTER DX R	
47	APC-1076	HOLE LID	
48	APC-1077	AIR VENT PLATE	
49	APC-1078	STICKER CENTER MARK	
50	APC-1083	MONITOR MASK	
51	APC-1084	DELTA PLATE L	
52	APC-1085	DELTA PLATE R	
53	APC-1014	COVER BRKT A	
54	APC-1015	COVER BRKT B	
55	APC-1016	COVER BRKT C	
56	APC-1017	COVER BRKT D	
57	APC-1094	SPCACER PIPE DX	

② ASSY FRONT CABINET (APC-1000)

(D-3/3)

ITEM NO.	PART NO.	DESCRIPTION	NOTE
201	000-P00408-WB	M SCR PH W/FS BLK M4 × 8	
202	000-P00416-WB	M SCR PH W/FS BLK M4 × 16	
203	000-T00410-OB	M SCR TH BLK M4 × 10	
204	000-T00410-OC	M SCR TH CRM M4 × 10	
205	000-T00416-OB	M SCR TH BLK M4 × 16	
206	008-B00830-OB	TMP PRF SCR BH BLK M8 × 30	
207	020-000820-OZ	HEX SKT H CAP SCR BLK OZ M8 × 20	
208	030-000630-SB	HEX BLT BLK W/S M6 × 30	
209	030-000820-SB	HEX BLT W/S BLK M8 × 20	
210	030-000830-SB	HEX BLT W/S BLK M8 × 30	
211	030-000850-SB	HEX BLT W/S BLK M8 × 50	
212	032-000425	WING BLT M4 × 25	
213	050-F00600	FLG NUT M6	
214	060-F00800-OB	FLT WSHR BLK M8	
215	060-S00800-OB	SPR WSHR BLK M8	
216	068-441616	FLT WSHR 4.4-16 × 1.6	
217	068-441616-OB	FLT WSHR BLK 4.4-16 × 1.6	
218	068-441616-OC	FLT WSHR CRM 4.4-16 × 1.6	
219	068-652016-OB	FLT WSHR BLK 6.5-20 × 1.6	
220	068-852216-OB	FLT WSHR BLK 8.5-22 × 1.6	
221	030-000816-SB	HEX BLT W/S BLK M8 × 16	
222	FAS-200023	HEX SKT H CAP SCR BLK OZ M8 × 12	
223	050-H00400	HEX NUT M4	
224	060-S00400	SPR WSHR M4	
225	060-F00400	FLT WSHR M4	
226	000-P00408-S	M SCR PH W/S M4 × 8	
227	000-P00420-WB	M SCR PH W/FS BLK M4 × 20	

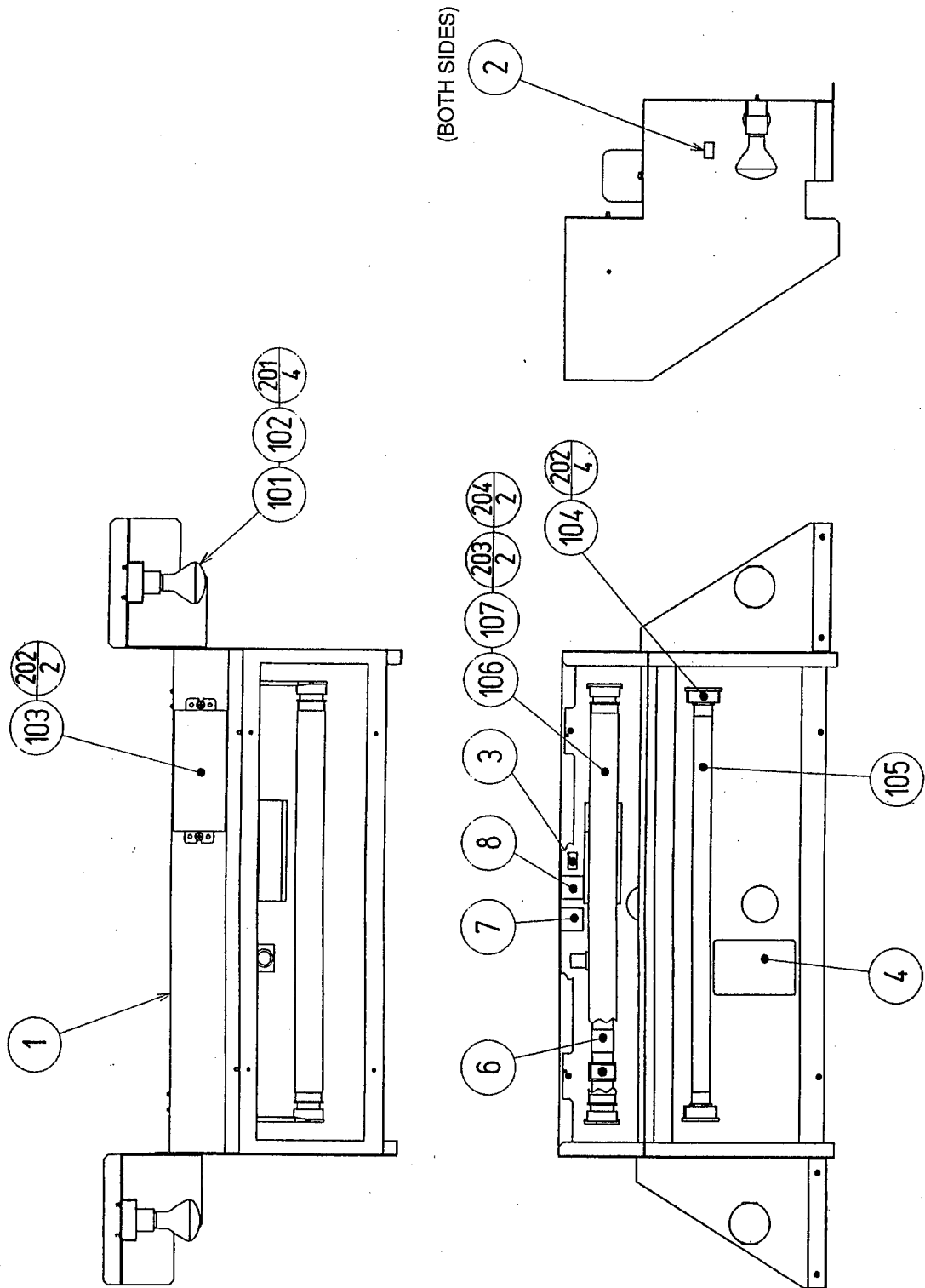
③ ASSY BILLBOARD (APC-0500)



ITEM NO.	PART NO.	DESCRIPTION	NOTE
1	APC-0550	ASSY LAMP BASE	
2	APC-0501	BILLBOARD BASE	
3	APC-0502	BILLBOARD COVER	
4	APC-0503	BILLBOARD PLATE	
5	APC-0504	EMG BRKT L	
6	APC-0505	EMG BRKT R	
7	APC-0506X	EMG PLATE L	
8	APC-0507X	EMG PLATE R	
9	APC-0508	FL LID	
10	APC-0509	LAMP LID	
11	253-5460-01	AIR VENT BLACK	
201	000-P00408-WB	M SCR PH W/FS BLK M4 × 8	
202	000-T00410-0B	M SCR TH BLK M4 × 10	
203	068-441616-0B	FLT WSHR BLK 4.4-16 × 1.6	
204	000-F00410	M SCR FH M4 × 10	
205	000-T00416-0B	M SCR TH BLK M4 × 16	
206	050-H00400	HEX NUT M4	
207	060-S00400	SPR WSHR M4	
208	060-F00400	FLT WSHR M4	
301	APC-60090	WIRE HARN BILLBOARD	
302	600-6972-0120	WIRE HARN EARTH ID5 0120MM	

④ ASSY LAMP BASE (APC-0550)

(D-1/2)



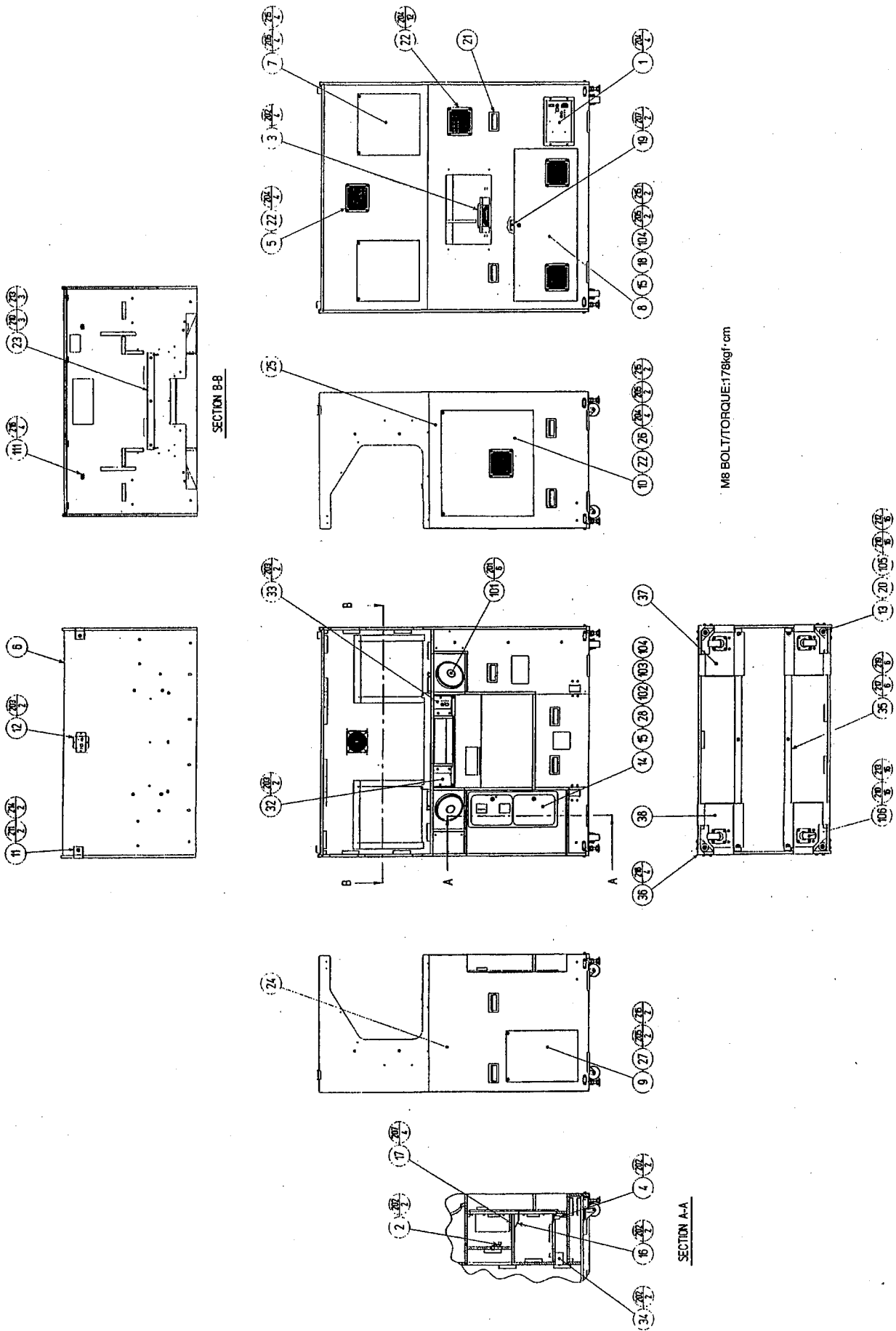
④ ASSY LAMP BASE (APC-0550)

(D-2/2)

ITEM NO.	PART NO.	DESCRIPTION	NOTE
1	APC-0551	LAMP BASE	
2	421-7501-16	STICKER 110V 30W	
3	421-7501-12	STICKER FL 15W NOT USED	OTHERS USA
4	440-WS0012XEG	STICKER W HIGH TEMP ENG	
6	440-CS0148-EG	STICKER C HI VOLT M ENG	
7	440-CS0149-EG	STICKER C HI TEMP M ENG	
8	440-CS0155-EG	STICKER C HI VOLT M ENG	
101	214-0110	BULB SKT (ES-T250-E17)	
102	390-5167	LAMP 110V 30W (R45-E17.F)	
103	182-5078-AB	COIL BALLAST AB-116 NOT USED	OTHERS USA
104	214-0223	FL SOCKET W/CONN	
105	390-6579-0440W	FL SLIM TYPE 0440MM WHITE NOT USED	OTHERS USA
106	390-6603-15EX	ASSY FL15W EX W/CONN HIGH T CE NOT USED	OTHERS USA
107	253-5457	FL HOLDER NOT USED	OTHERS USA
108	280-5009-01	CORD CLAMP 21	
109	280-5275-SR10	CORD CLAMP SR10	
110	601-6563-90	BUSH 2.4T	
201	000-P00312	M SCR PH M3 × 12	
202	000-P00408-W	M SCR PH W/FS M4 × 8	
203	000-P00430-S	M SCR PH W/S M4 × 30	
204	068-441616	FLT WSHR 4.4-16 × 1.6	
301	APC-60083	WIRE HARN FL	
302	APC-60084	WIRE HARN LAMP&FL	
303	APC-60085	WIRE HARN LAMP	
304	APC-60086	WIRE HARN SLIM FL 1	

5 ASSY FRONT SUB-CABI (APC-1001)

(D-1/3)



⑤ ASSY FRONT SUB-CABI (APC-1001)

(D-2/3)

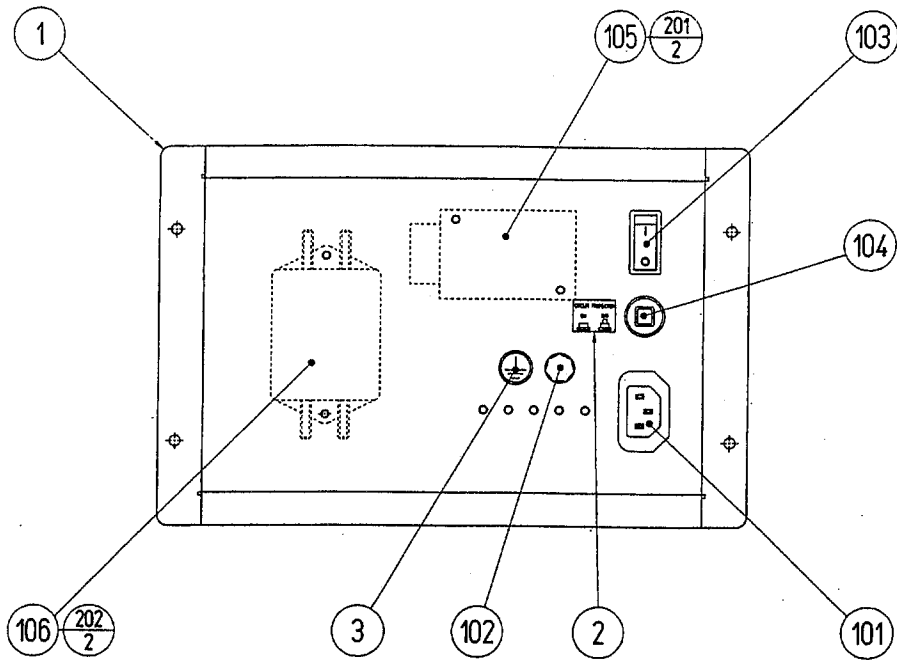
ITEM NO.	PART NO.	DESCRIPTION	NOTE
1	APC-1020	AC UNIT	
2	APC-1030	SW UNIT	
3	APC-1035	FAN MOTOR UNIT	
4	APC-1040	METER UNIT S	OTHERS
	APC-1040-01	METER UNIT T	USA
5	STR-1070	FAN UNIT	
6	APC-1002	WOODEN FRONT CABINET	
7	APC-1003	BACK DOOR UPPER	
8	APC-1004	BACK DOOR LOWER	
9	APC-1005	SIDE DOOR L	
10	APC-1006	SIDE DOOR R	
11	105-5373	SHIPPING BRKT RED	
12	APC-1008	CONN PANEL BILLBOARD	
13	ARC-1006	LEG BRACKET	
14	DP-1148X	LKG TNG	
15	DP-1167	TNG LKG	
16	105-5169	LOCK BRACKET W	
17	105-5171	CHUTE PLATE SINGLE	OTHERS
	105-5172	CHUTE PLATE DOUBLE	USA
18	117-0062	PLATE LOCK RETAINER	
19	117-5098	TNG RETAINER PLATE	
20	117-5233	PLATE LEG BRACKET BLACK	
21	253-5396-91	CABINET HANDLE	
22	253-5460-01	AIR VENT BLACK	
23	APC-1009	MONITOR BRKT LOWER	
24	APC-1010	STICKER SIDE L	
25	APC-1011	STICKER SIDE R	
26	APC-1012	STICKER SIDE DOOR R	
27	APC-1013	STICKER SIDE DOOR L	
28	421-7501-02	STICKER 6.3V 0.15A	
32	APC-1071	CONT PNL COVER BRKT L	
33	APC-1072	CONT PNL COVER BRKT R	
34	APC-1079	CONN PANEL METER	
35	APC-1087	UNDER FRAME	
36	APC-1090	CORNER GUARD	
37	APC-1092	CASTER SUPPORT BRKT A	
38	APC-1093	CASTER SUPPORT BRKT B	
101	130-5206	SPKR 16CM 40HM 25W	
102	220-5237-92- ~	ASSY C.C 2DR ~	
	220-5482-91- ~	ASSY C.C 2DR ~	
103	220-5574	CAM LOCK W/KEYS	
104	220-5575	CAM LOCK MASTER W/O KEY	
105	601-5699X	LEG ADJUSTER BOLT M16 × 75	
106	601-9377	CASTER FAI=75	
107	280-5009-01	CORD CLAMP 21	
108	280-0419	HARNESS LUG	
109	310-5029-D20	SUMITUBE F D 20 MM	
111	117-5402-06	EARTH TERMINAL PLATE 6P	
112	270-5117	FERRITE CORE TDK ZCAT3035-1330	
113	601-0460	PLASTIC TIE BELT 100 MM	

⑤ ASSY FRONT SUB-CABI (APC-1001)

(D-3/3)

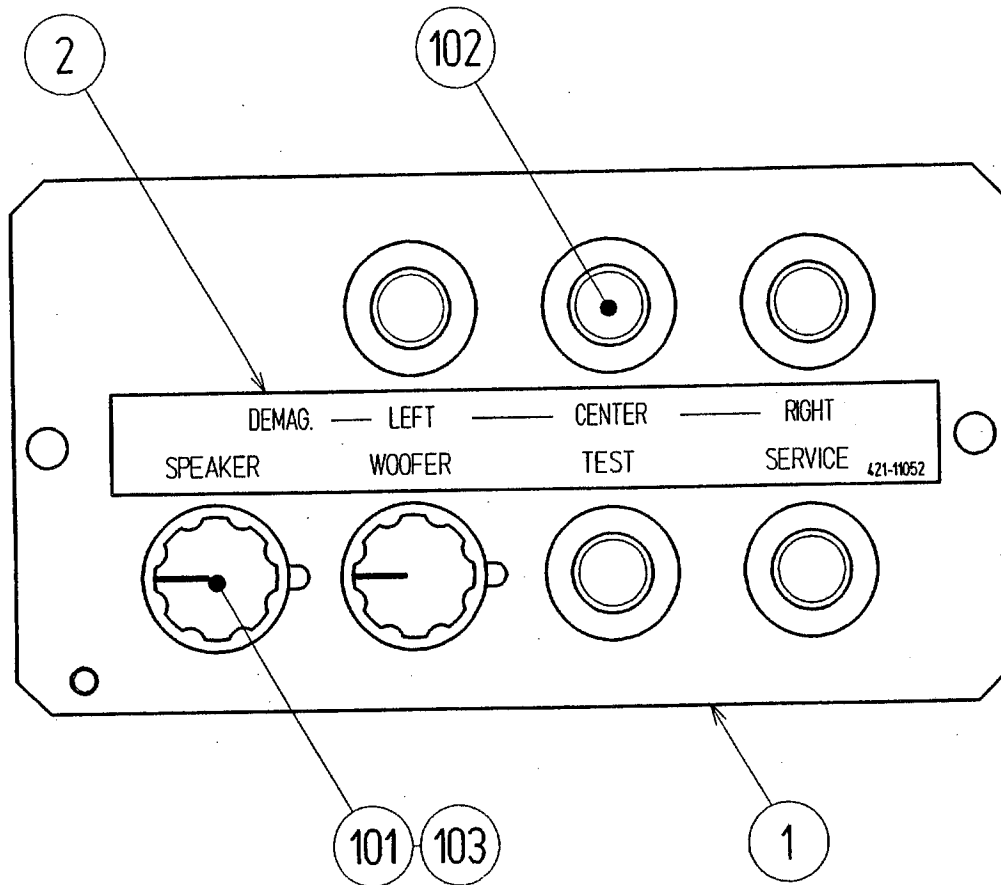
ITEM NO.	PART NO.	DESCRIPTION	NOTE
201	000-P00420-WB	M SCR PH W/FS BLK M4 × 20	
202	000-P00416-W	M SCR PH W/FS M4 × 16	
203	000-P00416-WB	M SCR PH W/FS BLK M4 × 16	
204	000-T00420-OB	M SCR TH BLK M4 × 20	
205	000-T00430-OB	M SCR TH BLK M4 × 30	
206	011-F00310	TAP SCR FH 3 × 10	
207	011-T00312	TAP SCR TH 3 × 12	
208	011-T03512	TAP SCR TH 3.5 × 12	
209	030-000625	HEX BLT M6 × 25	
210	030-000630-SB	HEX BLT BLK W/S M6 × 30	
211	030-000830-SB	HEX BLT W/S BLK M8 × 30	
212	050-H01600	HEX NUT M16	
213	060-F00600-OB	FLT WSHR BLK M6	
214	060-F00800-OB	FLT WSHR BLK M8	
215	068-441616-OB	FLT WSHR BLK 4.4-16 × 1.6	
216	011-F03516	TAP SCR FH 3.5 × 16	
217	030-000840-SB	HEX BLT W/S BLK M8 × 40	
218	FAS-110010	TAP SCR FH #1 BLK 3 × 10	
221	050-H00400	HEX NUT M4	
222	060-S00400	SPR WSHR M4	
223	060-F00400	FLT WSHR M4	
301	APC-6001	ASSY WIRE FRONT CABI AC	
302	APC-6002	ASSY WIRE FRONT CABI DC	
303	APC-6010	ASSY WIRE EARTH	
304	APC-60071	WIRE HARN SPEAKER FRONT	
305	APC-60072	WIRE HARN WOOFER FRONT	
306	APC-60088	WIRE HARN SPEAKER L	
307	APC-60089	WIRE HARN SPEAKER R	
308	APC-60091	WIRE HARN RGB L	
309	APC-60092	WIRE HARN RGB C	
310	APC-60093	WIRE HARN RGB R	
312	600-7141-100	CABLE JVS TYPE A-B 100CM	
313	600-6972-1000	WIRE HARN EARTH ID5 1000MM	
314	600-6972-1100	WIRE HARN EARTH ID5 1100MM	
315	600-6972-0400	WIRE HARN EARTH ID5 0400MM	
316	600-6972-0200	WIRE HARN EARTH ID5 0200MM	
317	600-6455-02	WIRE HARN C.C DOOR SINGLE	OTHERS
	600-7134	WIRE HARN COIN CHUTE 2	USA

⑥ AC UNIT (APC-1020)



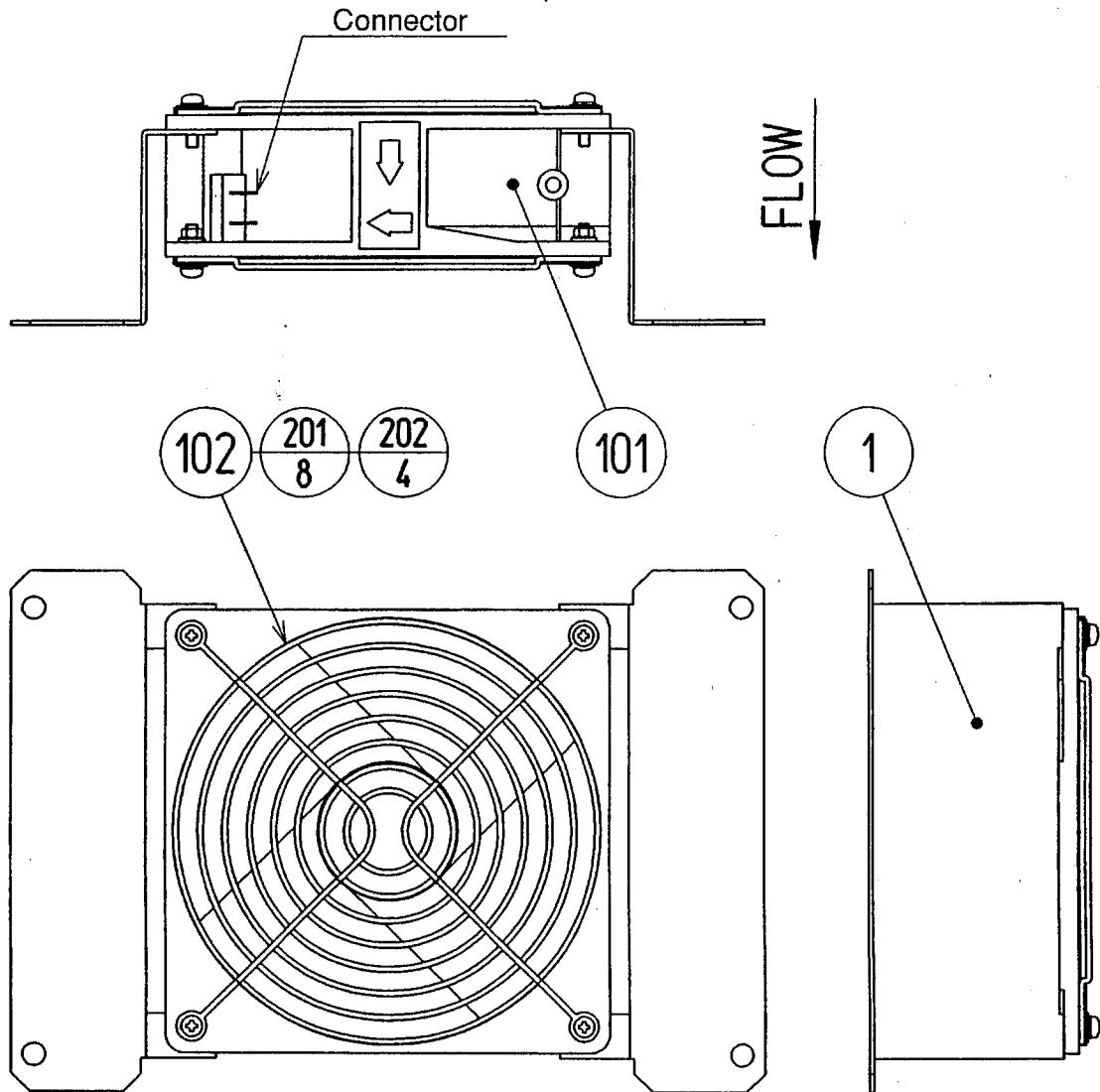
ITEM NO.	PART NO.	DESCRIPTION	NOTE
1	APC-1021	AC BRACKET	
2	421-7468-01	STICKER C.P W/PIC	
3	421-8202	STICKER EARTH MARK	
101	214-0202	AC INLET PANEL TYPE	
102	280-0417	TERMINAL BINDING POST BLACK	
103	509-5453-91-V-B	SW ROCKER J8 V-B	
104	512-5046-10000	C.P 10000MA CE UL	AC110V ~ 120V AREA
	512-5046-5000	C.P 5000MA CE UL	AC220V ~ 240V AREA
105	450-5126	MAGNET CONTACT S-NIOCX	AC 110V AREA
	450-5133	MAGNET CONTACT S-NIOCX AC 200V	AC 220V 60Hz AREA
	450-5134	MAGNET CONTACT S-NIOCX AC 230V	AC 220V 50Hz, AC240V AREA
	450-5135	MAGNET CONTACT S-NIOCX AC 120V	AC 120V AREA
106	270-5081	NOISE FILTER 20A	
107	280-5009-01	CORD CLAMP 21	
108	310-5029-G20	SUMITUBE F G 20MM	
109	601-0460	PLASTIC TIE BELT 100 MM	
201	000-P00416-W	M SCR PH W/FS M4 × 16	
202	000-P00408-W	M SCR PH W/FS M4 × 8	
203	050-H00400	HEX NUT M4	
204	060-S00400	SPR WSHR M4	
205	060-F00400	FLT WSHR M4	
301	APC-60001	WIRE HARN AC IN HOT	
302	APC-60002	WIRE HARN AC IN COLD	
303	APC-60003	WIRE HARN EARTH IN	
304	APC-60004	WIRE HARN C.P OUT	
305	APC-60005	WIRE HARN CONN J8	
306	APC-60006	WIRE HARN N.F IN HOT	
307	APC-60007	WIRE HARN N.F IN COLD	
308	APC-60008	WIRE HARN N.F OUT	
309	600-6972-0100	WIRE HARN EARTH ID5 0100MM	
310	600-6972-0120	WIRE HARN EARTH ID5 0120MM	

⑦ SW UNIT (APC-1030)



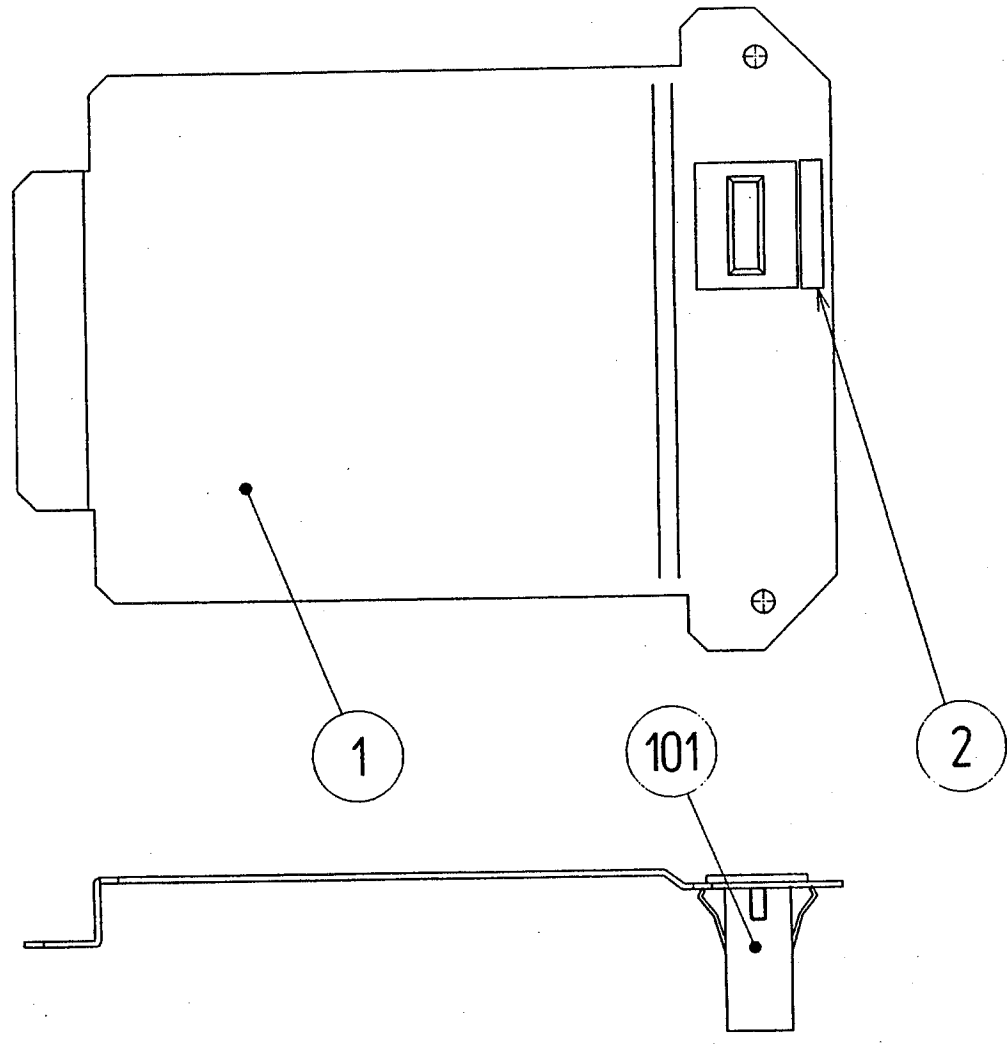
ITEM NO.	PART NO.	DESCRIPTION	NOTE
1	APC-1031	SW BRACKET	
2	421-11052	STICKER SW UNIT APC T-S-D3 S-W	
101	220-5179	VOL CONT B-5K OHM	
102	509-5028	SW PB 1M (MIYAMA DS-412R)	
103	601-0042	KNOB 22 MM	
104	310-5029-D20	SUMITUBE F D 20 MM	
105	601-0460	PLASTIC TIE BELT 100 MM	
301	APC-60087	WIRE HARN DEMAG	
302	600-6609-32	WIRE HARN TEST & SERVICE	
303	600-6609-33	WIRE HARN VOLUME A	
304	600-6609-34	WIRE HARN VOLUME B	

⑧ FAN MOTOR UNIT (APC-1035)



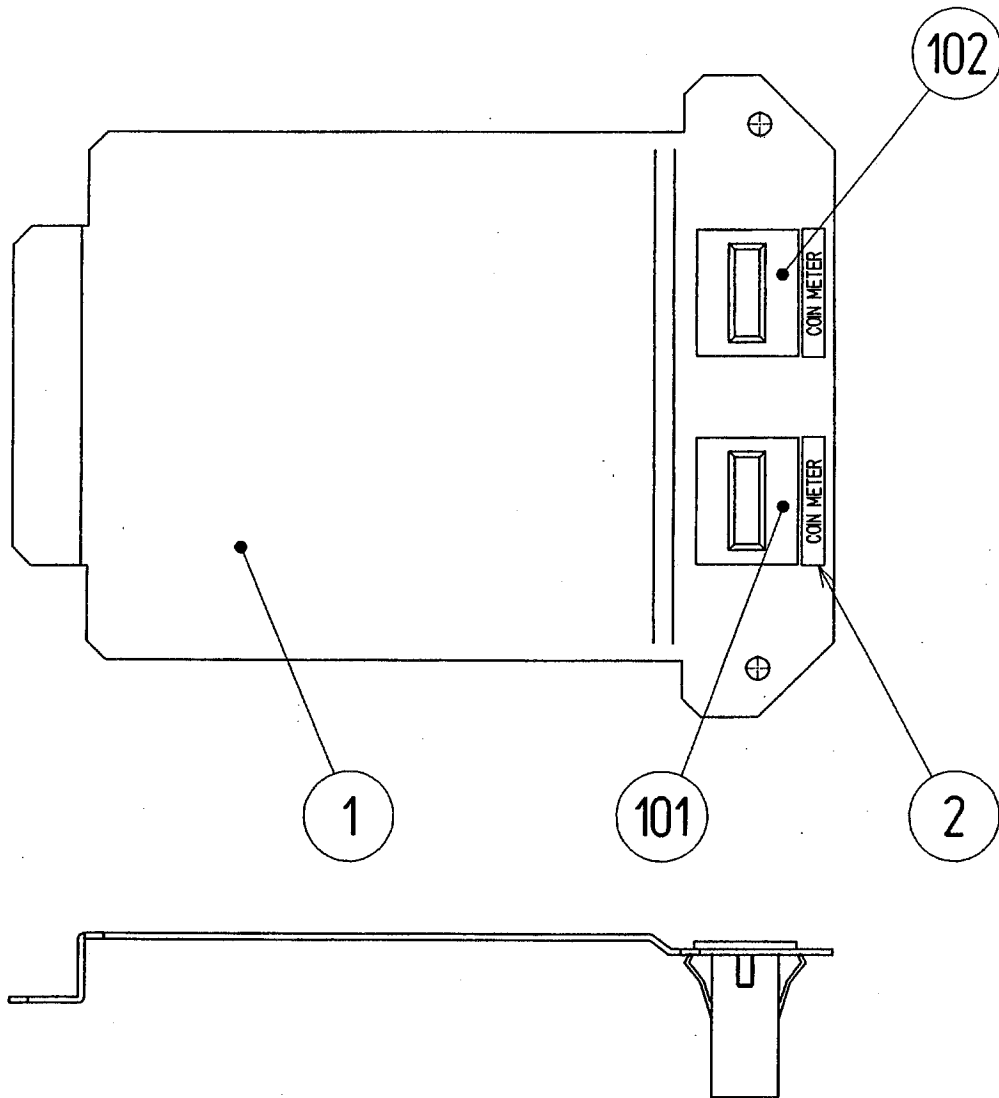
ITEM NO.	PART NO.	DESCRIPTION	NOTE
1	APC-1036	FAN MOTOR BRKT	
101	260-0011-02	AXIAL FLOW FAN AC100V 50-60HZ	
102	601-8543	FAN GUARD	
201	000-P00312-W	M SCR PH W/FS M3 × 12	
202	050-F00300	FLG NUT M3	

⑨ METER UNIT S (APC-1040)



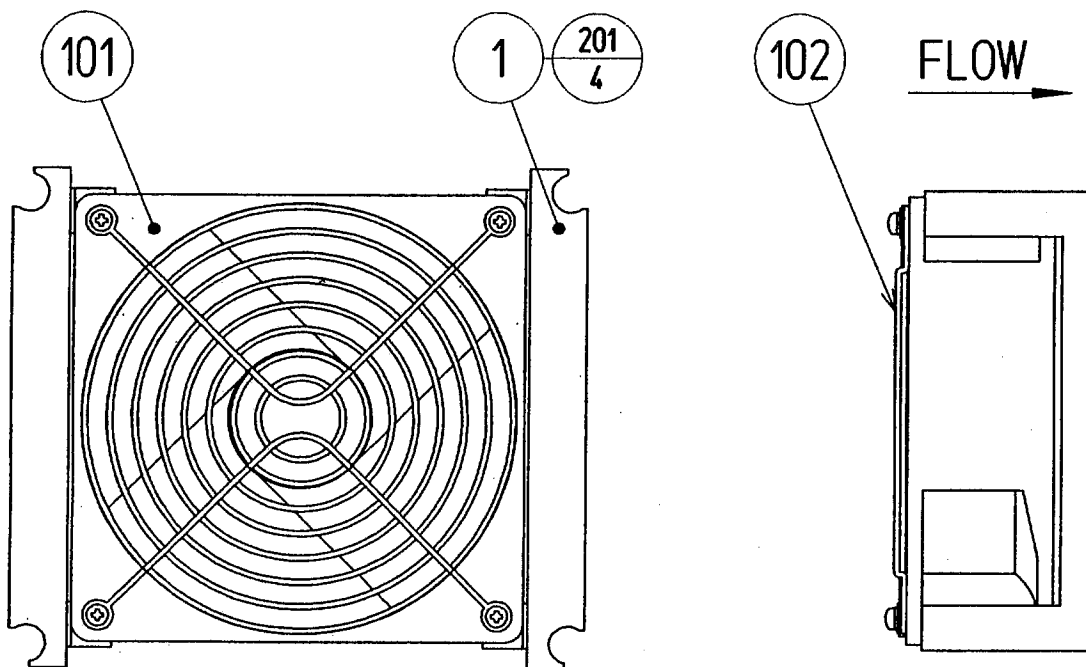
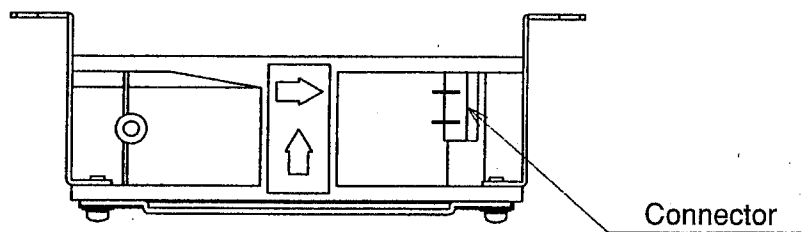
ITEM NO.	PART NO.	DESCRIPTION	NOTE
1	APC-1041	METER BRKT T	
2	421-6591-01	STICKER COIN METER	
101	220-5643-01	MAG CNTR DC5V 6P WH MZ-674-D04	

⑨ METER UNIT T (APC-1040-01)



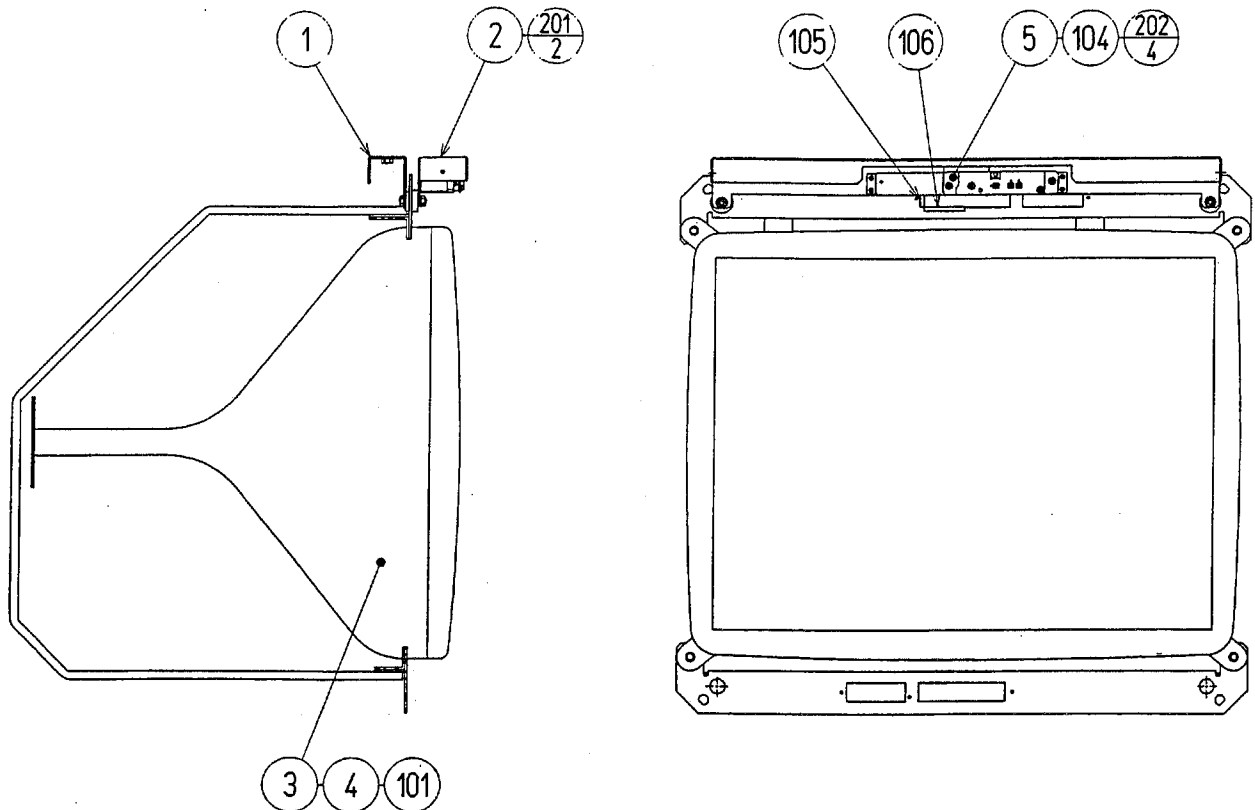
ITEM NO.	PART NO.	DESCRIPTION	NOTE
1	APC-1042	METER BRKT T	
2	421-6591-01	STICKER COIN METER	
101	220-5643-01	MAG CNTR DC5V 6P WH MZ-674-D04	
102	220-5643-02	MAG CNTR DC5V 6P YE MZ-674-D05	

⑩ FAN UNIT (STR-1070)



ITEM NO.	PART NO.	DESCRIPTION	NOTE
1	105-5340-01	FAN BRKT LONG	
101	260-0011-02	AXIAL FLOW FAN AC100V 50-60HZ	
102	601-8543	FAN GUARD	
201	000-P00312-W	M SCR PH W/FS M3 × 12	

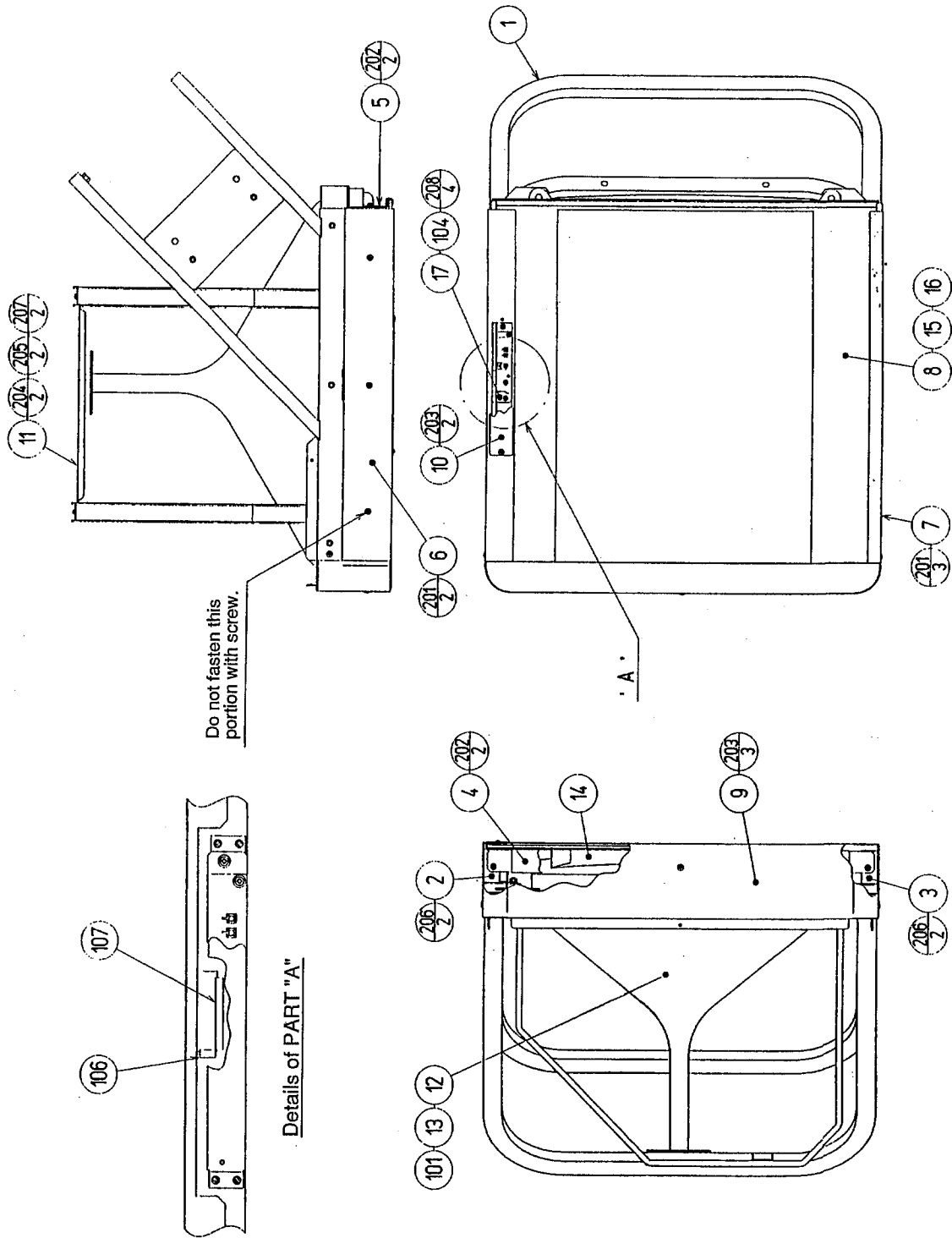
⑪ ASSY MONITOR CENTER (APC-1100)



ITEM NO.	PART NO.	DESCRIPTION	NOTE
1	APC-1101	MONITOR BRKT UPPER	
2	APC-1152X	MONITOR HOLD UPPER	
3	280-5112	BUSH FOR TV	
4	280-5113	COLLAR FOR TV	
5	APC-1086	MONITOR BD BASE	
101	200-5710	ASSY CLR DSPL 29AUTO MS-2931-S	
102	280-5275-SR10	CORD CLAMP SR10	
103	280-5009-01	CORD CLAMP 21	
104	280-5185-6	SPACER TUBE L=6	
105	601-6231-D020	EDGING NEW TYPE	
106	601-6231-D045	EDGING NEW TYPE	
201	050-F00600	FLG NUT M6	
202	000-P00312-W	M SCR PH W/FS M3 × 12	
301	600-6972-1600	WIRE HARN EARTH ID5 1600MM	

12 ASSY MONITOR LEFT (APC-1150)

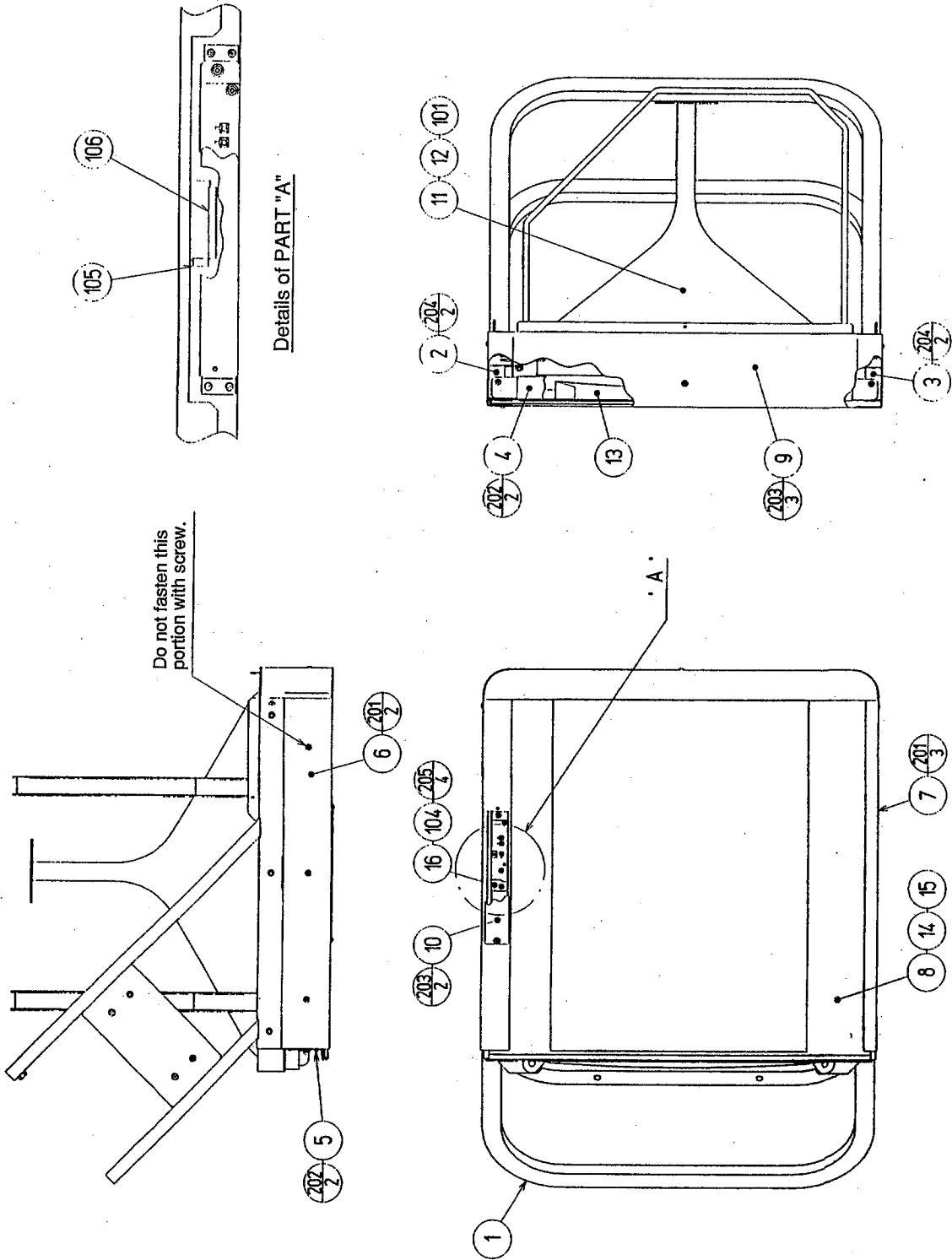
(D-1/2)



⑫ ASSY MONITOR LEFT (APC-1150)

(D-2/2)

ITEM NO.	PART NO.	DESCRIPTION	NOTE
1	APC-1151	MONITOR FRAME	
2	APC-1152X	MONITOR HOLD UPPER	
3	APC-1153X	MONITOR HOLD LOWER	
4	APC-1154X	SIDE COVER BRKT	
5	APC-1155X	SIDE BRKT	
6	APC-1156X	GLASS HOLDER UPPER SIDE	
7	APC-1157X	GLASS HOLDER LOWER SIDE	
8	APC-1054	GLASS	
9	APC-1159X	MONITOR SIDE COVER	
10	APC-1058X	MONITOR BD LID	
11	APC-1160	WIRE BRKT	
12	280-5112	BUSH FOR TV	
13	280-5113	COLLAR FOR TV	
14	APC-1083	MONITOR MASK	
15	601-10562-0170	RUBBER PACKING NO.96 L=170MM	
16	601-10562-0580	RUBBER PACKING NO.96 L=580MM	
17	APC-1086	MONITOR BD BASE	
101	200-5710	ASSY CLR DSPL 29AUTO MS-2931-S	
102	280-5275-SR10	CORD CLAMP SR10	
103	280-5009-01	CORD CLAMP 21	
104	280-5185-6	SPACER TUBE L=6	
105	280-5292	CORD CLAMP 18 PUSH TYPE	
106	601-6231-D010	EDGING NEW TYPE L=10	
107	601-6231-D045	EDGING NEW TYPE	
201	000-F00410-0B	M SCR FH BLK M4 × 10	
202	000-P00408-W	M SCR PH W/FS M4 × 8	
203	000-T00408-0B	M SCR TH BLK M4 × 8	
204	000-P00412-W	M SCR PH W/FS M4 × 12	
205	050-F00400	FLG NUT M4	
206	050-F00600	FLG NUT M6	
207	068-441616	FLT WSHR 4.4-16 × 1.6	
208	000-P00312-W	M SCR PH W/FS M3 × 12	
301	600-6972-1600	WIRE HARN EARTH ID5 1600MM	

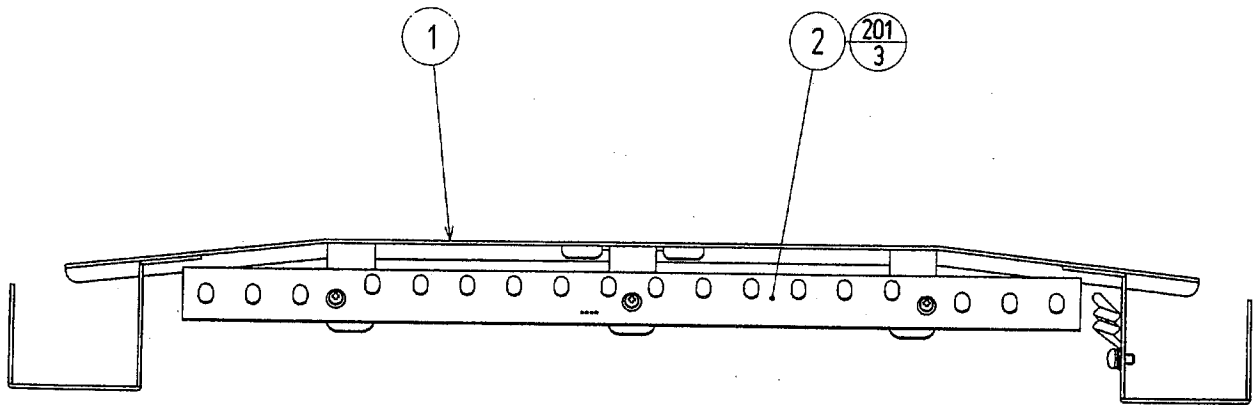


⑬ ASSY MONITOR RIGHT (APC-1200)

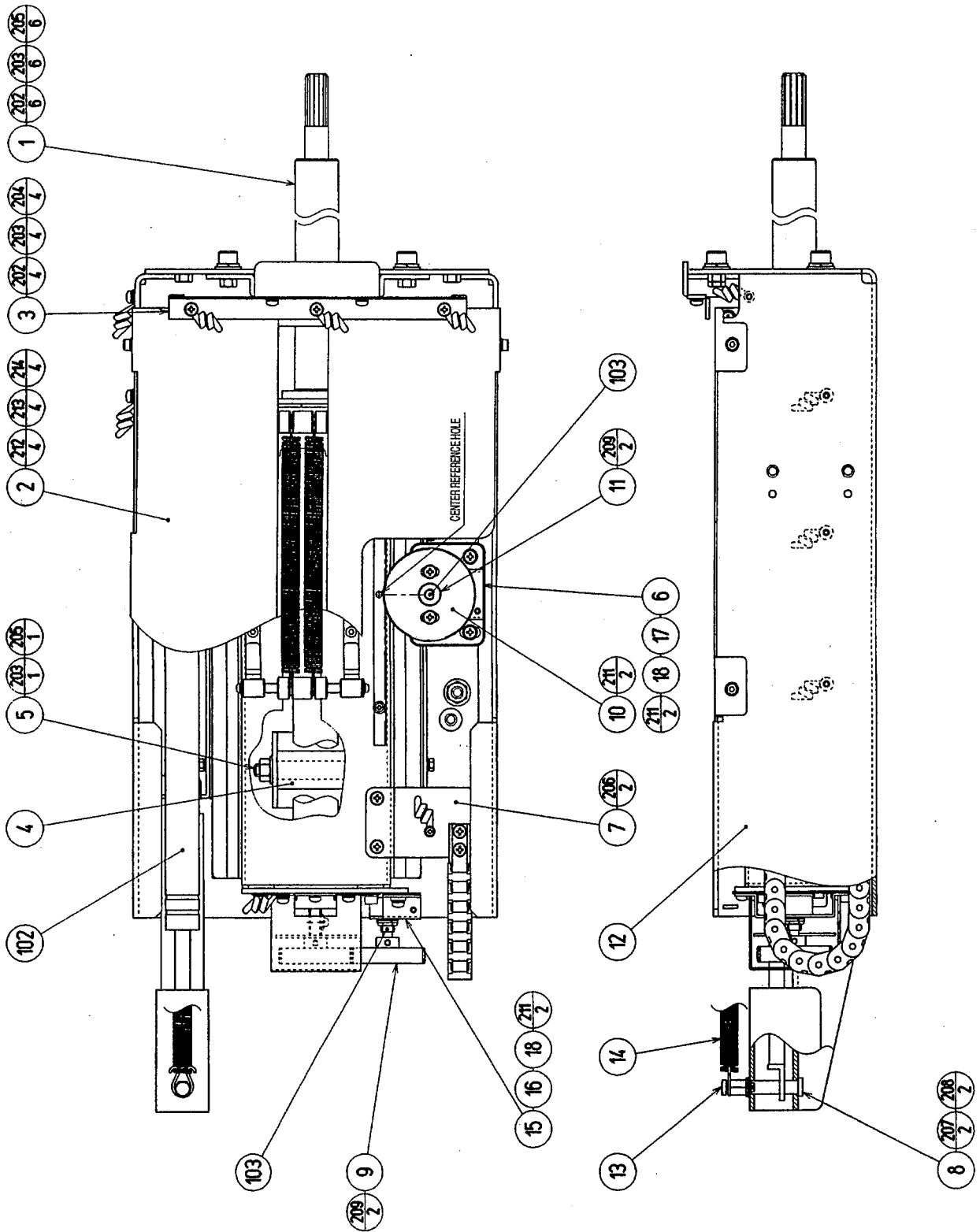
(D-2/2)

ITEM NO.	PART NO.	DESCRIPTION	NOTE
1	APC-1151	MONITOR FRAME	
2	APC-1152X	MONITOR HOLD UPPER	
3	APC-1153X	MONITOR HOLD LOWER	
4	APC-1154X	SIDE COVER BRKT	
5	APC-1155X	SIDE BRKT	
6	APC-1156X	GLASS HOLDER UPPER SIDE	
7	APC-1157X	GLASS HOLDER LOWER SIDE	
8	APC-1054	GLASS	
9	APC-1159X	MONITOR SIDE COVER	
10	APC-1058X	MONITOR BD LID	
11	280-5112	BUSH FOR TV	
12	280-5113	COLLAR FOR TV	
13	APC-1083	MONITOR MASK	
14	601-10562-0170	RUBBER PACKING NO.96 L=170MM	
15	601-10562-0580	RUBBER PACKING NO.96 L=580MM	
16	APC-1086	MONITOR BD BASE	
101	200-5710	ASSY CLR DSPL 29AUTO MS-2931-S	
102	280-5275-SR10	CORD CLAMP SR10	
103	280-5009-01	CORD CLAMP 21	
104	280-5185-6	SPACER TUBE L=6	
105	601-6231-D010	EDGING NEW TYPE L=10	
106	601-6231-D045	EDGING NEW TYPE	
201	000-F00410-0B	M SCR FH BLK M4 × 10	
202	000-P00408-W	M SCR PH W/FS M4 × 8	
203	000-T00408-0B	M SCR TH BLK M4 × 8	
204	050-F00600	FLG NUT M6	
205	000-P00312-W	M SCR PH W/FS M3 × 12	
301	600-6972-1600	WIRE HARN EARTH ID5 1600MM	

⑭ ASSY LED PANEL (APC-1300)



ITEM NO.	PART NO.	DESCRIPTION	NOTE
1	APC-1301	LED PANEL BRKT	
2	838-13757	LED BD APC	
101	280-5275-SR10	CORD CLAMP SR10	
102	280-0419	HARNESS LUG	
201	000-P00320-WB	M SCR PH W/FS BLK M3 × 20	
202	000-P00408-W	M SCR PH W/FS M4 × 8	
203	000-P00408-S	M SCR PH W/S M4 × 8	
204	060-F00400	FLT WSHR M4	
301	APC-60080	WIRE HARN LED	

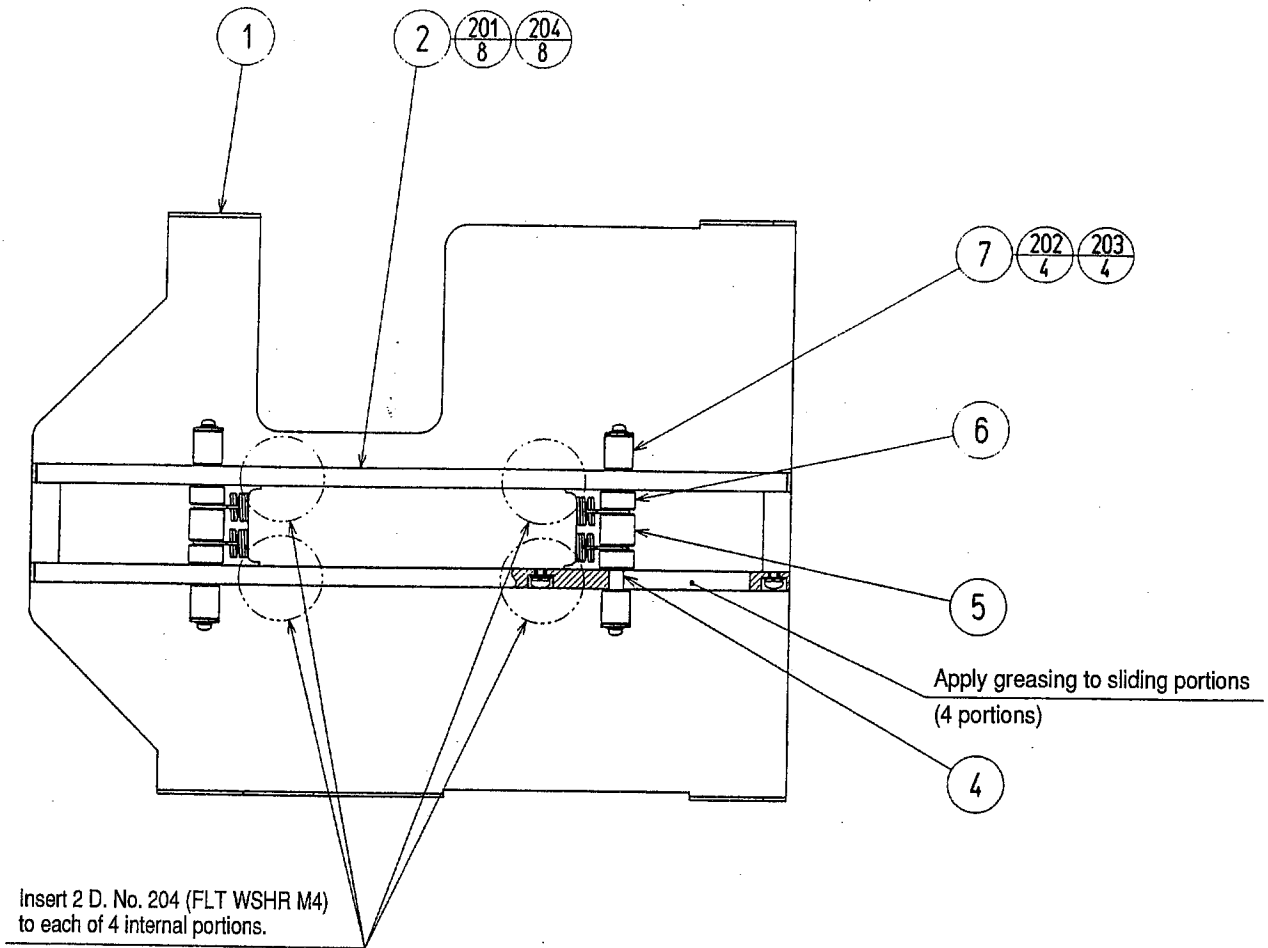


⑮ ASSY CONTROL MECHA (APC-2000)

(D-2/2)

ITEM NO.	PART NO.	DESCRIPTION	NOTE
1	APC-2050	ASSY SLIDE BASE	
2	APC-2030	ASSY CENTERING MECHA	
3	APC-2090	ASSY SHAFT GUIDE	
4	APC-2003	STOPPER RUBBER STROKE	
5	APC-2004	STOPPER SHAFT STROKE	
6	APC-2012	VR BRKT STROKE INSU	
7	APC-2006	CABLE BEAR BRKT	
8	APC-2007	STROKE DAMPER SHAFT	
9	601-7088-91	GEAR 64	
10	601-10572	GEAR 80	
11	601-8966	GEAR HOLDER	
12	APC-2001	MECHA BASE	
13	APC-2008	SPRING HOOK	
14	APC-2009	EXT SPRING LONG	
15	APC-2013	VR BRKT ROLL INSU	
16	APC-2010	INSULATOR PAPER ROLL	
17	APC-2011	INSULATOR PAPER STROKE	
18	APC-2014	INSULATOR BUSH	
102	601-10574	STROKE DAMPER	
103	220-5484	VOL CONT B-5K OHM	
104	280-0419	HARNESS LUG	
105	601-6231-B045	EDGING NEW TYPE	
202	060-S00800-0B	SPR WSHR BLK M8	
203	060-F00800-0B	FLT WSHR BLK M8	
204	020-000820-0Z	HEX SKT H CAP SCR BLK OZ M8 × 20	
205	050-U00800	U NUT M8	
206	000-P00408-W	M SCR PH W/FS M4 × 8	
207	060-S00600	SPR WSHR M6	
208	060-F00600	FLT WSHR M6	
209	028-A00308-P	SET SCR HEX SKT CUP P M3 × 8	
211	000-P00410-WB	M SCR PH BLK W/FS M4 × 10	
212	020-000410-HZ	HEX SKT CAP SCR BLK OZ M4 × 10	
213	060-F00400	FLT WSHR M4	
214	060-S00400	SPR WSHR M4	
215	000-P00308-W	M SCR PH W/FS M3 × 8	
301	APC-60082X	WIRE HARN ELE&AIL	
302	APC-60095	WIRE HARN EARTH SHAFT	
303	600-6972-0250	WIRE HARN EARTH ID5 0250MM	
304	600-6972-0450	WIRE HARN EARTH ID5 0450MM	

16 ASSY CENTERING MECHA (APC-2030)



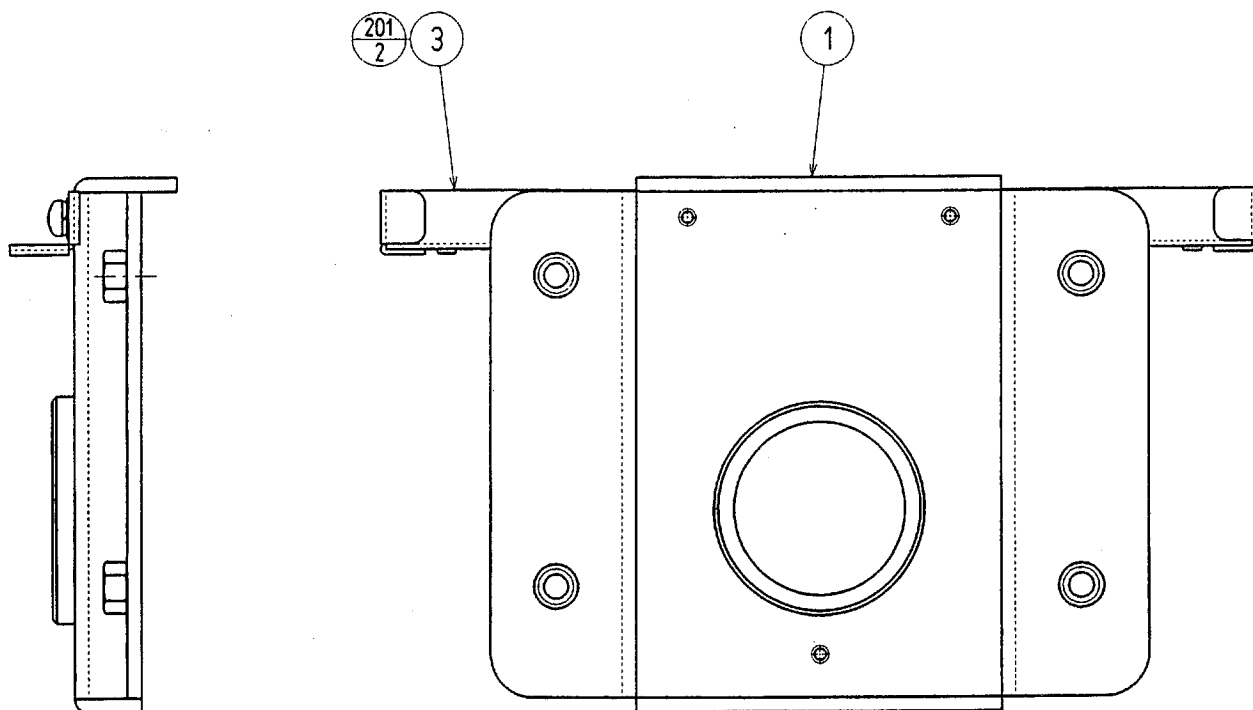
ITEM NO.	PART NO.	DESCRIPTION	NOTE
1	APC-2031	CENTERING BASE	
2	APC-2032	CENTERING GUIDE	
3	APC-2033	EXT SPRING	
4	APC-2034	SPRING SHAFT	
5	APC-2035	SPRING COLLAR INNER	
6	APC-2036	SPRING COLLAR OUTER	
7	APC-2037	MUTE RUBBER	
201	000-P00408-W	M SCR PH W/FS M4 × 8	
202	000-P00310-W	M SCR PH W/FS M3 × 10	
203	250-5421	FLT WSHR 3.5-12 T=1.0	
204	060-F00400	FLT WSHR M4	

①7 ASSY SLIDE BASE (APC-2050)

(D-2/2)

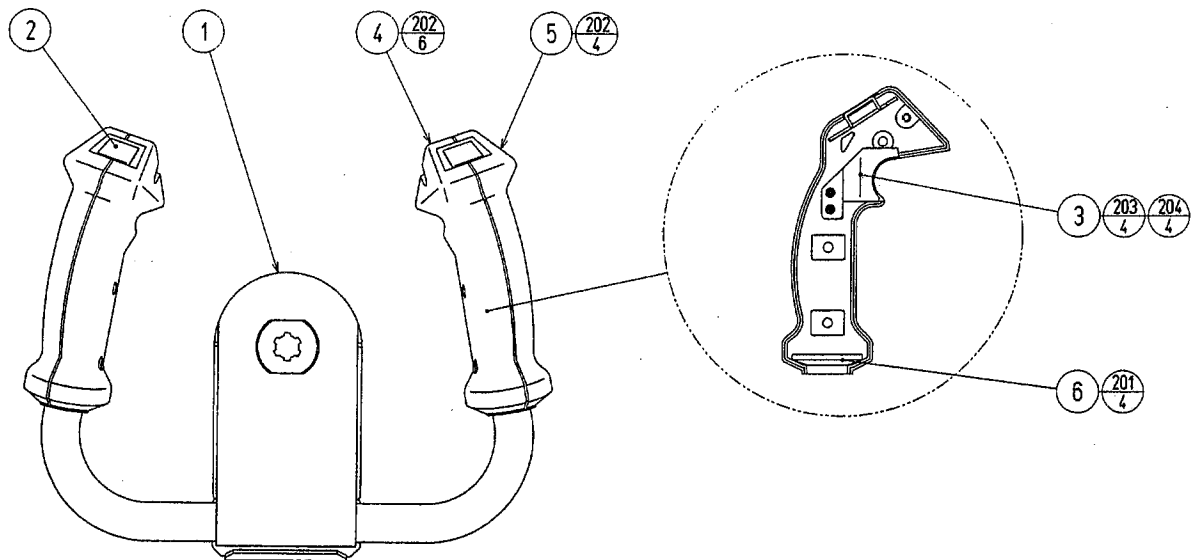
ITEM NO.	PART NO.	DESCRIPTION	NOTE
1	APC-2051	MAIN SHAFT	
2	APC-2052	INNER BASE	
3	APC-2053	HOUSING PLATE 30	
4	APC-2054	HOUSING PLATE 20	
5	APC-2055	STOPPER RUBBER ROLL	
6	APC-2056	STOPPER SHAFT ROLL	
8	APC-2058	SLIDE BRKT L	
9	APC-2059	SLIDE BRKT R	
10	601-10575	RACK	
11	601-7088-91	GEAR 64	
12	APC-2060	GUARD BRKT	
13	APC-2061	STOPPER	
14	APC-2062	INNER COLLAR	
15	APC-2063	GUIDE PLATE	
102	100-5340	BEARING 30 (6806ZZ)	
103	100-5168	BEARING 20 (NSK 6904ZZ)	
104	100-5341	SLIDE RAIL	
105	601-10573	ROTARY DAMPER ROLL	
202	020-000512-HZ	HEX SKT CAP SCR BLK OZ M5 × 12	
203	060-S00500-0B	SPR WSHR BLK M5	
204	050-U00800	U NUT M8	
205	060-F00800-0B	FLT WSHR BLK M8	
206	000-P00408-W	M SCR PH W/FS M4 × 8	
207	000-P00312-W	M SCR PH W/FS M3 × 12	
210	028-A00308-P	SET SCR HEX SKT CUP P M3 × 8	
211	000-T00408-0C	M SCR TH CRM M4 × 8	
212	050-U00400	U NUT M4	
213	060-S00400	SPR WSHR M4	
214	060-F00500-0B	FLT WSHR BLK M5	
215	029-000020	HEX SKT H CAP SCR M4 × 10	
216	000-P00408-S	M SCR PH W/S M4 × 8	

⑱ ASSY SHAFT GUIDE (APC-2090)

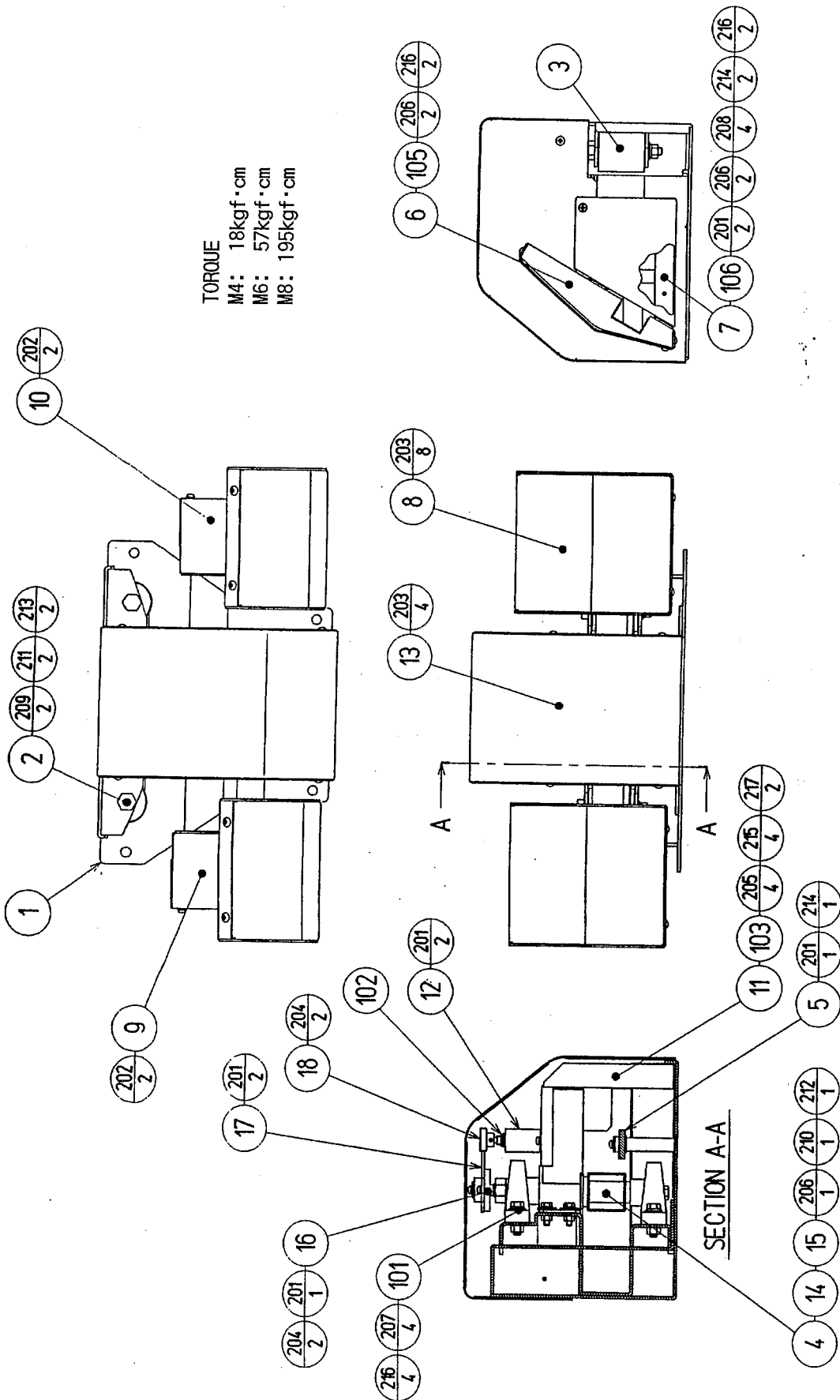


ITEM NO.	PART NO.	DESCRIPTION	NOTE
1	APC-2091	GUIDE BUSH BRKT	
3	APC-2093	L BRKT	
201	000-P00408-W	M SCR PH W/FS M4 × 8	

19 ASSY YOKE (APC-2100)



ITEM NO.	PART NO.	DESCRIPTION	NOTE
1	APC-2101	YOKE	
2	APC-2102	THUMB CAP	
3	APC-2103	TRIGGER CAP	
4	RCR-2151	HANDLE GRIP RIGHT	
5	RCR-2152	HANDLE GRIP LEFT	
6	GLC-2036	STOPPER	
201	000-P00410-0B	M SCR PH BLK M4 × 10	
202	008-P00510-0B	TMP PRF SCR PH BLK M5 × 10	
203	000-P00208	M SCR PH M2 × 8	
204	060-F00200	FLT WSHR M2	

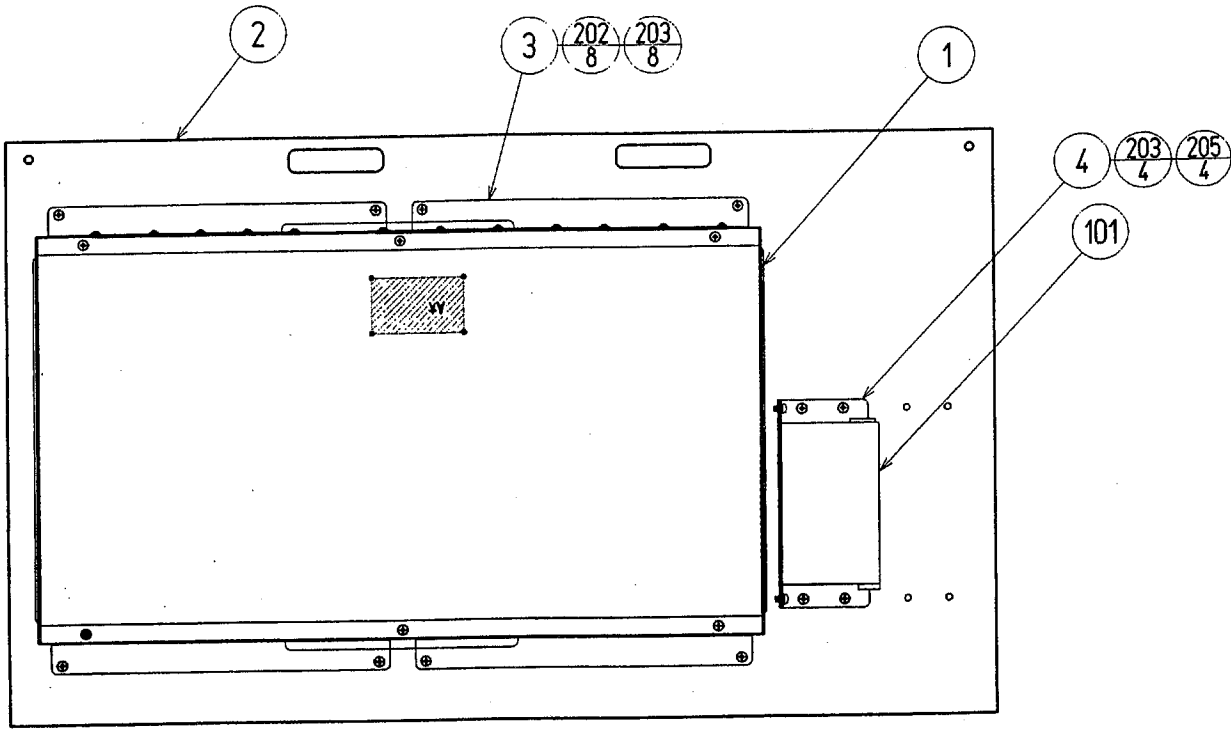


② PEDAL UNIT (APC-2200)

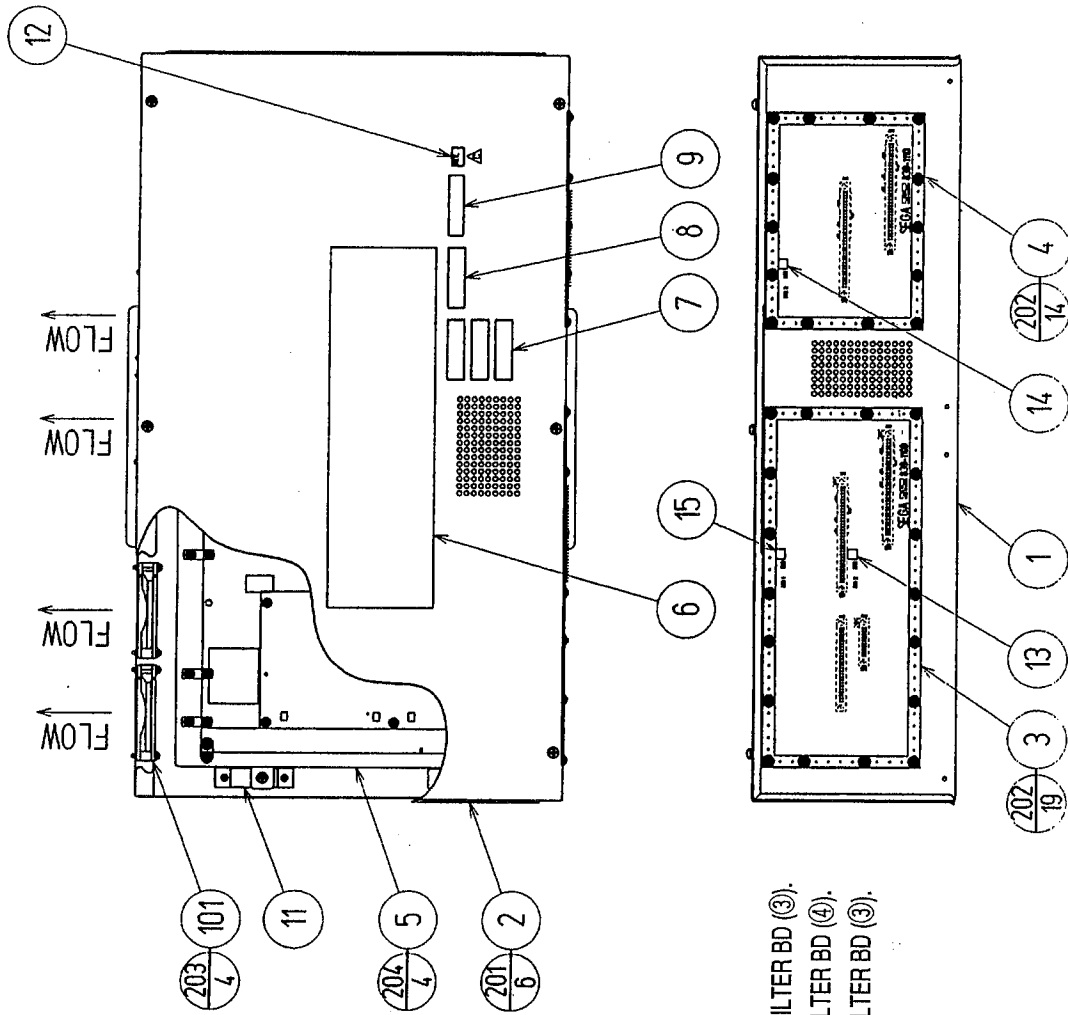
(D-2/2)

ITEM NO.	PART NO.	DESCRIPTION	NOTE
1	APC-2201	PEDAL BASE	
2	APC-2202	STOPPER SHAFT	
3	APC-2203	STOPPER RUBBER	
4	APC-2204	MAIN PIPE	
5	APC-2205	ARM	
6	APC-2206	PEDAL UPPER	
7	APC-2207	PEDAL LOWER	
8	APC-2208	PEDAL COVER	
9	APC-2209X	PEDAL REAR L	
10	APC-2210X	PEDAL REAR R	
11	APC-2211	ROSTA BRKT	
12	APC-2212	VOL BRKT	
13	APC-2213	PEDAL MECHA COVER	
14	AIN-2108	RING	
15	SAS-1178	FLT WSHR BLK 8.5-30 × 2	
16	TTR-2010	GEAR HOLDER 110	
17	601-6450	GEAR 110	
18	601-6555	GEAR Z=30 M=0.75	
101	100-5120	BEARING (FYH BLP 204)	
102	220-5484	VOL CONT B-5K OHM	
103	601-8917	ROSTA 22 (DR-S 27 × 40)	
104	280-5275-SR10	CORD CLAMP SR10	
105	100-5168	BEARING 20 (NSK 6904ZZ)	
106	100-5070	BEARING 15 (NSK 6002ZZ)	
201	000-P00410-W	M SCR PH W/FS M4 × 10	
202	000-P00408-WB	M SCR PH W/FS BLK M4 × 8	
203	000-T00408-OB	M SCR TH BLK M4 × 8	
204	028-A00410-P	SET SCR HEX SKT CUP P M4 × 10	
205	030-000620-S	HEX BLT W/S M6 × 20	
206	030-000816-S	HEX BLT W/S M8 × 16	
207	030-000830-S	HEX BLT W/S M8 × 30	
208	050-F00400	FLG NUT M4	
209	050-H00800	HEX NUT M8	
210	050-H01400	HEX NUT M14	
211	060-S00800	SPR WSHR M8	
212	060-S01400	SPR WSHR M14	
213	060-F00800	FLT WSHR M8	
214	068-441616	FLT WSHR 4.4-16 × 1.6	
215	068-652016	FLT WSHR 6.5-20 × 1.6	
216	068-852216	FLT WSHR 8.5-22 × 1.6	
217	050-F00600	FLG NUT M6	
301	APC-60081	WIRE HARN RUDDER	

21 ASSY MAIN BD DX (APC-4000)

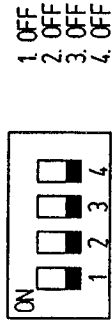


ITEM NO.	PART NO.	DESCRIPTION	NOTE
1	APC-4050-09 APC-4050-08 APC-4050-06 APC-4050-07	ASSY SHIELD CASE APC AUS WO JAL ASSY SHIELD CASE APC KOR WO JAL ASSY SHIELD CASE APC USA WO JAL ASSY SHIELD CASE APC EXP WO JAL	AUSTRALIA KOREA USA OTHERS
2	APC-4001	WOODEN MAIN BASE	
3	105-5368	SHIELD CASE BRKT	
4	APC-4002	SW REGU BRKT	
101	400-5397	SW REGU FOR JVS	
102	280-5009-01	CORD CLAMP 21	
104	280-0419	HARNES LUG	
105	270-5052-04	L. FILTER D(ASTEL 044S-806402)	
106	601-0460	PLASTIC TIE BELT 100 MM	
201	011-F00310	TAP SCR FH 3 × 10	
202	000-P00408-W	M SCR PH W/FS M4 × 8	
203	000-P00412-W	M SCR PH W/FS M4 × 12	
204	011-T03512	TAP SCR TH 3.5 × 12	
205	000-P00406-W	M SCR PH W/FS M4 × 6	
301	APC-60040	WIRE HARN SW REGU PWR	
302	APC-60041X	WIRE HARN MAIN BD PWR	



Note 1: Apply 421-10023-AAA(⑦) of 3 different SERIAL NOS.

Note 2: FILTER BD ③ DIP SW setting to be as follows:



Note 3: Apply STICKER L (⑬) to the right-hand side of Silk Printing CN 13 on FILTER BD (③).

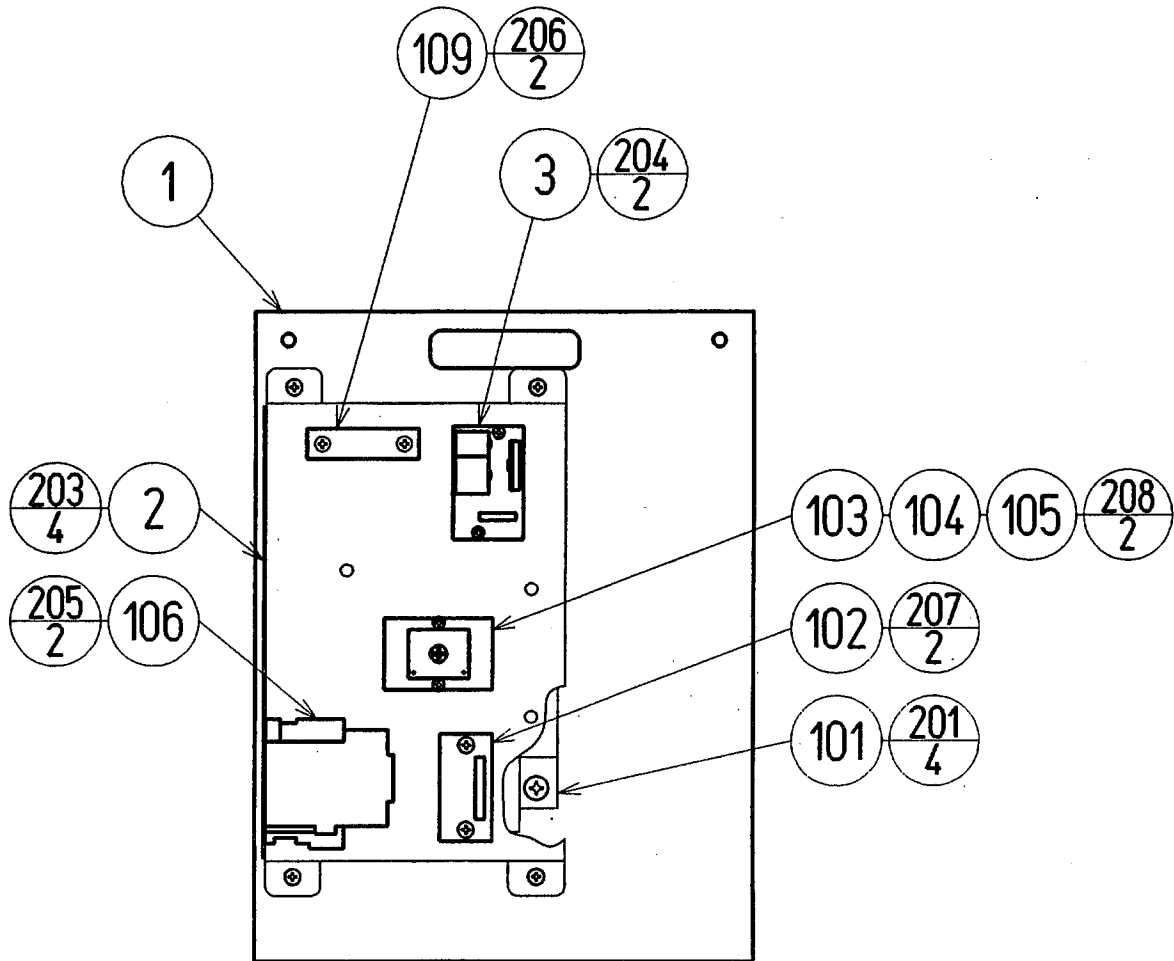
Apply STICKER R (⑭) to the right-hand side of Silk Printing CN 3 on FILTER BD (④).

Apply STICKER C (⑮) to the right-hand side of Silk Printing CN 3 on FILTER BD (③).

② ASSY SHIELD CASE APC ~ (APC-4050- ~)

(D-2/2)

ITEM NO.	PART NO.	DESCRIPTION	NOTE
1	105-5366	SHIELD CASE NAOMI MULTI	
2	105-5367	SHIELD CASE LID NAOMI MULTI	
3	839-1109-01	FLT BD NAOMI MULTI MASTER APC	
4	839-1110-01	FLT BD NAOMI MULTI SLAVE APC	
5	833-13762-06	GAME BD APC DX USA W/O JAL	USA
	833-13762-07	GAME BD APC DX EXP W/O JAL	OTHERS
	833-13762-08	GAME BD APC DX KOR W/O JAL	KOREA
	833-13762-09	GAME BD APC DX AUS W/O JAL	AUSTRALIA
6	421-9174-01	STICKER CAUTION ANTISTATIC	
7	421-10023-AAA	STICKER BD SERIAL NUMBER AAA	
8	421-10023-BAE	STICKER BD SERIAL NUMBER BAE	
9	421-6510-137626	STICKER 833-13762-06	USA
	421-6510-137627	STICKER 833-13762-07	OTHERS
	421-6510-137628	STICKER 833-13762-08	KOREA
	421-6510-137629	STICKER 833-13762-09	AUSTRALIA
10	601-10577	CARTON BOX NAOMI MULTI	
11	105-5390	FIXING BRACKET	
12	421-6570	STICKER FOR REV	
13	421-9757-L	STICKER L	
14	421-9757-R	STICKER R	
15	421-9757-C	STICKER C	
101	260-0064	FAN MOTOR DC12V	
102	280-5275-SR10	CORD CLAMP SR10	
103	601-0460	PLASTIC TIE BELT 100 MM	
201	000-P00408-W	M SCR PH W/FS M4 × 8	
202	010-P00308-F	S-TITE SCR PH W/F M3 × 8	
203	000-P00320-W	M SCR PH W/FS M3 × 20	
204	000-P00412-W	M SCR PH W/FS M4 × 12	
301	APC-60045	WIRE HARN FAN MOTOR MASTER	
302	APC-60046	WIRE HARN FAN MOTOR SLAVE	

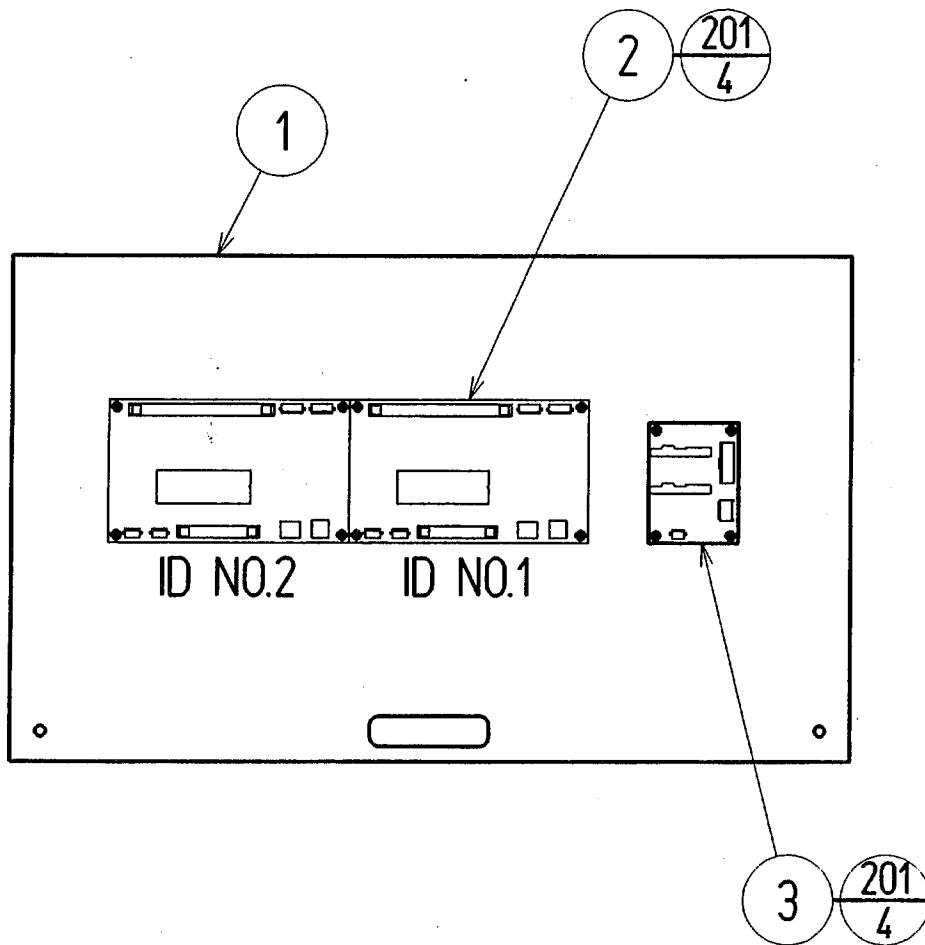


②3 ASSY PWR SPLY DX (APC-4100)

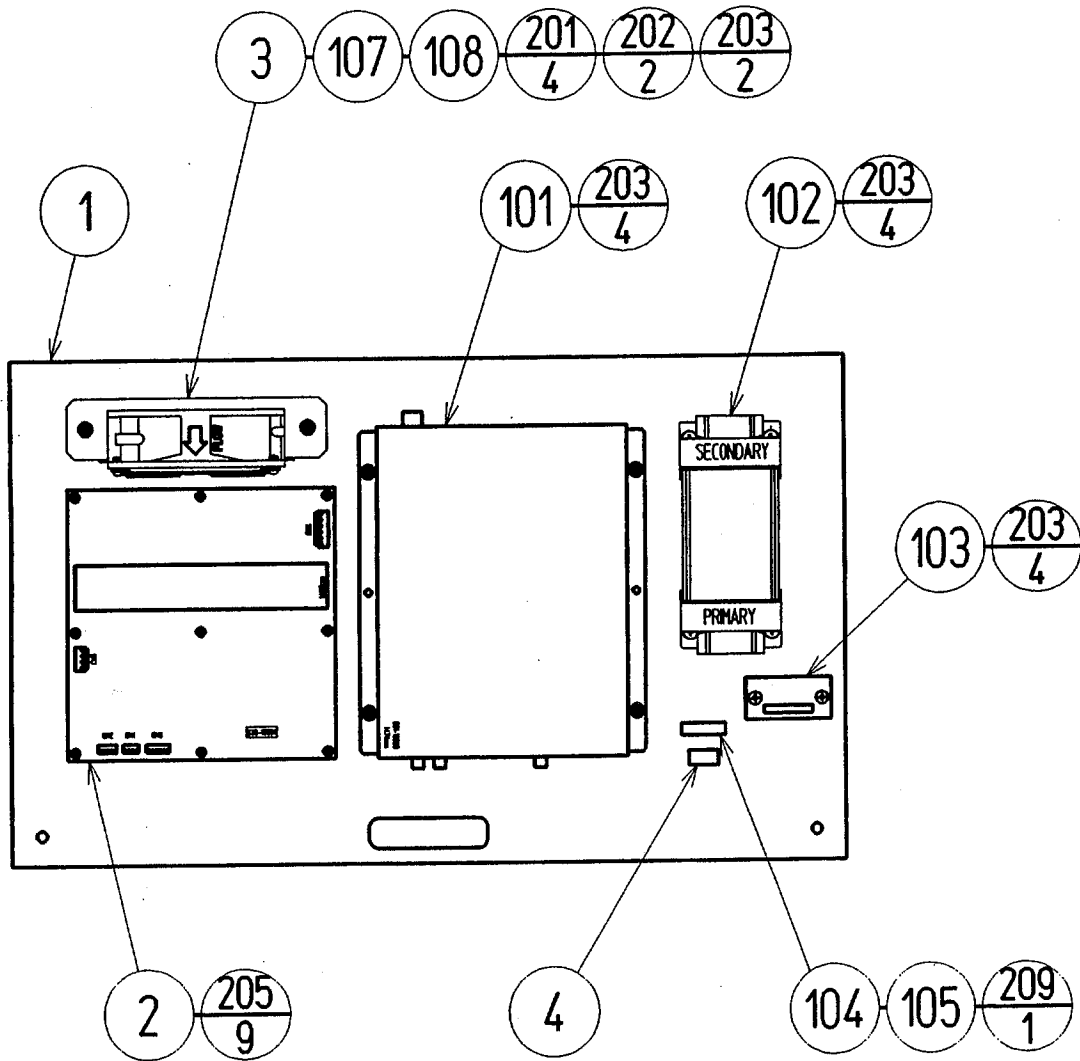
(D-2/2)

ITEM NO.	PART NO.	DESCRIPTION	NOTE
1	APC-4101	WOODEN PWR SPLY BASE	
2	APC-4102	PWR SPLY BRKT	
3	838-11856CE-02	CONNECT BD W/FUSE 6.3A CE	
101	560-5384	XFMR 100-120V 100V 10A WB	AC110V ~ 120V AREA
	560-5377	PWR XFMR 200-240V 100V 10A CE	AC220V ~ 240V AREA
102	117-5225	TERMINAL 3P 20A	
103	450-5163	TIMER RELAY GT5P-N30SA100	
104	214-0191	RELAY SOCKET (SR2P-06B)	
105	601-7783	FIXED SPRING(SFA-202)	
106	450-5126	MAGNET CONTACT S-NIOCX	
107	280-5169	CORD CLAMP TL-20S	
108	280-0419	HARNES LUG	
109	117-5402-12	EARTH TERMINAL PLATE 12P	
110	280-5275-SR10	CORD CLAMP SR10	
201	000-P00512-W	M SCR PH W/FS M5 × 12	
202	011-T03512	TAP SCR TH 3.5 × 12	
203	000-P00412-W	M SCR PH W/FS M4 × 12	
204	000-P00320-W	M SCR PH W/FS M3 × 20	
205	000-P00416-W	M SCR PH W/FS M4 × 16	
206	000-F00410	M SCR FH M4 × 10	
207	000-P00416-S	M SCR PH W/S M4 × 16	
208	000-P00325-W	M SCR PH W/FS M3 × 25	
301	APC-60010	WIRE HARN XFMR OUT	
302	APC-60011	WIRE HARN AC ELEC	
303	APC-60012	WIRE HARN CONN BD IN	
304	APC-60013X	WIRE HARN CONN BD OUT	
305	APC-60014	WIRE HARN MAG. CONT2 L1	
306	APC-60015	WIRE HARN MAG. CONT2 L3	
307	APC-60016	WIRE HARN TIMER 2	
308	APC-60017	WIRE HARN TIMER 7	
309	APC-60018	WIRE HARN TIMER 8	
310	APC-60019	WIRE HARN TIMER 6	
311	APC-60020	WIRE HARN TIMER 7 OUT	
312	APC-60021	WIRE HARN MAG. CONT2 OUT	
313	600-6972-0700	WIRE HARN EARTH ID5 0700MM	
314	APC-60022	WIRE HARN MAIN XFMR PRIMARY	
315	APC-60023	WIRE HARN MAIN XFMR SECONDARY	

②④ ASSY I/O DX (APC-4200)



ITEM NO.	PART NO.	DESCRIPTION	NOTE
1	APC-4201	WOODEN I/O BASE	
2	837-13551-91	I/O CONTROL BD FOR JVS	
3	839-1073-01	SSR BD 2 AC 2A	
101	280-5009-01	CORD CLAMP 21	
201	011-P00325	TAP SCR PH 3 × 25	
202	011-F00310	TAP SCR FH 3 × 10	
301	APC-60050	WIRE HARN SSR PWR IN	
302	APC-60051	WIRE HARN I/O PWR 1 IN	
303	APC-60052	WIRE HARN A/D IN	
304	APC-60053	WIRE HARN I/O 1 IN	
305	APC-60054	WIRE HARN I/O PWR 2 IN	
306	APC-60055	WIRE HARN I/O 2 OUT	
307	APC-60056	WIRE HARN SSR OUT	
308	600-7141-050	CABLE JVS TYPE A-B 050CM	



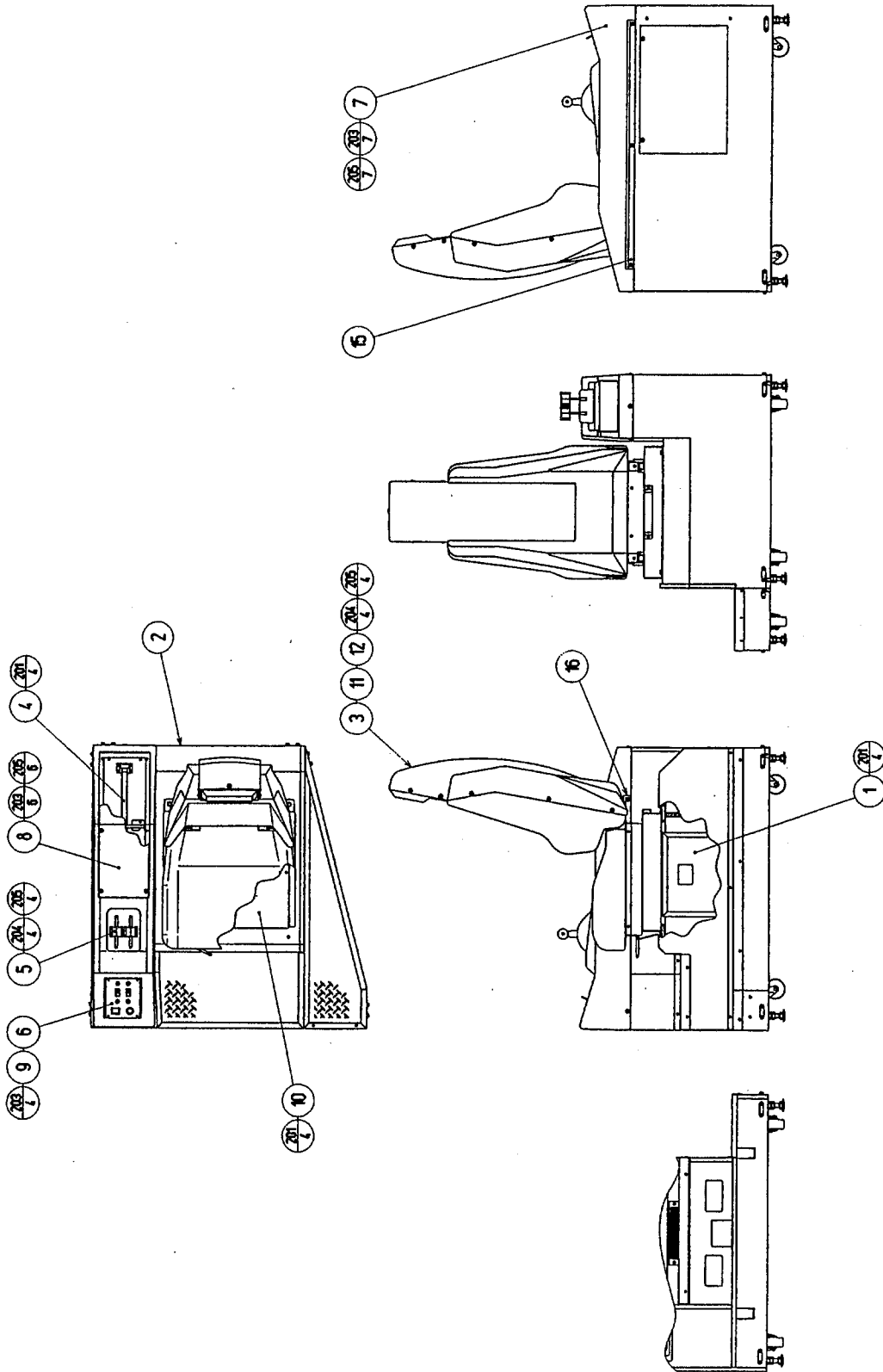
②5 ASSY AUDIO DX (APC-4300)

(D-2/2)

ITEM NO.	PART NO.	DESCRIPTION	NOTE
1	APC-4301	WOODEN AUDIO BASE	
2	838-13723	WOOFER AMP 50W × 2	
3	DRT-4502	FAN MOTOR BRKT	
4	421-7914-250630	STICKER AC 250V 6.3A	
101	601-10369	STEREO PWR AMP 47	
102	560-5419-V	XFMR 100V 23V9.6A × 2	
103	117-5225	TERMINAL 3P 20A	
104	514-5086-6300	FUSE S.B 6300MA 250V HBC CE	
105	514-5084	FUSE HOLDER F-60B W/F-60	
106	310-5029-F20	SUMI TUBE F F 20MM	
107	260-0011-02	AXIAL FLOW FAN AC100V 50-60HZ	
108	601-8543	FAN GUARD	
109	280-5009-01	CORD CLAMP 21	
110	280-0419	HARNESS LUG	
201	000-P00312-W	M SCR PH W/FS M3 × 12	
202	050-F00300	FLG NUT M3	
203	000-P00412-W	M SCR PH W/FS M4 × 12	
205	011-P00325	TAP SCR PH 3 × 25	
206	011-T03516	TAP SCR TH 3.5 × 16	
207	011-F00310	TAP SCR FH 3 × 10	
208	011-T03512	TAP SCR TH 3.5 × 12	
301	APC-60030	WIRE HARN AUDIO PWR	
302	APC-60031	WIRE HARN 47 PWR	
303	APC-60032	WIRE HARN FAN PWR	
304	APC-60033	WIRE HARN XFMR PWR	
305	APC-60034	WIRE HARN W. AMP PWR	
306	APC-60035	WIRE HARN SOUND SIG	
307	APC-60036	WIRE HARN SOUND VOL	
308	APC-60037	WIRE HARN SPEAKER OUT	
309	APC-60038	WIRE HARN WOOFER OUT	

26 ASSY REAR CABINET (APC-3000)

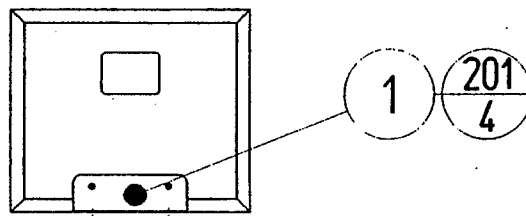
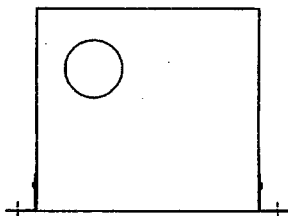
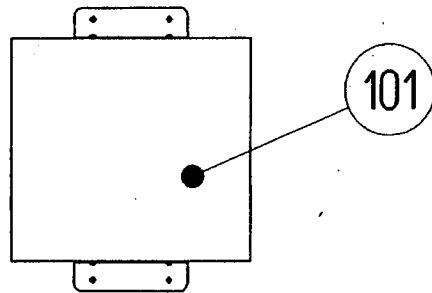
(D-1/2)



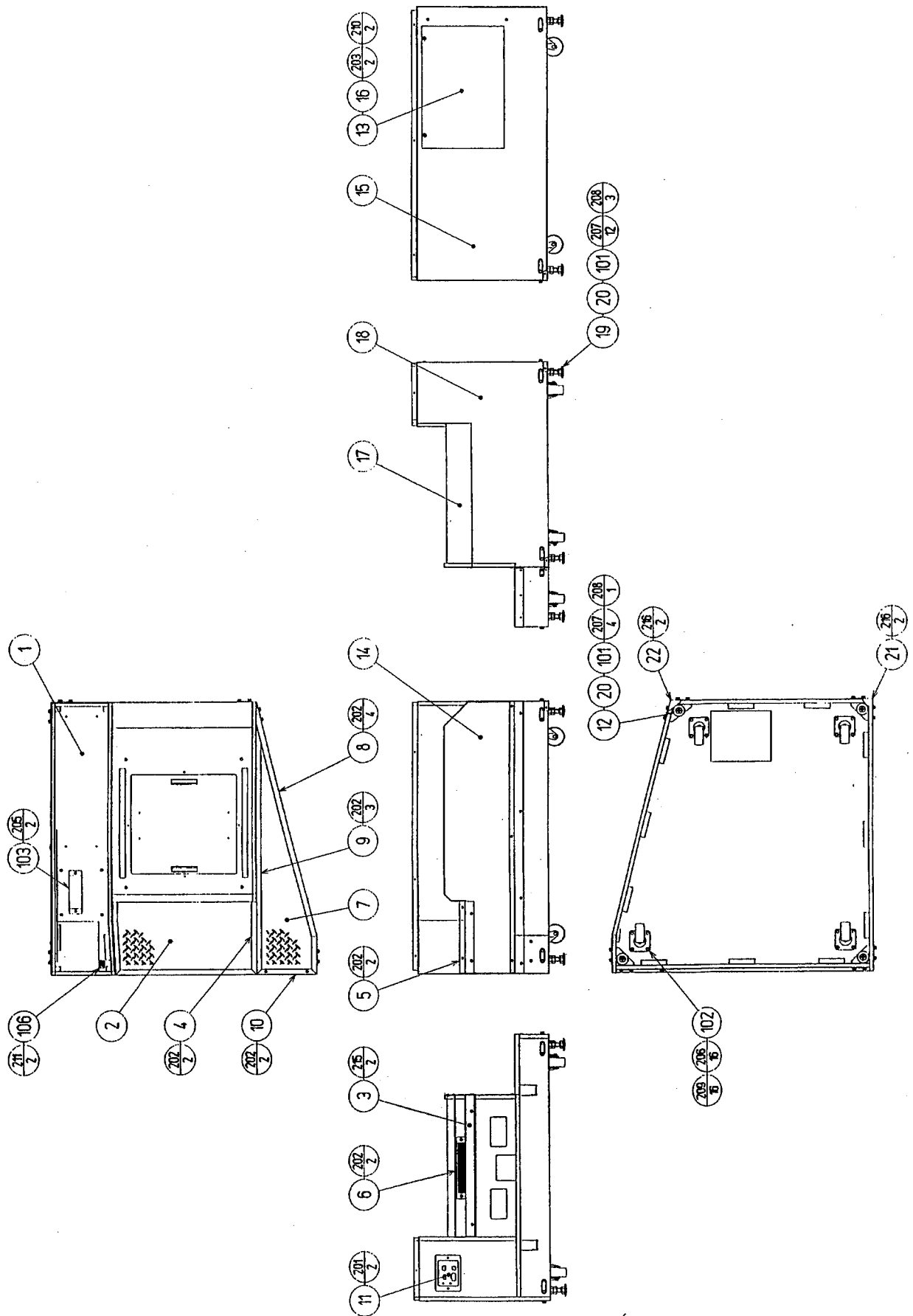
②6 ASSY REAR CABINET (APC-3000)

(D-2/2)

ITEM NO.	PART NO.	DESCRIPTION	NOTE
1	APC-3030	ASSY WOOFER	
2	APC-3050	ASSY REAR SUB-CABI	
3	APC-3100	ASSY SEAT	
4	APC-3150	SLIM LAMP UNIT	
5	APC-3200	LEVER UNIT	
6	APC-3300	ASSY SW PLATE	
7	APC-3001	CONSOLE COVER	
8	APC-3002	CONSOLE PLATE	
9	APC-3003	SW PROTECT PLATE	
10	APC-3004	WOOFER LID	
11	RAL-2007	RUBBER HOLDER R TWIN	
12	RAL-2008	RUBBER HOLDER L TWIN	
15	APC-3006	CONSOLE COVER HOLDER A	
16	APC-3007	CONSOLE COVER HOLDER B	
201	000-P00416-W	M SCR PH W/FS M4 × 16	
203	000-T00416-OB	M SCR TH BLK M4 × 16	
204	030-000825-SB	HEX BLT W/S BLK M8 × 25	
205	060-F00800-OB	FLT WSHR BLK M8	
206	068-441616-OB	FLT WSHR BLK 4.4-16 × 1.6	
207	000-P00408-S	M SCR PH W/S M4 × 8	
208	050-H00400	HEX NUT M4	
209	060-S00400	SPR WSHR M4	
210	060-F00400	FLT WSHR M4	



ITEM NO.	PART NO.	DESCRIPTION	NOTE
1	STW-3031	WOOFER BRKT	
101	130-5196	WOOFER 40HM 80W	
201	011-P00312	TAP SCR PH 3 × 12	



②8 ASSY REAR SUB-CABI (APC-3050)

(D-2/3)

ITEM NO.	PART NO.	DESCRIPTION	NOTE
1	APC-3051	WOODEN REAR CABINET	
2	APC-3052	FLOOR MAT	
3	APC-3053	FLOOR SUSH A	
4	APC-3054	FLOOR SUSH B	
5	APC-3055	FLOOR SUSH C	
6	APC-3056	WOOFER NET	
7	APC-3057	STEP MAT	
8	APC-3058	STEP SUSH A	
9	APC-3059	STEP SUSH B	
10	APC-3060	STEP SUSH C	
11	APC-3062	CONN PANEL	
12	APC-3063	LEG BRACKET ANG104	
13	APC-3064	SIDE DOOR REAR	
14	APC-3065	STICKER REAR SIDE L	
15	APC-3066	STICKER REAR SIDE R	
16	APC-3067	STICKER REAR DOOR	
17	APC-3068	STICKER REAR UPPER	
18	APC-3069	STICKER REAR LOWER	
19	ARC-1006	LEG BRACKET	
20	117-5191	PLATE	
21	APC-1090	CORNER GUARD	
22	APC-1091	CORNER GUARD L	
101	601-5699X	LEG ADJUSTER BOLT M16 × 75	
102	601-9377	CASTER FAI=75	
103	182-5078-AB	COIL BALLAST AB-116	
104	280-5009-01	CORD CLAMP 21	
105	280-0419	HARNES LUG	
106	117-5402-06	EARTH TERMINAL PLATE 6P	
201	000-P00416-W	M SCR PH W/FS M4 × 16	
202	000-T00416-OC	M SCR TH CRM M4 × 16	
203	000-T00430-OC	M SCR TH CRM M4 × 30	
204	011-F00310	TAP SCR FH 3 × 10	
205	011-T03512	TAP SCR TH 3.5 × 12	
206	030-000625-S	HEX BLT W/S M6 × 25	
207	030-000630-SC	HEX BLT W/S CRM M6 × 30	
208	050-H01600	HEX NUT M16	
209	060-F00600	FLT WSHR M6	
210	068-441616-OC	FLT WSHR CRM 4.4-16 × 1.6	
211	011-F00312	TAP SCR #1 FH 3 × 12	
212	000-P00408-S	M SCR PH W/S M4 × 8	
213	060-F00400	FLT WSHR M4	
214	060-S00400	SPR WSHR M4	
215	000-F00416	M SCR FH M4 × 16	
216	FAS-110010	TAP SCR FH #1 BLK 3 × 10	

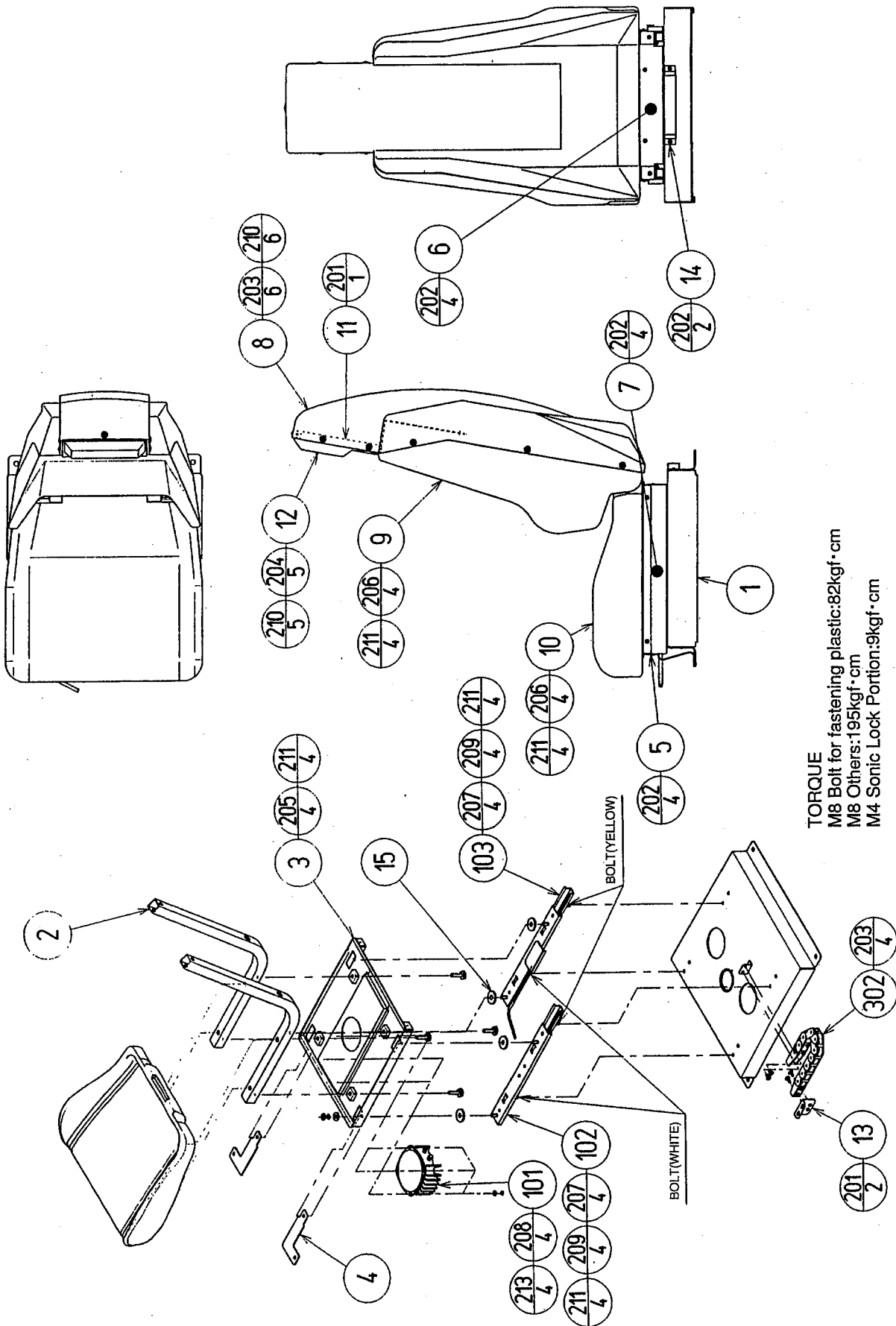
②8 ASSY REAR SUB-CAB I (APC-3050)

(D-3/3)

ITEM NO.	PART NO.	DESCRIPTION	NOTE
301	APC-60100	WIRE HARN A/D REAR	
302	APC-60101	WIRE HARN SW REAR	
303	APC-60102	WIRE HARN FL REAR	
304	APC-60103	WIRE HARN WOOFER REAR	
305	APC-60111	WIRE HARN FL REAR 2	
306	600-6972-0200	WIRE HARN EARTH ID5 0200MM	
307	600-6972-0400	WIRE HARN EARTH ID5 0400MM	
308	600-6972-0600	WIRE HARN EARTH ID5 0600MM	
309	600-6972-1750	WIRE HARN EARTH ID5 1750MM	

29 ASSY SEAT (APC-3100)

(D-1/2)



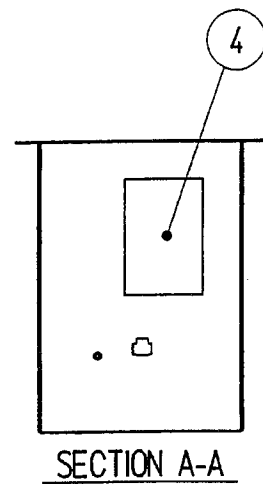
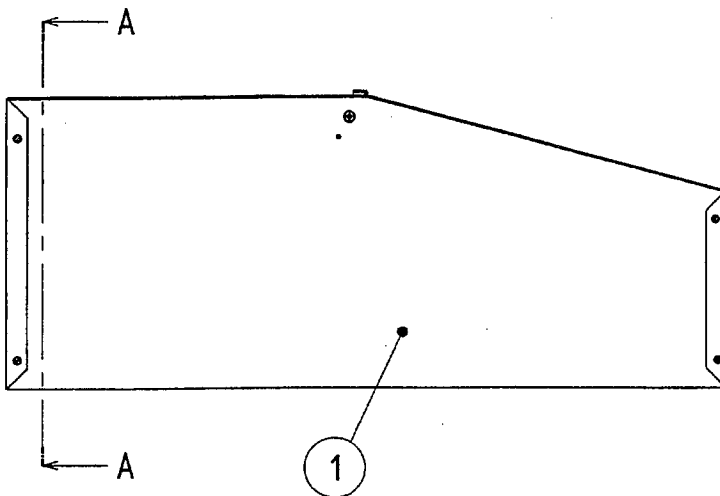
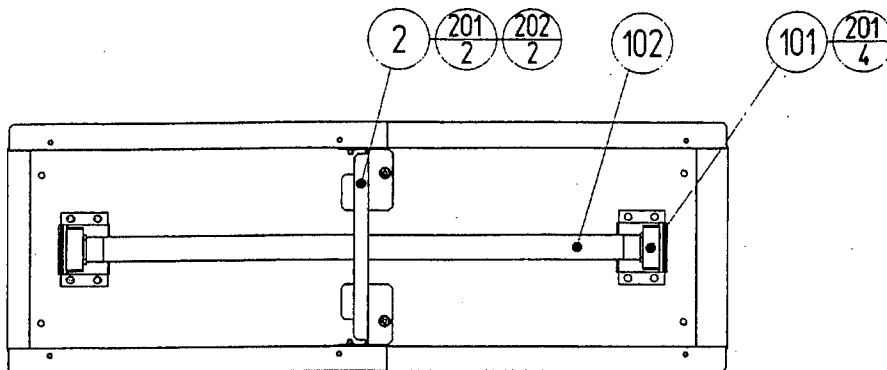
TORQUE
 M8 Bolt for fastening plastic: 82kgf·cm
 M8 Others: 195kgf·cm
 M4 Sontic Lock Portion: 9kgf·cm

(29) ASSY SEAT (APC-3100)

(D-2/2)

ITEM NO.	PART NO.	DESCRIPTION	NOTE
1	APC-3101	SEAT BASE	
2	APC-3102	SEAT FRAME	
3	APC-3103	SEAT MOUNT TRAY	
4	STC-1612	PROTECT RUBBER	
5	APC-3105	SAFETY GUARD FRONT	
6	APC-3106	SAFETY GUARD REAR	
7	APC-3107	SAFETY GUARD SIDE	
8	APC-3108	SEAT BACK COVER	
9	DYN-2131X	UPPER SEAT	
10	DYN-2132X	LOWER SEAT	
11	SDW-1566	HEAD REST BRKT	
12	APC-3111	HEAD REST	
13	APC-3109	CABLE BEAR BRKT	
14	APC-3114	SEAT BASE REAR	
15	GHO-3705	FLT WSHR 8.5-26*3.2	
101	130-5172	BASS SHAKER	
102	601-9059	SEAT RAIL L	
103	601-9060	SEAT RAIL R	
104	280-5275-SR10	CORD CLAMP SR10	
201	000-P00410-W	M SCR PH W/FS M4 × 10	
202	000-T00408-OB	M SCR TH BLK M4 × 8	
203	000-T00412-OC	M SCR TH CRM M4 × 12	
204	000-T00416-OC	M SCR TH CRM M4 × 16	
205	030-000816-S	HEX BLT W/S M8 × 16	
206	030-000850-S	HEX BLT W/S M8 × 50	
207	050-H00800	HEX NUT M8	
208	050-U00400	U NUT M4	
209	060-S00800	SPR WSHR M8	
210	068-441616-OC	FLT WSHR CRM 4.4-16 × 1.6	
211	068-852216	FLT WSHR 8.5-22 × 1.6	
212	000-T00616-OB	M SCR TH BLK M6 × 16	
213	060-F00400	FLT WSHR M4	
214	050-H00400	HEX NUT M4	
215	060-S00400	SPR WSHR M4	
216	000-P00408-S	M SCR PH W/S M4 × 8	
302	APC-60110	WIRE HARN BASS	

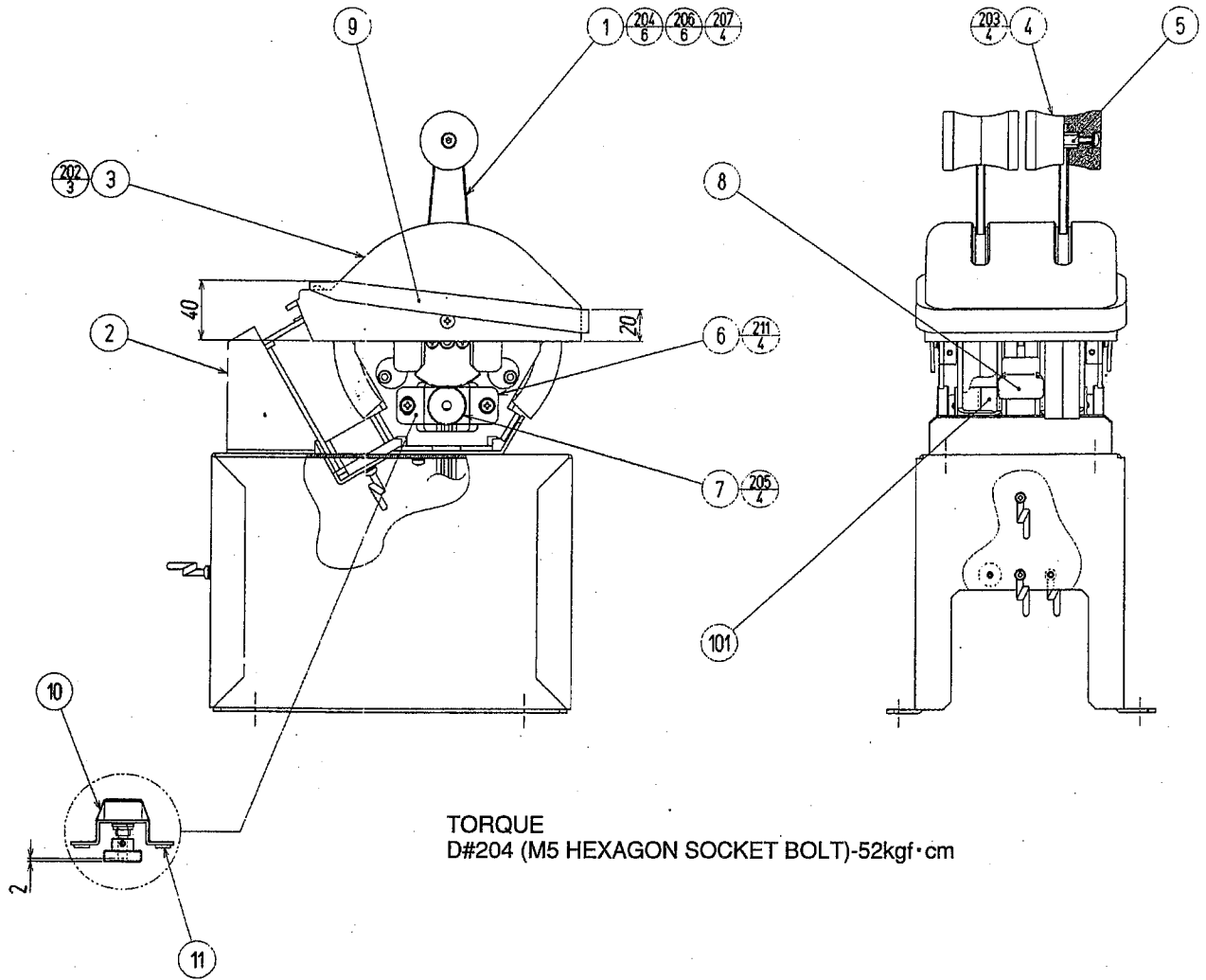
③⑩ SLIM LAMP UNIT (APC-3150)



ITEM NO.	PART NO.	DESCRIPTION	NOTE
1	APC-3151	SLIM LAMP BOX	
2	APC-3152	PROTECT BRKT	
4	440-WS0012XEG	STICKER W HIGH TEMP ENG	
101	214-0223	FL SOCKET W/CONN NOT USED	OTHERS USA
102	390-6579-0440W	FL SLIM TYPE 0440MM WHITE NOT USED	OTHERS USA
103	280-5009-01	CORD CLAMP 21	
104	280-5275-SR10	CORD CLAMP SR10	
201	000-P00408-W	M SCR PH W/FS M4 x 8	
202	050-F00400	FLG NUT M4	
301	APC-60107	WIRE HARN SLIM FL 2	

31 LEVER UNIT (APC-3200)

(D-1/2)

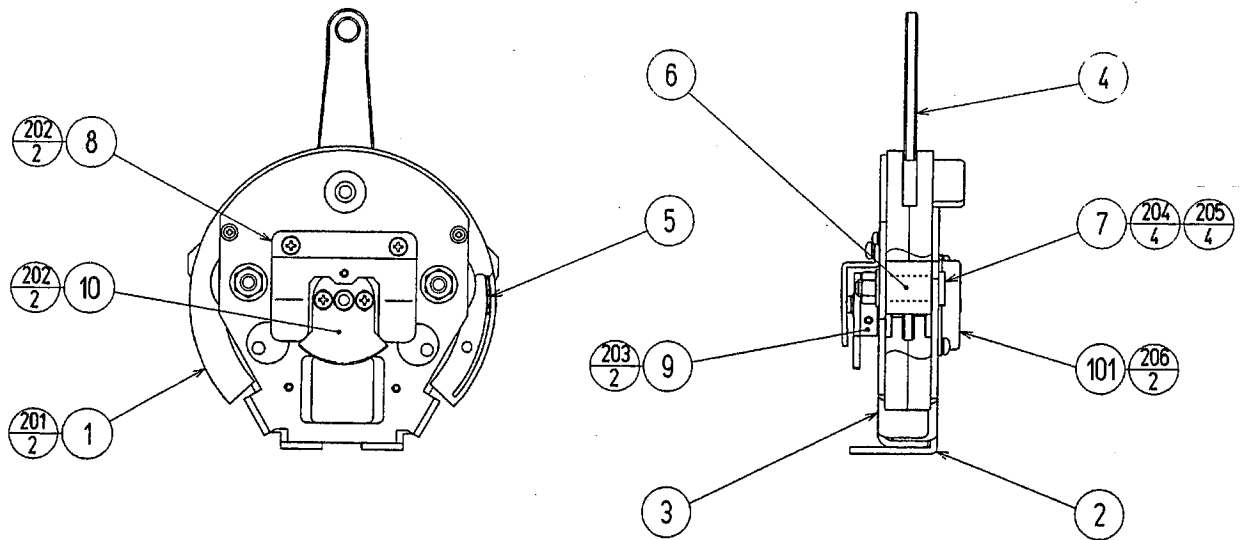


31 LEVER UNIT (APC-3200)

(D-2/2)

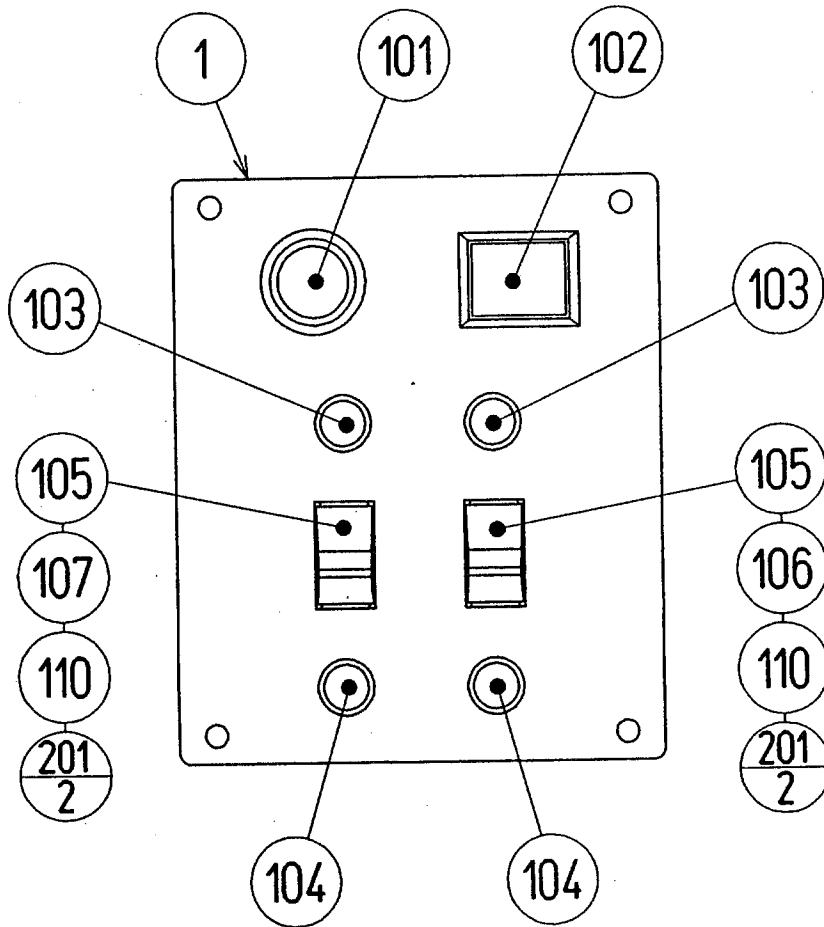
ITEM NO.	PART NO.	DESCRIPTION	NOTE
1	APC-3250	ASSY LEVER MECHA	
2	APC-3201	LEVER BASE	
3	APC-3202	LEVER COVER	
4	APC-3203	LEVER KNOB	
5	APC-3204	KNOB BUSH	
6	APC-3209	VR BRKT LEVER INSU	
7	601-6555	GEAR Z=30 M=0.75	
8	APC-3206	JOINT BRKT	
9	APC-3207	SPACER SPONGE	
10	APC-3208	INSULATOR PAPER LEVER	
11	APC-2014	INSULATOR BUSH	
101	220-5484	VOL CONT B-5K OHM	
102	280-0419	HARNES LUG	
201	000-P00408-W	M SCR PH W/FS M4 × 8	
202	000-T00406-0C	M SCR TH CRM M4 × 6	
203	008-T00416-0B	TMP PRF SCR TH BLK M4 × 16	
204	020-000512-HZ	HEX SKT CAP SCR BLK OZ M5 × 12	
205	028-A00404-P	SET SCR HEX SKT CUP P M4 × 4	
206	060-S00500	SPR WSHR M5	
207	000-P00408-S	M SCR PH W/S M4 × 8	
208	060-F00400	FLT WSHR M4	
211	000-P00410-W	M SCR PH W/FS M4 × 10	
301	APC-60104	WIRE HARN THRUST L	
302	APC-60105	WIRE HARN THRUST R	

③2 ASSY LEVER MECHA (APC-3250)



ITEM NO.	PART NO.	DESCRIPTION	NOTE
1	APC-3251	LEVER GUIDE	
2	APC-3252	LEVER BRKT INNER	
3	APC-3253	LEVER BRKT OUTER	
4	APC-3254	LEVER SHAFT	
5	APC-3255	SHUTTER PLATE	
6	APC-3256	STOPPER RUBBER LEVER	
7	APC-3257	STOPPER SHAFT LEVER	
8	APC-3258	Z BRKT	
9	TTR-2009	GEAR HOLDER 80	
10	601-6005	ADJUST GEAR	
101	601-10571	ROTARY DAMPER LEVER	
201	000-P00330-W	M SCR PH W/FS M3 × 30	
202	000-P00408-W	M SCR PH W/FS M4 × 8	
203	028-A00408-P	SET SCR HEX SKT CUP P M4 × 8	
204	050-U00800	U NUT M8	
205	060-F00800	FLT WSHR M8	
206	000-P00408-S	M SCR PH W/S. M4 × 8	

③③ ASSY SW PLATE (APC-3300)



ITEM NO.	PART NO.	DESCRIPTION	NOTE
1	APC-3301	SW PLATE	
101	509-5838-Y	SW PB LW1L-15Y-TK1670	
102	509-5495-05	PUSH BUTTON BLUE	
103	390-6637-GR	LED BD-1025 12V GREEN	
104	390-6637-RE	LED BD-1025 12V RED	
105	509-5910	ROCKER SW M-2012YG	
106	509-5911-G	SW LEVER AT-4157 GRAY	
107	509-5911-R	SW LEVER AT-4157 RED	
108	601-0460	PLASTIC TIE BELT 100 MM	
109	310-5029-D20	SUMITUBE F D 20 MM	
110	280-5185-7	SPACER TUBE L=7	
201	050-F00300	FLG NUT M3	
301	APC-60106	WIRE HARN SW PLATE	

21. WIRE COLOR CODE TABLE

THE WIRE COLOR CODE is as follow:

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

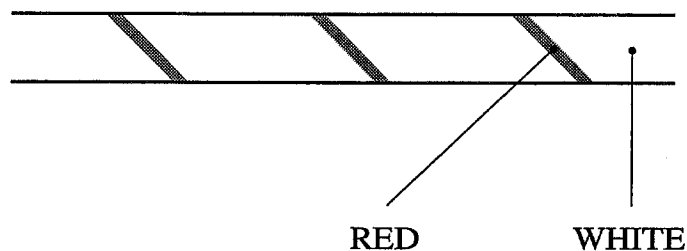
Wires other than those of any of the above 5 single colors will be displayed by 2 alphanumeric characters.

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).

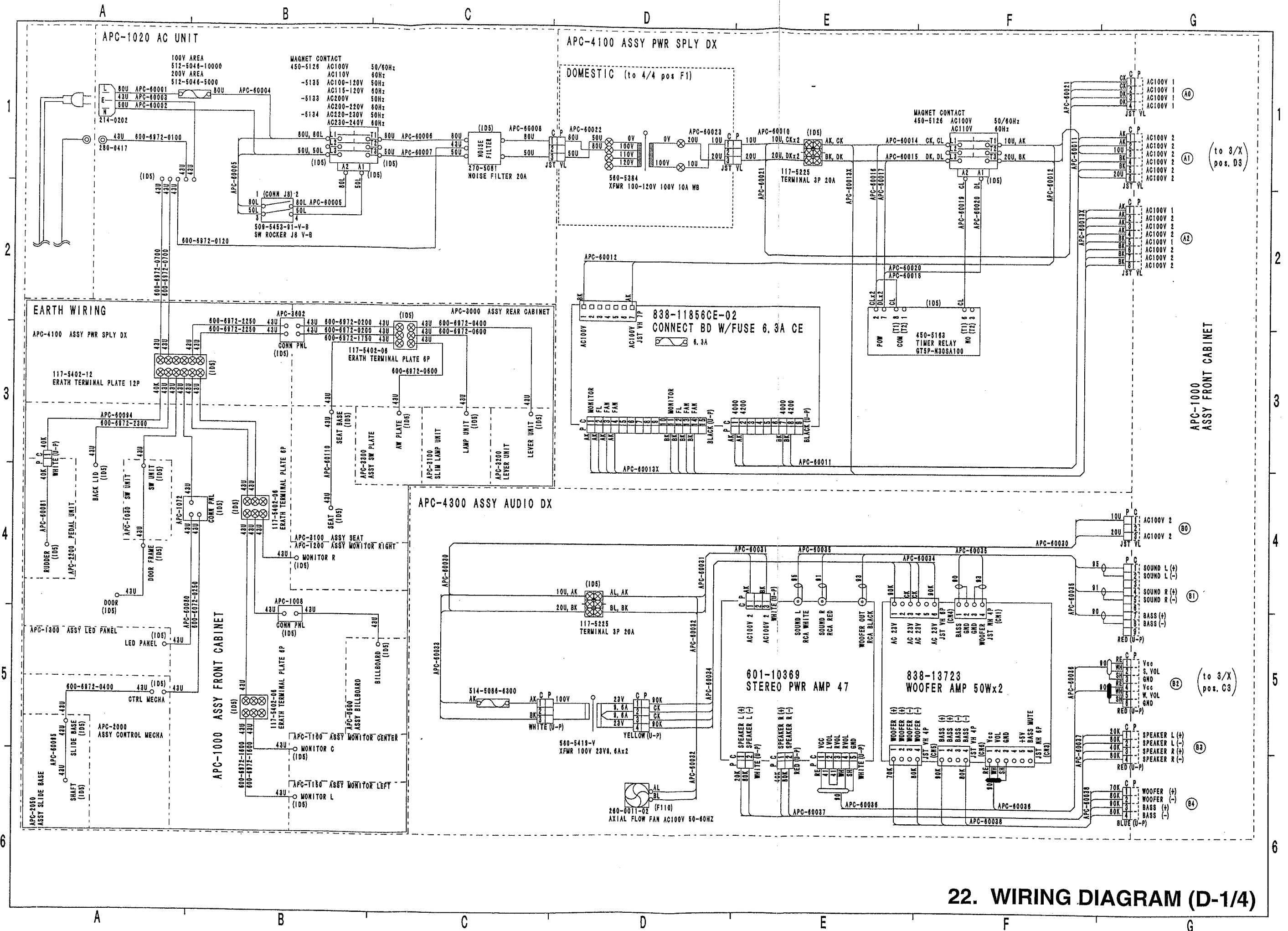
Note 1: If the right-hand side alphanumeric is not 0, that particular wire has a spiral color code. The left-hand side character shows the base color and the right-hand side one, the spiral color.

<Example> 51 WHITE / RED

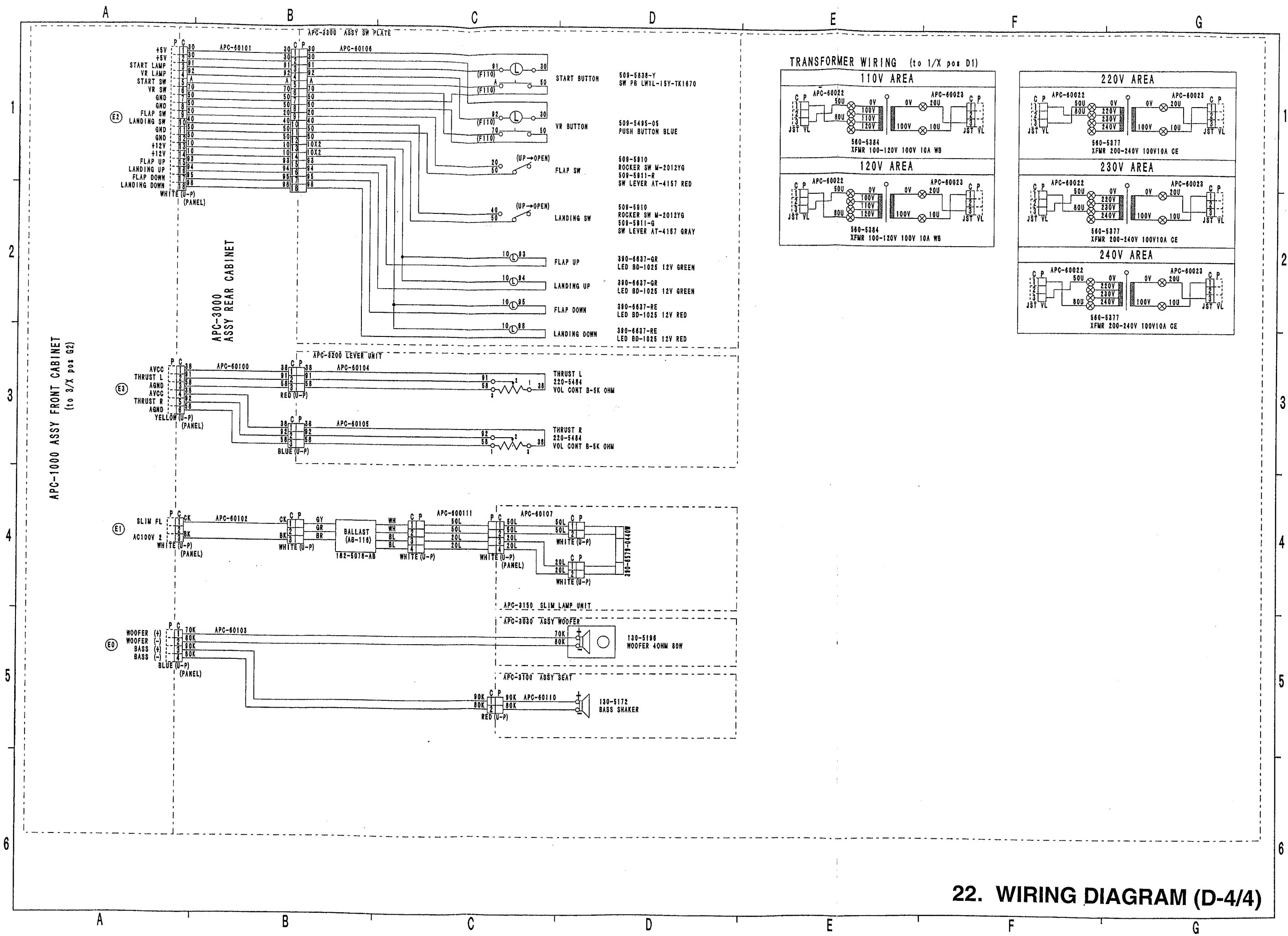


Note 2: The character following the wire color code indicates the size of the wire.

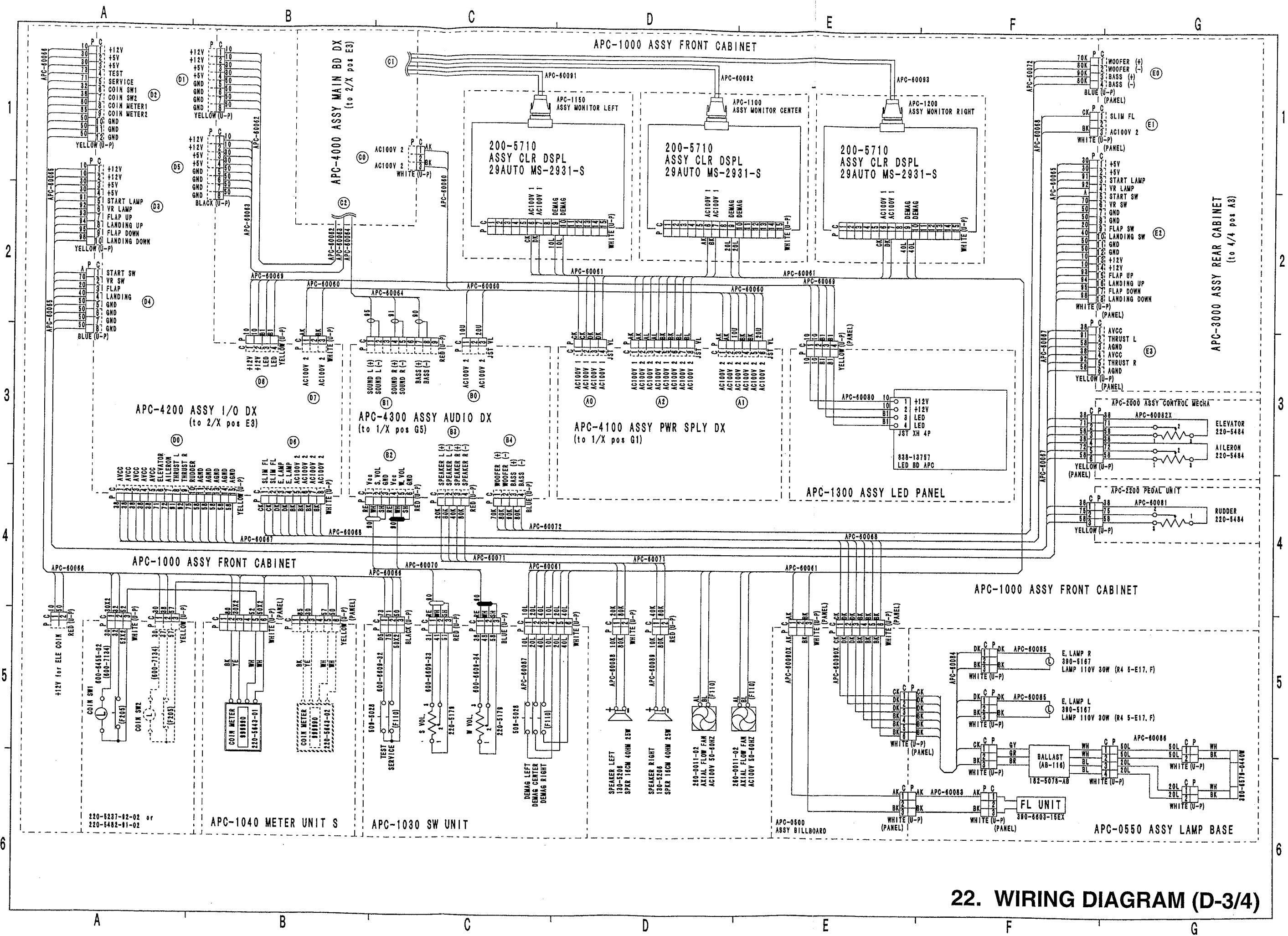
K:	AWG18, UL1015
L:	AWG20, UL1007
None:	AWG22, UL1007



22. WIRING DIAGRAM (D-1/4)



22. WIRING DIAGRAM (D-4/4)



22. WIRING DIAGRAM (D-3/4)

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