

1ST PRINTING FEB. 01

SEGA



STD TYPE

Owner's Manual



SEGA ENTERPRISES, INC. USA

MANUAL NO. 999-1149

Warranty

Your new Sega Product is covered for a period of 90 days from the date of shipment. This certifies that the Printed Circuit Boards, Power Supplies and Monitor are to be free of defects in workmanship or materials under normal operating conditions. This also certifies that all Interactive Control Assemblies are to be free from defects in workmanship and materials under normal operating conditions. No other product in this machine is hereby covered.

Sellers sole liability in the event a warranted part described above fails shall be, at its option, to replace or repair the defective part during the warranty period. For Warranty claims, contact your Sega Distributor.

Should the Seller determine, by inspection that the product was caused by Accident, Misuse, Neglect, Alteration, Improper Repair, Installation or Testing, the warranty offered will be null and void.

Under no circumstances is the Seller responsible for any loss of profits, loss of use, or other damages.

This shall be the exclusive written Warranty of the original purchaser expressed in lieu of all other warranties expressed or implied. Under no circumstance shall it extend beyond the period of time listed above.

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 WARNING, CAUTION, etc. are used. Be sure to understand the contents of the displays before reading the text.



WARNING!

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



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.

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.

○ 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. SEGA shall not be held responsible for any accidents, compensation for damage to a third party, resulting from the specifications not designated by SEGA.

- **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 running 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.

- **Be sure to adjust the monitor (projector) properly. (Applies only to the product w/monitor.)**
Do not operate the product leaving on-screen flickering or blurring as it is. Using the product with the monitor not properly adjusted may cause dizziness or a headache to an operator, a player, or the customers.

- **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

Length	: 74 inches
Height	: 65 inches.
Width	: 31 inches
Weight	: Approx. 400 lbs.
MONITOR	: 29 INCH COLOR MONITOR

INTRODUCTION OF THE OWNERS 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, **WILD RIDER STD 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.

Use of this product is unlikely to cause physical injuries or damages to property. However, where special attention is required this is indicated by a thick line, the word "IMPORTANT" and its sign in this manual.



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

IMPORTANT

SEGA ENTERPRISES, INC. (U.S.A.)/CUSTOMER SERVICE
45133 Industrial Drive, Fremont, California 94538, U.S.A.

Phone : (415) 701-6580

Fax : (415) 701-6594

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.

LISTED



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AMUSEMENT MACHINE

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.
- Specification changes, removal of equipment, conversion and/or addition, not designated by SEGA are not permitted.
 - Failure to observe this may cause a fire or an electric shock. Non-compliance with this instruction can have a bad influence upon physical conditions of the players or the lookers-on, or result in injury during play.
 - SEGA shall not be held responsible for damage, compensation for damage to a third party, caused by specification changes not designated by SEGA.
- Be sure to perform periodic maintenance inspections herein stated.



- 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.
- Some parts are the ones designed and manufactured not specifically for this game machine. The manufacturers may discontinue, or change the specifications of, such general-purpose parts. If this is the case, Sega cannot repair or replace a failed game machine whether or not a warranty period has expired.

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

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 Electrical 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 7A or higher (AC single phase 100 ~ 120V area), and 4A 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 7A or higher (AC 100 ~ 120V area) and 4A or higher (AC 220 ~ 240V area). Using a cord rated lower than the specified rating can cause a fire and electric shock.

OPERATION AREA



WARNING!

- For the operation of this machine, secure a minimum area of 1.3m (W) X 1.6m (D). In order to prevent injury resulting from the falling down accident during game play, be sure to secure the minimum area for operation.
- Be sure to provide sufficient space so as to allow this product's ventilation fan to function efficiently. To avoid machine malfunctioning and a fire, do not place any obstacles near the ventilation opening.
- SEGA shall not be held responsible for damage, compensation for damage to a third party, resulting from the failure to observe this instruction.



IMPORTANT

For transporting the machine into the location's building, the minimum necessary dimensions of the opening (of doors, etc.) are 0.8m(W) and 1.8m(H).

Electric current consumption

MAX. 3.66 A (AC 110V 50 Hz)
MAX. 3.57 A (AC 110V 60 Hz)
MAX. 3.25 A (AC 120V 60 Hz)
MAX. 1.83 A (AC 220V 50 Hz)
MAX. 1.82 A (AC 220V 60 Hz)
MAX. 1.77 A (AC 230V 50 Hz)
MAX. 1.73 A (AC 230V 60 Hz)
MAX. 1.70 A (AC 240V 50 Hz)
MAX. 1.68 A (AC 240V 60 Hz)
MAX. 3.70 A (For TAIWAN)

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:

- To ensure maximum safety for the players and the customers, ensure that where the product is operated has sufficient lighting to allow any warnings to be read. Operation under insufficient lighting can cause bodily contact with each other, hitting accident, and or trouble between customers.
- Be sure to perform appropriate adjustment of the monitor (projector). For operation of this machine, do not leave monitor's flickering or deviation as is. Failure to observe this can have a bad influence upon the players' or the customers' physical conditions.
- It is suggested to ensure a space allowing the players who feel sick while playing the game to take a rest.
- Check if all of the adjusters are in contact with the surface. If they are not, the Cabinet can move and cause an accident.



- Do not put any heavy 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 making bodily contact with each other, hitting accidents, and or trouble between customers.

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.

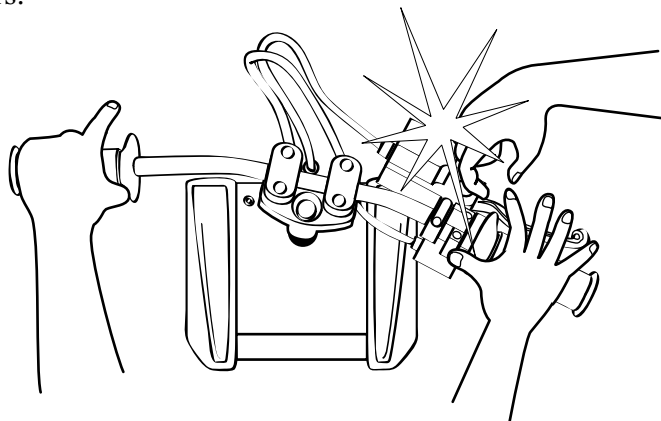


- To avoid injury and accidents, those who fall under the following categories are not allowed to play the game.
 - Those who need assistance such as the use of an apparatus when walking.
 - Those who have high blood pressure or a heart problem.
 - Those who have experienced muscle convulsion or loss 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.
- A player who has never been adversely affected by light stimulus might experience dizziness or headache depending on his physical condition when playing the game. Especially, small children can be subject to those conditions. Caution guardians of small children to keep watch on their children during play.
- Instruct those who feel sick during play to have a medical examination.
- 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.



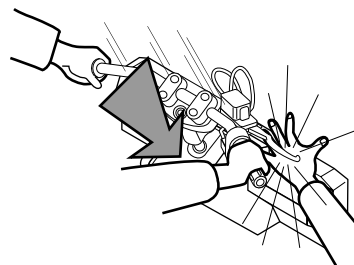
WARNING!

- To avoid electric shock and short circuit, do not allow the customers to unplug the power plug without a justifiable reason.
- Caution lookers-on so as not to touch the operating unit while in play. Failure to observe this may cause bodily contact with the player and trouble between the customers.



CAUTION!

- 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.
- Persons other than the player must not touch the device during play. If this is violated, their hands or fingers may be pinched by the handlebar, causing them to be injured.
- Instruct the player to watch his/her step when getting on the Floor Base so as to avoid stumbling over.



4. ACCESSORIES

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

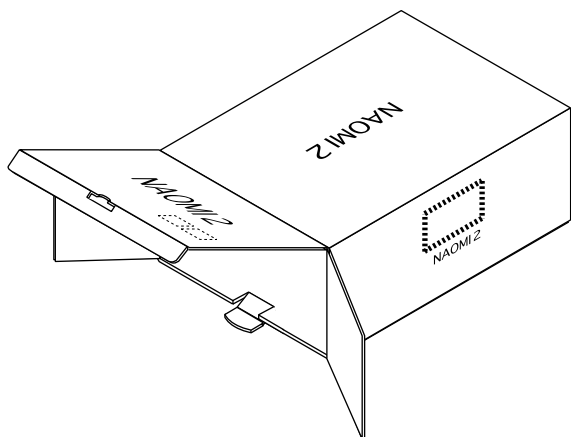
TABLE 4 ACCESSORIES

CARTON BOX

601-11044 (1)

Used for transporting the Game Board.

Refer to 15-3.

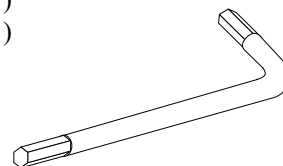


TAMPERPROO WRENCH

M4 540-0006-01 (1)

M6 540-0015-01 (1)

TOOL



5. 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.
- This work should be performed by the Location's Maintenance Man or Serviceman. Performing work by non-technical personnel can cause a severe accident such as electric shock. Failing to comply with this instruction can cause a severe accident such as electric shock to the player during operation.
- Provide sufficient space so that assembling can be performed. Performing work in places with narrow space or low ceiling may cause an accident and assembly work to be difficult.
- To perform work safely and avoid serious accident such as the cabinet's falling down, do not perform work in places where step-like grade differences, a ditch, or slope exist.



- When handling plastic parts, use care. Do not give a shock or apply excessive load to the fluorescent lamps and plastic parts. Failure to observe this can cause parts damage, resulting in injury due to fragments, cracks and broken pieces.
- 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.

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

- 1 SECURING IN PLACE (ADJUSTER ADJUSTMENT)
- 2 REMOVING THE SHIPPING BRACKET
- 3 POWER SUPPLY, AND EARTH CONNECTION
- 4 TURNING POWER ON
- 5 ASSEMBLY CHECK



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 2 Adjusters at the bottom front part of cabinet and 4 Casters in the rear. When the installation position is determined, let the Adjusters make direct contact with the floor and adjust to ensure the product position is level.

- ① Move the product to the installation position.
- ② Let the Adjusters make contact with the floor. Adjust the height of the 2 Adjusters by using a wrench to ensure the product position is level. If the floor surfaces are level, the product will be level when the front casters are raised approximately 7mm above the floor.

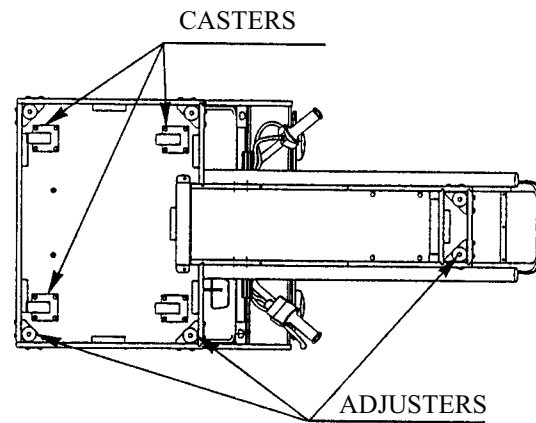


FIG. 5. 4 a BOTTOM VIEW

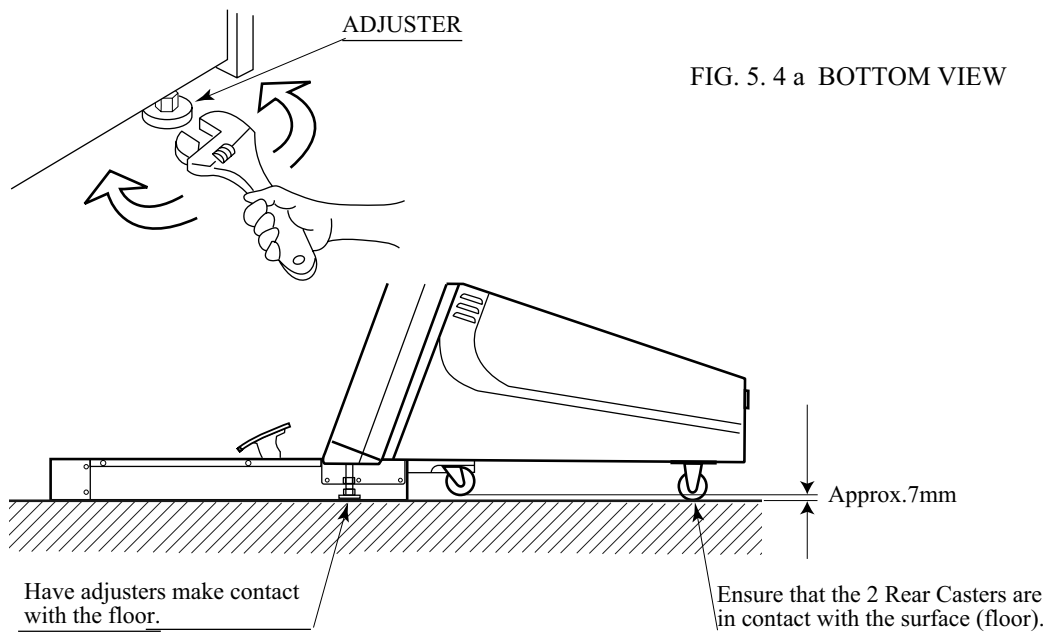


FIG. 5. 4 b ADJUSTER

REMOVING THE SHIPPING BRACKET

The mechanism of equipment is fastened for transportation at shipping. Remove the shipping bracket and screws.

- ① Remove the front lid (see Section 9-1).
- ② Take out the 2 screws and remove the shipping bracket. (FIG. 5. 5)

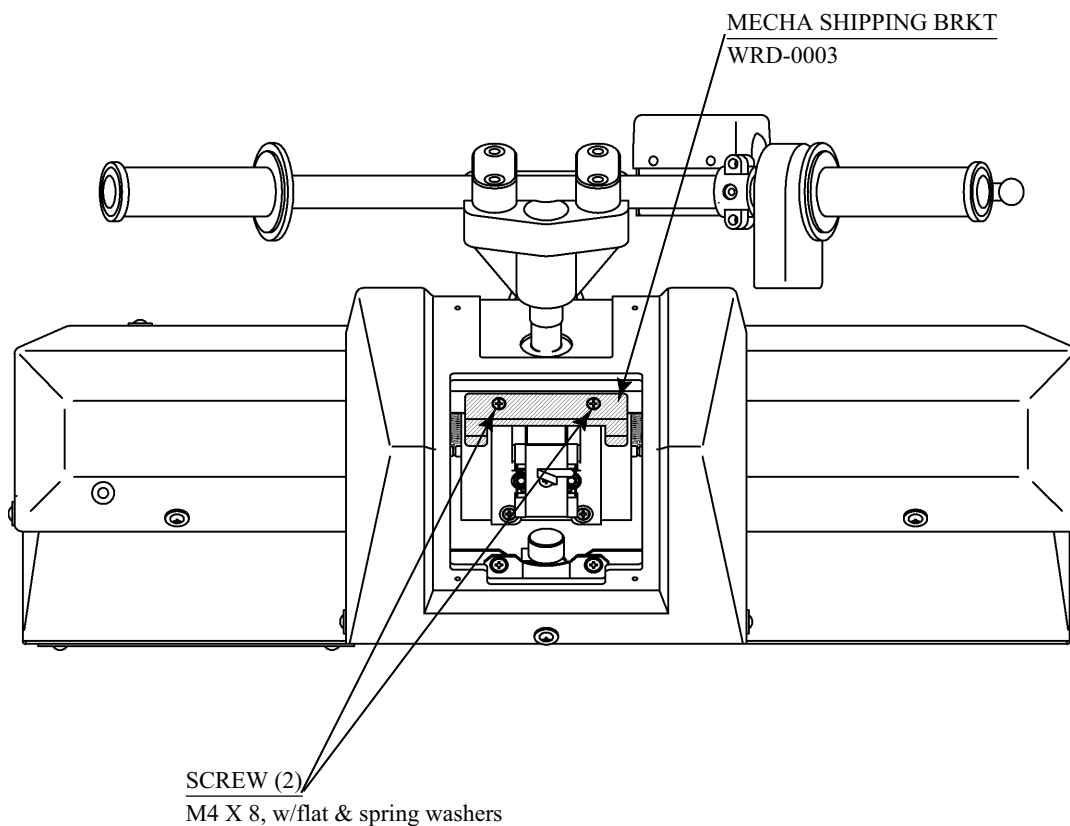


FIG. 5. 5



- 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.
- After wiring power cord on the floor, be sure to protect the power cord. Exposed power cord is susceptible to damage and causes an electric shock accident.

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.

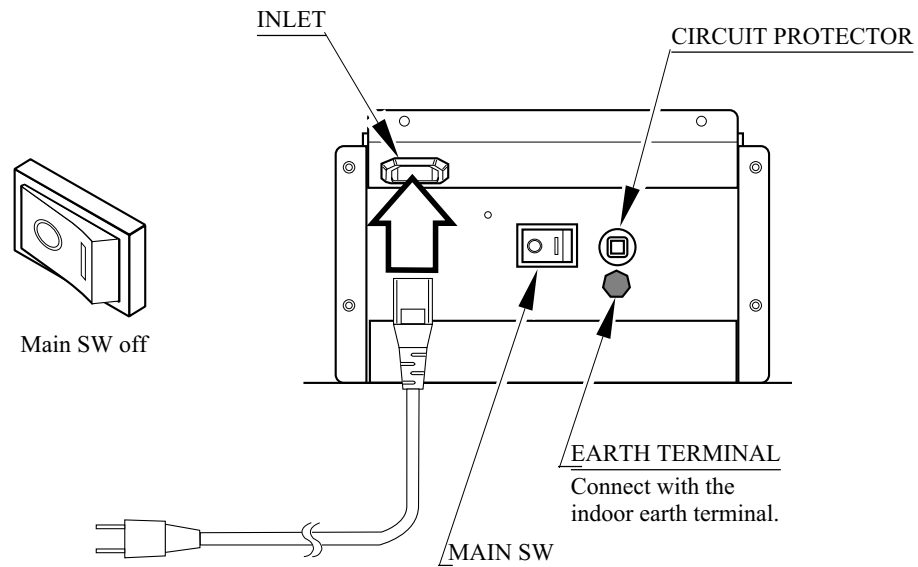


FIG. 5. 6 a AC unit

4

TURNING POWER ON

In this product, the Main SW is in the AC Unit and the SUB POWER SW is inside the SERVICE DOOR. The power is not turned on unless the above two switches are on. When the power is turned on, the two fluorescent lamps inside light up, images are outputted on the monitor, and the Advertise mode appears on the screen.

Once the power is turned off, the inserted coin(s) less than one credit and the BONUS ADDER data are cleared.

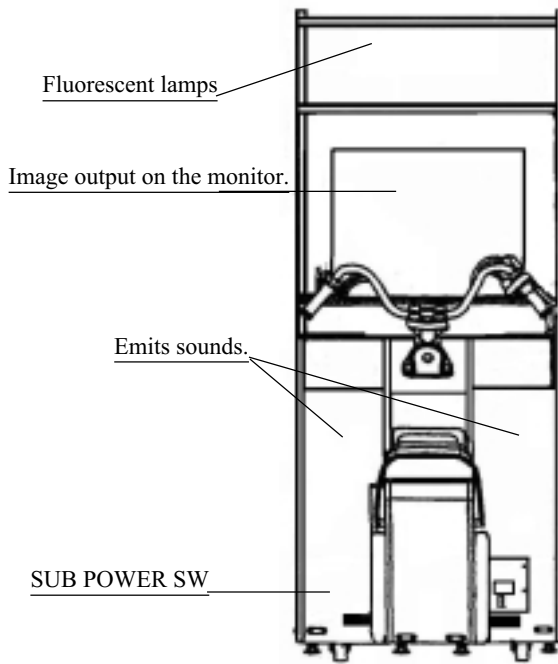


FIG. 5. 7

5

ASSEMBLY CHECK

In the TEST MODE, ascertain that the assembly has been made correctly and IC BD. is satisfactory (refer to Section 8).

In the test mode, perform the following test:

(1) MEMORY TEST

Selecting the RAM TEST on the system 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.

RAM TEST	
TESTING NOW	
IC29	GOOD
IC35	GOOD
IC09	GOOD
IC11	GOOD
IC16	GOOD
IC20	GOOD
IC17	GOOD
IC21	GOOD
IC106	GOOD
IC108	GOOD
IC111	GOOD
IC115	GOOD
IC112	GOOD
IC116	GOOD
IC10	GOOD
IC12	GOOD
IC18	GOOD
IC22	GOOD
IC19	GOOD
IC23	GOOD
IC107	GOOD
IC109	GOOD
IC113	GOOD
IC117	GOOD
IC114	GOOD
IC118	GOOD
PRESS TEST BUTTON TO EXIT	

(2) C.R.T. TEST

In the system test mode menu, selecting C.R.T. TEST allows the screen (on which the monitor is tested) to be displayed.

C.R.T. TEST 1/2	
1	32
RED	
GREEN	
BLUE	
WHITE	
PRESS TEST BUTTON TO CONTINUE	

C.R.T. TEST 2/2	
PRESS TEST BUTTON TO EXIT	

(3) SOUND TEST

SOUND TEST	
RIGHT SPEAKER	OFF
LEFT SPEAKER	OFF
-> EXIT	
SELECT WITH SERVICE BUTTON AND PRESS TEST BUTTON	

In the system 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.

(4) INPUT TEST

INPUT TEST	
HANDLEBAR	80
ACCELERATOR	00
FRONT BRAKE	00
REAR BRAKE	00
PUSH	OFF
PULL	OFF
START	OFF
SERVICE	OFF
TEST	OFF
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 is tested) to be displayed. Press each switch. If the display beside each switch indicates "ON," the switch and wiring connections are satisfactory.

(5) OUTPUT TEST

OUTPUT TEST	
START BUTTON LAMP	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 and wiring connections are tested) to appear. Ensure that lamp light up satisfactorily.

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

6. PRECAUTIONS TO BE HEEDED WHEN MOVING THE MACHINE



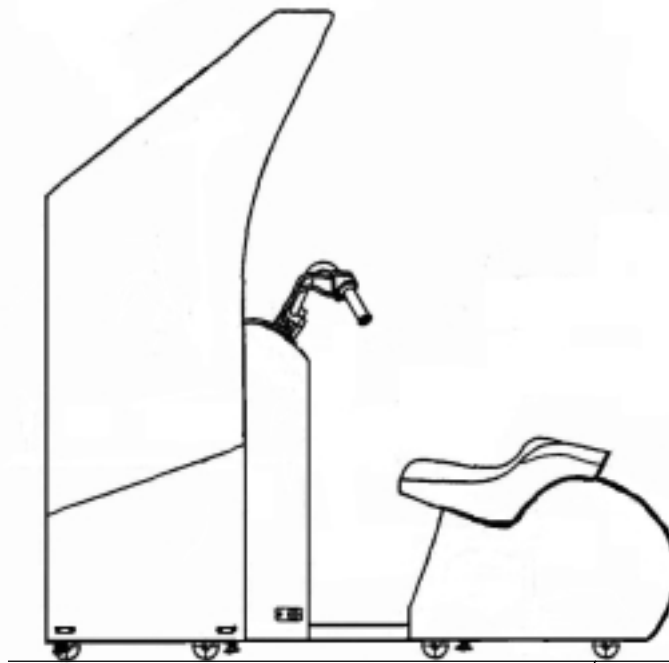
WARNING!

- 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 or short circuit.



CAUTION!

- When moving the product, do not push the Front Glass. The Glass part could be damaged and glass fractions may cause injury.
- When lifting the cabinet, be sure to hold the grip portions or bottom part. Failure to observe this may damage parts and cause injury.
- Do not push the Billboard. Failure to observe this may damage the installation portions and cause unexpected accidents.



Have casters make contact with the floor.

FIG. 6

7. 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.

The 2 Fluorescent Lamps of the product are always lit when the product is energized. During Advertise, the 2 Speakers and SUPERWOOFER output Advertise sounds, and Advertise images are outputted on to the monitor. Note that setting to NO SOUND OUTPUT during Advertise is possible (refer to the SERVICE MANUAL).

Fluorescent lamps is always on.

Image output on the monitor.

Steering Wheel(Handlebar)

START button

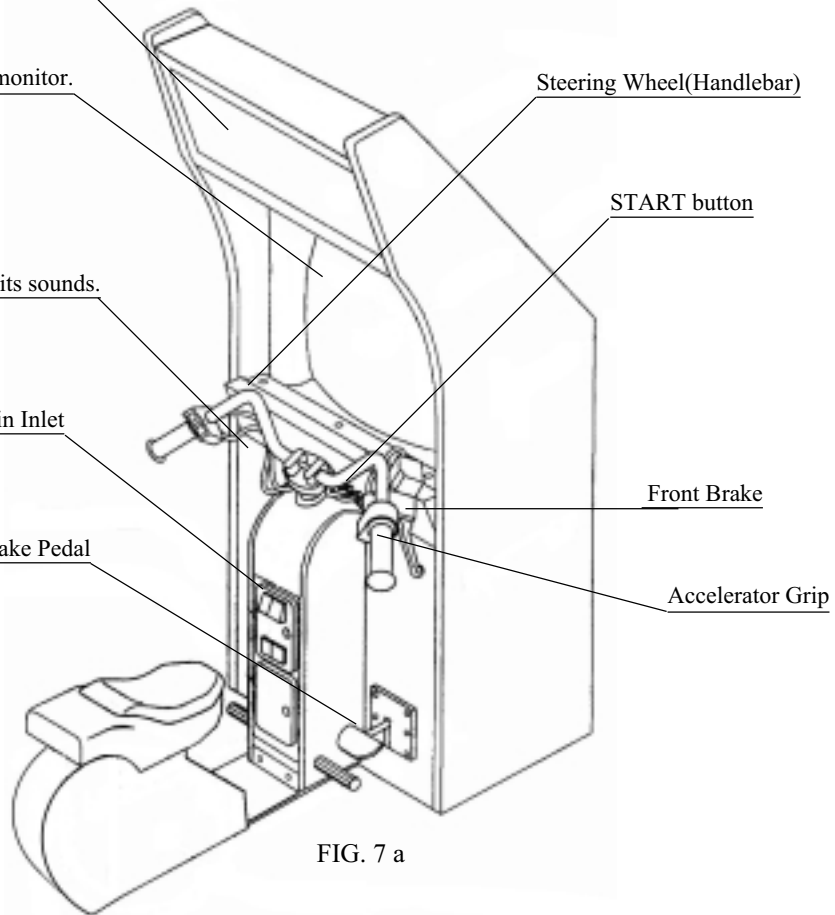
Emits sounds.

Coin Inlet

Front Brake

Rear Brake Pedal

Accelerator Grip



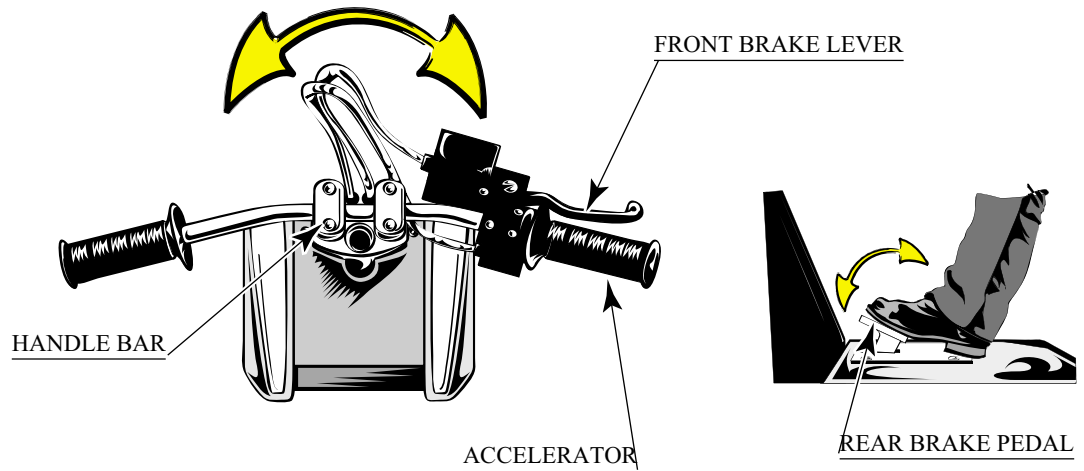
HOW TO PLAY

- WILD RIDERS is a motorbike action game, where you play the ace rider of motorbike team who should run away to the goal without being caught by the Police Inspector who is chasing you.
- Throw coins for one play session into the slot. Then, press the START button to display the Select Screen.
Select either character from the two riders (man and woman).
Selection of the character determines the motorbike type. Each motorbike has its specific characteristics; the key to success in runaway is to take full advantage of its characteristics.
- By determining the character while stepping on the rear brake pedal, the instructions about operating the handlebar will be skipped in the game session.
- Once the Select Screen closes, the Game Screen displays.
Once the game session starts, the Police Inspector (on a patrol car) begins to chase you. Run away toward the goal according to the arrows being displayed along the road.
- The distance meter located at the top of the screen indicates the distance from the Police Inspector. If it indicates 0, the game is over.
- You encounter several action points and should clear them by your motorbike action.
Two types of motorbike actions are available: Jump and Slide.
At a Jump point (orange), jump it by pulling off the handlebar. At a Slide point (green), push the handlebar inward for sliding.
If you succeed in each of the actions, you can enlarge the spacing from the Police Inspector. If you fail in it, this spacing reduces reversely.
- If you reach the goal without being caught by the Police Inspector, you get Game Clear and see the Ending view.
- After the game ends, you can view the whole course map to examine to what point you have been able to run away.
- If you acquire a high score at the end of the game, you may go to the Name Entry and be able to enter the initials of your name and so on.

INSTRUCTIONS ON OPERATIONS

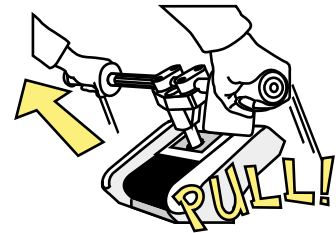
Basic operations include using the accelerator for accelerating the speed, using the brake for reducing the speed, and using the handlebar for cornering to the left or right.

Nothing short of this game enables the following special operations:



"Pull off Handlebar":

The motorbike is jumped by pulling off the handlebar at a Jump point, indicated by an orange line. In addition, pulling off the handlebar during usual running allows you to enjoy a wheelie of the motorbike.



"Push Handlebar":

When you push the handlebar at a Slide point, indicated by a green line, the motorbike slides. Pushing the handlebar during usual running also slides the motorbike.

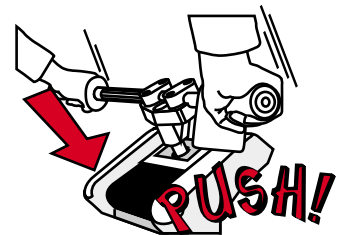


FIG. 7 b

DESCRIPTION OF GAME SCREEN

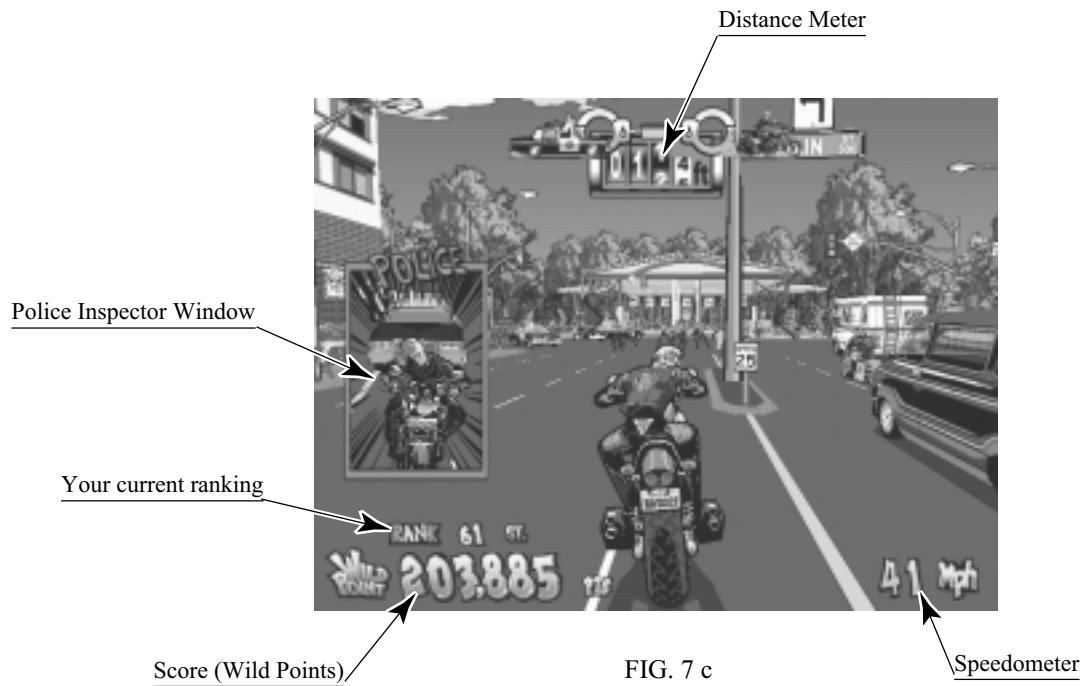


FIG. 7 c



FIG. 7 d US version screen

- **Distance Meter:** Indicates the distance from the Police Inspector. When it indicates 0, the game is over. <In the US version, the value is indicated in ft (feet).>
- **Ranking:** Indicates your current ranking. As you get a higher score, your ranking rises.
- **Speedometer:** Indicates the speed of the motorbike. <In the US version, the value is indicated in mph (miles per hour).>
- **Score (Wild Points):** Each time you succeed a motorbike action or send a small object (e.g., flowerpot) flying, this is counted as a score added.
- **Police Inspector Window:** Displays when the distance from the Police Inspector reduces within the predetermined value, in order to notify you that he is just behind you.

8. 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 2 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 2 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 2 BOARD, and the Game Test Mode for the specific product to execute Input/Output test for the operation equipment, difficulty setting, etc.

TABLE 8 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.	8-2E,8-2F,8-3D 8-3B 8-3C 8-2A, 8-2J
MEMORY	This test is automatically executed by selecting RAM TEST, or ROM BOARD TEST in the Menu mode.	8-2A, 8-2J
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.	8-2A, 8-2J 8-3D 8-3B 8-3C
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.	8-3B 8-3E 9,10
MONITOR	In the Monitor Adjustment mode, check to see if Monitor (Projector) adjustments are appropriate.	8-2D 11
IC BOARD	1. MEMORY TEST 2. In the SOUND TEST mode, check the sound related ROMs.	8-2A, 8-2J 8-2C
DATA CHECK	Check such data as game play time and histogram to adjust the difficulty level, etc.	8-2G 8-3F

8 - 1 SWITCH UNIT AND COIN METER



WARNING!

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



IMPORTANT

- 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:

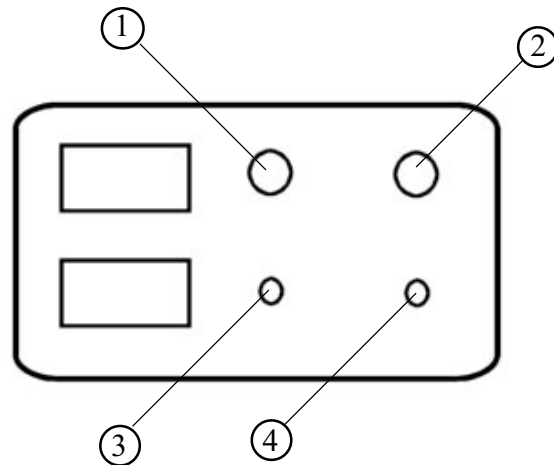


FIG. 8. 1 a SWITCH UNIT

- ① SPEAKER VOLUME:
SPEAKER VOL
- ② WOOFER VOLUME:
WOOFER VOL
- ③ TEST BUTTON:
TEST
- ④ SERVICE BUTTON:
SERVICE

Sound volume can be adjusted for the 2 Speakers.

Sound volume can be adjusted for the WOOFER.

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

Gives credits without registering on the coin meter.

8 - 2 SYSTEM TEST MODE



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.

```
SYSTEM MENU

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
[WILD RIDERS XXXXXXXXXX]

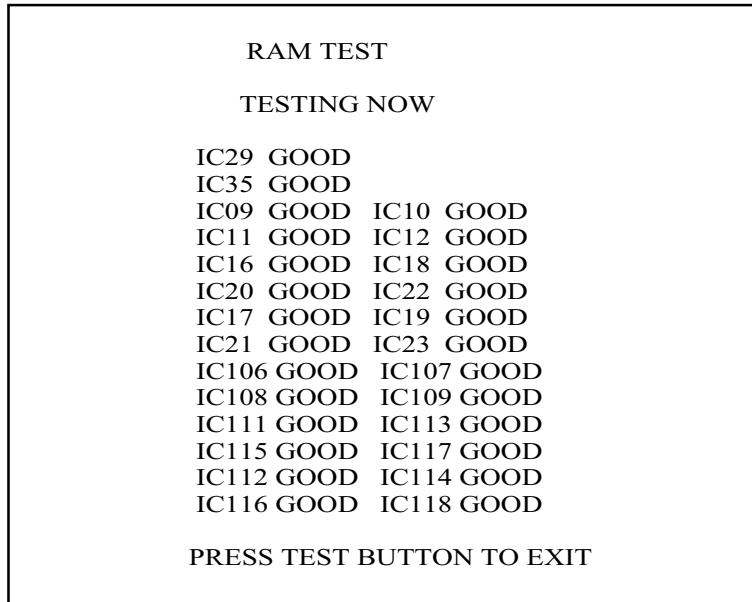
-> EXIT

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.

A. RAM TEST

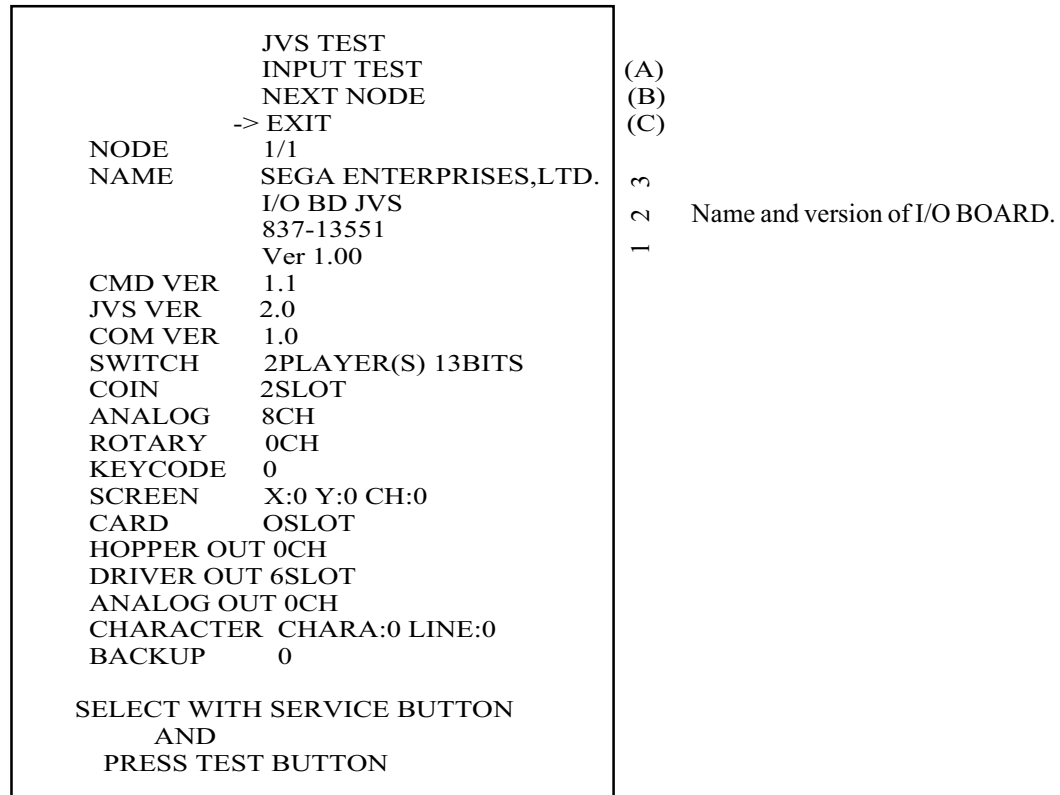
This allows for checking the functioning of the RAM on the NAOMI 2 Main BD.
"GOOD" is displayed for satisfactory RAMs, and "BAD" is indicated for irregular RAMs, if any.



"TESTING NOW" shows up (flashing) on the screen during the test.
Returns to the menu screen when the TEST button is pressed after the test is over.

B. JVS TEST

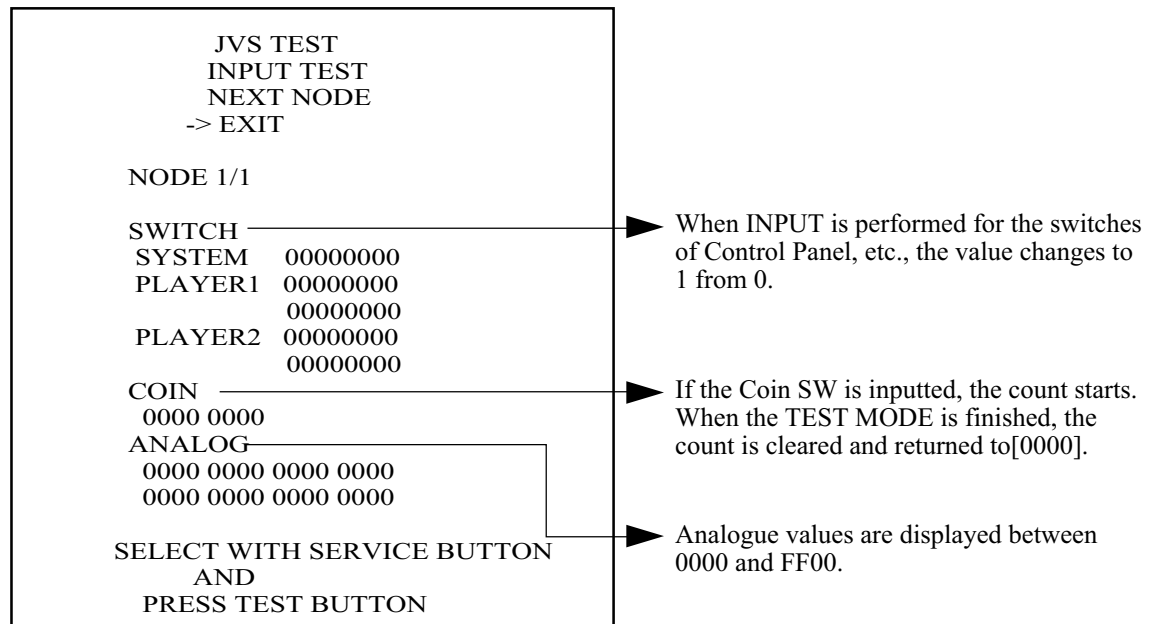
In this test, Specifications of the I/O Board connected to NAOMI 2 can be checked, and INPUT TEST can be performed. First, I/O Board Specifications are displayed.



Select with the SERVICE button and press the TEST button.

- (A) INPUT TEST : Proceeds to the INPUT TEST of I/O BOARD being displayed.
- (B) NEXT NODE : In the case where more than 2 I/O Boards are connected, proceeds to the next I/O Board.
- (C) EXIT : Returns to the menu mode.

INPUT TEST SCREEN



C. SOUND TEST

Sound Output test can be performed. Beep sounds can be emitted from each of left/right Speakers.

SOUND TEST

RIGHT SPEAKER OFF
LEFT SPEAKER OFF
-> EXIT

SELECT WITH SERVICE BUTTON
AND PRESS TEST BUTTON

- Emitted from the right-hand side Speaker.
- Emitted from the left-hand side Speaker.
- Returns to the menu mode.

D. C.R.T. TEST

1) RGB COLOR ADJUSTMENT SCREEN

In this page, monitor color can be checked.

C.R.T. TEST 1/2

1 32

RED
GREEN
BLUE
WHITE

PRESS TEST BUTTON TO CONTINUE

Each of red, green, and blue is the darkest at the leftmost end, and becomes brighter towards the right-hand end in 31 gradations. Monitor brightness is satisfactory if the white color bar is black at the left end and if it is white at the right end.

Press the TEST button to proceed to the next page.

2) MONITOR SIZE ADJUSTMENT SCREEN

In this page, monitor size can be checked.

C.R.T. TEST 2/2

PRESS TEST BUTTON TO EXIT

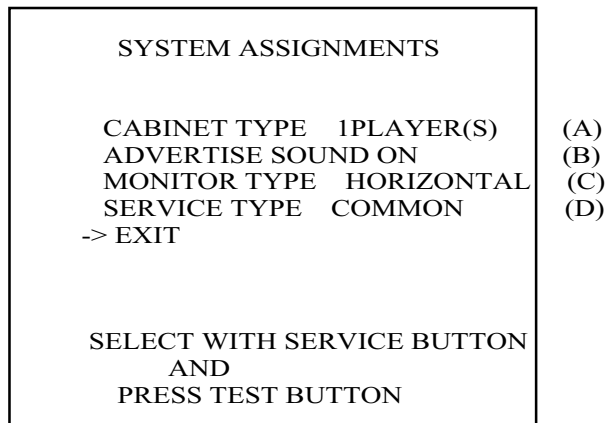
Adjust so that the checkered patterns do not go beyond the screen.

Press the TEST button to return to the menu mode.

E. SYSTEM ASSIGNMENTS

The settings of cabinet and board can be changed. Game related assignments such as game difficulty, etc. are performed in K. 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.



(A) CABINET TYPE (1PLAYER(S), 2PLAYER(S), 3PLAYER(S), 4PLAYER(S))

Sets the number of players between 1 and 4.
Fix setting to 1 PLAYER(S).

(B) ADVERTISE SOUND (ON, OFF)

Sets whether ADVERTISE sound is to be emitted or not.

(C) MONITOR TYPE (HORIZONTAL, VERTICAL)

Sets the on-screen display to the positional direction of monitor (HORIZONTAL/VERTICAL)
Fix setting to HORIZONTAL.

HORIZONTAL: Normal on-screen display

VERTICAL: On-screen display when the monitor is vertically positioned as against normal HORIZONTAL position.

(D) SERVICE TYPE (COMMON, INDIVIDUAL)

Sets the functioning of when the SERVICE button is pressed, in case that several SERVICE buttons exist.

Fix setting to COMMON.

COMMON: By pressing any SERVICE button, Service credit can be obtained for all Players.

INDIVIDUAL: By pressing SERVICE button, Service credit can be obtained for the Player corresponding to the SERVICE button pressed.

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

Setting to COMMON

Setting to INDIVIDUAL

(A) COIN CHUTE TYPE (COMMON, INDIVIDUAL)

Fix setting to COMMON.

COMMON

This setting is for the cabinet which has a coin chute(s) for common use by plural players. 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.

INDIVIDUAL

This setting is for the cabinet in which each player uses an independent coin chute. Coins inserted by each player are handled as the player's credits. Depending on the CABINET TYPE setting in the SYSTEM ASSIGNMENTS and the functioning of the connected I/O Board, the number of Coin SW INPUT ports varies between 1 and 4. (B) COIN/CREDIT SETTING ratio is common for each Coin Chute.

(B) COIN/CREDIT SETTING (# 1 ~ # 27)

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) and Table 2 (INDIVIDUAL).

(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 BONUS ADDER NO BONUS ADDER COIN CHUTE #1 MULTIPLIER 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 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 ->EXIT SELECT WITH SERVICE BUTTON AND PRESS TEST BUTTON	(D) (E)	COIN ASSIGNMENTS MANUAL SETTING COIN TO CREDIT 1 BONUS ADDER NO BONUS ADDER COIN CHUTE MULTIPLIER 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 ->EXIT SELECT WITH SERVICE BUTTON AND PRESS TEST BUTTON
(G)		

Setting to COMMON

Setting to INDIVIDUAL

(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: COIN/CREDIT SETTING (COIN CHUTE INDIVIDUAL TYPE)

NAME OF SETTING	EACH SEAT'S COIN CHUTE	NAME OF SETTING	EACH SEAT'S COIN CHUTE
SETTING #1	1 COIN 1 CREDIT	SETTING #21	5 COINS 1 CREDIT
SETTING #2	1 COIN 2 CREDITS	SETTING #23	2 COINS 1 CREDIT
SETTING #3	1 COIN 3 CREDITS		4 COINS 2 CREDITS
SETTING #4	1 COIN 4 CREDITS		5 COINS 3 CREDITS
SETTING #5	1 COIN 5 CREDITS	SETTING #25	1 COIN 1 CREDIT
SETTING #11	1 COIN 6 CREDITS		2 COINS 2 CREDITS
SETTING #12	2 COINS 1 CREDIT		3 COINS 3 CREDITS
SETTING #15	1 COIN 1 CREDIT 2 COINS 3 CREDITS		4 COINS 4 CREDITS
			5 COINS 6 CREDITS
SETTING #17	3 COINS 1 CREDIT	SETTING #27	FREE PLAY
SETTING #18	4 COINS 1 CREDIT		
SETTING #19	1 COIN 1 CREDIT 2 COINS 2 CREDITS 3 COINS 3 CREDITS 4 COINS 5 CREDITS		

Table 3: 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	
[WILD RIDERS XXXXXXXXXXXX]	
DESCRIPTION OF SEQUENCE	
1	CREDIT TO START
2	NO USE
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	

In cases of video games such as WILD RIDERS. :

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

SEQUENCE 2 ~ 8 : NOT USED.

G. BOOKKEEPING

- BOOKKEEPING 1/2

This allows such data as operating time/No. of coins inserted/ No. of credits to be checked.

BOOKKEEPING 1/2	
TOTAL TIME	
0D 00H 00M 00S	
CREDIT	0
COIN 1	0
COIN 2	0
COIN 3	0
COIN 4	0
TOTAL COIN	0
COIN CREDIT	0
SERVICE CREDIT	0
TOTAL CREDIT	0
PRESS TEST BUTTON TO CONTINUE	

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

- BOOKKEEPING 2/2

Each sequence displays the frequency of functioning.

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	

In cases of video games such as WILD RIDERS. :

P1 SEQ 1 : Play frequency of Player 1

P1 SEQ 2 ~ 8 : NOT USED.

H. BACKUP DATA CLEAR

Clears the contents of BOOKKEEPING.

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.

I. CLOCK SETTING

Set YEAR, MONTH, DAY, HOUR, and MINUTE for NAOMI 2 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.

J. ROM BOARD TEST

In this test, on-ROM-BD ROM check is executed.
If GOOD is displayed below RESULT, it is satisfactory.
BYTE and WORD refers to the check sum of each unit.

GAME ROM TEST				
[WILD RIDERS XXXXXXXX]				
NO.	TYPE	RESULT	BYTE	WORD
IC22	16M	----	0123	4567
IC1	64M	GOOD	0123	4567
IC2	64M	GOOD	0123	4567
IC3	64M	GOOD	0123	4567
IC4	64M	GOOD	0123	4567
IC5	64M	GOOD	0123	4567
IC6	64M	GOOD	0123	4567
IC7	64M	GOOD	0123	4567
IC8	64M	GOOD	0123	4567
IC9	64M	GOOD	0123	4567
IC10	64M	GOOD	0123	4567
		:		
IC20	64M	GOOD	0123	4567
PRESS TEST BUTTON TO EXIT				

Program ROMs (IC22) do not display GOOD or BAD.
Press the TEST button to return to the menu mode.

K. GAME TEST MODE

Enters the TEST mode of the game connected. The TEST mode includes INPUT test, GAME ASSIGNMENTS such as game difficulty and others, BOOKKEEPING, etc. Depending on specific games, necessary items are added and unnecessary items removed. As such, the contents thereof may be changed.

8 - 3 GAME TEST MODE

A. MENU MODE

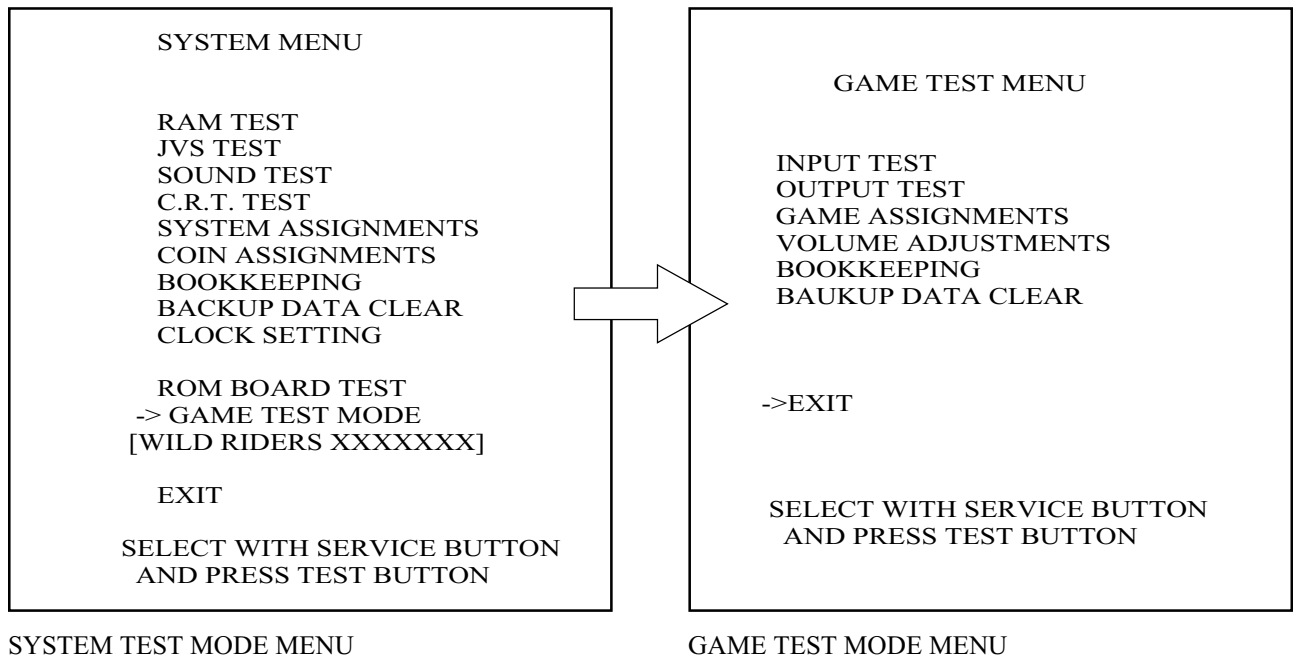


FIG. 8. 3 a MENU MODE

- 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	
HANDLEBAR	80
ACCELERATOR	00
FRONT BRAKE	00
REAR BRAKE	00
PUSH	OFF
PULL	OFF
START	OFF
SERVICE	OFF
TEST	OFF
PRESS TEST AND SERVICE BUTTON TO EXIT	

FIG. 8. 3 ba INPUT TEST

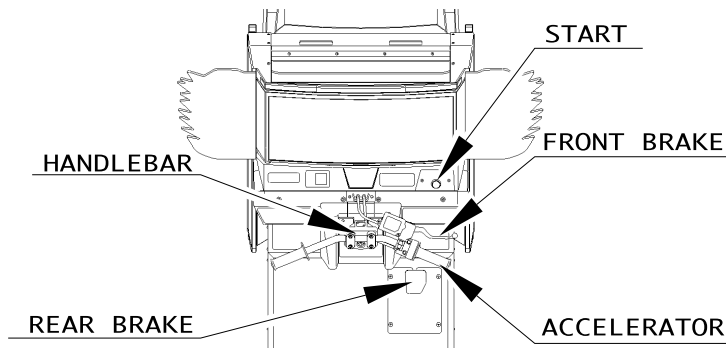


FIG. 8. 3 bb

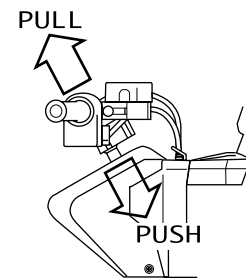


FIG. 8. 3 bc

- Press each switch. If the indicator to the right of the switch (currently Off) turns On, the switch and its wiring are normal.
- While operating the handlebar and pedal, check the variation in indication of the volume control value (HANDLEBAR, ACCELERATOR, FRONT BRAKE, REAR BRAKE). If the normal variation does not result that follows the operations, see Sections 9 and 10.
- Pressing the TEST and SERVICE buttons together returns you to the Menu 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.

Bring the arrow (->) to "START LAMP" and press the TEST button to alternate the right-hand ON and OFF display of START LAMP.

Check to ensure that the lamp lights up when ON is displayed and goes off when OFF is displayed. Bring the arrow (->) to "EXIT" and press the TEST button to return to the Test Menu.

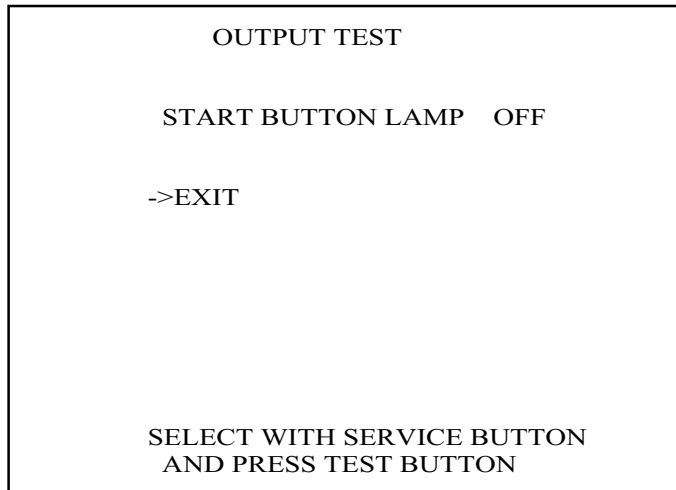


FIG. 8. 3 c OUTPUT TEST

D. 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.

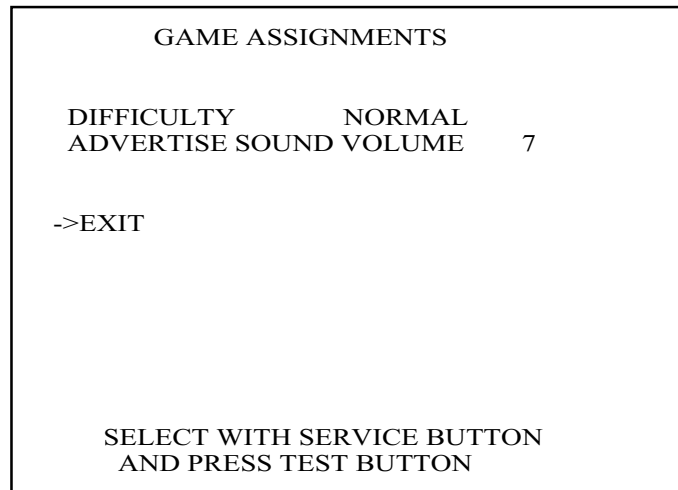


FIG. 8. 3 d GAME ASSIGNMENTS

- **DIFFICULTY :** Setting the difficulty of the game
You can select one of 5 levels of "VERY EASY," "EASY," "NORMAL," "HARD," and "VERY HARD."
- **ADVERTISE SOUND VOLUME :** For the advertisement sound volume, you can select one of 8 levels of "0" to "8".
The larger the value, the larger the sound volume ("0" is the minimum).
- Move the arrow with the SERVICE button to choose the setting change item.
Press the TEST button to change the difficulty.
- Bring the arrow to EXIT and press the TEST button to return to the menu mode.

E. VOLUME ADJUSTMENTS

If you select "VOLUME ADJUSTMENTS," the monitor screen lists the information below, which lets you set the volume controls of each operations unit.

If the operability is poor or you have adjusted or replaced one or more volume controls, use this mode to set them.

At this time, you must set the following four types of volume controls: HANDLEBAR, ACCELERATOR, FRONT BRAKE, and REAR BRAKE.

The MAX. value, MIN. value for each and the HANDLEBAR's NEUTRAL value are to be set as applicable.

VOLUME ADJUSTMENTS			
	MIN	MAX	NEUTRAL
HANDLEBAR	[00H]	[FFH]	[80H]
	(00H)	(FFH)	(80H)
ACCELERATOR	[00H]	[FFH]	[00H]
	(00H)	(FFH)	
FRONT BRAKE	[00H]	[FFH]	[00H]
	(00H)	(FFH)	
REAR BRAKE	[00H]	[FFH]	[00H]
	(00H)	(FFH)	
EXIT WITH SAVE			
->EXIT WITHOUT SAVE			
SELECT WITH SERVICE BUTTON			
AND PRESS TEST BUTTON			

FIG. 8. 3 e VOLUME ASSIGNMENTS

Move the handlebar, the accelerator, and the front and rear brake pedals fully in the movable range to set the proper volume control values.

Any value in brackets [] is the initial, or unadjusted value; any value in parentheses () is the currently backed up one.

- **HANDLEBAR** : Fully move the handlebar to the clockwise or counterclockwise end. Then, return it to the middle to place it in the state where no force is applied to it.
- **ACCELERATOR** : Fully turn the accelerator grip. Then, release it to return it to the state where no force is applied to it.
- **FRONT BRAKE** : Fully grasp the front brake lever. Then, release it to return it to the state where no force is applied to it.
- **REAR BRAKE** : Fully step on the rear brake pedal. Then, release it to return it to the state where no force is applied to it.

The settings you have made are not updated until "EXIT WITH SAVE" is completed. To update them, be sure to perform "EXIT WITH SAVE."

If you select "EXIT WITHOUT SAVE" before pressing the Test button, the system returns you to the Menu Screen without updating the settings.

APPROPRIATE VOLUME LEVELS

The range of appropriate volume levels are shown below. If a value outside the range is indicated, the volume may get damaged, in which case the volume gear should be disengaged once, and the angle of engagement should be modified (see Sections 10 and 11).

- | | | | |
|----------------------|---|----------------------------|--|
| • HANDLEBAR | 26H ~ 4AH
Turn handlebar to the left | 80H +/- 5
Initial state | C5H ~ EBH
Turn handlebar to the right |
| • ACCELERATOR | 10H ~ 30H
When your hand is removed from the grip | | D0H ~ F0H
Turn the grip all the way |
| • FRONT BRAKE | 20H ~ 30H
When your hand is removed from the lever | | 9EH ~ ADH
Pull the lever all the way |
| • REAR BRAKE | 2DH ~ 33H
When your foot is removed from the pedal | | B0H ~ BFH
Step on the pedal all the way |

F. BOOKKEEPING

If you select BOOKKEEPING, data about the current operation will be listed on two screens. When you press the TEST button, you go to the next screen. When you press it while the second screen remains in display, you return to the Menu Screen. The first screen (1 of 2) lists data related to the progress of the play.

BOOKKEEPING		PAGE 1/2
NUMBER OF GAMES	0	
PLAY TIME	0D 0H 0M 0S	
AVERAGE PLAY TIME	0M 0S	
LONGEST PLAY TIME	0M 0S	
SHORTEST PLAY TIME	0M 0S	
PRESS TEST BUTTON TO CONTINUE		

FIG. 8. 3 f a BOOKKEEPING (1/2)

- NUMBER OF GAMES : Total number of sessions played.
- PLAY TIME : Time taken for the game.

BOOKKEEPING		PAGE 2/2
TIME HISTOGRAM		
0M 00S ~ 0M 29S	0	
0M 30S ~ 0M 59S	0	
1M 00S ~ 1M 29S	0	
1M 30S ~ 1M 59S	0	
2M 00S ~ 2M 29S	0	
2M 30S ~ 2M 39S	0	
3M 00S ~ 3M 29S	0	
3M 30S ~ 3M 59S	0	
4M 00S ~ 4M 29S	0	
4M 30S ~ 4M 59S	0	
5M 00S ~ 5M 29S	0	
5M 30S ~ 5M 59S	0	
6M 00S ~ 6M 29S	0	
6M 30S ~ 6M 59S	0	
7M 00S ~ 7M 29S	0	
7M 30S ~ 7M 59S	0	
8M 00S ~ 8M 29S	0	
8M 30S ~ 8M 59S	0	
9M 00S ~ 9M 29S	0	
9M 30S ~ 9M 59S	0	
OVER 10M 00S	0	
PRESS TEST BUTTON TO EXIT		

The second screen (2 of 2) lists the number of sessions played that corresponds to each PLAY TIME. It provides a guide for setting up the difficulty and so on.

FIG. 8. 3 f b BOOKKEEPING (2/2)

G. 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 contents of BOOKKEEPING in the SYSTEM TEST mode are not cleared either.

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. Press the TEST button to return to the Menu mode. Bring the arrow to "NO (CANCEL)" and press the TEST button to return to the Menu mode.

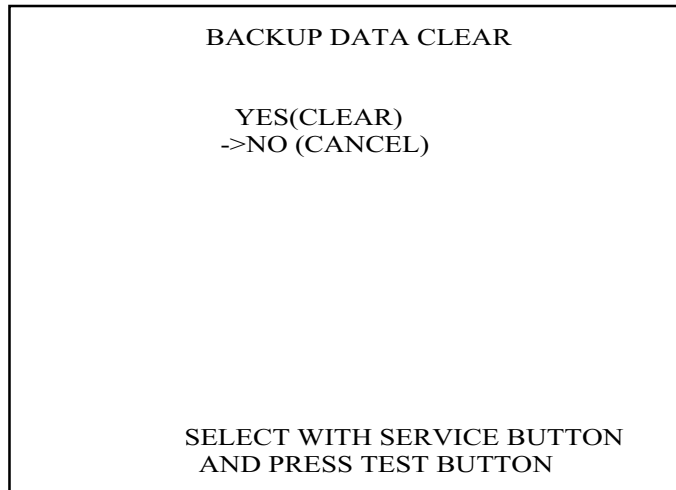


FIG. 8. 3 g BACKUP DATA CLEAR

9. CONTROL PANEL (HANDLE MECHA)



WARNING!

- Before starting to work, ensure that the Power SW is OFF. Failure to observe this can cause electric shock or short circuit.
- Use care so as not to damage wirings. Damaged wiring can cause electric shock or short circuit.
- Do not touch undesignated places. Touching places not designated can cause electric shock or 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 hazard.



CAUTION!

- When closing the Control Panel, be very careful so as not to have hand and fingers pinched in.
- Be careful when handling the plastic made parts. Failure to observe this may cause injury due to damage or fragments resulting from damage.



IMPORTANT

For the handlebar volume control, use the volume control with Part Number 220-5373. For the front brake or accelerator volume control, use the volume control with Part Number 220-5484. Do not confuse them.

The control panel of this product contains volume controls that are used to detect operations of the handlebar, accelerator, and front brake.

Verify operations of the input devices at least once a month. If a failure is found, immediately take proper action.

This document describes how to adjust and replace the volume controls.

The mechanisms of each input device is required to be greased every 3 months.

9 - 1 ADJUSTING / REPLACING THE HANDLEBAR VOLUME

ADJUSTING THE VOLUME

The following procedure requires a wrench for tamperproof screw (for M4, accessories), Phillips screwdriver (for M4), and the master key.

- ① Remove the 4 tamperproof screws that secure the Front lid to the base of the handlebar. Remove the single tamperproof bolt connecting the handlebar assembly to the shaft. Then remove the handlebar assembly momentarily.

TAMPERPROOF SCREW (2)

TAMPERPROOF SCREW (2)

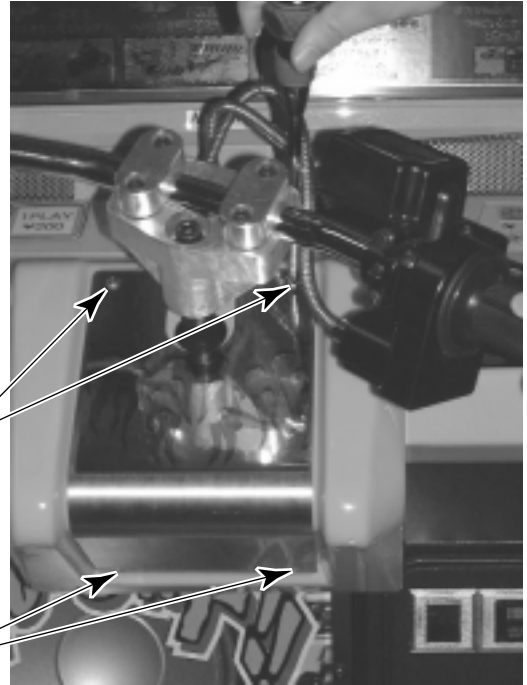
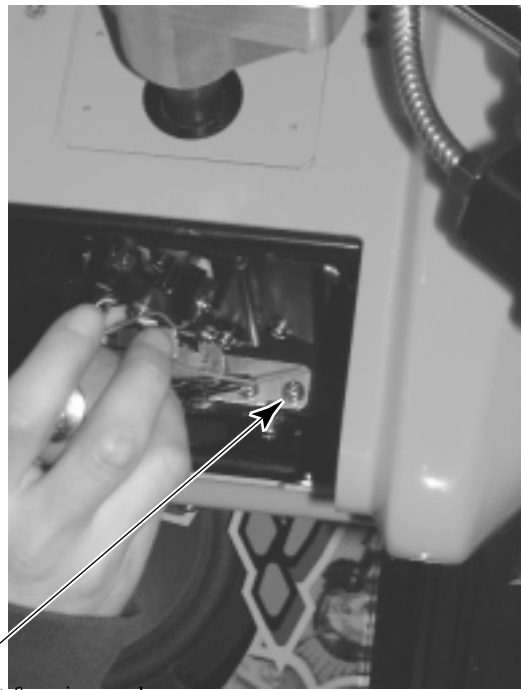


PHOTO 9. 1 a

- ② Remove the Front Lid.

- ③ Loosen the 2 screws securing the VR Bracket, and then this bracket can be moved (PHOTO 10.1c).



SCREW (2)
M4 X 12, w/flat & spring washers

PHOTO 9. 1 c

- ④ Move the VR Bracket back and forth to adjust the mesh of the gear. Moving the VR Bracket toward you disengages the mesh of the gear. By turning the volume control gear manually, vary the angle of the mesh (PHOTO 9.1d).

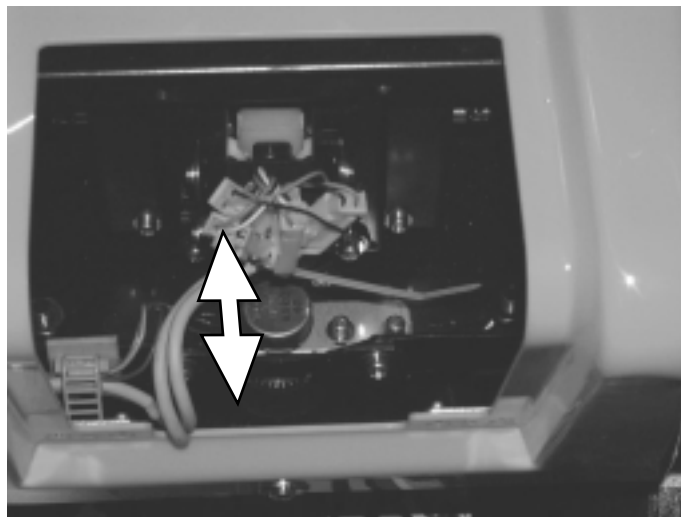


PHOTO 9. 1 d

- ⑤ In the Test mode, check that the handlebar control volume varies properly.

- ① Before any action is taken, turn off the main switch on the AC Unit in the back of the game.
- ② By reaching up through the coin door, untie the cord clamp securing the wire of the handlebar volume control, and pull off the connector (PHOTO 10.1g).

Disconnect the connector.

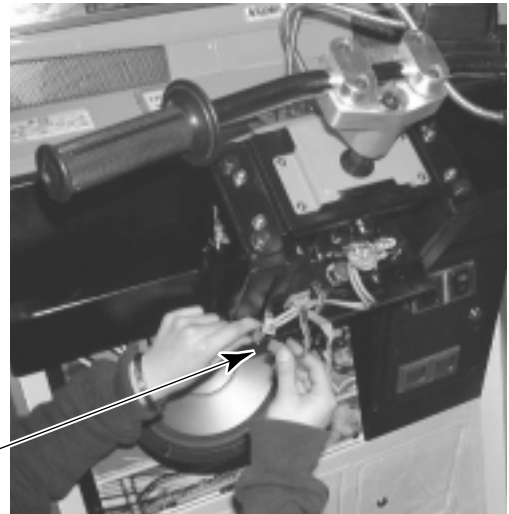


PHOTO 9. 1 g

- ③ Remove the 2 screws securing the VR bracket. Then, remove the volume control together with the bracket (PHOTO 10.1h).

SCREW (2)
M4 X 12, w/flat & spring washers



PHOTO 9. 1 h

VOLUME
220-5373

- ④ Remove the gear from the volume control. Remove the VR bracket. Cut the wire used for soldering. Then replace the volume control.
- ⑤ Check that, when you fully turn the handlebar clockwise or counterclockwise, check that the swing does not attempt to go outside the range of revolution of the volume control spindle.
- ⑥ Turn on the power. In the test mode, set the volume control value (see Section 8-3).

9 - 2 ADJUSTING / REPLACING THE FRONT BRAKE VOLUME

In the test mode, if the Front Brake Volume's value movements are irregular, adjust or replace the Volume by using the following procedure.

This procedure requires a Phillips screwdriver (for M4), a hexagonal wrench with an opposite-side distance of 1.5 mm, nippers, the master key, a solder iron, and solder.

Take out the 4 screws and remove the VR Cover.

The Front Brake Volume is inside the VR Cover.



PHOTO 9. 2 a

VOLUME ADJUSTMENT

- ① Loosen the 2 screws which secure the VR Bracket to move the VR Bracket.
- ② Move the VR Bracket to disengage gear mesh.
- ③ By adjusting gear mesh, fasten the 2 screws which secure the VR Bracket.
- ④ Move the Brake Lever fully to the movable range and check if the Volume Shaft's revolvable range is exceeded.
- ⑤ After the adjustment, be sure to perform the Volume setting in the test mode.

VOLUME REPLACEMENT

Replace the Volume if it is malfunctioning. Install the Volume in the manner so that 25H +/- 5 is indicated when force is not exerted.

- ① Remove the 2 screws which secure the VR Bracket.
- ② Remove the Volume Gear from the Volume Shaft and remove the Volume from the VR Bracket to replace the Volume.
- ③ After the replacement, be sure to perform the Volume setting in the test mode.

VOLUME
220-5484



PHOTO 9. 2 b

9 - 3 ADJUSTING / REPLACING THE ACCELERATOR VOLUME

In the test mode, if the Accelerator Volume's value movements are irregular, adjust or replace the Volume by using the following procedure.

This procedure requires a short Phillips screwdriver(for M4), a hexagonal wrench with an opposite-side distance of 1.5 mm, nippers, the master key, a solder iron, and solder.

Remove the 4 screws, and the VR Cover. The Accelerator Volume appears inside the Cover.

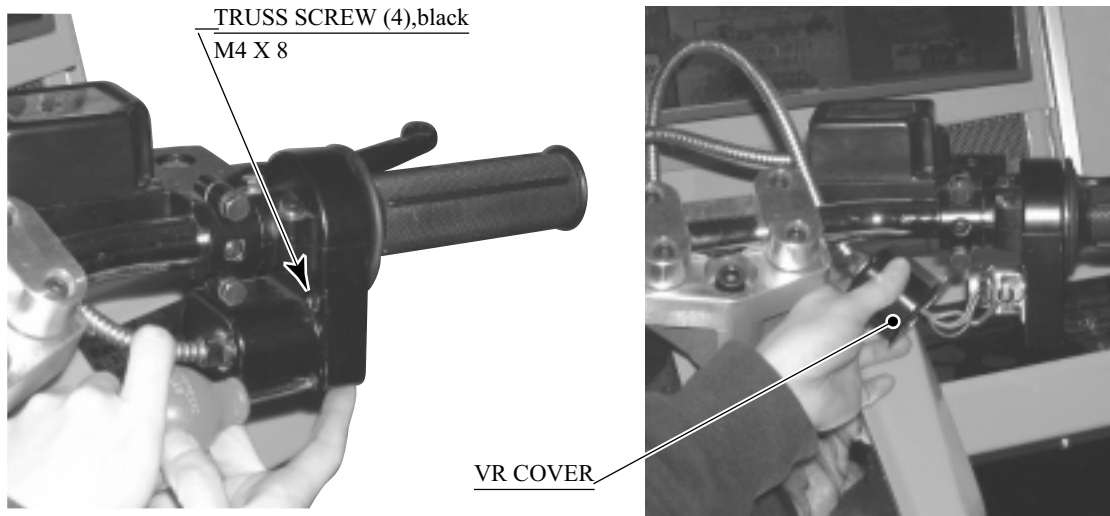


PHOTO 9. 3 a

VOLUME ADJUSTMENT

- ① Loosen the screw which secures the VR Bracket to move the VR Bracket.
- ② Move the VR Bracket to disengage gear mesh.
- ③ By adjusting gear mesh, fasten the screw which secures the VR Bracket.
- ④ Turn the Accelerator Grip fully to the movable range and check if the Volume Shaft's revolvable range is exceeded.
- ⑤ After the adjustment, be sure to perform the Volume setting in the test mode.

VOLUME REPLACEMENT

Replace the Volume if it is malfunctioning. Install the Volume in the manner so that 20H +/- 5 is indicated when force is not exerted.

- ① Remove the screw which secures the VR Bracket.
- ② Remove the Volume Gear from the Volume Shaft and remove the Volume from the VR Bracket to replace the Volume.
- ③ After the replacement, be sure to perform the Volume setting in the test mode.

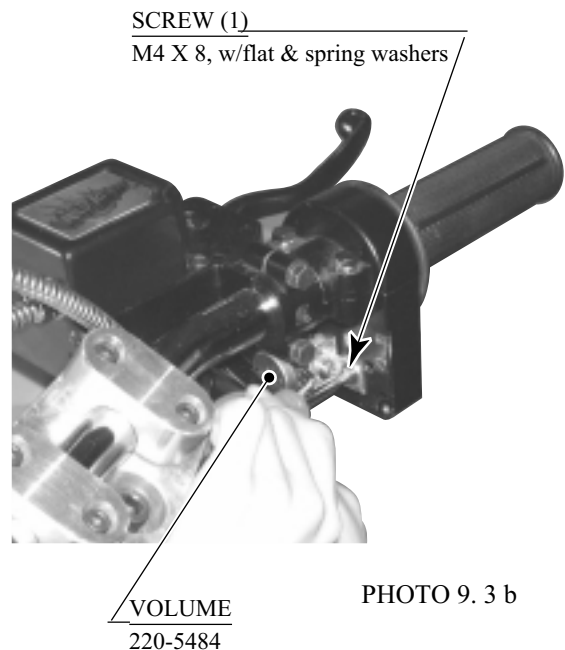


PHOTO 9. 3 b



WARNING!

- Grease is inflammable and must never be close to fire.
- Grease does harm to your body if you aspirate it. Do not perform any work related to grease in a location where ventilation is insufficient.



CAUTION!

- If grease adheres to your skin or enters an eye, immediately rise with clean water.
- If you feel out of sorts while you are performing the work, immediately stop it and keep quiet in a well-ventilated area. If you do not recover, consult with a doctor.
- Do not eat grease. Should you eat it, you may have loose bowels or feel like vomiting.
Should somebody swallow it, immediately have his or her illness diagnosed by a doctor, without compelling him or her to vomit the grease.

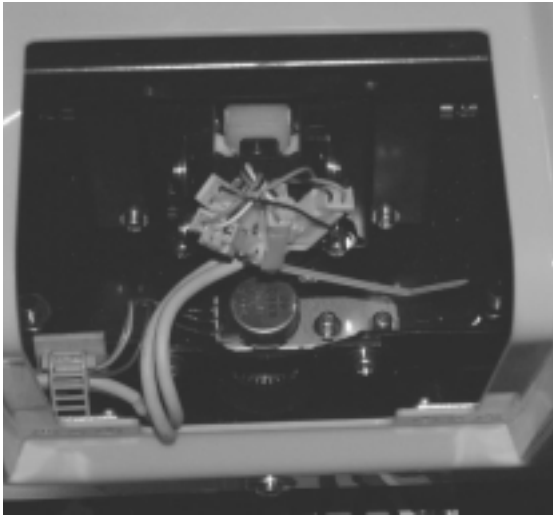


IMPORTANT

- Be sure to use the designated type of grease. If a non-designated type grease is used, components may break.
- The period for greasing specified herein is a standard. Apply greasing to the specified portions as occasion arises.
- Do not apply greasing to places other than those specified. Greasing to undesignated places can cause malfunctioning and the qualitative deterioration of parts.
- Do not grease any portions other than the specified ones. Use an extension tube annexed to spray grease.



Once every 3 months, apply greasing to the following places.
For greasing, use Grease Mate (P. No. 090-0066).



Handlebar Volume Control Mesh (Spring)
PHOTO 9. 4 a



Front Brake Volume Control Gear Mesh
PHOTO 9. 4 b



Brake Sliding Surface
PHOTO 9. 4 c



Accelerator Volume Control Mesh
PHOTO 9. 4 d

GREASING THE HANDLEBAR MECHANISM

Greasing the handlebar mechanism requires a wrench for tamperproof screw (for M4, accessories) and a hexagonal wrench with an opposite-side distance of 3 mm.

- ① Remove the control panel cover (see Section 9-1).
- ② Remove the 4 screws with hexagonal hole (PHOTO 9.4e).
- ③ Remove the ASSY centering mechanism (PHOTO 9.4f).

HEXAGON SOCKET SCREW (4)
M4 X 10, flat & spring washers used.

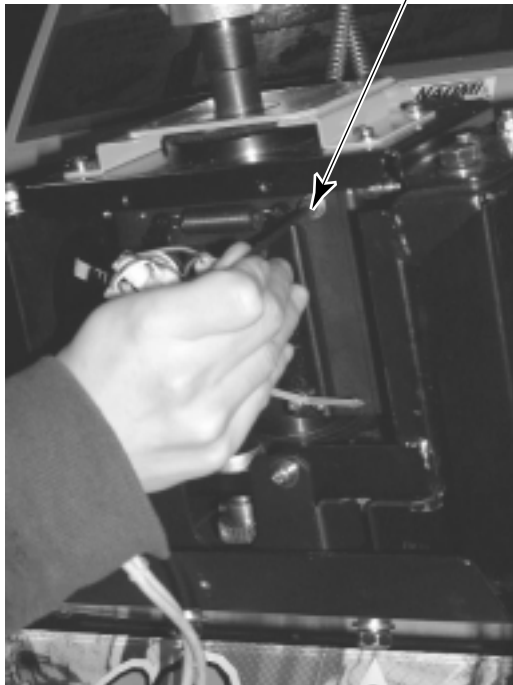


PHOTO 9.4 e

ASSY CENTERING MECHANISM

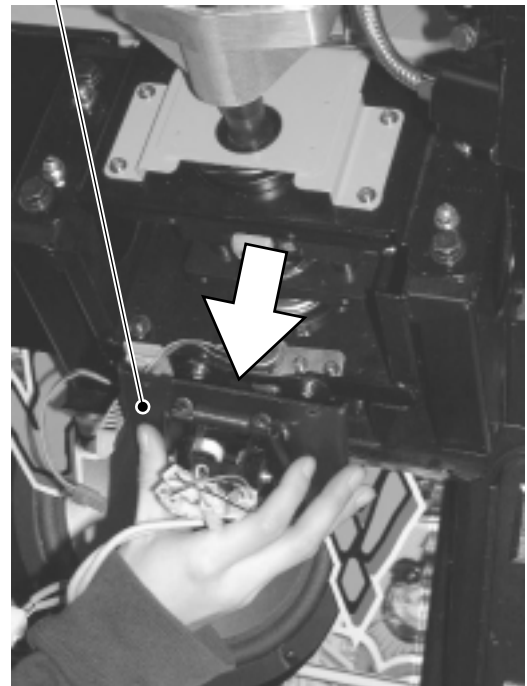


PHOTO 9.4 f

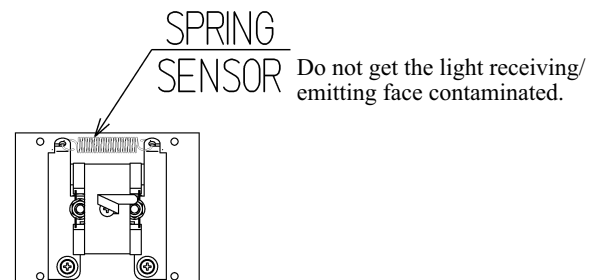
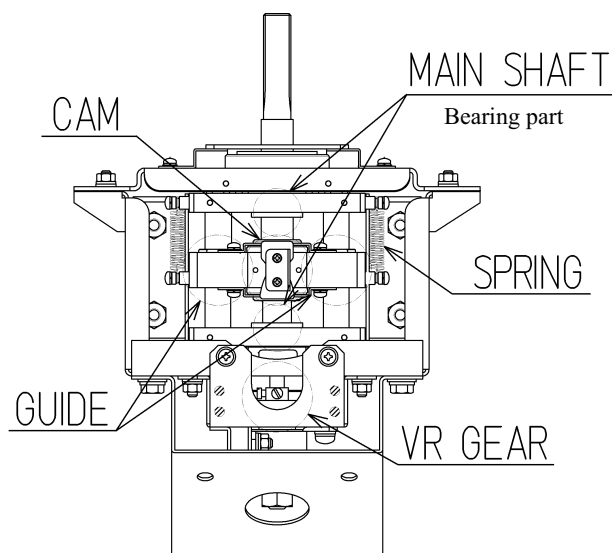


FIG. 9.4

- ④ Grease the sliding surface of the cam (PHOTO 9.4g).



PHOTO 9. 4 g

- ⑤ Grease a total of 4 springs (at the left and right) (PHOTO 9.4h).



PHOTO 9. 4 h

- ⑥ Grease the slide surfaces of the handlebar shaft and the left and right shafts (PHOTO 9.4i, j).



PHOTO 9. 4 i

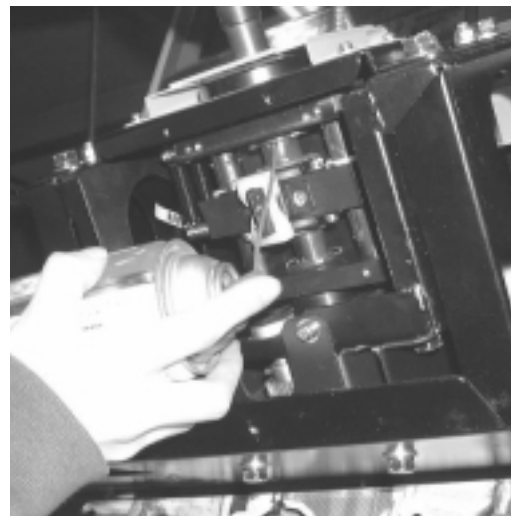


PHOTO 9. 4 j

9 - 5 REPLACING THE SPRING

The mechanism that returns the handlebar to the direction of going straight ahead uses one HOLD spring. The mechanism that returns the handlebar to the regular position uses 4 SUS springs. If one of the springs has failure such as deformation, the operability will be unsatisfactory. If so, use the following procedure to replace the spring with a spare. The replacement requires a wrench for tamper proof screw (for M4, accessories), a hexagonal wrench with an opposite-side distance of 3 mm, and a pair of pliers.

- ① Remove the control panel cover (see Section 9-1).
- ② Remove the 4 screws with hexagon hole, and then remove the ASSY centering mechanism (see Section 9-4).
- ③ While holding the HOLD spring with the pliers, release the hooks located at both ends of the spring (PHOTO 9.5a).

SPRING HOLD
WRD-2105

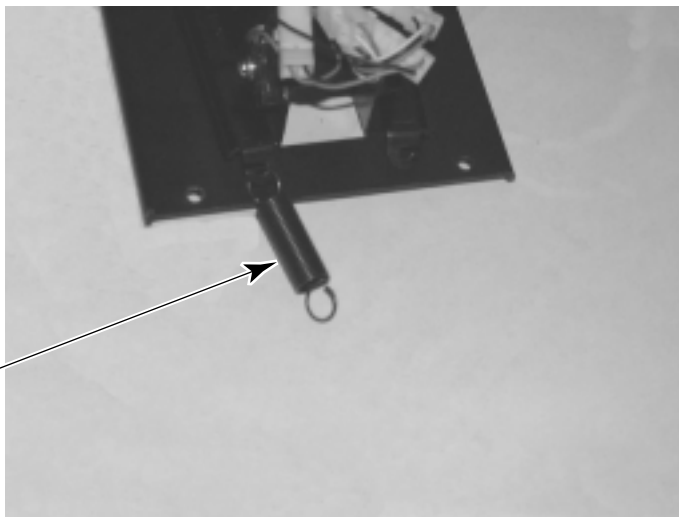
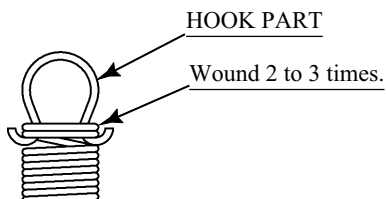


PHOTO 9. 5 a

- ④ The handlebar mechanism has a round hole on each of the left and right sides. Insert the pliers into the round hole, hold the SUS spring, and release the hook of both ends of the spring (PHOTO 9.5b).



Do not let the hook part at both ends (made of SUS material) shift beyond the position where the number of winding is 2 to 3 wounds from the end.

SPRING SUS
WRD-2010

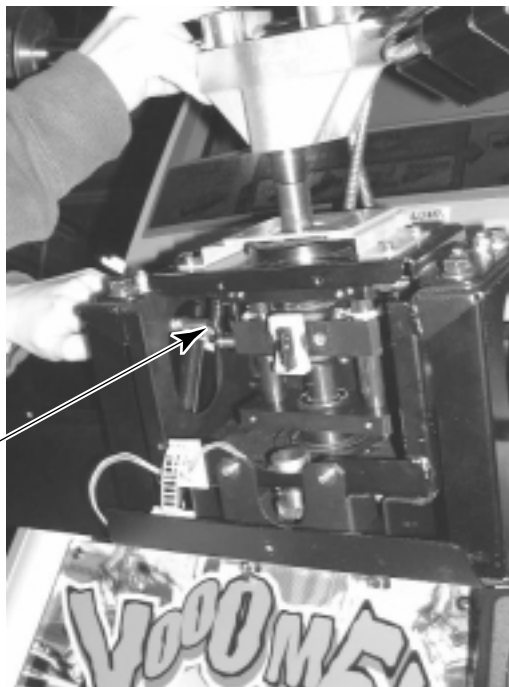


PHOTO 9. 5 b

10. REAR BRAKE



- Before starting to work, ensure that the Power SW is OFF. Failure to observe this can cause electric shock or short circuit.
- Use care so as not to damage wirings. Damaged wiring can cause electric shock or short circuit.
- Do not touch undesignated places. Touching places not designated can cause electric shock or 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 hazard.

If the operability of the brake pedal is poor or execution of the VOLUME ADJUSTMENTS in Test mode has no effect, adjust the volume control gear mesh or replace the volume control. In this product, when the Pedals are fully stepped on, if the Volume shaft is rotating within the movable range, the Volume is not feared to be damaged. Secure the Volume in the manner the Volume Shaft is oriented as shown and the gears are appropriately engaged when the Pedals are not stepped on.

10 - 1 REMOVING THE BRAKE UNIT

- ① Turn power OFF by using the Main SW of AC Unit, or SUB PWR SW inside the SERVICE DOOR.
- ② Take out the 4 Truss screws and remove the Floor Lid. (PHOTO 10.1a)

CARRIAGE BOLTS

FRONT LID



PHOTO 10. 1 a

- ③ Disconnect the connector.
- ④ Remove the 6 hexagon nuts, and disengage the brake unit from the ASSY Floor (PHOTO 10.1b).

HEXAGON NUT (6)
M6, spring washer used.

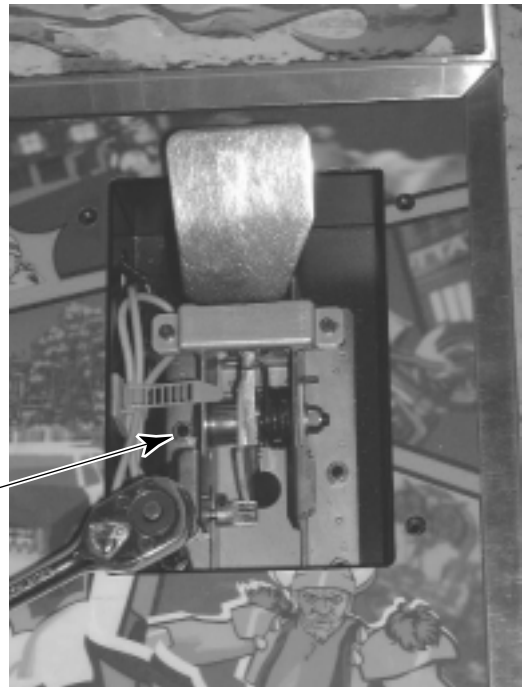


PHOTO 10. 1 b

10 - 2 ADJUSTING / REPLACING THE REAR BRAKE VOLUME

Adjusting or replacing the volume controls requires a Phillips screwdriver (for M4 screw), a hexagonal wrench with an opposite-side distance of 1.5 mm, nippers, the master key, a solder iron, and solder.

ADJUSTMENT

Loosen the 2 screws, move the VR Bracket, and adjust the angle and appropriateness of gear mesh.

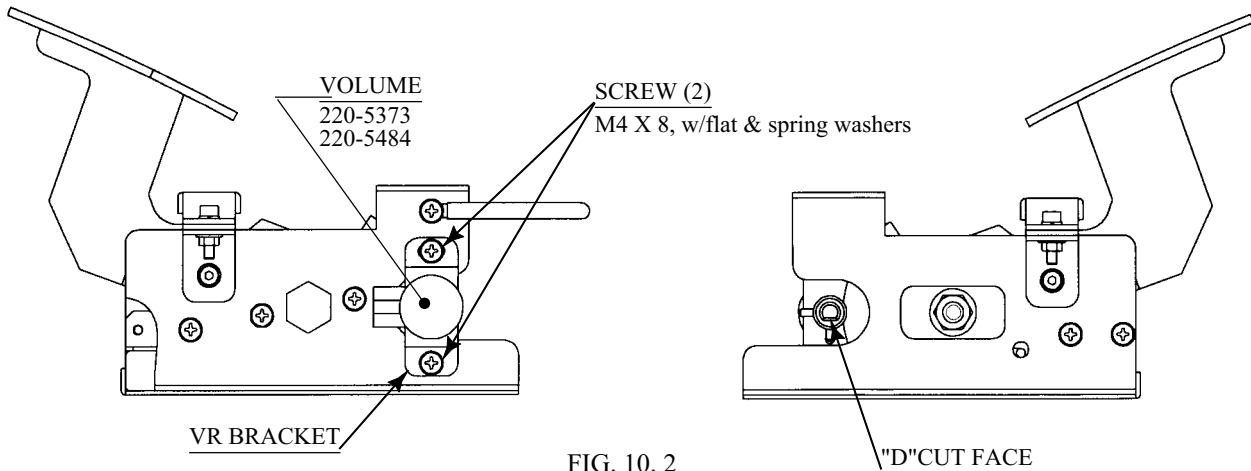


FIG. 10. 2

REPLACEMENT

- ① Take out the 2 screws and remove the Volume together with the VR Bracket.
- ② After replacing the Volume, engage the gears at the angle shown, and fix the VR Bracket.
- ③ Install the Brake Unit and connect the Connector.
- ④ Turn power ON and set the Volume value in the test mode.

10 - 3 GREASING



WARNING!

- Grease is inflammable and must never be close to fire.
- Grease does harm to your body if you aspirate it. Do not perform any work related to grease in a location where ventilation is insufficient.



CAUTION!

- If grease adheres to your skin or enters an eye, immediately rise with clean water.
- If you feel out of sorts while you are performing the work, immediately stop it and keep quiet in a well-ventilated area. If you do not recover, consult with a doctor.
- Do not eat grease. Should you eat it, you may have loose bowels or feel like vomiting.
Should somebody swallow it, immediately have his or her illness diagnosed by a doctor, without compelling him or her to vomit the grease.



IMPORTANT

- Be sure to use the designated type of grease. If a non-designated type grease is used, components may break.
- The period for greasing specified herein is a standard. Apply greasing to the specified portions as occasion arises.
- Do not apply greasing to places other than those specified. Greasing to undesignated places can cause malfunctioning and the qualitative deterioration of parts.
- Do not grease any portions other than the specified ones. Use an extension tube annexed to spray grease.



Apply greasing to gear mesh portions once every 3 months.
Use GREASE MATE (SEGA PART NO. 090-0066).

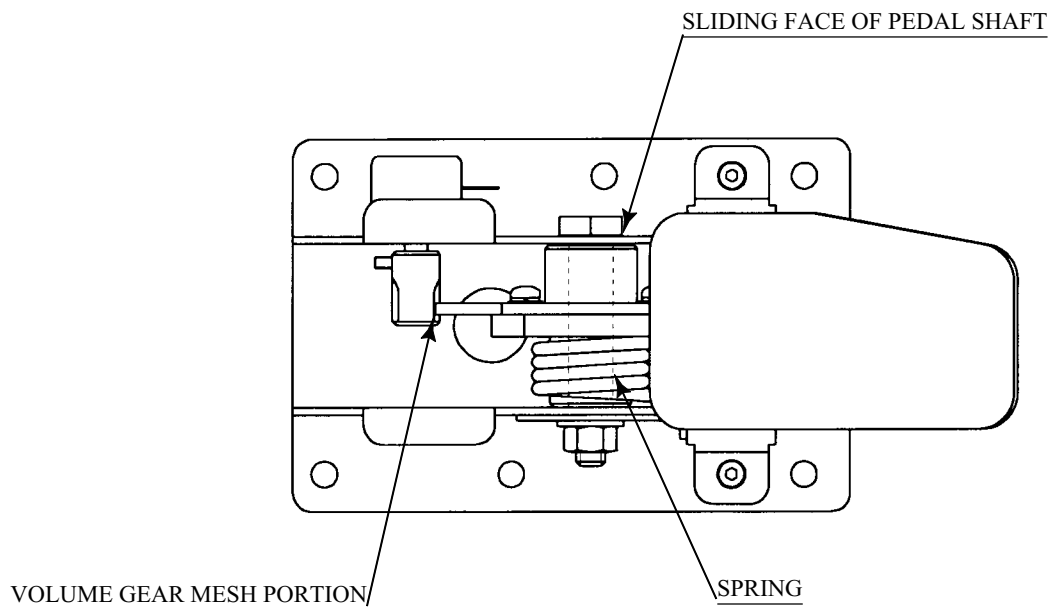


FIG. 10. 3



PHOTO 10. 3

11. MONITOR

11 - 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!

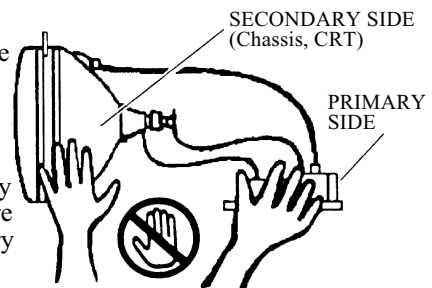
- When performing such work as installing and removing the monitor, inserting and disconnecting the external connectors to and from monitor interior and the monitor, be sure to disconnect the power connector (plug) before starting the work. Proceeding the work without following this instruction can cause 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!

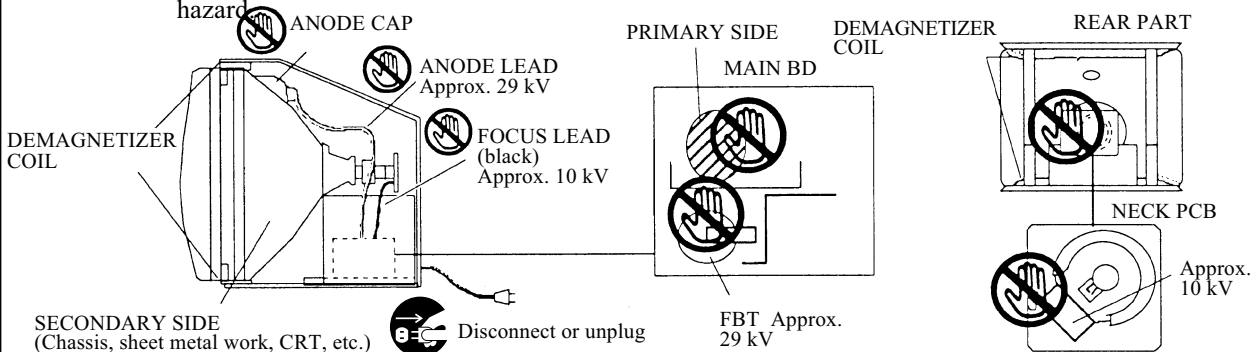
● Primary side and Secondary side

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.

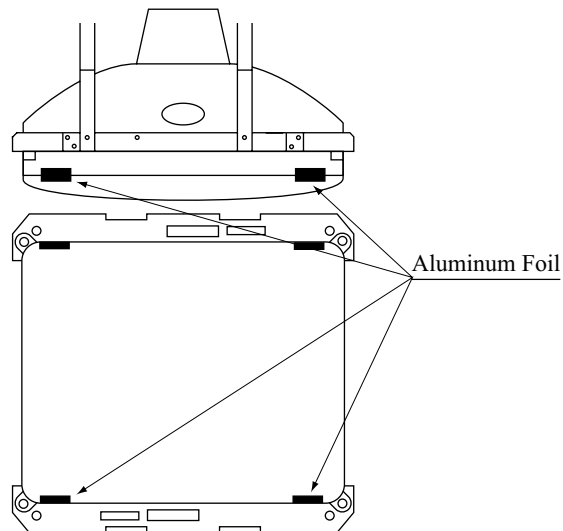
- **Installation and removal**

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.



11 - 2 CAUTIONS TO BE HEEDED 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.

12. 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



IMPORTANT

- 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?

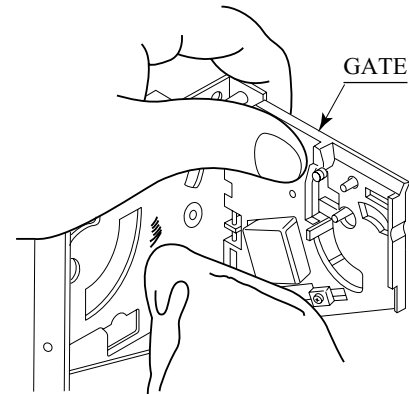


FIG. 12 a

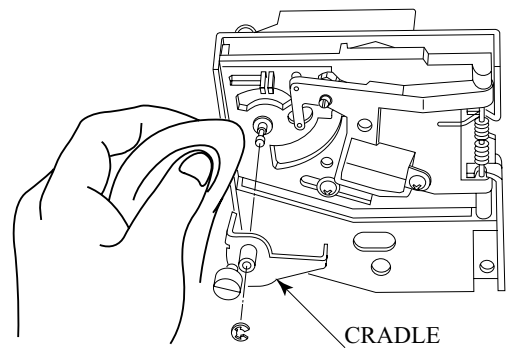


FIG. 12 b

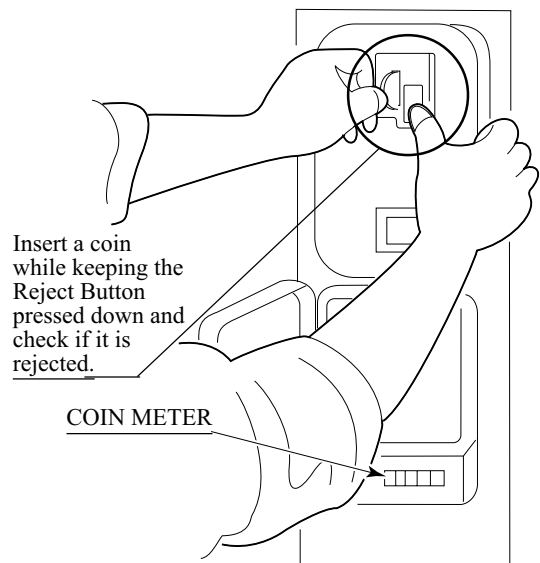


FIG. 12 c

WELLS-GARDNER ELECTRONICS CORPORATION

2701 N. KILDARE CHICAGO, IL 60639

1-800-336-6630

WWW.WGEC.COM

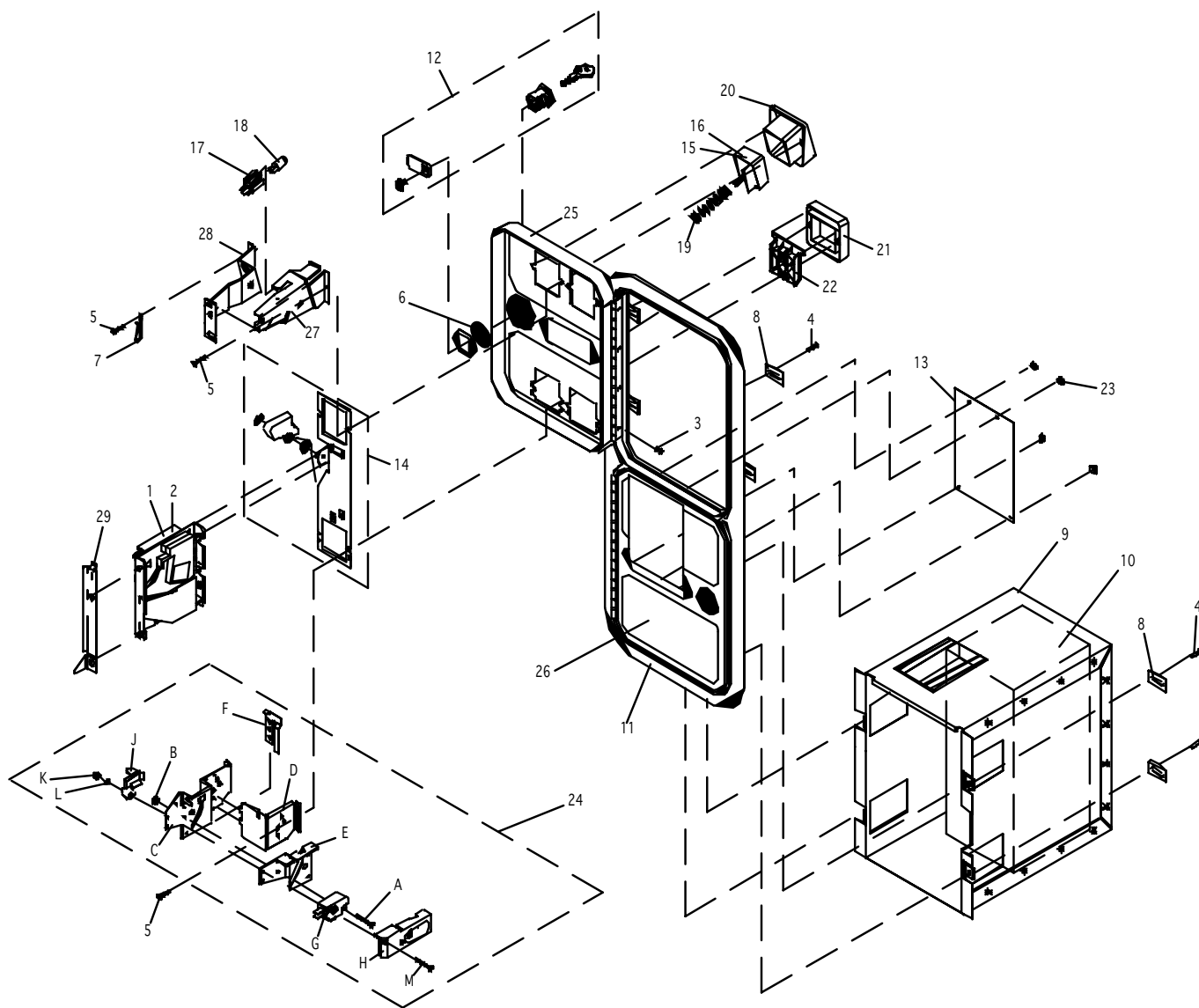
WGD15-2110-01

OVER/UNDER MINI DOOR

2 ENTRIES WITH BILL

VALIDATOR BOTTOM DOOR

& SPECIAL ENCLOSURE



#	W.G. PART #	DESCRIPTION
1	812-4150-011	S-7 US 25c COIN MECH LEFT
2	812-4050-011	S-10 US \$1 COIN MECH RIGHT
3	890-1002-00	HINGE SCREW
4	890-1003-00	CLAMP SCREW
5	890-1017-00	SCREW TRILOBULAR
6	890-1019-00	WASHER INTERNAL TOOTH 3/4"
7	890-1300-00	KEYHOOK
8	891-0514-00	CLAMP UK 5/8" CABINET
9	025X3711-001	ENCLOSURE W/CHUTE
10	025X3712-001	METAL CASHBOX
11	891-0509-162	DOUBLE FRAME
12	891-0547-00	LOCK SINGLE BIT
13	891-0100-4016	COVER PLATE
14	891-1008-107	BASE PLATE ASSEMBLY
15	891-1113-03	E/R BUTTON US 4x25c/\$1 LEFT
16	891-1113-011	E/R BUTTON US \$1 COIN RIGHT
17	891-1117-00	LAMPHOLDER
18	891-1118-00	LAMP WEDGE BASE 6 VOLT
19	891-1121-00	SPRING, E/R BUTTON
20	891-1311-16	BUTTON BEZEL, NYLON
21	891-1312-16	REJECT BEZEL, NYLON
22	891-1109-16	REJECT FLAP
23	020X1877-005	NUT KEPS #8-32 X 5/16 HEX
24	891-2216-16	MICROSWITCH ASSEMBLY
24A	890-1007-00	SCREW, FLAT HEAD M/S
24B	890-1206-02	KEP NUT
24C	891-1105-01	REJECT CUP SIDE PLATE
24D	891-1106-00	REJECT CUP BASE PLATE
24E	891-1107-00	BRACKET, MICROSWITCH
24F	891-1110-00	ADJUSTER, COIN
24G	891-1116-16	MICROSWITCH, BLACK - MED.
24H	891-1125-00	COVER, PLASTIC
24J	892-1002-07	CLIP, SNAP-ON
24K	892-1002-08	ELASTIC SNAP NUT
24L	892-1002-09	SLEEVE, SNAP-ON
24M	892-1002-11	SCREW, PAN HEAD
25	891-0604-16	MINI DOOR 2 ENTRIES
26	891-0614-16	MINI DOOR W/DBV C/O
27	892-1002-01	BRACKET, LAMP SIDE
28	892-1002-021	BRACKET, COVER SIDE
29	892-1002-10	BRACKET, HOLD DOWN

OPTIONAL DOLLAR BILL ACCEPTOR

- THE COIN DOOR ASSEMBLY USED ON **WILD RIDER STD** COMES EQUIPPED TO ACCEPT A DOLLAR BILL ACCEPTOR. ALL NEEDED WIRING CONNECTIONS ARE CONVENIENTLY LOCATED INSIDE THE GAME FOR THIS APPLICATION.
- THE COIN DOOR CAN ACCCOMMODATE THE FOLLOWING VALIDATOR(S):

FORWARD-MOST
HOLE POSITION

Mars 2000 series

**42-1155-00 MARS VALIDATOR \$1, 2, 5 300 CAP

The frame and cashbox enclosure on this coindoor has been modified to accomodate a Mars 2000 series upstacker. A 2000 series stacker can be added by simply removing the cut-out plate. This one entry door can be ordered through Happ Controls or one of Happ Controls authorized distributors. The part number is 40-6000-10EX. The Mars stacker can be obtained through an autherized Mars distibutor.

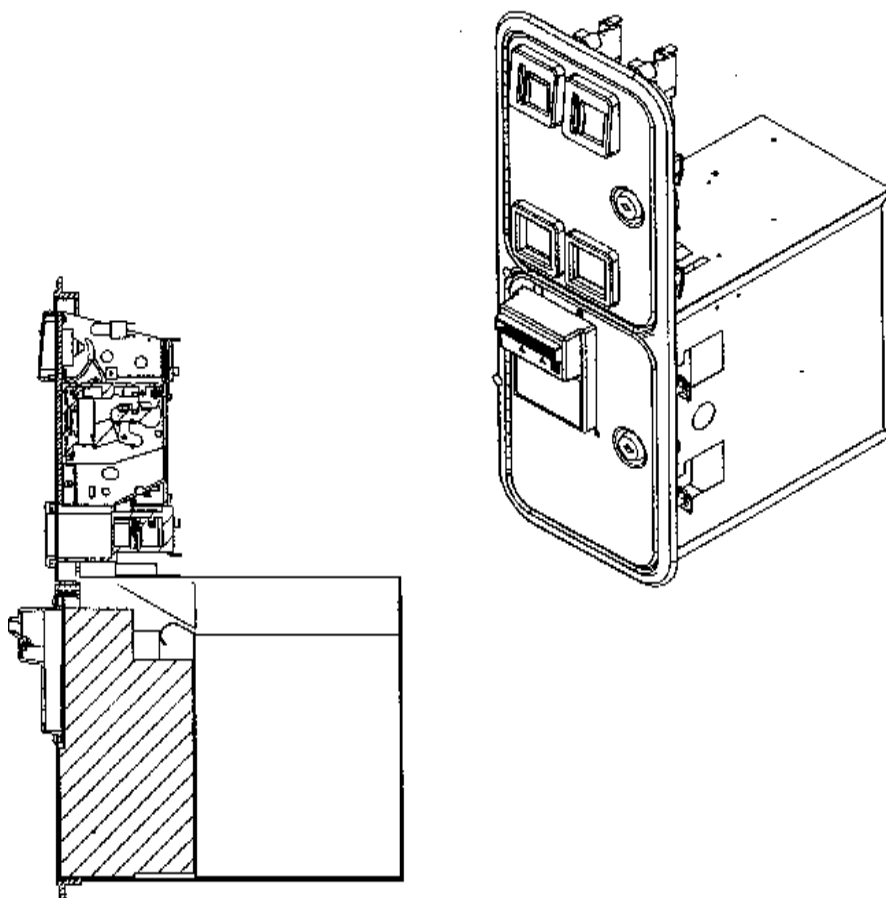
Note: Your game may have either Happ Controls Coin Door Assembly or the Wells Gardner Coin Door Assembly (not shown).

**Happ part number

Security Locking Bar/Bracket Set Part No.# 999-0966

Modified Cash Box (For use when DBA installed)
Part No. # 999-1106

****Coin door shown with optional dollar bill validator inserted****



13. 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 13

	Item	Interval	Reference
CABINET	Check Adjusters'contact with surface.	Daily	2
CONTROL PANEL	Check lamps.	Monthly	8-3
	Check VOLUME value.	Monthly	8-3
	Greasing	Trimonthly	9-4
REAR BRAKE	Check VOLUME value.	Monthly	8-3
	Greasing	Trimonthly	10-3
MONITOR	Check adjustments.	Monthly or when moving.	5,8-2,11
	Cleaning of CRT surfaces.	Weekly	11-2
COIN SELECTOR	Check COIN SW.	Monthly	8-2
	Coin insertion test.	Monthly	12
	Cleaning of COIN SELECTOR.	Trimonthly	12
GAME BD	MEMORY TEST.	Monthly	5,8-2
	Check settings.	Monthly	5,8-2,8-3
Cabinet surfaces	Cleaning	As necessary.	See below.
INTERIOR	Cleaning	Annually	See above.
POWER SUPPLY PLUG	Inspection and cleaning		

CLEANING THE CABINET SURFACES

When the cabinet surfaces are badly soiled, remove stains with a soft cloth dipped in water or diluted (with water) chemical detergent and squeezed dry. To avoid damaging surface finish, do not use such solvents as thinner, benzine, etc. or abrasives, bleaching agent and chemical dustcloth.

14. TROUBLESHOOTING

14 - 1 TABLE OF TROUBLESHOOTING



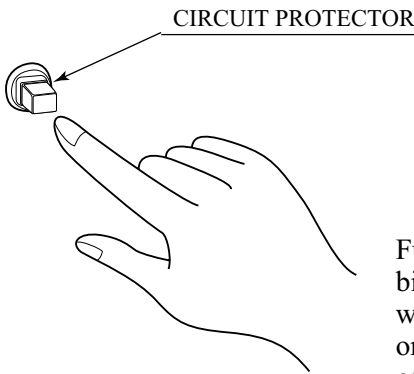
- In order to prevent electric shock and short circuit hazards, be sure to turn power off before performing work.
- Be careful so as not to damage wirings. Damaged wiring can cause electric shock or short circuit.
- After removing the cause of the functioning of the Circuit Protector, reinstate the Circuit 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.

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

TABLE 14. 1 a

PROBLEMS	CAUSE	COUNTERMEASURES
When the main SW is turned ON, the machine is not activated.	The power is not ON. Incorrect power source/voltage. The CIRCUIT PROTECTOR functioned due to momentary overcurrent.	Firmly insert the plug into the outlet. Make sure that the power supply/voltage are correct. After eliminating the cause of overload, have the Circuit Protector of the AC Unit restored .

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.)

FIG. 14. 1

TABLE 14. 1 b

PROBLEMS	CAUSE	COUNTERMEASURES
The color on the screen is not correct.	Incorrect monitor adjustment.	Make appropriate adjustments.
The on-screen image of the monitor sways and or shrinks.	Incorrect power source/voltage. In sufficient power capacity.	Make sure that the power supply/voltage are correct. Secure sufficient power capacity.
The image is displayed, but the Billboard does not light up.	Connection failure between Cabinet and Billboard Fluorescent Lamp needs replacement.	Check the connection of the connector (see 1 , Sec. 5).
Sound is not emitted. Sounds from Speakers and Woofer are not emitted.	Sound volume adjustment is not correct. Sound related Board and Memory are irregular.	Adjust the SWITCH UNIT's sound adjustment volume (control) (8-1). Perform sound and memory test (8-2).
Operation is unsatisfactory.	Poor V. R. setting. V. R. deviation or malfunctioning. Poor mesh of V.R. GEAR. Spring failure due to secular change of Handle, Accelerator and Brake mechanism.	Perform Volume setting. (8-3) Adjust or replace the V. R. (see Sec. 9, 10). Adjust GEAR mesh (see Sec. 9, 10). Replace the spring.

14 - 2 ERROR MESSAGE

On the screen, the NAOMI2 Board displays errors responding to various troubles when power is turned on or the Test mode closes. The game is not available at this time.

When an error is displayed, take action against it according to the appropriate cause and action listed below.

Usually no error is displayed unless the settings in the System Test mode have been made erroneously. If a component related to the NAOMI2 Board is replaced with one of another type of game machine, an error may occur.

ERROR 01

[DISPLAY]

ERROR 01

THIS GAME IS NOT ACCEPTABLE
BY MAIN BOARD.

[CAUSE]

The ROM BOARD is not connected correctly to the MAIN BD.

[COUNTERMEASURES]

First, turn power off, connect the ROM BD correctly. If the status is not improved yet, the board may be malfunctioning.

ERROR 02

[DISPLAY]

ERROR 02

THIS GAME IS NOT ACCEPTABLE
BY MAIN BOARD.

[CAUSE]

The destination for the NAOMI2 Board and that for the ROM board are different.

[COUNTERMEASURES]

Use the main or ROM board that conforms to the destination specification meeting the side of this product. This error cannot be avoided by changing the settings.

ERROR 03

[DISPLAY]

ERROR 03

BOARD MALFUNCTIONING.

[CAUSE]

The serial ID on the main board cannot be read.

[COUNTERMEASURES]

Remove the ROM board from the main body, and send only the main board to us for repair.

ERROR 04

[DISPLAY]

ERROR 04

BOARD MALFUNCTIONING.

[CAUSE]

BOOT ROM program cannot read the Main Board's serial ID.

[COUNTERMEASURES]

Board malfunctioning.

Ask for the repair/servicing of ROM BD and MAIN BD.

CAUTION 51 [DISPLAY]	CAUTION 51 GAME ASSIGNMENTS ARE INCORRECT. SET CORRECTLY IN SYSTEM ASSIGNMENTS OF TEST MODE. [CAUSE] The CABINET TYPE does not match the settings required for the game. [COUNTERMEASURES] Enter the Test mode, and change the CABINET TYPE setting of SYSTEM ASSIGNMENTS as suitable for the game. See Section 8-2 for the suitable setting.
CAUTION 52 [DISPLAY] [CAUSE] [COUNTERMEASURES]	CAUTION 52 CHANGE VIDEO OUTPUT OF THIS GAME TO THE SETTING CORRESPONDING TO HORIZONTAL SCANNING FREQUENCY 15KHz. Though the game is specialized for use with a horizontal frequency of 15 kHz, it is operating with 31 kHz. Set the monitor to 15 kHz, and turn on dip switch No. 1 on the NAOMI2 main board. If your monitor is not available for 15 kHz, this game does not work on it.
CAUTION 53 [DISPLAY] [CAUSE] [COUNTERMEASURES]	CAUTION 53 CHANGE VIDEO OUTPUT OF THIS GAME TO THE SETTING CORRESPONDING TO HORIZONTAL SCANNING FREQUENCY 31KHz. Though the game is specialized for use with a horizontal frequency of 31 kHz, it is operating with 15 kHz. Set the monitor to 31 kHz, and turn off dip switch No. 1 on the NAOMI2 main board. If your monitor is not available for 31 kHz, this game does not work on it.
CAUTION 54 [DISPLAY] [CAUSE] [COUNTERMEASURES]	CAUTION 54 GAME ASSIGNMENTS ARE INCORRECT. SET CORRECTLY IN SYSTEM ASSIGNMENTS OF TEST MODE. The MONITOR TYPE does not match the settings required for the game. Enter the Test mode, and change the CABINET TYPE setting of SYSTEM ASSIGNMENTS as suitable for the game. See Section 8-2 for the suitable setting. Perform replacement between length and breadth if it is required for the monitor.

15. GAME BOARD



WARNING!

- 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 or short circuit.
- Do not expose the Game BD, etc. without a good reason. Failure to observe this can cause electric shock hazard or malfunctioning.

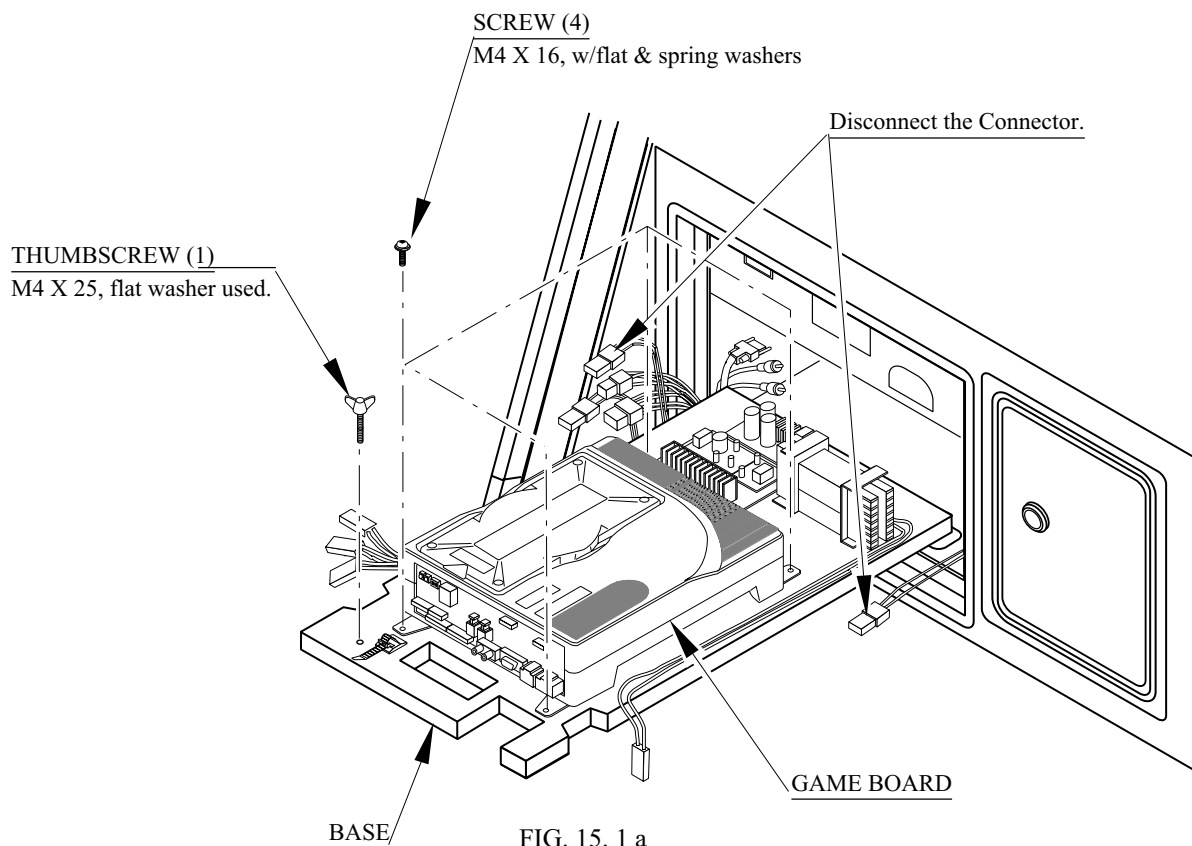


CAUTION!

In this product, setting changes are made during the test mode. The Game BD need not be operated. Use the Game BD, etc. as is with the same setting made at the time of shipment so as not to cause electric shock and malfunctioning.

15 - 1 TAKING OUT THE GAME BOARD

- ① Turn power OFF by using the Main SW of AC Unit or the SUB PWR SPLY SW inside the SERVICE DOOR.
- ② When the power is turned OFF with the Main SW, unlock and remove the SERVICE DOOR.
- ③ Disconnect all of the Connectors connected to the Filter Board at the front of the Shield Case, 3 Connectors on the left-hand side facing the Shield Case and the right-hand side Connector.



- ④ Take out the thumbscrew securing the Base, and remove the Base from the cabinet with the Shield Case as is mounted. When removing the Base, first withdraw the Base towards you up to the notch portions allowing for evading the fitting which secures the Base. From that position, lift up and remove the Base. At this time, be very careful so as not to damage wiring.

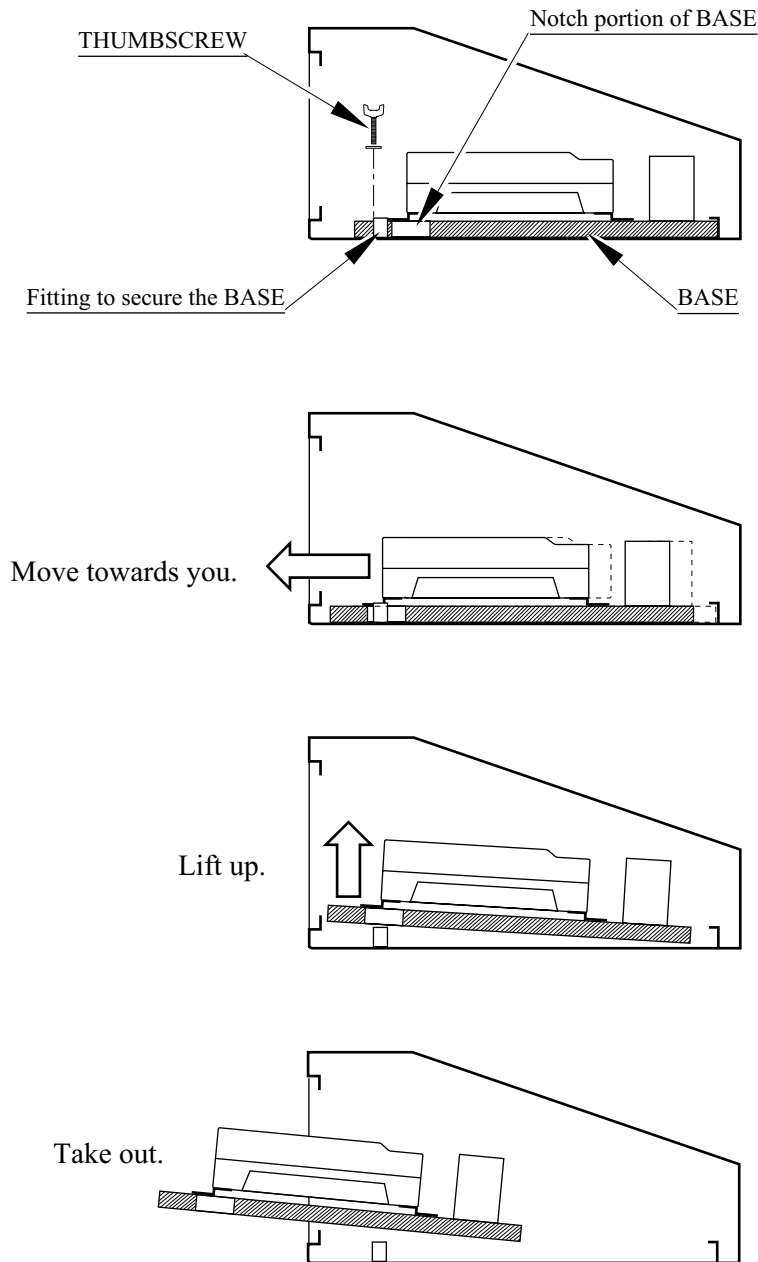


FIG. 15. 1 b

- ⑤ Take out the 4 screws and remove the Shield Case.

15 - 2 COMPOSITION OF GAME BOARD



Ensure that the DIP SW setting is performed as designated. Failure to observe this may cause functioning not suitable for the actual operation, or malfunctioning.

ASSY CASE NAO2 WRD USA (840-0046D-01) : USA
 ASSY CASE NAO2 WRD EXP (840-0046D-02) : OTHERS
 ASSY CASE NAO2 WRD KOR (840-0046D-03) : KOREA
 ASSY CASE NAO2 WRD AUS (840-0046D-04) : AUSTRALIA

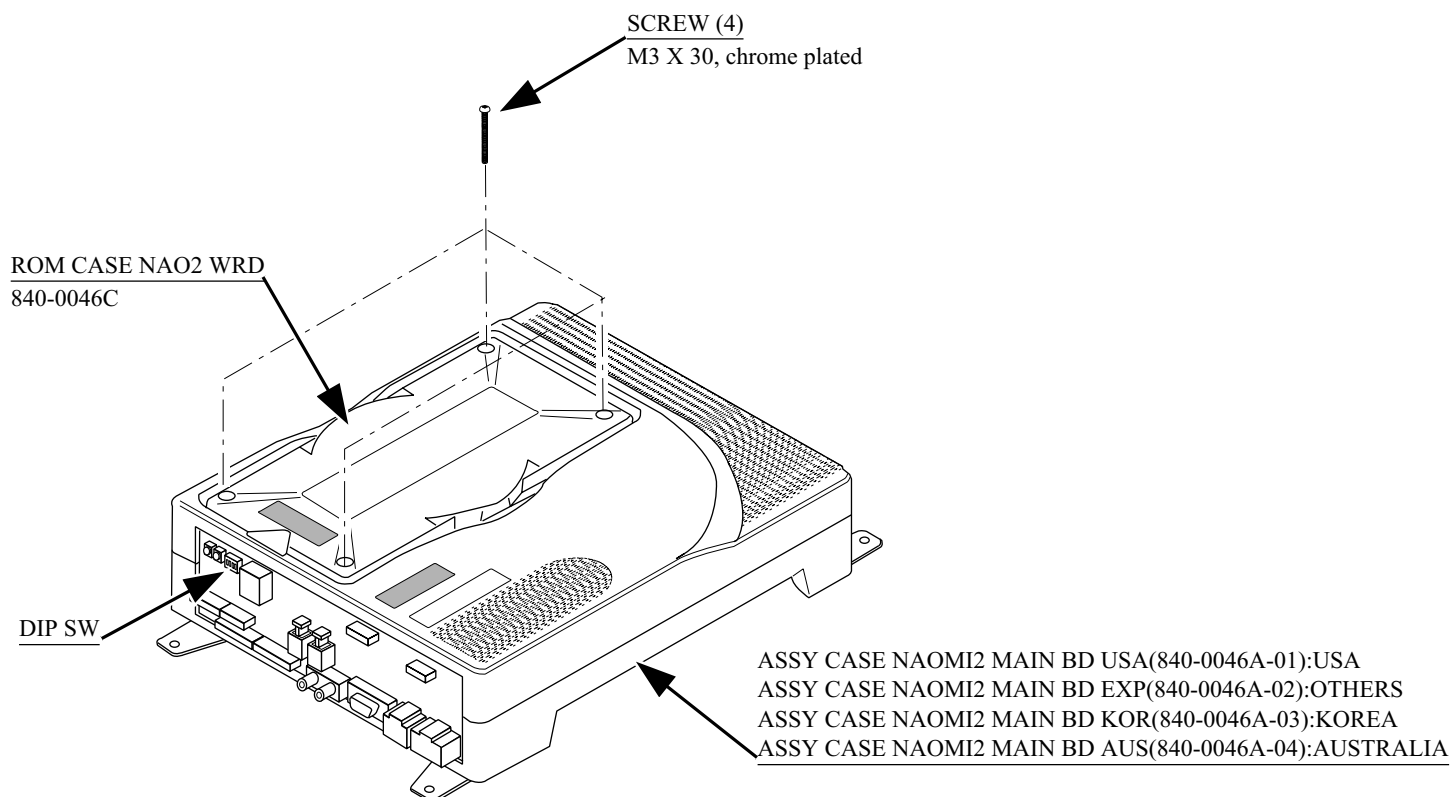


FIG. 15. 2 a

DIP SW SETTING

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

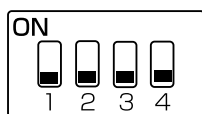


FIG. 15. 2 b

15 - 3 REPAIR/SERVICING AND CARTON BOX

When transporting NAOMI 2 for repair/servicing, follow the instructions below.

The accessory carton box is needed when transporting NAOMI 2 for repair/servicing. Be sure to safely store the Carton Box.

- When sending for repair/servicing, remove all of the wire harnesses and cables from the Filter BD in front.
- When transporting NAOMI 2 Main BD for the repair/servicing, ensure that the ROM BD used is in an as is installed status.
- When sending the NAOMI 2 Main BD for repair/servicing, be sure to put it in the accessory carton box together with the Shield Case. The Main Board (Shield Case) and carton box have an identical serial number. When sending, ensure that the combination serial number is identical with each other.
- When putting NAOMI 2 SHIELD CASE in the carton box, the Leg Bracket need not be removed.
- By paying careful attention to the following Figure and the direction shown by on-Carton-Box printing, put the Shield Case in the Carton Box.
- The projected portions of the packing material is intended for cushioning. Therefore, do not bend the projected portions.

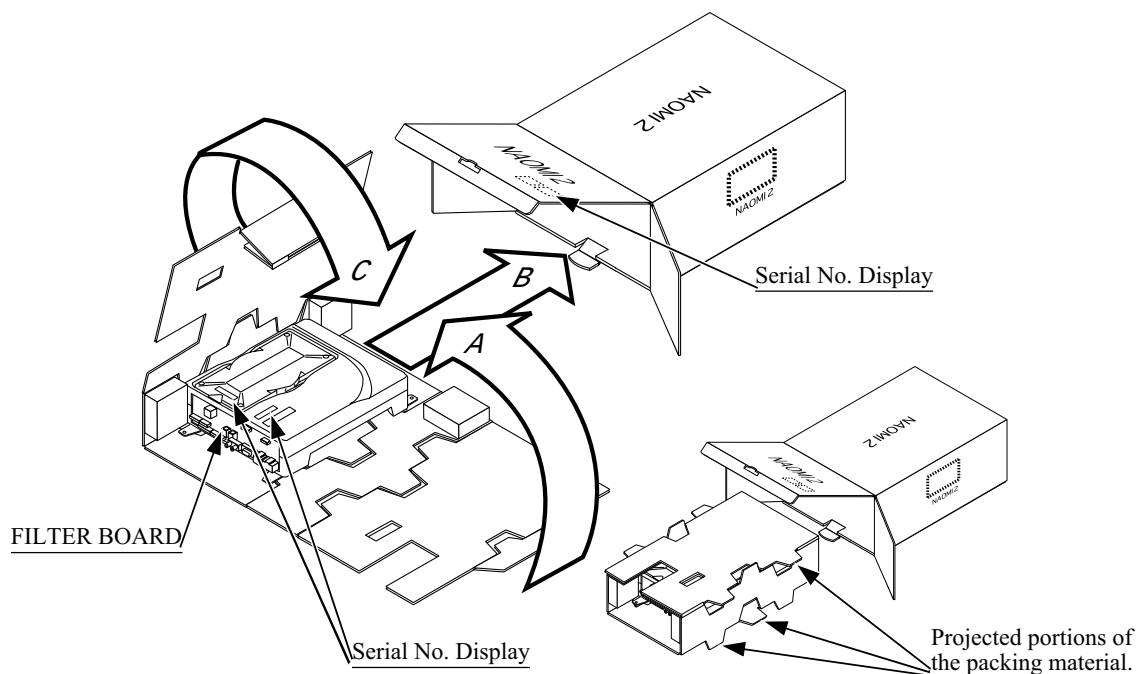


FIG. 15. 3 a

REMOVING AND REINSTALLING THE ROM BOARD

Ensure that the power is off before performing work.

- REMOVING

- ① Disconnect all of the wirings connected to NAOMI 2, and remove NAOMI 2 from inside the cabinet.
- ② Remove the 4 screws which secure the ROM BD Case on NAOMI 2 Case.
- ③ Remove ROM BD Case upward by holding both sides.

- INSTALLING

- ① Make sure that the connector direction is correct, and insert the ROM BD Case fully onto NAOMI 2 Main BD.
- ② By using the 4 screw previously removed as per REMOVING ② above, secure ROM BD Case to NAOMI 2 Case.

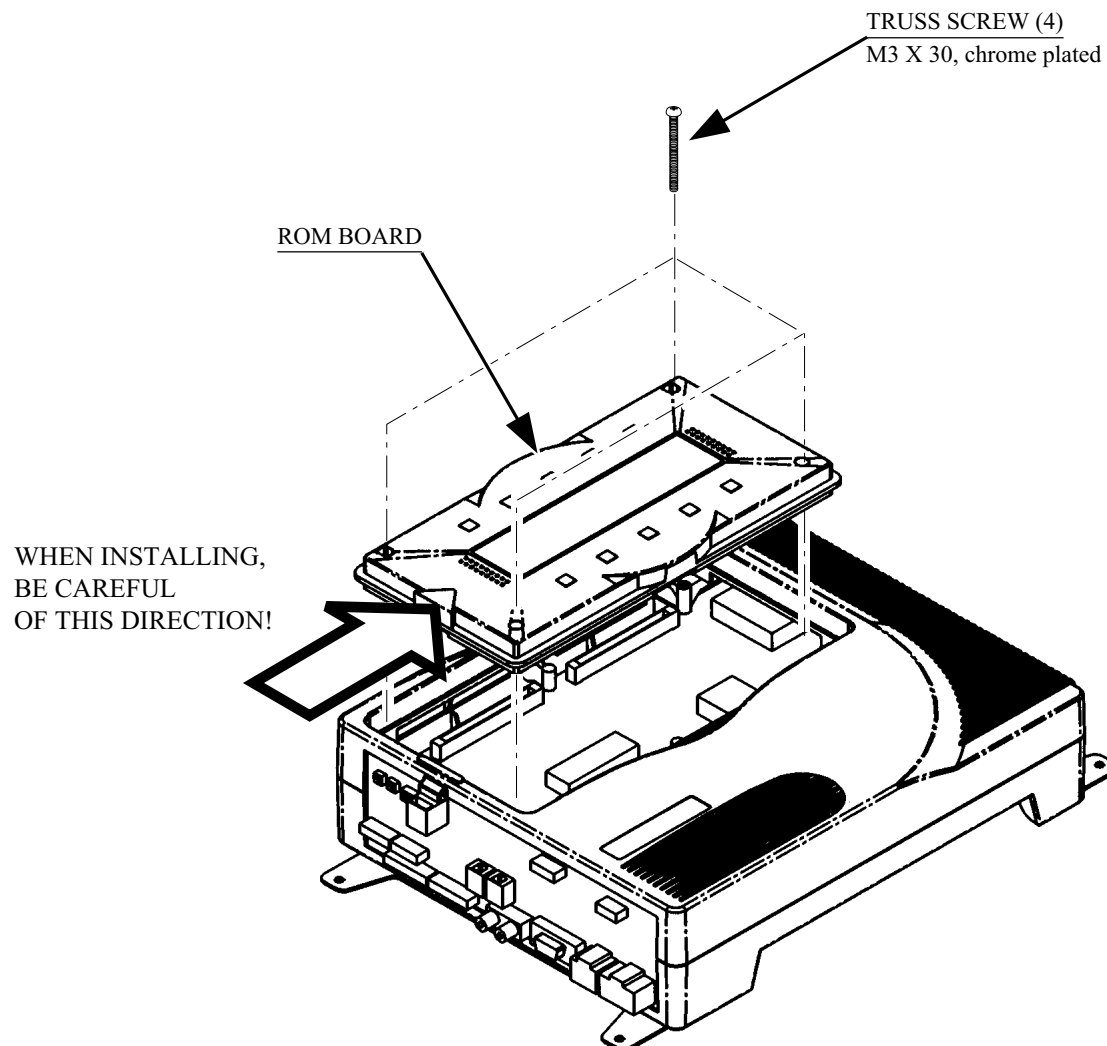
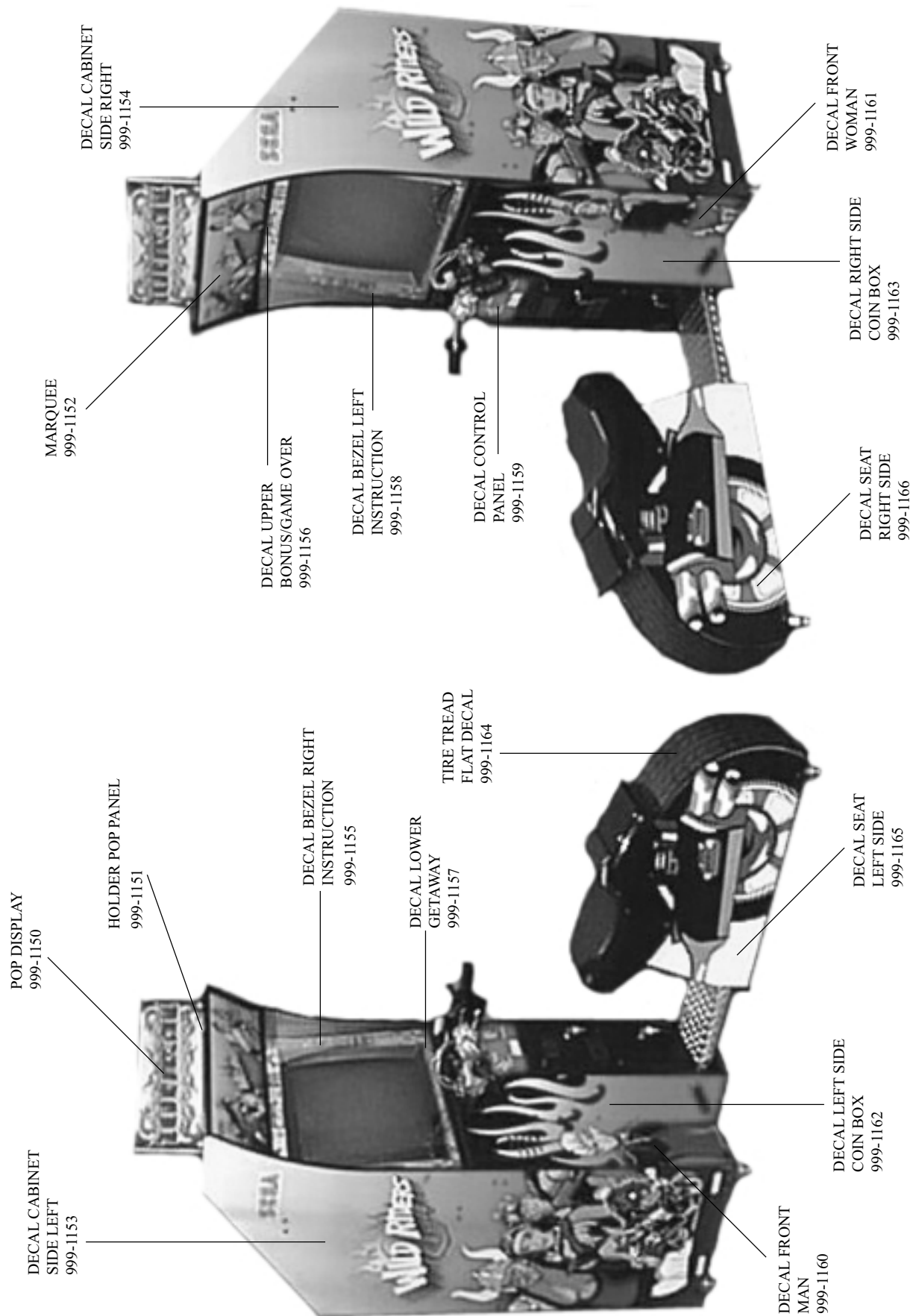


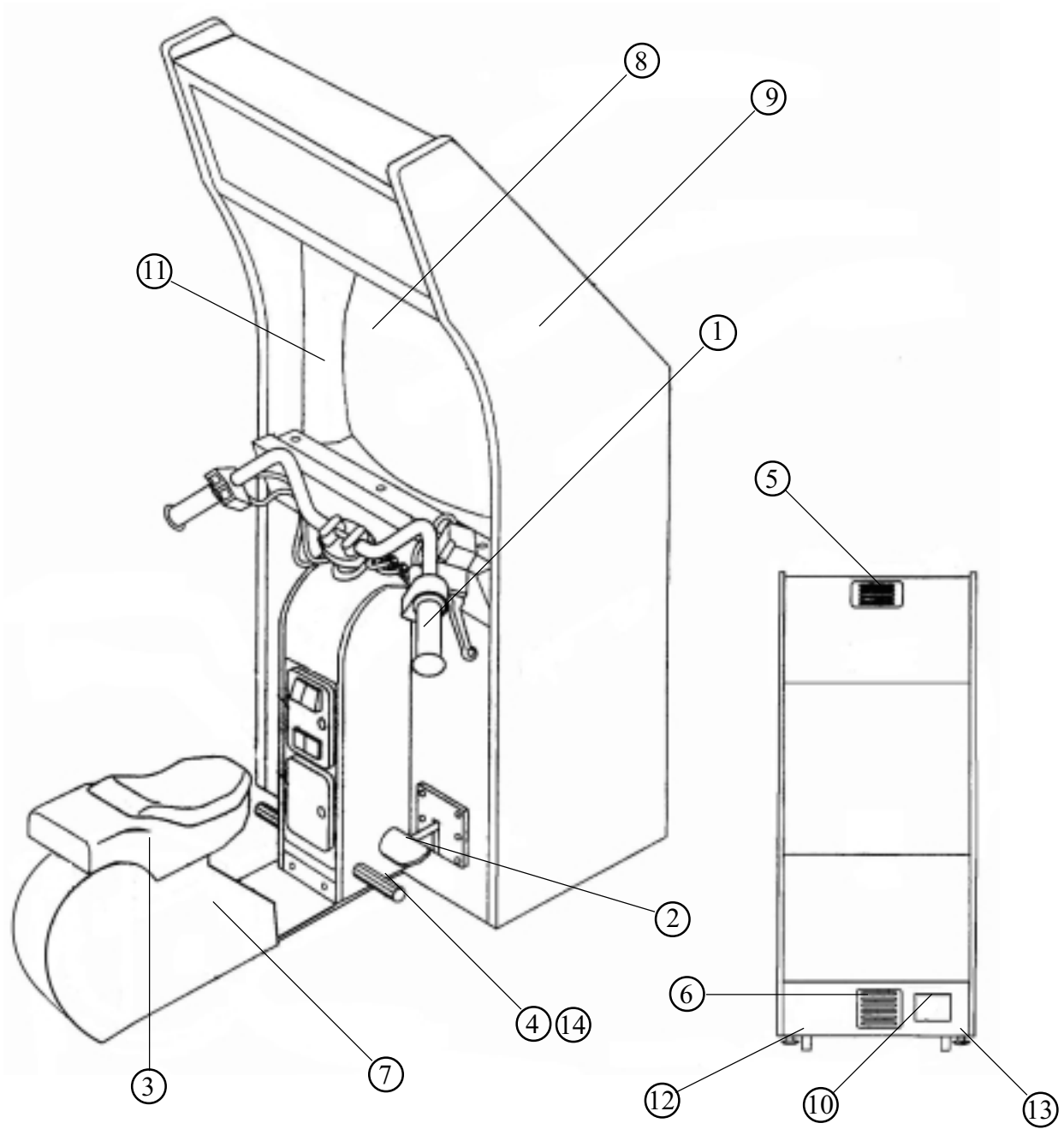
FIG. 15.3 b

16. DESIGN RELATED PARTS



17. PARTS LIST

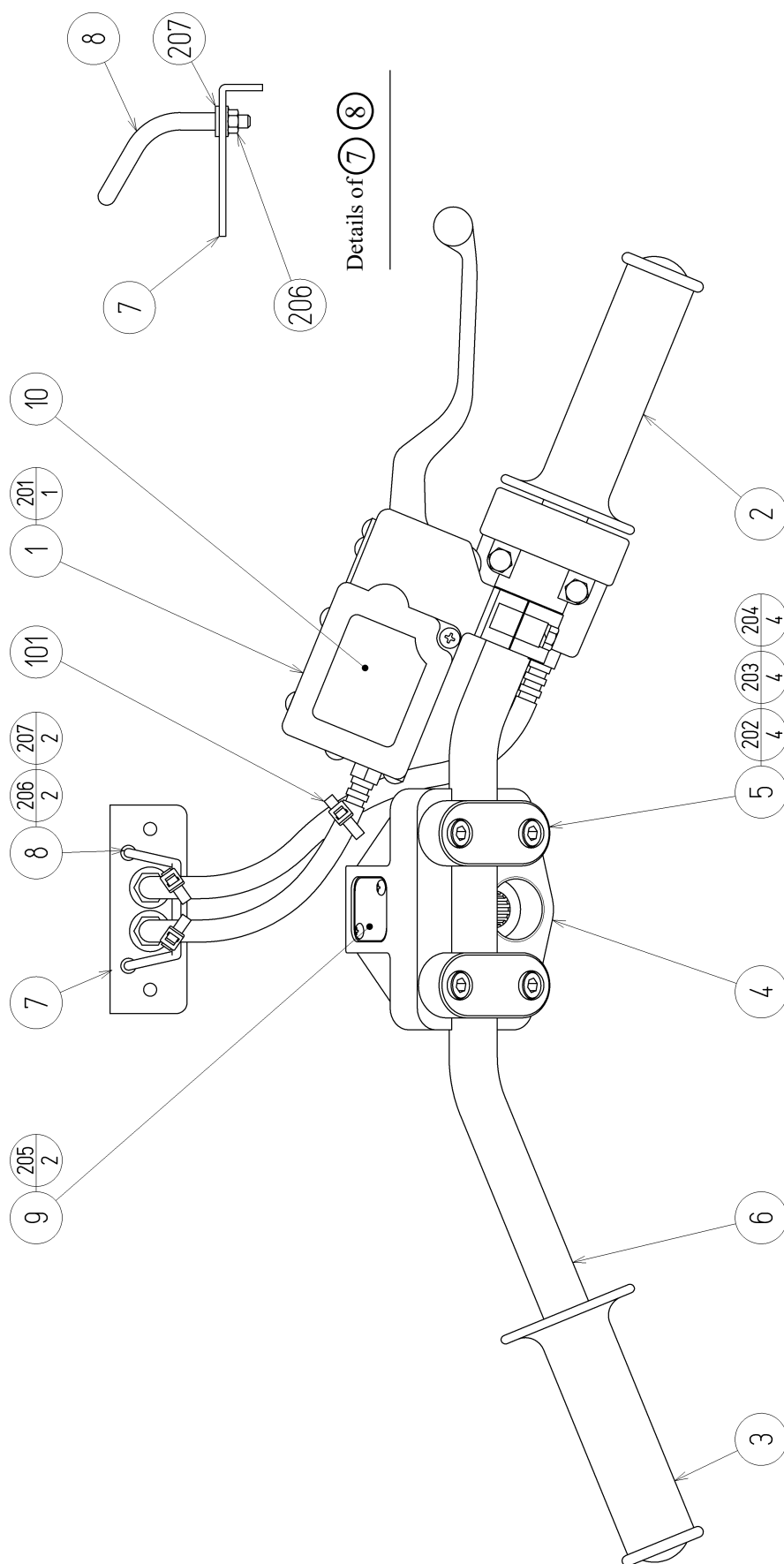
① TOP ASSY WRD



ITEM NO.	PART NO.	DESCRIPTION
1	WRD-2500	ASSY HANDLE
2	CTA-1650	BRAKE UNIT
3		SEAT CABI
4	999-1167	FOOT REST
5	999-1168	VENT -4 HOLE AIR BLACK PDRCOAT
6	999-1065	VENT -8 HOLE AIR BLACK PDRCOAT
7	LOC. PURCHASE	WOOFER
8		29 INCH MONITOR
9		CABINET
10		AC UNIT
11	999-1170	27" BEZEL
12	999-0169	CASTER
13	999-0167	LEG LEVELER
14	999-1169	COVER FOOT REST

② ASSY HANDLE (WRD-2500)

(D-1/2)



M6 SCREW FASTENING TORQUE TO BE : 8.8N•m

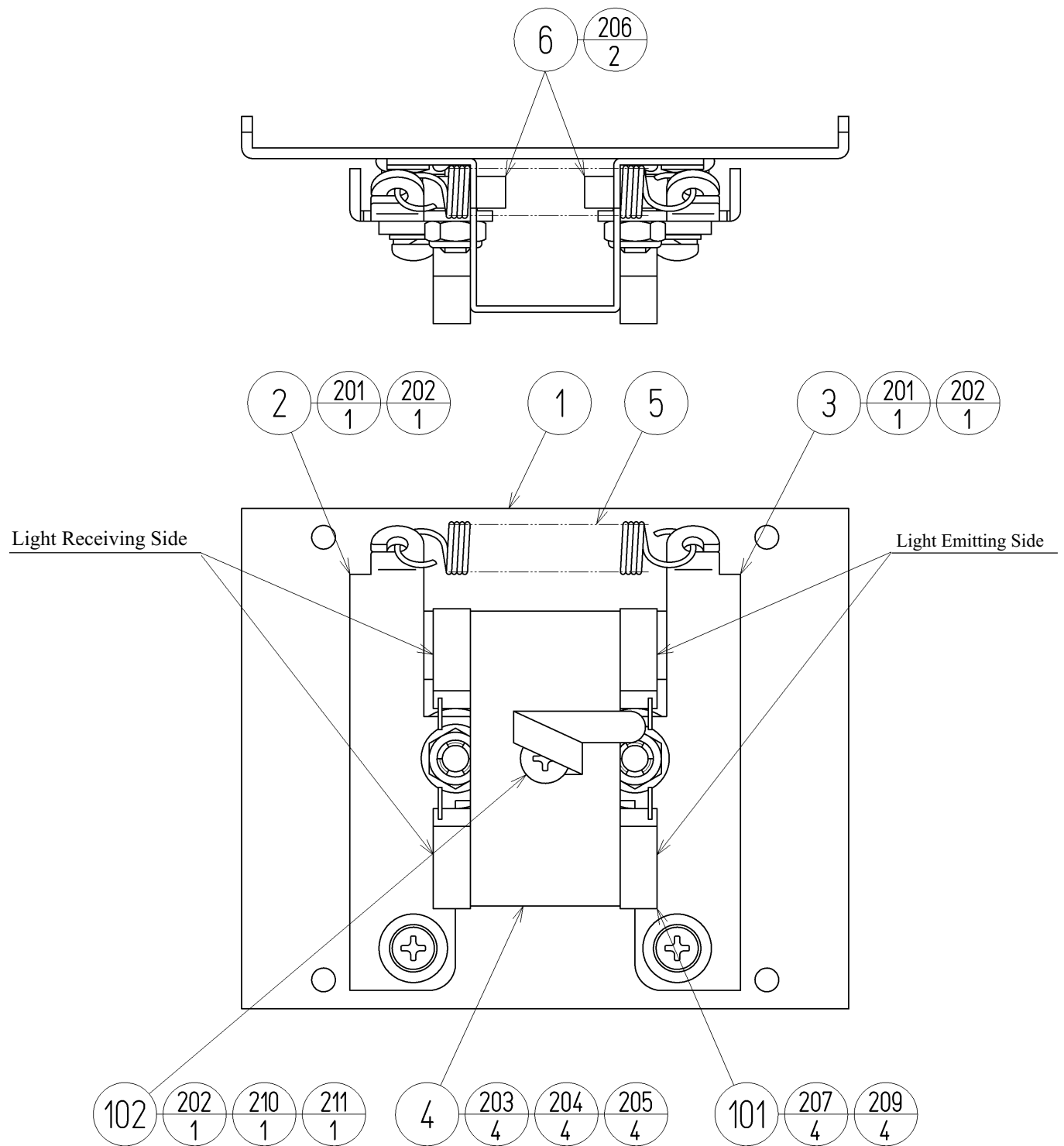
② ASSY HANDLE (WRD-2500)

(D-2/2)

ITEM NO.	PART NO.	DESCRIPTION
1	WRD-2550	ASSY BRAKE MEDHA
2	WRD-2600	ASSY THROTTLE
3	HLD-2002	GRIP LEFT
4	MJT-3603X	MOUNT BLOCK
5	MJT-3612	HANDLE HOLDER
6	WRD-2501	HANDLE BAR
7	WRD-2502	WIRE MOUNT PLATE
8	WRD-2503	WIRE STAY
9	WRD-2504	HOLE LID
10	WRD-2505	STICKER MASTER CYLINDER
101	280-6623-1S-0	PLASTIC TIE BELT PLT-1S-0
201	000-T00412-0B	M SCR TH BLK M4 X 12
202	020-000620-0Z	HEX SKT H CAP SCR BLK 0Z M6 X 20
203	060-F00600-0B	FLT WSHR BLK M6
204	060-S00600-0B	SPR WSHR BLK M6
205	000-T00310-0C	M SCR TH CRM M3 X 10
206	050-F00300	FLG NUT M3
207	060-F00300-0B	FLT WSHR BLK M3

③ ASSY CENTERING BASE (WRD-2100)

(D-1/2)



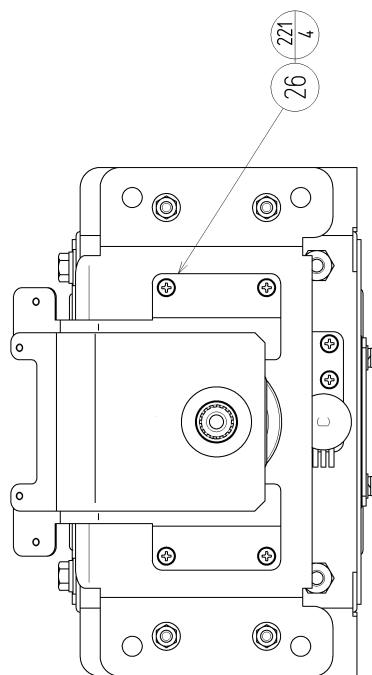
⑥ The tightening torque to each screw shall be 2.45 N•m.

③ ASSY CENTERING BASE (WRD-2100)

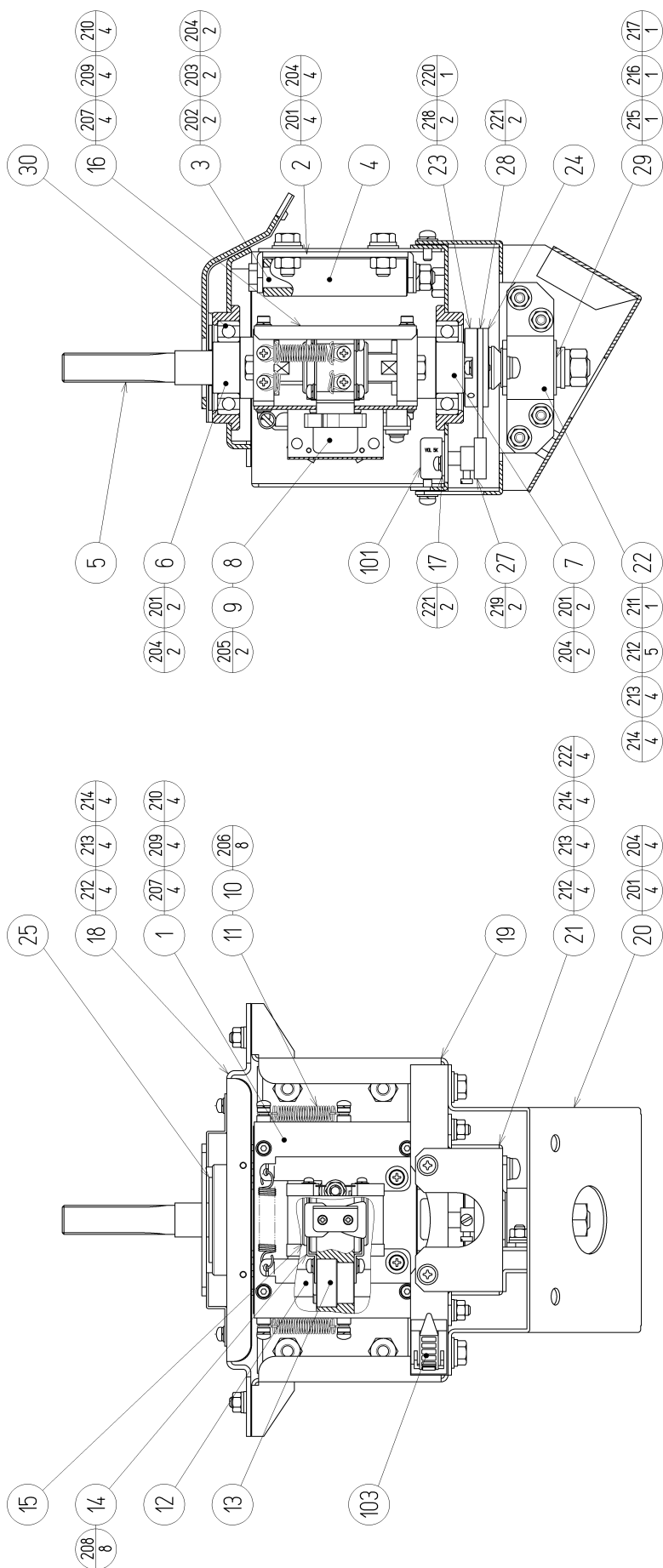
(D-2/2)

ITEM NO.	PART NO.	DESCRIPTION
1	WRD-2101	FRONT COVER
2	WRD-2102	CENTERING ARM L
3	WRD-2103	CENTERING ARM R
4	WRD-2104	SW BRKT
5	WRD-2105	SPRING HOLD
6	100-5050	ROLLER BEARING 19
7	421-7226-12-91	STICKER L LONG
8	421-7226-21-91	STICKER U LONG
101	370-5232	PHOTO SENSOR OMT-01DS
102	280-0419	HARNESS LUG
201	000-P00410-S	M SCR PH W/S M4 X 10
202	060-F00400	FLT WSHR M4
203	050-U00300	U NUT M3
204	060-S00300	SPR WSHR M3
205	060-F00300	FLT WSHR M3
206	050-U00600	U NUT M6
207	000-P00312-W	M SCR PH W/FS M3 X 12
209	050-H00300	HEX NUT M3
210	000-P00408	M SCR PH M4 X 8
211	060-S00400	SPR WSHR M4
301	WRD-60003	WH CENTERING MECHA01

Grease the gear and sliding section.



Toward VOLUME D-Cut



④ ASSY HANDLE MECHA (WRD-2000)

(D-2/3)

ITEM NO.	PART NO.	DESCRIPTION
1	WRD-2100	ASSY CENTERING MECHA
2	WRD-2001	STOPPER BRKT
3	WRD-2002	STOPPER SHAFT
4	WRD-2003	STOPPER ROT
5	WRD-2004	MAIN SHAFT
6	WRD-2005	SHAFT HOLDER UPPER
7	WRD-2006	SHAFT HOLDER LOWER
8	WRD-2007	SW SHADE
9	WRD-2009	HOLD CAM
10	WRD-2010	SPRING SUS
11	WRD-2011	SPRING HOOK
12	WRD-2012	GUIDE SHAFT
13	WRD-2013	GUIDE BLOCK
14	WRD-2014	STOPPER HOLDER
15	WRD-2015	STOPPER PP
16	WRD-2016	REAR COVER
17	WRD-2017	VR BRKT
18	WRD-2018	MECHA COVER
19	WRD-2019	MECHA BASE
20	WRD-2020	BASE BRKT
21	WRD-2021	ROSTA BASE
22	WRD-2022	ROSTA HOLDER
23	WRD-2023	GEAR BASE
24	WRD-2024	GEAR NUT PLATE
25	WRD-2025	HIDE PLATE
26	WRD-2026	TOP COVER
27	601-6555	GEAR Z=30 M=0.75
28	601-6450	GEAR 110
29	601-10999	TORSION RUBBER KURASHIKI 18 X 30
30	100-5071	BEARING 30
101	220-5373	VOL CONT B-5K
102	310-5029-F20	SUMITUBE F F 20MM
103	280-5009	CORD CLAMP 21

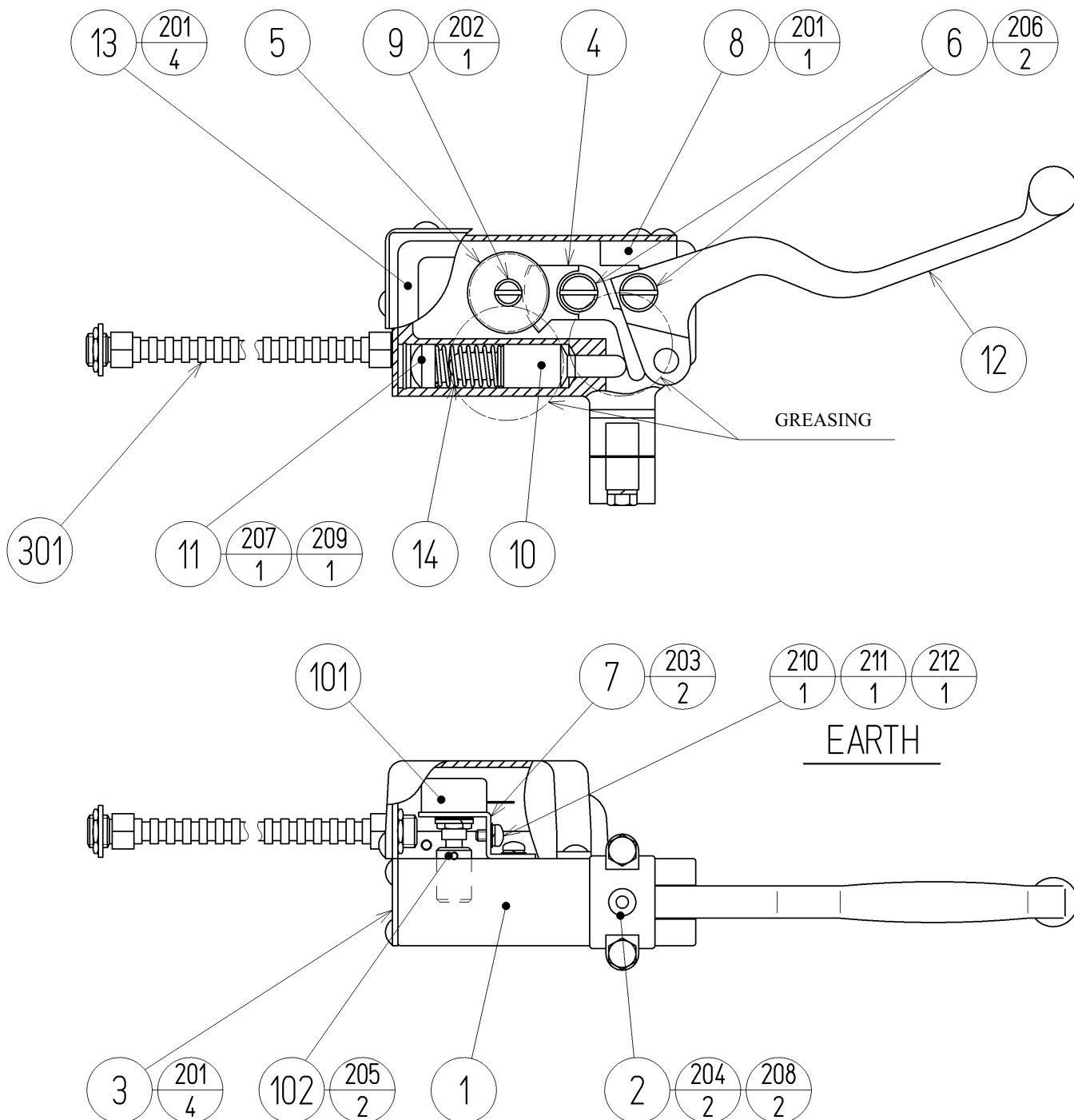
④ ASSY HANDLE MECHA (WRD-2000)

(D-3/3)

ITEM NO.	PART NO.	DESCRIPTION
201	030-000820-S	HEX BLT W/S M8 X 20
202	050-H00800	HEX NUT M8
203	060-S00800	SPR WSHR M8
204	060-F00800	FLT WSHR M8
205	000-P00416-W	M SCR PH W/FS M4 X 16
206	000-P00420-S	M SCR PH W/S M4 X 20
207	029-0427	HEX SKT H CAP SCR M4 X 10
208	000-P00408-W	M SCR PH W/FS M4 X 8
209	060-S00400	SPR WSHR M4
210	060-F00400	FLT WSHR M4
211	000-P00612-S	M SCR PH W/S M6 X 12
212	060-F00600	FLT WSHR M6
213	060-S00600	SPR WSHR M6
214	050-U00600	U NUT M6
215	050-H01200	HEX NUT M12
216	060-F01200	FLT WSHR M12
217	060-S01200	SPR WSHR M12
218	028-C00412-P	SET SCR CH CUP P M4 X 12
219	028-C00406-P	SET SCR CH CUP P M4 X 6
220	065-S025S0-Z	STP RING BLK 0Z S25
221	000-P00412-W	M SCR PH W/FS M4 X 12
222	000-P00512-W	M SCR PH W/FS M5 X 12
301	WRD-60004	WH HANDLE MECHA01

⑤ ASSY BRAKE MECHA (WRD-2550)

(D-1/2)



SCREW, NUT FASTENING TORQUE TO BE

M4 : 1.8 N•m

M6 : 7.3 N•m

Grease the gear and sliding section.

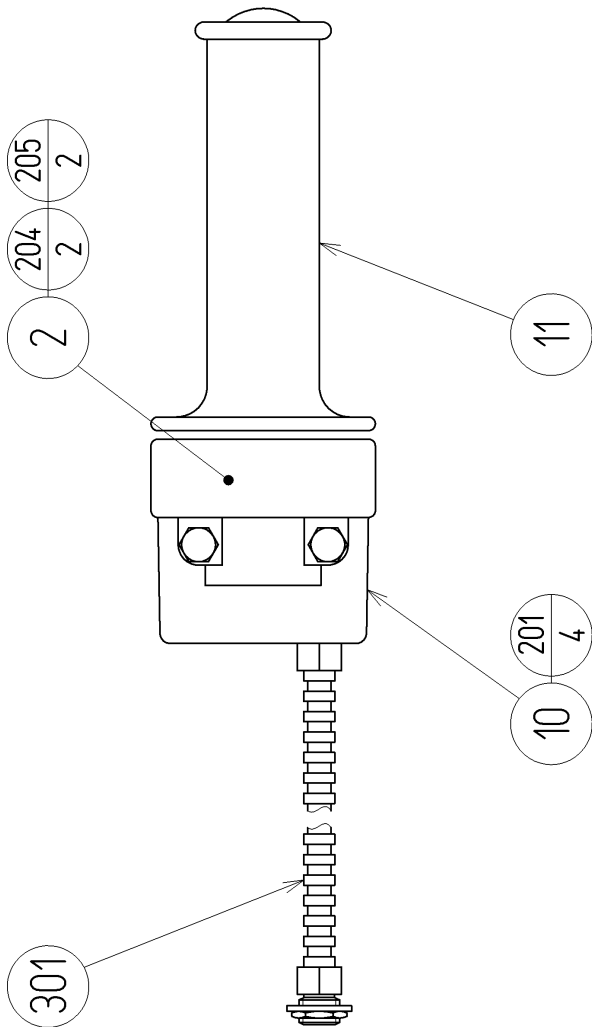
⑤ ASSY BRAKE MECHA (WRD-2550)

(D-2/2)

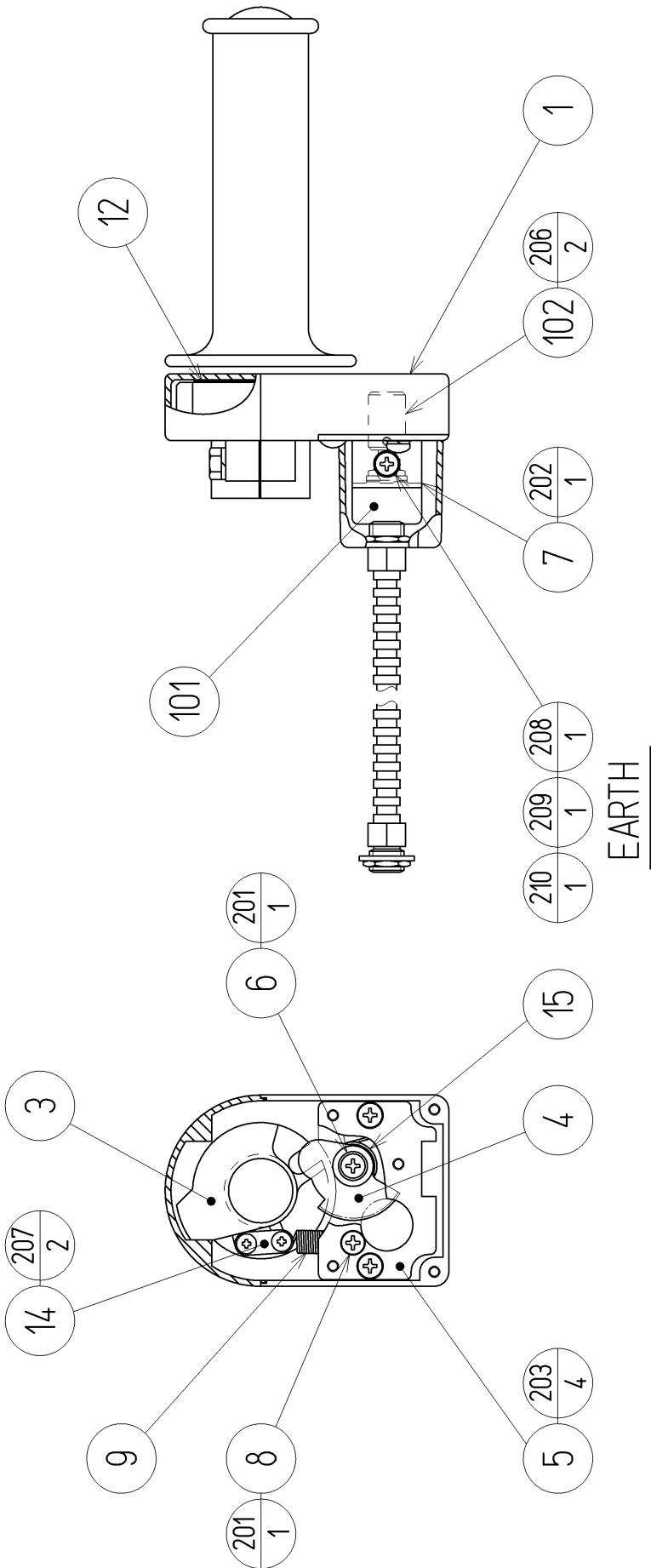
ITEM NO.	PART NO.	DESCRIPTION
1	HLD-2501	BRAKE MASTER CASE
2	HLD-2502	MASTER CASE HOLDER
3	HLD-2503	MASTER CASE COVER
4	HLD-2504	BRAKE GEAR
5	HLD-2505	IDOL GEAR
6	HLD-2506	PIVOT SHAFT
7	HLD-2507	VR BRKT
8	HLD-2508	LEVER STOPPER
9	HLD-2509	IDOL GEAR SHAFT
10	WRD-2551	MASTER PISTON
11	280-6619	RUBBER FOOT T 3G
12	HLD-2512	BRAKE LEVER
13	HLD-2513	VR COVER
14	HLD-2514	RETURN SPRING
101	220-5484	VOL CONT B-5K OHM
102	601-7944	GEAR 15
103	310-5029-F20	SUMITUBE F F 20MM
104	280-5275-SR10	CORD CLAMP SR10
201	000-T00408-0B	M SCR TH BLK M4 X 8
202	050-C00400-3B	CAP NUT TYPE3 BLK M4
203	000-P00408-W	M SCR PH W/FS M4 X 8
204	030-000620-SB	HEX BLT W/S BLK M6 X 20
205	028-A00306-P	SET SCR HEX SKT CUP P M3 X 6
206	FAS-500015	CAP NUT BLK M6
207	065-S016H0-Z	STP RING BLK OZ H16
208	068-441616	FLT WSHR 4.4-16 X 1.6
209	060-F00600-0B	FLT WSHR BLK M6
210	000-P00408	M SCR PH M4 X 8
211	060-S00400	SPR WSHR M4
212	060-F00400	FLT WSHR M4
301	WRD-60006	WH BRAKE MECHA01

⑥ ASSY THROTTLE (WRD-2600)

(D-1/2)



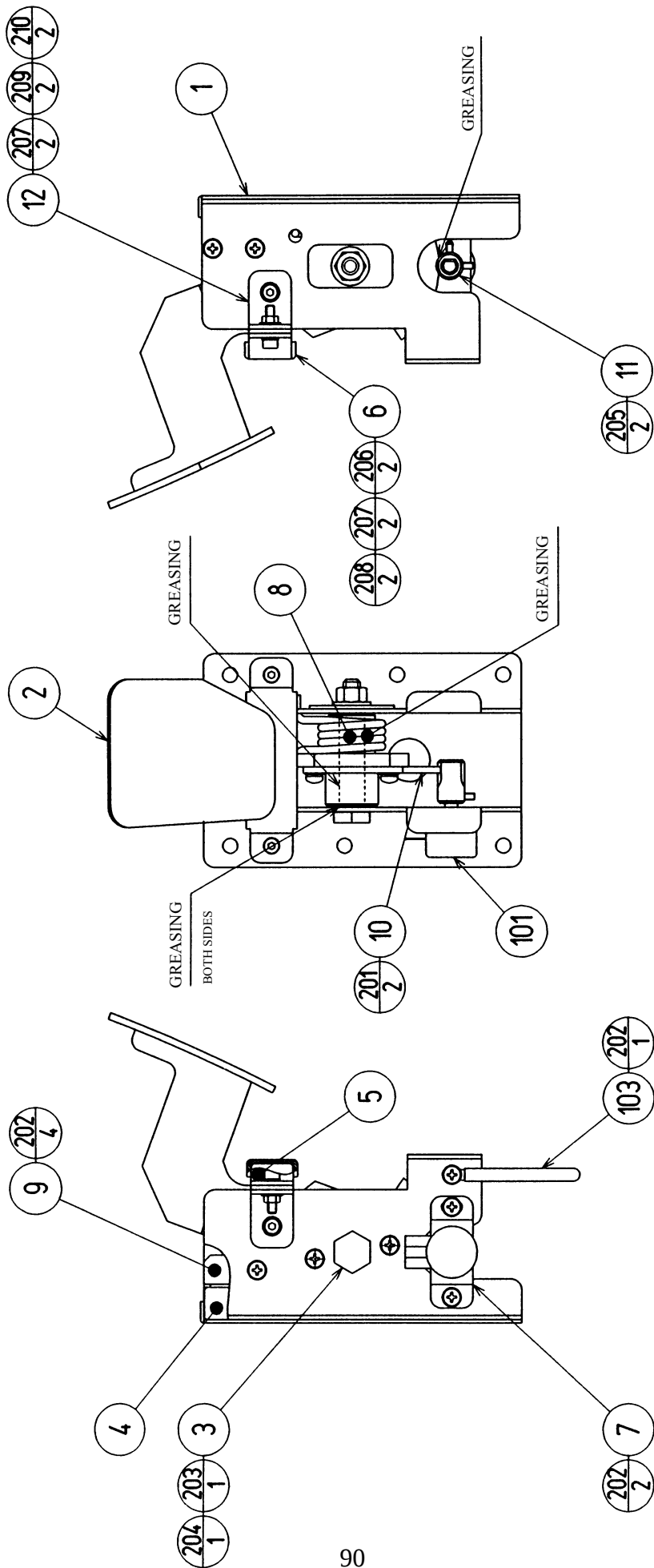
SCREW FASTENING TORQUE TO BE
M3 : 0.75 N•m
M4 : 1.8 N•m
Grease the gear section.



⑥ ASSY THROTTLE (WRD-2600)

(D-2/2)

ITEM NO.	PART NO.	DESCRIPTION
1	HLD-2601	THROTTLE CASE LOWER
2	HLD-2602	THROTTLE CASE UPPER
3	HLD-2603	INNER GRIP
4	HLD-2604	ACCEL GEAR
5	HLD-2605	BASE PLATE
6	HLD-2606	ACCEL GEAR SHAFT
7	HLD-2607	ACCEL VR BRKT
8	HLD-2608	SPRING HOOK
9	HLD-2609	RETURN SPRING
10	HLD-2610	VR COVER
11	HLD-2611	ACCEL GRIP
12	HLD-2612	SLIDE PLATE
14	HLD-2613	SPRING STOPPER
15	HLD-2614	GEAR SPRING
101	220-5484	VOL CONT B-5K OHM
102	601-7944	GEAR 15
103	310-5029-F20	SUMITUBE F F 20MM
201	000-T00408-0B	M SCR TH BLK M4 X 8
202	000-P00408-W	M SCR PH W/FS M4 X 8
203	000-F00408	M SCR FH M4 X 8
204	030-000625-SB	HEX BLT W/S BLK M6 X 25
205	060-F00600-0B	FLT WSHR BLK M6
206	028-A00306-P	SET SCR HEX SKT CUP P M3 X 6
207	012-P00306	TAP SCR #2 PH 3 X 6
208	000-P00408	M SCR PH M4 X 8
209	060-S00400	SPR WSHR M4
210	060-F00400	FLT WSHR M4
301	WRD-60005	WH THROTTLE01

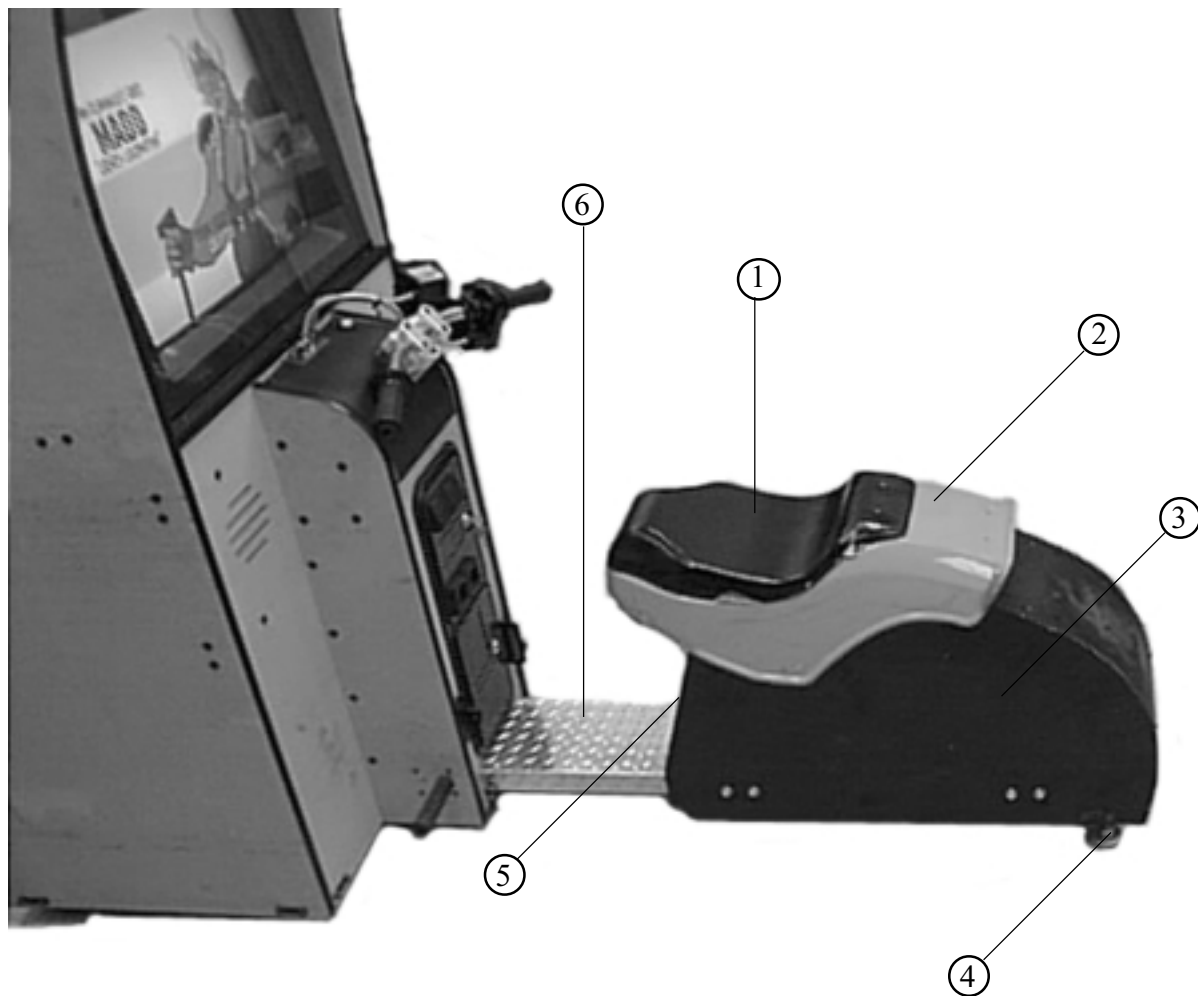


⑦ BRAKE UNIT (CTA-1650)

(D-2/2)

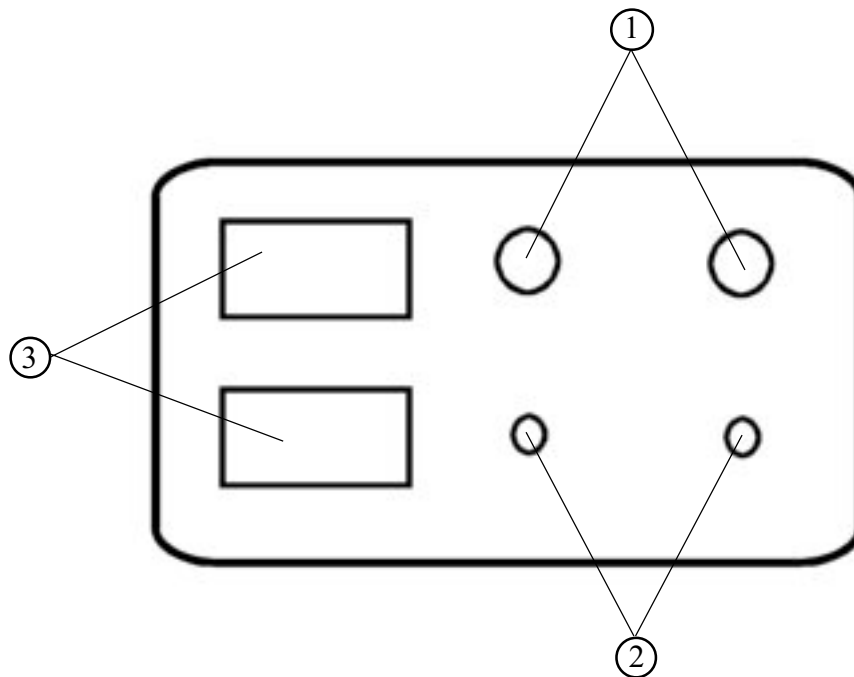
ITEM NO.	PART NO.	DESCRIPTION
1	CTA-1601	PEDAL BASE
2	CTA-1651	BRAKE PEDAL
3	CTA-1603	PEDAL SHAFT
4	CTA-1604	STOPPER BLOCK
5	CTA-1605	RUBBER PLATE
6	CTA-1606	RUBBER CASE
7	CTA-1607	VR BRKT
8	HLD-2805	TORSION SPRING
9	HLD-2808	RUBBER HOLDER
10	601-6450	GEAR 110
11	601-7944	GEAR 15
12	CTA-1608	SUPPORT BRKT
101	220-5373	VOL CONT B-5K
	220-5484	VOL CONT B-5K OHM
102	310-5029-F20	SUMITUBE F F 20MM
103	280-0419	HARNESS LUG
201	000-P00412-W	M SCR PH W/FS M4 X 12
202	000-P00408-W	M SCR PH W/FS M4 X 8
203	050-U00800	U NUT M8
204	060-F00800	FLT WSHR M8
205	028-A00308-P	SET SCR HEX SKT CUP P M3 X 8
206	020-000416-0Z	HEX SKT H CAP SCR BLK 0Z M4 X 16
207	060-S00400	SPR WSHR M4
208	050-F00400	FLG NUT M4
209	020-000408-0Z	HEX SKT CAP SCR BLK 0Z M4 X 8
210	060-F00400	FLT WSHR M4
301	CTA-60050	WIRE HARN BRAKE

⑧ SEAT CABI



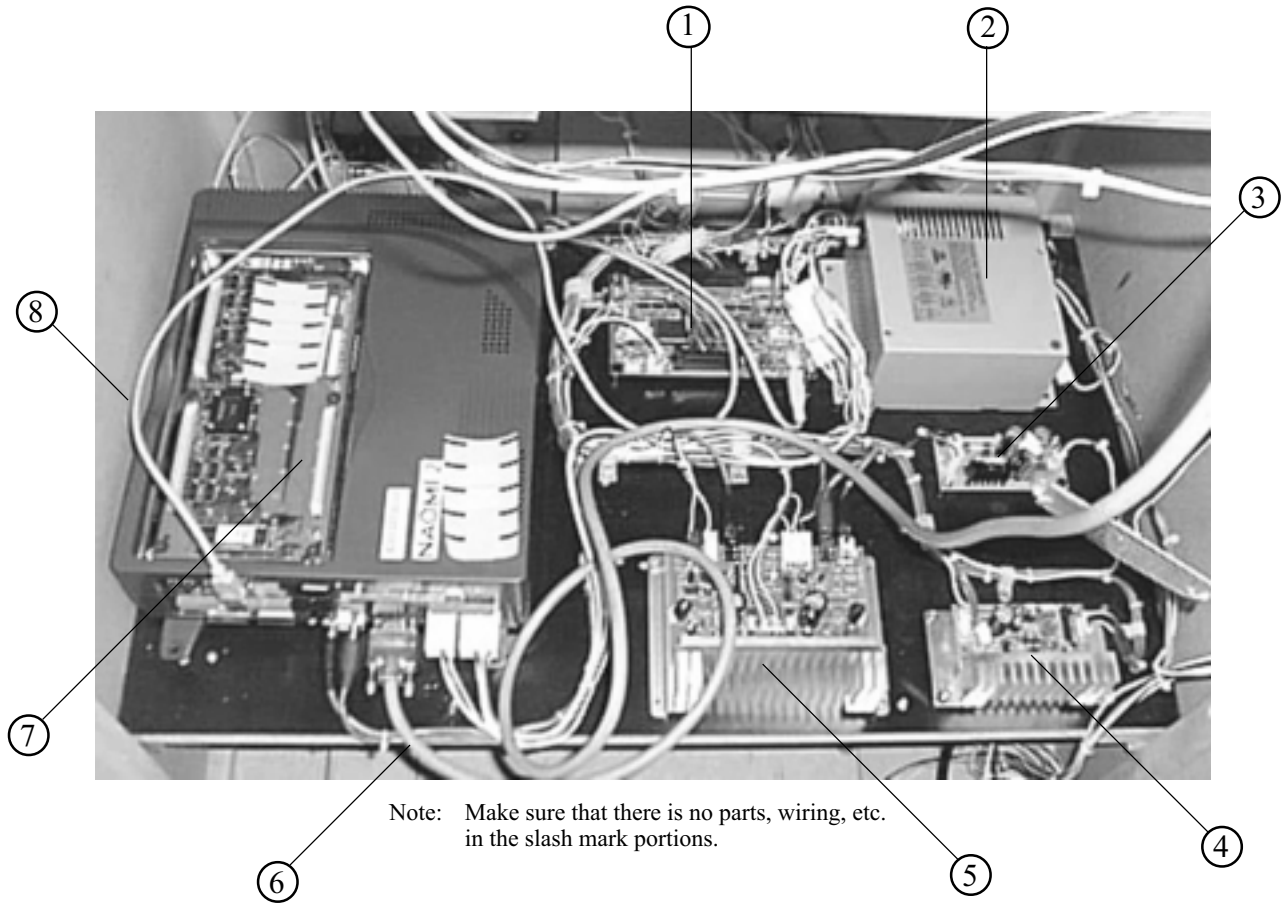
ITEM NO.	PART NO.	DESCRIPTION
1	999-1171	COVER SEAT VACUUM FORM
2	999-1172	FENDER VACUUM FORM
3	999-1173	S/A; SEAT & FENDER
4	999-0167	LEG LEVELER
5	999-1174	WOOD DOOR SEAT
6	999-1175	PLATE TREAD

⑨ SW UNIT (CTA-1160)



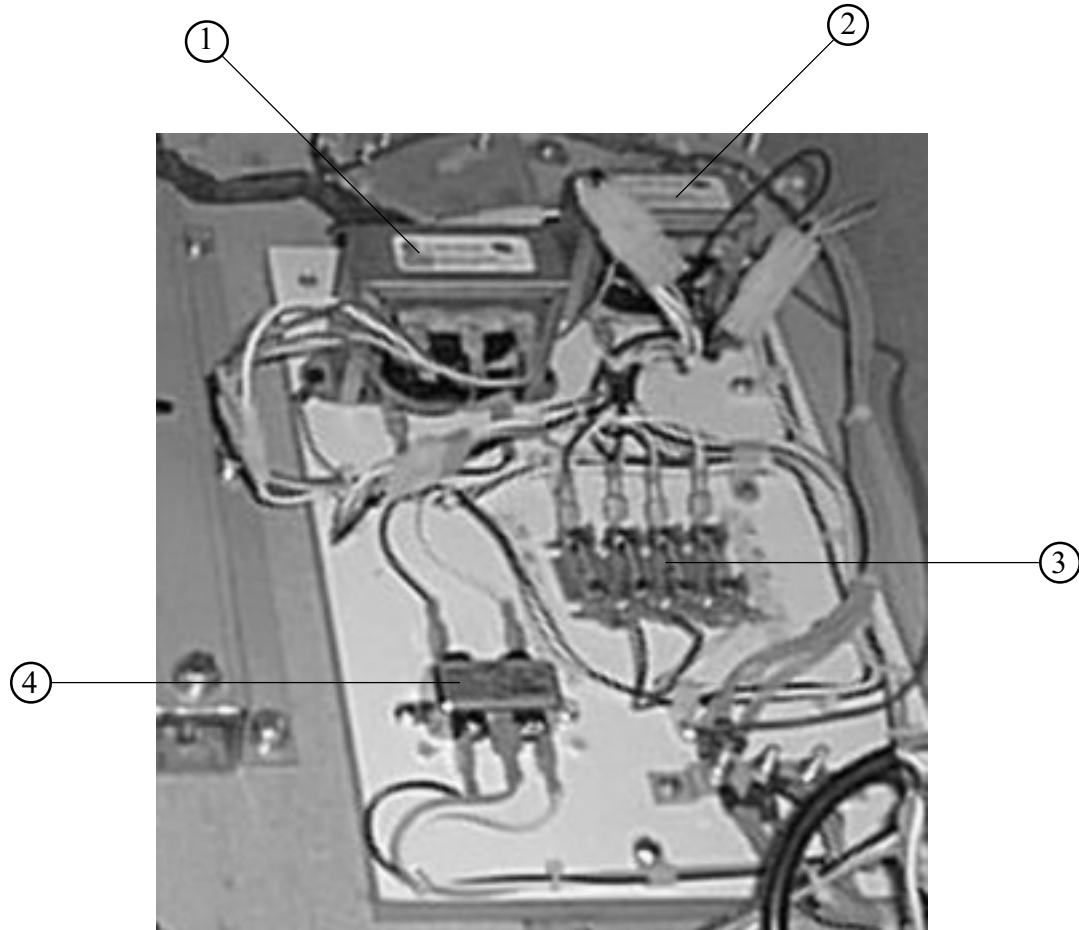
ITEM NO.	PART NO.	DESCRIPTION
1	LOC. PURCHASE	5 K POTENTIOMETER & VOLUME KNOB
2	LOC. PURCHASE	MOM. PUSH BUTTON SW
3	LOC. PURCHASE	COIN METER 6 VOLTS

⑩ ASSY MAIN BD



ITEM NO.	PART NO.	DESCRIPTION
1	837-13551-92	I/O CONTROL BD
2	400-5397-01	POWER SUPPLY FOR JVS
3	838-13759	RECT BD CTA
4	838-11651-01	PC BLOW PASS AMP w/LARGE HEAT SINK
5	838-13616	AUDIO POWER AMP 2 CH
6	600-7009-3000	ASSY RGB CABLE SUB 15P
7	840-0046D-01	ASSY CASE NAO2 WRD US
8	600-7141-200	USB CABLE

⑪ ASSY XFMR (NOB-4100)



Note: Make sure that there is no parts, wiring, etc. in the slash mark portions.

ITEM NO.	PART NO.	DESCRIPTION
1	998-0147	TRANSFORMER 12V HA MCI-4-06-7012
2	998-0146	TRANSFORMER MCI 4-06-8036
3	LOC. PURCHASE	FUSE BLOCK
4	LOC. PURCHASE	LINE FILTER 6 AMP

18. WIRE COLOR CODE TABLE

THE WIRE COLOR CODE is as follow:

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

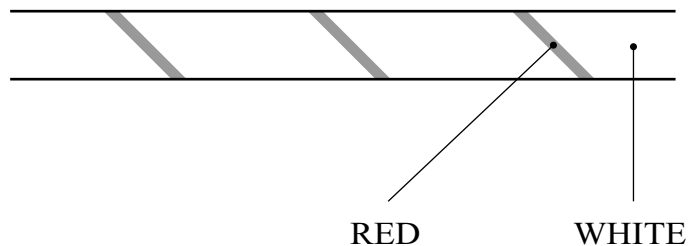
Wires other than those of any of the above 5 single colors will be displayed by 2 alphanumeric characters.

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.

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

VISIT OUR WEBSITE!





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